ARCADIS Design & Consultancy for natural and built assets

City of Portland, ME

WASTEWATER COLLECTION SYSTEM ANALYSIS AND ACTION PLAN

June 2020

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ACRONYMS AND ABBREVIATIONS

BSF	Base Sanitary Flow
CIPPL	Cured-in-Place Pipe Liner
CIPSR	Cured-in-Place Spot Repair
CRT	Chemical Root Treatment
CCTV	Closed-Circuit Television
CMOM	Capacity Management Operation and Maintenance
CNA/CNI/CNL	Could not access/inspect/locate
GPDIM	Gallons Per Day Per Inch Diameter Mile
GWI	Groundwater Infiltration
GSC	Grind Service Connection
I/I	Infiltration and Inflow
LF	Linear Feet
NASSCO	Nation Association of Sewer Service Companies
PACP	Pipeline Assessment Certification Program
QMR	Quick Maintenance Rating
QSR	Quick Structural Rating
QOR	Quick Overall Rating
RDII	Rainfall Derived Infiltration and Inflow
RII	Rainfall Induced Infiltration
SSO	Sanitary Sewer Overflow
TSJ	Test and Seal Joints
TSS	Test and Seal Services
WWTF	Wastewater Treatment Facility

EXECUTIVE SUMMARY

On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included Infiltration and Inflow (I/I) Reduction Measures, as well as continued improvements to the City's Collection System Mapping, by supplementing and correcting data gaps in the sewer GIS database as they are identified. This Wastewater Collection System Analysis and Action Plan (WCSAAP), presents the findings and recommendations of a City-wide Infiltration and Inflow Program conducted between the Spring of 2017 and Spring of 2020.

This report addresses the CMOM Plan recommendations and recommends a course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from their collection system. In accordance with the recommendations presented in the CMOM Report, the City-wide Infiltration and Inflow Program was conducted in three Phases:

Phase 1 – Investigation and Quantification of I/I Flows

Phase 2 – Identification of Major I/I Sources

Phase 3 – Schedule of Target Opportunities for Cost-effective Mitigation

Phase 1 – Investigation and Quantification of I/I Flows is summarized in Section 2 of this report and presents the findings of a two-year flow metering program conducted in the spring of 2018 and spring of 2019. The program includes the installation of 40 flow meters in 35 subareas, installation of 2 rainfall gauges and installation of 2 permanent groundwater monitoring wells. Flow meter data was analyzed to estimate infiltration and inflow for each sub-area. Sub-areas were ranked by quantity of infiltration and inflow, and follow-on investigation recommendations were developed based on these analyses and rankings. A summary of flow metering results and recommendations for follow on investigations is included in Section 2.3.3.

Phase 2 of the City-wide I/I Program – Identification of Major Infiltration and Inflow Sources, included a Sewer System Evaluation Survey (SSES) conducted to identify specific sources of infiltration and inflow within sub-areas identified during Phase 1 as containing excessive infiltration and/or inflow. SSES investigations completed include:

- 315, 268 LF of flow isolation
- 136,868 LF of CCTV
- 838 completed manhole inspections
- 119,244 LF of smoke testing; and
- 47 large building inspections

A detailed summary of SSES investigations and findings are included in Section 3 of this report.

Rehabilitation recommendations are included in Section 4 of this report. Recommendations include pipeline and manhole rehabilitation, the development of an Interceptor Maintenance, Inspection, and Renewal Program, inflow removal recommendations, and development of a permanent flow metering program.

Pipeline and Manhole Rehabilitation Recommendations – Phases 1, 2 and 3

Pipeline and manhole rehabilitation recommendations were grouped into three phases: Phase 1 Sanitary Sewer Rehabilitation, Phase 2 Sanitary Sewer Rehabilitation and Phase 3 Sanitary Sewer rehabilitation. Rehabilitation recommendations include cured-in-place pipe lining (CIPPL) using a combination of both ultraviolet light (UV) and steam curing technology, cured-in-place spot repairs (CIPSR), testing and sealing of pipeline joints and services, root removal, heavy cleaning, manhole cover replacement, manhole grouting, manhole bench and invert repair and manhole lining.

Sub-areas were grouped into phases based on NASSCO ratings, overall infiltration rate, geographic location, and known problem areas. A summary of pipeline and manhole rehabilitation recommendations and associated costs for each phase of rehabilitation are included below in Tables ES-1, ES-2, and ES-3 and in Sections 4.1.1, 4.1.2 and 4.1.3. Unit prices are included in Table 13 in Section 4.1.

Costs presented below include permitting, engineering and a 35% planning level contingency. Engineering costs include design, construction phase services, and post construction record drawings and closeout documents. The costs presented below are in today's dollars (2020). In accordance with the proposed implementation schedule presented in Section 4.6, construction costs are escalated 3% per year to the assumed midpoint of construction for each Phase of rehabilitation.

Table ES-1. Phase 1 Rehabilitation Cost Summary

Sub-area	Pipeline Rehab Cost	Manhole Rehab Cost	Subtotal	Escalation to midpoint of construction (2022)	Engineering & Permitting (35%)	Construction Contingency (35%)	Total
Sub-area 14	$115,895	$10,875	$126,770	$134,490	$47,071	$47,071	$228,633
Sub-area 15	$775,458	$40,954	$816,413	$866,132	$303,146	$303,146	$1,472,424
Sub-area 16	$545,311	$182,792	$728,103	$772,444	$270,355	$270,355	$1,313,155
Sub-area 17	$2,948	$46,404	$49,352	$52,358	$18,325	$18,325	$89,008
Sub-area 18	$543,851	$2,000	$545,851	$579,093	$202,683	$202,683	$984,458
Sub-area 19	$447,041		$447,041	$474,266	$165,993	$165,993	$806,252
Sub-area 20	$812,591		$812,591	$862,077	$301,727	$301,727	$1,465,531
Sub-area 21	$286,017	$3,000	$289,017	$306,618	$107,316	$107,316	$521,250
Sub-area 22	$669,645	$156,229	$825,874	$876,169	$306,659	$306,659	$1,489,488
Sub-area 29	$238,521	$35,750	$274,271	$290,974	$101,841	$101,841	$494,656
	$4,437,277	**$478,004**	**$4,915,281**	**$5,214,622**	**$1,825,118**	**$1,825,118**	**$8,864,857**

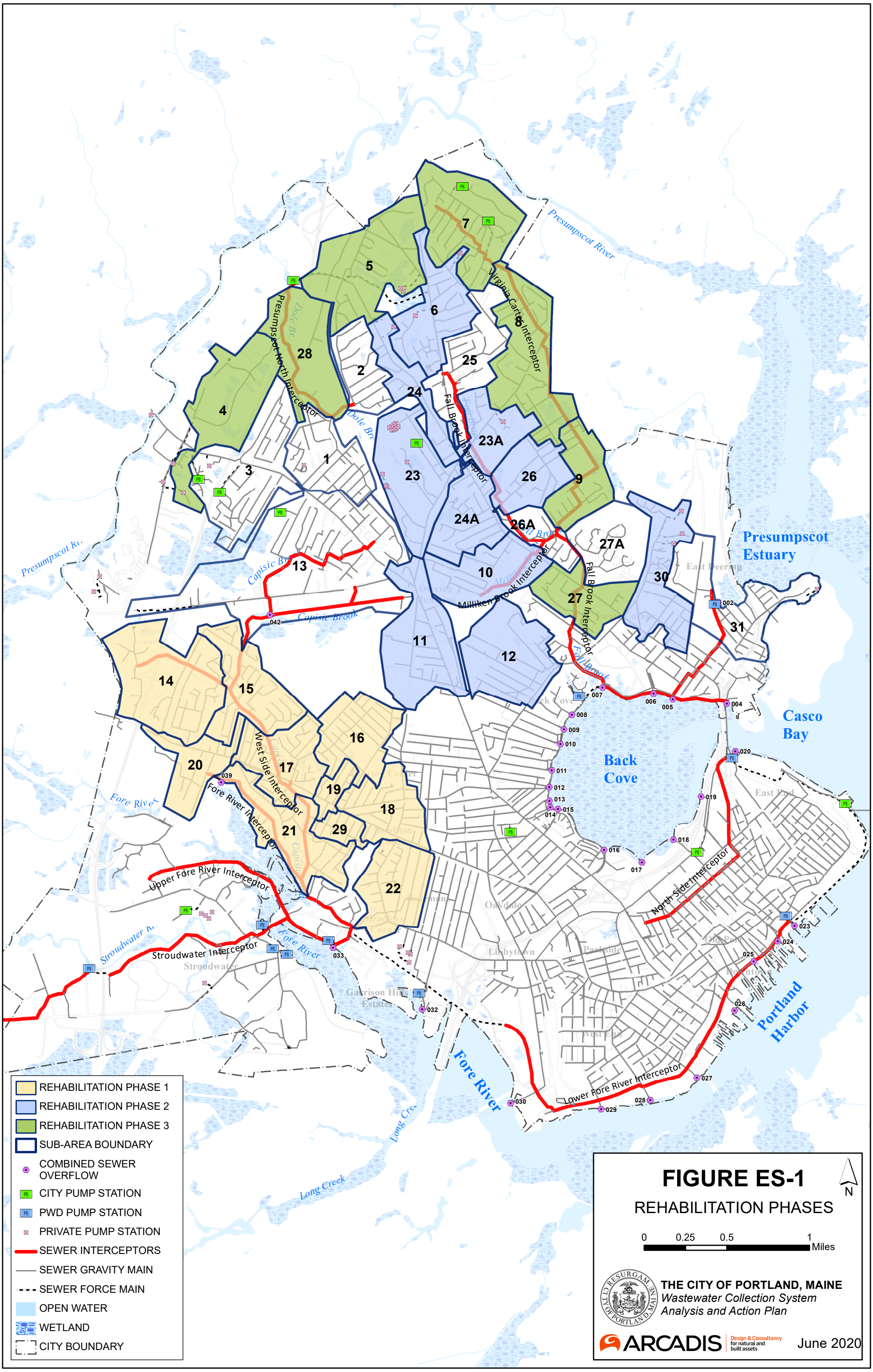
Table ES-2. Phase 2 Rehabilitation Cost Summary

Sub-area	Pipeline Rehab Cost	Manhole Rehab Cost	Subtotal	Escalation to midpoint of construction (2024)	Engineering & Permitting (35%)	Construction Contingency (35%)	Total
Sub-area 6	$317,525	$89,200	$406,725	$457,773	$160,221	$160,221	$778,214
Sub-area 10		$101,433	$101,433	$114,164	$39,957	$39,957	$194,079
Sub-area 11	$373,021	$214,029	$587,050	$660,730	$231,255	$231,255	$1,123,240
Sub-area 12	$629,728	$6,500	$636,228	$716,080	$250,628	$250,628	$1,217,336
Sub-area 23	$525,584	$81,492	$607,076	$683,269	$239,144	$239,144	$1,161,557
Sub-area 23A	$453,590	$38,788	$492,377	$554,175	$193,961	$193,961	$942,098
Sub-area 24	$149,968	$1,000	$150,968	$169,916	$59,471	$59,471	$288,857
Sub-area 24A	$225,919		$225,919	$254,274	$88,996	$88,996	$432,266
Sub-area 26	$273,410		$273,410	$307,725	$107,704	$107,704	$523,133
Sub-area 30	$610,375	$0	$610,375	$686,983	$240,444	$240,444	$1,167,870
	$3,559,120	**$532,442**	**$4,091,562**	**$4,605,089**	**$1,611,781**	**$1,611,781**	**$7,828,651**

Table ES-3. Phase 3 Rehabilitation Cost Summary

Sub-area	Pipeline Rehab Cost	Manhole Rehab Cost	Subtotal	Escalation to midpoint of construction (2026)	Engineering & Permitting (35%)	Construction Contingency (35%)	Total
Sub-area 4		$55,071	$55,071	$65,757	$23,015	$23,015	$111,788
Sub-area 5	$14,041	$12,400	$26,441	$31,572	$11,050	$11,050	$53,672
Sub-area 7	$45,919	$11,300	$57,219	$68,323	$23,913	$23,913	$116,148
Sub-area 8	$270,773	$25,600	$296,373	$353,885	$123,860	$123,860	$601,604
Sub-area 9	$394,862	$23,000	$417,862	$498,949	$174,632	$174,632	$848,214
Sub-area 27	$11,414	$36,333	$47,747	$57,013	$19,954	$19,954	$96,922
Sub-area 28	$45,492	$98,342	$143,833	$171,744	$60,111	$60,111	$291,966
	$782,501	**$262,046**	**$1,044,547**	**$1,247,243**	**$436,535**	**$436,535**	**$2,120,314**

Phases 1, 2 and 3 are shown on Figure ES-1.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Presumpscot North Interceptor
Dole Br.
Fall Brook Interceptor
Fall Brook
Milliken Brook Interceptor
Capisic Brook
West Side Interceptor
Fore River Interceptor
Upper Fore River Interceptor
Stroudwater Interceptor
North Side Interceptor
Lower Fore River Interceptor
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor
Fore River
Long Creek
Stroudwater
Capisic
East Deering
Oakdale
Lisbon
Parkside
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East End
Garrison Hills Estates
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REHABILITATION PHASE 1
REHABILITATION PHASE 2
REHABILITATION PHASE 3
SUB-AREA BOUNDARY
COMBINED SEWER OVERFLOW
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PWD PUMP STATION
PRIVATE PUMP STATION
SEWER INTERCEPTORS
SEWER GRAVITY MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY
FIGURE ES-1
REHABILITATION PHASES
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THE CITY OF PORTLAND, MAINE
Wastewater Collection System
Analysis and Action Plan
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June 2020

Interceptor Maintenance, Inspection, and Renewal Program

It is recommended that the City conduct an Interceptor Maintenance, Inspection and Renewal Program of their major interceptors that have not been routinely cleaned or inspected. Section 4.2 of this report includes recommendations for cleaning and televising portions of the Fore River Interceptor, Fall Brook Interceptor, West Side Interceptor, and Virginia Carter Interceptor. Using current (2020) contractor unit prices and day rates, Table ES-4 summarizes the estimated cleaning and televising costs for the interceptor maintenance and inspection program and a 35% planning contingency has been added to the total cost estimate. Interceptor repair or renewal recommendations would be developed from the inspection program. Detailed maps of the Interceptor Maintenance, Inspection and Renewal Program are included in Appendix H.

Table ES-4. Interceptor Maintenance, Inspection and Renewal Program

Interceptor	Maintenance Recommendation	Total Length (LF)	Diameter (in)	Estimated Cleaning and CCTV Cost
Fore River Interceptor	Clean and televise	4,144	10”-48”	$65,000
Fall Brook Interceptor	Clean and televise	5,976	8”-84”	$102,000
West Side Interceptor	Clean and televise the Northern portion	12,620	8”-60”	$210,000
Virginia Carter Interceptor	Clean and televise uninspected portions	3,268	12”-24”	$40,000
	Subtotal			$416,000
	35% Contingency			$145,600
	Total			**$561,600**

Inflow Removal Recommendations

- **Dye Testing Program** – Dye tests are recommended at 16 large buildings throughout the City to confirm suspected stormwater connections to the sanitary sewer system. Dye testing recommendations are summarized in Section 4.3.1 of this report.
- **Green Infrastructure Considerations** – Evaluation of potential green infrastructure solutions is recommended in sub-areas 7, 25, and 31, where private inflow sources were identified. GI considerations are further discussed in Section 4.3.2 of this report.
- **Pilot Sump Pump Investigations Program** – It is recommended that the City develop a Private Property Sump Pump Pilot Program in known high groundwater areas to identify and potentially

remove sump pumps connected to the City's sanitary sewer system. The Pilot Sump Pump Investigations Program is summarized in Section 4.3.3 of this report.

Cost associated with inflow recommendations are included in the summary of costs in Table ES-7 below.

Permanent Flow Metering Recommendations

In conjunction with the construction of rehabilitation Phases 1, 2 and 3, we recommend the implementation of a long-term flow metering program. A long-term flow metering program will allow for:

- Comparison of pre- and post-rehabilitation flow data to track the effectiveness of I/I removal projects
- Continued compliance monitoring in accordance with the EPA Consent Order and Corrective Action Plan
- Future hydraulic model updates with accurate, updated flow data

A cost summary for each phase of long-term flow metering is show in Table ES-5. A detailed description of the long-term flow metering program is included in Section 4.4.

Table ES-5. Long-Term Flow Metering Cost Summary

Rehabilitation Phase	Number of meters	Duration (meter weeks)	Flow meter and rain gauge costs (rental, installation, maintenance, data reduction	Engineering (35%)	Total
1	6	104	$280,210	$98,074	$378,284
2	5	104	$233,950	$81,883	$315,833
3	4	78	$141,930	$49,676	$191,606
Total	**15**	**286**	**$656,090**	**$229,632**	**$885,722**

Summary of Costs and Implementation Schedule

Table ES-6 presents a summary of estimated project costs and a proposed schedule for implementation of Phases 1, 2 and 3 of Sanitary Sewer Rehabilitation.

Table ES-6. Cost Summary and Implementation – Rehabilitation Phases

Project	Year	Cost
Phase 1 Sanitary Sewer Rehabilitation	2021 - 2023	$8,864,857
Phase 2 Sanitary Sewer Rehabilitation	2023 - 2025	$7,828,651
Phase 3 Sanitary Sewer Rehabilitation	2026 - 2027	$2,120,314
	Total	**$18,813,821**

Table ES-7 presents a summary of estimated project costs for additional I/I and sewer maintenance recommendations. The schedule and costs for projects can be determined in conjunction with the City's annual DPW operations budgeting process and Capital Improvement Planning.

Table ES-7. Cost Summary – Additional Recommendations

Project	Cost
Interceptor Investigations, Maintenance, and Renewal Program	$561,600
Dye Testing Program (16 buildings)	$15,000
Long-Term Flow Metering Program	$855,722

1 INTRODUCTION

1.1 Background

On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included Infiltration and Inflow (I/I) Reduction Measures, as well as continued improvements to the City's Collection System Mapping, by supplementing and correcting data gaps in the sewer GIS database as they are identified. This Wastewater Collection System Analysis and Action Plan (WCSAAP), presents the findings and recommendations of a City-wide Infiltration and Inflow Program conducted between the Spring of 2017 and Spring of 2020. This report addresses the CMOM Plan recommendations and recommends a course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from their collection system. In accordance with the recommendations presented in the CMOM Report, the City-wide Infiltration and Inflow Program was conducted in three Phases:

Phase 1 – Investigation and Quantification of I/I Flows

Phase 2 – Identification of Major I/I Sources

Phase 3 – Schedule of Target Opportunities for Cost-effective Mitigation

This report includes the findings from Phase 1 and Phase 2 and provides recommendations for follow-on short-term and long-term I/I Reduction Measure as part of Phase 3.

The reports compiled as part of Phase 1 and 2, "*Phase 1 – 2018 Flow Monitoring Report*", dated December 2018, "*Phase 1 – 2019 Flow Monitoring Report*", dated December 2019; and "*Phase 2 – Identification of Major I/I Sources*", dated June 2019, are included as Appendix A of this report.

1.2 Collection System Description

The City of Portland's wastewater collection system, shown on Figure 1, contains approximately 240 miles of separated and combined sewers and 24 pump stations, 11 of which are owned and operated by the City. The collection system and pump stations convey wastewater to the East End Wastewater Treatment Facility (WWTF) in Portland, which is operated by the Portland Water District.

Presumpscot River
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor
Fore River
Long Creek
Dole Brook
Capisic Brook
Fall Brook
Milliken Brook
Stroudwater River
Presumpscot North Interceptor
Virginia Carter Interceptor
Fall Brook Interceptor
Milliken Brook Interceptor
West Side Interceptor
Fore River Interceptor
Upper Fore River Interceptor
Stroudwater Interceptor
North Side Interceptor
Lower Fore River Interceptor
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WASTEWATER COLLECTION SYSTEM FEATURES

- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PORTLAND WATER DISTRICT (PWD) PUMP STATION
- OTHER PUMP STATION
- MAJOR SEWER INTERCEPTOR
- COMBINED SEWER STORM
- SEPARATED SANITARY SEWER
- SANITARY STORAGE CONDUIT
- SEWER FORCE MAIN

HYDROLOGY

- OPEN WATER
- WETLAND
- CITY BOUNDARY

FIGURE 1

CITY OF PORTLAND COLLECTION SYSTEM MAP

N

0 0.25 0.5 1 Miles

CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan

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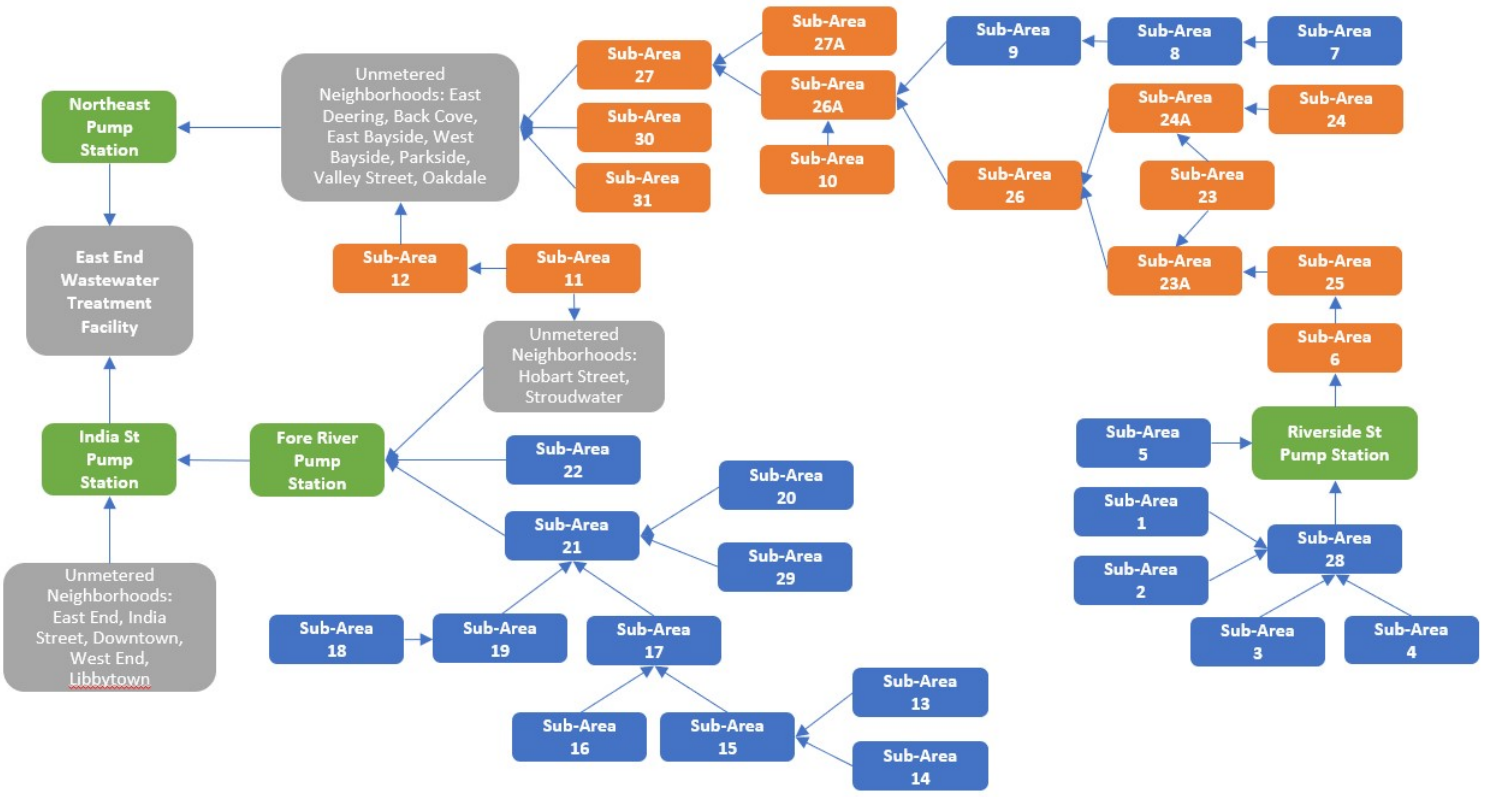
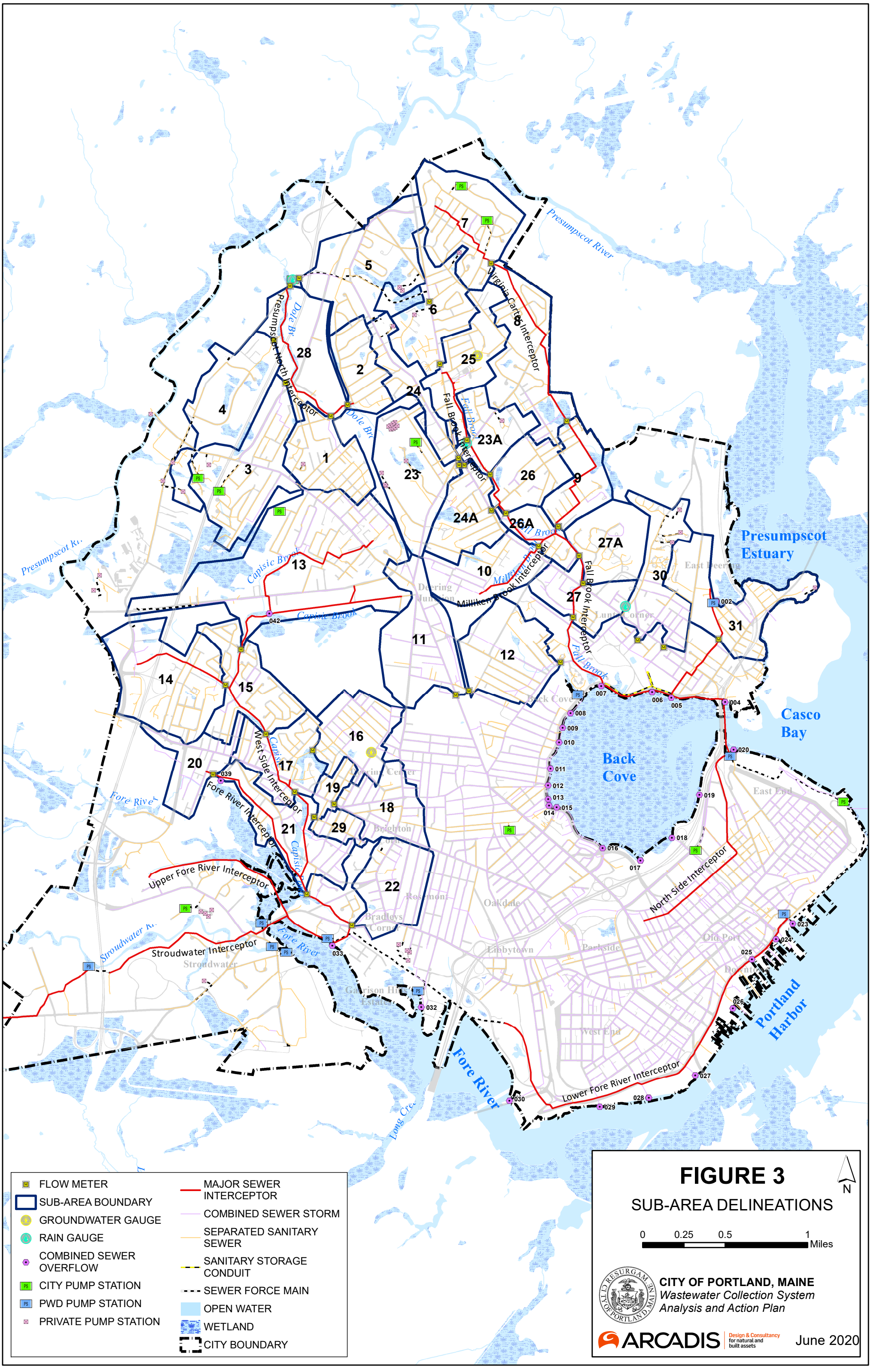
June 2020

1.2.1 Sub-Area Delineation

Thirty-five (35) total sub-areas were delineated during the first phase of the flow monitoring program. Twenty (20) sub-areas were monitored as part of the 2018 flow metering program, and an additional 15 sub-areas were monitored as part of the 2019 flow metering program. In general, sub-areas were created to include approximately 20,000 linear feet (LF) of pipe or less, as is optimal for isolating and identifying I/I sources. Due to ongoing sewer separation projects and the extent of combined sewers in the downtown area of Portland, efforts were focused on the north and west areas of the City. Prioritization of meter areas was based on recent and on-going flow monitoring and available CCTV data, historic and recently discovered problem areas where backups, surcharging and overflows occurred, areas tributary to known problem areas, areas where the hydraulic model identified potential I/I capacity issues, and areas near water bodies that could be contributing I/I to the system. Figure 2 shows a flow vector diagram for the 35 Sub-areas included in the metering program. The flow vector diagram is a visual representation of tributary flow within the system. Sub-areas delineated and included in the 2018 and 2019 metering program are shown on Figure 3.

Figure 2: Flow Vector Diagram

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Virginia Cartage Interceptor
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North Side Interceptor
Lower Fore River Interceptor
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor
Fore River
Deering Junction
Capisic Corner
Brighton
Rosemont
Oakdale
Bradleys Corner
Libbytown
Parkside
Stroudwater
Garrison Hill Estates
West End
East End
Old Port
Lunts Corner
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FLOW METER
SUB-AREA BOUNDARY
GROUNDWATER GAUGE
RAIN GAUGE
COMBINED SEWER OVERFLOW
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
MAJOR SEWER INTERCEPTOR
COMBINED SEWER STORM
SEPARATED SANITARY SEWER
SANITARY STORAGE CONDUIT
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY
FIGURE 3
SUB-AREA DELINEATIONS
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CITY OF PORTLAND, MAINE
Wastewater Collection System
Analysis and Action Plan
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June 2020

2 FLOW MONITORING PROGRAM

In Phase 1 of the City-wide I/I Program, two flow metering programs were conducted during the spring of 2018 and spring of 2019 and included the installation, maintenance, and monitoring of 40 flow meters, installation of 2 rainfall gauges, and installation of 2 permanent groundwater monitoring wells. The 2018 flow metering program incorporated 20 flow meters to record wastewater flows for 16-weeks within 20 sub-areas of the City's wastewater collection system; and the remaining 20 flow meters recorded flows in 15-sub-areas for 12-weeks as part of the 2019 flow metering program. The 2018 and 2019 flow monitoring programs were utilized to conduct an engineering analysis of flow data, including the calculation of average daily flow, peak daily flows and peak hourly flows, and estimates of infiltration and inflow for each sub-area. Sub-areas were ranked by quantity of infiltration and inflow, and follow-on investigation recommendations were developed based on these analyses and rankings.

2.1 Wastewater Characteristics

There are four major components of flow within a wastewater collection system, base sanitary flow (BSF), groundwater infiltration (GWI), rainfall induced infiltration (RII), and Inflow. The Environmental Protection Agency's "Guide for Estimating Infiltration and Inflow", June 2014, provides the following definitions:

Base Sanitary Flow (BSF) – The portion of wastewater which includes domestic, commercial, institutional, and industrial sewage and specifically excludes infiltration and inflow.

Groundwater Infiltration (GWI) – Measured during average dry weather flow period. The average of the low nighttime flows (midnight to 6am) per day for the same time period, minus significant industrial or commercial nighttime users

Rainfall Induced Infiltration (RII) – The short-term increase in infiltration which is the result of a rain event. Rainfall-induced infiltration is a portion of delayed inflow.

Inflow – Water other than sanitary wastewater that enters a sewer system from sources such as roof leaders, cellar/foundation drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, and catch basins. Inflow does not include infiltration.

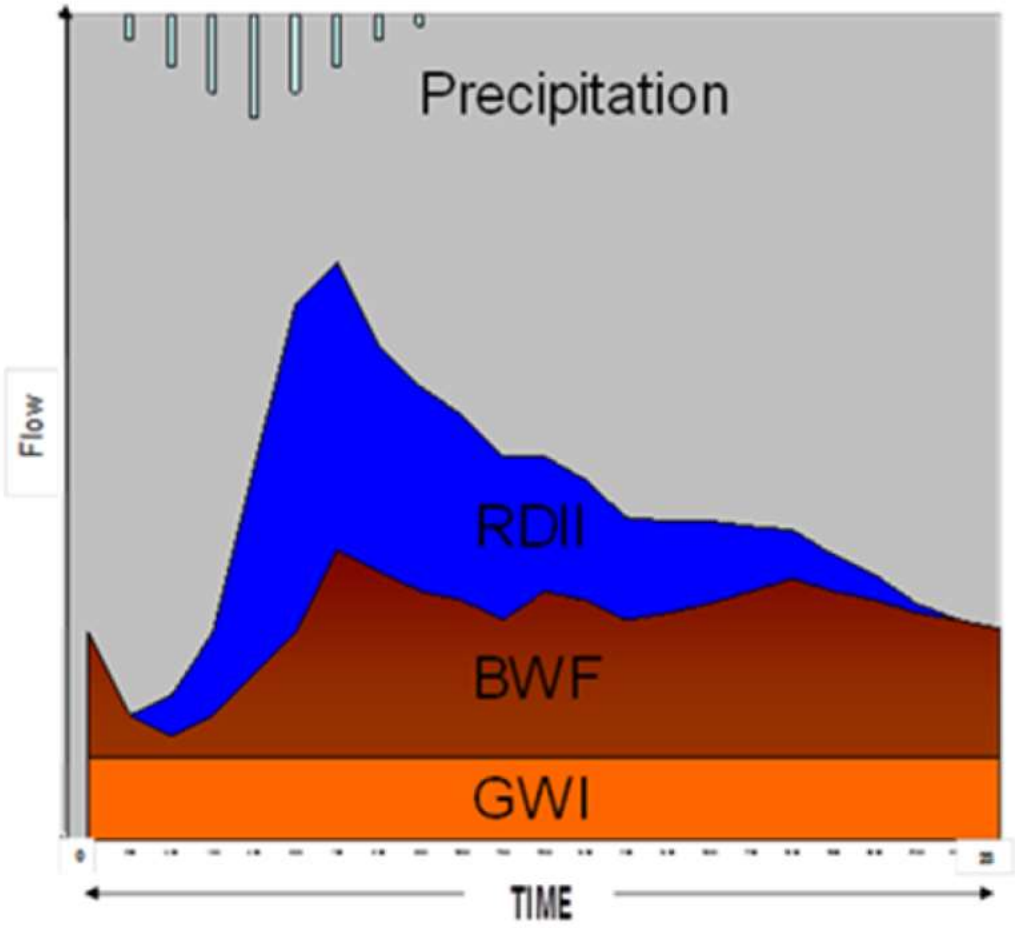
Delayed Inflow Volume – The portion of total inflow which is generated from indirect connections to the collection system or connections which produce inflow after a significant time delay from the beginning of a storm. Delayed inflow sources include sump pumps, foundation drains, indirect sewer/drain cross connections, etc. Rainfall-induced infiltration cannot be distinguished from delayed inflow and is therefore included as part of delayed inflow. Delayed inflow sources have a gradual impact on the collection system and flow decreases gradually upon conclusion of the rainfall event, and after peak inflow caused by direct connections.

Furthermore, Inflow and Delayed Inflow can be group into a category of rainfall derived infiltration and inflow (RDII – commonly referred to as the total inflow volume).

Figure 4 highlights the three key components of wastewater flow during a precipitation event. The GWI (orange line) remains constant and is not impacted by precipitation, the BWF (brown line) is a diurnal pattern based on actual usage and not impacted by precipitation, and the RDII (blue line) shows a very

clear increase in flows as a direct response to precipitation that dissipates after the completion of the storm.

Figure 4: Components of Wastewater Flow During Wet Weather (US EPA, 2007)



2.2 Approach

The City of Portland's collection system consists of approximately 240 miles of separated and combined sewers. A traditional infiltration and inflow analysis was conducted in the separated portion of the collection system, while a modified approach was used in the combined portion of the collection system. In the sub-areas where 75% or more of the collection system was separated, a traditional I/I analysis focused on identifying groundwater infiltration, rainfall-induced infiltration, and direct inflow. In the combined sewer system sub-areas, the I/I analysis focused on identifying groundwater infiltration and rainfall-induced infiltration (delayed inflow) but not direct inflow, since large volumes of direct inflow are

expected in a combined system due to known cross connections between the sanitary system and drainage system. While direct inflow values were calculated in primarily combined sub-areas, these values were not used to develop follow-on SSES investigations. Table 1 includes a summary of total pipeline footage, percentage of combined pipes and the approach for each sub-area.

Table 1. Sub-area Characteristics

Sub-Area	Total Footage (LF)	Percent Combined	I/I Analysis Approach
Sub-Area 01	19,997	7%	Traditional
Sub-Area 02	11,918	2%	Traditional
Sub-Area 03	28,692	36%	Modified
Sub-Area 04	8,893	0%	Traditional
Sub-Area 05	21,962	16%	Traditional
Sub-Area 6[1]	15,241	13%	Traditional
Sub-Area 07	23,684	13%	Traditional
Sub-Area 8[1]	25,297	40%	Modified
Sub-Area 9[1]	10,989	53%	Modified
Sub-Area 10	13,417	77%	Modified
Sub-Area 11	21,085	87%	Modified
Sub-Area 12[1]	20,125	33%	Modified
Sub-Area 13	48,470	57%	Modified
Sub-Area 14	23,488	24%	Traditional
Sub-Area 15[1]	22,812	30%	Modified
Sub-Area 16	21,410	67%	Modified
Sub-Area 17[1]	24,822	48%	Modified
Sub-Area 18	19,962	85%	Modified
Sub-Area 19[1]	5,677	35%	Modified
Sub-Area 20	9,924	79%	Modified
Sub-Area 21[1]	21,047	76%	Modified
Sub-Area 22	19,133	93%	Modified
Sub-Area 23	15,048	19%	Traditional
Sub-Area 23A[1]	10,072	27%	Modified
Sub-Area 24	11,037	37%	Modified

Sub-Area 24A[1]	15,091	13%	Traditional
Sub-Area 25[1]	16,547	7%	Traditional
Sub-Area 26[1]	11,664	25%	Traditional
Sub-Area 26A[1]	8,109	62%	Modified
Sub-Area 27[1]	12,520	81%	Modified
Sub-Area 27A	9,922	26%	Modified
Sub-Area 28[1]	11,010	75%	Modified
Sub-Area 29	6,174	34%	Modified
Sub-Area 30	20,905	50%	Modified
Sub-Area 31	22,861	15%	Traditional

Note: 1.Collects flows from upstream tributary sub-areas

2.3 Flow Metering Findings and Results

Table 2 lists the meter year, average daily flow (ADF), peak daily flow (PDF) and peak hourly flow (PHF) measured for each sub-area. Average daily flow (in gallons per day) is calculated by summing all metered flows and dividing by the duration (total days) of the metering period. Peak daily flow is the maximum daily flow over 24-hours measured throughout the metering period. Peak hourly flow is the maximum 1-hour flow rate measured. Peaking factor is calculated by dividing the peak hourly flow by the average daily flow for each sub-area. Where applicable, the flows listed in Table 2 represent the “net” flows within each subarea (with upstream tributary flows subtracted out). Note that sub-area 26 is shown to have a negative net flow after flows measured in upstream tributary sub-areas are subtracted out. While this is not the actual case, this can be mainly attributed to the fact that meter 26 was installed in the 72-inch diameter Fall Brook Interceptor, and metering such a large pipe can yield inaccurate results due to the geometry of the pipe and level of accuracy of the flow meters. In addition, unknown or varying levels of sediment and debris and slow or stagnant flows can further exacerbate inaccuracies in the meter data.

Table 2. Flow Metering Results – ADF, PDF, PHF

Meter Year	Sub-Area	Average Daily Flow (GPD)	Peak Daily Flow (GPD)	Peak Hourly Flow (GPD)	Peaking Factor
2018	Sub-Area 1	147,060	382,063	870,000	6
2018	Sub-Area 2	65,234	129,833	180,750	3
2018	Sub-Area 3	170,348	296,042	570,000	3
2018	Sub-Area 4	150,666	270,896	765,500	5
2018	Sub-Area 5	184,123	398,698	630,750	3
2018	Sub-Area 7	171,871	413,010	701,000	4
2018	Sub-Area 8*	125,390	484,365	1,104,750	9
2018	Sub-Area 9*	142,673	408,188	957,000	7
2018	Sub-Area 13	680,228	1,779,313	2,589,750	4
2018	Sub-Area 14	271,125	579,698	1,220,500	5
2018	Sub-Area 15*	89,215	358,104	2,902,875	33
2018	Sub-Area 16	425,703	1,472,542	4,129,000	10
2018	Sub-Area 17*	67,371	319,948	1,257,500	19
2018	Sub-Area 18	408,780	1,633,229	4,159,000	10
2018	Sub-Area 19*	72,388	872,031	2,812,750	39
2018	Sub-Area 20	247,097	2,416,948	7,569,000	31
2018	Sub-Area 21*	115,428	1,489,417	1,607,250	14
2018	Sub-Area 22	340,367	2,281,698	6,500,250	19
2018	Sub-Area 28*	105,904	401,594	847,750	8
2018	Sub-Area 29	112,546	865,542	2,859,000	25
2019	Sub-Area 6*	381,064	563,000	929,000	2
2019	Sub-Area 10	416,000	1,026,000	1,970,000	5
2019	Sub-Area 11	583,594	1,437,000	5,362,000	9
2019	Sub-Area 12*	478,901	1,253,000	2,608,000	5
2019	Sub-Area 23	266,608	1,070,000	3,018,000	11
2019	Sub-Area 23A*	506,788	865,000	1,622,000	3
2019	Sub-Area 24	207,455	576,000	1,855,000	9
2019	Sub-Area 24A*	85,268	585,000	1,115,000	13
2019	Sub-Area 25*	81,644	1,219,000	4,082,000	50

2019	Sub-Area 26*	-37,859	207,000	834,000	-
2019	Sub-Area 26A*	146,113	968,000	3,107,000	21
2019	Sub-Area 27*	782,969	2,658,000	7,810,000	10
2019	Sub-Area 27A	92,735	221,000	482,000	5
2019	Sub-Area 30	339,538	1,385,000	5,070,000	15
2019	Sub-Area 31	230,980	640,000	1,671,000	7

*Denotes net values for sub-areas with tributary sub-areas subtracted.

2.3.1 Groundwater Infiltration Analysis

Groundwater infiltration is defined as groundwater that enters or leaks into a sanitary sewer system through defective pipes, pipe joints, service connections, or manholes. The average groundwater infiltration rate is defined as 85% of the nighttime sanitary flow measured on dry days from 12:00am to 6:00am throughout the entire metering period. Only data for days that follow a minimum of 72-hours without a rainfall event are considered “dry days” to avoid inclusion of indirect inflow and rainfall induced infiltration (RII) in the infiltration estimate.

Groundwater levels were monitored throughout the metering period (as well as during “non-metering” months over two years) using the two groundwater monitoring wells installed. Groundwater levels for the 2-year period from April 2018 to May 2020 are shown on Figure 5. Groundwater depths during the metering periods were analyzed in relation to the average sewer pipe elevations in the area, as groundwater depths have a significant influence on the amount of infiltration entering a collection system.

Groundwater infiltration for each sub-area is normalized by calculating the gallons per day of infiltration per inch diameter mile of pipe (gpd/in-mi). The inch-diameter-mile of pipe, or inch-miles (in-mi), in a sub-area is calculated by summing the total miles of each pipe size, multiplied by the diameter in inches. As an example, if an area contained 1 mile of 10-inch diameter pipe, 1.5 miles of 12-inch diameter pipe, and 0.5 miles of 25-inch diameter pipe, the calculated inch-miles would be as follows:

(10-inch x 1 mile) + (12-inch x 1.5 miles) + (24-inch x 0.5 mile) = 40 in-mi

Groundwater infiltration rates for each sub-area were calculated by dividing the sub-area’s total groundwater infiltration by the number of inch-miles of sanitary sewer within the sub-area. The total groundwater infiltration rates for each sub-area measured during the metering periods are shown in Table 3.

Table 3. Groundwater Infiltration Results

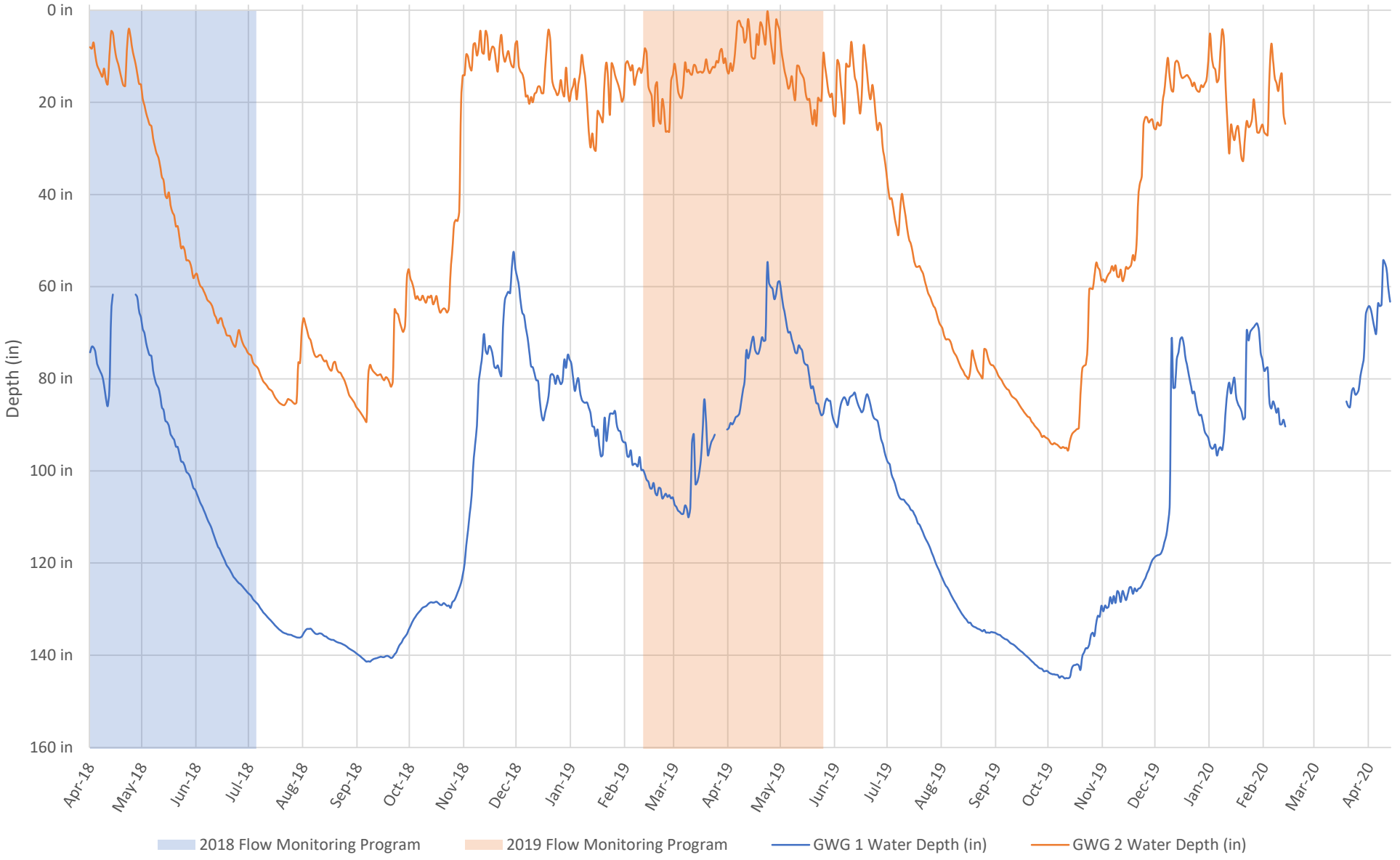
Sub-Area	Average Daily Flow (gpd)	Net Average Infiltration (gpd)	Infiltration Per Total LF (GPD/LF)	Infiltration (gpdim)
Sub-Area 01	147,060	78,910	3.9	2,515
Sub-Area 02	65,234	36,879	3.1	1,884
Sub-Area 03	170,348	91,912	3.2	1,968
Sub-Area 04	150,666	83,726	9.4	6,055
Sub-Area 05	184,123	97,130	4.4	2,444
Sub-Area 6 [1, 2]	381,064	234,104	15.0	7,231
Sub-Area 07	171,871	97,191	4.1	2,505
Sub-Area 8 [1, 2]	125,390	69,114	2.7	1,355
Sub-Area 9 [1, 2]	142,673	75,325	6.9	2,427
Sub-Area 10	416,000	271,664	20.0	5,784
Sub-Area 11	583,594	381,685	18.0	8,897
Sub-Area 12 [1]	478,901	284,260	14.0	4,457
Sub-Area 13	680,228	374,236	7.7	2,354
Sub-Area 14	271,125	152,698	6.5	3,489
Sub-Area 15 [1]	89,215	66,479	2.9	1,411
Sub-Area 16	425,703	279,739	13.1	5,375
Sub-Area 17 [1]	67,371	70,823	2.9	1,310
Sub-Area 18	408,780	209,635	10.5	4,487
Sub-Area 19 [1]	72,388	43,517	7.7	2,469
Sub-Area 20	247,097	118,081	11.9	4,235
Sub-Area 21 [1]	115,428	N/A	N/A	N/A
Sub-Area 22	340,367	128,450	6.7	2,367
Sub-Area 23	266,608	160,190	11.0	4,790
Sub-Area 23A [1]	506,788	331,600	33.0	8,728
Sub-Area 24	207,455	140,498	13.0	6,038
Sub-Area 24A [1]	85,268	45,463	3.0	1,443
Sub-Area 25 [1]	81,644	146,106	9.0	3,513
Sub-Area 26 [1]	-37,859	196,795	17.0	4,230
Sub-Area 26A [1]	146,113	178,823	22.0	3,039

Sub-Area 27 [1]	782,969	551,744	44.0	10,175
Sub-Area 27A	92,735	69,635	7.0	3,460
Sub-Area 28 [1]	105,904	50,821	9.6	1,527
Sub-Area 29	112,546	50,357	8.2	4,445
Sub-Area 30	339,538	176,534	8.0	3,749
Sub-Area 31	230,980	148,921	7.0	3,103

Note: 1. Collects flows from tributary sub-areas

It should be noted that, even though metering results for sub-area 26 yielded a negative net average daily flow value (as described above in Section 2.3, infiltration rates could still be calculated based on the flow data analyzed for dry weather days.

Figure 5: Groundwater Depth Below Ground Surface
April 2018 – May 2020



2.3.2 Rainfall Derived Infiltration and Inflow (RDII)

Four rainfall events for each metering period were analyzed to calculate rainfall derived infiltration and inflow. Precipitation data was used from the Riverside Road Pump Station Rain Gauge (2018 and 2019), Riverton Fire Station Rain Gauge (2018) and Allen Ave Fire Station Rain Gauge (2019). A wet weather hydrograph for each storm event was compared to a dry weather period on the same day of the week as each storm event. The dry weather flow is subtracted from the wet weather flow resulting in direct, delayed and total inflow volumes. The dry weather flow is calculated as an average of all dry days during the metering period for each day during the week. For example, all dry "Mondays" in the metering period are averaged together to determine the dry weather flow for each individual day. Hydrographs for each sub-area and rain event are included in the 2018 and 2019 metering reports included in Appendix A.

To determine high RDII sub-areas, or commonly known as "high inflow" subareas, a single storm event in the metering period was analyzed. The 2018 storm even occurred on April 25, 2018. The rain event had a total rainfall of 2.59", a peak intensity of 0.77 in/hr and a duration of 1215 minutes (20 hours and 15 minutes). The direct, delayed and total inflow volumes calculated for each sub-area during the April 25, 2018 storm event are shown in Table 4 below.

Table 4 Inflow Analysis - April 25, 2018 Storm Event

Subarea	Direct Inflow (Gal)	Delayed Inflow (Gal)	Total Inflow (Gal)
Sub-Area 13	930,700	857,700	1,788,400
Sub-Area 22	1,174,200	812,100	1,986,300
Sub-Area 18	989,800	734,400	1,724,200
Sub-Area 20	1,162,800	393,600	1,556,400
Sub-Area 16	457,200	348,800	806,000
Sub-Area 29	434,300	246,400	680,700
Sub-Area 19[1]	473,000	240,200	713,200
Sub-Area 14	197,500	220,300	417,800
Sub-Area 9[1]	227,900	211,900	439,800
Sub-Area 7	132,800	170,100	302,900
Sub-Area 8[1]	134,500	162,100	296,600
Sub-Area 15[1]	385,900	155,800	541,700
Sub-Area 21[1]	0	129,700	129,700
Sub-Area 1	141,300	121,100	262,400
Sub-Area 5	97,800	119,700	217,500
Sub-Area 3	90,600	91,300	181,900
Sub-Area 4	80,500	61,000	141,500

Sub-Area 2	37,500	46,000	83,500
Sub-Area 17[1]	283,800	23,900	307,700
Sub-Area 28	0	0	0

Notes: 1. Collects flows from tributary sub-areas

The 2019 storm event analyzed for high inflow occurred on April 26, 2019. The rain event had a total rainfall of 2.25", a peak intensity of 0.58 in/hr and a duration of 1350 minutes (22.50 hours). The direct, delayed and total inflow volumes calculated for each sub-area during the April 26, 2019 storm event are shown in Table 5 below.

Table 5. Inflow Analysis – April 26, 2019 Storm Event

Subarea	Direct Inflow (Gal)	Delayed Inflow (Gal)	Total Inflow (Gal)
Sub-Area 30	1,022,197	1,075,307	2,097,504
Sub-Area 10	330,280	867,732	1,198,012
Sub-Area 12[1]	642,173	789,315	1,431,488
Sub-Area 24	238,793	717,174	955,968
Sub-Area 23A[1]	528,870	621,988	1,150,858
Sub-Area 27[1]	593,494	581,971	1,175,465
Sub-Area 31	254,596	411,495	666,091
Sub-Area 11	1,002,760	364,002	1,366,762
Sub-Area 26A[1]	599,368	343,528	942,896
Sub-Area 23	412,772	298,809	711,581
Sub-Area 24A[1]	254,546	209,444	463,990
Sub-Area 25[1]	123,194	205,935	329,130
Sub-Area 27A	86,854	67,448	154,302
Sub-Area 26[1]	27,059	12,256	39,316
Sub-Area 6[1]	590,580	-	590,580

Notes: 1. Collects flows from tributary sub-areas

2.3.3 Sub-area Prioritization – High Infiltration and Inflow

According to industry standards, infiltration within a sanitary sewer system is considered excessive if a defined area exceeds a dry weather infiltration rate of 4,000 gallons per day per inch diameter mile (gpd/idm). High inflow sub-areas targeted for further inflow investigations were selected if a mostly

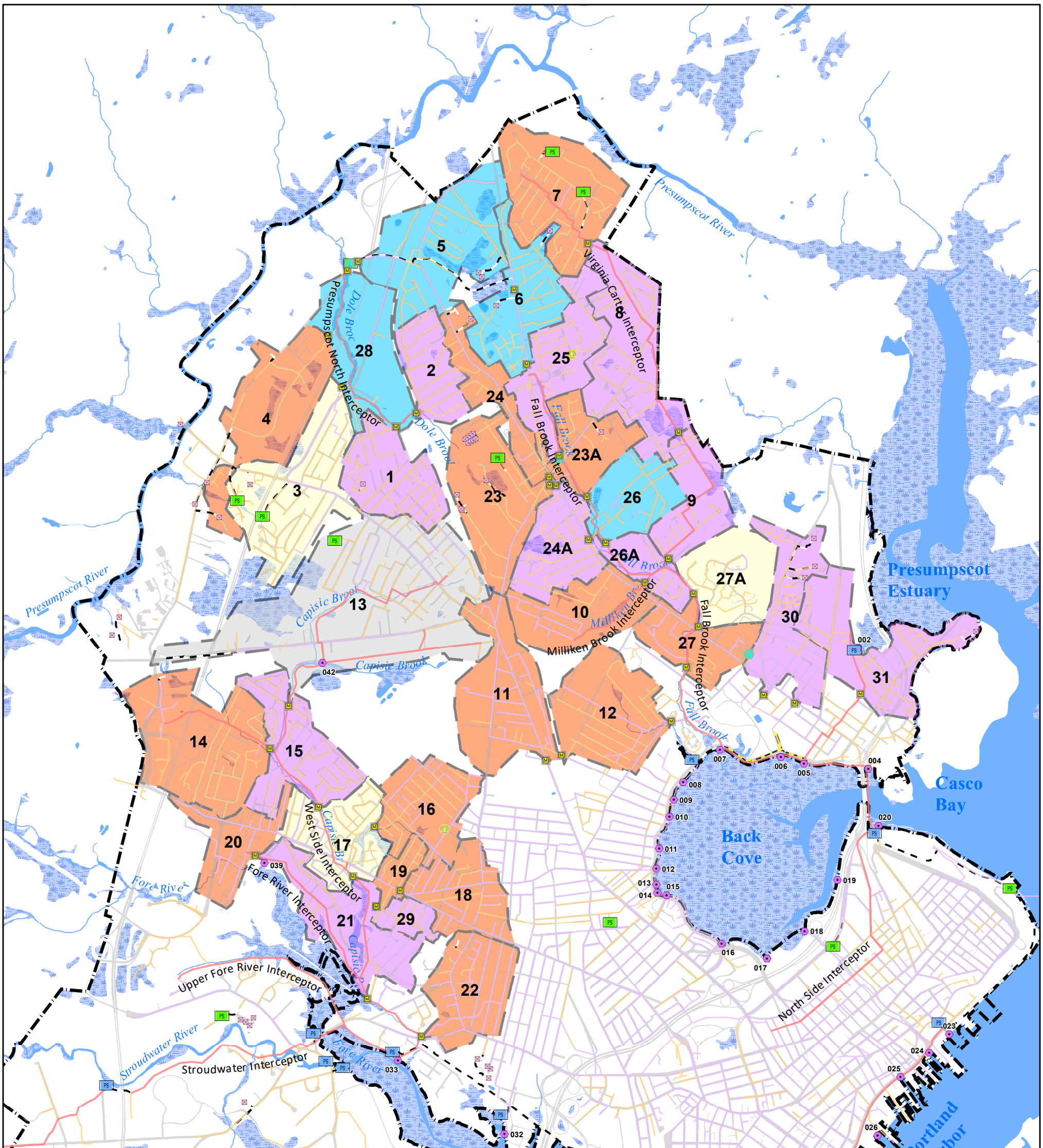
combined sub-area showed excessive amounts of delayed inflow or a mostly separated area showed excessive amounts of direct inflow. Table 6 and Figure 5 summarize the high infiltration and high inflow sub-areas as determined by the 2018 and 2019 flow metering results and the SSES investigation recommendations.

Table 6. Flow Metering Findings Summary

Sub-Area	Year	Approach	High Infiltration Sub-area	High Inflow Sub-area	Follow on investigations recommended
Sub-Area 01	2018	Traditional		X	Smoke Testing
Sub-Area 02	2018	Traditional		X	Smoke Testing
Sub-Area 03	2018	Modified			*No investigations recommended*
Sub-Area 04	2018	Traditional	X	X	Flow Isolation, CCTV, Manhole Inspections, Smoke Testing
Sub-Area 05	2018	Traditional	X		Flow Isolation, CCTV, Manhole Inspections
Sub-Area 6 [1]	2019	Traditional	X		Flow Isolation, Manhole Inspections
Sub-Area 7 [2]	2018	Traditional	X	X	Flow Isolation, CCTV, Manhole Inspections, Smoke Testing
Sub-Area 8 [1,2]	2018	Modified		X	Flow Isolation, CCTV, Manhole Inspections
Sub-Area 9 [1,2]	2018	Modified		X	CCTV, Manhole Inspections
Sub-Area 10 [2]	2019	Modified	X	X	Manhole Inspections
Sub-Area 11	2019	Modified	X	X	Flow Isolation, Manhole Inspections
Sub-Area 12 [1]	2019	Modified	X	X	Flow Isolation, Manhole Inspections
Sub-Area 13 [2]	2018	Modified	X	X	*Investigation work completed under the CSO-042 study*
Sub-Area 14	2018	Traditional	X	X	Flow Isolation, CCTV, Manhole Inspections
Sub-Area 15 [1,2]	2018	Modified		X	Flow Isolation, CCTV, Manhole Inspections
Sub-Area 16	2018	Modified	X	X	Flow Isolation, CCTV, Manhole Inspections
Sub-Area 17 [1,2]	2018	Modified			CCTV Manhole Inspections
Sub-Area 18	2018	Modified	X	X	Flow Isolation, CCTV, Manhole Inspections
Sub-Area 19 [1]	2018	Modified	X	X	CCTV

Sub-Area 20	2018	Modified	X	X	CCTV
Sub-Area 21 [1,2]	2018	Modified		X	Flow Isolation, CCTV, Manhole Inspections
Sub-Area 22	2018	Modified	X	X	Flow Isolation, CCTV, Manhole Inspections
Sub-Area 23	2019	Traditional	X	X	Flow Isolation, Manhole Inspections
Sub-Area 23A [1,2]	2019	Modified	X	X	Flow Isolation, Manhole Inspections
Sub-Area 24	2019	Modified	X	X	Flow Isolation, Manhole Inspections
Sub-Area 24A [1]	2019	Traditional		X	Flow Isolation, Smoke Testing
Sub-Area 25 [1,2]	2019	Traditional		X	Smoke Testing
Sub-Area 26 [1,2]	2019	Traditional	X		Flow Isolation
Sub-Area 26A [1,2,3]	2019	Modified		X	*No investigations recommended*
Sub-Area 27 [1]	2019	Modified	X	X	Flow Isolation, Manhole Inspections
Sub-Area 27A	2019	Modified			*No investigations recommended*
Sub-Area 28 [1,2]	2018	Modified	X		Flow Isolation, CCTV, Manhole Inspections
Sub-Area 29	2018	Modified		X	CCTV, Manhole Inspections
Sub-Area 30	2019	Modified		X	Flow Isolation, Manhole Inspections
Sub-Area 31	2019	Traditional		X	Smoke Testing

Note: 1. Collects flows from tributary sub-areas; 2. One or more sewer interceptors contained within the sub-area; 3. Due to the prevalence of combined sewers in sub-area 26A, inflow investigations are not recommended because they would not provide valid results.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Presumpscot North Interceptor
Virginia Cartage Interceptor
Fall Brook
Fall Brook Interceptor
Milliken Brook
Milliken Brook Interceptor
Capisic Brook
West Side Interceptor
Fore River
Fore River Interceptor
Upper Fore River Interceptor
Stroudwater River
Stroudwater Interceptor
Long Creek
Back Cove
Casco Bay
Presumpscot Estuary
Portland Harbor
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ASSESSED UNDER CSO 042 PROGRAM
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GROUNDWATER GAUGE
RAIN GAUGE
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
COMBINED SEWER OVERFLOW
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY
FIGURE 6
INFLOW AND INFILTRATION METER PROGRAM FINDINGS
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CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan
ARCADIS Design & Consultancy for natural and built assets
June 2020

3 SSES INVESTIGATIONS AND FINDINGS

Phase 2 of the City-wide I/I Program – Identification of Major Infiltration and Inflow Sources, included a Sewer System Evaluation Survey (SSES) conducted to identify specific sources of infiltration and inflow within sub-areas identified during Phase 1 as containing excessive infiltration and/or inflow. Investigations conducted as part of the SSES were conducted in conjunction with, or following, Phase 1 flow monitoring programs.

3.1.1 Flow Isolation

Flow isolation was conducted by Flow Assessment Services in sub-areas 4, 5, 7, 8, 14, 15, 16, 18, 21, 22, and 18 in December 2018 and sub-areas 6, 11, 12, 23, 23A, 24, 24A, 26, 27, and 30 in April 2019.

Flow isolation consisted of isolating stretches of sanitary sewers within high I/I areas and measuring flow rates during periods of high groundwater, dry weather, and minimum wastewater flow. Flow isolation was conducted between the hours of 12:00 am and 5:00 am, during low water and sewer use periods and during dry weather conditions. As such, in the absence of expected over-night flows, any measured flow indicates the likely presence of infiltration.

3.1.1.1 Flow Isolation Results

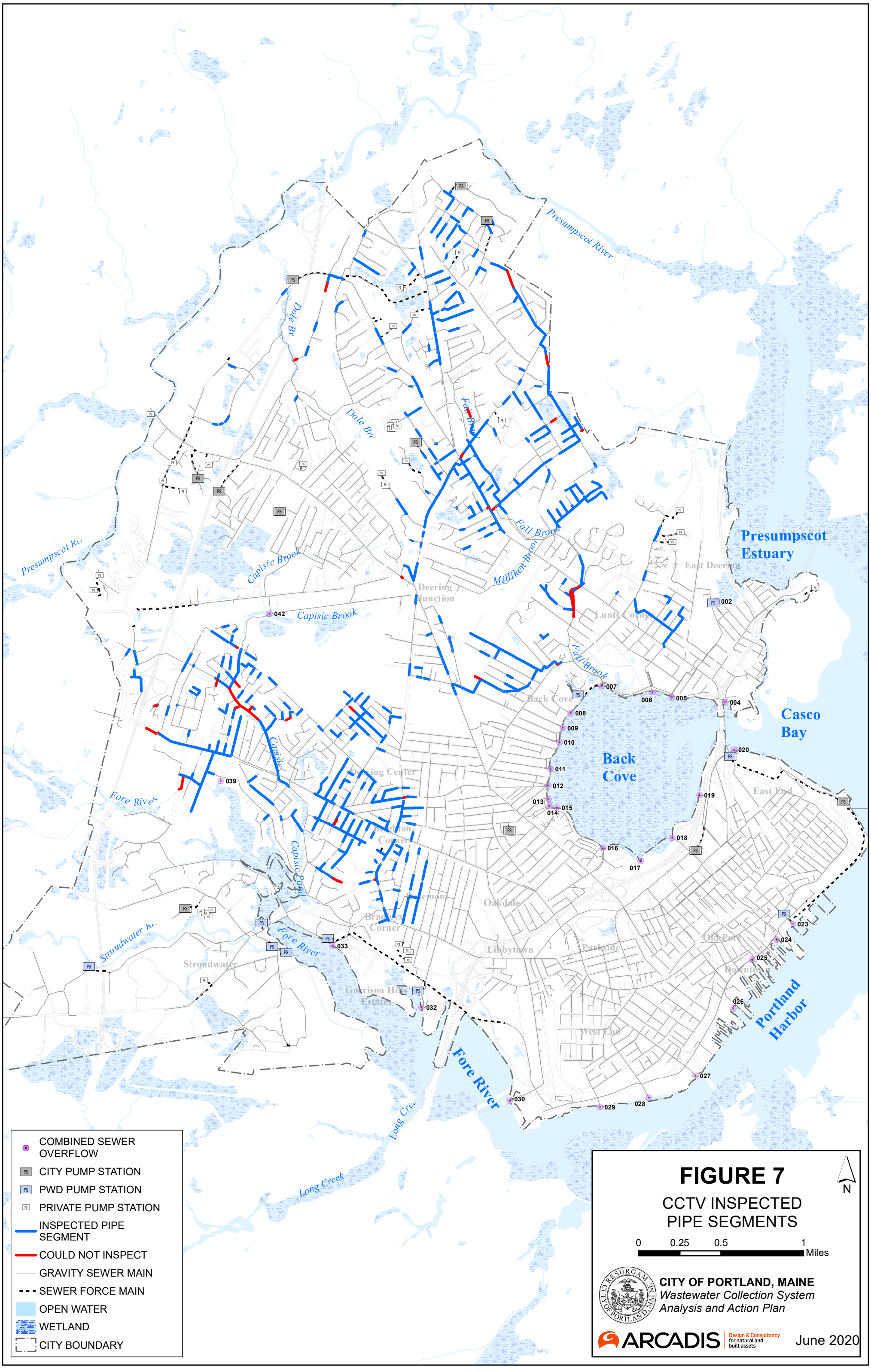
Approximately 315,270 LF of pipe was investigated between 2018 and 2019. Approximately 1.7 MGD of nightime flow was measured during flow isolation. In order to accurately compare infiltration rates for various size pipes, flows are normalized by converting gallons of infiltration to gallons per day per inch-diameter mile (gpd/in-mi). Infiltration rates greater than 4,000 gpd/in-mi are considered excessive by industry standards, therefore all stretches of pipe with measured infiltration rates greater than 4,000 gpd/in-mi were recommended for closed circuit television (CCTV) inspection. In addition, certain stretches of pipe were selected for CCTV based on pipe age, material, proximity to bodies of water, or known areas of concern identified by the City. Table 7 shows a breakdown of flow isolation results in each sub-area. Detailed flow isolation results are included in Appendix B.

Table 7. Flow Isolation Results

Year	Sub-Area	# LF Selected for Flow Isolation	Infiltration (gpd)	% of segments > 4,000 gpd/im
2018	Sub-Area 04	8,899	13,104	10%
2018	Sub-Area 05	21,962	33,984	6%
2018	Sub-Area 07	23,849	81,720	37%
2018	Sub-Area 08	19,179	74,952	15%
2018	Sub-Area 14	23,488	75,240	15%
2018	Sub-Area 15	19,404	130,320	20%
2018	Sub-Area 16	21,457	291,384	13%
2018	Sub-Area 18	19,962	139,536	11%
2018	Sub-Area 21	12,431	81,576	34%
2018	Sub-Area 22	19,133	109,368	29%
2018	Sub-Area 28	5,164	14,976	31%
2019	Sub-Area 06	15,813	123,768	18%
2019	Sub-Area 11	20,485	123,264	30%
2019	Sub-Area 12	13,814	56,448	27%
2019	Sub-Area 23	12,929	100,944	17%
2019	Sub-Area 23A	6,674	57,528	20%
2019	Sub-Area 24	10,227	36,576	22%
2019	Sub-Area 24A	12,426	43,344	16%
2019	Sub-Area 26	7,905	17,784	12%
2019	Sub-Area 27	9,292	17,136	20%
2019	Sub-Area 30	10,775	36,504	12%
	Totals	**315,268**	**1,659,456**	**20%**

3.1.2 CCTV Inspection

A two-year CCTV inspection program was performed by Ted Berry Company under subcontract to Arcadis. The work was performed in three phases to complete inspections during high groundwater periods, which best facilitates the identification of infiltration through pipe defects. A City-wide map showing all pipes that were inspected by CCTV is shown on Figure 7.


Presumpscot River
Dole Brook
Fall Brook
Capisic Brook
Presumpscot R.
Deering Junction
Lunts Corner
East Deering
Presumpscot Estuary
Back Cove
Casco Bay
Deering Center
Fore River
Brighton Corner
Capisic Pond
Stroudwater R.
Stroudwater
Oakdale
Bradleys Corner
McLemons
Libbytown
Parkside
Old Port
Downtown
East End
Garrison Hills Estates
West End
Portland Harbor
Long Creek
042
039
033
032
030
029
028
027
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025
024
023
020
019
018
017
016
015
014
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012
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007
006
005
004
002
PS
COMBINED SEWER OVERFLOW
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
INSPECTED PIPE SEGMENT
COULD NOT INSPECT
GRAVITY SEWER MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY
FIGURE 7
CCTV INSPECTED PIPE SEGMENTS
0 0.25 0.5 1 Miles
N
CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan
ARCADIS Design & Consultancy for natural and built assets
June 2020

A total of 147,487 ft (27.9 mi) of pipe were selected for CCTV inspection in sub-areas 4, 5, 6, 7, 8, 9, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 23A, 24, 24A, 26, 27, 28, 29 and 30. The pipe segments ranged in diameter from 6-inches to 84-inches. Approximately 136,800 LF of pipe were successfully inspected, and 10,688 LF of pipe could not be inspected due to access issues. Of the pipe segments that were not inspected, 4,773 LF of pipe were not inspected as a result of inspections abandoned due to obstructions or pipe defects. The remaining 5,914 LF were not inspected due to access. The pipe segments which could not be inspected are included in Appendix D.

CCTV Inspection was conducted to locate and identify defects and to estimate infiltration rates. All sewers were attempted to be cleaned prior to removing debris, grease, or other materials from the pipe. Ted Berry Company recorded deficiencies in pipe segments and service connections, including structural defects, active infiltration, evidence of infiltration (e.g., mineral deposits), evidence of operational problems (e.g., indication of surcharging), and actual blockages or potential for blockages (e.g., root intrusions, debris, or grease). Where infiltration was observed, flow was estimated and recorded. To ensure continuity with the City's ongoing CCTV program, NASSCO Pipeline Assessment and Certification Program (PACP) guidelines were followed. PACP provides a universal CCTV inspection standard to guarantee accurate and consistent documentation of sanitary sewer pipe conditions.

Arcadis reviewed all CCTV videos and performed a condition assessment for each pipe segment. In accordance with NASSCO's PACP standards, each defect rating was determined from the severity of the defect. Pipe defect ratings were assigned in accordance with the following criteria:

1. Excellent: minor defects; failure unlikely in the foreseeable future
2. Good: defects that have not begun to deteriorate; pipe unlikely to fail for at least 20 years
3. Fair: moderate defects that will continue to deteriorate; pipe may fail in 10 to 20 years
4. Poor: severe defects that will become Grade 5 defects in the foreseeable future; pipe will probably fail in 5 to 10 years
5. Immediate Attention: defects requiring immediate attention; pipe has failed or will likely fail within the next 5 years.

NASSCO's PACP condition ratings distinguish structural and maintenance defects separately. Structural defects impact the structural integrity of the sanitary pipe, which includes fractures, cracks, and holes. Maintenance defects pertain to defects related to the operational condition of the sewer, which includes sags, grease deposits, roots and infiltration. These condition ratings, the QSR (Quick Structural Rating), QMR (Quick Maintenance Rating), and QOR (Quick Overall Rating) were established in the field during CCTV inspections and are included in the CCTV results table in Appendix C.

3.1.2.1 CCTV Results

Each televised pipe segment video was reviewed, and a condition assessment was made for each segment. A detailed table listing each pipe segment, including pipe size, material, length, number of service connections, observed defects and infiltration rates, and the recommended rehabilitation is located in Appendix C.

Infiltration rates were calculated by applying a potential infiltration rate to each observed defect in the pipe segment. Infiltration rates were applied to roots, weepers, drippers, runners, gushers, and all structural defects. Table 8 lists the estimated infiltration rates.

Table 8. Pipeline Infiltration Rates

Infiltration Type	Estimated Infiltration Rate (gpm)
Roots/Minerals/Stains	0.1
Weeper	0.5
Dripper	1
Runner	2.5
Gusher	5
Structural Defects	0.1

The findings of the two-year CCTV inspection program are summarized in Table 9 below.

Table 9. CCTV Findings

Sub-area	Total Inspected Length (LF)	Unable to Inspect (LF)	Estimated Infiltration (gpd)	% of Total Infiltration	LF of Pipe with a NASSCO Rating of 3, 4 or 5	Percent of LF in Sub-Area with a NASSCO Rating of 3, 4 or 5
Sub-area 4	630	0	0	0%	0	0%
Sub-area 5	2,759	254	288	0%	0	0%
Sub-area 6	7,473	0	43,632	2%	2,572	17%
Sub-area 7	5,305	0	58,176	3%	776	3%
Sub-area 8	8,422	1,653	27,360	1%	2,706	11%
Sub-area 9	8,799	46	56,160	3%	914	8%
Sub-area 11	4,909	21	59,040	3%	2,852	14%
Sub-area 12	7,785	203	54,144	3%	2,120	11%
Sub-area 14	4,046	269	36,720	2%	746	3%
Sub-area 15	9,425	2,442	172,656	9%	5,427	24%
Sub-area 16	7,337	344	239,184	13%	4,139	19%
Sub-area 17	1,906	0	6,768	0%	0	0%
Sub-area 18	8,200	305	158,976	9%	3,993	20%
Sub-area 19	4,475	0	139,824	8%	2,422	43%
Sub-area 20	7,846	845	212,976	12%	4,732	48%
Sub-area 21	4,240	509	41,472	2%	1,693	8%

Sub-area 22	8,918	303	169,920	9%	4,702	25%
Sub-area 23	5,581	92	43,632	2%	2,584	17%
Sub-area 23A	3,819	395	25,056	1%	1,180	12%
Sub-area 24	2,246	0	17,424	1%	711	6%
Sub-area 24A	5,155	215	24,912	1%	824	5%
Sub-area 26	4,459	208	48,240	3%	1,942	17%
Sub-area 27	2,910	1,873	82,944	4%	1,264	10%
Sub-area 28	866	122	12,528	1%	262	2%
Sub-area 29	4,794	265	76,176	4%	1,534	25%
Sub-area 30	4,565	325	39,600	2%	2,079	10%
Totals	**136,868**	**10,688**	**1,847,808**	**100%**	**52,173**	**12%**

Pipe segments with observed infiltration totaled in 82,052 LF (16.1 mi) of pipe. Of that quantity, 36,732 LF (7 mi) of pipe contained defects with active infiltration entering the pipe through defects, joints, and service connections. Signs of inactive infiltration (staining, roots, and mineral deposits) were observed in the remaining 45,319 ft (8.5 mi) of pipes with infiltration.

Structural defects were observed in approximately 62,000 LF (11.7 mi) of inspected pipe. Infiltration was also observed in 49,942 LF (9.5 mi) of pipe with structural defects and is included in the pipe lengths identified with infiltration in Table 9. The remaining 12,057 LF (2.3 mi) of pipe with structural defects observed was free of infiltration.

Pipe segments that were unable to be inspected are included in a summary table in Appendix D. Additionally, a summary table identifying all operation and maintenance related issues (grease, debris, obstructions) is included in Appendix D.

Rehabilitation recommendations are included in Section 4 of this report.

3.1.3 Manhole Inspections

Manhole inspections were conducted by Flow Assessment Services, a subconsultant to Arcadis, in 23 high I/I sub-areas of the City (as designated by the flow monitoring results). A total of 938 manhole inspections were attempted in sub-areas 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 21, 22, 23, 23A, 24, 27, 28, 29 and 30, with 838 successfully completed inspections. Sixty-five (65) manholes could not be located and 33 manholes were not accessible or otherwise could not be inspected. A list of manholes that could not be inspected or located is included in Appendix E. Appendix E also indicates why the manholes could not be accessed or inspected.

Each inspection yielded the following information, which was collected by field crews:

- Identification of the manhole by its Facility ID and location
- Manhole cover: type, number and size of holes, and drainage area, and ponding potential
- Condition of manhole grade adjustments and manhole frame
- Conditions of walls, floor, corbel, steps, and invert, noting any defects
- Evidence of surcharge
- Structural assessment
- Material, flow direction, diameter of influent and effluent pipes,
- Invert depths from manhole rim
- All visible infiltration/inflow sources, estimated in gallons per minute (gpm)
- Photographs

3.1.3.1 Manhole Inspection Results

A comprehensive table of manhole inspection findings is included in Appendix E. Table 10 summarizes the manhole inspection findings and shows the following general information:

- Sixty-one (61) manholes (7%) had active infiltration during the time of inspection and 75 manholes (9%) had inactive infiltration identified by the presence of staining, mineral deposits or roots.
- An estimated 75,686 gpd rate of infiltration was observed during inspections.
- Three hundred and thirty-five (335) manholes (39%) had covers with more than 5 holes.
- Fifty-six (56) manhole frame and covers were found to be greater than ½" below grade.

Table 10. Manhole Findings

Sub-area	Number of Manholes				Number of Manholes with a Condition Grade of 3, 4, or 5					Total Infiltration Identified (gpd)
	Inspected	CNL/CNI	Cover below grade	>5 holes in the cover	Corbel	Walls	Floor	Invert	Frame	
Sub-area 4	39	8	2	1	8	3	2		1	734
Sub-area 5	6			2		2	1			8,640
Sub-area 6	85	2	6	28		1	1		1	0
Sub-area 7	4			2	1					2,880
Sub-area 8	23	3		18	2	2				288
Sub-area 9	21		4	1	1	7	1	1		5,040
Sub-area 10	57	9	4	21	9	5	4	6	3	5,760
Sub-area 11	92	10	5	49	10	6	6	5	6	21,888
Sub-area 12	3			2						0
Sub-area 14	7	1	1	4		2				0
Sub-area 15	23			16	1	1	2	1		1,584
Sub-area 16	98	3	9	57	11	5	2	3	4	3,456
Sub-area 17	21	7	2	5	2		2		1	0
Sub-area 18	4			2						0
Sub-area 21	1			1						720
Sub-area 22	100	16	10	53	6		3	1	4	72
Sub-area 23	82	9	5	19	6	1	3	2	3	7,776
Sub-area 23A	42	6	2	8	1		1	1		2,880
Sub-area 24	2									0
Sub-area 27	47	16	4	6	3			4		0
Sub-area 28	46	7	2	27	3	9	3	1		12,528
Sub-area 29	32	3		13	5				2	1,440
Sub-area 30	3									0
	838	**100**	**56**	**335**	**69**	**44**	**31**	**25**	**25**	**75,686**

3.1.4 Smoke Testing Results

Smoke testing was performed in 7 sub-areas and included 119,244 LF of pipe that was almost entirely separated sanitary sewer pipe rather than combined. During smoke testing, smoke was observed coming from 50 sources. Of the 50 sources detected, 32 sources were identified as direct connections to the sewer, while 18 sources of smoke were indirect connections. The 32 direct connections included 7 open or defective sewer cleanouts; 4 building roof leaders; 4 yard drains; 5 manhole covers; 1 catch basin; 2 defective raised manhole walls; and 9 unknown structures below ground. Included in the 18 indirect sources are 15 catch basins and 3 defective cleanout caps. In addition to the direct and indirect connections, 92 suspect sources were identified during smoke testing. Detailed smoke testing reports and all direct, indirect, and suspect sources are included as Appendix F.

Table 11. Smoke Testing Findings

Subarea	Direct Sources						Indirect Sources	
	Catch basin	Defective Cleanout	Manhole	Roof Drain	Yard Drain	Ground	Catch basin	Defective Cleanout
Sub-area 1			3		1			3
Sub-area 2			1					
Sub-area 4		3	3					
Sub-area 7		2		1	2	1	1	
Sub-area 24A						3	4	
Sub-area 25	1			2		1	4	
Sub-area 31		2		1	1	4	6	
Total	**1**	**7**	**7**	**4**	**4**	**9**	**15**	**3**

3.1.5 Building Inspections

A total of 47 buildings were identified for inspection to determine if the plumbing of each building connected stormwater pipes to the sanitary sewer services leaving each building. Visible illicit stormwater connections were identified in 6 of the buildings (shaded in Table 12 below) and 16 buildings were identified as suspect for having stormwater features connecting to sanitary sewer services. Follow-on recommendations for those 16 buildings are included in Section 4.3.1 of this report. Twenty-five (25) buildings inspected are unlikely to have any stormwater connections to the sanitary sewer.

A table of building inspection results and detailed inspection reports are included as Appendix G. A summary of findings is shown in Table 12 below.

Table 12. Building Inspection Results

Address	Building Inspection Details
1 Davis Farm Rd. Building 1	Six garage drains identified - suspect connection to sewer service
1 Davis Farm Rd. Building 2	Roof leaders plumbed into foundation floor, suspect connection to sewer service
1041 Brighton Ave	Cannot locate roof drainage discharge point, suspect connection to sewer service
110 Free St	Sump pumps and roof leaders plumbed into foundation floor, suspect connection to sewer service
1100 Brighton Ave	Roof leaders plumbed into foundation floor, suspect connection to sewer service
1125 Brighton Ave	No confirmed or suspect connections detected
1125 R Brighton Ave	No confirmed or suspect connections detected
1140 Brighton Ave	No confirmed or suspect connections detected
1145 Brighton Ave	Sump pump discharges into basement drain, suspect connection to sewer service
125 Presumpscot St	Sump pumps and roof leaders plumbed into foundation floor, suspect connection to sewer service
135 Walton St	Visually confirmed sump pumps and roof drainage connect to sewer service
138 Auburn St	No confirmed or suspect connections detected
150 Read St	No confirmed or suspect connections detected
155 Riverside St	No confirmed or suspect connections detected
155 Riverside St	No confirmed or suspect connections detected
162 Canco Rd	Visually confirmed roof drainage connected to sewer service
165 Read St	No confirmed or suspect connections detected
171 Auburn St	Visually confirmed sump pump connected to sewer service
175 Auburn St	Sump pump connected to unknown cleanout, suspect connection to sewer service
182-184 Read St	Roof leaders plumbed into foundation floor, suspect connection to sewer service
197 Presumpscot St	No confirmed or suspect connections detected
20-36 Danforth St	Roof leaders plumbed into foundation floor, suspect connection to sewer service
217 Read St	No confirmed or suspect connections detected
23 Orono Rd	No confirmed or suspect connections detected
235 Presumpscot St	No confirmed or suspect connections detected
236 Presumpscot St	No confirmed or suspect connections detected
250/256 Read St	Visually confirmed roof drainage connected to sewer service
273 Presumpscot St	No confirmed or suspect connections detected
275 Presumpscot St	No confirmed or suspect connections detected
290 Presumpscot St	No confirmed or suspect connections detected

299 Presumpscot St	Sump pumps are suspect connection to sewer service
305 Commercial St	Visually confirmed storm drainage connected to sanitary ejector pumps
321 Commercial St	Flat roof with unknown drainage discharge, suspect connection to sewer service
40 Quarry Rd	No confirmed or suspect connections detected
40 Spring St	Roof leaders plumbed into foundation floor, suspect connection to sewer service
40C Quarry Rd	No confirmed or suspect connections detected
45 Spring St	No confirmed or suspect connections detected
511 Riverside Industrial Park	Roof leaders plumbed into foundation floor, suspect connection to sewer service
56 Milliken St	Roof leaders plumbed into foundation floor, suspect connection to sewer service
59 Pleasant St	Visually confirmed roof leaders connect to sewer service
7 Rand St	Roof leaders plumbed into foundation floor, suspect connection to sewer service
70 Quarry Rd	No confirmed or suspect connections detected
81 Riverside St	No confirmed or suspect connections detected
82 Free St	Sump pump discharge unknown, suspect connection to sewer service
88 Spring St	Roof leaders plumbed into foundation floor, suspect connection to sewer service
90 Quarry Rd	No confirmed or suspect connections detected
91 Auburn St	Sump pump discharge unknown, suspect connection to sewer service

4 RECOMMENDATIONS FOR SEWER SYSTEM REHABILITATION AND RENEWAL FOR I/I REDUCTION

4.1 Pipeline and Manhole Rehabilitation

Pipeline and manhole rehabilitation recommendations were grouped into three phases; Phase 1 Sanitary Sewer Rehabilitation, Phase 2 Sanitary Sewer Rehabilitation and Phase 3 Sanitary Sewer Rehabilitation. These three phases, described in detail below, were developed based on the following criteria:

- ***NASSCO rating/Quantity and severity of defects and sources of infiltration.*** Sub-areas that had an overall high percentage of 3, 4, or 5 NASSCO ratings were selected for Phases 1 or 2.
- ***Overall infiltration rate***. Sub-areas that had the greatest overall infiltration rates were selected for Phases 1 or 2.
- ***Geographic location***. Removing infiltration and inflow by constructing sewer rehabilitation projects which address all needs within an entire sub-area is more efficient and cost-effective than implementing piecemeal sewer rehabilitation spread throughout a number of separated. Once a pipe or manhole is rehabilitated, groundwater that was previously infiltrating into the pipe or manhole can migrate upstream or downstream to another pipeline or manhole with a defect. This effect can be minimized by completing all necessary rehabilitation throughout a subarea and in contiguous subareas, to a reasonable and economically affordable extent.
- ***Known Problem Areas***. Sub-areas which have historically experienced flooding, capacity issues, or other regular maintenance needs were considered and prioritized when grouping sub-areas into individual phases.

Unit costs for pipeline and manhole rehabilitation are shown in Table 13 below. Unit costs do not include planning, permitting, engineering and contingencies, however these costs are included in the overall cost estimates per Phase in the sections that follow.

Sewer rehabilitation recommendations in Section 4 were limited to pipe sizes up to 60-inch diameter. The largest sized interceptors (i.e., larger than 60-inch diameter) were included in recommendations for an interceptor investigations, maintenance, and renewal program. A number of the unit prices listed in Table 13 are the unit prices in the City's contracts with the Ted Berry Company as of May 2020.

Table 13. Pipeline and Manhole Rehabilitation Unit Costs

Pipeline Rehabilitation	Unit	Cost
Light Cleaning of Sewers		
6"-12"	LF	$ 1.25
15"-42"	LF	$ 1.75
48”-60”	LF	$ 2.00
66”-84”	LF	$ 2.50
Heavy Cleaning of Sewers		
6"-8"	LF	$ 3.00
10"	LF	$ 4.00
12"-18"	LF	$ 5.00
21"	LF	$ 7.50
>21"	day	$ 3,800
Television Inspection of Sewers		
6"-12"	LF	$ 1.25
15"-42"	LF	$ 1.75
48”-60”	LF	$ 2.00
66”-84”	LF	$ 2.50
Mechanical Root Removal	each	$ 400
Chemical Root Treatment		
8"-18"	LF	$ 3.50
21"-48"	LF	$ 10.00
Grinding Service Connections	each	$ 350.00
Testing and Sealing Joints		
8"	each	$ 26.50
10"-18"	each	$ 40.00
20"-30"	each	$ 50.00
Testing and Sealing Service Connections		
8"-12"	each	$ 450.00
15"-20"	each	$ 600.00
24"-48"	each	$ 750.00
Lateral Lining Top Hats		

8"-15"	each	$ 3,500.00
Cured-In-Place Spot Repair		
8"-12"	each	$ 3,000.00
15"-24"	each	$ 5,000.00
36"-48"	each	$ 14,000.00
Cured-In-Place Pipe Liner – Steam or Hot Water Cure		
8"	LF	$ 35.00
10"	LF	$ 38.00
12"	LF	$ 50.00
15"	LF	$ 65.00
18"	LF	$ 72.00
20"-24"	LF	$ 110.00
36”	LF	$ 165.00
42"	LF	$ 225.00
44"-48"	LF	$ 300.00
Cured-In-Place Pipe Liner – UV Cure		
8"	LF	$ 65.00
10"	LF	$ 72.00
12"	LF	$ 80.00
15"	LF	$ 95.00
18"	LF	$ 113.00
20”	LF	$ 125.00
24”	LF	$ 135.00
Manhole Rehabilitation		
Manhole Grouting	each	$ 800.00
Cementitious lining	VF	$ 250.00
Epoxy lining	VF	$ 400.00
New Manhole Cover	each	$ 800.00
New Frame and Cover	each	$ 4,500.00
Reset Frame and Cover	each	$ 3,000.00
Repair Bench/Invert	each	$ 1,000.00
Chimney Seal	each	$ 750.00

A summary of pipeline and manhole rehabilitation recommendations and associated costs for each phase of rehabilitation are described in Sections 4.1.1, 4.1.2 and 4.1.3. The costs for pipeline rehabilitation assume CIPPL with UV technology for pipes 8"-24" in diameter and CIPPL with a steam or hot water cure process for pipes greater than 24". UV technology can also be considered pipes greater than 24" and the costs are competitive with a steam or hot water cure. Maps showing recommended pipeline and manhole rehabilitation by sub-area are included as figures at the end of Section 4. Individual pipeline and manhole rehabilitation recommendations are detailed in tables in Appendices C and E.

4.1.1 Phase 1 Sanitary Sewer Rehabilitation

The first phase of recommended sewer rehabilitation, Phase 1 Sanitary Sewer Rehabilitation, as shown on Figure 8, includes all pipeline and manhole rehabilitation recommended in Sub-areas 14, 15, 16, 17, 18, 19, 20, 22, and 29. The sub-areas included in Phase 1 were found to have the highest infiltration rates in the City and the largest percentage of pipelines with NASSCO rates of 3, 4 or 5. The sub-areas are located along both the Fore River Interceptor and the West Side Interceptor, and are within proximity of CSO-039 and CSO-042. A breakdown of Phase 1 pipeline and manhole recommendations by sub-area is included in Tables 14 and 15 below. Costs for light cleaning and CCTV are not shown separately in Table 14 but are built into the cost estimate in Table 16.

Table 14. Phase 1 Rehabilitation – Pipeline Recommendations

Sub-area	CIPPL (LF)	CIPSR (ea)	Heavy Cleaning (LF)	TSJ (ea)	Root Removal (LF)
Sub-area 14	1,036	4	648		325
Sub-area 15	7,659	1	486	311	4,606
Sub-area 16	4,577	1	482	1,033	4,006
Sub-area 17				144	
Sub-area 18	3,929	4	606	681	1,562
Sub-area 19	2,461	4		129	992
Sub-area 20	6,177		469		1,626
Sub-area 21	2,218	1	958	172	617
Sub-area 22	6,317	4	2,342	74	2,975
Sub-area 29	2,580				331
	36,953	**18**	**5,990**	**2,544**	**17,040**

Table 15. Phase 1 Rehabilitation – Manhole Recommendations

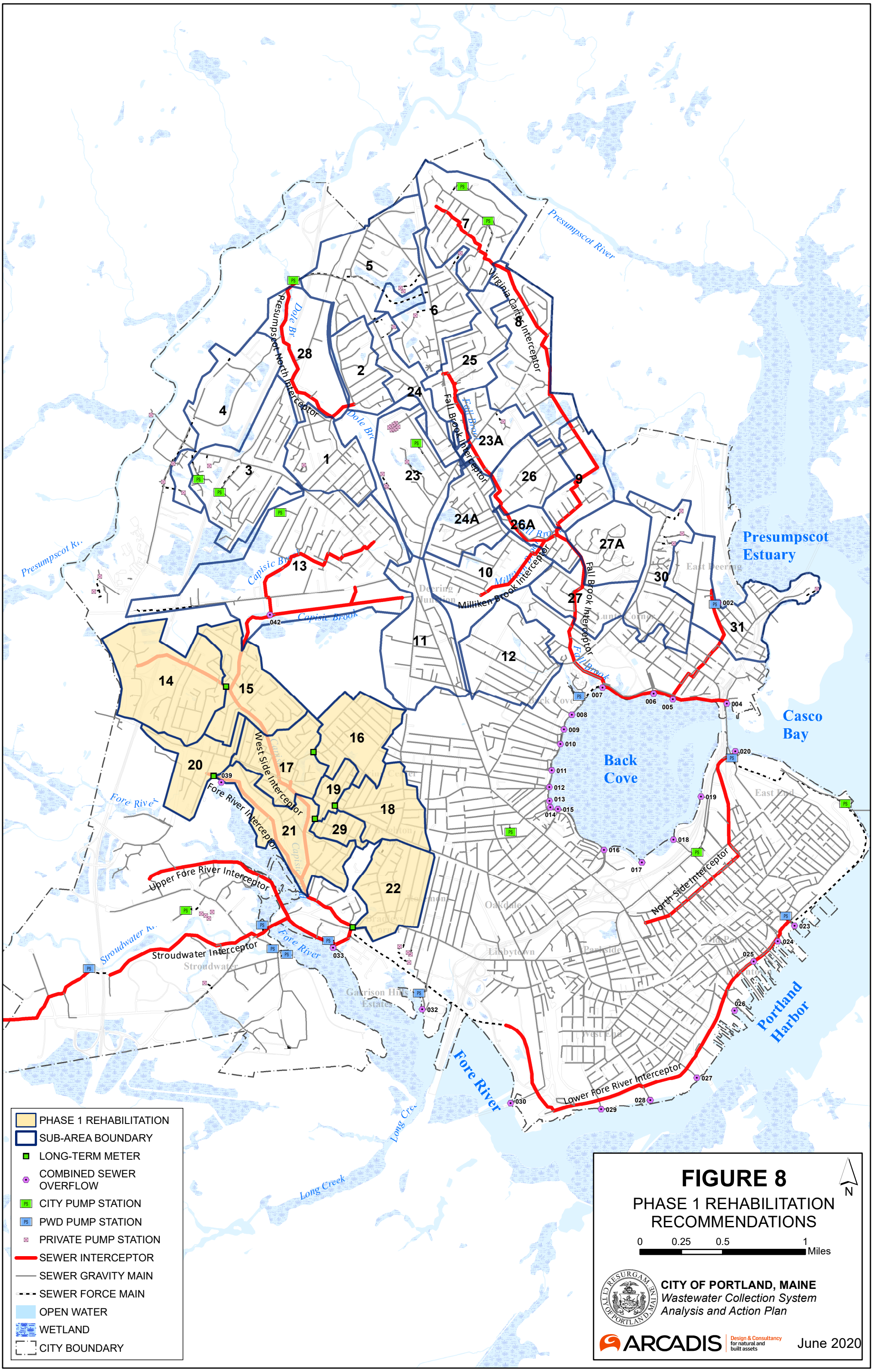
Sub-Area	Reset Frame and Cover	Replace Cover	Replace Frame and Cover	Install Chimney Seal	Cementitious Liner (VF)	Grout Manhole	Epoxy Lining (VF)	Repair Bench & Invert
Sub-area 14	1	4			186			
Sub-area 15	1	16			649	1	109	4
Sub-area 16	11	42	16	2	14	5		27
Sub-area 17	6	5	1	1	593	1		5
Sub-area 18		2						
Sub-area 21		1			96			
Sub-area 22	15	46	8	2	131			16
Sub-area 29	2	13	2	1				7
Total	**36**	**129**	**27**	**6**	**1669**	**7**	**109**	**59**

A cost summary for Phase 1 Sewer Rehabilitation is included in Table 16. The costs presented in Table 16 are in today's dollars (2020). In accordance with the proposed implementation schedule presented in Section 4.6, construction costs are escalated 3% per year to the assumed mid-point of construction. For Phase 1 the mid-point of construction is 2022.

Costs presented in Table 16 also include permitting, engineering and a 35% planning level contingency. Engineering includes design, construction phase services, and post-construction record drawings and contract close-out documents.

Table 16. Phase 1 Rehabilitation Cost Summary

Sub-area	Pipeline Rehab Cost	Manhole Rehab Cost	Subtotal	Escalation to midpoint of construction (2022)	Engineering & Permitting (35%)	Construction Contingency (35%)	Total
Sub-area 14	$115,895	$10,875	$126,770	$134,490	$47,071	$47,071	$228,633
Sub-area 15	$775,458	$40,954	$816,413	$866,132	$303,146	$303,146	$1,472,424
Sub-area 16	$545,311	$182,792	$728,103	$772,444	$270,355	$270,355	$1,313,155
Sub-area 17	$2,948	$46,404	$49,352	$52,358	$18,325	$18,325	$89,008
Sub-area 18	$543,851	$2,000	$545,851	$579,093	$202,683	$202,683	$984,458
Sub-area 19	$447,041		$447,041	$474,266	$165,993	$165,993	$806,252
Sub-area 20	$812,591		$812,591	$862,077	$301,727	$301,727	$1,465,531
Sub-area 21	$286,017	$3,000	$289,017	$306,618	$107,316	$107,316	$521,250
Sub-area 22	$669,645	$156,229	$825,874	$876,169	$306,659	$306,659	$1,489,488
Sub-area 29	$238,521	$35,750	$274,271	$290,974	$101,841	$101,841	$494,656
	$4,437,277	**$478,004**	**$4,915,281**	**$5,214,622**	**$1,825,118**	**$1,825,118**	**$8,864,857**


Presumpscot River
Dole Br.
Presumpscot North Interceptor
Fall Brook Interceptor
Fall Brook
Virginia Carter Interceptor
Milliken Brook Interceptor
Capisic Brook
West Side Interceptor
Fore River Interceptor
Upper Fore River Interceptor
Stroudwater Interceptor
North Side Interceptor
Lower Fore River Interceptor
Presumpscot Estuary
Casco Bay
Back Cove
Fore River
Portland Harbor
Long Creek
Stroudwater R.
Presumpscot R.
East Deering
Deering Junction
Lunts Corner
Back Cove
Oakdale
Libbytown
Parkside
Old Port
Downtown
East End
Stroudwater
Garrison Hills Estates
West End
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PHASE 1 REHABILITATION
SUB-AREA BOUNDARY
LONG-TERM METER
COMBINED SEWER OVERFLOW
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
SEWER INTERCEPTOR
SEWER GRAVITY MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY
FIGURE 8
PHASE 1 REHABILITATION RECOMMENDATIONS
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Miles
CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan
ARCADIS
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June 2020

4.1.2 Phase 2 Sanitary Sewer Rehabilitation

Phase 2 Sanitary Sewer Rehabilitation, as shown on Figure 9, includes all pipeline and manhole rehabilitation recommended in Sub-areas 6, 10, 11, 12, 23, 23A, 24, 24A, 26 and 30. The sub-areas included in Phase 2 are focused around the Fall Brook and Milliken Brook Interceptors. A breakdown of Phase 2 pipeline and manhole recommendations by sub-area is included in Tables 17 and 18 below. Costs for light cleaning and CCTV are not shown separately in Table 17 but are built into the cost estimate in Table 19.

Table 17. Phase 2 Rehabilitation – Pipeline Recommendations

Sub-area	CIPPL (LF)	CIPSR (ea)	Heavy Cleaning (LF)	TSJ (ea)	Root Removal (LF)
Sub-area 6	2,559	8	719	220	1,197
Sub-area 10	*No Pipeline Rehabilitation Recommendations*				
Sub-area 11	3,560		178	768	926
Sub-area 12	2,850	7			1,786
Sub-area 23	3,703	4	244		941
Sub-area 23A	1,757	1	387		1,242
Sub-area 24	1,074			522	311
Sub-area 24A	1,734	1	351	332	319
Sub-area 26	1,942		33		810
Sub-area 30	3,558	1	473		7,532
	22,738	**22**	**2,386**	**1,842**	**1,197**

Table 18. Phase 2 Rehabilitation – Manhole Recommendations

Sub-Area	Reset Frame and Cover	Replace Cover	Replace Frame and Cover	Install Chimney Seal	Cementitious Liner (VF)	Grout Manhole	Epoxy Lining (VF)	Repair Bench & Invert
Sub-area 6	11	22	4			4		13
Sub-area 10	3	18	5	2	928	2	165	21
Sub-area 11	15	46	6	3	2423	4	93	34
Sub-area 12		1	1					1
Sub-area 23	7	17	4	1	170	4		18
Sub-area 23A	4	8	1	2	273		93	4
Sub-area 24								1
Total	**40**	**112**	**21**	**8**	**3794**	**14**	**351**	**92**

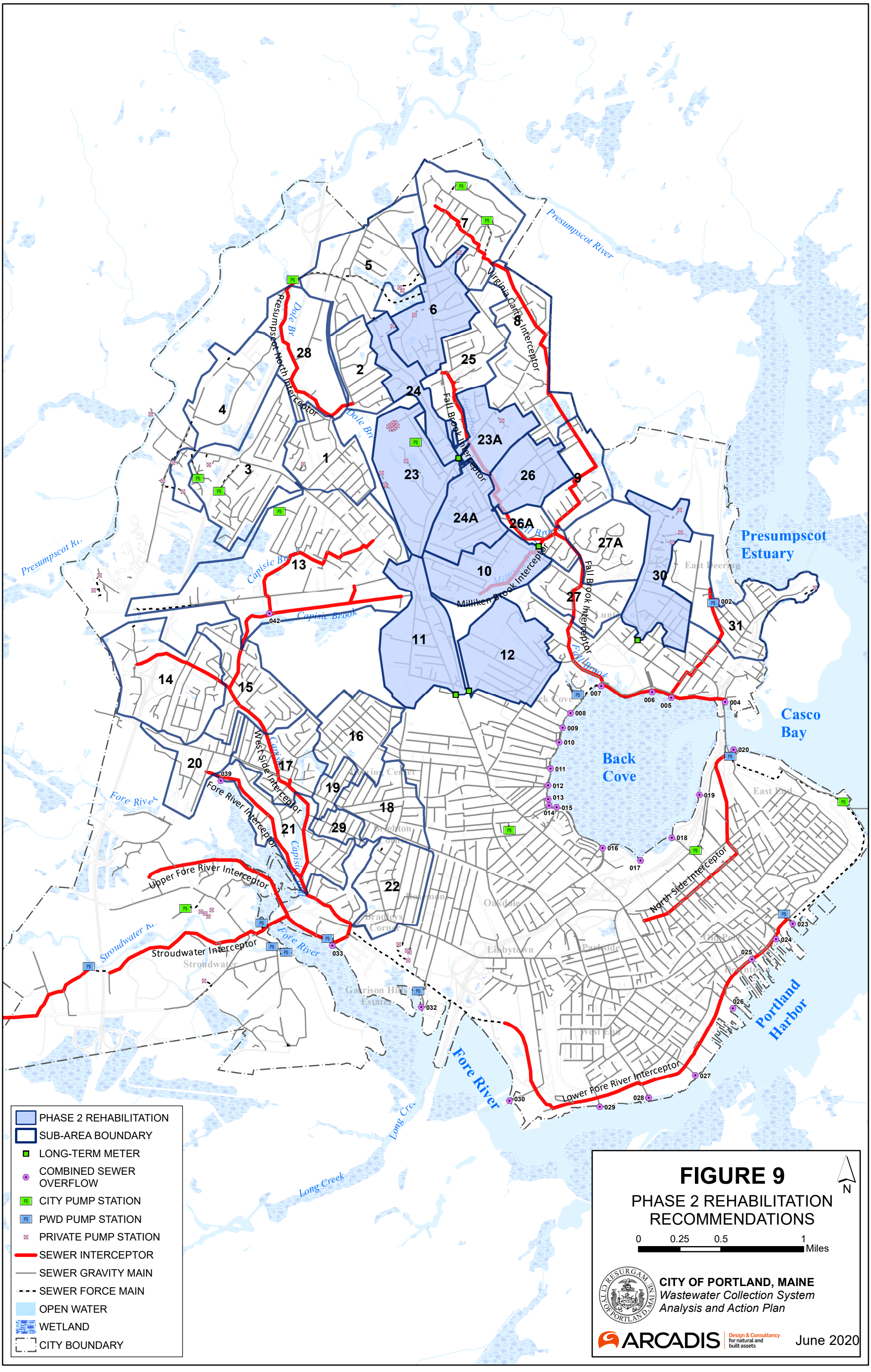
There are no manhole rehabilitation recommendations for Sub-areas 24A, 26, and 30.

A cost summary for Phase 2 Sewer Rehabilitation is included in Table 19. The costs presented in Table 16 are in today's dollars (2020). In accordance with the proposed implementation schedule presented in Section 4.6, construction costs are escalated 3% per year to the assumed mid-point of construction. For Phase 1 the mid-point of construction is 2024.

Costs presented in Table 19 also include permitting, engineering and a 35% planning level contingency. Engineering includes design, construction phase services, and post-construction record drawings and contract close-out documents.

Table 19. Phase 2 Rehabilitation Cost Summary

Sub-area	Pipeline Rehab Cost	Manhole Rehab Cost	Subtotal	Escalation to midpoint of construction (2024)	Engineering & Permitting (35%)	Construction Contingency (35%)	Total
Sub-area 6	$317,525	$89,200	$406,725	$457,773	$160,221	$160,221	$778,214
Sub-area 10		$101,433	$101,433	$114,164	$39,957	$39,957	$194,079
Sub-area 11	$373,021	$214,029	$587,050	$660,730	$231,255	$231,255	$1,123,240
Sub-area 12	$629,728	$6,500	$636,228	$716,080	$250,628	$250,628	$1,217,336
Sub-area 23	$525,584	$81,492	$607,076	$683,269	$239,144	$239,144	$1,161,557
Sub-area 23A	$453,590	$38,788	$492,377	$554,175	$193,961	$193,961	$942,098
Sub-area 24	$149,968	$1,000	$150,968	$169,916	$59,471	$59,471	$288,857
Sub-area 24A	$225,919		$225,919	$254,274	$88,996	$88,996	$432,266
Sub-area 26	$273,410		$273,410	$307,725	$107,704	$107,704	$523,133
Sub-area 30	$610,375	$0	$610,375	$686,983	$240,444	$240,444	$1,167,870
	$3,559,120	**$532,442**	**$4,091,562**	**$4,605,089**	**$1,611,781**	**$1,611,781**	**$7,828,651**


Presumpscot River
Dole Br.
Presumpscot North Interceptor
Virginia Cartier Interceptor
Fall Brook Interceptor
Capisic Brook
Milliken Brook Interceptor
Fall Brook
West Side Interceptor
Fore River Interceptor
Upper Fore River Interceptor
Stroudwater Interceptor
North Side Interceptor
Lower Fore River Interceptor
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor
Fore River
Long Creek
Stroudwater
Capisic
Deering Center
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Bradleys Corner
Libbytown
Parkside
Garrison Hills Estates
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PHASE 2 REHABILITATION
SUB-AREA BOUNDARY
LONG-TERM METER
COMBINED SEWER OVERFLOW
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
SEWER INTERCEPTOR
SEWER GRAVITY MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY
FIGURE 9
PHASE 2 REHABILITATION RECOMMENDATIONS
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Miles
CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan
ARCADIS
Design & Consultancy for natural and built assets
June 2020

4.1.3 Phase 3 Sanitary Sewer Rehabilitation

Phase 3 Sanitary Sewer Rehabilitation, as shown on Figure 10, includes all pipeline and manhole rehabilitation recommended in Sub-areas 4, 5, 7, 8, 9, 27, and 28. The sub-areas included in Phase 3 are focused in the northern most sub-areas, encompassing the northern perimeter of the City. A breakdown of Phase 3 pipeline and manhole recommendations by sub-area is included in Tables 20 and 21 below. Costs for light cleaning and CCTV are not shown separately in Table 20 but are built into the cost estimate in Table 22.

Table 20. Phase 3 Rehabilitation – Pipeline Recommendations

Sub-area	CIPPL (LF)	CIPSR (ea)	Heavy Cleaning (LF)	TSJ (ea)	Lateral Lining (Top Hats)	Root Removal
Sub-area 4	*No pipeline rehabilitation recommendations*					
Sub-area 5			1,379	277		
Sub-area 7		2	114	2,566	2	
Sub-area 8	2,300	2	3,313	162		704
Sub-area 9	2,370	3				
Sub-area 27	1,264		45			1309
Sub-area 28	458	1	262			
	6,392	**8**	**5,112**	**3,005**	**2**	**2,013**

Table 21. Phase 3 Rehabilitation – Manhole Recommendations

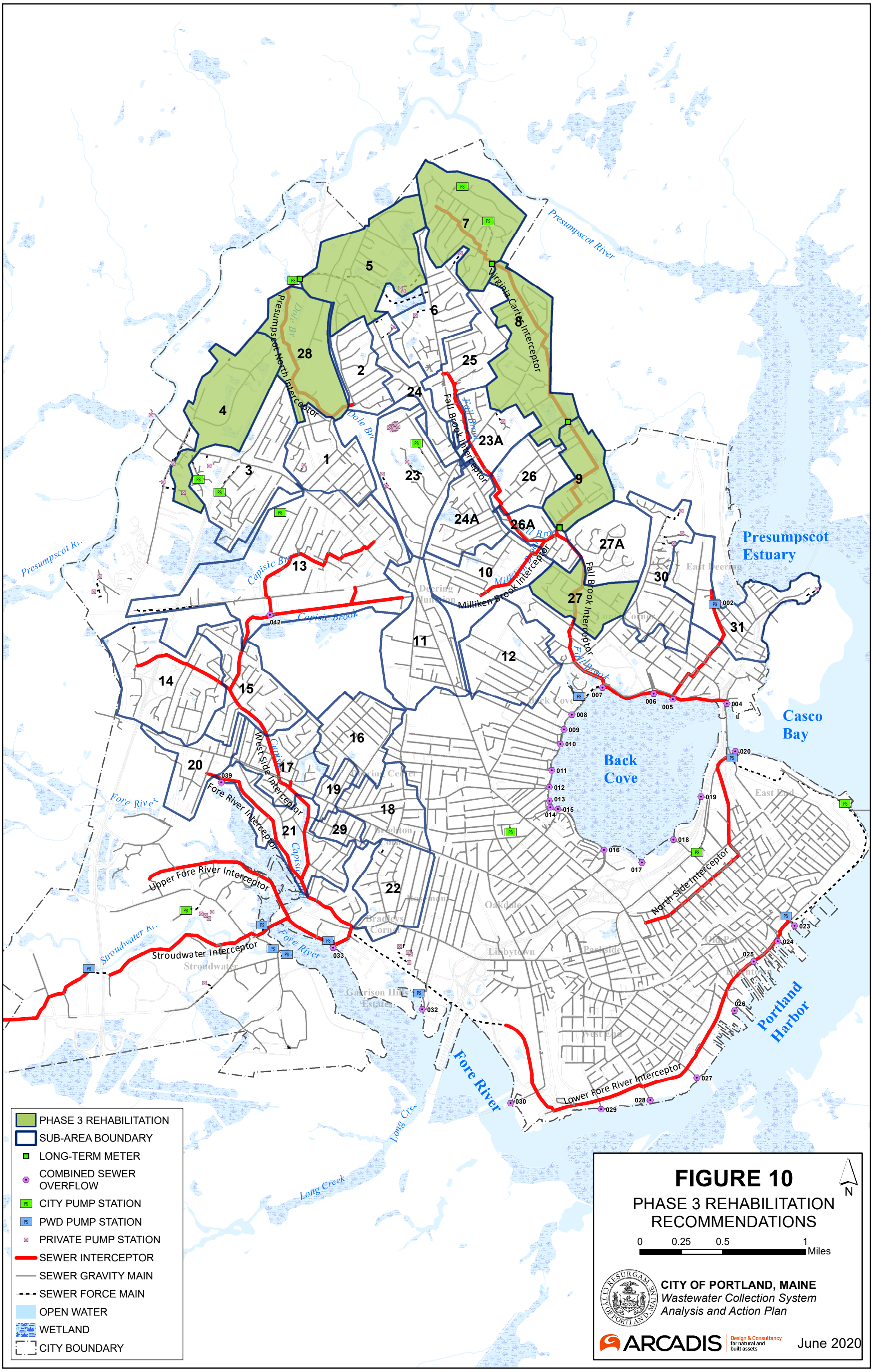
Sub-Area	Reset Frame and Cover	Replace Cover	Replace Frame and Cover	Install Chimney Seal	Cementitious Liner (VF)	Grout Manhole	Epoxy Lining (VF)	Repair Bench & Invert
Sub-area 4	5	2	1	17	97	21		2
Sub-area 5	2	2				3		2
Sub-area 7	1	1	1			1		2
Sub-area 8		18				7		2
Sub-area 9	4	2				10		1
Sub-area 27	6	6			256			7
Sub-area 28	1	26	1	6	2,586	3	122	
Total	**19**	**57**	**3**	**23**	**2,939**	**45**	**122**	**16**

A cost summary for Phase 3 Sewer Rehabilitation is included in Table 22. The costs presented in Table 16 are in today's dollars (2020). In accordance with the proposed implementation schedule presented in Section 4.6, construction costs are escalated 3% per year to the assumed mid-point of construction. For Phase 1 the mid-point of construction is 2026.

Costs presented in Table 16 also include permitting, engineering and a 35% planning level contingency. Engineering includes design, construction phase services, and post-construction record drawings and contract close-out documents.

Table 22. Phase 3 Rehabilitation Cost Summary

Sub-area	Pipeline Rehab Cost	Manhole Rehab Cost	Subtotal	Escalation to midpoint of construction (2026)	Engineering & Permitting (35%)	Construction Contingency (35%)	Total
Sub-area 4		$55,071	$55,071	$65,757	$23,015	$23,015	$111,788
Sub-area 5	$14,041	$12,400	$26,441	$31,572	$11,050	$11,050	$53,672
Sub-area 7	$45,919	$11,300	$57,219	$68,323	$23,913	$23,913	$116,148
Sub-area 8	$270,773	$25,600	$296,373	$353,885	$123,860	$123,860	$601,604
Sub-area 9	$394,862	$23,000	$417,862	$498,949	$174,632	$174,632	$848,214
Sub-area 27	$11,414	$36,333	$47,747	$57,013	$19,954	$19,954	$96,922
Sub-area 28	$45,492	$98,342	$143,833	$171,744	$60,111	$60,111	$291,966
	$782,501	**$262,046**	**$1,044,547**	**$1,247,243**	**$436,535**	**$436,535**	**$2,120,314**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PHASE 3 REHABILITATION
SUB-AREA BOUNDARY
LONG-TERM METER
COMBINED SEWER OVERFLOW
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
SEWER INTERCEPTOR
SEWER GRAVITY MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY
FIGURE 10
PHASE 3 REHABILITATION RECOMMENDATIONS
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CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan
ARCADIS Design & Consultancy for natural and built assets
June 2020

4.2 Interceptor Maintenance, Inspection, and Renewal Program

The CCTV investigations conducted as part of this City-wide I/I program did not include some the City's largest interceptors. The major interceptor inspections that were conducted or attempted identified the need for improved access, heavy cleaning, inspection and in some instances, rehabilitation. It is recommended that the City conduct an Interceptor Maintenance, Inspection, and Renewal Program of their major interceptors that have not been routinely cleaned or inspected.

Table 23 identifies 4 major interceptors that have not been cleaned or inspected and are either in wetlands, run along river banks, or upstream of CSO locations and are likely contributors of I/I. The estimated cleaning and televising costs included in Table 23 were calculated using unit costs from Table 13 in Section 4.1 of this report.

Table 23. Interceptor Maintenance, Inspection, and Renewal Program

Interceptor	Maintenance Recommendation	Total Length (LF)	Diameter (in)	Estimated Cleaning and CCTV Cost	Assumptions: Heavy Cleaning, Large Diameter Pipe with access impediments
Fore River Interceptor	Clean and televise	4,144	10"-48"	$65,000	Runs through sub-area 21, upstream of CSO-039. Cost assumes 7 days of heavy cleaning.
Fall Brook Interceptor	Clean and televise	5,976	8"-84"	$102,000	Runs along Fall Brook. Known access issues. Cost assumes 11 days of heavy cleaning.
West Side Interceptor	Clean and televise the Northern portion	12,620	8"-60"	$210,000	Southern portion recently replaced. Northern portion through sub-areas 17&15, and CSO-042. Cost assumes 22 days of heavy cleaning.
Virginia Carter Interceptor	Clean and televise uninspected portions	3,268	12"-24"	$40,000	All accessible portions televised during I/I program. Need access and heavy cleaning of remainder. Cost assumes 1 day of heavy cleaning for 290LF of 24" pipe.
	Subtotal			$416,000	
	35% Contingency			$145,600	
	Total			**$561,600**	

The costs in Table 23 are in today's dollars (2020). Since the implementation time frame is yet to be determined, no escalation factor has been applied. The level of permitting and engineering can vary significantly and therefore these costs have not been applied to the Interceptor Maintenance, Inspection, and Renewal Program. Interceptor repair or renewal recommendations would be developed from the inspection program.

It is recommended that the City improve access to all manhole structures along the interceptors to allow for routine maintenance and ease of inspection and rehabilitation. Maps of each interceptor are included in Appendix H. Each map in Appendix H indicates where recent work has been completed, including inspections conducted during this study, and also indicates locations which could not be accessed.

4.3 Inflow Removal Recommendations

4.3.1 Dye Testing Program

As a follow up to the large building inspections completed as part of this City-wide I/I Program (See Section 3.15 and building inspection result maps in Appendix G), dye tests are recommended at 16 large buildings throughout the City to confirm suspected stormwater connections to the sanitary sewer system. Table 24 below identifies the business name, address, suspect source to be dye tested and additional notes taken during the building inspection.

Table 24. Dye Testing Recommendations

Business Name	Address	Suspect Source(s)	Notes
Paradigm	56 Milliken St	Roof Drainage	Multiple leaders internal to building going into floor. Tyson Warehouse (located at Paradigm location) has 1 central drain. Slab foundation, sewer not located.
Pine Tree Shopping Center	1100 Brighton Ave	Roof Drainage	Exterior roof drains go into ground/slab foundation.
Boulous Company	7 Rand St	Roof Drainage	Exterior roof drains into foundation.
Maine Motor Vehicle Registry	125 Presumpscot St	Sump Pumps, Roof Drainage, and Yard Drain	Sump pump #1 discharge location unknown. Sump pump #2 ties in directly to roof leader outside. Roof drains go into ground. Yard drain was identified by property manager as open cleanout.

Vendetta and McHugh P.C.	20-36 Danforth St	Roof Drainage	Internal roof leaders go into foundation.
Holiday Inn by the Bay Parking Structure	40 Spring St	Roof Drainage	Roof is parking area/garage, and roof leaders and basement drains connect together. No sanitary plumbing at this address.
Holiday Inn by the Bay	88 Spring St	Roof Drainage	Basement drains connect to roof drains in garage, unable to locate roof drains for main hotel. Roof drain located in close proximity to sanitary sewer pipe.
Threads Thrift of Hope	1041 Brighton Ave	Roof Drainage	Flat roof; cannot locate any drains for roof. Landlord believes this building was separated after having a clogged drain.
Shipyard Brewing Distribution	182-184 Read St	Roof Drainage	Roof leaders enter the foundation.
Maine Health	110 Free St	Sump Pumps and Roof Drainage	2 sump pumps and all roof leaders connected to storm line in basement that runs adjacent to sanitary line. All basement drains go to sump pits. Dye test to confirm the storm line does not connect to the sanitary system.
Summit Natural Gas	1 Davis Farm Rd. Building 1	Garage Drains	6 drains in garage; suspect. Catch basins in parking lot.
Vacant	1 Davis Farm Rd. Building 2	Roof Drainage	Sewer and stormwater plumbing are piped under building.
Lyseth Community Center	175 Auburn St	Sump Pump	Sump pump has hose to a cleanout of unknown discharge location.
Shaw’s Plaza	91 Auburn St	Sump Pumps	Sump pump discharges to unknown location.

Baron Center	1145 Brighton Ave	Sump Pumps	Sump pump discharges into a basement drain.
Cross Insurance Arena	82 Free St	Sump Pumps and Roof Drainage	Sump pumps inaccessible to inspect. 4 external roof leaders go into ground.

All confirmed direct connections to the sanitary sewer are recommended to be disconnected from the sanitary sewer and rerouted overland or to the storm drain system if available.

4.3.2 Green Infrastructure Considerations

Traditional I/I removal programs target inflow removal by such standard methods as re-routing roof leaders, driveway drains, sump pumps and other inflow sources to either the ground surface or to a separated storm drain system, where available. In addition to such standard methods for removing illicit stormwater connections (i.e., inflow sources), Green Infrastructure (GI) projects can be incorporated to provide discharge options for re-routed inflow sources, and to also manage stormwater in ways which minimize pollution to receiving streams, rivers, harbors and other waterways. Decentralized GI systems, also referred to as stormwater Best Management Practices (BMPs), such as bioretention ponds, porous pavement and green roofs, are used to add capacity to the existing stormwater system while creating additional green space benefits.

While the development of specific GI recommendations is beyond the scope of this study, based on the findings of smoke testing, building inspections and dye testing, it is recommended that the City evaluate the potential to implement GI solutions in sub-areas 7, 25 and 31, where private inflow connections to the sewer system have been identified.

It is also recommended that the City dovetail any GI solutions that evolve from this I/I Program with GI projects being developed as part of the City's Integrated Water Resources Management Plan.

4.3.3 Pilot Sump Pump Investigation Program

In addition to the recommendations provided in Sections 4.1 through 4.4, we recommend the City develop a Private Property Sump Pump Pilot Program in known high groundwater areas to identify and remove sump pumps connected to the City's sanitary sewer system.

Before embarking upon a large-scale sump pump removal program, a small-scale pilot program would allow the City to, on a more manageable scale:

- evaluate optional protocols for gaining access to and inspecting properties
- determine the success rate of attempted inspections
- determine the percentage of inspections that identify sump pumps
- evaluate options for removing/re-routing sump pumps
- estimate the costs and determine the benefits of sump pump removals

Before implementing a wide-scale sump pump identification and removal program, the City should fully evaluate the technical and other challenges, as well as costs and benefits of such a program. Some of the non-technical obstacles could include legal challenges and public relations issues. Implementing a pilot program will allow the City to understand these challenges and issues before deciding whether to proceed with a larger program.

4.4 Permanent Flow Metering Recommendations

In conjunction with the construction of rehabilitation Phases 1, 2 and 3, we recommend the implementation of a long-term flow metering program. A long-term flow metering program will allow for:

- Comparison of pre- and post-rehabilitation flow data to track the effectiveness of I/I removal projects
- Continued compliance monitoring in accordance with the EPA Consent Order and Corrective Action Plan
- Future hydraulic model updates with accurate, updated flow data

Implemented in conjunction with each proposed phase of sewer rehabilitation, it is recommended that the flow meters be installed 6 weeks prior to the start of each construction phase, and remain installed throughout the construction period. Sub-areas were selected for long-term flow metering based on: the number of sub-areas upstream (sub-areas with more than 2 tributary sub-areas were not selected); the nature of the rehabilitation being completed; and the amount of separated pipe within each sub-area.

Sub-areas 14, 16, 18, 20, 22 and 29 are recommended for long-term flow metering during Phase 1 Rehabilitation; Sub-areas 10, 11, 12, 23 and 30 are recommended for long term flow metering during Phase 2 Rehabilitation; and Sub-areas 4, 7, 8 and 9 are recommended for long term flow metering during Phase 3 Rehabilitation. In order to track and compare long-term flow patterns, particularly infiltration and inflow rates, and to evaluate the effectiveness of the sewer rehabilitation projects, it is recommended that engineering monitoring and data analysis and evaluation be conducted during the long-term flow monitoring program. The long-term flow meter recommendations are shown on Figures 8, 9 and 10.

A cost summary for each phase of long-term flow metering is shown in Table 25. Costs were estimated based on a 2-year metering period for Phases 1 and 2 and an 18-month metering period for Phase 3. Each phase of long-term flow monitoring will also include the installation of a rain gauge centrally located within the project area. Groundwater trends during long-term flow monitoring can be tracked using by evaluating the local USGS groundwater gauge or installing groundwater gauges in the existing groundwater monitoring wells installed in 2018. Costs include meter rental and installation, bi-weekly maintenance, data reduction, and a 35% engineering contingency for data evaluation, analysis and presentation.

Table 25. Long-Term Flow Metering Cost Summary

Rehabilitation Phase	Number of meters	Duration (meter weeks)	Flow meter and rain gauge costs (rental, installation, maintenance, data reduction	Engineering (35%)	Total
1	6	104	$280,210	$98,074	$378,284
2	5	104	$233,950	$81,883	$315,833
3	4	78	$141,930	$49,676	$191,606
Total	**15**	**286**	**$656,090**	**$229,632**	**$885,722**

4.5 Summary of Costs and Implementation Schedule

Table 26 presents a summary of estimated project costs and a proposed schedule for implementation of Phases 1, 2 and 3 of Sewer System Rehabilitation.

Table 26. Cost Summary & Implementation Schedule – Rehabilitation Phases

Project	Year	Cost
Phase 1 Sanitary Sewer Rehabilitation	2021 - 2023	$8,864,857
Phase 2 Sanitary Sewer Rehabilitation	2023 - 2025	$7,828,651
Phase 3 Sanitary Sewer Rehabilitation	2026 - 2027	$2,120,314
	Total	**$18,813,821**

Table 27 presents a summary of estimated project costs for additional I/I and sewer maintenance recommendations. The schedule and costs for projects included in Table 26 can be determined in conjunction with the City's annual DPW operations budgeting process and Capital Improvement planning.

Table 27. Cost Summary – Additional Recommendations

Project	Cost
Interceptor Investigations, Maintenance, and Renewal Program	$561,600
Dye Testing Program (16 buildings)	$15,000
Long-Term Flow Metering Program	$855,722

FIGURES 11 – 37

Manhole and Pipeline Rehabilitation Recommendations

MINNOW BROOK

PRESUMPSCOT RIVER

DOLE BROOK

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Tee Dr
Caddie Ln
Wedge Way
Par Dr
Walch Dr
Riverside St
Evergreen Dr
Industrial Way
Interstate 95
Riverside Industrial Pkwy
Prim St
View St
Forest Ave
Riverside St
Wellesley
Riverton Dr
Pinewood Rd
Springbrook Way
Waldron Way
Rainmaker Dr
Castine Ave
Brandon St
Belden St
Aldworth St
Wyndham St
Tarbell Ave
Tucker Ave
Dover Ave
Beal St
Bailey Ave
Eastman Ave
Stuart St
Farnham St
Pari-Pl
Lane Ave
Epping St
Euclid Ave
Wendell St
Wilkie St

RIVERTON DR PUMP STATION

CASTINE AVE PUMP STATION

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 11

0 500 Feet

Sub-Area 4
Sewer Rehabilitation Recommendations

N

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

PRESUMPSCOT RIVER

Interstate 95

Interstate 495 Ramp

Interstate 495

Interstate 495 Ramp

Blackstrap Rd

Eugene St

Gray Rd

Armstrong Hts

Garsoe Dr

Washington Avenue Ext

Longview Dr

Summit St

Stonecrest Dr

Morningstar Ln

Davis Farm Rd

Lester Dr

Riverside St

Ballpark Dr

Georgia St

Havertys Way

Lambert St

Auburn St

Allison Ave

Washington Ave

W Lynne Ave

Smith Farm Ln

Cresfield Ter

Parsons Pond Dr

Settlers Ct

Braddish Ct

Quaker Ln

Wakely Ct

Auburn Ter

Riverside Industrial Pkwy

Deering Run Dr

Palmer Ave

Continental Dr

Dole Dr

Shepherd Ln

Rice St

7

6

5

28

24

2

PS

M

Recommendation

- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS

- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS

- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY

- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 12

0 500 Feet

Sub-Area 5
Sewer Rehabilitation Recommendations

N

City of Portland, Maine

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Sewer System
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ARCADIS Design & Consultancy for natural and built assets

Virginia-Carter Interceptor
Fall Brook Interceptor
FALL BROOK
SSGM-00866
SSGM-01600
SSGM-01599
SSGM-01598
SSGM-01607
SSGM-01613
SSGM-01612
SSGM-01616
SSGM-01615
SSGM-01614
SSGM-01619
SSGM-01620
SSGM-01621
SSGM-01622
SSGM-07475
SSGM-00864
SSGM-01930
SSGM-01472
SSGM-01469
SSGM-01475
Hillside Rd
Clayton St
Auburn St
Summit Park Ave
Alpine Rd
Christy Rd
Cresfield Ter
Settlers Ct
Braddish Ct
Parsons Pond Dr
Wakely Ct
Auburn Ter
Brookfield
Rustic Ln
Melody Ln
Autumn Ln
Fall Ln
Bartley Ave
Junior St
Washington Ave
Greenwood Ln
Primrose Ln
Regan Ln
Shepherd Ln
Quaker Ln
Smith Farm Ln
Summit St
Lambert St
Lester Dr
Ballpark Dr
Havertys Way
Georgia St
Morningstar Ln
Longview Dr
Caron St
Bonny St
Carter St
Crestview Dr
Pamela Rd
Abby Ln
Quiet Ln
Frost Hill Rd
Old Barn Ln
Curtis Rd
Wendy Way
Sturdivant Dr
Clapboard Rd
Talbot St
Juniper St
Olde Birch Ln
Martin Rd
Sumac St
Jackson St
Summit St
Kenneth St
5
6
7
8
24
25
2
PS
M

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 13

0 500 Feet

Sub-Area 6
Sewer Rehabilitation Recommendations

N

City of Portland, Maine
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ARCADIS Design & Consultancy for natural and built assets

Interstate 495
PRESUMPSCOT RIVER
HOPE AVE PUMP STATION
PS
Alice Ct
Garsoe Dr
Hope Ln
Basket Ln
Patricia Ln
SSGM-01327
Alice St
Carter St
Carter St
Longview Dr
Panoramic View St
Bonny St
Crestview Dr
Virginia-Carter Interceptor
Pamela Rd
CURTIS ROAD PUMP STATION
PS
SSGM-01371
Hope Ave
Sturdivant Dr
Clapboard Rd
Whaleboat Rd
Overset Rd
Whitehead Cir
Abby Ln
Virginia-Carter Interceptor
SSGM-01525
PS
Frost Hill Rd
Surrey Ln
Quiet Ln
Old Barn Ln
Wendy Way
Curtis Rd
Auburn St
Hillside Rd
Lambert St
Clayton St
Kenneth St
Jackson St
Summit St
Virginia-Carter Interceptor
5
6
7
8
25

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 14

0 500 Feet

Sub-Area 7
Sewer Rehabilitation Recommendations

N

City of Portland, Maine

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Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

FIGURE 15

Sub-Area 8
Sewer Rehabilitation Recommendations

0 500 Feet

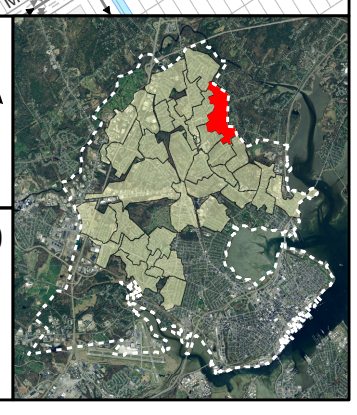
N

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary



City of Portland, Maine June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

23A

8

26

9

27A

26A

Virginia-Carter Interceptor

Virginia St

Nevada Ave

Jersey Ave

Penn Ave

Vermont Ave

Florida Ave

Maine Ave

Dakota St

Ray St

Hurley Ln

Liberty Way

Charlotte Dr

Ledgewood Dr

SSGM-03693

SSGM-03702

SSGM-04205

SSGM-04206

SSGM-07606

SSGM-07591

SSGM-07605

SSGM-03744

SSGM-07132

SSGM-07133

SSGM-01253

SSGM-00084

SSGM-03814

SSGM-03815

SSGM-04650

SSGM-04651

SSGM-04652

SSGM-03816

SSGM-03822

SSGM-03817

Humboldt St

Van Vechten St

Huntington Ave

Demeter St

Copley Woods Cir

Daggett St

Toronita St

Marlborough Rd

Nottingham Ave

Ivaloo St

Fall Brook Interceptor

FALL BROOK

Graystone Ln

Country Ln

Emergency Access Rd

Pheasant Hill Dr

Wildwood Cir

Recommendation

- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS

- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS

- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY

- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 16

0 500 Feet

Sub-Area 9
Sewer Rehabilitation Recommendations

N

City of Portland, Maine

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Sewer System
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ARCADIS Design & Consultancy for natural and built assets

Delaware Ct
Pennell Ave
Knight St
Maplewood St
Fobes St
Gertrude Ave
Loring Ave
Florida Ave
Texas St
Maine Ave
Dakota St
Ohio St
Idaho St
Fall Brook Interceptor
Ray St
Marlborough Rd
23
White Birch Ln
William Pl
Mona Rd
Sara Ln
Samuel Rd
Bernard Rd
Allen Ave
26
9
FALL BROOK
24A
26A
Drake St
Edgewood Ave
Northfield
Chesley Ave
Berry Ave
Harvard Ct
Washington Ave
Anthony Ave
Joseph Ave
Yale St
Old Campus Dr
Ammerdown Pl
Kimberly Ct
Nicholas Ct
Magnolia St
Woodlawn Ave
Harvard St
10
Princeton St
University St
Cornell St
Cambridge St
Majors Ct
Feeney Way
Tamarlane
27
Morrill S
Arbor St
Bell St
Adelaide St
Forest Ave
Poland St
11
Canco Rd
Murray St
Holiday Dr
Colson Cir
12
Quarry Rd
Read St
Waverly St
Elmwood St
Glengarden Dr
Bay Street Ext
Frye St
Kineo St
Loraine St
Wellwood Rd
Torrey St
Hall St

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

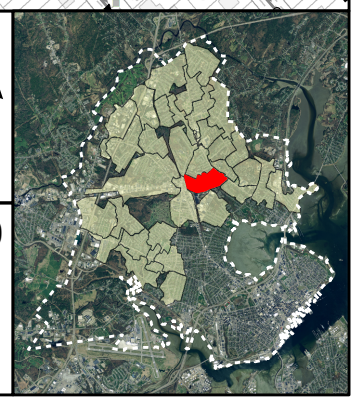
HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 17

0 500 Feet

N

Sub-Area 10
Sewer Rehabilitation Recommendations



City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

23
24A
10
13
11
12
16
Princeton Rdg
Maggie Ln
Forest Pnes
Warren Ave
Goodridge Ave
Eleanor St
Allen Ave
Magnolia St
Harvard St
Yale St
Woodlawn Ave
Princeton St
University St
Cornell St
Cambridge St
Bishop St
Mayfield St
Morrill St
Forest Ave
Arbor St
Adelaide St
Belt St
Poland St
College St
Waverly St
Stevens Ave
Elmwood St
Tremaine St
St Joseph St
Dingley Ct
Morgan Ct
Walton St
Holly St
Read St
Quarry Rd
Carlyle Rd
Canco Rd
Best St
Bedell St
Richardson St
Leonard St
Leland St
New St
CAPISIC BROOK
SSGM-03444
SSGM-00274U
SSGM-00274D
SSGM-06482
SSGM-06485
SSGM-00952
SSGM-07097
SSGM-07097A
SSGM-04469
SSGM-04461
SSGM-00644
SSGM-00645
SSGM-06745
SSGM-04459
SSGM-04458
SSGM-06555
SSGM-00601
SSGM-00602
SSGM-00603
SSGM-00604
SSGM-00606

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 18

0 500 Feet

Sub-Area 11
Sewer Rehabilitation Recommendations

N

City of Portland, Maine
Planning & Engineering
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ARCADIS Design & Consultancy for natural and built assets

10
27
12
11
University St
Woodlawn Ave
Majors Ct
Feeney Way
Cornell St
Cambridge St
Canco Rd
Tamalane
Fall Brook St
Murray St
Holiday Dr
Colson Cir
Quarry Rd
SSGM-04881
SSGM-04880
SSGM-03667
SSGM-00279
SSGM-04879
SSGM-04878
SSGM-04875
SSGM-04876
Glengarden St
SSGM-05260
Bay St
Read St
Gleckler Rd
SSGM-04859
SSGM-04885
SSGM-04872
SSGM-04860
SSGM-04918
SSGM-00134
Bayview Ter
Frye St
Kineo St
Loraine St
Hall St
Wellwood Rd
Torrey St
Canco Rd
SSGM-06193
SSGM-06194
SSGM-06195
Wellington Rd
Derby Rd
Carlyle Rd
SSGM-06180
SSGM-04867
SSGM-04868
Ocean Ave
Holly St
Walton St
Pya Rd
Forest Ave
George St
Clifton St
Baxter Blvd
Austin St
Mackworth St
Mayland St
Irving St

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 19

0 500 Feet

Sub-Area 12
Sewer Rehabilitation Recommendations

N

City of Portland, Maine
Planning & Engineering
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ARCADIS Design & Consultancy for natural and built assets

13
14
15
20
21
Riverside St
Interstate 95
Warren Ave
Campbell Rd
Riverside Ct
Larrabee Rd
Main St
Brighton Ave
CAPISIC BROOK
Birchwood Dr
Aspen Dr
Holm Ave
Robin St
Brookview Ter
Birchvale Dr
Pinecrest Rd
Sunset Ln
Celebration Ct
Poe St
Dale St
Taft Ave
Dale Ct
Gorges St
Godfrey St
Josslyn St
Purchas St
Orono Rd
Popham St
Cabot St
Riggs St
Warwick St
Dorset St
Lomond St
Wessex St
Terrace Ave
Rowe Ave
Meriline Ave
Webb St
Rand Rd
SSGM-03087
SSGM-02384
SSGM-02382
SSGM-06611
SSGM-03985
SSGM-02359
SSGM-02174
SSGM-05958
SSGM-07099
SSGM-02320
SSGM-02318
SSGM-02334
SSGM-02375
SSGM-02156
M

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 20

0 500 Feet

Sub-Area 14
Sewer Rehabilitation Recommendations

N

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

13
14
15
17
20
CAPISIC BROOK
CAPISIC BROOK
Saville St
Trundy St
Fern St
Birchwood Dr
Aspen Dr
Holm Ave
Taft Ave
Robin St
Birchvale Dr
Pinecrest Rd
Birchwood
Sunset Ln
Cedarhurst Ln
Poe St
Dale Ct
Godfrey St
Purchas St
Orono Rd
Warwick St
Dorset St
Devon St
Kent St
Essex St
Riggs St
Lomond St
Wessex St
Webb St
Terrace Ave
Rowe Ave
Merrline Ave
Brighton Ave
Capisic St
Penwood Dr
Glen Haven Rd W
Woodvale St
Glen Haven Rd E
Starlight Rd
Candlewyck Rd
Candlewyck Ter
Longwood Dr
Longwood Ter
Four Winds Rd
Ludlow St
Ludlow Ter
Groveside Rd
Dennett St
Donald St
Raymond Rd
Violette Ave
Violette Hl
Harmon Rd
Alden Cir
Woodfield Rd
Wayside Rd
SSGM-02439
SSGM-00682
SSGM-02436
SSGM-02435
SSGM-02301
SSGM-02302
SSGM-02175
SSGM-02176
SSGM-02300
SSGM-02154
SSGM-02155
SSGM-02349
SSGM-02345
SSGM-02346
SSGM-02293
SSGM-02294
SSGM-02283
SSGM-02282
SSGM-02286
SSGM-02287
SSGM-02306
SSGM-00238
SSGM-02297
SSGM-02352
SSGM-02425
SSGM-02469
SSGM-02364
SSGM-02360
SSGM-02401
SSGM-02399
SSGM-02549
SSGM-02550
SSGM-02501
SSGM-02502
SSGM-02499
SSGM-02494
SSGM-02442
SSGM-02489
SSGM-02484

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 21

0 500 Feet

N

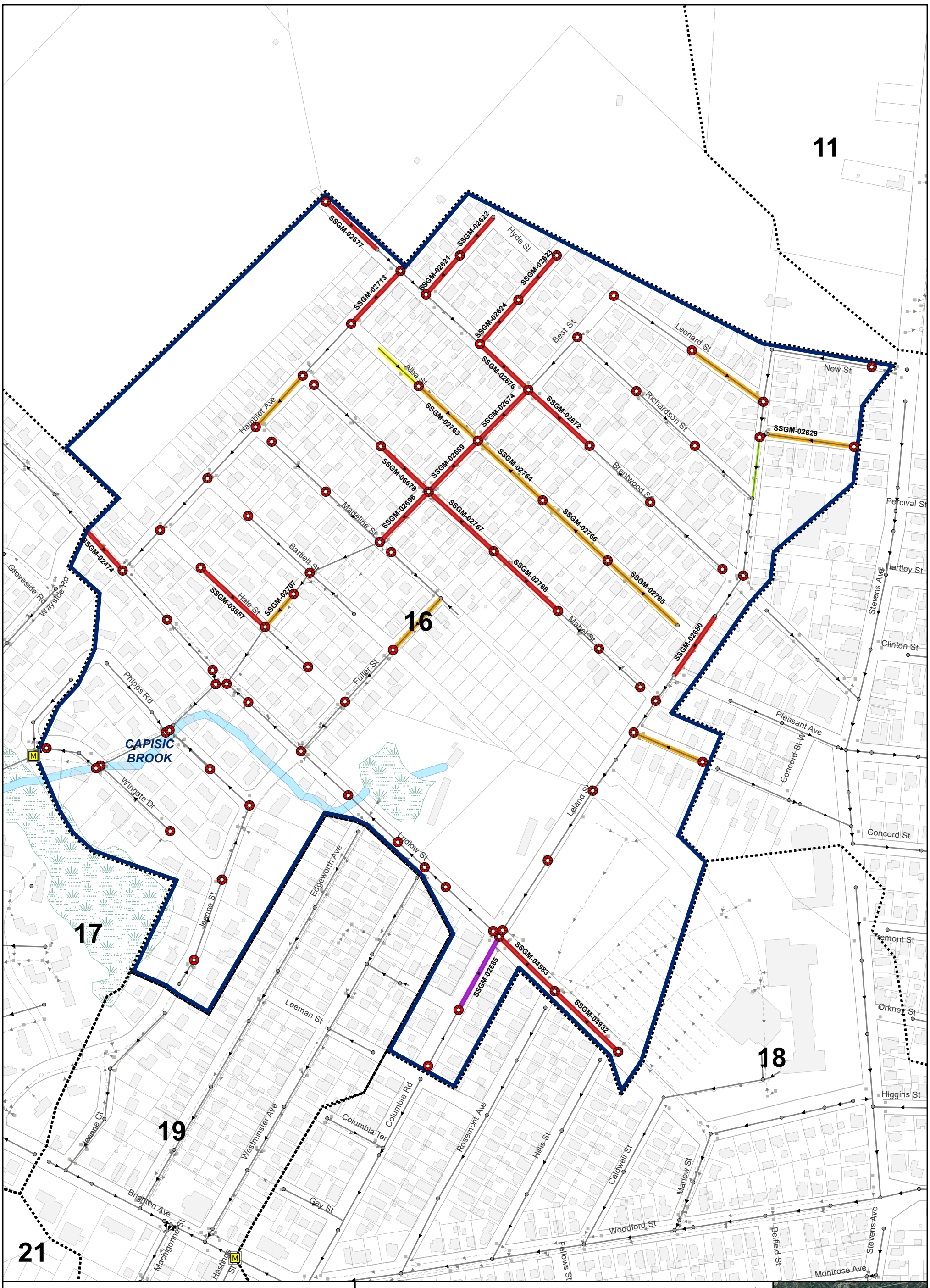
Sub-Area 15
Sewer Rehabilitation Recommendations

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets



Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

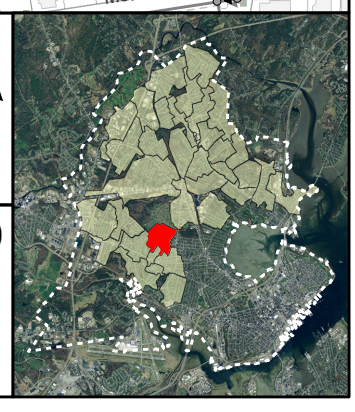
HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 22

0 500 Feet

Sub-Area 16
Sewer Rehabilitation Recommendations

N



City of Portland, Maine

Planning & Engineering
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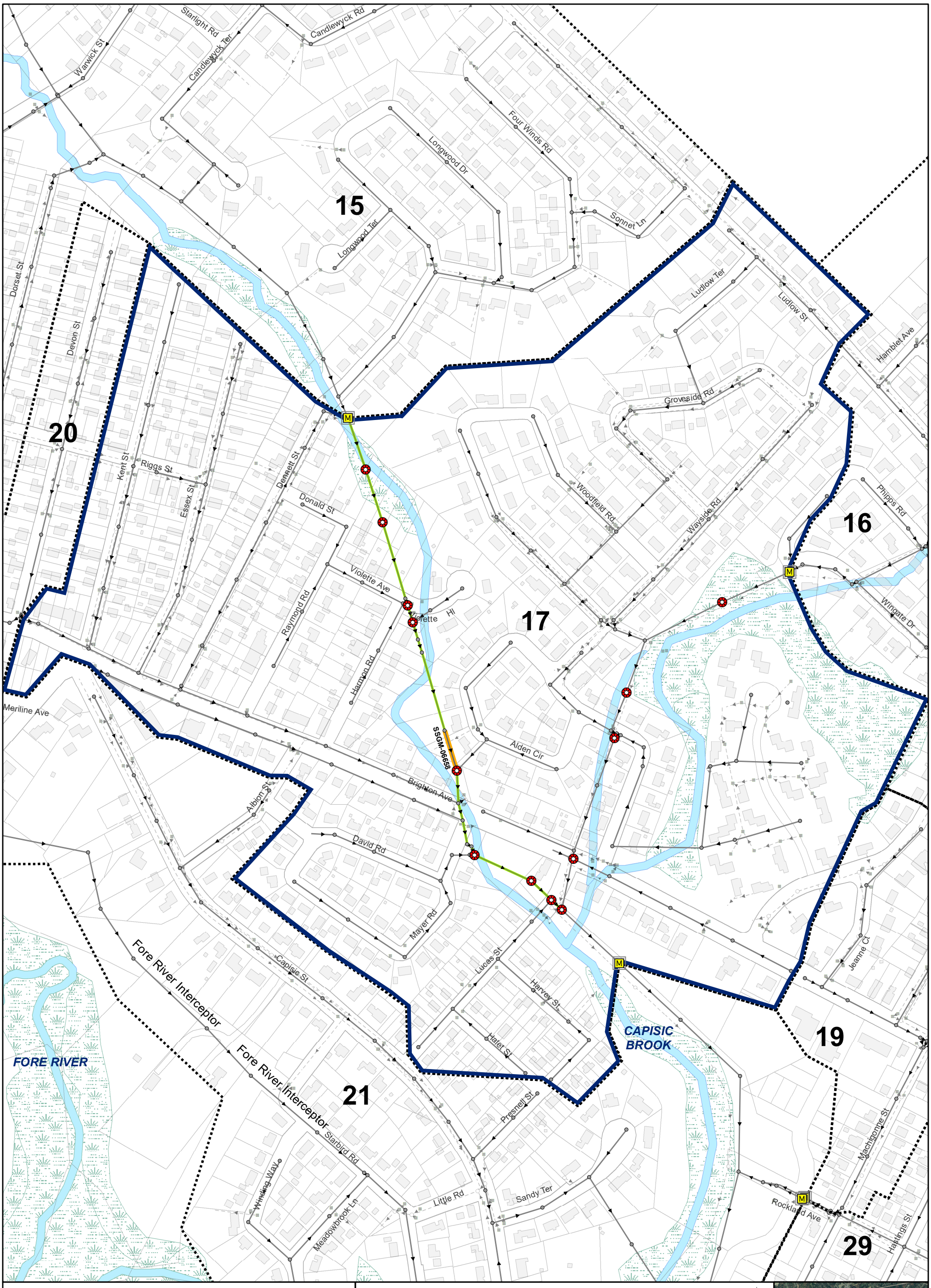


Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 23

0 500 Feet

Sub-Area 17
Sewer Rehabilitation Recommendations

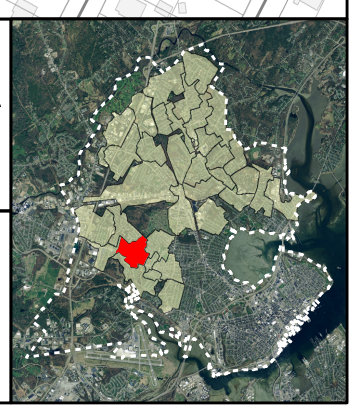
N

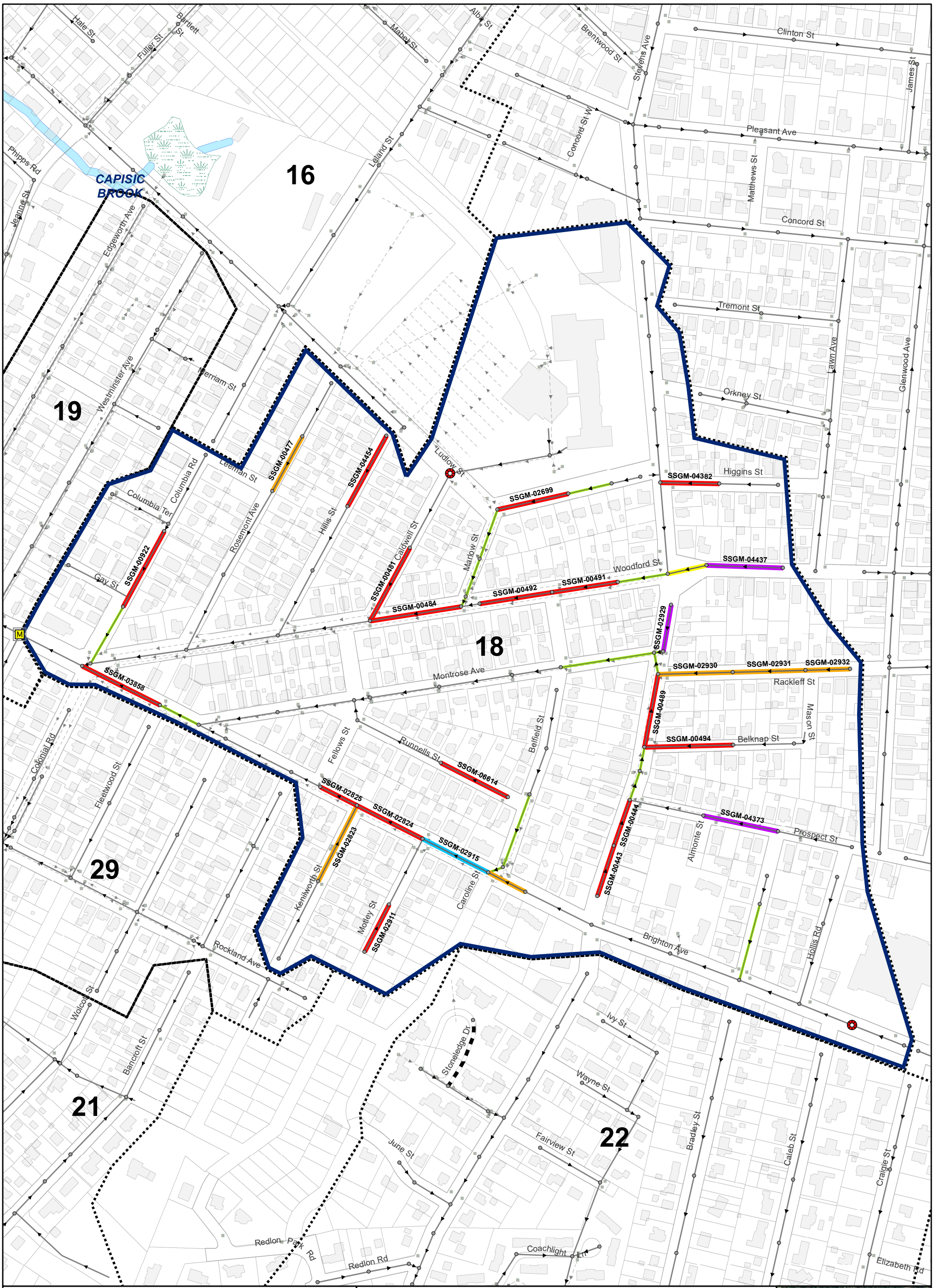
City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets





Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 24

0 500 Feet

Sub-Area 18
Sewer Rehabilitation Recommendations

N

City of Portland, Maine
Planning & Engineering
Sewer System
Evaluation Survey

June 2020

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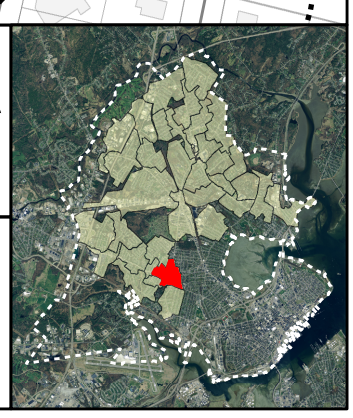
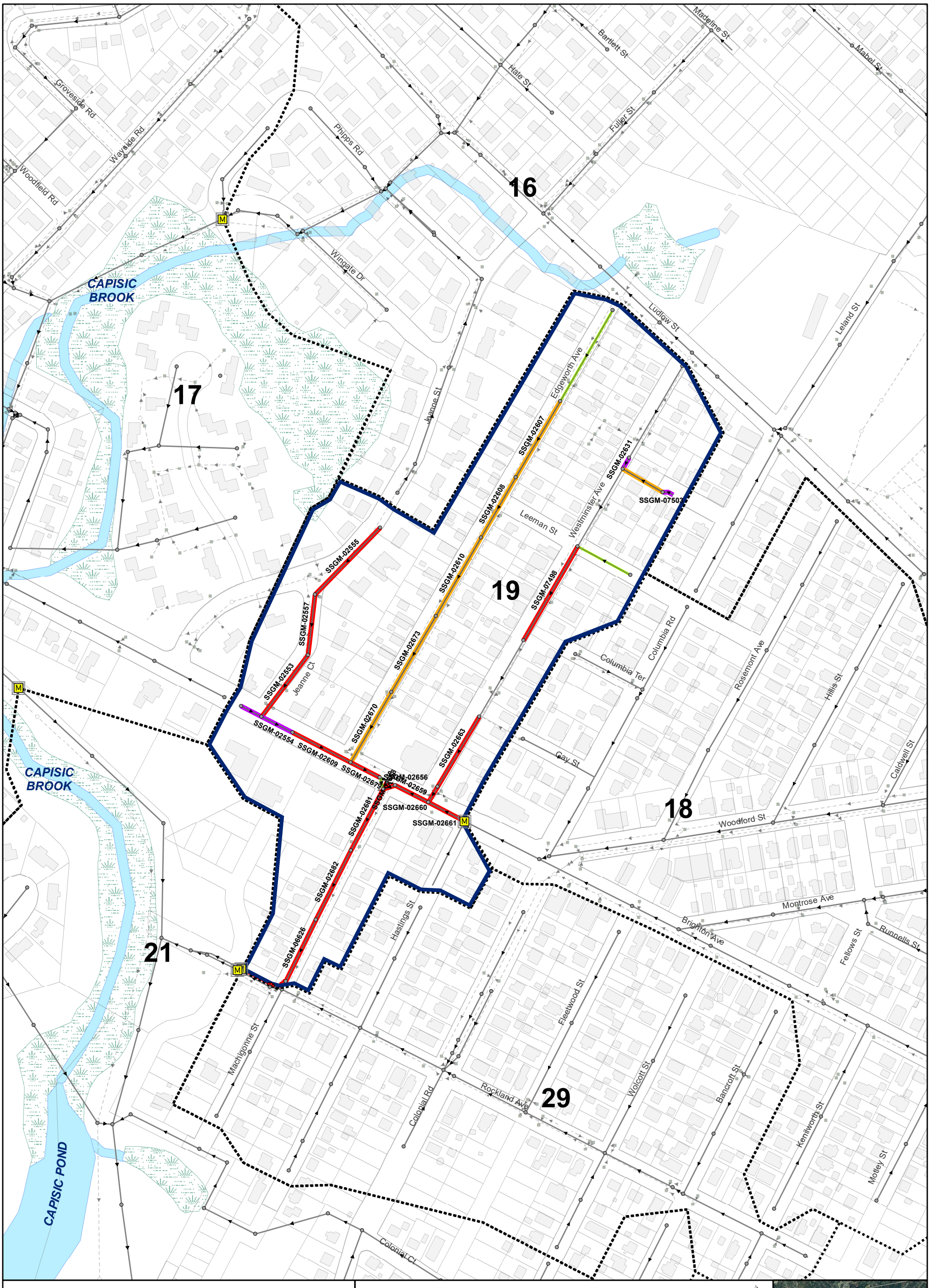
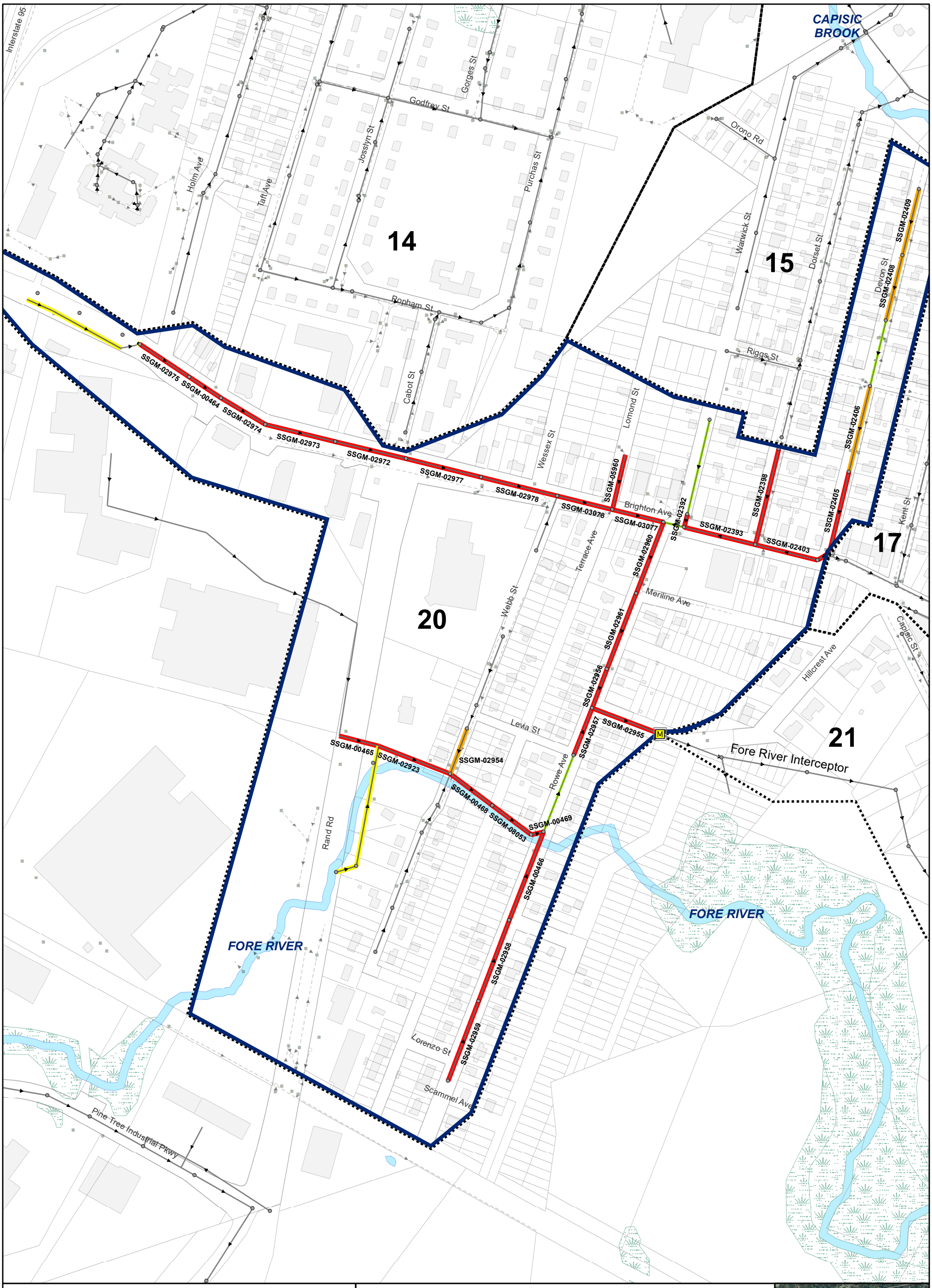



16
17
19
18
21
29
CAPISIC BROOK
CAPISIC BROOK
CAPISIC POND
Groveside Rd
Wayside Rd
Woodfield Rd
Phipps Rd
Wingate Dr
Hale St
Bartlett St
Madeline St
Mabel St
Fuller St
Ludlow St
Leland St
Edgeworth Ave
Westminster Ave
Leeman St
Jeanne St
Jeanne Ct
Columbia Ter
Columbia Rd
Rosemont Ave
Hillis St
Caldwell St
Gay St
Woodford St
Montrose Ave
Brighton Ave
Runnells St
Fellows St
Hastings St
Fleetwood St
Machigonne St
Colonial Rd
Colonial Ct
Rockland Ave
Wolcott St
Bancroft St
Kenilworth St
Motley St
SSGM-02607
SSGM-02608
SSGM-02610
SSGM-02673
SSGM-02670
SSGM-02663
SSGM-07498
SSGM-02631
SSGM-07503
SSGM-02555
SSGM-02557
SSGM-02553
SSGM-02554
SSGM-02609
SSGM-02656
SSGM-02659
SSGM-02660
SSGM-02661
SSGM-02681
SSGM-02682
SSGM-06626
M
Recommendation
Rehabilitation Manhole
CIPPL
CIPSR
CIPSR and TSJ
TSJ/TSS
Inspected, No Rehab
Could Not Inspect
Target Sub-Area Boundary
SEWER ASSETS
Sanitary Manhole
Flow Meter
City Pump Station
Portland Water District Pump Station
Private Pump Station
ssGravityMain
Sewer Force Main
DRAIN ASSETS
Drain Inlets
Drain Manhole
Drain Gravity Main
HYDROLOGY
Open Water
Wetland
Sub-Area Boundary
FIGURE 25
Sub-Area 19
Sewer Rehabilitation Recommendations
0
500
Feet
N
City of Portland, Maine
June 2020
Planning & Engineering
Sewer System
Evaluation Survey
ARCADIS
Design & Consultancy for natural and built assets



Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

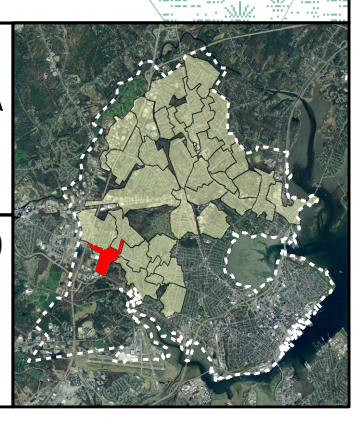
HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 26

0 500 Feet

Sub-Area 20
Sewer Rehabilitation Recommendations

N



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Evaluation Survey

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FIGURE 27

Sub-Area 21
Sewer Rehabilitation Recommendations

0 500 Feet

N

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

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29
18
21
22
Wolcott St
Bancroft St
Kenilworth St
Motley St
Caroline St
Belfield St
Runnells St
Brighton Ave
Rockland Ave
Almonte St
Prospect St
Glenwood Ave
Seeley Ave
Hollis Rd
Stoneledge Dr
Ivy St
Wayne St
Fairview St
June St
Redlon Park Rd
Redlon Rd
Coachlight Ln
Bradley St
Elizabeth Rd
Anson Rd
Capisic St
Stevens Ave
Frost St
Cobbert Rd
Dirigo St
Rudman Rd
Caleb St
Craigie St
Edwards St
Frances St
Haywood St
Eastfield Rd
Rabbit Run
Twin Knolls Ln
Scout St
Congress St
Mitton St
Whitney Ave
Lassell St
Davis St
Greeley St
Powsland St
Sewall St
Hobart St
Westland Ave
Caribou St
Fenway St
Osgood St
Willow Ln
FORE RIVER
SSGM-04703
SSGM-04702
SSGM-03034
SSGM-02944
SSGM-04700
SSGM-06579
SSGM-02948
SSGM-02936
SSGM-02937
SSGM-04698
SSGM-04710
SSGM-00447
SSGM-04588
SSGM-04586
SSGM-06709
SSGM-02934
SSGM-00435
SSGM-00436
SSGM-08036
SSGM-03025
SSGM-03029
SSGM-03032
SSGM-03031
SSGM-04593
SSGM-04594
SSGM-00322
SSGM-04583
SSGM-00303
SSGM-04568
SSGM-00306
SSGM-00302
SSGM-04569
SSGM-04569A
SSGM-00290U
SSGM-00305
SSGM-00301
SSGM-00300
PS

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
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SEWER ASSETS
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- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 28

0 500 Feet

N

Sub-Area 22
Sewer Rehabilitation Recommendations

City of Portland, Maine

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Sewer System
Evaluation Survey

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FIGURE 29

Sub-Area 23
Sewer Rehabilitation Recommendations

0 500 Feet

N

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
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DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

City of Portland, Maine
June 2020

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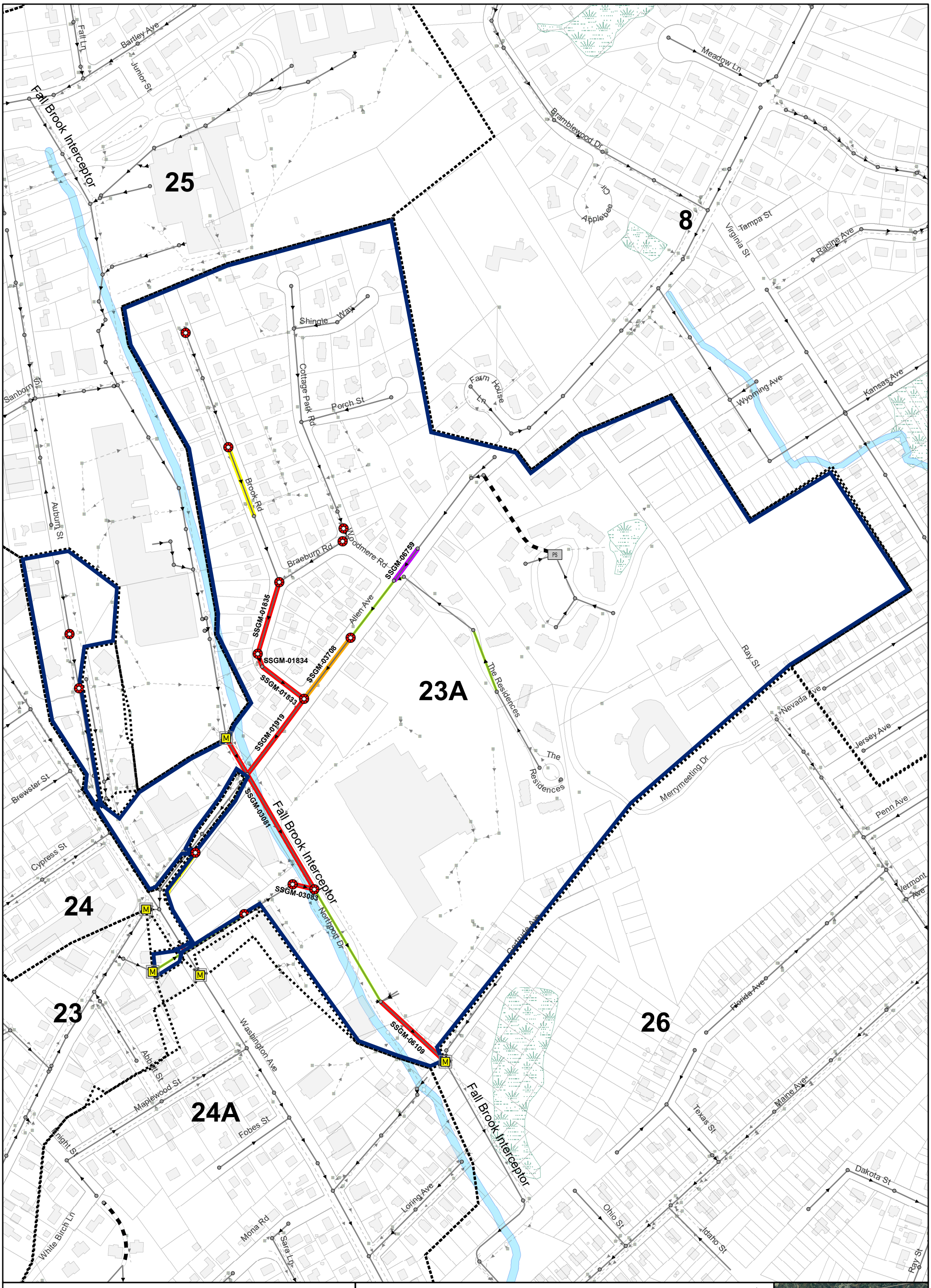

Recommendation
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- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
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- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
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- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

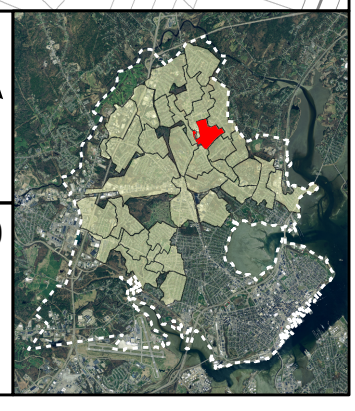
HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 30

0 500 Feet

Sub-Area 23A
Sewer Rehabilitation Recommendations

N



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June 2020

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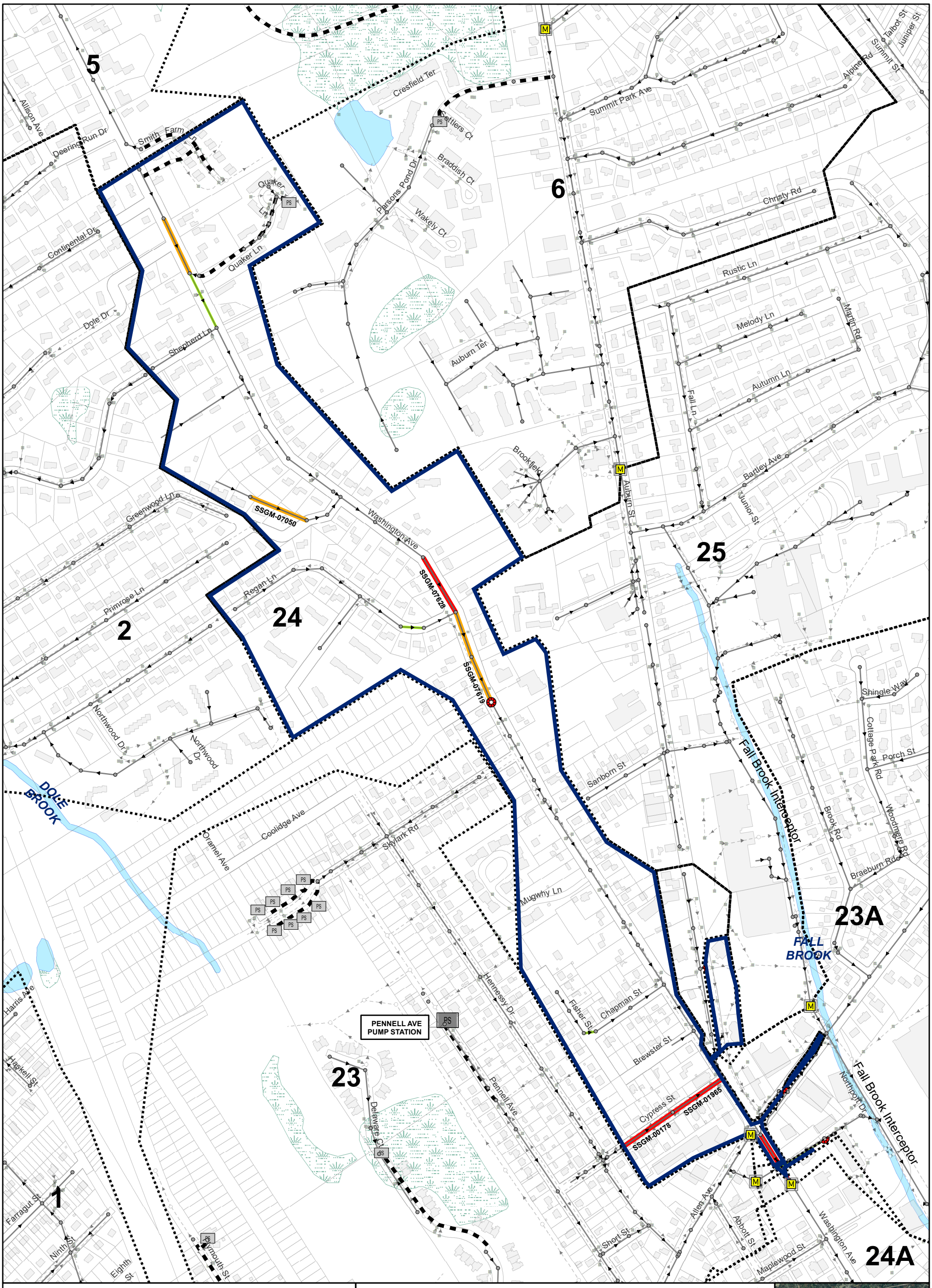

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
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- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 31

0 500 Feet

Sub-Area 24
Sewer Rehabilitation Recommendations

N

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

June 2020

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24
23A
23
24A
26
26A
10
FALL BROOK
SSGM-03903
SSGM-03902
SSGM-00198
SSGM-03917
SSGM-03918
SSGM-03920
SSGM-03922
SSGM-03921
SSGM-03826
SSGM-03928
SSGM-04960
SSGM-00152
SSGM-00150
Fall Brook Interceptor
Hennessy Dr
Cypress St
Pennell Ave
Short St
Allen Ave
Abbott St
Northport Dr
Gerrards Ave
Maplewood St
Fobes St
Knight St
White Birch Ln
Delaware Ct
William Pl
Mona Rd
Loring Ave
Washington Ave
Ohio St
Maine Ave
Sara Ln
Samuel Rd
Bernard Rd
Edgewood Ave
Chesley Ave
Berry Ave
Drake St
Harvard Cmn
Northfield
Yale St
Old Campus Dr
Ammerdown Pl
Harvard St
Magnolia St
Woodlawn Ave
Merrill St
Nicholas Ct
Kimberly Ct

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 32

0 500 Feet

Sub-Area 24A
Sewer Rehabilitation Recommendations

N

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Planning & Engineering
Sewer System
Evaluation Survey

June 2020

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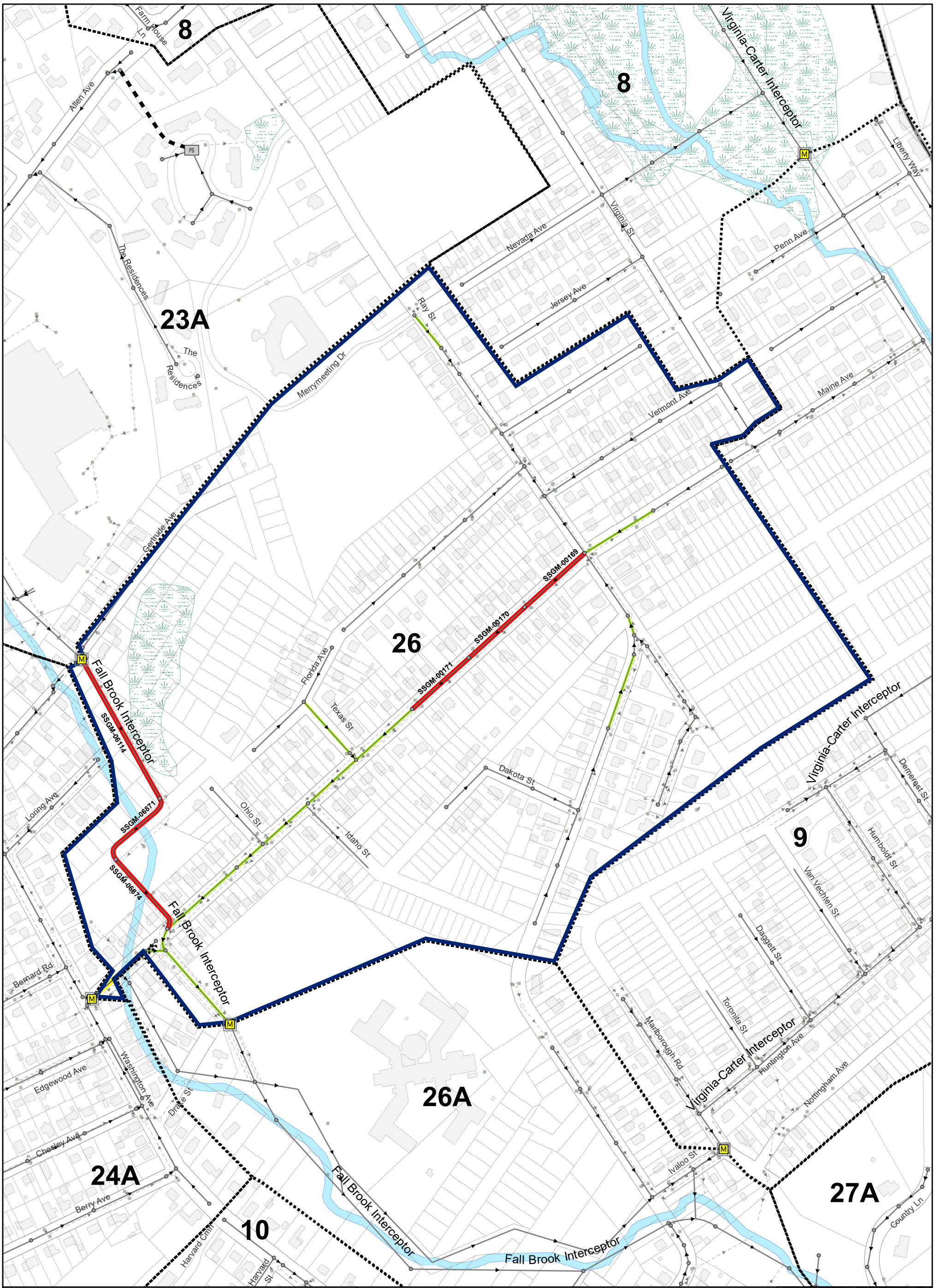

Recommendation
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- CIPSR and TSJ
- TSJ/TSS
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- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 33

0 500 Feet

Sub-Area 26
Sewer Rehabilitation Recommendations

N

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Sewer System
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June 2020

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FALL BROOK

Fall Brook Interceptor

26A

27A

27

10

12

30

SSGM-03869

SSGM-05810

SSGM-04185

SSGM-04182

Fall Brook Interceptor

Fall Brook Interceptor

Ivaloo St

Marlborough Rd

Anthony Ave

Ray St

Joseph Ave

Lawrence Ave

Felicia Ln

Malilly Rd

Canco Rd

Graystone Ln

Wildwood Cir

Emergency Access Rd

Country Ln

Pheasant Hill Dr

Rainbow Mall Rd

Washington Ave

Pineledge Ter

Fall Brook St

Tamarlane

Byfield Rd

Graham Ter

Slemons Rd

Vera St

Lloyd Ave

Victor Rd

Holliday Dr

Murray St

Lynda Rd

Sylvia Rd

Fernald Ter

Fernald St

W Kidder St

Ocean Ave

Frye St

Kineo St

Lorraine St

Hall St

Wellwood Rd

Torrey St

Rosedale St

Dudley St

Bayview Ter

Brookside Rd

Brookside Ln

FALL BROOK

Recommendation

- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS

- Sanitary Manhole
- Flow Meter
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- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS

- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY

- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 34

0 500 Feet

Sub-Area 27
Sewer Rehabilitation Recommendations

N

City of Portland, Maine

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Sewer System
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RIVERSIDE ST PUMP STATION

PS

SSGM-03118

SSGM-03127

SSGM-07186

28

5

2

4

3

1

Riverside St

Ballpark Dr

Washington Ave

Allison Ave

W Lynne Ave

Deering Run Dr

Continental Dr

Palmer Ave

Dole Dr

Shepherd Ln

Greenwood Ln

Primrose Ln

Regan Ln

Rice St

Riverside Industrial Pkwy

Interstate 95

Tee Dr

Wedge Way

Caddie Ln

Par Dr

Walch Dr

Industrial Way

Evergreen Dr

Milliken St

Milton St

Braintree St

Beverly St

Saugus St

Buca Run

Holbrook St

Randolph St

Tucker Ave

Tarbell Ave

Bailey Ave

Recommendation

- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS

- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS

- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY

- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 35

0 500 Feet

Sub-Area 28
Sewer Rehabilitation Recommendations

N

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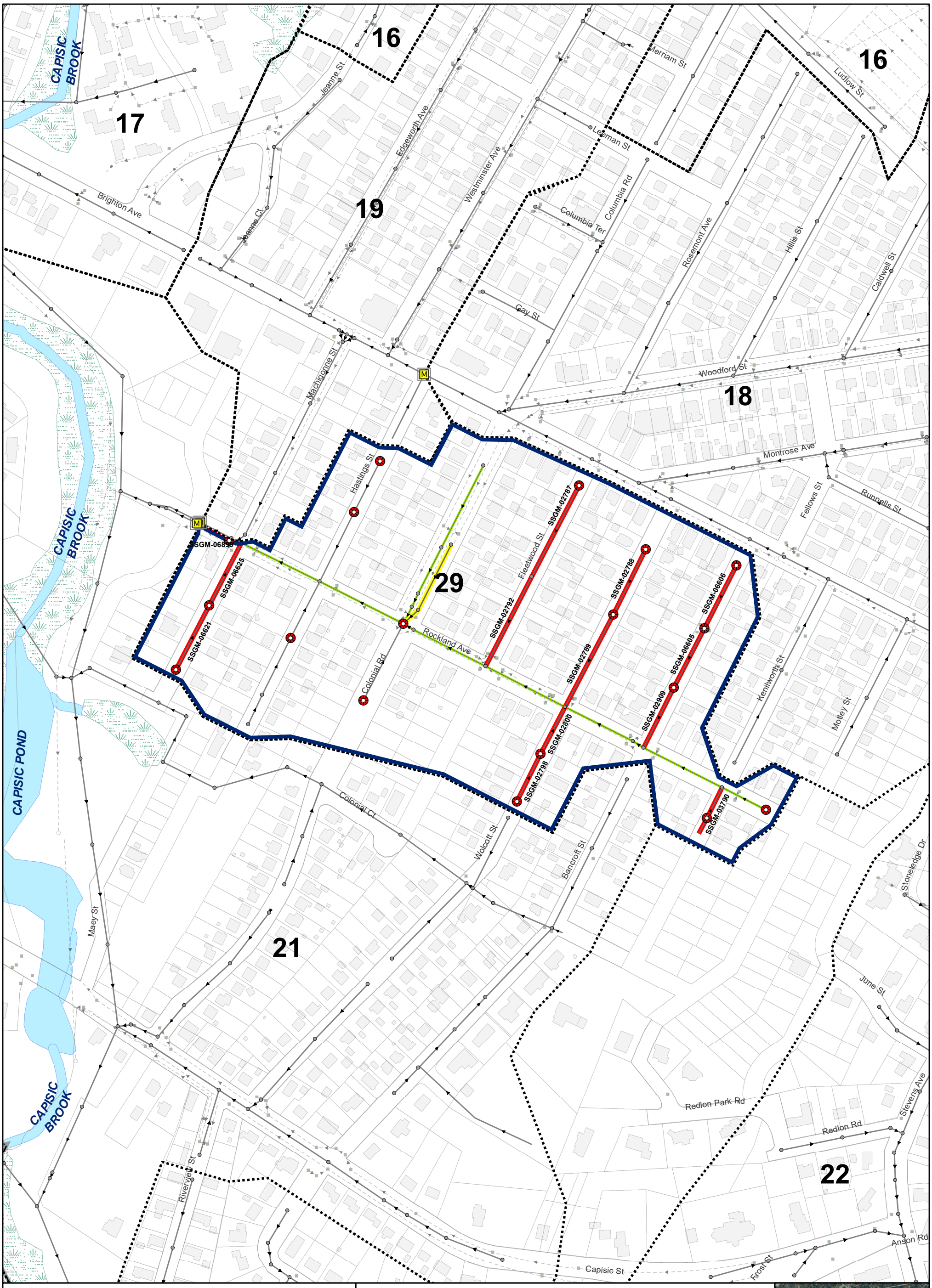

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
- Flow Meter
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary

FIGURE 36

Sub-Area 29
Sewer Rehabilitation Recommendations

0 500 Feet

N

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June 2020

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Sewer System
Evaluation Survey

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FIGURE 37

Sub-Area 30
Sewer Rehabilitation Recommendations

0 500 Feet

N

Recommendation
- Rehabilitation Manhole
- CIPPL
- CIPSR
- CIPSR and TSJ
- TSJ/TSS
- Inspected, No Rehab
- Could Not Inspect
- Target Sub-Area Boundary

SEWER ASSETS
- Sanitary Manhole
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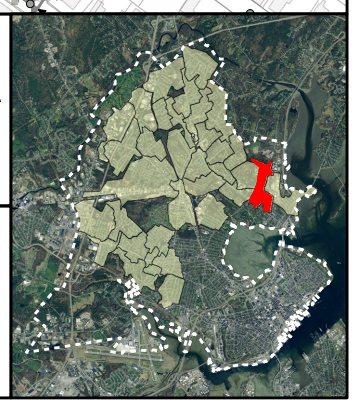
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland
- Sub-Area Boundary



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Planning & Engineering
Sewer System
Evaluation Survey

June 2020

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Appendix A - Phase 1 and 2 Reports

Wastewater Collection System

Analysis and Action Plan

June, 2020

Appendix Contents

PHASE 1 – 2018 FLOW MONITORING PROGRAM REPORT

PHASE 1 – 2019 FLOW MONITORING PROGRAM REPORT

PHASE 2 – IDENTIFICATION OF MAJOR INFLOW AND INFILTRATION SOURCES

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City of Portland, Maine

PHASE 1 INVESTIGATION OF FLOWS – 2018 MONITORING

DECEMBER 2018

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EXECUTIVE SUMMARY

On September 29, 2012, the United States Environmental Protection Agency (US EPA) issued an Order for Compliance and Complaint to the City of Portland for sanitary sewer overflows (SSOs) from non-permitted portions of the City's sewer collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program.

This report summarizes the results of Phase 1 of the I/I Program and provides recommendations for Phase 2 flow monitoring and investigations. In conjunction with the implementation of the flow monitoring program, Phase 1 includes engineering analysis of flow data, including calculation of average daily flow, peak daily flow and peak hourly flow, and estimation of infiltration and inflow for each meter area. Meter areas were evaluated and ranked by quantities of infiltration and inflow, and follow-on investigation recommendations were developed based on these evaluations and rankings.

The two-phase flow monitoring program includes installation, maintenance and monitoring of approximately 40 flow meters over a period of 2 years. This report summarizes the results of the first 20 meters. The program was planned as a 2-year program to allow for potentially unfavorable weather conditions (low precipitation or groundwater), the ability to meter small subsections of each sub-area in Year 2 (as established by the first year of data), and time to allow for corrections to the City's collection system mapping and pipeline connectivity.

Results and Recommendations

Based on the Phase 1 metering results summarized in Section 3.1 of this report and ongoing sewer system investigations, Phase 2 follow-on recommendations were developed. Recommendations, as detailed in Section 3 of this Report, include:

- Flow isolation of 194,740 linear feet (LF) of pipe
- Closed circuit television inspection (CCTV) of 27,611 LF of pipe
- Four hundred and forty-three (443) manhole inspections
- Implementation of a Spring 2019 flow monitoring program

Individual sub-area maps showing follow-on recommendations are included in Appendix C of this report.

In accordance with the Phase 1 metering results, flow isolation was completed in December 2018 and CCTV inspections are currently being conducted. Manhole inspections will be conducted in the Spring of 2019.

Investigations to identify direct inflow (i.e., smoke testing, dye testing and large building inspections), will be conducted in the Summer of 2019 upon completion of the Spring 2019 flow metering program.

The second phase of the flow monitoring program (Spring 2019), will include eleven (11) sub-areas that were not included in the first phase of flow metering. Metering data will be evaluated in the same fashion as the 2018 metering data (as presented herein), and follow-on investigations will be developed to further identify and eliminate I/I.

1 INTRODUCTION

1.1 Scope of Work

On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program, as well as making improvements to the City's collection system GIS by supplementing and correcting data gaps. This I/I Program will address those recommendations and set the course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from the sanitary collection system.

This report summarizes the results of Phase 1 of the I/I Program, a comprehensive flow monitoring program, and provides recommendations for Phase 2, investigation and rehabilitation. Phase 1 includes development of a flow monitoring strategy that includes review of recommended meter sites from the CMOM report, identification of other suitable sites, field verification of these sites, recommendation of initial sites, installation of flow monitoring equipment and data collection and maintenance procedures for the flow monitoring equipment. In conjunction with implementation of the flow monitoring program, Phase 1 includes engineering analysis of flow data, including calculation of average daily flow, peak daily flow, peak hourly flow, infiltration and inflow for each meter area. Meter areas were ranked by quantity of infiltration and inflow and follow-on investigation recommendations were developed.

The flow monitoring program includes installation, maintenance and monitoring of 40 flow meters over a period of 2 years. This report summarizes the results of the first 20 meters installed. The program was planned as a 2-year program to allow for potentially unfavorable weather conditions (low precipitation or groundwater), the ability to meter small subsections of each sub-area in year 2 (if required based on the first's year's data), and time to allow for corrections to the City's collection system mapping and pipeline connectivity.

1.2 Collection System Background and Description

The City of Portland's wastewater collection system, shown on Figure 1, contains approximately 240 miles of separated and combined sewers and 24 pump stations, 9 of which are owned and operated by the City. The collection system and pump stations convey wastewater to the East End Wastewater Treatment Facility (WWTF) in Portland, which is owned and operated by the Portland Water District.

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 1 - CITY OF PORTLAND COLLECTION SYSTEM MAP

December 2018

0 0.25 0.5 1 Miles

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Presumpscot River
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor
Fore River
Stroudwater River
Capisic Brook
Dole Brook
Fall Brook
Milliken Brook
Long Creek
Riverside Golf Course
Evergreen Cemetery
Woodfords Corner
Deering Oaks Park
Western Cemetery
Graves Hill
Peaks Island
East End Wastewater Treatement Facility
PRESUMPSCOT NORTH INTERCEPTOR
VIRGINIA CARTER INTERCEPTOR
FALL BROOK INTERCEPTOR
MILLIKEN BROOK INTERCEPTOR
WEST SIDE INTERCEPTOR
FORE RIVER INTERCEPTOR
PS
002
004
005
006
007
008
009
010
011
012
013
014
015
016
017
018
019
020
023
024
025
026
027
028
029
032
033
039
042

Legend

SEWER FEATURES
- SEWER MANHOLE
- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PORTLAND WATER DISTRICT (PWD) PUMP STATION
- PRIVATE PUMP STATION

SEWER PIPE TYPE
- SEPARATED GRAVITY SEWER
- COMBINED GRAVITY SEWER
- SEWER FORCE MAIN

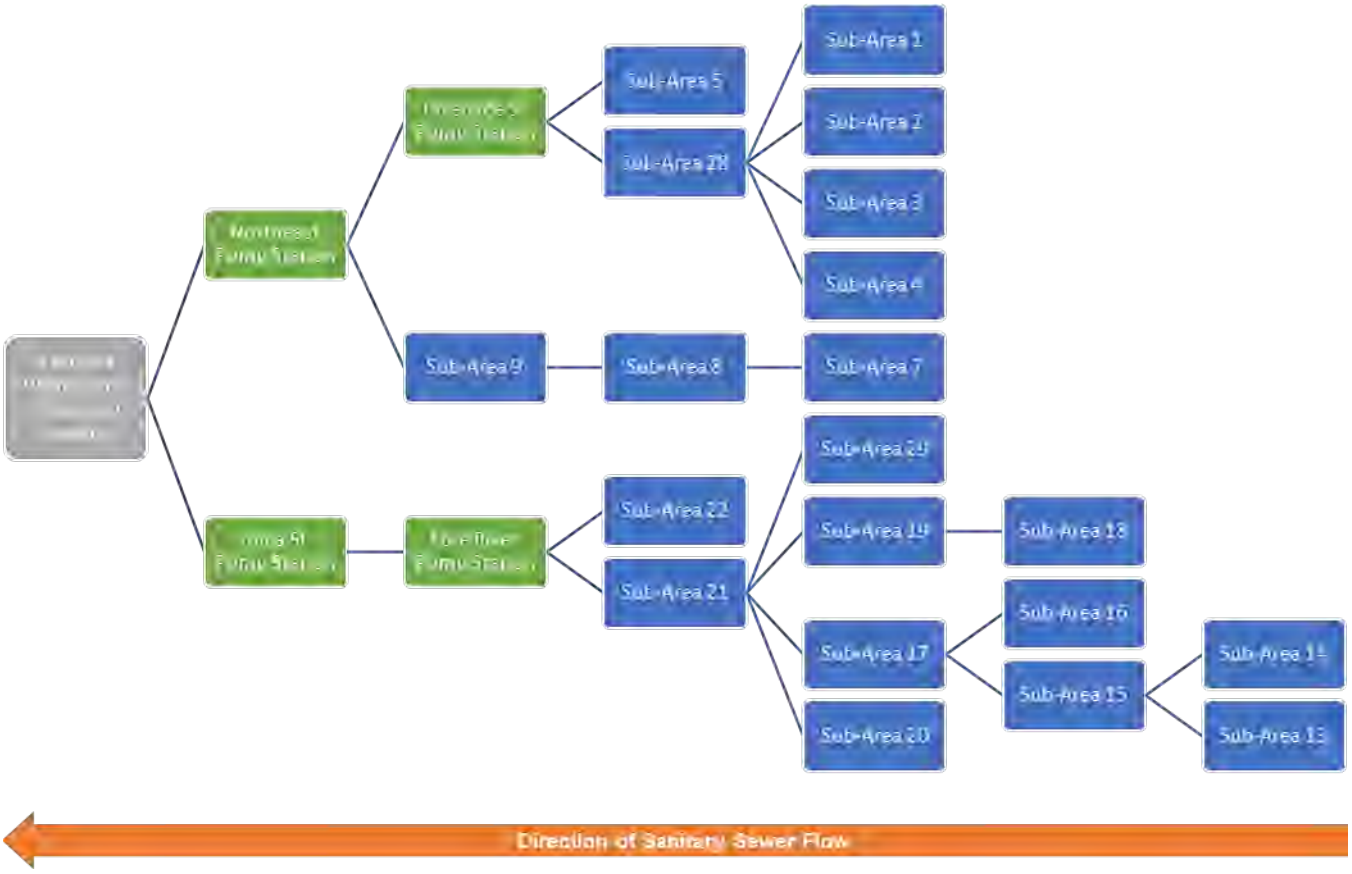
HYDROLOGY
- OPEN WATER
- WETLAND
- CITY BOUNDARY

G:\GIS\Portland\2018 I-I Report\FIGURE 1 - CITYWIDE SANITARY SEWER SYSTEM.mxd

1.2.1 Sub-Area Delineation

The first phase of the metering program included the delineation of 20 sub-areas throughout the City. Due to ongoing sewer separation projects and the extent of combined sewers in the downtown area of Portland, efforts were focused on the north and west areas of the City. Prioritization of meter areas was based on recent and on-going flow monitoring and available CCTV data, historic and recently discovered problem areas where backups, surcharging and overflows occurred, areas tributary to known problem areas, areas where the hydraulic model identified potential I/I capacity issues, and areas near water bodies that could be contributing I/I to the system. Figure 2 shows a flow vector diagram for the 20 sub-areas included in the metering program. The flow vector diagram is a visual representation of tributary flow within the system. Sub-areas delineated and included in the 2018 metering program are shown on Figure 3.

Figure 2. Flow Vector Diagram



Presumpscot River
Dole Brook
Dole Brook
Fall Brook
Millbrook
Fall Brook
Capisic Brook
Capisic Brook
Capisic Brook
Capisic Brook
Fore River
Fore River
Fore River
Long Creek
Presumpscot River
Stroudwater River
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor
1
2
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039
042

Legend

SEWER FEATURES

- Sewer Manholes
- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION

SEWER PIPE TYPE

- SEPARATED GRAVITY SEWER
- COMBINED GRAVITY SEWER
- SEWER FORCE MAIN
- (2) DELINEATED SUB-AREA

HYDROLOGY

- OPEN WATER
- WETLAND
- CITY BOUNDARY

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 3 - 2018 SUB-AREA DELINEATION

0 0.25 0.5 1 Miles

December 2018

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 3 - 2018 SUB-AREA DELINEATION.mxd

2 2018 METERING ANALYSIS

In March 2018, Arcadis and its subcontractor, Flow Assessment Services (FAS) completed a 16-week flow monitoring program of 20 sub-areas throughout the City of Portland. Meters were installed by FAS in the most downstream manhole of each sub-area where hydraulic conditions were conductive for metering. Metering was performed using continuous monitoring devices incorporating depth and velocity sensors to measure velocity, depth and flow rate. Two record tipping bucket rain gauges measuring rainfall every fifteen minutes were installed on the roof of the Fore River Pump Station and the Riverton Fire Station. Rain gauge data was supplemented with data from the City-owned rainfall gauge at the Riverside Street Pump Station.

Two permanent groundwater monitoring wells were installed on May 6, 2018 at the intersection of Martin Street and Bartley Street and on Leland Street across from the Deering High School parking lot. Maintenance and data collection for the groundwater gauges, rainfall gauges and flow meters was conducted bi-weekly by Flow Assessment Services.

2.1 Wastewater Characteristics

There are three major components of wastewater flow in a sanitary sewer system, base sanitary flow (BSF), groundwater infiltration (GWI) and rainfall derived inflow and infiltration (RDII - commonly referred to as inflow). The Environmental Protection Agency's "Guide for Estimating Infiltration and Inflow", June 2014, provides the following definitions:

Base Sanitary Flow (BSF) – The portion of wastewater which includes domestic, commercial, institutional, and industrial sewage and specifically excludes infiltration and inflow.

Groundwater Infiltration (GWI) – Measured during average dry weather flow period. The average of the low nighttime flows (midnight to 6am) per day for the same time period, minus significant industrial or commercial nighttime users

Rainfall Induced Infiltration (RII) – The short term increase in infiltration which is the result of a rain event. Rainfall-induced infiltration is a portion of delayed inflow.

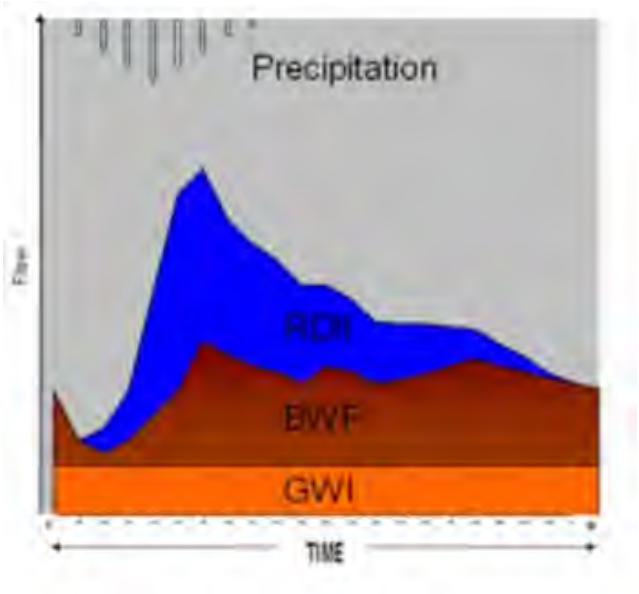
Delayed Inflow Volume – The portion of total inflow which is generated from indirect connections to the collection system or connections which produce inflow after a significant time delay from the beginning of a storm. Delayed inflow sources include: sump pumps, foundation drains, indirect sewer/drain cross connections, etc. Rainfall-induced infiltration cannot be distinguished from delayed inflow and is therefore included as part of delayed inflow. Delayed inflow sources have a gradual impact on the collection system and flow decreases gradually upon conclusion of the rainfall event, and after peak inflow caused by direct connections.

Inflow – Water other than sanitary wastewater that enters a sewer system from sources such as roof leaders, cellar/foundation drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, and catch basins. Inflow does not include infiltration.

Rainfall derived infiltration and inflow includes both rainfall-induced infiltration and inflow. Figure 4 highlights the three key components of wastewater flow during a precipitation event. The GWI (orange

line) remains constant and is not impacted by precipitation, the BWF (brown line) is a diurnal pattern based on actual usage and not impacted by precipitation, and the RDII (blue line) shows a very clear increase in flows as a direct response to precipitation.

Figure 4. Components of Wastewater Flow During Wet Weather (US EPA, 2007)



The City of Portland's collection system consists of approximately 240 miles of separated and combined sewers. A traditional infiltration and inflow analysis was conducted in the separated portion of the collection system, while a modified approach was used in the combined portion of the collection system. In the sub-areas where 75% or more of the collection system was separated, the I/I analysis focused on identifying groundwater infiltration, rainfall-induced infiltration and direct inflow. In the combined subareas, the I/I analysis focused on identifying groundwater infiltration and rainfall-induced infiltration (delayed inflow). Large volumes of direct inflow are expected in a combined system due to known cross connections between the sanitary system and the drainage system. While direct inflow values were calculated in these sub-areas, they were not used to develop follow-on investigation recommendations. Table 1 includes a summary of the total pipeline footage, percentage of combined pipes and the approach method for each sub-area.

Table 1. Sub-area Characteristics

Sub-area	Total Footage (LF)	Percent Combined (%)	Approach
Sub-Area 1	19,997	7%	Traditional
Sub-Area 2	11,918	2%	Traditional
Sub-Area 3	28,692	36%	Modified
Sub-Area 4	8,893	0%	Traditional
Sub-Area 5	21,962	16%	Traditional
Sub-Area 7	23,684	13%	Traditional
Sub-Area 8	25,297	40%	Modified
Sub-Area 9	10,989	53%	Modified
Sub-Area 13	48,470	57%	Modified
Sub-Area 14	23,488	24%	Traditional
Sub-Area 15	22,812	30%	Modified
Sub-Area 16	21,410	67%	Modified
Sub-Area 17	24,822	48%	Modified
Sub-Area 18	19,962	85%	Modified
Sub-Area 19	5,677	35%	Modified
Sub-Area 20	9,924	79%	Modified
Sub-Area 21	21,047	76%	Modified
Sub-Area 22	19,133	93%	Modified
Sub-Area 28	11,010	75%	Modified
Sub-Area 29	6,174	34%	Modified

2.2 Results and Findings

Table 2 identifies the average daily flow (ADF), peak daily flow (PDF) and peak hourly flow (PHF) measured from March 7, 2018 through July 16, 2018 for each of the twenty sub-areas. Average daily flow is calculated by summing all metered flows and dividing by the duration of the metering period. Peak daily flow is the maximum daily flow over 24-hours measured throughout the metering period. Peak hourly flow is the maximum 1-hour flow rate measured. Peaking factor is calculated by dividing the peak hourly flow by the average daily flow for each sub-area. Table 2 shows net average daily flow within each sub-area itself (with upstream tributary flows subtracted out), net peak daily flow, net peak hourly flow and the hourly peaking factor.

Table 2. Flow Metering Results – ADF, PDF, PHF

Sub-Area	Average Daily Flow (GPD)	Peak Daily Flow (GPD)	Peak Hourly Flow (GPD)	Hourly Peaking Factor
Sub-Area 1	147,060	382,063	870,000	6
Sub-Area 2	65,234	129,833	180,750	3
Sub-Area 3	170,348	296,042	570,000	3
Sub-Area 4	150,666	270,896	765,500	5
Sub-Area 5	184,123	398,698	630,750	3
Sub-Area 7	171,871	413,010	701,000	4
Sub-Area 8*	125,390	484,365	1,104,750	9
Sub-Area 9*	142,673	408,188	957,000	7
Sub-Area 13	680,228	1,779,313	2,589,750	4
Sub-Area 14	271,125	579,698	1,220,500	5
Sub-Area 15*	89,215	358,104	2,902,875	33
Sub-Area 16	425,703	1,472,542	4,129,000	10
Sub-Area 17*	67,371	319,948	1,257,500	19
Sub-Area 18	408,780	1,633,229	4,159,000	10
Sub-Area 19*	72,388	872,031	2,812,750	39
Sub-Area 20	247,097	2,416,948	7,569,000	31
Sub-Area 21*	115,428	1,489,417	1,607,250	14
Sub-Area 22	340,367	2,281,698	6,500,250	19
Sub-Area 28*	105,904	401,594	847,750	8
Sub-Area 29	112,546	865,542	2,859,000	25

*Denotes net values with tributary sub-areas subtracted.

Hyetographs showing average daily flow and rainfall for each of the 20 sub-areas are included in Appendix B.

2.3 Groundwater Infiltration

Groundwater infiltration is defined as groundwater that enters or leaks into a sanitary sewer system through defective pipes, pipe joints, service connections, or manholes. The average groundwater infiltration rate is defined as 85% of the nighttime sanitary flow measured on dry days from 12:00am to 6:00am throughout the entire metering period. Only data for days that follow a minimum of 72-hours without a rainfall event are considered “dry days” to avoid inclusion of indirect inflow and rainfall induced infiltration (RII) in the infiltration estimate.

Groundwater levels were monitored throughout the metering period using the two groundwater monitoring wells installed. The groundwater depth during the metering period was analyzed in relation to the average sewer pipe elevations in the area, as shown in Figure 5, as groundwater depth can have a significant influent on the amount of groundwater infiltration entering a collection system.

Groundwater infiltration for each sub-area is normalized by calculating the gallons per day per inch diameter mile of pipe (gpd/in-mi). The inch-diameter-mile of pipe, or inch-miles (in-mi), in a sub-area is calculated by multiplying the sum of the miles of for each diameter of pipe by its respective inch diameter. As an example, if a system contained 1 mile of 10-inch diameter, 1.5 miles of 12-inch diameter, and 0.5 miles of 25-inch diameter of gravity sewers, the calculated inch-miles would be as follows:

(10-inch x 1 mile) + (12-inch x 1.5 miles) + (24-inch x 0.5 mile) = 40 in-mi

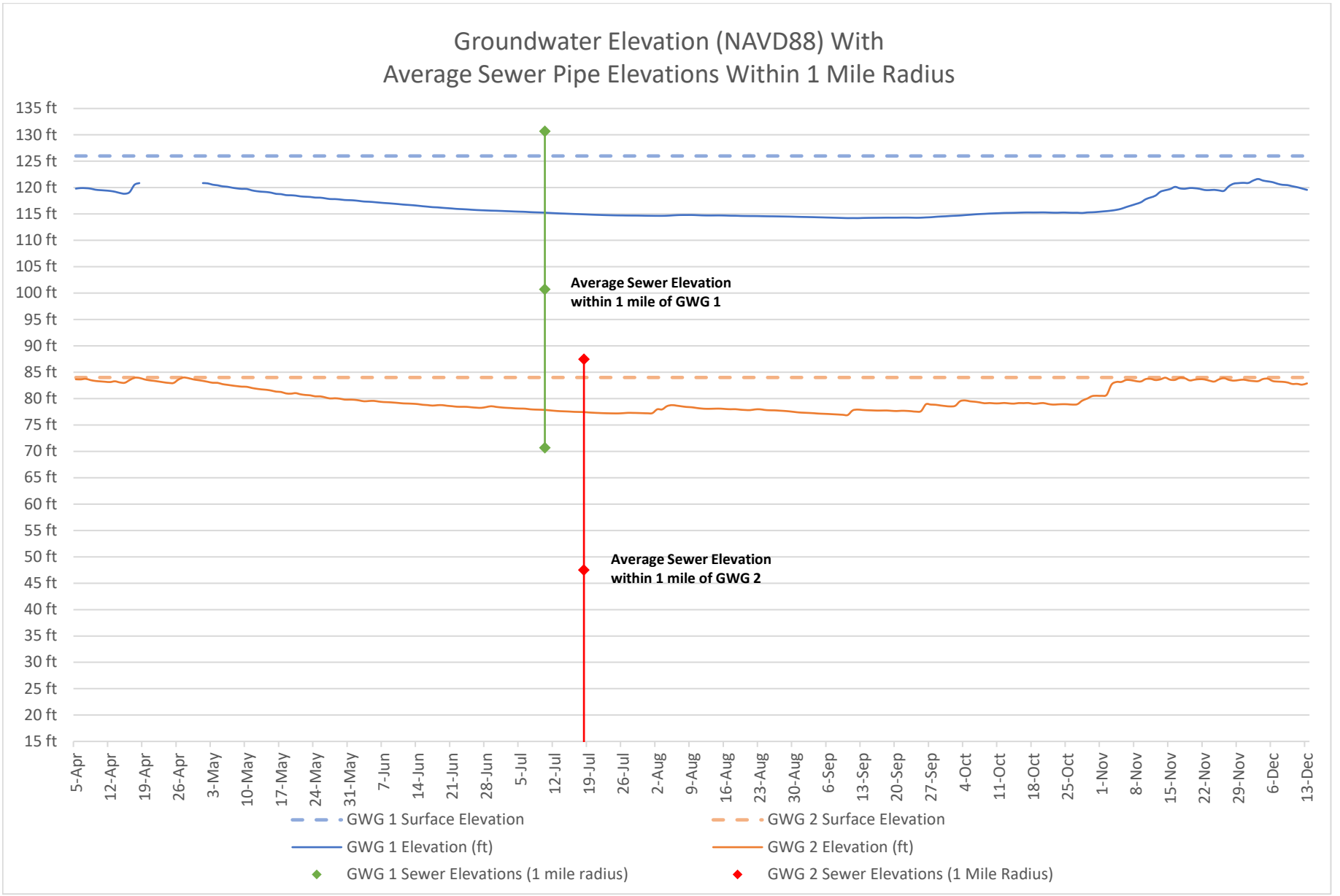
Groundwater infiltration rates for each sub-area were calculated by dividing the sub-area’s total groundwater infiltration by the number of inch-miles of sanitary sewer within the sub-area. The total groundwater infiltration rates for each sub-area during the metering period are shown in Table 3.

Table 3. Flow Metering Results – Infiltration

Sub-Area	Average Daily Flow (gpd)	Net Average Infiltration (gpd)	Infiltration GPD/Total LF (GPD/LF)	Gallons per Day per Inch-Mile (GPDIM)
Sub-Area 1	147,060	78,910	3.9	2,515
Sub-Area 2	65,234	36,879	3.1	1,884
Sub-Area 3	170,348	91,912	3.2	1,968
Sub-Area 4	150,666	83,726	9.4	6,055
Sub-Area 5	184,123	97,130	4.4	2,444
Sub-Area 7	171,871	97,191	4.1	2,505
Sub-Area 8 [1, 2]	125,390	69,114	2.7	1,355
Sub-Area 9 [1, 2]	142,673	75,325	6.9	2,427
Sub-Area 13	680,228	374,236	7.7	2,354
Sub-Area 14	271,125	152,698	6.5	3,489
Sub-Area 15 [1, 2]	89,215	66,479	2.9	1,411
Sub-Area 16	425,703	279,739	13.1	5,375
Sub-Area 17 [1, 2]	67,371	70,823	2.9	1,310
Sub-Area 18	408,780	209,635	10.5	4,487
Sub-Area 19 [1, 2]	72,388	43,517	7.7	2,469
Sub-Area 20	247,097	118,081	11.9	4,235
Sub-Area 21 [1, 2]	115,428	*N/A*	*N/A*	*N/A*
Sub-Area 22	340,367	128,450	6.7	2,367
Sub-Area 28 [1, 2]	105,904	50,821	9.6	1,527
Sub-Area 29	112,546	50,357	8.2	4,445

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

Figure 5 - Groundwater Depth with Average Sewer Pipe Elevations



2.4 Rainfall Derived Infiltration and Inflow (RDII)

Four rainfall events from the metering period were analyzed to calculate rainfall derived infiltration and inflow. Precipitation data was used from rain gauges at the Riverside Road Pump Station, Riverton Fire Station and the Fore River Pump Station. Table 4 outlines the duration, total rainfall and peak intensity of the four selected storms. The rainfall data from the April 16, 2018 storm event was only available from the Riverside Pump Station rain gauge and therefore was used in the inflow analysis for all sub-areas for that storm event. For the additional three storm events, the analysis used rainfall data from the closest rain gauge to the flow meter. The Riverside Pump Station rain gauge serviced sub-areas 1, 2, 3, 4, 5, 7, 8 and 9. The Riverton Fire Station rain gauge serviced sub-areas 13, 14, 15, 16 and 17 and the Fore River Pump Station rain gauge serviced sub-areas 18, 19, 20, 21, 22, 28 and 29.

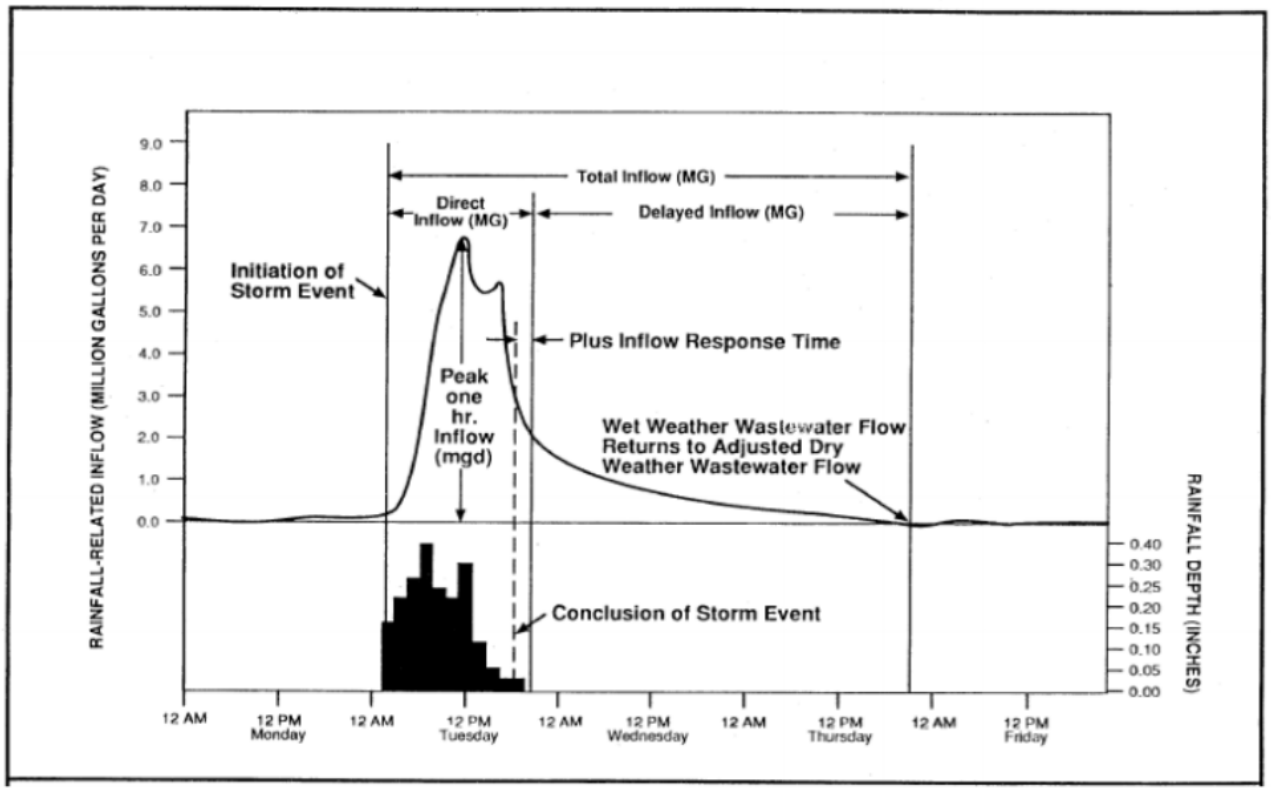
Table 4. Inflow Analysis – Selected Rainfall Events

Location	Rainfall Event	Duration (min)	Total Rainfall (in)	Peak Intensity (in/hr)
Riverside PS	4/16/18 8:00 AM	960	2.9	0.59
Riverside PS	4/25/18 12:45 PM	1215	2.59	0.48
Riverside PS	6/18/18 4:00 PM	165	1.07	0.77
Riverside PS	6/27/18 10:45 PM	1215	1.43	0.28
Riverton RG	4/25/18 12:45 PM	1230	1.67	0.29
Riverton RG	6/18/18 4:15 PM	165	1.13	0.85
Riverton RG	6/27/18 10:45 PM	1200	1.34	0.2
Fore River PS	4/25/18 12:45 PM	1245	1.76	0.28
Fore River PS	6/18/18 4:15 PM	135	0.96	0.75
Fore River PS	6/27/18 10:45 PM	1245	1.56	0.3

A wet weather hydrograph from each storm event was compared to a dry weather period on the same day of the week as each storm event. The dry weather flow is subtracted from the wet weather flow resulting in the inflow volumes presented in Table 5. The dry weather flow is calculated as an average of all dry days during the metering period for each day during the week. For example, all dry “Mondays” in the metering period are averaged together to determine the dry weather flow for each individual day.

The hydrograph shown as Figure 6 shows a typical inflow response to wet weather flow. The portion of inflow occurring during the storm event is identified as direct inflow and the portion of inflow that occurs once the storm has concluded is delayed inflow. Total inflow encompasses both direct and delayed inflow.

Figure 6. Wet Weather Hydrograph (MassDEP, 1993)



For the purposes of this study, direct inflow was calculated for all sub-areas; however, where the modified approach was used, only the delayed inflow results were used in the development of follow-on investigation recommendations.

Table 5 – Flow Metering Results - Inflow

Sub-Area	4/16/2018 Storm Event			4/25/2018 Storm Event			6/18/2018 Storm Event			6/27/2018 Storm Event		
	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)
Sub-Area 1	**237,480**	**236,470**	**473,951**	**141,300**	**121,100**	**262,400**	**600**	**0**	**600**	**2,900**	**4,200**	**7,100**
Sub-Area 2	**42,099**	**66,764**	**108,863**	**37,500**	**46,000**	**83,500**	**0**	**0**	**0**	**1,700**	**400**	**2,100**
Sub-Area 3	138,499	**133,903**	272,402	90,600	**91,300**	181,900	6,800	**800**	7,600	15,700	**3,600**	19,300
Sub-Area 4	**30,853**	**79,721**	**110,574**	**80,500**	**61,000**	**141,500**	**11,000**	**6,200**	**17,200**	**63,100**	**11,400**	**74,500**
Sub-Area 5	**172,264**	**214,393**	**386,657**	**97,800**	**119,700**	**217,500**	**2,500**	**600**	**3,100**	**0**	**2,500**	**2,500**
Sub-Area 7	**157,521**	**246,923**	**404,444**	**132,800**	**170,100**	**302,900**	**0**	**0**	**0**	**0**	**900**	**900**
Sub-Area 8	312,306	**366,043**	678,349	134,500	**162,100**	296,600	6,300	**0**	6,300	330,000	**8,400**	338,400
Sub-Area 9	285,422	**260,439**	545,861	227,900	**211,900**	439,800	500	**2,500**	3,000	0	**4,500**	4,500
Sub-Area 13	**975,293**	**1,142,995**	**2,118,288**	**930,700**	**857,700**	**1,788,400**	**86,500**	**0**	**86,500**	**396,100**	**89,200**	**485,300**
Sub-Area 14	**300,579**	**310,003**	**610,582**	**197,500**	**220,300**	**417,800**	**9,100**	**2,300**	**11,400**	**63,700**	**20,700**	**84,400**
Sub-Area 15	*N/A*	***N/A***	*N/A*	385,900	**155,800**	541,700	32,200	**42,200**	74,400	26,200	**0**	26,200
Sub-Area 16	1,076,962	**609,352**	1,686,314	457,200	**348,800**	806,000	945,000	**0**	945,000	243,300	**25,500**	268,800
Sub-Area 17	*N/A*	***N/A***	*N/A*	283,800	**23,900**	307,700	0	**0**	0	0	**0**	0
Sub-Area 18	1,284,107	**984,596**	2,268,703	989,800	**734,400**	1,724,200	148,800	**8,800**	157,600	451,200	**64,500**	515,700
Sub-Area 19	810,736	**389,442**	1,200,178	473,000	**240,200**	713,200	63,100	**2,900**	66,000	223,300	**0**	223,300
Sub-Area 20	2,166,025	**553,500**	2,719,525	1,162,800	**393,600**	1,556,400	221,900	**15,700**	237,600	549,400	**20,300**	569,700
Sub-Area 21	398,523	**1,397,997**	1,796,520	0	**129,700**	129,700	0	**145,200**	145,200	0	**131,700**	131,700
Sub-Area 22	1,980,560	**1,400,988**	3,381,548	1,174,200	**812,100**	1,986,300	102,100	**0**	102,100	543,100	**54,800**	597,900
Sub-Area 28	249,721	**0**	249,721	0	**0**	0	300	**0**	300	88,300	**31,800**	120,100
Sub-Area 29	812,737	**443,994**	1,256,731	434,300	**246,400**	680,700	73,500	**17,500**	91,000	207,600	**37,400**	245,000

3 SUB-AREA PRIORITIZATION AND RECOMMENDATIONS

3.1 High Infiltration and High RDII Sub-Areas

Infiltration within a sanitary sewer system is considered excessive if a subarea no greater than 20,000 linear feet of pipe exceeds a dry weather infiltration rate average of 4,000 gallons per day per inch diameter mile (gpd/idm). Sub-areas with infiltration rates exceeding 4,000 gpd/in-mi (Sub-areas 4, 16, 18, 20 and 29) are highlighted in Table 6.

Table 6. High Infiltration Sub-areas

Sub-Area	Groundwater Infiltration (GWI)	Infiltration GPD/Total LF (GPDLF)	Gallons per Day per Inch-Mile (GPDIM)
Sub-Area 4	83,726	**9.4**	6,055
Sub-Area 16	279,739	**13.1**	5,375
Sub-Area 18	209,635	**10.5**	4,487
Sub-Area 29	50,357	**8.2**	4,445
Sub-Area 20	118,081	**11.9**	4,235
Sub-Area 14	152,698	**6.5**	3,489
Sub-Area 1	78,910	3.9	2,515
Sub-Area 7	97,191	**4.1**	2,505
Sub-Area 19 [1, 2]	43,517	**7.7**	2,469
Sub-Area 5	97,130	**4.4**	2,444
Sub-Area 9 [1, 2]	75,325	**6.9**	2,427
Sub-Area 22	128,450	**6.7**	2,367
Sub-Area 13	374,236	**7.7**	2,354
Sub-Area 3	91,912	3.2	1,968
Sub-Area 2	36,879	3.1	1,884
Sub-Area 28 [1, 2]	50,821	**9.6**	1,527
Sub-Area 15 [1, 2]	66,479	2.9	1,411
Sub-Area 8 [1, 2]	69,114	2.7	1,355
Sub-Area 17 [1, 2]	70,823	2.9	1,310
Sub-Area 21 [1, 2]	*N/A*	*N/A*	*N/A*

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

The gallons per day of GWI per total liner footage of each sub-area was also calculated. Sub-areas with a total GPD/LF greater than 4 were also deemed high infiltration areas and are shown as bold in Table 6.

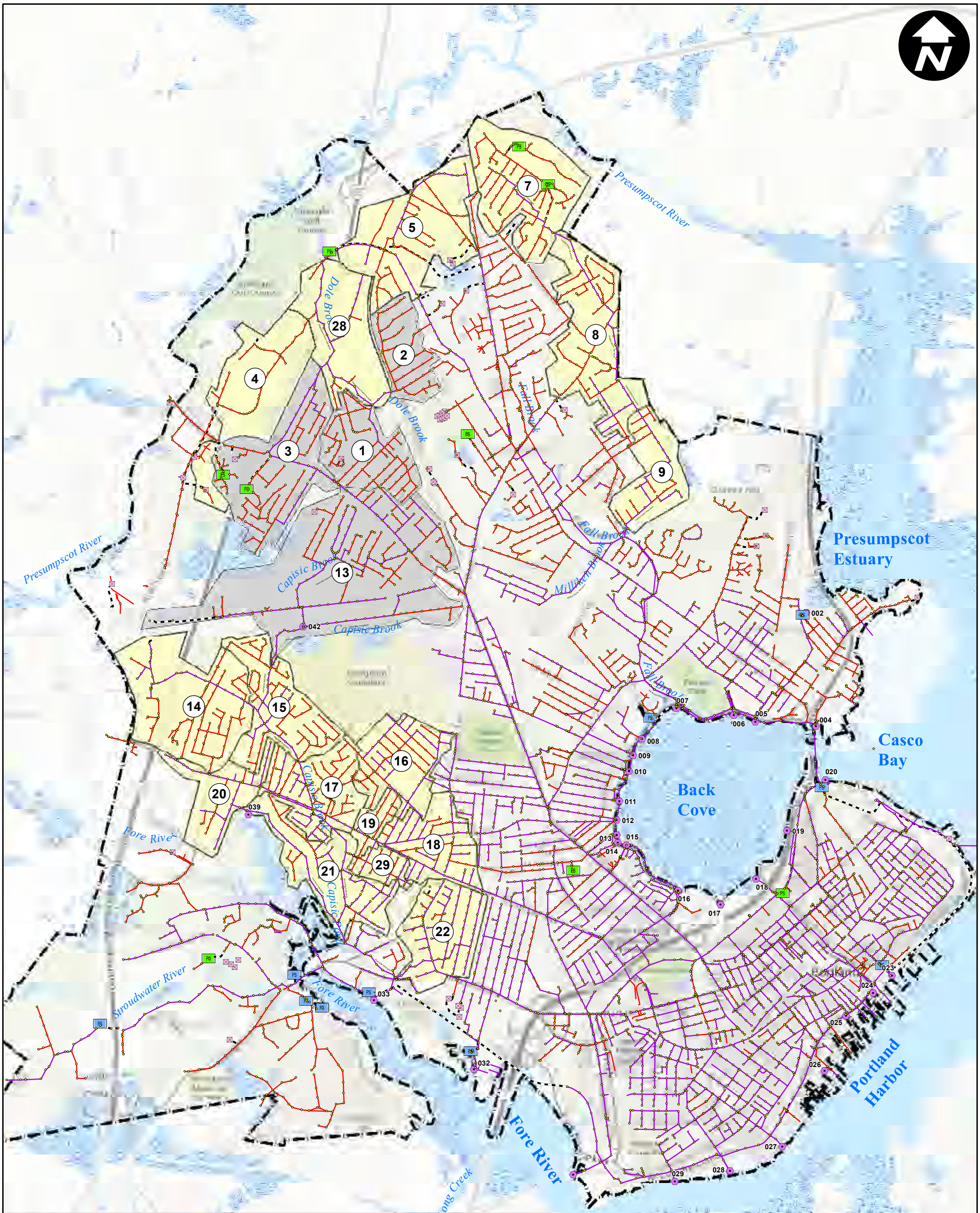
Inflow results were analyzed for the April 25, 2018 storm event to determine which sub-areas contribute excessive volumes of delayed inflow to the collection system. High delayed inflow sub-areas are shaded in Table 7.

Table 7. High Delayed Inflow Sub-areas – April 25, 2018 Storm Event

Subarea	Direct Inflow (Gal)	Delayed Inflow (Gal)	Total Inflow (Gal)
Sub-Area 13	**930,700**	**857,700**	**1,788,400**
Sub-Area 22	1,174,200	**812,100**	1,986,300
Sub-Area 18	989,800	**734,400**	1,724,200
Sub-Area 20	1,162,800	**393,600**	1,556,400
Sub-Area 16	457,200	**348,800**	806,000
Sub-Area 29	434,300	**246,400**	680,700
Sub-Area 19[1]	473,000	**240,200**	713,200
Sub-Area 14	**197,500**	**220,300**	**417,800**
Sub-Area 9[1]	227,900	**211,900**	439,800
Sub-Area 7	**132,800**	**170,100**	**302,900**
Sub-Area 8[1]	134,500	**162,100**	296,600
Sub-Area 15[1]	385,900	**155,800**	541,700
Sub-Area 21[1]	0	**129,700**	129,700
Sub-Area 1	**141,300**	**121,100**	**262,400**
Sub-Area 5	**97,800**	**119,700**	**217,500**
Sub-Area 3	90,600	**91,300**	181,900
Sub-Area 4	**80,500**	**61,000**	**141,500**
Sub-Area 2	**37,500**	**46,000**	**83,500**
Sub-Area 17[1]	283,800	**23,900**	307,700
Sub-Area 28[2]	0	**0**	0

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

High infiltration and inflow sub-areas are highlighted in Figure 7.



THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

0 0.25 0.5 1 Miles

December 2018

FIGURE 7 - HIGH INFILTRATION AND INFLOW SUB-AREAS

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 7 - HIGH I AND I SUB-AREAS.mxd

3.2 Investigation Recommendations

Based on the metering results summarized in Section 3.1 and ongoing investigation and construction within the City of Portland, Phase 2 follow-on recommendations were developed. Recommendations, summarized in Table 8 and shown on Figure 8 include flow isolation, CCTV and manhole inspections. Individual sub-area maps showing follow-on recommendations are included in Appendix C.

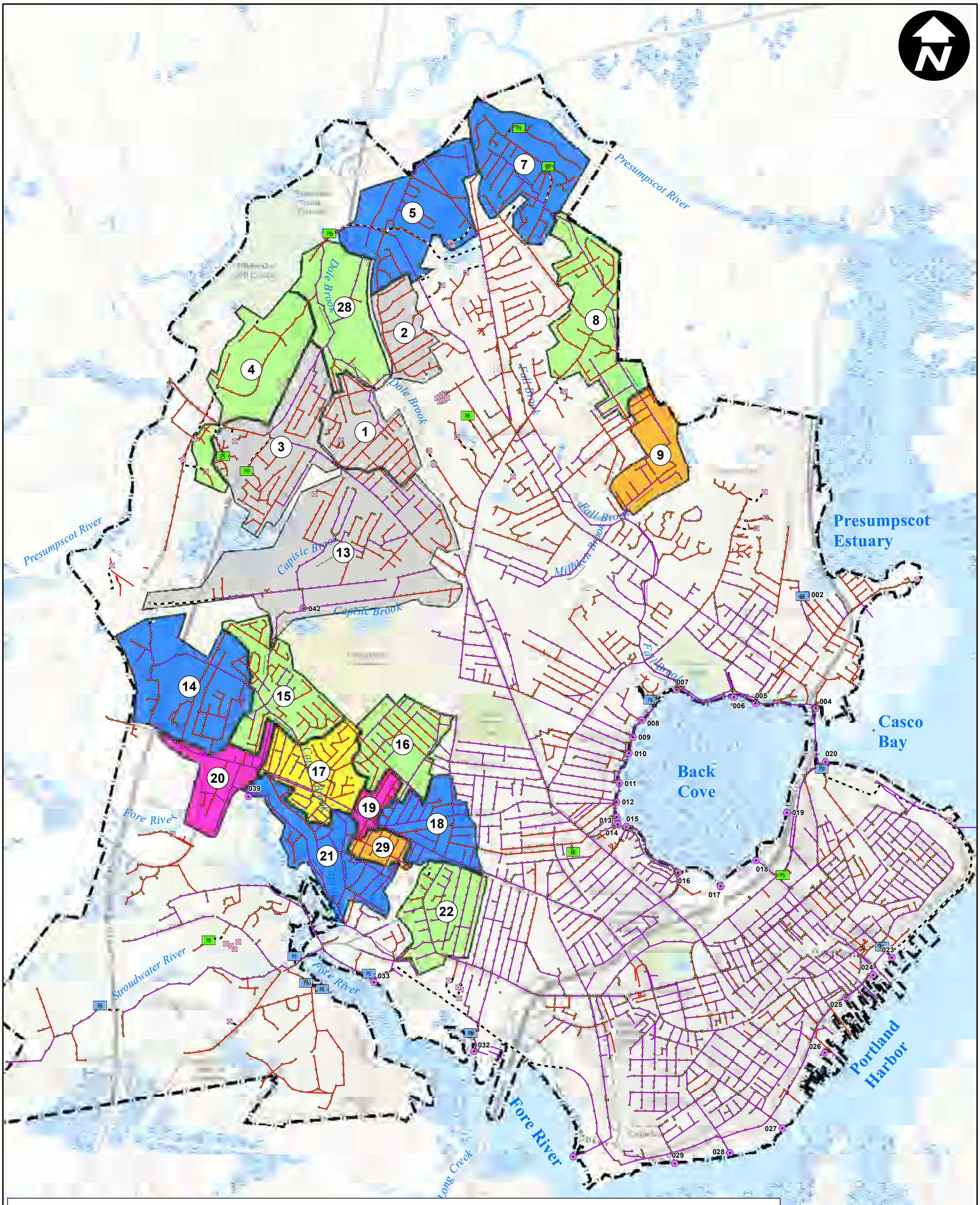
Table 8. Follow-on Investigation Recommendations

Sub-Area	High Infiltration Sub-areas	High Delayed Inflow Sub-area	Recommendations		
			Flow Isolation (LF)	CCTV (LF)	Manhole Inspections
Sub-Area 4	X		8,893		46
Sub-Area 5	X		21,962		
Sub-Area 7	X	X	23,684		
Sub-Area 8		X	19,179		26
Sub-Area 9		X		9,165	20
Sub-Area 13[1]	X	X	-	-	-
Sub-Area 14	X	X	23,488		
Sub-Area 15		X	19,404		20
Sub-Area 16	X	X	21,410		100
Sub-Area 17					28
Sub-Area 18	X	X	19,962		
Sub-Area 19	X	X		4,667	
Sub-Area 20	X	X		8,685	
Sub-Area 21		X	12,431		
Sub-Area 22	X	X	19,133		112
Sub-Area 28	X		5,164		56
Sub-Area 29	X	X		5,094	35
Total			***194,740***	***27,611***	***443***

Notes: 1. Investigation work in Sub-area 13 is ongoing through another project and therefore not included in these recommendations

Flow isolation was completed in December 2018 and CCTV is currently ongoing. Manhole inspections will be conducted in the Spring of 2019.

Investigations to identify direct inflow such as smoke testing, dye testing and large building inspections will be conducted in the summer of 2019 once the 2019 flow metering program is completed.



THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 8 - INVESTIGATION RECOMMENDATIONS

0 0.25 0.5 1 Miles

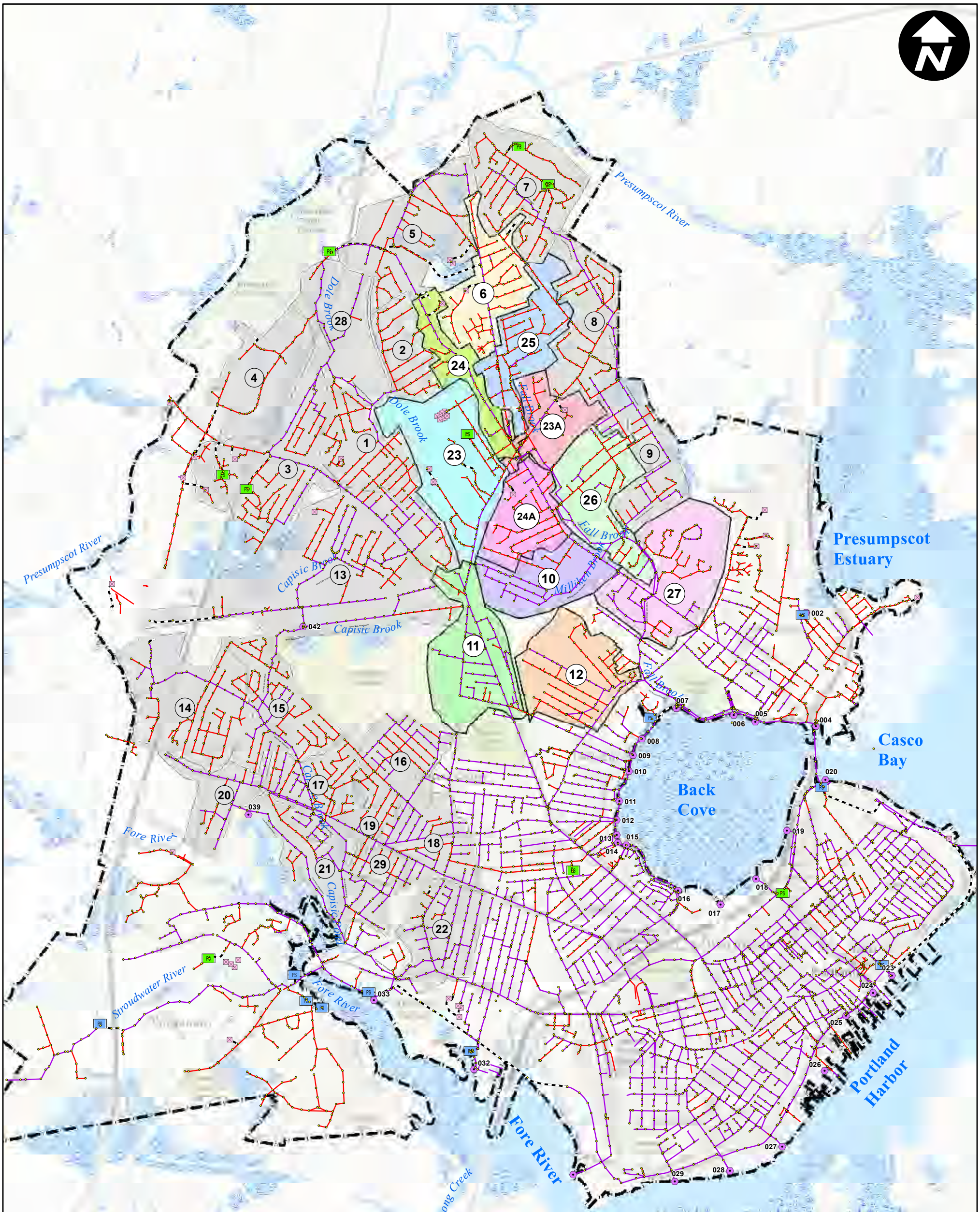
December 2018

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 8 - I AND I INVESTIGATION SUB-AREAS.mxd

3.3 2019 Flow Metering Program

A second phase of flow metering is scheduled to be conducted in April 2019 in 11 sub-areas that were not included in the first phase of flow metering. The metering program includes 11 meters, as shown on Figure 9, as well as 3 additional deduction meters in sub-areas 6, 11 and 26. Additional meters may be added to the 2019 flow metering program if results from the ongoing SSES activities identify the need for additional meter data.



THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 9 - 2019 FLOW METER LOCATIONS

0 0.25 0.5 1 Miles

December 2018

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 9 - 2019 SUB-AREA DELINEATION.mxd

APPENDIX A

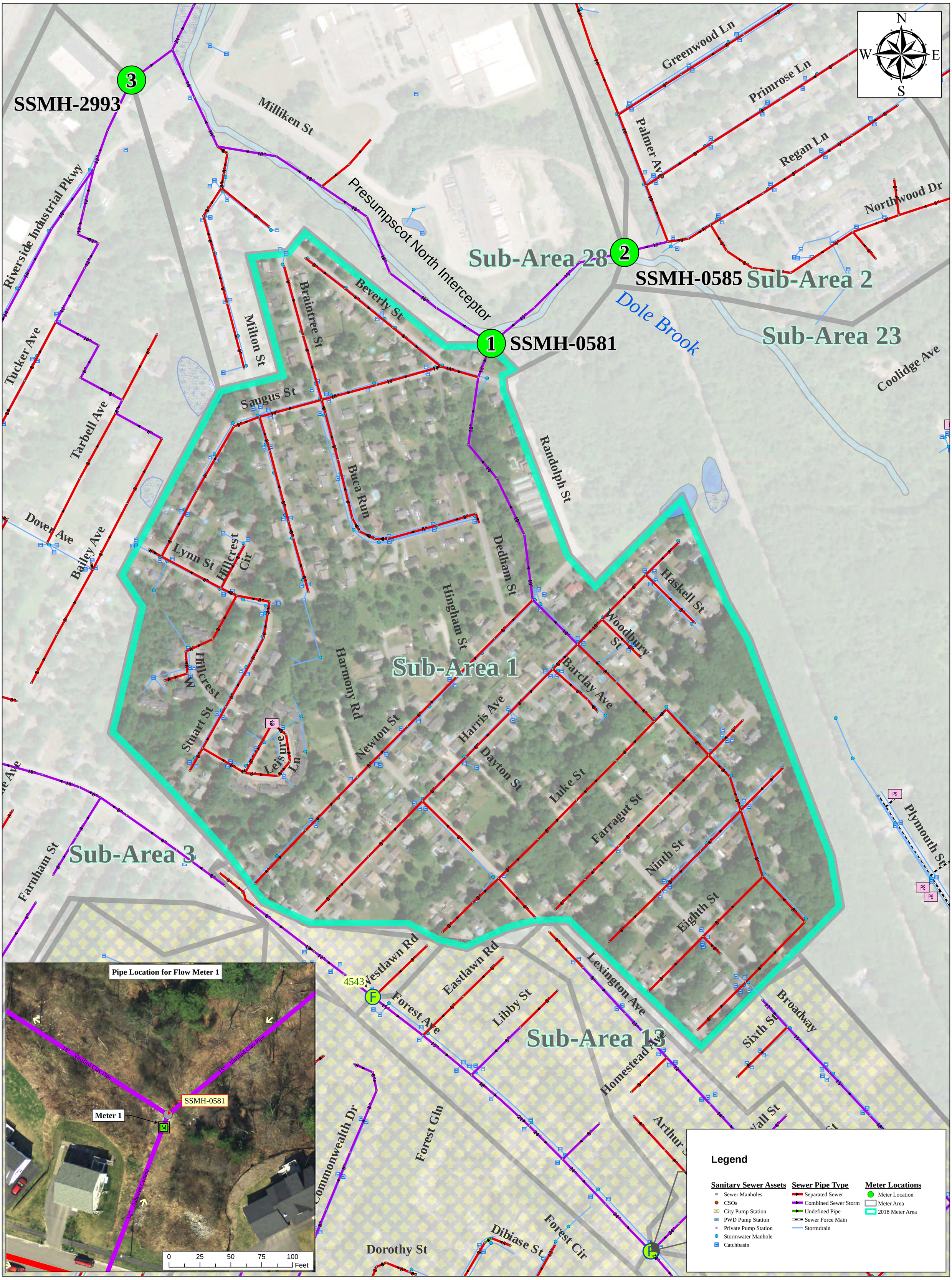
2018 Meter Area Figures

APPENDIX B

Flow Meter Hydrographs with Related Rainfall Hyetographs

APPENDIX C

Follow-on Investigation Sub-Area Figures



0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 1

Sub-Area Details

Area = 124 ACRES
Length of pipe = 20,000 LF
Sewer Manholes = 102 MHs
Buildings = 371 Bldgs

March 2018

Interstate 95
Riverside Industrial Pkwy
Rice St
Sub-Area 28
Milliken St
Presumpscot Nor
Allison Ave
W Lynne Ave
Deering Run Dr
Palmer Ave
Continental Dr
Dole Dr
Shepherd Ln
Sub-Area 2
Greenwood Ln
Primrose Ln
2
SSMH-0585
Dole Brook
Harris Ave
Smith Farm Ln
Quaker Ln
Washington Ave
Sub-Area 5
Haverlys Way
Cresfield Ter
Settlers Ct
Parsons Pond Dr
Braddish Ct
Wakely Ct
Sub-Area 6
Auburn Ter
Regan Ln
Northwood Dr
Sub-Area 24
Coolidge Ave
Oramel Ave
Skylark Rd
Hennessy Dr
Sub-Area 23
PS
N
W
E
S

Pipe Location for Flow Meter 2
10" Asbestos Cement
SSMH-0584
SSMH-0585
Vitrified Clay Pipe
Vitrified Clay Pipe
15" Vitrified Clay Pipe
M
Meter 2
0 25 50 75 100
Feet

Legend

Sanitary Sewer Assets
- Sewer Manholes
- CSOs
- City Pump Station
- PWD Pump Station
- Private Pump Station
- Stormwater Manhole
- Catchbasin

Sewer Pipe Type
- Separated Sewer
- Combined Sewer Storm
- Undefined Pipe
- Sewer Force Main
- Stormdrain

Meter Locations
- Meter Location
- Meter Area
- 2018 Meter Area

0 250 500 1,000
Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

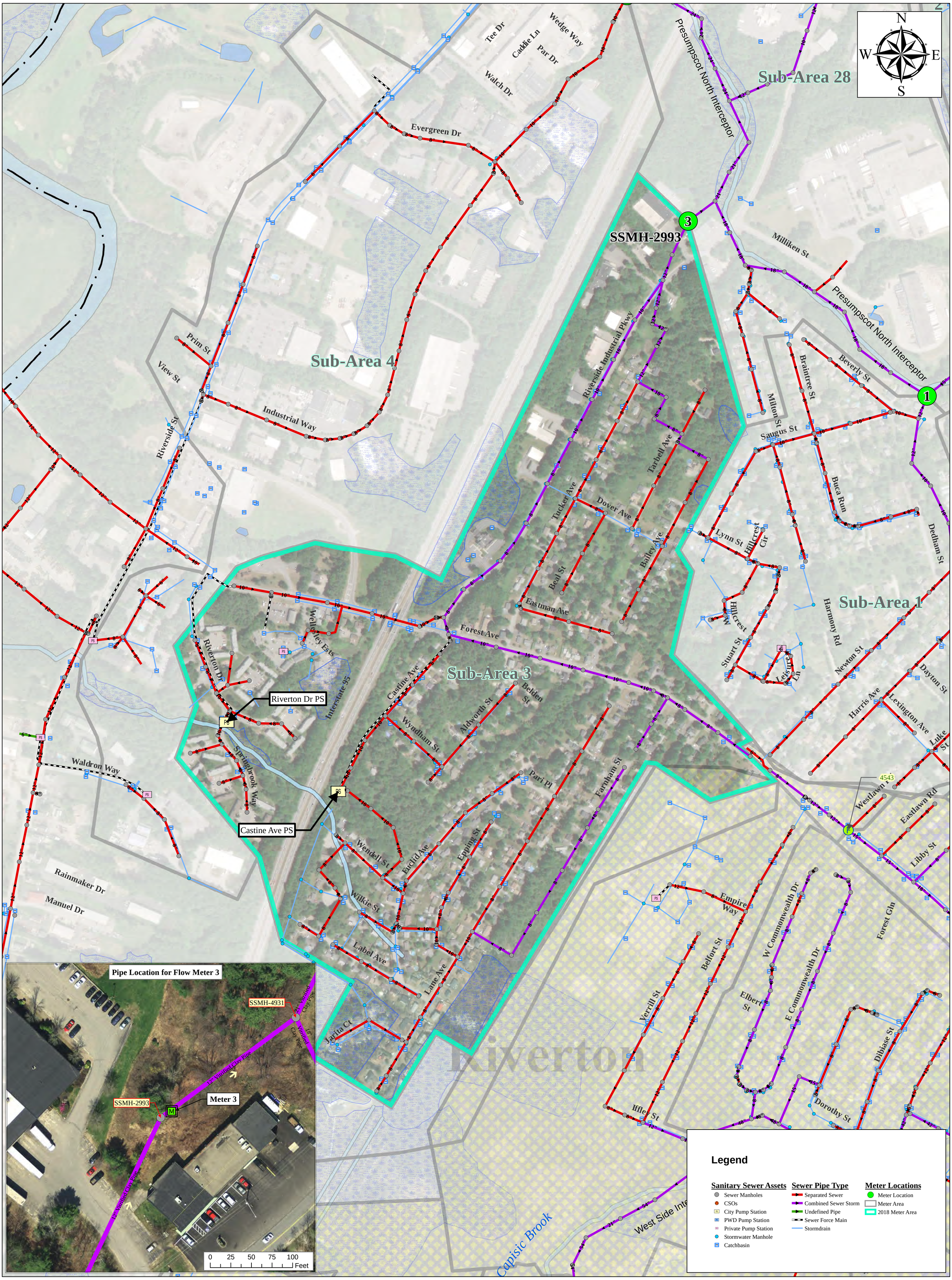
Sub-Area 2

Sub-Area Details

Area = 86 ACRES
Length of pipe = 11,919 LF
Sewer Manholes = 59 MHs
Buildings = 196 Bldgs

March 2018

ARCADIS



CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

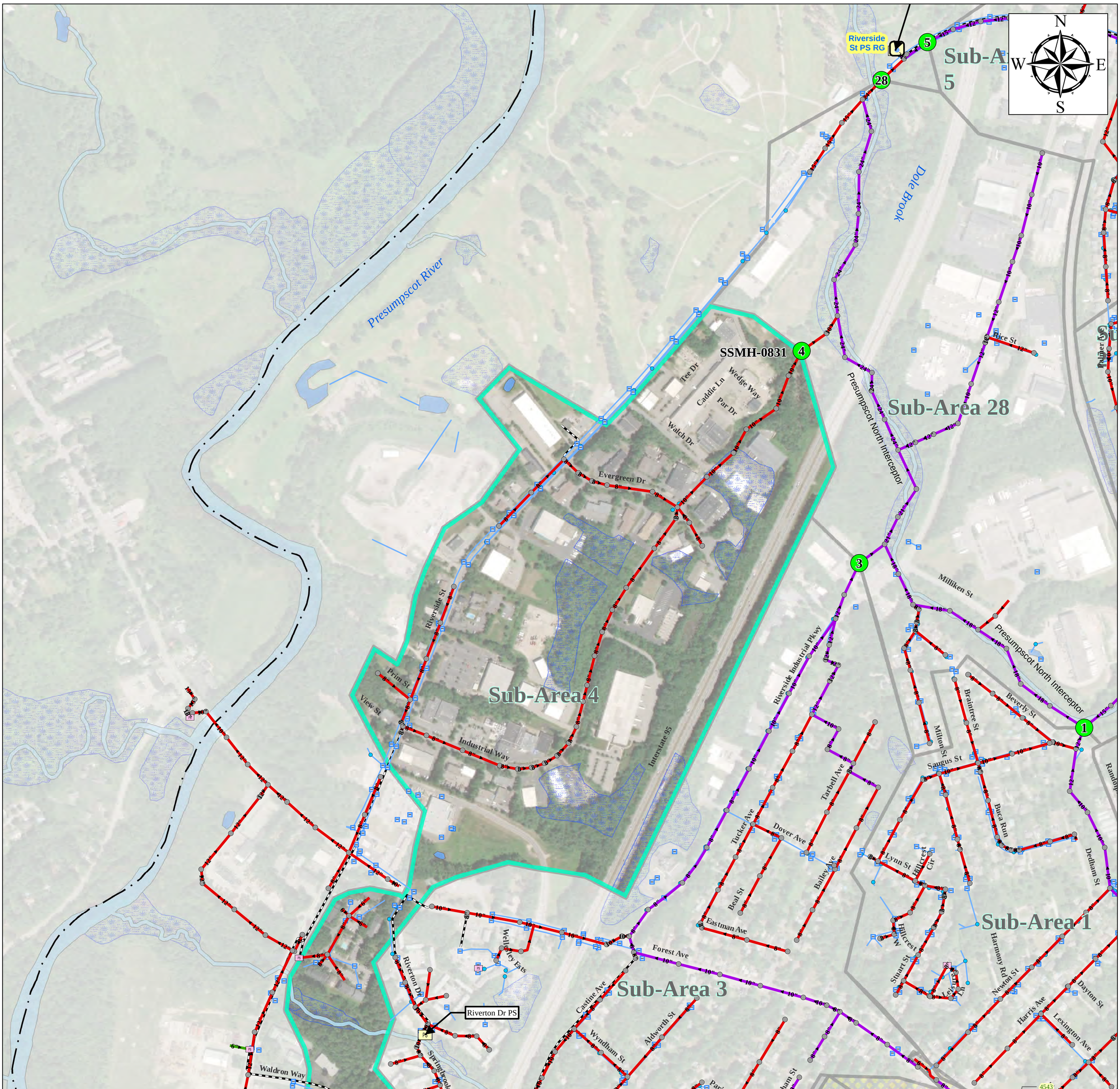
Sub-Area 3

ARCADIS

Sub-Area Details

Area = 218 ACRES
Length of pipe = 28,692 LF
Sewer Manholes = 148 MHs
Buildings = 515 Bldgs

March 2018



CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 4

Sub-Area Details

Area = 187 ACRES
Length of pipe = 8,893 LF
Sewer Manholes = 47 MHs
Buildings = 104 Bldgs

March 2018

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 5

ARCADIS

Sub-Area Details

Area = 220 ACRES
Length of pipe = 21,962 LF
Sewer Manholes = 111 MHs
Buildings = 275 Bldgs

March 2018

0 250 500 1,000 Feet

Pipe Location for Flow Meter 5

Meter 5

SSMH-5382

SSMH-5380

SSMH-5381

24" Vitrified Clay Pipe

15" Vitrified Clay Pipe

0 25 50 75 100 Feet

Riverside St PS

Riverside St PS RG

Sub-Area 5

Sub-Area 6

Sub-Area 7

Sub-Area 2

Presumpscot River

Dole Brook

Interstate 495

Interstate 95

Interstate 495 Ramp

Armstrong Hts

Alice Ct

Alice St

Hope Ln

Garsoe Dr

Patricia Ln

Longview Dr

Panoramic View St

Caron St

Carter St

Bonny St

Crestview Dr

Abby Ln

Quiet Ln

Hillside Rd

Clayton St

Kenneth St

Jackson St

Auburn St

Auburn Ter

Summit Park Ave

Alpine Rd

Christy Rd

Rustic Ln

Melody Ln

Fall Ln

Autumn Ln

Brookfield

Blackstrap Rd

Washington Avenue Ext

Summit St

Lambert St

Mornings tar Ln

Stonecrest Dr

Davis Farm Rd

Lester Dr

Ballpark Dr

Georgia St

Haverty's Way

Riverside St

W Lynne Ave

Allison Ave

Washington Ave

Smith Farm Ln

Cresfield Ter

Settlers Ct

Braddish Ct

Wakely Ct

Quaker Ln

Parsons Pond Dr

Deering Run Dr

Palmer Ave

Continental Dr

Dole Dr

Shepherd Ln

Greenwood Ln

Primrose Ln

Regan Ln

Northwood Dr

Legend

Sanitary Sewer Assets	Sewer Pipe Type	Meter Locations
Sewer Manholes	Separated Sewer	Meter Location
CSOs	Combined Sewer Storm	Meter Area
City Pump Station	Undefined Pipe	2018 Meter Area
PWD Pump Station	Sewer Force Main	
Private Pump Station	Stormdrain	
Stormwater Manhole		
Catchbasin		

0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 7

ARCADIS

Sub-Area Details

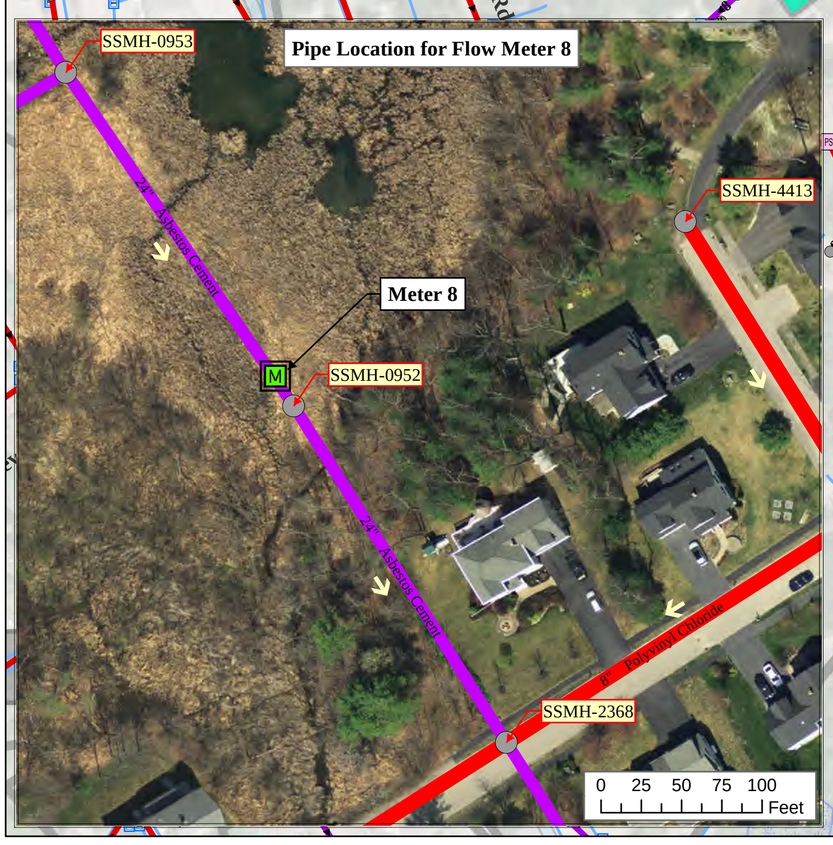
Area = 198 ACRES
Length of pipe = 23,684 LF
Sewer Manholes = 148 MHs
Buildings = 367 Bldgs

March 2018

N
W
E
S

SSMH-2391
7
Sub-Area 7
Sub-Area 6
Sub-Area 25
Sub-Area 8
Sub-Area 9
Sub-Area 26
8
SSMH-0952

Virginia Carter Interceptor
Quiet Ln
Clayton St
Frost Hill Rd
Old Barn Ln
Curtis Rd
Wendy Way
Abby Ln
Clapboard Rd
Sturdivant Dr
Pamela Rd
Jackson St
Summit Park Ave
Talbot St
Juniper St
Summit St
Alpine Rd
Christy Rd
Rustic Ln
Melody Ln
Autumn Ln
Fall Ln
Martin Rd
Sumac St
Junior St
Bartley Ave
Olde Birch Ln
Pineloch Dr
Heather Dr
Roaring Brook Rd
Deepwood Dr
Round Stone Way
Meadow Ln
Applebee Cir
Bramblewood Dr
Tampa St
Racine Ave
Allen Ave
Farm House Ln
Wyoming Ave
Kansas Ave
Virginia St
Shingle Way
Cottage Park Rd
Porch St
Fall Brook
Nevada Ave
Jersey Ave
Penn Ave
Ray St
Merrymeeting Dr
Florida Ave
Vermont Ave
Maine Ave
Liberty Way



Legend

Sanitary Sewer Assets
- Sewer Manholes
- CSOs
- City Pump Station
- PWD Pump Station
- Private Pump Station
- Stormwater Manhole
- Catchbasin

Sewer Pipe Type
- Separated Sewer
- Combined Sewer Storm
- Undefined Pipe
- Sewer Force Main
- Stormdrain

Meter Locations
- Meter Location
- Meter Area
- 2018 Meter Area

0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

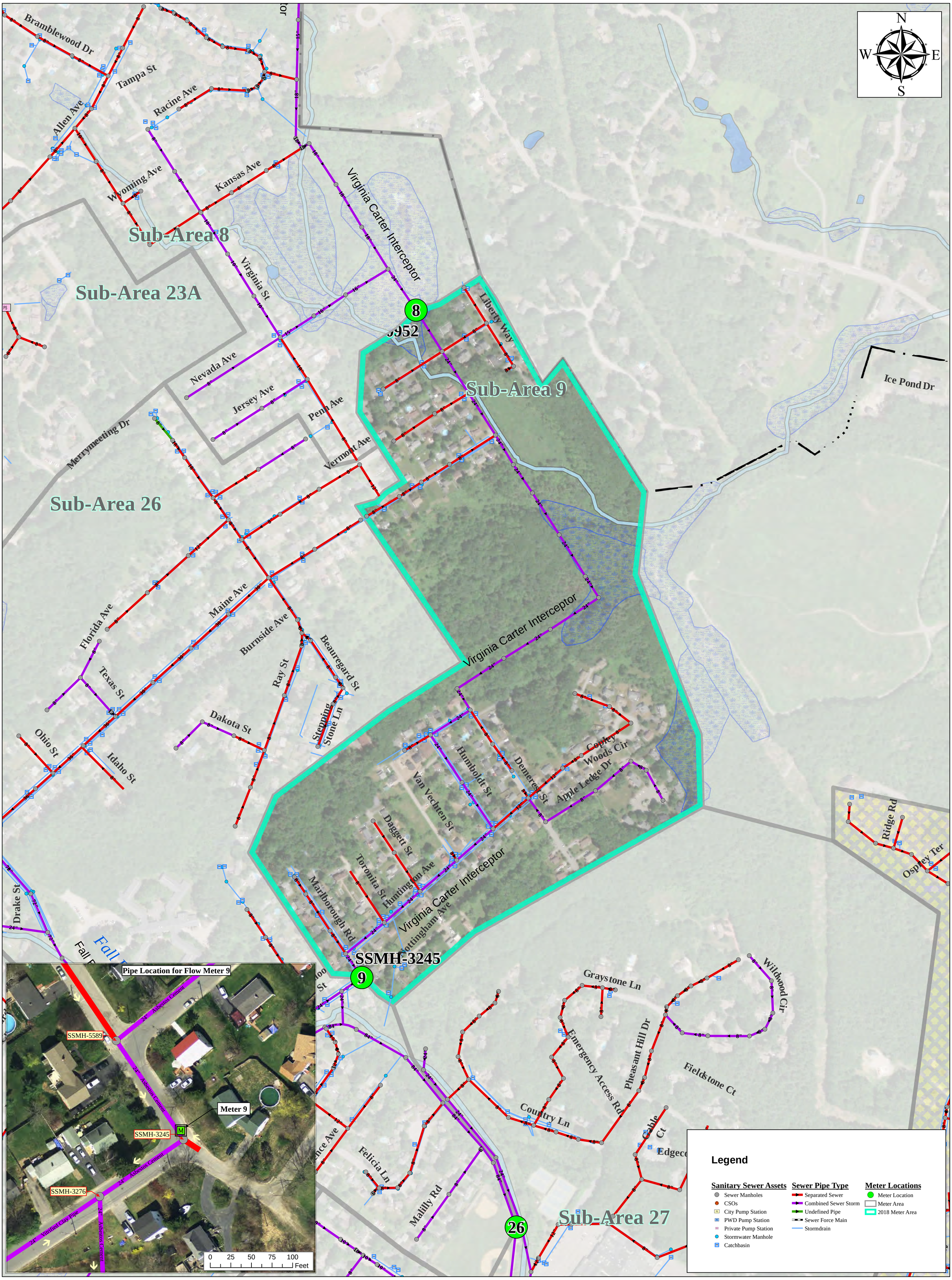
2018 Sanitary Flow Metering

Sub-Area 8

Sub-Area Details

Area = 203 ACRES
Length of pipe = 25,298 LF
Sewer Manholes = 128 MHs
Buildings = 416 Bldgs

March 2018



0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 9

ARCADIS

Sub-Area Details

Area = 103 ACRES
Length of pipe = 11,176 LF
Sewer Manholes = 51 MHs
Buildings = 193 Bldgs

March 2018

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

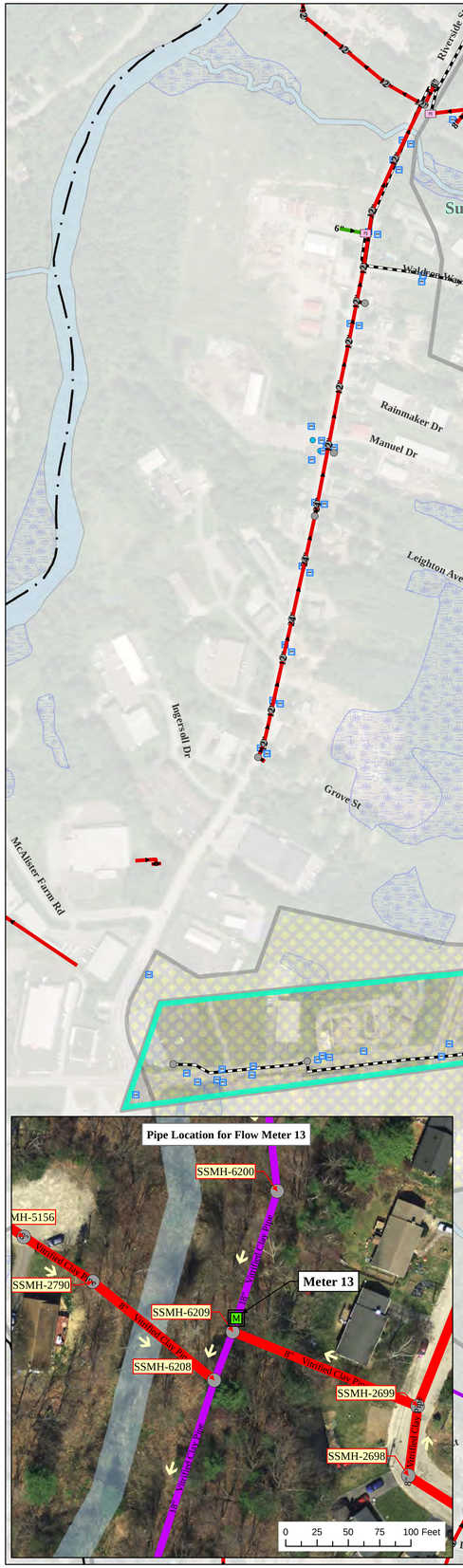
2018 Sanitary Flow Monitoring

Sub-Area 13

March 2018

Sub-Area Details

Area = 499 ACRES
Length of pipe = 48,470 LF
Sewer Manholes = 270 MHs
Buildings = 774 Bldgs



Legend

Sanitary Sewer Assets
- Sewer Manholes
- CSOs
- City Pump Station
- PWD Pump Station
- Private Pump Station
- Stormwater Manhole
- Catchbasin

Sewer Pipe Type
- Separated Sewer
- Combined Sewer Storm
- Undefined Pipe
- Sewer Force Main

Pipe Types

Meter Locations
- Meter Location
- Meter Area
- 2018 Meter Area

CITY OF PORTLAND, MAINE · RESURGAM · CIVITAS PORTLANDIA

ARCADIS

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 14

ARCADIS

Sub-Area Details

Area = 234 ACRES
Length of pipe = 23,488 LF
Sewer Manholes = 124 MHs
Buildings = 319 Bldgs

March 2018

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 15

Sub-Area Details

Area = 146 ACRES
Length of pipe = 22,812 LF
Sewer Manholes = 126 MHs
Buildings = 457 Bldgs

March 2018

ARCADIS

0 250 500 1,000 Feet

Legend

Sanitary Sewer Assets
- Sewer Manholes
- CSOs
- City Pump Station
- PWD Pump Station
- Private Pump Station
- Stormwater Manhole
- Catchbasin

Sewer Pipe Type
- Separated Sewer
- Combined Sewer Storm
- Undefined Pipe
- Sewer Force Main
- Stormdrain

Meter Locations
- Meter Location
- Meter Area
- 2018 Meter Area

Pipe Location for Flow Meter 15

24" Vitrified Clay Pipe
8" Vitrified Clay Pipe
SSMH-5213
SSMH-4074
Meter 15
12" Vitrified Clay Pipe
SSMH-0266
8" Polyvinyl Chloride
24" Vitrified Clay Pipe
SSMH-5203
10" Polyvinyl Chloride
0 25 50 75 100 Feet

Sub-Area 13
Sub-Area 14
Sub-Area 15
Sub-Area 16
Sub-Area 17
Sub-Area 21
SSMH-6209
SSMH-5188
SSMH-0266
SSMH-5248
042
039
Capisic Brook
West Side Interceptor
Fore River Interceptor
Grove St
Interstate 95
Warren Ave
Saville St
Newcomb St
Trundy St
Fern St
Meadow St
Xiviary St
Hicks St
Goodale St
Conway St
Bower St
Aspen Dr
Birchwood Dr
Pinecrest Rd
Robin St
Porter Ave
Birchvale Dr
Brookview Ter
Sunset Ln
Penwood Dr
Pinebrook Ln
Glen Haven Rd W
Woodvale St
Glen Haven Rd E
Celebration Ct
Holm Ave
Poe St
Taft Ave
Dale St
Dale Ct
Orono Rd
Gorges St
Godfrey St
Josslyn St
Purchas St
Popham St
Cabot St
Warwick St
Riggs St
Dorset St
Devon St
Kent St
Essex St
Dennett St
Donald St
Violette Ave
Violette Hl
Raymond Rd
Harmon Rd
Meriline Ave
Hillcrest Ave
Brighton Ave
Albion St
Capisic St
David Rd
Mayer Rd
Starbird Rd
Candlewyck Ter
Candlewyck Rd
Longwood Dr
Longwood Ter
Four Winds Rd
Sonnet Ln
Ludlow St
Ludlow Ter
Woodfield Rd
Groveside Rd
Alden Cir
Lucas St
Halet St
Harvey St
Wayside Rd
Vingate Dr
Phipps Rd
Hamblet Ave
Bartlett St
Hale St
Fuller St
Madison St
Leeman St

0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

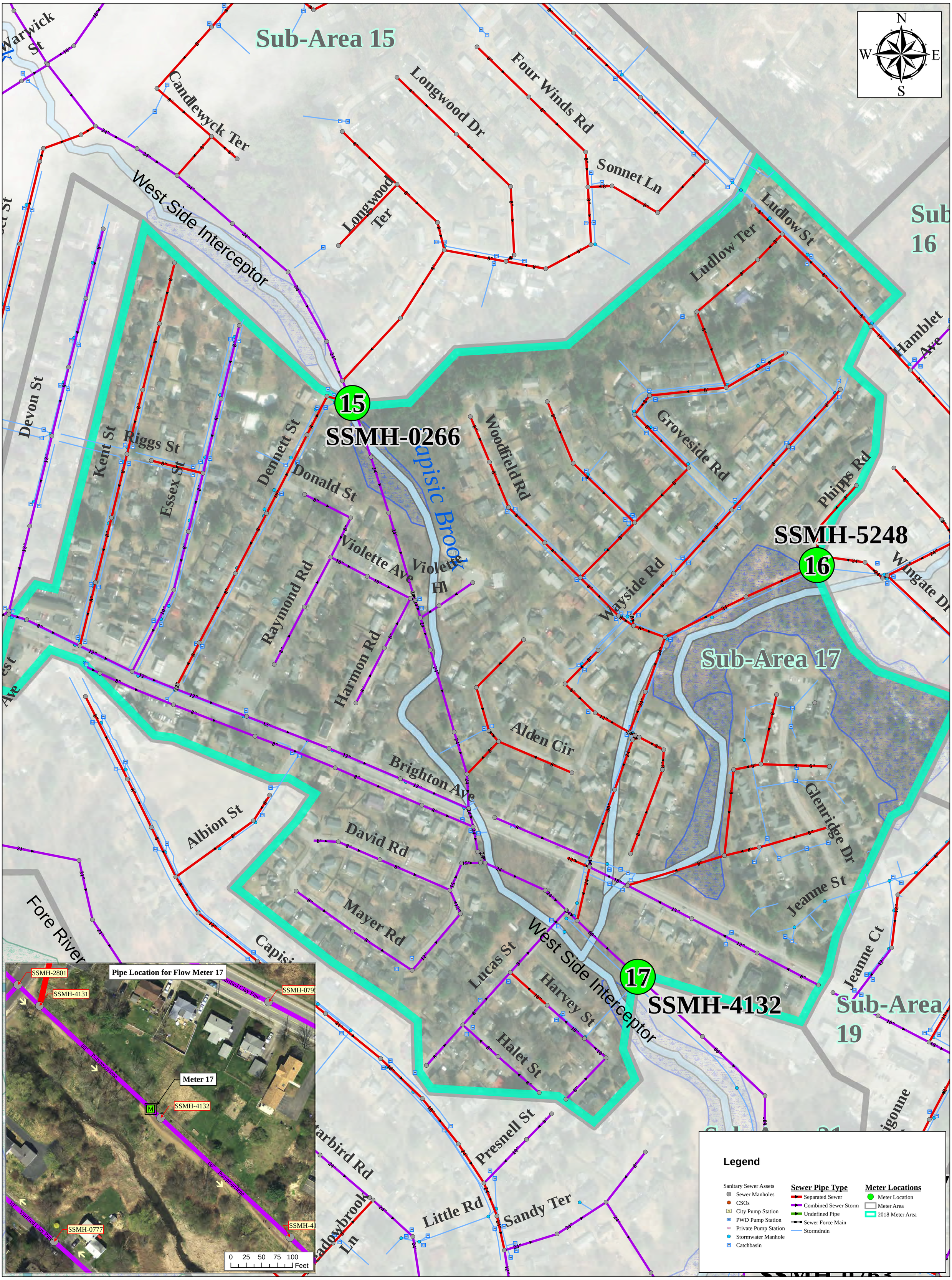
Sub-Area 16

ARCADIS

Sub-Area Details

Area = 124 ACRES
Length of pipe = 21,410 LF
Sewer Manholes = 101 MHs
Buildings = 442 Bldgs

March 2018



0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

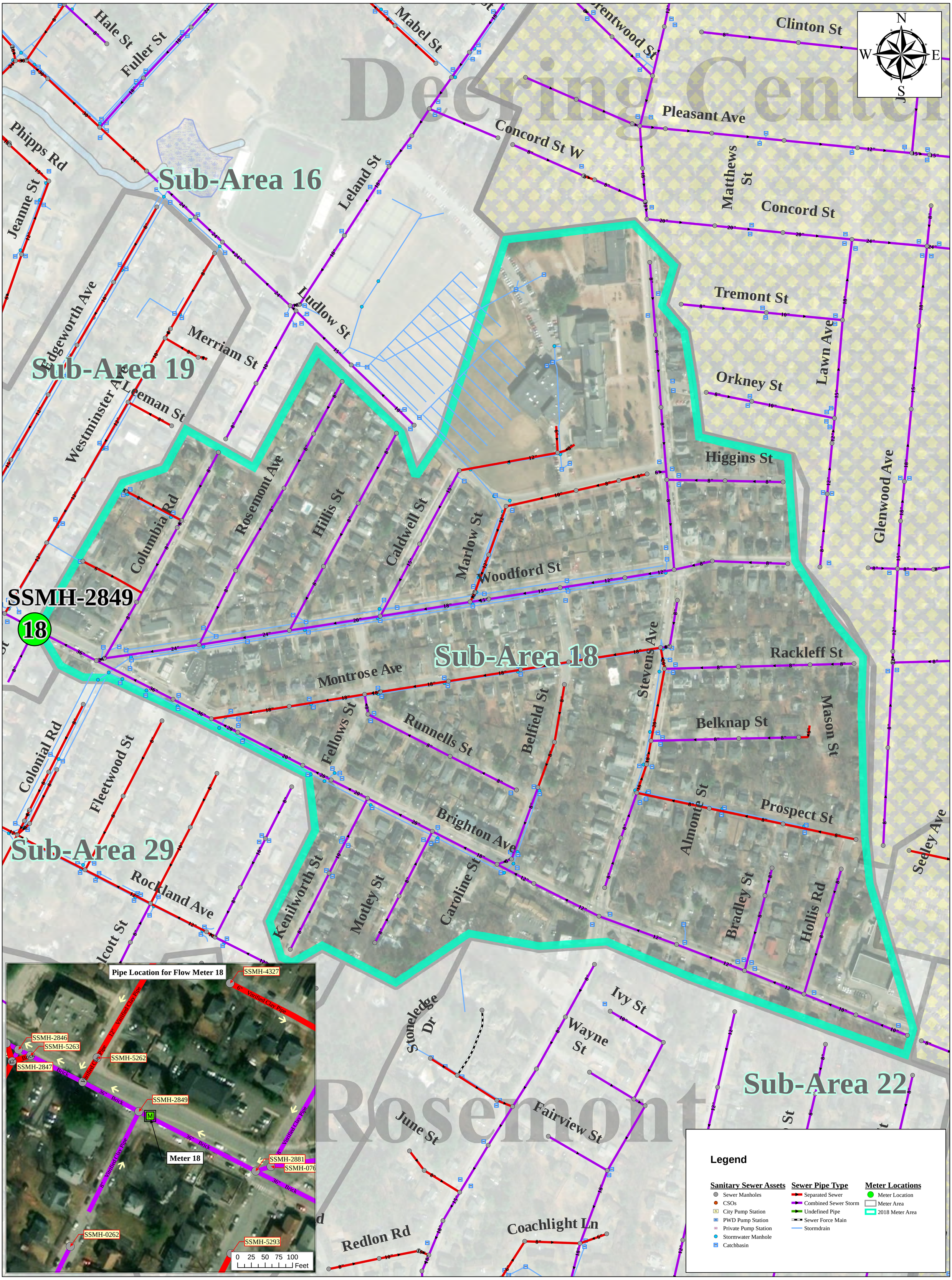
Sub-Area 17

ARCADIS

Sub-Area Details

Area = 127 ACRES
Length of pipe = 24,822 LF
Sewer Manholes = 142 MHs
Buildings = 427 Bldgs

March 2018



CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

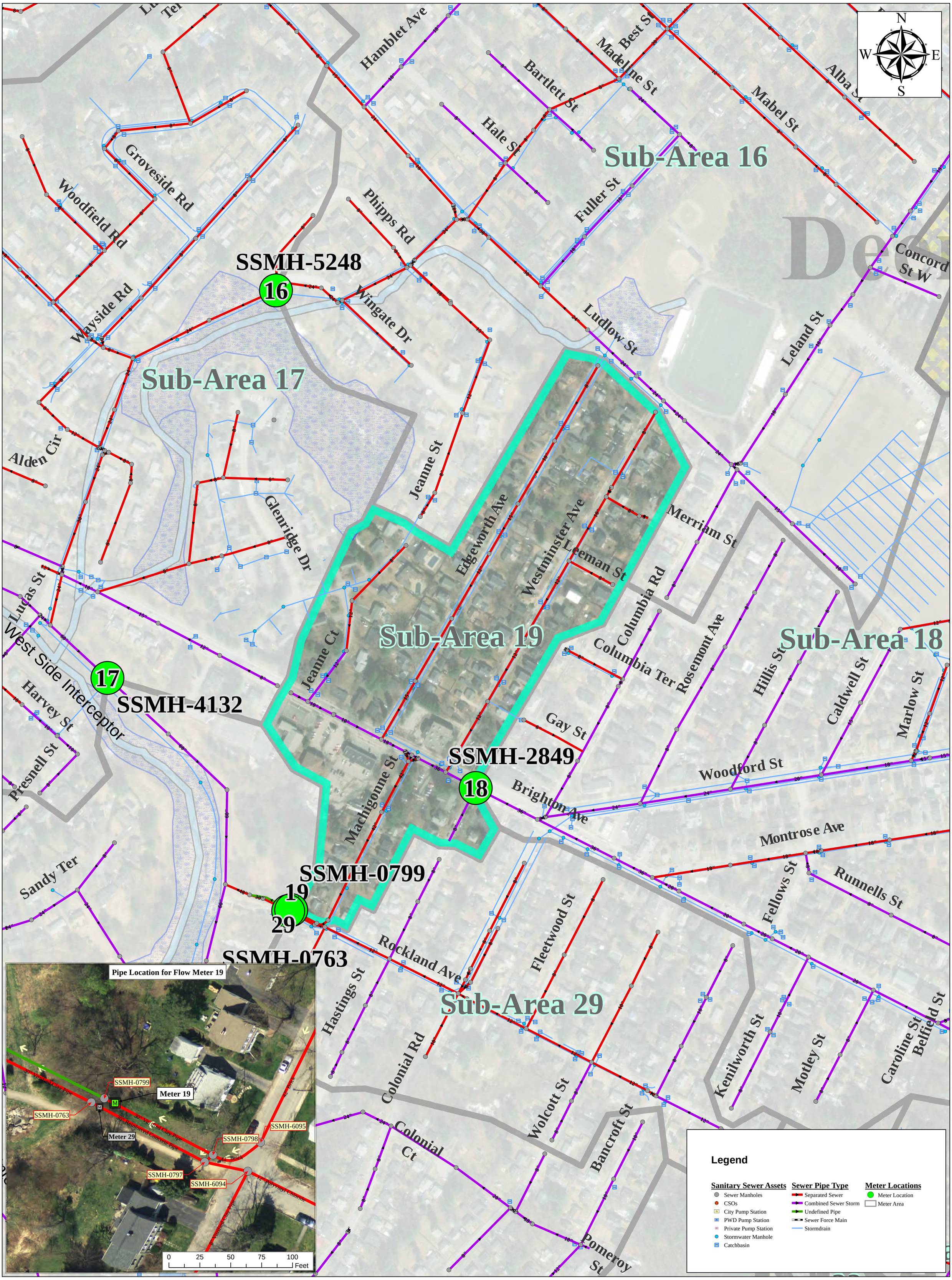
Sub-Area 18

ARCADIS

Sub-Area Details

Area = 111 ACRES
Length of pipe = 19,962 LF
Sewer Manholes = 94 MHs
Buildings = 469 Bldgs

March 2018



0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 19

Sub-Area Details

Area = 30 ACRES
Length of pipe = 5,677 LF
Sewer Manholes = 33 MHs
Buildings = 140 Bldgs

March 2018

Sub-Area 14

Sub-Area 17

Sub-Area 20

Sub-Area 21

Nasons Corner

SSMH-5188

14

SSMH-2945

20

039

Poe St
Dale St
Dale Ct
Holm Ave
Taft Ave
Josslyn St
Godfrey St
Gorges St
Purchas St
Orono Rd
Cedarhurst Ln
Sunset Ln
Glen Haven Rd W
Starlight Rd
Candlewyck Ter
Warwick St
Interstate 95
Popham St
Cabot St
Riggs St
Dorset St
Devon St
Kent St
Essex St
Dennett St
Raymond Rd
Hillcrest Ave
Capisic Brook
West Side Interceptor
Fore River Interceptor
Fore River
Brighton Ave
Wessex St
Lomond St
Terrace Ave
Meriline Ave
Webb St
Levia St
Rowe Ave
Lorenzo St
Albion St
Mayer Rd
Winding Way

N
W
E
S

Pipe Location for Flow Meter 20

SSMH-2905
36" Reinforced Concrete Pipe
SSMH-0805
48" Reinforced Concrete Pipe
Meter 20
M
SSMH-2945
48" Reinforced Concrete Pipe
SSMH-29
SSNS-0029
0 25 50 75 100 Feet

Legend

Sanitary Sewer Assets	Sewer Pipe Type	Meter Locations
Sewer Manholes	Separated Sewer	Meter Location
CSOs	Combined Sewer Storm	Meter Area
City Pump Station	Undefined Pipe	2018 Meter Area
PWD Pump Station	Sewer Force Main	
Private Pump Station	Stormdrain	
Stormwater Manhole		
Catchbasin		

0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 20

ARCADIS

Sub-Area Details

Area = 93 ACRES
Length of pipe = 9,924 LF
Sewer Manholes = 47 MHs
Buildings = 185 Bldgs

March 2018

Sub-Area 15

Sub-Area 20

Sub-Area 16

Sub-Area 17

Sub-Area 19

Sub-Area 18

Sub-Area 21

Sub-Area 29

SSMH-0266

SSMH-5248

SSMH-2945

SSMH-4132

SSMH-2849

SSMH-0799

SSMH-0763

SSMH-3986

Riggs St

Warwick St

Dorset St

Devon St

Kent St

Essex St

Dennett St

Donald St

Violette Ave

Violet Hl

Capisic Brook

Woodfield Rd

Groveside Rd

Hall St

Phipps Rd

Ludlow St

Wingate Dr

Wayside Rd

Raymond Rd

Harmon Rd

Meriline Ave

Hillcrest Ave

Albion St

Alden Cir

David Rd

Mayer Rd

Brighton Ave

Glenridge Dr

Jeanne St

Edgeworth Ave

Westminster Ave

Merriam St

Leeman St

Columbia Ter

Columbia Rd

Jeanne Ct

Gay St

Rosemont Ave

Machigonne St

Woodford St

Fleetwood St

Rockland Ave

Hastings St

Lucas St

Harvey St

Halet St

West Side Interceptor

Fore River Interceptor

Presnell St

Starbird Rd

Little Rd

Sandy Ter

Meadowbrook Ln

Winding Way

Capisic St

Capisic Pond

Macy St

Colonial Ct

Colonial Rd

Wolcott St

Bancroft St

Bancroft Ct

Riverview St

Pomeroy St

Redlon Park Rd

Frost St

Eastfield Rd

Congress St

River

039

Pipe Location for Flow Meter 21

SSMH-6133

SSMH-6089

SSMH-4048

SSMH-3986

SSMH-4147

SSMH-2914

Meter 21

60" Polypropylene

8" Polyvinyl Chloride

0 25 50 75 100 Feet

N

S

E

W

Legend

Sanitary Sewer Assets
- Sewer Manholes
- CSOs
- City Pump Station
- PWD Pump Station
- Private Pump Station
- Stormwater Manhole
- Catchbasin

Sewer Pipe Type
- Separated Sewer
- Combined Sewer Storm
- Undefined Pipe
- Sewer Force Main
- Stormdrain

Meter Locations
- Meter Location
- Meter Area
- 2018 Meter Area

0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Sub-Area 21

ARCADIS

Sub-Area Details

Area = 149 ACRES
Length of pipe = 21,047 LF
Sewer Manholes = 108 MHs
Buildings = 308 Bldgs

March 2018

SSMH-2849

18

Sub-Area 18

Sub-Area 29

Sub-Area 21

Sub-Area 22

SSMH-4145

22

Hastings St

Rosemont Ave

Woodford St

Caldwell St

Montrose Ave

Fellows St

Runnells St

Belfield St

Rackleff St

Belknap St

Mason St

Glenwood Ave

Seeley Ave

Fairmount St

Ashmont St

Prospect St

Highland St

Longfellow St W

Colonial Rd

Fleetwood St

Rockland Ave

Kenilworth St

Motley St

Caroline St

Brighton Ave

Almonte St

Hollis Rd

Wolcott St

Colonial Ct

Bancroft St

Pomeroy St

Stoneledge Dr

Ivy St

Wayne St

Fairview St

June St

Deblois St

Orland St

Redlon Park Rd

Redlon Rd

Coachlight Ln

Bradley St

Caleb St

Craigie St

Edwards St

Frances St

Whitney Ave

Elizabeth Rd

Anson Rd

Stevens Ave

Dirigo St

Cobbert Rd

Rudman Rd

Frost St

Eastfield Rd

Haywood St

Rabbit Run

West Side Interceptor

Twin Knolls Ln

Boody St

Congress St

Westland Ave

Scott St

Bolton St

Massachusetts Ave

Lassell St

Mitton St

Greeley St

Powsland St

Davis St

Sewall St

Douglass St

Willow Ln

PS

Pipe Location for Flow Meter 22

8" Polyvinyl Chloride

SSMH-3987

60" Polypropylene

SSNS-0126

Meter 22

42" Brick

SSMH-4145

SSMH-4144

8" Vitrified Clay Pipe

SSNS-0151

SSMH-0916

15" Vitrified Clay Pipe

72" Reinforced Concrete Pipe

0 25 50 75 100 Feet

N

S

E

W

Legend

Sanitary Sewer Assets
- Sewer Manholes
- CSOs
- City Pump Station
- PWD Pump Station
- Private Pump Station
- Stormwater Manhole
- Catchbasin

Sewer Pipe Type
- Separated Sewer
- Combined Sewer Storm
- Undefined Pipe
- Sewer Force Main
- Stormdrain

Meter Locations
- Meter Location
- Meter Area
- 2018 Meter Area

0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

Sub-Area 22

ARCADIS

Sub-Area Details

Area =
Length of pipe = 19,134 LF
Sewer Manholes = 113 MHs
Buildings = 377 Bldgs

March 2018

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

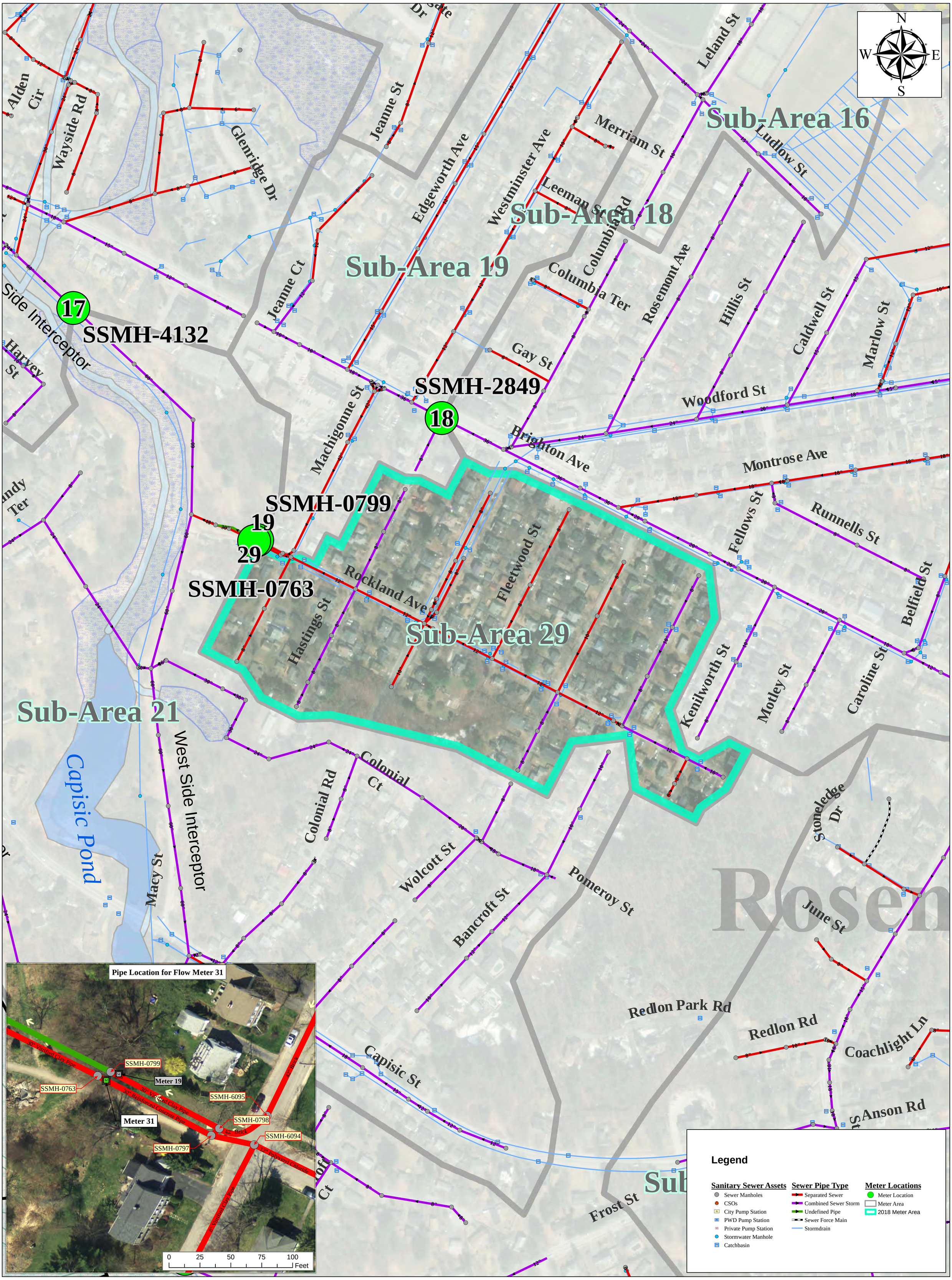
Sub-Area 28

ARCADIS

Sub-Area Details

Area = 162 ACRES
Length of pipe = 10,942 LF
Sewer Manholes = 58 MHs
Buildings = 42 Bldgs

March 2018



0 250 500 1,000 Feet

CITY OF PORTLAND, MAINE

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

2018 Sanitary Flow Metering

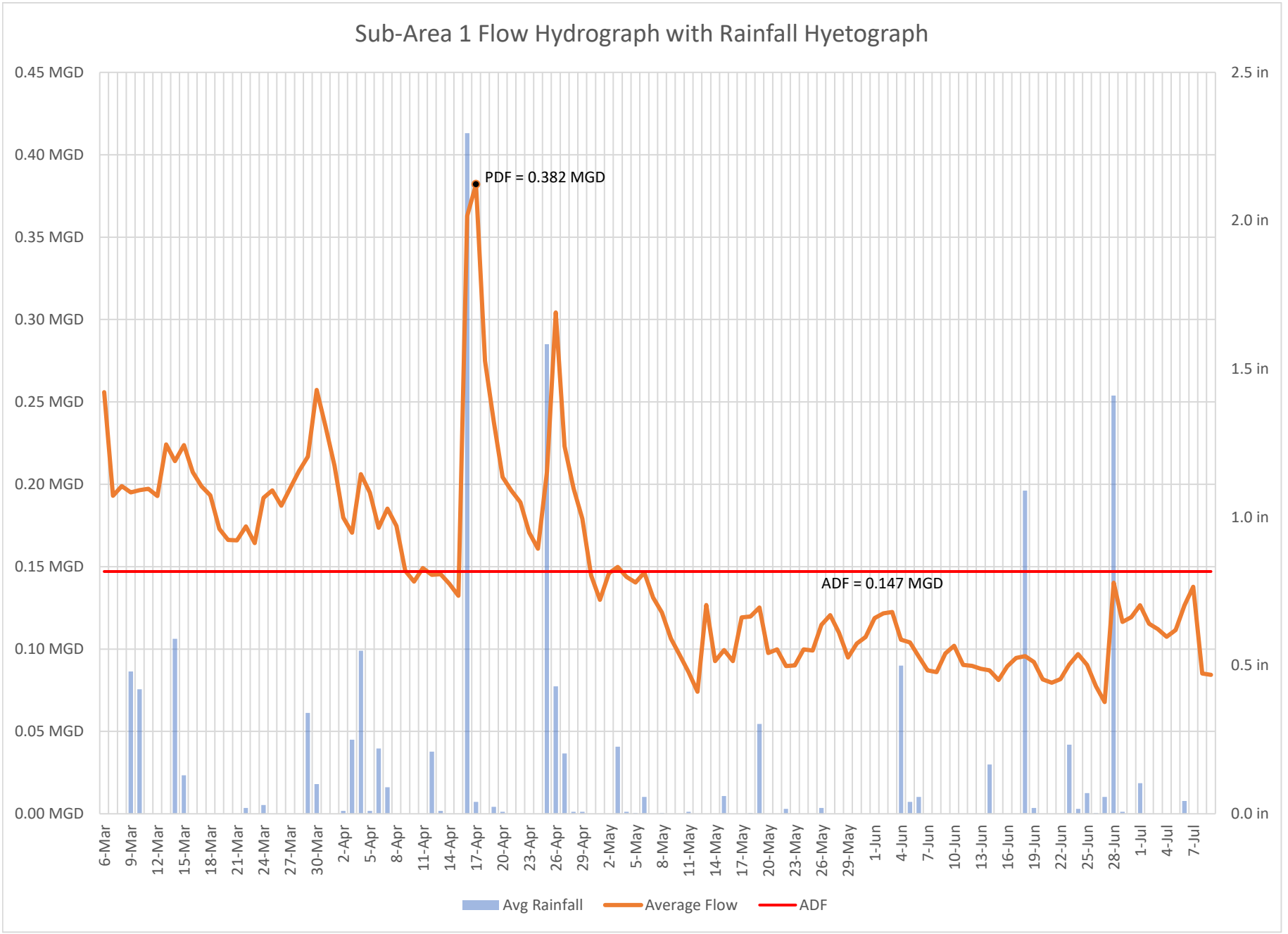
Sub-Area 29

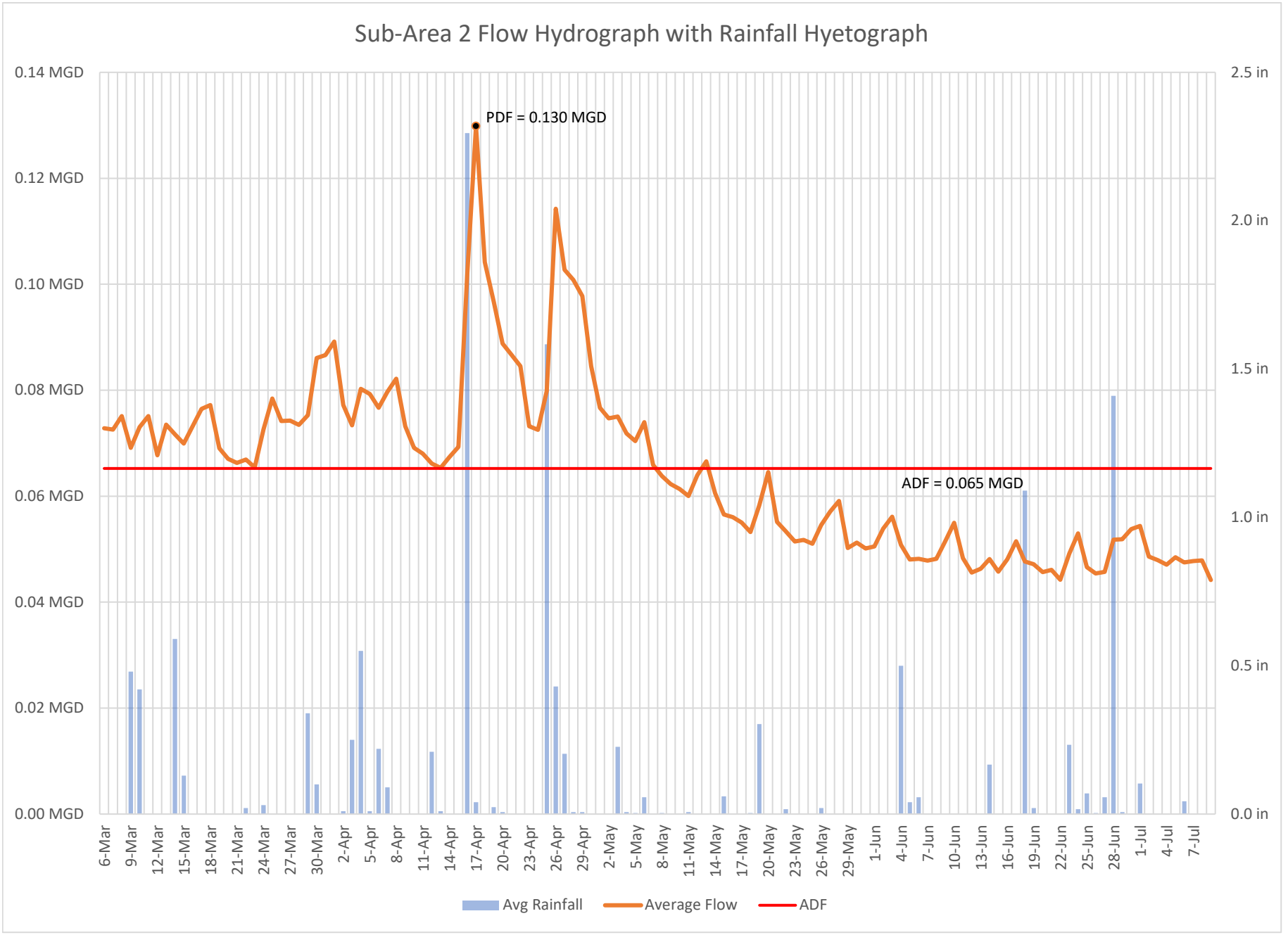
ARCADIS

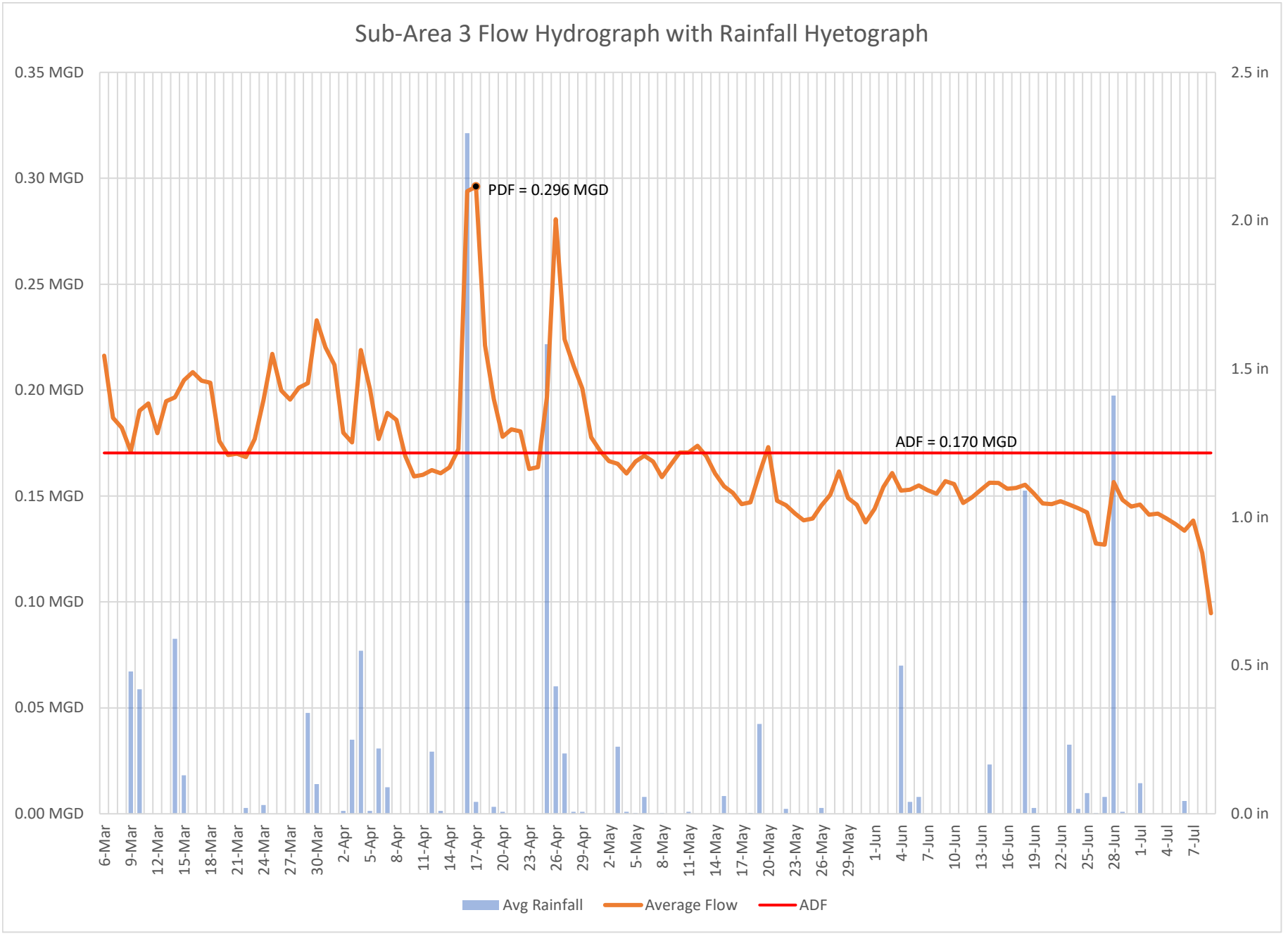
Sub-Area Details

Area = 31 ACRES
Length of pipe = 6,165 LF
Sewer Manholes = 35 MHs
Buildings = 155 Bldgs

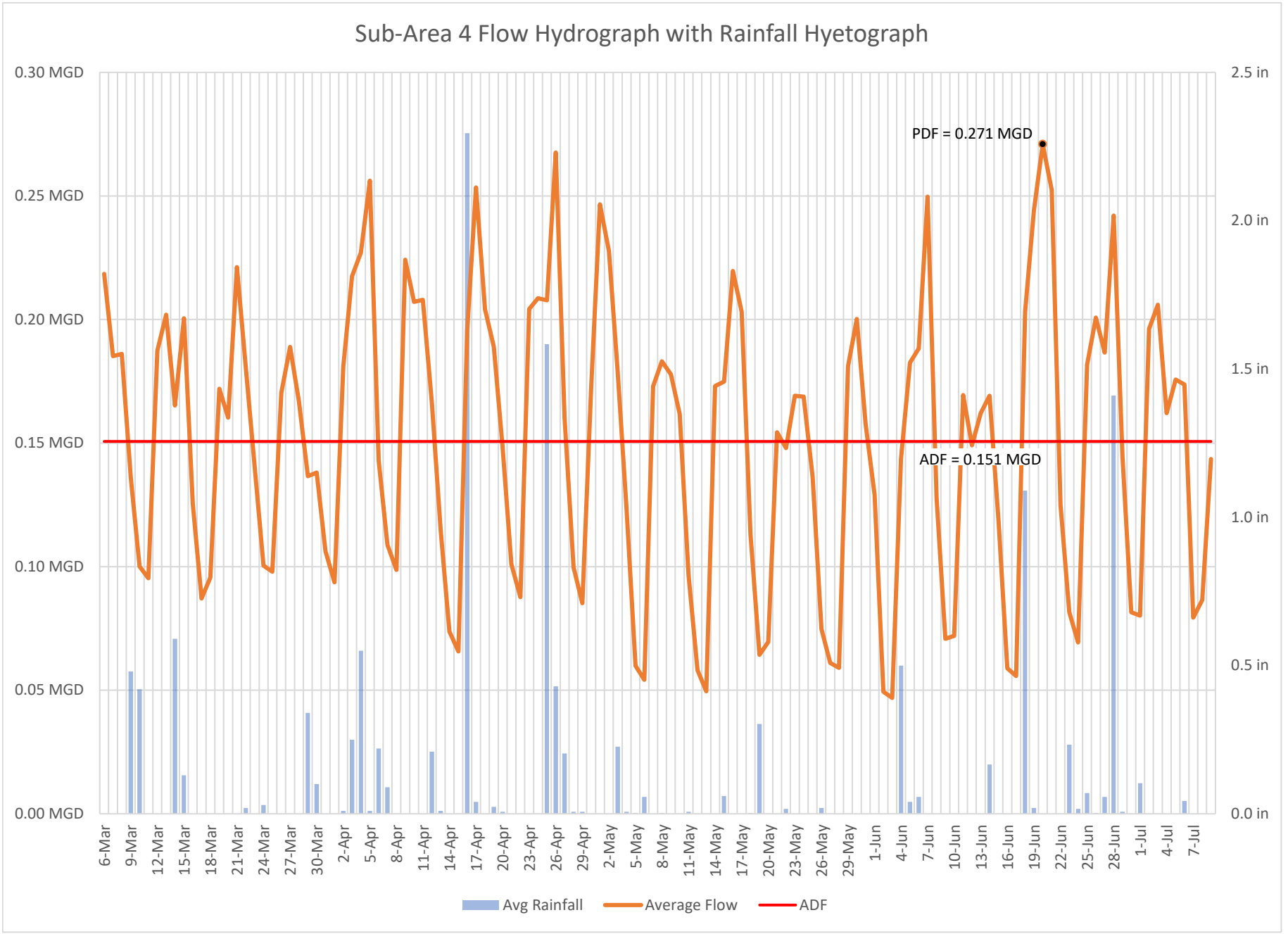
March 2018

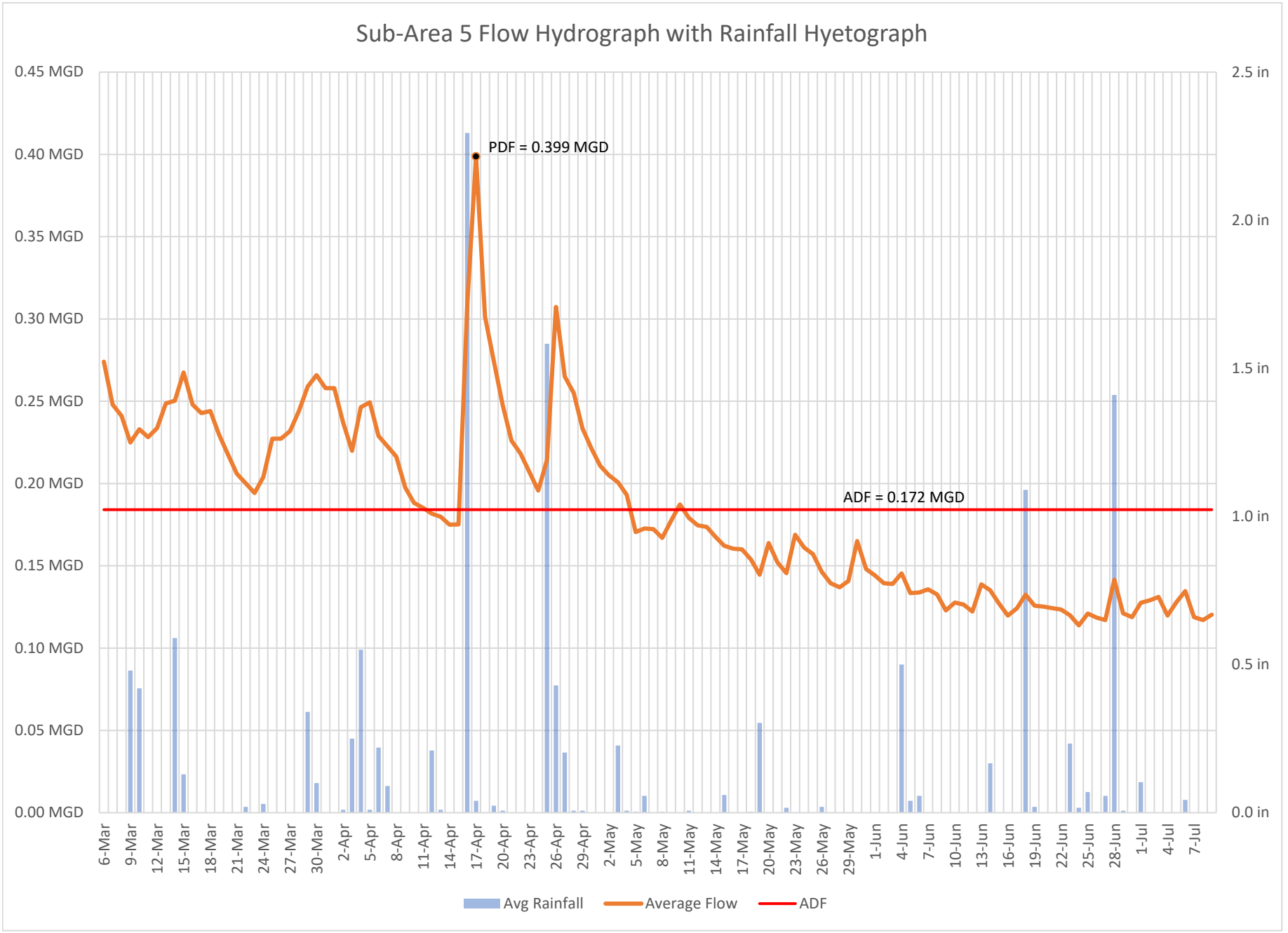

Sub-Area 1 Flow Hydrograph with Rainfall Hyetograph
0.45 MGD
0.40 MGD
0.35 MGD
0.30 MGD
0.25 MGD
0.20 MGD
0.15 MGD
0.10 MGD
0.05 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.382 MGD
ADF = 0.147 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Average Flow
ADF

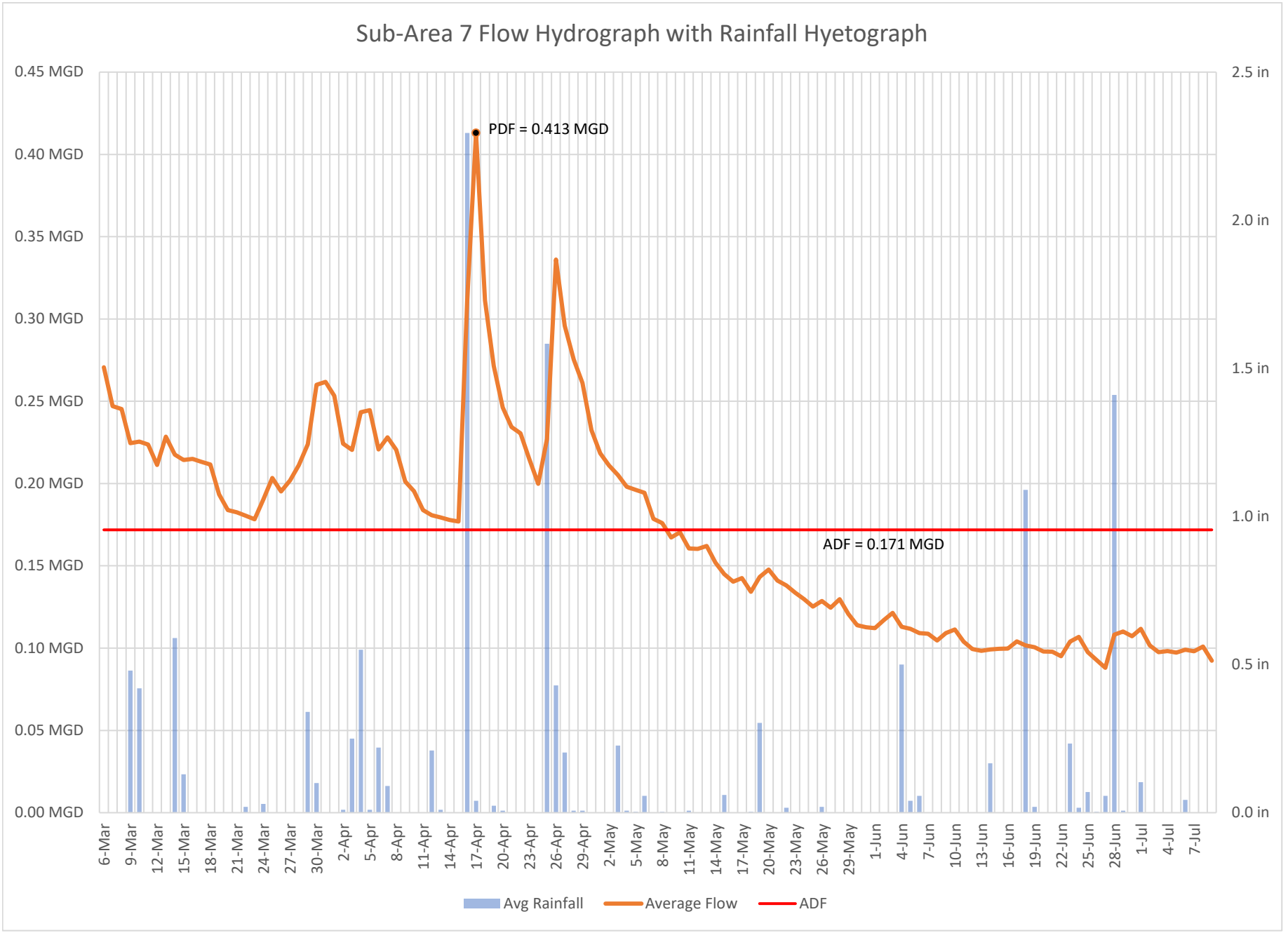

Sub-Area 2 Flow Hydrograph with Rainfall Hyetograph
0.14 MGD
0.12 MGD
0.10 MGD
0.08 MGD
0.06 MGD
0.04 MGD
0.02 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.130 MGD
ADF = 0.065 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Average Flow
ADF

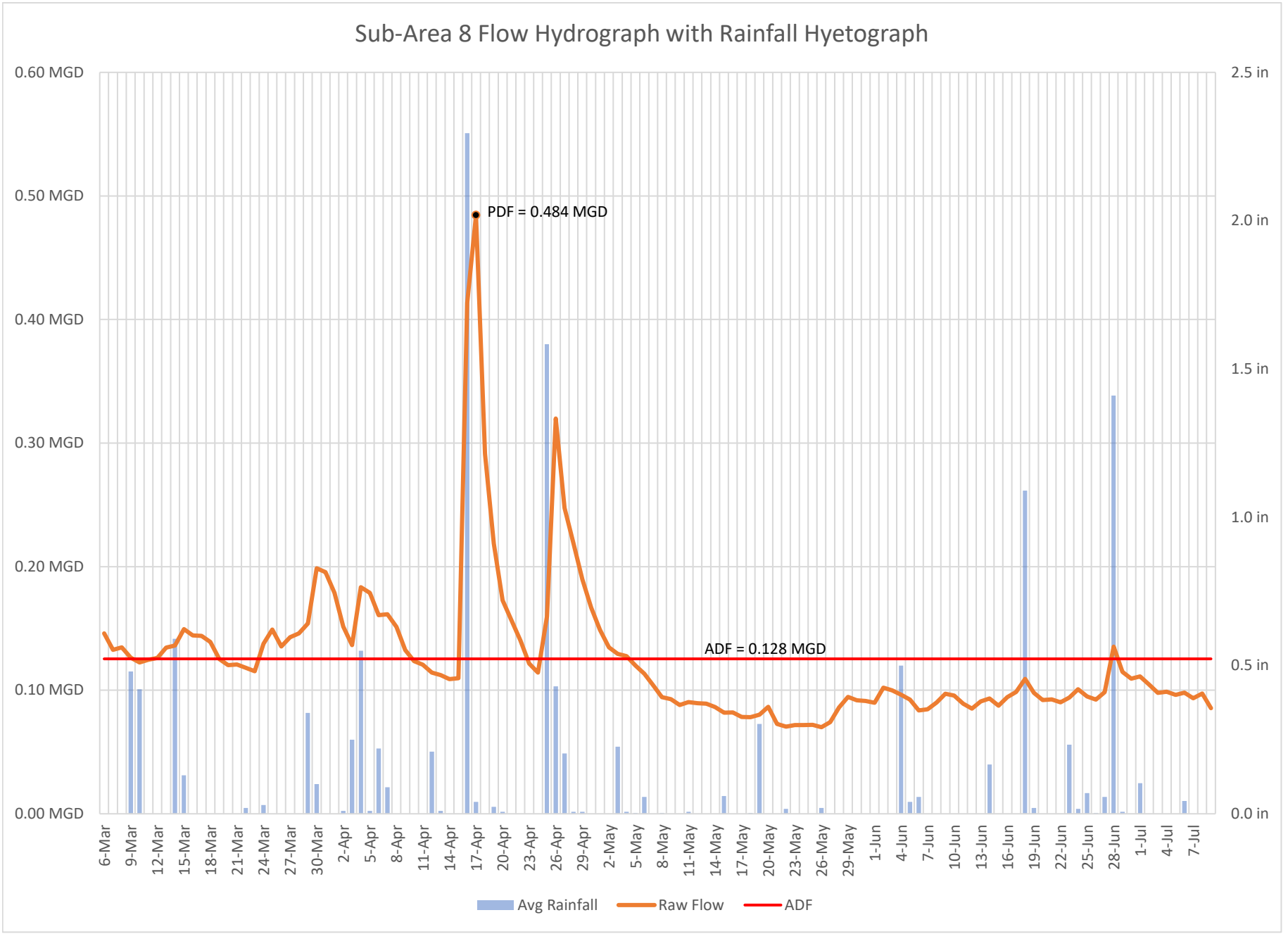

Sub-Area 3 Flow Hydrograph with Rainfall Hyetograph
0.35 MGD
0.30 MGD
0.25 MGD
0.20 MGD
0.15 MGD
0.10 MGD
0.05 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.296 MGD
ADF = 0.170 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Average Flow
ADF

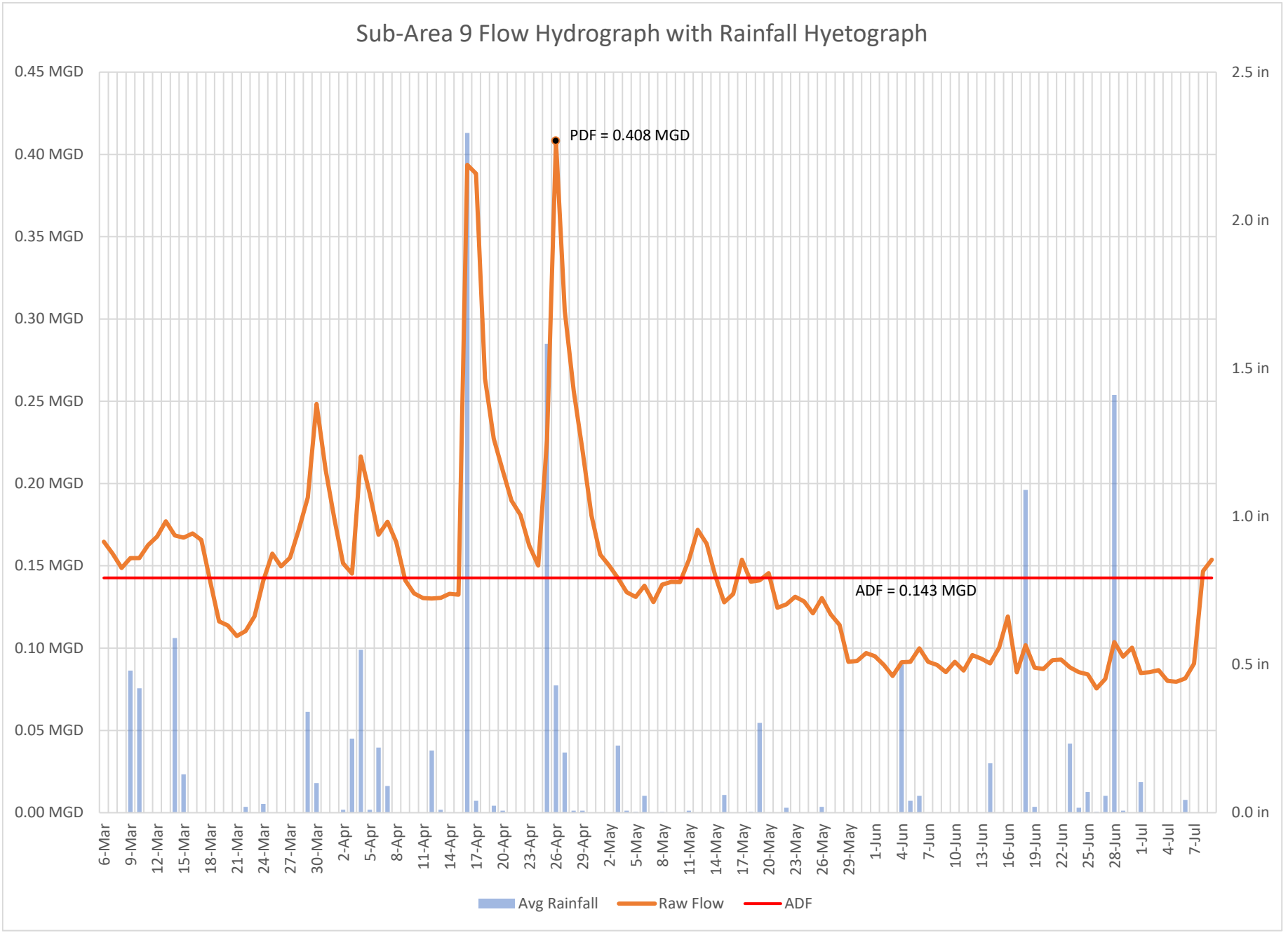
12/17/2018

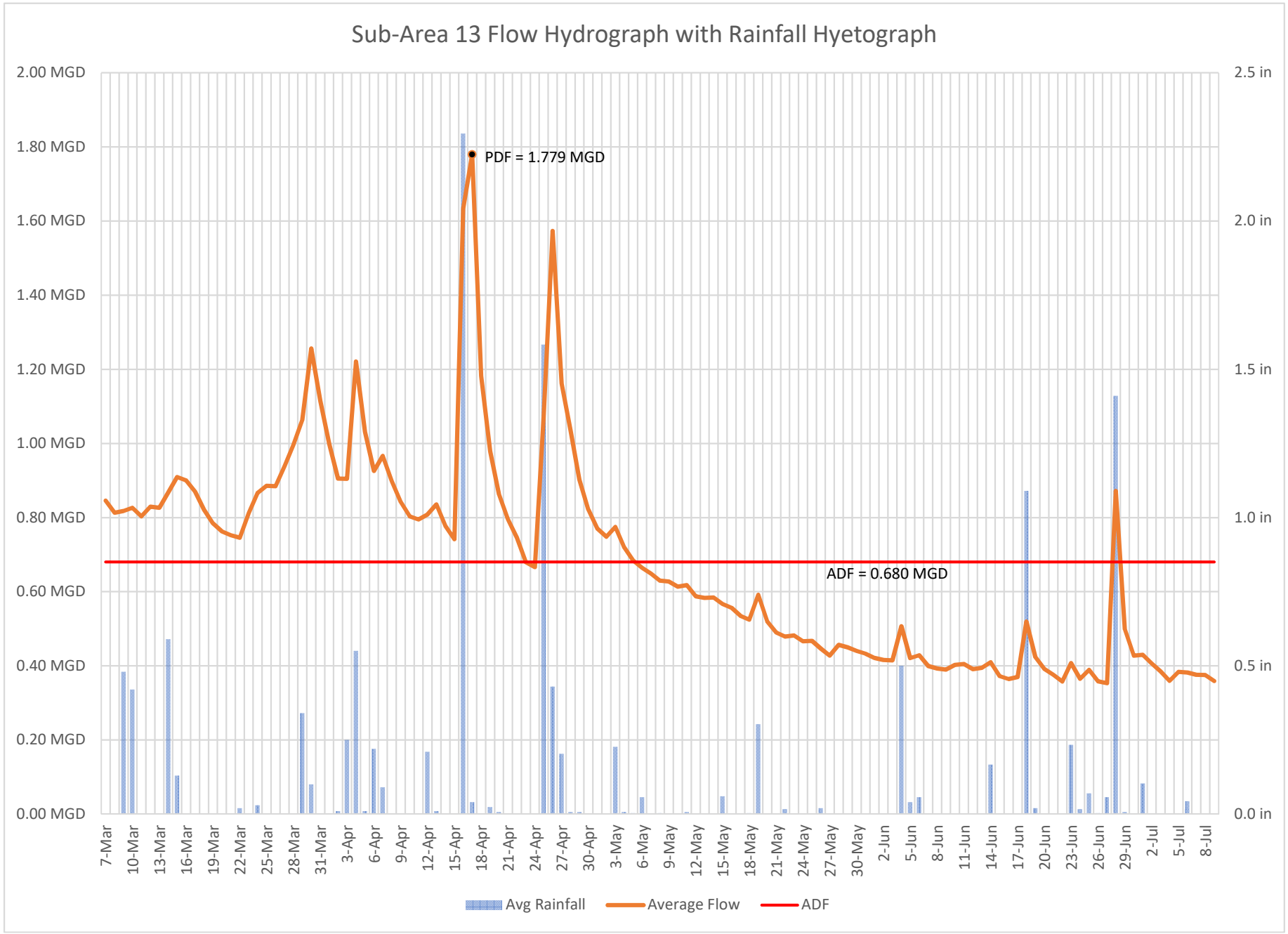

Sub-Area 4 Flow Hydrograph with Rainfall Hyetograph
0.30 MGD
0.25 MGD
0.20 MGD
0.15 MGD
0.10 MGD
0.05 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.271 MGD
ADF = 0.151 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Average Flow
ADF

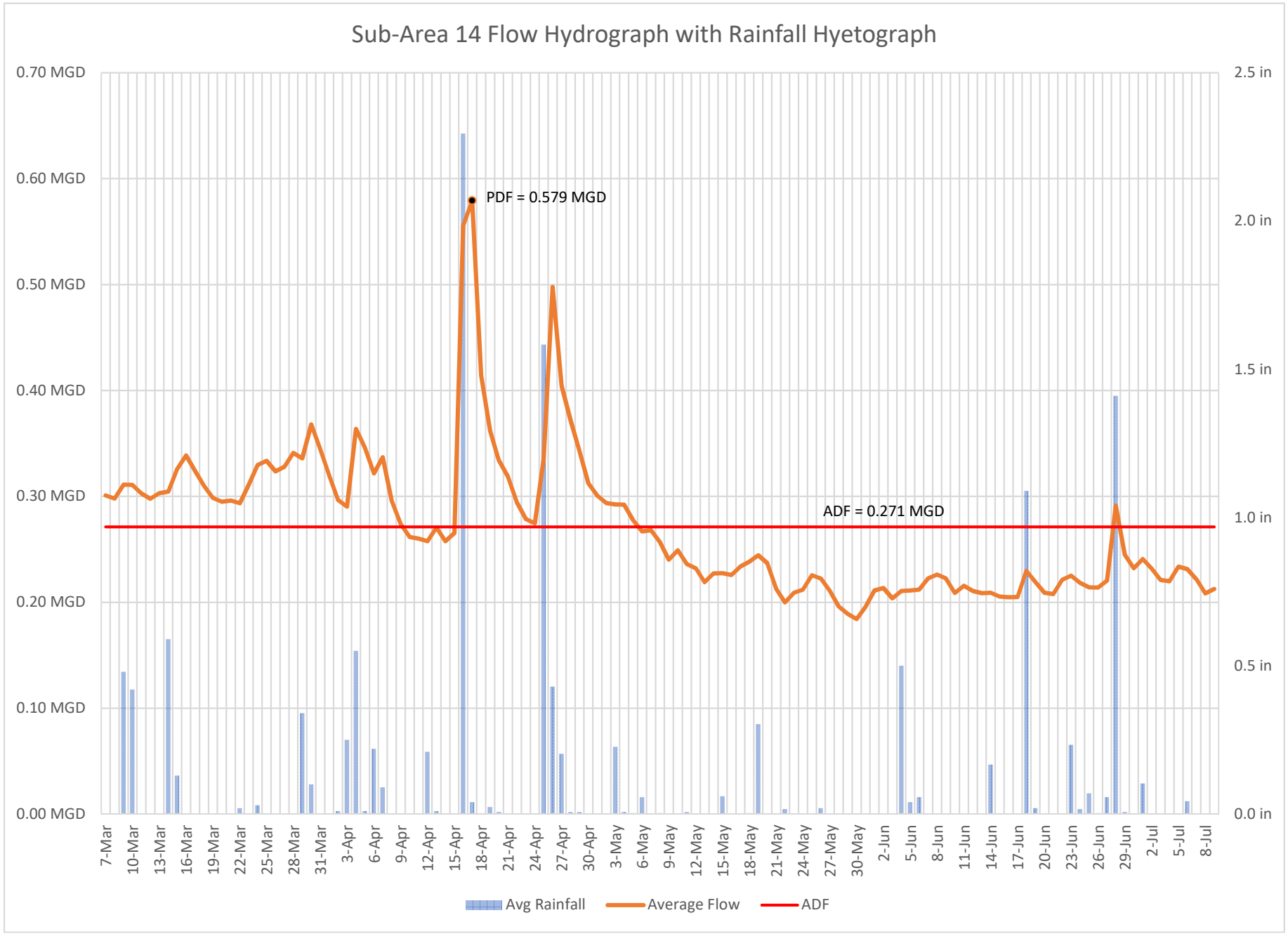

Sub-Area 5 Flow Hydrograph with Rainfall Hyetograph
0.45 MGD
0.40 MGD
0.35 MGD
0.30 MGD
0.25 MGD
0.20 MGD
0.15 MGD
0.10 MGD
0.05 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.399 MGD
ADF = 0.172 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Average Flow
ADF

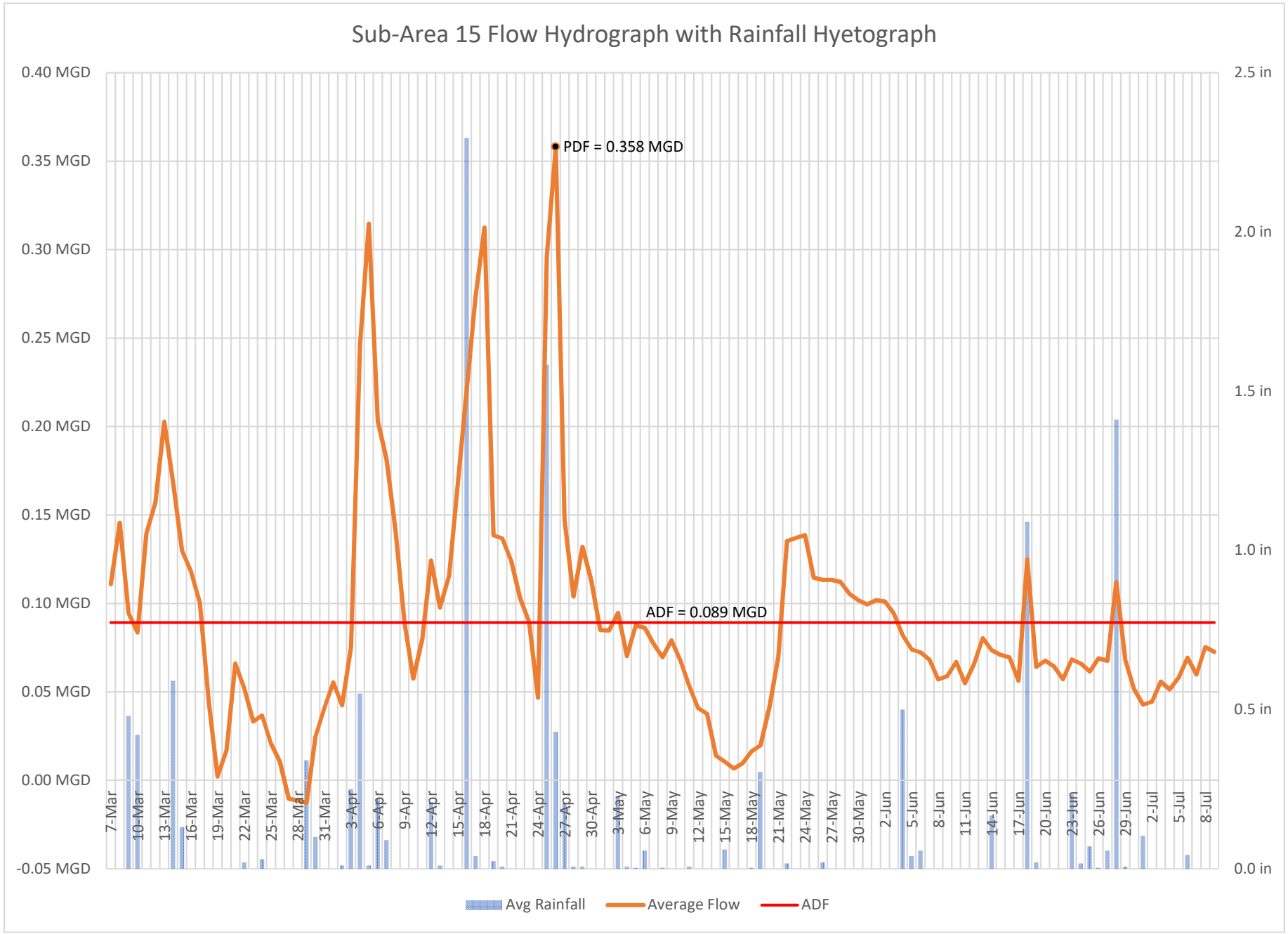

Sub-Area 7 Flow Hydrograph with Rainfall Hyetograph
0.45 MGD
0.40 MGD
0.35 MGD
0.30 MGD
0.25 MGD
0.20 MGD
0.15 MGD
0.10 MGD
0.05 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.413 MGD
ADF = 0.171 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Average Flow
ADF

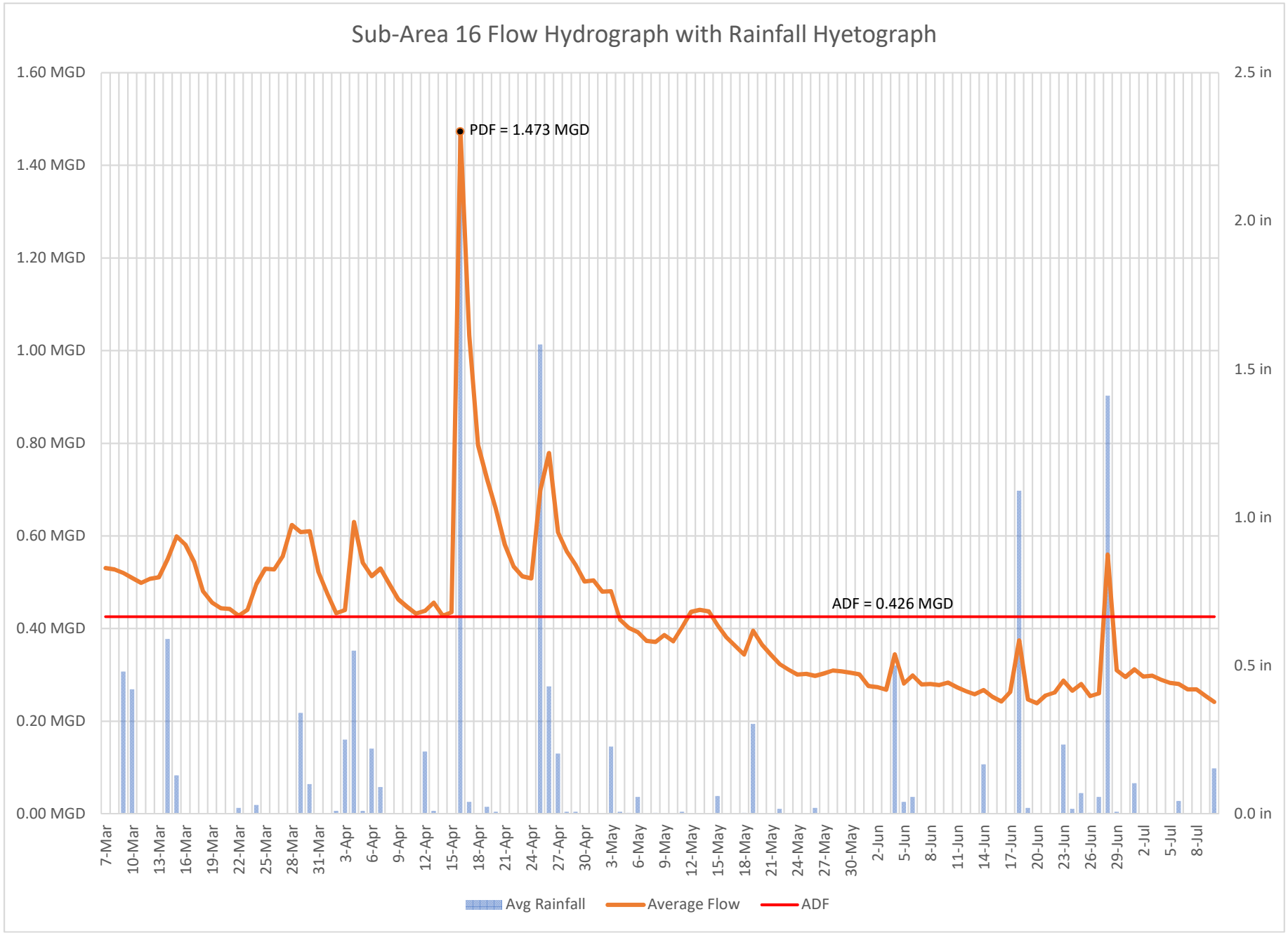

Sub-Area 8 Flow Hydrograph with Rainfall Hyetograph
0.60 MGD
0.50 MGD
0.40 MGD
0.30 MGD
0.20 MGD
0.10 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.484 MGD
ADF = 0.128 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Raw Flow
ADF


Sub-Area 9 Flow Hydrograph with Rainfall Hyetograph
0.45 MGD
0.40 MGD
0.35 MGD
0.30 MGD
0.25 MGD
0.20 MGD
0.15 MGD
0.10 MGD
0.05 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.408 MGD
ADF = 0.143 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Raw Flow
ADF

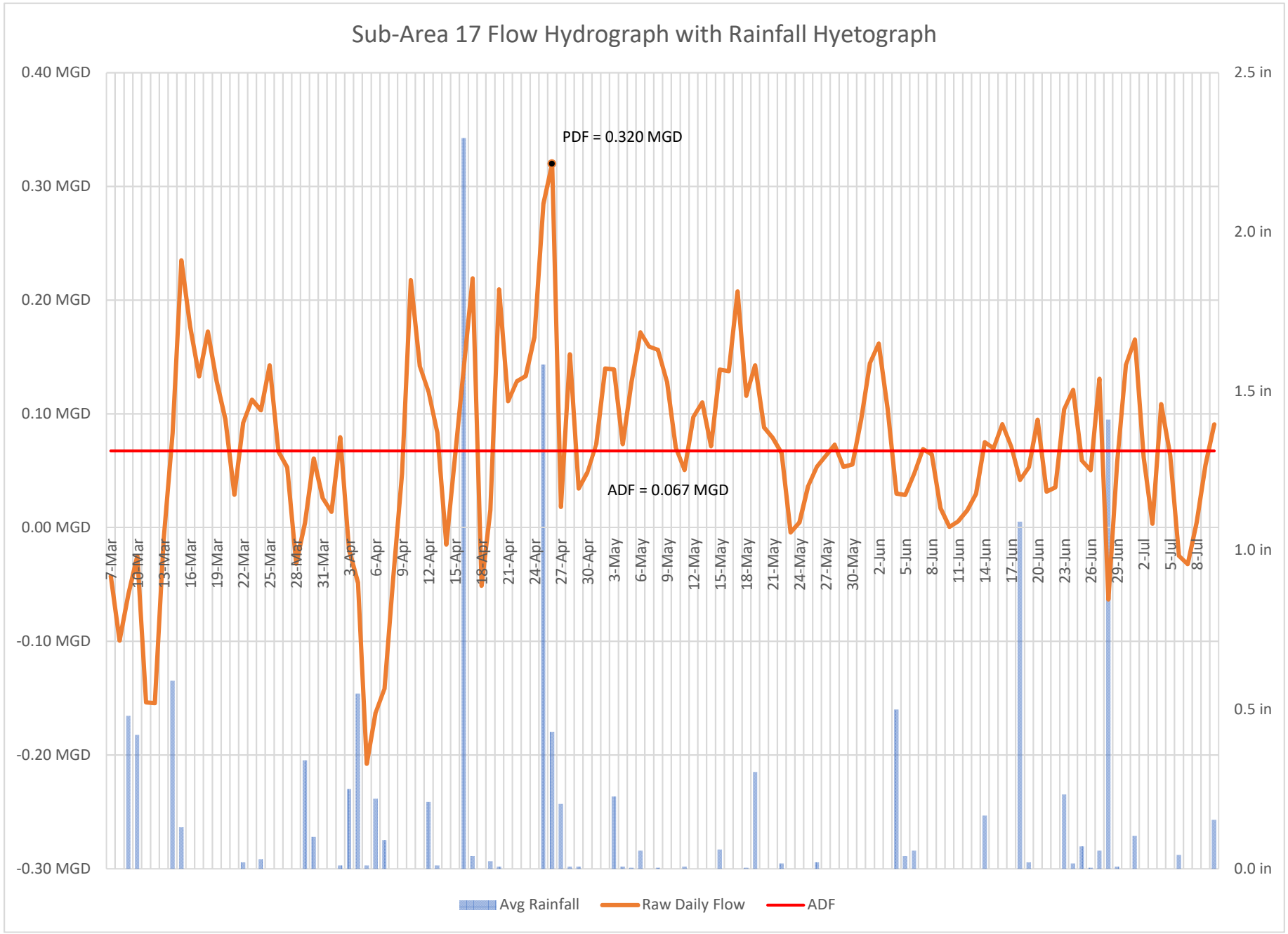

Sub-Area 13 Flow Hydrograph with Rainfall Hyetograph
2.00 MGD
1.80 MGD
1.60 MGD
1.40 MGD
1.20 MGD
1.00 MGD
0.80 MGD
0.60 MGD
0.40 MGD
0.20 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 1.779 MGD
ADF = 0.680 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF


