

CITY OF PORTLAND PUBLIC SERVICES DEPARTMENT

CONTRACT DRAWINGS

MORSE STREET SEWER SEPARATION

BID NUMBER: 915

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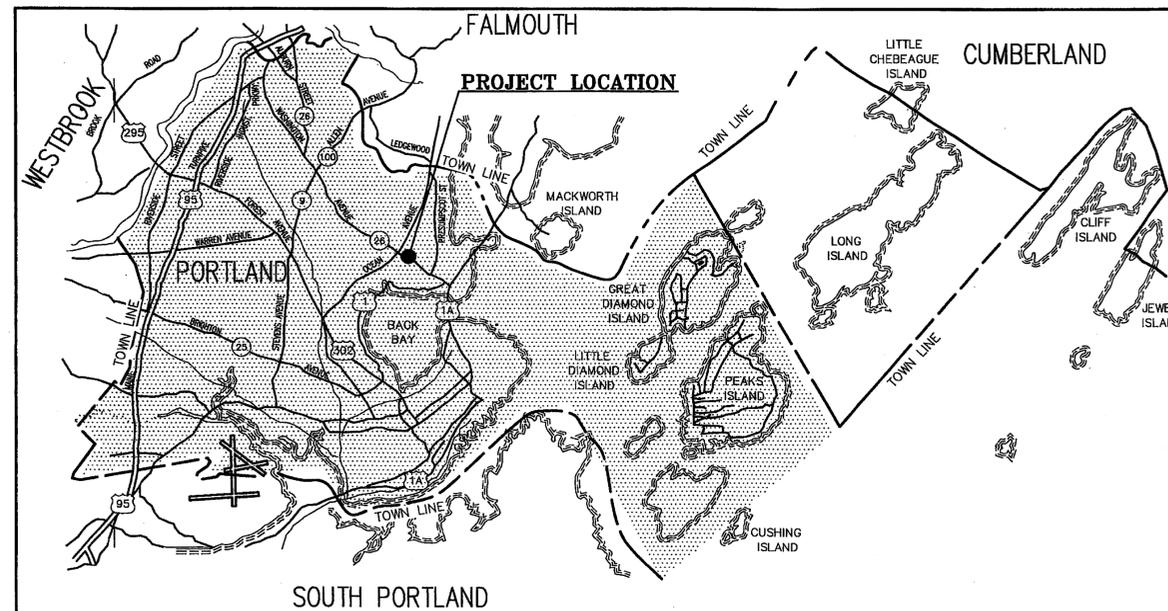
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DATE
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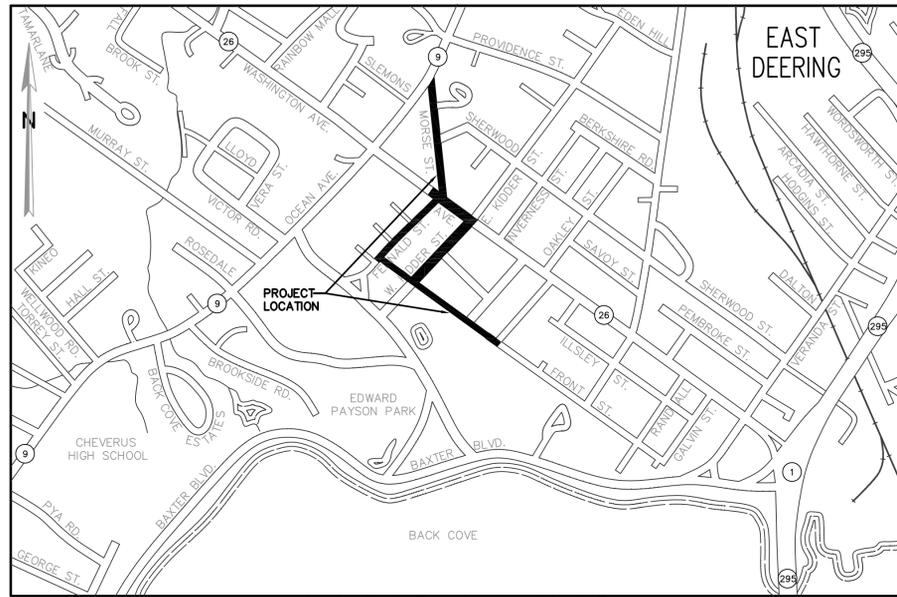
JULY 2014



YEAR APPROVED
JULY 2014

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PUBLIC SERVICES DEPARTMENT

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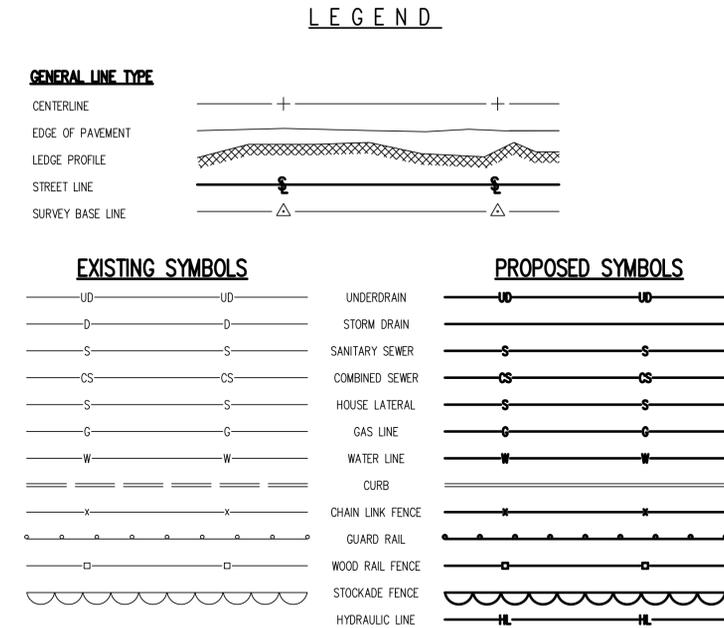