Sub-Area 14 Flow Hydrograph with Rainfall Hyetograph
0.70 MGD
0.60 MGD
0.50 MGD
0.40 MGD
0.30 MGD
0.20 MGD
0.10 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.579 MGD
ADF = 0.271 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF

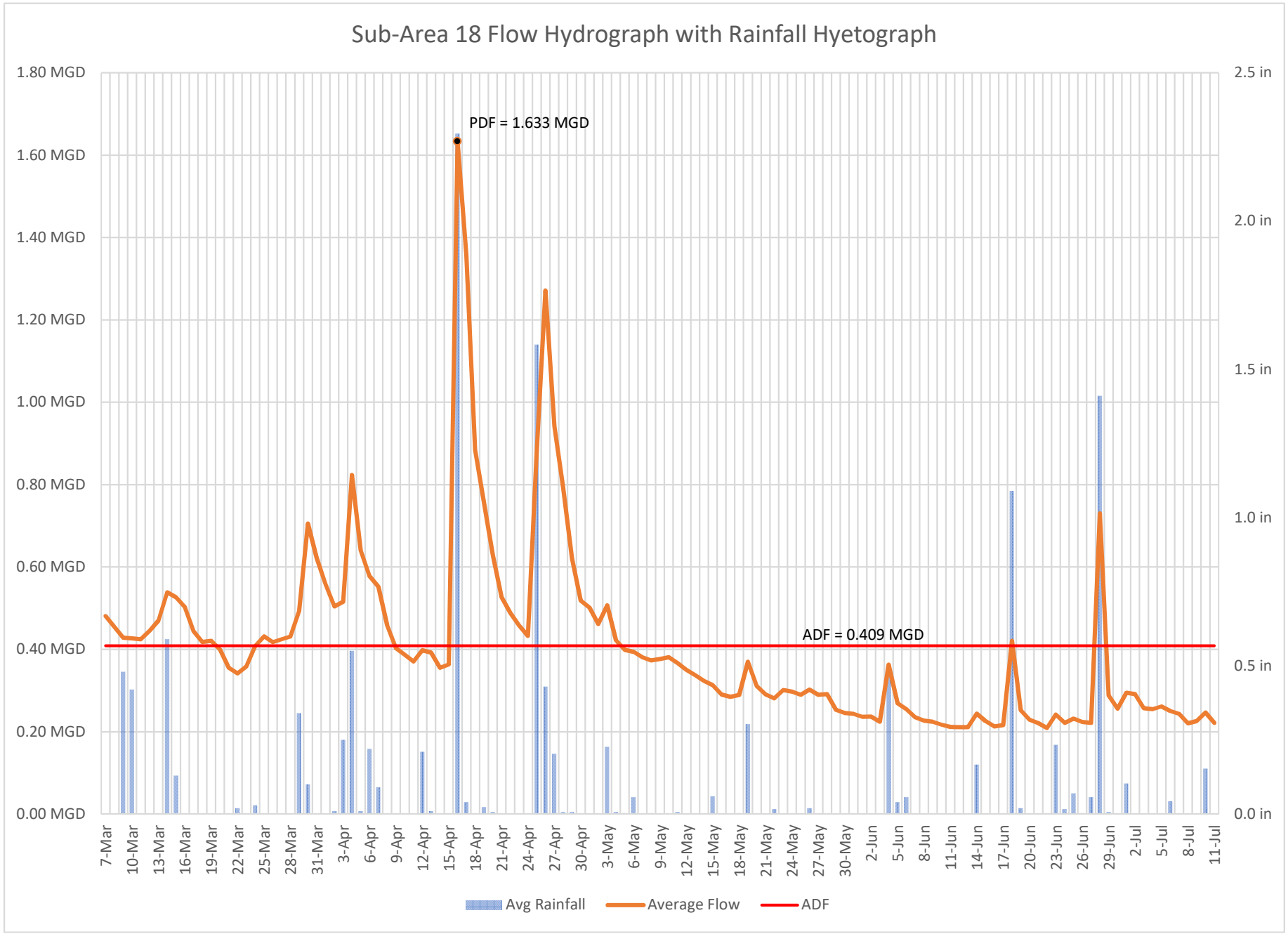

Sub-Area 15 Flow Hydrograph with Rainfall Hyetograph
0.40 MGD
0.35 MGD
0.30 MGD
0.25 MGD
0.20 MGD
0.15 MGD
0.10 MGD
0.05 MGD
0.00 MGD
-0.05 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.358 MGD
ADF = 0.089 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF

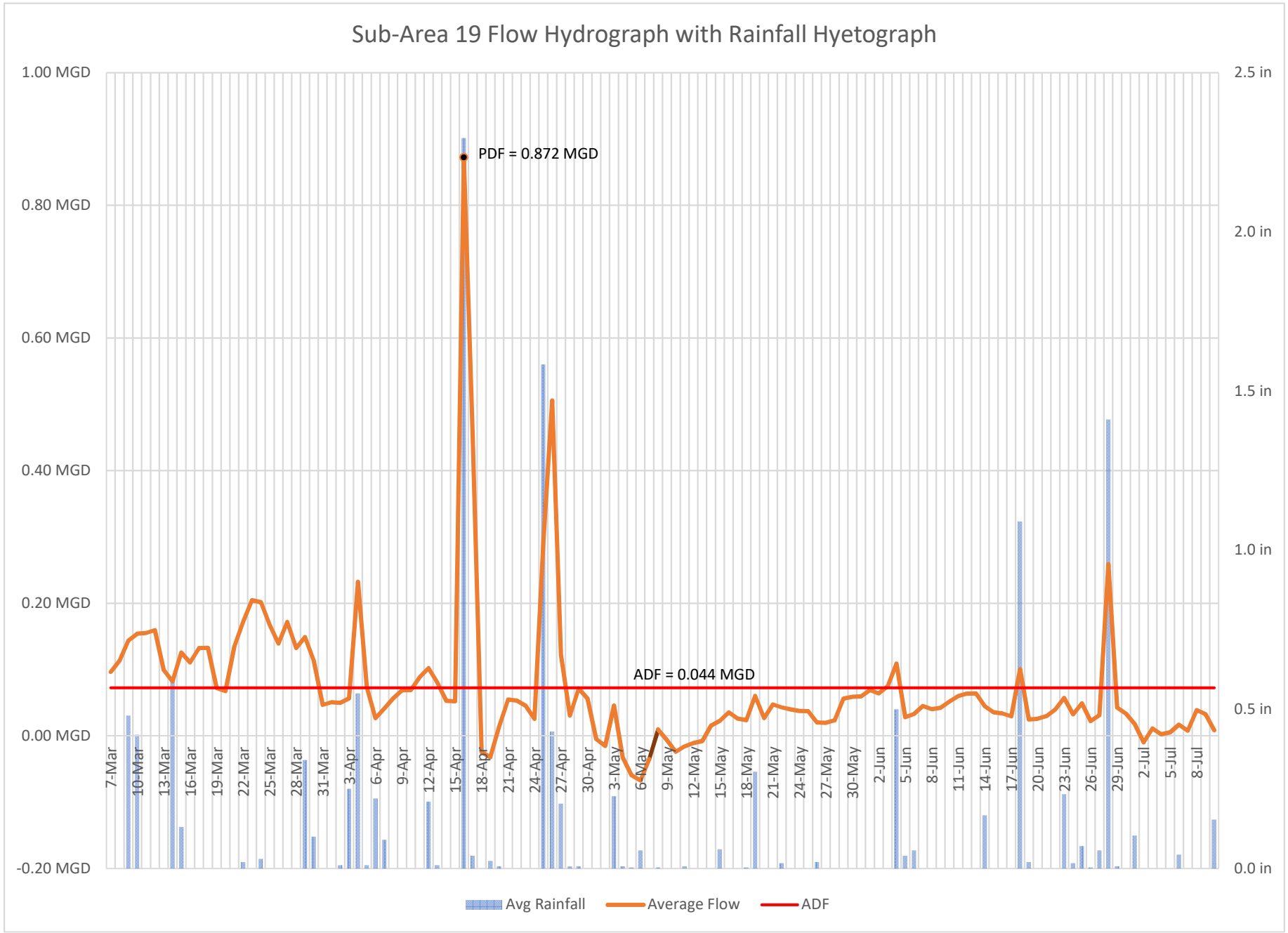

Sub-Area 16 Flow Hydrograph with Rainfall Hyetograph
1.60 MGD
1.40 MGD
1.20 MGD
1.00 MGD
0.80 MGD
0.60 MGD
0.40 MGD
0.20 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 1.473 MGD
ADF = 0.426 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF

12/17/2018

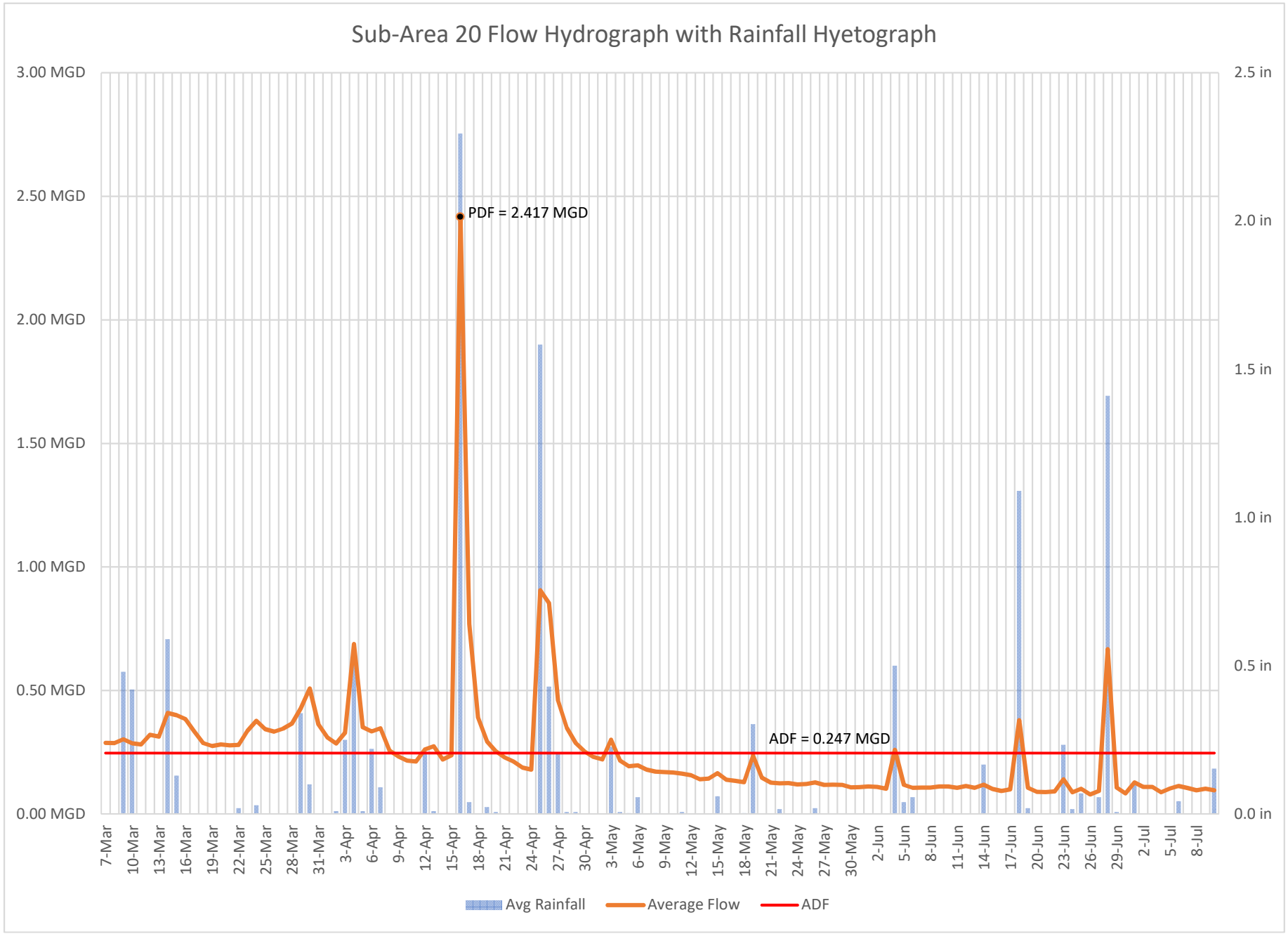

Sub-Area 17 Flow Hydrograph with Rainfall Hyetograph
0.40 MGD
0.30 MGD
0.20 MGD
0.10 MGD
0.00 MGD
-0.10 MGD
-0.20 MGD
-0.30 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.320 MGD
ADF = 0.067 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Raw Daily Flow
ADF

12/17/2018

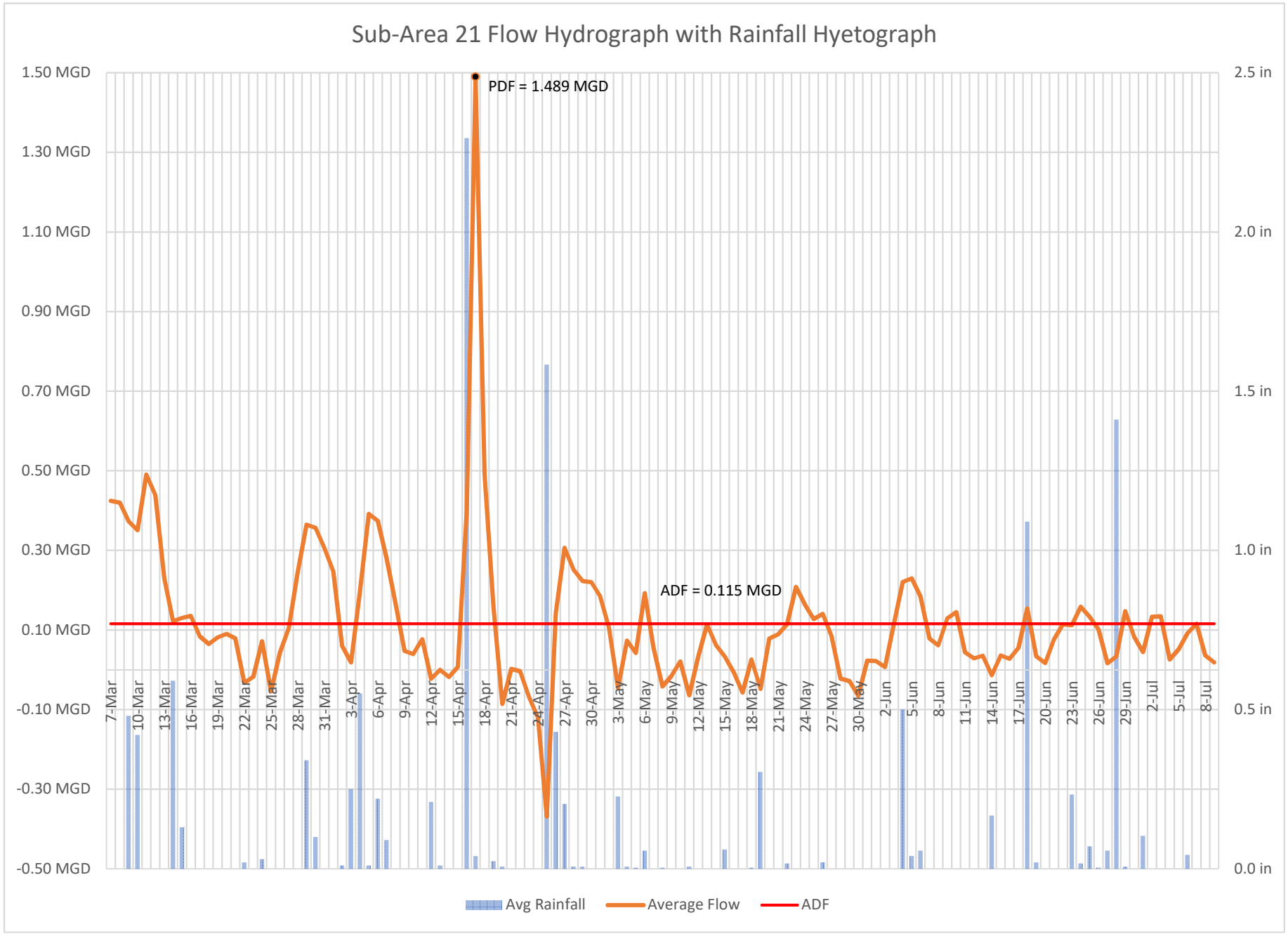

Sub-Area 18 Flow Hydrograph with Rainfall Hyetograph
1.80 MGD
1.60 MGD
1.40 MGD
1.20 MGD
1.00 MGD
0.80 MGD
0.60 MGD
0.40 MGD
0.20 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 1.633 MGD
ADF = 0.409 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
11-Jul
Avg Rainfall
Average Flow
ADF


Sub-Area 19 Flow Hydrograph with Rainfall Hyetograph
1.00 MGD
0.80 MGD
0.60 MGD
0.40 MGD
0.20 MGD
0.00 MGD
-0.20 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.872 MGD
ADF = 0.044 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF

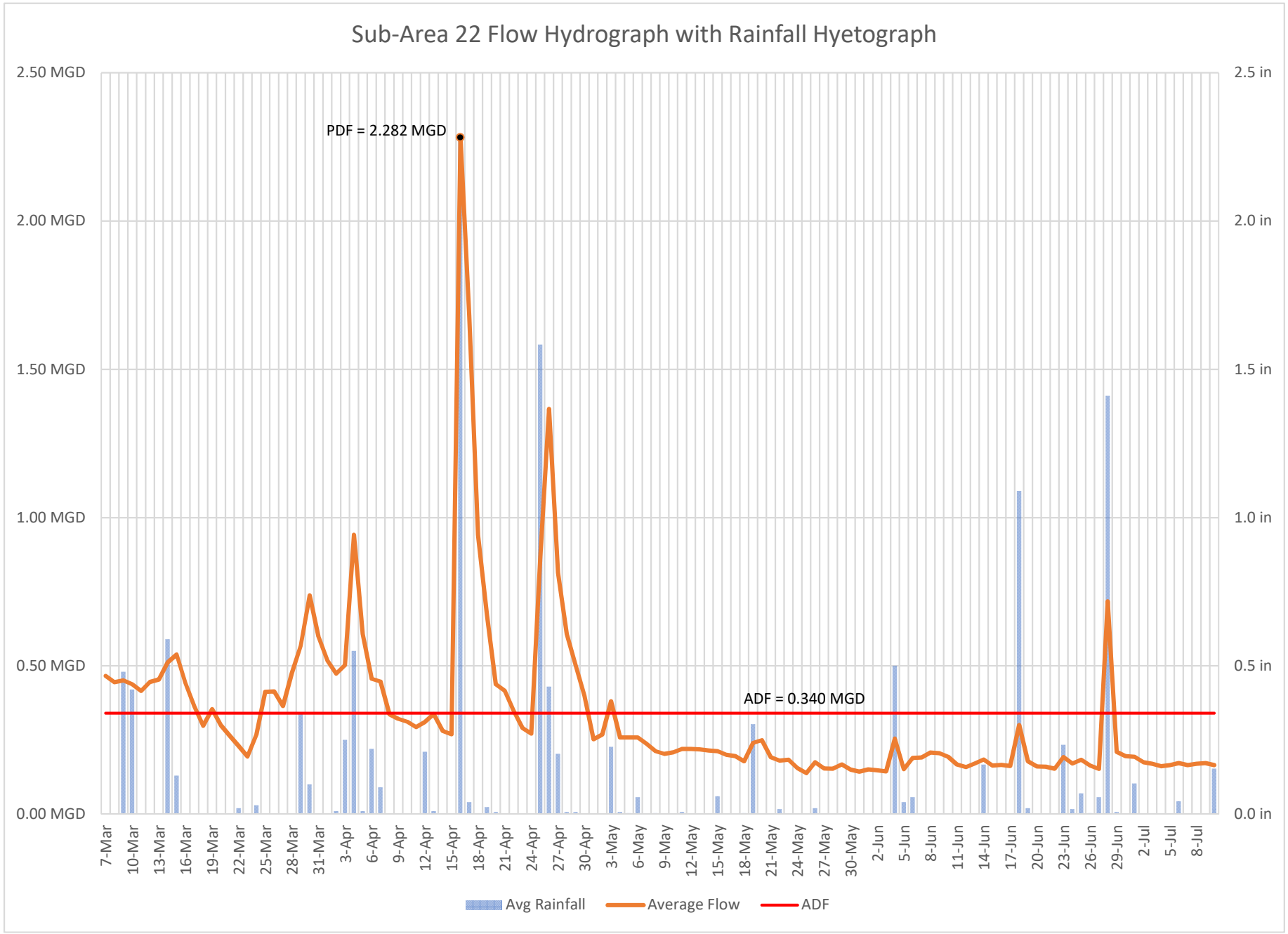
12/17/2018


Sub-Area 20 Flow Hydrograph with Rainfall Hyetograph
3.00 MGD
2.50 MGD
2.00 MGD
1.50 MGD
1.00 MGD
0.50 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 2.417 MGD
ADF = 0.247 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF

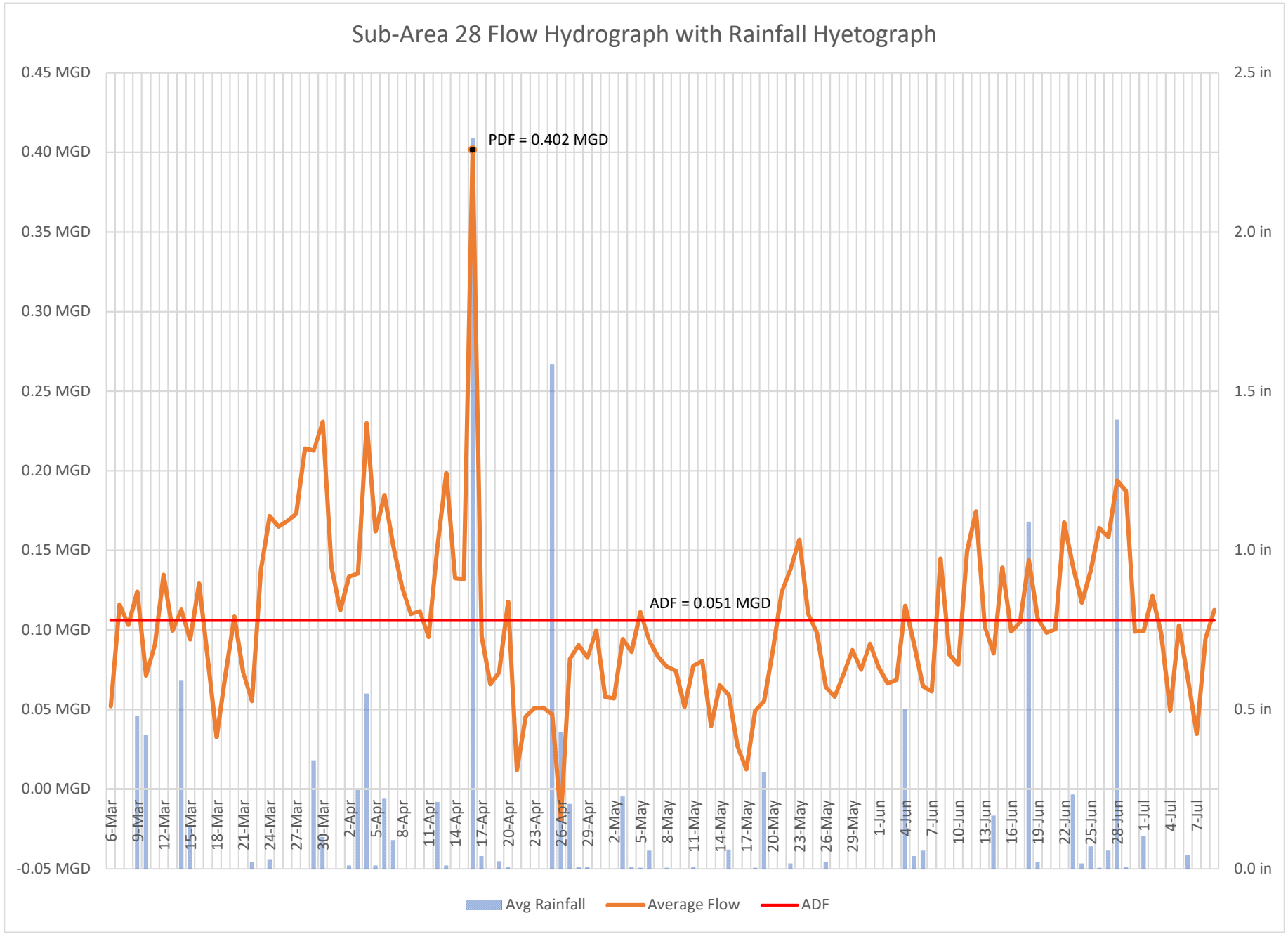
12/17/2018


Sub-Area 21 Flow Hydrograph with Rainfall Hyetograph
PDF = 1.489 MGD
ADF = 0.115 MGD
1.50 MGD
1.30 MGD
1.10 MGD
0.90 MGD
0.70 MGD
0.50 MGD
0.30 MGD
0.10 MGD
-0.10 MGD
-0.30 MGD
-0.50 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF

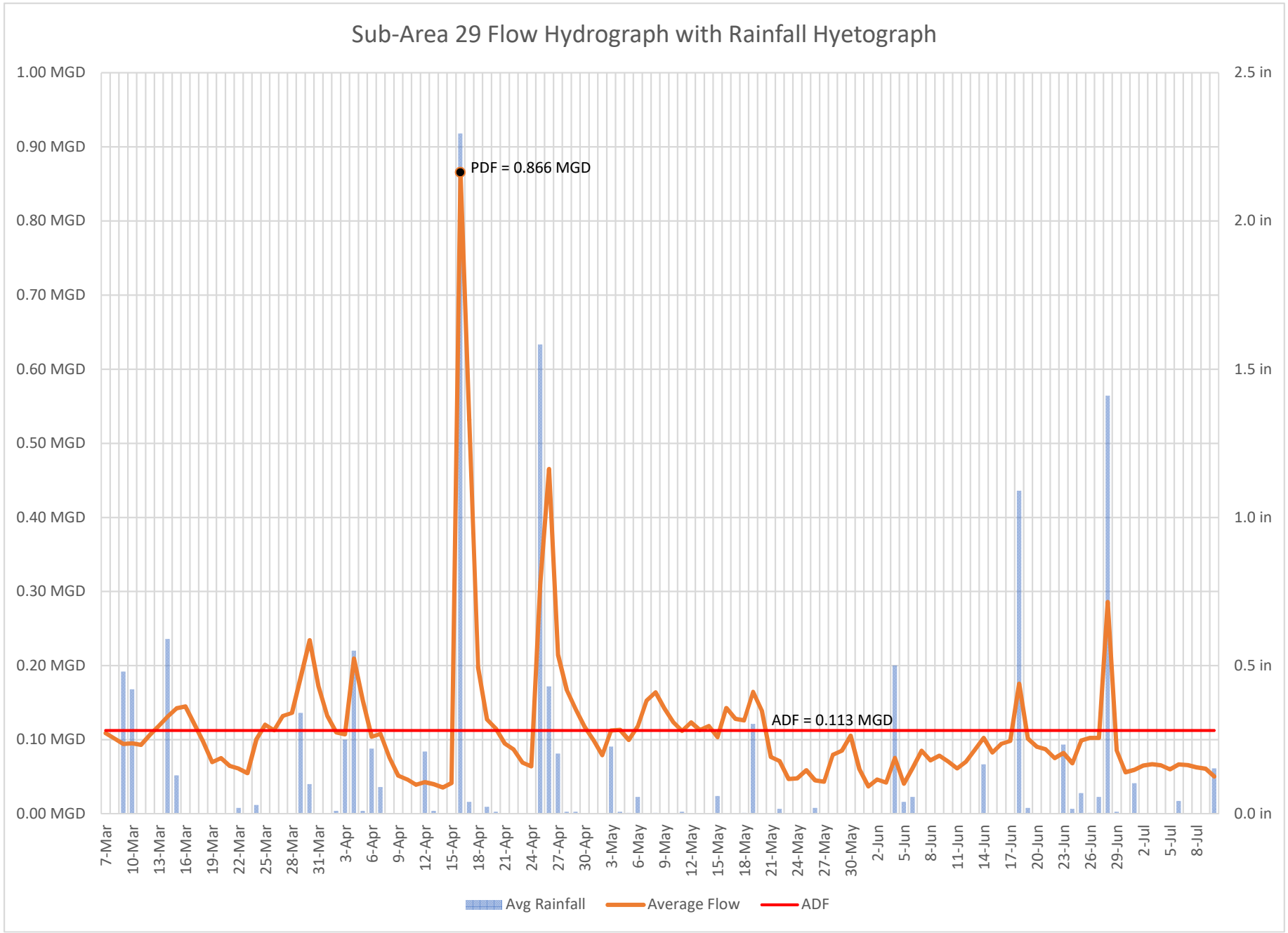
12/17/2018


Sub-Area 22 Flow Hydrograph with Rainfall Hyetograph
2.50 MGD
2.00 MGD
1.50 MGD
1.00 MGD
0.50 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 2.282 MGD
ADF = 0.340 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF

12/17/2018


Sub-Area 28 Flow Hydrograph with Rainfall Hyetograph
0.45 MGD
0.40 MGD
0.35 MGD
0.30 MGD
0.25 MGD
0.20 MGD
0.15 MGD
0.10 MGD
0.05 MGD
0.00 MGD
-0.05 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.402 MGD
ADF = 0.051 MGD
6-Mar
9-Mar
12-Mar
15-Mar
18-Mar
21-Mar
24-Mar
27-Mar
30-Mar
2-Apr
5-Apr
8-Apr
11-Apr
14-Apr
17-Apr
20-Apr
23-Apr
26-Apr
29-Apr
2-May
5-May
8-May
11-May
14-May
17-May
20-May
23-May
26-May
29-May
1-Jun
4-Jun
7-Jun
10-Jun
13-Jun
16-Jun
19-Jun
22-Jun
25-Jun
28-Jun
1-Jul
4-Jul
7-Jul
Avg Rainfall
Average Flow
ADF

12/17/2018


Sub-Area 29 Flow Hydrograph with Rainfall Hyetograph
1.00 MGD
0.90 MGD
0.80 MGD
0.70 MGD
0.60 MGD
0.50 MGD
0.40 MGD
0.30 MGD
0.20 MGD
0.10 MGD
0.00 MGD
2.5 in
2.0 in
1.5 in
1.0 in
0.5 in
0.0 in
PDF = 0.866 MGD
ADF = 0.113 MGD
7-Mar
10-Mar
13-Mar
16-Mar
19-Mar
22-Mar
25-Mar
28-Mar
31-Mar
3-Apr
6-Apr
9-Apr
12-Apr
15-Apr
18-Apr
21-Apr
24-Apr
27-Apr
30-Apr
3-May
6-May
9-May
12-May
15-May
18-May
21-May
24-May
27-May
30-May
2-Jun
5-Jun
8-Jun
11-Jun
14-Jun
17-Jun
20-Jun
23-Jun
26-Jun
29-Jun
2-Jul
5-Jul
8-Jul
Avg Rainfall
Average Flow
ADF

12/17/2018

INFILTRATION AND INFLOW INVESTIGATIONS:

FLOW ISOLATION LOCATIONS

SSMH-0195
SSMH-2985
SSMH-6179
SSMH-0830
SSMH-2986
SSMH-0828
SSMH-1560
SSMH-2984
SSMH-0211
SSMH-0827
SSMH-1559
SSMH-1558
SSMH-1557
SSMH-0829
SSMH-5376
SSMH-0826
SSMH-5375
SSMH-1453
SSMH-1454
SSMH-5373
SSMH-5374
SSMH-1452
SSMH-5372
SSMH-4439
SSMH-4437
SSMH-2977
SSMH-2976
SSMH-5368
SSMH-0205
SSMH-0832
SSMH-0206
SSMH-1343
SSMH-2975
SSMH-2973
SSMH-2974
SSMH-2983
SSMH-0489
SSMH-2982
SSMH-2972
SSMH-0210
SSMH-5370
SSMH-2978
SSMH-4555
SSMH-5412
SSMH-6018
SSMH-5413
Tee Dr
Caddie Ln
Par Dr
Walch Dr
Riverside Street
Evergreen Dr
Industrial Way
Prim St
View St
Riverside St
Riverside Street
Riverside Street
Riverton Dr
Wellesley Ests
Waldron Way
Pinewood Rd
Springbrook Way
Rainmaker Dr
Manuel Dr
Maine Turnpike
I 95
Tarbell Ave
Tucker Ave
Dover Ave
Bailey Ave
Beal St
Eastman Ave
Brandon St
Castine Ave
Belden St
Aldworth St
Wyndham St
Wendell St
Euclid Ave
Epping St
Wilkie St
Newell Avenue
Forest Avenue
Portland Friends Monthly Meeting
Feminist Spiritual Community
Spurwink School
PS

Legend

- CITY PUMP STATION
- PRIVATE PUMP STATION
- SEWER MANHOLE
- GRAVITY SEWER PIPE
- FLOW ISOLATION LOCATION
- SEWER FORCE MAIN
- SUB-AREA BOUNDARY

0 200 400 600 800 Feet

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 4

Flow Isolation Locations

December 2018

ARCADIS

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City of Portland, Maine

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Evaluation Survey

Sub-Area 5

Flow Isolation Locations

0 200 400 600 800 Feet

December 2018

ARCADIS

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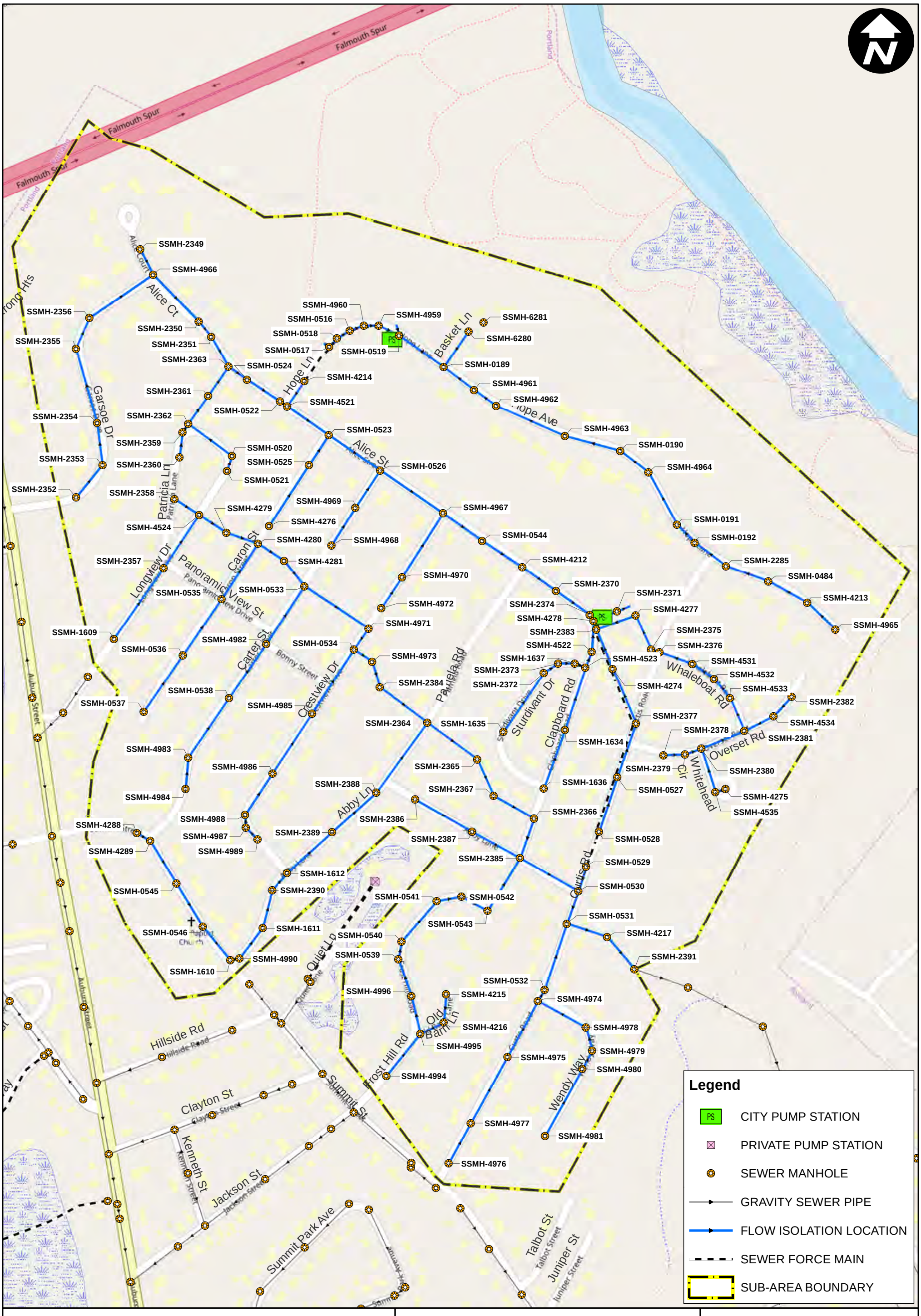
Legend

- CITY PUMP STATION
- PRIVATE PUMP STATION
- SEWER MANHOLE
- GRAVITY SEWER PIPE
- FLOW ISOLATION LOCATION
- SEWER FORCE MAIN
- SUB-AREA BOUNDARY



City of Portland, Maine

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Evaluation Survey

Sub-Area 7

Flow Isolation Locations

December 2018

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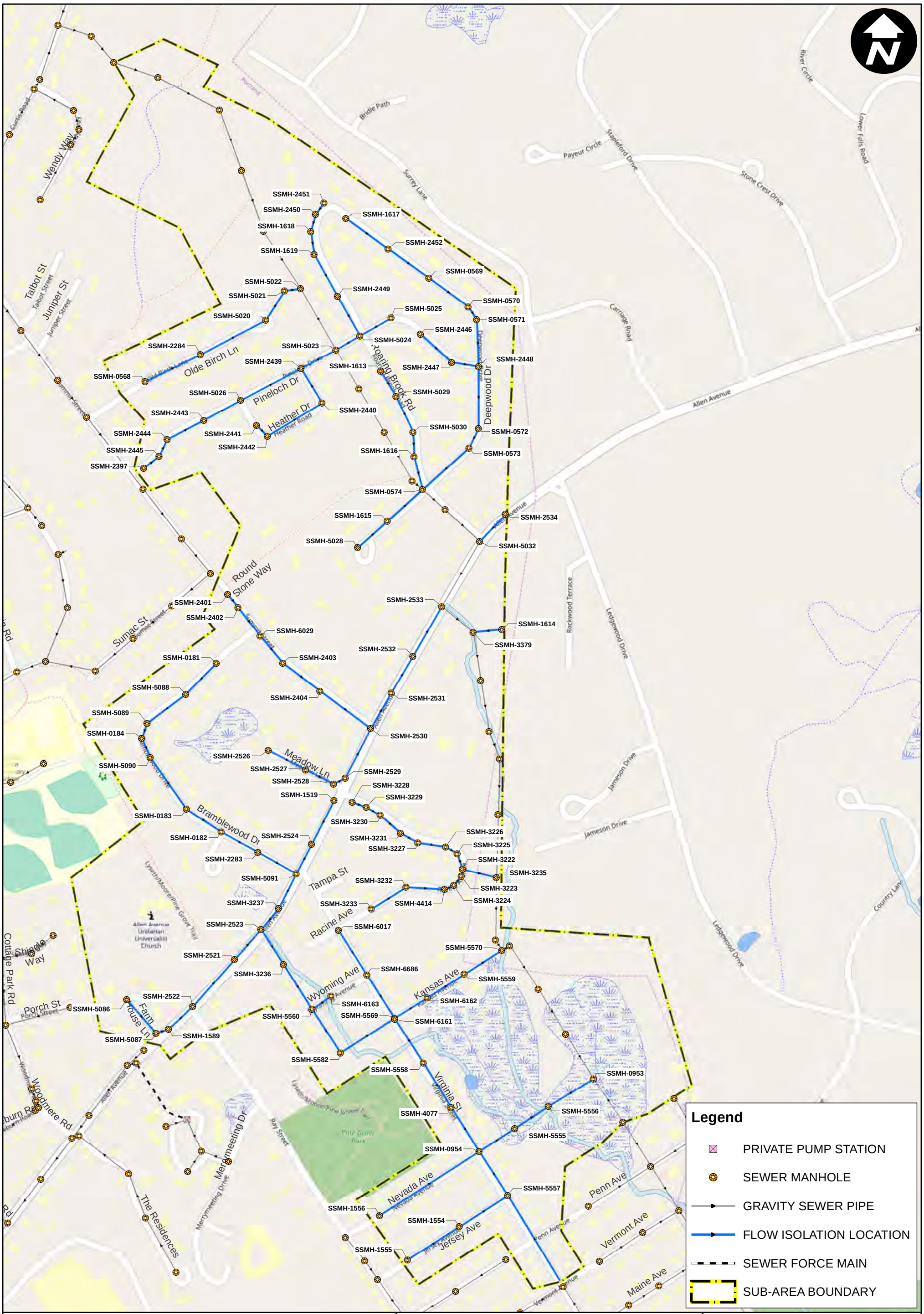

City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 8

Flow Isolation Locations

December 2018

ARCADIS

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Evaluation Survey

Sub-Area 14

Flow Isolation Locations

December 2018

ARCADIS

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City of Portland, Maine

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Evaluation Survey

Sub-Area 15

Flow Isolation Locations

December 2018

ARCADIS

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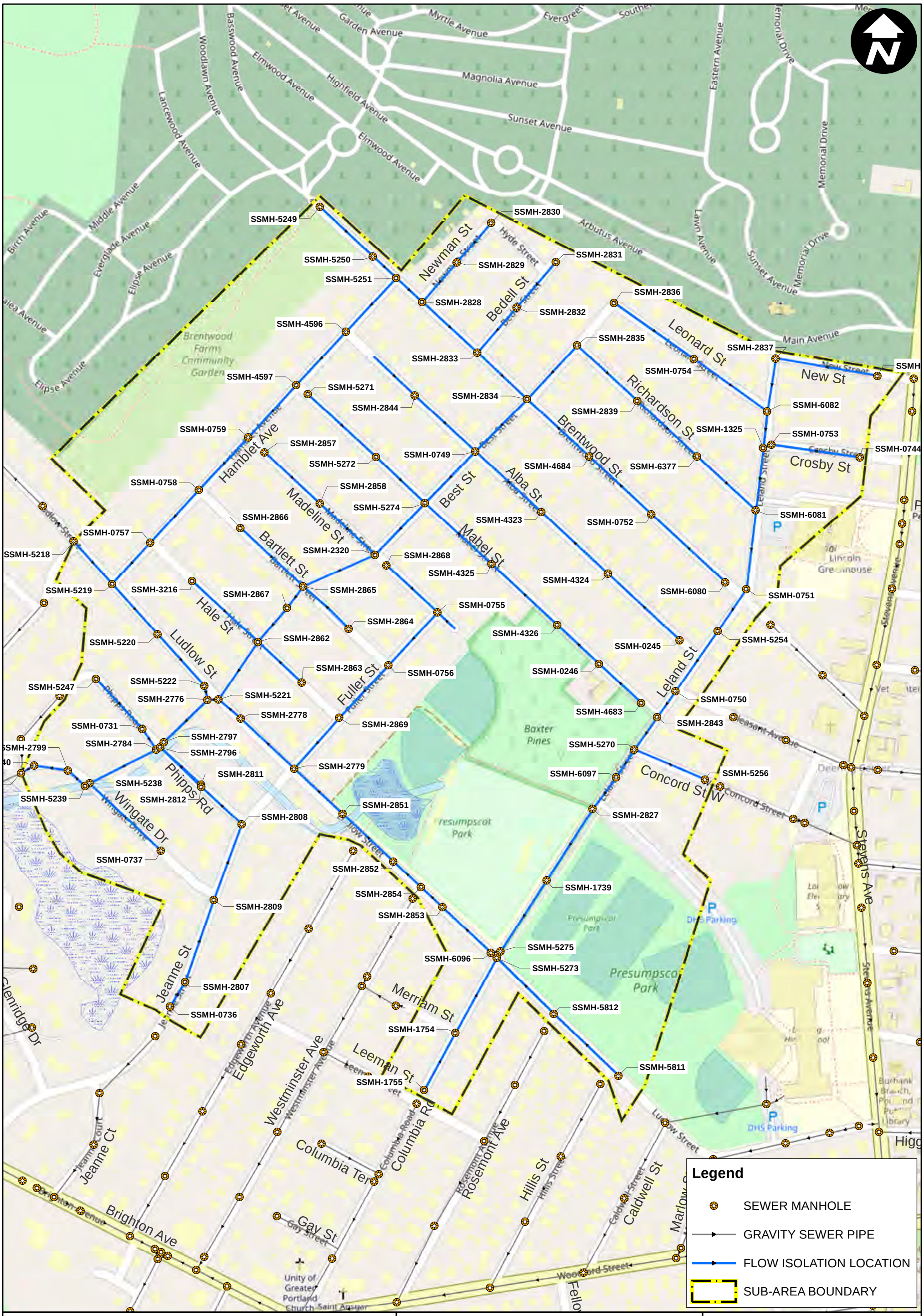

City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 16

Flow Isolation Locations

December 2018

ARCADIS

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City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 16

Flow Isolation Locations

0 200 400 600 Feet

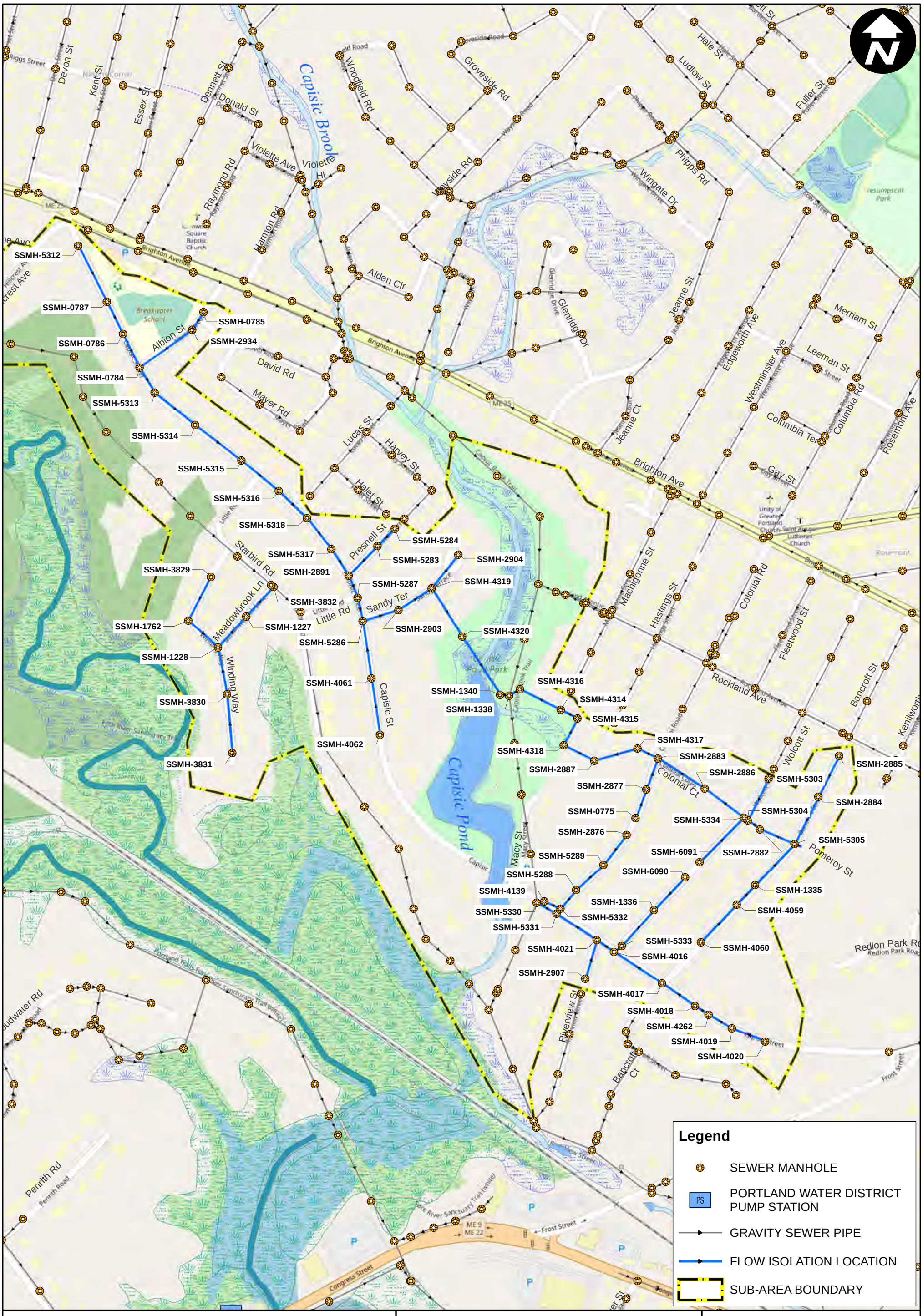
December 2018

ARCADIS

Legend

- SEWER MANHOLE
- GRAVITY SEWER PIPE
- FLOW ISOLATION LOCATION
- Sub-Area 16

G:\GIS\Portland\2018 - 2019 SSES Maps\2018 FLOW ISOLATION SUB AREA 18.mxd



City of Portland, Maine

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Evaluation Survey

Sub-Area 21

Flow Isolation Locations

December 2018

ARCADIS

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City of Portland, Maine

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Evaluation Survey

Sub-Area 22

Flow Isolation Locations

0 200 400 600 Feet

December 2018

ARCADIS

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SSMH-0837
SSMH-0834
SSMH-2981
SSMH-0833
SSMH-5390
SSMH-5389
SSMH-2999
SSMH-6282
SSMH-2997
SSMH-6287
SSMH-0194
SSMH-6301
SSMH-6302
SSMH-3000
SSMH-6283
SSMH-6176
SSMH-6175
SSMH-6295
SSMH-6177
SSMH-4931
SSMH-2993
SSMH-1632
SSMH-5398
SSMH-0849
SSMH-0193
SSMH-1633
SSMH-0840
SSMH-0839
SSMH-6723
SSMH-3117
SSMH-4930
SSMH-1631

Dole Brook
Maine Turnpike
I 95
Riverside Industrial Parkway
Freight Main Line
Allison Ave
W Lynne Ave
Palmer Ave
Deering Run Dr
Continental Dr
Dole Dr
Rice St
Milliken St
Wedge Way
Riverside Street
Braintree St
Beverly St
Saugus St
Tarbell Ave
Newell Avenue
Milton St
Buca Run
Randolph St

Legend

- SEWER MANHOLE
- GRAVITY SEWER PIPE
- FLOW ISOLATION LOCATION
- SUB-AREA BOUNDARY

0 200 400 600 Feet

City of Portland, Maine

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Evaluation Survey

Sub-Area 28

Flow Isolation Locations

December 2018

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INFILTRATION AND INFLOW INVESTIGATIONS:

CCTV INSPECTION LOCATIONS

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 9

Closed-Circuit Televised Inspection Locations

December 2018

ARCADIS

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City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 19

Closed-Circuit Televised Inspection Locations

December 2018

ARCADIS

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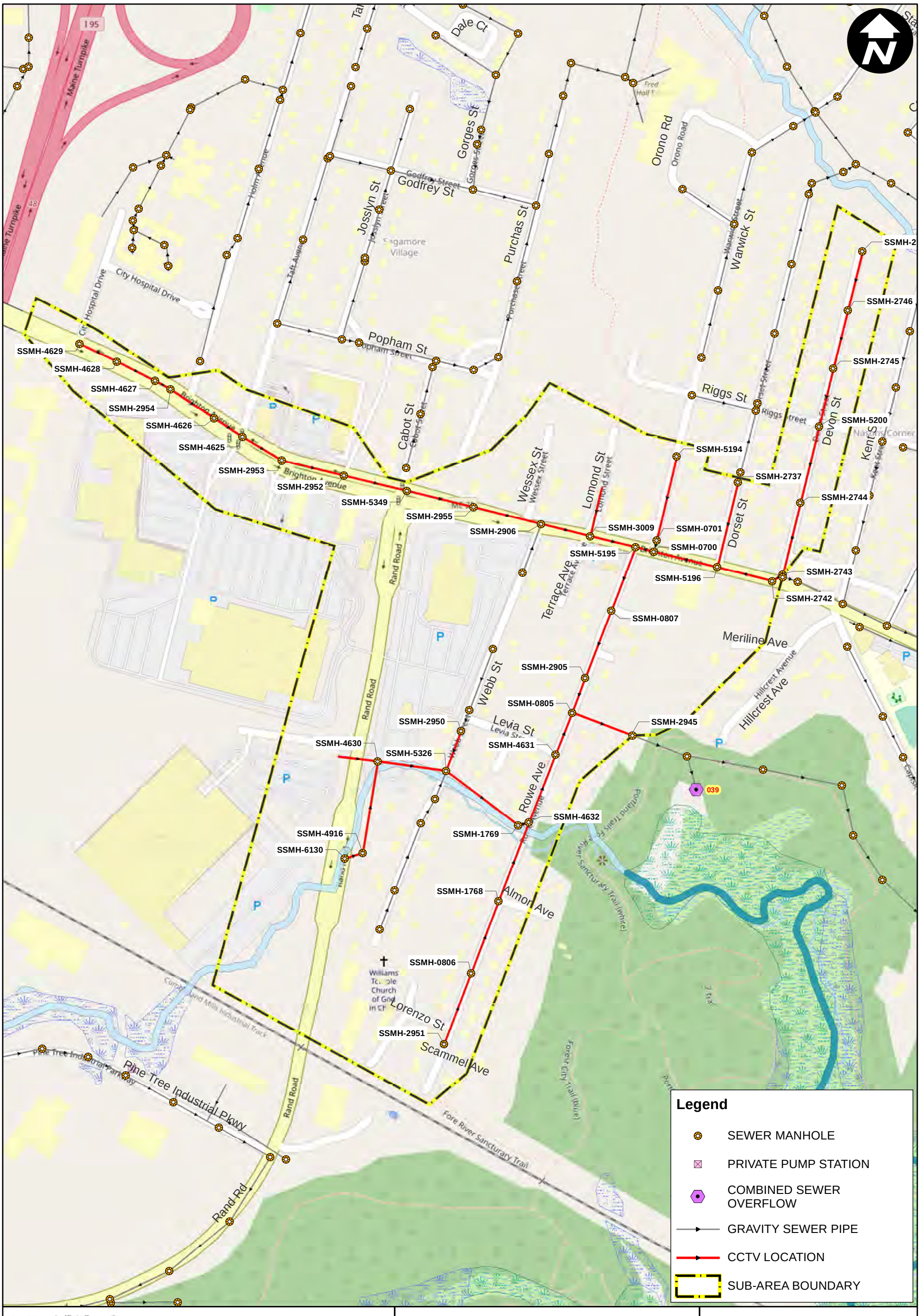

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 20

Closed-Circuit Televised Inspection Locations

0 200 400 600 Feet

December 2018

ARCADIS

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City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 29

Closed-Circuit Televised Inspection Locations

December 2018

ARCADIS

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INFILTRATION AND INFLOW INVESTIGATIONS:

MANHOLE INSPECTION LOCATIONS

SSMH-0195
SSMH-2985
SSMH-6179
SSMH-0830
SSMH-2986
SSMH-0828
SSMH-2984
SSMH-0211
SSMH-1560
SSMH-0827
SSMH-2972
SSMH-2982
SSMH-0489
SSMH-2983
SSMH-2974
SSMH-0210
SSMH-2973
SSMH-2975
SSMH-1559
SSMH-1558
SSMH-1557
SSMH-0829
SSMH-5376
SSMH-0826
SSMH-1343
SSMH-0206
SSMH-0832
SSMH-0205
SSMH-2976
SSMH-2977
SSMH-4437
SSMH-5368
SSMH-5375
SSMH-1453
SSMH-4439
SSMH-5374
SSMH-1454
SSMH-1452
SSMH-5373
SSMH-5372
SSMH-5370
SSMH-2978
SSMH-4555
SSMH-5412
SSMH-6018
SSMH-5413
Tee Dr
Caddie Ln
Wedge Way
Par Dr
Walch Dr
Riverside Street
Evergreen Dr
Industrial Way
Prim St
Riverside St
Forest Avenue
Maine Turnpike
I 95
Riverton Dr
Wellesley Ests
Brandon St
Casting Ave
Belden St
Aldworth St
Wyndham St
Pinewood Rd
Springbrook Way
Waldron Way
Newell Avenue
Tarbell Ave
Tucker Ave
Dover Ave
Bailey Ave
Beal St
Eastman Ave
Riverside Industrial Parkway
Pari Pl
Wendell St
Euclid Ave
Epping St
Wilkie St
Rainmaker Dr
Manuel Dr
Portland Friends Meeting Cemetery
Portland Friends Monthly Meeting
Feminist Spiritual Community
Spurwink School
PS

Legend

- PS — CITY PUMP STATION
- PRIVATE PUMP STATION
- SEWER MANHOLE
- MANHOLE INSPECTION
- GRAVITY SEWER PIPE
- SEWER FORCE MAIN
- SUB-AREA BOUNDARY

0 200 400 600 800 Feet

City of Portland, Maine

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Evaluation Survey

Sub-Area 4

Manhole Inspection Locations

December 2018

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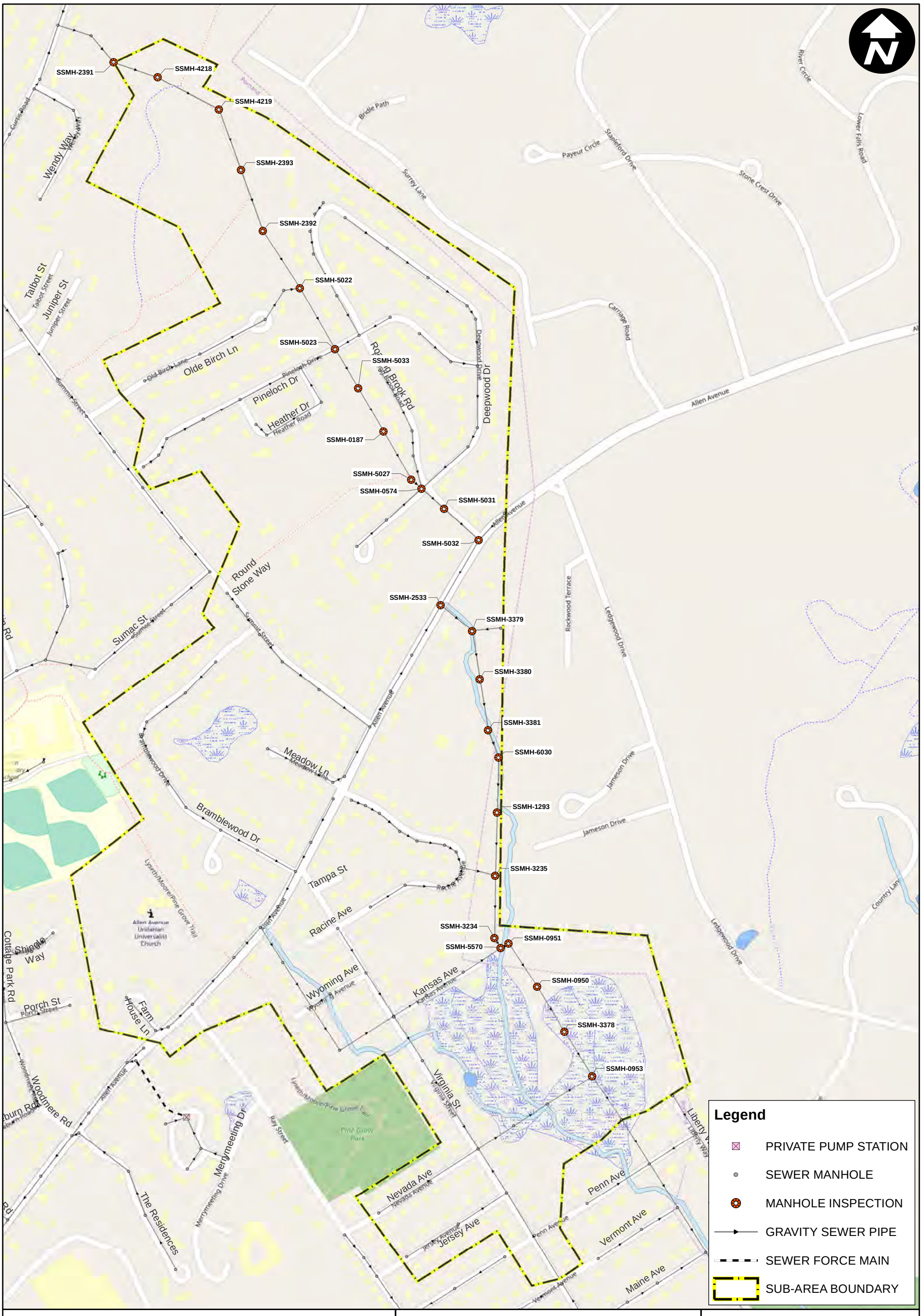

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 8

Manhole Inspection Locations

December 2018

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SSMH-0952
SSMH-2368
SSMH-3238
SSMH-1294
SSMH-4489
SSMH-1295
SSMH-5572
SSMH-5574
SSMH-5573
SSMH-3256
SSMH-1296
SSMH-3239
SSMH-3241
SSMH-2346
SSMH-1541
SSMH-4482
SSMH-1540
SSMH-0977
SSMH-1547
SSMH-5589

Virginia St
Liberty Way
Penn Ave
Vermont Ave
Maine Ave
Nevada Ave
Jersey Ave
Kansas Ave
Ledgewood Drive
Hurley Lane
Charlotte Drive
Burnside Ave
Beauregard St
Ray St
Stepping Stone Ln
Dakota St
Demerest St
Copley Woods Cir
Apple Ledge Dr
Humboldt St
Huntington Ave
Daggett St
Toronita St
Marlborough Rd
Marlborough Road
Ivaloo St
Graystone Ln
Wildwood Cir
Emergency Access Rd
Country Ln
Anthony Ave

Pine Grove Park

Legend

- SEWER MANHOLE
- MANHOLE INSPECTION
- GRAVITY SEWER PIPE
- SUB-AREA BOUNDARY

0 200 400 600 Feet

City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 9

Manhole Inspection Locations

December 2018

ARCADIS

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City of Portland, Maine

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Evaluation Survey

Sub-Area 15

Manhole Inspection Locations

0 200 400 600 Feet

December 2018

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City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 16

Manhole Inspection Locations

0 200 400 600 Feet

December 2018

ARCADIS

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City of Portland, Maine

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Evaluation Survey

Sub-Area 17

Manhole Inspection Locations

December 2018

ARCADIS

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City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 22

Manhole Inspection Locations

December 2018

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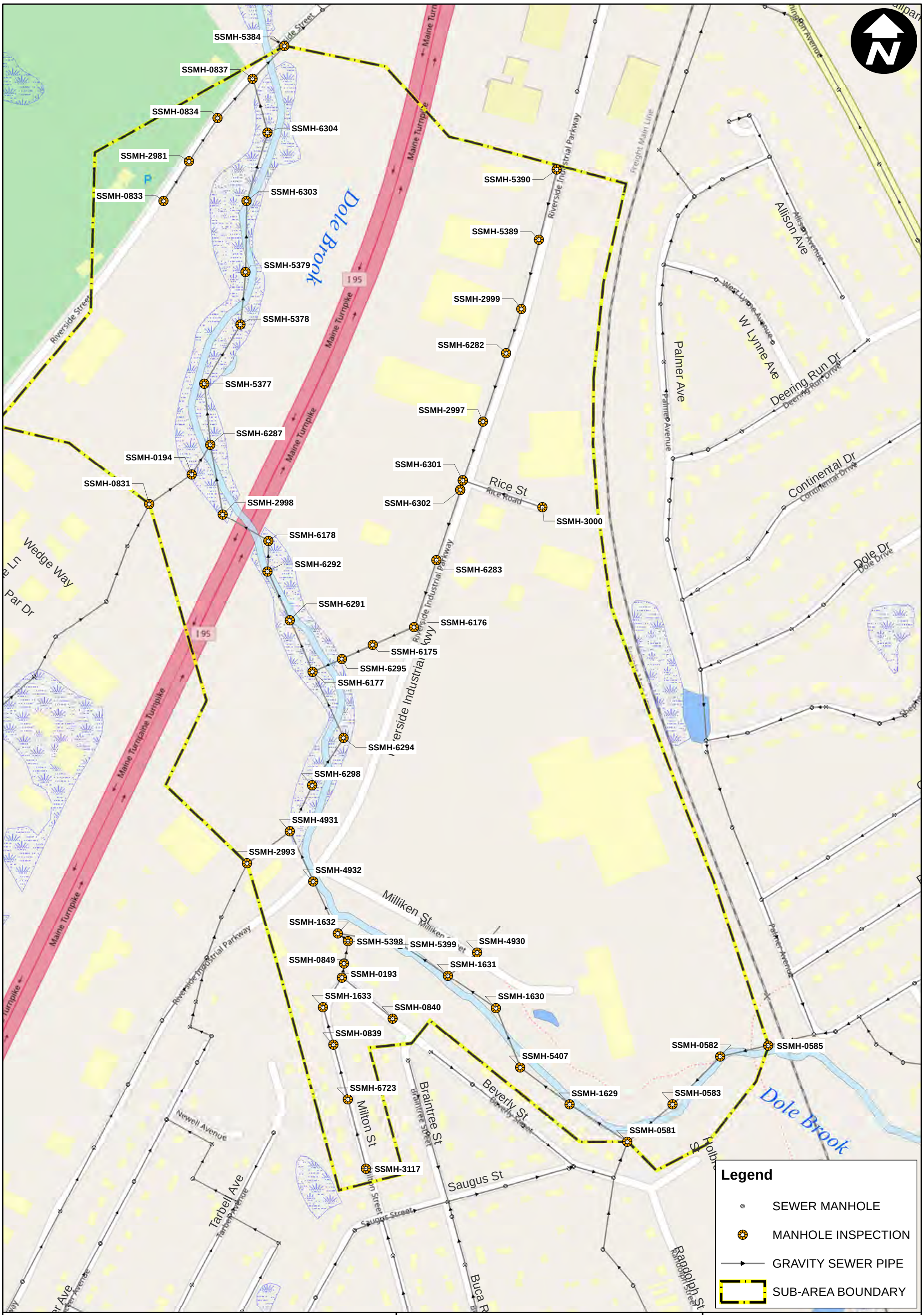

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 28

Manhole Inspection Locations

0 200 400 600 Feet

November 2018

ARCADIS

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City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 29

Manhole Inspection Locations

December 2018

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ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine

PHASE 1 INVESTIGATION OF FLOWS – 2019 MONITORING PROGRAM

DECEMBER 2019

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APPENDICES

Appendix A 2019 Meter Area Figures
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EXECUTIVE SUMMARY

On September 29, 2012, the United States Environmental Protection Agency (US EPA) issued an Order for Compliance and Complaint to the City of Portland for sanitary sewer overflows (SSOs) from non-permitted portions of the City's sanitary sewer collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program.

This report summarizes the results of the Phase 1 - 2019 Flow Monitoring Program and provides recommendations for Phase 2 - Identification of Major I/I Sources . The 2019 Flow Monitoring Program was the second of a two-phase program. In conjunction with the implementation of the flow monitoring program, this report includes engineering analysis of flow data, including calculation of average daily flow, peak daily flow and peak hourly flow, and estimation of infiltration and inflow for each sub-area. Meter areas were evaluated and ranked by quantities of infiltration and inflow, and follow-on investigation recommendations were developed based on these evaluations and rankings.

This two-phase flow monitoring program includes installation, maintenance and monitoring of 40 flow meters over 2 successive spring periods. This report summarizes the results of the second 20 meters. The first set of meters were installed in Spring of 2018. The program was planned as a 2-year program to allow for potentially unfavorable weather conditions (low precipitation or groundwater), the ability to meter small subsections of each sub-area in Year 2 (as established by the first year of data), and time to allow for corrections to the City's collection system mapping and pipeline connectivity. The results and recommendations for the 2018 flow monitoring period were summarized in the "Phase 1 – 2018 Flow Monitoring Report", dated December 2018.

Results and Recommendations

Based on the 2019 flow metering results, summarized in Section 3.1 of this report, and ongoing sewer system evaluation survey (SSES) investigations, Phase 2 follow on recommendations were developed. Recommendations, as detailed in Section 3 of this Report, include:

- Flow isolation of 120,377 linear feet (LF) of pipe (based on 2019 flow metering results)
- Four hundred and sixty-seven (467) manhole inspections (based on 2019 flow metering results)
- Smoke testing of 119,244 linear feet (LF) of pipe (based on 2018 and 2019 flow metering results)
- Follow up building inspections and dyed water testing

Individual sub-area maps showing follow-on SSES recommendations are included in Appendix C of this report.

In accordance with the Spring 2019 flow metering results, flow isolation was completed in June 2019, manhole inspections were completed in September 2019, and smoke testing was completed in October 2019.

CCTV investigations to identify infiltration is currently ongoing. Large building inspections will be conducted during the winter of 2020, and dye testing will be used to confirm suspected direct inflow sources identified during smoke testing and large building inspections. Follow-on cost-effective sewer system rehabilitation and renewal recommendations will be developed for the removal of I/I and will be

presented in the “Wastewater Collection System Analysis and Action Plan”, scheduled to be finalized in June 2020.

1 INTRODUCTION

1.1 Scope of Work

On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program, as well as improvements to the City's collection system GIS mapping. This I/I Program addresses those recommendations and sets the course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from the sanitary sewer collection system.

This report summarizes the results of the 2019 Flow Monitoring Program, the second phase of a comprehensive flow monitoring program, and provides recommendations for the continuation of Phase 2 – Identification of Major I/I Sources. Phase 1 includes development of a flow monitoring strategy that includes:

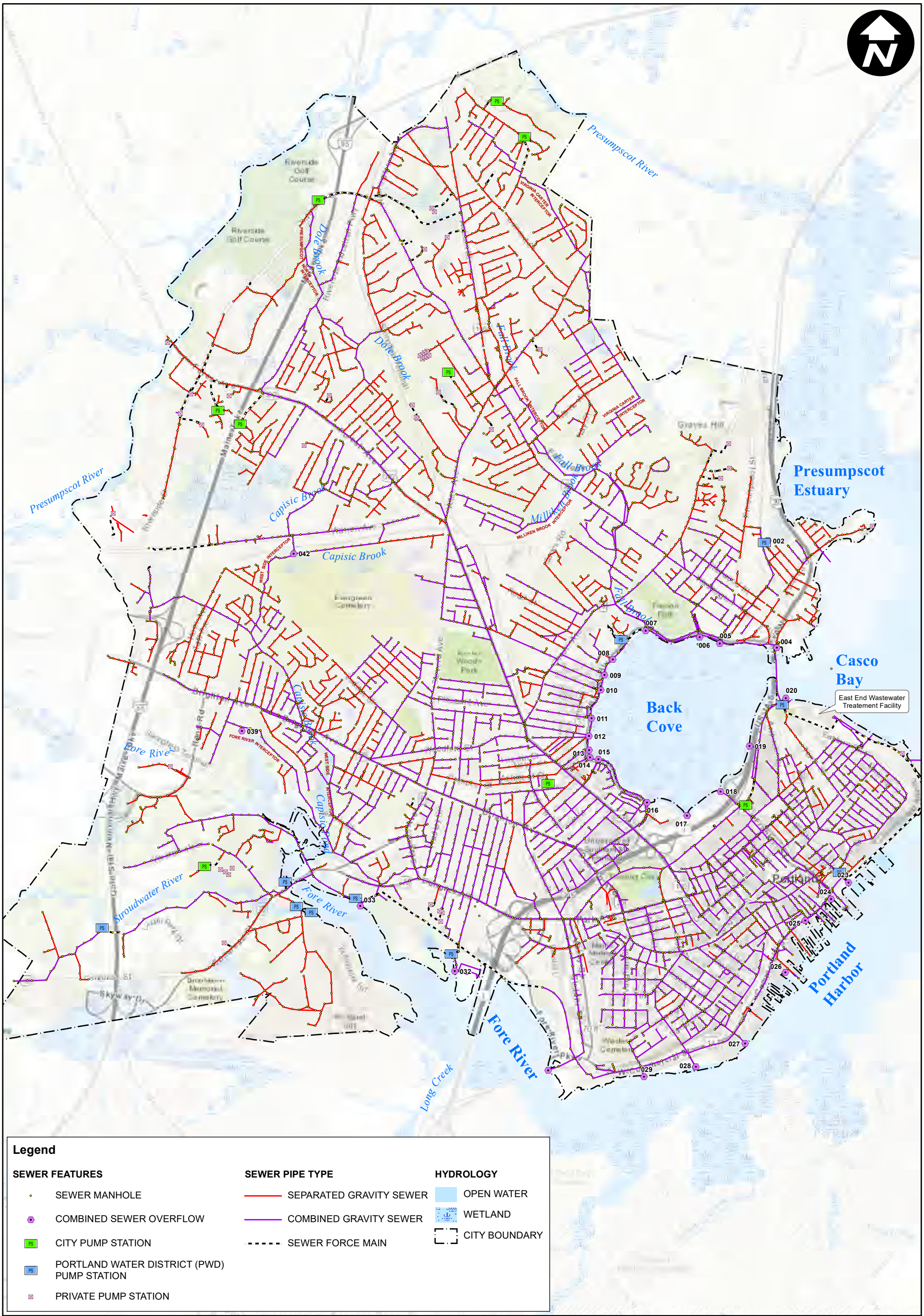
- review of recommended meter sites from the CMOM report
- identification, field verification and recommendation of other suitable sites
- installation of flow monitoring equipment and data collection;
- maintenance procedures for the flow monitoring equipment.

In conjunction with implementation of the flow monitoring program, the 2019 Flow Monitoring Program presents an engineering analysis of flow data, including the calculation of average daily flows, peak daily flows, and peak hourly flows, and estimates of infiltration and inflow for each sub-area. Sub-areas were ranked by quantity of infiltration and inflow and follow-on investigation recommendations were developed based on these analyses and rankings.

This two-phase flow monitoring program includes installation, maintenance and monitoring of 40 flow meters over a period of 2 successive Springs. This report summarizes the results of the second 20 meters. The first 20 meters were installed in Spring of 2018. The program was planned as a 2-year program to allow for potentially unfavorable weather conditions (low precipitation or groundwater), the ability to meter small subsections of each sub-area in Year 2 (as established by the first year of data), and time to allow for corrections to the City's collection system mapping and pipeline connectivity. The results and recommendations for the 2018 flow monitoring period were summarized in the "Phase 1 – 2018 Flow Monitoring Report", dated December 2018.

1.2 Collection System Background and Description

The City of Portland's wastewater collection system, shown on Figure 1, contains approximately 240 miles of separated and combined sewers and 24 pump stations, 9 of which are owned and operated by the City with the remaining 15 either privately owned or owned and operated by the Portland Water District. The collection system and pump stations convey wastewater to the East End Wastewater Treatment Facility (WWTF) in Portland, which is owned and operated by the Portland Water District.



Legend

SEWER FEATURES	SEWER PIPE TYPE	HYDROLOGY
SEWER MANHOLE	SEPARATED GRAVITY SEWER	OPEN WATER
COMBINED SEWER OVERFLOW	COMBINED GRAVITY SEWER	WETLAND
CITY PUMP STATION	SEWER FORCE MAIN	CITY BOUNDARY
PORTLAND WATER DISTRICT (PWD) PUMP STATION		
PRIVATE PUMP STATION		

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2019 Monitoring

FIGURE 1 - CITY OF PORTLAND COLLECTION SYSTEM MAP

0 0.25 0.5 1 Miles

December 2019

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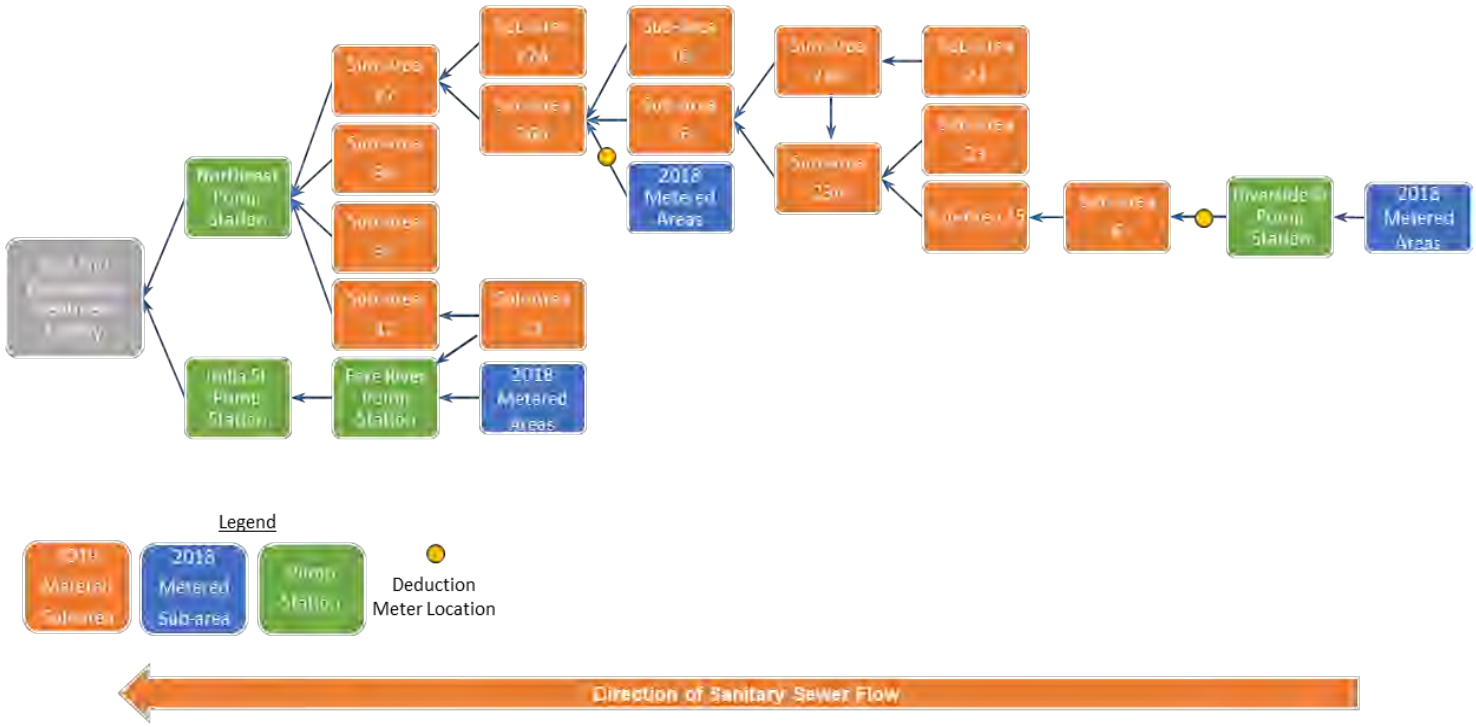
G:\GIS\Portland\2019 I-I Report\FIGURE 1 - CITYWIDE SANITARY SEWER SYSTEM.mxd

1.3 Sub-Area Delineation

The second phase of the metering program included the delineation of 15 sub-areas within the City and deployment of 20 meters. Due to the extent of combined sewers in the downtown area of Portland and on-going sewer separation efforts already in progress for those combined areas, efforts for this study were focused on the north and west areas of the City. Prioritization of meter areas was based on recent and on-going flow monitoring and CCTV data; historic and recently discovered problem areas where backups, surcharging and overflows occurred; areas tributary to known problem areas; areas where the hydraulic model identified potential I/I capacity issues; and areas near water bodies that could be contributing I/I to the system. Figure 2 shows a flow vector diagram for the 15 sub-areas included in the metering program. The flow vector diagram is a visual representation of tributary flow within the system. Sub-areas delineated and included in the 2019 metering program are shown on Figure 3.

Figure 2. Flow Vector Diagram



Presumpscot River
Dole Brook
Fall Brook
Capisic Brook
Millliken Brook
Fore River
Stroudwater River
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor

6
25
24
23A
23
26
24A
26
27A
10
27
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Legend

- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION
- GROUNDWATER GAUGE
- RAIN GAUGE

SEWER PIPE TYPE

- SEPARATED GRAVITY SEWER
- COMBINED GRAVITY SEWER
- SEWER FORCE MAIN
- 6 DELINEATED SUB-AREA

HYDROLOGY

- OPEN WATER
- WETLAND
- CITY BOUNDARY

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2019 Monitoring

FIGURE 3 - 2019 SUB-AREA DELINEATION

0 0.25 0.5 1 Miles

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G:\GIS\Portland\2019 I-I Report\FIGURE 3 - 2019 SUB-AREA DELINEATION.mxd

2 2019 METERING ANALYSIS

In March 2019, Arcadis and its subcontractor, Flow Assessment Services (FAS) started a 12-week flow monitoring program of 15 sub-areas throughout the City of Portland. Meters were installed by FAS in the most downstream manhole of each sub-area where hydraulic conditions were conductive for metering. While only 15 sub-areas were metered, 3 sub-areas required two meters each to ensure accurate data collection and 2 additional meters were installed as subtraction meters. Metering was performed using continuous monitoring devices incorporating depth and velocity sensors to measure velocity, depth and flow rate. Two record tipping bucket rain gauges measuring rainfall every fifteen minutes were installed on the roof of the Allen Ave Fire Station and the Ocean Ave Fire Station. Rain gauge data was supplemented with data from the City-owned rainfall gauge at the Riverside Street Pump Station.

Two permanent groundwater monitoring wells were installed on May 6, 2018 at the intersection of Martin Street and Bartley Street and on Leland Street across from the Deering High School parking lot. Maintenance and data collection for the groundwater gauges, rainfall gauges and flow meters were conducted bi-weekly by Flow Assessment Services.

2.1 Wastewater Characteristics

There are three major components of flow in a sanitary sewer system, base sanitary flow (BSF), groundwater infiltration (GWI) and rainfall derived inflow and infiltration (RDII - commonly referred to as inflow). The Environmental Protection Agency's "Guide for Estimating Infiltration and Inflow", June 2014, provides the following definitions:

Base Sanitary Flow (BSF) – The portion of wastewater which includes domestic, commercial, institutional, and industrial sewage and specifically excludes infiltration and inflow.

Groundwater Infiltration (GWI) – Measured during average dry weather flow period. The average of the low nighttime flows (midnight to 6am) per day for the same time period, minus significant industrial or commercial nighttime users

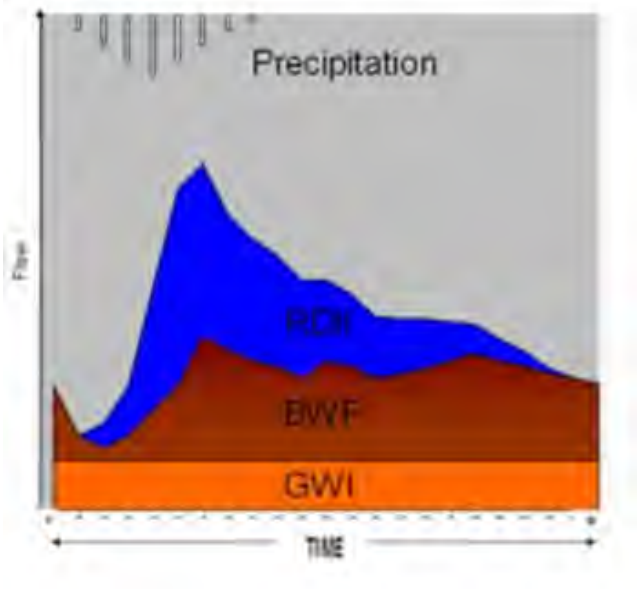
Rainfall Induced Infiltration (RII) – The short-term increase in infiltration which is the result of a rain event. Rainfall-induced infiltration is a portion of delayed inflow.

Delayed Inflow Volume – The portion of total inflow which is generated from indirect connections to the collection system or connections which produce inflow after a significant time delay from the beginning of a storm. Delayed inflow sources include sump pumps, foundation drains, indirect sewer/drain cross connections, etc. Rainfall-induced infiltration cannot be distinguished from delayed inflow and is therefore included as part of delayed inflow. Delayed inflow sources have a gradual impact on the collection system and flow decreases gradually upon conclusion of the rainfall event, and after peak inflow caused by direct connections.

Inflow – Water other than sanitary wastewater that enters a sewer system from sources such as roof leaders, cellar/foundation drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, and catch basins. Inflow does not include infiltration.

Rainfall derived infiltration and inflow includes both rainfall-induced infiltration and inflow. Figure 4 highlights the three key components of wastewater flow during a precipitation event. The GWI (orange line) remains constant and is not impacted by precipitation, the BWF (brown line) is a diurnal pattern based on actual usage and not impacted by precipitation, and the RDII (blue line) shows a very clear increase in flows as a direct response to precipitation.

Figure 4. Components of Wastewater Flow During Wet Weather (US EPA, 2007)



2.1.1 Flow Analysis Approach for Portland's Collection System

The City of Portland's collection system consists of approximately 240 miles of separated and combined sewers. A traditional infiltration and inflow analysis was conducted in the separated portion of the collection system, while a modified approach was used in the combined portion of the collection system. In the sub-areas where 75% or more of the collection system was separated, the I/I analysis focused on identifying groundwater infiltration, rainfall-induced infiltration and direct inflow. In the combined subareas, the I/I analysis focused on identifying groundwater infiltration and rainfall-induced infiltration (delayed inflow). Large volumes of direct inflow are expected in a combined system due to known cross connections between the sanitary system and the drainage system. While direct inflow values were calculated in these sub-areas, they were not used to develop follow-on investigation recommendations. Table 1 includes a summary of the total pipeline footage, percentage of combined pipes and the approach method for each sub-area.

Table 1. Sub-area Characteristics

Sub-area	Total Footage (LF)	Percent Combined (%)	Approach
Sub-Area 6	15,241	13%	Traditional
Sub-Area 10	13,417	77%	Modified
Sub-Area 11	21,085	87%	Modified
Sub-Area 12	20,125	33%	Modified
Sub-Area 23	15,048	19%	Traditional
Sub-Area 23A	10,072	27%	Modified
Sub-Area 24	11,037	37%	Modified
Sub-Area 24A	15,091	13%	Traditional
Sub-Area 25	16,547	7%	Traditional
Sub-Area 26	11,664	25%	Traditional
Sub-Area 26A	8,109	62%	Modified
Sub-Area 27	12,520	81%	Modified
Sub-Area 27A	9,922	26%	Modified
Sub-Area 30	20,905	50%	Modified
Sub-Area 31	22,861	15%	Traditional

2.2 Results and Findings

Table 2 identifies the average daily flow (ADF), peak daily flow (PDF) and peak hourly flow (PHF) measured from February 15, 2019 through May 31, 2019 for each of the fifteen sub-areas. Average daily flow is calculated by summing all metered flows and dividing by the duration of the metering period. Peak daily flow is the maximum daily flow over 24-hours measured throughout the metering period. Peak hourly flow is the maximum 1-hour flow rate measured. Peaking factor is calculated by dividing the peak hourly flow by the average daily flow for each sub-area. Table 2 shows net average daily flow within each sub-area itself (with upstream tributary flows subtracted out), net peak daily flow, net peak hourly flow and the hourly peaking factor.

Table 2. Flow Metering Results – ADF, PDF, PHF

Sub-Area	Average Daily Flow (GPD)	Peak Daily Flow (GPD)	Peak Hourly Flow (GPD)	Peaking Factor
Sub-Area 6*	381,064	563,000	929,000	2
Sub-Area 10	416,000	1,026,000	1,970,000	5
Sub-Area 11	583,594	1,437,000	5,362,000	9
Sub-Area 12*	478,901	1,253,000	2,608,000	5
Sub-Area 23	266,608	1,070,000	3,018,000	11
Sub-Area 23A*	506,788	865,000	1,622,000	3
Sub-Area 24	207,455	576,000	1,855,000	9
Sub-Area 24A*	85,268	585,000	1,115,000	13
Sub-Area 25*	81,644	1,219,000	4,082,000	50
Sub-Area 26*	-37,859	207,000	834,000	-22
Sub-Area 26A*	146,113	968,000	3,107,000	21
Sub-Area 27*	782,969	2,658,000	7,810,000	10
Sub-Area 27A	92,735	221,000	482,000	5
Sub-Area 30	339,538	1,385,000	5,070,000	15
Sub-Area 31	230,980	640,000	1,671,000	7

*Denotes net values with tributary sub-areas subtracted.

Hyetographs showing average daily flow and rainfall for each of the 15 sub-areas are included in Appendix B.

2.3 Groundwater Infiltration

Groundwater infiltration is defined as groundwater that enters or leaks into a sanitary sewer system through defective pipes, pipe joints, service connections, or manholes. The average groundwater infiltration rate is defined as 85% of the nighttime sanitary flow measured on dry days from 12:00am to 6:00am throughout the entire metering period. Only data for days that follow a minimum of 72-hours without a rainfall event are considered “dry days” to avoid inclusion of indirect inflow and rainfall induced infiltration (RII) in the infiltration estimate.

Groundwater levels were monitored throughout the metering period using the two groundwater monitoring wells installed. The groundwater depth during the metering period was analyzed in relation to the average sewer pipe elevations in the area, as shown in Figure 5, as groundwater depth can have a significant influent on the amount of groundwater infiltration entering a collection system.

Groundwater infiltration for each sub-area is normalized by calculating the gallons per day per inch diameter mile of pipe (gpd/in-mi). The inch-diameter-mile of pipe, or inch-miles (in-mi), in a sub-area is calculated by multiplying the sum of the miles of for each diameter of pipe by its respective inch diameter. As an example, if a system contained 1 mile of 10-inch diameter, 1.5 miles of 12-inch diameter, and 0.5 miles of 25-inch diameter of gravity sewers, the calculated inch-miles would be as follows:

(10-inch x 1 mile) + (12-inch x 1.5 miles) + (24-inch x 0.5 mile) = 40 in-mi

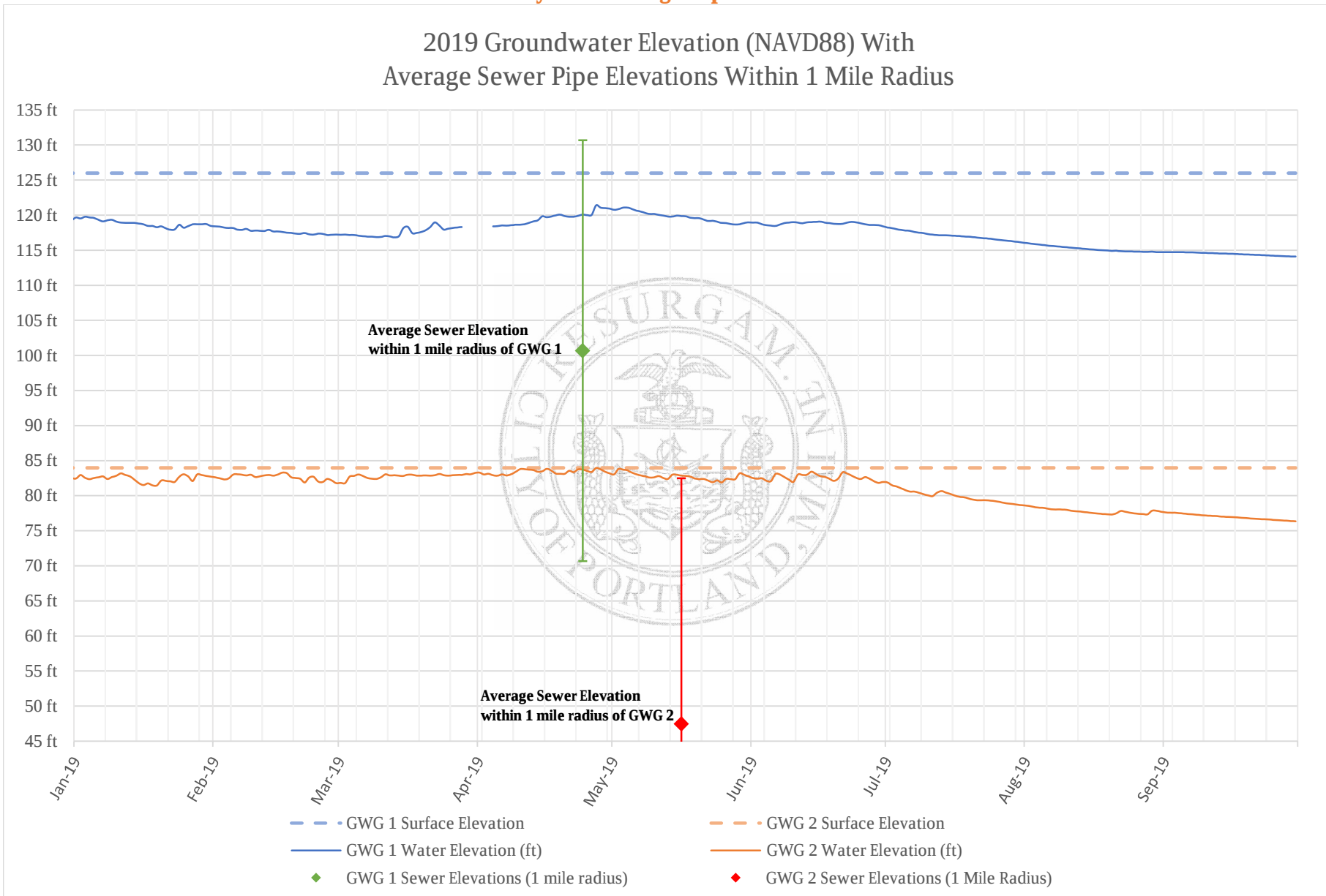
Groundwater infiltration rates for each sub-area were calculated by dividing the sub-area’s total groundwater infiltration by the number of inch-miles of sanitary sewer within the sub-area. The total groundwater infiltration rates for each sub-area during the metering period are shown in Table 3.

Table 3. Flow Metering Results – Infiltration

Sub-Area	Average Daily Flow (gpd)	Net Average Infiltration (gpd)	Infiltration GPD/Total LF (GPD/LF)	Infiltration Gallons per Day per Inch-Mile (GPDIM)
Sub-Area 6*	381,064	234,104	15	7,231
Sub-Area 10	416,000	271,664	20	5,784
Sub-Area 11	583,594	381,685	18	8,897
Sub-Area 12*	478,901	284,260	14	4,457
Sub-Area 23	266,608	160,190	11	4,790
Sub-Area 23A*	506,788	331,600	33	8,728
Sub-Area 24	207,455	140,498	13	6,038
Sub-Area 24A*	85,268	45,463	3	1,443
Sub-Area 25*	81,644	146,106	9	3,513
Sub-Area 26*	-37,859	196,795	17	4,230
Sub-Area 26A*	146,113	178,823	22	3,039
Sub-Area 27*	782,969	551,744	44	10,175
Sub-Area 27A	92,735	69,635	7	3,460
Sub-Area 30	339,538	176,534	8	3,749
Sub-Area 31	230,980	148,921	7	3,103

*Denotes net values with tributary sub-areas subtracted

Figure 5 - Groundwater Elevation
Infiltration and Inflow Program
January 2019 through September 2019



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2.4 Rainfall Derived Infiltration and Inflow (RDII)

Four rainfall events from the metering period were analyzed to calculate rainfall derived infiltration and inflow. Precipitation data was used from rain gauges at the Riverside Road Pump Station, Allen Avenue Fire Station and the Ocean Avenue Fire Station. The precipitation data acquired by these rain gauges was relatively similar; and the rain gauges were in sufficiently relative proximity to each other; as such, the average of these rain gauges was used in determining values for the four storm events selected for an inflow analysis of all sub-areas. Table 4 outlines the duration, total rainfall and peak intensity of the four selected storms.

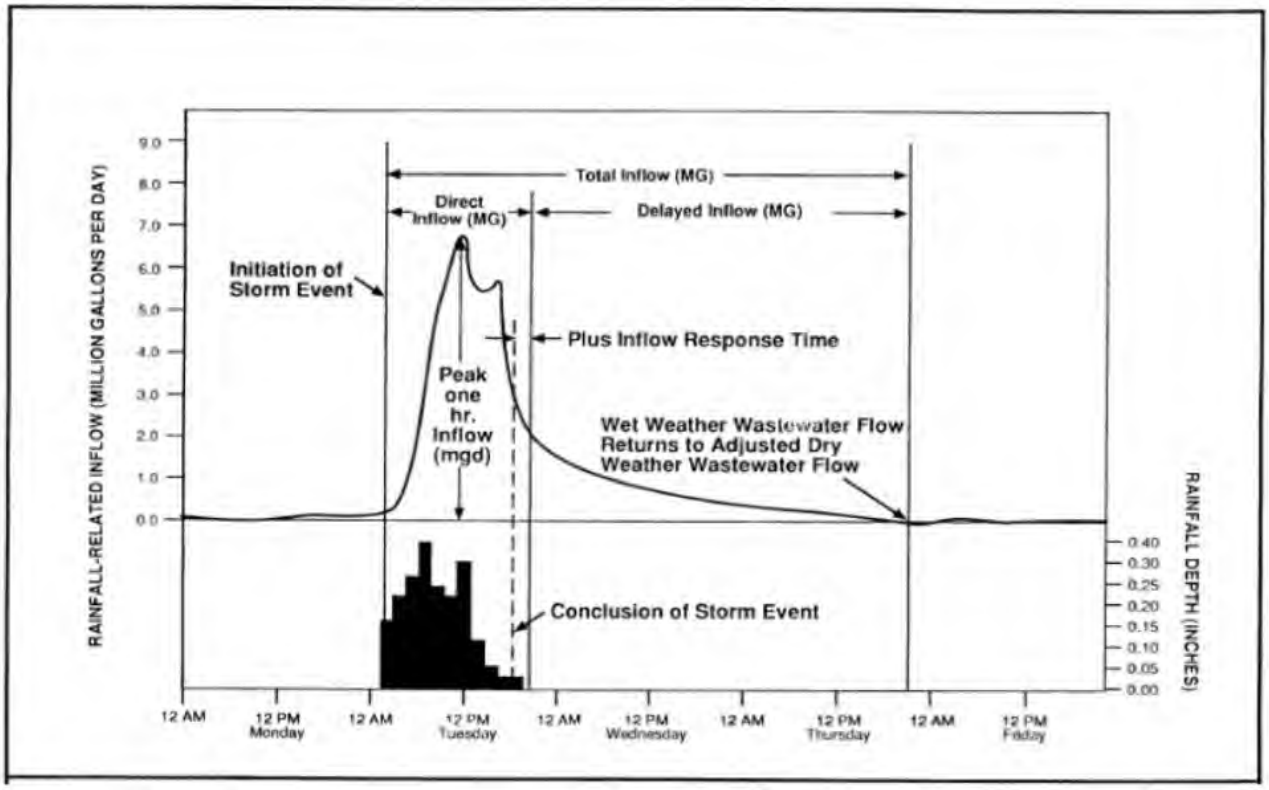
Table 4. Inflow Analysis – Selected Rainfall Events

Rainfall Event	Duration (min)	Duration (hrs)	Total Rainfall (in)	Peak Intensity (in/hr)
3/22/19 7:00 AM	1275	21.25	1.03	0.30
4/14/19 8:00 PM	1395	23.25	1.05	0.25
4/26/19 7:15 AM	1350	22.50	2.25	0.58
5/13/19 9:15 PM	1920	32	0.93	0.22

A wet weather hydrograph from each storm event was compared to a dry weather period on the same day of the week as each storm event. The dry weather flow is subtracted from the wet weather flow resulting in the inflow volumes presented in Table 5. The dry weather flow is calculated as an average of all dry days during the metering period for each day during the week. For example, all dry “Mondays” in the metering period are averaged together to determine the dry weather flow for each individual day.

The hydrograph shown as Figure 6 shows a typical inflow response to wet weather flow. The portion of inflow occurring during the storm event is identified as direct inflow and the portion of inflow that occurs once the storm has concluded is delayed inflow. Total inflow encompasses both direct and delayed inflow.

Figure 6. Wet Weather Hydrograph (MassDEP, 1993)



For the purposes of this study, direct inflow was calculated for all sub-areas; however, where the modified approach was used, only the delayed inflow results were used in the development of follow-on investigation recommendations.

Table 5 - Flow Metering Results - Inflow

Sub-Area	Friday, March 22, 2019			Sunday, April 14, 2019			Friday, April 26, 2019			Monday, May 13, 2019		
	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)
Sub-Area 6	27,695	20,084	47,779	122,502	0	122,502	590,580	0	590,580	481,286	214,602	695,888
Sub-Area 10	417,218	378,794	796,013	253,943	176,448	430,391	330,280	867,732	1,198,012	53,060	1,251	54,311
Sub-Area 11	679,275	199,672	878,947	406,817	18,974	425,792	1,002,760	364,002	1,366,762	259,715	5,452	265,167
Sub-Area 12	657,513	266,396	923,909	448,874	401,028	849,902	642,173	789,315	1,431,488	327,192	56,374	383,567
Sub-Area 23	327,219	148,543	475,762	239,598	103,751	343,349	412,772	298,809	711,581	125,181	6,342	131,522
Sub-Area 23A	343,272	24,195	367,468	166,301	229,206	395,507	528,870	621,988	1,150,858	81,984	0	81,984
Sub-Area 24	246,992	152,598	399,590	287,383	200,802	488,185	238,793	717,174	955,968	160,641	39,090	199,730
Sub-Area 24A	120,590	7,208	127,797	53,495	20,601	74,096	254,546	209,444	463,990	111,486	391,847	503,333
Sub-Area 25	439,151	183,230	622,381	310,850	275,032	585,882	123,194	205,935	329,130	149,081	86,980	236,061
Sub-Area 26	107,516	64,533	172,049	145,852	85,249	231,101	27,059	12,256	39,316	41,077	16,049	57,126
Sub-Area 26A	698,734	840,485	1,539,219	776,918	164,967	941,885	599,368	343,528	942,896	0	0	0
Sub-Area 27	0	0	0	0	307,527	307,527	593,494	581,971	1,175,465	0	0	0
Sub-Area 27A	74,499	73,746	148,245	14,609	4,656	19,265	86,854	67,448	154,302	0	12,518	12,518
Sub-Area 30	989,499	476,189	1,465,688	648,877	440,456	1,089,332	1,022,197	1,075,307	2,097,504	217,114	10,073	227,187
Sub-Area 31	307,075	142,472	449,547	225,645	279,559	505,205	254,596	411,495	666,091	55,760	0	55,760

Direct/Delayed inflow values of "0" denote inconclusive inflow data results

3 SUB-AREA PRIORITIZATION AND RECOMMENDATIONS

3.1 High Infiltration and High RDII Sub-Areas

According to industry standards, infiltration within a sanitary sewer system is considered excessive if a defined area exceeds a dry weather infiltration rate of 4,000 gallons per day per inch diameter mile (gpd/idm). Sub-areas with infiltration rates exceeding 4,000 gpd/in-mi (Sub-areas 6, 10, 11, 12, 23, 23A, 24, 26, 27) are highlighted in Table 6.

Table 6. High Infiltration Sub-areas

Sub-Area	Groundwater Infiltration (GWI)	Infiltration GPD/Total LF (GPDLF)	Gallons per Day per Inch-Mile (GPDIM)
Sub-Area 27*	551,744	44	10,175
Sub-Area 11	381,685	18	8,897
Sub-Area 23A*	331,600	33	8,728
Sub-Area 6*	234,104	15	7,231
Sub-Area 24	140,498	13	6,038
Sub-Area 10	271,664	20	5,784
Sub-Area 23	160,190	11	4,790
Sub-Area 12*	284,260	14	4,457
Sub-Area 26*	196,795	17	4,230
Sub-Area 30	176,534	8	3,749
Sub-Area 25*	146,106	9	3,513
Sub-Area 27A	69,635	7	3,460
Sub-Area 31	148,921	7	3,103
Sub-Area 26A*	178,823	22	3,039
Sub-Area 24A*	45,463	3	1,443

*Denotes net values with tributary sub-areas subtracted

Inflow results were analyzed for the April 26, 2019 storm event to determine which sub-areas contribute excessive volumes of delayed inflow to the collection system. High delayed inflow sub-areas are shaded in Table 7.

Table 7. High Delayed Inflow Sub-areas – April 26, 2019 Storm Event

Subarea	Direct Inflow (Gal)	Delayed Inflow (Gal)	Total Inflow (Gal)
Sub-Area 30	1,022,197	1,075,307	2,097,504
Sub-Area 10	330,280	867,732	1,198,012
Sub-Area 12*	642,173	789,315	1,431,488
Sub-Area 24	238,793	717,174	955,968
Sub-Area 23A*	528,870	621,988	1,150,858
Sub-Area 27*	593,494	581,971	1,175,465
Sub-Area 31	254,596	411,495	666,091
Sub-Area 11	1,002,760	364,002	1,366,762
Sub-Area 26A*	599,368	343,528	942,896
Sub-Area 23	412,772	298,809	711,581
Sub-Area 24A*	254,546	209,444	463,990
Sub-Area 25*	123,194	205,935	329,130
Sub-Area 27A	86,854	67,448	154,302
Sub-Area 26*	27,059	12,256	39,316
Sub-Area 6*.**	590,580	-	590,580

*Denotes net values with tributary sub-areas subtracted
**Denotes sub-area with inconclusive delayed inflow data

High infiltration and inflow sub-areas are highlighted in Figure 7.

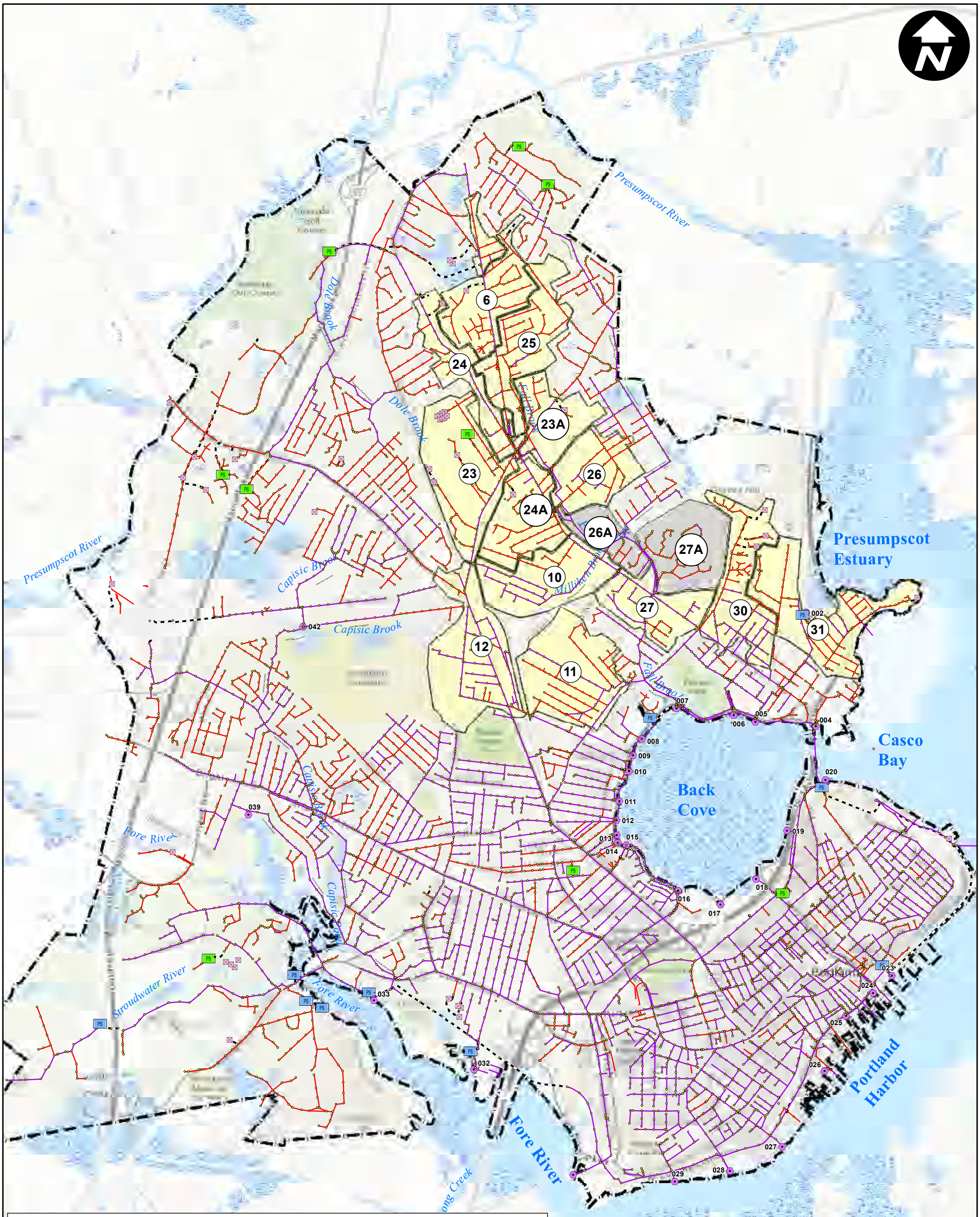


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FIGURE 7 - HIGH INFILTRATION AND INFLOW SUB-AREAS

0 0.25 0.5 1 Miles

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3.2 Investigation Recommendations

Based on the metering results summarized in Section 3.1 and ongoing investigation within the City of Portland, Phase 2 follow-on recommendations were developed. Recommendations, summarized in Table 8 and shown on Figure 8, include flow isolation, manhole inspections, and smoke testing. Smoke testing recommendations were developed based on 2018 and 2019 flow metering results. Flow isolation and manhole inspection recommendations are based on the 2019 flow metering results. Individual sub-area maps showing follow-on recommendations are included in Appendix C.

Table 8. Follow-on Investigation Recommendations

Sub-Area	Approach	High Infiltration Sub-areas	High Delayed Inflow Sub-area	Recommendations		
				Flow Isolation (LF)	Manhole Inspections	Smoke Testing (LF)
Sub-Area 1**	Traditional		X			19,994
Sub-Area 2**	Traditional		X			11,916
Sub-Area 4**	Traditional	X	X			8,894
Sub-Area 6*	Traditional	X		15,813	91	
Sub-Area 7**	Traditional	X	X			23,950
Sub-Area 10	Modified	X	X		66	
Sub-Area 11	Modified	X	X	20,485	103	
Sub-Area 12*	Modified	X	X	13,949	3	
Sub-Area 23	Traditional	X	X	12,442	89	
Sub-Area 23A*	Modified	X	X	6,635	46	
Sub-Area 24	Modified	X	X	10,450	2	
Sub-Area 24A*	Traditional		X	12,625		15,084
Sub-Area 25*	Traditional		X			16,546
Sub-Area 26*	Traditional	X		7,907		
Sub-Area 26A***	Modified		X			
Sub-Area 27*	Modified	X	X	9,293	64	
Sub-Area 27A	Modified					
Sub-Area 30	Modified		X	10,778	3	
Sub-Area 31	Traditional		X			22,860
Total				**120,377**	**467**	**119,244**

*Denotes net values with tributary sub-areas subtracted;
** Denotes sub-areas evaluated during 2018 flow monitoring program;
*** Due to the prevalence of combined sewers in sub-area 26A, inflow investigations are not recommended because they would not provide valid results.

Flow isolation was completed in sub-areas 6, 11, 12, 23, 23A, 24, 24A, 26, 27, and 30 in June 2019. Manhole Inspections were completed in September 2019 in sub-areas 6,10, 11, 12, 23, 23A, 24, 27, and 30. Smoke Testing was completed in October 2019 in sub-areas 1, 2, 4, 7, 24A, 25, and 31.

Follow-up building inspections and dye testing will be conducted for select large buildings in the Winter of 2020.

The results of all SSES investigations and recommendations for sewer system rehabilitation and renewal for I/I mitigation will be presented in the final I/I study report, “Wastewater Collection System Analysis and Action Plan”.

Presumpscot River
Dole Brook
Dole Brook
Hall Brook
Presumpscot River
Capisic Brook
Capisic Brook
Miller Brook
Fall Brook
Presumpscot Estuary
Casco Bay
Back Cove
Fore River
Capisic Brook
Stroudwater River
Fore River
Portland Harbor
Fore River
ng Creek

6
25
24
23A
23
26
24A
26A
27A
10
27
30
31
11
12

PS

Legend

SEWER FEATURES
- SEWER MANHOLE
- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION

SEWER PIPE TYPE
- SEPARATED GRAVITY SEWER
- COMBINED GRAVITY SEWER
- SEWER FORCE MAIN

Metering Year, AREA_ID
- 26 FLOW ISOLATION
- 9 FLOW ISOLATION AND SMOKE TESTING
- 6 FLOW ISOLATION AND MH INSPECTIONS
- 25 SMOKE TESTING
- 10 MH INSPECTIONS
- 27 NO INVESTIGATIONS

HYDROLOGY
- OPEN WATER
- WETLAND
- CITY BOUNDARY

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2019 Monitoring

FIGURE 8 - INVESTIGATION RECOMMENDATIONS

0 0.25 0.5 1 Miles

December 2019

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2019 I-I Report\FIGURE 8 - I AND I INVESTIGATION SUB-AREAS.mxd

APPENDIX A

2019 Meter Area Figures

APPENDIX B

Flow Meter Hydrographs with Related Rainfall Hyetographs

APPENDIX C

Follow-on Investigation Sub-Area Figures

Arcadis U.S., Inc

500 Edgewater Drive

Suite 511

Wakefield, Massachusetts 01880

Tel 781 224 4488

www.arcadis.com

Legend

- Flow Meter
- Subtraction Meter
- Sewer Manhole
- CSOs
- CITY PUMP STATION
- PORTLAND WATER DISTRICT PUMP
- PRIVATE PUMP STATION
- Sewage
- Combined
- Not Known
- SEWER FORCE MAIN
- CITY OF PORTLAND

Metering

- Sub-Area 6
- Sub-Area 10
- Sub-Area 11
- Sub-Area 12
- Sub-Area 23
- Sub-Area 23A
- Sub-Area 24
- Sub-Area 24A
- Sub-Area 25
- Sub-Area 26
- Sub-Area 26A
- Sub-Area 27
- Sub-Area 27A
- Sub-Area 30
- Sub-Area 31
- 2018 Meter

City of Portland, Maine

Planning & Engineering
Infiltration and Inflow Analysis

2019 Flow Monitoring Meter Location Recommendations

0 0.25 0.5 0.75 1 Miles

February 2019

ARCADIS

G:\GIS\Portland\2019 Flow Meters\City-Wide Map (11x17).mxd

Subtraction Meter

6

Lambert St
Morningstar Ln
Lambert St
Georgia St
Havertys Way
Hillside Rd
Clayton St
Kenneth St
Jackson St
Summit St
Crestview Dr
Pamela Rd
Sturdivant Dr
Clapboard Rd
Abby Ln
Quiet Ln
Curtis Rd
Old Barn Ln
Frost Hill Rd
Wendy Way
Summit Park Ave
Talbot St
Juniper St
Cresfield Ter
Settlers Ct
Parsons Pond Dr
Braddish Ct
Wakely Ct
Auburn St
Alpine Rd
Christy Rd
Smith Farm Ln
Quaker Ln
Auburn Ter
Rustic Ln
Melody Ln
Fall Ln
Autumn Ln
Bartley Ave
Junior St
Brookfield

Legend

- FLOW METER (1)
- SUBTRACTION METER (1)
- SANITARY SEWER MANHOLE
- CITY PUMP STATION
- PRIVATE PUMP STATION
- SEWER PIPE, SEPARATED
- SEWER PIPE, COMBINED
- SEWER PIPE, UNDEFINED
- SEWER FORCE MAIN

Stormwater Assets

- STORMWATER MANHOLE
- CATCH BASIN
- STORMWATER PIPE
- SUB-AREA 6
- MUNICIPAL BOUNDARY

0 200 400 600 Feet

City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 6

2019 Sanitary Flow Meter Location

Total Pipe Length = 19,233 ft
Total Manhole Count = 92

ARCADIS

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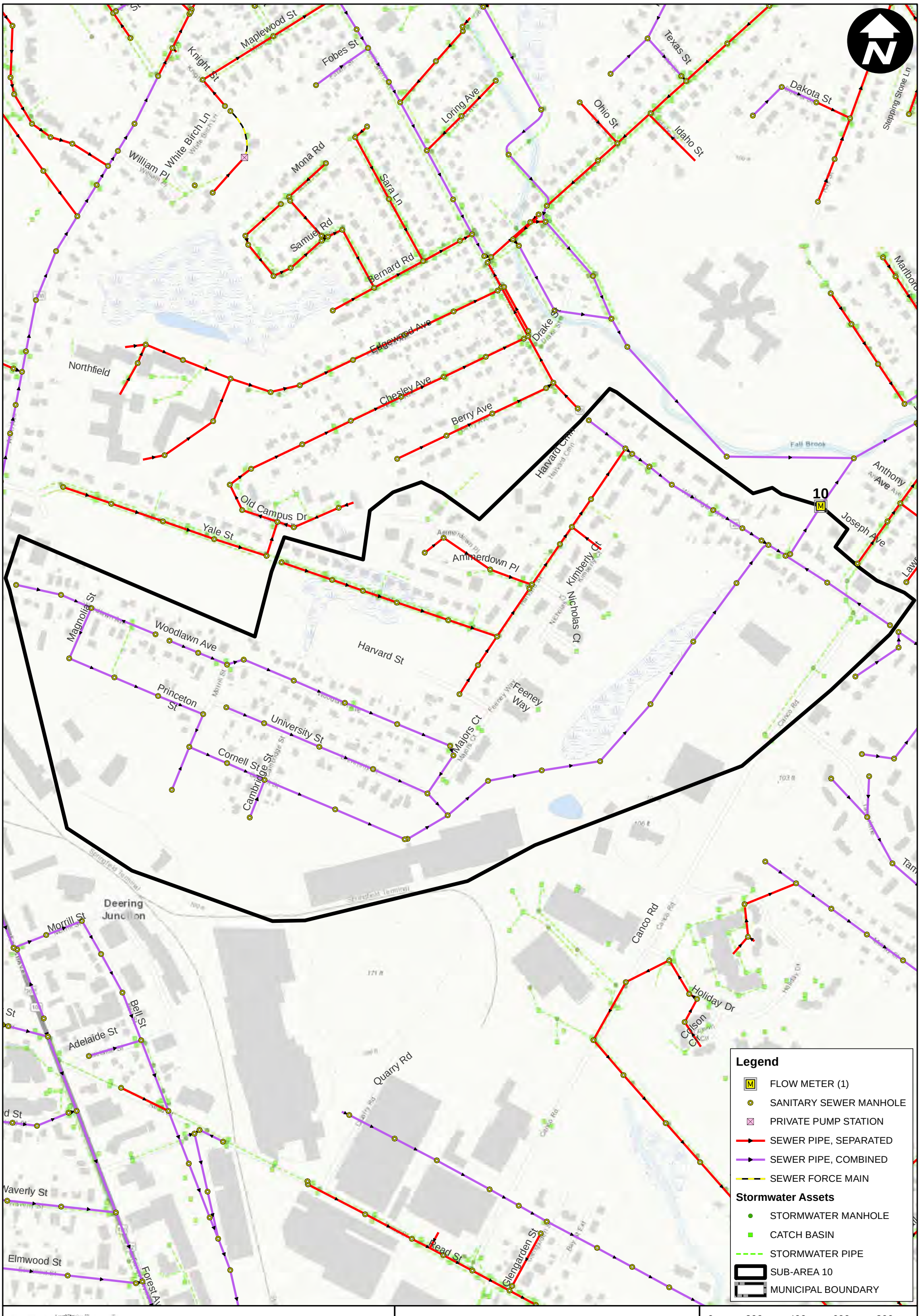
February 2019



City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 10

2019 Sanitary Flow Meter Location

0 200 400 600 800 Feet

Total Pipe Length = 13,417 ft
Total Manhole Count = 67

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February 2019

City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 11

2019 Sanitary Flow Meter Location

Legend

- FLOW METER (2)
- SANITARY SEWER MANHOLE
- SEWER PIPE, SEPARATED
- SEWER PIPE, COMBINED

Stormwater Assets

- STORMWATER MANHOLE
- CATCH BASIN
- STORMWATER PIPE
- SUB-AREA 11
- MUNICIPAL BOUNDARY

0 200 400 600 800 Feet

Total Pipe Length = 21,085 ft
Total Manhole Count = 105

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February 2019

City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 12

2019 Sanitary Flow Meter Location

Legend

- FLOW METER (1)
- SUBTRACTION METER (1)
- SANITARY SEWER MANHOLE
- PORTLAND WATER DISTRICT PUMP STATION
- COMBINED SEWER OVERFLOW
- SEWER PIPE, SEPARATED
- SEWER PIPE, COMBINED
- SEWER PIPE, UNDEFINED
- SEWER FORCE MAIN

Stormwater Assets

- STORMWATER MANHOLE
- CATCH BASIN
- STORMWATER PIPE
- SUB-AREA 12
- MUNICIPAL BOUNDARY

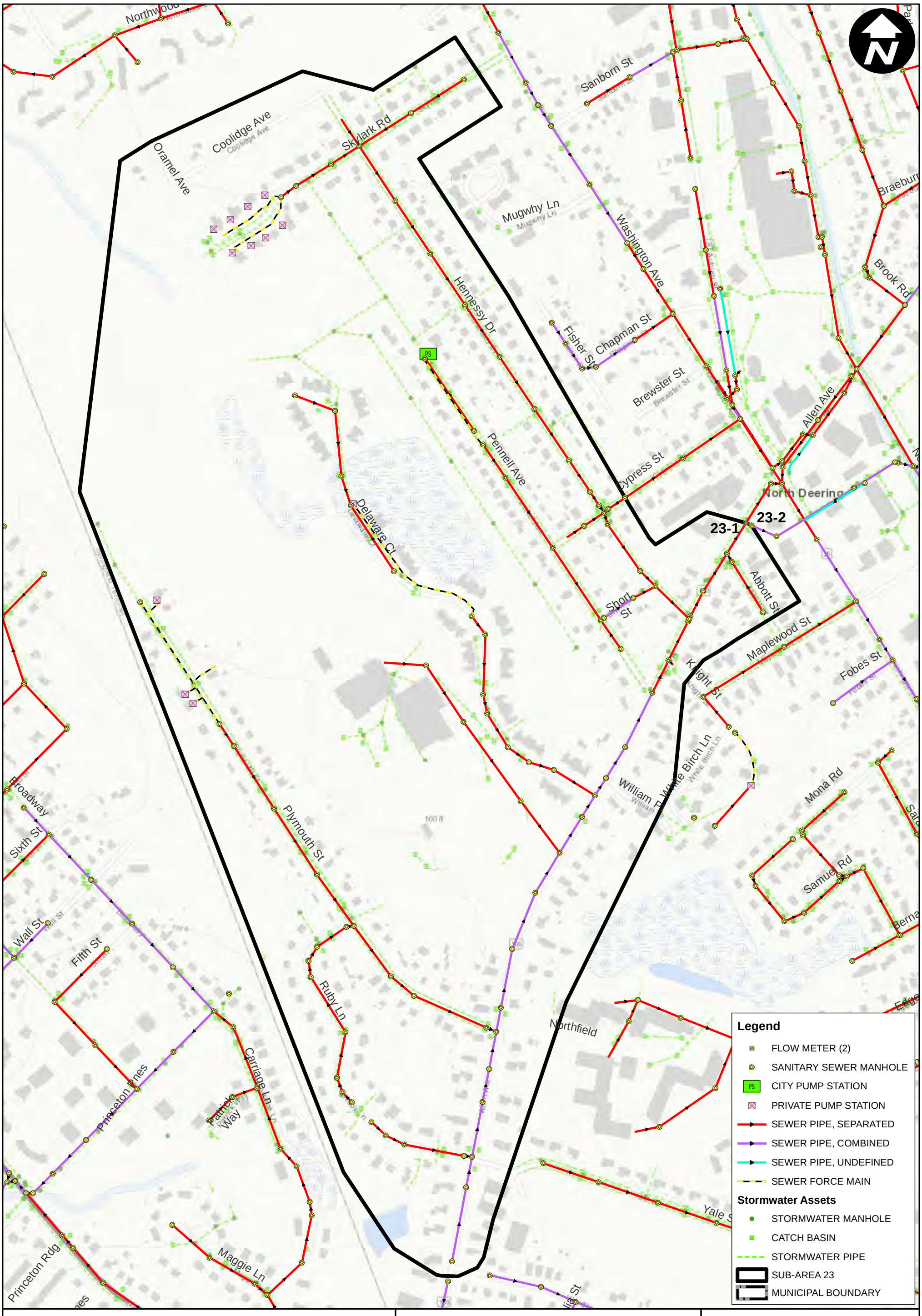
0 200 400 600 800 Feet

Total Pipe Length = 20,851 ft
Total Manhole Count = 109

ARCADIS

G:\GIS\Portland\2019 Flow Meters\2019 Meter Recommendations - Sub-Area 12.mxd

February 2019



City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 23

2019 Sanitary Flow Meter Location

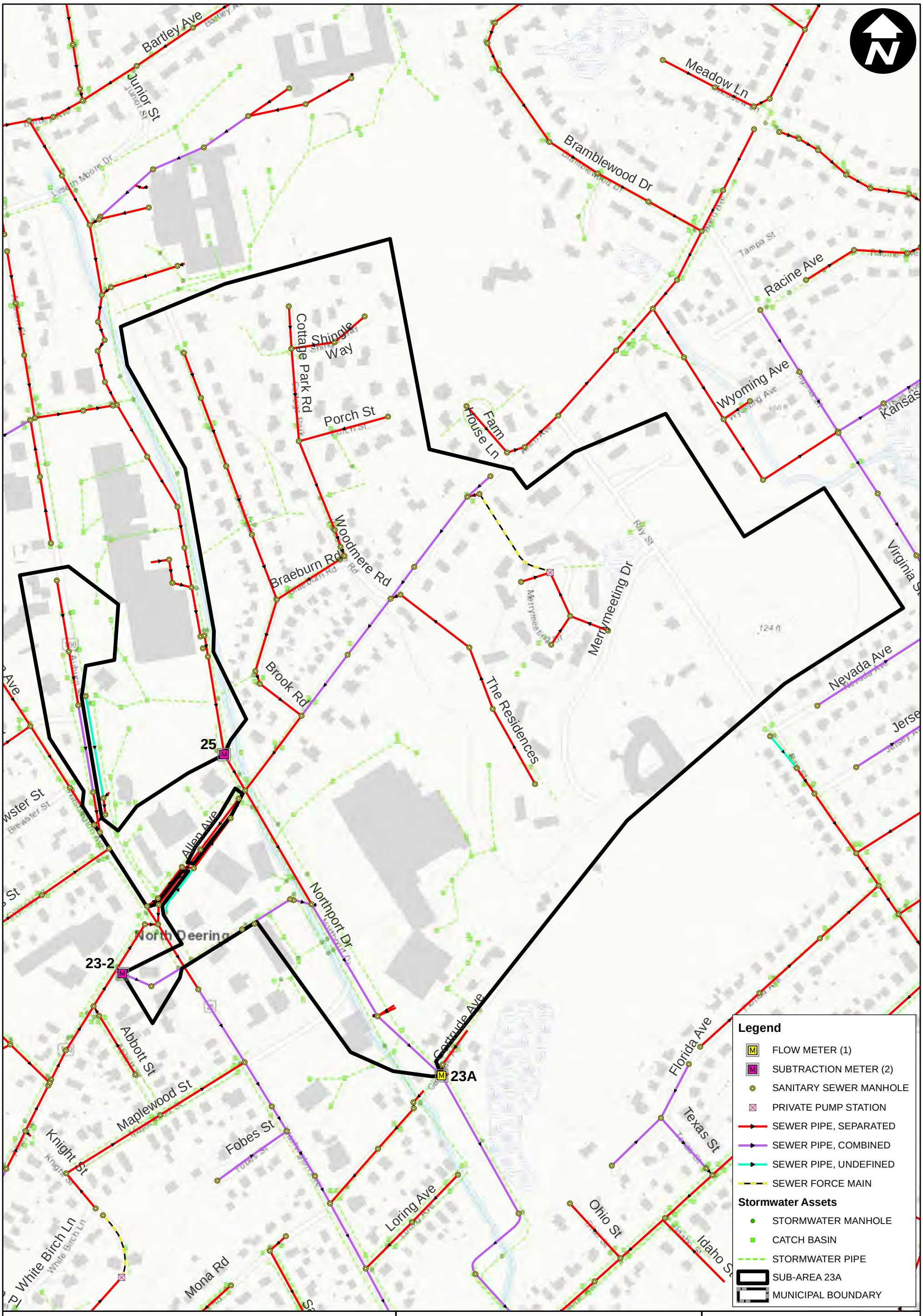
0 200 400 600 Feet

Total Pipe Length = 14,752 ft
Total Manhole Count = 90

ARCADIS

G:\GIS\Portland\2019 Flow Meters\2019 Meter Recommendations - Sub-Area 23.mxd

February 2019



City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 23A

2019 Sanitary Flow Meter Location

0 200 400 600 Feet

Total Pipe Length = 10,497 ft
Total Manhole Count = 52

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February 2019

Cresfield Ter
Settlers Ct
Parsons Pond Dr
Braddish Ct
Wakely Ct
Auburn St
Alpine Rd
Christy Rd
Rustic Ln
Melody Ln
Martin Rd
Auburn Ter
Fall Ln
Autumn Ln
Smith Farm Ln
Quaker Ln
Shepherd Ln
Brookfield
Bartley Ave
Junior St
Greenwood Ln
Primrose Ln
Regan Ln
Croquet Ln
Northwood Dr
Sanborn St
Coolidge Ave
Oramel Ave
Skylark Rd
Mugwhy Ln
Washington Ave
Hennessy Dr
Fisher St
Chapman St
Brewster St
Allen Ave
Brook Rd
Pennell Ave
Cypress St
Delaware Ct
North Deering
23-1
24

Legend

- FLOW METER (1)
- SUBTRACTION METER (1)
- SANITARY SEWER MANHOLE
- CITY PUMP STATION
- PRIVATE PUMP STATION
- SEWER PIPE, SEPARATED
- SEWER PIPE, COMBINED
- SEWER PIPE, UNDEFINED
- SEWER FORCE MAIN

Stormwater Assets

- STORMWATER MANHOLE
- CATCH BASIN
- STORMWATER PIPE
- SUB-AREA 24
- MUNICIPAL BOUNDARY

City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 24

2019 Sanitary Flow Meter Location

0 200 400 600 Feet

Total Pipe Length = 11,224 ft
Total Manhole Count = 58

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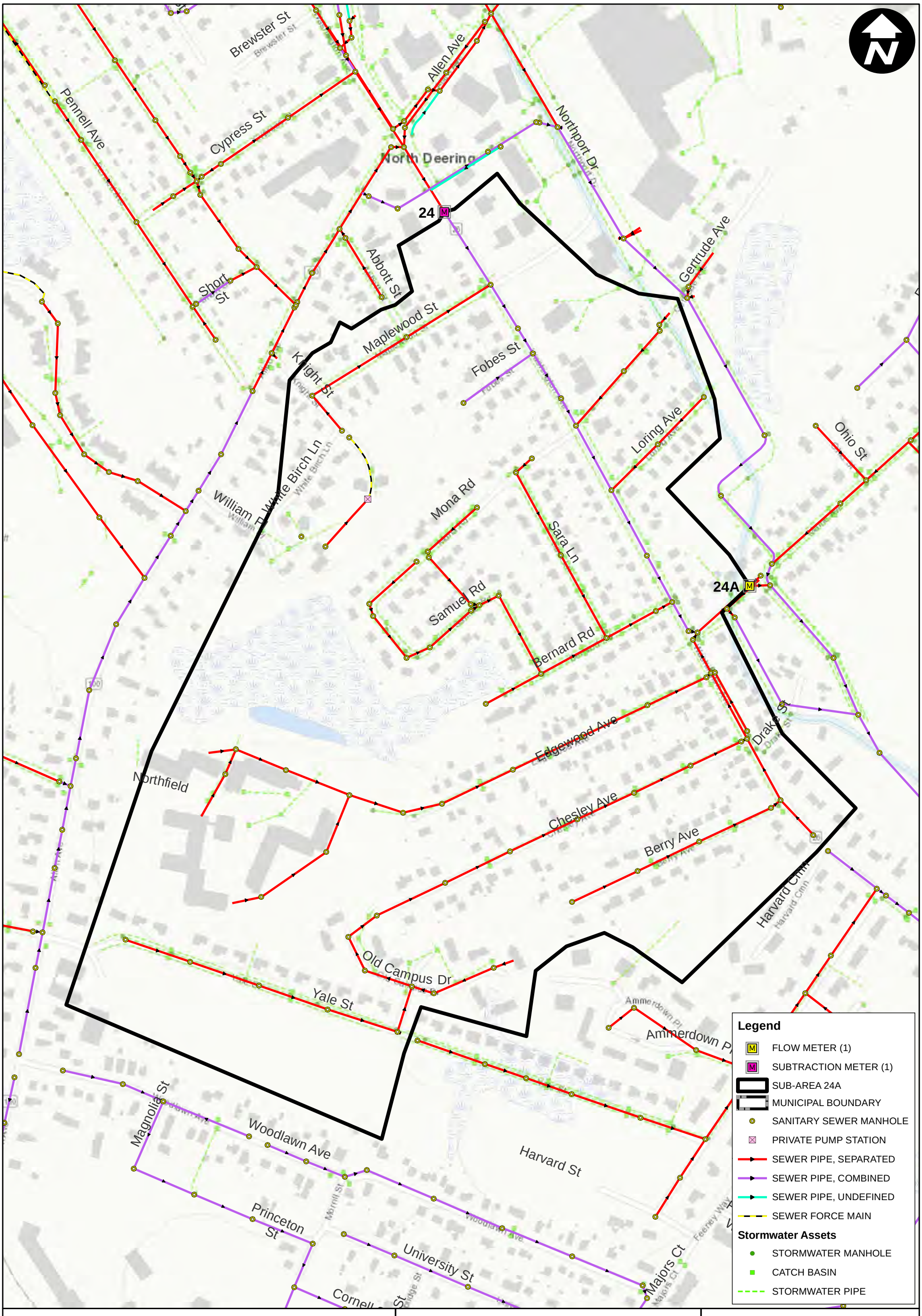
February 2019



City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 24A

2019 Sanitary Flow Meter Location

0 200 400 600 Feet

Total Pipe Length = 15,332 ft
Total Manhole Count = 83

ARCADIS

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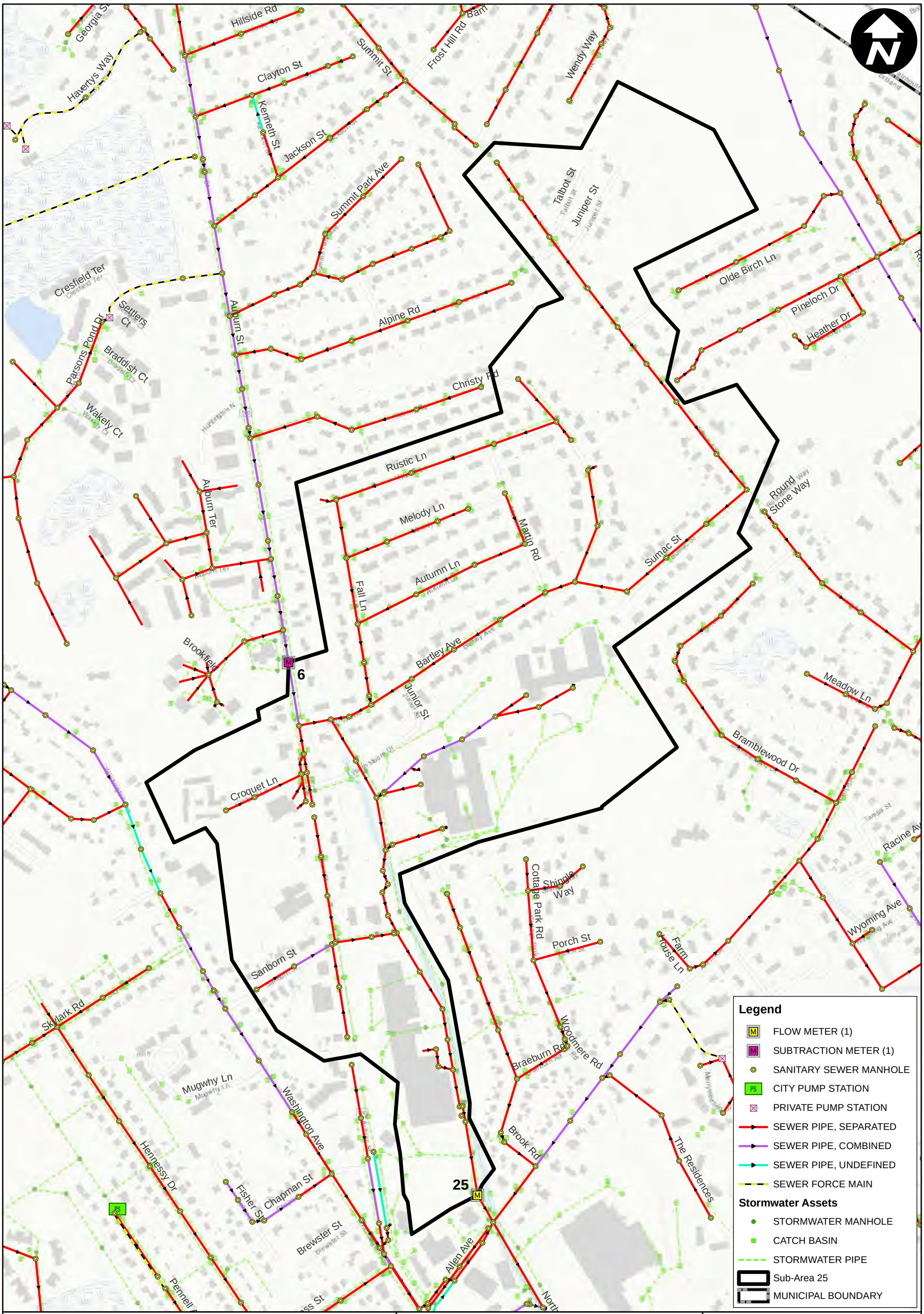
February 2019



City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 25

2019 Sanitary Flow Meter Location

0 200 400 600 800 Feet

Total Pipe Length = 16,547 ft
Total Manhole Count = 89

ARCADIS

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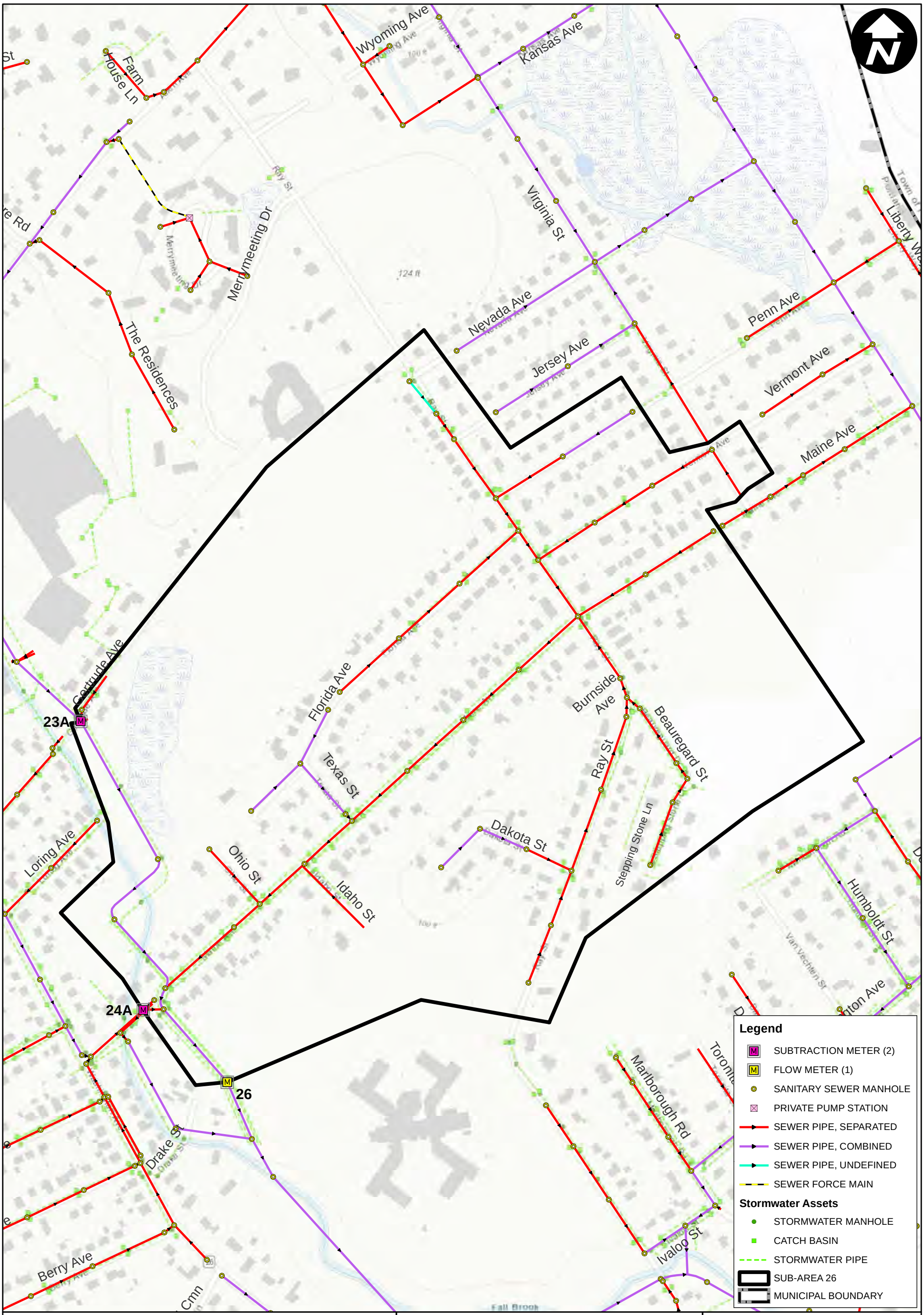
February 2019



City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 26

2019 Sanitary Flow Meter Location

0 200 400 600 Feet

Total Pipe Length = 11,423 ft
Total Manhole Count = 53

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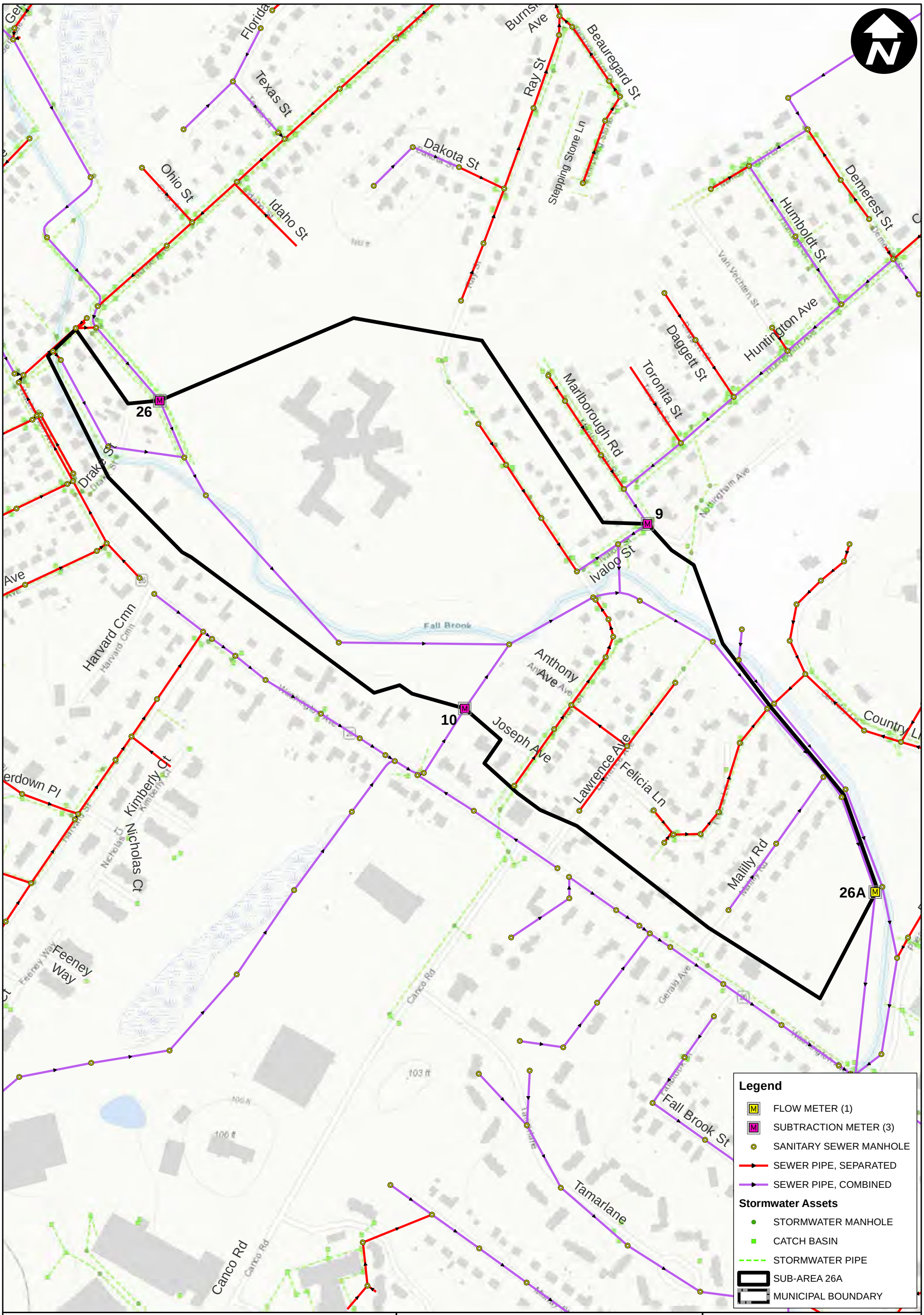
February 2019



City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 26A

2019 Sanitary Flow Meter Location

Total Pipe Length = 8,454 ft
Total Manhole Count = 40

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February 2019

City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 27

2019 Sanitary Flow Meter Location

0 200 400 600 Feet

Total Pipe Length = 12,480 ft
Total Manhole Count = 64

ARCADIS

Legend

- FLOW METER (1)
- SUBTRACTION METER (2)
- SANITARY SEWER MANHOLE
- SEWER PIPE, SEPARATED
- SEWER PIPE, COMBINED
- SEWER PIPE, UNDEFINED

Stormwater Assets

- STORMWATER MANHOLE
- CATCH BASIN
- STORMWATER PIPE
- SUB-AREA 27
- MUNICIPAL BOUNDARY

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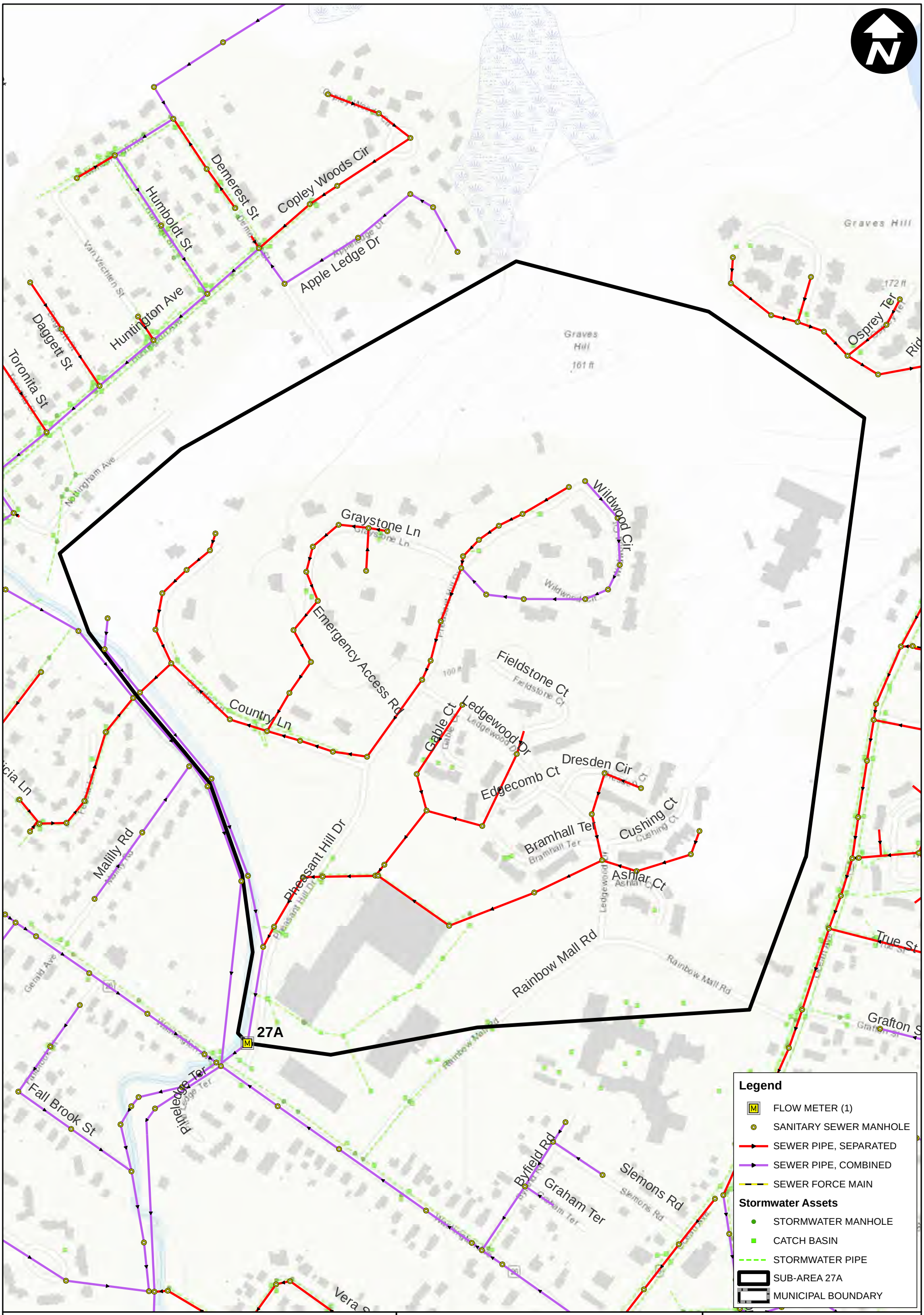
February 2019



City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 27A

2019 Sanitary Flow Meter Location

Total Pipe Length = 9,922 ft
Total Manhole Count = 64

ARCADIS

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February 2019

City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 30

2019 Sanitary Flow Meter Location

0 200 400 600 800 Feet

Total Pipe Length = 20,647 ft
Total Manhole Count = 117

ARCADIS

Legend

- FLOW METER (2)
- SANITARY SEWER MANHOLE
- PORTLAND WATER DISTRICT PUMP STATION
- PRIVATE PUMP STATION
- COMBINED SEWER OVERFLOW
- SEWER PIPE, SEPARATED
- SEWER PIPE, COMBINED
- SEWER PIPE, UNDEFINED
- SEWER FORCE MAIN

Stormwater Assets

- STORMWATER MANHOLE
- CATCH BASIN
- STORMWATER PIPE
- SUB-AREA 30
- MUNICIPAL BOUNDARY

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February 2019

City of Portland, Maine

Planning & Engineering Services for an Infiltration and Inflow Program of the Sanitary Sewer System

Sub-Area 31

2019 Sanitary Flow Meter Location

Total Pipe Length = 22,861 ft
Total Manhole Count = 123

0 200 400 600 800 1,000 Feet

ARCADIS

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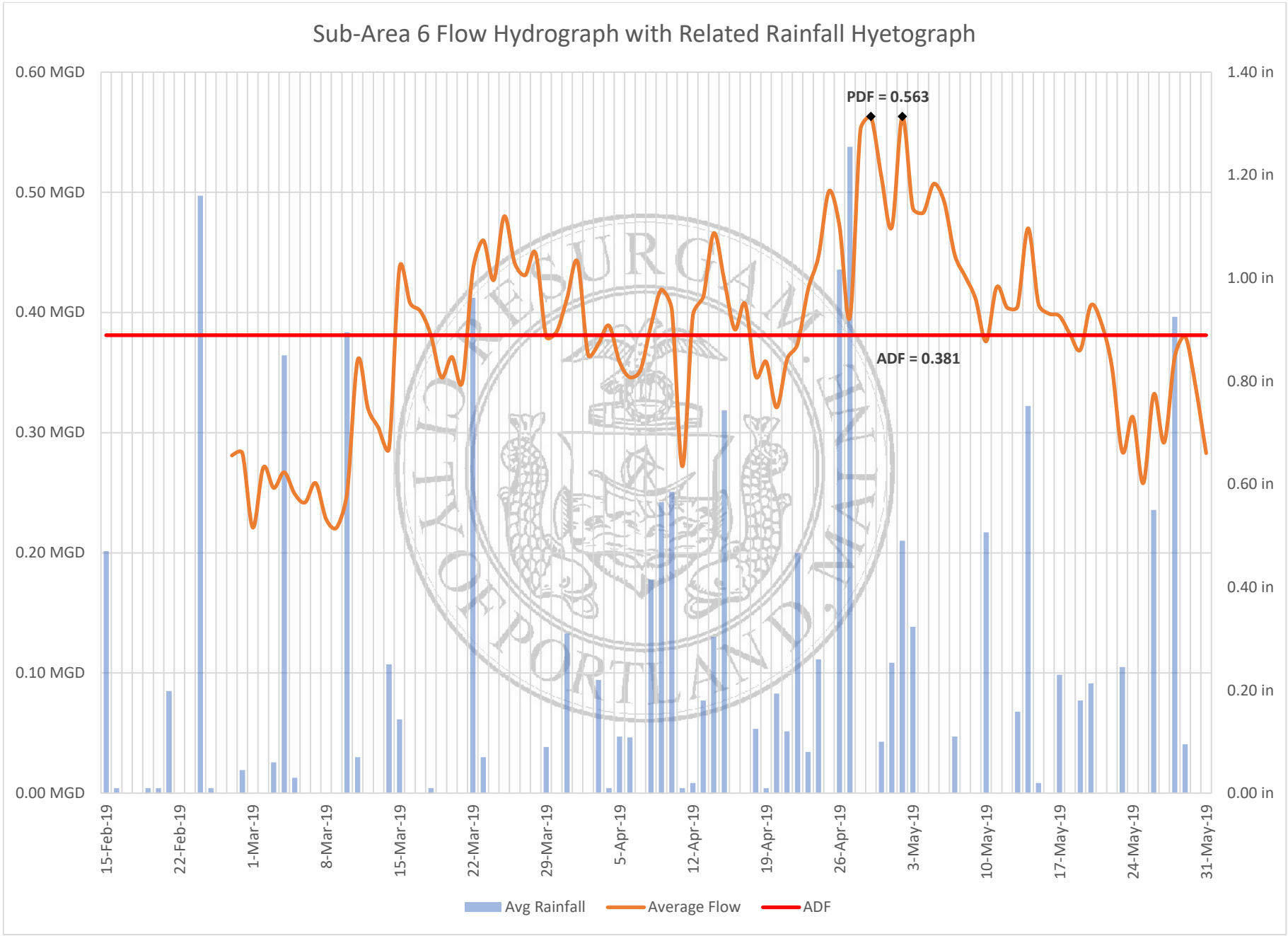
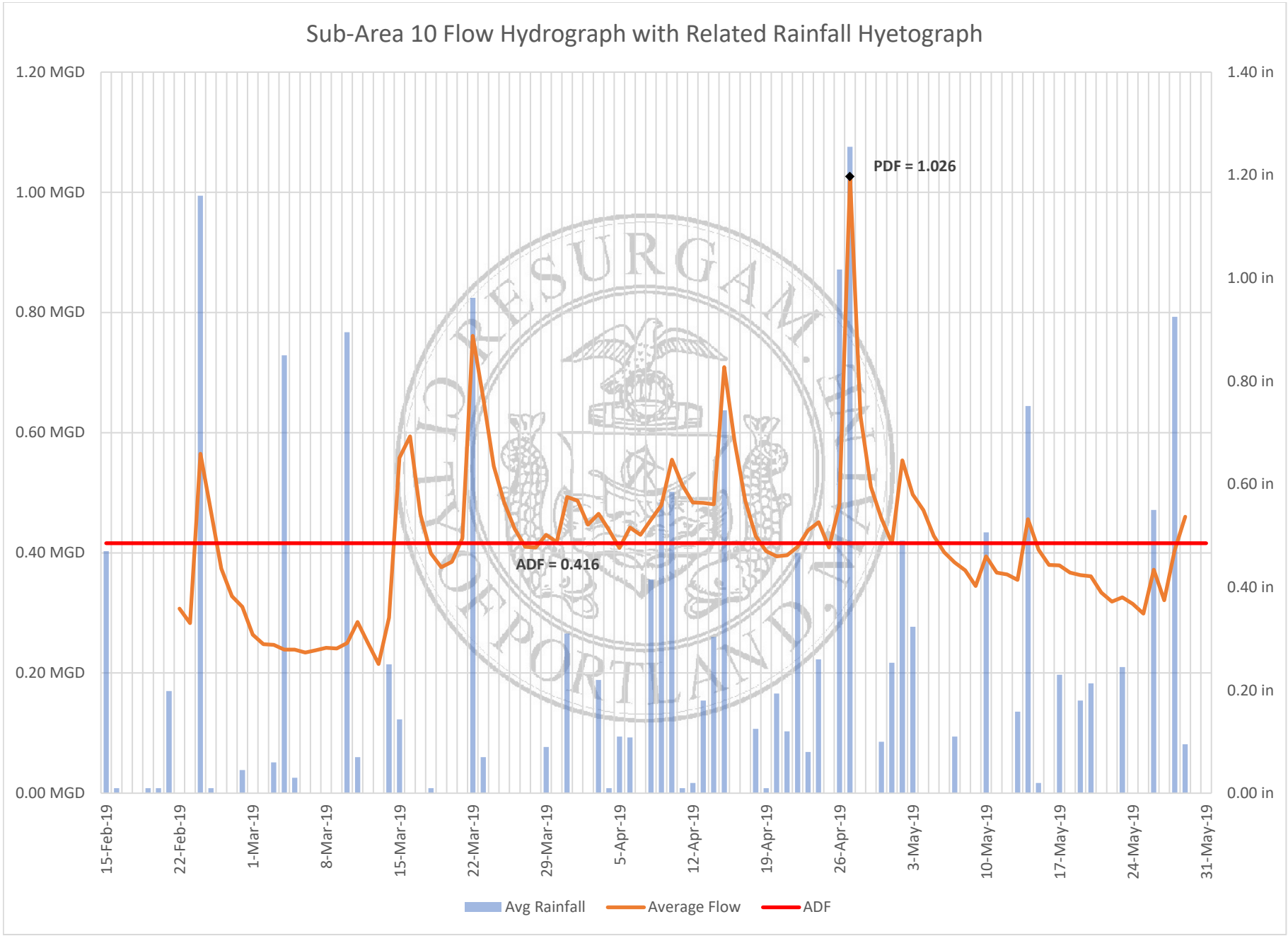
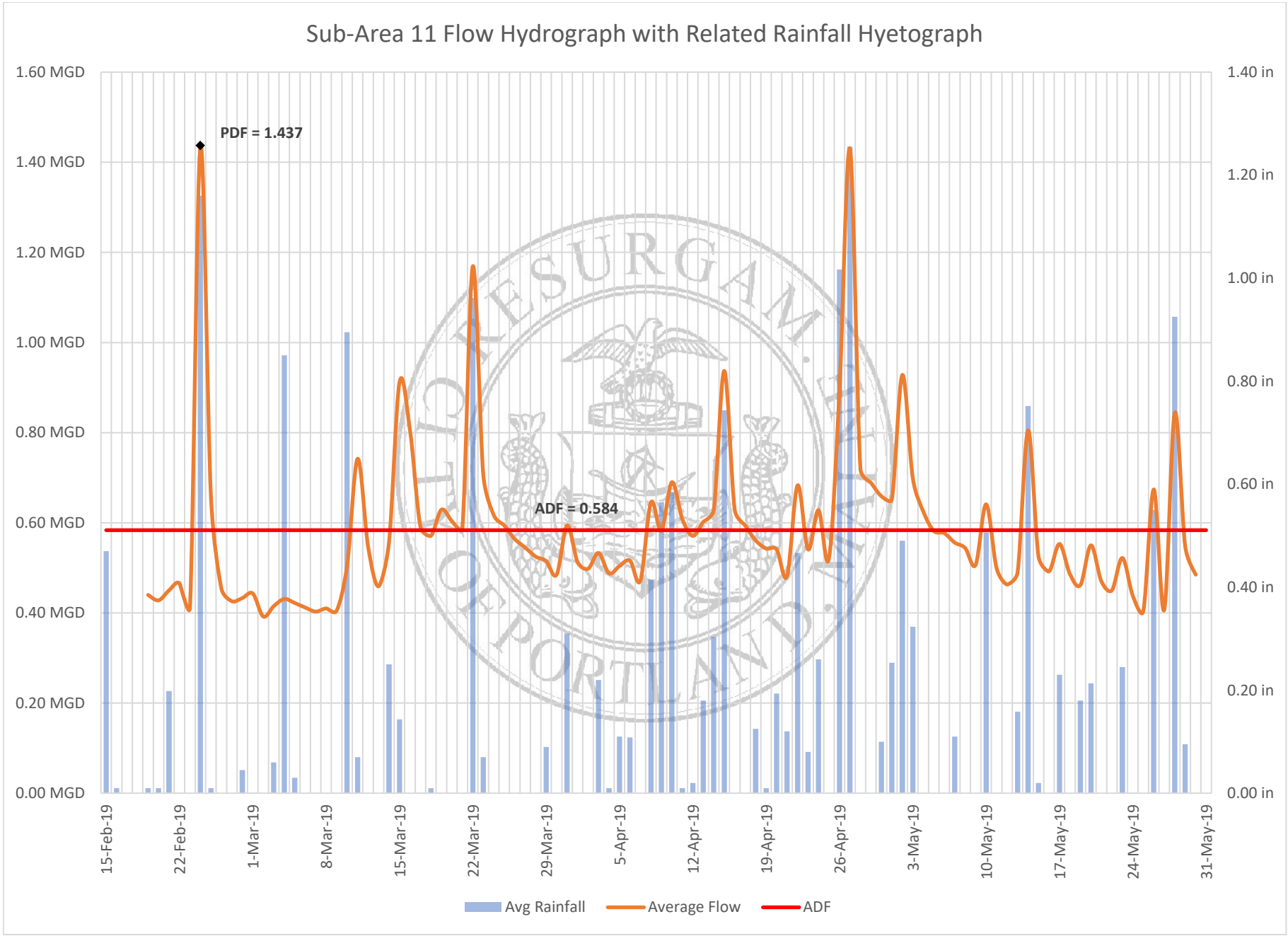
February 2019



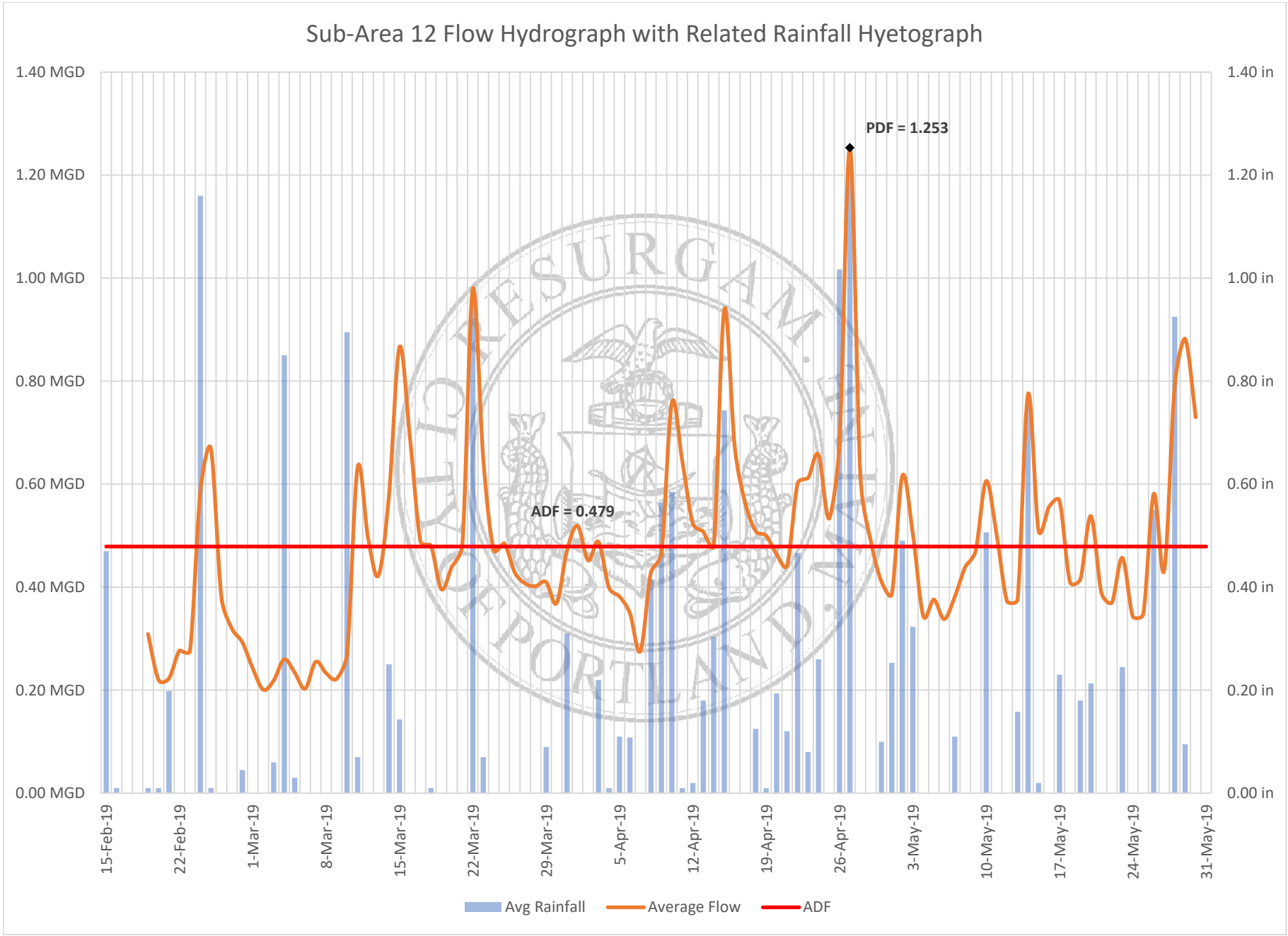
ADF = Average Daily Flow
PDF = Peak Daily Flow



ADF = Average Daily Flow
PDF = Peak Daily Flow



ADF = Average Daily Flow
PDF = Peak Daily Flow



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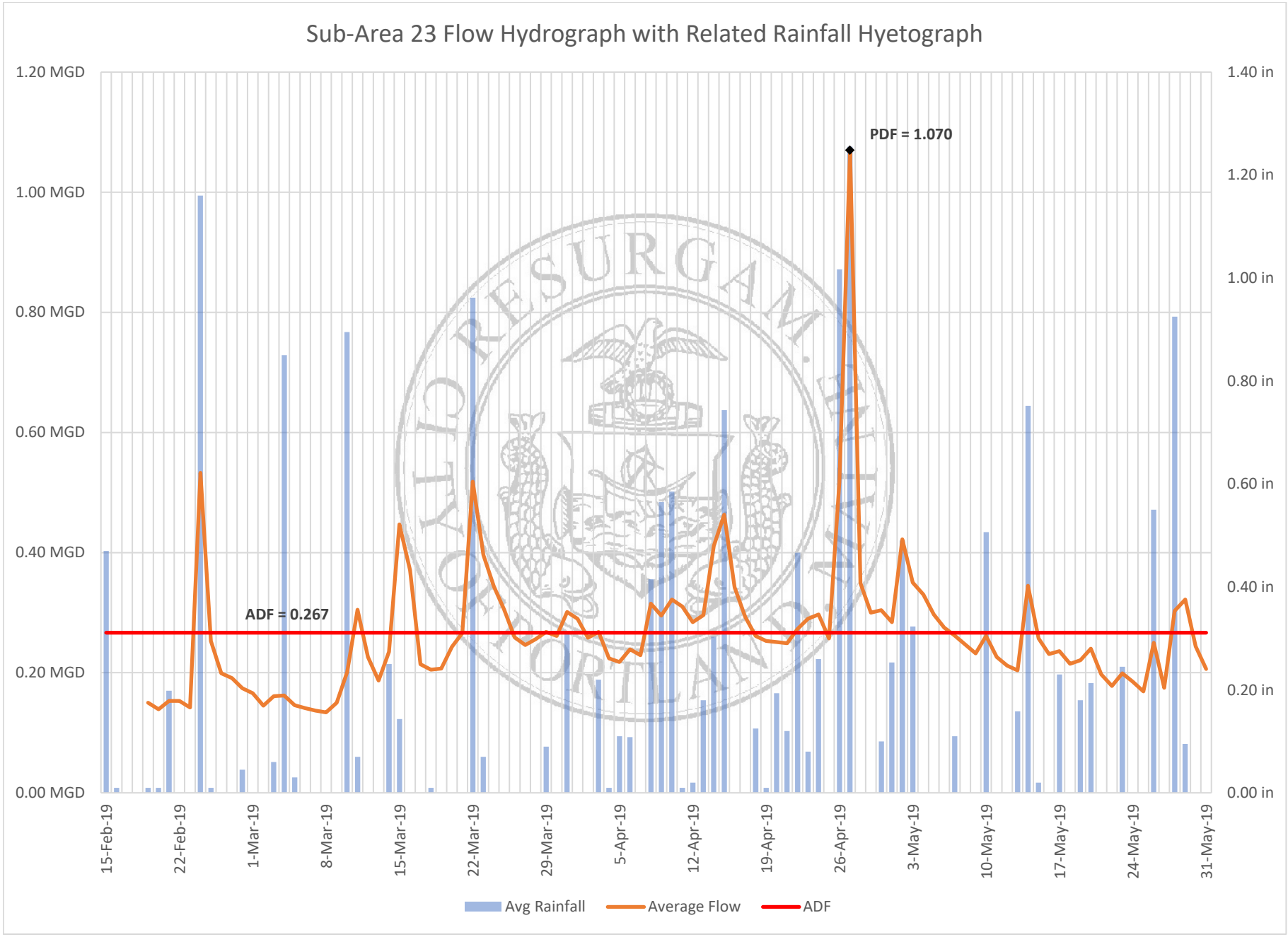
PDF = Peak Daily Flow



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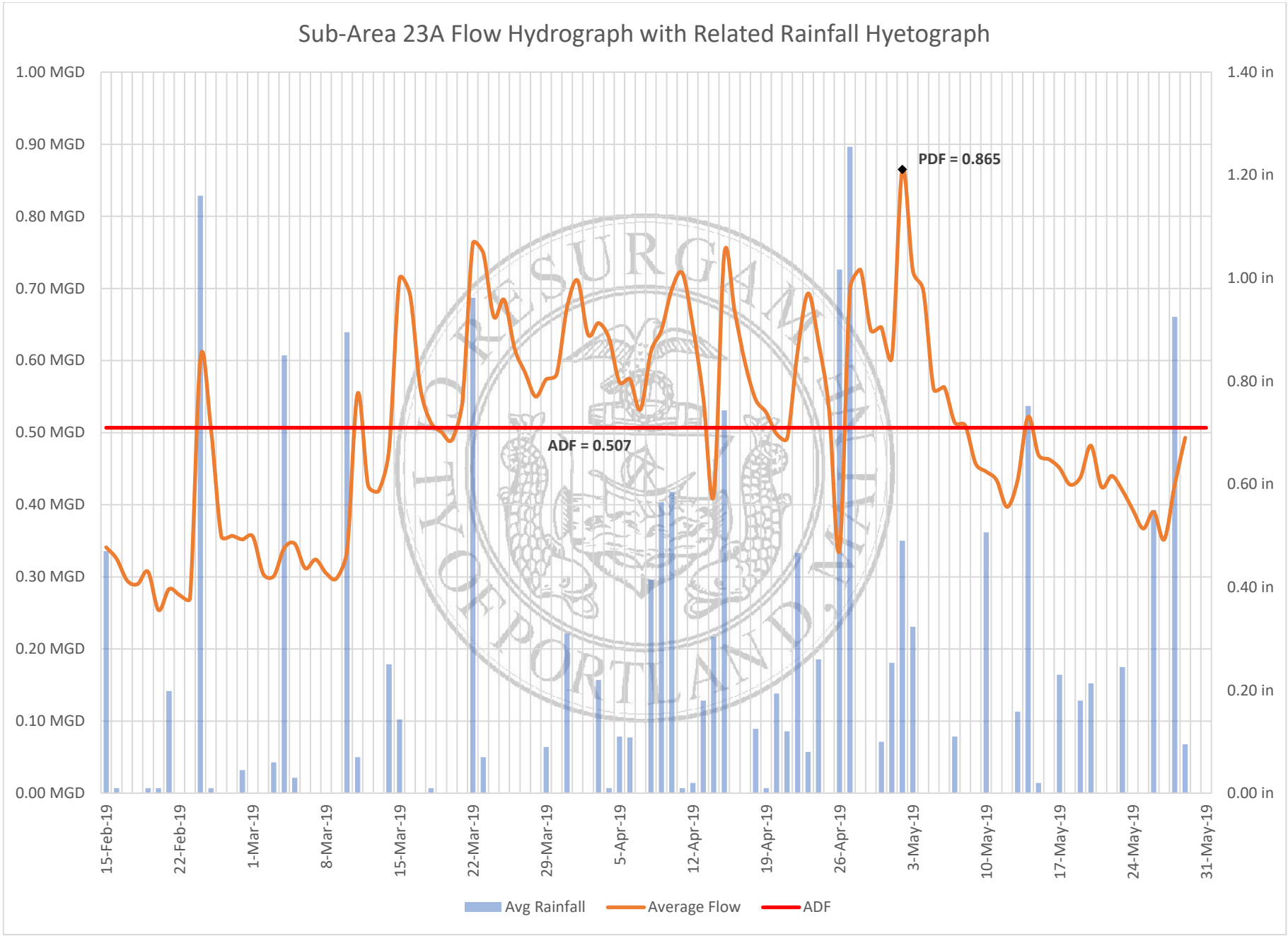
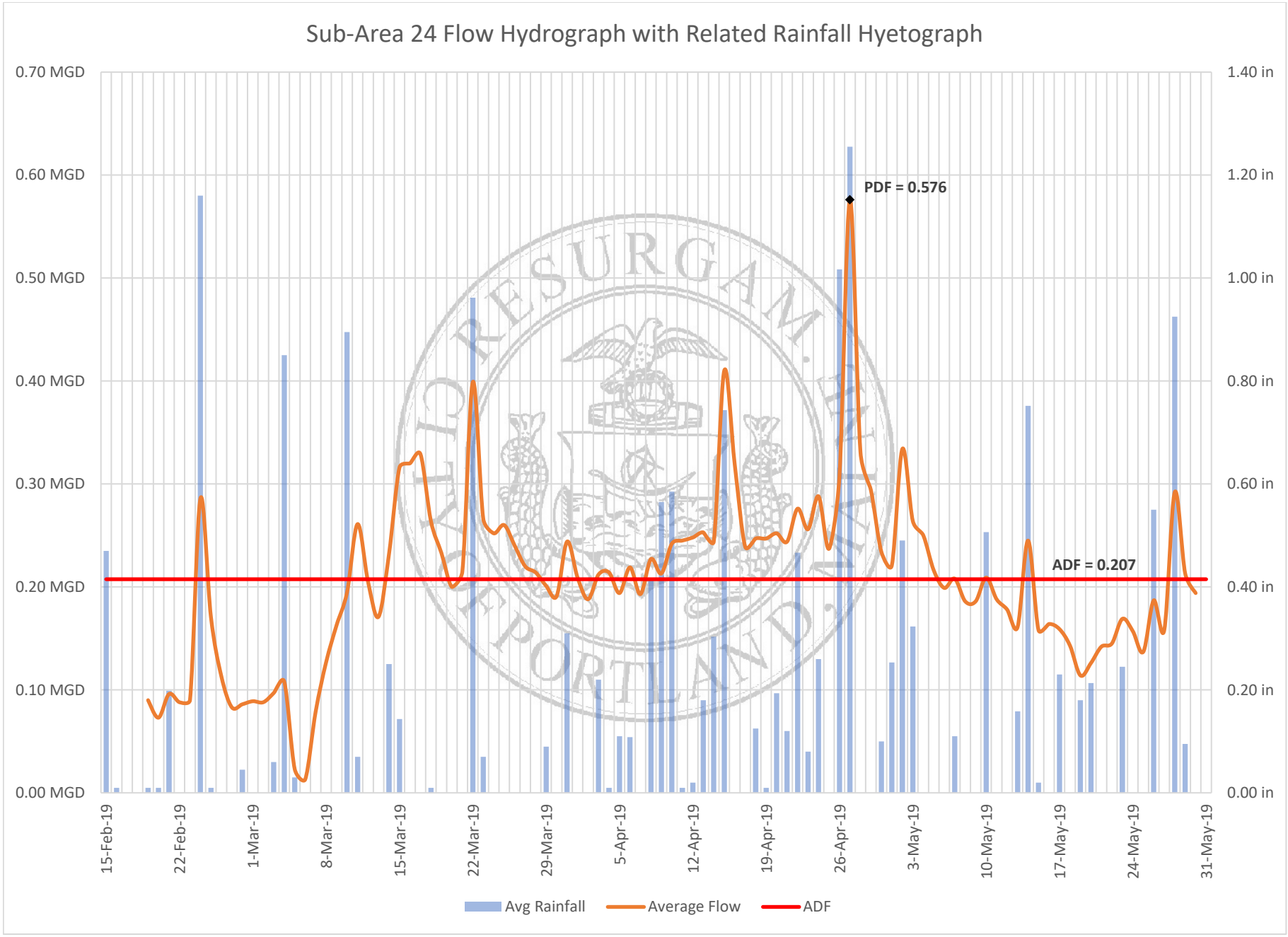
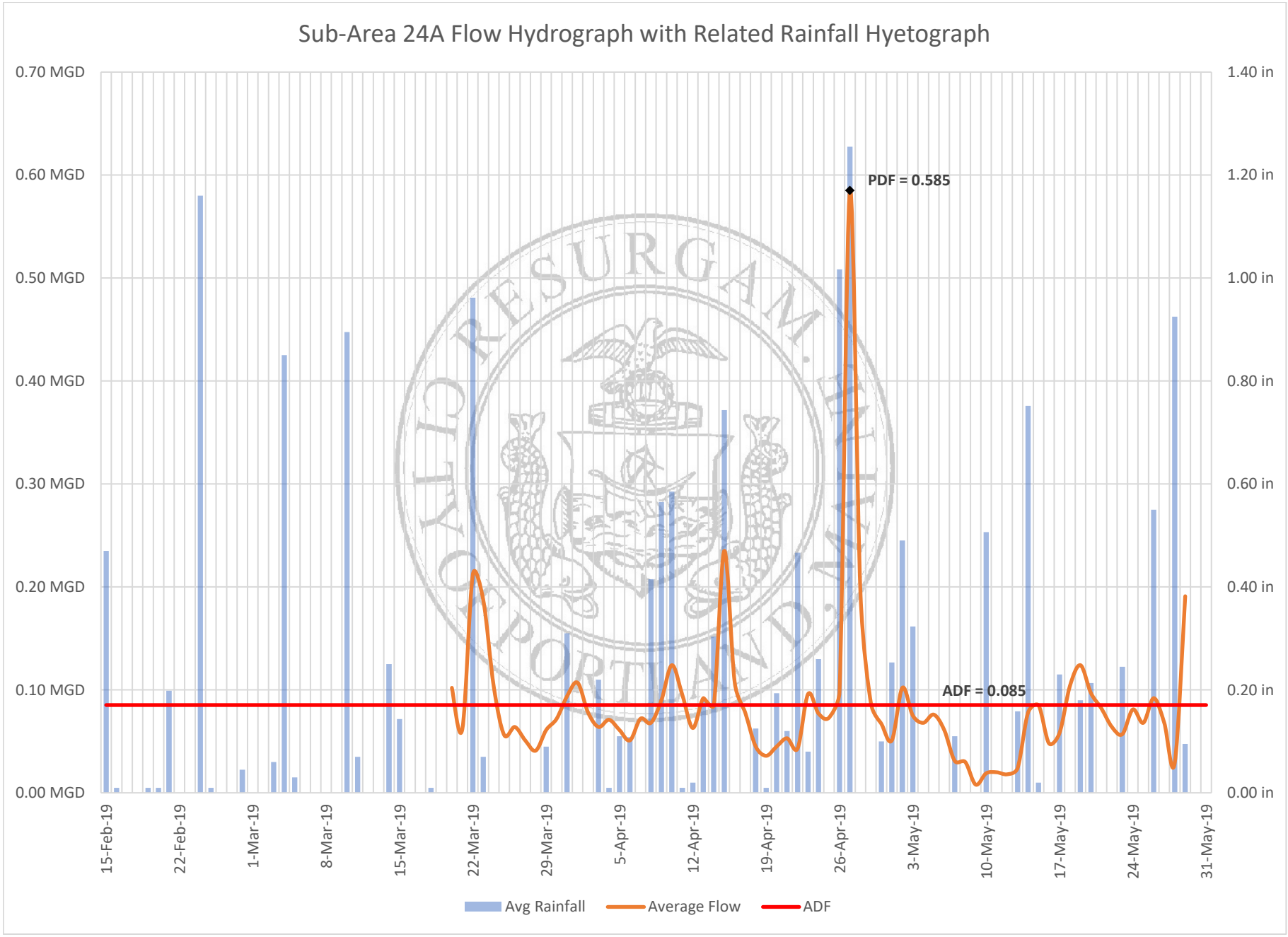
PDF = Peak Daily Flow



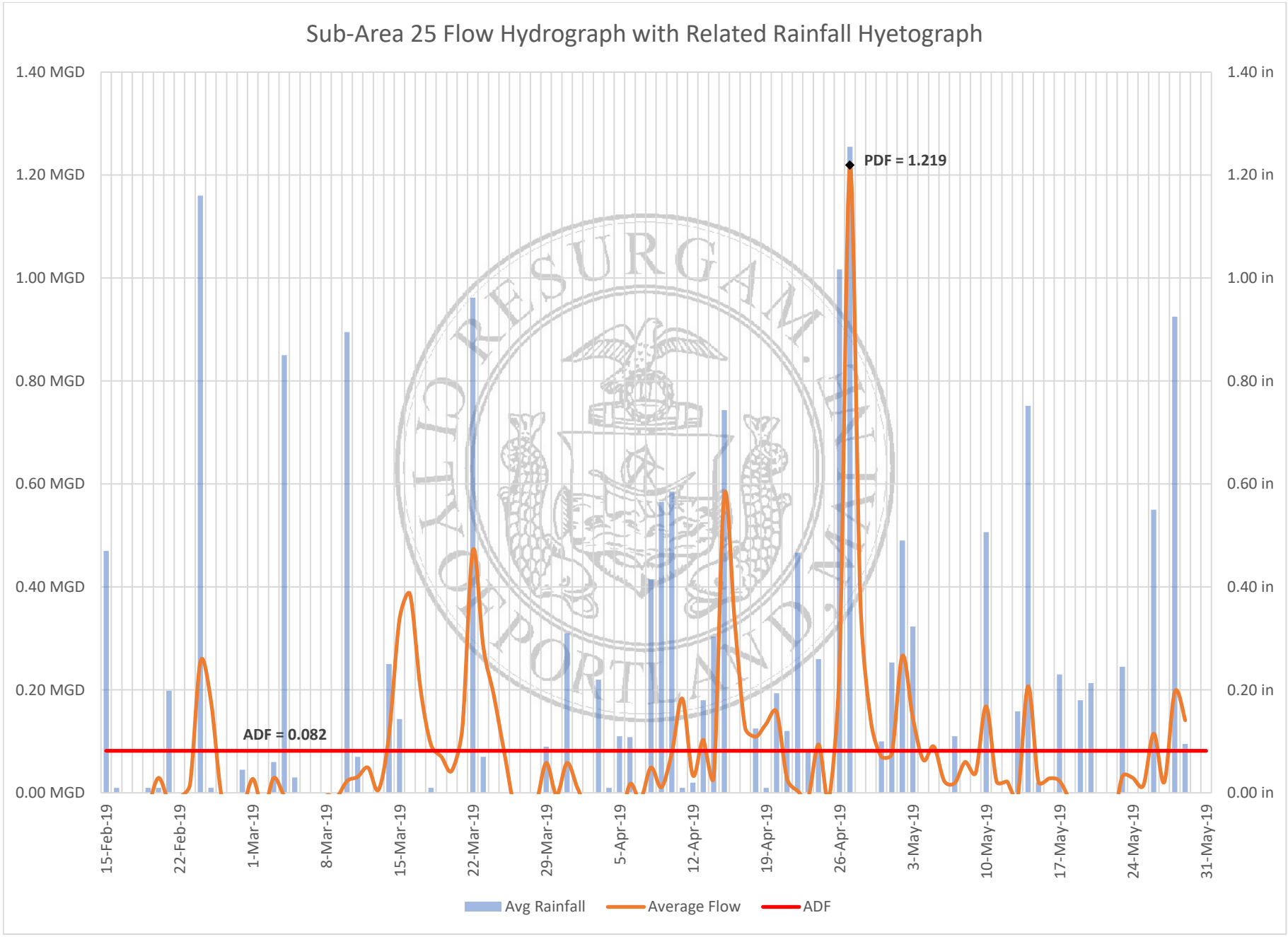
ADF = Average Daily Flow
PDF = Peak Daily Flow



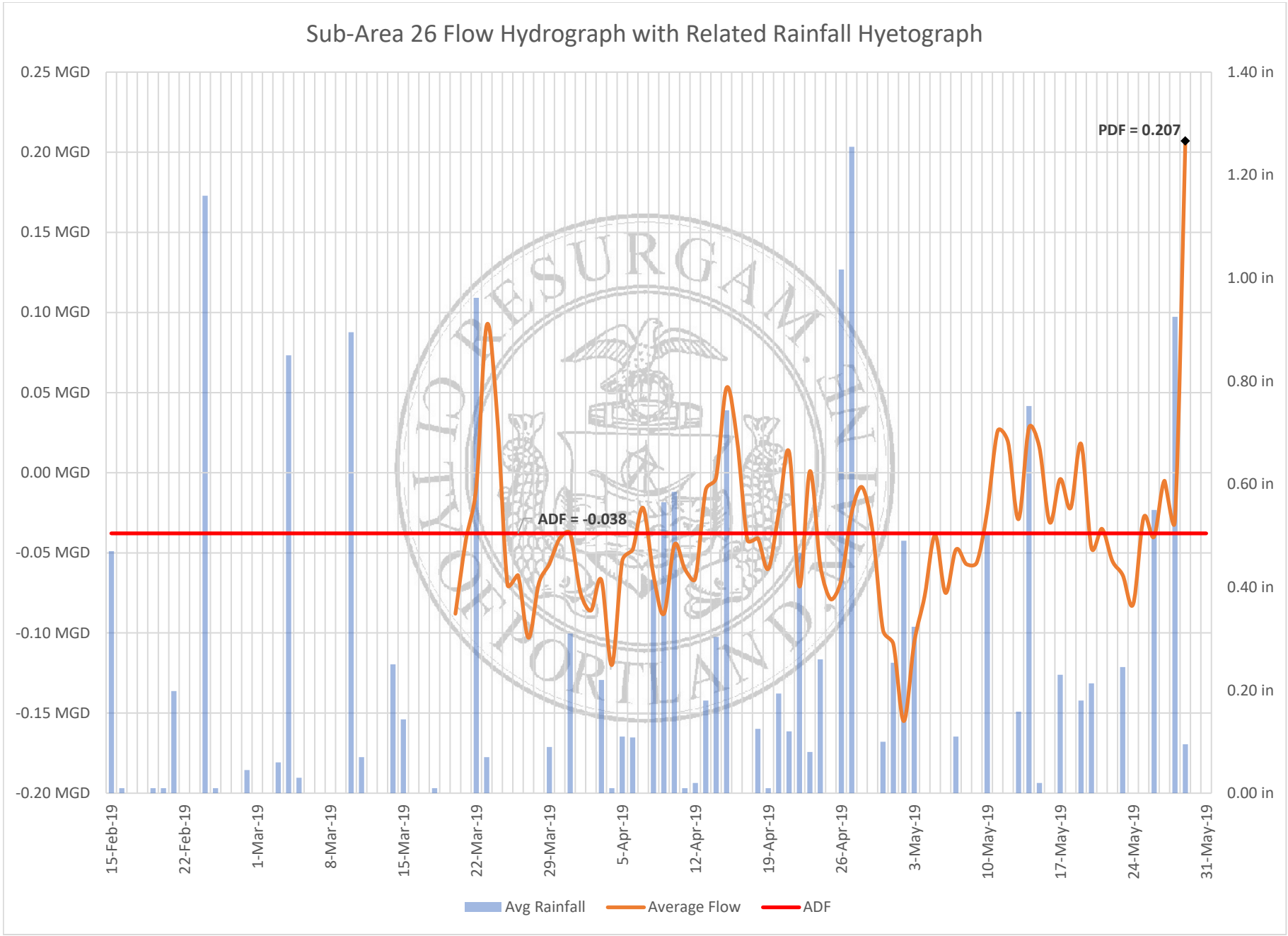
ADF = Average Daily Flow
PDF = Peak Daily Flow



ADF = Average Daily Flow
PDF = Peak Daily Flow



ADF = Average Daily Flow
PDF = Peak Daily Flow



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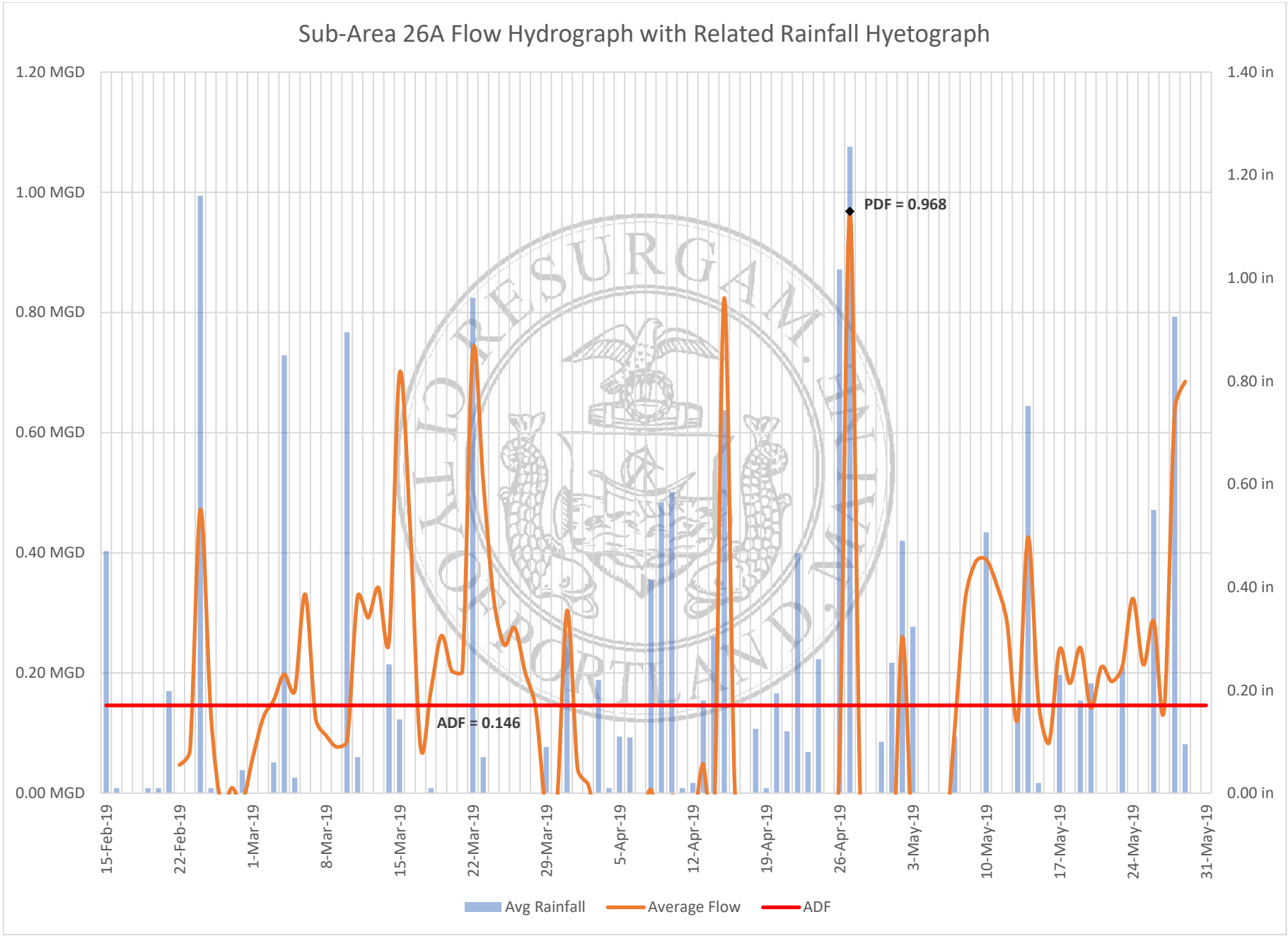
PDF = Peak Daily Flow



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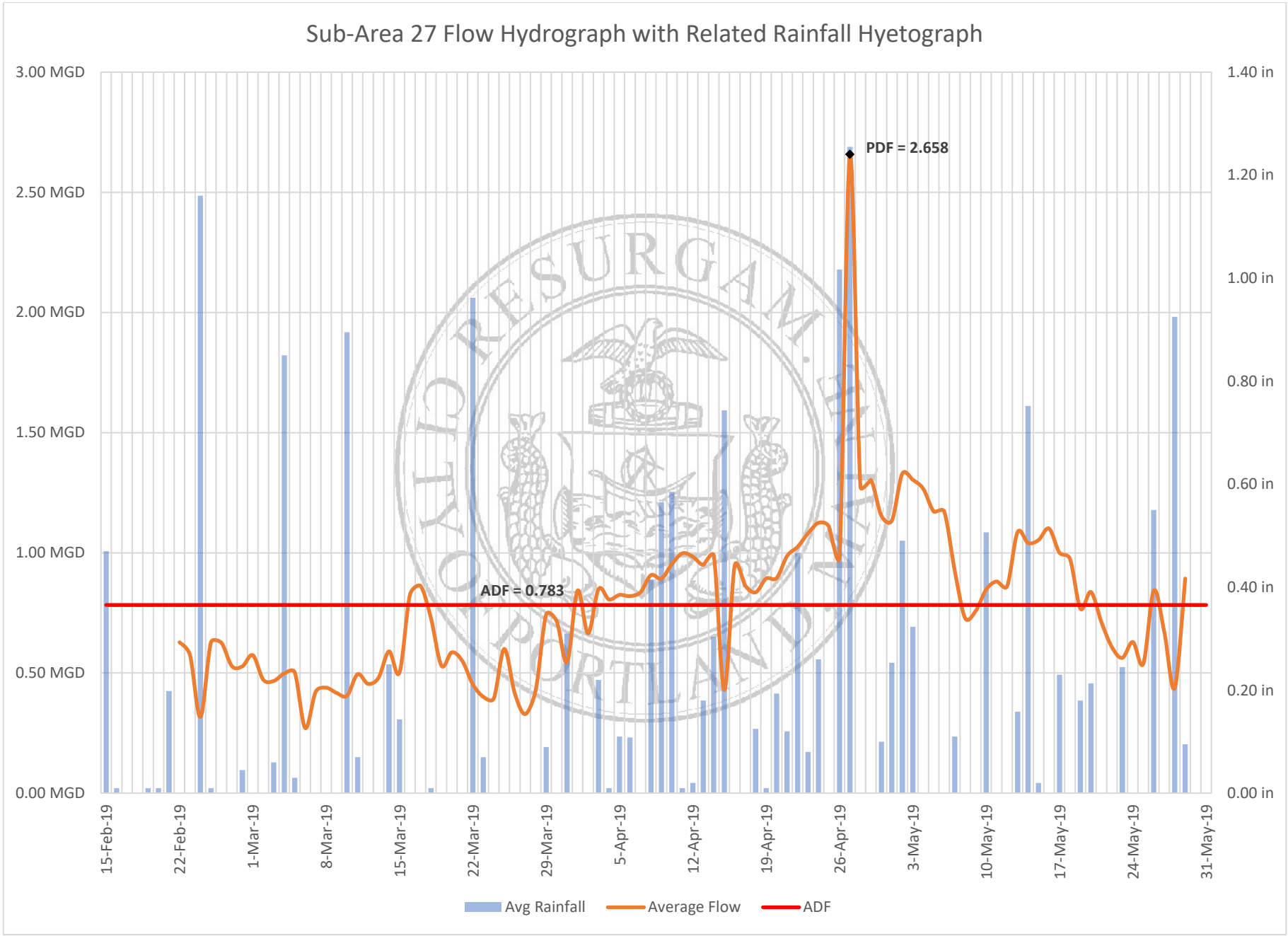
PDF = Peak Daily Flow



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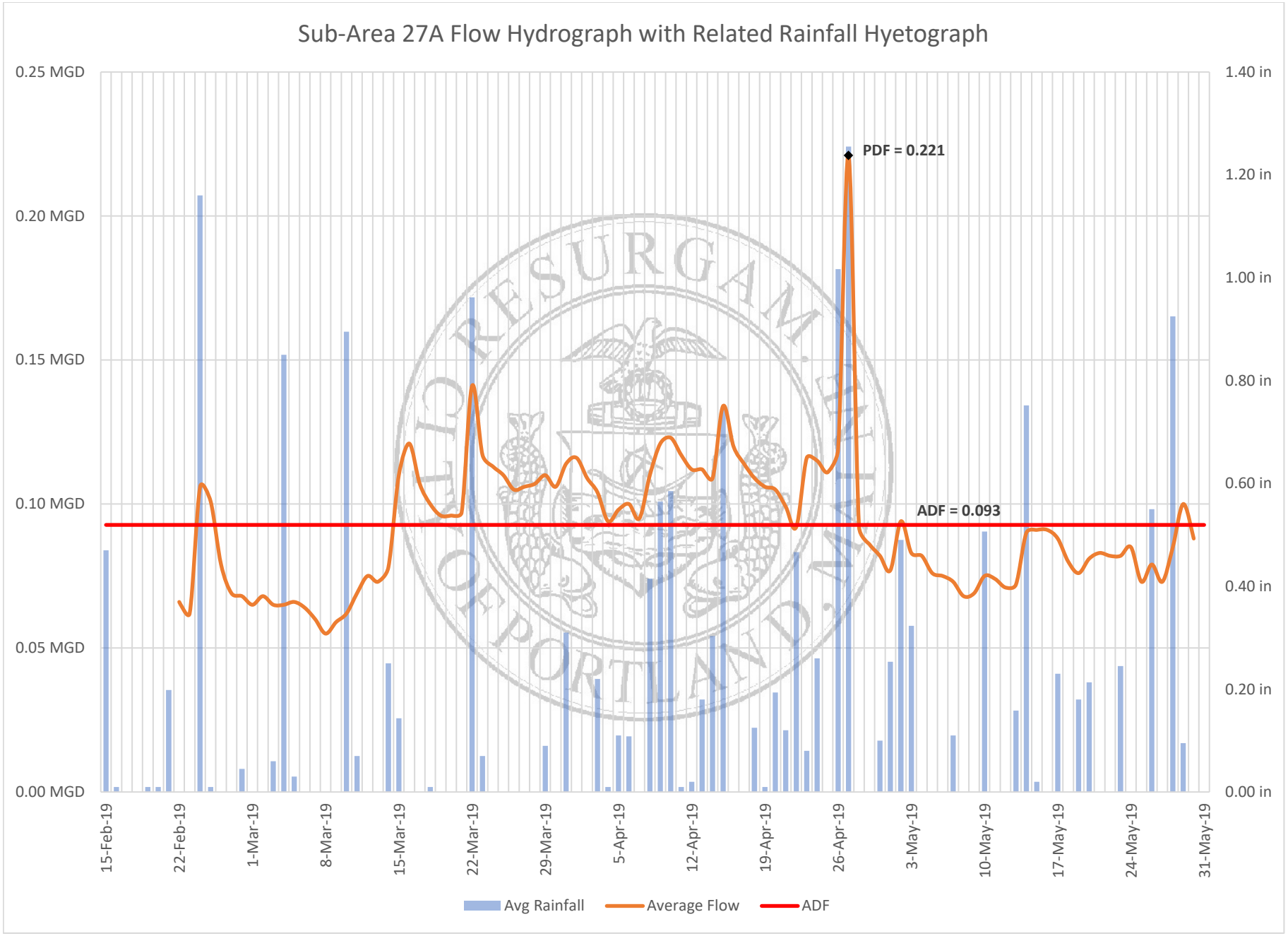
PDF = Peak Daily Flow



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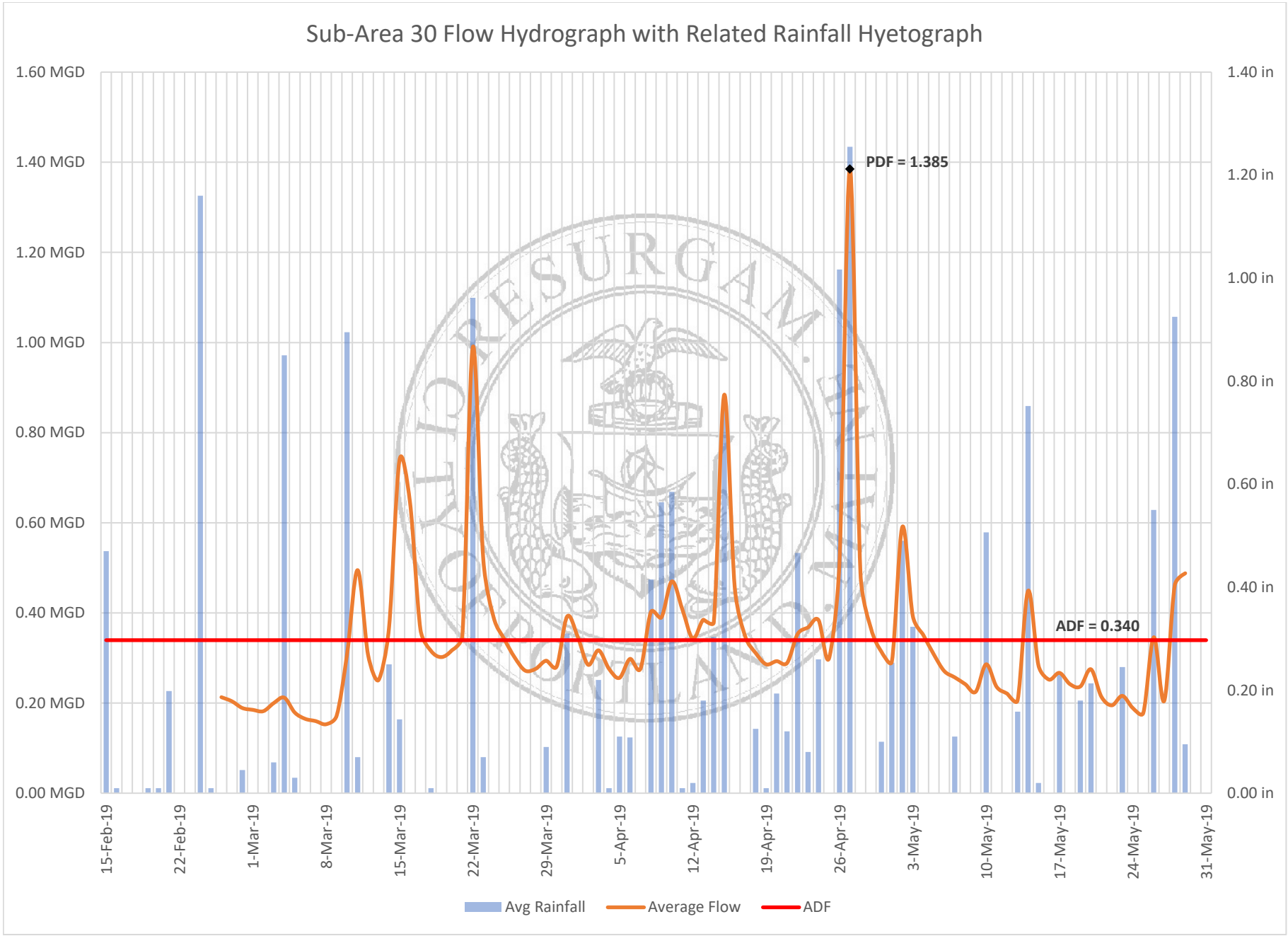
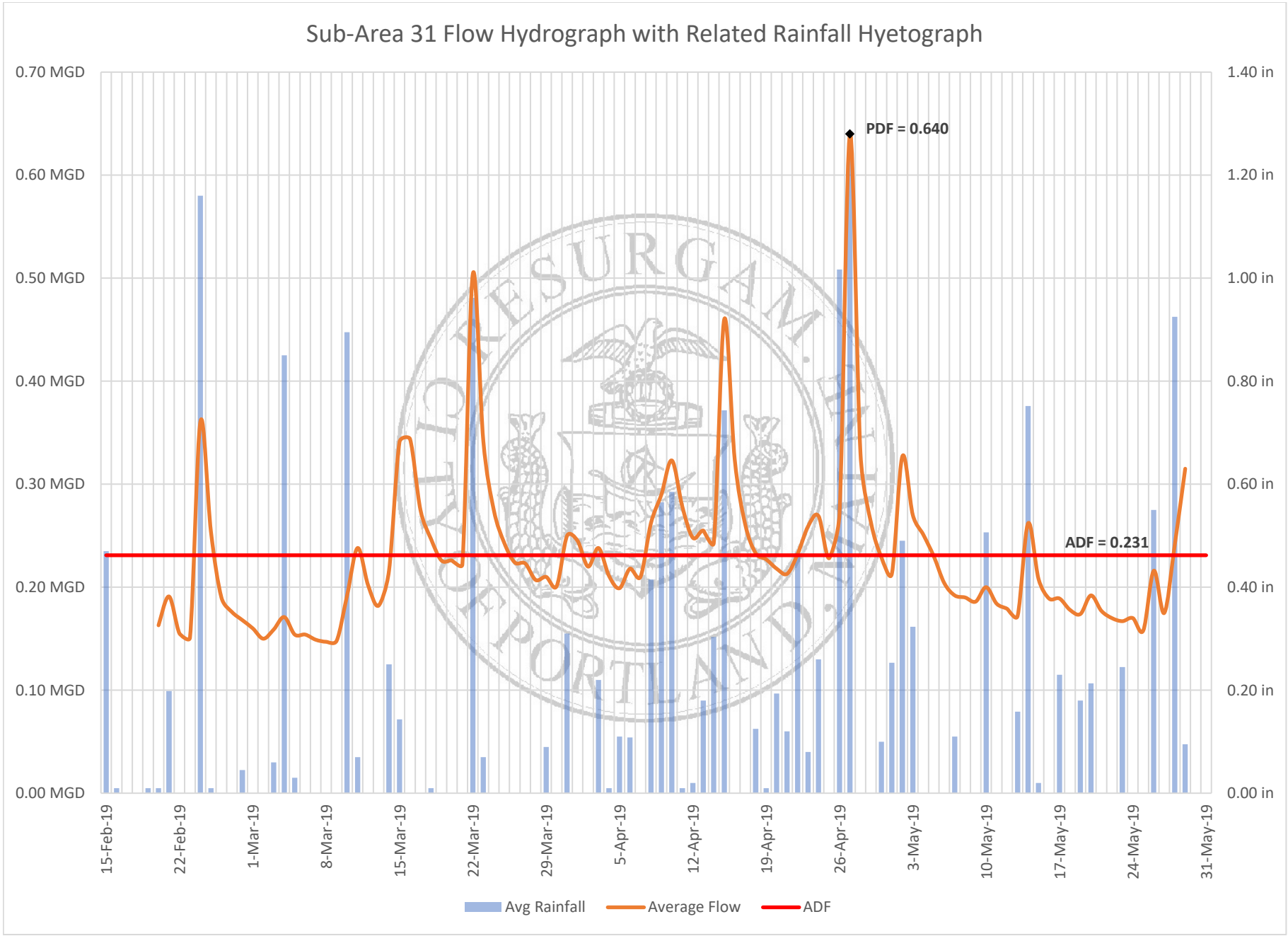


ADF = Average Daily Flow
PDF = Peak Daily Flow



ADF = Average Daily Flow
PDF = Peak Daily Flow

INFILTRATION AND INFLOW INVESTIGATIONS:

FLOW ISOLATION LOCATIONS

Legend

Sanitary Sewer Assets

- Sewer Manhole
- CSOs
- Meter Locations
- City Pump Station
- Portland Water District (PWD) Pump Station
- Private Pump Station
- Sewer Force Main
- Sewer Pipes
- Recommended Flow Isolation

Stormwater Assets

- Stormwater Manhole
- Catchbasin
- Stormdrain
- Sub-Area 6
- Municipal Boundary

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS

Sub-Area 6

Phase 2 - Flow Isolation Recommendations

May 2019

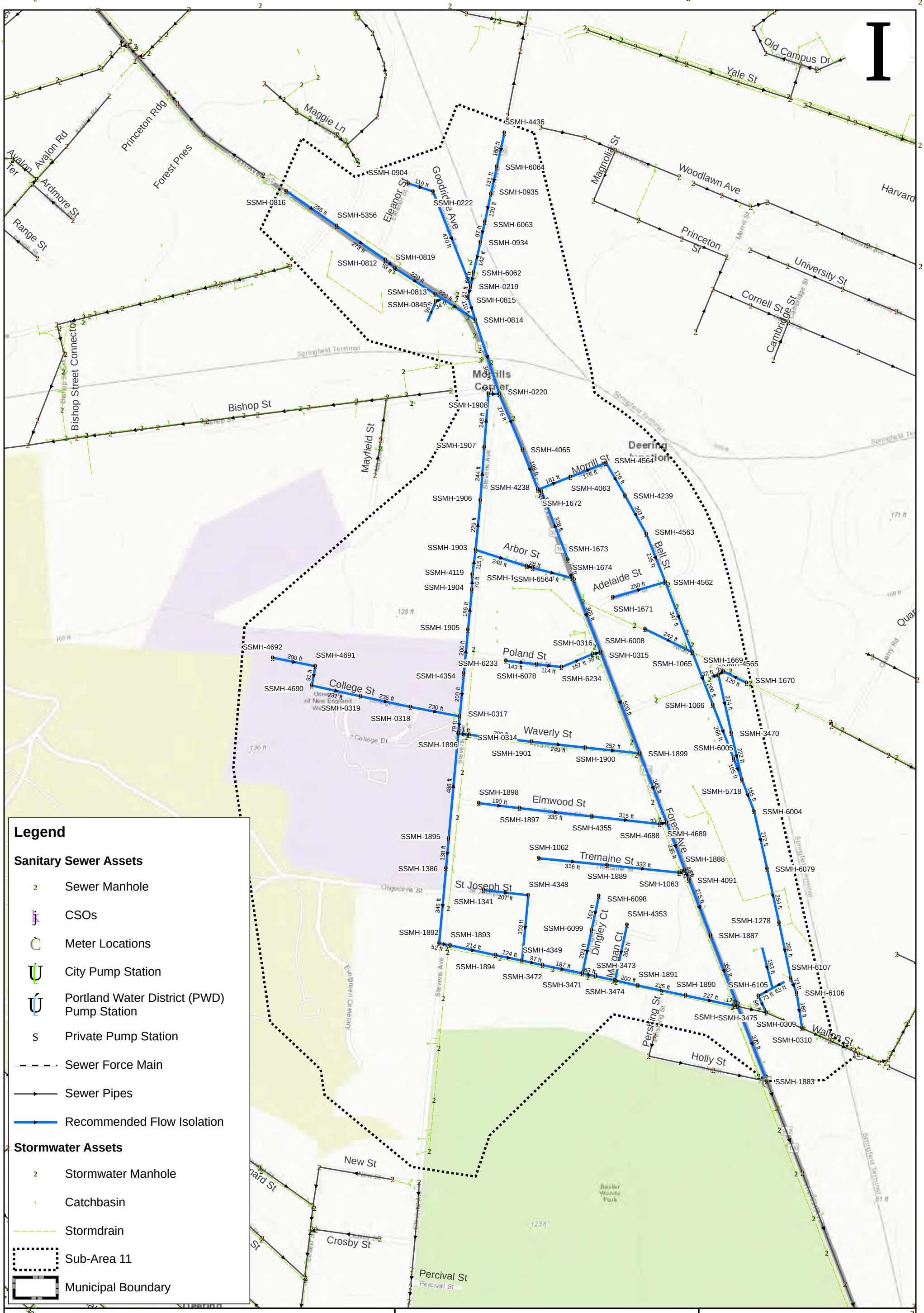
0 100 200 400 600 Feet

Total Recommended Pipe For Flow Isolation = 15,813 ft

Combined Sewers = 13 %

Infiltration Estimate = 9,582 GPD/IM

G:\GIS\Portland\2018 - 2019 SSES Maps\2019 Phase 2 Flow Isolation - Sub-Area 6.mxd



City of Portland, Maine

Planning & Engineering

Sewer System

Evaluation Survey

ARCADIS

Sub-Area 11

Phase 2 - Flow Isolation Recommendations

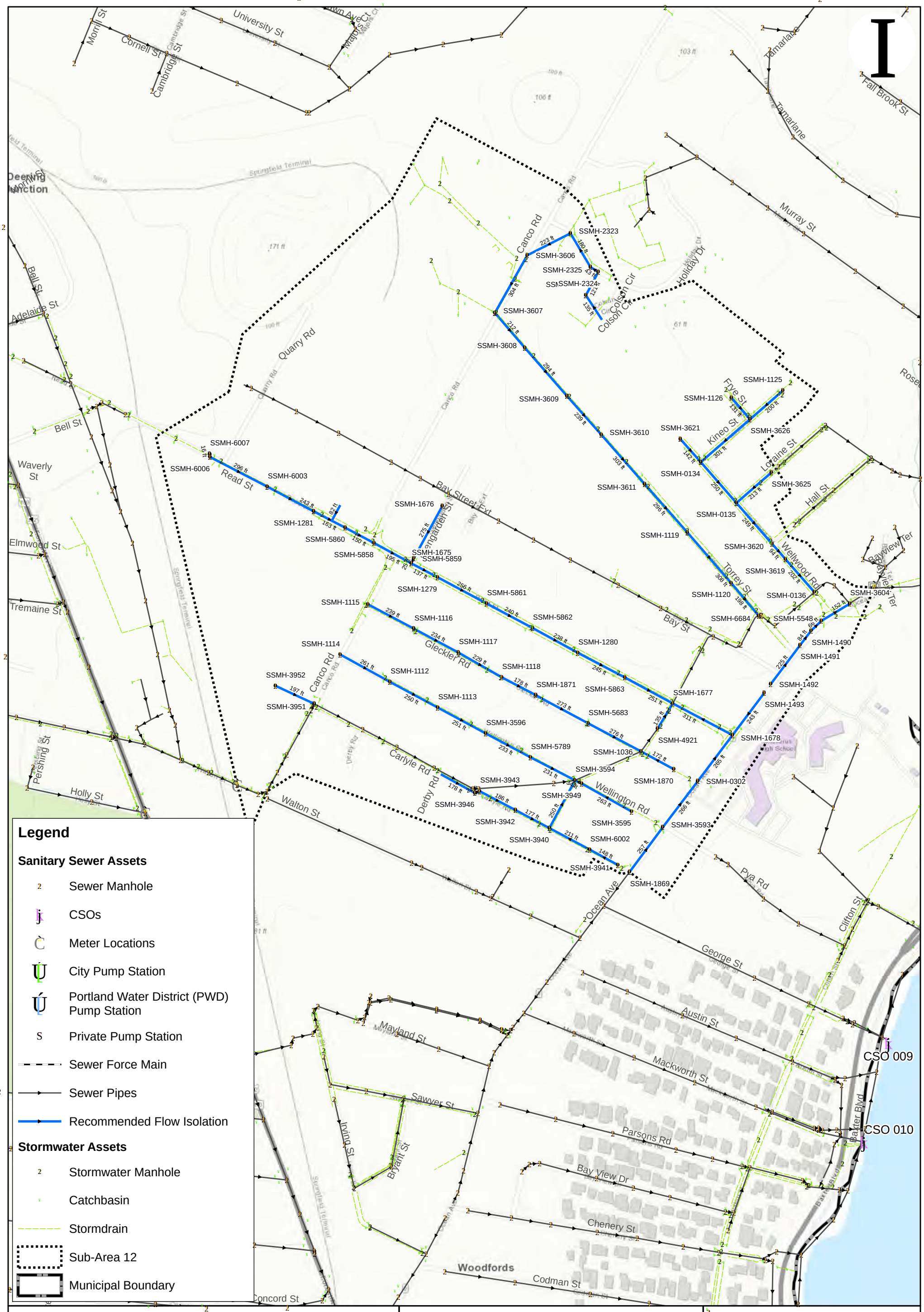
May 2019

Total Recommended Pipe For Flow Isolation = 20,484 ft

Combined Sewers = 87 %

Infiltration Estimate = 6,629 GPD/IM

G:\GIS\Portland\2018 - 2019 SSES Maps\2019 Phase 2 Flow Isolation - Sub-Area 11.mxd



City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS

Sub-Area 12

Phase 2 - Flow Isolation Recommendations

May 2019

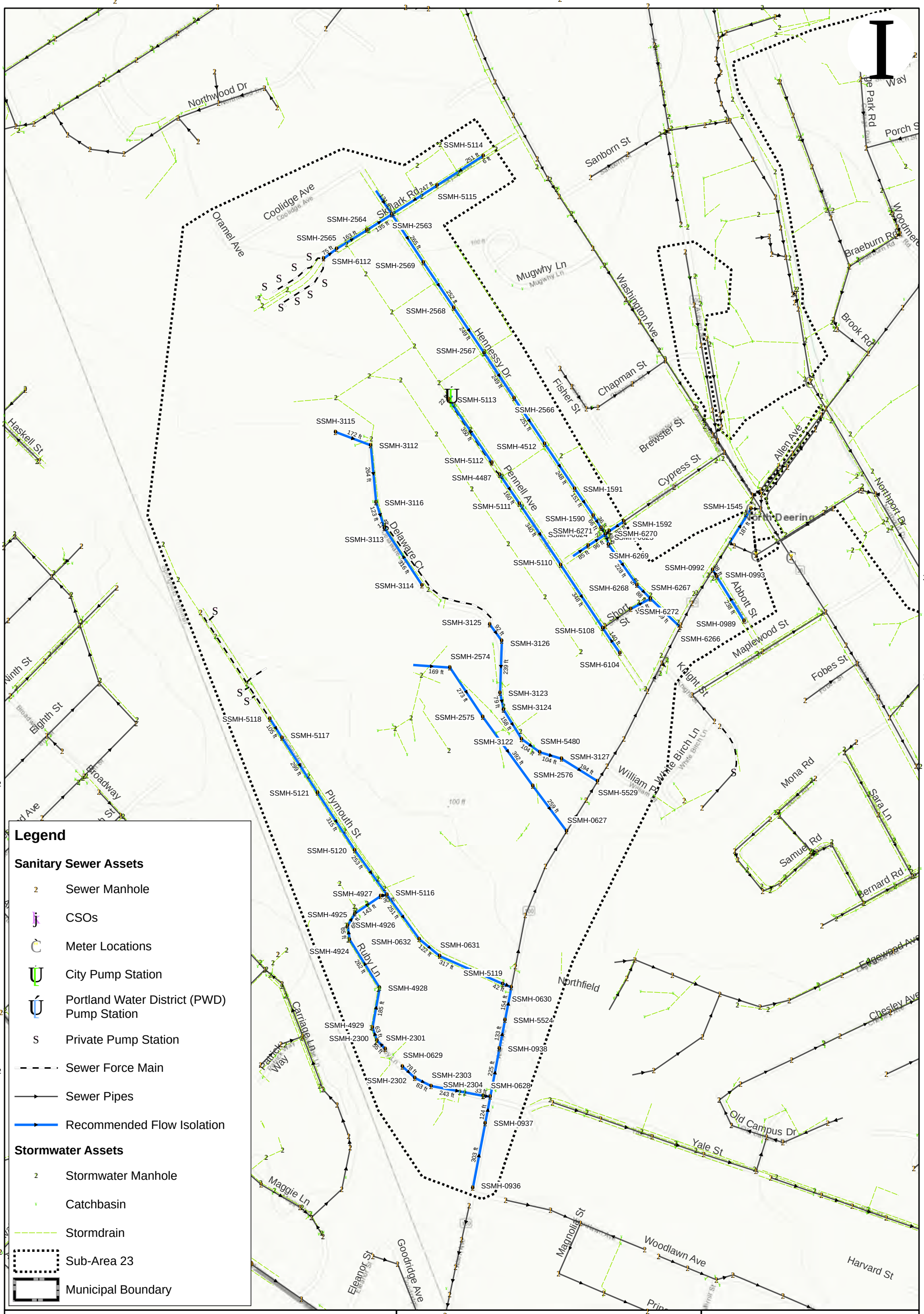
0 100 200 400 600 Feet

Total Recommended Pipe For Flow Isolation = 13,949 ft

Combined Sewers = 33 %

Infiltration Estimate = 4,127 GPD/IM

G:\GIS\Portland\2018 - 2019 SSES Maps\2019 Phase 2 Flow Isolation - Sub-Area 12.mxd



Legend

Sanitary Sewer Assets

- Sewer Manhole
- CSOs
- Meter Locations
- City Pump Station
- Portland Water District (PWD) Pump Station
- Private Pump Station
- Sewer Force Main
- Sewer Pipes
- Recommended Flow Isolation

Stormwater Assets

- Stormwater Manhole
- Catchbasin
- Stormdrain
- Sub-Area 23
- Municipal Boundary

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City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 23

Phase 2 - Flow Isolation Recommendations

May 2019

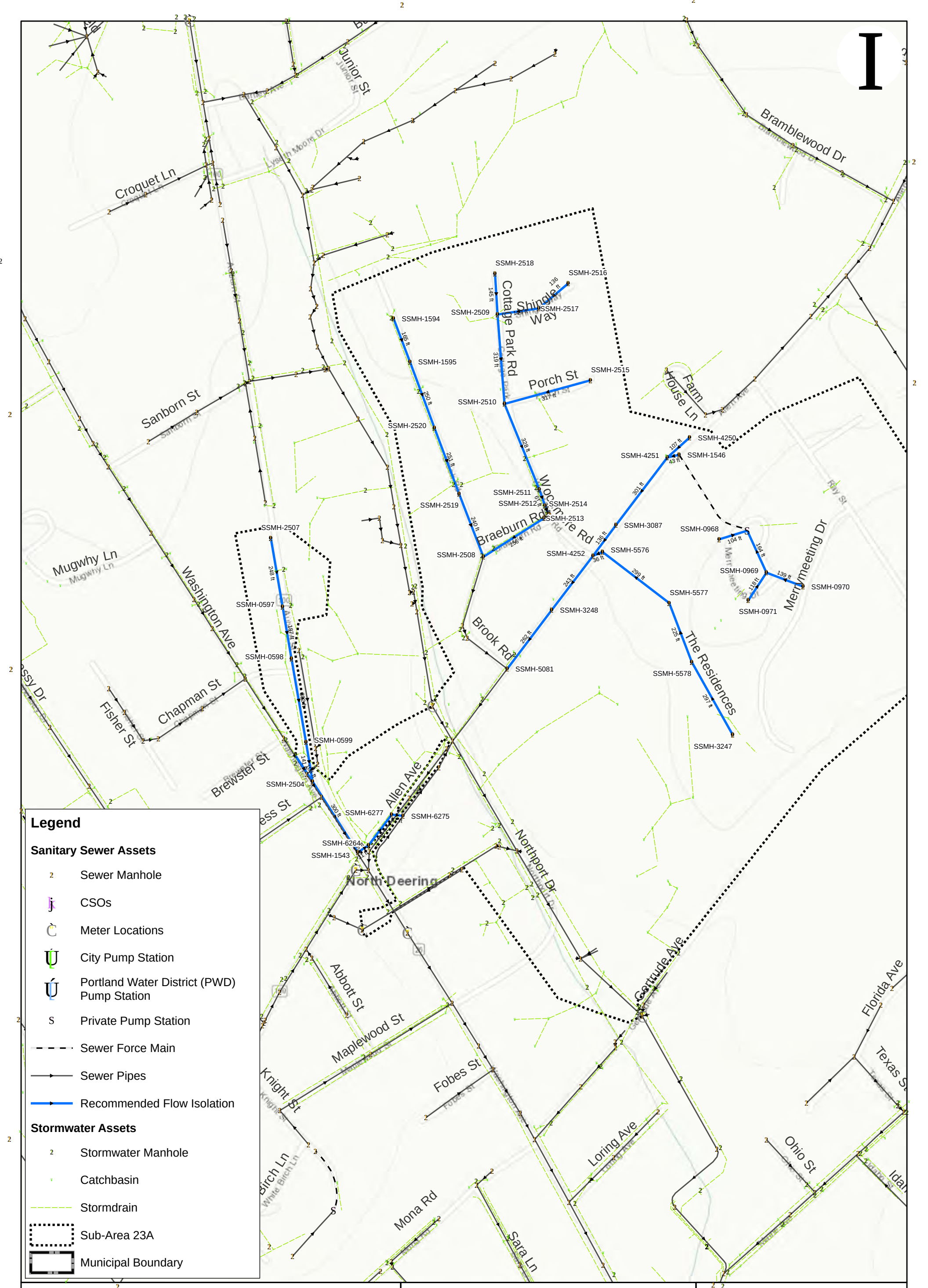
0 100 200 400 600 Feet

Total Recommended Pipe For Flow Isolation = 12,442 ft

Combined Sewers = 19 %

Infiltration Estimate = 4,081 GPD/IM

G:\GIS\Portland\2018 - 2019 SSES Maps\2019 Phase 2 Flow Isolation - Sub-Area 23.mxd



Legend

Sanitary Sewer Assets

- Sewer Manhole
- CSOs
- Meter Locations
- City Pump Station
- Portland Water District (PWD) Pump Station
- Private Pump Station
- Sewer Force Main
- Sewer Pipes
- Recommended Flow Isolation

Stormwater Assets

- Stormwater Manhole
- Catchbasin
- Stormdrain
- Sub-Area 23A
- Municipal Boundary

City of Portland, Maine

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Sub-Area 23A

Phase 2 - Flow Isolation Recommendations

May 2019

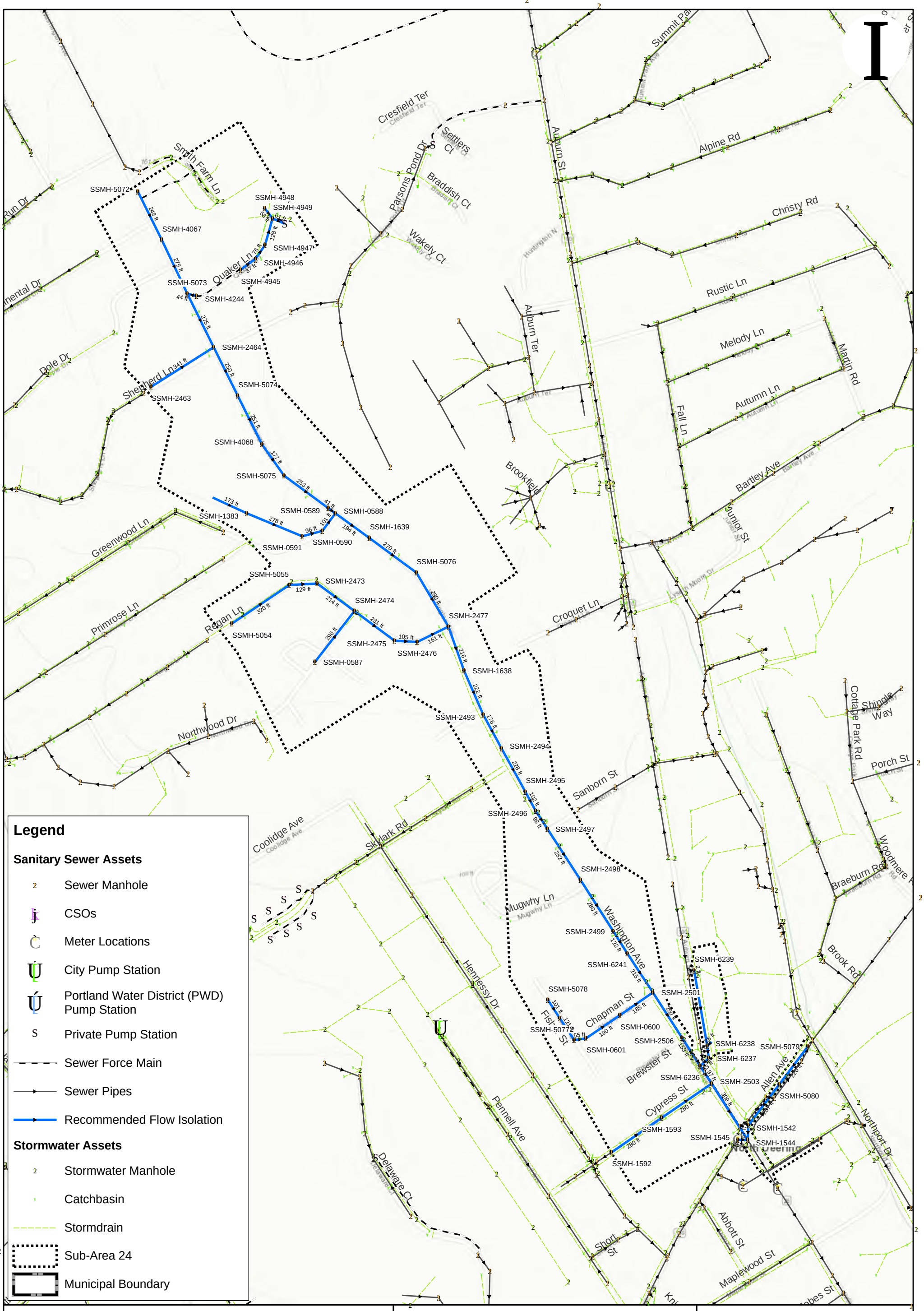
0 100 200 400 600 Feet

Total Recommended Pipe For Flow Isolation = 6,635 ft

Combined Sewers = 27 %

Infiltration Estimate = 7,255 GPD/IM

G:\GIS\Portland\2018 - 2019 SSES Maps\2019 Phase 2 Flow Isolation - Sub-Area 23A.mxd



City of Portland, Maine

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Sewer System

Evaluation Survey

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Sub-Area 24

Phase 2 - Flow Isolation Recommendations

May 2019

Total Recommended Pipe For Flow Isolation = 10,450 ft

Combined Sewers = 37 %

Infiltration Estimate = 5,919 GPD/IM

G:\GIS\Portland\2018 - 2019 SSES Maps\2019 Phase 2 Flow Isolation - Sub-Area 24.mxd

Legend

Sanitary Sewer Assets

- Sewer Manhole
- CSOs
- Meter Locations
- City Pump Station
- Portland Water District (PWD) Pump Station
- Private Pump Station
- Sewer Force Main
- Sewer Pipes
- Recommended Flow Isolation

Stormwater Assets

- Stormwater Manhole
- Catchbasin
- Stormdrain
- Sub-Area 24A
- Municipal Boundary

City of Portland, Maine

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Sub-Area 24A

Phase 2 - Flow Isolation Recommendations

May 2019

0 100 200 400 600 Feet

Total Recommended Pipe For Flow Isolation = 12,625 ft

Combined Sewers = 13 %

Infiltration Estimate = TBD

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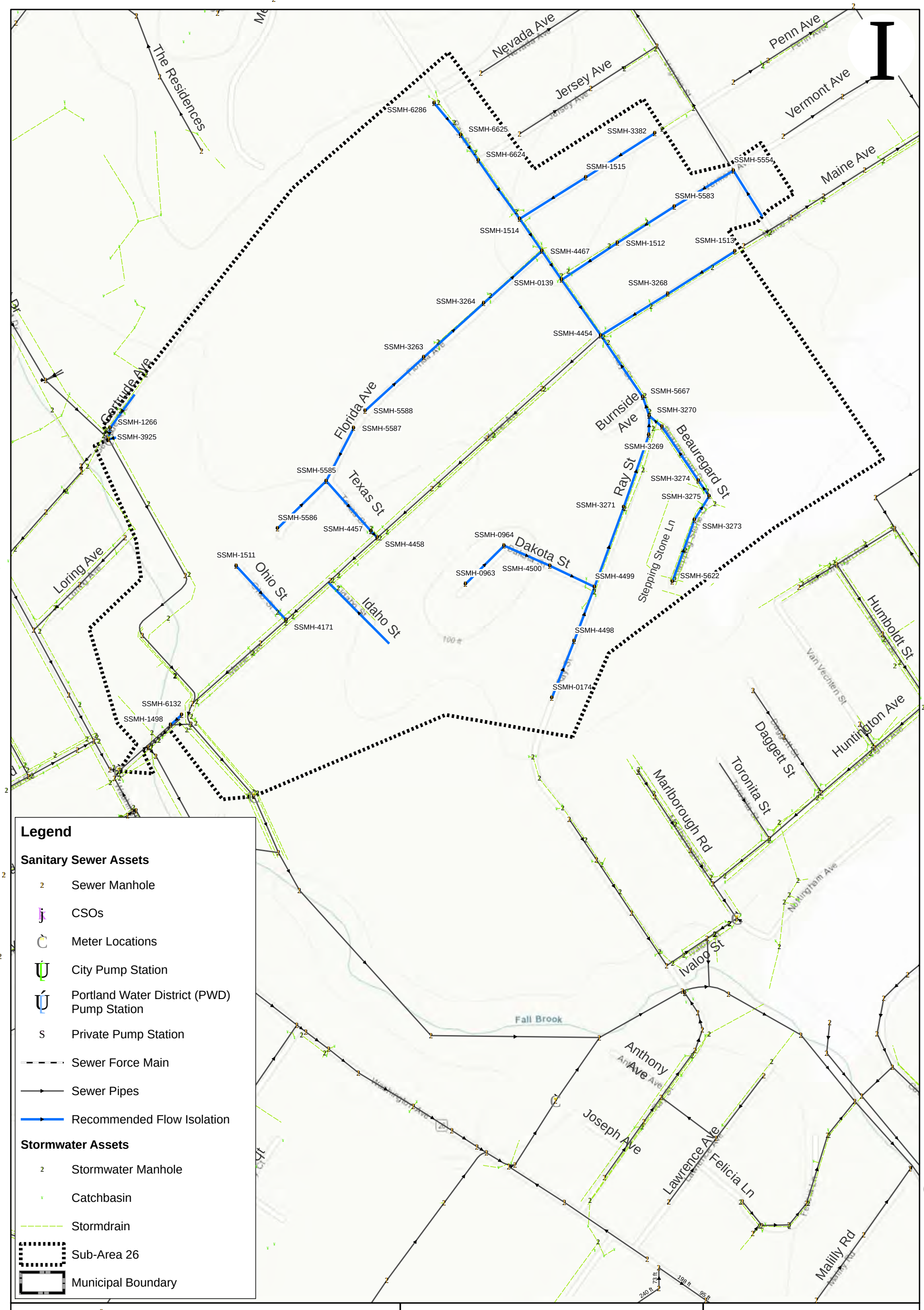

Legend

Sanitary Sewer Assets

- Sewer Manhole
- CSOs
- Meter Locations
- City Pump Station
- Portland Water District (PWD) Pump Station
- Private Pump Station
- Sewer Force Main
- Sewer Pipes
- Recommended Flow Isolation

Stormwater Assets

- Stormwater Manhole
- Catchbasin
- Stormdrain
- Sub-Area 26
- Municipal Boundary

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City of Portland, Maine

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Evaluation Survey

Sub-Area 26

Phase 2 - Flow Isolation Recommendations

May 2019

0 100 200 400 600 Feet

Total Recommended Pipe For Flow Isolation = 7,907 ft

Combined Sewers = 25 %

Infiltration Estimate = TBD

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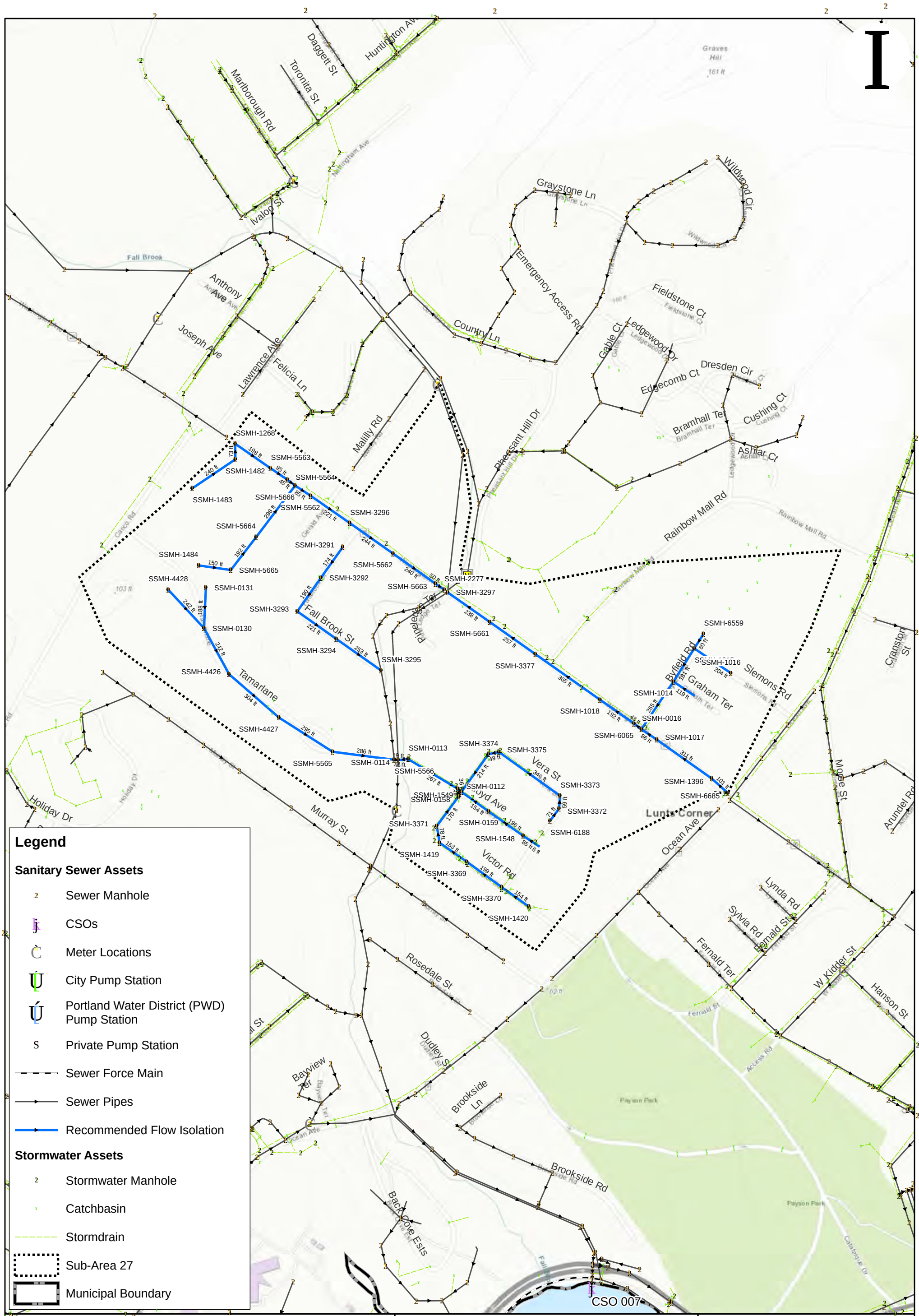

Legend

Sanitary Sewer Assets

- Sewer Manhole
- CSOs
- Meter Locations
- City Pump Station
- Portland Water District (PWD) Pump Station
- Private Pump Station
- Sewer Force Main
- Sewer Pipes
- Recommended Flow Isolation

Stormwater Assets

- Stormwater Manhole
- Catchbasin
- Stormdrain
- Sub-Area 27
- Municipal Boundary

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City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 27

Phase 2 - Flow Isolation Recommendations

May 2019

0 100 200 400 600 Feet

Total Recommended Pipe For Flow Isolation = 9,293 ft

Combined Sewers = 81 %

Infiltration Estimate = 6,806 GPD/IM

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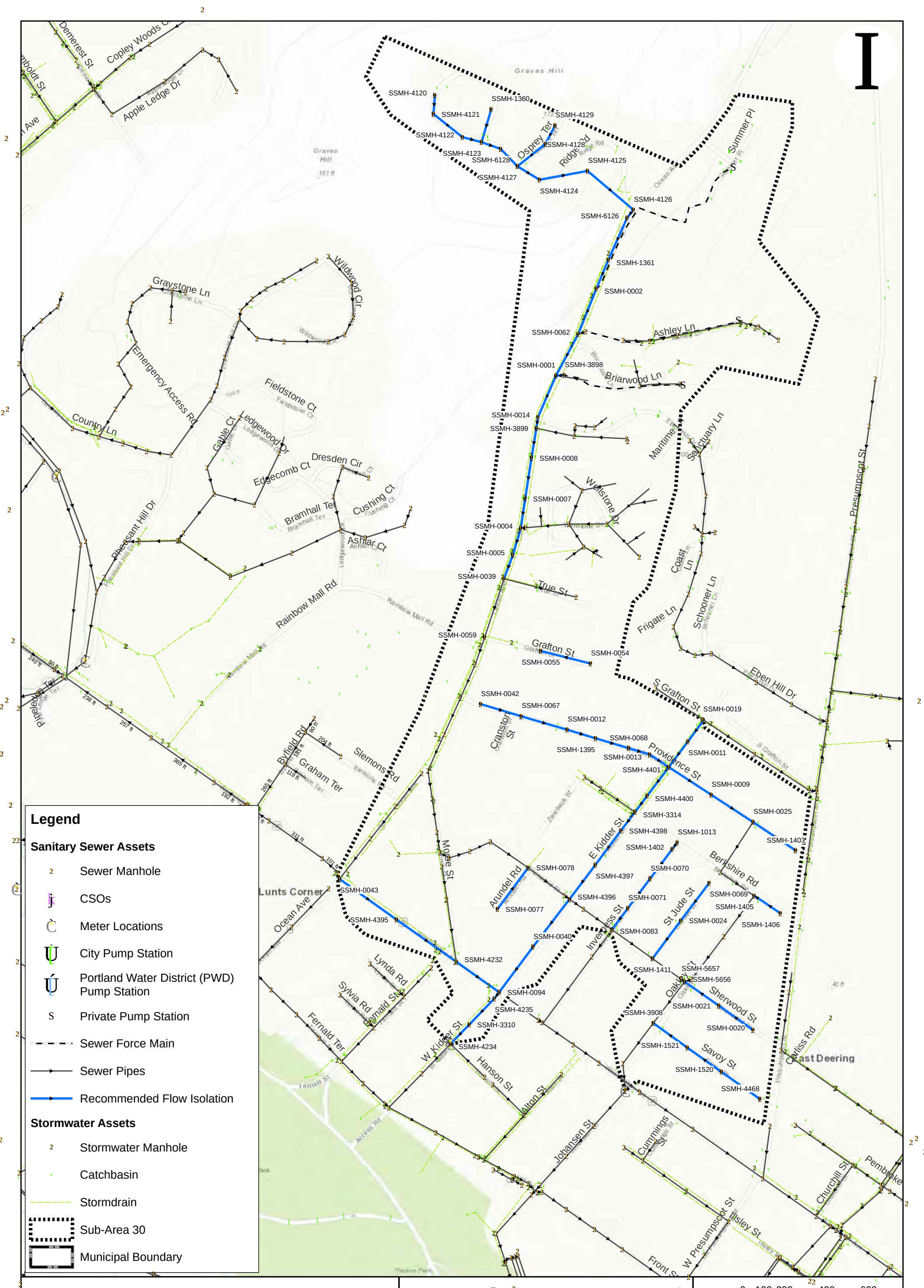

City of Portland, Maine

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Evaluation Survey

ARCADIS

Sub-Area 30

Phase 2 - Flow Isolation Recommendations

May 2019

Total Recommended Pipe For Flow Isolation = 10,778 ft

Combined Sewers = 50 %

Infiltration Estimate = 3,163 GPD/IM

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INFILTRATION AND INFLOW INVESTIGATIONS:

MANHOLE INSPECTION LOCATIONS

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 6

Phase 2.3 Manhole
Inspection Locations

0 200 400 600 800 Feet

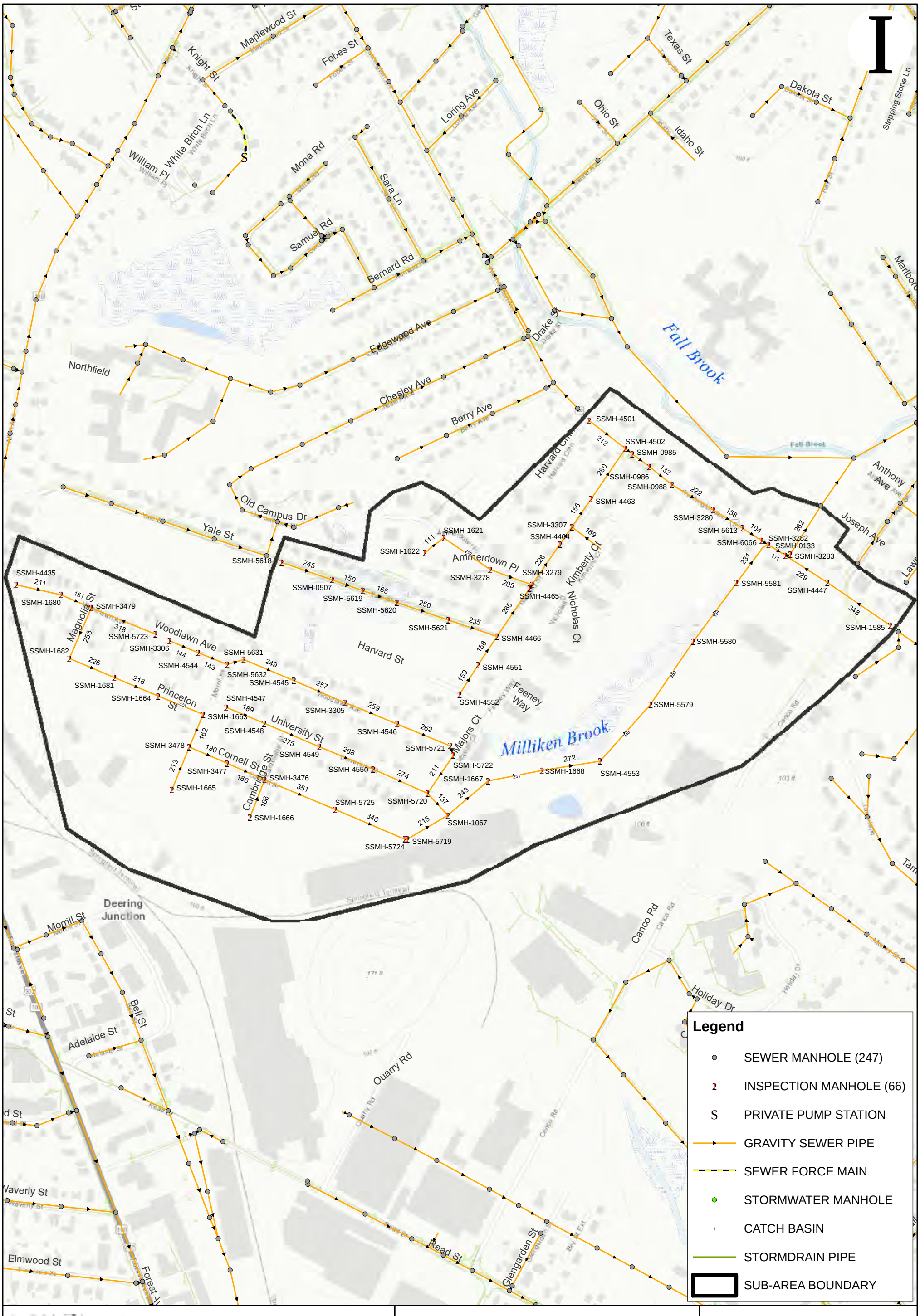
August 2019

ARCADIS Design & Consultancy for natural and built assets

Legend

- SEWER MANHOLE (263)
- INSPECTION MANHOLE (91)
- CITY PUMP STATION
- PRIVATE PUMP STATION
- GRAVITY SEWER PIPE
- SEWER FORCE MAIN
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

G:\GIS\Portland\2018 - 2019 SSES Maps\PHASE 3 - SSES\2019 MANHOLE INSPECTION SUB-AREA 06.mxd



City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 10

Phase 2.3 Manhole
Inspection Locations

August 2019

ARCADIS Design & Consultancy for natural and built assets

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I

Legend

- SEWER MANHOLE (164)
- INSPECTION MANHOLE (103)
- GRAVITY SEWER PIPE
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

City of Portland, Maine

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Evaluation Survey

Sub-Area 11

Phase 2.3 Manhole Inspection Locations

0 200 400 600 800 Feet

August 2019

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G:\GIS\Portland\2018 - 2019 SSES Maps\PHASE 3 - SSES\2019 MANHOLE INSPECTION SUB-AREA 11.mxd

City of Portland, Maine

Planning & Engineering

Sewer System

Evaluation Survey

Sub-Area 12

Phase 2.3 Manhole Inspection Locations

0 200 400 600 800 Feet

August 2019

ARCADIS Design & Consultancy for natural and built assets

Legend

- SEWER MANHOLE (345)
- INSPECTION MANHOLE (3)
- COMBINED SEWER OVERFLOW
- GRAVITY SEWER PIPE
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

SSMH-1118

SSMH-3594

SSMH-3593

Milliken Brook

Harvard St

Woodlawn Ave

Princeton St

University St

Cornell St

Cambridge St

Majors Ct

Feeney Way

Nicholas Ct

Fall Brook St

Tamarlane

Murray St

Holloway Dr

Colson Ct

Canco Rd

Quarry Rd

Springfield Terminal

Read St

Glengarden St

Bay St

Torrey St

Wellwood Rd

Kineo St

Frye St

Lorraine St

Hall St

Bayview Ter

Gleckler Rd

Wellington Rd

Carlyle Rd

Derby Rd

Walton St

Holly St

Mayland St

Sawyer St

Irving St

Bryant St

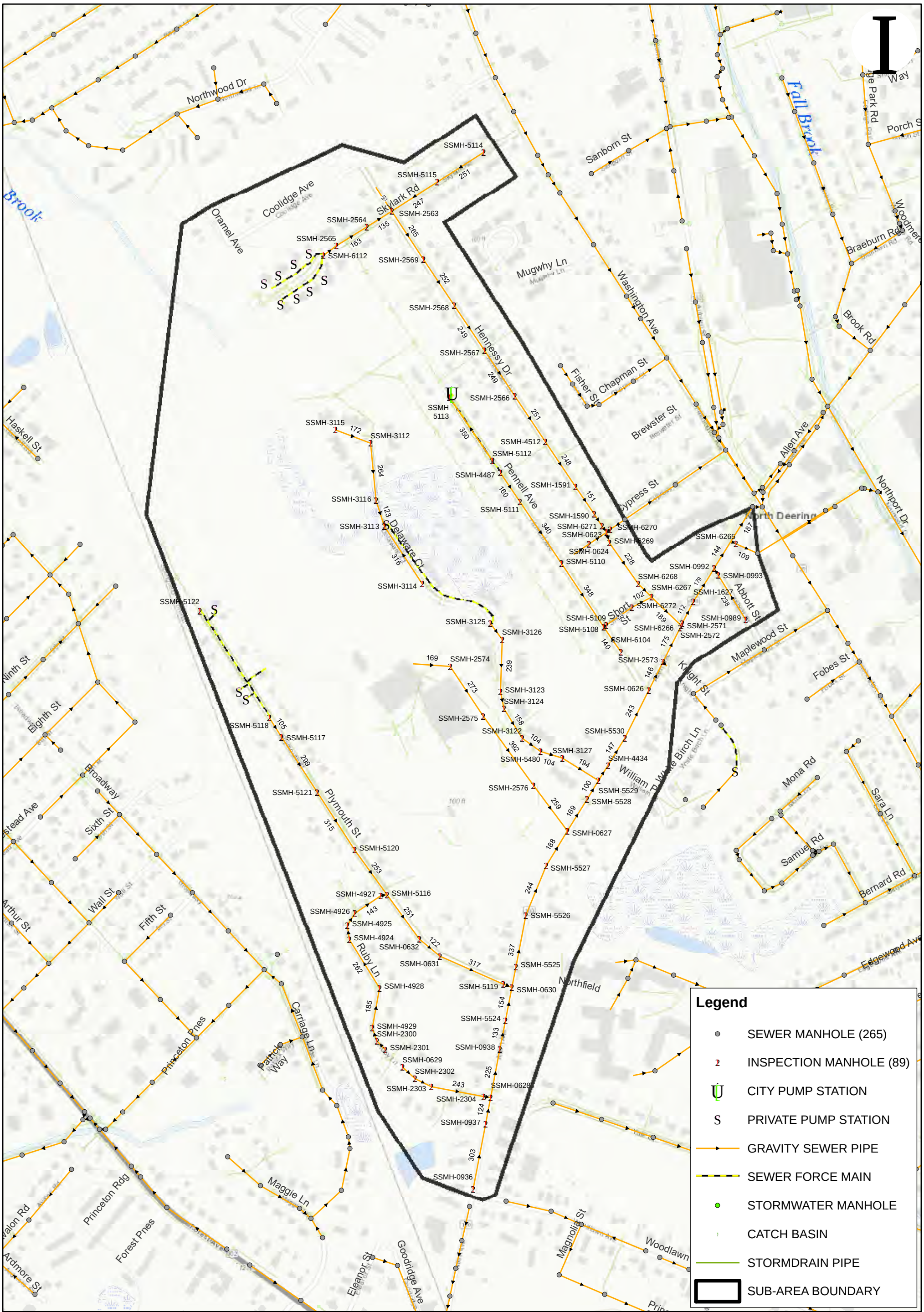
Parsons Rd

Austin St

Mackworth St

Pya Rd

G:\GIS\Portland\2018 - 2019 SSES Maps\PHASE 3 - SSES\2019 MANHOLE INSPECTION SUB-AREA 12.mxd



City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 23

Phase 2.3 Manhole
Inspection Locations

August 2019

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 - 2019 SSES Maps\PHASE 3 - SSES\2019 MANHOLE INSPECTION SUB-AREA 23.mxd

N

Auburn Ter
Melody Ln
Martin Rd
Autumn Ln
Fall Ln
Bartley Ave
Junior St
Sumac St
Round Stone Way
Meadow Ln
Bramblewood Dr
Croquet Ln
Racine Ave
Wyoming Ave
Kansas Ave
Sanborn St
Porch St
Farm House Ln
Cottage Park Rd
Shingle Way
Woodmere Rd
Braeburn Rd
Brook Rd
Washington Ave
Chapman St
Fisher St
Brewster St
Allen Ave
Cypress St
Northport Dr
Gertrude Ave
Maplewood St
Knight St
Abbott St
Short St
Fobes St
Loring Ave
Mona Rd
Sara Ln
Samuel Rd
Bernard Rd
Edgewood Ave
William Pl
White Birch Ln
Drake St
Ohio St
Idaho St
Texas St
Florida Ave
Ray St
Burnside Ave
Beauregard St
Virginia St
Nevada Ave
Jersey Ave
The Residences
Merrymeeting Dr
Tampa St
Yosemite Dr
Fall Brook
North Deering

SSMH-2518
SSMH-2516
SSMH-1594
SSMH-2517
SSMH 2509
SSMH-1595
SSMH-2515
SSMH-2510
SSMH-2520
SSMH-4250
SSMH-4251
SSMH-1546
SSMH-2519
SSMH 2511
SSMH-2512
SSMH-3087
SSMH-2507
SSMH-2508
SSMH 2513
SSMH-4252
SSMH-5576
SSMH-0597
SSMH-5577
SSMH-5083
SSMH-3248
SSMH-5082
SSMH-0598
SSMH-5081
SSMH-5578
SSMH-2544
SSMH-3247
SSMH-0599
SSMH-2545
SSMH-6276
SSMH-2504
SSMH-6277
SSMH-6275
SSMH-6264
SSMH-1543
SSMH-3018
SSMH-6378
SSMH-3017
SSMH-3016
SSMH-0991
SSMH-3015

Legend

- SEWER MANHOLE (343)
- INSPECTION MANHOLE (46)
- PRIVATE PUMP STATION
- GRAVITY SEWER PIPE
- SEWER FORCE MAIN
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

CITY OF PORTLAND, MAINE · RESURGAM

City of Portland, Maine

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Sewer System

Evaluation Survey

Sub-Area 23A

Phase 2.3 Manhole Inspection Locations

0 200 400 600 800 Feet

August 2019

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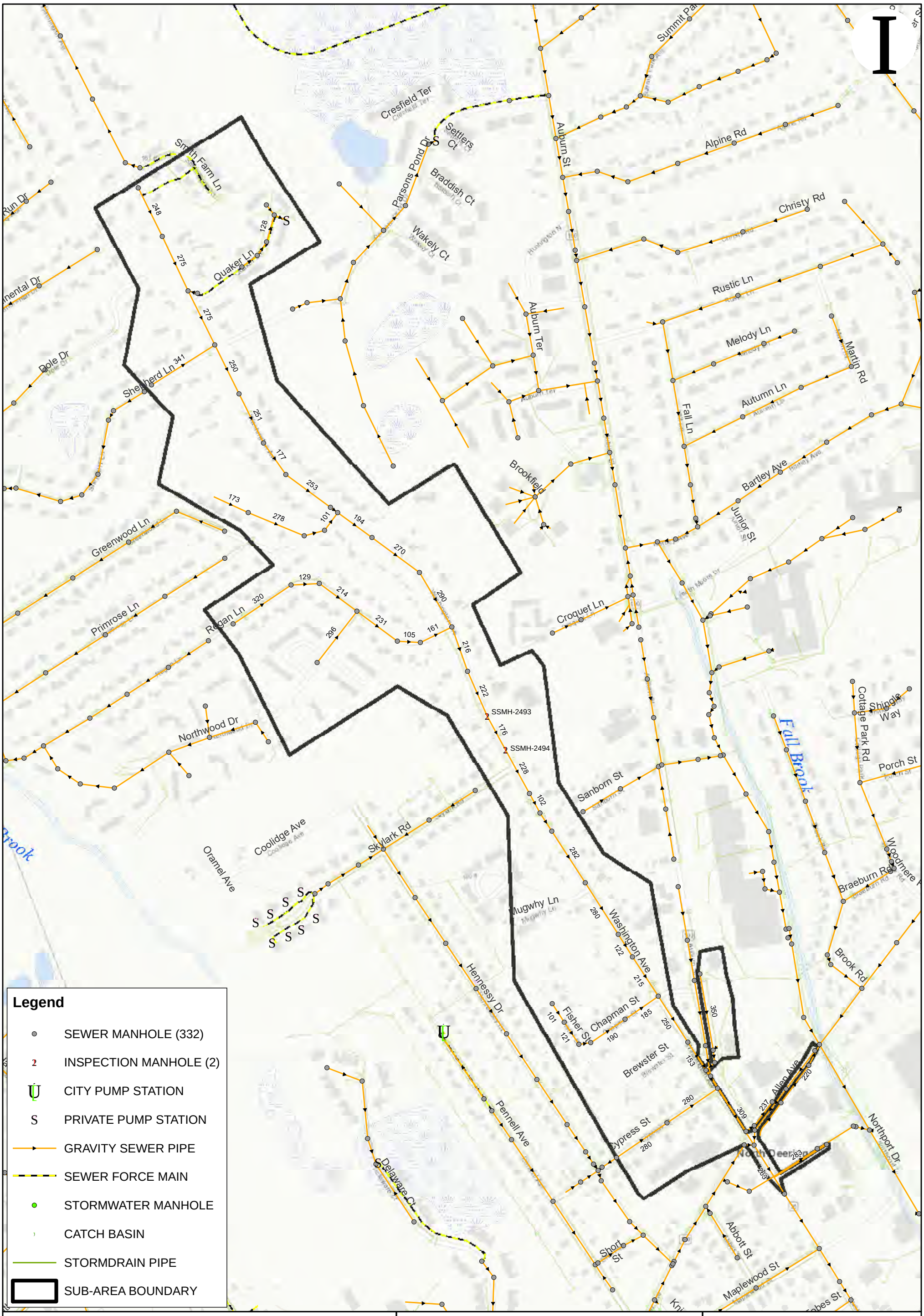

City of Portland, Maine

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Sewer System
Evaluation Survey

Sub-Area 24

Phase 2.3 Manhole
Inspection Locations

0 200 400 600 800 Feet

August 2019

ARCADIS Design & Consultancy for natural and built assets

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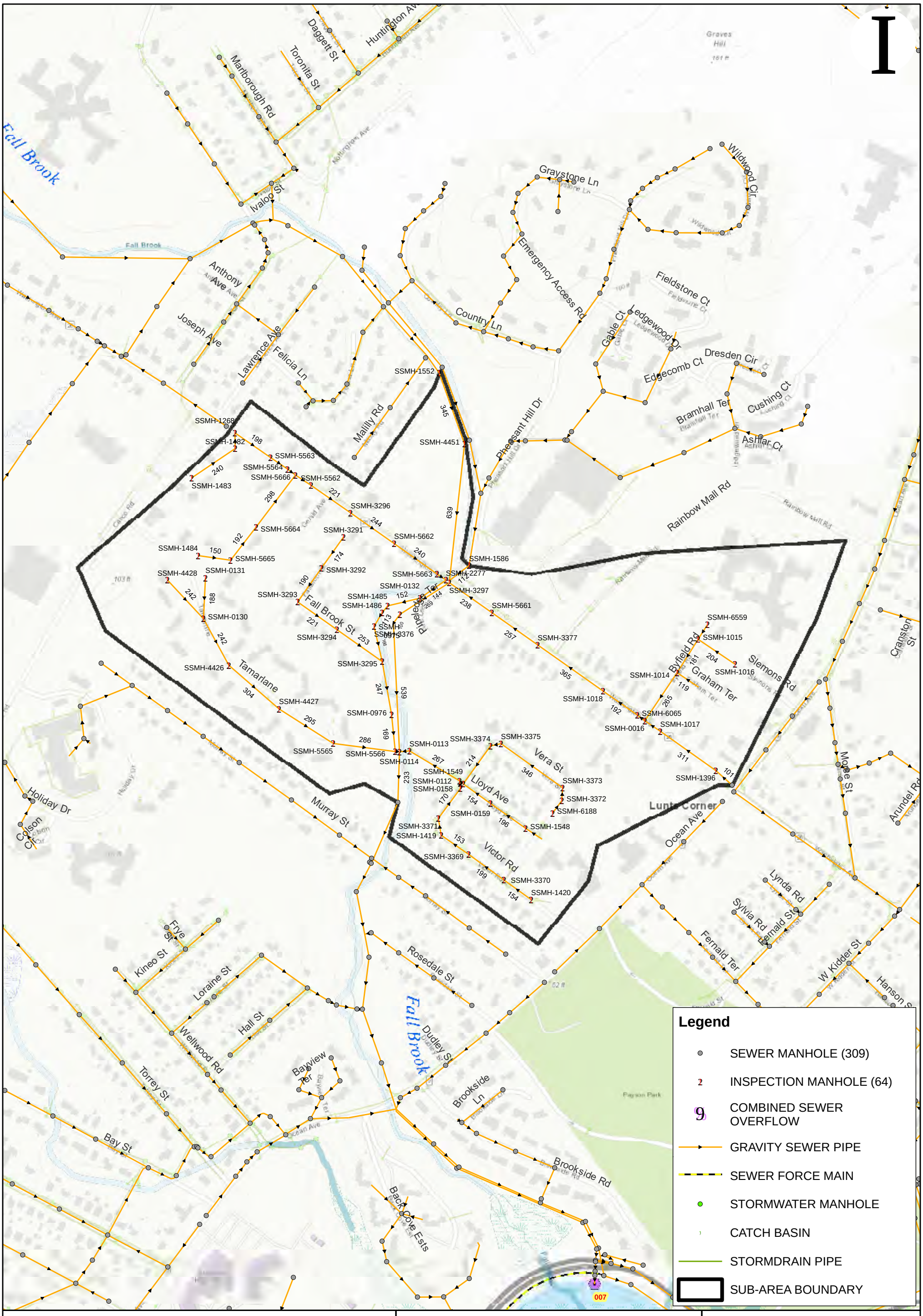
Fall Brook
Daggett St
Huntington Ave
Marlborough Rd
Toronita St
Graves Hill
Ivaloo St
Wildwood Cir
Graystone Ln
Emergency Access Rd
Fieldstone Ct
Ledgewood Dr
Gable Ct
Edgecomb Ct
Dresden Cir
Cushing Ct
Bramhall Ter
Ashlar Ct
Country Ln
Anthony Ave
Joseph Ave
Lawrence Ave
Felicia Ln
Mallily Rd
Pheasant Hill Dr
Rainbow Mall Rd
SSMH-1552
SSMH-1268
SSMH-1482
SSMH-5563
SSMH-5564
SSMH-5666
SSMH-5562
SSMH-1483
SSMH-4451
SSMH-1586
SSMH-2277
SSMH-3297
SSMH-5661
SSMH-3296
SSMH-5664
SSMH-3291
SSMH-5662
SSMH-1484
SSMH-5665
SSMH-3292
SSMH-4428
SSMH-0131
SSMH-5663
SSMH-0132
SSMH-3293
SSMH-1485
SSMH-1486
SSMH-3376
SSMH-0130
SSMH-3294
SSMH-3295
SSMH-4426
SSMH-4427
SSMH-0976
SSMH-5565
SSMH-5566
SSMH-0113
SSMH-0114
SSMH-3374
SSMH-3375
SSMH-1549
SSMH-0112
SSMH-0158
SSMH-3373
SSMH-3372
SSMH-6188
SSMH-0159
SSMH-1548
SSMH-3371
SSMH-1419
SSMH-3369
SSMH-3370
SSMH-1420
SSMH-3377
SSMH-6559
SSMH-1015
SSMH-1016
SSMH-1014
SSMH-1018
SSMH-6065
SSMH-0016
SSMH-1017
SSMH-1396
Byfield Rd
Graham Ter
Slemons Rd
Cranston St
Tamarlane
Fall Brook St
Pinebrook Ter
Vera St
Lloyd Ave
Victor Rd
Murray St
Holiday Dr
Colson Cir
Ocean Ave
Lynda Rd
Sylvia Rd
Fernald St
Fernald Ter
W Kidder St
Hanson St
Morse St
Arundel Rd
Lunts Corner
Kineo St
Frye St
Loraine St
Hall St
Wellwood Rd
Torrey St
Bay St
Bayview Ter
Rosedale St
Dudley St
Brookside Ln
Brookside Rd
Back Cove Ests
Payson Park
007
198
240
298
221
244
192
150
242
188
190
174
253
221
304
295
286
247
339
169
267
214
233
346
170
154
196
153
199
154
345
639
112
144
238
257
365
181
204
119
265
192
311
101
Legend
SEWER MANHOLE (309)
INSPECTION MANHOLE (64)
COMBINED SEWER OVERFLOW
GRAVITY SEWER PIPE
SEWER FORCE MAIN
STORMWATER MANHOLE
CATCH BASIN
STORMDRAIN PIPE
SUB-AREA BOUNDARY
City of Portland, Maine
Planning & Engineering
Sewer System
Evaluation Survey
Sub-Area 27
Phase 2.3 Manhole
Inspection Locations
0 200 400 600 800
Feet
July 2019
ARCADIS
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G:\GIS\Portland\2018 - 2019 SSES Maps\PHASE 3 - SSES\2019 MANHOLE INSPECTION SUB-AREA 27.mxd

City of Portland, Maine

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Sub-Area 30

Phase 2.3 Manhole
Inspection Locations

0 200 400 600 800 Feet

August 2019

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Legend

- SEWER MANHOLE (294)
- INSPECTION MANHOLE (3)
- COMBINED SEWER OVERFLOW
- PORTLAND WATER DISTRICT PUMP STATION
- PRIVATE PUMP STATION
- GRAVITY SEWER PIPE
- SEWER FORCE MAIN
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

G:\GIS\Portland\2018 - 2019 SSES Maps\PHASE 3 - SSES\2019 MANHOLE INSPECTION SUB-AREA 30.mxd

INFILTRATION AND INFLOW INVESTIGATIONS:

SMOKE TESTING LOCATIONS

City of Portland, Maine

Planning & Engineering

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Evaluation Survey

Sub-Area 1

Phase 2.3 Smoke Test Locations

September 2019

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Legend

- SEWER MANHOLE
- PRIVATE PUMP STATION
- SMOKE TEST PIPE
- SEWER GRAVITY
- SEWER FORCE MAIN
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

0 200 400 600 800 Feet

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City of Portland, Maine

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Evaluation Survey

Sub-Area 2

Phase 2.3 Smoke
Test Locations

September 2019

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City of Portland, Maine

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Evaluation Survey

Sub-Area 4

Phase 2.3 Smoke
Test Locations

0 200 400 600 800 Feet

September 2019

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Legend

- SEWER MANHOLE
- CITY PUMP STATION
- PRIVATE PUMP STATION
- SMOKE TEST PIPE
- SEWER GRAVITY
- SEWER FORCE MAIN
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

G:\GIS\Portland\2018 - 2019 SSES Maps\PHASE 3 - SSES\2019 SMOKE TESTING SUB-AREAS.mxd

I

Liberty Rd

84 ft

Falmouth Spur

Falmouth Spur

Gray Rd

Armstrong Hts

Alice Ct

Hope Ln

Basket Ln

Hope Ave

Garsoe Dr

Patricia Ln

Caron St

Carter St

Panoramic View St

Longview Dr

Crestview Dr

Pamela Rd

Sturdivant Dr

Clapboard Rd

Whaleboat Rd

Overset Rd

Whitehead Cir

Abby Ln

Quiet Ln

Curtis Rd

Old Barn Ln

Frost Hill Rd

Wendy Way

Alice St

Hillside Rd

Georgia St

Haverlys Way

Clayton St

Kenneth St

Jackson St

Summit St

Summit Park Ave

Talbot St

Juniper St

Alpine Rd

Auburn St

Settlers Ct

Cresfield Ter

Olde

Legend

- SEWER MANHOLE
- CITY PUMP STATION
- PRIVATE PUMP STATION
- SMOKE TEST PIPE
- SEWER GRAVITY
- SEWER FORCE MAIN
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

0 200 400 600 800 Feet

City of Portland, Maine

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Sub-Area 7

Phase 2.3 Smoke Test Locations

September 2019

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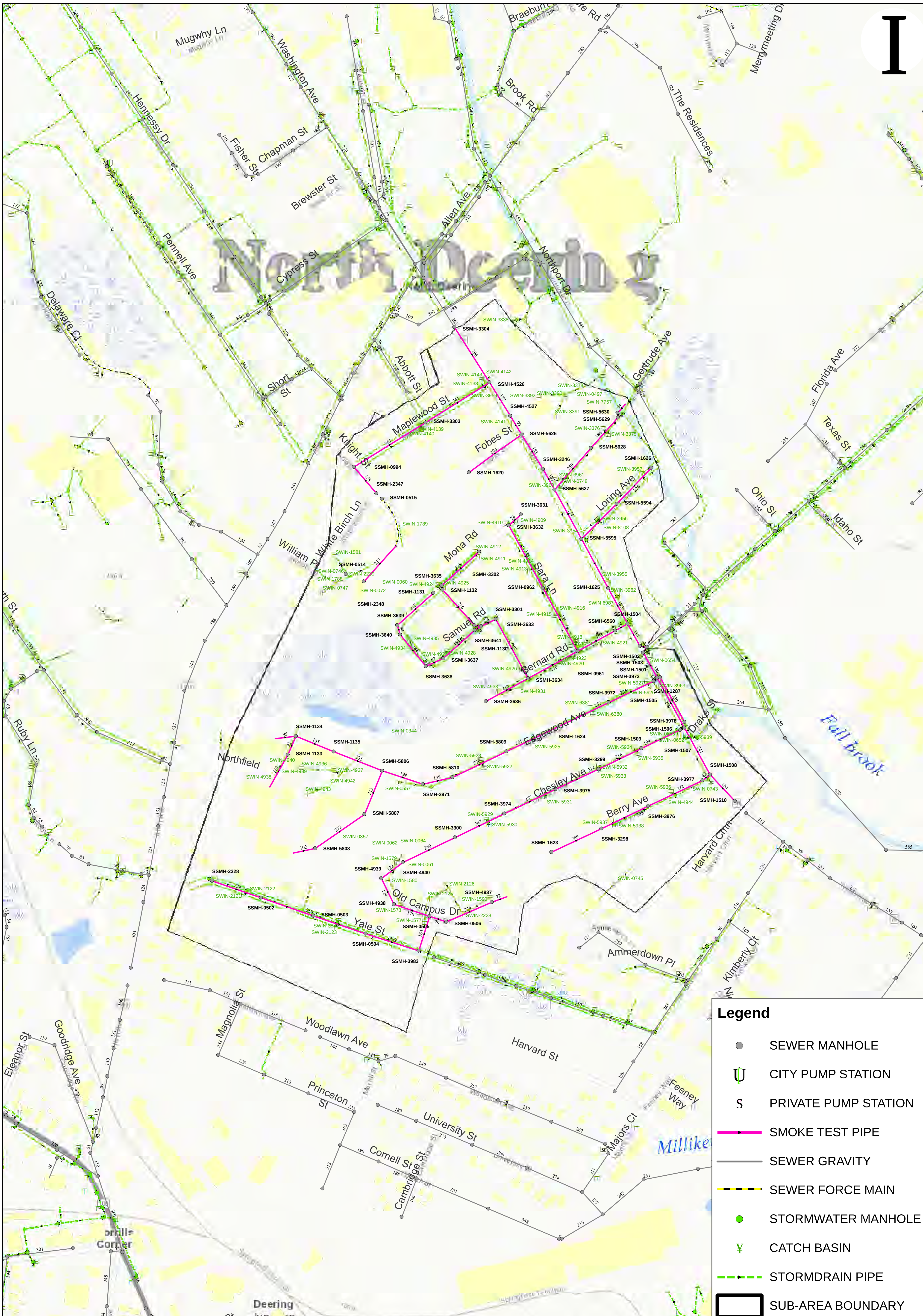

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 24A

Phase 2.3 Smoke
Test Locations

September 2019

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G:\GIS\Portland\2018 - 2019 SSES Maps\PHASE 3 - SSES\2019 SMOKE TESTING SUB-AREAS.mxd

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 25

Phase 2.3 Smoke
Test Locations

September 2019

ARCADIS Design & Consultancy for natural and built assets

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I

Legend

- SEWER MANHOLE
- COMBINED SEWER OVERFLOW
- PORTLAND WATER DISTRICT PUMP STATION
- PRIVATE PUMP STATION
- SMOKE TEST PIPE
- SEWER GRAVITY
- SEWER FORCE MAIN
- STORMWATER MANHOLE
- CATCH BASIN
- STORMDRAIN PIPE
- SUB-AREA BOUNDARY

0 200 400 600 800 Feet

City of Portland, Maine
Planning & Engineering
Sewer System
Evaluation Survey

Sub-Area 31

Phase 2.3 Smoke Test Locations

September 2019

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City of Portland, Maine

CITY-WIDE INFILTRATION AND INFLOW PROGRAM

Phase 2 Identification Of Major Infiltration And Inflow Sources

JUNE 2019

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1 Introduction 1
1.1 Scope of Work 1
1.2 Collection System Background and Description 1
1.2.1 Sub-Area Delineation 3
2 Phase 1 Flow Metering Programs 5
2.1 Methodology 5
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2.3 2019 Flow Metering Program 6
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APPENDICES

Appendix A Phase 1 – Investigation of Flows – 2018 Monitoring Report

ACRONYMS AND ABBREVIATIONS

BSF	Base Sanitary Flow
CCTV	Closed-Circuit Television
CMOM	Capacity Management Operation and Maintenance
GPDIM	Gallons Per Day Per Inch Diameter Mile
GWI	Groundwater Infiltration
I/I	Infiltration and Inflow
LF	Linear Feet
NASSCO	Nation Association of Sewer Service Companies
PACP	Pipeline Assessment Certification Program
RDII	Rainfall Derived Infiltration and Inflow
RII	Rainfall Induced Infiltration
SSO	Sanitary Sewer Overflow
WWTF	Wastewater Treatment Facility

1 INTRODUCTION

1.1 Scope of Work

On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included Infiltration and Inflow (I/I) Reduction Measures, as well as continued improvements to the City's Collection System Mapping by supplementing and correcting data gaps in their GIS system as they are identified. This I/I Reduction Measures Program will address those recommendations and set the course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from their collection system under three Phases of work:

Phase 1 – Investigation and Quantification of I/I Flows

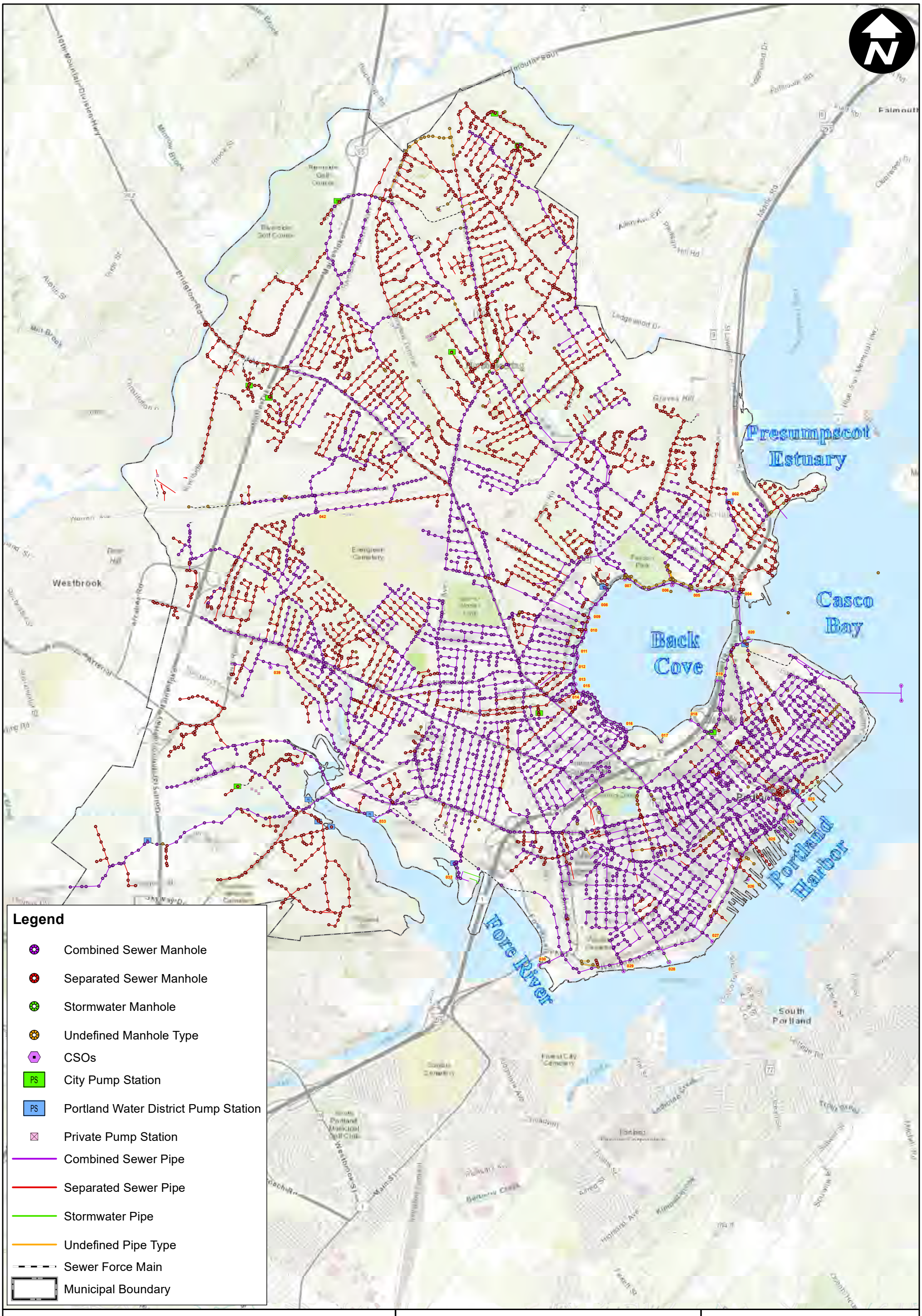
Phase 2 – Identification of Major I/I Sources

Phase 3 – Schedule of Target Opportunities for Cost-effective Mitigation

This report includes summarized findings from the Phase 1 and the activities completed and planned under Phase 2.

1.2 Collection System Background and Description

The City of Portland's wastewater collection system, shown on Figure 1, contains approximately 240 miles of separated and combined sewers and 24 pump stations, 9 of which are owned and operated by the City. The collection system and pump stations convey wastewater to the East End Wastewater Treatment Facility (WWTF) in Portland, which is owned and operated by the Portland Water District.



City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Phase 2 Identification of Major I/I Sources

Citywide Collection System

0 0.25 0.5 0.75 1 Miles

Figure 1

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 - 2019 SSES Maps\Phase 2 Technical Memo\Figure 1 - Citywide Collection System Map.mxd

June 2019

1.2.1 Sub-Area Delineation

Sub-areas were delineated during Phase 1 of the I/I Reduction Measures Program. 20 Sub-areas were assessed as part of the 2018 flow metering program, and an additional 15 Sub-areas were assessed as part of the 2019 flow metering program. Each Sub-area was created to contain approximately 20,000 linear feet (LF) of pipe or less, as is optimal for isolating and identifying I/I sources. Due to ongoing sewer separation projects and the extent of combined sewers in the downtown area of Portland, efforts were focused on the north and west areas of the City. Prioritization of meter areas was based on recent and on-going flow monitoring and available CCTV data, historic and recently discovered problem areas where backups, surcharging and overflows occurred, areas tributary to known problem areas, areas where the hydraulic model identified potential I/I capacity issues, and areas near water bodies that could be contributing I/I to the system. Figure 2 shows a flow vector diagram for the 35 Sub-areas included in the metering program. The flow vector diagram is a visual representation of tributary flow within the system. Sub-areas delineated and included in the 2018 and 2019 metering program are shown on Figure 3.

Figure 2: Flow Vector Diagram

Sub-Area 7
Sub-Area 5
Sub-Area 6
Sub-Area 28
Sub-Area 2
Sub-Area 25
Sub-Area 8
Sub-Area 24
Sub-Area 4
Sub-Area 23A
Sub-Area 1
Sub-Area 3
Sub-Area 23
Sub-Area 26
Sub-Area 9
Sub-Area 24A
Sub-Area 26A
Sub-Area 27A
Sub-Area 13
Sub-Area 10
Sub-Area 30
Sub-Area 27
Sub-Area 31
Sub-Area 11
Sub-Area 12
Sub-Area 14
Sub-Area 15
Sub-Area 16
Sub-Area 20
Sub-Area 17
Sub-Area 19
Sub-Area 18
Sub-Area 29
Sub-Area 21
Sub-Area 22

Presumpscot Estuary
Casco Bay
Back Cove
Fore River
Portland Harbor
South Portland

Legend

- Combined Sewer Manhole
- Separated Sewer Manhole
- Stormwater Manhole
- Undefined Manhole Type
- CSOs
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- Combined Sewer Pipe
- Separated Sewer Pipe
- Stormwater Pipe
- Undefined Pipe Type
- Sewer Force Main
- 2018 Sub-Area
- 2019 Sub-Area
- Municipal Boundary

City of Portland, Maine

Planning & Engineering
Sewer System
Evaluation Survey

Phase 2 Identification of Major I/I Sources

Sub-Area Delineations

0 0.25 0.5 0.75 1 Mi

Figure 3

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 - 2019 SSES Maps\Phase 2 Technical Memo\Figure 3 - Sub-Area Delineations.mxd

June 2019

2 PHASE 1 FLOW METERING PROGRAMS

2.1 Methodology

There are four major components of wastewater flow in a sanitary sewer system, base sanitary flow (BSF), groundwater infiltration (GWI), rainfall induced infiltration (RII), and Inflow. The Environmental Protection Agency's "Guide for Estimating Infiltration and Inflow", June 2014, provides the following definitions:

Base Sanitary Flow (BSF) – The portion of wastewater which includes domestic, commercial, institutional, and industrial sewage and specifically excludes infiltration and inflow.

Groundwater Infiltration (GWI) – Measured during average dry weather flow period. The average of the low nighttime flows (midnight to 6am) per day for the same time period, minus significant industrial or commercial nighttime users

Rainfall Induced Infiltration (RII) – The short-term increase in infiltration which is the result of a rain event. Rainfall-induced infiltration is a portion of delayed inflow.

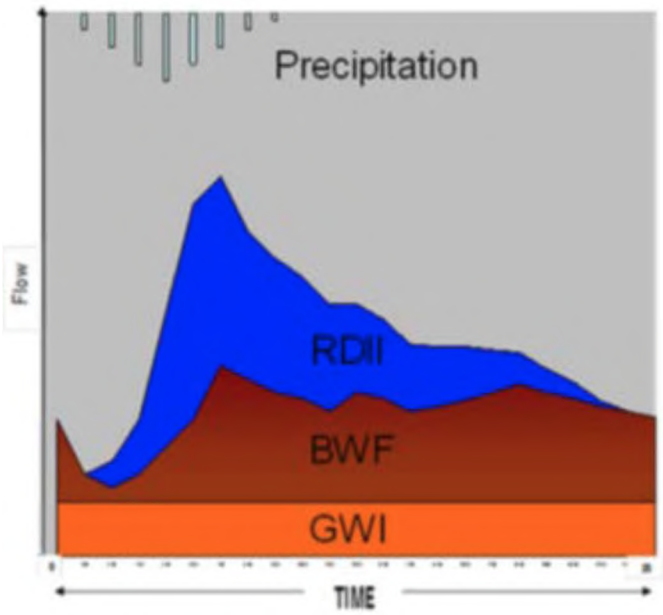
Inflow – Water other than sanitary wastewater that enters a sewer system from sources such as roof leaders, cellar/foundation drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, and catch basins. Inflow does not include infiltration.

Delayed Inflow Volume – The portion of total inflow which is generated from indirect connections to the collection system or connections which produce inflow after a significant time delay from the beginning of a storm. Delayed inflow sources include sump pumps, foundation drains, indirect sewer/drain cross connections, etc. Rainfall-induced infiltration cannot be distinguished from delayed inflow and is therefore included as part of delayed inflow. Delayed inflow sources have a gradual impact on the collection system and flow decreases gradually upon conclusion of the rainfall event, and after peak inflow caused by direct connections.

Furthermore, Inflow and Delayed Inflow can be group into a category of rainfall derived infiltration and inflow (RDII – commonly referred to as the total inflow volume).

Figure 4 highlights the three key components of wastewater flow during a precipitation event. The GWI (orange line) remains constant and is not impacted by precipitation, the BWF (brown line) is a diurnal pattern based on actual usage and not impacted by precipitation, and the RDII (blue line) shows a very clear increase in flows as a direct response to precipitation that dissipates after the completion of the storm.

Figure 4: Components of Wastewater Flow During Wet Weather (US EPA, 2007)



As part of Phase 1 of the Inflow and Infiltration Program two flow metering programs were conducted in the consecutive springs of 2018 and 2019. These flow metering programs were intended to isolate sub-areas of the City's collection system that contain excessive GWI rates and high RDII. GWI over 4000 gallons per day per inch diameter mile (GPDIM) is considered excessive for any given sub-area of pipe and should be considered for corrective action. Mitigation of RDII in a separated system is typically to address subsets within a study area that comprise the top 80% of the total inflow volume in the study area, however, because the City's collection system is still combined, rain induced infiltration will be used in assessing areas with excessive inflow which is not related to designed stormwater collection.

2.2 2018 Flow Metering Program

A 16-week flow metering program was conducted in 2018 that monitored flows in 20 sub-areas within the City's collection system. As a result of the 2018 flow monitoring program, high rates of infiltration were identified in Sub-areas 4, 16, 18, 20, and 29, and high RDII was identified in Sub-areas 13, 22, 18, 20, 16, 29, 19, 14, 9, 7, 8, 15, 21.

A copy of the Phase 1 Investigation of Flows – 2018 Monitoring report is included as Appendix A of this report.

2.3 2019 Flow Metering Program

The 2019 flow monitoring program was conducted in 15 sub-areas for 12-weeks of continuous monitoring. Flow meters were installed on February 15, 2019 and removed on May 31, 2019. Data collection for all sub-areas began early March and continued for 12 consecutive weeks. Data was

recorded for collection system flows, rainfall, and groundwater by enlisting 20 telemetry flow meters, 2 rain gauges, and 2 groundwater gauges, respectively.

The 2019 flow metering program was conducted following the same methodology of the 2018 flow metering program. A traditional infiltration and inflow analysis will be conducted in the separated portion of the collection system, while a modified approach will be used in the combined portion of the system. In sub-areas where 75% or more of the collection system is separated, the I/I analysis will focus on identifying groundwater infiltration, rainfall-inducted infiltration and direct inflow. In the combined areas, the I/I analysis will focus on identifying groundwater infiltration and rainfall-inducted infiltration (delayed inflow).

Table 1 includes a summary of the total pipeline footage and the percentage of combined pipes and the approach method for each sub-area.

Table 1: Sub-area Characteristics

Sub-area	Total Footage (LF)	Percent Combine0d (%)	Approach
6	15,241	13%	Traditional
10	13,417	77%	Modified
11	21,085	87%	Modified
12	20,125	33%	Modified
23	15,048	19%	Traditional
23A	10,072	27%	Modified
24	11,037	37%	Modified
24A	15,091	13%	Traditional
25	16,547	7%	Traditional
26	11,664	25%	Traditional
26A	8,109	62%	Modified
27	12,520	81%	Modified
27A	9,922	26%	Modified
30	20,905	50%	Modified
31	22,861	15%	Traditional

2.3.1 Results and Findings

Table 2 identifies the average daily flow (ADF), peak daily flow (PDF) and peak hourly flow (PHF) measured for each of the fifteen sub-areas. Average daily flow is calculated by summing all metered flows and dividing by the duration of the metering period. Peak daily flow is the maximum daily flow measured over 24-hours throughout the metering period. Peak hourly flow is the maximum 1-hr flow rate measured. Peaking factor is calculated by dividing the peak hourly flow by the average daily flow for each sub-area. Table 2 shows the net average daily flow within each sub-area itself (with upstream tributary flows subtracted out), net peak hourly flow and the hourly peaking factor.

Table 2: Flow Metering Results – ADF, PDF, PHF and Hourly Peaking Factor

Sub-area	Average Daily Flow (GPD)	Peak Daily Flow (GPD)	Peak Hourly Flow (GPD	Hourly Peaking Factor
6	565,514	1,605,250	735,837	3
10	313,380	920,000	772,000	3
11	499,056	4,065,000	1,362,000	8
12	484,472	2,211,000	1,063,000	5
23	244,075	1,541,000	535,000	6
23A	494,695	1,622,000	762,000	3
24	205,434	870,000	437,000	4
24A*	-	-	-	-
25	101,759	1,381,000	1,266,000	14
26*	-	-	-	-
26A	255,792	1,756,000	735,000	7
27	470,204	1,644,000	1,157,000	3
27A	84,469	267,000	140,000	3
30	380,652	3,015,000	1,250,000	8
31	199,308	1,629,000	470,000	8

*Data is still being reviewed and analyzed. Finalized values will be incorporated in the Final 2019 Flow Metering Report.

Preliminary data was used to produce a generalized assessment of sub-areas with excessive infiltration and provide sub-areas in which flow isolation could be conducted prior to the completion of flow metering.

Preliminary data indicated high infiltration in Sub-areas 6, 23A, 27, 11, 24, 10, 12, 30 and 23. Inflow analyses in these sub-areas will be conducted upon completion of the 2019 flow metering program.

Final infiltration and inflow analyses have not been completed for the 2019 flow metering period. These results will be included in the 2019 Flow Metering Report.

3 PHASE 2 INVESTIGATIONS

3.1 Methodology

Following the Phase 1 Flow metering programs, the isolation of defects within collection system assets is determined. The quantity, location, and severity of defects or defective assets are necessary in determining a cost-effective mitigation plan in the removal of infiltration and inflow from a collection system. Investigative technologies and techniques have been devised that have become an industry standard in isolating defects and defective assets. The typical investigation methods used in isolating the location of I/I and assessing the severity and frequency of defects and defective assets used in this Infiltration and Inflow Removal and Monitoring Program include:

Flow Isolation – a method of investigation that uses a portable volumetric weir that is placed at the downstream end of a pipe when sanitary system usage is at its lowest, typically between 12am and 5am. The weir has set values that allow for the estimation of flows between two points, typically manhole-to- manhole or approximated stretches of 1,000 LF of pipe. Conducting flow isolation while the sanitary sewer system is at a theoretical usage of virtually zero indicates an approximate flow rate derived from groundwater infiltration. Flow Isolation is typically conducted while groundwater elevation is high.

Closed-Circuit Television (CCTV) Inspection – one of the most common ways to assess the structural condition of pipes and determine the need for maintenance and rehabilitation. Inspections are conducted by inserting a camera into a pipe that is remotely directed from one end of the pipe to the other. CCTV operators actively identify and call out defects within the pipe during the inspection using the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) standards to identify defects. CCTV inspection conducted to identify defects contributing infiltration into the system are typically conducted when groundwater elevation is high.

Manhole Inspections – conducted to identify structural defects, infiltration sources, and the potential for inflow into a collection system. Manhole inspections can be conducted both externally and internally depending on the detail requirements of the inspection. Inspections conducted to identify infiltration is typically conducted during times when groundwater elevation is high.

Smoke Testing – used as a means in the identification of direct and indirect sources of inflow into a collection system. This is performed by introducing smoke or smokeless vapor into an isolated section of the collection system using a blower or fan and observing the surrounding buildings and landscape for escaping smoke. This method is typically conducted while groundwater elevation is low.

Building Inspections – typically conducted as precision investigations as follow on to more generalized investigations such as smoke testing, CCTV inspections, or flow isolation. Building

inspections are used in the confirmation of inflow sources and identification of illicit cross connections or faulty plumbing and can be conducted under various conditions, usually dependent on the nature of the inspection.

Dye Testing – used for multiple applications where tracking the flow of water from a point source is required. This method of investigation can be used in the determination of inflow sources, cross connections, faulty plumping and various other deficiencies within a collection system. Dye testing can be conducted under various conditions depending on the nature of the dye testing investigation.

Phase 2 investigations have been separated into three sub-phases of work that coincide with the completion and analyses of the Phase 1 flow metering programs and follow-on to preceding sub-phases of Phase 2 investigations.

3.2 Phase 2.1 Investigations

Phase 2.1 investigation were recommended as following the flow monitoring program conducted in the spring of 2018 and included flow isolation of 197,710 LF of pipe, CCTV inspection of 27,611 LF of pipe, and 496 manhole inspections in sub-areas identified as having excessive infiltration. A breakdown of investigations recommended for Phase 2.1 is included in Table 3. Phase 2.1 investigations began in December of 2018 and are ongoing. Flow Isolation and CCTV Inspections have been completed, and manhole inspections are scheduled to be completed in the Fall of 2019.

Table 3: Phase 2.1 Investigation Quantities

Sub-Area	Flow Isolation (LF)	CCTV Inspection (LF)	Manhole Inspection (Qty)
Sub-Area 4	8,893		46
Sub-Area 5	21,962		6
Sub-Area 7	23,684		4
Sub-Area 8	19,179		26
Sub-Area 9		9,165	20
Sub-Area 14	23,488		8
Sub-Area 15	19,404		23
Sub-Area 16	21,410		100
Sub-Area 17			28
Sub-Area 18	19,962		4
Sub-Area 19		4,667	
Sub-Area 20		8,685	
Sub-Area 21	12,431		2
Sub-Area 22	19,133		112
Sub-Area 28	5,164		55
Sub-Area 29		5,094	35
Total	**194,710**	**27,611**	**469**

3.3 Phase 2.2 Investigations

Phase 2.2 investigations were recommended in the spring of 2019 congruent to the 2019 flow monitoring program and include 120,377 LF of flow isolation for pipes identified as having excessive infiltration in the preliminary analysis of 2019 flow metering data, and 62,263 LF of CCTV inspections as follow on to the flow isolation conducted as part of Phase 2.1 investigations. A breakdown of investigations recommended for Phase 2.2 is included as Table 4. The flow isolation recommendations under Phase 2.2 investigations have been completed and CCTV inspections are ongoing.

Table 4: Phase 2.2 Investigation Quantities

Sub-Area	Flow Isolation (LF)	CCTV Inspection (LF)
Sub-Area 4		636
Sub-Area 5		3,018
Sub-Area 6	15,813	
Sub-Area 7		5,479
Sub-Area 8		10,092
Sub-Area 11	20,485	
Sub-Area 12	13,949	
Sub-Area 14		4,827
Sub-Area 15		11,628
Sub-Area 16		7,964
Sub-Area 17		1,914
Sub-Area 18		8,701
Sub-Area 21		4,952
Sub-Area 22		9,052
Sub-Area 23	12,442	
Sub-Area 23A	6,635	
Sub-Area 24	10,450	
Sub-Area 24A	12,625	
Sub-Area 26	7,907	
Sub-Area 27	9,293	
Sub-Area 28		1,000
Sub-Area 30	10,778	
Total	120,377	69,263

3.4 Phase 2.3 Investigations

The planning for Phase 2.3 Investigations include the recommendation of up approximately 56,000 LF of CCTV inspections as follow-on to Phase 2.2 Flow Isolation results, 490 manhole inspections, 126,000 LF of smoke testing, 45 building inspections, and 10 days of dye testing. Phase 2.3 Investigations are scheduled to be conducted throughout the remainder of 2019 and the spring of 2020.

4 SUMMARY

The following Phase 2 investigations for the identification of major I/I sources have effectively been completed or are in the process of being completed:

- 315,087 LF of flow isolation
- 96,874 LF of CCTV inspections; and
- 469 manhole inspections

In addition, the planning and execution of the following investigations will be conducted during the remainder of 2019 and through the spring of 2020:

- 56,000 LF of CCTV inspections
- 490 manhole inspections
- 126,000 LF of smoke testing
- 45 building inspections
- 10 days of dye testing

As illustrated in this report, the city has made considerable strides in identifying major I/I sources. As this effort continues, the City remains committed to meeting the goals and requirements of the EPA's Order for Compliance and the City's I/I Reduction Program.

APPENDIX A

Phase 1 – Investigation of Flows – 2018 Monitoring Report

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine

PHASE 1 INVESTIGATION OF FLOWS – 2018 MONITORING

DECEMBER 2018

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EXECUTIVE SUMMARY

On September 29, 2012, the United States Environmental Protection Agency (US EPA) issued an Order for Compliance and Complaint to the City of Portland for sanitary sewer overflows (SSOs) from non-permitted portions of the City's sewer collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program.

This report summarizes the results of Phase 1 of the I/I Program and provides recommendations for Phase 2 flow monitoring and investigations. In conjunction with the implementation of the flow monitoring program, Phase 1 includes engineering analysis of flow data, including calculation of average daily flow, peak daily flow and peak hourly flow, and estimation of infiltration and inflow for each meter area. Meter areas were evaluated and ranked by quantities of infiltration and inflow, and follow-on investigation recommendations were developed based on these evaluations and rankings.

The two-phase flow monitoring program includes installation, maintenance and monitoring of approximately 40 flow meters over a period of 2 years. This report summarizes the results of the first 20 meters. The program was planned as a 2-year program to allow for potentially unfavorable weather conditions (low precipitation or groundwater), the ability to meter small subsections of each sub-area in Year 2 (as established by the first year of data), and time to allow for corrections to the City's collection system mapping and pipeline connectivity.

Results and Recommendations

Based on the Phase 1 metering results summarized in Section 3.1 of this report and ongoing sewer system investigations, Phase 2 follow-on recommendations were developed. Recommendations, as detailed in Section 3 of this Report, include:

- Flow isolation of 194,740 linear feet (LF) of pipe
- Closed circuit television inspection (CCTV) of 27,611 LF of pipe
- Four hundred and forty-three (443) manhole inspections
- Implementation of a Spring 2019 flow monitoring program

Individual sub-area maps showing follow-on recommendations are included in Appendix C of this report.

In accordance with the Phase 1 metering results, flow isolation was completed in December 2018 and CCTV inspections are currently being conducted. Manhole inspections will be conducted in the Spring of 2019.

Investigations to identify direct inflow (i.e., smoke testing, dye testing and large building inspections), will be conducted in the Summer of 2019 upon completion of the Spring 2019 flow metering program.

The second phase of the flow monitoring program (Spring 2019), will include eleven (11) sub-areas that were not included in the first phase of flow metering. Metering data will be evaluated in the same fashion as the 2018 metering data (as presented herein), and follow-on investigations will be developed to further identify and eliminate I/I.

1 INTRODUCTION

1.1 Scope of Work

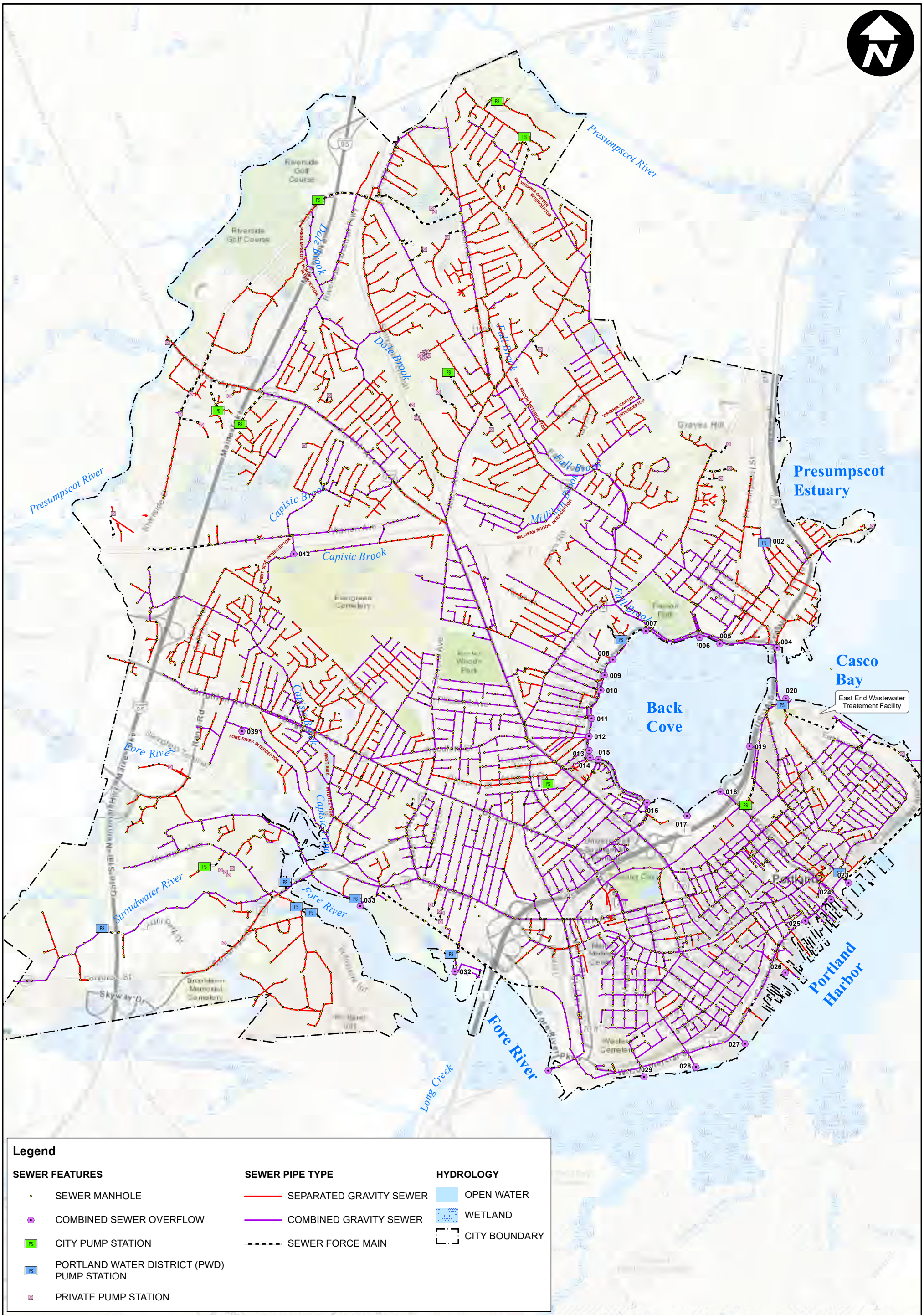
On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program, as well as making improvements to the City's collection system GIS by supplementing and correcting data gaps. This I/I Program will address those recommendations and set the course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from the sanitary collection system.

This report summarizes the results of Phase 1 of the I/I Program, a comprehensive flow monitoring program, and provides recommendations for Phase 2, investigation and rehabilitation. Phase 1 includes development of a flow monitoring strategy that includes review of recommended meter sites from the CMOM report, identification of other suitable sites, field verification of these sites, recommendation of initial sites, installation of flow monitoring equipment and data collection and maintenance procedures for the flow monitoring equipment. In conjunction with implementation of the flow monitoring program, Phase 1 includes engineering analysis of flow data, including calculation of average daily flow, peak daily flow, peak hourly flow, infiltration and inflow for each meter area. Meter areas were ranked by quantity of infiltration and inflow and follow-on investigation recommendations were developed.

The flow monitoring program includes installation, maintenance and monitoring of 40 flow meters over a period of 2 years. This report summarizes the results of the first 20 meters installed. The program was planned as a 2-year program to allow for potentially unfavorable weather conditions (low precipitation or groundwater), the ability to meter small subsections of each sub-area in year 2 (if required based on the first's year's data), and time to allow for corrections to the City's collection system mapping and pipeline connectivity.

1.2 Collection System Background and Description

The City of Portland's wastewater collection system, shown on Figure 1, contains approximately 240 miles of separated and combined sewers and 24 pump stations, 9 of which are owned and operated by the City. The collection system and pump stations convey wastewater to the East End Wastewater Treatment Facility (WWTF) in Portland, which is owned and operated by the Portland Water District.



THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 1 - CITY OF PORTLAND COLLECTION SYSTEM MAP

0 0.25 0.5 1 Miles

December 2018

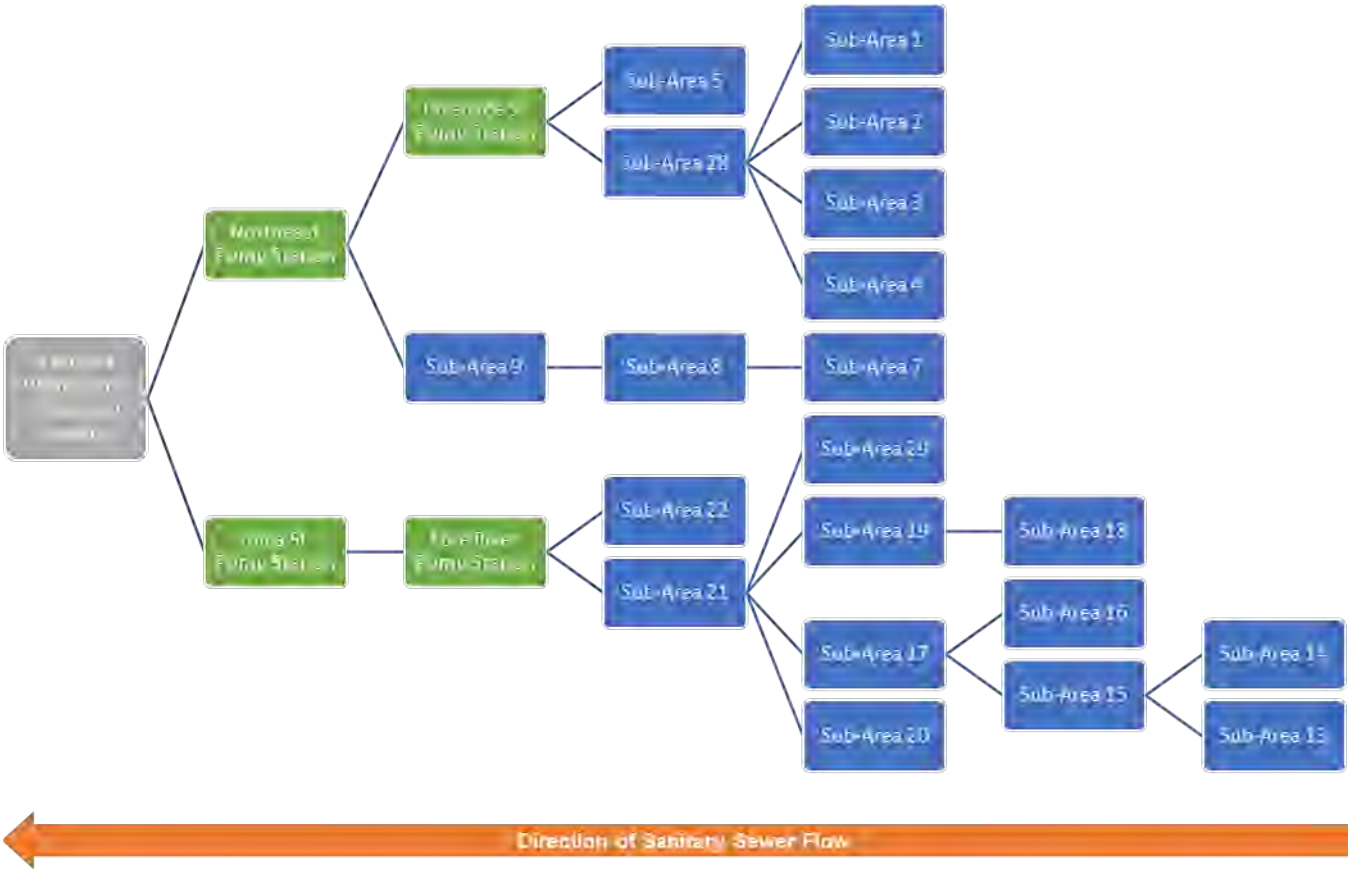
ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 1 - CITYWIDE SANITARY SEWER SYSTEM.mxd

1.2.1 Sub-Area Delineation

The first phase of the metering program included the delineation of 20 sub-areas throughout the City. Due to ongoing sewer separation projects and the extent of combined sewers in the downtown area of Portland, efforts were focused on the north and west areas of the City. Prioritization of meter areas was based on recent and on-going flow monitoring and available CCTV data, historic and recently discovered problem areas where backups, surcharging and overflows occurred, areas tributary to known problem areas, areas where the hydraulic model identified potential I/I capacity issues, and areas near water bodies that could be contributing I/I to the system. Figure 2 shows a flow vector diagram for the 20 sub-areas included in the metering program. The flow vector diagram is a visual representation of tributary flow within the system. Sub-areas delineated and included in the 2018 metering program are shown on Figure 3.

Figure 2. Flow Vector Diagram



Presumpscot River
Dole Brook
Fall Brook
Millbrook
Capisic Brook
Fore River
Stroudwater River
Long Creek
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor
1
2
3
4
5
7
8
9
13
14
15
16
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015
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042

Legend

SEWER FEATURES

- Sewer Manholes
- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION

SEWER PIPE TYPE

- SEPARATED GRAVITY SEWER
- COMBINED GRAVITY SEWER
- SEWER FORCE MAIN
- DELINEATED SUB-AREA

HYDROLOGY

- OPEN WATER
- WETLAND
- CITY BOUNDARY

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

0 0.25 0.5 1 Miles

December 2018

FIGURE 3 - 2018 SUB-AREA DELINEATION

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G:\GIS\Portland\2018 I-I Report\FIGURE 3 - 2018 SUB-AREA DELINEATION.mxd

2 2018 METERING ANALYSIS

In March 2018, Arcadis and its subcontractor, Flow Assessment Services (FAS) completed a 16-week flow monitoring program of 20 sub-areas throughout the City of Portland. Meters were installed by FAS in the most downstream manhole of each sub-area where hydraulic conditions were conductive for metering. Metering was performed using continuous monitoring devices incorporating depth and velocity sensors to measure velocity, depth and flow rate. Two record tipping bucket rain gauges measuring rainfall every fifteen minutes were installed on the roof of the Fore River Pump Station and the Riverton Fire Station. Rain gauge data was supplemented with data from the City-owned rainfall gauge at the Riverside Street Pump Station.

Two permanent groundwater monitoring wells were installed on May 6, 2018 at the intersection of Martin Street and Bartley Street and on Leland Street across from the Deering High School parking lot. Maintenance and data collection for the groundwater gauges, rainfall gauges and flow meters was conducted bi-weekly by Flow Assessment Services.

2.1 Wastewater Characteristics

There are three major components of wastewater flow in a sanitary sewer system, base sanitary flow (BSF), groundwater infiltration (GWI) and rainfall derived inflow and infiltration (RDII - commonly referred to as inflow). The Environmental Protection Agency's "Guide for Estimating Infiltration and Inflow", June 2014, provides the following definitions:

Base Sanitary Flow (BSF) – The portion of wastewater which includes domestic, commercial, institutional, and industrial sewage and specifically excludes infiltration and inflow.

Groundwater Infiltration (GWI) – Measured during average dry weather flow period. The average of the low nighttime flows (midnight to 6am) per day for the same time period, minus significant industrial or commercial nighttime users

Rainfall Induced Infiltration (RII) – The short term increase in infiltration which is the result of a rain event. Rainfall-induced infiltration is a portion of delayed inflow.

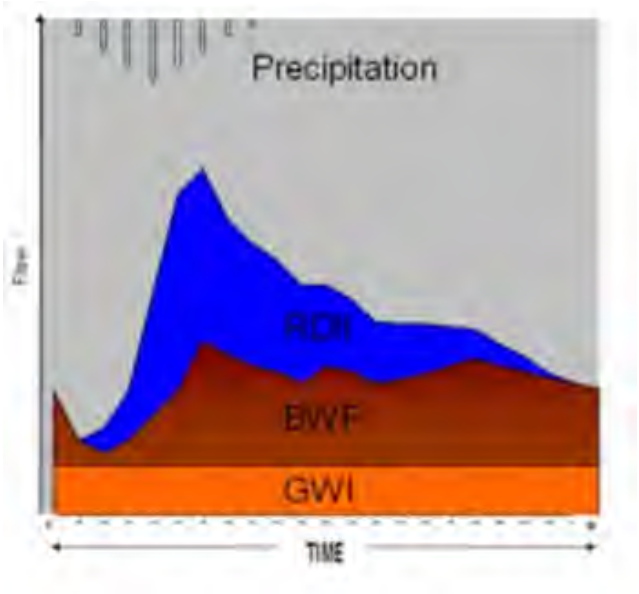
Delayed Inflow Volume – The portion of total inflow which is generated from indirect connections to the collection system or connections which produce inflow after a significant time delay from the beginning of a storm. Delayed inflow sources include: sump pumps, foundation drains, indirect sewer/drain cross connections, etc. Rainfall-induced infiltration cannot be distinguished from delayed inflow and is therefore included as part of delayed inflow. Delayed inflow sources have a gradual impact on the collection system and flow decreases gradually upon conclusion of the rainfall event, and after peak inflow caused by direct connections.

Inflow – Water other than sanitary wastewater that enters a sewer system from sources such as roof leaders, cellar/foundation drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, and catch basins. Inflow does not include infiltration.

Rainfall derived infiltration and inflow includes both rainfall-induced infiltration and inflow. Figure 4 highlights the three key components of wastewater flow during a precipitation event. The GWI (orange

line) remains constant and is not impacted by precipitation, the BWF (brown line) is a diurnal pattern based on actual usage and not impacted by precipitation, and the RDII (blue line) shows a very clear increase in flows as a direct response to precipitation.

Figure 4. Components of Wastewater Flow During Wet Weather (US EPA, 2007)



The City of Portland's collection system consists of approximately 240 miles of separated and combined sewers. A traditional infiltration and inflow analysis was conducted in the separated portion of the collection system, while a modified approach was used in the combined portion of the collection system. In the sub-areas where 75% or more of the collection system was separated, the I/I analysis focused on identifying groundwater infiltration, rainfall-induced infiltration and direct inflow. In the combined subareas, the I/I analysis focused on identifying groundwater infiltration and rainfall-induced infiltration (delayed inflow). Large volumes of direct inflow are expected in a combined system due to known cross connections between the sanitary system and the drainage system. While direct inflow values were calculated in these sub-areas, they were not used to develop follow-on investigation recommendations. Table 1 includes a summary of the total pipeline footage, percentage of combined pipes and the approach method for each sub-area.

Table 1. Sub-area Characteristics

Sub-area	Total Footage (LF)	Percent Combined (%)	Approach
Sub-Area 1	19,997	7%	Traditional
Sub-Area 2	11,918	2%	Traditional
Sub-Area 3	28,692	36%	Modified
Sub-Area 4	8,893	0%	Traditional
Sub-Area 5	21,962	16%	Traditional
Sub-Area 7	23,684	13%	Traditional
Sub-Area 8	25,297	40%	Modified
Sub-Area 9	10,989	53%	Modified
Sub-Area 13	48,470	57%	Modified
Sub-Area 14	23,488	24%	Traditional
Sub-Area 15	22,812	30%	Modified
Sub-Area 16	21,410	67%	Modified
Sub-Area 17	24,822	48%	Modified
Sub-Area 18	19,962	85%	Modified
Sub-Area 19	5,677	35%	Modified
Sub-Area 20	9,924	79%	Modified
Sub-Area 21	21,047	76%	Modified
Sub-Area 22	19,133	93%	Modified
Sub-Area 28	11,010	75%	Modified
Sub-Area 29	6,174	34%	Modified

2.2 Results and Findings

Table 2 identifies the average daily flow (ADF), peak daily flow (PDF) and peak hourly flow (PHF) measured from March 7, 2018 through July 16, 2018 for each of the twenty sub-areas. Average daily flow is calculated by summing all metered flows and dividing by the duration of the metering period. Peak daily flow is the maximum daily flow over 24-hours measured throughout the metering period. Peak hourly flow is the maximum 1-hour flow rate measured. Peaking factor is calculated by dividing the peak hourly flow by the average daily flow for each sub-area. Table 2 shows net average daily flow within each sub-area itself (with upstream tributary flows subtracted out), net peak daily flow, net peak hourly flow and the hourly peaking factor.

Table 2. Flow Metering Results – ADF, PDF, PHF

Sub-Area	Average Daily Flow (GPD)	Peak Daily Flow (GPD)	Peak Hourly Flow (GPD)	Hourly Peaking Factor
Sub-Area 1	147,060	382,063	870,000	6
Sub-Area 2	65,234	129,833	180,750	3
Sub-Area 3	170,348	296,042	570,000	3
Sub-Area 4	150,666	270,896	765,500	5
Sub-Area 5	184,123	398,698	630,750	3
Sub-Area 7	171,871	413,010	701,000	4
Sub-Area 8*	125,390	484,365	1,104,750	9
Sub-Area 9*	142,673	408,188	957,000	7
Sub-Area 13	680,228	1,779,313	2,589,750	4
Sub-Area 14	271,125	579,698	1,220,500	5
Sub-Area 15*	89,215	358,104	2,902,875	33
Sub-Area 16	425,703	1,472,542	4,129,000	10
Sub-Area 17*	67,371	319,948	1,257,500	19
Sub-Area 18	408,780	1,633,229	4,159,000	10
Sub-Area 19*	72,388	872,031	2,812,750	39
Sub-Area 20	247,097	2,416,948	7,569,000	31
Sub-Area 21*	115,428	1,489,417	1,607,250	14
Sub-Area 22	340,367	2,281,698	6,500,250	19
Sub-Area 28*	105,904	401,594	847,750	8
Sub-Area 29	112,546	865,542	2,859,000	25

*Denotes net values with tributary sub-areas subtracted.

Hyetographs showing average daily flow and rainfall for each of the 20 sub-areas are included in Appendix B.

2.3 Groundwater Infiltration

Groundwater infiltration is defined as groundwater that enters or leaks into a sanitary sewer system through defective pipes, pipe joints, service connections, or manholes. The average groundwater infiltration rate is defined as 85% of the nighttime sanitary flow measured on dry days from 12:00am to 6:00am throughout the entire metering period. Only data for days that follow a minimum of 72-hours without a rainfall event are considered “dry days” to avoid inclusion of indirect inflow and rainfall induced infiltration (RII) in the infiltration estimate.

Groundwater levels were monitored throughout the metering period using the two groundwater monitoring wells installed. The groundwater depth during the metering period was analyzed in relation to the average sewer pipe elevations in the area, as shown in Figure 5, as groundwater depth can have a significant influent on the amount of groundwater infiltration entering a collection system.

Groundwater infiltration for each sub-area is normalized by calculating the gallons per day per inch diameter mile of pipe (gpd/in-mi). The inch-diameter-mile of pipe, or inch-miles (in-mi), in a sub-area is calculated by multiplying the sum of the miles of for each diameter of pipe by its respective inch diameter. As an example, if a system contained 1 mile of 10-inch diameter, 1.5 miles of 12-inch diameter, and 0.5 miles of 25-inch diameter of gravity sewers, the calculated inch-miles would be as follows:

(10-inch x 1 mile) + (12-inch x 1.5 miles) + (24-inch x 0.5 mile) = 40 in-mi

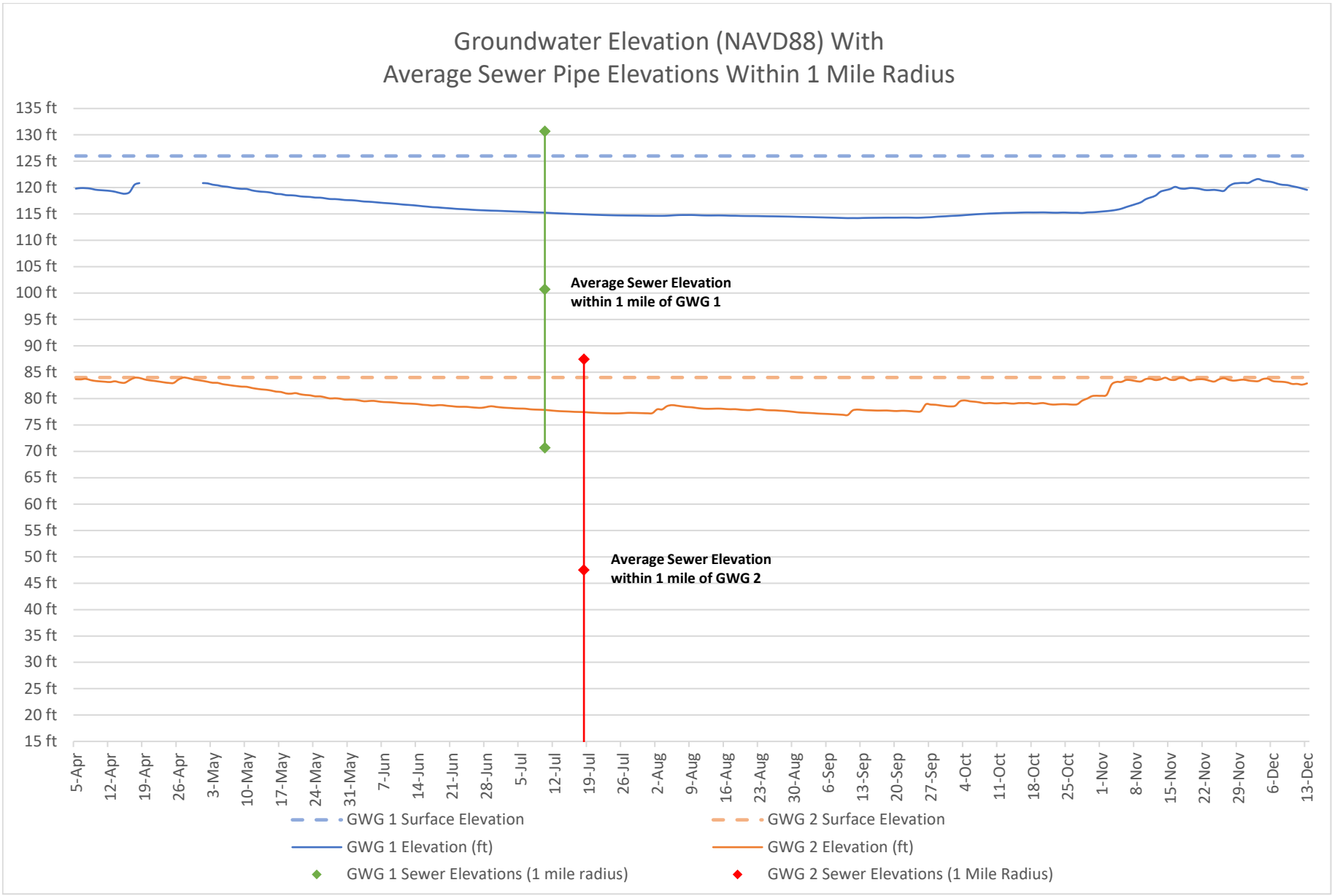
Groundwater infiltration rates for each sub-area were calculated by dividing the sub-area’s total groundwater infiltration by the number of inch-miles of sanitary sewer within the sub-area. The total groundwater infiltration rates for each sub-area during the metering period are shown in Table 3.

Table 3. Flow Metering Results – Infiltration

Sub-Area	Average Daily Flow (gpd)	Net Average Infiltration (gpd)	Infiltration GPD/Total LF (GPD/LF)	Gallons per Day per Inch-Mile (GPDIM)
Sub-Area 1	147,060	78,910	3.9	2,515
Sub-Area 2	65,234	36,879	3.1	1,884
Sub-Area 3	170,348	91,912	3.2	1,968
Sub-Area 4	150,666	83,726	9.4	6,055
Sub-Area 5	184,123	97,130	4.4	2,444
Sub-Area 7	171,871	97,191	4.1	2,505
Sub-Area 8 [1, 2]	125,390	69,114	2.7	1,355
Sub-Area 9 [1, 2]	142,673	75,325	6.9	2,427
Sub-Area 13	680,228	374,236	7.7	2,354
Sub-Area 14	271,125	152,698	6.5	3,489
Sub-Area 15 [1, 2]	89,215	66,479	2.9	1,411
Sub-Area 16	425,703	279,739	13.1	5,375
Sub-Area 17 [1, 2]	67,371	70,823	2.9	1,310
Sub-Area 18	408,780	209,635	10.5	4,487
Sub-Area 19 [1, 2]	72,388	43,517	7.7	2,469
Sub-Area 20	247,097	118,081	11.9	4,235
Sub-Area 21 [1, 2]	115,428	*N/A*	*N/A*	*N/A*
Sub-Area 22	340,367	128,450	6.7	2,367
Sub-Area 28 [1, 2]	105,904	50,821	9.6	1,527
Sub-Area 29	112,546	50,357	8.2	4,445

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

Figure 5 - Groundwater Depth with Average Sewer Pipe Elevations



2.4 Rainfall Derived Infiltration and Inflow (RDII)

Four rainfall events from the metering period were analyzed to calculate rainfall derived infiltration and inflow. Precipitation data was used from rain gauges at the Riverside Road Pump Station, Riverton Fire Station and the Fore River Pump Station. Table 4 outlines the duration, total rainfall and peak intensity of the four selected storms. The rainfall data from the April 16, 2018 storm event was only available from the Riverside Pump Station rain gauge and therefore was used in the inflow analysis for all sub-areas for that storm event. For the additional three storm events, the analysis used rainfall data from the closest rain gauge to the flow meter. The Riverside Pump Station rain gauge serviced sub-areas 1, 2, 3, 4, 5, 7, 8 and 9. The Riverton Fire Station rain gauge serviced sub-areas 13, 14, 15, 16 and 17 and the Fore River Pump Station rain gauge serviced sub-areas 18, 19, 20, 21, 22, 28 and 29.

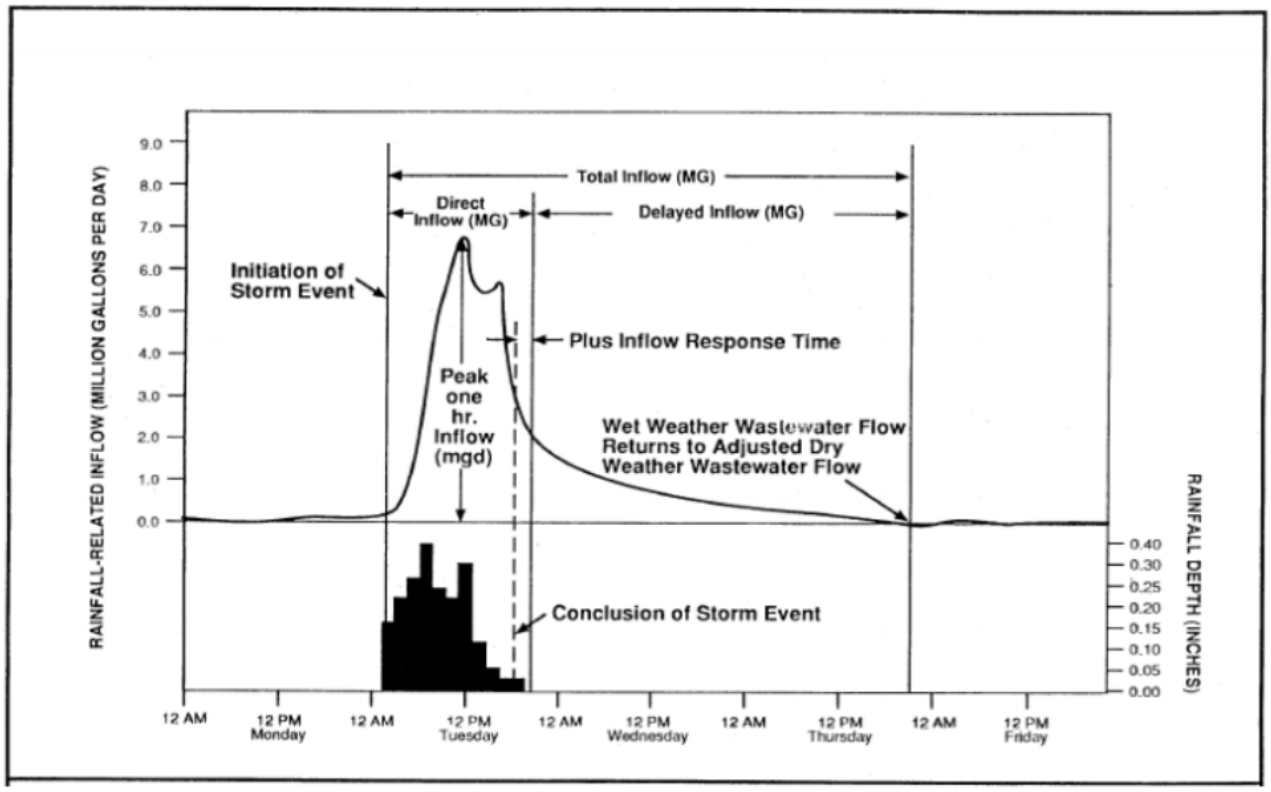
Table 4. Inflow Analysis – Selected Rainfall Events

Location	Rainfall Event	Duration (min)	Total Rainfall (in)	Peak Intensity (in/hr)
Riverside PS	4/16/18 8:00 AM	960	2.9	0.59
Riverside PS	4/25/18 12:45 PM	1215	2.59	0.48
Riverside PS	6/18/18 4:00 PM	165	1.07	0.77
Riverside PS	6/27/18 10:45 PM	1215	1.43	0.28
Riverton RG	4/25/18 12:45 PM	1230	1.67	0.29
Riverton RG	6/18/18 4:15 PM	165	1.13	0.85
Riverton RG	6/27/18 10:45 PM	1200	1.34	0.2
Fore River PS	4/25/18 12:45 PM	1245	1.76	0.28
Fore River PS	6/18/18 4:15 PM	135	0.96	0.75
Fore River PS	6/27/18 10:45 PM	1245	1.56	0.3

A wet weather hydrograph from each storm event was compared to a dry weather period on the same day of the week as each storm event. The dry weather flow is subtracted from the wet weather flow resulting in the inflow volumes presented in Table 5. The dry weather flow is calculated as an average of all dry days during the metering period for each day during the week. For example, all dry “Mondays” in the metering period are averaged together to determine the dry weather flow for each individual day.

The hydrograph shown as Figure 6 shows a typical inflow response to wet weather flow. The portion of inflow occurring during the storm event is identified as direct inflow and the portion of inflow that occurs once the storm has concluded is delayed inflow. Total inflow encompasses both direct and delayed inflow.

Figure 6. Wet Weather Hydrograph (MassDEP, 1993)



For the purposes of this study, direct inflow was calculated for all sub-areas; however, where the modified approach was used, only the delayed inflow results were used in the development of follow-on investigation recommendations.

Table 5 – Flow Metering Results - Inflow

Sub-Area	4/16/2018 Storm Event			4/25/2018 Storm Event			6/18/2018 Storm Event			6/27/2018 Storm Event		
	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)
Sub-Area 1	**237,480**	**236,470**	**473,951**	**141,300**	**121,100**	**262,400**	**600**	**0**	**600**	**2,900**	**4,200**	**7,100**
Sub-Area 2	**42,099**	**66,764**	**108,863**	**37,500**	**46,000**	**83,500**	**0**	**0**	**0**	**1,700**	**400**	**2,100**
Sub-Area 3	138,499	**133,903**	272,402	90,600	**91,300**	181,900	6,800	**800**	7,600	15,700	**3,600**	19,300
Sub-Area 4	**30,853**	**79,721**	**110,574**	**80,500**	**61,000**	**141,500**	**11,000**	**6,200**	**17,200**	**63,100**	**11,400**	**74,500**
Sub-Area 5	**172,264**	**214,393**	**386,657**	**97,800**	**119,700**	**217,500**	**2,500**	**600**	**3,100**	**0**	**2,500**	**2,500**
Sub-Area 7	**157,521**	**246,923**	**404,444**	**132,800**	**170,100**	**302,900**	**0**	**0**	**0**	**0**	**900**	**900**
Sub-Area 8	312,306	**366,043**	678,349	134,500	**162,100**	296,600	6,300	**0**	6,300	330,000	**8,400**	338,400
Sub-Area 9	285,422	**260,439**	545,861	227,900	**211,900**	439,800	500	**2,500**	3,000	0	**4,500**	4,500
Sub-Area 13	**975,293**	**1,142,995**	**2,118,288**	**930,700**	**857,700**	**1,788,400**	**86,500**	**0**	**86,500**	**396,100**	**89,200**	**485,300**
Sub-Area 14	**300,579**	**310,003**	**610,582**	**197,500**	**220,300**	**417,800**	**9,100**	**2,300**	**11,400**	**63,700**	**20,700**	**84,400**
Sub-Area 15	*N/A*	***N/A***	*N/A*	385,900	**155,800**	541,700	32,200	**42,200**	74,400	26,200	**0**	26,200
Sub-Area 16	1,076,962	**609,352**	1,686,314	457,200	**348,800**	806,000	945,000	**0**	945,000	243,300	**25,500**	268,800
Sub-Area 17	*N/A*	***N/A***	*N/A*	283,800	**23,900**	307,700	0	**0**	0	0	**0**	0
Sub-Area 18	1,284,107	**984,596**	2,268,703	989,800	**734,400**	1,724,200	148,800	**8,800**	157,600	451,200	**64,500**	515,700
Sub-Area 19	810,736	**389,442**	1,200,178	473,000	**240,200**	713,200	63,100	**2,900**	66,000	223,300	**0**	223,300
Sub-Area 20	2,166,025	**553,500**	2,719,525	1,162,800	**393,600**	1,556,400	221,900	**15,700**	237,600	549,400	**20,300**	569,700
Sub-Area 21	398,523	**1,397,997**	1,796,520	0	**129,700**	129,700	0	**145,200**	145,200	0	**131,700**	131,700
Sub-Area 22	1,980,560	**1,400,988**	3,381,548	1,174,200	**812,100**	1,986,300	102,100	**0**	102,100	543,100	**54,800**	597,900
Sub-Area 28	249,721	**0**	249,721	0	**0**	0	300	**0**	300	88,300	**31,800**	120,100
Sub-Area 29	812,737	**443,994**	1,256,731	434,300	**246,400**	680,700	73,500	**17,500**	91,000	207,600	**37,400**	245,000

3 SUB-AREA PRIORITIZATION AND RECOMMENDATIONS

3.1 High Infiltration and High RDII Sub-Areas

Infiltration within a sanitary sewer system is considered excessive if a subarea no greater than 20,000 linear feet of pipe exceeds a dry weather infiltration rate average of 4,000 gallons per day per inch diameter mile (gpd/idm). Sub-areas with infiltration rates exceeding 4,000 gpd/in-mi (Sub-areas 4, 16, 18, 20 and 29) are highlighted in Table 6.

Table 6. High Infiltration Sub-areas

Sub-Area	Groundwater Infiltration (GWI)	Infiltration GPD/Total LF (GPDLF)	Gallons per Day per Inch-Mile (GPDIM)
Sub-Area 4	83,726	**9.4**	6,055
Sub-Area 16	279,739	**13.1**	5,375
Sub-Area 18	209,635	**10.5**	4,487
Sub-Area 29	50,357	**8.2**	4,445
Sub-Area 20	118,081	**11.9**	4,235
Sub-Area 14	152,698	**6.5**	3,489
Sub-Area 1	78,910	3.9	2,515
Sub-Area 7	97,191	**4.1**	2,505
Sub-Area 19 [1, 2]	43,517	**7.7**	2,469
Sub-Area 5	97,130	**4.4**	2,444
Sub-Area 9 [1, 2]	75,325	**6.9**	2,427
Sub-Area 22	128,450	**6.7**	2,367
Sub-Area 13	374,236	**7.7**	2,354
Sub-Area 3	91,912	3.2	1,968
Sub-Area 2	36,879	3.1	1,884
Sub-Area 28 [1, 2]	50,821	**9.6**	1,527
Sub-Area 15 [1, 2]	66,479	2.9	1,411
Sub-Area 8 [1, 2]	69,114	2.7	1,355
Sub-Area 17 [1, 2]	70,823	2.9	1,310
Sub-Area 21 [1, 2]	*N/A*	*N/A*	*N/A*

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

The gallons per day of GWI per total liner footage of each sub-area was also calculated. Sub-areas with a total GPD/LF greater than 4 were also deemed high infiltration areas and are shown as bold in Table 6.

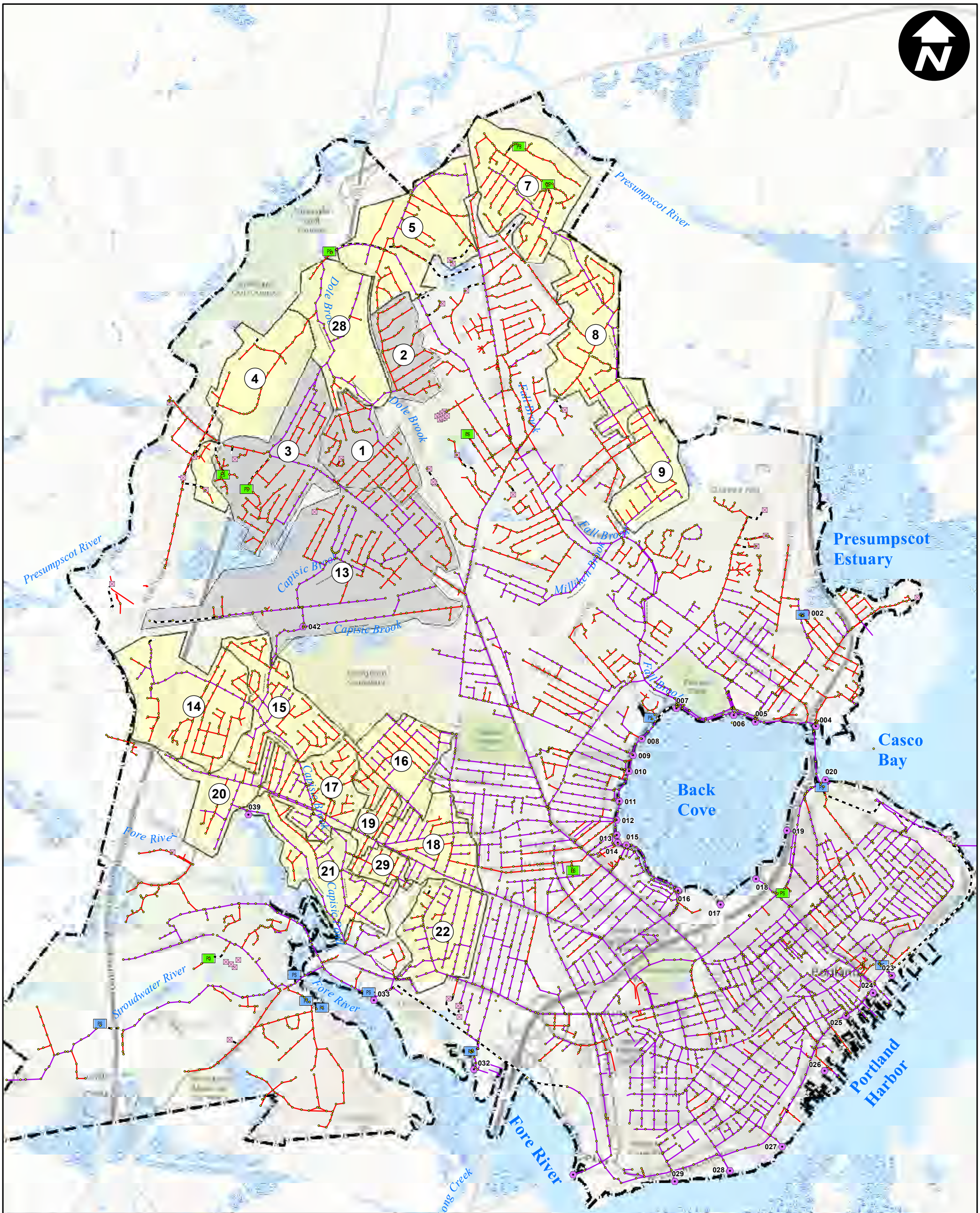
Inflow results were analyzed for the April 25, 2018 storm event to determine which sub-areas contribute excessive volumes of delayed inflow to the collection system. High delayed inflow sub-areas are shaded in Table 7.