LOCATION MAP
NOT TO SCALE

GENERAL NOTES

- LOCATIONS OF UTILITIES ARE APPROXIMATE AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE ALL THE UTILITIES LOCATE THEIR SERVICES PRIOR TO THE START OF CONSTRUCTION. THE LOCATION, TYPE AND SIZE OF EXISTING PIPES, DUCTS, CONDUITS AND OTHER UNDERGROUND UTILITIES AND STRUCTURES SHOWN ON THE DRAWINGS ARE NOT WARRANTED TO BE EXACT NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES AND STRUCTURES ARE SHOWN. INFORMATION SHOWN IS CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION AND IS INDICATED ON THE DRAWINGS TO GIVE BIDDERS A GENERAL IDEA OF EXISTING CONDITIONS. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR SHALL NOT RELY UPON THESE DRAWINGS FOR SUCH INFORMATION AND SHALL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE METHODS AND SHALL OBTAIN INFORMATION FROM UTILITY CORPORATIONS AND INDIVIDUALS AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES, BOTH PUBLIC AND PRIVATE PRIOR TO COMMENCEMENT OF CONSTRUCTION. DEPTH OF SERVICES ARE UNKNOWN AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. EXCAVATING TEST PITS AS NECESSARY TO VERIFY UTILITY LOCATIONS AND DEPTHS SHALL BE INCIDENTAL TO THIS PROJECT.
- PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SECURE A STREET OPENING PERMIT FROM THE PORTLAND PUBLIC SERVICES DEPARTMENT. NO FEE WILL BE CHARGED FOR THIS PERMIT.
- PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED AND SHALL NOT BE DISTURBED. IF DISTURBED, THEY SHALL BE REPLACED BY A LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE.
- ALL EXISTING CATCH BASINS, MANHOLES, CONNECTIONS, CONDUIT AND PIPING SHALL BE CLEANED AND LEFT IN SATISFACTORY OPERATING CONDITION AFTER CONSTRUCTION HAS BEEN COMPLETED. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
- ALL LAWN AREAS, WALKWAYS, AND DRIVEWAYS OUTSIDE THE WORK AREA, DAMAGED BY THE CONTRACTOR, SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE CITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES AND SHRUBS ON THE PROJECT WHICH ARE NOT TO BE REMOVED.
- EXISTING PAVEMENT SHALL BE SAW CUT AND BUTTED TO THE NEW PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED. DRIVEWAY BUTT JOINTS ARE INCIDENTAL TO THE CONTRACT AND SHALL NOT REQUIRE MEASUREMENT.
- EXISTING DRAINAGE STRUCTURES SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED IN THE DRAWINGS OR BY THE CITY REPRESENTATIVE.
- BEFORE CONNECTING NEW PIPES TO AN EXISTING SEWER LINE, THE CONTRACTOR SHALL NOTIFY THE SEWER MAINTENANCE DIVISION OR THE CITY OF PORTLAND PUBLIC SERVICES DEPARTMENT. NO WORK SHALL BE DONE WITHOUT THEIR APPROVAL.
- NO ADDITIONAL PAYMENT WILL BE MADE FOR GRADING SIDE SLOPES OF DRIVEWAYS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY TRENCH PAVEMENT THAT HAS EXPERIENCED EXCESSIVE SETTLEMENT, CRACKING, OR OPENING OF JOINTS. REPAIRS MAY INCLUDE OVERLAY, REMOVAL OF UNACCEPTABLE MATERIALS, COMPLETE REPLACEMENT, JOINT SEALING, OR REBUTTING PAVEMENT AS REQUIRED. THIS WORK MAY BE NECESSARY AFTER THE FINAL ACCEPTANCE OF WORK OR PRIOR TO THE END OF THE ONE YEAR GUARANTEE. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- THE FINISHED PAVEMENT SURFACE GRADE SHALL MATCH EXISTING GRADE UNLESS NOTED OTHERWISE.
- ALL MANHOLE FRAMES SHALL BE SUPPLIED WITH H-20 LOADING AND SOLID MANHOLE COVERS. THE RIM ELEVATION OF PROPOSED STORM AND SEWER MANHOLES SHALL BE SET AT FINISHED PAVEMENT SURFACE GRADE. WINTERIZATION WILL BE REQUIRED. SEE STANDARD DETAIL.
- NEW CATCH BASINS SHALL BE INSTALLED WITH A TYPE A-4 CATCH BASIN INLET STONE INCIDENTAL TO PAY ITEM 604.13. RIM ELEVATIONS FOR CATCH BASINS ARE GIVEN AT THE FACE OF THE CURB AND TAKE INTO ACCOUNT THE 3" DEPRESSION. PLACE HOT BITUMINOUS GRADING "C" AROUND CATCH BASINS NOT IN COBBLE STONE GUTTER (3' OUTSIDE OF FRAME, 2" THICK). PLACE 6" OF AGGREGATE SUBBASE GRAVEL UNDER THIS PAVEMENT. WINTERIZATION WILL BE REQUIRED.
- ON ALL "REMOVE" STRUCTURES, THE CONTRACTOR SHALL REMOVE THE STRUCTURE ENTIRELY. ALL EXISTING GRANITE CATCH BASIN STONES, MANHOLE FRAMES AND COVERS TO BE REMOVED SHALL BE DELIVERED TO THE CITY STOCK YARD AS DIRECTED. REMOVAL OF EXISTING STRUCTURAL CONCRETE, CONCRETE, EXCAVATED STRUCTURES, MANHOLES, CATCH BASINS, MORTARED STONE MASONRY, CONCRETE MASONRY, WOODEN TIMBERS/PILES AND ANY OTHER STRUCTURAL ELEMENTS ENCOUNTERED DURING CONSTRUCTION ARE INCIDENTAL TO THE ASSOCIATED PIPE PAY ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
- REMOVAL OF EXISTING STORM DRAINS, SEWER PIPES OR OTHER PIPE STRUCTURES, BACKFILLING AND ALL ASSOCIATED WORK SHALL BE CONSIDERED INCIDENTAL TO THE COSTS OF CONSTRUCTION. NO EXTRA PAYMENT WILL BE MADE.
- ALL TERMINAL MANHOLES SHALL HAVE CHANNELS CONSTRUCTED STRAIGHT THROUGH THE MANHOLE.
- THE CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS AS REQUIRED TO PERFORM THE WORK AS INDICATED ON THE DRAWINGS AND IN THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE FEDERAL, STATE AND LOCAL CODES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED WORK AS SHOWN ON THE DRAWINGS (STATIONS AND OFFSETS FOR MANHOLES AND OTHER STRUCTURES ARE SHOWN ON THE DRAWINGS TO THE CENTER OF EACH). ADDITIONALLY, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL "AS-BUILT" INFORMATION AS REQUIRED IN THE SPECIFICATION