Table 7. High Delayed Inflow Sub-areas – April 25, 2018 Storm Event

Subarea	Direct Inflow (Gal)	Delayed Inflow (Gal)	Total Inflow (Gal)
Sub-Area 13	**930,700**	**857,700**	**1,788,400**
Sub-Area 22	1,174,200	**812,100**	1,986,300
Sub-Area 18	989,800	**734,400**	1,724,200
Sub-Area 20	1,162,800	**393,600**	1,556,400
Sub-Area 16	457,200	**348,800**	806,000
Sub-Area 29	434,300	**246,400**	680,700
Sub-Area 19[1]	473,000	**240,200**	713,200
Sub-Area 14	**197,500**	**220,300**	**417,800**
Sub-Area 9[1]	227,900	**211,900**	439,800
Sub-Area 7	**132,800**	**170,100**	**302,900**
Sub-Area 8[1]	134,500	**162,100**	296,600
Sub-Area 15[1]	385,900	**155,800**	541,700
Sub-Area 21[1]	0	**129,700**	129,700
Sub-Area 1	**141,300**	**121,100**	**262,400**
Sub-Area 5	**97,800**	**119,700**	**217,500**
Sub-Area 3	90,600	**91,300**	181,900
Sub-Area 4	**80,500**	**61,000**	**141,500**
Sub-Area 2	**37,500**	**46,000**	**83,500**
Sub-Area 17[1]	283,800	**23,900**	307,700
Sub-Area 28[2]	0	**0**	0

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

High infiltration and inflow sub-areas are highlighted in Figure 7.



Legend

SEWER FEATURES	SEWER PIPE TYPE	HYDROLOGY
SEWER MANHOLE	SEPARATED GRAVITY SEWER	OPEN WATER
COMBINED SEWER OVERFLOW	COMBINED GRAVITY SEWER	WETLAND
CITY PUMP STATION	SEWER FORCE MAIN	CITY BOUNDARY
PWD PUMP STATION	(5) SUB-AREA WITH HIGH I/I	
PRIVATE PUMP STATION	(3) SUB-AREA WITH LOW I/I	

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

0 0.25 0.5 1 Miles

December 2018

FIGURE 7 - HIGH INFILTRATION AND INFLOW SUB-AREAS

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 7 - HIGH I AND I SUB-AREAS.mxd

3.2 Investigation Recommendations

Based on the metering results summarized in Section 3.1 and ongoing investigation and construction within the City of Portland, Phase 2 follow-on recommendations were developed. Recommendations, summarized in Table 8 and shown on Figure 8 include flow isolation, CCTV and manhole inspections. Individual sub-area maps showing follow-on recommendations are included in Appendix C.

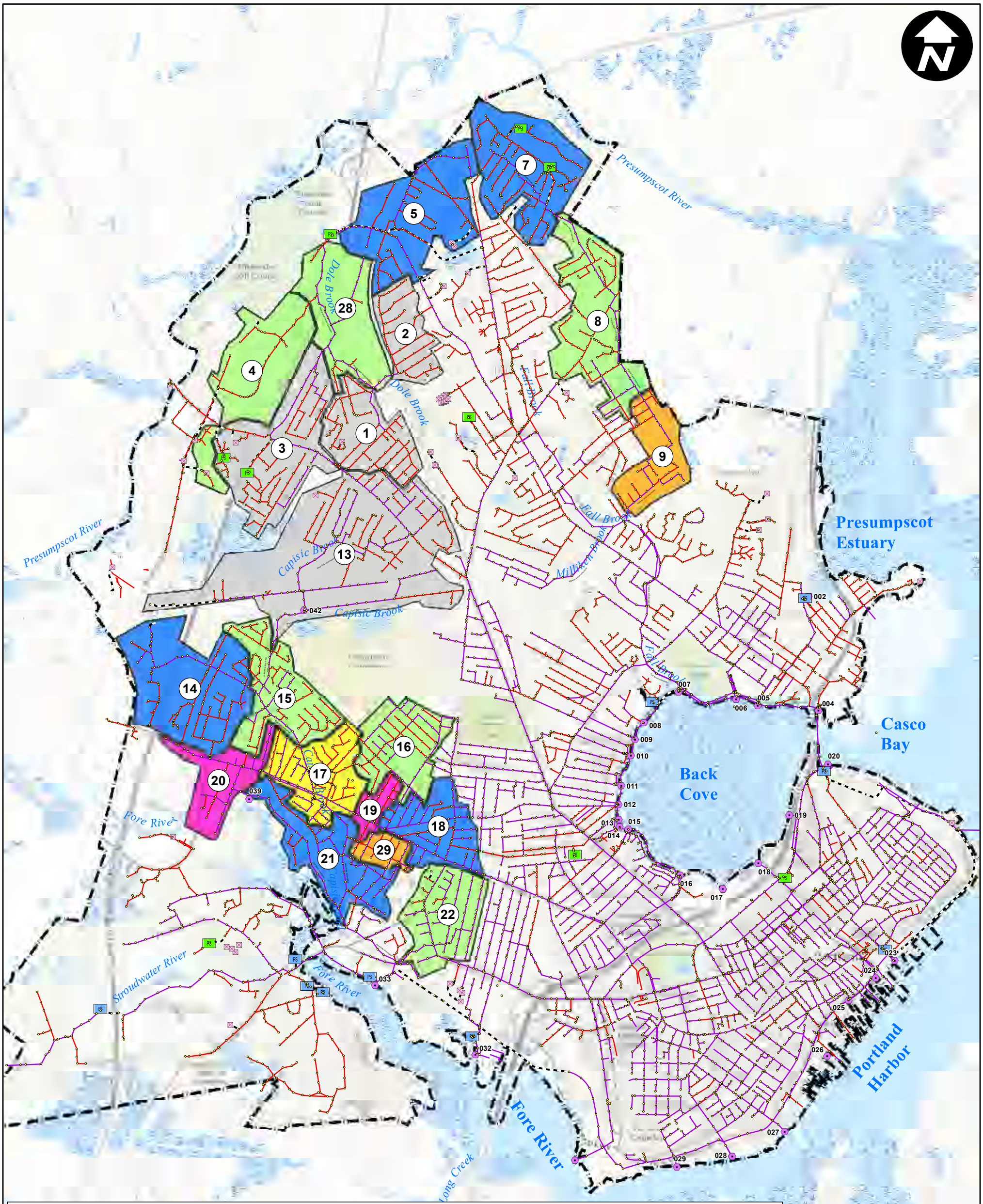
Table 8. Follow-on Investigation Recommendations

Sub-Area	High Infiltration Sub-areas	High Delayed Inflow Sub-area	Recommendations		
			Flow Isolation (LF)	CCTV (LF)	Manhole Inspections
Sub-Area 4	X		8,893		46
Sub-Area 5	X		21,962		
Sub-Area 7	X	X	23,684		
Sub-Area 8		X	19,179		26
Sub-Area 9		X		9,165	20
Sub-Area 13[1]	X	X	-	-	-
Sub-Area 14	X	X	23,488		
Sub-Area 15		X	19,404		20
Sub-Area 16	X	X	21,410		100
Sub-Area 17					28
Sub-Area 18	X	X	19,962		
Sub-Area 19	X	X		4,667	
Sub-Area 20	X	X		8,685	
Sub-Area 21		X	12,431		
Sub-Area 22	X	X	19,133		112
Sub-Area 28	X		5,164		56
Sub-Area 29	X	X		5,094	35
Total			***194,740***	***27,611***	***443***

Notes: 1. Investigation work in Sub-area 13 is ongoing through another project and therefore not included in these recommendations

Flow isolation was completed in December 2018 and CCTV is currently ongoing. Manhole inspections will be conducted in the Spring of 2019.

Investigations to identify direct inflow such as smoke testing, dye testing and large building inspections will be conducted in the summer of 2019 once the 2019 flow metering program is completed.



THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 8 - INVESTIGATION RECOMMENDATIONS

0 0.25 0.5 1 Miles

December 2018

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 8 - I AND I INVESTIGATION SUB-AREAS.mxd

3.3 2019 Flow Metering Program

A second phase of flow metering is scheduled to be conducted in April 2019 in 11 sub-areas that were not included in the first phase of flow metering. The metering program includes 11 meters, as shown on Figure 9, as well as 3 additional deduction meters in sub-areas 6, 11 and 26. Additional meters may be added to the 2019 flow metering program if results from the ongoing SSES activities identify the need for additional meter data.

Presumpscot River
Dole Brook
Capisic Brook
Fall Brook
Millikin Brook
Presumpscot Estuary
Casco Bay
Back Cove
Fore River
Stroudwater River
Portland Harbor
Long Creek

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 23A 24 24A 25 26 27 28 29

002 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 023 024 025 026 027 028 029 032 033 039 042

Legend

SEWER FEATURES
- SEWER MANHOLE
- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION

SEWER PIPE TYPE
- SEPARATED GRAVITY SEWER
- COMBINED GRAVITY SEWER
- SEWER FORCE MAIN
- 27 2019 SUB-AREA DELINEATION
- 5 2018 SUB-AREA DELINEATION

HYDROLOGY
- OPEN WATER
- WETLAND
- CITY BOUNDARY

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 9 - 2019 FLOW METER LOCATIONS

0 0.25 0.5 1 Miles

December 2018

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 9 - 2019 SUB-AREA DELINEATION.mxd

APPENDIX A

2018 Meter Area Figures

APPENDIX B

Flow Meter Hydrographs with Related Rainfall Hyetographs

APPENDIX C

Follow-on Investigation Sub-Area Figures

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City of Portland, Maine

PHASE 1 INVESTIGATION OF FLOWS – 2018 MONITORING

DECEMBER 2018

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EXECUTIVE SUMMARY

On September 29, 2012, the United States Environmental Protection Agency (US EPA) issued an Order for Compliance and Complaint to the City of Portland for sanitary sewer overflows (SSOs) from non-permitted portions of the City's sewer collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program.

This report summarizes the results of Phase 1 of the I/I Program and provides recommendations for Phase 2 flow monitoring and investigations. In conjunction with the implementation of the flow monitoring program, Phase 1 includes engineering analysis of flow data, including calculation of average daily flow, peak daily flow and peak hourly flow, and estimation of infiltration and inflow for each meter area. Meter areas were evaluated and ranked by quantities of infiltration and inflow, and follow-on investigation recommendations were developed based on these evaluations and rankings.

The two-phase flow monitoring program includes installation, maintenance and monitoring of approximately 40 flow meters over a period of 2 years. This report summarizes the results of the first 20 meters. The program was planned as a 2-year program to allow for potentially unfavorable weather conditions (low precipitation or groundwater), the ability to meter small subsections of each sub-area in Year 2 (as established by the first year of data), and time to allow for corrections to the City's collection system mapping and pipeline connectivity.

Results and Recommendations

Based on the Phase 1 metering results summarized in Section 3.1 of this report and ongoing sewer system investigations, Phase 2 follow-on recommendations were developed. Recommendations, as detailed in Section 3 of this Report, include:

- Flow isolation of 194,740 linear feet (LF) of pipe
- Closed circuit television inspection (CCTV) of 27,611 LF of pipe
- Four hundred and forty-three (443) manhole inspections
- Implementation of a Spring 2019 flow monitoring program

Individual sub-area maps showing follow-on recommendations are included in Appendix C of this report.

In accordance with the Phase 1 metering results, flow isolation was completed in December 2018 and CCTV inspections are currently being conducted. Manhole inspections will be conducted in the Spring of 2019.

Investigations to identify direct inflow (i.e., smoke testing, dye testing and large building inspections), will be conducted in the Summer of 2019 upon completion of the Spring 2019 flow metering program.

The second phase of the flow monitoring program (Spring 2019), will include eleven (11) sub-areas that were not included in the first phase of flow metering. Metering data will be evaluated in the same fashion as the 2018 metering data (as presented herein), and follow-on investigations will be developed to further identify and eliminate I/I.

1 INTRODUCTION

1.1 Scope of Work

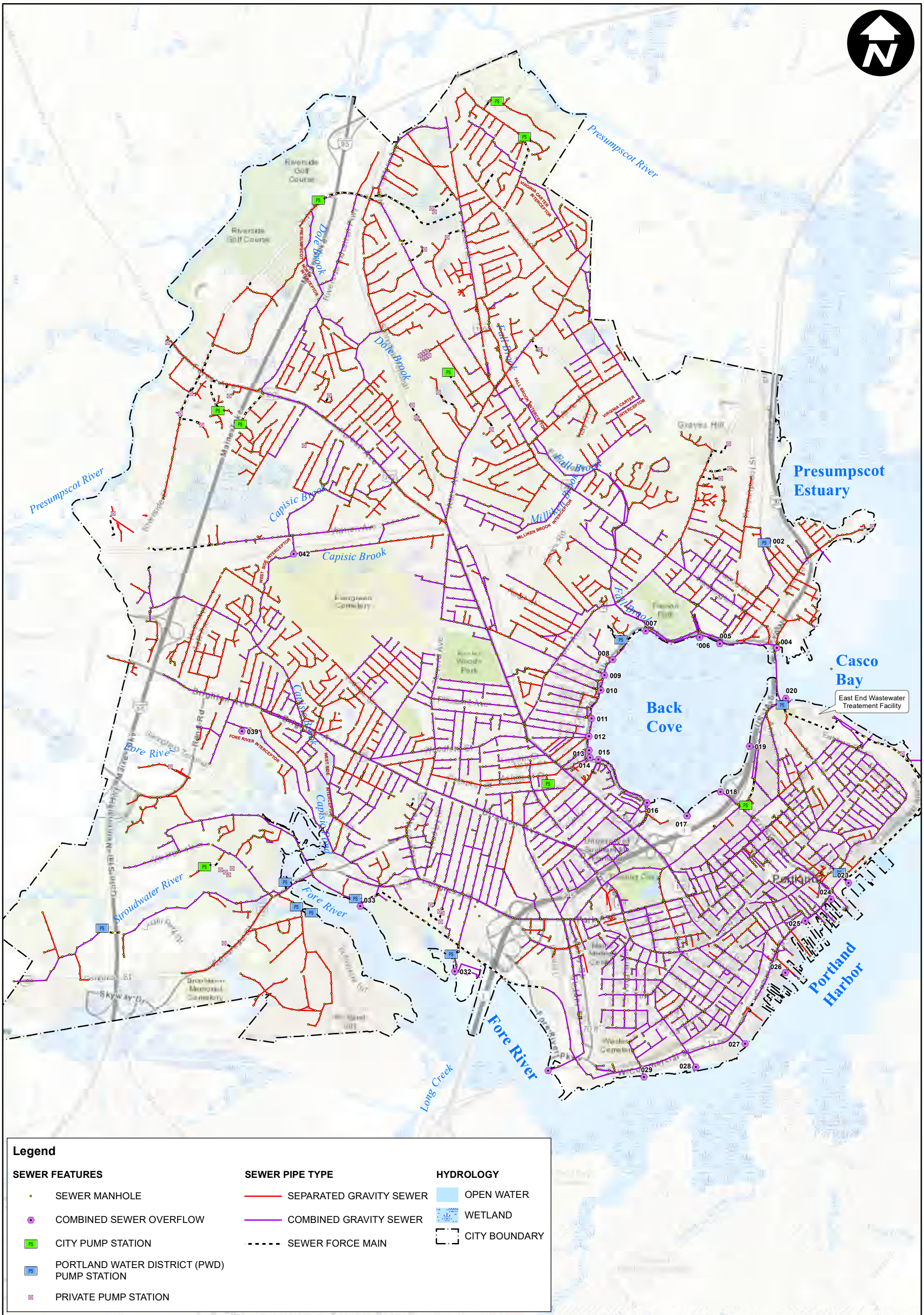
On September 29, 2012, the EPA issued an Order for Compliance and Complaint, including a proposed civil penalty, for sanitary sewer overflows (SSOs) from non-permitted portions of the City of Portland's collection system. In accordance with that Order, the City completed a "Capacity, Management, Operation and Maintenance (CMOM) and Corrective Action Plan" Report in November of 2013. The recommendations of the CMOM Report included an Infiltration/Inflow (I/I) Removal and Monitoring Program, as well as making improvements to the City's collection system GIS by supplementing and correcting data gaps. This I/I Program will address those recommendations and set the course for I/I mitigation and the City of Portland's continuing efforts to abate SSOs from the sanitary collection system.

This report summarizes the results of Phase 1 of the I/I Program, a comprehensive flow monitoring program, and provides recommendations for Phase 2, investigation and rehabilitation. Phase 1 includes development of a flow monitoring strategy that includes review of recommended meter sites from the CMOM report, identification of other suitable sites, field verification of these sites, recommendation of initial sites, installation of flow monitoring equipment and data collection and maintenance procedures for the flow monitoring equipment. In conjunction with implementation of the flow monitoring program, Phase 1 includes engineering analysis of flow data, including calculation of average daily flow, peak daily flow, peak hourly flow, infiltration and inflow for each meter area. Meter areas were ranked by quantity of infiltration and inflow and follow-on investigation recommendations were developed.

The flow monitoring program includes installation, maintenance and monitoring of 40 flow meters over a period of 2 years. This report summarizes the results of the first 20 meters installed. The program was planned as a 2-year program to allow for potentially unfavorable weather conditions (low precipitation or groundwater), the ability to meter small subsections of each sub-area in year 2 (if required based on the first's year's data), and time to allow for corrections to the City's collection system mapping and pipeline connectivity.

1.2 Collection System Background and Description

The City of Portland's wastewater collection system, shown on Figure 1, contains approximately 240 miles of separated and combined sewers and 24 pump stations, 9 of which are owned and operated by the City. The collection system and pump stations convey wastewater to the East End Wastewater Treatment Facility (WWTF) in Portland, which is owned and operated by the Portland Water District.



THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 1 - CITY OF PORTLAND COLLECTION SYSTEM MAP

0 0.25 0.5 1 Miles

December 2018

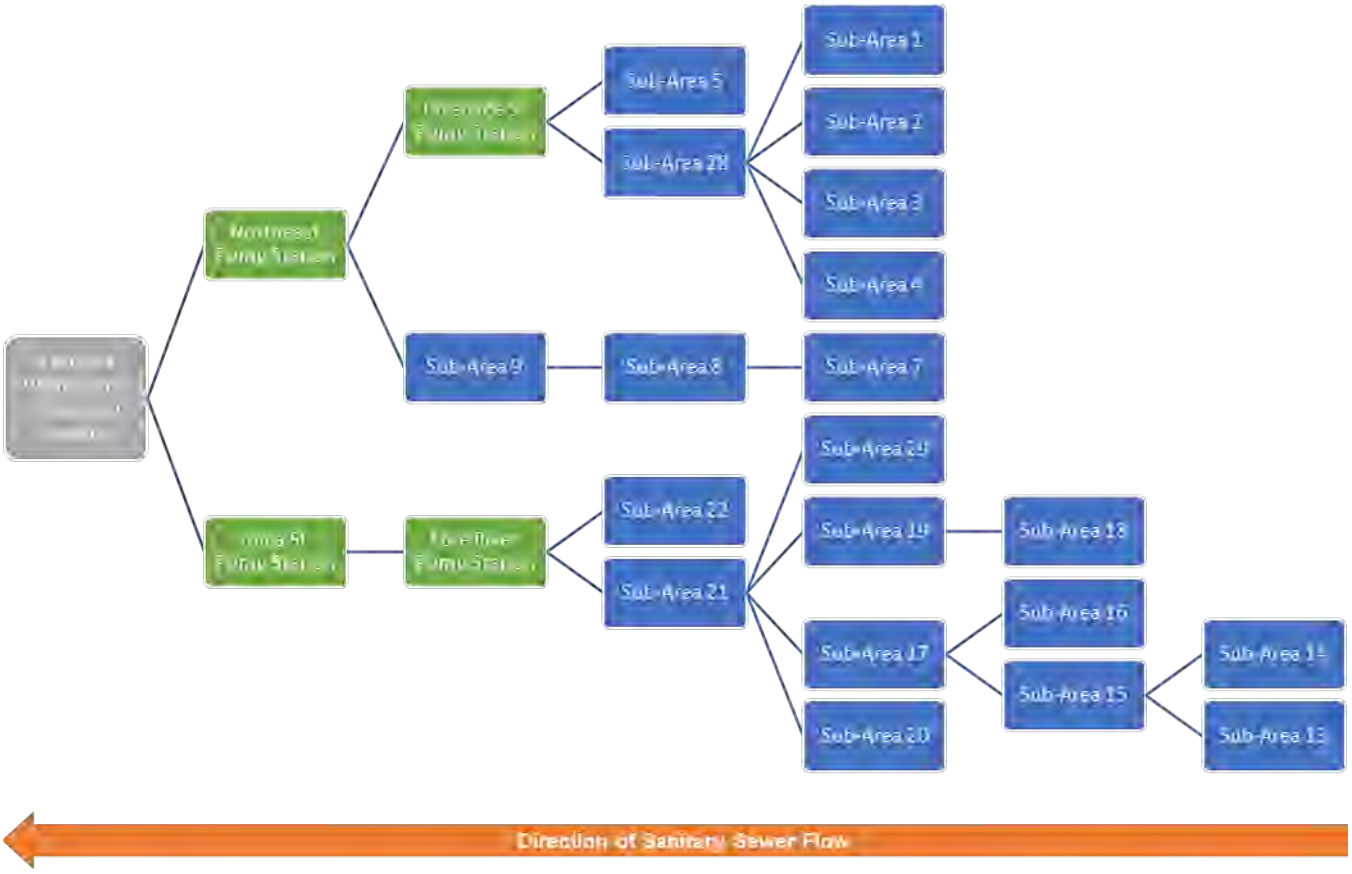
ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 1 - CITYWIDE SANITARY SEWER SYSTEM.mxd

1.2.1 Sub-Area Delineation

The first phase of the metering program included the delineation of 20 sub-areas throughout the City. Due to ongoing sewer separation projects and the extent of combined sewers in the downtown area of Portland, efforts were focused on the north and west areas of the City. Prioritization of meter areas was based on recent and on-going flow monitoring and available CCTV data, historic and recently discovered problem areas where backups, surcharging and overflows occurred, areas tributary to known problem areas, areas where the hydraulic model identified potential I/I capacity issues, and areas near water bodies that could be contributing I/I to the system. Figure 2 shows a flow vector diagram for the 20 sub-areas included in the metering program. The flow vector diagram is a visual representation of tributary flow within the system. Sub-areas delineated and included in the 2018 metering program are shown on Figure 3.

Figure 2. Flow Vector Diagram



Presumpscot River
Dole Brook
Fall Brook
Millbrook
Capisic Brook
Fore River
Stroudwater River
Long Creek
Presumpscot Estuary
Casco Bay
Back Cove
Portland Harbor
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Legend

SEWER FEATURES

- Sewer Manholes
- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION

SEWER PIPE TYPE

- SEPARATED GRAVITY SEWER
- COMBINED GRAVITY SEWER
- SEWER FORCE MAIN
- DELINEATED SUB-AREA

HYDROLOGY

- OPEN WATER
- WETLAND
- CITY BOUNDARY

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

0 0.25 0.5 1 Miles

December 2018

FIGURE 3 - 2018 SUB-AREA DELINEATION

ARCADIS Design & Consultancy for natural and built assets

G:\GIS\Portland\2018 I-I Report\FIGURE 3 - 2018 SUB-AREA DELINEATION.mxd

2 2018 METERING ANALYSIS

In March 2018, Arcadis and its subcontractor, Flow Assessment Services (FAS) completed a 16-week flow monitoring program of 20 sub-areas throughout the City of Portland. Meters were installed by FAS in the most downstream manhole of each sub-area where hydraulic conditions were conductive for metering. Metering was performed using continuous monitoring devices incorporating depth and velocity sensors to measure velocity, depth and flow rate. Two record tipping bucket rain gauges measuring rainfall every fifteen minutes were installed on the roof of the Fore River Pump Station and the Riverton Fire Station. Rain gauge data was supplemented with data from the City-owned rainfall gauge at the Riverside Street Pump Station.

Two permanent groundwater monitoring wells were installed on May 6, 2018 at the intersection of Martin Street and Bartley Street and on Leland Street across from the Deering High School parking lot. Maintenance and data collection for the groundwater gauges, rainfall gauges and flow meters was conducted bi-weekly by Flow Assessment Services.

2.1 Wastewater Characteristics

There are three major components of wastewater flow in a sanitary sewer system, base sanitary flow (BSF), groundwater infiltration (GWI) and rainfall derived inflow and infiltration (RDII - commonly referred to as inflow). The Environmental Protection Agency's "Guide for Estimating Infiltration and Inflow", June 2014, provides the following definitions:

Base Sanitary Flow (BSF) – The portion of wastewater which includes domestic, commercial, institutional, and industrial sewage and specifically excludes infiltration and inflow.

Groundwater Infiltration (GWI) – Measured during average dry weather flow period. The average of the low nighttime flows (midnight to 6am) per day for the same time period, minus significant industrial or commercial nighttime users

Rainfall Induced Infiltration (RII) – The short term increase in infiltration which is the result of a rain event. Rainfall-induced infiltration is a portion of delayed inflow.

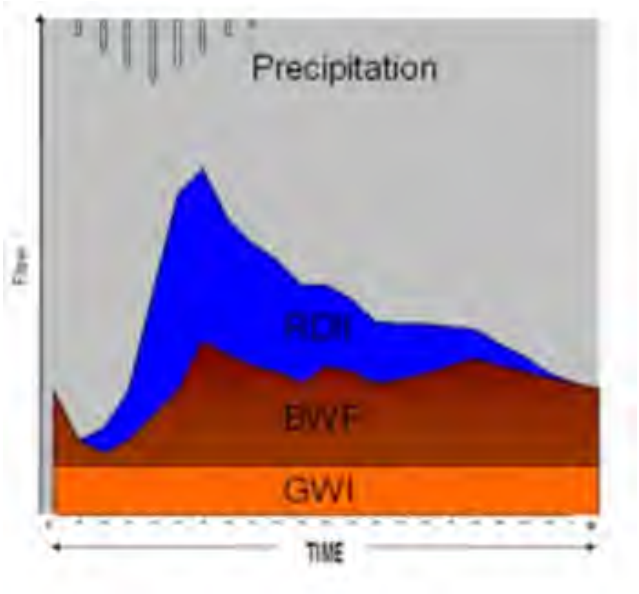
Delayed Inflow Volume – The portion of total inflow which is generated from indirect connections to the collection system or connections which produce inflow after a significant time delay from the beginning of a storm. Delayed inflow sources include: sump pumps, foundation drains, indirect sewer/drain cross connections, etc. Rainfall-induced infiltration cannot be distinguished from delayed inflow and is therefore included as part of delayed inflow. Delayed inflow sources have a gradual impact on the collection system and flow decreases gradually upon conclusion of the rainfall event, and after peak inflow caused by direct connections.

Inflow – Water other than sanitary wastewater that enters a sewer system from sources such as roof leaders, cellar/foundation drains, yard drains, area drains, drains from springs and swampy areas, manhole covers, cross connections between storm sewers and sanitary sewers, and catch basins. Inflow does not include infiltration.

Rainfall derived infiltration and inflow includes both rainfall-induced infiltration and inflow. Figure 4 highlights the three key components of wastewater flow during a precipitation event. The GWI (orange

line) remains constant and is not impacted by precipitation, the BWF (brown line) is a diurnal pattern based on actual usage and not impacted by precipitation, and the RDII (blue line) shows a very clear increase in flows as a direct response to precipitation.

Figure 4. Components of Wastewater Flow During Wet Weather (US EPA, 2007)



The City of Portland's collection system consists of approximately 240 miles of separated and combined sewers. A traditional infiltration and inflow analysis was conducted in the separated portion of the collection system, while a modified approach was used in the combined portion of the collection system. In the sub-areas where 75% or more of the collection system was separated, the I/I analysis focused on identifying groundwater infiltration, rainfall-induced infiltration and direct inflow. In the combined subareas, the I/I analysis focused on identifying groundwater infiltration and rainfall-induced infiltration (delayed inflow). Large volumes of direct inflow are expected in a combined system due to known cross connections between the sanitary system and the drainage system. While direct inflow values were calculated in these sub-areas, they were not used to develop follow-on investigation recommendations. Table 1 includes a summary of the total pipeline footage, percentage of combined pipes and the approach method for each sub-area.

Table 1. Sub-area Characteristics

Sub-area	Total Footage (LF)	Percent Combined (%)	Approach
Sub-Area 1	19,997	7%	Traditional
Sub-Area 2	11,918	2%	Traditional
Sub-Area 3	28,692	36%	Modified
Sub-Area 4	8,893	0%	Traditional
Sub-Area 5	21,962	16%	Traditional
Sub-Area 7	23,684	13%	Traditional
Sub-Area 8	25,297	40%	Modified
Sub-Area 9	10,989	53%	Modified
Sub-Area 13	48,470	57%	Modified
Sub-Area 14	23,488	24%	Traditional
Sub-Area 15	22,812	30%	Modified
Sub-Area 16	21,410	67%	Modified
Sub-Area 17	24,822	48%	Modified
Sub-Area 18	19,962	85%	Modified
Sub-Area 19	5,677	35%	Modified
Sub-Area 20	9,924	79%	Modified
Sub-Area 21	21,047	76%	Modified
Sub-Area 22	19,133	93%	Modified
Sub-Area 28	11,010	75%	Modified
Sub-Area 29	6,174	34%	Modified

2.2 Results and Findings

Table 2 identifies the average daily flow (ADF), peak daily flow (PDF) and peak hourly flow (PHF) measured from March 7, 2018 through July 16, 2018 for each of the twenty sub-areas. Average daily flow is calculated by summing all metered flows and dividing by the duration of the metering period. Peak daily flow is the maximum daily flow over 24-hours measured throughout the metering period. Peak hourly flow is the maximum 1-hour flow rate measured. Peaking factor is calculated by dividing the peak hourly flow by the average daily flow for each sub-area. Table 2 shows net average daily flow within each sub-area itself (with upstream tributary flows subtracted out), net peak daily flow, net peak hourly flow and the hourly peaking factor.

Table 2. Flow Metering Results – ADF, PDF, PHF

Sub-Area	Average Daily Flow (GPD)	Peak Daily Flow (GPD)	Peak Hourly Flow (GPD)	Hourly Peaking Factor
Sub-Area 1	147,060	382,063	870,000	6
Sub-Area 2	65,234	129,833	180,750	3
Sub-Area 3	170,348	296,042	570,000	3
Sub-Area 4	150,666	270,896	765,500	5
Sub-Area 5	184,123	398,698	630,750	3
Sub-Area 7	171,871	413,010	701,000	4
Sub-Area 8*	125,390	484,365	1,104,750	9
Sub-Area 9*	142,673	408,188	957,000	7
Sub-Area 13	680,228	1,779,313	2,589,750	4
Sub-Area 14	271,125	579,698	1,220,500	5
Sub-Area 15*	89,215	358,104	2,902,875	33
Sub-Area 16	425,703	1,472,542	4,129,000	10
Sub-Area 17*	67,371	319,948	1,257,500	19
Sub-Area 18	408,780	1,633,229	4,159,000	10
Sub-Area 19*	72,388	872,031	2,812,750	39
Sub-Area 20	247,097	2,416,948	7,569,000	31
Sub-Area 21*	115,428	1,489,417	1,607,250	14
Sub-Area 22	340,367	2,281,698	6,500,250	19
Sub-Area 28*	105,904	401,594	847,750	8
Sub-Area 29	112,546	865,542	2,859,000	25

*Denotes net values with tributary sub-areas subtracted.

Hyetographs showing average daily flow and rainfall for each of the 20 sub-areas are included in Appendix B.

2.3 Groundwater Infiltration

Groundwater infiltration is defined as groundwater that enters or leaks into a sanitary sewer system through defective pipes, pipe joints, service connections, or manholes. The average groundwater infiltration rate is defined as 85% of the nighttime sanitary flow measured on dry days from 12:00am to 6:00am throughout the entire metering period. Only data for days that follow a minimum of 72-hours without a rainfall event are considered “dry days” to avoid inclusion of indirect inflow and rainfall induced infiltration (RII) in the infiltration estimate.

Groundwater levels were monitored throughout the metering period using the two groundwater monitoring wells installed. The groundwater depth during the metering period was analyzed in relation to the average sewer pipe elevations in the area, as shown in Figure 5, as groundwater depth can have a significant influent on the amount of groundwater infiltration entering a collection system.

Groundwater infiltration for each sub-area is normalized by calculating the gallons per day per inch diameter mile of pipe (gpd/in-mi). The inch-diameter-mile of pipe, or inch-miles (in-mi), in a sub-area is calculated by multiplying the sum of the miles of for each diameter of pipe by its respective inch diameter. As an example, if a system contained 1 mile of 10-inch diameter, 1.5 miles of 12-inch diameter, and 0.5 miles of 25-inch diameter of gravity sewers, the calculated inch-miles would be as follows:

(10-inch x 1 mile) + (12-inch x 1.5 miles) + (24-inch x 0.5 mile) = 40 in-mi

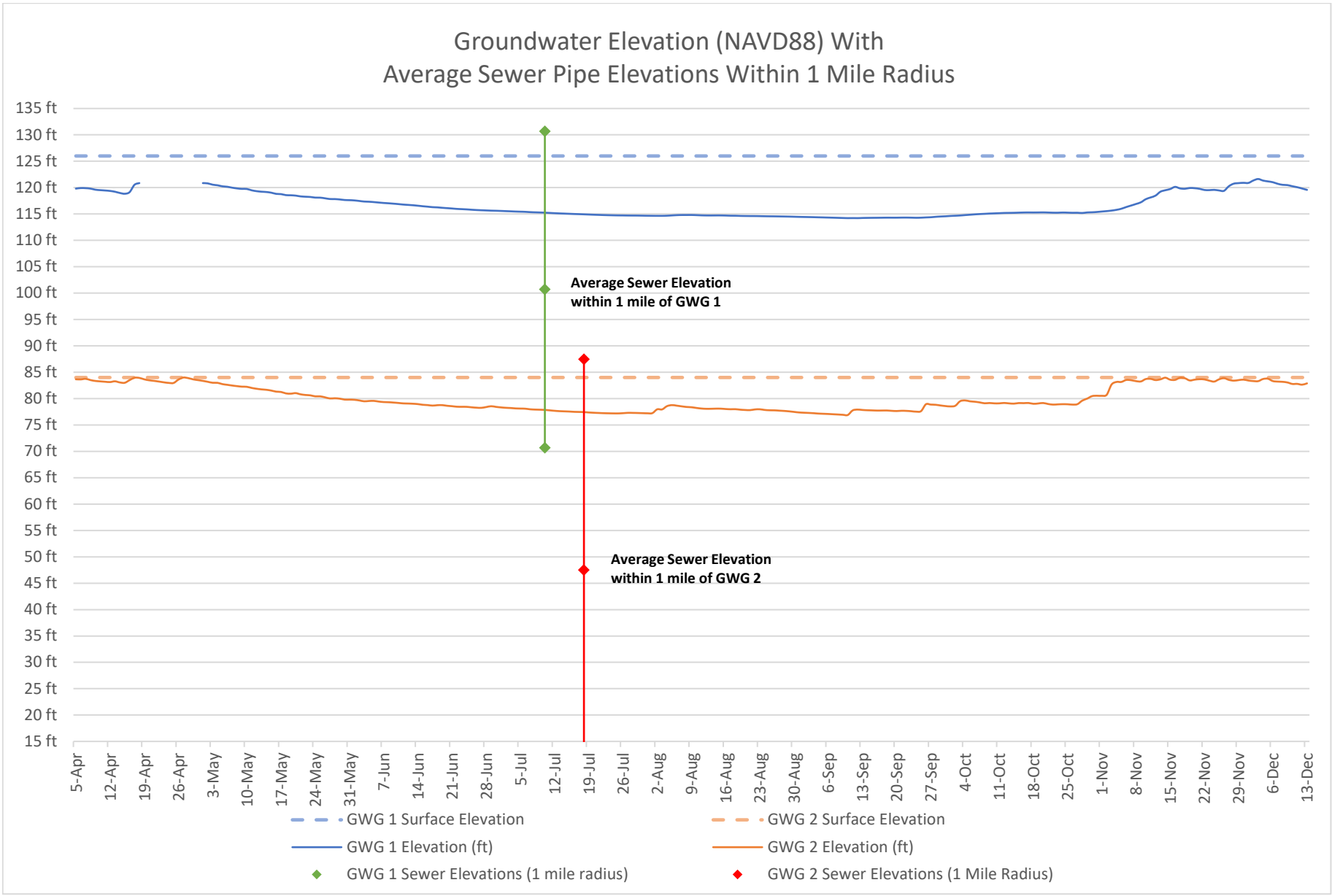
Groundwater infiltration rates for each sub-area were calculated by dividing the sub-area’s total groundwater infiltration by the number of inch-miles of sanitary sewer within the sub-area. The total groundwater infiltration rates for each sub-area during the metering period are shown in Table 3.

Table 3. Flow Metering Results – Infiltration

Sub-Area	Average Daily Flow (gpd)	Net Average Infiltration (gpd)	Infiltration GPD/Total LF (GPD/LF)	Gallons per Day per Inch-Mile (GPDIM)
Sub-Area 1	147,060	78,910	3.9	2,515
Sub-Area 2	65,234	36,879	3.1	1,884
Sub-Area 3	170,348	91,912	3.2	1,968
Sub-Area 4	150,666	83,726	9.4	6,055
Sub-Area 5	184,123	97,130	4.4	2,444
Sub-Area 7	171,871	97,191	4.1	2,505
Sub-Area 8 [1, 2]	125,390	69,114	2.7	1,355
Sub-Area 9 [1, 2]	142,673	75,325	6.9	2,427
Sub-Area 13	680,228	374,236	7.7	2,354
Sub-Area 14	271,125	152,698	6.5	3,489
Sub-Area 15 [1, 2]	89,215	66,479	2.9	1,411
Sub-Area 16	425,703	279,739	13.1	5,375
Sub-Area 17 [1, 2]	67,371	70,823	2.9	1,310
Sub-Area 18	408,780	209,635	10.5	4,487
Sub-Area 19 [1, 2]	72,388	43,517	7.7	2,469
Sub-Area 20	247,097	118,081	11.9	4,235
Sub-Area 21 [1, 2]	115,428	*N/A*	*N/A*	*N/A*
Sub-Area 22	340,367	128,450	6.7	2,367
Sub-Area 28 [1, 2]	105,904	50,821	9.6	1,527
Sub-Area 29	112,546	50,357	8.2	4,445

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

Figure 5 - Groundwater Depth with Average Sewer Pipe Elevations



2.4 Rainfall Derived Infiltration and Inflow (RDII)

Four rainfall events from the metering period were analyzed to calculate rainfall derived infiltration and inflow. Precipitation data was used from rain gauges at the Riverside Road Pump Station, Riverton Fire Station and the Fore River Pump Station. Table 4 outlines the duration, total rainfall and peak intensity of the four selected storms. The rainfall data from the April 16, 2018 storm event was only available from the Riverside Pump Station rain gauge and therefore was used in the inflow analysis for all sub-areas for that storm event. For the additional three storm events, the analysis used rainfall data from the closest rain gauge to the flow meter. The Riverside Pump Station rain gauge serviced sub-areas 1, 2, 3, 4, 5, 7, 8 and 9. The Riverton Fire Station rain gauge serviced sub-areas 13, 14, 15, 16 and 17 and the Fore River Pump Station rain gauge serviced sub-areas 18, 19, 20, 21, 22, 28 and 29.

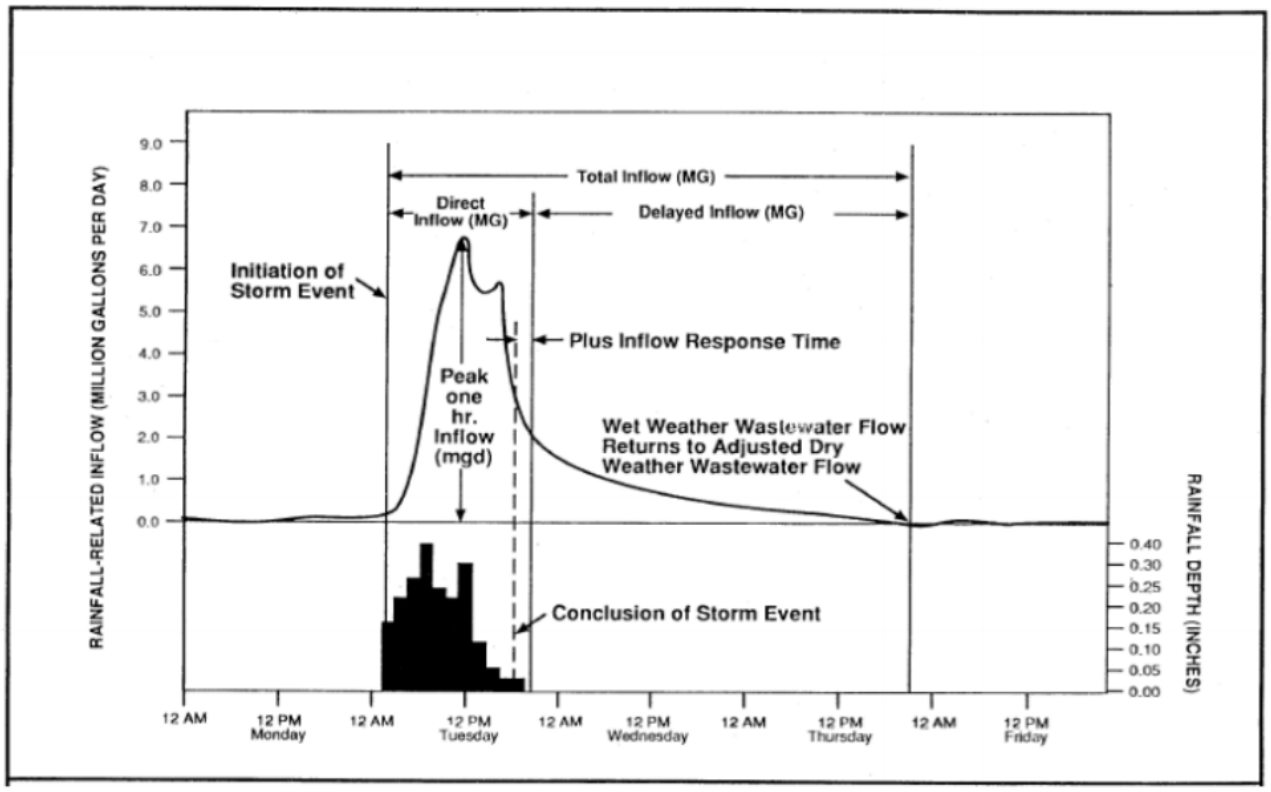
Table 4. Inflow Analysis – Selected Rainfall Events

Location	Rainfall Event	Duration (min)	Total Rainfall (in)	Peak Intensity (in/hr)
Riverside PS	4/16/18 8:00 AM	960	2.9	0.59
Riverside PS	4/25/18 12:45 PM	1215	2.59	0.48
Riverside PS	6/18/18 4:00 PM	165	1.07	0.77
Riverside PS	6/27/18 10:45 PM	1215	1.43	0.28
Riverton RG	4/25/18 12:45 PM	1230	1.67	0.29
Riverton RG	6/18/18 4:15 PM	165	1.13	0.85
Riverton RG	6/27/18 10:45 PM	1200	1.34	0.2
Fore River PS	4/25/18 12:45 PM	1245	1.76	0.28
Fore River PS	6/18/18 4:15 PM	135	0.96	0.75
Fore River PS	6/27/18 10:45 PM	1245	1.56	0.3

A wet weather hydrograph from each storm event was compared to a dry weather period on the same day of the week as each storm event. The dry weather flow is subtracted from the wet weather flow resulting in the inflow volumes presented in Table 5. The dry weather flow is calculated as an average of all dry days during the metering period for each day during the week. For example, all dry “Mondays” in the metering period are averaged together to determine the dry weather flow for each individual day.

The hydrograph shown as Figure 6 shows a typical inflow response to wet weather flow. The portion of inflow occurring during the storm event is identified as direct inflow and the portion of inflow that occurs once the storm has concluded is delayed inflow. Total inflow encompasses both direct and delayed inflow.

Figure 6. Wet Weather Hydrograph (MassDEP, 1993)



For the purposes of this study, direct inflow was calculated for all sub-areas; however, where the modified approach was used, only the delayed inflow results were used in the development of follow-on investigation recommendations.

Table 5 – Flow Metering Results - Inflow

Sub-Area	4/16/2018 Storm Event			4/25/2018 Storm Event			6/18/2018 Storm Event			6/27/2018 Storm Event		
	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)	Direct (gal)	Delayed (gal)	Total (gal)
Sub-Area 1	**237,480**	**236,470**	**473,951**	**141,300**	**121,100**	**262,400**	**600**	**0**	**600**	**2,900**	**4,200**	**7,100**
Sub-Area 2	**42,099**	**66,764**	**108,863**	**37,500**	**46,000**	**83,500**	**0**	**0**	**0**	**1,700**	**400**	**2,100**
Sub-Area 3	138,499	**133,903**	272,402	90,600	**91,300**	181,900	6,800	**800**	7,600	15,700	**3,600**	19,300
Sub-Area 4	**30,853**	**79,721**	**110,574**	**80,500**	**61,000**	**141,500**	**11,000**	**6,200**	**17,200**	**63,100**	**11,400**	**74,500**
Sub-Area 5	**172,264**	**214,393**	**386,657**	**97,800**	**119,700**	**217,500**	**2,500**	**600**	**3,100**	**0**	**2,500**	**2,500**
Sub-Area 7	**157,521**	**246,923**	**404,444**	**132,800**	**170,100**	**302,900**	**0**	**0**	**0**	**0**	**900**	**900**
Sub-Area 8	312,306	**366,043**	678,349	134,500	**162,100**	296,600	6,300	**0**	6,300	330,000	**8,400**	338,400
Sub-Area 9	285,422	**260,439**	545,861	227,900	**211,900**	439,800	500	**2,500**	3,000	0	**4,500**	4,500
Sub-Area 13	**975,293**	**1,142,995**	**2,118,288**	**930,700**	**857,700**	**1,788,400**	**86,500**	**0**	**86,500**	**396,100**	**89,200**	**485,300**
Sub-Area 14	**300,579**	**310,003**	**610,582**	**197,500**	**220,300**	**417,800**	**9,100**	**2,300**	**11,400**	**63,700**	**20,700**	**84,400**
Sub-Area 15	*N/A*	***N/A***	*N/A*	385,900	**155,800**	541,700	32,200	**42,200**	74,400	26,200	**0**	26,200
Sub-Area 16	1,076,962	**609,352**	1,686,314	457,200	**348,800**	806,000	945,000	**0**	945,000	243,300	**25,500**	268,800
Sub-Area 17	*N/A*	***N/A***	*N/A*	283,800	**23,900**	307,700	0	**0**	0	0	**0**	0
Sub-Area 18	1,284,107	**984,596**	2,268,703	989,800	**734,400**	1,724,200	148,800	**8,800**	157,600	451,200	**64,500**	515,700
Sub-Area 19	810,736	**389,442**	1,200,178	473,000	**240,200**	713,200	63,100	**2,900**	66,000	223,300	**0**	223,300
Sub-Area 20	2,166,025	**553,500**	2,719,525	1,162,800	**393,600**	1,556,400	221,900	**15,700**	237,600	549,400	**20,300**	569,700
Sub-Area 21	398,523	**1,397,997**	1,796,520	0	**129,700**	129,700	0	**145,200**	145,200	0	**131,700**	131,700
Sub-Area 22	1,980,560	**1,400,988**	3,381,548	1,174,200	**812,100**	1,986,300	102,100	**0**	102,100	543,100	**54,800**	597,900
Sub-Area 28	249,721	**0**	249,721	0	**0**	0	300	**0**	300	88,300	**31,800**	120,100
Sub-Area 29	812,737	**443,994**	1,256,731	434,300	**246,400**	680,700	73,500	**17,500**	91,000	207,600	**37,400**	245,000

3 SUB-AREA PRIORITIZATION AND RECOMMENDATIONS

3.1 High Infiltration and High RDII Sub-Areas

Infiltration within a sanitary sewer system is considered excessive if a subarea no greater than 20,000 linear feet of pipe exceeds a dry weather infiltration rate average of 4,000 gallons per day per inch diameter mile (gpd/idm). Sub-areas with infiltration rates exceeding 4,000 gpd/in-mi (Sub-areas 4, 16, 18, 20 and 29) are highlighted in Table 6.

Table 6. High Infiltration Sub-areas

Sub-Area	Groundwater Infiltration (GWI)	Infiltration GPD/Total LF (GPDLF)	Gallons per Day per Inch-Mile (GPDIM)
Sub-Area 4	83,726	**9.4**	6,055
Sub-Area 16	279,739	**13.1**	5,375
Sub-Area 18	209,635	**10.5**	4,487
Sub-Area 29	50,357	**8.2**	4,445
Sub-Area 20	118,081	**11.9**	4,235
Sub-Area 14	152,698	**6.5**	3,489
Sub-Area 1	78,910	3.9	2,515
Sub-Area 7	97,191	**4.1**	2,505
Sub-Area 19 [1, 2]	43,517	**7.7**	2,469
Sub-Area 5	97,130	**4.4**	2,444
Sub-Area 9 [1, 2]	75,325	**6.9**	2,427
Sub-Area 22	128,450	**6.7**	2,367
Sub-Area 13	374,236	**7.7**	2,354
Sub-Area 3	91,912	3.2	1,968
Sub-Area 2	36,879	3.1	1,884
Sub-Area 28 [1, 2]	50,821	**9.6**	1,527
Sub-Area 15 [1, 2]	66,479	2.9	1,411
Sub-Area 8 [1, 2]	69,114	2.7	1,355
Sub-Area 17 [1, 2]	70,823	2.9	1,310
Sub-Area 21 [1, 2]	*N/A*	*N/A*	*N/A*

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

The gallons per day of GWI per total liner footage of each sub-area was also calculated. Sub-areas with a total GPD/LF greater than 4 were also deemed high infiltration areas and are shown as bold in Table 6.

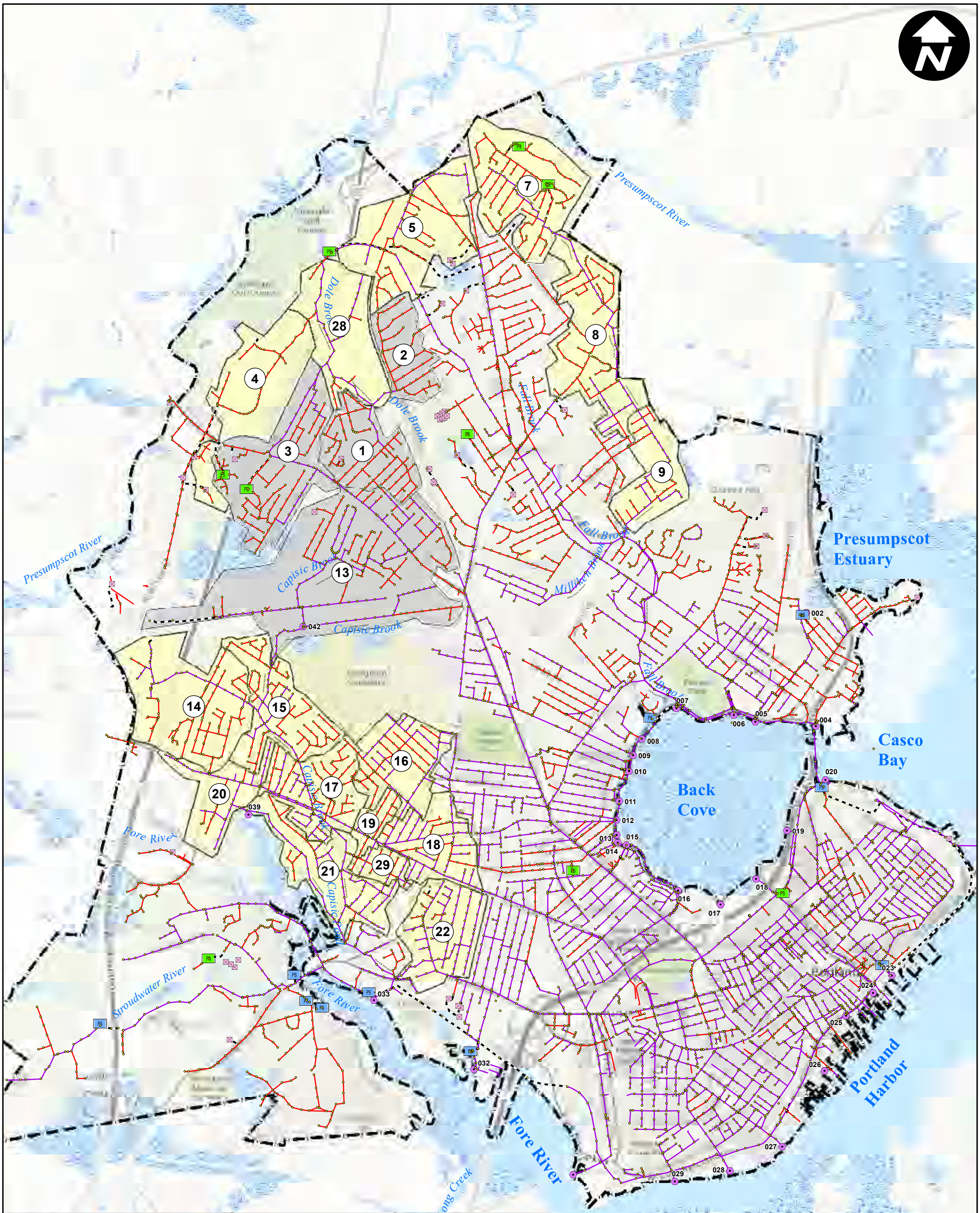
Inflow results were analyzed for the April 25, 2018 storm event to determine which sub-areas contribute excessive volumes of delayed inflow to the collection system. High delayed inflow sub-areas are shaded in Table 7.

Table 7. High Delayed Inflow Sub-areas – April 25, 2018 Storm Event

Subarea	Direct Inflow (Gal)	Delayed Inflow (Gal)	Total Inflow (Gal)
Sub-Area 13	**930,700**	**857,700**	**1,788,400**
Sub-Area 22	1,174,200	**812,100**	1,986,300
Sub-Area 18	989,800	**734,400**	1,724,200
Sub-Area 20	1,162,800	**393,600**	1,556,400
Sub-Area 16	457,200	**348,800**	806,000
Sub-Area 29	434,300	**246,400**	680,700
Sub-Area 19[1]	473,000	**240,200**	713,200
Sub-Area 14	**197,500**	**220,300**	**417,800**
Sub-Area 9[1]	227,900	**211,900**	439,800
Sub-Area 7	**132,800**	**170,100**	**302,900**
Sub-Area 8[1]	134,500	**162,100**	296,600
Sub-Area 15[1]	385,900	**155,800**	541,700
Sub-Area 21[1]	0	**129,700**	129,700
Sub-Area 1	**141,300**	**121,100**	**262,400**
Sub-Area 5	**97,800**	**119,700**	**217,500**
Sub-Area 3	90,600	**91,300**	181,900
Sub-Area 4	**80,500**	**61,000**	**141,500**
Sub-Area 2	**37,500**	**46,000**	**83,500**
Sub-Area 17[1]	283,800	**23,900**	307,700
Sub-Area 28[2]	0	**0**	0

Notes: 1. Collects flows from tributary sub-areas 2. Flow meter results indicate some negative net flows when tributary sub-areas are subtracted. Further investigations will be done during the next phase to account for negative values.

High infiltration and inflow sub-areas are highlighted in Figure 7.



Legend

SEWER FEATURES	SEWER PIPE TYPE	HYDROLOGY
SEWER MANHOLE	SEPARATED GRAVITY SEWER	OPEN WATER
COMBINED SEWER OVERFLOW	COMBINED GRAVITY SEWER	WETLAND
CITY PUMP STATION	SEWER FORCE MAIN	CITY BOUNDARY
PWD PUMP STATION	(5) SUB-AREA WITH HIGH I/I	
PRIVATE PUMP STATION	(3) SUB-AREA WITH LOW I/I	

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

0 0.25 0.5 1 Miles

December 2018

FIGURE 7 - HIGH INFILTRATION AND INFLOW SUB-AREAS

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3.2 Investigation Recommendations

Based on the metering results summarized in Section 3.1 and ongoing investigation and construction within the City of Portland, Phase 2 follow-on recommendations were developed. Recommendations, summarized in Table 8 and shown on Figure 8 include flow isolation, CCTV and manhole inspections. Individual sub-area maps showing follow-on recommendations are included in Appendix C.

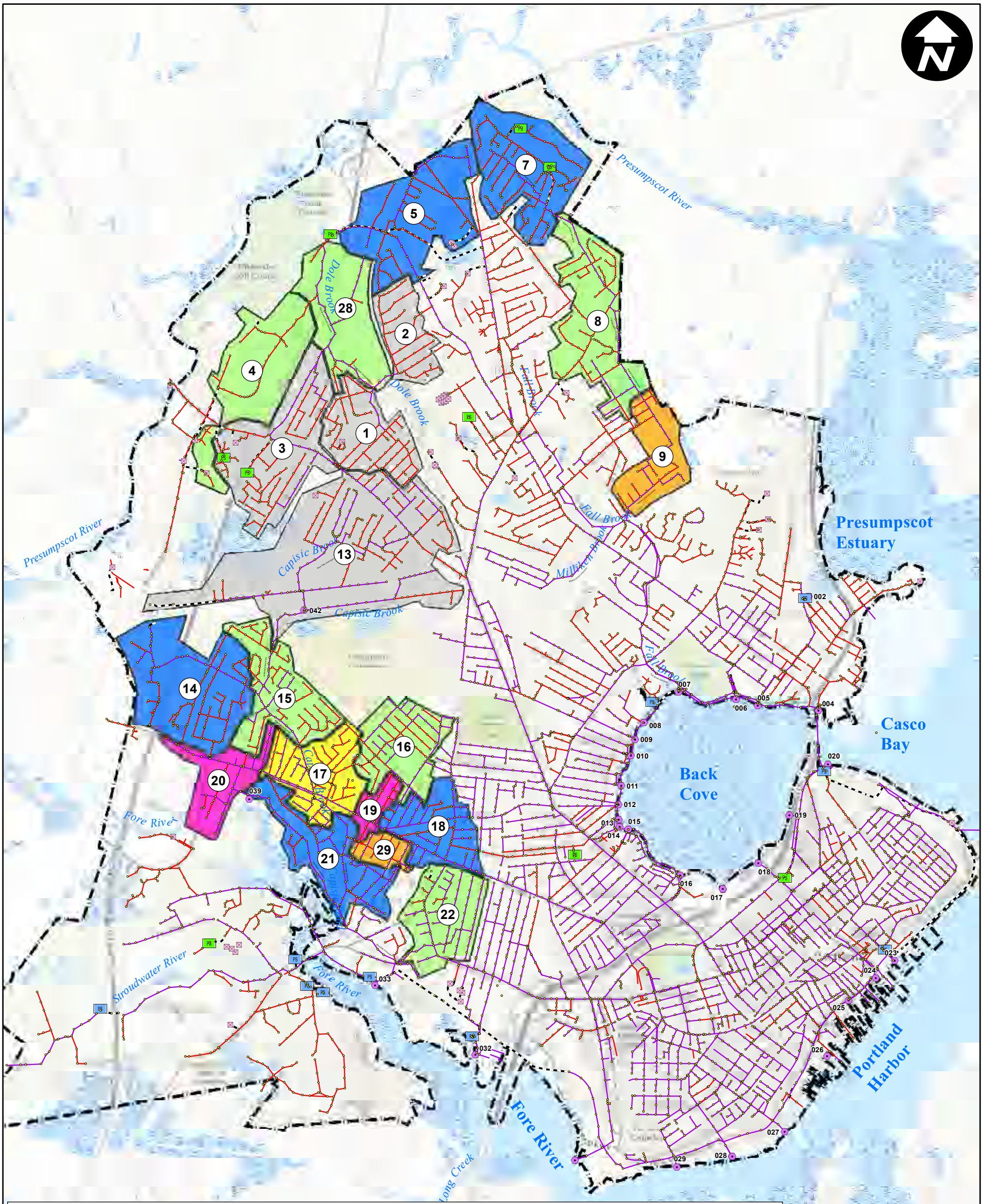
Table 8. Follow-on Investigation Recommendations

Sub-Area	High Infiltration Sub-areas	High Delayed Inflow Sub-area	Recommendations		
			Flow Isolation (LF)	CCTV (LF)	Manhole Inspections
Sub-Area 4	X		8,893		46
Sub-Area 5	X		21,962		
Sub-Area 7	X	X	23,684		
Sub-Area 8		X	19,179		26
Sub-Area 9		X		9,165	20
Sub-Area 13[1]	X	X	-	-	-
Sub-Area 14	X	X	23,488		
Sub-Area 15		X	19,404		20
Sub-Area 16	X	X	21,410		100
Sub-Area 17					28
Sub-Area 18	X	X	19,962		
Sub-Area 19	X	X		4,667	
Sub-Area 20	X	X		8,685	
Sub-Area 21		X	12,431		
Sub-Area 22	X	X	19,133		112
Sub-Area 28	X		5,164		56
Sub-Area 29	X	X		5,094	35
Total			***194,740***	***27,611***	***443***

Notes: 1. Investigation work in Sub-area 13 is ongoing through another project and therefore not included in these recommendations

Flow isolation was completed in December 2018 and CCTV is currently ongoing. Manhole inspections will be conducted in the Spring of 2019.

Investigations to identify direct inflow such as smoke testing, dye testing and large building inspections will be conducted in the summer of 2019 once the 2019 flow metering program is completed.



THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 8 - INVESTIGATION RECOMMENDATIONS

0 0.25 0.5 1 Miles

December 2018

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G:\GIS\Portland\2018 I-I Report\FIGURE 8 - I AND I INVESTIGATION SUB-AREAS.mxd

3.3 2019 Flow Metering Program

A second phase of flow metering is scheduled to be conducted in April 2019 in 11 sub-areas that were not included in the first phase of flow metering. The metering program includes 11 meters, as shown on Figure 9, as well as 3 additional deduction meters in sub-areas 6, 11 and 26. Additional meters may be added to the 2019 flow metering program if results from the ongoing SSES activities identify the need for additional meter data.

Presumpscot River
Dole Brook
Capisic Brook
Fall Brook
Millikin Brook
Presumpscot Estuary
Casco Bay
Back Cove
Fore River
Stroudwater River
Portland Harbor
Long Creek

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 23A 24 24A 25 26 27 28 29

002 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 023 024 025 026 027 028 029 032 033 039 042

Legend

SEWER FEATURES
- SEWER MANHOLE
- COMBINED SEWER OVERFLOW
- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION

SEWER PIPE TYPE
- SEPARATED GRAVITY SEWER
- COMBINED GRAVITY SEWER
- SEWER FORCE MAIN
- 27 2019 SUB-AREA DELINEATION
- 5 2018 SUB-AREA DELINEATION

HYDROLOGY
- OPEN WATER
- WETLAND
- CITY BOUNDARY

THE CITY OF PORTLAND, MAINE

Phase 1: Investigation of Flows - 2018 Monitoring

FIGURE 9 - 2019 FLOW METER LOCATIONS

0 0.25 0.5 1 Miles

December 2018

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APPENDIX A

2018 Meter Area Figures

APPENDIX B

Flow Meter Hydrographs with Related Rainfall Hyetographs

APPENDIX C

Follow-on Investigation Sub-Area Figures

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City of Portland, Maine

Appendix B - Flow Isolation Findings

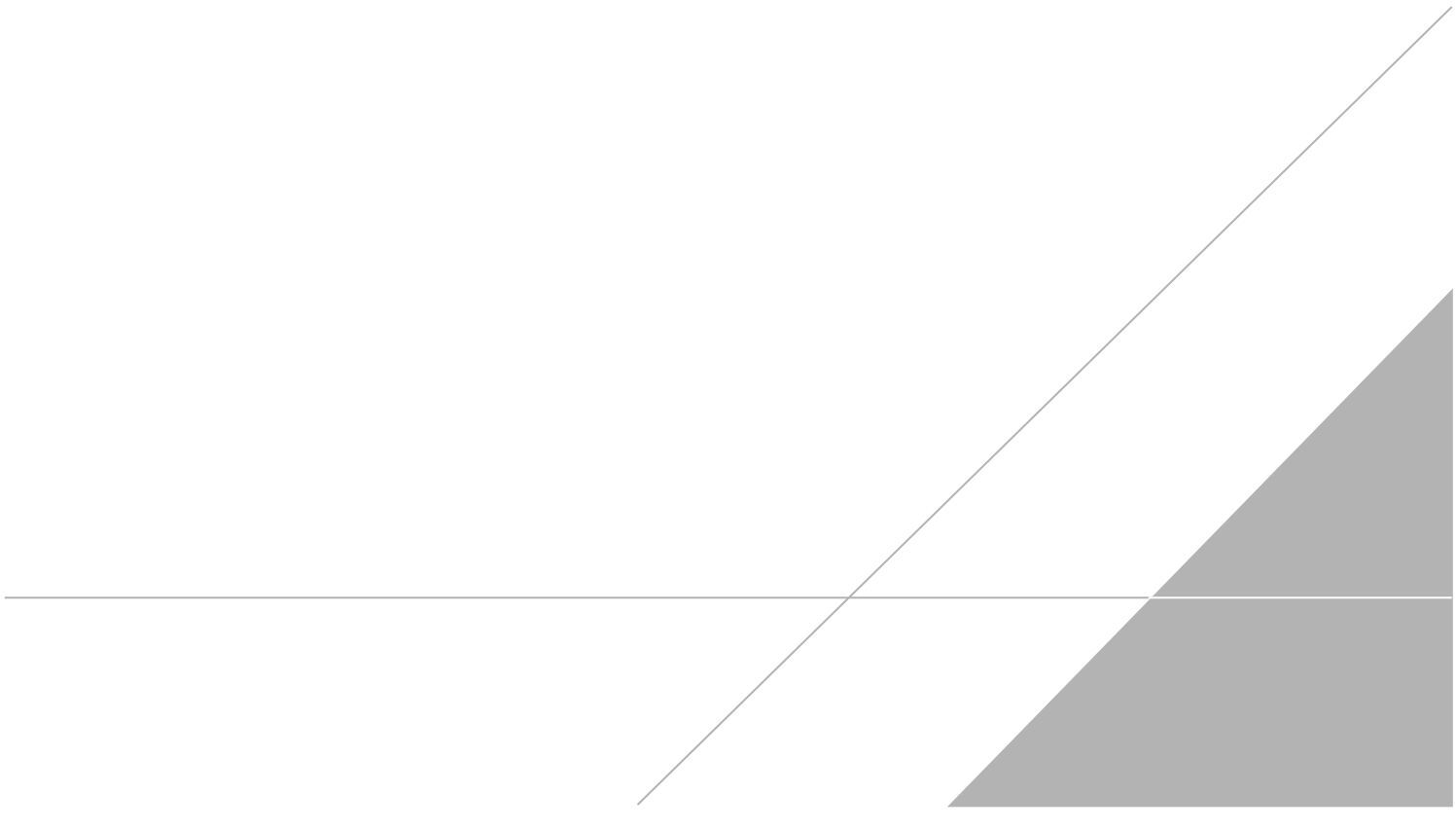
Wastewater Collection System

Analysis and Action Plan

June, 2020

Appendix Contents

FLOW ISOLATION FINDINGS TABLE



City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Flow Isolation Results

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 04	SSGM-03063	Evergreen Dr	SSMH-0210	SSMH-0828	PVC	8	195.0	0.00	0.30	0	None Detected					
2018	Sub-Area 04	SSGM-03092	Evergreen Dr	SSMH-2972	SSMH-2982	PVC	8	127.0	0.25	0.19	1,870	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-03093	Evergreen Dr	SSMH-2982	SSMH-2983	PVC	8	102.0	0.50	0.15	4,658	Infiltration > 4,000					
2018	Sub-Area 04	SSGM-03094	Evergreen Dr	SSMH-2983	SSMH-0489	PVC	8	100.8	0.50	0.15	4,712	Infiltration > 4,000					
2018	Sub-Area 04	SSGM-03095	Evergreen Dr	SSMH-0489	SSMH-0210	PVC	8	296.0	0.00	0.45	0	None Detected					
2018	Sub-Area 04	SSGM-03096	Evergreen Dr	SSMH-2984	SSMH-0828	PVC	8	125.7	0.10	0.19	756	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-03097	Evergreen Dr	SSMH-0211	SSMH-2984	PVC	8	171.0	0.10	0.26	556	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-03098	Evergreen Dr	SSMH-0828	SSMH-2986	PVC	10	272.2	0.15	0.52	419	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-00241	Industrial Parkway	SSMH-4437	SSMH-4439	PVC	8	251.7	0.50	0.38	1,888	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-00242	Industrial Way	SSMH-4439	SSMH-1452	PVC	8	259.6	0.00	0.39	0	None Detected					
2018	Sub-Area 04	SSGM-00243	Industrial Way	SSMH-1454	SSMH-1453	PVC	8	111.4	0.75	0.17	6,399	Infiltration > 4,000					
2018	Sub-Area 04	SSGM-00244	Industrial Way	SSMH-1557	SSMH-1558	PVC	8	156.7	0.00	0.24	0	None Detected					
2018	Sub-Area 04	SSGM-00245	Industrial Way	SSMH-1558	SSMH-1559	PVC	8	168.0	0.00	0.25	0	None Detected					
2018	Sub-Area 04	SSGM-03053	Industrial Way	SSMH-2977	SSMH-4437	PVC	8	161.6	0.25	0.24	1,470	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-03054	Industrial Way	SSMH-1452	SSMH-5372	PVC	8	117.5	1.50	0.18	12,133	Infiltration > 4,000					
2018	Sub-Area 04	SSGM-03055	Industrial Way	SSMH-5373	SSMH-1454	PVC	8	93.9	0.00	0.14	0	None Detected					
2018	Sub-Area 04	SSGM-03056	Industrial Way	SSMH-5372	SSMH-5374	PVC	8	89.6	0.25	0.14	2,653	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-03057	Industrial Way	SSMH-5374	SSMH-5373	PVC	8	88.1	0.50	0.13	5,391	Infiltration > 4,000					
2018	Sub-Area 04	SSGM-03058	Industrial Way	SSMH-1453	SSMH-5375	PVC	8	116.5	0.50	0.18	4,080	Infiltration > 4,000			3	SSMH-5375	8" PVC Service from West
2018	Sub-Area 04	SSGM-03059	Industrial Way	SSMH-5375	SSMH-0826	PVC	8	167.1	0.25	0.25	1,421	Infiltration < 4,000			0.5	SSMH-0826	8" PVC Service from East
2018	Sub-Area 04	SSGM-03060	Industrial Way	SSMH-0826	SSMH-5376	PVC	8	108.5	0.00	0.16	0	None Detected					
2018	Sub-Area 04	SSGM-03061	Industrial Way	SSMH-0829	SSMH-1557	PVC	8	162.2	0.25	0.25	1,465	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-03062	Industrial Way	SSMH-1560	SSMH-0828	PVC	8	71.6	0.00	0.11	0	None Detected					
2018	Sub-Area 04	SSGM-03064	Industrial Way	SSMH-0827	SSMH-1560	PVC	8	239.7	0.00	0.36	0	None Detected					
2018	Sub-Area 04	SSGM-03065	Industrial Way	SSMH-1559	SSMH-0827	PVC	8	311.8	0.25	0.47	762	Infiltration < 4,000					
2018	Sub-Area 04	SSGM-03066	Industrial Way	SSMH-5376	SSMH-0829	PVC	8	194.9	0.00	0.30	0	None Detected			0.5	SSMH-0829	8" PVC Service from East
2018	Sub-Area 04	SSGM-03068	Interceptor - Presumpscot North	SSMH-0195	SSMH-0831	AC	10	180.6	0.00	0.34	0	None Detected					
2018	Sub-Area 04	SSGM-03099	Interceptor - Presumpscot North	SSMH-2986	SSMH-0830	PVC	10	231.7	0.00	0.44	0	None Detected					
2018	Sub-Area 04	SSGM-03100	Interceptor - Presumpscot North	SSMH-2985	SSMH-0195	AC	10	226.3	0.00	0.43	0	None Detected					
2018	Sub-Area 04	SSGM-07193	Interceptor - Presumpscot North	SSMH-0830	SSMH-6179	PVC	10	172.7	0.00	0.33	0	None Detected					
2018	Sub-Area 04	SSGM-07194	Interceptor - Presumpscot North	SSMH-6179	SSMH-2985	PVC	10	235.0	0.00	0.45	0	None Detected					
2018	Sub-Area 04	SSGM-03108	Prim St	SSMH-0832	SSMH-0205	PVC	8	269.3	0.00	0.41	0	None Detected					
2018	Sub-Area 04	SSGM-00240	Riverside St	SSMH-0206	SSMH-0205	PVC	8	282.4	0.00	0.43	0	None Detected					
2018	Sub-Area 04	SSGM-03039	Riverside St	SSMH-2973	SSMH-2974	PVC	8	299.9	0.00	0.45	0	None Detected					
2018	Sub-Area 04	SSGM-03040	Riverside St	SSMH-2974	SSMH-2972	PVC	8	300.4	0.50	0.46	1,582	Infiltration < 4,000			5	SSMH-2972	8" ACP Service from WNW
2018	Sub-Area 04	SSGM-03041	Riverside St	SSMH-0205	SSMH-2976	PVC	8	158.5	0.00	0.24	0	None Detected					
2018	Sub-Area 04	SSGM-03042	Riverside St	SSMH-2976	SSMH-2977	PVC	8	27.6	0.00	0.04	0	None Detected					
2018	Sub-Area 04	SSGM-03043	Riverside St	SSMH-5368	SSMH-2977	PVC	8	41.3	0.00	0.06	0	None Detected					
2018	Sub-Area 04	SSGM-06711	Riverside St	SSMH-1343	SSMH-0206	PVC	8	250.1	0.00	0.38	0	None Detected					
2018	Sub-Area 04	SSGM-06712	Riverside St	SSMH-2975	SSMH-1343	PVC	8	248.4	0.00	0.38	0	None Detected					
2018	Sub-Area 04	SSGM-03044	Terrace Pond	SSMH-2978	SSNS-0030	ABS	8	183.6	0.00	0.28	0	None Detected					
2018	Sub-Area 04	SSGM-03045	Terrace Pond	SSFT-0218	SSMH-2978	ABS	8	198.6	1.00	0.30	4,786	Infiltration > 4,000					
2018	Sub-Area 04	SSGM-03046	Terrace Pond	SSFT-0217	SSMH-2978	ABS	8	89.1	1.00	0.14	10,665	Infiltration > 4,000					
2018	Sub-Area 04	SSGM-03047	Terrace Pond	SSMH-5370	SSMH-2978	ABS	8	286.0	0.00	0.43	0	None Detected					
2018	Sub-Area 04	SSGM-03048	Terrace Pond	SSFT-0221	SSMH-5370	ABS	6	136.6	0.00	0.16	0	None Detected					
2018	Sub-Area 04	SSGM-03049	Terrace Pond	SSFT-0220	SSMH-5370	ABS	6	175.5	0.00	0.20	0	None Detected					
2018	Sub-Area 04	SSGM-03050	Terrace Pond	SSFT-0219	SSMH-5370	ABS	6	59.7	0.00	0.07	0	None Detected					
2018	Sub-Area 04	SSGM-03242	Waldron Way	SSMH-4555	SSMH-5412	PVC	8	137.2	0.00	0.21	0	None Detected					
2018	Sub-Area 04	SSGM-03243	Waldron Way	SSMH-5412	SSNS-0035	PVC	8	31.4	0.00	0.05	0	None Detected					
2018	Sub-Area 04	SSGM-06273	Waldron Way	SSMH-5413	SSMH-6018	PVC	8	237.3	0.00	0.36	0	None Detected					
2018	Sub-Area 04	SSGM-06274	Waldron Way	SSMH-6018	SSMH-5412	PVC	8	179.3	0.00	0.27	0	None Detected					
2018	Sub-Area 05	SSGM-01672	Allison Ave	SSMH-2453	SSMH-2454	PVC	8	80.2	0.00	0.12	0	None Detected					
2018	Sub-Area 05	SSGM-01673	Allison Ave	SSMH-2454	SSMH-2455	PVC	8	176.0	0.00	0.27	0	None Detected					
2018	Sub-Area 05	SSGM-01674	Allison Ave	SSMH-2456	SSMH-2455	PVC	8	305.0	0.00	0.46	0	None Detected					
2018	Sub-Area 05	SSGM-01675	Allison Ave	SSMH-2457	SSMH-2456	PVC	8	298.0	0.00	0.45	0	None Detected					
2018	Sub-Area 05	SSGM-07779	Auburn St	SSMH-6683	SSMH-6682	-	-	300.0	*	#VALUE!	N/A	N/A					Could not locate SSMH-6683 or SSMH-6682
2018	Sub-Area 05	SSGM-01772	Ballpark Dr	SSMH-5065	SSMH-5064	PVC	8	36.8	0.00	0.06	0	None Detected					
2018	Sub-Area 05	SSGM-01773	Ballpark Dr	SSMH-5069	SSMH-5065	PVC	8	181.8	0.00	0.28	0	None Detected					
2018	Sub-Area 05	SSGM-01774	Ballpark Dr	SSMH-0592	SSMH-5069	PVC	8	202.2	0.00	0.31	0	None Detected					
2018	Sub-Area 05	SSGM-01775	Ballpark Dr	SSMH-0593	SSMH-0592	PVC	8	199.5	0.00	0.30	0	None Detected					
2018	Sub-Area 05	SSGM-01776	Ballpark Dr	SSMH-0594	SSMH-0593	PVC	8	200.3	0.00	0.30	0	None Detected					
2018	Sub-Area 05	SSGM-01777	Ballpark Dr	SSMH-0595	SSMH-0594	PVC	8	213.9	0.00	0.32	0	None Detected					
2018	Sub-Area 05	SSGM-01279	Davis Farm Rd	SSMH-2295	SSMH-2296	PVC	6	453.0	0.00	0.51	0	None Detected					
2018	Sub-Area 05	SSGM-01280	Davis Farm Rd	SSMH-2294	SSMH-2295	PVC	6	428.4	0.00	0.49	0	None Detected					
2018	Sub-Area 05	SSGM-01281	Davis Farm Rd	SSMH-2296	SSMH-2491	PVC	6	548.4	0.00	0.62	0	None Detected					
2018	Sub-Area 05	SSGM-01536	Georgia St	SSMH-2395	SSMH-2394	PVC	8	192.2	3.00	0.29	14,833	Infiltration > 4,000					Could not locate SSMH-2395 (mapped as starter)
2018	Sub-Area 05	SSGM-01537	Georgia St	SSMH-2394	SSMH-2396	PVC	8	102.7	1.25	0.16	11,566	Infiltration > 4,000					

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Flow Isolation Results

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 05	SSGM-01573	Lambert St	SSMH-5005	SSMH-0553	PVC	8	291.5	0.00	0.44	0	None Detected					
2018	Sub-Area 05	SSGM-01574	Lambert St	SSMH-5006	SSMH-5005	PVC	8	284.3	0.00	0.43	0	None Detected					
2018	Sub-Area 05	SSGM-01575	Lambert St	SSMH-5007	SSMH-5008	PVC	8	334.7	0.00	0.51	0	None Detected					
2018	Sub-Area 05	SSGM-01576	Lambert St	SSMH-5008	SSMH-5006	PVC	8	275.5	0.00	0.42	0	None Detected					
2018	Sub-Area 05	SSGM-01577	Lambert St	SSMH-5009	SSMH-4515	PVC	8	302.7	0.00	0.46	0	None Detected					
2018	Sub-Area 05	SSGM-01578	Lambert St	SSMH-5010	SSMH-5009	PVC	8	315.6	0.00	0.48	0	None Detected					
2018	Sub-Area 05	SSGM-01579	Lambert St	SSMH-2411	SSMH-5011	PVC	8	130.3	0.00	0.20	0	None Detected					
2018	Sub-Area 05	SSGM-01580	Lambert St	SSMH-2412	SSMH-2411	PVC	8	50.3	0.00	0.08	0	None Detected					
2018	Sub-Area 05	SSGM-01581	Lambert St	SSMH-2413	SSMH-2412	PVC	8	177.6	0.00	0.27	0	None Detected					
2018	Sub-Area 05	SSGM-01582	Lambert St	SSMH-2414	SSMH-2411	PVC	8	20.6	0.00	0.03	0	None Detected					
2018	Sub-Area 05	SSGM-01740	Lambert St	SSMH-5011	SSMH-2396	PVC	8	122.6	0.00	0.19	0	None Detected					
2018	Sub-Area 05	SSGM-01741	Lambert St	SSMH-2396	SSMH-5010	PVC	8	159.0	2.00	0.24	11,958	Infiltration > 4,000			5.5	SSMH-5010	8" PVC Service from East
2018	Sub-Area 05	SSGM-00867	Lester Dr	SSMH-4517	SSMH-4518	PVC	8	168.0	0.00	0.25	0	None Detected					
2018	Sub-Area 05	SSGM-00868	Lester Dr	SSMH-4518	SSMH-4519	PVC	8	303.1	0.00	0.46	0	None Detected					
2018	Sub-Area 05	SSGM-00869	Lester Dr	SSMH-4520	SSMH-1605	PVC	8	128.5	0.00	0.19	0	None Detected					
2018	Sub-Area 05	SSGM-00870	Lester Dr	SSMH-1605	SSMH-1606	AC	8	306.3	1.25	0.46	3,879	Infiltration < 4,000					
2018	Sub-Area 05	SSGM-00871	Lester Dr	SSMH-1606	SSMH-1607	AC	8	314.0	*	0.48	N/A	N/A					SSMH-1607 is paved over, high flow at downstream pipe.
2018	Sub-Area 05	SSGM-00872	Lester Dr	SSMH-1607	SSMH-1608	AC	8	306.1	1.25	0.46	3,882	Infiltration < 4,000					
2018	Sub-Area 05	SSGM-01594	Lester Dr	SSMH-0558	SSMH-2420	PVC	8	75.9	0.00	0.11	0	None Detected					
2018	Sub-Area 05	SSGM-01595	Lester Dr	SSMH-0559	SSMH-0558	PVC	8	333.9	0.00	0.51	0	None Detected					
2018	Sub-Area 05	SSGM-01596	Lester Dr	SSMH-4519	SSMH-0559	PVC	8	239.0	0.00	0.36	0	None Detected					
2018	Sub-Area 05	SSGM-01597	Lester Dr	SSMH-0560	SSMH-4520	PVC	8	124.5	0.00	0.19	0	None Detected					
2018	Sub-Area 05	SSGM-01689	Lynn Ave	SSMH-0579	SSMH-5036	PVC	8	208.2	0.00	0.32	0	None Detected					
2018	Sub-Area 05	SSGM-01690	Lynn Ave	SSMH-0580	SSMH-0579	PVC	8	153.3	0.00	0.23	0	None Detected					
2018	Sub-Area 05	SSGM-01691	Lynn Ave	SSMH-5042	SSMH-0580	PVC	8	173.8	0.00	0.26	0	None Detected					
2018	Sub-Area 05	SSGM-01676	Palmer Ave North	SSMH-2455	SSMH-2458	PVC	8	198.4	0.00	0.30	0	None Detected					
2018	Sub-Area 05	SSGM-01677	Palmer Ave North	SSMH-2458	SSMH-5034	PVC	8	125.0	0.50	0.19	3,801	Infiltration < 4,000					
2018	Sub-Area 05	SSGM-01678	Palmer Ave North	SSMH-5035	SSMH-5034	PVC	8	97.4	1.25	0.15	12,202	Infiltration > 4,000					
2018	Sub-Area 05	SSGM-01679	Palmer Ave North	SSMH-5036	SSMH-5035	PVC	8	193.7	1.25	0.29	6,132	Infiltration > 4,000					
2018	Sub-Area 05	SSGM-01680	Palmer Ave North	SSMH-5037	SSMH-5036	PVC	8	150.8	0.00	0.23	0	None Detected					
2018	Sub-Area 05	SSGM-01681	Palmer Ave North	SSMH-5038	SSMH-5037	PVC	8	220.0	0.00	0.33	0	None Detected					
2018	Sub-Area 05	SSGM-01682	Palmer Ave North	SSMH-5039	SSMH-5038	PVC	8	219.6	0.00	0.33	0	None Detected					
2018	Sub-Area 05	SSGM-01688	Palmer Ave North	SSMH-5034	SSMH-0578	PVC	12	221.5	0.00	0.50	0	None Detected					
2018	Sub-Area 05	SSGM-01692	Palmer Ave North	SSMH-0578	SSMH-5044	PVC	12	316.7	0.00	0.72	0	None Detected					
2018	Sub-Area 05	SSGM-01763	Palmer Ave North	SSMH-5044	SSMH-2488	PVC	12	324.3	0.00	0.74	0	None Detected					
2018	Sub-Area 05	SSGM-03122	Riverside Industrial Pkwy	SSMH-5387	SSMH-2491	VCP	10	273.5	1.45	0.52	4,031	Infiltration > 4,000					
2018	Sub-Area 05	SSGM-03123	Riverside Industrial Pkwy	SSMH-5388	SSMH-5387	VCP	10	275.5	*	0.52	N/A	N/A			0.25	SSMH-5388	Wet walls and floor in SSMH-5388 - See Photo#7158. Could not locate SSMH-5387
2018	Sub-Area 05	SSGM-01693	Riverside St	SSMH-5045	SSMH-5043	AC	12	170.0	0.00	0.39	0	None Detected					
2018	Sub-Area 05	SSGM-01762	Riverside St	SSMH-2488	SSMH-5043	PVC	12	32.7	0.00	0.07	0	None Detected					
2018	Sub-Area 05	SSGM-01764	Riverside St	SSMH-5043	SSMH-2489	AC	12	53.8	1.00	0.12	11,773	Infiltration > 4,000			0.5	SSMH-2489	Pipe connection leak - See Photo#7162
2018	Sub-Area 05	SSGM-01765	Riverside St	SSMH-2489	SSMH-2490	AC	18	108.9	*	0.37	N/A	N/A					Could not locate SSMH-2490, high flow at downstream pipe
2018	Sub-Area 05	SSGM-01766	Riverside St	SSMH-5063	SSMH-5045	AC	12	148.8	0.00	0.34	0	None Detected					
2018	Sub-Area 05	SSGM-01769	Riverside St	SSMH-5067	SSMH-2489	AC	16	311.0	0.00	0.94	0	None Detected					
2018	Sub-Area 05	SSGM-03074	Riverside St	SSMH-5383	SSMH-5382	VCP	15	185.8	0.00	0.53	0	None Detected			0.25	SSMH-5382	Mineral deposits on lower wall - See Photos#7156, 7157
2018	Sub-Area 05	SSGM-03075	Riverside St	SSMH-2980	SSMH-2979	VCP	12	214.8	0.00	0.49	0	None Detected					
2018	Sub-Area 05	SSGM-03076	Riverside St	SSMH-2491	SSMH-2980	VCP	15	216.5	0.00	0.62	0	None Detected					
2018	Sub-Area 05	SSGM-03120	Riverside St	SSMH-2979	SSMH-5386	VCP	12	184.6	0.00	0.42	0	None Detected					
2018	Sub-Area 05	SSGM-03121	Riverside St	SSMH-5386	SSMH-5383	VCP	12	185.1	0.00	0.42	0	None Detected					
2018	Sub-Area 05	SSGM-03183	Riverside St	SSMH-2490	SSMH-0847	AC	18	154.5	*	0.53	N/A	N/A					Could not locate SSMH-0847, high flow at downstream pipe
2018	Sub-Area 05	SSGM-03184	Riverside St	SSMH-0847	SSMH-2491	AC	18	151.5	4.40	0.52	12,265	Infiltration > 4,000					
2018	Sub-Area 05	SSGM-07067	Smith Farm Ln	SSMH-6166	SSMH-5070	PVC	8	70.8	0.00	0.11	0	None Detected					
2018	Sub-Area 05	SSGM-01590	Stonecrest Dr	SSMH-2422	SSMH-2418	VCP	8	298.2	0.00	0.45	0	None Detected					
2018	Sub-Area 05	SSGM-01591	Stonecrest Dr	SSMH-2423	SSMH-2422	VCP	8	80.5	0.00	0.12	0	None Detected					
2018	Sub-Area 05	SSGM-01592	Stonecrest Dr	SSMH-2424	SSMH-2421	VCP	8	308.3	0.00	0.47	0	None Detected					
2018	Sub-Area 05	SSGM-01593	Stonecrest Dr	SSMH-0557	SSMH-2424	VCP	8	81.7	0.00	0.12	0	None Detected					
2018	Sub-Area 05	SSGM-01538	Summit St	SSMH-4516	SSMH-4286	PVC	8	90.9	0.00	0.14	0	None Detected					
2018	Sub-Area 05	SSGM-01539	Summit St	SSMH-4287	SSMH-4515	PVC	8	199.8	0.00	0.30	0	None Detected					
2018	Sub-Area 05	SSGM-01540	Summit St	SSMH-4286	SSMH-4287	PVC	8	192.2	0.00	0.29	0	None Detected					
2018	Sub-Area 05	SSGM-01739	Summit St	SSMH-4515	SSMH-4285	AC	8	274.8	0.00	0.42	0	None Detected					
2018	Sub-Area 05	SSGM-01742	Summit St	SSMH-4285	SSMH-4284	AC	8	300.1	0.00	0.45	0	None Detected					
2018	Sub-Area 05	SSGM-01743	Summit St	SSMH-4284	SSMH-4283	AC	8	299.9	0.00	0.45	0	None Detected					
2018	Sub-Area 05	SSGM-01744	Summit St	SSMH-4283	SSMH-0586	AC	8	299.2	0.00	0.45	0	None Detected					
2018	Sub-Area 05	SSGM-01745	Summit St	SSMH-0586	SSMH-4282	AC	8	51.6	0.00	0.08	0	None Detected					
2018	Sub-Area 05	SSGM-01584	Washington Ave	SSMH-2417	SSMH-5004	AC	18	85.6	*	0.29	N/A	N/A					Could not locate SSMH-5004, high flow at downstream pipe
2018	Sub-Area 05	SSGM-01588	Washington Ave	SSMH-5004	SSMH-2421	AC	18	118.8	3.50	0.40	12,447	Infiltration > 4,000					
2018	Sub-Area 05	SSGM-01746	Washington Ave	SSMH-4282	SSMH-2417	AC	10	37.9	0.00	0.07	0	None Detected					
2018	Sub-Area 05	SSGM-01768	Washington Ave	SSMH-5066	SSMH-5067	AC	18	150.5	*	0.51	N/A	N/A					Could not locate SSMH-5067

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2018	Sub-Area 05	SSGM-01770	Washington Ave	SSMH-5068	SSMH-5066	AC	8	164.7	0.00	0.25	0	None Detected			5	SSMH-5066	Wall leak - See Photo#7163
2018	Sub-Area 05	SSGM-01771	Washington Ave	SSMH-5064	SSMH-5068	PVC	8	59.4	0.00	0.09	0	None Detected			6.4	SSMH-5068	Pipe connection leak - See Video#7164
2018	Sub-Area 05	SSGM-07623	Washington Ave	SSMH-5070	SSMH-5071	AC	8	328.0	0.00	0.50	0	None Detected					
2018	Sub-Area 05	SSGM-07624	Washington Ave	SSMH-5071	SSMH-4066	AC	8	324.2	0.00	0.49	0	None Detected					
2018	Sub-Area 05	SSGM-07625	Washington Ave	SSMH-4066	SSMH-0596	AC	8	322.0	1.00	0.49	2,952	Infiltration < 4,000					
2018	Sub-Area 05	SSGM-07626	Washington Ave	SSMH-0596	SSMH-5063	AC	8	300.1	0.50	0.45	1,584	Infiltration < 4,000					
2018	Sub-Area 05	SSGM-07765	Washington Ave	SSMH-1608	SSMH-5066	AC	18	345.1	0.00	1.18	0	None Detected					
2018	Sub-Area 05	SSGM-07771	Washington Ave	SSMH-0555	SSMH-0556	AC	8	201.5	0.00	0.31	0	None Detected					
2018	Sub-Area 05	SSGM-07772	Washington Ave	SSMH-0556	SSMH-2417	AC	8	110.0	0.00	0.17	0	None Detected					
2018	Sub-Area 05	SSGM-07780	Washington Ave	SSMH-2421	SSMH-2419	PVC	18	189.9	0.00	0.65	0	None Detected					
2018	Sub-Area 05	SSGM-07781	Washington Ave	SSMH-2418	SSMH-2420	AC	18	230.4	0.00	0.79	0	None Detected					
2018	Sub-Area 05	SSGM-07782	Washington Ave	SSMH-2420	SSMH-1608	AC	18	283.6	0.00	0.97	0	None Detected					
2018	Sub-Area 05	SSGM-07783	Washington Ave	SSMH-2419	SSMH-2418	PVC	18	73.7	0.00	0.25	0	None Detected					
2018	Sub-Area 05	SSGM-07766	Washington Ave Ext.	SSMH-6679	SSMH-2405	PVC	10	202.8	0.00	0.38	0	None Detected					
2018	Sub-Area 05	SSGM-07767	Washington Ave Ext.	SSMH-2405	SSMH-2407	PVC	10	149.8	0.00	0.28	0	None Detected					
2018	Sub-Area 05	SSGM-07768	Washington Ave Ext.	SSMH-2410	SSMH-0552	PVC	12	123.5	0.00	0.28	0	None Detected					
2018	Sub-Area 05	SSGM-07769	Washington Ave Ext.	SSMH-0552	SSMH-0554	PVC	12	200.4	0.00	0.46	0	None Detected					
2018	Sub-Area 05	SSGM-07770	Washington Ave Ext.	SSMH-0553	SSMH-0555	AC	8	260.7	0.00	0.40	0	None Detected					
2018	Sub-Area 05	SSGM-07773	Washington Ave Ext.	SSMH-2407	SSMH-2408	PVC	10	225.3	0.00	0.43	0	None Detected					
2018	Sub-Area 05	SSGM-07774	Washington Ave Ext.	SSMH-2408	SSMH-2409	PVC	10	148.4	0.00	0.28	0	None Detected					
2018	Sub-Area 05	SSGM-07775	Washington Ave Ext.	SSMH-2409	SSMH-2410	PVC	10	151.5	0.00	0.29	0	None Detected					
2018	Sub-Area 05	SSGM-07776	Washington Ave Ext.	SSMH-6680	SSMH-6681	PVC	-	300.9	*	#VALUE!	N/A	N/A					Could not locate SSMH-6680
2018	Sub-Area 05	SSGM-07777	Washington Ave Ext.	SSMH-6681	SSMH-6679	PVC	10	54.9	0.00	0.10	0	None Detected					
2018	Sub-Area 05	SSGM-07778	Washington Ave Ext.	SSMH-6682	SSMH-6681	PVC	-	300.0	*	#VALUE!	N/A	N/A					Could not locate SSMH-6681
2018	Sub-Area 05	SSGM-07788	Washington Ave Ext.	SSMH-0554	SSMH-0553	PVC	8	17.5	0.00	0.03	0	None Detected					
2019	Sub-Area 06	SSGM-01619	Alpine Rd	SSMH-0157	SSMH-2433	VCP	12	256.0	4.00	0.58	9,900	Infiltration > 4,000			2.1	SSMH-0157	6" service from Southeast
2019	Sub-Area 06	SSGM-01620	Alpine Rd	SSMH-2433	SSMH-0185	AC	12	250.0	3.20	0.57	8,110	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01621	Alpine Rd	SSMH-0185	SSMH-2434	AC	12	274.0	6.40	0.62	14,799	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01622	Alpine Rd	SSMH-2434	SSMH-6493	VCP	12	244.0	9.60	0.55	24,929	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01624	Alpine Rd	SSMH-6492	SSMH-4507	VCP	12	160.0	0.75	0.36	2,970	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-07475	Alpine Rd	SSMH-6493	SSMH-6492	PVC	12	148.0	2.40	0.34	10,275	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-00652	Auburn St	SSMH-4254	SSMH-4255	VCP	12	186.0	2.60	0.42	8,857	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-00653	Auburn St	SSMH-4255	SSMH-4256	VCP	12	193.0	1.30	0.44	4,268	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-07048	Auburn St	SSMH-1382	SSMH-4254	PVC	8	390.0	0.00	0.59	0	None Detected					
2019	Sub-Area 06	SSGM-01459	Auburn Ter	SSFT-0171	SSMH-0512	PVC	6	176.0	0.00	0.20	0	None Detected					
2019	Sub-Area 06	SSGM-01460	Auburn Ter	SSFT-0173	SSMH-0512	PVC	6	164.0	0.00	0.19	0	None Detected					
2019	Sub-Area 06	SSGM-01461	Auburn Ter	SSMH-0512	SSMH-1604	PVC	6	191.0	0.00	0.22	0	None Detected					
2019	Sub-Area 06	SSGM-01462	Auburn Ter	SSMH-0513	SSMH-1604	PVC	6	191.0	1.20	0.22	7,961	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01463	Auburn Ter	SSMH-4953	SSMH-0513	PVC	6	257.0	0.75	0.29	3,698	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01464	Auburn Ter	SSFT-0169	SSMH-4952	PVC	6	246.0	0.25	0.28	1,288	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01465	Auburn Ter	SSFT-0172	SSMH-4952	PVC	6	230.0	0.25	0.26	1,377	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01466	Auburn Ter	SSMH-4952	SSMH-0513	PVC	6	280.0	0.50	0.32	2,263	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01467	Auburn Ter	SSFT-0170	SSMH-1603	PVC	6	121.0	0.00	0.14	0	None Detected					
2019	Sub-Area 06	SSGM-01468	Auburn Ter	SSMH-1603	SSMH-1602	PVC	6	146.0	0.00	0.17	0	None Detected					
2019	Sub-Area 06	SSGM-01469	Auburn Ter	SSMH-1604	SSMH-1602	PVC	8	164.0	0.75	0.25	4,346	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01470	Auburn Ter	SSMH-4954	SSMH-1603	PVC	6	170.0	0.00	0.19	0	None Detected					
2019	Sub-Area 06	SSGM-01474	Auburn Ter	SSMH-1602	SSMH-4510	PVC	8	272.0	0.00	0.41	0	None Detected					
2019	Sub-Area 06	SSGM-07055	Auburn Ter	SSFT-0398	SSFT-0399	PVC	6	144.0	*	0.16	*	N/A					
2019	Sub-Area 06	SSGM-01949	Brookfield	SSMH-2561	SSMH-0160		8	186.0	4.00	0.28	20,439	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01950	Brookfield	SSMH-1601	SSMH-2561		8	222.0	1.25	0.34	5,351	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01951	Brookfield	SSMH-2562	SSMH-1601		6	132.0	1.25	0.15	12,000	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01952	Brookfield	SSFT-0185	SSMH-1601		4	127.0	0.00	0.10	0	None Detected					
2019	Sub-Area 06	SSGM-01953	Brookfield	SSFT-0184	SSMH-1601		4	56.0	1.00	0.04	33,943	Infiltration > 4,000	3.5	SSMH-1601			Pipe connection leak of 3GPM from incoming line and wall leak of 0.5GPM - See Video# 0150
2019	Sub-Area 06	SSGM-01954	Brookfield	SSFT-0186	SSMH-1601		4	140.0	0.00	0.11	0	None Detected					
2019	Sub-Area 06	SSGM-01955	Brookfield	SSFT-0187	SSMH-1601		4	155.0	0.00	0.12	0	None Detected					
2019	Sub-Area 06	SSGM-01956	Brookfield	SSFT-0188	SSMH-2562		6	28.0	0.00	0.03	0	None Detected					
2019	Sub-Area 06	SSGM-01957	Brookfield	SSFT-0189	SSMH-2562		4	35.0	0.00	0.03	0	None Detected					
2019	Sub-Area 06	SSGM-01471	Christy Rd	SSMH-2332	SSMH-2331	AC	8	167.0	0.00	0.25	0	None Detected					
2019	Sub-Area 06	SSGM-01472	Christy Rd	SSMH-2333	SSMH-2332	AC	8	312.0	2.50	0.47	7,615	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01473	Christy Rd	SSMH-2334	SSMH-2333	AC	8	312.0	0.50	0.47	1,523	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01935	Christy Rd	SSMH-2331	SSMH-0620	AC	8	322.0	0.50	0.49	1,476	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01598	Clayton St	SSMH-0561	SSMH-0562	VCP	8	120.0	*	0.18	*	N/A					Could not open SSMH-0562
2019	Sub-Area 06	SSGM-01599	Clayton St	SSMH-0562	SSMH-5012	VCP	8	216.0	2.10	0.33	9,240	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01600	Clayton St	SSMH-5012	SSMH-5013	VCP	12	158.0	1.20	0.36	4,812	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-07464	Clayton St	SSMH-5013	SSMH-0176	PVC	12	276.0	0.50	0.63	1,148	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-07469	Clayton St	SSMH-6485	SSMH-5013	PVC	8	179.0	0.00	0.27	0	None Detected					
2019	Sub-Area 06	SSGM-00866	Hillside Rd	SSMH-0175	SSMH-4253	VCP	12	275.0	2.25	0.63	5,184	Infiltration > 4,000					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 06	SSGM-07463	Hillside Rd	SSMH-4514	SSMH-0175	PVC	8	294.0	1.25	0.45	4,041	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01605	Jackson St	SSMH-5016	SSMH-6484	VCP	12	299.0	1.70	0.68	3,602	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01606	Jackson St	SSMH-0186	SSMH-5016	VCP	8	215.0	0.75	0.33	3,315	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01607	Jackson St	SSMH-5017	SSMH-0186	VCP	8	109.0	0.50	0.17	4,360	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01608	Jackson St	SSMH-4513	SSMH-5017	PVC	8	109.0	0.00	0.17	0	None Detected					
2019	Sub-Area 06	SSGM-07465	Jackson St	SSMH-6483	SSMH-5015	PVC	12	232.0	0.00	0.53	0	None Detected					
2019	Sub-Area 06	SSGM-07466	Jackson St	SSMH-6484	SSMH-6483	PVC	12	133.0	0.00	0.30	0	None Detected					
2019	Sub-Area 06	SSGM-07468	Kenneth St	SSMH-6485	SSMH-6484	PVC	8	217.0	0.00	0.33	0	None Detected					
2019	Sub-Area 06	SSGM-07110	Leavett Dr	SSMH-4245	SSMH-5061		8	195.0	0.00	0.30	0	None Detected					
2019	Sub-Area 06	SSGM-07111	Leavett Dr	SSMH-4246	SSMH-4245		8	308.0	0.00	0.47	0	None Detected					
2019	Sub-Area 06	SSGM-07112	Leavett Dr	SSMH-4247	SSMH-4246		8	307.0	0.00	0.47	0	None Detected					
2019	Sub-Area 06	SSGM-01399	Longwood Dr	SSMH-4941	SSMH-4942	PVC	8	170.0	0.00	0.26	0	None Detected					
2019	Sub-Area 06	SSGM-07049	Longwood Dr	SSMH-4942	SSMH-1382	PVC	8	141.0	0.00	0.21	0	None Detected					
2019	Sub-Area 06	SSGM-01754	Parsons Pond Dr	SSMH-5056	SSNS-0016		8	39.0	0.00	0.06	0	None Detected					
2019	Sub-Area 06	SSGM-01755	Parsons Pond Dr	SSMH-5057	SSMH-5056		8	300.0	0.75	0.45	2,376	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01756	Parsons Pond Dr	SSMH-5058	SSMH-5057		8	150.0	2.25	0.23	14,256	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01757	Parsons Pond Dr	SSMH-5059	SSMH-5058		8	202.0	1.25	0.31	5,881	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01758	Parsons Pond Dr	SSMH-5060	SSMH-5058		8	294.0	0.00	0.45	0	None Detected					
2019	Sub-Area 06	SSGM-01759	Parsons Pond Dr	SSMH-5061	SSMH-5059		8	176.0	0.50	0.27	2,700	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01760	Parsons Pond Dr	SSMH-5062	SSMH-5061		8	153.0	0.00	0.23	0	None Detected					
2019	Sub-Area 06	SSGM-01761	Parsons Pond Dr	SSMH-2487	SSMH-5062		8	73.0	0.00	0.11	0	None Detected					
2019	Sub-Area 06	SSGM-01434	Quiet Ln	SSMH-4992	SSMH-4993	PVC	8	199.0	0.00	0.30	0	None Detected					
2019	Sub-Area 06	SSGM-01435	Quiet Ln	SSMH-4991	SSMH-4992	PVC	8	16.0	0.00	0.02	0	None Detected					
2019	Sub-Area 06	SSGM-00864	Summit Park Ave	SSMH-6486	SSMH-4505	VCP	15	226.0	8.10	0.64	18,167	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01612	Summit Park Ave	SSMH-2426	SSMH-6489	VCP	8	244.0	1.15	0.37	4,479	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01613	Summit Park Ave	SSMH-2427	SSMH-2426	VCP	8	244.0	2.10	0.37	8,180	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01614	Summit Park Ave	SSMH-2428	SSMH-6488	VCP	12	130.0	1.20	0.30	5,849	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01615	Summit Park Ave	SSMH-2429	SSMH-2428	VCP	12	159.0	4.60	0.36	18,331	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01616	Summit Park Ave	SSMH-2430	SSMH-2429	VCP	12	191.0	2.60	0.43	8,625	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-01618	Summit Park Ave	SSMH-2432	SSMH-6491	VCP	8	336.0	2.10	0.51	5,940	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-07470	Summit Park Ave	SSMH-6487	SSMH-6486	PVC	8	126.0	0.00	0.19	0	None Detected					
2019	Sub-Area 06	SSGM-07471	Summit Park Ave	SSMH-6488	SSMH-6487	PVC	8	81.0	3.80	0.12	44,587	Infiltration > 4,000					
2019	Sub-Area 06	SSGM-07472	Summit Park Ave	SSMH-6489	SSMH-6488	PVC	8	188.0	0.00	0.28	0	None Detected					
2019	Sub-Area 06	SSGM-07473	Summit Park Ave	SSMH-6490	SSMH-2430	PVC	8	142.0	0.00	0.22	0	None Detected					
2019	Sub-Area 06	SSGM-07474	Summit Park Ave	SSMH-6491	SSMH-6490	PVC	8	52.0	0.00	0.08	0	None Detected	0.5	SSMH-6490			Wall leak - See Video# 0149
2019	Sub-Area 06	SSGM-01545	Summit St	SSMH-0547	SSMH-0548	PVC	8	155.0	0.00	0.23	0	None Detected					
2019	Sub-Area 06	SSGM-01546	Summit St	SSMH-0549	SSMH-4513	PVC	8	195.0	0.25	0.30	1,218	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01547	Summit St	SSMH-4993	SSMH-0549	PVC	8	255.0	0.10	0.39	373	Infiltration < 4,000					
2019	Sub-Area 06	SSGM-01548	Summit St	SSMH-0548	SSMH-4993	PVC	8	43.0	0.00	0.07	0	None Detected					
2019	Sub-Area 06	SSGM-01549	Summit St	SSMH-0551	SSMH-4513	PVC	8	300.0	0.00	0.45	0	None Detected	0.5	SSMH-4513			Pipe connection leak at outgoing line - See Video# 0148
2019	Sub-Area 06	SSGM-01550	Summit St	SSMH-0550	SSMH-0551	PVC	8	17.0	0.00	0.03	0	None Detected					
2019	Sub-Area 06	SSGM-01551	Summit St	SSMH-4997	SSMH-0550	PVC	8	127.0	0.00	0.19	0	None Detected					
2018	Sub-Area 07	NEW PIPE (1)	Abby Ln	SSMH-2385.1	SSMH-0530	AC	12	241.0	0.00	0.55	0	None Detected					See revised map.
2018	Sub-Area 07	SSGM-01437	Abby Ln	SSMH-4990	SSMH-1611	PVC	8	150.4	0.00	0.23	0	None Detected					
2018	Sub-Area 07	SSGM-01438	Abby Ln	SSMH-1611	SSMH-2390	PVC	8	152.7	1.25	0.23	7,779	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01439	Abby Ln	SSMH-2390	SSMH-1612	PVC	8	87.1	0.00	0.13	0	None Detected					
2018	Sub-Area 07	SSGM-01440	Abby Ln	SSMH-1612	SSMH-2389	PVC	8	239.5	0.00	0.36	0	None Detected					
2018	Sub-Area 07	SSGM-01442	Abby Ln	SSMH-2386	SSMH-2387	PVC	8	256.6	0.00	0.39	0	None Detected					
2018	Sub-Area 07	SSGM-01443	Abby Ln	SSMH-2387	SSMH-2385	PVC	8	214.5	0.00	0.33	0	None Detected			3	SSMH-2385	Leak next to outgoing line - See Photo#0413
2018	Sub-Area 07	SSGM-01444	Abby Ln	SSMH-2385	SSMH-2385.1	AC	12	12.0	0.00	0.03	0	None Detected					See revised map.
2018	Sub-Area 07	SSGM-01354	Alice Ct	SSMH-2349	SSMH-4966	PVC	8	111.8	0.00	0.17	0	None Detected					
2018	Sub-Area 07	SSGM-01353	Alice St	SSMH-2350	SSMH-2351	PVC	8	78.6	0.00	0.12	0	None Detected					
2018	Sub-Area 07	SSGM-01355	Alice St	SSMH-4966	SSMH-2350	PVC	8	255.3	0.50	0.39	1,861	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01356	Alice St	SSMH-2361	SSMH-2363	PVC	8	140.7	0.00	0.21	0	None Detected					
2018	Sub-Area 07	SSGM-01357	Alice St	SSMH-2363	SSMH-0524	PVC	8	89.0	0.00	0.13	0	None Detected					
2018	Sub-Area 07	SSGM-01358	Alice St	SSMH-2351	SSMH-2363	PVC	8	134.7	0.00	0.20	0	None Detected					
2018	Sub-Area 07	SSGM-01359	Alice St	SSMH-0522	SSMH-4521	PVC	8	34.3	0.00	0.05	0	None Detected					
2018	Sub-Area 07	SSGM-01360	Alice St	SSMH-0524	SSMH-0522	PVC	8	154.9	0.75	0.23	4,603	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01361	Alice St	SSMH-4521	SSMH-0523	PVC	8	198.0	4.70	0.30	22,556	Infiltration > 4,000					Light sewage in flow
2018	Sub-Area 07	SSGM-01363	Alice St	SSMH-0523	SSMH-0526	AC	8	244.1	0.00	0.37	0	None Detected					
2018	Sub-Area 07	SSGM-01365	Alice St	SSMH-0526	SSMH-4967	AC	10	298.4	0.00	0.57	0	None Detected					
2018	Sub-Area 07	SSGM-01366	Alice St	SSMH-4967	SSMH-0544	AC	10	186.7	4.00	0.35	16,288	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01367	Alice St	SSMH-0544	SSMH-4212	AC	10	189.6	0.00	0.36	0	None Detected					
2018	Sub-Area 07	SSGM-01368	Alice St	SSMH-4212	SSMH-2370	AC	8	160.3	0.00	0.24	0	None Detected					
2018	Sub-Area 07	SSGM-01327	Caron St	SSMH-4276	SSMH-0525	AC	8	284.9	1.00	0.43	3,336	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01330	Caron St	SSMH-4280	SSMH-4281	AC	12	122.6	0.00	0.28	0	None Detected					
2018	Sub-Area 07	SSGM-01331	Caron St	SSMH-4281	SSMH-0533	AC	12	127.0	0.00	0.29	0	None Detected					

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2018	Sub-Area 07	SSGM-01362	Caron St	SSMH-0525	SSMH-0523	AC	8	140.7	1.10	0.21	7,431	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01394	Caron St	SSMH-0537	SSMH-0536	AC	8	268.0	1.00	0.41	3,547	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01395	Caron St	SSMH-0535	SSMH-4280	AC	8	260.3	0.00	0.39	0	None Detected	5	SSMH-4280			Leak from above pipe 5 GPM - See Photo#0410.
2018	Sub-Area 07	SSGM-01396	Caron St	SSMH-0536	SSMH-0535	AC	8	267.7	2.80	0.41	9,940	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01325	Carter St	SSMH-4968	SSMH-4969	AC	8	175.0	0.00	0.27	0	None Detected					
2018	Sub-Area 07	SSGM-01332	Carter St	SSMH-0538	SSMH-4982	AC	8	257.5	2.20	0.39	8,119	Infiltration > 4,000					Light sewage in flow
2018	Sub-Area 07	SSGM-01333	Carter St	SSMH-4982	SSMH-0533	AC	8	271.7	0.00	0.41	0	None Detected					
2018	Sub-Area 07	SSGM-01334	Carter St	SSMH-4983	SSMH-0538	AC	8	282.2	1.00	0.43	3,368	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01335	Carter St	SSMH-4984	SSMH-4983	AC	8	123.1	0.00	0.19	0	None Detected					
2018	Sub-Area 07	SSGM-01364	Carter St	SSMH-4969	SSMH-0526	AC	8	176.2	0.00	0.27	0	None Detected					
2018	Sub-Area 07	SSGM-01455	Carter St	SSMH-0533	SSMH-4971	AC	12	300.4	1.00	0.68	2,109	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-00193	Clapboard Rd	SSMH-1636	SSMH-1634	PVC	8	243.6	0.00	0.37	0	None Detected					
2018	Sub-Area 07	SSGM-00194	Clapboard Rd	SSMH-1634	SSMH-4523	PVC	8	256.9	0.50	0.39	1,849	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-00195	Clapboard Rd	SSMH-4523	SSMH-4522	PVC	8	66.2	0.00	0.10	0	None Detected					
2018	Sub-Area 07	SSGM-01369	Clapboard Rd	SSMH-2370	SSMH-2374	AC	8	162.2	0.00	0.25	0	None Detected					
2018	Sub-Area 07	SSGM-01370	Clapboard Rd	SSMH-2374	SSMH-4278	AC	8	28.9	0.00	0.04	0	None Detected					
2018	Sub-Area 07	SSGM-01371	Clapboard Rd	SSMH-4522	SSMH-4278	PVC	8	120.4	1.00	0.18	7,897	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01372	Clapboard Rd	SSMH-4278	SSNS-0014	PVC	10	36.9	0.00	0.07	0	None Detected					
2018	Sub-Area 07	SSGM-01373	Clapboard Rd	SSNS-0014	SSMH-2371	AC	8	62.5	0.00	0.09	0	None Detected					
2018	Sub-Area 07	SSGM-01374	Clapboard Rd	SSMH-2371	SSFT-0410	AC	10	56.0	0.00	0.11	0	None Detected					
2018	Sub-Area 07	SSGM-01375	Clapboard Rd	SSMH-4277	SSMH-2383	PVC	8	163.3	*	0.25	N/A	N/A					Could not open SSMH-2383, PS is downstream.
2018	Sub-Area 07	SSGM-01376	Clapboard Rd	SSMH-2383	SSMH-4278	PVC	8	34.5	0.00	0.05	0	None Detected					
2018	Sub-Area 07	SSGM-01377	Clapboard Rd	SSMH-4274	SSMH-2383	PVC	8	167.1	0.00	0.25	0	None Detected					
2018	Sub-Area 07	SSGM-01446	Clapboard Rd	SSMH-2367	SSMH-2366	AC	12	180.9	0.00	0.41	0	None Detected					
2018	Sub-Area 07	SSGM-01447	Clapboard Rd	SSMH-2366	SSMH-2385.1	AC	12	174.0	0.00	0.40	0	None Detected					Downstream manhole is unmapped, line section from SSMH-2366 to SSMH-2385 does not exist. See revised map.
2018	Sub-Area 07	SSGM-01525	Clapboard Rd	SSMH-0543	SSMH-2385	RCP	8	242.6	1.00	0.37	3,917	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01336	Crestview Dr	SSMH-4986	SSMH-4985	AC	8	280.3	*	0.42	N/A	N/A					Could not open SSMH-4985, high flow at downstream pipe
2018	Sub-Area 07	SSGM-01337	Crestview Dr	SSMH-4988	SSMH-4986	AC	8	195.2	0.00	0.30	0	None Detected					
2018	Sub-Area 07	SSGM-01338	Crestview Dr	SSMH-4987	SSMH-4988	AC	8	49.7	0.25	0.08	4,779	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01339	Crestview Dr	SSMH-4989	SSMH-4987	AC	8	65.6	0.00	0.10	0	None Detected					
2018	Sub-Area 07	SSGM-01451	Crestview Dr	SSMH-4973	SSMH-2384	AC	12	104.6	2.00	0.24	12,113	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01452	Crestview Dr	SSMH-4985	SSMH-0534	AC	8	299.6	2.50	0.45	7,930	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01453	Crestview Dr	SSMH-0534	SSMH-4973	AC	12	85.9	0.00	0.20	0	None Detected					
2018	Sub-Area 07	SSGM-01454	Crestview Dr	SSMH-4971	SSMH-0534	AC	12	100.6	0.00	0.23	0	None Detected					
2018	Sub-Area 07	SSGM-01456	Crestview Dr	SSMH-4972	SSMH-4970	AC	8	145.8	0.00	0.22	0	None Detected					
2018	Sub-Area 07	SSGM-01457	Crestview Dr	SSMH-4970	SSMH-4967	AC	8	297.2	5.00	0.45	15,987	Infiltration > 4,000			2	SSMH-4967	
2018	Sub-Area 07	SSGM-01326	Curtis Rd	SSMH-4976	SSMH-4977	PVC	8	178.6	0.00	0.27	0	None Detected					
2018	Sub-Area 07	SSGM-01378	Curtis Rd	SSMH-2377	SSMH-4274	PVC	8	232.2	2.00	0.35	8,186	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01408	Curtis Rd	SSMH-2376	SSMH-2375	PVC	8	34.7	0.00	0.05	0	None Detected					
2018	Sub-Area 07	SSGM-01409	Curtis Rd	SSMH-2375	SSMH-4277	PVC	8	146.9	1.00	0.22	6,471	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01415	Curtis Rd	SSMH-0527	SSMH-2377	AC	8	223.2	0.00	0.34	0	None Detected					
2018	Sub-Area 07	SSGM-01416	Curtis Rd	SSMH-0528	SSMH-0527	AC	8	225.2	0.00	0.34	0	None Detected					
2018	Sub-Area 07	SSGM-01417	Curtis Rd	SSMH-0529	SSMH-0530	PVC	10	100.1	0.00	0.19	0	None Detected					
2018	Sub-Area 07	SSGM-01418	Curtis Rd	SSMH-0530	SSMH-0531	PVC	12	135.4	0.00	0.31	0	None Detected					
2018	Sub-Area 07	SSGM-01419	Curtis Rd	SSMH-0532	SSMH-0531	PVC	8	272.3	0.00	0.41	0	None Detected					
2018	Sub-Area 07	SSGM-01420	Curtis Rd	SSMH-4974	SSMH-0532	PVC	8	52.4	0.00	0.08	0	None Detected					
2018	Sub-Area 07	SSGM-01421	Curtis Rd	SSMH-4975	SSMH-4974	PVC	8	248.0	2.00	0.38	7,666	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01422	Curtis Rd	SSMH-4977	SSMH-4975	PVC	8	297.7	0.00	0.45	0	None Detected					
2018	Sub-Area 07	SSGM-01528	Curtis Rd	SSMH-0531	SSMH-4217	AC	18	166.4	0.00	0.57	0	None Detected					
2018	Sub-Area 07	SSGM-01529	Curtis Rd	SSMH-4217	SSMH-2391	AC	18	165.3	0.00	0.56	0	None Detected					
2018	Sub-Area 07	SSGM-01427	Frost Hill Rd	SSMH-4994	SSMH-4995	PVC	8	211.8	0.00	0.32	0	None Detected					
2018	Sub-Area 07	SSGM-01428	Frost Hill Rd	SSMH-4995	SSMH-4996	PVC	8	152.3	0.00	0.23	0	None Detected					
2018	Sub-Area 07	SSGM-01429	Frost Hill Rd	SSMH-4996	SSMH-0539	PVC	8	153.3	0.00	0.23	0	None Detected					
2018	Sub-Area 07	SSGM-01430	Frost Hill Rd	SSMH-0539	SSMH-0540	PVC	8	70.1	0.00	0.11	0	None Detected					
2018	Sub-Area 07	SSGM-01431	Frost Hill Rd	SSMH-0540	SSMH-0541	PVC	8	210.4	0.00	0.32	0	None Detected					
2018	Sub-Area 07	SSGM-01432	Frost Hill Rd	SSMH-0541	SSMH-0542	PVC	8	98.5	0.00	0.15	0	None Detected					
2018	Sub-Area 07	SSGM-01433	Frost Hill Rd	SSMH-0542	SSMH-0543	PVC	8	116.0	0.00	0.18	0	None Detected					
2018	Sub-Area 07	SSGM-01388	Garsoe Dr	SSMH-2356	SSMH-4966	PVC	8	302.3	0.25	0.46	786	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01389	Garsoe Dr	SSMH-2355	SSMH-2356	PVC	8	130.6	0.00	0.20	0	None Detected					
2018	Sub-Area 07	SSGM-01390	Garsoe Dr	SSMH-2354	SSMH-2355	PVC	8	301.8	0.00	0.46	0	None Detected					
2018	Sub-Area 07	SSGM-01391	Garsoe Dr	SSMH-2353	SSMH-2354	PVC	8	167.4	0.00	0.25	0	None Detected					
2018	Sub-Area 07	SSGM-01392	Garsoe Dr	SSMH-2352	SSMH-2353	PVC	8	164.2	0.00	0.25	0	None Detected					
2018	Sub-Area 07	SSGM-00189	Hope Ave	SSMH-0484	SSMH-2285	DIP	8	176.0	0.00	0.27	0	None Detected					
2018	Sub-Area 07	SSGM-00190	Hope Ave	SSMH-2285	SSMH-0192	DIP	8	154.2	0.00	0.23	0	None Detected					
2018	Sub-Area 07	SSGM-00191	Hope Ave	SSMH-0192	SSMH-0191	DIP	8	98.0	0.00	0.15	0	None Detected					
2018	Sub-Area 07	SSGM-01340	Hope Ave	SSMH-0191	SSMH-4964	DIP	8	233.8	0.00	0.35	0	None Detected					
2018	Sub-Area 07	SSGM-01341	Hope Ave	SSMH-4964	SSMH-0190	DIP	8	138.9	0.00	0.21	0	None Detected					

ARCADIS Design & Consultancy for natural and built assets

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2018	Sub-Area 07	SSGM-01342	Hope Ave	SSMH-0190	SSMH-4963	DIP	8	224.1	0.00	0.34	0	None Detected					
2018	Sub-Area 07	SSGM-01343	Hope Ave	SSMH-4963	SSMH-4962	DIP	8	293.8	0.50	0.45	1,617	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01344	Hope Ave	SSMH-4961	SSMH-0189	DIP	8	149.1	0.00	0.23	0	None Detected					
2018	Sub-Area 07	SSGM-01345	Hope Ave	SSMH-0189	SSMH-0519	DIP	8	214.9	0.00	0.33	0	None Detected					
2018	Sub-Area 07	SSGM-01346	Hope Ave	SSFT-0167	SSMH-0519	DIP	8	43.8	0.00	0.07	0	None Detected					
2018	Sub-Area 07	SSGM-01347	Hope Ave	SSMH-0519	SSNS-0013	DIP	8	31.3	0.00	0.05	0	None Detected					
2018	Sub-Area 07	SSGM-01348	Hope Ave	SSMH-4959	SSMH-0519	DIP	8	87.7	0.00	0.13	0	None Detected					
2018	Sub-Area 07	SSGM-01349	Hope Ave	SSMH-0516	SSMH-4960	DIP	8	57.9	0.00	0.09	0	None Detected					
2018	Sub-Area 07	SSGM-01350	Hope Ave	SSMH-0518	SSMH-0516	DIP	8	59.9	0.00	0.09	0	None Detected					
2018	Sub-Area 07	SSGM-01351	Hope Ave	SSFT-0168	SSMH-0517	DIP	8	27.4	0.00	0.04	0	None Detected					
2018	Sub-Area 07	SSGM-01352	Hope Ave	SSMH-0517	SSMH-0518	DIP	8	44.4	0.00	0.07	0	None Detected					
2018	Sub-Area 07	SSGM-01382	Hope Ave	SSMH-4213	SSMH-0484	DIP	8	173.9	0.00	0.26	0	None Detected					
2018	Sub-Area 07	SSGM-01383	Hope Ave	SSMH-4965	SSMH-4213	DIP	8	152.7	0.00	0.23	0	None Detected					
2018	Sub-Area 07	SSGM-01384	Hope Ave	SSMH-4962	SSMH-4961	DIP	8	107.3	0.00	0.16	0	None Detected					
2018	Sub-Area 07	SSGM-01385	Hope Ave	SSMH-6280	SSMH-0189	DIP	8	170.4	0.50	0.26	2,789	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01386	Hope Ave	SSMH-4960	SSMH-4959	DIP	8	58.5	0.00	0.09	0	None Detected					
2018	Sub-Area 07	SSGM-01387	Hope Ln	SSMH-4214	SSMH-4521	PVC	8	119.0	1.00	0.18	7,988	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01324	Longview Dr	SSMH-0521	SSMH-0520	AC	8	61.2	0.00	0.09	0	None Detected					
2018	Sub-Area 07	SSGM-01328	Longview Dr	SSMH-4524	SSMH-4279	AC	12	127.6	0.00	0.29	0	None Detected					
2018	Sub-Area 07	SSGM-01329	Longview Dr	SSMH-4279	SSMH-4280	AC	12	131.1	0.00	0.30	0	None Detected					
2018	Sub-Area 07	SSGM-01397	Longview Dr	SSMH-1609	SSMH-2357	AC	8	338.9	0.00	0.51	0	None Detected					
2018	Sub-Area 07	SSGM-01398	Longview Dr	SSMH-2357	SSMH-4524	AC	8	250.6	0.00	0.38	0	None Detected					
2018	Sub-Area 07	SSGM-03348	Longview Dr	SSMH-2358	SSMH-4524	AC	12	114.8	0.00	0.26	0	None Detected					
2018	Sub-Area 07	SSGM-01526	Old Barn Rd	SSMH-4216	SSMH-4995	PVC	8	101.4	0.00	0.15	0	None Detected					
2018	Sub-Area 07	SSGM-01527	Old Barn Rd	SSMH-4215	SSMH-4216	PVC	8	111.6	0.00	0.17	0	None Detected					
2018	Sub-Area 07	SSGM-01405	Overset Dr	SSMH-4534	SSMH-2381	PVC	8	128.4	0.00	0.19	0	None Detected					
2018	Sub-Area 07	SSGM-01410	Overset Dr	SSMH-2380	SSMH-2381	PVC	8	181.9	0.50	0.28	2,612	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01411	Overset Dr	SSMH-4535	SSMH-2380	PVC	8	178.0	0.00	0.27	0	None Detected					
2018	Sub-Area 07	SSGM-01413	Overset Dr	SSMH-2379	SSMH-2380	PVC	8	67.6	0.00	0.10	0	None Detected					
2018	Sub-Area 07	SSGM-01414	Overset Dr	SSMH-2378	SSMH-2379	PVC	8	84.6	0.00	0.13	0	None Detected					
2018	Sub-Area 07	SSGM-01404	Overset Rd	SSMH-2382	SSMH-4534	PVC	8	104.1	0.00	0.16	0	None Detected					
2018	Sub-Area 07	NEW PIPE	Pamela Rd	N/A	SSMH-4212	PVC	8	167.0	3.00	0.25	17,073	Infiltration > 4,000					Unmapped upstream manhole, incoming from Southwest - See revised map. Leaking from offset joints in MH 4212.1 - See Photo#0409
2018	Sub-Area 07	SSGM-01441	Pamela Rd	SSMH-2389	SSMH-2388	PVC	8	232.0	0.75	0.35	3,073	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01448	Pamela Rd	SSMH-2364	SSMH-2365	AC	12	243.0	0.00	0.55	0	None Detected	1	SSMH-2365			Wall leak - See Photo#0412.
2018	Sub-Area 07	SSGM-01449	Pamela Rd	SSMH-2388	SSMH-2364	PVC	8	340.2	0.00	0.52	0	None Detected					
2018	Sub-Area 07	SSGM-01450	Pamela Rd	SSMH-2384	SSMH-2364	AC	12	232.2	8.00	0.53	21,828	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01400	Patricia Ln	SSMH-2360	SSMH-2359	AC	8	99.1	0.00	0.15	0	None Detected					
2018	Sub-Area 07	SSGM-01401	Patricia Ln	SSMH-2359	SSMH-2362	AC	8	40.5	0.00	0.06	0	None Detected					
2018	Sub-Area 07	SSGM-01402	Patricia Ln	SSMH-0520	SSMH-2362	AC	8	212.6	0.00	0.32	0	None Detected					
2018	Sub-Area 07	SSGM-01403	Patricia Ln	SSMH-2362	SSMH-2361	AC	8	133.0	0.20	0.20	1,429	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-00192	Sturdivant Dr	SSMH-1637	SSMH-4523	PVC	8	44.6	0.00	0.07	0	None Detected					
2018	Sub-Area 07	SSGM-01379	Sturdivant Dr	SSMH-2373	SSMH-1637	PVC	8	65.2	0.00	0.10	0	None Detected					
2018	Sub-Area 07	SSGM-01380	Sturdivant Dr	SSMH-1635	SSMH-2372	PVC	8	278.9	0.00	0.42	0	None Detected					
2018	Sub-Area 07	SSGM-01381	Sturdivant Dr	SSMH-2372	SSMH-2373	PVC	8	68.1	0.00	0.10	0	None Detected					
2018	Sub-Area 07	SSGM-01445	Sturdivant St	SSMH-2365	SSMH-2367	AC	12	156.2	0.00	0.35	0	None Detected					
2018	Sub-Area 07	SSGM-01436	Summit St	SSMH-1610	SSMH-4990	PVC	8	37.1	0.00	0.06	0	None Detected					
2018	Sub-Area 07	SSGM-01541	Summit St	SSMH-4288	SSMH-4289	PVC	8	61.0	0.00	0.09	0	None Detected					
2018	Sub-Area 07	SSGM-01542	Summit St	SSMH-4289	SSMH-0545	PVC	8	195.6	0.00	0.30	0	None Detected					
2018	Sub-Area 07	SSGM-01543	Summit St	SSMH-0545	SSMH-0546	PVC	8	198.6	0.50	0.30	2,393	Infiltration < 4,000					
2018	Sub-Area 07	SSGM-01544	Summit St	SSMH-0546	SSMH-1610	PVC	8	169.7	0.00	0.26	0	None Detected					
2018	Sub-Area 07	SSGM-01423	Wendy Way	SSMH-4979	SSMH-4978	PVC	8	94.8	0.00	0.14	0	None Detected					
2018	Sub-Area 07	SSGM-01424	Wendy Way	SSMH-4978	SSMH-4974	PVC	8	213.9	3.00	0.32	13,330	Infiltration > 4,000					
2018	Sub-Area 07	SSGM-01425	Wendy Way	SSMH-4980	SSMH-4979	PVC	8	82.4	0.00	0.12	0	None Detected					
2018	Sub-Area 07	SSGM-01426	Wendy Way	SSMH-4981	SSMH-4980	PVC	8	299.6	0.00	0.45	0	None Detected					
2018	Sub-Area 07	SSGM-00184	Whaleboat Rd	SSMH-4533	SSMH-4532	PVC	8	97.4	0.00	0.15	0	None Detected					
2018	Sub-Area 07	SSGM-00185	Whaleboat Rd	SSMH-4532	SSMH-4531	PVC	8	102.6	0.00	0.16	0	None Detected					
2018	Sub-Area 07	SSGM-01406	Whaleboat Rd	SSMH-2381	SSMH-4533	PVC	8	140.6	0.00	0.21	0	None Detected					
2018	Sub-Area 07	SSGM-01407	Whaleboat Rd	SSMH-4531	SSMH-2376	PVC	8	137.7	0.00	0.21	0	None Detected					
2018	Sub-Area 07	SSGM-01412	Whitehead Cir	SSMH-4275	SSMH-4535	PVC	8	41.9	0.00	0.06	0	None Detected					
2018	Sub-Area 08	SSGM-01873	Allen Ave	SSMH-1589	SSMH-2522	PVC	8	158.2	0.00	0.24	0	None Detected					
2018	Sub-Area 08	SSGM-01874	Allen Ave	SSMH-2522	SSMH-2521	PVC	8	298.3	1.00	0.45	3,186	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-01875	Allen Ave	SSMH-2521	SSMH-2523	PVC	8	191.7	0.00	0.29	0	None Detected					
2018	Sub-Area 08	SSGM-01876	Allen Ave	SSMH-2524	SSMH-5091	PVC	8	158.1	1.00	0.24	6,010	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-01877	Allen Ave	SSMH-1519	SSMH-2524	PVC	8	235.2	0.00	0.36	0	None Detected					
2018	Sub-Area 08	SSGM-01881	Allen Ave	SSMH-2529	SSMH-2530	VCP	10	265.1	0.70	0.50	2,008	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-01883	Allen Ave	SSMH-2530	SSMH-2531	AC	10	196.7	0.00	0.37	0	None Detected					
2018	Sub-Area 08	SSGM-01884	Allen Ave	SSMH-2531	SSMH-2532	AC	10	201.1	0.00	0.38	0	None Detected					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 08	SSGM-01885	Allen Ave	SSMH-2532	SSMH-2533	AC	10	274.5	0.00	0.52	0	None Detected					
2018	Sub-Area 08	SSGM-01887	Allen Ave	SSMH-2534	SSMH-5032	PVC	8	177.9	0.00	0.27	0	None Detected					
2018	Sub-Area 08	SSGM-03699	Allen Ave	SSMH-2523	SSMH-3236	PVC	10	199.0	2.00	0.38	7,642	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-03700	Allen Ave	SSMH-3237	SSMH-2523	PVC	8	129.1	0.00	0.20	0	None Detected					
2018	Sub-Area 08	SSGM-03701	Allen Ave	SSMH-5091	SSMH-3237	PVC	8	186.7	0.00	0.28	0	None Detected					
2018	Sub-Area 08	SSGM-00186	Bramblewood Dr	SSMH-0183	SSMH-0182	PVC	8	197.3	0.00	0.30	0	None Detected					
2018	Sub-Area 08	SSGM-00187	Bramblewood Dr	SSMH-0182	SSMH-2283	PVC	8	200.2	0.00	0.30	0	None Detected					
2018	Sub-Area 08	SSGM-01867	Bramblewood Dr	SSMH-0181	SSMH-5088	PVC	8	207.8	0.00	0.31	0	None Detected					
2018	Sub-Area 08	SSGM-01868	Bramblewood Dr	SSMH-5088	SSMH-5089	PVC	8	230.6	0.00	0.35	0	None Detected					
2018	Sub-Area 08	SSGM-01869	Bramblewood Dr	SSMH-5089	SSMH-0184	PVC	8	75.6	0.00	0.11	0	None Detected					
2018	Sub-Area 08	SSGM-01870	Bramblewood Dr	SSMH-0184	SSMH-5090	PVC	8	100.7	0.00	0.15	0	None Detected					
2018	Sub-Area 08	SSGM-01871	Bramblewood Dr	SSMH-5090	SSMH-0183	PVC	8	299.9	0.50	0.45	1,585	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-01872	Bramblewood Dr	SSMH-2283	SSMH-5091	PVC	8	209.6	0.00	0.32	0	None Detected					
2018	Sub-Area 08	SSGM-01652	Deepwood Dr	SSMH-1617	SSMH-2452	PVC	8	248.2	0.00	0.38	0	None Detected					
2018	Sub-Area 08	SSGM-01653	Deepwood Dr	SSMH-2452	SSMH-0569	PVC	8	239.1	0.00	0.36	0	None Detected					
2018	Sub-Area 08	SSGM-01654	Deepwood Dr	SSMH-0569	SSMH-0570	PVC	8	230.7	0.00	0.35	0	None Detected					
2018	Sub-Area 08	SSGM-01655	Deepwood Dr	SSMH-0570	SSMH-0571	PVC	8	75.2	0.00	0.11	0	None Detected					
2018	Sub-Area 08	SSGM-01656	Deepwood Dr	SSMH-0571	SSMH-2448	PVC	8	223.3	0.25	0.34	1,064	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-01657	Deepwood Dr	SSMH-2448	SSMH-0572	PVC	8	294.1	0.00	0.45	0	None Detected					
2018	Sub-Area 08	SSGM-01658	Deepwood Dr	SSMH-0572	SSMH-0573	PVC	8	103.0	0.00	0.16	0	None Detected					
2018	Sub-Area 08	SSGM-01659	Deepwood Dr	SSMH-1615	SSMH-0574	PVC	8	224.0	0.00	0.34	0	None Detected					
2018	Sub-Area 08	SSGM-01660	Deepwood Dr	SSMH-0573	SSMH-0574	PVC	8	298.2	0.00	0.45	0	None Detected					
2018	Sub-Area 08	SSGM-01664	Deepwood Dr	SSMH-5028	SSMH-1615	PVC	8	189.7	0.00	0.29	0	None Detected					
2018	Sub-Area 08	SSGM-01864	Farmhouse Ln	SSMH-5086	SSMH-5087	PVC	8	211.6	0.50	0.32	2,245	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-01865	Farmhouse Ln	SSMH-5087	SSMH-1589	PVC	8	63.0	0.00	0.10	0	None Detected					
2018	Sub-Area 08	SSGM-01639	Heather Dr	SSMH-2440	SSMH-2439	AC	8	192.1	0.00	0.29	0	None Detected					
2018	Sub-Area 08	SSGM-01640	Heather Dr	SSMH-2441	SSMH-2442	AC	8	72.2	0.00	0.11	0	None Detected					
2018	Sub-Area 08	SSGM-01641	Heather Dr	SSMH-2442	SSMH-2440	VCP	8	304.6	0.70	0.46	2,184	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-00085	Jersey Av	SSMH-1555	SSMH-1554	AC	8	293.5	1.00	0.44	3,238	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-03767	Jersey Av	SSMH-1554	SSMH-5557	AC	8	272.6	2.25	0.41	7,845	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-03741	Kansas Ave	SSMH-5559	SSMH-5570	PVC	8	212.5	0.00	0.32	0	None Detected					
2018	Sub-Area 08	SSGM-03765	Kansas Ave	SSMH-5582	SSMH-5569	PVC	8	305.1	0.00	0.46	0	None Detected					
2018	Sub-Area 08	SSGM-07057	Kansas Ave	SSMH-5569	SSMH-6162	PVC	8	184.6	0.00	0.28	0	None Detected					
2018	Sub-Area 08	SSGM-07058	Kansas Ave	SSMH-6162	SSMH-5559	PVC	8	208.2	0.00	0.32	0	None Detected					
2018	Sub-Area 08	SSGM-01878	Meadow Ln	SSMH-2526	SSMH-2527	VCP	8	201.5	0.00	0.31	0	None Detected					
2018	Sub-Area 08	SSGM-01879	Meadow Ln	SSMH-2527	SSMH-2528	VCP	8	149.0	0.70	0.23	4,465	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-01880	Meadow Ln	SSMH-2528	SSMH-2529	VCP	8	61.5	0.00	0.09	0	None Detected					
2018	Sub-Area 08	SSGM-03694	Nevada Ave	SSMH-1556	SSMH-0954	AC	8	563.4	5.00	0.85	8,435	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-03696	Nevada Ave	SSMH-5555	SSMH-5556	AC	16	192.5	3.80	0.58	9,381	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-03697	Nevada Ave	SSMH-5556	SSMH-0953	AC	16	250.8	0.25	0.76	474	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-04200	Off Allen Ave	SSMH-1614	SSMH-3379	VCP	8	137.2	0.00	0.21	0	None Detected					
2018	Sub-Area 08	SSGM-01630	Olde Birch Ln	SSMH-0568	SSMH-2284	PVC	8	292.6	*	0.44	N/A	N/A					Could not open SSMH-2284
2018	Sub-Area 08	SSGM-01631	Olde Birch Ln	SSMH-2284	SSMH-5020	PVC	8	352.0	0.00	0.53	0	None Detected					
2018	Sub-Area 08	SSGM-01632	Olde Birch Ln	SSMH-5020	SSMH-5021	PVC	8	165.4	1.00	0.25	5,744	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-01633	Olde Birch Ln	SSMH-5021	SSMH-5022	PVC	8	77.4	0.00	0.12	0	None Detected					
2018	Sub-Area 08	SSGM-01635	Pineloch Dr	SSMH-5024	SSMH-5023	PVC	8	132.0	0.00	0.20	0	None Detected					
2018	Sub-Area 08	SSGM-01636	Pineloch Dr	SSMH-5025	SSMH-5024	PVC	8	171.7	0.00	0.26	0	None Detected					
2018	Sub-Area 08	SSGM-01637	Pineloch Dr	SSMH-2439	SSMH-5023	AC	8	188.0	0.00	0.28	0	None Detected					
2018	Sub-Area 08	SSGM-01638	Pineloch Dr	SSMH-5026	SSMH-2439	AC	8	325.5	0.00	0.49	0	None Detected					
2018	Sub-Area 08	SSGM-01642	Pineloch Dr	SSMH-2443	SSMH-5026	AC	8	198.3	0.00	0.30	0	None Detected					
2018	Sub-Area 08	SSGM-01643	Pineloch Dr	SSMH-2444	SSMH-2443	AC	8	198.3	0.00	0.30	0	None Detected					
2018	Sub-Area 08	SSGM-01644	Pineloch Dr	SSMH-2445	SSMH-2444	AC	8	88.4	0.00	0.13	0	None Detected					
2018	Sub-Area 08	SSGM-01645	Pineloch Dr	SSMH-2397	SSMH-2445	AC	8	92.7	0.00	0.14	0	None Detected					
2018	Sub-Area 08	SSGM-01646	Pineloch Dr	SSMH-2446	SSMH-2447	PVC	8	200.6	0.00	0.30	0	None Detected					
2018	Sub-Area 08	SSGM-01647	Pineloch Dr	SSMH-2447	SSMH-2448	PVC	8	128.6	0.00	0.19	0	None Detected					
2018	Sub-Area 08	SSGM-03678	Racine Ave	SSMH-3223	SSMH-3222	PVC	8	33.1	0.00	0.05	0	None Detected					
2018	Sub-Area 08	SSGM-03679	Racine Ave	SSMH-3224	SSMH-3223	PVC	8	55.6	0.00	0.08	0	None Detected					
2018	Sub-Area 08	SSGM-03680	Racine Ave	SSMH-4414	SSMH-3224	PVC	8	48.9	0.00	0.07	0	None Detected					
2018	Sub-Area 08	SSGM-03681	Racine Ave	SSMH-3225	SSMH-3222	PVC	8	78.2	0.00	0.12	0	None Detected					
2018	Sub-Area 08	SSGM-03682	Racine Ave	SSMH-3226	SSMH-3225	PVC	8	64.1	0.00	0.10	0	None Detected					
2018	Sub-Area 08	SSGM-03683	Racine Ave	SSMH-3227	SSMH-3226	PVC	8	134.0	0.00	0.20	0	None Detected					
2018	Sub-Area 08	SSGM-03684	Racine Ave	SSMH-3228	SSMH-3229	PVC	8	71.9	0.00	0.11	0	None Detected					
2018	Sub-Area 08	SSGM-03685	Racine Ave	SSMH-3229	SSMH-3230	PVC	8	76.4	0.00	0.12	0	None Detected					
2018	Sub-Area 08	SSGM-03686	Racine Ave	SSMH-3231	SSMH-3227	PVC	8	94.4	0.00	0.14	0	None Detected					
2018	Sub-Area 08	SSGM-03687	Racine Ave	SSMH-3230	SSMH-3231	PVC	8	128.8	0.25	0.20	1,845	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-03688	Racine Ave	SSMH-3232	SSMH-4414	PVC	8	184.0	0.70	0.28	3,615	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-03690	Racine Ave	SSMH-3222	SSMH-3235	PVC	8	166.0	0.00	0.25	0	None Detected	2	SSMH-3235			Leak from hole in corbel - See Photos#0427, 0429, 0430.

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 08	SSGM-03698	Racine Ave	SSMH-3236	SSMH-5560	PVC	8	252.2	2.10	0.38	7,914	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-06269	Racine Ave	SSMH-3233	SSMH-3232	PVC	8	195.2	0.00	0.30	0	None Detected					
2018	Sub-Area 08	SSGM-00188	Roaring Brook Rd	SSMH-1618	SSMH-1619	PVC	8	110.0	0.00	0.17	0	None Detected					
2018	Sub-Area 08	SSGM-01648	Roaring Brook Rd	SSMH-2449	SSMH-5024	PVC	8	214.9	0.25	0.33	1,106	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-01649	Roaring Brook Rd	SSMH-1619	SSMH-2449	PVC	8	229.3	0.00	0.35	0	None Detected					
2018	Sub-Area 08	SSGM-01650	Roaring Brook Rd	SSMH-2450	SSMH-1618	PVC	8	84.0	0.00	0.13	0	None Detected					
2018	Sub-Area 08	SSGM-01651	Roaring Brook Rd	SSMH-2451	SSMH-2450	PVC	8	68.1	0.00	0.10	0	None Detected					
2018	Sub-Area 08	SSGM-01661	Roaring Brook Rd	SSMH-1616	SSMH-0574	PVC	8	160.9	0.00	0.24	0	None Detected					
2018	Sub-Area 08	SSGM-01665	Roaring Brook Rd	SSMH-1613	SSMH-5029	PVC	8	141.0	0.00	0.21	0	None Detected					
2018	Sub-Area 08	SSGM-01666	Roaring Brook Rd	SSMH-5029	SSMH-5030	PVC	8	187.5	0.00	0.28	0	None Detected					
2018	Sub-Area 08	SSGM-01667	Roaring Brook Rd	SSMH-5030	SSMH-1616	PVC	8	119.2	0.00	0.18	0	None Detected					
2018	Sub-Area 08	SSGM-01560	Summit St	SSMH-2401	SSMH-2402	AC	8	79.7	0.00	0.12	0	None Detected					
2018	Sub-Area 08	SSGM-01561	Summit St	SSMH-2403	SSMH-2404	AC	8	219.9	0.00	0.33	0	None Detected					
2018	Sub-Area 08	SSGM-01882	Summit St	SSMH-2404	SSMH-2530	AC	8	300.7	0.00	0.46	0	None Detected					
2018	Sub-Area 08	SSGM-06301	Summit St	SSMH-6029	SSMH-2403	AC	8	169.9	0.00	0.26	0	None Detected					
2018	Sub-Area 08	SSGM-06302	Summit St	SSMH-2402	SSMH-6029	AC	8	169.9	0.00	0.26	0	None Detected					
2018	Sub-Area 08	SSGM-03771	Virginia St	SSMH-5557	SSMH-0954	VCP	10	251.3	5.00	0.48	15,130	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-04204	Virginia St	SSMH-5554	SSMH-5557	VCP	8	481.0	0.70	0.73	1,383	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-06270	Virginia St	SSMH-6017	SSMH-6686	VCP	8	251.6	3.00	0.38	11,332	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-06684	Virginia St	SSMH-5558	SSMH-4077	VCP	10	250.4	16.40	0.47	49,804	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-06685	Virginia St	SSMH-4077	SSMH-0954	VCP	10	248.2	0.00	0.47	0	None Detected					
2018	Sub-Area 08	SSGM-07056	Virginia St	SSMH-6161	SSMH-5558	VCP	10	248.8	1.00	0.47	3,056	Infiltration < 4,000					
2018	Sub-Area 08	SSGM-07793	Virginia St	SSMH-6686	SSMH-5569	VCP	8	243.3	2.00	0.37	7,811	Infiltration > 4,000					
2018	Sub-Area 08	SSGM-03695	Virginia-Carter Interceptor	SSMH-0954	SSMH-5555	AC	15	202.1	0.00	0.57	0	None Detected					
2018	Sub-Area 08	SSGM-03766	Wyoming Ave	SSMH-5560	SSMH-5582	PVC	8	248.1	0.00	0.38	0	None Detected					
2018	Sub-Area 08	SSGM-07059	Wyoming Ave	SSMH-6163	SSMH-5560	PVC	8	110.2	0.00	0.17	0	None Detected					
2019	Sub-Area 11	SSGM-07841		SSMH-6105	SSMH-0309	PVC	8	86.0	0.00	0.13	0	None Detected					
2019	Sub-Area 11	SSGM-02983	Allen Ave	SSMH-0219	SSMH-0815	VCP	8	51.0	0.00	0.08	0	None Detected					
2019	Sub-Area 11	SSGM-06480	Allen Ave	SSMH-0934	SSMH-6062	VCP	8	142.0	*	0.22	*	N/A					Could not weir SSMH-6062 due to blockage. Additionally, this manhole has catch basin leads from East and a drain manhole lead from NNW - See Photo# 0151
2019	Sub-Area 11	SSGM-06481	Allen Ave	SSMH-6062	SSMH-0219	VCP	8	65.0	0.70	0.10	10,235	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-06482	Allen Ave	SSMH-0935	SSMH-6063	VCP	8	130.0	0.00	0.20	0	None Detected					
2019	Sub-Area 11	SSGM-06483	Allen Ave	SSMH-6063	SSMH-0934	VCP	8	97.0	0.90	0.15	8,818	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-06484	Allen Ave	SSMH-4436	SSMH-6064	VCP	8	160.0	0.50	0.24	2,970	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-06485	Allen Ave	SSMH-6064	SSMH-0935	VCP	8	131.0	1.20	0.20	8,706	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-00278	Arbor St	SSFT-0036	SSMH-1674	VCP	0	22.0	1.20	0.00	414,720	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-04483	Arbor St	SSMH-6564	SSMH-1674	VCP	8	188.0	0.00	0.28	0	None Detected					
2019	Sub-Area 11	SSGM-05814	Arbor St	SSMH-1903	SSMH-1064	VCP	10	248.0	0.00	0.47	0	None Detected					
2019	Sub-Area 11	SSGM-07519	Arbor St	SSMH-1064	SSMH-6564	VCP	10	28.0	0.00	0.05	0	None Detected					
2019	Sub-Area 11	SSGM-00275	Bell St	SSMH-4563	SSMH-4562	VCP	10	236.0	1.60	0.45	5,155	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-00276	Bell St	SSMH-1671	SSMH-4562	VCP	12	250.0	0.00	0.57	0	None Detected					
2019	Sub-Area 11	SSGM-04484	Bell St	SSMH-1065	SSMH-1066	VCP	10	260.0	0.00	0.49	0	None Detected					
2019	Sub-Area 11	SSGM-06204	Bell St	SSMH-6005	SSMH-5718	VCP	10	105.0	0.00	0.20	0	None Detected	3	SSMH-5718			Pipe connection leak - See Video# 0160
2019	Sub-Area 11	SSGM-06205	Bell St	SSMH-1066	SSMH-6005	VCP	10	266.0	0.00	0.50	0	None Detected	5	SSMH-6005			Wall and floor leaks - See Video# 0159
2019	Sub-Area 11	SSGM-06209	Bell St	SSMH-4562	SSMH-1065	VCP	10	347.0	0.00	0.66	0	None Detected					
2019	Sub-Area 11	SSGM-06387	Bell St	SSMH-4239	SSMH-4563	VCP	10	203.0	0.00	0.38	0	None Detected	12.6	SSMH-4563			Wall leaks at incoming line and pipe connection leak - See Video# 0157
2019	Sub-Area 11	SSGM-06388	Bell St	SSMH-4564	SSMH-4239	VCP	10	176.0	*	0.33	*	N/A					Could not locate SSMH-4239
2019	Sub-Area 11	SSGM-04458	Bell X-Country	SSMH-3470	SSMH-5718	VCP	18	222.0	17.00	0.76	32,346	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-06203	Bell X-Country	SSMH-5718	SSMH-6004	VCP	18	155.0	0.00	0.53	0	None Detected					
2019	Sub-Area 11	SSGM-06558	Bell X-Country	SSMH-6079	SSMH-1278	VCP	18	254.0	0.00	0.87	0	None Detected					
2019	Sub-Area 11	SSGM-06559	Bell X-Country	SSMH-6004	SSMH-6079	VCP	18	272.0	0.00	0.93	0	None Detected					
2019	Sub-Area 11	SSGM-06728	Bell X-Country	SSMH-1278	SSMH-6107	VCP	18	262.0	0.00	0.89	0	None Detected					
2019	Sub-Area 11	SSGM-00623	College St	SSMH-4692	SSMH-4691	VCP	8	200.0	0.00	0.30	0	None Detected					
2019	Sub-Area 11	SSGM-00624	College St	SSMH-4691	SSMH-4690	VCP	8	91.0	0.00	0.14	0	None Detected					
2019	Sub-Area 11	SSGM-00625	College St	SSMH-4690	SSMH-0319	VCP	12	231.0	0.00	0.53	0	None Detected					
2019	Sub-Area 11	SSGM-00626	College St	SSMH-0319	SSMH-0318	VCP	12	235.0	0.50	0.53	1,348	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-00627	College St	SSMH-0318	SSMH-0317	VCP	12	230.0	1.25	0.52	3,443	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-06664	Dingley Ct	SSMH-6099	SSMH-3471	PVC	8	203.0	0.00	0.31	0	None Detected					
2019	Sub-Area 11	SSGM-06665	Dingley Ct	SSMH-6098	SSMH-6099	PVC	8	162.0	0.00	0.25	0	None Detected					
2019	Sub-Area 11	SSGM-03444	Eleanor St	SSMH-0904	SSMH-0222	VCP	8	119.0	*	0.18	*	N/A					Could not locate SSMH-0904 or SSMH-0222
2019	Sub-Area 11	SSGM-00620	Elmwood St	SSMH-1898	SSMH-1897	VCP	8	190.0	0.00	0.29	0	None Detected					
2019	Sub-Area 11	SSGM-04477	Elmwood St	SSMH-4688	SSMH-4689	VCP	8	31.0	0.00	0.05	0	None Detected					
2019	Sub-Area 11	SSGM-04478	Elmwood St	SSMH-1897	SSMH-4355	VCP	8	335.0	0.00	0.51	0	None Detected					
2019	Sub-Area 11	SSGM-04479	Elmwood St	SSMH-4355	SSMH-4688	VCP	8	315.0	0.50	0.48	1,509	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-00239	Forest Ave	SSMH-1673	SSMH-1672	VCP	8	338.0	0.00	0.51	0	None Detected					
2019	Sub-Area 11	SSGM-00600	Forest Ave	SSMH-0308	SSMH-3475	VCP	18	17.0	0.00	0.06	0	None Detected					
2019	Sub-Area 11	SSGM-00606	Forest Ave	SSMH-3475	SSMH-1883	VCP	12	370.0	5.00	0.84	8,562	Infiltration > 4,000					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 11	SSGM-00643	Forest Ave	SSMH-0315	SSMH-1899	VCP	10	500.0	0.75	0.95	1,140	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-00644	Forest Ave	SSMH-1899	SSMH-4689	VCP	10	341.0	5.70	0.65	12,709	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-00645	Forest Ave	SSMH-4689	SSMH-1888	VCP	10	235.0	4.10	0.45	13,265	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-00949	Forest Ave	SSMH-1674	SSMH-0315	VCP	10	365.0	0.00	0.69	0	None Detected					
2019	Sub-Area 11	SSGM-02979	Forest Ave	SSMH-5356	SSMH-0812	VCP	8	273.0	0.00	0.41	0	None Detected					
2019	Sub-Area 11	SSGM-02980	Forest Ave	SSMH-0813	SSMH-0814	VCP	8	220.0	0.90	0.33	3,888	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-02981	Forest Ave	SSMH-0814	SSMH-0220	VCP	10	360.0	0.00	0.68	0	None Detected					
2019	Sub-Area 11	SSGM-02982	Forest Ave	SSMH-0815	SSMH-0814	VCP	8	110.0	0.00	0.17	0	None Detected					
2019	Sub-Area 11	SSGM-02984	Forest Ave	SSMH-0816	SSMH-5356	VCP	8	285.0	0.50	0.43	1,667	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-03011	Forest Ave	SSMH-0819	SSMH-0813	VCP	8	220.0	*	0.33	*	N/A					SSMH-0813 is paved over
2019	Sub-Area 11	SSGM-03012	Forest Ave	SSMH-0812	SSMH-0819	VCP	8	58.0	1.20	0.09	19,663	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-03090	Forest Ave	SSFT-0223	SSMH-0845	VCP	6	98.0	*	0.11	*	N/A					Could not locate SSMH-0845
2019	Sub-Area 11	SSGM-03091	Forest Ave	SSMH-0845	SSFT-0250	VCP	6	34.0	*	0.04	*	N/A					
2019	Sub-Area 11	SSGM-04465	Forest Ave	SSMH-1887	SSMH-3475	VCP	10	350.0	N/A	0.66	N/A	N/A					Unable to obtain measurement at this manhole: SSMH-3475 has 18" line coming from SSMH-0308 leading into SSMH-0309. There is also a 12" line running through manhole but is enclosed so we were unable to weir from SSMH-1887.
2019	Sub-Area 11	SSGM-06386	Forest Ave	SSMH-1672	SSMH-4238	VCP	8	19.0	0.00	0.03	0	None Detected					
2019	Sub-Area 11	SSGM-06744	Forest Ave	SSMH-4091	SSMH-1888	VCP	10	48.0	0.00	0.09	0	None Detected					
2019	Sub-Area 11	SSGM-06745	Forest Ave	SSMH-4091	SSMH-1887	VCP	10	275.0	2.10	0.52	5,806	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-00274	Goodridge Ave	SSMH-0222	SSMH-0219	VCP	8	470.0	9.30	0.71	18,806	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-04474	Morgan Ct	SSMH-4353	SSMH-3474	PVC	8	262.0	0.00	0.40	0	None Detected					
2019	Sub-Area 11	SSGM-06633	Morrill St	SSMH-4238	SSMH-4063	lined	15	161.0	0.00	0.46	0	None Detected	5	SSMH-4063			Walls leaking - See Video# 0156
2019	Sub-Area 11	SSGM-06634	Morrill St	SSMH-4063	SSMH-4564	VCP	15	176.0	0.00	0.50	0	None Detected					
2019	Sub-Area 11	SSGM-06636	Morrill St	SSMH-4065	SSMH-4238	VCP	15	198.0	0.00	0.56	0	None Detected					
2019	Sub-Area 11	SSGM-06726	Morrill St Interceptor	SSMH-6106	SSMH-0310	VCP	18	166.0	0.00	0.57	0	None Detected					
2019	Sub-Area 11	SSGM-06727	Morrill St Interceptor	SSMH-6107	SSMH-6106	VCP	18	72.0	0.00	0.25	0	None Detected					
2019	Sub-Area 11	SSGM-04459	Off Read St	SSMH-4565	SSMH-3470	VCP	18	274.0	3.00	0.93	4,625	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-00621	Poland St	SSMH-0316	SSMH-0315	VCP	8	38.0	0.00	0.06	0	None Detected					
2019	Sub-Area 11	SSGM-06555	Poland St	SSMH-6234	SSMH-0316	VCP	8	157.0	2.10	0.24	12,712	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-06556	Poland St	SSMH-6078	SSMH-6234	VCP	8	114.0	0.00	0.17	0	None Detected					
2019	Sub-Area 11	SSGM-06557	Poland St	SSMH-6233	SSMH-6078	VCP	8	143.0	0.00	0.22	0	None Detected					
2019	Sub-Area 11	SSGM-00277	Read St	SSMH-1670	SSMH-1669	VCP	12	120.0	0.00	0.27	0	None Detected					Blockage incoming line, 98% capacity - See Photo# 0158
2019	Sub-Area 11	SSGM-06208	Read St	SSFT-0248	SSMH-4565	VCP	15	32.0	0.00	0.09	0	None Detected					
2019	Sub-Area 11	SSGM-06210	Read St	SSMH-6008	SSMH-1065	PVC	8	242.0	0.00	0.37	0	None Detected					
2019	Sub-Area 11	SSGM-06722	Read St	SSMH-1669	SSMH-4565	VCP	18	29.0	0.25	0.10	3,641	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-06663	St Joseph St	SSMH-1341	SSMH-4348	VCP	8	207.0	1.70	0.31	7,805	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-00001	Stevens Ave	SSMH-1908	SSMH-0220	VCP	8	52.0	0.00	0.08	0	None Detected					
2019	Sub-Area 11	SSGM-00271	Stevens Ave	SSMH-0220	SSMH-4065	VCP	10	276.0	0.00	0.52	0	None Detected	3	SSMH-4065			Walls leaking - See Video# 0155
2019	Sub-Area 11	SSGM-00628	Stevens Ave	SSMH-0317	SSMH-1896	VCP	12	79.0	0.00	0.18	0	None Detected					
2019	Sub-Area 11	SSGM-00629	Stevens Ave	SSMH-1895	SSMH-1896	VCP	8	486.0	0.00	0.74	0	None Detected					
2019	Sub-Area 11	SSGM-00641	Stevens Ave	SSMH-1905	SSMH-1904	VCP	8	186.0	0.00	0.28	0	None Detected					
2019	Sub-Area 11	SSGM-00950	Stevens Ave	SSMH-1903	SSMH-1906	VCP	8	229.0	0.50	0.35	2,075	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-00951	Stevens Ave	SSMH-1906	SSMH-1907	VCP	8	244.0	0.00	0.37	0	None Detected					
2019	Sub-Area 11	SSGM-00952	Stevens Ave	SSMH-1907	SSMH-1908	VCP	8	248.0	1.80	0.38	6,898	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-04475	Stevens Ave	SSMH-4354	SSMH-1905	VCP	8	200.0	0.00	0.30	0	None Detected					
2019	Sub-Area 11	SSGM-04476	Stevens Ave	SSMH-4354	SSMH-0317	VCP	8	200.0	0.00	0.30	0	None Detected					
2019	Sub-Area 11	SSGM-06839	Stevens Ave	SSMH-1904	SSMH-4119	VCP	8	70.0	0.00	0.11	0	None Detected					
2019	Sub-Area 11	SSGM-06840	Stevens Ave	SSMH-4119	SSMH-1903	VCP	8	115.0	0.00	0.17	0	None Detected					
2019	Sub-Area 11	SSGM-07097	Stevens Ave	SSMH-1386	SSMH-1892	VCP	8	346.0	2.10	0.52	5,768	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-07098	Stevens Ave	SSMH-1895	SSMH-1386	VCP	8	138.0	0.00	0.21	0	None Detected					
2019	Sub-Area 11	SSGM-04480	Tremaine St	SSMH-1062	SSMH-1889	VCP	8	316.0	0.00	0.48	0	None Detected					
2019	Sub-Area 11	SSGM-04481	Tremaine St	SSMH-1889	SSMH-1063	VCP	8	333.0	1.25	0.50	3,568	Infiltration < 4,000					
2019	Sub-Area 11	SSGM-04482	Tremaine St	SSMH-1063	SSMH-1888	VCP	10	29.0	0.00	0.05	0	None Detected					
2019	Sub-Area 11	SSGM-00618	Walton St	SSMH-1891	SSMH-1890	VCP	15	225.0	0.00	0.64	0	None Detected					
2019	Sub-Area 11	SSGM-00619	Walton St	SSMH-1892	SSMH-1893	VCP	10	52.0	0.00	0.10	0	None Detected			8.2	SSMH-1893	Service line from South
2019	Sub-Area 11	SSGM-04460	Walton St	SSMH-1893	SSMH-1894	VCP	15	214.0	0.00	0.61	0	None Detected					
2019	Sub-Area 11	SSGM-04461	Walton St	SSMH-3472	SSMH-3471	VCP	15	187.0	14.00	0.53	37,948	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-04462	Walton St	SSMH-3473	SSMH-3474	VCP	15	100.0	0.00	0.28	0	None Detected					
2019	Sub-Area 11	SSGM-04462.1	Walton St	SSMH-3474	SSMH-1891	VCP	15	100.0	2.00	0.28	10,138	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-04463	Walton St	SSMH-3471	SSMH-3473	VCP	15	63.0	0.00	0.18	0	None Detected					
2019	Sub-Area 11	SSGM-04467	Walton St	SSMH-4348	SSMH-4349	VCP	12	303.0	0.00	0.69	0	None Detected					
2019	Sub-Area 11	SSGM-04468	Walton St	SSMH-4349	SSMH-3472	VCP	15	97.0	0.00	0.28	0	None Detected					
2019	Sub-Area 11	SSGM-04469	Walton St	SSMH-1894	SSMH-4349	VCP	15	124.0	2.00	0.35	8,175	Infiltration > 4,000					
2019	Sub-Area 11	SSGM-06591	Walton St	SSMH-1890	SSMH-0308	VCP	18	227.0	0.00	0.77	0	None Detected					
2019	Sub-Area 11	SSGM-06723	Walton St	SSFT-0384	SSFT-0385	VCP	6	193.0	0.00	0.22	0	None Detected					
2019	Sub-Area 11	SSGM-06724	Walton St	SSFT-0385	SSMH-6105	VCP	12	73.0	0.00	0.17	0	None Detected					
2019	Sub-Area 11	SSGM-06725	Walton St	SSFT-0386	SSFT-0385	VCP	12	63.0	0.00	0.14	0	None Detected					
2019	Sub-Area 11	SSGM-00622	Waverly St	SSMH-1896	SSMH-0314	VCP	12	51.0	0.00	0.12	0	None Detected					

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2019	Sub-Area 11	SSGM-00639	Waverly St	SSMH-0314	SSMH-1901	VCP	8	290.0	0.00	0.44	0	None Detected					
2019	Sub-Area 11	SSGM-00640	Waverly St	SSMH-1901	SSMH-1900	VCP	8	249.0	0.00	0.38	0	None Detected					
2019	Sub-Area 11	SSGM-00642	Waverly St	SSMH-1900	SSMH-1899	VCP	8	252.0	0.00	0.38	0	None Detected					
2019	Sub-Area 12	SSGM-04886	Canco Rd	SSMH-3606	SSMH-3607	PVC	10	304.0	0.00	0.58	0	None Detected					
2019	Sub-Area 12	SSGM-04887	Canco Rd	SSMH-3607	SSMH-3608	PVC	10	212.0	0.00	0.40	0	None Detected					
2019	Sub-Area 12	SSGM-06190	Canco Rd	SSMH-3952	SSMH-3951	PVC	15	197.0	3.00	0.56	7,719	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-06177	Carlyle Rd	SSMH-3941	SSMH-6002	PVC	8	148.0	0.00	0.22	0	None Detected					
2019	Sub-Area 12	SSGM-06178	Carlyle Rd	SSMH-6002	SSMH-3940	PVC	8	211.0	0.00	0.32	0	None Detected					
2019	Sub-Area 12	SSGM-06179	Carlyle Rd	SSMH-3943	SSMH-3942	PVC	8	186.0	0.00	0.28	0	None Detected					
2019	Sub-Area 12	SSGM-06182	Carlyle Rd	SSMH-3946	SSMH-3943	PVC	8	24.0	0.00	0.04	0	None Detected					
2019	Sub-Area 12	SSGM-06185	Carlyle Rd	SSFT-0370	SSMH-3946	PVC	8	178.0	0.00	0.27	0	None Detected					
2019	Sub-Area 12	SSGM-06192	Carlyle Rd	SSMH-3942	SSMH-3940	PVC	8	177.0	0.00	0.27	0	None Detected					
2019	Sub-Area 12	SSGM-04930	Frye St	SSMH-1126	SSMH-3626	PVC	8	131.0	1.00	0.20	7,255	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-04290	Gleckler Rd	SSMH-1870	SSMH-1036	VCP	8	172.0	0.00	0.26	0	None Detected					
2019	Sub-Area 12	SSGM-04291	Gleckler Rd	SSMH-1871	SSMH-5683	VCP	15	273.0	1.00	0.78	1,857	Infiltration < 4,000					
2019	Sub-Area 12	SSGM-04292	Gleckler Rd	SSMH-5683	SSMH-1036	VCP	15	276.0	0.00	0.78	0	None Detected					
2019	Sub-Area 12	SSGM-04856	Gleckler Rd	SSMH-1115	SSMH-1116	PVC	8	239.0	0.00	0.36	0	None Detected					
2019	Sub-Area 12	SSGM-04857	Gleckler Rd	SSMH-1116	SSMH-1117	PVC	8	234.0	0.00	0.35	0	None Detected					
2019	Sub-Area 12	SSGM-04858	Gleckler Rd	SSMH-1117	SSMH-1118	PVC	8	229.0	0.00	0.35	0	None Detected	1.75	SSMH-1118			Pipe connection leak of 1GPM and invert leak of 0.75GPM - See Video# 0164
2019	Sub-Area 12	SSGM-04859	Gleckler Rd	SSMH-1118	SSMH-1871	VCP	15	178.0	4.00	0.51	11,391	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-05255	Glengarden St	SSMH-1676	SSMH-5859	PVC	8	275.0	1.25	0.42	4,320	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-05256	Glengarden St	SSMH-5859	SSMH-1675	PVC	8	25.0	0.00	0.04	0	None Detected					
2019	Sub-Area 12	SSGM-01283	Holiday Dr	SSFT-0116	SSMH-2322	PVC	8	135.0	0.00	0.20	0	None Detected					
2019	Sub-Area 12	SSGM-01284	Holiday Dr	SSMH-2322	SSMH-2324	PVC	8	121.0	0.00	0.18	0	None Detected					
2019	Sub-Area 12	SSGM-01285	Holiday Dr	SSMH-2324	SSMH-2325	PVC	8	43.0	0.00	0.07	0	None Detected					
2019	Sub-Area 12	SSGM-01286	Holiday Dr	SSMH-2325	SSMH-2323	PVC	8	180.0	0.00	0.27	0	None Detected					
2019	Sub-Area 12	SSGM-06281	Holiday Dr	SSMH-2323	SSMH-3606	PVC	8	223.0	0.00	0.34	0	None Detected					
2019	Sub-Area 12	SSGM-04928	Kineo St	SSMH-3626	SSMH-0134	PVC	8	301.0	0.50	0.46	1,579	Infiltration < 4,000					
2019	Sub-Area 12	SSGM-04929	Kineo St	SSMH-1125	SSMH-3626	PVC	8	200.0	7.80	0.30	37,066	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-04927	Loraine St	SSMH-3625	SSMH-0135	PVC	8	213.0	0.00	0.32	0	None Detected					
2019	Sub-Area 12	SSGM-00139	Ocean Ave	SSMH-1492	SSMH-1491	VCP	8	225.0	0.00	0.34	0	None Detected					
2019	Sub-Area 12	SSGM-00140	Ocean Ave	SSMH-1491	SSMH-1490	VCP	8	84.0	0.00	0.13	0	None Detected					
2019	Sub-Area 12	SSGM-03669	Ocean Ave	SSMH-1490	SSMH-5548	VCP	8	66.0	0.00	0.10	0	None Detected					
2019	Sub-Area 12	SSGM-04851	Ocean Ave	SSMH-1869	SSMH-3593	VCP	10	257.0	0.50	0.49	1,479	Infiltration < 4,000	1	SSMH-3593			Wall leaks - See Video# 0161
2019	Sub-Area 12	SSGM-04862	Ocean Ave	SSMH-1493	SSMH-1678	VCP	10	243.0	0.50	0.46	1,564	Infiltration < 4,000					
2019	Sub-Area 12	SSGM-05261	Ocean Ave	SSMH-3593	SSMH-0302	VCP	10	266.0	0.00	0.50	0	None Detected					
2019	Sub-Area 12	SSGM-05262	Ocean Ave	SSMH-0302	SSMH-1678	VCP	10	265.0	1.30	0.50	3,730	Infiltration < 4,000					
2019	Sub-Area 12	SSGM-06604	Ocean Ave	SSMH-5548	SSMH-3604	VCP	10	152.0	0.00	0.29	0	None Detected					
2019	Sub-Area 12	SSGM-04888	Off Canco Rd	SSMH-3609	SSMH-3610	PVC	10	239.0	0.00	0.45	0	None Detected					
2019	Sub-Area 12	SSGM-04889	Off Canco Rd	SSMH-3608	SSMH-3609	PVC	10	294.0	0.00	0.56	0	None Detected					
2019	Sub-Area 12	SSGM-00280	Read St	SSMH-1678	SSMH-1677	PVC	10	311.0	0.00	0.59	0	None Detected					
2019	Sub-Area 12	SSGM-05253	Read St	SSMH-5860	SSMH-5858	PVC	15	150.0	1.25	0.43	4,224	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-05254	Read St	SSMH-5858	SSMH-1675	PVC	12	195.0	0.00	0.44	0	None Detected					
2019	Sub-Area 12	SSGM-05257	Read St	SSMH-5861	SSMH-5862	PVC	12	240.0	1.50	0.55	3,960	Infiltration < 4,000					
2019	Sub-Area 12	SSGM-05258	Read St	SSMH-5863	SSMH-1677	PVC	12	251.0	0.00	0.57	0	None Detected					
2019	Sub-Area 12	SSGM-06176	Read St	SSMH-3940	SSMH-3594	VCP	12	250.0	0.00	0.57	0	None Detected	20	SSMH-3594			Pipe connection leak - See Video# 0162
2019	Sub-Area 12	SSGM-06196	Read St	SSMH-1279	SSMH-5861	PVC	12	256.0	0.00	0.58	0	None Detected					
2019	Sub-Area 12	SSGM-06197	Read St	SSMH-1675	SSMH-1279	PVC	12	137.0	0.00	0.31	0	None Detected					
2019	Sub-Area 12	SSGM-06198	Read St	SSMH-5862	SSMH-1280	PVC	12	238.0	0.00	0.54	0	None Detected					
2019	Sub-Area 12	SSGM-06199	Read St	SSMH-1280	SSMH-5863	PVC	12	245.0	0.00	0.56	0	None Detected					
2019	Sub-Area 12	SSGM-06200	Read St	SSMH-6003	SSMH-1281	PVC	12	243.0	0.50	0.55	1,304	Infiltration < 4,000					
2019	Sub-Area 12	SSGM-06201	Read St	SSMH-1281	SSMH-5860	PVC	15	163.0	6.30	0.46	19,591	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-06202	Read St	SSFT-0372	SSFT-0373		0	82.0	*	0.00	*	N/A					
2019	Sub-Area 12	SSGM-06206	Read St	SSMH-6006	SSMH-6003	VCP	12	296.0	0.00	0.67	0	None Detected					
2019	Sub-Area 12	SSGM-06207	Read St	SSMH-6007	SSMH-6006	PVC	10	16.0	0.00	0.03	0	None Detected					
2019	Sub-Area 12	SSGM-04890	Torrey St	SSMH-3610	SSMH-3611	PVC	10	303.0	0.00	0.57	0	None Detected					
2019	Sub-Area 12	SSGM-04891	Torrey St	SSMH-3611	SSMH-1119	PVC	10	296.0	0.00	0.56	0	None Detected					
2019	Sub-Area 12	SSGM-04892	Torrey St	SSMH-1119	SSMH-1120	PVC	10	308.0	1.20	0.58	2,962	Infiltration < 4,000					
2019	Sub-Area 12	SSGM-04893	Torrey St	SSMH-1120	SSMH-6684	PVC	10	198.0	0.00	0.38	0	None Detected					
2019	Sub-Area 12	SSGM-04853	Wellington Rd	SSMH-1113	SSMH-3596	PVC	8	251.0	0.30	0.38	1,136	Infiltration < 4,000					
2019	Sub-Area 12	SSGM-04854	Wellington Rd	SSMH-1112	SSMH-1113	PVC	8	250.0	0.00	0.38	0	None Detected					
2019	Sub-Area 12	SSGM-04855	Wellington Rd	SSMH-1114	SSMH-1112	PVC	8	261.0	0.00	0.40	0	None Detected					
2019	Sub-Area 12	SSGM-04869	Wellington Rd	SSMH-5789	SSMH-3594	PVC	8	231.0	6.00	0.35	24,686	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-04870	Wellington Rd	SSMH-3596	SSMH-5789	PVC	8	233.0	1.00	0.35	4,079	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-06186	Wellington Rd	SSMH-3949	SSMH-3594	PVC	8	34.0	0.30	0.05	8,386	Infiltration > 4,000					
2019	Sub-Area 12	SSGM-06187	Wellington Rd	SSMH-3595	SSMH-3949	PVC	8	263.0	0.00	0.40	0	None Detected					
2019	Sub-Area 12	SSGM-00138	Wellwood Rd	SSMH-0134	SSMH-0135	PVC	8	250.0	0.00	0.38	0	None Detected					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 12	SSGM-04920	Wellwood Rd	SSMH-3619	SSMH-0136	PVC	8	202.0	0.00	0.31	0	None Detected					
2019	Sub-Area 12	SSGM-04921	Wellwood Rd	SSMH-3620	SSMH-3619	PVC	8	94.0	0.00	0.14	0	None Detected					
2019	Sub-Area 12	SSGM-04922	Wellwood Rd	SSMH-0135	SSMH-3620	PVC	8	249.0	0.00	0.38	0	None Detected					
2019	Sub-Area 12	SSGM-04923	Wellwood Rd	SSMH-3621	SSMH-0134	PVC	8	142.0	0.00	0.22	0	None Detected					
2018	Sub-Area 14	SSGM-07582	Barron Center	SSFT-0456	SSMH-5186	PVC	6	34.3	0.00	0.04	0	None Detected					
2018	Sub-Area 14	SSGM-02354	Birchvale Dr	SSMH-0692	SSMH-0693	AC	8	225.5	0.00	0.34	0	None Detected					
2018	Sub-Area 14	SSGM-02355	Birchvale Dr	SSMH-0693	SSMH-0694	AC	8	197.4	0.00	0.30	0	None Detected					
2018	Sub-Area 14	SSGM-02356	Birchvale Dr	SSMH-0694	SSMH-0695	AC	8	88.7	0.00	0.13	0	None Detected					
2018	Sub-Area 14	SSGM-02357	Birchvale Dr	SSMH-0695	SSMH-5187	AC	8	263.3	0.00	0.40	0	None Detected					
2018	Sub-Area 14	SSGM-02358	Birchvale Dr	SSMH-5187	SSMH-0691	AC	8	237.3	0.00	0.36	0	None Detected					
2018	Sub-Area 14	SSGM-02149	Cabot St	SSMH-2691	SSMH-2692	VCP	8	213.9	0.25	0.32	1,111	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02150	Cabot St	SSMH-2692	SSMH-2693	VCP	8	184.1	0.75	0.28	3,872	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02174	City Home Branch Sewer	SSMH-2665	SSMH-2666	VCP	15	106.9	0.00	0.30	0	None Detected					Root ball in SSMH-2666 70% capacity. (Additionally, the net line flow listed here includes the following line sections upstream of SSMH-2665: SSMH-2721, SSMH-0691 and SSMH-2664)
2018	Sub-Area 14	SSGM-02366	City Home Branch Sewer	SSMH-2721	SSMH-2665	VCP	15	88.8	-	0.25	N/A	N/A					Could not locate SSMH-2665 (See line section SSMH-2665 to SSMH-2666)
2018	Sub-Area 14	SSGM-02367	City Home Branch Sewer	SSMH-2668	SSMH-2721	VCP	15	279.9	0.00	0.80	0	None Detected					
2018	Sub-Area 14	SSGM-02383	City Home Branch Sewer	SSMH-2730	SSMH-1773	VCP	15	240.9	0.75	0.68	1,578	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-05958	City Home Branch Sewer	SSMH-2666	SSMH-5188	VCP	15	216.1	8.30	0.61	19,467	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-06644	City Home Branch Sewer	SSMH-0928	SSMH-4069	AC	16	284.8	0.00	0.86	0	None Detected					
2018	Sub-Area 14	SSGM-06645	City Home Branch Sewer	SSMH-4069	SSMH-4070	AC	16	296.8	0.00	0.90	0	None Detected					
2018	Sub-Area 14	SSGM-06646	City Home Branch Sewer	SSMH-4070	SSMH-2730	VCP	15	129.8	0.00	0.37	0	None Detected					
2018	Sub-Area 14	SSGM-06647	City Home Branch Sewer	SSMH-5360	SSMH-4071	AC	12	370.4	0.00	0.84	0	None Detected					
2018	Sub-Area 14	SSGM-06651	City Home Branch Sewer	SSMH-4071	SSMH-4073	AC	16	154.5	0.00	0.47	0	None Detected			1	SSMH-4073	Wall leak
2018	Sub-Area 14	SSGM-06652	City Home Branch Sewer	SSMH-4073	SSMH-0928	AC	16	147.3	0.00	0.45	0	None Detected					
2018	Sub-Area 14	SSGM-02318	Dale Ct	SSMH-0684	SSMH-2703	-	8	180.2	*	0.27	N/A	N/A					Could not locate SSMH-2703, high flow at downstream pipe
2018	Sub-Area 14	SSGM-02320	Dale Ct	SSMH-0685	SSMH-2703	-	6	274.7	*	0.31	N/A	N/A					Could not locate SSMH-0685, high flow at downstream pipe
2018	Sub-Area 14	SSGM-07099	Dale Ct	SSMH-1387	SSMH-0684	-	6	238.7	*	0.27	N/A	N/A					Could not locate SSMH-1387 or SSMH 0684, high flow at downstream pipe
2018	Sub-Area 14	SSGM-02159	Godfrey St	SSMH-0661	SSMH-2700	PVC	8	239.8	0.00	0.36	0	None Detected					
2018	Sub-Area 14	SSGM-02160	Godfrey St	SSMH-2700	SSMH-2701	PVC	10	321.9	0.25	0.61	591	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02161	Godfrey St	SSMH-2701	SSMH-2656	PVC	10	249.3	0.20	0.47	610	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02319	Gorges St	SSMH-2703	SSMH-2785	PVC	8	217.5	1.50	0.33	6,556	Infiltration > 4,000			0.5	SSMH-2785	Two Services - one from East, one from West contributing 0.25 GPM each
2018	Sub-Area 14	SSGM-02432	Gorges St	SSMH-2786	SSMH-2701	PVC	10	174.4	0.50	0.33	2,180	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02433	Gorges St	SSMH-2785	SSMH-2786	PVC	8	56.9	0.00	0.09	0	None Detected					
2018	Sub-Area 14	SSGM-02326	Holm Ave	SSMH-5181	SSMH-5180	VCP	10	75.7	0.00	0.14	0	None Detected					
2018	Sub-Area 14	SSGM-02327	Holm Ave	SSFT-0203	SSMH-5182	PVC	6	8.8	0.00	0.01	0	None Detected					
2018	Sub-Area 14	SSGM-02328	Holm Ave	SSFT-0200	SSMH-5182	PVC	6	25.7	0.00	0.03	0	None Detected					
2018	Sub-Area 14	SSGM-02329	Holm Ave	SSMH-5182	SSMH-5184	PVC	8	68.5	0.00	0.10	0	None Detected					
2018	Sub-Area 14	SSGM-02330	Holm Ave	SSMH-5184	SSMH-5183	PVC	8	36.2	0.00	0.05	0	None Detected					
2018	Sub-Area 14	SSGM-02331	Holm Ave	SSFT-0199	SSMH-5184	-	-	19.3	*	#VALUE!	N/A	N/A					
2018	Sub-Area 14	SSGM-02332	Holm Ave	SSMH-5183	SSMH-5185	PVC	8	50.3	0.00	0.08	0	None Detected					
2018	Sub-Area 14	SSGM-02335	Holm Ave	SSFT-0201	SSMH-2705	PVC	8	21.6	0.00	0.03	0	None Detected					
2018	Sub-Area 14	SSGM-02336	Holm Ave	SSFT-0202	SSMH-2705	PVC	8	21.7	0.00	0.03	0	None Detected					
2018	Sub-Area 14	SSGM-02337	Holm Ave	SSMH-2705	SSMH-2706	PVC	8	82.9	0.00	0.13	0	None Detected					
2018	Sub-Area 14	SSGM-02338	Holm Ave	SSMH-2706	SSMH-5184	PVC	8	131.1	0.00	0.20	0	None Detected					
2018	Sub-Area 14	SSGM-02340	Holm Ave	SSFT-0198	SSMH-2707	PVC	8	224.1	7.30	0.34	30,956	Infiltration > 4,000					Blockage in SSMH-2707
2018	Sub-Area 14	SSGM-02341	Holm Ave	SSMH-2709	SSMH-2708	VCP	8	9.1	0.00	0.01	0	None Detected					
2018	Sub-Area 14	SSGM-02370	Holm Ave	SSMH-2723	SSMH-1773	VCP	15	240.3	0.25	0.68	527	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02371	Holm Ave	SSMH-1775	SSMH-2723	VCP	15	259.6	0.75	0.74	1,464	Infiltration < 4,000			1.5	SSMH-2723	6" VCP Service from SE
2018	Sub-Area 14	SSGM-02375	Holm Ave	SSMH-5180	SSMH-2725	VCP	10	277.5	1.50	0.53	4,110	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-02376	Holm Ave	SSMH-2725	SSMH-2726	VCP	12	277.0	0.00	0.63	0	None Detected					
2018	Sub-Area 14	SSGM-02377	Holm Ave	SSMH-2726	SSMH-1770	VCP	15	39.1	0.00	0.11	0	None Detected					
2018	Sub-Area 14	SSGM-02378	Holm Ave	SSMH-1770	SSMH-2727	VCP	15	227.5	0.00	0.65	0	None Detected					
2018	Sub-Area 14	SSGM-02379	Holm Ave	SSMH-2727	SSMH-2728	VCP	15	275.5	0.00	0.78	0	None Detected					
2018	Sub-Area 14	SSGM-02380	Holm Ave	SSMH-2728	SSMH-2729	VCP	15	207.9	0.00	0.59	0	None Detected					
2018	Sub-Area 14	SSGM-02381	Holm Ave	SSMH-2729	SSMH-1771	VCP	18	198.9	0.00	0.68	0	None Detected					
2018	Sub-Area 14	SSGM-02382	Holm Ave	SSMH-1772	SSMH-2730	VCP	8	136.1	1.50	0.21	10,476	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-02384	Holm Ave	SSMH-2731	SSMH-2730	PVC	8	319.1	6.25	0.48	18,612	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-02385	Holm Ave	SSMH-0696	SSMH-2731	PVC	8	166.3	0.15	0.25	857	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02387	Holm Ave	SSMH-0697	SSMH-0696	PVC	8	304.5	0.00	0.46	0	None Detected					
2018	Sub-Area 14	SSGM-02388	Holm Ave	SSMH-0698	SSMH-0697	PVC	8	200.6	0.00	0.30	0	None Detected					
2018	Sub-Area 14	SSGM-03573	Holm Ave	SSMH-5546	SSMH-5181	VCP	10	419.6	0.00	0.79	0	None Detected					
2018	Sub-Area 14	SSGM-03985	Holm Ave	SSMH-1771	SSMH-5634	VCP	15	77.9	1.00	0.22	6,506	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-05955	Holm Ave	SSMH-3878	SSMH-1770	VCP	8	150.3	0.00	0.23	0	None Detected					
2018	Sub-Area 14	SSGM-06610	Holm Ave	SSMH-5634	SSMH-1331	VCP	18	35.0	0.50	0.12	6,032	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-06611	Holm Ave	SSMH-1331	SSMH-1772	VCP	18	50.8	0.50	0.17	4,157	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-02333	Hospital Dr	SSMH-5185	SSMH-2704	VCP	8	186.7	0.50	0.28	2,545	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02334	Hospital Dr	SSMH-2704	SSMH-5186	VCP	8	43.8	0.25	0.07	5,421	Infiltration > 4,000					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 14	SSGM-02339	Hospital Dr	SSMH-2707	SSMH-5186	RPM	8	135.5	0.50	0.21	3,506	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02342	Hospital Dr	SSMH-5186	SSMH-2709	ZZZ	8	196.9	0.00	0.30	0	None Detected					
2018	Sub-Area 14	SSGM-05956	Hospital Drive Cross Country	SSMH-2708	SSMH-3878	VCP	8	232.7	0.00	0.35	0	None Detected					
2018	Sub-Area 14	SSGM-02321	Josslyn St	SSMH-0686	SSMH-2700	PVC	8	245.8	0.00	0.37	0	None Detected					
2018	Sub-Area 14	SSGM-02322	Josslyn St	SSMH-0687	SSMH-2700	PVC	8	156.8	0.30	0.24	1,818	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02323	Josslyn St	SSMH-2651	SSMH-0688	VCP	8	309.9	0.00	0.47	0	None Detected					
2018	Sub-Area 14	SSGM-02324	Josslyn St	SSMH-0688	SSMH-0689	PVC	8	15.0	0.00	0.02	0	None Detected					
2018	Sub-Area 14	SSGM-02325	Josslyn St	SSMH-0689	SSMH-0687	PVC	8	191.3	0.10	0.29	497	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-03107	Maine Turnpike	SSMH-2992	SSMH-3013	AC	10	221.9	1.50	0.42	5,139	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-03178	Maine Turnpike	SSFT-0227	SSMH-0846	-	4	6.6	*	0.00	N/A	N/A			2.5	SSMH-0846	6" VCP Service from South
2018	Sub-Area 14	SSGM-03179	Maine Turnpike	SSMH-0846	SSMH-2992	VCP	6	97.4	*	0.11	N/A	N/A					
2018	Sub-Area 14	SSGM-03180	Maine Turnpike	SSFT-0228	SSMH-6553	VCP	8	16.2	2.00	0.02	117,416	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-03181	Maine Turnpike	SSFT-0229	SSMH-6553	-	-	17.2	*	#VALUE!	N/A	N/A					
2018	Sub-Area 14	SSGM-03182	Maine Turnpike	SSMH-6553	SSMH-2992	VCP	10	187.7	*	0.36	N/A	N/A					Could not locate SSMH-2992, high flow at downstream pipe
2018	Sub-Area 14	SSGM-03229	Maine Turnpike	SSMH-4332	SSMH-6553	PVC	8	59.2	0.00	0.09	0	None Detected					
2018	Sub-Area 14	SSGM-03112	Off Riverside Ct	SSMH-3013	SSMH-0835	AC	10	54.8	0.00	0.10	0	None Detected					
2018	Sub-Area 14	SSGM-02172	Pinecrest Rd	SSMH-2662	SSMH-2663	-	10	297.3	0.00	0.56	0	None Detected					
2018	Sub-Area 14	SSGM-02173	Pinecrest Rd	SSMH-2663	SSMH-2664	-	8	54.3	0.00	0.08	0	None Detected					
2018	Sub-Area 14	SSGM-02359	Pinecrest Rd	SSMH-0691	SSMH-2665	-	8	172.0	-	0.26	N/A	N/A					Could not locate SSMH-2665 (See line section SSMH-2665 to SSMH-2666)
2018	Sub-Area 14	SSGM-06316	Pinecrest Rd	SSMH-2664	SSMH-2665	VCP	8	198.4	*	0.30	N/A	N/A					Could not locate SSMH-2665
2018	Sub-Area 14	SSGM-02151	Popham St	SSMH-2693	SSMH-2694	PVC	8	27.7	0.00	0.04	0	None Detected					
2018	Sub-Area 14	SSGM-02271	Popham St	SSMH-2648	SSMH-2694	PVC	8	303.5	0.50	0.46	1,566	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02272	Popham St	SSMH-2694	SSMH-2649	PVC	10	147.9	0.10	0.28	514	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02274	Popham St	SSMH-2651	SSMH-2648	PVC	8	67.0	0.20	0.10	2,837	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02275	Popham St	SSMH-2652	SSMH-2651	VCP	8	254.6	0.00	0.39	0	None Detected					
2018	Sub-Area 14	SSGM-02162	Purchas St	SSMH-2650	SSMH-2657	PVC	10	298.2	0.25	0.56	637	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02163	Purchas St	SSMH-2657	SSMH-2656	PVC	10	298.9	1.00	0.57	2,543	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02164	Purchas St	SSMH-2656	SSMH-2658	PVC	10	204.0	0.30	0.39	1,118	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02165	Purchas St	SSMH-2658	SSMH-2659	PVC	10	228.2	0.50	0.43	1,666	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02166	Purchas St	SSMH-2659	SSMH-2660	PVC	10	128.8	0.00	0.24	0	None Detected					
2018	Sub-Area 14	SSGM-02167	Purchas St	SSMH-2660	SSMH-2662	PVC	10	215.0	0.00	0.41	0	None Detected					
2018	Sub-Area 14	SSGM-02168	Purchas St	SSMH-2661	SSMH-2662	PVC	8	38.2	0.00	0.06	0	None Detected					
2018	Sub-Area 14	SSGM-02169	Purchas St	SSFT-0195	SSMH-2661	PVC	6	156.0	*	0.18	N/A	N/A					
2018	Sub-Area 14	SSGM-02171	Purchas St	SSFT-0196	SSMH-2661	PVC	8	153.2	*	0.23	N/A	N/A					
2018	Sub-Area 14	SSGM-02273	Purchas St	SSMH-2649	SSMH-2650	PVC	10	107.1	0.10	0.20	710	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02992	Riverside Ct	SSMH-2958	SSMH-2959	PVC	8	27.6	0.00	0.04	0	None Detected					
2018	Sub-Area 14	SSGM-03079	Riverside Ct	SSMH-3012	SSMH-3011	AC	10	78.1	0.00	0.15	0	None Detected					
2018	Sub-Area 14	SSGM-03080	Riverside Ct	SSMH-3010	SSMH-3011	AC	10	197.9	1.00	0.37	3,842	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-03087	Riverside Ct	SSMH-3019	SSMH-3010	AC	10	231.7	1.00	0.44	3,281	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-03088	Riverside Ct	SSMH-2959	SSMH-3019	PVC	10	185.0	0.50	0.35	2,055	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-03111	Riverside Ct	SSMH-0835	SSMH-3012	DIP	10	126.3	0.00	0.24	0	None Detected					
2018	Sub-Area 14	SSGM-06649	Riverside Ct	SSMH-4072	SSMH-5360	AC	12	221.0	0.00	0.50	0	None Detected					
2018	Sub-Area 14	SSGM-06650	Riverside Ct	SSMH-3011	SSMH-4072	AC	12	110.3	0.00	0.25	0	None Detected					
2018	Sub-Area 14	SSGM-02991	Riverside St	SSMH-5362	SSMH-5361	PVC	8	248.7	0.00	0.38	0	None Detected			3	SSMH-5361	6" PVC Service from SW
2018	Sub-Area 14	SSGM-02993	Riverside St	SSMH-2962	SSMH-2960	PVC	8	94.7	0.00	0.14	0	None Detected					
2018	Sub-Area 14	SSGM-02994	Riverside St	SSMH-2961	SSMH-2962	PVC	8	191.2	0.00	0.29	0	None Detected					
2018	Sub-Area 14	SSGM-03086	Riverside St	SSMH-0844	SSMH-3019	AC	10	160.6	0.25	0.30	1,183	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-03089	Riverside St	SSMH-5361	SSMH-0844	PVC	8	216.9	0.00	0.33	0	None Detected					
2018	Sub-Area 14	SSGM-03114	Riverside St	SSFT-0225	SSMH-0836	VCP	6	30.7	3.00	0.03	123,906	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-03115	Riverside St	SSFT-0226	SSMH-0836	VCP	8	25.8	0.00	0.04	0	None Detected					
2018	Sub-Area 14	SSGM-03116	Riverside St	SSMH-0836	SSMH-3013	VCP	8	66.0	0.00	0.10	0	None Detected			10	SSMH-3013	8" VCP Service from West
2018	Sub-Area 14	SSGM-03215	Riverside St	SSFT-0231	SSMH-3035	PVC	6	73.8	0.00	0.08	0	None Detected					
2018	Sub-Area 14	SSGM-03216	Riverside St	SSNS-0033	SSFT-0413	PVC	6	17.1	*	0.02	N/A	N/A					
2018	Sub-Area 14	SSGM-03217	Riverside St	SWIN-0519	SSNS-0033	PVC	6	11.7	*	0.01	N/A	N/A					
2018	Sub-Area 14	SSGM-03218	Riverside St	SWIN-0520	SWIN-0521	-	-	43.8	*	#VALUE!	N/A	N/A					
2018	Sub-Area 14	SSGM-03219	Riverside St	SWIN-0521	SSNS-0034	-	-	57.8	*	#VALUE!	N/A	N/A					
2018	Sub-Area 14	SSGM-03220	Riverside St	SSMH-3036	SSMH-3037	PVC	8	297.6	0.00	0.45	0	None Detected					
2018	Sub-Area 14	SSGM-03221	Riverside St	SSMH-3035	SSMH-4329	PVC	6	283.0	0.00	0.32	0	None Detected					
2018	Sub-Area 14	SSGM-03222	Riverside St	SSMH-4329	SSMH-4330	PVC	6	21.8	0.00	0.02	0	None Detected					
2018	Sub-Area 14	SSGM-03223	Riverside St	SSMH-3037	SSMH-4331	PVC	8	128.9	0.00	0.20	0	None Detected					
2018	Sub-Area 14	SSGM-03224	Riverside St	SSNS-0034	SSMH-4331	PVC	8	40.5	0.00	0.06	0	None Detected					
2018	Sub-Area 14	SSGM-03225	Riverside St	SSFT-0230	SSMH-4331	PVC	6	23.0	0.00	0.03	0	None Detected					
2018	Sub-Area 14	SSGM-03226	Riverside St	SSMH-4331	SSMH-3038	PVC	8	206.3	0.00	0.31	0	None Detected					
2018	Sub-Area 14	SSGM-03227	Riverside St	SSMH-3038	SSMH-4330	PVC	8	86.6	0.00	0.13	0	None Detected					
2018	Sub-Area 14	SSGM-03228	Riverside St	SSMH-4330	SSMH-3039	PVC	8	111.0	0.00	0.17	0	None Detected					
2018	Sub-Area 14	SSGM-03230	Riverside St	SSMH-3039	SSMH-4332	PVC	8	368.6	2.00	0.56	5,157	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-06540	Riverside St	SSMH-6074	SSMH-0844	AC	8	215.4	2.00	0.33	8,826	Infiltration > 4,000			1	SSMH-0844	8" VCP Service from North

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Flow Isolation Results

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 14	SSGM-06541	Riverside St	SSMH-6075	SSMH-6074	AC	8	186.0	0.00	0.28	0	None Detected					
2018	Sub-Area 14	SSGM-06542	Riverside St	SSMH-4041	SSMH-2958	PVC	8	112.3	0.00	0.17	0	None Detected					
2018	Sub-Area 14	SSGM-06543	Riverside St	SSMH-2960	SSMH-4041	PVC	8	126.6	0.00	0.19	0	None Detected					
2018	Sub-Area 14	SSGM-02386	Robin St	SSMH-2732	SSMH-0696	PVC	8	39.9	0.00	0.06	0	None Detected					
2018	Sub-Area 14	SSGM-02353	Sunset Ln	SSMH-5189	SSMH-0693	VCP	8	294.6	0.00	0.45	0	None Detected					
2018	Sub-Area 14	SSGM-00226	Taft Ave	SSMH-1914	SSMH-1776	VCP	12	181.2	0.50	0.41	1,749	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-00473	Taft Ave	SSMH-1774	SSMH-1775	VCP	12	181.1	0.00	0.41	0	None Detected					
2018	Sub-Area 14	SSGM-02276	Taft Ave	SSMH-2652	SSMH-2653	VCP	8	336.4	0.10	0.51	283	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02277	Taft Ave	SSMH-2653	SSMH-2654	VCP	8	324.1	0.20	0.49	586	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02278	Taft Ave	SSMH-2654	SSMH-0661	PVC	8	12.9	0.10	0.02	7,348	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-02279	Taft Ave	SSMH-0662	SSMH-0661	PVC	8	279.0	0.25	0.42	852	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02351	Taft Ave	SSMH-5190	SSMH-2668	VCP	15	258.1	0.00	0.73	0	None Detected					
2018	Sub-Area 14	SSGM-02368	Taft Ave	SSMH-1777	SSMH-2722	VCP	8	155.1	0.10	0.24	613	Infiltration < 4,000			0.5	SSMH-2722	6" VCP Service from SE
2018	Sub-Area 14	SSGM-02369	Taft Ave	SSMH-2722	SSMH-1774	VCP	8	164.0	0.20	0.25	1,159	Infiltration < 4,000					
2018	Sub-Area 14	SSGM-02372	Taft Ave	SSMH-1773	SSMH-5190	VCP	15	258.5	0.00	0.73	0	None Detected					
2018	Sub-Area 14	SSGM-02373	Taft Ave	SSMH-2724	SSMH-1773	VCP	10	41.4	0.25	0.08	4,587	Infiltration > 4,000					
2018	Sub-Area 14	SSGM-02374	Taft Ave	SSMH-1776	SSMH-2724	VCP	12	258.8	0.50	0.59	1,224	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02311	Aspen Dr	SSMH-0671	SSMH-0668	AC	8	76.8	0.00	0.12	0	None Detected					
2018	Sub-Area 15	SSGM-02312	Aspen Dr	SSMH-0668	SSMH-0669	AC	8	189.6	0.00	0.29	0	None Detected					
2018	Sub-Area 15	SSGM-02313	Aspen Dr	SSMH-0669	SSMH-0670	AC	8	180.4	0.00	0.27	0	None Detected					
2018	Sub-Area 15	SSGM-00682	Birchwood Dr	SSMH-2789	SSMH-1915	VCP	8	235.9	2.00	0.36	8,056	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02435	Birchwood Dr	SSMH-2788	SSMH-5156	VCP	8	213.5	1.80	0.32	8,014	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02436	Birchwood Dr	SSMH-1915	SSMH-2788	VCP	8	243.1	4.00	0.37	15,639	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02437	Birchwood Dr	SSMH-0320	SSMH-1916	VCP	8	49.1	0.00	0.07	0	None Detected					
2018	Sub-Area 15	SSGM-02438	Birchwood Dr	SSMH-1916	SSMH-2787	VCP	8	221.7	0.50	0.34	2,143	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02439	Birchwood Dr	SSMH-2787	SSMH-2789	VCP	8	233.8	1.20	0.35	4,879	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02440	Birchwood Dr	SSMH-5156	SSMH-2790	VCP	8	65.7	4.00	0.10	57,875	Infiltration > 4,000					Light sewage
2018	Sub-Area 15	SSGM-02441	Birchwood Dr	SSMH-2790	SSMH-6208	VCP	8	124.9	0.00	0.19	0	None Detected					
2018	Sub-Area 15	SSGM-02343	Brookview Ter	SSMH-2711	SSMH-2710	VCP	8	124.7	0.00	0.19	0	None Detected					
2018	Sub-Area 15	SSGM-02344	Brookview Ter	SSMH-2710	SSMH-2712	VCP	8	81.3	0.00	0.12	0	None Detected					
2018	Sub-Area 15	SSGM-02345	Brookview Ter	SSMH-2712	SSMH-2713	VCP	8	190.9	2.60	0.29	12,947	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02346	Brookview Ter	SSMH-2713	SSMH-2714	VCP	8	187.0	0.70	0.28	3,557	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02347	Brookview Ter	SSMH-2714	SSMH-1912	VCP	8	137.1	0.00	0.21	0	None Detected					
2018	Sub-Area 15	SSGM-02429	Candlewyck Rd	SSMH-2757	SSMH-2756	AC	8	212.2	0.00	0.32	0	None Detected					
2018	Sub-Area 15	SSGM-02430	Candlewyck Rd	SSMH-2758	SSMH-2757	AC	8	242.9	0.00	0.37	0	None Detected					
2018	Sub-Area 15	SSGM-02431	Candlewyck Rd	SSMH-2759	SSMH-2758	AC	8	290.1	*	0.44	N/A	N/A					SSMH-2758 is paved over
2018	Sub-Area 15	SSGM-02428	Candlewyck Ter	SSMH-2754	SSMH-2755	AC	8	235.2	0.00	0.36	0	None Detected					
2018	Sub-Area 15	SSGM-02503	Candlewyck Ter	SSMH-5232	SSMH-2756	VCP	8	246.5	0.50	0.37	1,927	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02504	Candlewyck Ter	SSMH-5233	SSMH-2755	AC	8	110.0	0.50	0.17	4,320	Infiltration > 4,000	0.5	SSMH-2755			Hole in bench and wall seam - See Photo#0425
2018	Sub-Area 15	SSGM-02521	Candlewyck Ter	SSMH-2756	SSMH-2798	AC	8	249.9	0.00	0.38	0	None Detected					
2018	Sub-Area 15	SSGM-02522	Candlewyck Ter	SSMH-2798	SSMH-2754	AC	8	265.5	1.40	0.40	5,012	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02545	Candlewyck Ter	SSMH-2755	SSMH-2765	AC	8	168.4	1.10	0.26	6,207	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02350	Cedarhurst Ln	SSMH-0690	SSMH-1911	VCP	8	221.3	0.00	0.34	0	None Detected					
2018	Sub-Area 15	SSGM-02501	Dennett St	SSMH-5231	SSMH-5213	VCP	8	276.5	4.00	0.42	13,750	Infiltration > 4,000					Light sewage
2018	Sub-Area 15	SSGM-02502	Dennett St	SSMH-4583	SSMH-5231	VCP	8	261.9	3.00	0.40	10,885	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02397	Dorset St	SSMH-2736	SSMH-5197	VCP	10	241.5	0.25	0.46	787	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02399	Dorset St	SSMH-5198	SSMH-2738	VCP	10	276.3	2.00	0.52	5,503	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02400	Dorset St	SSMH-2738	SSMH-2740	VCP	12	273.1	0.00	0.62	0	None Detected					
2018	Sub-Area 15	SSGM-02401	Dorset St	SSMH-2740	SSMH-2741	VCP	12	275.5	4.45	0.63	10,233	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02402	Dorset St	SSMH-2741	SSMH-2739	VCP	10	43.8	0.00	0.08	0	None Detected					
2018	Sub-Area 15	SSGM-02446	Dorset St	SSMH-2739	SSMH-5210	VCP	15	128.9	2.00	0.37	7,866	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02544	Dorset St	SSMH-5210	SSMH-2763	VCP	15	55.2	0.00	0.16	0	None Detected					
2018	Sub-Area 15	SSGM-02394	Dorsett St	SSMH-5197	SSMH-5198	VCP	10	28.2	0.00	0.05	0	None Detected					
2018	Sub-Area 15	SSGM-02442	Four Winds Rd	SSMH-2761	SSMH-0708	VCP	8	186.3	*	0.28	N/A	N/A					Could not open SSMH-0708, high flow at downstream pipe
2018	Sub-Area 15	SSGM-02487	Fourwinds Dr	SSMH-5224	SSMH-5225	VCP	8	233.5	0.00	0.35	0	None Detected					
2018	Sub-Area 15	SSGM-02488	Fourwinds Rd	SSMH-5226	SSMH-2761	VCP	8	113.4	0.00	0.17	0	None Detected					
2018	Sub-Area 15	SSGM-02489	Fourwinds Rd	SSMH-5225	SSMH-5226	VCP	8	256.1	1.10	0.39	4,083	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02490	Fourwinds Rd	SSMH-0708	SSMH-5227	VCP	8	165.9	4.25	0.25	24,343	Infiltration > 4,000					Light sewage
2018	Sub-Area 15	SSGM-02491	Fourwinds Rd	SSMH-5227	SSMH-5228	VCP	8	131.4	0.00	0.20	0	None Detected					
2018	Sub-Area 15	SSGM-02492	Fourwinds Rd	SSMH-5228	SSMH-4583	VCP	8	202.5	0.00	0.31	0	None Detected					
2018	Sub-Area 15	SSGM-02288	Glen Haven East	SSMH-5158	SSMH-5152	VCP	8	120.8	0.00	0.18	0	None Detected					
2018	Sub-Area 15	SSGM-02289	Glen Haven East	SSMH-6216	SSMH-6217	VCP	15	34.6	0.00	0.10	0	None Detected					
2018	Sub-Area 15	SSGM-02290	Glen Haven East	SSMH-2655	SSMH-6216	VCP	15	269.3	0.00	0.77	0	None Detected					
2018	Sub-Area 15	SSGM-02303	Glen Haven East	SSMH-6217	SSMH-6218	VCP	15	124.1	0.00	0.35	0	None Detected	2	SSMH-6218			Hole in front of pipe - See Photos#0420, 0421
2018	Sub-Area 15	SSGM-02306	Glen Haven East	SSMH-0667	SSMH-2655	VCP	12	165.0	1.70	0.38	6,527	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02282	Glen Haven Rd	SSMH-0663	SSMH-0664	VCP	8	126.2	0.00	0.19	0	None Detected					Broken pipe from SSMH-0663 - See Photos#0414, 0415
2018	Sub-Area 15	SSGM-02284	Glen Haven Rd	SSMH-0665	SSMH-0664	VCP	8	256.6	0.00	0.39	0	None Detected					

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 15	SSGM-02286	Glen Haven Rd	SSMH-5153	SSMH-0663	VCP	8	175.2	0.75	0.27	4,070	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02285	Glen Haven West	SSMH-5154	SSMH-0665	VCP	8	149.5	0.00	0.23	0	None Detected					
2018	Sub-Area 15	SSGM-02304	Glen Haven West	SSMH-0666	SSMH-6218	VCP	15	99.7	0.00	0.28	0	None Detected					
2018	Sub-Area 15	SSGM-02156	Holm Ave	SSMH-2696	SSMH-2695	AC	8	57.1	0.00	0.09	0	None Detected					
2018	Sub-Area 15	SSGM-02389	Holm Ave	SSMH-0699	SSMH-0320	AC	8	149.5	0.00	0.23	0	None Detected					
2018	Sub-Area 15	SSGM-02493	Longwood Dr	SSMH-5229	SSMH-5228	VCP	8	33.7	0.00	0.05	0	None Detected					
2018	Sub-Area 15	SSGM-02494	Longwood Dr	SSMH-5230	SSMH-5229	VCP	8	221.9	1.10	0.34	4,710	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02495	Longwood Dr	SSMH-0720	SSMH-5230	VCP	8	244.2	0.00	0.37	0	None Detected					
2018	Sub-Area 15	SSGM-02496	Longwood Dr	SSMH-0721	SSMH-0720	VCP	8	265.6	0.00	0.40	0	None Detected					
2018	Sub-Area 15	SSGM-02497	Longwood Dr	SSMH-0722	SSMH-0723	VCP	8	246.4	1.10	0.37	4,243	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02498	Longwood Dr	SSMH-0724	SSMH-4583	VCP	8	92.0	0.00	0.14	0	None Detected					
2018	Sub-Area 15	SSGM-02499	Longwood Dr	SSMH-0723	SSMH-0724	VCP	8	179.8	1.00	0.27	5,285	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02500	Longwood Ter	SSMH-0725	SSMH-0723	VCP	8	274.4	0.00	0.42	0	None Detected					
2018	Sub-Area 15	SSGM-02469	Ludlow St	SSMH-0719	SSMH-5215	VCP	8	321.2	1.30	0.49	3,847	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02470	Ludlow St	SSMH-5215	SSMH-2759	VCP	8	55.1	0.00	0.08	0	None Detected					
2018	Sub-Area 15	SSGM-02471	Ludlow St	SSMH-5216	SSMH-2760	VCP	8	209.0	0.00	0.32	0	None Detected					
2018	Sub-Area 15	SSGM-02472	Ludlow St	SSMH-2760	SSMH-5217	VCP	8	300.4	0.00	0.46	0	None Detected					
2018	Sub-Area 15	SSGM-02483	Ludlow St	SSMH-5217	SSMH-2780	VCP	8	298.6	0.70	0.45	2,228	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02360	Orono Rd	SSMH-5161	SSMH-5191	VCP	8	240.0	3.20	0.36	12,674	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02152	Penwood Dr	SSMH-2699	SSMH-6209	VCP	8	159.0	0.00	0.24	0	None Detected					
2018	Sub-Area 15	SSGM-02153	Penwood Dr	SSMH-2698	SSMH-2699	VCP	8	56.1	0.00	0.08	0	None Detected					
2018	Sub-Area 15	SSGM-02154	Penwood Dr	SSMH-2697	SSMH-2698	VCP	8	213.3	4.30	0.32	19,157	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02155	Penwood Dr	SSMH-2695	SSMH-2697	VCP	8	167.2	2.10	0.25	11,937	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02158	Penwood Dr	SSMH-2646	SSMH-2699	VCP	8	218.7	0.50	0.33	2,173	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02280	Pinebrook Ln	SSMH-5155	SSMH-6207	VCP	8	117.5	0.00	0.18	0	None Detected					
2018	Sub-Area 15	SSGM-02283	Pinebrook Ln	SSMH-0664	SSMH-5155	VCP	8	168.7	1.00	0.26	5,634	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02309	Pinecrest Rd	SSMH-5159	SSMH-0671	AC	8	201.1	1.00	0.30	4,727	Infiltration > 4,000	0.25	SSMH-0671			Leak next to incoming line - See Photo#0417
2018	Sub-Area 15	SSGM-02310	Pinecrest Rd	SSMH-5160	SSMH-0671	AC	8	225.7	0.00	0.34	0	None Detected	0.5	SSMH-0671			Leak over incoming line - See Photo#0416
2018	Sub-Area 15	SSGM-02314	Pinecrest Rd	SSMH-5162	SSMH-5163	AC	8	64.2	0.00	0.10	0	None Detected					
2018	Sub-Area 15	SSGM-02315	Pinecrest Rd	SSMH-5164	SSMH-5165	AC	8	141.7	1.70	0.21	11,404	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02316	Pinecrest Rd	SSMH-5163	SSMH-5164	AC	8	121.6	0.00	0.18	0	None Detected					
2018	Sub-Area 15	SSGM-02317	Pinecrest Rd	SSMH-5165	SSMH-0670	AC	8	132.5	0.00	0.20	0	None Detected					
2018	Sub-Area 15	SSGM-02348	Pinecrest Rd	SSMH-2715	SSMH-2717	VCP	8	125.8	0.25	0.19	1,889	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02349	Pinecrest Rd	SSMH-2717	SSMH-2716	VCP	8	300.0	6.15	0.45	19,481	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02422	Pinecrest Rd	SSMH-2716	SSMH-1912	VCP	8	244.3	0.00	0.37	0	None Detected					
2018	Sub-Area 15	SSGM-02434	Pinecrest Rd	SSMH-0670	SSMH-2788	AC	8	254.9	0.90	0.39	3,356	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02395	Riggs St	SSMH-5199	SSMH-5197	PVC	8	252.1	0.00	0.38	0	None Detected					
2018	Sub-Area 15	SSGM-02484	Sonnet Ln	SSMH-2780	SSMH-2781	VCP	8	228.7	2.10	0.35	8,728	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02485	Sonnet Ln	SSMH-2781	SSMH-5223	VCP	8	171.5	0.00	0.26	0	None Detected					
2018	Sub-Area 15	SSGM-02486	Sonnet Ln	SSMH-5223	SSMH-2761	VCP	8	77.8	0.70	0.12	8,550	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-00237	Sunset Ln	SSMH-1913	SSMH-1910	VCP	8	245.6	1.00	0.37	3,870	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-00238	Sunset Ln	SSMH-1912	SSMH-1911	VCP	12	157.8	3.20	0.36	12,846	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02295	Sunset Ln	SSMH-1911	SSMH-2702	VCP	12	196.2	0.00	0.45	0	None Detected					
2018	Sub-Area 15	SSGM-02296	Sunset Ln	SSMH-1910	SSMH-2702	VCP	8	28.5	0.00	0.04	0	None Detected					
2018	Sub-Area 15	SSGM-02361	Warwick St	SSMH-5192	SSMH-5193	VCP	8	264.5	0.00	0.40	0	None Detected					
2018	Sub-Area 15	SSGM-02362	Warwick St	SSMH-5193	SSMH-5191	VCP	8	259.7	0.50	0.39	1,829	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02364	Warwick St	SSMH-5191	SSMH-2718	VCP	8	283.5	9.60	0.43	32,186	Infiltration > 4,000					
2018	Sub-Area 15	SSGM-02365	Warwick St	SSMH-2718	SSMH-2719	PVC	10	187.5	0.00	0.36	0	None Detected					Blockage in outgoing line - See Photo#0422
2018	Sub-Area 15	SSGM-02424	Warwick St	SSMH-6218	SSMH-1909	VCP	18	322.3	0.00	1.10	0	None Detected					
2018	Sub-Area 15	SSGM-02425	Warwick St	SSMH-1909	SSMH-2753	VCP	18	280.9	2.00	0.96	3,007	Infiltration < 4,000					Light sewage
2018	Sub-Area 15	SSGM-02427	Warwick St	SSMH-2753	SSMH-2720	PVC	10	104.3	0.00	0.20	0	None Detected					Blockage in outgoing line - See Photos#0423, 0424
2018	Sub-Area 15	SSGM-02541	Warwick St	SSMH-2719	SSMH-2768	PVC	10	99.8	0.00	0.19	0	None Detected					
2018	Sub-Area 15	SSGM-02157	Woodvale St	SSMH-2647	SSMH-2696	AC	8	133.7	0.00	0.20	0	None Detected					
2018	Sub-Area 15	SSGM-02287	Woodvale St	SSMH-5152	SSMH-5157	VCP	15	232.7	1.30	0.66	2,832	Infiltration < 4,000					
2018	Sub-Area 15	SSGM-02305	Woodvale St	SSMH-5157	SSMH-0666	VCP	15	251.7	0.00	0.72	0	None Detected					
2018	Sub-Area 15	SSGM-02308	Woodvale St	SSFT-0197	SSMH-5152	VCP	15	55.8	0.00	0.16	0	None Detected					
2018	Sub-Area 16	SSGM-02763	Alba St	SSMH-2844	SSMH-0749	VCP	8	274.2	3.60	0.42	12,479	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02764	Alba St	SSMH-4323	SSMH-0749	LINED	11.5	299.9	3.00	0.65	6,613	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02765	Alba St	SSMH-0245	SSMH-4324	LINED	7.5	325.8	1.70	0.46	5,290	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02766	Alba St	SSMH-4324	SSMH-4323	LINED	10	302.0	10.00	0.57	25,173	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-06632	Alba St	SSFT-0382	SSMH-2844	LINED	7.5	189.8	2.00	0.27	10,682	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02703	Bartlett St	SSMH-2864	SSMH-2865	AC	8	206.9	0.50	0.31	2,297	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02705	Bartlett St	SSMH-2866	SSMH-2865	AC	8	286.7	0.20	0.43	663	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02706	Bartlett St	SSMH-2865	SSMH-2867	VCP	8	89.9	0.00	0.14	0	None Detected					
2018	Sub-Area 16	SSGM-02707	Bartlett St	SSMH-2867	SSMH-2862	VCP	8	149.0	2.10	0.23	13,396	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02623	Bedell St	SSMH-2831	SSMH-2832	VCP	8	200.6	0.70	0.30	3,316	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02624	Bedell St	SSMH-2832	SSMH-2833	VCP	8	199.4	1.80	0.30	8,581	Infiltration > 4,000					

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Flow Isolation Results

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 16	SSGM-02625	Best St	STUB	SSMH-2834	VCP	8	244.8	0.00	0.37	0	None Detected					GIS listed original line section as SSMH-2835 to SSMH-2834, however there is no connection here. Only a stubbed line upstream of SSMH-2834.
2018	Sub-Area 16	SSGM-02674	Best St	SSMH-2834	SSMH-0749	VCP	15	244.4	73.00	0.69	151,395	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02689	Best St	SSMH-0749	SSMH-5274	VCP	15	241.3	1.00	0.69	2,101	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02696	Best St	SSMH-5274	SSMH-2320	VCP	20	239.1	1.10	0.91	1,749	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02619	Brentwood St	SSMH-2828	SSMH-2833	VCP	15	249.4	0.00	0.71	0	None Detected					
2018	Sub-Area 16	SSGM-02620	Brentwood St	STUB	SSMH-5251	VCP	8	117.9	0.00	0.18	0	None Detected					GIS listed original line section as SSMH-5251 to SSMH-2828, however there is no connection here. Only a stubbed line upstream of SSMH-5251.
2018	Sub-Area 16	SSGM-02671	Brentwood St	SSMH-0752	SSMH-4684	VCP	12	282.7	0.00	0.64	0	None Detected					
2018	Sub-Area 16	SSGM-02672	Brentwood St	SSMH-4684	SSMH-2834	VCP	12	282.5	3.25	0.64	7,288	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02676	Brentwood St	SSMH-2833	SSMH-2834	VCP	15	227.3	7.75	0.65	17,284	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02677	Brentwood St	SSMH-5249	SSMH-5250	VCP	8	241.4	7.80	0.37	30,712	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02678	Brentwood St	SSMH-5250	SSMH-5251	VCP	8	106.5	0.00	0.16	0	None Detected			2	SSMH-5251	Wall leak and from above incoming line - See Photos#0433, 0435, 0436
2018	Sub-Area 16	SSGM-06560	Brentwood St	SSMH-6080	SSMH-0752	VCP	8	334.8	0.00	0.51	0	None Detected					
2018	Sub-Area 16	SSGM-02723	Columbia Rd	SSMH-1755	SSMH-1754	VCP	8	217.4	0.00	0.33	0	None Detected					
2018	Sub-Area 16	SSGM-02685	Columbia St	SSMH-1754	SSMH-5273	VCP	10	284.7	3.00	0.54	8,011	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02683	Concord St West	SSMH-5256	SSMH-5270	VCP	8	256.2	2.10	0.39	7,791	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02629	Crosby St	SSMH-0744	SSMH-0753	VCP	8	297.4	3.00	0.45	9,586	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-06567	Crosby St	SSMH-0753	SSMH-1325	AC	10	29.3	0.00	0.06	0	None Detected					
2018	Sub-Area 16	SSGM-02512	Deering Center Branch	SSMH-5238	SSMH-5239	RCP	24	17.3	*	0.08	N/A	N/A					Could not locate SSMH-5239
2018	Sub-Area 16	SSGM-02704	Deering Center Branch	SSMH-2320	SSMH-2865	VCP	8	261.1	0.00	0.40	0	None Detected					Overflow pipe
2018	Sub-Area 16	SSGM-02708	Fuller St	SSMH-2869	SSMH-2779	VCP	18	226.4	0.00	0.77	0	None Detected					
2018	Sub-Area 16	SSGM-02709	Fuller St	SSMH-0756	SSMH-2869	VCP	18	239.8	0.00	0.82	0	None Detected					
2018	Sub-Area 16	SSGM-02712	Fuller St	SSMH-0755	SSMH-0756	VCP	24	240.2	4.90	1.09	6,461	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02702	Hale St	SSMH-2863	SSMH-2862	VCP	8	199.6	0.00	0.30	0	None Detected					
2018	Sub-Area 16	SSGM-03657	Hale St	SSMH-3216	SSMH-2862	AC	8	298.5	1.00	0.45	3,184	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02713	Hamblet Ave	SSMH-5251	SSMH-4596	VCP	15	245.7	8.30	0.70	17,124	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02714	Hamblet Ave	SSMH-4596	SSMH-4597	VCP	15	242.2	0.00	0.69	0	None Detected					
2018	Sub-Area 16	SSGM-02715	Hamblet Ave	SSMH-4597	SSMH-0759	RCP	18	236.9	3.00	0.81	5,348	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02716	Hamblet Ave	SSMH-0758	SSMH-0757	RCP	18	238.9	0.00	0.81	0	None Detected					
2018	Sub-Area 16	SSGM-02717	Hamblet Ave	SSMH-0757	SSMH-5219	RCP	18	187.7	0.00	0.64	0	None Detected					
2018	Sub-Area 16	SSGM-02718	Hamblet Ave	SSMH-0759	SSMH-0758	RCP	18	240.4	0.00	0.82	0	None Detected					
2018	Sub-Area 16	SSGM-02559	Jeanne St	SSMH-0736	SSMH-2807	VCP	8	95.9	0.00	0.15	0	None Detected					
2018	Sub-Area 16	SSGM-02561	Jeanne St	SSMH-2807	SSMH-2809	VCP	8	289.9	0.00	0.44	0	None Detected					
2018	Sub-Area 16	SSGM-02563	Jeanne St	SSMH-2809	SSMH-2808	PVC	12	268.9	0.25	0.61	589	Infiltration < 4,000			0.25	SSMH-2808	10" Service from SW - possible catch basin
2018	Sub-Area 16	SSGM-02615	Leland St	SSMH-0751	SSMH-5254	VCP	18	169.4	0.00	0.58	0	None Detected					
2018	Sub-Area 16	SSGM-02641	Leland St	SSMH-2827	SSMH-1739	VCP	18	282.9	0.00	0.96	0	None Detected					
2018	Sub-Area 16	SSGM-02669	Leland St	SSMH-0750	SSMH-2843	VCP	15	106.2	0.00	0.30	0	None Detected					
2018	Sub-Area 16	SSGM-02680	Leland St	SSMH-5254	SSMH-0750	VCP	18	245.2	2.00	0.84	3,445	Infiltration < 4,000					Light sewage
2018	Sub-Area 16	SSGM-02684	Leland St	SSMH-2843	SSMH-5270	VCP	15	131.8	0.00	0.37	0	None Detected					
2018	Sub-Area 16	SSGM-02725	Leland St	SSMH-1739	SSMH-5275	VCP	18	282.8	0.00	0.96	0	None Detected					
2018	Sub-Area 16	SSGM-06562	Leland St	SSMH-6081	SSMH-0751	AC	10	263.6	0.00	0.50	0	None Detected					
2018	Sub-Area 16	SSGM-06564	Leland St	SSMH-2837	SSMH-6082	AC	8	179.1	0.00	0.27	0	None Detected					
2018	Sub-Area 16	SSGM-06565	Leland St	SSMH-6082	SSMH-1325	AC	8	121.6	0.00	0.18	0	None Detected					
2018	Sub-Area 16	SSGM-06566	Leland St	SSMH-1325	SSMH-6081	AC	10	210.6	6.20	0.40	22,382	Infiltration > 4,000					Light sewage
2018	Sub-Area 16	SSGM-06630	Leland St	SSMH-6097	SSMH-2827	VCP	18	131.5	0.00	0.45	0	None Detected					
2018	Sub-Area 16	SSGM-06631	Leland St	SSMH-5270	SSMH-6097	VCP	18	110.9	0.00	0.38	0	None Detected					
2018	Sub-Area 16	SSGM-02675	Leonard St	SSMH-2836	SSMH-0754	VCP	8	324.8	0.00	0.49	0	None Detected					
2018	Sub-Area 16	SSGM-06563	Leonard St	SSMH-0754	SSMH-6082	VCP	8	300.3	1.70	0.46	5,380	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02474	Ludlow St	SSMH-5218	SSMH-5219	VCP	15	190.7	7.80	0.54	20,731	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02475	Ludlow St	SSMH-5219	SSMH-5220	RCP	21	226.0	0.00	0.90	0	None Detected					
2018	Sub-Area 16	SSGM-02476	Ludlow St	SSMH-5220	SSMH-5222	RCP	18	231.8	0.00	0.79	0	None Detected					
2018	Sub-Area 16	SSGM-02477	Ludlow St	SSMH-5222	SSMH-2776	RCP	18	48.8	0.00	0.17	0	None Detected					
2018	Sub-Area 16	SSGM-02478	Ludlow St	SSMH-5221	SSMH-2776	RCP	30	37.3	*	0.21	N/A	N/A					Could not locate SSMH-2776
2018	Sub-Area 16	SSGM-02480	Ludlow St	SSMH-2776	SSDP-0007	-	24	8.4	N/A	0.04	N/A	N/A					Could not locate SSMH-2776
2018	Sub-Area 16	SSGM-02481	Ludlow St	SSMH-2778	SSMH-5221	RCP	30	96.9	0.00	0.55	0	None Detected					
2018	Sub-Area 16	SSGM-02482	Ludlow St	SSMH-2779	SSMH-2778	VCP	30	244.8	0.00	1.39	0	None Detected					
2018	Sub-Area 16	SSGM-02519	Ludlow St	SSMH-2776	SSMH-2797	RCP	24	201.7	0.00	0.92	0	None Detected					
2018	Sub-Area 16	SSGM-02665	Ludlow St	SSMH-2851	SSMH-2779	VCP	24	220.6	0.00	1.00	0	None Detected					
2018	Sub-Area 16	SSGM-02666	Ludlow St	SSMH-2852	SSMH-2851	VCP	24	231.8	0.00	1.05	0	None Detected					
2018	Sub-Area 16	SSGM-02667	Ludlow St	SSMH-2853	SSMH-2854	VCP	24	99.2	0.00	0.45	0	None Detected					
2018	Sub-Area 16	SSGM-02668	Ludlow St	SSMH-2854	SSMH-2852	VCP	24	125.4	0.00	0.57	0	None Detected					
2018	Sub-Area 16	SSGM-02701	Ludlow St	SSMH-2862	SSMH-5221	VCP	8	232.8	0.00	0.35	0	None Detected					
2018	Sub-Area 16	SSGM-04982	Ludlow St	SSMH-5811	SSMH-5812	VCP	10	299.5	*	0.57	N/A	N/A					Could not open SSMH-5812, high flow at downstream pipe
2018	Sub-Area 16	SSGM-04983	Ludlow St	SSMH-5812	SSMH-5273	VCP	15	265.9	26.60	0.76	50,704	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-06627	Ludlow St	SSMH-6096	SSMH-2853	VCP	24	220.4	0.00	1.00	0	None Detected					
2018	Sub-Area 16	SSGM-06628	Ludlow St	SSMH-5275	SSMH-6096	VCP	18	32.4	0.00	0.11	0	None Detected					
2018	Sub-Area 16	SSGM-06629	Ludlow St	SSMH-5273	SSMH-6096	VCP	18	26.7	0.00	0.09	0	None Detected					
2018	Sub-Area 16	NEW PIPE (3)	Mabel St	SSMH-2320	SSMH-2868	VCP	8	47.0	0.00	0.07	0	None Detected					Existing connection not shown on map - See revised map.

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 16	SSGM-00935	Mabel St	SSMH-4683	SSMH-0246	VCP	8	191.2	0.50	0.29	2,485	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02688	Mabel St	SSMH-5271	SSMH-5272	VCP	8	309.5	0.50	0.47	1,536	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02767	Mabel St	SSMH-4325	SSMH-5274	VCP	12	300.9	3.20	0.68	6,739	Infiltration > 4,000					Light sewage
2018	Sub-Area 16	SSGM-02768	Mabel St	SSMH-4326	SSMH-4325	VCP	8	299.3	3.00	0.45	9,528	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02769	Mabel St	SSMH-0246	SSMH-4326	VCP	8	189.6	0.00	0.29	0	None Detected					
2018	Sub-Area 16	SSGM-06678	Mabel St	SSMH-5272	SSMH-5274	VCP	12	223.8	3.10	0.51	8,775	Infiltration > 4,000					Light sewage
2018	Sub-Area 16	SSGM-02694	Madeline St	SSMH-2858	SSMH-2320	VCP	8	250.8	0.00	0.38	0	None Detected					
2018	Sub-Area 16	SSGM-02695	Madeline St	SSMH-2857	SSMH-2858	VCP	8	251.8	0.00	0.38	0	None Detected					
2018	Sub-Area 16	SSGM-02710	Madeline St	SSFT-0209	SSMH-0755	VCP	8	81.0	0.00	0.12	0	None Detected					
2018	Sub-Area 16	SSGM-02711	Madeline St	SSMH-2868	SSMH-0755	VCP	24	230.8	0.00	1.05	0	None Detected					
2018	Sub-Area 16	SSGM-02627	New St	SSMH-2838	SSMH-2837	VCP	8	344.6	0.00	0.52	0	None Detected					
2018	Sub-Area 16	SSGM-02621	Newman St	SSMH-2829	SSMH-2828	VCP	8	175.9	0.70	0.27	3,783	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02622	Newman St	SSMH-2830	SSMH-2829	VCP	8	175.0	1.00	0.27	5,430	Infiltration > 4,000					
2018	Sub-Area 16	SSGM-02510	Phipps Rd	SSMH-0731	SSMH-2784	AC	8	82.9	0.00	0.13	0	None Detected					
2018	Sub-Area 16	SSGM-02518	Phipps Rd	SSMH-2796	SSMH-2784	RCP	24	15.3	0.00	0.07	0	None Detected					
2018	Sub-Area 16	SSGM-02520	Phipps Rd	SSMH-2797	SSMH-2796	RCP	24	21.3	0.00	0.10	0	None Detected					
2018	Sub-Area 16	SSGM-02565	Phipps Rd	SSMH-5247	SSMH-0731	AC	8	227.8	0.00	0.35	0	None Detected					
2018	Sub-Area 16	SSGM-02573	Phipps Rd	SSMH-2808	SSMH-2812	VCP	15	183.4	0.00	0.52	0	None Detected					
2018	Sub-Area 16	SSGM-02574	Phipps Rd	SSMH-2811	SSMH-2796	PVC	8	184.8	0.00	0.28	0	None Detected					
2018	Sub-Area 16	SSGM-02575	Phipps Rd	SSMH-2812	SSMH-2796	PVC	18	190.5	0.00	0.65	0	None Detected					
2018	Sub-Area 16	SSGM-02602	Richardson St	SSMH-2839	SSMH-6377	VCP	12	272.8	0.50	0.62	1,161	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02626	Richardson St	SSMH-2835	SSMH-2839	VCP	8	272.9	0.00	0.41	0	None Detected					
2018	Sub-Area 16	SSGM-06561	Richardson St	SSMH-6377	SSMH-6081	VCP	12	265.0	0.50	0.60	1,196	Infiltration < 4,000					
2018	Sub-Area 16	SSGM-02511	Wingate Dr	SSMH-2784	SSMH-5238	RCP	24	249.3	0.00	1.13	0	None Detected					
2018	Sub-Area 16	SSGM-02524	Wingate Dr	SSMH-2799	SSMH-5240	RCP	24	113.4	0.00	0.52	0	None Detected					
2018	Sub-Area 16	SSGM-02564	Wingate Dr	SSMH-0737	SSMH-5238	AC	8	326.4	0.00	0.49	0	None Detected					
2018	Sub-Area 16	SSGM-02567	Wingate Dr	SSMH-5240	SSMH-5248	RCP	24	50.4	0.00	0.23	0	None Detected					
2018	Sub-Area 16	SSGM-02523	Wingate Rd	SSMH-5239	SSMH-2799	RCP	24	76.5	0.00	0.35	0	None Detected					
2018	Sub-Area 18	SSGM-02917	Belfield Ave	SSMH-2935	SSMH-2936	PVC	8	200.9	0.25	0.30	1,183	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02918	Belfield Ave	SSMH-2936	SSMH-2937	PVC	8	165.9	0.50	0.25	2,864	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02919	Belfield Ave	SSMH-2937	SSMH-0235	PVC	8	262.5	2.50	0.40	9,051	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00493	Belknap St	SSMH-4601	SSMH-4600	VCP	8	206.1	0.25	0.31	1,153	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00494	Belknap St	SSMH-4600	SSMH-4598	VCP	8	302.1	5.00	0.46	15,732	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-05926	Belknap St	SSFT-0332	SSMH-4601	VCP	6	70.7	0.25	0.08	4,479	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-04550	Bradley St	SSMH-3496	SSMH-3495	VCP	8	98.2	0.00	0.15	0	None Detected					
2018	Sub-Area 18	SSGM-04551	Bradley St	SSMH-3495	SSMH-1767	VCP	8	267.2	4.00	0.40	14,228	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00450	Brighton Ave	SSMH-0125	SSMH-4618	VCP	10	190.3	0.00	0.36	0	None Detected			4	SSMH-4618	12" ACP Service from NNE
2018	Sub-Area 18	SSGM-00451	Brighton Ave	SSMH-4621	SSMH-4622	VCP	20	250.1	0.00	0.95	0	None Detected					Lamped line, looked good
2018	Sub-Area 18	SSGM-00452	Brighton Ave	SSMH-4622	SSMH-4623	VCP	20	102.6	0.00	0.39	0	None Detected					Lamped line, looked good
2018	Sub-Area 18	SSGM-00453	Brighton Ave	SSMH-4623	SSMH-4624	BR	36	147.4	1.50	1.01	2,149	Infiltration < 4,000					Lamped line, looked good
2018	Sub-Area 18	SSGM-02752	Brighton Ave	SSMH-2881	SSMH-2849	BR	36	238.7	0.00	1.63	0	None Detected					
2018	Sub-Area 18	SSGM-02753	Brighton Ave	SSMH-0761	SSMH-2881	VCP	24	28.8	0.00	0.13	0	None Detected					
2018	Sub-Area 18	SSGM-02822	Brighton Ave	SSMH-5306	SSMH-4621	VCP	20	110.0	0.00	0.42	0	None Detected					
2018	Sub-Area 18	SSGM-02824	Brighton Ave	SSMH-4620	SSMH-5307	VCP	20	250.4	1.50	0.95	2,278	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02825	Brighton Ave	SSMH-5307	SSMH-5306	VCP	20	139.8	0.50	0.53	1,360	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02915	Brighton Ave	SSMH-5308	SSMH-4620	VCP	18	249.8	4.00	0.85	6,765	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02916	Brighton Ave	SSMH-0235	SSMH-5308	PVC	8	52.9	0.50	0.08	8,988	Infiltration > 4,000			0.75	SSMH-5308	8" PVC Service from East
2018	Sub-Area 18	SSGM-03858	Brighton Ave	SSMH-4624	SSMH-2881	BR	36	295.4	2.00	2.01	1,430	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-04546	Brighton Ave	SSMH-4618	SSMH-3492	VCP	10	192.5	0.00	0.36	0	None Detected					
2018	Sub-Area 18	SSGM-04547	Brighton Ave	SSMH-3492	SSMH-1767	VCP	12	219.6	0.00	0.50	0	None Detected					
2018	Sub-Area 18	SSGM-04554	Brighton Ave	SSMH-1767	SSMH-3497	VCP	12	250.4	0.00	0.57	0	None Detected					
2018	Sub-Area 18	SSGM-04555	Brighton Ave	SSMH-3497	SSMH-1073	VCP	12	283.9	0.00	0.65	0	None Detected					
2018	Sub-Area 18	SSGM-04556	Brighton Ave	SSMH-1073	SSMH-1074	VCP	12	250.8	0.00	0.57	0	None Detected					
2018	Sub-Area 18	SSGM-04557	Brighton Ave	SSMH-1074	SSMH-5308	VCP	12	142.5	3.00	0.32	13,340	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00481	Caldwell St	SSMH-0254	SSMH-0253	VCP	15	282.3	3.10	0.80	5,565	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02691	Caldwell St	SSMH-2856	SSMH-0254	VCP	15	287.2	0.75	0.82	1,323	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00474	Columbia Rd	SSMH-1757	SSMH-4265	VCP	8	28.9	0.00	0.04	0	None Detected					
2018	Sub-Area 18	SSGM-00475	Columbia Rd	SSMH-1756	SSMH-1757	VCP	8	266.3	0.50	0.40	1,784	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00922	Columbia Rd	SSMH-4265	SSMH-4264	VCP	8	291.7	3.75	0.44	12,219	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02720	Columbia Rd	SSMH-4264	SSMH-0761	VCP	8	222.3	1.35	0.34	5,771	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02722	Columbia Ter	SSMH-4328	SSMH-1757	PVC	8	215.5	0.25	0.33	1,102	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02771	Columbia Ter	SSFT-0045	SSMH-4328	PVC	8	2.0	*	0.00	N/A	N/A					
2018	Sub-Area 18	SSGM-02920	Fellows St	SSMH-0800	SSMH-2889	VCP	8	69.2	0.00	0.10	0	None Detected					
2018	Sub-Area 18	SSGM-02770	Gay St	SSMH-4327	SSFT-0412	VCP	6	229.8	*	0.26	N/A	N/A					
2018	Sub-Area 18	SSGM-04382	Higgins St	SSMH-5701	SSMH-4611	VCP	8	200.4	10.00	0.30	47,414	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-04383	Higgins St	SSMH-5702	SSMH-5701	VCP	8	199.5	0.50	0.30	2,382	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-04453	Hillis St	SSMH-5715	SSMH-0244	VCP	8	249.5	0.50	0.38	1,904	Infiltration < 4,000					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 18	SSGM-04454	Hillis St	SSMH-5716	SSMH-5717	VCP	8	274.0	1.50	0.42	5,203	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-04455	Hillis St	SSMH-5717	SSMH-5715	VCP	8	248.0	0.00	0.38	0	None Detected					
2018	Sub-Area 18	SSGM-04548	Hollis Rd	SSMH-3493	SSMH-3492	VCP	8	283.6	0.30	0.43	1,006	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-04549	Hollis Rd	SSMH-3494	SSMH-3493	VCP	8	165.0	0.00	0.25	0	None Detected					
2018	Sub-Area 18	SSGM-02823	Kenilworth St	SSMH-2930	SSMH-5307	VCP	10	289.7	1.75	0.55	4,593	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02910	Kenilworth St	SSMH-2929	SSMH-2930	VCP	8	293.9	0.75	0.45	2,425	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00488	Ludlow St	SSFT-0147	SSFT-0146	VCP	6	38.0	*	0.04	N/A	N/A					
2018	Sub-Area 18	SSGM-02690	Ludlow St	SSMH-2855	SSMH-2856	VCP	12	343.5	0.00	0.78	0	None Detected			11.9	SSMH-2856	12" PVC Service from NNE
2018	Sub-Area 18	SSGM-02698	Ludlow St	SSMH-2859	SSMH-2860	VCP	8	150.6	0.50	0.23	3,155	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02699	Ludlow St	SSMH-2860	SSMH-5290	VCP	10	247.0	1.50	0.47	4,617	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02700	Ludlow St	SSMH-2861	SSMH-2859	VCP	8	99.9	0.00	0.15	0	None Detected					
2018	Sub-Area 18	SSGM-04984	Ludlow St	SSFT-0294	SSMH-2855	VCP	6	92.2	0.00	0.10	0	None Detected					
2018	Sub-Area 18	SSGM-07504	Ludlow St	SSFT-0208	SSMH-2855	VCP	8	64.9	0.00	0.10	0	None Detected					
2018	Sub-Area 18	SSGM-02755	Marlow St	SSMH-5290	SSMH-5292	PVC	12	177.3	2.00	0.40	7,148	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02756	Marlow St	SSMH-5292	SSMH-5291	PVC	12	137.2	0.75	0.31	3,463	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02830	Montrose Ave	SSMH-2841	SSMH-5309	PVC	18	320.1	3.50	1.09	4,619	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02831	Montrose Ave	SSMH-5309	SSMH-5311	PVC	18	166.9	0.00	0.57	0	None Detected					
2018	Sub-Area 18	SSGM-02832	Montrose Ave	SSMH-5311	SSMH-5310	PVC	18	251.1	0.00	0.86	0	None Detected					
2018	Sub-Area 18	SSGM-02833	Montrose Ave	SSMH-5310	SSMH-2888	PVC	18	237.5	0.00	0.81	0	None Detected					
2018	Sub-Area 18	SSGM-02834	Montrose Ave	SSMH-2888	SSMH-2889	PVC	18	54.5	0.00	0.19	0	None Detected					
2018	Sub-Area 18	SSGM-02835	Montrose Ave	SSMH-2889	SSMH-2890	PVC	18	262.3	0.00	0.89	0	None Detected					
2018	Sub-Area 18	SSGM-02836	Montrose Ave	SSMH-2890	SSMH-4623	PVC	18	271.3	0.00	0.92	0	None Detected					
2018	Sub-Area 18	SSGM-02911	Motley St	SSMH-2932	SSMH-2931	VCP	8	180.7	1.50	0.27	7,888	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02912	Motley St	SSMH-2931	SSMH-4620	VCP	8	250.4	0.00	0.38	0	None Detected					
2018	Sub-Area 18	SSGM-00445	Prospect St	SSMH-4582	SSMH-4581	PVC	8	255.0	0.25	0.39	932	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-04373	Prospect St	SSMH-1048	SSMH-4582	PVC	8	259.3	3.00	0.39	10,995	Infiltration > 4,000	1.5	SSMH-4582			Pipe connection leak
2018	Sub-Area 18	SSGM-04392	Prospect St	SSMH-3446	SSMH-1048	VCP	8	256.3	0.25	0.39	927	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02930	Rackleff St	SSMH-2923	SSMH-4599	VCP	8	253.9	3.00	0.38	11,229	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02931	Rackleff St	SSMH-4321	SSMH-2923	VCP	8	246.5	1.00	0.37	3,855	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02932	Rackleff St	SSMH-4322	SSMH-4321	VCP	8	151.4	1.00	0.23	6,276	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00476	Rosemont Av	SSMH-1760	SSMH-1759	VCP	8	204.8	0.30	0.31	1,392	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00477	Rosemont Av	SSMH-1759	SSMH-1758	VCP	8	212.4	1.20	0.32	5,369	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00480	Rosemont Av	SSMH-0243	SSMH-0242	VCP	8	284.5	0.25	0.43	835	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-04457	Rosemont Av	SSMH-1758	SSMH-0243	VCP	8	328.5	0.90	0.50	2,604	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02921	Runnells St	SSMH-0801	SSMH-0800	VCP	8	317.6	0.25	0.48	748	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-06614	Runnels St	SSMH-1334	SSMH-0801	VCP	8	255.9	1.50	0.39	5,571	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00443	Stevens Ave	SSMH-6539	SSMH-6538	VCP	8	180.0	1.00	0.27	5,280	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00444	Stevens Ave	SSMH-6538	SSMH-4581	VCP	8	164.4	0.75	0.25	4,336	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00485	Stevens Ave	SSMH-4611	SSMH-0259	VCP	8	310.3	0.75	0.47	2,297	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00487	Stevens Ave	SSMH-4612	SSMH-4611	VCP	8	249.1	0.00	0.38	0	None Detected					
2018	Sub-Area 18	SSGM-00489	Stevens Ave	SSMH-4598	SSMH-4599	VCP	20	252.1	2.00	0.95	3,016	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02649	Stevens Ave	SSMH-5266	SSMH-4612	VCP	8	250.0	0.00	0.38	0	None Detected					
2018	Sub-Area 18	SSGM-02650	Stevens Ave	SSMH-5265	SSMH-5266	VCP	8	250.4	0.00	0.38	0	None Detected					
2018	Sub-Area 18	SSGM-02651	Stevens Ave	SSMH-4599	SSMH-2841	VCP	20	73.9	0.25	0.28	1,287	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02652	Stevens Ave	SSMH-2842	SSMH-4598	VCP	18	82.4	0.50	0.28	2,564	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-02653	Stevens Ave	SSMH-4581	SSMH-2842	VCP	18	103.5	1.00	0.35	4,082	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02928	Stevens Ave	SSMH-2921	SSMH-2841	VCP	8	31.8	0.50	0.05	14,966	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-02929	Stevens Ave	SSMH-2922	SSMH-2921	VCP	8	160.3	1.25	0.24	7,409	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00482	Woodford St	SSMH-0253	SSMH-0244	VCP	20	316.4	0.00	1.20	0	None Detected					Lamped line, looked good
2018	Sub-Area 18	SSGM-00483	Woodford St	SSMH-0255	SSMH-0256	VCP	15	64.4	0.00	0.18	0	None Detected					
2018	Sub-Area 18	SSGM-00484	Woodford St	SSMH-0256	SSMH-0253	VCP	18	312.9	1.50	1.07	2,025	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00490	Woodford St	SSMH-0259	SSMH-0258	VCP	12	171.4	1.25	0.39	4,620	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-00491	Woodford St	SSMH-0258	SSMH-0257	VCP	12	225.2	0.75	0.51	2,110	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00492	Woodford St	SSMH-0257	SSMH-0255	VCP	15	248.9	1.50	0.71	3,055	Infiltration < 4,000					
2018	Sub-Area 18	SSGM-00886	Woodford St	SSMH-0244	SSMH-0242	VCP	24	314.5	0.00	1.43	0	None Detected					Lamped line, looked good
2018	Sub-Area 18	SSGM-02721	Woodford St	SSMH-0242	SSMH-0761	VCP	24	328.6	0.00	1.49	0	None Detected					Lamped line, looked good
2018	Sub-Area 18	SSGM-02754	Woodford St	SSMH-5291	SSMH-0256	PVC	12	37.0	0.50	0.08	8,563	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-04436	Woodford St	SSMH-3469	SSMH-0259	VCP	8	135.1	4.00	0.20	28,144	Infiltration > 4,000					
2018	Sub-Area 18	SSGM-04437	Woodford St	SSMH-3468	SSMH-3469	VCP	8	259.4	6.00	0.39	21,980	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-02858	Albion St	SSMH-2934	SSMH-0784	PVC	8	309.8	1.00	0.47	3,068	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-02859	Albion St	SSMH-0785	SSMH-2934	PVC	8	98.5	0.00	0.15	0	None Detected					
2018	Sub-Area 21	SSGM-02801	Bancroft St	SSMH-2885	SSMH-2884	VCP	10	219.9	2.00	0.42	6,916	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-02820	Bancroft St	SSMH-2884	SSMH-5305	VCP	10	252.6	6.00	0.48	18,058	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-02821	Bancroft St	SSMH-5305	SSMH-2882	VCP	18	180.8	*	0.62	N/A	N/A					Could not locate SSMH-2882, high flow at downstream pipe
2018	Sub-Area 21	SSGM-06607	Bancroft St	SSMH-4060	SSMH-4059	VCP	10	248.9	2.00	0.47	6,109	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-06616	Bancroft St	SSMH-4059	SSMH-1335	VCP	12	126.2	3.00	0.29	15,060	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-06617	Bancroft St	SSMH-1335	SSMH-5305	VCP	12	271.7	3.00	0.62	6,997	Infiltration > 4,000			0.5	SSMH-5305	Wall leak and wet walls - See Photo#7165

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 21	SSGM-06659	Capisic Pond Park	SSMH-4316	SSMH-1338	PVC	36	59.1	0.00	0.40	0	None Detected					
2018	Sub-Area 21	SSGM-06889	Capisic Pond Park	SSMH-1340	SSMH-1338	DIP	30	43.0	0.00	0.24	0	None Detected					
2018	Sub-Area 21	SSGM-02860	Capisic St	SSMH-0786	SSMH-0784	VCP	18	179.1	0.00	0.61	0	None Detected					
2018	Sub-Area 21	SSGM-02861	Capisic St	SSMH-0787	SSMH-0786	VCP	18	173.8	0.00	0.59	0	None Detected					
2018	Sub-Area 21	SSGM-02862	Capisic St	SSMH-5312	SSMH-0787	VCP	18	300.1	0.00	1.02	0	None Detected					
2018	Sub-Area 21	SSGM-02863	Capisic St	SSMH-0784	SSMH-5313	PVC	8	137.4	0.00	0.21	0	None Detected					
2018	Sub-Area 21	SSGM-02864	Capisic St	SSMH-5313	SSMH-5314	RCP	18	247.7	2.00	0.84	3,410	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-02865	Capisic St	SSMH-5314	SSMH-5315	RCP	21	278.3	*	1.11	N/A	N/A					Could not open SSMH-5315, high flow at downstream pipe
2018	Sub-Area 21	SSGM-02866	Capisic St	SSMH-5315	SSMH-5316	RCP	21	229.8	8.20	0.91	12,922	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-02868	Capisic St	SSMH-2891	SSMH-5287	RCP	24	114.8	0.00	0.52	0	None Detected					
2018	Sub-Area 21	SSGM-02869	Capisic St	SSMH-5317	SSMH-2891	RCP	24	151.4	0.00	0.69	0	None Detected					
2018	Sub-Area 21	SSGM-02870	Capisic St	SSMH-5316	SSMH-5318	VCP	18	186.3	1.80	0.64	4,081	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-02871	Capisic St	SSMH-5318	SSMH-5317	VCP	18	187.7	0.00	0.64	0	None Detected					
2018	Sub-Area 21	SSGM-02899	Capisic St	SSMH-5331	SSMH-5330	VCP	18	108.5	0.00	0.37	0	None Detected					
2018	Sub-Area 21	SSGM-02914	Capisic St	SSMH-5287	SSMH-5286	RCP	24	113.4	2.00	0.52	5,588	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-06450	Capisic St	SSMH-4017	SSMH-4016	VCP	18	273.3	*	0.93	N/A	N/A					
2018	Sub-Area 21	SSGM-06451	Capisic St	SSMH-4018	SSMH-4017	VCP	15	191.0	1.60	0.54	4,246	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-06452	Capisic St	SSMH-4262	SSMH-4018	VCP	12	77.7	1.50	0.18	12,230	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-06453	Capisic St	SSMH-4019	SSMH-4262	VCP	12	128.4	*	0.29	N/A	N/A					Could not locate SSMH-4262, high flow at downstream pipe.
2018	Sub-Area 21	SSGM-06454	Capisic St	SSMH-4020	SSMH-4019	VCP	12	170.7	*	0.39	N/A	N/A					Could not locate SSMH-4020 or SSMH-4019, high flow at downstream pipe.
2018	Sub-Area 21	SSGM-06457	Capisic St	SSMH-4021	SSMH-5331	VCP	18	229.9	0.20	0.78	368	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-06458	Capisic St	SSMH-4016	SSMH-4021	VCP	18	98.8	3.50	0.34	14,956	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-06608	Capisic St	SSMH-4061	SSMH-5286	VCP	12	276.3	0.70	0.63	1,606	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-06609	Capisic St	SSMH-4062	SSMH-4061	VCP	12	272.3	0.00	0.62	0	None Detected					
2018	Sub-Area 21	SSGM-06892	Capisic St	SSMH-4139	SSMH-5330	VCP	12	37.8	0.00	0.09	0	None Detected					
2018	Sub-Area 21	SSGM-06893	Capisic St	SSMH-5332	SSMH-4139	VCP	12	83.7	0.00	0.19	0	None Detected					
2018	Sub-Area 21	SSGM-02814	Colonial Ct	SSMH-2886	SSMH-2883	VCP	24	265.5	0.00	1.21	0	None Detected					
2018	Sub-Area 21	SSGM-02904	Colonial Ct	SSMH-5334	SSMH-2886	VCP	20	232.1	0.00	0.88	0	None Detected					
2018	Sub-Area 21	SSGM-02804	Colonial Rd	SSMH-2876	SSMH-5289	VCP	8	181.7	0.00	0.28	0	None Detected					
2018	Sub-Area 21	SSGM-02805	Colonial Rd	SSMH-5289	SSMH-5288	VCP	8	175.9	0.00	0.27	0	None Detected					
2018	Sub-Area 21	SSGM-02807	Colonial Rd	SSMH-2883	SSMH-4317	VCP	24	108.3	0.00	0.49	0	None Detected					
2018	Sub-Area 21	SSGM-02811	Colonial Rd	SSMH-0775	SSMH-2877	VCP	8	145.7	0.40	0.22	2,609	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-02813	Colonial Rd	SSMH-2877	SSMH-2883	VCP	8	157.4	0.20	0.24	1,207	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-02902	Colonial Rd	SSMH-5288	SSMH-5332	VCP	8	116.6	0.00	0.18	0	None Detected					
2018	Sub-Area 21	SSGM-02903	Colonial Rd	SSFT-0213	SSMH-2876	VCP	8	12.6	10.40	0.02	782,495	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-06661	Cross Country	SSMH-4320	SSMH-1340	RCP	24	331.9	2.20	1.51	2,100	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-02806	Hastings St	SSMH-4317	SSMH-2887	VCP	24	214.3	0.00	0.97	0	None Detected					
2018	Sub-Area 21	SSGM-02808	Hastings St	SSMH-2887	SSMH-4318	VCP	24	163.3	0.00	0.74	0	None Detected					
2018	Sub-Area 21	SSGM-02802	Machigonne St	SSMH-4315	SSMH-4314	VCP	30	88.0	0.00	0.50	0	None Detected					
2018	Sub-Area 21	SSGM-02803	Machigonne St	SSMH-4314	SSMH-4316	VCP	30	217.9	0.00	1.24	0	None Detected					
2018	Sub-Area 21	SSGM-02809	Macy St	SSMH-4318	SSMH-4315	VCP	30	144.8	0.00	0.82	0	None Detected					
2018	Sub-Area 21	SSGM-05729	Meadowbrook Ln	SSMH-1227	SSMH-3832	VCP	8	190.2	1.00	0.29	4,998	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-05730	Meadowbrook Ln	SSMH-1228	SSMH-1227	VCP	8	199.8	0.00	0.30	0	None Detected					
2018	Sub-Area 21	SSGM-02819	Pomeroy St	SSFT-0211	SSMH-5305	VCP	30	32.6	0.00	0.19	0	None Detected			2	SSMH-5305	8" VCP Service from SE
2018	Sub-Area 21	SSGM-02837	Presnell St	SSMH-5283	SSMH-2891	VCP	10	197.1	0.00	0.37	0	None Detected					
2018	Sub-Area 21	SSGM-02838	Presnell St	SSMH-5284	SSMH-5283	VCP	8	115.9	0.00	0.18	0	None Detected					
2018	Sub-Area 21	SSGM-06456	Riverview St	SSMH-2907	SSMH-4021	PVC	8	192.1	0.00	0.29	0	None Detected					
2018	Sub-Area 21	SSGM-02810	Sandy Ter	SSMH-4319	SSMH-4320	RCP	24	270.9	*	1.23	N/A	N/A					Could not locate SSMH-4320, high flow at downstream pipe.
2018	Sub-Area 21	SSGM-02872	Sandy Ter	SSMH-5286	SSMH-2903	RCP	24	178.4	0.00	0.81	0	None Detected					
2018	Sub-Area 21	SSGM-02873	Sandy Ter	SSMH-2903	SSMH-4319	RCP	24	189.0	0.00	0.86	0	None Detected					
2018	Sub-Area 21	SSGM-02874	Sandy Ter	SSMH-2904	SSMH-4319	VCP	8	206.0	0.70	0.31	3,229	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-05723	Winding Way	SSMH-3829	SSMH-1762	VCP	8	233.9	0.00	0.35	0	None Detected					
2018	Sub-Area 21	SSGM-05724	Winding Way	SSMH-3831	SSMH-3830	VCP	8	281.7	0.00	0.43	0	None Detected					
2018	Sub-Area 21	SSGM-05731	Winding Way	SSMH-1762	SSMH-1228	VCP	8	190.9	0.00	0.29	0	None Detected					
2018	Sub-Area 21	SSGM-05732	Winding Way	SSMH-3830	SSMH-1228	VCP	8	228.3	0.00	0.35	0	None Detected					
2018	Sub-Area 21	SSGM-02795	Wolcott St	SSMH-2882	SSMH-5304	VCP	18	71.8	2.00	0.24	11,772	Infiltration > 4,000					
2018	Sub-Area 21	SSGM-02797	Wolcott St	SSMH-5303	SSMH-5304	VCP	8	222.8	0.50	0.34	2,133	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-02905	Wolcott St	SSMH-5334	SSMH-5304	VCP	20	22.4	0.00	0.08	0	None Detected					
2018	Sub-Area 21	SSGM-06455	Wolcott St	SSMH-5333	SSMH-4016	VCP	12	45.9	*	0.10	N/A	N/A					Could not locate SSMH-4016, high flow at downstream pipe.
2018	Sub-Area 21	SSGM-06618	Wolcott St	SSMH-1336	SSMH-5333	VCP	8	230.3	*	0.35	N/A	N/A					Could not locate SSMH-5333, high flow at downstream pipe.
2018	Sub-Area 21	SSGM-06619	Wolcott St	SSMH-6090	SSMH-1336	VCP	8	215.7	0.50	0.33	2,203	Infiltration < 4,000					
2018	Sub-Area 21	SSGM-06620	Wolcott St	SSMH-6091	SSMH-5334	VCP	8	300.4	0.25	0.46	791	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00431	Anson Rd	SSMH-1753	SSMH-4613	VCP	8	214.6	0.50	0.33	2,214	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00432	Anson Rd	SSMH-4613	SSMH-4614	VCP	10	200.9	0.25	0.38	946	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04574	Anson Rd	SSMH-3503	SSMH-3502	VCP	21	172.7	0.00	0.69	0	None Detected					
2018	Sub-Area 22	SSGM-04575	Anson Rd	SSMH-4614	SSMH-3503	VCP	21	27.0	0.00	0.11	0	None Detected					
2018	Sub-Area 22	SSGM-04577	Anson Rd	SSFT-0270	SSMH-4614	VCP	8	56.8	0.00	0.09	0	None Detected					

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 22	SSGM-04694	Anson Rd	SSMH-3539	SSMH-4614	VCP	21	25.8	0.00	0.10	0	None Detected					
2018	Sub-Area 22	SSGM-00290	Bradley St	SSMH-4424	SSMH-0111	VCP	10	225.7	1.50	0.43	5,054	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04559	Bradley St	SSMH-5734	SSMH-0224	VCP	21	31.3	0.00	0.12	0	None Detected					
2018	Sub-Area 22	SSGM-04560	Bradley St	SSMH-1076	SSMH-5734	VCP	21	83.7	0.00	0.33	0	None Detected			1.25	SSMH-5734	12" VCP Service from NW
2018	Sub-Area 22	SSGM-04561	Bradley St	SSMH-5735	SSMH-1076	VCP	12	10.3	0.00	0.02	0	None Detected					
2018	Sub-Area 22	SSGM-04562	Bradley St	SSMH-5736	SSMH-5735	VCP	12	21.6	0.00	0.05	0	None Detected					
2018	Sub-Area 22	SSGM-04569	Bradley St	SSMH-0223	SSMH-0111	VCP	24	249.5	4.00	1.13	5,079	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04570	Bradley St	SSMH-3498	SSMH-3499	BR	42	199.2	0.00	1.58	0	None Detected					
2018	Sub-Area 22	SSGM-04571	Bradley St	SSMH-3501	SSMH-0223	VCP	24	248.1	0.00	1.13	0	None Detected					
2018	Sub-Area 22	SSGM-04572	Bradley St	SSMH-0224	SSMH-3501	VCP	20	127.6	0.00	0.48	0	None Detected					
2018	Sub-Area 22	SSGM-04579	Bradley St	SSMH-3505	SSMH-3506	VCP	30	83.9	0.00	0.48	0	None Detected					
2018	Sub-Area 22	SSGM-04580	Bradley St	SSMH-3506	SSMH-0111	VCP	30	71.9	0.00	0.41	0	None Detected					
2018	Sub-Area 22	SSGM-04581	Bradley St	SSMH-3507	SSMH-3505	VCP	30	209.8	0.00	1.19	0	None Detected					
2018	Sub-Area 22	SSGM-04582	Bradley St	SSMH-3504	SSMH-3507	VCP	30	213.0	0.00	1.21	0	None Detected					
2018	Sub-Area 22	SSGM-04681	Bradley St	SSMH-4423	SSMH-3538	BR	33	257.5	0.00	1.61	0	None Detected					
2018	Sub-Area 22	SSGM-04682	Bradley St	SSMH-1090	SSMH-3498	BR	42	143.2	0.00	1.14	0	None Detected					
2018	Sub-Area 22	SSGM-04685	Bradley St	SSMH-1091	SSMH-1090	BR	42	45.1	0.00	0.36	0	None Detected					
2018	Sub-Area 22	SSGM-04704	Bradley St	SSMH-1078	SSMH-3545	VCP	12	269.1	0.00	0.61	0	None Detected					
2018	Sub-Area 22	SSGM-04705	Bradley St	SSMH-3545	SSMH-3546	VCP	12	260.7	0.20	0.59	486	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04706	Bradley St	SSMH-3546	SSMH-3548	VCP	12	120.6	*	0.27	N/A	N/A					Could not locate SSMH-3548
2018	Sub-Area 22	SSGM-04707	Bradley St	SSMH-3548	SSMH-3547	VCP	12	105.2	*	0.24	N/A	N/A					Could not locate SSMH-3547
2018	Sub-Area 22	SSGM-04708	Bradley St	SSMH-3547	SSMH-5736	VCP	12	62.8	0.00	0.14	0	None Detected					
2018	Sub-Area 22	SSGM-04709	Bradley St	SSMH-5733	SSMH-3549	VCP	12	266.1	0.50	0.60	1,191	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04710	Bradley St	SSMH-3549	SSMH-1078	VCP	12	269.9	1.00	0.61	2,347	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-05990	Bradley St	SSMH-3538	SSMH-1250	RCP	42	288.2	0.00	2.29	0	None Detected					
2018	Sub-Area 22	SSGM-05991	Bradley St	SSMH-1250	SSMH-1090	RCP	42	166.2	0.00	1.32	0	None Detected					
2018	Sub-Area 22	SSGM-06922	Bradley St	SSMH-3499	SSMH-4145	BR	42	161.1	0.00	1.28	0	None Detected					
2018	Sub-Area 22	SSGM-06930	Bradley St	SSMH-0111	SSMH-4146	VCP	30	156.5	0.00	0.89	0	None Detected					
2018	Sub-Area 22	SSGM-00304	Caleb St	SSMH-1436	SSMH-1437	VCP	8	150.2	0.50	0.23	3,164	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00305	Caleb St	SSMH-1437	SSMH-4418	VCP	10	216.6	1.25	0.41	4,387	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00306	Caleb St	SSMH-4418	SSMH-4419	VCP	10	209.2	1.50	0.40	5,451	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00447	Caleb St	SSMH-1763	SSMH-1764	VCP	8	174.0	2.50	0.26	13,655	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00448	Caleb St	SSMH-1764	SSMH-1765	VCP	8	260.6	0.10	0.39	365	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00449	Caleb St	SSMH-1765	SSMH-1766	VCP	8	219.7	0.20	0.33	865	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04568	Caleb St	SSMH-4419	SSMH-5740	VCP	10	275.1	2.70	0.52	7,463	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04578	Caleb St	SSMH-5740	SSMH-3504	VCP	30	127.0	0.00	0.72	0	None Detected					
2018	Sub-Area 22	SSGM-04584	Caleb St	SSMH-3508	SSMH-5740	VCP	24	30.0	0.00	0.14	0	None Detected					
2018	Sub-Area 22	SSGM-04592	Caleb St	SSMH-1766	SSMH-1081	VCP	8	221.6	0.25	0.34	1,072	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04593	Caleb St	SSMH-1081	SSMH-1082	VCP	24	220.5	1.20	1.00	1,724	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04594	Caleb St	SSMH-1082	SSMH-1083	VCP	15	251.2	3.25	0.71	6,559	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04595	Caleb St	SSMH-1083	SSMH-5740	VCP	15	232.6	0.50	0.66	1,089	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-03025	Capisic St	SSMH-4617	SSMH-0825	VCP	6	307.9	2.00	0.35	8,231	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-03026	Capisic St	SSMH-4616	SSMH-0825	VCP	8	98.3	0.00	0.15	0	None Detected					
2018	Sub-Area 22	SSGM-03027	Capisic St	SSMH-5363	SSMH-6550	VCP	8	82.9	0.40	0.13	4,588	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-03028	Capisic St	SSMH-0825	SSMH-5363	VCP	8	175.7	0.50	0.27	2,704	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04691	Coachlight Ln	SSMH-5762	SSMH-5761	PVC	6	150.6	0.10	0.17	841	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04692	Coachlight Ln	SSMH-5758	SSMH-5760	PVC	6	97.4	0.20	0.11	2,603	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04693	Coachlight Ln	SSMH-5761	SSMH-5760	PVC	8	190.3	0.20	0.29	999	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04695	Coachlight Ln	SSMH-5760	SSMH-5759	VCP	18	174.9	0.00	0.60	0	None Detected					
2018	Sub-Area 22	SSGM-04696	Coachlight Ln	SSMH-5759	SSMH-3539	VCP	21	124.1	0.00	0.49	0	None Detected					
2018	Sub-Area 22	SSGM-04698	Coachlight Ln	SSMH-3541	SSMH-5760	VCP	18	267.5	3.00	0.91	4,737	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00434	Cobbert Rd	SSMH-2939	SSFT-0215	VCP	8	312.0	0.00	0.47	0	None Detected					
2018	Sub-Area 22	SSGM-00312	Congress St	SSMH-4420	SSMH-4421	VCP	8	305.2	0.25	0.46	779	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04567	Congress St	SSMH-0233	SSMH-5739	VCP	8	287.8	0.00	0.44	0	None Detected					
2018	Sub-Area 22	SSGM-06708	Congress St	SSMH-5739	SSMH-4422	VCP	8	287.7	2.00	0.44	6,608	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00300	Craigie St	SSMH-1481	SSMH-0128	VCP	8	194.6	1.50	0.29	7,327	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00301	Craigie St	SSMH-0128	SSMH-0129	VCP	8	188.8	1.15	0.29	5,788	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00302	Craigie St	SSMH-0129	SSMH-1431	VCP	12	246.9	1.10	0.56	2,823	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00303	Craigie St	SSMH-1431	SSMH-1432	VCP	12	182.8	5.00	0.42	17,335	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00322	Craigie St	SSMH-1569	SSMH-4497	VCP	15	124.8	1.50	0.35	6,094	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00323	Craigie St	SSMH-4497	SSMH-4496	RCP	21	195.7	*	0.78	N/A	N/A					Could not locate SSMH-4496, high flow at downstream pipe.
2018	Sub-Area 22	SSGM-00324	Craigie St	SSMH-4496	SSMH-1432	RCP	21	177.2	2.50	0.70	5,107	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04558	Craigie St	SSMH-1077	SSMH-1076	VCP	8	35.3	0.00	0.05	0	None Detected					
2018	Sub-Area 22	SSGM-04583	Craigie St	SSMH-1432	SSMH-3508	RCP	24	292.7	1.00	1.33	1,082	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04585	Craigie St	SSMH-3509	SSMH-1569	VCP	15	115.3	0.00	0.33	0	None Detected					
2018	Sub-Area 22	SSGM-04586	Craigie St	SSMH-1080	SSMH-3509	VCP	8	317.9	2.00	0.48	5,980	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04588	Craigie St	SSMH-1079	SSMH-1080	VCP	8	297.4	1.10	0.45	3,516	Infiltration < 4,000			1.5	SSMH-1080	8" VCP Service from East

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Flow Isolation Results

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 22	SSGM-06589	Craigie St	SSMH-4051	SSMH-1079	VCP	8	77.9	0.00	0.12	0	None Detected					
2018	Sub-Area 22	SSGM-06590	Craigie St	SSMH-4052	SSMH-4051	VCP	8	212.6	0.00	0.32	0	None Detected					
2018	Sub-Area 22	SSGM-00307	Dirigo St	SSMH-4566	SSMH-0225	VCP	8	321.3	0.25	0.49	739	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04576	Dirigo St	SSMH-0225	SSMH-0224	VCP	8	175.8	0.75	0.27	4,054	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04701	Fairview St	SSMH-3543	SSMH-3541	VCP	10	234.7	0.50	0.44	1,619	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-04573	Ivy St	SSMH-3502	SSMH-1077	VCP	21	164.0	0.00	0.65	0	None Detected					
2018	Sub-Area 22	SSGM-06578	Ivy St	SSMH-6085	SSMH-1075	VCP	10	211.7	0.75	0.40	2,694	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-02939	June St	SSMH-5338	SSMH-5336	VCP	8	143.1	0.00	0.22	0	None Detected					
2018	Sub-Area 22	SSGM-02948	June St	SSMH-2943	SSMH-5338	VCP	8	84.1	1.30	0.13	14,695	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-02935	Redlon Rd	SSMH-0804	SSMH-0803	VCP	10	37.7	0.00	0.07	0	None Detected					
2018	Sub-Area 22	SSGM-02938	Redlon Rd	SSMH-5337	SSMH-0804	VCP	10	138.8	0.00	0.26	0	None Detected					
2018	Sub-Area 22	SSGM-06709	Redlon Rd	SSMH-1342	SSMH-5337	VCP	8	177.0	1.25	0.27	6,713	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00438	Rudman Rd	SSFT-0142	SSMH-1752	VCP	8	139.4	0.25	0.21	1,704	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-03031	Rudman Rd	SSMH-1752	SSMH-5364	VCP	8	149.2	0.50	0.23	3,186	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00309	Stevens Ave	SSMH-4422	SSMH-4423	VCP	8	288.1	1.50	0.44	4,948	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-00310	Stevens Ave	SSMH-1561	SSMH-4423	VCP	18	86.1	0.50	0.29	2,452	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00313	Stevens Ave	SSMH-4421	SSMH-4422	VCP	8	45.5	1.50	0.07	31,336	Infiltration > 4,000			1.5	SSMH-4422	10" VCP Service from South
2018	Sub-Area 22	SSGM-00435	Stevens Ave	SSMH-1761	SSMH-4615	VCP	18	96.6	0.50	0.33	2,186	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00436	Stevens Ave	SSMH-4615	SSMH-6550	VCP	18	63.7	0.50	0.22	3,314	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-00437	Stevens Ave	SSMH-6541	SSMH-1561	VCP	18	248.4	0.50	0.85	850	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-02933	Stevens Ave	SSMH-0802	SSMH-1761	VCP	18	78.1	0.50	0.27	2,706	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-02934	Stevens Ave	SSMH-0803	SSMH-0802	VCP	18	59.9	1.50	0.20	10,574	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-02936	Stevens Ave	SSMH-5335	SSMH-0803	VCP	18	127.6	1.70	0.43	5,629	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-02937	Stevens Ave	SSMH-5336	SSMH-5335	VCP	15	113.7	*	0.32	N/A	N/A					Could not locate SSMH-5335, high flow at dowsntream pipe.
2018	Sub-Area 22	SSGM-02944	Stevens Ave	SSMH-5341	SSMH-2938	VCP	10	157.0	1.60	0.30	7,750	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-02945	Stevens Ave	SSMH-2938	SSMH-5336	VCP	15	188.9	0.30	0.54	805	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-03029	Stevens Ave	SSMH-6550	SSMH-6551	VCP	18	135.3	0.50	0.46	1,561	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-03030	Stevens Ave	SSMH-5364	SSMH-6541	VCP	18	74.3	0.50	0.25	2,843	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-03032	Stevens Ave	SSMH-6552	SSMH-5364	VCP	18	231.7	2.00	0.79	3,645	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-03033	Stevens Ave	SSMH-6551	SSMH-6552	VCP	18	230.0	0.50	0.78	918	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-03034	Stevens Ave	SSMH-5365	SSMH-5341	VCP	10	153.5	0.90	0.29	4,459	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04702	Stevens Ave	SSMH-3544	SSMH-5365	VCP	8	204.4	1.50	0.31	6,975	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04703	Stevens Ave	SSMH-4619	SSMH-3544	VCP	8	206.5	1.25	0.31	5,752	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-06929	Stevens Ave	SSMH-4146	SSMH-4423	VCP	30	183.0	0.00	1.04	0	None Detected					
2018	Sub-Area 22	SSGM-02941	Stone Ledge Dr	SSMH-5342	SSMH-5341	PVC	8	58.3	1.50	0.09	24,452	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-02942	Stone Ledge Dr	SSMH-5339	SSMH-5342	PVC	8	161.0	1.50	0.24	8,857	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-02943	Stone Ledge Dr	SSMH-5340	SSMH-5339	PVC	8	109.3	0.50	0.17	4,348	Infiltration > 4,000					
2018	Sub-Area 22	SSGM-04697	Wayne St	SSMH-3542	SSMH-3540	VCP	15	45.0	0.00	0.13	0	None Detected					
2018	Sub-Area 22	SSGM-04699	Wayne St	SSMH-3540	SSMH-3541	VCP	15	257.5	0.00	0.73	0	None Detected			1.5	SSMH-3541	12" VCP Service from East
2018	Sub-Area 22	SSGM-04700	Wayne St	SSMH-1075	SSMH-3542	VCP	10	219.1	1.00	0.42	3,470	Infiltration < 4,000					
2018	Sub-Area 22	SSGM-06579	Wayne St	SSMH-6086	SSMH-3542	VCP	8	178.3	0.75	0.27	3,998	Infiltration < 4,000					
2019	Sub-Area 23	SSGM-03907	Abbott St	SSMH-0989	SSMH-0993	PVC	8	238.0	1.20	0.36	4,792	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-03907	Abbott St	SSMH-0989	SSMH-0993	PVC	8	238.0	1.20	0.36	4,792	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-03908	Abbott St	SSMH-0993	SSMH-0992	PVC	8	38.0	0.00	0.06	0	None Detected					
2019	Sub-Area 23	SSGM-03908	Abbott St	SSMH-0993	SSMH-0992	PVC	8	38.0	0.00	0.06	0	None Detected					
2019	Sub-Area 23	SSGM-01993	Allen Ave	SSFT-0193	SSMH-2574		8	169.0	*	0.26	*	N/A			7.8	SSFT-0193	Could not locate SSMH-2574
2019	Sub-Area 23	SSGM-01994	Allen Ave	SSMH-2574	SSMH-2575		8	273.0	0.00	0.41	0	None Detected					
2019	Sub-Area 23	SSGM-01995	Allen Ave	SSMH-2575	SSMH-2576		8	392.0	0.00	0.59	0	None Detected					
2019	Sub-Area 23	SSGM-01996	Allen Ave	SSMH-2576	SSMH-0627		8	259.0	0.00	0.39	0	None Detected					
2019	Sub-Area 23	SSGM-02006	Allen Ave	SSMH-5119	SSMH-0630	VCP	12	42.0	0.00	0.10	0	None Detected					
2019	Sub-Area 23	SSGM-03612	Allen Ave	SSMH-0936	SSMH-0937	VCP	8	303.0	0.25	0.46	784	Infiltration < 4,000					
2019	Sub-Area 23	SSGM-03613	Allen Ave	SSMH-0937	SSMH-0628	VCP	12	124.0	4.00	0.28	20,439	Infiltration > 4,000	0.3	SSMH-0937	0.5	SSMH-0937	Service from East is possibly a drain line. Additionally there are wall leaks - See Video# 0174
2019	Sub-Area 23	SSGM-03614	Allen Ave	SSMH-0628	SSMH-0938	VCP	15	225.0	0.00	0.64	0	None Detected					
2019	Sub-Area 23	SSGM-03615	Allen Ave	SSMH-0938	SSMH-5524	VCP	15	133.0	4.90	0.38	18,675	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-03616	Allen Ave	SSMH-5524	SSMH-0630	VCP	18	154.0	0.00	0.53	0	None Detected					
2019	Sub-Area 23	SSGM-03909	Allen Ave	SSNS-0157	SSMH-1545	VCP	15	187.0	0.00	0.53	0	None Detected					
2019	Sub-Area 23	SSGM-03909	Allen Ave	SSNS-0157	SSMH-1545	VCP	15	187.0	0.00	0.53	0	None Detected					
2019	Sub-Area 23	SSGM-07278	Allen Ave	SSMH-2573	SSFT-0433	VCP	8	26.0	N/A	0.04	N/A	N/A					Unable to locate this line section anywhere on maps
2019	Sub-Area 23	SSGM-01962	Cypress St	SSFT-0190	SSMH-0624	VCP	8	85.0	0.00	0.13	0	None Detected					
2019	Sub-Area 23	SSGM-01963	Cypress St	SSMH-1592	SSMH-6270	PVC	8	80.0	0.00	0.12	0	None Detected	0.75	SSMH-6270			Outgoing pipe connection leak - See Video# 0172
2019	Sub-Area 23	SSGM-01964	Cypress St	SSMH-0624	SSMH-0623	PVC	8	96.0	1.20	0.15	11,880	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-07265	Cypress St	SSMH-6268	SSMH-6267	PVC	12	88.0	0.00	0.20	0	None Detected					
2019	Sub-Area 23	SSGM-07266	Cypress St	SSMH-6269	SSMH-6268	PVC	12	228.0	0.00	0.52	0	None Detected					
2019	Sub-Area 23	SSGM-07267	Cypress St	SSMH-6268	SSFT-0016	PVC	8	5.0	0.00	0.01	0	None Detected					
2019	Sub-Area 23	SSGM-07268	Cypress St	SSMH-0623	SSMH-6269	PVC	12	49.0	0.00	0.11	0	None Detected					
2019	Sub-Area 23	SSGM-07270	Cypress St	SSMH-6270	SSMH-0623	PVC	8	22.0	0.00	0.03	0	None Detected					
2019	Sub-Area 23	SSGM-03424	Delaware Ct	SSMH-3114	SSMH-3113	PVC	8	316.0	0.00	0.48	0	None Detected					

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 23	SSGM-03425	Delaware Ct	SSMH-3113	SSNS-0113	PVC	8	12.0	0.00	0.02	0	None Detected					
2019	Sub-Area 23	SSGM-03426	Delaware Ct	SSMH-3115	SSMH-3112	PVC	8	172.0	0.00	0.26	0	None Detected					
2019	Sub-Area 23	SSGM-03427	Delaware Ct	SSMH-3112	SSMH-3116	PVC	8	264.0	0.00	0.40	0	None Detected					
2019	Sub-Area 23	SSGM-03428	Delaware Ct	SSMH-3116	SSMH-3113	PVC	8	123.0	0.00	0.19	0	None Detected					
2019	Sub-Area 23	SSGM-03453	Delaware Ct	SSMH-3125	SSMH-3126	PVC	8	92.0	0.00	0.14	0	None Detected					
2019	Sub-Area 23	SSGM-03454	Delaware Ct	SSMH-3126	SSMH-3123	PVC	8	239.0	0.00	0.36	0	None Detected					
2019	Sub-Area 23	SSGM-03455	Delaware Ct	SSMH-3123	SSMH-3124	PVC	8	79.0	0.00	0.12	0	None Detected					
2019	Sub-Area 23	SSGM-03456	Delaware Ct	SSMH-3124	SSMH-3122	PVC	8	158.0	0.00	0.24	0	None Detected					
2019	Sub-Area 23	SSGM-03457	Delaware Ct	SSMH-3122	SSMH-5480	PVC	8	104.0	2.10	0.16	19,191	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-03458	Delaware Ct	SSMH-5480	SSMH-3127	PVC	8	104.0	*	0.16	*	N/A					Could not open SSMH-3127
2019	Sub-Area 23	SSGM-03459	Delaware Ct	SSMH-3127	SSMH-5529	PVC	8	194.0	0.00	0.29	0	None Detected					
2019	Sub-Area 23	SSGM-00179	Hennessy Dr	SSMH-4512	SSMH-1591	VCP	8	248.0	1.20	0.38	4,599	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-00180	Hennessy Dr	SSMH-1591	SSMH-1590	VCP	8	151.0	5.40	0.23	33,988	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-01961	Hennessy Dr	SSMH-1590	SSMH-6271	PVC	8	66.0	0.00	0.10	0	None Detected					
2019	Sub-Area 23	SSGM-01977	Hennessy Dr	SSFT-0192	SSMH-2563	VCP	8	131.0	2.10	0.20	15,235	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-01981	Hennessy Dr	SSMH-2566	SSMH-4512	VCP	8	251.0	0.00	0.38	0	None Detected					
2019	Sub-Area 23	SSGM-01982	Hennessy Dr	SSMH-2567	SSMH-2566	VCP	8	249.0	0.00	0.38	0	None Detected					
2019	Sub-Area 23	SSGM-01983	Hennessy Dr	SSMH-2568	SSMH-2567	VCP	8	249.0	6.00	0.38	22,901	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-01984	Hennessy Dr	SSMH-2569	SSMH-2568	VCP	8	252.0	0.00	0.38	0	None Detected					
2019	Sub-Area 23	SSGM-01985	Hennessy Dr	SSMH-2563	SSMH-2569	VCP	8	265.0	0.00	0.40	0	None Detected					
2019	Sub-Area 23	SSGM-07517	Hennessy Dr	SSMH-6271	SSMH-0623	PVC	8	36.0	0.00	0.05	0	None Detected					
2019	Sub-Area 23	SSGM-01969	Pennell Ave	SSMH-5110	SSMH-5108	VCP	10	348.0	4.70	0.66	10,269	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-01971	Pennell Ave	SSMH-5111	SSMH-5110	PVC	8	340.0	0.00	0.52	0	None Detected					
2019	Sub-Area 23	SSGM-01972	Pennell Ave	SSMH-4487	SSMH-5111	PVC	8	160.0	1.20	0.24	7,128	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-01973	Pennell Ave	SSMH-5112	SSMH-5113	PVC	8	350.0	0.00	0.53	0	None Detected					
2019	Sub-Area 23	SSGM-01974	Pennell Ave	SSMH-5113	SSNS-0019	PVC	8	22.0	0.00	0.03	0	None Detected					
2019	Sub-Area 23	SSGM-06683	Pennell Ave	SSMH-6104	SSMH-5108	VCP	8	140.0	2.10	0.21	14,256	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-02002	Plymouth St	SSMH-0632	SSMH-0631	AC	8	122.0	0.00	0.18	0	None Detected					
2019	Sub-Area 23	SSGM-02004	Plymouth St	SSMH-5116	SSMH-0632	AC	8	251.0	0.00	0.38	0	None Detected					
2019	Sub-Area 23	SSGM-02005	Plymouth St	SSMH-5118	SSMH-5117	PVC	8	105.0	0.00	0.16	0	None Detected					
2019	Sub-Area 23	SSGM-02007	Plymouth St	SSMH-0631	SSMH-5119	AC	8	317.0	0.00	0.48	0	None Detected			11.6	SSMH-5119	Catch basin lead from South with 9.5GPM and catch basin lead from North with 2.1GPM - See Video# 0173
2019	Sub-Area 23	SSGM-02008	Plymouth St	SSMH-5120	SSMH-5116	AC	8	253.0	6.25	0.38	23,478	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-02009	Plymouth St	SSMH-5121	SSMH-5120	AC	8	315.0	7.80	0.48	23,534	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-02010	Plymouth St	SSMH-5117	SSMH-5121	AC	8	299.0	0.00	0.45	0	None Detected					
2019	Sub-Area 23	SSGM-01477	Ruby Ln	SSMH-2301	SSMH-2300	PVC	8	55.0	0.00	0.08	0	None Detected					
2019	Sub-Area 23	SSGM-01478	Ruby Ln	SSMH-2300	SSMH-4929	PVC	8	63.0	0.00	0.10	0	None Detected					
2019	Sub-Area 23	SSGM-01479	Ruby Ln	SSMH-4929	SSMH-4928	PVC	8	185.0	0.00	0.28	0	None Detected					
2019	Sub-Area 23	SSGM-01480	Ruby Ln	SSMH-4928	SSMH-4924	PVC	8	262.0	0.00	0.40	0	None Detected					
2019	Sub-Area 23	SSGM-01481	Ruby Ln	SSMH-4924	SSMH-4925	PVC	8	65.0	0.00	0.10	0	None Detected					
2019	Sub-Area 23	SSGM-01482	Ruby Ln	SSMH-4925	SSMH-4926	PVC	8	65.0	0.00	0.10	0	None Detected					
2019	Sub-Area 23	SSGM-01997	Ruby Ln	SSMH-4926	SSMH-4927	PVC	8	143.0	0.00	0.22	0	None Detected					
2019	Sub-Area 23	SSGM-01998	Ruby Ln	SSMH-2304	SSMH-0628		12	33.0	0.00	0.08	0	None Detected					
2019	Sub-Area 23	SSGM-01999	Ruby Ln	SSMH-2303	SSMH-2304	PVC	8	243.0	0.00	0.37	0	None Detected					
2019	Sub-Area 23	SSGM-02000	Ruby Ln	SSMH-2302	SSMH-2303	PVC	8	83.0	2.10	0.13	24,046	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-02001	Ruby Ln	SSMH-0629	SSMH-2302	PVC	8	78.0	0.00	0.12	0	None Detected					Drain line from Southwest is blocked off but leaking 2.1GPM - See Video# 0176. Additionally the line doesn't appear to lead anywhere.
2019	Sub-Area 23	SSGM-02003	Ruby Ln	SSMH-4927	SSMH-5116	PVC	8	30.0	2.10	0.05	66,528	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-07264	Short St	SSMH-6267	SSMH-6266	PP	15	189.0	0.00	0.54	0	None Detected					
2019	Sub-Area 23	SSGM-07269	Short St	SSMH-6272	SSMH-6267	PP	15	102.0	0.00	0.29	0	None Detected					
2019	Sub-Area 23	SSGM-01975	Skylark Rd	SSFT-0191	SSMH-5114	VCP	8	6.0	0.00	0.01	0	None Detected					
2019	Sub-Area 23	SSGM-01976	Skylark Rd	SSMH-5114	SSMH-5115	VCP	8	251.0	2.60	0.38	9,845	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-01978	Skylark Rd	SSMH-5115	SSMH-2563	VCP	8	247.0	11.70	0.37	45,019	Infiltration > 4,000					
2019	Sub-Area 23	SSGM-01979	Skylark Rd	SSMH-2564	SSMH-2563	VCP	8	135.0	0.00	0.20	0	None Detected					Blockage in line from SSMH-2564 - 90% capacity - See Photo# 0170
2019	Sub-Area 23	SSGM-01980	Skylark Rd	SSMH-2565	SSMH-2564	AC	6	163.0	0.00	0.19	0	None Detected	3.25	SSMH-2564			Invert leak - See Video# 0171
2019	Sub-Area 23	SSGM-06790	Skylark Rd	SSMH-6112	SSMH-2565	PVC	0	75.0	0.00	0.01	0	None Detected					
2019	Sub-Area 23A	SSGM-00056	Allen Ave	SSMH-1546	SSMH-4251	VCP	8	43.0	0.00	0.07	0	None Detected					
2019	Sub-Area 23A	SSGM-00176	Allen Ave	SSMH-4250	SSMH-4251	VCP	8	107.0	0.00	0.16	0	None Detected					
2019	Sub-Area 23A	SSGM-03353	Allen Ave	SSMH-4251	SSMH-3087	VCP	8	301.0	0.00	0.46	0	None Detected					
2019	Sub-Area 23A	SSGM-03708	Allen Ave	SSMH-3248	SSMH-5081	VCP	12	262.0	25.00	0.60	60,458	Infiltration > 4,000					
2019	Sub-Area 23A	SSGM-03754	Allen Ave	SSMH-5576	SSMH-4252	PVC	8	36.0	0.50	0.05	13,200	Infiltration > 4,000					
2019	Sub-Area 23A	SSGM-06759	Allen Ave	SSMH-3087	SSMH-4252	VCP	12	136.0	4.70	0.31	21,896	Infiltration > 4,000					
2019	Sub-Area 23A	SSGM-06760	Allen Ave	SSMH-4252	SSMH-3248	VCP	12	243.0	2.00	0.55	5,215	Infiltration > 4,000					
2019	Sub-Area 23A	SSGM-07273	Allen Ave	SSMH-6264	SSMH-6277	PP	18	136.0	0.00	0.46	0	None Detected					
2019	Sub-Area 23A	SSGM-07274	Allen Ave	SSMH-6277	SSMH-6275	PP	18	41.0	0.00	0.14	0	None Detected					
2019	Sub-Area 23A	SSGM-01814	Auburn St	SSMH-2504	SSMH-1543	VCP	18	300.0	0.00	1.02	0	None Detected					
2019	Sub-Area 23A	SSGM-01821	Auburn St	SSMH-2507	SSMH-0597	VCP	12	248.0	0.00	0.56	0	None Detected					
2019	Sub-Area 23A	SSGM-01822	Auburn St	SSMH-0597	SSMH-0598	VCP	15	187.0	0.00	0.53	0	None Detected					
2019	Sub-Area 23A	SSGM-01823	Auburn St	SSMH-0598	SSMH-0599	VCP	15	302.0	0.00	0.86	0	None Detected					

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Flow Isolation Results

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 23A	SSGM-01824	Auburn St	SSMH-0599	SSMH-2504	VCP	15	141.0	0.00	0.40	0	None Detected					
2019	Sub-Area 23A	SSGM-07262	Auburn St	SSMH-1543	SSFT-0015	PVC	15	15.0	0.00	0.04	0	None Detected					
2019	Sub-Area 23A	SSGM-07263	Auburn St	SSFT-0015	SSMH-6264	PP	18	31.0	0.00	0.11	0	None Detected					
2019	Sub-Area 23A	SSGM-01840	Braeburn Rd	SSMH-2513	SSMH-2508	PVC	15	256.0	2.00	0.73	3,960	Infiltration < 4,000					
2019	Sub-Area 23A	SSGM-01842	Braeburn Rd	SSMH-2514	SSMH-2513	PVC	15	21.0	0.00	0.06	0	None Detected					
2019	Sub-Area 23A	SSGM-00175	Brook Rd	SSMH-1594	SSMH-1595	VCP	12	165.0	0.70	0.38	2,688	Infiltration < 4,000	0.6	SSMH-1594			Pipe connection leaks of 0.3GPM from Northern line and 0.3GPM from Eastern line - See Video# 0166
2019	Sub-Area 23A	SSGM-01847	Brook Rd	SSMH-2519	SSMH-2508	VCP	15	240.0	0.00	0.68	0	None Detected					
2019	Sub-Area 23A	SSGM-01848	Brook Rd	SSMH-1595	SSMH-2520	VCP	12	250.0	1.20	0.57	3,041	Infiltration < 4,000					
2019	Sub-Area 23A	SSGM-01849	Brook Rd	SSMH-2520	SSMH-2519	VCP	15	251.0	2.15	0.71	4,342	Infiltration > 4,000					
2019	Sub-Area 23A	SSGM-01836	Cottage Park Rd	SSMH-2509	SSMH-2510	PVC	8	319.0	0.00	0.48	0	None Detected					
2019	Sub-Area 23A	SSGM-01837	Cottage Park Rd	SSMH-2510	SSMH-2511	PVC	8	328.0	0.50	0.50	1,449	Infiltration < 4,000					
2019	Sub-Area 23A	SSGM-01846	Cottage Park Rd	SSMH-2518	SSMH-2509	PVC	0	145.0	0.00	0.03	0	None Detected					
2019	Sub-Area 23A	SSGM-03764	Merrymeeting Condos	SSMH-0971	SSMH-0969	PVC	8	118.0	0.00	0.18	0	None Detected					
2019	Sub-Area 23A	SSGM-06271	Merrymeeting Condos	SSMH-0969	SSNS-0111	PVC	8	164.0	0.00	0.25	0	None Detected	0.75	SSNS-0111			Walls weeping - See Photo# 0168
2019	Sub-Area 23A	SSGM-06272	Merrymeeting Condos	SSMH-0968	SSNS-0111	PVC	8	104.0	0.00	0.16	0	None Detected					
2019	Sub-Area 23A	SSGM-03763	Merrymeeting Dr	SSMH-0970	SSMH-0969	PVC	8	139.0	0.00	0.21	0	None Detected					
2019	Sub-Area 23A	SSGM-06110	Northport Dr	SSFT-0364	SSMH-3015		0	19.0	0.00	0.00	0	None Detected					
2019	Sub-Area 23A	SSGM-01843	Porch St	SSMH-2515	SSMH-2510	PVC	8	317.0	0.00	0.48	0	None Detected					
2019	Sub-Area 23A	SSGM-03755	Residences	SSMH-5577	SSMH-5576	PVC	8	299.0	0.00	0.45	0	None Detected					
2019	Sub-Area 23A	SSGM-03756	Residences	SSMH-5578	SSMH-5577	PVC	8	225.0	1.20	0.34	5,069	Infiltration > 4,000					
2019	Sub-Area 23A	SSGM-03757	Residences	SSMH-3247	SSMH-5578	PVC	8	297.0	0.00	0.45	0	None Detected	1.2	SSMH-3247			Outgoing line pipe connection leak - See Video# 0167
2019	Sub-Area 23A	SSGM-01844	Shingle Way	SSMH-2517	SSMH-2509	PVC	8	149.0	0.00	0.23	0	None Detected					
2019	Sub-Area 23A	SSGM-01845	Shingle Way	SSMH-2516	SSMH-2517	PVC	8	136.0	0.00	0.21	0	None Detected					
2019	Sub-Area 23A	SSGM-01817	Washington Ave	SSFT-0006	SSMH-2504	VCP	18	108.0	0.00	0.37	0	None Detected			6.4	SSMH-2504	Service from West
2019	Sub-Area 23A	SSGM-01838	Woodmere Rd	SSMH-2511	SSMH-2512	VCP	15	61.0	0.00	0.17	0	None Detected					
2019	Sub-Area 23A	SSGM-01841	Woodmere Rd	SSMH-2512	SSMH-2514	VCP	15	34.0	0.00	0.10	0	None Detected					
2019	Sub-Area 24	SSGM-01831	Allen Ave	SSMH-5079	SSMH-5080	AC	10	220.0	0.00	0.42	0	None Detected					
2019	Sub-Area 24	SSGM-01832	Allen Ave	SSMH-5080	SSMH-1542	VCP	12	237.0	0.00	0.54	0	None Detected					
2019	Sub-Area 24	SSGM-07216	Auburn St	SSMH-6237	SSMH-6236	PVC	8	53.0	0.00	0.08	0	None Detected					
2019	Sub-Area 24	SSGM-07217	Auburn St	SSMH-6238	SSMH-6237	PVC	8	57.0	0.00	0.09	0	None Detected					
2019	Sub-Area 24	SSGM-07232	Auburn St	SSFT-0009	SSMH-6238	PVC	8	350.0	0.00	0.53	0	None Detected					
2019	Sub-Area 24	SSGM-07233	Auburn St	SSMH-6239	SSFT-0009	PVC	8	4.0	0.00	0.01	0	None Detected					
2019	Sub-Area 24	SSGM-07234	Auburn St	SSFT-0010	SSMH-6239	PVC	8	2.0	0.00	0.00	0	None Detected					
2019	Sub-Area 24	SSGM-07235	Auburn St	SSFT-0008	SSMH-6239	PVC	8	2.0	0.00	0.00	0	None Detected					
2019	Sub-Area 24	SSGM-07236	Auburn St	SSFT-0177	SSMH-6238	PVC	8	28.0	0.00	0.04	0	None Detected					
2019	Sub-Area 24	SSGM-01826	Chapman St	SSMH-0600	SSMH-2501	VCP	8	185.0	0.00	0.28	0	None Detected					
2019	Sub-Area 24	SSGM-01827	Chapman St	SSMH-0601	SSMH-0600	VCP	8	190.0	0.50	0.29	2,501	Infiltration < 4,000					
2019	Sub-Area 24	SSGM-01828	Chapman St	SSMH-0602	SSMH-0601	VCP	8	55.0	0.50	0.08	8,640	Infiltration > 4,000					
2019	Sub-Area 24	SSGM-00178	Cypress St	SSMH-1592	SSMH-1593	VCP	8	280.0	1.20	0.42	4,073	Infiltration > 4,000					
2019	Sub-Area 24	SSGM-01965	Cypress St	SSMH-1593	SSMH-2503	VCP	8	280.0	2.10	0.42	7,128	Infiltration > 4,000					
2019	Sub-Area 24	SSGM-01829	Fisher St	SSMH-5077	SSMH-0602	VCP	8	121.0	0.00	0.18	0	None Detected					
2019	Sub-Area 24	SSGM-01830	Fisher St	SSMH-5078	SSMH-5077	VCP	8	101.0	0.00	0.15	0	None Detected					
2019	Sub-Area 24	SSGM-01752	Greenwood Ln	SSMH-0590	SSMH-0588	VCP	8	101.0	0.30	0.15	2,823	Infiltration < 4,000					
2019	Sub-Area 24	SSGM-01753	Greenwood Ln	SSMH-0591	SSMH-0590	VCP	8	96.0	0.00	0.15	0	None Detected					
2019	Sub-Area 24	SSGM-07050	Greenwood Ln	SSMH-1383	SSMH-0591	VCP	8	278.0	1.20	0.42	4,102	Infiltration > 4,000					
2019	Sub-Area 24	SSGM-07342	Northport Dr	SSMH-6379	SSFT-0041	PVC	8	283.0	0.00	0.43	0	None Detected					
2019	Sub-Area 24	SSGM-01749	Northwood Dr	SSMH-0587	SSMH-2474	PVC	8	296.0	0.00	0.45	0	None Detected					
2019	Sub-Area 24	SSGM-07104	Quaker Ln	SSMH-4948	SSMH-4949		8	58.0	0.00	0.09	0	None Detected					
2019	Sub-Area 24	SSGM-07105	Quaker Ln	SSMH-4244	SSMH-5073		8	44.0	0.00	0.07	0	None Detected					
2019	Sub-Area 24	SSGM-07106	Quaker Ln	SSMH-4945	SSMH-4946		8	87.0	0.00	0.13	0	None Detected					
2019	Sub-Area 24	SSGM-07107	Quaker Ln	SSMH-4946	SSMH-4947		8	76.0	0.00	0.12	0	None Detected					
2019	Sub-Area 24	SSGM-07108	Quaker Ln	SSMH-4947	SSMH-4949		8	128.0	0.00	0.19	0	None Detected					
2019	Sub-Area 24	SSGM-07109	Quaker Ln	SSMH-4949	SSNS-0001		8	61.0	0.00	0.09	0	None Detected					
2019	Sub-Area 24	SSGM-01722	Regan Ln	SSMH-5054	SSMH-5055	PVC	8	320.0	0.00	0.48	0	None Detected					
2019	Sub-Area 24	SSGM-01723	Regan Ln	SSMH-5055	SSMH-2473	PVC	8	129.0	0.00	0.20	0	None Detected					
2019	Sub-Area 24	SSGM-01724	Regan Ln	SSMH-2473	SSMH-2474	PVC	8	214.0	0.00	0.32	0	None Detected					
2019	Sub-Area 24	SSGM-01725	Regan Ln	SSMH-2474	SSMH-2475	PVC	8	231.0	0.30	0.35	1,234	Infiltration < 4,000					
2019	Sub-Area 24	SSGM-01726	Regan Ln	SSMH-2475	SSMH-2476	PVC	8	105.0	1.20	0.16	10,862	Infiltration > 4,000					
2019	Sub-Area 24	SSGM-01727	Regan Ln	SSMH-2476	SSMH-2477	PVC	8	161.0	0.00	0.24	0	None Detected					
2019	Sub-Area 24	SSGM-01700	Shepherd Ln	SSMH-2463	SSMH-2464	VCP	10	341.0	1.20	0.65	2,676	Infiltration < 4,000					
2019	Sub-Area 24	SSGM-00196	Washington Ave	SSMH-1545	SSMH-1544	VCP	15	45.0	0.00	0.13	0	None Detected					
2019	Sub-Area 24	SSGM-00197	Washington Ave	SSMH-1542	SSMH-1544	VCP	12	67.0	0.00	0.15	0	None Detected					
2019	Sub-Area 24	SSGM-01786	Washington Ave	SSMH-2493	SSMH-2494	PVC	15	176.0	0.00	0.50	0	None Detected	5	SSMH-2494			Wall leaks - See Video# 0178
2019	Sub-Area 24	SSGM-01795	Washington Ave	SSMH-2499	SSMH-6241	VCP	18	122.0	0.00	0.42	0	None Detected					
2019	Sub-Area 24	SSGM-01815	Washington Ave	SSMH-2506	SSMH-6236	VCP	10	153.0	0.00	0.29	0	None Detected					
2019	Sub-Area 24	SSGM-01820	Washington Ave	SSMH-2503	SSMH-1544	VCP	15	309.0	0.00	0.88	0	None Detected					
2019	Sub-Area 24	SSGM-07051	Washington Ave	SSFT-0397	SSMH-1383	VCP	8	173.0	0.00	0.26	0	None Detected					

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Flow Isolation Results

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 24	SSGM-07223	Washington Ave	SSMH-6241	SSMH-2501	PP	15	215.0	0.00	0.61	0	None Detected					
2019	Sub-Area 24	SSGM-07516	Washington Ave	SSMH-6236	SSMH-2503	PP	15	97.0	0.00	0.28	0	None Detected					
2019	Sub-Area 24	SSGM-07610	Washington Ave	SSMH-2498	SSMH-2499	VCP	15	280.0	0.00	0.80	0	None Detected					
2019	Sub-Area 24	SSGM-07611	Washington Ave	SSMH-2494	SSMH-2495	VCP	18	228.0	2.00	0.78	3,705	Infiltration < 4,000					
2019	Sub-Area 24	SSGM-07612	Washington Ave	SSMH-2495	SSMH-2496	VCP	15	102.0	0.00	0.29	0	None Detected					
2019	Sub-Area 24	SSGM-07616	Washington Ave	SSMH-2496	SSMH-2497	VCP	15	98.0	0.00	0.28	0	None Detected					
2019	Sub-Area 24	SSGM-07617	Washington Ave	SSMH-2497	SSMH-2498	VCP	15	282.0	0.00	0.80	0	None Detected					
2019	Sub-Area 24	SSGM-07619	Washington Ave	SSMH-1638	SSMH-2493	VCP	15	222.0	5.20	0.63	11,873	Infiltration > 4,000	2	SSMH-2493			Wall leaks - See Video# 0177
2019	Sub-Area 24	SSGM-07620	Washington Ave	SSMH-5072	SSMH-4067	VCP	12	248.0	0.50	0.56	1,277	Infiltration < 4,000					
2019	Sub-Area 24	SSGM-07621	Washington Ave	SSMH-4067	SSMH-5073	VCP	12	275.0	2.10	0.63	4,838	Infiltration > 4,000					
2019	Sub-Area 24	SSGM-07622	Washington Ave	SSMH-5073	SSMH-2464	VCP	12	275.0	2.10	0.63	4,838	Infiltration > 4,000					
2019	Sub-Area 24	SSGM-07627	Washington Ave	SSMH-1639	SSMH-5076	VCP	15	270.0	0.80	0.77	1,502	Infiltration < 4,000					
2019	Sub-Area 24	SSGM-07629	Washington Ave	SSMH-2464	SSMH-5074	VCP	0	250.0	3.00	0.05	91,238	Infiltration > 4,000					
2019	Sub-Area 24	SSGM-07630	Washington Ave	SSMH-5074	SSMH-4068	VCP	15	251.0	0.00	0.71	0	None Detected					
2019	Sub-Area 24	SSGM-07631	Washington Ave	SSMH-4068	SSMH-5075	VCP	0	177.0	0.00	0.03	0	None Detected					
2019	Sub-Area 24	SSGM-07632	Washington Ave	SSMH-5075	SSMH-0589	VCP	15	253.0	1.20	0.72	2,404	Infiltration < 4,000					
2019	Sub-Area 24	SSGM-07633	Washington Ave	SSMH-0588	SSMH-1639	VCP	15	194.0	0.00	0.55	0	None Detected					
2019	Sub-Area 24	SSGM-07634	Washington Ave	SSMH-0589	SSMH-0588	VCP	15	41.0	0.00	0.12	0	None Detected					
2019	Sub-Area 24	SSGM-07761	Washington Ave	SSMH-2501	SSMH-2506		0	250.0	0.00	0.05	0	None Detected					
2019	Sub-Area 24A	SSGM-04957	Bernard Rd	SSMH-0961	SSMH-6560	PVC	8	193.0	0.00	0.29	0	None Detected					
2019	Sub-Area 24A	SSGM-04958	Bernard Rd	SSMH-3634	SSMH-0961	PVC	12	256.0	0.00	0.58	0	None Detected					
2019	Sub-Area 24A	SSGM-04960	Bernard Rd	SSMH-3636	SSMH-3634	PVC	8	216.0	2.10	0.33	9,240	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-03899	Berry Ave	SSMH-1623	SSMH-3298	AC	8	249.0	0.25	0.38	954	Infiltration < 4,000					
2019	Sub-Area 24A	SSGM-06250	Berry Ave	SSMH-3298	SSMH-3976	VCP	8	235.0	1.75	0.36	7,077	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-06251	Berry Ave	SSMH-3976	SSMH-3977	RCP	18	272.0	0.00	0.93	0	None Detected					
2019	Sub-Area 24A	SSGM-06252	Berry Ave	SSMH-3977	SSMH-1508	PVC	8	42.0	0.50	0.06	11,314	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-00201	Chesley Ave	SSMH-1506	SSMH-1507	PVC	8	21.0	0.00	0.03	0	None Detected					
2019	Sub-Area 24A	SSGM-03900	Chesley Ave	SSMH-3299	SSMH-1509	PVC	8	216.0	0.00	0.33	0	None Detected					
2019	Sub-Area 24A	SSGM-03901	Chesley Ave	SSMH-4940	SSMH-3300	PVC	8	260.0	0.00	0.39	0	None Detected					
2019	Sub-Area 24A	SSGM-04972	Chesley Ave	SSFT-0302	SSMH-1134		8	95.0	N/A	0.14	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-06247	Chesley Ave	SSMH-3300	SSMH-3974	PVC	8	247.0	0.00	0.37	0	None Detected					
2019	Sub-Area 24A	SSGM-06248	Chesley Ave	SSMH-3974	SSMH-3975	PVC	8	257.0	0.00	0.39	0	None Detected					
2019	Sub-Area 24A	SSGM-06249	Chesley Ave	SSMH-3975	SSMH-3299	PVC	8	214.0	1.20	0.32	5,329	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-04980	Edgewood Ave	SSMH-5809	SSMH-1624	PVC	8	261.0	0.00	0.40	0	None Detected					
2019	Sub-Area 24A	SSGM-04981	Edgewood Ave	SSMH-5810	SSMH-5809	VCP	15	270.0	0.00	0.77	0	None Detected					
2019	Sub-Area 24A	SSGM-06245	Edgewood Ave	SSMH-1624	SSMH-3972	PVC	8	252.0	1.00	0.38	3,771	Infiltration < 4,000					
2019	Sub-Area 24A	SSGM-06254	Edgewood Ave	SSMH-3972	SSMH-1287	PVC	8	225.0	0.00	0.34	0	None Detected					
2019	Sub-Area 24A	SSGM-07508	Fobes St	SSMH-1620	SSMH-5626	VCP	10	294.0	0.00	0.56	0	None Detected					
2019	Sub-Area 24A	SSGM-03922	Gertrude Ave	SSMH-5628	SSMH-5627	PVC	8	250.0	3.25	0.38	12,355	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-03923	Gertrude Ave	SSMH-5629	SSMH-5628	PVC	8	186.0	0.00	0.28	0	None Detected					
2019	Sub-Area 24A	SSGM-03924	Gertrude Ave	SSMH-5630	SSMH-5629	PVC	8	20.0	0.00	0.03	0	None Detected					
2019	Sub-Area 24A	SSGM-03925	Gertrude Ave	SSFT-0258	SSMH-5630	PVC	8	54.0	0.00	0.08	0	None Detected					
2019	Sub-Area 24A	SSGM-03916	Knight St	SSMH-2347	SSMH-0994		8	158.0	0.00	0.24	0	None Detected					
2019	Sub-Area 24A	SSGM-03826	Loring Ave	SSMH-1626	SSMH-5594	VCP	8	226.0	2.10	0.34	8,831	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-03827	Loring Ave	SSMH-5594	SSMH-5595	VCP	8	225.0	0.00	0.34	0	None Detected					
2019	Sub-Area 24A	SSGM-03902	Maplewood St	SSMH-3303	SSMH-4526	VCP	10	341.0	2.10	0.65	4,682	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-03915	Maplewood St	SSMH-0994	SSMH-3303	VCP	8	381.0	0.25	0.58	624	Infiltration < 4,000					
2019	Sub-Area 24A	SSGM-04954	Mona Rd	SSMH-3631	SSMH-3632	VCP	8	74.0	0.00	0.11	0	None Detected					
2019	Sub-Area 24A	SSGM-04962	Mona Rd	SSMH-3302	SSMH-3635	PVC	8	228.0	0.00	0.35	0	None Detected					
2019	Sub-Area 24A	SSGM-04963	Mona Rd	SSMH-3638	SSMH-3637	PVC	8	87.0	0.00	0.13	0	None Detected					
2019	Sub-Area 24A	SSGM-04966	Mona Rd	SSMH-3640	SSMH-3638	PVC	8	184.0	0.00	0.28	0	None Detected					
2019	Sub-Area 24A	SSGM-04969	Mona Rd	SSMH-1131	SSMH-3639	PVC	8	218.0	0.00	0.33	0	None Detected					
2019	Sub-Area 24A	SSGM-04970	Mona Rd	SSMH-3635	SSMH-1132		8	19.0	0.00	0.03	0	None Detected					
2019	Sub-Area 24A	SSGM-04973	Northfield	SSMH-1133	SSMH-1134		8	92.0	N/A	0.14	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-04974	Northfield	SSMH-1134	SSMH-1135		8	185.0	N/A	0.28	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-04975	Northfield	SSMH-1135	SSMH-5806		8	235.0	N/A	0.36	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-04976	Northfield	SSMH-5807	SSMH-5806		8	212.0	N/A	0.32	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-04977	Northfield	SSMH-5808	SSMH-5807		8	272.0	N/A	0.41	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-04978	Northfield	SSFT-0304	SSMH-5808		8	102.0	N/A	0.15	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-04979	Northfield	SSFT-0303	SSMH-1133		8	167.0	N/A	0.25	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-06243	Northfield	SSMH-3971	SSMH-5810		8	138.0	4.00	0.21	27,548	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-06244	Northfield	SSMH-5806	SSMH-3971		8	194.0	N/A	0.29	N/A	N/A					Could not locate line section
2019	Sub-Area 24A	SSGM-01290	Old Campus Dr	SSMH-4939	SSMH-4940	VCP	8	122.0	0.00	0.18	0	None Detected					
2019	Sub-Area 24A	SSGM-01291	Old Campus Dr	SSMH-4938	SSMH-4939		8	129.0	0.00	0.20	0	None Detected					
2019	Sub-Area 24A	SSGM-01292	Old Campus Dr	SSMH-0505	SSMH-4938	PVC	8	170.0	0.00	0.26	0	None Detected					
2019	Sub-Area 24A	SSGM-01293	Old Campus Dr	SSFT-0157	SSMH-4937		6	72.0	0.00	0.08	0	None Detected					
2019	Sub-Area 24A	SSGM-01294	Old Campus Dr	SSMH-4937	SSMH-0506		8	224.0	1.20	0.34	5,091	Infiltration > 4,000					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 24A	SSGM-01295	Old Campus Dr	SSMH-0506	SSMH-0505	PVC	8	79.0	*	0.12	*	N/A					Could not open SSMH-0505
2019	Sub-Area 24A	SSGM-04955	Samuel Rd	SSMH-1130	SSMH-3301	PVC	8	74.0	2.10	0.11	26,971	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-04959	Samuel Rd	SSMH-3301	SSMH-3634	PVC	8	305.0	4.00	0.46	12,464	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-04961	Samuel Rd	SSMH-1132	SSMH-3633	PVC	8	216.0	0.00	0.33	0	None Detected					
2019	Sub-Area 24A	SSGM-04964	Samuel Rd	SSMH-3637	SSMH-3641	PVC	8	191.0	0.00	0.29	0	None Detected					
2019	Sub-Area 24A	SSGM-04967	Samuel Rd	SSMH-3633	SSMH-1130	PVC	8	30.0	0.00	0.05	0	None Detected					
2019	Sub-Area 24A	SSGM-04968	Samuel Rd	SSMH-3641	SSMH-1130	PVC	8	34.0	0.00	0.05	0	None Detected					
2019	Sub-Area 24A	SSGM-03735	Sara La-Mona	SSMH-0962	SSMH-0961	PVC	8	325.0	2.10	0.49	6,141	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-04956	Sara La-Mona	SSMH-3632	SSMH-0962	PVC	8	324.0	1.00	0.49	2,933	Infiltration < 4,000					
2019	Sub-Area 24A	SSGM-00150	Washington Ave	SSMH-1510	SSMH-1508	VCP	8	164.0	1.20	0.25	6,954	Infiltration > 4,000					
2019	Sub-Area 24A	SSGM-06246	Washington Ave	SSMH-3973	SSMH-1505		0	13.0	0.00	0.00	0	None Detected					
2019	Sub-Area 24A	SSGM-06253	Washington Ave	SSMH-3978	SSMH-3973	PVC	6	230.0	0.00	0.26	0	None Detected					
2019	Sub-Area 24A	SSGM-06255	Washington Ave	SSMH-1287	SSMH-1505	RCP	8	22.0	0.00	0.03	0	None Detected					
2019	Sub-Area 24A	SSGM-01314	White Birch Ln	SSMH-2348	SSNS-0012	PVC	8	217.0	N/A	0.33	N/A	N/A					Could not locate this line section
2019	Sub-Area 24A	SSGM-06289	Yale Ct	SSMH-3983	SSMH-0505	PVC	8	164.0	*	0.25	*	N/A					
2019	Sub-Area 24A	SSGM-01287	Yale St	SSMH-2328	SSMH-0502	PVC	8	234.0	0.00	0.35	0	None Detected					
2019	Sub-Area 24A	SSGM-01288	Yale St	SSMH-0502	SSMH-0503	PVC	8	250.0	0.00	0.38	0	None Detected					
2019	Sub-Area 24A	SSGM-01289	Yale St	SSMH-0503	SSMH-0504	PVC	8	250.0	0.00	0.38	0	None Detected					
2019	Sub-Area 24A	SSGM-06290	Yale St	SSMH-0504	SSMH-3983	PVC	8	252.0	0.00	0.38	0	None Detected					
2019	Sub-Area 24A	SSGM-06291	Yale St	SSFT-0504	SSMH-5618	PVC	8	12.0	N/A	0.02	N/A	N/A					Could not locate this line section
2019	Sub-Area 26	SSGM-07791		SSFT-0487	SSMH-5554	PVC	12	187.0	0.00	0.43	0	None Detected					
2019	Sub-Area 26	SSGM-03799	Beauregard St	SSMH-3275	SSMH-3274	PVC	8	65.0	0.00	0.10	0	None Detected					
2019	Sub-Area 26	SSGM-03801	Beauregard St	SSMH-3274	SSMH-3272	PVC	8	226.0	0.00	0.34	0	None Detected					
2019	Sub-Area 26	SSGM-03802	Beauregard St	SSMH-3272	SSMH-3270	PVC	8	58.0	0.00	0.09	0	None Detected					
2019	Sub-Area 26	SSGM-00162	Dakota St	SSMH-4500	SSMH-4499	AC	8	171.0	0.15	0.26	834	Infiltration < 4,000					
2019	Sub-Area 26	SSGM-03736	Dakota St	SSMH-0963	SSMH-0964	AC	8	188.0	0.00	0.28	0	None Detected					
2019	Sub-Area 26	SSGM-03737	Dakota St	SSMH-0964	SSMH-4500	AC	8	174.0	0.00	0.26	0	None Detected					
2019	Sub-Area 26	SSGM-03784	Florida Ave	SSMH-5586	SSMH-5585	PVC	8	235.0	0.00	0.36	0	None Detected					
2019	Sub-Area 26	SSGM-03785	Florida Ave	SSMH-5587	SSMH-5585	PVC	8	207.0	0.00	0.31	0	None Detected					
2019	Sub-Area 26	SSGM-03786	Florida Ave	SSMH-5588	SSMH-3263	VCP	8	275.0	0.30	0.42	1,037	Infiltration < 4,000					
2019	Sub-Area 26	SSGM-03787	Florida Ave	SSMH-3264	SSMH-4467	PVC	12	271.0	0.30	0.62	701	Infiltration < 4,000					
2019	Sub-Area 26	SSGM-03788	Florida Ave	SSMH-3263	SSMH-3264	PVC	8	280.0	0.00	0.42	0	None Detected					
2019	Sub-Area 26	SSGM-06107	Gertrude Ave	SSFT-0056	SSMH-1266	PVC	8	144.0	0.00	0.22	0	None Detected					
2019	Sub-Area 26	SSGM-06108	Gertrude Ave	SSMH-1266	SSMH-3925	PVC	8	39.0	0.00	0.06	0	None Detected					
2019	Sub-Area 26	SSGM-06113	Gertrude Ave	SSFT-0367	SSMH-3925	PVC	4	26.0	0.00	0.02	0	None Detected					
2019	Sub-Area 26	SSGM-00154	Idaho St	SSFT-0149	SSFT-0148		8	300.0	0.00	0.45	0	None Detected					
2019	Sub-Area 26	SSGM-03793	Maine Ave	SSMH-3268	SSMH-4454	PVC	8	274.0	1.20	0.42	4,162	Infiltration > 4,000					
2019	Sub-Area 26	SSGM-03794	Maine Ave	SSMH-1513	SSMH-3268	PVC	8	275.0	0.00	0.42	0	None Detected					
2019	Sub-Area 26	SSGM-06872	Maine Ave	SSMH-6132	SSMH-1498			51.0	N/A	0.00	N/A	N/A					Unable to locate line section
2019	Sub-Area 26	SSGM-07038	Ohio St	SSMH-1511	SSMH-4171		8	255.0	1.20	0.39	4,472	Infiltration > 4,000					
2019	Sub-Area 26	SSGM-00163	Pennsylvania Ave	SSMH-1515	SSMH-1514	VCP	8	271.0	0.00	0.41	0	None Detected					
2019	Sub-Area 26	SSGM-04203	Pennsylvania Ave	SSMH-3382	SSMH-1515	VCP	8	284.0	0.30	0.43	1,004	Infiltration < 4,000					
2019	Sub-Area 26	SSGM-00159	Ray St	SSMH-4498	SSMH-4499	PVC	8	200.0	0.15	0.30	713	Infiltration < 4,000					
2019	Sub-Area 26	SSGM-00165	Ray St	SSMH-1514	SSMH-4467	PVC	8	135.0	0.00	0.20	0	None Detected					
2019	Sub-Area 26	SSGM-00166	Ray St	SSMH-4467	SSMH-0139	PVC	8	121.0	0.00	0.18	0	None Detected					
2019	Sub-Area 26	SSGM-00167	Ray St	SSMH-0139	SSMH-4454	PVC	8	236.0	0.00	0.36	0	None Detected					
2019	Sub-Area 26	SSGM-00286	Ray St	SSMH-0174	SSMH-4498	PVC	8	211.0	0.00	0.32	0	None Detected					
2019	Sub-Area 26	SSGM-03795	Ray St	SSMH-3269	SSMH-3270	PVC	8	66.0	0.00	0.10	0	None Detected					
2019	Sub-Area 26	SSGM-03796	Ray St	SSMH-3271	SSMH-3269	PVC	8	265.0	1.80	0.40	6,456	Infiltration > 4,000					
2019	Sub-Area 26	SSGM-03797	Ray St	SSMH-4499	SSMH-3271	PVC	8	295.0	0.00	0.45	0	None Detected					
2019	Sub-Area 26	SSGM-04195	Ray St	SSMH-5667	SSMH-4454	PVC	8	258.0	0.00	0.39	0	None Detected					
2019	Sub-Area 26	SSGM-04196	Ray St	SSMH-3270	SSMH-5667	PVC	8	69.0	1.10	0.10	15,151	Infiltration > 4,000					
2019	Sub-Area 26	SSGM-07285	Ray St	SSMH-6286	SSMH-6625	PVC	8	144.0	1.00	0.22	6,600	Infiltration > 4,000					
2019	Sub-Area 26	SSGM-07581	Ray St	SSMH-6625	SSMH-6624	PVC	18	107.0	0.00	0.36	0	None Detected					
2019	Sub-Area 26	SSGM-07590	Ray St	SSMH-6624	SSMH-1514	PVC	18	248.0	2.25	0.85	3,832	Infiltration < 4,000					
2019	Sub-Area 26	SSGM-03798	Stepping Stone Ln	SSMH-5622	SSMH-3273	PVC	8	228.0	0.00	0.35	0	None Detected					
2019	Sub-Area 26	SSGM-03800	Stepping Stone Ln	SSMH-3273	SSMH-3275	PVC	8	96.0	0.00	0.15	0	None Detected					
2019	Sub-Area 26	SSGM-00156	Texas St	SSMH-4457	SSMH-4458	VCP	12	31.0	1.10	0.07	22,483	Infiltration > 4,000					
2019	Sub-Area 26	SSGM-03783	Texas St	SSMH-5585	SSMH-4457	VCP	8	233.0	1.20	0.35	4,895	Infiltration > 4,000					
2019	Sub-Area 26	SSGM-00174	Vermont Ave	SSMH-1512	SSMH-0139	PVC	8	233.0	0.30	0.35	1,224	Infiltration < 4,000					
2019	Sub-Area 26	SSGM-03768	Vermont Ave	SSMH-5554	SSMH-5583	PVC	8	239.0	0.00	0.36	0	None Detected					
2019	Sub-Area 26	SSGM-03769	Vermont Ave	SSMH-5583	SSMH-1512	PVC	8	234.0	0.00	0.35	0	None Detected					
2019	Sub-Area 27	SSGM-07792		SSMH-6685	SSMH-1396		0	101.0	N/A	0.00	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04173	Byfield Rd	SSMH-1014	SSMH-0016	VCP	8	265.0	N/A	0.40	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04176	Byfield Rd	SSMH-6559	SSMH-1015	VCP	8	80.0	1.30	0.12	15,444	Infiltration > 4,000					
2019	Sub-Area 27	SSGM-04175	Byfield St	SSMH-1015	SSMH-1014	VCP	8	181.0	0.00	0.27	0	None Detected					
2019	Sub-Area 27	SSGM-03893	Fall Brook St	SSMH-3291	SSMH-3292	VCP	8	174.0	1.00	0.26	5,462	Infiltration > 4,000					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 27	SSGM-03894	Fall Brook St	SSMH-3292	SSMH-3293	VCP	8	190.0	0.00	0.29	0	None Detected					
2019	Sub-Area 27	SSGM-03895	Fall Brook St	SSMH-3293	SSMH-3294	VCP	8	221.0	0.00	0.33	0	None Detected					
2019	Sub-Area 27	SSGM-03896	Fall Brook St	SSMH-3294	SSMH-3295	VCP	8	253.0	1.20	0.38	4,508	Infiltration > 4,000					
2019	Sub-Area 27	SSGM-00070	Farmhouse Condos	SSMH-1483	SSMH-1482	PVC	8	240.0	N/A	0.36	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-06115	Farmhouse Condos	SSMH-1482	SSMH-1268	PVC	8	73.0	N/A	0.11	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04174	Graham Ter	SSFT-0271	SSMH-1014	VCP	8	119.0	0.00	0.18	0	None Detected					
2019	Sub-Area 27	SSGM-00115	Lloyd Av	SSMH-0112	SSMH-0113	PP	12	267.0	0.00	0.61	0	None Detected					
2019	Sub-Area 27	SSGM-00122	Lloyd Av	SSMH-0113	SSMH-0114	RCP	18	46.0	0.00	0.16	0	None Detected					
2019	Sub-Area 27	SSGM-00116	Lloyd Ave	SSMH-1548	SSMH-0159	VCP	8	196.0	0.00	0.30	0	None Detected					
2019	Sub-Area 27	SSGM-00117	Lloyd Ave	SSMH-1549	SSMH-0112	VCP	12	22.0	0.00	0.05	0	None Detected					
2019	Sub-Area 27	SSGM-00135	Lloyd Ave	SSMH-0159	SSMH-1549	VCP	8	154.0	0.00	0.23	0	None Detected					
2019	Sub-Area 27	SSGM-07209	Lloyd Ave	SSFT-0023	SSFT-0002	VCP	8	6.0	N/A	0.01	N/A	N/A					Unable to locate this line section on maps
2019	Sub-Area 27	SSGM-07210	Lloyd Ave	SSFT-0002	SSMH-1548	PP	8	85.0	0.00	0.13	0	None Detected					
2019	Sub-Area 27	SSGM-03721	Lloyd St	SSMH-5566	SSMH-0114	VCP	15	19.0	0.00	0.05	0	None Detected					
2019	Sub-Area 27	SSGM-04177	Slemons Rd	SSMH-1016	SSMH-1015	VCP	8	204.0	0.70	0.31	3,261	Infiltration < 4,000					
2019	Sub-Area 27	SSGM-00118	Tamarlane	SSMH-0131	SSMH-0130	PVC	8	188.0	*	0.28	*	N/A					Could not locate SSMH-0131
2019	Sub-Area 27	SSGM-00119	Tamarlane	SSMH-4428	SSMH-0130	PVC	8	242.0	*	0.37	*	N/A					Could not locate SSMH-4428 or SSMH-0130
2019	Sub-Area 27	SSGM-00120	Tamarlane	SSMH-0130	SSMH-4426	PVC	8	242.0	*	0.37	*	N/A					SSMH-4426 is paved over
2019	Sub-Area 27	SSGM-00121	Tamarlane	SSMH-4426	SSMH-4427	PVC	8	304.0	3.10	0.46	9,692	Infiltration > 4,000					
2019	Sub-Area 27	SSGM-03720	Tamarlane	SSMH-4427	SSMH-5565	PVC	8	295.0	1.20	0.45	3,866	Infiltration < 4,000					
2019	Sub-Area 27	SSGM-03758	Tamarlane	SSMH-5565	SSMH-5566	PVC	8	286.0	3.40	0.43	11,298	Infiltration > 4,000					
2019	Sub-Area 27	SSGM-04189	Tamarlane	SSMH-5665	SSMH-5664	PVC	8	192.0	N/A	0.29	N/A	N/A					Could not locate line section
2019	Sub-Area 27	SSGM-04190	Tamarlane	SSMH-1484	SSMH-5665	PVC	8	150.0	N/A	0.23	N/A	N/A					Could not locate line section
2019	Sub-Area 27	SSGM-04191	Tamarlane	SSMH-5664	SSMH-5666	PVC	8	298.0	N/A	0.45	N/A	N/A					Could not locate line section
2019	Sub-Area 27	SSGM-04164	Vera St	SSMH-6188	SSMH-3372	PVC	8	71.0	0.00	0.11	0	None Detected					
2019	Sub-Area 27	SSGM-04165	Vera St	SSMH-3372	SSMH-3373	VCP	8	59.0	0.00	0.09	0	None Detected					
2019	Sub-Area 27	SSGM-04167	Vera St	SSMH-3374	SSMH-1549	VCP	8	214.0	0.00	0.32	0	None Detected					
2019	Sub-Area 27	SSGM-04168	Vera St	SSMH-3375	SSMH-3374	VCP	8	49.0	0.00	0.07	0	None Detected					
2019	Sub-Area 27	SSGM-04169	Vera St	SSMH-3373	SSMH-3375	VCP	8	346.0	0.00	0.52	0	None Detected					
2019	Sub-Area 27	SSGM-00114	Victor Rd	SSMH-0158	SSMH-0112	RCP	18	36.0	0.00	0.12	0	None Detected					
2019	Sub-Area 27	SSGM-04159	Victor Rd	SSMH-3369	SSMH-1419	RCP	18	153.0	0.00	0.52	0	None Detected					
2019	Sub-Area 27	SSGM-04161	Victor Rd	SSMH-1420	SSMH-3370	VCP	8	154.0	0.00	0.23	0	None Detected					
2019	Sub-Area 27	SSGM-04162	Victor Rd	SSMH-1419	SSMH-3371	RCP	18	78.0	0.00	0.27	0	None Detected					
2019	Sub-Area 27	SSGM-04163	Victor Rd	SSMH-3371	SSMH-0158	PP	12	170.0	0.00	0.39	0	None Detected					
2019	Sub-Area 27	SSGM-07608	Victor Rd	SSMH-3370	SSMH-3369	PVC	10	199.0	0.00	0.38	0	None Detected					
2019	Sub-Area 27	SSGM-03898	Washington Ave	SSMH-5562	SSMH-3296	VCP	10	221.0	N/A	0.42	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04178	Washington Ave	SSMH-1017	SSMH-0016	VCP	8	86.0	N/A	0.13	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04179	Washington Ave	SSMH-1396	SSMH-1017	VCP	8	311.0	N/A	0.47	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04180	Washington Ave	SSMH-1018	SSMH-3377	VCP	8	365.0	N/A	0.55	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04181	Washington Ave	SSMH-3377	SSMH-5661	VCP	8	257.0	N/A	0.39	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04183	Washington Ave	SSMH-5661	SSMH-3297	VCP	8	238.0	N/A	0.36	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04186	Washington Ave	SSMH-3296	SSMH-5662	VCP	10	244.0	N/A	0.46	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04187	Washington Ave	SSMH-5662	SSMH-5663	VCP	10	240.0	N/A	0.45	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04188	Washington Ave	SSMH-5663	SSMH-2277	VCP	10	50.0	N/A	0.09	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04192	Washington Ave	SSMH-5563	SSMH-5564	VCP	10	95.0	N/A	0.18	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04193	Washington Ave	SSMH-5564	SSMH-5666	VCP	10	45.0	N/A	0.09	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-04194	Washington Ave	SSMH-5666	SSMH-5562	VCP	10	85.0	N/A	0.16	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-06116	Washington Ave	SSMH-1268	SSMH-5563	VCP	10	198.0	N/A	0.38	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-06487	Washington Ave	SSMH-6065	SSMH-1018	VCP	8	192.0	N/A	0.29	N/A	N/A					Unable to complete due to road construction
2019	Sub-Area 27	SSGM-06488	Washington Ave	SSMH-6065	SSMH-0016	VCP	8	43.0	N/A	0.07	N/A	N/A					Unable to complete due to road construction
2018	Sub-Area 28	SSGM-03152	Beverly St	SSMH-0840	SSMH-0193	PVC	8	248.5	0.00	0.38	0	None Detected					
2018	Sub-Area 28	SSGM-03168	Beverly St	SSMH-0193	SSMH-0849	PVC	8	54.5	0.00	0.08	0	None Detected					
2018	Sub-Area 28	SSGM-03169	Beverly St	SSMH-0849	SSMH-5398	PVC	8	85.9	0.00	0.13	0	None Detected					
2018	Sub-Area 28	SSGM-07185	Interceptor Presumpscot North	SSMH-6176	SSMH-6175	VCP	15	171.7	0.00	0.49	0	None Detected					
2018	Sub-Area 28	SSGM-07187	Interceptor Presumpscot North	SSMH-6295	SSMH-6177	VCP	15	121.8	0.80	0.35	3,329	Infiltration < 4,000					
2018	Sub-Area 28	SSGM-03364	Milliken St	SSFT-0235	SSMH-4930	AC	8	133.2	3.00	0.20	21,399	Infiltration > 4,000					
2018	Sub-Area 28	SSGM-03461	Milliken St	SSMH-4930	SSMH-1631	AC	8	141.4	0.00	0.21	0	None Detected					
2018	Sub-Area 28	SSGM-03151	Milton St	SSMH-0839	SSMH-1633	PVC	8	147.8	0.00	0.22	0	None Detected					
2018	Sub-Area 28	SSGM-03209	Milton St	SSMH-1633	SSMH-0193	PVC	8	134.0	1.00	0.20	7,091	Infiltration > 4,000					Light sewage
2018	Sub-Area 28	SSGM-03429	Milton St	SSMH-6723	SSMH-0839	PVC	8	216.6	0.00	0.33	0	None Detected					
2018	Sub-Area 28	SSGM-07842	Milton St	SSMH-3117	SSMH-6723	PVC	8	271.5	0.00	0.41	0	None Detected					
2018	Sub-Area 28	SSGM-03170	Off Beverly St	SSMH-5398	SSMH-1632	PVC	8	48.4	0.00	0.07	0	None Detected	3	SSMH-1632			Multiple wall leaks - See Photos#0431, 0432
2018	Sub-Area 28	SSGM-03138	Rice St	SSMH-3000	SSMH-6301	AC	12	320.3	0.20	0.73	396	Infiltration < 4,000					
2018	Sub-Area 28	SSGM-03124	Riverside Industrial Pkwy	SSMH-5390	SSMH-5389	VCP	10	275.5	0.00	0.52	0	None Detected					
2018	Sub-Area 28	SSGM-03125	Riverside Industrial Pkwy	SSMH-2993	SSMH-4931	VCP	12	204.2	0.00	0.46	0	None Detected					
2018	Sub-Area 28	SSGM-03127	Riverside Industrial Pkwy	SSMH-6282	SSMH-2997	VCP	10	274.1	1.50	0.52	4,161	Infiltration > 4,000					
2018	Sub-Area 28	SSGM-03132	Riverside Industrial Pkwy	SSMH-5389	SSMH-2999	VCP	10	271.8	0.20	0.51	559	Infiltration < 4,000					

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Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2018	Sub-Area 28	SSGM-03133	Riverside Industrial Pkwy	SSMH-2999	SSMH-6282	VCP	10	179.1	0.00	0.34	0	None Detected					
2018	Sub-Area 28	SSGM-03137	Riverside Industrial Pkwy	SSMH-2997	SSMH-6301	VCP	12	238.1	0.40	0.54	1,065	Infiltration < 4,000					
2018	Sub-Area 28	SSGM-03139	Riverside Industrial Pkwy	SSMH-6301	SSMH-6302	VCP	12	37.6	0.00	0.09	0	None Detected					
2018	Sub-Area 28	SSGM-03140	Riverside Industrial Pkwy	SSMH-6302	SSMH-6283	VCP	12	281.1	0.00	0.64	0	None Detected					
2018	Sub-Area 28	SSGM-07184	Riverside Industrial Pkwy	SSMH-6175	SSMH-6295	VCP	15	128.6	0.00	0.37	0	None Detected					
2018	Sub-Area 28	SSGM-07186	Riverside Industrial Pkwy	SSMH-6283	SSMH-6176	VCP	10	269.0	1.60	0.51	4,522	Infiltration > 4,000					Crushed pipe approximately 10' upstream, unable to get photo due to fog
2018	Sub-Area 28	SSGM-03067	Riverside St	SSMH-0831	SSMH-0194	AC	10	197.2	0.00	0.37	0	None Detected					
2018	Sub-Area 28	SSGM-03109	Riverside St	SSMH-0833	SSMH-2981	AC	15	180.5	0.00	0.51	0	None Detected					
2018	Sub-Area 28	SSGM-03110	Riverside St	SSMH-2981	SSMH-0834	AC	15	197.2	0.00	0.56	0	None Detected					
2018	Sub-Area 28	SSGM-03118	Riverside St	SSMH-0834	SSMH-0837	AC	15	201.1	1.70	0.57	4,284	Infiltration > 4,000					
2018	Sub-Area 28	SSGM-03135	Riverside St	SSMH-0194	SSMH-6287	AC	10	133.1	0.00	0.25	0	None Detected					
2019	Sub-Area 30	SSGM-00039	Arundel Rd	SSMH-0077	SSMH-0078	VCP	8	245.0	0.50	0.37	1,940	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-00053	Berkshire Rd	SSMH-1406	SSFT-0017	VCP	8	120.0	0.10	0.18	792	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-00054	Berkshire Rd	SSFT-0017	SSMH-1405	VCP	12	30.0	0.00	0.07	0	None Detected					
2019	Sub-Area 30	SSGM-03953	E Kidder St	SSMH-4400	SSMH-3314	VCP	8	97.0	0.10	0.15	980	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-03954	E Kidder St	SSMH-3314	SSMH-4398	VCP	8	110.0	0.00	0.17	0	None Detected					
2019	Sub-Area 30	SSGM-03940	Grafton St	SSMH-0054	SSMH-0055	VCP	8	244.0	0.75	0.37	2,921	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-00048	Inverness St	SSMH-1402	SSMH-0070	VCP	8	175.0	0.75	0.27	4,073	Infiltration > 4,000					
2019	Sub-Area 30	SSGM-00049	Inverness St	SSMH-0070	SSMH-0071	VCP	8	176.0	1.10	0.27	5,940	Infiltration > 4,000					
2019	Sub-Area 30	SSGM-00050	Inverness St	SSMH-0071	SSMH-0083	VCP	8	127.0	0.00	0.19	0	None Detected					
2019	Sub-Area 30	SSGM-04136	Inverness St	SSMH-1013	SSMH-1402	VCP	8	40.0	0.00	0.06	0	None Detected					
2019	Sub-Area 30	SSGM-00010	Kidder St	SSMH-0094	SSMH-4235	VCP	12	37.0	0.00	0.08	0	None Detected					
2019	Sub-Area 30	SSGM-00646	Kidder St	SSMH-4398	SSMH-4397	VCP	8	205.0	0.25	0.31	1,159	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-00648	Kidder St	SSMH-4397	SSMH-4396	VCP	8	204.0	0.00	0.31	0	None Detected					
2019	Sub-Area 30	SSGM-03949	Kidder St	SSMH-0040	SSMH-0094	PVC	8	270.0	0.25	0.41	880	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-03950	Kidder St	SSMH-4396	SSMH-0040	PVC	8	286.0	0.25	0.43	831	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-06055	Kidder St	SSMH-0011	SSMH-4401	PVC	8	152.0	0.00	0.23	0	None Detected					
2019	Sub-Area 30	SSGM-06056	Kidder St	SSMH-0019	SSMH-0011	PVC	8	127.0	0.00	0.19	0	None Detected					
2019	Sub-Area 30	SSGM-06689	Kidder St	SSMH-4401	SSMH-4400	VCP	18	171.0	0.00	0.58	0	None Detected					
2019	Sub-Area 30	SSGM-04139	Oakley St	SSMH-5657	SSMH-5656			21.0	0.00	0.00	0	None Detected					
2019	Sub-Area 30	SSGM-06022	Ocean Ave	SSMH-0014	SSMH-3899		8	55.0	0.00	0.08	0	None Detected					
2019	Sub-Area 30	SSGM-06693	Ocean Ave	SSMH-3899	SSMH-0008	RCP	8	141.0	0.00	0.21	0	None Detected					
2019	Sub-Area 30	SSGM-06694	Ocean Ave	SSMH-0008	SSMH-0007	RCP	10	197.0	0.00	0.37	0	None Detected			2.6	SSMH-0007	Service from East
2019	Sub-Area 30	SSGM-06853	Ocean Ave	SSMH-0005	SSMH-0039	VCP	8	120.0	0.00	0.18	0	None Detected					
2019	Sub-Area 30	SSGM-06854	Ocean Ave	SSMH-0004	SSMH-0005	VCP	10	134.0	0.00	0.25	0	None Detected					
2019	Sub-Area 30	SSGM-06856	Ocean Ave	SSMH-0007	SSMH-0004	VCP	10	142.0	0.00	0.27	0	None Detected					
2019	Sub-Area 30	SSGM-06859	Ocean Ave	SSMH-0001	SSMH-0014	RCP	8	213.0	0.00	0.32	0	None Detected					
2019	Sub-Area 30	SSGM-06860	Ocean Ave	SSMH-0062	SSMH-0001	RCP	8	225.0	7.10	0.34	29,990	Infiltration > 4,000					
2019	Sub-Area 30	SSGM-06861	Ocean Ave	SSMH-3898	SSMH-0001		8	41.0	0.00	0.06	0	None Detected					
2019	Sub-Area 30	SSGM-06862	Ocean Ave	SSMH-0002	SSMH-0062	RCP	8	235.0	3.80	0.36	15,368	Infiltration > 4,000					
2019	Sub-Area 30	SSGM-06863	Ocean Ave	SSMH-1361	SSMH-0002			148.0	0.00	0.03	0	None Detected					
2019	Sub-Area 30	SSGM-06864	Ocean Ave	SSMH-4126	SSMH-6126		8	50.0	0.00	0.08	0	None Detected					
2019	Sub-Area 30	SSGM-06865	Ocean Ave	SSMH-6126	SSMH-1361		8	218.0	0.00	0.33	0	None Detected					
2019	Sub-Area 30	SSGM-06849	Osprey Ter	SSMH-4128	SSMH-4127		8	170.0	0.00	0.26	0	None Detected					
2019	Sub-Area 30	SSGM-06850	Osprey Ter	SSMH-4129	SSMH-4128		8	99.0	0.00	0.15	0	None Detected					
2019	Sub-Area 30	SSGM-00002	Providence St	SSMH-1395	SSMH-0068	VCP	10	164.0	0.00	0.31	0	None Detected					
2019	Sub-Area 30	SSGM-00051	Providence St	SSMH-4401	SSMH-0009	RCP	18	241.0	3.30	0.82	5,784	Infiltration > 4,000					
2019	Sub-Area 30	SSGM-03937	Providence St	SSMH-0042	SSMH-0067	VCP	10	202.0	0.75	0.38	2,823	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-04005	Providence St	SSMH-1403	SSMH-0025	VCP	8	243.0	0.00	0.37	0	None Detected					
2019	Sub-Area 30	SSGM-06051	Providence St	SSMH-0068	SSMH-0013	VCP	15	104.0	1.70	0.30	8,286	Infiltration > 4,000					
2019	Sub-Area 30	SSGM-06052	Providence St	SSMH-0013	SSMH-4401	VCP	15	109.0	1.30	0.31	6,045	Infiltration > 4,000					
2019	Sub-Area 30	SSGM-06053	Providence St	SSMH-0012	SSMH-1395	VCP	10	141.0	0.40	0.27	2,157	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-06054	Providence St	SSMH-0067	SSMH-0012	VCP	10	229.0	0.95	0.43	3,154	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-06688	Providence St	SSMH-0009	SSMH-0025	RCP	18	238.0	0.00	0.81	0	None Detected					
2019	Sub-Area 30	SSGM-06844	Ridge Rd	SSMH-4120	SSMH-4121		8	89.0	0.00	0.13	0	None Detected					
2019	Sub-Area 30	SSGM-06845	Ridge Rd	SSMH-4121	SSMH-4122		8	177.0	0.00	0.27	0	None Detected					
2019	Sub-Area 30	SSGM-06846	Ridge Rd	SSMH-4122	SSMH-4123		8	94.0	0.00	0.14	0	None Detected					
2019	Sub-Area 30	SSGM-06847	Ridge Rd	SSMH-4124	SSMH-4125		8	233.0	0.00	0.35	0	None Detected					
2019	Sub-Area 30	SSGM-06848	Ridge Rd	SSMH-4125	SSMH-4126		8	285.0	0.00	0.43	0	None Detected					
2019	Sub-Area 30	SSGM-06851	Ridge Rd	SSMH-4127	SSMH-4124		8	123.0	0.00	0.19	0	None Detected					
2019	Sub-Area 30	SSGM-06852	Ridge Rd	SSMH-1360	SSMH-4123		8	162.0	0.00	0.25	0	None Detected					
2019	Sub-Area 30	SSGM-06868	Ridge Rd	SSMH-4123	SSMH-6128		8	96.0	0.00	0.15	0	None Detected					
2019	Sub-Area 30	SSGM-06869	Ridge Rd	SSMH-6128	SSMH-4127		8	115.0	0.00	0.17	0	None Detected					
2019	Sub-Area 30	SSGM-00033	Savoy St	SSMH-1520	SSMH-1521	VCP	10	199.0	0.00	0.38	0	None Detected					
2019	Sub-Area 30	SSGM-00616	Savoy St	SSMH-4468	SSMH-1520	VCP	8	225.0	0.00	0.34	0	None Detected					
2019	Sub-Area 30	SSGM-06062	Savoy St	SSMH-1521	SSMH-3908	VCP	12	199.0	0.00	0.45	0	None Detected					
2019	Sub-Area 30	SSGM-04135	Sherwood St	SSMH-0020	SSMH-0021	VCP	10	200.0	0.00	0.38	0	None Detected					