- THE QUANTITY OF HOUSE AND STORM DRAIN LATERALS INCLUDES A QUANTITY FOR EVERY HOUSE WITHIN PROJECT LIMITS EVEN THOUGH NOT ALL ARE SHOWN ON THE PLANS. THE FINAL DETERMINATION OF HOW MANY ARE INSTALLED WILL BE DETERMINED IN THE FIELD BY ENGINEER.
- THE EXISTING COLLECTION SYSTEM INCLUDING GRAVITY SEWERS AND STORM DRAINS SHALL REMAIN FULLY OPERATIONAL DURING CONSTRUCTION UNTIL PROJECT IS COMPLETED AND ACCEPTED BY OWNER. THE CONTRACTOR SHALL FULLY COORDINATE CONSTRUCTION ACTIVITIES WITH THE OWNER'S OPERATIONS TO MINIMIZE ADVERSE IMPACTS ON THEIR EXISTING OPERATIONS. THE COST OF ADDITIONAL WORK REQUIRED TO MAINTAIN EXISTING OPERATIONS THROUGHOUT CONSTRUCTION OPERATIONS WILL NOT BE ELIGIBLE FOR PAYMENT AS AN EXTRA UNDER A CHANGE ORDER; RATHER, THESE COSTS WILL BE CONSIDERED AS "INCIDENTAL" TO THE BIDS SUBMITTED FOR THIS CONTRACT. ALSO, THE NECESSITY TO COORDINATE CONSTRUCTION ACTIVITIES WITH OWNER OPERATIONS WILL NOT BE CONSIDERED A VALID OR MERITORIOUS REASON FOR A DELAY CLAIM OR TIME EXTENSION ON THIS PROJECT.
- THERE MAY BE ONE OR MORE CONTRACTORS PERFORMING WORK IN THE PROJECT AREA. COORDINATION BETWEEN CONTRACTORS IS A PRIMARY RESPONSIBILITY OF EACH CONTRACTOR WITH THE INTENT TO AVOID DELAYS, COMPLICATIONS AND UNDO DISRUPTION OF CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL MAINTAIN TRAFFIC IN A SAFE MANNER AT ALL TIMES DURING CONSTRUCTION. THE MOST CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) MANUAL FOR BOTH WORK ZONE AND TRAFFIC CONTROL REQUIREMENTS SHALL APPLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CREATING A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SECTION 652 (PAY ITEM 652.39).
- EXISTING FACILITIES AND IMPROVEMENTS (I.E. LIGHT POLES, SIGNS, ETC.) SHALL BE REMOVED AND REPLACED OR PROTECTED AS REQUIRED DURING CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS. BRACING OF UTILITY POLES, WHERE REQUIRED, SHALL BE INCIDENTAL TO THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES ON THE PROJECT WHICH ARE NOT CALLED TO BE REMOVED. EQUIPMENT AND MATERIALS SHALL NOT BE STORED OVER THE ROOT ZONE WHICH SHALL BE DEFINED AS THE AREA ENCOMPASSED BY THE DRILLPLINE. WHENEVER POSSIBLE, OTHER PLANTINGS SHALL BE PRESERVED BY WHATEVER METHOD NECESSARY INCLUDING TRANSPLANTING AND/OR TEMPORARY RELOCATION. THE ASSOCIATED COSTS ARE INCIDENTAL TO THE PROJECT. ANY TREES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED USING APPROVED TREE DRESSING OR PAINT IN ACCORDANCE WITH THE APPROPRIATE PROVISIONS OF SECTION 201 OF THE STANDARD SPECIFICATIONS. ANY TREE DAMAGED BY THE CONTRACTOR SHALL RESULT IN A FINANCIAL PENALTY OF \$1,500 FOR EACH INCIDENCE. DAMAGE SHALL INCLUDE ANY AND ALL IMPACTS TO TREES TO INCLUDE BUT NOT LIMITED TO LIMB/TREE BREAKAGE, DAMAGE TO TREE TRUNKS, ROOTS STRUCTURE AND ANY INCIDENTAL IMPACTS.
- ALL CONNECTIONS OF PIPING TO EXISTING FACILITIES SHALL BE CONSIDERED INCIDENTAL. THIS INCLUDES ALL WORK REQUIRED TO CORE HOLE, INSTALLATION OF WATERTIGHT CONNECTIONS, AND ALL ASSOCIATED WORK.
- DELIVERED WITHIN TEN (10) CALENDAR DAYS OF THE CONTRACT SIGNING, THE CONTRACTOR SHALL SUBMIT THREE (3) COPIES OF A CONSTRUCTION OPERATIONS PLAN TO THE ENGINEER, AND CITY OF PORTLAND. THE COST OF THE OPERATIONS PLAN SHALL BE INCIDENTAL.
- ALL PIPE TRENCH EXCAVATIONS SHALL BE BACKFILLED AND "CLOSED" DURING CONTRACTOR NON-WORKING HOURS INCLUDING NIGHTS, HOLIDAYS AND WEEKENDS. THE CONTRACTOR MAY REQUEST IN WRITING TO THE ENGINEER AND OWNER TO SECURE OPEN EXCAVATION IN LIEU OF BACKFILLED AND "CLOSED." NOT ALLOWING A SECURE OPEN EXCAVATION SHALL NOT BE A BASIS FOR CLAIMS AGAINST THE OWNER.
- THERE IS A POTENTIAL THAT THE WORK OF THIS CONTRACT WILL INVOLVE THE EXCAVATION OF CONTAMINATED SOIL AND POSSIBLE EXPOSURE TO CONTAMINATED GROUNDWATER BASED ON HISTORIC USES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COST OF HANDLING CONTAMINATED SOIL PER PAY ITEM 203.30 AND CONTAMINATED GROUNDWATER PER PAY ITEM 203.32.
- BORINGS WERE COMPLETED BETWEEN JUNE 2014.. REFERENCE APPENDIX OF THE SPECIFICATIONS.
- TEST PITS SHALL BE EXCAVATED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL OBTAIN THE LOCATION OF THE UTILITY/STRUCTURE IN QUESTION WITH TIES TO SURROUNDING FEATURES AND THE ELEVATION OF BOTH THE TOP AND BOTTOM OF THE UTILITY/STRUCTURE. COSTS FOR TEST PITS WILL BE PAID THROUGH THE BID ITEM 203.28.
- ANY EXCAVATION BY CONTRACTOR THAT UNCOVERS AN HISTORICAL OR ARCHAEOLOGICAL ARTIFACT SHALL BE IMMEDIATELY REPORTED TO OWNER AND A REPRESENTATIVE OF AGENCY. CONSTRUCTION SHALL BE TEMPORARILY HALTED PENDING THE NOTIFICATION PROCESS AND FURTHER DIRECTIONS ISSUED BY AGENCY AFTER CONSULTATION WITH THE STATE HISTORIC PRESERVATION OFFICER (SHPO). CONTRACTOR SHALL NOT BE ENTITLED TO PAY COMPENSATION DUE TO DELAY ASSOCIATED WITH THIS ITEM. COST SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- ANY REQUIRED PROJECT WORK NOT IDENTIFIED UNDER A PAY ITEM OR RELATED TO A PAY ITEM SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. NO EXTRA PAYMENT WILL BE MADE.
- IF WORK IS NECESSARY BEYOND THE SAW CUT LINES SHOWN ON CONTRACT PLANS TO ACCOMMODATE PROJECT CONSTRUCTION, COSTS SHALL BE CONSIDERED INCIDENTAL TO COSTS OF CONSTRUCTION AND NO EXTRA PAYMENT WILL MADE. ALL REQUIRED PROJECT WORK ASSOCIATED WITH CONTRACT DRAWINGS, DETAILS, GENERAL CONDITIONS AND SPECIFICATIONS SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAYS ITEMS. NO EXTRA PAYMENT WILL BE MADE FOR ANY DIRECT OR INCIDENTAL WORK REQUIRED TO COMPLETE THE PROJECT IN ITS ENTIRETY AND READY FOR OWNER ACCEPTANCE.



LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
12398N
FIELD BOOK USED:
N/A

REFERENCES:
12398N.dwg, TAB: NOTES-1

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SCALE:
AS NOTED
DATE:
06-27-14



MORSE STREET
SEWER SEPARATION
LEGEND, GENERAL NOTES
AND LOCATION MAP

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



EROSION CONTROL NOTES

THIS PLAN HAS BEEN DEVELOPED TO PROVIDE A STRATEGY FOR DEALING WITH SOIL EROSION AND SEDIMENTATION DURING AND AFTER THE STREET RECONSTRUCTION AND SEWER SEPARATION PROJECT. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSES A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

PRE-CONSTRUCTION PHASE

1. PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 85%-90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

1. IN ORDER TO PROTECT THE NATURAL RESOURCES IN THE PROJECT AREA, ONLY DISTURB THOSE AREAS NECESSARY TO CONSTRUCT THE ROAD, INSTALL LANDSCAPING, SIDEWALKS AND SPECIFIED PIPING.
2. AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN 14-DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100' OF NATURAL RESOURCES SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.
3. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNTREATED OR UNVEGETATED CONDITION FOR A MAXIMUM OF 14 DAYS FROM FINAL GRADING OF THE LOAM. LOAM WILL BE STOCKPILED FOR FUTURE USE AND PROTECTED FROM EROSION LOSSES BY MULCH AND FILTER FABRIC/HAY BALE BARRIERS.
4. PRIOR TO ANY CLEARING OR GRUBBING, A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.
5. PRIOR TO CLEARING AND GRUBBING THE SITE, STORMDRAIN INLET PROTECTION SHALL BE INSTALLED AT ALL CATCH BASINS.
6. PRIOR TO CLEARING AND GRUBBING, SEDIMENT BARRIERS WILL BE INSTALLED ACROSS THE SLOPES, ON THE CONTOUR, AT OR JUST BELOW THE LIMITS OF CONSTRUCTION AND/OR JUST ABOVE ANY DOWNSLOPE ADJACENT PROPERTY OR WETLAND TO PROTECT AGAINST CONSTRUCTION RELATED EROSION.
7. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION
8. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. THE DISPOSAL OF POST SEEDING SEDIMENT, IF ANY SHALL, BE THE RESPONSIBILITY OF THE CONTRACTOR.
9. WHEN WORK IS IMMEDIATELY ADJACENT TO THE NATURAL RESOURCES, INCLUDING COASTAL WETLANDS, STREAMS AND HABITATS, CONSTRUCTION SITE MUST BE STABILIZED PRIOR TO THE END OF THE WORK DAY OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

EROSION CONTROL APPLICATIONS & MEASURES

THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES, THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEEPED OR WASHED TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. PAYSON PARK ACCESS DRIVES SHALL NOT BE USED FOR CONSTRUCTION ACCESS.

2. TEMPORARY VEGETATION AND MULCH:

IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED BY SEPTEMBER 15TH OF THE YEAR OF CONSTRUCTION, THEN ON THAT DATE THESE AREAS WILL BE GRADED AND SMOOTHED, THEN SEEDED TO A WINTER COVER CROP OF RYE AT THE RATE OF 112 LBS/ACRE OR 3 LBS/1,000 SQUARE FEET AND MULCHED AT A RATE OF 70LBS./1000 SQUARE FEET. THE RYE SEEDING WILL PROCEED BY AN APPLICATION OF 3 TONS OF LIME AND 1000 LBS. OF 10-10-10 FERTILIZER PER ACRE, OR ITS EQUIVALENT. IF THE RYE SEEDING DOES NOT MAKE ADEQUATE GROWTH TO PROVE AT LEAST 75% VEGETATIVE COVER BY NOVEMBER 15TH, THEN ON THAT DATE, A TEMPORARY MULCH OF HAY WILL BE APPLIED TO THE AREA AT A RATE OF 150LBS./1000 SQUARE FEET. AREAS STABILIZED WITH RYE AND MULCH WILL BE TILLED AND RESEEDED USING THE VEGETATION PLAN FOR PERMANENT SEEDING THE FOLLOWING SPRING. FINAL VEGETATION OF THE SITE SHALL NOT BE CONSIDERED COMPLETE UNTIL EACH DISTURBED AREA NOT TO BE PAVED OR TREATED WITH RIPRAP HAS A VEGETATIVE COVER OVER AT LEAST 90% OF ITS SURFACE.

ALL AREAS SEEDDED DURING THE WINTER MONTHS WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS SUFFICIENTLY VEGETATED (LESS THAN 75 PERCENT CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

TEMPORARY MULCH WILL BE APPLIED TO ALL EXPOSED SOIL SURFACES WITHIN SEVEN (7) DAYS OR PRIOR TO ANY STORM EVENT.

3. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND REESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SILT FENCING SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. MAXIMUM STAKE SPACING OF 6 FEET SHALL BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. SILT FENCING WITH A THE BOTTOM OF THE FENCE SHOULD BE PROPERLY ANCHORED A MINIMUM OF 6" PER THE PLAN DETAIL AND BACKFILLED.

ALL SILT FENCE SHALL BE INSPECTED, REPLACED, AND/OR REPAIRED WEEKLY, AS WELL AS IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL, OR WHEN SEDIMENT REACHES 1/3 THE BARRIER HEIGHT. ALL HAY BALE, FILTER FABRIC BARRIERS SHALL REMAIN IN PLACE UNTIL SEEDINGS HAVE BECOME 75% ESTABLISHED AND THEN REMOVED WITH IN 10 DAYS.

ANY SILT FENCE IDENTIFIED BY THE OWNER OR REVIEWING AGENCIES AS NOT BEING PROPERLY INSTALLED DURING CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED IN ACCORDANCE WITH THE INSTALLATION DETAILS.

5. STORMDRAIN INLET PROTECTION:

SILT SACKS SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES. INSTALL SILT SACKS IN ACCORDANCE WITH THE DETAIL AND PER MANUFACTURER'S RECOMMENDATIONS.

6. DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE.

7. PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEED. PERMANENT REVEGETATION MEASURES INCLUDING LOAM, SEED AND MULCH SHALL MEET SECTION 615 OF THE SPECIFICATIONS.

TRENCH DEWATERING:

1. EXCAVATION AND INSTALLATION OF CONDUIT STORAGE, STORM DRAINS AND ASSOCIATED STRUCTURES WILL REQUIRE CONTINUOUS DEWATERING THROUGHOUT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR PREPARING AND IMPLEMENTING A DEWATERING PLAN MEETING ENVIRONMENTAL REGULATIONS AND REQUIREMENTS STIPULATED WITHIN THE CONTRACT DOCUMENTS AND PLANS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A WRITTEN DEWATERING PLAN AND SHALL MEET WITH CITY REPRESENTATIVES TO REVIEW THE DEWATERING PLAN. THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO THE DEWATERING PLAN AS REQUIRED BY THE CITY OR OTHER AGENCIES. ANY REQUIRED CHANGES SHALL BE CONSIDERED INCIDENTAL TO THE COST OF DEWATERING AND NO EXTRA PAYMENT WILL BE MADE. ALL DEWATERING SHALL BE RUN THROUGH A PUMPED SEDIMENT REMOVAL SYSTEM EQUAL TO "DIRT BAG" OR ALTERNATIVE METHODS AS APPROVED BY THE ENGINEER. IT IS ANTICIPATED THAT HIGH VOLUMES OF PUMPING WILL BE REQUIRED FOR THE PROJECT. DISCHARGE LOCATIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK AND COSTS ASSOCIATED WITH DEWATERING THE JOBSITE INCLUDING ANY CHANGES, MODIFICATIONS OR SPECIAL DEWATERING SYSTEMS/REQUIREMENTS TO ENSURE THE SITE IS DEWATERED. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS. WATER FROM CONSTRUCTION TRENCH DEWATERING WILL PASS FIRST THROUGH A SEDIMENTATION COLLECTION BAG PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE SEDIMENTATION COLLECTION BAG BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

MONITORING:

1. MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. WEEKLY AND AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL INSTALLED EROSION CONTROL MEASURES AND REPAIRS WILL BE MADE AS NEEDED TO INSURE THEIR CONTINUING FUNCTION AS DESIGNED. FOLLOWING THE FINAL SEEDINGS, THE SITE WILL BE INSPECTED EVERY FIFTEEN DAYS UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 75% OF AREA VEGETATED WITH VIGOROUS GROWTH. RESEEDING WILL BE CARRIED OUT, WITH FOLLOW UP INSPECTIONS, IN THE EVENT OF ANY FAILURES. ALL EROSION CONTROL MEASURES WILL BE REMOVED WITHIN 10 DAYS WHEN VEGETATION IS ADEQUATELY ESTABLISHED.

DEMOLITION NOTES

1. DEMOLITION OF EXISTING SEWER AND STORMDRAIN PIPE TO BE INCIDENTAL TO PIPE INSTALLATION.
2. EACH EXISTING DRAINAGE STRUCTURE OR SEWER STRUCTURE TO BE ABANDONED OR REMOVED WILL BE INCIDENTAL TO THE INSTALLATION OF NEW STRUCTURES.
3. DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE. CONTRACTOR SHALL ENSURE EXISTING ROAD SURFACE DRAINAGE IS MAINTAINED DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY DRAINAGE PROVISIONS. COSTS FOR TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

LOD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
12398N
FIELD BOOK USED:
N/A

REFERENCES:

12398N.dwg, TAB: NOTES-2

DESIGNED BY:	DRAM/CAB	CHECKED BY:	GAH	SCALE:	AS NOTED
DRAWN BY:	CAB	DATE:	06-27-14		

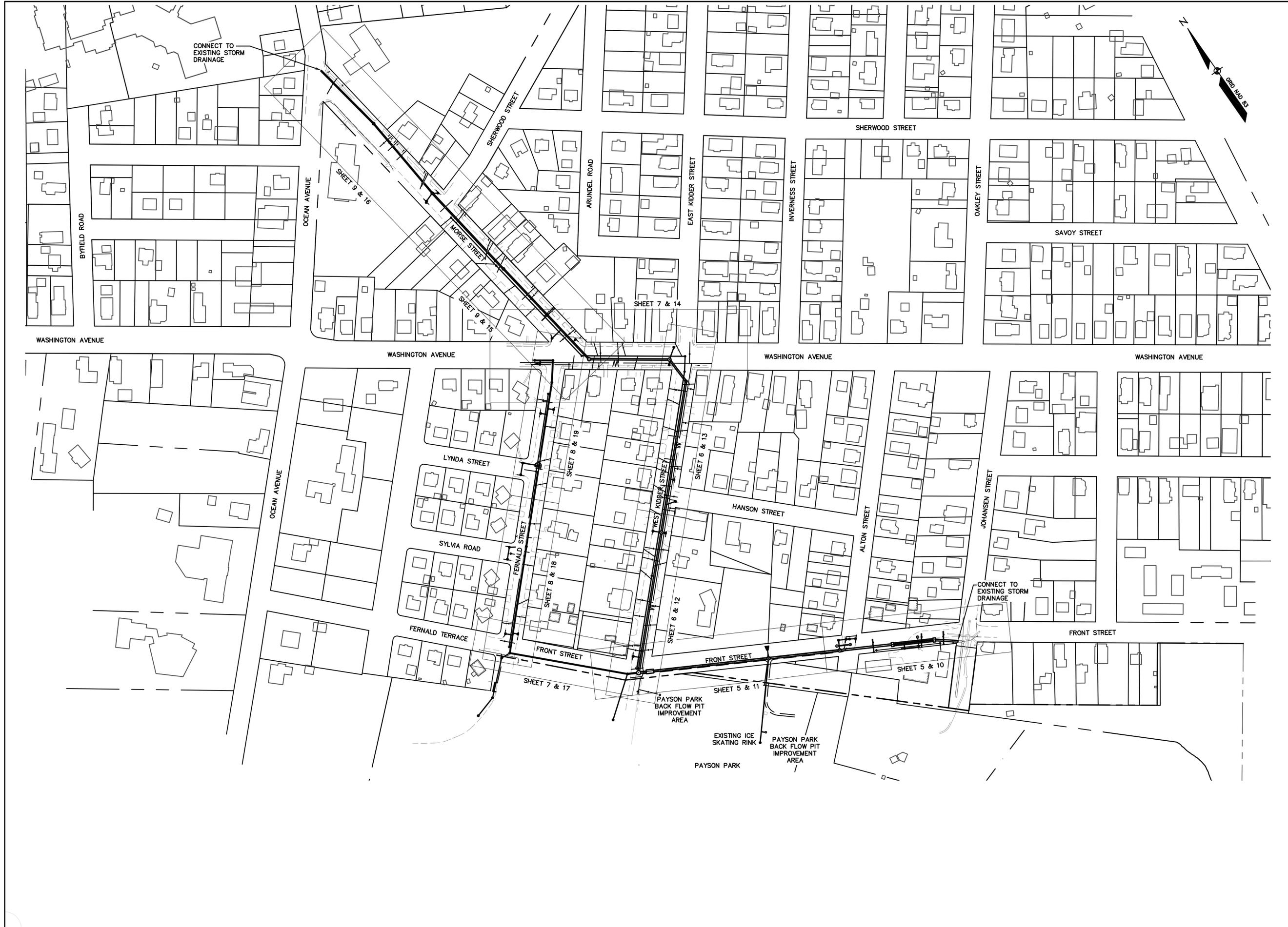


MORSE STREET
SEWER SEPARATION
NOTES

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



SHEET #
3 OF 29
PLAN NUMBER



GRID NO. 83

N

LDD PROJECT NAME:
 MORSE STREET
 SEWER SEPARATION
 DRAWING NAME:
 123980DP
 FIELD BOOK USED:
 N/A

REFERENCES:
 123980DP.dwg, TAB: ODP

DESIGNED BY: OAM/CAB	DRAWN BY: BFE/CAB	CHECKED BY: OAM	SCALE: 1"=100'	DATE: 06-27-14
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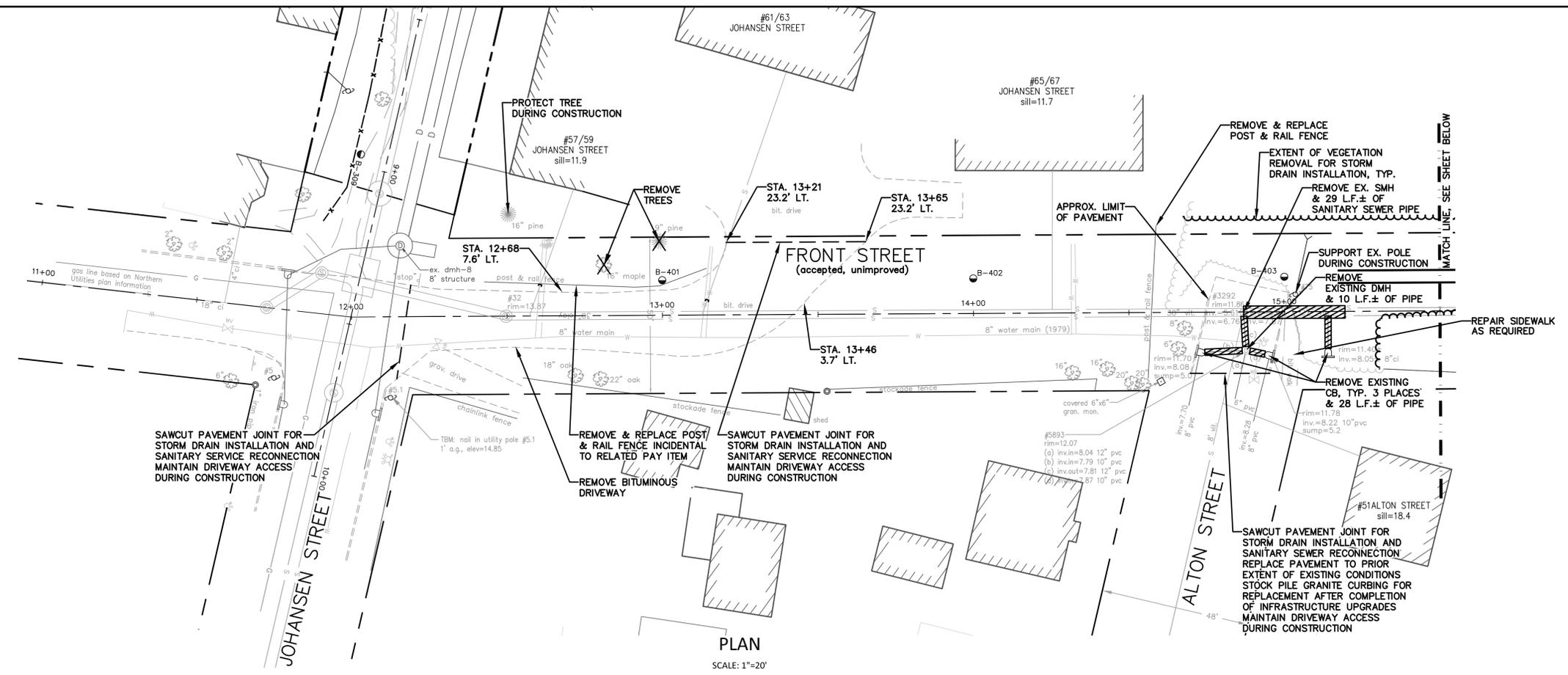
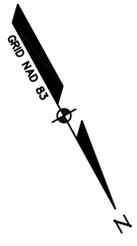
SALE OF
CRAIG A. BURGESS
No. 2688
STATE OF MAINE
Professional Engineer