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City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Flow Isolation Results

Year	Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Material	Diameter (in)	Estimated Length (ft)	Flow (GPM)	IDM	GPDIM	Infiltration Category	Manhole Infiltration	Infiltration Manhole ID	Service Infiltration	Service Infiltration Manhole ID	Comments
2019	Sub-Area 30	SSGM-04141	Sherwood St	SSMH-0021	SSMH-5656	VCP	10	199.0	0.00	0.38	0	None Detected					
2019	Sub-Area 30	SSGM-04007	St Jude St	SSMH-0069	SSMH-0024	VCP	8	224.0	0.30	0.34	1,273	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-04008	St Jude St	SSMH-0024	SSMH-1411	VCP	10	226.0	0.70	0.43	2,355	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-03941	W Kidder St	SSMH-4235	SSMH-3310	PVC	14	173.0	0.00	0.46	0	None Detected					
2019	Sub-Area 30	SSGM-03942	W Kidder St	SSMH-3310	SSMH-4234	VCP	12	128.0	0.00	0.29	0	None Detected					
2019	Sub-Area 30	SSGM-00043	Washington Ave	SSMH-4395	SSMH-4232	VCP	8	350.0	0.00	0.53	0	None Detected			0.3	SSMH-4232	Northern line from Morse Street
2019	Sub-Area 30	SSGM-00045	Washington Ave	SSMH-4232	SSMH-0094	VCP	12	250.0	1.00	0.57	2,534	Infiltration < 4,000					
2019	Sub-Area 30	SSGM-03936	Washington Ave	SSMH-0043	SSMH-4395	VCP	8	332.0	0.00	0.50	0	None Detected	2.1	SSMH-0043			Floor leaks - See Video# 0179
Totals		**1747**						**315,268**					**87.55**	**29**	**118.55**	**39**	**184**

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City of Portland, Maine

Appendix C - CCTV Inspection Results and Rehabilitation Recommendations

Wastewater Collection System

Analysis and Action Plan

June, 2020

Appendix Contents

CCTV INSPECTION RESULTS AND REHABILITATION RECOMMENDATIONS

City of Portland, Maine
Wastewater Collection System Analysis and Action Plan
Pipe Inspection Findings and Rehabilitation Recommedations

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 04	SSGM-03093	EVERGREEN DR	SSMH-2982	SSMH-2983	100.4	PVC	8	1	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 04	SSGM-03094	EVERGREEN DR	SSMH-2983	SSMH-0489	102.0	PVC	8	1	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 04	SSGM-00243	INDUSTRIAL WAY	SSMH-1454	SSMH-1453	113.1	PVC	10	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 04	SSGM-03054	INDUSTRIAL WAY	SSMH-1452	SSMH-5372	117.4	PVC	10	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 04	SSGM-03057	INDUSTRIAL WAY	SSMH-5374	SSMH-5373	86.2	PVC	10	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 04	SSGM-03058	INDUSTRIAL WAY	SSMH-1453	SSMH-5375	110.9	PVC	10	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 05	SSGM-01536	GEORGIA ST	SSMH-2395	SSMH-2394	191.0	PVC	8	6	Deposits settled fine(175.8')	COMPLETE	2100	0	2100	1	0										X		Debris
SUB-AREA 05	SSGM-01537	GEORGIA ST	SSMH-2394	SSMH-2396	103.0	VC	8	1	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 05	SSGM-01741	LAMBERT ST	SSMH-2396	SSMH-5010	159.3	PVC	8	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 05	SSGM-00870	LESTER DR	SSMH-1605	SSMH-1606	306.6	AC	8	7	Deposits settled fine(295.2')	COMPLETE	2100	0	2100	1	0										X		Debris
SUB-AREA 05	SSGM-00871	LESTER DR	SSMH-1606	SSMH-1607	314.0	AC	8	5	Deposits attached encrustation (264.0', 276.8'), obstruction rocks (185.6')	COMPLETE	2300	0	2300	1	0										X		Debris
SUB-AREA 05	SSGM-00872	LESTER DR	SSMH-1607	SSMH-1608	301.5	AC	8	7	Deposits attached encrustation (235.8'), intruding sealing material (274.8')	COMPLETE	2200	0	2200	1	144										X		
SUB-AREA 05	SSGM-01677	PALMER AVE NORTH	SSMH-2458	SSMH-5034	124.7	PVC	8	2	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 05	SSGM-01678	PALMER AVE NORTH	SSMH-5035	SSMH-5034	96.6	PVC	8	2	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 05	SSGM-01679	PALMER AVE NORTH	SSMH-5036	SSMH-5035	192.1	PVC	8	4	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 05	SSGM-03122	RIVERSIDE INDUSTRIAL PKWY	SSMH-5387	SSMH-2491	277.2	VC	10	2	Infiltration Stain Joint(121.5')	COMPLETE	1100	0	1100	1	144							2		X			
SUB-AREA 05	SSGM-03123	RIVERSIDE INDUSTRIAL PKWY	SSMH-5388	SSMH-5387	21.2	VC	10	0	Deposits Settled Fine (4.8'), Survey Survey Abandoned - Debris (21.2'), Downstream Manhole Buried	Needs Cleaning	2200	0	2200	2	0										X		Debris
SUB-AREA 05	SSGM-01764	RIVERSIDE ST	SSMH-5043	SSMH-2489	54.6	AC	12	2	Deposits attached Ragging (4.0')	COMPLETE	2100	0	2100	1	0												
SUB-AREA 05	SSGM-01765	RIVERSIDE ST	SSMH-2489	SSMH-2490	109.8	AC	18	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 05	SSGM-03183	RIVERSIDE ST	SSMH-2490	SSMH-0847	154.3	AC	18	0	Deposits settled fine(3.4')	COMPLETE	2100	0	2100	1	0										X		Debris
SUB-AREA 05	SSGM-03184	RIVERSIDE ST	SSMH-0847	SSMH-2491	150.9	AC	18	1	Material Change to AC (0.4)	COMPLETE	0	0	0	0	0												
SUB-AREA 05	SSGM-01584	WASHINGTON AVE	SSMH-2417	SSMH-5004	90.2	AC	18	0	Deposits Settled Fine(70.4')	COMPLETE	2100	0	2100	1	0										X		Debris
SUB-AREA 05	SSGM-01588	WASHINGTON AVE	SSMH-5004	SSMH-2421	111.5	AC	18	2	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 06	SSGM-01619	ALPINE RD	SSMH-0157	SSMH-2433	241.1	VC	12	7	Infiltration Runner Connection(128.9', 207.9'), Infiltration Stain Connection(222.0'), Infiltration Weeper Connection(130.8', 210.2'), Fracture Longitudinal(222.6'), Fracture Circumferential(81.0'), Infiltration Stain Barrel(51.3'), Infiltration Dripper Connection(92.5')	COMPLETE	4231	3121	4232	4	10,656					X		7					
SUB-AREA 06	SSGM-01620	ALPINE RD	SSMH-2433	SSMH-0185	235.2	AC	12	5	Crack Longitudinal(6.6'), Infiltration Stain Joint(19.9', 24.7', 36.1'), Crack Multiple(232.6')	COMPLETE	1300	3121	3121	3	720			1	232.5(2)	X		5					
SUB-AREA 06	SSGM-01621	ALPINE RD	SSMH-0185	SSMH-2434	258.4	PE	12	6	Material change VCP(139.7'), Infiltration Stain Joint(141.9', 155.4'), Fracture Longitudinal(193.4, 193.9'), Crack Longitudinal(142.5')	COMPLETE	1200	4231	4231	4	720					X		6					
SUB-AREA 06	SSGM-01622	ALPINE RD	SSMH-2434	SSMH-6493	229.1	VC	12	2	Material change PVC(70.7', 219.2'), Material change VCP(76.5'), Broken Pipe(139.2'),	COMPLETE	0	5100	5100	3	144			4	88.7, 144.2, 195.7, 214.2		1					CIPSR 136'-142'	
SUB-AREA 06	SSGM-07475	ALPINE RD	SSMH-6493	SSMH-6492	137.7	PE	12	3	Broken Pipe(54.0'), Infiltration Runner Joint(54.0'), Water Level Sag(113.9')	COMPLETE	4100	5100	5141	5	3,744						1					CIPSR 51'-57'	
SUB-AREA 06	SSGM-00652	AUBURN ST	SSMH-4254	SSMH-4255	187.3	VC	12	5	Joint Offset Medium(3.1', 20.2', 181.2')	COMPLETE	0	3300	3300	2	432												
SUB-AREA 06	SSGM-00653	AUBURN ST	SSMH-4255	SSMH-4256	192.7	VC	12	3	Joint Offset Medium(6.0', 14.0', 83.8', 117.2'), Water level Sag(12.4'), Change in water level(53.7', 62.8')	COMPLETE	0	3400	3400	2	576												
SUB-AREA 06	SSGM-00681	AUBURN ST	SSMH-4505	SSMH-4507	179.7	RCP	30	3	Deposits Attached Grease(0.0', 179.7'), Deposits Settled Gravel(170.5', 179.7'), Roots Fine Joint(78.9')	COMPLETE	3411	0	3411	3	144								X			Debris, Roots, and Grease
SUB-AREA 06	SSGM-01458	AUBURN ST	SSMH-4507	SSMH-4508	156.5	RCP	30	1	Deposits Attached Grease(102.4', 156.5')	COMPLETE	3200	0	3200	3	0										X		Grease
SUB-AREA 06	SSGM-01475	AUBURN ST	SSMH-4510	SSMH-4511	171.1	RCP	30	1	Infiltration Stain(17.5', 21.0', 23.8'(2), 163.2', 164.1')	COMPLETE	1500	0	1500	1	864					X		1					
SUB-AREA 06	SSGM-01930	AUBURN ST	SSMH-5015	SSMH-0618	219.5	RCP	30	2	Deposits Settled Gravel(137.5'), Intruding Sealing Material Grout(89.9', 213.8'), Infiltration Gusher Joint(209.9')	COMPLETE	5121	2200	5123	5	7,488			1	90		1	2		X		CIPSR 207' - 213'	Debris
SUB-AREA 06	SSGM-01931	AUBURN ST	SSMH-0618	SSMH-4505	201.3	RCP	30	2	Deposits Settled Gravel(29.4'), General Observation - Pump station kicked on(186.9')/ Deposits Attached Grease(15.7', 24.3')	COMPLETE	2300	0	2300	2	0										X		Debris and Grease
SUB-AREA 06	SSGM-01932	AUBURN ST	SSMH-4508	SSMH-0619	181.8	RCP	30	1	Deposits Attached Grease(0.4', 181.7')	COMPLETE	3200	0	3200	3	0										X		Grease
SUB-AREA 06	SSGM-01933	AUBURN ST	SSMH-0619	SSMH-0620	48.3	RCP	30	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 06	SSGM-01934	AUBURN ST	SSMH-0620	SSMH-4509	216.7	RCP	30	1	Defective Lateral(168.9')	COMPLETE	0	2100	2100	2	144				38								
SUB-AREA 06	SSGM-01936	AUBURN ST	SSMH-4509	SSMH-5100	257.3	RCP	30	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 06	SSGM-01937	AUBURN ST	SSMH-5100	SSMH-4510	83.5	RCP	30	2	Infiltration Stain(80.1')	COMPLETE	1100	0	1100	1	144												
SUB-AREA 06	SSGM-01938	AUBURN ST	SSMH-4511	SSMH-0160	159.0	RCP	30	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 06	SSGM-01939	AUBURN ST	SSMH-0160	SSMH-0161	148.7	RCP	30	2	No significant defects	COMPLETE	0	0	0	0	0				131								
SUB-AREA 06	SSGM-01469	AUBURN TER	SSMH-1604	SSMH-1602	165.6	AC	8	0	Change in water level(19.0', 45.4', 66.2', 80.4', 116.4', 129.8', 162.3'), Infiltration Weeper Joint(101.0'), Deposits attached Grease(10.0', 24.0', 28.1', 30.6', 89.3'), PVC point repair (89.4'-96.4')	COMPLETE	2115	0	2115	2	720						1					CIPSR 98'-104'	Grease
SUB-AREA 06	SSGM-01949	BROOKFIELD	SSMH-2561	SSMH-0160	198.2	PVC	8	0	Water level Sag(44.6', 60.6', 75.5', 143.1', 153.5', 173.0')	COMPLETE	0	0	0	0	0												
SUB-AREA 06	SSGM-01950	BROOKFIELD	SSMH-1601	SSMH-2561	210.3	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 06	SSGM-01472	CHRISTY RD	SSMH-2333	SSMH-2332	313.2	AC	8	7	Hole(15.1')	COMPLETE	0	5100	5100	3	144						1					CIPSR 12'-18'	
SUB-AREA 06	SSGM-01598	CLAYTON ST	SSMH-0561	SSMH-0562	118.6	VC	8	3	Crack Spiral(43.3'), PVC point repair (63.5'-78.0'), Surface damage surface spalling(103.6')	COMPLETE	0	2111	2111	2	144						1					CIPSR 40'-46'	
SUB-AREA 06	SSGM-01599	CLAYTON ST	SSMH-0562	SSMH-5012	215.1	VC	8	5	Material change PVC(25.3'), Material change VCP(71.0'), Deposits settled fine(76.1', 82.1', 103.9', 107.0'), Roots Fine Joint(110.4', 112.3', 118.9', 121.2', 127.3', 133.6', 142.2', 145.4', 148.4', 151.3', 160.3', 178.6', 178.6', 182.3'), Crack Longitudinal(169.5')	COMPLETE	211A	2100	221A	2	2,160	X				X		5					Debris, and Roots
SUB-AREA 06	SSGM-01600	CLAYTON ST	SSMH-5012	SSMH-5013	158.0	VC	12	4	Roots Fine Joint(4.0', 10.3', 22.4', 28.4', 31.5', 41.4', 41.7', 121.6', 124.7', 127.9', 138.3'), Deposits settled fine(12.7'), Roots Tap Joint(32.4'), Fracture Multiple(144.9'), material change PVC(153.3')	COMPLETE	211A	4100	4121	3	1,872	X				X		4					Debris, and Roots
SUB-AREA 06	SSGM-00866	HILLSIDE RD	SSMH-0175	SSMH-4253	273.0	VC	12	7	Material Change PVC(42.7'), Material change VCP(57.3'), Fracture Spiral(67.1'), Roots Fine Barrel(93.2', 97.6'), Crack Multiple(157.6'), Fracture Multiple(169.6'), Deposits settled ragging(256.3')	COMPLETE	2211	4132	4132	4	720					X		7					Debris, and Roots
SUB-AREA 06	SSGM-07463	HILLSIDE RD	SSMH-4514	SSMH-0175	294.4	PVC	8	10	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 06	SSGM-01607	JACKSON ST	SSMH-5017	SSMH-0186	110.6	VC	8	3	Joint Offset Medium(5.5', 106.5'), Crack Longitudinal(24.9'), Fracture Circumferential(44.3'), Broken pipe void visible(44.3'), Joint Offset Large(86.9')	COMPLETE	0	5141	5141	5	864			1	43		1					CIPSR 41'-47'	
SUB-AREA 06	SSGM-01756	PARSONS POND DR	SSMH-5058	SSMH-5057	152.2	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 06	SSGM-01757	PARSONS POND DR	SSMH-5059	SSMH-5058	201.4	PVC	8	0	Deformed Flexible Elleptical(102.7', 130.5'), Water level Sag(133.9')	COMPLETE	0	3200	3200	2	0												
SUB-AREA 06	SSGM-00864	SUMMIT PARK AVE	SSMH-6486	SSMH-4505	225.4	VC	15	2	Material Change VCP(67.7'), Roots Medium Joint(70.6', 181.8'), Roots Fine Joint(73.7', 85.8', 92.2', 95.2', 101.4', 175.7', 187.7), Fracture Spiral(129.4', 184.8', 205.8'), Fracture Longitudinal(203.0', 218.3'), Infiltration Runner(70.6')	COMPLETE	4132	3500	4137	4	5,616	X		1	62	X		2					Roots
SUB-AREA 06	SSGM-01612	SUMMIT PARK AVE	SSMH-2426	SSMH-6489	247.3	VC	8	3	PVC Stub(0.0'), Material change VCP (8.0', 165.0'), Material Change PVC(148.2'), Joint Offset Large(8.0'), Roots Medium Joint(12.1', 140.6', 180.7'), Roots Fine Joint(15.1', 18.3', 24.3', 27.2', 30.3', 54.1', 81.0', 93.1', 96.0', 102.0', 104.9', 116.7', 119.7', 190.4'), Joint Offset Medium(15.1', 241.8'),	COMPLETE	331A	4131	4132	4	2,880	X		3	48.8, 127.8, 140.3	X		3					Roots
SUB-AREA 06	SSGM-01613	SUMMIT PARK AVE	SSMH-2427	SSMH-2426	230.4	VC	8	7	Roots fine Joint(31.1', 33.4', 50.4', 55.9', 90.8', 204.7', 216.1', 226.7'), Material Change PVC(36.4', 158.3'), Material change VCP(49.8', 170.6'), Roots fine connection(57.5')	COMPLETE	1900	0	1900	1	1,296	X				X		7					Roots
SUB-AREA 06	SSGM-01614	SUMMIT PARK AVE	SSMH-2428	SSMH-6488	120.8	VC	12	1	Crack Spiral(10.6'), Roots fine Joint(58.1', 64.0', 75.5'), Material Change PVC(118.2')	COMPLETE	1300	2100	2113	2	576	X		1	8	X		1					Roots

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine
Wastewater Collection System Analysis and Action Plan
Pipe Inspection Findings and Rehabilitation Recommedations

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 06	SSGM-01615	SUMMIT PARK AVE	SSMH-2429	SSMH-2428	149.5	VC	12	4	Hole Soil Visible(37.2')	COMPLETE	0	5100	5100	3	144						1	4				CIPSR 34'-40'	
SUB-AREA 06	SSGM-01616	SUMMIT PARK AVE	SSMH-2430	SSMH-2429	183.4	VC	12	5	Crack Longitudinal(95.4'), Fracture Circumferential(95.9'), Crack Longitudinal(122.6'), Broken Pipe(158.7'), Material change (173.9')	COMPLETE	0	5122	5122	4	576			1	123	X		5					
SUB-AREA 06	SSGM-01618	SUMMIT PARK AVE	SSMH-2432	SSMH-6491	317.8	VC	8	6	Roots fine connection(115.2'), Water level Sag(243.9'), Material change PVC(314.4')	COMPLETE	1100	0	1100	1	144				7.0, 232.9								Roots
SUB-AREA 06	SSGM-07471	SUMMIT PARK AVE	SSMH-6488	SSMH-6487	82.4	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01438	ABBY LN	SSMH-1611	SSMH-2390	153.4	PVC	8	2	Gushing Infiltration at service (24)	COMPLETE	5100	0	5100	3	7,200								2	X			
SUB-AREA 07	SSGM-01360	ALICE ST	SSMH-0524	SSMH-0522	152.4	AC	8	1	No significant defects, PVC point repair (0-2')	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01361	ALICE ST	SSMH-4521	SSMH-0523	199.2	PVC	8	3	No significant defects, material change ACP(1.4')	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01366	ALICE ST	SSMH-4967	SSMH-0544	186.0	AC	10	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01327	CARON ST	SSMH-4276	SSMH-0525	287.5	AC	8	3	Gushing Infiltration at joint (149), Surface Spalling (0-287.5)	COMPLETE	5100	0	5100	3	7,200						1	3		X		CIPSR 146' to152'	
SUB-AREA 07	SSGM-01362	CARON ST	SSMH-0525	SSMH-0523	138.3	AC	8	2	No significant defects	COMPLETE	0	0	0	0	0				16								
SUB-AREA 07	SSGM-01394	CARON ST	SSMH-0537	SSMH-0536	269.7	AC	8	5	Running Infiltration at service (79), Infiltration stain at joint (42.5, 55, 68, 189, 239)	COMPLETE	4115	0	4115	3	4,320							5		X			
SUB-AREA 07	SSGM-01396	CARON ST	SSMH-0536	SSMH-0535	267.9	AC	8	5	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01332	CARTER ST	SSMH-0538	SSMH-4982	256.6	AC	8	4	Infiltration stain at joint (188-248)	COMPLETE	1100	0	1100	1	2,880							4		X			
SUB-AREA 07	SSGM-01334	CARTER ST	SSMH-4983	SSMH-0538	281.8	AC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01455	CARTER ST	SSMH-0533	SSMH-4971	300.0	AC	12	4	Gushing Infiltration at service (241), Staining at joint (71)	COMPLETE	5111	0	5111	3	7,344							4		X			
SUB-AREA 07	SSGM-01371	CLAPBOARD RD	SSMH-4522	SSMH-4278	114.2	PVC	8	3	Running infiltration at lateral (49.1), Infiltration stain at joint (62.7), Deformed eliptical-10%(86.6), Deformed eliptical-20%(99-107) ,Grease<10%(103-110), Sag in pipe (107-114.2), Fine deposits settled (110), Obstruction in lateral 40%(111.8)	COMPLETE	3112	3200	3312	2	3,744							3			X		Debris and Grease
SUB-AREA 07	SSGM-01525	CLAPBOARD RD	SSMH-0543	SSMH-2385	243.1	PVC	8	2	Running Infiltration at service (41.2), Fracture Longitudinal (142)	COMPLETE	4100	3100	4131	4	3,744						1	2		X		CIPSR 139' to 145'	
SUB-AREA 07	SSGM-01336	CRESTVIEW DR	SSMH-4986	SSMH-4985	281.6	AC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01338	CRESTVIEW DR	SSMH-4987	SSMH-4988	49.7	AC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01451	CRESTVIEW DR	SSMH-4973	SSMH-2384	102.4	AC	12	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01452	CRESTVIEW DR	SSMH-4985	SSMH-0534	296.0	AC	8	4	Running Infiltration at service (195), Surface Spalling (0-282)	COMPLETE	4100	0	4100	2	3,600							4		X			
SUB-AREA 07	SSGM-01457	CRESTVIEW DR	SSMH-4970	SSMH-4967	295.0	AC	8	6	Gushing Infiltration at joint (149)	COMPLETE	5100	0	5100	3	7,200							6		X			
SUB-AREA 07	SSGM-01378	CURTIS RD	SSMH-2377	SSMH-4274	232.5	AC	8	3	Gushing Infiltration at service (6), Mineral Deposits at joint (35)	COMPLETE	5111	0	5111	3	7,344							3		X			
SUB-AREA 07	SSGM-01409	CURTIS RD	SSMH-2375	SSMH-4277	148.2	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01421	CURTIS RD	SSMH-4975	SSMH-4974	250.5	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01387	HOPE LN	SSMH-4214	SSMH-4521	120.3	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01441	PAMELA RD	SSMH-2389	SSMH-2388	232.4	PVC	8	4	Running Infiltration at service (74)	COMPLETE	4100	0	4100	2	3,600							4		X			
SUB-AREA 07	SSGM-01450	PAMELA RD	SSMH-2384	SSMH-2364	233.4	AC	12	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 07	SSGM-01424	WENDY WAY	SSMH-4978	SSMH-4974	213.0	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-01874	ALLEN AVE	SSMH-2522	SSMH-2521	298.2	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0				64								
SUB-AREA 08	SSGM-01876	ALLEN AVE	SSMH-2524	SSMH-5091	157.9	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-01886	ALLEN AVE	SSMH-5032	SSMH-2533	357.0	AC	15	3	Infiltration Gusher Joint(54.3'), Infiltration Stain Lateral(197.5')	COMPLETE	5111	0	5111	3	7,344			2	267.7, 289.8	X		3					
SUB-AREA 08	SSGM-03699	ALLEN AVE	SSMH-2523	SSMH-3236	196.0	PVC	8	3	Tap Saddle(126.1')	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-04199	ALLEN AVE	SSMH-2533	SSMH-3379	190.5	AC	15	2	Deposits attached Encrustation at service location(101.5'), Tap Factory made defective(117.0')	COMPLETE	2100	3100	3121	3	288				110						X		
SUB-AREA 08	SSGM-01530	CURTIS RD	SSMH-2391	SSMH-4218	224.7	AC	18	0	Deposits Settled Gravel(76.8', 89.3', 107.5', 142.7',)	COMPLETE	2400	0	2400	2	0										X		Debris
SUB-AREA 08	SSGM-01531	CURTIS RD	SSMH-4218	SSMH-4219	325.0	AC	18	0	Deposits attached Encrustation(208.5', 215.6'), Deposits attached Grease(281.2')	COMPLETE	2300	0	2300	1	288										X		Grease
SUB-AREA 08	SSGM-01532	CURTIS RD	SSMH-4219	SSMH-2393	167.3	AC	18	0	Deposit attached Grease(144.5'), Deposits settled Gravel(15.6', 47.7', 91.8', 106.0', 167.3'), Survey abandoned - Gravel (167.3')	Needs Cleaning	3600	0	3600	3	0												Debris and Grease
SUB-AREA 08	SSGM-03767	JERSEY AV	SSMH-1554	SSMH-5557	269.1	AC	8	4	Deposits settled gravel(264.1'), Broken pipe Void Visible(136.4')	COMPLETE	2100	5100	5121	4	144						1				X	CIPSR 133'-139'	Debris
SUB-AREA 08	SSGM-00085	JERSEY AVE	SSMH-1555	SSMH-1554	293.6	AC	8	10	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-03739	KANSAS AVE	SSMH-5570	SSMH-0951	45.5	AC	18	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-03740	KANSAS AVE/ ALLEN AVE XC	SSMH-3234	SSMH-5570	58.7	AC	18	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-01879	MEADOW LN	SSMH-2527	SSMH-2528	148.6	AC	8	1	Deposits attached ragging(145.4', 147.2')	COMPLETE	2200	0	2200	1	0			1	119								
SUB-AREA 08	SSGM-03691	MONTANA ST / KANSAS AVE XC	SSMH-0951	SSMH-0950	242.8	AC	18	2	Deposits Settled Gravel(49.2', 71.0')	COMPLETE	2200	0	2200	2	0										X		Debris
SUB-AREA 08	SSGM-04198	MONTANA ST/ KANSAS AVE XC	SSMH-0950	SSMH-3378	72.7	AC	18	0	Obstacles Rock(35.5', 51.6', 64.0', 72.7'), infiltration Dripper Joint(72.7'), survey abandoned - Rocks (72.2'), Drop Connection at downstream manhole.	Cannot Complete	3124	0	3124	3	1,440						X				X		Debris
SUB-AREA 08	SSGM-04197	MONTANA ST/ PENN AVE	SSMH-3378	SSMH-0953	245.3	AC	18	0	Infiltration Runner Joint(66.0')	COMPLETE	4100	0	4100	4	3,600						X						
SUB-AREA 08	SSGM-03694	NEVADA AVE	SSMH-1556	SSMH-0954	367.1	AC	8	6	Point Repair Patch - Patched Hole (54.3'), Broken Pipe Soil Visible(232.6'), Fracture Spiral(225.7'), Water level Sag(169.3'), Roots Ball Joint(300.9'), Roots fine Joint(271.3', 273.8', 275.4', 279.0', 283.6'), Roots Medium Joint(281.2', 283.9', 288.6', 298.9'), Infiltration from broken service line (179.1'), Survey abandoned - Roots (367.1'), Upstream manhole not located.	Needs Cleaning	4234	5131	5142	5	1,872	X	X				X		6				Roots
SUB-AREA 08	SSGM-03696	NEVADA AVE	SSMH-5555	SSMH-5556	0.0				Cross Country Pipe Segment, Cannot Access Manholes	Cannot Access	N/A	N/A	N/A	N/A	0												
SUB-AREA 08	SSGM-01632	OLDE BIRCH LN	SSMH-5020	SSMH-5021	161.5	PVC	8	2	Grease(63.0', 63.7', 65.5'), Infiltration Gusher Joint(125.2')	COMPLETE	5123	0	5123	4	7,200							2	X	X			Grease
SUB-AREA 08	SSGM-01670	PINELOCH DR	SSMH-5023	SSMH-5033	217.0	AC	18	0	Crack Longitudinal(150.8'), Deposits Settled Gravel(3.0', 11.1')	COMPLETE	2200	2100	2300	2	144					X					X		Debris
SUB-AREA 08	SSGM-01671	PINELOCH DR	SSMH-5033	SSMH-0187	238.7	AC	18	0	Deposits Settled Gravel(111.3')	COMPLETE	2100	0	2100	2	0										X		Debris
SUB-AREA 08	SSGM-03688	RACINE AVE	SSMH-3232	SSMH-4414	184.4	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-03698	RACINE AVE	SSMH-3236	SSMH-5560	252.0	PVC	8	1	Deposits settled rock(51.8)	COMPLETE	2100	0	2100	1	0			2	65.4, 191.5								Debris
SUB-AREA 08	SSGM-01533	ROARING BROOK RD	SSMH-2393	SSMH-2392	20.1	AC	18	0	Survey abandoned due to rock (20.0'), not enough vactor hose to clean	Needs Cleaning	2100	0	2100	2	0										X		Debris
SUB-AREA 08	SSGM-01663	ROARING BROOK RD	SSMH-5027	SSMH-0574	62.2	AC	18	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-01668	ROARING BROOK RD	SSMH-0574	SSMH-5031	148.9	AC	18	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-01747	ROARING BROOK RD	SSMH-2392	SSMH-5022	326.6	AC	18	0	Deposits Encrustation (324.3')	COMPLETE	2100	0	2100	2	144										X		
SUB-AREA 08	SSGM-01634	ROARING BROOK RD / CURTIS RD XC	SSMH-5022	SSMH-5023	336.6	AC	18	0	Deposits Settled Gravel(23.9', 156.4', 229.9', 243.9'), Roots Medium Barrel(333.5')	COMPLETE	3500	0	3500	3	144	X											Debris, and Roots
SUB-AREA 08	SSGM-01662	ROARING BROOK RD / PINELOCH DR XC	SSMH-0187	SSMH-5027	265.0	AC	18	0	Grease (254.0' - 261.4')	COMPLETE	3500	0	3500	3	0										X		Grease
SUB-AREA 08	SSGM-01669	ROARING BROOK RD/ ALLEN AVE	SSMH-5031	SSMH-5032	16.8	AC	18	0	Survey abandoned due to debris settled underwater (16.8')	COMPLETE	2100	0	2100	1	0										X		Debris
SUB-AREA 08	SSGM-03692	VIRGINIA CARTER INTERCEPTOR	SSMH-0953	SSMH-0952	253.6	AC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-04202	VIRGINIA CARTER INTERCEPTOR	SSMH-3380	SSMH-3381	0.0				Drop connection at downstream manhole, Cannot Access Upstream Manhole	Cannot Complete	N/A	N/A	N/A	N/A	0												
SUB-AREA 08	SSGM-06303	VIRGINIA CARTER INTERCEPTOR	SSMH-3381	SSMH-6030	0.0				Cross Country Pipe Segment, Cannot Access Manholes	Cannot Access	N/A	N/A	N/A	N/A	0												
SUB-AREA 08	SSGM-06305	VIRGINIA CARTER INTERCEPTOR	SSMH-1293	SSMH-3235	296.3	AC	15	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-03689	VIRGINIA CARTER INTERCEPTOR/ ALLEN AVE XC	SSMH-3235	SSMH-3234	300.5	AC	18	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 08	SSGM-06304	VIRGINIA CARTER INTERCEPTOR/ ALLEN AVE XC	SSMH-6030	SSMH-1293	262.0	AC	15	0	Deposits Settled Gravel(208.8', 217.0')	COMPLETE	2200	0	2200	2	0										X		Debris
SUB-AREA 08	SSGM-04201	VIRGINIA CARTER INTERCEPTOR/ CROSS COUNTRY	SSMH-3379	SSMH-3380	235.4	AC	15	0	Surface damage 139.0'	COMPLETE	0	1100	1100	1	0												
SUB-AREA 08	SSGM-03771	VIRGINIA ST	SSMH-5557	SSMH-0954	252.2	VC	10	4	Joint Offset Medium(216.6'), Debris at joint(189.2')	COMPLETE	2100	3100	3121	3	144						1				X	CIPSR 186'-192'	Debris
SUB-AREA 08	SSGM-06270	VIRGINIA ST	SSMH-6017	SSMH-6686	250.4	VC	8	8	Broken Pipe(78.7', 109.9'), Crack Circumferential(118.2'), Hole Void Visible(230.4), Material change AC(231.2'), Roots Ball Lateral(91.6'), Roots fine Joint(89.7', 94.7')	COMPLETE	4112	5111	5141	5	1,008						X		8				Roots
SUB-AREA 08	SSGM-06684	VIRGINIA ST	SSMH-5558	SSMH-4077	227.9	VC	10	4	Deposits settled Gravel(217.5', 223.9'), Obstruction Tar(193.8')	COMPLETE	2300	0	2300	1	0			1	28						X	Remove obstruction at 194'	Debris
SUB-AREA 08	SSGM-07056	VIRGINIA ST	SSMH-6161	SSMH-5558	214.2	VC	8	1	Broken pipe (94.6'), Deposits attached ragging(169.2'), deposits settled tar(46.0'), Infiltration Stain Joint(75.5', 186.3', 192.4'), Material change concrete lined corrugated metal(103.4'), Material change VCP(117.2') / Deposits settled tar(23.3'), Material change VCP(1.7')	COMPLETE	2313	5100	5123	4	576			3	48.4, 170.2, 188.6	X		1					Debris

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Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 08	SSGM-07793	VIRGINIA ST	SSMH-6686	SSMH-5569	239.4	VC	8	8	Crack Longitudinal(10.0', 27.3', 42.7', 58.3'), Joint Seperated Medium(89.9'), Joint Offset Large(235.7'), Fracture Longitudinal Hinge 4 (211.0', 231.3'), Broken Pipe(147.3'), Broken pipe Void Visible(212.8'), Crack Circumferential(202.6'), Hole Void Visible(213.0'), Material Change PVC(233.7'), Deposits attached Encrustation(79.6', 82.2', 164.1')	COMPLETE	2300	5343	5343	5	3,024					X		8			X		
SUB-AREA 09	SSGM-00083	APPLE LEDGE DR	SSMH-4481	SSMH-4480	94.0	PVC	8	2	Water level sags 6-21, 28-38, 64-81	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03711	APPLE LEDGE DR	SSMH-4480	SSMH-0955	241.2	PVC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03712	APPLE LEDGE DR	SSMH-0955	SSMH-4479	301.1	PVC	8	0	Water level sag 182-195, 208-235, 291-298	COMPLETE	0	2900	2900	1	0												
SUB-AREA 09	SSGM-03713	APPLE LEDGE DR	SSMH-0956	SSMH-4481	176.7	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03705	COPLEY WOODS CIR	SSMH-3243	SSMH-3242	241.5	PVC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03706	COPLEY WOODS CIR	SSMH-3244	SSMH-3243	137.7	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03819	COPLEY WOODS CIR	SSMH-3242	SSMH-5590	124.6	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-06288	COPLEY WOODS CIR	SSMH-3982	SSMH-3244	164.7	PVC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-04650	DAGGETT ST	SSMH-5753	SSMH-0977	234.2	PVC	8	2	VC Point Repair (232.5-233.5) with Gushing infiltration at joint.	COMPLETE	5100	0	5100	3	7,200						1					CIPSR 231'-234'	
SUB-AREA 09	SSGM-04651	DAGGETT ST	SSMH-5754	SSMH-5753	195.6	PVC	8	7	Running infiltration at service (129)	COMPLETE	4100	0	4100	2	3,600							7					
SUB-AREA 09	SSGM-08052	DAGGETT ST	SSFT-0546	SSMH-5754	2.0	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03703	DEMEREST ST	SSMH-3240	SSMH-3241	208.0	PVC	8	6	Water Level Sag 191-201	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03709	DEMEREST ST	SSMH-4479	SSMH-3249	151.5	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-07130	DEMEREST ST	SSMH-4197	SSMH-3240	165.4	PVC	8	5	Joints seperated small (135, 145), Roots fine service (106)	COMPLETE	1100	0	1100	1	432												Roots
SUB-AREA 09	SSGM-01253	HUMBOLDT ST	SSMH-1541	SSMH-4482	279.3	AC	24	7	Infiltration Weeper Joint (5.5), Infiltration Dripping Connection (11, 131), Infiltration Stain Joint (26, 104, 167), Infiltration Weeper Connection (60, 214, 266), Pipe chipped at joint (195), Tap Factory Defective - clogged with grease/rags (195)	COMPLETE	3324	0	3324	3	6,192			6	11, 60, 63, 127,131, 214, 266	X		7					Grease
SUB-AREA 09	SSGM-07133	HUMBOLDT ST	SSMH-2346	SSMH-1541	273.0	AC	24	9	Surface roughness increased (0-273), crack Longitudinal (10, 34), Infiltration Stain at service (78), Infiltration stain on wall (80), Weeping infiltration and mineral deposits at service (105, 174, 255), Dripping Infiltration and mineral deposits at service (140, 252), Running Infiltration and mineral deposits at service (250)	COMPLETE	4132	221I	4132	4	4,752			9	78, 91, 105, 140, 174, 211, 250, 252, 255	X		9					
SUB-AREA 09	SSGM-00084	HUNTINGTON AVE	SSMH-4482	SSMH-1540	232.6	AC	24	7	Weeping Infiltration at service (4, 6, 132), Dripping infiltration at service (99, 165), Infiltration stain at joint (225)	COMPLETE	3121	0	3121	3	5,184			4	59.5, 132.2, 165, 184	X		7					
SUB-AREA 09	SSGM-03710	HUNTINGTON AVE	SSMH-3249	SSMH-4482	235.0	PVC	12	3	Roots fine joint (217)	COMPLETE	1100	0	1100	1	144												Roots
SUB-AREA 09	SSGM-03814	HUNTINGTON AVE	SSMH-1540	SSMH-0977	232.0	AC	24	5	Infiltration stain at joint (5), Dripping infiltration at service (35, 45), Infiltration stain at service (92, 175, 195), surface roughness increased (0-232)	COMPLETE	2214	1H00	221H	2	3,456			3	35, 45, 175	X		5					
SUB-AREA 09	SSGM-03815	HUNTINGTON AVE	SSMH-0977	SSMH-1547	230.1	AC	24	5	Running infiltration at service (4), Infiltration stain at service (44), Dripping infiltration at service (157, 165), surface roughness increased (0-230.1)	COMPLETE	4132	1H00	4132	4	6,624			3	4, 44, 157	X		5					
SUB-AREA 09	SSGM-03816	HUNTINGTON AVE	SSMH-1547	SSMH-5589	240.3	AC	24	5	Crack longitudinal (10, 36), Infiltration stain/Mineral deposits at service (9), Infiltration stain at service (99), surface roughness increased (0-240)	COMPLETE	1200	211H	211H	2	576			3	21, 82.5, 183			5					
SUB-AREA 09	SSGM-03820	HUNTINGTON AVE	SSMH-5590	SSMH-6884	187.5	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03821	HUNTINGTON AVE	SSFT-0256	SSMH-3249	29.6	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-08051	HUNTINGTON AVE	SSMH-6884	SSMH-3249	43.4	PVC	12	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03804	IVALOO ST	SSFT-0254	SSMH-3245	2.0	VC	12	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03742	LIBERTY WAY	SSMH-4413	SSMH-4414	217.8	PVC	8	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-06279	LIBERTY WAY	SSMH-3979	SSMH-5571	257.2	PVC	8	5	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-06280	LIBERTY WAY	SSFT-0377	SSMH-3979	0.0				Pipe Segment Not Located	Pipe Not Located	N/A	N/A	N/A	N/A	0												
SUB-AREA 09	SSGM-03770	MAINE AVE	SSMH-6642	SSMH-4488	196.6	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-07591	MAINE AVE	SSMH-1518	SSMH-6643	177.3	AC	8	2	Surface roughness increased (0-177), PVC point repair (50.5-55.2), Infiltration stain at joint (134), Fracture Circumferential (151), Crack Circumferential with staining (166)	COMPLETE	1200	2F11	2F13	2	432					X		2					
SUB-AREA 09	SSGM-07605	MAINE AVE	SSMH-4488	SSMH-1518	117.0	AC	8	6	Mineral Deposits and Staining at Joint (5), Mineral Deposits and Staining around Service Connections (16, 96), PVC point repairs(38.5-42, 68-92.5)	COMPLETE	1700	1500	1A00	1	432					X		6					
SUB-AREA 09	SSGM-07606	MAINE AVE	SSMH-6643	SSMH-1294	271.6	AC	8	9	Infiltration Staining Joint (2, 35, 61, 105), Infiltration Weeper Lateral (9), Surface roughness increased (0-272)	COMPLETE	2114	1I00	211I	2	1,296			1	72	X		9					
SUB-AREA 09	SSGM-03817	MARLBOROUGH RD	SSMH-5589	SSMH-3245	130.5	AC	24	1	Infiltration stain at service (42), Surface roughness increased (0-130.5)	COMPLETE	1100	1D00	1D00	1	144			1	42			1					
SUB-AREA 09	SSGM-03822	MARLBOROUGH RD	SSMH-5592	SSMH-5589	144.0	PVC	8	4	VC point repair defective with medium joint offset (137.4-144), Roots fine joint & joint offset small (139.7), Mineral deposits in service (140), Fracture spiral (141), Hardened cement (141)	COMPLETE	3111	3200	3311	2	576						1	4				CIPSR 136' to 144'	Roots
SUB-AREA 09	SSGM-03823	MARLBOROUGH RD	SSFT-0257	SSMH-5591	5.0	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03824	MARLBOROUGH RD	SSMH-5593	SSMH-5592	227.2	PVC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03825	MARLBOROUGH RD	SSMH-5591	SSMH-5593	104.4	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-07131	MARLBOROUGH RD	SSMH-2345	SSMH-2346	151.0	PVC	8	5	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-07132	MARLBOROUGH RD	SSMH-3241	SSMH-2346	222.7	AC	24	1	Surface roughness increased (0-222.7), Infiltration stain at joint (33, 93, 130), Running Infiltration and mineral deposits at joint (106), Running infiltration at service lateral (148), Broken Pipe (148), Pipe fracture with staining (151)	COMPLETE	421H	5121	5142	5	7,920					X		1					
SUB-AREA 09	SSGM-01476	PENNSYLVANIA AVE	SSMH-2369	SSMH-6880	142.3	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-03743	PENNSYLVANIA AVE	SSMH-5571	SSMH-2368	263.0	PVC	8	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-08046	PENNSYLVANIA AVE	SSMH-6880	SSMH-2368	352.1	PVC	8	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-04652	TORONITA ST	SSFT-0277	SSMH-1547	34.1	PVC	8	1	Material change 33.4 to VC with Hole soil visible 8-2 Oclock. Pipe capped at 34	COMPLETE	0	5200	5200	3	144						1					CIPSR 30' to 34'	
SUB-AREA 09	SSGM-03818	VAN VECHTEN ST	SSFT-0255	SSMH-1540	95.2	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 09	SSGM-04205	VERMONT AVE	SSMH-3383	SSMH-3238	188.0	AC	8	6	Fracture Multiple with weeping infiltration/mineral deposits (141-145), Infiltration stain and mineral deposits around service connection (4, 4.2, 71, 134,140), Infiltration stain and mineral deposits around capped service (80), Pipe in poor structural condition at SMH3238 inlet, Surface roughness increased (0-188)	COMPLETE	2600	411F	4126	3	1,728			1	82.0	X		6					
SUB-AREA 09	SSGM-04206	VERMONT AVE	SSMH-3384	SSMH-3383	270.6	AC	8	6	Fine roots at service (8), Infiltration stain at joint (112, 200), Mineral deposits at service connection (128, 128.2, 200), Infiltration stain at service (201), Surface roughness increased (0-270.6)	COMPLETE	1700	2I00	2I17	2	1,008					X		6					Roots
SUB-AREA 09	SSGM-03693	VIRGINIA CARTER INTERCEPTOR	SSMH-0952	SSMH-2368	219.5	AC	24	0	Infiltration stain at joint (43.5, 54.5), Chipped pipe at joint (154), Surface roughness increased (0-219.5)	COMPLETE	1200	2500	2512	2	288					X							
SUB-AREA 09	SSGM-03702	VIRGINIA CARTER INTERCEPTOR	SSMH-2368	SSMH-3238	221.4	AC	24	1	Infiltration Runner Service (206)	COMPLETE	4100	0	4100	2	3,600							1					
SUB-AREA 09	SSGM-03744	VIRGINIA CARTER INTERCEPTOR	SSMH-5574	SSMH-5573	118.8	AC	24	0	Crack Longitudinal (42), Mineral Deposits (56)	COMPLETE	1100	2100	2111	2	288					X							
SUB-AREA 09	SSGM-06306	VIRGINIA CARTER INTERCEPTOR	SSMH-3238	SSMH-1294	248.4	AC	24	0	Infiltration stain at joint (212)	COMPLETE	1100	0	1100	1	144												
SUB-AREA 11	SSGM-06480	ALLEN AVE	SSMH-0934	SSMH-6062	141.7	VC	8	2	Deposits attached Grease(0.7', 9.3', 19.2', 25.8', 28.2', 103.2'), Joint Offset Medium(4.8', 136.5'), PVC point repair (7.5'-11.2')	COMPLETE	1600	3100	3116	2	144									X			Grease
SUB-AREA 11	SSGM-06481	ALLEN AVE	SSMH-6062	SSMH-0219	66.0	VC	8	0	Joint Offset Medium(14.0', 63.1'), Joint Seperated Medium(14.1'), Water level Sag(15.5'), Change in water level(10.3')	COMPLETE	0	3200	3200	2	432												
SUB-AREA 11	SSGM-06483	ALLEN AVE	SSMH-6063	SSMH-0934	98.3	VC	8	1	Material change AC(7.0'), Material change PVC(57.8'), Material change VCP(94.0'), Joint Offset Medium(94.9')	COMPLETE	0	3100	3100	2	144												
SUB-AREA 11	SSGM-06485	ALLEN AVE	SSMH-6064	SSMH-0935	130.6	VC	8	1	Broken Pipe Void Visible(1.5'), Surface Spalling(9.3', 14.2', 39.1', 47.0'), Joint Offset Medium(11.0', 103.8', 122.8', 126.3'), Hole Soil Visible(19.2'), Material change CIPP(109.5'), Material change VCP (113.5'), Infiltration Stain(57.1', 63.4', 67.4', 73.7', 75.7', 77.7', 79.7', 83.5', 90.1', 94.1')	COMPLETE	1A00	5234	5234	4	2,304					X		1					
SUB-AREA 11	SSGM-04458	BELL CROSS COUNTRY	SSMH-3470	SSMH-5718	220.4	VC	18	3	Crack Multiple(27.9', 32.3', 39.5', 48.3', 57.1', 104.5', 108.1', 139.6', 164.6'), Fracture Longitudinal(40.0', 115.9', 139.6'), Infiltration Stain Joint(191.6', 195.4', 203.8')	COMPLETE	1300	3A00	3A13	4	2,160					X		3					

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 11	SSGM-00275	BELL ST	SSMH-4563	SSMH-4562	238.4	VC	8	4	Water level Sag(117.7', 133.6', 198.1'), Change in water level(19.0', 32.1', 75.1', 81.3', 135.6', 155.6')	COMPLETE	0	0	0	0	0												
SUB-AREA 11	SSGM-03444	ELEANOR ST/ GOODRIDGE AVE	SSMH-0904	SSMH-0222	142.1	VC	8	2	Fracture Spiral(3.1'), Jolint Offset Medium(4.9', 139.2'), Roots fine Joint(12.0', 16.1', 24.1', 26.5', 34.7', 36.8', 38.9', 41.4', 53.8', 68.7', 70.6', 74.4', 79.2', 81.3', 87.7', 93.8', 96.2', 100.0', 102.4', 104.6', 106.7', 108.8', 113.0'), Broken pipe void visible(32.6'), Roots medium joint(30.1'), Fracture Multiple(132.8'), Hole Soil Visible(133.6'), Joint Offset Large(30.1')	COMPLETE	311B	5241	5241	5	4,464	X				X		2				Roots
SUB-AREA 11	SSGM-00606	FOREST AVE	SSMH-3475	SSMH-1883	372.5	VC	12	5	Fracture Multiple(1.0', 22.2', 54.9', 56.8', 93.0', 173.5'), Fracture Longitudinal(15.3', 25.7', 29.6', 75.4', 85.9', 119.3', 167.1', 208.4'), Infiltration Stain(36.8', 86.3', 95.3', 98.7', 101.2', 104.6', 107.3', 160.2', 183.5', 186.6', 201.0', 203.7', 240.3', 249.4', 262.2', 276.5', 188.5', 292.1', 295.2', 304.6', 310.8', 313.6', 321.7'), Fracture Longitudinal Hinge-3(45.1', 66.9'), Repair patch(369.5')	COMPLETE	1B00	463A	463A	4	6,336			2	60.4, 90.3	X		5					
SUB-AREA 11	SSGM-00644	FOREST AVE	SSMH-1899	SSMH-4689	343.5	VC	10	4	Fracture Longitudinal(42.6'), Infiltration Stain(95.1', 97.3', 99.4', 102.5', 114.3', 117.7', 120.2', 138.4', 157.0', 177.0', 218.9', 237.3', 243.4', 246.3', 249.8', 254.9', 273.1', 275.0', 278.2', 287.7', 306.5', 312.1', 315.3', 318.3', 321.2', 323.4', 326.3', 339.4'), Infiltration Weeper(284.6'), Deposits attached Grease(290.4'), Infiltration Dripper(296.8'), Broken Pipe(302.7'), Change in water level(294.6', 311.9', 333.1')	COMPLETE	3121	5131	5132	4	6,480					X		4				Grease
SUB-AREA 11	SSGM-00645	FOREST AVE	SSMH-4689	SSMH-1888	237.1	VC	10	4	Deposits attached grease(1.8'), Infiltration Stain(5.2', 7.7', 11.3', 13.8', 17.5', 20.4', 31.4'), Roots fine Barrell(100.1'), Joint Offset Large(119.2') / Material change AC (0.3'), Surface Spalling(62.4'), Material change VCP(113.4')	COMPLETE	2118	4131	4131	4	1,296			1	106	X		4					Roots and Grease
SUB-AREA 11	SSGM-03012	FOREST AVE	SSMH-0812	SSMH-0819	36.6	AC	8	0	Camera Underwater(33.0', 36.6'), Survey abandoned needs cleaning(36.6')	Needs Cleaning	5100	0	5100	5	0										X		
SUB-AREA 11	SSGM-06745	FOREST AVE	SSMH-4091	SSMH-1887	277.1	VC	10	3	Infiltration Stain (4.2', 7.3', 10.3', 13.4', 15.7', 18.8', 20.2', 24.9', 30.9', 46.1', 49.3', 70.1', 72.8', 76.2', 79.4', 82.3', 85.2', 88.7', 91.3', 103.9', 108.9', 271.2'), Infiltration Runner(76.2'), Broken Pipe(221.2')	COMPLETE	411B	5100	5141	5	6,912					X		3					
SUB-AREA 11	SSGM-00274D	GOODRIDGE AVE	SSMH-0222A	SSMH-0219	253.0	VC	8	1	Surface Spalling(10.7'), Joint Offset Medium(11.8', 22.2', 41.3', 47.5', 138.8'), Roots Ball Joint(138.8'), Joint Seperated Medium(68.1')/ Joint Offset Medium(15.6', 55.2'), Joint Offset Large(16.7'), Material change PVC(16.4'), Material change VCP(28.7'), Roots Fine Joint(39.0', 41.3', 59.7', 64.2', 66.2', 68.5', 70.6', 72.3', 76.8', 81.2', 96.0')	COMPLETE	411A	4131	4231	4	3,024	X				X		1					Roots
SUB-AREA 11	SSGM-00274U	GOODRIDGE AVE	SSMH-0222	SSMH-0222A	220.1	VC	8	3	Hole Soil Visible(82.9'),Material change PVC(106.6'), Material change VCP(109.6'), Repair Patch(111.6', 119.4', 146.9', 205.6'), Joint Offset Large(121.3')	COMPLETE	0	5100	5100	3	288					X		3					
SUB-AREA 11	SSGM-04459	OFF READ ST/ BELL ST XC	SSMH-4565	SSMH-3470	261.1	VC	18	1	Crack Longitudinal(102.8')	COMPLETE	0	2100	2100	2	144					X		1					
SUB-AREA 11	SSGM-06555	POLAND ST	SSMH-6234	SSMH-0316	159.5	VC	8	0	Joint Offset Medium(3.0'), Roots Fine Joint(5.9', 9.2', 18.5', 24.9', 28.1', 31.4', 34.7')/ Roots fine Joint(17.6', 29.8', 79.8', 86.5', 89.8', 96.3', 99.2'), Roots Medium Joint(108.7'), Joint Offset Medium(42.4', 46.0', 68.0', 79.8', 96.3', 99.2'), Water Level Sag(89.8')	COMPLETE	311A	3700	381A	3	3,168	X		1	47	X							Roots
SUB-AREA 11	SSGM-06663	ST JOSEPH ST	SSMH-1341	SSMH-4348	207.8	VC	8	4	Joint Offset Medium(20.6', 26.6'), Size or Shape Change(33.6') / Infiltration Stain Joint(53.8', 62.1', 66.0', 68.6', 71.9', 77.8', 151.2'), Deposits Attached Encrustation(83.1', 92.6'), Deposits Settled unknown piece of plastic(97.6'), Water level Sag(56.0')	COMPLETE	1900	3200	3219	3	1,296			2	3.0, 63.7			4		X			Debris
SUB-AREA 11	SSGM-00952	STEVENS AVE	SSMH-1907	SSMH-1908	245.0	VC	8	3	Roots Fine Joint(75.9'), Repair Point Pipe Replaced PVC(77.0', 89.8', 178.9', 191.9')	COMPLETE	1100	0	1100	1	144	X							X				Roots
SUB-AREA 11	SSGM-07097	STEVENS AVE	SSMH-1386A	SSMH-1892	243.2	VC	8	2	Joint Offset Medium(29.8', 151.1', 196.7', 214.1'), Joint Offset Large(96.4'), Infiltration Stain (15.1', 162.1', 168.8', 178.2', 184.0', 190.6', 201.8', 207.6', 211.3', 217.3', 237.6')	COMPLETE	1A00	4134	4134	4	2,304					X		2					
SUB-AREA 11	SSGM-07097A	STEVENS AVE	SSMH-1386	SSMH-1386A	104.0	VC	8	0	Joint Offset Medium(3.9', 13.2', 43.9', 89.1'), Infiltration Stain(7.1', 16.4', 25.3', 28.8', 31.8', 43.9', 51.5', 52.2', 60.9', 64.5', 73.8', 80.1', 86.4', 95.5')	COMPLETE	1A00	3400	341A	2	2,592					X							
SUB-AREA 11	SSGM-00601	WALTON ST	SSMH-3475	SSMH-0309	133.1	VC	24	1	Infiltration Stain(25.4', 37.4'), Crack Longitudinal(25.8', 89.2'), Fracture Circumferential(70.9'), Fracture Longitudinal(91.2'), Crack Circumferential(76.6'), Crack Multiple(48.7')	COMPLETE	1200	3322	3322	3	1,152			1	85	X		1					
SUB-AREA 11	SSGM-00602	WALTON ST	SSMH-0309	SSMH-0310	178.5	VC	24	4	Crack multiple (17.7), Infiltration staining (18.0), Crack circumferential (116.9), Infiltration weeper (118.6)	COMPLETE	2111	3111	3121	3	1,152			1	73	X		4					
SUB-AREA 11	SSGM-00603	WALTON ST	SSMH-0310	SSMH-0311	140.3	VC	24	3	Infiltration staining (3.7, 5.6, 9.5, 11.7-136.6), Running infiltration (56.5), Dripping infiltration (56.9), Deposits attached encrustation (83.0)	COMPLETE	4131	0	4131	4	11,664					X		3					
SUB-AREA 11	SSGM-00604	WALTON ST	SSMH-0311	SSMH-0312	144.2	VC	24	1	Crack circumferential (79.9), Crack multiple (82.2), Broken pipe (83.5), Infiltration staining (121.5, 133.0)	COMPLETE	2100	5131	5131	5	720					X		1					
SUB-AREA 11	SSGM-04461	WALTON ST	SSMH-3472	SSMH-3471	188.6	VC	15	1	Infiltration Stain(78.3', 90.7', 96.6'), Intruding Sealing Grout(47.3')	COMPLETE	1300	2100	2113	2	432								X				
SUB-AREA 11	SSGM-04469	WALTON ST	SSMH-1894	SSMH-4349	126.7	VC	15	1	Roots Fine Joint(19.1', 45.5')	COMPLETE	1200	0	1200	1	288	X							X				Roots
SUB-AREA 12	SSGM-00279	BAY ST	SSMH-0136	SSMH-0137	152.7	RCP	24	2	Infiltration Runner Joint(9.0'), Roots Fine Joint(13.0', 21.0', 24.8', 39.3')	COMPLETE	4114	0	4114	4	4,176	X				X		2					Roots
SUB-AREA 12	SSGM-03667	BAY ST	SSMH-0949	SSMH-0138	226.8	RCP	30	4	Infiltration Runner Joint(29.9')	COMPLETE	4100	0	4100	4	3,600					X		4					
SUB-AREA 12	SSGM-04871	BAY ST	SSMH-5790	SSMH-5791	264.9	VC	24	3	PVC point repair (237.7'-249.1')	COMPLETE	0	0	0	0	0				72.4, 172.7								
SUB-AREA 12	SSGM-04875	BAY ST	SSMH-3598	SSMH-3599	181.6	RCP	24	0	Roots Fine Joint (5.9', 14.3', 17.5', 51.9', 60.9')	COMPLETE	1500	0	1500	1	720	X				X							Roots
SUB-AREA 12	SSGM-04876	BAY ST	SSMH-3599	SSMH-3600	193.2	RCP	24	1	Roots fine Joint(13.5', 29.3', 33.8', 61.2', 68.9', 89.1', 126.0', 141.5', 158.4')	COMPLETE	1900	0	1900	1	1,296	X				X		1					Roots
SUB-AREA 12	SSGM-04877	BAY ST	SSMH-3600	SSMH-3597	249.4	RCP	24	7	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-04878	BAY ST	SSMH-3601	SSMH-3598	264.2	RCP	24	1	Roots Fine Joint(241.4')	COMPLETE	1100	0	1100	1	144	X				X		1					Roots
SUB-AREA 12	SSGM-04879	BAY ST	SSMH-0137	SSMH-3601	151.4	RCP	24	1	Roots Fine Joint(6.9', 18.3', 30.6', 54.2', 151.4', 151.4')	COMPLETE	1600	0	1600	1	864	X				X		1					Roots
SUB-AREA 12	SSGM-04880	BAY ST	SSMH-3602	SSMH-0949	218.2	RCP	30	3	Fracture Longitudinal(6.2', 12.0'), Infiltration Stain Joint(9.2', 37.2', 135.2'), Infiltration Dripper Joint(61.6'), Crack Longitudinal(16.7', 59.4'), Obstruction Rocks(115.5'),	COMPLETE	3121	3221	3322	3	2,448			1	114	X		3					Debris
SUB-AREA 12	SSGM-04881	BAY ST	SSMH-3603	SSMH-3602	235.8	RCP	30	0	Infiltration Runner Barrel(14.7'), Infiltration Stain Joint(87.7', 91.7', 95.3', 235.8'), Crack Longitudinal(203.2')	COMPLETE	4114	2100	4121	4	4,320					X							
SUB-AREA 12	SSGM-04882	BAY ST	SSFT-0301	SSMH-3603	27.5	VC	21	0	Crack Longitudinal(6.0'), Fracture Longitudinal(6.0', 12.6', 20.9'), Broken Pipe Soil Visible-Broken at joint(18.8')	COMPLETE	0	5131	5131	5	720					X							
SUB-AREA 12	SSGM-04885	BAY ST	SSMH-5791	SSMH-3605	102.8	BR	42	2	Infiltration Runner Connection(52.4', 53.4'), Active lateral with obstruction and infiltration at two locations around connection (52.9'), Line left(78.2')	COMPLETE	4200	0	4200	4	10,080							2					
SUB-AREA 12	SSGM-05260	BAY ST	SSMH-3597	SSMH-5790	228.0	VC	24	4	Fracture Longitudinal(56.2', 65.9', 70.4', 80.7', 93.0'), Infiltration Runner(84.6'), Roots Fine Lateral(94.9', 101.3', 113.1'), Roots Medium Joint(106.7'(2), 110.1')	COMPLETE	4133	3500	4138	4	5,184	X		1	202	X		4					Roots
SUB-AREA 12	SSGM-07496	BAY ST	SSMH-3605	SSMH-1122	124.2	BR	42	2	Line Right(110.0')	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-07786	BAY ST	SSMH-6684	SSMH-1122	10.0	BR	48	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-00607	CANCO RD	SSMH-4676	SSMH-4677	43.0	PVC	30	0	Crack Longitudinal(23.6')	COMPLETE	0	2100	2100	2	144						1					CIPSR 20'-26'	
SUB-AREA 12	SSGM-06188	CANCO RD	SSMH-3950	SSMH-3951	33.0	PVC	30	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-06190	CANCO RD	SSMH-3952	SSMH-3951	0.0		15		Could not Inspect. Downstream has drop connection with cap.	Cannot Complete	N/A	N/A	N/A	N/A	0												
SUB-AREA 12	SSGM-06193	CANCO RD	SSMH-3953	SSMH-3950	228.8	VC	30	2	Fracture Longitudinal(21.1'(2), 32.8'(2)), Crack Longitudinal Hinge2(38.1', 67.1'), Crack Longitudinal(97.8'(2), 105.8'(2), 106.3', 167.0'(2), 169.0', 181.7'(3))	COMPLETE	0	3228	3228	3	2,736					X		2					
SUB-AREA 12	SSGM-06194	CANCO RD	SSMH-1276	SSMH-3953	92.6	VC	30	1	Fracture Longitudinal(3.3'), Infiltration Stain(3.3')	COMPLETE	1100	3100	3111	3	288						1					CIPSR 0' to 6'	
SUB-AREA 12	SSGM-06195	CANCO RD	SSMH-4677	SSMH-1276	96.6	VC	30	0	Crack Longitudinal(11.2'(2), 92.2')	COMPLETE	0	2300	2300	2	432						2					CIPSR 8'-14' and 89'-95'	
SUB-AREA 12	SSGM-06180	CARLYLE RD	SSMH-3944	SSMH-5787	24.1	VC	30	0	PP point repair (0.0'-7.3'), Crack Longitudinal(7.9')	COMPLETE	0	2100	2100	2	144						1					CIPSR 4'-10'	
SUB-AREA 12	SSGM-06181	CARLYLE RD	SSMH-3945	SSMH-3944	201.4	PP	30	5	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-06183	CARLYLE RD	SSMH-3947	SSMH-3945	197.9	PP	30	5	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-06184	CARLYLE RD	SSMH-3948	SSMH-3947	180.9	PP	30	3	Deposits Attached Encrustation(151.5')	COMPLETE	2100	0	2100	2	144				33.8, 36.7								
SUB-AREA 12	SSGM-06189	CARLYLE RD	SSMH-3951	SSMH-3948	249.1	PP	30	7	No significant defects	COMPLETE	0	0	0	0	0												

ARCADIS Design & Consultancy for natural and built assets

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 12	SSGM-04867	CARLYLE RD / WELLINGTON RD	SSMH-5787	SSMH-5788	315.7	VC	30	5	Defective Lateral(215.6'), Roots Fine Joint(60.6', 69.5', 121.6', 143.6', 162.2', 174.3', 201.7'), Roots Fine Connection(64.2'), Crack multiple(43.1')	COMPLETE	3118	2100	3121	3	1,440	X				X		5					Roots
SUB-AREA 12	SSGM-04868	CARLYLE RD / WELLINGTON RD	SSMH-5788	SSMH-3594	123.2	VC	30	2	Roots Fine Joint(39.0', 62.7', 74.9')	COMPLETE	1300	0	1300	1	432	X				X		2					Roots
SUB-AREA 12	SSGM-04930	FRYE ST	SSMH-1126A	SSMH-3626	150.4	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-04930A	FRYE ST	SSMH-1126	SSMH-1126A	52.3	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-04852	GLECKLER RD	SSMH-3594	SSMH-1036	328.9	BR	36	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-04859	GLECKLER RD	SSMH-1118	SSMH-1871	176.4	Other	12	3	Infiltration Runner(80.2'), Roots Fine Lateral(80.2'), Roots Medium Lateral(170.2')	COMPLETE	4131	0	4131	4	3,888	X						3					Roots
SUB-AREA 12	SSGM-04860	GLECKLER RD	SSMH-1036	SSMH-4921	114.2	BR	44	2	Deposits settled fine (16.1'), Infiltration Gusher Joint(105.2')	Needs Cleaning	5121	0	5121	5	7,200						1	2				CIPSR 102'-108'	Debris
SUB-AREA 12	SSGM-05255	GLENGARDEN ST	SSMH-1676	SSMH-5859	277.1	PVC	8	0	Water level sag(54.2'), Change in water level(123.7', 150.7', 254.9')	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-04929	KINEO ST	SSMH-1125	SSMH-3626	391.3	PVC	8	7	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-06596	OCEAN AVE	SSNS-0114	SSMH-5800	129.8	RCP	72	0	No significant defects	COMPLETE	0	0	0	0	0											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	
SUB-AREA 12	SSGM-06597	OCEAN AVE	SSMH-3604	SSNS-0114	0.0	BR	48		Pipe not connected as mapped, Line sweeps in from SSCO-005, not SSNS-0114	Cannot Complete	N/A	N/A	N/A	N/A	0												
SUB-AREA 12	SSGM-04872	READ ST	SSMH-1677	SSMH-5791	303.2	BR	42	3	Deposits attached Encrustation(31.3'), Infiltration Weeper Barrel(72.1', 75.4', 105.1'), Line Right(278.7'), Possible defective lateral (56.5')	COMPLETE	2400	0	2400	2	2,304					X		3					
SUB-AREA 12	SSGM-04918	READ ST	SSMH-3618	SSMH-3604	110.7	BR	48	5	Weeping infiltration barrel (57.9)	COMPLETE	2100	0	2100	2	720						1					CIPSR 55'-61'	
SUB-AREA 12	SSGM-04919	READ ST	SSMH-0136	SSMH-3618	107.6	BR	48	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-05253	READ ST	SSMH-5860	SSMH-5858	149.4	PVC	15	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-06201	READ ST	SSMH-1281	SSMH-5860	164.7	PVC	15	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-00134	TORREY ST	SSMH-1489	SSMH-0136	250.2	BR	48	3	Weeping infiltration from barrel (63.4)	COMPLETE	2100	0	2100	2	720						1					CIPSR 60'-66'	
SUB-AREA 12	SSGM-04896	TORREY ST	SSMH-1122	SSMH-1123	8.0	BR	48	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-04897	TORREY ST	SSMH-1123	SSMH-1489	84.6	BR	48	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-00605	WALTON ST	SSMH-0312	SSMH-4676	100.6	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-04869	WELLINGTON RD	SSMH-3594	SSMH-5789	217.8	PVC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-04870	WELLINGTON RD	SSMH-3596	SSMH-5789	218.0	PVC	8	5	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 12	SSGM-06186	WELLINGTON RD	SSMH-3949	SSMH-3594	33.0	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 14	SSGM-02150	CABOT ST	SSMH-2692	SSMH-2693	184.4	VC	8	4	Infiltration Stain at joint (12, 15.5), Crack Spiral (37, 54, 69, 84, 144), Crack Longitudinal (65), Fracture Spiral (94), Joint offset medium and crack multiple (129), Material change PVC (177')	COMPLETE	1200	3227	3227	3	1,440					X		4					
SUB-AREA 14	SSGM-02318	DALE CT	SSMH-0684	SSMH-2703	170.8	PVC	8	1	Pipe deformed elliptical 20-30%(85.3-119), Running infiltration lateral (119.4), Pipe deformed elliptical 10-20% (163.2-170.8)	COMPLETE	3100	3121	3221	3	3,888							1					
SUB-AREA 14	SSGM-02320	DALE CT	SSMH-0685	SSMH-2703	193.0	PVC	6	3	Hanging sealing material<10%(7.2), Running infiltration at service connection(7.2), Fine deposits settled in pipe (140-150, 185-190), Sag in pipe water level to 50%(170.7-180), Survey abandoned - cannot pass debris (193)	Needs Cleaning	4133	0	41433	4	3,744							3			X		Debris
SUB-AREA 14	SSGM-07099	DALE CT	SSMH-1387	SSMH-0684	249.0	PVC	6	4	Mineral Deposits Connection (118), Infiltration stain at service connection (14, 198), Deformed Flexible Bulging Round (17.3), Infiltration stain at joint (43)	COMPLETE	1300	3100	3113	2	720							4					
SUB-AREA 14	SSGM-02375	HOLM AVE	SSMH-5180	SSMH-2725	276.8	VC	10	6	Crack Circumferential (.2, 68, 121, 244, 272.6), Fracture Longitudinal (1), Hardened Cement at joint (14, 46, 54, 108.5-115, 252, 256), Crack Spiral (26, 270.7), Fine roots joint (35.5, 80, 262, 270.7, 272.6), Crack Longitudinal (69.5), Material change PVC (172'), material change VCP (242.4')	COMPLETE	1500	3128	3128	3	2,016			1	153	X		6					Roots
SUB-AREA 14	SSGM-02382	HOLM AVE	SSMH-1772	SSMH-2730	137.4	PVC	8	0	Fracture Spiral(90.0'), material change PVC(96.0'), material change VCP(8.0', 100.0')	COMPLETE	0	2100	2100	1	144						1					CIPSR 87'-93'	
SUB-AREA 14	SSGM-02384	HOLM AVE	SSMH-2731	SSMH-2730	316.2	PVC	8	6	Infiltration Gushing Lateral (122.5), Gushing Infiltration at PVC/VC Material Change (315), Material change VC (315')	COMPLETE	5200	0	5200	3	14,400						1	6				CIPSR 313'-316'	
SUB-AREA 14	SSGM-03985	HOLM AVE	SSMH-1771	SSMH-5634	80.0	VC		2	Material Change PVC(75.8), Infiltration Stain Joint(10.0', 19.1', 52.1'), Infiltration Stain Barrel(17.1'), Deposits settled Tar(30.9'), Crack Multiple(13.7', 17.1')	COMPLETE	2213	3200	3222	3	864					X		2		X			Debris
SUB-AREA 14	SSGM-06610	HOLM AVE	SSMH-5634	SSMH-1331	26.2	PVC	18	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 14	SSGM-06611	HOLM AVE	SSMH-1331	SSMH-1772	61.5	PVC	18	2	Broken pipe(45.8')	COMPLETE	0	5100	5100	3	144						1					CIPSR 42'-48'	
SUB-AREA 14	SSGM-02334	HOSPITAL DR	SSMH-2704	SSMH-5186	0.6	VC	8	0	Roots mediuim Barrel(0.2'), Roots ball joint(0.6'), Survey abandoned due to severe roots in pipe (0.62')	Needs Cleaning	4200	0	4200	5	432	X				X		TBD				Mechanical root removal required	Roots
SUB-AREA 14	SSGM-02339	HOSPITAL DR	SSMH-2707	SSMH-5186	0.0				Cannot Access Pipe, Cars Parked on Manhole	Cannot Access	N/A	N/A	N/A	N/A	0												
SUB-AREA 14	SSGM-03107	MAINE TURNPIKE	SSMH-2992	SSMH-3013	224.0	VC	10	1	Deposits Attached Grease(65.1', 105.8', 125.0')	COMPLETE	2300	0	2300	1	0												Grease
SUB-AREA 14	SSGM-03179	MAINE TURNPIKE	SSMH-0846	SSMH-2992	96.2	PVC	6	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 14	SSGM-03182	MAINE TURNPIKE	SSMH-6553	SSMH-2992	185.2	AC	10	0	Intruding sealing material (176.6)	COMPLETE	0	2100	2100	2	0										X		
SUB-AREA 14	SSGM-02174	PINECREST RD	SSMH-2665	SSMH-2666	107.9	VC	15	0	Deposits attached Grease(46.8', 96.5', 104.3'), Roots Ball Joint(103.1'), Roots Fine Joint(72.3'), Obstruction Roots at Joint(72.3')	COMPLETE	4124	0	4124	3	432	X				X							Roots and Grease
SUB-AREA 14	SSGM-02359	PINECREST RD	SSMH-0691	SSMH-2665	168.8	AC	8	3	Infiltration Dripper Joint(36.0')	COMPLETE	3100	0	3100	2	1,440					X		3					
SUB-AREA 14	SSGM-02366	PINECREST RD	SSMH-2721	SSMH-2665	111.9	VC	15	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 14	SSGM-05958	PINECREST RD	SSMH-2666	SSMH-5188	217.3	VC	15	1	Deposits attached Encrustation(25.6', 27.7', 162.2', 169.0'), Deposits Attached Grease(101.6', 126.7', 132.1', 139.8', 144.1', 149.3', 201.3'), Infiltration Runner Joint(23.3'), Infiltration Stain (37.4', 46.0') , Infiltration Stain Joint(17.5', 46.0', 60.4', 70.6'), Roots Fine connection(165.1'), Roots Fine Joint(180.8')	COMPLETE	412A	0	412A	3	5,328	X				X		1					Roots and Grease
SUB-AREA 14	SSGM-06316	PINECREST RD	SSMH-2664	SSMH-2665	189.8				Survey abandoned due to high water level, cannot access downstream manhole	Needs Cleaning	N/A	N/A	N/A	N/A	0									X	Access downstream MH and reinspect	
SUB-AREA 14	SSGM-03080	RIVERSIDE CT	SSMH-3010	SSMH-3011	197.9	AC	10	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 14	SSGM-03087	RIVERSIDE CT	SSMH-3019	SSMH-3010	227.2	AC	10	0	Material Change AC(180.9'), Material Change PVC(177.1'), Line Right(179.3'), Infiltration Stain Barrel(188.2'), Infiltration Runner Barrel(188.2')	COMPLETE	5121	0	5121	4	1,584			1	223		1					CIPSR 185' -191'	
SUB-AREA 14	SSGM-03230	RIVERSIDE ST	SSMH-3039	SSMH-4332	369.4	PVC	8	0	Roots medium connection from pipe to HM(369.3')	COMPLETE	3100	0	3100	2	144												Roots
SUB-AREA 14	SSGM-06540	RIVERSIDE ST	SSMH-6074	SSMH-0844	203.7	AC	8	0	Deposits attached Grease(15.8', 36.1')	COMPLETE	2200	0	2200	1	0												Grease
SUB-AREA 14	SSGM-02278	TAFT AVE	SSMH-2654	SSMH-0661	10.0	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 14	SSGM-02373	TAFT AVE	SSMH-2724	SSMH-1773	40.4	PVC	10	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 15	SSGM-00682	BIRCHWOOD DR	SSMH-2789	SSMH-1915	237.0	AC	8	6	Running Infiltration at service (75), Running infiltration/staining at service (189), Mineral deposits around service connection (118)	COMPLETE	4211	0	4211	3	7,344			4	35, 75, 118, 226	X		6					
SUB-AREA 15	SSGM-02435	BIRCHWOOD DR	SSMH-2788	SSMH-5156	214.0	VC	8	4	Dripping Infiltration at service (95.5), Running Infiltration at service (75, 151), Running Infiltration/staining at joint (207.7), Weeping infiltration/mineral deposits at service (208), Mineral Deposits at joint (208.8)	COMPLETE	4231	0	4231	4	8,640			1	96	X		4					
SUB-AREA 15	SSGM-02436	BIRCHWOOD DR	SSMH-1915	SSMH-2788	236.2	VC	8	4	Infiltration Gusher Joint(94.5'), Infiltration Runner Connection(217.8', 233.4'), Water level Sag(105.9', 172.2', 224.4')	COMPLETE	5142	2300	5142	5	14,400					X		4					
SUB-AREA 15	SSGM-02439	BIRCHWOOD DR	SSMH-2787	SSMH-2789	235.9	AC	8	5	Joint offset large (13.5), Infiltration stain capped service (98), Mineral Deposits service connection (108), Staining around service connection (163, 233.5), Weeping infiltration at service connection (181), Running Infiltration Lateral (90)	COMPLETE	4121	4100	4221	3	5,040			1	90, 108, 181	X		5					
SUB-AREA 15	SSGM-02440	BIRCHWOOD DR	SSMH-5156	SSMH-2790	53.4	VC	8		Fine roots joint (32.5), Survey abandoned at 63' due to increased pipe decline. Ties into to interceptor in easement downstream.	Cannot Complete	1100	0	1100	1	144	X											Roots
SUB-AREA 15	SSGM-02345	BROOKVIEW TER	SSMH-2712	SSMH-2713	193.8	VC	8	7	Fine roots joint (18.5, 31, 35.5, 39, 43, 46.6), Crack Spiral (35, 115, 118, 167), Fracture Spiral (71, 94), Dripping infiltration at service (102), Crack Longitudinal (170, 174, 179)	COMPLETE	1600	3227	3227	3	3,600	X		4	20, 102, 106, 185	X		7					Roots

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 15	SSGM-02346	BROOKVIEW TER	SSMH-2713	SSMH-2714	186.9	VC	8	4	Fracture Longitudinal (129-132), Fracture Spiral (9, 133, 157), Medium Roots at Joint (13), Fine Roots Joint (17-33), Crack Spiral (37, 81, 124, 137, 180), Crack Multiple (49), Crack Circumferential (64, 74.5, 77), Crack Longitudinal (100.5, 124), Fracture Multiple (85, 121), Broken Pipe (177)	COMPLETE	3115	5143	5143	5	3,024	X		4	63.5, 74, 116, 135	X		4						Roots
SUB-AREA 15	SSGM-02504	CANDLEWYCK TER	SSMH-5233	SSMH-2755	110.0	AC	8	1	Infiltration Runner Joint(7.0')	COMPLETE	4100	0	4100	2	3,600							1		X			
SUB-AREA 15	SSGM-02522	CANDLEWYCK TER	SSMH-2798	SSMH-2754	132.8	AC	8	4	Water level Sag(36.9'), Obstruction Debris(74.9'), Joint Seperated Medium(6.1')	COMPLETE	2100	3121	3122	3	144										X		Debris
SUB-AREA 15	SSGM-02545	CANDLEWYCK TER	SSMH-2755	SSMH-2765	0.0				Requires Heavy Cleaning, no d/s access.	Needs Cleaning	N/A	N/A	N/A	N/A	0												
SUB-AREA 15	SSGM-02352	CEDARHURST LANE	SSMH-5188	SSMH-6214	27.2	VC	15		Deposits Attached Grease(13.9'), Roots Fine Joint(18.4'), Survey abandoned due to Root Ball (27.2')	COMPLETE	4121	0	4121	3	288	X				X							Roots and Grease
SUB-AREA 15	SSGM-08048	DENNET ST XC	SSMH-5213	SSMH-0266	80.0	VC	24		No significant defects	COMPLETE	1500	2100	2115	2	0												
SUB-AREA 15	SSGM-02501	DENNETT ST	SSMH-5231	SSMH-5213	275.7	VC	8	5	Water Level Sag(10.0', 268.6'), Crack Longitudinal(167.8'), Broken Pipe Void Visible(270.0')	COMPLETE	0	5123	5123	4	288			1	105	X		5					
SUB-AREA 15	SSGM-02502	DENNETT ST	SSMH-4583	SSMH-5231	263.2	VC	8	4	Fracture Circumferential(2.0'), Infiltration Runner Connection(123.3')	COMPLETE	4100	1100	4111	3	3,744			1	192	X		4					
SUB-AREA 15	SSGM-02399	DORSET ST	SSMH-5198	SSMH-2738	274.9	VC	8	4	Roots Fine Joint(35.6', 106.3', 130.9'), Crack Multiple(41.7'), Water Level Sag(38.7', 59.8', 66.0', 223.4', 239.6', 254.3'), Roots Fine Lateral(129.5'), Deposits Settled Fine(243.3'), Fracture Multiple(62.4')	COMPLETE	2112	4131	4131	4	864	X		2	26.0, 131.8	X		4						Debris, and Roots
SUB-AREA 15	SSGM-02401	DORSET ST	SSMH-2740	SSMH-2741	205.3	VCP	12	5	Object in joint <10% (10), Roots fine joint (38.4, 45.4, 55.5, 60.0, 62.7, 65.3, 134.1), Roots medium joint (41.8, 49, 68.8, 71, 73.4, 76.7, 172.9, 190, 203.2), Root ball connection (44), Root ball joint (205.3), Survey Abandoned due to roots. Drop connection at downstream manhole.	Cannot Complete	4239	0	4239	4	2,736	X	X			X					Mechanical root removal required	Roots
SUB-AREA 15	SSGM-02446	DORSET ST	SSMH-2739	SSMH-5210	0.0				Unable to Access Pipe Segment, manholes in easement.	Cannot Access	N/A	N/A	N/A	N/A	0												
SUB-AREA 15	SSGM-02442	FOUR WINDS RD	SSMH-2761	SSMH-0708	185.4	VC	8	2	Roots fine Joint(48.4', 51.1', 107.5'), Roots Fine Connection(59.7'), Infiltration Runner Joint(63.4')	COMPLETE	4131	5131	5141	5	4,176	X		4	47.2, 67.4 / 43.9, 59.7			2					Roots
SUB-AREA 15	SSGM-02489	FOURWINDS RD	SSMH-5225	SSMH-5226	254.7	VC	8	6	Roots Fine Joint(25.2', 43.0', 56.0', 70.5', 88.2', 109.6', 133.4',), Roots Fine Connection(51.8'), Crack Spiral(124.4'), Crack Longitudinal(195.8'), Fracture Spiral(112.8', 133.4', 201.8'), Fracture Multiple(240.8', 246.8'), Broken Pipe Void Visible(237.9')	COMPLETE	1800	5142	5142	5	2,304	X		1	47	X		6						Roots
SUB-AREA 15	SSGM-02490	FOURWINDS RD	SSMH-0708	SSMH-5227	56.2	VC	8		DS: Survey Abandoned 41' protruding service/ US: Obstruction Rocks(10.0'), Obstruction through Connection Concrete through joint(14.9'), Survey Abandoned 15' Concrete in joint.	Cannot Complete	2200	0	2200	1	0			1	41						Cut protruding service (41), then resinpect	Debris
SUB-AREA 15	SSGM-02306	GLEN HAVEN EAST	SSMH-0667	SSMH-2655	165.2	VC	12	3	Roots Fine Joint(2.0), Roots Medium Joint(2.0', 32.4'), Crack Spiral(19.0'), Crack Longitudinal(58.5', 92.6'), Crack Circumferential(132.2'), Fracture Longitudinal(61.7', 64.7',107.5')	COMPLETE	3111	3323	3423	3	1,440	X				X		3						Roots
SUB-AREA 15	SSGM-02282	GLEN HAVEN RD	SSMH-0663	SSMH-0664	126.0	VC	8	2	Fracture Longitudinal (117.5), Roots Fine Joint (117.5), Dripping Infiltration and Mineral Deposits at joint (12), Mineral Deposits/Infiltration Stain at service connection (6, 83), Infiltration stain at joint (7, 27, 41.5, 62, 67, 77, 82), Mineral Deposits at Joint (17, 32, 37, 47, 52, 57.5) ,Crack Longitudinal with staining (17.2), Broken Pipe with Soil Visible (121)	COMPLETE	1B00	5131	5131	4	3,024					X		2			X			Roots
SUB-AREA 15	SSGM-02286	GLEN HAVEN RD	SSMH-5153	SSMH-0663	176.1	VC	8	3	Infiltration Stain Joint(21.6'), Deposits Attached Encrustation(11.8', 36.5', 46.1'), Deposits Attached Encrustationat joint(51.8'),Water level Sag(86.4', 135.6'), Infiltration Stain Joint(21.6')/ Fracture Longitudinal(9.0'), Broken Pipe Void Visible(29.3')	COMPLETE	2412	5131	5131	4	1,152			1	136	X		3						
SUB-AREA 15	SSGM-02494	LONGWOOD DR	SSMH-5230	SSMH-5229	223.4	VC	8	3	Fracture Multiple(3.0')	COMPLETE	0	4100	4100	2	144						1					CIPSR 0' to 6'	
SUB-AREA 15	SSGM-02497	LONGWOOD DR	SSMH-0722	SSMH-0723	247.9	VC	8	4	Water level Sag(237.5')	COMPLETE	0	2100	2100	1	0			1	99								
SUB-AREA 15	SSGM-02499	LONGWOOD DR	SSMH-0723	SSMH-0724	178.4	VC	8	2	Infiltration Runner Connection(78.5', 151.4'), Water Level Sag(74.5', 169.3')	COMPLETE	4200	2200	4222	3	7,200			1	79			2					
SUB-AREA 15	SSGM-02469	LUDLOW ST	SSMH-0719	SSMH-5215	321.0	VC	8	7	Fracture Circumferential (3.5), Fracture Spiral (315), Crack Circumferential (126.6), Brick Point Repair at joint (139.4), Running Infiltration Lateral (302)	COMPLETE	4100	3121	4131	4	4,032			3	120, 302, 316	X		7						
SUB-AREA 15	SSGM-02293	OFF GLEN HAVEN WEST	SSMH-6212	SSMH-6213	144.9	VC	18	0	Roots Fine Joint(134.8')	COMPLETE	1100	0	1100	1	144	X				X							Roots
SUB-AREA 15	SSGM-02301	OFF PENWOOD DR	SSMH-6209	SSMH-6208	40.0	VC	18	0	Roots Fine Joint(27.6', 36.3')	COMPLETE	1200	0	1200	1	288	X				X							Roots
SUB-AREA 15	SSGM-02302	OFF PENWOOD DR	SSMH-6208	SSMH-6210	151.0	VC	18	0	Roots Ball Barrell(26.9'), Roots Medium Joint(52.4'), Obstruction Other object under water (85.4')/ Roots fine Joint(3.7'), Deposits Attached Encrustation(10.0', 41.8'), Infiltration Stain Joint(34.1'), Obstruction Rocks(63.5'), Miscellaneous Survey Abandoned Reversal Complete(65.6')	COMPLETE	5131	0	5131	4	576	X				X								Debris, and Roots
SUB-AREA 15	SSGM-02175	OFF PINEBROOK LN	SSMH-6210	SSMH-6211	184.3	VC	18	0	Deposits Attached Encrustation (136.1'), Infiltration Stain Joint(3.7', 67.5', 69.7', 123.9'), Infiltration Weeper Joint(6.0'), Roots Fine Joint(153.9', 155.9', 160.3', 169.9', 172.2')	COMPLETE	2219	0	2219	2	2,160	X				X								Roots
SUB-AREA 15	SSGM-02176	OFF PINEBROOK LN	SSMH-6211	SSMH-6207	150.5	VC	18	0	Infiltration Dripper Joint(105.7', 109.7'), Infiltration Stain Joint(25.6', 33.6', 39.6', 48.0', 55.4', 117.7', 145.4'), Roots Fine Joint(131.5')	COMPLETE	3218	0	3218	3	4,032					X							Roots
SUB-AREA 15	SSGM-02300	OFF PINEBROOK LN	SSMH-6207	SSMH-6212	65.6	VC	18	0	Roots Fine Joint(23.4')	COMPLETE	1100	0	1100	1	144	X				X							Roots
SUB-AREA 15	SSGM-02360	ORONO RD	SSMH-5161	SSMH-5191	240.0	VC	8	4	Roots Fine Lateral(18.4'), Roots Fine Joint(61.0', 158.0', 163.5', 166.3'), Obstruction Wedged in the Joint rock(80.8'),Obstruction Rocks(126.6'), Fracture Circumferential(234.6')	COMPLETE	2215	2100	2315	2	864	X				X		4						Debris, and Roots
SUB-AREA 15	SSGM-02154	PENWOOD DR	SSMH-2697	SSMH-2698	213.2	VC	8	5	Root ball obstruction and running infiltration at service (20), Running infiltration and medium roots at service (6), Fine Roots at Joint (12, 22), Crack Longitudinal (59.5), Infiltration stain around service (147), Infiltration Stain at joint (209)	COMPLETE	4331	2100	4331	4	8,064	X		2	6, 147	X		5						Roots
SUB-AREA 15	SSGM-02155	PENWOOD DR	SSMH-2695	SSMH-2697	166.4	VC	8	3	Running Infiltration and Fine Roots at service (118), Weeping Infiltration and Mineral Deposits around service (31.5), Infiltration stain/Minor Crack around service (79), Crack Longitudinal (117), Fine roots joint (141), Roots Medium Joint (161)	COMPLETE	4131	2111	4131	4	5,040	X		1	79	X		3						Roots
SUB-AREA 15	SSGM-02283	PINEBROOK LN	SSMH-0664	SSMH-5155	168.0	VC	8	4	Fracture Circumferential with staining (102), Mineral Deposits/Staining/Fine Roots at joint (2), Weeping Infiltration and staining at service (58), Crack Longitudinal (58, 61.1,146.4), Running Infiltration and staining at Service (162), Crack Circumferential (162.2), Infiltration stain at joint (6,11, 21, 36, 41-71, 91, 106-141), Crack Multiple (76), Crack Spiral (62), Fine Roots Joint (36, 41)	COMPLETE	4122	3125	4131	4	9,792			2	61.5, 162	X		4						Roots
SUB-AREA 15	SSGM-02309	PINECREST RD	SSMH-5159	SSMH-0671	201.1	AC	8	4	Infiltration stain at service (20, 48 (fine roots), 148.5), Debris settled (87-108, 131-148.5)	COMPLETE	1100	0	1100	1	432	X		1	149			4		X			Debris, and Roots
SUB-AREA 15	SSGM-02315	PINECREST RD	SSMH-5164	SSMH-5165	143.5	AC	8	2	No significant defects	COMPLETE	0	0	0	0	0				24								
SUB-AREA 15	SSGM-02349	PINECREST RD	SSMH-2717	SSMH-2716	202.0	VC	8	4	DS: Root ball joint (159, 163, 166), Root Obstruction in Lateral (194), Roots medium joint (168, 171 (weeper), 199), Fine roots and dripping infiltration at joint (150, 153, 156), Fine roots joint (93-129, 144-148, 174, 180-195), Crack Circumferential (.2), Crack Spiral (8), Fracture Longitudinal Hinge 2 (19), Crack Longitudinal (64), Service defective with roots (112, 116.5), Running Infiltration and fine roots at service (116), Survey abandoned due to roots (201)	Needs Cleaning	4537	3122	4538	4	13,968	X	X			X		4			Mechanical root removal required	Roots
SUB-AREA 15	SSGM-02434	PINECREST RD	SSMH-0670	SSMH-2788	254.8	AC	8	3	No significant defects, VC point repair (253'-255')	COMPLETE	0	0	0	0	0												
SUB-AREA 15	SSGM-02484	SONNET LN	SSMH-2780	SSMH-2781	229.9	VC	8	3	Obstruction Rocks(0.0'), Fracture Circumferential(68.0'), Fracture Multiple(127.3'), Crack Multiple(130.1'), Fracture Spiral(142.2'), Fracture Longitudinal(154.4')/ Roots Fine Joint(12.5'), Roots fine Connection(15.1'), Roots Fine Joint(16.6'), Fracture Multiple(48.9'), Water Level Sag(49.9')	COMPLETE	2100	4233	4233	4	1,296	X		1	0 / 15.1	X		3						Debris, and Roots
SUB-AREA 15	SSGM-02486	SONNET LN	SSMH-5223	SSMH-2761	79.2	VC	8	1	No significant defects	COMPLETE	0	0	0	0	0												

City of Portland, Maine
Wastewater Collection System Analysis and Action Plan
Pipe Inspection Findings and Rehabilitation Recommedations

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 15	SSGM-00237	SUNSET LN	SSMH-1913	SSMH-1910	5.0	VC	8	1	Survey abandoned - protruding service (5)', drop connection at downstream manhole	Cannot Complete	0	0	0	0	0			X	5							Cut protruding service at 5' and reinspect	
SUB-AREA 15	SSGM-00238	SUNSET LN	SSMH-1912	SSMH-1911	159.1	VC	12	3	Fracture Longitudinal (34), Fracture Circumferential (49), Crack Longitudinal (93, 97, 102.5), Crack Spiral (20.5, 81.4, 105), Crack Circumferential (127), Infiltration stain at joint (77.7), Infiltration stain at service (125)	COMPLETE	0	3127	3127	3	1,584			1	76	X		3					
SUB-AREA 15	SSGM-02294	SUNSET LN	SSMH-6213	SSMH-2702	303.4	VC	18		Deposits Attached Encrustation (68.2', 78.3', 185.9', 193.8', 233.8', 240.3', 254.0'), Infiltration Dripper Joint (88.1', 198.0', 203.9', 285.6'), Infiltration Runner Joint (201.9'), Infiltration Stain Joint (60.1', 65.9', 82.4', 221.8', 238.1', 239.9', 244.2', 246.0', 300.0'), Infiltration Weeper Joint (44.1', 52.3', 188.4', 223.8', 230.0'), Roots fine Joint(175.9')	COMPLETE	4234	0	4234	4	15,408	X				X								Roots
SUB-AREA 15	SSGM-02295	SUNSET LN	SSMH-1911	SSMH-2702	200.0	VC	15	2	Fracture Longitudinal(4.0', 102.0', 111.4', 158.5'), Water level Sag(101.8'), Roots Fine Joint(140.4', 200.0')	COMPLETE	1200	3421	3421	3	864	X				X		2					Roots
SUB-AREA 15	SSGM-02297	SUNSET LN	SSMH-2702	SSMH-6214	300.6	VC	18		Infiltration Stain Joint(27.0', 45.3', 57.1', 92.6', 95.2', 98.9', 150.9', 178.9'), Infiltration Weeper Barrel(39.5'), Joint Offset Large(205.0'), Roots Fine Joint(115.3', 176.8', 179.1', 181.1', 191.2', 197.6', 279.1'), Roots Fine Barrel(145.2')	COMPLETE	3121	4100	4131	4	3,168	X				X								Roots
SUB-AREA 15	SSGM-02364	WARWICK ST	SSMH-5191	SSMH-2718	283.7	VC	8	2	Water level Sag(38.7', 151.0', 244.5'), Infiltration Runner Joint(44.9'), Infiltration Runner Barrel (61.0'), Fracture Longitudinal(80.7'), Joint Angular Large(169.9', 173.4')	COMPLETE	4200	4231	4431	4	7,632			1	138	X		2					
SUB-AREA 15	SSGM-02425	WARWICK ST	SSMH-1909	SSMH-2753	278.2	VC	18	5	Crack Multiple(52.3'), Roots Fine Joint(13.2', 22.4', 162.6', 278.2', 278.2'), Infiltration Runner Connection(180.7'), Roots Fine Connection(180.7'), Roots Medium Connection(127.2')	COMPLETE	4131	3100	4132	4	4,752	X		1	127	X		5					Roots
SUB-AREA 15	SSGM-02539	WARWICK ST	SSMH-2767	SSMH-2720	0.0				Pipe surcharged, Grease in manholes.	Needs Cleaning	5100	0	5100	5	0										X		Grease
SUB-AREA 15	SSGM-02540	WARWICK ST	SSMH-2720	SSMH-2768	0.0				Pipe surcharged, Grease in manholes.	Needs Cleaning	5100	0	5100	5	0										X		Grease
SUB-AREA 15	SSGM-02542	WARWICK ST	SSMH-2768	SSMH-2763	0.0				Pipe surcharged, Grease in manholes.	Cannot Complete	5100	0	5100	5	0										X		Grease
SUB-AREA 15	SSGM-02287	WOODVALE ST	SSMH-5152	SSMH-5157	233.3	VC	15	5	Fracture Longitudinal Continuous 12 oclk (0-233.3), Fracture Longitudinal (21), Infiltration stain joint (6), Fracture Multiple (76), Crack Spiral (2:162, 174, 204 (staining), Fracture Longitudinal (184), Crack Longitudinal (Hinge 2: 142.5, 196, 201), Crack Circumferential (231)	COMPLETE	2111	413H	413H	4	13,248					X		5					
SUB-AREA 15	SSGM-02538	WSIS SECTION 7	SSMH-6214	SSMH-2767	0.0				Cleaned, could not acces for inspection, pipe is in easement	Cannot Access	N/A	N/A	N/A	N/A	0												
SUB-AREA 15	SSGM-02543	WSIS SECTION 7	SSMH-2763	SSMH-2764	0.0				Cleaned, could not acces for inspection, pipe is in easement	Cannot Access	N/A	N/A	N/A	N/A	0												
SUB-AREA 15	SSGM-02546	WSIS SECTION 7	SSMH-2764	SSMH-2765	0.0				Cleaned, could not acces for inspection, pipe is in easement	Cannot Access	N/A	N/A	N/A	N/A	0												
SUB-AREA 15	SSGM-02547	WSIS SECTION 7	SSMH-2765	SSMH-2766	0.0				Cannot complete, access issues, Pipe in easement	Cannot Complete	N/A	N/A	N/A	N/A	0												
SUB-AREA 15	SSGM-02548	WSIS SECTION 7	SSMH-2766	SSMH-5214	0.0				Cleaned, could not acces for inspection, pipe is in easement	Cannot Access	N/A	N/A	N/A	N/A	0												
SUB-AREA 15	SSGM-02549	WSIS SECTION 7	SSMH-5214	SSMH-0927	226.9	VC	24		Roots Fine Joint(130.1'), Crack Longitudinal(168.4'), Infiltration Weeper Joint(96.0'), Debris underwater(226.9'), survey abandoned due to rock in pipe (226.9)	Needs Cleaning	2211	2100	2311	2	1,008					X					X		Debris, and Roots
SUB-AREA 15	SSGM-02550	WSIS SECTION 7	SSMH-0927	SSMH-5213	139.4	VC	24		Crack Spiral(18.2'), Infiltration stain Joint(15.6', 18.2', 26.6', 29.8'), Roots Fine Joint(107.4')	COMPLETE	1500	2100	2115	2	864	X				X							Roots
SUB-AREA 16	SSGM-02763	ALBA ST	SSMH-2844	SSMH-0749	181.4	CIPPL	8	4	Connection weeping infiltration (3.3, 123.7, 178.0), Fine deposits in pipe (13.4), Connection dripping infiltration (25.8), Wrinkle in Liner (38.9-81.3, 88.4-102.8, 106.7-120.0, 166.9-181.4), Sag in pipe (84.3-98.8), Survey abandoned due tue obstruction in pipe (181.4)	COMPLETE	3123	1400	3123	3	3,600							4				X		
SUB-AREA 16	SSGM-02764	ALBA ST	SSMH-4323	SSMH-0749	296.1	CIPPL	8	11	Grease attached to pipe (62.9, 95.4, 126.4-188.2), Fine roots at connection (103.9), Weeping infiltration at connection (123.3), Sag in pipe (164.1-188.2), Camera under water(180.5-188.2), Survey abandoned due to root ball (188.2) / R: Root ball in service (66.4), Medium roots at connection (66.4), Running infiltration at connection (93.7), Survey abandoned at root ball at connection (108.4)	COMPLETE	4431	0	4431	4	5,040	X	X					11				Mechanical root removal required	Roots and Grease
SUB-AREA 16	SSGM-02765	ALBA ST	SSMH-0245	SSMH-4324	324.4	CIPPL	8	13	Running infiltration at connection (20.1, 70.8, 76.6, 136.2, 175.8, 188.3, 219.1, 258.6), Medium roots from lateral (28.6), Root ball at joint in lateral (28.6)	COMPLETE	4931	0	4931	4	29,088	X						13					Roots
SUB-AREA 16	SSGM-02766	ALBA ST	SSMH-4324	SSMH-4323	301.3	CIPPL	8	7	Obstruction construction debris (70.8), Service connection dripping infiltration (76.1), Service connection running infiltration (77.8, 169.5, 191.2, 247.1, 251.5), Infiltration stain on liner (111.2), Liner wrinkled (144.8)	COMPLETE	4531	0	4531	4	19,584							7					Debris
SUB-AREA 16	SSGM-06632	ALBA ST	SSFT-0382	SSMH-2844	68.7	VC	8		Survey abandoned - cannot navigate offset joint (68.7'). No upstream access point.	Cannot Complete	0	4100	4100	4	0												
SUB-AREA 16	SSGM-02707	BARTLETT ST	SSMH-2867	SSMH-2862	151.1	CIPPL	8	1	Deformed bulging round (19.8-37.8), running infiltration at connection (143.4)	COMPLETE	4100	3100	4131	4	3,600							1					
SUB-AREA 16	SSGM-02623	BEDELL ST	SSMH-2831	SSMH-2832	160.6	VC	8	8	Roots fine joint (5.4, 10.0, 24.0, 34.0, 42.9, 44.9, 49.2, 53.1, 59.6, 61.3, 69.6, 77.6, 89.8, 92.1, 104.2, 116.5, 120.7, 122.5, 124.6, 128.5, 130.9, 133.1, 139.24), Surface spalling (29.5), Medium joint offset (89.8, 92.1, 130.9, 133.1), Joint weeping infiltration (136.4), Root tap joint (141.2), Hole soil visible (147.7), Survey abandoned due to protruding service (149.6) / R: Roots fine joint (3.4, 5.7), Root ball joint (11.0, 13.0), Root ball barrel (12.0), Survey abandoned due to roots (12.0)	COMPLETE	5321	5134	5434	4	5,616	X	X	1	150	X		8				Mechanical root removal required	Roots
SUB-AREA 16	SSGM-02624	BEDELL ST	SSMH-2832	SSMH-2833	199.7	VC	8	3	Medium joint offsets (13.0, 16.8), Infiltration stain at joint (13.0, 75.3, 77.6), Fine roots at joint (23.0, 25.3, 27.5, 40.9, 131.6, 135.8, 137.4, 135.8, 141.5, 156.2, 162.1, 174.5), Dripping infiltration at oint (31.2), Weeping infiltration at joint (33.4, 34.7, 37.2, 43.5, 45.7, 47.6, 49.5, 53.2, 59.6, 61.7, 63.6, 65.4, 67.8, 81.8, 115.1, 125.4, 127.6, 129.4), Infiltration stain in capped tap (36.8), Longitudinal crack (42.2), Fine roots through barrel (42.2), Medium roots at joint (51.2, 55.7, 57.6, 170.3, 176.4, 186.9, 188.8, 193.0), Object in joint (150.1), Running infiltration at joint (150.1), Circumferential fracture (172.9), Fine roots at connection (184.5)	COMPLETE	4139	3222	413A	5	22,176	X		1	185	X		3					Roots
SUB-AREA 16	SSGM-02674	BEST ST	SSMH-2834	SSMH-0749	243.6	VC	15	6	Crack Circumferential (192.9'), Crack Longitudinal(11.3', 11.5', 28.0', 29.3', 79.4', 81.8', 85.8', 89.5', 94.8', 108.8', 116.0', 150.5', 176.3', 218.5', 228.2', 234.6'), Crack Multiple(110.0', 208.4'), Crack Spiral(195.9'), Fracture Longitudinal Hinge 4(18.2', 94.8'), Fracture Longitudinal(79.8', 94.8', 106.4', 112.7', 232.7'), Fracture Multiple(91.9'), Infiltration Dripper Barrel(104.6'), Infiltration Dripper Connection(217.1'), Infiltration Gusher Joint(228.2'), Infiltration runner Joint(69.7', 138.6', 142.9', 169.5', 228.3', 230.6'), Infiltration Stain Barrel(109.2', 150.5', 208.4'), Infiltration Stain Connection(146.6', 227.6'), Infiltration Stain Joint(61.5', 216.1', 218.4', 220.3', 224.5', 232.2', 234.6', 241.4',), Infiltration Weeper Barrel(110.0), Infiltration Weeper Joint(75.7', 134.5', 179.5', 226.3'), Roots Fine Joint(118.3', 120.4', 122.9'), Roots Medium Connection(121.6'),	COMPLETE	5146	4337	5149	5	42,336	X				X		6					Roots
SUB-AREA 16	SSGM-02689	BEST ST	SSMH-0749	SSMH-5274	240.8	VC	15	5	Crack Multiple (76.8'), Fracture Circumferential(28.1'), Infiltration Dripper Joint (58.0', 138.9', 157.2'), infiltration Stain Barrel(76.8'), Infiltration Stain Connection(14.4', 64.9', 144.2'), Infiltration Stain Joint(13.2', 28.1', 235.9')	COMPLETE	3321	3121	3422	3	5,616			1	180	X		5					
SUB-AREA 16	SSGM-02696	BEST ST	SSMH-5274	SSMH-2320	237.4	VC	20	5	Crack Circumferential(88.6'), Infiltration Stain Barrel(88.6'), Infiltration Stain Joint(8.2', 31.4', 57.1', 66.0', 78.3', 90.7', 94.0',106.1', 109.2', 118.3', 122.4', 134.6'), Root fine Connection(229.9'), Root Fine Joint(232.5'), Roots medium Joint(208.1', 237.4')	COMPLETE	3221	1100	3221	3	2,592	X				X		5					Roots
SUB-AREA 16	SSGM-02672	BRENTWOOD ST	SSMH-4684	SSMH-2834	266.3	VC	12	11	Crack circumferential (0, 12.7), Fine roots at connection (6.0), Fine roots at joint (6.9. 12.7, 17.4), Spiral fracture (15.2), Fine deposits settled (110.7), Medium roots from lateral (187.2), Root ball at joint in lateral (187.2), Fine roots at joint in lateral (238.8), Fine roots from lateral (238.3)	COMPLETE	2115	3112	3121	3	1,584	X				X		11					Debris, and Roots
SUB-AREA 16	SSGM-02676	BRENTWOOD ST	SSMH-2833	SSMH-2834	228.5	VC	15	8	Infiltration Stain Joint(193.8'), Roots Fine Connection(7.0'), Root Fine Joint(101.8', 136.9'), Roots medium connection(83.0')	COMPLETE	3114	0	3114	2	720	X				X		8					Roots

ARCADIS Design & Consultancy for natural and built assets

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 16	SSGM-02677	BRENTWOOD ST	SSMH-5249	SSMH-5250	239.8	VC	8	1	Joint medium offset (10.0, 14.6, 77.7, 82.2), deposits settled fine (18.9 - 239.8), Capped tap with running infiltration (26.5), Large seperation at joint where soil is visible (29.6, 54.4, 58.8, 69.2, 75.1, 190.4, 234.1, 236.5), Joint running infiltration (29.6, 184.0), Medium separation at joint (43.9), Service connection with 60% full of fine sediment (49.5), Fine roots at joint (58.8, 77.7, 79.8, 82.2, 86.1, 88.5, 184.0, 186.2, 204.8, 209.6, 211.1, 213.5, 215.2. 217.7, 223.7, 225.8, 228.2, 230.1, 232.1, 234.1, 236.5), Capped tap with weeping infiltration (62.1), Sag in pipe (72.2-, 106.5-124.8, 190.8-198.0, 202.7-), Hole with soil visible (79.8, 173.7), point repair (79.8, 118.8), , Tap roots at joint (92.4, 94.4), Gushing infiltration at joint (94.4), Capped tap with roots and dripping infiltration (96.1), capped tap with dripping infiltration (149.8, 162.5, 218.7)	COMPLETE	3224	0	3224	3	30,384	X				X		1					Debris, and Roots
SUB-AREA 16	SSGM-02685	COLUMBIA ST	SSMH-1754	SSMH-5273	283.5	VC	10	11	Crack Multiple(32.8'), Deposits attached Encrustation(5.0', 96.3'), Fracture Spiral(37.7'), Surface Damage Roughness Increased(11.3')	COMPLETE	2200	3211	3222	3	288			1	172		1					CIPSR 31' to 39'	
SUB-AREA 16	SSGM-02683	CONCORD ST WEST	SSMH-5256	SSMH-5270	255.0	VC	8	5	Infiltration Runner Connection(99.3')	COMPLETE	4100	0	4100	2	3,600							5		X			
SUB-AREA 16	SSGM-02629	CROSBY ST	SSMH-0744	SSMH-0753	296.7	VC	8	9	Broken (1.41), Offset joint with root ball in lateral (2.5), Multiple fractures (3.9, 211.5, 260.8), Hole (3.6), Spiral fracture (6.4), Circumferential fracture (10.6, 35.9, 145.2, 159.9), Crack circumferential (24.4), Longitudinal fracture (49.4, 57.2, 97.9, 131.3, 135.6, 147.4, 158.7, 161.2-182.0, 191.4), Fine roots joint (97.5, 105.8, 107.8, 112.1, 116.3, 118.4, 120.3, 131.3, 135.6, 137.7, 194.4, 200.9, 205.2, 206.9, 209.2, 230.4, 232.6, 234.8, 236.9, 238.9, 241.2, 245.2, 256.9, 260.4, 264.6, 266.2, 289.6), Fine roots connection (110.9, 124.4, 191.4, 213.2), Medium roots at lateral joint (110.9, 124.4, 191.4, 213.2), Fractures Hinge 2 (141.6, 144.6), Fractures Hinge 3 (156.4), Surface spalling (177.6), Medium roots joint (211.5, 213.2, 215.4, 218.0, 222.2, 228.0), Root ball joint (225.3), Infiltration stain from barrel (291.0)	COMPLETE	4136	5244	5245	5	10,944	X		1	81			9					Roots
SUB-AREA 16	SSGM-02712	FULLER ST	SSMH-0755	SSMH-0756	239.3	VC	24	8	Roots fine joint(119.4', 129.6'), Infiltration stain Joint(139.8')	COMPLETE	1300	0	1300	1	432	X						8		X			Roots
SUB-AREA 16	SSGM-03657	HALE ST	SSMH-3216	SSMH-2862	299.0	AC	8	9	Broken Pipe(144.6'), Fracture Multiple(38.1', 53.1'), Infiltration Gusher Connection(5.0'), Infiltration stain Joint(53.1', 81.2', 223.0', 245.8', 275.6', 285.5'), Joint Offset Medium(291.8')	COMPLETE	5116	5142	5242	5	8,640					X		9					
SUB-AREA 16	SSGM-02715	HAMBLET AVE	SSMH-4597	SSMH-0759	239.5	RCP	18	3	Deposits attached Encrustation(44.0', 116.5', 148.9'), Infiltration Stain Joint(8.0', 169.6')	COMPLETE	2312	0	2312	2	288			1	217			3		X			
SUB-AREA 16	SSGM-02713	HAMBLET ST	SSMH-5251	SSMH-4596	244.3	VC	15	2	Crack Longitudinal(149.6', 156.2'), Crack Multiple(0.0'), Deposits attached Encrustation(9.0'), Fracture Longitudinal(6.0'), Infiltration Dripper Joint (176.3'), Infiltration Stain Barrel(0.0', 149.6'), Infiltration Stain Connection(163.3'), Infiltration Stain Joint(9.0', 11.5', 20.5', 23.7', 156.2', 158.6', 161.5', 167.5', 179.6', 188.1', 203.6'), Roots fine Joint(84.3', 90.3', 104.9', 116.8', 131.5', 158.6'), Roots medium joint(68.1', 74.7', 107.6', 114.3')	COMPLETE	3523	3222	3725	3	5,472	X		2	163.3, 225.3	X		2					Roots
SUB-AREA 16	SSGM-02680	LELAND ST	SSMH-5254	SSMH-0750	247.6	VC	18	2	Crack Circumferential(122.9', 227.9'), Crack Longitudinal(83.1', 194.3', 236.7'), Fracture Longitudinal(83.6'), Infiltration Stain Barrel(236.7'), Infiltration Stain Joint(28.3', 31.2', 51.9', 58.2', 63.9', 75.6', 241.4'), Roots fine Joint(138.1', 150.0', 153.4' , 164.9', 183.3', 189.2', 194.6', 207.2'), Roots Medium Joint(176.4'),	COMPLETE	311B	3123	3223	3	3,312	X		5	9.0, 56.0, 80.7, 177.7, 237.9	X		2					Roots
SUB-AREA 16	SSGM-06566	LELAND ST	SSMH-1325	SSMH-6081	121.0	AC	10	1	Fracture Spiral(57.7'), Roots Ball Joint(121.0'), Roots Fine Joint(1.0', 10.4', 99.5'), survey abandoned (121')	COMPLETE	4113	3100	4131	4	720	X	X	1	52							Mechanical root removal required	Roots
SUB-AREA 16	SSGM-06563	LEONARD ST	SSMH-0754	SSMH-6082	299.2	PVC	10	7	Broken pipe void visible(136.0'), Fracture Circumferential(83.2', 137.0', 229.1'), Roots fine joint(51.3', 53.4', 59.3', 70.3', 79.6', 83.0', 299.2'), Roots Medium Joint(70.0', 76.0', 84.8', 146.0'), Tap factory Defective(88.9')	COMPLETE	3517	5113	5135	4	2,304	X		1	160			7		X			Roots
SUB-AREA 16	SSGM-02474	LUDLOW ST	SSMH-5218	SSMH-5219	189.9	VC	15	5	Fracture longitudinal(51.1'), Crack Circumferential(57.6', 78.4', 114.6'), Crack Longitudinal(90.3'), Fracture Longitudinal(56.3', 72.5', 75.9', 135.3'), Fracture Multiple(81.7')	COMPLETE	0	4135	4135	4	1,440			1	13	X		5					
SUB-AREA 16	SSGM-04982	LUDLOW ST	SSMH-5811	SSMH-5812	295.7	VC	10	3	Crack Longitudinal(155.8', 215.0'), Crack Spiral(261.3'), Infiltration Stain Joint(41.3', 50.0', 53.0', 56.1', 59.1', 95.1', 101.7', 137.2', 164.6', 292.6'), Infiltration Weeper Joint(47.0')	COMPLETE	211A	2300	241A	2	2,592					X		3					
SUB-AREA 16	SSGM-04983	LUDLOW ST	SSMH-5812	SSMH-5273	15.3	VC	15	2	Joint weeping infiltration (5.6, 12.2, 35.9, 44.8, 154.8, 184.3, 196.3, 213.6, 229.6, 234.9), Fins sediments settledd (17.3, 57.7, 196.3),Joint with staininid or deposits (17.9, 20.6, 28.6, 37.7, 39.3, 53.7, 57.7, 62.2, 66.5, 161.1, 185.5, 192.2, 196.3, 205.3, 210.4, 213.6, 217.4, 233.4), Spiraling crack(39.3), joint dripping infiltration (55.9), fine roots at joint (100.9), Longitudinal crack (114.2), Multiple cracks (120.3, 158.0, 160.8, 161.8, 174), Spiraling fracture (126.1), Multiple fractures (166.2), 3 Hinge fractures (245.3-253.1), Broken Pipe(255.6, 264)	COMPLETE	312A	5244	5244	5	13,104	X				X		2					Roots
SUB-AREA 16	SSGM-02767	MABEL ST	SSMH-4325	SSMH-5274	299.7	VC	8	8	Crack Circumferential(1.0'), Joint Offset Medium(1.9', 17.8', 43.9', 182.6'), Deposits Attached Encrustation(50.1', 79.3', 106.2', 126.0', 126.4'), Infiltration Stain Joint(5.4', 11.5', 11.8', 62.3', 217.7'), Crack Spiral(97.2'), Joint Angular Small(150.1')/ Joint Offset Medium(56.7'), Joint Offset Large(29.5')	COMPLETE	2515	4135	4135	4	2,016			1	218	X		8					
SUB-AREA 16	SSGM-02768	MABEL ST	SSMH-4326	SSMH-4325	300.2	VC	8	5	Infiltration Stain Joint(10.6', 16.5', 20.1', 300.2'), Deposits attached Encrustation(36.6', 59.2', 144.8', 151.0', 240.1', 260.8', 276.3'), Joint Offset Medium(31.3', 39.7', 42.8', 70.5', 229.5', 285.4'), Broken Pipe(297.0'), Infiltration Dripper Joint(29.5')	COMPLETE	3127	4136	4137	4	3,024					X		5			X		
SUB-AREA 16	SSGM-06678	MABEL ST	SSMH-5272	SSMH-5274	225.2	VC	12	5	Deposits Settled Fine(11.8', 40.2', 91.8'), Broken pipe void visible(84.2'), Crack circumferential(85.3'), Joint Offset Large(170.9'), Deposits Attached Encrustation(174.6'), Hole Void Visible(185.3'), Broken pipe(220.3'), Broken pipe soil visible(222.5'), Fracture Longitudinal(109.0', 220.2'), Infiltration Stain Joint(68.9', 102.4', 108.7', 220.2'), Joint Angular Large(27.1'), Joint Offset Large(60.4'), Joint Offset Medium(75.2', 89.7', 106.1', 112.6'), joint Offset Large(168.5', 170.9'), Joint Seperated Medium (108.7')	COMPLETE	2414	5346	5346	5	3,168			2	138.5, 144.8	X		5					Debris
SUB-AREA 16	SSGM-02621	NEWMAN ST	SSMH-2829	SSMH-2828	174.6	VC	8		Medium joint offset (83.9, 96.1), Fine roots at joint (130.8, 135.0, 137.0, 157.0, 165.2)	COMPLETE	1500	3200	3215	2	864	X		1	157	X							Roots
SUB-AREA 16	SSGM-02622	NEWMAN ST	SSMH-2830	SSMH-2829	171.6	VC	8	9	Fine roots in service (3.1, 25.0, 96.2), Fine roots at joint (17.7, 19.7, 21.0, 44.0, 86.7, 89.9, 101.1, 103.0, 151.7, 153.6, 155.3, 157.7, 159.5, 161.5, 167.7), Medium roots at joint (23.6, 25.8, 27.8, 30.0, 31.6, 33.3, 37.5, 39.9, 41.9, 92.7, 95.1), Medium joint offset (104.8), Weeping infiltration from joint (128.0, 131.0, 134.0, 137.0, 140.0)	COMPLETE	3A25	3100	3A25	4	5,040	X				X		9					Roots
SUB-AREA 17	SSGM-02527	LUCAS ST	SSMH-2801	SSMH-4131	44.0	RCP	24	0	Material Change PVC(14.1')	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-02526	LUCAS ST/ MAYER RD XC	SSMH-4569	SSMH-2801	100.3	CIPPL	24	1	Liner Feature - Liner appears to be cut and peeled (72.0', 87.0')	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-02854	MAYER RD	SSMH-2902	SSMH-4569	207.4	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-02855	MAYER RD	SSMH-0782	SSMH-2902	28.1	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-02856	MAYER RD	SSMH-0781	SSMH-0782	15.9	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-03587	MAYER RD	SSMH-0929	SSMH-0781	84.8	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-06658	VIOLETTE AVE XC	SSMH-4076	SSMH-2783	144.4	VC	24	0	Infiltration Stain Joints (2'-142')	COMPLETE	1G00	0	1G00	1	6,768									X			
SUB-AREA 17	SSGM-03586	WSIS SECTION 6/ BRIGHTON AVE	SSMH-5276	SSMH-0929	62.1	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-02726	WSIS SECTION 7	SSMH-2783	SSMH-5276	107.6	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-06656	WSIS SECTION 7	SSMH-4075	SSMH-4263	188.9	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-02448	WSIS SECTION 7 / DENNET ST	SSMH-4263	SSMH-5212	270.2	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 17	SSGM-02465	WSIS SECTION 7 / DENNET ST XC	SSMH-5212	SSMH-2769	28.3	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-06655	WSIS SECTION 7/ DENNET ST	SSMH-0266	SSMH-4075	183.9	CIPPL	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-03574	WSIS SECTION 7/ VIOLETTE AVE XC	SSMH-3179	SSMH-6882	60.7	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-03576	WSIS SECTION 7/ VIOLETTE AVE XC	SSMH-2769	SSMH-3179	59.8	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-06657	WSIS SECTION 7/ VIOLETTE AVE XC	SSMH-2770	SSMH-4076	273.8	CIPPL	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 17	SSGM-08049	WSIS SECTION 7/ VIOLETTE AVE XC	SSMH-6882	SSMH-2770	45.9	VC	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 18	SSGM-02919	BELFIELD AVE	SSMH-2937	SSMH-0235	259.9	PVC	8	3	Water level sag(228.4')	COMPLETE	0	2100	2100	1	0												
SUB-AREA 18	SSGM-00494	BELKNAP ST	SSMH-4600	SSMH-4598	298.7	VC	8	11	Surface Damage Surface Spalling(7.8'), Broken Pipe Void visible(52'), Crack Longitudinal(268.1'), Crack Multiple(260.4'), Fracture Longitudinal(150.6', 264.5'), Hole Soil Visible(67.8'), Roots fine joint(22.1', 64.5')	COMPLETE	1100	5233	5233	4	1,152	X				X		11					Roots
SUB-AREA 18	SSGM-04551	BRADLEY ST	SSMH-3495	SSMH-1767	266.0	VC	8	11	Deposits Settled Gravel(0.0')	COMPLETE	1100	0	1100	1	0												Debris
SUB-AREA 18	SSGM-00453	BRIGHTON AVE	SSMH-4623	SSMH-4624	150.5	BR	36	6	Deposits Settled Fine(21.0'), Deposits Attached Encrustation(21.0', 76.9', 85.0', 119.7'), Infiltration Stain Barrel(87.6', 93.0', 94.5')	COMPLETE	2513	0	2513	2	1,008												Debris
SUB-AREA 18	SSGM-02824	BRIGHTON AVE	SSMH-4620	SSMH-5307	245.3	VC	20	10	Roots fine joint(140.6'), Crack Multiple(240.2')	COMPLETE	1100	3100	3111	2	288			1	197	X		10					Roots
SUB-AREA 18	SSGM-02825	BRIGHTON AVE	SSMH-5307	SSMH-5306	141.1	VC	20	5	Crack Multiple(5.9'), Fracture Multiple(15.4'), Hole Void Visible(20'), Infiltration stain(58.5')	COMPLETE	1100	5141	5141	5	576					X		5					
SUB-AREA 18	SSGM-02915	BRIGHTON AVE	SSMH-5308	SSMH-4620	250.3	VC	18	10	Deposits attached Encrustation(21.3'), Infiltration Stain Joint(13.1', 39.6',128.9', 164.2', 196'), Crack Multiple(234.2'), Obstruction with Debris(77.6'), Roots fine Joint(139.6')	COMPLETE	2216	4100	4122	3	1,152			1	170		1			X		CIPSR 231.2' to 237.2'	Debris, and Roots
SUB-AREA 18	SSGM-02916	BRIGHTON AVE	SSMH-0235	SSMH-5308	49.3	PVC	8	0	Obstruction Rocks(48.8')	COMPLETE	2100	0	2100	1	0												Debris
SUB-AREA 18	SSGM-03858	BRIGHTON AVE	SSMH-4624	SSMH-2881	291.9	BR	36	9	Deposits attached Encrustation(58.0', 66.9', 90.4', 106.1', 213.2'), Infiltration Weeper Barrel(10.0')	COMPLETE	2600	0	2600	2	720			1	2'	X		9					
SUB-AREA 18	SSGM-04557	BRIGHTON AVE	SSMH-1074	SSMH-5308	144.4	VC	12	5	Infiltration Stain Joint(57.3', 63.4', 75.4', 139.7')	COMPLETE	1400	0	1400	1	576			2	66.1, 91.5			5		X			
SUB-AREA 18	SSGM-00481	CALDWELL ST	SSMH-0254	SSMH-0253	283.5	VC	15	5	Crack Longitudinal (14.4', 27.2'), Deposits attached encrustation at joint(87.0', 96.3',119.5', 165.9', 175.4', 176.6', 181.0', 186.6' - 193.3'), Deposits attached encrustation at capped service(90.3'), Fracture Multiple(9.8'), Infiltration Stain Joint(81.0', 135.5', 172.3', 178.2', 187.2'), Water Level Sag(85.5'), Infiltration Stain at service location(110.2', 175.1', 238.2'), Object protruding from pipe wall(136.4'), Infiltration stain(158.7'), Joint offset medium(258.7')	COMPLETE	2A19	4132	4132	4	3,168	X				X		5			X		
SUB-AREA 18	SSGM-00922	COLUMBIA RD	SSMH-4265	SSMH-4264	292.1	VC	8	12	Downstream: Broken Pipe Void Visible(6'), Deformed Rigid >5% (29.6'), Deposits Ingress Gravel (30.1), Deposits Ingress Other-Piece of Pipe Wall 15% (36'), Infiltration Weeper Joint (58.3', 61.5', 64.5', 67.5', 70.2', 73.2, 76.2', 79.2', 82.2'), Obstruction Joint Other - Unknown stick-like (89.5''), Survey Abandoned-Tap Intruding (92.7') Upstream/Reversal: Deposits Attached Encrustation(3', 16.2',), Infiltration Stain Joint(55'), Surface Damage Spalling (64.5', 182.5'), Defective Tap - Joint Offset Medium (91'), Infiltration Runner Connection (149.0'), Infiltration Weeper Joint (157', 160', 166.3', 188'), Reversal Complete (199.4')	COMPLETE	4131	5121	5141	5	6,624			2	Upstream: 149.0, 199.4	X		12					Debris
SUB-AREA 18	SSGM-02720	COLUMBIA RD	SSMH-4264	SSMH-0761	222.1	VC	8	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 18	SSGM-04382	HIGGINS ST	SSMH-5701	SSMH-4611	199.3	VC	8	5	Broken Pipe(2.5'), Infiltration Stain Joint(192.7'), Roots Fine Joint(21.6', 24.7', 102.2', 166.0', 173.8'), Roots Medium Connection(29.7'), Roots Medium Joint(28.5', 32.8', 41.5')	COMPLETE	3416	5100	5134	4	1,584	X				X		5					Roots
SUB-AREA 18	SSGM-04454	HILLIS ST	SSMH-5716	SSMH-5717	138.7	VC	8	2	Crack Circumferential(53.5'), Crack Longitudinal(25.4', 129.8'), Fracture Circumferential(19.7'), Infiltration Stain Joint(33.5'), Intruding sealing material sealing ring concrete(43.5'), Roots Ball Joint(105.9', 107.7'), Roots Fine Joint(45.5', 51.7', 53.7', 55.7', 63.6', 85.9', 95.8', 100.0', 103.8', 120.3')	COMPLETE	4221	3122	4231	4	2,592	X		3	2.5, 25.9, 114.9	X		2					Roots
SUB-AREA 18	SSGM-02823	KENILWORTH ST	SSMH-2930	SSMH-5307	286.5	VC	10	13	Shape/size change(13.6'), Joint offset Large(23.3'), Deposits attached Encrustation(153.9'), Material change PVC(16.8'), Material change VCP (22.5'), Infiltration Stain Joint(273.5')	COMPLETE	2111	4100	4121	3	432								X				
SUB-AREA 18	SSGM-02698	LUDLOW ST	SSMH-2859	SSMH-2860	147.1	VC	8	3	Crack Circumferential(70.3'), Deposit settled compacted(141.9'), Infiltration Stain Joint(2.5', 8.0', 147.1')	COMPLETE	2113	1100	2114	2	576										X		
SUB-AREA 18	SSGM-02699	LUDLOW ST	SSMH-2860	SSMH-5290	247.2	VC	10	4	Deposits attached encrustation(68.2', 120.7', 132.7', 136.9'), Infiltration Dripper Joint(143.1', 193.3'), Infiltration Runner Barrel(0.0'), Infiltration Stain Joint(2.5'), Material change PVC (239.9')	COMPLETE	4132	0	4132	4	7,200					X		4					
SUB-AREA 18	SSGM-02755	MARLOW ST	SSMH-5290	SSMH-5292	175.8	PVC	12	4	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 18	SSGM-02756	MARLOW ST	SSMH-5292	SSMH-5291	139.2	PVC	12	1	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 18	SSGM-02830	MONTROSE AVE	SSMH-2841	SSMH-5309	320.3	PVC	18	6	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 18	SSGM-02911	MOTLEY ST	SSMH-2932	SSMH-2931	180.2	VC	8	4	Broken Pipe(176.2'), Crack Spiral(157.3'), deposits attached encrustation(7.0'), Fracture Spiral(149.0'), Infiltration Stain Joint(7.0', 11.8',74.0', 178.0'), Roots Fine Joint(168.3', 178.0')	COMPLETE	2116	5131	5131	4	1,440			1	93	X		4					Roots
SUB-AREA 18	SSGM-04373	PROSPECT ST	SSMH-1048	SSMH-4582	259.0	VC	8	10	Broken Pipe soil Visible(0.5'), Material Change PVC(2.5'), Material change VCP(254.9'),	COMPLETE	0	5100	5100	3	144						1					CIPSR 0' to 6'	
SUB-AREA 18	SSGM-02930	RACKLEFF ST	SSMH-2923	SSMH-4599	249.4	Not Known	8	9	Infiltration Runner Connection(216.1'), Infiltration Dripper Connection(81.0', 226.1')	COMPLETE	4132	0	4132	4	6,480							9					
SUB-AREA 18	SSGM-02931	RACKLEFF ST	SSMH-4321	SSMH-2923	246.2	CIPPL	8	7	Roots Fine Connection(44.6'), Water Level Sag(184.2', 200.2', 204.1'), Infitration Runner Connection(119.5'), Infiltration Dripper Connection(72.4')	COMPLETE	4131	2300	4131	4	5,184	X						7				Clean to remove roots from Service	Roots
SUB-AREA 18	SSGM-02932	RACKLEFF ST	SSMH-4322	SSMH-4321	153.2	CIPPL	8	4	Infiltration Dripper Connection(12.0', 32.7')	COMPLETE	3200	0	3200	2	1,440			1	12			4					
SUB-AREA 18	SSGM-00477	ROSEMONT AV	SSMH-1759	SSMH-1758	213.1			5	Roots Medium Connection(57.1', 57.9')	COMPLETE	3200	0	3200	2	288	X						5				Clean to remove roots from Service	Roots
SUB-AREA 18	SSGM-06614	RUNNELS ST	SSMH-1334	SSMH-0801	254.9	VC	8	15	DS: Infiltration Staining Joint (3', 6', 12', 25.5', 31', 34', 50', 112',), Fracture Longitudinal (6.5',), Infiltration Weeper Joint (18', 46.4', 73.1', 76.3', 79', 82', 88', 91', 97', 104', 115', 118', 122', 125', 130.3', 133.6',), Point Repair Patch-Brick (23.5'), Infiltration Stain Barrel (60.3', 85.6', 94'), Deposits Attached Encrusting Joint-Continuous (0-135.3) / US: Infiltration Runner Connection (11.8'), Deposits Attached Encrusted (12', 15', 30', 36', 48', 51', 57', 63', 77', 80', 86', 89', 97', 100', 103', 109.5',), Infiltration Weeper Joint (18', 24', 27', 60', 74', 91.2',), Infiltration Staining Joint (21',33', 42', 45', 54', 66', 69')	COMPLETE	2H1A	3100	312H	3	30,960			4	Downstream: 105.3, 135.3 Upstream(Reversal): 11.1, 63.1	X		15						
SUB-AREA 18	SSGM-00443	STEVENS AVE	SSMH-6539	SSMH-6538	180.4	VC	8	6	Mineral Deposit at capped service(15.5', 49.8', 64.4'), Infiltration at service joint(38.6', 89.7'), Infiltration Stain Joint (42.4', 56.7'), Offset joint Medium (18.3', 172.8'), Root fine Connection(172.8')	COMPLETE	2513	3100	3125	3	1,440	X				X		6					Roots
SUB-AREA 18	SSGM-00444	STEVENS AVE	SSMH-6538	SSMH-4581	161.1	VC	8	7	Fracture Longitudinal(16.2', 18.8'), Fracture Multiple(22.6', 88.6'), Infiltration stain at service(38.0', 98.8', 121.8'), Infiltration Stain joint (52.5', 75.7', 78.8', 84.8', 99.5', 102.5', 108.6', 121.8', 123.8', 131.5', 137.8', 144.4', 147.2'), Crack Longitudinal (93') Fracture Hinge 2 (142.5'), Mineral Deposit(98.6')	COMPLETE	2116	4233	4233	4	3,456			2	45.7, 55.6	X		7						
SUB-AREA 18	SSGM-00489	STEVENS AVE	SSMH-4598	SSMH-4599	251.0	VC	20	6	Crack Longitudinal(17.7'), Infiltration Stain at capped service location(34.2', 55.8', 127.7'), Infiltration weeper connection(55.8', 147.1', 149.1'), Infiltration Stain Joint(135.4', 156.1', 169.4')	COMPLETE	2316	2100	2416	2	3,168					X		6					
SUB-AREA 18	SSGM-02651	STEVENS AVE	SSMH-4599	SSMH-2841	72.4	VC	20	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 18	SSGM-02652	STEVENS AVE	SSMH-2842	SSMH-4598	80.1	VC	18	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 18	SSGM-02653	STEVENS AVE	SSMH-4581	SSMH-2842	103.4	VC	18	4	Concrete Intruding(89.7)	COMPLETE	2100	0	2100	1	0												
SUB-AREA 18	SSGM-02928	STEVENS AVE	SSMH-2921	SSMH-2841	30.0	VC	8		No significant defects, PVC point repair (22.2'-26.0')	COMPLETE	0	0	0	0	0												
SUB-AREA 18	SSGM-02929	STEVENS AVE	SSMH-2922	SSMH-2921	153.9	VC	8	7	Obstruction Brick or Masonry(17.4'), Fracture Longitudinal(94.5'), Roots fine connection(14.7', 20.6', 23.8', 102.3', 131.8')	COMPLETE	2115	3100	3121	3	864		X				1	7				CIPSR 92' to 98'	Roots

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Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 18	SSGM-00484	WOODFORD ST	SSMH-0256	SSMH-0253	313.5	VC	18	12	Infiltration Runner Connection(171', 182.2', 257', 309.4'), Infiltration runner Joint(309.4'), Infiltration Stain Joint(30.7', 34.4', 39.6', 92.8', 119.8', 144.4', 168.8'), Ziptie stuck(144.4'), Surface damage surface spalling(155.8', 174' - 174.5'), Infiltration Stain at service location(180.5', 224.7', 229'), Obstruction Rock through pipe(246.0'), Point Repair Patch Brick Obstruction (257'), Intruding Infiltration Runner Capped Connection (230.3', 260.1')	COMPLETE	5147	1200	5147	5	23,328			2	224.7, 260.1	X		12						Debris
SUB-AREA 18	SSGM-00490	WOODFORD ST	SSMH-0259	SSMH-0258	175.3	PVC	12		Gravel in pipe (107.6')	COMPLETE	2100	0	2100	1	0										X		Debris
SUB-AREA 18	SSGM-00491	WOODFORD ST	SSMH-0258	SSMH-0257	202.4	PVC	12	10	Material Change to VC (78.5), Sag in pipe 5% (78.5 -87.2), Fine deposits settled 5% (78.5 - 87.2), Running infiltration at joint (83.3), Longitudinal fracture (119.7, 160.5), Large joint offset (139.6), PVC Point repair (141.5'-150.5'), Spiraling fracture (163.7)	COMPLETE	4121	3400	4134	4	4,176					X		10						Debris
SUB-AREA 18	SSGM-00492	WOODFORD ST	SSMH-0257	SSMH-0255	247.4	VC	12	17	Infiltration Weeping Joints Continuous (0-147), Capped Factory Tap Weeping Infiltration (68.4), Infiltration Runner Joint (72, 105, 110), Point Repair Replacement-PVC (75-78), Root Tap Joint (95), Capped Factory Tap Dripping Infiltration (217.5)	COMPLETE	4331	2200	4331	4	48,384			1	143	X		17						Roots
SUB-AREA 18	SSGM-04436	WOODFORD ST	SSMH-3469	SSMH-0259	2.1	VC	8		Roots fine Joint (0.0', 2.0'), survey abandoned due to Medium roots (2.1')	Needs Cleaning	3122	0	3122	3	432	X	X									Mechanical root removal required	Roots
SUB-AREA 18	SSGM-04437	WOODFORD ST	SSMH-3468	SSMH-3469	87.1	VC	8	5	US: Survey Abandoned - Protruding Service (39.2') / DS: Fracture Longitudinal (23.4'), Material Change PVC(47.2'), Material change VCP(57.4'), Survey abandoned due to - Protruding Service (65.4')	Cannot Complete	0	3100	3100	2	144			2	39.2, 83.9		1					Cut protruding service at 65.4' to gain access. CIPSR 78' to 84'	
SUB-AREA 18	SSGM-02754	WOODFORD ST/ MARLOW STREET	SSMH-5291	SSMH-0256	35.0	PVC	12		No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 19	SSGM-02552	BRIGHTON AVE	SSMH-0732	SSMH-2810	61.6	VC	10	1	Minor Crack Circumferential (61.3)	COMPLETE	0	1100	1100	1	144						1					CIPSR 58'-64'	
SUB-AREA 19	SSGM-02554	BRIGHTON AVE	SSMH-2810	SSMH-0735	116.2	VC	10	1	Joint seperated large and soil visible (90), Joint offset small (111.5)	COMPLETE	0	4100	4100	2	288						1					CIPSR 87'-93'	
SUB-AREA 19	SSGM-02609	BRIGHTON AVE	SSMH-0735	SSMH-0739	153.6	VC	10	3	Infiltration stain at joint (8, 11, 115, 121, 144, 150), Infiltration stain at service (115)	COMPLETE	1700	0	1700	1	1,008			3	25, 53,115	X		3					
SUB-AREA 19	SSGM-02656	BRIGHTON AVE	SSMH-2846	SSMH-2847	36.5	BR	42	1	Infiltration staining on barrel (6.7'), Ifiltration dripping from barrel (12.6'), Infiltration weaping from barrel (16.8'), mineral deposits (24.9')	COMPLETE	3121	0	3121	3	2,448					X		1					
SUB-AREA 19	SSGM-02657	BRIGHTON AVE	SSMH-2845	SSMH-2847	32.8	VC	18	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 19	SSGM-02658	BRIGHTON AVE	SSMH-5263	SSMH-2847	37.4	BR	42	1	Continuous Infiltration staining (0-37.4), Infiltration Runner Lateral (27.4), Mineral Deposits (27.6)	COMPLETE	4121	0	4121	3	5,472					X		1					
SUB-AREA 19	SSGM-02659	BRIGHTON AVE	SSMH-2848	SSMH-5263	84.7	BR	36	2	Mineral Deposits on pipe wall (18-19.9, 24, 35), Weeping infiltration and mineral deposits on pipe wall (20), Continuous infiltration stain on pipe wall (0-84.7)	COMPLETE	211C	0	211C	2	12,960					X							
SUB-AREA 19	SSGM-02660	BRIGHTON AVE	SSMH-5262	SSMH-2848	37.9	VC	18	3	Crack Multiple (6), Crack Longitudinal (27.3), Mineral Deposits at joint (28)	COMPLETE	1100	3121	3121	3	432			2	6, Capped Service (8)	X		3					
SUB-AREA 19	SSGM-02661	BRIGHTON AVE	SSMH-2849	SSMH-2848	95.3	BR	36	6	Continuous Infiltration stain on pipe wall (0-35), Mineral deposits in service (27), Continuous mineral deposits and infiltration stain on pipe wall (40, 59-95)	COMPLETE	1C00	0	1C00	1	3,744					X		6					
SUB-AREA 19	SSGM-02679	BRIGHTON AVE	SSMH-0739	SSMH-2845	92.5	VC	18	0	Infiltration stain/Mineral Deposits at joint (8.5, 20.5, 31.5, 37, 88.5), Weeping infiltration at joint (69.5), Minor Crack Longitudinal (77.5)	COMPLETE	2115	2100	2215	2	1,584					X							
SUB-AREA 19	SSGM-02605	EDGEWORTH AVE	SSMH-2821	SSMH-2822	298.1	PVC	10	8	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 19	SSGM-02607	EDGEWORTH AVE	SSMH-2822	SSMH-2823	247.1	CIPPL	10	6	Gushing infiltration at service (158'), Service lateral defective with roots (146')	COMPLETE	5111	0	5111	3	7,200							6					Roots
SUB-AREA 19	SSGM-02610	EDGEWORTH AVE	SSMH-2824	SSMH-0740	257.6	CIPPL	12	8	Weeping infiltration at service (39, 221), Mineral Deposits at service connection (83), Dripping infiltration at service (94), PVC point repair (130.4-036.6), Running infiltration at service (167, 218)	COMPLETE	4231	0	4231	4	10,224							8					
SUB-AREA 19	SSGM-02670	EDGEWORTH AVE	SSMH-0738	SSMH-0739	209.8	CIPPL	15	4	Running Infiltration at service (14, 56), Weeping infiltration/staining and mineral deposits at service (192)	COMPLETE	1100	0	1100	1	4,464							4					
SUB-AREA 19	SSGM-02608	EDGEWORTH DR	SSMH-2823	SSMH-2824	197.6	CIPPL	15	8	Gushing Infiltration at service (24), Running infiltration at service (5, 48, 75, 164), Dripping infiltration at service (136), Infiltration stain at service (183)	COMPLETE	5141	0	5141	5	23,184							8					
SUB-AREA 19	SSGM-02673	EDGEWORTH DR	SSMH-0740	SSMH-0738	248.6	CIPPL	15	8	Running infiltration at service (61, 124, 168.5), Dripping infiltration at service (63)	COMPLETE	4331	0	4331	4	12,240							8					
SUB-AREA 19	SSGM-02553	JEANNE CT	SSMH-0733	SSMH-2810	206.6	VC	12	3	PVC replacement (4-22), Crack Longitudinal (22-64, 90-106, 124, 133, 135, 141-168, 184, 199), Crack Multiple (76.5, 130.5, 169, 174, 203), Fracture Circumferential (93), Crack Spiral (60, 172, 179, 182, 190, 196), Infiltration stain at joint (155, 167, 172)	COMPLETE	1300	352A	352A	3	4,176					X		3					
SUB-AREA 19	SSGM-02555	JEANNE ST	SSMH-2806	SSMH-0734	263.5	PVC	8 to 10	5	VC pipe remaining (0-4.5), Broken Pipe (2), fine roots joint (4.5, 77), Joint offset large (44), Pipe diameter change from 8" to 10" (243'	COMPLETE	1200	5141	5141	5	576	X				X		5					Roots
SUB-AREA 19	SSGM-02557	JEANNE ST	SSMH-0734	SSMH-0733	170.0	VC	12	4	PVC point repair (3-78), Fine roots joint (3), Crack longitudinal (83, 125, 130, 156, 159), Fracture Longitudinal (105, 161), Crack Multiple (124-132)	COMPLETE	1100	3525	3525	3	1,584			1	164	X		4					Roots
SUB-AREA 19	SSGM-05809	LEEMAN ST	SSMH-5951	SSMH-5260	164.2	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 19	SSGM-02681	MACHIGONNE ST	SSMH-2847	SSMH-5268	195.4	BR	42	10	Continuous infiltration staining (0-195.4), Mineral Deposits on pipe wall (5.4, 84.9, 107.4, 127.4, 134.4, 138.4), Roots fine service (48.4), Mineral Deposits on pipe wall (92), Mineral Deposits at service (113.4)	COMPLETE	1G00	0	1G00	1	10,656	X		1	113	X		10					Roots
SUB-AREA 19	SSGM-02682	MACHIGONNE ST	SSMH-5268	SSMH-5269	220.3	BR	42	12	Continuous infiltration staining (0-220.3), Fine roots (101.3), Mineral deposits (107.3), Brick missing with fine roots (149.3), Mortar missing (159.3)	COMPLETE	1300	4131	4131	4	11,088					X		12					Roots
SUB-AREA 19	SSGM-06626	MACHIGONNE ST	SSMH-5269	SSMH-6095	196.3	BR	42	7	Continuous infiltration stain (0-196.3), Mineral Deposits (144, 184), Fine roots service (36)	COMPLETE	1G00	0	1G00	1	9,792					X		7					Roots
SUB-AREA 19	SSGM-06899	MACHIGONNE ST	SSMH-6095	SSMH-0798	36.0	BR	42	0	Infiltration stain (6,10)	COMPLETE	1200	0	1200	1	288					X							
SUB-AREA 19	SSGM-07503	MERRIAM ST	SSFT-0206	SSMH-5259	15.1	VC	8	3	Crack Spiral (7, 11.5), Survey Abandoned - Cannot Navigate Bend in Pipe (15.1'), No Upstream Manhole	Cannot Complete	0	2100	2100	1	288						1					CIPSR 5' to 13'	
SUB-AREA 19	SSGM-02744	ROCKLAND AVE	SSMH-0798	SSMH-0799	98.7	VC	30	1	Roots medium Lateral (56), Infiltration stain joint (12, 20-51, 76-94), Crack Longitudinal (22.4, 59), Roots fine joint (51, 54)	COMPLETE	311B	2200	3122	3	3,168	X				X		1					Roots
SUB-AREA 19	SSGM-02631	WESTMINSTER AVE	SSMH-0747	SSMH-0748	36.7	VC	8	3	Crack Longitudinal (19), Broken pipe with soil visible (20.5)	COMPLETE	0	5121	5121	4	288			2	11.7, 19.5		1				CIPSR 17' to 23', Reinstate service at 19.5'	
SUB-AREA 19	SSGM-02636	WESTMINSTER AVE	SSMH-5259	SSMH-0748	128.9	VC	10	3	Fine roots at service (27) ,Infiltration stain at joint (39), Mineral deposits at joint (65, 103)	COMPLETE	1400	0	1400	1	576	X		1	27			3		X			Roots
SUB-AREA 19	SSGM-02663	WESTMINSTER AVE	SSMH-2850	SSMH-5262	230.9	VC	12	7	Fracture Multiple (227), Crack Longitudinal (39.5, 43, 140.5), Crack Spiral (21, 51, 79 (2), 107, 109 (2)), Hole (149), Crack Circumferential (206)	COMPLETE	0	4127	4127	3	1,872					X		7					
SUB-AREA 19	SSGM-07498	WESTMINSTER AVE	SSMH-5260	SSMH-5261	305.3	VC	12	8	PVC repairs (0-42, 266-300), Fracture Spiral and staining at joint (105.4), Mineral Deposits and Infiltration Stain at joint (47.4-105, 119-133, 150-183.7), Hole with infiltration stain (57), Tap factory made capped with infiltration stain at connection (62, 84, 152.5), Infiltration stain at joint (69.7, 80, 127, 135.5-160, 179, 193, 197, 205), Crack Circumferential (82.5 (staining), 210, 234, 236.4), Crack Longitudinal (100, 125, 186.7, 188, 189.2 (staining), 252.5, 257), Crack Multiple (133 (staining)), Crack Spiral (150 (staining), 156, 164, 260), Weeping infiltration and mineral deposits at joint (177.7), Service lateral defective with roots (219, 256), Roots fine joint (226, 243, 246, 252.5, 263, 266), Roots medium joint (249), Root ball joint (254.5)	COMPLETE	4133	5134	5141	5	10,080	X		1	116	X		8					Roots
SUB-AREA 20	SSGM-00462	BRIGHTON AVE	SSMH-4629	SSMH-4628	0.0				Line Appears to be Capped	Cannot Complete	N/A	N/A	N/A	N/A	0												
SUB-AREA 20	SSGM-00463	BRIGHTON AVE	SSMH-4628	SSMH-4627	0.0				Line Appears to be Capped	Cannot Complete	N/A	N/A	N/A	N/A	0												
SUB-AREA 20	SSGM-00464	BRIGHTON AVE	SSMH-4626	SSMH-4625	129.7	VC	12	4	Crack Circumferential (17), Crack Longitudinal (20, 27, 36, 54, 106), Infiltration stain joint (27), Fracture Multiple (48), Fracture longitudinal (67), Crack Multiple (76, 100.5), Fracture Spiral (85)	COMPLETE	1100	4134	4134	4	1,728			1	37	X		4					
SUB-AREA 20	SSGM-02391	BRIGHTON AVE	SSMH-0700	SSMH-5195	68.4	VC	21	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 20	SSGM-02393	BRIGHTON AVE	SSMH-5196	SSMH-0700	250.6	VC	18	1	Crack Multiple (5), Infiltration Stain Joint / mineral deposits joint (7, 19, 25, 31, 48, 51-60, 69, 76-89, 96-141.5, 145-163, 175-199, 208-219), Running infiltration at joint with mineral deposits (112, 228), Crack Spiral (7, 10, 33, 198), Crack Longitudinal (93, 102, 163)	COMPLETE	421C	3127	4231	4	14,400					X		1					

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Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 20	SSGM-02403	BRIGHTON AVE	SSMH-2742	SSMH-5196	216.6	VC	15	4	Fracture Longitudinal with mineral deposits (45), Weeping infiltration at joint (13), Crack Longitudinal (72.5, 79, 102-121, 135.5-152, 183, 187), Crack Multiple with Staining (0-21, 26.5-31, 41-50, 76), Crack Multiple (90, 101, 188.8), Infiltration stain at joint (19-90, 106-148, 201, 204), Mineral deposits at joint (38, 44.5, 47-53)	COMPLETE	2A1B	3B2A	3B2B	4	13,536			2	126, 191	X		4					
SUB-AREA 20	SSGM-02404	BRIGHTON AVE	SSMH-2743	SSMH-2742	45.3	VC	15	0	Continuous Crack Multiple with staining and mineral deposits (0-42), Weeping infiltration at joint (10), Infiltration stain at joint (5-42), Crack Spiral with mineral deposits (21), Crack Longitudinal with mineral deposits (33.5)	COMPLETE	2A1A	3A22	312A	3	7,056					X							
SUB-AREA 20	SSGM-02972	BRIGHTON AVE	SSMH-2952	SSMH-5349	248.9	VC	12	7	Crack Longitudinal (3, 6, 21-29 (staining), 45, 52, 81-89, 118, 156-168, 183, 189, 205-211, 235), Mineral deposits at service (15, 103), Infiltration stain connection (25), Crack Multiple (182), Fracture Spiral (29), Fracture Longitudinal (216, 243, 246)	COMPLETE	1400	332D	332D	3	4,032			2	15, 103	X		7					
SUB-AREA 20	SSGM-02973	BRIGHTON AVE	SSMH-2953	SSMH-2952	240.1	VC	12	3	Fracture Longitudinal (70-78.5), Crack Multiple (3, 30.5, 42, 52, 61, 64, 158), Crack Longitudinal (6, 24, 79, 88, 91, 161, 217, 224), Mineral deposits joint (9-15, 61, 104, 134, 210, 213, 217), Crack Spiral (58, 161), Fracture multiple (73, 76, 211), Fracture Spiral (122, 183), Infiltration stain joint (131, 140, 201), Crack Circumferential (140, 146), Surface spalling (185)	COMPLETE	1A00	4329	4329	4	5,328			1	26	X		3					
SUB-AREA 20	SSGM-02974	BRIGHTON AVE	SSMH-4625	SSMH-2953	179.6	VC	12	2	Fracture Multiple (4, 28), Crack Multiple (15, 19, 37, 52, 73, 122), Crack Circumferential (18, 33, 76), Crack Longitudinal (25, 31, 44-51, 60-68, 95, 99, 102, 110-117), Fracture Longitudinal (89, 153), Fracture Spiral (46, 92), Crack Spiral (104), Joint offset small (136), Brick Point Repair (140)	COMPLETE	0	5142	5142	5	3,888			1	151	X		2					
SUB-AREA 20	SSGM-02975	BRIGHTON AVE	SSMH-2954	SSMH-4626	199.5	VC	12	0	Fracture Longitudinal (176), Crack Spiral (3, 6, 64, 67, 104), Crack Longitudinal (71, 76-117, 125, 157, 161, 165, 172, 182), Mineral Deposits at joint (111-132)	COMPLETE	1700	312B	312B	3	4,896					X							
SUB-AREA 20	SSGM-02976	BRIGHTON AVE	SSFT-2954	SSMH-2954	3.0				Survey Abandoned - Line Capped (3')	Cannot Complete	0	0	0	0	0												
SUB-AREA 20	SSGM-02977	BRIGHTON AVE	SSMH-5349	SSMH-2955	260.4	VC	15	3	Crack Longitudinal (13-92, 117, 131-158, 178-212, 248, 253), Crack Multiple (103, 157, 169-179, 194), Fracture Longitudinal (208)	COMPLETE	0	372E	372E	3	7,776			1	235	X		3					
SUB-AREA 20	SSGM-02978	BRIGHTON AVE	SSMH-2955	SSMH-2906	263.9	VC	15	6	Infiltration stain service (8, 77), Crack Longitudinal (6-111, 125, 136, 210, 232, 251), Mineral deposits at service (32, 169.4), Crack Multiple (37, 52, 79.5, 110 (staining), 168, 176.5, 198, 210), Crack Circumferential (67, 70, 116, 133, 143, 228 (staining)), Crack Spiral (92, 247), Infiltration stain joint (85), Fracture multiple (140.4), Fracture Spiral (250), Fracture Longitudinal (259)	COMPLETE	1700	3A2A	3A2A	3	9,360			3	32, 178, 242.5	X		6					
SUB-AREA 20	SSGM-03077	BRIGHTON AVE	SSMH-3009	SSMH-5195	176.3	RCP	30	3	Infiltration stain at joint (33.4, 53.7, 155, 157), Infiltration stain at service (51), Mineral Deposits at service (142)	COMPLETE	1600	0	1600	1	864					X		3					
SUB-AREA 20	SSGM-03078	BRIGHTON AVE	SSMH-2906	SSMH-3009	189.5	VC	15	6	Broken Pipe (106, 183), Fracture Multiple (32), Fracture Spiral (14, 75.5), Crack Multiple (3, 29-49.5, 69, 149, 151, 165), Infiltration stain at service (90, 153, 157, 172), Crack Longitudinal (56-62, 75.5-87, 97.5-105.5, 118-133,145, 176), Crack Spiral (121.5), Fracture Longitudinal Hinge 3 (186)	COMPLETE	1400	5242	5242	5	5,904			1	153	X		6					
SUB-AREA 20	SSGM-02405	DEVON ST	SSMH-2744	SSMH-2743	268.2	VC	12	8	Joint staining (3-129, 210-269), Crack Longitudinal (18.7, 104, 203), Deposits Settled Fine (25.1), Infiltration Staining Barrel (72.1), Infiltration Stain Capped Connection (93.2), Roots Fine Connection (131.4), Roots Fine Connection-Capped (133.4), Roots Fine Joint (116, 145, 256.6,), Infiltration Runner Lateral (203.4), Roots Medium Connection (256.6), Tap Break-in Other-Defective or Capped (264.3), Fracture Circumferential (264.3)	COMPLETE	4131	3124	4132	4	14,256	X		3	203.4, 204.4, 264.3	X		8					Debris, and Roots
SUB-AREA 20	SSGM-02406	DEVON ST	SSMH-5200	SSMH-2744	302.1	CIPPL	12	7	Medium Roots at 12 oclk with dripping infiltration (23.6 - possible service), Running infiltration at service (69), Running infiltration and mineral deposits at service (201), Mineral deposits in service (217), Service defective with roots and mineral deposits/staining (279)	COMPLETE	4331	0	4331	4	9,072			1	216			7					Roots
SUB-AREA 20	SSGM-02407	DEVON ST	SSMH-2745	SSMH-5200	227.3	CIPPL	8	5	Joint offset large in lateral connection (162)	COMPLETE	3100	0	3100	2	144												
SUB-AREA 20	SSGM-02408	DEVON ST	SSMH-2746	SSMH-2745	229.6	CIPPL	8	7	Root ball lateral 100% blocked (8.5), Service laterals defective with medium roots (127), Service lateral defective with fine roots (170), Service lateral 95% root obstruction (215)	COMPLETE	4231	0	4231	4	576	X	X					7				Mechanical root removal required	Roots
SUB-AREA 20	SSGM-02409	DEVON ST	SSMH-2747	SSMH-2746	228.5	CIPPL	8	6	Root Ball (195.6), Root Ball (116), Grease 5% (53-101)	COMPLETE	421B	0	421B	3	288	X									X		Roots and Grease
SUB-AREA 20	SSGM-02398	DORSET ST	SSMH-2737	SSMH-5196	335.0	VC	12	9	Fracture Longitudinal (36, 78, 84, 204, 219.5), Fracture Spiral (45, 204), Fracture Multiple (159, 186, 262), Crack Longitudinal (42, 52, 67, 72, 85.5, 94, 100, 105, 140, 144, 201, 252, 292, 314, 317 (staining), 324.5, 330), Crack Multiple (30, 33, 92,122,137, 146, 161, 173, 216, 222.5, 256, 286.5, 329), Crack Spiral (24, 48, 61,125, 237, 264.5, 270, 311), Crack Circumferential (21, 192, 194), Infiltration stain at service (252), Fine roots joint (173, 185, 189, 192,198), Infiltration stain at joint (253, 311-331)	COMPLETE	1500	432B	432B	4	8,928	X		6	3.5, 16, 55, 74, 203, 301	X		9					Roots
SUB-AREA 20	SSGM-05960	LOMOND ST	SSFT-0335	SSMH-3009	188.0	RCP	24	2	Crack Longitudinal (182.5), Infiltration stain at joint (19.6, 22, 157), Mineral Deposits at joint (60, 140), Infiltration stain at RC lift hole (81, 89, 96.4, 105, 121, 129, 145, 153.4, 161, 169, 177, 186), Infiltration stain at service (138), Mineral deposits at service (186.4), Hole with Mineral deposits (135), Mineral Deposits at brick cap (188)	COMPLETE	2A18	2100	2A18	2	3,312					X		2					
SUB-AREA 20	SSGM-00465	RAND RD	SSFT-0145	SSMH-4630	136.0	RCP	15	0	Mineral deposits at joint (122,132), Crack Circumferential and Infiltration stain (126), Infiltration stain at joint (2, 42, 82, 114)	COMPLETE	1700	1100	1800	1	1,152					X							
SUB-AREA 20	SSGM-01274	RAND RD	SSMH-4916	SSMH-4630	0.0				Upstream and Downstream manholes not found	Pipe Not Located	N/A	N/A	N/A	N/A	0												
SUB-AREA 20	SSGM-06870	RAND RD	SSMH-6130	SSMH-4916	0.0				Upstream and Downstream manholes not found	Pipe Not Located	N/A	N/A	N/A	N/A	0												
SUB-AREA 20	SSGM-00466	ROWE AVE	SSMH-1768	SSMH-4632	321.9	VC	8	6	Fracture Longitudinal (19.5, 29, 63, 73, 78, 98, 103 (staining), 108, 117, 142, 302), Fracture Spiral (3-12, 24, 69 (staining), 223 (staining)), Crack Longitudinal (20 (staining), 26, 33.5, 72, 92 (staining), 106, 126.5 (staining), 132 (staining), 142, 147 (staining), 152 (staining), 154 (staining), 209, 213, 264 (staining), 273, 310), Crack Circumferential (66, 110-138 (staining), 172, 184), Crack Spiral (96 (staining), 123 (staining)), Crack Multiple (144, 169 (staining), 175, 219), Mineral Deposits at Joint (127, 269) Infiltration stain at joint (122, 196, 213), Weeping Infiltration and mineral deposits at service (125), Roots fine joint (223), Broken Pipe (320.5)	COMPLETE	2B13	513B	513B	5	11,376	X		2	171, 211	X		6					Roots
SUB-AREA 20	SSGM-00467	ROWE AVE	SSMH-4632	SSMH-4631	273.0	RCP	18	6	No significant defects	COMPLETE	0	0	0	0	0				68, 71								
SUB-AREA 20	SSGM-00468	ROWE AVE	SSMH-5326	SSMH-6885	179.0	RCP	18	0	Infiltration stain joint (23), Roots fine joint (50-109, 122-142, 154, 161-173), Crack Longitudinal (79)	COMPLETE	1C00	2100	211C	2	4,320					X							Roots
SUB-AREA 20	SSGM-00469	ROWE AVE	SSMH-1769	SSMH-4632	40.0	RCP	18	0	Roots medium Joint (7), Roots fine joint (9, 14)	COMPLETE	2112	0	2112	2	432	X				X							Roots
SUB-AREA 20	SSGM-02955	ROWE AVE	SSMH-0805	SSMH-2945	240.5	RCP	48	0	Fine Roots Joint (104 (staining),145, 149), Crack Multiple (173), Crack Longitudinal (18, 162, 174, 178, 184, 202, 206, 209)	COMPLETE	1300	3128	3128	3	1,584					X							Roots
SUB-AREA 20	SSGM-02956	ROWE AVE	SSMH-2905	SSMH-0805	132.1	RCP	36	5	Infiltration stain at joint (27, 37), Mineral Deposits at joint (23, 86, 92), Crack Longitudinal (16, 33, 54-65, 78, 82), Mineral Deposits at service (88), Infiltration stain at service (30, 41)	COMPLETE	1800	2600	2618	2	2,016					X		5					
SUB-AREA 20	SSGM-02957	ROWE AVE	SSMH-4631	SSMH-0805	124.0	RCP	18	5	Fracture Longitudinal (54-60), Crack Longitudinal continuous (14-124), Mineral Deposits at joint (10, 87), Mineral deposits at service (84), Infiltration stain at joint (6.5, 15-34, 77, 81)	COMPLETE	1300	322D	322D	4	6,624					X		5					

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 20	SSGM-02958	ROWE AVE	SSMH-0806	SSMH-1768	299.4	VC	8	7	Crack Longitudinal (7.4, 60.4, 61.4, 81.4-159.4,164.4-208.4, 213.4-247.4, 266.4-293.4), Crack Multiple (188.9, 230.4, 283.4, 218.4, 238.4, 242.9, 264.4, 273.4, 290.4), Crack Circumferential (245.4, 277.4, 281.4), Crack Spiral (22.4, 55.4, 56.4, 104.4), Fracture Longitudinal (144, 174.4, 241.8, 242.9, 267.4, 277.4), Fracture Multiple (203.4, 264), Broken Pipe (46, 50.4, 65.4), Infiltration stain joint (20.4, 71, 75, 100, 130, 169, 184), Joint offset medium (18, 37, 41, 119, 258), Infiltration Stain Barrel (81.4-159.4, 164.4-208.4, 188.9, 203.4, 213.4-247.4, 273.4)	COMPLETE	1K00	5342	5342	5	22,608			6	54, 118, 143, 205, 241, 245	X		7					
SUB-AREA 20	SSGM-02959	ROWE AVE	SSMH-2951	SSMH-0806	286.4	VC	8	12	Fracture Longitudinal (80, 144), Crack Longitudinal (3-19, 45.4-88.4 , 126-134 , 149-160, 173-197, 211-216, 236-255, 275), Crack Multiple (130, 187, 217, 228, 246, 265), Crack Spiral (7, 91, 192, 280), Crack Circumferential (2, 120, 143, 147, 165, 246, 262), Broken Pipe (284), Staining Barrel (57, 58, 126, 173, 191, 90.4, 106.1, 144.4, 155.4, 275, 187)	COMPLETE	0	5138	5138	4	10,368			9	10,15, 55, 58, 127, 185, 212, 249, 273	X		12					
SUB-AREA 20	SSGM-02960	ROWE AVE	SSMH-5195	SSMH-0807	260.3	RCP	36	6	Infiltration Stain/Mineral Deposits at joint (12-43, 70-86, 154, 168, 176, 221), Crack Longitudinal (37, 65), Mineral Deposits around capped service (154), Mineral deposits around service (157)	COMPLETE	1B00	2200	221B	2	3,456					X		6					
SUB-AREA 20	SSGM-02961	ROWE AVE	SSMH-0807	SSMH-2905	276.4	RCP	36	8	Running infiltration at joint (180.4, 184.4), Dripping Infiltration at joint (43), Infiltration stain at joint (49, 85, 125), Crack Longitudinal (33.4)	COMPLETE	4231	2100	4231	4	9,216					X		8					
SUB-AREA 20	SSGM-08053	ROWE AVE	SSMH-6885	SSMH-1769	158.2	RCP	18	0	Continuous fine roots at joint (9-77, 90-155)	COMPLETE	1F00	0	1F00	1	6,336	X				X							Roots
SUB-AREA 20	SSGM-02390	WARWICK ST	SSMH-5194	SSMH-0701	337.2	PVC	8	4	Water level sag 5% (119-132)	COMPLETE	0	0	0	0	0												
SUB-AREA 20	SSGM-02392	WARWICK ST	SSMH-0701	SSMH-0700	45.0	VC	18	4	PVC point repair (0'-6'), Crack Longitudinal (22.5, 39.5), Crack Multiple (6-13.5, 17-19, 27.5), Water level sag 15% (33-38.5), Mineral Deposits at joint (16.5), Mineral Deposits at service (15), Infiltration stain at joint (6,11) Infiltration stain at service (10, 13.3), Root Ball Lateral -100% (12), Infiltration Runner Lateral (12)	COMPLETE	4213	3522	4235	4	5,184	X		1	13	X		4					Roots
SUB-AREA 20	SSGM-02923	WEBB ST	SSMH-4630	SSMH-5326	246.4	RCP	18	2	Infiltration stain/mineral deposts at joint (13, 51, 70, 109, 128, 147, 186, 205, 223, 242, 246), Deposits settled fine (34-48), Mineral deposits at joint (167), Infiltration stain/mineral deposits around service lateral (200)	COMPLETE	251A	0	251A	2	1,872			1	74	X		2					Debris
SUB-AREA 20	SSGM-02954	WEBB ST	SSMH-2950	SSMH-5326	240.1	VC	8	2	Broken (14), Crack Longitudinal (33, 52, 71 , 80, 108.5, 113, 133, 138, 147, 152, 181, 208, 218, 239), Crack Spiral (10, 14, 142, 166, 176 , 200), Infiltration stain at joint (11, 11.5, 108.2, 142, 175-218), Mineral Deposits at joint (90, 95,104,108, 152-204), Roots Fine Joint (213), Crack Multiple (133, 147), Fracture Multiple (10.5), Fracture Longitudinal (89.6, 90.2), Fracture Spiral (69,105, 108, 128), Deposits Attached Grease (220-240), Infiltration Staining Barrel (10, 80, 108.5, 113, 133, 138, 142, 147, 176, 200, 239)	COMPLETE	2B1A	5141	5141	5	11,088			1	104			2			X		Roots and Grease
SUB-AREA 21	SSGM-02858	ALBION ST	SSMH-2934	SSMH-0784	307.8	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 21	SSGM-02801	BANCROFT ST	SSMH-2885	SSMH-2884	220.0	VC	10	4	Crack Longitudinal(83.1', 210.1'), Crack Multiple(26.3', 84.7', 92.9', 214.2'), Crack Spiral(42.4', 44.8'), Fracture Longitudinal(46.5', 210.3'), Infiltration Runner Connection(154.2'), infiltration Stain Barrel(83.1', 84.7', 92.9', 210.3'), Infiltration stain Joint(21.8', 26.1', 28.0', 66.7', 72.9', 76.8', 80.9', 85.3', 86.9', 216.1')	COMPLETE	4124	3624	4136	4	7,056			1	154	X		4					
SUB-AREA 21	SSGM-02820	BANCROFT ST	SSMH-2884	SSMH-5305	246.6	VC	10	4	Crack Longitudinal(22.8'), Crack Multiple(168.9'), Crack Spiral(171.1', 205.1'), Deposits attached Concrete(180.7'), Fracture longitudinal(168.9'), Fracture Multiple(118.1', 128.0'), Fracture Spiral(119.6'), Infiltration Stain Barrel(22.8', 31.7'), Infiltration Stain Joint(19.2', 37.4', 43.4', 214.9'), Material Change PVC(156.4'), Material Change VCP(162.8'),	COMPLETE	3122	4233	4234	4	2,160			2	136.4, 27.8								
SUB-AREA 21	SSGM-02821	BANCROFT ST	SSMH-5305	SSMH-2882	180.8	VC	18	3	Crack Longitudinal(150.0'), Fracture Longitudinal(144.0'), Roots Fine Connection(118.8'), Roots Fine Joint(22.0', 121.4', 123.9', 180.8')	COMPLETE	1500	3121	3121	3	1,008	X				X		3					Roots
SUB-AREA 21	SSGM-06607	BANCROFT ST	SSMH-6860	SSMH-4059	144.7	VC	10	3	Crack Longitudinal(11.9'), Crack Spiral(48.4', 107.6'), Infiltration Runner Joint(136.3', 138.2', 142.0'), Infiltration Stain Joint(53.0', 56.9', 58.6', 68.5'), Material Change PVC(143.2')	COMPLETE	4314	2300	4323	3	11,808					X		3					
SUB-AREA 21	SSGM-06616	BANCROFT ST	SSMH-4059	SSMH-1335	200.0	VC	12	4	Broken Pipe(156.3'), infiltration Stain Joint(6.0', 52.8'), Water level Sag(71.6', 86.9'), Roots Fine Joint(134.3', 136.7'), Infiltration Dripper at the capped service location(123.5')	COMPLETE	3114	5122	5131	4	2,160					X		4					Roots
SUB-AREA 21	SSGM-06617	BANCROFT ST	SSMH-1335	SSMH-5305	19.6	VC	12	1	Roots fine connection(7.2'), Roots Fine Joint(13.7', 19.6')	COMPLETE	1300	0	1300	1	0	X						1		X			Roots
SUB-AREA 21	SSGM-08026	BANCROFT ST	SSMH-4060	SSMH-6860	99.5	VC	10	4	Infiltration Stain Joint (62.8', 92.4')	COMPLETE	1200	0	1200	1	288					X		4					
SUB-AREA 21	SSGM-02864	CAPISIC ST	SSMH-5313	SSMH-5314	246.8	RCP	12		Rock at (111.2')	COMPLETE	3100	0	3100	3	0										X		Debris
SUB-AREA 21	SSGM-02865	CAPISIC ST	SSMH-5314	SSMH-5315	276.4	RCP	21	7	Obstruction Brick or Masonry (50.8'), Joint Medium offset (231.5')	COMPLETE	2100	3100	3121	3	144												
SUB-AREA 21	SSGM-02866	CAPISIC ST	SSMH-5315	SSMH-5316	224.5	RCP	21	5	Miscellenous object protruding from the joint(17.6'), Deposits encrustation at joint(53.5', 191.7'), Infiltration Runner Joint(94.8'),	COMPLETE	4123	0	4123	3	3,888					X		5			X	Remove obstruction at 17.6"	
SUB-AREA 21	SSGM-02870	CAPISIC ST	SSMH-5316	SSMH-5318	184.8	VC	21	3	Fracture longitudinal(24.7', 194.8'), infiltration stain at service(65.2')	COMPLETE	1100	3200	3211	2	432					X		3					
SUB-AREA 21	SSGM-02914	CAPISIC ST	SSMH-5287	SSMH-5286	114.0	RCP	24	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 21	SSGM-06450	CAPISIC ST	SSMH-4017	SSMH-4016	271.8	VC	18	7	Crack multiple(17.5')	COMPLETE	0	3100	3100	2	144			1	50		1					CIPSR 14' to 20'	
SUB-AREA 21	SSGM-06451	CAPISIC ST	SSMH-4018	SSMH-4017	188.6	VC	15	5	Infiltration stain at capped location(10.0'), Crack Longitudinal(36.7, 91.6' - 94.0', 140.2'), Fracture Longitudinal(58.4', 71.9', 171.2'), Roots Fine joint(67.2'), Defective Service location(89.5'), Service location with protruding branch or rebar(157.7')	COMPLETE	4112	3423	4134	4	1,440			2	24.0, 159.5	X		5			X	Remove obstruction-Stick/Rebar(Cutter), cut protruding services at 24' and 159.5'	Roots
SUB-AREA 21	SSGM-06452	CAPISIC ST	SSMH-4262	SSMH-4018	76.0	VC	12	1	Obstruction through Connection concrete through joints(34.6', 56.1'), Infiltration Stain Joint(10.0' - 19.0')	COMPLETE	2213	0	2213	2	432									X	X	Remove obstructions-Chain knocker	
SUB-AREA 21	SSGM-06453	CAPISIC ST	SSMH-4019	SSMH-4262	63.4	VC	12	2	Roots fine Joint(45.3'), Roots medium Joint(35.3', 40.0', 49.5', 63.4'), Survey abandoned due to roots Tap Joint(63.4')	Needs Cleaning	3421	0	3421	3	864	X										Remove Roots and Reinspect	Roots
SUB-AREA 21	SSGM-06454	CAPISIC ST	SSMH-4020	SSMH-4019	0.0				Could not locate pipe segment, US or DS manholes	Pipe Not Located	N/A	N/A	N/A	N/A	0												
SUB-AREA 21	SSGM-06458	CAPISIC ST	SSMH-4016	SSMH-4021	98.3	VC	18	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 21	SSGM-06661	CROSS COUNTRY/ SANDY TER	SSMH-4320	SSMH-1340	221.9	RCP	24	0	Deposits attached Encrustation(85.8', 102.0', 145.0'), Deposits Settled other debris(216.5'), Infiltration Runner Joint(145.0', 174.6'), Infiltration Stain Joint(154.8', 207.4'), Survey Abandoned - debris (221.9'), Cannot access downstream manhole.	Needs Cleaning	4224	0	4224	3	7,920										X		Debris
SUB-AREA 21	SSGM-05729	MEADOWBROOK LN	SSMH-1227	SSMH-3832	186.9	VC	8	2	PVC point repair (17.2'-20.1'), Water level Sag(16.4', 44.4'), Obstruction Rocks(99.8')	COMPLETE	2100	2200	2300	1	0												Debris
SUB-AREA 21	SSGM-02810	SANDY TER	SSMH-4319	SSMH-4320	276.5	RCP	24	2	Roots fine Joint(42.6')	COMPLETE	1100	0	1100	1	144							2			X		Roots
SUB-AREA 21	SSGM-02874	SANDY TER	SSMH-2904	SSMH-4319	204.0	VC	8	4	Roots fine Joint(15.6', 50.3', 59.4', 81.8', 86.5', 101.8', 197.0'), Debris at joint(25.8', 161.6'), PVC point repair (101.8'-109.1'), Water level sag(198.3' - 199.6')	COMPLETE	2217	2100	2317	2	1,008	X		1	96	X		4					Debris, and Roots
SUB-AREA 21	SSGM-06455	WOLCOTT ST	SSMH-5333	SSMH-4016	37.3	VC	12	0	Survey abandoned due to reduction in pipe diameter to 10", us manhole paved over.	Cannot Complete	N/A	N/A	N/A	N/A	0												
SUB-AREA 21	SSGM-06618	WOLCOTT ST	SSMH-1336	SSMH-5333	75.9	VC	8	2	Deposits attached Encrustation(1.0', 2.4') Survey abandoned due to protruding service at 75.9', d/s has drop and is paved over	Cannot Complete	2200	0	2200	1	288	X		1	76					X		Cut protruding service at 76' and reinspect	
SUB-AREA 21	SSGM-02795	WOLCOTT ST/ BANCROFT ST	SSMH-2882	SSMH-5304	73.5	VC	18		Roots Fine Joint(6.9', 49.5')	COMPLETE	1200	0	1200	1	288	X				X							Roots
SUB-AREA 22	SSGM-00290D	BRADLEY ST	SSMH-4424A	SSMH-0111	46.0	PVC	8	1	Water Level Sag (33.2'), Joint Angular Large (40.1')	COMPLETE	0	4121	4121	3	144				31								
SUB-AREA 22	SSGM-00290U	BRADLEY ST	SSMH-4424	SSMH-4424A	181.9	VC	8	6	PVC point repair (0-8), Joint Offset Medium(8'), Deposits Attached Encrusting (42.1'), Fracture Hinge 3 (65.1'), Fracture Longitudinal (68.8'), Roots Fine Joint (91.9', 117.4', 121.8', 138.6'), Surface Damage Spalling (94.5'), Root Tap Joint (98.1', 109.9'), Fracture Spiral (98.1', 114.7', 142.0', 156.6'), Infiltration Stain Barrel (114.7'), Crack Spiral (172.8', 176.4')	COMPLETE	2315	4136	4136	4	2,736			1	158	X		6					Roots

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 22	SSGM-04569	BRADLEY ST	SSMH-0223	SSMH-0223A	201.3	VC	24	7	Deposits Attached Encrustation/Infiltration Weeper Joint (2'-198'), Infiltration Runner Joint (4', 8', 122'), Infiltration Gusher Connection (6.6'), Roots Fine Connection (6.6'), Roots fine Joint (10', 16.8', 176.1'), Roots Tap Joint (20.3', 22', 24'), Infiltration Runner Connection (123.1'), Water Level Sag (166'-201.3')	COMPLETE	5144	0	5144	5	70,128			2	6.6, 116.2	X		7					Roots
SUB-AREA 22	SSGM-04569A	BRADLEY ST	SSMH-0223A	SSMH-0111	45.9	VC	24	0	Deposits Attached Encrustation/Infiltration Weeper Joint (2'-44')	COMPLETE	2B00	0	2B00	2	10,080					X							
SUB-AREA 22	SSGM-04710	BRADLEY ST	SSMH-3549	SSMH-1078	271.0	VC	8	5	Broken Pipe Void Visible(141.1'), Crack Circumferential(52.2'), Crack Longitudinal(7.5'), Crack Multiple(263.9'), Crack Spiral(14.3'), Fracture Circumferential(184.0'), Fracture Longitudinal Hinge 2(25.8'), Fracture longitudinal(7.8', 37.4', 157.8'), Fracture Multiple(56.0', 116.9'), PVC point repair (192.8'-202.1'), Roots Fine Connection(73.1', 90.3'), Roots Fine Joint(25.8', 62.4', 82.6', 89.2', 97.1', 121.8'), Roots fine Lateral(142.2')	COMPLETE	1900	5142	5142	5	3,168	X		1	73	X		5					Roots
SUB-AREA 22	SSGM-00304	CALEB ST	SSMH-1436	SSMH-1437	150.9	VC	8	1	Deposits settled gravel(12.7')	COMPLETE	2100	0	2100	1	0												Debris
SUB-AREA 22	SSGM-00305	CALEB ST	SSMH-1437	SSMH-4418	217.0	VC	8	13	Crack Longitudinal(57.6'), Crack Spiral(152.8'), Deposits Settled Fine(204.0'), Obstruction Other-Dunkin cup (44.6')	COMPLETE	2200	2200	2400	1	288					X		13			X		Debris
SUB-AREA 22	SSGM-00306	CALEB ST	SSMH-4418	SSMH-4419	209.1	VC	10	6	Fracture Spiral(49.6'), Deposit Encrustation at joint(121.1', 181.4')	COMPLETE	2200	3100	3122	3	432					X		6			X		
SUB-AREA 22	SSGM-00447	CALEB ST	SSMH-1763	SSMH-1764	261.2	VC	8	3	Deposits attached Encrustation(158.1'), Fracture multiple(258.0'), Fracture Spiral(208.6'), Hole Void Visible(65.9'), Roots Fine Joint(42.2', 60.5')	COMPLETE	2112	5141	5141	5	864	X				X		3					Roots
SUB-AREA 22	SSGM-04568	CALEB ST	SSMH-4419	SSMH-5740	272.0	VC	10	9	Infiltration Weeper Joint (50.1', 159.2', 163.1', 169.1', 187.1', 204.1', 206.4', 209.2', 214.9', 217.7', 223.5', 225.0', 230.7', 233.6', 242.3', 251.0', 253.3', 261.7'), Fracture Multiple (59.2', 264.4'), Deposits Attached Encrusted (161.4', 189.9', 211.1', 228.5', 236.8', 245.3', 248.3', 255.2'), Infiltration Stain Joint (166.2', 269.1'), Crack Spiral (178.3'), Crack Circumferential (195.4'), Fracture Longitudinal (206.4'), Infiltration Stain Barrel (206.4'), Crack Longitudinal (233.6'), Fracture Circumferential (266.4')	COMPLETE	2C12	4231	4231	4	15,552					X		9					
SUB-AREA 22	SSGM-04593	CALEB ST	SSMH-1081	SSMH-1082	245.5	VC	10	8	Crack Circumferential(128.3'), Crack Longitudinal(105.7'), Deposit Attached Encrustation(160.0', 196.4', 202.6'), Fracture Spiral(213.9'), Infiltration Dripper Connection(85.5', 136.8'), Infiltration Stain Barrel (105.7'), Infiltration Stain joint (26.4', 109.4', 111.3', 242.4'), Roots Fine Joint(12.3', 76.9', 92.8', 99.3'), Roots Medium Joint (88.8', 95.2')	COMPLETE	3421	3121	3522	3	5,328			3	81.7, 85.5, 98.2	X		8					Roots
SUB-AREA 22	SSGM-04594	CALEB ST	SSMH-1082	SSMH-1083	245.5	VC	15	11	Roots fine joint (12.3, 76.9, 92.8, 98.4, 99.3), Infiltration staining (26.4, 105.7, 109.4, 111.3-242.4), Connection dripping infiltration (85.5, 136.8), Medium roots joint (88.8, 95.2), Crack longitudinal (105.7), Crack circumferential (128.3), Deposits attached encrusted (160.0, 196.4, 202.6)	COMPLETE	3423	2111	3424	3	11,376	X		3	81.7, 85.5, 98.2	X		11					Roots
SUB-AREA 22	SSGM-03025	CAPISIC ST	SSMH-4617	SSMH-6870	195.4	VC	8	1	Fracture Multiple (0.00'), Crack Longitudinal (96.7', 171.8', 174.8', 185.1'), Broken Pipe Void Visible(121.5'), Crack multiple(23.9', 129.9', 161.3'), Fracture Longitudinal(108.2'), Fracture Multiple(166.4'), survey abandoned 195.4' due to rock.	Needs Cleaning	0	5141	5141	5	1,728					X		1		X			Debris
SUB-AREA 22	SSGM-08036	CAPISIC ST	SSMH-6870	SSMH-0825	58.2	VC	8	0	Crack Spiral(5.3'), Crack multiple(32.7')	COMPLETE	0	3121	3121	3	288					X							
SUB-AREA 22	SSGM-04698	COACHLIGHT LN/ FAIRVIEW ST XE	SSMH-3541	SSMH-5760	262.2	VC	18	1	Roots fine connection(74.2'), Roots fine joint(77.6', 90', 108.6', 117.6', 136.1', 153.1', 262.2'), Crack Longitudinal(189.3'), Crack Multiple(240.5')	COMPLETE	1800	3121	3121	3	1,440	X				X		1					Roots
SUB-AREA 22	SSGM-06708	CONGRESS ST	SSMH-5739	SSMH-4422	286.8	VC	8	11	Deposits attached ragging(156.8'), Deposits Settled fine(50.9')	COMPLETE	2200	0	2200	1	0												Debris
SUB-AREA 22	SSGM-00300	CRAIGIE ST	SSMH-1481	SSMH-0128	197.2	VC	8	7	Broken Pipe Void Visible(32.6'), Crack Longitudinal(56.9', 84.1', 108.4', 135.7'), Fracture Circumferential(150.7'), Infiltration Stain Joint(53.7', 117.6'), Water Level Sag(78.9', 131.8')	COMPLETE	1200	5127	5127	4	1,152					X		7					
SUB-AREA 22	SSGM-00301	CRAIGIE ST	SSMH-0128	SSMH-0129	186.5	VC	8	6	Crack Circumferential(0.9'), Crack Longitudinal(95.2'), Crack Multiple(75.2'), Fracture Circumferential(166.0'), Fracture Longitudinal(69.3', 126.7'), Infiltration Runner Joint(42.1'), Water level Sag(9.2'), Obstruction Wedged in the Joint concrete or dirt(12.6')	COMPLETE	4121	3323	4133	4	864					X		6		X			
SUB-AREA 22	SSGM-00302	CRAIGIE ST	SSMH-0129	SSMH-1431	248.7	VC	8	5	Crack Longitudinal(4.6'), Crack Multiple(11.1', 29.9', 69.8'), Deposits Settled Fine(44.0', 49.9'), Fracture Longitudinal(75.7', 81.2'), Fracture Multiple(169.8'), Infiltration Dripper Joint(171.3'), Obstruction Wedged in the Joint concrete(109.8', 189.3')	COMPLETE	3124	4135	4136	4	2,448					X		5		X			Debris
SUB-AREA 22	SSGM-00303	CRAIGIE ST	SSMH-1431	SSMH-1432	176.1	VC	8	4	Crack Longitudinal(72.1', 79.9', 83.5'), Deposits attached Grease(130.7', 142.1', 156.7'), Fracture Longitudinal(34.2', 65.6', 68.4', 74.7', 77.7', 80.2'), infiltration Dripper Joint(62.0'), Water Level Sag(117.8'), Roots Medium Joint(156.7'), Roots Tap Joint(160.9')	COMPLETE	3224	3624	3828	3	3,024	X				X		4		X			Roots and Grease
SUB-AREA 22	SSGM-00322	CRAIGIE ST	SSMH-1569	SSMH-4497	125.0	VC	15	4	Crack Multiple(106.6'), Obstruction Wedged in the Joint concrete(18.3', 125.0')	COMPLETE	2200	3100	3122	3	144						1				X	CIPSR 103' to 109'	
SUB-AREA 22	SSGM-00323	CRAIGIE ST	SSMH-4497	SSMH-4496	196.7	RCP	21	8	Deposits Settled Gravel(53.2, 61.1, 97.0, 147.6')	COMPLETE	2400	0	2400	1	0												Debris
SUB-AREA 22	SSGM-00324	CRAIGIE ST	SSMH-4496	SSMH-1432	178.0	RCP	21	4	Deposits settled fine(84.1', 146.3')	COMPLETE	2200	0	2200	1	0												Debris
SUB-AREA 22	SSGM-04583	CRAIGIE ST	SSMH-1432	SSMH-3508	293.3	RCP	24	3	Deposits Attached Ragging Rag Ball(259.4'), Deposits Settled Gravel(0.00', 40.3', 293.3'), Infiltration Dripper joint(145.2'), Intruding sealing material Grout(153.7'), Obstruction Brick/ Masonry(43.8', 233.4'), Obstruction Sandbag(134.2'), Roots Tap Joint(145.2')	COMPLETE	4132	0	4132	4	1,584	X		1	215	X		3		X	Remove obstruction at 134'		Debris, and Roots
SUB-AREA 22	SSGM-04586	CRAIGIE ST	SSMH-1080	SSMH-3509	397.8	VC	8	3	US: Crack Circumferential(52.3'), Fracture Multiple(71.1'), Infiltration Stain Joint(97.5'), Roots fine Connection(170.2'), Roots Fine Joint(94.3', 153.0', 159.0', 165.0', 167.2', 172.7') Point Repair Patch unknown(122.2'), Roots Tap Joint(162.0'), Surface Damage Surface Spalling(189.8'), survey abandoned (192.7') protruding service / DS: Survey completed (205.1') protruding service	COMPLETE	2118	4112	4121	3	1,584			1	193	X		3					Roots
SUB-AREA 22	SSGM-04588	CRAIGIE ST	SSMH-1079	SSMH-1080	301.7	VC	8	2	Broken Pipe Void Visible(66.3'), Hole Soil Visible(49.3', 85.1'), Line Down(55.9'), Material change PVC(67.8'), Material change VCP(74.5'), Water level Sag (23.4') / Broken pipe Void Visible(21.7', 151.3'), Fracture Circumferential(203.3'), Fracture Longitudinal (2.2', 20.7'), Infiltration Runner Joint (203.3'), Joint Angular Medium(10.7', 175.6'), Joint Offset Medium(0.0'), Material change PVC(199.5'), Material change VCP(201.2'), Roots Fine Joint(33.6'), Defective repair defective(20.7')	COMPLETE	4112	5542	5543	5	5,472	X		1	2	X		2					Roots
SUB-AREA 22	SSGM-04576	DIRIGO ST	SSMH-0225	SSMH-0224	172.1	CIPPL	8	1	Lining feature wrinkled(53.4', 56.4', 59.9', 149.9', 167.0'), Water level sag(10.0')	COMPLETE	0	3521	3521	3	0				92								
SUB-AREA 22	SSGM-06578	IVY ST	SSMH-6085	SSMH-1075	223.1	VC	8	8	DS: Fracture Circumferential(101.2'), Obstruction wedged in the joint(186.3') Survey abandoned / US: Obstruction in joint (36.8) Reversal complete	COMPLETE	2100	2100	2200	1	144									X	Remove obstruction in joint	
SUB-AREA 22	SSGM-02948	JUNE ST	SSMH-2943	SSMH-5338	94.7	PVC	8	6	Roots fine Connection(10.0'), Roots fine Lateral(88.6')	COMPLETE	1200	0	1200	1	288	X						6					Roots
SUB-AREA 22	SSGM-06709	REDLON RD	SSMH-1342	SSMH-5337	147.0	PVC	8	3	Material Change-VCP (47.7'), Fracture Spiral (85.6), Deposits Attached Encrustations (88.5', 105.6', 128.9',), Infiltration Staining Joint (102.5'), Broken (111.3'), Fracture Multiple (114.6')	COMPLETE	2311	5141	5141	5	1,008			2	53.6, 77.7	X		3					
SUB-AREA 22	SSGM-03031	RUDMAN RD	SSMH-1752	SSMH-5364	150.3	VC	8	1	Deposits settled fine(63.7'), Infiltration Stain Joint(14.1'), Intruding sealing material Grout(11.3', 14.1'), Water level Sag(15.0' - 18.9'), Deposit Encrustation at joint(47.7'), Joint offset medium defective(63.7'), water level sag(18.9') Rversal: Crack Spiral(38.1', 86.3'), Continous Infiltration stain joint(49.9' - 55.3'), intruding sealing material Grout at joint(68.7')	COMPLETE	2517	2700	2A17	2	1,440					X		1					Debris
SUB-AREA 22	SSGM-00309	STEVENS AVE	SSMH-4422	SSMH-6881	45.8	VC	8	0	Roots Medium Joint(17.1', 20.4', 22.6',), Roots Medium Barrel (21.6'), Infiltration Stain Joint (28.4',31.4',34.4'), Deposits Attached Encrusted (42.6'), Material Change-PVC(45.8'), Joint Offset Large (45.8'), Water Level Sag:50% (45.8'-52), Deposit Settled Other:Unknown (45.8'), Survey Abandoned due to rock in pipe (45.8')	COMPLETE	5141	4131	5142	5	1,296									X			Debris, and Roots

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 22	SSGM-00310	STEVENS AVE	SSMH-1561	SSMH-4423	85.9	PVC	18	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 22	SSGM-00435	STEVENS AVE	SSMH-1761	SSMH-4615	98.4	VC	18	2	Crack Longitudinal (59.6'), Obstruction through connection concrete in joint(72.3'), Root Fine Joint(53.5')	COMPLETE	2111	2100	2211	2	288	X					1				X	CIPSR 57'-63'	Roots
SUB-AREA 22	SSGM-00436	STEVENS AVE	SSMH-4615	SSMH-6550	60.5	VC	18	0	Crack longitudinal (18.6')	COMPLETE	0	2100	2100	1	144			1	3		1					CIPSR 15' to 21'	
SUB-AREA 22	SSGM-02933	STEVENS AVE	SSMH-0802	SSMH-1761	78.4	VC	18	0	Obstruction through connection(45.5'), Obstruction through joint(15.5')	COMPLETE	3121	0	3121	3	0										X	Remove obstruction at 15' and 45'	
SUB-AREA 22	SSGM-02934	STEVENS AVE	SSMH-0803	SSMH-0802	63.1	VC	18	3	Obstruction through connection concrete through joint(14.3', 34.4'), Roots fine Joint(21.0), Crack Longitudinal(17.2', 39.5'), Fracture Longitudinal(44.7'), Water level Sag(52.8')	COMPLETE	2211	3123	3125	3	576					X		3			X	Remove obstruction at 14.3' and 34.4'	Roots
SUB-AREA 22	SSGM-02936	STEVENS AVE	SSMH-5335	SSMH-0803	132.4	VC	18	3	Crack Circumferential(51.3'), Infiltration Runner Joint(38.1', 73.3'), Roots fine Barrel(99.7', 105.1')	COMPLETE	4212	1100	4213	3	7,632	X				X		3					Roots
SUB-AREA 22	SSGM-02937	STEVENS AVE	SSMH-5336	SSMH-5335	108.3	VC	15/15	2	Roots fine joint(28.1'), Infiltration Runner Joint(74.7'), Obstruction Wedged in the joint branch(97.6'), Roots fine Connection(74.7')	COMPLETE	4121	0	4121	3	3,888	X				X		2					Roots
SUB-AREA 22	SSGM-02944	STEVENS AVE	SSMH-5341	SSMH-2938	159.0	VC	10	1	Fracture Longitudinal(0.6'), Obstruction Rock(25.9')/ [Crack Multiple(68.1'), Fracture Longitudinal(71.5'), Obstruction through connection concrete in joints(122.3', 130.5')]	COMPLETE	2300	3300	3323	3	432					X		1			X	Remove obstructions at 25.9', 122.3' and 130.5'	Debris
SUB-AREA 22	SSGM-03027	STEVENS AVE	SSMH-5363	SSMH-6550	57.7	VC	8	1	US: Infiltration Staining Joint (1'), Deposits Attached Grease (3' - 46'), Crack Circumferential (5.8', 20.9'), Deposits Settled Fine (31.8'-46'), Survey Abandoned - Debris (46'), Cannot clean debris due obstruction from DS	Cannot Complete	2112	2100	2212	2	576												Debris and Grease
SUB-AREA 22	SSGM-03029	STEVENS AVE	SSMH-6550	SSMH-6551	133.3	VC	18	1	Roots Medium Joint (9', 103.3'), Infiltration Weeping Joint (9'), Infiltration Stain Joint (48.5'), Infiltration Runner Connection (101.0'), Obstruction Wedged in Joint:Concrete (103.3')	COMPLETE	4132	0	4132	4	4,752	X				X		1					Roots
SUB-AREA 22	SSGM-03030	STEVENS AVE	SSMH-5364	SSMH-6541	74.3	VC	18	1	Root tap joint(0.1')	COMPLETE	1100	0	1100	1	144							1		X			Roots
SUB-AREA 22	SSGM-03032	STEVENS AVE	SSMH-6552	SSMH-5364	232.6	VC	18	5	Fracture Multiple(50.8'), Intruding sealing material grout(0.0', 17.2', 77.5', 144.8')	COMPLETE	2400	4100	4124	3	720						1				X	CIPSR 48'-54'	
SUB-AREA 22	SSGM-03034	STEVENS AVE	SSMH-5365	SSMH-5341	152.6	VC	10	1	Fracture Spiral(108.7'), Fracture Circumferential(128.3'), Fracture Longitudinal(95.2', 151.5'), Infiltration Runner Connection(149.8')	COMPLETE	4100	3321	4133	4	4,176					X		1					
SUB-AREA 22	SSGM-04702	STEVENS AVE	SSMH-3544	SSMH-5365	199.7	VC	8	2	Broken pipe void visible(77.3'), Crack Spiral(70.5'), Fracture Multiple (72.9'), Roots medium joint(77.3'), Intruding sealing material grout(37.9', 99.6')	COMPLETE	3122	5141	5141	5	864	X		1	199	X		2					Roots
SUB-AREA 22	SSGM-04703	STEVENS AVE	SSMH-4619	SSMH-3544	206.6	VC	8	2	Crack multiple(83.0), deposit settled Rock(167.6'), intruding sealing material grout(140.5', 194.6', 199.2'), Water level Sag(130.5', 172.2'), Roots fine joint(188.3', 192.5')	COMPLETE	2412	4122	4126	3	864					X		2					Debris, and Roots
SUB-AREA 22	SSGM-08047	STEVENS AVE	SSMH-6881	SSMH-4423	17.2	PVC	8	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 22	SSGM-00313	STEVENS AVE/ CONGRESS ST	SSMH-4421	SSMH-4422	45.4	PVC	8	0	General Observation Patch(24.9')	COMPLETE	0	0	0	0	0												
SUB-AREA 22	SSGM-02941	STONE LEDGE DR	SSMH-5342	SSMH-5341	57.9	PVC	8	0	Water level Sag(43.8')	COMPLETE	0	2100	2100	1	0												
SUB-AREA 22	SSGM-02942	STONE LEDGE DR	SSMH-5339	SSMH-5342	162.6	PVC	8	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 22	SSGM-02943	STONE LEDGE DR	SSMH-5340	SSMH-5339	110.8	PVC	8	0	No Significant Defects	COMPLETE	0	0	0	0	0												
SUB-AREA 22	SSGM-04700	WAYNE ST	SSMH-1075	SSMH-3542	217.4	VC	8	4	Fracture Longitudinal(20'), Infiltration Stain Joint(16.9'), Material change PVC(22.7'), Material change VCP(92.4'), Roots Fine Joint(94.8', 200')	COMPLETE	1300	3100	3113	2	576	X				X		4					Roots
SUB-AREA 22	SSGM-06579	WAYNE ST	SSMH-6086	SSMH-3542	179.8	VC	8	7	Fracture Longitudinal(61.9'), Infiltration stain Joint(174.6'), Obstruction Wedged in the Joint stick(62.2')	COMPLETE	2111	3100	3121	3	288	X				X		7				Remove obstruction at 62.2'	
SUB-AREA 23	SSGM-03907	ABBOTT ST	SSMH-0989	SSMH-0993	225.4	VC	8	12	Broken pipe Soil Visible(114.2'), Water Level Sag(161.4'), Deposits attached Encrustation(195.0'), Material change PVC(217.8'), Joint Offset Medium Defective(217.8')	COMPLETE	1100	5131	5131	4	432						1					CIPSR 111'-117'	
SUB-AREA 23	SSGM-01989	ALLEN AVE	SSMH-6266	SSMH-2571	9.0	VC	24	0	PVC point repair (0'-4.8')	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-01990	ALLEN AVE	SSMH-2571	SSMH-1627	109.8	VC	30	2	Infiltration Stain(11.0', 16.5', 21.2'(2), 38.5', 43.9', 66.0', 73.4', 90.9', 93.4'), Joint Offset Medium(58.7', 104.7')	COMPLETE	1A00	3100	311A	2	1,728					X		2					
SUB-AREA 23	SSGM-01991	ALLEN AVE	SSMH-0626	SSMH-2573	146.3	VC	30	2	Infiltration Stain(1.7', 5.9', 8.2', 10.6', 18.0', 20.3'(2), 32.1'(2), 53.8', 59.7', 69.2'(2), 119.9'(2), 128.1', 132.1', 135.2'), Deposits attached Encrustation(119.9', 138.0'), Fracture Longitudinal(101.5'), Surface Other Bulging of Pipe(40.4')	COMPLETE	221B	3100	3122	3	3,024			4	37.1, 51.6, 106.9,112.7	X		2				
SUB-AREA 23	SSGM-01992	ALLEN AVE	SSMH-2573	SSMH-2572	175.1	VC	30	6	Infiltration Stain(15.1', 16.9', 24.8', 27.9', 31.2', 34.2', 61.5'(2), 85.0', 87.0', 90.8', 106.0', 166.9', 167.7'), Infiltration Runner(24.8')	COMPLETE	411A	0	411A	4	5,616			1	7	X		6				
SUB-AREA 23	SSGM-03460	ALLEN AVE	SSMH-5529	SSMH-4434	78.8	VC	24	1	Infiltration Stain(5.9', 8.9', 14.5', 18.2', 56.1'), Joint Offset Medium(14.5', 74.5'), Infiltration Runner(71.5', 74.5'), Fracture Longitudinal(74.5'), Material Change PVC(75.8')	COMPLETE	4215	3100	4231	4	8,352					X		1					
SUB-AREA 23	SSGM-03613	ALLEN AVE	SSMH-0937	SSMH-0628	125.8	VC	12	3	Infiltration Stain(13.6', 17.1', 23.0', 26.0', 37.5', 46.2', 48.1', 49.3', 51.2', 55.0', 60.7', 111.6', 114.1', 119.8')	COMPLETE	1A00	0	1A00	1	2,016			1	92	X		3				
SUB-AREA 23	SSGM-03615	ALLEN AVE	SSMH-0938	SSMH-5524	130.7	VC	15	3	Fracture Multiple(0.4'), Fracture Longitudinal(70.6'), Crack Mulptiple(72.9'), Joint Offset Medium(25.6', 126.5')	COMPLETE	0	4132	4132	4	576					X		3					
SUB-AREA 23	SSGM-03617	ALLEN AVE	SSMH-5527	SSMH-0627	187.2	VC	24	3	Infiltration Stain(156.5', 164.5'(2), 179.7', 181.8'(2), 183.9'(2)	COMPLETE	1800	0	1800	2	1,152			1	161	X		3				
SUB-AREA 23	SSGM-03618	ALLEN AVE	SSMH-5526	SSMH-5527	242.4	VC	24	3	Infiltration Stain(3.0', 20.4', 28.3', 38.4', 40.4', 43.4', 45.8', 234.4'(2))	COMPLETE	1900	0	1900	2	1,152			2	107.8, 213.8	X		3				
SUB-AREA 23	SSGM-03619	ALLEN AVE	SSMH-0627	SSMH-5528	169.6	VC	24	4	Infiltration Stain(4.2', 6.8', 8.9', 59.0', 71.6', 161.6'(2)), Defective Lateral(99.5')	COMPLETE	1700	0	1700	1	1,152					X		4					
SUB-AREA 23	SSGM-03620	ALLEN AVE	SSMH-5528	SSMH-5529	99.9	VC	24	4	Material Change PVC Stub(0.0'), Material Change VCP(6.1'), Obstacle in Joint Wooden Stick(7.0'), Joint Offset Medium(20.8', 35.4', 95.4'), Infiltration stain(33.0', 95.4')	COMPLETE	3112	2300	3123	3	720			1	56	X		4				
SUB-AREA 23	SSGM-03621	ALLEN AVE	SSMH-4434	SSMH-5530	150.0	VC	24	3	Infiltration Stain(3.0', 39.8'(2), 42.8', 42.9', 146.0'(2)), Joint Offset Medium(13.3', 146.0')	COMPLETE	1700	2100	2117	2	1,296					X		3					
SUB-AREA 23	SSGM-03622	ALLEN AVE	SSMH-5530	SSMH-0626	243.8	VC	24	5	Infiltration Stain(3.1', 75.6', 78.2', 87.2'(2), 93.5', 98.4'(2), 102.5', 111.5', 120.8', 124.9'(2), 127.9', 131.1'(2), 134.0', 137.2'(2), 158.5', 187.7', 241.5'(2)), Joint Offset Medium(29.1', 241.5'), Joint Seperated Medium(8.4'), Infiltration Dripper(96.7'), Deposits Attached Encrustation(187.7', 193.4', 199.9', 220.5', 222.8', 241.5'(2))	COMPLETE	3127	2100	3128	3	6,192			1	10	X		5				
SUB-AREA 23	SSGM-03905	ALLEN AVE	SSMH-0992	SSMH-0157	144.9	VC	30	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-03906	ALLEN AVE	SSMH-1627	SSMH-0992	180.7	VC	30	6	Lining Failure Delaminating(35.2'), Defective Lateral -unknown debris obstructing about 80% Lateral(43.3'), Lining Failure Wrinkled(44.7', 52.1')	COMPLETE	0	0	0	0	144												
SUB-AREA 23	SSGM-04503D	ALLEN AVE	SSMH-5525	SSMH-5526	239.1	VC	24	3	Joint Offset Medium(25.3', 232.6'), Infiltration Stain(40.2, 43.1', 49.4'(2), 232.6'(2)), Roots fine connection(60.2'), Roots Medium Connection(88.7'), Defective Lateral roots at connection(60.2', 88.7'), Defective lateral 30% settled fine deposits or possible roots in lateral(91.5'), roots fine joint(163.6')	COMPLETE	3316	2200	3322	3	2,304	X				X		3					Roots
SUB-AREA 23	SSGM-04503U	ALLEN AVE	SSMH-0630	SSMH-5525	97.8	VC	24	4	Infiltration Stain(12.7', 19.8', 23.0', 90.8', 91.4'), Joint Offset Medium(35.1', 91.5'), Fracture Longitudinal(72.8')	COMPLETE	1500	3121	3121	2	1,008					X		4					
SUB-AREA 23	SSGM-07272	ALLEN AVE	SSMH-2572	SSMH-6266	10.3	PVC	24	0	Material Change VCP Stub(0.0'), Material Change PVC(3.6')	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-03913	ALLEN AVE XC	SSMH-6265	SSMH-0991	110.3	CP	36	1	Obstacle Rocks(86.8')	COMPLETE	3100	0	3100	3	0										X		Debris
SUB-AREA 23	SSGM-03914	ALLEN AVE XC	SSNS-0157	SSMH-6265	23.2	CP	36	2	No significant defects	COMPLETE	0	0	0	0	0				22								
SUB-AREA 23	SSGM-01964	CYPRESS ST	SSMH-0624	SSMH-0623	4.0	PVC	8	0	Joint Offset Large (4.0'), Survey abandoned unable to navigate through offset joint (4.0'), Drop connection at downstream manhole.	Cannot Complete	0	4100	4100	4	144										X	Heavy clean and reinspect	
SUB-AREA 23	SSGM-03457	DELAWARE CT	SSMH-3122	SSMH-5480	100.3	PVC	8	1	Change in water level(43.8')	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-00179	HENNESSY DR	SSMH-4512	SSMH-1591	237.8	PVC	8	7	Water Level Sag(21.5', 32.1', 83.6'), Roots fine joint(97.0', 102.3', 116.8'), Hole Soil Visible(127.1', 230.8'), Broken pipe soil visible(233.0'), Change in water level(183.3')	COMPLETE	1300	5200	5213	3	864	X				X		7					Roots
SUB-AREA 23	SSGM-00180	HENNESSY DR	SSMH-1591	SSMH-1590	150.6	VC	8	3	Fracture Multiple(5.0', 36.9'), Defective capped lateral- cap appears to be shifted allowing dirt into connection (11.2', 60.3'), Broken Pipe(30.1'), Hole(81.7'), Defective lateral - cap fell(107.8'), Joint Offset Medium(141.2').	COMPLETE	0	5142	5142	5	1,152			1	88	X		3				
SUB-AREA 23	SSGM-01977	HENNESSY DR	SSFT-0192	SSMH-2563	123.3	VC	8	1	Crack Longitudinal(77.3')	COMPLETE	0	1100	1100	1	144						1					CIPSR 74'-80'	

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Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 23	SSGM-01983	HENNESSY DR	SSMH-2568	SSMH-2567	236.6	VC	8	7	Hole Soil Visible(14.2'), Fracture Multiple(70.8'), Roots Medium Lateral(75.8'), Roots Medium Barrel(77.1'), Roots Fine Joint(101.9'), Broken Pipe Soil Visible(135.9'), Fracture Spiral(144.3'), Crack Spiral(170.1')	COMPLETE	4121	5241	5242	5	1,152					X		7					Roots
SUB-AREA 23	SSGM-01969	PENNELL AVE	SSMH-5110	SSMH-5108	328.2	PVC	8	14	Material change VCP(50.0'), Roots Fine Joint(83.9', 96.4'), Broken Pipe Soil Visible(93.3'), Water level Sag(223.8', 271.5', 305.6'), Fracture Multiple(225.0')	COMPLETE	1200	5141	5141	5	576	X				X		14					Roots
SUB-AREA 23	SSGM-01972	PENNELL AVE	SSMH-4487	SSMH-5111	150.9	PVC	8	8	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-06683	PENNELL AVE	SSMH-6104	SSMH-5108	133.2	VC	8	6	Deposits Settled Fine(0.0'), Water Level Sag(103.9'), Material change PVC(126.9')	COMPLETE	1100	0	1100	1	0										X		Debris
SUB-AREA 23	SSGM-02008	PLYMOUTH ST	SSMH-5120	SSMH-5116	238.0	AC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-02009	PLYMOUTH ST	SSMH-5121	SSMH-5120	296.9	AC	8	8	Point Repair patch-Patch repair at joint(35.2'), Water level Sag(94.1')	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-02000	RUBY LN	SSMH-2302	SSMH-2303	83.0	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-02003	RUBY LN	SSMH-4927	SSMH-5116	30.1	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 23	SSGM-01967	SHORT ST	SSMH-5108	SSMH-5109	13.8	VC	20	0	Crack Longitudinal(0.3', 9.4'), Broken Pipe(11.2')	COMPLETE	0	5121	5121	5	288						2					CIPSR 0'-6' and 7'-13'	
SUB-AREA 23	SSGM-01987	SHORT ST	SSMH-5109	SSMH-6272	136.2	VC	20	2	Tap Factory Defective Roots in Lateral(15.8'), Crack Circumferential(2.4'), Crack Longitudinal(113.4'), Point Repair Liner(119.4'), Roots Fine Joint(128.3'), Repair Point Pipe Replaced Polyethylene(130.7', 135.7')	COMPLETE	1200	2111	2113	2	576	X				X		2					Roots
SUB-AREA 23	SSGM-01976	SKYLARK RD	SSMH-5114	SSMH-5115	239.6	VC	8	7	Roots fine Joint(44.3', 52.9', 58.4', 61.3'), Roots fine Lateral(64.4')/ Broken Pipe Soil Visible(45.1'), Fracture Longitudinal(45.1'), Roots Fine Lateral(151.7')	COMPLETE	1600	5131	5131	4	1,152			1	5	X		7					Roots
SUB-AREA 23	SSGM-01978	SKYLARK RD	SSMH-5115	SSMH-2563	178.1	VC	8	1	Crack Circumferential(69.2'), Fracture Multiple(79.7')/ Fracture Multiple(5.0', 7.0'), Fracture Longitudinal(25.1')	COMPLETE	0	4331	4331	4	720			1	122	X		1					
SUB-AREA 23A	SSGM-01919	ALLEN AVE	SSMH-5081	SSMH-2545	281.0	VC	20	7	Tap Break -in Defective Infiltration around Lateral(57.8'), Tap Break-in Defective Infiltration at cap(115.2'), Deposits Settled Gravel(0.0', 10.1'), Infiltration Runner Connection(57.8'), Fracture Multiple(171.2'), Infiltration Stain Joint(218.4'), PVC point repair (262-274)	COMPLETE	4122	4100	4222	4	4,032					X		7		X			Debris
SUB-AREA 23A	SSGM-01920	ALLEN AVE	SSMH-2544	SSMH-2545	141.9	RCP	48	0	Infiltration Stain(26.1', 50.9'(2), 63.4'(2))	COMPLETE	1500	0	1500	1	720					X							
SUB-AREA 23A	SSGM-03708	ALLEN AVE	SSMH-3248	SSMH-5081	264.8	VC	12	6	Infiltration Runner connection (30.1', 134.0'), Lining Failure Wrinkled(41.1', 143.1', 189.0', 212.5', 227.0')	COMPLETE	4200	5300	5342	5	7,200			1	253			6					
SUB-AREA 23A	SSGM-03754	ALLEN AVE	SSMH-5576	SSMH-4252	37.4	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 23A	SSGM-06482	ALLEN AVE	SSMH-0935	SSMH-6063	129.7	VC	8	3	Joint Offset Medium(1.3', 124.8'), Broken Pipe(21.0', 71.9', 85.8', 93.1', 103.1', 123.8'), Hole Void Visible(22.9', 32.3', 45.1', 51.2', 69.5', 73.9', 100.6', 106.7'), Broken pipe void visible(58.5'), Fracture Longitudinal(89.2'), Fracture Multiple(94.4')	COMPLETE	0	5B41	5B41	5	2,736					X		3					
SUB-AREA 23A	SSGM-06759	ALLEN AVE	SSMH-3087	SSMH-4252	136.6	VC	12	0	Joint Offset Medium(1.9', 62.9')	COMPLETE	0	3100	3100	2	288						2					CIPSR 0'-6' and 60'-66'	
SUB-AREA 23A	SSGM-06760	ALLEN AVE	SSMH-4252	SSMH-3248	245.6	VC	12	7	Lining Failure Wrinkled(21.9', 47.4', 104.1', 127.9'), Lining Failure Undercut Connection(41.5'), Change in water level(64.5', 75.1')	COMPLETE	0	3500	3500	2	0											Re-cut service (42)	
SUB-AREA 23A	SSGM-07275	ALLEN AVE	SWIN-2311	SSMH-6275	0.0	RCP	24		Line not located. Downstream is 80% blocked by shelf, upstream manhole not located.	Pipe Not Located	N/A	N/A	N/A	N/A	0												
SUB-AREA 23A	SSGM-07276	ALLEN AVE	SSMH-6275	SSMH-6278	190.4	RCP	24	0	Intruding Sealing Material Grout(98.2', 150.2')	COMPLETE	0	2200	2200	2	0											Remove intruding sealing material	
SUB-AREA 23A	SSGM-07277	ALLEN AVE	SSMH-6278	SSMH-2545	106.3	RCP	24	0	Deposits Settled Fine(34.5', 46.5', 96.9', 106.3'),	COMPLETE	2400	0	2400	2	0										X		Debris
SUB-AREA 23A	SSGM-01833	BROOK RD	SSMH-5082	SSMH-5081	142.6	VC	20	5	Roots Fine Joint(14.6', 16.5', 57.6', 60.9', 71.3', 11.4'), Roots Tap Lateral(70.4'), Roots Medium Joint(74.7'), Roots Medium Connection(48.2'), Point Repair Patch (56.4', 58.5', 59.5', 61.3', 63.1', 64.6', 65.8', 66.8', 67.6', 71.5', 72.9', 77.1', 80.1', 82.4', 83.9', 85.4', 87.5', 89.7', 91.5', 93.2', 95.6', 97.3', 102.0', 103.8', 105.4', 107.7', 109.6')	Needs Cleaning	3221	0	3221	3	1,296	X				X		5					Roots
SUB-AREA 23A	SSGM-01834	BROOK RD	SSMH-5083	SSMH-5082	41.8	VC	20	2	Defective capped with Roots in lateral(23.6', 25.2'), Roots Fine Joint(22.2', 28.7', 32.3')	Needs Cleaning	2213	0	2213	2	720	X				X		2					Roots
SUB-AREA 23A	SSGM-01835	BROOK RD	SSMH-2508	SSMH-5083	215.3	VC	20	6	Crack Longitudinal(4.0'), Point Repair Patch (35.5', 88.2', 90.3', 210.7'(2)), Roots Fine Joint(4.0', 9.0', 10.0', 19.9', 31.2', 48.0',131.6', 133.7', 133.7', 135.8', 145.1', 174.5'), Roots Medium Joint(57.3', 147.2', 160.8')	Needs Cleaning	331A	2100	3321	3	2,304	X				X		6					Roots
SUB-AREA 23A	SSGM-01849	BROOK RD	SSMH-2520	SSMH-2519	37.2	VC	15	0	Deposits attached ragging(10.1'), Roots Medium Joint(23.1', 27.3', 27.3', 37.2'), Survey abandoned unable to navigate due to roots(37.2')	Needs Cleaning	3421	0	3421	3	576	X	X									Mechanical root removal required	Roots
SUB-AREA 23A	SSGM-03082	FALL BROOK INTERCEPTOR	SSMH-3016	SSMH-3015	450.1	RCP	60	0	No significant defects	COMPLETE	0	0	0	0	0											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	
SUB-AREA 23A	SSGM-06109	GERTRUDE AVE / NORTHPORT DR XC	SSMH-3015	SSMH-3925	300.3	RCP	60	1	Roots Fine Joint(133.3',146.3')	COMPLETE	1200	0	1200	1	288											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	Roots
SUB-AREA 23A	SSGM-03081	NORTHPORT DR	SSMH-2545	SSMH-3016	443.2	RCP	48	1	Infiltration Stain(24.0'(2), 68.0', 146.7'(2), 320.2'(2), 360.5'), Roots Fine joint(121.2', 121.4'), Roots Medium Joint(192.5', 193.1', 200.7', 222.1'(2)), Camera Underwater(227.0'), Repair Patch Concrete(436.4'), Infiltration Weeper At patch repair(437.8'), Hole Under patch repair(437.8'),	COMPLETE	3421	5100	5134	5	3,024	X		1	76	X		1					Roots
SUB-AREA 23A	SSGM-03083	NORTHPORT DR	SSMH-3017	SSMH-3016	61.2	RCP	48	0	Infiltration Weeper(9.0', 29.7'), Roots Tap Joint(34.6'), Crack Multiple(50.0')	COMPLETE	2300	3100	3123	3	1,728	X				X							Roots
SUB-AREA 23A	SSGM-03084	NORTHPORT DR	SSMH-3018	SSMH-3017	10.0	RCP	36	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 23A	SSGM-03911D	NORTHPORT DR	SSMH-0991	SSMH-6378A	189.5	RCP	36	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 23A	SSGM-03911U	NORTHPORT DR	SSMH-6378A	SSMH-6378	179.4	RCP	36	1	Infiltration Stain(22.6'), Obstacle External pipe or cable Cross bore(144.3'), Obstacle Pipe Material(153.6'), Obstruction Construction Debris(166.2')	COMPLETE	1100	3100	3111	3	144												Debris
SUB-AREA 23A	SSGM-03756	RESIDENCES	SSMH-5578	SSMH-5577	214.5	PVC	8	1	Water level Sag(90.7')	COMPLETE	0	0	0	0	0												
SUB-AREA 24	SSGM-01828	CHAPMAN ST	SSMH-0602	SSMH-0601	51.1	AC	8	2	Water level Sag(6.1')	COMPLETE	0	0	0	0	0												
SUB-AREA 24	SSGM-00178	CYPRESS ST	SSMH-1592	SSMH-1593	264.4	VCP	8	14	Fracture Circumferential(10.8'), PVC spot repair (56.9'-59.0'), Water Level Sag(62.0')	COMPLETE	0	2100	2100	1	144					X		14					
SUB-AREA 24	SSGM-01965	CYPRESS ST	SSMH-1593	SSMH-2503	261.8	VCP	8	5	Water Level Sag(120.3', 146.4', 159.4', 166.9', 244.9'), Infiltration Dripper Joint(184.5', 247.8'), Deposits attached encrustation(184.5', 188.1', 224.2', 247.8', 253.9')	COMPLETE	3215	0	3215	2	2,016					X		5					
SUB-AREA 24	SSGM-07050	GREENWOOD LN	SSMH-1383	SSMH-0591	32.1	VCP	8	0	Roots Ball Joint(31.9'), Survey abandoned due to roots (32.1)	Needs Cleaning	4100	0	4100	2	144	X								X			Roots
SUB-AREA 24	SSGM-01726	REGAN LN	SSMH-2475	SSMH-2476	104.7	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24	SSGM-03904	WASHINGTON AVE	SSMH-1544	SSMH-3304	264.0	VCP	20	8	Infiltration Stain(5.9', 195.8'), Defective Lateral(25.2'), Repair Point Defective(Fiberglass pulling away from walls(149.4')	COMPLETE	1200	0	1200	1	576					X		8					
SUB-AREA 24	SSGM-07618	WASHINGTON AVE	SSMH-2477	SSMH-1638	211.9	VCP	21	5	Crack Longitudinal (16.1', 24.1', 92.1'), Infiltration Dripping Connection (47.1', 134.9'), Infiltration Weeping Joint (54.7'), Infiltration Stain Joint (58.0', 110.0'), Infiltration Staining Connection (92.1')	COMPLETE	3221	2300	3224	3	4,464							5		X			
SUB-AREA 24	SSGM-07619	WASHINGTON AVE	SSMH-1638	SSMH-2493	215.1	VCP	18	5	Crack Longitudinal (5.0', 161.8'), Surface Spalling (71.0'), Infiltration Weeper Connection (91.0'), Cracks Multiple (146.7')	COMPLETE	2100	3123	3124	3	1,152							3					
SUB-AREA 24	SSGM-07621	WASHINGTON AVE	SSMH-4067	SSMH-5073	278.5	VCP	12	6	Joint Offset Medium(22.2', 188.7'), Roots Fine Joint(130.5')	COMPLETE	1100	3100	3111	2	432	X						6		X			Roots
SUB-AREA 24	SSGM-07622	WASHINGTON AVE	SSMH-5073	SSMH-2464	278.3	VCP	12	7	Joint Offset Medium(99.4', 173.4', 204.2', 260.5')	COMPLETE	0	3400	3400	2	576												
SUB-AREA 24	SSGM-07628	WASHINGTON AVE	SSMH-5076	SSMH-2477	283.6	RCP	21	5	Infiltration Stain Joint (2.1', 17.0', 149.3', 157.2', 207.8', 219.2', 223.3', 228.0', 243.2', 250.3'), Infiltration Weeper Joint (179.9', 187.5', 191.6', 203.8', 211.9', 215.8', 247.3'), Infiltration Dripping Joint (183.3'),	COMPLETE	3127	0	3127	3	7,920					X		5					
SUB-AREA 24A	SSGM-04960	BERNARD RD	SSMH-3636	SSMH-3634A	205.7	PVC	8	5	Intruding Sealing Ring Hanging(10.4'), Intruding sealing ring loose/Poorly fitting(11.3'), Infiltration stain(11.4', 66.8'), Water level sag(201.7')	COMPLETE	1200	2200	2212	2	576									X		Cut intruding sealing rings	
SUB-AREA 24A	SSGM-04960A	BERNARD RD	SSMH-3636	SSMH-3634A	196.1	PVC	8	4	Water level Sag(7.0', 25.1', 50.6', 111.2', 189.9')	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-04971	BERNARD RD	SSMH-6560	SSMH-1504	0.0		36		Cannot inspect, pipe water level too high	Cannot Complete	N/A	N/A	N/A	N/A	0												

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Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 24A	SSGM-06250	BERRY AVE	SSMH-3298	SSMH-3976	222.1	PVC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-06252	BERRY AVE	SSMH-3977	SSMH-1508	43.3	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-06249	CHESLEY AVE	SSMH-3975	SSMH-3299	200.7	PVC	8	6	Water level Sag(15.2')	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-00200	CHESLEY ST	SSMH-1509	SSMH-1506	202.5	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-03922	GERTRUDE AVE	SSMH-5628	SSMH-5627	138.5	VCP	8	0	PVC spot repair (0-7.0'), Water level Sag(19.4', 24.7'), Deposits attached encrustation(101.3', 104.9', 107.3', 109.0', 125.6', 138.5'), Infiltration Dripper Joint(104.9', 107.3'), Deposits settled fine(138.4')	Needs Cleaning	3223	0	3223	3	2,304					X					X		Debris
SUB-AREA 24A	SSGM-03826	LORING AVE	SSMH-1626	SSMH-5594	212.7	VCP	8	7	Deposits settled fine(5.0', 12.3', 20.2', 42.4', 55.1', 208.2'), hole soil visible(132.9'), water level sag(176.4', 189.2', 208.2')	COMPLETE	1600	5100	5116	3	144						1				X	CIPSR 129'-135'	Debris
SUB-AREA 24A	SSGM-00146	MAINE AVE	SSMH-1502	SSMH-1501	0.0	RCP	42		Cannot inspect, downstream pipe needs heavy cleaning to access.	Needs Cleaning	N/A	N/A	N/A	N/A	0										X	Heavy clean, reinspect	
SUB-AREA 24A	SSGM-03902	MAPLEWOOD ST	SSMH-3303	SSMH-4526	318.7	VCP	10	6	Roots Medium Joint(9.0', 19.9', 25.7', 60.3', 65.9', 135.0'), Deposits settled fine(92.1'), Roots fine Joint(153.3'), Fracture longitudinal(266.5', 279.1'), PVC point repair (294.1-298.9')	COMPLETE	3612	3200	3812	3	1,296	X				X		6					Debris, and Roots
SUB-AREA 24A	SSGM-04965	MONA RD	SSMH-3639	SSMH-3640	47.1	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-06243	NORTHFIELD/ EDGEWOOD AVE	SSMH-3971	SSMH-5810	129.2	PVC	8	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-01294	OLD CAMPUS DR	SSMH-4937	SSMH-0506	213.5	PVC	8	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-04955	SAMUEL RD	SSMH-1130	SSMH-3301	71.6	PVC	8	1	Change in water level(8.5'), Water level Sag(24.7', 62.3')	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-04959	SAMUEL RD	SSMH-3301	SSMH-3634	287.4	PVC	8	6	Water level Sag(6.0', 191.9', 242.5', 275.4'), Change in water level(12.2')	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-03735	SARA LA-MONA	SSMH-0962	SSMH-0961	307.6	PVC	8	8	Water level Sag(128.6' 253.2')	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-00057	WASHINGTON AVE	SSMH-1625	SSMH-1504	62.6	VCP	20	1	Fracture Multiple(13.6', 15.0'), Survey abandoned- unable to navigate due to high water level(62.6')	COMPLETE	4100	4200	4300	4	288										X	Heavy clean, then inspect while dewatering pipe	
SUB-AREA 24A	SSGM-00145	WASHINGTON AVE	SSMH-1504	SSMH-1502	108.0	VCP	42	2	Mineral Deposits Joint (1.5', 40.4', 43.4', 67.5',), Gravel in Invert (11.4'), Infiltration Staining Joint (13.5'), Crack Longitudinal (29.9')	COMPLETE	2511	2100	2611	2	864										X	Cleaning to remove gravel	Debris
SUB-AREA 24A	SSGM-00147	WASHINGTON AVE	SSMH-1503	SSMH-1501	26.4	RCP	24	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-00150	WASHINGTON AVE	SSMH-1510	SSMH-1508	164.0	VCP	8	3	Joint Offset Medium(4.7', 14.0', 160.6'), Infiltration Stain(10.7', 16.3', 19.8', 160.6')	COMPLETE	1400	3300	3314	2	1,008					X		3					
SUB-AREA 24A	SSGM-00151	WASHINGTON AVE	SSMH-1508	SSMH-1507	238.7	RCP	21	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 24A	SSGM-00152	WASHINGTON AVE	SSMH-1507	SSMH-1505	258.2	RCP	24	2	Intruding Sealing Material Grout(173.0'), PVC point repair (250.3', 255.5')	COMPLETE	0	2100	2100	2	0				131								
SUB-AREA 24A	SSGM-00153	WASHINGTON AVE	SSMH-1505	SSMH-1503	125.9	RCP	24	2	Deposits Attached Encrustation(73.1')	COMPLETE	2100	0	2100	2	144									X	X		
SUB-AREA 24A	SSGM-00198	WASHINGTON AVE	SSMH-4526	SSMH-4527	175.2	VCP	20	3	Infiltration Stain(11.7', 21.9', 29.9'), Crack Longitudinal(108.6')	COMPLETE	1300	2100	2131	2	576					X		3					
SUB-AREA 24A	SSGM-03828	WASHINGTON AVE	SSMH-5595	SSMH-1625	250.4	VCP	20	4	Crack Longitudinal(5.0', 8.0'), Fracture Longitudinal(5.7', 16.2'), Infiltration Weeper(13.1', 25.2'), Survey abandoned intruding tap(31.4') / Reversal: Infiltration Weeper(7.0', 46.5', 91.4', 190.1', 198.6', 201.7', 204.8', 207.6', 210.7'), Crack Multiple(28.7'), Crack Longitudinal(34.7', 100.5', 133.1', 142.3', 157.1', 172.1'), Infiltration Dripper Connection(47.2'), Infiltration Stain(91.4', 94.6'), Crack Spiral(108.8'), Fracture Longitudinal(112.4', 127.3', 145.2', 181.4', 201.8'), Broken Pipe(157.1')	COMPLETE	312A	5138	5139	5	12,240			3	31.4/ 24.5, 47.2	X		4					
SUB-AREA 24A	SSGM-03903	WASHINGTON AVE	SSMH-3304	SSMH-4526	298.5	VCP	20	6	Infiltration Stain(14.3', 34.4', 126.7', 181.7', 275.2'), Infiltration Dripper(216.3'), Defective Lateral(91.7'), Fracture Multiple(230.7')	COMPLETE	3115	4121	4131	3	2,448			1	246	X		6					
SUB-AREA 24A	SSGM-03917	WASHINGTON AVE	SSMH-4527	SSMH-5626	97.8	VCP	20	2	Crack Spirak(0.0'), Infiltration Stain(0.0', 38.9', 44.1', 52.2', 58.3', 62.6', 93.7')	COMPLETE	1700	2100	2117	2	1,152					X		2					
SUB-AREA 24A	SSGM-03918	WASHINGTON AVE	SSMH-5626	SSMH-3246	183.2	VCP	20	3	Infiltration Stain(32.5', 179.6')	COMPLETE	1200	0	1200	1	288					X		3					
SUB-AREA 24A	SSGM-03920	WASHINGTON AVE	SSMH-3246	SSMH-5627	107.4	VCP	20	2	Infiltration Stain(4.1', 9.2', 101.1'), Deposits attached Encrustation(93.7')	COMPLETE	2113	0	2113	2	576					X		2					
SUB-AREA 24A	SSGM-03921	WASHINGTON AVE	SSMH-5627	SSMH-5595	262.0	VCP	20	3	Defective Lateral Defective 100% Encrustation(100.4'), Defective lateral Encrustation(174.6'), Infiltration Stain(63.1', 182.1', 235.6')	COMPLETE	2113	0	2113	2	1,008							3		X			
SUB-AREA 26	SSGM-06114	FALL BROOK INTERCEPTOR	SSMH-3925	SSMH-1267	552.6	RCP	66	0	Repair Patch Bricks(11.0'), Infiltration Dripper(447.5'), Infiltration Dripper Bolt hole(455.0', 462.3', 470.0', 478.5', 494.6', 503.6', 528.2')	COMPLETE	3800	0	3800	3	11,520											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	
SUB-AREA 26	SSGM-06871	FALL BROOK INTERCEPTOR	SSMH-1267	SSMH-6131	303.6	RCP	60	0	Infiltration Runner Bolt hole(8.8'), Infiltration Stain(72.6', 81.0', 235.9', 259.4'), Infiltration Stain Bolt Hole(100.9', 255.0'), Roots Fine Barell From bolt hole(129.8', 240.6'), Infiltration Dripper Bolt Hole(171.4'), Infiltration Weeper(185.5'), Roots Fine Joint(235.9'), Infiltration Weeper Bolt Hole(240.6'),	COMPLETE	4131	0	4131	4	7,776											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	Roots
SUB-AREA 26	SSGM-00157	INTERCEPTOR - FALL BROOK	SSMH-1497	SSMH-4461	332.1	RCP	72	0	No significant defects	COMPLETE	0	0	0	0	0											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	
SUB-AREA 26	SSGM-00148	MAINE AVE	SSMH-1501	SSMH-1498	33.1	RCP	42		Survey Abandoned 33.1' due to debris	Needs Cleaning	2100	0	2100	2	0										X		Debris
SUB-AREA 26	SSGM-00149	MAINE AVE	SSMH-1498	SSMH-1497	84.5	RCP	42	1	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-00169	MAINE AVE	SSMH-4454	SSMH-4462	271.8	RCP	30	9	Infiltration Stain Joint (231.9'), Infiltration Runner Joint(265.1', 269.7', 269.7', 257.6')	COMPLETE	4411	0	4411	4	14,544					X		9					
SUB-AREA 26	SSGM-00170	MAINE AVE	SSMH-4462	SSMH-4455	256.2	RCP	30	9	Infiltration Runner Joint(26.7', 115.4')	COMPLETE	4200	0	4200	4	7,200					X		9					
SUB-AREA 26	SSGM-00171	MAINE AVE	SSMH-4455	SSMH-4456	258.2	RCP	30	6	Infiltration Dripper(16.6'), Infiltration Stain(103.5', 148.3')	COMPLETE	3112	0	3112	3	1,728			1	243	X		6					
SUB-AREA 26	SSGM-00172	MAINE AVE	SSMH-4456	SSMH-4458	256.8	RCP	30	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-03777	MAINE AVE	SSMH-4460	SSMH-1496	238.4	RCP	42	9	Deposits Settled Fine(25.4')	COMPLETE	2100	0	2100	2	0												Debris
SUB-AREA 26	SSGM-03782	MAINE AVE	SSMH-4458	SSMH-4459	219.5	RCP	30	7	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-03793	MAINE AVE	SSMH-3268	SSMH-4454	256.0	PVC	8	8	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-06874	MAINE AVE	SSMH-6131	SSMH-1496	299.9	RCP	66	0	Infiltration Weeper(45.2', 63.6'), Infiltration Stain(75.3', 75.4'), Hole Soil Visible(88.7'), Infiltration Runner at defect(88.7'), Roots Fine Joint(238.4')	COMPLETE	4122	5100	5141	5	5,472											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	Roots
SUB-AREA 26	SSGM-07037	MAINE AVE	SSMH-1496	SSMH-1497	73.0	RCP	66	0	No significant defects	COMPLETE	0	0	0	0	0											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	
SUB-AREA 26	SSGM-07039D	MAINE AVE	SSMH-4171	SSMH-4460	116.1	RCP	30	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-07039U	MAINE AVE	SSMH-4459	SSMH-4171	206.2	RCP	30	7	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-03796	RAY ST	SSMH-3271	SSMH-3269	250.3	PVC	8	7	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-04196	RAY ST	SSMH-3270	SSMH-5667	66.4	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-07285	RAY ST	SSMH-6286	SSMH-6625	136.8	PVC	8	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 26	SSGM-00156	TEXAS ST	SSMH-4457	SSMH-4458	26.1	VCP	12	0	PVC point repair (0--8.3'), Deposits Settled Fine(13.1')	COMPLETE	1100	0	1100	0	0												Debris
SUB-AREA 26	SSGM-03783	TEXAS ST	SSMH-5585	SSMH-4457	221.8	VCP	8	3	No significant defects	COMPLETE	0	0	1100	1	0												
SUB-AREA 27	SSGM-04176	BYFIELD RD	SSMH-6559	SSMH-1015	82.1	VC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 27	SSGM-03869	ESIS FALL BROOK BRANCH	SSMH-1552	SSMH-4451	271.1	RCP	84	1	Weeping infiltration (11.3, 22.9, 27.2, 39.7, 130.1, 140.1, 156.0,187.7), Infiltration Stain (22.9, 88.1, 139.6), Running infiltration (27.3, 33.6), Dripping infiltration (118.6), Medium roots joint (161.1, 168.3, 188.7, 206.6), Tap Roots connection (185.4), Surface damage reinforcement visible (185.4), Tap Root joint (195.8), Survey abandoned Cable Length Exceeded (271.1)	Cannot Complete	4235	4100	4335	4	15,840											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	Roots
SUB-AREA 27	SSGM-04182	ESIS FALL BROOK BRANCH	SSMH-3297	SSMH-0975	275.4	RCP	84	1	Infiltration stain (5.0), Medium roots joint (98.0, 167.0, 176.9, 177.7)	COMPLETE	3411	0	3411	3	720											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	Roots

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 27	SSGM-05810	ESIS FALL BROOK BRANCH	SSMH-4451	SSMH-3297	645.2	RCP	84	1	Alignment left (10.0), Medium roots joint (34.3, 43.3, 196.4, 205.3, 223.3, 223.6, 286.5, 299.9, 309.9, 316.7, 328.3), Gushing infiltration (72.1, 78.5, 117.4, 149.6, 181.9), Running infiltration (149.7, 196.5, 215.9, 467.7, 474.7), Fracture multiple (196.5), Tap roots joint (233.8), Roots fine joint (274.8), Weeping infiltration (411.4, 416.2, 416.3, 467.4, 474.6, 495.7, 500.9, 552.0), Infiltration stain (411.5)	COMPLETE	5545	4100	5546	5	61,920												To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	Roots
SUB-AREA 27	SSGM-00137	ESIS FALL BROOK BRANCH SECT 2	SSNS-0060	SSMH-0114	0.0	RCP	84		Cross Country Pipe Segment, Cannot Access Manholes	Cannot Access	N/A	N/A	N/A	N/A	0											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	
SUB-AREA 27	SSGM-03893	FALL BROOK ST	SSMH-3291	SSMH-3292	166.0	VC	8	1	Water level Sag(70.9', 85.3', 113.4', 131.3', 155.7', 160.1')	COMPLETE	0	0	0	0	0												
SUB-AREA 27	SSGM-03896	FALL BROOK ST	SSMH-3294	SSMH-3295	242.0	VC	8	5	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 27	SSGM-03897	FALL BROOK ST	SSMH-3295	SSMH-0976	44.7	VC	24		Deposits settled fine (0.0, 44.7), Deposits attached ragging (6.0, 18.2), Weeping infiltration (6.1, 23.2), Deposits settled other (18.2), Medium roots joint (23.2(2), 44.7), survey abandoned due to roots	Needs Cleaning	3327	0	3327	3	1,872	X									X		Debris, and Roots
SUB-AREA 27	SSGM-04171	FALL BROOK ST	SSMH-3376	SSMH-3295	0.0	VC	24		Cross Country Pipe Segment, Cannot Access Manholes	Cannot Access	N/A	N/A	N/A	N/A	0										X	Heavy clean, then inspect	Debris
SUB-AREA 27	SSGM-03813	OFF FALL BROOK ST	SSMH-0976	SSMH-5566	0.0	VC	24		Cross Country Pipe Segment, Cannot Access Manholes	Cannot Access	N/A	N/A	N/A	N/A	0											Inspect using easement machine	
SUB-AREA 27	SSGM-04170	OFF FALL BROOK ST	SSMH-1485	SSMH-3376	0.0	VC	24		Cross Country Pipe Segment, Cannot Access Manholes	Cannot Access	N/A	N/A	N/A	N/A	0										X	Heavy clean, then inspect	Debris
SUB-AREA 27	SSGM-03812	OFF PINE RIDGE TER	SSMH-0975	SSNS-0060	19.1	RCP	84		Vault chamber no access(18.9'), metal bar across pipe(18.9'), Joint Offset Medium(19.0'), Survey abandoned offset joint to vault chamber -no access(19.1')	Cannot Complete	0	3100	3100	3	288											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	
SUB-AREA 27	SSGM-00123	OFF WASHINGTON AV	SSMH-0132	SSMH-1485	0.0	VC	24		Cross Country Pipe Segment, Cannot Access Manholes	Cannot Access	N/A	N/A	N/A	N/A	0										X	Heavy clean, then inspect	Debris
SUB-AREA 27	SSGM-00118	TAMARLANE	SSMH-0131	SSMH-0130	176.4	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 27	SSGM-00119	TAMARLANE	SSMH-4428	SSMH-0130	115.8	PVC	8	1	Deformed flexible Bulging Round(34.5'), Deformed Flexible Elliptical(103.1'), Survey abandoned reversal complete(115.8')	COMPLETE	0	3200	3200	2	0												
SUB-AREA 27	SSGM-00120	TAMARLANE	SSMH-0130	SSMH-4426	281.6	PVC	8	1	Water level Sag(113.9')	COMPLETE	0	0	0	0	0												
SUB-AREA 27	SSGM-00121	TAMARLANE	SSMH-4426	SSMH-4427/ 5565	281.0	PVC	8	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 27	SSGM-03758	TAMARLANE	SSMH-5565	SSMH-5566	237.0	PVC	8	2	Water level Sag(232.4')	COMPLETE	0	0	0	0	0												
SUB-AREA 27	SSGM-03722	VICTOR RD	SSMH-0114	SSMH-5567	0.0	RCP	84		Cross Country Pipe Segment, Cannot Access Manholes	Cannot Access	N/A	N/A	N/A	N/A	0											To be evaluated under the Interceptor Maintenance, Inspection, and Renewal Program	
SUB-AREA 27	SSGM-04184	WASHINGTON AVE	SSMH-2277	SSMH-0132	0.0	VCP	24		Unable to Navigate Debris, Survey Abandoned	Needs Cleaning	2100	0	2100	2	0										X	Heavy Clean, then inspect	Debris
SUB-AREA 27	SSGM-04185	WASHINGTON AVE	SSMH-1586	SSFT-0419	72.6	VC	24	0	Infiltration Staining (7.0-38.8), Deposits settled fine (37.0), Crack longitudinal (54.8), Deposits attached ragging (59.3), Medium roots joint (67.1, 70.4(2)), Fracture longitudinal (70.4)	COMPLETE	3322	3121	3423	3	2,304	X				X							Debris, and Roots
SUB-AREA 28	SSGM-07187	INTERCEPTOR PRESUMPSCOT NORTH	SSMH-6295	SSMH-6177	0.0	VC	12	0	Cannot Inspect due to Debris, Cannot Access d/s Manhole in easement	Needs Cleaning	N/A	N/A	N/A	N/A	0												
SUB-AREA 28	SSGM-03209	MILTON ST	SSMH-1633	SSMH-0193	134.1	PVC	8	1	None	COMPLETE	0	0	0	0	0												
SUB-AREA 28	SSGM-03127	RIVERSIDE INDUSTRIAL PKWY	SSMH-6282	SSMH-2997	273.5	VC	10	1	Crack longitudinal(55.6')	COMPLETE	0	1100	1100	1	144						1					CIPSR 52' to 58'	
SUB-AREA 28	SSGM-03118	RIVERSIDE ST	SSMH-0834	SSMH-0837	196.0	AC	15	0	Infiltration Staining Joint (1.1', 18', 31.1', 44.2', 57.4', 69.9', 74.8', 86.1', 98.9', 111.9', 130', 151', 163.6'), Joint Offset Medium (193.2')	COMPLETE	1A00	2100	211A	2	2,016			1	126	X							
SUB-AREA 28	SSGM-07186	RIVERSIDE ST/ RIVERSIDE INDUSTRIAL PKWY	SSMH- 6283	SSMH- 6176	262.0	VC	10	2	Infiltration Weeping Joint (15', 75.8', 91.6', 100.1', 141.3', 147.5', 152.8', 157.2'), Fracture Multiple (27.0'), Infiltration Staining Joint (80.7', 116.8', 126.7'), Infiltration Staining Barrel (102.1') Crack Longitudinal (102.1'), Infiltration Runner Joint (107.4'), Deposits Attached Encrustation (181.5'), Deposits Attached Grease (219'-247'), Water Level Sag (246.5'-257'), Obstruction/Obstacle Other 20-30%: Unknown (253.8'), Deposits Attached Hardened (254')	COMPLETE	4231	412A	4331	4	10,368					X		2			X		Grease
SUB-AREA 29	SSGM-02909	BANCROFT ST	SSMH-2928	SSMH-2926	183.0	VC	8	4	Crack Longitudinal (3, 6, 33, 61, 68), Crack Spiral (8,120, 150), Infiltration Stain Joint (10, 28, 67, 128), Roots Fine Joint (41, 47, 51, 53, 55, 69, 72, 151), Roots Medium Joint (43, 49), Roots Fine Lateral Capped (52, 54, 80), Tap Defective Joint Offset Large - Soil Visible (150), PVC point repair (156-183)	COMPLETE	221A	2900	2A1A	2	3,744	X				X		4					Roots
SUB-AREA 29	SSGM-06605	BANCROFT ST	SSMH-4058	SSMH-2928	190.1	VC	10	2	Running Infiltration (14.5), Mineral Deposits at service connection (7), Crack Multiple (8, 21), Crack Spiral (13, 69, 170, 186.2), Crack Circumferential (78), Mineral Deposits at joint (16.5, 18.5, 36, 45, 55-97), Chipped Pipe at joint repaired with brick and cement (43), Mineral Deposits at capped service (5, 9, 19.5, 21), Infiltration stain at joint (4, 13, 22.4-38, 103-113.5, 142, 152, 154, 170-184), Hole (57.5)	COMPLETE	411C	5132	5141	5	10,656					X		2					
SUB-AREA 29	SSGM-06606	BANCROFT ST	SSMH-4057	SSMH-4058	199.0	VC	8	8	Broken Soil Visible (161, 165-172), Fracture Longitudinal Hinge 3 (163), Fracture Spiral (125, 139, 160, 172), Fracture Multiple (92, 113, 145, 179), Infiltration stain at joint (3, 8.5, 11, 15.5, 24, 189), Mineral Deposits at Joint (13.5, 22, 42, 48, 50, 62, 76, 129, 175, 179) Infiltration Weeper Joint (76), Crack Circumferential (3.2, 22, 118, 181), Crack Longitudinal (10, 15, 18, 19, 29, 52, 58, 113, 152, 153, 157, 177), Crack Multiple (56.4), Crack Spiral (195), Alignment Right and Water Level Sag 5% (109-199), Surface spalling (10.5)	COMPLETE	211B	5345	5145	5	7,632			2	47, 125	X		8					
SUB-AREA 29	SSGM-02758	COLONIAL RD	SSMH-5293	SSMH-5294	261.0	PVC	8	11	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02759	COLONIAL RD	SSMH-5294	SSMH-5296	143.1	PVC	8	5	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02760	COLONIAL RD	SSMH-5295	SSMH-5329	41.0	PVC	8	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02761	COLONIAL RD	SSMH-5296	SSMH-5295	47.8	PVC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02762	COLONIAL RD	SSMH-5297	SSMH-0768	0.0				Unable to Locate Pipe Segment	Pipe Not Located	N/A	N/A	N/A	N/A	0												
SUB-AREA 29	SSGM-02784	COLONIAL RD	SSMH-0768	SSMH-5329	0.0				Unable to Locate Pipe Segment	Pipe Not Located	N/A	N/A	N/A	N/A	0												
SUB-AREA 29	SSGM-02785	COLONIAL RD	SSMH-0769	SSMH-5329	35.4	PVC	12	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02787	FLEETWOOD ST	SSMH-0260	SSMH-0771	286.8	VC	8	7	Mineral Deposits at joint (10, 13, 15, 17, 25-37, 62, 149-156, 193, 213, 225.5), Infiltration Stain at joint (23.5, 128, 146, 150, 170, 172, 178-188, 199, 203, 217, 251, 274), Hardened Cement at joint (40-48, 56, 60, 64, 66, 81, 85, 87, 133, 137, 142, 162, 190, 197, 201, 205, 236, 238, 276), PVC point repair (101-103.5), Crack Circumferential (282)	COMPLETE	2B1B	1100	2B1B	2	4,320					X		7					
SUB-AREA 29	SSGM-02792	FLEETWOOD ST	SSMH-0771	SSMH-5298	288.9	VC	8	8	Mineral Deposits at joint (12, 47-163, 176.4- 191, 200.5-210.4, 220-246.6), Infiltration stain at joint (5, 9, 22-28, 38-44, 146.5-168, 194, 196), Crack multiple with mineral deposits (59-70, 90-97), Capped Service with Mineral Deposits (64,88,91,113), Crack Spiral (103), Crack Multiple (32), Crack Circumferential (111.2, 111.4), PVC point repair (249-288.9)	COMPLETE	1G00	3121	3121	3	13,824			1	19	X		8					
SUB-AREA 29	SSGM-03790	KENILWORTH ST	SSFT-0253	SSMH-2927	143.3	VC	8	4	PVC point repair (0-20), Tap Factory Defective-Joint Offset Medium (51.4), Crack Lungitudinal (52.2, 87.7), Broken Soil Visible (65.8), Fracture Hindge 3 (73.7), Fracture Multiple (82.8), Point Repair Patch - Brick (95.6), Infiltration Dripper Joint (95.6), Fracture Hindge 2 (127.6), Fracture longitudinal (15.5), Dripping infiltraton at joint repaired with brick and cement (48), Crack longitudinal (54, 91), Fracture Circumferential (62), Crack circumferential (105), Fracture longitudinal & crack longitudinal hindge 2 (72), Broken pipe soil visible (77), Service joint offset & soil visible (92), Crack in service (94), PVC point repair (125-143.3)	COMPLETE	3100	5242	5242	5	5,760					X		4					

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
SUB-AREA 29	SSGM-06621	MACHIGONNE ST	SSMH-6092	SSMH-6093	204.3	VC	8	4	Crack Longitudinal (19.5, 68, 69, 104.4, 145), Crack Multiple (58), Crack Circumferential (72, 187), Crack Spiral (109), Mineral Deposits at joint (15, 18, 24, 27-62, 89, 90, 99, 117, 119, 127, 141, 151, 167)	COMPLETE	2A00	3126	312B	3	4,752			1	7	X		4						
SUB-AREA 29	SSGM-06625	MACHIGONNE ST	SSMH-6093	SSMH-6094	185.8	VC	8	3	Fracture Circumferential (24), Crack Multiple (44), Mineral deposits and infiltration staining continuous at joint (70-156), Mineral deposits at tap factory capped (71, 108, 110), Joint offset medium (170.4), PVC point repair (170.4-185.8)	COMPLETE	1C00	3211	321C	3	5,040			1	16	X		3						
SUB-AREA 29	SSGM-02743	ROCKLAND AVE	SSMH-0798	SSMH-0797	6.0	BR	30	0	RCP point repair 2-6	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02748	ROCKLAND AVE	SSMH-5329	SSMH-5328	263.3	PVC	12	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02749	ROCKLAND AVE	SSMH-0797	SSMH-0763	101.1	RCP	30	0	Crack Longitudinal (10, 19, 31, 44, 47-62, 72), Infiltration Stain Joint (62-75), Fine roots joint (75)	COMPLETE	1400	2A00	2A14	2	2,160					X							Roots
SUB-AREA 29	SSGM-02790	ROCKLAND AVE	SSMH-0774	SSMH-5298	249.3	PVC	12	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02791	ROCKLAND AVE	SSMH-5298	SSMH-0769	232.2	PVC	12	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02794	ROCKLAND AVE	SSMH-5299	SSMH-0774	219.3	PVC	12	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02907	ROCKLAND AVE	SSMH-2926	SSMH-5299	33.2	PVC	12	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02908	ROCKLAND AVE	SSMH-2927	SSMH-2926	248.3	PVC	12	4	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-03791	ROCKLAND AVE	SSFT-0537	SSMH-3267	15.1	PVC	10	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-03792	ROCKLAND AVE	SSMH-3267	SSMH-2927	141.1	PVC	8	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-06623	ROCKLAND AVE	SSMH-5328	SSMH-6094	248.0	PVC	12	6	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-06624	ROCKLAND AVE	SSMH-6094	SSMH-0797	30.5	PVC	12	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 29	SSGM-02788	WOLCOTT ST	SSMH-0772	SSMH-0773	203.2	VC	8	5	Broken Pipe (90.6, 137), Mineral deposits at joint (3, 6, 12, 14, 20, 34.5, 37, 38.5, 46, 115, 171, 185, 193), Infiltration Stain at joint (24, 26, 84), Crack Circumferential (58, 59.5, 82, 191), Joint offset medium (70.3, 106), Crack Longitudinal (108.8)	COMPLETE	2A13	5232	5232	4	3,456					X		5						
SUB-AREA 29	SSGM-02789	WOLCOTT ST	SSMH-0773	SSMH-0774	296.7	VC	10	9	Broken Pipe Soil Visible (11), Infiltration Stain at Joint (53, 70, 72.7, 107-112, 121, 133-142), Mineral Deposits at Joint (57.7-64, 74, 116-124, 147), Infiltration Stain at capped service (120), Fracture Longitudinal with staining (121.2), Crack Longitudinal (163), Crack Longitudinal Hinge 2 (247.5), Water Level Sag 15% (230-248), Fracture Longitudinal (249), PVC point repair (256-296.7)	COMPLETE	1A00	5132	5132	4	3,312			1	18	X		9						
SUB-AREA 29	SSGM-02798	WOLCOTT ST	SSMH-5301	SSMH-5302	148.5	VC	8	5	Fine roots joint (3), Fine roots service (9.5), Weeping infiltration at joint (93), Crack Longitudinal (14, 82, 93), Mineral Deposits at joint (30, 61, 65, 109, 113, 121, 126, 129,135, 143), Cracks Multiple with staining (39, 43, 49, 72, 73, 81, 87), Infiltration stain at joint (46, 67, 91, 115, 117, 141, 145), Infiltration stain at capped service (58), Crack Spiral (58, 85, 143), Running infiltration Joint (68), Crack circumferential (94, 133, 147)	COMPLETE	4121	261A	4127	3	7,344	X				X		5						Roots
SUB-AREA 29	SSGM-02800	WOLCOTT ST	SSMH-5302	SSMH-0774	149.0	VC	8 to 10	2	Crack Circumferential (2.5, 65), Infiltration stain joint (5, 21, 23, 35, 46, 88, 92), Crack Longitudinal (6, 27, 46.5), Crack Spiral (9, 15), Mineral Deposits at Joint (11, 55.5, 59, 67.6, 69, 96, 101, 108), Crack Multiple (15, 34, 48, 76, 78), Spalling (61), Staining at capped service (62), Holes (74), Change in diameter from 8 - 10 at 110', PVC point repair (111-149)	COMPLETE	1B00	3525	3525	3	4,176					X		2						
SUB-AREA 30	SSGM-00029	BERKSHIRE ST	SSMH-1405	SSMH-1407	243.3	RCP	30	5	Roots Fine Joint(143.1')	COMPLETE	1100	0	1100	1	144	X				X		5					Roots
SUB-AREA 30	SSGM-00052	BERKSHIRE ST	SSMH-1401	SSMH-1405	194.6	RCP	30	3	Crack Longitudinal(34.4')	COMPLETE	0	2100	2100	2	144						1					CIPSR 31-37	
SUB-AREA 30	SSGM-00048	INVERNESS ST	SSMH-1402	SSMH-0070	172.9	VCP	8	5	Fracture Spiral(1.9', 5.3', 100.4', 167.7'), Joint Offset Medium(24.0', 48.9', 68.5', 116.5'), Joint Offset Large(32.0'), Water Level Sag(77.3', 89.2'), Surface Damage Surface Spalling(130.6', 135.2',141.2', 170.4'), PVC point repair (81.7-86.2'), Roots Fine Joint(114.4', 117.4', 153.1'), Roots at defective lateral(129.8')	COMPLETE	1400	3824	3824	3	1,872	X						5						Roots
SUB-AREA 30	SSGM-00049	INVERNESS ST	SSMH-0070	SSMH-0071	176.2	VCP	8	7	Joint Offset Medium(1.9', 167.2'), Water Level Sag(93.6', 102.1')	COMPLETE	0	3100	3100	2	288					X		7					
SUB-AREA 30	SSGM-00051	KIDDER ST	SSMH-4401	SSMH-4400	172.5	VCP	18	1	Deposits Settled Fine(62.1'), Crack Longitudinal(72.1'), Unknown continous encrusted (128.1' - 130.4')	COMPLETE	2500	2100	2600	2	144					X		1			X		Debris
SUB-AREA 30	SSGM-00024	MORSE ST	SSMH-0091	SSMH-0090	134.7	VCP	30	0	Fracture Longitudinal Hinge 2(0.0', 10.1', 50.7', 129.3'), Fracture Longitudinal(24.5', 25.7'(2), 30.4'(3), 36.5', 50.7'), Fracture Multiple(39.8', 46.9', 77.2', 77.3', 117.3', 123.4'), PVC point repair(129.3', 133.5')	COMPLETE	0	4539	4539	4	3,168					X							
SUB-AREA 30	SSGM-00025	MORSE ST	SSMH-0090	SSMH-0089	163.4	VCP	30	2	Fracture Multiple(0.0', 20.5', 26.0', 36.5'), Fracture Longitudinal(20.5', 85.5', 85.5'), Fracture Longitudinal Hinge-2(28.4', 47.7'), Hole Soil Visible(37.7')	COMPLETE	0	5144	5144	5	1,728					X		2					
SUB-AREA 30	SSGM-00034	MORSE ST	SSMH-0089	SSMH-0082	98.6	VCP	30	1	Crack Longitudinal(36.8')	COMPLETE	0	2100	2100	2	144					X		1					
SUB-AREA 30	SSGM-00035	MORSE ST	SSMH-0082	SSMH-0081	48.1	VCP	30	1	Joint Offset Medium(5.3', 29.5')	COMPLETE	0	2100	2100	2	288												
SUB-AREA 30	SSGM-00030	OAKLEY ST	SSMH-1407	SSMH-1410	6.0	RCP	27	0	Obstacle Rocks(5.7'), Survey abandoned unable to navigate rocks and bricks (6.0')	Needs Cleaning	3100	0	3100	3	0					X					X		Debris
SUB-AREA 30	SSGM-04137	OAKLEY ST	SSMH-1410	SSMH-5656	35.7	RCP	27	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 30	SSGM-06061	OAKLEY ST	SSMH-5656	SSMH-3908	247.7	BRICK	36	4	Infiltration Stain(5.0', 10.1', 12.5', 21.6', 39.5', 54.4', 56.6', 78.2', 83.2', 109.6', 123.1')	COMPLETE	1A00	0	1A00	2	1,584			1	152	X		4					
SUB-AREA 30	SSGM-06064	OAKLEY ST	SSMH-3908	SSMH-3909	164.1	BRICK	42	5	Defective Lateral(133.3'), Roots Tap Connection(133.3'), Deposits Settled Debris(151.5'), Obstacle Rocks(163.8'), Survey abandoned unable to navigate Rocks (164.1')	Needs Cleaning	2300	3100	3123	3	288					X		5			X		Debris, and Roots
SUB-AREA 30	SSGM-03955	OCEAN AVE	SSMH-0039	SSMH-0059	295.4	PVC	12	3	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 30	SSGM-06860	OCEAN AVE	SSMH-0062	SSMH-0001	221.8	RCP/ AC	8	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 30	SSGM-06862	OCEAN AVE	SSMH-0002	SSMH-0062	236.9	RCP/ AC	8	3	Infiltration Gusher(227.3')	COMPLETE	5100	0	5100	3	7,200					X		3					
SUB-AREA 30	SSGM-04006	PROVIDENCE ST	SSMH-0025	SSMH-1401	287.9	RCP	24	3	Fracture Longitudinal(0.9', 33.6', 58.1', 73.8'), Infiltration Weeper(131.3'), Obstacle other Stick wedged in joint(258.0'), Roots fine Joint(176.0'), Survey Abandoned Unable to navigate(258.0')/ Intruding Sealing Ring Hanging(3.1'), Survey abandoned Reversal complete(29.9')	COMPLETE	3211	3421	3621	3	1,584			1	19	X		3						Roots
SUB-AREA 30	SSGM-06051	PROVIDENCE ST	SSMH-0068	SSMH-0013	101.2	VCP	15	3	Infiltration Stain Joint(35.4'), Surface Damage Surface Spalling(51.2'), Fracture Spiral(57.8')	COMPLETE	1100	3100	3111	3	288					X		3					
SUB-AREA 30	SSGM-06052	PROVIDENCE ST	SSMH-0013	SSMH-4401	99.9	VCP	15	6	Crack Spiral(15.3'), Crack Multiple(17.4'), Crack Longitudinal(83.7', 89.2'), Material Change PVC(89.2')	COMPLETE	0	3123	3123	3	576					X		6					
SUB-AREA 30	SSGM-00036	SHERWOOD ST	SSMH-0081	SSMH-0080	101.6	VCP	30	0	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 30	SSGM-00037	SHERWOOD ST	SSMH-0080	SSMH-0079	109.3	VCP	30	2	No significant defects	COMPLETE	0	0	0	0	0												
SUB-AREA 30	SSGM-00038	SHERWOOD ST	SSMH-0079	SSMH-0078	223.2	VCP	30	5	Fracture Multiple(91.3', 93.9'), Infiltration Stain(190.3', 208.5'(2)), Roots Fine Connection(108.5', 119.6'), Fracture Longitudinal(112.6')	COMPLETE	1500	4231	4231	4	1,152	X				X		5					Roots
SUB-AREA 30	SSGM-00040	SHERWOOD ST	SSMH-0083	SSMH-1411	237.1	VCP	30	3	Infiltration Stain(77.8', 80.5', 83.7', 128.7', 134.5', 149.8', 162.0', 164.7', 173.7', 176.5', 183.4', 230.8'), Deposits attached Encrustation(182.3', 208.9', 212.3'(2), 216.2'(2), 224.8'), Infiltration Dripper(89.3')	COMPLETE	3127	0	3127	3	4,176					X		3					
SUB-AREA 30	SSGM-04138	SHERWOOD ST	SSMH-1411	SSMH-5657	170.3	VCP	30	2	Fracture Longitudinal Hinge 3(0.0', 10.1', 58.0'), Fracture Longitudinal Hinge 2(58.0', 114.2', 127.3'), Roots Ball Lateral(105.1'), Fracture Longitudinal(106.3')	COMPLETE	4100	4134	4234	4	2,448	X				X		2						Roots
SUB-AREA 30	SSGM-06057	SHERWOOD ST	SSMH-0010	SSMH-4396	27.8	VCP	30	1	Infiltration Stain (7.3', 14.6', 22.5', 24.4'), Fracture Longitudinal(10.6')	COMPLETE	1400	2100	0	3	720					X		1					
SUB-AREA 30	SSGM-06058	SHERWOOD ST	SSMH-0078	SSMH-0010	214.5	VCP	30	2	Fracture Spiral(159.1', 202.4'), Fracture Multiple(169.1'), Fracture Longitudinal(181.9'), Infiltration Stain(194.7'(2))	COMPLETE	1200	4131	4131	4	864					X		2					
SUB-AREA 30	SSGM-06059	SHERWOOD ST	SSMH-3907	SSMH-0083	167.6	VCP	30	1	Deposits Attached Encrustation(7.4', 50.2', 89.1', 91.9', 94.8', 116.3'), Joint Offset Medium(66.2', 73.9', 167.5'), Infiltration Stain(12.6', 124.9')	COMPLETE	2611	2100	2711	2	1,584					X		1			X		
SUB-AREA 30	SSGM-06060	SHERWOOD ST	SSMH-4396	SSMH-3907	82.1	VCP	30	1	Infiltration Stain(34.0'(2), 31.2', 45.7', 48.9', 70.2'), Fracture Longitudinal(42.4', 46.1')	COMPLETE	1600	3200	3216	3	1,152					X		1					
SUB-AREA 30	SSGM-06063	WASHINGTON AVE	SSMH-3909	SSMH-1523	130.3	BR	42	3	Infiltration staining (2.0-76, 2.0-78.5, 110.7, 113.7, 119.2, 124.6), Grease attached (16.1-51.2, 16.1-52.5), Missing brick at tap (34.8), Crack circumferential (55.4)	COMPLETE	2515	11	2516	2	8,064					X		3			X		Grease

City of Portland, Maine
Wastewater Collection System Analysis and Action Plan
Pipe Inspection Findings and Rehabilitation Recommedations

Sub-Area	Pipe ID	Street / Location	Upstream Manhole	Downstream Manhole	Inspected Length (ft)	Material	Diameter (in)	No. of Services	INSPECTION DETAILS	Inspection Status	QMR	QSR	QOR	NASSCO RATING	ESTIMATED INFILTRATION (GPD)	CRT	Mechanical Root Removal	GSC	PROTRUDING TAP LOCATIONS (ft)	CIPPL	CIPSR	TSS	Top Hats	TSJ	Heavy Cleaning	RECOMMENDATION NOTES	O & M
	Totals				**136,867.7**									**794**	**1,847,808**	**131**	**10**	**256**		**315**	**51**	**1515**	**2**	**37**	**93**		

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine

Appendix D - Operation and Maintenance List

Wastewater Collection System

Analysis and Action Plan

June, 2020

Appendix Contents

OPERATION AND MAINTENANCE LOCATIONS TABLE

OPERATION AND MAINTENANCE LOCATIONS MAP

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-02764	Alba St	City	City	SSMH-4323	SSMH-0749	Lined - VCP	Circular	8	8	8	300	INSPECTED	Grease & Roots	Grease attached to pipe (62.9, 95.4, 126.4-188.2), Fine roots at connection (103.9), Weeping infiltration at connection (123.3), Sag in pipe (164.1-188.2), Camera under water(180.5-188.2), Survey abandoned due to root ball (188.2) / R: Root ball in service (66.4), Medium roots at connection (66.4), Running infiltration at connection (93.7), Survey abandoned at root ball at connection (108.4)
SSGM-02765	Alba St	City	City	SSMH-0245	SSMH-4324	Lined - VCP	Circular	8	8	8	326	INSPECTED	Roots	Running infiltration at connection (20.1, 70.8, 76.6, 136.2, 175.8, 188.3, 219.1, 258.6), Medium roots from lateral (28.6), Root ball at joint in lateral (28.6)
SSGM-02766	Alba St	City	City	SSMH-4324	SSMH-4323	Lined - VCP	Circular	8	8	8	302	INSPECTED	Debris	Obstruction construction debris (70.8), Service connection dripping infiltration (76.1), Service connection running infiltration (77.8, 169.5, 191.2, 247.1, 251.5), Infiltration stain on liner (111.2), Liner wrinkled (144.8)
SSGM-01919	Allen Ave	City	City	SSMH-5081	SSMH-2545	VCP	Circular	24	24	24	322	INSPECTED	Debris	Tap Break -in Defective Infiltration around Lateral(57.8'), Tap Break-in Defective Infiltration at cap(115.2'), Deposits Settled Gravel(0.0', 10.1'), Infiltration Runner Connection(57.8'), Fracture Multiple(171.2'), Infiltration Stain Joint(218.4'), PVC point repair (262-274)
SSGM-03913	Allen Ave	City	City	SSMH-6265	SSMH-0991	<Null>	Rectangular	48	36	36	109	INSPECTED	Debris	Obstacle Rocks(86.8')
SSGM-06480	Allen Ave	City	City	SSMH-0934	SSMH-6062	VCP	Circular	8	8	8	142	INSPECTED	Grease	Deposits attached Grease(0.7', 9.3', 19.2', 25.8', 28.2', 103.2'), Joint Offset Medium(4.8', 136.5'), PVC point repair (7.5'-11.2')
SSGM-07277	Allen Ave	City	City	SSMH-6278	SSMH-2545	RCP	Circular	24	24	24	107	INSPECTED	Debris	Deposits Settled Fine(34.5', 46.5', 96.9', 106.3'),
SSGM-00681	Auburn St	City	City	SSMH-4505	SSMH-4507	RCP	<Null>	<Null>	30	30	180	INSPECTED	Grease, Roots, and Debris	Deposits Attached Grease(0.0', 179.7'), Deposits Settled Gravel(170.5', 179.7'), Roots Fine Joint(78.9')
SSGM-01458	Auburn St	City	City	SSMH-4507	SSMH-4508	RCP	<Null>	<Null>	30	30	158	INSPECTED	Grease	Deposits Attached Grease(102.4', 156.5')
SSGM-01930	Auburn St	City	City	SSMH-5015	SSMH-0618	RCP	<Null>	<Null>	30	30	220	INSPECTED	Debris	Deposits Settled Gravel(137.5'), Intruding Sealing Material Grout(89.9', 213.8'), Infiltration Gusher Joint(209.9')
SSGM-01931	Auburn St	City	City	SSMH-0618	SSMH-4505	RCP	<Null>	<Null>	30	30	198	INSPECTED	Grease & Debris	Deposits Settled Gravel(29.4'), General Observation - Pump station kicked on(186.9')/ Deposits Attached Grease(15.7', 24.3')
SSGM-01932	Auburn St	City	City	SSMH-4508	SSMH-0619	RCP	<Null>	<Null>	30	30	180	INSPECTED	Grease	Deposits Attached Grease(0.4', 181.7')
SSGM-01469	Auburn Ter	Private	Private	SSMH-1604	SSMH-1602	PVC	Circular	8	8	8	164	INSPECTED	Grease	Change in water level(19.0', 45.4', 66.2', 80.4', 116.4', 129.8', 162.3'), Infiltration Weeper Joint(101.0'), Deposits attached Grease(10.0', 24.0', 28.1', 30.6', 89.3'), PVC point repair (89.4'-96.4')
SSGM-02821	Bancroft St	City	City	SSMH-5305	SSMH-2882	VCP	Circular	18	18	18	181	INSPECTED	Roots	Crack Longitudinal(150.0'), Fracture Longitudinal(144.0'), Roots Fine Connection(118.8'), Roots Fine Joint(22.0', 121.4', 123.9', 180.8')
SSGM-02909	Bancroft St	City	City	SSMH-2928	SSMH-2926	PVC	Circular	8	8	8	191	INSPECTED	Roots	Crack Longitudinal (3, 6, 33, 61, 68), Crack Spiral (8,120, 150), Infiltration Stain Joint (10, 28, 67, 128), Roots Fine Joint (41, 47, 51, 53, 55, 69, 72, 151), Roots Medium Joint (43, 49), Roots Fine Lateral Capped (52, 54, 80), Tap Defective Joint Offset Large - Soil Visible (150), PVC point repair (156-183)
SSGM-06616	Bancroft St	City	City	SSMH-4059	SSMH-1335	VCP	Circular	12	12	12	200	INSPECTED	Roots	Broken Pipe(156.3'), infiltration Stain Joint(6.0', 52.8'), Water level Sag(71.6', 86.9'), Roots Fine Joint(134.3', 136.7'), Infiltration Dripper at the capped service location(123.5')
SSGM-06617	Bancroft St	City	City	SSMH-1335	SSMH-5305	VCP	Circular	12	12	12	198	INSPECTED	Roots	Roots fine connection(7.2'), Roots Fine Joint(13.7', 19.6')
SSGM-00279	Bay St	City	City	SSMH-0138	SSMH-0137	RCP	Circular	24	24	24	154	INSPECTED	Roots	Infiltration Runner Joint(9.0'), Roots Fine Joint(13.0', 21.0', 24.8', 39.3')
SSGM-04875	Bay St	City	City	SSMH-3598	SSMH-3599	RCP	<Null>	<Null>	24	24	183	INSPECTED	Roots	Roots Fine Joint (5.9', 14.3', 17.5', 51.9', 60.9')
SSGM-04876	Bay St	City	City	SSMH-3599	SSMH-3600	RCP	Circular	24	24	24	194	INSPECTED	Roots	Roots fine Joint(13.5', 29.3', 33.8', 61.2', 68.9', 89.1', 126.0', 141.5', 158.4')
SSGM-04878	Bay St	City	City	SSMH-3601	SSMH-3598	RCP	Circular	24	24	24	262	INSPECTED	Roots	Roots Fine Joint(241.4')
SSGM-04879	Bay St	City	City	SSMH-0137	SSMH-3601	RCP	Circular	24	24	24	148	INSPECTED	Roots	Roots Fine Joint(6.9', 18.3', 30.6', 54.2', 151.4', 151.4')
SSGM-04880	Bay St	City	City	SSMH-3602	SSMH-0949	RCP	<Null>	<Null>	30	30	219	INSPECTED	Debris	Fracture Longitudinal(6.2', 12.0'), Infiltration Stain Joint(9.2', 37.2', 135.2'), Infiltration Dripper Joint(61.6'), Crack Longitudinal(16.7', 59.4'), Obstruction Rocks(115.5'),
SSGM-05260	Bay St	City	City	SSMH-3597	SSMH-5790	VCP	Circular	24	24	24	223	INSPECTED	Roots	Fracture Longitudinal(56.2', 65.9', 70.4', 80.7', 93.0'), Infiltration Runner(84.6'), Roots Fine Lateral(94.9', 101.3', 113.1'), Roots Medium Joint(106.7'(2), 110.1')
SSGM-02624	Bedell St	City	City	SSMH-2832	SSMH-2833	VCP	Circular	8	8	8	199	INSPECTED	Roots	Medium joint offsets (13.0, 16.8), Infiltration stain at joint (13.0, 75.3, 77.6), Fine roots at joint (23.0, 25.3, 27.5, 40.9, 131.6, 135.8, 137.4, 135.8, 141.5, 156.2, 162.1, 174.5), Dripping infiltration at oint (31.2), Weeping infiltration at joint (33.4, 34.7, 37.2, 43.5, 45.7, 47.6, 49.5, 53.2, 59.6, 61.7, 63.6, 65.4, 67.8, 81.8, 115.1, 125.4, 127.6, 129.4), Infiltration stain in capped tap (36.8), Longitudinal crack (42.2), Fine roots through barrel (42.2), Medium roots at joint (51.2, 55.7, 57.6, 170.3, 176.4, 186.9, 188.8, 193.0), Object in joint (150.1), Running infiltration at joint (150.1), Circumferential fracture (172.9), Fine roots at connection (184.5)
SSGM-02623	Bedell St	City	City	SSMH-2831	SSMH-2832	VCP	Circular	8	8	8	201	INSPECTED	Roots	Roots fine joint (5.4, 10.0, 24.0, 34.0, 42.9, 44.9, 49.2, 53.1, 59.6, 61.3, 69.6, 77.6, 89.8, 92.1, 104.2, 116.5, 120.7, 122.5, 124.6, 128.5, 130.9, 133.1, 139.24), Surface spalling (29.5), Medium joint offset (89.8, 92.1, 130.9, 133.1), Joint weeping infiltration (136.4), Root tap joint (141.2), Hole soil visible (147.7), Survey abandoned due to protruding service (149.6) / R: Roots fine joint (3.4, 5.7), Root ball joint (11.0, 13.0), Root ball barrel (12.0), Survey abandoned due to roots (12.0)
SSGM-00494	Belknap St	City	City	SSMH-4600	SSMH-4598	VCP	Circular	8	8	8	302	INSPECTED	Roots	Surface Damage Surface Spalling(7.8'), Broken Pipe Void visible(52'), Crack Longitudinal(268.1'), Crack Multiple(260.4'), Fracture Longitudinal(150.6', 264.5'), Hole Soil Visible(67.8'), Roots fine joint(22.1', 64.5')
SSGM-02674	Best St	City	City	SSMH-2834	SSMH-0749	VCP	Circular	15	15	15	244	INSPECTED	Roots	Crack Circumferential (192.9'), Crack Longitudinal(11.3', 11.5', 28.0', 29.3', 79.4', 81.8', 85.8', 89.5', 94.8', 108.8', 116.0', 150.5', 176.3', 218.5', 228.2', 234.6'), Crack Multiple(110.0', 208.4'), Crack Spiral(195.9'), Fracture Longitudinal Hinge 4(18.2', 94.8'), Fracture Longitudinal(79.8', 94.8', 106.4', 112.7', 232.7'), Fracture Multiple(91.9'), Infiltration Dripper Barrel(104.6'), Infiltration Dripper Connection(217.1'), Infiltration Gusher Joint(228.2'), Infiltration runner Joint(69.7', 138.6', 142.9', 169.5', 228.3', 230.6'), Infiltration Stain Barrel(109.2', 150.5', 208.4'), Infiltration Stain Connection(146.6', 227.6'), Infiltration Stain Joint(61.5', 216.1', 218.4', 220.3', 224.5', 232.2', 234.6', 241.4',), Infiltration Weeper Barrel(110.0), Infiltration Weeper Joint(75.7', 134.5', 179.5', 226.3'), Roots Fine Joint(118.3', 120.4', 122.9'), Roots Medium Connection(121.6'),

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-02696	Best St	City	City	SSMH-5274	SSMH-2320	VCP	Circular	20	20	20	239	INSPECTED	Roots	Crack Circumferential(88.6'), Infiltration Stain Barrel(88.6'), Infiltration Stain Joint(8.2', 31.4', 57.1', 66.0', 78.3', 90.7', 94.0',106.1', 109.2', 118.3', 122.4', 134.6'), Root fine Connection(229.9'), Root Fine Joint(232.5'), Roots medium Joint(208.1', 237.4')
SSGM-02440	Birchwood Dr	City	City	SSMH-5156	SSMH-2790	VCP	Circular	8	8	8	66	CNI - Other	Roots	Fine roots joint (32.5), Survey abandoned at 63' due to increased pipe decline. Cannot access d/s MH.
SSGM-04551	Bradley St	City	City	SSMH-3495	SSMH-1767	VCP	Circular	8	8	8	267	INSPECTED	Debris	Deposits Settled Gravel(0.0')
SSGM-04569	Bradley St	City	City	SSMH-0223	SSMH-0111	VCP	Circular	24	24	24	250	INSPECTED	Roots	Deposits Attached Encrustation/Infiltration Weeper Joint (2'-198'), Infiltration Runner Joint (4', 8', 122'), Infiltration Gusher Connection (6.6'), Roots Fine Connection (6.6'), Roots fine Joint (10', 16.8', 176.1'), Roots Tap Joint (20.3', 22', 24'), Infiltration Runner Connection (123.1'), Water Level Sag (166'-201.3')
SSGM-04710	Bradley St	City	City	SSMH-3549	SSMH-1078	VCP	Circular	12	12	12	270	INSPECTED	Roots	Broken Pipe Void Visible(141.1'), Crack Circumferential(52.2'), Crack Longitudinal(7.5'), Crack Multiple(263.9'), Crack Spiral(14.3'), Fracture Circumferential(184.0'), Fracture Longitudinal Hinge 2(25.8'), Fracture longitudinal(7.8', 37.4', 157.8'), Fracture Multiple(56.0', 116.9'), PVC point repair (192.8'-202.1'), Roots Fine Connection(73.1', 90.3'), Roots Fine Joint(25.8', 62.4', 82.6', 89.2', 97.1', 121.8'), Roots fine Lateral(142.2')
SSGM-02672	Brentwood St	City	City	SSMH-4684	SSMH-2834	VCP	Circular	12	12	12	283	INSPECTED	Roots & Debris	Crack circumferential (0, 12.7), Fine roots at connection (6.0), Fine roots at joint (6.9. 12.7, 17.4), Spiral fracture (15.2), Fine deposits settled (110.7), Medium roots from lateral (187.2), Root ball at joint in lateral (187.2), Fine roots at joint in lateral (238.8), Fine roots from lateral (238.3)
SSGM-02676	Brentwood St	City	City	SSMH-2833	SSMH-2834	VCP	Circular	15	15	15	227	INSPECTED	Roots	Infiltration Stain Joint(193.8'), Roots Fine Connection(7.0'), Root Fine Joint(101.8', 136.9'), Roots medium connection(83.0')
SSGM-02677	Brentwood St	City	City	SSMH-5249	SSMH-5250	VCP	Circular	8	8	8	241	INSPECTED	Roots & Debris	Joint medium offset (10.0, 14.6, 77.7, 82.2), deposits settled fine (18.9 - 239.8), Capped tap with running infiltration (26.5), Large seperation at joint where soil is visible (29.6, 54.4, 58.8, 69.2, 75.1, 190.4, 234.1, 236.5), Joint running infiltration (29.6, 184.0), Medium separation at joint (43.9), Service connection with 60% full of fine sediment (49.5), Fine roots at joint (58.8, 77.7, 79.8, 82.2, 86.1, 88.5, 184.0, 186.2, 204.8, 209.6, 211.1, 213.5, 215.2. 217.7, 223.7, 225.8, 228.2, 230.1, 232.1, 234.1, 236.5), Capped tap with weeping infiltration (62.1), Sag in pipe (72.2-, 106.5-124.8, 190.8-198.0, 202.7-), Hole with soil visible (79.8, 173.7), point repair (79.8, 118.8), , Tap roots at joint (92.4, 94.4), Gushing infiltration at joint (94.4), Capped tap with roots and dripping infiltration (96.1), capped tap with dripping infiltration (149.8, 162.5, 218.7)
SSGM-00453	Brighton Ave	City	City	SSMH-4623	SSMH-4624	BR	<Null>	<Null>	36	36	147	INSPECTED	Debris	Deposits Settled Fine(21.0'), Deposits Attached Encrustation(21.0', 76.9', 85.0', 119.7'), Infiltration Stain Barrel(87.6', 93.0', 94.5')
SSGM-02824	Brighton Ave	City	City	SSMH-4620	SSMH-5307	VCP	Circular	20	20	20	250	INSPECTED	Roots	Roots fine joint(140.6'), Crack Multiple(240.2')
SSGM-02915	Brighton Ave	City	City	SSMH-5308	SSMH-4620	VCP	Circular	18	18	18	250	INSPECTED	Roots & Debris	Deposits attached Encrustation(21.3'), Infiltration Stain Joint(13.1', 39.6',128.9', 164.2', 196'), Crack Multiple(234.2'), Obstruction with Debris(77.6'), Roots fine Joint(139.6')
SSGM-02916	Brighton Ave	City	City	SSMH-0235	SSMH-5308	PVC	Circular	8	8	8	53	INSPECTED	Debris	Obstruction Rocks(48.8')
SSGM-01833	Brook Rd	City	City	SSMH-5082	SSMH-5081	VCP	Circular	20	20	20	180	CNI - HEAVY CLEAN	Roots	Roots Fine Joint(14.6', 16.5', 57.6', 60.9', 71.3', 11.4'), Roots Tap Lateral(70.4'), Roots Medium Joint(74.7'), Roots Medium Connection(48.2'), Point Repair Patch (56.4', 58.5', 59.5', 61.3', 63.1', 64.6', 65.8', 66.8', 67.6', 71.5', 72.9', 77.1', 80.1', 82.4', 83.9', 85.4', 87.5', 89.7', 91.5', 93.2', 95.6', 97.3', 102.0', 103.8', 105.4', 107.7', 109.6')
SSGM-01834	Brook Rd	City	City	SSMH-5083	SSMH-5082	VCP	Circular	20	20	20	47	CNI - HEAVY CLEAN	Roots	Defective capped with Roots in lateral(23.6', 25.2'), Roots Fine Joint(22.2', 28.7', 32.3')
SSGM-01835	Brook Rd	City	City	SSMH-2508	SSMH-5083	VCP	Circular	20	20	20	255	CNI - HEAVY CLEAN	Roots	Crack Longitudinal(4.0'), Point Repair Patch (35.5', 88.2', 90.3', 210.7'(2)), Roots Fine Joint(4.0', 9.0', 10.0', 19.9', 31.2', 48.0',131.6', 133.7', 133.7', 135.8', 145.1', 174.5'), Roots Medium Joint(57.3', 147.2', 160.8')
SSGM-01849	Brook Rd	City	City	SSMH-2520	SSMH-2519	VCP	Circular	15	15	15	251	CNI - HEAVY CLEAN	Roots	Deposits attached ragging(10.1'), Roots Medium Joint(23.1', 27.3', 27.3', 37.2'), Survey abandoned unable to navigate due to roots(37.2')
SSGM-02345	Brookview Ter	City	City	SSMH-2712	SSMH-2713	VCP	Circular	8	8	8	191	INSPECTED	Roots	Fine roots joint (18.5, 31, 35.5, 39, 43, 46.6), Crack Spiral (35, 115, 118, 167), Fracture Spiral (71, 94), Dripping infiltration at service (102), Crack Longitudinal (170, 174, 179)
SSGM-02346	Brookview Ter	City	City	SSMH-2713	SSMH-2714	VCP	Circular	8	8	8	187	INSPECTED	Roots	Fracture Longitudinal (129-132), Fracture Spiral (9, 133, 157), Medium Roots at Joint (13), Fine Roots Joint (17-33), Crack Spiral (37, 81, 124, 137, 180), Crack Multiple (49), Crack Circumferential (64, 74.5, 77), Crack Longitudinal (100.5, 124), Fracture Multiple (85, 121), Broken Pipe (177)
SSGM-00304	Caleb St	City	City	SSMH-1436	SSMH-1437	VCP	Circular	8	8	8	150	INSPECTED	Debris	Deposits settled gravel(12.7')
SSGM-00305	Caleb St	City	City	SSMH-1437	SSMH-4418	VCP	Circular	10	10	10	217	INSPECTED	Debris	Crack Longitudinal(57.6'), Crack Spiral(152.8'), Deposits Settled Fine(204.0'), Obstruction Other-Dunkin cup (44.6')
SSGM-00447	Caleb St	City	City	SSMH-1763	SSMH-1764	VCP	Circular	8	8	8	174	INSPECTED	Roots	Deposits attached Encrustation(158.1'), Fracture multiple(258.0'), Fracture Spiral(208.6'), Hole Void Visible(65.9'), Roots Fine Joint(42.2', 60.5')
SSGM-04593	Caleb St	City	City	SSMH-1081	SSMH-1082	VCP	Circular	10	24	24	221	INSPECTED	Roots	Crack Circumferential(128.3'), Crack Longitudinal(105.7'), Deposit Attached Encrustation(160.0', 196.4', 202.6'), Fracture Spiral(213.9'), Infiltration Dripper Connection(85.5', 136.8'), Infiltration Stain Barrel (105.7'), Infiltration Stain joint (26.4', 109.4', 111.3', 242.4'), Roots Fine Joint(12.3', 76.9', 92.8', 99.3'), Roots Medium Joint (88.8', 95.2')
SSGM-04594	Caleb St	City	City	SSMH-1082	SSMH-1083	VCP	Circular	15	15	15	251	INSPECTED	Roots	Roots fine joint (12.3, 76.9, 92.8, 98.4, 99.3), Infiltration staining (26.4, 105.7, 109.4, 111.3-242.4), Connection dripping infiltration (85.5, 136.8), Medium roots joint (88.8, 95.2), Crack longitudinal (105.7), Crack circumferential (128.3), Deposits attached encrusted (160.0, 196.4, 202.6)
SSGM-02522	Candlewyck Ter	City	City	SSMH-2798	SSMH-2754	AC	Circular	8	8	8	265	INSPECTED	Debris	Water level Sag(36.9'), Obstruction Debris(74.9'), Joint Seperated Medium(6.1')
SSGM-02864	Capisic St	City	City	SSMH-5313	SSMH-5314	RCP	Circular	12	12	12	248	INSPECTED	Debris	Rock at (111.2')
SSGM-03025	Capisic St	City	City	SSMH-4617	SSMH-6870	VCP	Circular	8	8	8	250	CNI - HEAVY CLEAN	Debris	Fracture Multiple (0.00'), Crack Longitudinal (96.7', 171.8', 174.8', 185.1'), Broken Pipe Void Visible(121.5'), Crack multiple(23.9', 129.9', 161.3'), Fracture Longitudinal(108.2'), Fracture Multiple(166.4'), survey abandoned 195.4' due to rock.

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-03027	Capisic St	City	City	SSMH-5363	SSMH-6550	VCP	Circular	8	8	8	83	CNI - HEAVY CLEAN	Grease & Debris	US: Infiltration Staining Joint (1'), Deposits Attached Grease (3' - 46'), Crack Circumferential (5.8', 20.9'), Deposits Settled Fine (31.8'-46'), Survey Abandoned - Debris (46'), Cannot clean debris due obstruction from DS
SSGM-06451	Capisic St	City	City	SSMH-4018	SSMH-4017	VCP	Circular	15	15	15	191	INSPECTED	Roots	Infiltration stain at capped location(10.0'), Crack Longitudinal(36.7, 91.6' - 94.0', 140.2'), Fracture Longitudinal(58.4', 71.9', 171.2'), Roots Fine joint(67.2'), Defective Service location(89.5'), Service location with protruding branch or rebar(157.7')
SSGM-06453	Capisic St	City	City	SSMH-4019	SSMH-4262	VCP	Circular	12	12	12	128	CNI - HEAVY CLEAN	Roots	Roots fine Joint(45.3'), Roots medium Joint(35.3', 40.0', 49.5', 63.4'), Survey abandoned due to roots Tap Joint(63.4')
SSGM-02352	Cedarhurst Ln	City	City	SSMH-5188	SSMH-6214	VCP	Circular	15	15	15	150	INSPECTED	Grease & Roots	Deposits Attached Grease(13.9'), Roots Fine Joint(18.4'), Survey abandoned due to Root Ball (27.2')
SSGM-05958	Cedarhurst Ln	City	City	SSMH-2666	SSMH-5188	VCP	Circular	15	15	15	216	INSPECTED	Grease & Roots	Deposits attached Encrustation(25.6', 27.7', 162.2', 169.0'), Deposits Attached Grease(101.6', 126.7', 132.1', 139.8', 144.1', 149.3', 201.3'), Infiltration Runner Joint(23.3'), Infiltration Stain (37.4', 46.0') , Infiltration Stain Joint(17.5', 46.0', 60.4', 70.6'), Roots Fine connection(165.1'), Roots Fine Joint(180.8')
SSGM-02174	City Home Branch Sewer	City	City	SSMH-2665	SSMH-2666	VCP	Circular	15	15	15	106	INSPECTED	Grease & Roots	Deposits attached Grease(46.8', 96.5', 104.3'), Roots Ball Joint(103.1'), Roots Fine Joint(72.3'), Obstruction Roots at Joint(72.3')
SSGM-01371	Clapboard Rd	City	City	SSMH-4522	SSMH-4278	PVC	Circular	8	8	8	120	INSPECTED	Grease & Debris	Running infiltration at lateral (49.1), Infiltration stain at joint (62.7), Deformed eliptical-10%(86.6), Deformed eliptical-20%(99-107) ,Grease<10%(103-110), Sag in pipe (107-114.2), Fine deposits settled (110), Obstruction in lateral 40%(111.8)
SSGM-01599	Clayton St	City	City	SSMH-0562	SSMH-5012	VCP	Circular	8	8	8	216	INSPECTED	Roots & Debris	Material change PVC(25.3'), Material change VCP(71.0'), Deposits settled fine(76.1', 82.1', 103.9', 107.0'), Roots Fine Joint(110.4', 112.3', 118.9', 121.2', 127.3', 133.6', 142.2', 145.4', 148.4', 151.3', 160.3', 178.6', 178.6', 182.3'), Crack Longitudinal(169.5')
SSGM-01600	Clayton St	City	City	SSMH-5012	SSMH-5013	VCP	Circular	12	12	12	158	INSPECTED	Roots & Debris	Roots Fine Joint(4.0', 10.3', 22.4', 28.4', 31.5', 41.4', 41.7', 121.6', 124.7', 127.9', 138.3'), Deposits settled fine(12.7'), Roots Tap Joint(32.4'), Fracture Multiple(144.9'), material change PVC(153.3')
SSGM-04698	Coachlight Ln	City	City	SSMH-3541	SSMH-5760	VCP	Circular	18	18	18	268	INSPECTED	Roots	Roots fine connection(74.2'), Roots fine joint(77.6', 90', 108.6', 117.6', 136.1', 153.1', 262.2'), Crack Longitudinal(189.3'), Crack Multiple(240.5')
SSGM-00922	Columbia Rd	City	City	SSMH-4265	SSMH-4264	VCP	Circular	8	8	8	292	INSPECTED	Debris	Downstream: Broken Pipe Void Visible(6'), Deformed Rigid >5% (29.6'), Deposits Ingress Gravel (30.1), Deposits Ingress Other-Piece of Pipe Wall 15% (36'), Infiltration Weeper Joint (58.3', 61.5', 64.5', 67.5', 70.2', 73.2, 76.2', 79.2', 82.2'), Obstruction Joint Other - Unknown stick-like (89.5''), Survey Abandoned-Tap Intruding (92.7') Upstream/Reversal: Deposits Attached Encrustation(3', 16.2',), Infiltration Stain Joint(55'), Surface Damage Spalling (64.5', 182.5'), Defective Tap - Joint Offset Medium (91'), Infiltration Runner Connection (149.0'), Infiltration Weeper Joint (157', 160', 166.3', 188'), Reversal Complete (199.4')
SSGM-06708	Congress St	City	City	SSMH-5739	SSMH-4422	VCP	Circular	8	8	8	288	INSPECTED	Debris	Deposits attached ragging(156.8'), Deposits Settled fine(50.9')
SSGM-00302	Craigie St	City	City	SSMH-0129	SSMH-1431	VCP	Circular	12	12	12	247	INSPECTED	Debris	Crack Longitudinal(4.6'), Crack Multiple(11.1', 29.9', 69.8'), Deposits Settled Fine(44.0', 49.9'), Fracture Longitudinal(75.7', 81.2'), Fracture Multiple(169.8'), Infiltration Dripper Joint(171.3'), Obstruction Wedged in the Joint concrete(109.8', 189.3')
SSGM-00303	Craigie St	City	City	SSMH-1431	SSMH-1432	VCP	Circular	12	12	12	183	INSPECTED	Grease & Roots	Crack Longitudinal(72.1', 79.9', 83.5'), Deposits attached Grease(130.7', 142.1', 156.7'), Fracture Longitudinal(34.2', 65.6', 68.4', 74.7', 77.7', 80.2'), infiltration Dripper Joint(62.0'), Water Level Sag(117.8'), Roots Medium Joint(156.7'), Roots Tap Joint(160.9')
SSGM-00323	Craigie St	City	City	SSMH-4497	SSMH-4496	RCP	Circular	21	21	21	196	INSPECTED	Debris	Deposits Settled Gravel(53.2, 61.1, 97.0, 147.6')
SSGM-00324	Craigie St	City	City	SSMH-4496	SSMH-1432	RCP	Circular	21	21	21	177	INSPECTED	Debris	Deposits settled fine(84.1', 146.3')
SSGM-04583	Craigie St	City	City	SSMH-1432	SSMH-3508	RCP	Circular	24	24	24	293	INSPECTED	Roots & Debris	Deposits Attached Ragging Rag Ball(259.4'), Deposits Settled Gravel(0.00', 40.3', 293.3'), Infiltration Dripper joint(145.2'), Intruding sealing material Grout(153.7'), Obstruction Brick/ Masonry(43.8', 233.4'), Obstruction Sandbag(134.2'), Roots Tap Joint(145.2')
SSGM-04586	Craigie St	City	City	SSMH-1080	SSMH-3509	VCP	Circular	8	8	8	318	INSPECTED	Roots	US: Crack Circumferential(52.3'), Fracture Multiple(71.1'), Infiltration Stain Joint(97.5'), Roots fine Connection(170.2'), Roots Fine Joint(94.3', 153.0', 159.0', 165.0', 167.2', 172.7') Point Repair Patch unknown(122.2'), Roots Tap Joint(162.0'), Surface Damage Surface Spalling(189.8'), survey abandoned (192.7') protruding service / DS: Survey completed (205.1') protruding service
SSGM-04588	Craigie St	City	City	SSMH-1079	SSMH-1080	VCP	Circular	8	8	8	297	INSPECTED	Roots	Broken Pipe Void Visible(66.3'), Hole Soil Visible(49.3', 85.1'), Line Down(55.9'), Material change PVC(67.8'), Material change VCP(74.5'), Water level Sag (23.4') / Broken pipe Void Visible(21.7', 151.3'), Fracture Circumferential(203.3'), Fracture Longitudinal (2.2', 20.7'), Infiltration Runner Joint (203.3'), Joint Angular Medium(10.7', 175.6'), Joint Offset Medium(0.0'), Material change PVC(199.5'), Material change VCP(201.2'), Roots Fine Joint(33.6'), Defective repair defective(20.7')
SSGM-02629	Crosby St	City	City	SSMH-0744	SSMH-0753	VCP	Circular	8	8	8	297	INSPECTED	Roots	Broken (1.41), Offset joint with root ball in lateral (2.5), Multiple fractures (3.9, 211.5, 260.8), Hole (3.6), Spiral fracture (6.4), Circumferential fracture (10.6, 35.9, 145.2, 159.9), Crack circumferential (24.4), Longitudinal fracture (49.4, 57.2, 97.9, 131.3, 135.6, 147.4, 158.7, 161.2-182.0, 191.4), Fine roots joint (97.5, 105.8, 107.8, 112.1, 116.3, 118.4, 120.3, 131.3, 135.6, 137.7, 194.4, 200.9, 205.2, 206.9, 209.2, 230.4, 232.6, 234.8, 236.9, 238.9, 241.2, 245.2, 256.9, 260.4, 264.6, 266.2, 289.6), Fine roots connection (110.9, 124.4, 191.4, 213.2), Medium roots at lateral joint (110.9, 124.4, 191.4, 213.2), Fractures Hinge 2 (141.6, 144.6), Fractures Hinge 3 (156.4), Surface spalling (177.6), Medium roots joint (211.5, 213.2, 215.4, 218.0, 222.2, 228.0), Root ball joint (225.3), Infiltration stain from barrel (291.0)
SSGM-06661	Cross Country	City	City	SSMH-4320	SSMH-1340	RCP	Circular	24	24	24	332	CNI - HEAVY CLEAN	Debris	Deposits attached Encrustation(85.8', 102.0', 145.0'), Deposits Settled other debris(216.5'), Infiltration Runner Joint(145.0', 174.6'), Infiltration Stain Joint(154.8', 207.4'), Survey Abandoned - debris (221.9')
SSGM-02320	Dale Ct	Private	Private	SSMH-0685	SSMH-2703	PVC	Circular	6	6	6	275	CNI - HEAVY CLEAN	Debris	Hanging sealing material<10%(7.2), Running infiltration at service connection(7.2), Fine deposits settled in pipe (140-150, 185-190), Sag in pipe water level to 50%(170.7-180), Survey abandoned - cannot pass debris (193)
SSGM-07130	Demerest St	City	City	SSMH-4197	SSMH-3240	PVC	Circular	8	8	8	166	INSPECTED	Roots	Joints seperated small (135, 145), Roots fine service (106)

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-02405	Devon St	City	City	SSMH-2744	SSMH-2743	VCP	Circular	12	12	12	283	INSPECTED	Roots & Debris	Joint staining (3-129, 210-269), Crack Longitudinal (18.7, 104, 203), Deposits Settled Fine (25.1), Infiltration Staining Barrel (72.1), Infiltration Stain Capped Connection (93.2), Roots Fine Connection (131.4), Roots Fine Connection-Capped (133.4), Roots Fine Joint (116, 145, 256.6,), Infiltration Runner Lateral (203.4), Roots Medium Connection (256.6), Tap Break-in Other-Defective or Capped (264.3), Fracture Circumferential (264.3)
SSGM-02406	Devon St	City	City	SSMH-5200	SSMH-2744	Lined - VCP	Circular	12	12	12	300	INSPECTED	Roots	Medium Roots at 12 oclk with dripping infiltration (23.6 - possible service), Running infiltration at service (69), Running infiltration and mineral deposits at service (201), Mineral deposits in service (217), Service defective with roots and mineral deposits/staining (279)
SSGM-02408	Devon St	City	City	SSMH-2746	SSMH-2745	Lined - VCP	Circular	8	8	8	229	INSPECTED	Roots	Root ball lateral 100% blocked (8.5), Service laterals defective with medium roots (127), Service lateral defective with fine roots (170), Service lateral 95% root obstruction (215)
SSGM-02409	Devon St	City	City	SSMH-2747	SSMH-2746	Lined - VCP	Circular	8	8	8	232	INSPECTED	Grease & Roots	Root Ball (195.6), Root Ball (116), Grease 5% (53-101)
SSGM-02398	Dorset St	City	City	SSMH-2737	SSMH-5196	VCP	Circular	12	12	12	335	INSPECTED	Roots	Fracture Longitudinal (36, 78, 84, 204, 219.5), Fracture Spiral (45, 204), Fracture Multiple (159, 186, 262), Crack Longitudinal (42, 52, 67, 72, 85.5, 94, 100, 105, 140, 144, 201, 252, 292, 314, 317 (staining), 324.5, 330), Crack Multiple (30, 33, 92,122,137, 146, 161, 173, 216, 222.5, 256, 286.5, 329), Crack Spiral (24, 48, 61,125, 237, 264.5, 270, 311), Crack Circumferential (21, 192, 194), Infiltration stain at service (252), Fine roots joint (173, 185, 189, 192,198), Infiltration stain at joint (253, 311-331)
SSGM-02399	Dorset St	City	City	SSMH-5198	SSMH-2738	VCP	Circular	10	10	10	276	INSPECTED	Roots & Debris	Roots Fine Joint(35.6', 106.3', 130.9'), Crack Multiple(41.7'), Water Level Sag(38.7', 59.8', 66.0', 223.4', 239.6', 254.3'), Roots Fine Lateral(129.5'), Deposits Settled Fine(243.3'), Fracture Multiple(62.4')
SSGM-02401	Dorset St	City	City	SSMH-2740	SSMH-2741	VCP	Circular	12	12	12	276	CNI - Roots	Roots	Object in joint <10% (10), Roots fine joint (38.4, 45.4, 55.5, 60.0, 62.7, 65.3, 134.1), Roots medium joint (41.8, 49, 68.8, 71, 73.4, 76.7, 172.9, 190, 203.2), Root ball connection (44), Root ball joint (205.3), Survey Abandoned due to roots. DS manhole has drop.
SSGM-02607	Edgeworth Ave	City	City	SSMH-2822	SSMH-2823	VCP	Circular	10	10	10	250	INSPECTED	Roots	Gushing infiltration at service (158'), Service lateral defective with roots (146')
SSGM-03444	Eleanor St	City	City	SSMH-0904	SSMH-0222	VCP	Circular	8	8	8	136	INSPECTED	Roots	Fracture Spiral(3.1'), Jolint Offset Medium(4.9', 139.2'), Roots fine Joint(12.0', 16.1', 24.1', 26.5', 34.7', 36.8', 38.9', 41.4', 53.8', 68.7', 70.6', 74.4', 79.2', 81.3', 87.7', 93.8', 96.2', 100.0', 102.4', 104.6', 106.7', 108.8', 113.0'), Broken pipe void visible(32.6'), Roots medium joint(30.1'), Fracture Multiple(132.8'), Hole Soil Visible(133.6'), Joint Offset Large(30.1')
SSGM-03897	Fall Brook St	City	City	SSMH-3295	SSMH-0976	VCP	Circular	24	24	24	247	INSPECTED	Roots & Debris	Deposits settled fine (0.0, 44.7), Deposits attached ragging (6.0, 18.2), Weeping infiltration (6.1, 23.2), Deposits settled other (18.2), Medium roots joint (23.2(2), 44.7), survey abandoned due to debris 44.7
SSGM-00644	Forest Ave	City	City	SSMH-1899	SSMH-4689	VCP	Circular	10	10	10	341	INSPECTED	Grease	Fracture Longitudinal(42.6'), Infiltration Stain(95.1', 97.3', 99.4', 102.5', 114.3', 117.7', 120.2', 138.4', 157.0', 177.0', 218.9', 237.3', 243.4', 246.3', 249.8', 254.9', 273.1', 275.0', 278.2', 287.7', 306.5', 312.1', 315.3', 318.3', 321.2', 323.4', 326.3', 339.4'), Infiltration Weeper(284.6'), Deposits attached Grease(290.4'), Infiltration Dripper(296.8'), Broken Pipe(302.7'), Change in water level(294.6', 311.9', 333.1')
SSGM-00645	Forest Ave	City	City	SSMH-4689	SSMH-1888	VCP	Circular	10	10	10	235	INSPECTED	Grease & Roots	Deposits attached grease(1.8'), Infiltration Stain(5.2', 7.7', 11.3', 13.8', 17.5', 20.4', 31.4'), Roots fine Barrell(100.1'), Joint Offset Large(119.2') / Material change AC (0.3'), Surface Spalling(62.4'), Material change VCP(113.4')
SSGM-02442	Four Winds Rd	City	City	SSMH-2761	SSMH-0708	VCP	Circular	8	8	8	186	INSPECTED	Roots	Roots fine Joint(48.4', 51.1', 107.5'), Roots Fine Connection(59.7'), Infiltration Runner Joint(63.4')
SSGM-02490	Four Winds Rd	City	City	SSMH-0708	SSMH-5227	VCP	Circular	8	8	8	166	CNI - HEAVY CLEAN	Debris	DS: Survey Abandoned 41' protruding service/ US: Obstruction Rocks(10.0'), Obstruction through Connection Concrete through joint(14.9'), Survey Abandoned 15' Concrete in joint.
SSGM-02489	Fourwinds Rd	City	City	SSMH-5225	SSMH-5226	VCP	Circular	8	8	8	256	INSPECTED	Roots	Roots Fine Joint(25.2', 43.0', 56.0', 70.5', 88.2', 109.6', 133.4',), Roots Fine Connection(51.8'), Crack Spiral(124.4'), Crack Longitudinal(195.8'), Fracture Spiral(112.8', 133.4', 201.8'), Fracture Multiple(240.8', 246.8'), Broken Pipe Void Visible(237.9')
SSGM-02712	Fuller St	City	City	SSMH-0755	SSMH-0756	VCP	Circular	24	24	24	240	INSPECTED	Roots	Roots fine joint(119.4', 129.6'), Infiltration stain Joint(139.8')
SSGM-01536	Georgia St	City	City	SSMH-2395	SSMH-2394	PVC	Circular	8	8	8	192	INSPECTED	Debris	Deposits settled fine(175.8')
SSGM-03922	Gertrude Ave	City	City	SSMH-5628	SSMH-5627	PVC	Circular	8	8	8	250	CNI - HEAVY CLEAN	Debris	PVC spot repair (0-7.0'), Water level Sag(19.4', 24.7'), Deposits attached encrustation(101.3', 104.9', 107.3', 109.0', 125.6', 138.5'), Deposits settled fine(138.4'), Infiltration Dripper Joint(104.9', 107.3')
SSGM-04859	Gleckler Rd	City	City	SSMH-1118	SSMH-1871	VCP	Circular	15	15	15	178	INSPECTED	Roots	Infiltration Runner(80.2'), Roots Fine Lateral(80.2'), Roots Medium Lateral(170.2')
SSGM-04860	Gleckler Rd	City	City	SSMH-1036	SSMH-4921	BR	Circular	44	44	44	130	CNI - HEAVY CLEAN	Debris	Deposits settled fine (16.1'), Infiltration Gusher Joint(105.2')
SSGM-02306	Glen Haven East	City	City	SSMH-0667	SSMH-2655	VCP	Circular	12	12	12	165	INSPECTED	Roots	Roots Fine Joint(2.0), Roots Medium Joint(2.0', 32.4'), Crack Spiral(19.0'), Crack Longitudinal(58.5', 92.6'), Crack Circumferential(132.2'), Fracture Longitudinal(61.7', 64.7',107.5')
SSGM-02282	Glen Haven Rd	City	City	SSMH-0663	SSMH-0664	VCP	Circular	8	8	8	126	INSPECTED	Roots	Fracture Longitudinal (117.5), Roots Fine Joint (117.5), Dripping Infiltration and Mineral Deposits at joint (12), Mineral Deposits/Infiltration Stain at service connection (6, 83), Infiltration stain at joint (7, 27, 41.5, 62, 67, 77, 82), Mineral Deposits at Joint (17, 32, 37, 47, 52, 57.5) ,Crack Longitudinal with staining (17.2), Broken Pipe with Soil Visible (121)
SSGM-07050	Greenwood Ln	City	City	SSMH-1383	SSMH-0591	VCP	Circular	8	8	8	278	CNI - HEAVY CLEAN	Roots	Roots Ball Joint(31.9')
SSGM-02713	Hamblet Ave	City	City	SSMH-5251	SSMH-4596	VCP	Circular	15	15	15	246	INSPECTED	Roots	Crack Longitudinal(149.6', 156.2'), Crack Multiple(0.0'), Deposits attached Encrustation(9.0'), Fracture Longitudinal(6.0'), Infiltration Dripper Joint (176.3'), Infiltration Stain Barrel(0.0', 149.6'), Infiltration Stain Connection(163.3'), Infiltration Stain Joint(9.0', 11.5', 20.5', 23.7', 156.2', 158.6', 161.5', 167.5', 179.6', 188.1', 203.6'), Roots fine Joint(84.3', 90.3', 104.9', 116.8', 131.5', 158.6'), Roots medium joint(68.1', 74.7', 107.6', 114.3')
SSGM-00179	Hennessy Dr	City	City	SSMH-4512	SSMH-1591	VCP	Circular	8	8	8	248	INSPECTED	Roots	Water Level Sag(21.5', 32.1', 83.6'), Roots fine joint(97.0', 102.3', 116.8'), Hole Soil Visible(127.1', 230.8'), Broken pipe soil visible(233.0'), Change in water level(183.3')
SSGM-01983	Hennessy Dr	City	City	SSMH-2568	SSMH-2567	VCP	Circular	8	8	8	249	INSPECTED	Roots	Hole Soil Visible(14.2'), Fracture Multiple(70.8'), Roots Medium Lateral(75.8'), Roots Medium Barrel(77.1'), Roots Fine Joint(101.9'), Broken Pipe Soil Visible(135.9'), Fracture Spiral(144.3'), Crack Spiral(170.1')
SSGM-04382	Higgins St	City	City	SSMH-5701	SSMH-4611	VCP	Circular	8	8	8	200	INSPECTED	Roots	Broken Pipe(2.5'), Infiltration Stain Joint(192.7'), Roots Fine Joint(21.6', 24.7', 102.2', 166.0', 173.8'), Roots Medium Connection(29.7'), Roots Medium Joint(28.5', 32.8', 41.5')

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-04454	Hillis St	City	City	SSMH-5716	SSMH-5717	VCP	Circular	8	8	8	274	INSPECTED	Roots	Crack Circumferential(53.5'), Crack Longitudinal(25.4', 129.8'), Fracture Circumferential(19.7'), Infiltration Stain Joint(33.5'), Intruding sealing material sealing ring concrete(43.5'), Roots Ball Joint(105.9', 107.7'), Roots Fine Joint(45.5', 51.7', 53.7', 55.7', 63.6', 85.9', 95.8', 100.0', 103.8', 120.3')
SSGM-00866	Hillside Rd	City	City	SSMH-0175	SSMH-4253	VCP	Circular	12	12	12	275	INSPECTED	Roots & Debris	Material Change PVC(42.7'), Material change VCP(57.3'), Fracture Spiral(67.1'), Roots Fine Barrel(93.2', 97.6'), Crack Multiple(157.6'), Fracture Multiple(169.6'), Deposits settled ragging(256.3')
SSGM-03985	Holm Av	City	City	SSMH-1771	SSMH-5634	VCP	Circular	15	15	15	78	INSPECTED	Debris	Material Change PVC(75.8), Infiltration Stain Joint(10.0', 19.1', 52.1'), Infiltration Stain Barrel(17.1'), Deposits settled Tar(30.9'), Crack Multiple(13.7', 17.1')
SSGM-02375	Holm Ave	City	City	SSMH-5180	SSMH-2725	VCP	Circular	10	10	10	278	INSPECTED	Roots	Crack Circumferential (.2, 68, 121, 244, 272.6), Fracture Longitudinal (1), Hardened Cement at joint (14, 46, 54, 108.5-115, 252, 256), Crack Spiral (26, 270.7), Fine roots joint (35.5, 80, 262, 270.7, 272.6), Crack Longitudinal (69.5), Material change PVC (172'), material change VCP (242.4')
SSGM-02334	Hospital Dr	City	City	SSMH-2704	SSMH-5186	VCP	Circular	8	8	8	44	CNI - HEAVY CLEAN	Roots	Roots mediuim Barrel(0.2'), Roots ball joint(0.6'), Survey abandoned due to severe roots in pipe (0.62')
SSGM-01253	Humboldt St	City	City	SSMH-1541	SSMH-4482	AC	Circular	24	24	24	282	INSPECTED	Grease	Infiltration Weeper Joint (5.5), Infiltration Dripping Connection (11, 131), Infiltration Stain Joint (26, 104, 167), Infiltration Weeper Connection (60, 214, 266), Pipe chipped at joint (195), Tap Factory Defective - clogged with grease/rags (195)
SSGM-03710	Huntington Ave	City	City	SSMH-3249	SSMH-4482	PVC	Circular	12	12	12	193	INSPECTED	Roots	Roots fine joint (217)
SSGM-03081	Interceptor - Fall Brook	City	City	SSMH-2545	SSMH-3016	RCP	Circular	48	48	48	453	INSPECTED	Roots	Infiltration Stain(24.0'(2), 68.0', 146.7'(2), 320.2'(2), 360.5'), Roots Fine joint(121.2', 121.4'), Roots Medium Joint(192.5', 193.1', 200.7', 222.1'(2)), Camera Underwater(227.0'), Repair Patch Concrete(436.4'), Infiltration Weeper At patch repair(437.8'), Hole Under patch repair(437.8'),
SSGM-03869	Interceptor - Fall Brook	City	City	SSMH-1552	SSMH-4451	RCP	Circular	84	84	84	345	CNI - Roots	Roots	Weeping infiltration (11.3, 22.9, 27.2, 39.7, 130.1, 140.1, 156.0,187.7), Infiltration Stain (22.9, 88.1, 139.6), Running infiltration (27.3, 33.6), Dripping infiltration (118.6), Medium roots joint (161.1, 168.3, 188.7, 206.6), Tap Roots connection (185.4), Surface damage reinforcement visible (185.4), Tap Root joint (195.8), Survey abandoned Cable Length Exceeded (271.1)
SSGM-04182	Interceptor - Fall Brook	City	City	SSMH-3297	SSMH-0975	RCP	Circular	84	84	84	269	INSPECTED	Roots	Infiltration stain (5.0), Medium roots joint (98.0, 167.0, 176.9, 177.7)
SSGM-05810	Interceptor - Fall Brook	City	City	SSMH-4451	SSMH-3297	RCP	Circular	84	84	84	639	INSPECTED	Roots	Alignment left (10.0), Medium roots joint (34.3, 43.3, 196.4, 205.3, 223.3, 223.6, 286.5, 299.9, 309.9, 316.7, 328.3), Gushing infiltration (72.1, 78.5, 117.4, 149.6, 181.9), Running infiltration (149.7, 196.5, 215.9, 467.7, 474.7), Fracture multiple (196.5), Tap roots joint (233.8), Roots fine joint (274.8), Weeping infiltration (411.4, 416.2, 416.3, 467.4, 474.6, 495.7, 500.9, 552.0), Infiltration stain (411.5)
SSGM-06109	Interceptor - Fall Brook	City	City	SSMH-3015	SSMH-3925	RCP	<Null>	<Null>	60	60	300	INSPECTED	Roots	Roots Fine Joint(133.3',146.3')
SSGM-06871	Interceptor - Fall Brook	City	City	SSMH-1267	SSMH-6131	RCP	Circular	60	60	60	282	INSPECTED	Roots	Infiltration Runner Bolt hole(8.8'), Infiltration Stain(72.6', 81.0', 235.9', 259.4'), Infiltration Stain Bolt Hole(100.9', 255.0'), Roots Fine Barell From bolt hole(129.8', 240.6'), Infiltration Dripper Bolt Hole(171.4'), Infiltration Weeper(185.5'), Roots Fine Joint(235.9'), Infiltration Weeper Bolt Hole(240.6'),
SSGM-02923	Interceptor - Presumpscot North Newton Branch	City	City	SSMH-4630	SSMH-5326	RCP	Circular	18	18	18	261	INSPECTED	Debris	Infiltration stain/mineral deposts at joint (13, 51, 70, 109, 128, 147, 186, 205, 223, 242, 246), Deposits settled fine (34-48), Mineral deposits at joint (167), Infiltration stain/mineral deposits around service lateral (200)
SSGM-01530	Interceptor - Virginia-Carter	City	City	SSMH-2391	SSMH-4218	AC	Circular	18	18	18	222	INSPECTED	Debris	Deposits Settled Gravel(76.8', 89.3', 107.5', 142.7',)
SSGM-01531	Interceptor - Virginia-Carter	City	City	SSMH-4218	SSMH-4219	AC	Circular	18	18	18	331	INSPECTED	Grease	Deposits attached Encrustation(208.5', 215.6'), Deposits attached Grease(281.2')
SSGM-01532	Interceptor - Virginia-Carter	City	City	SSMH-4219	SSMH-2393	AC	Circular	18	18	18	308	CNI - HEAVY CLEAN	Grease & Debris	Deposit attached Grease(144.5'), Deposits settled Gravel(15.6', 47.7', 91.8', 106.0', 167.3'), Survey abandoned - Gravel (167.3')
SSGM-01533	Interceptor - Virginia-Carter	City	City	SSMH-2393	SSMH-2392	AC	Circular	18	18	18	307	CNI - HEAVY CLEAN	Debris	Survey abandoned due to rocks(20.0')
SSGM-01669	Interceptor - Virginia-Carter	City	City	SSMH-5031	SSMH-5032	AC	Circular	18	18	18	223	INSPECTED	Debris	Survey abandoned due to debris settled underwater (16.8')
SSGM-01670	Interceptor - Virginia-Carter	City	City	SSMH-5023	SSMH-5033	AC	Circular	18	18	18	217	INSPECTED	Debris	Crack Longitudinal(150.8'), Deposits Settled Gravel(3.0', 11.1')
SSGM-01671	Interceptor - Virginia-Carter	City	City	SSMH-5033	SSMH-0187	AC	Circular	18	18	18	238	INSPECTED	Debris	Deposits Settled Gravel(111.3')
SSGM-06304	Interceptor - Virginia-Carter	City	City	SSMH-6030	SSMH-1293	AC	Circular	15	15	15	264	INSPECTED	Debris	Deposits Settled Gravel(208.8', 217.0')
SSGM-02549	Interceptor - West Side 7	City	City	SSMH-5214	SSMH-0927	VCP	Circular	24	24	24	258	CNI - HEAVY CLEAN	Roots & Debris	Roots Fine Joint(130.1'), Crack Longitudinal(168.4'), Infiltration Weeper Joint(96.0'), Debris underwater(226.9'), survey abandoned due to rock in pipe (226.9)
SSGM-02550	Interceptor - West Side 7	City	City	SSMH-0927	SSMH-5213	VCP	Circular	24	24	24	137	INSPECTED	Roots	Crack Spiral(18.2'), Infiltration stain Joint(15.6', 18.2', 26.6', 29.8'), Roots Fine Joint(107.4')
SSGM-00048	Inverness St	City	City	SSMH-1402	SSMH-0070	VCP	Circular	8	8	8	175	INSPECTED	Roots	Fracture Spiral(1.9', 5.3', 100.4', 167.7'), Joint Offset Medium(24.0', 48.9', 68.5', 116.5'), Joint Offset Large(32.0'), Water Level Sag(77.3', 89.2'), Surface Damage Surface Spalling(130.6', 135.2',141.2', 170.4'), PVC point repair (81.7-86.2'), Roots Fine Joint(114.4', 117.4', 153.1'), Roots at defective lateral(129.8')
SSGM-02555	Jeanne St	City	City	SSMH-2806	SSMH-0734	VCP	Circular	8	8	8	266	INSPECTED	Roots	VC pipe remaining (0-4.5), Broken Pipe (2), fine roots joint (4.5, 77), Joint offset large (44), Pipe diameter change from 8" to 10" (243'
SSGM-02557	Jeanne St	City	City	SSMH-0734	SSMH-0733	VCP	Circular	12	12	12	173	INSPECTED	Roots	PVC point repair (3-78), Fine roots joint (3), Crack longitudinal (83, 125, 130, 156, 159), Fracture Longitudinal (105, 161), Crack Multiple (124-132)
SSGM-03767	Jersey Av	City	City	SSMH-1554	SSMH-5557	AC	Circular	8	8	8	273	INSPECTED	Debris	Deposits setlled gravel(264.1'), Broken pipe Void Visible(136.4')
SSGM-02948	June St	City	City	SSMH-2943	SSMH-5338	Lined - VCP	Circular	8	8	8	84	INSPECTED	Roots	Roots fine Connection(10.0'), Roots fine Lateral(88.6')
SSGM-00051	Kidder St	City	City	SSMH-4401	SSMH-4400	VCP	Circular	18	18	18	171	INSPECTED	Debris	Deposits Settled Fine(62.1'), Crack Longitudinal(72.1'), Unknown continous encrusted (128.1' - 130.4')
SSGM-02680	Leland St	City	City	SSMH-5254	SSMH-0750	VCP	Circular	18	18	18	245	INSPECTED	Roots	Crack Circumferential(122.9', 227.9'), Crack Longitudinal(83.1', 194.3', 236.7'), Fracture Longitudinal(83.6'), Infiltration Stain Barrel(236.7'), Infiltration Stain Joint(28.3', 31.2', 51.9', 58.2', 63.9', 75.6', 241.4'), Roots fine Joint(138.1', 150.0', 153.4' , 164.9', 183.3', 189.2', 194.6', 207.2'), Roots Medium Joint(176.4'),
SSGM-06566	Leland St	City	City	SSMH-1325	SSMH-6081	AC	Circular	10	10	10	211	INSPECTED	Roots	Fracture Spiral(57.7'), Roots Ball Joint(121.0'), Roots Fine Joint(1.0', 10.4', 99.5'), survey abandoned (121')
SSGM-06563	Leonard St	City	City	SSMH-0754	SSMH-6082	VCP	Circular	8	8	8	300	INSPECTED	Roots	Broken pipe void visible(136.0'), Fracture Circumferential(83.2', 137.0', 229.1'), Roots fine joint(51.3', 53.4', 59.3', 70.3', 79.6', 83.0', 299.2'), Roots Medium Joint(70.0', 76.0', 84.8', 146.0'), Tap factory Defective(88.9')
SSGM-00870	Lester Dr	City	City	SSMH-1605	SSMH-1606	AC	Circular	8	8	8	306	INSPECTED	Debris	Deposits settled fine(295.2')
SSGM-00871	Lester Dr	City	City	SSMH-1606	SSMH-1607	AC	Circular	8	8	8	314	INSPECTED	Debris	Deposits attached encrustation (264.0', 276.8'), obstruction rocks (185.6')

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-03826	Loring Ave	City	City	SSMH-1626	SSMH-5594	VCP	Circular	8	8	8	226	INSPECTED	Debris	Deposits settled fine(5.0', 12.3', 20.2', 42.4', 55.1', 208.2'), hole soil visible(132.9'), water level sag(176.4', 189.2', 208.2')
SSGM-04983	Ludlow St	City	City	SSMH-5812	SSMH-5273	VCP	Circular	15	15	15	266	INSPECTED	Roots	Joint weeping infiltration (5.6, 12.2, 35.9, 44.8, 154.8, 184.3, 196.3, 213.6, 229.6, 234.9), Fins sediments settledd (17.3, 57.7, 196.3),Joint with stainind or deposits (17.9, 20.6, 28.6, 37.7, 39.3, 53.7, 57.7, 62.2, 66.5, 161.1, 185.5, 192.2, 196.3, 205.3, 210.4, 213.6, 217.4, 233.4), Spiraling crack(39.3), joint dripping infiltration (55.9), fine roots at joint (100.9), Longitudinal crack (114.2), Multiple cracks (120.3, 158.0, 160.8, 161.8, 174), Spiraling fracture (126.1), Multiple fractures (166.2), 3 Hinge fractures (245.3-253.1), Broken Pipe(255.6, 264)
SSGM-06678	Mabel St	City	City	SSMH-5272	SSMH-5274	VCP	Circular	10	10	10	224	INSPECTED	Debris	Deposits Settled Fine(11.8', 40.2', 91.8'), Broken pipe void visible(84.2'), Crack circumferential(85.3'), Joint Offset Large(170.9'), Deposits Attached Encrustation(174.6'), Hole Void Visible(185.3'), Broken pipe(220.3'), Broken pipe soil visible(222.5'), Fracture Longitudinal(109.0', 220.2'), Infiltration Stain Joint(68.9', 102.4', 108.7', 220.2'), Joint Angular Large(27.1'), Joint Offset Large(60.4'), Joint Offset Medium(75.2', 89.7', 106.1', 112.6'), joint Offset Large(168.5', 170.9'), Joint Seperated Medium (108.7')
SSGM-02681	Machigonne St	City	City	SSMH-2847	SSMH-5268	BR	Circular	42	42	42	197	INSPECTED	Roots	Continuous infiltration staining (0-195.4), Mineral Deposits on pipe wall (5.4, 84.9, 107.4, 127.4, 134.4, 138.4), Roots fine service (48.4), Mineral Deposits on pipe wall (92), Mineral Deposits at service (113.4)
SSGM-02682	Machigonne St	City	City	SSMH-5268	SSMH-5269	BR	Circular	42	42	42	221	INSPECTED	Roots	Continuous infiltration staining (0-220.3), Fine roots (101.3), Mineral deposits (107.3), Brick missing with fine roots (149.3), Mortar missing (159.3)
SSGM-06626	Machigonne St	City	City	SSMH-5269	SSMH-6095	BR	Circular	42	42	42	195	INSPECTED	Roots	Continuous infiltration stain (0-196.3), Mineral Deposits (144, 184), Fine roots service (36)
SSGM-00148	Maine Ave	City	City	SSMH-1501	SSMH-1498	RCP	<Null>	<Null>	42	42	241	CNI - HEAVY CLEAN	Debris	Survey Abandoned 33.1' due to debris
SSGM-03777	Maine Ave	City	City	SSMH-4460	SSMH-1496	RCP	Circular	36	36	36	314	INSPECTED	Debris	Deposits Settled Fine(25.4')
SSGM-06874	Maine Ave	City	City	SSMH-6131	SSMH-1496	RCP	<Null>	<Null>	66	66	306	INSPECTED	Roots	Infiltration Weeper(45.2', 63.6'), Infiltration Stain(75.3', 75.4'), Hole Soil Visible(88.7'), Infiltration Runner at defect(88.7'), Roots Fine Joint(238.4')
SSGM-03107	Maine Turnpike	State	State	SSMH-2992	SSMH-3013	AC	Circular	10	10	10	222	INSPECTED	Grease	Deposits Attached Grease(65.1', 105.8', 125.0')
SSGM-03902	Maplewood St	City	City	SSMH-3303	SSMH-4526	VCP	Circular	10	10	10	341	INSPECTED	Roots & Debris	Roots Medium Joint(9.0', 19.9', 25.7', 60.3', 65.9', 135.0'), Deposits settled fine(92.1'), Roots fine Joint(153.3'), Fracture longitudinal(266.5', 279.1'), PVC point repair (294.1-298.9')
SSGM-03822	Marlborough Rd	City	City	SSMH-5592	SSMH-5589	PVC	Circular	8	8	8	140	INSPECTED	Roots	VC point repair defective with medium joint offset (137.4-144), Roots fine joint & joint offset small (139.7), Mineral deposits in service (140), Fracture spiral (141), Hardened cement (141)
SSGM-05729	Meadowbrook Ln	City	City	SSMH-1227	SSMH-3832	VCP	Circular	8	8	8	190	INSPECTED	Debris	PVC point repair (17.2'-20.1'), Water level Sag(16.4', 44.4'), Obstruction Rocks(99.8')
SSGM-03691	Montana St	City	City	SSMH-0951	SSMH-0950	AC	Circular	18	18	18	247	INSPECTED	Debris	Deposits Settled Gravel(49.2', 71.0')
SSGM-04198	Montana St	City	City	SSMH-0950	SSMH-3378	AC	Circular	18	18	18	252	CNI - HEAVY CLEAN	Debris	Obstacles Rock(35.5', 51.6', 64.0', 72.7'), infiltration Dripper Joint(72.7'), survey abandoned - Rocks (72.2'), Downstream Manhole is a Drop Connection
SSGM-02911	Motley St	City	City	SSMH-2932	SSMH-2931	VCP	Circular	8	8	8	181	INSPECTED	Roots	Broken Pipe(176.2'), Crack Spiral(157.3'), deposits attached encrustation(7.0'), Fracture Spiral(149.0'), Infiltration Stain Joint(7.0', 11.8',74.0', 178.0'), Roots Fine Joint(168.3', 178.0')
SSGM-03694	Nevada Ave	City	City	SSMH-1556	SSMH-0954	VCP	Circular	8	8	8	563	CNI - HEAVY CLEAN	Roots	Point Repair Patch - Patched Hole (54.3'), Broken Pipe Soil Visible(232.6'), Fracture Spiral(225.7'), Water level Sag(169.3'), Roots Ball Joint(300.9'), Roots fine Joint(271.3', 273.8', 275.4', 279.0', 283.6'), Roots Medium Joint(281.2', 283.9', 288.6', 298.9'), Infiltration from broken service line (179.1'), Survey abandoned - Roots (367.1')
SSGM-02621	Newman St	City	City	SSMH-2829	SSMH-2828	VCP	Circular	8	8	8	176	INSPECTED	Roots	Medium joint offset (83.9, 96.1), Fine roots at joint (130.8, 135.0, 137.0, 157.0, 165.2)
SSGM-02622	Newman St	City	City	SSMH-2830	SSMH-2829	VCP	Circular	8	8	8	175	INSPECTED	Roots	Fine roots in service (3.1, 25.0, 96.2), Fine roots at joint (17.7, 19.7, 21.0, 44.0, 86.7, 89.9, 101.1, 103.0, 151.7, 153.6, 155.3, 157.7, 159.5, 161.5, 167.7), Medium roots at joint (23.6, 25.8, 27.8, 30.0, 31.6, 33.3, 37.5, 39.9, 41.9, 92.7, 95.1), Medium joint offset (104.8), Weeping infiltration from joint (128.0, 131.0, 134.0, 137.0, 140.0)
SSGM-03083	North Port Business Park	City	City	SSMH-3017	SSMH-3016	RCP	Circular	48	48	48	64	INSPECTED	Roots	Infiltration Weeper(9.0', 29.7'), Roots Tap Joint(34.6'), Crack Multiple(50.0')
SSGM-00029	Oakley St	City	City	SSMH-1405	SSMH-1407	RCP	Circular	27	27	27	242	INSPECTED	Roots	Roots Fine Joint(143.1')
SSGM-00030	Oakley St	City	City	SSMH-1407	SSMH-1410	RCP	Circular	27	27	27	254	CNI - HEAVY CLEAN	Debris	Obstacle Rocks(5.7'), Survey abandoned unable to navigate(6.0')
SSGM-06064	Oakley St	City	City	SSMH-3908	SSMH-3909	BR	<Null>	<Null>	42	42	241	CNI - HEAVY CLEAN	Roots & Debris	Defective Lateral(133.3'), Roots Tap Connection(133.3'), Deposits Settled Debris(151.5'), Obstacle Rocks(163.8'), Survey abandoned unable to navigate(164.1')
SSGM-02293	Off Glen Haven West	City	City	SSMH-6212	SSMH-6213	VCP	Circular	18	18	18	147	INSPECTED	Roots	Roots Fine Joint(134.8')
SSGM-02301	Off Penwood Dr	City	City	SSMH-6209	SSMH-6208	VCP	Circular	18	18	18	41	INSPECTED	Roots	Roots Fine Joint(27.6', 36.3')
SSGM-02302	Off Penwood Dr	City	City	SSMH-6208	SSMH-6210	VCP	Circular	18	18	18	150	INSPECTED	Roots & Debris	Roots Ball Barrell(26.9'), Roots Medium Joint(52.4'), Obstruction Other object under water (85.4')/ Roots fine Joint(3.7'), Deposits Attached Encrustation(10.0', 41.8'), Infiltration Stain Joint(34.1'), Obstruction Rocks(63.5'), Miscellaneous Survey Abandoned Reversal Complete(65.6')
SSGM-02175	Off Pinebrook Ln	City	City	SSMH-6210	SSMH-6211	VCP	Circular	18	18	18	185	INSPECTED	Roots	Deposits Attached Encrustation (136.1'), Infiltration Stain Joint(3.7', 67.5', 69.7', 123.9'), Infiltration Weeper Joint(6.0'), Roots Fine Joint(153.9', 155.9', 160.3', 169.9', 172.2')
SSGM-02176	Off Pinebrook Ln	City	City	SSMH-6211	SSMH-6207	VCP	Circular	18	18	18	152	INSPECTED	Roots	Infiltration Dripper Joint(105.7', 109.7'), Infiltration Stain Joint(25.6', 33.6', 39.6', 48.0', 55.4', 117.7', 145.4'), Roots Fine Joint(131.5')
SSGM-02300	Off Pinebrook Ln	City	City	SSMH-6207	SSMH-6212	VCP	Circular	18	18	18	62	INSPECTED	Roots	Roots Fine Joint(23.4')
SSGM-01632	Olde Birch Ln	City	City	SSMH-5020	SSMH-5021	PVC	Circular	8	8	8	165	INSPECTED	Grease	Grease(63.0', 63.7', 65.5'), Infiltration Gusher Joint(125.2')
SSGM-02360	Orono Rd	City	City	SSMH-5161	SSMH-5191	VCP	Circular	8	8	8	240	INSPECTED	Roots & Debris	Roots Fine Lateral(18.4'), Roots Fine Joint(61.0', 158.0', 163.5', 166.3'), Obstruction Wedged in the Joint rock(80.8'),Obstruction Rocks(126.6'), Fracture Circumferential(234.6')
SSGM-01969	Pennell Ave	City	City	SSMH-5110	SSMH-5108	VCP	Circular	10	10	10	348	INSPECTED	Roots	Material change VCP(50.0'), Roots Fine Joint(83.9', 96.4'), Broken Pipe Soil Visible(93.3'), Water level Sag(223.8', 271.5', 305.6'), Fracture Multiple(225.0')
SSGM-06683	Pennell Ave	City	City	SSMH-6104	SSMH-5108	VCP	Circular	8	8	8	140	INSPECTED	Debris	Deposits Settled Fine(0.0'), Water Level Sag(103.9'), Material change PVC(126.9')
SSGM-02154	Penwood Dr	City	City	SSMH-2697	SSMH-2698	VCP	Circular	8	8	8	213	INSPECTED	Roots	Root ball obstruction and running infiltration at service (20), Running infiltration and medium roots at service (6), Fine Roots at Joint (12, 22), Crack Longitudinal (59.5), Infiltration stain around service (147), Infiltration Stain at joint (209)

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-02155	Penwood Dr	City	City	SSMH-2695	SSMH-2697	VCP	Circular	8	8	8	167	INSPECTED	Roots	Running Infiltration and Fine Roots at service (118), Weeping Infiltration and Mineral Deposits around service (31.5), Infiltration stain/Minor Crack around service (79), Crack Longitudinal (117), Fine roots joint (141), Roots Medium Joint (161)
SSGM-02283	Pinebrook Ln	City	City	SSMH-0664	SSMH-5155	VCP	Circular	8	8	8	169	INSPECTED	Roots	Fracture Circumferential with staining (102), Mineral Deposits/Staining/Fine Roots at joint (2), Weeping Infiltration and staining at service (58), Crack Longitudinal (58, 61.1,146.4), Running Infiltration and staining at Service (162), Crack Circumferential (162.2), Infiltration stain at joint (6,11, 21, 36, 41-71, 91, 106-141), Crack Multiple (76), Crack Spiral (62), Fine Roots Joint (36, 41)
SSGM-02309	Pinecrest Rd	City	City	SSMH-5159	SSMH-0671	AC	Circular	8	8	8	201	INSPECTED	Roots & Debris	Infiltration stain at service (20, 48 (fine roots), 148.5), Debris settled (87-108, 131-148.5)
SSGM-02349	Pinecrest Rd	City	City	SSMH-2717	SSMH-2716	VCP	Circular	8	8	8	300	CNI - HEAVY CLEAN	Roots	DS: Root ball joint (159, 163, 166), Root Obstruction in Lateral (194), Roots medium joint (168, 171 (weeper), 199), Fine roots and dripping infiltration at joint (150, 153, 156), Fine roots joint (93-129, 144-148, 174, 180-195), Crack Circumferential (.2), Crack Spiral (8), Fracture Longitudinal Hinge 2 (19), Crack Longitudinal (64), Service defective with roots (112, 116.5), Running Infiltration and fine roots at service (116), Survey abandoned due to roots (201)
SSGM-06555	Poland St	City	City	SSMH-6234	SSMH-0316	VCP	Circular	8	8	8	157	INSPECTED	Roots	Joint Offset Medium(3.0'), Roots Fine Joint(5.9', 9.2', 18.5', 24.9', 28.1', 31.4', 34.7')/ Roots fine Joint(17.6', 29.8', 79.8', 86.5', 89.8', 96.3', 99.2'), Roots Medium Joint(108.7'), Joint Offset Medium(42.4', 46.0', 68.0', 79.8', 96.3', 99.2'), Water Level Sag(89.8')
SSGM-04006	Providence St	City	City	SSMH-0025	SSMH-1401	RCP	<Null>	<Null>	24	24	285	INSPECTED	Roots	Fracture Longitudinal(0.9', 33.6', 58.1', 73.8'), Infiltration Weeper(131.3'), Obstacle other Stick wedged in joint(258.0'), Roots fine Joint(176.0'), Survey Abandoned Unable to navigate(258.0')/ Intruding Sealing Ring Hanging(3.1'), Survey abandoned Reversal complete(29.9')
SSGM-03698	Racine Ave	City	City	SSMH-3236	SSMH-5560	PVC	Circular	8	8	8	252	INSPECTED	Debris	Deposits settled rock(51.8)
SSGM-02931	Rackleff St	City	City	SSMH-4321	SSMH-2923	Lined - VCP	Circular	8	8	8	247	INSPECTED	Roots	Roots Fine Connection(44.6'), Water Level Sag(184.2', 200.2', 204.1'), Infitration Runner Connection(119.5'), Infiltration Dripper Connection(72.4')
SSGM-03123	Riverside Industrial Pkwy	City	City	SSMH-5388	SSMH-5387	VCP	Circular	10	10	10	276	CNI - HEAVY CLEAN	Debris	Deposits Settled Fine (4.8'), Survey Survey Abandoned - Debris (21.2'), Downstream Manhole Buried
SSGM-07186	Riverside Industrial Pkwy	City	City	SSMH-6283	SSMH-6176	VCP	Circular	10	10	10	269	INSPECTED	Grease	Infiltration Weeping Joint (15', 75.8', 91.6', 100.1', 141.3', 147.5', 152.8', 157.2'), Fracture Multiple (27.0'), Infiltration Staining Joint (80.7', 116.8', 126.7'), Infiltration Staining Barrel (102.1') Crack Longitudinal (102.1'), Infiltration Runner Joint (107.4'), Deposits Attached Encrustation (181.5'), Deposits Attached Grease (219'-247'), Water Level Sag (246.5'-257'), Obstruction/Obstacle Other 20-30%: Unknown (253.8'), Deposits Attached Hardened (254')
SSGM-03183	Riverside St	City	City	SSMH-2490	SSMH-0847	AC	Circular	18	18	18	154	INSPECTED	Debris	Deposits settled fine(3.4')
SSGM-03230	Riverside St	Private	Private	SSMH-3039	SSMH-4332	PVC	Circular	8	8	8	369	INSPECTED	Roots	Roots medium connection from pipe to HM(369.3')
SSGM-06540	Riverside St	City	City	SSMH-6074	SSMH-0844	AC	Circular	8	8	8	215	INSPECTED	Grease	Deposits attached Grease(15.8', 36.1')
SSGM-01634	Roaring Brook Rd	City	City	SSMH-5022	SSMH-5023	AC	Circular	18	18	18	337	INSPECTED	Roots & Debris	Deposits Settled Gravel(23.9', 156.4', 229.9', 243.9'), Roots Medium Barrel(333.5')
SSGM-01662	Roaring Brook Rd	City	City	SSMH-0187	SSMH-5027	AC	Circular	18	18	18	266	INSPECTED	Grease	Grease (254.0' - 261.4')
SSGM-02744	Rockland Ave	City	City	SSMH-0798	SSMH-0799	VCP	Circular	30	30	30	99	INSPECTED	Roots	Roots medium Lateral (56), Infiltration stain joint (12, 20-51, 76-94), Crack Longitudinal (22.4, 59), Roots fine joint (51, 54)
SSGM-02749	Rockland Ave	City	City	SSMH-0797	SSMH-0763	RCP	Circular	30	30	30	104	INSPECTED	Roots	Crack Longitudinal (10, 19, 31, 44, 47-62, 72), Infiltration Stain Joint (62-75), Fine roots joint (75)
SSGM-00477	Rosemont Ave	City	City	SSMH-1759	SSMH-1758	Lined - VCP	Circular	8	8	8	212	INSPECTED	Roots	Roots Medium Connection(57.1', 57.9')
SSGM-00466	Rowe Ave	City	City	SSMH-1768	SSMH-4632	VCP	Circular	8	8	8	323	INSPECTED	Roots	Fracture Longitudinal (19.5, 29, 63, 73, 78, 98, 103 (staining), 108, 117, 142, 302), Fracture Spiral (3-12, 24, 69 (staining), 223 (staining)), Crack Longitudinal (20 (staining), 26, 33.5, 72, 92 (staining), 106, 126.5 (staining), 132 (staining), 142, 147 (staining), 152 (staining), 154 (staining), 209, 213, 264 (staining), 273, 310), Crack Circumferential (66, 110-138 (staining), 172, 184), Crack Spiral (96 (staining), 123 (staining)), Crack Multiple (144, 169 (staining), 175, 219), Mineral Deposits at Joint (127, 269) Infiltration stain at joint (122, 196, 213), Weeping Infiltration and mineral deposits at service (125), Roots fine joint (223), Broken Pipe (320.5)
SSGM-00468	Rowe Ave	City	City	SSMH-5326	SSMH-6885	RCP	Circular	18	18	18	182	INSPECTED	Roots	Infiltration stain joint (23), Roots fine joint (50-109, 122-142, 154, 161-173), Crack Longitudinal (79)
SSGM-00469	Rowe Ave	City	City	SSMH-1769	SSMH-4632	RCP	Circular	18	18	18	43	INSPECTED	Roots	Roots medium Joint (7), Roots fine joint (9, 14)
SSGM-02955	Rowe Ave	City	City	SSMH-0805	SSMH-2945	RCP	Circular	48	48	48	247	INSPECTED	Roots	Fine Roots Joint (104 (staining),145, 149), Crack Multiple (173), Crack Longitudinal (18, 162, 174, 178, 184, 202, 206, 209)
SSGM-03031	Rudman Rd	City	City	SSMH-1752	SSMH-5364	VCP	Circular	8	8	8	149	INSPECTED	Debris	Deposits settled fine(63.7'), Infiltration Stain Joint(14.1'), Intruding sealing material Grout(11.3', 14.1'), Water level Sag(15.0' - 18.9'), Deposit Encrustation at joint(47.7'), Joint offset medium defective(63.7'), water level sag(18.9') Rversal: Crack Spiral(38.1', 86.3'), Continous Infiltration stain joint(49.9' - 55.3'), intruding sealing material Grout at joint(68.7')
SSGM-02810	Sandy Ter	City	City	SSMH-4319	SSMH-4320	RCP	Circular	24	24	24	271	INSPECTED	Roots	Roots fine Joint(42.6')
SSGM-02874	Sandy Ter	City	City	SSMH-2904	SSMH-4319	VCP	Circular	8	8	8	206	INSPECTED	Roots & Debris	Roots fine Joint(15.6', 50.3', 59.4', 81.8', 86.5', 101.8', 197.0'), Debris at joint(25.8', 161.6'), PVC point repair (101.8'-109.1'), Water level sag(198.3' - 199.6')
SSGM-00038	Sherwood St	City	City	SSMH-0079	SSMH-0078	VCP	Circular	27	27	27	217	INSPECTED	Roots	Fracture Multiple(91.3', 93.9'), Infiltration Stain(190.3', 208.5'(2)), Roots Fine Connection(108.5', 119.6'), Fracture Longitudinal(112.6')
SSGM-04138	Sherwood St	City	City	SSMH-1411	SSMH-5657	VCP	Circular	30	30	30	167	INSPECTED	Roots	Fracture Longitudinal Hinge 3(0.0', 10.1', 58.0'), Fracture Longitudinal Hinge 2(58.0', 114.2', 127.3'), Roots Ball Lateral(105.1'), Fracture Longitudinal(106.3')
SSGM-01987	Short St	City	City	SSMH-5109	SSMH-6272	VCP	Circular	20	20	20	143	INSPECTED	Roots	Tap Factory Defective Roots in Lateral(15.8'), Crack Circumferential(2.4'), Crack Longitudinal(113.4'), Point Repair Liner(119.4'), Roots Fine Joint(128.3'), Repair Point Pipe Replaced Polyethylene(130.7', 135.7')
SSGM-01976	Skylark Rd	City	City	SSMH-5114	SSMH-5115	VCP	Circular	8	8	8	251	INSPECTED	Roots	Roots fine Joint(44.3', 52.9', 58.4', 61.3'), Roots fine Lateral(64.4')/ Broken Pipe Soil Visible(45.1'), Fracture Longitudinal(45.1'), Roots Fine Lateral(151.7')

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-02484	Sonnet Ln	City	City	SSMH-2780	SSMH-2781	VCP	Circular	8	8	8	229	INSPECTED	Roots & Debris	Obstruction Rocks(0.0'), Fracture Circumferential(68.0'), Fracture Multiple(127.3'), Crack Multiple(130.1'), Fracture Spiral(142.2'), Fracture Longitudinal(154.4')/ Roots Fine Joint(12.5'), Roots fine Connection(15.1'), Roots Fine Joint(16.6'), Fracture Multiple(48.9'), Water Level Sag(49.9')
SSGM-06663	St Joseph St	City	City	SSMH-1341	SSMH-4348	VCP	Circular	8	8	8	207	INSPECTED	Debris	Joint Offset Medium(20.6', 26.6'), Size or Shape Change(33.6') / Infiltration Stain Joint(53.8', 62.1', 66.0', 68.6', 71.9', 77.8', 151.2'), Deposits Attached Encrustation(83.1', 92.6'), Deposits Settled unknown piece of plastic(97.6'), Water level Sag(56.0')
SSGM-00309	Stevens Ave	City	City	SSMH-4422	SSMH-6881	VCP	Circular	8	8	8	269	INSPECTED	Roots & Debris	Roots Medium Joint(17.1', 20.4', 22.6',), Roots Medium Barrel (21.6'), Infiltration Stain Joint (28.4',31.4',34.4'), Deposits Attached Encrusted (42.6'), Material Change-PVC(45.8'), Joint Offset Large (45.8'), Water Level Sag:50% (45.8'-52), Deposit Settled Other:Unknown (45.8'), Survey Abandoned due to rock in pipe (45.8')
SSGM-00435	Stevens Ave	City	City	SSMH-1761	SSMH-4615	VCP	Circular	18	18	18	97	INSPECTED	Roots	Crack Longitudinal (59.6'), Obstruction through connection concrete in joint(72.3'), Root Fine Joint(53.5')
SSGM-00443	Stevens Ave	City	City	SSMH-6539	SSMH-6538	VCP	Circular	8	8	8	180	INSPECTED	Roots	Mineral Deposit at capped service(15.5', 49.8', 64.4'), Infiltration at service joint(38.6', 89.7'), Infiltration Stain Joint (42.4', 56.7'), Offset joint Medium (18.3', 172.8'), Root fine Connection(172.8')
SSGM-00952	Stevens Ave	City	City	SSMH-1907	SSMH-1908	VCP	Circular	8	8	8	248	INSPECTED	Roots	Roots Fine Joint(75.9'), Repair Point Pipe Replaced PVC(77.0', 89.8', 178.9', 191.9')
SSGM-02929	Stevens Ave	City	City	SSMH-2922	SSMH-2921	VCP	Circular	8	8	8	160	INSPECTED	Roots	Obstruction Brick or Masonry(17.4'), Fracture Longitudinal(94.5'), Roots fine connection(14.7', 20.6', 23.8', 102.3', 131.8')
SSGM-02934	Stevens Ave	City	City	SSMH-0803	SSMH-0802	VCP	Circular	18	18	18	60	INSPECTED	Roots	Obstruction through connection concrete through joint(14.3', 34.4'), Roots fine Joint(21.0), Crack Longitudinal(17.2', 39.5'), Fracture Longitudinal(44.7'), Water level Sag(52.8')
SSGM-02936	Stevens Ave	City	City	SSMH-5335	SSMH-0803	VCP	Circular	18	18	18	128	INSPECTED	Roots	Crack Circumferential(51.3'), Infiltration Runner Joint(38.1', 73.3'), Roots fine Barrel(99.7', 105.1')
SSGM-02937	Stevens Ave	City	City	SSMH-5336	SSMH-5335	VCP	Circular	15	15	15	114	INSPECTED	Roots	Roots fine joint(28.1'), Infiltration Runner Joint(74.7'), Obstruction Wedged in the joint branch(97.6'), Roots fine Connection(74.7')
SSGM-02944	Stevens Ave	City	City	SSMH-5341	SSMH-2938	VCP	Circular	10	10	10	157	INSPECTED	Debris	Fracture Longitudinal(0.6'), Obstruction Rock(25.9')/ [Crack Multiple(68.1'), Fracture Longitudinal(71.5'), Obstruction through connection concrete in joints(122.3', 130.5')]
SSGM-03029	Stevens Ave	City	City	SSMH-6550	SSMH-6551	VCP	Circular	18	18	18	135	INSPECTED	Roots	Roots Medium Joint (9', 103.3'), Infiltration Weeping Joint (9'), Infiltration Stain Joint (48.5'), Infiltration Runner Connection (101.0'), Obstruction Wedged in Joint:Concrete (103.3')
SSGM-03030	Stevens Ave	City	City	SSMH-5364	SSMH-6541	VCP	Circular	18	18	18	74	INSPECTED	Roots	Root tap joint(0.1')
SSGM-04702	Stevens Ave	City	City	SSMH-3544	SSMH-5365	VCP	Circular	8	8	8	204	INSPECTED	Roots	Broken pipe void visible(77.3'), Crack Spiral(70.5'), Fracture Multiple (72.9'), Roots medium joint(77.3'), Intruding sealing material grout(37.9', 99.6')
SSGM-04703	Stevens Ave	City	City	SSMH-4619	SSMH-3544	VCP	Circular	8	8	8	207	INSPECTED	Roots & Debris	Crack multiple(83.0), deposit settled Rock(167.6'), intruding sealing material grout(140.5', 194.6', 199.2'), Water level Sag(130.5', 172.2'), Roots fine joint(188.3', 192.5')
SSGM-00864	Summit Park Ave	City	City	SSMH-6486	SSMH-4505	VCP	Circular	15	15	15	226	INSPECTED	Roots	Material Change VCP(67.7'), Roots Medium Joint(70.6', 181.8'), Roots Fine Joint(73.7', 85.8', 92.2', 95.2', 101.4', 175.7', 187.7), Fracture Spiral(129.4', 184.8', 205.8'), Fracture Longitudinal(203.0', 218.3'), Infiltration Runner(70.6')
SSGM-01612	Summit Park Ave	City	City	SSMH-2426	SSMH-6489	VCP	Circular	8	8	8	244	INSPECTED	Roots	PVC Stub(0.0'), Material change VCP (8.0', 165.0'), Material Change PVC(148.2'), Joint Offset Large(8.0'), Roots Medium Joint(12.1', 140.6', 180.7'), Roots Fine Joint(15.1', 18.3', 24.3', 27.2', 30.3', 54.1', 81.0', 93.1', 96.0', 102.0', 104.9', 116.7', 119.7', 190.4'), Joint Offset Medium(15.1', 241.8'),
SSGM-01613	Summit Park Ave	City	City	SSMH-2427	SSMH-2426	VCP	Circular	8	8	8	244	INSPECTED	Roots	Roots fine Joint(31.1', 33.4', 50.4', 55.9', 90.8', 204.7', 216.1', 226.7'), Material Change PVC(36.4', 158.3'), Material change VCP(49.8', 170.6'), Roots fine connection(57.5')
SSGM-01614	Summit Park Ave	City	City	SSMH-2428	SSMH-6488	VCP	Circular	12	12	12	130	INSPECTED	Roots	Crack Spiral(10.6'), Roots fine Joint(58.1', 64.0', 75.5'), Material Change PVC(118.2')
SSGM-01618	Summit Park Ave	City	City	SSMH-2432	SSMH-6491	VCP	Circular	8	8	8	336	INSPECTED	Roots	Roots fine connection(115.2'), Water level Sag(243.9'), Material change PVC(314.4')
SSGM-02294	Sunset Ln	City	City	SSMH-6213	SSMH-2702	VCP	Circular	18	18	18	296	INSPECTED	Roots	Deposits Attached Encrustation (68.2', 78.3', 185.9', 193.8', 233.8', 240.3', 254.0'), Infiltration Dripper Joint (88.1', 198.0', 203.9', 285.6'), Infiltration Runner Joint (201.9'), Infiltration Stain Joint (60.1', 65.9', 82.4', 221.8', 238.1', 239.9', 244.2', 246.0', 300.0'), Infiltration Weeper Joint (44.1', 52.3', 188.4', 223.8', 230.0'), Roots fine Joint(175.9')
SSGM-02295	Sunset Ln	City	City	SSMH-1911	SSMH-2702	VCP	Circular	15	15	15	196	INSPECTED	Roots	Fracture Longitudinal(4.0', 102.0', 111.4', 158.5'), Water level Sag(101.8'), Roots Fine Joint(140.4', 200.0')
SSGM-02297	Sunset Ln	City	City	SSMH-2702	SSMH-6214	VCP	Circular	18	18	18	296	INSPECTED	Roots	Infiltration Stain Joint(27.0', 45.3', 57.1', 92.6', 95.2', 98.9', 150.9', 178.9'), Infiltration Weeper Barrel(39.5'), Joint Offset Large(205.0'), Roots Fine Joint(115.3', 176.8', 179.1', 181.1', 191.2', 197.6', 279.1'), Roots Fine Barrel(145.2')
SSGM-00156	Texas St	City	City	SSMH-4457	SSMH-4458	VCP	Circular	12	12	12	31	INSPECTED	Debris	PVC point repair (0--8.3'), Deposits Settled Fine(13.1')
SSGM-04206	Vermont Ave	City	City	SSMH-3384	SSMH-3383	AC	Circular	8	8	8	248	INSPECTED	Roots	Fine roots at service (8), Infiltration stain at joint (112, 200), Mineral deposits at service connection (128, 128.2, 200), Infiltration stain at service (201), Surface roughness increased (0-270.6)
SSGM-03771	Virginia St	City	City	SSMH-5557	SSMH-0954	VCP	Circular	10	10	10	251	INSPECTED	Debris	Joint Offset Medium(216.6'), Debris at joint(189.2')
SSGM-06270	Virginia St	City	City	SSMH-6017	SSMH-6686	VCP	Circular	8	8	8	252	INSPECTED	Roots	Broken Pipe(78.7', 109.9'), Crack Circumferential(118.2'), Hole Void Visible(230.4), Material change AC(231.2'), Roots Ball Lateral(91.6'), Roots fine Joint(89.7', 94.7')
SSGM-06684	Virginia St	City	City	SSMH-5558	SSMH-4077	VCP	Circular	10	10	10	250	INSPECTED	Debris	Deposits settled Gravel(217.5', 223.9'), Obstruction Tar(193.8')
SSGM-07056	Virginia St	City	City	SSMH-6161	SSMH-5558	VCP	Circular	10	10	10	249	INSPECTED	Debris	Broken pipe (94.6'), Deposits attached ragging(169.2'), deposits settled tar(46.0'), Infiltration Stain Joint(75.5', 186.3', 192.4'), Material change concrete lined corrugated metal(103.4'), Material change VCP(117.2') / Deposits settled tar(23.3'), Material change VCP(1.7')
SSGM-04469	Walton St	City	City	SSMH-1894	SSMH-4349	VCP	Circular	15	15	15	124	INSPECTED	Roots	Roots Fine Joint(19.1', 45.5')
SSGM-02392	Warwick St	City	City	SSMH-0701	SSMH-0700	VCP	Circular	15	15	15	46	INSPECTED	Roots	PVC point repair (0'-6'), Crack Longitudinal (22.5, 39.5), Crack Multiple (6-13.5, 17-19, 27.5), Water level sag 15% (33-38.5), Mineral Deposits at joint (16.5), Mineral Deposits at service (15), Infiltration stain at joint (6,11) Infiltration stain at service (10, 13.3), Root Ball Lateral -100% (12), Infiltration Runner Lateral (12)
SSGM-02425	Warwick St	Private	Private	SSMH-1909	SSMH-2753	VCP	Circular	18	18	18	281	INSPECTED	Roots	Crack Multiple(52.3'), Roots Fine Joint(13.2', 22.4', 162.6', 278.2', 278.2'), Infiltration Runner Connection(180.7'), Roots Fine Connection(180.7'), Roots Medium Connection(127.2')
SSGM-02539	Warwick St	City	City	SSMH-2767	SSMH-2720	VCP	Circular	24	24	24	192	CNI - HEAVY CLEAN	Grease	Pipe surcharged, Grease in manholes.