**MORSE STREET
SEWER SEPARATION
OVERALL
SITE PLAN**

CITY OF PORTLAND, MAINE
 PUBLIC SERVICES DEPARTMENT
 ENGINEERING DIVISION

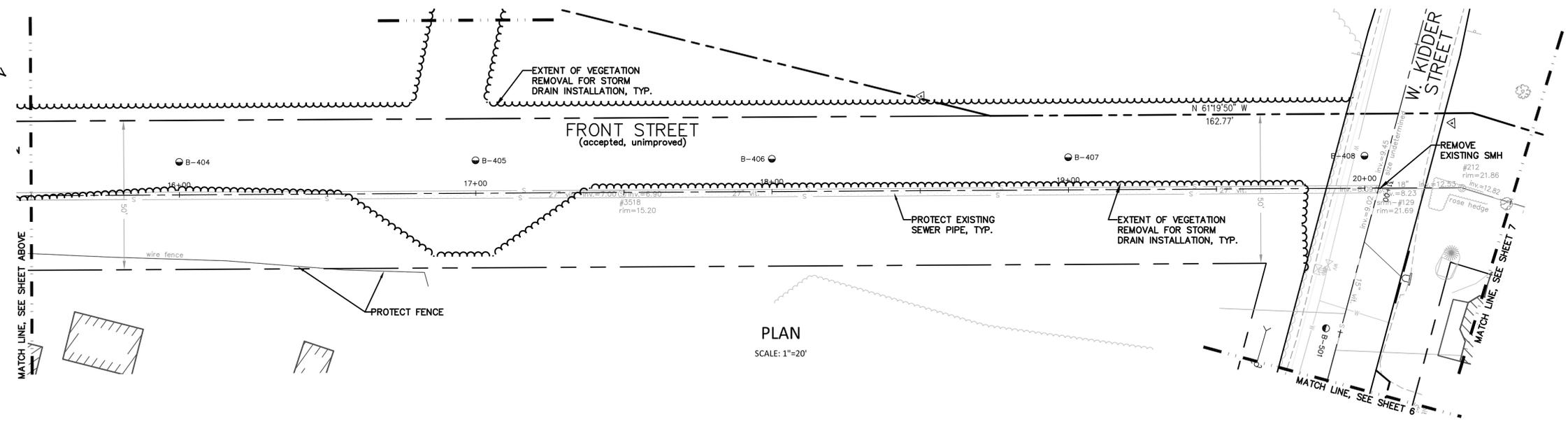
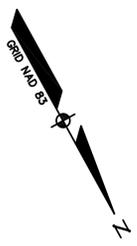
ALLEN RESURGAM
CITY OF PORTLAND, MAINE

SHEET #
 4 OF 29
 PLAN NUMBER



PLAN
SCALE: 1"=20'

- NOTES:
1. ANY REMOVAL OF EXISTING PIPES AND STRUCTURES WILL BE INCIDENTAL TO PAY SECTIONS 603 & 604.
 2. DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY.



PLAN
SCALE: 1"=20'

LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
0906103
FIELD BOOK USED:
N/A

REFERENCES:
0906103.dwg, TAB: FRONT 11+00-20+50

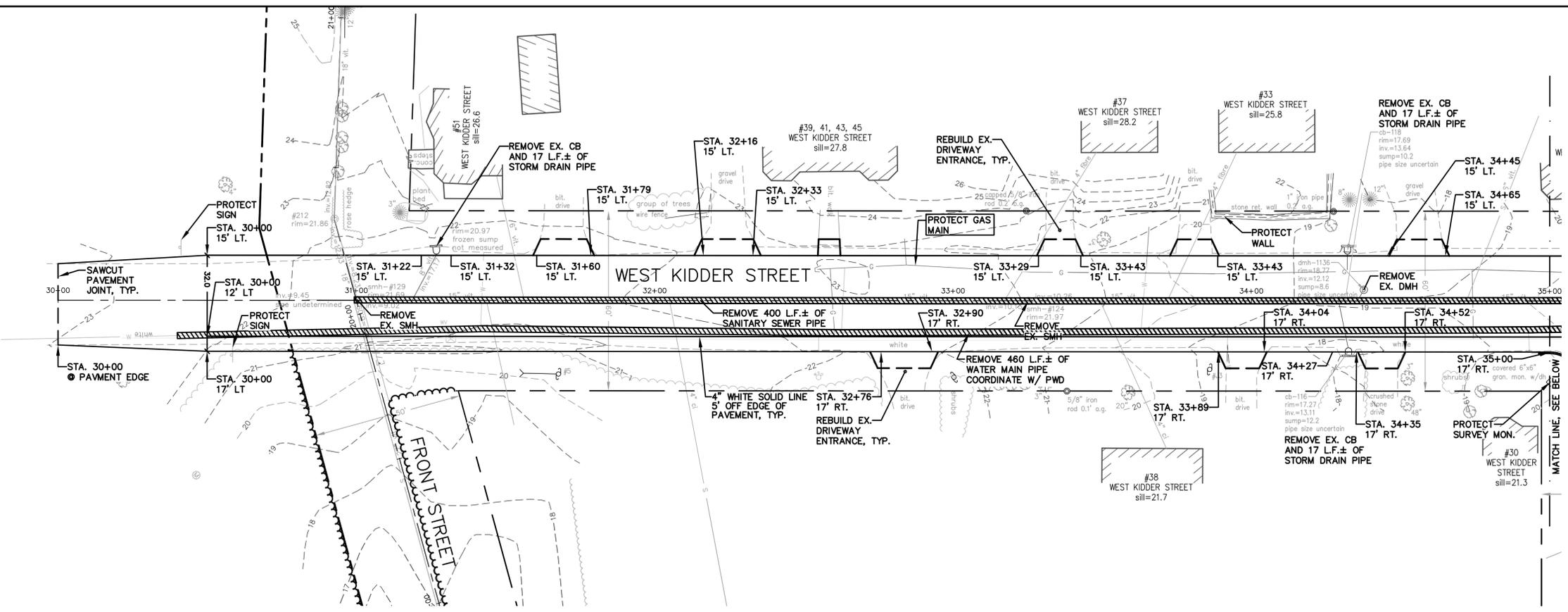
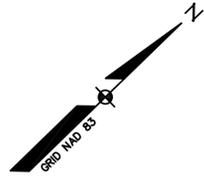
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MORSE STREET
SEWER SEPARATION
DEMOLITION & LAYOUT PLAN
FRONT STREET, STATIONS 11+00 TO 20+50