Facility Identifier	Location Description	Owned By	Managed By	From Manhole	To Manhole	Material	Shape	Width	Height	Diameter	Length	Inspection Status	O&M Reason	Inspection Notes
SSGM-02540	Warwick St	City	City	SSMH-2720	SSMH-2768	VCP	Circular	24	24	24	6	CNI - HEAVY CLEAN	Grease	Pipe surcharged, Grease in manholes.
SSGM-02542	Warwick St	City	City	SSMH-2768	SSMH-2763	VCP	Circular	24	24	24	251	CNI - HEAVY CLEAN	Grease	Pipe surcharged, Grease in manholes.
SSGM-00145	Washington Ave	City	City	SSMH-1504	SSMH-1502	RCP	<Null>	<Null>	42	42	115	INSPECTED	Debris	Mineral Deposits Joint (1.5', 40.4', 43.4', 67.5',), Gravel in Invert (11.4'), Infiltration Staining Joint (13.5'), Crack Longitudinal (29.9')
SSGM-01584	Washington Ave	City	City	SSMH-2417	SSMH-5004	AC	<Null>	<Null>	18	18	86	INSPECTED	Debris	Deposits Settled Fine(70.4')
SSGM-04184	Washington Ave	City	City	SSMH-2277	SSMH-0132	VCP	Circular	24	24	24	144	CNI - HEAVY CLEAN	Debris	Unable to Navigate Debris, Survey Abandoned
SSGM-04185	Washington Ave	City	City	SSMH-1586	SSFT-0419	VCP	Circular	24	24	24	112	INSPECTED	Roots & Debris	Infiltration Staining (7.0-38.8), Deposits settled fine (37.0), Crack longitudinal (54.8), Deposits attached ragging (59.3), Medium roots joint (67.1, 70.4(2)), Fracture longitudinal (70.4)
SSGM-06063	Washington Ave	City	City	SSMH-3909	SSMH-1523	BR	Circular	42	42	42	130	INSPECTED	Grease	Infiltration staining (2.0-76, 2.0-78.5, 110.7, 113.7, 119.2, 124.6), Grease attached (16.1-51.2, 16.1-52.5), Missing brick at tap (34.8), Crack circumferential (55.4)
SSGM-07621	Washington Ave	City	City	SSMH-4067	SSMH-5073	VCP	Circular	12	12	12	275	INSPECTED	Roots	Joint Offset Medium(22.2', 188.7'), Roots Fine Joint(130.5')
SSGM-04700	Wayne St	City	City	SSMH-1075	SSMH-3542	VCP	Circular	10	10	10	219	INSPECTED	Roots	Fracture Longitudinal(20'), Infiltration Stain Joint(16.9'), Material change PVC(22.7'), Material change VCP(92.4'), Roots Fine Joint(94.8', 200')
SSGM-02954	Webb St	City	City	SSMH-2950	SSMH-5326	VCP	Circular	8	8	8	164	INSPECTED	Grease & Roots	Broken (14), Crack Longitudinal (33, 52, 71 , 80, 108.5, 113, 133, 138, 147, 152, 181, 208, 218, 239), Crack Spiral (10, 14, 142, 166, 176 , 200), Infiltration stain at joint (11, 11.5, 108.2, 142, 175-218), Mineral Deposits at joint (90, 95,104,108, 152-204), Roots Fine Joint (213), Crack Multiple (133, 147), Fracture Multiple (10.5), Fracture Longitudinal (89.6, 90.2), Fracture Spiral (69,105, 108, 128), Deposits Attached Grease (220-240), Infiltration Staining Barrel (10, 80, 108.5, 113, 133, 138, 142, 147, 176, 200, 239)
SSGM-08053	Webb St	City	City	SSMH-6885	SSMH-1769	RCP	Circular	18	18	18	163	INSPECTED	Roots	Continuous fine roots at joint (9-77, 90-155)
SSGM-04867	Wellington Rd	City	City	SSMH-5787	SSMH-5788	VCP	Circular	30	30	30	347	INSPECTED	Roots	Defective Lateral(215.6'), Roots Fine Joint(60.6', 69.5', 121.6', 143.6', 162.2', 174.3', 201.7'), Roots Fine Connection(64.2'), Crack multiple(43.1')
SSGM-04868	Wellington Rd	City	City	SSMH-5788	SSMH-3594	VCP	Circular	30	30	30	98	INSPECTED	Roots	Roots Fine Joint(39.0', 62.7', 74.9')
SSGM-02636	Westminster Ave	City	City	SSMH-5259	SSMH-0748	VCP	Circular	8	8	8	132	INSPECTED	Roots	Fine roots at service (27) ,Infiltration stain at joint (39), Mineral deposits at joint (65, 103)
SSGM-07498	Westminster Ave	City	City	SSMH-5260	SSMH-5261	VCP	Circular	12	12	12	308	INSPECTED	Roots	PVC repairs (0-42, 266-300), Fracture Spiral and staining at joint (105.4), Mineral Deposits and Infiltration Stain at joint (47.4-105, 119-133, 150-183.7), Hole with infiltration stain (57), Tap factory made capped with infiltration stain at connection (62, 84, 152.5), Infiltration stain at joint (69.7, 80, 127, 135.5-160, 179, 193, 197, 205), Crack Circumferential (82.5 (staining), 210, 234, 236.4), Crack Longitudinal (100, 125, 186.7, 188, 189.2 (staining), 252.5, 257), Crack Multiple (133 (staining)), Crack Spiral (150 (staining), 156, 164, 260), Weeping infiltration and mineral deposits at joint (177.7), Service lateral defective with roots (219, 256), Roots fine joint (226, 243, 246, 252.5, 263, 266), Roots medium joint (249), Root ball joint (254.5)
SSGM-02795	Wolcott St	City	City	SSMH-2882	SSMH-5304	VCP	Circular	18	18	18	72	INSPECTED	Roots	Roots Fine Joint(6.9', 49.5')
SSGM-02798	Wolcott St	City	City	SSMH-5301	SSMH-5302	VCP	Circular	8	8	8	150	INSPECTED	Roots	Fine roots joint (3), Fine roots service (9.5), Weeping infiltration at joint (93), Crack Longitudinal (14, 82, 93), Mineral Deposits at joint (30, 61, 65, 109, 113, 121, 126, 129,135, 143), Cracks Multiple with staining (39, 43, 49, 72, 73, 81, 87), Infiltration stain at joint (46, 67, 91, 115, 117, 141, 145), Infiltration stain at capped service (58), Crack Spiral (58, 85, 143), Running infiltration Joint (68), Crack circumferential (94, 133, 147)
SSGM-00484	Woodford St	City	City	SSMH-0256	SSMH-0253	VCP	Circular	18	18	18	313	INSPECTED	Debris	Infiltration Runner Connection(171', 182.2', 257', 309.4'), Infiltration runner Joint(309.4'), Infiltration Stain Joint(30.7', 34.4', 39.6', 92.8', 119.8', 144.4', 168.8'), Ziptie stuck(144.4'), Surface damage surface spalling(155.8', 174' - 174.5'), Infiltration Stain at service location(180.5', 224.7', 229'), Obstruction Rock through pipe(246.0'), Point Repair Patch Brick Obstruction (257'), Intruding Infiltration Runner Capped Connection (230.3', 260.1')
SSGM-00490	Woodford St	City	City	SSMH-0259	SSMH-0258	VCP	Circular	12	12	12	171	INSPECTED	Debris	Gravel in pipe (107.6')
SSGM-00491	Woodford St	City	City	SSMH-0258	SSMH-0257	VCP	Circular	12	12	12	225	INSPECTED	Debris	Material Change to VC (78.5), Sag in pipe 5% (78.5 -87.2), Fine deposits settled 5% (78.5 - 87.2), Running infiltration at joint (83.3), Longitudinal fracture (119.7, 160.5), Large joint offset (139.6), PVC Point repair (141.5'-150.5'), Spiraling fracture (163.7)
SSGM-00492	Woodford St	City	City	SSMH-0257	SSMH-0255	VCP	Circular	15	15	15	249	INSPECTED	Roots	Infiltration Weeping Joints Continuous (0-147), Capped Factory Tap Weeping Infiltration (68.4), Infiltration Runner Joint (72, 105, 110), Point Repair Replacement-PVC (75-78), Root Tap Joint (95), Capped Factory Tap Dripping Infiltration (217.5)
SSGM-04436	Woodford St	City	City	SSMH-3469	SSMH-0259	VCP	Circular	8	8	8	135	CNI - HEAVY CLEAN	Roots	Roots fine Joint (0.0', 2.0'), survey abandoned due to Medium roots (2.1')

Presumpscot River
Virginia Carter Interceptor
Presumpscot North Interceptor
Dole Brook
Fall Brook Interceptor
Fall Brook
Presumpscot Estuary
Milliken Brook
Milliken Brook Interceptor
Capisic Brook
Deering Junction
East Deering
Lunts Corner
Back Cove
Casco Bay
West Side Interceptor
Fore River Interceptor
Fore River
Deering Center
East End
Upper Fore River Interceptor
Capisic Pond
North Side Interceptor
Oakdale
Libbytown
Parkside
Old Port
Downtown
Stroudwater Interceptor
Stroudwater
Garrison Hill Estates
West End
Portland Harbor
Lower Fore River Interceptor
Long Creek

- MULTIPLE O AND M (ROOTS, GREASE, DEBRIS)
- GREASE
- ROOTS
- DEBRIS
- GRAVITY SEWER MAIN
- SEWER FORCE MAIN
- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION
- OPEN WATER
- WETLAND
- CITY BOUNDARY

APPENDIX D

O & M RECOMMENDATION LOCATIONS

N

0 0.25 0.5 1 Miles

CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan

ARCADIS Design & Consultancy for natural and built assets

June 2020

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine

Appendix E - Manhole Inspection Reports

Wastewater Collection System

Analysis and Action Plan

June, 2020

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MANHOLE INSPECTION AND REHABILITATION RECOMMENDATIONS TABLE

CNI AND CNL MANHOLE TABLE

MANHOLE INSPECTION AND REHABILITATION RECOMMENDATIONS TABLE

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Manhole Inspection Results and Rehabilitation Recommendations

Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Lining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 04	SSMH-5376	INDUSTRIAL WAY	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 04	SSMH-0832	PRIM STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 04	SSMH-0830	RIVERSIDE STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 04	SSMH-2985	RIVERSIDE STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 04	SSMH-6179	RIVERSIDE STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 04	SSMH-4437	1 INDUSTRIAL WAY	91.5	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Floor - Mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-1454	100 INDUSTRIAL WAY	114.8	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-5375	108 INDUSTRIAL WAY	95.8	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar, light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-1453	125 INDUSTRIAL WAY	102.0	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Heavy mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-0826	126 INDUSTRIAL WAY	86.3	0	0.25 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-1558	175 INDUSTRIAL WAY	90.5	0	0.5 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Light mineral deposits, Wall - Moderate mineral deposits.		Minerals	X			X		X					
Sub-Area 04	SSMH-1559	175 INDUSTRIAL WAY	92.0	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-2982	2 EVERGREEN DRIVE	76.0	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 04	SSMH-2983	21 EVERGREEN DRIVE	76.0	0	0.2 BELOW GRADE	2	Inspected	Chimney - Broken and missing brick.													
Sub-Area 04	SSMH-1560	220 INDUSTRIAL WAY	96.5	0	0.75 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals	X			X		X					
Sub-Area 04	SSMH-0827	225 INDUSTRIAL WAY	-	0	CNI	CNI	CNI	Cover cracked				X									
Sub-Area 04	SSMH-0489	25 EVERGREEN DRIVE	80.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Wall - Light mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-5412	31 WALDRON WAY	93.3	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar.						X							
Sub-Area 04	SSMH-4439	35 INDUSTRIAL WAY	93.3	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Floor - Missing mortar, mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-4555	36 WALDRON WAY	70.5	0	0.5 ABOVE GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Crackedintopieces, Chimney - Broken, loose and missing brick.					X					X			Repair Chimney
Sub-Area 04	SSMH-1452	53 INDUSTRIAL WAY	102.0	0	0.25 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Wall - Light mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-0210	56 EVERGREEN DRIVE	84.0	14	0.5 BELOW GRADE	0	Inspected	Cover - Cracked pavement surrounding frame, blind flange, Frame - 1"riser, Wall - Leak, light mineral deposits, top portion not set in bottom 3".		Active	X			X		X					
Sub-Area 04	SSMH-2986	56 EVERGREEN DRIVE R.O.W.	159.5	0	19 ABOVE GRADE	2	Inspected	Wall - Light mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-6018	68 WALDRON WAY	93.7	0	5 ABOVE GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 04	SSMH-2978	723 RIVERSIDE STREET PARKING LOT	142.0	0	AT GRADE	2	Inspected	Invert - Solids catching in invert.													
Sub-Area 04	SSMH-5370	723 RIVERSIDE STREET PARKING LOT	74.8	0	AT GRADE	2	Inspected	Invert - Sediment catching in invert.													
Sub-Area 04	SSMH-2984	74 EVERGREEN DRIVE	96.5	360	0.2 BELOW GRADE	2	Inspected	Chimney - Broken, loose and missing brick, missing pieces, Wall - Leak at seam.		Active				X		X					
Sub-Area 04	SSMH-5372	75 INDUSTRIAL WAY	138.0	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-5374	77 INDUSTRIAL WAY	130.7	0	0.25 BELOW GRADE	1	Inspected	Chimney - Light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-5373	81 INDUSTRIAL WAY	123.5	0	0.25 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-5368	828 RIVERSIDE STREET	46.3	0	AT GRADE	3	Inspected	No Significant Defects													

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine
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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Lining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 04	SSMH-0206	872 RIVERSIDE STREET	126.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 04	SSMH-1343	892 RIVERSIDE STREET	-	0	CNI	CNI	CNI	Cover cracked				X									
Sub-Area 04	SSMH-2975	902 RIVERSIDE STREET	93.0	0	AT GRADE	3	Inspected	Highpoint manhole, Floor - Dirt and debris, Invert - Full of dirt.													
Sub-Area 04	SSMH-2973	910 RIVERSIDE STREET	119.5	0	AT GRADE	21	Inspected	Floor - Missing mortar, Invert - Catching solids.													
Sub-Area 04	SSMH-5413	92 WALDRON WAY	80.0	0	1 BELOW GRADE	1	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.			X			X		X		X			Repair Chimney
Sub-Area 04	SSMH-0211	95 EVERGREEN DRIVE	92.0	360	0.2 BELOW GRADE	2	Inspected	Starter manhole, Wall - Leak at seam.		Active						X					
Sub-Area 04	SSMH-2974	980 RIVERSIDE STREET	-	0	CNI	CNI	CNI	Manhole has smart cover													
Sub-Area 04	SSMH-0831	CADDIE LANE EASEMENT	124.0	0	12 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 04	SSMH-0828	EVERGREEN DRIVE AT INDUSTRIAL WAY	103.0	0	AT GRADE	2	Inspected	Chimney - Broken brick, Invert - Missing mortar.						X							
Sub-Area 04	SSMH-0829	INDUSTRIAL WAY	83.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-1557	INDUSTRIAL WAY OFFICE MAX - SECOND ENTRANCE	80.8	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-2972	RIVERSIDE STREET AT EVERGREEN DRIVE	81.2	0	AT GRADE	3	Inspected	Frame - Hasriser.													
Sub-Area 04	SSMH-2976	RIVERSIDE STREET AT INDUSTRIAL WAY	69.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 04	SSMH-2977	RIVERSIDE STREET AT INDUSTRIAL WAY	65.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 04	SSMH-0205	RIVERSIDE STREET AT PRIM STREET	96.7	0	AT GRADE	3	Inspected	Floor - Broken brick, missing mortar, debris.													
Sub-Area 04	SSMH-0195	RIVERSIDE STREET R.O.W.	96.5	0	6 ABOVE GRADE	2	Inspected	Unable to enter manhole - unsafe levels of CO at 145+PPM, Chimney - Missing mortar, weeping, Wall - Missing mortar, weeping.		Active					X							
Sub-Area 05	SSMH-2489	1412 RIVERSIDE STREET	218.7	0	AT GRADE	19	Inspected	Frame - Offset3", Many holes in cover	Cover Holes		X	X									
Sub-Area 05	SSMH-5068	1955 WASHINGTON AVENUE	104.5	4,320	0.25 BELOW GRADE	1	Inspected	Chimney - Missing mortar, Wall - Leak at seam.		Active						X		X			Repair Chimney Mortar
Sub-Area 05	SSMH-5066	1958 WASHINGTON AVENUE	156.3	4,320	AT GRADE	1	Inspected	Wall - Leaking at seam.		Active						X					
Sub-Area 05	SSMH-5388	500 RIVERSIDE INDUSTRIAL PARKWAY	104.0	0	0.5 BELOW GRADE	16	Inspected	Chimney - Missing mortar. Many holes in Cover)	Cover Holes		X	X						X			Repair Chimney Mortar
Sub-Area 05	SSMH-5010	65 LAMBERT STREET	95.7	0	AT GRADE	1	Inspected	Floor - Mineral deposits, Invert - Light mineral deposits.		Minerals						X					
Sub-Area 05	SSMH-5382	RIVERSIDE STREET	120.5	0	0.25 BELOW GRADE	3	Inspected	Cover - Cracked and missing pavement surrounding frame.													
Sub-Area 06	SSMH-1601	#C BROOKFIELD APARTMENTS	128.7	0	0.5 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar.			X							X			Repair Chimney
Sub-Area 06	SSMH-2562	#F BROOKFIELD APARTMENTS R.O.W.	103.3	0	1 BELOW GRADE	1	Inspected	Chimney - Missing mortar, Wall - Moderate roots.		Roots	X					X		X		X	Remove Roots, Repair Chimney Mortar
Sub-Area 06	SSMH-5059	103 PARSONS POND DRIVE	113.5	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 06	SSMH-0157	114 ALPINE ROAD	99.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Floor - Missing brick, moderate mineral deposits, Invert - Sediment catching in invert, light mineral deposits.		Minerals						X		X			Repair Brick and Mortar of Floor, Seal Bulkheaded Service
Sub-Area 06	SSMH-4954	126 AUBURN TERRACE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 06	SSMH-6491	128 SUMMIT PARK AVENUE	99.0	0	0.75 BELOW GRADE	0	Inspected	Cover - Blind flange.			X										
Sub-Area 06	SSMH-6485	13 KENNETH STREET	83.0	0	0.25 ABOVE GRADE	0	Inspected	Highpoint manhole, Cover - Blind flange.													
Sub-Area 06	SSMH-1603	134 AUBURN TERRACE	46.7	0	AT GRADE	1	Inspected	Invert - Sediment catching in invert.												X	Clean Invert
Sub-Area 06	SSMH-6490	135 SUMMIT PARK AVENUE	104.0	0	0.25 BELOW GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-1602	136 AUBURN TERRACE	75.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 06	SSMH-2430	147 SUMMIT PARK AVENUE	102.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-0186	16 JACKSON STREET	77.0	0	AT GRADE	21	Inspected	Rock caught in invert causing debris to collect - rock and part of debris removed during inspection however a portion of debris remains in pipe.				X								X	Clean Outgoing Pipe
Sub-Area 06	SSMH-2429	164 SUMMIT PARK AVENUE	115.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Chimney - Broken brick.										X			Repair Brick and Mortar of Chimney
Sub-Area 06	SSMH-6492	17 ALPINE ROAD	102.5	0	AT GRADE	0	Inspected	Cover - Cracked pavement surrounding frame, blind flange, Invert - Catching solids.												X	Clean Invert
Sub-Area 06	SSMH-6486	17 SUMMIT PARK AVENUE	102.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-4992	18 QUIET LANE	49.5	0	AT GRADE	3	Inspected	No Significant Defects													

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Sub-Area 06	SSMH-4991	18 QUIET LANE R.O.W.	50.5	0	AT GRADE	2	Inspected	Invert - 1" debris.												X	Clean Invert
Sub-Area 06	SSMH-0175	20 HILLSIDE ROAD	95.0	0	AT GRADE	4	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4941	21 LONGVIEW DRIVE	63.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 06	SSMH-0512	22 AUBURN TERRACE	76.7	0	AT GRADE	1	Inspected	Wall - Light mineral deposits, Invert - Debris catching in invert.		Minerals										X	Clean Invert
Sub-Area 06	SSMH-0160	233 AUBURN STREET AT BROOKFIELD APARTMENTS	117.0	0	AT GRADE	1	Inspected	Frame - Chipped, Floor - Water covering floor.				X									
Sub-Area 06	SSMH-4997	244 SUMMIT STREET AT CURTIS ROAD	119.0	0	0.25 ABOVE GRADE	1	Inspected	Starter manhole.													
Sub-Area 06	SSMH-4511	245 AUBURN STREET	124.0	0	AT GRADE	24	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-4509	246 AUBURN STREET	120.5	0	AT GRADE	14	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-0551	257 SUMMIT STREET	118.0	0	AT GRADE	29	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 06	SSMH-0550	260 SUMMIT STREET	111.0	0	AT GRADE	1	Inspected	Chimney - Broken brick.													
Sub-Area 06	SSMH-5100	267 AUBURN STREET	117.5	0	AT GRADE	19	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-6493	27 ALPINE ROAD	102.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-6487	27 SUMMIT PARK AVENUE	100.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-5016	29 JACKSON STREET	93.0	0	0.1 ABOVE GRADE	11	Inspected	Cover - Manhy Holes	Cover Holes		X										
Sub-Area 06	SSMH-0549	295 SUMMIT STREET AT CLAYTON STREET	121.5	0	0.5 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 06	SSMH-1604	31 AUBURN TERRACE	80.0	0	AT GRADE	1	Inspected	Floor - Light mineral deposits.		Minerals											Seal Bench and invert
Sub-Area 06	SSMH-5012	31 CLAYTON STREET	99.0	0	AT GRADE	24	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-6488	31 SUMMIT PARK AVENUE	108.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Invert - Debris catching.												X	Clean Invert
Sub-Area 06	SSMH-0619	315 AUBURN STREET	121.5	0	AT GRADE	16	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes		X						X				Repair Chimney
Sub-Area 06	SSMH-4508	321 AUBURN STREET	126.0	0	AT GRADE	15	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-2331	33 CHRISTY ROAD	130.5	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 06	SSMH-0547	336 SUMMIT STREET	101.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 06	SSMH-2428	35 SUMMIT PARK AVENUE	87.0	0	0.25 BELOW GRADE	0	Inspected	Cover - Blind flange, Chimney - Broken brick, missing mortar.									X				Repair Brick and Mortar of Chimney
Sub-Area 06	SSMH-0179	405 AUBURN STREET	146.0	0	0.4 BELOW GRADE	23	Inspected	Chimney - Loose brick, missing mortar.			X										
Sub-Area 06	SSMH-0177	408 AUBURN STREET	141.3	0	AT GRADE	15	Inspected	Chimney - Broken and loose brick.			X						X				Repair Chimney
Sub-Area 06	SSMH-2332	41 CHRISTY ROAD	113.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 06	SSMH-0178	418 AUBURN STREET R.O.W.	99.5	0	2 BELOW GRADE	20	Inspected	No Significant Defects			X									X	Remove Roots from Incoming Line (Force Main) and Address Deteriorating Pipe
Sub-Area 06	SSMH-0513	42 AUBURN TERRACE	82.0	0	1.5 BELOW GRADE	1	Inspected	Chimney - Broken brick, missing mortar, Invert - Solids catching.			X						X				Repair Chimney
Sub-Area 06	SSMH-4514	45 HILLSIDE ROAD	77.5	0	AT GRADE	8	Inspected	No Significant Defects													
Sub-Area 06	SSMH-2434	46 ALPINE ROAD	100.5	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-0562	46 CLAYTON STREET	87.0	0	0.25 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4257	479 AUBURN STREET	102.5	0	0.25 BELOW GRADE	6	Inspected	No Significant Defects													
Sub-Area 06	SSMH-5056	49 PARSONS POND DRIVE	138.8	0	0.5 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4256	491 AUBURN STREET	89.0	0	0.3 BELOW GRADE	3	Inspected	No Significant Defects			X										
Sub-Area 06	SSMH-4942	5 LONGVIEW DRIVE	83.0	0	AT GRADE	1	Inspected	Frame - Chipped,missingpiece.				X									
Sub-Area 06	SSMH-4255	510 AUBURN STREET	99.0	0	AT GRADE	15	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-6489	52 SUMMIT PARK AVENUE	97.0	0	0.5 BELOW GRADE	0	Inspected	Cover - Blind flange.			X										
Sub-Area 06	SSMH-0561	53 CLAYTON STREET	87.0	0	AT GRADE	12	Inspected	Starter manhole.			X										
Sub-Area 06	SSMH-4953	55 AUBURN TERRACE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 06	SSMH-6483	66 JACKSON STRET	89.0	0	AT GRADE	8	Inspected	Invert - Catching solids.												X	Clean Invert
Sub-Area 06	SSMH-0185	67 ALPINE ROAD	97.0	0	0.25 BELOW GRADE	37	Inspected	Wall - Broken and missing brick.													
Sub-Area 06	SSMH-2333	67 CHRISTY ROAD	102.0	0	AT GRADE	23	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-2426	68 SUMMIT PARK AVENUE	100.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-2432	8 SUMMIT PARK AVENUE	115.5	0	0.5 BELOW GRADE	0	Inspected	Manhole in gutterline, Cover - Blind flange.			X										
Sub-Area 06	SSMH-4952	87 AUBURN TERRACE	74.3	0	3.75 BELOW GRADE	1	Inspected	Frame - Offset3", Chimney - Broken brick, missing mortar, Wall - Light mineral deposits.		Minerals	X				X		X				Repair Chimney
Sub-Area 06	SSMH-2433	90 ALPINE ROAD	99.5	0	AT GRADE	32	Inspected	Cover - Cracked pavement surrounding frame.			X										
Sub-Area 06	SSMH-2334	91 CHRISTY ROAD	100.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 06	SSMH-2427	92 SUMMIT PARK AVENUE	96.0	0	0.75 BELOW GRADE	0	Inspected	Starter manhole, Cover - Blind flange, Wall - Missing brick.			X						X				Repair Wall
Sub-Area 06	SSMH-4507	AUBURN STREET AT ALPINE ROAD	135.7	0	AT GRADE	23	Inspected	No Significant Defects			X										
Sub-Area 06	SSMH-4510	AUBURN STREET AT AUBURN TERRACE	116.7	0	AT GRADE	21	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-0620	AUBURN STREET AT CHRISTY ROAD	115.7	0	AT GRADE	31	Inspected	Many holes in cover	Cover Holes		X										

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Sub-Area 06	SSMH-0176	AUBURN STREET AT CLAYTON STREET	129.3	0	AT GRADE	21	Inspected	Invert - Solids catching.			X										
Sub-Area 06	SSMH-4253	AUBURN STREET AT HILLSIDE ROAD	112.3	0	0.25 BELOW GRADE	18	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-5015	AUBURN STREET AT JACKSON STREET	148.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 06	SSMH-1382	AUBURN STREET AT LONGVIEW DRIVE	52.0	0	0.25 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 06	SSMH-0618	AUBURN STREET AT PARSONS POND DRIVE	148.7	0	AT GRADE	4	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4505	AUBURN STREET AT SUMMIT PARK AVENUE	145.7	0	AT GRADE	22	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes		X						X				Repair Chimney
Sub-Area 06	SSMH-4254	AUBURN STREET AT SUMMIT STREET	97.5	0	AT GRADE	8	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 06	SSMH-2561	BROOKFIELD APARTMENTS	79.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Loose, Chimney - Missing mortar, Invert - Sediment catching.		X							X				Repair Chimney Mortar
Sub-Area 06	SSMH-5013	CLAYTON STREET AT KENNETH STREET	97.3	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 06	SSMH-5017	JACKSON STREET AT SUMMIT STREET	92.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick.									X				Repair Chimney
Sub-Area 06	SSMH-6484	JACKSON STRET AT KENNETH STREET	97.3	0	AT GRADE	19	Inspected	Cover - Many Holes, Frame - Chipped.	Cover Holes			X									
Sub-Area 06	SSMH-0180	PARSONS POND DRIVE	62.3	0	1 ABOVE GRADE	2	Inspected	Floor - Broken brick, missing mortar.													
Sub-Area 06	SSMH-2487	PARSONS POND DRIVE	63.0	0	2 ABOVE GRADE	3	Inspected	Starter manhole, Floor - Surcharged, Invert - Surcharged.											X		Clean Outgoing Pipe
Sub-Area 06	SSMH-5061	PARSONS POND DRIVE	100.0	0	1 ABOVE GRADE	3	Inspected	Chimney - Broken brick.													
Sub-Area 06	SSMH-5062	PARSONS POND DRIVE	62.5	0	0.75 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 06	SSMH-5057	PARSONS POND DRIVE AT BRADDISH COURT	117.5	0	0.5 ABOVE GRADE	1	Inspected	Cover - Half blind flange.													
Sub-Area 06	SSMH-5058	PARSONS POND DRIVE AT WAKELY COURT	120.7	0	0.75 ABOVE GRADE	1	Inspected	Cover - Half blind flange.													
Sub-Area 06	SSMH-0548	SUMMIT STREET AT HILLSIDE ROAD	101.0	0	0.2 BELOW GRADE	1	Inspected	Frame - Chipped.				X									
Sub-Area 06	SSMH-4513	SUMMIT STREET AT JACKSON STREET	144.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4993	SUMMIT STREET AT QUIET LANE	103.7	0	AT GRADE	3	Inspected	Invert - Catching solids.												X	Clean Invert
Sub-Area 07	SSMH-2365	18 STURDIVANT DRIVE R.O.W.	166.0	0	1 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 07	SSMH-4280	69 CARON STREET	108.0	2,880	AT GRADE	30	Inspected	Cover - Cracked pavement surrounding frame and Many Holes, Frame - Chipped, Chimney - Missing brick and mortar, broken brick, loose pieces, Wall - Leak at mouth of SW pipe at wall.	Cover Holes	Active		X			X		X				Repair Chimney
Sub-Area 07	SSMH-2385	ABBY LANE AT CLAPBOARD ROAD	88.3	0	0.25 BELOW GRADE	1	Inspected	Frame - 1"riser, Chimney - Missing mortar.			X						X				Repair Chimney Mortar
Sub-Area 07	SSMH-4967	ALICE STREET AT CRESTVIEW DRIVE	128.2	0	0.2 ABOVE GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 08	SSMH-3381	ALLEN AVENUE EASEMENT	-	0	CNL	CNL	CNL	CNL													
Sub-Area 08	SSMH-0953	KANSAS AVENUE EASEMENT	-	0	CNL	CNL	CNL	CNL													
Sub-Area 08	SSMH-5031	ROARING BROOK ROAD	-	0	CNL	CNL	CNL	CNL													
Sub-Area 08	SSMH-5022	126 ROARING BROOK ROAD EASEMENT	147.3	0	3 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 08	SSMH-2392	138 ROARINGBROOK ROAD EASEMENT	217.0	0	12 ABOVE GRADE	30	Inspected	Cover - Many Holes, Wall - Staining/Deposits	Cover Holes	Minerals		X				X					
Sub-Area 08	SSMH-3235	55 RACINE AVENUE	80.0	0	14 ABOVE GRADE	31	Inspected	Cover - Many Holes, Chimney - Missing brick and mortar, stream running into manhole.	Cover Holes			X					X				Repair Chimney
Sub-Area 08	SSMH-0187	56 ROARING BROOK ROAD	145.5	0	17 ABOVE GRADE	31	Inspected	Cover - Manhy Holes, Wall - Moderate Mineral Deposist and Staining	Cover Holes	Minerals		X				X					
Sub-Area 08	SSMH-1293	65 RACINE AVENUE (BEHIND HOME)	154.5	0	1.5 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-6030	661 ALLEN AVENUE (BEHIND HOME)	109.0	0	4 ABOVE GRADE	30	Inspected	Cover - Many Holes, Manhole is in brook.	Cover Holes			X									
Sub-Area 08	SSMH-3379	691 ALLEN AVENUE	84.7	144	15 ABOVE GRADE	31	Inspected	Cover - Many Holes, Wall - Weeping walls.	Cover Holes	Active		X				X					
Sub-Area 08	SSMH-2533	704 ALLEN AVENUE	116.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 08	SSMH-5033	82 ROARING BROOK ROAD	188.5	0	18 ABOVE GRADE	31	Inspected	Cover - Many Holes, Wall - Staining/Deposits	Cover Holes	Minerals		X				X					
Sub-Area 08	SSMH-5032	ALLEN AVENUE AT ROARING BROOK ROAD	91.7	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 08	SSMH-3380	ALLEN AVENUE EASEMENT	88.5	0	12 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-2391	CURTIS ROAD EASEMENT	139.5	0	6 ABOVE GRADE	31	Inspected	Cover - Many Holes, Wall - Staining/Deposits, Floor - Staining/Deposits	Cover Holes	Minerals		X				X					
Sub-Area 08	SSMH-4218	CURTIS ROAD EASEMENT	105.5	0	24 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-0950	KANSAS AVENUE EASEMENT	143.5	0	19 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-0951	KANSAS AVENUE EASEMENT	109.5	0	1 ABOVE GRADE	30	Inspected	Cover - Many Holes, Chimney - Mortar completely missing between frame and Chimney.	Cover Holes			X					X				Repair Chimney
Sub-Area 08	SSMH-3234	KANSAS AVENUE EASEMENT	95.5	0	2 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-3378	KANSAS AVENUE EASEMENT	102.0	0	8 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-5570	KANSAS AVENUE EASEMENT	95.7	0	2 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Lining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 08	SSMH-5023	PINELOCH DRIVE NEAR ROARING BROOK ROAD	157.3	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-0574	ROARING BROOK ROAD AT DEEPWOOD ROAD	112.6	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 08	SSMH-4219	ROARING BROOK ROAD EASEMENT	84.5	0	12 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 08	SSMH-5027	ROARING BROOK ROAD NEAR DEEPWOOD DRIVE	117.5	144	8 ABOVE GRADE	31	Inspected	Cover - Many Holes, Wall - Walls leaking, moderate mineral deposits.	Cover Holes	Active		X				X					
Sub-Area 08	SSMH-2393	ROARINGBROOK ROAD EASEMENT	209.5	0	AT GRADE	18	Inspected	Cover - Many Holes, Wall - Staining/Deposits, Floor - Staining/Deposits	Cover Holes	Minerals		X				X					
Sub-Area 09	SSMH-1541	17 HUMBOLDT STREET	153.5	0	1.3 BELOW GRADE	2	Inspected	Chimney - Missing bricks, Wall - Stains/Deposits		Minerals	X					X					
Sub-Area 09	SSMH-1547	HUNINGTON AVENUE AT TORONITA STREET	133.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-0977	HUNTINGTON AVENUE AT DAGGETT STREET	125.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 09	SSMH-4482	HUNTINGTON AVENUE AT HUMBOLDT STREET	134.0	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 09	SSMH-1540	HUNTINGTON AVENUE AT VAN VECHTEN STREET	129.3	1,800	AT GRADE	2	Inspected	Wall - Wall leak lower barrel near line from NW, mineral deposits, Floor - Floor leak near NW line.		Active						X					
Sub-Area 09	SSMH-3245	IVALOO STREET AT MARLBOROUGH ROAD	144.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-1294	MAINE AVENUE	125.0	0	AT GRADE	2	Inspected	Wall - Moderate mineral deposits.		Minerals						X					
Sub-Area 09	SSMH-1295	MAINE AVENUE EASEMENT	113.5	0	2.5 BELOW GRADE	2	Inspected	Chimney - Moderate roots, missing mortar, Wall - Wet walls.		Roots	X					X					
Sub-Area 09	SSMH-4489	MAINE AVENUE EASEMENT	106.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-3241	MARLBOROUGH ROAD AT DEMEREST STREET	142.7	0	AT GRADE	2	Inspected	Cover - Cracked and missing pavement surrounding frame.													
Sub-Area 09	SSMH-2346	MARLBOROUGH ROAD AT HUMBOLDT STREET	140.7	0	0.5 BELOW GRADE	2	Inspected	Frame - Offset4.5".			X										
Sub-Area 09	SSMH-5589	MARLBOROUGH ROAD AT HUNTINGTON AVENUE	157.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-1296	MARLBOROUGH ROAD EASEMENT	208.0	0	2 BELOW GRADE	2	Inspected	Wall - Staining/Deposits		Minerals	X					X					
Sub-Area 09	SSMH-3239	MARLBOROUGH ROAD EASEMENT	192.5	0	4 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-3256	MARLBOROUGH ROAD EASEMENT	238.5	0	AT GRADE	2	Inspected	Wall - Heavy mineral deposits on lower ring.		Minerals						X					
Sub-Area 09	SSMH-5572	MARLBOROUGH ROAD EASEMENT	151.3	1,872	AT GRADE	2	Inspected	Invert - Invert leak. Wall - Deposits, Pipe Connections - SW Capped leaking 0.1 GPM, East Capped leaking 0.2 GPM		Active						X		X			Seal Capped Connections (SW, E)
Sub-Area 09	SSMH-5573	MARLBOROUGH ROAD EASEMENT	206.5	288	4 ABOVE GRADE	2	Inspected	Wall - Walls weeping, light roots.		Active						X				X	Remove Roots
Sub-Area 09	SSMH-5574	MARLBOROUGH ROAD EASEMENT	234.5	1,080	AT GRADE	2	Inspected	Wall - Moderate mineral deposits, wall leak.		Active						X					
Sub-Area 09	SSMH-2368	PENN AVENUE	152.3	0	AT GRADE	2	Inspected	Cover - Cracked cover.				X									
Sub-Area 09	SSMH-0952	PENN AVENUE EASEMENT	106.5	0	24 ABOVE GRADE	2	Inspected	Wall - Heavy mineral deposits.		Minerals						X					
Sub-Area 09	SSMH-3238	VERMONT AVENUE	121.7	0	4 BELOW GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X								X	Remove Blockage from Inlet (SSMH-2368)
Sub-Area 10	SSMH-1622	AMMERDOWN PLACE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-3477	CORNELL STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-1663	MORRILL STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-1665	MORRILL STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-1664	PRINCETON STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-5719	UNIVERSITY STREET R.O.W	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-5724	UNIVERSITY STREET R.O.W	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-5722	WOODLAWN AVENUE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-5631	100 WOODLAWN AVENUE	90.0	0	3 BELOW GRADE	9	Inspected	Manhole in gutterline, Chimney - Broken brick.			X								X		Repair Chimney
Sub-Area 10	SSMH-0133	1066 WASHINGTON AVENUE	140.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-3282	1072 WASHINGTON AVENUE	164.3	2,160	AT GRADE	3	Inspected	Frame - Chipped, Wall - Wall leak, light mineral deposits.		Active			X		X		X				
Sub-Area 10	SSMH-3283	1072 WASHINGTON AVENUE	166.7	0	AT GRADE	3	Inspected	Chimney - Broken and loose brick, missing pieces.											X		Repair Chimney
Sub-Area 10	SSMH-6066	1085 WASHINGTON AVENUE	141.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-5613	1088 WASHINGTON AVENUE	110.5	0	AT GRADE	3	Inspected	Chimney - Broken and loose brick.											X		Repair Chimney
Sub-Area 10	SSMH-3280	1100 WASHINGTON AVENUE	92.5	0	AT GRADE	3	Inspected	Pipe Connections - NW and SW are from Drain Structures, Catch Basin Connections (2)	Drain Connections												
Sub-Area 10	SSMH-0986	1127 WASHINGTON AVENUE	103.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-0985	1137 WASHINGTON AVENUE	105.5	0	0.1 BELOW GRADE	3	Inspected	Chimney - Broken brick.											X		Repair Chimney
Sub-Area 10	SSMH-0507	114 YALE STREET	72.5	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 10	SSMH-4501	115 WASHINGTON AVENUE	100.5	0	AT GRADE	3	Inspected	No Significant Defects													

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Sub-Area 10	SSMH-0988	119 WASHINGTON AVENUE	121.5	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 10	SSMH-4545	122 WOODLAWN AVENUE	89.5	0	AT GRADE	10	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and loose brick.	Cover Holes		X						X				Repair Chimney
Sub-Area 10	SSMH-5619	124 YALE STREET	90.5	0	0.1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-5620	140 YALE STREET	99.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-3305	142 WOODLAWN AVENUE	80.0	0	0.1 BELOW GRADE	38	Inspected	Chimney - Broken, loose and missing brick, missing mortar.			X						X				Rebuild Chimney
Sub-Area 10	SSMH-4546	157 WOODLAWN AVENUE	128.0	0	0.2 BELOW GRADE	15	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose pieces.	Cover Holes		X						X				Repair Chimney
Sub-Area 10	SSMH-5621	160 YALE STREET	96.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-5721	180 WOODLAWN AVENUE	70.7	0	0.75 BELOW GRADE	19	Inspected	Cover - Many Holes, Chimney - Broken and loose brick, loose mortar.	Cover Holes		X	X						X			Repair Chimney
Sub-Area 10	SSMH-4552	189 HARVARD STREET	83.0	0	0.25 BELOW GRADE	11	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes			X						X			Repair Chimney
Sub-Area 10	SSMH-4548	20 UNIVERSITY STREET	99.5	0	AT GRADE	29	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick, missing parge, Invert - Catching solids.	Cover Holes			X						X			Repair/Rebuild Chimney
Sub-Area 10	SSMH-4551	201 HARVARD STREET	95.5	0	AT GRADE	22	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 10	SSMH-4465	235 HARVARD STREET	96.0	0	AT GRADE	8	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken and loose brick, loose and missing mortar, Invert - Root growth.						X					X		Remove Roots
Sub-Area 10	SSMH-4464	261 HARVARD STREET	102.5	0	0.75 BELOW GRADE	2	Inspected	Chimney - Broken brick, missing mortar.			X						X				Repair Chimney
Sub-Area 10	SSMH-3307	270 HARVARD STREET	103.3	0	AT GRADE	2	Inspected	Chimney - Soft and missing mortar.									X				Repair Chimney
Sub-Area 10	SSMH-4463	276 HARVARD STREET	98.5	0	0.2 BELOW GRADE	4	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.									X				Repair Chimney
Sub-Area 10	SSMH-1666	29 CAMBRIDGE STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 10	SSMH-1680	30 WOODLAWN AVENUE	97.5	0	AT GRADE	1	Inspected	Frame - Broken.				X									
Sub-Area 10	SSMH-1621	304 AMMERDOWN PLACE	100.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 10	SSMH-4553	312 CANCO ROAD R.O.W.	99.0	0	1 ABOVE GRADE	3	Inspected	Chimney - Light roots, Wall - Moderate roots, Floor - Heavy roots, Invert - Heavy roots.		Roots				X	X					X	Remove Roots
Sub-Area 10	SSMH-5579	312 CANCO ROAD R.O.W.	98.7	0	2 ABOVE GRADE	21	Inspected	Cover - Many Holes, Chimney - Missing mortar, Wall - Missing mortar, Invert - Mineral deposits, large rock in invert.	Cover Holes	Minerals		X			X					X	Remove Rock from Invert
Sub-Area 10	SSMH-5580	360 CANCO ROAD R.O.W.	99.5	432	18 ABOVE GRADE	37	Inspected	Frame - Loose, Chimney - Broken, loose and missing brick, missing mortar, Wall - Broken brick, missing mortar, weeping, Floor - Broken brick, missing mortar, weeping, Invert - Mineral deposits, weeping.		Active		X		X	X						
Sub-Area 10	SSMH-5581	360 CANCO ROAD R.O.W.	81.8	0	AT GRADE	37	Inspected	Cover - Many Holes, Wall - Missing mortar, Invert - Heavy roots and mineral deposits.	Cover Holes	Roots		X			X					X	Remove Roots
Sub-Area 10	SSMH-4549	40 UNIVERSITY STREET	109.5	0	0.3 BELOW GRADE	30	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, Invert - Catching solids.	Cover Holes			X						X		X	Repair Chimney, Clean Invert
Sub-Area 10	SSMH-3479	42 WOODLAWN AVENUE	121.7	0	1 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Broken.					X								
Sub-Area 10	SSMH-1682	43 MAGNOLIA STREET	95.0	0	1 ABOVE GRADE	1	Inspected	Cover - Cracked and missing pavement surrounding frame, Frame - Chipped, Invert - Catching solids.					X							X	Clean Invert
Sub-Area 10	SSMH-1681	53 WOODLAWN AVENUE R.O.W.	87.0	0	2 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 10	SSMH-5725	55 UNIVERSITY STREET	157.5	0	3 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 10	SSMH-4550	64 UNIVERSITY STREET	100.5	0	0.2 BELOW GRADE	30	Inspected	Cover - Many Holes, Chimney - Broken, loose and missing brick.	Cover Holes			X						X			Repair/Rebuild Chimney
Sub-Area 10	SSMH-5723	64 WOODLAWN AVENUE	87.0	0	0.2 ABOVE GRADE	1	Inspected	Starter manhole.													
Sub-Area 10	SSMH-3306	71 WOODLAWN AVENUE	67.0	0	AT GRADE	12	Inspected	Starter manhole, Chimney - Broken brick, Floor - Broken, roots growing from floor into line.		Roots		X						X		X	Remove Roots and Repair Bench
Sub-Area 10	SSMH-3278	77 AMMERDOWN PLACE	90.4	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Floor - Loose brick, missing mortar.													Repair Bench

ARCADIS Design & Consultancy for natural and built assets

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Sub-Area 10	SSMH-5720	81 UNIVERSITY STREET AT MAJORS COURT	81.3	0	0.25 BELOW GRADE	0	Inspected	Cover - Blind flange, Floor - Missing brick, Invert - Catching solids.									X			X	Repair Bench (Missing Bricks), Clean Invert
Sub-Area 10	SSMH-4544	83 WOODLAWN AVENUE	73.5	0	AT GRADE	7	Inspected	Floor - Debris covering floor.												X	Clean Bench
Sub-Area 10	SSMH-4435	9 WOODLAWN AVENUE	89.0	0	0.5 BELOW GRADE	1	Inspected	Starter manhole, Frame - Cracked.					X								
Sub-Area 10	SSMH-5618	92 YALE STREET	85.0	0	AT GRADE	3	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame.													
Sub-Area 10	SSMH-3476	CAMBRIDGE STREET AT CORNELL STREET	132.5	288	0.25 BELOW GRADE	2	Inspected	Wall - Weeping walls.		Active					X						
Sub-Area 10	SSMH-3279	HARVARD STREET AT AMMERDOWN PLACE	95.3	0	AT GRADE	31	Inspected	Cover - Many Holes, Floor - Covered in dirt.	Cover Holes			X								X	Clean Bench
Sub-Area 10	SSMH-4466	HARVARD STREET AT YALE STREET	98.7	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick.									X				Repair Chimney
Sub-Area 10	SSMH-3478	MORRILL STREET R.O.W.	153.7	0	0.25 BELOW GRADE	1	Inspected	Invert - Catching debris.												X	Clean Invert
Sub-Area 10	SSMH-4547	UNIVERSITY STREET AT MORRILL STREET	91.7	0	AT GRADE	28	Inspected	Cover - Many Holes, Invert - Full of dirt.	Cover Holes			X								X	Clean Floor
Sub-Area 10	SSMH-1067	UNIVERSITY STREET R.O.W.	93.8	720	4 ABOVE GRADE	37	Inspected	Cover - Many Holes, Wall - Mineral deposits, wall leak, Floor - Wet from wall leaks.	Cover Holes	Active		X			X						
Sub-Area 10	SSMH-1667	UNIVERSITY STREET R.O.W.	92.5	720	1 ABOVE GRADE	8	Inspected	Wall - Weeping walls, Invert - Leak at incoming line.		Active		X			X						
Sub-Area 10	SSMH-1668	UNIVERSITY STREET R.O.W.	102.0	2,160	2 ABOVE GRADE	3	Inspected	Manhole is surrounded by water and mud, Chimney - Mineral deposits, weeping, Wall - Mineral deposits, walls leaks, Floor - Mineral deposits, Invert - Mineral deposits, Pipe Connection - NW Capped Leaking 0.5 GPM		Active					X						Seal Capped Service (NW)
Sub-Area 10	SSMH-1585	WASHINGTON AVENUE AT CANCO ROAD	102.0	0	AT GRADE	3	Inspected	Starter manhole, Chimney - Loose pieces, Floor - 18" of debris, Invert - 18" of debris.												X	Clean Floor and Invert
Sub-Area 10	SSMH-4502	WASHINGTON AVENUE AT HARVARD STREET	100.0	0	0.1 BELOW GRADE	3	Inspected	Chimney - Broken and loose parge.									X				Repair Chimney
Sub-Area 10	SSMH-4447	WASHINGTON AVENUE AT RAY STREET	83.0	0	AT GRADE	3	Inspected	Wall - Light mineral deposits.		Minerals					X						
Sub-Area 10	SSMH-5632	WOODLAWN AVENUE AT MORRILL STREET	73.0	0	AT GRADE	13	Inspected	Cover - Many Holes, Catch Basin Connections (2)	Cover Holes and Drain Connections			X							X		
Sub-Area 11	SSMH-4239	BELL STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 11	SSMH-0813	FOREST AVENUE	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 11	SSMH-1673	FOREST AVENUE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 11	SSMH-0222	GOODRIDGE AVENUE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 11	SSMH-4564	MORRILL STREET AT BELL STREET	-	0	CNI	CNI	CNI	Smart Cover													
Sub-Area 11	SSMH-6106	WALTON STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 11	SSMH-4353	10 MORGAN COURT	95.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 11	SSMH-1341	11 ST. JOSEPH STREET	104.0	0	AT GRADE	5	Inspected	Starter manhole, Frame - Broken, Wall - Missing mortar, Invert - Cracked at joint.					X		X						
Sub-Area 11	SSMH-4238	1148 FOREST AVENUE	195.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-4065	1160 FOREST AVENUE	154.7	720	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Covered in mud, Wall - Weeping walls, leak at outgoing line, Floor - Broken and missing brick, missing mortar.		Active					X		X				Repair Bench
Sub-Area 11	SSMH-6234	12 POLAND STREET	90.0	0	0.25 ABOVE GRADE	3	Inspected	Manhole is in gutterline, Chimney - Missing mortar, Invert - Debris catching, break in joint.									X				Repair Chimney
Sub-Area 11	SSMH-0845	1208 FOREST AVENUE ON SIDEWALK	71.5	0	6 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 11	SSMH-0814	1209 FOREST AVENUE	104.7	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-0812	1245 FOREST AVENUE	101.5	0	AT GRADE	17	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-0819	1250 FOREST AVENUE	99.5	0	0.5 BELOW GRADE	30	Inspected	Cover - Many Holes, Cracked and missing pavement surrounding frame.	Cover Holes		X	X									
Sub-Area 11	SSMH-0816	1295 FOREST AVENUE	76.0	0	AT GRADE	3	Inspected	Chimney - Missing mortar.									X				Repair Chimney
Sub-Area 11	SSMH-6098	13 DINGLEY COURT	75.5	0	0.5 BELOW GRADE	2	Inspected	Chimney - Missing mortar, Invert - 0.2" standing flow.			X						X				Repair Chimney
Sub-Area 11	SSMH-0311	151 WALTON STREET	125.0	0	0.2 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 11	SSMH-6099	16 DINGLEY COURT	97.5	0	1 ABOVE GRADE	2	Inspected	Chimney - Missing mortar.									X				Repair Chimney
Sub-Area 11	SSMH-0310	166 WALTON STREET	98.7	0	AT GRADE	2	Inspected	Chimney - Loose brick.									X				Repair Chimney
Sub-Area 11	SSMH-6564	17 ARBOR STREET	109.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 11	SSMH-1890	203 WALTON STREET	113.0	0	0.2 BELOW GRADE	3	Inspected	Wall - Moderate mineral deposits.		Minerals					X						
Sub-Area 11	SSMH-1900	21 WAVERLY STREET	89.0	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Invert - Joint seperated.	Cover Holes			X						X			Repair Invert

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Lining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 11	SSMH-6078	22 POLAND STREET	88.3	0	0.25 ABOVE GRADE	1	Inspected	Invert - Large crack at joint.									X				Repair Invert (Fracture)
Sub-Area 11	SSMH-1891	223 WALTON STREET	100.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 11	SSMH-1064	24 ARBOR STREET	111.5	0	AT GRADE	24	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Floor - Missing mortar.	Cover Holes			X					X				Repair Bench
Sub-Area 11	SSMH-4063	24 MORRILL STREET	181.0	2,880	AT GRADE	0	Inspected	Cover - Blind flange, Wall - 1 GPM pipe leak and 2 GPM leak at anchor hole in wall.		Active					X						
Sub-Area 11	SSMH-3473	241 WALTON STREET	99.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 11	SSMH-1066	250 READ STREET	206.5	288	0.75 BELOW GRADE	1	Inspected	Manhole in gutterline, Wall - Wall leaks.		Active	X				X						
Sub-Area 11	SSMH-1670	250 READ STREET	81.0	0	AT GRADE	3	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-1669	256 READ STREET	129.5	0	AT GRADE	23	Inspected	Cover - Many Holes, Frame - Chipped, Invert - Full of debris, restricting flow.	Cover Holes				X							X	Clean Invert
Sub-Area 11	SSMH-3471	259 WALTON STREET	100.5	0	AT GRADE	24	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-0904	26 ELEANOR STREET	-	0	CNI	CNI	CNI	CNI													
Sub-Area 11	SSMH-4349	271 WALTON STREET	117.0	0	AT GRADE	32	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, Invert - Missing mortar at joint.	Cover Holes			X						X			Repair Chimney and Invert
Sub-Area 11	SSMH-1894	275 WALTON STREET	104.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-0934	28 ALLEN AVENUE	78.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Broken.					X								
Sub-Area 11	SSMH-1889	28 TREMAINE STREET	83.5	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-6008	293 READ STREET	59.0	0	AT GRADE	0	Inspected	Starter manhole, Cover - Blind flange.													
Sub-Area 11	SSMH-1671	3 ADELAIDE STREET	97.0	0	AT GRADE	34	Inspected	Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Floor - Could not thouroughly inspect, covered in debris, Invert - Debris.	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 11	SSMH-4355	30 ELMWOOD STREET	87.0	0	0.25 BELOW GRADE	27	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and missing brick.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-4348	30 ST. JOSEPH STREET	101.5	0	AT GRADE	29	Inspected	Cover - Many Holes, Invert - Missing mortar.	Cover Holes			X						X			Repair invert
Sub-Area 11	SSMH-6063	33 ALLEN AVENUE	68.7	0	0.5 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.			X										
Sub-Area 11	SSMH-0319	33 COLLEGE STREET	90.7	0	AT GRADE	19	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-6233	36 POLAND STREET	83.5	0	0.2 ABOVE GRADE	8	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Loose brick, loose and missing mortar.									X				Repair Chimney
Sub-Area 11	SSMH-1901	42 WAVERLY STREET	95.5	0	AT GRADE	12	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose pieces.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-0935	50 ALLEN AVENUE	86.5	0	AT GRADE	38	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-6064	50 ALLEN AVENUE	91.0	0	AT GRADE	29	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-4691	51 COLLEGE STREET (BEHIND)	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 11	SSMH-1062	54 TREMAINE STREET	71.0	0	AT GRADE	30	Inspected	Cover - Many Holes, Invert - 1.5" debris.	Cover Holes			X								X	Clean Floor
Sub-Area 11	SSMH-1897	55 ELMWOOD STREET	91.0	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar.									X				Repair/Rebuild Chimney
Sub-Area 11	SSMH-6062	6 ALLEN AVENUE	85.3	0	0.1 BELOW GRADE	1	Inspected	Floor - 3" of dirt, Invert - Restricted flow, grease back up. Storm Drain Connections (2)	Drain Connections									X	X		
Sub-Area 11	SSMH-1386	673 STEVENS AVENUE	83.0	0	AT GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-4436	70 ALLEN AVENUE	99.0	0	AT GRADE	14	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-4690	74 COLLEGE STREET AT STEVENS AVENUE	-	0	CNI	CNI	CNI	Cover cracked				X									

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Sub-Area 11	SSMH-4354	751 STEVENS AVENUE	97.5	0	3 BELOW GRADE	37	Inspected	Cover - Many Holes, Frame - Missingasphalt, Chimney - Broken and loose brick, missing mortar.	Cover Holes		X	X									
Sub-Area 11	SSMH-4119	772 STEVENS AVENUE	113.5	0	AT GRADE	39	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-1904	788 STEVENS AVENUE	110.0	0	AT GRADE	37	Inspected	Cover - Many Holes, Highpoint manhole, Cover - Many Holes, Cracked pavement surrounding frame, Wall - Large gap in mortar.	Cover Holes			X			X						
Sub-Area 11	SSMH-4692	79 COLLEGE STREET	68.0	0	AT GRADE	0	Inspected	Starter manhole.													
Sub-Area 11	SSMH-1903	798 STEVENS AVENUE	104.8	0	0.5 BELOW GRADE	15	Inspected	Cover - Many Holes, Invert seems to have been changed several times over the years. There are numerous rough spots for rags to catch. The dirt is being undermined under the floor because the invert is not sealed well., Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar, Floor - Missing mortar, dirt underneath undermined - see notes, Invert - Catching solids.	Cover Holes		X	X						X			Repair/Rebuild Bench and Invert
Sub-Area 11	SSMH-4563	80 BELL STREET	212.0	13,680	AT GRADE	23	Inspected	Cover - Many Holes, Wall - Multiple leaks, Floor - Multiple leaks, missing brick and mortar.	Cover Holes	Active		X			X	X					
Sub-Area 11	SSMH-1906	812 STEVENS AVENUE	108.5	0	AT GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar.	Cover Holes			X		X				X			Repair Chimney
Sub-Area 11	SSMH-1907	832 STEVENS AVENUE	101.5	0	AT GRADE	2	Inspected	Chimney - Covered in mud.													
Sub-Area 11	SSMH-6105	945 FOREST AVENUE	92.7	0	0.5 BELOW GRADE	2	Inspected	Wall - Aggregate exposed.			X				X		X				
Sub-Area 11	SSMH-6107	945 FOREST AVENUE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 11	SSMH-1887	964 FOREST AVENUE	119.0	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Broken, Wall - Weeping walls.		Active			X		X						
Sub-Area 11	SSMH-4091	991 FOREST AVENUE	93.0	0	0.5 BELOW GRADE	35	Inspected	Cover - Many Holes, Chimney - Loose brick, missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-0815	ALLEN AVENUE AT FOREST AVENUE	114.5	0	9 ABOVE GRADE	3	Inspected	Chimney - Loose and missing brick, loose and missing mortar.										X			Repair Chimney
Sub-Area 11	SSMH-4562	BELL STREET AT ADELAIDE STREET	205.7	0	AT GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 11	SSMH-4565	BELL STREET AT READ STREET	138.7	0	AT GRADE	32	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 11	SSMH-1278	BELL STREET R.O.W.	144.5	0	AT GRADE	19	Inspected	Cover - Many Holes, Invert - Light mineral deposits.	Cover Holes	Minerals		X				X					
Sub-Area 11	SSMH-3470	BELL STREET R.O.W.	110.0	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 11	SSMH-5718	BELL STREET R.O.W.	121.0	0	0.2 BELOW GRADE	31	Inspected	Cover - Many Holes, Wall - Light mineral deposits.	Cover Holes	Minerals		X			X						
Sub-Area 11	SSMH-6004	BELL STREET R.O.W.	132.0	0	0.2 ABOVE GRADE	2	Inspected	Wall - Heavy mineral deposits, Floor - Standing water, heavy mineral deposits, Invert - Heavy mineral deposits.		Minerals					X						
Sub-Area 11	SSMH-6005	BELL STREET R.O.W.	132.0	4,320	0.5 BELOW GRADE	36	Inspected	Cover - Many Holes, Wall - Broken brick, missing mortar, missing pieces, Floor - 2GPM leak and 1GPM leak at incoming line, missing mortar.	Cover Holes	Active	X	X			X	X					
Sub-Area 11	SSMH-6079	BELL STREET R.O.W.	130.5	0	2 BELOW GRADE	17	Inspected	Cover - Many Holes, Frame - Sinkingintoground, Wall - Weeping walls, Floor - Broken pieces, loose brick, missing mortar, Invert - Missing mortar.	Cover Holes	Active	X	X			X						
Sub-Area 11	SSMH-0318	COLLEGE STREET AT LINNELL HALL	97.0	0	AT GRADE	23	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar, Floor - Cracked and loose brick, missing mortar.	Cover Holes			X						X			Repair Bench
Sub-Area 11	SSMH-4688	ELMWOOD STREET AT FOREST AVENUE	88.5	0	AT GRADE	38	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Missing mortar, Invert - Light mineral deposits.	Cover Holes	Minerals		X			X						
Sub-Area 11	SSMH-4689	ELMWOOD STREET AT FOREST AVENUE	110.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Wall - Light mineral deposits.		Minerals					X						

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Sub-Area 11	SSMH-1898	ELMWOOD STREET AT STEVENS AVENUE	93.0	0	0.25 BELOW GRADE	37	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar, Invert - 4" debris.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-1674	FOREST AVENUE AT ARBOR STREET	102.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Wall - Missing mortar, Floor - Dirt and debris.	Cover Holes			X						X		X	Clean Bench, Repair Walls
Sub-Area 11	SSMH-5356	FOREST AVENUE AT MAGGIE LANE	93.5	0	AT GRADE	3	Inspected	Chimney - Missing mortar.										X			Repair Chimney
Sub-Area 11	SSMH-1672	FOREST AVENUE AT MORRIL STREET	95.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Covered in mud, Wall - Covered in mud. Catch Basin Connections (2)	Drain Connections												
Sub-Area 11	SSMH-0315	FOREST AVENUE AT POLAND STREET	103.0	0	0.5 ABOVE GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Missing mortar, Floor - Loose and missing brick, missing mortar.	Cover Holes			X			X			X			Repair Bench
Sub-Area 11	SSMH-0316	FOREST AVENUE AT POLAND STREET	67.7	0	0.25 ABOVE GRADE	37	Inspected	Cover - Many Holes, Floor - Missing mortar.	Cover Holes			X						X			Repair Bench
Sub-Area 11	SSMH-0220	FOREST AVENUE AT STEVENS AVENUE	126.0	0	AT GRADE	3	Inspected	Cover - Cracked and missing pavement surrounding frame, Chimney - Broken brick, missing mortar, Floor - Mineral deposits.		Minerals					X			X			Repair Chimney
Sub-Area 11	SSMH-1908	FOREST AVENUE AT STEVENS AVENUE	80.7	0	AT GRADE	3	Inspected	Chimney - Broken brick, missing mortar, Catch Basin Connection	Drain Connections									X			Repair Chimney
Sub-Area 11	SSMH-1888	FOREST AVENUE AT TREMAINE STREET	94.0	0	0.5 BELOW GRADE	30	Inspected	Cover - Many Holes, Cracked and missing pavement surrounding frame, Frame - Chipped.	Cover Holes		X		X								
Sub-Area 11	SSMH-0308	FOREST AVENUE AT WALTON STREET	101.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-0309	FOREST AVENUE AT WALTON STREET	112.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 11	SSMH-3475	FOREST AVENUE AT WALTON STREET	127.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Closed line running through manhole, coming from Forest Avenue.	Cover Holes			X									
Sub-Area 11	SSMH-1899	FOREST AVENUE AT WAVERLY STREET	104.3	0	1 BELOW GRADE	34	Inspected	Cover - Many Holes, Cracked and missing pavement surrounding frame, Chimney - Loose pieces.	Cover Holes		X	X						X			Repair Chimney
Sub-Area 11	SSMH-1065	READ STREET AT BELL STREET	182.7	0	AT GRADE	0	Inspected	Cover - Cracked pavement surrounding frame, blind flange, Wall - Weeping walls.		Active					X						
Sub-Area 11	SSMH-0317	STEVENS AVENUE AT COLLEGE STREET	106.3	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken, loose and missing bricks, missing mortar, large cracks, Wall - Missing parging.	Cover Holes			X			X						
Sub-Area 11	SSMH-1895	STEVENS AVENUE AT ELMWOOD STREET	75.7	0	AT GRADE	2	Inspected	Highpoint manhole, Cover - Cracked pavement surrounding frame, Chimney - Completely deteriorated, almost non-existent.										X			Rebuild Chimney
Sub-Area 11	SSMH-1892	STEVENS AVENUE AT WALTON STREET	88.0	0	AT GRADE	37	Inspected	Cover - Many Holes, Chimney - Loose brick, missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-1896	STEVENS AVENUE AT WAVERLY STREET	106.8	0	0.5 BELOW GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Broken,largecracks, Chimney - Broken, loose and missing brick, missing mortar, large cracks.	Cover Holes				X					X			Rebuild Chimney
Sub-Area 11	SSMH-1905	STEVENS AVENUE NEAR POLAND STREET	93.7	0	1 BELOW GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.	Cover Holes		X	X						X			Repair Chimney
Sub-Area 11	SSMH-1063	TREMAINE STREET AT FOREST AVENUE	79.5	0	AT GRADE	21	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing and loose pieces, Wall - Weeping walls.	Cover Holes	Active		X		X	X						
Sub-Area 11	SSMH-3472	WALTON STREET AT DINGLEY COURT	107.0	0	AT GRADE	2	Inspected	Chimney - Loose brick, missing mortar.													
Sub-Area 11	SSMH-3474	WALTON STREET AT MORGAN COURT	105.8	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 11	SSMH-1893	WALTON STREET AT STEVENS AVENUE	121.3	0	AT GRADE	18	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-0314	WAVERLY STREET AT STEVENS AVENUE	109.5	0	AT GRADE	28	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X		X						X	Remove Roots
Sub-Area 12	SSMH-3594	33 WELLINGTON ROAD	102.8	0	0.2 ABOVE GRADE	15	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 12	SSMH-1118	79 GLECKLER ROAD	89.0	0	AT GRADE	2	Inspected	Wall - Broken brick.													

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Sub-Area 12	SSMH-3593	OCEAN AVENUE AT WELLINGTON ROAD	106.0	0	AT GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Chipped.	Cover Holes			X					X				Repair Capped Service (Leaking)
Sub-Area 14	SSMH-0846	RIVERSIDE STREET - FIRESIDE INN	-	0	CNL	CNL	CNL	CNL													
Sub-Area 14	SSMH-3013	155 RIVERSIDE STREET - RAMADA INN PARKING LOT	147.3	0	4 ABOVE GRADE	15	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 14	SSMH-2785	17 GORGES STREET	87.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 14	SSMH-5361	200 RIVERSIDE STREET	80.3	0	AT GRADE	2	Inspected	Cover - Blind flange.													
Sub-Area 14	SSMH-4073	HOLM AVENUE EASEMENT	141.5	0	36 ABOVE GRADE	29	Inspected	Cover - Many Holes, Frame - Restingonprecastwall.	Cover Holes		X										
Sub-Area 14	SSMH-0844	RIVERSIDE STREET	124.0	0	5 BELOW GRADE	28	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 14	SSMH-2722	TAFT AVENUE AT DALE STREET	92.3	0	0.5 BELOW GRADE	1	Inspected	Wall - Wet walls, mineral deposits.		Minerals	X			X							
Sub-Area 14	SSMH-2723	TAFT AVENUE AT POE STREET	93.5	0	AT GRADE	31	Inspected	Cover - Many Holes, Wall - Walls weeping.	Cover Holes	Active		X		X							
Sub-Area 15	SSMH-2755	104 CANDLEWYCK TERRACE	157.3	720	AT GRADE	3	Inspected	Wall - Wall leak, Floor - Debris on bench, Invert - Concrete debris restricting flow, catching rags.		Active					X				X	Clean Bench and Invert
Sub-Area 15	SSMH-2720	158 WARWICK STREET	262.8	0	AT GRADE	2	Inspected	Wall - Bottom 4' is brick.													
Sub-Area 15	SSMH-2768	158 WARWICK STREET	294.3	0	AT GRADE	2	Inspected	Floor - Surcharged, Invert - Surcharged.												X	Manhole Surcharged
Sub-Area 15	SSMH-0671	197 PINECREST ROAD	97.3	0	AT GRADE	1	Inspected	Frame - Offset4", Chimney - Loose pieces, missing mortar.			X						X				Repair Chimney
Sub-Area 15	SSMH-5188	20 CEDARHURST LANE EASEMENT	123.5	0	8 ABOVE GRADE	38	Inspected	Cover - Many Holes, Wall - Light roots, wet walls.	Cover Holes	Roots		X			X					X	Remove Roots
Sub-Area 15	SSMH-2702	31 SUNSET LANE	217.3	0	0.5 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 15	SSMH-5213	95 DENNETT STREET	145.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Floor - Debris.													
Sub-Area 15	SSMH-2766	CANDLEWYCK TERRACE	109.0	0	19 ABOVE GRADE	37	Inspected	Cover - Many Holes, Chimney - Corroded bricks and mortar, Wall - Light roots.	Cover Holes	Roots		X				X	X				Repair Chimney
Sub-Area 15	SSMH-2763	CANDLEWYCK TERRACE R.O.W.	98.5	0	19 ABOVE GRADE	37	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes			X					X				Repair Chimney
Sub-Area 15	SSMH-2764	CANDLEWYCK TERRACE R.O.W.	172.5	0	14 ABOVE GRADE	37	Inspected	Cover - Many Holes, Wall - Light roots, Floor - Rocks on floor, Invert - Debris blocking invert.	Cover Holes	Roots		X			X				X	Remove Roots, Clean Bench and Invert
Sub-Area 15	SSMH-2765	CANDLEWYCK TERRACE R.O.W.	125.0	0	3 ABOVE GRADE	37	Inspected	Cover - Many Holes, Wall - Roots, Floor - Roots.	Cover Holes	Roots		X			X				X	Remove Roots
Sub-Area 15	SSMH-0927	DENNETT STREET R.O.W.	117.5	0	16 ABOVE GRADE	25	Inspected	Cover - Many Holes, Floor - Debris on floor.	Cover Holes			X							X	Clean Bench
Sub-Area 15	SSMH-6213	GLEN HAVEN ROAD WEST R.O.W.	119.5	0	11 ABOVE GRADE	37	Inspected	Cover - Many Holes, Floor - Debris.	Cover Holes			X							X	Clean Bench
Sub-Area 15	SSMH-5214	LONGWOOD TERRACE R.O.W.	102.5	0	9 ABOVE GRADE	37	Inspected	Cover - Many Holes	Cover Holes			X								
Sub-Area 15	SSMH-6208	PENWOOD DRIVE EASEMENT	118.0	0	27 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X								
Sub-Area 15	SSMH-6209	PENWOOD DRIVE EASEMENT	122.3	144	44 ABOVE GRADE	30	Inspected	Cover - Many Holes, Floor - Weeping.	Cover Holes	Active		X		X						
Sub-Area 15	SSMH-6210	PENWOOD DRIVE EASEMENT	137.5	0	12 ABOVE GRADE	36	Inspected	Cover - Many Holes	Cover Holes			X								
Sub-Area 15	SSMH-6211	PINEBROOK LANE R.O.W.	123.0	0	4 ABOVE GRADE	37	Inspected	Cover - Many Holes	Cover Holes			X								
Sub-Area 15	SSMH-6212	PINEBROOK LANE R.O.W.	121.5	0	7 ABOVE GRADE	37	Inspected	Cover - Many Holes, Floor - Debris on floor.	Cover Holes			X							X	Clean Bench
Sub-Area 15	SSMH-6207	PINEWOOD LANE R.O.W.	106.3	720	14 ABOVE GRADE	21	Inspected	Cover - Many Holes, Wall - Wall leak, light roots, Floor - Heavy roots.	Cover Holes	Active		X			X				X	Remove Roots
Sub-Area 15	SSMH-6218	WARWICK STREET AT GLEN HAVEN ROAD	77.5	0	AT GRADE	2	Inspected	Catch Basin Connections (2)	Drain Connections												
Sub-Area 15	SSMH-2767	WARWICK STREET R.O.W.	111.5	0	6 ABOVE GRADE	37	Inspected	Cover - Many Holes, Chimney - Broken brick, Floor - Dirt on floor.	Cover Holes			X					X				Repair Chimney
Sub-Area 15	SSMH-6214	WARWICK STREET R.O.W.	132.3	0	4 ABOVE GRADE	37	Inspected	Cover - Many Holes, Invert - 2" of debris.	Cover Holes			X							X	Clean Invert
Sub-Area 16	SSMH-5249	BRENTWOOD STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 16	SSMH-6097	LELAND STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 16	SSMH-5219	LUDLOW STREET AT HAMBLET AVENUE	-	0	CNI	CNI	CNI	Cover cracked				X									
Sub-Area 16	SSMH-4684	100 BRENTWOOD STREET	101.0	0	AT GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-2844	103 ALBA STREET	69.0	0	AT GRADE	22	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2858	108 MADELINE STREET	96.5	0	0.25 BELOW GRADE	12	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick.	Cover Holes			X					X				Repair Chimney
Sub-Area 16	SSMH-2811	11 PHIPPS ROAD	80.0	0	3 ABOVE GRADE	1	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Floor - 1.5" Debris on floor, Invert - Full of debris.												X	Clean Bench and Invert
Sub-Area 16	SSMH-2812	11 PHIPPS ROAD	104.5	0	0.75 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Wall - Heavily weeping walls, light mineral deposits.		Active	X			X							
Sub-Area 16	SSMH-0744	12 CROSBY STREET	75.5	0	AT GRADE	18	Inspected	Cover - Many Holes, Floor - Heavy debris on floor.	Cover Holes			X							X	Clean Bench

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Lining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 16	SSMH-3216	12 HALE STREET	89.0	0	0.5 BELOW GRADE	1	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Wall - Weeping walls, Invert - 1" debris.		Active	X					X				X	Clean Invert
Sub-Area 16	SSMH-2829	12 NEWMAN STREET	84.5	0	0.2 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick.									X				Repair Chimney
Sub-Area 16	SSMH-5271	122 MABEL STREET	96.5	0	AT GRADE	16	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Weeping walls.	Cover Holes	Active		X			X						
Sub-Area 16	SSMH-2857	128 MADELINE STREET	60.0	0	1 BELOW GRADE	13	Inspected	Cover - Many Holes, Chimney - Broken brick, missing mortar.	Cover Holes		X	X					X				Repair Chimney
Sub-Area 16	SSMH-2853	150 LUDLOW STREET	125.5	0	0.2 ABOVE GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped.					X								
Sub-Area 16	SSMH-2838	16 NEW STREET	68.5	0	AT GRADE	3	Inspected	Chimney - Missing pieces.									X				Repair Chimney
Sub-Area 16	SSMH-2852	168 LUDLOW STREET	106.7	2,160	0.2 ABOVE GRADE	26	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Chipped, Wall - Moderate mineral deposits, large root ball at seam of floor, Floor - Missing mortar, Invert - Root growing from wall into invert.	Cover Holes	Minerals			X		X					X	Remove Roots
Sub-Area 16	SSMH-0737	17 WINGATE DRIVE	102.5	0	0.5 ABOVE GRADE	30	Inspected	Cover - Many Holes, Lamped 15' up line from South, did not see any lines tied into it - very clear and fast flow, Chimney - Missing mortar.	Cover Holes			X									
Sub-Area 16	SSMH-5250	178 BRENTWOOD STREET	84.0	0	0.5 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 16	SSMH-2851	182 LUDLOW STREET	126.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick.									X				Repair Chimney
Sub-Area 16	SSMH-0246	19 MABEL STREET	87.0	0	1.5 BELOW GRADE	21	Inspected	Cover - Many Holes, One side of frame is sunken 1.5" due to Chimney deterioration, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick, missing mortar, Invert - Broken in several places, causing flow to back up.	Cover Holes		X	X					X			X	Clean Invert and Bench, Repair Invert
Sub-Area 16	SSMH-2778	219 LUDLOW STREET	128.5	0	AT GRADE	4	Inspected	Frame - Chipped.					X								
Sub-Area 16	SSMH-5221	226 LUDLOW STREET	166.0	0	AT GRADE	2	Inspected	Frame - Chipped.					X								
Sub-Area 16	SSMH-2776	226 LUDLOW STREET R.O.W.	180.3	0	1 BELOW GRADE	32	Inspected	Cover - Many Holes	Cover Holes		X	X									
Sub-Area 16	SSMH-5222	236 LUDLOW STREET	85.5	0	AT GRADE	3	Inspected	Frame - Chipped.					X								
Sub-Area 16	SSMH-2796	25 PHIPPS ROAD	85.0	0	AT GRADE	1	Inspected	Chimney - Missing mortar, Invert - 1.5" standing flow.									X				Repair Chimney
Sub-Area 16	SSMH-6377	25 RICHARDSON STREET	93.5	0	0.2 ABOVE GRADE	30	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar.	Cover Holes			X					X				Repair Chimney
Sub-Area 16	SSMH-5220	253 LUDLOW STREET	92.5	0	AT GRADE	0	Inspected	Frame - Chipped, Chimney - Broken and missing brick.					X				X				Repair Chimney
Sub-Area 16	SSMH-5256	26 CONCORD STREET WEST	105.0	720	AT GRADE	3	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Invert - Leak at seam.		Active					X						
Sub-Area 16	SSMH-2784	26 PHIPPS ROAD	92.7	0	0.75 BELOW GRADE	2	Inspected	Below Grade			X										
Sub-Area 16	SSMH-0754	28 LEONARD STREET	97.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-2831	29 BEDELL STREET	98.0	0	0.25 BELOW GRADE	3	Inspected	Starter manhole, Chimney - Broken brick, Wall - Light roots.		Roots					X					X	Remove Roots
Sub-Area 16	SSMH-4324	31 ALBA STREET	92.5	0	AT GRADE	38	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2865	33 BARTLETT STREET	89.8	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Floor - Broken, Invert - Broken, piece blocking incoming line.	Cover Holes			X								X	Rebuild Bench and Invert
Sub-Area 16	SSMH-2797	33 PHIPPS ROAD	84.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 16	SSMH-0758	34 HAMBLET AVENUE AT BARTLET STREET	89.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick. Catch Basin Connections (2)	Drain Connections								X				Repair Chimney
Sub-Area 16	SSMH-0731	34 PHIPPS ROAD	93.5	0	AT GRADE	2	Inspected	Chimney - Missing mortar.													
Sub-Area 16	SSMH-2862	35 HALE STREET	130.0	288	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Broken, Wall - Wall leak.	Cover Holes	Active			X			X					
Sub-Area 16	SSMH-4326	35 MABEL STREET	87.5	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2867	41 BARTLETT STREET R.O.W.	192.5	0	4 ABOVE GRADE	25	Inspected	Cover - Many Holes, Wall - Weeping walls.	Cover Holes	Active		X			X						

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Sub-Area 16	SSMH-2839	44 RICHARDSON STREET	78.5	0	0.2 ABOVE GRADE	29	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-5238	49 WINGATE DRIVE	98.3	0	0.25 ABOVE GRADE	2	Inspected	Chimney - Broken brick, missing mortar, Wall - Missing pieces, Invert - Standing solids.									X			X	Repair Chimney and Wall, Clean Invert
Sub-Area 16	SSMH-0759	5 HAMBLET AVENUE AT MADELINE STREET	95.0	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Loose, Chimney - Broken and missing brick, Loose and missing mortar, Wall - Weeping walls.	Cover Holes	Active		X		X	X						
Sub-Area 16	SSMH-5239	50 WINGATE DRIVE	99.5	0	1.5 BELOW GRADE	2	Inspected	In gutterline.			X										
Sub-Area 16	SSMH-2864	53 BARTLETT STREET	119.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 16	SSMH-6080	54 BRENTWOOD STREET	72.0	0	0.75 BELOW GRADE	23	Inspected	Cover - Many Holes, Chimney - Broken, loose and missing brick, missing mortar, missing pieces, Invert - Full of debris.	Cover Holes		X	X						X		X	Clean Bench and Invert, Repair Chimney
Sub-Area 16	SSMH-4323	55 ALBA STREET	85.0	0	0.2 ABOVE GRADE	11	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2863	55 HALE STREET	79.0	0	AT GRADE	31	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Invert - 1" debris.	Cover Holes			X									X	Clean Invert
Sub-Area 16	SSMH-2799	55 WINGATE DRIVE	104.5	0	0.25 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 16	SSMH-0245	56 ALBA STREET	86.0	0	AT GRADE	8	Inspected	Starter manhole.													
Sub-Area 16	SSMH-5254	57 LELAND STREET	92.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 16	SSMH-4325	59 MABEL STREET	89.5	0	AT GRADE	29	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes			X						X			Repair Chimney
Sub-Area 16	SSMH-5247	59 PHIPPS ROAD	74.0	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 16	SSMH-0736	62 JEANNE STREET	78.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Invert - 1.5" debris.												X	Clean Invert
Sub-Area 16	SSMH-5240	62 WINGATE DRIVE	101.0	0	0.5 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.			X										
Sub-Area 16	SSMH-2807	70 JEANNE STREET	89.0	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick, Floor - Missing mortar, Invert - Missing mortar, broken brick, piece missing at outgoing line.										X			Repair Bench and Invert
Sub-Area 16	SSMH-4597	74 HAMBLET AVENUE AT MABEL STREET	101.5	0	AT GRADE	23	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Light roots, weeping walls, Floor - Missing mortar.	Cover Holes	Active		X			X					X	Remove Roots
Sub-Area 16	SSMH-0752	77 BRENTWOOD STREET	90.0	0	AT GRADE	30	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-2868	83 MADELINE STREET	116.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Floor - Covered with debris.	Cover Holes			X								X	Clean Bench
Sub-Area 16	SSMH-0751.1	86 LELAND STREET	71.3	0	0.25 BELOW GRADE	3	Inspected	No Significant Defects													
Sub-Area 16	SSMH-2866	9 BARTLETT STREET	106.0	0	0.5 ABOVE GRADE	3	Inspected	Starter manhole, Wall - Light mineral deposits, Invert - Full of debris.		Minerals					X					X	Clean Invert
Sub-Area 16	SSMH-2832	9 BEDELL STREET	100.5	0	0.25 BELOW GRADE	14	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick.	Cover Holes			X							X		Repair Chimney
Sub-Area 16	SSMH-4596	92 HAMBLET AVENUE AT ALBA STREET	95.5	0	1 ABOVE GRADE	33	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose and broken brick, missing mortar, Wall - Weeping walls.	Cover Holes	Active		X		X	X						
Sub-Area 16	SSMH-5272	99 MABEL STREET	102.5	0	0.75 BELOW GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-0749	ALBA STREET AT BEST STREET	101.5	0	AT GRADE	37	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2836	BEST STREET AT LEONARD STREET	94.0	0	AT GRADE	3	Inspected	Starter manhole, Chimney - Broken brick, missing mortar.											X		Repair Chimney
Sub-Area 16	SSMH-2835	BEST STREET AT RICHARDSON STREET	72.0	0	AT GRADE	12	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and loose pieces.	Cover Holes			X							X		Repair Chimney
Sub-Area 16	SSMH-2833	BRENTWOOD STREET AT BEDELL STREET	101.3	0	0.2 BELOW GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar.	Cover Holes			X							X		Repair Chimney
Sub-Area 16	SSMH-2834	BRENTWOOD STREET AT BEST STREET	115.0	0	0.2 BELOW GRADE	22	Inspected	Cover - Many Holes, Chimney - Broken and missing brick, missing mortar.	Cover Holes			X							X		Repair Chimney

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Sub-Area 16	SSMH-5251	BRENTWOOD STREET AT HAMBLET AVENUE	105.3	0	AT GRADE	7	Inspected	Chimney - Broken, loose, missing and soft brick, missing mortar, Wall - Broken and missing brick, missing mortar, Floor - Missing brick and mortar.						X							
Sub-Area 16	SSMH-2828	BRENTWOOD STREET AT NEWMAN STRRET	92.0	0	AT GRADE	7	Inspected	Chimney - Broken and loose brick.									X				Repair Chimney
Sub-Area 16	SSMH-1755	COLUMBIA ROAD AT LEE MAN STREET	72.0	0	AT GRADE	34	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Floor - Covered in 1.5" of debris, Invert - Covered in 1.5" of debris.	Cover Holes		X									X	Clean Bench and Invert
Sub-Area 16	SSMH-1754	COLUMBIA ROAD AT MERRIAM STREET	85.5	0	0.75 ABOVE GRADE	14	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Crackedthrough.	Cover Holes			X									
Sub-Area 16	SSMH-0753	CROSBY STREET AT LELAND STREET	92.0	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 16	SSMH-0756	FULLER STREET AT BARTLETT STREET	108.5	0	AT GRADE	7	Inspected	Chimney - Broken brick.									X				Repair Chimney
Sub-Area 16	SSMH-2869	FULLER STREET AT HALE STREET	98.0	0	0.25 ABOVE GRADE	36	Inspected	Cover - Many Holes, Frame - Chipped.	Cover Holes			X									
Sub-Area 16	SSMH-0755	FULLER STREET AT MADELINE STREET	107.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 16	SSMH-0757	HAMBLET AVENUE AT HALE STREET	71.5	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick. Catch Basin Connection (2)	Cover Holes and Drain Connections								X				Repair Chimney
Sub-Area 16	SSMH-2808	JEANNE STREET AT PHIPPS ROAD	101.0	288	AT GRADE	26	Inspected	Cover - Many Holes, Frame - Chipped, Wall - Weeping walls, light mineral deposits. Storm Drain Connection	Cover Holes and Drain Connections	Active		X		X							
Sub-Area 16	SSMH-2809	JEANNE STREET AT WINGATE ROAD	74.5	0	0.25 ABOVE GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Chipped, Chimney - Broken brick, Wall - Broken brick, Floor - Missing mortar, Invert - Missing mortar.	Cover Holes			X		X							
Sub-Area 16	SSMH-2827	LELAND STREET AT ACCESS ROAD	94.0	0	AT GRADE	36	Inspected	Cover - Many Holes, Catch Basin Connection	Cover Holes and Drain Connections		X								X		
Sub-Area 16	SSMH-0751	LELAND STREET AT BRENTWOOD STREET	75.0	0	AT GRADE	29	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 16	SSMH-5270	LELAND STREET AT CONCORD STREET WEST	115.3	0	AT GRADE	35	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Light mineral deposits.	Cover Holes	Minerals	X			X							
Sub-Area 16	SSMH-1325	LELAND STREET AT CROSBY STREET	112.3	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Wall - Moderate roots.		Roots					X					X	Remove Roots
Sub-Area 16	SSMH-6082	LELAND STREET AT LEONARD STREET	101.7	0	0.75 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.			X										
Sub-Area 16	SSMH-5275	LELAND STREET AT LUDLOW STREET	84.3	0	0.2 ABOVE GRADE	32	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing pieces. Drain Lines Connections (2)	Cover Holes and Drain Connections		X						X				Repair Chimney
Sub-Area 16	SSMH-2843	LELAND STREET AT MABEL STREET	94.0	0	AT GRADE	36	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes		X										
Sub-Area 16	SSMH-0750	LELAND STREET AT PLEASANT AVENUE	80.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 16	SSMH-6081	LELAND STREET AT RICHARDSON STREET	98.0	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 16	SSMH-1739	LELAND STREET AT TENNIS COURT	89.0	0	0.25 ABOVE GRADE	33	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Loose and missing piece,chipped. Catch Basin Connection	Cover Holes and Drain Connections			X									
Sub-Area 16	SSMH-5273	LUDLOW STREET AT COLUMBIA ROAD	98.0	0	AT GRADE	29	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 16	SSMH-2779	LUDLOW STREET AT FULLER STREET	120.7	0	AT GRADE	4	Inspected	Frame - Chipped, Wall - Light roots.		Roots		X		X						X	Remove Roots
Sub-Area 16	SSMH-5811	LUDLOW STREET AT HILLIS STREET	70.0	0	AT GRADE	22	Inspected	Cover - Many Holes, Chimney - Missing mortar.	Cover Holes		X						X				Repair Chimney
Sub-Area 16	SSMH-6096	LUDLOW STREET AT LELAND STREET	107.3	0	AT GRADE	36	Inspected	Cover - Many Holes, Frame - Chipped,cracked.	Cover Holes			X									
Sub-Area 16	SSMH-5812	LUDLOW STREET AT ROSEMONT AVENUE	71.3	0	AT GRADE	19	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Cracked, Chimney - Missing mortar. Drainage Inlet Connection (Athletic Field Drainage)	Cover Holes and Drain Connections			X						X			Repair Chimney
Sub-Area 16	SSMH-5218	LUDLOW STREET AT WAYSIDE ROAD	79.0	0	AT GRADE	6	Inspected	No Significant Defects													
Sub-Area 16	SSMH-2854	LUDLOW STREET AT WESTMINSTER AVENUE	127.0	0	0.25 ABOVE GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped, Wall - Moderate mineral deposits.		Minerals		X			X						
Sub-Area 16	SSMH-5274	MABEL STREET AT BEST STREET	109.0	0	AT GRADE	16	Inspected	Cover - Many Holes, Chimney - Broken brick, missing mortar.	Cover Holes		X										

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Sub-Area 16	SSMH-4683	MABEL STREET AT LELAND STREET	83.5	0	AT GRADE	2	Inspected	Highpoint manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick, missing mortar, Floor - Covered in debris, Invert - Covered in debris.									X		X		Repair Chimney, Clean Bench and Invert
Sub-Area 16	SSMH-2320	MADELINE STREET AT BEST STREET	114.5	0	AT GRADE	36	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2837	NEW STREET AT LELAND STREET	99.0	0	AT GRADE	6	Inspected	No Significant Defects													
Sub-Area 16	SSMH-2830	NEWMAN STREET AT HYDE STREET	92.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 17	SSMH-5244	ALDEN CIRCLE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 17	SSMH-5206	BRIGHTON AVENUE AT LUCAS STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 17	SSMH-3179	VIOLET AVENUE AT HARMON ROAD	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 17	SSMH-5212	VIOLETTE AVENUE AT HARMON ROAD	-	0	CNL	CNL	CNL	CNL													
Sub-Area 17	SSMH-2791	WAYSIDE DRIVE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 17	SSMH-0781	11 MAYER ROAD	174.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 17	SSMH-2770	35 HARMON ROAD	-	0	CNI	CNI	CNI	Could Not Access													
Sub-Area 17	SSMH-5242	43 WAYSIDE DRIVE	129.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 17	SSMH-6102	43 WAYSIDE DRIVE	135.7	0	AT GRADE	2	Inspected	Frame - Offset2".			X										
Sub-Area 17	SSMH-1243	43 WAYSIDE ROAD	107.5	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 17	SSMH-2783	44 ALDEN CIRCLE R.O.W.	93.3	0	28 ABOVE GRADE	2	Inspected	Surface inspection performed due to poor location of manhole - structure is on edge of river bank, no safe entry with tripod., Floor - Very wet, signs of mineral deposits, Invert - Loose pieces.		Minerals				X							
Sub-Area 17	SSMH-4076	50 ALDEN CIRCLE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 17	SSMH-5241	51 WAYSIDE DRIVE	118.3	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 17	SSMH-0265	731 BRIGHTON AVENUE	136.7	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 17	SSMH-5276	774 BRIGHTON AVENUE	139.8	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 17	SSMH-0266	79 DENNETT STREET	114.3	0	84 ABOVE GRADE	0	Inspected	Manhole is in brook. Pieces missing from outer portion of precast walls, pipe exposted in brook, Cover - Cover is wood, Wall - Wet walls.				X		X			X				Repair External Structure
Sub-Area 17	SSMH-4075	79 DENNETT STREET R.O.W.	101.5	0	46 ABOVE GRADE	37	Inspected	Cover - Many Holes, Invert - Corroded.	Cover Holes			X							X		Repair Invert
Sub-Area 17	SSMH-4263	DONALD STREET R.O.W.	105.5	0	1 ABOVE GRADE	37	Inspected	Cover - Many Holes, Wall - Wet spot, possible future leak, Invert - Corroded.	Cover Holes	Active		X				X					
Sub-Area 17	SSMH-2801	LUCAS STREET AT CAPISIC TRAIL HEAD	147.7	0	AT GRADE	20	Inspected	Cover - Many Holes, Frame - Hasriser, Chimney - Broken and cracked bricks, Wall - Broken brick, missing mortar, Floor - Broken brick, missing pieces.	Cover Holes			X		X							
Sub-Area 17	SSMH-4131	LUCAS STREET R.O.W.	165.0	0	1 BELOW GRADE	0	Inspected	Below Grade			X										
Sub-Area 17	SSMH-4569	LUCAS STREET R.O.W.	102.5	0	3 BELOW GRADE	3	Inspected	Frame - Belowgrade-shouldberaised, Floor - Water trapped by pipe liner, Invert - Liner not cut flush with floor.			X									X	Trim Lined Invert
Sub-Area 17	SSMH-0929	MAYER ROAD AT BRIGHTON AVENUE	151.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 17	SSMH-0782	MAYER ROAD R.O.W.	136.5	0	20 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 17	SSMH-2902	MAYER ROAD R.O.W.	100.7	0	5 ABOVE GRADE	22	Inspected	Cover - Many Holes, Manhole from West was opened and it too has extremely heavy root blockage. Nearby homeowner states line backs up into basement., Wall - Wet, Floor - Line from West lands on bench.	Cover Holes	Roots		X			X					X	Remove Roots from Inside Drop
Sub-Area 17	SSMH-5248	PHIPPS ROAD AT WINGATE DRIVE	96.3	0	0.5 BELOW GRADE	2	Inspected	Manhole in gutterline.			X										
Sub-Area 17	SSMH-2769	VIOLETTE AVENUE AT HARMON ROAD	160.3	0	AT GRADE	30	Inspected	Cover - Many Holes, Chimney - Broken and loose brick, missing mortar.	Cover Holes			X							X		Repair Chimney
Sub-Area 17	SSMH-5243	WAYSIDE ROAD R.O.W.	99.0	0	AT GRADE	1	Inspected	Chimney - Broken brick, missing mortar.											X		Repair Chimney
Sub-Area 17	SSMH-2800	WINGATE DRIVE R.O.W.	85.5	0	1 ABOVE GRADE	3	Inspected	Chimney - Broken brick.											X		Repair Chimney
Sub-Area 18	SSMH-4582	221 PROSPECT STREET	85.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 18	SSMH-4618	335 BRIGHTON AVENUE - MAINE MEDICAL CENTER	74.3	0	AT GRADE	36	Inspected	Cover - Many Holes, Floor - 6" of debris on floor.	Cover Holes			X								X	Clean Bench
Sub-Area 18	SSMH-5308	BRIGHTON AVENUE AT BELFIELD STREET	112.3	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 18	SSMH-2856	LUDLOW STREET AT CALDWELL STREET	85.0	0	AT GRADE	25	Inspected	Cover - Many Holes	Cover Holes			X									

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Sub-Area 21	SSMH-5305	BANCROFT STREET AT POMEROY STREET	95.8	720	0.2 BELOW GRADE	11	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Light mineral deposits, Floor - Missing mortar, Invert - Missing mortar.	Cover Holes	Minerals		X			X						
Sub-Area 22	SSMH-3547	BRADLEY STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-3548	BRADLEY STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-5736	BRADLEY STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-3505	BRADLEY STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-3506	BRADLEY STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-1079	CRAIGIE STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-4496	CRAIGIE STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-5335	STEVENS AVENUE	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 22	SSMH-1090	TWIN KNOLL LANE R.O.W.	-	0	CNI	CNI	CNI	Sealed Closed				X									
Sub-Area 22	SSMH-1091	TWIN KNOLL LANE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-3498	TWIN KNOLLS LANE	-	0	CNI	CNI	CNI	Sealed with Concrete				X									
Sub-Area 22	SSMH-3499	TWIN KNOLLS LANE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-3538	1 TWIN KNOLLS LANE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 22	SSMH-1753	10 ANSON ROAD	108.0	0	AT GRADE	2	Inspected	Starter manhole													
Sub-Area 22	SSMH-4497	107 CRAIGIE STREET	97.0	0	AT GRADE	6	Inspected	Chimney - Loose mortar									X				Repair Chimney
Sub-Area 22	SSMH-5761	11 COACHLIGHT LANE R.O.W.	92.7	0	2.5 BELOW GRADE	1	Inspected	Invert - Missing mortar		X							X				Repair Invert
Sub-Area 22	SSMH-0225	11 DIRIGO STREET	68.0	0	0.25 BELOW GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 22	SSMH-3543	11 FAIRVIEW STREET	91.0	0	0.75 ABOVE GRADE	2	Inspected	Starter manhole, Invert - 6" hard packed debris												X	Clean Invert
Sub-Area 22	SSMH-1752	11 RUDMAN ROAD	96.5	0	AT GRADE	13	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-1082	112 CALEB STREET	110.0	0	0.25 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped													
Sub-Area 22	SSMH-1569	112 CRAIGIE STREET	77.5	0	0.1 BELOW GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-1761	115 STEVENS AVENUE	106.5	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-3546	116 BRADLEY STREET	96.5	0	2 BELOW GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X	X									
Sub-Area 22	SSMH-4424	12 BRADLEY STREET	76.0	0	AT GRADE	3	Inspected	Starter manhole, Frame - Cracked					X								
Sub-Area 22	SSMH-5338	13 JUNE STREET	82.5	0	AT GRADE	33	Inspected	Cover - Many Holes, Cracked and missing pavement surrounding frame, Frame - Riser	Cover Holes				X								
Sub-Area 22	SSMH-1081	131 CALEB STREET	82.5	0	0.25 ABOVE GRADE	11	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-3509	132 CRAIGIE STREET	138.0	0	AT GRADE	3	Inspected	Frame - Rimbent					X								
Sub-Area 22	SSMH-4420	1355 CONGRESS STREET	100.0	0	AT GRADE	38	Inspected	Cover - Many Holes, Highpoint manhole, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar, Floor - Covered in 6" of dirt, Invert - Covered in 8" of dirt	Cover Holes		X									X	Clean Bench and Invert
Sub-Area 22	SSMH-3545	138 BRADLEY STREET	96.5	0	0.2 BELOW GRADE	27	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-5739	1399 CONGRESS STREET	106.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 22	SSMH-5759	14 COACHLIGHT LANE R.O.W.	71.7	0	2 ABOVE GRADE	32	Inspected	Cover - Many Holes, Floor - Loose and missing brick, missing mortar, Drainage Inlet Connection	Cover Holes and Drain Connections		X								X		
Sub-Area 22	SSMH-6085	14 IVY STREET	78.0	0	0.25 BELOW GRADE	21	Inspected	Cover - Many Holes, Starter manhole, Chimney - Missing brick and mortar, loose mortar, Invert - Covered in debris	Cover Holes		X						X		X		Repair Chimney, Clean Invert
Sub-Area 22	SSMH-0233	1424 CONGRESS STREET	82.0	0	AT GRADE	3	Inspected	Starter manhole, Invert - 4" of debris												X	Clean Bench and Invert
Sub-Area 22	SSMH-1078	15 BRADLEY STREET	85.0	0	0.2 ABOVE GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, cover cracked, Frame - Cracked	Cover Holes			X									
Sub-Area 22	SSMH-5760	15 COACHLIGHT DRIVE	90.5	0	0.25 ABOVE GRADE	27	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 22	SSMH-4050	15 STONELEDGE DRIVE	77.0	0	0.5 BELOW GRADE	2	Inspected	Manhole is Wetwell for Pump Station, Frame - 10"riser		X											
Sub-Area 22	SSMH-1766	150 CALEB STREET	85.5	0	1 BELOW GRADE	21	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes	X	X										
Sub-Area 22	SSMH-1080	159 CRAIGIE STREET	100.7	0	AT GRADE	37	Inspected	Cover - Many Holes	Cover Holes		X										

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Sub-Area 22	SSMH-2938	163 STEVENS AVENUE	106.5	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-1765	164 CALEB STREET	87.5	0	0.5 ABOVE GRADE	3	Inspected	Chimney - Missing brick and mortar									X				Repair Chimney
Sub-Area 22	SSMH-5758	17 COACHLIGHT LANE	71.5	0	0.75 ABOVE GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar													
Sub-Area 22	SSMH-1437	18 CALEB STREET	82.5	0	AT GRADE	13	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-3549	180 BRADLEY STREET	91.5	0	0.1 ABOVE GRADE	8	Inspected	Cover - Cracked pavement surrounding frame, Frame - Smallchip													
Sub-Area 22	SSMH-4051	182 CRAIGIE STREET	84.5	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-1764	186 CALEB STREET	98.5	0	AT GRADE	22	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose and broken brick, loose and missing mortar	Cover Holes		X						X				Repair Chimney
Sub-Area 22	SSMH-5365	189 STEVENS AVENUE	93.5	0	0.1 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-4613	19 ANSON ROAD	106.0	0	AT GRADE	30	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 22	SSMH-0825	19 CAPISIC STREET	105.0	0	AT GRADE	21	Inspected	Cover - Many Holes, Chimney - Loose and missing mortar	Cover Holes		X						X				Repair Chimney
Sub-Area 22	SSMH-6870	19 CAPISIC STREET	106.5	0	AT GRADE	28	Inspected	Cover - Many Holes, Unmapped manhole - see revised map, Cover - Many Holes, Cracked pavement surrounding frame, Floor - Top layer of bricks missing	Cover Holes		X						X				Repair Bench
Sub-Area 22	SSMH-2943	19 JUNE STREET	87.0	0	AT GRADE	0	Inspected	Starter manhole, Cover - Blind flange													
Sub-Area 22	SSMH-5342	19 STONELEDGE DRIVE	58.5	0	0.5 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-4052	194 CRAIGIE STREET	91.0	0	AT GRADE	16	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing brick and mortar, Floor - Covered in dirt, Invert - Covered in dirt	Cover Holes		X									X	Clean Bench and Invert
Sub-Area 22	SSMH-5733	195 BRADLEY STREET	87.0	0	AT GRADE	12	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Frame - Cracked	Cover Holes			X									
Sub-Area 22	SSMH-5339	2 STONELEDGE DRIVE	57.8	0	1 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame		X											
Sub-Area 22	SSMH-3544	200 STEVENS AVENUE	101.5	0	0.25 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 22	SSMH-1342	22 REDLON ROAD	70.0	0	1 BELOW GRADE	3	Inspected	Frame - Offset2"		X			X								
Sub-Area 22	SSMH-4619	226 STEVENS AVENUE	86.0	0	0.1 BELOW GRADE	2	Inspected	Starter manhole													
Sub-Area 22	SSMH-2939	24 COBBERT ROAD	74.0	0	AT GRADE	16	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Floor - Covered in dirt	Cover Holes		X										
Sub-Area 22	SSMH-1075	24 IVY STREET	58.5	0	0.1 ABOVE GRADE	4	Inspected	Floor - 1" dirt												X	Clean Bench
Sub-Area 22	SSMH-4424A	25 BRADLEY STREET	90.5	0	0.1 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-0128	25 CRAIGIE STREET	121.5	0	AT GRADE	20	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 22	SSMH-4616	26 CAPISIC STREET	95.0	0	1 BELOW GRADE	22	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 22	SSMH-4422.1	27 STEVENS AVENUE	129.0	0	0.1 ABOVE GRADE	3	Inspected	Unmapped manhole - see revised map, Frame - Chipped													
Sub-Area 22	SSMH-4423	27 STEVENS AVENUE	148.0	0	0.1 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped													
Sub-Area 22	SSMH-3542	29 WAYNE STREET	81.0	0	0.5 BELOW GRADE	23	Inspected	Cover - Many Holes	Cover Holes		X	X									
Sub-Area 22	SSMH-0111	30 BRADLEY STREET	118.0	0	0.25 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-4418	31 CALEB STREET	106.5	0	AT GRADE	33	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-3539	32 ANSON ROAD	130.5	0	0.25 BELOW GRADE	27	Inspected	Cover - Many Holes, Manhole is in gutterline, Frame - 8"riser, Chimney - Missing brick, Floor - Missing brick	Cover Holes		X	X			X						
Sub-Area 22	SSMH-3541	32 FAIRVIEW STREET	112.5	0	AT GRADE	4	Inspected	Catch Basin Connections (2)	Drain Connections									X			
Sub-Area 22	SSMH-3540	35 WAYNE STREET	93.0	0	0.5 BELOW GRADE	18	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Catch Basin Connection	Cover Holes and Drain Connections		X							X			
Sub-Area 22	SSMH-4614	37 ANSON ROAD	126.5	0	0.5 BELOW GRADE	21	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-4566	40 DIRIGO STREET	75.5	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes		X										

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Sub-Area 22	SSMH-0129	41 CRAIGIE STREET	119.0	0	AT GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-3503	43 ANSON ROAD	-	0	CNI	CNI	CNI	Catch Basin Cover (Circle)					X								
Sub-Area 22	SSMH-0223	47 BRADLEY STREET	83.0	0	0.5 BELOW GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick	Cover Holes		X	X						X			Repair Chimney
Sub-Area 22	SSMH-4419	48 CALEB STREET	106.5	0	0.5 BELOW GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-5762	5 COACHLIGHT LANE	58.5	0	0.5 BELOW GRADE	1	Inspected	Manhole is in gutterline, Chimney - Missing mortar										X			Repair Chimney
Sub-Area 22	SSMH-3507	51 BRADLEY STREET R.O.W.	76.5	0	0.25 BELOW GRADE	42	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-6541	55 STEVENS AVENUE	112.5	0	AT GRADE	36	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-5340	6 STONELEDGE DRIVE	57.3	0	0.2 BELOW GRADE	2	Inspected	Manhole is in gutterline													
Sub-Area 22	SSMH-1431	61 CRAIGIE STREET	114.5	0	AT GRADE	6	Inspected	No Significant Defects													
Sub-Area 22	SSMH-5337	7 REDLON ROAD	98.5	0	AT GRADE	21	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing brick, loose parging, Floor - Covered in dirt	Cover Holes			X							X			Repair Chimney
Sub-Area 22	SSMH-3504	70 CALEB ROAD	-	0	CNI	CNI	CNI	Buried													
Sub-Area 22	SSMH-5740	70 CALEB STRET	87.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 22	SSMH-3501	71 BRADLEY STREET	109.5	0	AT GRADE	14	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-3508	75 CALEB STREET	86.0	0	0.25 BELOW GRADE	3	Inspected	No Significant Defects													
Sub-Area 22	SSMH-1432	75 CRAIGIE STREET	149.3	0	AT GRADE	15	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-5734	83 BRADLEY STREET	95.3	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-1076	87 BRADLEY STREET	90.3	0	0.25 ABOVE GRADE	8	Inspected	Cover - Cracked pavement surrounding frame, Floor - Missing brick and mortar										X			Repair Bench
Sub-Area 22	SSMH-1481	9 CRAIGIE STREET	104.0	72	0.1 BELOW GRADE	2	Inspected	Starter manhole, Floor - Covered in debris, Invert - Covered in debris												X	Clean Bench and Invert
Sub-Area 22	SSMH-1250	9 TWIN KNOLL LANE	265.5	0	2 BELOW GRADE	2	Inspected	Chimney - 1" gap between frame and Chimney			X			X							
Sub-Area 22	SSMH-6086	9 WAYNE STREET	79.0	0	2.5 BELOW GRADE	1	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken brick, Floor - Debris on floor			X							X			Repair Chimney
Sub-Area 22	SSMH-1077	91 BRADLEY STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 22	SSMH-5735	91 BRADLEY STREET	70.5	0	AT GRADE	7	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-1083	94 CALEB STREET	91.5	0	0.75 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame			X										
Sub-Area 22	SSMH-0219	ALLEN AVENUE AT GOODRIDGE AVENUE	100.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 22	SSMH-0224	BRADLEY STREET AT DIRIGO STREET	81.8	0	AT GRADE	13	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-1763	CALEB STREET AT BRIGHTON AVENUE	93.0	0	AT GRADE	3	Inspected	Starter manhole, Invert - 1" debris												X	Clean Invert
Sub-Area 22	SSMH-4617	CAPISIC STREET AT FROST STREET	65.0	0	AT GRADE	47	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-5363	CAPISIC STREET AT STEVENS AVENUE	100.5	0	AT GRADE	27	Inspected	Cover - Many Holes, Floor - Large rocks on floor	Cover Holes			X								X	Clean Bench
Sub-Area 22	SSMH-4421	CONGRESS STREET AT STEVENS AVENUE	104.0	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and loose brick, missing mortar	Cover Holes			X							X		Repair Chimney
Sub-Area 22	SSMH-4422	CONGRESS STREET AT STEVENS AVENUE	101.5	0	0.25 ABOVE GRADE	3	Inspected	Frame - Chipped													
Sub-Area 22	SSMH-1436	CRAIGIE STREET AT CONGRESS STREET	78.0	0	1.5 BELOW GRADE	14	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X	X									
Sub-Area 22	SSMH-3502	CROSS COUNTRY R.O.W.	73.5	0	6 ABOVE GRADE	33	Inspected	Cover - Many Holes, Chimney - Deteriorating mortar	Cover Holes			X							X		Repair Chimney
Sub-Area 22	SSMH-4146	CROSS COUNTRY R.O.W.	96.5	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 22	SSMH-0804	REDLON ROAD AT STEVEN AVENUE	90.5	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar, Floor - Dirt	Cover Holes			X							X		Repair Chimney, Clean Bench
Sub-Area 22	SSMH-6551	STEVENS AVENUE AT ANSON ROAD	89.0	0	AT GRADE	23	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing brick and mortar	Cover Holes			X							X		Repair Chimney
Sub-Area 22	SSMH-6550	STEVENS AVENUE AT CAPISIC STREET	96.0	0	AT GRADE	2	Inspected	Catch Basin Connection	Drain Connections												

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Lining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 22	SSMH-0802	STEVENS AVENUE AT COACHLIGHT LANE	109.0	0	AT GRADE	2	Inspected	Floor - Heavy rocks on floor, Invert - Small blockage of leaves												X	Clean Bench and Invert
Sub-Area 22	SSMH-6552	STEVENS AVENUE AT DIRIGO STREET	117.5	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 22	SSMH-5336	STEVENS AVENUE AT JUNE STREET	100.3	0	0.25 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-0803	STEVENS AVENUE AT REDLON ROAD	109.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-5364	STEVENS AVENUE AT RUDMAN ROAD	111.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 22	SSMH-5341	STEVENS AVENUE AT STONELEDGE DRIVE	87.7	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-1561	STEVENS AVENUE AT TWIN KNOLLS LANE	117.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, cover is 0.4" smaller than frame, Frame - Chipped			X										
Sub-Area 22	SSMH-4615	STEVENS ROAD AT CAPISIC STREET	101.5	0	0.2 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 23	SSMH-0936	ALLEN AVENUE AT WOODLAWN AVENUE	-	0	CNI	CNI	CNI	Unable to Open				X									
Sub-Area 23	SSMH-3112	DELAWARE COURT	-	0	CNI	CNI	CNI	Buried		X											
Sub-Area 23	SSMH-5121	PLYMOUTH STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 23	SSMH-5122	PLYMOUTH STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 23	SSMH-6267	SHORT STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 23	SSMH-6268	SHORT STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 23	SSMH-5112	101 PENNELL AVENUE	43.0	0	AT GRADE	31	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 23	SSMH-4926	102 RUBY LANE	120.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0989	11 ABBOTT STREET	64.0	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick, loose and missing mortar, Floor - Bricks on floor, Invert - Bricks in invert									X			X	Clean Floor, Repair/Rebuild Chimney
Sub-Area 23	SSMH-5114	11 SKYLARK ROAD	89.0	0	AT GRADE	10	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 23	SSMH-2567	110 HENNESSY DRIVE	58.7	0	0.2 ABOVE GRADE	29	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and missing brick, loose pieces	Cover Holes		X						X				Repair Chimney
Sub-Area 23	SSMH-3114	115 DELAWARE COURT	84.0	0	AT GRADE	1	Inspected	Starter manhole, Chimney - Missing mortar, Invert - Debris				X					X			X	Repair Chimney, Clean Invert
Sub-Area 23	SSMH-3127	12 DELAWARE COURT	-	0	CNI	CNI	CNI	Could Not Open				X									
Sub-Area 23	SSMH-0938	125 ALLEN AVENUE	107.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-5113	128 PENNELL AVENUE	54.7	0	0.2 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 23	SSMH-5117	130 PLYMOUTH STREET	89.0	0	AT GRADE	2	Inspected	Frame - Spacerconnectedtocover, Floor - Covered in dirt		X											
Sub-Area 23	SSMH-2568	132 HENNESSY DRIVE	101.0	0	0.2 ABOVE GRADE	7	Inspected	Chimney - Missing mortar, loose pieces, Invert - 02" debris									X			X	Repair Chimney, Clean Bench and Invert
Sub-Area 23	SSMH-5524	134 ALLEN AVENUE	117.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-5113.1	137 PENNELL AVENUE	55.5	0	AT GRADE	3	Inspected	Unampped manhole - See revised map													
Sub-Area 23	SSMH-5118	138 PLYMOUTH STREET	56.5	0	AT GRADE	3	Inspected	Floor - Covered in dirt													
Sub-Area 23	SSMH-5113.2	140 PENNELL AVENUE	53.0	0	1 BELOW GRADE	3	Inspected	Unmapped manhole - See revised map													
Sub-Area 23	SSMH-2569	148 HENNESSY DRIVE	97.0	0	0.2 ABOVE GRADE	19	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 23	SSMH-5525	152 ALLEN AVENUE	82.3	0	AT GRADE	0	Inspected	Cover - Blind flange, Catch Basin Connections (2)	Drain Connections												
Sub-Area 23	SSMH-6104	16 PENNELL AVENUE	65.0	0	AT GRADE	1	Inspected	Starter manhole													
Sub-Area 23	SSMH-5526	168 ALLEN AVENUE	138.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-3115	192 DELAWARE COURT	69.0	0	2 BELOW GRADE	2	Inspected	Starter manhole													
Sub-Area 23	SSMH-5527	193 ALLEN AVENUE	145.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Invert - Debris catching, causing back-ups												X	Clean Invert
Sub-Area 23	SSMH-5108	21 PENNELL AVENUE	66.4	0	AT GRADE	1	Inspected	Floor - Missing brick and mortar										X			Repair Floor
Sub-Area 23	SSMH-0627	211 ALLEN AVENUE	111.7	1,440	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23	SSMH-5528	219 ALLEN AVENUE	94.0	0	AT GRADE	13	Inspected	Cover - Many Holes , Catch Basin Connections (2)	Cover Holes and Drain Connections		X										
Sub-Area 23	SSMH-5529	221 ALLEN AVENUE	127.0	0	AT GRADE	2	Inspected	Frame - Chipped													
Sub-Area 23	SSMH-5480	23 DELAWARE COURT	77.5	0	AT GRADE	2	Inspected	Floor - Covered in mud, Invert - Small blockage												X	Clean Bench and Invert

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Sub-Area 23	SSMH-4434	237 ALLEN AVENUE	134.0	576	AT GRADE	1	Inspected	Invert - 02GPM leak at first joint, 02GPM leak at second joint		Active						X					
Sub-Area 23	SSMH-5530	247 ALLEN AVENUE	165.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Invert - Debris catching													
Sub-Area 23	SSMH-2303	25 RUBY LANE	92.5	0	AT GRADE	3	Inspected	Invert - Debris													
Sub-Area 23	SSMH-0626	267 ALLEN AVENUE	109.3	0	AT GRADE	1	Inspected	Frame - Chipped, broken pieces				X									
Sub-Area 23	SSMH-2302	28 RUBY LANE	109.5	0	AT GRADE	3	Inspected	Invert - Standing water													
Sub-Area 23	SSMH-2572	285 ALLEN AVENUE	106.0	0	AT GRADE	20	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 23	SSMH-3122	29 DELAWARE COURT	74.5	0	AT GRADE	2	Inspected	Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-6266	292 ALLEN AVENUE	104.7	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-2571	295 ALLEN AVENUE	108.0	0	AT GRADE	30	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 23	SSMH-0631	30 PLYMOUTH STREET	131.3	0	1 ABOVE GRADE	2	Inspected	Floor - Wet													
Sub-Area 23	SSMH-1627	301 ALLEN AVENUE	98.0	0	0.25 BELOW GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-5115	32 SKYLARK ROAD	84.0	0	0.25 ABOVE GRADE	14	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 23	SSMH-6265	327 ALLEN AVENUE	89.3	0	AT GRADE	32	Inspected	Cover - Many Holes, Floor - Moderate mineral deposits	Cover Holes	Minerals	X					X					
Sub-Area 23	SSMH-0629	38 RUBY LANE	57.0	0	0.5 BELOW GRADE	3	Inspected	Starter manhole, Chimney - Missing pieces, Floor - Covered in dirt, Invert - Full of debris			X						X		X		Repair Chimney, Clean Bench and Invert
Sub-Area 23	SSMH-0632	39 PLYMOUTH STREET	115.4	0	1 ABOVE GRADE	1	Inspected	Frame - Offset, Floor - Old cover on bench			X								X		Remove old Cover from Manhole Bench
Sub-Area 23	SSMH-1590	42 HENNESSY DRIVE	53.0	0	0.5 ABOVE GRADE	3	Inspected	Frame - Chipped, Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-3123	43 DELAWARE COURT	43.5	0	AT GRADE	2	Inspected	Chimney - Chipped, missing mortar, Floor - Covered in mud									X		X		Repair Chimney, Clean Invert
Sub-Area 23	SSMH-2301	43 RUBY LANE	60.0	0	1 ABOVE GRADE	4	Inspected	Starter manhole, Invert - Debris													
Sub-Area 23	SSMH-3124	45 DELAWARE COURT	63.5	0	0.5 ABOVE GRADE	2	Inspected	Chimney - Broken and missing brick, missing mortar, Floor - Debris									X				Repair Chimney
Sub-Area 23	SSMH-1591	48 HENNESSY DRIVE	51.0	0	0.2 ABOVE GRADE	9	Inspected	Cover - Many Holes, Chimney - Broken, loose and missing brick, loose pieces, missing mortar	Cover Holes		X						X				Repair/Rebuild Chimney
Sub-Area 23	SSMH-2300	48 RUBY LANE	90.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-4929	52 RUBY LANE	119.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0623	53 CYPRESS STREET	52.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23	SSMH-6269	53 CYPRESS STREET	61.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0624	59 CYPRESS STREET	44.0	0	0.5 ABOVE GRADE	1	Inspected	Floor - Missing mortar									X				Repair Bench
Sub-Area 23	SSMH-4512	68 HENNESSY DRIVE	63.0	0	0.2 ABOVE GRADE	20	Inspected	Cover - Many Holes, Chimney - Broken and missing brick, missing mortar, Floor - Broken brick, missing mortar, Invert - 03" debris	Cover Holes		X			X					X		Clean Invert
Sub-Area 23	SSMH-6272	7 SHORT STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 23	SSMH-2564	70 SKYLARK ROAD	76.7	0	0.25 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Invert - Missing mortar													
Sub-Area 23	SSMH-4928	71 RUBY LANE	120.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-3126	73 DELAWARE COURT	-	0	CNI	CNI	CNI	Could Not Open				X									
Sub-Area 23	SSMH-3125	80 DELAWARE COURT	58.5	0	1 ABOVE GRADE	1	Inspected	Floor - Covered in dirt													
Sub-Area 23	SSMH-2565	82 SKYLARK ROAD	53.0	0	0.2 BELOW GRADE	16	Inspected	Cover - Many Holes, Chimney - Loose pieces	Cover Holes		X										
Sub-Area 23	SSMH-5111	84 PENNELL AVENUE	52.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 23	SSMH-5120	84 PLYMOUTH STREET	100.5	0	AT GRADE	2	Inspected	Frame - Spacerbroken, Floor - Covered in dirt			X										
Sub-Area 23	SSMH-2566	87 HENNESSY DRIVE	81.0	0	0.25 ABOVE GRADE	7	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped, Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-6112	88 SKYLARK ROAD	51.3	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-4924	90 RUBY LANE	158.5	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0937	91 ALLEN AVENUE	97.5	0	AT GRADE	37	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 23	SSMH-4925	94 RUBY LANE	131.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-4487	96 PENNELL AVENUE	40.0	0	AT GRADE	26	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X										
Sub-Area 23	SSMH-0993	ABBOTT STREET AT ALLEN AVENUE	79.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0992	ALLEN AVENUE AT ABBOTT STREET	89.8	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 23	SSMH-2573	ALLEN AVENUE AT KNIGHT STREET	100.0	0	AT GRADE	25	Inspected	Cover - Many Holes, Chimney - Loose brick, Invert - Debris catching in invert	Cover Holes		X						X				Repair Chimney
Sub-Area 23	SSMH-0630	ALLEN AVENUE AT PLYMOUTH STREET	99.7	0	AT GRADE	0	Inspected	Cover - Blind flange, Floor - Missing brick									X				Repair Bench
Sub-Area 23	SSMH-0628	ALLEN AVENUE AT YALE STREET	84.3	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-2576	ALLEN AVENUE R.O.W.	67.5	0	1 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 23	SSMH-2574	CASCO BAY HIGH SCHOOL	115.7	5,760	3 BELOW GRADE	2	Inspected	Floor - Several leaks, Invert - Several leaks		Active					X						

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Sub-Area 23	SSMH-2575	CASCO BAY HIGH SCHOOL	63.3	0	1 BELOW GRADE	2	Inspected	Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-6270	CYPRESS STREET AT HENNESSY DRIVE	47.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23	SSMH-3113	DELAWARE COURT	104.7	0	AT GRADE	3	Inspected	Chimney - Missing mortar, Invert - Rags in invert									X		X		Repair Chimney, Clean Invert
Sub-Area 23	SSMH-3116	DELAWARE COURT	83.5	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-6271	HENNESSY DRIVE AT CYPRESS STREET	46.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-2563	HENNESSY DRIVE AT SKYLARK ROAD	106.3	0	0.2 ABOVE GRADE	27	Inspected	Cover - Many Holes, Chimney - Missing brick and mortar, loose pieces, Wall - Missing mortar, Invert - Debris catching	Cover Holes		X			X							
Sub-Area 23	SSMH-5110	PENNELL AVENUE AT CYPRESS STREET	67.5	0	0.25 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-5119	PLYMOUTH STREET AT ALLEN AVENUE	67.3	0	1 ABOVE GRADE	3	Inspected	Chimney - Covered in mud, Wall - Covered in mud, Floor - Wet, Drain Line Connections (2)	Drain Connections												
Sub-Area 23	SSMH-5116	PLYMOUTH STREET AT RUBY LANE	113.0	0	1 ABOVE GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Frame - Cracked,broken,missingpieces, Wall - Leak		Active				X		X					
Sub-Area 23	SSMH-2304	RUBY LANE AT ALLEN AVENUE	81.0	0	AT GRADE	3	Inspected	Frame - Offset			X										
Sub-Area 23	SSMH-4927	RUBY LANE AT PLYMOUTH STREET	100.0	0	AT GRADE	3	Inspected	Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-5109	SHORT STREET AT PENNELL AVENUE	61.3	0	0.5 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-0598	AUBURN STREET	-	0	CNI	CNI	CNI	Sealed Shut				X									
Sub-Area 23A	SSMH-0599	AUBURN STREET	-	0	CNL	CNL	CNL	CNL													
Sub-Area 23A	SSMH-2514	BRAEBURN ROAD	-	0	CNI	CNI	Inspected	Drain Manhole													Reassign Feature to Stormwater Mapping
Sub-Area 23A	SSMH-3018	NORTHPOINT DRIVE R.O.W.	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 23A	SSMH-2517	11 SHINGLE WAY	86.5	0	0.5 BELOW GRADE	1	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-1594	114 BROOK ROAD	90.0	0	1 ABOVE GRADE	3	Inspected	Floor - Missing pieces									X				Repair Bench
Sub-Area 23A	SSMH-5578	12 THE RESIDENCES	70.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-0991	1378 WASHINGTON AVENUE DUNKIN DONUTS	93.3	0	0.5 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing brick, H2S deterioration, Invert - 3" dirt, 02 standing flow						X	X		X				
Sub-Area 23A	SSMH-5082	14 BROOK ROAD	106.5	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-5083	18 BROOK ROAD	88.5	0	AT GRADE	4	Inspected	Chimney - Missing mortar, Invert - Blockage									X		X		Clean Invert, Repair Chimney
Sub-Area 23A	SSMH-2512	19 COTTAGE PARK ROAD	85.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Wall - Light roots		Roots					X				X		Remove Roots
Sub-Area 23A	SSMH-2513	19 COTTAGE PARK ROAD	97.3	0	3 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar			X										
Sub-Area 23A	SSMH-3247	19 THE RESIDENCES	87.5	0	0.5 BELOW GRADE	1	Inspected	Chimney - Missing mortar													
Sub-Area 23A	SSMH-2511	25 COTTAGE PARK ROAD	90.0	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-2515	25 PERCH STREET	104.0	0	0.5 BELOW GRADE	0	Inspected	Starter manhole, Invert - Light debris													
Sub-Area 23A	SSMH-2510	26 COTTAGE PARK ROAD	86.3	0	0.5 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-3247.1	26 THE RESIDENCES	95.5	0	2 ABOVE GRADE	2	Inspected	Chimney - Missing mortar													
Sub-Area 23A	SSMH-2516	30 SHINGLE WAY	89.0	0	AT GRADE	1	Inspected	Starter manhole													
Sub-Area 23A	SSMH-6277	362 ALLEN AVENUE	101.0	0	AT GRADE	0	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-6278	362 ALLEN AVENUE	158.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-6275	365 ALLEN AVENUE	129.3	2,880	AT GRADE	10	Inspected	Cover - Many Holes, Chimney - Missing mortar, Pipe Connection - Bulkheaded Inlet Leaking (2 GPM)	Cover Holes	Active		X					X				Repair Bulkheaded Drain Connection (2GPM Leak)
Sub-Area 23A	SSMH-3248	427 ALLEN AVENUE	104.5	0	AT GRADE	9	Inspected	Cover - Many Holes, Chimney - Broken brick, Floor - Dirt	Cover Holes			X					X				Repair Chimney
Sub-Area 23A	SSMH-4252	459 ALLEN AVENUE	94.0	0	AT GRADE	2	Inspected	Floor - Dirt and debris													
Sub-Area 23A	SSMH-5576	459 ALLEN AVENUE	100.5	0	1 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-0597	46 AUBURN STREET	83.5	0	AT GRADE	13	Inspected	Cover - Many Holes, Manhole is in gutterline	Cover Holes			X									
Sub-Area 23A	SSMH-3087	468 ALLEN AVENUE	98.0	0	AT GRADE	0	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-4250	499 ALLEN AVENUE	101.0	0	AT GRADE	0	Inspected	Starter manhole, Wall - Muddy, Floor - Dirt and debris, Invert - Dirt and debris													
Sub-Area 23A	SSMH-1546	502 ALLEN AVENUE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 23A	SSMH-4251	502 ALLEN AVENUE	134.0	0	AT GRADE	0	Inspected	Floor - Dirt and debris													
Sub-Area 23A	SSMH-2509	54 COTTAGE PARK ROAD	99.0	0	1 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-5577	6 THE RESIDENCES	111.5	0	AT GRADE	2	Inspected	Chimney - Missing mortar													
Sub-Area 23A	SSMH-2519	60 BROOK ROAD	79.5	0	AT GRADE	2	Inspected	Chimney - Riser, Floor - Covered in dirt													
Sub-Area 23A	SSMH-2518	70 COTTAGE PARK ROAD	95.0	0	AT GRADE	1	Inspected	Starter manhole													
Sub-Area 23A	SSMH-2507	72 AUBURN STREET	82.0	0	AT GRADE	5	Inspected	Manhole is in gutterline													

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Manhole Inspection Results and Rehabilitation Recommendations

Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Lining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 23A	SSMH-2520	82 BROOK ROAD	94.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Chimney - Broken and missing brick, missing mortar, Wall - Bricks offset, Floor - Covered in dirt	Cover Holes			X		X	X						
Sub-Area 23A	SSMH-1595	99 BROOK ROAD	78.5	0	AT GRADE	4	Inspected	Chimney - Missing mortar, Floor - Debris													
Sub-Area 23A	SSMH-5081	ALLEN AVENUE AT BROOK ROAD	115.3	0	AT GRADE	26	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 23A	SSMH-2545	ALLEN AVENUE AT NORTHPOINT DRIVE	150.3	0	AT GRADE	1	Inspected	Wall - Muddy													
Sub-Area 23A	SSMH-6264	ALLEN AVENUE AT WASHINGTON AVENUE	78.5	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-2504	AUBURN STREET AT WASHINGTON AVENUE	71.7	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23A	SSMH-2508	BROOK ROAD AT BRAEBURN ROAD	119.0	0	AT GRADE	14	Inspected	Cover - Many Holes, Chimney - Missing mortar, Invert - Debris	Cover Holes			X									
Sub-Area 23A	SSMH-3015	NORTHPOINT DRIVE	145.5	0	AT GRADE	3	Inspected	Wall - Wet													
Sub-Area 23A	SSMH-3016	NORTHPOINT DRIVE	139.0	0	2 BELOW GRADE	14	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X	X									
Sub-Area 23A	SSMH-2544	NORTHPOINT DRIVE R.O.W.	167.0	0	1 ABOVE GRADE	31	Inspected	Cover - Many Holes, Chimney - Missing mortar	Cover Holes			X									
Sub-Area 23A	SSMH-1543	WASHINGTON AVENUE AT ALLEN AVENUE	75.5	0	AT GRADE	1	Inspected	Floor - Covered in dirt, Invert - Catching solids													
Sub-Area 23A	SSMH-3017	WASHINGTON AVENUE R.O.W.	129.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-6378	WASHINGTON AVENUE R.O.W.	72.7	0	AT GRADE	1	Inspected	Frame - Offset			X										
Sub-Area 24	SSMH-2494	1552 WASHINGTON AVENUE	130.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 24	SSMH-2493	1568 WASHINGTON AVENUE	118.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.									X				Repair Chimney
Sub-Area 27	SSMH-3376	FALL BROOK STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-1586	PHEASANT HILL DRIVE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-0132	PINELEDGE TERRACE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-0976	PINELEDGE TERRACE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-1485	PINELEDGE TERRACE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-1486	PINELEDGE TERRACE R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-1016	SLEMONS ROAD	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-0114	TAMARLANE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-0130	TAMARLANE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-0131	TAMARLANE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-0975	TAMARLANE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-5566	TAMARLANE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-5665	TAMARLANE	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-1483	WASHINGTON AVENUE FARMHOUSE CONDO	-	0	CNL	CNL	CNL	CNL													
Sub-Area 27	SSMH-4451	WASHINGTON AVENUE R.O.W.	-	0	CNI	CNI	CNI	Buried													
Sub-Area 27	SSMH-1548	10 LLOYD AVENUE	78.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-5563	1007 WASHINGTON AVENUE	80.0	0	AT GRADE	3	Inspected	Chimney - Broken and missing brick, loose and missing mortar, Floor - Mud and debris, Invert - Holding solids, piece of concrete in invert									X		X	Repair Chimney, Clean Bench and Invert
Sub-Area 27	SSMH-1268	1023 WASHINGTON AVENUE	101.0	0	AT GRADE	3	Inspected	Starter manhole - map incorrect, shows incoming line from MH 1482 but that is not accurate, Floor - Covered in dirt, Invert - Covered in dirt										X	Clean Bench and Invert. Correct Mapping, No Incoming Line from SSMH-1482
Sub-Area 27	SSMH-1482	1024 WASHINGTON AVENUE #4 FARMHOUSE CONDO	90.5	0	2 BELOW GRADE	2	Inspected	Below Grade			X										
Sub-Area 27	SSMH-1484	104 TAMAR LANE	61.5	0	0.5 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 27	SSMH-3292	20 FALL BROOK STREET	77.5	0	AT GRADE	36	Inspected	Cover - Many Holes, Chimney - Broken, loose and missing brick, loose mortar	Cover Holes			X					X				Repair Chimney
Sub-Area 27	SSMH-0159	20 LLOYD AVENUE	72.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-4426	21 TAMARLANE APARTMENTS	90.3	0	1 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame			X										
Sub-Area 27	SSMH-1420	24 VICTOR ROAD	101.0	0	AT GRADE	0	Inspected	Starter manhole, Cover - Blind flange													
Sub-Area 27	SSMH-6188	3 VERA STREET	56.0	0	AT GRADE	0	Inspected	Starter manhole, Cover - Blind flange													
Sub-Area 27	SSMH-3370	32 VICTOR ROAD	82.5	0	AT GRADE	0	Inspected	Cover - Cracked pavement surrounding frame, blind flange													
Sub-Area 27	SSMH-3293	35 FALL BROOK STREET	121.5	0	AT GRADE	37	Inspected	Cover - Many Holes, Chimney - Loose brick, missing mortar	Cover Holes			X					X				Repair Chimney
Sub-Area 27	SSMH-4427	37 TAMARLANE APARTMENTS	72.3	0	1 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar			X										

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Sub-Area 27	SSMH-3372	37 VERA STREET	78.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-1015	38 BYFIELD ROAD	91.0	0	AT GRADE	26	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar	Cover Holes			X						X			Repair Chimney
Sub-Area 27	SSMH-6559	39 BYFIELD ROAD	88.0	0	0.5 ABOVE GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-3373	43 VERA STREET	99.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-5565	46 TAMARLANE APARTMENTS	62.3	0	1 BELOW GRADE	2	Inspected	Chimney - Missing mortar			X										
Sub-Area 27	SSMH-3369	51 VICTOR ROAD	80.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-1552	55 MALILLY ROAD	209.5	0	2 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 27	SSMH-3294	56 FALL BROOK STREET	98.0	0	AT GRADE	37	Inspected	Cover - Many Holes, Chimney - Loose parging, Invert - 1" debris	Cover Holes			X						X		X	Repair Chimney, Clean Invert
Sub-Area 27	SSMH-1419	66 VICTOR ROAD	90.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-3295	69 FALL BROOK STREET	115.7	0	0.3 BELOW GRADE	35	Inspected	Cover - Many Holes, Invert - 4" debris	Cover Holes			X								X	Clean Invert
Sub-Area 27	SSMH-3375	71 VERA STREET	91.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-3374	75 VERA STREET	88.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-3371	78 VICTOR ROAD	101.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-4428	8 TAMARLANE APARTMENTS	80.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 27	SSMH-1396	801 WASHINGTON AVENUE	92.0	0	AT GRADE	3	Inspected	Starter manhole, Floor - Dirt and debris, Invert - Dirt and debris												X	Clean Bench and Invert
Sub-Area 27	SSMH-1017	828 WASHINGTON AVENUE	93.5	0	AT GRADE	3	Inspected	Invert - Blockage												X	Clean Downstream Line, Clean Bench and Invert
Sub-Area 27	SSMH-0158	83 VICTOR ROAD	130.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-6065	836 WASHINGTON AVENUE	90.0	0	AT GRADE	3	Inspected	Invert - Missing piece, catching solids											X		Repair Invert
Sub-Area 27	SSMH-1018	855 WASHINGTON AVENUE	100.5	0	AT GRADE	3	Inspected	Floor - Debris, Invert - Blockage												X	Clean Downstream Line, Clean Bench and Invert
Sub-Area 27	SSMH-3377	886 WASHINGTON AVENUE	80.0	0	AT GRADE	3	Inspected	Wall - Mineral deposits, Floor - Dirt and debris		Minerals					X						
Sub-Area 27	SSMH-5661	904 WASHINGTON AVENUE	96.5	0	AT GRADE	3	Inspected	Chimney - Missing mortar, Wall - Broken brick, missing mortar, Invert - Catching solids							X					X	Clean Bench and Invert
Sub-Area 27	SSMH-5663	936 WASHINGTON AVENUE	117.0	0	AT GRADE	3	Inspected	Chimney - Missing mortar, Floor - Dirt and debris, Invert - Roots at incoming line		Roots							X			X	Remove Roots, Seal Pipe Connection (SSMH-5662), Repair Chimney
Sub-Area 27	SSMH-5662	956 WASHINGTON AVENUE	101.5	0	AT GRADE	3	Inspected	Floor - Dirt and debris													
Sub-Area 27	SSMH-3296	970 WASHINGTON AVENUE	79.7	0	AT GRADE	0	Inspected	Floor - Dirt and debris													
Sub-Area 27	SSMH-5562	985 WASHINGTON AVENUE	79.7	0	AT GRADE	0	Inspected	Floor - Dirt and debris													
Sub-Area 27	SSMH-5564	997 WASHINGTON AVENUE	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 27	SSMH-5666	997 WASHINGTON AVENUE	101.3	0	AT GRADE	3	Inspected	Floor - Dirt and debris, Invert - Holding solids													
Sub-Area 27	SSMH-1014	BYFIELD ROAD AT GRAHAM TERRACE	90.7	0	AT GRADE	2	Inspected	Frame - Loose, Invert - 02" debris			X									X	Clean Invert
Sub-Area 27	SSMH-0113	FALL BROOK EASEMENT	60.0	0	5 ABOVE GRADE	0	Inspected	Cover - Locking cover													
Sub-Area 27	SSMH-3291	FALL BROOK STREET AT WASHINGTON AVENUE	79.0	0	AT GRADE	34	Inspected	Cover - Many Holes, Starter manhole, Chimney - Broken, loose and missing brick, missing mortar, Wall - Deteriorating mortar	Cover Holes			X			X						
Sub-Area 27	SSMH-0112	LLOYD AVENUE AT VICTOR ROAD	114.7	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-1549	VICTOR ROAD AT LLOYD AVENUE	80.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-0016	WASHINGTON AVENUE AT BYFIELD ROAD	93.3	0	AT GRADE	3	Inspected	Invert - Catching solids												X	Clean Invert
Sub-Area 27	SSMH-2277	WASHINGTON AVENUE AT PHEASANT HILL DRIVE	123.3	0	AT GRADE	0	Inspected	Wall - Muddy, Floor - Dirt and debris, Invert - Catching solids													
Sub-Area 27	SSMH-3297	WASHINGTON AVENUE AT PHEASANT HILL DRIVE	187.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 28	SSMH-0582	MILIKEN STREET R.O.W.	-	0	CNI	CNI	CNI	Sealed Shut				X									Replace with Bolted Frame and Cover
Sub-Area 28	SSMH-6175	RIVERSIDE INDUSTRIAL PARKWAY R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 28	SSMH-6295	RIVERSIDE INDUSTRIAL PARKWAY R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 28	SSMH-6178	RIVERSIDE INDUSTRIAL WAY R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 28	SSMH-0194	RIVERSIDE STREET R.O.W.	-	0	CNL	CNL	CNL	CNL													
Sub-Area 28	SSMH-5377	RIVERSIDE STREET R.O.W.	-	0	CNI	CNI	CNI	Could Not Access													
Sub-Area 28	SSMH-0834	1064 RIVERSIDE STREET	187.5	0	AT GRADE	18	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Staining at Lift Hole and Joint	Cover Holes	Minerals		X				X					
Sub-Area 28	SSMH-0833	1158 RIVERSIDE STREET	179.5	0	AT GRADE	28	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Mineral deposits	Cover Holes	Minerals		X				X					
Sub-Area 28	SSMH-2981	1158 RIVERSIDE STREET	176.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Wall - Mineral deposits, Invert - Holding solids		Minerals					X					X	Clean Invert
Sub-Area 28	SSMH-3117	138 MILTON STREET	85.0	0	2 ABOVE GRADE	2	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken brick													

ARCADIS Design & Consultancy for natural and built assets

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Sub-Area 28	SSMH-0840	139 BEVERLY STREET	-	0	CNI	CNI	CNI	Could Not Open													
Sub-Area 28	SSMH-0193	159 BEVERLY STREET	122.3	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 28	SSMH-0849	159 BEVERLY STREET	243.0	0	8 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 28	SSMH-1632	159 BEVERLY STREET R.O.W.	111.7	7,200	2 ABOVE GRADE	22	Inspected	Cover - Many Holes, Wall - 4 leaks, heavy mineral deposits, Invert - Light mineral deposits	Cover Holes	Active		X			X						
Sub-Area 28	SSMH-5398	159 BEVERLY STREET R.O.W.	84.0	0	2 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 28	SSMH-6723	160 MILTON STREET	83.5	0	0.2 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 28	SSMH-0839	174 MILTON STREET	85.0	0	AT GRADE	3	Inspected	Chimney - Broken brick, missing mortar													
Sub-Area 28	SSMH-1633	192 MILTON STREET	84.0	0	AT GRADE	3	Inspected	Manhole is in gutterline													
Sub-Area 28	SSMH-2993	232 RIVERSIDE INDUSTRIAL PARKWAY	121.7	144	42 ABOVE GRADE	1	Inspected	Manhole is in brook Aggregate showing and broken pieces on outside upper portion of wall - See image, Wall - Moderate mineral deposits, missing mortar, leaking at joints		Active				X		X	X				
Sub-Area 28	SSMH-3000	25 RICE STREET	84.0	144	4 BELOW GRADE	19	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked and missing pavement surrounding frame, Chimney - Leak, missing brick and mortar, broken brick, loose pieces	Cover Holes	Active		X		X							
Sub-Area 28	SSMH-6283	356 RIVERSIDE INDUSTRIAL PARKWAY	80.0	0	0.5 ABOVE GRADE	1	Inspected	Frame - Offset3"			X										
Sub-Area 28	SSMH-6176	356 RIVERSIDE INDUSTRIAL PARKWAY (ADJACENT)	226.0	0	3 ABOVE GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-2997	376 RIVERSIDE INDUSTRIAL PARKWAY	146.0	0	8 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-6301	376 RIVERSIDE INDUSTRIAL PARKWAY	136.0	0	1 BELOW GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-6302	376 RIVERSIDE INDUSTRIAL PARKWAY	120.5	0	0.5 ABOVE GRADE	33	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-2999	430 RIVERSIDE INDUSTRIAL PARKWAY	147.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Chimney - Missing mortar	Cover Holes			X									
Sub-Area 28	SSMH-6282	430 RIVERSIDE INDUSTRIAL PARKWAY	129.7	0	AT GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-5389	444 RIVERSIDE INDUSTRIAL PARKWAY	119.0	0	5 ABOVE GRADE	40	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-5390	474 RIVERSIDE INDUSTRIAL PARKWAY	92.5	0	1 ABOVE GRADE	24	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-4930	56 MILIKEN STREET	199.5	0	0.5 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 28	SSMH-0581	57 BEVERLY STREET	129.3	0	60 ABOVE GRADE	34	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-0837	95 RIVERSIDE STREET	206.3	0	AT GRADE	2	Inspected	Bottom 5' of manhole is brick, Cover - Cracked pavement surrounding frame, Wall - Brick section wet, however no visible leaks, Floor - Debris		Active					X						
Sub-Area 28	SSMH-5384	95 RIVERSIDE STREET	158.3	0	AT GRADE	3	Inspected	Landing halfway down manhole, Cover - Cracked pavement surrounding frame, Floor - Debris													
Sub-Area 28	SSMH-5399	MILIKEN ROAD R.O.W.	142.5	0	60 ABOVE GRADE	21	Inspected	Cover - Many Holes, Unable to safely setup tripod at manhole - internal inspection performed, Wall - Light roots on brick portion, Floor - Debris	Cover Holes	Roots		X			X					X	Remove Roots
Sub-Area 28	SSMH-0583	MILIKEN STREET R.O.W.	105.5	720	16 ABOVE GRADE	18	Inspected	Cover - Many Holes, Chimney - Broken brick, missing mortar, Wall - Leak, broken brick, missing mortar, mineral deposits, roots, Floor - Covered in broken brick from Chimney	Cover Holes	Active		X		X	X						
Sub-Area 28	SSMH-1629	MILIKEN STREET R.O.W.	137.5	0	65 ABOVE GRADE	15	Inspected	Cover - Many Holes, Unable to enter manhole - precast section added made entry unsafe - nowhere to put cover, feared it might fall over, Chimney - Precast section just set over mannhole was not sealed	Cover Holes			X		X							
Sub-Area 28	SSMH-1630	MILIKEN STREET R.O.W.	113.0	0	38 ABOVE GRADE	21	Inspected	Cover - Many Holes, Unable to safely carry tripod down hill to manhole, or to set it up - surface inspection performed due to these restrictions	Cover Holes			X			X						
Sub-Area 28	SSMH-1631	MILIKEN STREET R.O.W.	115.7	1,440	39 ABOVE GRADE	21	Inspected	Cover - Many Holes, Floor - Mineral deposits, leak, loose and missing bricks, missing mortar, Invert - Mineral deposits	Cover Holes	Active		X			X						
Sub-Area 28	SSMH-5407	MILIKEN STREET R.O.W.	134.5	0	65 ABOVE GRADE	15	Inspected	Cover - Many Holes, Unsafe to enter manhole - nowhere to place cover	Cover Holes			X									

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Sub-Area 28	SSMH-0585	REGAN LANE EASEMENT	104.5	0	24 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-4931	RIVERSIDE INDUSTRIAL WAY R.O.W.	104.0	720	23 ABOVE GRADE	6	Inspected	Chimney - Missing mortar, Wall - Light roots, Floor - Heavy roots, Invert - Blockage from roots		Roots				X	X					X	Remove Roots
Sub-Area 28	SSMH-4932	RIVERSIDE INDUSTRIAL WAY R.O.W.	246.7	0	4 ABOVE GRADE	22	Inspected	Cover - Many Holes, Chimney - Missing mortar, Wall - Weeping, mineral deposits, Floor - Debris on bench, Invert - Rock in invert	Cover Holes	Active		X			X						
Sub-Area 28	SSMH-6177	RIVERSIDE INDUSTRIAL WAY R.O.W.	100.3	1,440	5 ABOVE GRADE	14	Inspected	Cover - Many Holes, Wall - Missing mortar, mineral depositis, Floor - Dirt	Cover Holes	Minerals		X			X						
Sub-Area 28	SSMH-6291	RIVERSIDE INDUSTRIAL WAY R.O.W.	101.5	0	5 ABOVE GRADE	12	Inspected	Cover - Many Holes, Wall - Missing mortar, heavy mineral deposits	Cover Holes	Minerals		X			X						
Sub-Area 28	SSMH-6292	RIVERSIDE INDUSTRIAL WAY R.O.W.	81.5	0	10 ABOVE GRADE	2	Inspected	Chimney - Missing mortar, Wall - Covered in mud, roots, Floor - Mineral deposits, Invert - Missing mortar		Roots					X						
Sub-Area 28	SSMH-6294	RIVERSIDE INDUSTRIAL WAY R.O.W.	161.0	0	16 ABOVE GRADE	18	Inspected	Cover - Many Holes, Manhole is 10' from brook - invert should be parged to seal from contamination, Wall - Light roots, Floor - Mud, Invert - Missing brick and mortar, mineral deposits	Cover Holes	Roots		X			X						
Sub-Area 28	SSMH-6298	RIVERSIDE INDUSTRIAL WAY R.O.W.	110.5	0	26 ABOVE GRADE	24	Inspected	Cover - Many Holes, Wall - Mineral deposits, multiple small leaks <05 GPM, Invert - Debris	Cover Holes	Active		X			X						
Sub-Area 28	SSMH-2998	RIVERSIDE STREET R.O.W.	162.5	720	12 ABOVE GRADE	12	Inspected	Cover - Many Holes, Colony of what appears to be black widows in manhole, Chimney - Broken and missing brick, missing mortar, Wall - Leak, light roots, mineral deposits	Cover Holes	Active		X		X	X						
Sub-Area 28	SSMH-5378	RIVERSIDE STREET R.O.W.	118.5	0	16 ABOVE GRADE	2	Inspected	Did not enter -- 45+ PPM CO at top of manhole, Chimney - Broken brick, missing mortar, Wall - Weeping, mineral deposits at pipe connection		Active					X						
Sub-Area 28	SSMH-5379	RIVERSIDE STREET R.O.W.	109.0	0	18 ABOVE GRADE	2	Inspected	Did not enter -- 50+ PPM CO at top of manhole, Wall - Weeping walls		Active					X						
Sub-Area 28	SSMH-6287	RIVERSIDE STREET R.O.W.	114.0	0	5 ABOVE GRADE	2	Inspected	Unsafe to enter -- 55+ PPM CO at top of manhole, Chimney - Missing mortar, light roots, Wall - Weeping walls		Active					X						
Sub-Area 28	SSMH-6303	RIVERSIDE STREET R.O.W.	102.5	0	8 ABOVE GRADE	2	Inspected	Chimney - Broken brick, Wall - Weeping walls, mineral deposits, Invert - Debris		Active					X						
Sub-Area 28	SSMH-6304	RIVERSIDE STREET R.O.W.	103.5	0	6 ABOVE GRADE	2	Inspected	Chimney - Light roots, Wall - Weeping walls, roots, mineral deposits		Active					X						
Sub-Area 29	SSMH-1283	KENILWORTH STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 29	SSMH-0772	11 WOLCOTT STREET	99.0	0	0.25 BELOW GRADE	21	Inspected	Cover - Many Holes, Chimney - Soft brick and mortar, missing mortar, Invert - Heavy debris	Cover Holes			X						X		X	Repair Chimney, Clean Invert
Sub-Area 29	SSMH-4058	17 BANCROFT STREET	65.7	0	0.25 ABOVE GRADE	12	Inspected	Cover - Many Holes, Chimney - Broken brick	Cover Holes			X						X			Repair Chimney
Sub-Area 29	SSMH-0262	20 HASTINGS STREET	105.0	0	AT GRADE	11	Inspected	Cover - Many Holes, Starte manhole, Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 29	SSMH-3267	22 ROCKLAND AVENUE	90.0	0	AT GRADE	2	Inspected	Frame - Frame and cover are rusted together					X								
Sub-Area 29	SSMH-0771	27 FLEETWOOD STREET	87.5	0	AT GRADE	2	Inspected	Cover - Cracked and missing pavement surrounding frame, Frame - Chipped, Chimney - Broken and missing brick, soft mortar													
Sub-Area 29	SSMH-0773	28 WOLCOTT STREET	108.5	0	AT GRADE	26	Inspected	Cover - Many Holes, Chimney - Missing mortar, missing pieces	Cover Holes			X								X	Repair Chimney
Sub-Area 29	SSMH-2928	33 BANCROFT STREET	114.5	0	0.25 ABOVE GRADE	24	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 29	SSMH-5294	33 COLONIAL ROAD	88.0	0	0.25 BELOW GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-5297	33 COLONIAL ROAD	-	0	CNL	CNL	CNL	CNL													
Sub-Area 29	SSMH-0261	34 HASTINGS STREET	92.5	0	AT GRADE	22	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing and broken brick, missing mortar, loose pieces	Cover Holes			X									Repair Chimney
Sub-Area 29	SSMH-5296	40 COLONIAL ROAD	97.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 29	SSMH-0768	48 COLONIAL ROAD	-	0	CNL	CNL	CNL	CNL													

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Manhole Inspection Results and Rehabilitation Recommendations

Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Lining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 29	SSMH-5295	48 COLONIAL ROAD	106.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-0263	64 HASTINGS STREET	129.5	0	0.5 BELOW GRADE	15	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing brick and mortar, broken brick, soft mortar, Floor - Covered in debris	Cover Holes			X						X		X	Repair Chimney, Clean Bench
Sub-Area 29	SSMH-5302	64 WOLCOTT STREET	92.5	0	AT GRADE	28	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 29	SSMH-0770	67 COLONIAL ROAD	79.0	0	AT GRADE	26	Inspected	Cover - Many Holes, Starter manhole, Floor - 80% covered in debris, Invert - Full of debris	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 29	SSMH-6093	68 MACHIGONNE STREET	107.5	0	AT GRADE	10	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 29	SSMH-5293	7 COLONIAL ROAD	88.0	0	AT GRADE	3	Inspected	Starter manhole													
Sub-Area 29	SSMH-5301	75 WOLCOTT STREET	92.0	0	AT GRADE	27	Inspected	Cover - Many Holes, Starter manhole	Cover Holes			X									
Sub-Area 29	SSMH-0264	80 HASTINGS STREET	88.5	0	0.75 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 29	SSMH-6092	84 MACHIGONNE STREET	68.0	0	AT GRADE	31	Inspected	Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Frame - Chipped, Invert - Full of heavy debris	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 29	SSMH-6543	88 HASTINGS STREET	52.0	0	0.25 ABOVE GRADE	0	Inspected	Starter manhole, Cover - Blind flange													
Sub-Area 29	SSMH-4057	BANCROFT STREET AT BRIGHTON AVENUE	90.0	0	AT GRADE	5	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken and missing brick, missing mortar									X				Repair Chimney
Sub-Area 29	SSMH-2926	BANCROFT STREET AT ROCKLAND AVENUE	118.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-5329	COLONIAL ROAD AT ROCKLAND AVENUE	156.3	0	AT GRADE	3	Inspected	Frame - Frame and cover are rusted together				X									
Sub-Area 29	SSMH-0260	FLEETWOOD STREET AT BRIGHTON AVENUE	80.0	0	0.25 BELOW GRADE	2	Inspected	Starter manhole, Frame - Offset2", Chimney - Soft mortar, mineral deposits, Invert - Heavy solids		Minerals	X		X				X		X	Clean Invert, Repair Chimney
Sub-Area 29	SSMH-5328	HASTING STREET AT ROCKLAND AVENUE	123.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 29	SSMH-6094	MACHIGONNE STREET AT ROCKLAND AVENUE	124.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-5299	ROCKLAND AVENUE AT BANCROFT STREET	127.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-0769	ROCKLAND AVENUE AT COLONIAL ROAD	160.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-5298	ROCKLAND AVENUE AT FLEETWOOD STREET	102.3	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 29	SSMH-2927	ROCKLAND AVENUE AT KENILWORTH STREET	104.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-0797	ROCKLAND AVENUE AT MACHIGONNE STREET R.O.W.	147.7	1,440	0.25 BELOW GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 29	SSMH-0774	ROCKLAND AVENUE AT WOLCOTT STREET	82.8	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 30	SSMH-0007	OCEAN AVENUE AT WELLSTONE DRIVE	86.5	0	AT GRADE	3	Inspected	Floor - Dirt and debris.													
Sub-Area 30	SSMH-4232	WASHINGTON AVENUE AT MORSE STREET	120.7	0	AT GRADE	0	Inspected	No Significant Defects													
Sub-Area 30	SSMH-0043	WASHINGTON AVENUE AT OCEAN AVENUE	93.0	0	AT GRADE	3	Inspected	Floor - Covered in debris, Invert - Full of debris.												X	Clean Bench and Invert
Totals	**937**			**76,406**						**136**	**95**	**298**	**51**	**37**	**83**	**66**	**5**	**167**	**6**	**105**	

ARCADIS Design & Consultancy for natural and built assets

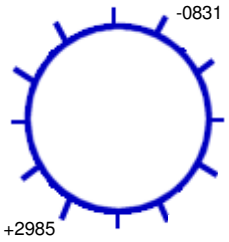
MANHOLE INSPECTION LOGS SUB-AREA 4

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0195***
Street:	Riverside Street R.O.W.			**Sub-System:**	***4***
Inspection Date:	7/18/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



185 **Ft. to DS MH #:** 0831

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 6 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Unable to enter manhole - unsafe levels of CO at 145+PPM

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar, weeping
STEPS	ALUM	1			
WALLS	BRICK	2			Missing mortar, weeping
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2985	08' 00"	12	VCP	3	2.00	0			0	
OUT TO	0831	08' 01"	12	VCP	3	2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0205***
Street:	Riverside Street at Prim Street			**Sub-System:**	***4***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

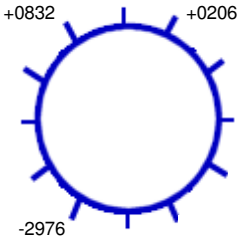
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



150 **Ft. to DS MH #:** 2976

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Broken brick, missing mortar, debris
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

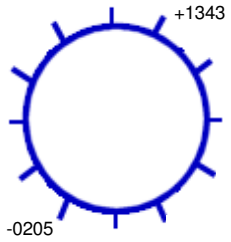
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0206	08' 01"	8	PVC		0	0			0	
IN FROM	0832	07' 11"	8	PVC		0	0			0	
OUT TO	2976	08' 02"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0206***
Street:	872 Riverside Street			**Sub-System:**	***4***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



280 **Ft. to DS MH #:** 0205

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

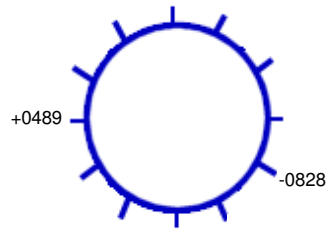
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1343	10' 06"	8	PVC		0.10	0			0	
OUT TO	0205	10' 07"	8	PVC		0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 56 Evergreen Drive
Manhole No.: 0210
Sub-System: 4
Inspection Date: 6/21/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



190 **Ft. to DS MH #:** 0828

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.5 In.
Cracked pavement surrounding frame, blind flange

COVER INFLOW POTENTIAL
Drainage Area 1:
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			1" riser
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	3	0.01		Leak, light mineral deposits, top portion not set in bottom 3"
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0489	06' 11"	8	PVC	10	2.00	0			0	
OUT TO	0828	07' 01"	8	PVC	10	1.00	0			0	

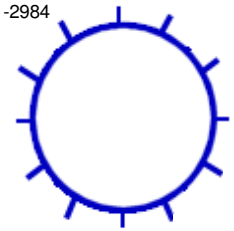
NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0211***
Street:	95 Evergreen Drive			**Sub-System:**	***4***
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



171 **Ft. to DS MH #:** 2984

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	2	0.25		Leak at seam
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2984	07' 08"	8	PVC	10	1.00	0			0	Standing flow

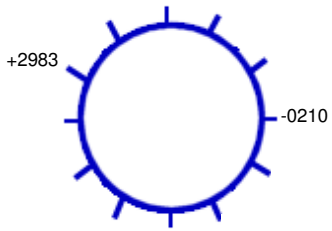
NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0489
Street:	25 Evergreen Drive			**Sub-System:**	4
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



296 **Ft. to DS MH #:** 0210

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

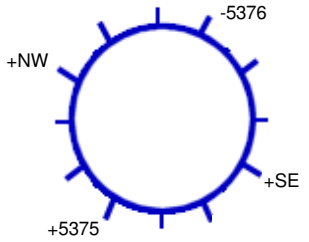
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2983	06' 07"	8	PVC	10	0.50	0			0	
OUT TO	0210	06' 09"	8	PVC	10	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0826
Street:	126 Industrial Way			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



108 **Ft. to DS MH #:** 5376

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Light mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 02"	6	PVC	10	0.70	0			0	Standing flow
IN FROM	SE	07' 00"	6	PVC	10	0.25	0			0	Standing flow
IN FROM	5375	07' 03"	10	PVC	10	2.50	0			0	
OUT TO	5376	07' 04"	10	PVC	10	2.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0827
Street:	225 Industrial Way			**Sub-System:**	4
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not open - cracked cover

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0828
Street:	Evergreen Drive at Industrial Way			**Sub-System:**	4
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

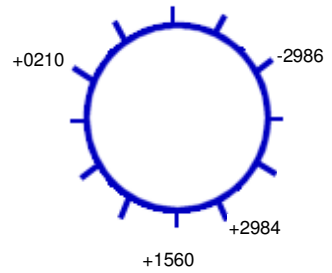
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



272 **Ft. to DS MH #:** 2986

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Missing mortar

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

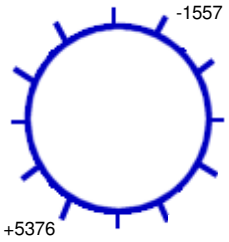
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0210	08' 06"	8	PVC	10	0.75	0			0	
IN FROM	1560	08' 08"	10	PVC	10	1.50	0			0	
IN FROM	2984	08' 06"	8	PVC	10	0.50	0			0	
OUT TO	2986	08' 08"	10	PVC	10	2.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0829
Street:	Industrial Way			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



195 **Ft. to DS MH #:** 1557

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Moderate mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5376	06' 11"	10	PVC	10	2.00	0			0	
OUT TO	1557	07' 00"	10	PVC	10	2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0830
Street:	Riverside Street R.O.W.			**Sub-System:**	4
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

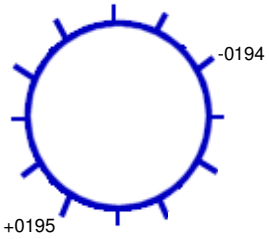
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0831
Street:	Caddie Lane Easement			**Sub-System:**	4
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



197 **Ft. to DS MH #:** 0194

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 12 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0195	10' 03"	8	ACP		3.00	0			0	
OUT TO	0194	10' 05"	8	ACP		2.00	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0832
Street:	Prim Street			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*1343*
Street:	892 Riverside Street			**Sub-System:**	*4*
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not open - cover will break

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1452***
Street:	53 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N

+North

+4439

-5372

+South

117 **Ft. to DS MH #:** 5372

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

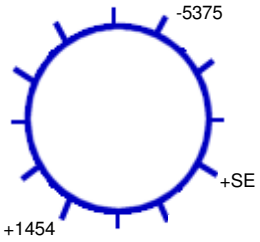
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	08' 05"	6	PVC	10	0	0			0	
IN FROM	South	08' 05"	6	PVC	10	0	0.25			0	
IN FROM	4439	08' 06"	8	PVC	10	0.70	0			0	
OUT TO	5372	08' 08"	8	PVC	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1453***
Street:	125 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



116 **Ft. to DS MH #:** 5375

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Heavy mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

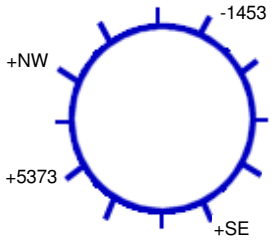
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	08' 04"	8	PVC	10	0	0.20			0	
IN FROM	1454	08' 06"	10	PVC	10	1.70	0			0	
OUT TO	5375	08' 08"	10	PVC	10	1.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1454***
Street:	100 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



111 **Ft. to DS MH #:** 1453

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	3			Moderate mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

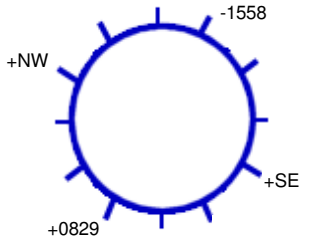
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 06"	6	PVC	10	0.10	0			0	
IN FROM	SE	09' 06"	6	PVC	10	0.20	0			0	
IN FROM	5373	09' 07"	10	PVC	10	1.00	0			0	
OUT TO	1453	09' 08"	10	PVC	10	1.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1557***
Street:	Industrial Way Office Max - Second Entrance			**Sub-System:**	***4***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



162 **Ft. to DS MH #:** 1558

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Moderate mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

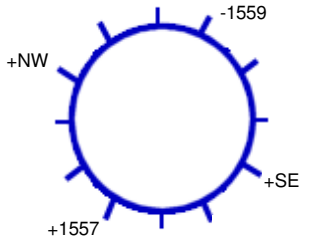
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	06' 08"	6	PVC	10	0	1.00			0	
IN FROM	SE	06' 08"	6	PVC	10	1.00	0.50			0	Standing flow
IN FROM	0829	06' 09"	10	PVC	10	2.00	0			0	
OUT TO	1558	06' 10"	10	PVC	10	2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1558***
Street:	175 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



157 **Ft. to DS MH #:** 1559

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 6 **X** 0.9 **=** 21.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Light mineral deposits
STEPS	PLASTIC	4			Missing steps
WALLS	PRECAST	3			Moderate mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

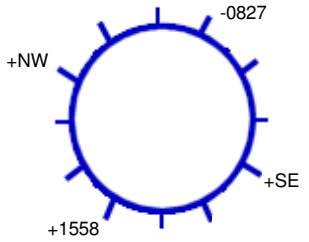
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 06"	6	PVC	10	0	0			0	
IN FROM	SE	07' 05"	6	PVC	10	0	0			0	
IN FROM	1557	07' 07"	10	PVC	10	1.50	0			0	
OUT TO	1559	07' 08"	10	PVC	10	1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1559***
Street:	175 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



168 **Ft. to DS MH #:** 0827

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Light mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 08"	6	PVC	10	0	0			0	
IN FROM	SE	07' 06"	6	PVC	10	0	0			0	
IN FROM	1558	07' 08"	10	PVC	10	1.50	0			0	
OUT TO	0827	07' 10"	10	PVC	10	1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1560***
Street:	220 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

-0828

+0827

72 **Ft. to DS MH #:** 0828

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 6 **X** 0.9 **=** 21.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Moderate mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

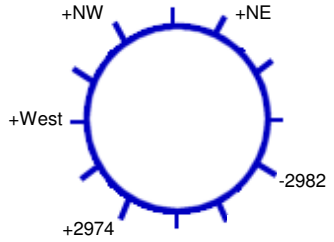
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0827	08' 00"	10	PVC	10	2.50	0			0	
OUT TO	0828	08' 01"	10	PVC	10	2.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2972***
Street:	Riverside Street at Evergreen Drive			**Sub-System:**	***4***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



115 **Ft. to DS MH #:** 2982

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Has riser
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

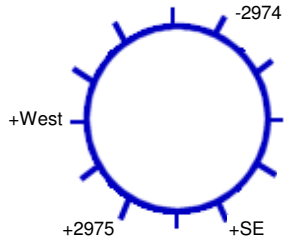
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	06' 10"	10	ACP		0	0			0	
IN FROM	NW	05' 10"	1	PVC		0	0			0	
IN FROM	West	06' 11"	8	ACP		0.05	0			0	
IN FROM	2974	07' 01"	8	PVC		1.00	0			0	
OUT TO	2982	07' 02"	8	PVC		0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2973***
Street:	910 Riverside Street			**Sub-System:**	***4***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



300 **Ft. to DS MH #:** 2974

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	21	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Missing mortar
INVERT	BRICK	2			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	09' 10"	8	PVC		0.10	0			0	
IN FROM	West	10' 00"	8	PVC		0.10	0			0	
IN FROM	2975	09' 11"	8	VCP		0	0			0	
OUT TO	2974	10' 01"	8	PVC		0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	2974
Street:	980 Riverside Street			**Sub-System:**	4
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Manhole has a Smart Cover - did not want to break

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2975***
Street:	902 Riverside Street			**Sub-System:**	***4***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

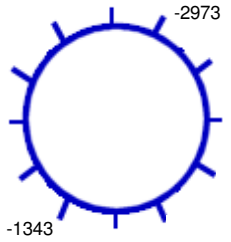
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



260 **Ft. to DS MH #:** 1343

General Comments: Highpoint manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			Dirt and debris
INVERT	CNI	0			Full of dirt

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1343	07' 09"	8	PVC		0	0.75			0	
OUT TO	2973	07' 09"	8	PVC		0.25	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2976***
Street:	Riverside Street at Industrial Way			**Sub-System:**	***4***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

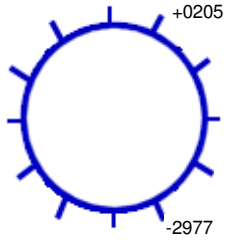
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



23 **Ft. to DS MH #:** 2977

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0205	05' 09"	8	PVC		0	0			0	
OUT TO	2977	05' 10"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2977***
Street:	Riverside Street at Industrial Way			**Sub-System:**	***4***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

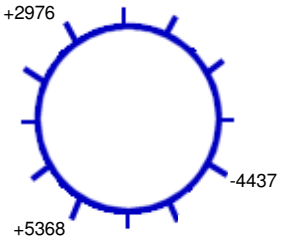
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



150 **Ft. to DS MH #:** 4437

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

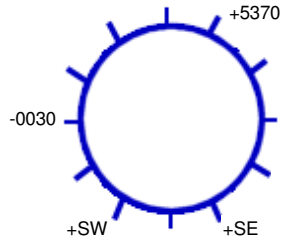
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2976	05' 04"	8	PVC		0.30	0			0	
IN FROM	5368	05' 06"	8	PVC		0	0			0	
OUT TO	4437	05' 07"	8	PVC		0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	2978
Street:	723 Riverside Street parking lot			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



184 **Ft. to DS MH #:** 0030

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Solids catching in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

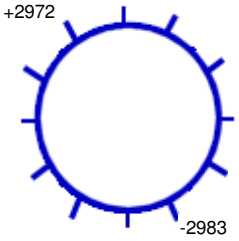
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	11' 09"	8	PVC	10	1.00	0.25			0	Standing flow
IN FROM	SW	11' 10"	8	PVC	10	2.00	0.25			0	Standing flow
IN FROM	5370	11' 09"	8	PVC	10	0.50	0			0	
OUT TO	0030	12' 00"	8	PVC	10	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2982***
Street:	2 Evergreen Drive			**Sub-System:**	***4***
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



102 **Ft. to DS MH #:** 2983

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2972	06' 04"	8	PVC	10	0.40	0			0	
OUT TO	2983	06' 04"	8	PVC	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2983***
Street:	21 Evergreen Drive			**Sub-System:**	***4***
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

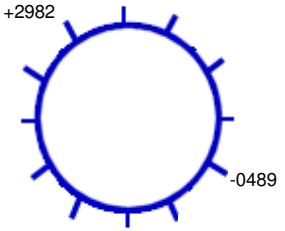
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



101 **Ft. to DS MH #:** 0489

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken and missing brick
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

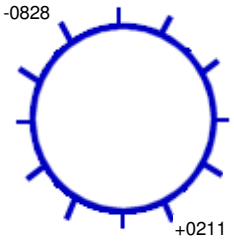
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2982	06' 04"	8	PVC	10	0.50	0			0	
OUT TO	0489	06' 04"	8	PVC	10	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	2984
Street:	74 Evergreen Drive			**Sub-System:**	4
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



126 **Ft. to DS MH #:** 0828

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	4			Broken, loose and missing brick, missing pieces
STEPS	PLASTIC	1			
WALLS	PRECAST	3	0.25		Leak at seam
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0211	08' 00"	8	PVC	10	0.25	0.20			0	
OUT TO	0828	08' 01"	8	PVC	10	0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	2985
Street:	Riverside Street R.O.W.			**Sub-System:**	4
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2986***
Street:	56 Evergreen Drive R.O.W.			**Sub-System:**	***4***
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 19 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

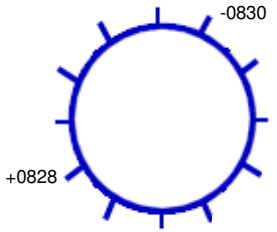
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



232 **Ft. to DS MH #:** 0830

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

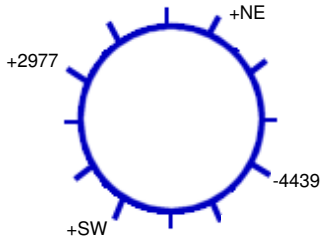
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0828	13' 03"	10	PVC	10	1.75	0			0	
OUT TO	0830	13' 04"	10	PVC	10	1.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4437***
Street:	1 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



252 **Ft. to DS MH #:** 4439

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	3			Mineral deposits
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 07"	6	PVC	10	0.50	0			0	
IN FROM	SW	07' 08"	6	PVC	10	1.00	0			0	
IN FROM	2977	07' 06"	8	PVC	10	0.20	0			0	
OUT TO	4439	07' 09"	8	PVC	10	2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4439***
Street:	35 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

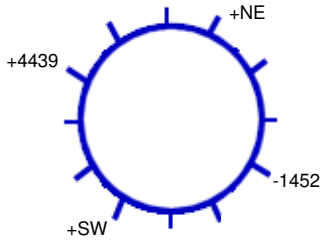
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



260 **Ft. to DS MH #:** 1452

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	3			Missing mortar, mineral deposits
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

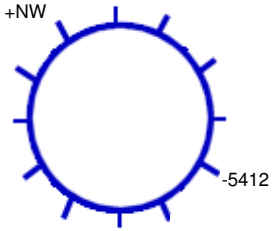
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 08"	6	PVC	10	0	1.00			0	
IN FROM	SW	07' 09"	6	PVC	10	0.05	0			0	
IN FROM	4439	07' 08"	8	PVC	10	0.70	0			0	
OUT TO	1452	08' 00"	8	PVC	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4555
Street:	36 Waldron Way			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



137 **Ft. to DS MH #:** 5412

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	5			Cracked into pieces
CORBEL	BRICK	4			Broken, loose and missing brick
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	05' 10"	6	PVC	10	0	0.25			0	
OUT TO	5412	05' 11"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5368***
Street:	828 Riverside Street			**Sub-System:**	***4***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

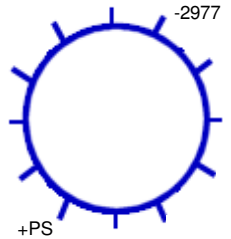
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



36 **Ft. to DS MH #:** 2977

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

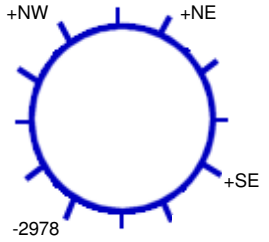
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	PS	03' 07"	4	PVC		0	0			0	Force Main
IN FROM	South	03' 06"	5	CIP		0	0			0	
OUT TO	2977	04' 06"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5370
Street:	723 Riverside Street parking lot			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



286 **Ft. to DS MH #:** 2978

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Sediment catching in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

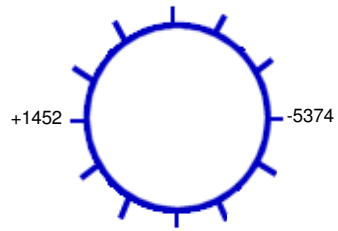
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	06' 02"	6	PVC	10	0.10	0			0	
IN FROM	NW	06' 02"	6	PVC	10	0.50	0			0	
IN FROM	SE	06' 03"	6	PVC	10	0.50	0			0	
OUT TO	2978	06' 04"	8	PVC	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 75 Industrial Way
Manhole No.: 5372
Sub-System: 4
Inspection Date: 6/20/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



90 **Ft. to DS MH #:** 5374

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.2 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Moderate mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	11' 06"	8	PVC	10	0.70	0			0	
IN FROM	1452	11' 06"	8	PVC	10	0.70	0			0	
OUT TO	5374	11' 06"	8	PVC	10	1.50	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5373***
Street:	81 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

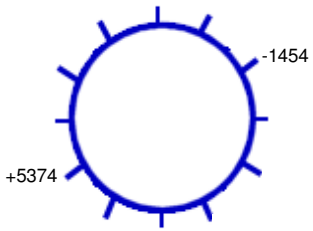
Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1



94 **Ft. to DS MH #:** 1454

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Light mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5374	10' 03"	10	PVC	10	1.00	0			0	
OUT TO	1454	10' 04"	10	PVC	10	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5374***
Street:	77 Industrial Way			**Sub-System:**	***4***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

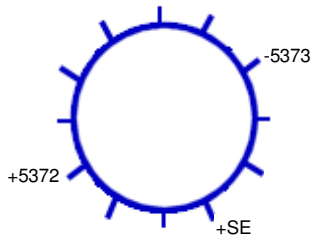
Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1



88 **Ft. to DS MH #:** 5373

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Light mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

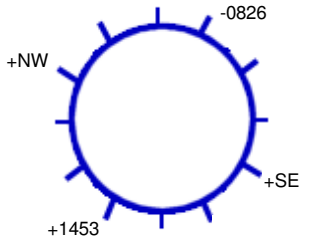
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	10' 10"	8	PVC	10	0	0			0	
IN FROM	5372	10' 11"	8	PVC	10	1.50	0			0	
OUT TO	5373	10' 11"	10	PVC	10	1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5375
Street:	108 Industrial Way			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



167 **Ft. to DS MH #:** 0826

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar, light mineral deposits
STEPS	PLASTIC	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 11"	8	PVC	10	2.00	0			0	Standing flow
IN FROM	SE	07' 11"	8	PVC	10	0	0.50			0	
IN FROM	1453	08' 00"	10	PVC	10	2.00	0			0	
OUT TO	0826	08' 01"	10	PVC	10	2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*5376*
Street:	Industrial Way			**Sub-System:**	*4*
Inspection Date:	6/21/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

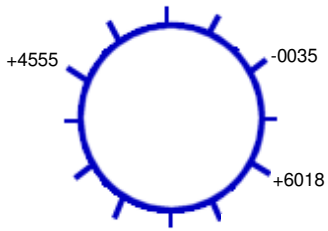
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5412
Street:	31 Waldron Way			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



31 **Ft. to DS MH #:** 0035

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

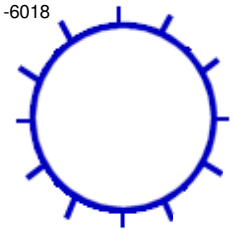
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4555	07' 09"	8	PVC	10	0.20	0			0	
IN FROM	6018	07' 09"	8	PVC	10	0.20	0			0	
OUT TO	0035	07' 10"	8	PVC	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5413
Street:	92 Waldron Way			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



237 **Ft. to DS MH #:** 6018

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 6 **X** 0.9 **=** 27.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

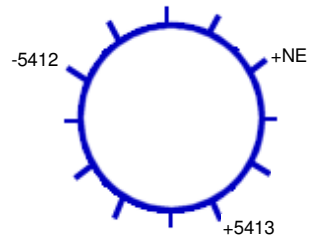
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	6018	06' 08"	8	PVC	10	0	0.50			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6018
Street:	68 Waldron Way			**Sub-System:**	4
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



179 **Ft. to DS MH #:** 5412

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 09"	8	PVC	10	0.10	0			0	
IN FROM	5413	07' 09"	8	PVC	10	0.10	0			0	
OUT TO	5412	07' 11"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*6179*
Street:	Riverside Street R.O.W.			**Sub-System:**	*4*
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

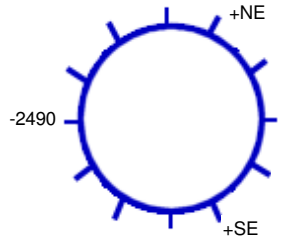
MANHOLE INSPECTION LOGS SUB-AREA 5

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2489***
Street:	1412 Riverside Street			**Sub-System:**	***5***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



109 **Ft. to DS MH #:** 2490

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	19	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Offset 3"
CORBEL	NONE	0			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

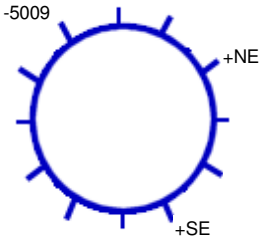
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	21' 10"	15	VCP	3	3.00	1.00			0	Outside drop
IN FROM	SE	10' 11"	12	ACP	3	2.00	0			0	
OUT TO	2490	21' 11"	15	VCP	3	4.00	1.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5010***
Street:	65 Lambert Street			**Sub-System:**	***5***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



316 **Ft. to DS MH #:** 5009

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	3			Mineral deposits
INVERT	BRICK	2			Light mineral deposits

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

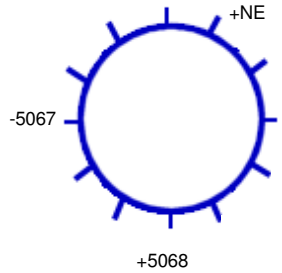
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 10"	8	PVC	10	0.20	0			0	
IN FROM	SE	07' 11"	8	PVC	10	0.20	0			0	
OUT TO	5009	08' 02"	8	PVC	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5066
Street:	1958 Washington Avenue			**Sub-System:**	5
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



151 **Ft. to DS MH #:** 5067

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	4	3		Leaking at seam
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

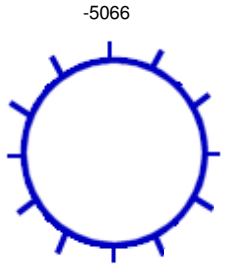
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	15' 04"	18	CONC	4	2.00	0			1	
IN FROM	5068	08' 01"	8	VCP	3	0.50	0			1	Outside drop
OUT TO	5067	15' 08"	18	CONC	4	3.50	1.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5068***
Street:	1955 Washington Avenue			**Sub-System:**	***5***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



165 **Ft. to DS MH #:** 5066

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	3	3		Leak at seam
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

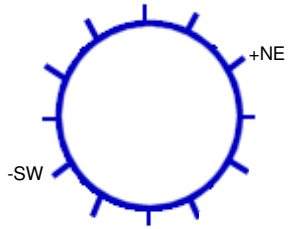
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	08' 08"	8	PVC	10	0.20	0			0	
OUT TO	5066	08' 09"	8	VCP	3	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5382
Street:	Riverside Street			**Sub-System:**	5
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



Ft. to DS MH #: SW

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 2 **X** 0.9 **=** 7.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

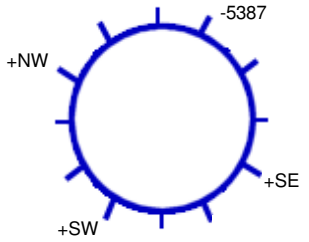
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	10' 00"	15	VCP	3	3.00	0			0	
OUT TO	SW	10' 01"	24	VCP	3	3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5388***
Street:	500 Riverside Industrial Parkway			**Sub-System:**	***5***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



276 **Ft. to DS MH #:** 5387

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.3 **=** 4.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	16	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	08' 06"	6	VCP	3	0	0			0	
IN FROM	SE	08' 08"	6	VCP	3	0	0			0	
IN FROM	SW									0	Bulkheaded
OUT TO	5387	08' 10"	8	VCP	3	0	1.00			0	

MANHOLE INSPECTION LOGS SUB-AREA 6

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0157***
Street:	114 Alpine Road			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

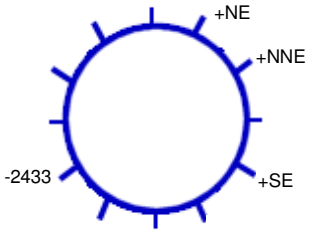
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



254 **Ft. to DS MH #:** 2433

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	3			Missing brick, moderate mineral deposits
INVERT	BRICK	2			Sediment catching in invert, light mineral deposits

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE		10	ACP	3	0.01	0			0	Bulkheaded but leaking
IN FROM	NNE	08' 02"	6	VCP	3	0.05	0			1	Pipe changes to 4" ACP 3" upstream
IN FROM	SE	08' 02"	6	VCP	3	0.40	0			3	Heavy mineral deposits, standing flow
OUT TO	2433	08' 05"	12	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0160***
Street:	233 Auburn Street at Brookfield Apartments			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

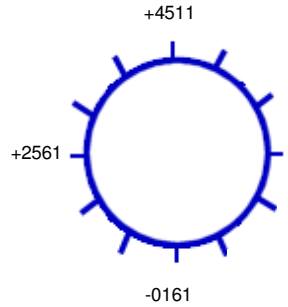
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



150 **Ft. to DS MH #:** 0161

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Chipped
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	CNI	0			Water covering floor
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

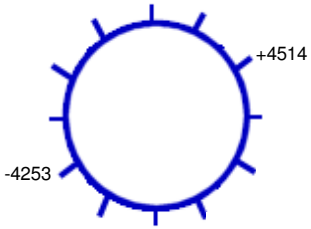
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2561	08' 09"	8	PVC	10	0.75	0			0	
IN FROM	4511	10' 03"	30	RCP	3	3.00	0			0	Force main
OUT TO	0161	10' 03"	30	RCP	3	3.00	0			0	Force main

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0175
Street:	20 Hillside Road			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



276 **Ft. to DS MH #:** 4253

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

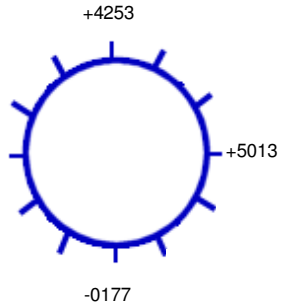
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4514	07' 09"	8	PVC	10	0.05	0			1	
OUT TO	4253	08' 01"	10	VCP	3	0.05	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0176
Street:	Auburn Street at Clayton Street			**Sub-System:**	6
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



198 **Ft. to DS MH #:** 0177

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Solids catching

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

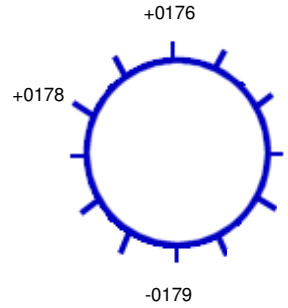
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4253	11' 00"	24	RCP	3	0.75	0			1	
IN FROM	5013	10' 00"	12	VCP	3	0.20	0			1	
OUT TO	0177	11' 04"	30	RCP	3	1.00	0.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0177***
Street:	408 Auburn Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



57 **Ft. to DS MH #:** 0179

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	15	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken and loose brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

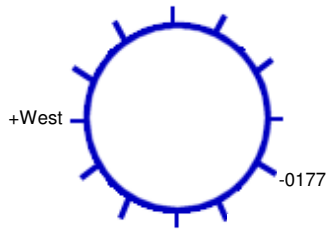
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0176	12' 03"	30	RCP	3	0.75	0			1	
IN FROM	0178	10' 10"	18	VCP	3	0	0			1	
OUT TO	0179	12' 03"	30	RCP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0178
Street:	418 Auburn Street R.O.W.			**Sub-System:**	6
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



40 **Ft. to DS MH #:** 0177

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 5 **X** 0.3 **=** 4.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	20	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	07' 09"		CIP	4	0	0			0	Force main, heavy roots, corrosion, pipe appears to be crumbling
OUT TO	0177	08' 10"	18	VCP	3	0	0			0	

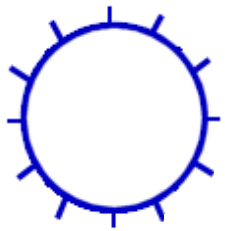
Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0179
Street:	405 Auburn Street			**Sub-System:**	6
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+0177



-5015

252 **Ft. to DS MH #:** 5015

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 4 **X** 0.9 **=** 7.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0177	12' 02"	30	RCP	3	6.00	0			1	Force main, running
OUT TO	5015	12' 02"	30	RCP	3	6.00	0			1	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0180
Street:	Parsons Pond Drive			**Sub-System:**	6
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+West -0618

+South

187 **Ft. to DS MH #:** 0618

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Broken brick, missing mortar
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

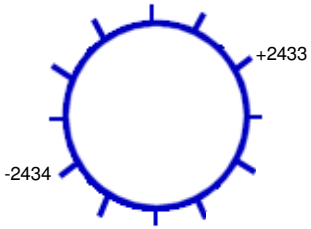
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	05' 02"	6	PVC	10	1.00	0			0	Standing flow
IN FROM	West	05' 02"	6	CIP	10	0	0			0	Pump station
OUT TO	0618	05' 03"	8	PVC	10	1.00	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0185***
Street:	67 Alpine Road			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



271 **Ft. to DS MH #:** 2434

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 6 **X** 0.9 **=** 21.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Broken and missing brick
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

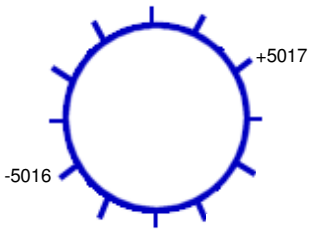
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2433	08' 00"	12	VCP	3	0.50	0			1	
OUT TO	2434	08' 02"	12	CPP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0186
Street:	16 Jackson Street			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



215 **Ft. to DS MH #:** 5016

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments: Rock caught in invert causing debris to collect - rock and part of debris removed during inspection however a portion of debris remains in pipe

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5017	06' 05"	8	VCP	3	0.50	0			1	
OUT TO	5016	06' 05"	8	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0512***
Street:	22 Auburn Terrace			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

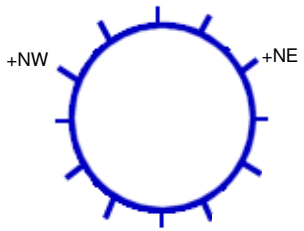
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



195 **Ft. to DS MH #:** 1604

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	PIP	1			
INVERT	PIP	1			Debris catching in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

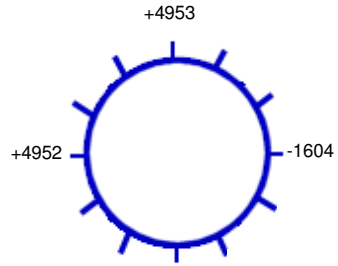
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 01"	6	ACP	3	0.75	0			0	
IN FROM	NW	04' 11"	6	ACP	3	0.50	0			0	Outside drop
OUT TO	1604	07' 02"	8	ACP	3	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0513***
Street:	42 Auburn Terrace			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



193 **Ft. to DS MH #:** 1604

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

6 **X** 20 **X** 0.9 **=** 108.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			Solids catching

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4952	06' 10"	8	ACP	3	1.50	0			0	Slow flow
IN FROM	4953	06' 10"	8	ACP	3	0.50	0			0	Standing flow
OUT TO	1604	06' 10"	8	ACP	3	0.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	*0547*
Street:	336 Summit Street			**Sub-System:**	*6*
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

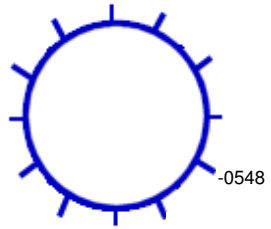
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



163 **Ft. to DS MH #:** 0548

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM/PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

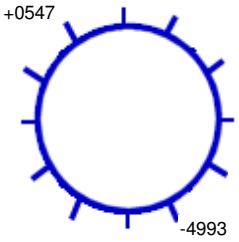
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0548	08' 05"	8	PVC	10	0	0.75			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0548
Street:	Summit Street at Hillside Road			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



44 **Ft. to DS MH #:** 4993

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0547	08' 04"	8	PVC	10	0	0			0	
OUT TO	4993	08' 06"	8	PVC	10	0	0.25			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0549
Street:	295 Summit Street at Clayton Street			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

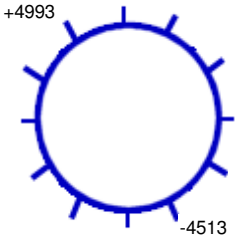
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



196 **Ft. to DS MH #:** 4513

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

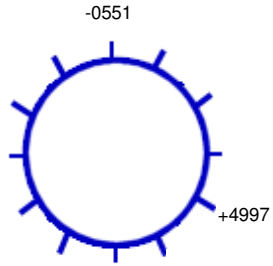
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4993	10' 01"	8	PVC	10	0.05	0			0	
OUT TO	4513	10' 02"	8	PVC	10	0.05	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0550***
Street:	260 Summit Street			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



15 **Ft. to DS MH #:** 0551

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4997	09' 02"	8	PVC	10	0	0			0	
OUT TO	0551	09' 04"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0551***
Street:	257 Summit Street			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1

N

-4513

+0550

299 **Ft. to DS MH #:** 4513

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 3 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

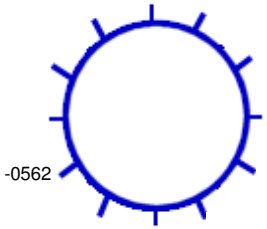
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0550	09' 09"	8	PVC	10	0	0			0	
OUT TO	4513	09' 11"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0561***
Street:	53 Clayton Street			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



129 **Ft. to DS MH #:** 0562

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	12	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

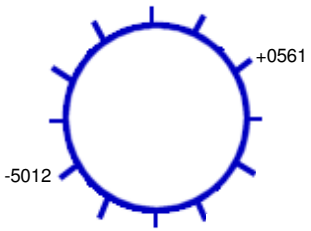
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0562	07' 03"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0562
Street:	46 Clayton Street			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



216 **Ft. to DS MH #:** 5012

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

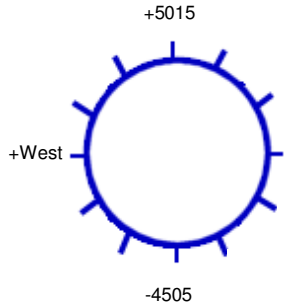
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0561	07' 03"	8	VCP	3	0.10	0			1	
OUT TO	5012	07' 03"	8	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0618
Street:	Auburn Street at Parsons Pond Drive			**Sub-System:**	6
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



198 **Ft. to DS MH #:** 4505

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	11' 03"	8	PVC	10	0	0			1	
IN FROM	5015	12' 11"	30	RCP	3	6.00	0			1	Force main, running
OUT TO	4505	13' 00"	30	RCP	3	6.00	0			1	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0619
Street:	315 Auburn Street			**Sub-System:**	6
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+4508

-0620

47 **Ft. to DS MH #:** 0620

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	16	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	3			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4508	10' 01"	30	RCP	3	5.00	0			1	Force main, running
OUT TO	0620	10' 02"	30	RCP	3	5.00	0			1	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0620***
Street:	Auburn Street at Christy Road			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

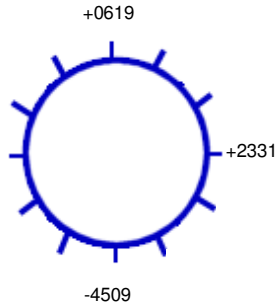
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N



216 **Ft. to DS MH #:** 4509

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

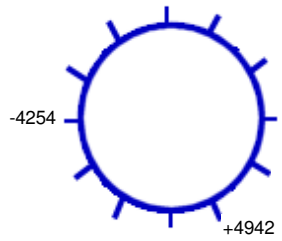
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0619	10' 01"	30	RCP	3	2.00	0			0	Force main, running
IN FROM	2331	08' 08"	8	ACP	3	0.25	0			0	
OUT TO	4509	10' 02"	30	RCP	3	2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1382***
Street:	Auburn Street at Longview Drive			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



390 **Ft. to DS MH #:** 4254

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 5 **X** 0.9 **=** 13.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

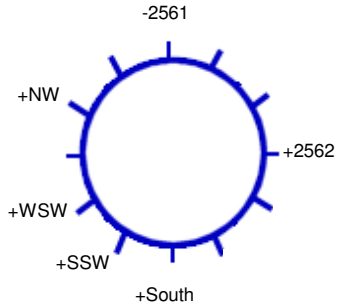
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4942	04' 04"	8	PVC	10	0	0			0	
OUT TO	4254	04' 04"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1601***
Street:	#C Brookfield Apartments			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



209 **Ft. to DS MH #:** 2561

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 6 **X** 0.9 **=** 21.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

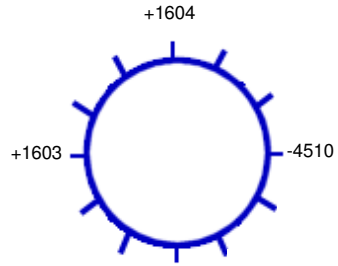
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	10' 07"	8	PVC	10	0.20	0			0	
IN FROM	South	10' 07"	8	PVC	10	0.20	0			0	
IN FROM	SSW	10' 07"	8	PVC	10	0	0			0	
IN FROM	WSW	10' 08"	8	PVC	10	0.30	0			0	
IN FROM	2562	10' 11"	8	PVC	10	1.50	0.25			0	Slow flow
OUT TO	2561	11' 00"	8	PVC	10	1.00	0.25			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1602***
Street:	136 Auburn Terrace			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



273 **Ft. to DS MH #:** 4510

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

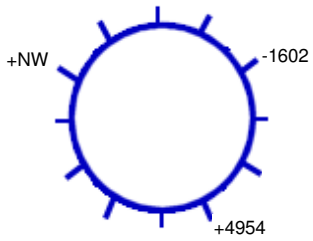
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	06' 05"	6	ACP	3	2.00	0			0	Standing flow
IN FROM	1603	05' 09"	6	ACP	3	0.30	0			0	
IN FROM	1604	06' 04"	8	ACP	3	2.00	0			0	
OUT TO	4510	06' 06"	8	ACP	3	1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1603***
Street:	134 Auburn Terrace			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



146 **Ft. to DS MH #:** 1602

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			Sediment catching in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	03' 09"	6	ACP	3	0.20	0.25			0	
IN FROM	4954	03' 11"	6	ACP	3	0.10	0			0	
OUT TO	1602	04' 00"	6	ACP	3	0.75	0			0	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1604***
Street:	31 Auburn Terrace			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

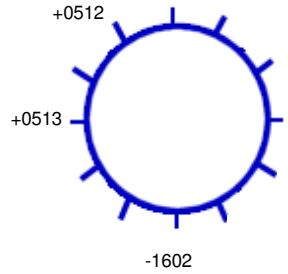
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



163 **Ft. to DS MH #:** 1602

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PIP	2			Light mineral deposits
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0512	06' 09"	6	ACP	3	0.40	0			0	
IN FROM	0513	06' 06"	8	ACP	3	0.75	0			0	
OUT TO	1602	06' 09"	8	ACP	3	1.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2331***
Street:	33 Christy Road			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

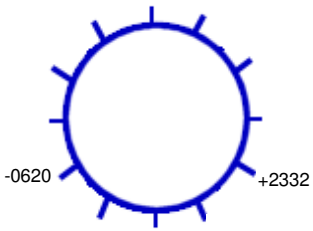
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



323 **Ft. to DS MH #:** 0620

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

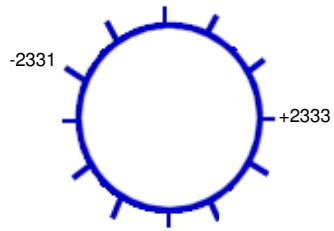
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2332	10' 10"	10	ACP	3	0.25	0			0	
OUT TO	0620	10' 11"	10	ACP	3	0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2332***
Street:	41 Christy Road			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



168 **Ft. to DS MH #:** 2331

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

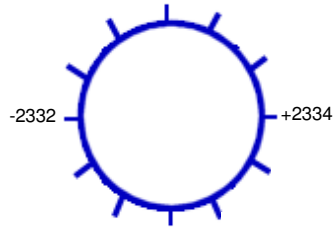
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2333	09' 05"	10	ACP	3	0.25	0			0	
OUT TO	2331	09' 06"	10	ACP	3	0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2333***
Street:	67 Christy Road			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



314 **Ft. to DS MH #:** 2332

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2334	08' 05"	10	ACP	3	0.10	0			0	
OUT TO	2332	08' 07"	10	ACP	3	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2334***
Street:	91 Christy Road			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

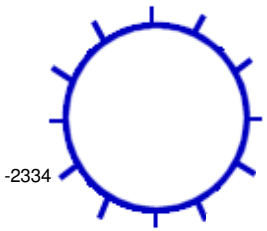
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1



311 **Ft. to DS MH #:** 2333

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

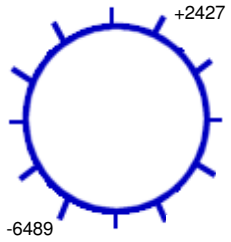
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2334	08' 04"	10	ACP	3	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2426***
Street:	68 Summit Park Avenue			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



246 **Ft. to DS MH #:** 6489

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2427	08' 04"	8	VCP	3	0.70	0			1	
OUT TO	6489	08' 04"	8	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2427***
Street:	92 Summit Park Avenue			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

Blind flange

COVER INFLOW POTENTIAL

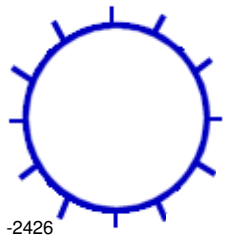
Drainage Area 1:

4 **X** 8 **X** 0.9 **=** 28.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--



244 **Ft. to DS MH #:** 2426

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Missing brick
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

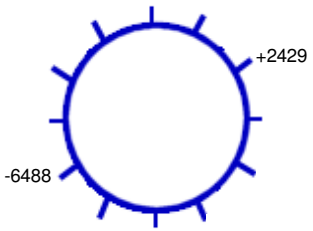
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2426	08' 00"	8	VCP	3	0	0			2	Light roots at first joint

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	2428
Street:	35 Summit Park Avenue			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



131 **Ft. to DS MH #:** 6488

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

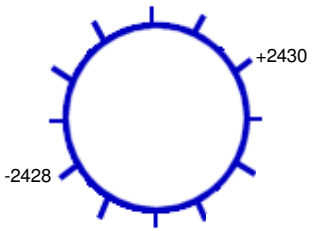
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2429	07' 03"	12	VCP	10	0.50	0			1	
OUT TO	6488	07' 03"	12	VCP	10	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	2429
Street:	164 Summit Park Avenue			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



157 **Ft. to DS MH #:** 2428

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2430	09' 07"	12	VCP	3	0.50	0			0	
OUT TO	2428	09' 07"	12	VCP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2430***
Street:	147 Summit Park Avenue			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

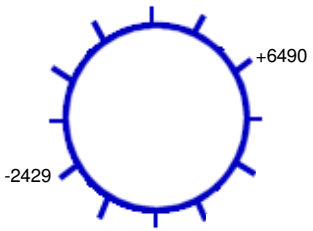
3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N

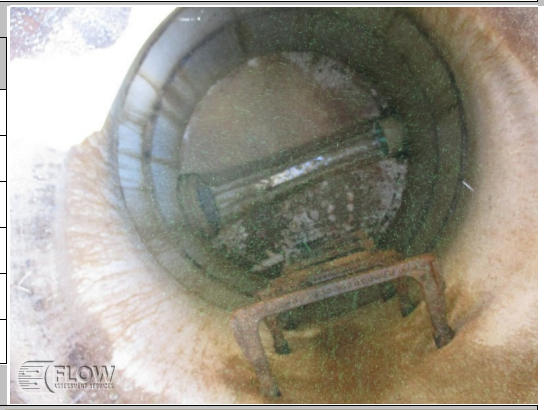


195 **Ft. to DS MH #:** 2429

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			



Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

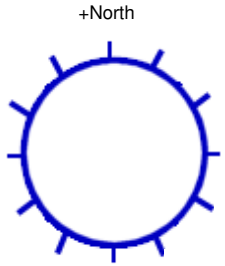
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6490	08' 05"	8	PVC	10	0.40	0			0	
OUT TO	2429	08' 07"	12	CPP	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2432***
Street:	8 Summit Park Avenue			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



341 **Ft. to DS MH #:** 6491

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

8 **X** 10 **X** 0.9 **=** 72.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments: Manhole in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

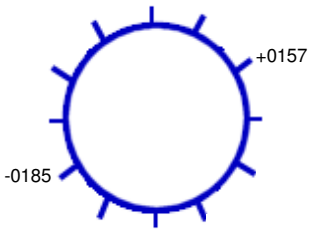
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	09' 07"	6	VCP	3	0	0.25			0	
OUT TO	6491	09' 08"	8	VCP	3	0.25	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	2433
Street:	90 Alpine Road			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



252 **Ft. to DS MH #:** 0185

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	32	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

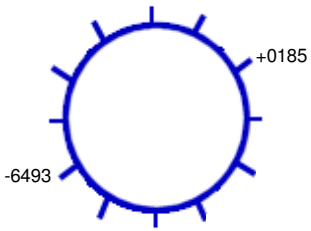
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0157	08' 03"	12	VCP	3	0.50	0			1	
OUT TO	0185	08' 04"	12	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	2434
Street:	46 Alpine Road			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



244 **Ft. to DS MH #:** 2434

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0185	08' 04"	12	VCP	3	0.50	0			1	
OUT TO	6493	08' 05"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2487***
Street:	Parsons Pond Drive			**Sub-System:**	***6***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

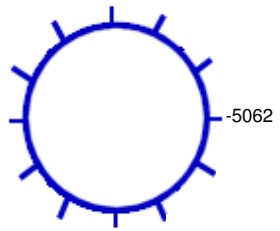
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



73 **Ft. to DS MH #:** 5062

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	CNI	0			Surcharged
INVERT	CNI	0			Surcharged

Surcharge From Invert: **Currently:** 6.25 **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

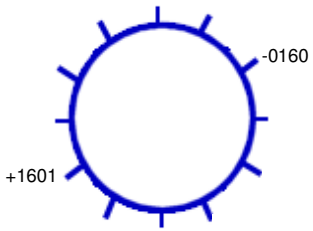
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5062	05' 03"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2561***
Street:	Brookfield Apartments			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



198 **Ft. to DS MH #:** 0160

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Loose
CORBEL	BRICK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			Sediment catching

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1601	06' 07"	8	PVC	10	1.50	0.50			0	Slow flow
OUT TO	0160	06' 08"	8	PVC	10	1.00	0.25			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2562***
Street:	#F Brookfield Apartments R.O.W.			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

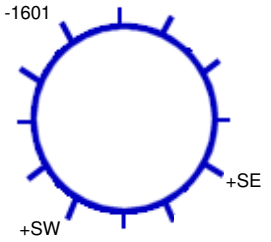
4 **X** 5 **X** 0.3 **=** 6.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



132 **Ft. to DS MH #:** 1601

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/BLOCK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	3			Moderate roots
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

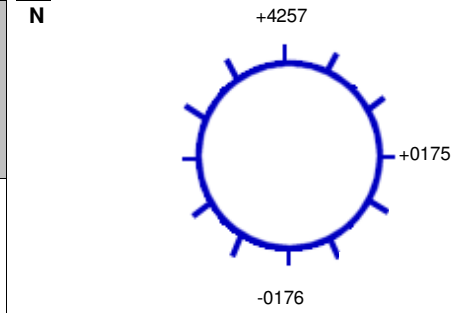
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	08' 05"	4	PVC	10	0.50	0			1	
IN FROM	SW	08' 08"	6	PVC	1	0	0.50			1	
OUT TO	1601	08' 09"	6	PVC	10	0.90	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Auburn Street at Hillside Road
Manhole No.: 4253
Sub-System: 6
Inspection Date: 8/1/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



284 **Ft. to DS MH #:** 0176

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 4 **X** 0.9 **=** 7.2 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	18	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0175	08' 10"	12	VCP	3	0.10	0			1	
IN FROM	4257	09' 07"	24	RCP	3	0.75	0			1	
OUT TO	0176	09' 08"	24	RCP	3	1.00	0.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4254***
Street:	Auburn Street at Summit Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

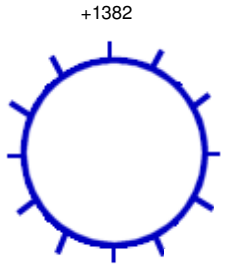
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

N



186 **Ft. to DS MH #:** 4255

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

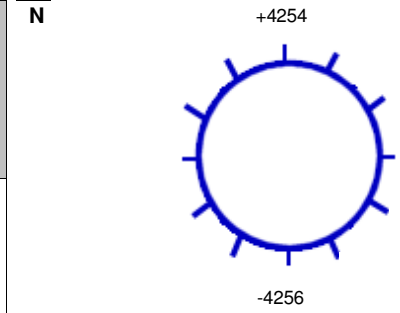
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1382	08' 00"	8	PVC	10	0.10	0			1	
OUT TO	4255	08' 03"	12	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4255***
Street:	510 Auburn Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



193 **Ft. to DS MH #:** 4256

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4254	08' 03"	12	VCP	3	0.20	0			1	
OUT TO	4256	08' 03"	12	VCP	3	0.20	0			1	Second joint offset 1.5"

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4256***
Street:	491 Auburn Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.3 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 4 **X** 0.9 **=** 7.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N

+4255

-4257

303 **Ft. to DS MH #:** 4257

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4255	07' 01"	12	VCP	3	0.20	0			1	
OUT TO	4257	07' 09"	24	RCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4257***
Street:	479 Auburn Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 4 **X** 0.9 **=** 7.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	6	1

N

+4256

-4253

301 **Ft. to DS MH #:** 4253

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

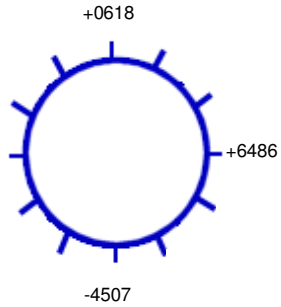
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4256	08' 06"	24	RCP	3	1.00	0.25			1	
OUT TO	4253	08' 07"	24	RCP	3	1.00	0.25			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4505***
Street:	Auburn Street at Summit Park Avenue			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



180 **Ft. to DS MH #:** 4507

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

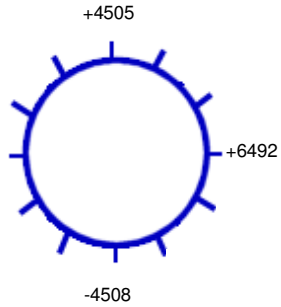
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0618	12' 06"	30	RCP	3	3.00	0			1	Force main, running
IN FROM	6486	11' 04"	15	VCP	3	0.50	0			1	
OUT TO	4507	12' 07"	30	RCP	3	3.00	0			1	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4507***
Street:	Auburn Street at Alpine Road			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



158 **Ft. to DS MH #:** 4508

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	RCP/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

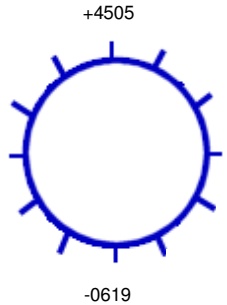
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4505	11' 08"	30	RCP	3	2.00	0			1	Force main, running
IN FROM	6492	10' 07"	12	VCP	3	0.50	0			1	
OUT TO	4508	11' 08"	30	RCP	3	2.00	0			1	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 321 Auburn Street
Manhole No.: 4508
Sub-System: 6
Inspection Date: 8/1/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



180 **Ft. to DS MH #:** 0619

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

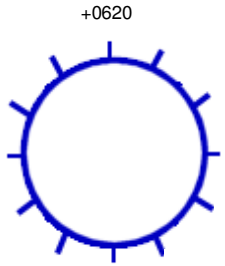
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4505	10' 05"	30	RCP	3	3.00	0			1	Force main, running
OUT TO	0619	10' 07"	30	RCP	3	3.00	0			1	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4509***
Street:	246 Auburn Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



260 **Ft. to DS MH #:** 5100

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

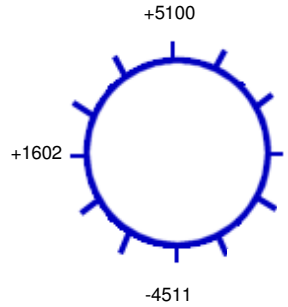
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0620	10' 00"	30	RCP	3	2.00	0			1	Force main, running
OUT TO	5100	10' 01"	30	RCP	3	2.00	0			1	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4510***
Street:	Auburn Street at Auburn Terrace			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



173 **Ft. to DS MH #:** 4511

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

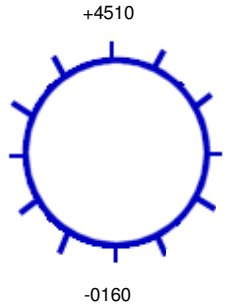
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1602	09' 03"	8	PVC	3	1.25	0			0	
IN FROM	5100	09' 11"	30	RCP	3	5.00	0			0	Force main, running
OUT TO	4511	10' 00"	30	RCP	3	5.00	0			0	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4511***
Street:	245 Auburn Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



158 **Ft. to DS MH #:** 0160

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	24	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4510	09' 11"	30	RCP	3	4.00	0			1	Fast flow, force main, running
OUT TO	0160	10' 09"	30	RCP	3	4.00	0			1	Fast flow, force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4513
Street:	Summit Street at Jackson Street			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

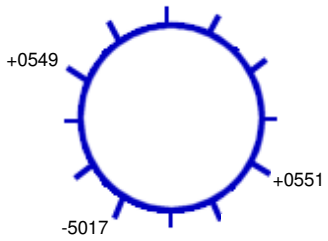
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



120 **Ft. to DS MH #:** 5017

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

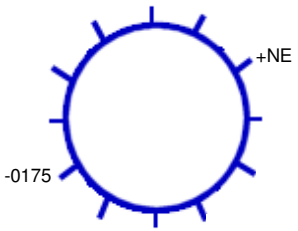
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0549	09' 00"	8	PVC	10	0.25	0			0	Outside drop
IN FROM	0551	13' 03"	8	PVC	10	0.10	0			0	
OUT TO	5017	13' 09"	8	PVC	10	0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4514
Street:	45 Hillside Road			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



307 **Ft. to DS MH #:** 0175

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	05' 02"	4	ACP	3	0	0			1	
OUT TO	0175	07' 09"	8	PVC	10	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4941***
Street:	21 Longview Drive			**Sub-System:**	***6***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

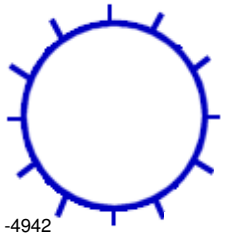
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



171 **Ft. to DS MH #:** 4942

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4942	05' 03"	8	PVC	10	0	0.20			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4942***
Street:	5 Longview Drive			**Sub-System:**	***6***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

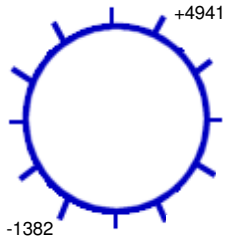
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



143 **Ft. to DS MH #:** 1382

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Chipped, missing piece
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

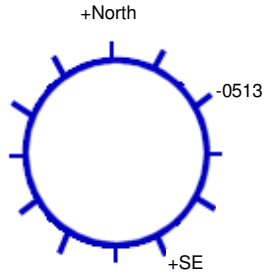
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4941	06' 11"	8	PVC	10	0.25	0			0	
OUT TO	1382	06' 11"	8	PVC	10	0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4952***
Street:	87 Auburn Terrace			**Sub-System:**	***6***
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



282 **Ft. to DS MH #:** 0513

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 3.75 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

6 **X** 20 **X** 0.9 **=** 108.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Offset 3"
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	06' 02"	8	ACP	3	0.75	0			0	
IN FROM	SE	06' 02"	8	ACP	3	0.30	0			0	
OUT TO	0513	06' 03"	8	ACP	3	1.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	4953
Street:	55 Auburn Terrace			**Sub-System:**	6
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	4954
Street:	126 Auburn Terrace			**Sub-System:**	6
Inspection Date:	7/29/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4991***
Street:	18 Quiet Lane R.O.W.			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

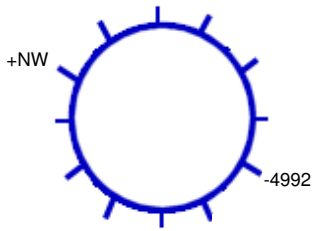
2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



16 **Ft. to DS MH #:** 4992

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			1" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	04' 02"	8	PVC	10	0	1.00			0	
OUT TO	4992	04' 03"	8	PVC	10	0	1.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4992***
Street:	18 Quiet Lane			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

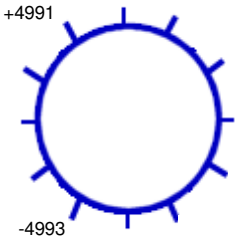
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



211 **Ft. to DS MH #:** 4993

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

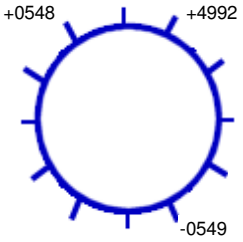
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4991	04' 01"	8	PVC	10	0	0			0	
OUT TO	4993	04' 02"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4993
Street:	Summit Street at Quiet Lane			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



265 **Ft. to DS MH #:** 0549

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

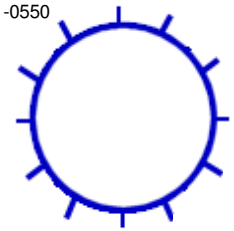
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0548	08' 07"	8	PVC	10	0.10	0			0	
IN FROM	4992	08' 08"	8	PVC	10	1.50	0			0	
OUT TO	0549	08' 08"	8	PVC	10	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4997
Street:	244 Summit Street at Curtis Road			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



122 **Ft. to DS MH #:** 0550

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0550	09' 11"	8	PVC	10	0	0.50			0	Solid debris

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5012***
Street:	31 Clayton Street			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

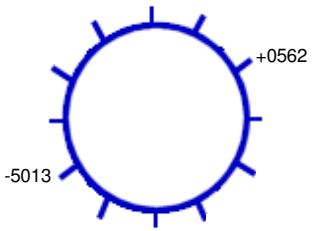
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	24	1

N



160 **Ft. to DS MH #:** 5013

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

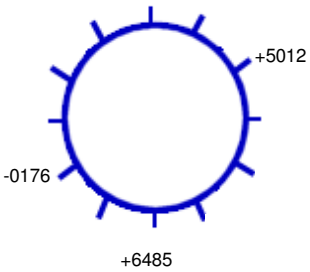
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0562	08' 03"	8	VCP	3	0.20	0			1	
OUT TO	5013	08' 03"	10	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5013
Street:	Clayton Street at Kenneth Street			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



276 **Ft. to DS MH #:** 0176

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5012	08' 04"	12	PVC	10	0.10	0			0	
IN FROM	6485	07' 08"	8	PVC	10	0	0			0	
OUT TO	0176	08' 04"	12	CPP	10	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5015***
Street:	Auburn Street at Jackson Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

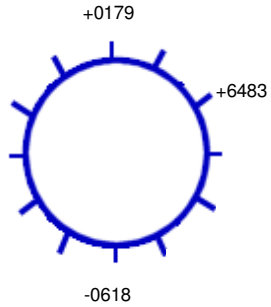
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



220 **Ft. to DS MH #:** 0618

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK/RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

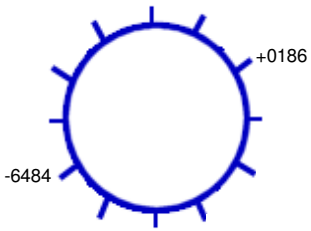
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0179	13' 02"	30	RCP	3	3.00	0			1	
IN FROM	6483	10' 08"	12	PVC	10	0.50	0			1	
OUT TO	0618	13' 04"	30	RCP	3	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5016
Street:	29 Jackson Street			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



301 **Ft. to DS MH #:** 6484

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	11	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

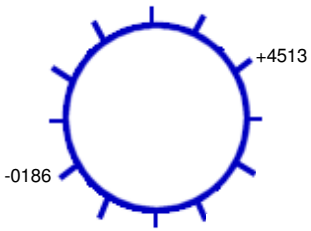
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0186	07' 08"	8	VCP	3	0.70	0			1	
OUT TO	6484	07' 10"	10	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5017
Street:	Jackson Street at Summit Street			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



119 **Ft. to DS MH #:** 0186

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

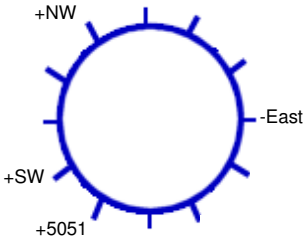
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4513	07' 08"	8	PVC	10	0.50	0			1	
OUT TO	0186	07' 09"	8	VCP	10	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5056
Street:	49 Parsons Pond Drive			**Sub-System:**	6
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



41 **Ft. to DS MH #:** PS

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	11' 07"	6	PVC	10	0.25	0			0	
IN FROM	SW	11' 07"	6	PVC	10	0.10	0			0	
IN FROM	5051	11' 06"	8	PVC	10	0.25	0			0	
OUT TO	East	11' 07"	8	PVC	10	0.50	0			0	Pump Station

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5057***
Street:	Parsons Pond Drive at Braddish Court			**Sub-System:**	***6***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

Half blind flange

COVER INFLOW POTENTIAL

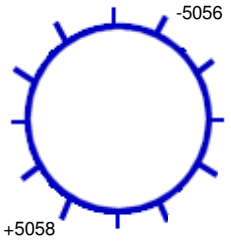
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1



301 **Ft. to DS MH #:** 5056

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

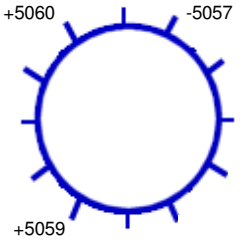
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5058	09' 09"	8	PVC	10	0.25	0			0	
OUT TO	5056	09' 10"	8	PVC	10	0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5058
Street:	Parsons Pond Drive at Wakely Court			**Sub-System:**	6
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



149 **Ft. to DS MH #:** 5057

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.75 In.

Half blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

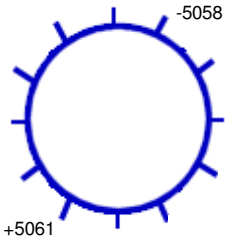
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5059	10' 01"	8	PVC	10	0.10	0			0	
IN FROM	5060	10' 00"	8	PVC	10	0	0.50			0	
OUT TO	5057	10' 01"	8	PVC	10	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5059***
Street:	103 Parsons Pond Drive			**Sub-System:**	***6***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



202 **Ft. to DS MH #:** 5058

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

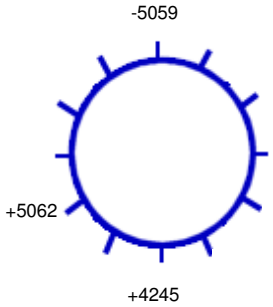
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5061	09' 05"	8	PVC	10	0.10	0			0	
OUT TO	5058	09' 06"	8	PVC	10	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5061***
Street:	Parsons Pond Drive			**Sub-System:**	***6***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



178 **Ft. to DS MH #:** 5059

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

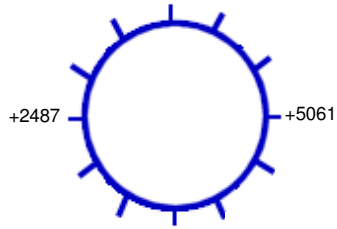
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4245	08' 04"	8	PVC	10	0	0			0	
IN FROM	5062	08' 04"	8	PVC	10	0.20	0			0	Outside drop, standing flow
OUT TO	5059	08' 04"	8	PVC	10	0	1.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5062
Street:	Parsons Pond Drive			**Sub-System:**	6
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



153 **Ft. to DS MH #:** 5061

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.75 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

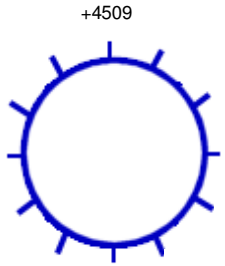
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2487	05' 02"	8	PVC	10	0	0			0	
OUI TO	5061	05' 03"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5100***
Street:	267 Auburn Street			**Sub-System:**	***6***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



84 **Ft. to DS MH #:** 4510

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	19	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4509	09' 09"	30	RCP	3	6.00	0			1	Force main, running
OUT TO	4510	09' 10"	30	RCP	3	6.00	0			1	Force main, running

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6483***
Street:	66 Jackson Stret			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

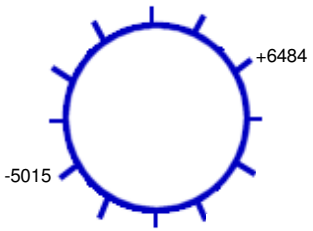
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

N



233 **Ft. to DS MH #:** 5015

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6484	07' 06"	15	CPP	10	0.70	0			0	
OUT TO	5015	07' 04"	15	PVC	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6484***
Street:	Jackson Stret at Kenneth Street			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

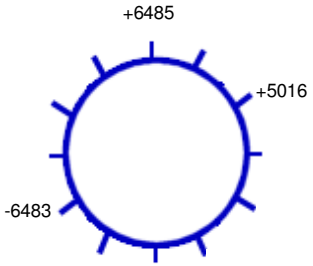
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	19	1

N



131 **Ft. to DS MH #:** 6483

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

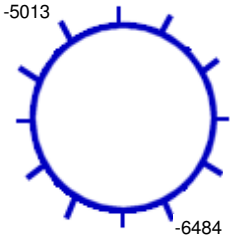
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5016	08' 02"	12	CPP	10	0.70	0			0	
IN FROM	6485	07' 10"	8	PVC	10	0	0			0	
OUT TO	6483	08' 04"	12	CPP	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6485
Street:	13 Kenneth Street			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



178 **Ft. to DS MH #:** 5013

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments: Highpoint manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

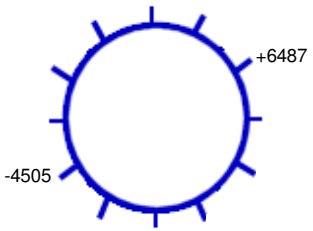
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5013	06' 11"	8	PVC	10	0	0			0	178' downstream to MH 5013
OUT TO	6484	06' 11"	8	PVC	10	0	0			0	219' downstream to MH 6484

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6486
Street:	17 Summit Park Avenue			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



226 **Ft. to DS MH #:** 4505

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6487	08' 06"	8	PVC	10	0.50	0			0	
OUT TO	4505	08' 06"	15	CPP	10	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6487***
Street:	27 Summit Park Avenue			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

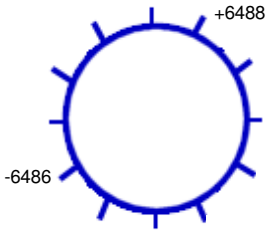
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



126 **Ft. to DS MH #:** 6486

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

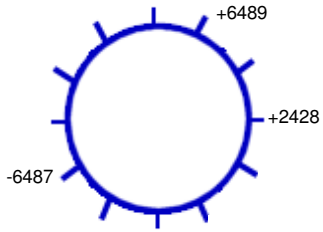
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6488	08' 04"	8	PVC	10	0.70	0			0	
OUT TO	6486	08' 04"	8	PVC	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6488***
Street:	31 Summit Park Avenue			**Sub-System:**	***6***
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



82 **Ft. to DS MH #:** 6487

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Debris catching

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2428	08' 00"	12	PVC	10	0.40	0			0	
IN FROM	6489	09' 06"	8	PVC	10	0.30	0			0	
OUT TO	6487	09' 06"	8	PVC	10	1.25	0.25			0	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6489
Street:	52 Summit Park Avenue			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

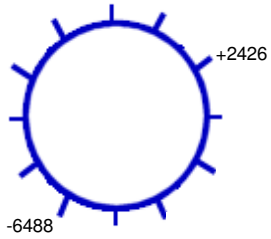
4 **X** 8 **X** 0.9 **=** 28.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



187 **Ft. to DS MH #:** 6488

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2426	08' 00"	8	PVC	10	0.40	0			0	
OUT TO	6488	08' 02"	8	PVC	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6490
Street:	135 Summit Park Avenue			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

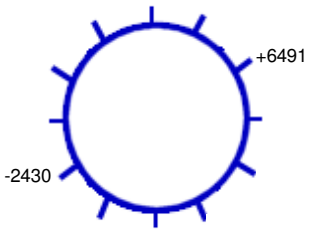
2 **X** 4 **X** 0.9 **=** 7.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



140 **Ft. to DS MH #:** 2430

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

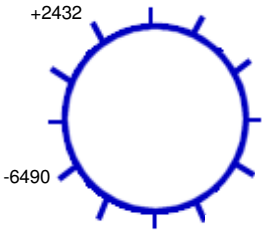
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6491	08' 08"	8	PVC	10	0.25	0			0	
OUT TO	2430	08' 08"	8	PVC	10	0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6491
Street:	128 Summit Park Avenue			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



52 **Ft. to DS MH #:** 6490

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 10 **X** 0.9 **=** 36.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

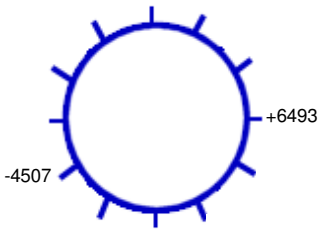
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2432	08' 03"	8	PVC	10	0.20	0			0	
OUT TO	6490	08' 03"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6492
Street:	17 Alpine Road			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



163 **Ft. to DS MH #:** 4507

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame, blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

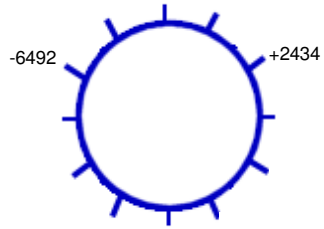
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6493	08' 06"	12	CPP	10	0.75	0			0	
OUT TO	4507	08' 07"	12	CPP	10	0.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6493
Street:	27 Alpine Road			**Sub-System:**	6
Inspection Date:	7/30/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



146 **Ft. to DS MH #:** 6492

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2434	08' 06"	15	PVC	10	0.75	0			0	
OUT TO	6492	08' 06"	12	CPP	10	0.75	0			0	

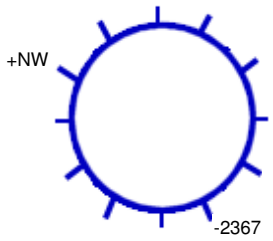
MANHOLE INSPECTION LOGS SUB-AREA 7

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2365***
Street:	18 Sturdivant Drive R.O.W.			**Sub-System:**	***7***
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



156 **Ft. to DS MH #:** 2367

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 2 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	13' 10"	12	ACP	3	1.50	0.20			0	
OUT TO	2367	13' 10"	12	ACP	3	1.50	0.20			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2385***
Street:	Abby Lane at Clapboard Road			**Sub-System:**	***7***
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

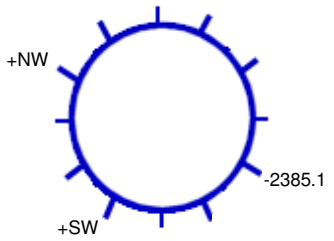
5 **X** 10 **X** 0.9 **=** 45.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



9 **Ft. to DS MH #:** 2385.1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			1" riser
CORBEL	BRICK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK/PVC	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 2 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

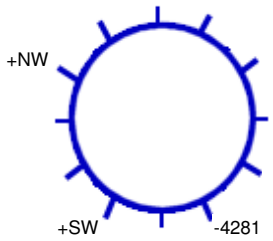
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 05"	8	PVC	10	1.20	0			0	
IN FROM	SW	07' 03"	8	ACP	3	2.00	0			0	
OUT TO	2385.1	07' 05"	8	PVC	10	2.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4280
Street:	69 Caron Street			**Sub-System:**	7
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



123 **Ft. to DS MH #:** 4281

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	3			Missing brick and mortar, broken brick, loose pieces
STEPS	ALUM	1			
WALLS	PRECAST	2	2		Leak at mouth of SW pipe at wall
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 07"	12	ACP	3	1.50	0.50			0	
IN FROM	SW	07' 09"	8	PVC	3	0.10	0			0	Outside drop
OUT TO	4281	09' 08"	12	ACP	3	2.00	1.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4967***
Street:	Alice Street at Crestview Drive			**Sub-System:**	***7***
Inspection Date:	6/20/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N

+NNW +NW +NE -0544 +SW

187 **Ft. to DS MH #:** 0544

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 00"	4	PVC	10	0.10	0			0	Service
IN FROM	NNW	07' 05"	10	VCP	3	0	0			0	
IN FROM	NW	14' 01"	4	PVC	10	0.50	0			0	Service
IN FROM	SW	09' 09"	10	VCP	3	0.30	0			0	Outside drop
OUT TO	0544	14' 02"	10	VCP	3	0.70	0			0	

MANHOLE INSPECTION LOGS SUB-AREA 8

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0187***
Street:	56 Roaring Brook Road			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 17 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

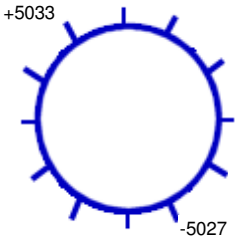
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	0.5

N



266 **Ft. to DS MH #:** 5027

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5033	12' 01"	24	ACP		3.00	0			0	
OUT TO	5027	12' 02"	24	ACP		3.00	0			0	

Job Number: 19056

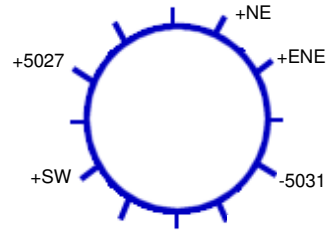
NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0574
Street:	Roaring Brook Road at Deepwood Road			**Sub-System:**	8
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



145 **Ft. to DS MH #:** 5031

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

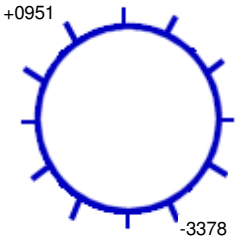
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	ENE	09' 02"	8	PVC		0.50	0			0	
IN FROM	NE	09' 02"	8	PVC		0.50	0			0	
IN FROM	SW	09' 02"	8	PVC		0.25	0			0	
IN FROM	5027	09' 08"	16	ACP		3.50	1.50			0	
OUT TO	5031	09' 09"	24	ACP		3.50	1.50			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0950
Street:	Kansas Avenue Easement			**Sub-System:**	8
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



252 **Ft. to DS MH #:** 3378

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 19 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

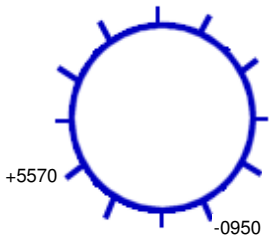
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0951	11' 11"	24	ACP		1.20	0			0	
OUT TO	3378	12' 00"	24	ACP		1.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: Kansas Avenue Easement
Manhole No.: 0951
Sub-System: 8
Inspection Date: 10/2/2019 **Inspector:** JS/RV **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



247 **Ft. to DS MH #:** 0950

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Mortar completely missing between frame and corbel
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5570	09' 00"	18	VCP	3	1.00	0			0	
OUT TO	0950	09' 03"	18	VCP	3	1.00	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0953***
Street:	Kansas Avenue Easement			**Sub-System:**	***8***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: In wetland

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

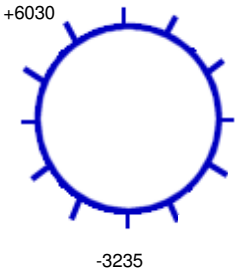
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1293***
Street:	65 Racine Avenue (Behind home)			**Sub-System:**	***8***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



301 **Ft. to DS MH #:** 3235

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

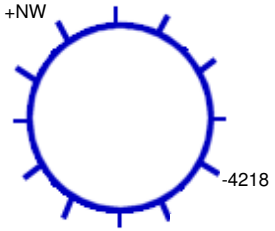
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6030	12' 10"	15	VCP	3	1.00	0			0	
OUT TO	3235	12' 11"	15	VCP	3	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2391***
Street:	Curtis Road Easement			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



222 **Ft. to DS MH #:** 4218

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 6 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

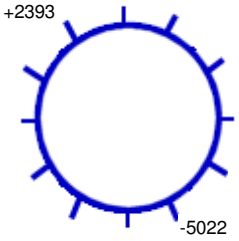
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	11' 07"	18	ACP		1.50	0			0	
OUT TO	4218	11' 08"	18	ACP		1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2392***
Street:	138 Roaringbrook Road Easement			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



325 **Ft. to DS MH #:** 5022

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 12 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 1.3 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2393	18' 00"	15	ACP		3.00	2.00			0	
OUT TO	5022	18' 02"	15	ACP		1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2393***
Street:	Roaringbrook Road Easement			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	18	1.25

N

+4219

-2392

307 **Ft. to DS MH #:** 2392

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4219	17' 05"	15	ACP		2.00	0			0	
OUT TO	2392	17' 06"	15	ACP		2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2533***
Street:	704 Allen Avenue			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

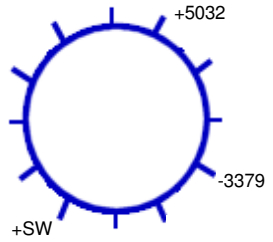
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	0.5

N



194 **Ft. to DS MH #:** 3379

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

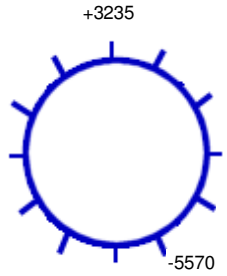
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	07' 09"	10	ACP		1.00	0			0	Outside drop, fast flow
IN FROM	5032	07' 02"	16	ACP		2.00	0			0	Outside drop, fast flow
OUT TO	3379	14' 03"	16	ACP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: Kansas Avenue Easement
Manhole No.: 3234
Sub-System: 8
Inspection Date: 10/2/2019 **Inspector:** JS/RV **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



21 **Ft. to DS MH #:** 5570

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3235	07' 11"	15	VCP	3	1.00	0			0	
OUT TO	5570	08' 00"	18	VCP	3	1.00	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3235***
Street:	55 Racine Avenue			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+1293

+West

-3234

297 **Ft. to DS MH #:** 3234

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 14 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

80 **X** 100 **X** 0.9 **=** 7200.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BLOCK	5			Missing brick and mortar, stream running into manhole
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	03' 10"	8	PVC	13	0.50	0			1	Outside drop
IN FROM	1293	08' 01"	15	ACP	4	2.00	0			1	
OUT TO	3234	08' 01"	15	ACP	4	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	3378
Street:	Kansas Avenue Easement			**Sub-System:**	8
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 8 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N

+0950

-0953

250 **Ft. to DS MH #:** 0953

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 9 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

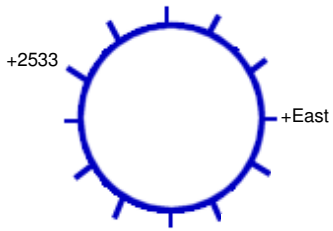
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0950	07' 04"	24	ACP		2.00	0			0	Inside drop
OUT TO	0953	09' 08"	24	ACP		1.00	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 691 Allen Avenue
Manhole No.: 3379
Sub-System: 8
Inspection Date: 7/24/2019 **Inspector:** RV/JC **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



233 **Ft. to DS MH #:** 3380

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 15 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	3	0.1		Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

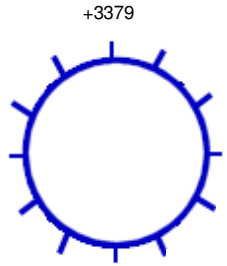
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	07' 01"	8	PVC	13	0	0			1	
IN FROM	2533	05' 05"	16	ACP	4	2.00	0			1	Outside drop, fast flow
OUT TO	3380	08' 08"	16	ACP	4	3.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3380***
Street:	Allen Avenue Easement			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



246 **Ft. to DS MH #:** 3381

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 12 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3379	07' 02"	16	ACP		3.00	0			0	Inside drop
OUT TO	3381	07' 07"	16	ACP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3381***
Street:	Allen Avenue Easement			**Sub-System:**	***8***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

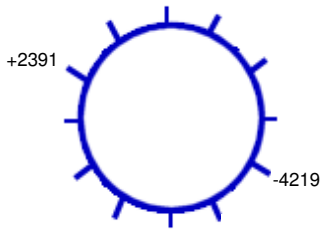
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4218
Street:	Curtis Road Easement			**Sub-System:**	8
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



331 **Ft. to DS MH #:** 4219

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 24 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

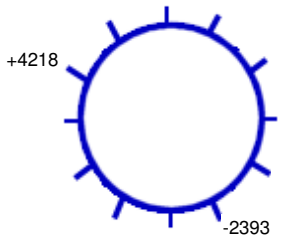
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2391	08' 09"	18	ACP		2.00	0			0	
OUT TO	4219	08' 10"	18	ACP		2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4219
Street:	Roaring Brook Road Easement			**Sub-System:**	8
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



308 **Ft. to DS MH #:** 2393

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 12 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 1.5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4218	07' 00"	18	ACP		1.50	0			0	
OUT TO	2393	07' 01"	18	ACP		1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5022***
Street:	126 Roaring Brook Road Easement			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 3 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

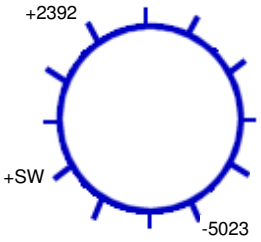
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



337 **Ft. to DS MH #:** 5023

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

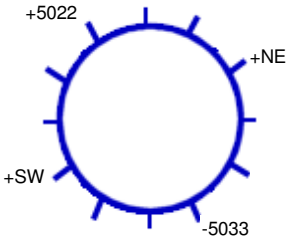
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	09' 07"	8	PVC		0.50	0			0	Inside drop
IN FROM	2392	13' 07"	15	ACP		4.00	0			0	
OUT TO	5023	13' 08"	15	ACP		4.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5023***
Street:	Pineloch Drive near Roaring Brook Road			**Sub-System:**	***8***
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



217 **Ft. to DS MH #:** 5033

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

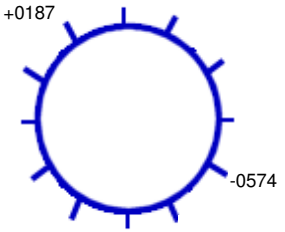
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	10' 00"	8	VCP		1.00	0			0	Outside drop
IN FROM	SW	10' 00"	8	VCP		1.00	0			0	Outside drop
IN FROM	5022	16' 02"	24	ACP		3.00	3.00			0	
OUT TO	5033	16' 03"	24	ACP		3.00	3.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5027
Street:	Roaring Brook Road near Deepwood Drive			**Sub-System:**	8
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



64 **Ft. to DS MH #:** 0574

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 8 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	3	0.1		Walls leaking, moderate mineral deposits
FLOOR	BRICK/PARGED	1			
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0187	08' 01"	12	ACP	4	2.00	0			1	Outside drop
OUT TO	0574	11' 06"	16	ACP	4	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	5031
Street:	Roaring Brook Road			**Sub-System:**	8
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5032
Street:	Allen Avenue at Roaring Brook Road			**Sub-System:**	8
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

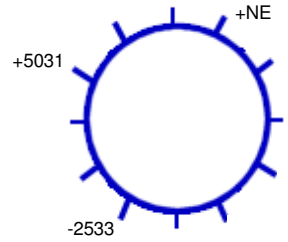
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1.25

N



359 **Ft. to DS MH #:** 2533

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

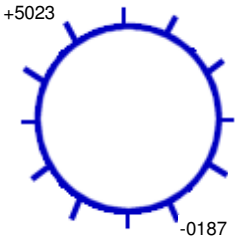
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 06"	8	ACP		0	0			0	
IN FROM	5031	07' 05"	16	ACP		1.50	0			0	Fast flow
OUT TO	2533	08' 00"	16	ACP		4.00	0			0	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5033
Street:	82 Roaring Brook Road			**Sub-System:**	8
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



238 **Ft. to DS MH #:** 0187

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 18 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5023	15' 08"	24	ACP		2.50	0			0	
OUT TO	0187	15' 09"	24	ACP		2.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5570
Street:	Kansas Avenue Easement			**Sub-System:**	8
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

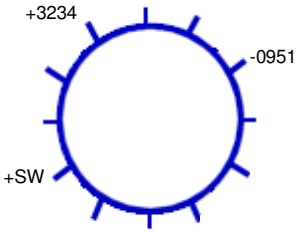
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



18 **Ft. to DS MH #:** 0951

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	07' 11"	8	PVC	10	1.50	0.25			0	Slow flow
IN FROM	3234	07' 10"	18	VCP	3	1.00	0			0	
OUT TO	0951	08' 02"	18	VCP	3	0.75	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6030
Street:	661 Allen Avenue (Behind home)			**Sub-System:**	8
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+3381

-1293

264 **Ft. to DS MH #:** 1293

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments: Manhole is in brook

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3381	09' 00"	15	VCP	3	1.50	0			0	
OUT TO	1293	09' 02"	15	VCP	3	0.75	0			0	Fast flow

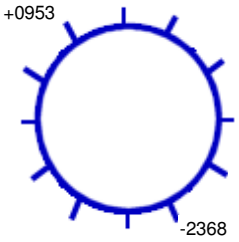
MANHOLE INSPECTION LOGS SUB-AREA 9

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0952
Street:	Penn Avenue Easement			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



247 **Ft. to DS MH #:** 2368

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 24 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	3			Heavy mineral deposits
FLOOR	PARGED	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

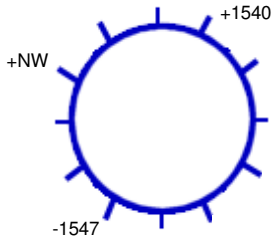
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0953	08' 10"	24	ACP	5	3.00	0			1	
OUT TO	2368	08' 11"	24	ACP	5	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0977
Street:	Huntington Avenue at Daggett Street			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



241 **Ft. to DS MH #:** 1547

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 2 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

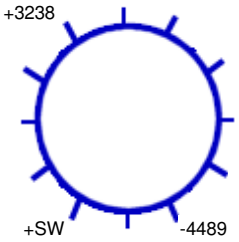
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 09"	10	VCP		1.00	0			0	
IN FROM	1540	10' 10"	24	RCP		5.00	2.00			0	Slow flow
OUT TO	1547	10' 09"	24	RCP		5.00	2.00			0	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1294***
Street:	Maine Avenue			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



174 **Ft. to DS MH #:** 4489

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	3			Moderate mineral deposits
FLOOR	PARGED	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	09' 08"	8	VCP	3	1.00	0			1	
IN FROM	3238	10' 09"	24	ACP	5	6.00	2.00			1	
OUT TO	4489	10' 10"	24	ACP	5	6.00	2.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1295***
Street:	Maine Avenue Easement			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

50 **X** 10 **X** 0.3 **=** 150.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

N

+4489

-5572

251 **Ft. to DS MH #:** 5572

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	3			Moderate roots, missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	3			Wet walls
FLOOR	PARGED	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4489	09' 05"	24	ACP	5	3.00	0			1	
OUT TO	5572	09' 06"	24	ACP	5	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1296***
Street:	Marlborough Road Easement			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2 In.

COVER INFLOW POTENTIAL

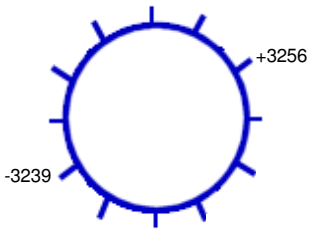
Drainage Area 1:

6 **X** 8 **X** 0.3 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1



282 **Ft. to DS MH #:** 3239

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

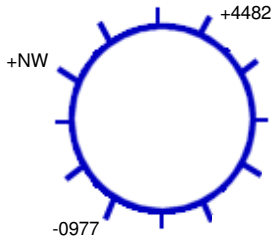
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3256	17' 03"	24	ACP		3.00	0			0	
OUT TO	3239	17' 05"	24	ACP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	1540
Street:	Huntington Avenue at Van Vechten Street			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



243 **Ft. to DS MH #:** 0977

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	3	0.75		Wall leak lower barrel near line from NW, mineral deposits
FLOOR	BRICK/PARGED	3	0.5		Floor leak near NW line
INVERT	BRICK/PARGED	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 6 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

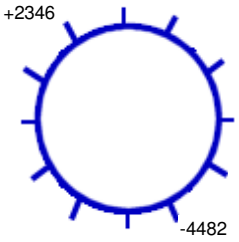
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 11"	8	PVC	13	0.10	0			1	
IN FROM	4482	11' 02"	24	RCP	4	4.50	0			1	
OUT TO	0977	11' 03"	24	RCP	4	4.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1541***
Street:	17 Humboldt Street			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



282 **Ft. to DS MH #:** 4482

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1.3 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing bricks
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 1 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2346	12' 09"	24	RCP		3.00	0			0	
OUT TO	4482	12' 10"	24	RCP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1547***
Street:	Hunington Avenue at Toronita Street			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

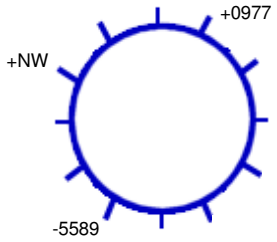
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.25

N



251 **Ft. to DS MH #:** 5589

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

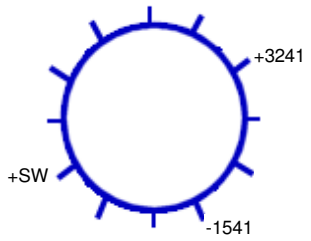
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	10' 00"	10	VCP		0.30	0			0	
IN FROM	0977	11' 07"	24	RCP		3.50	0			0	Fast flow
OUT TO	5589	11' 08"	24	RCP		3.50	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	*2346*
Street:	Marlborough Road at Humboldt Street			**Sub-System:**	*9*
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



288 **Ft. to DS MH #:** 1541

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Offset 4.5"
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

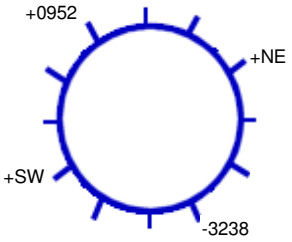
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	05' 08"	8	PVC		0.50	0			0	Outside drop
IN FROM	3241	14' 08"	24	RCP		4.50	0			0	Slow flow
OUT TO	1541	14' 10"	24	RCP		2.50	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	2368
Street:	Penn Avenue			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



250 **Ft. to DS MH #:** 3238

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked cover

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	ACP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 8.3 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

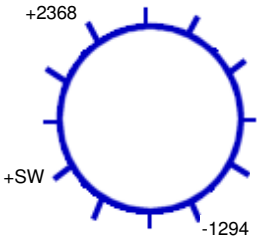
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	12' 03"	8	PVC		0.30	0			0	
IN FROM	SW	12' 03"	8	PVC		0	0			0	
IN FROM	0952	13' 01"	24	ACP		3.00	0			0	
OUT TO	3238	13' 02"	24	ACP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	3238
Street:	Vermont Avenue			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



252 **Ft. to DS MH #:** 1294

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

10 **X** 10 **X** 0.3 **=** 30.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

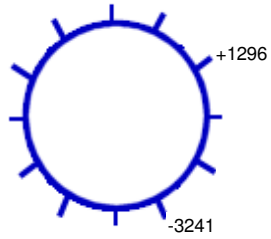
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	08' 08"	8	VCP		0.75	0			0	
IN FROM	2368	10' 10"	24	ACP		5.00	2.00			0	Blockage
OUT TO	1294	10' 11"	24	ACP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: Marlborough Road Easement
Manhole No.: 3239
Sub-System: 9
Inspection Date: 7/23/2019 **Inspector:** RV/JC **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



127 **Ft. to DS MH #:** 3241

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1296	16' 00"	24	ACP		3.00	0			0	
OUT TO	3241	16' 01"	24	ACP		3.00	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3241***
Street:	Marlborough Road at Demerest Street			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

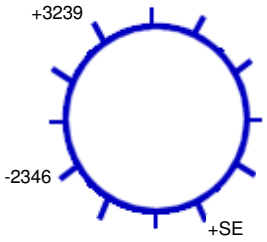
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

N



237 **Ft. to DS MH #:** 2346

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 07"	8	PVC		0.30	0			0	Outside drop
IN FROM	3239	14' 00"	24	RCP		3.50	0			0	
OUT TO	2346	14' 01"	24	RCP		3.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3245***
Street:	Ivaloo Street at Marlborough Road			**Sub-System:**	***9***
Inspection Date:	7/22/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+5589

-SW

150 **Ft. to DS MH #:** SW

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

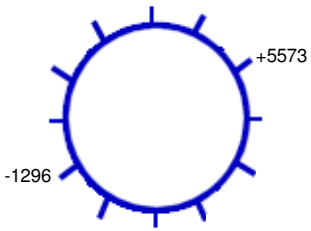
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5589	12' 00"	24	RCP		3.00	0			0	
OUT TO	SW	12' 01"	24	RCP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	3256
Street:	Marlborough Road Easement			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



277 **Ft. to DS MH #:** 1296

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	3			Heavy mineral deposits on lower ring
FLOOR	PARGED	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

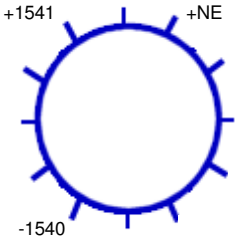
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5573	19' 10"	24	ACP	5	4.00	0			1	
OUT TO	1296	19' 11"	24	ACP	5	4.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4482
Street:	Huntington Avenue at Humboldt Street			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



243 **Ft. to DS MH #:** 1540

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 12.3 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

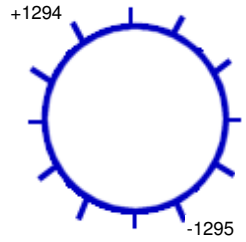
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 11"	12	PVC		0.50	0			0	Outside drop
IN FROM	1541	12' 03"	24	RCP		4.00	0.50			0	
OUT TO	1540	12' 04"	24	RCP		4.00	0.50			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4489
Street:	Maine Avenue Easement			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



173 **Ft. to DS MH #:** 1295

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1294	08' 09"	24	ACP		3.00	0			0	
OUT TO	1295	08' 11"	24	ACP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5572***
Street:	Marlborough Road Easement			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

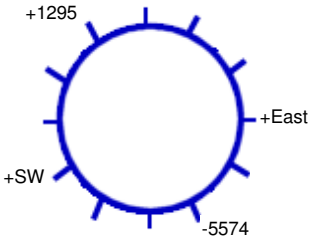
2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



248 **Ft. to DS MH #:** 5574

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	ACP	3	1		Invert leak

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	09' 01"	8	VCP		0	0			0	Blocked but leaking 0.2 GPM
IN FROM	SW	09' 01"	8	VCP		0	0			0	Blocked but leaking 0.1 GPM
IN FROM	1295	16' 01"	24	ACP	5	3.00	0			1	
OUT TO	5574	16' 02"	24	ACP	5	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5573***
Street:	Marlborough Road Easement			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

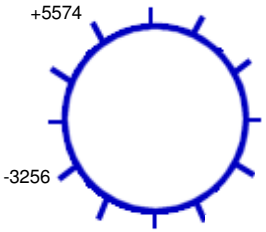
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



293 **Ft. to DS MH #:** 3256

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	3	0.2		Walls weeping, light roots
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5574	17' 02"	24	ACP	5	4.00	0			1	
OUT TO	3256	17' 03"	24	ACP	5	4.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5574***
Street:	Marlborough Road Easement			**Sub-System:**	***9***
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

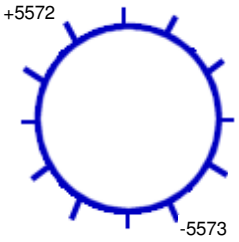
2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

N



128 **Ft. to DS MH #:** 5573

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	3	0.25		Moderate mineral deposits, wall leak
FLOOR	PARGED	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

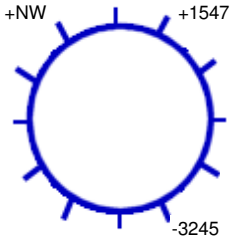
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5572	19' 06"	24	ACP	5	4.00	0			1	Pipe connection leak 0.5 GPM
OUT TO	5573	19' 07"	24	ACP	5	4.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5589
Street:	Marlborough Road at Huntington Avenue			**Sub-System:**	9
Inspection Date:	7/23/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



145 **Ft. to DS MH #:** 3245

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 3 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	12' 04"	10	VCP		0.50	0			0	
IN FROM	1547	13' 06"	24	RCP		4.00	0			0	
OUT TO	3245	13' 07"	24	RCP		4.00	0			0	

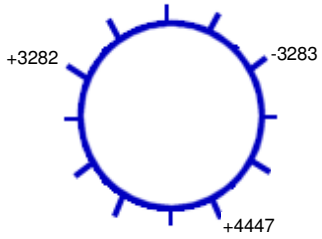
MANHOLE INSPECTION LOGS SUB-AREA 10

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0133***
Street:	1066 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/6/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



23 **Ft. to DS MH #:** 3283

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

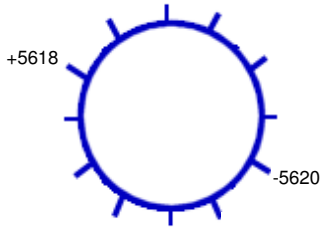
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3282	11' 06"	10	VCP	3	0	0			3	Outside drop. First five joints are offset
IN FROM	4447	11' 06"	8	VCP	3	0.20	0			3	Outside drop. First five joints are offset
OUT TO	3283	12' 02"	18	VCP	3	0.70	1.30			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0507***
Street:	114 Yale Street			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



150 **Ft. to DS MH #:** 5619

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5618	06' 00"	8	PVC	10	0.10	0			0	
OUT TO	5620	06' 01"	8	PVC	10	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0985***
Street:	1137 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N

+4502

-0986

99 **Ft. to DS MH #:** 0986

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4502	08' 09"	20	RCP	3	0.75	0			1	
OUT TO	0986	08' 10"	20	RCP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0986***
Street:	1127 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

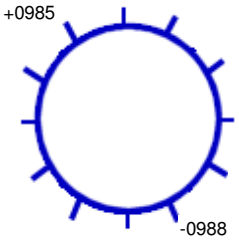
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



132 **Ft. to DS MH #:** 0988

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

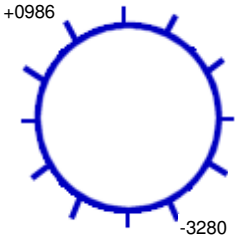
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	08' 00"	10	VCP	3	0	0			4	Heavy mineral deposits 4' upstream
IN FROM	0985	08' 10"	24	RCP	3	0.75	0			1	
OUT TO	0988	08' 11"	24	RCP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0988***
Street:	119 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



222 **Ft. to DS MH #:** 3280

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

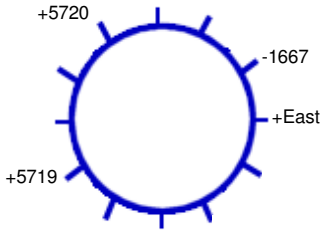
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0986	10' 01"	24	RCP	3	1.20	0			0	
OUT TO	3280	10' 02"	24	RCP	3	1.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1067***
Street:	University Street R.O.W.			**Sub-System:**	***10***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



265 **Ft. to DS MH #:** 1667

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	3	0.5		Mineral deposits, wall leak
FLOOR	BRICK	2			Wet from wall leaks
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	06' 00"	4	PVC	10	0	0			1	
IN FROM	5719	08' 11"	42	RCP	4	4.00	3.00			2	Light roots at joints
IN FROM	5720	07' 04"	15	VCP	3	0.75	0			2	Roots at joints
OUT TO	1667	09' 00"	42	RCP	4	4.00	2.00			2	Boulders downstream

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1585***
Street:	Washington Avenue at Canco Road			**Sub-System:**	***10***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

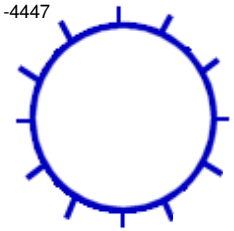
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



229 **Ft. to DS MH #:** 0133

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose pieces
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	CNI	0			18" of debris
INVERT	CNI	0			18" of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

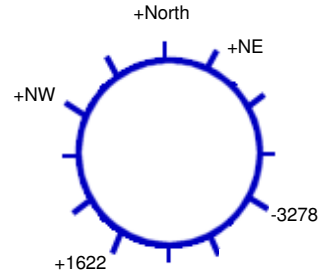
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4447	08' 06"	8	VCP	3	0	6.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1621***
Street:	304 Ammerdown Place			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



259 **Ft. to DS MH #:** 3278

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 04"	4	ACP	3	2.00	0			0	Standing flow
IN FROM	North	08' 04"	4	ACP	3	2.00	0			0	Standing flow
IN FROM	NW	08' 04"	8	VCP	3	0.70	0			0	
IN FROM	1622	08' 04"	8	VCP	3	0.30	0			0	
OUT TO	3278	08' 04"	8	VCP	3	2.00	0.50			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1622***
Street:	Ammerdown Place			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1663***
Street:	Morrill Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1664***
Street:	Princeton Street R.O.W.			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1665***
Street:	Morrill Street R.O.W.			**Sub-System:**	***10***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1666***
Street:	29 Cambridge Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

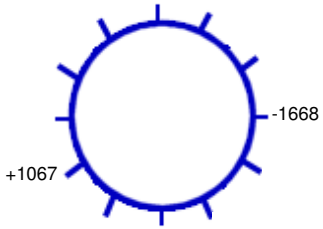
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1667***
Street:	University Street R.O.W.			**Sub-System:**	***10***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



265 **Ft. to DS MH #:** 1668

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK/RCP	3	0.5		Leak at incoming line

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1067	07' 08"	42	RCP	4	2.00	0			2	Small rock upstream
OUT TO	1668	07' 09"	42	RCP	4	2.00	0			2	Light roots

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1668***
Street:	University Street R.O.W.			**Sub-System:**	***10***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+NW

+1667 -4553

270 **Ft. to DS MH #:** 4553

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments: Manhole is surrounded by water and mud

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Mineral deposits, weeping
STEPS	CAST	5			Corroded
WALLS	BRICK	3	1		Mineral deposits, walls leaks
FLOOR	BRICK	3			Mineral deposits
INVERT	BRICK	3			Mineral deposits

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

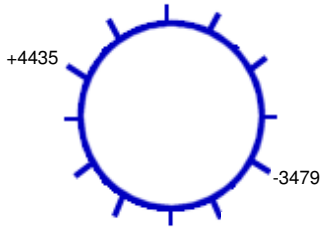
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 09"	24	VCP	3	0.05	0			4	Bulkheaded, 0.5 GPM leak due to rot in steel pipe used to block
IN FROM	1667	08' 10"	42	RCP	4	1.50	0			2	Light roots
OUT TO	4553	08' 11"	42	RCP	4	1.50	0			2	Light roots

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1680***
Street:	30 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



150 **Ft. to DS MH #:** 3479

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Broken
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4435	08' 01"	8	ACP	3	0.10	0			0	
OUT TO	3479	08' 02"	8	ACP	3	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1681***
Street:	53 Woodlawn Avenue R.O.W.			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

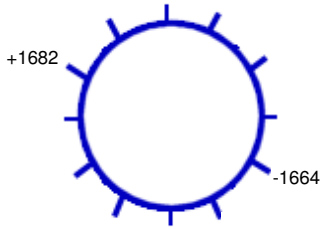
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



220 **Ft. to DS MH #:** 1664

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

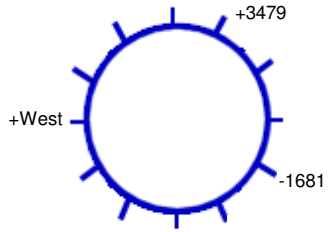
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1682	07' 02"	8	ACP	3	0.50	0			0	
OUT TO	1664	07' 04"	8	ACP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1682***
Street:	43 Magnolia Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



235 **Ft. to DS MH #:** 1681

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

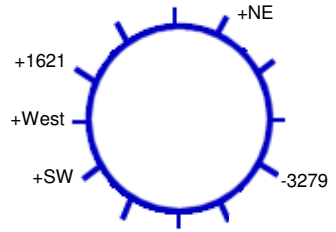
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	07' 05"	8	PVC	10	0.20	0			0	
IN FROM	3479	08' 01"	8	ACP	3	0.25	0			0	
OUT TO	1681	08' 03"	8	ACP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 77 Ammerdown Place
Manhole No.: 3278
Sub-System: 10
Inspection Date: 7/31/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



205 **Ft. to DS MH #:** 3279

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	3			Loose brick, missing mortar
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

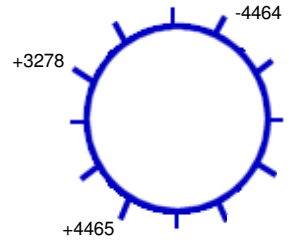
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 02"	6	CIP	4	0.10	0			1	
IN FROM	SW	06' 10"	6	CIP	4	0.20	1.00			2	First joint offset 1"
IN FROM	West	07' 06"	4	CIP	4	0.10	0			1	
IN FROM	1621	08' 07"	8	ACP	3	0.20	0			1	
OUT TO	3279	07' 07"	8	ACP	3	0.80	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3279***
Street:	Harvard Street at Ammerdown Place			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



226 **Ft. to DS MH #:** 4464

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Light rust, corrosion, missing steps
WALLS	BRICK/BLOCK	1			
FLOOR	CNI	0			Covered in dirt
INVERT	RCP/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

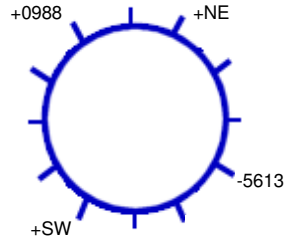
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3278	07' 11"	8	VCP	3	1.00	0			1	
IN FROM	4465	07' 11"	21	RCP	3	1.00	0			1	
OUT TO	4464	08' 00"	21	RCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3280***
Street:	1100 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



158 **Ft. to DS MH #:** 5613

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	05' 04"	10	ACP	3	0	0			0	Drain
IN FROM	SW	06' 09"	10	ACP	3	0	0			0	Drain
IN FROM	0988	09' 04"	24	ACP	3	1.25	0			0	
OUT TO	5613	09' 05"	24	ACP	3	1.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3282***
Street:	1072 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

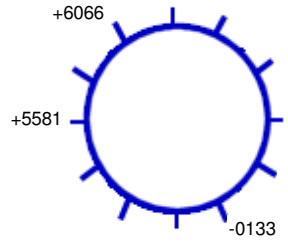
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



111 **Ft. to DS MH #:** 0133

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	3	1.5		Wall leak, light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5581	12' 03"	24	PVC	10	0.60	0			1	
IN FROM	6066	14' 04"	48	CONC	3	1.20	0			1	
OUT TO	0133	14' 06"	48	CONC	3	1.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3283***
Street:	1072 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/6/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

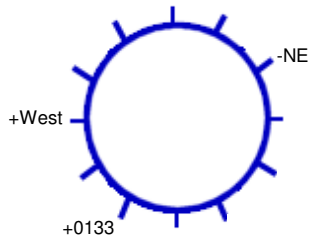
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



262 **Ft. to DS MH #:** 4503

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and loose brick, missing pieces
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

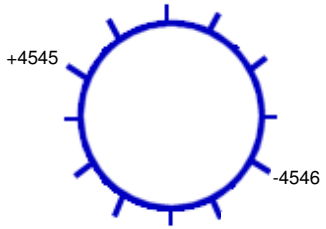
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	13' 00"	24	PVC	10	0.20	0			1	0.2GPM leak, light mineral deposits
IN FROM	0133	14' 03"	48	CONC	3	1.80	0			1	
OUT TO	NE	14' 05"	48	CONC	3	1.80	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 142 Woodlawn Avenue
Manhole No.: 3305
Sub-System: 10
Inspection Date: 7/31/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



259 **Ft. to DS MH #:** 4546

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.1 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	38	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	5			Broken, loose and missing brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4545	06' 04"	12	VCP	3	0.25	0			1	
OUT TO	4546	07' 00"	12	VCP	3	0.25	0.25			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3306***
Street:	71 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

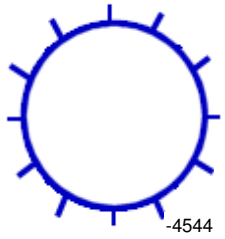
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	12	1

N



144 **Ft. to DS MH #:** 4544

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	5			Broken, roots growing from floor into line
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

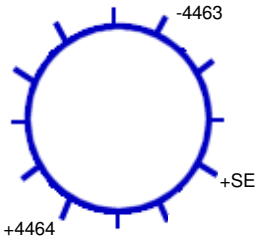
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4544	05' 07"	8	VCP	3	0	0			1	Roots

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3307***
Street:	270 Harvard Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



156 **Ft. to DS MH #:** 4463

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Soft and missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	08' 07"	8	PVC	10	0.10	0			0	
IN FROM	4464	08' 07"	21	RCP	3	0.75	0			0	
OUT TO	4463	08' 08"	20	PVC	10	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3476***
Street:	Cambridge Street at Cornell Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

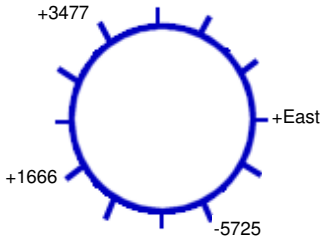
Drainage Area 1:

3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1



351 **Ft. to DS MH #:** 5725

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	04' 06"	4	PVC	10	0	0			0	Inside drop
IN FROM	1666	14' 03"	10	ACP	3	0.20	0			0	
IN FROM	3477	10' 07"	12	ACP	3	2.00	0			0	Outside drop, slow flow
OUT TO	5725	14' 10"	12	ACP	3	1.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3477***
Street:	Cornell Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3478***
Street:	Morrill Street R.O.W.			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

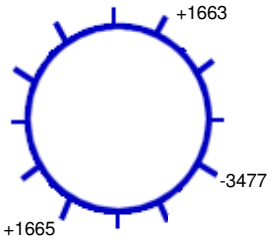
3 **X** 4 **X** 0.3 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



190 **Ft. to DS MH #:** 3477

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Catching debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1663	11' 05"	12	VCP	3	1.25	0			0	Outside drop
IN FROM	1665	13' 05"	12	VCP	3	0.20	0			0	Slow flow
OUT TO	3477	13' 07"	12	VCP	3	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3479***
Street:	42 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

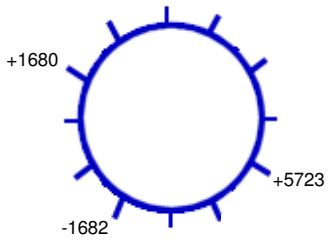
Drainage Area 1:

3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1



261 **Ft. to DS MH #:** 1682

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	4			Broken
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

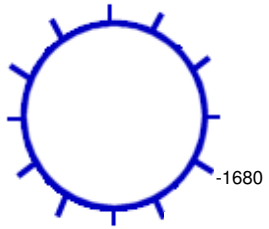
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1680	07' 06"	8	ACP	3	0.10	0			0	Outside drop
IN FROM	5723	11' 05"	8	VCP	3	0.25	0			0	
OUT TO	1682	11' 06"	8	VCP	3	0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4435***
Street:	9 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



272 **Ft. to DS MH #:** 1680

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 8 **X** 0.9 **=** 28.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	1	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Cracked
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1680	07' 05"	8	ACP	3	0	1.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4447***
Street:	Washington Avenue at Ray Street			**Sub-System:**	***10***
Inspection Date:	8/6/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

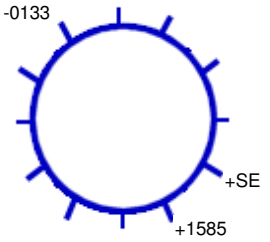
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



348 **Ft. to DS MH #:** 4447

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

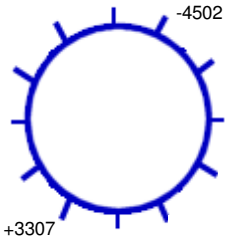
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	03' 06"	4	VCP	3	0	0			1	
IN FROM	1585	08' 06"	8	VCP	3	0.20	0.40			1	
OUT TO	0133	08' 09"	8	VCP	3	0.20	0.30			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4463***
Street:	276 Harvard Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



280 **Ft. to DS MH #:** 4502

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 4 **X** 0.9 **=** 7.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

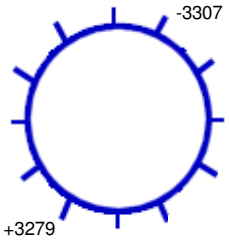
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3307	08' 02"	21	RCP	3	1.00	0			1	
OUT TO	4502	08' 03"	21	RCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4464
Street:	261 Harvard Street			**Sub-System:**	10
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



96 **Ft. to DS MH #:** 3307

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

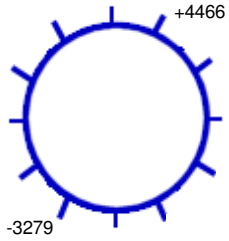
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3279	08' 06"	21	RCP	3	0.75	0			1	
OUT TO	3307	08' 07"	21	RCP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4465***
Street:	235 Harvard Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



20 **Ft. to DS MH #:** 3279

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and loose brick, loose and missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	3			Root growth

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

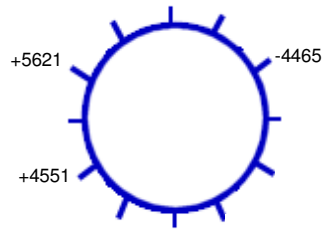
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4466	08' 00"	21	RCP	3	1.00	3.00			5	Root ball growth 10' upstream, restricting 50% of pipe
OUT TO	3279	08' 00"	21	RCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4466***
Street:	Harvard Street at Yale Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



285 **Ft. to DS MH #:** 4465

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4551	08' 01"	18	CONC	3	0	0			0	
IN FROM	5621	07' 08"	8	PVC	10	0.10	0			0	
OUT TO	4465	08' 11"	24	CONC	3	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4501***
Street:	115 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

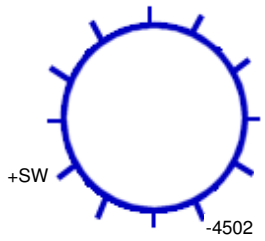
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



212 **Ft. to DS MH #:** 4502

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	08' 00"	8	PVC	10	0.20	0			1	
OUT TO	4502	08' 09"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4502***
Street:	Washington Avenue at Harvard Street			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

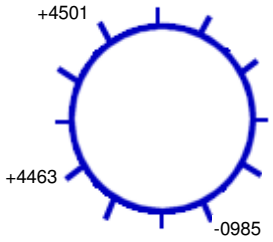
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



39 **Ft. to DS MH #:** 0985

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	2			Broken and loose parge
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK/PIP/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4463	08' 02"	20	RCP	3	0.50	0			1	
IN FROM	4501	08' 01"	12	VCP	3	0.50	0			1	
OUT TO	0985	08' 09"	20	RCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4544***
Street:	83 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

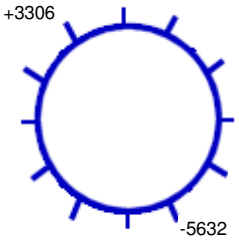
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	7	1

N



154 **Ft. to DS MH #:** 5632

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	CNI	0			Debris covering floor
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3306	06' 01"	8	VCP	3	0.20	0			1	
OUT TO	5632	06' 02"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4545***
Street:	122 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

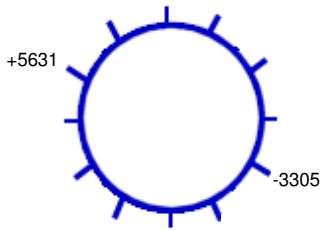
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	10	1



257 **Ft. to DS MH #:** 3305

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and loose brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5631	07' 02"	12	VCP	3	0.20	0			1	
OUT TO	3305	07' 09"	12	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4546***
Street:	157 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

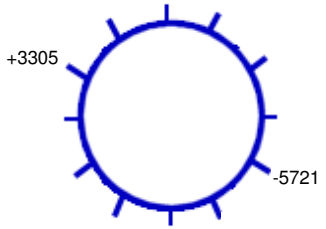
3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

N



262 **Ft. to DS MH #:** 5721

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose pieces
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

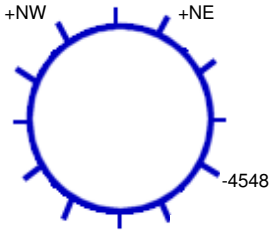
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3305	10' 06"	12	VCP	3	0.25	0			3	Moderate roots at second and third joints
OUT TO	5721	10' 10"	12	VCP	3	0.25	0			2	Light roots at first joint

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: University Street at Morrill Street
Manhole No.: 4547
Sub-System: 10
Inspection Date: 7/31/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



189 **Ft. to DS MH #:** 4548

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	28	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	CNI	0			Full of dirt

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

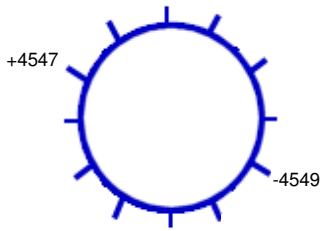
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 07"	10	ACP	3	0	4.00			0	
IN FROM	NW	07' 07"	10	ACP	3	0	4.00			0	
OUT TO	4548	07' 09"	10	ACP	3	0	3.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4548***
Street:	20 University Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



275 **Ft. to DS MH #:** 4549

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	4			Broken, loose and missing brick, missing parge
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4547	08' 03"	10	ACP	3	0.50	0.25			0	Standing flow
OUT TO	4549	08' 04"	10	ACP	3	0.50	0.25			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4549***
Street:	40 University Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.3 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

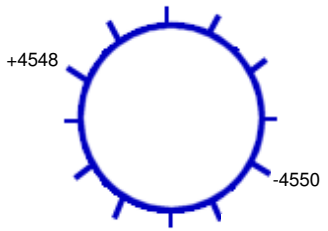
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



268 **Ft. to DS MH #:** 4550

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4548	09' 01"	10	ACP	3	0.20	0			0	
OUT TO	4550	09' 02"	10	ACP	3	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4550***
Street:	64 University Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

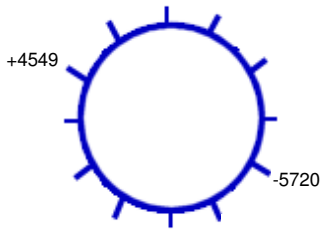
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1



274 **Ft. to DS MH #:** 5720

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	5			Broken, loose and missing brick
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4549	08' 04"	10	ACP	3	0.50	0.20			0	
OUT TO	5720	08' 05"	10	ACP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4551***
Street:	201 Harvard Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

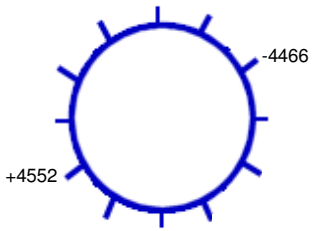
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

N



158 **Ft. to DS MH #:** 4466

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

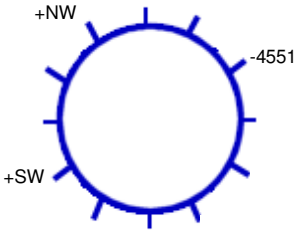
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4552	07' 11"	18	CONC	3	0.50	0			1	Standing flow
OUT TO	4466	08' 00"	18	CONC	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4552***
Street:	189 Harvard Street			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



159 **Ft. to DS MH #:** 4551

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	11	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

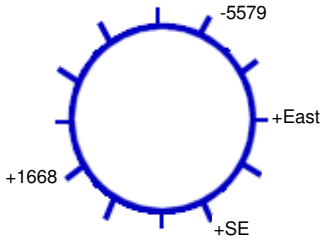
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 10"	18	CONC	3	0	0			1	3' upstream the line changes to a 2" CIP service
IN FROM	SW	05' 00"	4	PVC	10	0	0			1	Inside drop
OUT TO	4551	07' 11"	18	CONC	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4553***
Street:	312 Canco Road R.O.W.			**Sub-System:**	***10***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



330 **Ft. to DS MH #:** 5579

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Light roots
STEPS	CAST	4			Corroded
WALLS	BRICK	3			Moderate roots
FLOOR	BRICK	4			Heavy roots
INVERT	BRICK	4			Heavy roots

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	07' 01"	8	VCP	3	0.25	0			1	
IN FROM	SE	07' 02"	0		0	0	0			0	Bulkheaded
IN FROM	1668	09' 04"	48	RCP	4	1.50	0			2	Roots
OUT TO	5579	09' 05"	48	RCP	4	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5579***
Street:	312 Canco Road R.O.W.			**Sub-System:**	***10***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

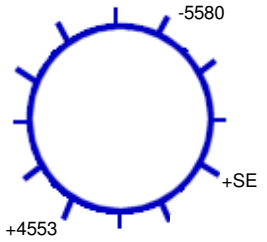
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

N



355 **Ft. to DS MH #:** 5580

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	4			Corroded
WALLS	BRICK	2			Missing mortar
FLOOR	BRICK	1			
INVERT	BRICK	2			Mineral deposits, large rock in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	06' 11"	8	ACP	3	0.50	0			1	
IN FROM	4553	08' 10"	48	RCP	4	1.00	0.25			1	
OUT TO	5580	08' 11"	48	RCP	4	1.00	0.25			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5580***
Street:	360 Canco Road R.O.W.			**Sub-System:**	***10***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 18 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

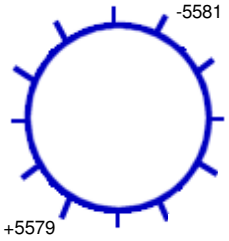
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



340 **Ft. to DS MH #:** 5581

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Loose
CORBEL	BRICK	5			Broken, loose and missing brick, missing mortar
STEPS	CAST	4			Corroded
WALLS	BRICK	3			Broken brick, missing mortar, weeping
FLOOR	BRICK	2			Broken brick, missing mortar, weeping
INVERT	BRICK	3			Mineral deposits, weeping

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

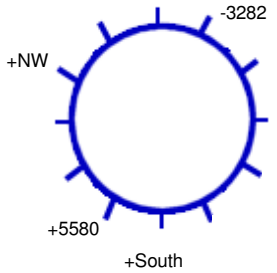
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5579	08' 03"	48	RCP	4	1.00	0			1	
OUT TO	5581	08' 04"	48	RCP	4	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5581***
Street:	360 Canco Road R.O.W.			**Sub-System:**	***10***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



220 **Ft. to DS MH #:** 3282

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.3 **=** 4.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	BRICK	2			Missing mortar
FLOOR	NONE	0			
INVERT	BRICK	5			Heavy roots and mineral deposits

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	04' 06"	0		0	0	0			0	Bulkheaded
IN FROM	South	06' 00"	4	PVC	10	0	4.00			5	Filled with roots
IN FROM	5580	08' 04"	48	RCP	4	1.00	0.50			1	
OUT TO	3282	08' 05"	4	RCP	4	1.00	0.50			2	Roots

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5613***
Street:	1088 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

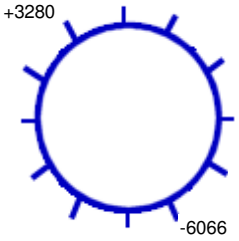
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



104 **Ft. to DS MH #:** 6066

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken and loose brick
STEPS	STEEL	2			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3280	09' 02"	24	ACP	3	1.00	0			1	
OUT TO	6066	09' 03"	24	ACP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5618***
Street:	92 Yale Street			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

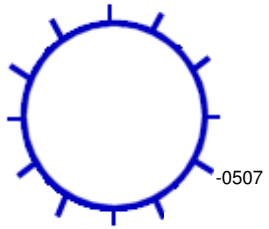
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



245 **Ft. to DS MH #:** 0507

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0507	07' 01"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5619***
Street:	124 Yale Street			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

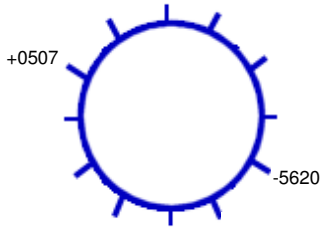
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



165 **Ft. to DS MH #:** 5620

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0507	07' 06"	8	PVC	10	0.10	0			0	
OUT TO	5620	07' 07"	8	PVC	10	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5620***
Street:	140 Yale Street			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

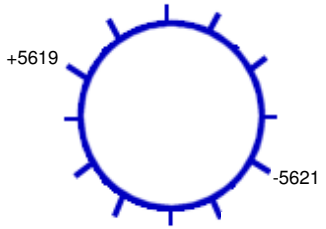
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



250 **Ft. to DS MH #:** 5621

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5619	08' 03"	8	PVC	10	0.20	0			0	
OUT TO	5621	08' 03"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5621***
Street:	160 Yale Street			**Sub-System:**	***10***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

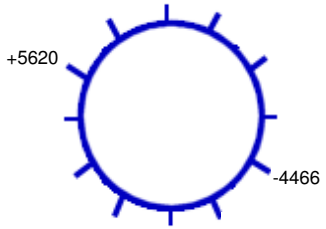
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



235 **Ft. to DS MH #:** 4466

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5620	08' 00"	8	PVC	10	0.20	0			0	
OUT TO	4466	08' 01"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5631***
Street:	100 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 3 In.

COVER INFLOW POTENTIAL

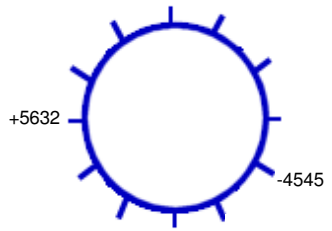
Drainage Area 1:

6 **X** 16 **X** 0.9 **=** 86.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	9	1



249 **Ft. to DS MH #:** 4545

General Comments: Manhole in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

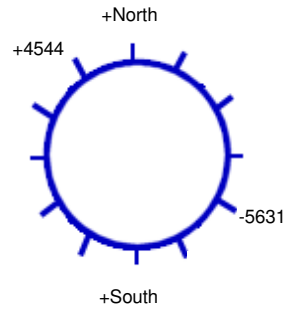
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5632	07' 05"	12	VCP	3	0	0			1	
OUT TO	4545	07' 07"	12	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Woodlawn Avenue at Morrill Street
Manhole No.: 5632
Sub-System: 10
Inspection Date: 7/31/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



79 **Ft. to DS MH #:** 5631

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	13	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	04' 10"	10	VCP	3	0	0			1	Storm drain
IN FROM	South	06' 05"	10	VCP	3	0	0			1	Storm drain
IN FROM	4544	06' 06"	12	VCP	3	0.10	0			1	
OUT TO	5631	06' 07"	12	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5719***
Street:	University Street R.O.W			**Sub-System:**	***10***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5720***
Street:	81 University Street at Majors Court			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

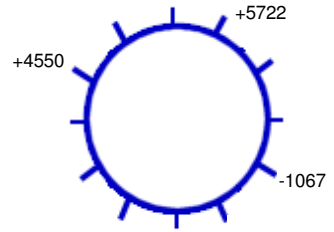
3 **X** 8 **X** 0.9 **=** 21.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



137 **Ft. to DS MH #:** 1067

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	2			Missing brick
INVERT	BRICK	1			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4550	06' 09"	12	ACP	3	0.75	0			1	
IN FROM	5722	06' 06"	12	VCP	3	0.50	0			1	
OUT TO	1067	07' 01"	15	VCP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5721***
Street:	180 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

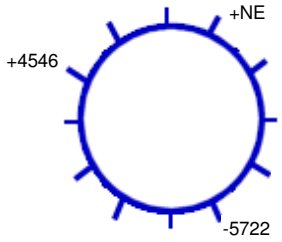
6 **X** 10 **X** 0.9 **=** 54.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	19	1

N



35 **Ft. to DS MH #:** 5722

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and loose brick, loose mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	05' 03"	12	VCP	3	0	0			1	
IN FROM	4546	06' 02"	12	PVC	10	0.40	0			1	
OUT TO	5722	06' 03"	12	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5722***
Street:	Woodlawn Avenue R.O.W.			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5723***
Street:	64 Woodlawn Avenue			**Sub-System:**	***10***
Inspection Date:	7/31/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

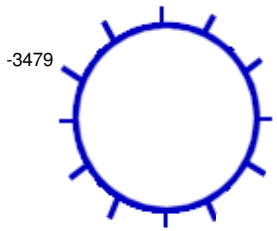
3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



320 **Ft. to DS MH #:** 3479

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3479	07' 03"	8	ACP	3	0	0.25			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5724***
Street:	University Street R.O.W			**Sub-System:**	***10***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

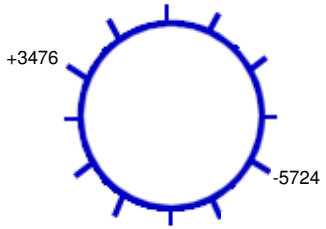
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5725***
Street:	55 University Street			**Sub-System:**	***10***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



340 **Ft. to DS MH #:** 5724

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 3 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 11 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3476	13' 01"	10	ACP		0.75	0			0	
OUT TO	5724	13' 02"	10	ACP		0.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6066***
Street:	1085 Washington Avenue			**Sub-System:**	***10***
Inspection Date:	8/10/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

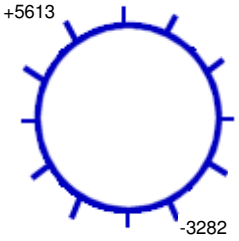
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



39 **Ft. to DS MH #:** 3282

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5613	11' 03"	48	CONC	3	0.20	0			0	
OUT TO	3282	12' 03"	48	CONC	3	0.20	0			0	

MANHOLE INSPECTION LOGS SUB-AREA 11

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0220***
Street:	Forest Avenue at Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

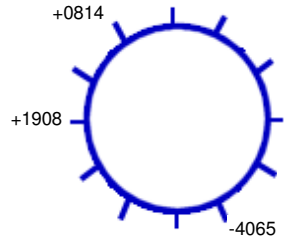
5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



276 **Ft. to DS MH #:** 4065

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	CAST	5			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Mineral deposits
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0814	10' 08"	10	VCP	3	3.00	1.50			1	
IN FROM	1908	10' 01"	8	VCP	3	0.30	0			1	
OUT TO	4065	10' 09"	10	LINED		2.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0222***
Street:	Goodridge Avenue			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0308***
Street:	Forest Avenue at Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

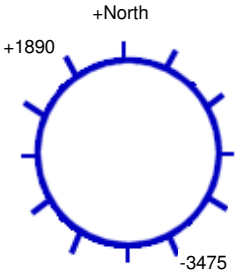
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



17 **Ft. to DS MH #:** 3475

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North									0	Bulkheaded
IN FROM	1890	08' 04"	18	VCP	3	0.50	0			1	
OUT TO	3475	08' 06"	18	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0309***
Street:	Forest Avenue at Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

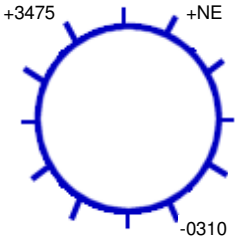
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



180 **Ft. to DS MH #:** 0310

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

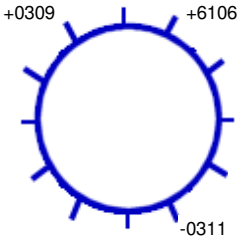
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 01"	12	PVC	10	0	0			1	
IN FROM	3475	09' 11"	27	VCP	3	1.20	0			1	
OUT TO	0310	10' 00"	24	LINED		1.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0310***
Street:	166 Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



140 **Ft. to DS MH #:** 0311

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick
STEPS	STEEL	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

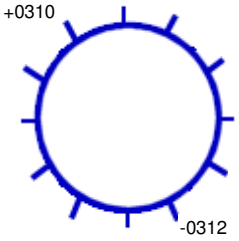
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0309	08' 04"	23	LINED		2.50	0.20			1	
IN FROM	6106	07' 10"	18	VCP	3	2.00	0			1	
OUT TO	0311	08' 06"	24	VCP	3	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0311***
Street:	151 Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



145 **Ft. to DS MH #:** 0312

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0310	10' 04"	24	VCP	3	1.50	0			2	Light mineral deposits at first and second joints
OUT TO	0312	10' 06"	24	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0314***
Street:	Waverly Street at Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

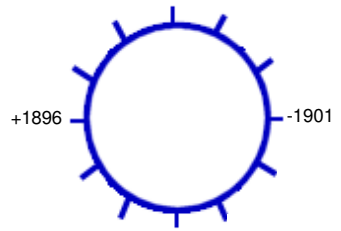
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	28	1

N



290 **Ft. to DS MH #:** 1901

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, rust, heavy corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

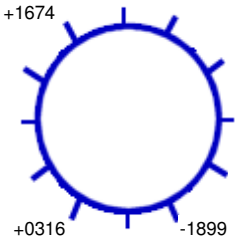
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1896	09' 01"	10	VCP	3	1.00	0			1	
OUT TO	1901	09' 02"	10	VCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0315***
Street:	Forest Avenue at Poland Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



500 **Ft. to DS MH #:** 1899

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	2			Missing mortar
FLOOR	BRICK	4			Loose and missing brick, missing mortar
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0316	08' 03"	8	VCP	3	0.50	0			1	
IN FROM	1674	08' 08"	10	VCP	3	0.30	0			1	
OUT TO	1899	08' 10"	10	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0316***
Street:	Forest Avenue at Poland Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

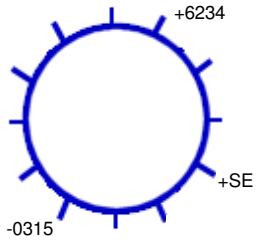
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



38 **Ft. to DS MH #:** 0315

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	2			Missing mortar
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	05' 06"	8	PVC	10	0.20	0			1	
IN FROM	6234	05' 08"	8	VCP	3	0.50	0			1	
OUT TO	0315	05' 09"	8	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0317***
Street:	Stevens Avenue at College Street			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

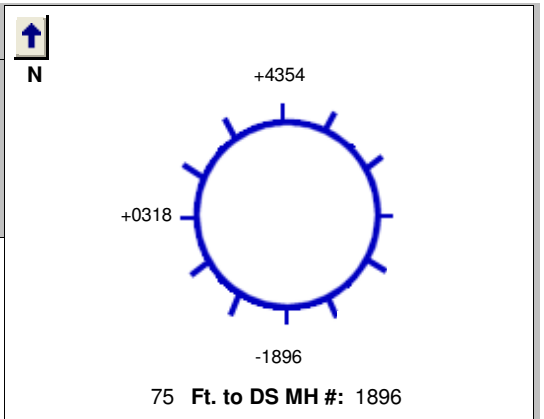
Drainage Area 1:

3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1



75 **Ft. to DS MH #:** 1896

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Broken, loose and missing bricks, missing mortar, large cracks
STEPS	VINYL COATED	1			
WALLS	PARGED	2			Missing parging
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0318	08' 10"	12	VCP		0.75	0			0	
IN FROM	4354	08' 10"	10	LINED		0.75	0			0	
OUT TO	1896	08' 11"	12	VCP		1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0318***
Street:	College Street at Linnell Hall			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

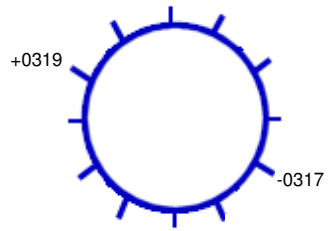
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1

N



230 **Ft. to DS MH #:** 0317

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Loose brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	2			Cracked and loose brick, missing mortar
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

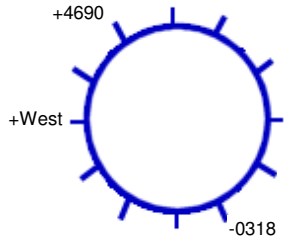
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0319	08' 00"	12	VCP	3	1.50	0			1	
OUT TO	0317	08' 02"	12	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0319***
Street:	33 College Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



235 **Ft. to DS MH #:** 0318

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	19	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	06' 11"	8	VCP	3	0	0			1	
IN FROM	4690	07' 10"	12	VCP	3	0.70	0			1	
OUT TO	0318	07' 11"	12	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0812***
Street:	1245 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

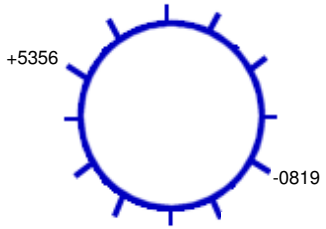
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	17	1

N



25 **Ft. to DS MH #:** 0819

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Moderate rust
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5356	08' 05"	12	VCP	3	3.00	1.00			1	
OUT TO	0819	08' 06"	12	VCP	3	3.00	1.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0813***
Street:	Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

Confirmed with sound test

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0814***
Street:	1209 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

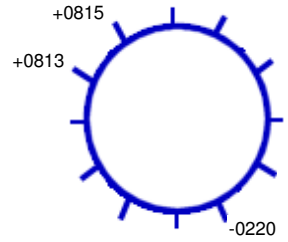
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



360 **Ft. to DS MH #:** 0220

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

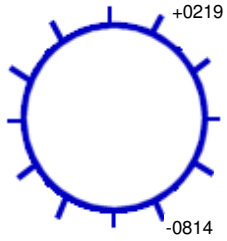
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0813	08' 05"	8	VCP	3	0.30	0			1	
IN FROM	0815	08' 10"	10	VCP	3	2.50	0			1	
OUT TO	0220	08' 11"	10	VCP	3	2.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0815***
Street:	Allen Avenue at Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



110 **Ft. to DS MH #:** 0814

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 9 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Loose and missing brick, loose and missing mortar
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

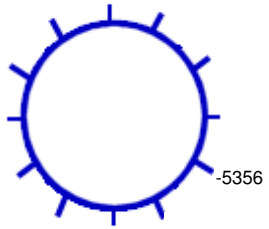
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0219	09' 06"	8	VCP	3	3.00	0			1	Slow flow
OUT TO	0814	09' 07"	8	VCP	3	3.00	0			1	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0816
Street:	1295 Forest Avenue			**Sub-System:**	11
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



+South

285 **Ft. to DS MH #:** 5356

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	2			Missing mortar
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	06' 01"	8	PVC	10	0	0			1	
OUT TO	5356	06' 07"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0819***
Street:	1250 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

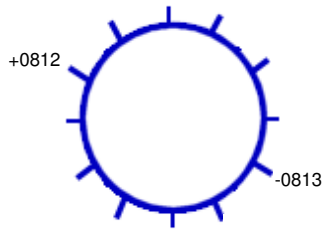
5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



220 **Ft. to DS MH #:** 0813

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

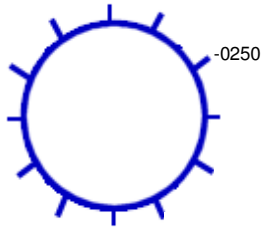
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0812	08' 03"	12	VCP	3	0.50	0			1	
OUT TO	0813	08' 04"	12	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0845***
Street:	1208 Forest Avenue on sidewalk			**Sub-System:**	***11***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



34 **Ft. to DS MH #:** 0250

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 6 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	05' 08"	6	PVC	10	0.20	0			1	
OUT TO	0250	06' 03"	6	PVC	10	0.20	0			1	Tees into line from MH 0813 to MH 0814

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0904***
Street:	26 Eleanor Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0934***
Street:	28 Allen Avenue			**Sub-System:**	***11***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

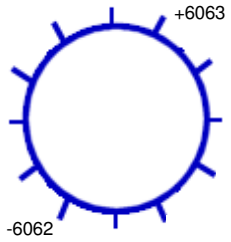
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



142 **Ft. to DS MH #:** 6062

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Broken
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 5.5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6063	06' 06"	8	VCP	3	0.50	0			1	
OUT TO	6062	06' 07"	8	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0935***
Street:	50 Allen Avenue			**Sub-System:**	***11***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

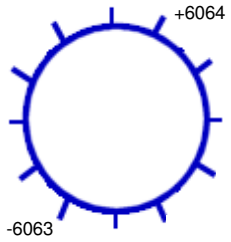
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	38	1

N



130 **Ft. to DS MH #:** 6063

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6064	07' 02"	8	VCP	3	0.30	0			1	
OUT TO	6063	07' 03"	8	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	*1062*
Street:	54 Tremaine Street			**Sub-System:**	*11*
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

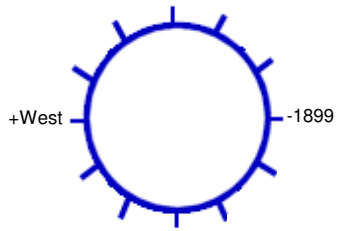
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



316 **Ft. to DS MH #:** 1889

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	BRICK	1			1.5" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West									0	Bulkheaded
OUT TO	1899	05' 11"	6	VCP	3	0	1.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1063***
Street:	Tremaine Street at Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

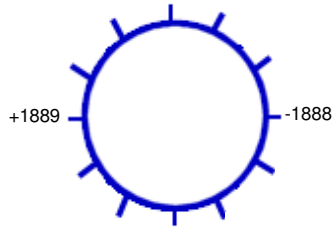
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

N



29 **Ft. to DS MH #:** 1888

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing and loose pieces
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1889	06' 07"	8	VCP	3	0.20	0			0	
OUT TO	1888	06' 08"	10	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1064***
Street:	24 Arbor Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

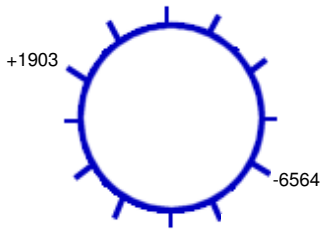
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	24	1

N



28 **Ft. to DS MH #:** 6564

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	2			Missing mortar
INVERT	BRICK/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1903	09' 03"	10	VCP	3	0.20	0			1	
OUT TO	6564	09' 04"	10	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1065***
Street:	Read Street at Bell Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame, blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

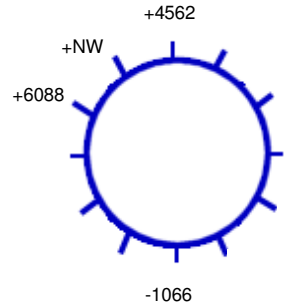
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



260 **Ft. to DS MH #:** 1066

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW									0	Bulkheaded
IN FROM	4562	19' 10"	10	ACP	3	3.00	0			1	
IN FROM	6088	05' 10"	8	PVC	10	0	0			1	
OUT TO	1066	20' 00"	10	ACP	3	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1066***
Street:	250 Read Street			**Sub-System:**	***11***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

8 **X** 8 **X** 0.9 **=** 57.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N

+1065

-6005

266 **Ft. to DS MH #:** 6005

General Comments: Manhole in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Corrosion
WALLS	BRICK	3	0.2		Wall leaks
FLOOR	BRICK	1			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	< NEW >					0	0			0	
IN FROM	1065	17' 02"	11.75	LINED		2.00	0			1	
OUT TO	6005	17' 03"	11.75	LINED		2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1278***
Street:	Bell Street R.O.W.			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

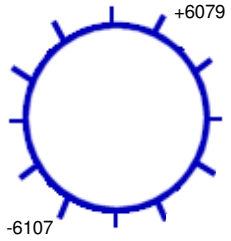
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	19	1

N



262 **Ft. to DS MH #:** 6107

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	PIP	2			Light mineral deposits

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6079	12' 00"	18	RCP	8	1.70	0			1	
OUT TO	6107	12' 01"	18	RCP	8	1.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	*1341*
Street:	11 St. Joseph Street			**Sub-System:**	*11*
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

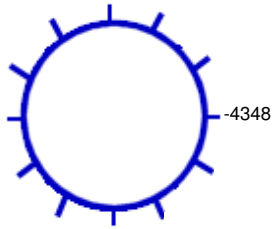
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	5	1

N



207 **Ft. to DS MH #:** 4348

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	4			Broken
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Missing mortar
FLOOR	BRICK	1			
INVERT	VCP	2			Cracked at joint

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

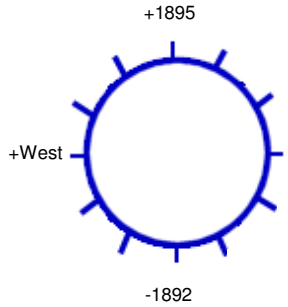
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4348	08' 08"	6	VCP	10	0.20	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1386***
Street:	673 Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



325 **Ft. to DS MH #:** 1892

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	06' 10"	8	VCP		0	0			0	
IN FROM	1895	06' 11"	8	VCP		0	0			0	
OUT TO	1892	07' 00"	8	VCP		0	0.25			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1669***
Street:	256 Read Street			**Sub-System:**	***11***
Inspection Date:	8/2/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

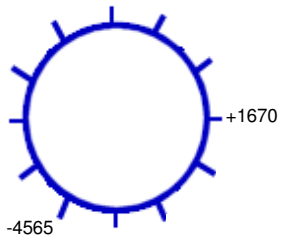
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1



29 **Ft. to DS MH #:** 4565

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	3			Full of debris, restricting flow

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

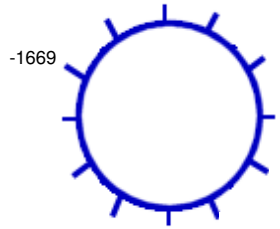
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1670	10' 09"	12	VCP	3	0.20	10.00			5	75% restricted by debris
OUT TO	4565	10' 10"	15	VCP	3	0.20	5.00			3	2.5" debris in line, moderate roots, offset joint

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1670***
Street:	250 Read Street			**Sub-System:**	***11***
Inspection Date:	8/2/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



260 **Ft. to DS MH #:** 1669

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1669	06' 09"	12	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1671***
Street:	3 Adelaide Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

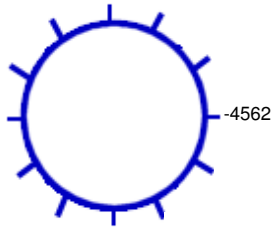
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	34	1

N



250 **Ft. to DS MH #:** 4562

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	0			Could not thouroughly inspect, covered in debris
INVERT	VCP	1			Debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4562	08' 01"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1672***
Street:	Forest Avenue at Morril Street			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

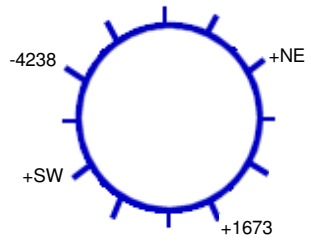
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



17 **Ft. to DS MH #:** 4238

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Covered in mud
STEPS	VINYL COATED	1			
WALLS	PRECAST	2			Covered in mud
FLOOR	BRICK	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 09"	8	PVC		0	0			0	From catch basin
IN FROM	SW	07' 09"	8	PVC		0	0			0	From catch basin
IN FROM	1673	08' 00"	8	PVC		0.50	0			0	
OUT TO	4238	08' 02"	8	PVC		0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1673***
Street:	Forest Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1674***
Street:	Forest Avenue at Arbor Street			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

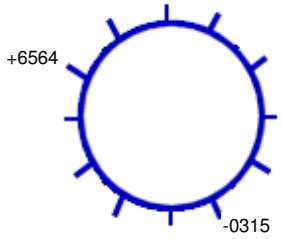
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



360 **Ft. to DS MH #:** 0315

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Corroded
WALLS	BRICK	2			Missing mortar
FLOOR	BRICK	2			Dirt and debris
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6564	08' 06"	10	VCP	3	0.75	0			1	
OUT TO	0315	08' 07"	10	VCP	3	3.75	2.00			1	Slow flow, soft sediment

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1887***
Street:	964 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N

+4091

-3475

350 **Ft. to DS MH #:** 3475

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Broken
CORBEL	BRICK	1			
STEPS	BRICK	5			Unsafe
WALLS	BRICK	2			Weeping walls
FLOOR	PIP	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4091	09' 10"	10	VCP	3	1.20	0			2	Light mineral deposits at first joint
OUT TO	3475	10' 00"	10	VCP	3	1.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1888***
Street:	Forest Avenue at Tremaine Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

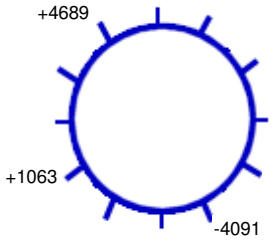
5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



48 **Ft. to DS MH #:** 4091

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

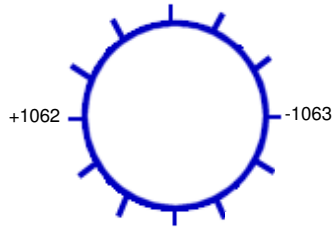
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1063	07' 08"	10	VCP	3	0.10	0			1	
IN FROM	4689	07' 11"	10	VCP	3	1.70	0			1	
OUT TO	4091	07' 11"	10	VCP	3	1.70	0			2	1 GPM leak at first joint

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1889***
Street:	28 Tremaine Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



333 **Ft. to DS MH #:** 1063

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1062	06' 06"	8	VCP	3	0.20	0			1	
OUT TO	1063	07' 05"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1890***
Street:	203 Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N

+1891

-0308

227 **Ft. to DS MH #:** 0308

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	3			Moderate mineral deposits
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1891	09' 04"	15	VCP	3	0.40	0			2	Monderal mineral deposits at first five joints
OUT TO	0308	09' 06"	15	VCP	3	0.40	0			1	Moderate mineral deposits at first and second joints

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1891***
Street:	223 Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

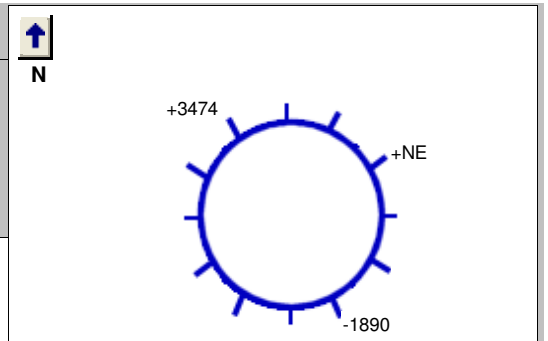
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



225 **Ft. to DS MH #:** 1890

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 08"	6	VCP	3	0.10	0			2	Light mineral deposits
IN FROM	3474	08' 08"	15	VCP	3	0.40	0			1	
OUT TO	1890	08' 09"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1892***
Street:	Stevens Avenue at Walton Street			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

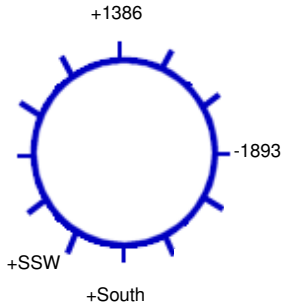
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



47 **Ft. to DS MH #:** 1893

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick, missing mortar
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

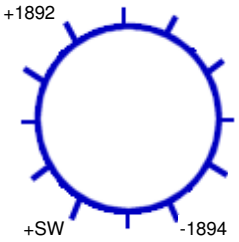
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	08' 03"								0	Bulkheaded
IN FROM	SSW	04' 04"								0	Bulkheaded
IN FROM	1386	08' 04"	8	VCP	3	0.50	0			1	Slow flow
OUT TO	1893	08' 05"	10	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1893***
Street:	Walton Street at Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



214 **Ft. to DS MH #:** 1894

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	18	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

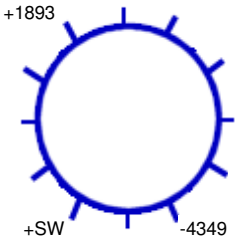
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	10' 03"	18	ACP	3	1.20	0			2	Third joint offset 2"
IN FROM	1892	09' 09"	10	VCP	3	0.10	2.00			1	
OUT TO	1894	10' 04"	15	ACP	3	0.50	0.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1894***
Street:	275 Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



124 **Ft. to DS MH #:** 4349

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

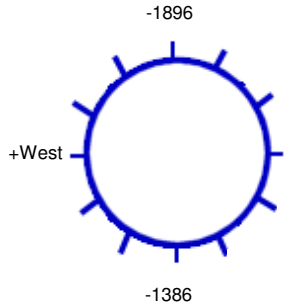
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	07' 09"	8	CIP	8	0	0			1	
IN FROM	1893	09' 01"	15	ACP	3	0.70	0			1	
OUT TO	4349	09' 03"	15	ACP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1895***
Street:	Stevens Avenue at Elmwood Street			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



440 **Ft. to DS MH #:** 1896

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Highpoint manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	5			Completely deteriorated, almost non-existent
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

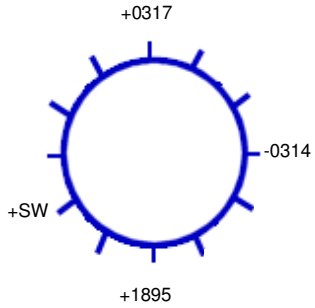
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	06' 03"								0	Bulkheaded
OUT TO	1386	06' 04"	8	VCP	3	0	3.00			1	
OUT TO	1896	06' 04"	8	VCP	3	0	3.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Stevens Avenue at Waverly Street
Manhole No.: *1896*
Sub-System: *11*
Inspection Date: 9/13/2019 **Inspector:** TG/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



45 **Ft. to DS MH #:** 0314

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.5 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	4			Broken, large cracks
CORBEL	BRICK	4			Broken, loose and missing brick, missing mortar, large cracks
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

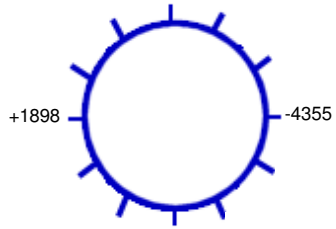
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	08' 06"	10	ACP	3	0.75	0			1	
IN FROM	0317	09' 00"	12	VCP	3	1.00	0			1	
IN FROM	1895	09' 00"	8	VCP	3	1.00	0			1	
OUT TO	0314	09' 01"	12	VCP	3	1.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1897***
Street:	55 Elmwood Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



335 **Ft. to DS MH #:** 4355

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Loose brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1898	07' 07"	8	VCP	3	0.70	0			1	
OUT TO	4355	07' 07"	8	VCP	3	0.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1898***
Street:	Elmwood Street at Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

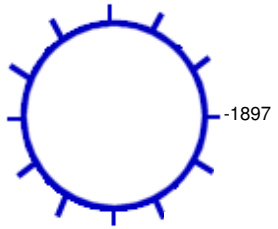
5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



190 **Ft. to DS MH #:** 1897

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick, missing mortar
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			4" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1897	07' 09"	6	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1899***
Street:	Forest Avenue at Waverly Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

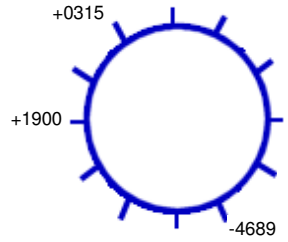
5 **X** 8 **X** 0.9 **=** 36.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	34	1

N



341 **Ft. to DS MH #:** 4689

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose pieces
STEPS	BRICK	5			Unsafe
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

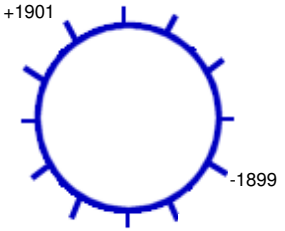
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0315	08' 11"	10	VCP	3	1.00	0			3	Root masses on second, third and fifth joints
IN FROM	1900	08' 03"	8	VCP	3	4.00	0			1	
OUT TO	4689	08' 11"	10	VCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1900***
Street:	21 Waverly Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



252 **Ft. to DS MH #:** 1899

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	VCP	2			Joint seperated

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

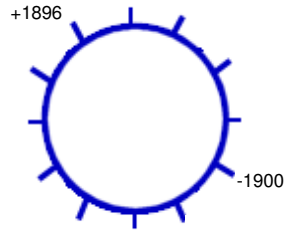
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1901	07' 04"	8	VCP	3	1.50	0			1	
OUT TO	1899	07' 06"	8	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1901***
Street:	42 Waverly Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



249 **Ft. to DS MH #:** 1900

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	12	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose pieces
STEPS	BRICK	5			Unsafe
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

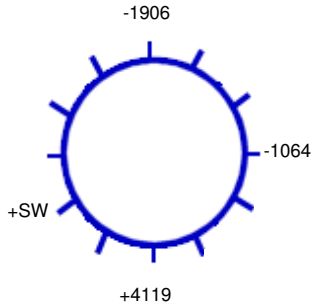
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1896	07' 11"	8	VCP	3	1.70	0			2	Light mineral deposits at fifth joint and beyond
OUT TO	1900	08' 00"	8	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 798 Stevens Avenue
Manhole No.: *1903*
Sub-System: *11*
Inspection Date: 9/13/2019 **Inspector:** TG/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



300 **Ft. to DS MH #:** 1064

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.5 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

General Comments: Invert seems to have been changed several times over the years. There are numerous rough spots for rags to catch. The dirt is being undermined under the floor because the invert is not sealed well.

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	3			Missing mortar, dirt underneath undermined - see notes
INVERT	VCP	3			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	08' 07"								0	Bulkheaded
IN FROM	4119	08' 10"	8	VCP	3	0.30	0			1	
OUT TO	1064	08' 10"	10	VCP	3	0.30	0			1	
OUT TO	1906	08' 08"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1904***
Street:	788 Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

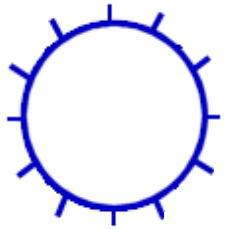
Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N

-4119



-1905

185 **Ft. to DS MH #:** 1905

General Comments: Highpoint manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Corroded
WALLS	BRICK	2			Large gap in mortar
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1905	09' 02"	8	VCP	3	0	0			1	
OUT TO	4119	09' 02"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1905***
Street:	Stevens Avenue near Poland Street			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

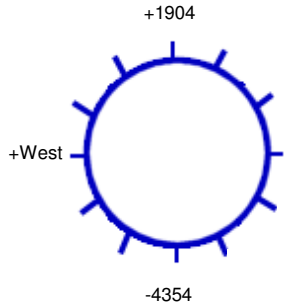
5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



195 **Ft. to DS MH #:** 4354

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	CAST	5			Corroded
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	07' 06"	4	CIP	10	0	0			1	
IN FROM	1904	07' 11"	8	VCP	3	0	0.75			1	
OUT TO	4354	08' 00"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1906***
Street:	812 Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

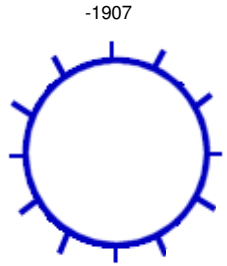
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	1

N



244 **Ft. to DS MH #:** 1907

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Loose brick, missing mortar
STEPS	CAST	5			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1903	09' 00"	8	VCP	3	1.00	0			1	Standing flow
OUT TO	1907	09' 01"	8	VCP	3	1.00	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1907***
Street:	832 Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

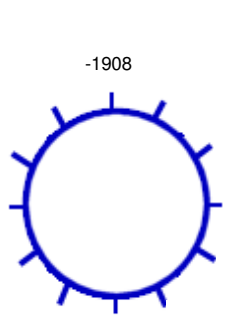
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1



248 **Ft. to DS MH #:** 1908

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Covered in mud
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1906	08' 05"	8	VCP	3	0.50	0			2	Offset joints
OUT TO	1908	08' 06"	8	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1908***
Street:	Forest Avenue at Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

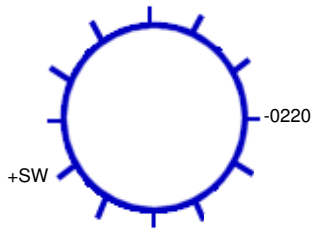
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



52 **Ft. to DS MH #:** 0220

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	CAST	5			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

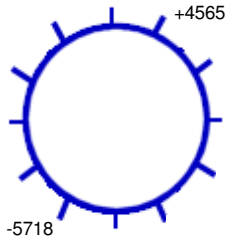
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	02' 09"	6	PVC	10	0	0			1	Catch basin
IN FROM	1907	08' 07"	8	VCP	3	0.50	0			2	Light roots
OUT TO	0220	08' 10"	8	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	3470
Street:	Bell Street R.O.W.			**Sub-System:**	11
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



222 **Ft. to DS MH #:** 5718

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	BRICK/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

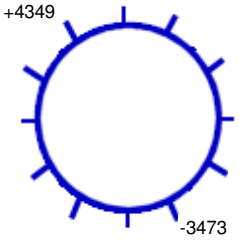
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4565	09' 01"	18	VCP	3	0.70	0			1	
OUT TO	5718	09' 03"	18	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3471***
Street:	259 Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



63 **Ft. to DS MH #:** 3473

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	24	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4349	08' 04"	15	ACP	3	1.00	0.10			1	
OUT TO	3473	08' 05"	15	ACP	3	0.50	0			2	First joint broken

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3472***
Street:	Walton Street at Dingley Court			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

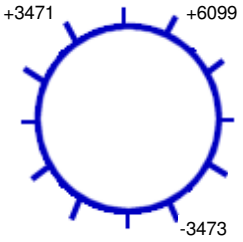
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



187 **Ft. to DS MH #:** 3473

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Loose brick, missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

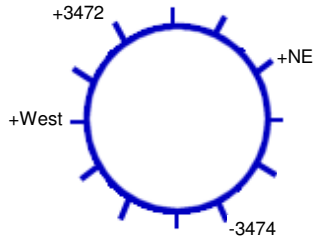
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3471	09' 01"	15	ACP	3	0.40	0			0	
IN FROM	6099	08' 06"	10	PVC	10	0.10	0			0	
OUT TO	3473	09' 02"	18	ACP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3473***
Street:	241 Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



91 **Ft. to DS MH #:** 3474

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 02"	6	VCP	3	0	0			1	
IN FROM	West									0	Bulkheaded
IN FROM	3472	08' 09"	15	VCP	3	0.40	0			1	
OUT TO	3474	08' 10"	15	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3474***
Street:	Walton Street at Morgan Court			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

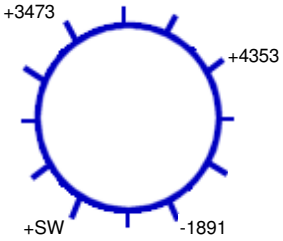
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



200 **Ft. to DS MH #:** 1891

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	08' 08"	12	PVC	10	0.30	0			0	
IN FROM	3473	08' 11"	15	VCP	3	0.40	0			0	
IN FROM	4353	08' 07"	10	PVC	10	0	0			0	
OUT TO	1891	09' 01"	15	VCP	3	0.80	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3475***
Street:	Forest Avenue at Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

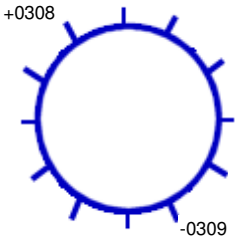
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



135 **Ft. to DS MH #:** 0309

General Comments: Closed line running through manhole, coming from Forest Avenue

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

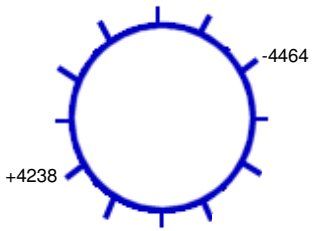
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0308	10' 03"	18	VCP	3	0.40	0			0	
OUT TO	0309	11' 00"	27	VCP	3	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4063
Street:	24 Morrill Street			**Sub-System:**	11
Inspection Date:	8/2/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



176 **Ft. to DS MH #:** 4564

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1	2		1 GPM pipe leak and 2 GPM leak at anchor hole in wall
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4238	15' 01"	14.75	LINED		2.50	0			1	
OUT TO	4464	15' 01"	14.75	LINED		2.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4065***
Street:	1160 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

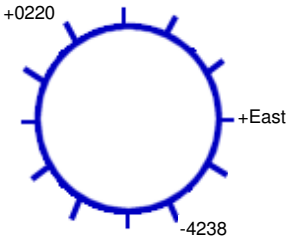
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



198 **Ft. to DS MH #:** 4238

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Covered in mud
STEPS	CAST	5			Corroded
WALLS	BRICK	3	0.5		Weeping walls, leak at outgoing line
FLOOR	BRICK	4			Broken and missing brick, missing mortar
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	06' 07"	5	CIP	10	0.10	0			1	
IN FROM	0220	16' 00"	10	LINED		1.25	0			1	
OUT TO	4238	16' 01"	12	VCP	3	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4091***
Street:	991 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	35	1

N

+1888

-1887

275 **Ft. to DS MH #:** 1887

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick, missing mortar
STEPS	BRICK	5			Unsafe
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1888	07' 08"	10	VCP	3	1.00	0			1	
OUT TO	1887	07' 10"	10	VCP	3	1.00	0			2	Light mineral deposits at first joint

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4119***
Street:	772 Stevens Avenue			**Sub-System:**	***11***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

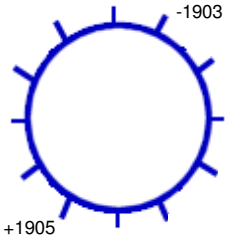
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	39	1

N



115 **Ft. to DS MH #:** 1903

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	BRICK	5			Unsafe
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1905	09' 05"	8	VCP	3	0.10	0			1	
OUT TO	1903	09' 06"	8	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4238***
Street:	1148 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

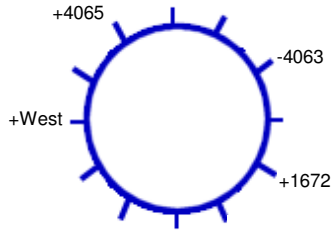
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



161 **Ft. to DS MH #:** 4063

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	10' 05"	8	PVC		0.10	0			0	
IN FROM	1672	08' 10"	8	PVC		0.10	0			0	Inside drop
IN FROM	4065	22' 10"	10	PVC		3.00	0			0	
OUT TO	4063	22' 11"	10	PVC		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	4239
Street:	Bell Street			**Sub-System:**	11
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

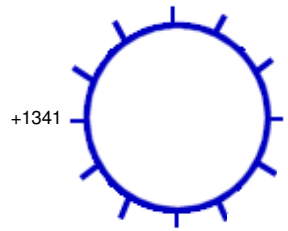
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4348
Street:	30 St. Joseph Street			**Sub-System:**	11
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



303 **Ft. to DS MH #:** 4349

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Missing mortar

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

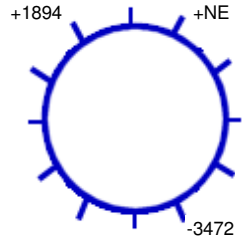
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1341	08' 05"	12	VCP	3	0.50	0			1	
OUT TO	4349	08' 06"	12	VCP	3	0.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4349***
Street:	271 Walton Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



97 **Ft. to DS MH #:** 3472

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	32	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick
STEPS	STEEL	2			Light rust
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	ACP	2			Missing mortar at joint

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	09' 08"	12	VCP	3	0.50	0.10			1	
IN FROM	1894	09' 09"	15	ACP	3	0.70	0			1	
OUT TO	3472	09' 10"	15	ACP	3	0.90	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4353***
Street:	10 Morgan Court			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

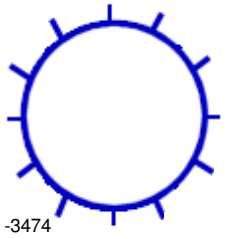
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



262 **Ft. to DS MH #:** 3474

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

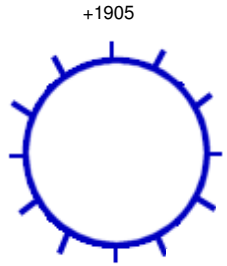
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3474	07' 11"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 751 Stevens Avenue
Manhole No.: 4354
Sub-System: 11
Inspection Date: 9/13/2019 **Inspector:** TG/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



200 **Ft. to DS MH #:** 0317

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 3 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
6 **X** 6 **X** 0.9 **=** 32.4 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Missing asphalt
CORBEL	BRICK	3			Broken and loose brick, missing mortar
STEPS	VINYL COATED	1			
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1905	08' 01"	8	VCP		0	0.50			0	
OUT TO	0317	08' 02"	8	VCP		0	0.50			0	

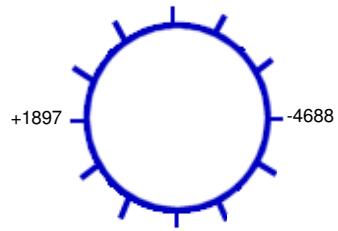
NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4355***
Street:	30 Elmwood Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



315 **Ft. to DS MH #:** 4688

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	27	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and missing brick
STEPS	STEEL	5			Broken, missing, moderate rust and corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1897	07' 03"	8	VCP	3	0.25	0			5	Heavy mineral deposits at sixth joint, heavy root ball, 1 GPM leak
OUT TO	4688	07' 03"	8	VCP	3	0.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4436
Street:	70 Allen Avenue			**Sub-System:**	11
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

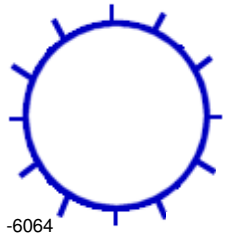
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

N



160 **Ft. to DS MH #:** 6064

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

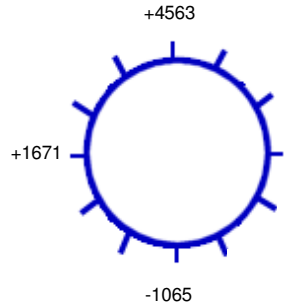
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	6064	08' 03"	8	VCP	3	0.50	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4562***
Street:	Bell Street at Adelaide Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



347 **Ft. to DS MH #:** 1065

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1671	21' 08"	10	ACP	3	2.70	0			1	
IN FROM	4563	08' 09"	8	PVC	10	0	0			1	Outside drop
OUT TO	1065	21' 00"	10	ACP	3	2.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4563***
Street:	80 Bell Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

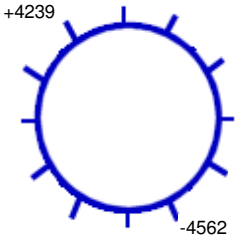
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1

N



236 **Ft. to DS MH #:** 4562

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	4	6.5		Multiple leaks
FLOOR	BRICK	2	3		Multiple leaks, missing brick and mortar
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4239	17' 08"	10	PVC	10	4.00	1.50			1	
OUT TO	4562	17' 08"	10	ACP	3	4.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	4564
Street:	Morrill Street at Bell Street			**Sub-System:**	11
Inspection Date:	8/2/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Smart cover meter attached to underside of manhole cover

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

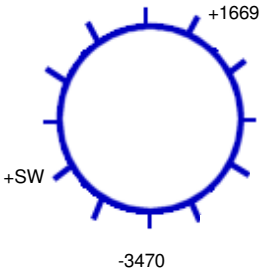
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4565***
Street:	Bell Street at Read Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



274 **Ft. to DS MH #:** 3470

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	32	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	11' 02"								0	Bulkheaded
IN FROM	1669	11' 08"	15	VCP	3	0.20	0			1	
OUT TO	3470	11' 10"	18	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4688***
Street:	Elmwood Street at Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

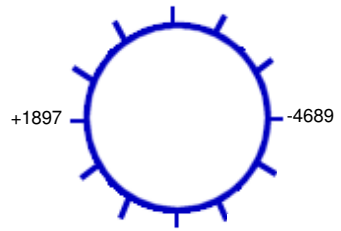
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	38	1

N



31 **Ft. to DS MH #:** 4689

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	2			Missing mortar
FLOOR	BRICK	1			
INVERT	VCP	2			Light mineral deposits

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1897	07' 04"	8	VCP	3	0.25	0			3	Moderate mineral deposits at all joints
OUT TO	4689	07' 05"	8	VCP	3	0.25	0			0	Moderate mineral deposits at first, second and third joints

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4689***
Street:	Elmwood Street at Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

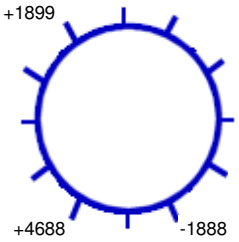
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



235 **Ft. to DS MH #:** 1888

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	BRICK	5			Unsafe
WALLS	BRICK	2			Light mineral deposits
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1899	09' 03"	10	VCP	3	1.80	0			3	Moderate mineral deposits at first joint, third joint offset 2"
IN FROM	4688	08' 11"	8	VCP	3	0.10	0			2	Moderate mineral deposits on first and third joints
OUT TO	1888	09' 04"	10	VCP	3	1.80	0			2	Moderate mineral deposits at first four joints

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	4690
Street:	74 College Street at Stevens Avenue			**Sub-System:**	11
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Cracked cover

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***4691***
Street:	51 College Street (behind)			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	< NEW >					0	0				

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4692***
Street:	79 College Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

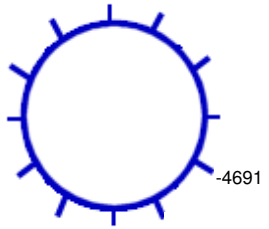
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



200 **Ft. to DS MH #:** 4691

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4691	05' 08"	8	VCP	3	0	0.75			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5356***
Street:	Forest Avenue at Maggie Lane			**Sub-System:**	***11***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

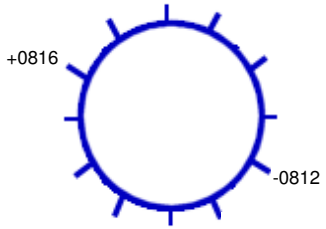
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



273 **Ft. to DS MH #:** 0812

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0816	07' 09"	8	VCP	3	0.20	0			1	
OUT TO	0812	07' 10"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5718***
Street:	Bell Street R.O.W.			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 5 **X** 0.9 **=** 18.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N

+6005 +3470

-6004

155 **Ft. to DS MH #:** 6004

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Light mineral deposits
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3470	10' 02"	18	VCP	3	2.50	0			1	
IN FROM	6005	09' 09"	15	ACP	3	2.80	0			1	
OUT TO	6004	10' 04"	18	VCP	3	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6004***
Street:	Bell Street R.O.W.			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N

+5718

-6079

272 **Ft. to DS MH #:** 6079

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL/PLASTIC	2			Light rust, corrosion
WALLS	BRICK	4			Heavy mineral deposits
FLOOR	BRICK	5			Standing water, heavy mineral deposits
INVERT	VCP	5			Heavy mineral deposits

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5718	10' 11"	18	VCP	3	2.20	0			3	Moderate mineral deposits at first 7 joints
OUT TO	6079	11' 01"	18	VCP	3	2.20	0			3	Moderate mineral deposits at first six joints

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6005***
Street:	Bell Street R.O.W.			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

6 **X** 10 **X** 0.9 **=** 54.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

N

+1066

-5718

266 **Ft. to DS MH #:** 5718

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	4			Broken brick, missing mortar, missing pieces
FLOOR	BRICK	5	3		2GPM leak and 1GPM leak at incoming line, missing mortar
INVERT	ACP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1066	11' 00"	12	ACP	3	3.20	0			3	Moderate size root ball 20' upstream
OUT TO	5718	11' 00"	12	ACP	3	3.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6008
Street:	293 Read Street			**Sub-System:**	11
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

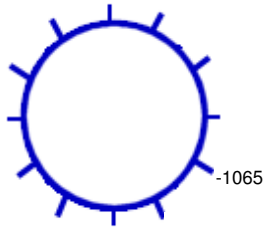
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



242 **Ft. to DS MH #:** 1065

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

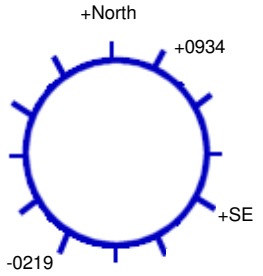
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1065	04' 11"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 6 Allen Avenue
Manhole No.: 6062
Sub-System: 11
Inspection Date: 8/15/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



65 **Ft. to DS MH #:** 0219

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.1 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			3" of dirt
INVERT	VCP	4			Restricted flow, grease back up

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 7.5 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	06' 01"	12	VCP	3	0	0			0	Storm drain
IN FROM	SE	06' 01"	12	VCP	3	0	0			0	Storm drain
IN FROM	0934	08' 00"	8	VCP	3	4.20	0			0	Slow flow
OUT TO	0219	08' 03"	8	VCP	3	4.40	0			0	

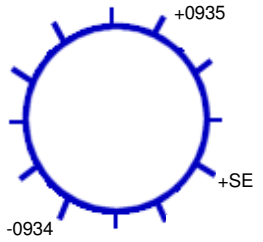
NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	6063
Street:	33 Allen Avenue			**Sub-System:**	11
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



97 **Ft. to DS MH #:** 0934

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

6 **X** 6 **X** 0.9 **=** 32.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 5 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

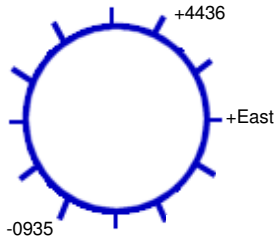
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	05' 07"	6	PVC	10	1.00	0			1	
IN FROM	0935	05' 09"	8	VCP	3	1.00	0.30			1	Standing flow
OUT TO	0934	05' 10"	8	VCP	3	2.00	0.30			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6064
Street:	50 Allen Avenue			**Sub-System:**	11
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



131 **Ft. to DS MH #:** 0935

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

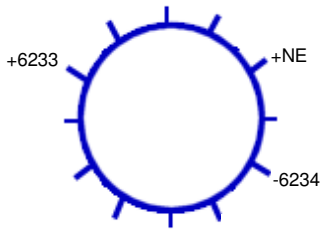
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	07' 06"	8	VCP	3	0	0			0	
IN FROM	4436	07' 07"	8	VCP	3	0.20	0			1	
OUT TO	0935	07' 08"	8	VCP	3	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6078***
Street:	22 Poland Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



114 **Ft. to DS MH #:** 6234

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM/PLASTIC	1			
WALLS	BRICK/PRECAST	1			
FLOOR	BRICK	1			
INVERT	VCP	2			Large crack at joint

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 03"	8	PVC	10	0	1.00			4	7" of debris 2' upstream
IN FROM	6233	07' 05"	8	VCP	3	0	0			1	
OUT TO	6234	07' 05"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6079***
Street:	Bell Street R.O.W.			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

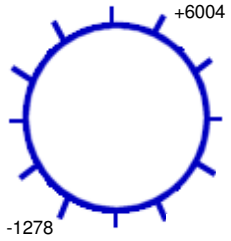
12 **X** 20 **X** 0.9 **=** 216.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	17	1

N



254 **Ft. to DS MH #:** 1278

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	5			Sinking into ground
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK/PARGED	3			Broken pieces, loose brick, missing mortar
INVERT	CONCRETE	3			Missing mortar

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

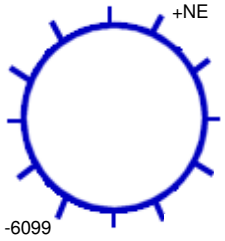
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6004	10' 10"	18	CONC	8	2.00	0			1	
OUT TO	1278	10' 11"	18	CONC	8	2.00	0			2	Moderate mineral deposits at third joint

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6098***
Street:	13 Dingley Court			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



162 **Ft. to DS MH #:** 6099

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			0.2" standing flow

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

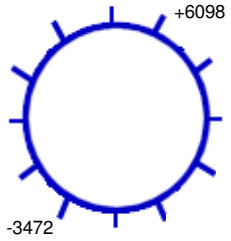
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	06' 03"	8	PVC	10	0	0			0	
OUT TO	6099	06' 04"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6099***
Street:	16 Dingley Court			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



203 **Ft. to DS MH #:** 3472

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

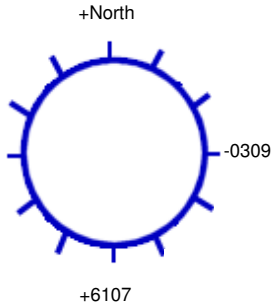
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6098	08' 01"	8	PVC	10	0	0			0	
OUT TO	3472	08' 02"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6105***
Street:	945 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



86 **Ft. to DS MH #:** 0309

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	2			Aggregate exposed
FLOOR	PIP	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	07' 00"	6	CIP	8	0	0			0	
IN FROM	6107	08' 00"	18	VCP	3	0	0			0	
OUT TO	0309	08' 02"	18	VCP	3	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***6106***
Street:	Walton Street R.O.W.			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	< NEW >					0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***6107***
Street:	945 Forest Avenue			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6233***
Street:	36 Poland Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

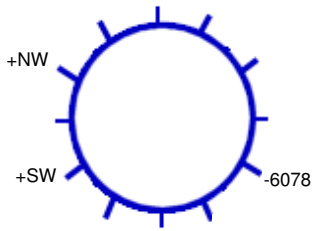
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

N



143 **Ft. to DS MH #:** 6078

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick, loose and missing mortar
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

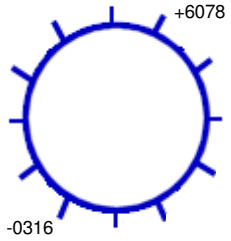
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW									0	Bulkheaded
IN FROM	SW	06' 02"	4	VCP	3	0	0			1	
OUT TO	6078	07' 09"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6234***
Street:	12 Poland Street			**Sub-System:**	***11***
Inspection Date:	8/7/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



157 **Ft. to DS MH #:** 0316

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments: Manhole is in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	STEEL	4			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	2			Debris catching, break in joint

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6078	07' 06"	8	VCP	3	0.70	0.70			3	Small root ball in first joint
OUT TO	0316	07' 06"	8	VCP	3	0.10	0			3	Small root ball in second joint

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6564***
Street:	17 Arbor Street			**Sub-System:**	***11***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

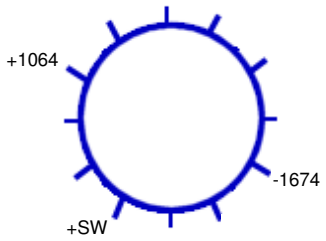
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



188 **Ft. to DS MH #:** 1674

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	09' 00"	10	PVC	10	0	0			0	
IN FROM	1064	09' 01"	12	PVC	10	0.30	0			0	
OUT TO	1674	09' 02"	12	PVC	10	0.30	0.20			0	

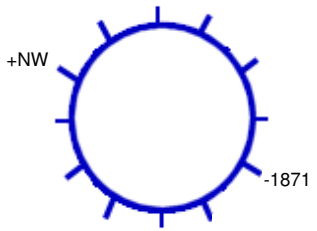
MANHOLE INSPECTION LOGS SUB-AREA 12

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1118***
Street:	79 Gleckler Road			**Sub-System:**	***12***
Inspection Date:	8/2/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



178 **Ft. to DS MH #:** 1871

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Broken brick
FLOOR	BRICK	1			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

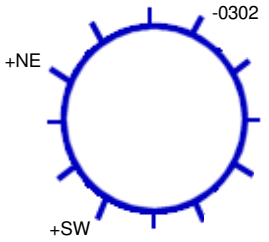
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 04"	8	PVC	10	0.20	0			1	This is a lined pipe that PVC runs through
OUT TO	1871	07' 06"	10	LINED		0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Ocean Avenue at Wellington Road
Manhole No.: 3593
Sub-System: 12
Inspection Date: 8/6/2019 **Inspector:** JS/JG **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



266 **Ft. to DS MH #:** 0302

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE									0	Bulkheaded, but leaking
IN FROM	SW	08' 09"	10	VCP	3	0.10	0			1	
OUT TO	0302	08' 11"	10	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3594***
Street:	33 Wellington Road			**Sub-System:**	***12***
Inspection Date:	8/2/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

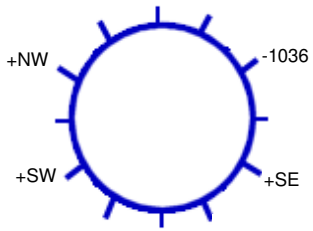
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

N



331 **Ft. to DS MH #:** 1036

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 07"	8	PVC	10	0.20	0			1	
IN FROM	SE	08' 02"	8	PVC	10	0.05	0			1	
IN FROM	South	08' 01"	12	PVC	10	0.01	0			1	
IN FROM	SW	09' 03"	30	VCP	3	1.25	0			1	
OUT TO	1036	09' 09"	37	BRK		1.75	0			1	

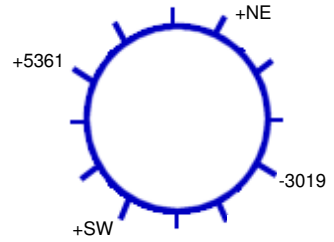
MANHOLE INSPECTION LOGS SUB-AREA 14

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0844
Street:	Riverside Street			**Sub-System:**	14
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



161 **Ft. to DS MH #:** 3019

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

6 **X** 6 **X** 0.3 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	28	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 30 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	10' 06"	8	ACP		0.50	0			0	
IN FROM	SW	10' 06"	8	ACP		0.50	0			0	
IN FROM	5361	09' 09"	8	PVC		1.00	0			0	Inside drop
OUT TO	3019	10' 07"	10	ACP		3.00	2.00			0	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*0846*
Street:	Riverside Street - Fireside Inn			**Sub-System:**	*14*
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2722***
Street:	Taft Avenue at Dale Street			**Sub-System:**	***14***
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

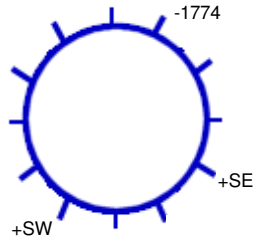
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



164 **Ft. to DS MH #:** 1774

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	3			Wet walls, mineral deposits
FLOOR	BRICK/PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 06"	6	VCP	4	0.20	0			1	
IN FROM	SW	07' 09"	10	VCP	4	0.25	0			1	
OUT TO	1774	07' 10"	10	VCP	4	0.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2723***
Street:	Taft Avenue at Poe Street			**Sub-System:**	***14***
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

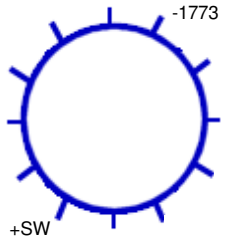
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N



240 **Ft. to DS MH #:** 1773

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	3			Walls weeping
FLOOR	BRICK/PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

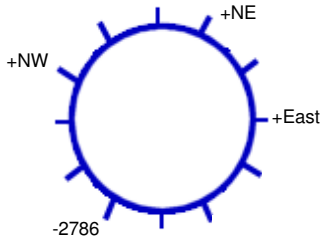
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	07' 09"	12	VCP	4	0.75	0			1	
OUT TO	1773	07' 10"	12	VCP	4	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2785***
Street:	17 Gorges Street			**Sub-System:**	***14***
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



57 **Ft. to DS MH #:** 2786

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

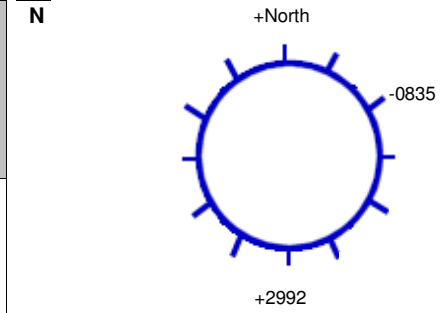
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	07' 04"	4	PVC	13	0.50	0			1	Standing flow
IN FROM	NE	07' 01"	8	PVC	13	0.50	0			1	
IN FROM	NW	07' 04"	4	CIP		0.50	0			1	
OUT TO	2786	07' 05"	8	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	3013
Street:	155 Riverside Street - Ramada Inn parking lot			**Sub-System:**	14
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



55 **Ft. to DS MH #:** 0835

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

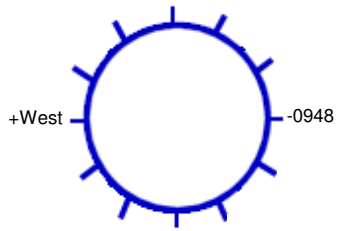
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	12' 03"	10	ACP		0.50	0			0	
IN FROM	2992	12' 03"	10	ACP		2.50	0			0	
OUT TO	0835	12' 04"	12	ACP		3.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4073
Street:	Holm Avenue Easement			**Sub-System:**	14
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



147 **Ft. to DS MH #:** 0948

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 36 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Resting on precast wall
CORBEL	NONE	0			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

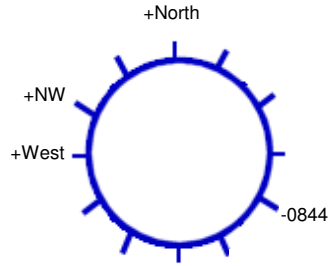
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	11' 06"	12	ACP		1.00	0			0	Fast flow
OUT TO	0948	12' 01"	12	ACP		1.00	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5361
Street:	200 Riverside Street			**Sub-System:**	14
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



217 **Ft. to DS MH #:** 0844

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	2

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	06' 08"	6	PVC		0.50	0			0	
IN FROM	NW	06' 08"	8	PVC		0.20	0.50			0	
IN FROM	West	06' 08"	6	PVC		0	0			0	
OUT TO	0844	06' 09"	8	PVC		1.50	0			0	

MANHOLE INSPECTION LOGS SUB-AREA 15

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0671***
Street:	197 Pinecrest Road			**Sub-System:**	***15***
Inspection Date:	8/20/2019	**Inspector:**	TG/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N

+West +East

-0668

77 **Ft. to DS MH #:** 0668

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Offset 4"
CORBEL	BRICK	2			Loose pieces, missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	08' 01"	8	VCP		0.30	0			0	
IN FROM	West	08' 01"	8	VCP		0.30	0			0	
OUT TO	0668	08' 02"	8	VCP		0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0927***
Street:	Dennett Street R.O.W.			**Sub-System:**	***15***
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 16 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

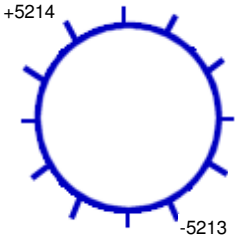
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	1

N



216 **Ft. to DS MH #:** 5213

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Debris on floor
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

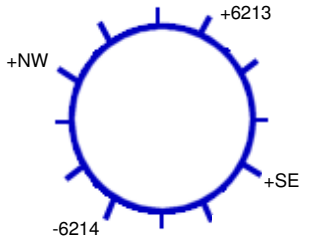
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5214	09' 09"	24	VCP	3	5.00	0			1	
OUT TO	5213	09' 10"	27	VCP	3	5.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2702***
Street:	31 Sunset Lane			**Sub-System:**	***15***
Inspection Date:	8/20/2019	**Inspector:**	TG/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



296 **Ft. to DS MH #:** 6214

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 6 **X** 0.9 **=** 21.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

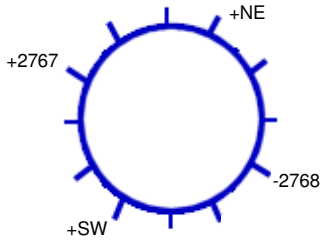
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	13' 04"	10	VCP	3	0.75	0			1	
IN FROM	SE	21' 04"	10	VCP	3	0.50	0			1	
IN FROM	6213	16' 04"	18	VCP	3	8.00	0			1	
OUT TO	6214	21' 05"	18	VCP	3	8.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2720***
Street:	158 Warwick Street			**Sub-System:**	***15***
Inspection Date:	8/20/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



5 **Ft. to DS MH #:** 2768

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	BRICK/PRECAST	1			Bottom 4' is brick
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	14' 01"	8	VCP		3.00	0			0	Outside drop
IN FROM	SW	23' 11"	8	VCP		4.00	0			0	Standing flow
IN FROM	2767	24' 09"	18	VCP		10.00	4.00			0	
OUT TO	2768	24' 10"	18	VCP		10.00	4.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2755***
Street:	104 Candlewyck Terrace			**Sub-System:**	***15***
Inspection Date:	8/20/2019	**Inspector:**	TG/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

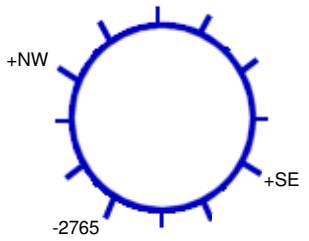
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



168 **Ft. to DS MH #:** 2765

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	2	0.5		Wall leak
FLOOR	BRICK	2			Debris on bench
INVERT	BRICK	2			Concrete debris restricting flow, catching rags

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

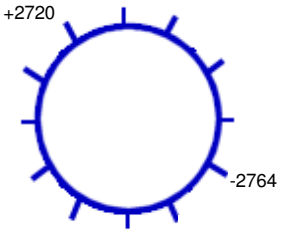
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	13' 01"	8	VCP		0.20	0			0	
IN FROM	SE	13' 01"	8	VCP		0.20	0			0	
OUT TO	2765	13' 02"	8	VCP		0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2763***
Street:	Candlewyck Terrace R.O.W.			**Sub-System:**	***15***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



153 **Ft. to DS MH #:** 2764

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 19 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2720	08' 02"	24	VCP	3	7.50	3.50			1	
OUT TO	2764	08' 03"	24	VCP	3	7.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2764***
Street:	Candlewyck Terrace R.O.W.			**Sub-System:**	***15***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 14 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

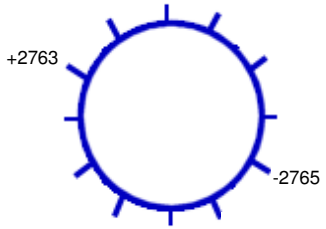
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



156 **Ft. to DS MH #:** 2765

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	2			Light roots
FLOOR	BRICK	2			Rocks on floor
INVERT	BRICK	3			Debris blocking invert

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 6.75 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2763	14' 04"	21	VCP	3	7.00	0			1	
OUT TO	2765	14' 05"	21	VCP	3	7.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2765***
Street:	Candlewyck Terrace R.O.W.			**Sub-System:**	***15***
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 3 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

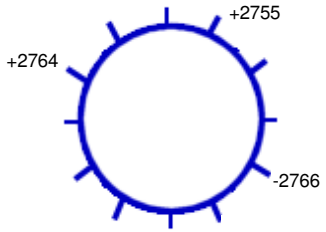
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



237 **Ft. to DS MH #:** 2766

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Corroded
WALLS	BRICK	3			Roots
FLOOR	BRICK	3			Roots
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2755	05' 01"	8	ACP	3	0.50	0			2	Outside drop, roots at first joint
IN FROM	2764	13' 00"	24	VCP	3	6.00	0			1	
OUT TO	2766	13' 02"	24	VCP	3	6.00	0			2	Roots at third joint

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2766***
Street:	Candlewyck Terrace			**Sub-System:**	***15***
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 19 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

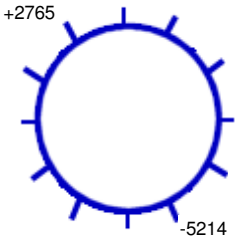
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



239 **Ft. to DS MH #:** 5214

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Corroded bricks and mortar
STEPS	CAST	4			Corroded
WALLS	BRICK	2			Light roots
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 5 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2765	09' 00"	24	VCP		8.00	0			1	
OUT TO	5214	09' 02"	24	VCP		8.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2767***
Street:	Warwick Street R.O.W.			**Sub-System:**	***15***
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 6 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

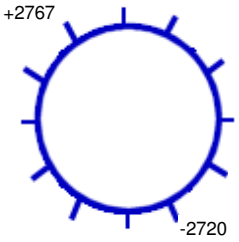
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



200 **Ft. to DS MH #:** 2720

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	CAST	3			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Dirt on floor
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 5.5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2767	09' 03"	24	VCP	3	5.50	0			1	
OUT TO	2720	09' 04"	24	VCP	3	5.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2768***
Street:	158 Warwick Street			**Sub-System:**	***15***
Inspection Date:	8/20/2019	**Inspector:**	TG/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

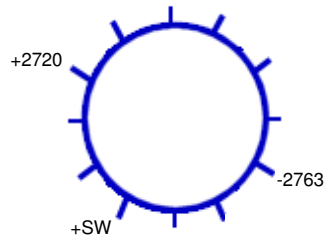
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



251 **Ft. to DS MH #:** 2763

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	CNI	0			Surcharged
INVERT	CNI	0			Surcharged

Surcharge From Invert: **Currently:** 2 **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

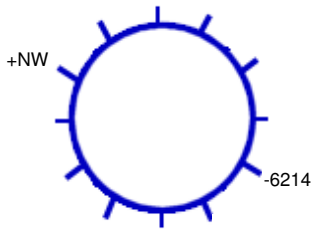
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	24' 00"									Could not inspect, surcharged
IN FROM	2720	24' 09"									Could not inspect, surcharged
OUT TO	2763	24' 10"									Could not inspect, surcharged

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5188
Street:	20 Cedarhurst Lane Easement			**Sub-System:**	15
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



150 **Ft. to DS MH #:** 6214

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 8 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	38	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust
WALLS	BRICK	2			Light roots, wet walls
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

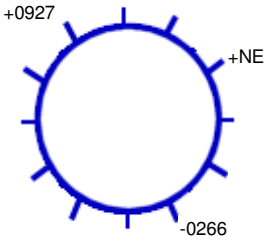
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	10' 03"	15	VCP	3	6.00	1.00			1	
OUT TO	6214	10' 04"	15	VCP	3	6.00	1.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5213***
Street:	95 Dennett Street			**Sub-System:**	***15***
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



75 **Ft. to DS MH #:** 0266

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	PRECAST/PARGED	1			
FLOOR	PARGED	2			Debris
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 7.5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

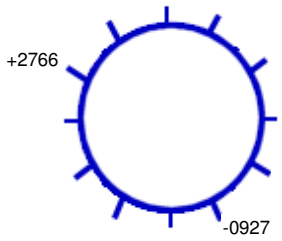
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 03"	8	ACP		1.00	0			0	
IN FROM	0927	14' 00"	24	VCP		9.00	0			0	
OUT TO	0266	14' 01"	24	VCP		9.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5214
Street:	Longwood Terrace R.O.W.			**Sub-System:**	15
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



257 **Ft. to DS MH #:** 0927

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 9 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 5 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2766	08' 06"	24	VCP	3	7.00	0			4	Heavy roots at thrid and forth joints
OUT TO	0927	08' 07"	27	VCP	3	7.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6207***
Street:	Pinewood Lane R.O.W.			**Sub-System:**	***15***
Inspection Date:	8/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 14 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

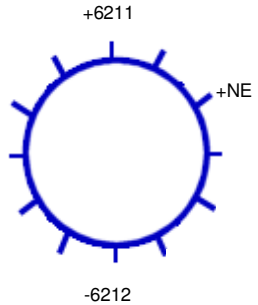
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

N



62 **Ft. to DS MH #:** 6212

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Corroded
WALLS	BRICK	2	0.5		Wall leak, light roots
FLOOR	BRICK	2			Heavy roots
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	05' 02"	10	VCP	3	0.40	0			1	
IN FROM	6211	10' 08"	18	VCP	3	3.00	0			1	
OUT TO	6212	10' 09"	18	VCP	3	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6208***
Street:	Penwood Drive Easement			**Sub-System:**	***15***
Inspection Date:	6/27/2019	**Inspector:**	RV/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 27 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

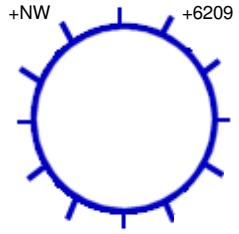
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



155 **Ft. to DS MH #:** 6210

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 05"	8	VCP	2	1.30	0			1	
IN FROM	6209	10' 00"	20	VCP	2	8.20	1.90			2	Light roots at first and third joints
OUT TO	6210	10' 01"	18	VCP	2	8.20	1.40			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Penwood Drive Easement
Manhole No.: 6209
Sub-System: 15
Inspection Date: 6/27/2019 **Inspector:** RV/JG **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N

+NE

+SE

-SW

42 **Ft. to DS MH #:** 6208

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 44 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BLOCK	1			
FLOOR	BRICK/PARGED	3	0.1		Weeping
INVERT	BRICK/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

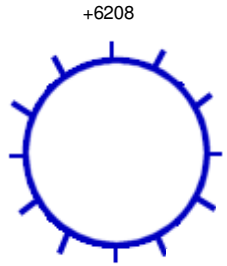
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	11' 04"	20	VCP	2	7.90	0.90			1	
IN FROM	SE	07' 10"	8	VCP	2	0.50	2.00			1	Outside drop
OUT TO	SW	11' 05"	20	VCP	2	7.90	0.90			3	0.05GPM leak at first joint, sixth joint downstream offset 1"

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	6210
Street:	Penwood Drive Easement			**Sub-System:**	15
Inspection Date:	6/27/2019	**Inspector:**	RV/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



182 **Ft. to DS MH #:** 6211

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 12 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6208	11' 05"	18	VCP	2	6.20	0			3	First joint offset 1", rootball also at first joint
OUT TO	6211	11' 06"	18	VCP	2	6.20	0			3	Large rootball five joints downstream

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6211***
Street:	Pinebrook Lane R.O.W.			**Sub-System:**	***15***
Inspection Date:	8/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

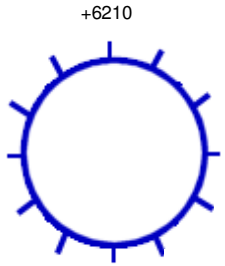
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



149 **Ft. to DS MH #:** 6207

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6210	10' 02"	18	VCP	3	4.50	2.00			1	
OUT TO	6207	10' 04"	18	VCP	3	4.50	2.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6212***
Street:	Pinebrook Lane R.O.W.			**Sub-System:**	***15***
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+6207

-6213

143 **Ft. to DS MH #:** 6213

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 7 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Debris on floor
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 1.75 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6207	10' 01"	18	VCP	3	2.00	0			1	
OUT TO	6213	10' 02"	18	VCP	3	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6213***
Street:	Glen Haven Road West R.O.W.			**Sub-System:**	***15***
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 11 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

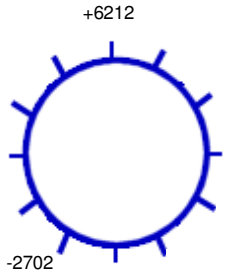
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



301 **Ft. to DS MH #:** 2702

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Debris
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4.75 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

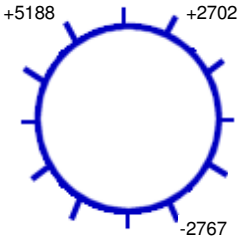
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6212	09' 11"	18	VCP	3	2.50	0			2	Roots at third joint
OUT TO	2702	10' 00"	18	VCP	3	3.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	6214
Street:	Warwick Street R.O.W.			**Sub-System:**	15
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



213 **Ft. to DS MH #:** 2767

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	3			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	CNI	0			2" of debris

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 3.8 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2702	11' 01"	18	VCP	3	7.00	1.00			3	Roots from mouth to first joint
IN FROM	5188	10' 10"	15	VCP	3	3.00	1.00			3	Roots at third joint
OUT TO	2767	11' 02"	21	VCP	3	8.50	1.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6218***
Street:	Warwick Street at Glen Haven Road			**Sub-System:**	***15***
Inspection Date:	8/20/2019	**Inspector:**	TG/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

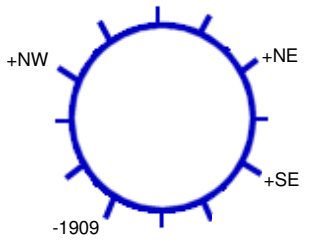
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



322 **Ft. to DS MH #:** 1909

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	06' 00"	15	PVC	10	0	0			1	Has plug, from drain manhole
IN FROM	NW	06' 07"	15	VCP	3	0.25	0			1	
IN FROM	SE	06' 07"	15	VCP	3	0.25	0			1	
OUT TO	1909	06' 08"	15	VCP	3	0.30	0			1	

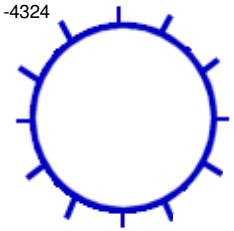
MANHOLE INSPECTION LOGS SUB-AREA 16

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0245
Street:	56 Alba Street			**Sub-System:**	16
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



326 **Ft. to DS MH #:** 4324

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	STEEL	4			Heavy rust
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

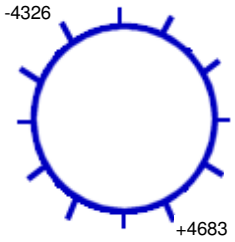
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4324	07' 02"	8	LINED		0	0.50			0	Debris

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0246
Street:	19 Mabel Street			**Sub-System:**	16
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



190 **Ft. to DS MH #:** 4326

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments: One side of frame is sunken 1.5" due to corbel deterioration

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Broken, loose and missing brick, missing mortar
STEPS	STEEL	5			Broken, rusted, corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	4			Broken in several places, causing flow to back up

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

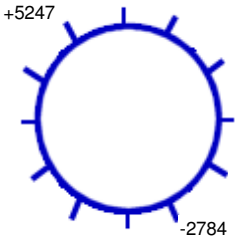
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4683	07' 03"	8	VCP	3	0.20	0			1	Plugged due to bricks in invert, cleared during inspection
OUT TO	4326	07' 03"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0731***
Street:	34 Phipps Road			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



88 **Ft. to DS MH #:** 2784

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

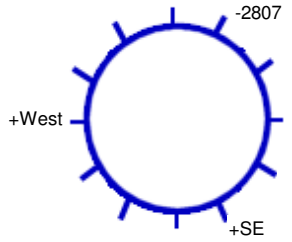
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5247	07' 09"	8	PVC	10	0	0			0	
OUT TO	2784	07' 10"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0736
Street:	62 Jeanne Street			**Sub-System:**	16
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



95 **Ft. to DS MH #:** 2807

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			1.5" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

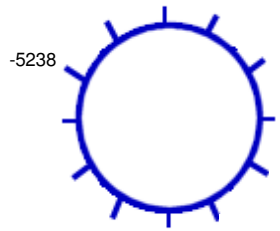
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	06' 06"	4	PVC	10	0	0.20			0	
IN FROM	West	06' 05"	4	PVC	10	0	0			0	
OUT TO	2807	06' 07"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0737
Street:	17 Wingate Drive			**Sub-System:**	16
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



327 **Ft. to DS MH #:** 5238

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	0.75

General Comments: Lamped 15' up line from South, did not see any lines tied into it - very clear and fast flow

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

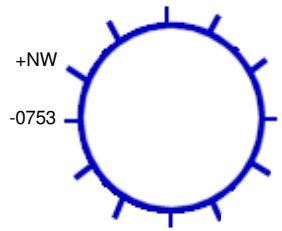
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	08' 05"	8	ACP	3	0.50	0			1	Clear, fast flow
OUT TO	5238	08' 08"	8	ACP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0744
Street:	12 Crosby Street			**Sub-System:**	16
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



297 **Ft. to DS MH #:** 0753

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	18	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK/PARGED	1			
FLOOR	BRICK	1			Heavy debris on floor
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	04' 11"	4	PVC	10	0	0			0	Inside drop
OUT TO	0753	07' 08"	8	VCP	3	0	0			4	Pipe is broken at third joint downstream

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0749
Street:	Alba Street at Best Street			**Sub-System:**	16
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+2844 +2834 -5274 +4323

241 **Ft. to DS MH #:** 5274

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	NONE	0			
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	LINED/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2834	08' 05"	12	VCP	3	1.00	0			0	Fast flow
IN FROM	2844	08' 02"	8	LINED		0.30	0			0	
IN FROM	4323	08' 6"	10	LINED		0.40	0			0	
OUT TO	5274	08' 09"	12	VCP	3	1.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0750
Street:	Leland Street at Pleasant Avenue			**Sub-System:**	16
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

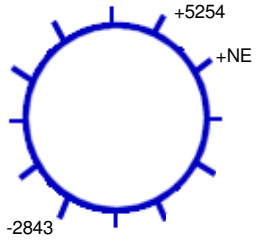
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



106 **Ft. to DS MH #:** 2843

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	05' 09"	6	VCP	3	0.10	0			1	
IN FROM	5254	07' 02"	15	VCP	3	0.50	0			1	
OUT TO	2843	07' 03"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0751***
Street:	Leland Street at Brentwood Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

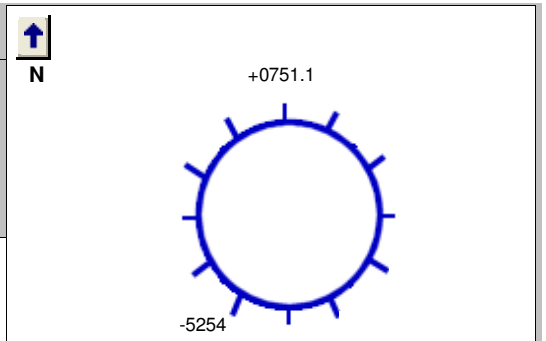
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1



169 **Ft. to DS MH #:** 5254

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	BRICK/PRECAST	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0751.1	06' 02"	8	VCP	3	0.75	0			0	
OUT TO	5254	06' 04"	18	VCP	3	0.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0752***
Street:	77 Brentwood Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

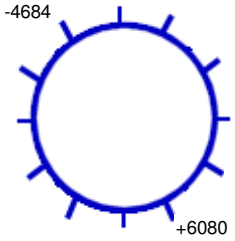
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



283 **Ft. to DS MH #:** 4684

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

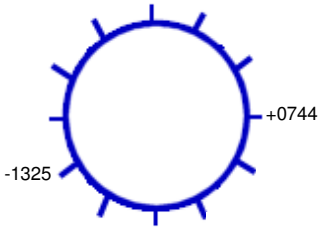
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6080	07' 05"	8	VCP	3	0.20	0			3	Moderate roots
OUT TO	4684	07' 07"	12	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0753***
Street:	Crosby Street at Leland Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



29 **Ft. to DS MH #:** 1325

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

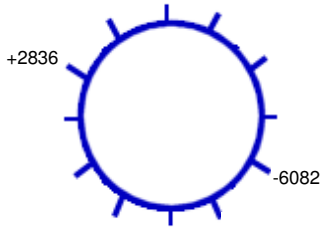
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0744	07' 07"	8	VCP	3	0.50	0			0	
OUT TO	1325	07' 09"	8	VCP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0754
Street:	28 Leonard Street			**Sub-System:**	16
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



300 **Ft. to DS MH #:** 6082

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL/BRICK	5			Unsafe, Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	PRECAST	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2836	08' 01"	8	VCP	3	0.20	0			1	
OUT TO	6082	08' 02"	10	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0755***
Street:	Fuller Street at Madeline Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

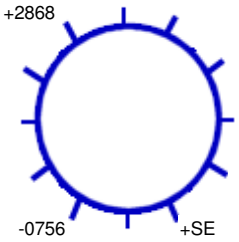
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



240 **Ft. to DS MH #:** 0756

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	08' 05"	8	VCP	3	0.25	0			1	Clear flow
IN FROM	2868	09' 02"	24	VCP	3	3.25	0			1	
OUT TO	0756	09' 04"	24	VCP	3	3.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0756
Street:	Fuller Street at Bartlett Street			**Sub-System:**	16
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

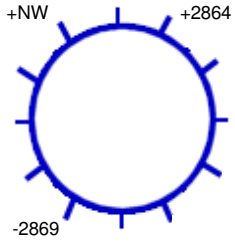
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	7	1

N



240 **Ft. to DS MH #:** 2869

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	3			Rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

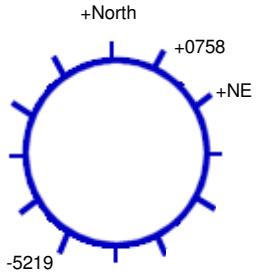
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW									0	Bulkheaded
IN FROM	2864	09' 00"	24	VCP	3	2.00	0			1	
OUT TO	2869	09' 01"	18	VCP	3	2.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Hamblet Avenue at Hale Street
Manhole No.: 0757
Sub-System: 16
Inspection Date: 6/5/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



188 **Ft. to DS MH #:** 5219

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 2 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

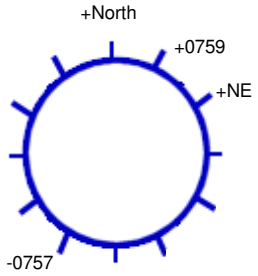
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	04' 00"	12	RCP	3	0	0			1	Storm drain
IN FROM	North	04' 09"	12	RCP	3	0	0			1	Storm drain
IN FROM	0758	07' 06"	18	VCP	3	1.50	0.10			1	
OUT TO	5219	07' 07"	18	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0758***
Street:	34 Hamblet Avenue at Bartlet Street			**Sub-System:**	***16***
Inspection Date:	6/4/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



239 **Ft. to DS MH #:** 0757

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

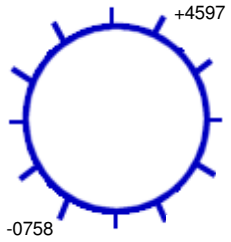
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	05' 05"	12	RCP	3	0	0			1	Storm line tied into sewer
IN FROM	North	05' 04"	12	RCP	3	0	0			1	Storm line tied into sewer
IN FROM	0759	09' 05"	18	CIP	3	2.00	0			1	
OUT TO	0757	09' 07"	18	CIP	3	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 5 Hamblet Avenue at Madeline Street
Manhole No.: *0759*
Sub-System: *16*
Inspection Date: 6/4/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



240 **Ft. to DS MH #:** 0758

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 4 **X** 0.9 **=** 7.2 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Loose
CORBEL	BRICK	3			Broken and missing brick, Loose and missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

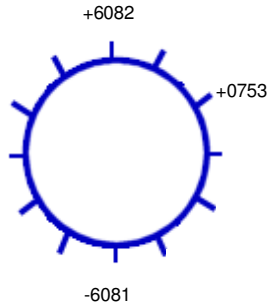
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4597	07' 11"	18	CIP	3	1.00	0			1	4" CIP service has continuous clear flow
OUT TO	0758	07' 11"	18	CIP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: Leland Street at Crosby Street
Manhole No.: 1325
Sub-System: 16
Inspection Date: 6/11/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



211 **Ft. to DS MH #:** 6081

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	3			Moderate roots
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0753	09' 04"	8	VCP	3	0.50	0			0	
IN FROM	6082	08' 10"	8	VCP	3	0.20	0			0	
OUT TO	6081	09' 11"	10	VCP	3	0.50	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	*1739*
Street:	Leland Street at tennis court			**Sub-System:**	*16*
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

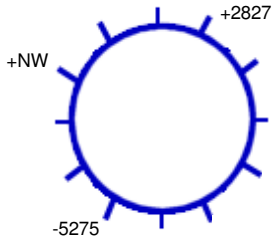
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	33	1

N



283 **Ft. to DS MH #:** 5275

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	4			Loose and missing piece, chipped
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 2 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	05' 04"	10	PVC	10	0	0			1	Storm drain
IN FROM	2827	08' 04"	18	ACP	3	0.70	0			1	
OUT TO	5275	08' 07"	18	ACP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1751.1***
Street:	86 Leland Street			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

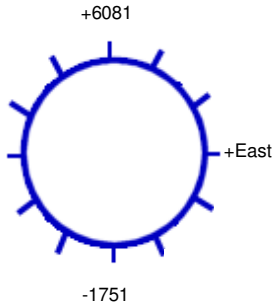
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



149 **Ft. to DS MH #:** 1751

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK/PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

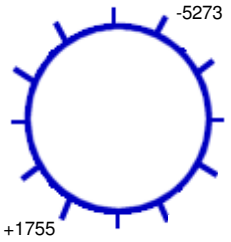
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	03' 09"	8	PVC	8	0.20	0			0	Outside drop
IN FROM	6081	07' 00"	8	PVC	8	0.50	0			0	
OUT TO	1751	07' 01"	8	PVC	8	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Columbia Road at Merriam Street
Manhole No.: 1754
Sub-System: 16
Inspection Date: 5/16/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



285 **Ft. to DS MH #:** 5273

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 0.75 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Cracked through
CORBEL	BRICK	1			
STEPS	STEEL	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1755	07' 01"	10	VCP	3	0.70	0			1	
OUT TO	5273	07' 02"	10	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1755***
Street:	Columbia Road at Lee Man Street			**Sub-System:**	***16***
Inspection Date:	5/16/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

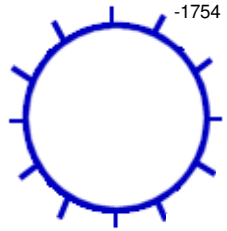
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	34	1

N



217 **Ft. to DS MH #:** 1754

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, corroded
WALLS	BRICK	1			
FLOOR	CNI	0			Covered in 1.5" of debris
INVERT	CNI	0			Covered in 1.5" of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

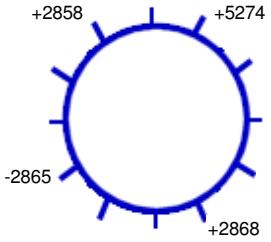
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1754	06' 00"	8	VCP	3	0	1.50			2	Light roots at first and second joints

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2320***
Street:	Madeline Street at Best Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



261 **Ft. to DS MH #:** 2865

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

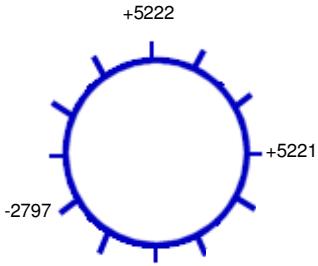
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2858	09' 00"	8	VCP	3	0.70	0			1	Inside drop
IN FROM	2868	10' 01"	30	VCP	3	4.00	0			1	
IN FROM	5274	09' 09"	24	VCP	3	4.00	0			1	
OUT TO	2865	09' 04"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2776***
Street:	226 Ludlow Street R.O.W.			**Sub-System:**	***16***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



202 **Ft. to DS MH #:** 2797

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 5 **X** 0.3 **=** 7.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	32	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5221	15' 01"	30	RCP	4	2.50	0			0	
IN FROM	5222	14' 07"	18	RCP	4	2.00	0			0	
OUT TO	2797	15' 05"	30	RCP	4	3.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2778***
Street:	219 Ludlow Street			**Sub-System:**	***16***
Inspection Date:	6/6/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

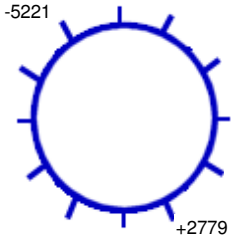
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

N



97 **Ft. to DS MH #:** 5221

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

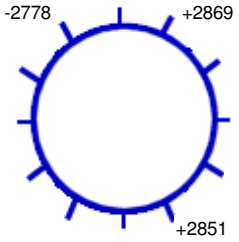
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2779	10' 07"	30	RCP	4	2.50	0			1	
OUT TO	5221	10' 10"	30	RCP	4	2.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Ludlow Street at Fuller Street
Manhole No.: 2779
Sub-System: 16
Inspection Date: 6/6/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



245 **Ft. to DS MH #:** 2778

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	2			Light roots
FLOOR	BRICK	1			
INVERT	BRICK/ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2851	09' 06"	24	ACP	3	1.90	0			1	
IN FROM	2869	09' 08"	18	ACP	3	1.50	0			1	
OUT TO	2778	11' 00"	30	ACP	3	2.40	0			2	Light roots

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2784***
Street:	26 Phipps Road			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

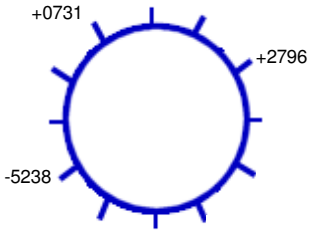
5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



245 **Ft. to DS MH #:** 5238

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0731	07' 05"	8	PVC	10	0.10	0			0	
IN FROM	2796	07' 10"	24	RCP	10	2.50	0			0	
OUT TO	5238	07' 11"	24	RCP	10	2.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2796***
Street:	25 Phipps Road			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

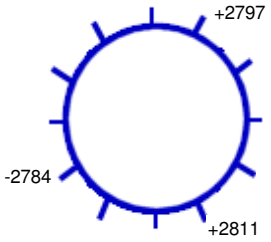
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



14 **Ft. to DS MH #:** 2784

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			1.5" standing flow

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

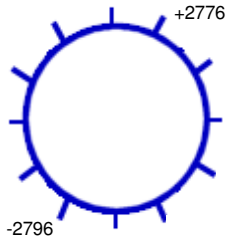
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2797	06' 10"	24	RCP	10	2.50	0			0	
IN FROM	2811	07' 01"	8	PVC	8	1.50	0			0	Standing flow
OUT TO	2784	07' 04"	24	RCP	10	2.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2797***
Street:	33 Phipps Road			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



21 **Ft. to DS MH #:** 2796

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

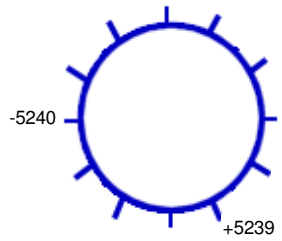
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2776	07' 00"	24	RCP	10	2.20	0			0	
OUT TO	2796	07' 01"	24	RCP	10	2.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	2799
Street:	55 Wingate Drive			**Sub-System:**	16
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



113 **Ft. to DS MH #:** 5240

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5239	08' 08"	24	RCP	8	5.00	0			0	
OUT TO	5240	08' 09"	24	RCP	8	5.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2807***
Street:	70 Jeanne Street			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

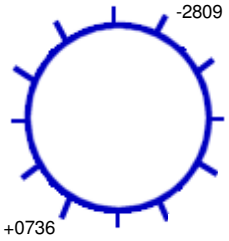
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



290 **Ft. to DS MH #:** 2809

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	2			Missing mortar
INVERT	BRICK	3			Missing mortar, broken brick, piece missing at outgoing line

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0736	07' 05"	8	ACP	3	0.20	2.00			1	3' upstream material changes to PVC, solids catching
OUT TO	2809	07' 05"	8	ACP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2808***
Street:	Jeanne Street at Phipps Road			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

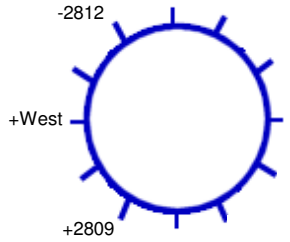
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	26	1

N



183 **Ft. to DS MH #:** 2812

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	3			Light rust, corrosion
WALLS	BRICK	2	0.2		Weeping walls, light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	07' 06"	12	PVC	3	0.20	0			1	Storm drain
IN FROM	2809	08' 10"	15	VCP	3	0.50	0			1	
OUT TO	2812	08' 11"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2809***
Street:	Jeanne Street at Wingate Road			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

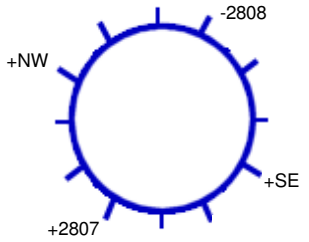
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



270 **Ft. to DS MH #:** 2808

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	1			
WALLS	BRICK	2			Broken brick
FLOOR	BRICK	2			Missing mortar
INVERT	BRICK	2			Missing mortar

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 1.5 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	05' 02"	10	ACP	3	0	0			3	Bulkheaded but not completely sealed
IN FROM	SE	05' 00"								0	Bulkheaded
IN FROM	2807	07' 02"	8	VCP	3	0.20	0			2	Second joint length offset 0.75"
OUT TO	2808	07' 06"	12	VCP	3	0.20	0			1	3' downstream material changes to PVC

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2811***
Street:	11 Phipps Road			**Sub-System:**	***16***
Inspection Date:	5/16/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 3 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

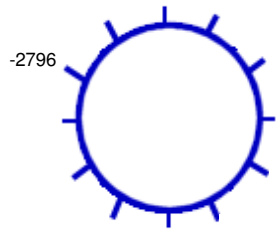
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



185 **Ft. to DS MH #:** 2796

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			1.5" Debris on floor
INVERT	BRICK	1			Full of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2796	06' 08"	8	PVC	10	0	0.50			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2812***
Street:	11 Phipps Road			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

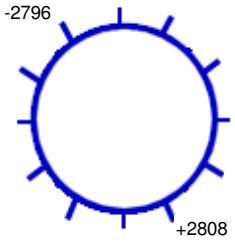
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



191 **Ft. to DS MH #:** 2796

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	3			Heavily weeping walls, light mineral deposits
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2808	08' 08"	15	VCP	3	0.50	0			1	
OUT TO	2796	08' 09"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2827***
Street:	Leland Street at access road			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

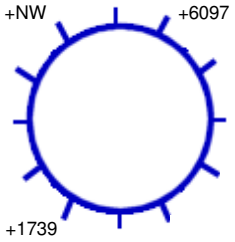
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

N



283 **Ft. to DS MH #:** 1739

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 2 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	05' 09"	10	PVC	10	0	0			1	Storm drain
IN FROM	1739	08' 11"	18	VCP	3	0.75	0			1	
IN FROM	6097	08' 10"	15	VCP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2828***
Street:	Brentwood Street at Newman Strret			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

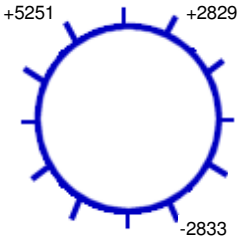
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	7	1

N



249 **Ft. to DS MH #:** 2833

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken and loose brick
STEPS	STEEL	5			Broken and missing
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

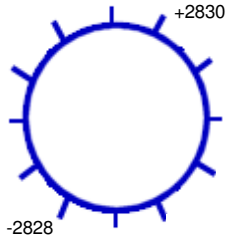
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2829	07' 01"	10	VCP	3	0.10	0			1	
IN FROM	5251	07' 11"	15	VCP	3	0.25	0			1	
OUT TO	2833	08' 00"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2829***
Street:	12 Newman Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



176 **Ft. to DS MH #:** 2828

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken, loose and missing brick
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2830	07' 00"	10	VCP	3	0	0			1	
OUT TO	2828	07' 01"	10	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2830***
Street:	Newman Street at Hyde Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

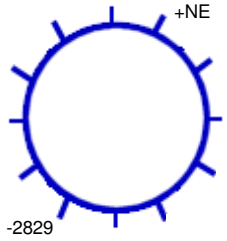
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



175 **Ft. to DS MH #:** 2829

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE									0	Bulkheaded
OUT TO	2829	07' 08"	10	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2831***
Street:	29 Bedell Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

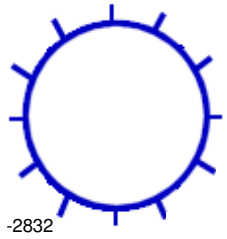
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



201 **Ft. to DS MH #:** 2832

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	3			Light rust, corrosion
WALLS	BRICK	2			Light roots
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2832	08' 02"	10	VCP	3		0			3	Moderate roots 20' downstream

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2832***
Street:	9 Bedell Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

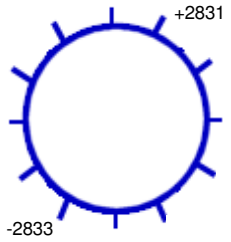
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

N



199 **Ft. to DS MH #:** 2833

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

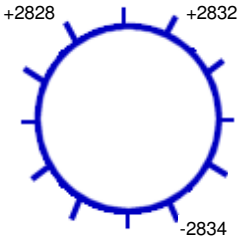
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2831	08' 04"	10	VCP	3	0.10	0			1	
OUT TO	2833	08' 05"	10	VCP	3	0.10	0			3	Moderate roots at joint

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2833***
Street:	Brentwood Street at Bedell Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



227 **Ft. to DS MH #:** 2834

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Loose brick, missing mortar
STEPS	STEEL	5			All broken
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

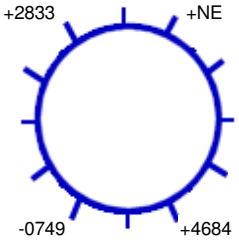
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2828	08' 08"	15	VCP	3	0.40	0			1	
IN FROM	2832	07' 11"	10	VCP	3	0.20	0			1	
OUT TO	2834	08' 09"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2834***
Street:	Brentwood Street at Best Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



244 **Ft. to DS MH #:** 0749

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and missing brick, missing mortar
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

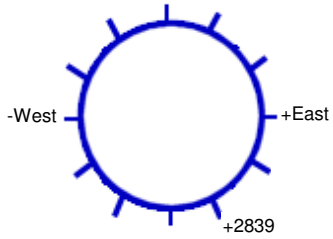
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	09' 07"	10	VCP	3	0	0			1	
IN FROM	2833	09' 06"	15	VCP	3	1.75	0			1	
IN FROM	4684	09' 05"	12	VCP	3	0.40	0			1	
OUT TO	0749	09' 10"	15	VCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2835***
Street:	Best Street at Richardson Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



273 **Ft. to DS MH #:** 2839

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	12	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	2			Broken and loose pieces
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	05' 08"	8	PVC	10	0	0			1	
IN FROM	2839	06' 04"	10	VCP	3	0	1.00			1	
OUT TO	West	06' 00"	8	VCP	3	0	0			1	Appears to be overflow to MH 2834

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2836***
Street:	Best Street at Leonard Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

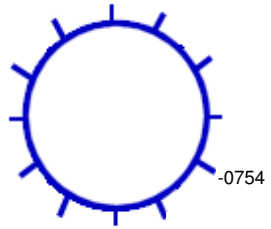
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



325 **Ft. to DS MH #:** 0754

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken brick, missing mortar
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

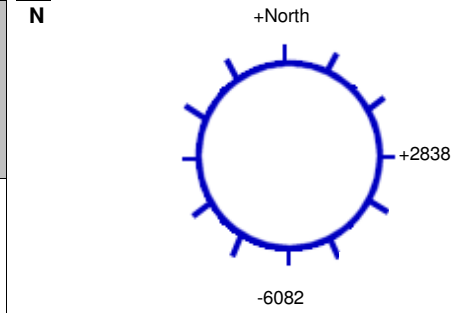
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0754	07' 10"	8	VCP	3	0.25	0			2	Light roots, standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2837***
Street:	New Street at Leland Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



179 **Ft. to DS MH #:** 6082

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	6	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Unsafe
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	07' 10"	6	VCP	3	0	0			1	
IN FROM	2838	08' 05"	8	VCP	3	0.10	0			1	
OUT TO	6082	08' 06"	8	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2838***
Street:	16 New Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

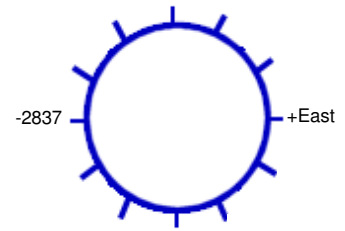
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



345 **Ft. to DS MH #:** 2837

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing pieces
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	05' 08"	8	VCP	3	0.50	0			1	Standing flow
OUT TO	2837	05' 09"	8	VCP	3	0.50	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2839***
Street:	44 Richardson Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

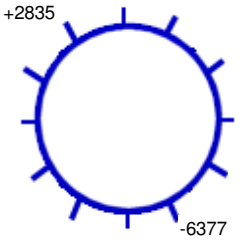
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1

N



273 **Ft. to DS MH #:** 6377

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2835	06' 06"	10	VCP	3	0.30	0			1	
OUT TO	6377	06' 07"	10	VCP	3	0.75	0			1	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2843***
Street:	Leland Street at Mabel Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

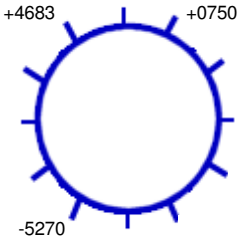
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

N



132 **Ft. to DS MH #:** 5270

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0750	08' 01"	15	VCP	3	0.50	0			1	
IN FROM	4683	07' 03"	8	VCP	3	0	0.50			1	Debris
OUT TO	5270	08' 02"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2844***
Street:	103 Alba Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

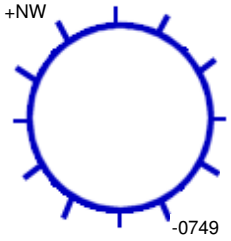
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

N



274 **Ft. to DS MH #:** 0749

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	NONE	0			
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	05' 09"	8	VCP	3	0.20	0			0	
OUT TO	0749	05' 09"	8	LINED	3	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2851***
Street:	182 Ludlow Street			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

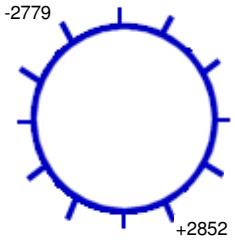
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



221 **Ft. to DS MH #:** 2779

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2852	10' 06"	24	VCP	3	2.50	0			1	
OUT TO	2779	10' 07"	24	VCP	3	2.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2852***
Street:	168 Ludlow Street			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

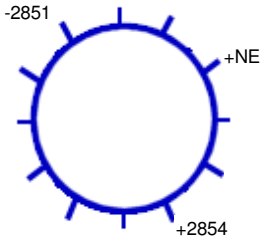
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	26	1

N



232 **Ft. to DS MH #:** 2851

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	4	1.5		Moderate mineral deposits, large root ball at seam of floor
FLOOR	BRICK	2			Missing mortar
INVERT	VCP	1			Root growing from wall into invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	05' 08"								0	Bulkheaded
IN FROM	2854	10' 06"	24	VCP	3	2.50	0			2	Light mineral deposits
OUT TO	2851	10' 06"	24	VCP	3	2.50	0			2	Light mineral deposits at joints

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2853***
Street:	150 Ludlow Street			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

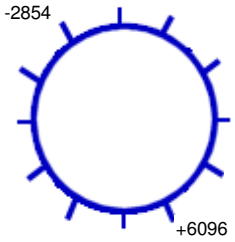
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



99 **Ft. to DS MH #:** 2854

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6096	10' 05"	24	VCP	3	2.20	0			1	
OUT TO	2854	10' 06"	24	VCP	3	2.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2854***
Street:	Ludlow Street at Westminster Avenue			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

-2852

+2853

125 **Ft. to DS MH #:** 2852

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Chipped
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	3			Moderate mineral deposits
FLOOR	PIP	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2853	10' 07"	24	VCP	3	2.50	0			0	
OUT TO	2852	10' 07"	24	VCP	3	2.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2857***
Street:	128 Madeline Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	13	1

N

+NNW

+NW

-2858

252 **Ft. to DS MH #:** 2858

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken brick, missing mortar
STEPS	STEEL	3			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

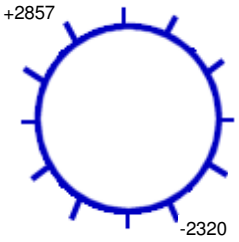
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NNW	05' 00"	6	VCP	3	0.05	0			1	
IN FROM	NW	04' 05"	8	VCP	3	0.05	0			1	
OUT TO	2858	05' 07"	8	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2858***
Street:	108 Madeline Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



251 **Ft. to DS MH #:** 2320

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	12	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	3			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

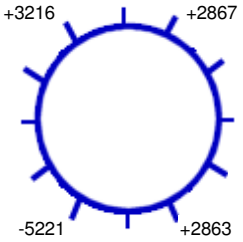
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2857	08' 00"	8	VCP	3	0.30	0.10			1	
OUT TO	2320	08' 01"	8	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2862***
Street:	35 Hale Street			**Sub-System:**	***16***
Inspection Date:	6/6/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



233 **Ft. to DS MH #:** 5221

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Broken
CORBEL	BRICK	1			
STEPS	STEEL/ALUM	2			Heavy rust, corrosion
WALLS	BRICK/PRECAST	2	0.2		Wall leak
FLOOR	BRICK	1			
INVERT	BRICK/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

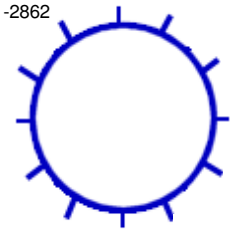
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2863	06' 05"	8	ACP	3	0.10	0			1	Outside drop, standing flow
IN FROM	2867	14' 03"	8	LINED	3	0.50	0			1	
IN FROM	3216	08' 03"	8	ACP	3	0.20	0			1	Outside drop
OUT TO	5221	14' 05"	8	VCP	3	0.70	0			3	Light roots, moderal mineral deposits

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2863***
Street:	55 Hale Street			**Sub-System:**	***16***
Inspection Date:	6/6/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



200 **Ft. to DS MH #:** 2862

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			1" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

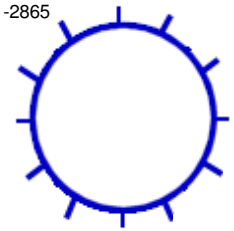
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2862	06' 07"	8	ACP	3	0	1.00			0	Debris

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2864***
Street:	53 Bartlett Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



207 **Ft. to DS MH #:** 2865

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

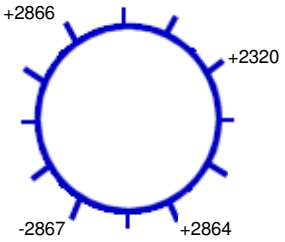
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2865	09' 11"	18	ACP	3	0.75	1.50			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2865***
Street:	33 Bartlett Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



90 **Ft. to DS MH #:** 2867

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	4			Broken
INVERT	ACP	5			Broken, piece blocking incoming line

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2320	07' 06"	8	VCP	3	0.20	0			1	
IN FROM	2864	07' 06"	8	ACP	3	0.20	0			1	
IN FROM	2866	07' 02"	8	ACP	3	0.40	1.00			1	Sediment
OUT TO	2867	07' 09"	8	LINED	0	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2866***
Street:	9 Bartlett Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

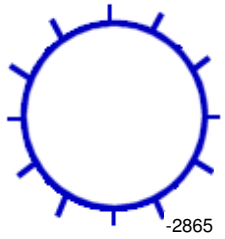
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



287 **Ft. to DS MH #:** 2865

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	ALUM	1			
WALLS	PRECAST	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	CNI	0			Full of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2865	08' 10"	8	ACP	3	0	0.75			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2867***
Street:	41 Bartlett Street R.O.W.			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

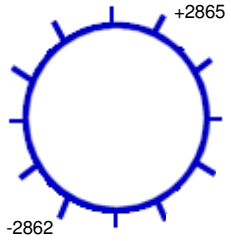
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	1

N



149 **Ft. to DS MH #:** 2862

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK/ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2865	16' 00"	8	LINED		0.10	0			1	Outside drop
OUT TO	2862	16' 01"	8	LINED		0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2868***
Street:	83 Madeline Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

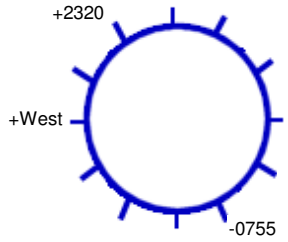
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



231 **Ft. to DS MH #:** 0755

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	BRICK/PRECAST	1			
FLOOR	CNI	0			Covered with debris
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West									0	Bulkheaded
IN FROM	2320	09' 08"	24	VCP	3	3.25	0			1	
OUT TO	0755	09' 09"	24	VCP	3	3.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2869***
Street:	Fuller Street at Hale Street			**Sub-System:**	***16***
Inspection Date:	6/6/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

N

+NW +0756

-2779

226 **Ft. to DS MH #:** 2779

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	3			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

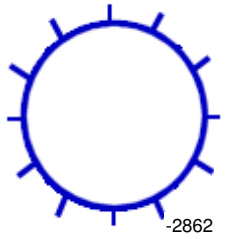
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	08' 01"	18	VCP	3	1.50	0			0	
IN FROM	0756									0	Bulkheaded 9" upstream
OUT TO	2779	08' 03"	18	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	3216
Street:	12 Hale Street			**Sub-System:**	16
Inspection Date:	6/6/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



299 **Ft. to DS MH #:** 2862

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	2			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK	1			1" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2862	07' 05"	8	ACP	3	0.05	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4323***
Street:	55 Alba Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

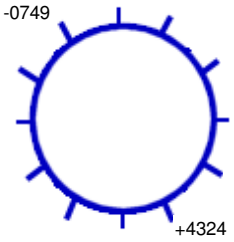
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	11	1

N



300 **Ft. to DS MH #:** 0749

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4324	07' 01"	8	LINED		0.75	0			0	
OUT TO	0749	07' 01"	8	LINED		0.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4324***
Street:	31 Alba Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

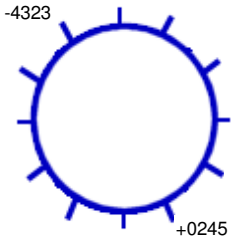
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	38	1



302 **Ft. to DS MH #:** 4323

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	NONE	0			
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0245	07' 08"	8	LINED		0.40	0			0	
OUT TO	4323	07' 09"	8	LINED		0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4325***
Street:	59 Mabel Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

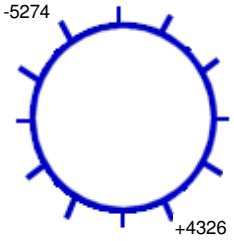
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1

N



301 **Ft. to DS MH #:** 5274

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

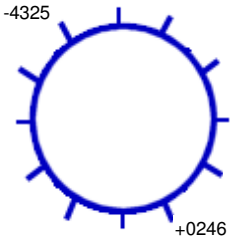
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4326	07' 05"	10	VCP	3	0.50	0			1	
OUT TO	5274	07' 6"	10	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4326***
Street:	35 Mabel Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



299 **Ft. to DS MH #:** 4325

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0246	07' 03"	8	VCP	3	0.40	0			1	
OUT TO	4325	07' 04"	8	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4596
Street:	92 Hamblet Avenue at Alba Street			**Sub-System:**	16
Inspection Date:	6/4/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

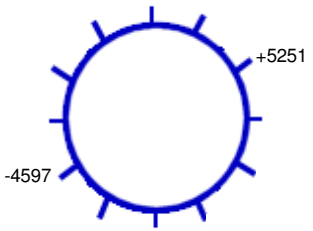
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	33	1

N



242 **Ft. to DS MH #:** 4597

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose and broken brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 1 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5251	07' 11"	15	VCP	3	0.70	0.20			1	
OUT TO	4597	08' 00"	15	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4597
Street:	74 Hamblet Avenue at Mabel Street			**Sub-System:**	16
Inspection Date:	6/4/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

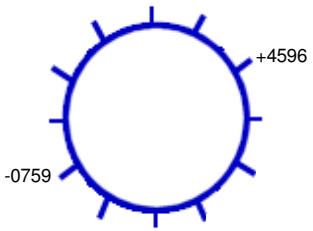
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1



237 **Ft. to DS MH #:** 0759

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Light roots, weeping walls
FLOOR	BRICK	2			Missing mortar
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

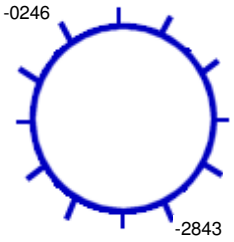
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4596	08' 04"	15	VCP	3	0.70	0			3	Heavy roots
OUT TO	0759	08' 07"	15	VCP	3	0.70	0			1	Clear flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4683
Street:	Mabel Street at Leland Street			**Sub-System:**	16
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



191 **Ft. to DS MH #:** 0246

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Highpoint manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken, loose and missing brick, missing mortar
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	CNI	0			Covered in debris
INVERT	CNI	0			Covered in debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

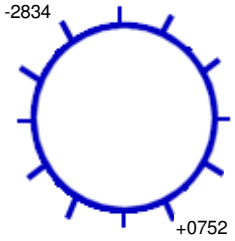
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0246	07' 00"	8	VCP	3	0	4.00			1	Debris
OUT TO	2843	06' 11"	8	VCP	3	1.50	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4684
Street:	100 Brentwood Street			**Sub-System:**	16
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



283 **Ft. to DS MH #:** 2834

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

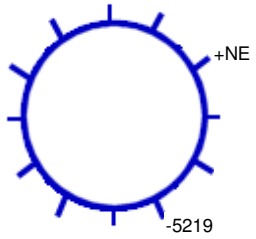
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0752	08' 05"	15	VCP	3	0.50	0			1	
OUT TO	2834	08' 05"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5218
Street:	Ludlow Street at Wayside Road			**Sub-System:**	16
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



191 **Ft. to DS MH #:** 5219

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	6	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE									0	Bulkheaded, but not completely sealed off
OUT TO	5219	06' 07"	18	VCP	3	0	0.75			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	5219
Street:	Ludlow Street at Hamblet Avenue			**Sub-System:**	16
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Cracked manhole cover

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5220***
Street:	253 Ludlow Street			**Sub-System:**	***16***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

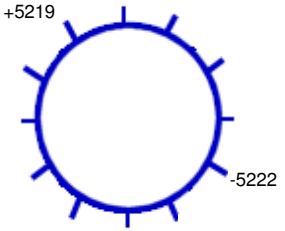
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



232 **Ft. to DS MH #:** 5222

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	2			Broken and missing brick
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5219	07' 02"	21	RCP	3	1.50	0			1	Outside drop, clear flow
OUT TO	5222	08' 03"	20	RCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5221***
Street:	226 Ludlow Street			**Sub-System:**	***16***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

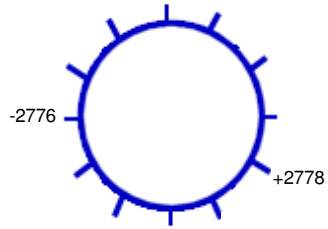
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



37 **Ft. to DS MH #:** 2776

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

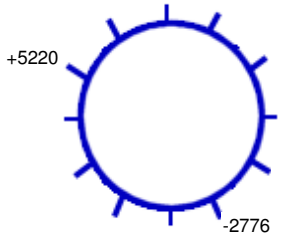
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2778	13' 09"	30	RCP	4	2.75	0			1	
OUT TO	2776	13' 11"	30	RCP	4	2.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5222
Street:	236 Ludlow Street			**Sub-System:**	16
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



49 **Ft. to DS MH #:** 2776

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

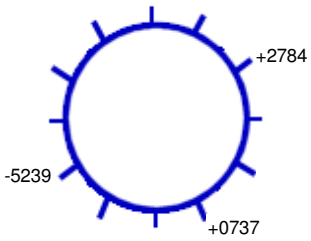
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5220	07' 01"	18	RCP	3	2.00	0			1	
OUT TO	2776	07' 02"	18	PVC	10	2.00	0			2	Second joint offset 2"

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5238***
Street:	49 Wingate Drive			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



18 **Ft. to DS MH #:** 5239

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	2			Missing pieces
FLOOR	BRICK	1			
INVERT	BRICK	1			Standing solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0737	08' 02"	24	RCP	8	3.50	0			0	
IN FROM	2784	08' 02"	8	ACP	8	1.00	0			0	
OUT TO	5239	08' 03"	24	RCP	8	3.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5239***
Street:	50 Wingate Drive			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 15 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

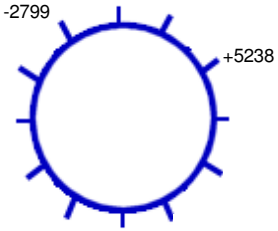
3 **X** 5 **X** 0.9 **=** 13.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



80 **Ft. to DS MH #:** 2799

General Comments: In gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

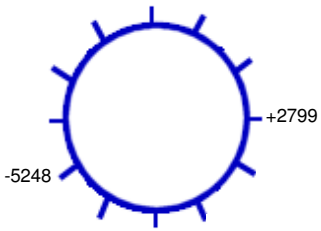
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5238	08' 03"	24	RCP	8	3.50	0			0	
OUT TO	2799	08' 04"	24	RCP	8	3.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5240***
Street:	62 Wingate Drive			**Sub-System:**	***16***
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



49 **Ft. to DS MH #:** 5248

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Meter location

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

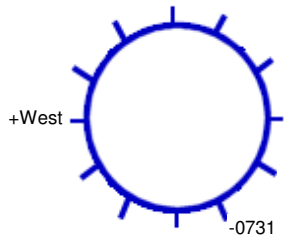
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2799	08' 03"	24	RCP	8	5.00	0			0	
OUT TO	5248	08' 07"	24	RCP	8	5.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5247
Street:	59 Phipps Road			**Sub-System:**	16
Inspection Date:	5/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



231 **Ft. to DS MH #:** 0731

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	06' 02"	8	ACP	4	0	0			0	Appears to be stubbed line
OUT TO	0731	06' 02"	8	ACP	4	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	5249
Street:	Brentwood Street			**Sub-System:**	16
Inspection Date:	6/3/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5250***
Street:	178 Brentwood Street			**Sub-System:**	***16***
Inspection Date:	6/3/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N

+5249

-5251

106 **Ft. to DS MH #:** 5251

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Broken, rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	ACP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5249	07' 00"	8	ACP	3	0.75	0.20			1	
OUT TO	5251	07' 00"	8	ACP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5251***
Street:	Brentwood Street at Hamblet Avenue			**Sub-System:**	***16***
Inspection Date:	6/3/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

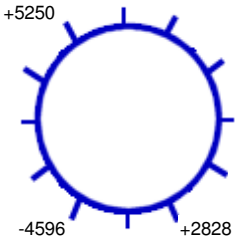
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	7	1

N



246 **Ft. to DS MH #:** 4596

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken, loose, missing and soft brick, missing mortar
STEPS	STEEL	2			Light corrosion
WALLS	BRICK	3			Broken and missing brick, missing mortar
FLOOR	BRICK	3			Missing brick and mortar
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

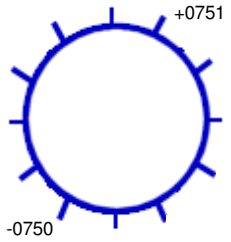
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2828	07' 01"	8	VCP	3	0.10	0			3	Inside drop, standing flow, root ball 20' upstream
IN FROM	5250	07' 05"	8	VCP	3	0.30	0			1	Outside drop
OUT TO	4596	11' 10"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5254***
Street:	57 Leland Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



245 **Ft. to DS MH #:** 0750

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

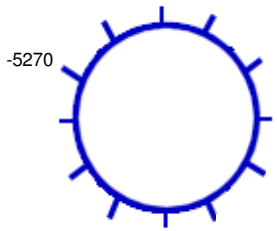
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0751	07' 08"	18	VCP	3	0.70	0			1	
OUT TO	0750	07' 09"	18	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5256***
Street:	26 Concord Street West			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



256 **Ft. to DS MH #:** 5270

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	2	0.5		Leak at seam

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

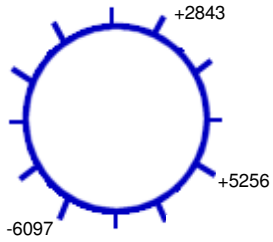
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5270	08' 09"	8	LINED		0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5270
Street:	Leland Street at Concord Street West			**Sub-System:**	16
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



111 **Ft. to DS MH #:** 6097

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	35	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Missing, heavy rust, corrosion
WALLS	BRICK	2			Light mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2843	09' 08"	15	VCP	3	0.50	0			1	
IN FROM	5256	09' 05"	8	LINED		0.20	0			1	
OUT TO	6097	09' 09"	15	VCP	3	0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5271***
Street:	122 Mabel Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

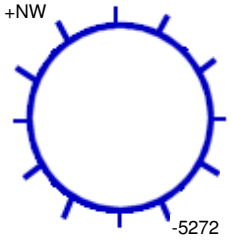
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	16	1

N



309 **Ft. to DS MH #:** 5272

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	08' 00"	6	VCP	3	0	2.75			1	Full of dirt 5' upstream
OUT TO	5272	08' 01"	8	ACP	3	0	3.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5272***
Street:	99 Mabel Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

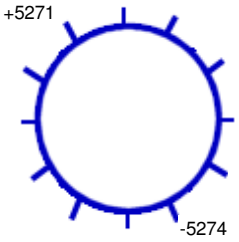
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	1

N



224 **Ft. to DS MH #:** 5274

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

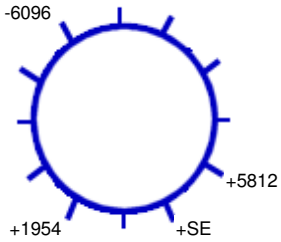
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5271	08' 06"	8	VCP	3	0.50	0			1	
OUT TO	5274	08' 07"	10	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5273
Street:	Ludlow Street at Columbia Road			**Sub-System:**	16
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



27 **Ft. to DS MH #:** 6096

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

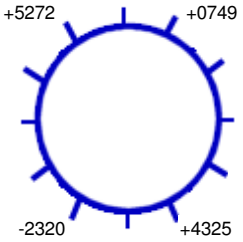
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE									0	Bulkheaded
IN FROM	1954	08' 09"	15	VCP	3	0.25	0			1	
IN FROM	5812	06' 06"	15	VCP	3	2.00	0			1	
OUT TO	6096	09' 03"	15	VCP	3	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5274***
Street:	Mabel Street at Best Street			**Sub-System:**	***16***
Inspection Date:	6/7/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



239 **Ft. to DS MH #:** 2320

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	16	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0749	09' 00"	15	VCP	3	1.20	0			1	
IN FROM	4325	08' 10"	12	VCP	3	1.00	0			1	
IN FROM	5272	08' 10"	12	VCP	3	0.30	0			1	
OUT TO	2320	09' 08"	20	VCP	3	1.50	0			1	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5275***
Street:	Leland Street at Ludlow Street			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

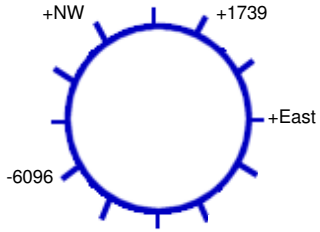
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	32	1

N



32 **Ft. to DS MH #:** 6096

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken brick, missing pieces
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	06' 03"	8	VCP	3	0	0			1	Storm drain
IN FROM	NW	06' 00"	8	VCP	3	0	0			1	Storm drain
IN FROM	1739	07' 10"	18	VCP	3	1.00	0			1	
OUT TO	6096	08' 00"	18	VCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5811***
Street:	Ludlow Street at Hillis Street			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

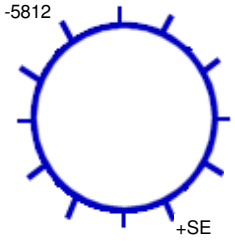
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

N



300 **Ft. to DS MH #:** 5812

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	STEEL	3			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE									0	Bulkheaded
OUT TO	5812	05' 10"	10	VCP	3	0.10	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5812***
Street:	Ludlow Street at Rosemont Avenue			**Sub-System:**	***16***
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

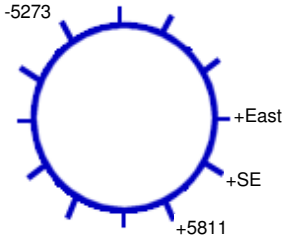
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	19	1

N



266 **Ft. to DS MH #:** 5273

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Cracked
CORBEL	BRICK	2			Missing mortar
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

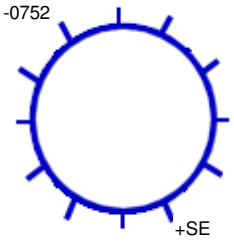
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	05' 02"	8	VCP	3	1.00	0			1	Storm drain
IN FROM	SE	05' 07"	15	PVC	10	0	0			1	
IN FROM	5811	06' 05"	10	VCP	3	0.20	0			0	
OUT TO	5273	06' 07"	15	VCP	3	1.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	6080
Street:	54 Brentwood Street			**Sub-System:**	16
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



335 **Ft. to DS MH #:** 0752

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 4 **X** 0.9 **=** 18.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Broken, loose and missing brick, missing mortar, missing pieces
STEPS	STEEL	4			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			Full of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE									0	Bulkheaded
OUT TO	0752	06' 00"	12	VCP	3	0	2.00			2	Light roots, debris

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6081***
Street:	Leland Street at Richardson Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 3 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N

+1325

+6377

-0751.1

113 **Ft. to DS MH #:** 0751.1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1325	08' 01"	10	VCP	3	0.50	0			0	
IN FROM	6377	08' 00"	12	VCP	3	0.20	0			0	
OUT TO	0751.1	08' 05"	10	VCP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6082***
Street:	Leland Street at Leonard Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

7 **X** 8 **X** 0.9 **=** 50.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N

+2837

+0754

-1325

122 **Ft. to DS MH #:** 1325

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

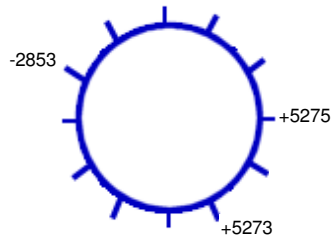
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0754	07' 11"	10	VCP	3	0.20	0			0	
IN FROM	2837	08' 09"	8	VCP	3	0.50	0			0	
OUT TO	1325	08' 09"	8	VCP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	6096
Street:	Ludlow Street at Leland Street			**Sub-System:**	16
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



220 **Ft. to DS MH #:** 2853

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped, cracked
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5273	09' 03"	18	VCP	3	1.00	0				1 GPM leak at sixth joint
IN FROM	5275	08' 02"	18	VCP	3	1.00	0			1	
OUT TO	2853	09' 05"	24	VCP	3	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	6097
Street:	Leland Street			**Sub-System:**	16
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

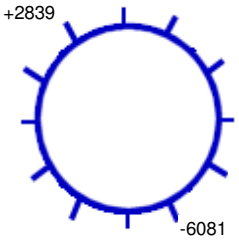
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6377***
Street:	25 Richardson Street			**Sub-System:**	***16***
Inspection Date:	6/11/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



265 **Ft. to DS MH #:** 6081

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	BRICK	5			Unsafe
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2839	07' 09"	10	VCP	3	0.50	0			1	
OUT TO	6081	07' 10"	10	VCP	3	0.50	0			1	

MANHOLE INSPECTION LOGS SUB-AREA 17

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0265***
Street:	731 Brighton Avenue			**Sub-System:**	***17***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

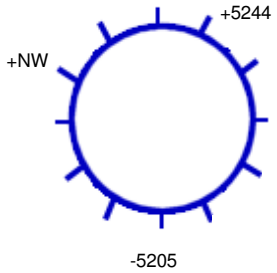
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



29 **Ft. to DS MH #:** 5205

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

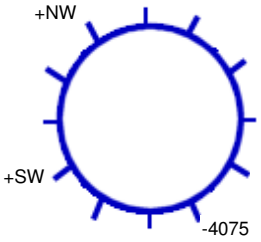
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	08' 09"	8	PVC		0.20	0			0	
IN FROM	5244	12' 08"	24	RCP		8.00	0			0	
OUT TO	5205	12' 09"	24	RCP		8.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0266
Street:	79 Dennett Street			**Sub-System:**	17
Inspection Date:	10/4/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



185 **Ft. to DS MH #:** 4075

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 84 In.

Cover is wood

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments: Manhole is in brook. Pieces missing from outer portion of precast walls, pipe exposted in brook

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust
WALLS	PARGED	2			Wet walls
FLOOR	BRICK/PARGED	1			
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

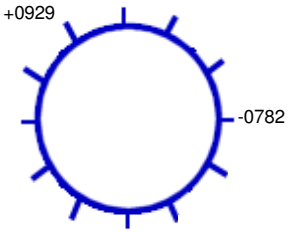
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 06"	24	VCP	3	7.00	0			0	
IN FROM	SW	09' 06"	12	VCP	3	5.00	0			0	
OUT TO	4075	09' 07"	24	VCP	3	7.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0781***
Street:	11 Mayer Road			**Sub-System:**	***17***
Inspection Date:	8/21/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



17 **Ft. to DS MH #:** 0782

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.3 **=** 4.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0929	14' 06"	24	PVC		5.00	0			0	
OUT TO	0782	14' 07"	24	LINED		5.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0782***
Street:	Mayer Road R.O.W.			**Sub-System:**	***17***
Inspection Date:	8/21/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 20 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

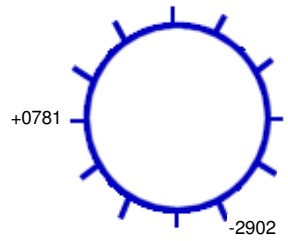
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



30 **Ft. to DS MH #:** 2902

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0781	11' 04"	24	LINED		5.00	0			0	
OUT TO	2902	11' 05"	24	LINED		5.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0929***
Street:	Mayer Road at Brighton Avenue			**Sub-System:**	***17***
Inspection Date:	8/21/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

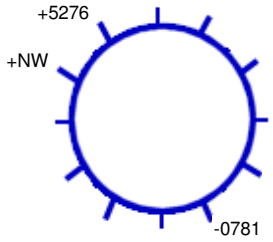
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



83 **Ft. to DS MH #:** 0781

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 00"	10	PVC		0.50	0			0	
IN FROM	5276	14' 04"	24	VCP		9.00	0			0	
OUT TO	0781	14' 05"	24	VCP		9.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1243***
Street:	43 Wayside Road			**Sub-System:**	***17***
Inspection Date:	8/20/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

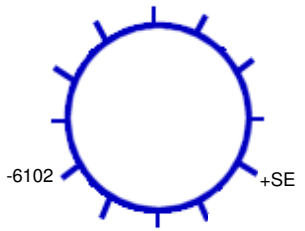
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



26 **Ft. to DS MH #:** 6102

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	08' 11"	8	VCP		0.45	0			0	
OUT TO	6102	09' 00"	8	PVC		1.20	0			0	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2769***
Street:	Violette Avenue at Harmon Road			**Sub-System:**	***17***
Inspection Date:	8/21/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

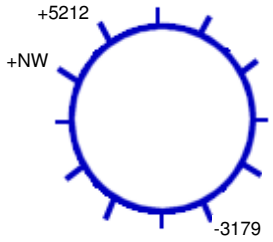
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



59 **Ft. to DS MH #:** 3179

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	3			Broken and loose brick, missing mortar
STEPS	CAST	1			
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	12' 05"	12	VCP		0.40	0			0	
IN FROM	5212	13' 09"	24	LINED		3.50	0			0	
OUT TO	3179	13' 11"	24	LINED		3.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	2770
Street:	35 Harmon Road			**Sub-System:**	17
Inspection Date:	9/9/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not access - Manhole is located inside locked fence behind house

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS

Image Path:

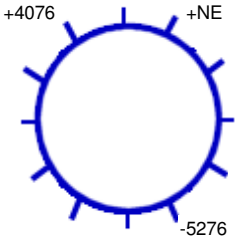
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2783***
Street:	44 Alden Circle R.O.W.			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



111 **Ft. to DS MH #:** 5276

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 28 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	2	1

General Comments: Surface inspection performed due to poor location of manhole - structure is on edge of river bank, no safe entry with tripod.

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	3			Very wet, signs of mineral deposits
INVERT	VCP	2			Loose pieces

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 00"	8	LINED		0.30	0			0	
IN FROM	4076	08' 01"	24	LINED		6.00	0			0	
OUT TO	5276	08' 03"	24	LINED		6.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***2791***
Street:	Wayside Drive R.O.W.			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Town cleared area where a storm drain was located, but not this manhole - assuming it is buried - numerous yellow jackets forced us to stop our search.

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2800***
Street:	Wingate Drive R.O.W.			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

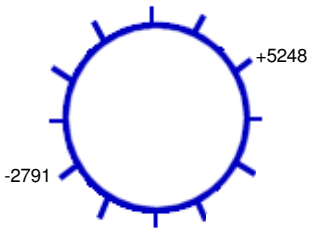
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



293 **Ft. to DS MH #:** 2791

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5248	07' 01"	24	RCP		3.00	0			0	
OUT TO	2791	07' 02"	24	RCP		3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2801***
Street:	Lucas Street at Capisic Trail head			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

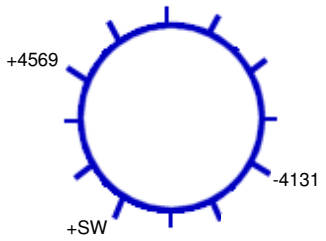
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	20	1

N



49 **Ft. to DS MH #:** 4131

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Has riser
CORBEL	BRICK	3			Broken and cracked bricks
STEPS	CAST	5			Corroded
WALLS	BRICK	2			Broken brick, missing mortar
FLOOR	BRICK	2			Broken brick, missing pieces
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

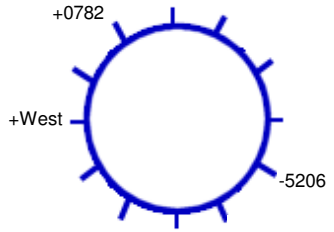
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	11' 10"	10	VCP	3	4.50	0			1	
IN FROM	4569	12' 06"	24	LINED		0.50	0			1	
OUT TO	4131	12' 07"	24	RCP	3	5.00	0			1	Pipe material changes to PVC approximately 9' downstream

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2902***
Street:	Mayer Road R.O.W.			**Sub-System:**	***17***
Inspection Date:	8/21/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



213 **Ft. to DS MH #:** 5206

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

General Comments: Manhole from West was opened and it too has extremely heavy root blockage. Nearby homeowner states line backs up into basement.

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	2			Wet
FLOOR	BRICK	2			Line from West lands on bench
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	06' 07"	8	VCP		0.50	7.50			5	Inside drop, 95% blocked with roots
IN FROM	0782	09' 03"	24	LINED		5.00	0			1	
OUT TO	5206	09' 04"	24	LINED		5.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3179***
Street:	Violet Avenue at Harmon Road			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4075***
Street:	79 Dennett Street R.O.W.			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 46 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N

+0266

-4263

189 **Ft. to DS MH #:** 4263

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	CAST	5			Corroded
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	CMP	2			Corroded

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 3.3 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0266	08' 05"	24	CMP		4.00	0			0	
OUT TO	4263	08' 06"	24	CMP		4.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	4076
Street:	50 Alden Circle R.O.W.			**Sub-System:**	17
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☑

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Manhole possibly under planter pot but would not be able to move it without breaking. Also believe it is buried quite a bit and would require digging up yard.

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4131***
Street:	Lucas Street R.O.W.			**Sub-System:**	***17***
Inspection Date:	8/21/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

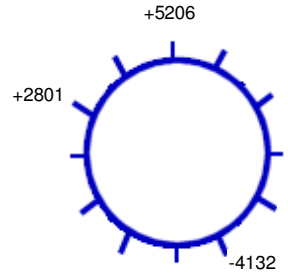
6 **X** 5 **X** 0.3 **=** 9.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



267 **Ft. to DS MH #:** 4132

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	NONE	0			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2801	14' 04"	24	LINED		4.00	0			0	
IN FROM	5206	12' 05"	24	LINED		4.00	0			0	
OUT TO	4132	14' 06"	48	LINED		5.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4263***
Street:	Donald Street R.O.W.			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N

+4075

-5212

272 **Ft. to DS MH #:** 5212

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	CAST	5			Corroded
WALLS	PARGED	2			Wet spot, possible future leak
FLOOR	PARGED	1			
INVERT	CMP	2			Corroded

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4075	08' 09"	24	CMP		6.00	0			0	
OUT TO	5212	08' 10"	24	CMP		6.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4569***
Street:	Lucas Street R.O.W.			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 3 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

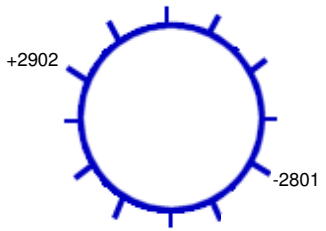
20 **X** 80 **X** 0.9 **=** 1440.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



95 **Ft. to DS MH #:** 2801

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Below grade - should be raised
CORBEL	BRICK	1			
STEPS	CAST	5			Corroded
WALLS	BRICK	1			
FLOOR	CNI	3			Water trapped by pipe liner
INVERT	LINED	2			Liner not cut flush with floor

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2902	08' 06"	24	LINED		6.00	0			1	
OUT TO	2801	08' 07"	24	LINED		6.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5206***
Street:	Brighton Avenue at Lucas Street			**Sub-System:**	***17***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5212***
Street:	Violette Avenue at Harmon Road			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

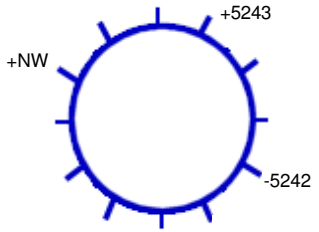
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5241***
Street:	51 Wayside Drive			**Sub-System:**	***17***
Inspection Date:	8/20/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



15 **Ft. to DS MH #:** 5242

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 10"	10	PVC		0.50	0			0	
IN FROM	5243	09' 10"	24	RCP		2.00	0			0	
OUT TO	5242	09' 11"	24	RCP		2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5242***
Street:	43 Wayside Drive			**Sub-System:**	***17***
Inspection Date:	8/20/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

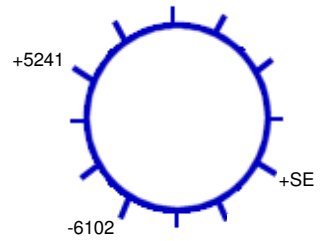
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1



21 **Ft. to DS MH #:** 6102

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	11' 02"								0	Blocked off, appears to have previously come from MH 1243
IN FROM	5241	10' 00"	24	RCP		2.00	0			0	
OUT TO	6102	11' 03"	24	RCP		2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5243***
Street:	Wayside Road R.O.W.			**Sub-System:**	***17***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

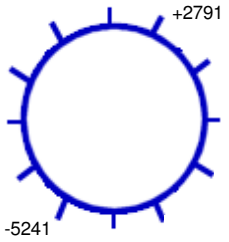
Drainage Area 1:

4 **X** 4 **X** 0.3 **=** 4.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1



141 **Ft. to DS MH #:** 5241

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2791	08' 02"	24	RCP		5.00	0			0	
OUT TO	5241	08' 04"	24	RCP		5.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5244***
Street:	Alden Circle R.O.W.			**Sub-System:**	***17***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: Phipps Road at Wingate Drive
Inspection Date: 10/4/2019 **Inspector:** JS/RV **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

Manhole No.: 5248
Sub-System: 17

N

+North
+NE
-2800

251 **Ft. to DS MH #:** 2800

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
10 **X** 5 **X** 0.9 **=** 45.0 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Manhole in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 00"	24	VCP		2.50	0			0	
IN FROM	North	07' 09"	8	PVC		1.00	0			0	
OUT TO	2800	08' 04"	24	VCP		2.50	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5276***
Street:	774 Brighton Avenue			**Sub-System:**	***17***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N

+2783

+NNW

+NW

-0929

46 **Ft. to DS MH #:** 0929

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NNW	10' 06"	12	PVC		0.20	0			0	
IN FROM	NW	11' 06"	10	PVC		0.20	0			0	
IN FROM	2783	12' 03"	24	RCP		10.00	0			0	
OUT TO	0929	12' 04"	24	RCP		10.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6102***
Street:	43 Wayside Drive			**Sub-System:**	***17***
Inspection Date:	8/20/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

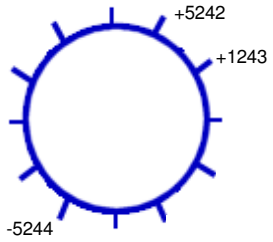
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

2 **X** 1 **X** 0.3 **=** 0.6 **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



172 **Ft. to DS MH #:** 5244

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Offset 2"
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1243	11' 00"	8	PVC		0.35	0			0	
IN FROM	5242	11' 05"	24	RCP		3.00	0			0	
OUT TO	5244	11' 06"	24	RCP		3.00	0			0	

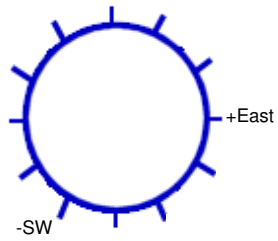
MANHOLE INSPECTION LOGS SUB-AREA 18

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Ludlow Street at Caldwell Street
Manhole No.: 2856
Sub-System: 18
Inspection Date: 7/24/2019 **Inspector:** RV/JC **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



287 **Ft. to DS MH #:** SW

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, cracked
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

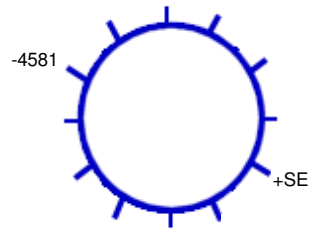
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	06' 02"	12	PVC	13	1.00	0			1	Inside drop
OUT TO	SW	08' 00"	12							0	Could not fully inspect, regulator in pipe

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4582
Street:	221 Prospect Street			**Sub-System:**	18
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



255 **Ft. to DS MH #:** 4581

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

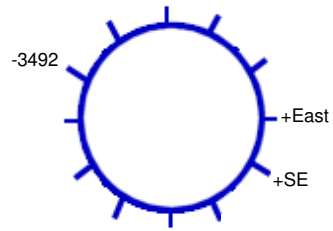
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 01"	8	VCP	3	0.20	0			1	
OUT TO	4581	07' 01"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4618
Street:	335 Brighton Avenue - Maine Medical Center			**Sub-System:**	18
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



193 **Ft. to DS MH #:** 3492

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded, missing
WALLS	BRICK	1			
FLOOR	BRICK	2			6" of debris on floor
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 6.5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

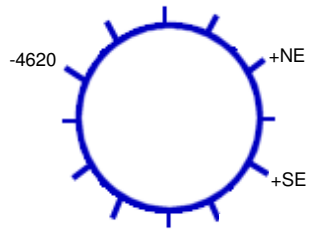
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	05' 08"	8	VCP	3	0.50	0			1	Service from hospital
IN FROM	SE	06' 05"	8	VCP	3	1.50	0			1	
OUT TO	3492	06' 06"	8	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5308
Street:	Brighton Avenue at Belfield Street			**Sub-System:**	18
Inspection Date:	7/24/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



250 **Ft. to DS MH #:** 4620

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	09' 00"	8	PVC	13	0.25	0			1	
IN FROM	SE	09' 06"	10	VCP	3	1.00	0			1	
OUT TO	4620	09' 07"	24	VCP	3	1.00	0			1	

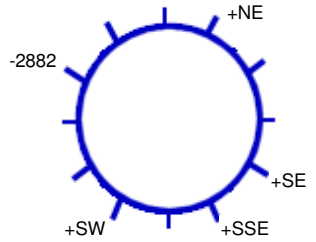
MANHOLE INSPECTION LOGS SUB-AREA 21

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Bancroft Street at Pomeroy Street
Manhole No.: 5305
Sub-System: 21
Inspection Date: 6/5/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



181 **Ft. to DS MH #:** 2882

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.2 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	11	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, rusted, corroded
WALLS	BRICK	2			Light mineral deposits
FLOOR	BRICK	2			Missing mortar
INVERT	BRICK/VCP	2			Missing mortar

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 3 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 04"	10	VCP	3	0.20	0			1	Clear flow
IN FROM	SE	08' 09"	8	PVC	10	0	0			1	0.5 GPM leak at mouth of pipe
IN FROM	SSE	05' 03"	8	VCP	3	0.50	1.50			2	Clear flow. Pipe material changes to PVC 9" upstream, is offset by 3" causing back up in flow
IN FROM	SW	08' 06"	12	VCP	3	1.00	0			1	
OUT TO	2882	09' 01"	20	VCP	3	1.40	0			1	

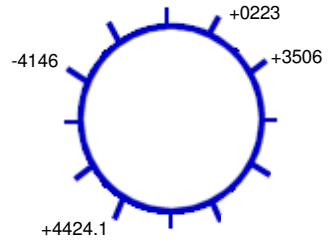
MANHOLE INSPECTION LOGS SUB-AREA 22

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0111***
Street:	30 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



156 **Ft. to DS MH #:** 4146

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

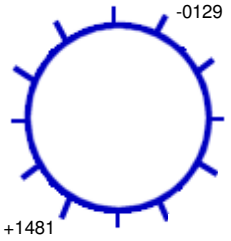
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0223	10' 09"	24	VCP	3	0.75	0			1	
IN FROM	3506	11' 00"	36	VCP	3	1.00	1.00			1	
IN FROM	4424.1	06' 05"	10	PVC	10	0.20	0			1	Outside drop
OUT TO	4146	11' 02"	36	VCP	3	1.00	0			1	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0128***
Street:	25 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



189 **Ft. to DS MH #:** 0129

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	20	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

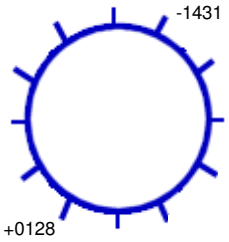
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1481	10' 01"	8	VCP	3	0.20	0			1	
OUT TO	0129	10' 02"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0129***
Street:	41 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



247 **Ft. to DS MH #:** 1431

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

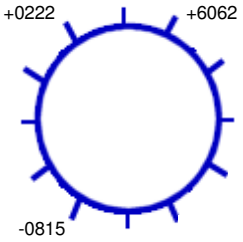
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0128	09' 09"	8	VCP	3	0.40	0			1	
OUT TO	1431	10' 01"	12	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0219***
Street:	Allen Avenue at Goodridge Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



51 **Ft. to DS MH #:** 0815

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

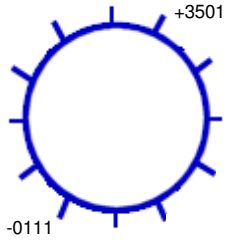
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0222	08' 00"	8	VCP	3	0.20	0			1	
IN FROM	6062	08' 06"	8	VCP	3	0.40	0			1	
OUT TO	0815	08' 07"	8	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0223***
Street:	47 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



250 **Ft. to DS MH #:** 0111

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken, loose and missing brick
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

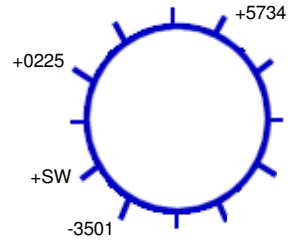
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3501	06' 10"	24	VCP	3	0.50	0			1	
OUT TO	0111	07' 00"	24	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0224***
Street:	Bradley Street at Dirigo Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



128 **Ft. to DS MH #:** 3501

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	13	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	05' 04"	6	CMP	10	0	0			1	
IN FROM	0225	05' 00"	7.5	LINED		0.30	0			1	
IN FROM	5734	08' 05"	24	VCP	3	0.50	0			1	
OUT TO	3501	08' 06"	24	VCP	3	1.50	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0225***
Street:	11 Dirigo Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

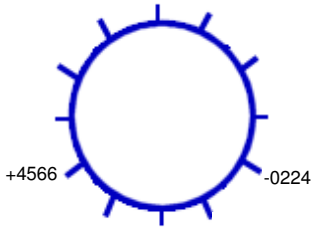
3 **X** 20 **X** 0.9 **=** 54.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



176 **Ft. to DS MH #:** 0224

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

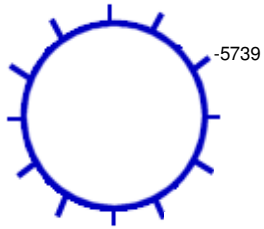
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4566	05' 07"	7.5	LINED		0.80	0			1	
OUT TO	0224	05' 09"	7.5	LINED		0.60	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0233***
Street:	1424 Congress Street			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



288 **Ft. to DS MH #:** 5739

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	3			4" of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

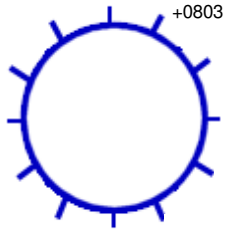
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5739	06' 10"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0802***
Street:	Stevens Avenue at Coachlight Lane			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



78 **Ft. to DS MH #:** 1761

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			Heavy rocks on floor
INVERT	BRICK	1			Small blockage of leaves

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 1.25 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0803	09' 00"	15	VCP	3	4.00	2.00			1	Standing flow
OUT TO	1761	09' 02"	15	VCP	3	1.00	0.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0803***
Street:	Stevens Avenue at Redlon Road			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

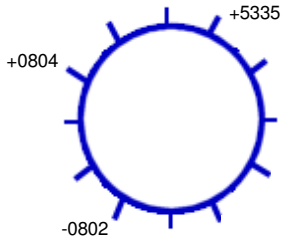
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1



60 **Ft. to DS MH #:** 0802

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0804	08' 05"	10	VCP	3	0.30	0			1	
IN FROM	5335	09' 05"	15	VCP	3	0.75	0			1	
OUT TO	0802	09' 06"	15	VCP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0804***
Street:	Redlon Road at Steven Avenue			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

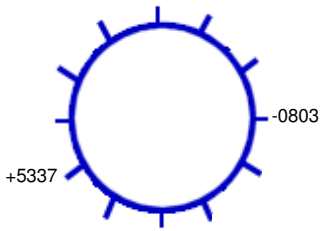
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N



38 **Ft. to DS MH #:** 0803

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	2			Missing mortar
STEPS	CAST	3			Light rust, corrosion, flaking
WALLS	BRICK	1			
FLOOR	BRICK	2			Dirt
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5337	07' 07"	10	VCP	3	0.75	0.20			1	
OUT TO	0803	07' 06"	10	VCP	3	0.75	0.20			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0825***
Street:	19 Capisic Street			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

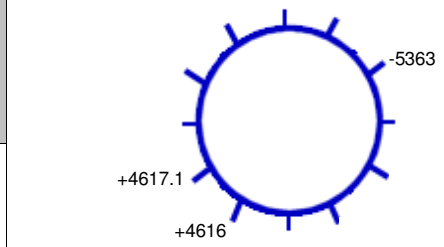
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1



174 **Ft. to DS MH #:** 5363

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	2			Loose and missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PRECAST	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

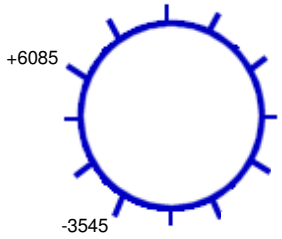
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4616	08' 08"	8	VCP	3	0	0			0	
IN FROM	4617.1	08' 09"	8	VCP	3	1.00	0			0	
OUT TO	5363	08' 10"	8	VCP	3	0.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1075***
Street:	24 Ivy Street			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



219 **Ft. to DS MH #:** 3545

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	2			1" dirt
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

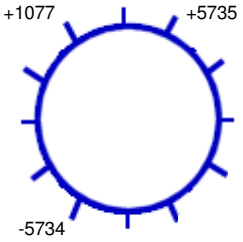
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6085	09' 04"	12	VCP	3	0.30	1.00			1	
OUT TO	3545	00' 5"	12	VCP	3	0.30	1.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1076***
Street:	87 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



84 **Ft. to DS MH #:** 5734

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BLOCK	3			Missing brick and mortar
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1077	08' 09"	18	VCP	3	0.30	0			1	
IN FROM	5735	05' 00"	12	VCP	3	0.40	0			1	Outside drop
OUT TO	5734	08' 10"	18	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1077***
Street:	91 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

Confirmed location with metal detector

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

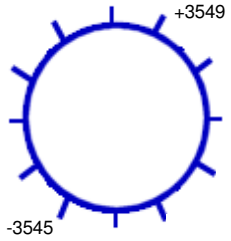
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1078***
Street:	15 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



269 **Ft. to DS MH #:** 3545

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame, cover cracked

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Cracked
CORBEL	BRICK	1			
STEPS	CAST	4			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3549	07' 00"	8	VCP	3	0.50	0			1	
OUT TO	3545	07' 02"	10	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*1079*
Street:	Craigie Street			**Sub-System:**	*22*
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

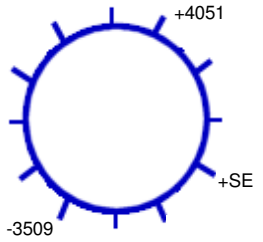
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1080***
Street:	159 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



318 **Ft. to DS MH #:** 1080

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	08' 03"	8	VCP	3	0	0			1	
IN FROM	4051	07' 09"	8	VCP	3	0.40	0			1	
OUT TO	3509	09' 02"	8	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1081***
Street:	131 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

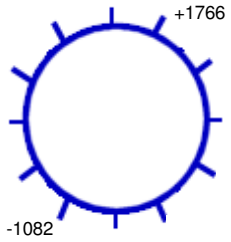
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	11	1

N



221 **Ft. to DS MH #:** 1082

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1766	06' 10"	8	VCP	3	0.20	0			1	
OUT TO	1082	06' 11"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1082***
Street:	112 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

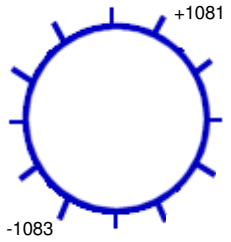
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



251 **Ft. to DS MH #:** 1083

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Chipped
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1081	07' 09"	8	VCP	3	0.30	0			1	Outside drop
OUT TO	1083	10' 07"	12	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1083***
Street:	94 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.75 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

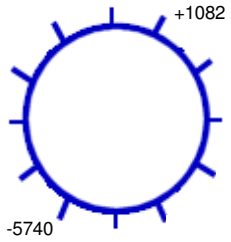
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



233 **Ft. to DS MH #:** 5740

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1082	07' 07"	12	VCP	3	0.35	0			1	
OUT TO	5740	07' 08"	12	VCP	3	0.35	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*1090*
Street:	Twin Knoll Lane R.O.W.			**Sub-System:**	*22*
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not open, sealed shut

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1091***
Street:	Twin Knoll Lane R.O.W.			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1250***
Street:	9 Twin Knoll Lane			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

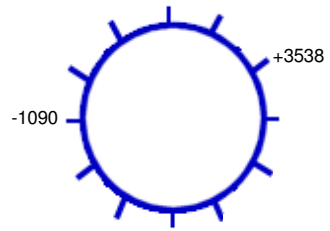
3 **X** 10 **X** 0.9 **=** 27.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



166 **Ft. to DS MH #:** 1090

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	2			1" gap between frame and corbel
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3538	22' 00"	36	RCP	3	1.50	0			0	
OUT TO	1090	22' 03"	36	RCP	3	1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1342***
Street:	22 Redlon Road			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

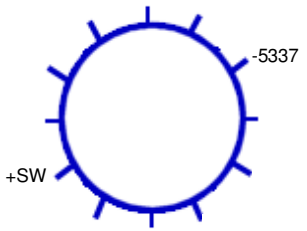
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



177 **Ft. to DS MH #:** 5337

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Offset 2"
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	05' 06"	6	PVC	10	0	0			0	
OUT TO	5337	06' 02"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1431***
Street:	61 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

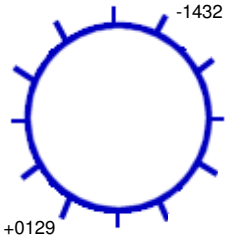
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	6	1

N



183 **Ft. to DS MH #:** 1432

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

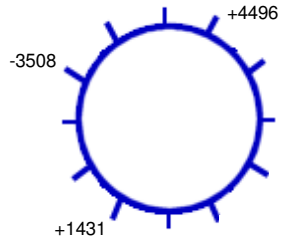
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0129	09' 06"	12	VCP	3	0.20	0			1	
OUT TO	1432	09' 07"	12	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1432***
Street:	75 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



293 **Ft. to DS MH #:** 3508

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

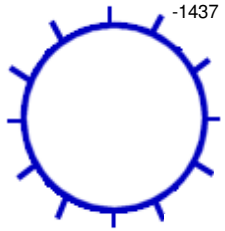
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1431	09' 00"	12	VCP	3	0.30	0			1	Outside drop
IN FROM	4496	14' 00"	24	VCP	3	0.50	0			1	
OUT TO	3508	14' 04"	24	VCP	3	2.00	0			1	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1436***
Street:	Craigie Street at Congress Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



150 **Ft. to DS MH #:** 1437

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1437	06' 06"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1437***
Street:	18 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

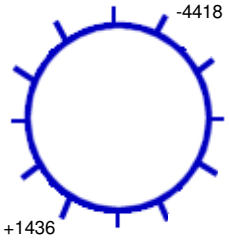
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	13	1

N



217 **Ft. to DS MH #:** 4418

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

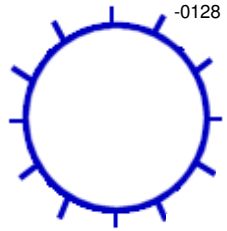
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1436	06' 10"	8	VCP	3	0	0			1	
OUT TO	4418	06' 11"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1481***
Street:	9 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



150 **Ft. to DS MH #:** 0128

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	2	0.05		
FLOOR	CNI	0			Covered in debris
INVERT	CNI	0			Covered in debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0128	08' 08"	8	VCP	3	0.20	2.00			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1561***
Street:	Stevens Avenue at Twin Knolls Lane			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame, cover is 0.4" smaller than frame

COVER INFLOW POTENTIAL

Drainage Area 1:

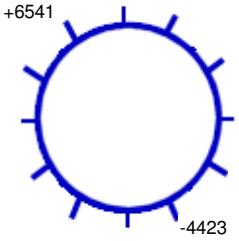
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



86 **Ft. to DS MH #:** 4423

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

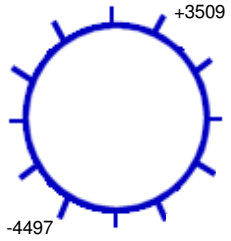
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6541	09' 09"	15	VCP	3	0.50	0			1	
OUT TO	4423	09' 10"	15	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1569***
Street:	112 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



125 **Ft. to DS MH #:** 4497

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 8 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

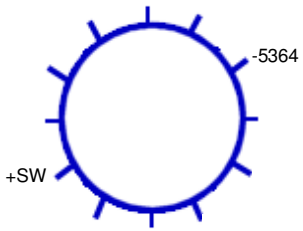
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3509	06' 05"	15	VCP	3	0.40	0			1	
OUT TO	4497	06' 06"	15	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1752***
Street:	11 Rudman Road			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



149 **Ft. to DS MH #:** 5364

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	13	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

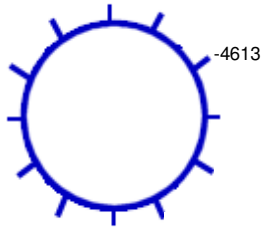
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	08' 00"	8	VCP	4	0.20	0			1	
OUT TO	5364	08' 01"	8	VCP	4	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1753***
Street:	10 Anson Road			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



215 **Ft. to DS MH #:** 4613

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4613	09' 00"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1761***
Street:	115 Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

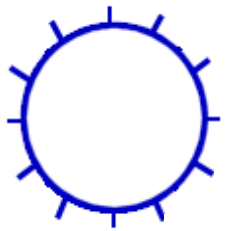
Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N

+0802



-4615

97 **Ft. to DS MH #:** 4615

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

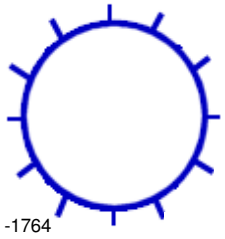
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0802	08' 10"	15	VCP	3	0.45	0			1	
OUT TO	4615	08' 11"	15	VCP	3	0.45	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Caleb Street at Brighton Avenue
Manhole No.: *1763*
Sub-System: *22*
Inspection Date: 8/13/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



174 **Ft. to DS MH #:** 1764

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			1" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1764	07' 09"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1764***
Street:	186 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

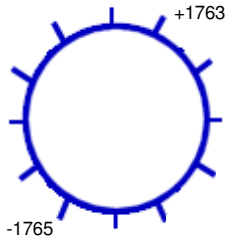
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

N



261 **Ft. to DS MH #:** 1765

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Loose and broken brick, loose and missing mortar
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1763	08' 02"	8	VCP	3	0.50	0			1	Standing flow
OUT TO	1765	08' 03"	8	VCP	3	0.50	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1765***
Street:	164 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

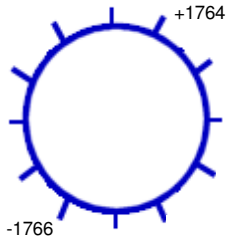
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



220 **Ft. to DS MH #:** 1766

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Missing brick and mortar
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1764	07' 03"	8	VCP	3	0.30	0			1	
OUT TO	1766	07' 04"	8	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1766***
Street:	150 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

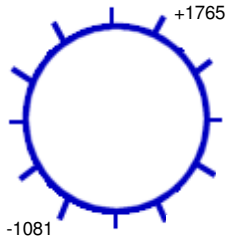
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

N



222 **Ft. to DS MH #:** 1081

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1765	07' 01"	8	VCP	3	0.20	0			1	
OUT TO	1081	07' 02"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2938***
Street:	163 Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

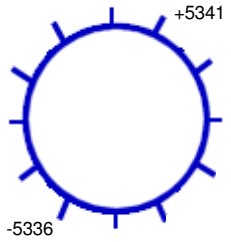
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



189 **Ft. to DS MH #:** 5336

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

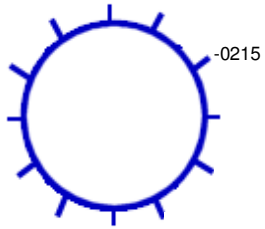
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5341	08' 08"	10	VCP	3	0.40	0			1	
OUT TO	5336	09' 01"	12	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	2939
Street:	24 Cobbert Road			**Sub-System:**	22
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



+South

312 **Ft. to DS MH #:** 0215

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	16	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	2			Covered in dirt
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	05' 07"	4	CIP	4	0.20	0			1	
OUT TO	0215	06' 09"	8	VCP	4	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2943***
Street:	19 June Street			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

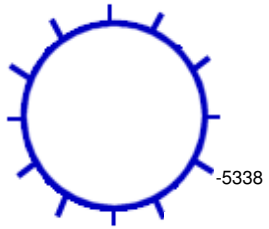
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



84 **Ft. to DS MH #:** 5338

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5338	07' 03"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	3498
Street:	Twin Knolls Lane			**Sub-System:**	22
Inspection Date:	10/4/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Manhole appears to have a flood cover with concrete covering opening - See image

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3499***
Street:	Twin Knolls Lane			**Sub-System:**	***22***
Inspection Date:	10/4/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3501***
Street:	71 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

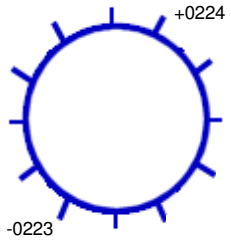
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1



248 **Ft. to DS MH #:** 0223

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0224	09' 00"	24	VCP	3	1.00	0			1	
OUT TO	0223	09' 03"	24	VCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3502***
Street:	Cross Country R.O.W.			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 6 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

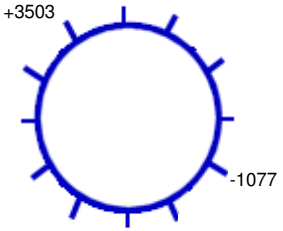
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	33	1

N



164 **Ft. to DS MH #:** 1077

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Deteriorating mortar
STEPS	CAST	2			Light rust, corrosion
WALLS	PARGED	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3503	06' 01"	18	VCP	3	0.40	0			1	
OUT TO	1077	06' 02"	18	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3503***
Street:	43 Anson Road			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not open, has drain grid as cover

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3504***
Street:	70 Caleb Road			**Sub-System:**	***22***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Located manhole but Town did not clear - homeowner not at home, did not want to dig out lawn in their absence.

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3505***
Street:	Bradley Street R.O.W.			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3506***
Street:	Bradley Street R.O.W.			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3507***
Street:	51 Bradley Street R.O.W.			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

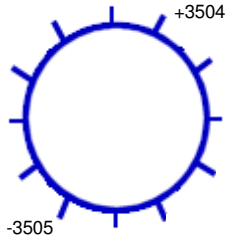
3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	42	1

N



210 **Ft. to DS MH #:** 3505

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

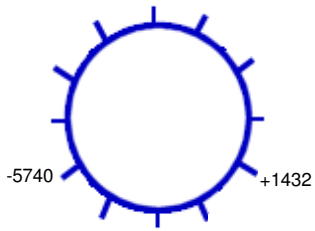
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3504	06' 04"	30	VCP	3	1.00	1.00			1	
OUT TO	3505	06' 05"	30	VCP	3	1.00	1.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3508***
Street:	75 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



30 **Ft. to DS MH #:** 5740

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 25 **X** 0.9 **=** 67.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

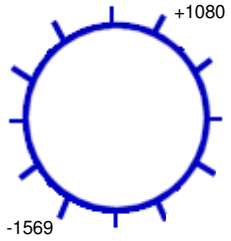
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1432	07' 01"	24	RCP	3	0.50	0			1	
OUT TO	5740	07' 03"	24	RCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3509***
Street:	132 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



115 **Ft. to DS MH #:** 1569

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Rim bent
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1080	11' 04"	10	VCP	3	0.50	0			1	
OUT TO	1569	11' 08"	15	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3538***
Street:	1 Twin Knolls Lane			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

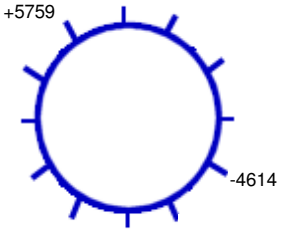
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	3539
Street:	32 Anson Road			**Sub-System:**	22
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



26 **Ft. to DS MH #:** 4614

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

8 **X** 80 **X** 0.9 **=** 576.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	27	1

General Comments: Manhole is in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			8" riser
CORBEL	BRICK	2			Missing brick
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	3			Missing brick
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5759	10' 10"	18	VCP	3	0.50	0			1	
OUT TO	4614	10' 11"	18	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	3540
Street:	35 Wayne Street			**Sub-System:**	22
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

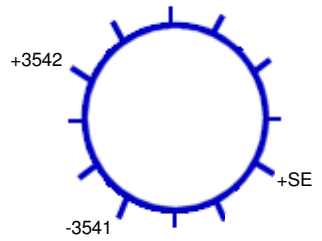
3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	18	1

N



258 **Ft. to DS MH #:** 3541

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	06' 08"	8	VCP	3	0	0			1	Storm drain
IN FROM	3542	08' 01"	15	VCP	3	0.40	0			1	
OUT TO	3541	08' 06"	15	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3541***
Street:	32 Fairview Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

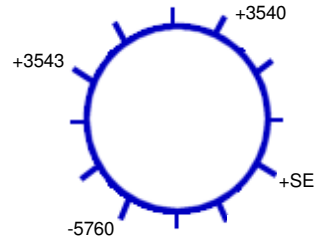
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

N



268 **Ft. to DS MH #:** 5760

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

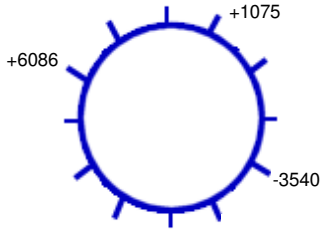
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	09' 05"	12	VCP	3	0	0			1	Storm drain
IN FROM	3540	10' 00"	15	VCP	3	0.40	0			1	
IN FROM	3543	07' 09"	10	VCP	3	0.10	0			1	Outside drop
OUT TO	5760	10' 04"	18	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3542***
Street:	29 Wayne Street			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



45 **Ft. to DS MH #:** 3540

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 1 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

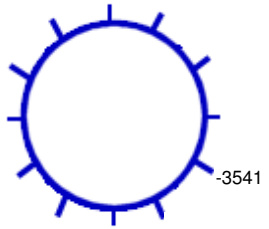
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1075	06' 08"	12	VCP	3	0.10	0			1	
IN FROM	6086	06' 04"	8	VCP	3	0.30	0			1	
OUT TO	3540	07' 03"	15	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 11 Fairview Street
Manhole No.: 3543
Sub-System: 22
Inspection Date: 8/13/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



235 **Ft. to DS MH #:** 3541

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 0.75 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	CNI	0			6" hard packed debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

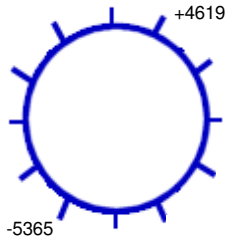
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3541	07' 07"	12	ACP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	3544
Street:	200 Stevens Avenue			**Sub-System:**	22
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



204 **Ft. to DS MH #:** 5365

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4619	08' 05"	8	VCP	3	0.20	0			1	
OUT TO	5365	08' 06"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3545***
Street:	138 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

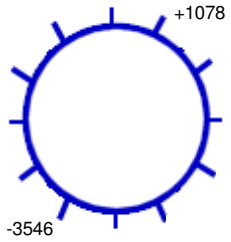
3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	27	1

N



261 **Ft. to DS MH #:** 3546

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

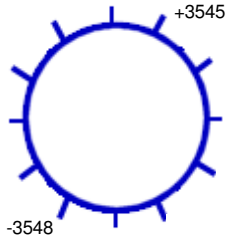
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1078	08' 00"	10	VCP	3	0.50	0			1	
OUT TO	3546	08' 01"	12	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3546***
Street:	116 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



121 **Ft. to DS MH #:** 3548

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3545	08' 00"	12	VCP	3	0.40	0			1	
OUT TO	3548	08' 01"	12	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3547***
Street:	Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3548***
Street:	Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3549***
Street:	180 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

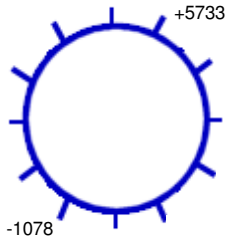
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	8	1

N



270 **Ft. to DS MH #:** 1078

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Small chip
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

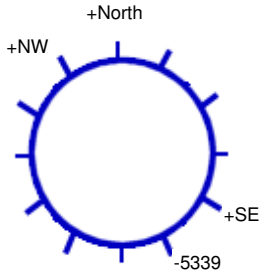
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5733	07' 07"	8	VCP	3	0.20	0			1	
OUT TO	1078	07' 08"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4050***
Street:	15 Stoneledge Drive			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



235 **Ft. to DS MH #:** 5339

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

15 **X** 3 **X** 0.9 **=** 40.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			10" riser
CORBEL	NONE	0			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	CNI	0			Surcharged
INVERT	CNI	0			Surcharged

Surcharge From Invert: **Currently:** 4.5 **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

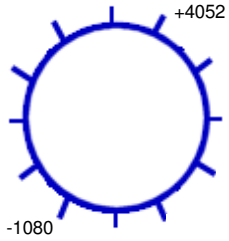
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	06' 08"	5	PVC	10	0	0			0	
IN FROM	NW	06' 08"	5	PVC	10	0	0			0	
IN FROM	SE	06' 06"	5	PVC	10	0	0.10			0	
OUT TO	5339	05' 10"	6	PVC	10	0	0			0	Force main

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4051***
Street:	182 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



300 **Ft. to DS MH #:** 1080

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4052	07' 00"	8	VCP	3	0	0			1	
OUT TO	1080	07' 01"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4052
Street:	194 Craigie Street			**Sub-System:**	22
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

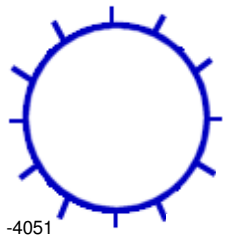
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	16	1



213 **Ft. to DS MH #:** 4051

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing brick and mortar
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	2			Covered in dirt
INVERT	VCP	2			Covered in dirt

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4051	07' 07"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4146***
Street:	Cross Country R.O.W.			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

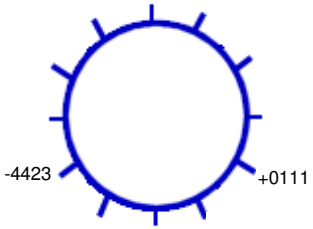
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



183 **Ft. to DS MH #:** 4423

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

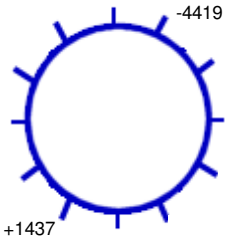
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0111	08' 00"	30	VCP	3	0.50	0			1	
OUT TO	4423	08' 01"	30	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4418***
Street:	31 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



209 **Ft. to DS MH #:** 4419

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	33	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1437	08' 10"	10	VCP	3	0.40	0			1	Standing flow
OUT TO	4419	08' 11"	10	VCP	3	0.40	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4419***
Street:	48 Caleb Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

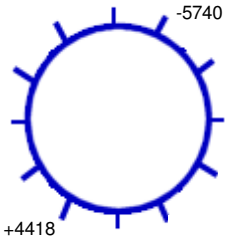
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N



275 **Ft. to DS MH #:** 5740

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4418	08' 10"	10	VCP	3	0.30	0			1	
OUT TO	5740	08' 11"	10	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4420***
Street:	1355 Congress Street			**Sub-System:**	***22***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

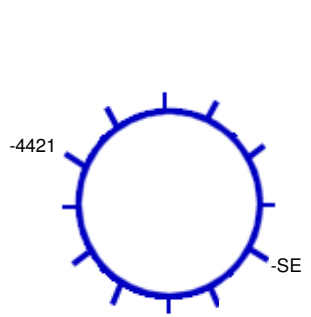
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	38	1



305 **Ft. to DS MH #:** 4421

General Comments: Highpoint manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	CNI	0			Covered in 6" of dirt
INVERT	CNI	0			Covered in 8" of dirt

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	SE	08' 04"	8	VCP	3	0	4.00			1	4" debris
OUT TO	4421	08' 04"	8	VCP	3	0	2.00			1	2" debris

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4421***
Street:	Congress Street at Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

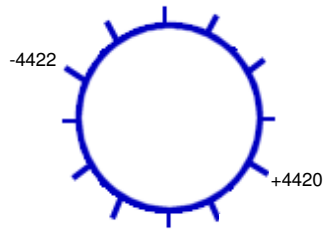
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N



45 **Ft. to DS MH #:** 4422

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken and loose brick, missing mortar
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4420	08' 07"	8	VCP	3	0.30	0.20			1	
OUT TO	4422	08' 09"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4422***
Street:	Congress Street at Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

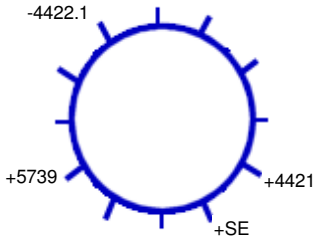
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



267 **Ft. to DS MH #:** 4423

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	08' 05"	8	VCP	3	0.30	0			1	
IN FROM	4421	08' 05"	8	VCP	3	0.35	0			1	
IN FROM	5739	08' 00"	12	VCP	3	0.35	0			1	
OUT TO	4422.1	09' 00"	8	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4422.1***
Street:	27 Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

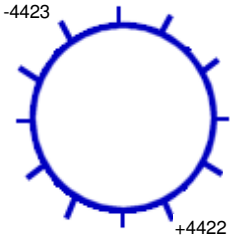
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



18 **Ft. to DS MH #:** 4423

General Comments: Unmapped manhole - see revised map

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4422	10' 06"	12	PVC	10	1.00	0			0	
OUT TO	4423	11' 00"	12	PVC	10	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4423***
Street:	27 Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

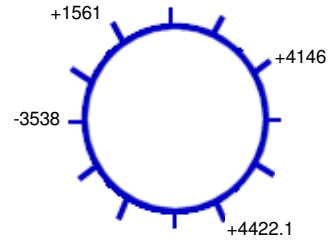
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



258 **Ft. to DS MH #:** 3538

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

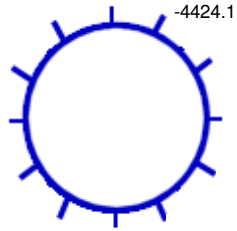
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1561	11' 08"	15	VCP	3	0.50	0			1	
IN FROM	4146	12' 08"	36	VCP	3	0.75	0			1	
IN FROM	4422.1	12' 00"	12	PVC	10	1.00	0			1	
OUT TO	3538	13' 00"	36	VCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4424
Street:	12 Bradley Street			**Sub-System:**	22
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



183 **Ft. to DS MH #:** 4424.1

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Cracked
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

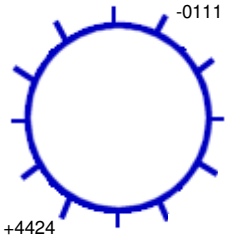
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4424.1	06' 04"	8	VCP	3	0	0			1	Unmapped manhole

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4424.1***
Street:	25 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



43 **Ft. to DS MH #:** 0111

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4424	07' 06"	10	PVC	10	0.20	0			0	
OUT TO	0111	07' 07"	10	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	4496
Street:	Craigie Street			**Sub-System:**	22
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4497***
Street:	107 Craigie Street			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

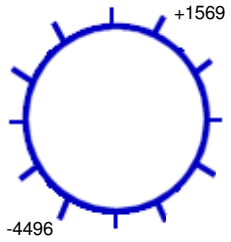
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	6	1

N



196 **Ft. to DS MH #:** 4496

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose mortar
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1569	07' 09"	15	VCP	3	0.40	0			1	Fast flow
OUT TO	4496	08' 05"	18	VCP	3	0.30	0			1	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4566***
Street:	40 Dirigo Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

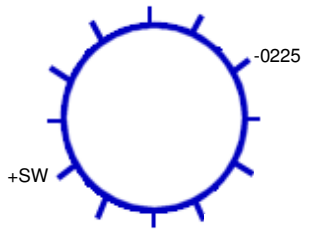
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N



321 **Ft. to DS MH #:** 0225

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

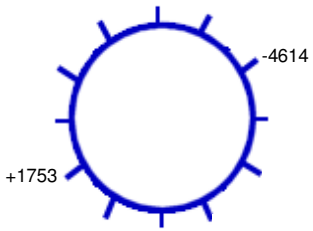
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	06' 03"	8	VCP	3	0.20	0			1	Standing flow
OUT TO	0225	06' 04"	7.5	LINED		0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4613***
Street:	19 Anson Road			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



201 **Ft. to DS MH #:** 4614

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1753	08' 09"	10	VCP	3	0.10	0			1	
OUT TO	4614	08' 11"	10	VCP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4614***
Street:	37 Anson Road			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

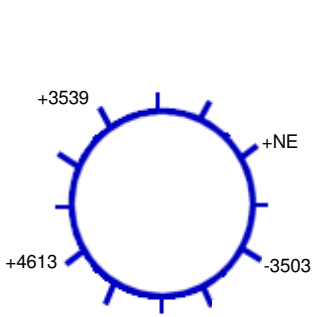
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1



27 **Ft. to DS MH #:** 3503

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BLOCK	1			
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

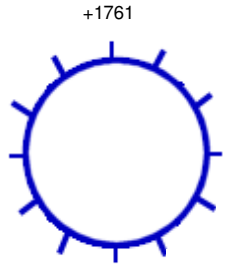
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	09' 07"	8	VCP	3	0	0			1	
IN FROM	3539	11' 05"	18	VCP	3	0.60	0			1	
IN FROM	4613	09' 07"	10	VCP	3	0.40	0			1	
OUT TO	3503	11' 07"	18	VCP	3	0.60	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Stevens Road at Capisic Street
Manhole No.: 4615
Sub-System: 22
Inspection Date: 8/15/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



64 **Ft. to DS MH #:** 6550

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.2 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1761	08' 05"	15	VCP	3	0.40	0			1	
OUT TO	6550	08' 06"	15	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4616***
Street:	26 Capisic Street			**Sub-System:**	***22***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

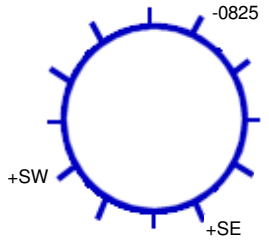
8 **X** 12 **X** 0.3 **=** 28.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

N



98 **Ft. to DS MH #:** 0825

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	ALUM	1			
WALLS	BRICK/PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 04"	4	ACP	4	0	0			1	
IN FROM	SW	08' 02"	6	ACP	4	0	0			1	
OUT TO	0825	08' 03"	8	ACP	4	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4617***
Street:	Capisic Street at Frost Street			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

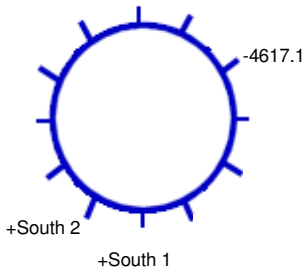
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	47	1

N



252 **Ft. to DS MH #:** 4617.1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South 1	03' 07"	3	PVC	10	0	0			1	Inside drop
IN FROM	South 2	03' 07"	3	PVC	10	0	0			1	Inside drop
OUT TO	4617.1	09' 01"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4617.1***
Street:	19 Capisic Street			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

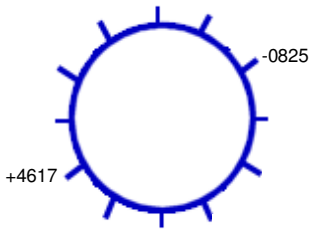
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	28	1



57 **Ft. to DS MH #:** 0825

General Comments: Unmapped manhole - see revised map

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	4			Top layer of bricks missing
INVERT	VCP/PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

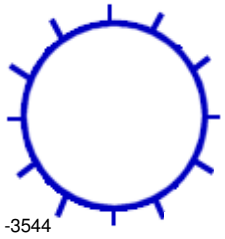
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4617	08' 09"	8	VCP	3	0.50	0			1	Slow flow
OUT TO	0825	09' 00"	8	VCP	3	0.50	0			1	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4619***
Street:	226 Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



207 **Ft. to DS MH #:** 3544

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 8 **X** 0.9 **=** 28.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	2	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3544	07' 02"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5335***
Street:	Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5336***
Street:	Stevens Avenue at June Street			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

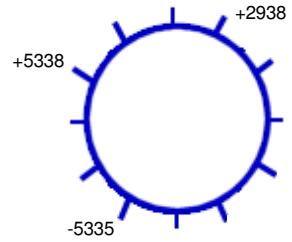
3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



114 **Ft. to DS MH #:** 5335

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2938	08' 07"	15	VCP	3	0.50	0			1	
IN FROM	5338	07' 10"	12	LINED		0	0			1	
OUT TO	5335	08' 08"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5337***
Street:	7 Redlon Road			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

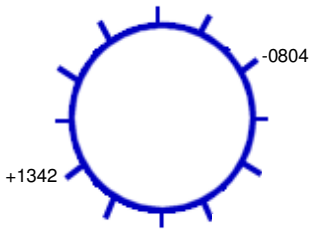
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

N



139 **Ft. to DS MH #:** 0804

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	3			Missing brick, loose parging
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	2			Covered in dirt
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1342	08' 02"	8	VCP	3	0.20	0			1	
OUT TO	0804	08' 03"	10	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5338***
Street:	13 June Street			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

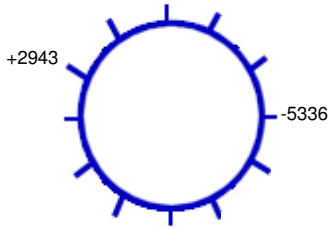
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	33	1

N



143 **Ft. to DS MH #:** 5336

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Riser
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2943	06' 10"	8	PVC	10	0	0			1	
OUT TO	5336	06' 11"	10	PVC	10	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5339***
Street:	2 Stoneledge Drive			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

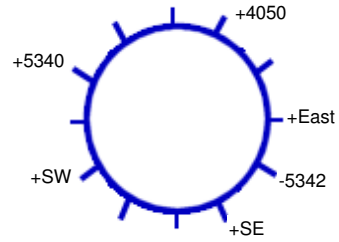
3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



161 **Ft. to DS MH #:** 5342

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	04' 02"	4	PVC	10	0	0			0	
IN FROM	SE	04' 03"	4	PVC	10	0	0			0	
IN FROM	SW	04' 10"	4	PVC	10	0.20	0			0	
IN FROM	4050	05' 01"	3	PVC	10	0	0			0	
IN FROM	5340	05' 03"	8	PVC	10	0	0			0	
OUT TO	5342	05' 04"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5340***
Street:	6 Stoneledge Drive			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

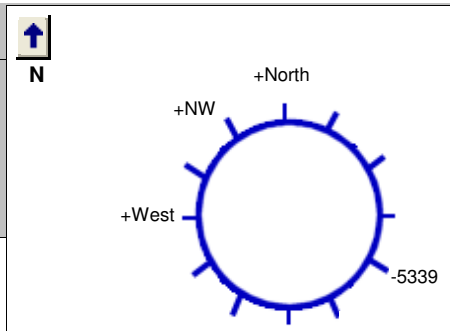
Drainage Area 1:

4 **X** 8 **X** 0.9 **=** 28.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1



109 **Ft. to DS MH #:** 5339

General Comments: Manhole is in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	04' 09"	4	PVC	10	0	0			1	
IN FROM	NW	04' 09"	4	PVC	10	0.30	0			1	
IN FROM	West	04' 09"	4	PVC	10	0	0			1	
OUT TO	5339	04' 10"	8	PVC	10	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5341***
Street:	Stevens Avenue at Stoneledge Drive			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

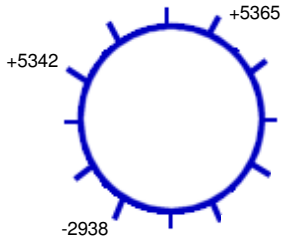
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



157 **Ft. to DS MH #:** 2938

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5342	06' 10"	8	VCP	3	0.30	0			1	
IN FROM	5365	07' 06"	8	VCP	3	0.30	0			1	
OUT TO	2938	07' 07"	8	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5342***
Street:	19 Stoneledge Drive			**Sub-System:**	***22***
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

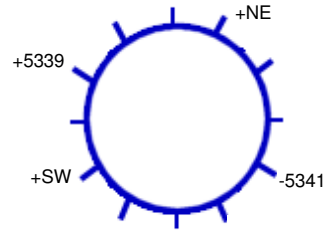
Drainage Area 1:

3 **X** 5 **X** 0.9 **=** 13.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1



58 **Ft. to DS MH #:** 5341

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	04' 10"	4	PVC	10	0	0			0	
IN FROM	SW	04' 10"	6	PVC	10	0	0			0	
IN FROM	5339	05' 01"	8	PVC	10	0.10	0			0	
OUT TO	5341	04' 09"	8	PVC	10	0.50	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5363***
Street:	Capisic Street at Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

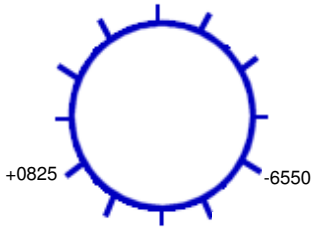
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	27	1

N



83 **Ft. to DS MH #:** 6550

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			Large rocks on floor
INVERT	VCP	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 0.5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0825	08' 04"	8	VCP	3	0.50	0			1	
OUT TO	6550	08' 05"	8	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5364***
Street:	Stevens Avenue at Rudman Road			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

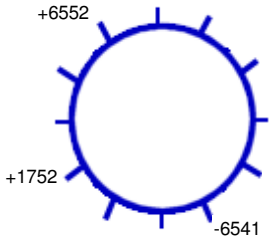
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



74 **Ft. to DS MH #:** 6541

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

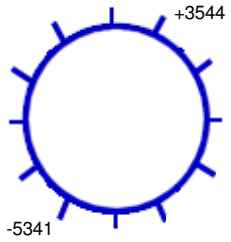
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1752	09' 00"	8	VCP	3	0.30	0			1	
IN FROM	6552	09' 05"	15	VCP	0.7	0	0			1	
OUT TO	6541	09' 06"	15	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5365***
Street:	189 Stevens Avenue			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



153 **Ft. to DS MH #:** 5341

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 6 **X** 0.9 **=** 16.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

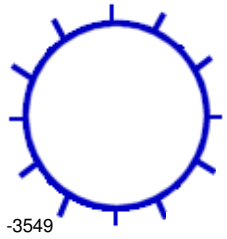
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3544	07' 09"	8	VCP	3	0.40	0			1	
OUT TO	5341	07' 10"	8	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5733***
Street:	195 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



266 **Ft. to DS MH #:** 3549

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	12	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Cracked
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3549	07' 03"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5734***
Street:	83 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

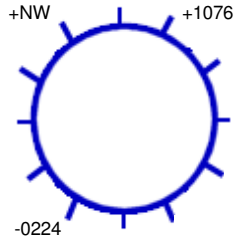
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



31 **Ft. to DS MH #:** 0224

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate corrosion
WALLS	BRICK	1			
FLOOR	PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 03"	18	VCP	3	0.20	0			1	
IN FROM	1076	08' 03"	24	VCP	3	0.70	0			1	
OUT TO	0224	08' 04"	24	VCP	3	0.60	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5735***
Street:	91 Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

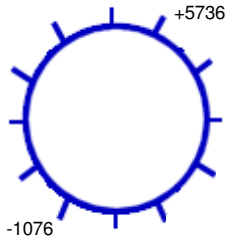
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	7	1



10 **Ft. to DS MH #:** 1076

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5736	05' 10"	12	VCP	3	0.30	0			1	
OUT TO	1076	05' 11"	12	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5736***
Street:	Bradley Street			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

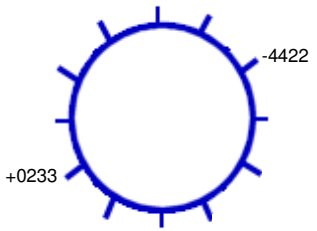
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5739
Street:	1399 Congress Street			**Sub-System:**	22
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



288 **Ft. to DS MH #:** 4422

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

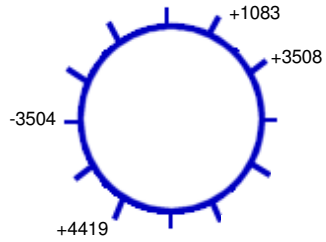
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0233	08' 09"	8	VCP	3	0.80	0			1	Slow flow
OUT TO	4422	09' 00"	8	VCP	3	0.75	7.75			5	Almost entirely blocked

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5740***
Street:	70 Caleb Stret			**Sub-System:**	***22***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



127 **Ft. to DS MH #:** 3504

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

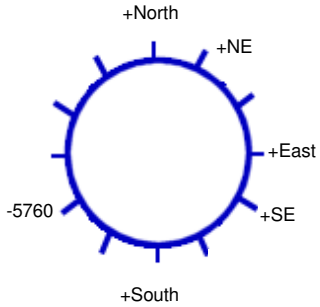
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1083	06' 11"	15	VCP	3	0.40	0			1	
IN FROM	3508	07' 07"	24	VCP	3	0.40	0			1	
IN FROM	4419	06' 06"	10	VCP	3	0.20	0			1	
OUT TO	3504	08' 02"	36	VCP	3	3.50	2.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 17 Coachlight Lane
Manhole No.: 5758
Sub-System: 22
Inspection Date: 8/13/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



97 **Ft. to DS MH #:** 5760

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 0.75 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	05' 11"	4	PVC	10	0	0			0	
IN FROM	NE	05' 11"	4	PVC	10	0	0			0	
IN FROM	North	05' 11"	4	PVC	10	0	0			0	
IN FROM	SE	05' 11"	4	PVC	10	0	0			0	
IN FROM	South	05' 11"	4	PVC	10	0	0			0	
OUT TO	5760	06' 02"	6	PVC	10	0	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5759***
Street:	14 Coachlight Lane R.O.W.			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

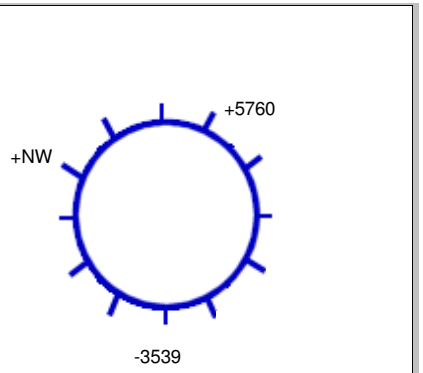
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	32	1



124 **Ft. to DS MH #:** 3539

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			Loose and missing brick, missing mortar
INVERT	BRICK	2			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

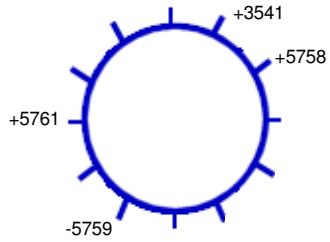
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	05' 06"	12	VCP	3	0	0			1	Culvert entrance
IN FROM	5760	06' 02"	18	VCP	3	0.30	0			1	
OUT TO	3539	06' 03"	18	VCP	3	1.00	0			1	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5760***
Street:	15 Coachlight Drive			**Sub-System:**	***22***
Inspection Date:	10/4/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



175 **Ft. to DS MH #:** 5759

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	27	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

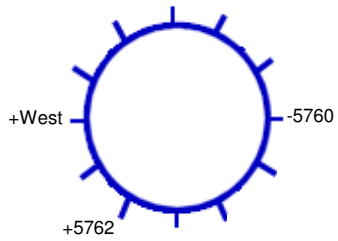
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3541	07' 07"	20	VCP	3	0.50	0			1	
IN FROM	5758	07' 06"	8	PVC	10	0	0			1	
IN FROM	5761	07' 05"	10	PVC	10	0.20	0			1	
OUT TO	5759	07' 08"	20	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5761***
Street:	11 Coachlight Lane R.O.W.			**Sub-System:**	***22***
Inspection Date:	8/13/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



190 **Ft. to DS MH #:** 5760

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

12 **X** 8 **X** 0.3 **=** 28.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Missing mortar

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

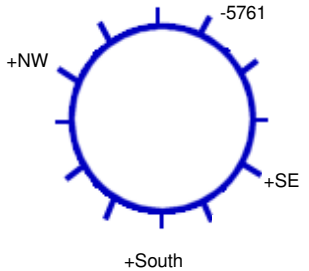
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	07' 07"	4	PVC	10	0	0			0	
IN FROM	5762	07' 09"	6	PVC	10	1.00	0			0	Standing flow
OUT TO	5760	07' 10"	8	PVC	10	0.50	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 5 Coachlight Lane
Manhole No.: 5762
Sub-System: 22
Inspection Date: 8/13/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



151 **Ft. to DS MH #:** 5761

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
8 **X** 150 **X** 0.9 **=** 1080.0 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments: Manhole is in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

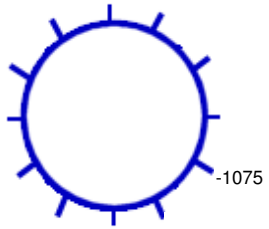
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	04' 11"	4	PVC	10	0	0			0	
IN FROM	SE	04' 09"	4	PVC	10	0.05	0			0	
IN FROM	South	04' 09"	4	PVC	10	0.50	0			0	Fast flow
OUT TO	5761	05' 01"	6	PVC	10	0.40	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	6085
Street:	14 Ivy Street			**Sub-System:**	22
Inspection Date:	8/12/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



212 **Ft. to DS MH #:** 1075

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Missing brick and mortar, loose mortar
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	CNI	0			Covered in debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

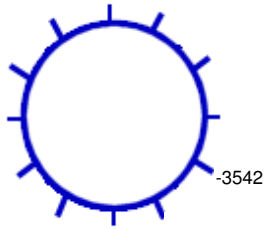
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1075	06' 06"	10	VCP	3	0	4.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 9 Wayne Street
Manhole No.: 6086
Sub-System: 22
Inspection Date: 8/12/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



178 **Ft. to DS MH #:** 3542

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 2.5 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			Debris on floor
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

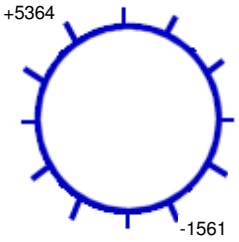
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3542	06' 07"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 55 Stevens Avenue
Manhole No.: 6541
Sub-System: 22
Inspection Date: 8/15/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



248 **Ft. to DS MH #:** 1561

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

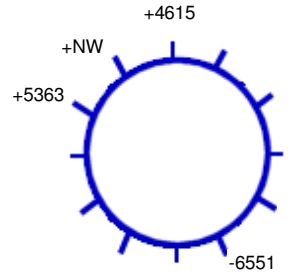
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5364	09' 04"	15	VCP	3	0.50	0			1	
OUT TO	1561	09' 05"	15	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Stevens Avenue at Capisic Street
Manhole No.: 6550
Sub-System: 22
Inspection Date: 8/15/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



135 **Ft. to DS MH #:** 6551

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

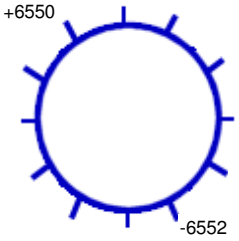
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 00"	12	ACP	3	0	0			1	Storm drain
IN FROM	4615	08' 05"	15	VCP	3	1.50	0.30			1	
IN FROM	5363	08' 01"	12	VCP	3	0.40	0			1	Outside drop
OUT TO	6551	08' 06"	15	VCP	3	1.00	0.30			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6551***
Street:	Stevens Avenue at Anson Road			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



230 **Ft. to DS MH #:** 6552

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	23	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Missing brick and mortar
STEPS	CAST	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6550	07' 03"	15	VCP	3	0.40	0			1	
OUT TO	6552	07' 07"	15	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6552***
Street:	Stevens Avenue at Dirigo Street			**Sub-System:**	***22***
Inspection Date:	8/15/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

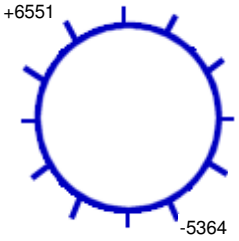
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



232 **Ft. to DS MH #:** 5364

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6551	09' 09"	15	VCP	3	0.40	0			1	
OUT TO	5364	09' 10"	15	VCP	3	0.40	0			1	

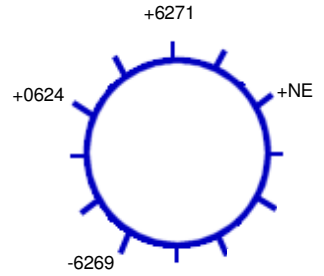
MANHOLE INSPECTION LOGS SUB-AREA 23

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0623
Street:	53 Cypress Street			**Sub-System:**	23
Inspection Date:	8/9/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



49 **Ft. to DS MH #:** 6269

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

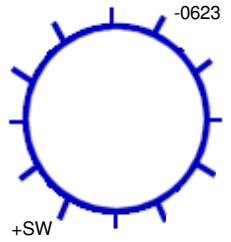
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	04' 07"	8	PVC	10	0.30	0			0	Standing flow
IN FROM	0624	03' 06"	10	PVC	10	0.10	0			0	
IN FROM	6271	04' 07"	8	PVC	10	0.50	0			0	
OUT TO	6269	04' 08"	12	ACP	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0624***
Street:	59 Cypress Street			**Sub-System:**	***23***
Inspection Date:	8/9/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



96 **Ft. to DS MH #:** 0623

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Missing mortar
INVERT	PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	03' 08"	8	PVC	10	0	0.30			0	
OUT TO	0623	03' 08"	8	PVC	10	0	0.10			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0626
Street:	267 Allen Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

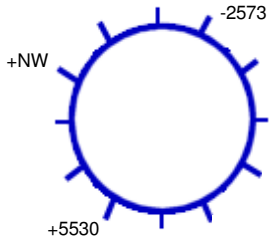
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1



146 **Ft. to DS MH #:** 2573

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Chipped, broken pieces
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

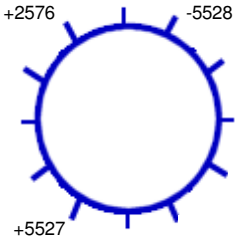
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	07' 00"	18	RCP	3	0	0			0	
IN FROM	5530	10' 02"	24	VCP	3	0.40	0			0	
OUT TO	2573	10' 02"	24	VCP	3	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0627
Street:	211 Allen Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



169 **Ft. to DS MH #:** 5528

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

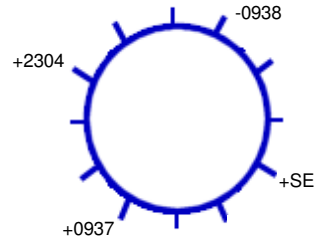
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2576	09' 07"	8	VCP	3	1.70	0			1	
IN FROM	5527	08' 07"	24	VCP	3	0.70	0			3	All joints offset by 2" - 3"
OUT TO	5528	09' 09"	24	VCP	3	0.90	0			3	All joints offset by 2" - 3" 1GPM leak at first joint

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0628
Street:	Allen Avenue at Yale Street			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



225 **Ft. to DS MH #:** 0938

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	06' 09"	12	VCP	3	0	0			3	Heavy mineral deposits at joints
IN FROM	0937	07' 01"	12	VCP	3	0.20	2.00			3	Heavy mineral deposits at joints
IN FROM	2304	06' 10"	12	PVC	10	0.10	0			1	
OUT TO	0938	07' 05"	15	ACP	3	0.20	0			3	Heavy mineral deposits at joints

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0629
Street:	38 Ruby Lane			**Sub-System:**	23
Inspection Date:	7/31/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

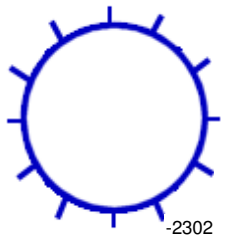
Drainage Area 1:

4 **X** 2 **X** 0.9 **=** 7.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



100 **Ft. to DS MH #:** 2302

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	2			Missing pieces
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PARGED	2			Covered in dirt
INVERT	PARGED	3			Full of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

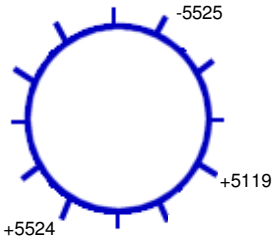
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2302	04' 09"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0630
Street:	Allen Avenue at Plymouth Street			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



337 **Ft. to DS MH #:** 5525

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			All broken
WALLS	BRICK	1			
FLOOR	BRICK	2			Missing brick
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5119	08' 00"	12	VCP	3	0.10	0			2	First two joints offset by 1.5"
IN FROM	5524	08' 03"	18	VCP	3	0.20	0			1	
OUT TO	5525	08' 08"	24	VCP	3	0.40	0			2	Light mineral deposits

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0631
Street:	30 Plymouth Street			**Sub-System:**	23
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

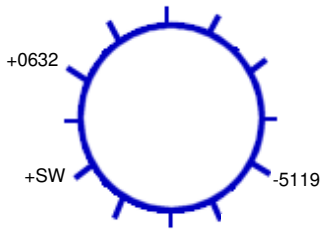
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



317 **Ft. to DS MH #:** 5119

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Wet
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

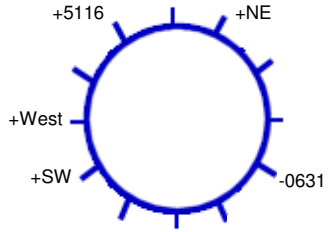
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	07' 05"	4	PVC		0	0			0	Outside drop, service
IN FROM	0632	12' 08"	8	ACP		0.50	0			0	
OUT TO	5119	12' 09"	8	ACP		0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0632
Street:	39 Plymouth Street			**Sub-System:**	23
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



122 **Ft. to DS MH #:** 0631

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Offset
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Old cover on bench
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 10"	6	PVC		0	0			1	Outside drop
IN FROM	SW	04' 08"	6	PVC		0	0			1	Inside drop
IN FROM	West	07' 06"	6	PVC		0	0			1	Outside drop
IN FROM	5116	14' 00"	8	ACP		0.50	0			1	
OUT TO	0631	14' 01"	8	ACP		0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0936
Street:	Allen Avenue at Woodlawn Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not open

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0937***
Street:	91 Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

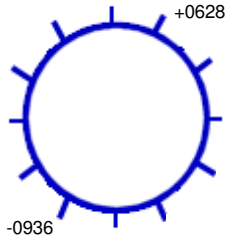
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



124 **Ft. to DS MH #:** 0628

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

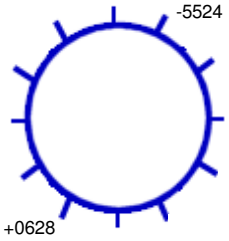
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0628	08' 00"	8	VCP	3	0.20	0			1	
OUT TO	0936	08' 03"	10	VCP	3	0.20	0			2	Light mineral deposits

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0938
Street:	125 Allen Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



133 **Ft. to DS MH #:** 5524

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

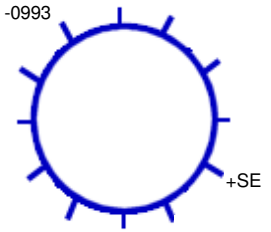
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0628	08' 10"	15	VCP	3	0.20	0			1	
OUT TO	5524	09' 00"	15	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 11 Abbott Street
Manhole No.: 0989
Sub-System: 23
Inspection Date: 8/14/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



238 **Ft. to DS MH #:** 0993

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Broken, loose and missing brick, loose and missing mortar
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	2			Bricks on floor
INVERT	VCP	2			Bricks in invert

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 0.3 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

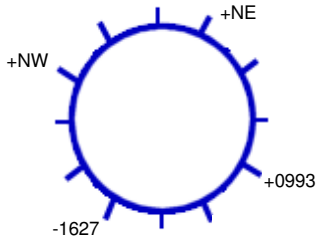
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	04' 03"	4	CIP	4	0	0			1	
OUT TO	0993	06' 05"	8	VCP	3	0	0.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0992
Street:	Allen Avenue at Abbott Street			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



144 **Ft. to DS MH #:** NE

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK/LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 07"	28.5	LINED		1.50	0			1	
IN FROM	NW	07' 04"	10	VCP	3	0.10	0			1	
IN FROM	0993	07' 04"	6	PVC	10	0	0			1	
OUT TO	1627	07' 08"	28.5	LINED		1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0993***
Street:	Abbott Street at Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

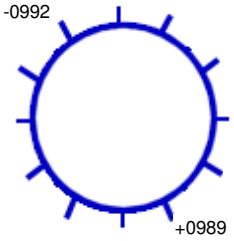
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



38 **Ft. to DS MH #:** 0992

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0989	06' 07"	8	PVC	10	0.20	0			0	
OUT TO	0992	06' 08"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1590***
Street:	42 Hennessy Drive			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

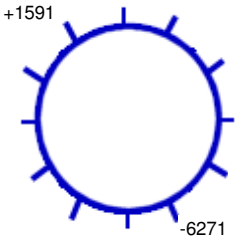
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



66 **Ft. to DS MH #:** 6271

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	2			Missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1591	04' 05"	8	PVC	10	0.10	0			0	
OUT TO	6271	04' 05"	8	PVC	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1591***
Street:	48 Hennessy Drive			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

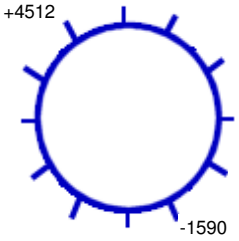
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	9	1

N



151 **Ft. to DS MH #:** 1590

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/WOOD	4			Broken, loose and missing brick, loose pieces, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4512	04' 02"	VCP	8	3	0.30	0			1	
OUT TO	1590	04' 04"	VCP	8	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1627***
Street:	301 Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

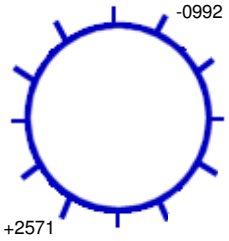
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



179 **Ft. to DS MH #:** 0992

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

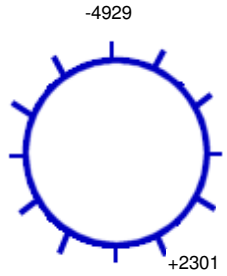
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2571	08' 01"	30	VCP	3	2.00	0.90			2	Moderate mineral deposits
OUT TO	0992	08' 03"	28.5	LINED		2.00	0.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2300***
Street:	48 Ruby Lane			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



72 **Ft. to DS MH #:** 4929

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2301	07' 05"	8	PVC		0	0			0	
OUT TO	4929	07' 07"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2301***
Street:	43 Ruby Lane			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

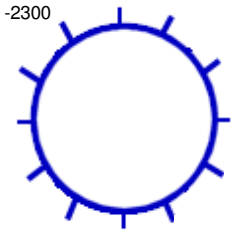
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

N



63 **Ft. to DS MH #:** 2300

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	2			Debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2300	05' 00"	8	PVC		0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2302***
Street:	28 Ruby Lane			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

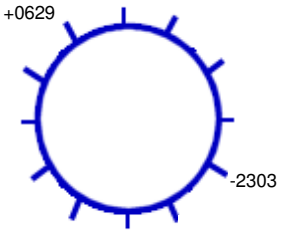
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



90 **Ft. to DS MH #:** 2303

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	2			Standing water

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0629	09' 01"	8	PVC		0.20	0			0	
OUT TO	2303	09' 02"	8	PVC		0.20	0.30			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2303***
Street:	25 Ruby Lane			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

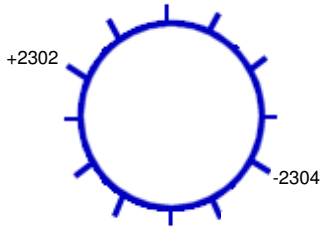
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



243 **Ft. to DS MH #:** 2304

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2302	07' 08"	8	PVC		0.20	0			2	Light debris at mouth of pipe
OUT TO	2304	07' 09"	8	PVC		0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	2304
Street:	Ruby Lane at Allen Avenue			**Sub-System:**	23
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

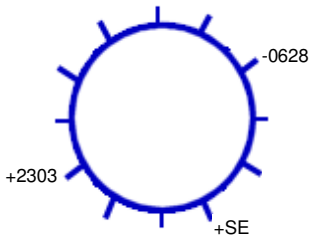
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



30 **Ft. to DS MH #:** 0628

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Offset
CORBEL	PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

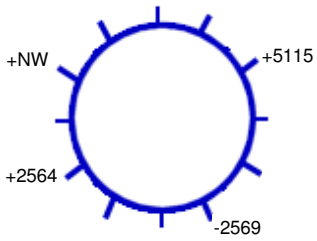
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	06' 08"	10	PVC		0	0			0	Bulkheaded
IN FROM	2303	06' 09"	8	PVC		0.30	0			1	
OUT TO	0628	06' 10"	10	PVC		0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Hennessy Drive at Skylark Road
Manhole No.: 2563
Sub-System: 23
Inspection Date: 8/5/2019 **Inspector:** JS/JG **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



265 **Ft. to DS MH #:** 2569

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	27	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Missing brick and mortar, loose pieces
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	2			Missing mortar
FLOOR	BRICK	1			
INVERT	BRICK	1			Debris catching

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

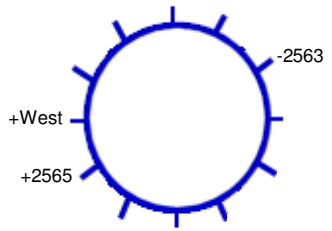
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	08' 07"								0	Stubbed
IN FROM	2564	08' 09"	8	VCP	3	3.00	0			1	
IN FROM	5115	08' 09"	8	VCP	3	0.20	0			1	
OUT TO	2569	09' 04"	8	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	2564
Street:	70 Skylark Road			**Sub-System:**	23
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



135 **Ft. to DS MH #:** 2563

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Missing mortar

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

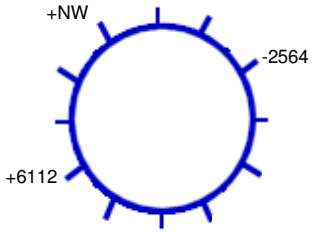
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	05' 10"	4	CIP	10	0	0			1	
IN FROM	2565	06' 04"	8	ACP	3	0	0			1	
OUT TO	2563	07' 00"	8	ACP	3	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2565***
Street:	82 Skylark Road			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



163 **Ft. to DS MH #:** 2564

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	16	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose pieces
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

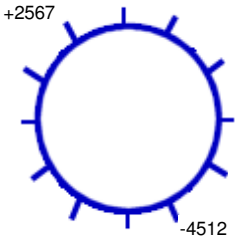
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	04' 02"	4	CIP	3	0.10	0			1	
IN FROM	6112	04' 03"	8	PVC	10	0	0			1	
OUT TO	2564	04' 10"	6	ACP	3	0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2566***
Street:	87 Hennessy Drive			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



251 **Ft. to DS MH #:** 4512

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	7	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	2			Missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

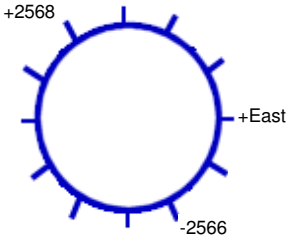
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2567	06' 08"	8	VCP	3	0.30	0			1	
OUT TO	4512	06' 10"	8	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2567***
Street:	110 Hennessy Drive			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



249 **Ft. to DS MH #:** 2566

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	29	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and missing brick, loose pieces
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	04' 09"	6	ACP	3	0	0			1	
IN FROM	2568	04' 11"	8	VCP	3	0.30	0			1	
OUT TO	2566	05' 00"	8	VCP	3	0.50	0.20			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2568***
Street:	132 Hennessy Drive			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

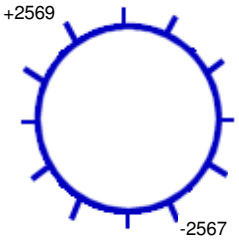
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	7	1

N



241 **Ft. to DS MH #:** 2567

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar, loose pieces
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			0.2" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2569	08' 04"	8	VCP	3	0	0.30			1	
OUT TO	2567	08' 06"	8	VCP	3	0	0.30			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2569***
Street:	148 Hennessy Drive			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

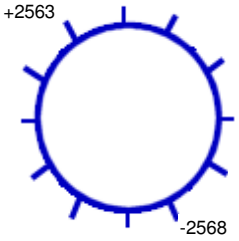
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	19	1

N



252 **Ft. to DS MH #:** 2568

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2563	08' 00"	8	VCP	3	0.30	0			2	First joint offset 0.5"
OUT TO	2568	08' 02"	8	VCP	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2571***
Street:	295 Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

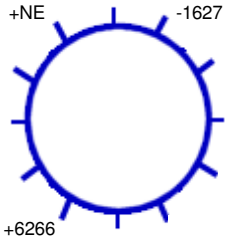
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



112 **Ft. to DS MH #:** 1627

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE									0	Bulkheaded
IN FROM	6266	09' 00"	24	PVC	10	0.70	0			1	
OUT TO	1627	09' 00"	24	VCP	3	0.70	0			3	Heavy mineral deposits

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2572***
Street:	285 Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/8/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

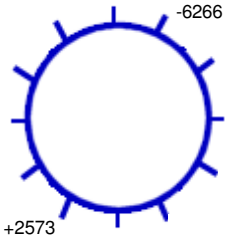
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	20	1

N



10 **Ft. to DS MH #:** 6266

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2573	08' 08"	24	VCP	3	0.20	0			2	Light mineral deposits at third and fourth joints
OUT TO	6266	09' 00"	24	PVC	10	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2573***
Street:	Allen Avenue at Knight Street			**Sub-System:**	***23***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

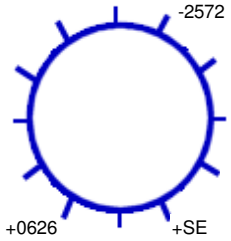
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	25	1

N



175 **Ft. to DS MH #:** 2572

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Debris catching in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

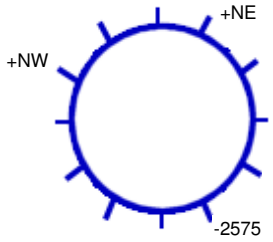
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 04"	8	VCP	3	0.40	0			1	
IN FROM	0626	08' 10"	24	VCP	3	0	0			2	Third joint offset by 3", light mineral deposits
OUT TO	2572	08' 10"	24	VCP	3	0.40	0			2	Light mineral deposits

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	2574
Street:	Casco Bay High School			**Sub-System:**	23
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



273 **Ft. to DS MH #:** 2575

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 3 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

10 **X** 4 **X** 0.3 **=** 12.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	5	2		Several leaks
INVERT	BRICK	5	2		Several leaks

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

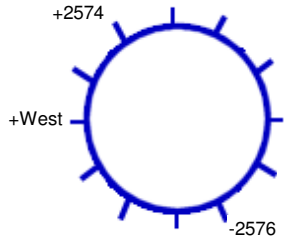
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	09' 10"	8	ACP		0.50	0			0	Stubbed
IN FROM	NW	09' 02"	8	ACP		0	0			0	Service
OUT TO	2575	09' 11"	8	ACP		1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2575***
Street:	Casco Bay High School			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



392 **Ft. to DS MH #:** 2576

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	05' 01"	8	ACP		0	0			1	Service
IN FROM	2574	05' 04"	8	ACP		1.50	0			1	
OUT TO	2576	05' 05"	8	ACP		1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2576***
Street:	Allen Avenue R.O.W.			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

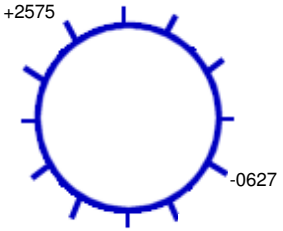
12 **X** 4 **X** 0.3 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



259 **Ft. to DS MH #:** 0627

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2575	05' 07"	8	ACP		1.50	0			0	
OUT TO	0627	05' 08"	8	ACP		1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3112***
Street:	Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

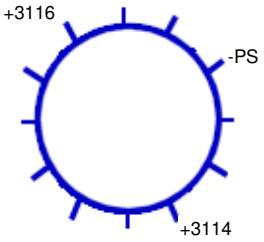
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3113***
Street:	Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



22 **Ft. to DS MH #:** PS

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Rags in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3114	08' 08"	8	PVC		0.20	0			0	
IN FROM	3116	08' 08"	8	PVC		0.50	0			0	
OUT TO	PS	08' 10"	8	PVC		0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3114***
Street:	115 Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

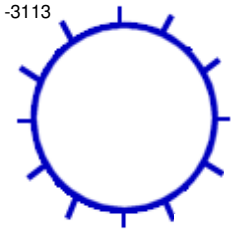
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



316 **Ft. to DS MH #:** 3113

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3113	07' 00"	8	PVC		0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3115***
Street:	192 Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

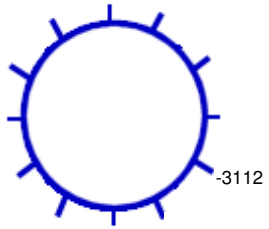
10 **X** 5 **X** 0.9 **=** 45.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



172 **Ft. to DS MH #:** 3112

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

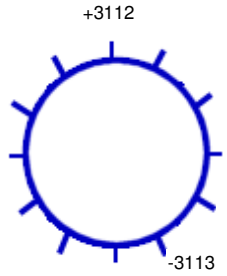
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3112	05' 09"	8	PVC		0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3116***
Street:	Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



123 **Ft. to DS MH #:** 3113

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3112	06' 11"	8	PVC		0.25	0			0	
OUT TO	3113	07' 00"	8	PVC		0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3122***
Street:	29 Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

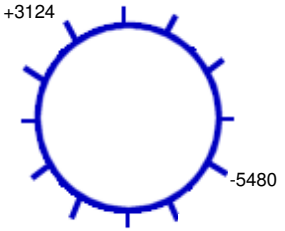
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



104 **Ft. to DS MH #:** 5480

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3124	06' 02"	8	PVC		0.30	0			0	
OUT TO	5480	06' 03"	8	PVC		0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3123***
Street:	43 Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

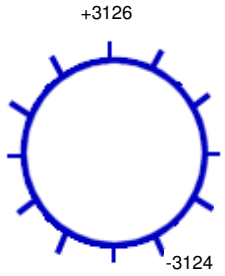
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



80 **Ft. to DS MH #:** 3124

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Chipped, missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Covered in mud
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

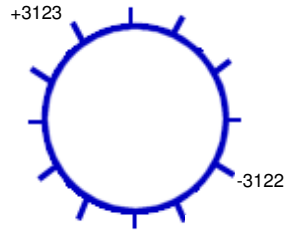
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3126	03' 07"	8	PVC		0.30	0			0	
OUT TO	3124	03' 08"	8	PVC		0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3124***
Street:	45 Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



158 **Ft. to DS MH #:** 3122

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Broken and missing brick, missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Debris
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3123	05' 03"	8	PVC		0.25	0			1	
OUT TO	3122	05' 04"	8	PVC		0.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3125***
Street:	80 Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N

+NE

-3126

108 **Ft. to DS MH #:** 3126

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Covered in dirt
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	04' 08"	2	PVC		0	0			1	Force main
OUT TO	3126	05' 01"	8	PVC		0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3126***
Street:	73 Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☑
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not open

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3127***
Street:	12 Delaware Court			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☑
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not open

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4434
Street:	237 Allen Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

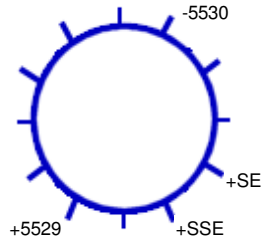
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



147 **Ft. to DS MH #:** 5530

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	VCP	2	0.4		0.2GPM leak at first joint, 0.2GPM leak at second joint

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	10' 06"	18	PVC	10	0.40	0			0	
IN FROM	SSE	10' 04"	10	PVC	10	0	0			0	
IN FROM	5529	11' 10"	24	VCP	3	0	0			0	
OUT TO	5530	12' 00"	24	VCP	3	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4487***
Street:	96 Pennell Avenue			**Sub-System:**	***23***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

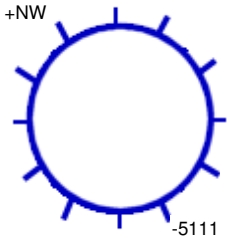
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	26	1

N



160 **Ft. to DS MH #:** 5111

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

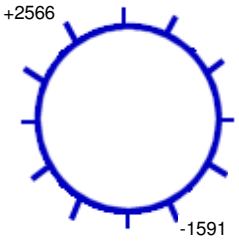
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	03' 03"	4	PVC	10	0	0			0	
OUT TO	5111	03' 05"	8	PVC	10	1.00	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4512
Street:	68 Hennessy Drive			**Sub-System:**	23
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



248 **Ft. to DS MH #:** 1591

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	20	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and missing brick, missing mortar
STEPS	STEEL	2			Missing mortar
WALLS	BRICK	1			
FLOOR	BRICK	3			Broken brick, missing mortar
INVERT	VCP	1			0.3" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2566	05' 03"	8	VCP	3	0.30	0.20			1	
OUT TO	1591	05' 03"	8	VCP	3	0.30	0.30			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4924***
Street:	90 Ruby Lane			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

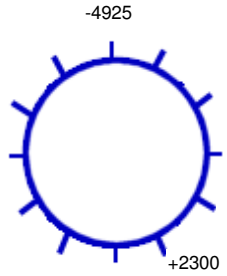
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



70 **Ft. to DS MH #:** 4925

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2300	13' 02"	8	PVC		0.50	0			1	
OUT TO	4925	13' 03"	8	PVC		0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4925***
Street:	94 Ruby Lane			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

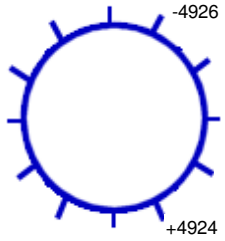
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



75 **Ft. to DS MH #:** 4926

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4924	10' 11"	8	PVC		0.75	0			1	
OUT TO	4926	11' 00"	8	PVC		0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4926***
Street:	102 Ruby Lane			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

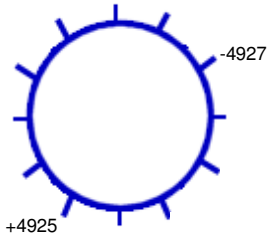
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



143 **Ft. to DS MH #:** 4927

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4925	10' 00"	8	PVC		0.75	0			0	
OUT TO	4927	10' 01"	8	PVC		0.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4927***
Street:	Ruby Lane at Plymouth Street			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

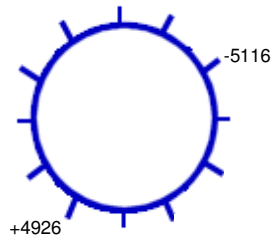
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



36 **Ft. to DS MH #:** 5116

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4926	08' 03"	8	PVC		0.75	0			1	
OUT TO	5116	08' 05"	8	PVC		0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4928***
Street:	71 Ruby Lane			**Sub-System:**	***23***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

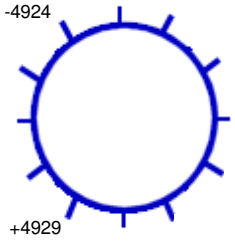
20 **X** 8 **X** 0.9 **=** 144.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



262 **Ft. to DS MH #:** 4924

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

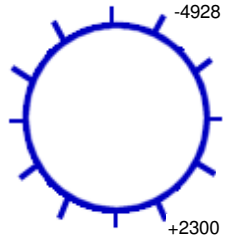
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4929	10' 00"	8	PVC		0.25	0			1	
OUT TO	4924	10' 01"	8	PVC		0.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 52 Ruby Lane
Manhole No.: 4929
Sub-System: 23
Inspection Date: 7/31/2019 **Inspector:** MS/JC **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



185 **Ft. to DS MH #:** 4928

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

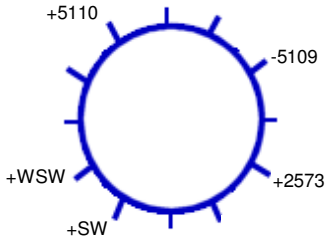
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2300	09' 10"	8	PVC		0.10	0			1	
OUT TO	4928	10' 00"	8	PVC		0.10	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5108***
Street:	21 Pennell Avenue			**Sub-System:**	***23***
Inspection Date:	8/9/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



14 **Ft. to DS MH #:** 5109

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	2			Missing brick and mortar
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

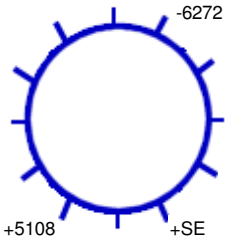
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	04' 11"								0	Bulkheaded
IN FROM	WSW	05' 10"								0	Bulkheaded
IN FROM	2573	05' 05"	8	VCP	3	0.10	0			1	
IN FROM	5110	05' 05"	10	VCP	3	1.50	0			1	
OUT TO	5109	06' 01"	20	VCP	3	1.50	1.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5109***
Street:	Short Street at Pennell Avenue			**Sub-System:**	***23***
Inspection Date:	8/9/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



143 **Ft. to DS MH #:** 6272

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	< NEW >					0	0			0	
IN FROM	SE	03' 08"	8	CMP	8	0	0			0	
IN FROM	5108	05' 09"	20	VCP	3	0.10	0.30			0	
OUT TO	6272	05' 11"	20	VCP	3	0.10	0.30			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5110***
Street:	Pennell Avenue at Cypress Street			**Sub-System:**	***23***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

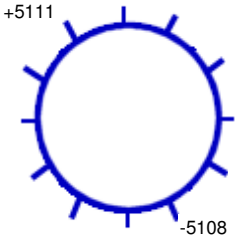
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



348 **Ft. to DS MH #:** 5108

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

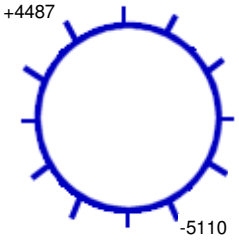
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5111	05' 07"	8	PVC	10	0.20	0			1	
OUT TO	5108	05' 08"	8	PVC	10	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5111***
Street:	84 Pennell Avenue			**Sub-System:**	***23***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



340 **Ft. to DS MH #:** 5110

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

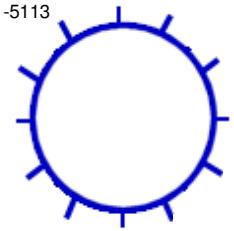
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4487	04' 03"	8	PVC	10	1.00	0			0	Standing flow
OUT TO	5110	04' 05"	8	PVC	10	1.00	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5112***
Street:	101 Pennell Avenue			**Sub-System:**	***23***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



350 **Ft. to DS MH #:** 5113

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

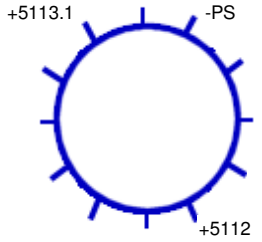
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5113	03' 07"	8	PVC	10	0	1.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5113***
Street:	128 Pennell Avenue			**Sub-System:**	***23***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



23 **Ft. to DS MH #:** PS

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5112	04' 06"	8	PVC	10	0.10	0			0	
IN FROM	5113.1	04' 06"	8	PVC	10	0.20	0			0	
OUT TO	PS	04' 08"	8	PVC	10	0.10	0			0	"SSNS-0019"

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5113.1***
Street:	137 Pennell Avenue			**Sub-System:**	***23***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

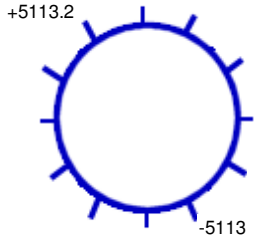
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



128 **Ft. to DS MH #:** 5113

General Comments: Unampped manhole - See revised map

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5113.2	04' 07"	8	PVC	10	0.20	0			0	
OUT TO	5113	04' 08"	8	PVC	10	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5113.2***
Street:	140 Pennell Avenue			**Sub-System:**	***23***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

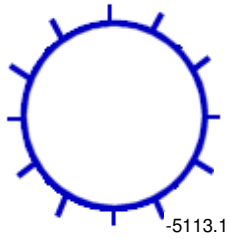
2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



43 **Ft. to DS MH #:** 5113.1

General Comments: Unmapped manhole - See revised map

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	PRECAST	1			
INVERT	PRECAST	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5113.1	04' 05"	8	PVC	10	0.30	0			0	Standing flow

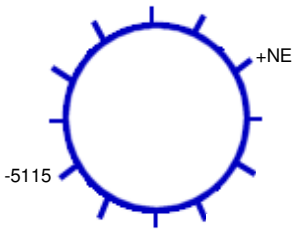
NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5114
Street:	11 Skylark Road			**Sub-System:**	23
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



257 **Ft. to DS MH #:** 5115

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	10	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

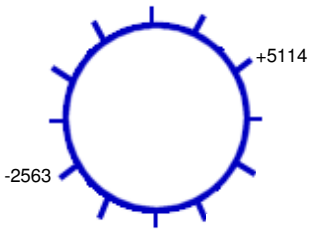
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 04"	8	VCP	3	0	0			1	Outside drop
OUT TO	5115	07' 06"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5115***
Street:	32 Skylark Road			**Sub-System:**	***23***
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



247 **Ft. to DS MH #:** 2563

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

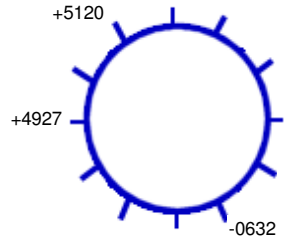
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5114	07' 01"	8	VCP	3	0.20	0			1	
OUT TO	2563	06' 11"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: Plymouth Street at Ruby Lane
Manhole No.: 5116
Sub-System: 23
Inspection Date: 8/1/2019 **Inspector:** MS/JC **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



251 **Ft. to DS MH #:** 0632

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 1 In.
Cracked pavement surrounding frame

COVER INFLOW POTENTIAL
Drainage Area 1:
4 **X** 2 **X** 0.9 **=** 7.2 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	5			Cracked, broken, missing pieces
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	3			Leak
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4927	09' 04"	8	PVC		0.50	0			0	
IN FROM	5120	09' 05"	8	ACP		0.50	0			0	
OUT TO	0632	09' 06"	8	ACP		2.00	0			0	Standing flow

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5117***
Street:	130 Plymouth Street			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

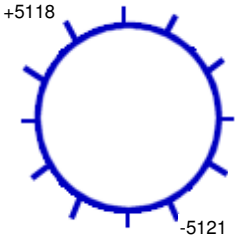
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



299 **Ft. to DS MH #:** 5121

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	4			Spacer connected to cover
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Covered in dirt
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5118	05' 05"	8	PVC		1.00	0			1	Outside drop
OUT TO	5121	09' 05"	8	PVC		1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5118***
Street:	138 Plymouth Street			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

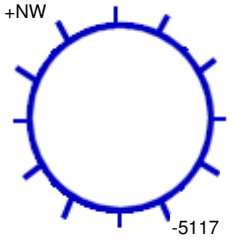
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



105 **Ft. to DS MH #:** 5117

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Covered in dirt
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

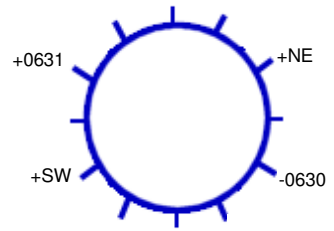
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	04' 08"	6	CIP		0	0			0	Force main
OUT TO	5117	04' 09"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: Plymouth Street at Allen Avenue
Manhole No.: 5119
Sub-System: 23
Inspection Date: 8/1/2019 **Inspector:** MS/JC **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



30 **Ft. to DS MH #:** 0630

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Covered in mud
STEPS	ALUM	1			
WALLS	BRICK	2			Covered in mud
FLOOR	BRICK	2			Wet
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	05' 05"	12	CPP		0	0			0	Catch basin
IN FROM	SW	05' 05"	12	CPP		0.25	0			0	Catch basin
IN FROM	0631	05' 00"	8	ACP		0.50	0			0	Outside drop
OUT TO	0630	06' 07"	10	ACP		0.50	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5120***
Street:	84 Plymouth Street			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

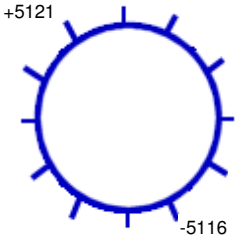
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



253 **Ft. to DS MH #:** 5116

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Spacer broken
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	3			Covered in dirt
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5121	08' 04"	8	ACP		0.50	0			0	
OUT TO	5116	08' 05"	8	ACP		0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5121***
Street:	Plymouth Street			**Sub-System:**	***23***
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	5122
Street:	Plymouth Street R.O.W.			**Sub-System:**	23
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

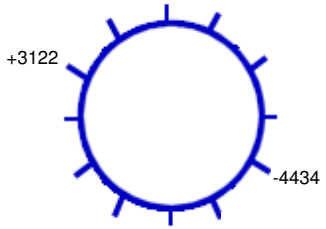
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5480
Street:	23 Delaware Court			**Sub-System:**	23
Inspection Date:	8/1/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



104 **Ft. to DS MH #:** 4434

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Covered in mud
INVERT	BRICK	2			Small blockage

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3122	06' 05"	8	PVC		0.30	0			0	
OUT TO	4434	06' 06"	8	PVC		0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5524
Street:	134 Allen Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

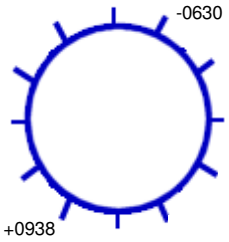
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



154 **Ft. to DS MH #:** 0630

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0938	09' 08"	15	VCP	3	0.20	0			1	
OUT TO	0630	09' 10"	18	VCP	3	0.20	0			3	Heavy mineral deposits

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5525***
Street:	152 Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

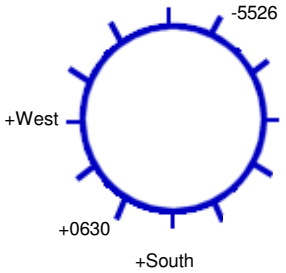
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--



97 **Ft. to DS MH #:** 5526

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

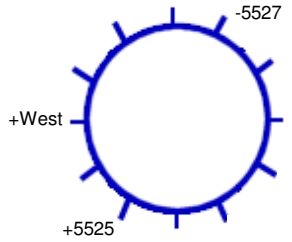
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	04' 10"	18	RCP	3	0	0			0	Storm drain
IN FROM	West	05' 06"	18	RCP	3	0	0			0	Storm drain
IN FROM	0630	08' 06"	24	VCP	3	0.20	0			0	
OUT TO	5526	08' 07"	24	VCP	3	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5526***
Street:	168 Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



244 **Ft. to DS MH #:** 5527

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West									0	Bulkheaded
IN FROM	5525	11' 05"	24	VCP	3	0.30	1.50			1	
OUT TO	5527	11' 07"	24	VCP	3	0.30	1.50			1	First joint offset by 1", second joint offset by 1.5"

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5527***
Street:	193 Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

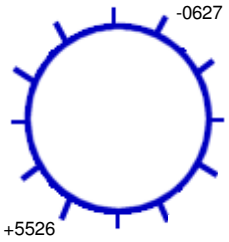
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



188 **Ft. to DS MH #:** 0627

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Debris catching, causing back-ups

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

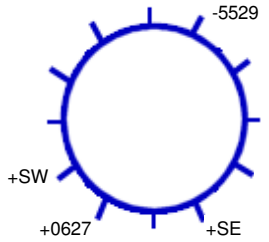
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5526	12' 00"	24	RCP	3	4.50	1.50			1	
OUT TO	0627	12' 02"	24	RCP	3	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5528
Street:	219 Allen Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



169 **Ft. to DS MH #:** 5529

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	13	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	05' 04"	12	RCP	3	0	0			1	Storm drain
IN FROM	SW	06' 06"	12	RCP	3	0	0			1	Storm drain
IN FROM	0627	09' 09"	24	VCP	3	1.50	0			1	
OUT TO	5529	09' 09"	24	VCP	3	1.50	0			2	Light mineral deposits

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5529***
Street:	221 Allen Avenue			**Sub-System:**	***23***
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

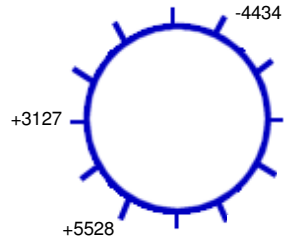
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



83 **Ft. to DS MH #:** 4434

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3127	10' 05"	10	VCP	3	0.20	0.50			0	
IN FROM	5528	10' 07"	24	VCP	3	0.30	0			0	
OUT TO	4434	10' 09"	24	VCP	3	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5530
Street:	247 Allen Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

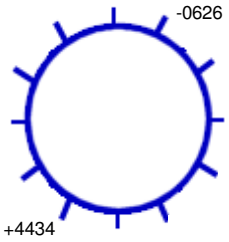
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--



149 **Ft. to DS MH #:** 0626

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			Debris catching

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

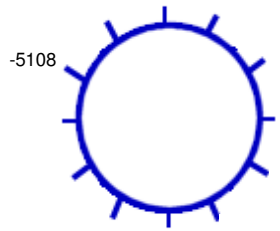
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4434	13' 08"	24	VCP	3	2.00	0.20			0	Moderate mineral deposits at third joint
OUT TO	0626	13' 10"	24	VCP	3	1.00	0			3	All joints offset up to 3"

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6104
Street:	16 Pennell Avenue			**Sub-System:**	23
Inspection Date:	8/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



140 **Ft. to DS MH #:** 5108

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5108	05' 05"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6112
Street:	88 Skylark Road			**Sub-System:**	23
Inspection Date:	8/5/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

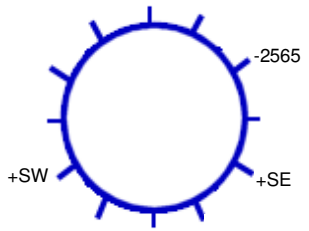
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



75 **Ft. to DS MH #:** 2565

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

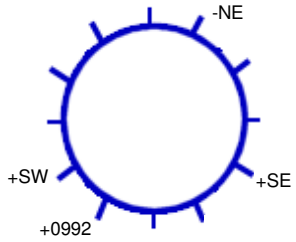
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	04' 02"	4	PVC	10	0	0			0	
IN FROM	SW	04' 02"	4	PVC	10	0	0			0	
OUT TO	2565	04' 06"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 327 Allen Avenue
Manhole No.: 6265
Sub-System: 23
Inspection Date: 8/6/2019 **Inspector:** JS/JG **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



109 **Ft. to DS MH #:** NE

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	32	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	2			Moderate mineral deposits
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 07"	36	CONC		0	0			1	36"x36" square pipe
IN FROM	SW									0	Bulkheaded
IN FROM	0992	07' 00"	28.5	LINED		0.90	0			1	
OUT TO	NE	07' 09"	14.5	LINED		0.90	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6266
Street:	292 Allen Avenue			**Sub-System:**	23
Inspection Date:	8/6/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

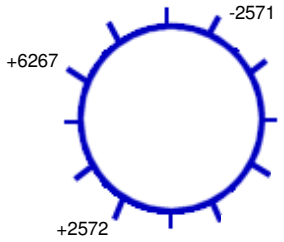
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



12 **Ft. to DS MH #:** 2571

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2572	08' 09"	24	PVC	10	0.20	0			0	
IN FROM	6267	08' 08"	14	PVC	10	0.20	0.30			0	
OUT TO	2571	08' 09"	24	PVC	10	0.40	0.30			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	6267
Street:	Short Street R.O.W.			**Sub-System:**	23
Inspection Date:	8/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	6268
Street:	Short Street R.O.W.			**Sub-System:**	23
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

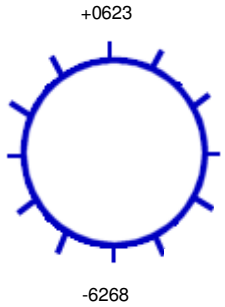
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6269***
Street:	53 Cypress Street			**Sub-System:**	***23***
Inspection Date:	8/9/2019	**Inspector:**	JS/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



228 **Ft. to DS MH #:** 6268

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

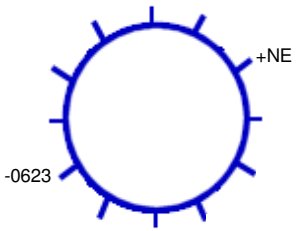
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0623	05' 00"	12	CPP	10	0.50	0			0	
OUT TO	6268	05' 02"	12	CPP	10	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6270
Street:	Cypress Street at Hennessy Drive			**Sub-System:**	23
Inspection Date:	8/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



22 **Ft. to DS MH #:** 0623

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

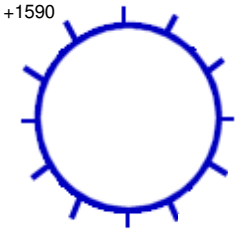
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	03' 04"	10	PVC	10	0	0			0	
OUT TO	0623	04' 06"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: Hennessy Drive at Cypress Street
Manhole No.: 6271
Sub-System: 23
Inspection Date: 8/5/2019 **Inspector:** JS/JG **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



36 **Ft. to DS MH #:** 0623

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.
Blind flange

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1590	03' 09"	8	PVC	10	0.20	0			0	
OUT TO	0623	03' 11"	8	PVC	10	0.20	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	6272
Street:	7 Short Street			**Sub-System:**	23
Inspection Date:	8/9/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

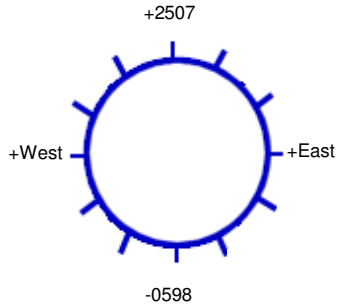
MANHOLE INSPECTION LOGS SUB-AREA 23A

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0597
Street:	46 Auburn Street			**Sub-System:**	23A
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



187 **Ft. to DS MH #:** 0598

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	13	1

General Comments: Manhole is in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	07' 02"	8	VCP	3	0	0			1	
IN FROM	West	05' 08"	6	VCP	3	0.10	0			1	
IN FROM	2507	07' 05"	10	VCP	3	0.10	0			1	
OUT TO	0598	07' 07"	12	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0598
Street:	Auburn Street			**Sub-System:**	23A
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Sealed shut

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0599
Street:	Auburn Street			**Sub-System:**	23A
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0991
Street:	1378 Washington Avenue Dunkin Donuts			**Sub-System:**	23A
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

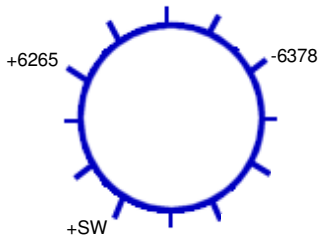
6 **X** 8 **X** 0.9 **=** 43.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



367 **Ft. to DS MH #:** 6378

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing brick, H2S deterioration
STEPS	CAST	5			Missing, heavy rust, corrosion
WALLS	PRECAST	1			
FLOOR	NONE	0			
INVERT	CNI	2			3" dirt, 0.2 standing flow

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	05' 09"	6	VCP	3	0.05	0			0	
IN FROM	6265	08' 09"	36	RCP	3	0.20	3.00			0	Standing flow
OUT TO	6378	08' 10"	36	RCP	3	0.20	3.00			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1543***
Street:	Washington Avenue at Allen Avenue			**Sub-System:**	***23A***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

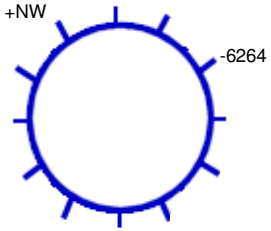
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



38 **Ft. to DS MH #:** 6264

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	PIP	2			Covered in dirt
INVERT	PIP	2			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	06' 03"	18	PVC		0.20	0			0	
OUT TO	6264	06' 04"	15	HDPE		0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*1546*
Street:	502 Allen Avenue			**Sub-System:**	*23A*
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Either buried or does not exist

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

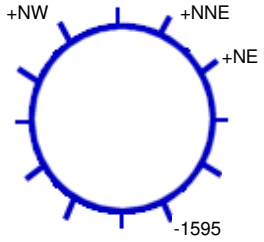
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1594***
Street:	114 Brook Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



165 **Ft. to DS MH #:** 1595

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	PARGED	3			Missing pieces
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 04"	6	PVC	8	0.25	0			1	Service
IN FROM	NNE	05' 00"								0	Old catch basin, bulkheaded
IN FROM	NW	08' 03"	4	CIP		0	0.50			1	Force main
OUT TO	1595	08' 05"	12	VCP	4	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1595***
Street:	99 Brook Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

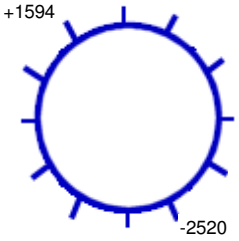
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

N



250 **Ft. to DS MH #:** 2520

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	2			Debris
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 3 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

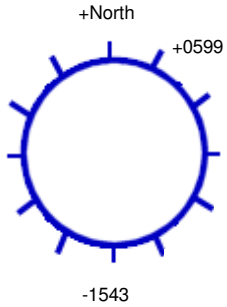
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1594	06' 06"	12	VCP	4	0.25	0			1	
OUT TO	2520	06' 07"	12	VCP	4	0.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	**2504**
Street:	Auburn Street at Washington Avenue			**Sub-System:**	**23A**
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



300 **Ft. to DS MH #:** 1543

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

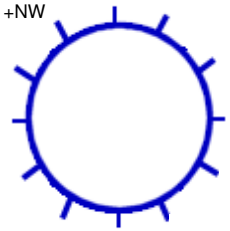
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	06' 00"	18	VCP	3	0.05	0			1	
IN FROM	0599	05' 11"	15	VCP	3	0.50	0			1	
OUT TO	1543	06' 00"	18	VCP	3	0.60	0.25			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2507***
Street:	72 Auburn Street			**Sub-System:**	***23A***
Inspection Date:	8/1/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



248 **Ft. to DS MH #:** 0597

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 4 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	5	1

General Comments: Manhole is in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	06' 04"	6	VCP	3	0.10	0			1	
OUT TO	0597	07' 04"	10	VCP	3	0	1.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2508***
Street:	Brook Road at Braeburn Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

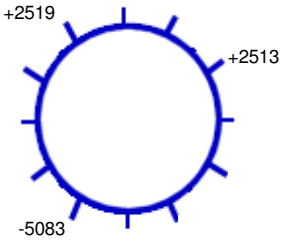
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

N



230 **Ft. to DS MH #:** 5083

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2513	09' 10"	15	VCP	4	1.00	0			1	
IN FROM	2519	09' 09"	15	VCP	4	1.00	0			1	
OUT TO	5083	10' 02"	20	VCP	4	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2509***
Street:	54 Cottage Park Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

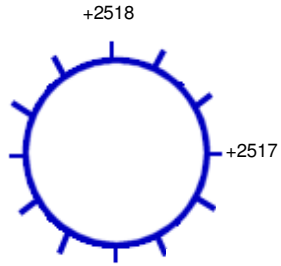
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	0.5

N



275 **Ft. to DS MH #:** 2510

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

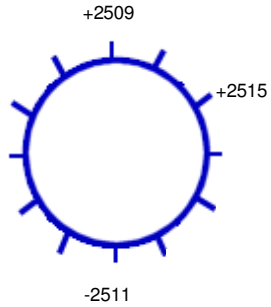
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2517	08' 03"	8	PVC		0	0			0	
IN FROM	2518	08' 02"	8	PVC		0.20	0			0	
OUT TO	2510	08' 04"	8	PVC		0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2510***
Street:	26 Cottage Park Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



240 **Ft. to DS MH #:** 2511

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

12 **X** 3 **X** 0.9 **=** 32.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2509	07' 02"	8	PVC		0.30	0			0	
IN FROM	2515	07' 02"	8	PVC		0.30	0			0	
OUT TO	2511	07' 03"	8	PVC		2.00	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2511***
Street:	25 Cottage Park Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

+2510

-2512

310 **Ft. to DS MH #:** 2512

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	**SIZE (In)**
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2510	07' 03"	8	PVC		0.70	0			0	
OUT TO	2512	07' 09"	12	PVC		1.00	0			0	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2512***
Street:	19 Cottage Park Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

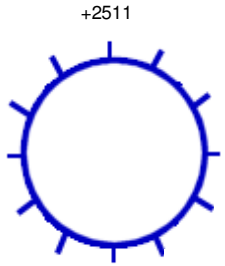
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



40 **Ft. to DS MH #:** 2513

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	2			Light roots
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2511	07' 01"	12	VCP	4	1.00	0			2	Roots
OUT TO	2513	07' 02"	15	VCP	4	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2513***
Street:	19 Cottage Park Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 3 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

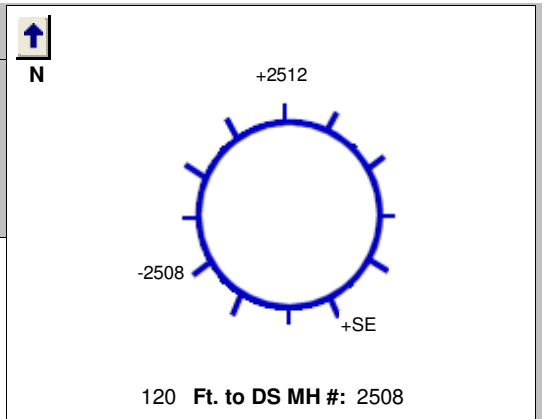
Drainage Area 1:

5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



120 **Ft. to DS MH #:** 2508

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 05"	8	VCP	4	0.20	0			1	Inside drop
IN FROM	2512	08' 05"	15	VCP	4	1.00	0			1	
OUT TO	2508	08' 06"	15	VCP	4	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*2514*
Street:	Braeburn Road			**Sub-System:**	*23A*
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Manhole does not exist - this is a drain manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2515***
Street:	25 Perch Street			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS.JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

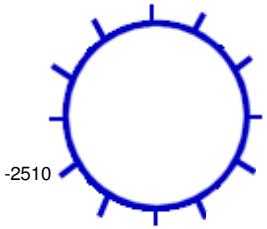
4 **X** 3 **X** 0.9 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



300 **Ft. to DS MH #:** 2510

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	2			Light debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2510	08' 08"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2516***
Street:	30 Shingle Way			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

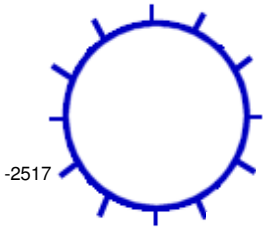
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	0.5

N



165 **Ft. to DS MH #:** 2517

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	LINED	1			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2517	07' 05"	8	PVC		0	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2517***
Street:	11 Shingle Way			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

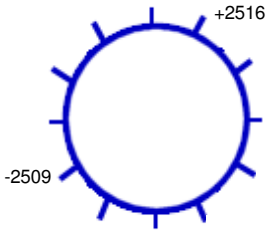
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	0.5

N



180 **Ft. to DS MH #:** 2509

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2516	07' 02"	8	PVC		0.20	0			0	
OUT TO	2509	07' 03"	8	PVC		0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2518***
Street:	70 Cottage Park Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

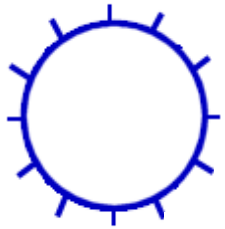
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	0.5

N



-2509

160 **Ft. to DS MH #:** 2509

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	LINED	1			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	2509	07' 11"	8	PVC		0	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2519***
Street:	60 Brook Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

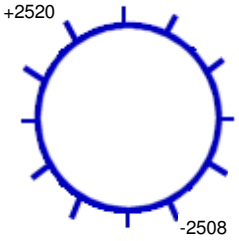
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



250 **Ft. to DS MH #:** 2508

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	CONCRETE	1			Riser
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	2			Covered in dirt
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2520	06' 07"	15	VCP	4	1.00	0			1	
OUT TO	2508	06' 08"	15	VCP	4	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2520***
Street:	82 Brook Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

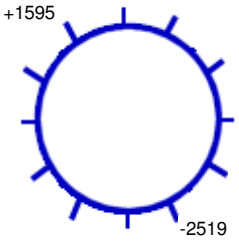
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

N



251 **Ft. to DS MH #:** 2519

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Broken and missing brick, missing mortar
STEPS	CAST	1			
WALLS	BRICK	2			Bricks offset
FLOOR	BRICK	2			Covered in dirt
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1595	07' 10"	12	VCP	4	0.50	0			1	
OUT TO	2519	07' 11"	12	VCP	4	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2544***
Street:	Northpoint Drive R.O.W.			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

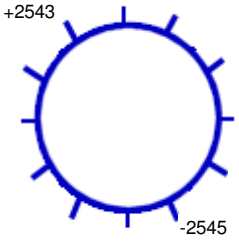
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

N



143 **Ft. to DS MH #:** 2545

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	2			Rusted
WALLS	BRICK	1			
FLOOR	PRECAST	1			
INVERT	PRECAST	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2543	13' 10"	48	CONC	15	4.00	0			1	
OUT TO	2545	14' 00"	48	CONC	15	4.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	**2545**
Street:	Allen Avenue at Northpoint Drive			**Sub-System:**	**23A**
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

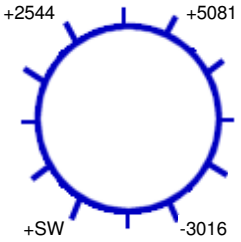
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



453 **Ft. to DS MH #:** 3016

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Corroded
WALLS	PRECAST	1			Muddy
FLOOR	NONE	0			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

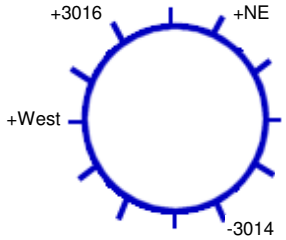
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	13' 00"	24	RCP		0.50	0			0	
IN FROM	2544	14' 03"	60	RCP		6.00	0			0	
IN FROM	5081	08' 06"	21	VCP		1.00	0			0	Outside drop
OUT TO	3016	14' 04"	60	RCP		6.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3015***
Street:	Northpoint Drive			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



270 **Ft. to DS MH #:** 3014

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	CAST	1			
WALLS	BRICK	2			Wet
FLOOR	PRECAST	1			
INVERT	PRECAST	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	07' 00"	6	CIP	8	0	0			1	Inside drop
IN FROM	West	06' 05"	6	PVC	8	0	0			1	Inside drop
IN FROM	3016	17' 06"	60	CONC	15	3.00	0			1	
OUT TO	3014	17' 07"	60	CONC	15	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3016***
Street:	Northpoint Drive			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

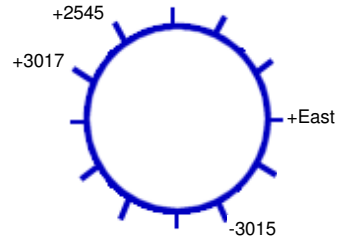
5 **X** 5 **X** 0.9 **=** 22.5 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

N



445 **Ft. to DS MH #:** 3015

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	PRECAST	1			
INVERT	PRECAST	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

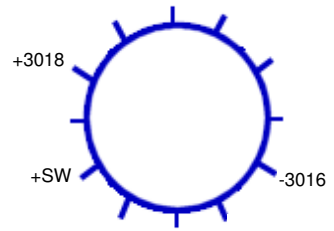
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	02' 06"	8	ACP	8	1.00	0			1	Service
IN FROM	2545	13' 08"	48	CONC	15	3.50	0			1	
IN FROM	3017	14' 09"	48	CONC	15	0.20	0			1	
OUT TO	3015	15' 05"	60	CONC	15	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3017***
Street:	Washington Avenue R.O.W.			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



42 **Ft. to DS MH #:** 3016

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	PRECAST	1			
INVERT	PRECAST	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW									0	Bulkheaded
IN FROM	3018	08' 09"	36	CONC		0.20	0			1	36"x48" rectangular pipe
OUT TO	3016	12' 09"	48	CONC	15	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3018***
Street:	Northpoint Drive R.O.W.			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	< NEW >					0	0				

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	3087
Street:	468 Allen Avenue			**Sub-System:**	23A
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

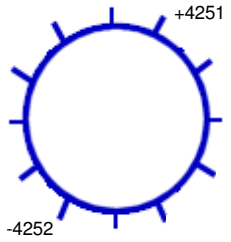
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



136 **Ft. to DS MH #:** 4252

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

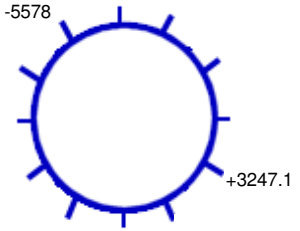
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4251	07' 00"	8	PVC		0	0			0	Outside drop
OUT TO	4252	09' 04"	12	VCP		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3247***
Street:	19 The Residences			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



297 **Ft. to DS MH #:** 5578

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	2

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3247.1	07' 03"	8	PVC		0	0			1	
OUT TO	5578	07' 04"	8	PVC		0.50	0			2	Leak above pipe

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3247.1***
Street:	26 The Residences			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

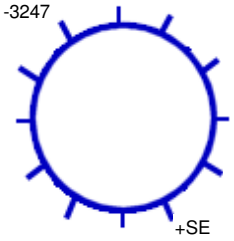
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



100 **Ft. to DS MH #:** 3247

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

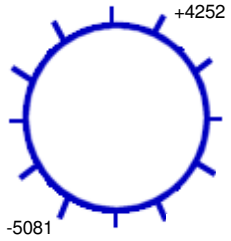
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 11"	6	PVC		0	0			1	Service
OUT TO	3247	08' 00"	8	PVC		0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	3248
Street:	427 Allen Avenue			**Sub-System:**	23A
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



262 **Ft. to DS MH #:** 5081

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	9	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Dirt
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4252	08' 08"	12	LINED	3	0.30	0			1	
OUT TO	5081	08' 09"	12	LINED	3	0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4250***
Street:	499 Allen Avenue			**Sub-System:**	***23A***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

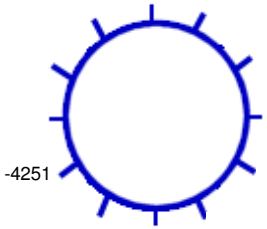
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



103 **Ft. to DS MH #:** 4251

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	2			Muddy
FLOOR	BRICK	2			Dirt and debris
INVERT	BRICK	2			Dirt and debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4251	08' 05"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4251***
Street:	502 Allen Avenue			**Sub-System:**	***23A***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

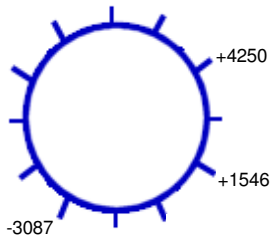
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



300 **Ft. to DS MH #:** 3087

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Dirt and debris
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

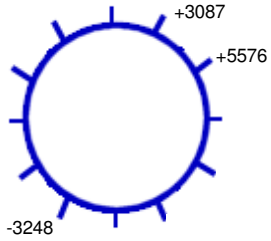
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1546	11' 00"	8	PVC		0	0			0	
IN FROM	4250	11' 02"	8	PVC		0	0			0	
OUT TO	3087	11' 04"	8	PVC		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4252***
Street:	459 Allen Avenue			**Sub-System:**	***23A***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



243 **Ft. to DS MH #:** 3248

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Dirt and debris
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

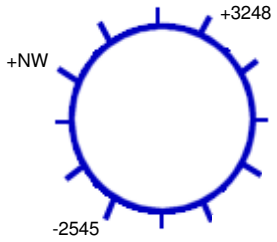
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3087	07' 10"	12	VCP	3	0	0			1	
IN FROM	5576	07' 09"	8	PVC	10	0.50	0			1	
OUT TO	3248	07' 11"	12	LINED	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Allen Avenue at Brook Road
Manhole No.: 5081
Sub-System: 23A
Inspection Date: 9/12/2019 **Inspector:** TG/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



322 **Ft. to DS MH #:** 2545

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	26	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	10' 05"	21	VCP	3	0.75	0			1	
IN FROM	3248	07' 11"	12	LINED		0.30	0			1	Inside drop
OUT TO	2545	10' 06"	21	VCP	3	0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5082***
Street:	14 Brook Road			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

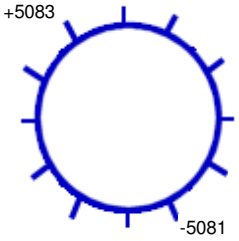
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



180 **Ft. to DS MH #:** 5081

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	2			Rusted
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

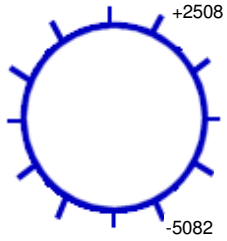
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5083	08' 10"	18	VCP	4	1.00	0			1	
OUT TO	5081	08' 11"	18	VCP	4	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	5083
Street:	18 Brook Road			**Sub-System:**	23A
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



45 **Ft. to DS MH #:** 5082

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	4	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	3			Blockage

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2508	07' 04"	18	VCP	4	3.00	0.50			2	Debris upstream
OUT TO	5082	07' 05"	18	VCP	4	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5576***
Street:	459 Allen Avenue			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL

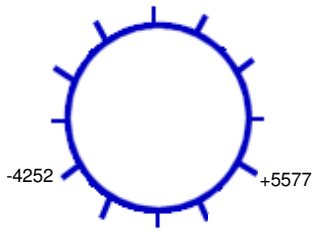
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1



30 **Ft. to DS MH #:** 4252

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	3			Broken
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5577	08' 04"	8	PVC		0.20	0			0	
OUT TO	4252	08' 05"	8	PVC		0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5577***
Street:	6 The Residences			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N

-5576

+5578

299 **Ft. to DS MH #:** 5576

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

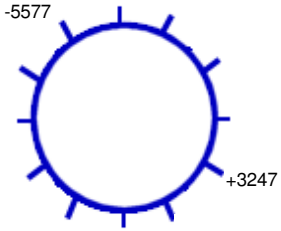
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5578	09' 03"	8	PVC		0.20	0			1	
OUT TO	5576	09' 04"	8	PVC		0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5578***
Street:	12 The Residences			**Sub-System:**	***23A***
Inspection Date:	7/31/2019	**Inspector:**	MS/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



225 **Ft. to DS MH #:** 5577

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3247	05' 11"	8	PVC		0.20	0			0	
OUT TO	5577	05' 10"	8	PVC		0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6264***
Street:	Allen Avenue at Washington Avenue			**Sub-System:**	***23A***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

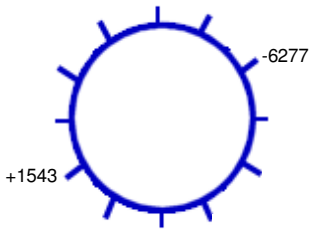
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

N



181 **Ft. to DS MH #:** 6277

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1543	06' 06"	18	HDPE		0.30	0			0	Very clear flow
OUT TO	6277	06' 07"	18	HDPE		1.00	0			0	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6275***
Street:	365 Allen Avenue			**Sub-System:**	***23A***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

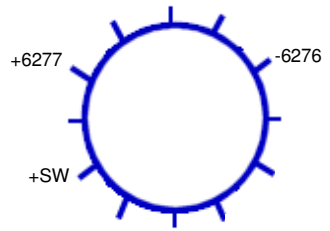
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	10	1

N



214 **Ft. to DS MH #:** 6276

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	09' 08"	18	HDPE	12	0.25	0			1	Outside drop
IN FROM	6277	10' 08"								0	Poorly bulkheaded, leaking 2 GPM
OUT TO	6276	12' 00"	24	RCP	4	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6276***
Street:	362 Allen Avenue			**Sub-System:**	***23A***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

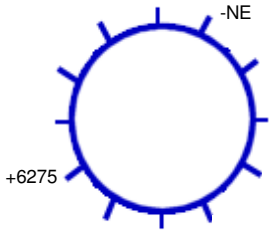
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



107 **Ft. to DS MH #:** NE

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6275	13' 02"	24	RCP		0.50	0			0	
OUT TO	NE	13' 03"	24	RCP		0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6277***
Street:	362 Allen Avenue			**Sub-System:**	***23A***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

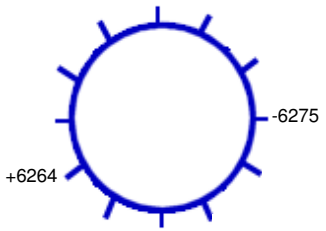
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--



36 **Ft. to DS MH #:** 6275

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	PIP	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6264	08' 04"	18	HDPE		0.10	0			0	
OUT TO	6275	08' 06"	18	HDPE		0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	6278
Street:	Allen Avenue			**Sub-System:**	23A
Inspection Date:	10/4/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

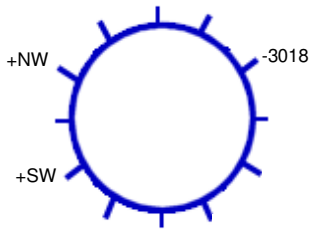
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Washington Avenue R.O.W.
Manhole No.: 6378
Sub-System: 23A
Inspection Date: 7/31/2019 **Inspector:** MS/JC **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



220 **Ft. to DS MH #:** 3018

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.3 **=** 1.2 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Offset
CORBEL	BRICK	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	PRECAST	1			
INVERT	PRECAST	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	04' 09"	6	ACP		0	0			1	Service
IN FROM	SW	06' 08"	36	CONC		0	0			1	36"x48" rectangular line
OUT TO	3018	06' 09"	36	CONC		0	0			1	36"x48" rectangular line

MANHOLE INSPECTION LOGS SUB-AREA 24

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2493***
Street:	1568 Washington Avenue			**Sub-System:**	***24***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

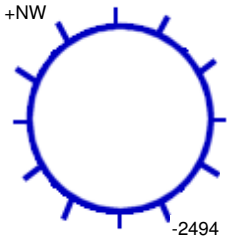
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



176 **Ft. to DS MH #:** 2494

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	09' 10"	18	VCP	3	2.00	0			1	Slow flow
OUT TO	2494	09' 11"	15	PVC	10	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2494***
Street:	1552 Washington Avenue			**Sub-System:**	***24***
Inspection Date:	9/12/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

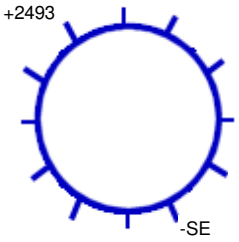
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



228 **Ft. to DS MH #:** SE

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2493	10' 10"	15	PVC		0.75	0			0	Fast flow
OUT TO	SE	10' 11"	15	PVC		0.75	0			0	Fast flow

MANHOLE INSPECTION LOGS SUB-AREA 27

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0016***
Street:	Washington Avenue at Byfield Road			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

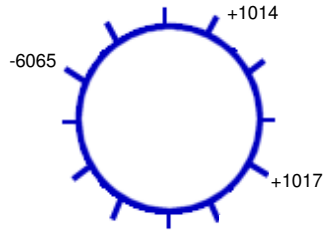
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



28 **Ft. to DS MH #:** 6065

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	CAST	4			Corroded
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	VCP	2			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1014	07' 07"	8	LINED		0.50	0			0	
IN FROM	1017	07' 10"	8	VCP		2.00	0			0	Slow flow
OUT TO	6065	07' 11"	8	VCP		2.00	0			0	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0112***
Street:	Lloyd Avenue at Victor Road			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

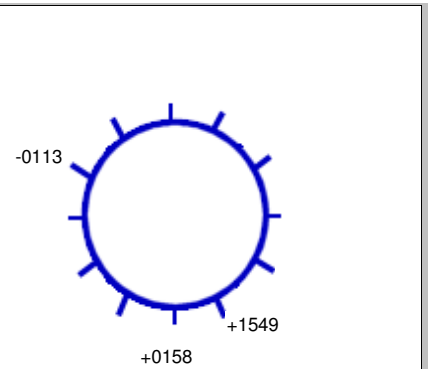
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--



General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0158	10' 11"	12	CPP	10	0.20	0			0	
IN FROM	1549	06' 09"	12	CPP	10	0.40	0			0	Outside drop
OUT TO	0113	11' 00"	12	CPP	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0113***
Street:	Fall Brook Easement			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 5 In.

Locking cover

COVER INFLOW POTENTIAL

Drainage Area 1:

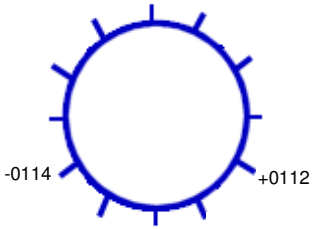
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



46 **Ft. to DS MH #:** 0114

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	NONE	0			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0112	04' 08"	12	RCP	3	0.20	0			0	
OUT TO	0114	05' 04"	18	RCP	3	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0114***
Street:	Tamarlane			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared/private property

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0130***
Street:	Tamarlane			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0131***
Street:	Tamarlane			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0132***
Street:	Pineledge Terrace R.O.W.			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0158***
Street:	83 Victor Road			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

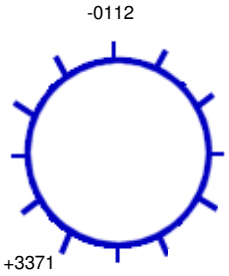
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N

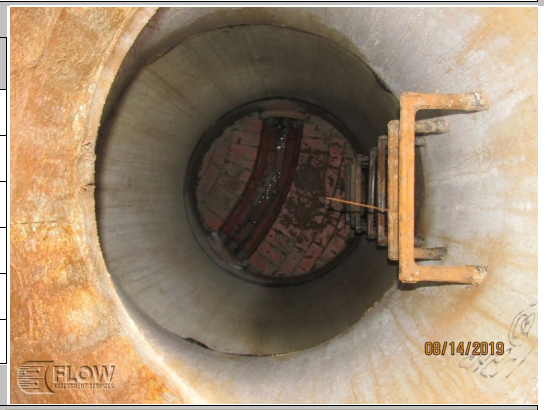


36 **Ft. to DS MH #:** 0112

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			



Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3371	10' 10"	12	CPP	10	0.20	0			0	
OUT TO	0112	10' 11"	12	CPP	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0159***
Street:	20 Lloyd Avenue			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

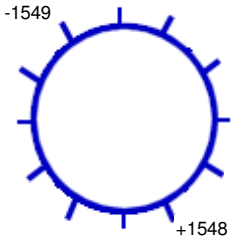
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



154 **Ft. to DS MH #:** 1549

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1548	06' 00"	8	PVC	10	0	0			0	
OUT TO	1549	06' 01"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0975***
Street:	Tamarlane			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared/private property

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0976
Street:	Pineledge Terrace R.O.W.			**Sub-System:**	27
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared/private property

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1014***
Street:	Byfield Road at Graham Terrace			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

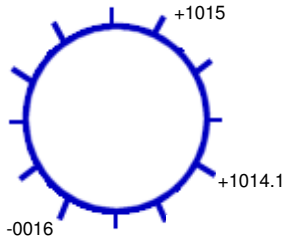
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



265 **Ft. to DS MH #:** 0016

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Loose
CORBEL	BRICK	1			
STEPS	CAST	2			Light rust, corrosion
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	PARGED	1			0.2" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

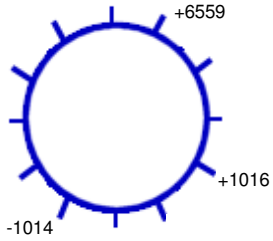
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1014.1	07' 08"	7.5	LINED		0.35	0			1	Standing flow, unmapped manhole
IN FROM	1015	07' 03"	8	VCP	3	0.20	0			1	
OUT TO	0016	07' 09"	7.5	LINED		0.35	0			1	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1015***
Street:	38 Byfield Road			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



181 **Ft. to DS MH #:** 1014

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	26	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1016	07' 06"	8	VCP	3	0.10	0			1	
IN FROM	6559	07' 07"	7.5	LINED		0.10	0			1	
OUT TO	1014	07' 08"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1016***
Street:	Slemons Road			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1017***
Street:	828 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

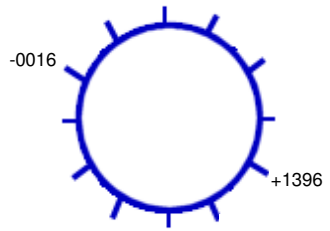
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



75 **Ft. to DS MH #:** 0016

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	CAST	4			Corroded
WALLS	PARGED	1			
FLOOR	PARGED	1			
INVERT	CNI	5			Blockage

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1396	07' 09"	8	VCP		6.00	0			0	Slow flow
OUT TO	0016	07' 10"	8	VCP		0.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1018***
Street:	855 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

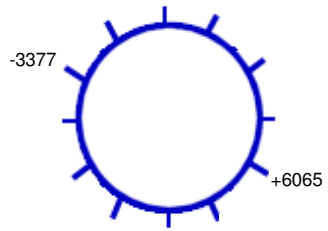
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



365 **Ft. to DS MH #:** 3377

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Debris
INVERT	CNI	5			Blockage

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6065	08' 04"	8	VCP	3	5.50	0.50			1	
OUT TO	3377	08' 05"	8	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	*1268*
Street:	1023 Washington Avenue			**Sub-System:**	*27*
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

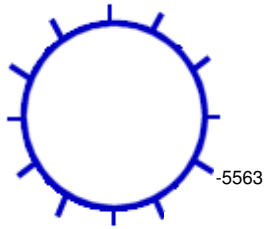
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



198 **Ft. to DS MH #:** 5563

General Comments: Starter manhole - map incorrect, shows incoming line from MH 1482 but that is not accurate.

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Corroded
WALLS	BRICK	1			
FLOOR	CNI	0			Covered in dirt
INVERT	CNI	0			Covered in dirt

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5563	08' 05"	8	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1396***
Street:	801 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

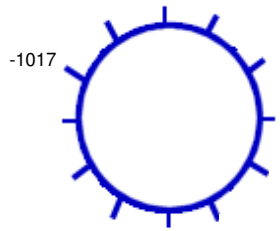
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



311 **Ft. to DS MH #:** 1017

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PARGED	1			
STEPS	CAST	5			Corroded
WALLS	PARGED	1			
FLOOR	CNI	2			Dirt and debris
INVERT	CNI	2			Dirt and debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1017	07' 08"	8	VCP		0	3.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1419***
Street:	66 Victor Road			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

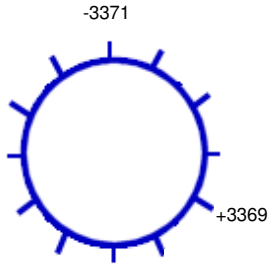
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



78 **Ft. to DS MH #:** 3371

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3369	07' 05"	12	CCP	10	0	0			0	
OUT TO	3371	07' 07"	12	CCP	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1420***
Street:	24 Victor Road			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

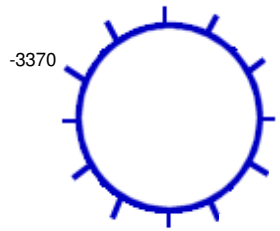
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



154 **Ft. to DS MH #:** 3370

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

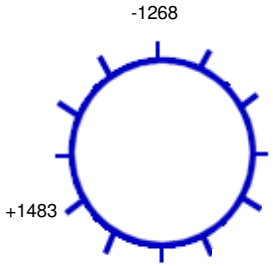
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3370	08' 05"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1482***
Street:	1024 Washington Avenue #4 Farmhouse condo			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



73 **Ft. to DS MH #:** 1268

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

6 **X** 6 **X** 0.9 **=** 32.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 2 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1483	07' 06"	8	PVC	10	0.50	0			0	
OUT TO	1268	07' 07"	8	PVC	10	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1483***
Street:	Washington Avenue Farmhouse condo			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

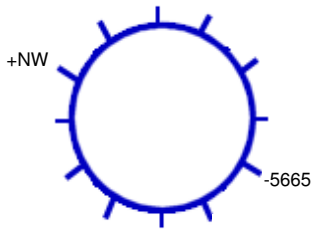
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	*1484*
Street:	104 Tamar Lane			**Sub-System:**	*27*
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



150 **Ft. to DS MH #:** 5665

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

10 **X** 10 **X** 0.9 **=** 90.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	05' 01"	6	PVC	10	0	0			0	
OUT TO	5665	05' 02"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1485***
Street:	Pineledge Terrace R.O.W.			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1486***
Street:	Pineledge Terrace R.O.W.			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1548***
Street:	10 Lloyd Avenue			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

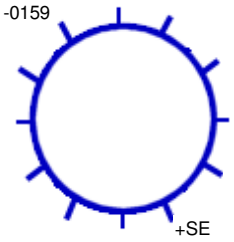
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



196 **Ft. to DS MH #:** 0159

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	06' 06"	8	PVC	10	0.20	0			0	
OUT TO	0159	06' 07"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1549***
Street:	Victor Road at Lloyd Avenue			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

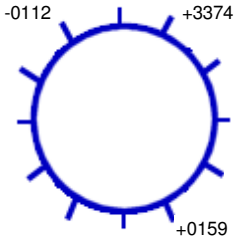
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



22 **Ft. to DS MH #:** 0112

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0159	06' 03"	8	PVC	10	0.30	0			0	
IN FROM	3374	06' 09"	8	PVC	10	0.30	0			0	
OUT TO	0112	07' 00"	12	CPP	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1552***
Street:	55 Malilly Road			**Sub-System:**	***27***
Inspection Date:	10/1/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N

+NW

-4451

245 **Ft. to DS MH #:** 4451

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust
WALLS	BRICK/PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	17' 05"	84	BRK		5.00	0			0	
OUT TO	4451	17' 06"	84	BRK		5.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	*1586*
Street:	Pheasant Hill Drive			**Sub-System:**	*27*
Inspection Date:	10/4/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2277***
Street:	Washington Avenue at Pheasant Hill Drive			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

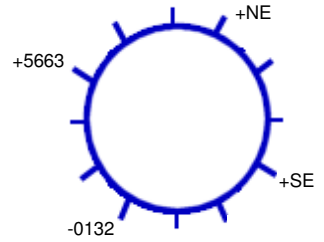
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



144 **Ft. to DS MH #:** 0132

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Corroded
WALLS	BRICK	2			Muddy
FLOOR	BRICK	2			Dirt and debris
INVERT	BRICK	2			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	11' 03"				0	0			0	Bulkheaded
IN FROM	SE	08' 00"				0	0			0	Bulkheaded
IN FROM	5663	10' 06"	10	VCP	3	1.50	0			1	Inside drop
OUT TO	0132	11' 04"	24	VCP	3	2.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3291***
Street:	Fall Brook Street at Washington Avenue			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

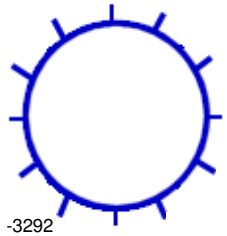
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	34	1

N



174 **Ft. to DS MH #:** 3292

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken, loose and missing brick, missing mortar
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	2			Deteriorating mortar
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3292	06' 07"	7.5	LINED		0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3292***
Street:	20 Fall Brook Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

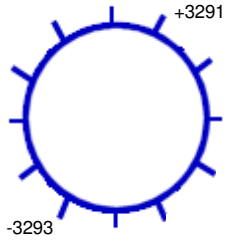
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	36	1

N



190 **Ft. to DS MH #:** 3293

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken, loose and missing brick, loose mortar
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3291	06' 05"	7.5	LINED		0	0			1	
OUT TO	3293	06' 06"	7.5	LINED		0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3293***
Street:	35 Fall Brook Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

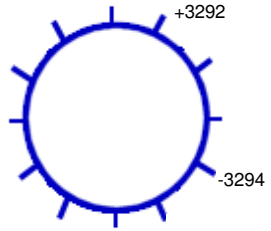
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



221 **Ft. to DS MH #:** 3294

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Loose brick, missing mortar
STEPS	CAST	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3292	10' 01"	7.5	LINED		0.30	0			1	
OUT TO	3294	10' 02"	7.5	LINED		0.30	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3294***
Street:	56 Fall Brook Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

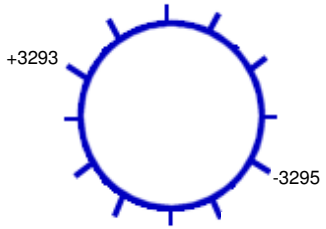
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	37	1

N



253 **Ft. to DS MH #:** 3295

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	2			Loose parging
STEPS	CAST	5			Completely rusted off
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			1" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3293	08' 01"	7.5	LINED		0.35	0			1	
OUT TO	3295	08' 03"	7.5	LINED		0.35	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3295***
Street:	69 Fall Brook Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.3 In.

COVER INFLOW POTENTIAL

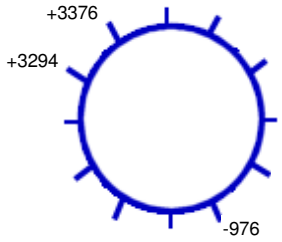
Drainage Area 1:

2 **X** 4 **X** 0.9 **=** 7.2 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	35	1



247 **Ft. to DS MH #:** 076

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PARGED	1			
STEPS	CAST	5			Broken, missing, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			4" debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3294	08' 04"	7.5	LINED		0.35	0			1	
IN FROM	3376	10' 03"	24	VCP	3	3.00	4.00			1	Slow flow
OUT TO	976	10' 04"	24	VCP	3	3.00	4.00			1	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3296***
Street:	970 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

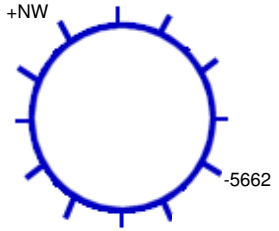
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



244 **Ft. to DS MH #:** 5662

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Dirt and debris
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	03' 00"				0	0			0	Bulkheaded
IN FROM	5562	08' 05"	10	VCP	3	1.50	0			2	Offset joints
OUT TO	5662	08' 06"	10	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3297***
Street:	Washington Avenue at Pheasant Hill Drive			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

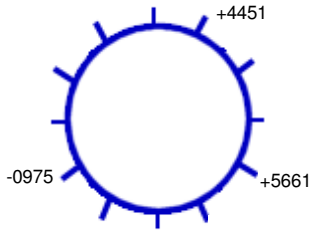
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



269 **Ft. to DS MH #:** 0975

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK/PRECAST	1			
FLOOR	NONE	0			
INVERT	RCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4451	19' 01"	84	RCP	4	8.00	0			1	
IN FROM	5661	08' 07"	8	VCP	3	1.50	0			1	Outside drop
OUT TO	0975	19' 03"	84	RCP	4	8.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3369***
Street:	51 Victor Road			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

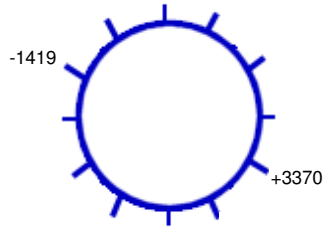
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



153 **Ft. to DS MH #:** 1419

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

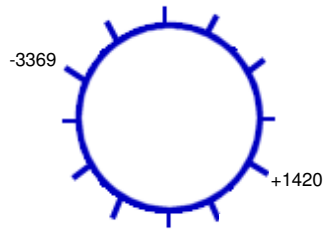
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3370	06' 05"	8	PVC	10	0	0			0	
OUT TO	1419	07' 00"	12	CPP	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3370***
Street:	32 Victor Road			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



199 **Ft. to DS MH #:** 3369

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame, blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1420	06' 09"	8	PVC	10	0	0			0	
OUT TO	3369	07' 00"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3371***
Street:	78 Victor Road			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

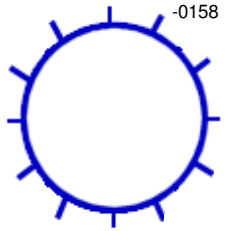
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



170 **Ft. to DS MH #:** 0158

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

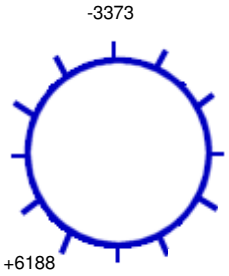
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1419	08' 04"	12	CCP	10	0	0			0	
OUT TO	0158	08' 07"	12	CCP	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3372***
Street:	37 Vera Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



59 **Ft. to DS MH #:** 3373

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6188	06' 06"	8	PVC	10	0	0			0	
OUT TO	3373	06' 07"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3373***
Street:	43 Vera Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

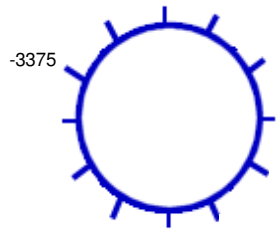
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--



346 **Ft. to DS MH #:** 3375

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

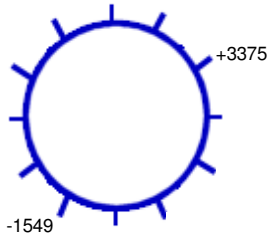
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3372	08' 03"	8	PVC	10	0	0			0	
OUT TO	3375	08' 04"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3374***
Street:	75 Vera Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



214 **Ft. to DS MH #:** 1549

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3375	07' 04"	8	PVC	10	0	0			0	
OUT TO	1549	07' 05"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3375***
Street:	71 Vera Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

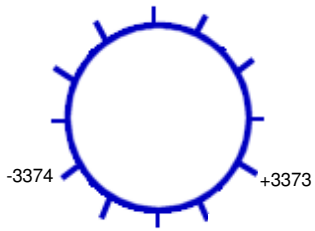
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



49 **Ft. to DS MH #:** 3374

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3373	07' 07"	8	PVC	10	0	0			0	
OUT TO	3374	07' 08"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***3376***
Street:	Fall Brook Street R.O.W.			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3377***
Street:	886 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

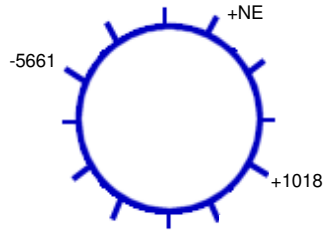
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



257 **Ft. to DS MH #:** 5661

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	2			Mineral deposits
FLOOR	BRICK	2			Dirt and debris
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	03' 09"	1	CIP		0	0			1	Possibly abandoned
IN FROM	1018	08' 01"	8	VCP	3	1.00	0			1	
OUT TO	5661	08' 02"	8	VCP	3	1.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4426***
Street:	21 Tamarlane Apartments			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

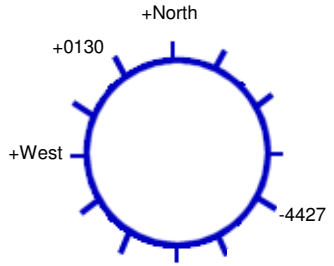
12 **X** 5 **X** 0.9 **=** 54.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



304 **Ft. to DS MH #:** 4427

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

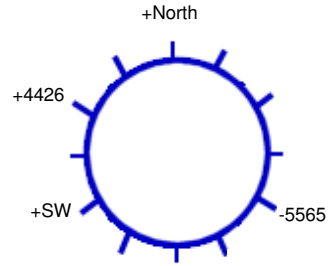
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	07' 06"	8	PVC	10	0.50	0			0	Slow flow
IN FROM	West	07' 06"	6	PVC	10	0	0			0	
IN FROM	0130	07' 06"	8	PVC	10	0.20	0			0	
OUT TO	4427	07' 07"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4427
Street:	37 Tamarlane Apartments			**Sub-System:**	27
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



295 **Ft. to DS MH #:** 5565

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 8 **X** 0.9 **=** 28.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

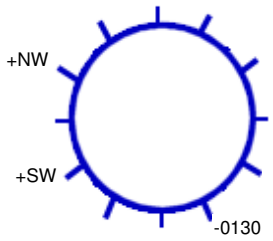
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	06' 00"	6	PVC	10	0	0			0	
IN FROM	SW	06' 00"	6	PVC	10	0	0			0	
IN FROM	4426	06' 00"	8	PVC	10	0.30	0			0	
OUT TO	5565	06' 01"	8	PVC	10	0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4428
Street:	8 Tamarlane Apartments			**Sub-System:**	27
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



242 **Ft. to DS MH #:** 0130

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	06' 08"	6	PVC	10	0	0			0	
IN FROM	SW	06' 08"	6	PVC	10	0	0			0	
OUT TO	0130	06' 09"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	4451
Street:	Washington Avenue R.O.W.			**Sub-System:**	27
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Buried under baseball field

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS

Image Path:

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5562***
Street:	985 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

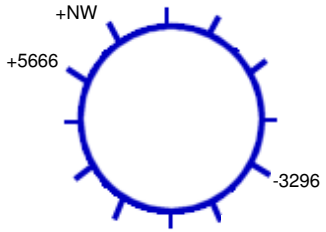
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



221 **Ft. to DS MH #:** 3296

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Dirt and debris
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

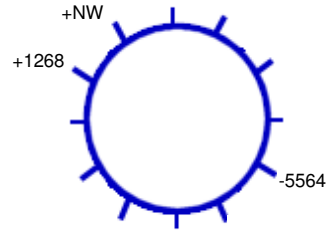
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	03' 00"				0	0			0	Bulkheaded
IN FROM	5666	08' 05"	10	VCP	3	1.50	0			2	Offset joints
OUT TO	3296	08' 06"	10	VCP	3	1.50	0			2	Offset joints

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 1007 Washington Avenue
Manhole No.: 5563
Sub-System: 27
Inspection Date: 9/11/2019 **Inspector:** TG/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



90 **Ft. to DS MH #:** 5564

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Broken and missing brick, loose and missing mortar
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Mud and debris
INVERT	VCP	2			Holding solids, piece of concrete in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	03' 01"				0	0			0	Bulkheaded
IN FROM	1268	08' 05"	10	VCP	3	4.00	2.00			2	Slow flow, misaligned joints
OUT TO	5564	08' 06"	10	VCP	3	2.50	0.50			1	Slow flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5564***
Street:	997 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL

Drainage Area 1:

X **X** 0.9 **=** **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path:

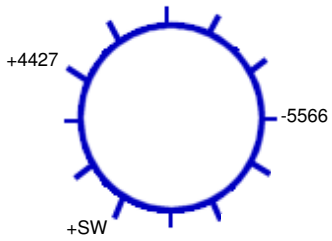
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5565***
Street:	46 Tamarlane Apartments			**Sub-System:**	***27***
Inspection Date:	8/14/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



286 **Ft. to DS MH #:** 5566

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	05' 02"	6	PVC	10	0	0			0	
IN FROM	4427	05' 02"	8	PVC	10	0.50	0			0	
OUT TO	5566	05' 03"	8	PVC	10	0.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5566***
Street:	Tamarlane			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared/private property

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5661***
Street:	904 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

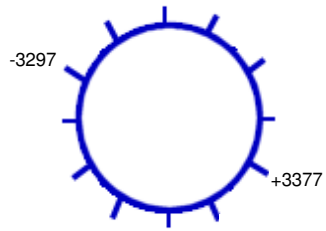
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



238 **Ft. to DS MH #:** 3297

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	4			Corroded
WALLS	BRICK	2			Broken brick, missing mortar
FLOOR	BRICK	1			
INVERT	VCP	2			Catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3377	08' 00"	8	VCP	3	1.50	0			2	Offset joint
OUT TO	3297	08' 01"	8	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5662***
Street:	956 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

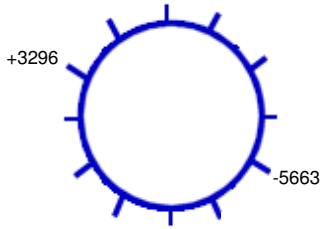
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



240 **Ft. to DS MH #:** 5663

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Dirt and debris
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3296	08' 05"	10	VCP	3	2.00	0			2	Offset joint
OUT TO	5663	08' 06"	10	VCP	3	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5663***
Street:	936 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

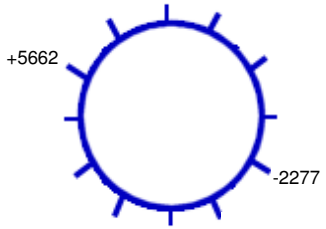
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



38 **Ft. to DS MH #:** 2277

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	4			Corroded
WALLS	BRICK	1			
FLOOR	BRICK	2			Dirt and debris
INVERT	VCP	3			Roots at incoming line

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5662	09' 04"	10	VCP	3	1.50	0			1	Inside drop
OUT TO	2277	10' 02"	10	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5665***
Street:	Tamarlane			**Sub-System:**	***27***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5666***
Street:	997 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

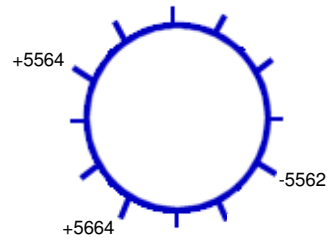
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



95 **Ft. to DS MH #:** 5562

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	2			Dirt and debris
INVERT	BRICK	2			Holding solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5564	08' 05"	10	PVC		1.00	0			0	
IN FROM	5664	08' 05"	8	PVC		2.00	0			0	Slow flow
OUT TO	5562	08' 06"	10	PVC		1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6065***
Street:	836 Washington Avenue			**Sub-System:**	***27***
Inspection Date:	9/11/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

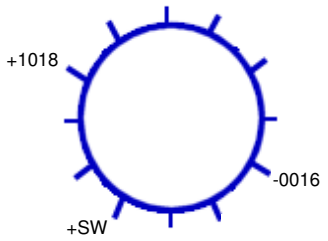
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



192 **Ft. to DS MH #:** 1018

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK/VCP	3			Missing piece, catching solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	06' 09"	6	PVC		0.25	0			0	
IN FROM	1018	07' 10"	8	VCP		0.50	0			0	
OUT TO	0016	07' 11"	8	VCP		1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6188***
Street:	3 Vera Street			**Sub-System:**	***27***
Inspection Date:	8/16/2019	**Inspector:**	JC/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

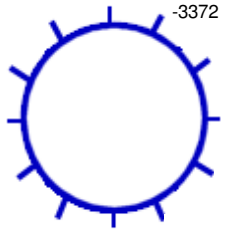
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



71 **Ft. to DS MH #:** 3372

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

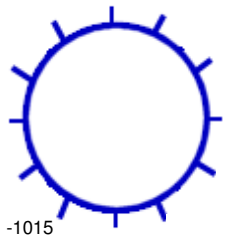
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	3372	04' 08"	8	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 39 Byfield Road
Manhole No.: 6559
Sub-System: 27
Inspection Date: 8/16/2019 **Inspector:** JC/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



80 **Ft. to DS MH #:** 1015

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 0.5 In.
Blind flange

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	PVC	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	1015	07' 04"	7.5	LINED		0	0			0	

NOTE: This inspection was performed from the surface without entering the manhole.

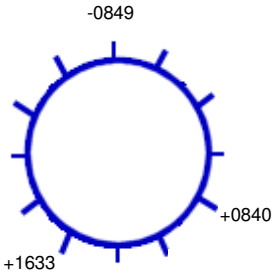
MANHOLE INSPECTION LOGS SUB-AREA 28

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0193***
Street:	159 Beverly Street			**Sub-System:**	***28***
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



55 **Ft. to DS MH #:** 0849

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0840	10' 02"	8	PVC	10	0.50	0			0	Standing flow
IN FROM	1633	10' 02"	8	PVC	10	0.40	0			0	
OUT TO	0849	10' 03"	8	PVC	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0194
Street:	Riverside Street R.O.W.			**Sub-System:**	28
Inspection Date:	7/18/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0581***
Street:	57 Beverly Street			**Sub-System:**	***28***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 60 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

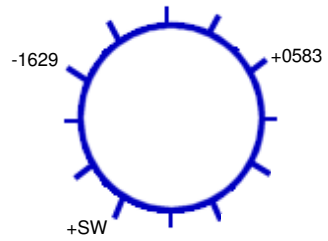
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	34	1

N



262 **Ft. to DS MH #:** 1629

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	STEEL	2			Light rust
WALLS	BRICK/PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	10' 07"	12	VCP	3	2.00	0			0	
IN FROM	0583	10' 09"	15	VCP	3	2.00	0			0	
OUT TO	1629	11' 00"	18	VCP	3	1.50	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0582
Street:	Miliken Street R.O.W.			**Sub-System:**	28
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Cound not open - cover sealed shut with concrete

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS

Image Path:

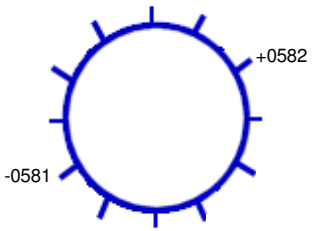
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0583
Street:	Miliken Street R.O.W.			**Sub-System:**	28
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



210 **Ft. to DS MH #:** 0581

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 16 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	18	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	ALUM	1			
WALLS	BRICK	3	0.5		Leak, broken brick, missing mortar, mineral deposits, roots
FLOOR	BRICK	2			Covered in broken brick from corbel
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

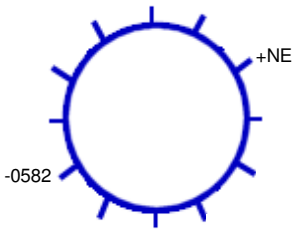
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0582	08' 09"	16	VCP	3	1.00	0			1	
OUT TO	0581	08' 10"	16	VCP	3	0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0585***
Street:	Regan Lane Easement			**Sub-System:**	***28***
Inspection Date:	10/2/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



187 **Ft. to DS MH #:** 0582

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 24 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

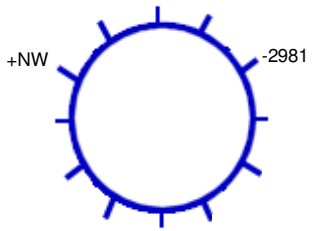
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 08"	15	VCP	3	4.00	2.00			0	
OUT TO	0582	08' 09"	15	VCP	3	4.00	2.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0833***
Street:	1158 Riverside Street			**Sub-System:**	***28***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



215 **Ft. to DS MH #:** 2981

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	28	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	2			Mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

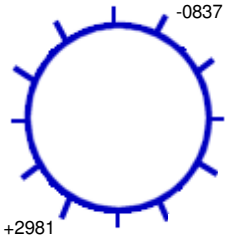
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	14' 08"	8	VCP		0.20	0			0	
OUT TO	2981	15' 03"	10	VCP		0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0834***
Street:	1064 Riverside Street			**Sub-System:**	***28***
Inspection Date:	10/1/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



201 **Ft. to DS MH #:** 0837

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	18	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

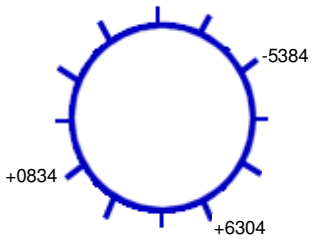
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2981	15' 07"	15	VCP	3	0.50	1.00			0	
OUT TO	0837	15' 08"	15	VCP	3	0.50	1.00			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0837
Street:	95 Riverside Street			**Sub-System:**	28
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



174 **Ft. to DS MH #:** 5384

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Bottom 5' of manhole is brick

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	BRICK/PRECAST	2			Brick section wet, however no visible leaks
FLOOR	BRICK	2			Debris
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0834	14' 00"	10	VCP		0.50	0			0	Outside drop
IN FROM	6304	18' 09"	24	RCP		6.50	0			0	
OUT TO	5384	18' 10"	24	RCP		6.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0839***
Street:	174 Milton Street			**Sub-System:**	***28***
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

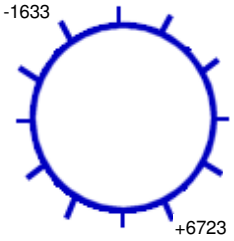
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



148 **Ft. to DS MH #:** 1633

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6723	07' 00"	8	PVC	10	0.20	0			0	
OUT TO	1633	07' 02"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	0840
Street:	139 Beverly Street			**Sub-System:**	28
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☑

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

X X 0.9 = (SQFT)

Drainage Area 2: (if applicable)

X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Could not open

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

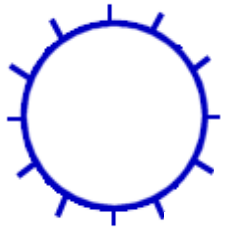
Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0849
Street:	159 Beverly Street			**Sub-System:**	28
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

-5398



+0193

86 **Ft. to DS MH #:** 5398

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 8 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

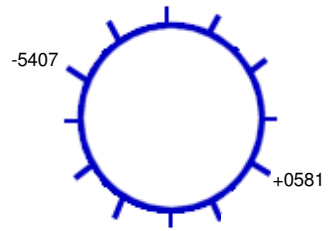
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0193	17' 00"	8	PVC	10	0.30	0			0	
OUT TO	5398	23' 06"	8	PVC	10	0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	*1629*
Street:	Miliken Street R.O.W.			**Sub-System:**	*28*
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



230 **Ft. to DS MH #:** 5407

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 65 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

General Comments: Unable to enter manhole - precast section added made entry unsafe - nowhere to put cover, feared it might fall over

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	4			Precast section just set over mannhole was not sealed
STEPS	NONE	0			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0581	11' 05"	18	VCP	3	1.50	0			1	
OUT TO	5407	11' 06"	18	VCP	3	1.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1630***
Street:	Miliken Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 38 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

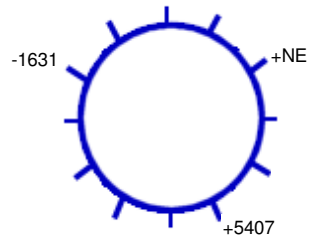
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

N



210 **Ft. to DS MH #:** 1631

General Comments: Unable to safely carry tripod down hill to manhole, or to set it up - surface inspection performed due to these restrictions.

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	NONE	0			
WALLS	BRICK/PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	09' 00"	6	CIP		0	0			0	
IN FROM	5407	09' 07"	18	RCP		1.50	0			0	
OUT TO	1631	09' 08"	18	VCP		1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1631***
Street:	Miliken Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	9/18/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 39 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

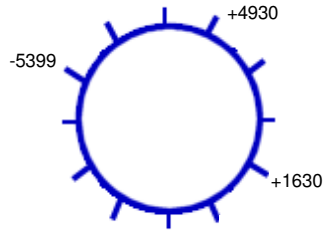
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

N



210 **Ft. to DS MH #:** 1630

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	NONE	0			
WALLS	BRICK/PRECAST	1			
FLOOR	BRICK	3	1		Mineral deposits, leak, loose and missing bricks, missing mortar
INVERT	VCP	2			Mineral deposits

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1630	09' 11"	18	VCP		2.00	0			0	
IN FROM	4930	09' 00"	8	ACP		1.00	0			0	
OUT TO	5399	10' 00"	18	VCP		2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1632***
Street:	159 Beverly Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

N

-4932

+5399

+5398

219 **Ft. to DS MH #:** 4932

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	STEEL	1			
WALLS	BRICK	4	5		4 leaks, heavy mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			Light mineral deposits

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

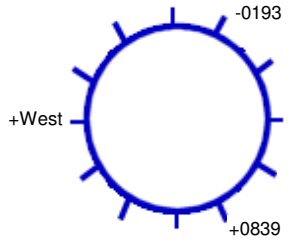
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5398	08' 04"	8	PVC	10	0.40	0			1	
IN FROM	5399	09' 08"	15	VCP	3	2.00	0			1	
OUT TO	4932	09' 11"	15	VCP	3	2.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***1633***
Street:	192 Milton Street			**Sub-System:**	***28***
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



134 **Ft. to DS MH #:** 0193

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 6 **X** 0.9 **=** 27.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments: Manhole is in gutterline

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	06' 11"	4	PVC	10	0	0			0	
IN FROM	0839	07' 00"	8	PVC	10	0.10	0			0	
OUT TO	0193	07' 01"	8	PVC	10	0.10	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2981***
Street:	1158 Riverside Street			**Sub-System:**	***28***
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

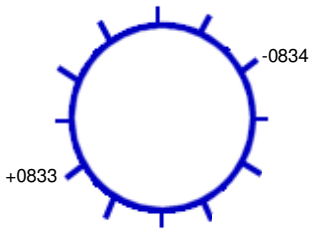
4 **X** 5 **X** 0.9 **=** 18.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



215 **Ft. to DS MH #:** 0834

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	2			Mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	2			Holding solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0833	14' 08"	10	VCP		0.20	0			0	
OUT TO	0834	14' 09"	10	VCP		0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	2993
Street:	232 Riverside Industrial Parkway			**Sub-System:**	28
Inspection Date:	10/1/2019	**Inspector:**	JS/RV	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 42 In.

COVER INFLOW POTENTIAL

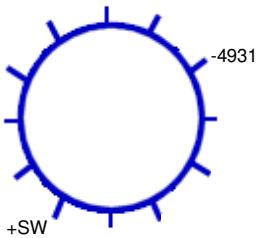
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1



204 **Ft. to DS MH #:** 4931

General Comments: Manhole is in brook. Aggregate showing and broken pieces on outside upper portion of wall - See image

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	ALUM	1			
WALLS	BRICK/PRECAST	4	0.1		Moderate mineral deposits, missing mortar, leaking at joints
FLOOR	BRICK/PARGED	1			
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	South	04' 01"	4	CIP	8	0.10	0			0	Inside drop
IN FROM	SW	13' 02"	15	ACP	3	3.00	1.00			0	
OUT TO	4931	13' 02"	15	ACP	3	3.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2997***
Street:	376 Riverside Industrial Parkway			**Sub-System:**	***28***
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 8 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

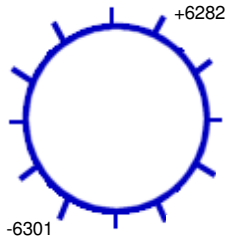
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	0.75

N



238 **Ft. to DS MH #:** 6301

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM/CAST	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

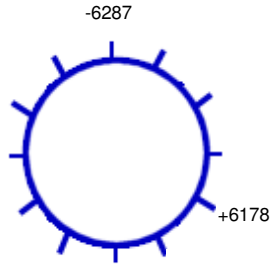
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6282	12' 00"	10	VCP		1.00	0			0	
OUT TO	6301	12' 04"	10	VCP		0.75	0			0	Fast flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	2998
Street:	Riverside Street R.O.W.			**Sub-System:**	28
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



271 **Ft. to DS MH #:** 6287

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 12 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	12	1

General Comments: Colony of what appears to be black widows in manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and missing brick, missing mortar
STEPS	CAST	1			
WALLS	BRICK	2	0.5		Leak, light roots, mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 6 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

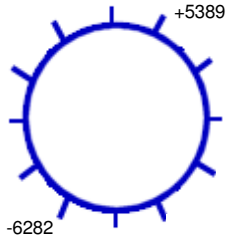
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6178	13' 06"	24	VCP	3	6.00	0			1	
OUT TO	6287	13' 07"	24	VCP	3	6.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	2999
Street:	430 Riverside Industrial Parkway			**Sub-System:**	28
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



179 **Ft. to DS MH #:** 6282

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

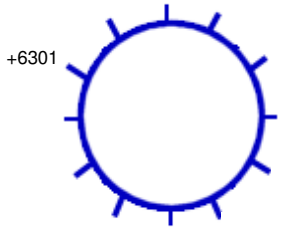
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5389	12' 03"	10	VCP		1.00	0			0	
OUT TO	6282	12' 04"	10	VCP		1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	3000
Street:	25 Rice Street			**Sub-System:**	28
Inspection Date:	6/12/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



320 **Ft. to DS MH #:** 6301

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 4 In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

10 **X** 20 **X** 0.9 **=** 180.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	19	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	5	0.1		Leak, missing brick and mortar, broken brick, loose pieces
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

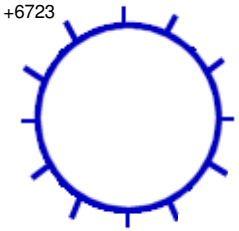
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6301	07' 00"	12	VCP	3	0	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3117***
Street:	138 Milton Street			**Sub-System:**	***28***
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



272 **Ft. to DS MH #:** 6723

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

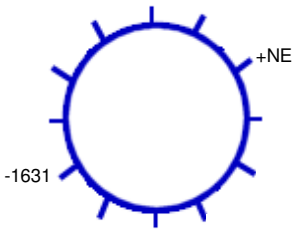
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6723	07' 01"	8	PVC	10	0	0.40			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	4930
Street:	56 Miliken Street			**Sub-System:**	28
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



141 **Ft. to DS MH #:** 1631

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BLOCK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	16' 07"	8	VCP	3	0.40	0			0	
OUT TO	1631	16' 08"	8	VCP	3	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4931***
Street:	Riverside Industrial Way R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 23 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

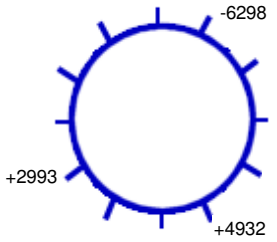
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	6	1

N



200 **Ft. to DS MH #:** 6298

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	1			
WALLS	BRICK	2			Light roots
FLOOR	BRICK	4			Heavy roots
INVERT	BRICK	2			Blockage from roots

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2993	08' 05"	12	VCP	3	5.00	0			1	
IN FROM	4932	08' 09"	18	VCP	3	4.00	0			2	<0.5 GPM leak at pipe connection
OUT TO	6298	08' 10"	21	VCP	3	5.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4932***
Street:	Riverside Industrial Way R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 4 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

N

-4931

+NE

+1632

205 **Ft. to DS MH #:** 4931

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	2			Rusted
WALLS	BRICK	2			Weeping, mineral deposits
FLOOR	BRICK	2			Debris on bench
INVERT	BRICK	2			Rock in invert

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	20' 01"	8	VCP	3	0.20	0			1	
IN FROM	1632	20' 09"	18	VCP	3	5.00	1.00			1	
OUT TO	4931	20' 10"	18	VCP	3	5.00	1.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5377***
Street:	Riverside Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☑
Grade: AT In.

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Unsafe/unable to enter - 7' high in a brook

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** In. **Inside Frame Dia.:** 0 In.

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** Feet **Marks To:** Feet

LINE CONDITIONS **Image Path:**

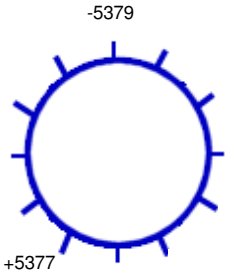
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5378***
Street:	Riverside Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/18/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



205 **Ft. to DS MH #:** 5379

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 16 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Did not enter -- 45+ PPM CO at top of manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick, missing mortar
STEPS	CAST	1			
WALLS	BRICK	3			Weeping, mineral deposits at pipe connection
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** 6 **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5377	09' 10"	24	VCP	3	4.50	0			1	
OUT TO	5379	09' 11"	24	VCP	3	4.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5379***
Street:	Riverside Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/18/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 18 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N

-6303

+SW

+5378

235 **Ft. to DS MH #:** 6303

General Comments: Did not enter -- 50+ PPM CO at top of manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SW	08' 06"	6	PVC	10	0	0			1	
IN FROM	5378	09' 04"	24	VCP	3	5.00	0			1	
OUT TO	6303	09' 05"	24	VCP	3	5.00	0			2	Mineral depositis

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5384
Street:	95 Riverside Street			**Sub-System:**	28
Inspection Date:	9/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

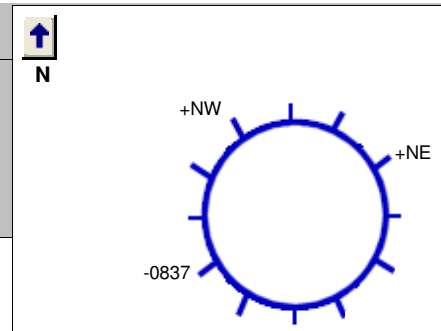
Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1



205 **Ft. to DS MH #:** NE

General Comments: Landing halfway down manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	4			Corroded
WALLS	PRECAST	1			
FLOOR	BRICK	2			Debris
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 6 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

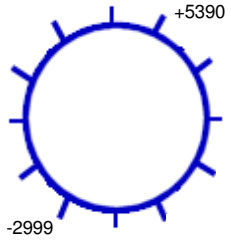
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	14' 08"	24	RCP		8.00	0			0	
IN FROM	NW	10' 02"	12	CIP		0.25	0			0	
OUT TO	0837	14' 09"	24	RCP		8.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5389***
Street:	444 Riverside Industrial Parkway			**Sub-System:**	***28***
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



272 **Ft. to DS MH #:** 2999

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	40	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM/CAST	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

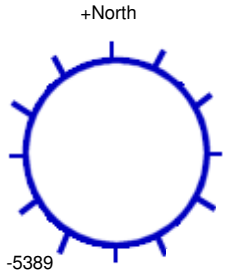
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5390	09' 10"	10	VCP		0.30	0			0	
OUT TO	2999	10' 00"	10	VCP		0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 474 Riverside Industrial Parkway
Manhole No.: 5390
Sub-System: 28
Inspection Date: 7/25/2019 **Inspector:** RV/JC **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



276 **Ft. to DS MH #:** 5389

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 1 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	24	0.5

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM/CAST	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 5 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	06' 09"	10	CIP		0.30	0			0	Inside drop
OUT TO	5389	08' 08"	10	VCP		1.00	0			0	Slow flow

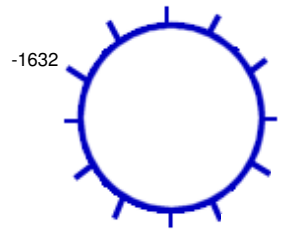
NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5398
Street:	159 Beverly Street R.O.W.			**Sub-System:**	28
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



48 **Ft. to DS MH #:** 1632

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 2 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

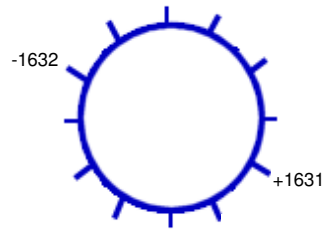
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0849	07' 00"	8	PVC	10	0.30	0			0	
OUT TO	1632	07' 00"	8	PVC	10	0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5399
Street:	Miliken Road R.O.W.			**Sub-System:**	28
Inspection Date:	9/17/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



220 **Ft. to DS MH #:** 1632

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 60 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments: Unable to safely setup tripod at manhole - internal inspection performed

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	NONE	0			
WALLS	BRICK/PRECAST	2			Light roots on brick portion
FLOOR	PARGED	2			Debris
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1631	11' 10"	10	VCP		1.50	0			0	
OUT TO	1632	11' 11"	10	VCP		1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	5407
Street:	Miliken Street R.O.W.			**Sub-System:**	28
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N

-1630

+1629

225 **Ft. to DS MH #:** 1630

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 65 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

General Comments: Unsafe to enter manhole - nowhere to place cover

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1629	10' 10"	18	VCP	3	2.00	0			0	Inside drop
OUT TO	1630	11' 07"	18	VCP	3	2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***6175***
Street:	Riverside Industrial Parkway R.O.W.			**Sub-System:**	***28***
Inspection Date:	9/18/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

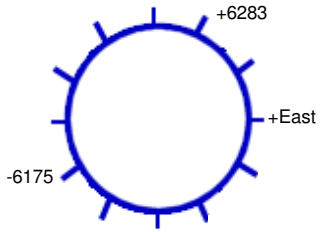
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	< NEW >					0	0				

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality: Portland, ME
Street: 356 Riverside Industrial Parkway (adjacent)
Manhole No.: 6176
Sub-System: 28
Inspection Date: 8/20/2019 **Inspector:** TG/JG **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



172 **Ft. to DS MH #:** 6175

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 3 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	East	23' 06"	12	VCP		0	0			0	Stubbed
IN FROM	6283	09' 05"	12	VCP		3.00	0			0	
OUT TO	6175	23' 07"	12	VCP		5.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6177***
Street:	Riverside Industrial Way R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

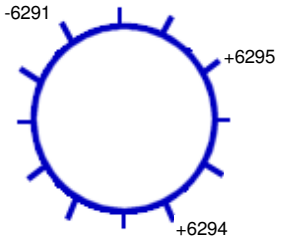
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	14	1

N



210 **Ft. to DS MH #:** 6291

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	3	1		Missing mortar, mineral depositis
FLOOR	BRICK	2			Dirt
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6294	08' 04"	21	VCP	3	7.00	3.00			2	Mineral deposits in pipe
IN FROM	6295	08' 04"	15	VCP	3	3.75	0			1	
OUT TO	6291	08' 05"	24	VCP	3	9.80	4.00			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	6178
Street:	Riverside Industrial Way R.O.W.			**Sub-System:**	28
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X X 0.9 = (SQFT)
Drainage Area 2: (if applicable)
X X 0.3 = (SQFT)

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

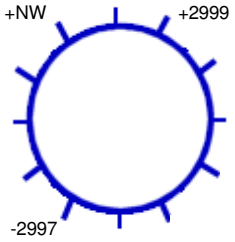
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6282
Street:	430 Riverside Industrial Parkway			**Sub-System:**	28
Inspection Date:	7/25/2019	**Inspector:**	RV/JC	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



274 **Ft. to DS MH #:** 2997

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	30	0.75

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM/CAST	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK/PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

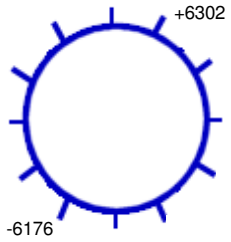
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NW	06' 04"	8	PVC		2.00	0			0	Inside drop
IN FROM	2999	13' 00"	10	VCP		0	0			0	
OUT TO	2997	13' 01"	10	VCP		0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6283***
Street:	356 Riverside Industrial Parkway			**Sub-System:**	***28***
Inspection Date:	8/20/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



269 **Ft. to DS MH #:** 6176

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Offset 3"
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6302	06' 05"	12	VCP		1.00	0			0	
OUT TO	6176	06' 11"	12	VCP		1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6287***
Street:	Riverside Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N

-5377

+0194 +2998

210 **Ft. to DS MH #:** 5377

General Comments: Unsafe to enter -- 55+ PPM CO at top of manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar, light roots
STEPS	CAST	1			
WALLS	BRICK	2			Weeping walls
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0194	08' 09"	12	VCP	3	2.00	0			1	
IN FROM	2998	09' 10"	24	VCP	3	3.00	0			1	
OUT TO	5377	09' 11"	24	VCP	3	4.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6291***
Street:	Riverside Industrial Way R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

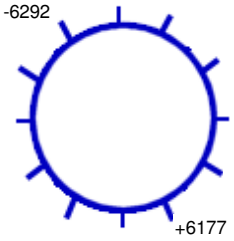
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	12	1

N

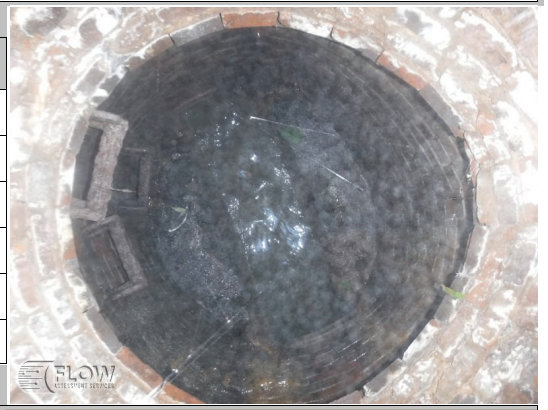


205 **Ft. to DS MH #:** 6292

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	4			Missing mortar, heavy mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			



Surcharge From Invert: **Currently:** **Feet** **Marks To:** 6 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6177	08' 05"	24	VCP	3	6.00	0			1	
OUT TO	6292	08' 06"	24	VCP	3	6.00	0			2	Roots at second joint downstream

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6292***
Street:	Riverside Industrial Way R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 10 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N

-6178

+6291

100 **Ft. to DS MH #:** 6178

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar
STEPS	CAST	1			
WALLS	BRICK	3			Covered in mud, roots
FLOOR	BRICK	3			Mineral deposits
INVERT	BRICK	2			Missing mortar

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 4 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6291	06' 09"	24	VCP	3	6.00	0			2	Offset joint, roots
OUT TO	6178	06' 10"	24	VCP	3	6.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	6294
Street:	Riverside Industrial Way R.O.W.			**Sub-System:**	28
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 16 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	18	1

N

-6177

+6298

240 **Ft. to DS MH #:** 6177

General Comments: Manhole is 10' from brook - invert should be parged to seal from contamination

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	1			
WALLS	BRICK	2			Light roots
FLOOR	BRICK	2			Mud
INVERT	BRICK	4			Missing brick and mortar, mineral deposits

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6298	13' 04"	21	VCP	3	3.00	0			1	
OUT TO	6177	13' 06"	21	VCP	3	3.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***6295***
Street:	Riverside Industrial Parkway R.O.W.			**Sub-System:**	***28***
Inspection Date:	9/18/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments: Area not cleared

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6298***
Street:	Riverside Industrial Way R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/19/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 26 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

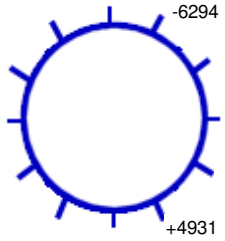
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	24	1

N



215 **Ft. to DS MH #:** 6294

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	CAST	1			
WALLS	BRICK	3			Mineral deposits, multiple small leaks <0.5 GPM
FLOOR	PARGED	1			
INVERT	BRICK	2			Debris

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 3 **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4931	09' 02"	21	VCP	3	5.00	1.00			1	
OUT TO	6294	09' 03"	21	VCP	3	5.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6301***
Street:	376 Riverside Industrial Parkway			**Sub-System:**	***28***
Inspection Date:	8/20/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 1 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

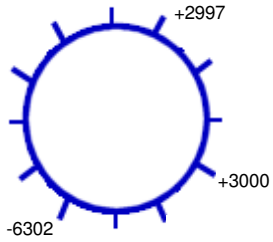
6 **X** 6 **X** 0.3 **=** 10.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

N



38 **Ft. to DS MH #:** 6302

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2997	11' 07"	12	VCP		4.00	0.50			0	
IN FROM	3000	10' 09"	12	VCP		0.40	0			0	
OUT TO	6302	11' 08"	12	VCP		4.00	0.50			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6302***
Street:	376 Riverside Industrial Parkway			**Sub-System:**	***28***
Inspection Date:	8/20/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.5 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

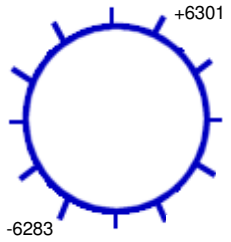
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	33	1

N



281 **Ft. to DS MH #:** 6283

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

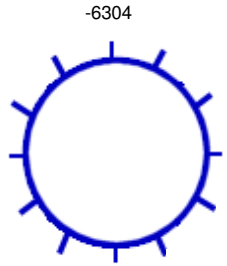
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6301	10' 00"	12	VCP		4.00	0			0	
OUT TO	6283	10' 01"	12	VCP		4.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6303***
Street:	Riverside Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/18/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



230 **Ft. to DS MH #:** 6304

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 8 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	CAST	1			
WALLS	BRICK	2			Weeping walls, mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	2			Debris

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 6.5 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5379	08' 06"	24	VCP	3	5.00	0			1	
OUT TO	6304	08' 07"	24	VCP	3	5.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6304***
Street:	Riverside Street R.O.W.			**Sub-System:**	***28***
Inspection Date:	7/18/2019	**Inspector:**	TG/JG	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 6 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

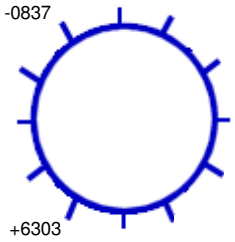
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



210 **Ft. to DS MH #:** 0837

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Light roots
STEPS	CAST	1			
WALLS	BRICK	3			Weeping walls, roots, mineral deposits
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: **Currently:** **Feet** **Marks To:** 3 **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

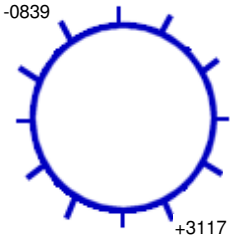
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6303	08' 07"	24	VCP	3	5.00	0			1	
OUT TO	0837	08' 08"	24	VCP	3	5.00	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6723***
Street:	160 Milton Street			**Sub-System:**	***28***
Inspection Date:	6/19/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



217 **Ft. to DS MH #:** 0839

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.2 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	3117	06' 11"	8	PVC	10	0	0			0	
OUT TO	0839	07' 00"	8	PVC	10	0	0			0	

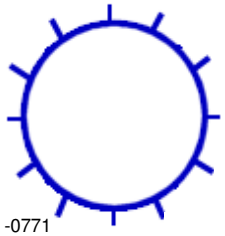
MANHOLE INSPECTION LOGS SUB-AREA 29

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: Fleetwood Street at Brighton Avenue
Manhole No.: 0260
Sub-System: 29
Inspection Date: 6/5/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



292 **Ft. to DS MH #:** 0771

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			Offset 2"
CORBEL	BRICK	3			Soft mortar, mineral deposits
STEPS	STEEL	5			Heavy rust, corroded, broken, missing
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			Heavy solids

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

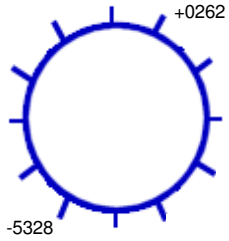
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0771	06' 08"	8	VCP	3	0	0.20			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0261***
Street:	34 Hastings Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



220 **Ft. to DS MH #:** 5328

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	22	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Missing and broken brick, missing mortar, loose pieces
STEPS	STEEL	5			Broken, corroded, heavy rust
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	LINED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

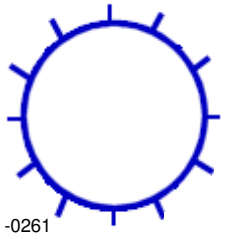
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0262	07' 08"	8	LINED		0.70	0			1	STANDING FLOW
OUT TO	5328	07' 09"	8	LINED		0.70	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0262
Street:	20 Hastings Street			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



163 **Ft. to DS MH #:** 0261

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	11	1

General Comments: Starte manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Rusted, corroded
WALLS	BRICK	1			
FLOOR	BRICK/PARGED	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0261	08' 09"	8	LINED		1.50	0.70			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0263***
Street:	64 Hastings Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.5 In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

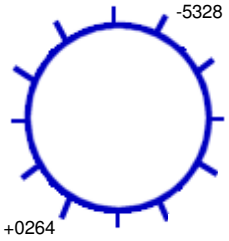
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	15	1

N



180 **Ft. to DS MH #:** 5328

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Missing brick and mortar, broken brick, soft mortar
STEPS	STEEL	3			Rusted, corroded
WALLS	BRICK	1			
FLOOR	CNI	0			Covered in debris
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

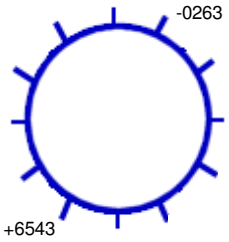
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0264	10' 09"	8	LINED		0.75	0			1	
OUT TO	5328	10' 10"	8	LINED		0.75	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0264
Street:	80 Hastings Street			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



180 **Ft. to DS MH #:** 0263

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.75 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	1	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6543	07' 04"	8	LINED		0.50	0.40			1	Soft debris
OUT TO	0263	07' 05"	8	LINED		0.50	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***0768***
Street:	48 Colonial Road			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

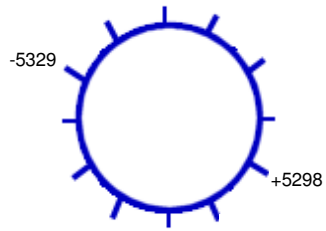
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0769
Street:	Rockland Avenue at Colonial Road			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



35 **Ft. to DS MH #:** 5329

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

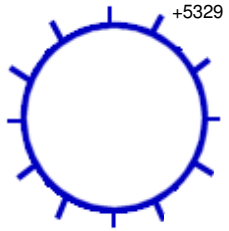
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5298	13' 04"	10	PVC	10	1.25	0			0	
OUT TO	5329	13' 05"	10	PVC	10	1.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0770
Street:	67 Colonial Road			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



245 **Ft. to DS MH #:** 5329

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	26	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	0			80% covered in debris
INVERT	CNI	0			Full of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5329	06' 07"	8	VCP	3	0	1.50			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0771
Street:	27 Fleetwood Street			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked and missing pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

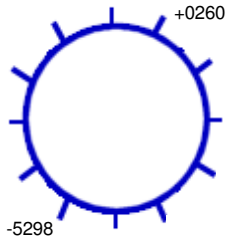
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



285 **Ft. to DS MH #:** 5298

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	BRICK	2			Broken and missing brick, soft mortar
STEPS	STEEL	5			Broken, heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

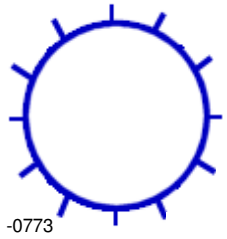
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0260	07' 03"	8	VCP	3	0.40	0			1	
OUT TO	5298	07' 04"	8	VCP	3	0.40	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 11 Wolcott Street
Manhole No.: 0772
Sub-System: 29
Inspection Date: 6/5/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



207 **Ft. to DS MH #:** 0773

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
4 **X** 4 **X** 0.9 **=** 14.4 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	21	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	4			Soft brick and mortar, missing mortar
STEPS	STEEL	3			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			Heavy debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0773	08' 03"	8	VCP	3	0	0.40			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0773***
Street:	28 Wolcott Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

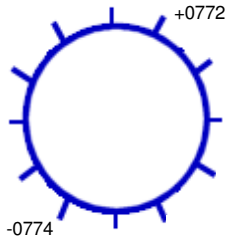
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	26	1

N



295 **Ft. to DS MH #:** 0774

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Missing mortar, missing pieces
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

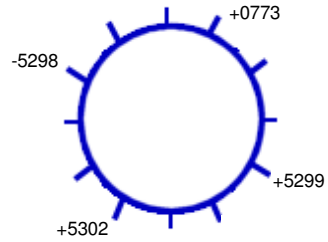
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0772	08' 05"	8	VCP	3	0.20	0			1	Outside drop
OUT TO	0774	09' 08"	10	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0774***
Street:	Rockland Avenue at Wolcott Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



253 **Ft. to DS MH #:** 5298

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

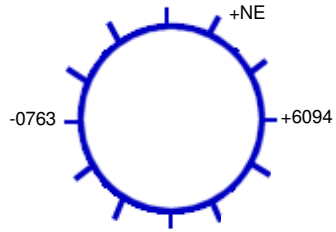
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0773	06' 10"	10	PVC	10	0.70	0			0	
IN FROM	5299	07' 01"	10	PVC	10	0.70	0			0	Slow flow
IN FROM	5302	06' 07"	10	PVC	10	0.20	0			0	
OUT TO	5298	07' 01"	10	PVC	10	1.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***0797***
Street:	Rockland Avenue at Machigonne Street R.O.W.			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



104 **Ft. to DS MH #:** 0763

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

4 **X** 4 **X** 0.3 **=** 4.8 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	12' 03"	30	RCP	3	0	0			1	1 GPM leak at seam
IN FROM	6094	12' 00"	12	PVC	10	1.25	0			1	
OUT TO	0763	12' 08"	30	RCP	3	1.25	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***1283***
Street:	Kenilworth Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☑ **CNL:** ☐ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

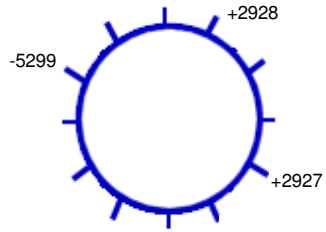
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2926***
Street:	Bancroft Street at Rockland Avenue			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



35 **Ft. to DS MH #:** 5299

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK/VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2927	07' 10"	10	PVC	10	0.20	0			0	Outside drop
IN FROM	2928	10' 09"	10	PVC	10	0.50	0			0	
OUT TO	5299	11' 00"	10	PVC	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2927***
Street:	Rockland Avenue at Kenilworth Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

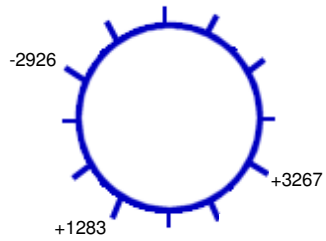
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



249 **Ft. to DS MH #:** 2926

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

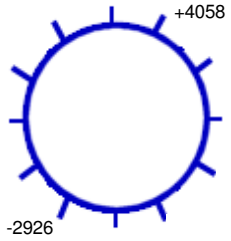
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	1283	08' 08"	8	PVC	10	0.20	0			0	
IN FROM	3267	08' 08"	10	PVC	10	0.20	0			0	
OUT TO	2926	08' 09"	10	PVC	10	0.30	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***2928***
Street:	33 Bancroft Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



191 **Ft. to DS MH #:** 2926

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	24	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Heavy rust, corrosion, missing pieces
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

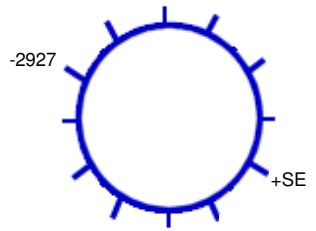
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	4058	09' 06"	10	VCP	3	0.50	0			1	
OUT TO	2926	09' 07"	10	VCP	3	0.50	0.20			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***3267***
Street:	22 Rockland Avenue			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



140 **Ft. to DS MH #:** 2927

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Frame and cover are rusted together
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	SE	07' 06"	10	PVC	10	0	0			0	
OUT TO	2927	07' 06"	10	PVC	10	0	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	4057
Street:	Bancroft Street at Brighton Avenue			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

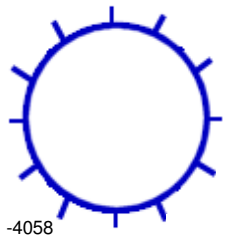
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	5	1



200 **Ft. to DS MH #:** 4058

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	3			Broken and missing brick, missing mortar
STEPS	STEEL	2			Light rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

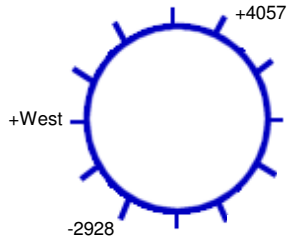
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	4058	07' 06"	8	ACP	3	0.50	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality: Portland, ME
Street: 17 Bancroft Street
Manhole No.: 4058
Sub-System: 29
Inspection Date: 6/5/2019 **Inspector:** JS/MP **Prefix #:**
Weather: CLEAR **Temp:** 0 **Time:**

N



189 **Ft. to DS MH #:** 2928

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☐ **CNI:** ☐
Grade: ABOVE 0.25 In.

COVER INFLOW POTENTIAL
Drainage Area 1:
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	12	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	2			Broken brick
STEPS	STEEL	2			Corrosion, broken pieces
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	West	05' 00"	8	VCP	3	0.20	0			1	Clear flow
IN FROM	4057	05' 08"	8	VCP	3	0.20	0			1	
OUT TO	2928	05' 09"	10	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5293***
Street:	7 Colonial Road			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

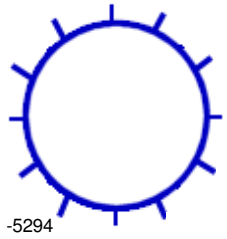
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



261 **Ft. to DS MH #:** 5294

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5294	07' 04"	8	PVC	10	0	0.25			0	

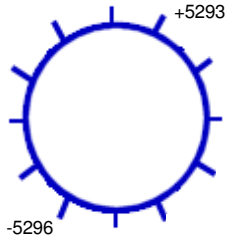
NOTE: This inspection was performed from the surface without entering the manhole.

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5294***
Street:	33 Colonial Road			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



146 **Ft. to DS MH #:** 5296

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: BELOW 0.25 In.

COVER INFLOW POTENTIAL

Drainage Area 1:

5 **X** 4 **X** 0.9 **=** 18.0 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

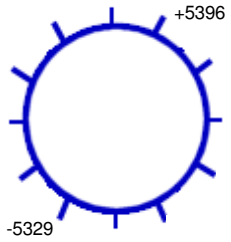
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5293	07' 04"	8	PVC	10	0.20	0			0	
OUT TO	5296	07' 04"	8	PVC	10	0.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5295***
Street:	48 Colonial Road			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



54 **Ft. to DS MH #:** 5329

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

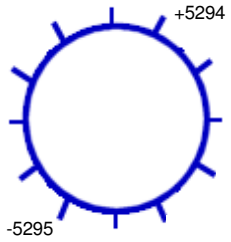
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5396	07' 09"	8	PVC	10	0.40	0			0	Outside drop, pipe offset from invert, floor is blocking portion of pipe
OUT TO	5329	10' 00"	8	PVC	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5296***
Street:	40 Colonial Road			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



41 **Ft. to DS MH #:** 5295

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5294	08' 01"	8	PVC	10	0.40	0			0	
OUT TO	5295	08' 02"	8	PVC	10	0.40	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

N

Municipality:	Portland, ME			**Manhole No.:**	***5297***
Street:	33 Colonial Road			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS
Buried: ☐ **CNL:** ☑ **CNI:** ☐

COVER INFLOW POTENTIAL
Drainage Area 1:
X **X** 0.9 **=** **(SQFT)**
Drainage Area 2: (if applicable)
X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

Ft. to DS MH #:

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME		0			
CORBEL		0			
STEPS		0			
WALLS		0			
FLOOR		0			
INVERT		0			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:**

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5298***
Street:	Rockland Avenue at Fleetwood Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

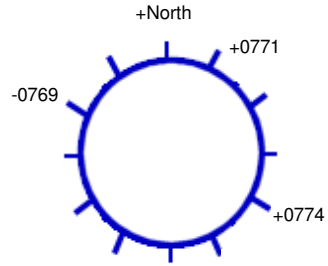
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

N



228 **Ft. to DS MH #:** 0769

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

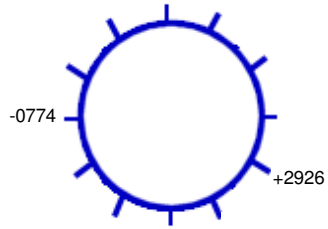
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	08' 05"	8	PVC	10	0	0.50			0	Debris
IN FROM	0771	08' 05"	8	PVC	10	0.50	0			0	
IN FROM	0774	08' 06"	10	PVC	10	1.00	0			0	
OUT TO	0769	08' 09"	10	PVC	10	1.20	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5299***
Street:	Rockland Avenue at Bancroft Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



216 **Ft. to DS MH #:** 0774

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	NONE	0			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

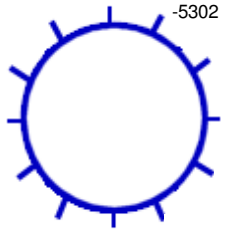
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	2926	10' 06"	10	PVC	10	0.70	0			0	
OUT TO	0774	10' 08"	10	PVC	10	0.70	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5301***
Street:	75 Wolcott Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



150 **Ft. to DS MH #:** 5302

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	27	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	4			Broken, missing, rusted, corroded
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	5302	07' 08"	8	VCP	3	0	0			2	Light roots

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5302***
Street:	64 Wolcott Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

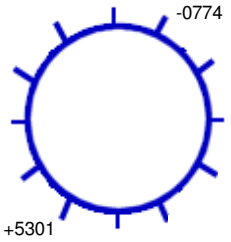
Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	28	1



150 **Ft. to DS MH #:** 0774

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Moderate rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

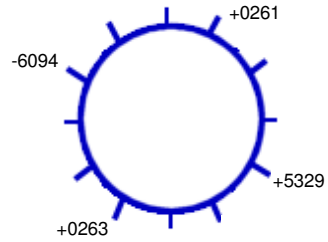
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5301	07' 08"	8	VCP	3	0.20	0			1	
OUT TO	0774	07' 09"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5328***
Street:	Hasting Street at Rockland Avenue			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



247 **Ft. to DS MH #:** 6094

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	2	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0261	08' 04"	8	LINED	10	0.20	0			0	Inside drop
IN FROM	0263	10' 04"	8	LINED		0.20	0			0	
IN FROM	5329	11' 02"	10	PVC	10	1.50	0			0	
OUT TO	6094	11' 02"	10	PVC	10	1.50	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***5329***
Street:	Colonial Road at Rockland Avenue			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

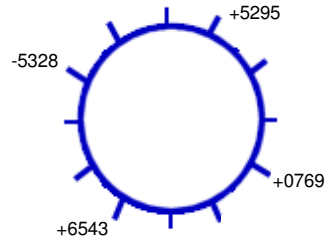
2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N



265 **Ft. to DS MH #:** 5328

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	3			Frame and cover rusted together
CORBEL	BRICK	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

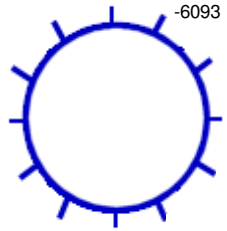
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	0769	13' 06"	10	PVC	10	1.25	0			0	
IN FROM	5295	12' 07"	8	PVC	10	0.20	0			0	
IN FROM	6543	12' 06"	10	PVC	10	0.20	0			0	
OUT TO	5328	13' 06"	10	PVC	10	1.25	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	6092
Street:	84 Machigonne Street			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



205 **Ft. to DS MH #:** 6093

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	31	1

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	2			Chipped
CORBEL	CAST	1			
STEPS	STEEL	5			Broken and missing
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			Full of heavy debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

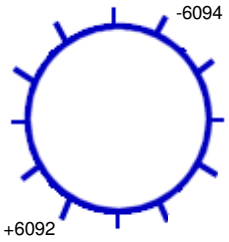
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	6093	05' 08"	8	VCP	3	0.50	0			1	Standing flow

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	***6093***
Street:	68 Machigonne Street			**Sub-System:**	***29***
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



199 **Ft. to DS MH #:** 6094

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

Cracked pavement surrounding frame

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	10	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	STEEL	3			Heavy rust, corrosion
WALLS	BRICK	1			
FLOOR	BRICK	1			
INVERT	VCP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

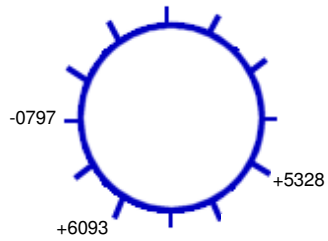
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	6092	08' 11"	8	VCP	3	0.20	0			1	
OUT TO	6094	09' 00"	8	VCP	3	0.20	0			1	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6094
Street:	Machigonne Street at Rockland Avenue			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



36 **Ft. to DS MH #:** 0797

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK/PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	1			
INVERT	PIP	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

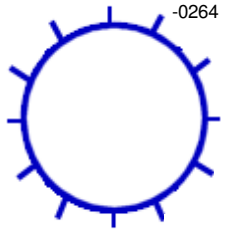
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	5328	10' 04"	10	PVC	10	2.00	0			0	
IN FROM	6093	10' 03"	8	PVC	10	0.20	0			0	
OUT TO	0797	10' 05"	10	PVC	10	2.00	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	6543
Street:	88 Hastings Street			**Sub-System:**	29
Inspection Date:	6/5/2019	**Inspector:**	JS/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



92 **Ft. to DS MH #:** 0264

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: ABOVE 0.25 In.

Blind flange

COVER INFLOW POTENTIAL

Drainage Area 1:

2 **X** 2 **X** 0.9 **=** 3.6 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

General Comments: Starter manhole

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	PRECAST	1			
STEPS	PLASTIC	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS

Image Path: P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
OUT TO	0264	04' 04"	9.5	LINED		0	0			0	

MANHOLE INSPECTION LOGS SUB-AREA 30

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	0007
Street:	Ocean Avenue at Wellstone Drive			**Sub-System:**	30
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

N

+North

-South

142 **Ft. to DS MH #:** South

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	ALUM	1			
WALLS	PRECAST	1			
FLOOR	BRICK/PARGED	2			Dirt and debris
INVERT	PARGED	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

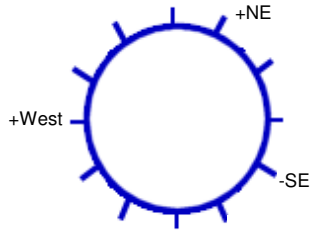
Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	07' 01"	8	ACP		0.75	0			0	
OUT TO	South	07' 04"	12	PVC		0.75	0			0	

Flow Assessment Services, LLC. Structure Inspection Log

☐ Surface ☑ Internal

Municipality:	Portland, ME			**Manhole No.:**	0043
Street:	Washington Avenue at Ocean Avenue			**Sub-System:**	30
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

N



332 **Ft. to DS MH #:** SE

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	3	1

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	CAST	5			Corroded
WALLS	BRICK	1			
FLOOR	CNI	0			Covered in debris
INVERT	CNI	0			Full of debris

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	NE	08' 06"	8	VCP	3	7.00	7.00			2	Standing flow, offset joints
IN FROM	West	06' 02"	6	VCP	3	0	0			2	Offset joint
OUT TO	SE	08' 07"	8	VCP	3	4.00	0			3	Standing flow, line blocked with grease ball

Flow Assessment Services, LLC. Structure Inspection Log

☑ Surface ☐ Internal

Municipality:	Portland, ME			**Manhole No.:**	***4232***
Street:	Washington Avenue at Morse Street			**Sub-System:**	***30***
Inspection Date:	9/13/2019	**Inspector:**	TG/MP	**Prefix #:**	
Weather:	CLEAR	**Temp:**	0	**Time:**	

COVER CHARACTERISTICS / COMMENTS

Buried: ☐ **CNL:** ☐ **CNI:** ☐

Grade: AT In.

COVER INFLOW POTENTIAL

Drainage Area 1:

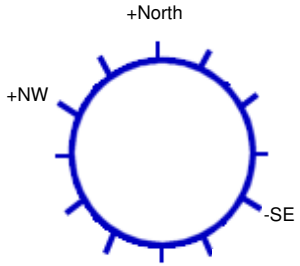
3 **X** 3 **X** 0.9 **=** 8.1 **(SQFT)**

Drainage Area 2: (if applicable)

X **X** 0.3 **=** **(SQFT)**

	QTY	SIZE (In)
Holes In Cover	--	--

N



250 **Ft. to DS MH #:** SE

General Comments:

INTERNAL MANHOLE OBSERVATIONS **Clear Opening Dia.:** **In.** **Inside Frame Dia.:** 0 **In.**

ITEM	MATERIAL	CONDITION	Leaks (gpm)	Photo	DEFECTS
FRAME	CAST	1			
CORBEL	BRICK	1			
STEPS	VINYL COATED	1			
WALLS	PRECAST	1			
FLOOR	BRICK	1			
INVERT	BRICK	1			

Surcharge From Invert: NONE EVIDENT **Currently:** **Feet** **Marks To:** **Feet**

LINE CONDITIONS **Image Path:** P:\Portland, ME 19056_Manhole Inspection Report Fi

Direction (In / Out)	Connect MH #	Rim To Invert Depth	Pipe Dia. (In.)	Pipe Material	Joint Length	Flow Depth (In.)	Debris Depth (In.)	Pipe Conn Leak (gpm)	Photo	Line Cond 1-5	Line Comments
IN FROM	North	09' 09"	8	PVC		0.20	0			0	
IN FROM	NW	10' 02"	8	PVC		0.50	0			0	
OUT TO	SE	10' 03"	12	PVC		0.50	0			0	

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Manhole Inspection Results and Rehabilitation Recommendations

Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 04	SSMH-5376	INDUSTRIAL WAY	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 04	SSMH-0832	PRIM STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 04	SSMH-0830	RIVERSIDE STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 04	SSMH-2985	RIVERSIDE STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 04	SSMH-6179	RIVERSIDE STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 04	SSMH-4437	1 INDUSTRIAL WAY	91.5	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Floor - Mineral deposits.		Minerals					X						
Sub-Area 04	SSMH-1454	100 INDUSTRIAL WAY	114.8	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-5375	108 INDUSTRIAL WAY	95.8	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar, light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-1453	125 INDUSTRIAL WAY	102.0	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Heavy mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-0826	126 INDUSTRIAL WAY	86.3	0	0.25 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-1558	175 INDUSTRIAL WAY	90.5	0	0.5 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Light mineral deposits, Wall - Moderate mineral deposits.		Minerals	X			X		X					
Sub-Area 04	SSMH-1559	175 INDUSTRIAL WAY	92.0	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-2982	2 EVERGREEN DRIVE	76.0	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 04	SSMH-2983	21 EVERGREEN DRIVE	76.0	0	0.2 BELOW GRADE	2	Inspected	Chimney - Broken and missing brick.													
Sub-Area 04	SSMH-1560	220 INDUSTRIAL WAY	96.5	0	0.75 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals	X			X		X					
Sub-Area 04	SSMH-0827	225 INDUSTRIAL WAY	-	0	CNI	CNI	CNI	Could not open - cracked cover				X									
Sub-Area 04	SSMH-0489	25 EVERGREEN DRIVE	80.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Wall - Light mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-5412	31 WALDRON WAY	93.3	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar.						X							
Sub-Area 04	SSMH-4439	35 INDUSTRIAL WAY	93.3	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Floor - Missing mortar, mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-4555	36 WALDRON WAY	70.5	0	0.5 ABOVE GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Crackedintopieces, Chimney - Broken, loose and missing brick.					X				X				Repair Chimney
Sub-Area 04	SSMH-1452	53 INDUSTRIAL WAY	102.0	0	0.25 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Wall - Light mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-0210	56 EVERGREEN DRIVE	84.0	14	0.5 BELOW GRADE	0	Inspected	Cover - Cracked pavement surrounding frame, blind flange, Frame - 1"riser, Wall - Leak, light mineral deposits, top portion not set in bottom 3".		Active	X			X		X					
Sub-Area 04	SSMH-2986	56 EVERGREEN DRIVE R.O.W.	159.5	0	19 ABOVE GRADE	2	Inspected	Wall - Light mineral deposits.		Minerals						X					
Sub-Area 04	SSMH-6018	68 WALDRON WAY	93.7	0	5 ABOVE GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 04	SSMH-2978	723 RIVERSIDE STREET PARKING LOT	142.0	0	AT GRADE	2	Inspected	Invert - Solids catching in invert.													
Sub-Area 04	SSMH-5370	723 RIVERSIDE STREET PARKING LOT	74.8	0	AT GRADE	2	Inspected	Invert - Sediment catching in invert.													
Sub-Area 04	SSMH-2984	74 EVERGREEN DRIVE	96.5	360	0.2 BELOW GRADE	2	Inspected	Chimney - Broken, loose and missing brick, missing pieces, Wall - Leak at seam.		Active				X		X					
Sub-Area 04	SSMH-5372	75 INDUSTRIAL WAY	138.0	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-5374	77 INDUSTRIAL WAY	130.7	0	0.25 BELOW GRADE	1	Inspected	Chimney - Light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-5373	81 INDUSTRIAL WAY	123.5	0	0.25 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Light mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-5368	828 RIVERSIDE STREET	46.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 04	SSMH-0206	872 RIVERSIDE STREET	126.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 04	SSMH-1343	892 RIVERSIDE STREET	-	0	CNI	CNI	CNI	Could not open - cover will break				X									
Sub-Area 04	SSMH-2975	902 RIVERSIDE STREET	93.0	0	AT GRADE	3	Inspected	Highpoint manhole, Floor - Dirt and debris, Invert - Full of dirt.													
Sub-Area 04	SSMH-2973	910 RIVERSIDE STREET	119.5	0	AT GRADE	21	Inspected	Floor - Missing mortar, Invert - Catching solids.													
Sub-Area 04	SSMH-5413	92 WALDRON WAY	80.0	0	1 BELOW GRADE	1	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.			X			X		X		X			Repair Chimney
Sub-Area 04	SSMH-0211	95 EVERGREEN DRIVE	92.0	360	0.2 BELOW GRADE	2	Inspected	Starter manhole, Wall - Leak at seam.		Active						X					
Sub-Area 04	SSMH-2974	980 RIVERSIDE STREET	-	0	CNI	CNI	CNI	Manhole has a Smart Cover - did not want to break													
Sub-Area 04	SSMH-0831	CADDIE LANE EASEMENT	124.0	0	12 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 04	SSMH-0828	EVERGREEN DRIVE AT INDUSTRIAL WAY	103.0	0	AT GRADE	2	Inspected	Chimney - Broken brick, Invert - Missing mortar.						X							
Sub-Area 04	SSMH-0829	INDUSTRIAL WAY	83.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-1557	INDUSTRIAL WAY OFFICE MAX - SECOND ENTRANCE	80.8	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Moderate mineral deposits, Wall - Light mineral deposits.		Minerals				X		X					
Sub-Area 04	SSMH-2972	RIVERSIDE STREET AT EVERGREEN DRIVE	81.2	0	AT GRADE	3	Inspected	Frame - Hasriser.													
Sub-Area 04	SSMH-2976	RIVERSIDE STREET AT INDUSTRIAL WAY	69.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 04	SSMH-2977	RIVERSIDE STREET AT INDUSTRIAL WAY	65.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 04	SSMH-0205	RIVERSIDE STREET AT PRIM STREET	96.7	0	AT GRADE	3	Inspected	Floor - Broken brick, missing mortar, debris.													
Sub-Area 04	SSMH-0195	RIVERSIDE STREET R.O.W.	96.5	0	6 ABOVE GRADE	2	Inspected	Unable to enter manhole - unsafe levels of CO at 145+PPM, Chimney - Missing mortar, weeping, Wall - Missing mortar, weeping.		Active					X						
Sub-Area 05	SSMH-2489	1412 RIVERSIDE STREET	218.7	0	AT GRADE	19	Inspected	Frame - Offset3", Many holes in cover	Cover Holes		X	X									

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liining	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 05	SSMH-5068	1955 WASHINGTON AVENUE	104.5	4,320	0.25 BELOW GRADE	1	Inspected	Chimney - Missing mortar, Wall - Leak at seam.		Active					X		X				Repair Chimney Mortar
Sub-Area 05	SSMH-5066	1958 WASHINGTON AVENUE	156.3	4,320	AT GRADE	1	Inspected	Wall - Leaking at seam.		Active					X						
Sub-Area 05	SSMH-5388	500 RIVERSIDE INDUSTRIAL PARKWAY	104.0	0	0.5 BELOW GRADE	16	Inspected	Chimney - Missing mortar. Many holes in Cover)	Cover Holes		X	X					X				Repair Chimney Mortar
Sub-Area 05	SSMH-5010	65 LAMBERT STREET	95.7	0	AT GRADE	1	Inspected	Floor - Mineral deposits, Invert - Light mineral deposits.		Minerals					X						
Sub-Area 05	SSMH-5382	RIVERSIDE STREET	120.5	0	0.25 BELOW GRADE	3	Inspected	Cover - Cracked and missing pavement surrounding frame.													
Sub-Area 06	SSMH-1601	#C BROOKFIELD APARTMENTS	128.7	0	0.5 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar.			X						X				Repair Chimney
Sub-Area 06	SSMH-2562	#F BROOKFIELD APARTMENTS R.O.W.	103.3	0	1 BELOW GRADE	1	Inspected	Chimney - Missing mortar, Wall - Moderate roots.		Roots	X				X		X			X	Remove Roots, Repair Chimney Mortar
Sub-Area 06	SSMH-5059	103 PARSONS POND DRIVE	113.5	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 06	SSMH-0157	114 ALPINE ROAD	99.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Floor - Missing brick, moderate mineral deposits, Invert - Sediment catching in invert, light mineral deposits.		Minerals					X		X				Repair Brick and Mortar of Floor, Seal Bulkheaded Service
Sub-Area 06	SSMH-4954	126 AUBURN TERRACE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 06	SSMH-6491	128 SUMMIT PARK AVENUE	99.0	0	0.75 BELOW GRADE	0	Inspected	Cover - Blind flange.			X										
Sub-Area 06	SSMH-6485	13 KENNETH STREET	83.0	0	0.25 ABOVE GRADE	0	Inspected	Highpoint manhole, Cover - Blind flange.													
Sub-Area 06	SSMH-1603	134 AUBURN TERRACE	46.7	0	AT GRADE	1	Inspected	Invert - Sediment catching in invert.												X	Clean Invert
Sub-Area 06	SSMH-6490	135 SUMMIT PARK AVENUE	104.0	0	0.25 BELOW GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-1602	136 AUBURN TERRACE	75.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 06	SSMH-2430	147 SUMMIT PARK AVENUE	102.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-0186	16 JACKSON STREET	77.0	0	AT GRADE	21	Inspected	Rock caught in invert causing debris to collect - rock and part of debris removed during inspection however a portion of debris remains in pipe.				X								X	Clean Outgoing Pipe
Sub-Area 06	SSMH-2429	164 SUMMIT PARK AVENUE	115.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Chimney - Broken brick.									X				Repair Brick and Mortar of Chimney
Sub-Area 06	SSMH-6492	17 ALPINE ROAD	102.5	0	AT GRADE	0	Inspected	Cover - Cracked pavement surrounding frame, blind flange, Invert - Catching solids.												X	Clean Invert
Sub-Area 06	SSMH-6486	17 SUMMIT PARK AVENUE	102.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-4992	18 QUIET LANE	49.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4991	18 QUIET LANE R.O.W.	50.5	0	AT GRADE	2	Inspected	Invert - 1" debris.												X	Clean Invert
Sub-Area 06	SSMH-0175	20 HILLSIDE ROAD	95.0	0	AT GRADE	4	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4941	21 LONGVIEW DRIVE	63.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 06	SSMH-0512	22 AUBURN TERRACE	76.7	0	AT GRADE	1	Inspected	Wall - Light mineral deposits, Invert - Debris catching in invert.		Minerals										X	Clean Invert
Sub-Area 06	SSMH-0160	233 AUBURN STREET AT BROOKFIELD APARTMENTS	117.0	0	AT GRADE	1	Inspected	Frame - Chipped, Floor - Water covering floor.					X								
Sub-Area 06	SSMH-4997	244 SUMMIT STREET AT CURTIS ROAD	119.0	0	0.25 ABOVE GRADE	1	Inspected	Starter manhole.													
Sub-Area 06	SSMH-4511	245 AUBURN STREET	124.0	0	AT GRADE	24	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-4509	246 AUBURN STREET	120.5	0	AT GRADE	14	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-0551	257 SUMMIT STREET	118.0	0	AT GRADE	29	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 06	SSMH-0550	260 SUMMIT STREET	111.0	0	AT GRADE	1	Inspected	Chimney - Broken brick.													
Sub-Area 06	SSMH-5100	267 AUBURN STREET	117.5	0	AT GRADE	19	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-6493	27 ALPINE ROAD	102.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-6487	27 SUMMIT PARK AVENUE	100.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-5016	29 JACKSON STREET	93.0	0	0.1 ABOVE GRADE	11	Inspected	Cover - Manhy Holes	Cover Holes			X									

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Sub-Area 06	SSMH-0549	295 SUMMIT STREET AT CLAYTON STREET	121.5	0	0.5 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.			X										
Sub-Area 06	SSMH-1604	31 AUBURN TERRACE	80.0	0	AT GRADE	1	Inspected	Floor - Light mineral deposits.		Minerals					X						Seal Bench and invert
Sub-Area 06	SSMH-5012	31 CLAYTON STREET	99.0	0	AT GRADE	24	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-6488	31 SUMMIT PARK AVENUE	108.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Invert - Debris catching.												X	Clean Invert
Sub-Area 06	SSMH-0619	315 AUBURN STREET	121.5	0	AT GRADE	16	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes			X					X				Repair Chimney
Sub-Area 06	SSMH-4508	321 AUBURN STREET	126.0	0	AT GRADE	15	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-2331	33 CHRISTY ROAD	130.5	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 06	SSMH-0547	336 SUMMIT STREET	101.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 06	SSMH-2428	35 SUMMIT PARK AVENUE	87.0	0	0.25 BELOW GRADE	0	Inspected	Cover - Blind flange, Chimney - Broken brick, missing mortar.									X				Repair Brick and Mortar of Chimney
Sub-Area 06	SSMH-0179	405 AUBURN STREET	146.0	0	0.4 BELOW GRADE	23	Inspected	Chimney - Loose brick, missing mortar.				X									
Sub-Area 06	SSMH-0177	408 AUBURN STREET	141.3	0	AT GRADE	15	Inspected	Chimney - Broken and loose brick.				X					X				Repair Chimney
Sub-Area 06	SSMH-2332	41 CHRISTY ROAD	113.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 06	SSMH-0178	418 AUBURN STREET R.O.W.	99.5	0	2 BELOW GRADE	20	Inspected	No Significant Defects				X								X	Remove Roots from Incoming Line (Force Main) and Address Deteriorating Pipe
Sub-Area 06	SSMH-0513	42 AUBURN TERRACE	82.0	0	1.5 BELOW GRADE	1	Inspected	Chimney - Broken brick, missing mortar, Invert - Solids catching.			X						X				Repair Chimney
Sub-Area 06	SSMH-4514	45 HILLSIDE ROAD	77.5	0	AT GRADE	8	Inspected	No Significant Defects													
Sub-Area 06	SSMH-2434	46 ALPINE ROAD	100.5	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-0562	46 CLAYTON STREET	87.0	0	0.25 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4257	479 AUBURN STREET	102.5	0	0.25 BELOW GRADE	6	Inspected	No Significant Defects													
Sub-Area 06	SSMH-5056	49 PARSONS POND DRIVE	138.8	0	0.5 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4256	491 AUBURN STREET	89.0	0	0.3 BELOW GRADE	3	Inspected	No Significant Defects			X										
Sub-Area 06	SSMH-4942	5 LONGVIEW DRIVE	83.0	0	AT GRADE	1	Inspected	Frame - Chipped,missingpiece.					X								
Sub-Area 06	SSMH-4255	510 AUBURN STREET	99.0	0	AT GRADE	15	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-6489	52 SUMMIT PARK AVENUE	97.0	0	0.5 BELOW GRADE	0	Inspected	Cover - Blind flange.			X										
Sub-Area 06	SSMH-0561	53 CLAYTON STREET	87.0	0	AT GRADE	12	Inspected	Starter manhole.				X									
Sub-Area 06	SSMH-4953	55 AUBURN TERRACE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 06	SSMH-6483	66 JACKSON STRET	89.0	0	AT GRADE	8	Inspected	Invert - Catching solids.												X	Clean Invert
Sub-Area 06	SSMH-0185	67 ALPINE ROAD	97.0	0	0.25 BELOW GRADE	37	Inspected	Wall - Broken and missing brick.													
Sub-Area 06	SSMH-2333	67 CHRISTY ROAD	102.0	0	AT GRADE	23	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-2426	68 SUMMIT PARK AVENUE	100.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 06	SSMH-2432	8 SUMMIT PARK AVENUE	115.5	0	0.5 BELOW GRADE	0	Inspected	Manhole in gutterline, Cover - Blind flange.			X										
Sub-Area 06	SSMH-4952	87 AUBURN TERRACE	74.3	0	3.75 BELOW GRADE	1	Inspected	Frame - Offset3", Chimney - Broken brick, missing mortar, Wall - Light mineral deposits.		Minerals	X				X		X				Repair Chimney
Sub-Area 06	SSMH-2433	90 ALPINE ROAD	99.5	0	AT GRADE	32	Inspected	Cover - Cracked pavement surrounding frame.				X									
Sub-Area 06	SSMH-2334	91 CHRISTY ROAD	100.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 06	SSMH-2427	92 SUMMIT PARK AVENUE	96.0	0	0.75 BELOW GRADE	0	Inspected	Starter manhole, Cover - Blind flange, Wall - Missing brick.			X						X				Repair Wall
Sub-Area 06	SSMH-4507	AUBURN STREET AT ALPINE ROAD	135.7	0	AT GRADE	23	Inspected	No Significant Defects				X									
Sub-Area 06	SSMH-4510	AUBURN STREET AT AUBURN TERRACE	116.7	0	AT GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-0620	AUBURN STREET AT CHRISTY ROAD	115.7	0	AT GRADE	31	Inspected	Many holes in cover	Cover Holes			X									
Sub-Area 06	SSMH-0176	AUBURN STREET AT CLAYTON STREET	129.3	0	AT GRADE	21	Inspected	Invert - Solids catching.				X									

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Sub-Area 06	SSMH-4253	AUBURN STREET AT HILLSIDE ROAD	112.3	0	0.25 BELOW GRADE	18	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-5015	AUBURN STREET AT JACKSON STREET	148.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 06	SSMH-1382	AUBURN STREET AT LONGVIEW DRIVE	52.0	0	0.25 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 06	SSMH-0618	AUBURN STREET AT PARSONS POND DRIVE	148.7	0	AT GRADE	4	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4505	AUBURN STREET AT SUMMIT PARK AVENUE	145.7	0	AT GRADE	22	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes			X						X			Repair Chimney
Sub-Area 06	SSMH-4254	AUBURN STREET AT SUMMIT STREET	97.5	0	AT GRADE	8	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 06	SSMH-2561	BROOKFIELD APARTMENTS	79.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Loose, Chimney - Missing mortar, Invert - Sediment catching.			X							X			Repair Chimney Mortar
Sub-Area 06	SSMH-5013	CLAYTON STREET AT KENNETH STREET	97.3	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 06	SSMH-5017	JACKSON STREET AT SUMMIT STREET	92.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick.										X			Repair Chimney
Sub-Area 06	SSMH-6484	JACKSON STRET AT KENNETH STREET	97.3	0	AT GRADE	19	Inspected	Cover - Many Holes, Frame - Chipped.	Cover Holes				X								
Sub-Area 06	SSMH-0180	PARSONS POND DRIVE	62.3	0	1 ABOVE GRADE	2	Inspected	Floor - Broken brick, missing mortar.													
Sub-Area 06	SSMH-2487	PARSONS POND DRIVE	63.0	0	2 ABOVE GRADE	3	Inspected	Starter manhole, Floor - Surcharged, Invert - Surcharged.												X	Clean Outgoing Pipe
Sub-Area 06	SSMH-5061	PARSONS POND DRIVE	100.0	0	1 ABOVE GRADE	3	Inspected	Chimney - Broken brick.													
Sub-Area 06	SSMH-5062	PARSONS POND DRIVE	62.5	0	0.75 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 06	SSMH-5057	PARSONS POND DRIVE AT BRADDISH COURT	117.5	0	0.5 ABOVE GRADE	1	Inspected	Cover - Half blind flange.													
Sub-Area 06	SSMH-5058	PARSONS POND DRIVE AT WAKELY COURT	120.7	0	0.75 ABOVE GRADE	1	Inspected	Cover - Half blind flange.													
Sub-Area 06	SSMH-0548	SUMMIT STREET AT HILLSIDE ROAD	101.0	0	0.2 BELOW GRADE	1	Inspected	Frame - Chipped.					X								
Sub-Area 06	SSMH-4513	SUMMIT STREET AT JACKSON STREET	144.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 06	SSMH-4993	SUMMIT STREET AT QUIET LANE	103.7	0	AT GRADE	3	Inspected	Invert - Catching solids.												X	Clean Invert
Sub-Area 07	SSMH-2365	18 STURDIVANT DRIVE R.O.W.	166.0	0	1 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 07	SSMH-4280	69 CARON STREET	108.0	2,880	AT GRADE	30	Inspected	Cover - Cracked pavement surrounding frame and Many Holes, Frame - Chipped, Chimney - Missing brick and mortar, broken brick, loose pieces, Wall - Leak at mouth of SW pipe at wall.	Cover Holes	Active			X			X		X			Repair Chimney
Sub-Area 07	SSMH-2385	ABBY LANE AT CLAPBOARD ROAD	88.3	0	0.25 BELOW GRADE	1	Inspected	Frame - 1"riser, Chimney - Missing mortar.			X							X			Repair Chimney Mortar
Sub-Area 07	SSMH-4967	ALICE STREET AT CRESTVIEW DRIVE	128.2	0	0.2 ABOVE GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 08	SSMH-3381	ALLEN AVENUE EASEMENT	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 08	SSMH-0953	KANSAS AVENUE EASEMENT	-	0	CNL	CNL	CNL	In wetland													
Sub-Area 08	SSMH-5031	ROARING BROOK ROAD	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 08	SSMH-5022	126 ROARING BROOK ROAD EASEMENT	147.3	0	3 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 08	SSMH-2392	138 ROARINGBROOK ROAD EASEMENT	217.0	0	12 ABOVE GRADE	30	Inspected	Cover - Many Holes, Wall - Staining/Deposits	Cover Holes	Minerals		X				X					
Sub-Area 08	SSMH-3235	55 RACINE AVENUE	80.0	0	14 ABOVE GRADE	31	Inspected	Cover - Many Holes, Chimney - Missing brick and mortar, stream running into manhole.	Cover Holes			X						X			Repair Chimney
Sub-Area 08	SSMH-0187	56 ROARING BROOK ROAD	145.5	0	17 ABOVE GRADE	31	Inspected	Cover - Manhy Holes, Wall - Moderate Mineral Deposist and Staining	Cover Holes	Minerals		X				X					
Sub-Area 08	SSMH-1293	65 RACINE AVENUE (BEHIND HOME)	154.5	0	1.5 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-6030	661 ALLEN AVENUE (BEHIND HOME)	109.0	0	4 ABOVE GRADE	30	Inspected	Cover - Many Holes, Manhole is in brook.	Cover Holes			X									
Sub-Area 08	SSMH-3379	691 ALLEN AVENUE	84.7	144	15 ABOVE GRADE	31	Inspected	Cover - Many Holes, Wall - Weeping walls.	Cover Holes	Active		X				X					
Sub-Area 08	SSMH-2533	704 ALLEN AVENUE	116.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 08	SSMH-5033	82 ROARING BROOK ROAD	188.5	0	18 ABOVE GRADE	31	Inspected	Cover - Many Holes, Wall - Staining/Deposits	Cover Holes	Minerals		X				X					
Sub-Area 08	SSMH-5032	ALLEN AVENUE AT ROARING BROOK ROAD	91.7	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 08	SSMH-3380	ALLEN AVENUE EASEMENT	88.5	0	12 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-2391	CURTIS ROAD EASEMENT	139.5	0	6 ABOVE GRADE	31	Inspected	Cover - Many Holes, Wall - Staining/Deposits, Floor - Staining/Deposits	Cover Holes	Minerals		X				X					
Sub-Area 08	SSMH-4218	CURTIS ROAD EASEMENT	105.5	0	24 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-0950	KANSAS AVENUE EASEMENT	143.5	0	19 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-0951	KANSAS AVENUE EASEMENT	109.5	0	1 ABOVE GRADE	30	Inspected	Cover - Many Holes, Chimney - Mortar completely missing between frame and Chimney.	Cover Holes			X						X			Repair Chimney
Sub-Area 08	SSMH-3234	KANSAS AVENUE EASEMENT	95.5	0	2 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-3378	KANSAS AVENUE EASEMENT	102.0	0	8 ABOVE GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-5570	KANSAS AVENUE EASEMENT	95.7	0	2 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-5023	PINELOCH DRIVE NEAR ROARING BROOK ROAD	157.3	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 08	SSMH-0574	ROARING BROOK ROAD AT DEEPWOOD ROAD	112.6	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 08	SSMH-4219	ROARING BROOK ROAD EASEMENT	84.5	0	12 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 08	SSMH-5027	ROARING BROOK ROAD NEAR DEEPWOOD DRIVE	117.5	144	8 ABOVE GRADE	31	Inspected	Cover - Many Holes, Wall - Walls leaking, moderate mineral deposits.	Cover Holes	Active		X				X					
Sub-Area 08	SSMH-2393	ROARINGBROOK ROAD EASEMENT	209.5	0	AT GRADE	18	Inspected	Cover - Many Holes, Wall - Staining/Deposits, Floor - Staining/Deposits	Cover Holes	Minerals		X				X					
Sub-Area 09	SSMH-1541	17 HUMBOLDT STREET	153.5	0	1.3 BELOW GRADE	2	Inspected	Chimney - Missing bricks, Wall - Stains/Deposits		Minerals	X					X					
Sub-Area 09	SSMH-1547	HUNINGTON AVENUE AT TORONITA STREET	133.0	0	AT GRADE	2	Inspected	No Significant Defects													

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Wastewater Collection System Action and Analysis Plan
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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 09	SSMH-0977	HUNTINGTON AVENUE AT DAGGETT STREET	125.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 09	SSMH-4482	HUNTINGTON AVENUE AT HUMBOLDT STREET	134.0	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 09	SSMH-1540	HUNTINGTON AVENUE AT VAN VECHTEN STREET	129.3	1,800	AT GRADE	2	Inspected	Wall - Wall leak lower barrel near line from NW, mineral deposits, Floor - Floor leak near NW line.		Active					X						
Sub-Area 09	SSMH-3245	IVALOO STREET AT MARLBOROUGH ROAD	144.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-1294	MAINE AVENUE	125.0	0	AT GRADE	2	Inspected	Wall - Moderate mineral deposits.		Minerals					X						
Sub-Area 09	SSMH-1295	MAINE AVENUE EASEMENT	113.5	0	2.5 BELOW GRADE	2	Inspected	Chimney - Moderate roots, missing mortar, Wall - Wet walls.		Roots	X				X						
Sub-Area 09	SSMH-4489	MAINE AVENUE EASEMENT	106.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-3241	MARLBOROUGH ROAD AT DEMEREST STREET	142.7	0	AT GRADE	2	Inspected	Cover - Cracked and missing pavement surrounding frame.													
Sub-Area 09	SSMH-2346	MARLBOROUGH ROAD AT HUMBOLDT STREET	140.7	0	0.5 BELOW GRADE	2	Inspected	Frame - Offset4.5".			X										
Sub-Area 09	SSMH-5589	MARLBOROUGH ROAD AT HUNTINGTON AVENUE	157.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-1296	MARLBOROUGH ROAD EASEMENT	208.0	0	2 BELOW GRADE	2	Inspected	Wall - Staining/Deposits		Minerals	X				X						
Sub-Area 09	SSMH-3239	MARLBOROUGH ROAD EASEMENT	192.5	0	4 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 09	SSMH-3256	MARLBOROUGH ROAD EASEMENT	238.5	0	AT GRADE	2	Inspected	Wall - Heavy mineral deposits on lower ring.		Minerals					X						
Sub-Area 09	SSMH-5572	MARLBOROUGH ROAD EASEMENT	151.3	1,872	AT GRADE	2	Inspected	Invert - Invert leak. Wall - Deposits, Pipe Connections - SW Capped leaking 0.1 GPM, East Capped leaking 0.2 GPM		Active					X		X				Seal Capped Connections (SW, E)
Sub-Area 09	SSMH-5573	MARLBOROUGH ROAD EASEMENT	206.5	288	4 ABOVE GRADE	2	Inspected	Wall - Walls weeping, light roots.		Active					X					X	Remove Roots
Sub-Area 09	SSMH-5574	MARLBOROUGH ROAD EASEMENT	234.5	1,080	AT GRADE	2	Inspected	Wall - Moderate mineral deposits, wall leak.		Active					X						
Sub-Area 09	SSMH-2368	PENN AVENUE	152.3	0	AT GRADE	2	Inspected	Cover - Cracked cover.				X									
Sub-Area 09	SSMH-0952	PENN AVENUE EASEMENT	106.5	0	24 ABOVE GRADE	2	Inspected	Wall - Heavy mineral deposits.		Minerals					X						
Sub-Area 09	SSMH-3238	VERMONT AVENUE	121.7	0	4 BELOW GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X								X	Remove Blockage from Inlet (SSMH-2368)
Sub-Area 10	SSMH-1622	AMMERDOWN PLACE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-3477	CORNELL STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-1663	MORRILL STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-1665	MORRILL STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-1664	PRINCETON STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-5719	UNIVERSITY STREET R.O.W	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-5724	UNIVERSITY STREET R.O.W	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-5722	WOODLAWN AVENUE R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-5631	100 WOODLAWN AVENUE	90.0	0	3 BELOW GRADE	9	Inspected	Manhole in gutterline, Chimney - Broken brick.			X							X			Repair Chimney
Sub-Area 10	SSMH-0133	1066 WASHINGTON AVENUE	140.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-3282	1072 WASHINGTON AVENUE	164.3	2,160	AT GRADE	3	Inspected	Frame - Chipped, Wall - Wall leak, light mineral deposits.		Active			X		X		X				
Sub-Area 10	SSMH-3283	1072 WASHINGTON AVENUE	166.7	0	AT GRADE	3	Inspected	Chimney - Broken and loose brick, missing pieces.										X			Repair Chimney
Sub-Area 10	SSMH-6066	1085 WASHINGTON AVENUE	141.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-5613	1088 WASHINGTON AVENUE	110.5	0	AT GRADE	3	Inspected	Chimney - Broken and loose brick.										X			Repair Chimney
Sub-Area 10	SSMH-3280	1100 WASHINGTON AVENUE	92.5	0	AT GRADE	3	Inspected	Pipe Connections - NW and SW are from Drain Structures, Catch Basin Connections (2)	Drain Connections												
Sub-Area 10	SSMH-0986	1127 WASHINGTON AVENUE	103.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-0985	1137 WASHINGTON AVENUE	105.5	0	0.1 BELOW GRADE	3	Inspected	Chimney - Broken brick.										X			Repair Chimney
Sub-Area 10	SSMH-0507	114 YALE STREET	72.5	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 10	SSMH-4501	115 WASHINGTON AVENUE	100.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-0988	119 WASHINGTON AVENUE	121.5	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 10	SSMH-4545	122 WOODLAWN AVENUE	89.5	0	AT GRADE	10	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and loose brick.	Cover Holes			X						X			Repair Chimney
Sub-Area 10	SSMH-5619	124 YALE STREET	90.5	0	0.1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-5620	140 YALE STREET	99.0	0	AT GRADE	3	Inspected	No Significant Defects													

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Sub-Area 10	SSMH-3305	142 WOODLAWN AVENUE	80.0	0	0.1 BELOW GRADE	38	Inspected	Chimney - Broken, loose and missing brick, missing mortar.				X					X				Rebuild Chimney
Sub-Area 10	SSMH-4546	157 WOODLAWN AVENUE	128.0	0	0.2 BELOW GRADE	15	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose pieces.	Cover Holes			X					X				Repair Chimney
Sub-Area 10	SSMH-5621	160 YALE STREET	96.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 10	SSMH-5721	180 WOODLAWN AVENUE	70.7	0	0.75 BELOW GRADE	19	Inspected	Cover - Many Holes, Chimney - Broken and loose brick, loose mortar.	Cover Holes		X	X					X				Repair Chimney
Sub-Area 10	SSMH-4552	189 HARVARD STREET	83.0	0	0.25 BELOW GRADE	11	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes			X					X				Repair Chimney
Sub-Area 10	SSMH-4548	20 UNIVERSITY STREET	99.5	0	AT GRADE	29	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick, missing parge, Invert - Catching solids.	Cover Holes			X					X				Repair/Rebuild Chimney
Sub-Area 10	SSMH-4551	201 HARVARD STREET	95.5	0	AT GRADE	22	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.	Cover Holes			X					X				Repair Chimney
Sub-Area 10	SSMH-4465	235 HARVARD STREET	96.0	0	AT GRADE	8	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken and loose brick, loose and missing mortar, Invert - Root growth.						X						X	Remove Roots
Sub-Area 10	SSMH-4464	261 HARVARD STREET	102.5	0	0.75 BELOW GRADE	2	Inspected	Chimney - Broken brick, missing mortar.			X						X				Repair Chimney
Sub-Area 10	SSMH-3307	270 HARVARD STREET	103.3	0	AT GRADE	2	Inspected	Chimney - Soft and missing mortar.									X				Repair Chimney
Sub-Area 10	SSMH-4463	276 HARVARD STREET	98.5	0	0.2 BELOW GRADE	4	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.									X				Repair Chimney
Sub-Area 10	SSMH-1666	29 CAMBRIDGE STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 10	SSMH-1680	30 WOODLAWN AVENUE	97.5	0	AT GRADE	1	Inspected	Frame - Broken.					X								
Sub-Area 10	SSMH-1621	304 AMMERDOWN PLACE	100.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 10	SSMH-4553	312 CANCO ROAD R.O.W.	99.0	0	1 ABOVE GRADE	3	Inspected	Chimney - Light roots, Wall - Moderate roots, Floor - Heavy roots, Invert - Heavy roots.		Roots				X	X					X	Remove Roots
Sub-Area 10	SSMH-5579	312 CANCO ROAD R.O.W.	98.7	0	2 ABOVE GRADE	21	Inspected	Cover - Many Holes, Chimney - Missing mortar, Wall - Missing mortar, Invert - Mineral deposits, large rock in invert.	Cover Holes	Minerals		X			X					X	Remove Rock from Invert
Sub-Area 10	SSMH-5580	360 CANCO ROAD R.O.W.	99.5	432	18 ABOVE GRADE	37	Inspected	Frame - Loose, Chimney - Broken, loose and missing brick, missing mortar, Wall - Broken brick, missing mortar, weeping, Floor - Broken brick, missing mortar, weeping, Invert - Mineral deposits, weeping.		Active		X		X	X						
Sub-Area 10	SSMH-5581	360 CANCO ROAD R.O.W.	81.8	0	AT GRADE	37	Inspected	Cover - Many Holes, Wall - Missing mortar, Invert - Heavy roots and mineral deposits.	Cover Holes	Roots		X			X					X	Remove Roots
Sub-Area 10	SSMH-4549	40 UNIVERSITY STREET	109.5	0	0.3 BELOW GRADE	30	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, Invert - Catching solids.	Cover Holes			X					X			X	Repair Chimney, Clean Invert
Sub-Area 10	SSMH-3479	42 WOODLAWN AVENUE	121.7	0	1 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Broken.					X								
Sub-Area 10	SSMH-1682	43 MAGNOLIA STREET	95.0	0	1 ABOVE GRADE	1	Inspected	Cover - Cracked and missing pavement surrounding frame, Frame - Chipped, Invert - Catching solids.					X							X	Clean Invert
Sub-Area 10	SSMH-1681	53 WOODLAWN AVENUE R.O.W.	87.0	0	2 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 10	SSMH-5725	55 UNIVERSITY STREET	157.5	0	3 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 10	SSMH-4550	64 UNIVERSITY STREET	100.5	0	0.2 BELOW GRADE	30	Inspected	Cover - Many Holes, Chimney - Broken, loose and missing brick.	Cover Holes			X					X				Repair/Rebuild Chimney
Sub-Area 10	SSMH-5723	64 WOODLAWN AVENUE	87.0	0	0.2 ABOVE GRADE	1	Inspected	Starter manhole.													
Sub-Area 10	SSMH-3306	71 WOODLAWN AVENUE	67.0	0	AT GRADE	12	Inspected	Starter manhole, Chimney - Broken brick, Floor - Broken, roots growing from floor into line.		Roots		X					X			X	Remove Roots and Repair Bench
Sub-Area 10	SSMH-3278	77 AMMERDOWN PLACE	90.4	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Floor - Loose brick, missing mortar.									X				Repair Bench

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Sub-Area 10	SSMH-5720	81 UNIVERSITY STREET AT MAJORS COURT	81.3	0	0.25 BELOW GRADE	0	Inspected	Cover - Blind flange, Floor - Missing brick, Invert - Catching solids.									X			X	Repair Bench (Missing Bricks), Clean Invert
Sub-Area 10	SSMH-4544	83 WOODLAWN AVENUE	73.5	0	AT GRADE	7	Inspected	Floor - Debris covering floor.												X	Clean Bench
Sub-Area 10	SSMH-4435	9 WOODLAWN AVENUE	89.0	0	0.5 BELOW GRADE	1	Inspected	Starter manhole, Frame - Cracked.				X									
Sub-Area 10	SSMH-5618	92 YALE STREET	85.0	0	AT GRADE	3	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame.													
Sub-Area 10	SSMH-3476	CAMBRIDGE STREET AT CORNELL STREET	132.5	288	0.25 BELOW GRADE	2	Inspected	Wall - Weeping walls.		Active					X						
Sub-Area 10	SSMH-3279	HARVARD STREET AT AMMERDOWN PLACE	95.3	0	AT GRADE	31	Inspected	Cover - Many Holes, Floor - Covered in dirt.	Cover Holes			X								X	Clean Bench
Sub-Area 10	SSMH-4466	HARVARD STREET AT YALE STREET	98.7	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick.									X				Repair Chimney
Sub-Area 10	SSMH-3478	MORRILL STREET R.O.W.	153.7	0	0.25 BELOW GRADE	1	Inspected	Invert - Catching debris.												X	Clean Invert
Sub-Area 10	SSMH-4547	UNIVERSITY STREET AT MORRILL STREET	91.7	0	AT GRADE	28	Inspected	Cover - Many Holes, Invert - Full of dirt.	Cover Holes			X								X	Clean Floor
Sub-Area 10	SSMH-1067	UNIVERSITY STREET R.O.W.	93.8	720	4 ABOVE GRADE	37	Inspected	Cover - Many Holes, Wall - Mineral deposits, wall leak, Floor - Wet from wall leaks.	Cover Holes	Active		X			X						
Sub-Area 10	SSMH-1667	UNIVERSITY STREET R.O.W.	92.5	720	1 ABOVE GRADE	8	Inspected	Wall - Weeping walls, Invert - Leak at incoming line.		Active		X			X						
Sub-Area 10	SSMH-1668	UNIVERSITY STREET R.O.W.	102.0	2,160	2 ABOVE GRADE	3	Inspected	Manhole is surrounded by water and mud, Chimney - Mineral deposits, weeping, Wall - Mineral deposits, walls leaks, Floor - Mineral deposits, Invert - Mineral deposits, Pipe Connection - NW Capped Leaking 0.5 GPM		Active					X						Seal Capped Service (NW)
Sub-Area 10	SSMH-1585	WASHINGTON AVENUE AT CANCO ROAD	102.0	0	AT GRADE	3	Inspected	Starter manhole, Chimney - Loose pieces, Floor - 18" of debris, Invert - 18" of debris.												X	Clean Floor and Invert
Sub-Area 10	SSMH-4502	WASHINGTON AVENUE AT HARVARD STREET	100.0	0	0.1 BELOW GRADE	3	Inspected	Chimney - Broken and loose parge.									X				Repair Chimney
Sub-Area 10	SSMH-4447	WASHINGTON AVENUE AT RAY STREET	83.0	0	AT GRADE	3	Inspected	Wall - Light mineral deposits.		Minerals					X						
Sub-Area 10	SSMH-5632	WOODLAWN AVENUE AT MORRILL STREET	73.0	0	AT GRADE	13	Inspected	Cover - Many Holes, Catch Basin Connections (2)	Cover Holes and Drain Connections			X						X			
Sub-Area 11	SSMH-4239	BELL STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 11	SSMH-0813	FOREST AVENUE	-	0	CNI	CNI	CNI	Confirmed with sound test			X										
Sub-Area 11	SSMH-1673	FOREST AVENUE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 11	SSMH-0222	GOODRIDGE AVENUE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 11	SSMH-4564	MORRILL STREET AT BELL STREET	-	0	CNI	CNI	CNI	Smart cover meter attached to underside of manhole cover													
Sub-Area 11	SSMH-6106	WALTON STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 11	SSMH-4353	10 MORGAN COURT	95.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 11	SSMH-1341	11 ST. JOSEPH STREET	104.0	0	AT GRADE	5	Inspected	Starter manhole, Frame - Broken, Wall - Missing mortar, Invert - Cracked at joint.					X		X						
Sub-Area 11	SSMH-4238	1148 FOREST AVENUE	195.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-4065	1160 FOREST AVENUE	154.7	720	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Covered in mud, Wall - Weeping walls, leak at outgoing line, Floor - Broken and missing brick, missing mortar.		Active					X			X				Repair Bench
Sub-Area 11	SSMH-6234	12 POLAND STREET	90.0	0	0.25 ABOVE GRADE	3	Inspected	Manhole is in gutterline, Chimney - Missing mortar, Invert - Debris catching, break in joint.									X				Repair Chimney
Sub-Area 11	SSMH-0845	1208 FOREST AVENUE ON SIDEWALK	71.5	0	6 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 11	SSMH-0814	1209 FOREST AVENUE	104.7	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-0812	1245 FOREST AVENUE	101.5	0	AT GRADE	17	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-0819	1250 FOREST AVENUE	99.5	0	0.5 BELOW GRADE	30	Inspected	Cover - Many Holes, Cracked and missing pavement surrounding frame.	Cover Holes		X	X									
Sub-Area 11	SSMH-0816	1295 FOREST AVENUE	76.0	0	AT GRADE	3	Inspected	Chimney - Missing mortar.									X				Repair Chimney
Sub-Area 11	SSMH-6098	13 DINGLEY COURT	75.5	0	0.5 BELOW GRADE	2	Inspected	Chimney - Missing mortar, Invert - 0.2" standing flow.			X						X				Repair Chimney
Sub-Area 11	SSMH-0311	151 WALTON STREET	125.0	0	0.2 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 11	SSMH-6099	16 DINGLEY COURT	97.5	0	1 ABOVE GRADE	2	Inspected	Chimney - Missing mortar.									X				Repair Chimney

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Sub-Area 11	SSMH-0310	166 WALTON STREET	98.7	0	AT GRADE	2	Inspected	Chimney - Loose brick.									X				Repair Chimney
Sub-Area 11	SSMH-6564	17 ARBOR STREET	109.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 11	SSMH-1890	203 WALTON STREET	113.0	0	0.2 BELOW GRADE	3	Inspected	Wall - Moderate mineral deposits.		Minerals				X							
Sub-Area 11	SSMH-1900	21 WAVERLY STREET	89.0	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Invert - Joint seperated.	Cover Holes			X					X				Repair Invert
Sub-Area 11	SSMH-6078	22 POLAND STREET	88.3	0	0.25 ABOVE GRADE	1	Inspected	Invert - Large crack at joint.									X				Repair Invert (Fracture)
Sub-Area 11	SSMH-1891	223 WALTON STREET	100.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 11	SSMH-1064	24 ARBOR STREET	111.5	0	AT GRADE	24	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Floor - Missing mortar.	Cover Holes			X					X				Repair Bench
Sub-Area 11	SSMH-4063	24 MORRILL STREET	181.0	2,880	AT GRADE	0	Inspected	Cover - Blind flange, Wall - 1 GPM pipe leak and 2 GPM leak at anchor hole in wall.		Active					X						
Sub-Area 11	SSMH-3473	241 WALTON STREET	99.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 11	SSMH-1066	250 READ STREET	206.5	288	0.75 BELOW GRADE	1	Inspected	Manhole in gutterline, Wall - Wall leaks.		Active	X			X							
Sub-Area 11	SSMH-1670	250 READ STREET	81.0	0	AT GRADE	3	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-1669	256 READ STREET	129.5	0	AT GRADE	23	Inspected	Cover - Many Holes, Frame - Chipped, Invert - Full of debris, restricting flow.	Cover Holes				X							X	Clean Invert
Sub-Area 11	SSMH-3471	259 WALTON STREET	100.5	0	AT GRADE	24	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-0904	26 ELEANOR STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 11	SSMH-4349	271 WALTON STREET	117.0	0	AT GRADE	32	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, Invert - Missing mortar at joint.	Cover Holes			X					X				Repair Chimney and Invert
Sub-Area 11	SSMH-1894	275 WALTON STREET	104.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-0934	28 ALLEN AVENUE	78.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Broken.					X								
Sub-Area 11	SSMH-1889	28 TREMAINE STREET	83.5	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-6008	293 READ STREET	59.0	0	AT GRADE	0	Inspected	Starter manhole, Cover - Blind flange.													
Sub-Area 11	SSMH-1671	3 ADELAIDE STREET	97.0	0	AT GRADE	34	Inspected	Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Floor - Could not thouroughly inspect, covered in debris, Invert - Debris.	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 11	SSMH-4355	30 ELMWOOD STREET	87.0	0	0.25 BELOW GRADE	27	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and missing brick.	Cover Holes			X					X				Repair Chimney
Sub-Area 11	SSMH-4348	30 ST. JOSEPH STREET	101.5	0	AT GRADE	29	Inspected	Cover - Many Holes, Invert - Missing mortar.	Cover Holes			X					X				Repair invert
Sub-Area 11	SSMH-6063	33 ALLEN AVENUE	68.7	0	0.5 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.			X										
Sub-Area 11	SSMH-0319	33 COLLEGE STREET	90.7	0	AT GRADE	19	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.	Cover Holes			X					X				Repair Chimney
Sub-Area 11	SSMH-6233	36 POLAND STREET	83.5	0	0.2 ABOVE GRADE	8	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Loose brick, loose and missing mortar.									X				Repair Chimney
Sub-Area 11	SSMH-1901	42 WAVERLY STREET	95.5	0	AT GRADE	12	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose pieces.	Cover Holes			X					X				Repair Chimney
Sub-Area 11	SSMH-0935	50 ALLEN AVENUE	86.5	0	AT GRADE	38	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-6064	50 ALLEN AVENUE	91.0	0	AT GRADE	29	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-4691	51 COLLEGE STREET (BEHIND)	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 11	SSMH-1062	54 TREMAINE STREET	71.0	0	AT GRADE	30	Inspected	Cover - Many Holes, Invert - 1.5" debris.	Cover Holes			X								X	Clean Floor
Sub-Area 11	SSMH-1897	55 ELMWOOD STREET	91.0	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar.									X				Repair/Rebuild Chimney
Sub-Area 11	SSMH-6062	6 ALLEN AVENUE	85.3	0	0.1 BELOW GRADE	1	Inspected	Floor - 3" of dirt, Invert - Restricted flow, grease back up. Storm Drain Connections (2)	Drain Connections										X	X	
Sub-Area 11	SSMH-1386	673 STEVENS AVENUE	83.0	0	AT GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-4436	70 ALLEN AVENUE	99.0	0	AT GRADE	14	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar.	Cover Holes			X					X				Repair Chimney
Sub-Area 11	SSMH-4690	74 COLLEGE STREET AT STEVENS AVENUE	-	0	CNI	CNI	CNI	Cracked cover				X									
Sub-Area 11	SSMH-4354	751 STEVENS AVENUE	97.5	0	3 BELOW GRADE	37	Inspected	Cover - Many Holes, Frame - Missingasphalt, Chimney - Broken and loose brick, missing mortar.	Cover Holes			X	X								
Sub-Area 11	SSMH-4119	772 STEVENS AVENUE	113.5	0	AT GRADE	39	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 11	SSMH-1904	788 STEVENS AVENUE	110.0	0	AT GRADE	37	Inspected	Cover - Many Holes, Highpoint manhole, Cover - Many Holes, Cracked pavement surrounding frame, Wall - Large gap in mortar.	Cover Holes			X			X						
Sub-Area 11	SSMH-4692	79 COLLEGE STREET	68.0	0	AT GRADE	0	Inspected	Starter manhole.													
Sub-Area 11	SSMH-1903	798 STEVENS AVENUE	104.8	0	0.5 BELOW GRADE	15	Inspected	Cover - Many Holes, Invert seems to have been changed several times over the years. There are numerous rough spots for rags to catch. The dirt is being undermined under the floor because the invert is not sealed well., Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar, Floor - Missing mortar, dirt underneath undermined - see notes, Invert - Catching solids.	Cover Holes		X	X						X			Repair/Rebuild Bench and Invert
Sub-Area 11	SSMH-4563	80 BELL STREET	212.0	13,680	AT GRADE	23	Inspected	Cover - Many Holes, Wall - Multiple leaks, Floor - Multiple leaks, missing brick and mortar.	Cover Holes	Active		X			X	X					
Sub-Area 11	SSMH-1906	812 STEVENS AVENUE	108.5	0	AT GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar.	Cover Holes			X		X				X			Repair Chimney
Sub-Area 11	SSMH-1907	832 STEVENS AVENUE	101.5	0	AT GRADE	2	Inspected	Chimney - Covered in mud.													
Sub-Area 11	SSMH-6105	945 FOREST AVENUE	92.7	0	0.5 BELOW GRADE	2	Inspected	Wall - Aggregate exposed.			X				X		X				
Sub-Area 11	SSMH-6107	945 FOREST AVENUE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 11	SSMH-1887	964 FOREST AVENUE	119.0	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Frame - Broken, Wall - Weeping walls.		Active			X		X						
Sub-Area 11	SSMH-4091	991 FOREST AVENUE	93.0	0	0.5 BELOW GRADE	35	Inspected	Cover - Many Holes, Chimney - Loose brick, missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-0815	ALLEN AVENUE AT FOREST AVENUE	114.5	0	9 ABOVE GRADE	3	Inspected	Chimney - Loose and missing brick, loose and missing mortar.										X			Repair Chimney
Sub-Area 11	SSMH-4562	BELL STREET AT ADELAIDE STREET	205.7	0	AT GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 11	SSMH-4565	BELL STREET AT READ STREET	138.7	0	AT GRADE	32	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 11	SSMH-1278	BELL STREET R.O.W.	144.5	0	AT GRADE	19	Inspected	Cover - Many Holes, Invert - Light mineral deposits.	Cover Holes	Minerals		X				X					
Sub-Area 11	SSMH-3470	BELL STREET R.O.W.	110.0	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 11	SSMH-5718	BELL STREET R.O.W.	121.0	0	0.2 BELOW GRADE	31	Inspected	Cover - Many Holes, Wall - Light mineral deposits.	Cover Holes	Minerals		X			X						
Sub-Area 11	SSMH-6004	BELL STREET R.O.W.	132.0	0	0.2 ABOVE GRADE	2	Inspected	Wall - Heavy mineral deposits, Floor - Standing water, heavy mineral deposits, Invert - Heavy mineral deposits.		Minerals					X						
Sub-Area 11	SSMH-6005	BELL STREET R.O.W.	132.0	4,320	0.5 BELOW GRADE	36	Inspected	Cover - Many Holes, Wall - Broken brick, missing mortar, missing pieces, Floor - 2GPM leak and 1GPM leak at incoming line, missing mortar.	Cover Holes	Active	X	X			X	X					
Sub-Area 11	SSMH-6079	BELL STREET R.O.W.	130.5	0	2 BELOW GRADE	17	Inspected	Cover - Many Holes, Frame - Sinkingintoground, Wall - Weeping walls, Floor - Broken pieces, loose brick, missing mortar, Invert - Missing mortar.	Cover Holes	Active	X	X			X						
Sub-Area 11	SSMH-0318	COLLEGE STREET AT LINNELL HALL	97.0	0	AT GRADE	23	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar, Floor - Cracked and loose brick, missing mortar.	Cover Holes			X						X			Repair Bench
Sub-Area 11	SSMH-4688	ELMWOOD STREET AT FOREST AVENUE	88.5	0	AT GRADE	38	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Missing mortar, Invert - Light mineral deposits.	Cover Holes	Minerals		X			X						
Sub-Area 11	SSMH-4689	ELMWOOD STREET AT FOREST AVENUE	110.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Wall - Light mineral deposits.		Minerals					X						
Sub-Area 11	SSMH-1898	ELMWOOD STREET AT STEVENS AVENUE	93.0	0	0.25 BELOW GRADE	37	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar, Invert - 4" debris.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-1674	FOREST AVENUE AT ARBOR STREET	102.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Wall - Missing mortar, Floor - Dirt and debris.	Cover Holes			X						X		X	Clean Bench, Repair Walls
Sub-Area 11	SSMH-5356	FOREST AVENUE AT MAGGIE LANE	93.5	0	AT GRADE	3	Inspected	Chimney - Missing mortar.										X			Repair Chimney
Sub-Area 11	SSMH-1672	FOREST AVENUE AT MORRIL STREET	95.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Covered in mud, Wall - Covered in mud. Catch Basin Connections (2)	Drain Connections												
Sub-Area 11	SSMH-0315	FOREST AVENUE AT POLAND STREET	103.0	0	0.5 ABOVE GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Missing mortar, Floor - Loose and missing brick, missing mortar.	Cover Holes			X			X			X			Repair Bench
Sub-Area 11	SSMH-0316	FOREST AVENUE AT POLAND STREET	67.7	0	0.25 ABOVE GRADE	37	Inspected	Cover - Many Holes, Floor - Missing mortar.	Cover Holes			X						X			Repair Bench
Sub-Area 11	SSMH-0220	FOREST AVENUE AT STEVENS AVENUE	126.0	0	AT GRADE	3	Inspected	Cover - Cracked and missing pavement surrounding frame, Chimney - Broken brick, missing mortar, Floor - Mineral deposits.		Minerals					X			X			Repair Chimney
Sub-Area 11	SSMH-1908	FOREST AVENUE AT STEVENS AVENUE	80.7	0	AT GRADE	3	Inspected	Chimney - Broken brick, missing mortar, Catch Basin Connection	Drain Connections									X			Repair Chimney
Sub-Area 11	SSMH-1888	FOREST AVENUE AT TREMAINE STREET	94.0	0	0.5 BELOW GRADE	30	Inspected	Cover - Many Holes, Cracked and missing pavement surrounding frame, Frame - Chipped.	Cover Holes		X		X								
Sub-Area 11	SSMH-0308	FOREST AVENUE AT WALTON STREET	101.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 11	SSMH-0309	FOREST AVENUE AT WALTON STREET	112.0	0	AT GRADE	0	Inspected	Cover - Blind flange.													
Sub-Area 11	SSMH-3475	FOREST AVENUE AT WALTON STREET	127.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Closed line running through manhole, coming from Forest Avenue.	Cover Holes			X									

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Sub-Area 11	SSMH-1899	FOREST AVENUE AT WAVERLY STREET	104.3	0	1 BELOW GRADE	34	Inspected	Cover - Many Holes, Cracked and missing pavement surrounding frame, Chimney - Loose pieces.	Cover Holes		X	X						X			Repair Chimney
Sub-Area 11	SSMH-1065	READ STREET AT BELL STREET	182.7	0	AT GRADE	0	Inspected	Cover - Cracked pavement surrounding frame, blind flange, Wall - Weeping walls.		Active					X						
Sub-Area 11	SSMH-0317	STEVENS AVENUE AT COLLEGE STREET	106.3	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken, loose and missing bricks, missing mortar, large cracks, Wall - Missing parging.	Cover Holes			X			X						
Sub-Area 11	SSMH-1895	STEVENS AVENUE AT ELMWOOD STREET	75.7	0	AT GRADE	2	Inspected	Highpoint manhole, Cover - Cracked pavement surrounding frame, Chimney - Completely deteriorated, almost non-existent.										X			Rebuild Chimney
Sub-Area 11	SSMH-1892	STEVENS AVENUE AT WALTON STREET	88.0	0	AT GRADE	37	Inspected	Cover - Many Holes, Chimney - Loose brick, missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 11	SSMH-1896	STEVENS AVENUE AT WAVERLY STREET	106.8	0	0.5 BELOW GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Broken,largecracks, Chimney - Broken, loose and missing brick, missing mortar, large cracks.	Cover Holes				X					X			Rebuild Chimney
Sub-Area 11	SSMH-1905	STEVENS AVENUE NEAR POLAND STREET	93.7	0	1 BELOW GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.	Cover Holes		X	X						X			Repair Chimney
Sub-Area 11	SSMH-1063	TREMAINE STREET AT FOREST AVENUE	79.5	0	AT GRADE	21	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing and loose pieces, Wall - Weeping walls.	Cover Holes	Active		X		X	X						
Sub-Area 11	SSMH-3472	WALTON STREET AT DINGLEY COURT	107.0	0	AT GRADE	2	Inspected	Chimney - Loose brick, missing mortar.													
Sub-Area 11	SSMH-3474	WALTON STREET AT MORGAN COURT	105.8	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 11	SSMH-1893	WALTON STREET AT STEVENS AVENUE	121.3	0	AT GRADE	18	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 11	SSMH-0314	WAVERLY STREET AT STEVENS AVENUE	109.5	0	AT GRADE	28	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X		X						X	Remove Roots
Sub-Area 12	SSMH-3594	33 WELLINGTON ROAD	102.8	0	0.2 ABOVE GRADE	15	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 12	SSMH-1118	79 GLECKLER ROAD	89.0	0	AT GRADE	2	Inspected	Wall - Broken brick.													
Sub-Area 12	SSMH-3593	OCEAN AVENUE AT WELLINGTON ROAD	106.0	0	AT GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Chipped.	Cover Holes				X					X			Repair Capped Service (Leaking)
Sub-Area 14	SSMH-0846	RIVERSIDE STREET - FIRESIDE INN	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 14	SSMH-3013	155 RIVERSIDE STREET - RAMADA INN PARKING LOT	147.3	0	4 ABOVE GRADE	15	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 14	SSMH-2785	17 GORGES STREET	87.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 14	SSMH-5361	200 RIVERSIDE STREET	80.3	0	AT GRADE	2	Inspected	Cover - Blind flange.													
Sub-Area 14	SSMH-4073	HOLM AVENUE EASEMENT	141.5	0	36 ABOVE GRADE	29	Inspected	Cover - Many Holes, Frame - Restingonprecastwall.	Cover Holes			X									
Sub-Area 14	SSMH-0844	RIVERSIDE STREET	124.0	0	5 BELOW GRADE	28	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 14	SSMH-2722	TAFT AVENUE AT DALE STREET	92.3	0	0.5 BELOW GRADE	1	Inspected	Wall - Wet walls, mineral deposits.		Minerals	X				X						
Sub-Area 14	SSMH-2723	TAFT AVENUE AT POE STREET	93.5	0	AT GRADE	31	Inspected	Cover - Many Holes, Wall - Walls weeping.	Cover Holes	Active		X			X						
Sub-Area 15	SSMH-2755	104 CANDLEWYCK TERRACE	157.3	720	AT GRADE	3	Inspected	Wall - Wall leak, Floor - Debris on bench, Invert - Concrete debris restricting flow, catching rags.		Active						X				X	Clean Bench and Invert
Sub-Area 15	SSMH-2720	158 WARWICK STREET	262.8	0	AT GRADE	2	Inspected	Wall - Bottom 4' is brick.													
Sub-Area 15	SSMH-2768	158 WARWICK STREET	294.3	0	AT GRADE	2	Inspected	Floor - Surcharged, Invert - Surcharged.												X	Manhole Surcharged
Sub-Area 15	SSMH-0671	197 PINECREST ROAD	97.3	0	AT GRADE	1	Inspected	Frame - Offset4", Chimney - Loose pieces, missing mortar.			X							X			Repair Chimney
Sub-Area 15	SSMH-5188	20 CEDARHURST LANE EASEMENT	123.5	0	8 ABOVE GRADE	38	Inspected	Cover - Many Holes, Wall - Light roots, wet walls.	Cover Holes	Roots		X			X				X	Remove Roots
Sub-Area 15	SSMH-2702	31 SUNSET LANE	217.3	0	0.5 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 15	SSMH-5213	95 DENNETT STREET	145.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Floor - Debris.													
Sub-Area 15	SSMH-2766	CANDLEWYCK TERRACE	109.0	0	19 ABOVE GRADE	37	Inspected	Cover - Many Holes, Chimney - Corroded bricks and mortar, Wall - Light roots.	Cover Holes	Roots		X					X	X			Repair Chimney
Sub-Area 15	SSMH-2763	CANDLEWYCK TERRACE R.O.W.	98.5	0	19 ABOVE GRADE	37	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes			X						X			Repair Chimney

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Sub-Area 15	SSMH-2764	CANDLEWYCK TERRACE R.O.W.	172.5	0	14 ABOVE GRADE	37	Inspected	Cover - Many Holes, Wall - Light roots, Floor - Rocks on floor, Invert - Debris blocking invert.	Cover Holes	Roots		X			X					X	Remove Roots, Clean Bench and Invert
Sub-Area 15	SSMH-2765	CANDLEWYCK TERRACE R.O.W.	125.0	0	3 ABOVE GRADE	37	Inspected	Cover - Many Holes, Wall - Roots, Floor - Roots.	Cover Holes	Roots		X			X					X	Remove Roots
Sub-Area 15	SSMH-0927	DENNETT STREET R.O.W.	117.5	0	16 ABOVE GRADE	25	Inspected	Cover - Many Holes, Floor - Debris on floor.	Cover Holes			X								X	Clean Bench
Sub-Area 15	SSMH-6213	GLEN HAVEN ROAD WEST R.O.W.	119.5	0	11 ABOVE GRADE	37	Inspected	Cover - Many Holes, Floor - Debris.	Cover Holes			X								X	Clean Bench
Sub-Area 15	SSMH-5214	LONGWOOD TERRACE R.O.W.	102.5	0	9 ABOVE GRADE	37	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 15	SSMH-6208	PENWOOD DRIVE EASEMENT	118.0	0	27 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 15	SSMH-6209	PENWOOD DRIVE EASEMENT	122.3	144	44 ABOVE GRADE	30	Inspected	Cover - Many Holes, Floor - Weeping.	Cover Holes	Active		X			X						
Sub-Area 15	SSMH-6210	PENWOOD DRIVE EASEMENT	137.5	0	12 ABOVE GRADE	36	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 15	SSMH-6211	PINEBROOK LANE R.O.W.	123.0	0	4 ABOVE GRADE	37	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 15	SSMH-6212	PINEBROOK LANE R.O.W.	121.5	0	7 ABOVE GRADE	37	Inspected	Cover - Many Holes, Floor - Debris on floor.	Cover Holes			X								X	Clean Bench
Sub-Area 15	SSMH-6207	PINEWOOD LANE R.O.W.	106.3	720	14 ABOVE GRADE	21	Inspected	Cover - Many Holes, Wall - Wall leak, light roots, Floor - Heavy roots.	Cover Holes	Active		X			X					X	Remove Roots
Sub-Area 15	SSMH-6218	WARWICK STREET AT GLEN HAVEN ROAD	77.5	0	AT GRADE	2	Inspected	Catch Basin Connections (2)	Drain Connections												
Sub-Area 15	SSMH-2767	WARWICK STREET R.O.W.	111.5	0	6 ABOVE GRADE	37	Inspected	Cover - Many Holes, Chimney - Broken brick, Floor - Dirt on floor.	Cover Holes			X						X			Repair Chimney
Sub-Area 15	SSMH-6214	WARWICK STREET R.O.W.	132.3	0	4 ABOVE GRADE	37	Inspected	Cover - Many Holes, Invert - 2" of debris.	Cover Holes			X								X	Clean Invert
Sub-Area 16	SSMH-5249	BRENTWOOD STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 16	SSMH-6097	LELAND STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 16	SSMH-5219	LUDLOW STREET AT HAMBLET AVENUE	-	0	CNI	CNI	CNI	Cracked manhole cover				X									
Sub-Area 16	SSMH-4684	100 BRENTWOOD STREET	101.0	0	AT GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-2844	103 ALBA STREET	69.0	0	AT GRADE	22	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2858	108 MADELINE STREET	96.5	0	0.25 BELOW GRADE	12	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick.	Cover Holes			X							X		Repair Chimney
Sub-Area 16	SSMH-2811	11 PHIPPS ROAD	80.0	0	3 ABOVE GRADE	1	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Floor - 1.5" Debris on floor, Invert - Full of debris.												X	Clean Bench and Invert
Sub-Area 16	SSMH-2812	11 PHIPPS ROAD	104.5	0	0.75 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Wall - Heavily weeping walls, light mineral deposits.		Active	X				X						
Sub-Area 16	SSMH-0744	12 CROSBY STREET	75.5	0	AT GRADE	18	Inspected	Cover - Many Holes, Floor - Heavy debris on floor.	Cover Holes			X								X	Clean Bench
Sub-Area 16	SSMH-3216	12 HALE STREET	89.0	0	0.5 BELOW GRADE	1	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Wall - Weeping walls, Invert - 1" debris.		Active	X					X				X	Clean Invert
Sub-Area 16	SSMH-2829	12 NEWMAN STREET	84.5	0	0.2 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick.											X		Repair Chimney
Sub-Area 16	SSMH-5271	122 MABEL STREET	96.5	0	AT GRADE	16	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Weeping walls.	Cover Holes	Active		X			X						
Sub-Area 16	SSMH-2857	128 MADELINE STREET	60.0	0	1 BELOW GRADE	13	Inspected	Cover - Many Holes, Chimney - Broken brick, missing mortar.	Cover Holes		X	X							X		Repair Chimney
Sub-Area 16	SSMH-2853	150 LUDLOW STREET	125.5	0	0.2 ABOVE GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped.					X								
Sub-Area 16	SSMH-2838	16 NEW STREET	68.5	0	AT GRADE	3	Inspected	Chimney - Missing pieces.											X		Repair Chimney
Sub-Area 16	SSMH-2852	168 LUDLOW STREET	106.7	2,160	0.2 ABOVE GRADE	26	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Chipped, Wall - Moderate mineral deposits, large root ball at seam of floor, Floor - Missing mortar, Invert - Root growing from wall into invert.	Cover Holes	Minerals			X		X					X	Remove Roots
Sub-Area 16	SSMH-0737	17 WINGATE DRIVE	102.5	0	0.5 ABOVE GRADE	30	Inspected	Cover - Many Holes, Lamped 15' up line from South, did not see any lines tied into it - very clear and fast flow, Chimney - Missing mortar.	Cover Holes			X									
Sub-Area 16	SSMH-5250	178 BRENTWOOD STREET	84.0	0	0.5 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 16	SSMH-2851	182 LUDLOW STREET	126.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick.											X		Repair Chimney

City of Portland, Maine
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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 16	SSMH-0246	19 MABEL STREET	87.0	0	1.5 BELOW GRADE	21	Inspected	Cover - Many Holes, One side of frame is sunken 1.5" due to Chimney deterioration, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick, missing mortar, Invert - Broken in several places, causing flow to back up.	Cover Holes		X	X					X		X		Clean Invert and Bench, Repair Invert
Sub-Area 16	SSMH-2778	219 LUDLOW STREET	128.5	0	AT GRADE	4	Inspected	Frame - Chipped.					X								
Sub-Area 16	SSMH-5221	226 LUDLOW STREET	166.0	0	AT GRADE	2	Inspected	Frame - Chipped.					X								
Sub-Area 16	SSMH-2776	226 LUDLOW STREET R.O.W.	180.3	0	1 BELOW GRADE	32	Inspected	Cover - Many Holes	Cover Holes		X	X									
Sub-Area 16	SSMH-5222	236 LUDLOW STREET	85.5	0	AT GRADE	3	Inspected	Frame - Chipped.					X								
Sub-Area 16	SSMH-2796	25 PHIPPS ROAD	85.0	0	AT GRADE	1	Inspected	Chimney - Missing mortar, Invert - 1.5" standing flow.									X				Repair Chimney
Sub-Area 16	SSMH-6377	25 RICHARDSON STREET	93.5	0	0.2 ABOVE GRADE	30	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar.	Cover Holes			X					X				Repair Chimney
Sub-Area 16	SSMH-5220	253 LUDLOW STREET	92.5	0	AT GRADE	0	Inspected	Frame - Chipped, Chimney - Broken and missing brick.					X				X				Repair Chimney
Sub-Area 16	SSMH-5256	26 CONCORD STREET WEST	105.0	720	AT GRADE	3	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Invert - Leak at seam.		Active				X							
Sub-Area 16	SSMH-2784	26 PHIPPS ROAD	92.7	0	0.75 BELOW GRADE	2	Inspected	Below Grade			X										
Sub-Area 16	SSMH-0754	28 LEONARD STREET	97.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-2831	29 BEDELL STREET	98.0	0	0.25 BELOW GRADE	3	Inspected	Starter manhole, Chimney - Broken brick, Wall - Light roots.		Roots				X						X	Remove Roots
Sub-Area 16	SSMH-4324	31 ALBA STREET	92.5	0	AT GRADE	38	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2865	33 BARTLETT STREET	89.8	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Floor - Broken, Invert - Broken, piece blocking incoming line.	Cover Holes			X					X				Rebuild Bench and Invert
Sub-Area 16	SSMH-2797	33 PHIPPS ROAD	84.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 16	SSMH-0758	34 HAMBLET AVENUE AT BARTLET STREET	89.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick. Catch Basin Connections (2)	Drain Connections								X				Repair Chimney
Sub-Area 16	SSMH-0731	34 PHIPPS ROAD	93.5	0	AT GRADE	2	Inspected	Chimney - Missing mortar.													
Sub-Area 16	SSMH-2862	35 HALE STREET	130.0	288	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Broken, Wall - Wall leak.	Cover Holes	Active			X			X					
Sub-Area 16	SSMH-4326	35 MABEL STREET	87.5	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2867	41 BARTLETT STREET R.O.W.	192.5	0	4 ABOVE GRADE	25	Inspected	Cover - Many Holes, Wall - Weeping walls.	Cover Holes	Active		X			X						
Sub-Area 16	SSMH-2839	44 RICHARDSON STREET	78.5	0	0.2 ABOVE GRADE	29	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-5238	49 WINGATE DRIVE	98.3	0	0.25 ABOVE GRADE	2	Inspected	Chimney - Broken brick, missing mortar, Wall - Missing pieces, Invert - Standing solids.									X			X	Repair Chimney and Wall, Clean Invert
Sub-Area 16	SSMH-0759	5 HAMBLET AVENUE AT MADELINE STREET	95.0	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Loose, Chimney - Broken and missing brick, Loose and missing mortar, Wall - Weeping walls.	Cover Holes	Active		X		X	X						
Sub-Area 16	SSMH-5239	50 WINGATE DRIVE	99.5	0	1.5 BELOW GRADE	2	Inspected	In gutterline.			X										
Sub-Area 16	SSMH-2864	53 BARTLETT STREET	119.0	0	AT GRADE	1	Inspected	Starter manhole.													
Sub-Area 16	SSMH-6080	54 BRENTWOOD STREET	72.0	0	0.75 BELOW GRADE	23	Inspected	Cover - Many Holes, Chimney - Broken, loose and missing brick, missing mortar, missing pieces, Invert - Full of debris.	Cover Holes		X	X					X			X	Clean Bench and Invert, Repair Chimney
Sub-Area 16	SSMH-4323	55 ALBA STREET	85.0	0	0.2 ABOVE GRADE	11	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2863	55 HALE STREET	79.0	0	AT GRADE	31	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Invert - 1" debris.	Cover Holes			X								X	Clean Invert
Sub-Area 16	SSMH-2799	55 WINGATE DRIVE	104.5	0	0.25 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 16	SSMH-0245	56 ALBA STREET	86.0	0	AT GRADE	8	Inspected	Starter manhole.													
Sub-Area 16	SSMH-5254	57 LELAND STREET	92.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 16	SSMH-4325	59 MABEL STREET	89.5	0	AT GRADE	29	Inspected	Cover - Many Holes, Chimney - Broken brick.	Cover Holes			X					X				Repair Chimney
Sub-Area 16	SSMH-5247	59 PHIPPS ROAD	74.0	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													

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Sub-Area 16	SSMH-0736	62 JEANNE STREET	78.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Invert - 1.5" debris.												X	Clean Invert
Sub-Area 16	SSMH-5240	62 WINGATE DRIVE	101.0	0	0.5 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame.			X										
Sub-Area 16	SSMH-2807	70 JEANNE STREET	89.0	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick, Floor - Missing mortar, Invert - Missing mortar, broken brick, piece missing at outgoing line.										X			Repair Bench and Invert
Sub-Area 16	SSMH-4597	74 HAMBLET AVENUE AT MABEL STREET	101.5	0	AT GRADE	23	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Light roots, weeping walls, Floor - Missing mortar.	Cover Holes	Active		X			X					X	Remove Roots
Sub-Area 16	SSMH-0752	77 BRENTWOOD STREET	90.0	0	AT GRADE	30	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-2868	83 MADELINE STREET	116.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Floor - Covered with debris.	Cover Holes			X								X	Clean Bench
Sub-Area 16	SSMH-0751.1	86 LELAND STREET	71.3	0	0.25 BELOW GRADE	3	Inspected	No Significant Defects													
Sub-Area 16	SSMH-2866	9 BARTLETT STREET	106.0	0	0.5 ABOVE GRADE	3	Inspected	Starter manhole, Wall - Light mineral deposits, Invert - Full of debris.		Minerals					X					X	Clean Invert
Sub-Area 16	SSMH-2832	9 BEDELL STREET	100.5	0	0.25 BELOW GRADE	14	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick.	Cover Holes			X						X			Repair Chimney
Sub-Area 16	SSMH-4596	92 HAMBLET AVENUE AT ALBA STREET	95.5	0	1 ABOVE GRADE	33	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose and broken brick, missing mortar, Wall - Weeping walls.	Cover Holes	Active		X		X	X						
Sub-Area 16	SSMH-5272	99 MABEL STREET	102.5	0	0.75 BELOW GRADE	25	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									
Sub-Area 16	SSMH-0749	ALBA STREET AT BEST STREET	101.5	0	AT GRADE	37	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2836	BEST STREET AT LEONARD STREET	94.0	0	AT GRADE	3	Inspected	Starter manhole, Chimney - Broken brick, missing mortar.										X			Repair Chimney
Sub-Area 16	SSMH-2835	BEST STREET AT RICHARDSON STREET	72.0	0	AT GRADE	12	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and loose pieces.	Cover Holes			X						X			Repair Chimney
Sub-Area 16	SSMH-2833	BRENTWOOD STREET AT BEDELL STREET	101.3	0	0.2 BELOW GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose brick, missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 16	SSMH-2834	BRENTWOOD STREET AT BEST STREET	115.0	0	0.2 BELOW GRADE	22	Inspected	Cover - Many Holes, Chimney - Broken and missing brick, missing mortar.	Cover Holes			X						X			Repair Chimney
Sub-Area 16	SSMH-5251	BRENTWOOD STREET AT HAMBLET AVENUE	105.3	0	AT GRADE	7	Inspected	Chimney - Broken, loose, missing and soft brick, missing mortar, Wall - Broken and missing brick, missing mortar, Floor - Missing brick and mortar.							X						
Sub-Area 16	SSMH-2828	BRENTWOOD STREET AT NEWMAN STRRET	92.0	0	AT GRADE	7	Inspected	Chimney - Broken and loose brick.										X			Repair Chimney
Sub-Area 16	SSMH-1755	COLUMBIA ROAD AT LEE MAN STREET	72.0	0	AT GRADE	34	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Floor - Covered in 1.5" of debris, Invert - Covered in 1.5" of debris.	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 16	SSMH-1754	COLUMBIA ROAD AT MERRIAM STREET	85.5	0	0.75 ABOVE GRADE	14	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Crackedthrough.	Cover Holes				X								
Sub-Area 16	SSMH-0753	CROSBY STREET AT LELAND STREET	92.0	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 16	SSMH-0756	FULLER STREET AT BARTLETT STREET	108.5	0	AT GRADE	7	Inspected	Chimney - Broken brick.										X			Repair Chimney
Sub-Area 16	SSMH-2869	FULLER STREET AT HALE STREET	98.0	0	0.25 ABOVE GRADE	36	Inspected	Cover - Many Holes, Frame - Chipped.	Cover Holes				X								
Sub-Area 16	SSMH-0755	FULLER STREET AT MADELINE STREET	107.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 16	SSMH-0757	HAMBLET AVENUE AT HALE STREET	71.5	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick. Catch Basin Connection (2)	Cover Holes and Drain Connections									X			Repair Chimney
Sub-Area 16	SSMH-2808	JEANNE STREET AT PHIPPS ROAD	101.0	288	AT GRADE	26	Inspected	Cover - Many Holes, Frame - Chipped, Wall - Weeping walls, light mineral deposits. Storm Drain Connection	Cover Holes and Drain Connections	Active			X		X						
Sub-Area 16	SSMH-2809	JEANNE STREET AT WINGATE ROAD	74.5	0	0.25 ABOVE GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Chipped, Chimney - Broken brick, Wall - Broken brick, Floor - Missing mortar, Invert - Missing mortar.	Cover Holes				X		X						
Sub-Area 16	SSMH-2827	LELAND STREET AT ACCESS ROAD	94.0	0	AT GRADE	36	Inspected	Cover - Many Holes, Catch Basin Connection	Cover Holes and Drain Connections			X							X		
Sub-Area 16	SSMH-0751	LELAND STREET AT BRENTWOOD STREET	75.0	0	AT GRADE	29	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-5270	LELAND STREET AT CONCORD STREET WEST	115.3	0	AT GRADE	35	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Light mineral deposits.	Cover Holes	Minerals		X			X						
Sub-Area 16	SSMH-1325	LELAND STREET AT CROSBY STREET	112.3	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Wall - Moderate roots.		Roots						X				X	Remove Roots
Sub-Area 16	SSMH-6082	LELAND STREET AT LEONARD STREET	101.7	0	0.75 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.			X										
Sub-Area 16	SSMH-5275	LELAND STREET AT LUDLOW STREET	84.3	0	0.2 ABOVE GRADE	32	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing pieces. Drain Lines Connections (2)	Cover Holes and Drain Connections			X						X			Repair Chimney
Sub-Area 16	SSMH-2843	LELAND STREET AT MABEL STREET	94.0	0	AT GRADE	36	Inspected	Cover - Many Holes, Cracked pavement surrounding frame.	Cover Holes			X									

ARCADIS Design & Consultancy for natural and built assets

Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 16	SSMH-0750	LELAND STREET AT PLEASANT AVENUE	80.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 16	SSMH-6081	LELAND STREET AT RICHARDSON STREET	98.0	0	0.2 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 16	SSMH-1739	LELAND STREET AT TENNIS COURT	89.0	0	0.25 ABOVE GRADE	33	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Loose and missing piece,chipped. Catch Basin Connection	Cover Holes and Drain Connections			X									
Sub-Area 16	SSMH-5273	LUDLOW STREET AT COLUMBIA ROAD	98.0	0	AT GRADE	29	Inspected	Cover - Many Holes	Cover Holes		X										
Sub-Area 16	SSMH-2779	LUDLOW STREET AT FULLER STREET	120.7	0	AT GRADE	4	Inspected	Frame - Chipped, Wall - Light roots.		Roots		X		X						X	Remove Roots
Sub-Area 16	SSMH-5811	LUDLOW STREET AT HILLIS STREET	70.0	0	AT GRADE	22	Inspected	Cover - Many Holes, Chimney - Missing mortar.	Cover Holes		X						X				Repair Chimney
Sub-Area 16	SSMH-6096	LUDLOW STREET AT LELAND STREET	107.3	0	AT GRADE	36	Inspected	Cover - Many Holes, Frame - Chipped,cracked.	Cover Holes			X									
Sub-Area 16	SSMH-5812	LUDLOW STREET AT ROSEMONT AVENUE	71.3	0	AT GRADE	19	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Frame - Cracked, Chimney - Missing mortar. Drainage Inlet Connection (Athletic Field Drainage)	Cover Holes and Drain Connections			X					X				Repair Chimney
Sub-Area 16	SSMH-5218	LUDLOW STREET AT WAYSIDE ROAD	79.0	0	AT GRADE	6	Inspected	No Significant Defects													
Sub-Area 16	SSMH-2854	LUDLOW STREET AT WESTMINSTER AVENUE	127.0	0	0.25 ABOVE GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped, Wall - Moderate mineral deposits.		Minerals			X			X					
Sub-Area 16	SSMH-5274	MABEL STREET AT BEST STREET	109.0	0	AT GRADE	16	Inspected	Cover - Many Holes, Chimney - Broken brick, missing mortar.	Cover Holes			X									
Sub-Area 16	SSMH-4683	MABEL STREET AT LELAND STREET	83.5	0	AT GRADE	2	Inspected	Highpoint manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick, missing mortar, Floor - Covered in debris, Invert - Covered in debris.									X			X	Repair Chimney, Clean Bench and Invert
Sub-Area 16	SSMH-2320	MADELINE STREET AT BEST STREET	114.5	0	AT GRADE	36	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 16	SSMH-2837	NEW STREET AT LELAND STREET	99.0	0	AT GRADE	6	Inspected	No Significant Defects													
Sub-Area 16	SSMH-2830	NEWMAN STREET AT HYDE STREET	92.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 17	SSMH-5244	ALDEN CIRCLE R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 17	SSMH-5206	BRIGHTON AVENUE AT LUCAS STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 17	SSMH-3179	VIOLET AVENUE AT HARMON ROAD	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 17	SSMH-5212	VIOLETTE AVENUE AT HARMON ROAD	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 17	SSMH-2791	WAYSIDE DRIVE R.O.W.	-	0	CNL	CNL	CNL	Town cleared area where a storm drain was located, but not this manhole - assuming it is buried - numerous yellow jackets forced us to stop our search.													
Sub-Area 17	SSMH-0781	11 MAYER ROAD	174.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 17	SSMH-2770	35 HARMON ROAD	-	0	CNI	CNI	CNI	Could not access - Manhole is located inside locked fence behind house													
Sub-Area 17	SSMH-5242	43 WAYSIDE DRIVE	129.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 17	SSMH-6102	43 WAYSIDE DRIVE	135.7	0	AT GRADE	2	Inspected	Frame - Offset2".			X										
Sub-Area 17	SSMH-1243	43 WAYSIDE ROAD	107.5	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 17	SSMH-2783	44 ALDEN CIRCLE R.O.W.	93.3	0	28 ABOVE GRADE	2	Inspected	Surface inspection performed due to poor location of manhole - structure is on edge of river bank, no safe entry with tripod., Floor - Very wet, signs of mineral deposits, Invert - Loose pieces.		Minerals					X						
Sub-Area 17	SSMH-4076	50 ALDEN CIRCLE R.O.W.	-	0	CNL	CNL	CNL	Manhole possibly under planter pot but would not be able to move it without breaking. Also believe it is buried quite a bit and would require digging up yard.													
Sub-Area 17	SSMH-5241	51 WAYSIDE DRIVE	118.3	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 17	SSMH-0265	731 BRIGHTON AVENUE	136.7	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 17	SSMH-5276	774 BRIGHTON AVENUE	139.8	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame.													
Sub-Area 17	SSMH-0266	79 DENNETT STREET	114.3	0	84 ABOVE GRADE	0	Inspected	Manhole is in brook. Pieces missing from outer portion of precast walls, pipe exposted in brook, Cover - Cover is wood, Wall - Wet walls.				X		X			X				Repair External Structure
Sub-Area 17	SSMH-4075	79 DENNETT STREET R.O.W.	101.5	0	46 ABOVE GRADE	37	Inspected	Cover - Many Holes, Invert - Corroded.	Cover Holes			X					X				Repair Invert
Sub-Area 17	SSMH-4263	DONALD STREET R.O.W.	105.5	0	1 ABOVE GRADE	37	Inspected	Cover - Many Holes, Wall - Wet spot, possible future leak, Invert - Corroded.	Cover Holes	Active		X				X					
Sub-Area 17	SSMH-2801	LUCAS STREET AT CAPISIC TRAIL HEAD	147.7	0	AT GRADE	20	Inspected	Cover - Many Holes, Frame - Hasriser, Chimney - Broken and cracked bricks, Wall - Broken brick, missing mortar, Floor - Broken brick, missing pieces.	Cover Holes			X		X							
Sub-Area 17	SSMH-4131	LUCAS STREET R.O.W.	165.0	0	1 BELOW GRADE	0	Inspected	Below Grade			X										
Sub-Area 17	SSMH-4569	LUCAS STREET R.O.W.	102.5	0	3 BELOW GRADE	3	Inspected	Frame - Belowgrade-shouldberaised, Floor - Water trapped by pipe liner, Invert - Liner not cut flush with floor.			X									X	Trim Lined Invert
Sub-Area 17	SSMH-0929	MAYER ROAD AT BRIGHTON AVENUE	151.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 17	SSMH-0782	MAYER ROAD R.O.W.	136.5	0	20 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 17	SSMH-2902	MAYER ROAD R.O.W.	100.7	0	5 ABOVE GRADE	22	Inspected	Cover - Many Holes, Manhole from West was opened and it too has extremely heavy root blockage. Nearby homeowner states line backs up into basement., Wall - Wet, Floor - Line from West lands on bench.	Cover Holes	Roots		X			X					X	Remove Roots from Inside Drop
Sub-Area 17	SSMH-5248	PHIPPS ROAD AT WINGATE DRIVE	96.3	0	0.5 BELOW GRADE	2	Inspected	Manhole in gutterline.			X										

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Sub-Area 17	SSMH-2769	VIOLETTE AVENUE AT HARMON ROAD	160.3	0	AT GRADE	30	Inspected	Cover - Many Holes, Chimney - Broken and loose brick, missing mortar.	Cover Holes			X					X				Repair Chimney
Sub-Area 17	SSMH-5243	WAYSIDE ROAD R.O.W.	99.0	0	AT GRADE	1	Inspected	Chimney - Broken brick, missing mortar.									X				Repair Chimney
Sub-Area 17	SSMH-2800	WINGATE DRIVE R.O.W.	85.5	0	1 ABOVE GRADE	3	Inspected	Chimney - Broken brick.									X				Repair Chimney
Sub-Area 18	SSMH-4582	221 PROSPECT STREET	85.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 18	SSMH-4618	335 BRIGHTON AVENUE - MAINE MEDICAL CENTER	74.3	0	AT GRADE	36	Inspected	Cover - Many Holes, Floor - 6" of debris on floor.	Cover Holes			X								X	Clean Bench
Sub-Area 18	SSMH-5308	BRIGHTON AVENUE AT BELFIELD STREET	112.3	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 18	SSMH-2856	LUDLOW STREET AT CALDWELL STREET	85.0	0	AT GRADE	25	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 21	SSMH-5305	BANCROFT STREET AT POMEROY STREET	95.8	720	0.2 BELOW GRADE	11	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Light mineral deposits, Floor - Missing mortar, Invert - Missing mortar.	Cover Holes	Minerals		X			X						
Sub-Area 22	SSMH-3547	BRADLEY STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-3548	BRADLEY STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-5736	BRADLEY STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-3505	BRADLEY STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-3506	BRADLEY STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-1079	CRAIGIE STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-4496	CRAIGIE STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-5335	STEVENS AVENUE	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 22	SSMH-1090	TWIN KNOLL LANE R.O.W.	-	0	CNI	CNI	CNI	Could not open, sealed shut				X									
Sub-Area 22	SSMH-1091	TWIN KNOLL LANE R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-3498	TWIN KNOLLS LANE	-	0	CNI	CNI	CNI	Manhole appears to have a flood cover with concrete covering opening				X									
Sub-Area 22	SSMH-3499	TWIN KNOLLS LANE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-3538	1 TWIN KNOLLS LANE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 22	SSMH-1753	10 ANSON ROAD	108.0	0	AT GRADE	2	Inspected	Starter manhole													
Sub-Area 22	SSMH-4497	107 CRAIGIE STREET	97.0	0	AT GRADE	6	Inspected	Chimney - Loose mortar									X				Repair Chimney
Sub-Area 22	SSMH-5761	11 COACHLIGHT LANE R.O.W.	92.7	0	2.5 BELOW GRADE	1	Inspected	Invert - Missing mortar			X						X				Repair Invert
Sub-Area 22	SSMH-0225	11 DIRIGO STREET	68.0	0	0.25 BELOW GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 22	SSMH-3543	11 FAIRVIEW STREET	91.0	0	0.75 ABOVE GRADE	2	Inspected	Starter manhole, Invert - 6" hard packed debris												X	Clean Invert
Sub-Area 22	SSMH-1752	11 RUDMAN ROAD	96.5	0	AT GRADE	13	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-1082	112 CALEB STREET	110.0	0	0.25 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped													
Sub-Area 22	SSMH-1569	112 CRAIGIE STREET	77.5	0	0.1 BELOW GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-1761	115 STEVENS AVENUE	106.5	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-3546	116 BRADLEY STREET	96.5	0	2 BELOW GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X	X									
Sub-Area 22	SSMH-4424	12 BRADLEY STREET	76.0	0	AT GRADE	3	Inspected	Starter manhole, Frame - Cracked					X								
Sub-Area 22	SSMH-5338	13 JUNE STREET	82.5	0	AT GRADE	33	Inspected	Cover - Many Holes, Cracked and missing pavement surrounding frame, Frame - Riser	Cover Holes				X								
Sub-Area 22	SSMH-1081	131 CALEB STREET	82.5	0	0.25 ABOVE GRADE	11	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-3509	132 CRAIGIE STREET	138.0	0	AT GRADE	3	Inspected	Frame - Rimbent					X								
Sub-Area 22	SSMH-4420	1355 CONGRESS STREET	100.0	0	AT GRADE	38	Inspected	Cover - Many Holes, Highpoint manhole, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar, Floor - Covered in 6" of dirt, Invert - Covered in 8" of dirt	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 22	SSMH-3545	138 BRADLEY STREET	96.5	0	0.2 BELOW GRADE	27	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-5739	1399 CONGRESS STREET	106.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 22	SSMH-5759	14 COACHLIGHT LANE R.O.W.	71.7	0	2 ABOVE GRADE	32	Inspected	Cover - Many Holes, Floor - Loose and missing brick, missing mortar, Drainage Inlet Connection	Cover Holes and Drain Connections			X							X		
Sub-Area 22	SSMH-6085	14 IVY STREET	78.0	0	0.25 BELOW GRADE	21	Inspected	Cover - Many Holes, Starter manhole, Chimney - Missing brick and mortar, loose mortar, Invert - Covered in debris	Cover Holes			X						X		X	Repair Chimney, Clean Invert
Sub-Area 22	SSMH-0233	1424 CONGRESS STREET	82.0	0	AT GRADE	3	Inspected	Starter manhole, Invert - 4" of debris												X	Clean Bench and Invert
Sub-Area 22	SSMH-1078	15 BRADLEY STREET	85.0	0	0.2 ABOVE GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, cover cracked, Frame - Cracked	Cover Holes				X								
Sub-Area 22	SSMH-5760	15 COACHLIGHT DRIVE	90.5	0	0.25 ABOVE GRADE	27	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-4050	15 STONELEDGE DRIVE	77.0	0	0.5 BELOW GRADE	2	Inspected	Manhole is Wetwell for Pump Station, Frame - 10"riser			X										
Sub-Area 22	SSMH-1766	150 CALEB STREET	85.5	0	1 BELOW GRADE	21	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X	X									

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 22	SSMH-1080	159 CRAIGIE STREET	100.7	0	AT GRADE	37	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-2938	163 STEVENS AVENUE	106.5	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-1765	164 CALEB STREET	87.5	0	0.5 ABOVE GRADE	3	Inspected	Chimney - Missing brick and mortar									X				Repair Chimney
Sub-Area 22	SSMH-5758	17 COACHLIGHT LANE	71.5	0	0.75 ABOVE GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar													
Sub-Area 22	SSMH-1437	18 CALEB STREET	82.5	0	AT GRADE	13	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-3549	180 BRADLEY STREET	91.5	0	0.1 ABOVE GRADE	8	Inspected	Cover - Cracked pavement surrounding frame, Frame - Smallchip													
Sub-Area 22	SSMH-4051	182 CRAIGIE STREET	84.5	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-1764	186 CALEB STREET	98.5	0	AT GRADE	22	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Loose and broken brick, loose and missing mortar	Cover Holes			X						X			Repair Chimney
Sub-Area 22	SSMH-5365	189 STEVENS AVENUE	93.5	0	0.1 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-4613	19 ANSON ROAD	106.0	0	AT GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-0825	19 CAPISIC STREET	105.0	0	AT GRADE	21	Inspected	Cover - Many Holes, Chimney - Loose and missing mortar	Cover Holes			X						X			Repair Chimney
Sub-Area 22	SSMH-6870	19 CAPISIC STREET	106.5	0	AT GRADE	28	Inspected	Cover - Many Holes, Unmapped manhole - see revised map, Cover - Many Holes, Cracked pavement surrounding frame, Floor - Top layer of bricks missing	Cover Holes			X						X			Repair Bench
Sub-Area 22	SSMH-2943	19 JUNE STREET	87.0	0	AT GRADE	0	Inspected	Starter manhole, Cover - Blind flange													
Sub-Area 22	SSMH-5342	19 STONELEDGE DRIVE	58.5	0	0.5 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-4052	194 CRAIGIE STREET	91.0	0	AT GRADE	16	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing brick and mortar, Floor - Covered in dirt, Invert - Covered in dirt	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 22	SSMH-5733	195 BRADLEY STREET	87.0	0	AT GRADE	12	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Frame - Cracked	Cover Holes				X								
Sub-Area 22	SSMH-5339	2 STONELEDGE DRIVE	57.8	0	1 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame			X										
Sub-Area 22	SSMH-3544	200 STEVENS AVENUE	101.5	0	0.25 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 22	SSMH-1342	22 REDLON ROAD	70.0	0	1 BELOW GRADE	3	Inspected	Frame - Offset2"			X			X							
Sub-Area 22	SSMH-4619	226 STEVENS AVENUE	86.0	0	0.1 BELOW GRADE	2	Inspected	Starter manhole													
Sub-Area 22	SSMH-2939	24 COBBERT ROAD	74.0	0	AT GRADE	16	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Floor - Covered in dirt	Cover Holes			X									
Sub-Area 22	SSMH-1075	24 IVY STREET	58.5	0	0.1 ABOVE GRADE	4	Inspected	Floor - 1" dirt												X	Clean Bench
Sub-Area 22	SSMH-4424A	25 BRADLEY STREET	90.5	0	0.1 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-0128	25 CRAIGIE STREET	121.5	0	AT GRADE	20	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-4616	26 CAPISIC STREET	95.0	0	1 BELOW GRADE	22	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-4422.1	27 STEVENS AVENUE	129.0	0	0.1 ABOVE GRADE	3	Inspected	Unmapped manhole - see revised map, Frame - Chipped													
Sub-Area 22	SSMH-4423	27 STEVENS AVENUE	148.0	0	0.1 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped													
Sub-Area 22	SSMH-3542	29 WAYNE STREET	81.0	0	0.5 BELOW GRADE	23	Inspected	Cover - Many Holes	Cover Holes		X	X									
Sub-Area 22	SSMH-0111	30 BRADLEY STREET	118.0	0	0.25 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-4418	31 CALEB STREET	106.5	0	AT GRADE	33	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-3539	32 ANSON ROAD	130.5	0	0.25 BELOW GRADE	27	Inspected	Cover - Many Holes, Manhole is in gutterline, Frame - 8"riser, Chimney - Missing brick, Floor - Missing brick	Cover Holes		X	X			X						
Sub-Area 22	SSMH-3541	32 FAIRVIEW STREET	112.5	0	AT GRADE	4	Inspected	Catch Basin Connections (2)	Drain Connections										X		
Sub-Area 22	SSMH-3540	35 WAYNE STREET	93.0	0	0.5 BELOW GRADE	18	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Catch Basin Connection	Cover Holes and Drain Connections			X							X		
Sub-Area 22	SSMH-4614	37 ANSON ROAD	126.5	0	0.5 BELOW GRADE	21	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-4566	40 DIRIGO STREET	75.5	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-0129	41 CRAIGIE STREET	119.0	0	AT GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-3503	43 ANSON ROAD	-	0	CNI	CNI	CNI	Could not open, has drain grid as cover					X								
Sub-Area 22	SSMH-0223	47 BRADLEY STREET	83.0	0	0.5 BELOW GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick	Cover Holes		X	X						X			Repair Chimney
Sub-Area 22	SSMH-4419	48 CALEB STREET	106.5	0	0.5 BELOW GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-5762	5 COACHLIGHT LANE	58.5	0	0.5 BELOW GRADE	1	Inspected	Manhole is in gutterline, Chimney - Missing mortar										X			Repair Chimney
Sub-Area 22	SSMH-3507	51 BRADLEY STREET R.O.W.	76.5	0	0.25 BELOW GRADE	42	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-6541	55 STEVENS AVENUE	112.5	0	AT GRADE	36	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-5340	6 STONELEDGE DRIVE	57.3	0	0.2 BELOW GRADE	2	Inspected	Manhole is in gutterline													
Sub-Area 22	SSMH-1431	61 CRAIGIE STREET	114.5	0	AT GRADE	6	Inspected	No Significant Defects													
Sub-Area 22	SSMH-5337	7 REDLON ROAD	98.5	0	AT GRADE	21	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing brick, loose parging, Floor - Covered in dirt	Cover Holes			X						X			Repair Chimney
Sub-Area 22	SSMH-3504	70 CALEB ROAD	-	0	CNI	CNI	CNI	Located manhole but Town did not clear - homeowner not at home, did not want to dig out lawn in their absence.													
Sub-Area 22	SSMH-5740	70 CALEB STRET	87.5	0	AT GRADE	3	Inspected	No Significant Defects													

ARCADIS Design & Consultancy for natural and built assets

Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 22	SSMH-3501	71 BRADLEY STREET	109.5	0	AT GRADE	14	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-3508	75 CALEB STREET	86.0	0	0.25 BELOW GRADE	3	Inspected	No Significant Defects													
Sub-Area 22	SSMH-1432	75 CRAIGIE STREET	149.3	0	AT GRADE	15	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-5734	83 BRADLEY STREET	95.3	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-1076	87 BRADLEY STREET	90.3	0	0.25 ABOVE GRADE	8	Inspected	Cover - Cracked pavement surrounding frame, Floor - Missing brick and mortar										X			Repair Bench
Sub-Area 22	SSMH-1481	9 CRAIGIE STREET	104.0	72	0.1 BELOW GRADE	2	Inspected	Starter manhole, Floor - Covered in debris, Invert - Covered in debris												X	Clean Bench and Invert
Sub-Area 22	SSMH-1250	9 TWIN KNOLL LANE	265.5	0	2 BELOW GRADE	2	Inspected	Chimney - 1" gap between frame and Chimney			X			X							
Sub-Area 22	SSMH-6086	9 WAYNE STREET	79.0	0	2.5 BELOW GRADE	1	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken brick, Floor - Debris on floor			X							X			Repair Chimney
Sub-Area 22	SSMH-1077	91 BRADLEY STREET	-	0	CNI	CNI	CNI	Confirmed location with metal detector			X										
Sub-Area 22	SSMH-5735	91 BRADLEY STREET	70.5	0	AT GRADE	7	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-1083	94 CALEB STREET	91.5	0	0.75 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame			X										
Sub-Area 22	SSMH-0219	ALLEN AVENUE AT GOODRIDGE AVENUE	100.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 22	SSMH-0224	BRADLEY STREET AT DIRIGO STREET	81.8	0	AT GRADE	13	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-1763	CALEB STREET AT BRIGHTON AVENUE	93.0	0	AT GRADE	3	Inspected	Starter manhole, Invert - 1" debris												X	Clean Invert
Sub-Area 22	SSMH-4617	CAPISIC STREET AT FROST STREET	65.0	0	AT GRADE	47	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 22	SSMH-5363	CAPISIC STREET AT STEVENS AVENUE	100.5	0	AT GRADE	27	Inspected	Cover - Many Holes, Floor - Large rocks on floor	Cover Holes			X								X	Clean Bench
Sub-Area 22	SSMH-4421	CONGRESS STREET AT STEVENS AVENUE	104.0	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and loose brick, missing mortar	Cover Holes			X							X		Repair Chimney
Sub-Area 22	SSMH-4422	CONGRESS STREET AT STEVENS AVENUE	101.5	0	0.25 ABOVE GRADE	3	Inspected	Frame - Chipped													
Sub-Area 22	SSMH-1436	CRAIGIE STREET AT CONGRESS STREET	78.0	0	1.5 BELOW GRADE	14	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X	X									
Sub-Area 22	SSMH-3502	CROSS COUNTRY R.O.W.	73.5	0	6 ABOVE GRADE	33	Inspected	Cover - Many Holes, Chimney - Deteriorating mortar	Cover Holes			X							X		Repair Chimney
Sub-Area 22	SSMH-4146	CROSS COUNTRY R.O.W.	96.5	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 22	SSMH-0804	REDLON ROAD AT STEVEN AVENUE	90.5	0	AT GRADE	31	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing mortar, Floor - Dirt	Cover Holes			X							X	X	Repair Chimney, Clean Bench
Sub-Area 22	SSMH-6551	STEVENS AVENUE AT ANSON ROAD	89.0	0	AT GRADE	23	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing brick and mortar	Cover Holes			X							X		Repair Chimney
Sub-Area 22	SSMH-6550	STEVENS AVENUE AT CAPISIC STREET	96.0	0	AT GRADE	2	Inspected	Catch Basin Connection	Drain Connections												
Sub-Area 22	SSMH-0802	STEVENS AVENUE AT COACHLIGHT LANE	109.0	0	AT GRADE	2	Inspected	Floor - Heavy rocks on floor, Invert - Small blockage of leaves												X	Clean Bench and Invert
Sub-Area 22	SSMH-6552	STEVENS AVENUE AT DIRIGO STREET	117.5	0	AT GRADE	37	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 22	SSMH-5336	STEVENS AVENUE AT JUNE STREET	100.3	0	0.25 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-0803	STEVENS AVENUE AT REDLON ROAD	109.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-5364	STEVENS AVENUE AT RUDMAN ROAD	111.7	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 22	SSMH-5341	STEVENS AVENUE AT STONELEDGE DRIVE	87.7	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 22	SSMH-1561	STEVENS AVENUE AT TWIN KNOLLS LANE	117.5	0	AT GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, cover is 0.4" smaller than frame, Frame - Chipped				X									
Sub-Area 22	SSMH-4615	STEVENS ROAD AT CAPISIC STREET	101.5	0	0.2 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 23	SSMH-0936	ALLEN AVENUE AT WOODLAWN AVENUE	-	0	CNI	CNI	CNI	Could not open					X								
Sub-Area 23	SSMH-3112	DELAWARE COURT	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 23	SSMH-5121	PLYMOUTH STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 23	SSMH-5122	PLYMOUTH STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 23	SSMH-6267	SHORT STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 23	SSMH-6268	SHORT STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 23	SSMH-5112	101 PENNELL AVENUE	43.0	0	AT GRADE	31	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 23	SSMH-4926	102 RUBY LANE	120.5	0	AT GRADE	3	Inspected	No Significant Defects													

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Sub-Area 23	SSMH-0989	11 ABBOTT STREET	64.0	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken, loose and missing brick, loose and missing mortar, Floor - Bricks on floor, Invert - Bricks in invert									X		X		Clean Floor, Repair/Rebuild Chimney
Sub-Area 23	SSMH-5114	11 SKYLARK ROAD	89.0	0	AT GRADE	10	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 23	SSMH-2567	110 HENNESSY DRIVE	58.7	0	0.2 ABOVE GRADE	29	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken and missing brick, loose pieces	Cover Holes			X						X			Repair Chimney
Sub-Area 23	SSMH-3114	115 DELAWARE COURT	84.0	0	AT GRADE	1	Inspected	Starter manhole, Chimney - Missing mortar, Invert - Debris									X		X		Repair Chimney, Clean Invert
Sub-Area 23	SSMH-3127	12 DELAWARE COURT	-	0	CNI	CNI	CNI	Could not open				X									
Sub-Area 23	SSMH-0938	125 ALLEN AVENUE	107.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-5113	128 PENNELL AVENUE	54.7	0	0.2 ABOVE GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 23	SSMH-5117	130 PLYMOUTH STREET	89.0	0	AT GRADE	2	Inspected	Frame - Spacerconnectedtocover, Floor - Covered in dirt			X										
Sub-Area 23	SSMH-2568	132 HENNESSY DRIVE	101.0	0	0.2 ABOVE GRADE	7	Inspected	Chimney - Missing mortar, loose pieces, Invert - 02" debris									X		X		Repair Chimney, Clean Bench and Invert
Sub-Area 23	SSMH-5524	134 ALLEN AVENUE	117.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-5113.1	137 PENNELL AVENUE	55.5	0	AT GRADE	3	Inspected	Unampped manhole - See revised map													
Sub-Area 23	SSMH-5118	138 PLYMOUTH STREET	56.5	0	AT GRADE	3	Inspected	Floor - Covered in dirt													
Sub-Area 23	SSMH-5113.2	140 PENNELL AVENUE	53.0	0	1 BELOW GRADE	3	Inspected	Unmapped manhole - See revised map													
Sub-Area 23	SSMH-2569	148 HENNESSY DRIVE	97.0	0	0.2 ABOVE GRADE	19	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 23	SSMH-5525	152 ALLEN AVENUE	82.3	0	AT GRADE	0	Inspected	Cover - Blind flange, Catch Basin Connections (2)	Drain Connections												
Sub-Area 23	SSMH-6104	16 PENNELL AVENUE	65.0	0	AT GRADE	1	Inspected	Starter manhole													
Sub-Area 23	SSMH-5526	168 ALLEN AVENUE	138.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-3115	192 DELAWARE COURT	69.0	0	2 BELOW GRADE	2	Inspected	Starter manhole													
Sub-Area 23	SSMH-5527	193 ALLEN AVENUE	145.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Invert - Debris catching, causing back-ups												X	Clean Invert
Sub-Area 23	SSMH-5108	21 PENNELL AVENUE	66.4	0	AT GRADE	1	Inspected	Floor - Missing brick and mortar										X			Repair Floor
Sub-Area 23	SSMH-0627	211 ALLEN AVENUE	111.7	1,440	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23	SSMH-5528	219 ALLEN AVENUE	94.0	0	AT GRADE	13	Inspected	Cover - Many Holes , Catch Basin Connections (2)	Cover Holes and Drain Connections			X									
Sub-Area 23	SSMH-5529	221 ALLEN AVENUE	127.0	0	AT GRADE	2	Inspected	Frame - Chipped													
Sub-Area 23	SSMH-5480	23 DELAWARE COURT	77.5	0	AT GRADE	2	Inspected	Floor - Covered in mud, Invert - Small blockage												X	Clean Bench and Invert
Sub-Area 23	SSMH-4434	237 ALLEN AVENUE	134.0	576	AT GRADE	1	Inspected	Invert - 02GPM leak at first joint, 02GPM leak at second joint		Active						X					
Sub-Area 23	SSMH-5530	247 ALLEN AVENUE	165.0	0	AT GRADE	0	Inspected	Cover - Blind flange, Invert - Debris catching													
Sub-Area 23	SSMH-2303	25 RUBY LANE	92.5	0	AT GRADE	3	Inspected	Invert - Debris													
Sub-Area 23	SSMH-0626	267 ALLEN AVENUE	109.3	0	AT GRADE	1	Inspected	Frame - Chipped, broken pieces				X									
Sub-Area 23	SSMH-2302	28 RUBY LANE	109.5	0	AT GRADE	3	Inspected	Invert - Standing water													
Sub-Area 23	SSMH-2572	285 ALLEN AVENUE	106.0	0	AT GRADE	20	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 23	SSMH-3122	29 DELAWARE COURT	74.5	0	AT GRADE	2	Inspected	Chimney - Missing mortar										X			Repair Chimney
Sub-Area 23	SSMH-6266	292 ALLEN AVENUE	104.7	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-2571	295 ALLEN AVENUE	108.0	0	AT GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 23	SSMH-0631	30 PLYMOUTH STREET	131.3	0	1 ABOVE GRADE	2	Inspected	Floor - Wet													
Sub-Area 23	SSMH-1627	301 ALLEN AVENUE	98.0	0	0.25 BELOW GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-5115	32 SKYLARK ROAD	84.0	0	0.25 ABOVE GRADE	14	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 23	SSMH-6265	327 ALLEN AVENUE	89.3	0	AT GRADE	32	Inspected	Cover - Many Holes, Floor - Moderate mineral deposits	Cover Holes	Minerals		X				X				
Sub-Area 23	SSMH-0629	38 RUBY LANE	57.0	0	0.5 BELOW GRADE	3	Inspected	Starter manhole, Chimney - Missing pieces, Floor - Covered in dirt, Invert - Full of debris			X							X		X	Repair Chimney, Clean Bench and Invert

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Sub-Area 23	SSMH-0632	39 PLYMOUTH STREET	115.4	0	1 ABOVE GRADE	1	Inspected	Frame - Offset, Floor - Old cover on bench			X									X	Remove old Cover from Manhole Bench
Sub-Area 23	SSMH-1590	42 HENNESSY DRIVE	53.0	0	0.5 ABOVE GRADE	3	Inspected	Frame - Chipped, Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-3123	43 DELAWARE COURT	43.5	0	AT GRADE	2	Inspected	Chimney - Chipped, missing mortar, Floor - Covered in mud									X			X	Repair Chimney, Clean Invert
Sub-Area 23	SSMH-2301	43 RUBY LANE	60.0	0	1 ABOVE GRADE	4	Inspected	Starter manhole, Invert - Debris													
Sub-Area 23	SSMH-3124	45 DELAWARE COURT	63.5	0	0.5 ABOVE GRADE	2	Inspected	Chimney - Broken and missing brick, missing mortar, Floor - Debris									X				Repair Chimney
Sub-Area 23	SSMH-1591	48 HENNESSY DRIVE	51.0	0	0.2 ABOVE GRADE	9	Inspected	Cover - Many Holes, Chimney - Broken, loose and missing brick, loose pieces, missing mortar	Cover Holes			X					X				Repair/Rebuild Chimney
Sub-Area 23	SSMH-2300	48 RUBY LANE	90.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-4929	52 RUBY LANE	119.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0623	53 CYPRESS STREET	52.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23	SSMH-6269	53 CYPRESS STREET	61.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0624	59 CYPRESS STREET	44.0	0	0.5 ABOVE GRADE	1	Inspected	Floor - Missing mortar									X				Repair Bench
Sub-Area 23	SSMH-4512	68 HENNESSY DRIVE	63.0	0	0.2 ABOVE GRADE	20	Inspected	Cover - Many Holes, Chimney - Broken and missing brick, missing mortar, Floor - Broken brick, missing mortar, Invert - 03" debris	Cover Holes			X			X					X	Clean Invert
Sub-Area 23	SSMH-6272	7 SHORT STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 23	SSMH-2564	70 SKYLARK ROAD	76.7	0	0.25 BELOW GRADE	1	Inspected	Cover - Cracked pavement surrounding frame, Invert - Missing mortar													
Sub-Area 23	SSMH-4928	71 RUBY LANE	120.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-3126	73 DELAWARE COURT	-	0	CNI	CNI	CNI	Could not open					X								
Sub-Area 23	SSMH-3125	80 DELAWARE COURT	58.5	0	1 ABOVE GRADE	1	Inspected	Floor - Covered in dirt													
Sub-Area 23	SSMH-2565	82 SKYLARK ROAD	53.0	0	0.2 BELOW GRADE	16	Inspected	Cover - Many Holes, Chimney - Loose pieces	Cover Holes			X									
Sub-Area 23	SSMH-5111	84 PENNELL AVENUE	52.0	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 23	SSMH-5120	84 PLYMOUTH STREET	100.5	0	AT GRADE	2	Inspected	Frame - Spacerbroken, Floor - Covered in dirt			X										
Sub-Area 23	SSMH-2566	87 HENNESSY DRIVE	81.0	0	0.25 ABOVE GRADE	7	Inspected	Cover - Cracked pavement surrounding frame, Frame - Chipped, Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-6112	88 SKYLARK ROAD	51.3	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-4924	90 RUBY LANE	158.5	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0937	91 ALLEN AVENUE	97.5	0	AT GRADE	37	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 23	SSMH-4925	94 RUBY LANE	131.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-4487	96 PENNELL AVENUE	40.0	0	AT GRADE	26	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 23	SSMH-0993	ABBOTT STREET AT ALLEN AVENUE	79.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-0992	ALLEN AVENUE AT ABBOTT STREET	89.8	0	AT GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 23	SSMH-2573	ALLEN AVENUE AT KNIGHT STREET	100.0	0	AT GRADE	25	Inspected	Cover - Many Holes, Chimney - Loose brick, Invert - Debris catching in invert	Cover Holes			X									Repair Chimney
Sub-Area 23	SSMH-0630	ALLEN AVENUE AT PLYMOUTH STREET	99.7	0	AT GRADE	0	Inspected	Cover - Blind flange, Floor - Missing brick													Repair Bench
Sub-Area 23	SSMH-0628	ALLEN AVENUE AT YALE STREET	84.3	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23	SSMH-2576	ALLEN AVENUE R.O.W.	67.5	0	1 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 23	SSMH-2574	CASCO BAY HIGH SCHOOL	115.7	5,760	3 BELOW GRADE	2	Inspected	Floor - Several leaks, Invert - Several leaks		Active						X					
Sub-Area 23	SSMH-2575	CASCO BAY HIGH SCHOOL	63.3	0	1 BELOW GRADE	2	Inspected	Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-6270	CYPRESS STREET AT HENNESSY DRIVE	47.0	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23	SSMH-3113	DELAWARE COURT	104.7	0	AT GRADE	3	Inspected	Chimney - Missing mortar, Invert - Rags in invert									X			X	Repair Chimney, Clean Invert
Sub-Area 23	SSMH-3116	DELAWARE COURT	83.5	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-6271	HENNESSY DRIVE AT CYPRESS STREET	46.0	0	AT GRADE	0	Inspected	Cover - Blind flange													

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Sub-Area 23	SSMH-2563	HENNESSY DRIVE AT SKYLARK ROAD	106.3	0	0.2 ABOVE GRADE	27	Inspected	Cover - Many Holes, Chimney - Missing brick and mortar, loose pieces, Wall - Missing mortar, Invert - Debris catching	Cover Holes			X			X						
Sub-Area 23	SSMH-5110	PENNELL AVENUE AT CYPRESS STREET	67.5	0	0.25 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23	SSMH-5119	PLYMOUTH STREET AT ALLEN AVENUE	67.3	0	1 ABOVE GRADE	3	Inspected	Chimney - Covered in mud, Wall - Covered in mud, Floor - Wet, Drain Line Connections (2)	Drain Connections												
Sub-Area 23	SSMH-5116	PLYMOUTH STREET AT RUBY LANE	113.0	0	1 ABOVE GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Frame - Cracked,broken,missingpieces, Wall - Leak		Active			X			X					
Sub-Area 23	SSMH-2304	RUBY LANE AT ALLEN AVENUE	81.0	0	AT GRADE	3	Inspected	Frame - Offset			X										
Sub-Area 23	SSMH-4927	RUBY LANE AT PLYMOUTH STREET	100.0	0	AT GRADE	3	Inspected	Chimney - Missing mortar									X				Repair Chimney
Sub-Area 23	SSMH-5109	SHORT STREET AT PENNELL AVENUE	61.3	0	0.5 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-0598	AUBURN STREET	-	0	CNI	CNI	CNI	Sealed shut				X									
Sub-Area 23A	SSMH-0599	AUBURN STREET	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 23A	SSMH-2514	BRAEBURN ROAD	-	0	CNI	CNI	Inspected	Drain Manhole													Reassign Feature to Stormwater Mapping
Sub-Area 23A	SSMH-3018	NORTHPOINT DRIVE R.O.W.	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 23A	SSMH-2517	11 SHINGLE WAY	86.5	0	0.5 BELOW GRADE	1	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-1594	114 BROOK ROAD	90.0	0	1 ABOVE GRADE	3	Inspected	Floor - Missing pieces									X				Repair Bench
Sub-Area 23A	SSMH-5578	12 THE RESIDENCES	70.5	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-0991	1378 WASHINGTON AVENUE DUNKIN DONUTS	93.3	0	0.5 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing brick, H2S deterioration, Invert - 3" dirt, 02 standing flow					X	X		X					
Sub-Area 23A	SSMH-5082	14 BROOK ROAD	106.5	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-5083	18 BROOK ROAD	88.5	0	AT GRADE	4	Inspected	Chimney - Missing mortar, Invert - Blockage									X		X		Clean Invert, Repair Chimney
Sub-Area 23A	SSMH-2512	19 COTTAGE PARK ROAD	85.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Wall - Light roots		Roots					X				X		Remove Roots
Sub-Area 23A	SSMH-2513	19 COTTAGE PARK ROAD	97.3	0	3 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Missing mortar			X										
Sub-Area 23A	SSMH-3247	19 THE RESIDENCES	87.5	0	0.5 BELOW GRADE	1	Inspected	Chimney - Missing mortar													
Sub-Area 23A	SSMH-2511	25 COTTAGE PARK ROAD	90.0	0	1 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-2515	25 PERCH STREET	104.0	0	0.5 BELOW GRADE	0	Inspected	Starter manhole, Invert - Light debris													
Sub-Area 23A	SSMH-2510	26 COTTAGE PARK ROAD	86.3	0	0.5 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-3247.1	26 THE RESIDENCES	95.5	0	2 ABOVE GRADE	2	Inspected	Chimney - Missing mortar													
Sub-Area 23A	SSMH-2516	30 SHINGLE WAY	89.0	0	AT GRADE	1	Inspected	Starter manhole													
Sub-Area 23A	SSMH-6277	362 ALLEN AVENUE	101.0	0	AT GRADE	0	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-6278	362 ALLEN AVENUE	158.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-6275	365 ALLEN AVENUE	129.3	2,880	AT GRADE	10	Inspected	Cover - Many Holes, Chimney - Missing mortar, Pipe Connection - Bulkheaded Inlet Leaking (2 GPM)	Cover Holes	Active		X						X			Repair Bulkheaded Drain Connection (2GPM Leak)
Sub-Area 23A	SSMH-3248	427 ALLEN AVENUE	104.5	0	AT GRADE	9	Inspected	Cover - Many Holes, Chimney - Broken brick, Floor - Dirt	Cover Holes			X						X			Repair Chimney
Sub-Area 23A	SSMH-4252	459 ALLEN AVENUE	94.0	0	AT GRADE	2	Inspected	Floor - Dirt and debris													
Sub-Area 23A	SSMH-5576	459 ALLEN AVENUE	100.5	0	1 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-0597	46 AUBURN STREET	83.5	0	AT GRADE	13	Inspected	Cover - Many Holes, Manhole is in gutterline	Cover Holes			X									
Sub-Area 23A	SSMH-3087	468 ALLEN AVENUE	98.0	0	AT GRADE	0	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-4250	499 ALLEN AVENUE	101.0	0	AT GRADE	0	Inspected	Starter manhole, Wall - Muddy, Floor - Dirt and debris, Invert - Dirt and debris													
Sub-Area 23A	SSMH-1546	502 ALLEN AVENUE	-	0	CNL	CNL	CNL	Either buried or does not exist													
Sub-Area 23A	SSMH-4251	502 ALLEN AVENUE	134.0	0	AT GRADE	0	Inspected	Floor - Dirt and debris													
Sub-Area 23A	SSMH-2509	54 COTTAGE PARK ROAD	99.0	0	1 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-5577	6 THE RESIDENCES	111.5	0	AT GRADE	2	Inspected	Chimney - Missing mortar													
Sub-Area 23A	SSMH-2519	60 BROOK ROAD	79.5	0	AT GRADE	2	Inspected	Chimney - Riser, Floor - Covered in dirt													
Sub-Area 23A	SSMH-2518	70 COTTAGE PARK ROAD	95.0	0	AT GRADE	1	Inspected	Starter manhole													
Sub-Area 23A	SSMH-2507	72 AUBURN STREET	82.0	0	AT GRADE	5	Inspected	Manhole is in gutterline													

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Sub-Area 23A	SSMH-2520	82 BROOK ROAD	94.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Chimney - Broken and missing brick, missing mortar, Wall - Bricks offset, Floor - Covered in dirt	Cover Holes			X		X	X						
Sub-Area 23A	SSMH-1595	99 BROOK ROAD	78.5	0	AT GRADE	4	Inspected	Chimney - Missing mortar, Floor - Debris													
Sub-Area 23A	SSMH-5081	ALLEN AVENUE AT BROOK ROAD	115.3	0	AT GRADE	26	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 23A	SSMH-2545	ALLEN AVENUE AT NORTHPOINT DRIVE	150.3	0	AT GRADE	1	Inspected	Wall - Muddy													
Sub-Area 23A	SSMH-6264	ALLEN AVENUE AT WASHINGTON AVENUE	78.5	0	AT GRADE	1	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-2504	AUBURN STREET AT WASHINGTON AVENUE	71.7	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 23A	SSMH-2508	BROOK ROAD AT BRAEBURN ROAD	119.0	0	AT GRADE	14	Inspected	Cover - Many Holes, Chimney - Missing mortar, Invert - Debris	Cover Holes			X									
Sub-Area 23A	SSMH-3015	NORTHPOINT DRIVE	145.5	0	AT GRADE	3	Inspected	Wall - Wet													
Sub-Area 23A	SSMH-3016	NORTHPOINT DRIVE	139.0	0	2 BELOW GRADE	14	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes		X	X									
Sub-Area 23A	SSMH-2544	NORTHPOINT DRIVE R.O.W.	167.0	0	1 ABOVE GRADE	31	Inspected	Cover - Many Holes, Chimney - Missing mortar	Cover Holes			X									
Sub-Area 23A	SSMH-1543	WASHINGTON AVENUE AT ALLEN AVENUE	75.5	0	AT GRADE	1	Inspected	Floor - Covered in dirt, Invert - Catching solids													
Sub-Area 23A	SSMH-3017	WASHINGTON AVENUE R.O.W.	129.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 23A	SSMH-6378	WASHINGTON AVENUE R.O.W.	72.7	0	AT GRADE	1	Inspected	Frame - Offset			X										
Sub-Area 24	SSMH-2494	1552 WASHINGTON AVENUE	130.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 24	SSMH-2493	1568 WASHINGTON AVENUE	118.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar.									X				Repair Chimney
Sub-Area 27	SSMH-3376	FALL BROOK STREET R.O.W.	-	0	CNL	CNL	CNL	Area not cleared													
Sub-Area 27	SSMH-1586	PHEASANT HILL DRIVE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 27	SSMH-0132	PINELEDGE TERRACE R.O.W.	-	0	CNL	CNL	CNL	Area not cleared													
Sub-Area 27	SSMH-0976	PINELEDGE TERRACE R.O.W.	-	0	CNL	CNL	CNL	Area not cleared/private property													
Sub-Area 27	SSMH-1485	PINELEDGE TERRACE R.O.W.	-	0	CNL	CNL	CNL	Area not cleared													
Sub-Area 27	SSMH-1486	PINELEDGE TERRACE R.O.W.	-	0	CNL	CNL	CNL	Area not cleared													
Sub-Area 27	SSMH-1016	SLEMONS ROAD	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 27	SSMH-0114	TAMARLANE	-	0	CNL	CNL	CNL	Area not cleared/private property													
Sub-Area 27	SSMH-0130	TAMARLANE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 27	SSMH-0131	TAMARLANE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 27	SSMH-0975	TAMARLANE	-	0	CNL	CNL	CNL	Area not cleared/private property													
Sub-Area 27	SSMH-5566	TAMARLANE	-	0	CNL	CNL	CNL	Area not cleared/private property													
Sub-Area 27	SSMH-5665	TAMARLANE	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 27	SSMH-1483	WASHINGTON AVENUE FARMHOUSE CONDO	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 27	SSMH-4451	WASHINGTON AVENUE R.O.W.	-	0	CNI	CNI	CNI	Buried under baseball field													
Sub-Area 27	SSMH-1548	10 LLOYD AVENUE	78.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-5563	1007 WASHINGTON AVENUE	80.0	0	AT GRADE	3	Inspected	Chimney - Broken and missing brick, loose and missing mortar, Floor - Mud and debris, Invert - Holding solids, piece of concrete in invert									X		X		Repair Chimney, Clean Bench and Invert
Sub-Area 27	SSMH-1268	1023 WASHINGTON AVENUE	101.0	0	AT GRADE	3	Inspected	Starter manhole - map incorrect, shows incoming line from MH 1482 but that is not accurate, Floor - Covered in dirt, Invert - Covered in dirt												X	Clean Bench and Invert. Correct Mapping, No Incoming Line from SSMH-1482
Sub-Area 27	SSMH-1482	1024 WASHINGTON AVENUE #4 FARMHOUSE CONDO	90.5	0	2 BELOW GRADE	2	Inspected	Below Grade			X										
Sub-Area 27	SSMH-1484	104 TAMAR LANE	61.5	0	0.5 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 27	SSMH-3292	20 FALL BROOK STREET	77.5	0	AT GRADE	36	Inspected	Cover - Many Holes, Chimney - Broken, loose and missing brick, loose mortar	Cover Holes			X					X				Repair Chimney
Sub-Area 27	SSMH-0159	20 LLOYD AVENUE	72.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-4426	21 TAMARLANE APARTMENTS	90.3	0	1 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame			X										
Sub-Area 27	SSMH-1420	24 VICTOR ROAD	101.0	0	AT GRADE	0	Inspected	Starter manhole, Cover - Blind flange													
Sub-Area 27	SSMH-6188	3 VERA STREET	56.0	0	AT GRADE	0	Inspected	Starter manhole, Cover - Blind flange													
Sub-Area 27	SSMH-3370	32 VICTOR ROAD	82.5	0	AT GRADE	0	Inspected	Cover - Cracked pavement surrounding frame, blind flange													
Sub-Area 27	SSMH-3293	35 FALL BROOK STREET	121.5	0	AT GRADE	37	Inspected	Cover - Many Holes, Chimney - Loose brick, missing mortar	Cover Holes			X					X				Repair Chimney
Sub-Area 27	SSMH-4427	37 TAMARLANE APARTMENTS	72.3	0	1 BELOW GRADE	2	Inspected	Cover - Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar			X										
Sub-Area 27	SSMH-3372	37 VERA STREET	78.5	0	AT GRADE	0	Inspected	Cover - Blind flange													

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 27	SSMH-1015	38 BYFIELD ROAD	91.0	0	AT GRADE	26	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Broken brick, missing mortar	Cover Holes			X					X				Repair Chimney
Sub-Area 27	SSMH-6559	39 BYFIELD ROAD	88.0	0	0.5 ABOVE GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-3373	43 VERA STREET	99.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-5565	46 TAMARLANE APARTMENTS	62.3	0	1 BELOW GRADE	2	Inspected	Chimney - Missing mortar			X										
Sub-Area 27	SSMH-3369	51 VICTOR ROAD	80.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-1552	55 MALILLY ROAD	209.5	0	2 ABOVE GRADE	2	Inspected	No Significant Defects													
Sub-Area 27	SSMH-3294	56 FALL BROOK STREET	98.0	0	AT GRADE	37	Inspected	Cover - Many Holes, Chimney - Loose parging, Invert - 1" debris	Cover Holes			X					X			X	Repair Chimney, Clean Invert
Sub-Area 27	SSMH-1419	66 VICTOR ROAD	90.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-3295	69 FALL BROOK STREET	115.7	0	0.3 BELOW GRADE	35	Inspected	Cover - Many Holes, Invert - 4" debris	Cover Holes			X								X	Clean Invert
Sub-Area 27	SSMH-3375	71 VERA STREET	91.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-3374	75 VERA STREET	88.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-3371	78 VICTOR ROAD	101.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-4428	8 TAMARLANE APARTMENTS	80.3	0	AT GRADE	2	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 27	SSMH-1396	801 WASHINGTON AVENUE	92.0	0	AT GRADE	3	Inspected	Starter manhole, Floor - Dirt and debris, Invert - Dirt and debris												X	Clean Bench and Invert
Sub-Area 27	SSMH-1017	828 WASHINGTON AVENUE	93.5	0	AT GRADE	3	Inspected	Invert - Blockage												X	Clean Downstream Line, Clean Bench and Invert
Sub-Area 27	SSMH-0158	83 VICTOR ROAD	130.5	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-6065	836 WASHINGTON AVENUE	90.0	0	AT GRADE	3	Inspected	Invert - Missing piece, catching solids									X				Repair Invert
Sub-Area 27	SSMH-1018	855 WASHINGTON AVENUE	100.5	0	AT GRADE	3	Inspected	Floor - Debris, Invert - Blockage												X	Clean Downstream Line, Clean Bench and Invert
Sub-Area 27	SSMH-3377	886 WASHINGTON AVENUE	80.0	0	AT GRADE	3	Inspected	Wall - Mineral deposits, Floor - Dirt and debris		Minerals					X						
Sub-Area 27	SSMH-5661	904 WASHINGTON AVENUE	96.5	0	AT GRADE	3	Inspected	Chimney - Missing mortar, Wall - Broken brick, missing mortar, Invert - Catching solids							X					X	Clean Bench and Invert
Sub-Area 27	SSMH-5663	936 WASHINGTON AVENUE	117.0	0	AT GRADE	3	Inspected	Chimney - Missing mortar, Floor - Dirt and debris, Invert - Roots at incoming line		Roots							X			X	Remove Roots, Seal Pipe Connection (SSMH-5662), Repair Chimney
Sub-Area 27	SSMH-5662	956 WASHINGTON AVENUE	101.5	0	AT GRADE	3	Inspected	Floor - Dirt and debris													
Sub-Area 27	SSMH-3296	970 WASHINGTON AVENUE	79.7	0	AT GRADE	0	Inspected	Floor - Dirt and debris													
Sub-Area 27	SSMH-5562	985 WASHINGTON AVENUE	79.7	0	AT GRADE	0	Inspected	Floor - Dirt and debris													
Sub-Area 27	SSMH-5564	997 WASHINGTON AVENUE	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 27	SSMH-5666	997 WASHINGTON AVENUE	101.3	0	AT GRADE	3	Inspected	Floor - Dirt and debris, Invert - Holding solids													
Sub-Area 27	SSMH-1014	BYFIELD ROAD AT GRAHAM TERRACE	90.7	0	AT GRADE	2	Inspected	Frame - Loose, Invert - 02" debris			X									X	Clean Invert
Sub-Area 27	SSMH-0113	FALL BROOK EASEMENT	60.0	0	5 ABOVE GRADE	0	Inspected	Cover - Locking cover													
Sub-Area 27	SSMH-3291	FALL BROOK STREET AT WASHINGTON AVENUE	79.0	0	AT GRADE	34	Inspected	Cover - Many Holes, Starter manhole, Chimney - Broken, loose and missing brick, missing mortar, Wall - Deteriorating mortar	Cover Holes			X			X						

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Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 27	SSMH-0112	LLOYD AVENUE AT VICTOR ROAD	114.7	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-1549	VICTOR ROAD AT LLOYD AVENUE	80.0	0	AT GRADE	0	Inspected	Cover - Blind flange													
Sub-Area 27	SSMH-0016	WASHINGTON AVENUE AT BYFIELD ROAD	93.3	0	AT GRADE	3	Inspected	Invert - Catching solids												X	Clean Invert
Sub-Area 27	SSMH-2277	WASHINGTON AVENUE AT PHEASANT HILL DRIVE	123.3	0	AT GRADE	0	Inspected	Wall - Muddy, Floor - Dirt and debris, Invert - Catching solids													
Sub-Area 27	SSMH-3297	WASHINGTON AVENUE AT PHEASANT HILL DRIVE	187.7	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 28	SSMH-0582	MILIKEN STREET R.O.W.	-	0	CNI	CNI	CNI	Cound not open - cover sealed shut with concrete				X									Replace with Bolted Frame and Cover
Sub-Area 28	SSMH-6175	RIVERSIDE INDUSTRIAL PARKWAY R.O.W.	-	0	CNL	CNL	CNL	Area not cleared													
Sub-Area 28	SSMH-6295	RIVERSIDE INDUSTRIAL PARKWAY R.O.W.	-	0	CNL	CNL	CNL	Area not cleared													
Sub-Area 28	SSMH-6178	RIVERSIDE INDUSTRIAL WAY R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 28	SSMH-0194	RIVERSIDE STREET R.O.W.	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 28	SSMH-5377	RIVERSIDE STREET R.O.W.	-	0	CNI	CNI	CNI	Unsafe/unable to enter - 7' high in a brook													
Sub-Area 28	SSMH-0834	1064 RIVERSIDE STREET	187.5	0	AT GRADE	18	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Staining at Lift Hole and Joint	Cover Holes	Minerals		X			X						
Sub-Area 28	SSMH-0833	1158 RIVERSIDE STREET	179.5	0	AT GRADE	28	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Wall - Mineral deposits	Cover Holes	Minerals		X			X						
Sub-Area 28	SSMH-2981	1158 RIVERSIDE STREET	176.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame, Wall - Mineral deposits, Invert - Holding solids		Minerals				X						X	Clean Invert
Sub-Area 28	SSMH-3117	138 MILTON STREET	85.0	0	2 ABOVE GRADE	2	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken brick													
Sub-Area 28	SSMH-0840	139 BEVERLY STREET	-	0	CNI	CNI	CNI	Could not open													
Sub-Area 28	SSMH-0193	159 BEVERLY STREET	122.3	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 28	SSMH-0849	159 BEVERLY STREET	243.0	0	8 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 28	SSMH-1632	159 BEVERLY STREET R.O.W.	111.7	7,200	2 ABOVE GRADE	22	Inspected	Cover - Many Holes, Wall - 4 leaks, heavy mineral deposits, Invert - Light mineral deposits	Cover Holes	Active		X			X						
Sub-Area 28	SSMH-5398	159 BEVERLY STREET R.O.W.	84.0	0	2 ABOVE GRADE	3	Inspected	No Significant Defects													
Sub-Area 28	SSMH-6723	160 MILTON STREET	83.5	0	0.2 BELOW GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 28	SSMH-0839	174 MILTON STREET	85.0	0	AT GRADE	3	Inspected	Chimney - Broken brick, missing mortar													
Sub-Area 28	SSMH-1633	192 MILTON STREET	84.0	0	AT GRADE	3	Inspected	Manhole is in gutterline													
Sub-Area 28	SSMH-2993	232 RIVERSIDE INDUSTRIAL PARKWAY	121.7	144	42 ABOVE GRADE	1	Inspected	Manhole is in brook Aggregate showing and broken pieces on outside upper portion of wall - See image, Wall - Moderate mineral deposits, missing mortar, leaking at joints		Active				X		X	X				
Sub-Area 28	SSMH-3000	25 RICE STREET	84.0	144	4 BELOW GRADE	19	Inspected	Cover - Many Holes, Starter manhole, Cover - Many Holes, Cracked and missing pavement surrounding frame, Chimney - Leak, missing brick and mortar, broken brick, loose pieces	Cover Holes	Active		X		X							
Sub-Area 28	SSMH-6283	356 RIVERSIDE INDUSTRIAL PARKWAY	80.0	0	0.5 ABOVE GRADE	1	Inspected	Frame - Offset3"			X										
Sub-Area 28	SSMH-6176	356 RIVERSIDE INDUSTRIAL PARKWAY (ADJACENT)	226.0	0	3 ABOVE GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-2997	376 RIVERSIDE INDUSTRIAL PARKWAY	146.0	0	8 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-6301	376 RIVERSIDE INDUSTRIAL PARKWAY	136.0	0	1 BELOW GRADE	21	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-6302	376 RIVERSIDE INDUSTRIAL PARKWAY	120.5	0	0.5 ABOVE GRADE	33	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-2999	430 RIVERSIDE INDUSTRIAL PARKWAY	147.5	0	AT GRADE	30	Inspected	Cover - Many Holes, Chimney - Missing mortar	Cover Holes			X									
Sub-Area 28	SSMH-6282	430 RIVERSIDE INDUSTRIAL PARKWAY	129.7	0	AT GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-5389	444 RIVERSIDE INDUSTRIAL PARKWAY	119.0	0	5 ABOVE GRADE	40	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-5390	474 RIVERSIDE INDUSTRIAL PARKWAY	92.5	0	1 ABOVE GRADE	24	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-4930	56 MILIKEN STREET	199.5	0	0.5 BELOW GRADE	2	Inspected	No Significant Defects													
Sub-Area 28	SSMH-0581	57 BEVERLY STREET	129.3	0	60 ABOVE GRADE	34	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 28	SSMH-0837	95 RIVERSIDE STREET	206.3	0	AT GRADE	2	Inspected	Bottom 5' of manhole is brick, Cover - Cracked pavement surrounding frame, Wall - Brick section wet, however no visible leaks, Floor - Debris		Active					X						
Sub-Area 28	SSMH-5384	95 RIVERSIDE STREET	158.3	0	AT GRADE	3	Inspected	Landing halfway down manhole, Cover - Cracked pavement surrounding frame, Floor - Debris													
Sub-Area 28	SSMH-5399	MILIKEN ROAD R.O.W.	142.5	0	60 ABOVE GRADE	21	Inspected	Cover - Many Holes, Unable to safely setup tripod at manhole - internal inspection performed, Wall - Light roots on brick portion, Floor - Debris	Cover Holes	Roots		X			X					X	Remove Roots
Sub-Area 28	SSMH-0583	MILIKEN STREET R.O.W.	105.5	720	16 ABOVE GRADE	18	Inspected	Cover - Many Holes, Chimney - Broken brick, missing mortar, Wall - Leak, broken brick, missing mortar, mineral deposits, roots, Floor - Covered in broken brick from Chimney	Cover Holes	Active		X		X	X						
Sub-Area 28	SSMH-1629	MILIKEN STREET R.O.W.	137.5	0	65 ABOVE GRADE	15	Inspected	Cover - Many Holes, Unable to enter manhole - precast section added made entry unsafe - nowhere to put cover, feared it might fall over, Chimney - Precast section just set over mannhole was not sealed	Cover Holes			X		X							
Sub-Area 28	SSMH-1630	MILIKEN STREET R.O.W.	113.0	0	38 ABOVE GRADE	21	Inspected	Cover - Many Holes, Unable to safely carry tripod down hill to manhole, or to set it up - surface inspection performed due to these restrictions	Cover Holes			X			X						
Sub-Area 28	SSMH-1631	MILIKEN STREET R.O.W.	115.7	1,440	39 ABOVE GRADE	21	Inspected	Cover - Many Holes, Floor - Mineral deposits, leak, loose and missing bricks, missing mortar, Invert - Mineral deposits	Cover Holes	Active		X			X						
Sub-Area 28	SSMH-5407	MILIKEN STREET R.O.W.	134.5	0	65 ABOVE GRADE	15	Inspected	Cover - Many Holes, Unsafe to enter manhole - nowhere to place cover	Cover Holes			X									
Sub-Area 28	SSMH-0585	REGAN LANE EASEMENT	104.5	0	24 ABOVE GRADE	30	Inspected	Cover - Many Holes	Cover Holes			X									

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Sub-Area 28	SSMH-4931	RIVERSIDE INDUSTRIAL WAY R.O.W.	104.0	720	23 ABOVE GRADE	6	Inspected	Chimney - Missing mortar, Wall - Light roots, Floor - Heavy roots, Invert - Blockage from roots		Roots				X	X					X	Remove Roots
Sub-Area 28	SSMH-4932	RIVERSIDE INDUSTRIAL WAY R.O.W.	246.7	0	4 ABOVE GRADE	22	Inspected	Cover - Many Holes, Chimney - Missing mortar, Wall - Weeping, mineral deposits, Floor - Debris on bench, Invert - Rock in invert	Cover Holes	Active		X			X						
Sub-Area 28	SSMH-6177	RIVERSIDE INDUSTRIAL WAY R.O.W.	100.3	1,440	5 ABOVE GRADE	14	Inspected	Cover - Many Holes, Wall - Missing mortar, mineral depositis, Floor - Dirt	Cover Holes	Minerals		X			X						
Sub-Area 28	SSMH-6291	RIVERSIDE INDUSTRIAL WAY R.O.W.	101.5	0	5 ABOVE GRADE	12	Inspected	Cover - Many Holes, Wall - Missing mortar, heavy mineral deposits	Cover Holes	Minerals		X			X						
Sub-Area 28	SSMH-6292	RIVERSIDE INDUSTRIAL WAY R.O.W.	81.5	0	10 ABOVE GRADE	2	Inspected	Chimney - Missing mortar, Wall - Covered in mud, roots, Floor - Mineral deposits, Invert - Missing mortar		Roots					X						
Sub-Area 28	SSMH-6294	RIVERSIDE INDUSTRIAL WAY R.O.W.	161.0	0	16 ABOVE GRADE	18	Inspected	Cover - Many Holes, Manhole is 10' from brook - invert should be parged to seal from contamination, Wall - Light roots, Floor - Mud, Invert - Missing brick and mortar, mineral deposits	Cover Holes	Roots		X			X						
Sub-Area 28	SSMH-6298	RIVERSIDE INDUSTRIAL WAY R.O.W.	110.5	0	26 ABOVE GRADE	24	Inspected	Cover - Many Holes, Wall - Mineral deposits, multiple small leaks <05 GPM, Invert - Debris	Cover Holes	Active		X			X						
Sub-Area 28	SSMH-2998	RIVERSIDE STREET R.O.W.	162.5	720	12 ABOVE GRADE	12	Inspected	Cover - Many Holes, Colony of what appears to be black widows in manhole, Chimney - Broken and missing brick, missing mortar, Wall - Leak, light roots, mineral deposits	Cover Holes	Active		X		X	X						
Sub-Area 28	SSMH-5378	RIVERSIDE STREET R.O.W.	118.5	0	16 ABOVE GRADE	2	Inspected	Did not enter -- 45+ PPM CO at top of manhole, Chimney - Broken brick, missing mortar, Wall - Weeping, mineral deposits at pipe connection		Active					X						
Sub-Area 28	SSMH-5379	RIVERSIDE STREET R.O.W.	109.0	0	18 ABOVE GRADE	2	Inspected	Did not enter -- 50+ PPM CO at top of manhole, Wall - Weeping walls		Active					X						
Sub-Area 28	SSMH-6287	RIVERSIDE STREET R.O.W.	114.0	0	5 ABOVE GRADE	2	Inspected	Unsafe to enter -- 55+ PPM CO at top of manhole, Chimney - Missing mortar, light roots, Wall - Weeping walls		Active					X						
Sub-Area 28	SSMH-6303	RIVERSIDE STREET R.O.W.	102.5	0	8 ABOVE GRADE	2	Inspected	Chimney - Broken brick, Wall - Weeping walls, mineral deposits, Invert - Debris		Active					X						
Sub-Area 28	SSMH-6304	RIVERSIDE STREET R.O.W.	103.5	0	6 ABOVE GRADE	2	Inspected	Chimney - Light roots, Wall - Weeping walls, roots, mineral deposits		Active					X						
Sub-Area 29	SSMH-1283	KENILWORTH STREET	-	0	CNI	CNI	CNI	Buried			X										
Sub-Area 29	SSMH-0772	11 WOLCOTT STREET	99.0	0	0.25 BELOW GRADE	21	Inspected	Cover - Many Holes, Chimney - Soft brick and mortar, missing mortar, Invert - Heavy debris	Cover Holes			X						X		X	Repair Chimney, Clean Invert
Sub-Area 29	SSMH-4058	17 BANCROFT STREET	65.7	0	0.25 ABOVE GRADE	12	Inspected	Cover - Many Holes, Chimney - Broken brick	Cover Holes			X						X			Repair Chimney
Sub-Area 29	SSMH-0262	20 HASTINGS STREET	105.0	0	AT GRADE	11	Inspected	Cover - Many Holes, Starte manhole, Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 29	SSMH-3267	22 ROCKLAND AVENUE	90.0	0	AT GRADE	2	Inspected	Frame - Frame and cover are rusted together					X								
Sub-Area 29	SSMH-0771	27 FLEETWOOD STREET	87.5	0	AT GRADE	2	Inspected	Cover - Cracked and missing pavement surrounding frame, Frame - Chipped, Chimney - Broken and missing brick, soft mortar													
Sub-Area 29	SSMH-0773	28 WOLCOTT STREET	108.5	0	AT GRADE	26	Inspected	Cover - Many Holes, Chimney - Missing mortar, missing pieces	Cover Holes			X						X			Repair Chimney
Sub-Area 29	SSMH-2928	33 BANCROFT STREET	114.5	0	0.25 ABOVE GRADE	24	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 29	SSMH-5294	33 COLONIAL ROAD	88.0	0	0.25 BELOW GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-5297	33 COLONIAL ROAD	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 29	SSMH-0261	34 HASTINGS STREET	92.5	0	AT GRADE	22	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing and broken brick, missing mortar, loose pieces	Cover Holes			X						X			Repair Chimney
Sub-Area 29	SSMH-5296	40 COLONIAL ROAD	97.5	0	AT GRADE	3	Inspected	Cover - Cracked pavement surrounding frame													
Sub-Area 29	SSMH-0768	48 COLONIAL ROAD	-	0	CNL	CNL	CNL	Could Not Locate													
Sub-Area 29	SSMH-5295	48 COLONIAL ROAD	106.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-0263	64 HASTINGS STREET	129.5	0	0.5 BELOW GRADE	15	Inspected	Cover - Many Holes, Cracked pavement surrounding frame, Chimney - Missing brick and mortar, broken brick, soft mortar, Floor - Covered in debris	Cover Holes			X						X		X	Repair Chimney, Clean Bench
Sub-Area 29	SSMH-5302	64 WOLCOTT STREET	92.5	0	AT GRADE	28	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 29	SSMH-0770	67 COLONIAL ROAD	79.0	0	AT GRADE	26	Inspected	Cover - Many Holes, Starter manhole, Floor - 80% covered in debris, Invert - Full of debris	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 29	SSMH-6093	68 MACHIGONNE STREET	107.5	0	AT GRADE	10	Inspected	Cover - Many Holes, Cracked pavement surrounding frame	Cover Holes			X									
Sub-Area 29	SSMH-5293	7 COLONIAL ROAD	88.0	0	AT GRADE	3	Inspected	Starter manhole													
Sub-Area 29	SSMH-5301	75 WOLCOTT STREET	92.0	0	AT GRADE	27	Inspected	Cover - Many Holes, Starter manhole	Cover Holes			X									
Sub-Area 29	SSMH-0264	80 HASTINGS STREET	88.5	0	0.75 ABOVE GRADE	1	Inspected	No Significant Defects													
Sub-Area 29	SSMH-6092	84 MACHIGONNE STREET	68.0	0	AT GRADE	31	Inspected	Starter manhole, Cover - Many Holes, Cracked pavement surrounding frame, Frame - Chipped, Invert - Full of heavy debris	Cover Holes			X								X	Clean Bench and Invert
Sub-Area 29	SSMH-6543	88 HASTINGS STREET	52.0	0	0.25 ABOVE GRADE	0	Inspected	Starter manhole, Cover - Blind flange													

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Wastewater Collection System Action and Analysis Plan
Manhole Inspection Results and Rehabilitation Recommendations

Sub-Area	Manhole ID	Street / Location	Rim to Invert Depth (in)	Infiltration Estimate (gpd)	Manhole Grade	Holes in Cover	Inspection Status	Inspection Details	Inflow Source	Infiltration Source	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Install Flex-Coat Chimney Seal	Apply Cementitious Liming	Seal Manhole with Grout Injection	Apply Chemical Seal (Epoxy)	Structural Repair	Disconnect Storm Drain	Operation and Maintenance	Notes
Sub-Area 29	SSMH-4057	BANCROFT STREET AT BRIGHTON AVENUE	90.0	0	AT GRADE	5	Inspected	Starter manhole, Cover - Cracked pavement surrounding frame, Chimney - Broken and missing brick, missing mortar									X				Repair Chimney
Sub-Area 29	SSMH-2926	BANCROFT STREET AT ROCKLAND AVENUE	118.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-5329	COLONIAL ROAD AT ROCKLAND AVENUE	156.3	0	AT GRADE	3	Inspected	Frame - Frame and cover are rusted together					X								
Sub-Area 29	SSMH-0260	FLEETWOOD STREET AT BRIGHTON AVENUE	80.0	0	0.25 BELOW GRADE	2	Inspected	Starter manhole, Frame - Offset2", Chimney - Soft mortar, mineral deposits, Invert - Heavy solids		Minerals	X			X				X		X	Clean Invert, Repair Chimney
Sub-Area 29	SSMH-5328	HASTING STREET AT ROCKLAND AVENUE	123.0	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 29	SSMH-6094	MACHIGONNE STREET AT ROCKLAND AVENUE	124.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-5299	ROCKLAND AVENUE AT BANCROFT STREET	127.0	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-0769	ROCKLAND AVENUE AT COLONIAL ROAD	160.5	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-5298	ROCKLAND AVENUE AT FLEETWOOD STREET	102.3	0	AT GRADE	2	Inspected	No Significant Defects													
Sub-Area 29	SSMH-2927	ROCKLAND AVENUE AT KENILWORTH STREET	104.3	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 29	SSMH-0797	ROCKLAND AVENUE AT MACHIGONNE STREET R.O.W.	147.7	1,440	0.25 BELOW GRADE	31	Inspected	Cover - Many Holes	Cover Holes			X									
Sub-Area 29	SSMH-0774	ROCKLAND AVENUE AT WOLCOTT STREET	82.8	0	AT GRADE	3	Inspected	No Significant Defects													
Sub-Area 30	SSMH-0007	OCEAN AVENUE AT WELLSTONE DRIVE	86.5	0	AT GRADE	3	Inspected	Floor - Dirt and debris.													
Sub-Area 30	SSMH-4232	WASHINGTON AVENUE AT MORSE STREET	120.7	0	AT GRADE	0	Inspected	No Significant Defects													
Sub-Area 30	SSMH-0043	WASHINGTON AVENUE AT OCEAN AVENUE	93.0	0	AT GRADE	3	Inspected	Floor - Covered in debris, Invert - Full of debris.											X		Clean Bench and Invert
Totals	**937**			**76,406**						**136**	**95**	**298**	**51**	**37**	**83**	**66**	**5**	**167**	**6**	**105**	

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Manhole Inspection Results and Rehabilitation Recommendations

Sub-Area	Manhole ID	Street / Location	Inspection Status	Inspection Details	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Notes
Sub-Area 04	SSMH-5376	INDUSTRIAL WAY	CNI	Buried	X			
Sub-Area 04	SSMH-0827	225 INDUSTRIAL WAY	CNI	Could not open - cracked cover		X		
Sub-Area 04	SSMH-1343	892 RIVERSIDE STREET	CNI	Could not open - cover will break		X		
Sub-Area 04	SSMH-2974	980 RIVERSIDE STREET	CNI	Manhole has a Smart Cover - did not want to break				
Sub-Area 11	SSMH-4239	BELL STREET	CNI	Buried	X			
Sub-Area 11	SSMH-0813	FOREST AVENUE	CNI	Confirmed with sound test	X			
Sub-Area 11	SSMH-4564	MORRILL STREET AT BELL STREET	CNI	Smart cover meter attached to underside of manhole cover				
Sub-Area 11	SSMH-4691	51 COLLEGE STREET (BEHIND)	CNI	Buried	X			
Sub-Area 11	SSMH-4690	74 COLLEGE STREET AT STEVENS AVENUE	CNI	Cracked cover		X		
Sub-Area 16	SSMH-5249	BRENTWOOD STREET	CNI	Buried	X			
Sub-Area 16	SSMH-5219	LUDLOW STREET AT HAMBLET AVENUE	CNI	Cracked manhole cover		X		
Sub-Area 17	SSMH-5206	BRIGHTON AVENUE AT LUCAS STREET	CNI	Buried	X			
Sub-Area 17	SSMH-3179	VIOLET AVENUE AT HARMON ROAD	CNI	Buried	X			
Sub-Area 17	SSMH-2770	35 HARMON ROAD	CNI	Could not access - Manhole is located inside locked fence behind house				
Sub-Area 22	SSMH-5335	STEVENS AVENUE	CNI	Buried	X			
Sub-Area 22	SSMH-1090	TWIN KNOLL LANE R.O.W.	CNI	Could not open, sealed shut			X	
Sub-Area 22	SSMH-3498	TWIN KNOLLS LANE	CNI	Manhole appears to have a flood cover with concrete covering opening			X	
Sub-Area 22	SSMH-3503	43 ANSON ROAD	CNI	Could not open, has drain grid as cover			X	
Sub-Area 22	SSMH-3504	70 CALEB ROAD	CNI	Located manhole but Town did not clear - homeowner not at home, did not want to dig out lawn in their absence.	X			
Sub-Area 22	SSMH-1077	91 BRADLEY STREET	CNI	Confirmed location with metal detector	X			
Sub-Area 23	SSMH-0936	ALLEN AVENUE AT WOODLAWN AVENUE	CNI	Could not open			X	
Sub-Area 23	SSMH-3112	DELAWARE COURT	CNI	Buried	X			
Sub-Area 23	SSMH-3127	12 DELAWARE COURT	CNI	Could not open			X	
Sub-Area 23	SSMH-6272	7 SHORT STREET	CNI	Buried	X			
Sub-Area 23	SSMH-3126	73 DELAWARE COURT	CNI	Could not open			X	
Sub-Area 23A	SSMH-0598	AUBURN STREET	CNI	Sealed shut			X	
Sub-Area 23A	SSMH-3018	NORTHPOINT DRIVE R.O.W.	CNI	Buried	X			
Sub-Area 27	SSMH-4451	WASHINGTON AVENUE R.O.W.	CNI	Buried under baseball field	X			
Sub-Area 27	SSMH-5564	997 WASHINGTON AVENUE	CNI	Buried	X			
Sub-Area 28	SSMH-0582	MILIKEN STREET R.O.W.	CNI	Cound not open - cover sealed shut with concrete			X	Replace with Bolted Frame and Cover
Sub-Area 28	SSMH-5377	RIVERSIDE STREET R.O.W.	CNI	Unsafe/unable to enter - 7' high in a brook				
Sub-Area 28	SSMH-0840	139 BEVERLY STREET	CNI	Could not open				
Sub-Area 29	SSMH-1283	KENILWORTH STREET	CNI	Buried	X			
Sub-Area 04	SSMH-0832	PRIM STREET	CNL	Could Not Locate				
Sub-Area 04	SSMH-0830	RIVERSIDE STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 04	SSMH-2985	RIVERSIDE STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 04	SSMH-6179	RIVERSIDE STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 06	SSMH-4954	126 AUBURN TERRACE	CNL	Could Not Locate				
Sub-Area 06	SSMH-4953	55 AUBURN TERRACE	CNL	Could Not Locate				
Sub-Area 08	SSMH-3381	ALLEN AVENUE EASEMENT	CNL	Could Not Locate				
Sub-Area 08	SSMH-0953	KANSAS AVENUE EASEMENT	CNL	In wetland				
Sub-Area 08	SSMH-5031	ROARING BROOK ROAD	CNL	Could Not Locate				
Sub-Area 10	SSMH-1622	AMMERDOWN PLACE	CNL	Could Not Locate				
Sub-Area 10	SSMH-3477	CORNELL STREET	CNL	Could Not Locate				
Sub-Area 10	SSMH-1663	MORRILL STREET	CNL	Could Not Locate				
Sub-Area 10	SSMH-1665	MORRILL STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 10	SSMH-1664	PRINCETON STREET R.O.W.	CNL	Could Not Locate				

Sub-Area	Manhole ID	Street / Location	Inspection Status	Inspection Details	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Notes
Sub-Area 10	SSMH-5719	UNIVERSITY STREET R.O.W	CNL	Could Not Locate				
Sub-Area 10	SSMH-5724	UNIVERSITY STREET R.O.W	CNL	Could Not Locate				
Sub-Area 10	SSMH-5722	WOODLAWN AVENUE R.O.W.	CNL	Could Not Locate				
Sub-Area 10	SSMH-1666	29 CAMBRIDGE STREET	CNL	Could Not Locate				
Sub-Area 11	SSMH-1673	FOREST AVENUE	CNL	Could Not Locate				
Sub-Area 11	SSMH-0222	GOODRIDGE AVENUE	CNL	Could Not Locate				
Sub-Area 11	SSMH-6106	WALTON STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 11	SSMH-0904	26 ELEANOR STREET	CNL	Could Not Locate				
Sub-Area 11	SSMH-6107	945 FOREST AVENUE	CNL	Could Not Locate				
Sub-Area 14	SSMH-0846	RIVERSIDE STREET - FIRESIDE INN	CNL	Could Not Locate				
Sub-Area 16	SSMH-6097	LELAND STREET	CNL	Could Not Locate				
Sub-Area 17	SSMH-5244	ALDEN CIRCLE R.O.W.	CNL	Could Not Locate				
Sub-Area 17	SSMH-5212	VIOLETTE AVENUE AT HARMON ROAD	CNL	Could Not Locate				
Sub-Area 17	SSMH-2791	WAYSIDE DRIVE R.O.W.	CNL	Town cleared area where a storm drain was located, but not this manhole - assuming it is buried - numerous yellow jackets forced us to stop our search.				
Sub-Area 17	SSMH-4076	50 ALDEN CIRCLE R.O.W.	CNL	Manhole possibly under planter pot but would not be able to move it without breaking. Also believe it is buried quite a bit and would require digging up yard.				
Sub-Area 22	SSMH-3547	BRADLEY STREET	CNL	Could Not Locate				
Sub-Area 22	SSMH-3548	BRADLEY STREET	CNL	Could Not Locate				
Sub-Area 22	SSMH-5736	BRADLEY STREET	CNL	Could Not Locate				
Sub-Area 22	SSMH-3505	BRADLEY STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 22	SSMH-3506	BRADLEY STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 22	SSMH-1079	CRAIGIE STREET	CNL	Could Not Locate				
Sub-Area 22	SSMH-4496	CRAIGIE STREET	CNL	Could Not Locate				
Sub-Area 22	SSMH-1091	TWIN KNOLL LANE R.O.W.	CNL	Could Not Locate				
Sub-Area 22	SSMH-3499	TWIN KNOLLS LANE	CNL	Could Not Locate				
Sub-Area 22	SSMH-3538	1 TWIN KNOLLS LANE	CNL	Could Not Locate				
Sub-Area 23	SSMH-5121	PLYMOUTH STREET	CNL	Could Not Locate				
Sub-Area 23	SSMH-5122	PLYMOUTH STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 23	SSMH-6267	SHORT STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 23	SSMH-6268	SHORT STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 23A	SSMH-0599	AUBURN STREET	CNL	Could Not Locate				
Sub-Area 23A	SSMH-1546	502 ALLEN AVENUE	CNL	Either buried or does not exist				
Sub-Area 27	SSMH-3376	FALL BROOK STREET R.O.W.	CNL	Area not cleared				
Sub-Area 27	SSMH-1586	PHEASANT HILL DRIVE	CNL	Could Not Locate				
Sub-Area 27	SSMH-0132	PINELEDGE TERRACE R.O.W.	CNL	Area not cleared				
Sub-Area 27	SSMH-0976	PINELEDGE TERRACE R.O.W.	CNL	Area not cleared/private property				
Sub-Area 27	SSMH-1485	PINELEDGE TERRACE R.O.W.	CNL	Area not cleared				
Sub-Area 27	SSMH-1486	PINELEDGE TERRACE R.O.W.	CNL	Area not cleared				
Sub-Area 27	SSMH-1016	SLEMONS ROAD	CNL	Could Not Locate				
Sub-Area 27	SSMH-0114	TAMARLANE	CNL	Area not cleared/private property				
Sub-Area 27	SSMH-0130	TAMARLANE	CNL	Could Not Locate				
Sub-Area 27	SSMH-0131	TAMARLANE	CNL	Could Not Locate				
Sub-Area 27	SSMH-0975	TAMARLANE	CNL	Area not cleared/private property				
Sub-Area 27	SSMH-5566	TAMARLANE	CNL	Area not cleared/private property				
Sub-Area 27	SSMH-5665	TAMARLANE	CNL	Could Not Locate				
Sub-Area 27	SSMH-1483	WASHINGTON AVENUE FARMHOUSE CONDO	CNL	Could Not Locate				

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Manhole Inspection Results and Rehabilitation Recommendations

Sub-Area	Manhole ID	Street / Location	Inspection Status	Inspection Details	Reset Frame and Cover to Grade	Replace Cover	Replace Frame and Cover	Notes
Sub-Area 28	SSMH-6175	RIVERSIDE INDUSTRIAL PARKWAY R.O.W.	CNL	Area not cleared				
Sub-Area 28	SSMH-6295	RIVERSIDE INDUSTRIAL PARKWAY R.O.W.	CNL	Area not cleared				
Sub-Area 28	SSMH-6178	RIVERSIDE INDUSTRIAL WAY R.O.W.	CNL	Could Not Locate				
Sub-Area 28	SSMH-0194	RIVERSIDE STREET R.O.W.	CNL	Could Not Locate				
Sub-Area 29	SSMH-5297	33 COLONIAL ROAD	CNL	Could Not Locate				
Sub-Area 29	SSMH-0768	48 COLONIAL ROAD	CNL	Could Not Locate				

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City of Portland, Maine

Appendix F - Smoke Testing Logs

Wastewater Collection System

Analysis and Action Plan

June, 2020

Appendix Contents

SMOKE TESTING LOGS SUB-AREA 1

SMOKE TESTING LOGS SUB-AREA 2

SMOKE TESTING LOGS SUB-AREA 4

SMOKE TESTING LOGS SUB-AREA 7

SMOKE TESTING LOGS SUB-AREA 24A

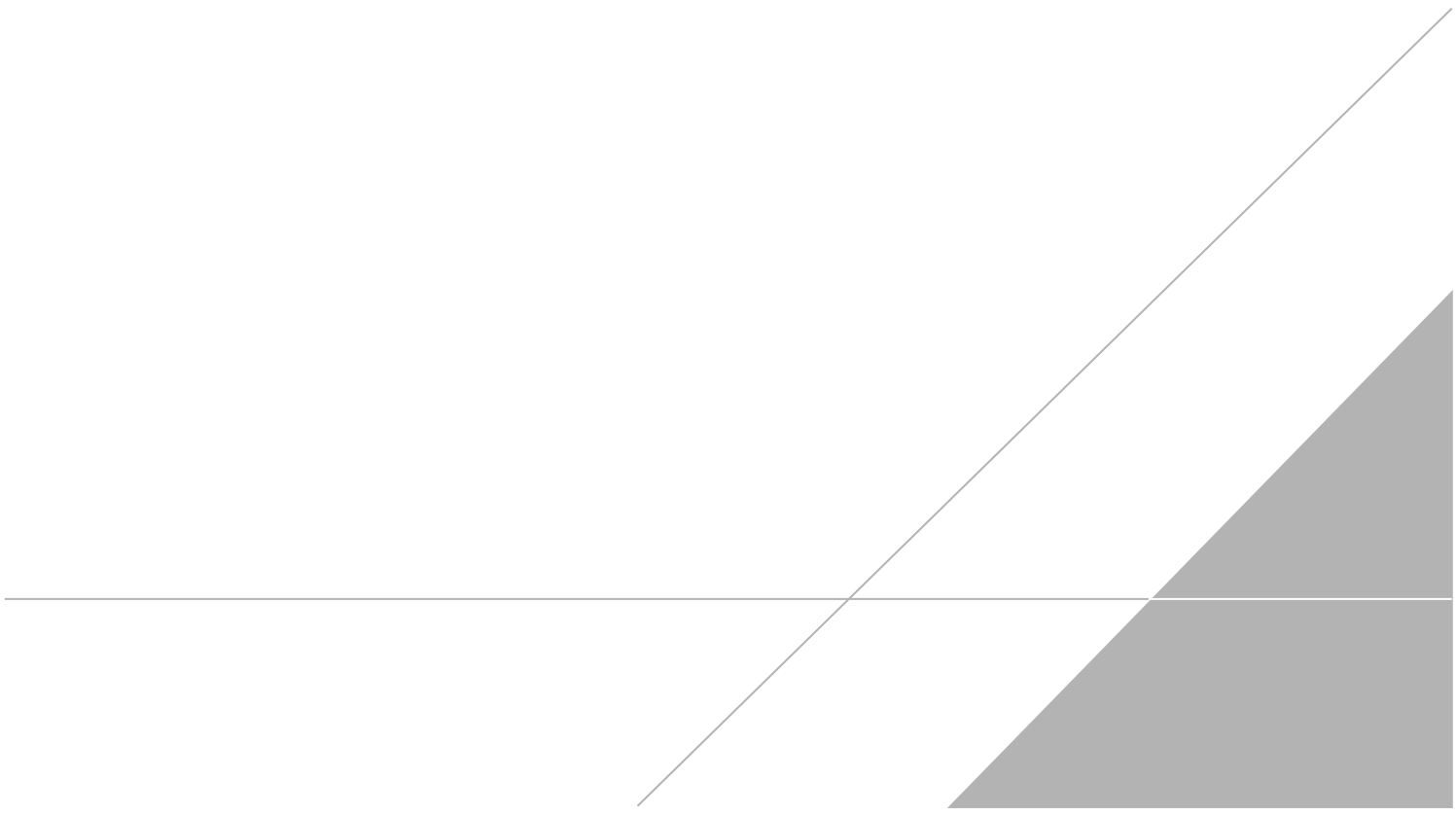
SMOKE TESTING LOGS SUB-AREA 25

SMOKE TESTING LOGS SUB-AREA 31

SMOKE TESTING I/I SOURCE FINDINGS TABLE

SMOKE TESTING SUSPECT SOURCES TABLE

SMOKE TESTING LOGS SUB-AREA 1



Sub-System: 1

Portland, ME

Smoke Testing Summary of Findings By Street Address

Table 1

Findings Address	Findings	Drainage Area SqFt	Runoff Coeff	Photo No.	Sketch No.	Insp. Date
Eight Street	Manhole 2604 is 0.5" below grade with 25 holes, 1" in diameter	120	0.9	720		09/24/19
Homestead Avenue R.O.W.	Smoke from exposed exterior walls of manhole 2583- direct connection (the finding is listed twice as there are two drainage coefficients.)	4	0.9	722		09/24/19
Homestead Avenue R.O.W.	Smoke from exposed exterior walls of manhole 2583- direct connection (the finding is listed twice as there are two drainage coefficients.)	30	0.3	721		09/24/19
21 Leisure Lane	Smoke from cleanout with broken cap- indirect connection	0	0	718		09/24/19
57 Leisure Lane	Smoke from clenaout with broken cap- indirect connection	0	0	1640		09/24/19
63 Milton Street	Smoke from yard drain- direct connection	2625	0.3	716	1-1	09/24/19

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

Project No: 19056

Date: 09/24/2019

Finding Location:
Eight Street

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Manhole 2604 is 0.5" below grade with 25 holes, 1" in diameter	120	0.9

Image #: P1020720.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

Project No: 19056

Date: 09/24/2019

Finding Location:
Homestead Avenue R.O.W.

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from exposed exterior walls of manhole 2583- direct connection (the finding is listed twice as there are two drainage coefficients.)	4	0.9

Image #: P1020722.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

Project No: 19056

Date: 09/24/2019

Finding Location:
Homestead Avenue R.O.W.

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from exposed exterior walls of manhole 2583- direct connection (the finding is listed twice as there are two drainage coefficients.)	30	0.3

Image #: P1020721.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

Project No: 19056

Date: 09/24/2019

Finding Location:
21 Leisure Lane

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with broken cap- indirect connection	0	0

Image #: P1020719.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

Project No: 19056

Date: 09/24/2019

Finding Location:
21 Leisure Lane

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with broken cap- indirect connection	0	0

Image #: P1020718.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

Project No: 19056

Date: 09/24/2019

Finding Location:
57 Leisure Lane

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with broken cap- indirect connection	0	0

Image #: IMG_1641.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

Project No: 19056

Date: 09/24/2019

Finding Location:
57 Leisure Lane

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from clenaout with broken cap- indirect connection	0	0

Image #: IMG_1640.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

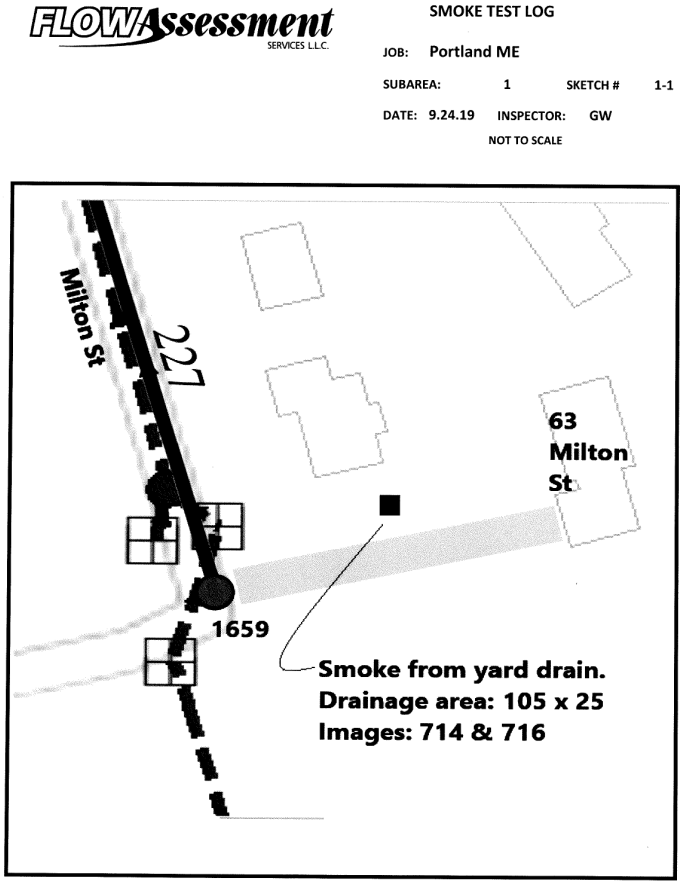
Project No: 19056

Date: 09/24/2019

Finding Location:
63 Milton Street

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from yard drain- direct connection	0	0



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Sketch #: Portland, ME Subarea 1 Sketch 1-1.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 1

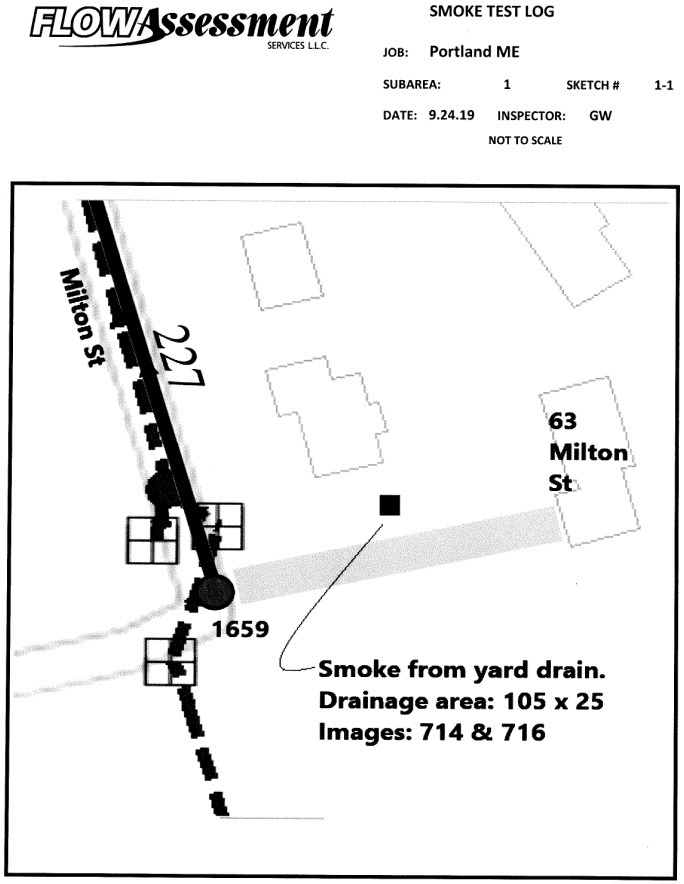
Project No: 19056

Date: 09/24/2019

Finding Location:
63 Milton Street

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from yard drain- direct connection	2625	0.3



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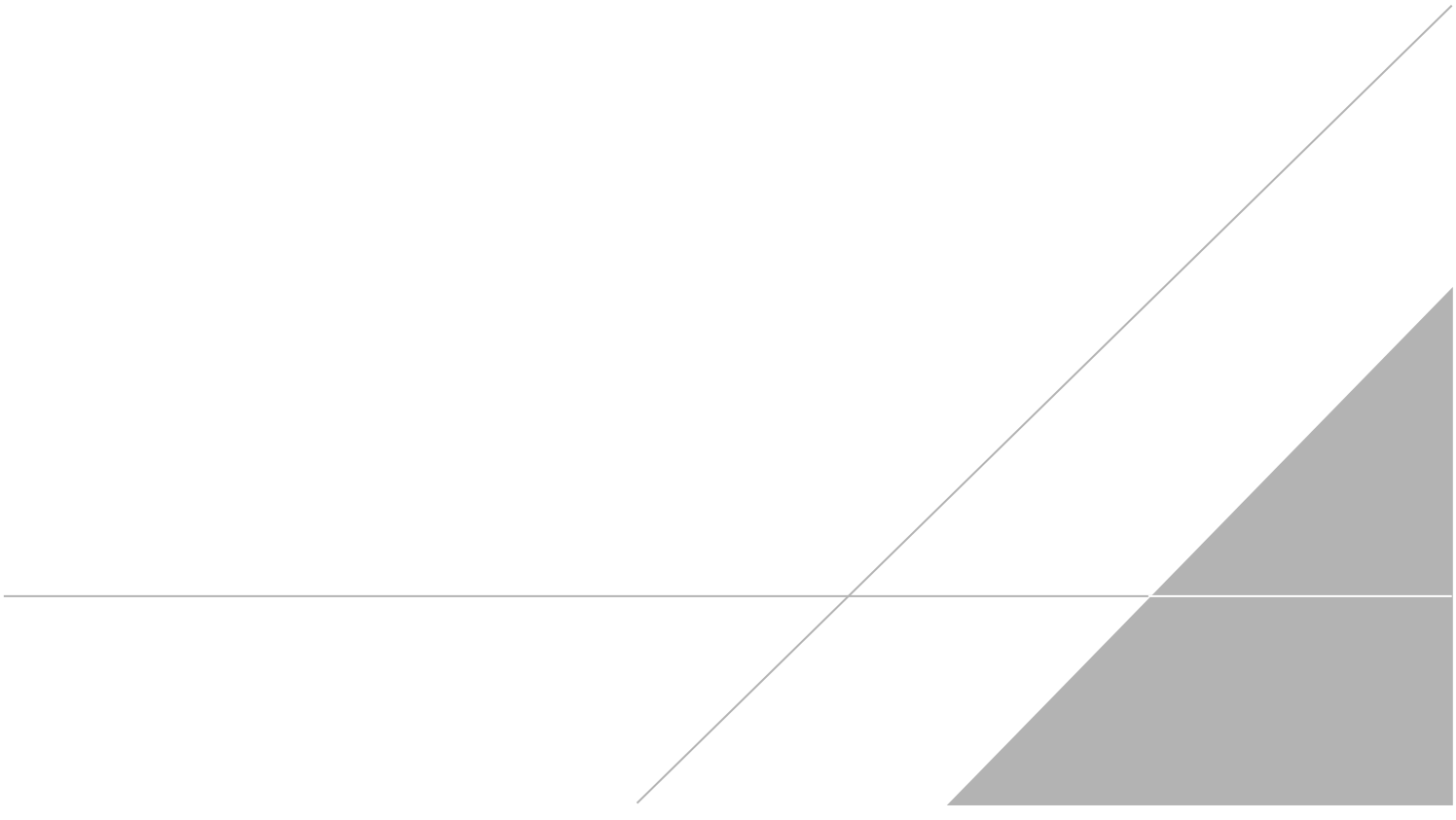
SMOKE TESTING LOGS SUB-AREA 2



Sub-System: 2

Portland, ME

Smoke Testing Summary of Findings By Street Address

Table 1

Findings Address	Findings	Drainage Area SqFt	Runoff Coeff	Photo No.	Sketch No.	Insp. Date
Continental Drive	Manhole 2460 is 1.5" below grade with 25 half inch diameter holes in the cover- direct connection	16	0.9	723		09/25/19

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 2

Project No: 19056

Finding Location:

Continental Drive

Date: 09/25/2019

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Manhole 2460 is 1.5" below grade with 25 half inch diameter holes in the cover- direct connection	16	0.9

Image #: P1020723.JPG

Sketch #:

SMOKE TESTING LOGS SUB-AREA 4

Sub-System: 4

Portland, ME

Smoke Testing Summary of Findings By Street Address

Table 1

Findings Address	Findings	Drainage Area SqFt	Runoff Coeff	Photo No.	Sketch No.	Insp. Date
126 Industrial Way	Smoke from cleanout with missing cap- direct connection	18	0.3	731	4-2	09/25/19
126 Industrial Way	Smoke from cleanout with broken cap, above grade- direct connection	0	0	727	4-2	09/25/19
921 Riverside Street	Smoke from an unidentified SSMH, 12" below grade- direct connection (the finding is listed twice as there are two drainage coefficients.)	4	0.9	734	4-3	09/25/19
921 Riverside Street	Smoke from an unidentified SSMH, 12 "below grade- direct connection (the finding is listed twice as there are two drainage coefficients.)	120	0.3	733	4-3	09/25/19
83 Walch Drive	Smoke from open cleanout, 10" above grade- direct connection	0	0	1642		09/25/19
Wedge Way	Smoke from sewer manhole on Wedge Way with no frame or cover- direct connection.This structure does not appear on the map- see revised map	9	0.9	724	4-1	09/25/19

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

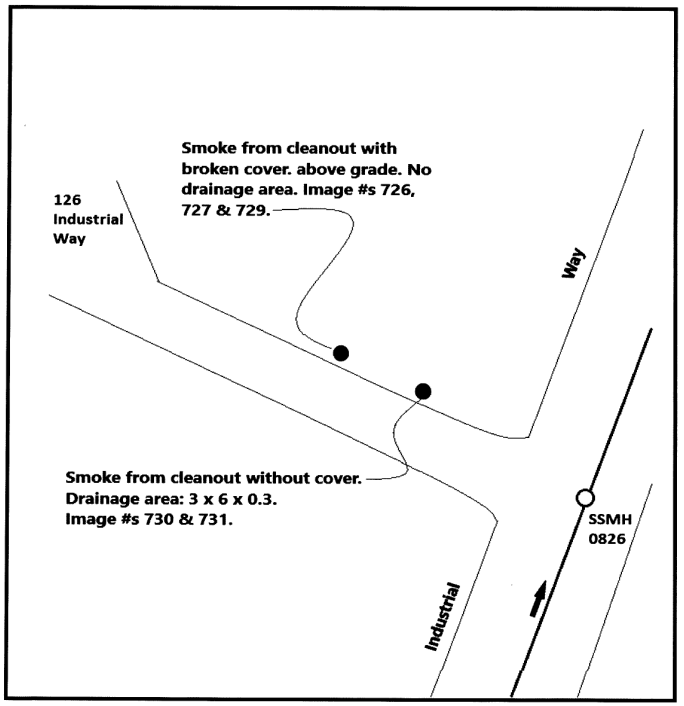
Project No: 19056

Date: 09/25/2019

Finding Location:
126 Industrial Way

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with missing cap- direct connection	0	0



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Sketch #: Portland, ME Subarea 4 Sketch 4-2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Finding Location:
126 Industrial Way

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with missing cap- direct connection	18	0.3

FLOW Assessment SERVICES L.L.C.

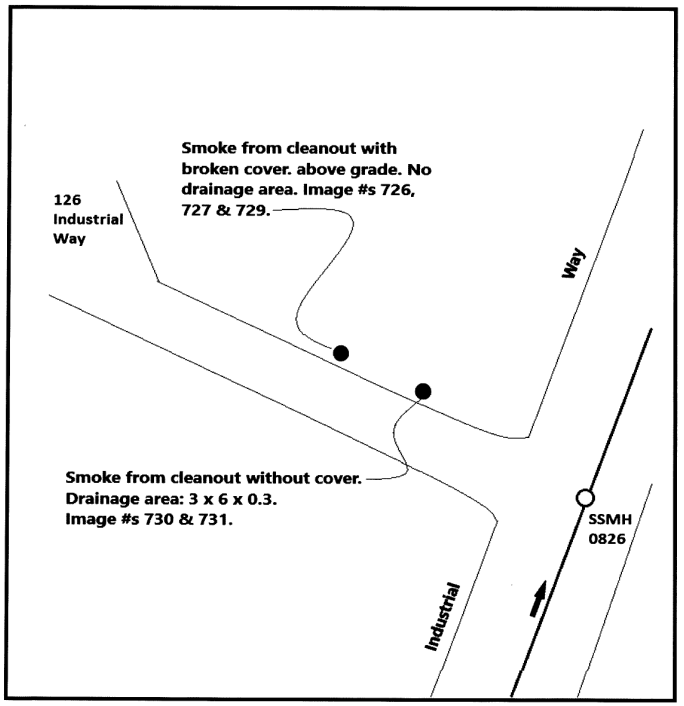
SMOKE TEST LOG

JOB: PORTLAND ME

SUBAREA: 4 SKETCH # 4-2

DATE: 9/25/19 INSPECTOR: GW

NOT TO SCALE



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Sketch #: Portland, ME Subarea 4 Sketch 4-2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Finding Location:
126 Industrial Way

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with broken cap, above grade- direct connection	0	0

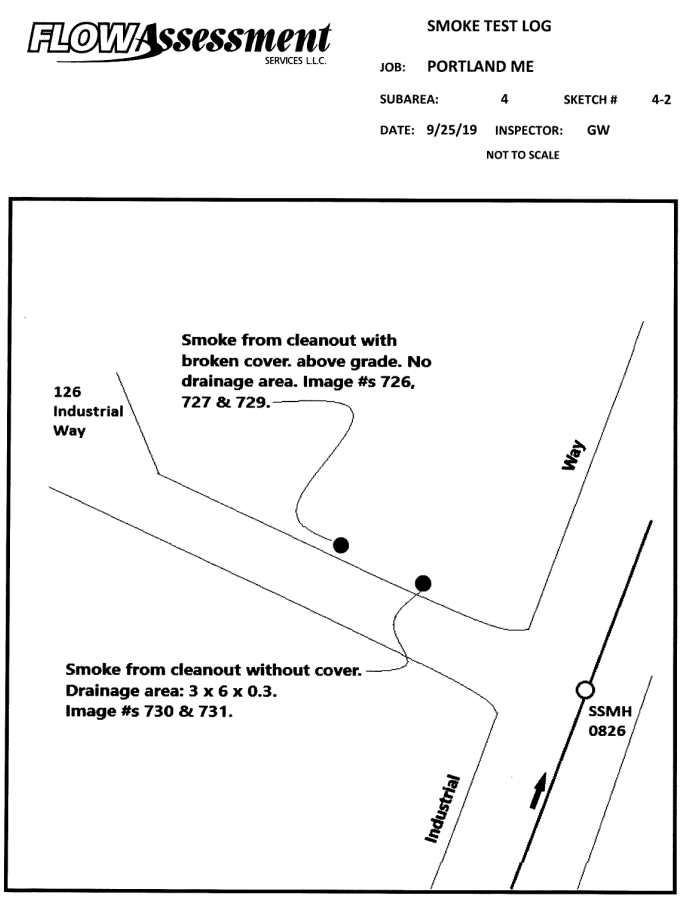


Image #: P1020729.JPG

Sketch #: Portland, ME Subarea 4 Sketch 4-2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Inspector: GW

Finding Location:
126 Industrial Way

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with broken cap, above grade- direct connection	0	0

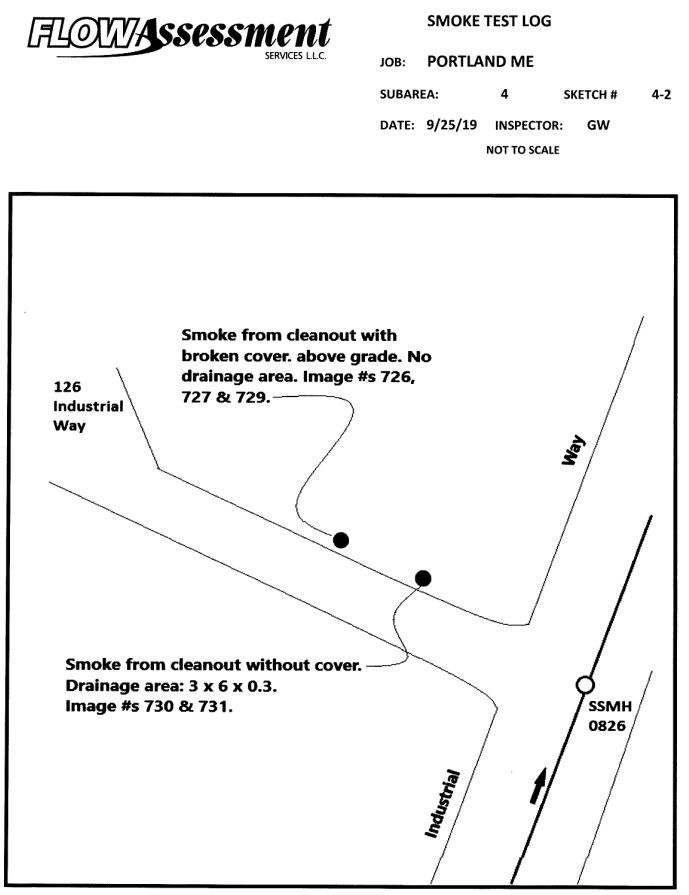


Image #: P1020726.JPG

Sketch #: Portland, ME Subarea 4 Sketch 4-2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Inspector: GW

Finding Location:
126 Industrial Way

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with broken cap, above grade- direct connection	0	0

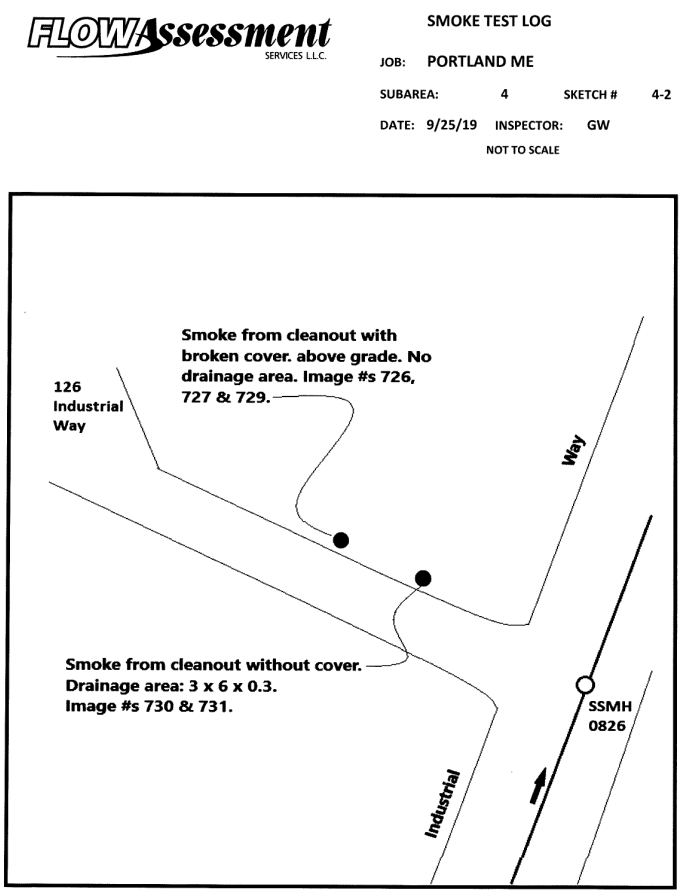


Image #: P1020727.JPG

Sketch #: Portland, ME Subarea 4 Sketch 4-2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Inspector: GW

Finding Location:

921 Riverside Street

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from an unidentified SSMH, 12" below grade- direct connection (the finding is listed twice as there are two drainage coefficients.)	4	0.9

FLOWAssessment SERVICES L.L.C.

SMOKE TEST LOG

JOB: PORTLAND ME

SUBAREA: 4 SKETCH # 4-3

DATE: 4/26/19 INSPECTOR: GW

NOT TO SCALE

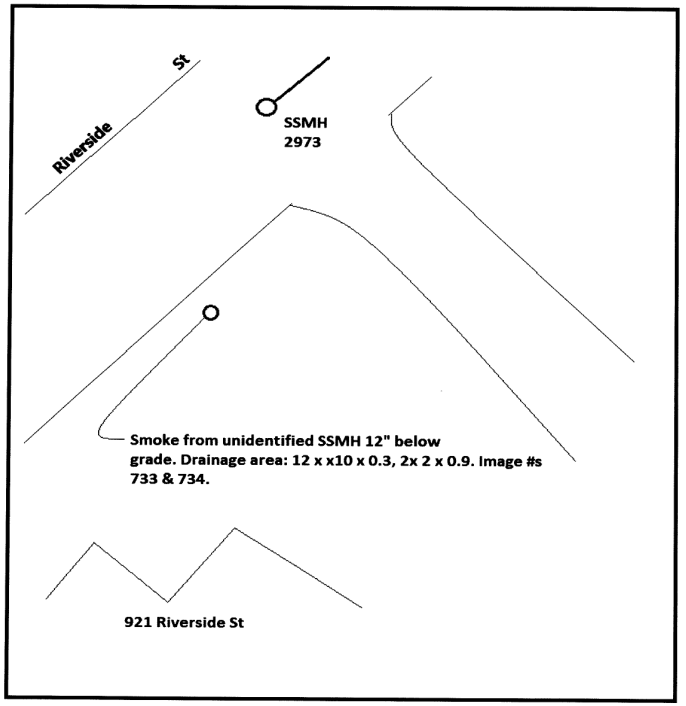


Image #: P1020734.JPG

Sketch #: Portland, ME Subarea 4 Sketch 4-3.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Finding Location:
921 Riverside Street

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from an unidentified SSMH, 12 "below grade- direct connection (the finding is listed twice as there are two drainage coefficients.)	120	0.3

FLOWAssessment SERVICES L.L.C.

SMOKE TEST LOG

JOB: PORTLAND ME

SUBAREA: 4 SKETCH # 4-3

DATE: 4/26/19 INSPECTOR: GW

NOT TO SCALE

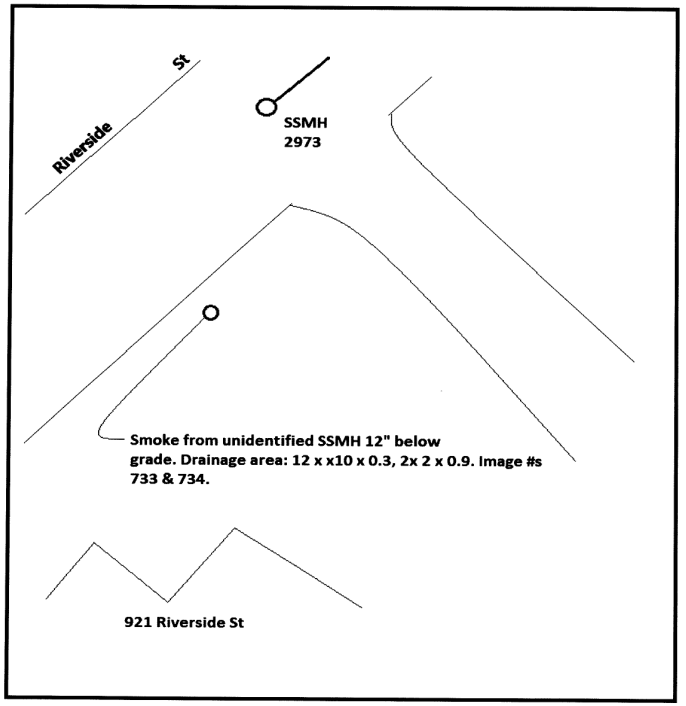


Image #: P1020733.JPG

Sketch #: Portland, ME Subarea 4 Sketch 4-3.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Finding Location:
83 Walch Drive

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from open cleanout, 10" above grade- direct connection	0	0

Image #: IMG_1642.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Finding Location:
Wedge Way

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from sewer manhole on Wedge Way with no frame or cover- direct connection.This structure does not appear on the map- see revised map	0	0

FLOWAssessment SERVICES L.L.C.

SMOKE TEST LOG

JOB: PORTLAND ME

SUBAREA: 4 SKETCH # 4-1

DATE: 9/25/19 INSPECTOR: GW

NOT TO SCALE

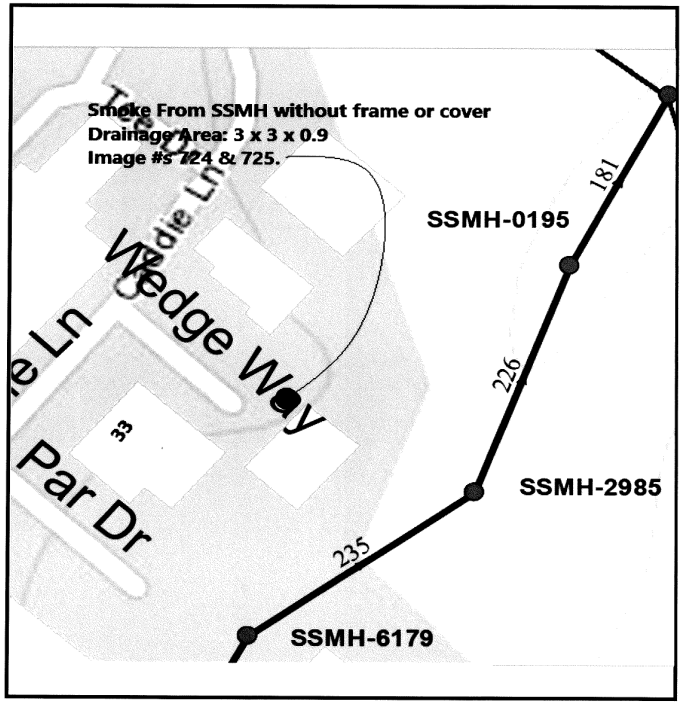


Image #: P1020725.JPG

Sketch #: Portland, ME Subarea 4 Sketch 4-1.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 4

Project No: 19056

Date: 09/25/2019

Finding Location:
Wedge Way

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from sewer manhole on Wedge Way with no frame or cover- direct connection.This structure does not appear on the map- see revised map	9	0.9

FLOW Assessment SERVICES L.L.C.

SMOKE TEST LOG

JOB: PORTLAND ME

SUBAREA: 4 SKETCH # 4-1

DATE: 9/25/19 INSPECTOR: GW

NOT TO SCALE

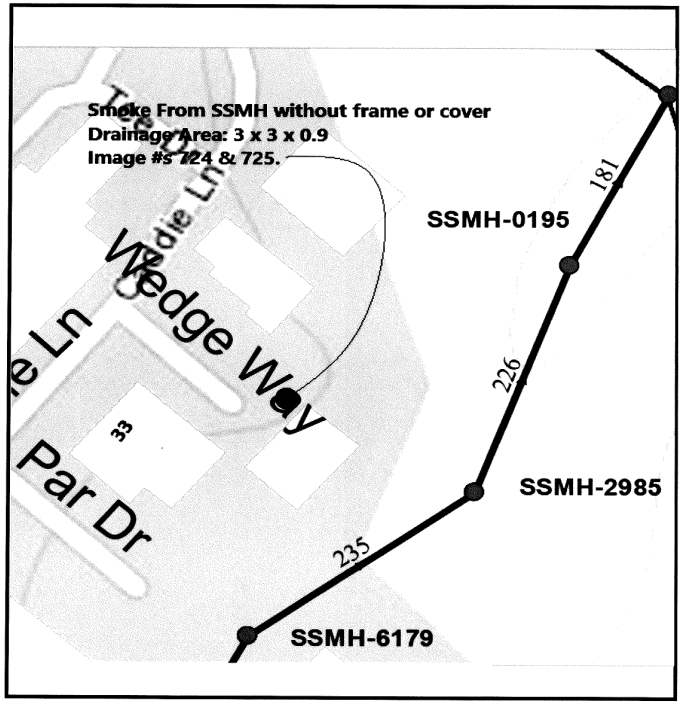
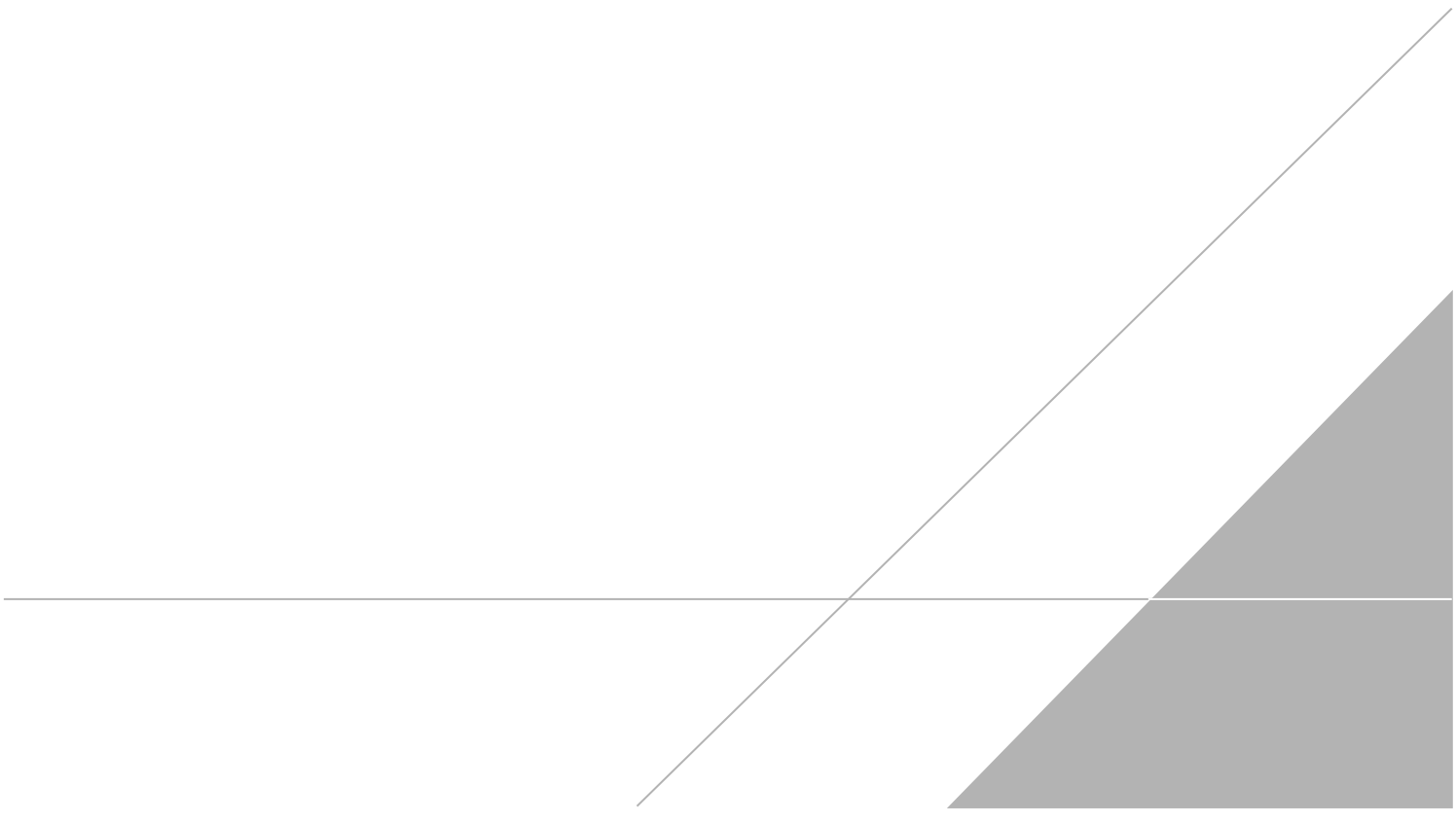


Image #: P1020724.JPG

Sketch #: Portland, ME Subarea 4 Sketch 4-1.tif

SMOKE TESTING LOGS SUB-AREA 7



Sub-System: 7

Portland, ME

Smoke Testing Summary of Findings By Street Address

Table 1

Findings Address	Findings	Drainage Area SqFt	Runoff Coeff	Photo No.	Sketch No.	Insp. Date
38 Alice Court	Smoke from open cleanout, above grade- direct connection	0	0	735		09/26/19
Alice Street	Light smoke fom catch basin SWIN-1816- indirect connection	0	0	736	7-2	09/26/19
3 Alice Street	Smoke from yard drain, drainage areas combined- direct connection	1000	0.3	739	7-1	09/26/19
3 Alice Street	Smoke from roof leader- direct connection	466	0.9	738	7-1	09/26/19
Curtis Road	Smoke from cracked pavement around SSMH-0527, manhole is 1" below grade- direct connection	16	0.9	741		09/27/19
229 Hope Avenue	Smoke from cleanout with broken cap- above grade, direct connection	0	0	743		09/27/19

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 7

Project No: 19056

Date: 09/26/2019

Finding Location:
38 Alice Court

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from open cleanout, above grade- direct connection	0	0

Image #: P1020735.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
Alice Street

Sub-System: 7

Project No: 19056
Date: 09/26/2019
Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Light smoke fom catch basin SWIN-1816- indirect connection	0	0

FLOW Assessment SERVICES L.L.C.

SMOKE TEST LOG

JOB: PORTLAND ME

SUBAREA: 7 SKETCH # 7-2

DATE: 9/26/19 INSPECTOR: GW

NOT TO SCALE

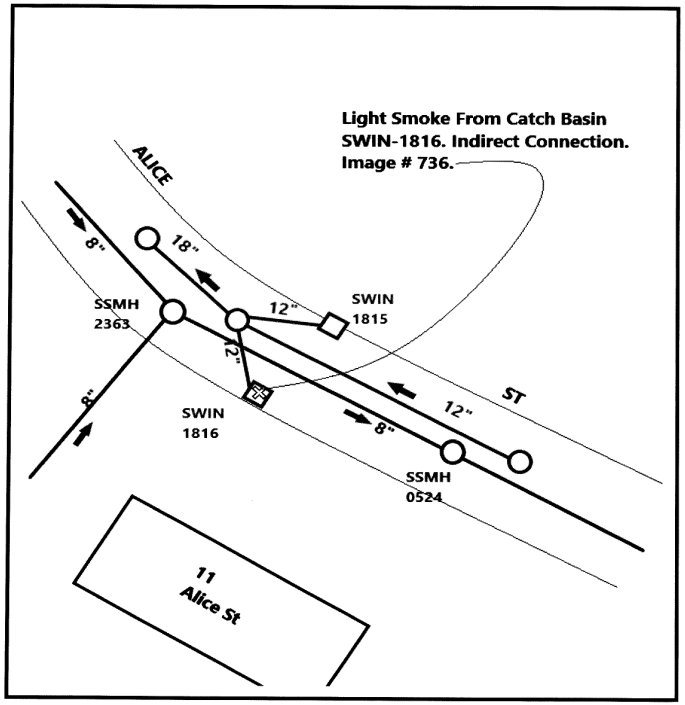


Image #: P1020736.JPG

Sketch #: Portland, ME Subarea 7 SKetch 7-2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
3 Alice Street

Sub-System: 7

Project No: 19056
Date: 09/26/2019
Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from yard drain drainage areas combined- direct connection	0	0

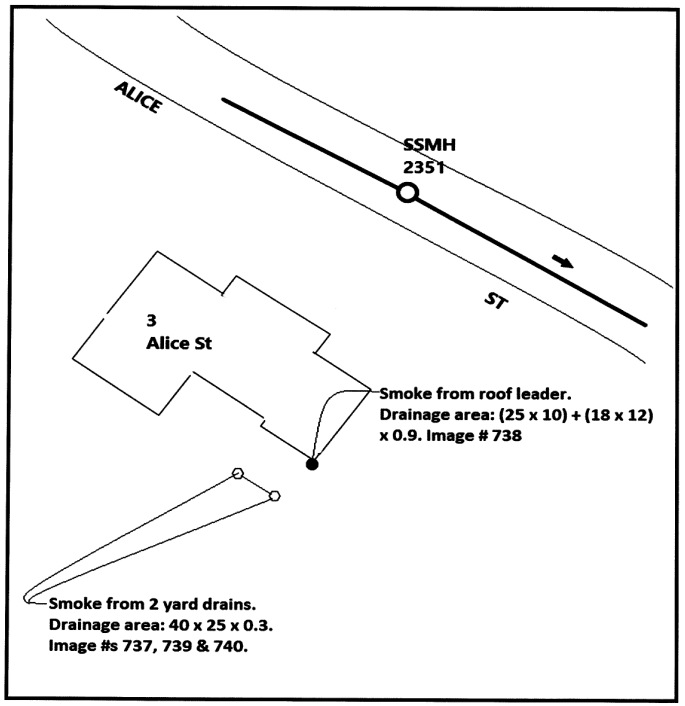


Image #: P1020740.JPG

Sketch #: Portland, ME Subarea 7 Sketch 7-1.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 7

Project No: 19056

Date: 09/26/2019

Finding Location:
3 Alice Street

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from yard drain drainage areas combined- direct connection	0	0

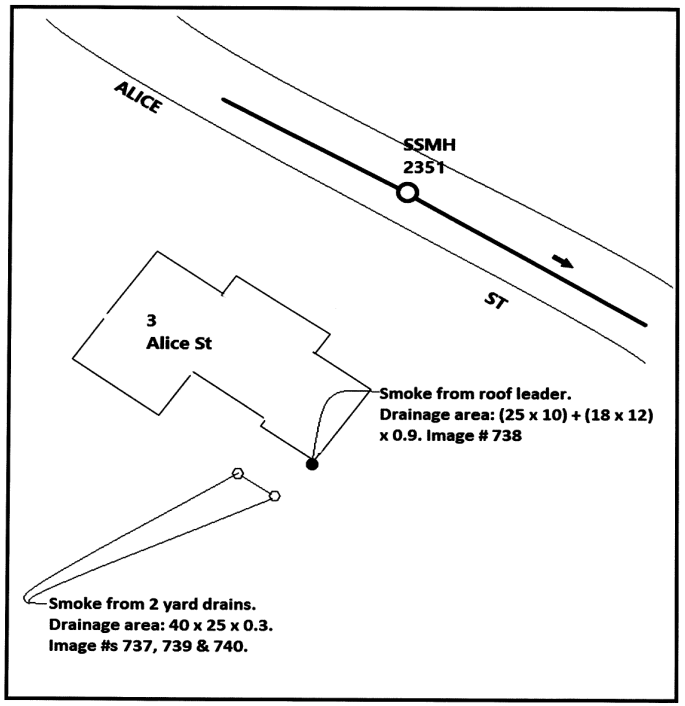


Image #: P1020737.JPG

Sketch #: Portland, ME Subarea 7 Sketch 7-1.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
3 Alice Street

Sub-System: 7

Project No: 19056
Date: 09/26/2019
Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from yard drain, drainage areas combined- direct connection	1000	0.3

FLOW Assessment SERVICES L.L.C.

SMOKE TEST LOG

JOB: PORTLAND ME

SUBAREA: 7 SKETCH # 7-1

DATE: 9/26/19 INSPECTOR: GW

NOT TO SCALE

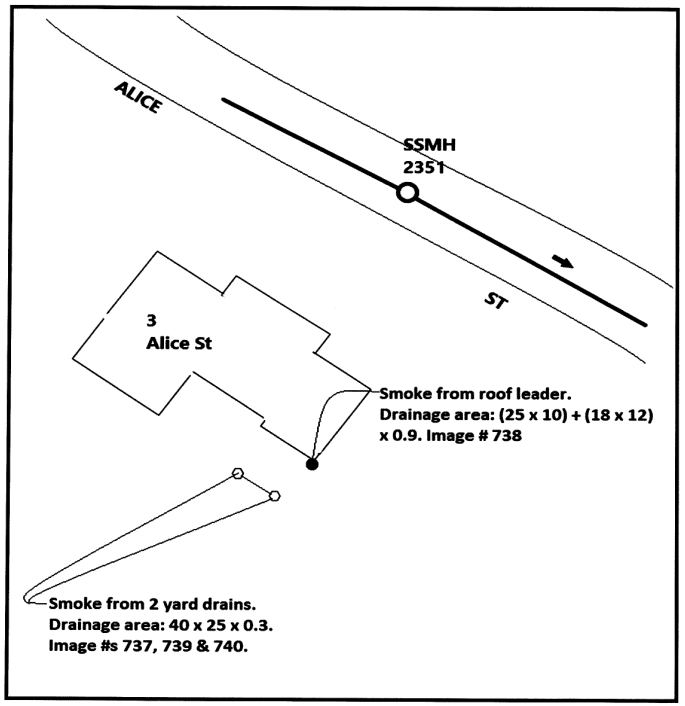


Image #: P1020739.JPG

Sketch #: Portland, ME Subarea 7 Sketch 7-1.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
3 Alice Street

Sub-System: 7

Project No: 19056
Date: 09/26/2019
Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from roof leader- direct connection	466	0.9

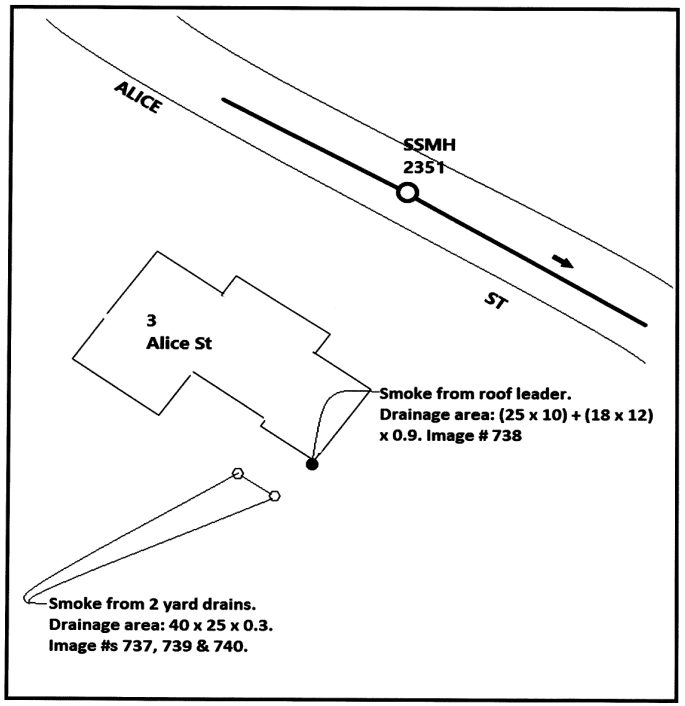


Image #: P1020738.JPG

Sketch #: Portland, ME Subarea 7 Sketch 7-1.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 7

Project No: 19056

Date: 09/27/2019

Finding Location:
Curtis Road

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cracked pavement around SSMH-0527, manhole is 1" below grade- direct connection	16	0.9

Image #: P1020741.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 7

Project No: 19056

Date: 09/27/2019

Finding Location:
229 Hope Avenue

Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with broken cap- above grade, direct connection	0	0

Image #: P1020743.JPG

Sketch #:

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 7

Project No: 19056

Date: 09/27/2019

Finding Location:
229 Hope Avenue

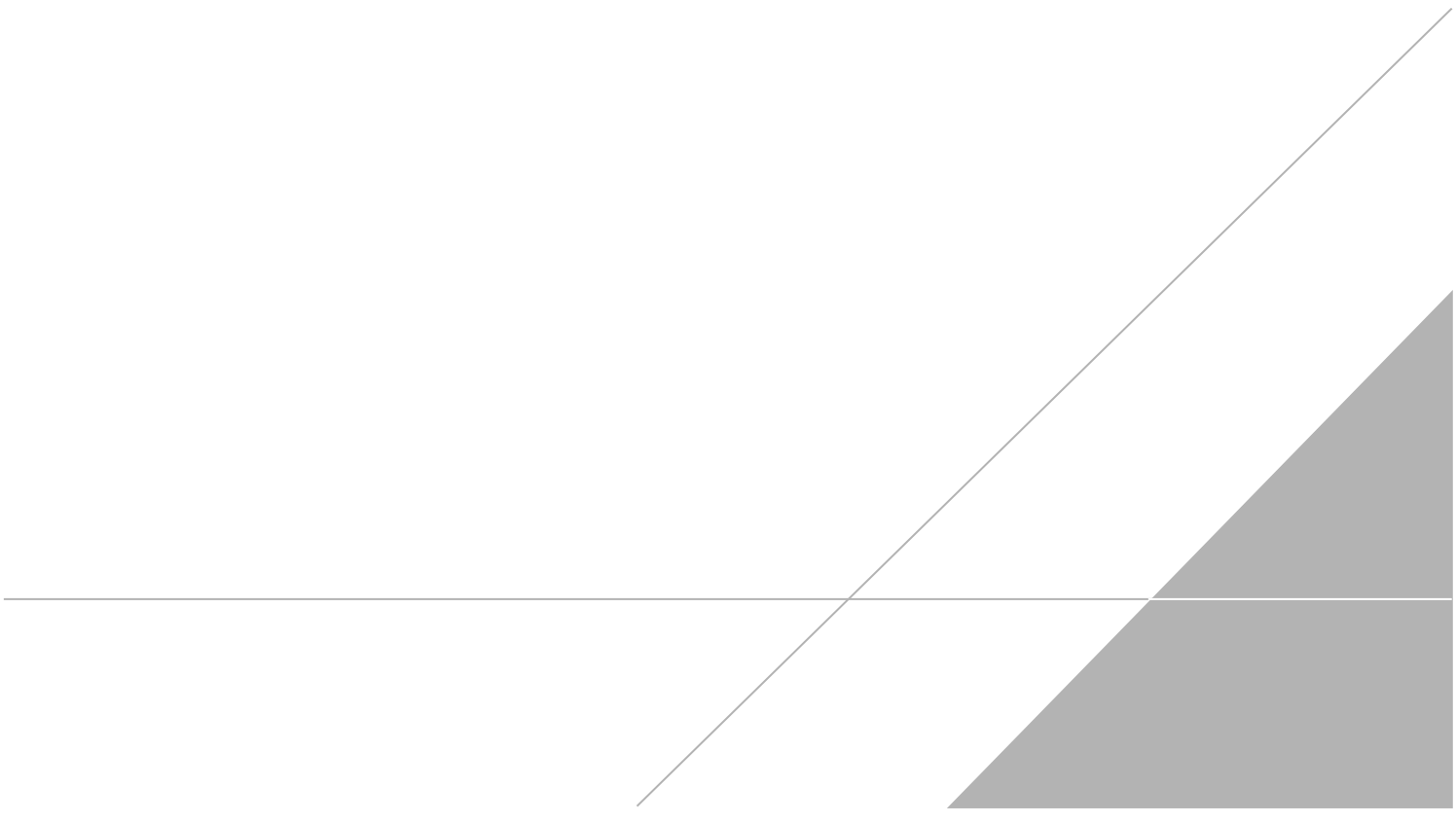
Inspector: GW

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from cleanout with broken cap, above grade- direct connection	0	0

Image #: P1020742.JPG

Sketch #:

SMOKE TESTING LOGS SUB-AREA 24A



Sub-System: 24a

Portland, ME

Smoke Testing Summary of Findings By Street Address

Table 1

Findings Address	Findings	Drainage Area SqFt	Runoff Coeff	Photo No.	Sketch No.	Insp. Date
53 Edgewood Avenue	Light smoke from ground- direct connection	25	0.9	1682	3	10/03/19
Loring Avenue	Light smoke from catch basin SWIN-3957- indirect connection	0	0	1678	2	10/03/19
Loring Avenue	Light smoke from catch basin SWIN-8100- indirect connection	0	0	1680	2	10/03/19
23 Loring Avenue	Light smoke from ground- direct connection	16	0.3	1679	2	10/03/19
32 Loring Avenue	Smoke from ground in the right, front corner of the house- direct connection	9	0.3	1681	2	10/03/19
Maplewood Street	Light smoke from catch basin SWIN4138- indirect connection	0	0	0745	1	10/03/19
Maplewood Street	Light smoke from catch basin SWIN3959- indirect connection	0	0	0744	1	10/03/19

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 24a

Project No: 19056

Date: 10/03/2019

Finding Location:
53 Edgewood Avenue

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Light smoke from ground- direct connection	25	0.9

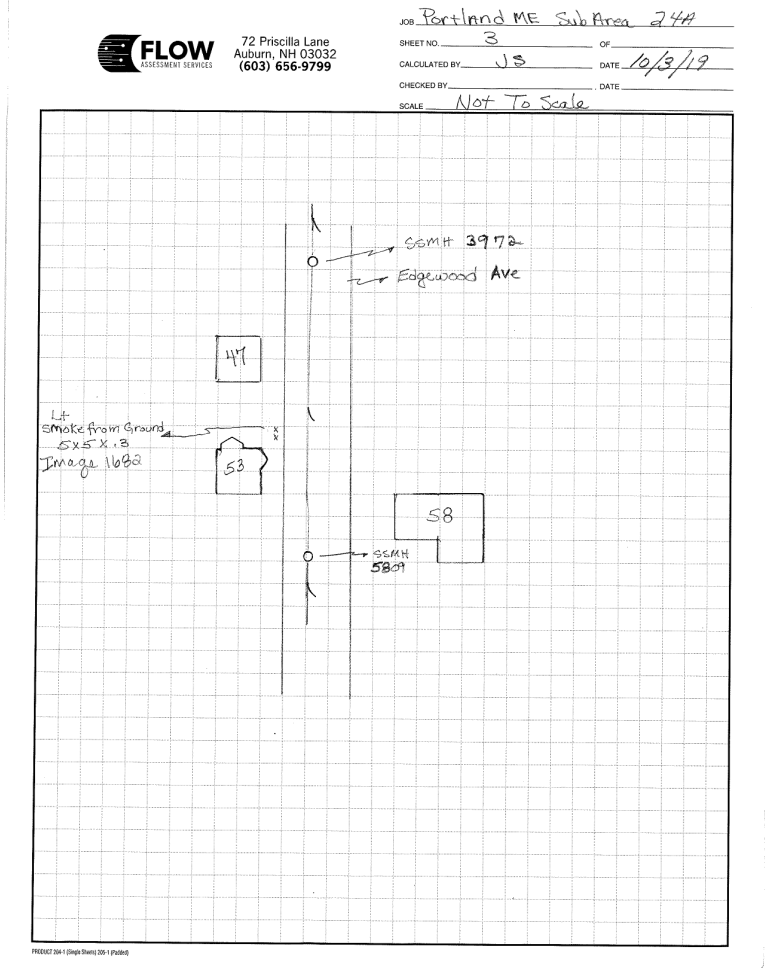


Image #: IMG_1682.JPG

Sketch #: Portland, ME Subarea 24a Sketch 3.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
Loring Avenue

Sub-System: 24a

Project No: 19056
Date: 10/03/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Light smoke from catch basin SWIN-8100- indirect connection	0	0

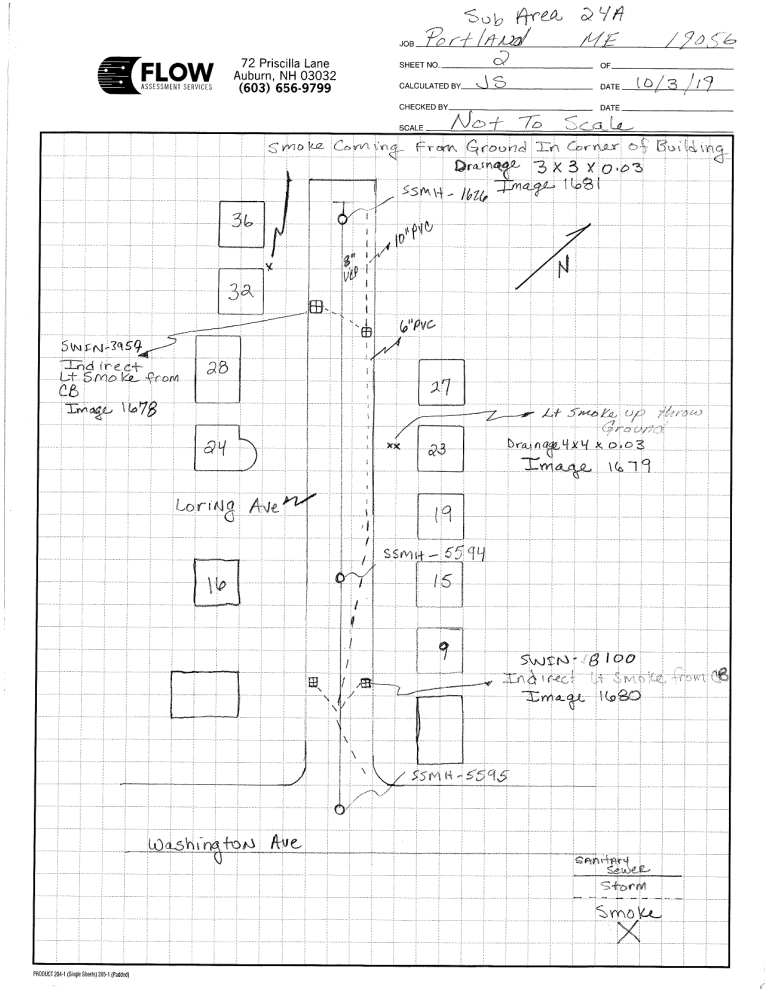


Image #: IMG_1680.JPG

Sketch #: Portland, ME Subarea 24a Sketch 2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
Loring Avenue

Sub-System: 24a

Project No: 19056
Date: 10/03/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Light smoke from catch basin SWIN-3957- indirect connection	0	0

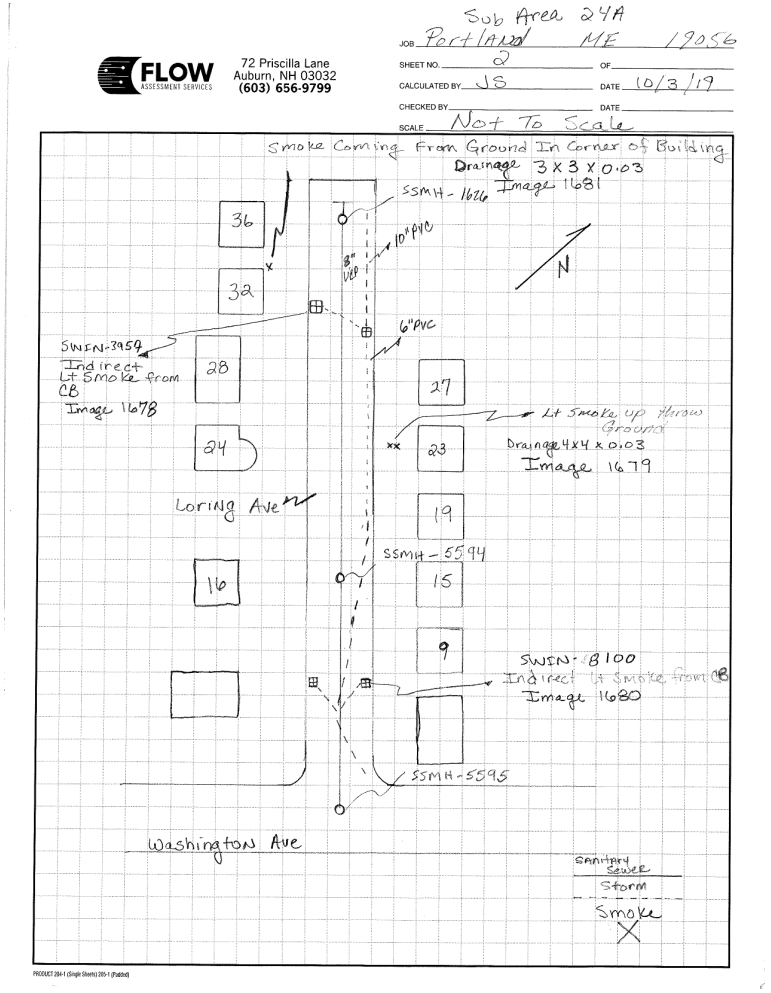


Image #: IMG_1678.JPG

Sketch #: Portland, ME Subarea 24a Sketch 2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 24a

Project No: 19056

Date: 10/03/2019

Finding Location:
23 Loring Avenue

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Light smoke from ground- direct connection	16	0.3

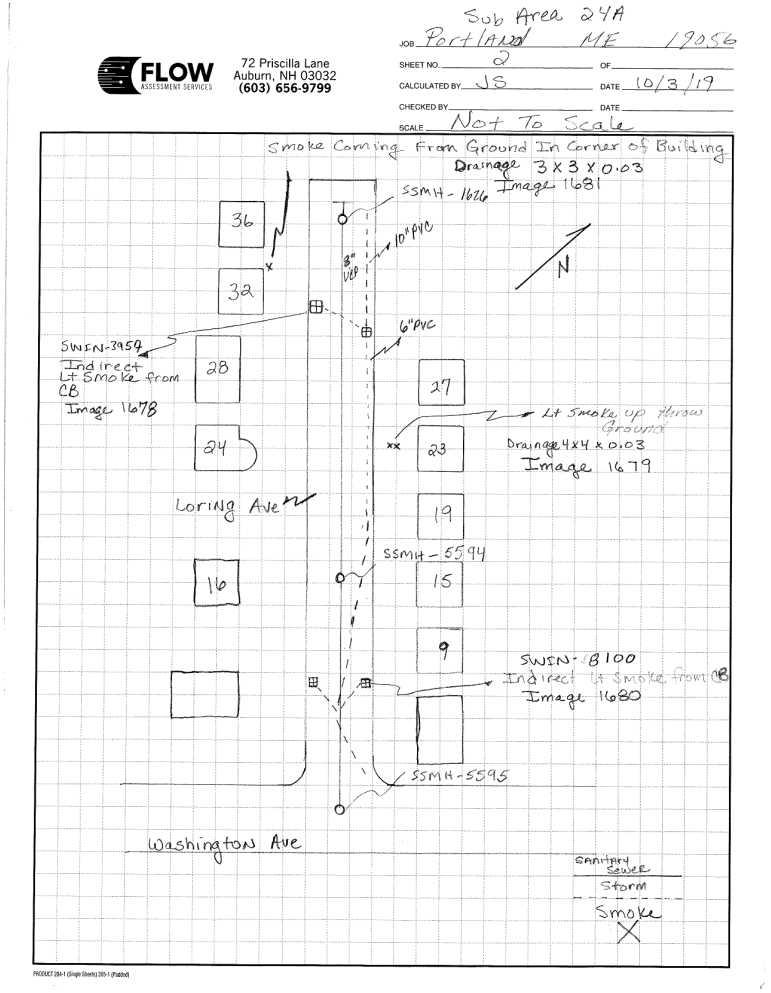


Image #: IMG_1679.JPG

Sketch #: Portland, ME Subarea 24a Sketch 2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 24a

Project No: 19056

Date: 10/03/2019

Finding Location:
32 Loring Avenue

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from ground in the right, front corner of the house- direct connection	9	0.3

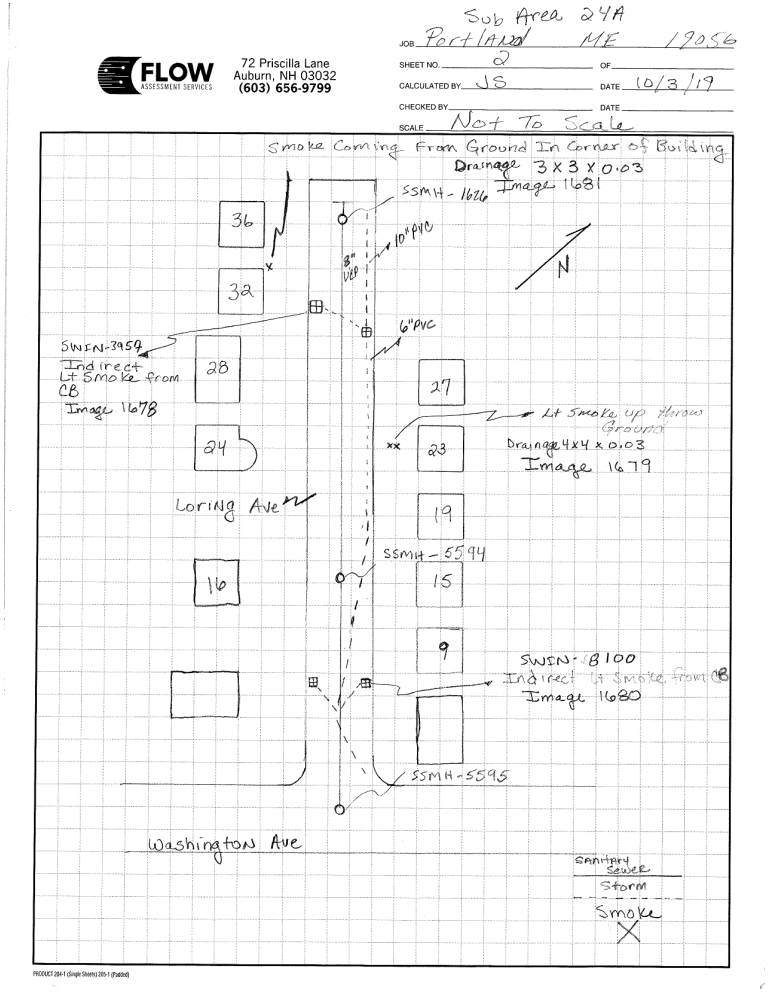


Image #: IMG_1681.JPG

Sketch #: Portland, ME Subarea 24a Sketch 2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 24a

Project No: 19056

Date: 10/03/2019

Finding Location:
Maplewood Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Light smoke from catch basin SWIN4138- indirect connection	0	0

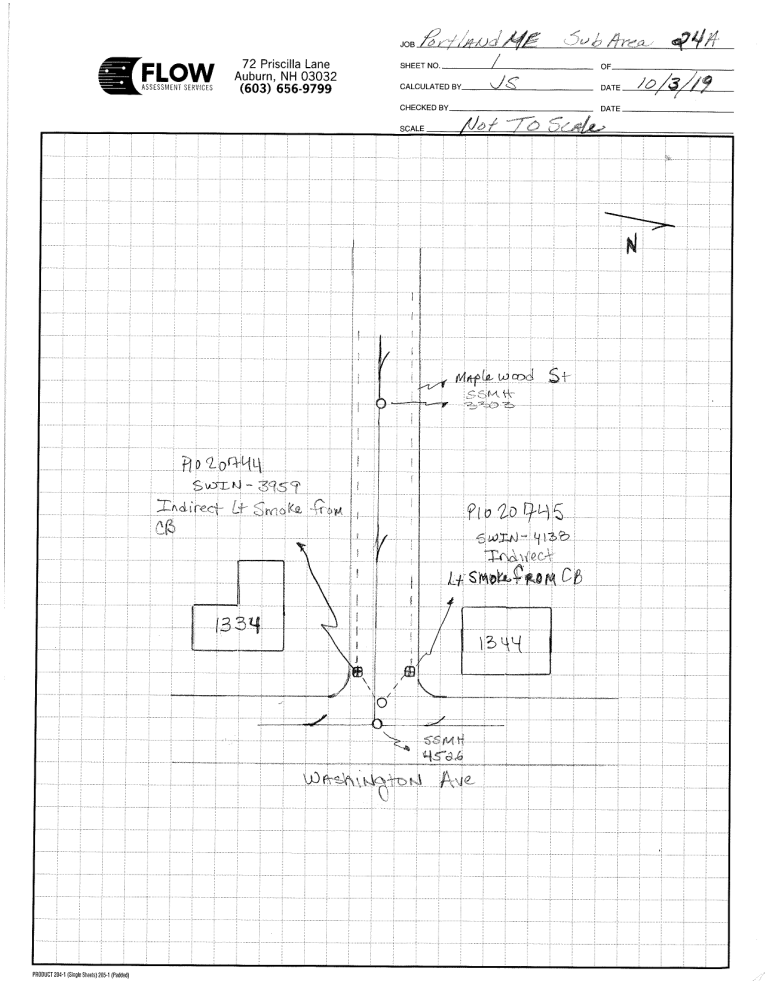


Image #: P1020745.JPG

Sketch #: Portland, ME Subarea 24a Sketch 1.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 24a

Project No: 19056

Date: 10/03/2019

Finding Location:
Maplewood Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Light smoke from catch basin SWIN3959- indirect connection	0	0

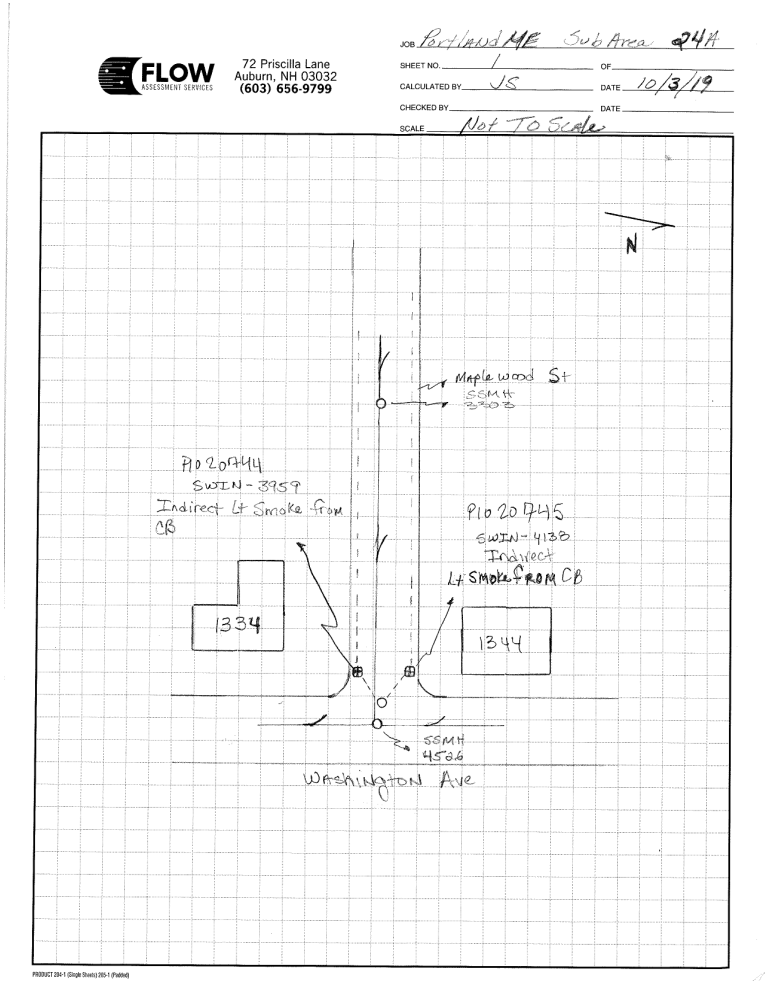
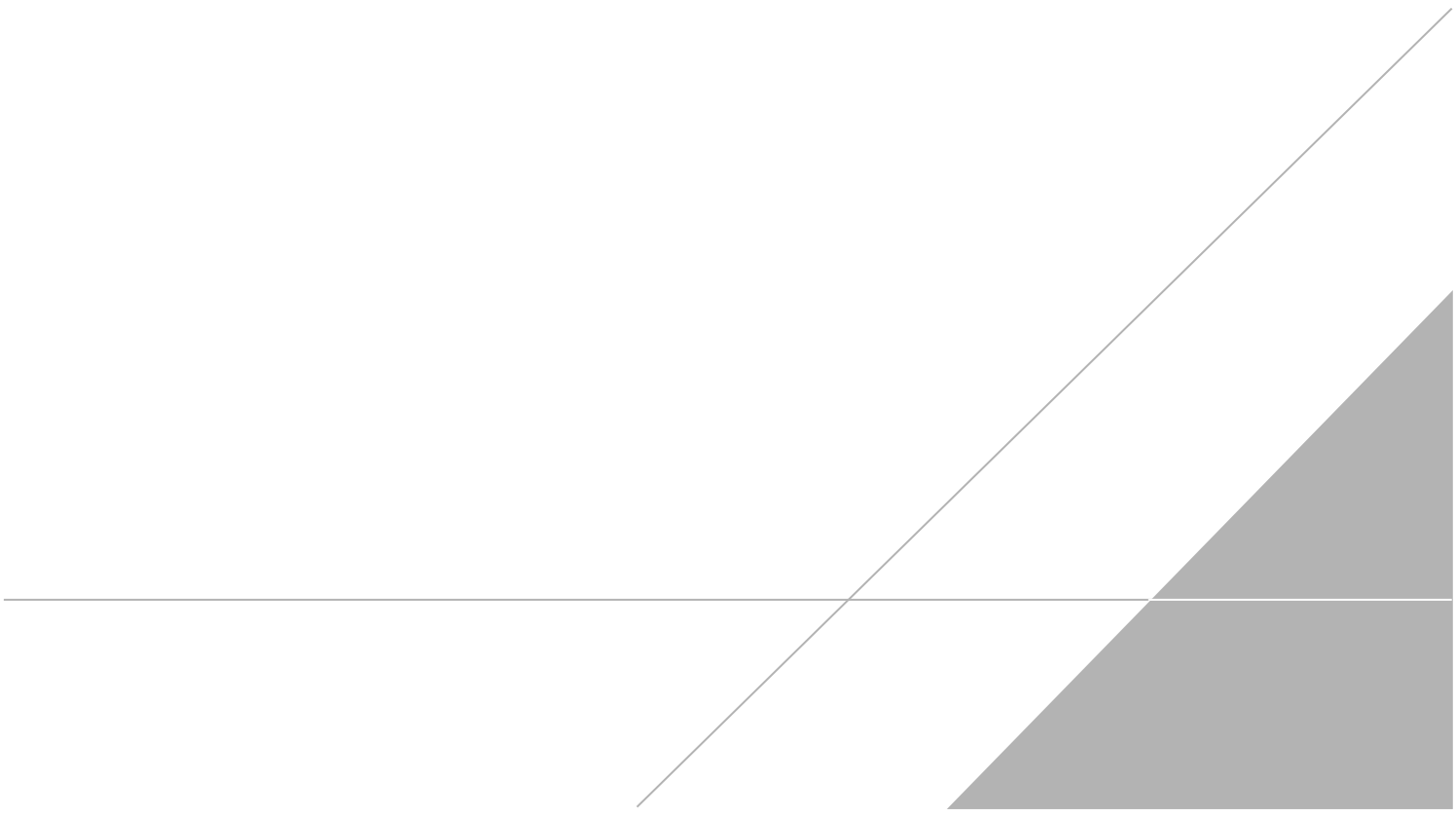


Image #: P1020744.JPG

Sketch #: Portland, ME Subarea 24a Sketch 1.tif

SMOKE TESTING LOGS SUB-AREA 25



Sub-System: 25

Portland, ME

Smoke Testing Summary of Findings By Street Address

Table 1

Findings Address	Findings	Drainage Area SqFt	Runoff Coeff	Photo No.	Sketch No.	Insp. Date
Auburn Street	Heavy smoke from catch basin SWIN-1009- indirect connection	0	0	1696	3	10/09/19
94 Auburn Street	Heavy smoke from catch basin SWIN-5107- direct connection	9600	0.9	1694	4	10/09/19
94 Auburn Street	Heavy smoke from three roof leaders (drainage area is combined)- direct connection	6000	0.9	1695	4	10/09/19
151 Auburn Street	Heavy smoke from catch basin SWIN-7403- indirect connection	0	0	1698	2	10/09/19
110 Auburn Street (across from)	Heavy smoke from catch basin SWIN-7399- indirect connection	0	0	1697	3	10/09/19
171 Auburn Street (Lyman Moore Middle)	Medium smoke from ground- direct connection	200	0.3	1700	5	10/09/19
171 Auburn Street (Lyman Moore Middle)	Heavy smoke from 18 roof drains (drainage area is combined)- direct connection		0	0006	5	10/09/19
171 Auburn Street (Lyman Moore Middle)	Heavy smoke from 18 roof drains (drainage area is combined)- direct connection	0	0	0005	5	10/09/19
171 Auburn Street (Lyman Moore Middle)	Heavy smoke from 18 roof drains (drainage area is combined)- direct connection	26000	0.9	0004	5	10/09/19
Crouquet Lane	Medium smoke from catch basin SWIN-2508- indirect connection	0	0	1693	1	10/09/19

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 25

Project No: 19056

Date: 10/09/2019

Finding Location:
Auburn Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from catch basin SWIN-1009- indirect connection	0	0

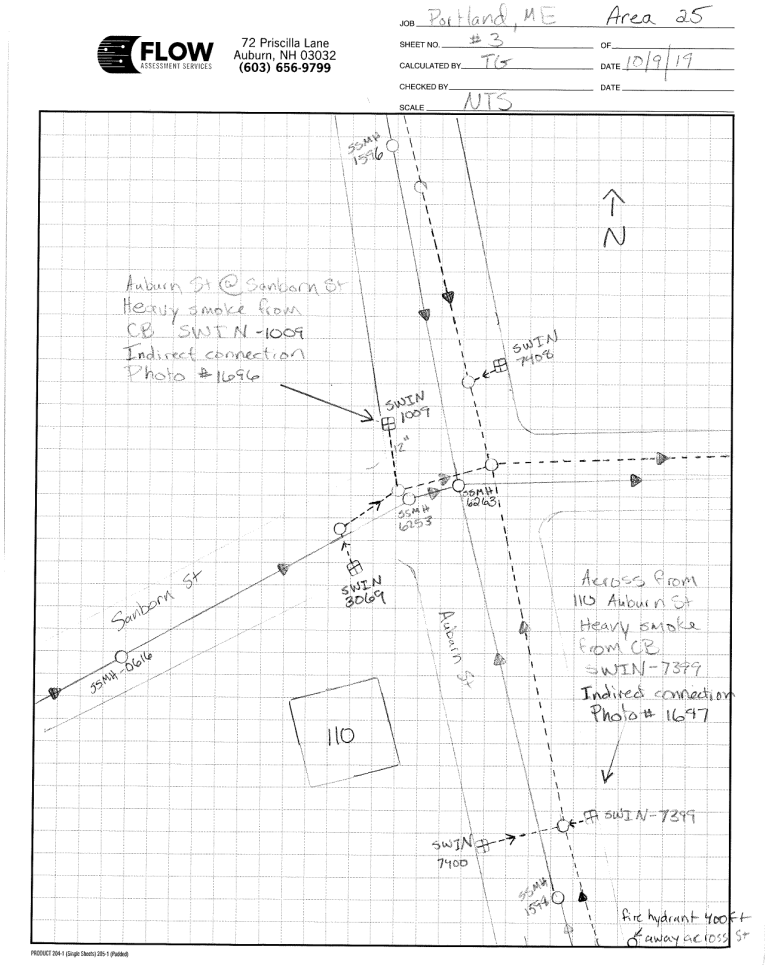


Image #: IMG_1696.JPG

Sketch #: Portland, ME Subarea 25 Sketch 3.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 25

Project No: 19056

Date: 10/09/2019

Finding Location:
94 Auburn Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from catch basin SWIN-5107- direct connection	9600	0.9

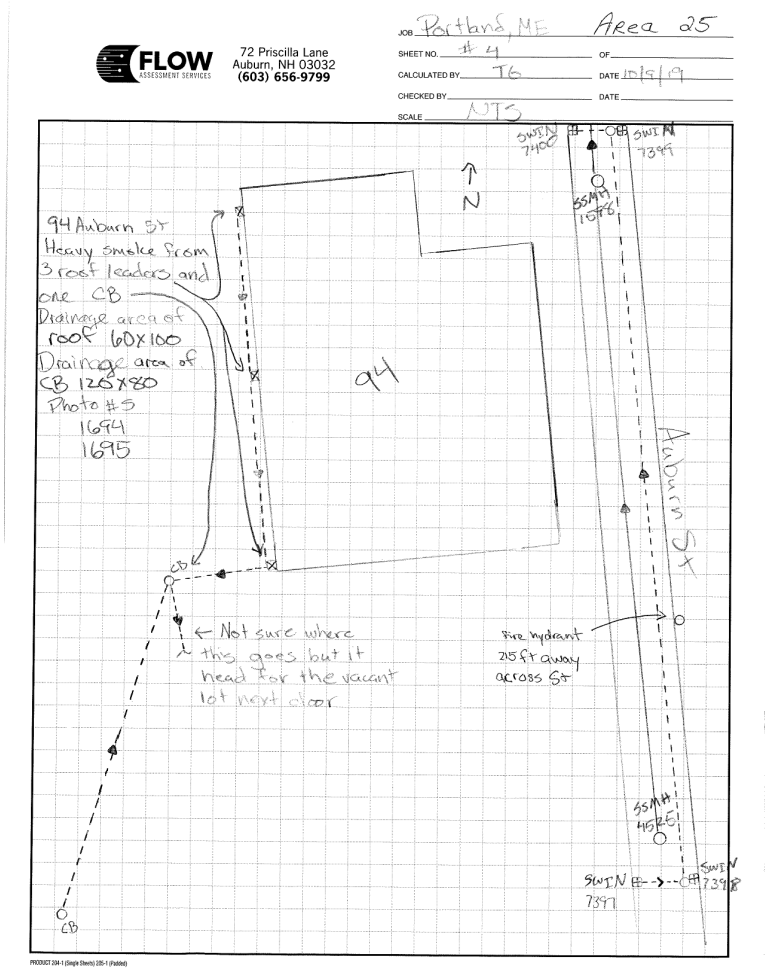


Image #: IMG_1694.JPG

Sketch #: Portland, ME Subarea 25 Sketch 4.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
94 Auburn Street

Sub-System: 25

Project No: 19056
Date: 10/09/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from three roof leaders (drainage area is combined)- direct connection	6000	0.9

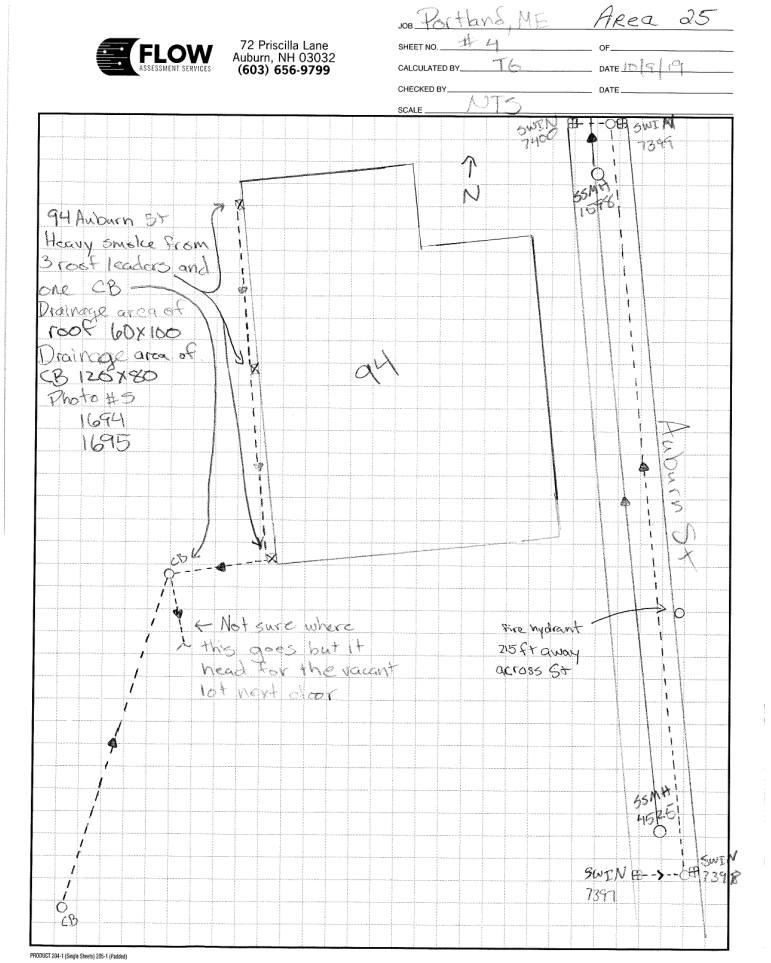


Image #: IMG_1695.JPG

Sketch #: Portland, ME Subarea 25 Sketch 4.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 25

Project No: 19056

Date: 10/09/2019

Finding Location:
151 Auburn Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from catch basin SWIN-7403- indirect connection	0	0

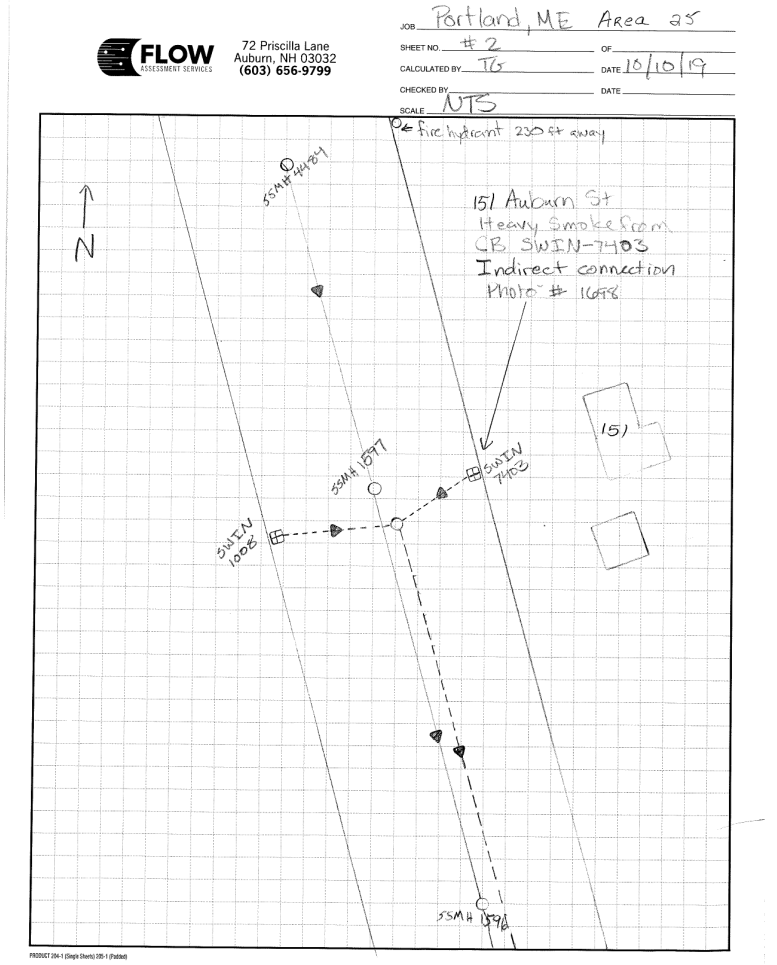


Image #: IMG_1698.JPG

Sketch #: Portland, ME Subarea 25 Sketch 2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
110 Auburn Street (across from)

Sub-System: 25

Project No: 19056
Date: 10/09/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from catch basin SWIN-7399- indirect connection	0	0

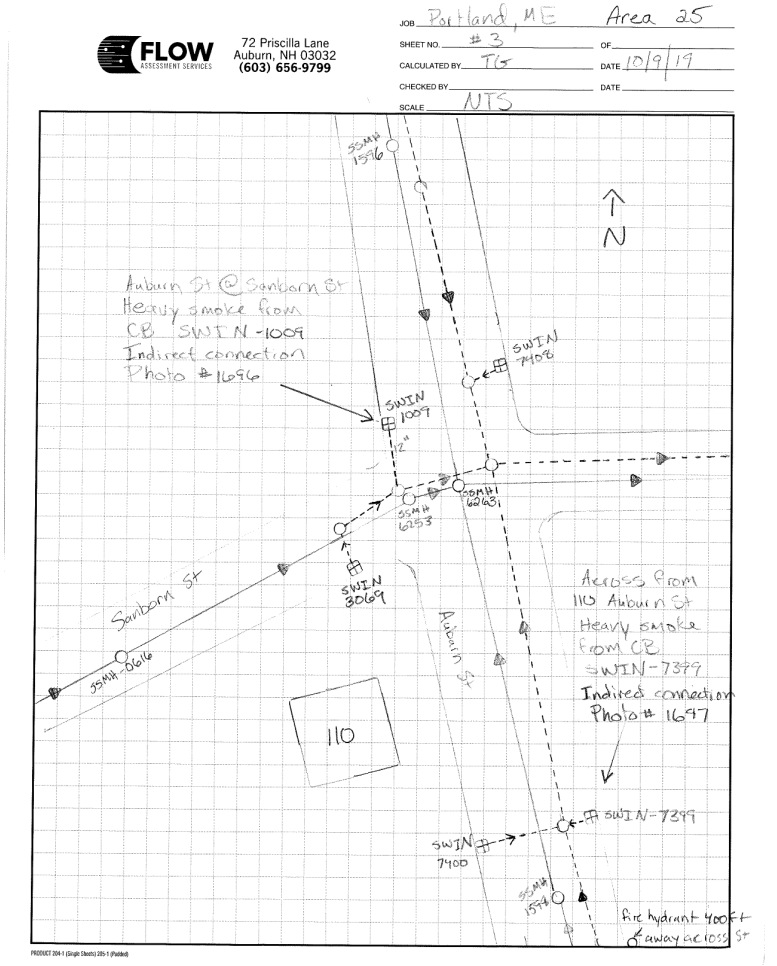


Image #: IMG_1697.JPG

Sketch #: Portland, ME Subarea 25 Sketch 3.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 25

Project No: 19056

Date: 10/09/2019

Finding Location:
171 Auburn Street (Lyman Moore Middle)

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Medium smoke from ground- direct connection	0	0

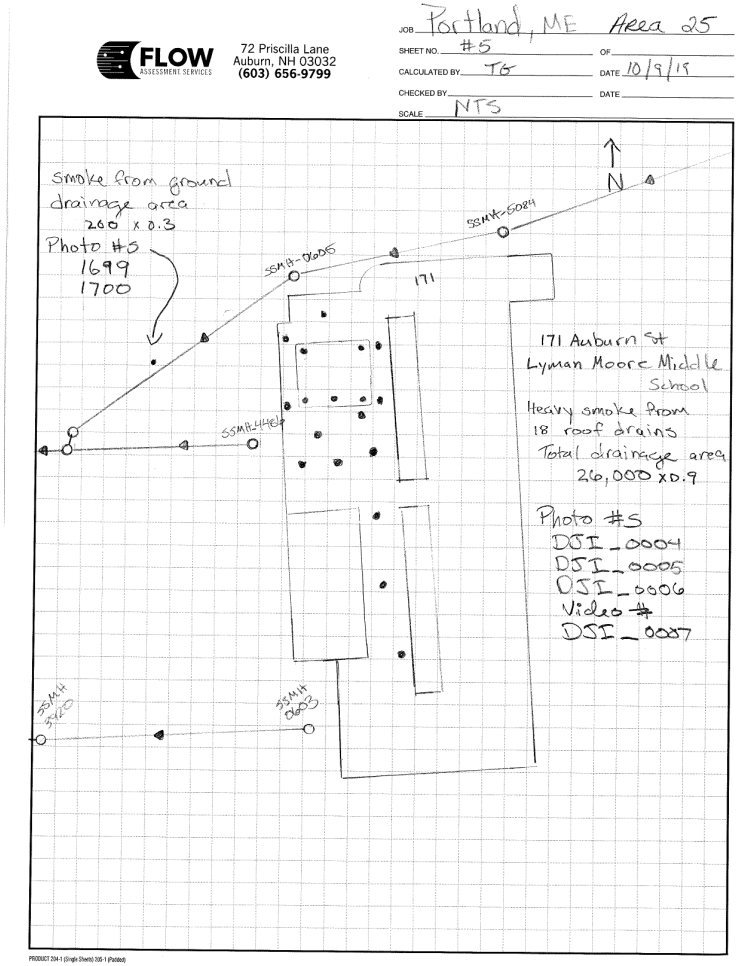


Image #: IMG_1699.JPG

Sketch #: Portland, ME Subarea 25 Sketch 5.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 25

Project No: 19056

Finding Location:

171 Auburn Street (Lyman Moore Middle)

Date: 10/09/2019

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Medium smoke from ground- direct connection	200	0.3

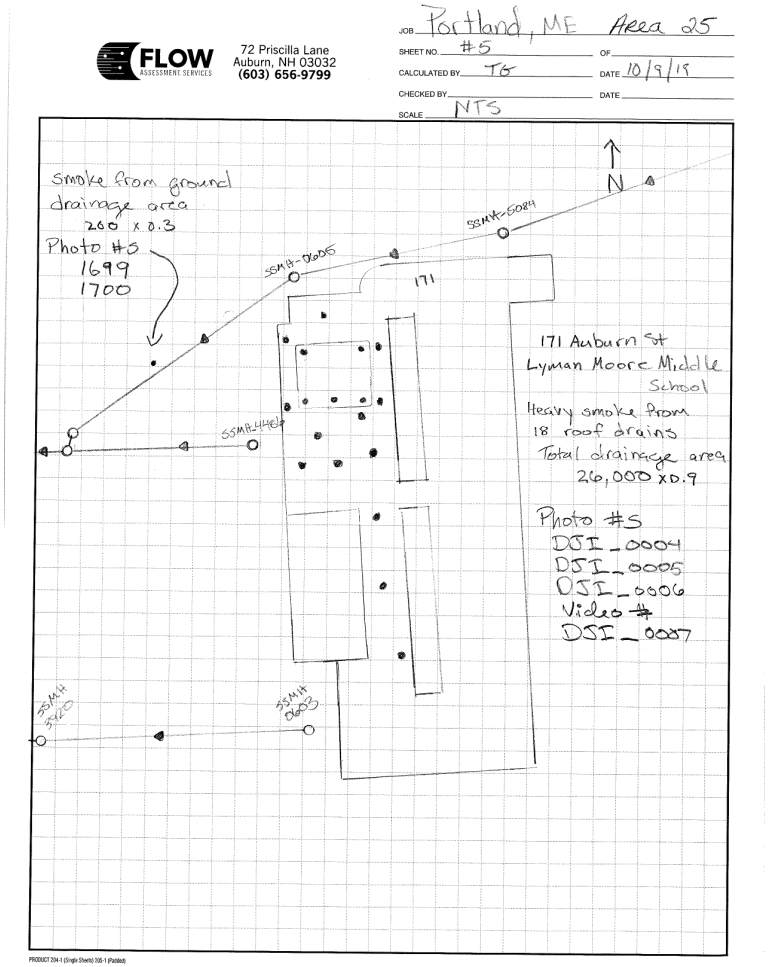


Image #: IMG_1700.JPG

Sketch #: Portland, ME Subarea 25 Sketch 5.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 25

Project No: 19056

Date: 10/09/2019

Finding Location:
171 Auburn Street (Lyman Moore Middle)

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from 18 roof drains (drainage area is combined)- direct connection		0

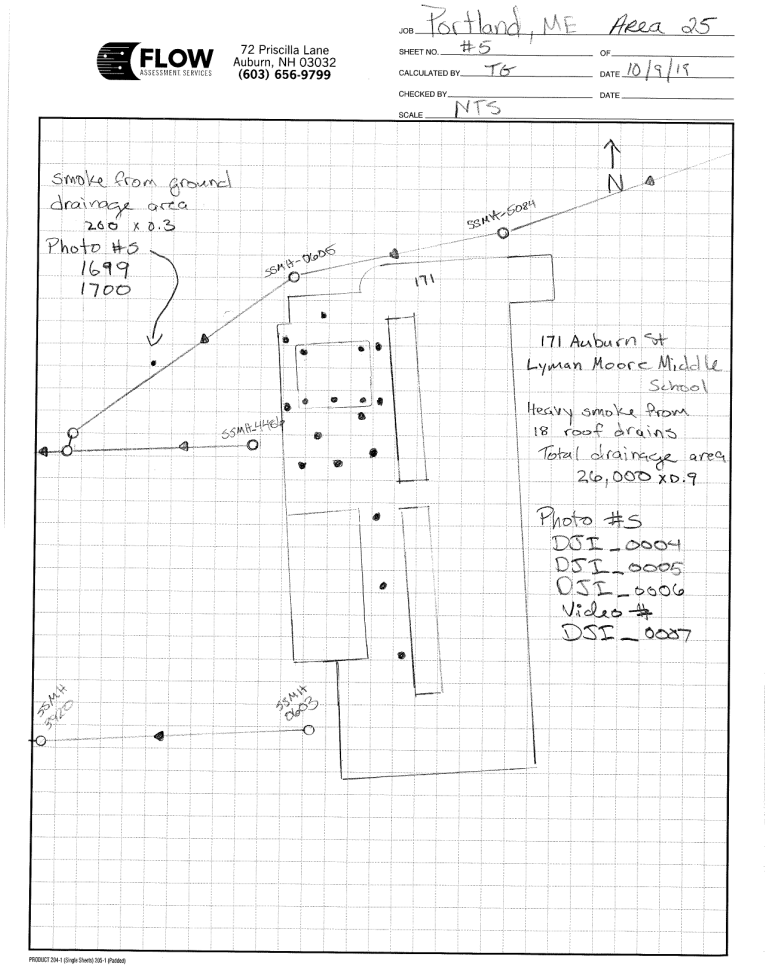


Image #: DJI_0006.JPG

Sketch #: Portland, ME Subarea 25 Sketch 5.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 25

Project No: 19056

Date: 10/09/2019

Finding Location:
171 Auburn Street (Lyman Moore Middle)

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from 18 roof drains (drainage area is combined)- direct connection	0	0

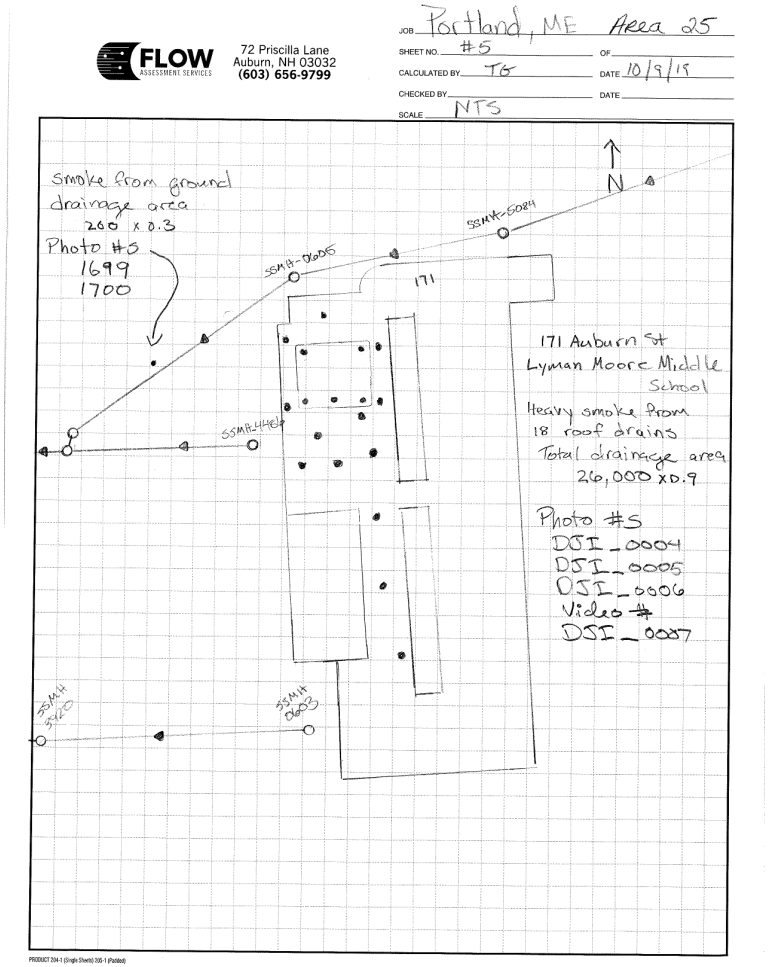


Image #: DJI_0005.JPG

Sketch #: Portland, ME Subarea 25 Sketch 5.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 25

Project No: 19056

Date: 10/09/2019

Finding Location:
171 Auburn Street (Lyman Moore Middle)

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from 18 roof drains (drainage area is combined)- direct connection	26000	0.9

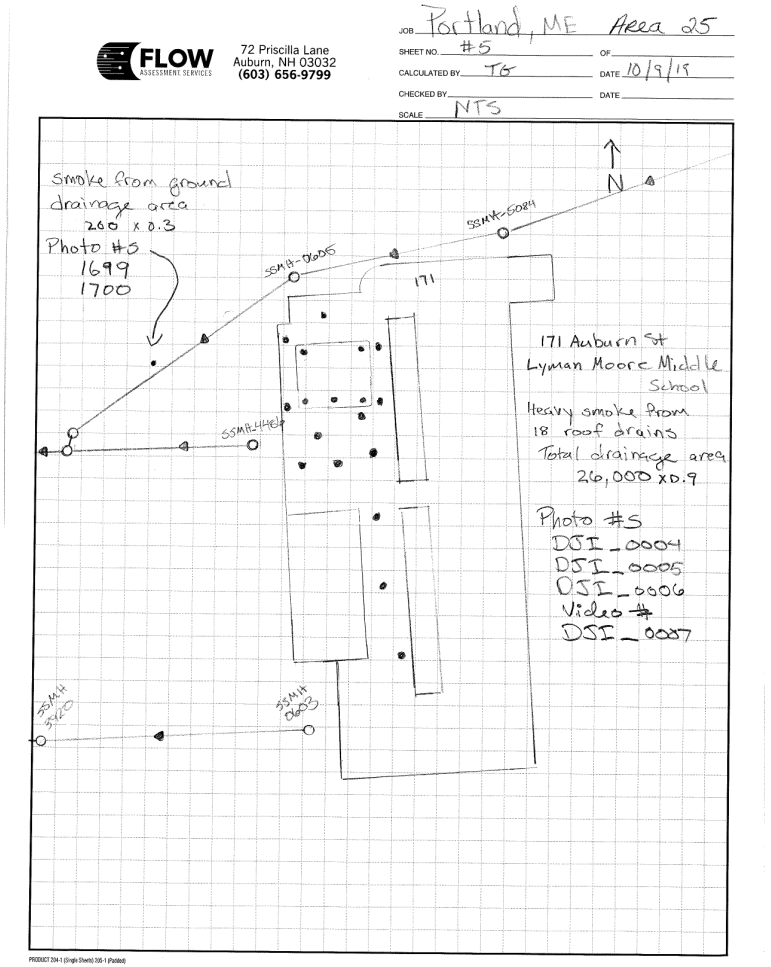


Image #: DJI_0004.JPG

Sketch #: Portland, ME Subarea 25 Sketch 5.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
Crouquet Lane

Sub-System: 25

Project No: 19056
Date: 10/09/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Medium smoke from catch basin SWIN-2508- indirect connection	0	0

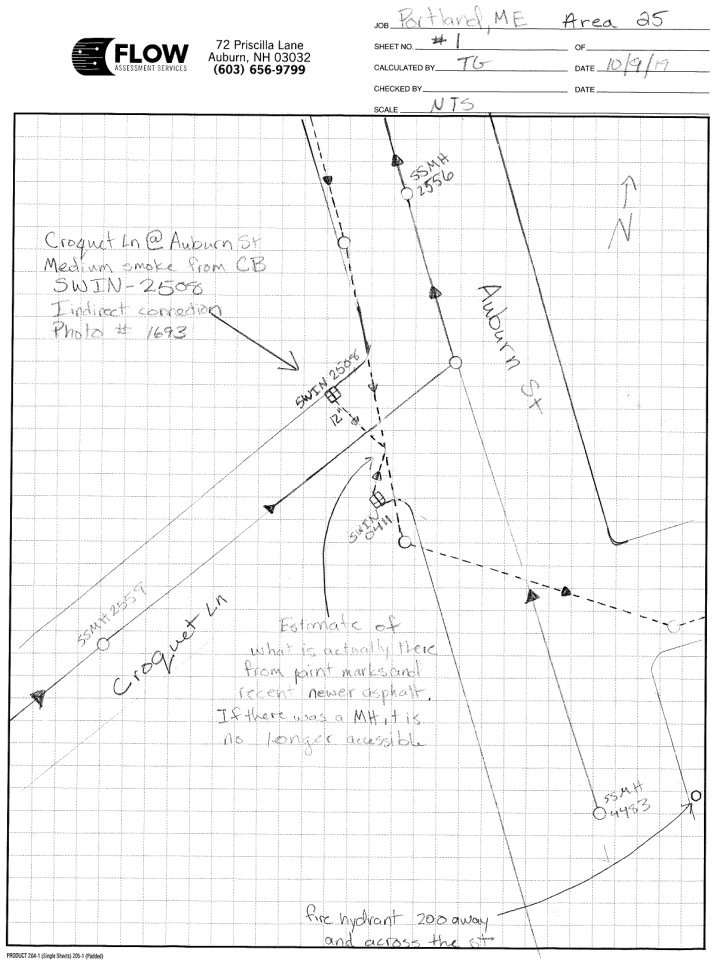
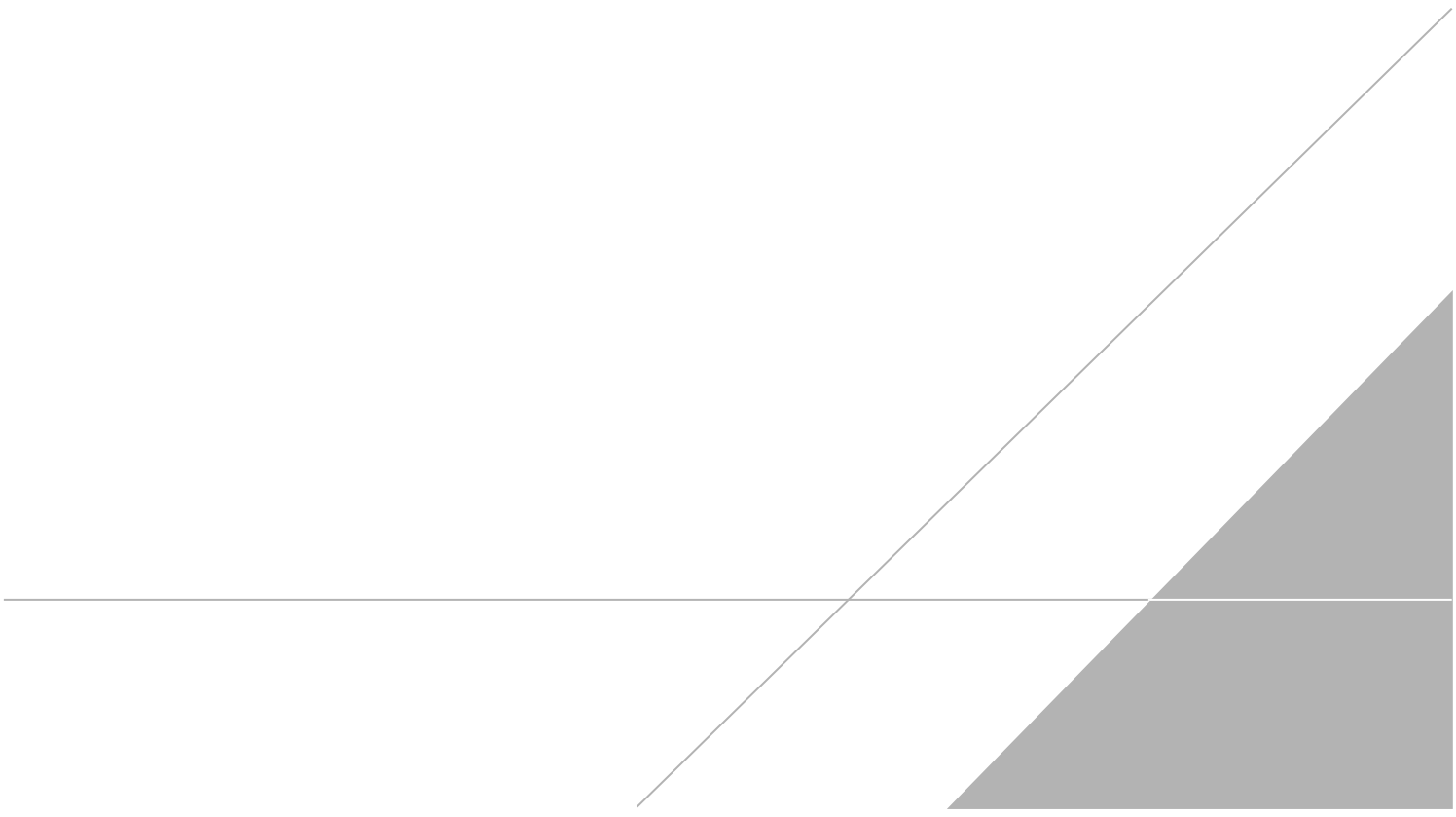


Image #: IMG_1693.JPG

Sketch #: Portland, ME Subarea 25 Sketch 1.tif

SMOKE TESTING LOGS SUB-AREA 31



Sub-System: 31

Portland, ME

Smoke Testing Summary of Findings By Street Address

Table 1

Findings Address	Findings	Drainage Area SqFt	Runoff Coeff	Photo No.	Sketch No.	Insp. Date
27 Hawthorne Street	Medium smoke from ground- direct connection	9	0.9	1708	5	10/10/19
78 Hawthorne Street	Heavy smoke from broken cleanout cap- direct connection	9	0.3	1707	4	10/10/19
6 Island Street	Medium smoke from ground- direct connection	12	0.3	1717	10	10/10/19
7-9 Kensington Street	Smoke from open cleanout- direct connection	100	0.3	1706	2	10/10/19
19 Olympia Street	Heavy smoke from catch basin SWIN-4302- indirect connection	0	0	1709	6	10/10/19
32 Olympia Street	Heavy smoke from catch basin SWIN-4310- indirect connection	0	0	1714	7	10/10/19
37 Olympia Street	Heavy smoke from catch basin SWIN-4303- indirect connection	0	0	1713	7	10/10/19
125 Presumpscot Street	Heavy smoke from yard drain 10" above grade- possible direct connection, see sketch	1600	0.9	1701	1	10/10/19
Veranda Street	Heavy smoke from roof leader- direct connection	1330	0.9	1716	9	10/10/19
107 Veranda Street	Smoke from ground- direct connection	20	0.3	1704	3	10/10/19
115 Veranda Street	Smoke from ground- direct connection	40	0.3	1702	3	10/10/19
270 Veranda Street	Heavy smoke from catch basin SWIN-0632- indirect connection	0	0	1712	8	10/10/19
21 Victoria Street	Light smoke from catch basin SWIN-4300- indirect connection	0	0	1711	6	10/10/19
22 Victoria Street	Medium smoke from catch basin SWIN-4285- indirect connection	0	0	1710	6	10/10/19

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
27 Hawthorne Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Medium smoke from ground- direct connection	9	0.9

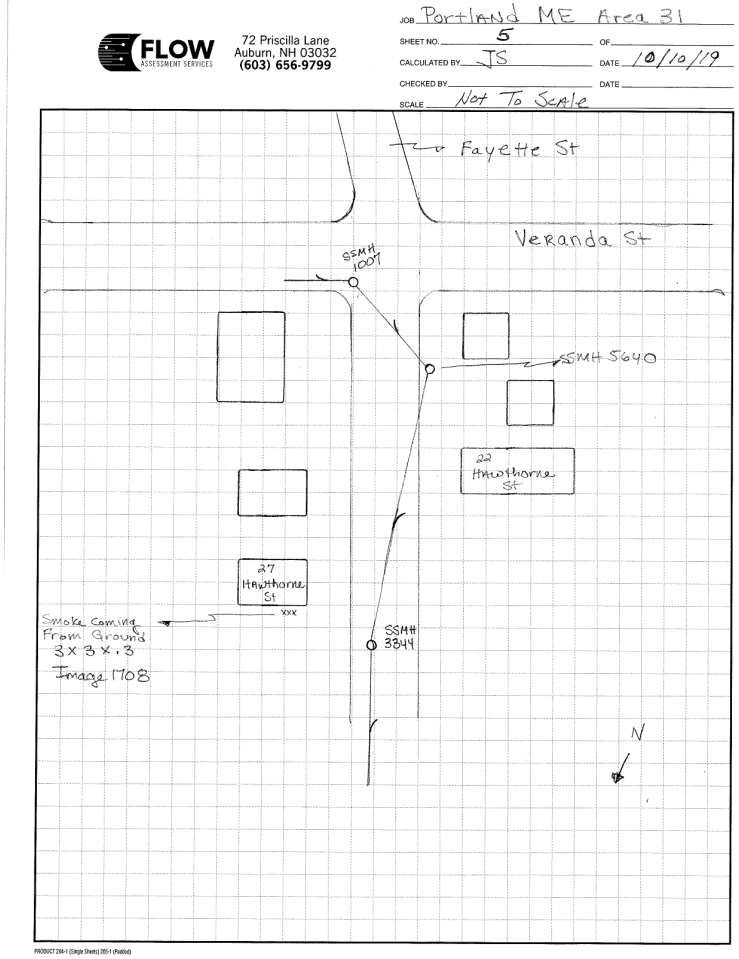


Image #: IMG_1708.JPG

Sketch #: Portland, ME Subarea 31 Sketch 5.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
78 Hawthorne Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from broken cleanout cap- direct connection	9	0.3

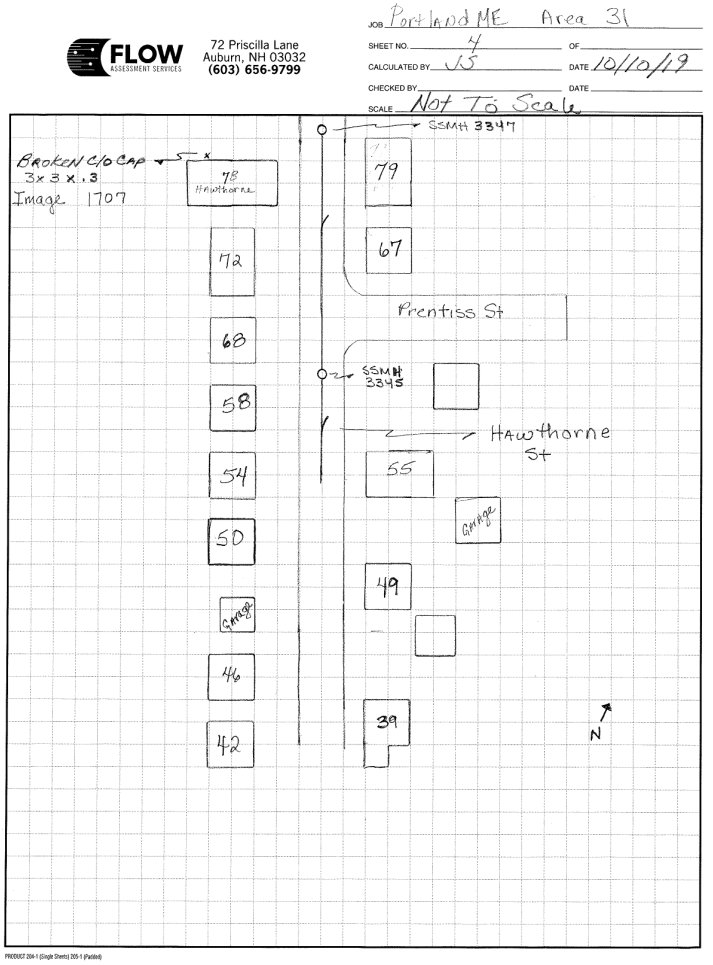


Image #: IMG_1707.JPG

Sketch #: Portland, ME Subarea 31 Sketch 4.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
6 Island Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Medium smoke from ground- direct connection	12	0.3

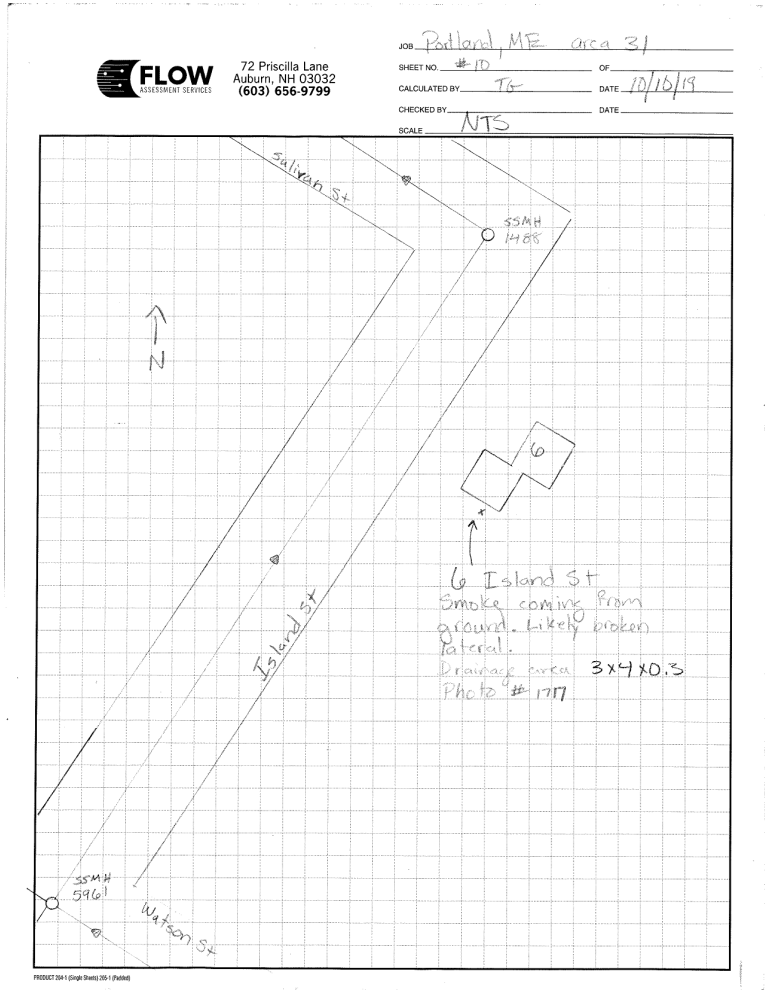


Image #: IMG_1717.JPG

Sketch #: Portland, ME Subarea 31 Sketch 10.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
7-9 Kensington Street

Sub-System: 31

Project No: 19056
Date: 10/10/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from open cleanout- direct connection	100	0.3

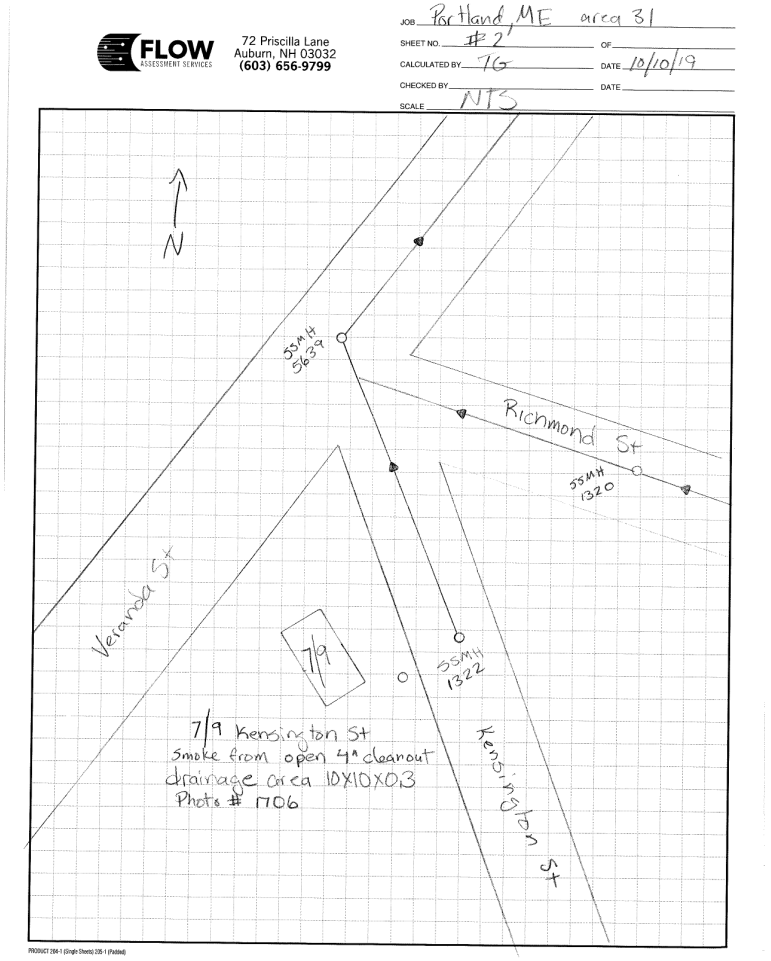


Image #: IMG_1706.JPG

Sketch #: Portland, ME Subarea 31 Sketch 2.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
19 Olympia Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from catch basin SWIN-4302- indirect connection	0	0

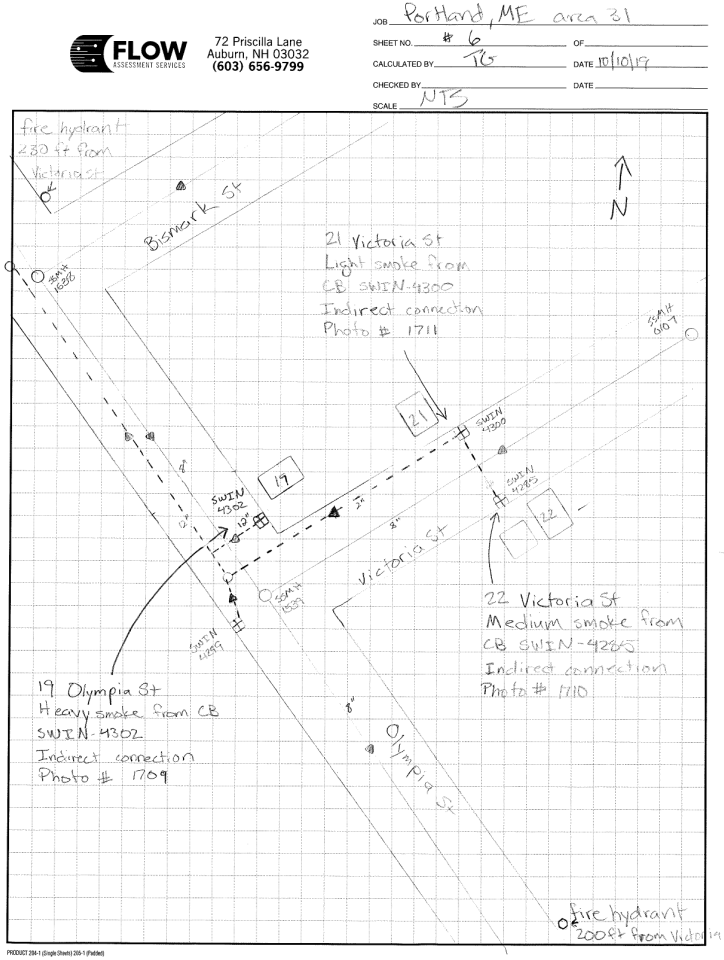


Image #: IMG_1709.JPG

Sketch #: Portland, ME Subarea 31 Sketch 6.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
32 Olympia Street

Sub-System: 31

Project No: 19056
Date: 10/10/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from catch basin SWIN-4310- indirect connection	0	0

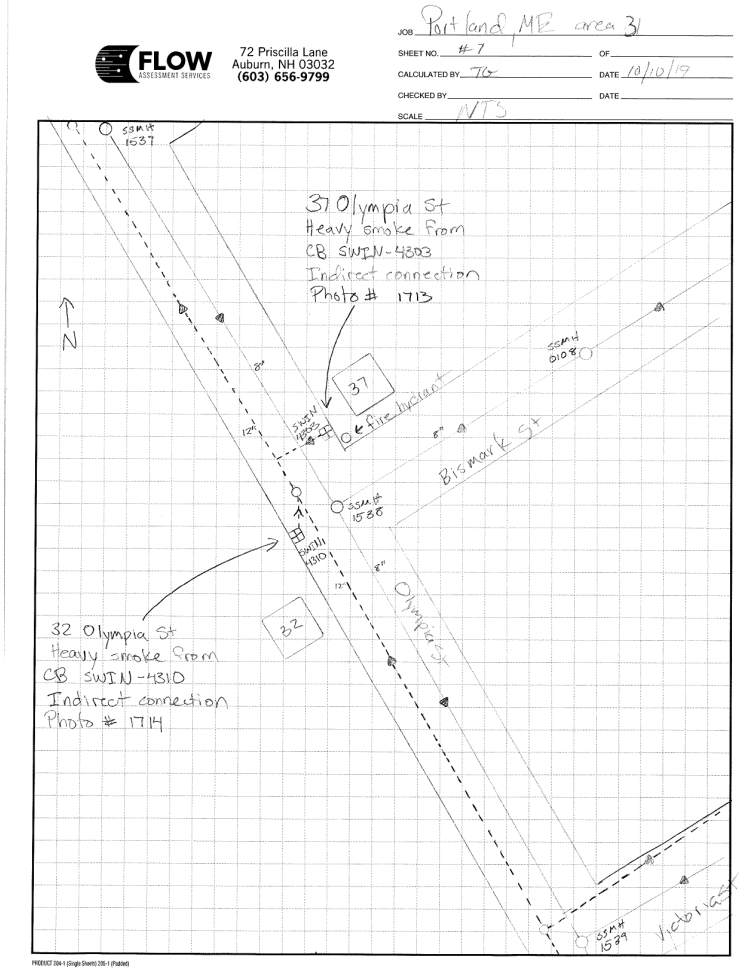


Image #: IMG_1714.JPG

Sketch #: Portland, ME Subarea 31 Sketch 7.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
37 Olympia Street

Sub-System: 31

Project No: 19056
Date: 10/10/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from catch basin SWIN-4303- indirect connection	0	0

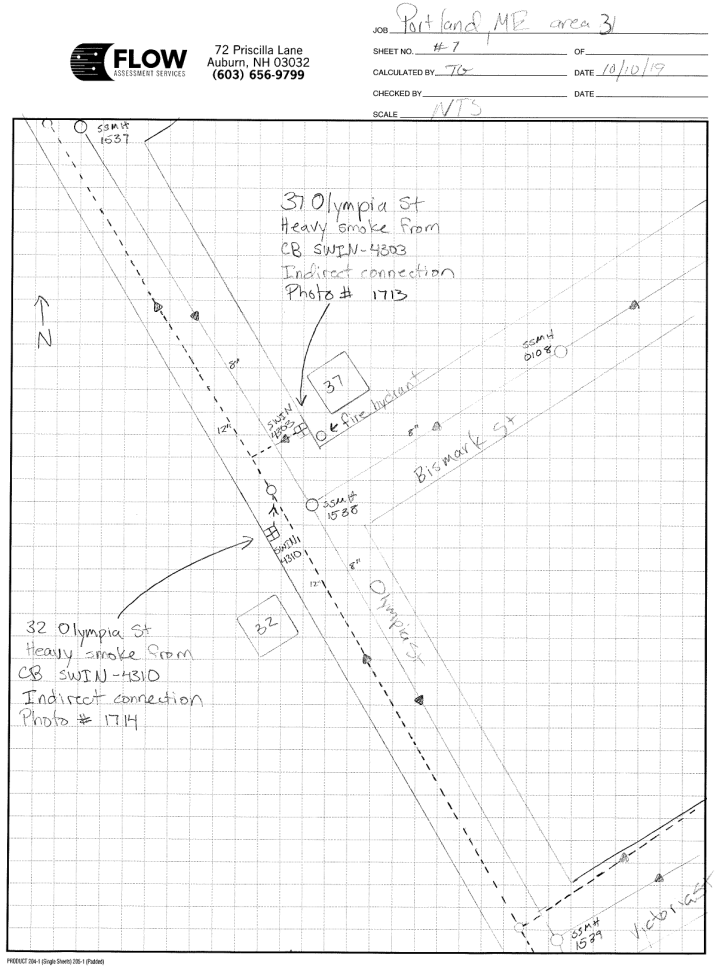


Image #: IMG_1713.JPG

Sketch #: Portland, ME Subarea 31 Sketch 7.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
125 Presumpscot Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from yard drain 10" above grade- possible direct connection, see sketch	1600	0.9

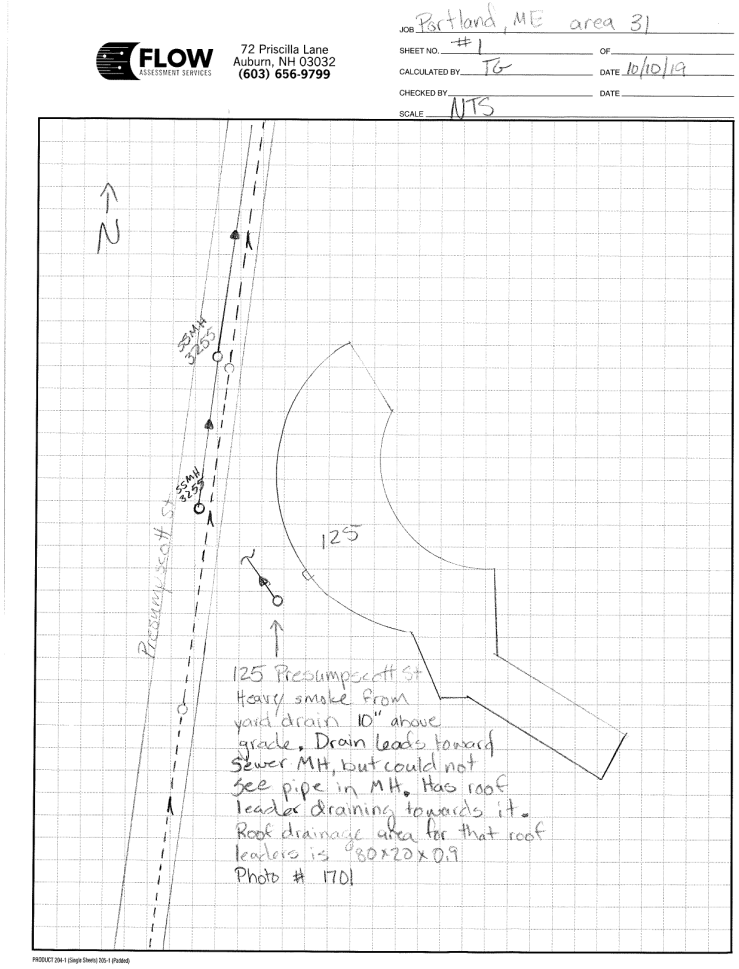


Image #: IMG_1701.JPG

Sketch #: Portland, ME Subarea 31 Sketch 1.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
Veranda Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from roof leader- direct connection	0	0

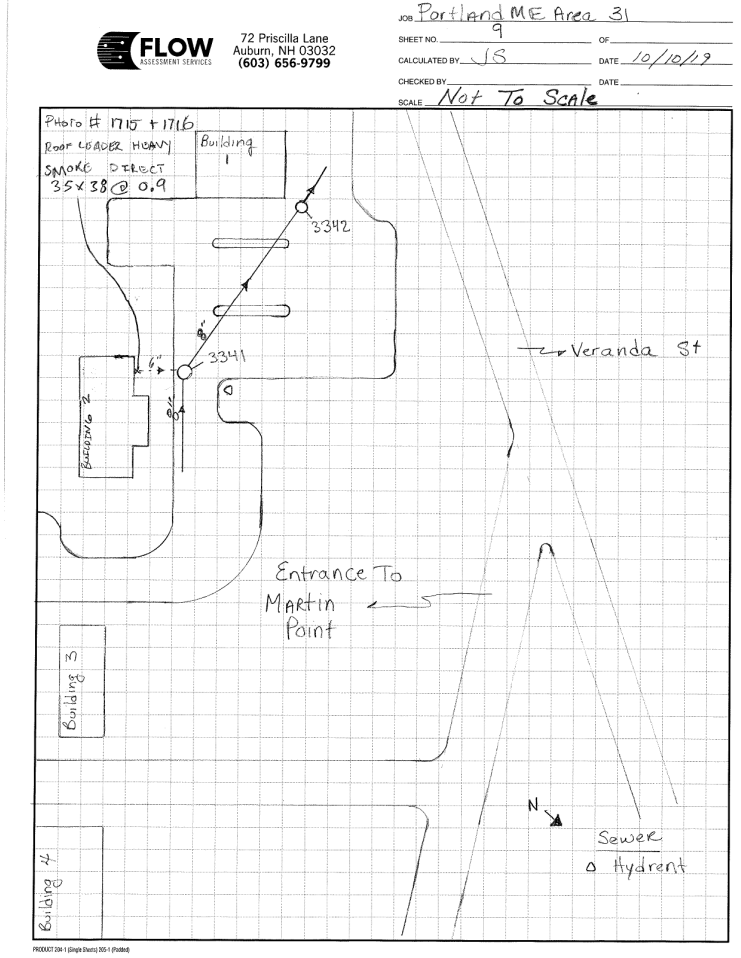


Image #: IMG_1715.JPG

Sketch #: Portland, ME Subarea 31 Sketch 9.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
Veranda Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from roof leader- direct connection	1330	0.9

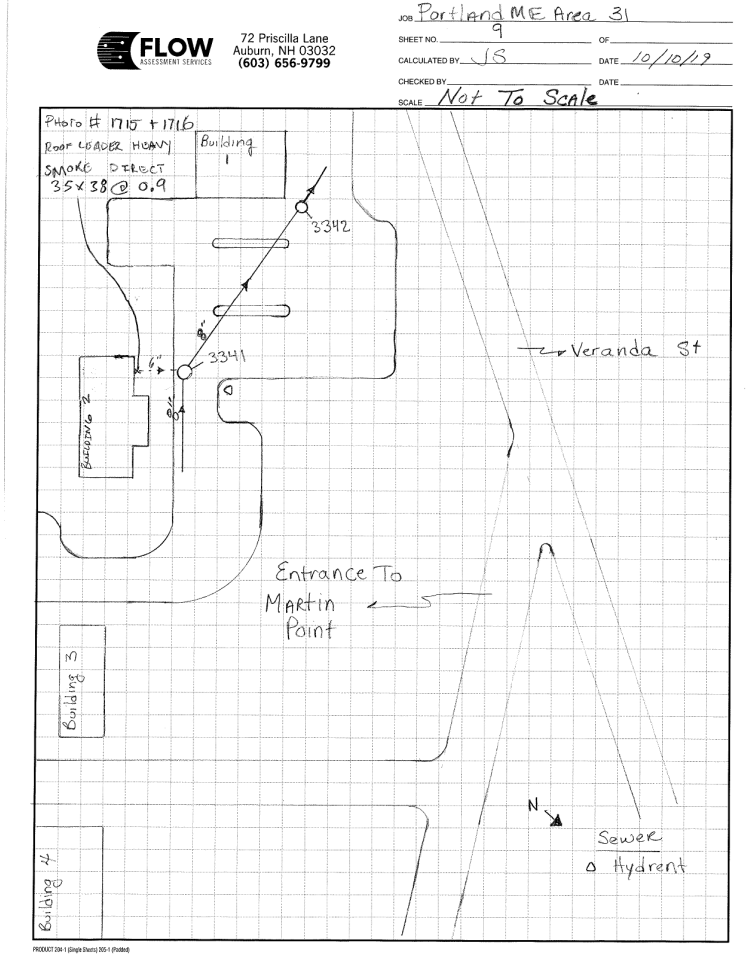


Image #: IMG_1716.JPG

Sketch #: Portland, ME Subarea 31 Sketch 9.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
107 Veranda Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from ground- direct connection	20	0.3

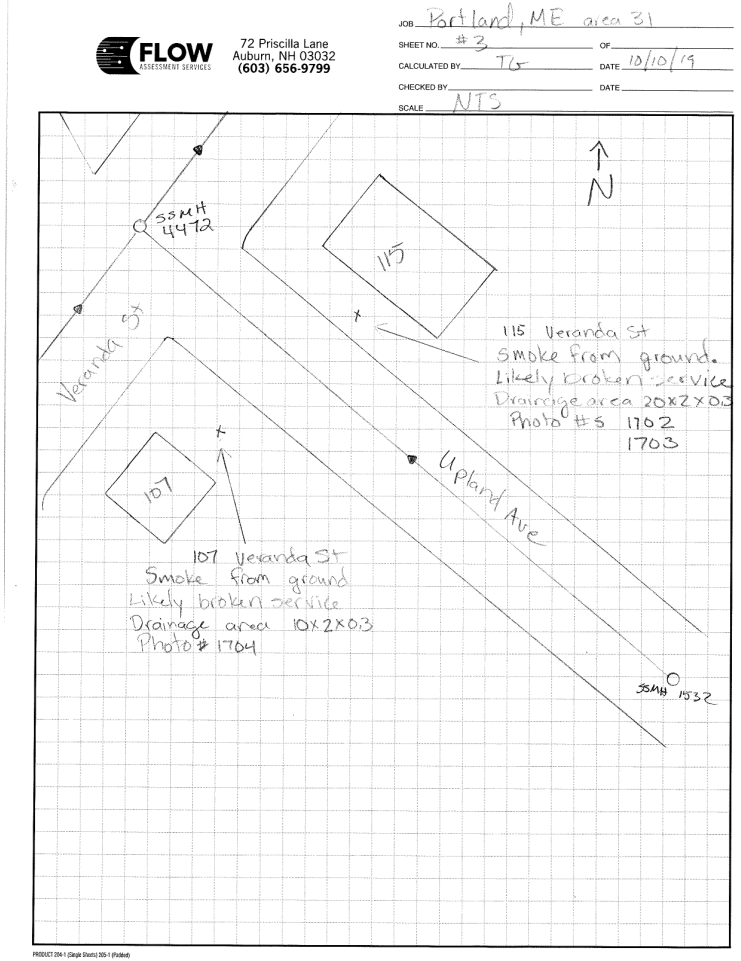


Image #: IMG_1704.JPG

Sketch #: Portland, ME Subarea 31 Sketch 3.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
115 Veranda Street

Sub-System: 31

Project No: 19056
Date: 10/10/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from ground- direct connection	0	0

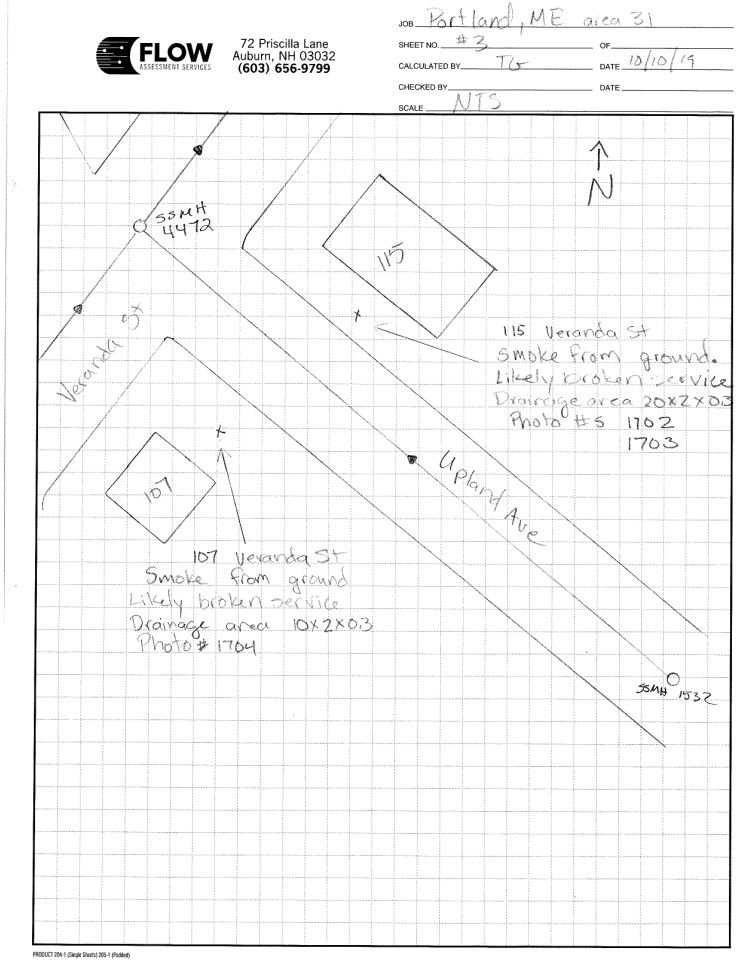


Image #: IMG_1703.JPG

Sketch #: Portland, ME Subarea 31 Sketch 3.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
115 Veranda Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Smoke from ground- direct connection	40	0.3

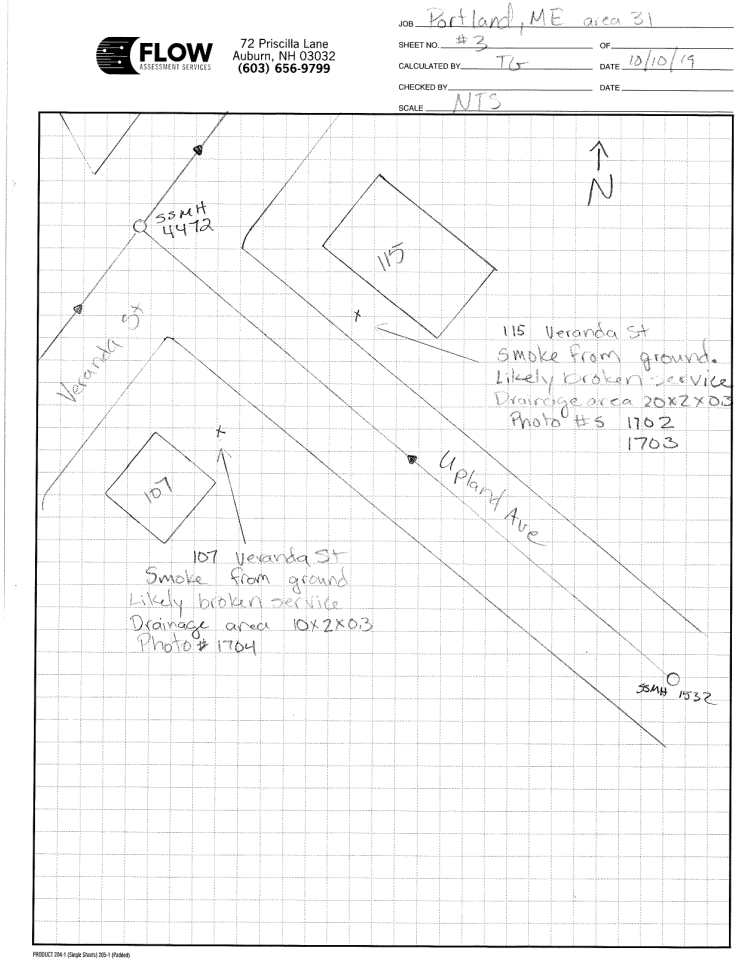


Image #: IMG_1702.JPG

Sketch #: Portland, ME Subarea 31 Sketch 3.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Finding Location:
270 Veranda Street

Sub-System: 31

Project No: 19056
Date: 10/10/2019
Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Heavy smoke from catch basin SWIN-0632- indirect connection	0	0

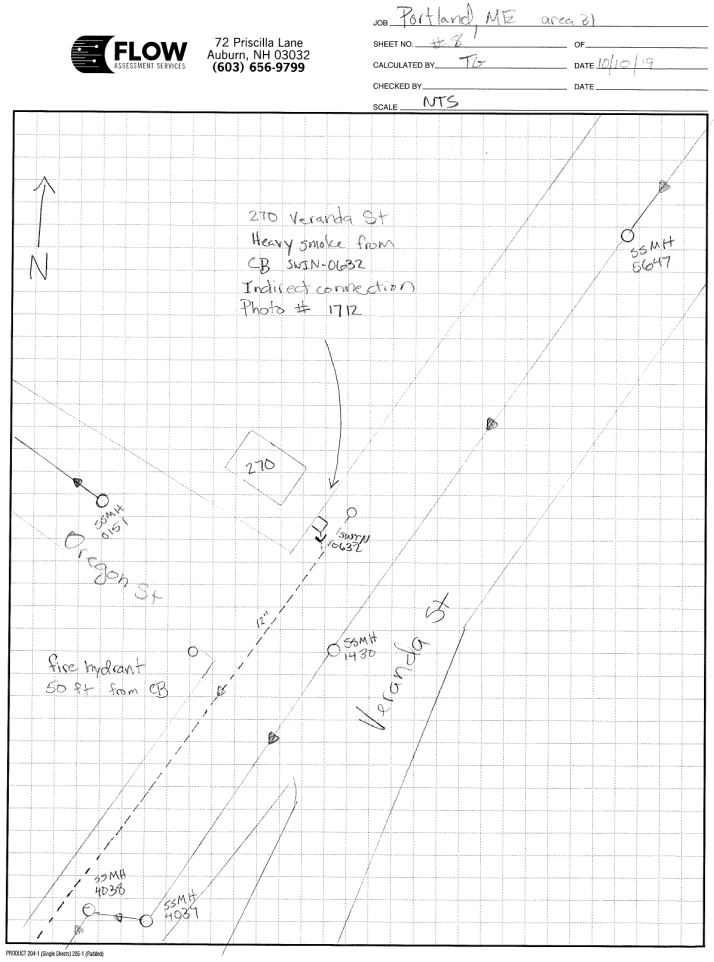


Image #: IMG_1712.JPG

Sketch #: Portland, ME Subarea 31 Sketch 8.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
21 Victoria Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Light smoke from catch basin SWIN-4300- indirect connection	0	0

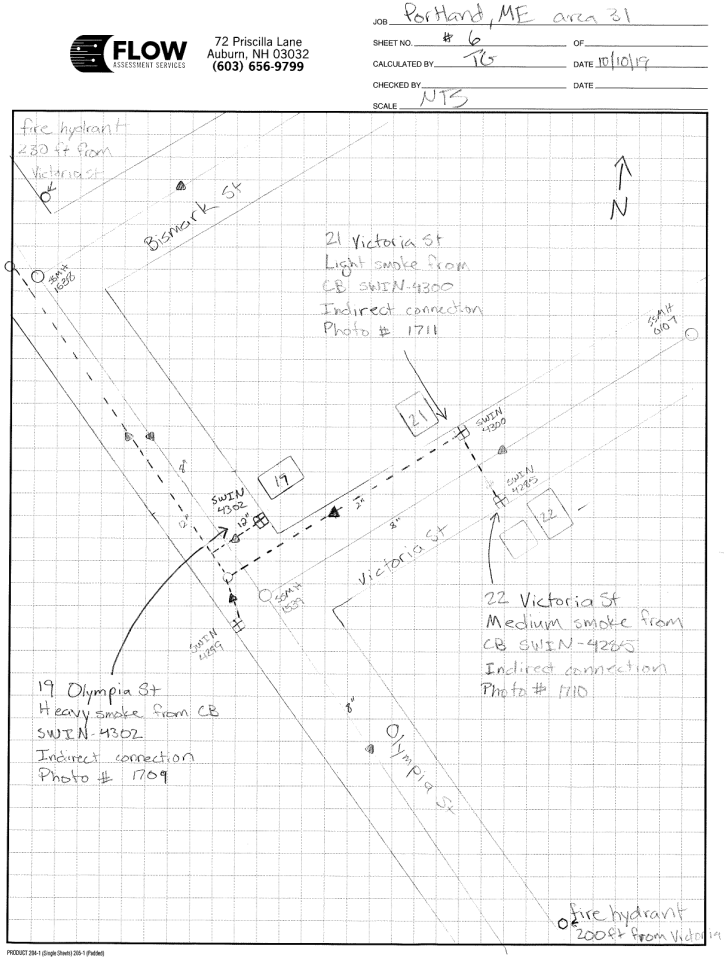


Image #: IMG_1711.JPG

Sketch #: Portland, ME Subarea 31 Sketch 6.tif

Flow Assessment Services, L.L.C.

Smoke Testing Log

Municipality: Portland, ME

Sub-System: 31

Project No: 19056

Date: 10/10/2019

Finding Location:
22 Victoria Street

Inspector: JS

Findings:	Drainage Area SqFt	Runoff Coeff
Medium smoke from catch basin SWIN-4285- indirect connection	0	0

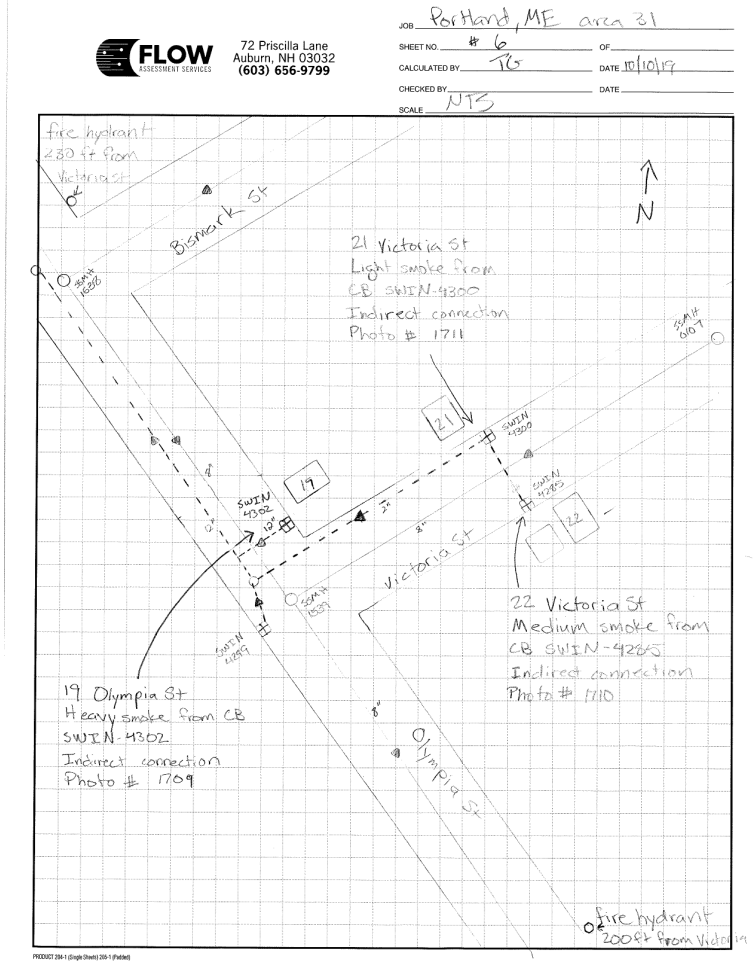


Image #: IMG_1710.JPG

Sketch #: Portland, ME Subarea 31 Sketch 6.tif

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Smoke Testing Program Findings

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 1	SSMH-2314	SSMH-1640	Barclay Avenue	188		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-6647	SSMH-2314	Barclay Avenue	61		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1651	SSMH-3022	Beverly Street	200		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1652	SSMH-1628	Beverly Street	157		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3022	SSMH-3023	Beverly Street	248		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3023	SSMH-1652	Beverly Street	249		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1628	SSMH-0581	Beverly Street R.O.W.	146		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1650	SSMH-3004	Braintree Street	290		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3004	SSMH-3003	Braintree Street	270		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2603	SSMH-2604	Broadway	99		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0967	SSMH-5401	Buca Run	206		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3020	SSMH-3021	Buca Run	243		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3021	SSMH-3118	Buca Run	191		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3118	SSMH-3003	Buca Run	59		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5401	SSMH-5403	Buca Run	53		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5402	SSMH-0967	Buca Run	163		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5403	SSMH-5404	Buca Run	68		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5404	SSMH-3020	Buca Run	60		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	Stub	SSMH-5402	Dedham Street	40		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2604	SSMH-2672	Eighth Street	340	Eight Street	Manhole 2604 is 0.5" below grade with 25 holes, 1" in diameter	Manhole	Direct	120	0.9	720	
Sub-Area 1	SSMH-5136	SSMH-2604	Eighth Street	310		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2672	SSMH-0639	Eighth Street R.O.W.	281		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0641	SSMH-0644	Farragut Street	232		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0642	SSMH-0641	Farragut Street	192		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0643	SSMH-0642	Farragut Street	171		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0644	SSMH-2321	Farragut Street	282		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-4293	SSMH-2321	Farragut Street	197		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2321	SSMH-2674	Farragut Street R.O.W.	250		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1640	SSMH-4933	Harris Avenue	141		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2315	SSMH-1640	Harris Avenue	248		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2316	SSMH-2315	Harris Avenue	264		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2602	SSMH-2316	Harris Avenue	250		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2608	SSMH-2609	Harris Avenue	307		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2609	SSMH-2602	Harris Avenue	311		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2317	SSMH-2318	Harris Street	187		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2318	SSMH-4935	Harris Street	251		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-4935	SSMH-4933	Harris Street	140		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-4933	SSMH-0647	Harris Street R.O.W.	254		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2319	SSMH-2318	Haskell Street	277		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3030	SSMH-1657	Hillcrest Circle	198		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0893	SSMH-0896	Hillcrest West	200		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0895	SSMH-0896	Hillcrest West	95		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0896	SSMH-0897	Hillcrest West	89		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0897	SSMH-0893	Hillcrest West	120		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2582	SSMH-2583	Homestead Avenue	340		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2584	SSMH-2582	Homestead Avenue	272		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2583	SSMH-2672	Homestead Avenue R.O.W.	250	Homestead Avenue R.O.W.	Smoke from exposed exterior walls of manhole 2583- direct connection (the finding is listed twice as there are two drainage coefficients.)	Manhole	Direct	4	0.9	722	
Sub-Area 1	SSMH-2583	SSMH-2672	Homestead Avenue R.O.W.		Homestead Avenue R.O.W.	Smoke from exposed exterior walls of manhole 2583- direct connection (the finding is listed twice as there are two drainage coefficients.)	Manhole	Direct	30	0.3	721	
Sub-Area 1	SSMH-0851	SSMH-3033	Leisure Lane	191		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1291	PS	Leisure Lane	79	57 Leisure Lane	Smoke from cleanout with broken cap- indirect connection	Defective Cleanout	Indirect	0	0	1641	
Sub-Area 1	SSMH-1292	SSMH-1291	Leisure Lane	102		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3034	SSMH-6016	Leisure Lane	134		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3034	PS	Leisure Lane	229	21 Leisure Lane	Smoke from cleanout with broken cap- indirect connection	Defective Cleanout	Indirect	0	0	718	
Sub-Area 1	SSMH-3034	PS	Leisure Lane	229	Leisure Lane	Smoke from cleanout with broken cap- indirect connection	Defective Cleanout	Indirect	0	0	719	
Sub-Area 1	SSMH-6016	SSMH-1292	Leisure Lane	76		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2599	SSMH-2600	Lexington Avenue	216		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2601	SSMH-2602	Lexington Avenue	284		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2600	SSMH-5133	Luke Street	224		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2674	SSMH-2675	Luke Street	70		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5133	SSMH-5134	Luke Street	223		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5134	SSMH-5135	Luke Street	224		No defects observed.	None Observed	N/A	0	0		

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Smoke Testing Program Findings

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 1	SSMH-5135	SSMH-2675	Luke Street	221		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2675	SSMH-4934	Luke Street R.O.W.	216		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0896	SSMH-1657	Lynn Street	70		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1655	SSMH-1656	Lynn Street	57		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1657	SSMH-1656	Lynn Street	272		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1658	SSMH-0896	Lynn Street	134		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1659	SSMH-3026	Milton Street	227	63 Milton Street	Smoke from yard drain- direct connection	Other Drain	Direct	2625	0.3	716	1-1
Sub-Area 1	SSMH-3025	SSMH-3031	Milton Street	295		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3026	SSMH-3025	Milton Street	69		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3031	SSMH-1654	Milton Street	143		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0648	SSMH-0647	Newton Street	220		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0649	SSMH-0650	Newton Street	280		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0650	SSMH-0648	Newton Street	217		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-4220	SMH-H-0649	Newton Street	288		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5170	SSMH-4220	Newton Street	299		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5171	SSMH-5170	Newton Street	295		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0647	SSMH-6180	Newton Street R.O.W.	264		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3001	SSMH-3002	Newton Street R.O.W.	179		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3002	SSMH-1628	Newton Street R.O.W.	275		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-6180	SSMH-3001	Newton Street R.O.W.	252		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0640	SSMH-0639	Ninth Street	230		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2605	SSMH-0639	Ninth Street	242		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2606	SSMH-0640	Ninth Street	225		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2607	SSMH-2606	Ninth Street	294		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0639	SSMH-2673	Ninth Street R.O.W.	142		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-2673	SSMH-2321	Ninth Street R.O.W.	122		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-0485	SSMH-1653	Saugus Street	250		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1653	SSMH-1652	Saugus Street	20		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1654	SSMH-3003	Saugus Street	260		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1656	SSMH-3024	Saugus Street	301		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1662	SSMH-1654	Saugus Street	111		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3003	SSMH-0485	Saugus Street	228		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3024	SSMH-1662	Saugus Street	298		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-1660	SSMH-3028	Stuart Street	204		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3027	SSMH-1658	Stuart Street	50		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3028	SSMH-3029	Stuart Street	111		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3029	SSMH-3027	Stuart Street	99		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3032	SSMH-3033	Stuart Street	105		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-3033	SSMH-1660	Stuart Street	190		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5131	SSMH-5132	Westlawn Road	169		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-5132	SSMH-2600	Westlawn Road	143		No defects observed.	None Observed	N/A	0	0		
Sub-Area 1	SSMH-4936	SSMH-4935	Woodbury Street	215		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2459	SSMH-5048	Continental Drive	224		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2460	SSMH-2459	Continental Drive	238	Continental Drive	Manhole 2460 is 1.5" below grade with 25 half inch diameter holes in the cover- direct connection	Manhole	Direct	16	0.9	723	
Sub-Area 2	SSMH-2461	SSMH-2460	Continental Drive	318		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2462	SSMH-2461	Continental Drive	314		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5048	SSMH-1384	Continental Drive	71		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-0576	SSMH-0575	Deering Run Drive	171		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-0577	SSMH-0576	Deering Run Drive	143		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-0577	SSMH-4433	Deering Run Drive	280		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-4433	SSMH-5041	Deering Run Drive	147		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5041	SSMH-5040	Deering Run Drive	138		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5102	SSMH-5101	Dole Drive	78		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5103	SSMH-5102	Dole Drive	303		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5104	SSMH-5103	Dole Drive	151		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5105	SSMH-5104	Dole Drive	208		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-0621	SSMH-2466	Greenwood Lane	260		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2465	SSMH-0621	Greenwood Lane	238		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2466	SSMH-2467	Greenwood Lane	303		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2467	SSMH-4417	Greenwood Lane	307		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-4417	SSMH-2468	Greenwood Lane	300		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2478	SSMH-2480	Northwood Drive	123		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2479	SSMH-2478	Northwood Drive	157		No defects observed.	None Observed	N/A	0	0		

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 2	SSMH-2480	SSMH-5049	Northwood Drive	120		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2481	SSMH-2479	Northwood Drive	299		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2482	SSMH-2481	Northwood Drive	142		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2483	SSMH-2481	Northwood Drive	198		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2484	SSMH-2483	Northwood Drive	144		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2485	SSMH-2483	Northwood Drive	221		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2486	SSMH-2485	Northwood Drive	107		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-0120	SSMH-2471	Palmer Avenue	303		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-1384	SSMH-5101	Palmer Avenue	274		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-1649	SSMH-0584	Palmer Avenue	242		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2468	SSMH-1649	Palmer Avenue	307		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2471	SSMH-2468	Palmer Avenue	298		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5040	SSMH-5046	Palmer Avenue	159		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5046	SSMH-5047	Palmer Avenue	150		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5047	SSMH-1384	Palmer Avenue	237		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5101	SSMH-5106	Palmer Avenue	271		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5106	SSMH-0120	Palmer Avenue	44		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-0584	SSMH-0584.1	Palmer Avenue R.O.W.	180		SSMH0584.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 2	SSMH-2469	SSMH-2470	Primrose Lane	330		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2470	SSMH-4416	Primrose Lane	324		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-4415	SSMH-1649	Primrose Lane	322		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-4416	SSMH-4415	Primrose Lane	329		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2472	SSMH-0584	Regan Lane	84		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5049	SSMH-2472	Regan Lane	105		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5050	SSMH-5049	Regan Lane	247		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5051	SSMH-5050	Regan Lane	202		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5052	SSMH-5051	Regan Lane	225		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-5053	SSMH-5052	Regan Lane	220		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-0121	SSMH-5106	Shepherd Lane	161		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2549	SSMH-5107	Shepherd Lane	54		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2550	SSMH-2549	Shepherd Lane	213		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2551	SSMH-2550	Shepherd Lane	101		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2552	SSMH-2551	Shepherd Lane	120		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2553	SSMH-2552	Shepherd Lane	252		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2554	SSMH-2553	Shepherd Lane	49		No defects observed.	None Observed	N/A	0	0		
Sub-Area 2	SSMH-2554.1	SSMH-2554	Shepherd Lane	166	Shepherd Lane	SSMH2554.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 2	SSMH-5107	SSMH-0121	Shepherd Lane	263		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0961	SSMH-6560	Bernard Road	193		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3634	SSMH-0961	Bernard Road	256		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3636	SSMH-3634	Bernard Road	216		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1623	SSMH-3298	Berry Avenue	249		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3298	SSMH-3976	Berry Avenue	235		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3976	SSMH-3977	Berry Avenue	272		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3977	SSMH-1508	Berry Avenue	42		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1506	SSMH-1507	Chelsey Avenue	21		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1509	SSMH-1506	Chelsey Avenue	194		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3299	SSMH-1509	Chelsey Avenue	216		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3300	SSMH-3974	Chelsey Avenue	247		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3974	SSMH-3975	Chelsey Avenue	257		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3975	SSMH-3299	Chelsey Avenue	214		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-4940	SSMH-3300	Chelsey Avenue	260		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1624	SSMH-3972	Edgewood Avenue	252		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3972	SSMH-1287	Edgewood Avenue	225		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5809	SSMH-1624	Edgewood Avenue	261	53 Edgewood Avenue	Light smoke from ground- direct connection	Ground	Direct	25	0.9	1682	3
Sub-Area 24a	SSMH-5810	SSMH-5809	Edgewood Avenue	270		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1620	SSMH-5626	Fobes Street	294		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0258	SSMH-5630	Gertrude Avenue	54		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5628	SSMH-5627	Gertrude Avenue	250		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5629	SSMH-5628	Gertrude Avenue	186		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5630	SSMH-5629	Gertrude Avenue	20		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-2347	SSMH-0994	Knight Street	158		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1626	SSMH-5594	Loring Avenue	226	Loring Avenue	Light smoke from catch basin SWIN-3957- indirect connection	Catch-Basin	Indirect	0	0	1678	2
Sub-Area 24a	SSMH-1626	SSMH-5594	Loring Avenue		23 Loring Avenue	Light smoke from ground- direct connection	Ground	Direct	16	0.3	1679	2

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Smoke Testing Program Findings

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 24a	SSMH-1626	SSMH-5594	Loring Avenue		32 Loring Avenue	Smoke from ground in the right, front corner of the house- direct connection	Ground	Direct	9	0.3	1681	2
Sub-Area 24a	SSMH-5594	SSMH-5595	Loring Avenue	225	Loring Avenue	Light smoke from catch basin SWIN-8100- indirect connection	Catch-Basin	Indirect	0	0	1680	2
Sub-Area 24a	SSMH-0994	SSMH-3303	Maplewood Street		Maplewood Street	Light smoke from catch basin SWIN3959- indirect connection	Catch-Basin	Indirect	0	0	0744	1
Sub-Area 24a	SSMH-0994	SSMH-3303	Maplewood Street	381	Maplewood Street	Light smoke from catch basin SWIN4138- indirect connection	Catch-Basin	Indirect	0	0	0745	1
Sub-Area 24a	SSMH-3303	SSMH-4526	Maplewood Street	341		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1131	SSMH-3639	Mona Road	218		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3302	SSMH-3635	Mona Road	228		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3631	SSMH-3632	Mona Road	74		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3635	SSMH-1132	Mona Road	19		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3638	SSMH-3637	Mona Road	87		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3640	SSMH-3638	Mona Road	184		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0302	SSMH-1134	Northfield Green Apartments	95		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0303	SSMH-1133	Northfield Green Apartments	167		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0304	SSMH-5808	Northfield Green Apartments	102		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1133	SSMH-1134	Northfield Green Apartments	92		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1134	SSMH-1135	Northfield Green Apartments	185		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1135	SSMH-5806	Northfield Green Apartments	235		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3971	SSMH-5810	Northfield Green Apartments	138		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5806	SSMH-3971	Northfield Green Apartments	194		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5807	SSMH-5806	Northfield Green Apartments	212		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5808	SSMH-5807	Northfield Green Apartments	272		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0157	SSMH-4937	Old Campus Drive	72		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0505	SSMH-4938	Old Campus Drive	170		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0506	SSMH-0505	Old Campus Drive	79		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-4937	SSMH-0506	Old Campus Drive	224		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-4938	SSMH-4939	Old Campus Drive	129		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-4939	SSMH-4940	Old Campus Drive	122		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1130	SSMH-3301	Samuel Road	74		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1132	SSMH-3633	Samuel Road	216		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3301	SSMH-3634	Samuel Road	305		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3633	SSMH-1130	Samuel Road	30		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3637	SSMH-3641	Samuel Road	191		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3641	SSMH-1130	Samuel Road	34		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0962	SSMH-0961	Sara Lane	325		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3632	SSMH-0962	Sara Lane	324		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1287	SSMH-1505	Washington Avenue	22		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1505	SSMH-1503	Washington Avenue	130		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1507	SSMH-1505	Washington Avenue	258		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1508	SSMH-1507	Washington Avenue	241		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1510	SSMH-1508	Washington Avenue	164		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-1625	SSMH-1504	Washington Avenue	182		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3246	SSMH-5627	Washington Avenue	107		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3304	SSMH-4526	Washington Avenue	296		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3973	SSMH-1505	Washington Avenue	13		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3978	SSMH-3973	Washington Avenue	230		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-4526	SSMH-4527	Washington Avenue	177		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-4527	SSMH-5626	Washington Avenue	99		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5595	SSMH-1625	Washington Avenue	254		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5626	SSMH-3246	Washington Avenue	183		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-5627	SSMH-5595	Washington Avenue	254		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-2348	SSMH-0012	White Birch Lane	217		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-3983	SSMH-0505	Yale Court	164		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0502	SSMH-0503	Yale Street	250		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0503	SSMH-0504	Yale Street	250		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-0504	SSMH-3983	Yale Street	252		No defects observed.	None Observed	N/A	0	0		
Sub-Area 24a	SSMH-2328	SSMH-0502	Yale Street	234		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0616	SSMH-2547	Auburn Street	200		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-1596	SSMH-6263	Auburn Street	211	Auburn Street	Heavy smoke from catch basin SWIN-1009- indirect connection	Catch-Basin	Indirect	0	0	1696	3
Sub-Area 25	SSMH-1597	SSMH-1596	Auburn Street	180	151 Auburn Street	Heavy smoke from catch basin SWIN-7403- indirect connection	Catch-Basin	Indirect	0	0	1698	2
Sub-Area 25	SSMH-1598	SSMH-2547	Auburn Street	197	110 Auburn Street (across from)	Heavy smoke from catch basin SWIN-7399- indirect connection	Catch-Basin	Indirect	0	0	1697	3
Sub-Area 25	SSMH-1599	SSMH-2556	Auburn Street	96		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2547	SSMH-6263	Auburn Street	10		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2556	SSMH-0162	Auburn Street	130		No defects observed.	None Observed	N/A	0	0		

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Smoke Testing Program Findings

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 25	SSMH-2557	SSMH-1599	Auburn Street	140		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-4483	SSMH-4483.1	Auburn Street	149	Auburn Street	Manhole SSMH4483.1 is an unnamed manole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 25	SSMH-4483.1	SSMH-2556	Auburn Street	88		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-4484	SSMH-1597	Auburn Street	182		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-4525	SSMH-15982	Auburn Street	232	94 Auburn Street	Heavy smoke from catch basin SWIN-5107- direct connection	Catch-Basin	Direct	9600	0.9	1694	4
Sub-Area 25	SSMH-4525	SSMH-15982	Auburn Street		94 Auburn Street	Heavy smoke from three roof leaders (drainage area is combined)- direct connection	Roof Drains	Direct	6000	0.9	1695	4
Sub-Area 25	Stub	SSMH-2557	Auburn Street	54		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	Stub	SSMH-1599	Auburn Street	16		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-1265	SSMH-2544	Auburn Street Easement	240		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2698	SSMH-5985	Auburn Street Easement	67		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2969	SSMH-2968	Auburn Street Easement	81		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3913	SSMH-3914	Auburn Street Easement	201		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3914	SSMH-5986	Auburn Street Easement	142		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3916	SSMH-5987	Auburn Street Easement	109		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3917	SSMH-3916	Auburn Street Easement	45		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3918	SSMH-3917	Auburn Street Easement	66		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5982	SSMH-5983	Auburn Street Easement	10		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5983	SSMH-1265	Auburn Street Easement	72		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5985	SSMH-5982	Auburn Street Easement	172		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5986	SSMH-5985	Auburn Street Easement	139		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5987	SSMH-5988	Auburn Street Easement	89		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5988	SSMH-3913	Auburn Street Easement	206		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	Stub	SSMH-2969	Auburn Street Easement	64		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5093	SSMH-5092	Autumn Lane	300		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5094	SSMH-5093	Autumn Lane	299		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5095	SSMH-5094	Autumn Lane	249		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0162	SSMH-2536	Bartley Avenue	149		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0566	SSMH-6262	Bartley Avenue	240		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2538	SSMH-0566	Bartley Avenue	145		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6258	SSMH-2536	Bartley Avenue	84		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6259	SMH-6258	Bartley Avenue	115		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6260	SSMH-6259	Bartley Avenue	220		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6261	SSMH-6260	Bartley Avenue	233		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6262	SSMH-6261	Bartley Avenue	253		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2536	SSMH-3924	Bartley Avenue Easement	212		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3924	SSMH-3921	Bartley Avenue Easement	194		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0564	SSMH-0565	Christy Road	258		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0565	SMH-2538	Christy Road	276		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2438	SSMH-2437	Christy Road	108		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6028	SSMH-2437	Christy Road	262		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	Stub	SSMH-0564	Christy Road	43		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2558	SSMH-2559	Crouquet Lane	144	Crouquet Lane	Medium smoke from catch basin SWIN-2508- indirect connection	Catch-Basin	Indirect	0	0	1693	1
Sub-Area 25	SSMH-2559	SSMH-1599	Crouquet Lane	264		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0610	SSMH-0611	Fall Lane	272		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2535	SSMH-6263	Fall Lane	154		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5092	SSMH-2535	Fall Lane	178		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6263	SSMH-6259	Fall Lane	41		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0605	SSMH-3922.1	Lyseth Moore Drive	242	Lyseth Moore Drive	Manhole SSMH3922.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 25	SSMH-0606	SSMH-0608	Lyseth Moore Drive	202		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0607	SSMH-0608	Lyseth Moore Drive	171		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0608	SSMH-5084	Lyseth Moore Drive	186		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3922.1	SSMH-3922	Lyseth Moore Drive	10		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5084	SSMH-0605	Lyseth Moore Drive		171 Auburn Street (Lyman Moore Middle)	Heavy smoke from 18 roof drains (drainage area is combined)- direct connection	Roof Drains	Direct	26000	0.9	4	5
Sub-Area 25	SSMH-5084	SSMH-0605	Lyseth Moore Drive		171 Auburn Street (Lyman Moore Middle)	Medium smoke from ground- direct connection	Ground	Direct	200	0.3	1700	5
Sub-Area 25	SSMH-5085	SSMH-0606	Lyseth Moore Drive	180		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0603	SSMH-3920	Lyseth Moore Drive Easement	239		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3919	SSMH-3918	Lyseth Moore Drive Easement	98		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3920	SSMH-3919	Lyseth Moore Drive Easement	42		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3921	SSMH-3919	Lyseth Moore Drive Easement	244		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-3922	SSMH-3921	Lyseth Moore Drive Easement	38		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	Stub	SSMH-0603	Lyseth Moore Drive Easement	25		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5096	SSMH-5095	Martin Road	249		No defects observed.	None Observed	N/A	0	0		

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 25	SSMH-0611	SSMH-5092	Melody Lane	306		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0612	SSMH-0611	Melody Lane	201		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0613	SSMH-0612	Melody Lane	249		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0614	SSMH-0613	Melody Lane	151		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0093	SMH-1679	Presumpscot Street Easement	240		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0563	SSMH-0609	Rustic Lane	400		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0609	SSMH-0610	Rustic Lane	364		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2437	SSMH-0563	Rustic Lane	303		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-0617	SSMH-0616	Sanborn Street	201		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6254	SSMH-5988	Sanborn Street	104		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-6263	SSMH-6254	Sanborn Street	168		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2400	SSMH-2541	Sumac Street	220		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2539	SSMH-2538	Sumac Street	241		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2540	SSMH-2539	Sumac Street	237		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2541	SSMH-2540	Sumac Street	241		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2398	SSMH-2399	Summit Street	300		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-2399	SSMH-2400	Summit Street	214		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-4998	SSMH-4999	Summit Street	196		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-4999	SSMH-5000	Summit Street	220		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5000	SSMH-5001	Summit Street	294		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5001	SSMH-5002	Summit Street	224		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5002	SSMH-5003	Summit Street	215		No defects observed.	None Observed	N/A	0	0		
Sub-Area 25	SSMH-5003	SSMH-2398	Summit Street	221		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1000	PS	Arcadia Street	30		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1001	SSMH-1000	Arcadia Street	50		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1002	SSMH-1001	Arcadia Street	21		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1003	SSMH-1002	Arcadia Street	244		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1525	SSMH-1526	Arcadia Street	24		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1526	SSMH-1527	Arcadia Street	267		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1527	SSMH-4475	Arcadia Street	291		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1529	SSMH-1001	Arcadia Street	220		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1530	SSMH-1003	Arcadia Street	243		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1531	SSMH-1529	Arcadia Street	254		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3345	SSMH-1531	Arcadia Street	217		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4475	SSMH-1530	Arcadia Street	290		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0108	SSMH-1538	Bismark Street	238		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0154	SSMH-0108	Bismark Street	243		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0154	SSMH-0106	Cleveland Street	80		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0027	SSMH-0026	Eben Hill Drive	31		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1257	SSMH-1259	Eben Hill Drive	200		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1259	SSMH-5975	Eben Hill Drive	185		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3900	SSMH-1257	Eben Hill Drive	80		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3903	SSMH-3904	Eben Hill Drive	254		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3904	SSMH-3905	Eben Hill Drive	198		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3905	SSMH-0027	Eben Hill Drive	159		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3906	SSMH-5979	Eben Hill Drive	171		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5975	SSMH-5976	Eben Hill Drive	92		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5976	SSMH-3906	Eben Hill Drive	204		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5977	SMH-5975	Eben Hill Drive	62		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5978	SSMH-5975	Eben Hill Drive	51		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5979	SSMH-5980	Eben Hill Drive	108		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5980	SSMH-5981	Eben Hill Drive	76		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5981	SSMH-3903	Eben Hill Drive	79		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1319	SSMH-1525	Fairfield Street	248		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1535	SSMH-1528	Fayette Street	190		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3344	SSMH-3346	Hawthorne Street	230		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3346	SSMH-3345	Hawthorne Street	190		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3347	SSMH-3345	Hawthorne Street	189	78 Hawthorne Street	Heavy smoke from broken cleanout cap- direct connection	Defective Cleanout	Direct	9	0.3	1707	4
Sub-Area 31	SSMH-5640	SSMH-3344	Hawthorne Street	352	27 Hawthorne Street	Medium smoke from ground- direct connection	Ground	Direct	9	0.9	1708	5
Sub-Area 31	SSMH-1005	SSMH-1004	Helene Street	176		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4471	SSMH-5644	Hodgins Street	332		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4473	SSMH-4474	Hodgins Street	105		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5644	SSMH-5645	Hodgins Street	215		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5645	SSMH-4473	Hodgins Street	205		No defects observed.	None Observed	N/A	0	0		

City of Portland, Maine
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Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 31	SSMH-5961	SSMH-1488	Island Street	240	6 Island Street	Medium smoke from ground- direct connection	Ground	Direct	12	0.3	1717	10
Sub-Area 31	SSMH-5961.1	SSMH-5961	Island Street	127	Island Street	Manhole SSMH5961.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 31	Stub	SSMH-5961	Island Street	130		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1004	SSMH-1537	Olympia Street	232		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1006	SSMH-1004	Olympia Street	81		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1537	SSMH-1538	Olympia Street		37 Olympia Street	Heavy smoke from catch basin SWIN-4303- indirect connection	Catch-Basin	Indirect	0	0	1713	7
Sub-Area 31	SSMH-1537	SSMH-1538	Olympia Street	228	32 Olympia Street	Heavy smoke from catch basin SWIN-4310- indirect connection	Catch-Basin	Indirect	0	0	1714	7
Sub-Area 31	SSMH-1538	SSMH-1539	Olympia Street	229	19 Olympia Street	Heavy smoke from catch basin SWIN-4302- indirect connection	Catch-Basin	Indirect	0	0	1709	6
Sub-Area 31	SSMH-1539	SSMH-0152	Olympia Street	204		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1539	SSMH-3350	Olympia Street	54		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3350	SSMH-4040	Olympia Street	167		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0151	SSMH-0154	Oregon Street	369		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4474	SSMH-1530	Prentiss Street	218		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0026	SSMH-0049	Presumpscot Street	149		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0029	SSMH-0026	Presumpscot Street	337		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0050	SSMH-0049	Presumpscot Street	300		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0051	SSMH-0050	Presumpscot Street	198		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0052	SSMH-0051	Presumpscot Street	301		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3255	SSMH-0029	Presumpscot Street	310		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3255.1	SSMH-3255	Presumpscot Street		125 Presumpscot Street	Heavy smoke from yard drain 10" above grade- possible direct connection, see sketch	Other Drain	Direct	1600	0.9	1701	1
Sub-Area 31	SSMH-3255.1	SSMH-3255	Presumpscot Street	180	Presumpscot Street	Manhole SSMH3255.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 31	SSMH-4079	SSMH-0052	Presumpscot Street	190		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4080	SSMH-4079	Presumpscot Street	198		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4081	SSMH-4080	Presumpscot Street	227		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0044	SSMH-0093	Presumpscot Street Easement	258		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0045	SSMH-0044	Presumpscot Street Easement	183		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0046	SSMH-0045	Presumpscot Street Easement	74		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0047	SSMH-0046	Presumpscot Street Easement	185		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0048	SSMH-0047	Presumpscot Street Easement	42		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0049	SSMH-0048	Presumpscot Street Easement	197		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0093	SSMH-1679	Presumpscot Street Easement	240		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0999	SSMH-3366	Presumpscot Street Easement	180		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1679	SSMH-0999	Presumpscot Street Easement	250		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3365	SSMH-3367	Presumpscot Street Easement	224		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3366	SSMH-3365	Presumpscot Street Easement	348		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3841	SSMH-0044	Presumpscot Street Easement	222		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	Stub	SSMH-3841	Presumpscot Street Easement	46		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	Stub	SSMH-0045	Presumpscot Street Easement	21		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1321	SSMH-1321.1	Richmond Street	128	Richmond Street	Manhole SSMH1321.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 31	SSMH-1321.1	Tee	Richmond Street	107		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1322	SSMH-5639	Richmond Street	118	7-9 Kensington Street	Smoke from open cleanout- direct connection	Defective Cleanout	Direct	100	0.3	1706	2
Sub-Area 31	SSMH-1258	SSMH-1257	Sanctuary Lane	75		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0019	SSMH-0053	South Grafton Street	295		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0019.1	SSMH-0019	South Grafton Street	270	South Grafton Street	Manhole SSMH0019.1 is an unnamed manhole- see revise map	Unmapped Feature	N/A	0	0		
Sub-Area 31	SSMH-0053	SSMH-0053.1	South Grafton Street	314	South Grafton Street	Manhole SSMH0053.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 31	SSMH-0053.1	SSMH-0029	South Grafton Street	36		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1488	SSMH-2281	Sullivan Street	219		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-2281	SSMH-1319	Sullivan Street	310		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1532	SSMH-4472	Upland Avenue	325	107 Veranda Street	Smoke from ground- direct connection	Ground	Direct	20	0.3	1704	3
Sub-Area 31	SSMH-1532	SSMH-4472	Upland Avenue	325	115 Veranda Street	Smoke from ground- direct connection	Ground	Direct	40	0.3	1702	3
Sub-Area 31	SSMH-0105	SSMH-1537	Vaill Street	231		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0106	SSMH-0105	Vaill Street	161		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0152	SSMH-4040	Veranda Street	12		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1007	SSMH-5640	Veranda Street	52		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1008	SSMH-3336	Veranda Street	7		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1430	SSMH-4037	Veranda Street	105		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1528	SSMH-1525	Veranda Street	242		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1533	SSMH-1007	Veranda Street	247		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3322	SSMH-0152	Veranda Street	271		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3335	SSMH-3336	Veranda Street	177		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3336	SSMH-1533	Veranda Street	177		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3337	SSMH-5648	Veranda Street	105		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3338	SSMH-3343	Veranda Street	139		No defects observed.	None Observed	N/A	0	0		

City of Portland, Maine
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Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 31	SSMH-3339	SSMH-3337	Veranda Street	103		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3340	SSMH-3341	Veranda Street	151		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3341	SSMH-3342	Veranda Street	136	Veranda Street	Heavy smoke from roof leader- direct connection	Roof Drains	Direct	1330	0.9	1716	9
Sub-Area 31	SSMH-3342	SSMH-5647	Veranda Street	151		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3343	SSMH-3340	Veranda Street	108		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4037	SSMH-4038	Veranda Street	19		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4038	SSMH-4040	Veranda Street	381		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4040	SSMH-3335	Veranda Street	297		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-4472	SSMH-1525	Veranda Street	242		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5639	SSMH-4472	Veranda Street	220		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5647	SSMH-1430	Veranda Street	197	270 Veranda Street	Heavy smoke from catch basin SWIN-0632- indirect connection	Catch-Basin	Indirect	0	0	1712	8
Sub-Area 31	SSMH-5648	SSMH-3338	Veranda Street	92		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5651	SSMH-3322	Veranda Street	104		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	Stub	SSMH-3339	Veranda Street	99		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0107	SSMH-1539	Victoria Street	360	21 Victoria Street	Light smoke from catch basin SWIN-4300- indirect connection	Catch-Basin	Indirect	0	0	1711	6
Sub-Area 31	SSMH-0107	SSMH-1539	Victoria Street		22 Victoria Street	Medium smoke from catch basin SWIN-4285- indirect connection	Catch-Basin	Indirect	0	0	1710	6
Sub-Area 31	SSMH-2282	SSMH-5961	Watson Street	269		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0110	SSMH-5650	Whittier Street	173		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1009	SSMH-1008	Whittier Street	196		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5649	SSMH-1009	Whittier Street	176		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-5650	SSMH-5649	Whittier Street	100		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-0153	SSMH-3348	Wordsworth Street	39		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1534	SSMH-1533	Wordsworth Street	19		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-1536	SSMH-1534	Wordsworth Street	214		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3348	SSMH-3349	Wordsworth Street	190		No defects observed.	None Observed	N/A	0	0		
Sub-Area 31	SSMH-3349	SSMH-1536	Wordsworth Street	252		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0210	SSMH-0828	Evergreen Drive	190		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0211	SSMH-2984	Evergreen Drive	171		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0489	SSMH-0210	Evergreen Drive	296		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2972	SSMH-2982	Evergreen Drive	127		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2982	SSMH-2983	Evergreen Drive	102		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2983	SSMH-0489	Evergreen Drive	101		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2984	SSMH-0828	Evergreen Drive	126		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0826	SSMH-5376	Industrial Way		126 Industrial Way	Smoke from cleanout with broken cap, above grade- direct connection	Defective Cleanout	Direct	0	0	727	43923
Sub-Area 4	SSMH-0826	SSMH-5376	Industrial Way		126 Industrial Way	Smoke from cleanout with missing cap- direct connection	Defective Cleanout	Direct	18	0.3	731	43923
Sub-Area 4	SSMH-0827	SSMH-1560	Industrial Way	240		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0829	SSMH-1557	Industrial Way	162		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-1452	SSMH-5372	Industrial Way	117		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-1453	SSMH-5375	Industrial Way	116		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-1454	SSMH-1453	Industrial Way	111		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-1557	SSMH-1558	Industrial Way	157		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-1558	SSMH-1559	Industrial Way	168		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-1559	SSMH-0827	Industrial Way	312		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-1560	SSMH-0828	Industrial Way	72		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2976	SSMH-4437	Industrial Way	162		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-4437	SSMH-4439	Industrial Way	252		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-4439	SSMH-1452	Industrial Way	260		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5372	SSMH-5373	Industrial Way	90		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5373	SSMH-5374	Industrial Way	88		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5374	SSMH-1454	Industrial Way	94		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5375	SSMH-0826	Industrial Way	167		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5376	SSMH-0829	Industrial Way	195		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0195	SSMH-0195.1	Industrial Way R.O.W.	181	Industrial Way R.O.W.	SSMH0195.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 4	SSMH-0828	SSMH-2986	Industrial Way R.O.W.	272		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0830	SSMH-6179	Industrial Way R.O.W.	173		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2985	SSMH-0195	Industrial Way R.O.W.	226		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2986	SSMH-0830	Industrial Way R.O.W.	232	83 Walch Drive	Smoke from open cleanout, 10" above grade- direct connection	Defective Cleanout	Direct	0	0	1642	
Sub-Area 4	SSMH-6179	SSMH-2985	Industrial Way R.O.W.		Wedge Way	Smoke from sewer manhole on Wedge Way with no frame or cover- direct connection.This structure does not appear on the map- see revised map	Manhole	Direct	9	0.9	724	43922
Sub-Area 4	SSMH-0832	SSMH-0205	Prim Street	269		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0205	SSMH-2977	Riverside Street	159		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-0206	SSMH-0205	Riverside Street	282		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-1343	SSMH-0206	Riverside Street	250		No defects observed.	None Observed	N/A	0	0		

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 4	SSMH-2973	SSMH-2974	Riverside Street		921 Riverside Street	Smoke from an unidentified SSMH, 12 "below grade- direct connection (the finding is listed twice as there are two drainage coefficients.)	Manhole	Direct	120	0.3	733	43924
Sub-Area 4	SSMH-2973	SSMH-2974	Riverside Street	300	921 Riverside Street	Smoke from an unidentified SSMH, 12" below grade- direct connection (the finding is listed twice as there are two drainage coefficients.)	Manhole	Direct	4	0.9	734	43924
Sub-Area 4	SSMH-2974	SSMH-2972	Riverside Street	300		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2975	SSMH-1343	Riverside Street	248		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2977	SSMH-2976	Riverside Street	28		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-2978	PS	Riverside Street	184		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5368	SSMH-2976	Riverside Street	41		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5370	SSMH-2978	Riverside Street	286		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	Stub	SSMH-2978	Riverside Street	89		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	Stub	SSMH-2978	Riverside Street	199		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	Stub	SSMH-5370	Riverside Street	69		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	Stub	SSMH-5370	Riverside Street	175		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	Stub	SSMH-5370	Riverside Street	137		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-4555	SSMH-5412	Waldron Way	137		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5412	PS	Waldron Way	31		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-5413	SSMH-6018	Waldron Way	237		No defects observed.	None Observed	N/A	0	0		
Sub-Area 4	SSMH-6018	SSMH-5412	Waldron Way	179		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0546	SSMH-1610	Abby Lane	170		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-1610	SSMH-2390.2	Abby Lane	37		SSMH2390.2 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 7	SSMH-1612	SSMH-2389	Abby Lane	229		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2385	SSMH-2385.1	Abby Lane	12		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2385.1	SSMH-0530	Abby Lane	263		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2386	SSMH-2387	Abby Lane	257		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2387	SSMH-2385	Abby Lane	215		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2389	SSMH-2388	Abby Lane	232		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2390	SSMH-1612	Abby Lane	87		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2390.1	SSMH-2390	Abby Lane	153		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2390.2	SSMH-2390.1	Abby Lane	150		SSMH2390.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 7	SSMH-2349	SSMH-4966	Alice Court	112	38 Alice Court	Smoke from open cleanout, above grade- direct connection	Defective Cleanout	Direct	0	0	735	
Sub-Area 7	SSMH-0522	SSMH-4521	Alice Street	34		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0523	SSMH-0526	Alice Street	244		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0524	SSMH-0522	Alice Street	155		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0526	SSMH-4967	Alice Street	298		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0544	SSMH-4212	Alice Street	190		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2350	SSMH-2351	Alice Street	79		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2351	SSMH-2363	Alice Street	135	3 Alice Street	Smoke from roof leader- direct connection	Roof Drains	Direct	466	0.9	738	44013
Sub-Area 7	SSMH-2351	SSMH-2363	Alice Street	135	3 Alice Street	Smoke from yard drain drainage areas combined- direct connection	Other Drain	Direct	0	0	737	44013
Sub-Area 7	SSMH-2351	SSMH-2363	Alice Street		3 Alice Street	Smoke from yard drain, drainage areas combined- direct connection	Other Drain	Direct	1000	0.3	739	44013
Sub-Area 7	SSMH-2363	SSMH-0524	Alice Street	89	Alice Street	Light smoke fom catch basin SWIN-1816- indirect connection	Catch-Basin	Indirect	0	0	736	44014
Sub-Area 7	SSMH-2370	SSMH-2374	Alice Street	162		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2374	SSMH-4278	Alice Street	29		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4212	SSMH-2370	Alice Street	160		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4278	PS	Alice Street	37		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4521	SSMH-0523	Alice Street	198		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4966	SSMH-2350	Alice Street	255		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4967	SSMH-0544	Alice Street	187		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	PS	SSMH-2371	Alice Street R.O.W.	63		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2371	Stub	Alice Street R.O.W.	56		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-6280	SSMH-0189	Basket Lane	215		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0525	SSMH-0523	Caron Street	141		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0535	SSMH-4280	Caron Street	260		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0536	SSMH-0535	Caron Street	274		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0537	SSMH-0536	Caron Street	268		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4276	SSMH-0525	Caron Street	285		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4280	SSMH-4281	Caron Street R.O.W.	123		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4281	SSMH-0533	Caron Street R.O.W.	127		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0538	SSMH-4982	Carter Street	258		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4968	SSMH-4969	Carter Street	175		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4969	SSMH-0526	Carter Street	176		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4982	SSMH-0533	Carter Street	272		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4983	SSMH-0538	Carter Street	282		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4984	SSMH-4983	Carter Street	123		No defects observed.	None Observed	N/A	0	0		

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 7	SSMH-0533	SSMH-4971	Carter Street R.O.W.	300		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-1634	SSMH-1637	Clapboard Road	257		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-1636	SSMH-1634	Clapboard Road	244		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-1637	SSMH-4278.1	Clapboard Road	66		SSMH4278.1 is an unnamed manhole- see revised map	Unmapped Feature	N/A	0	0		
Sub-Area 7	SSMH-2366	SSMH-2385.1	Clapboard Road	165		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2383	SSMH-4278	Clapboard Road	34		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4278.1	SSMH-4278	Clapboard Road	120		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4970	SSMH-4967	Crestview Drive	297		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4971	SSMH-0534	Crestview Drive	101		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4972	SSMH-4970	Crestview Drive	146		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4985	SSMH-0534	Crestview Drive	300		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4986	SSMH-4985	Crestview Drive	280		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4987	SSMH-4988	Crestview Drive	50		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4988	SSMH-4986	Crestview Drive	195		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4989	SSMH-4987	Crestview Drive	66		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0534	SSMH-4973	Crestview Drive R.O.W.	86		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2384	SSMH-2364	Crestview Drive R.O.W.	232		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4973	SSMH-2384	Crestview Drive R.O.W.	105		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0527	SSMH-2377	Curtis Road	223		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0528	SSMH-0527	Curtis Road	225	Curtis Road	Smoke from cracked pavement around SSMH-0527, manhole is 1" below grade- direct connection	Ground	Direct	16	0.9	741	
Sub-Area 7	SSMH-0529	SSMH-0530	Curtis Road	100		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0530	SSMH-0531	Curtis Road	135		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0532	SSMH-0531	Curtis Road	272		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4974	SSMH-0532	Curtis Road	52		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4975	SSMH-4974	Curtis Road	248		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4976	SSMH-4977	Curtis Road	179		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4977	SSMH-4975	Curtis Road	298		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0531	SSMH-4217	Curtis Road R.O.W.	166		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2375	SSMH-4522	Curtis Road R.O.W.	36		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2377	SSMH-4274	Curtis Road R.O.W.	232		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4217	SSMH-2391	Curtis Road R.O.W.	165		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4274	SSMH-2383	Curtis Road R.O.W.	167		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4277	SSMH-2383	Curtis Road R.O.W.	163		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4522	SSMH-4277	Curtis Road R.O.W.	147		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0539	SSMH-0540	Frost Hill Road	70		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0540	SSMH-0541	Frost Hill Road	210		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0541	SSMH-0542	Frost Hill Road	99		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0542	SSMH-0543	Frost Hill Road	116		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4994	SSMH-4995	Frost Hill Road	212		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4995	SSMH-4996	Frost Hill Road	152		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4996	SSMH-0539	Frost Hill Road	153		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0543	SSMH-2385	Frost Hill Road R.O.W.	243		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2352	SSMH-2353	Garsoe Drive	164		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2353	SSMH-2354	Garsoe Drive	167		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2354	SSMH-2355	Garsoe Drive	302		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2355	SSMH-2356	Garsoe Drive	131		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2356	SSMH-4966	Garsoe Drive	302		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0190	SSMH-4963	Hope Avenue	224		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0191	SSMH-4964	Hope Avenue	234		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0192	SSMH-0191	Hope Avenue	98		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0484	SSMH-2285	Hope Avenue	176		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0516	SSMH-0518	Hope Avenue	60		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0517	SSMH-0516	Hope Avenue	44		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0518	SSMH-4960	Hope Avenue	58		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0519	PS	Hope Avenue	35		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2285	SSMH-0192	Hope Avenue	154		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4213	SSMH-0484	Hope Avenue	174		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4214	SSMH-4521	Hope Avenue	119		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4960	SSMH-0519	Hope Avenue	88		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4961	SSMH-0189	Hope Avenue	149		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4962	SSMH-4961	Hope Avenue	107		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4963	SSMH-4962	Hope Avenue	294		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4964	SSMH-0190	Hope Avenue	139		No defects observed.	None Observed	N/A	0	0		

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Smoke Testing Program Findings

Sub-Area	Upstream Manhole	Downstream Manhole	Street / Location	Estimated Segment Length (ft)	Finding Address	Findings	Finding Category	Finding Type	Drainage Area	Runoff Coefficient	Image File #	Sketch #
Sub-Area 7	SSMH-4965	SSMH-4213	Hope Avenue	153	229 Hope Avenue	Smoke from cleanout with broken cap- above grade, direct connection	Defective Cleanout	Direct	0	0	743	
Sub-Area 7	Stub	SSMH-0517	Hope Avenue	27		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	Stub	SSMH-0519	Hope Avenue	44		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0520	SSMH-2362	Longview Drive	213		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0521	SSMH-0520	Longview Drive	61		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-1609	SSMH-2357	Longview Drive	339		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2357	SSMH-4352	Longview Drive	251		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4279	SSMH-4280	Longview Drive R.O.W.	125		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4524	SSMH-4279	Longview Drive R.O.W.	128		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4215	SSMH-4216	Old Barn Lane	112		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4216	SSMH-4995	Old Barn Lane	111		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2378	SSMH-2379	Overset Road	85		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2379	SSMH-2380	Overset Road	68		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2380	SSMH-2381	Overset Road	182		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2382	SSMH-4534	Overset Road	104		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4534	SSMH-2381	Overset Road	128		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2388	SSMH-2364	Pamela Road	340		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4212.1	SSMH-4212	Pamela Road	161		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2364	SSMH-2365	Pamela Road R.O.W.	243		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2365	SSMH-2367	Pamela Road R.O.W.	156		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2367	SSMH-2366	Pamela Road R.O.W.	181		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2360	SSMH-2359	Patricia Lane	40		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2358	SSMH-4524	Patricia Lane R.O.W.	115		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2361	SSMH-2363	Patricia Lane R.O.W.	141		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2362	SSMH-2361	Patricia Lane R.O.W.	133		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-1635	SSMH-2372	Sturdivant Drive	279		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2372	SSMH-2373	Sturdivant Drive	68		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2373	SSMH-4523	Sturdivant Drive	65		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4523	SSMH-1637	Sturdivant Drive	45		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-0545	SSMH-0546	Summit Street	199		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4288	SSMH-4289	Summit Street	61		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4289	SSMH-0545	Summit Street	196		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4978	SSMH-4974	Wendy Way	214		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4979	SSMH-4978	Wendy Way	95		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4980	SSMH-4979	Wendy Way	82		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4981	SSMH-4980	Wendy Way	300		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-2381	SSMH-4533	Whaleboat Road	141		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4531	SSMH-2375	Whaleboat Road	138		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4532	SSMH-4531	Whaleboat Road	103		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4533	SSMH-4532	Whaleboat Road	97		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4275	SSMH-4535	Whitehead Circle	42		No defects observed.	None Observed	N/A	0	0		
Sub-Area 7	SSMH-4535	SSMH-2380	Whitehead Circle	178		No defects observed.	None Observed	N/A	0	0		

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Smoke Testing Program Suspect Sources

Sub-Area	Address	# of Roof Leaders into Ground	# of Roof Leaders into Foundation	# of Driveway Drains	# of Yard Drains	# of Stairwell Drains	# of Window Well Drains	Flat Roof	Other	Roof Leaders	Other Drains
Sub-Area 1	31 Barclay Avenue				1						1
Sub-Area 1	35 Barclay Avenue				1						1
Sub-Area 1	69 Broadway	2								1	
Sub-Area 1	20 Harris Avenue	1								1	
Sub-Area 1	37 Leisure Lane	2								1	
Sub-Area 1	49 Leisure Lane				1						1
Sub-Area 1	18 Lexington Avenue	1					1			1	1
Sub-Area 1	145 Newton Street	1								1	
Sub-Area 1	48 Ninth Street	2								1	
Sub-Area 1	85 Stuart Street	1			1					1	1
Sub-Area 2	11 Continental Drive	1								1	
Sub-Area 2	44 Deering Run Drive	1								1	
Sub-Area 2	50 Deering Run Drive	2								1	
Sub-Area 2	58 Deering Run Drive	1								1	
Sub-Area 2	66 Dole Drive	1								1	
Sub-Area 2	105 Dole Drive	1								1	
Sub-Area 2	38 Greenwood Lane				1						1
Sub-Area 2	63 Greenwood Lane	1								1	
Sub-Area 2	82 Greenwood Lane				1						1
Sub-Area 2	42 Northwood Drive				1	1					1
Sub-Area 2	43 Northwood Drive					1					1
Sub-Area 2	44 Northwood Drive					1					1
Sub-Area 2	47 Northwood Drive					1					1
Sub-Area 2	96 Northwood Drive	2								1	
Sub-Area 2	136 Regan Lane	1								1	
Sub-Area 2	62 Shepherd Lane	1								1	
Sub-Area 2	96 Shepherd Lane	2								1	
Sub-Area 2	118 Shepherd Lane	1								1	
Sub-Area 24A	12 Bernard Road				1						1
Sub-Area 24A	31 Mona Road				1						1
Sub-Area 24A	1321 Washington Avenue							X			
Sub-Area 24A	1345 Washington Avenue							X			
Sub-Area 25	94 Auburn Street							X			
Sub-Area 25	117 Auburn Street							X			
Sub-Area 25	172 Auburn Street							X			
Sub-Area 25	111 Auburn Street (CVS)	10								1	

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Smoke Testing Program Suspect Sources

Sub-Area	Address	# of Roof Leaders into Ground	# of Roof Leaders into Foundation	# of Driveway Drains	# of Yard Drains	# of Stairwell Drains	# of Window Well Drains	Flat Roof	Other	Roof Leaders	Other Drains
Sub-Area 25	171 Auburn Street (School)							X			
Sub-Area 25	59 Bartley Avenue				1						1
Sub-Area 25	33 Crouquet Lane				2						1
Sub-Area 31	1 Arcadia Street		2							1	
Sub-Area 31	11 Arcadia Street		2							1	
Sub-Area 31	14 Arcadia Street		2							1	
Sub-Area 31	15 Arcadia Street		2							1	
Sub-Area 31	29 Arcadia Street		2							1	
Sub-Area 31	46 Arcadia Street		1							1	
Sub-Area 31	46 Sullivan Street		2							1	
Sub-Area 31	26 Woodsworth Street		2							1	
Sub-Area 31	40 Woodsworth Street		2							1	
Sub-Area 31	20-22 Woodsworth Street		4							1	
Sub-Area 31	31-33 Woodsworth Street		4							1	
Sub-Area 4	33 Caddie Lane							X			
Sub-Area 4	56 Evergreen Drive							X			
Sub-Area 4	14 Industrial Way							X			
Sub-Area 4	75 Industrial Way							X			
Sub-Area 4	75 Industrial Way							X			
Sub-Area 4	100 Industrial Way							X			
Sub-Area 4	126 Industrial Way							X			
Sub-Area 4	175 Industrial Way			1							1
Sub-Area 4	53-57 Industrial Way							X			
Sub-Area 4	961 Riverside Street							X			
Sub-Area 4	1093 Riverside Street							X			
Sub-Area 4	40 Walch Drive			1				X			1
Sub-Area 4	75 Walch Drive			1				X			1
Sub-Area 4	88 Walch Drive							X			
Sub-Area 4	31 Waldron Way							X			
Sub-Area 4	36 Waldron Way			1							1
Sub-Area 4	68 Waldron Way			1				X			1
Sub-Area 7	106 Abby Lane	1								1	
Sub-Area 7	117 Abby Lane	2								1	
Sub-Area 7	3 Alice Street	1								1	
Sub-Area 7	5 Alice Street	1								1	
Sub-Area 7	11 Alice Street	1								1	
Sub-Area 7	69 Caron Street	1								1	

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Smoke Testing Program Suspect Sources

Sub-Area	Address	# of Roof Leaders into Ground	# of Roof Leaders into Foundation	# of Driveway Drains	# of Yard Drains	# of Stairwell Drains	# of Window Well Drains	Flat Roof	Other	Roof Leaders	Other Drains
Sub-Area 7	74 Caron Street	3								1	
Sub-Area 7	142 Curtis Road	2								1	
Sub-Area 7	76 Garsoe Drive	1								1	
Sub-Area 7	109 Hope Avenue	1								1	
Sub-Area 7	44 Longview Drive			1							1
Sub-Area 7	100 Longview Drive	2								1	
Sub-Area 7	111 Longview Drive	2								1	
Sub-Area 7	5 Overset Road	1								1	
Sub-Area 7	20 Pamela Road			1							1
Sub-Area 7	34 Patricia Lane	1								1	
Sub-Area 7	1 Sturdivant Drive	2								1	
Sub-Area 7	4 Sturdivant Drive	3								1	
Sub-Area 7	4 Sturdivant Drive	5								1	
Sub-Area 7	52 Sturdivant Drive	2								1	
Total		**38**	**11**	**7**	**11**	**4**	**1**				

ARCADIS Design & Consultancy for natural and built assets

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine

Appendix G - Building Inspection Reports

Wastewater Collection System

Analysis and Action Plan

June, 2020

Appendix Contents

1 DAVIS FARM ROAD BUILDING 1

1 DAVIS FARM ROAD BUILDING 2

511 RIVERSIDE INDUSTRIAL PARK

56 MILLIKEN STREET

171 AUBURN STREET

91 AUBURN STREET

1041 BRIGHTON AVENUE

1100 BRIGHTON AVENUE

1125 BRIGHTON AVENUE

1125R BRIGHTON AVENUE

1140 BRIGHTON AVENUE

1145 BRIGHTON AVENUE

155 RIVERSIDE STREET (SEASONS GRILL)

155 RIVERSIDE STREET

23 ORONO ROAD

7 RAND ROAD

81 RIVERSIDE STREET

150 READ STREET

162 CANCO ROAD

165 READ STREET

182-184 READ STREET

217 READ STREET

250-256 READ STREET

70 QUARRY ROAD

90 QUARRY ROAD

125 PRESUMPSCOT STREET

197 PRESUMPSCOT STREET

235 PRESUMPSCOT STREET

236 PRESUMPSCOT STREET

273 PRESUMPSCOT STREET

275 PRESUMPSCOT STREET

290 PRESUMPSCOT STREET

299 PRESUMPSCOT STREET

45 SPRING STREET

110 FREE STREET

20 DANFORTH STREET

305 COMMERCIAL STREET

321 COMMERCIAL STREET

40 SPRING STREET

59 PLEASANT STREET

82 FREE STREET

88 SPRING STREET

135 WALTON STREET

138 AUBURN STREET

40C QUARRY ROAD

40 QUARRY ROAD

BUILDING INSPECTION RESULTS TABLE

BUILDING INSPECTION RESULTS MAPS

Portland, ME Building Inspection

Section 1

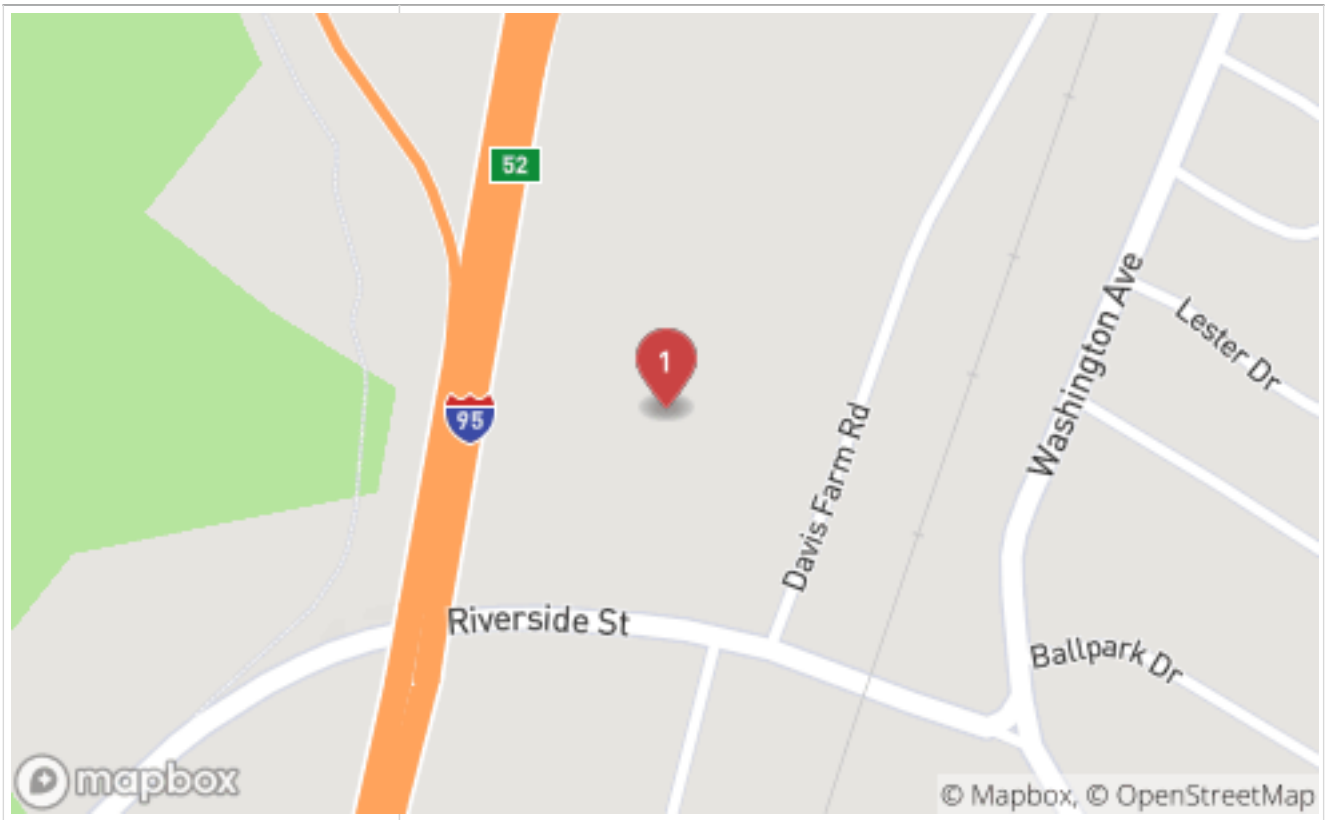
Municipality	Portland, ME
Job Number	20012
Subsystem	5
Interviewer	MATTHEW SILVA
Address	1 Davis Farm Rd. Building 1
Location Photo	
	43.717106, -70.304263
Business Name	Summit Natural Gas
Intial Date	02-03-2020
Time	10:40 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes

Portland, ME Building Inspection

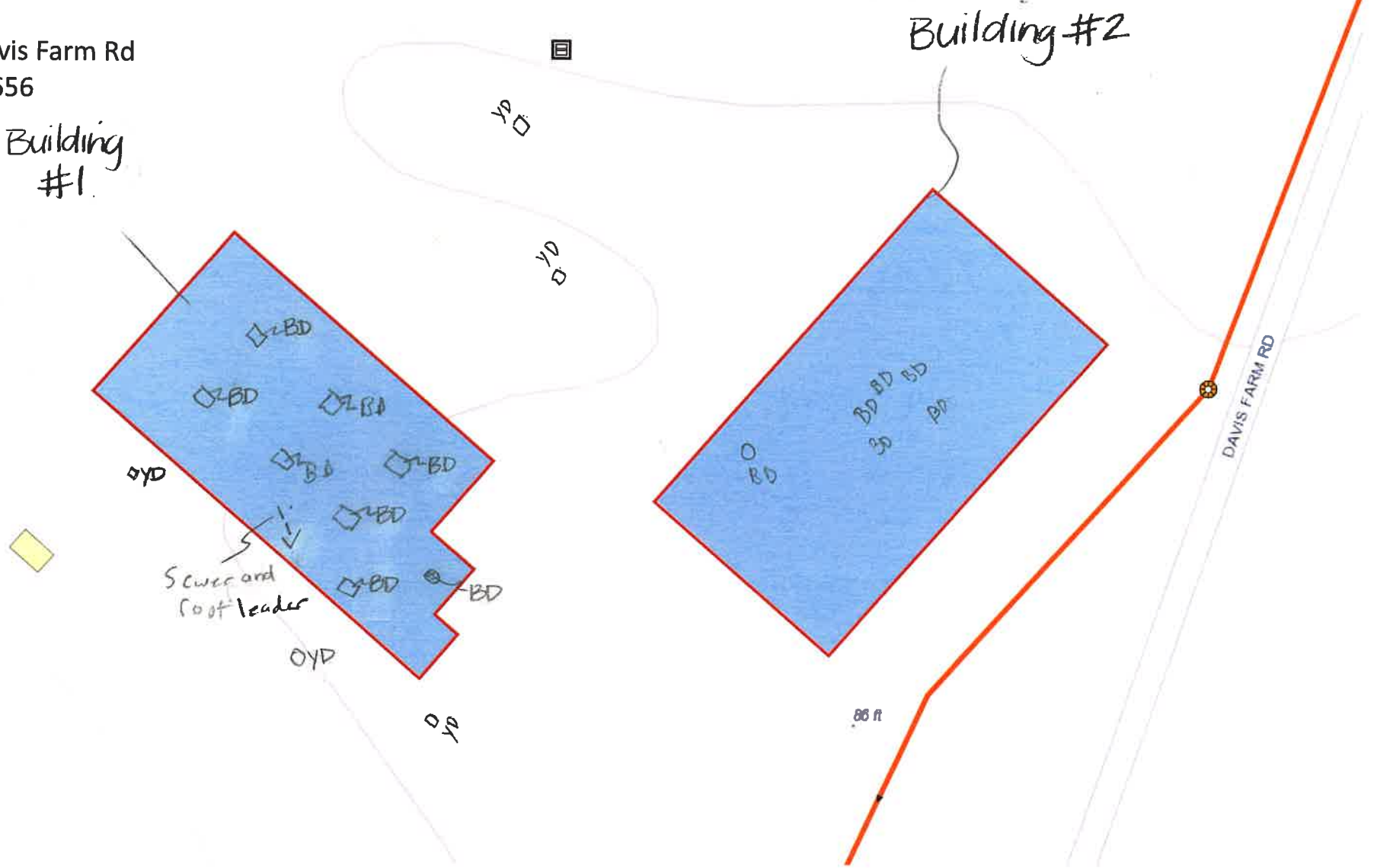
Open Cleanout (#)	0
Basement Drain (#)	8
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	6 Drains are located in garage area of building, 2 are located in separate rooms
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	Yes
Are any outside drains present?	Yes
Yard Drains (#)	5
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	0
Outside Drain Comments:	All yard drains are catch basins in parking lot
GENERAL COMMENTS:	Contact: Bryan Haberman This inspection is for building in the back (Labeled Building #1)
Additional Photo(s)	 This drain is located next to what appears to be sewer and roof leader (marked on sketch)

Portland, ME Building Inspection

Form Locations



Location: 1 Davis Farm Rd
Roof Sqft: 48,656



Date Submitted: 02-18-2020 09:20 AM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

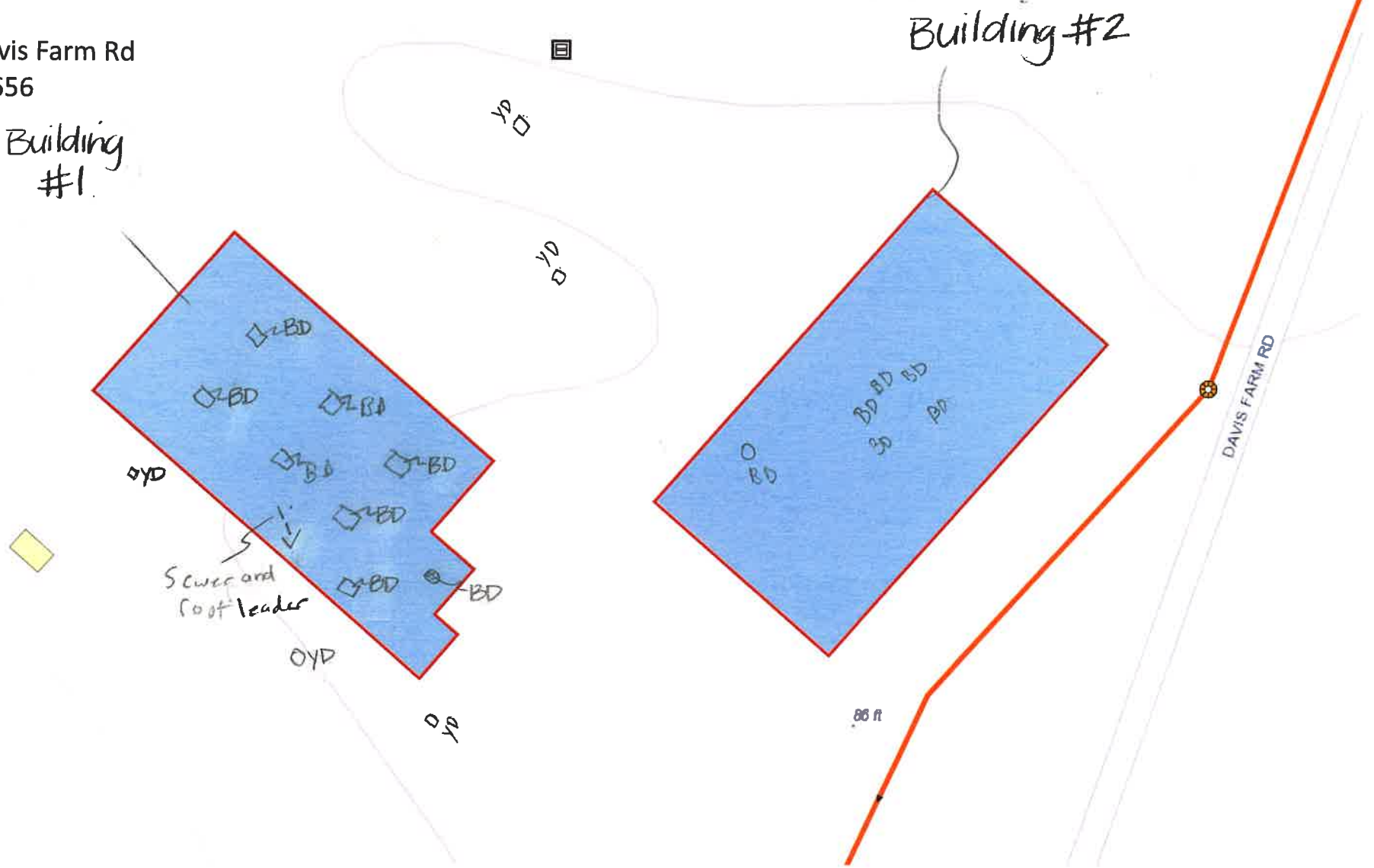
Municipality	Portland, ME
Job Number	20012
Subsystem	5
Interviewer	MATTHEW SILVA
Address	1 Davis Farm Rd (Building 2)
Location Photo	
Business Name	Vacant (no business)
Intial Date	02-05-2020
Time	08:05 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	6
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	No Basement all structures are located on first floor
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	3 drains in middle of roof
Are any outside drains present?	No
GENERAL COMMENTS:	Sewer is under building. Found a possible access point but could not open.

Date Submitted: 02-18-2020 09:20 AM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Additional Photo(s)	Possible drain from roof	Roof drain into floor

Location: 1 Davis Farm Rd
Roof Sqft: 48,656



Portland, ME Building Inspection

Section 1

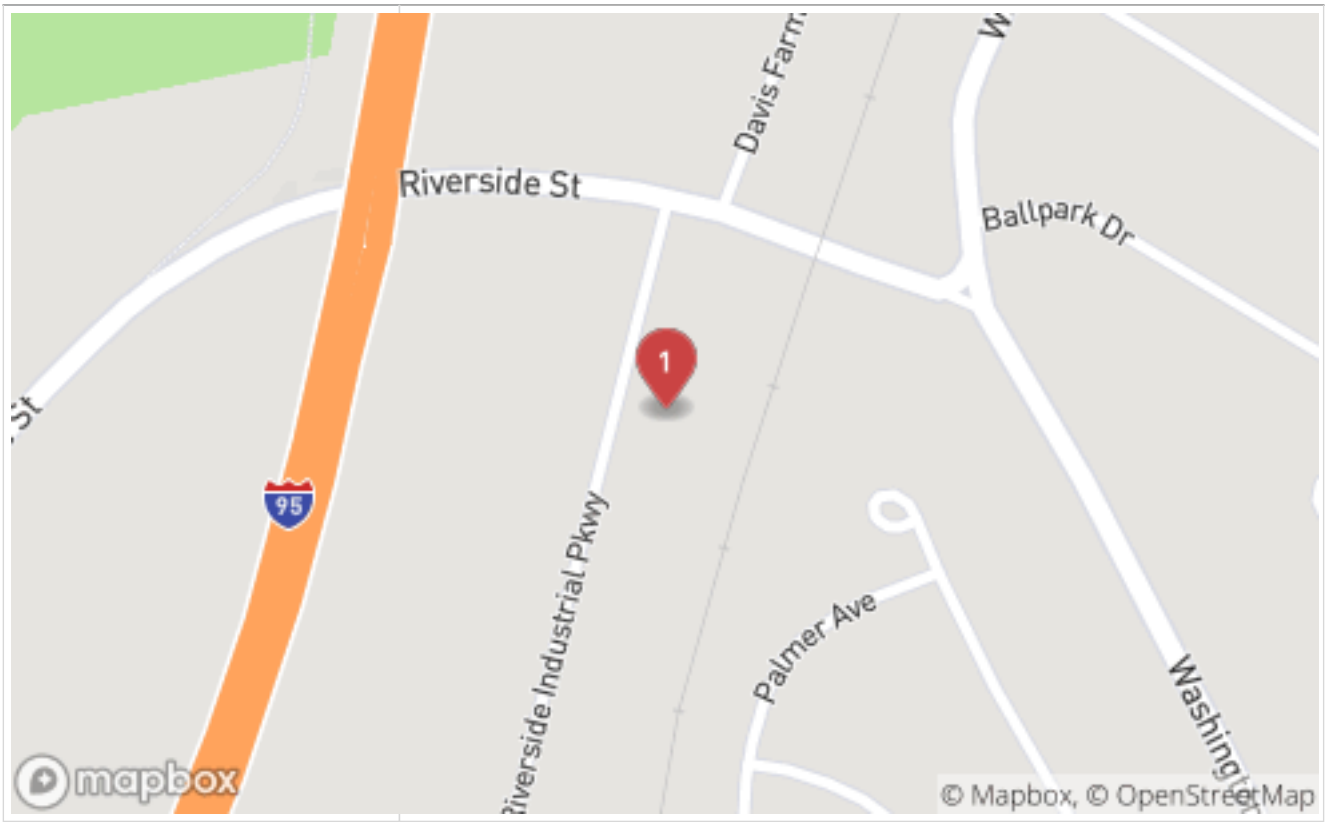
Municipality	Portland, ME
Job Number	20012
Subsystem	5
Interviewer	MATTHEW SILVA
Address	511 Riverside Industrial Park
Location Photo	
	43.714564, -70.303874
Business Name	Muscle Mover
Intial Date	02-03-2020
Time	11:39 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	1
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	Drain can be found in boiler room
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	3
Possible Flat Roof Drain System?	N/A

Portland, ME Building Inspection

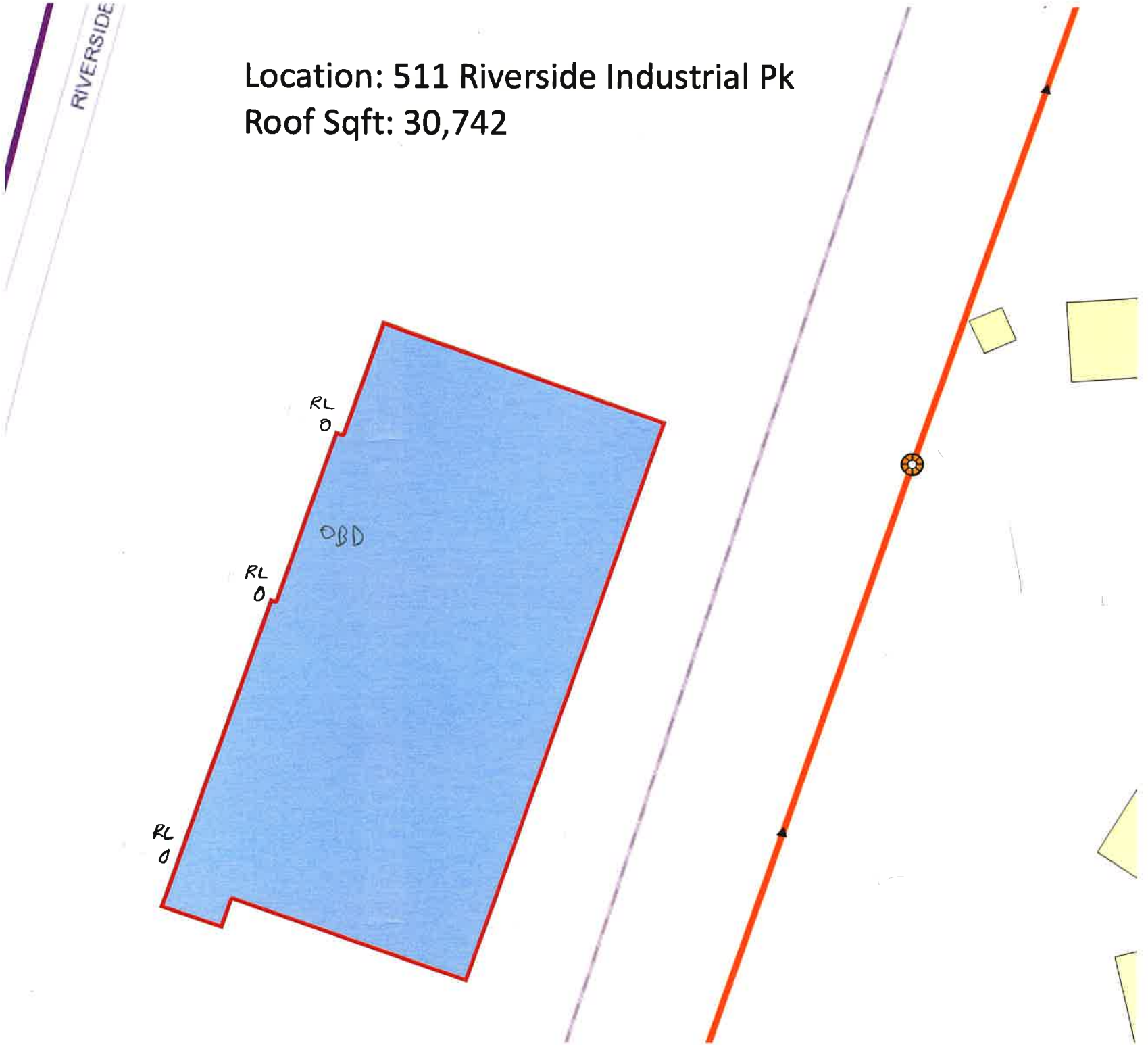
Are any outside drains present?	No
GENERAL COMMENTS:	Building Contact: Tim Meehan

Portland, ME Building Inspection

Form Locations



Location: 511 Riverside Industrial Pk
Roof Sqft: 30,742



Date Submitted: 02-14-2020 09:28 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	28
Interviewer	MATTHEW SILVA
Address	56 Milliken St
Location Photo	
	43.706299, -70.304522
Business Name	Paradigm
Intial Date	02-12-2020
Time	08:32 (-5 GMT)
Follow up Date/Time	02-14-2020
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
Sump Pump Comments:	Pumps present are for wastewater to be pumped up
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	12
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	13
Roof Leaders onto Surface (#)	0

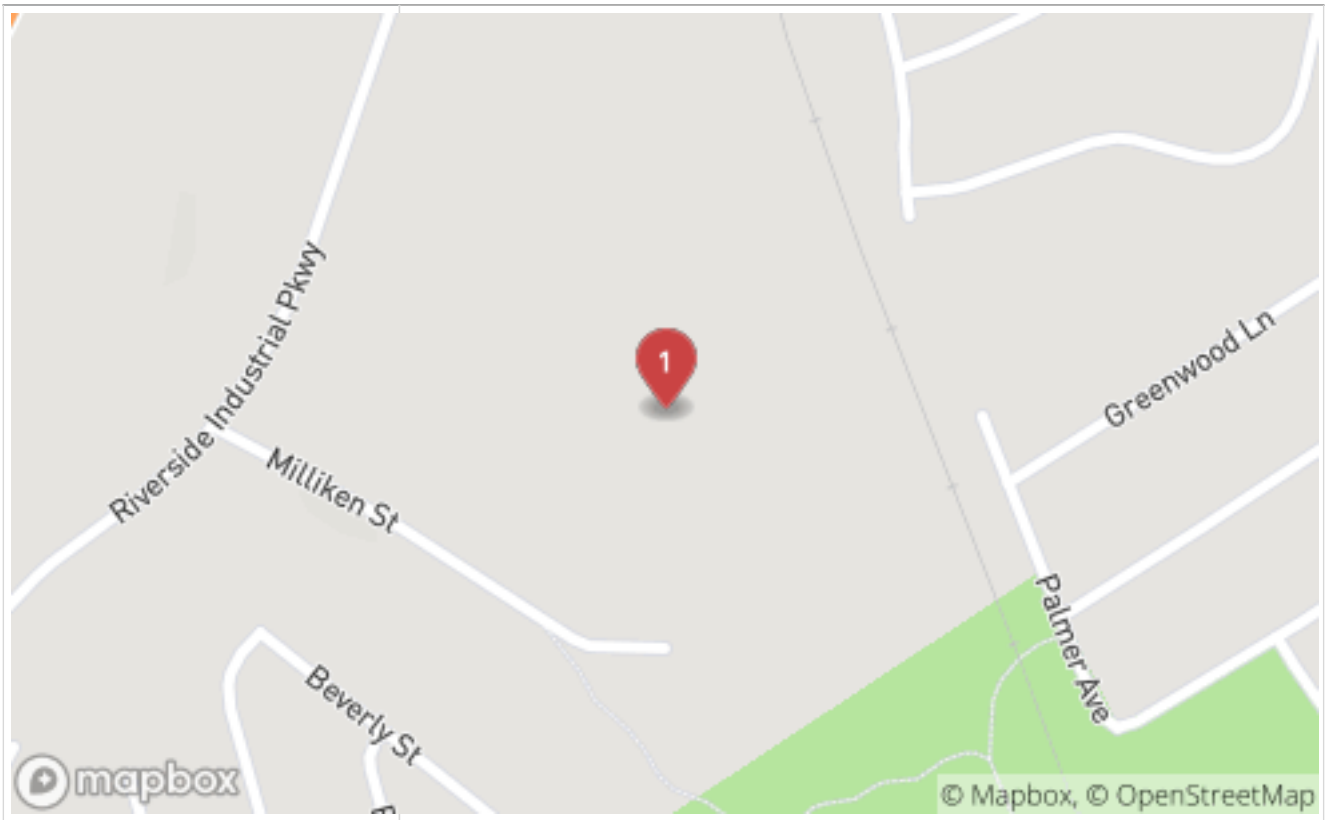
Portland, ME Building Inspection

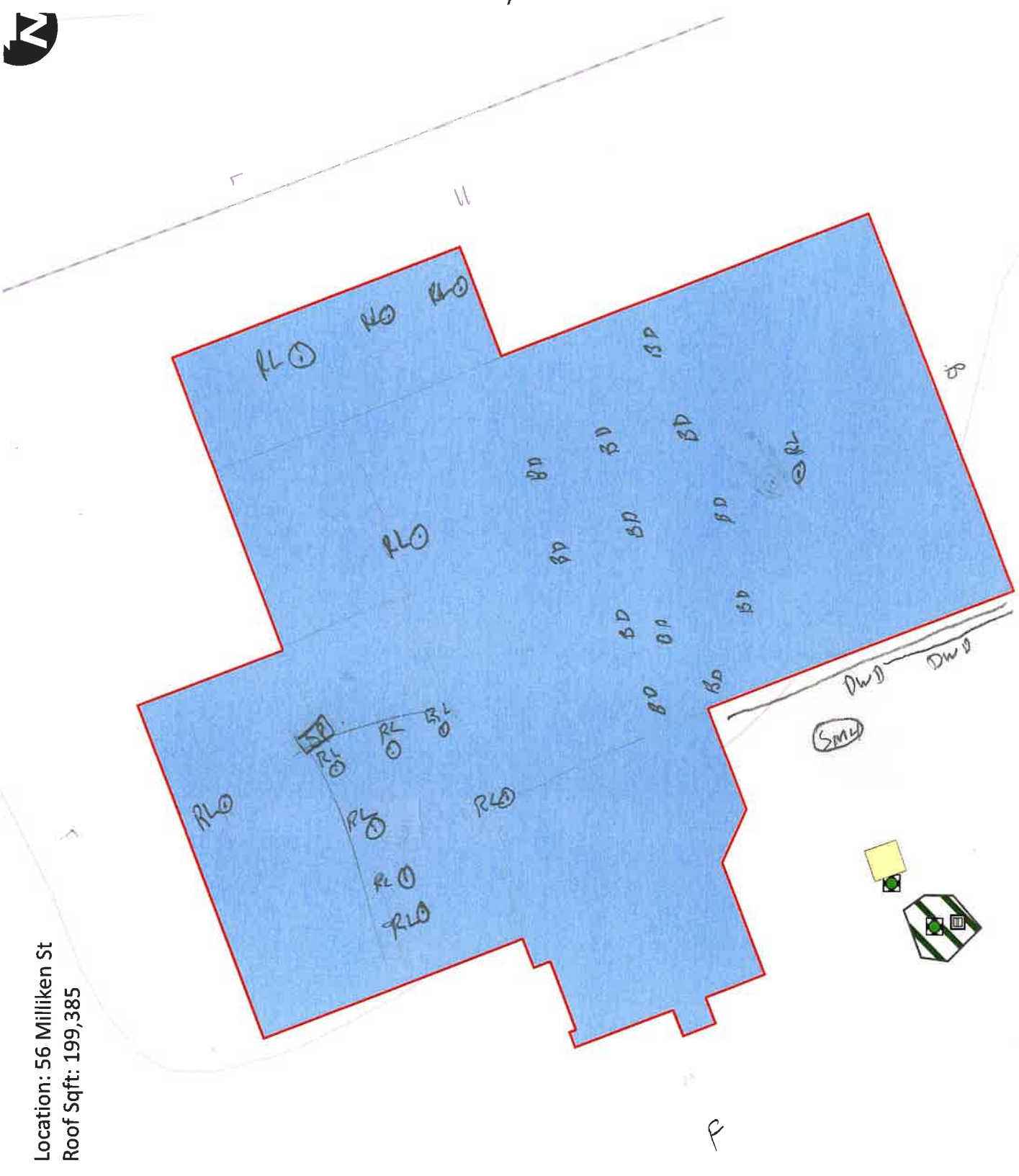
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Paradigm has multiple leaders going into floor Tyson Warehouse has 1 central drain
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	2
GENERAL COMMENTS:	Building on slab. Unable to locate sewer.
Additional Photo(s)	 Example of what roof leaders look through out building (Paradigm side) Sump pit to pump waste from cleaning station in Paradigm

Date Submitted: 02-14-2020 09:28 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Form Locations





Location: 56 Milliken St
Roof Sqft: 199,385

Patric
207-956-1738

Mark Dan Bard
747 5000
5511

Date Submitted: 02-18-2020 03:11 PM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

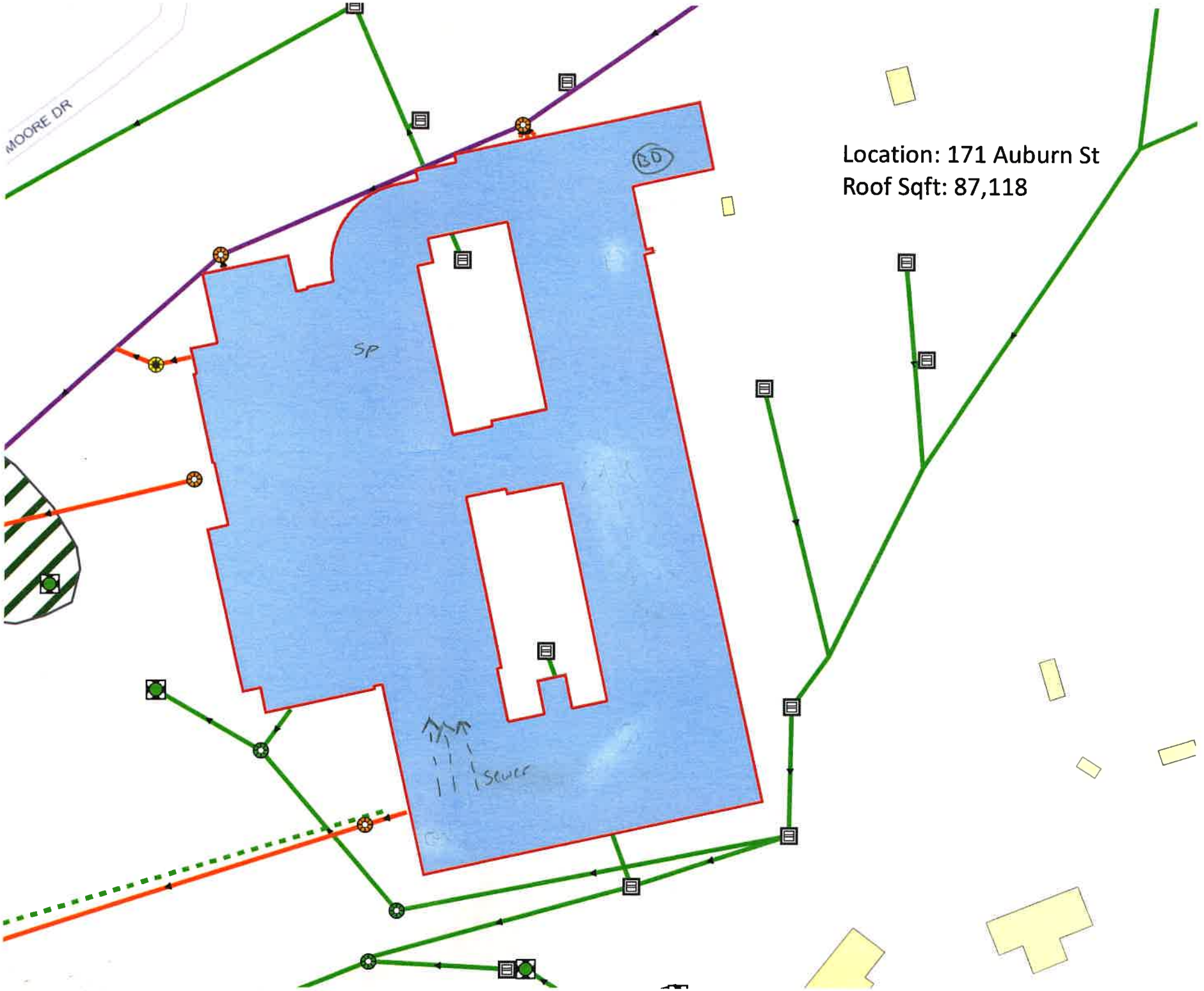
Municipality	Portland, ME
Job Number	20012
Subsystem	25
Interviewer	MATTHEW SILVA
Address	171 Auburn St
Location Photo	
Business Name	Lyman Moore Middle School
Intial Date	02-04-2020
Time	10:22 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	

Portland, ME Building Inspection

2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Sanitary
Sump Pump Photo(s)	
Sump Pump Comments:	Sump is hard piped to sewer
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	1
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	Basement drain exit location unknown
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	Yes

Portland, ME Building Inspection

Roof Leader or Flat Roof Drain Comments:	Can only locate roof drains in cafeteria’s ceiling
Are any outside drains present?	No
GENERAL COMMENTS:	All Drains and sewer manholes are accurate on map. Sewer lines can be located under gym floor in crawl space



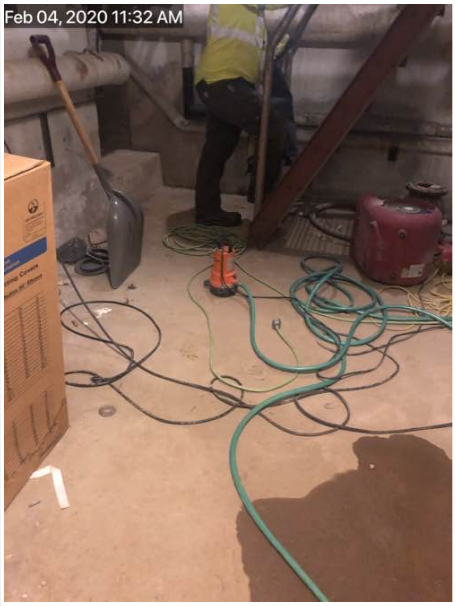
Location: 171 Auburn St
Roof Sqft: 87,118

Portland, ME Building Inspection

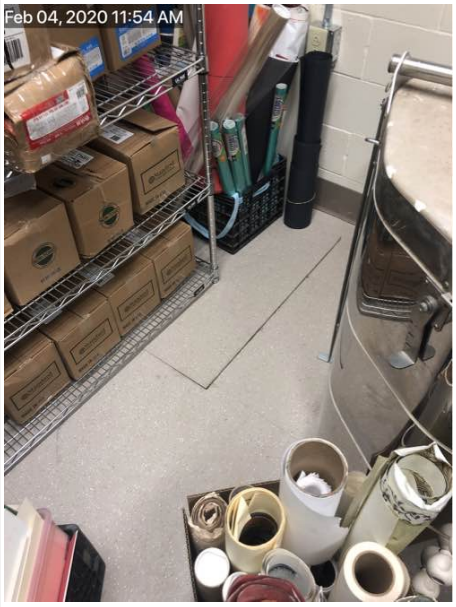
Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	25
Interviewer	MATTHEW SILVA
Address	175 Auburn St
Location Photo	
	43.707462, -70.286264
Business Name	Lyseth Community Center
Intial Date	02-04-2020
Time	11:16 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	# 1 2
2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Other

Portland, ME Building Inspection

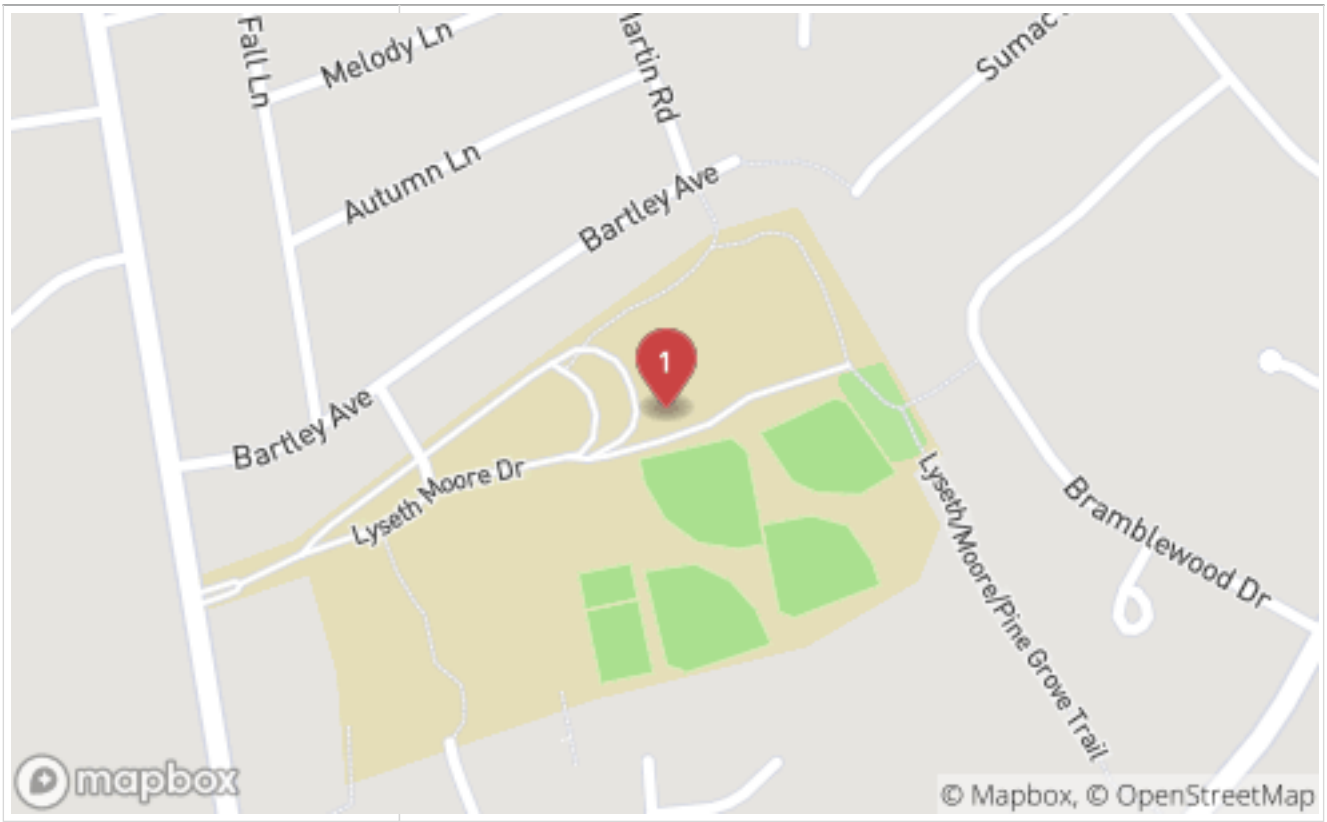
Sump Pump Photo(s)	 Hose from sump to open cleanout
Sump Pump Comments:	Sump pump has a hose to an open cleanout (unknown source)
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	1
Basement Drain (#)	2
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	All found under cafeteria
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	Yes
Are any outside drains present?	No
GENERAL COMMENTS:	Drains and Manholes are in correct location on map

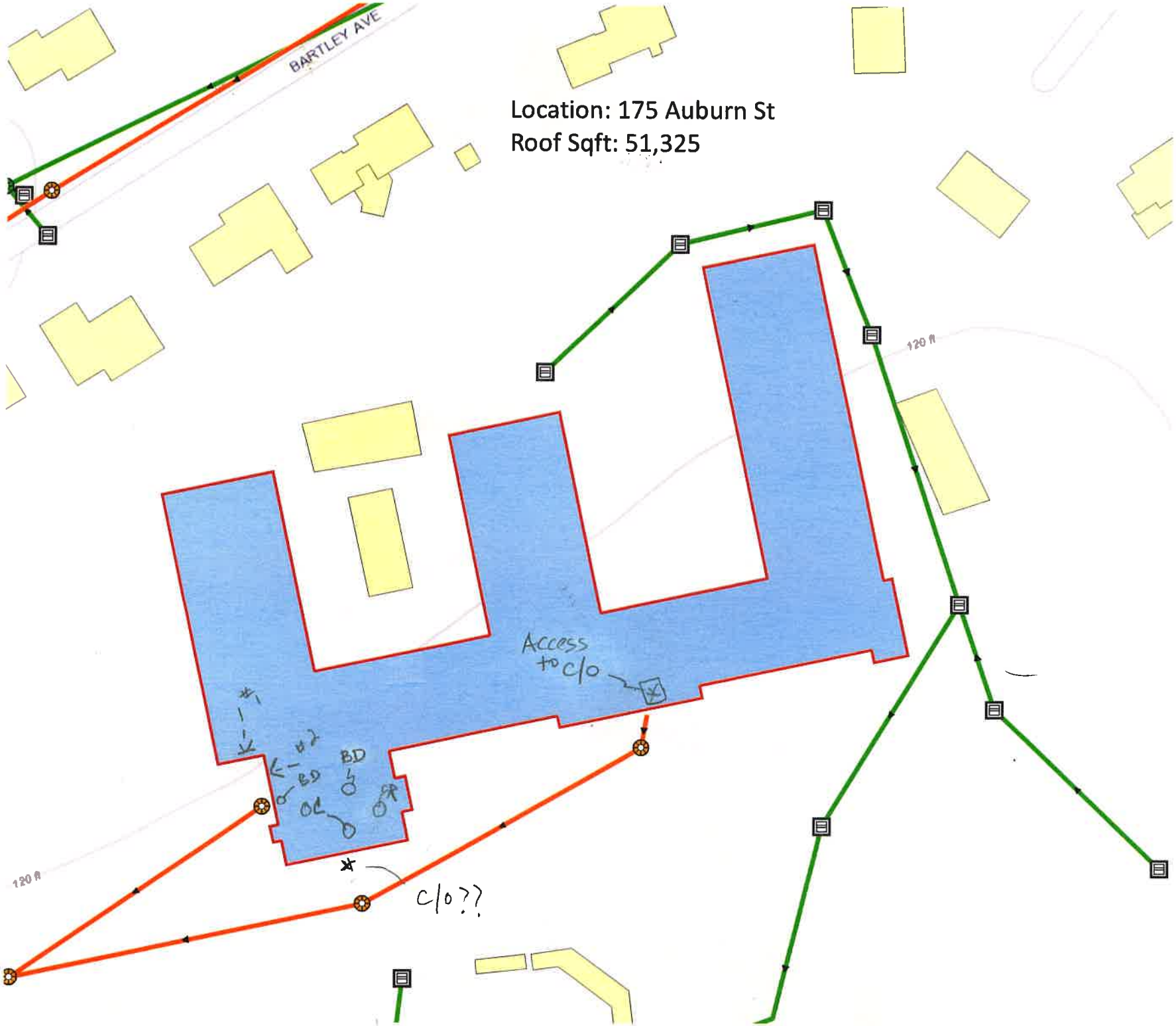
Portland, ME Building Inspection

Additional Photo(s)	 Possible access pit to Sewer clean out	Possible cleanout outside of building for sewer

Portland, ME Building Inspection

Form Locations




BARTLEY AVE
Location: 175 Auburn St
Roof Sqft: 51,325
120 ft
Access to c/o
BD
BD
OL
SK
c/o??
120 ft

Date Submitted: 02-18-2020 09:26 AM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

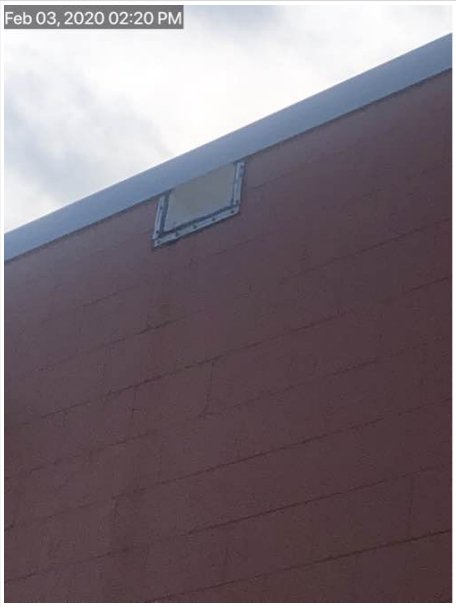
Section 1

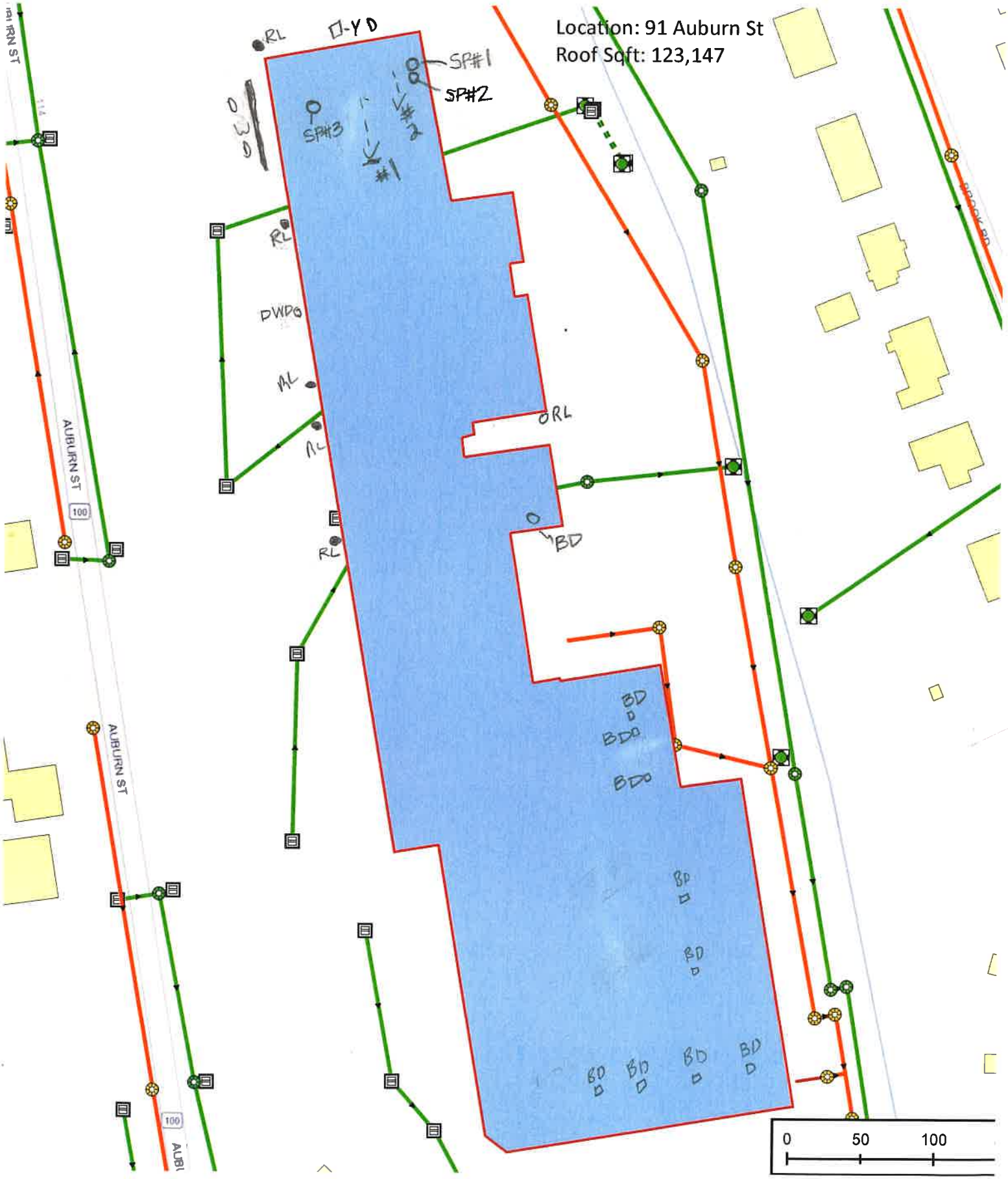
Municipality	Portland, ME
Job Number	20012
Subsystem	25
Interviewer	MATTHEW SILVA
Address	91 Auburn St
Location Photo	
Business Name	Shaw's Plaza
Intial Date	02-03-2020
Time	13:51 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	Sewer 1 Sewer 2 Above floor about 12"
2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Unknown

Portland, ME Building Inspection

Sump Pump Photo(s)	Sump 1 Sump 2 Sump 3
Sump Pump Comments:	All sump pumps are piped together and discharge out through wall (unknown source)
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	10
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0

Portland, ME Building Inspection

4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	5
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	1
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Back side of building is a flat roof. Unknown if has a roof drain because it has slots where water can drain (See additional photo for an example)
Are any outside drains present?	Yes
Yard Drains (#)	1
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	2
GENERAL COMMENTS:	Contact: Bob (Winslow Property) 207-319-5636 There is another sewer lateral that comes out of Shaw's side of building but we were unable to locate
Additional Photo(s)	 Drainage spot for flat roof


Location: 91 Auburn St
Roof Sqft: 123,147
SP#1
SP#2
SP#3
RL
DWD
ORL
BD
AUBURN ST
100
0
50
100

Date Submitted: 02-18-2020 03:10 PM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	14/15
Interviewer	MATTHEW SILVA
Address	1041 Brighton Ave
Location Photo	
Business Name	Threads Thrift of hope
Intial Date	02-03-2020
Time	15:09 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Flat roof can not locate any drain source
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	4
Outside Drain Comments:	Unable to locate where drains discharge
GENERAL COMMENTS:	Contact: Gus 617-901-1163. Landlord believes everything has already been separated after they had a drain clogged. Also was told that sewer exits through front of building facing Brighton Ave.

Location: 1041 Brighton Ave
Roof Sqft: 26,051
TAFT AVE
TAFT AVE
CABOT ST
BRIGHTON AVE
BRIGHTON AVE
BRIGHTON AVE
25
25
DWD
DWD
DWD
DWD
sewer?
On sewer MH
Gus Land lord
617-901-1163

Date Submitted: 02-17-2020 11:06 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	28
Interviewer	MATTHEW SILVA
Address	1100 Brighton Ave
Location Photo	
	43.674195, -70.324495
Business Name	Pine Tree Shopping Center
Intial Date	02-12-2020
Time	09:44 (-5 GMT)
Follow up Date/Time	02-17-2020
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	2
Roof Leaders onto Surface (#)	4
Possible Flat Roof Drain System?	No
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	8

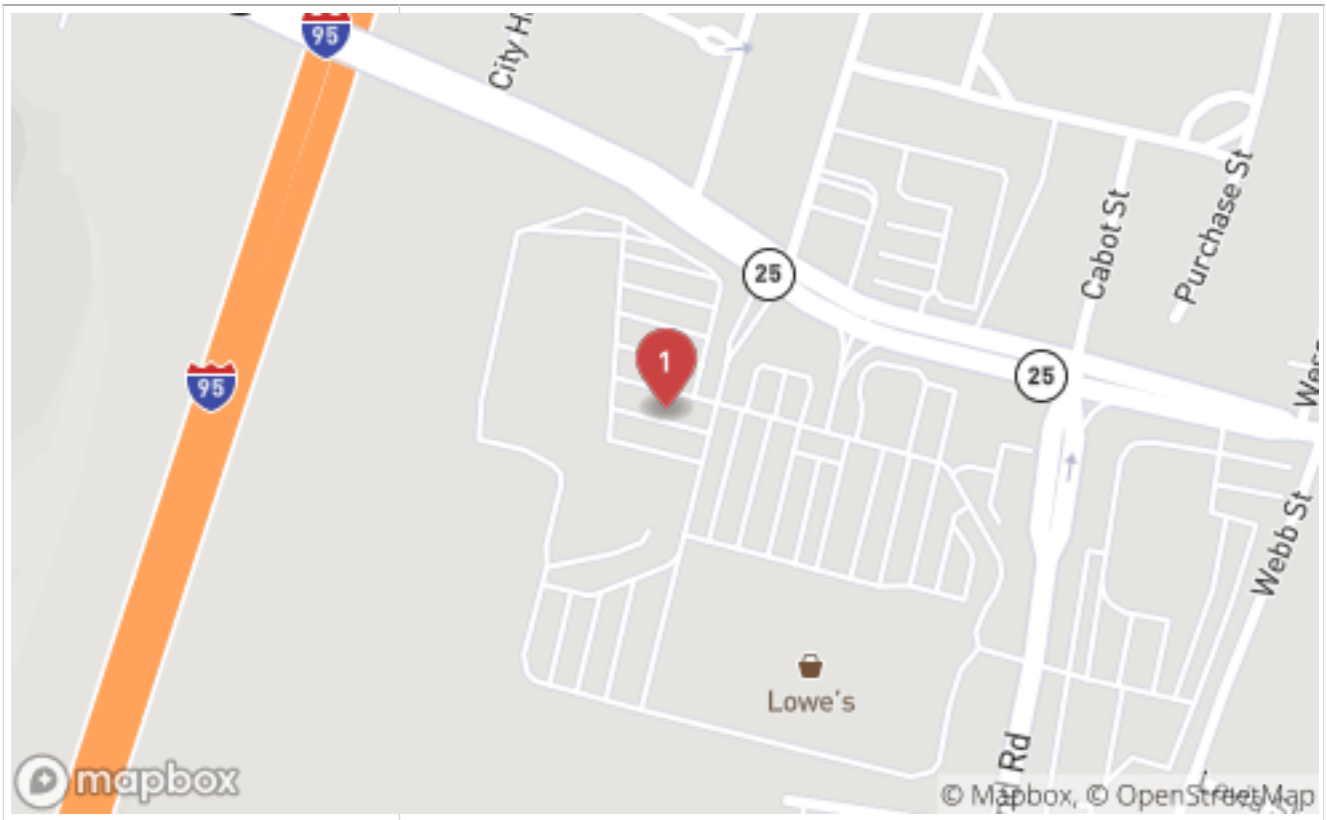
Portland, ME Building Inspection

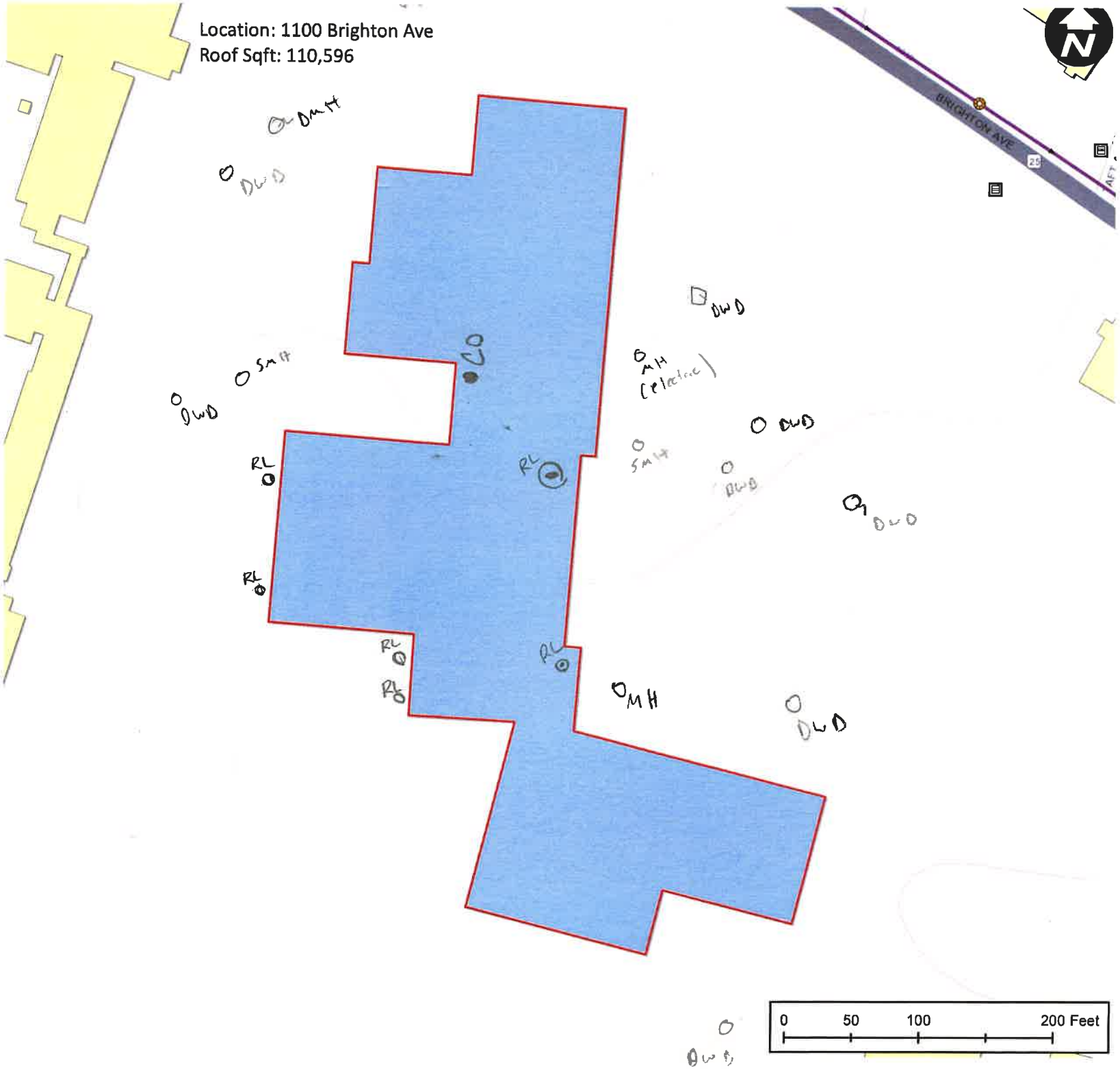
Outside Drain Comments:	All Driveway drains are catch basins
GENERAL COMMENTS:	Building is built in sections so possible multiple laterals exiting (Built on slab and can not locate) Can only locate 2 roof leaders from roof. There are more built inside columns
Additional Photo(s)	Cleanout located in back of old cvs Roof leaders 1 (May be main drain system for roof)

Date Submitted: 02-17-2020 11:06 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Form Locations




Location: 1100 Brighton Ave
Roof Sqft: 110,596
BRIGHTON AVE
28
N
DMH
DWD
SMH
OMH
(electric)
RL
0
50
100
200 Feet

Portland, ME Building Inspection

Section 1

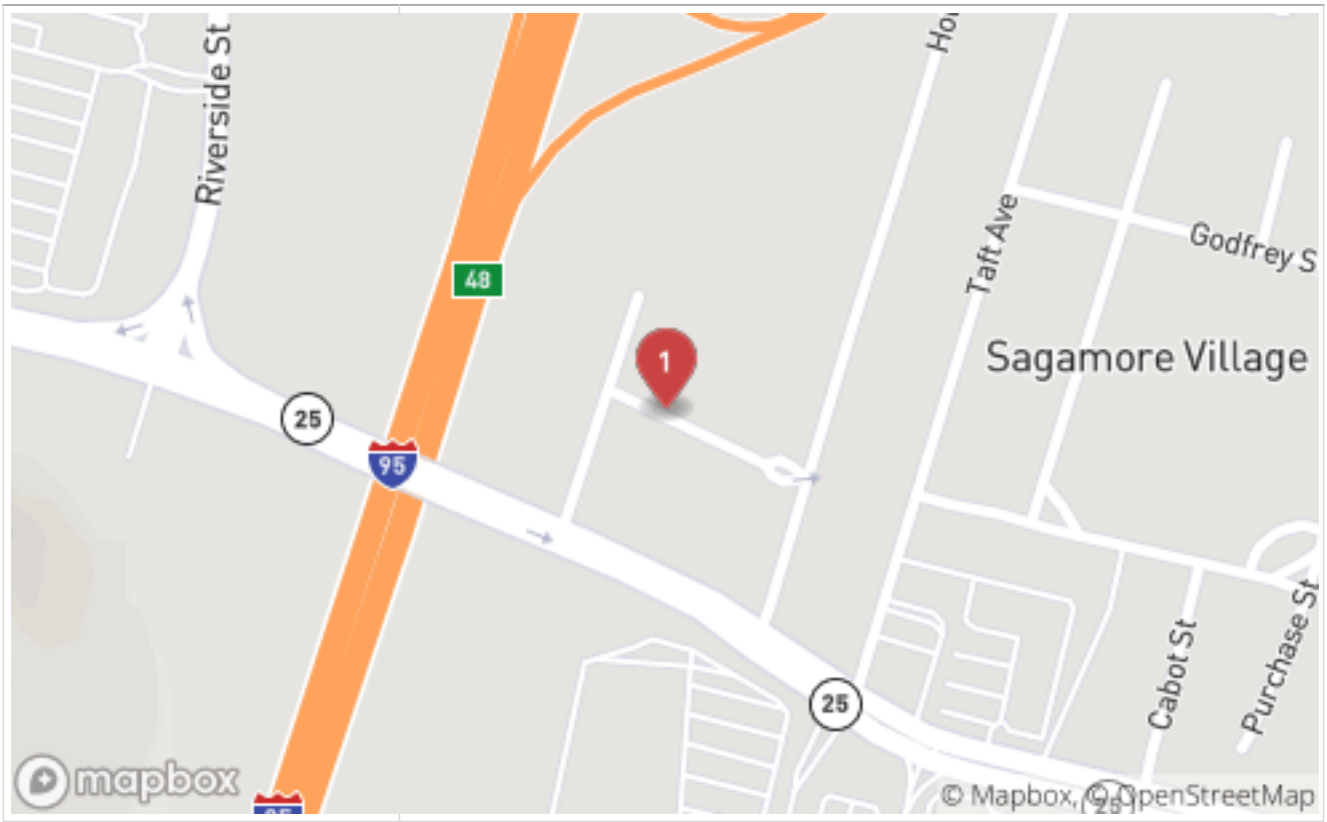
Municipality	Portland, ME
Job Number	20012
Subsystem	14
Interviewer	MATTHEW SILVA
Address	1125 Brighton Ave
Location Photo	
	43.676696, -70.325035
Business Name	Loring House Apartments (1)
Intial Date	02-04-2020
Time	08:20 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	This is one of several sewer exit points for this building.
2. Is there a sump pump in the basement?	No

Portland, ME Building Inspection

3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	3
Open Pipe (#)	0
Sump Pit (#)	0
Indoor Structure Comments:	All structures are located in first floor (no basement)
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders onto Surface (#)	2
Possible Flat Roof Drain System?	No
Are any outside drains present?	Yes
Yard Drains (#)	3
Window Well Drains (#)	0
Stairwell Drains (#)	1
Driveway Drains (#)	0
Outside Drain Comments:	Only drew in drains that weren't already on the map
GENERAL COMMENTS:	Contact: Peter Valcout - Maintenance Supervisor 207-762-1618. No Basement for building. 2 courtyards with drains (See sketch)

Portland, ME Building Inspection

Form Locations



Location: 1125 Brighton Ave

Roof Sqft: 34,134

Portland, ME Building Inspection

Section 1

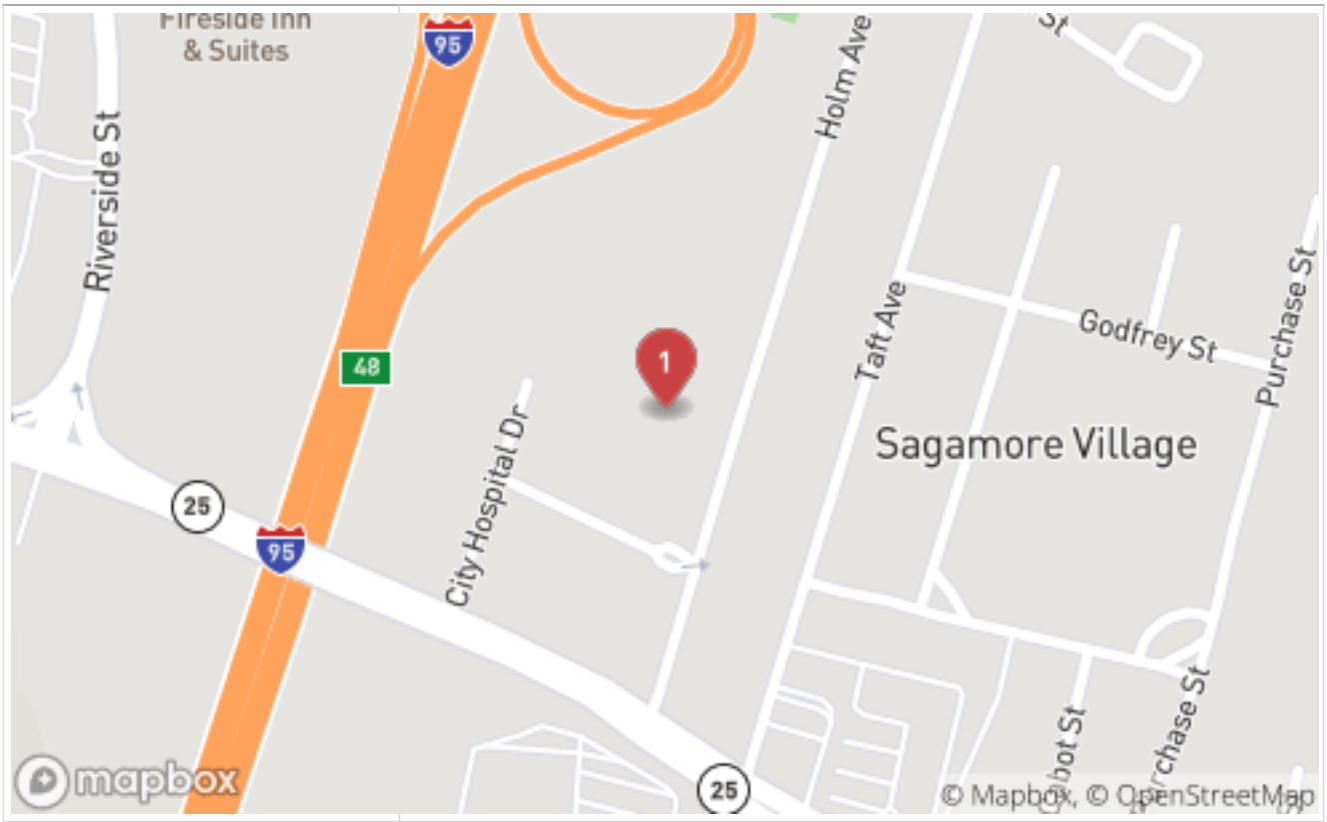
Municipality	Portland, ME
Job Number	20012
Subsystem	14
Interviewer	MATTHEW SILVA
Address	1125 R Brighton Ave
Location Photo	
	43.677200, -70.324143
Business Name	Loring House Apartments 2
Intial Date	02-04-2020
Time	09:03 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	1
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	2
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Roof leader that goes into ground could just drop out into surface under the deck
Are any outside drains present?	Yes
Yard Drains (#)	N/A
Window Well Drains (#)	N/A
Stairwell Drains (#)	N/A

Portland, ME Building Inspection

Driveway Drains (#)	N/A
Outside Drain Comments:	All outside drains already mapped out
GENERAL COMMENTS:	Point of Contact: Josh Stevens (Resident Service Director) Foundation is on slab. Multiple cleanout covers in floor of building.

Portland, ME Building Inspection

Form Locations



Location: 1125 Brighton Ave (A)
Roof Sqft: 27,702
RL
RL
RL
CITY HOSPITAL DR
136

Date Submitted: 02-18-2020 10:00 AM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	20
Interviewer	MATTHEW SILVA
Address	1140 Brighton Ave
Location Photo	
Business Name	Kon Asian Bistro/ Northern Lights Tobacco Shop
Intial Date	02-04-2020
Time	15:34 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Above the floor level approximately
Approximate # of inches above floor level	60
Sewer Exit Photo(s)	
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes

Portland, ME Building Inspection

Open Cleanout (#)	0
Basement Drain (#)	2
Open Pipe (#)	1
Sump Pit (#)	1
Access Pit (#)	0
Indoor Structure Comments:	Open pipe appears to be abandoned sewer line
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	5
Possible Flat Roof Drain System?	No
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	1
GENERAL COMMENTS:	All sewer runs out under Kon's side of building. Small flat area of roof present in front of building with drains that come off of the sides.
Additional Photo(s)	Sump pit
	Open pipe

BRIGHTON AVE
1162
1124
25
95
95
Location: 1140 Brighton Ave
Roof Sqft: 15,585
DWD
BD
SP
BD
Sewer
RL
RL
RL
RL
RL

Date Submitted: 02-18-2020 10:05 AM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

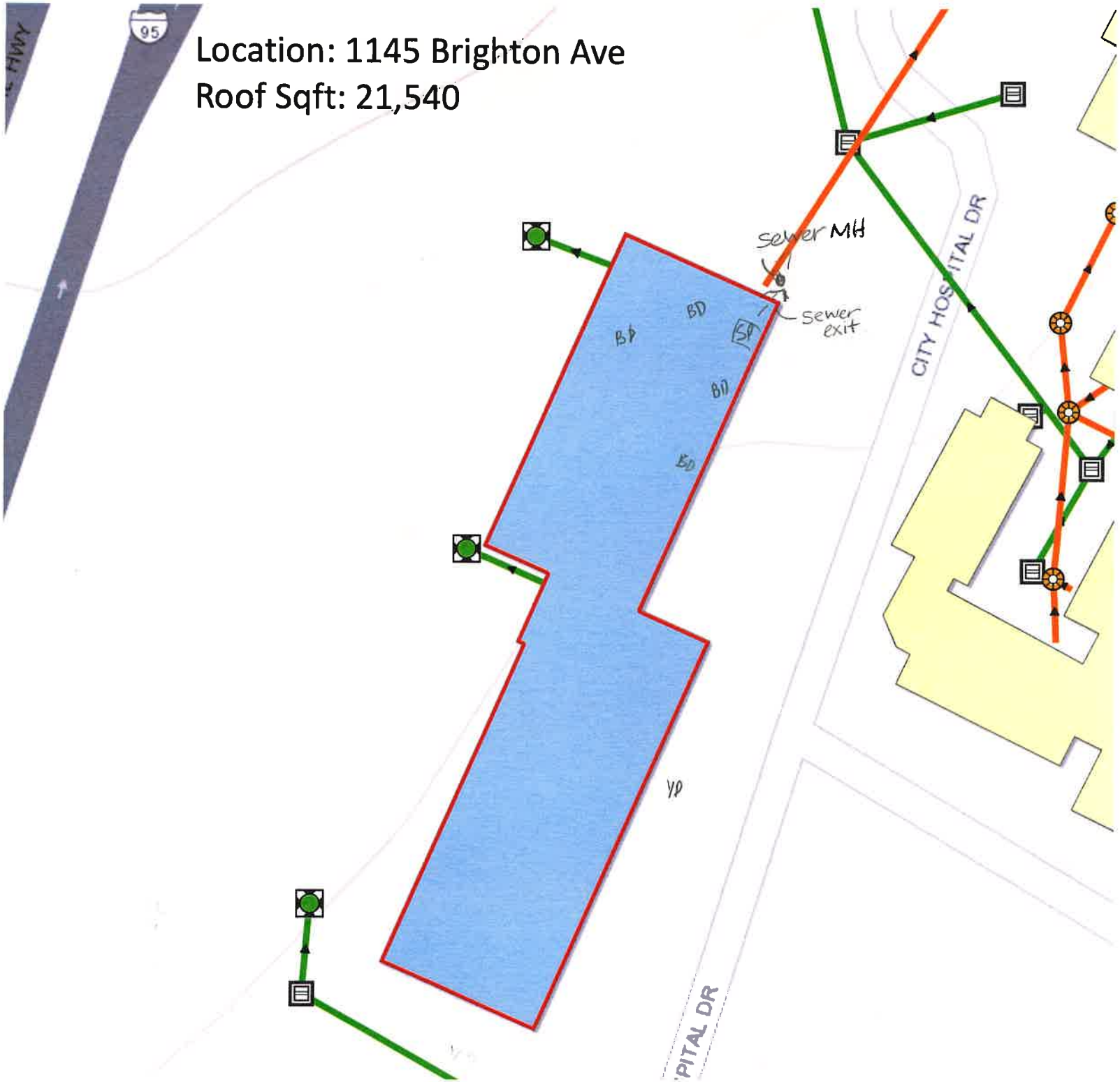
Municipality	Portland, ME
Job Number	20012
Subsystem	14
Interviewer	MATTHEW SILVA
Address	1145 Brighton Ave
Location Photo	
Business Name	Baron Center
Intial Date	02-04-2020
Time	14:53 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level approximately:
Approximate # of inches below floor level	48
2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Other

Portland, ME Building Inspection

Sump Pump Photo(s)	Sump pump 1 has hose from pump to basement drain Hose from sump 1 to BD
Sump Pump Comments:	Sump pump drains with a hose into basement drain
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	4
Open Pipe (#)	0
Sump Pit (#)	1
Access Pit (#)	0
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Roof drain is piped through building. Exits behind retaining wall
Are any outside drains present?	Yes
Yard Drains (#)	1
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	0
GENERAL COMMENTS:	Unable to locate sewer inside of building. Could only locate from outside through manhole

Portland, ME Building Inspection

Additional Photo(s)	Sewer lateral from outside in manhole next to building	Roof drain
	Roof drains exit point	

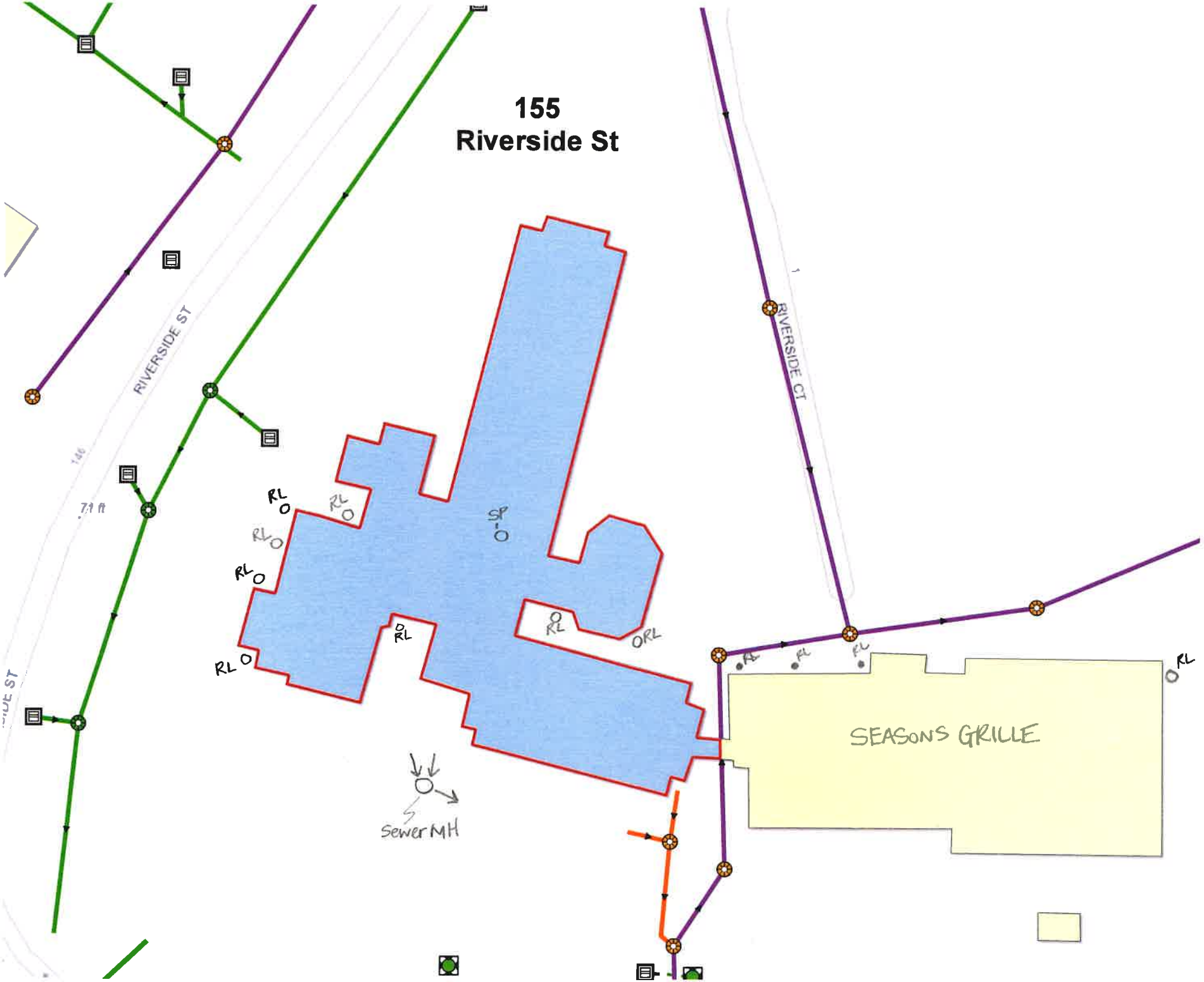

Location: 1145 Brighton Ave
Roof Sqft: 21,540
95
sewer MH
sewer exit
CITY HOSPITAL DR
BD
BD
BD
BD
SD
YD

Date Submitted: 02-21-2020 02:36 PM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	14
Interviewer	MATTHEW SILVA
Address	155 Riverside St. Season's Grille
Location Photo	
Business Name	Season’s (Ramada Plaza extension)
Intial Date	02-05-2020
Time	09:59 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	3
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	1
Possible Flat Roof Drain System?	No
Are any outside drains present?	No
GENERAL COMMENTS:	Roof leaders into ground discharge through retaining wall


155
Riverside St
RIVERSIDE ST
RIVERSIDE CT
SEASONS GRILLE
Sewer MH

Date Submitted: 02-18-2020 09:39 AM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

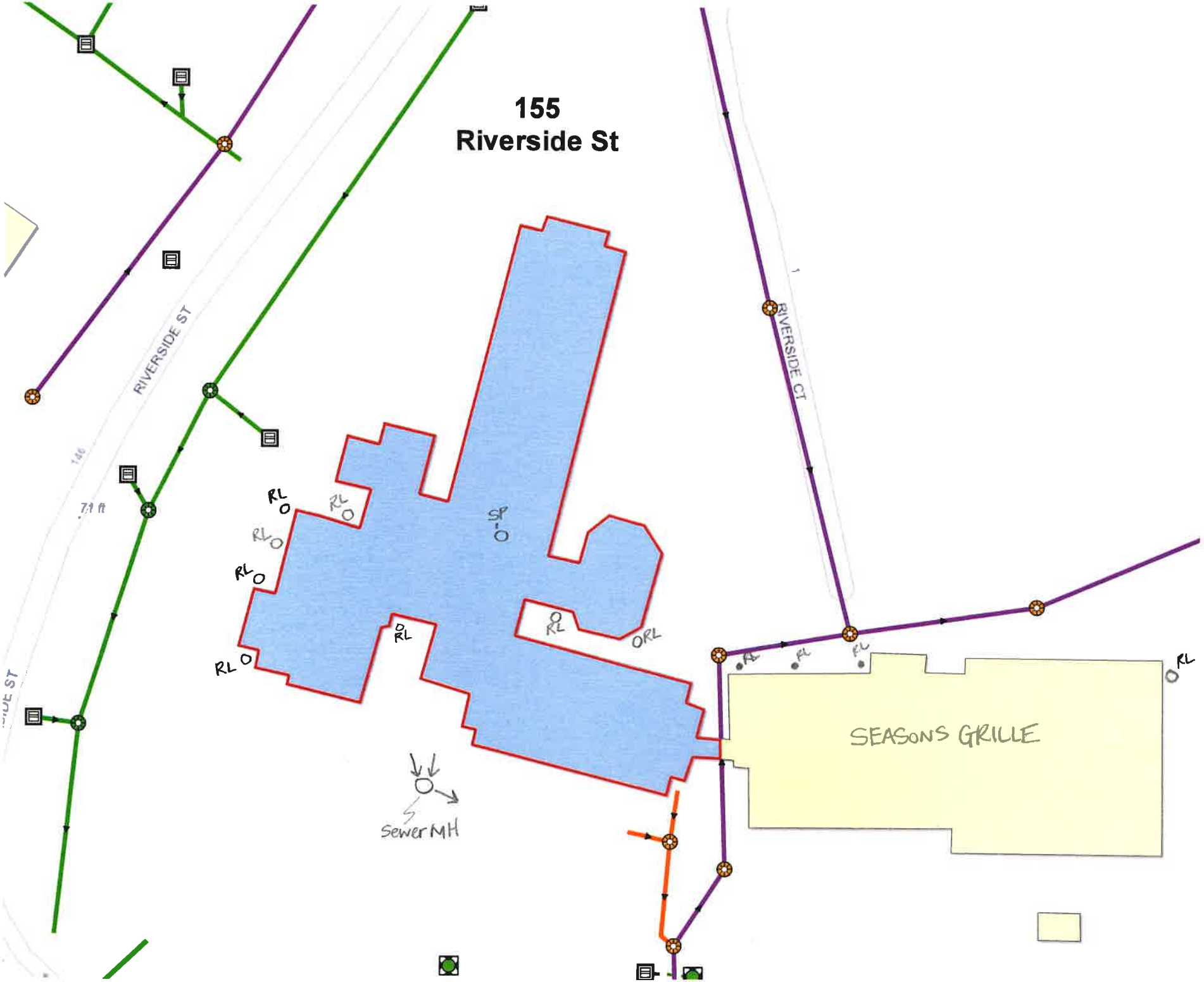
Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	14
Interviewer	MATTHEW SILVA
Address	155 Riverside St
Location Photo	
Business Name	Ramada Plaza
Intial Date	02-05-2020
Time	09:29 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Unknown
Sump Pump Photo(s)	
Sump Pump Comments:	Very dry and was told that it doesn't ever run

Portland, ME Building Inspection

3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	8
Possible Flat Roof Drain System?	No
Are any outside drains present?	No
GENERAL COMMENTS:	No Basement (built on slab) Sewer can only be seen from outside of building
Additional Photo(s)	 Picture of manhole drawn on sketch (laterals for hotel and restaurant


155
Riverside St
RIVERSIDE ST
RIVERSIDE CT
SEASONS GRILLE
Sewer MH

Date Submitted: 02-18-2020 03:11 PM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

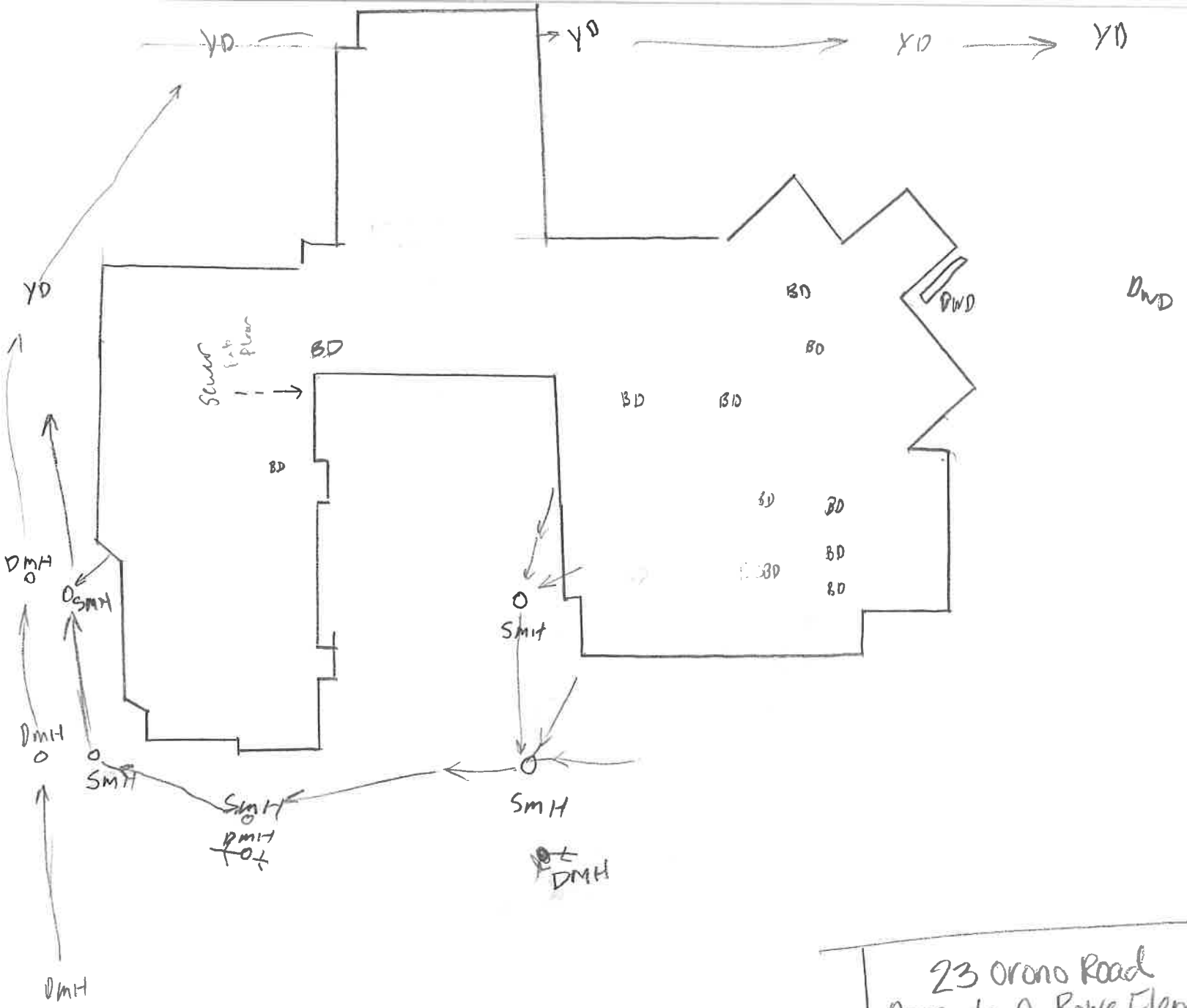
Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	15
Interviewer	MATTHEW SILVA
Address	23 Orono Rd
Location Photo	
Business Name	Amanda C. Rowe Elementary
Intial Date	02-04-2020
Time	13:31 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	#1
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0

Portland, ME Building Inspection

Basement Drain (#)	11
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	No basement - all structures are located on the first floor
4. Are there any outdoor structures present?	
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Roof is flat but all drains on roof drain out of side of building (See additional photo)
Are any outside drains present?	Yes
Yard Drains (#)	5
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	2
Outside Drain Comments:	Also 4 drain Manholes
GENERAL COMMENTS:	This building is only 2 years old (Old school has been torn down). All manholes were opened to verify where lines led.
Additional Photo(s)	Roof drains exit points (these can be located through out the outside of the building)



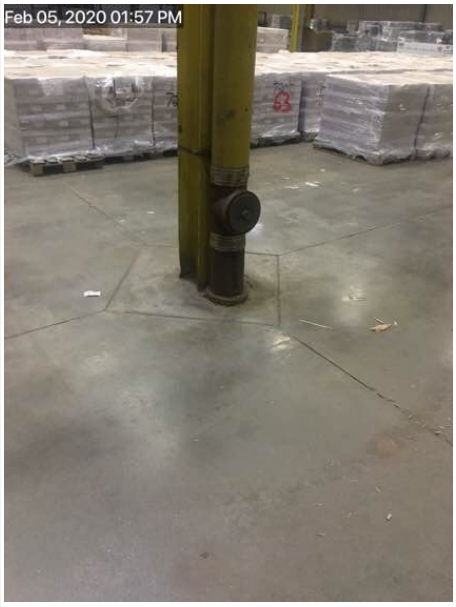
23 Orono Road
Amanda C. Rowe Elementary

Portland, ME Building Inspection

Section 1

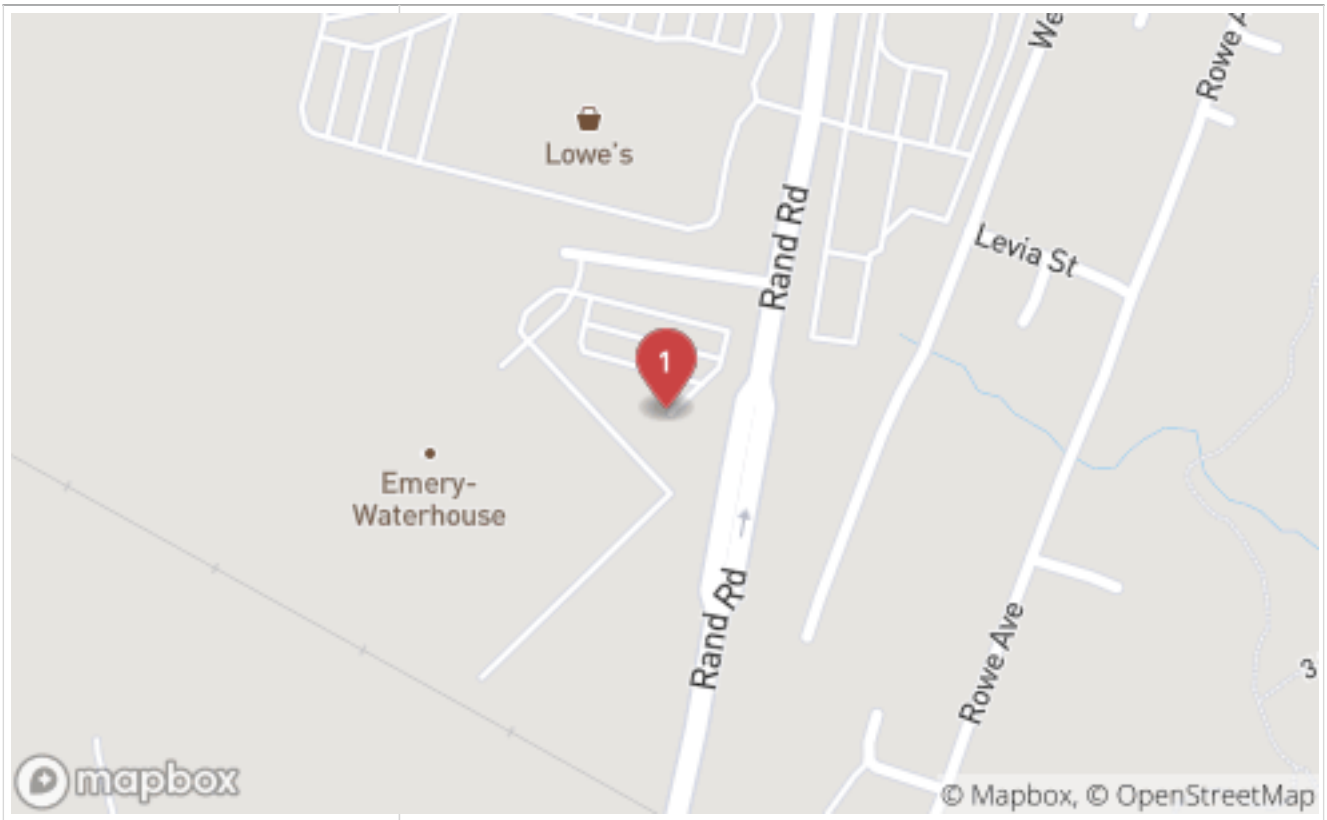
Municipality	Portland, ME
Job Number	20012
Subsystem	14
Interviewer	TG/JC
Address	7 Rand St
Location Photo	
	43.671012, -70.322709
Business Name	Boulous Company
Intial Date	02-05-2020
Time	13:57 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Foundation (#)	13
Roof Leaders onto Surface (#)	1
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Could not locate RL in office area

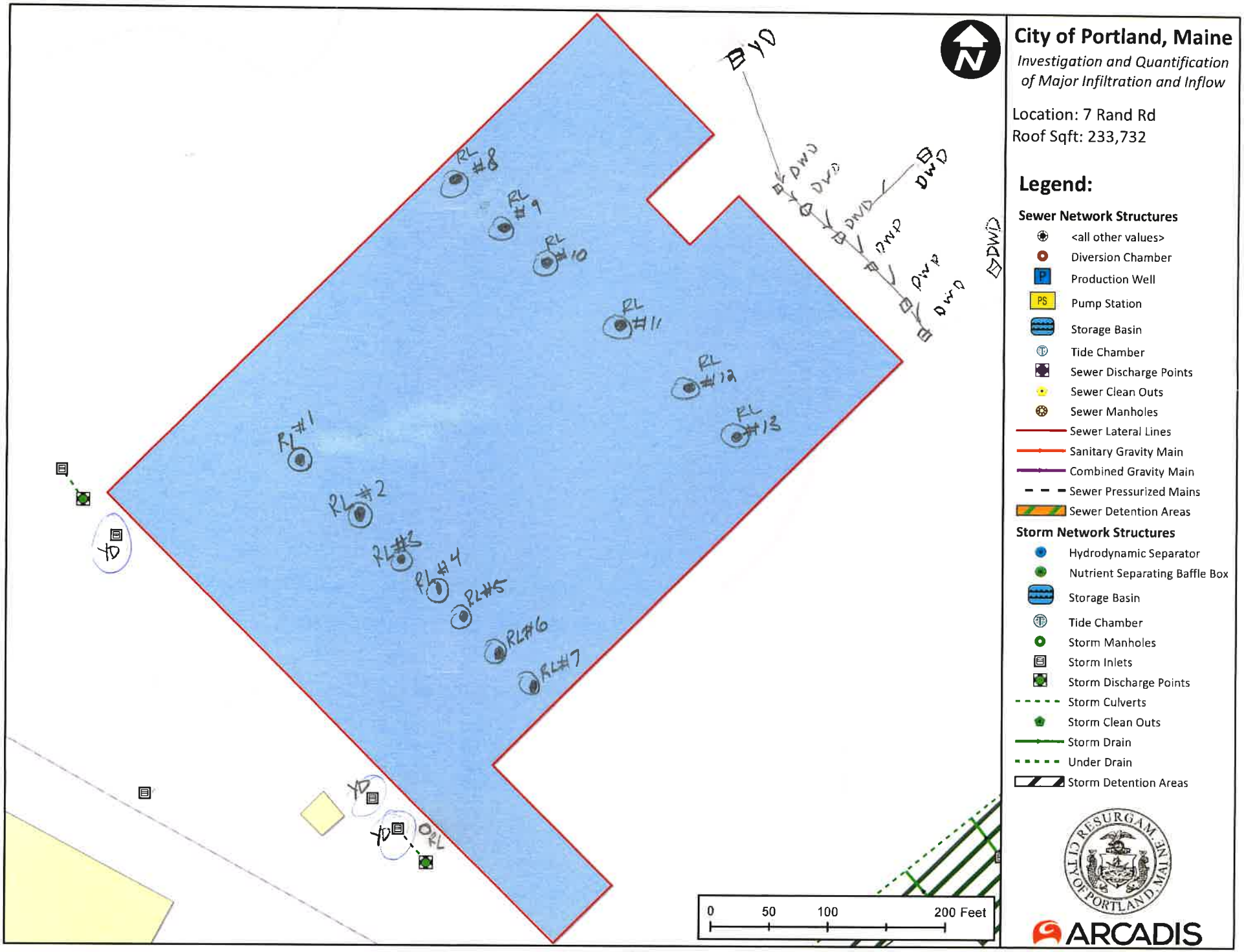
Portland, ME Building Inspection

Are any outside drains present?	Yes
Yard Drains (#)	4
Driveway Drains (#)	8
GENERAL COMMENTS:	Did not photograph all roof leaders
Additional Photo(s)	 RL 1 RL2 RL3

Portland, ME Building Inspection

Form Locations




City of Portland, Maine
Investigation and Quantification of Major Infiltration and Inflow
Location: 7 Rand Rd
Roof Sqft: 233,732
Legend:
Sewer Network Structures
<all other values>
Diversion Chamber
Production Well
Pump Station
Storage Basin
Tide Chamber
Sewer Discharge Points
Sewer Clean Outs
Sewer Manholes
Sewer Lateral Lines
Sanitary Gravity Main
Combined Gravity Main
Sewer Pressurized Mains
Sewer Detention Areas
Storm Network Structures
Hydrodynamic Separator
Nutrient Separating Baffle Box
Storage Basin
Tide Chamber
Storm Manholes
Storm Inlets
Storm Discharge Points
Storm Culverts
Storm Clean Outs
Storm Drain
Under Drain
Storm Detention Areas
RL #1
RL #2
RL #3
RL #4
RL #5
RL #6
RL #7
RL #8
RL #9
RL #10
RL #11
RL #12
RL #13
0
50
100
200 Feet
CITY OF PORTLAND, MAINE
ARCADIS

Portland, ME Building Inspection

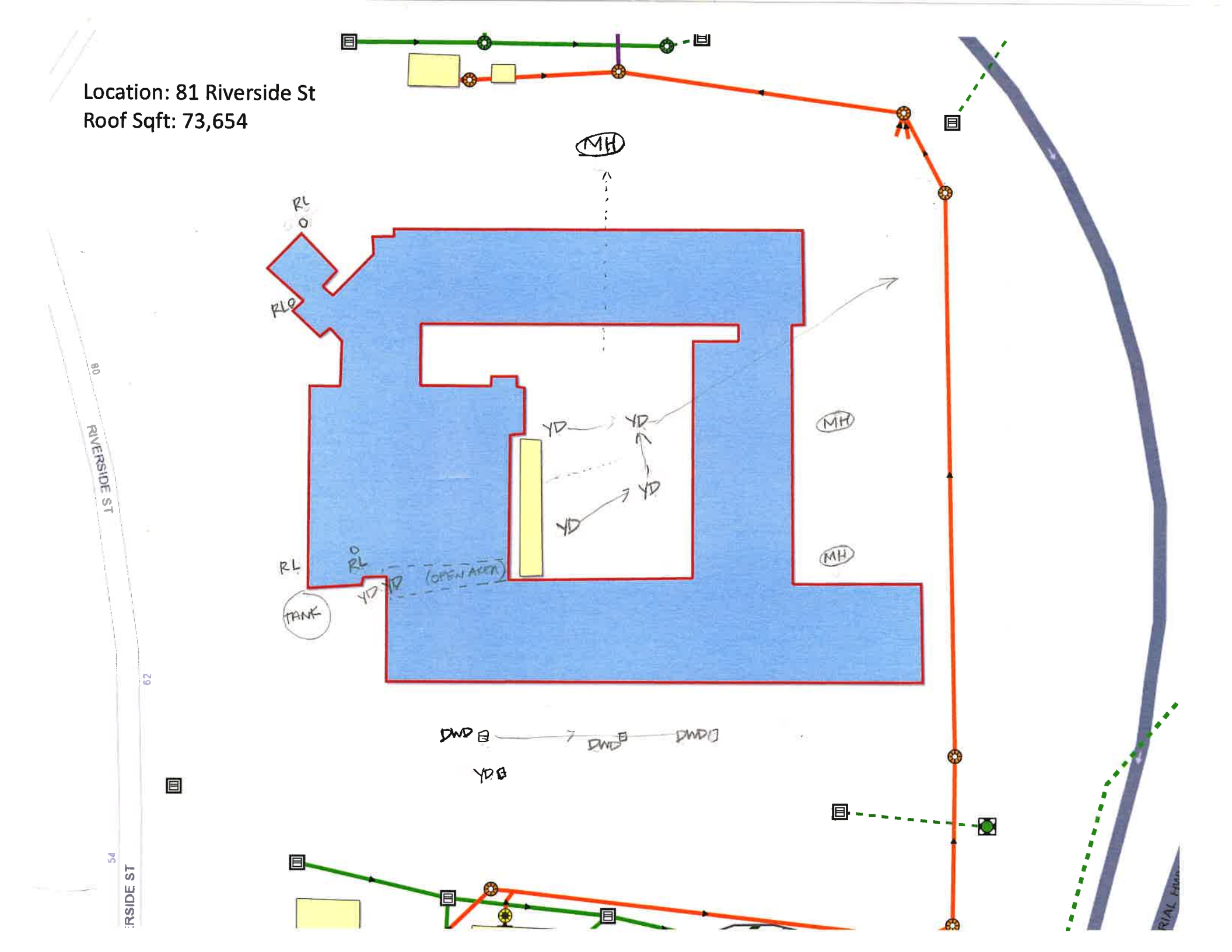
Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	14
Interviewer	TG/JC
Address	81 Riverside St
Location Photo	
Business Name	Fireside Inn
Intial Date	02-05-2020
Time	12:53 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders onto Surface (#)	4
Possible Flat Roof Drain System?	No
Are any outside drains present?	Yes
Yard Drains (#)	7
Driveway Drains (#)	3
Outside Drain Comments:	Yard drains in the courtyard discharge onto ground

Portland, ME Building Inspection

Additional Photo(s)	One of the roof leaders has a catchment tank teed into it collecting some of the water runoff	

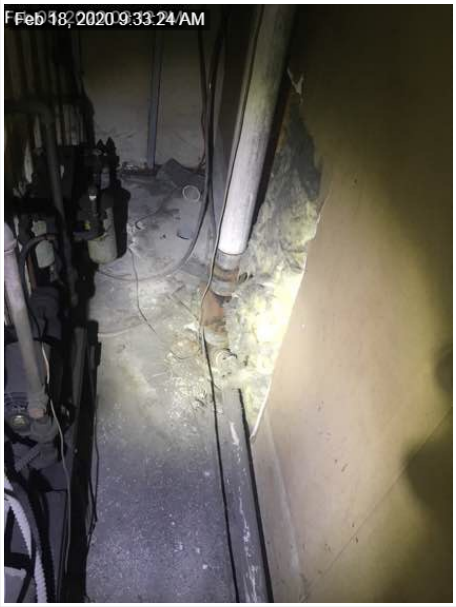
Location: 81 Riverside St
Roof Sqft: 73,654



Date Submitted: 02-18-2020 03:11 PM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	4
Interviewer	TG/JC
Address	150 Read St
Location Photo	
Business Name	Bunzl Distribution
Intial Date	02-05-2020
Time	15:12 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	

Portland, ME Building Inspection

2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	7
Possible Flat Roof Drain System?	No
Are any outside drains present?	No

Location: 150 Read St
Roof Sqft: 58,639
HWSD
RL
RL
RL
RL
RL
RL
RL
SLANT
CANCO RD
CANCO RD

Date Submitted: 02-11-2020 11:15 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	12
Interviewer	MATTHEW SILVA
Address	162 Canco Rd
Location Photo	
	43.682870, -70.283655
Business Name	Central Maine Power
Intial Date	02-11-2020
Time	10:06 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Above the floor level approximately
Approximate # of inches above floor level	144
Sewer Exit Photo(s)	 Arrow points sewer out
2. Is there a sump pump in the basement?	No

Portland, ME Building Inspection

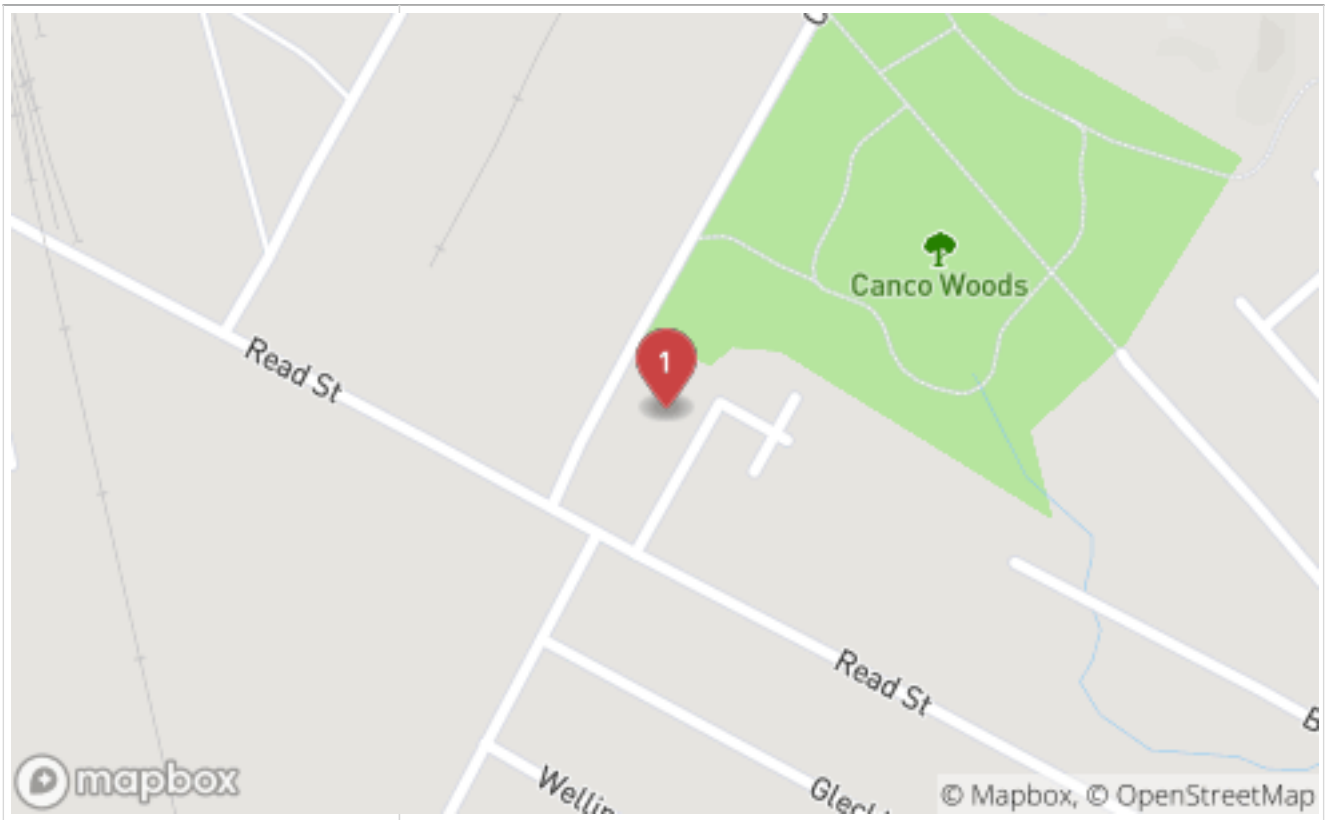
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	13
Open Pipe (#)	0
Sump Pit (#)	0
Indoor Structure Comments:	All basement drains go into oil/water pit (separator)
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	9
Roof Leaders onto Surface (#)	2
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	All roof drains go into foundation throughout building One other goes into wall
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	4
Outside Drain Comments:	All drains are catch basins
GENERAL COMMENTS:	Was told that everything is combined in building

Portland, ME Building Inspection

Additional Photo(s)		
	Basement pumps for downstairs bathroom	Oil/ Water separator all roof drains drain into this pit

Portland, ME Building Inspection

Form Locations



Location: 162 Canco Rd
Roof Sqft: 54,520

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	12
Interviewer	TG/JC
Address	165 Read St
Location Photo	
	43.682868, -70.285441
Business Name	Americold Logistics
Intial Date	02-05-2020
Time	15:45 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth

Portland, ME Building Inspection

Sewer Exit Photo(s)	Clean outs where we believe sewer exits	Where all the bathrooms drain to before entering foundation
2. Is there a sump pump in the basement?	No	
3.Are there any additional structures present which could collect water from the basement floor?	Yes	
Basement Drain (#)	2	
Indoor Structure Comments:	2 evaporator catchment tanks that pump to the sewer - See photo	
4. Are there any outdoor structures present?	Yes	
Roof Leaders into Ground (#)	6	
Roof Leaders into Foundation (#)	5	
Roof Leaders onto Surface (#)	5	
Possible Flat Roof Drain System?	Yes	
Are any outside drains present?	Yes	
Driveway Drains (#)	4	
Outside Drain Comments:	2 more drains from unknown sources into the ground (See photos)	

Portland, ME Building Inspection

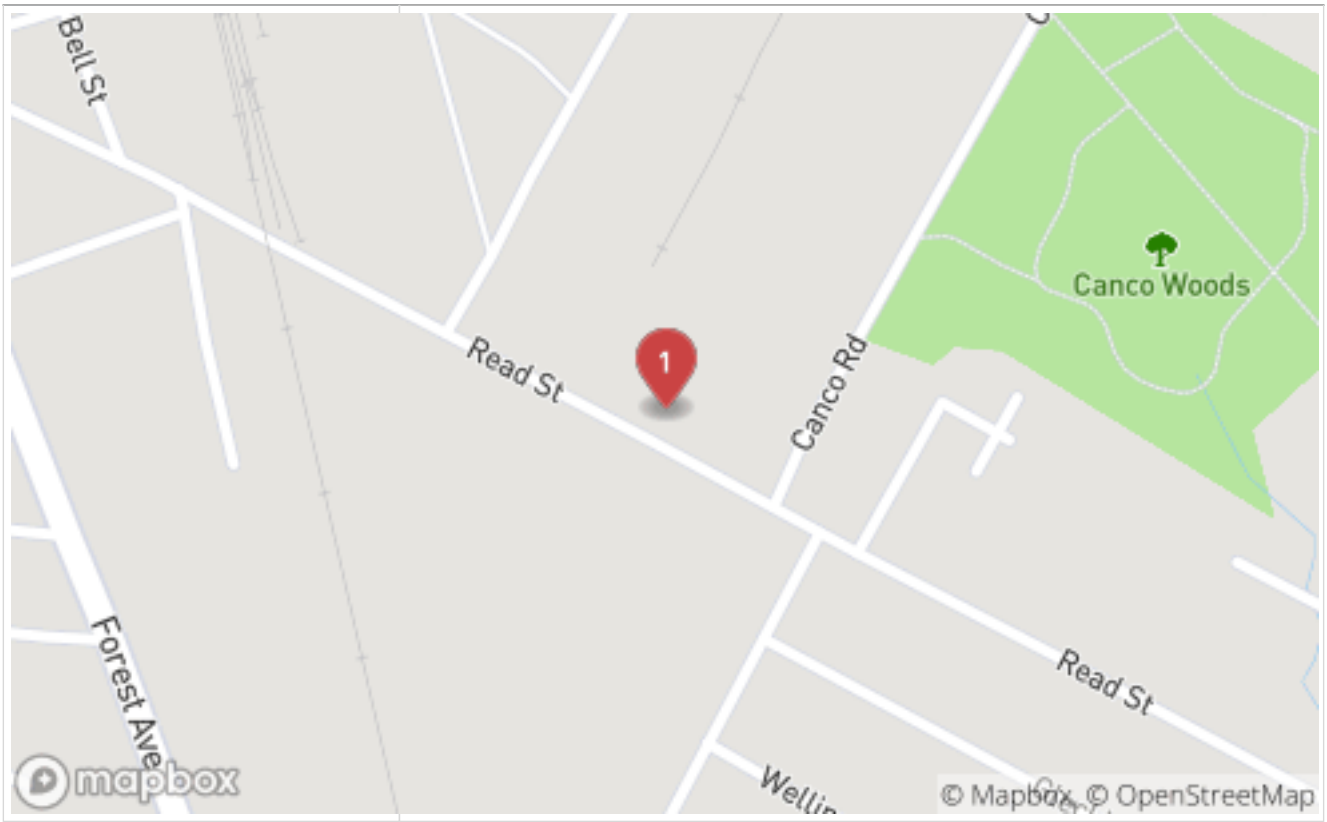
Additional Photo(s)		
	RI into foundation.	Floor drain
	Catchment drain for freezer evaporators. When the tank fills it is pumped to the sewer according to employee	One of the drains that exits to ground surface. This is where it has been separated from an old pipe into the foundation.

Portland, ME Building Inspection

	Exterior RL into the ground with cast iron pipe	Drain from unknown source into ground with cast iron pipe
	Drain from unknown source into ground with pvc pipe	

Portland, ME Building Inspection

Form Locations



Location: 165 Read St
Roof Sqft: 89,690
CANCO RD
READ ST
DRAIN FROM UNKNOWN SOURCE
DRAIN FROM UNKNOWN
RL into wall
RL into floor
main sewer out
SMH
MH
FD
BD
DWD
RL

Portland, ME Building Inspection

Section 1

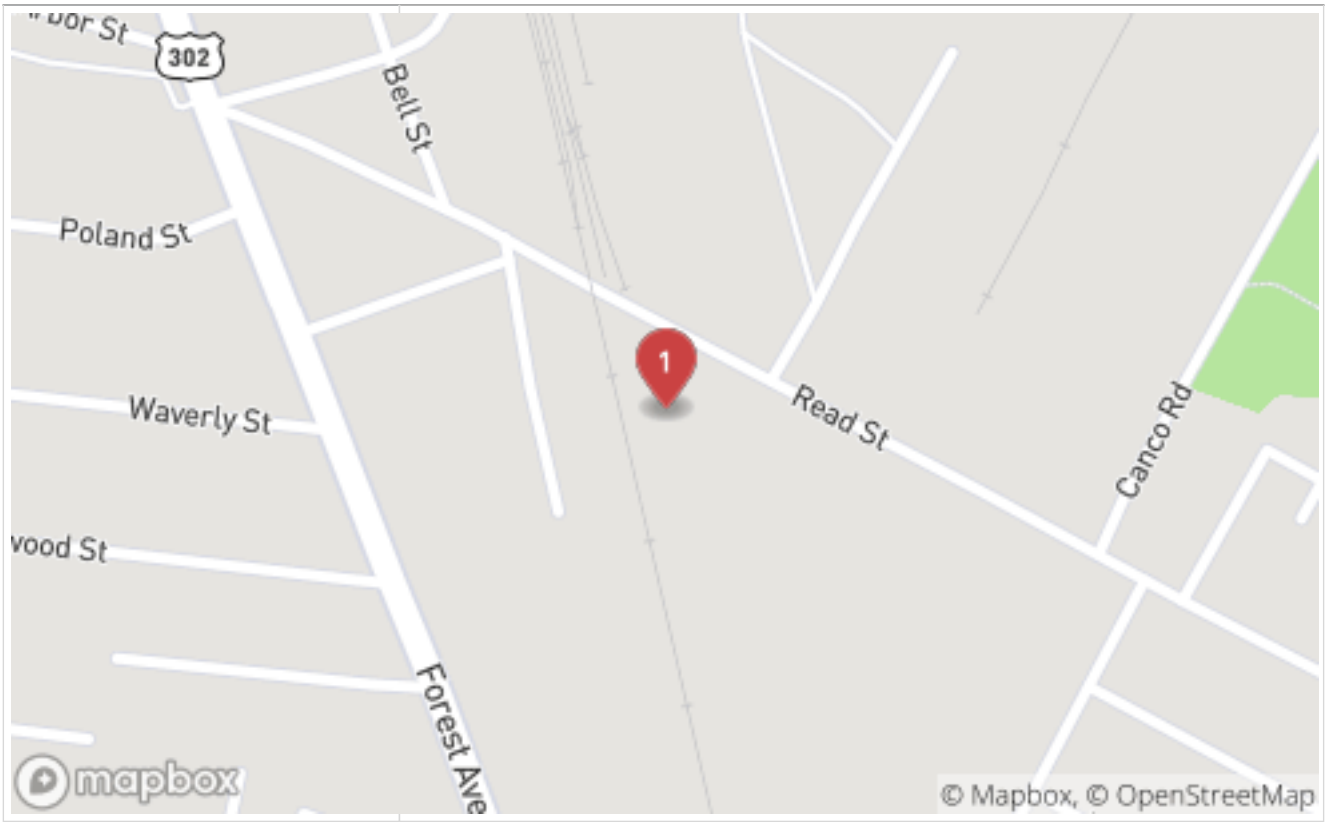
Municipality	Portland, ME
Job Number	20012
Subsystem	12
Interviewer	TG/JC
Address	182-184 Read St
Location Photo	
	43.683145, -70.288053
Business Name	Shipyard Brewing Distribution
Intial Date	02-06-2020
Time	15:49 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Foundation (#)	13
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	All roof leaders exit below foundation floor
Are any outside drains present?	No

Portland, ME Building Inspection

Additional Photo(s)		
	One of two roof drains along back wall	Roof drains along posts

Portland, ME Building Inspection

Form Locations



Location: 182 Read St
Roof Sqft: 105,731

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	12
Interviewer	TG/JC
Address	217 Read St
Location Photo	
	43.684277, -70.287082
Business Name	Read Street Self Storage
Intial Date	02-06-2020
Time	10:29 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth

Portland, ME Building Inspection

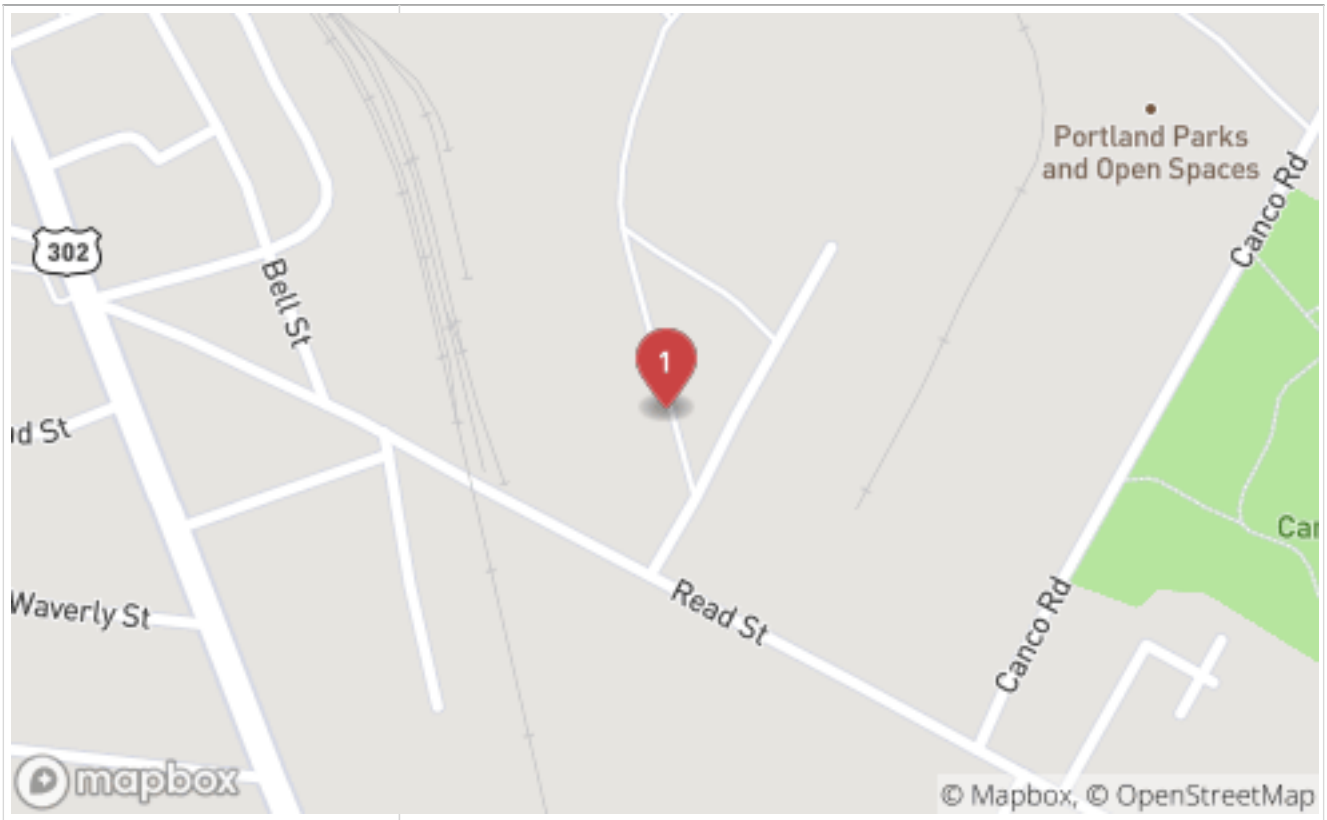
Sewer Exit Photo(s)	All sewer lines seem to exit here under the dirt in an unknown direction	All roof leaders seem to collect into this large pipe and exit here, except for the garage area which goes strait into the foundation
2. Is there a sump pump in the basement?	No	
3.Are there any additional structures present which could collect water from the basement floor?	Yes	
Sump Pit (#)	1	
Indoor Structure Comments:	It appears that there was once a sump pump in the current pit but is not used anymore	
4. Are there any outdoor structures present?	Yes	
Roof Leaders into Ground (#)	0	
Roof Leaders into Foundation (#)	18	
Roof Leaders onto Surface (#)	1	
Possible Flat Roof Drain System?	Yes	
Roof Leader or Flat Roof Drain Comments:	Also believe roof drains further into the building; other units may also drain to this pipe	
Are any outside drains present?	Yes	
Stairwell Drains (#)	1	
Driveway Drains (#)	3	
Outside Drain Comments:	DWD1 may actually be a sewer line with a catch basin cover. Lots of flow, lots of heat coming out of it, and smelled like burnt coffee.	
GENERAL COMMENTS:	The self storage business extends further than the supplied drawing shows. Added a line to show approximately where it ends on the map. Garage area structures are included with 40 Quarry Road inspection however we believe this is a multi-use space for the entire building.	

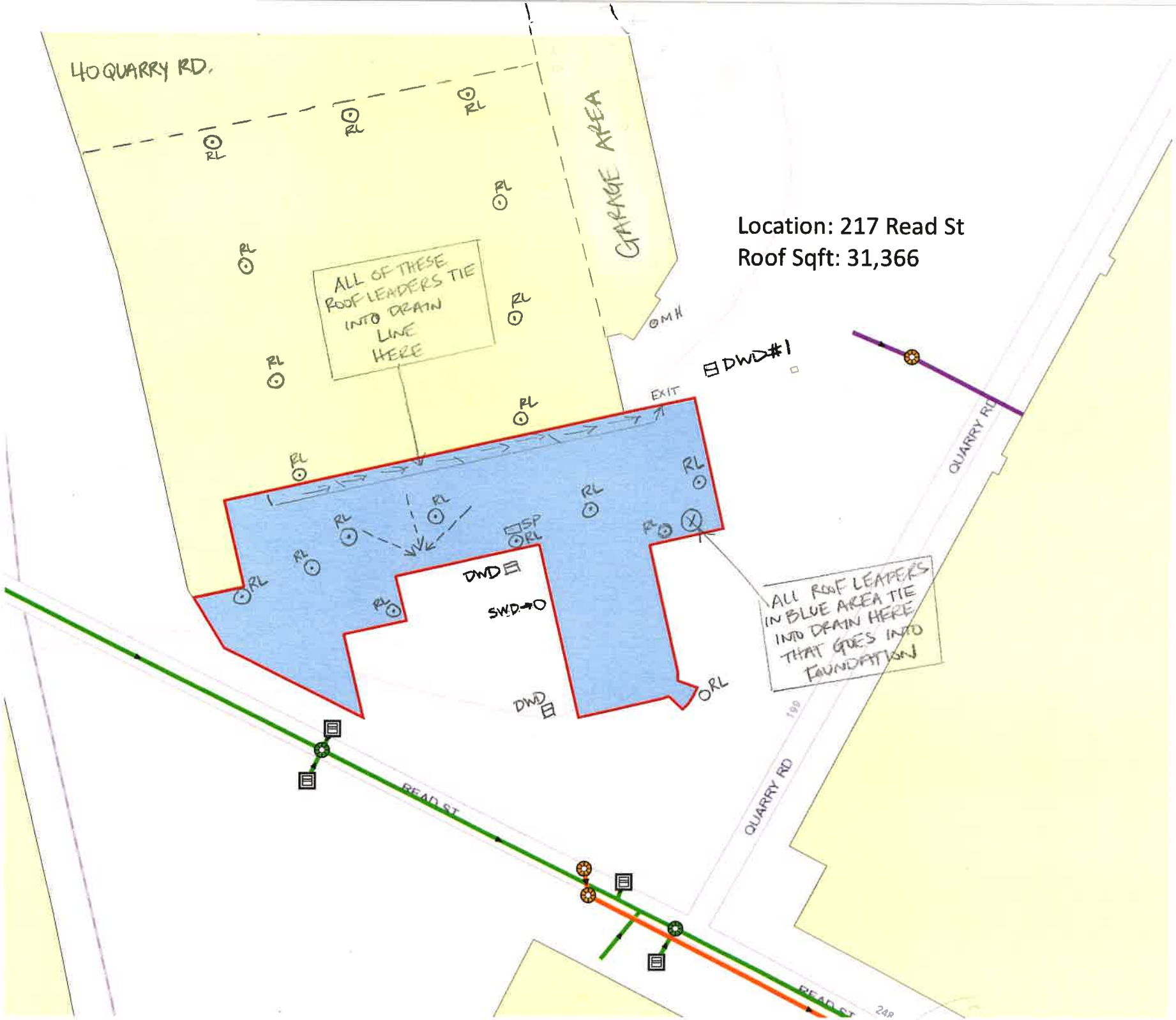
Portland, ME Building Inspection

Additional Photo(s)	Sump pit	5 roof drains from blue area drain to here

Portland, ME Building Inspection

Form Locations




40 QUARRY RD.
GARAGE AREA
ALL OF THESE ROOF LEADERS TIE INTO DRAIN LINE HERE
Location: 217 Read St
Roof Sqft: 31,366
DWD#1
EXIT
SP
DWD
SWD
ALL ROOF LEADERS IN BLUE AREA TIE INTO DRAIN HERE THAT GOES INTO FOUNDATION
QUARRY RD
READ ST
RL

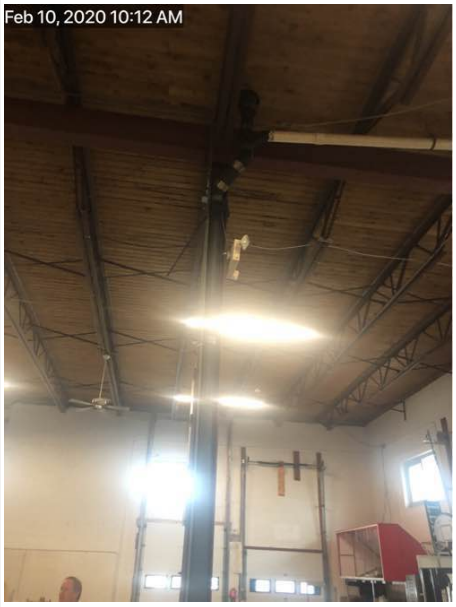
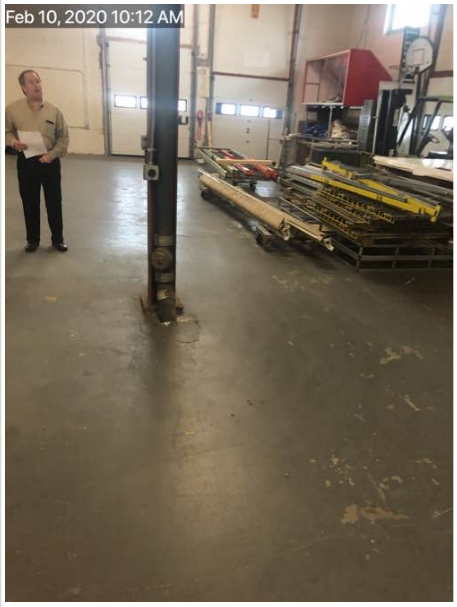
Date Submitted: 02-10-2020 10:36 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

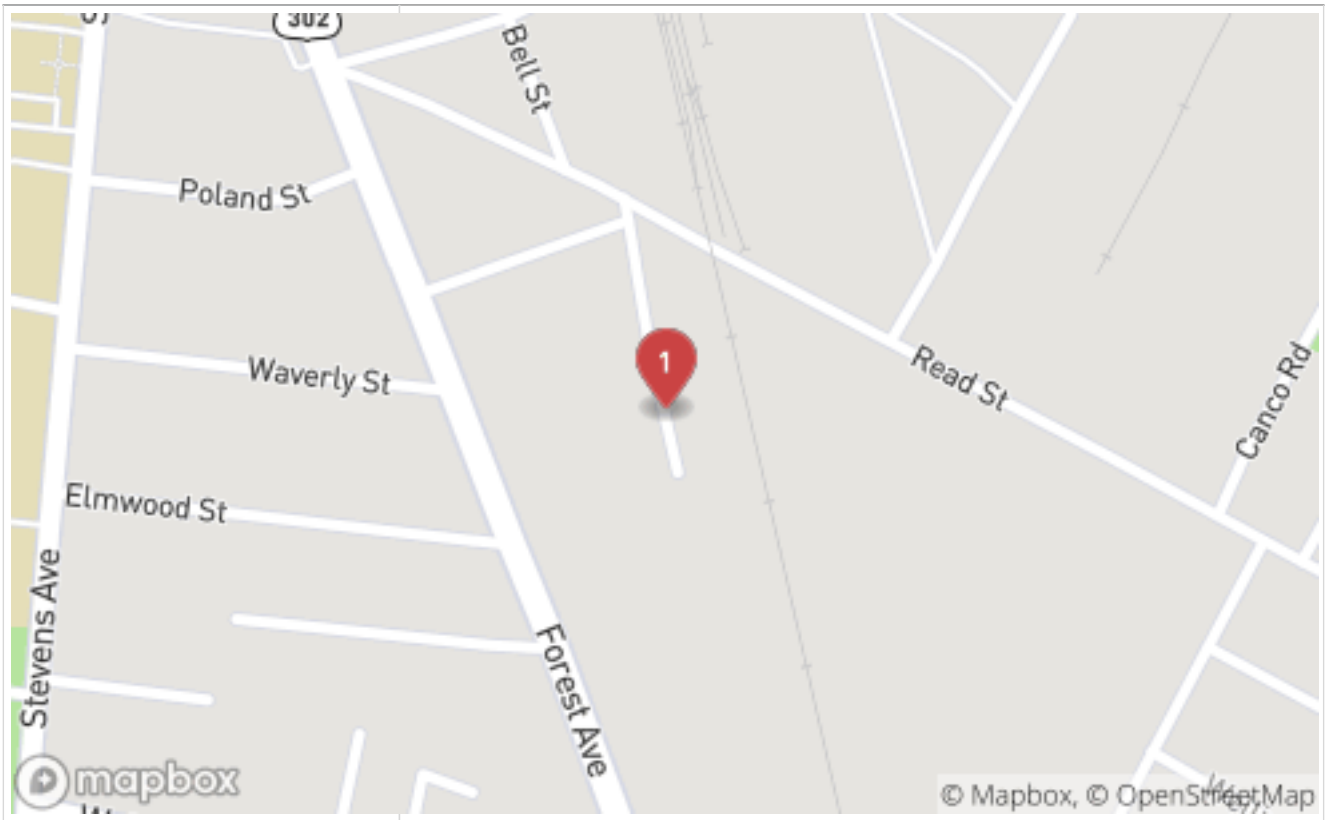
Municipality	Portland, ME
Job Number	20012
Subsystem	12
Interviewer	MATTHEW SILVA
Address	250/256 Read St
Location Photo	
	43.682917, -70.289013
Business Name	Leavitt and Parris
Intial Date	02-10-2020
Time	10:08 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	1
Roof Leaders onto Surface (#)	2
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	1 roof drain goes through foundation into floor. Other drains out of back of building
Are any outside drains present?	No
GENERAL COMMENTS:	Built on slab. Unable to locate sewer.

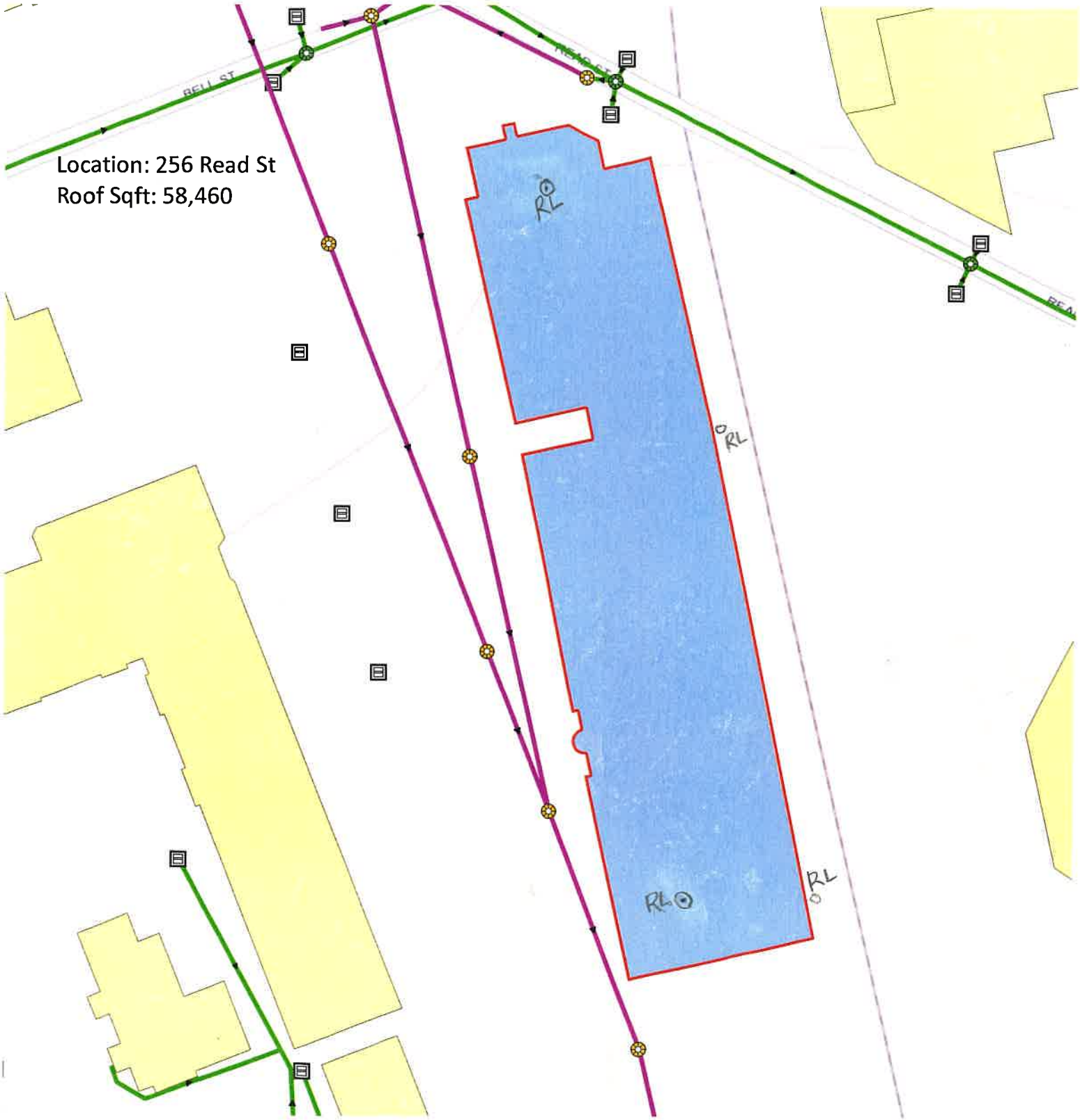
Portland, ME Building Inspection

Additional Photo(s)	 Roof drain through garage floor	 Exit for roof drain into floor
	Roof drain into building on Otto side of building	

Portland, ME Building Inspection

Form Locations



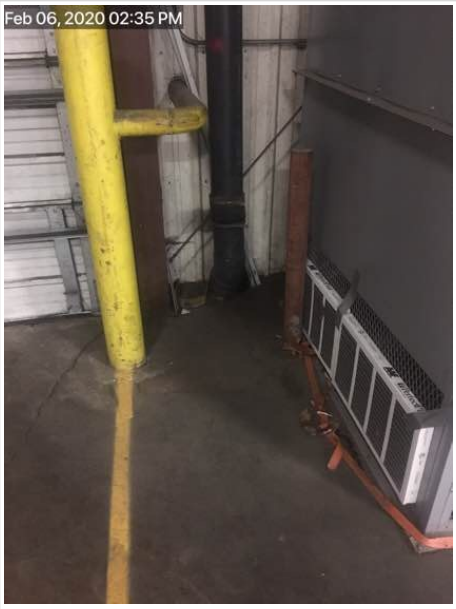
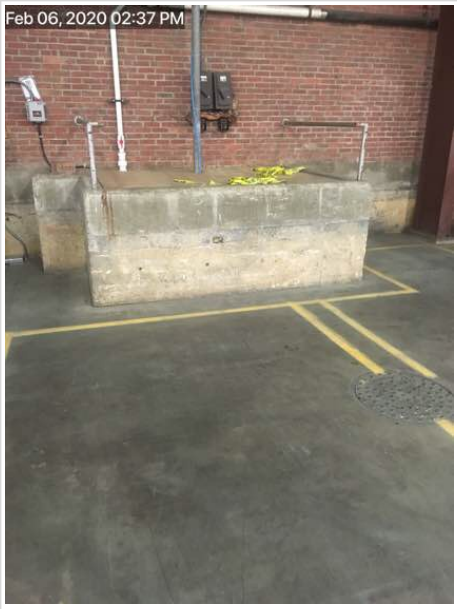

Location: 256 Read St
Roof Sqft: 58,460
RL
RL
RL
RL

Portland, ME Building Inspection

Section 1

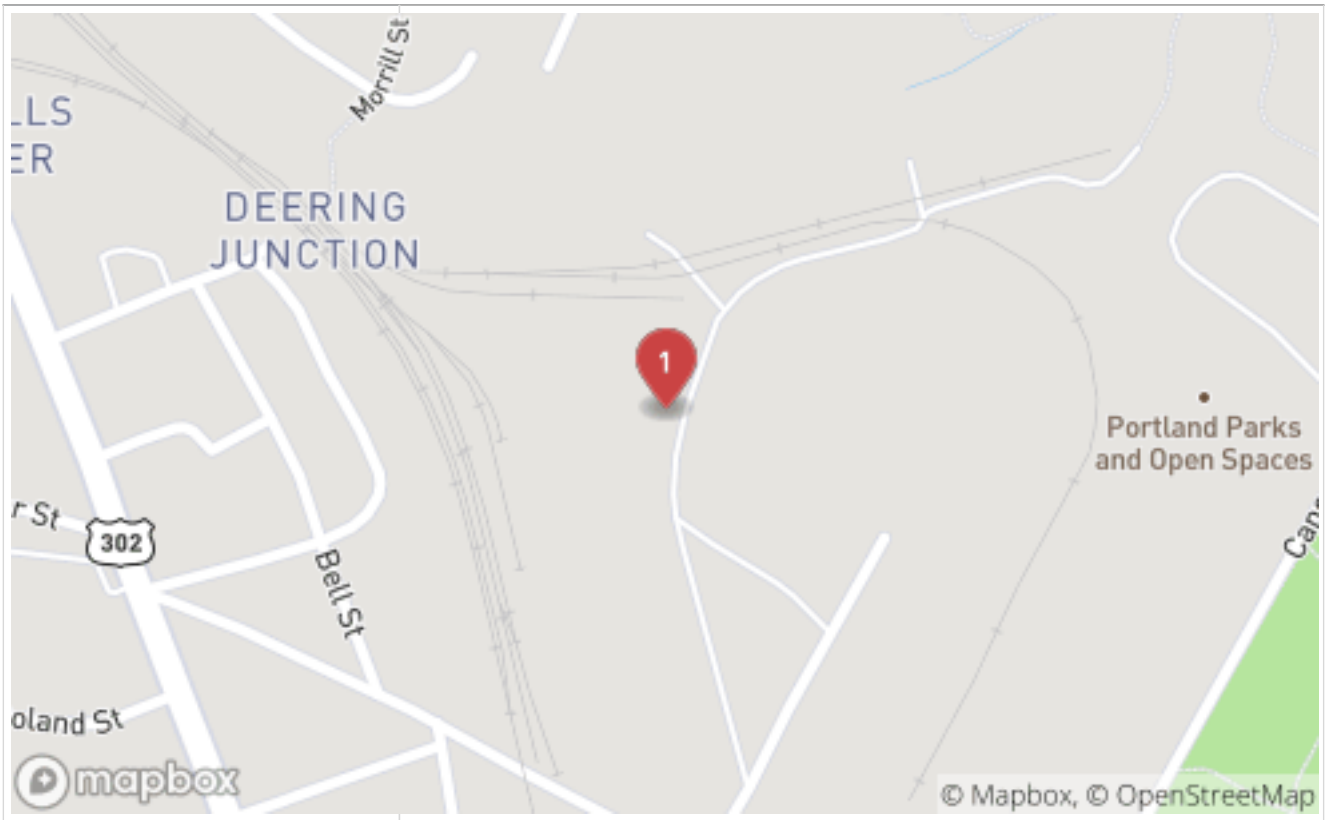
Municipality	Portland, ME
Job Number	2000X
Subsystem	12
Interviewer	TG/JC
Address	70 Quarry Rd
Location Photo	
	43.685966, -70.287509
Business Name	NEPW Logistics
Intial Date	02-06-2020
Time	14:35 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Other
Sump Pump Comments:	See sump pit photo in additional photos.
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Foundation (#)	14
Possible Flat Roof Drain System?	Yes

Portland, ME Building Inspection

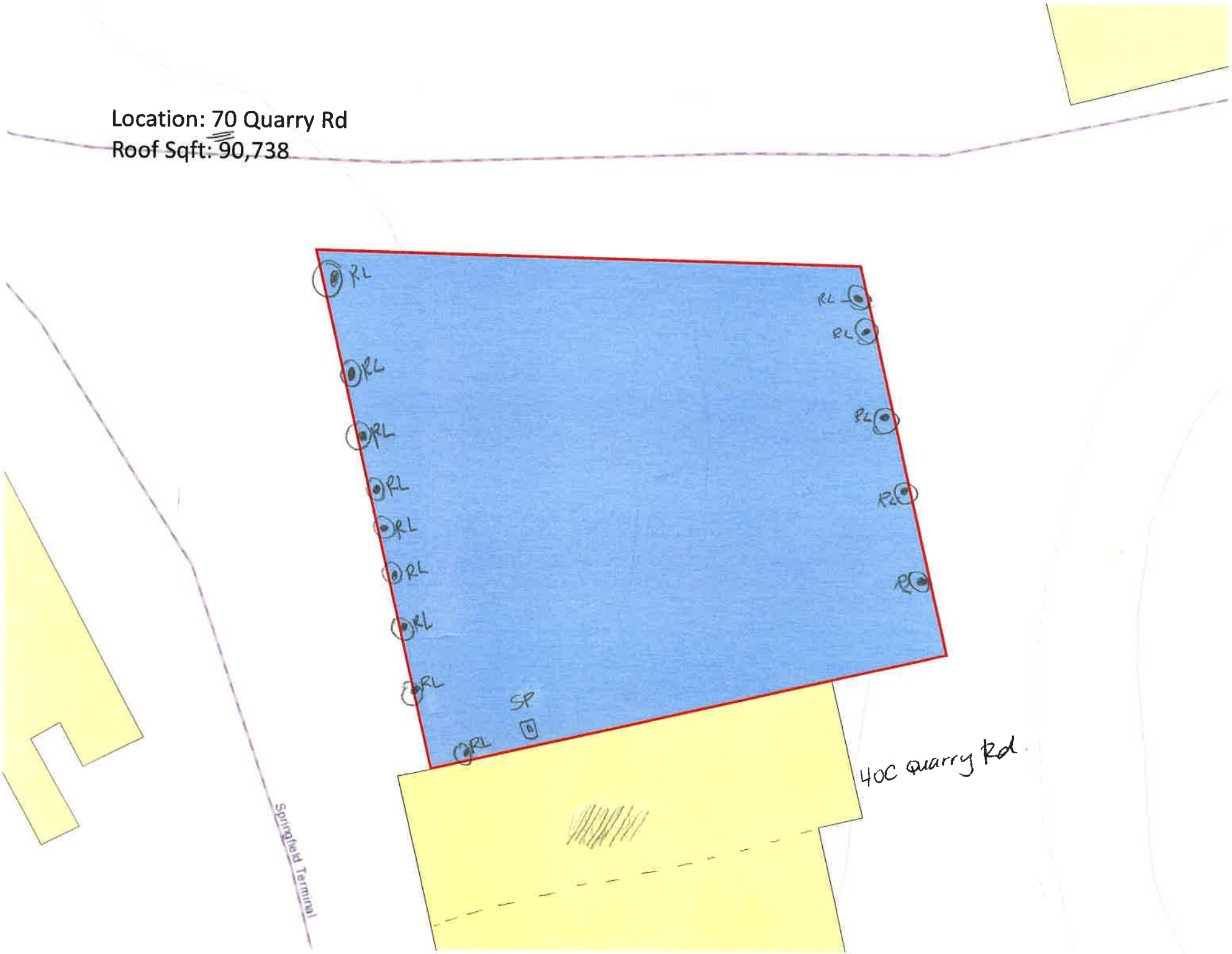
Roof Leader or Flat Roof Drain Comments:	Likely connect to 217 Read St drain pipe
Are any outside drains present?	No
Additional Photo(s)	 Roof drains into foundation  Large sump pit. Pumps to roof leader pipe

Portland, ME Building Inspection

Form Locations



Location: 70 Quarry Rd
Roof Sqft: 90,738



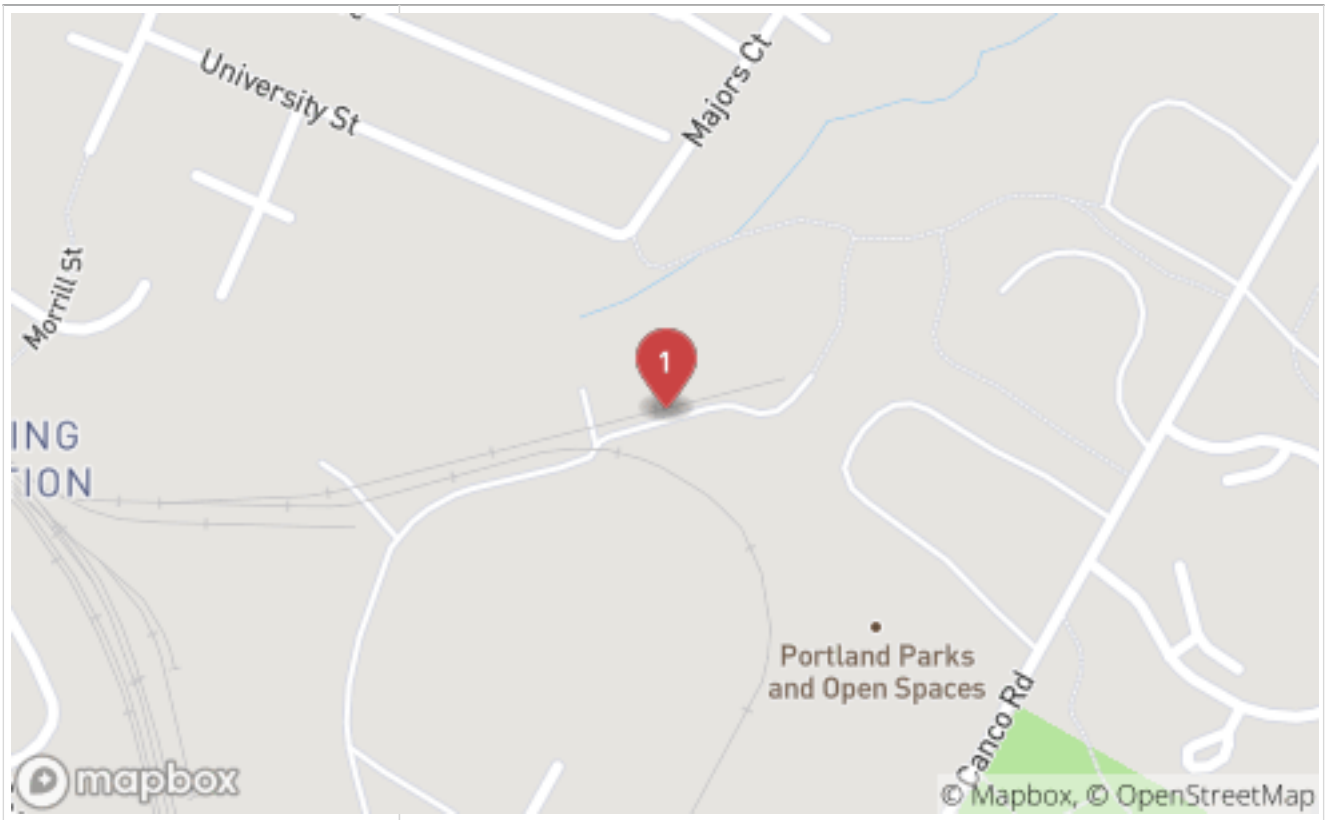
Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	12
Interviewer	TG/JC
Address	90 Quarry Rd
Location Photo	
	43.687295, -70.284881
Business Name	NEPW Logistics
Intial Date	02-06-2020
Time	15:24 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	No
Are any outside drains present?	No

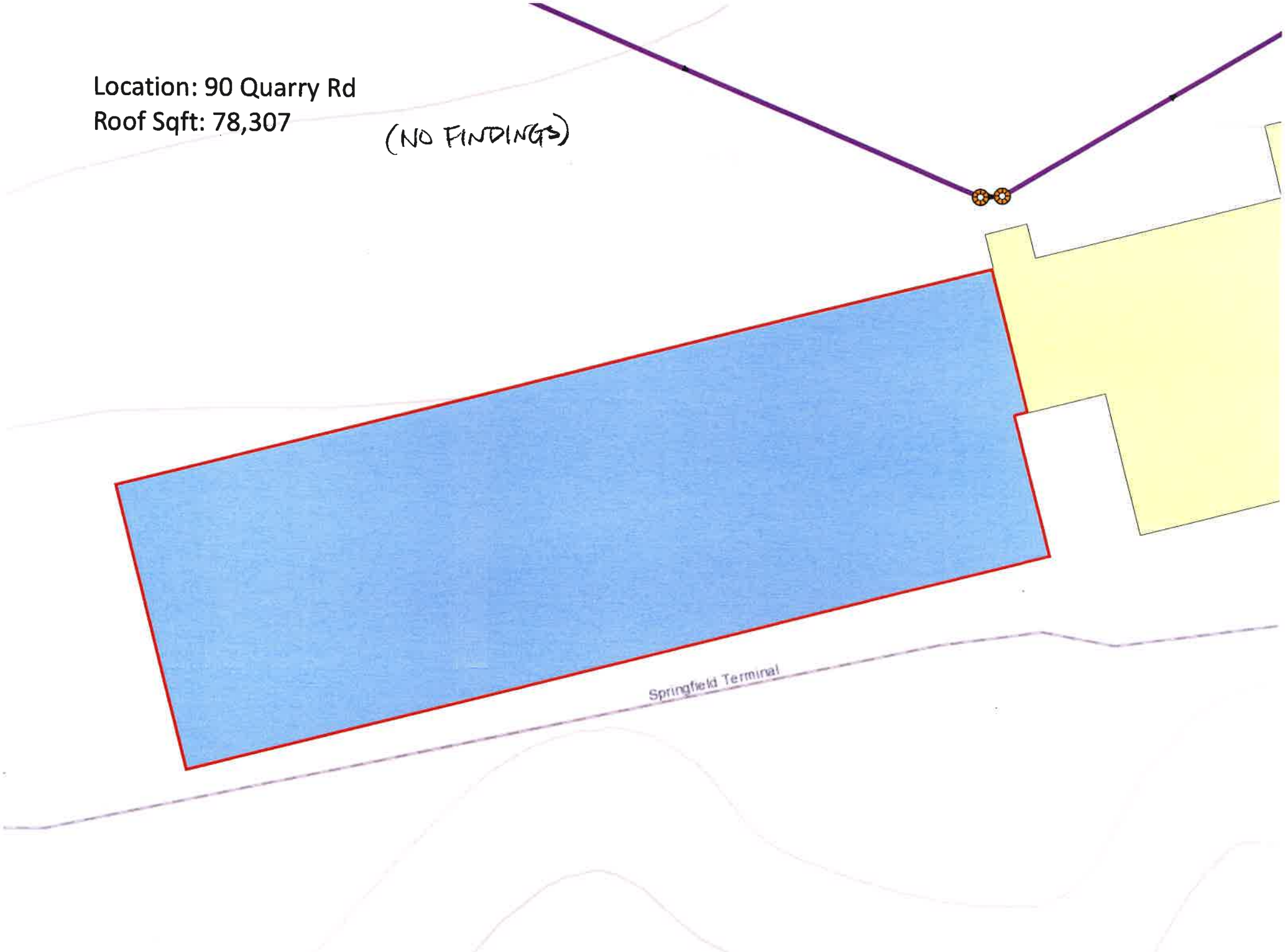
Portland, ME Building Inspection

Form Locations



Location: 90 Quarry Rd
Roof Sqft: 78,307

(NO FINDINGS)



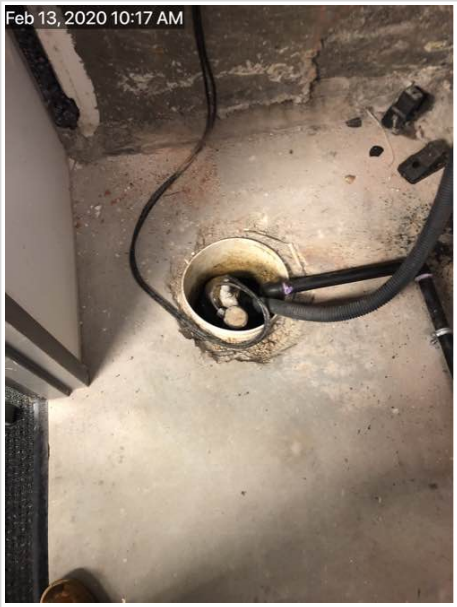
Date Submitted: 02-13-2020 10:54 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	31
Interviewer	MATTHEW SILVA
Address	125 Presumpscot St
Location Photo	
	43.685397, -70.259984
Business Name	Maine Motor Vehicle Registry
Intial Date	02-11-2020
Time	09:40 (-5 GMT)
Follow up Date/Time	02-13-2020
1. At what level does the sewer pipe exit the building structure?	Above the floor level approximately
Approximate # of inches above floor level	60
Sewer Exit Photo(s)	Sewer 1
	Sewer 2. Below floor 24"

Portland, ME Building Inspection

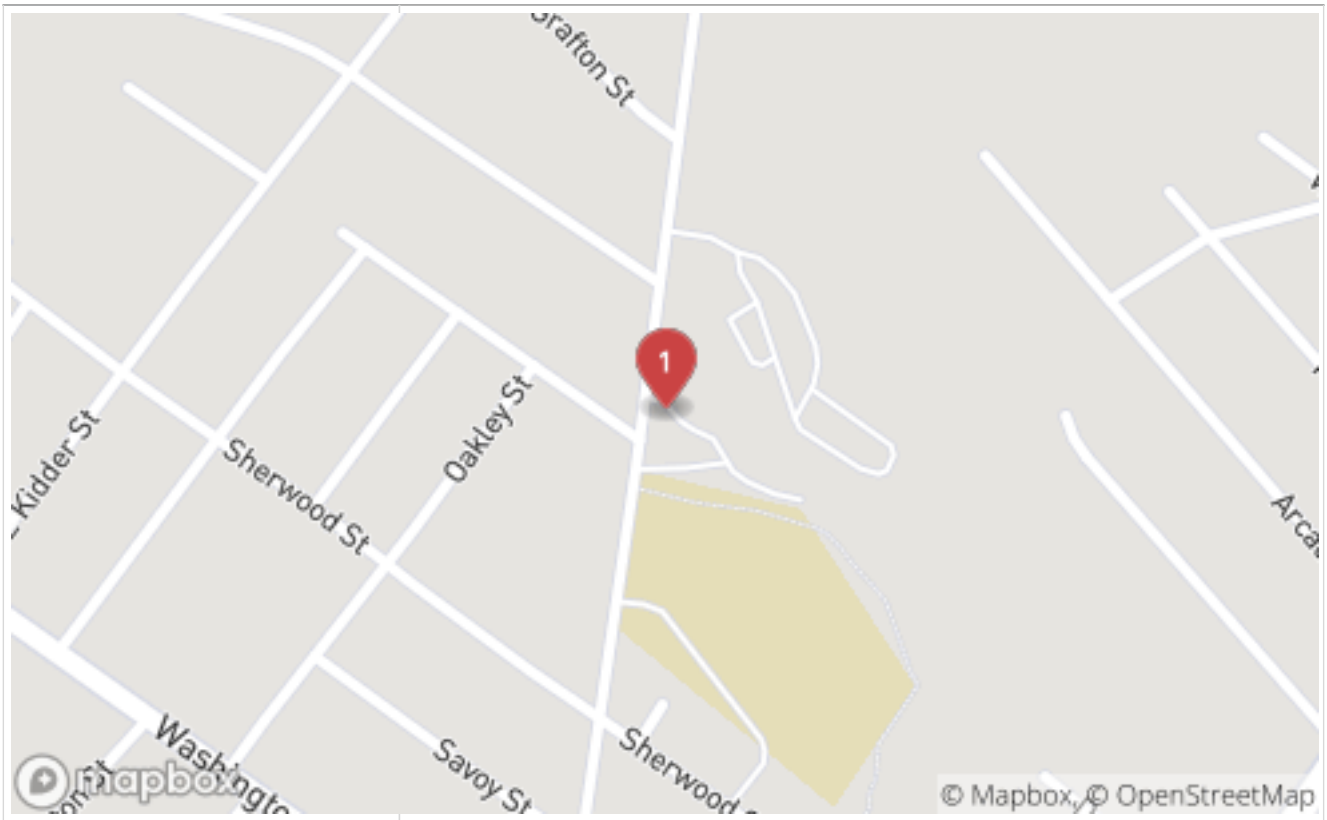
2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Unknown
Sump Pump Photo(s)	Sump 1  Sump 2 hard piped to outside roof leader
Sump Pump Comments:	Sump pump 1 exit point unknown Sump pump 2 ties in directly to roof leader outside
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	14
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	9
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Very small section of flat roof, unknown drainage?
Are any outside drains present?	Yes
Yard Drains (#)	1
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	3
Outside Drain Comments:	Yard drain is supposedly open cleanout per property manager

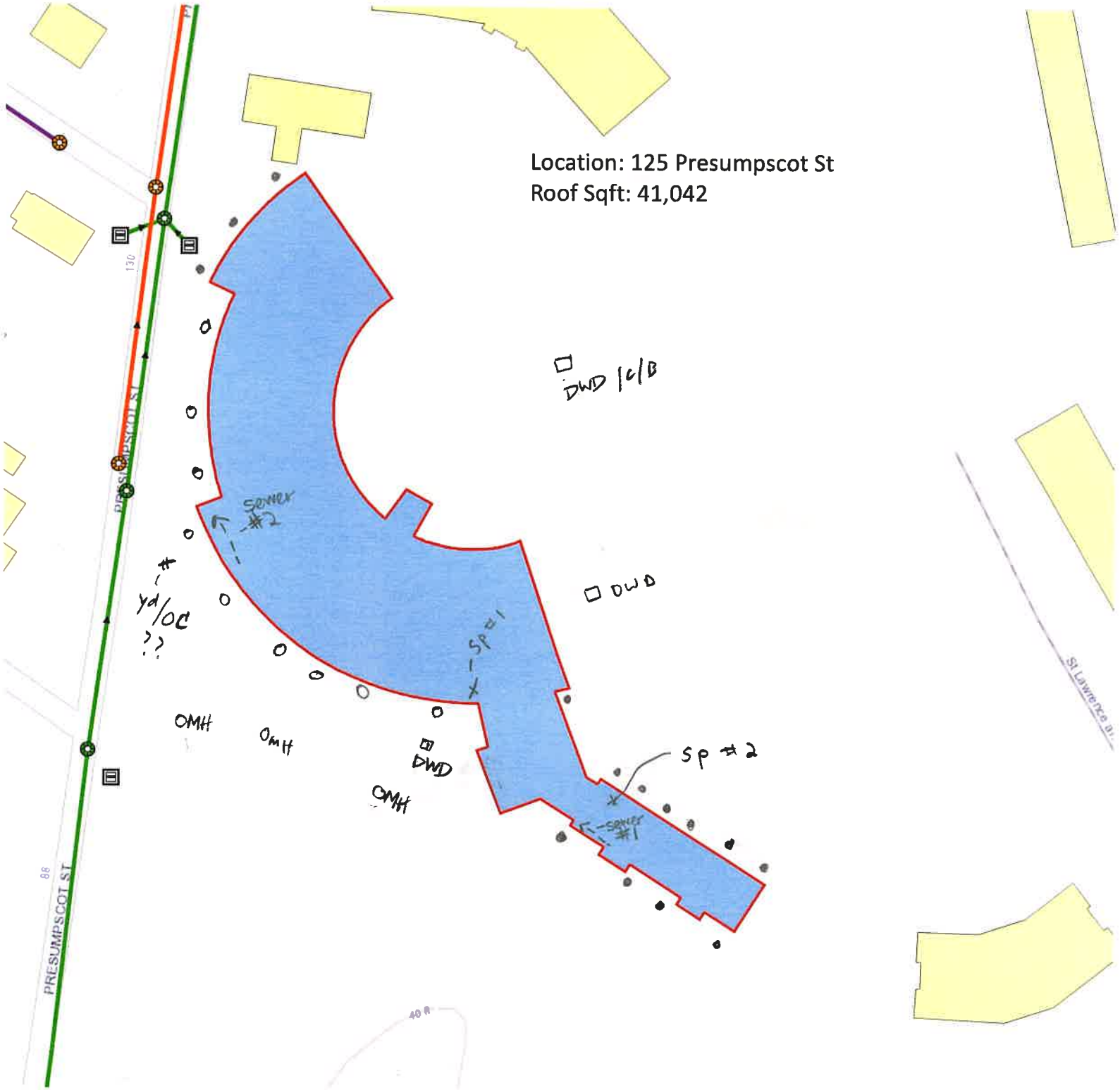
Portland, ME Building Inspection

Additional Photo(s)	Open clean out or yard drain	

Portland, ME Building Inspection

Form Locations




Location: 125 Presumpscot St
Roof Sqft: 41,042
PRESUMPSCOT ST
PRESUMPSCOT ST
DWD 1c/B
DWD
DWD
OMH
OMH
OMH
SP #1
SP #2
SEWER #2
SEWER #1
yd/oc
??
St Lawrence D...

Date Submitted: 02-07-2020 08:52 AM
Submitted By: tgagnon@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

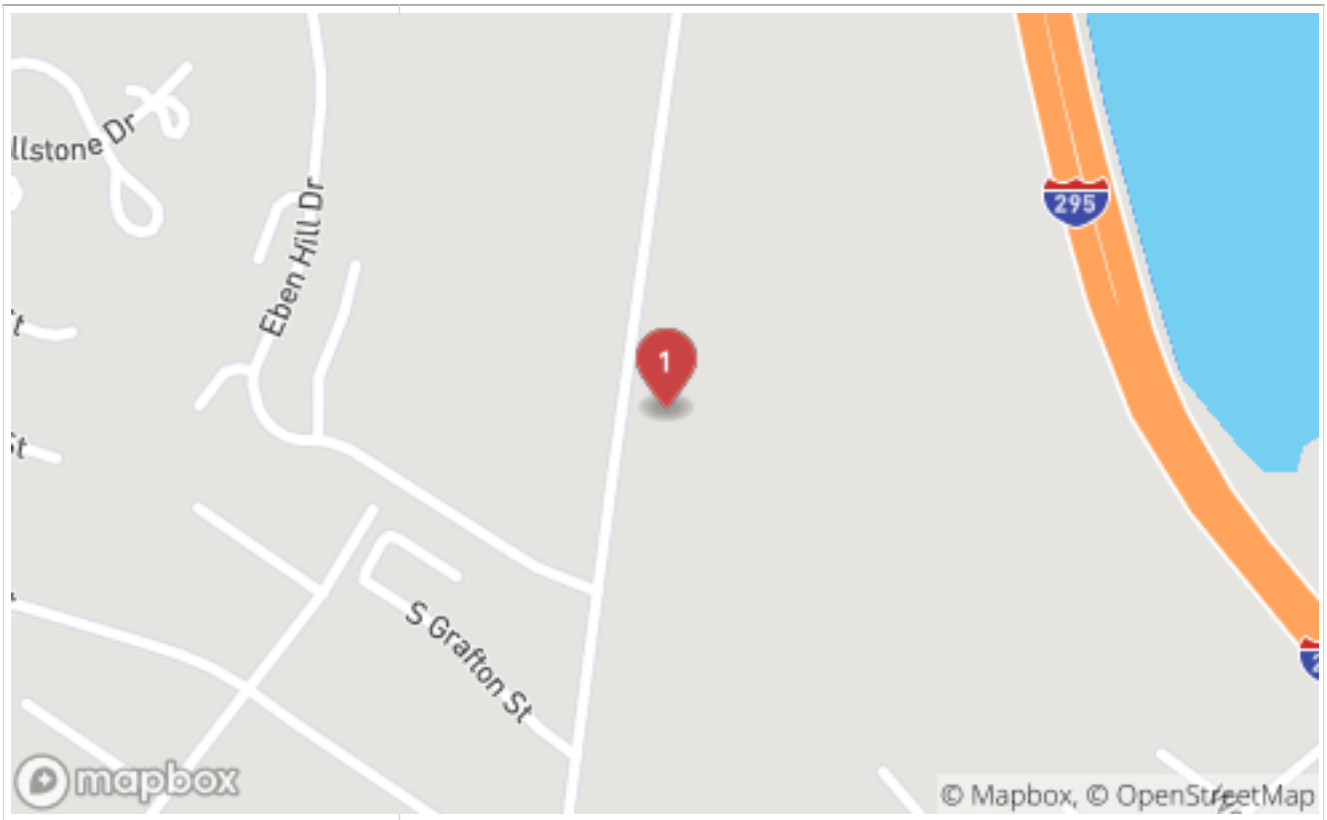
Municipality	Portland, ME
Job Number	20012
Subsystem	31
Interviewer	TG/JC
Address	197 Presumpscot St
Location Photo	
	43.688978, -70.259161
Business Name	Hamilton Marine
Intial Date	02-07-2020
Time	08:43 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	1
Roof Leaders onto Surface (#)	3
Possible Flat Roof Drain System?	No
Are any outside drains present?	No

Portland, ME Building Inspection

Additional Photo(s)	Roof leader into ground	

Portland, ME Building Inspection

Form Locations



Location: 197 Presumpscot St
Roof Sqft: 65,265

Date Submitted: 02-10-2020 11:32 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

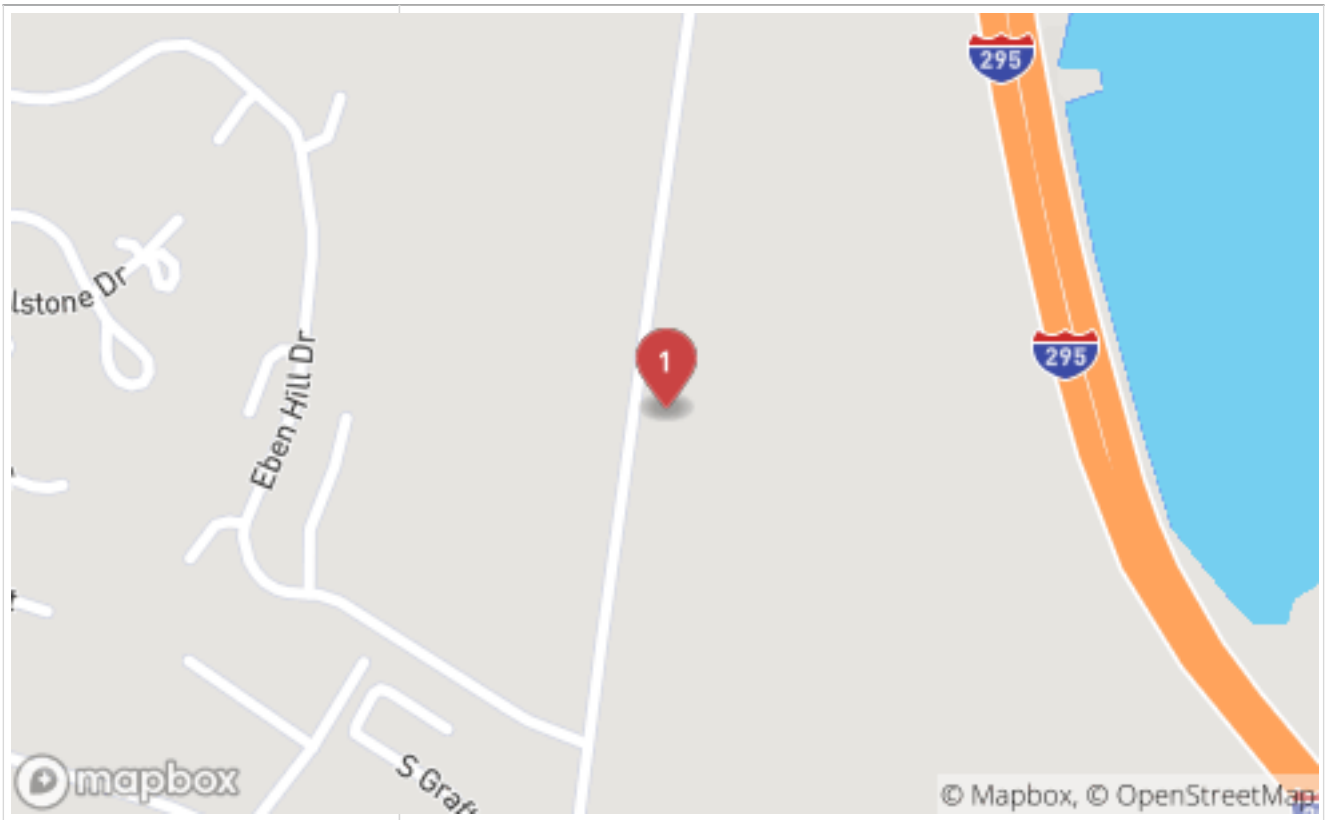
Municipality	Portland, ME
Job Number	20012
Subsystem	31
Interviewer	MATTHEW SILVA
Address	235 Presumpscot St
Location Photo	
	43.689867, -70.259087
Business Name	NAPA and Life Storage
Intial Date	02-10-2020
Time	10:54 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	2
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	Basement drain does not appear to be in use
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	1
Roof Leaders onto Surface (#)	2
Possible Flat Roof Drain System?	No

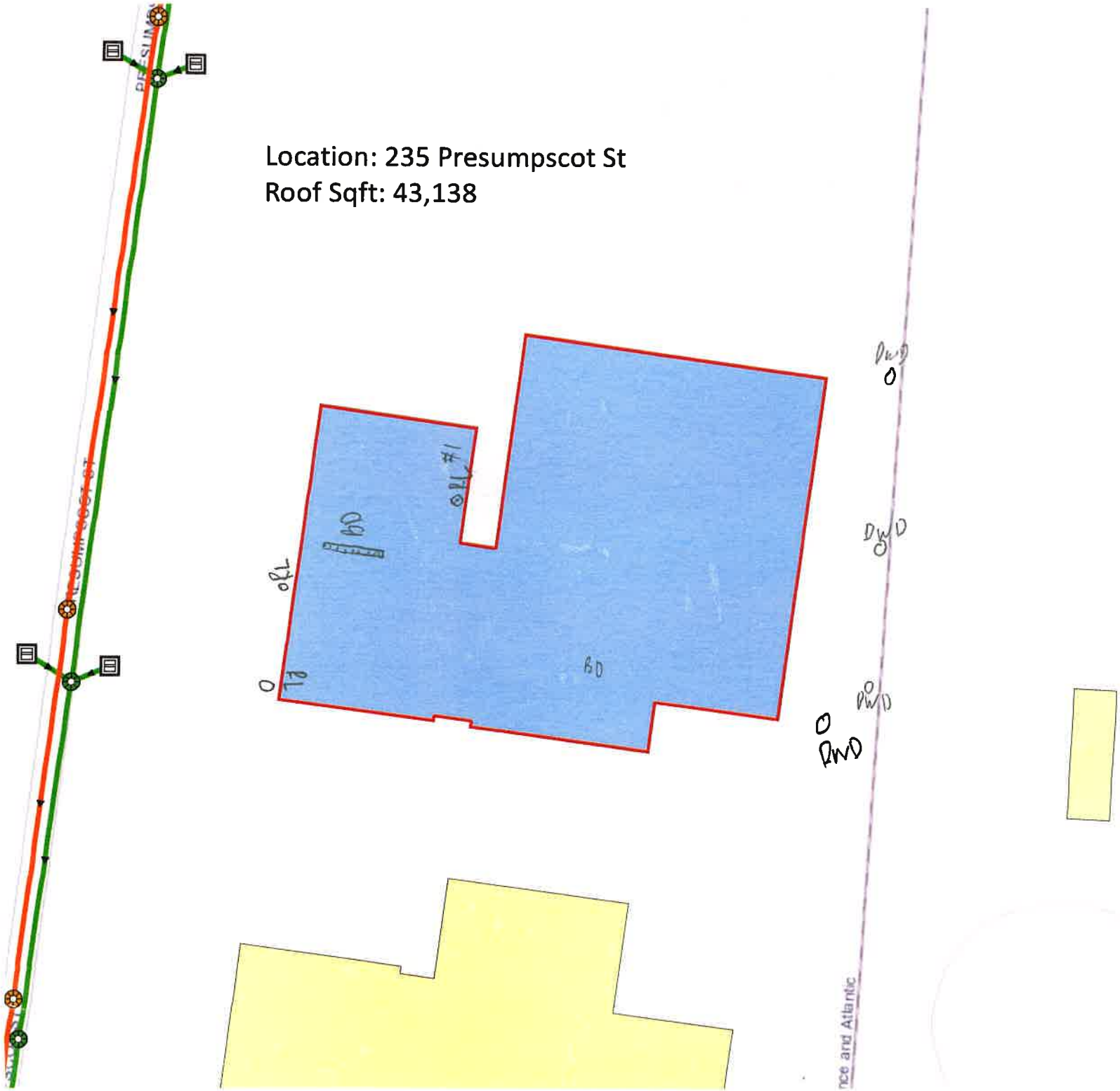
Portland, ME Building Inspection

Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	4
Outside Drain Comments:	Not a flat roof. That is why marked no central drain system. Does have 1 Roof leader to foundation. Addition is being added to this building
GENERAL COMMENTS:	Built on slab. Unable to locate sewer.
Additional Photo(s)	Roof leader in back of Napa through foundation Label # 1

Portland, ME Building Inspection

Form Locations

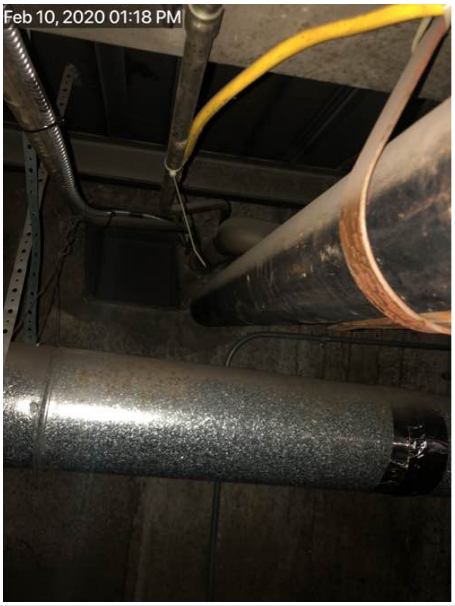



Location: 235 Presumpscot St
Roof Sqft: 43,138

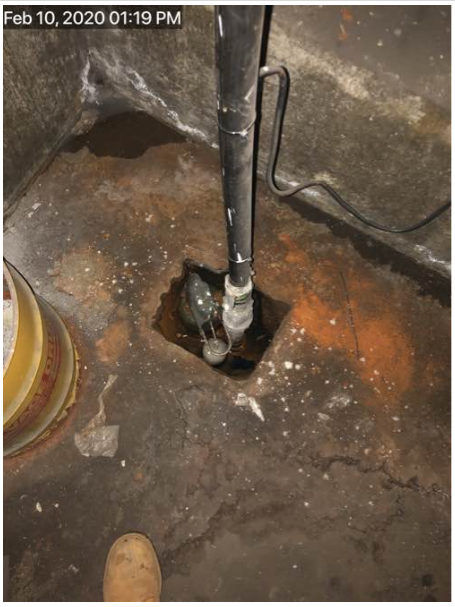
Date Submitted: 02-10-2020 01:31 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

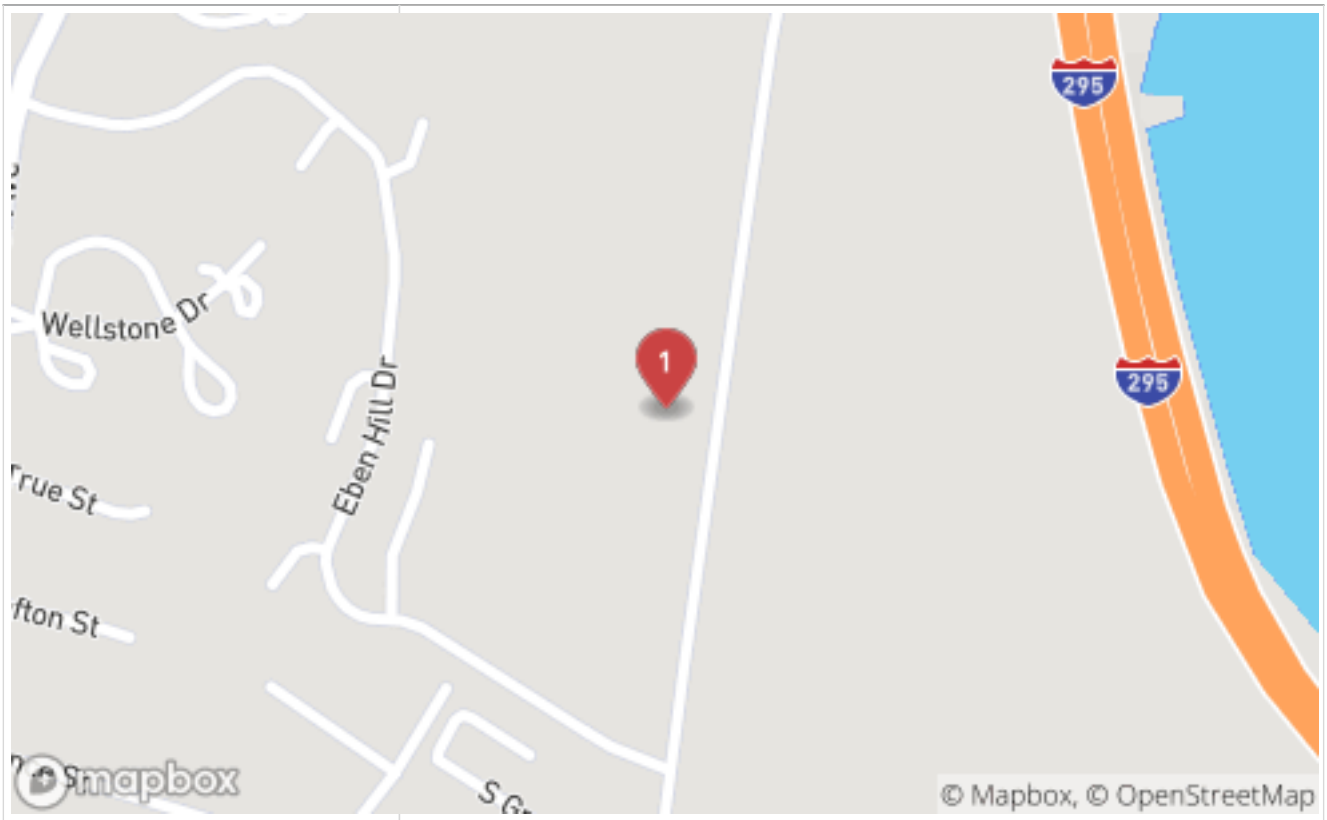
Municipality	Portland, ME
Job Number	20012
Subsystem	31
Interviewer	MATTHEW SILVA
Address	236 Presumpscot St
Location Photo	
	43.690018, -70.259749
Business Name	Fed Ex Freight
Intial Date	02-10-2020
Time	13:10 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Above the floor level approximately
Approximate # of inches above floor level	48
Sewer Exit Photo(s)	
2. Is there a sump pump in the basement?	Yes

Portland, ME Building Inspection

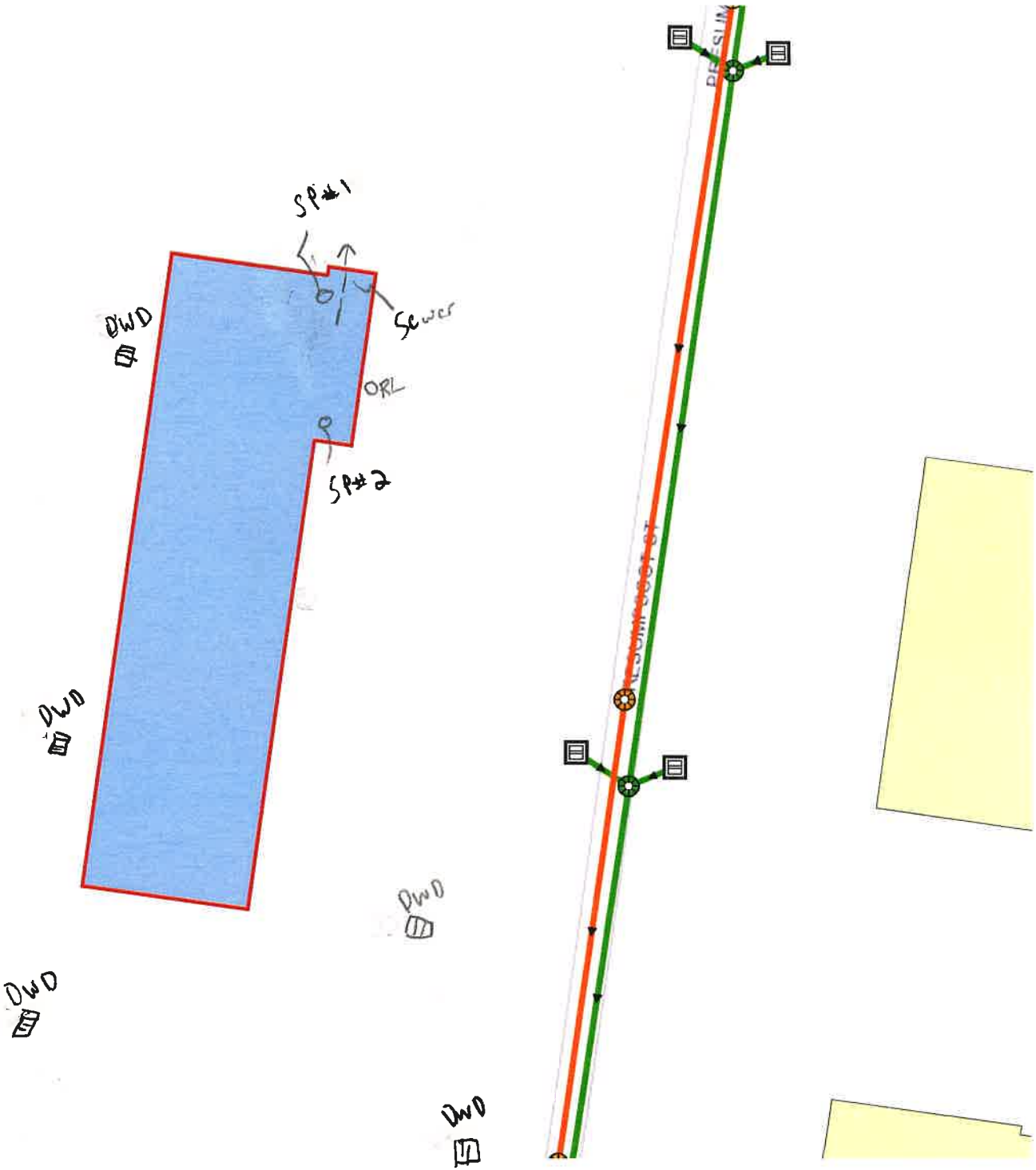
Sump Pump Discharge Location	Ground
Sump Pump Photo(s)	 Pumps to Sump pump 2 Pumps outside building
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	1
Possible Flat Roof Drain System?	No
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	5
Outside Drain Comments:	All Driveway drains are catch basins

Portland, ME Building Inspection

Form Locations



Location: 236 Presumpscot St
Roof Sqft: 20,735



Date Submitted: 02-10-2020 02:10 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

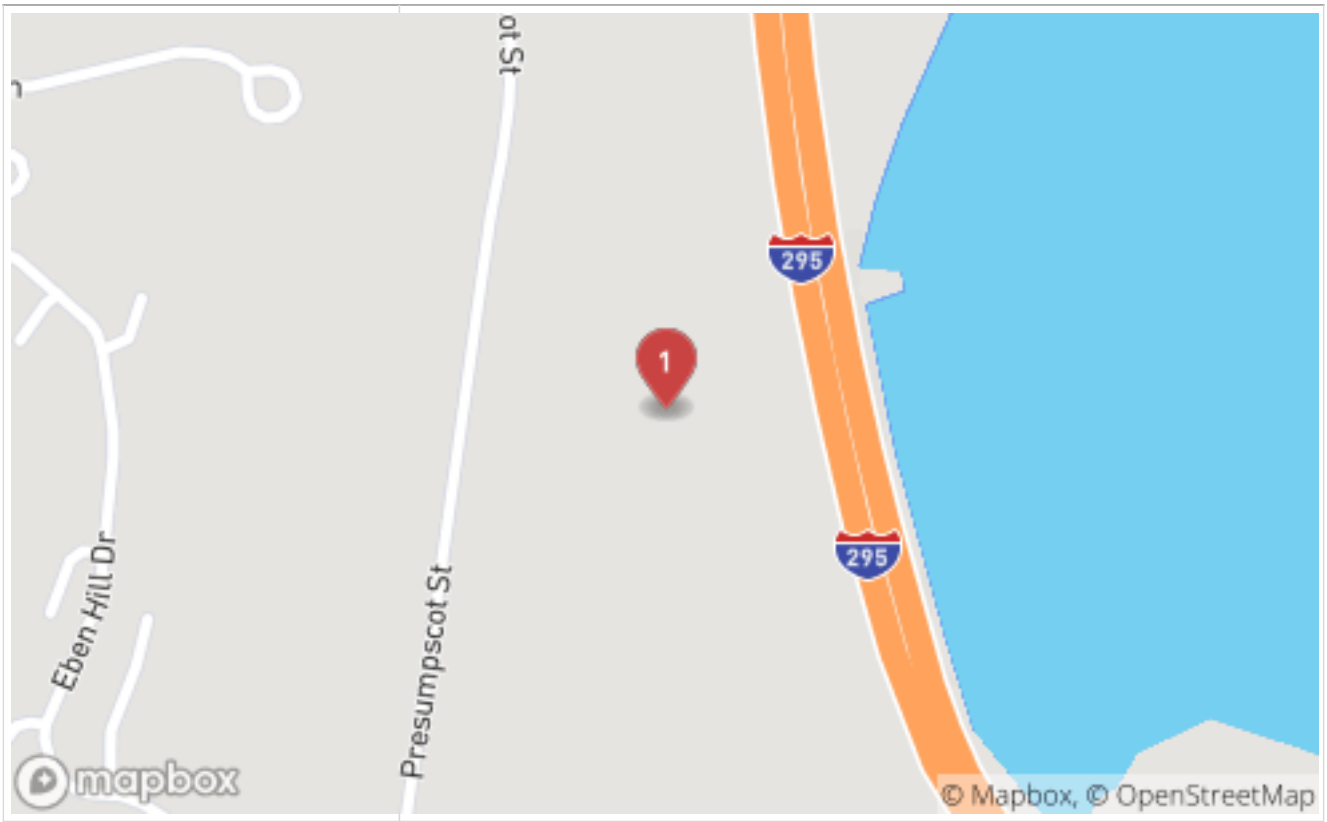
Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	31
Interviewer	MATTHEW SILVA
Address	273 Presumpscot St
Location Photo	
	43.691035, -70.257489
Business Name	Eco-kids
Intial Date	02-10-2020
Time	13:47 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	No
Are any outside drains present?	No
GENERAL COMMENTS:	This building has an area that is surround by fence - we were unable to gain access.

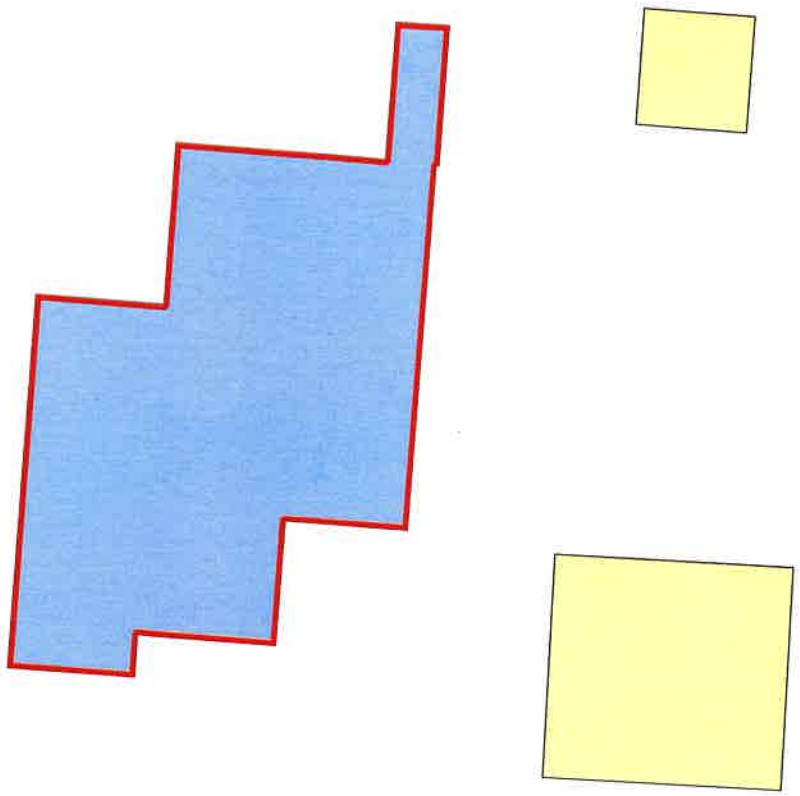
Portland, ME Building Inspection

Form Locations



Location: 273 Presumpscot St

Roof Sqft: 12,539 (NO FINDINGS)



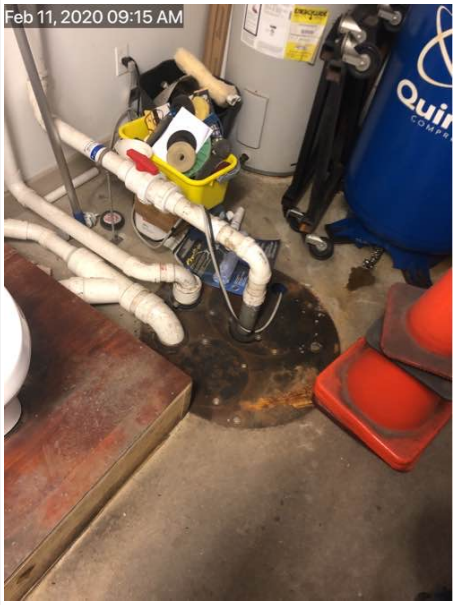
Date Submitted: 02-11-2020 09:25 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	31
Interviewer	MATTHEW SILVA
Address	275 Presumpscot St
Location Photo	
	43.691055, -70.258834
Business Name	Portland Motor Club
Intial Date	02-10-2020
Time	14:10 (-5 GMT)
Follow up Date/Time	02-11-2020
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	Can only locate cleanout cover outside the building
2. Is there a sump pump in the basement?	No

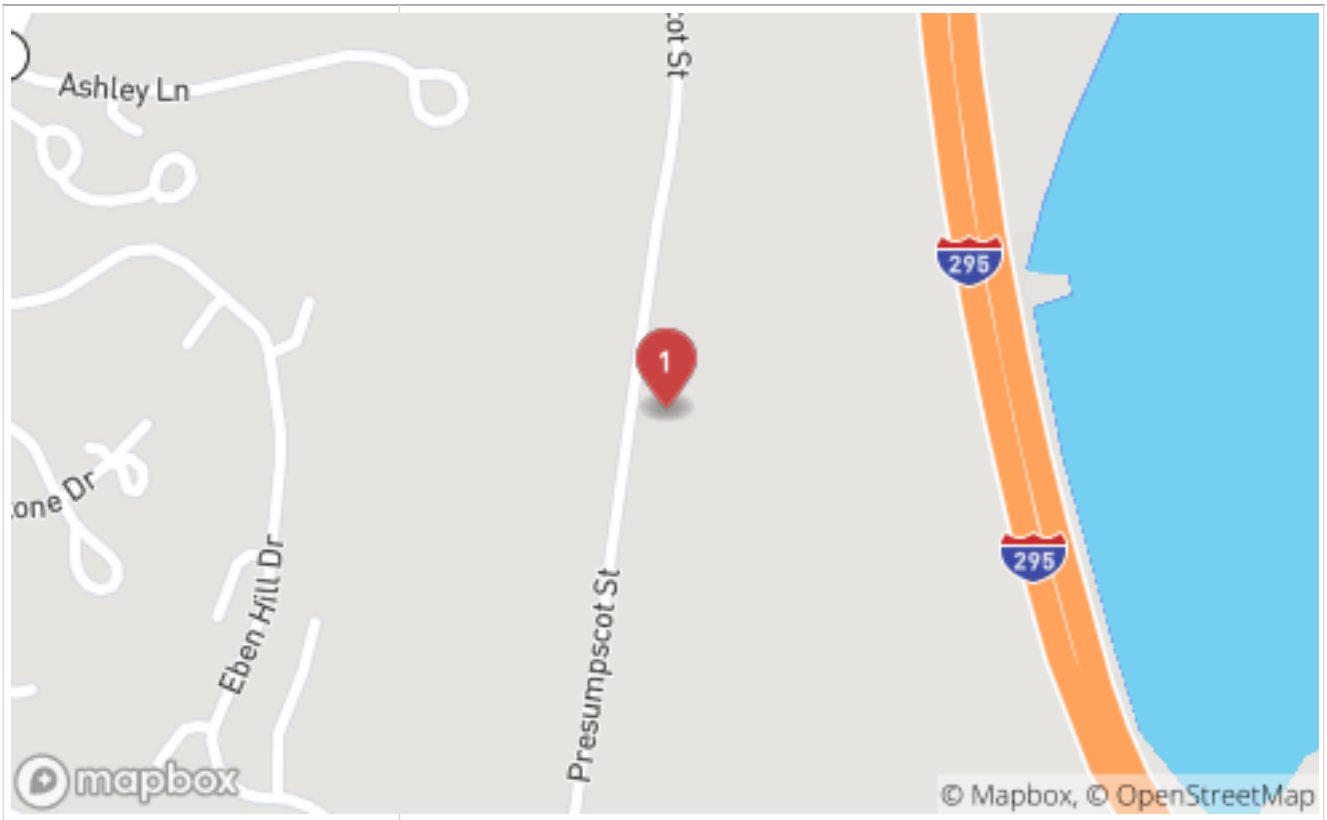
Portland, ME Building Inspection

3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	5
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	Extra pumping pit in back corner for bathroom (See additional photos)
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	6
Possible Flat Roof Drain System?	No
Are any outside drains present?	No
GENERAL COMMENTS:	Cleanout cover outside is missing its cover
Additional Photo(s)	 Pit in back corner for all floor drains after drain manhole fills Drain manhole for all basement drains

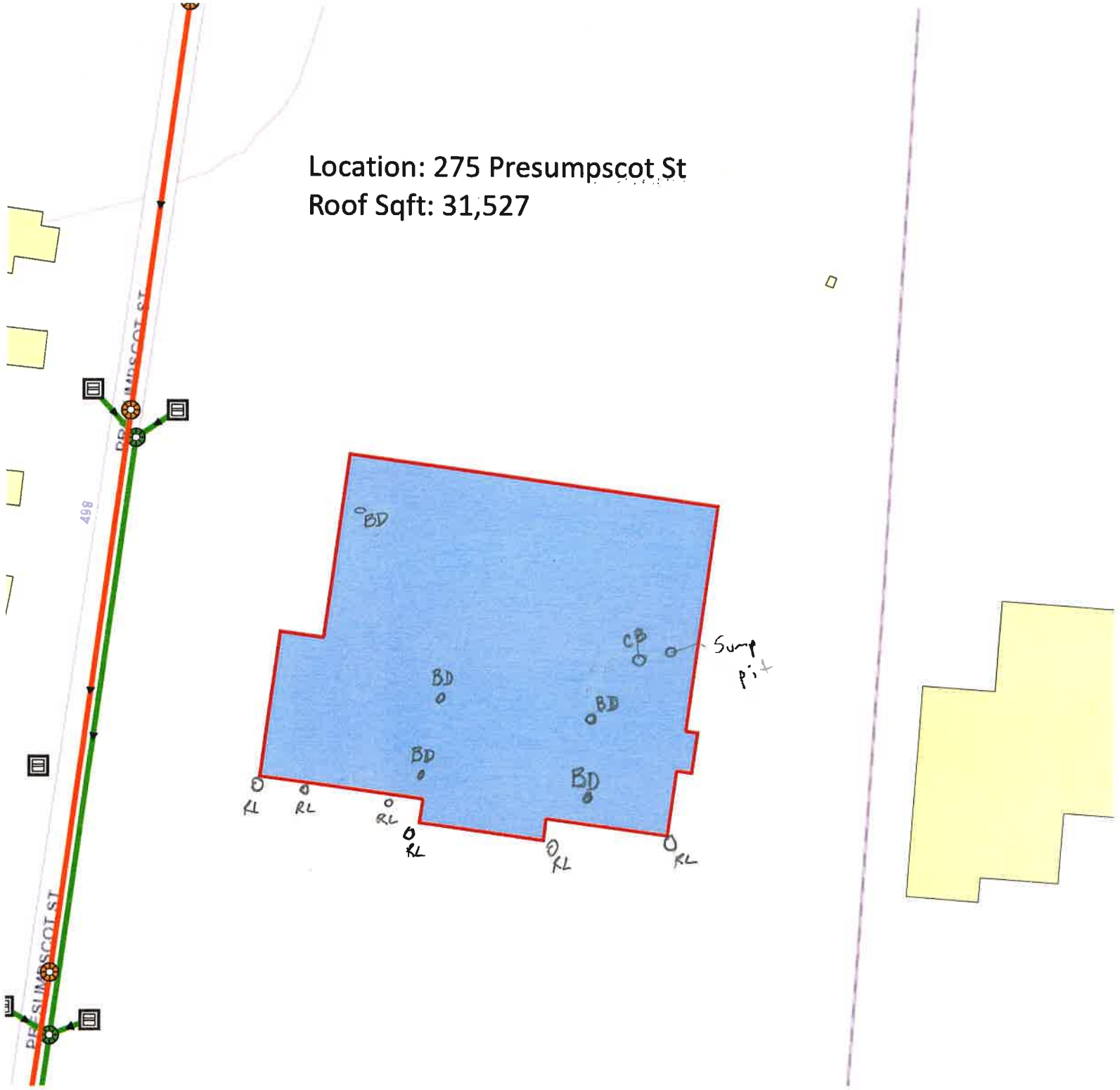
Date Submitted: 02-11-2020 09:25 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Form Locations



Location: 275 Presumpscot St
Roof Sqft: 31,527



Date Submitted: 02-10-2020 02:34 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

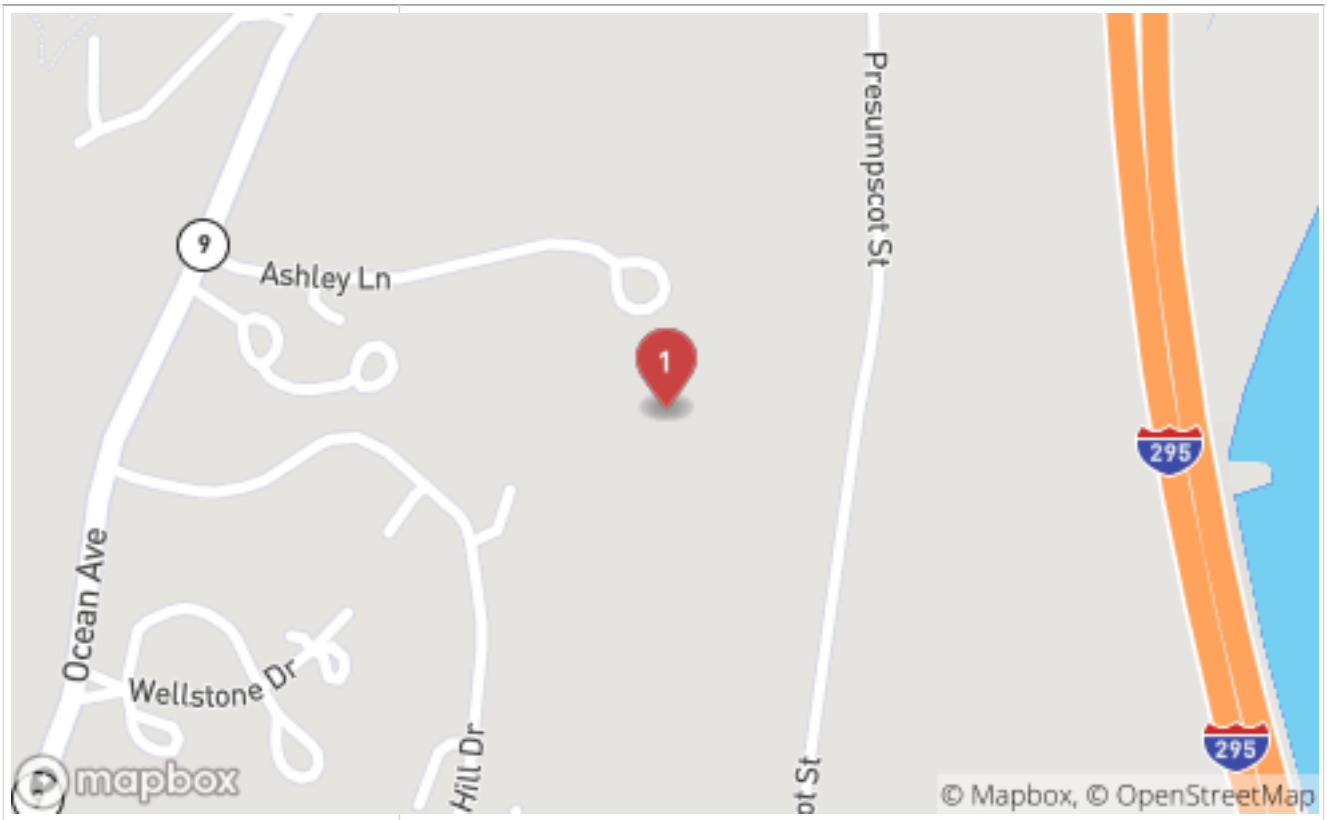
Municipality	Portland, ME
Job Number	20012
Subsystem	31
Interviewer	MATTHEW SILVA
Address	290 Presumpscot St
Location Photo	
	43.692150, -70.260452
Business Name	Veritiv
Intial Date	02-10-2020
Time	14:19 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	 Could only locate sewer cleanout
2. Is there a sump pump in the basement?	No

Portland, ME Building Inspection

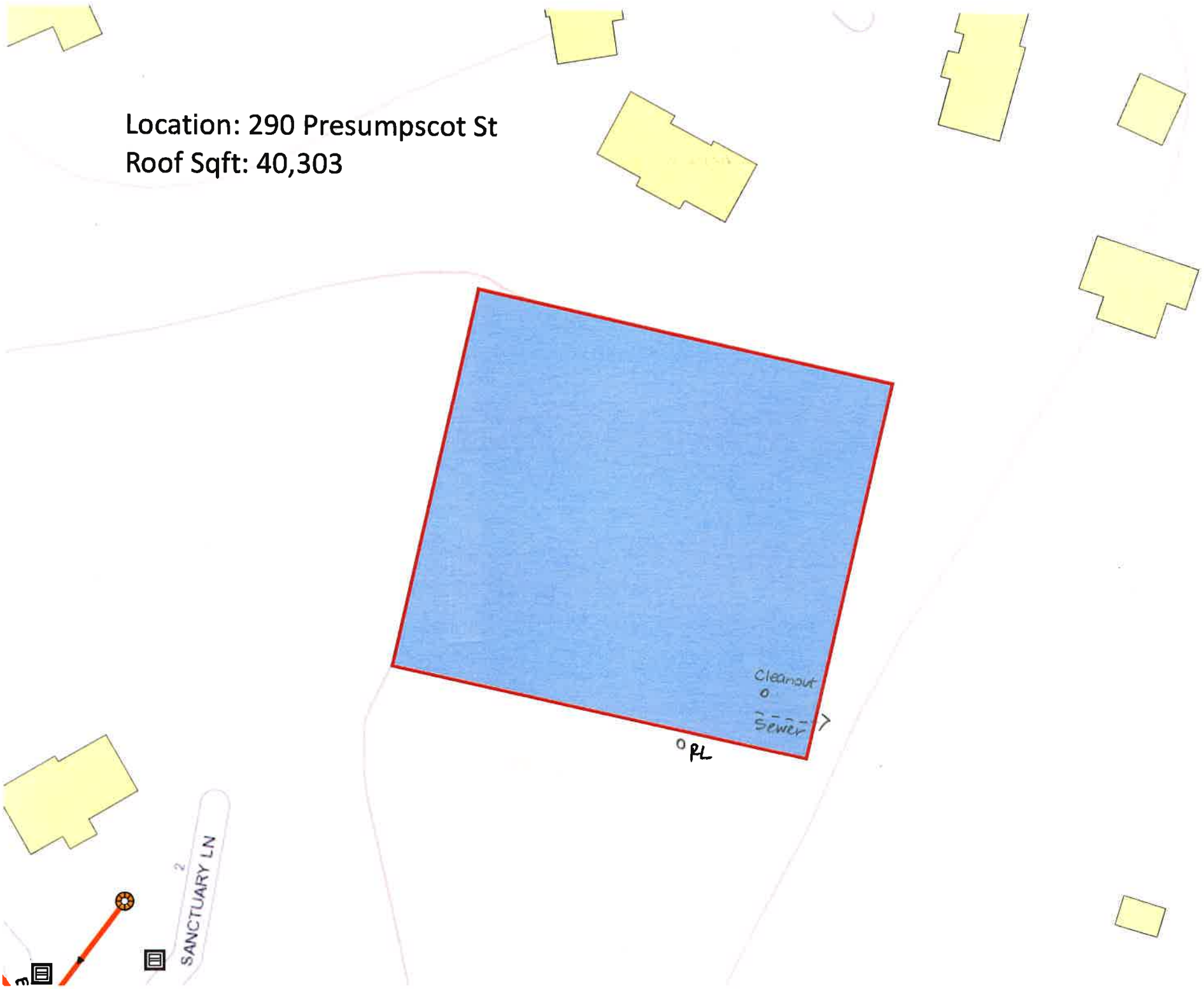
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	0
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	Foundation is slab
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	0
Roof Leaders onto Surface (#)	1
Possible Flat Roof Drain System?	No
Are any outside drains present?	No
GENERAL COMMENTS:	

Portland, ME Building Inspection

Form Locations



Location: 290 Presumpscot St
Roof Sqft: 40,303



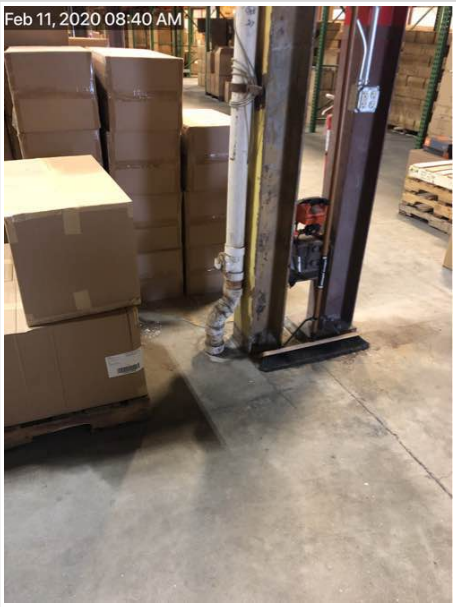
Date Submitted: 02-11-2020 09:02 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	31
Interviewer	MATTHEW SILVA
Address	299 Presumpscot St
Location Photo	
	43.692338, -70.258635
Business Name	John Meade Design
Intial Date	02-11-2020
Time	08:25 (-5 GMT)
Follow up Date/Time	02-11-2020
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	Arrow is pointing to what I believe is sump pump from manhole 1 that is tied into sewer

Portland, ME Building Inspection

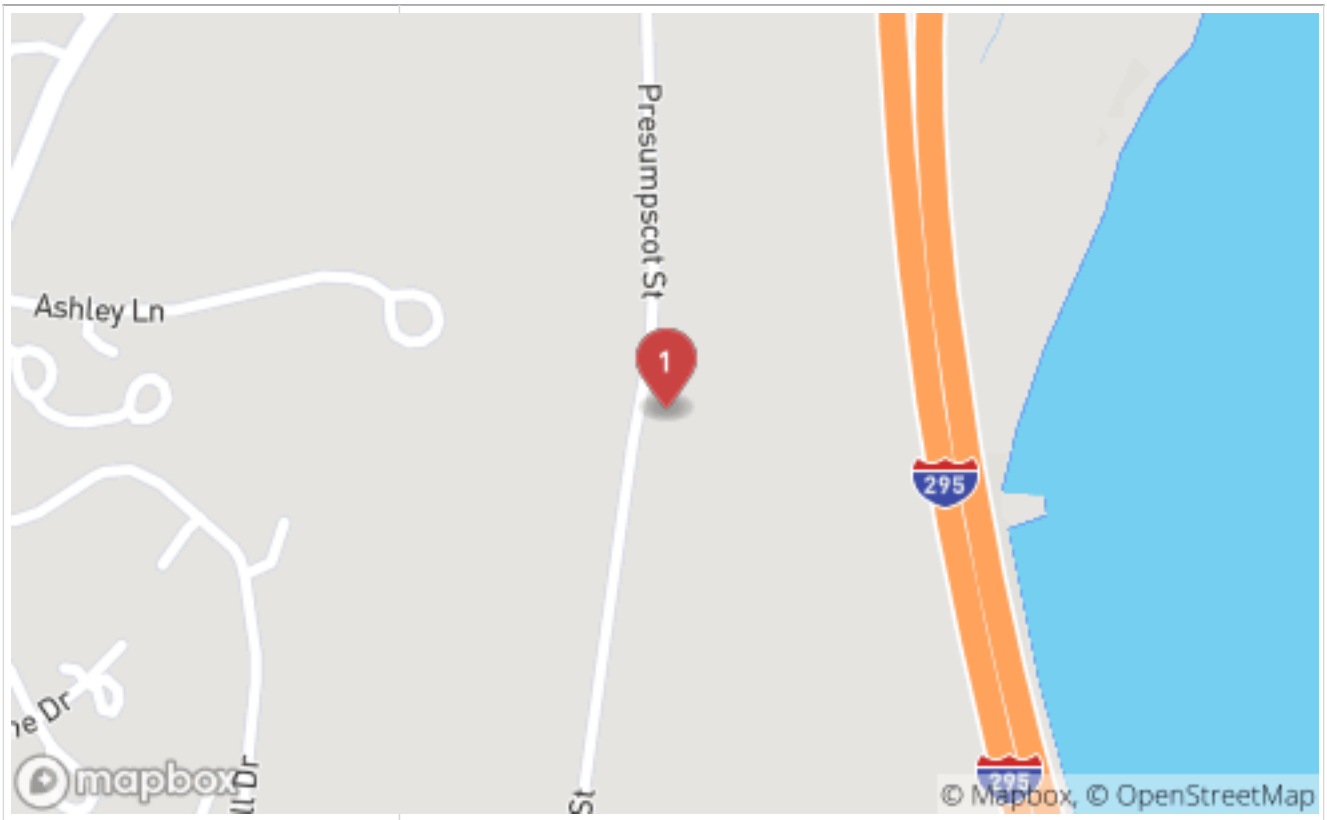
2. Is there a sump pump in the basement?	No
Sump Pump Comments:	Both sump pump are located outside of building
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	1
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	1 roof leader through center of garage
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	1
Roof Leaders onto Surface (#)	5
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	One roof leader to foundation can be found inside garage
Are any outside drains present?	No
GENERAL COMMENTS:	Both Manholes outside of building have sump pumps in them (unknown discharge point)
Additional Photo(s)	 Roof leader through foundation Sump pump outside building in MH # 2

Portland, ME Building Inspection

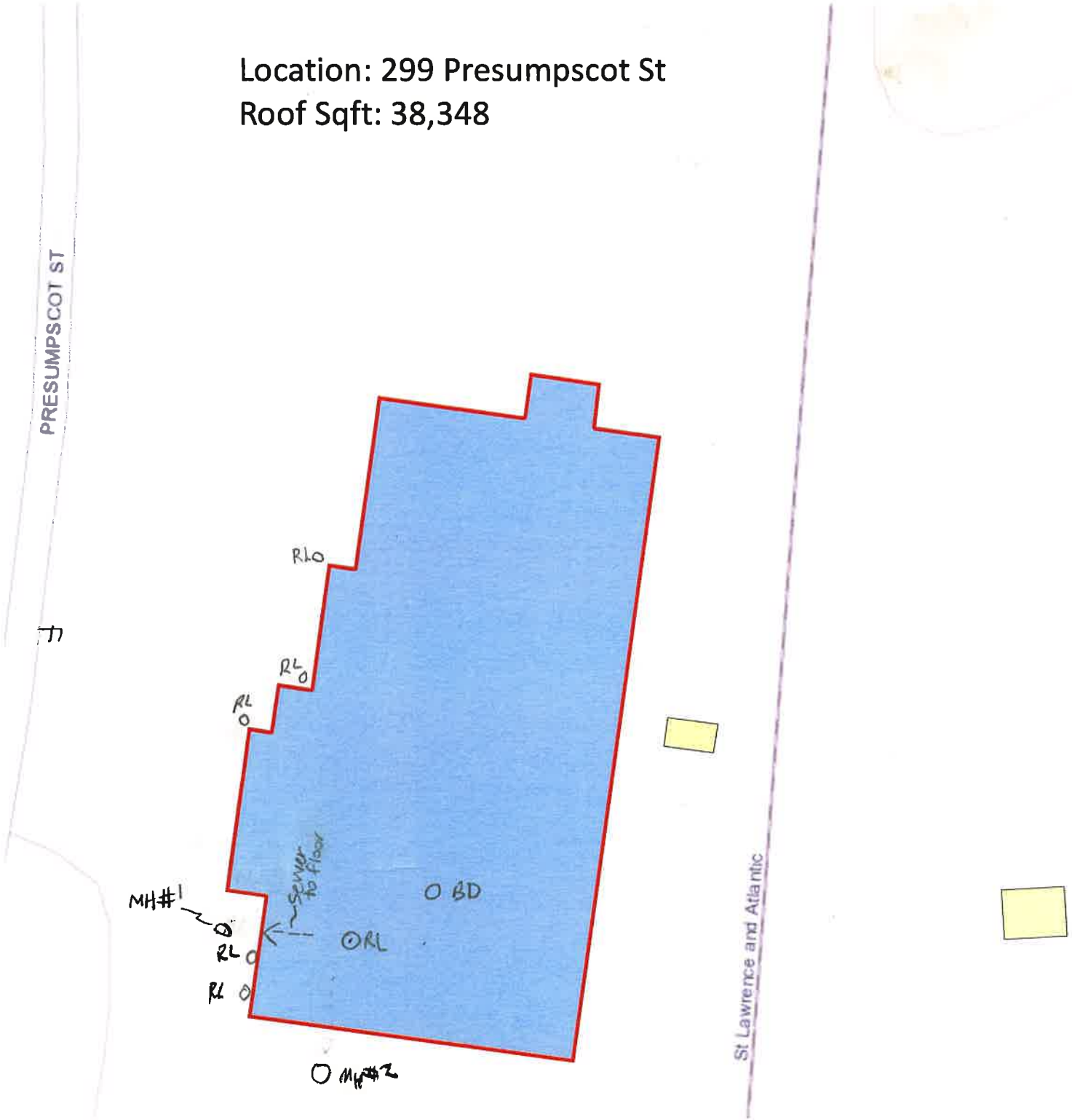
Sump pump inside MH # 1

Portland, ME Building Inspection

Form Locations



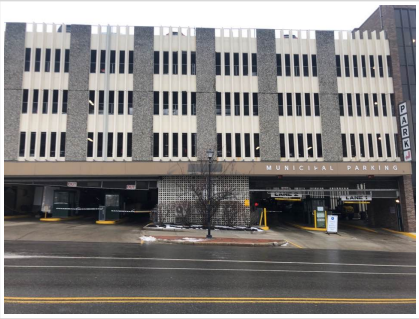
Location: 299 Presumpscot St
Roof Sqft: 38,348



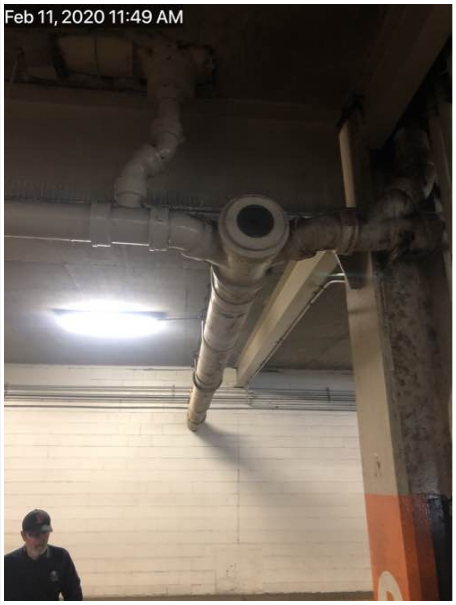
Date Submitted: 02-11-2020 12:02 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	45 Spring St
Location Photo	
	43.654521, -70.259656
Business Name	Spring St Parking Garage
Intial Date	02-11-2020
Time	11:31 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	Sewer line out Sewer pipe heading out back of building 36" above floor level
2. Is there a sump pump in the basement?	No

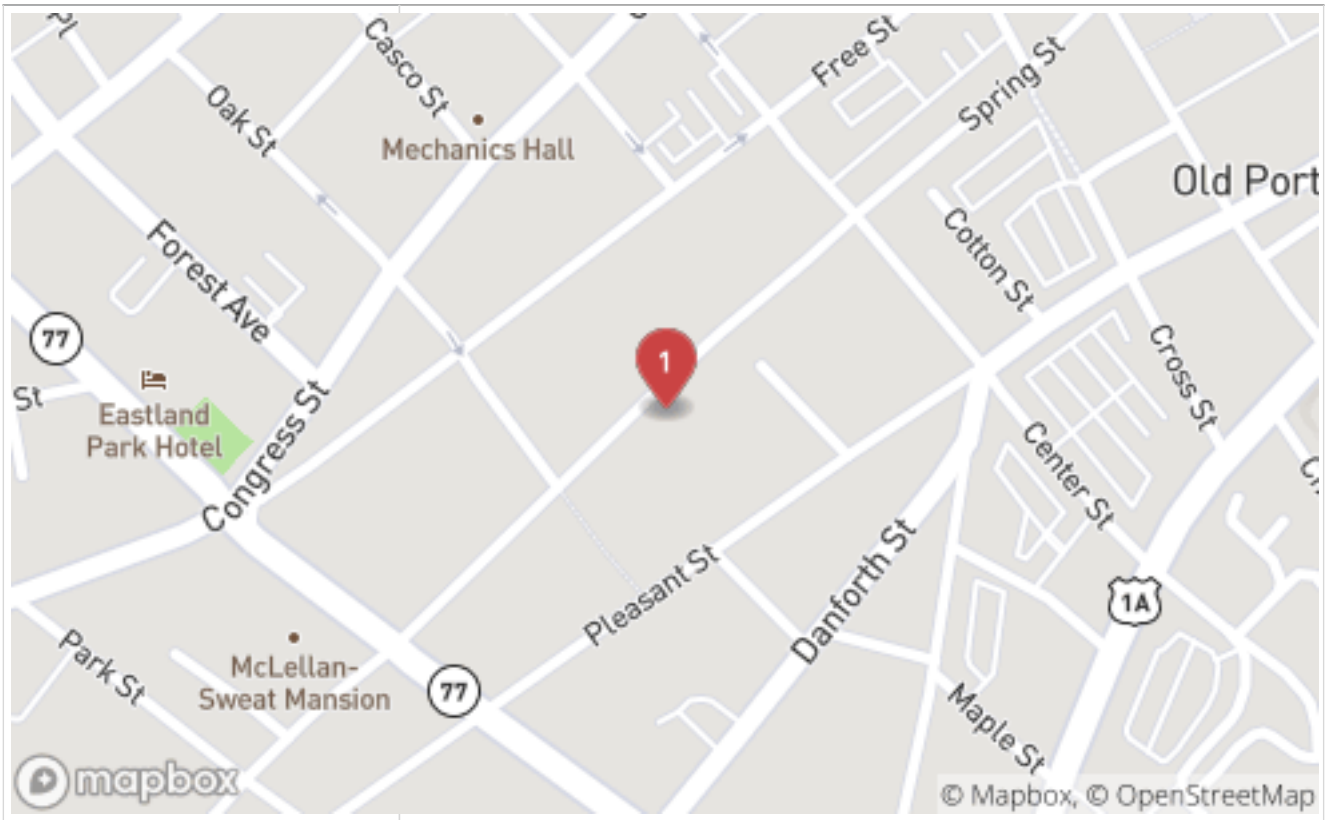
Portland, ME Building Inspection

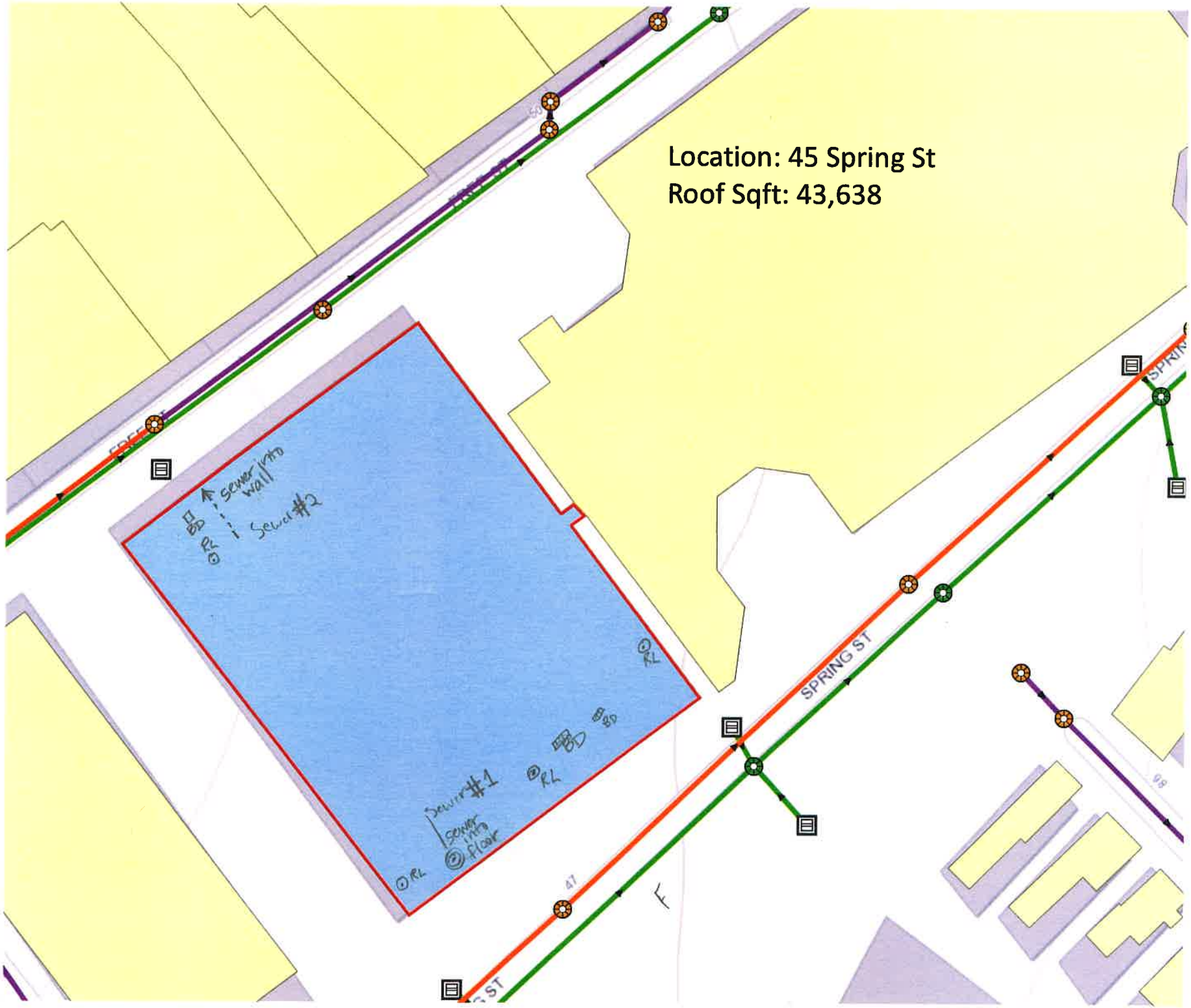
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	3
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	4
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	All roof leaders go to foundation from top floor
Are any outside drains present?	No
Additional Photo(s)	 Drain pipe for upper level (ties into catch basin)

Date Submitted: 02-11-2020 12:02 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Form Locations




Location: 45 Spring St
Roof Sqft: 43,638
SPRING ST
Sewer into wall
Sewer #2
Sewer #1
Sewer into floor
RL
47

Date Submitted: 02-11-2020 03:10 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	110 Free St
Location Photo	
	43.655003, -70.261160
Business Name	Maine Health
Intial Date	02-11-2020
Time	14:37 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Above the floor level approximately
Approximate # of inches above floor level	72
Sewer Exit Photo(s)	
2. Is there a sump pump in the basement?	Yes

Portland, ME Building Inspection

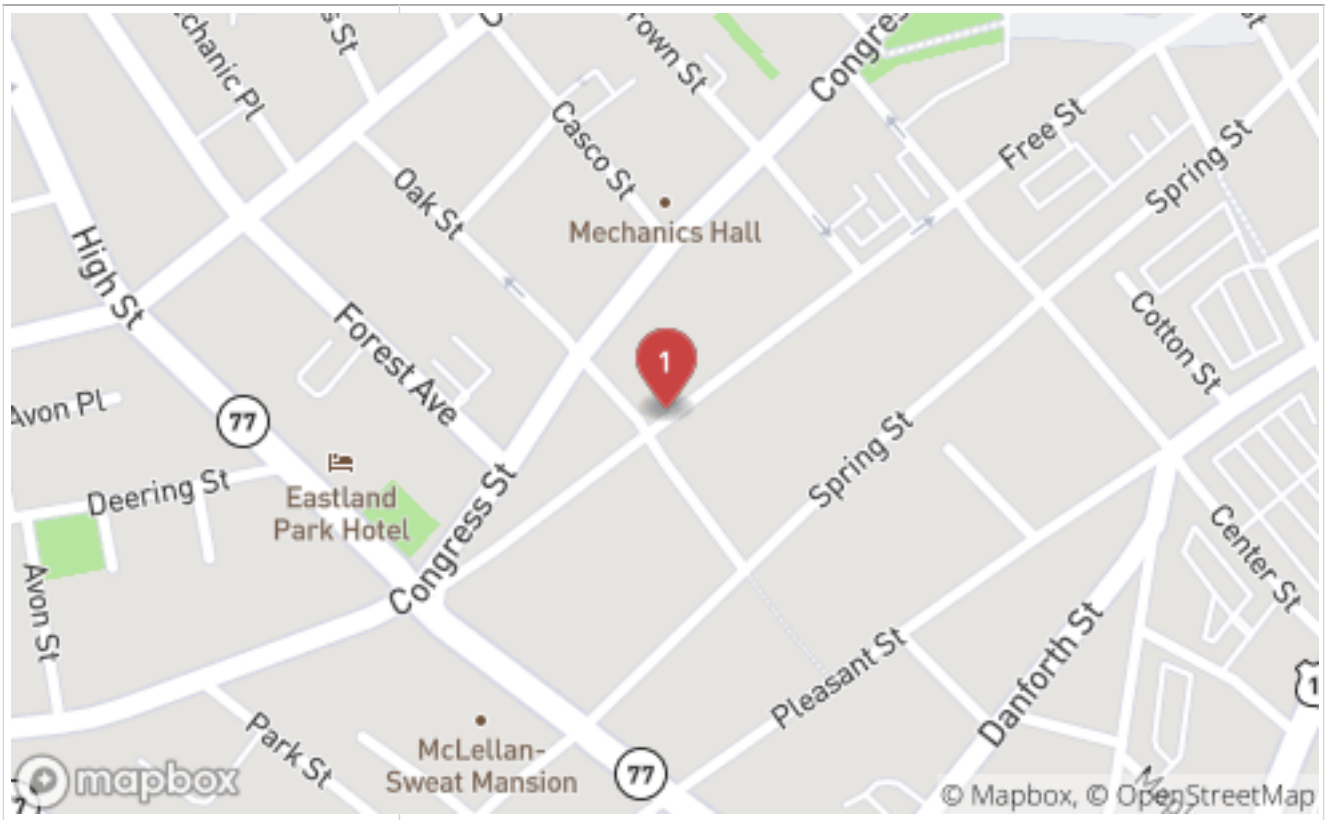
Sump Pump Discharge Location	Other
Sump Pump Photo(s)	
Sump Pump Comments:	2 sump pump that connect to storm line that runs in basement next to sewer line
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	3
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	All basement drains do to sump pit
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	5
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	All roof leaders tie directly into storm drain in basement
Are any outside drains present?	Yes
Yard Drains (#)	1
Window Well Drains (#)	0
Stairwell Drains (#)	0

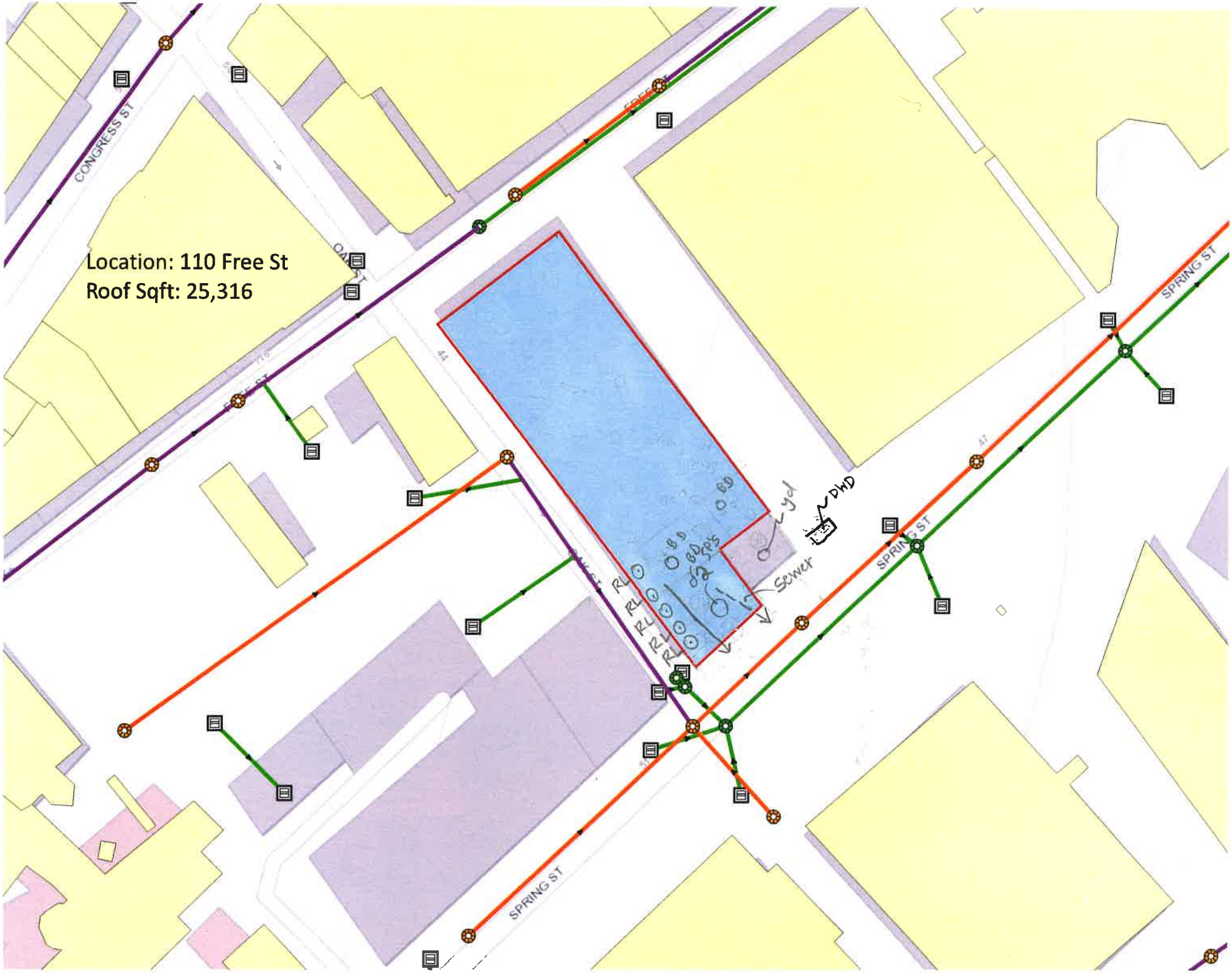
Portland, ME Building Inspection

Driveway Drains (#)	1
GENERAL COMMENTS:	Building was renovated and supposedly separated in 2011
Additional Photo(s)	Storm line in sewer

Portland, ME Building Inspection

Form Locations




Location: 110 Free St
Roof Sqft: 25,316
CONGRESS ST
FREE ST
SPRING ST
SPRING ST
Sewer
DHD

Date Submitted: 02-11-2020 02:09 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	20 Danforth St
Location Photo	
	43.653628, -70.257889
Business Name	Vendetta and McHugh P.C.
Intial Date	02-11-2020
Time	13:17 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Above the floor level approximately
Approximate # of inches above floor level	18
Sewer Exit Photo(s)	Sewer 1
2. Is there a sump pump in the basement?	No

Portland, ME Building Inspection

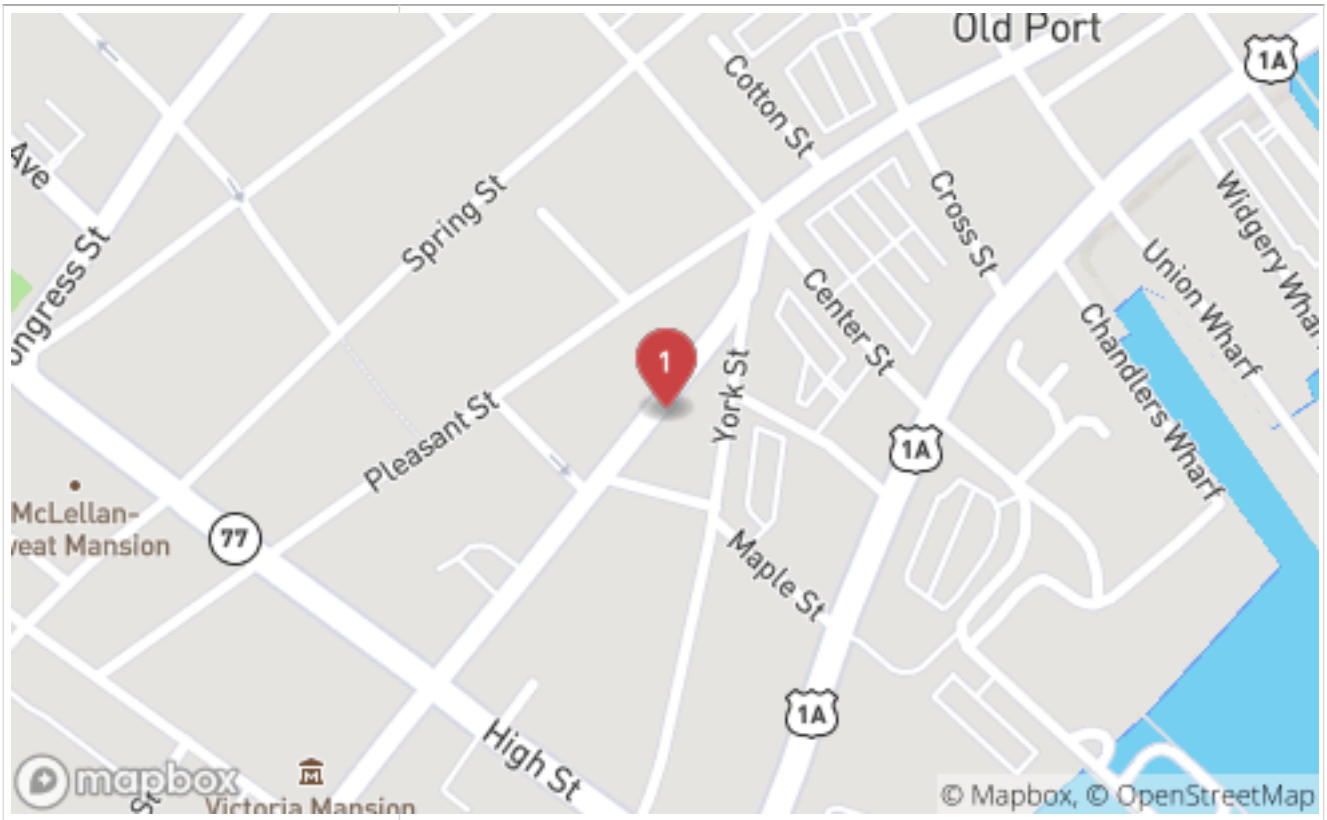
Sump Pump Comments:	Sump pump is under elevator - unable to access, however it is tied into Roof leader # 1
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	3
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	1
Outside Drain Comments:	1 Access pit outside next to address 47 York st
GENERAL COMMENTS:	Actual address starts at 20 and ends at 36
Additional Photo(s)	Roof drains from the front Sump pump from elevator pit

Portland, ME Building Inspection

	Abandoned sewer cleanout	Roof leader # 2
	Old acces pit possibly for water or sewer	

Portland, ME Building Inspection

Form Locations



Location: 20 Danforth St
Roof Sqft: 22,086
DANFORTH ST
YORK ST
MAPLE ST
Sewer into wall
RL
RL#1
SP
Abandoned cleanout
RL#2
Driveway Drain
Access Pit

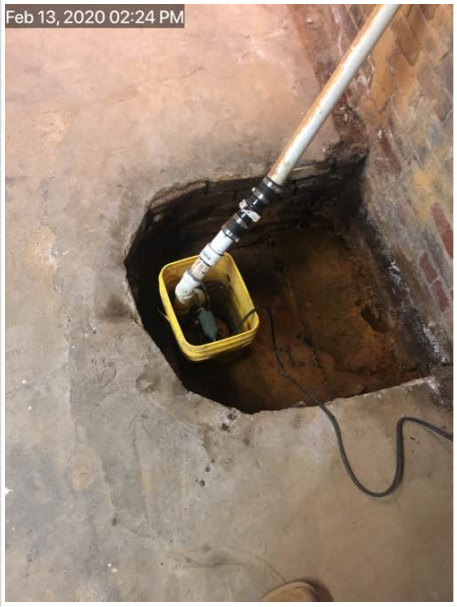
Date Submitted: 02-13-2020 02:55 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	305 Commercial St
Location Photo	
	43.653462, -70.256111
Business Name	Aquarius Property Management
Intial Date	02-13-2020
Time	13:51 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	 One or both are sewer out 24" above floor
2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Other

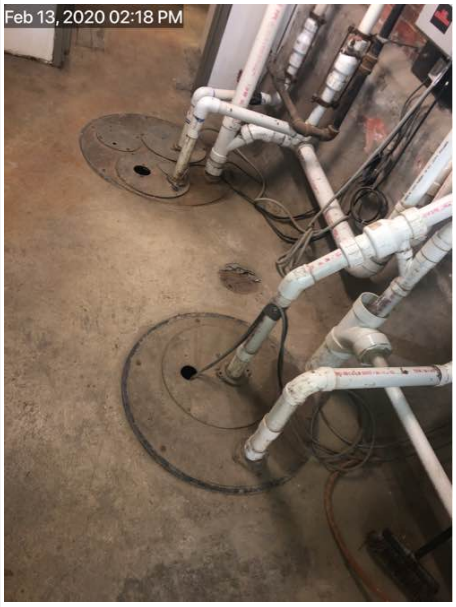
Portland, ME Building Inspection

Sump Pump Photo(s)	Sump 1 ties into floor drain	 Sump 2 pumps into floor drain
	Sump 3 ties directly into sewer lateral	Sump 4 unknown where it discharges

Portland, ME Building Inspection

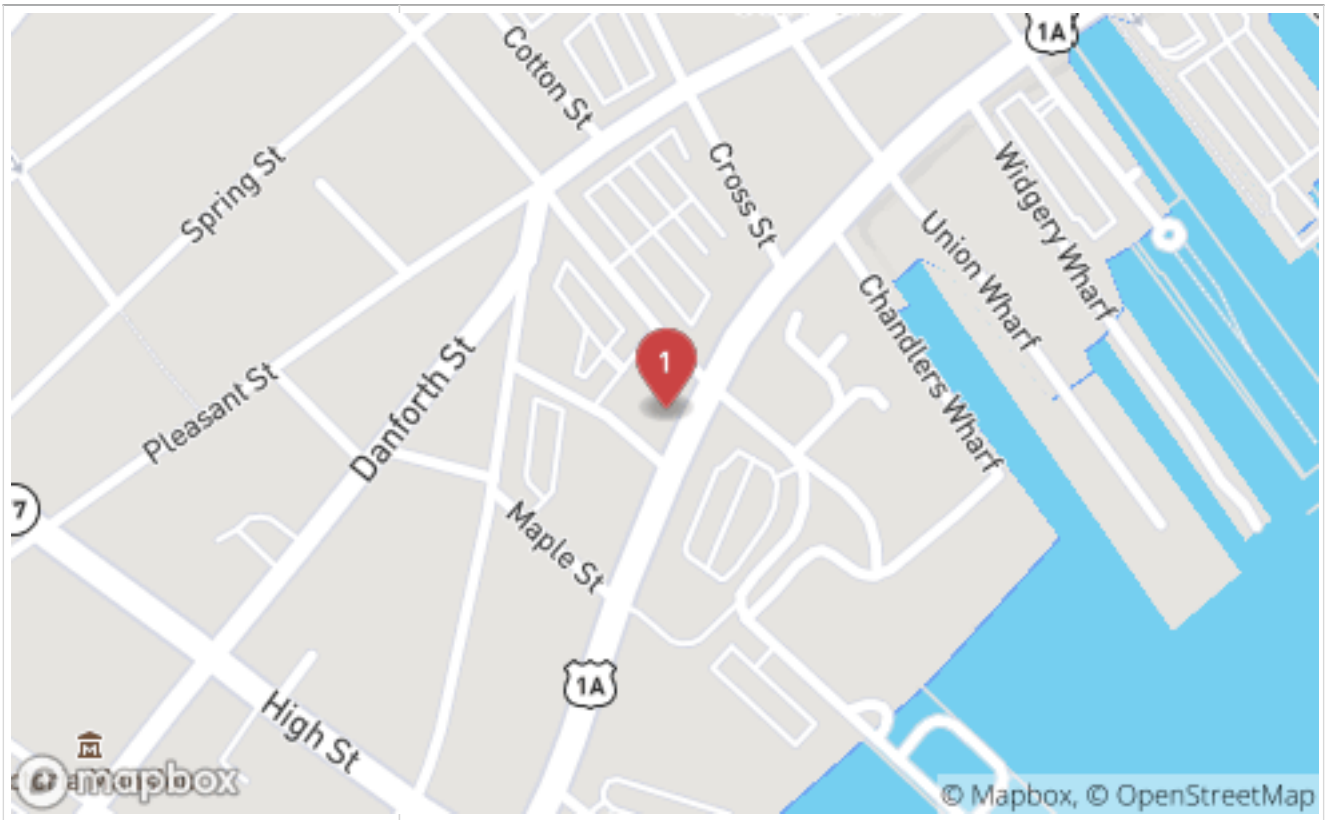
	Sump 5
Sump Pump Comments:	All sump pumps appear to take on both groundwater and raw sewage
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	4
Open Pipe (#)	0
Sump Pit (#)	1
Access Pit (#)	0
Indoor Structure Comments:	2 basement drains take on 2 sump pumps
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	No
Are any outside drains present?	No
GENERAL COMMENTS:	Multiple sumps in basement but all appear to be used for sewage

Portland, ME Building Inspection

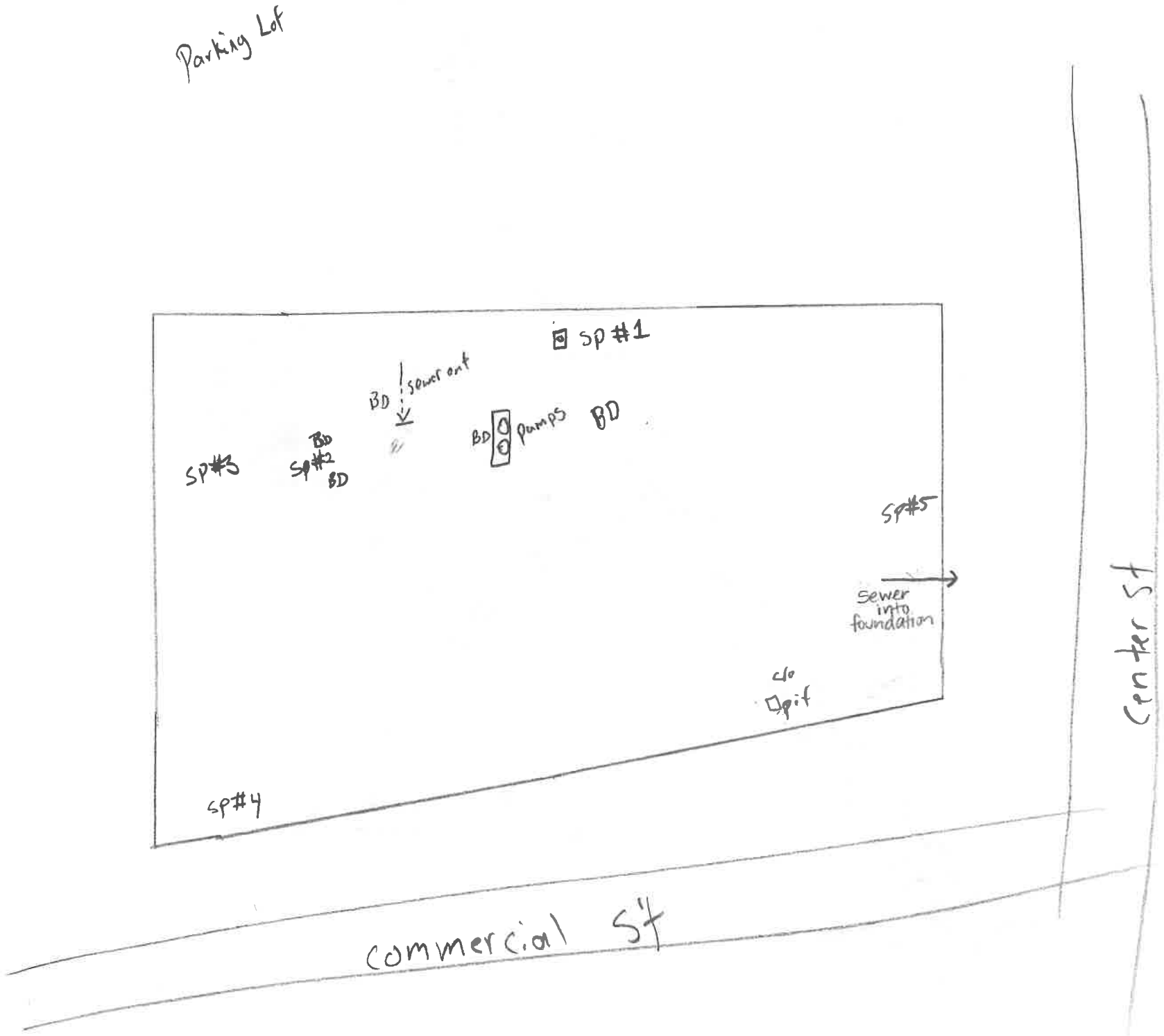
Additional Photo(s)		
	Pumps in basement that take on raw sewage (not being used as a sump pump but an actual sewer pump)	Open pit with cleanout next to it

Portland, ME Building Inspection

Form Locations



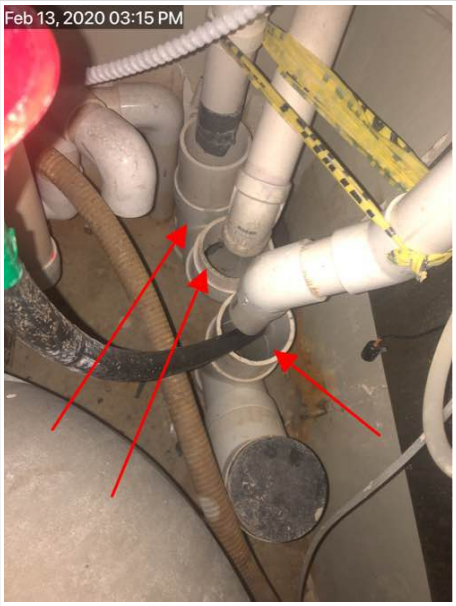
305 Commercial Street



Date Submitted: 02-18-2020 09:47 AM
Submitted By: jlapointe@flowassessment.com
Portland, ME Building Inspections

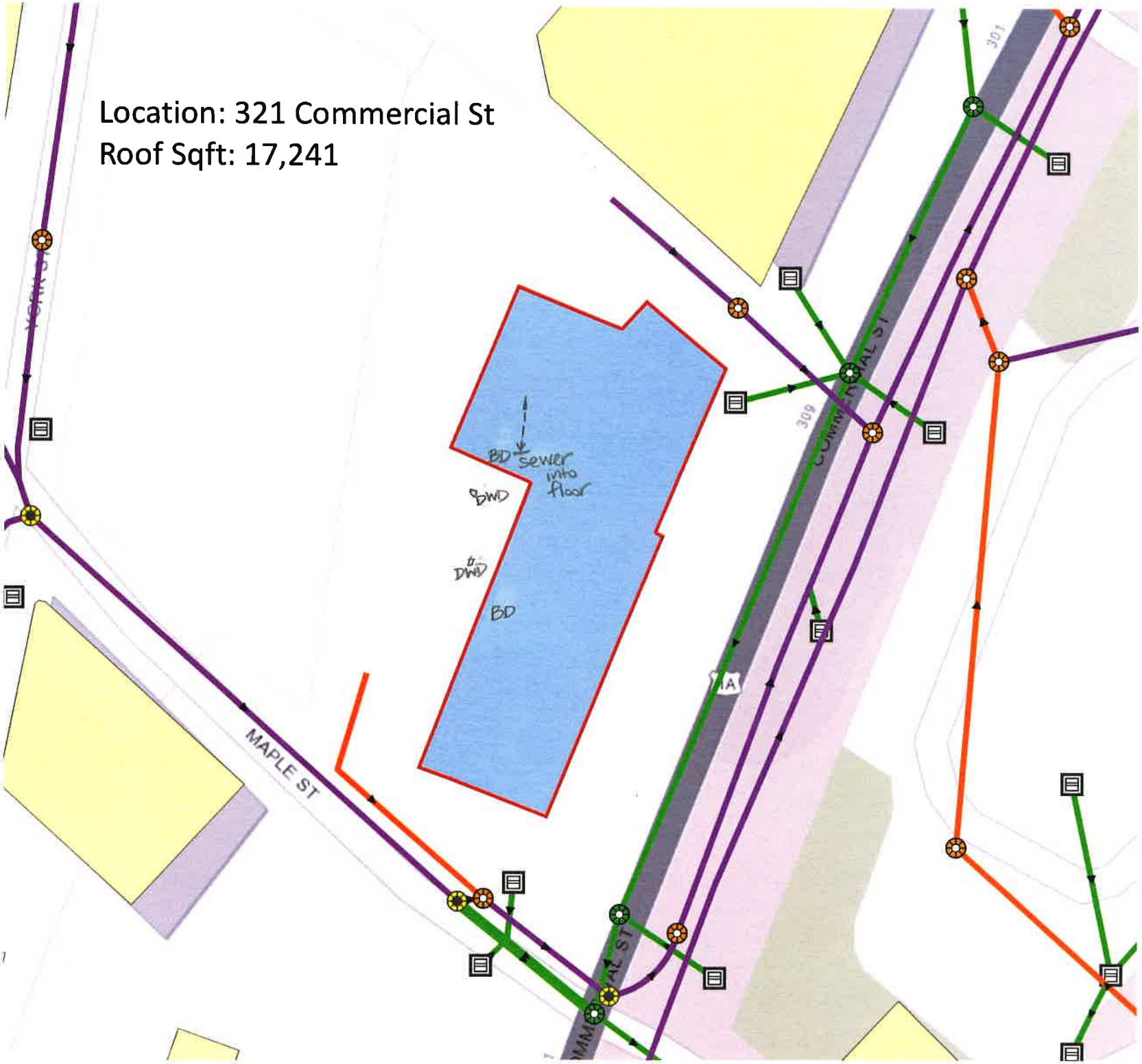
Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	321 Commercial St
Location Photo	
Business Name	Courtyard by Marriott
Intial Date	02-13-2020
Time	13:53 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	 All discharge points located inside pool closet
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes

Portland, ME Building Inspection

Open Cleanout (#)	0
Basement Drain (#)	2
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
4. Are there any outdoor structures present?	No
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Unable to locate any roof leaders. Roof is flat
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	2
GENERAL COMMENTS:	Building was built 6 years ago. Believe everything is separated.


Location: 321 Commercial St
Roof Sqft: 17,241
BD sewer into floor
DWD
DWD
BD
MAPLE ST
COMMERCIAL ST
309
301

Date Submitted: 02-12-2020 10:40 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	40 Spring St
Location Photo	
	43.654340, -70.259900
Business Name	Holiday Inn Portland- By The Parking
Intial Date	02-12-2020
Time	10:18 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	7
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	All structures will be found between 1st and 2nd floor
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	11
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes

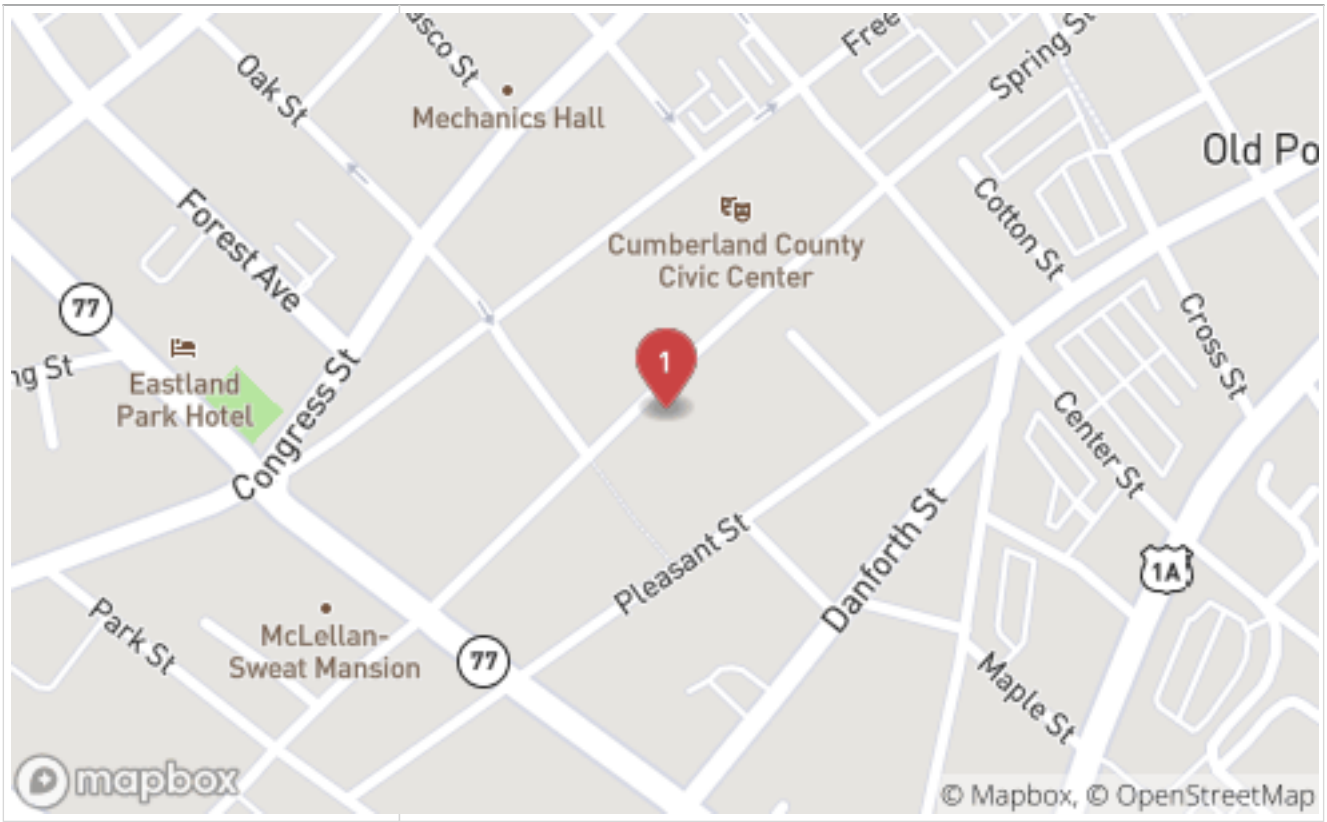
Portland, ME Building Inspection

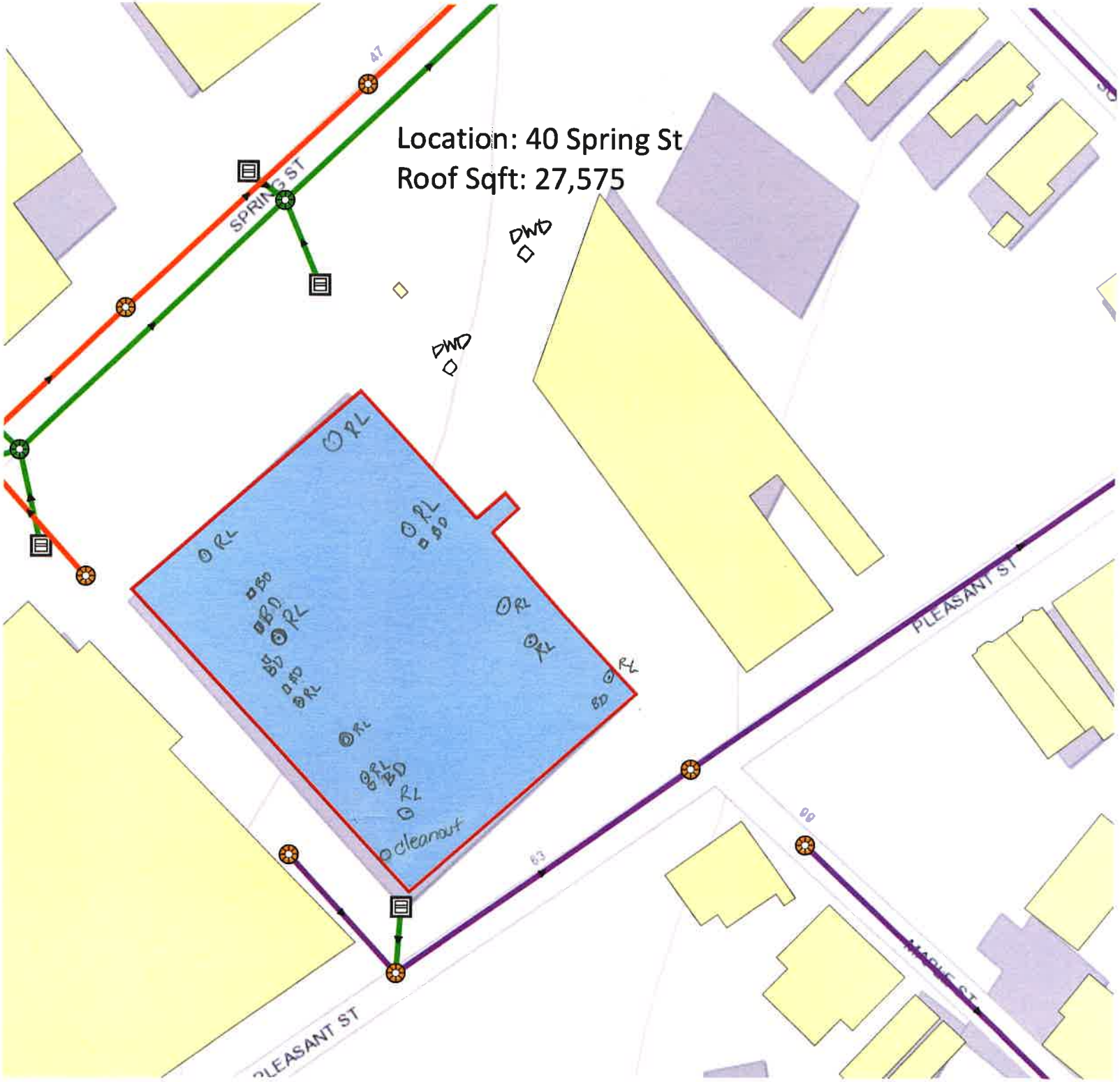
Roof Leader or Flat Roof Drain Comments:	Roof is a parking area all basement drains tie into same roof leaders throughout building
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	2
GENERAL COMMENTS:	No sewer in property
Additional Photo(s)	Cleanout found on ramp to 2nd floor

Date Submitted: 02-12-2020 10:40 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Form Locations




Location: 40 Spring St
Roof Sqft: 27,575
SPRING ST
PLEASANT ST
PLEASANT ST
MAPLE ST
DWD
DWD
RL
BD
cleanout

Date Submitted: 02-13-2020 01:38 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	59 Pleasant St
Location Photo	
	43.653772, -70.259063
Business Name	Bakery Studio
Intial Date	02-13-2020
Time	12:57 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes

Portland, ME Building Inspection

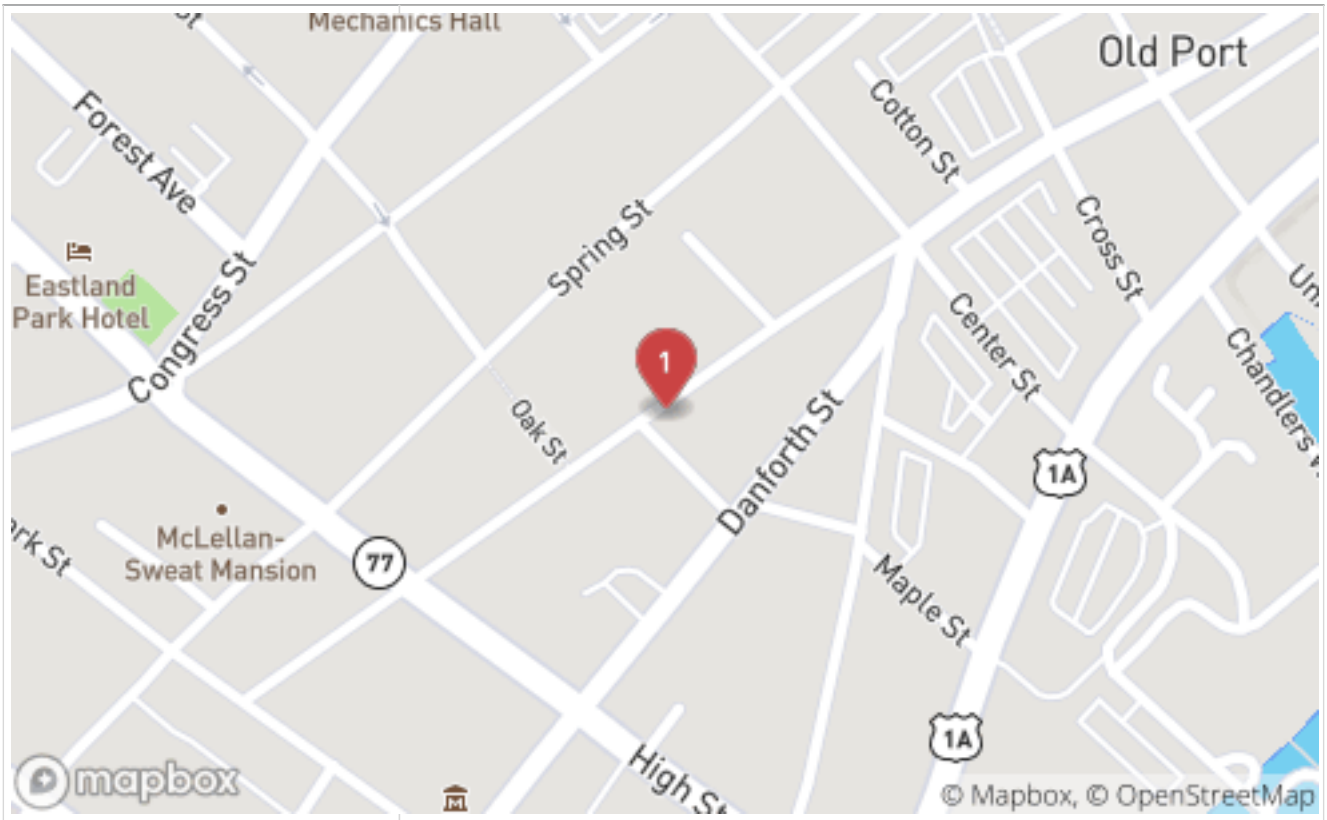
Open Cleanout (#)	0
Basement Drain (#)	0
Open Pipe (#)	4
Sump Pit (#)	0
Access Pit (#)	4
Indoor Structure Comments:	All 4 pits labeled with photos of running water from open pipes - all tied into sewer
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	4
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	All roof leaders are directly tied into sewer
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	1
GENERAL COMMENTS:	A lot of groundwater running through this basement with open pipes in each pit
Additional Photo(s)	Pit 1 Pit 2 (open pipe with running water to it)

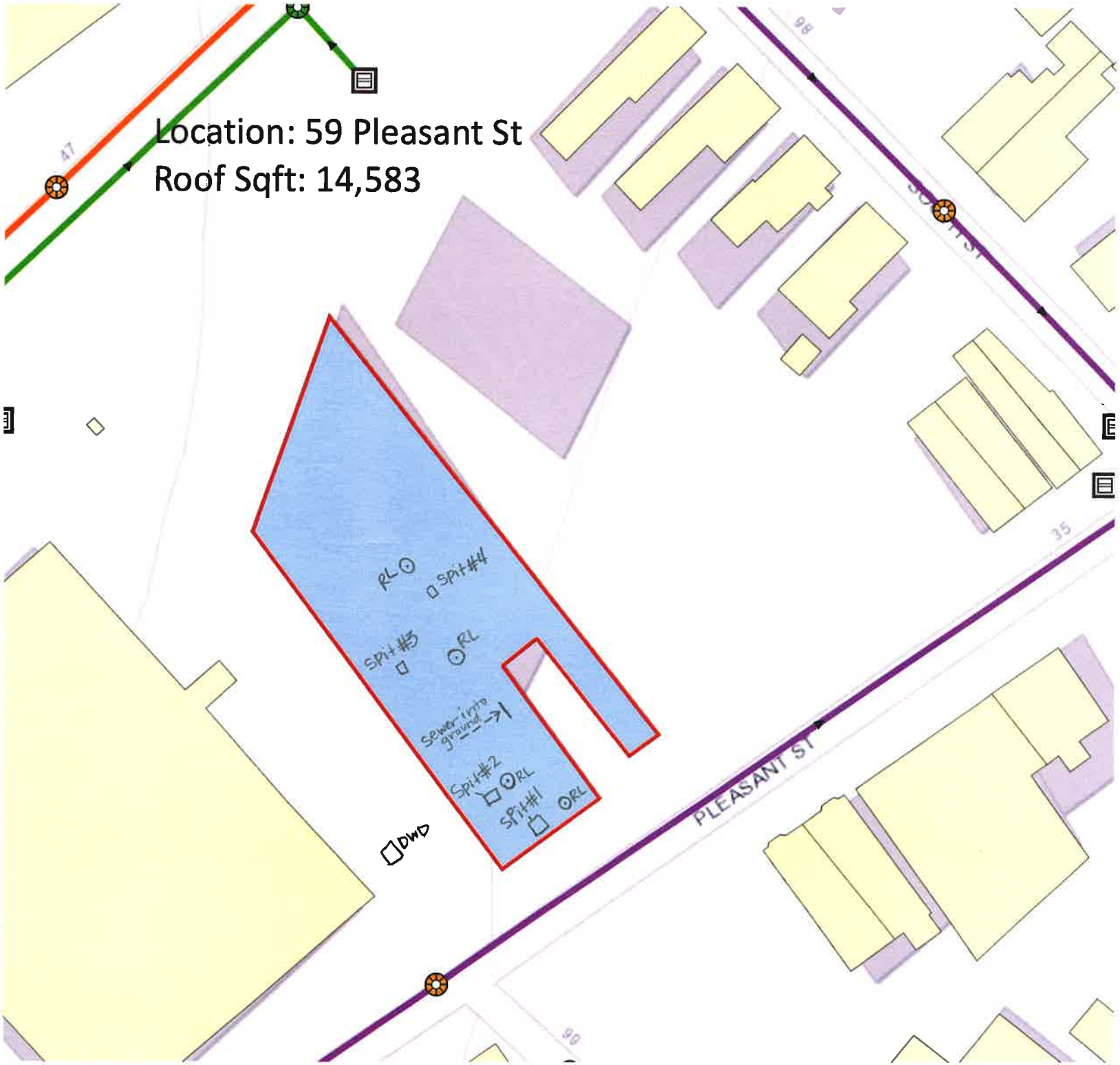
Portland, ME Building Inspection

	Pit 3 with open pipe	Pit 4

Portland, ME Building Inspection

Form Locations




Location: 59 Pleasant St
Roof Sqft: 14,583
RL
Spit#4
Spit#5
RL
sewer into ground
Spit#2
RL
Spit#1
RL
DWD
PLEASANT ST

Date Submitted: 02-12-2020 12:37 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	82 Free St
Location Photo	
	43.655358, -70.259513
Business Name	Cross Insurance Arena
Intial Date	02-12-2020
Time	10:08 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	Possible sewer discharge 1 Sewer 2 into floor

Portland, ME Building Inspection

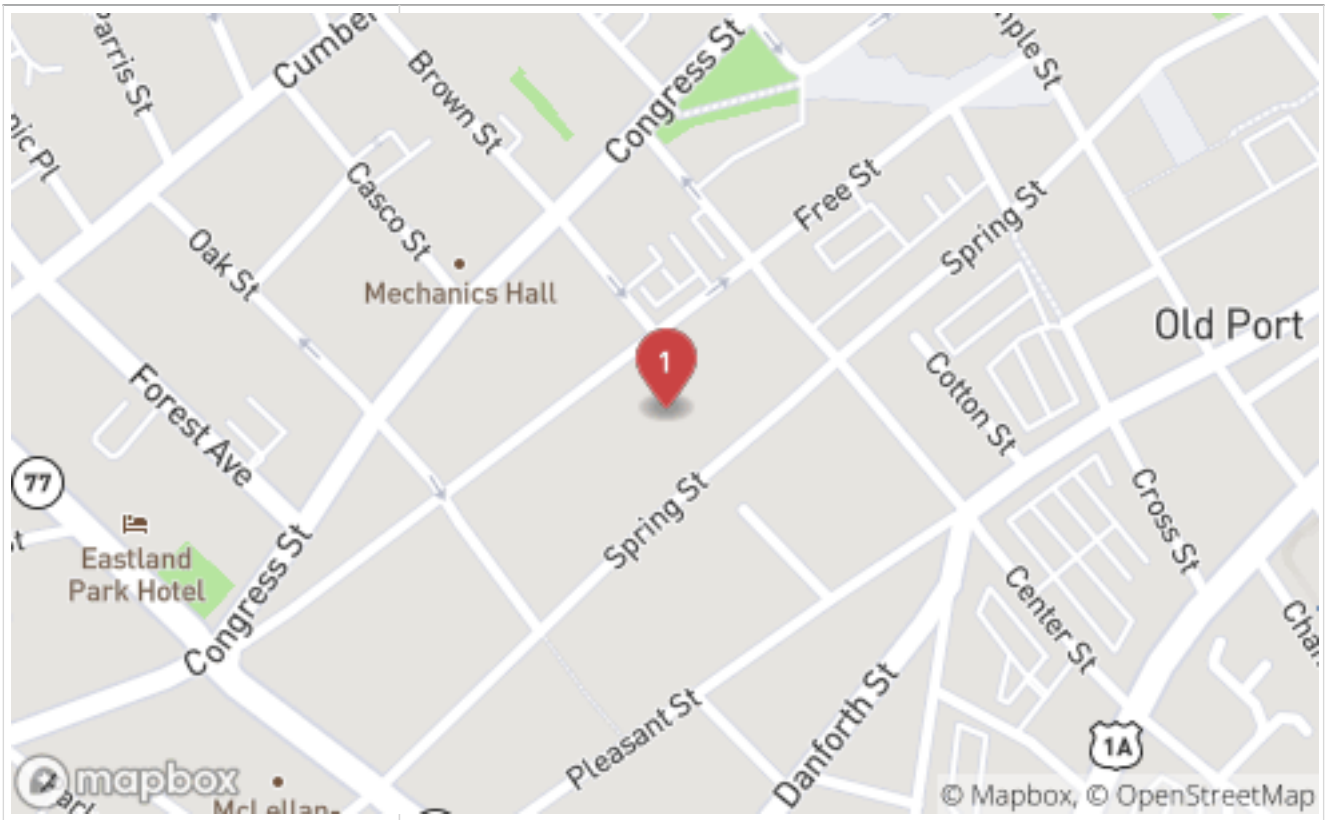
	Pipe is labeled grease waste	Sewer 3
	Sewer 4 and 5 to the floor	
2. Is there a sump pump in the basement?	Yes	
Sump Pump Discharge Location	Unknown	
Sump Pump Comments:	Sump pumps located under elevator shafts - unable to obtain photos	
3.Are there any additional structures present which could collect water from the basement floor?	Yes	
Open Cleanout (#)	0	
Basement Drain (#)	16	

Portland, ME Building Inspection

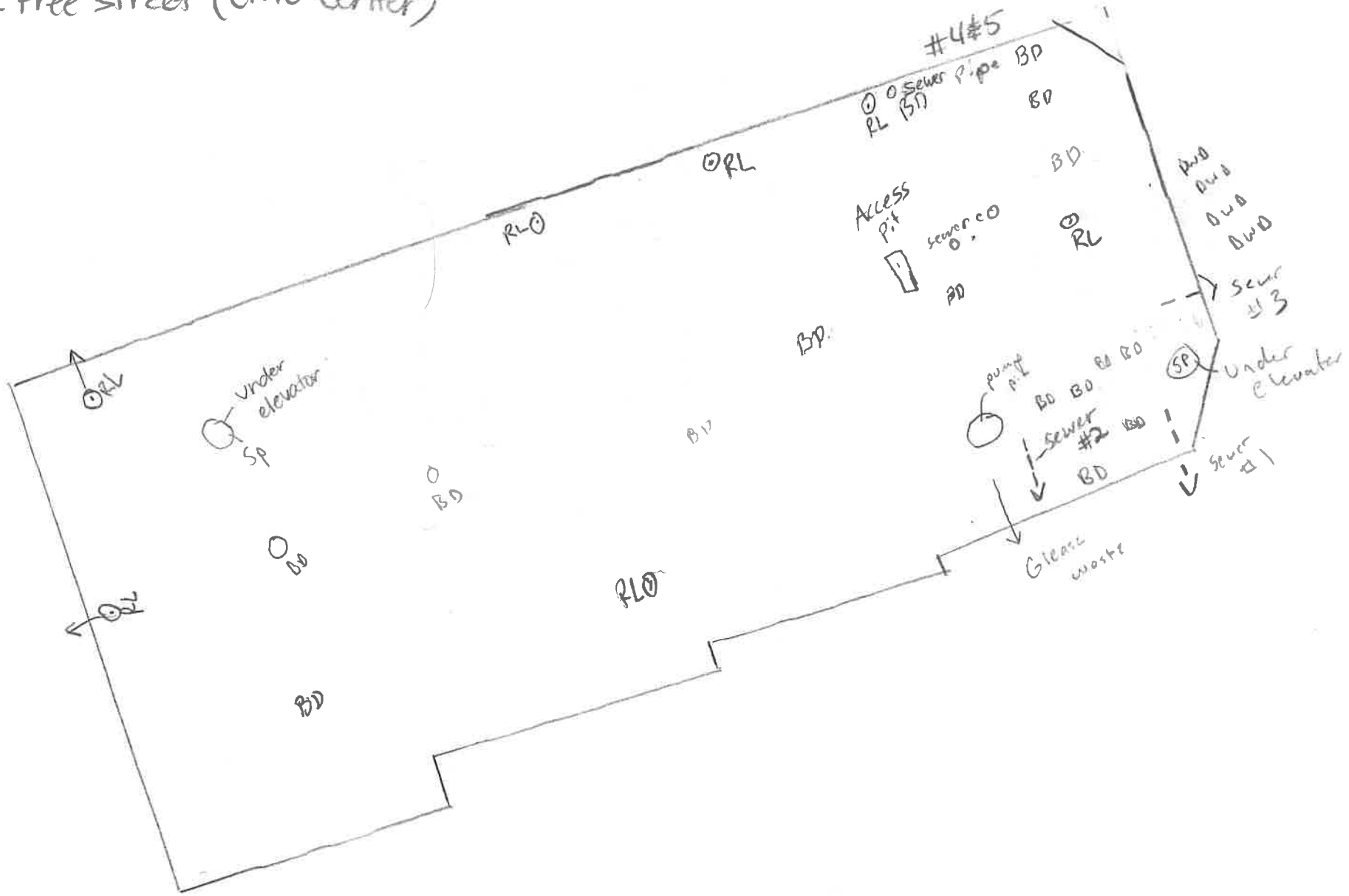
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	1
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	7
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	8 drains on main roof discharge through floor in 4 locations
Are any outside drains present?	Yes
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	4
GENERAL COMMENTS:	All sewer exit photos are estimates where pipe is exiting the building. Several vent pipes throughout building all coming out of floor at lowest point. Have to assume main lateral for building is underground
Additional Photo(s)	Pump pit

Portland, ME Building Inspection

Form Locations



82 Free Street (Civic Center)



*Map provided had incorrect outline

Date Submitted: 02-13-2020 11:49 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	N/A
Interviewer	MATTHEW SILVA
Address	88 Spring St
Location Photo	
	43.654181, -70.260126
Business Name	Holiday Inn by the bay
Intial Date	02-13-2020
Time	11:15 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth

Portland, ME Building Inspection

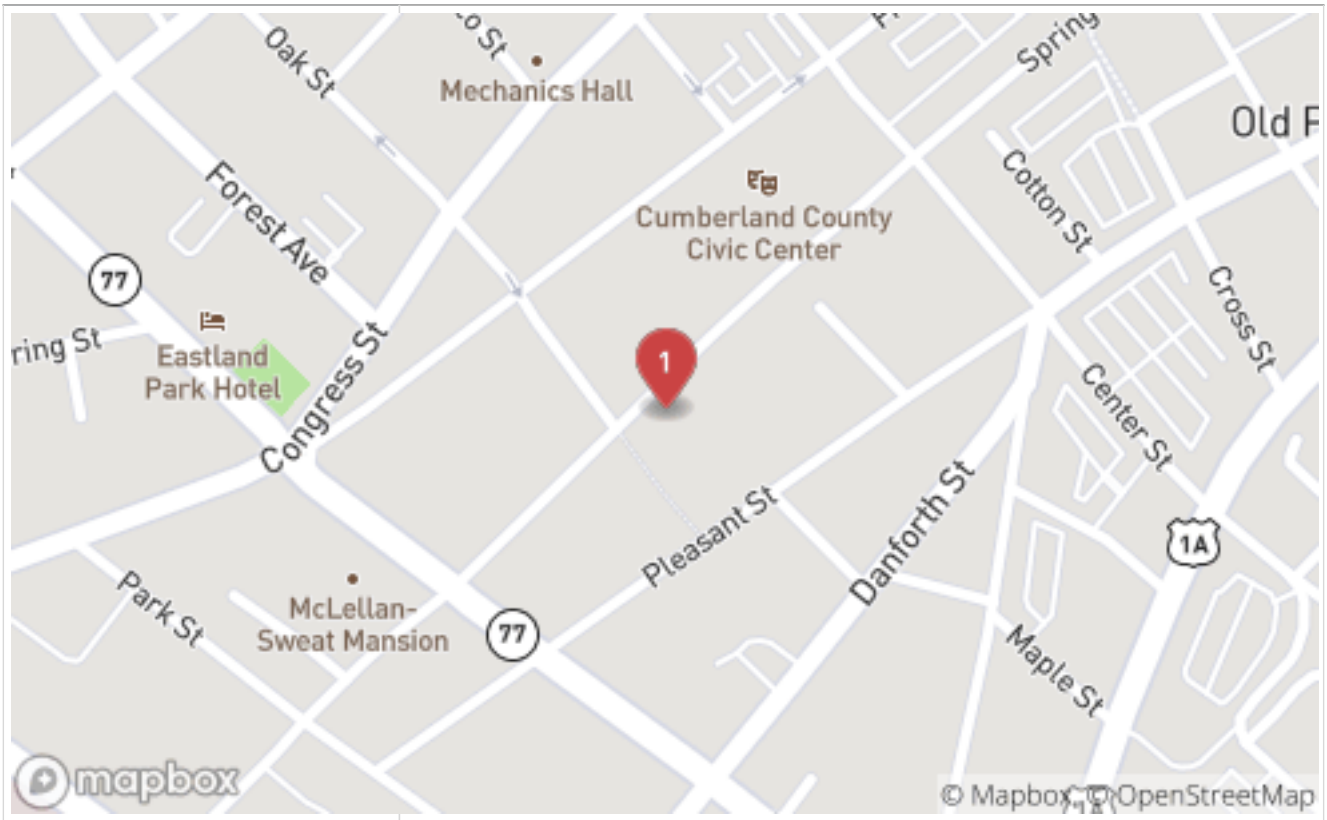
Sewer Exit Photo(s)	 Bigger line is sewer smaller is a roof leader
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Open Cleanout (#)	0
Basement Drain (#)	5
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	All drains appear to be tied into wherever roof leaders go
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	7
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	Able to locate all roof leaders under parking garage on back side of hotel, however unable to locate roof leaders that maintenance said were present on main building.
Are any outside drains present?	No
GENERAL COMMENTS:	All roof leaders and sewer pipe are located very close together

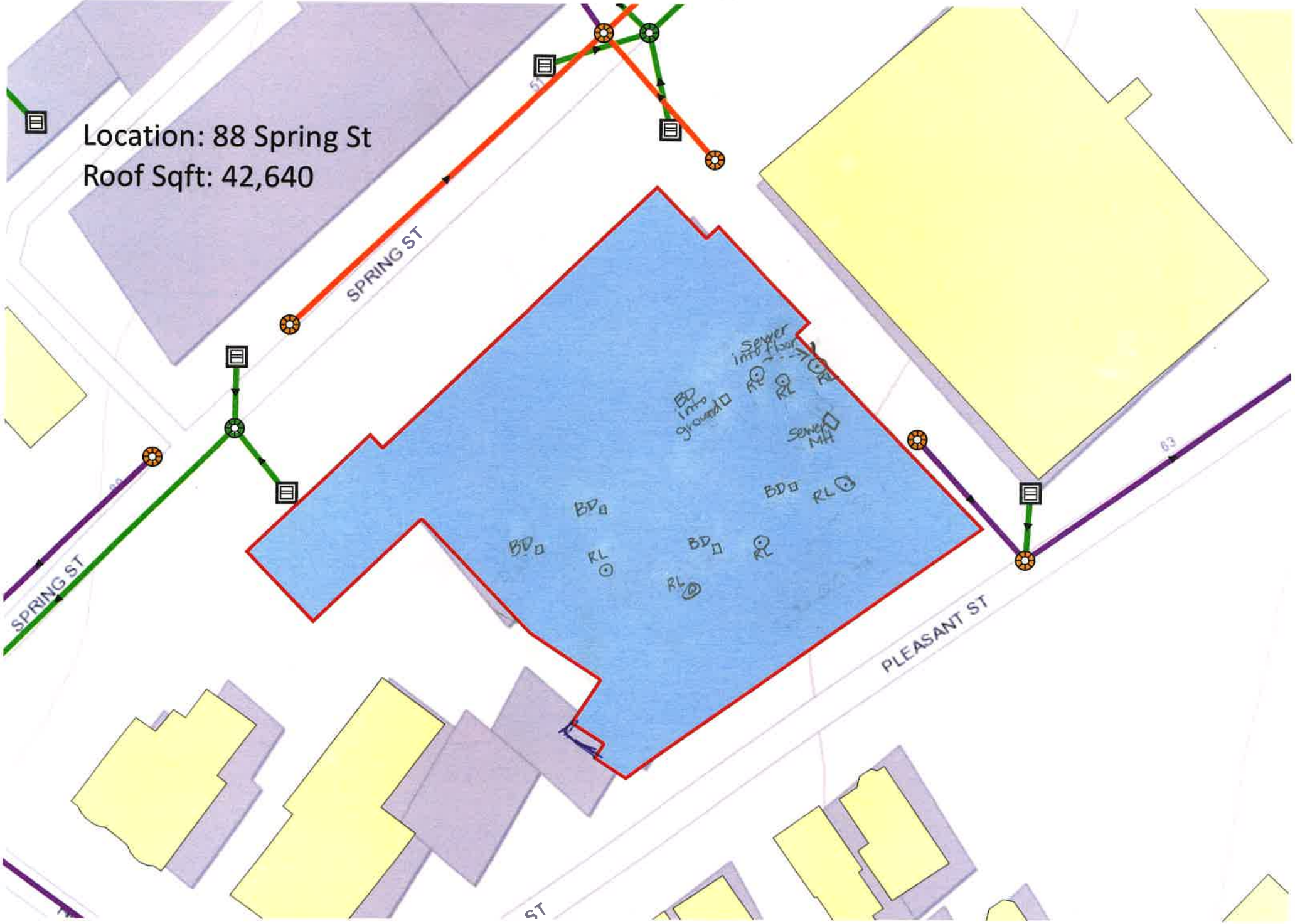
Portland, ME Building Inspection

Additional Photo(s)	 Manhole in lowest part of garage CNO welded shut.	

Portland, ME Building Inspection

Form Locations




Location: 88 Spring St
Roof Sqft: 42,640
SPRING ST
SPRING ST
PLEASANT ST
Sewer into floor
BD into ground
Sewer MH
BD
RL

Date Submitted: 02-14-2020 10:50 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	12
Interviewer	MATTHEW SILVA
Address	135 Walton St
Location Photo	
	43.679609, -70.286581
Business Name	Wayside Food Program
Intial Date	02-14-2020
Time	09:48 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level approximately:
Approximate # of inches below floor level	72
Sewer Exit Photo(s)	
2. Is there a sump pump in the basement?	Yes

Portland, ME Building Inspection

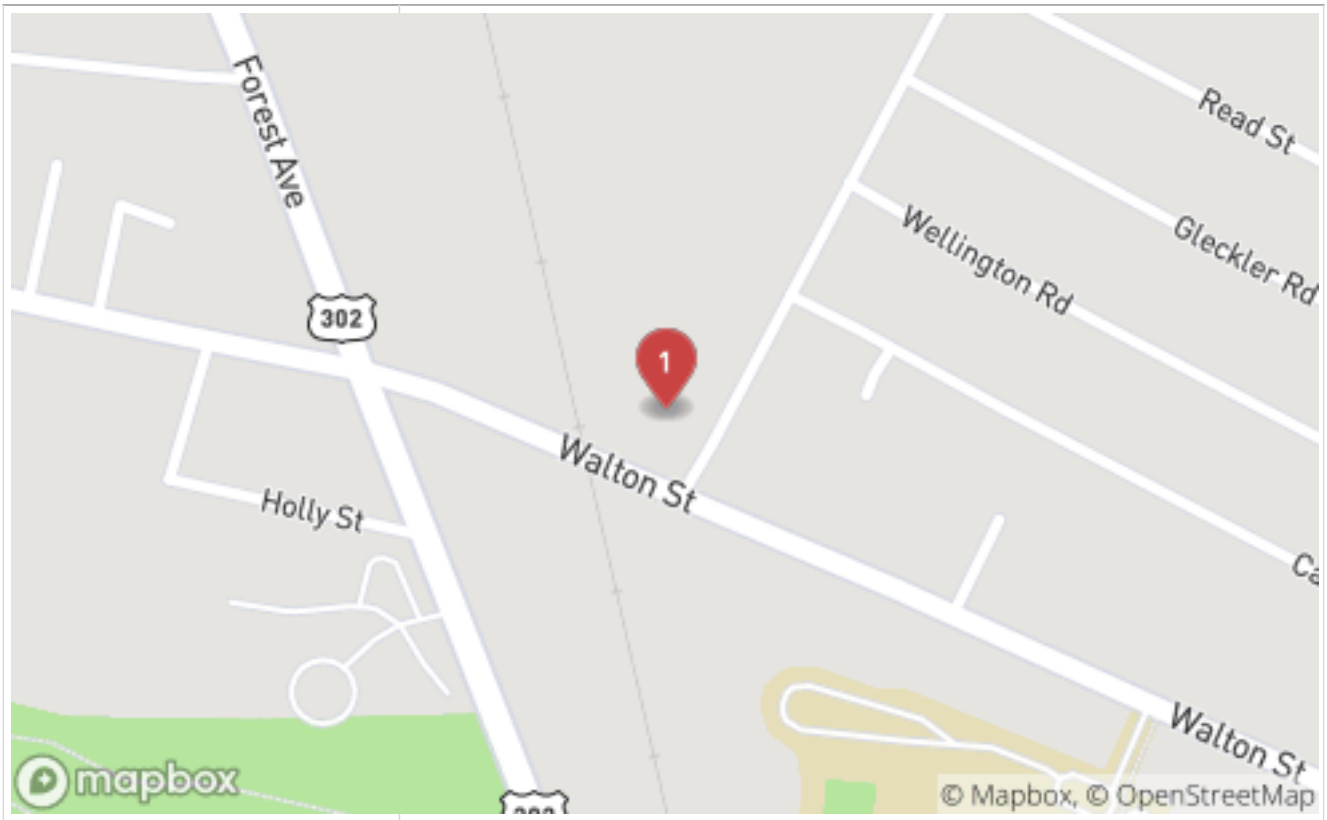
Sump Pump Discharge Location	Sanitary
Sump Pump Photo(s)	Sump 1 Sump 2
Sump Pump Comments:	Both tied into sewer
3.Are there any additional structures present which could collect water from the basement floor?	No
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	9
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	All tie into sewer
Are any outside drains present?	No
GENERAL COMMENTS:	Entire building is a combined system Basement is a crawl space

Portland, ME Building Inspection

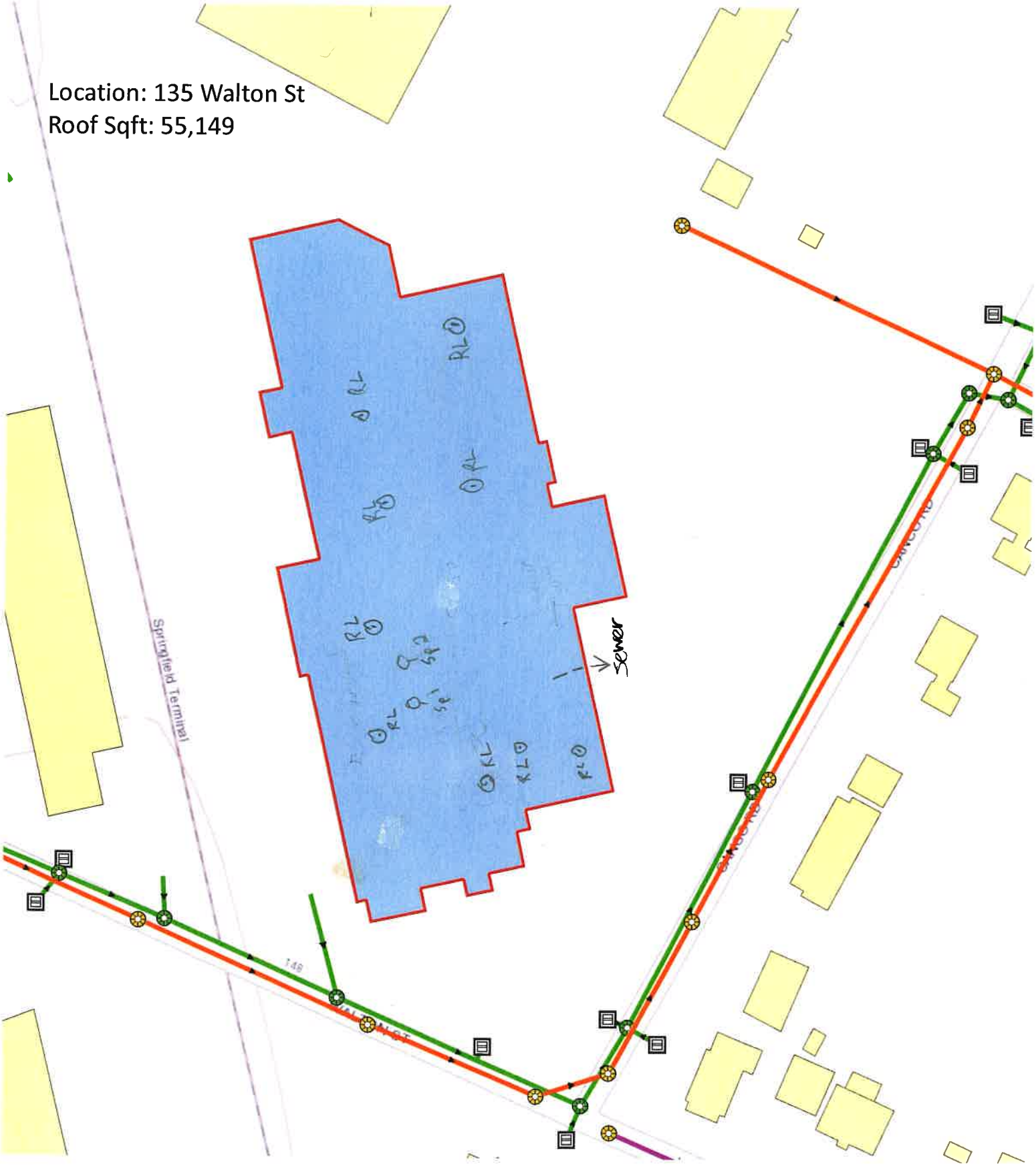
Additional Photo(s)	Sewer line leaking in crawl space	

Portland, ME Building Inspection

Form Locations



Location: 135 Walton St
Roof Sqft: 55,149



Date Submitted: 02-17-2020 11:57 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	25
Interviewer	MATTHEW SILVA
Address	138 Auburn St
Location Photo	
	43.705087, -70.289995
Business Name	First Lutheran Church
Intial Date	02-17-2020
Time	11:21 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Cannot locate
2. Is there a sump pump in the basement?	Yes
Sump Pump Discharge Location	Ground

Portland, ME Building Inspection

Sump Pump Photo(s)	Sump pump has fresh water pumping into it	Sump discharge
3.Are there any additional structures present which could collect water from the basement floor?	Yes	
Open Cleanout (#)	0	
Basement Drain (#)	3	
Open Pipe (#)	1	
Sump Pit (#)	0	
Access Pit (#)	1	
Indoor Structure Comments:	Open pipe is in access pit	
4. Are there any outdoor structures present?	Yes	
Roof Leaders into Ground (#)	1	
Roof Leaders into Foundation (#)	0	
Roof Leaders onto Surface (#)	10	
Possible Flat Roof Drain System?	No	
Are any outside drains present?	No	
GENERAL COMMENTS:	Building is built half on slab, half on foundation	

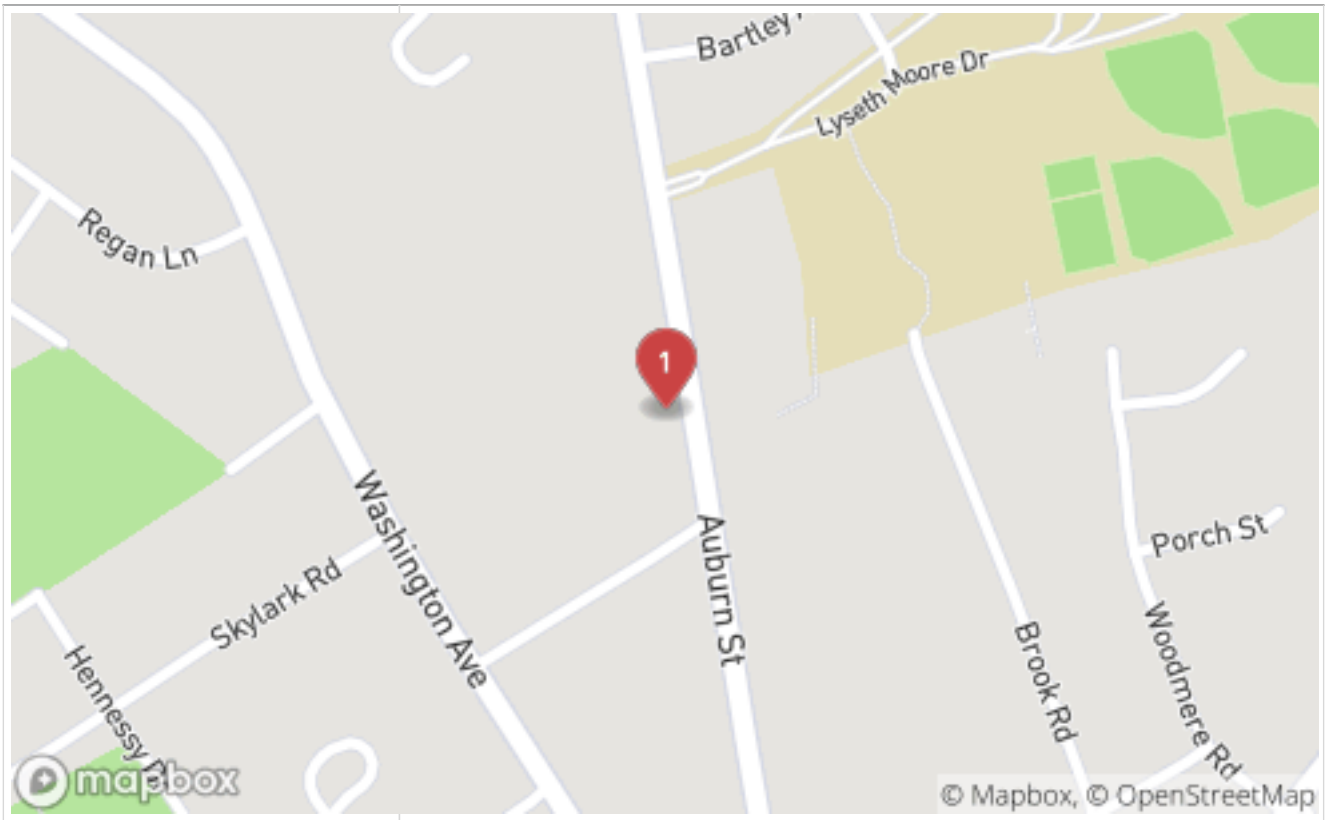
Portland, ME Building Inspection

Additional Photo(s)	Roof leader in surface	Access pit with open pipe and ground water in it

Date Submitted: 02-17-2020 11:57 AM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

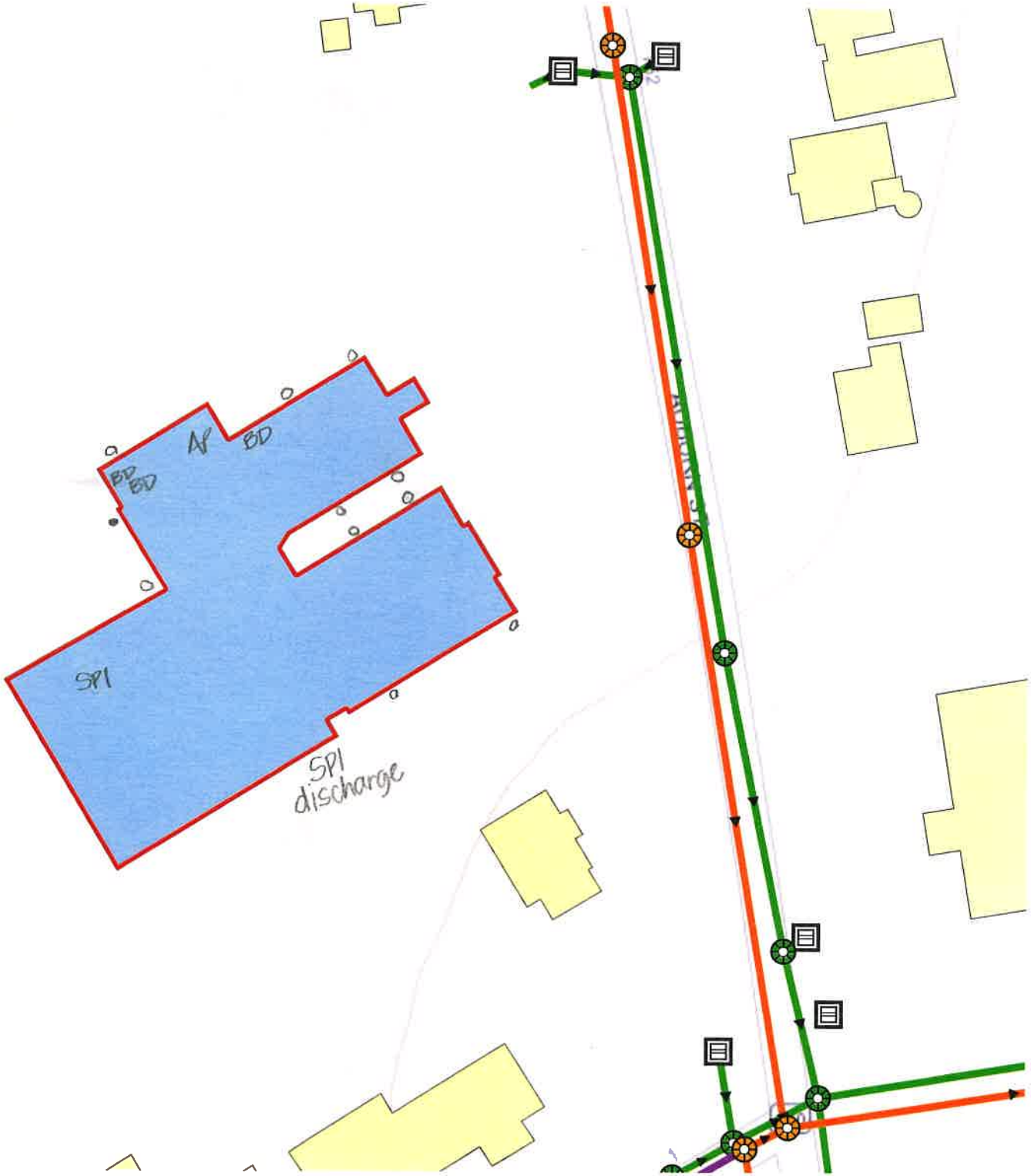
Form Locations



Location: 138 Auburn St

Roof Sqft: 16,914

AP = Access Pit



Portland, ME Building Inspection

Section 1

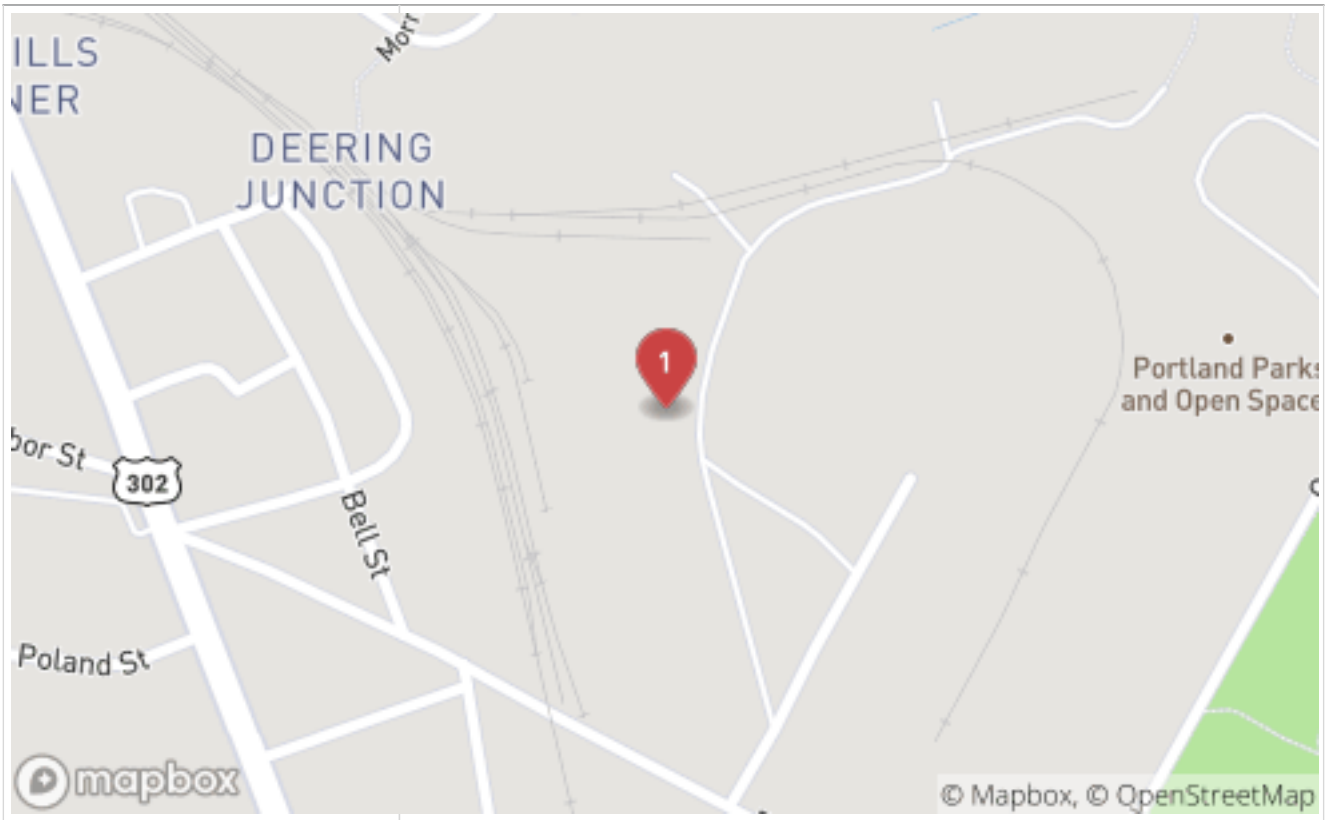
Municipality	Portland, ME
Job Number	2000X
Subsystem	12
Interviewer	TG/JC
Address	40C Quarry Rd
Location Photo	
	43.685622, -70.287718
Business Name	Redford Trucking
Intial Date	02-06-2020
Time	11:39 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes
Basement Drain (#)	1
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	6
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes

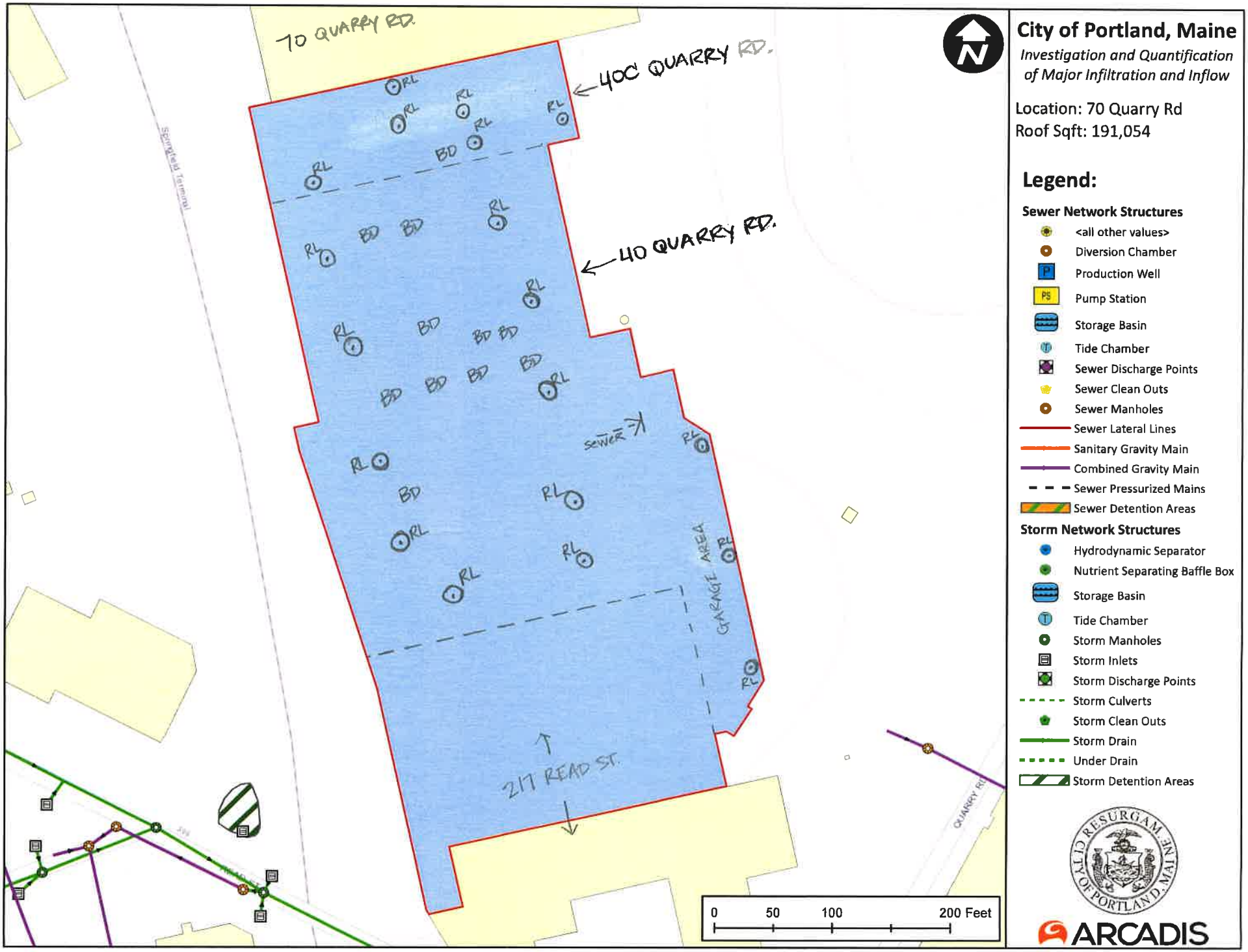
Portland, ME Building Inspection

Roof Leader or Flat Roof Drain Comments:	Roof drains likely connect to drain pipe in 217 Read St	
Are any outside drains present?	No	
Additional Photo(s)	This is actually a picture for 217 Read st in the garage area	Roof drain to foundation

Portland, ME Building Inspection

Form Locations





City of Portland, Maine

Investigation and Quantification of Major Infiltration and Inflow

Location: 70 Quarry Rd
Roof Sqft: 191,054

Legend:

Sewer Network Structures

- <all other values>
- Diversion Chamber
- Production Well
- Pump Station
- Storage Basin
- Tide Chamber
- Sewer Discharge Points
- Sewer Clean Outs
- Sewer Manholes
- Sewer Lateral Lines
- Sanitary Gravity Main
- Combined Gravity Main
- Sewer Pressurized Mains
- Sewer Detention Areas

Storm Network Structures

- Hydrodynamic Separator
- Nutrient Separating Baffle Box
- Storage Basin
- Tide Chamber
- Storm Manholes
- Storm Inlets
- Storm Discharge Points
- Storm Culverts
- Storm Clean Outs
- Storm Drain
- Under Drain
- Storm Detention Areas

RESURGAM CITY OF PORTLAND, MAINE

ARCADIS

Date Submitted: 02-12-2020 02:23 PM
Submitted By: msilva@flowassessment.com
Portland, ME Building Inspections

Portland, ME Building Inspection

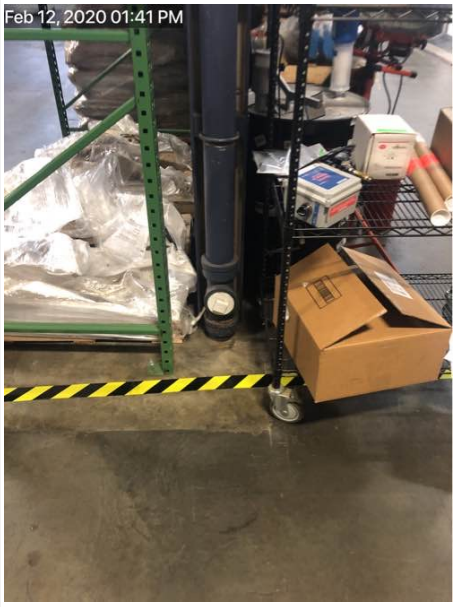
Section 1

Municipality	Portland, ME
Job Number	20012
Subsystem	12
Interviewer	MATTHEW SILVA
Address	40 Quarry Rd
Location Photo	
	43.684959, -70.287597
Business Name	Kerry
Intial Date	02-12-2020
Time	13:29 (-5 GMT)
1. At what level does the sewer pipe exit the building structure?	Below floor level at unknown depth
Sewer Exit Photo(s)	
2. Is there a sump pump in the basement?	No
3.Are there any additional structures present which could collect water from the basement floor?	Yes

Portland, ME Building Inspection

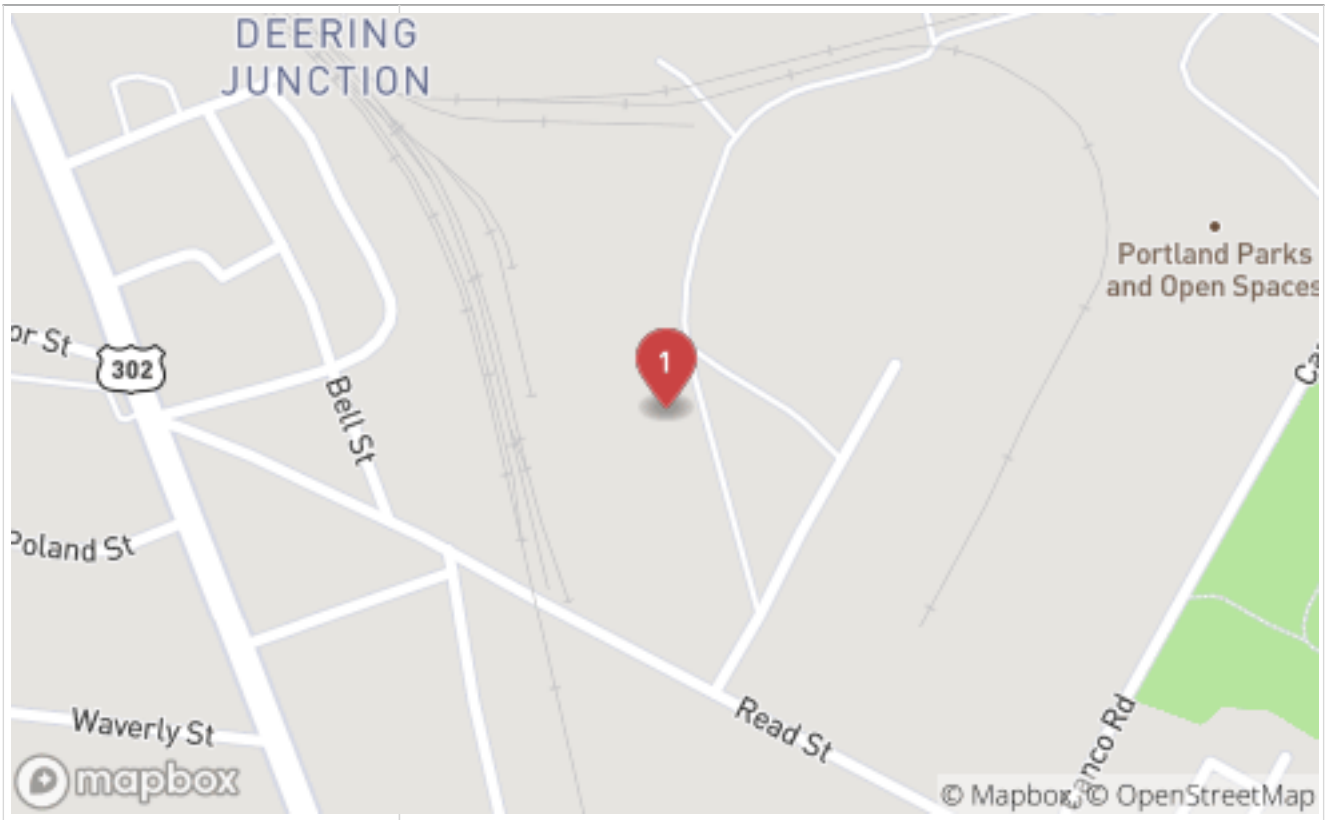
Open Cleanout (#)	0
Basement Drain (#)	10
Open Pipe (#)	0
Sump Pit (#)	0
Access Pit (#)	0
Indoor Structure Comments:	Informed that all are separated to catch Basin
4. Are there any outdoor structures present?	Yes
Roof Leaders into Ground (#)	0
Roof Leaders into Foundation (#)	13
Roof Leaders onto Surface (#)	0
Possible Flat Roof Drain System?	Yes
Roof Leader or Flat Roof Drain Comments:	All drain out to catch basin in front
Are any outside drains present?	No
Yard Drains (#)	0
Window Well Drains (#)	0
Stairwell Drains (#)	0
Driveway Drains (#)	0
Outside Drain Comments:	Catch Basin is on map for 217 Read St
GENERAL COMMENTS:	All separated back in 2012 per factory supervisor: Ryan Sullivan

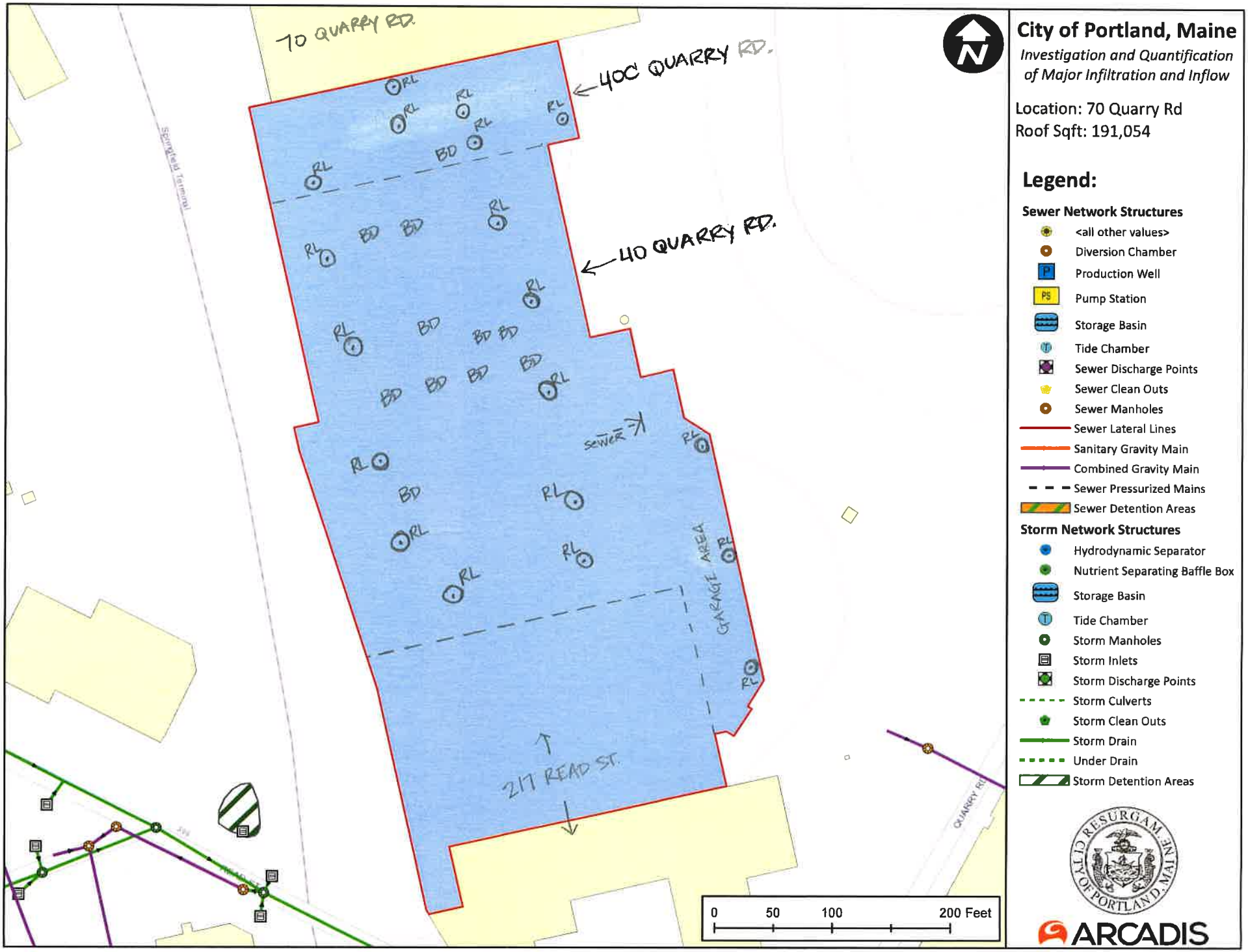
Portland, ME Building Inspection

Additional Photo(s)		
	All roof leaders look like this in warehouse area	

Portland, ME Building Inspection

Form Locations





City of Portland, Maine

Investigation and Quantification of Major Infiltration and Inflow

Location: 70 Quarry Rd
Roof Sqft: 191,054

Legend:

Sewer Network Structures

- <all other values>
- Diversion Chamber
- Production Well
- Pump Station
- Storage Basin
- Tide Chamber
- Sewer Discharge Points
- Sewer Clean Outs
- Sewer Manholes
- Sewer Lateral Lines
- Sanitary Gravity Main
- Combined Gravity Main
- Sewer Pressurized Mains
- Sewer Detention Areas

Storm Network Structures

- Hydrodynamic Separator
- Nutrient Separating Baffle Box
- Storage Basin
- Tide Chamber
- Storm Manholes
- Storm Inlets
- Storm Discharge Points
- Storm Culverts
- Storm Clean Outs
- Storm Drain
- Under Drain
- Storm Detention Areas

RESURGAM CITY OF PORTLAND, MAINE

ARCADIS

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Building Inspection Findings

Address	Is there a sump pump in the basement?	Sump Pump Discharge Location	Sump Pump Comments:	Are there any additional structures present which could collect water from the basement floor?	Open Cleanouts	Basement Drains	Open Pipes	Sump Pits	Access Pits	Indoor Structure Comments:	Are there any outdoor structures present?	Roof Leaders into Ground	Roof Leaders into Foundation	Roof Leaders onto Surface	Possible Flat Roof Drain System?	Roof Leader or Flat Roof Drain Comments:	Are any outside drains present?	External Drains	Yard Drains	Stairwell Drains	Driveway Drains	Outside Drain Comments:	GENERAL COMMENTS:
1 Davis Farm Rd. Building 1	NO			YES		8				6 Drains are located in garage area of building, 2 are located in separate rooms	NO				YES		YES	5	5			All yard drains are catch basins in parking lot	Contact: Bryan Haberman This inspection is for building in the back (Labeled Building #1)
1 Davis Farm Rd. Building 2	NO			YES		6				No Basement - all structures are located on the first floor	NO				YES	3 drains in middle of roof	NO						Sewer is under building. Found a possible access point but could not open.
511 Riverside Industrial Park	NO			YES		1				Drain can be found in boiler room	YES			3	YES		NO						Building Contact: Tim Meehan
56 Milliken St	NO		Pumps present are for wastewater to be pumped up	YES		12					YES		13		YES	Paradigm has multiple leaders going into floor Tyson Warehouse has 1 central drain	YES	2			2		Built on slab. Unable to locate sewer.
171 Auburn St	YES	Sanitary	Sump is hard piped to sewer	YES		1				Basement drain exit location unknown	NO				YES	Can only locate roof drains in cafeteria's ceiling	NO						All drains and sewer manholes are accurate on map. Sewer lines can be located under gym floor in crawl space
175 Auburn St	YES	Other	Sump pump has a hose to an open cleanout (unknown source)	YES	1	2				All found under cafeteria	NO				YES		NO						Drains and manholes are in correct location on map
91 Auburn St	YES	Unknown	All sump pumps are piped together and discharge out through wall (unknown source)	YES		10					YES	5		1	YES	Back side of building is a flat roof. Unknown if has a roof drain because it has slots where water can drain (See additional photo for example)	YES	3	1		2		Contact: Bob (Winslow Property) 207-319-5636 There is another sewer lateral that comes out of Shaw's side of building but we were unable to locate
1041 Brighton Ave	NO			NO							NO				YES	Flat roof can not locate any drain source	YES	4			4	Unable to locate where drains discharge	Contact: Gus 617-901-1163. Landlord believes everything has already been separated after they had a drain clogged. Also was told that sewer exits through front of building facing Brighton Ave.
1100 Brighton Ave	NO			NO							YES		2	4	NO		YES	8			8	All Driveway drains are catch basins	Building is built in sections so possible multiple laterals exiting (Built on slab and cannot locate) Can only locate 2 roof leaders from roof. There are more built inside columns
1125 Brighton Ave	NO			YES		3				All structures are located in first floor (no basement)	YES			2	NO		YES	4	3	1		Only drew in drains that weren't already on the map	Contact: Peter Valcourt - Maintenance Supervisor 207-762-1618. No Basement for building. 2 courtyards with drains (See sketch)
1125 R Brighton Ave	NO			NO							YES	1		2	YES	Roof leader that goes into ground could just drop out into surface under the deck	YES		N/A	N/A	N/A	All outside drains already mapped out	Point of Contact: Josh Stevens (Resident Service Director) Foundation is on slab. Multiple cleanout covers in floor of building.
1140 Brighton Ave	NO			YES		2	1	1		Open pipe appears to be abandoned sewer line	YES			5	NO		YES	1			1		All sewer runs out under Kon's side of building. Small flat area of roof present in front of building with drains that come off of the sides.
1145 Brighton Ave	YES	Other	Sump pump drains with a hose into basement drain	YES		4		1			NO				YES	Roof drain is piped through building. Exits behind retaining wall	YES	1	1				Unable to locate sewer inside of building. Could only locate from outside through manhole
155 Riverside St	NO			NO							YES	3		1	NO		NO						Roof leaders into ground discharge through retaining wall
155 Riverside St	YES	Unknown	Very dry and was told that it doesn't ever run	NO							YES			8	NO		NO						No Basement (built on slab) Sewer can only be seen from outside of building
23 Orono Rd	NO			YES		11				No Basement - all structures are located on the first floor	NO				YES	Roof is flat but all drains on roof drain out of side of building (See additional photo)	YES	7	5		2	Also 4 drain manholes	This building is only 2 years old (Old school has been torn down). All manholes were opened to verify where lines led.
7 Rand St	NO			NO							YES		13	1	YES	Could not locate roof leader in office area	YES	12	4		8		Did not photograph all roof leaders
81 Riverside St	NO			NO							YES			4	NO		YES	10	7		3	Yard drains in the courtyard discharge onto ground	
150 Read St	NO			NO							YES			7	NO		NO						
162 Canco Rd	NO			YES		13				All basement drains go into oil/water pit (separator)	YES		9	2	YES	All roof drains go into foundation throughout building One other goes into wall	YES	4			4	All drains are catch basins	Was told that everything is combined in building
165 Read St	NO			YES		2				2 evaporator catchment tanks present that pump to the sewer - See photo	YES	6	5	5	YES		YES	4			4	2 more drains from unknown sources into the ground (See photos)	
182-184 Read St	NO			NO							YES		13		YES	All roof leaders exit below foundation floor	NO						
217 Read St	NO			YES				1		It appears that there was once a sump pump in the current pit but is not used anymore	YES		18	1	YES	Also believe roof drains further into the building; other units may also drain to this pipe	YES	4		1	3	DWD1 may actually be a sewer line with a catch basin cover. Lots of flow, lots of heat coming out of it, and smelled like burnt coffee.	The self storage business extends further than the supplied drawing shows. Added a line to show approximately where it ends on the map. Garage area structures are included with 40 Quarry Road inspection however we believe this is a multi-use space for this entire building.
250/256 Read St	NO			NO							YES		1	2	YES	1 roof drain goes through foundation into floor. Other drains out of back of building	NO						Built on slab. Unable to locate sewer.
70 Quarry Rd	YES	Other	See sump pit photo in additional photos.	NO							YES		14		YES	Likely connect to 217 Read St drain pipe	NO						
90 Quarry Rd	NO			NO							NO				NO		NO						
125 Presumpscot St	YES	Unknown	Sump pump 1 exit point unknown Sump pump 2 ties in directly to roof leader outside	NO							YES	14		9	YES	Very small section of flat roof, unknown drainage?	YES	4	1		3	Yard drain is supposedly open cleanout per property manager	
197 Presumpscot St	NO			NO							YES	1		3	NO		NO						
235 Presumpscot St	NO			YES		2				Basement drain does not appear to be in use	YES		1	2	NO		YES	4			4	Not a flat roof. That is why marked no central drain system. Does have 1 Roof leader to foundation. Addition is being added to this building	Built on slab. Unable to locate sewer.
236 Presumpscot St	YES	Ground		NO							YES			1	NO		YES	5			5	All Driveway drains are catch basins	
273 Presumpscot St	NO			NO							NO				NO		NO						This building has an area that is surround by fence - we were unable to gain access.
275 Presumpscot St	NO			YES		5				Extra pumping pit in back corner for bathroom (See additional photos)	YES			6	NO		NO						Cleanout cover outside is missing its cover
290 Presumpscot St	NO			YES						Foundation is slab	YES			1	NO		NO						
299 Presumpscot St	NO		Both sump pumps are located outside of building	YES		1				1 roof leader through center of garage	YES		1	5	YES	One roof leader to foundation can be found inside garage	NO						Both manholes outside of building have sump pumps in them (unknown discharge point)
45 Spring St	NO			YES		3					YES		4		YES	All roof leaders go to foundation from top floor	NO						
110 Free St	YES	Other	2 sump pumps that connect to storm line that runs in basement next to sewer line	YES		3				All basement drains go to sump pit	YES		5		YES	All roof leaders tie directly into storm drain in basement	YES	2	1		1		Building was renovated and supposedly separated in 2011
20-36 Danforth St	NO		Sump pump is under elevator - unable to access, however it is tied into Roof leader # 1	NO							YES		3		YES		YES	1			1	1 Access pit outside next to address 47 York St	Actual address starts at 20 and ends at 36
305 Commercial St	YES	Other	All sump pumps appear to take on both groundwater and raw sewage	YES		4		1		2 basement drains take on 2 sump pumps	NO				NO		NO						Multiple sumps in basement but all appear to be used for sewage
321 Commercial St	NO			YES		2					NO				YES	Unable to locate any roof leaders. Roof is flat	YES	2			2		Building was built 6 years ago. Believe everything is separated.
40 Spring St	NO			YES		7				All structures will be found between 1st and 2nd floor	YES		11		YES	Roof is a parking area all basement drains tie into same roof leaders throughout building	YES	2			2		No sewer in property
59 Pleasant St	NO			YES			4	4		All 4 pits labeled with photos of running water from open pipes - all tied into sewer	YES		4		YES	All roof leaders are directly tied into sewer	YES	1			1		A lot of groundwater running through this basement with open pipes in each pit

ARCADIS Design & Consultancy for natural and built assets

City of Portland, Maine
Wastewater Collection System Action and Analysis Plan
Building Inspection Findings

Address	Is there a sump pump in the basement?	Sump Pump Discharge Location	Sump Pump Comments:	Are there any additional structures present which could collect water from the basement floor?	Open Cleanouts	Basement Drains	Open Pipes	Sump Pits	Access Pits	Indoor Structure Comments:	Are there any outdoor structures present?	Roof Leaders into Ground	Roof Leaders into Foundation	Roof Leaders onto Surface	Possible Flat Roof Drain System?	Roof Leader or Flat Roof Drain Comments:	Are any outside drains present?	External Drains	Yard Drains	Stairwell Drains	Driveway Drains	Outside Drain Comments:	GENERAL COMMENTS:
82 Free St	YES	Unknown	Sump pumps located under elevator shafts - unable to obtain photos	YES		16			1		YES		7		YES	8 drains on main roof discharge through floor in 4 locations	YES	4			4		All sewer exit photos are estimates where pipe is exiting the building. Several vent pipes throughout building all coming out of floor at lowest point. Have to assume main lateral for building is underground
88 Spring St	NO			YES		5				All drains appear to be tied into wherever roof leaders go	YES		7		YES	Able to locate all roof leaders under parking garage on back side of hotel, however unable to locate roof leaders that maintenance said were present on main building.	NO						All roof leaders and sewer pipe are located very close together
135 Walton St	YES	Sanitary	Both tied into sewer	NO							YES		9		YES	All tie into sewer	NO						Entire building is a combined system. Basement is a crawl space
138 Auburn St	YES	Ground		YES		3	1		1	Open pipe is in access pit	YES	1		10	NO		NO						Building is built half on slab, half on foundation
40C Quarry Rd	NO			YES		1					YES		6		YES	Roof drains likely connect to drain pipe in 217 Read St	NO						
40 Quarry Rd	NO			YES		10				Informed that all are separated to catch Basin	YES		13		YES	All drain out to catch basin in front	NO					Catch Basin is on map for 217 Read St	All separated back in 2012 per factory supervisor: Ryan Sullivan

ARCADIS Design & Consultancy for natural and built assets

Interstate 495

Interstate 95

ADDRESS: 1 DAVIS FARM RD. BUILDING 1
FOLLOW UP: DYE TEST GARAGE DRAINAGE

ADDRESS: 1 DAVIS FARM RD. BUILDING 2
FOLLOW UP: DYE TEST ROOF DRAINAGE

RIVERSIDE ST
PUMP STATION
PS

ADDRESS: 511 RIVERSIDE INDUSTRIAL PARK
FOLLOW UP: DYE TEST ROOF DRAINAGE

ADDRESS: 56 MILLIKEN ST
FOLLOW UP: DYE TEST ROOF DRAINAGE

SEWER ASSETS
- Sanitary Manhole
- PS City Pump Station
- PS Portland Water District Pump Station
- PS Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland

BUILDING INSPECTION LOCATIONS
- Follow Up
- No Follow Up

Building Inspection Findings

0 100 200 300 400 500 Feet

N

Sheet 1 of 6

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

ADDRESS: 175 AUBURN ST
FOLLOW UP DYE TEST SUMP PUMP

ADDRESS: 171 AUBURN ST
FOLLOW UP: EVALUATE DISCONNECTION OF SUMP PUMP AND CONNECTION TO NEARBY DRAINAGE

ADDRESS: 138 AUBURN ST

ADDRESS: 91 AUBURN ST
FOLLOW UP: DYE TEST SUMP PUMPS

PENNELL AV PUMP STATION

Auburn St

Fall Brook Interceptor

Allen Ave

Washington Ave

SEWER ASSETS
- Sanitary Manhole
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland

BUILDING INSPECTION LOCATIONS
- Follow Up
- No Follow Up

Building Inspection Findings

0 100 200 300 400 500 Feet

N

Sheet 2 of 6

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

ADDRESS: 90 QUARRY RD

ADDRESS: 70 QUARRY RD

ADDRESS: 40C QUARRY RD

ADDRESS: 40 QUARRY RD

ADDRESS: 217 READ ST

ADDRESS: 250/256 READ ST
FOLLOW UP: DISCONNECT ROOF DRAINAGE FROM SANITARY AND CONNECT TO STORM DRAIN

ADDRESS: 162 CANCO RD
FOLLOW UP: DISCONNECT ROOF DRAINAGE FROM SANITARY AND CONNECT TO STORM DRAIN OR SURFACE

ADDRESS: 165 READ ST

ADDRESS: 182-184 READ ST
FOLLOW UP: DYE TEST ROOF DRAINAGE

ADDRESS: 150 READ ST

ADDRESS: 135 WALTON ST
FOLLOW UP: DISCONNECT SUMP PUMP AND ROOF DRAINAGE FROM SANITARY AND CONNECT TO STORM DRAIN OR SURFACE

Washington Ave

Forest Ave

Ocean Ave

SEWER ASSETS
- Sanitary Manhole
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland

BUILDING INSPECTION LOCATIONS
- Follow Up
- No Follow Up

Building Inspection Findings

0 100 200 300 400 500 Feet

N

Sheet 3 of 6

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

SEWER ASSETS

- Sanitary Manhole
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS

- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY

- Open Water
- Wetland

BUILDING INSPECTION LOCATIONS

- Follow Up
- No Follow Up

Building Inspection Findings

0 100 200 300 400 500 Feet

N

Sheet 4 of 6

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

ADDRESS: 155 RIVERSIDE ST

ADDRESS: 81 RIVERSIDE ST

ADDRESS: 23 ORONO RD

ADDRESS: 1125 R BRIGHTON AVE

ADDRESS: 1145 BRIGHTON AVE
FOLLOW UP: DYE TEST SUMP PUMPS

ADDRESS: 1125 BRIGHTON AVE

ADDRESS: 1041 BRIGHTON AVE
FOLLOW UP: DYE TEST ROOF DRAINAGE

ADDRESS: 1140 BRIGHTON AVE

ADDRESS: 1100 BRIGHTON AVE
FOLLOW UP: DYE TEST ROOF DRAINAGE

ADDRESS: 7 RAND ST
FOLLOW UP: DYE TEST ROOF DRAINAGE

Interstate 95

CAPISIC BROOK

Brighton Ave

Rand Rd

Fore River Interceptor

FORE RIVER

FORE RIVER

SEWER ASSETS

- Sanitary Manhole
- PS — City Pump Station
- PS — Portland Water District Pump Station
- PS — Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS

- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY

- Open Water
- Wetland

BUILDING INSPECTION LOCATIONS

- Follow Up
- No Follow Up

Building Inspection Findings

0 100 200 300 400 500 Feet

N

Sheet 5 of 6

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

ARCADIS Design & Consultancy for natural and built assets

ADDRESS: 82 FREE ST
FOLLOW UP: DYE TEST SUMP PUMPS AND ROOF DRAINS

ADDRESS: 45 SPRING ST

ADDRESS: 110 FREE ST
FOLLOW UP: DYE TEST SUMP PUMPS AND ROOF DRAINS

ADDRESS: 59 PLEASANT ST
FOLLOW UP: DISCONNECT ROOF DRAINAGE FROM SANITARY

ADDRESS: 40 SPRING ST
FOLLOW UP: DYE TEST ROOF DRAINAGE

ADDRESS: 305 COMMERCIAL ST
FOLLOW UP: DISCONNECT SUMP PUMP FROM SANITARY

ADDRESS: 88 SPRING ST
FOLLOW UP: DYE TEST ROOF DRAINAGE

ADDRESS: 20-36 DANFORTH ST
FOLLOW UP: DYE TEST ROOF DRAINAGE

ADDRESS: 321 COMMERCIAL ST
FOLLOW UP: DYE TEST ROOF DRAINAGE

Franklin St
Forest Ave
High St
State St
York St
Casco Bay Brg
Beach Street Ramp
Commercial St

SEWER ASSETS
- Sanitary Manhole
- City Pump Station
- Portland Water District Pump Station
- Private Pump Station
- ssGravityMain
- Sewer Force Main

DRAIN ASSETS
- Drain Inlets
- Drain Manhole
- Drain Gravity Main

HYDROLOGY
- Open Water
- Wetland

BUILDING INSPECTION LOCATIONS
- Follow Up
- No Follow Up

Building Inspection Findings

0 100 200 300 400 500 Feet

N

Sheet 6 of 6

City of Portland, Maine

June 2020

Planning & Engineering
Sewer System
Evaluation Survey

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City of Portland, Maine

Appendix H - Interceptor Maintenance, Inspection, and Renewal Program

Wastewater Collection System

Analysis and Action Plan

June, 2020

Appendix Contents

INTERCEPTOR MAINTENANCE, INSPECTION, AND RENEWAL PROGRAM MAPS

INTERCEPTOR MAINTENANCE, INSPECTION, AND RENEWAL PROGRAM MAPS

SHEET 1

SHEET 2

SHEET 3

SHEET 4

SHEET 5

SHEET 6

SHEET 7

- CITY PUMP STATION
- PWD PUMP STATION
- PRIVATE PUMP STATION
- COMBINED SEWER OVERFLOW
- HEAVY CLEAN AND INSPECT
- COULD NOT INSPECT
- PREVIOUSLY TELEVISED
- GRAVITY SEWER MAIN
- SEWER FORCE MAIN
- OPEN WATER
- WETLAND
- CITY BOUNDARY

INTERCEPTOR MAINTENANCE, INSPECTION, AND RENEWAL PROGRAM

COVER SHEET

0 0.25 0.5 1 Miles

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Wastewater Collection System Analysis and Action Plan

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Ruby Ln
Goodridge Ave
Eleanor St
Carriage Ln
Patrick Way
Maggie Ln
Broadway
CAPISIC BROOK
Princeton Pnes
Forest Ave
Fifth St
Forest Pnes
Princeton Rdg
Arthur St
Wall St
West Side Interceptor
Avalon Rd
Ardmore St
Homewood Dr
Forest Cir
Avalon Ter
Range St
Beaumont St
King St
Dibiase St
Dorothy St
Hicks St
Hemingway St
Warren Ave
Goodale St
E Commonwealth Dr
W Commonwealth Dr
Elbert St
Belfort St
Xivary St
Meadow St
Newcomb St
Saville St
Bishop St
Mayfield St
Bishop Street Connector
SHEET 2

SSGM-02114
SSGM-02115
8" PVC
Inspected 8/22/2016

Previously CIPPL
SSGM-02021
36" RCP
SSGM-07212
42" RCP
48" BR
48" RCP
54" BR
24" DIP
20" VCP
24" VCP
SSGM-02133
SSGM-06313
24" PP
Inspected 1/28/2019
SSGM-02255
Inspected 7/1/2015
18" VCP

SEWER MANHOLE
COMBINED SEWER OVERFLOW
OTHER SEWER STRUCTURE
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
HEAVY CLEAN AND INSPECT
COULD NOT INSPECT
PREVIOUSLY TELEVISED
GRAVITY SEWER MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY

Interceptor Maintenance, Inspection and Renewal Program

SHEET 1 of 7

0 200 400 800 Feet

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Wastewater Collection System Analysis and Action Plan

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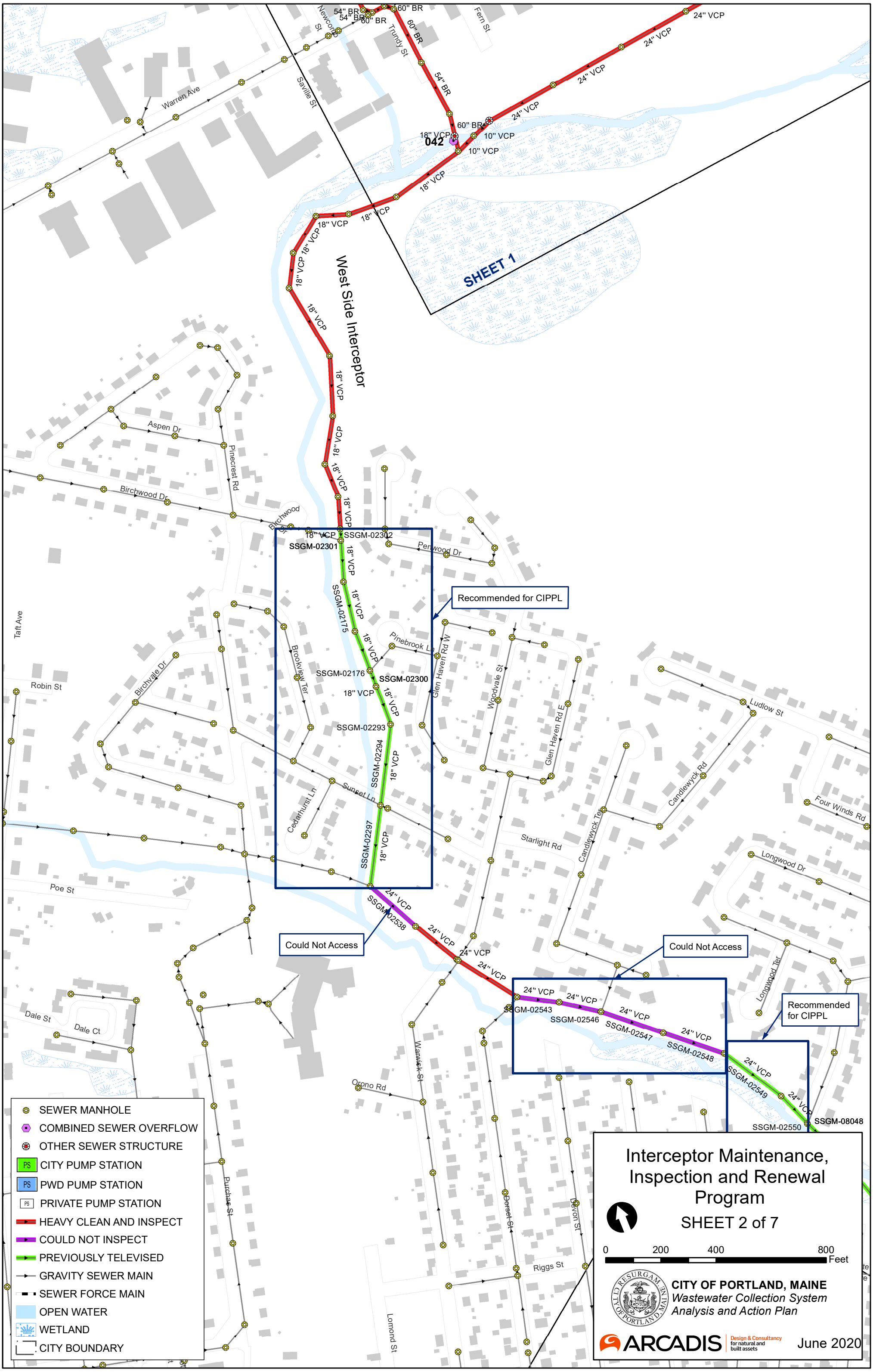
54" BR
54" BR
60" BR
60" BR
60" BR
54" BR
60" BR
18" VCP
042
10" VCP
10" VCP
24" VCP
24" VCP
24" VCP
24" VCP
24" VCP
18" VCP
18" VCP
18" VCP
18" VCP
18" VCP
18" VCP
18" VCP
18" VCP
18" VCP
18" VCP
18" VCP
18" VCP
SSGM-02301
SSGM-02302
SSGM-02175
SSGM-02176
SSGM-02300
SSGM-02293
SSGM-02294
SSGM-02297
24" VCP
SSGM-02538
24" VCP
24" VCP
24" VCP
SSGM-02543
SSGM-02546
SSGM-02547
SSGM-02548
24" VCP
24" VCP
24" VCP
SSGM-02549
24" VCP
SSGM-02550
SSGM-08048
West Side Interceptor
SHEET 1
Recommended for CIPPL
Could Not Access
Could Not Access
Recommended for CIPPL
Warren Ave
Saville St
Newcomb St
Trundy St
Fern St
Aspen Dr
Pinecrest Rd
Birchwood Dr
Birchwood Ln
Penwood Dr
Taft Ave
Robin St
Birchvale Dr
Brookview Ter
Pinebrook Ln
Glen Haven Rd W
Woodvale St
Glen Haven Rd E
Ludlow St
Candlewyck Rd
Four Winds Rd
Cedarhurst Ln
Sunset Ln
Starlight Rd
Candlewyck Ter
Longwood Dr
Longwood Ter
Poe St
Dale St
Dale Ct
Orono Rd
Warwick St
Purchas St
Dorset St
Devon St
Riggs St
Lomond St
SEWER MANHOLE
COMBINED SEWER OVERFLOW
OTHER SEWER STRUCTURE
PS CITY PUMP STATION
PS PWD PUMP STATION
PS PRIVATE PUMP STATION
HEAVY CLEAN AND INSPECT
COULD NOT INSPECT
PREVIOUSLY TELEVISED
GRAVITY SEWER MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY
Interceptor Maintenance, Inspection and Renewal Program
SHEET 2 of 7
0
200
400
800
Feet
CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan
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Recommended for CIPPL

Inspected 10/16/2018

039

SSGM-02955 48" RCP

SSGM-02949 48" RCP

48" RCP

SSGM-02951 21" RCP

21" RCP

21" RCP

21" RCP

10" VCP

12" VCP

24" VCP

24" RCP

24" RCP

24" RCP

24" VCP

24" RCP

24" RCP

24" RCP

24" RCP

24" RCP

24" ZZZ

24" RCP

Lined

SSGM-06326

Fore River Interceptor

SHEET 2

FORE RIVER

CAPISIC BROOK

CAPISIC POND

Rand Rd

Webb St

Levia St

Rowe Ave

Terrace Ave

Lorenzo St

Scammel Ave

Almon Ave

Dorset St

Devon St

Kent St

Essex St

Dennett St

Raymond Rd

Brighton Ave

Capisic St

Albion St

Hermon Rd

Meriline Ave

Hillcrest Ave

David Rd

Mayer Rd

Starbird Rd

Lucas St

Harvey St

Halet St

Presnell St

Little Rd

Sandy Ter

Meadowbrook Ln

Winding Way

Stroudwater Rd

Machigonne St

Hastings St

Rockland Ave

Riverview

SEWER MANHOLE
COMBINED SEWER OVERFLOW
OTHER SEWER STRUCTURE
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
HEAVY CLEAN AND INSPECT
COULD NOT INSPECT
PREVIOUSLY TELEVISED
GRAVITY SEWER MAIN
SEWER FORCE MAIN
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Interceptor Maintenance, Inspection and Renewal Program

SHEET 3 of 7

0 200 400 800 Feet

CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan

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June 2020

Washington Avenue Ext
Garsoe Dr
Alice Ct
Patricia Ln
Hope Ln
PS
Basket Ln
Auburn St
Longview Dr
Caron St
Panoramic View St
Alice St
12" ACP
12" ACP
12" ACP
12" ACP
12" ACP
Inspected 5/7/2019
Summit St
Carter St
Bonny St
SSGM-01455
12" ACP
Creekview Dr
12" ACP
12" ACP
SSGM-01451
Inspected 5/7/2019
SSGM-01450
12" ACP
Pamela Rd
Hope Ave
Abby Ln
12" ACP
Sturdivant Dr
PS
12" ACP
12" ACP
Clapboard Rd
Whaleboat Rd
Hillside Rd
Quiet Ln
PS
Curtis Rd
12" ACP
12" ACP
Clayton St
Frost Hill Rd
Overset Rd
Old Barn Ln
Cir
Whitehead
12" PVC
12" ACP
Jackson St
18" ACP
Inspected 5/7/2019
18" ACP
SSGM-01530
Virginia Carter Interceptor
SSGM-01531
18" ACP
Wendy Way
Summit Park Ave
Talbot St
Aster Ln
Alpine Rd
Juniper St
18" ACP
18" ACP
Bridle Path
Inspected 5/29/2019
CIPPL Recommended
SSGM-01747
18" ACP
SHEET 5
Olde Birch Ln
Olde Birch Ln
Roaring Brook Rd
Deepwood Dr
SSGM-01634
18" ACP
Pineloch Dr
18" ACP
SSGM-01670

SEWER MANHOLE
COMBINED SEWER OVERFLOW
OTHER SEWER STRUCTURE
CITY PUMP STATION
PWD PUMP STATION
PRIVATE PUMP STATION
HEAVY CLEAN AND INSPECT
COULD NOT INSPECT
PREVIOUSLY TELEVISED
GRAVITY SEWER MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY

Interceptor Maintenance, Inspection and Renewal Program

SHEET 4 of 7

0 200 400 800 Feet

CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan

ARCADIS Design & Consultancy for natural and built assets

June 2020

18" ACP
SSGM-01747
SSGM-01634
18" ACP
Olde Birch Ln
Surrey Ln
Pineloch Dr
SSGM-01670
18" ACP
SHEET 4
CIPPL Recommended
Carriage Rd
Heather Dr
SSGM-01671
18" ACP
Roaring Brook Rd
SSGM-01662
18" ACP
Deepwood Dr
18" ACP
Inspected 5/29/2019
SSGM-01663
Summit St
Round Stone Way
Sumac St
18" ACP
SSGM-01668
Deepwood Dr
SSGM-01669
18" ACP
Allen Avenue Ext
SSGM-01886
15" PVC
CIPPL Recommended
Inspected 6/5/2019
15" ACP
SSGM-04199
SSGM-04201
15" ACP
Ledgewood Dr
Meadow Ln
Allen Ave
Bramblewood Dr
SSGM-04202
15" ACP
Could Not Access Manholes
15" ACP
SSGM-06303
Applebee Ct
SSGM-06304
15" ACP
Jameson Dr
Tampa St
SSGM-06305
15" ACP
Inspected 5/29/2019
Racine Ave
Virginia Carter Interceptor
SSGM-03689
18" ACP
Wyoming Ave
SSGM-03739
18" ACP
SSGM-03740
Kansas Ave
18" ACP
SSGM-03691
Inspected 5/29/2019
SSGM-04198
18" ACP
Recommended for CIPPL
SSGM-04197
18" ACP
Virginia St
Country Ln
Ledgewood Dr
Inspected 5/29/2019
SSGM-03692
24" ACP
Recommended for CIPPL
SSGM-03693
24" ACP
Liberty Way
Penn Ave
Recommended for TSS
SSGM-03702
24" ACP
Inspected 5/29/2019
SSGM-06306
Vermont Ave
24" ACP
SHEET 6

SEWER MANHOLE
COMBINED SEWER OVERFLOW
OTHER SEWER STRUCTURE
PS CITY PUMP STATION
PS PWD PUMP STATION
PS PRIVATE PUMP STATION
HEAVY CLEAN AND INSPECT
COULD NOT INSPECT
PREVIOUSLY TELEVISED
GRAVITY SEWER MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY

Interceptor Maintenance, Inspection and Renewal Program

SHEET 5 of 7

0 200 400 800 Feet

CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan

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June 2020

Brookfield
Autumn Ln
Fall Ln
Martin Rd
Christy Rd
Northwood Dr
Regan Ln
Bartley Ave
Sumac Dr
Junior St
36" RCP
21" PVC
21" PVC
21" PVC
15" PVC
15" PVC
21" PVC
8" PVC
21" PVC
21" PVC
21" PVC
21" PVC
Coolidge Ave
Skylark Rd
Washington Ave
Auburn St
Sanborn St
24" PVC
24" PVC
24" PVC
24" PVC
24" PVC
24" PVC
Shingle Way
Cottage Park Rd
Porch St
Mugwhy Ln
Brook Rd
Fall House Ln
Fisher St
Chapman St
Hennessy Dr
Braeburn Rd
Woodmere Rd
Fall Brook Interceptor
48" RCP
48" RCP
Brewster St
Allen Ave
48" RCP
SSGM-01920
Cypress St
The Residences
SSGM-03081
48" RCP
CIPPL Recommended
Short St
Pennell Ave
Abbott St
Knight St
Maplewood St
Inspected 2020
SSGM-03082
60" RCP
Northport Dr
Merrymeeting Dr
Ray St
SSGM-06109
60" RCP
Gertrude Ave
CIPPL Recommended
Fobes St
Washington Ave
SSGM-06114
66" RCP
FALL BROOK
Loring Ave
Sara Ln
SSGM-06871
60" RCP
66" RCP
SSGM-06874
Ohio St
Idaho St
SHEET 5
SHEET 7

SEWER MANHOLE
COMBINED SEWER OVERFLOW
OTHER SEWER STRUCTURE
PS CITY PUMP STATION
PS PWD PUMP STATION
PS PRIVATE PUMP STATION
HEAVY CLEAN AND INSPECT
COULD NOT INSPECT
PREVIOUSLY TELEVISED
GRAVITY SEWER MAIN
SEWER FORCE MAIN
OPEN WATER
WETLAND
CITY BOUNDARY

Interceptor Maintenance, Inspection and Renewal Program

SHEET 6 of 7

0 200 400 800 Feet

CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan

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June 2020

SSGM-06871
60" RCP
SSGM-06874
66" RCP
SHEET 6
SSGM-07037
66" ZZZ
CIPPL Recommended
SSGM-00157
72" RCP
Inspected 2020
72" RCP
SSGM-03807
72" RCP
Inspected 5/22/2019
SSGM-03809
72" RCP
72" RCP
Fall Brook Interceptor
84" RCP
24" ACP
24" ACP
84" RCP
84" RCP
84" RCP
SSGM-03816
SSGM-03815
24" ACP
24" ACP
24" ACP
Virginia Carter Interceptor
SSGM-03817
TSS Recommended
SSGM-03869
84" RCP
CIPPL Recommended
Fall Brook Interceptor
SSGM-05810
84" RCP
Survey Abandoned at Vault Structure
Could Not Access
SSGM-03812
SSGM-04182
84" RCP
84" RCP
SSGM-00137
84" RCP
SSGM-03722
84" RCP
FALL BROOK
Samuel Rd
Sara Ln
Bernard Rd
Florida Ave
Ohio St
Texas St
Maine Ave
Idaho St
Dakota St
Edgewood Ave
Washington Ave
Chesley Ave
Drake St
Berry Ave
Ammerdown Pl
Harvard Cmn
Harvard St
Yale St
Kimberly Ct
Majors Ct
Feeney Way
Nicholas Ct
Canco Rd
Ray St
Marlborough Rd
Togonita St
Ivaloo St
Nottingham Ave
Anthony Ave
Joseph Ave
Lawrence Ave
Felicia Ln
Washington Ave
Country Ln
Malilly Rd
Tamarlane
Fall Brook St
Pleasant Hill Dr
Colson Cir
Holiday Dr
Murray St
Victor Rd
Lloyd Ave
Vera St
Pineledge Ter

SEWER MANHOLE
COMBINED SEWER OVERFLOW
OTHER SEWER STRUCTURE
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PS PWD PUMP STATION
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SEWER FORCE MAIN
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Interceptor Maintenance, Inspection and Renewal Program

SHEET 7 of 7

0 200 400 800 Feet

CITY OF PORTLAND, MAINE
Wastewater Collection System Analysis and Action Plan

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June 2020