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

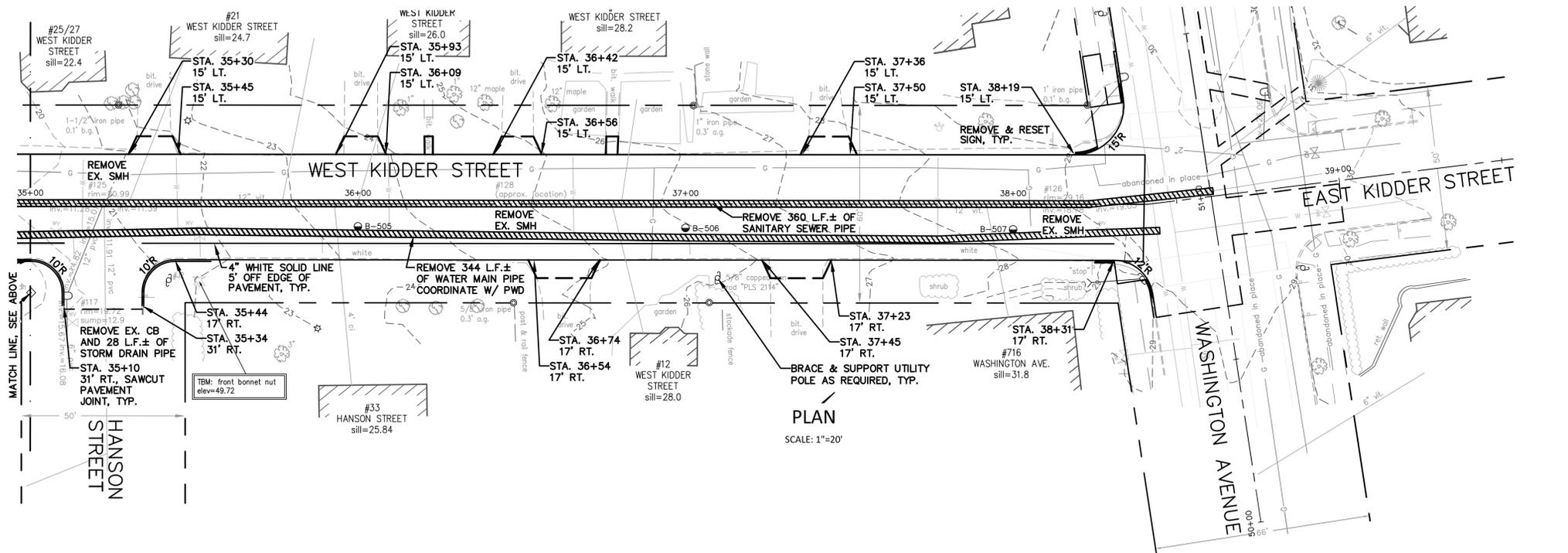
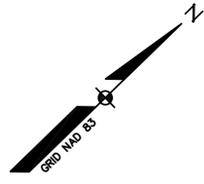




PLAN

SCALE: 1"=20'

- NOTES:
1. ANY REMOVAL OF EXISTING PIPES AND STRUCTURES WILL BE INCIDENTAL TO PAVEMENT SECTIONS 603 & 604.
 2. DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY.



PLAN

SCALE: 1"=20'

LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
09006104
FIELD BOOK USED:
N/A

REFERENCES:
09006104.dwg, TAB: WEST KIDDER 30+00-39+50

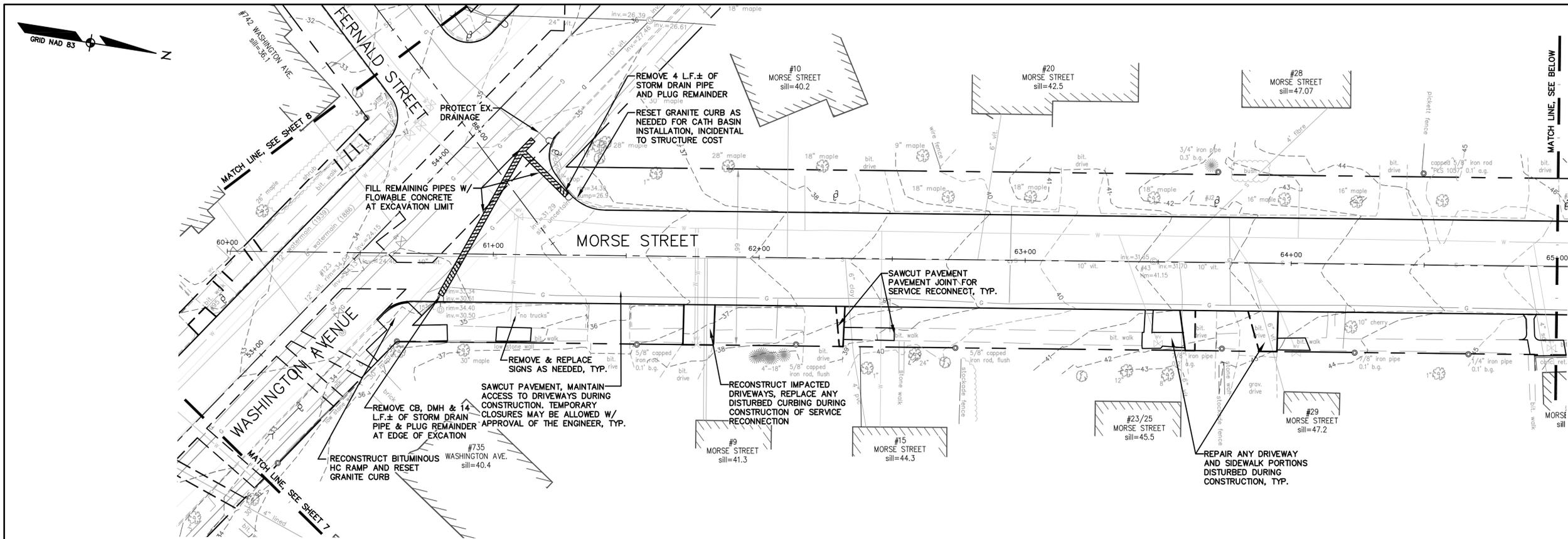
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DRAWN BY:	BE/CAB
CHECKED BY:	DAW
SCALE:	AS NOTED
DATE:	06-27-14



MORSE STREET
SEWER SEPARATION
DEMOLITION & LAYOUT PLAN
WEST KIDDER STREET, STATIONS 30+00 TO 39+50

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

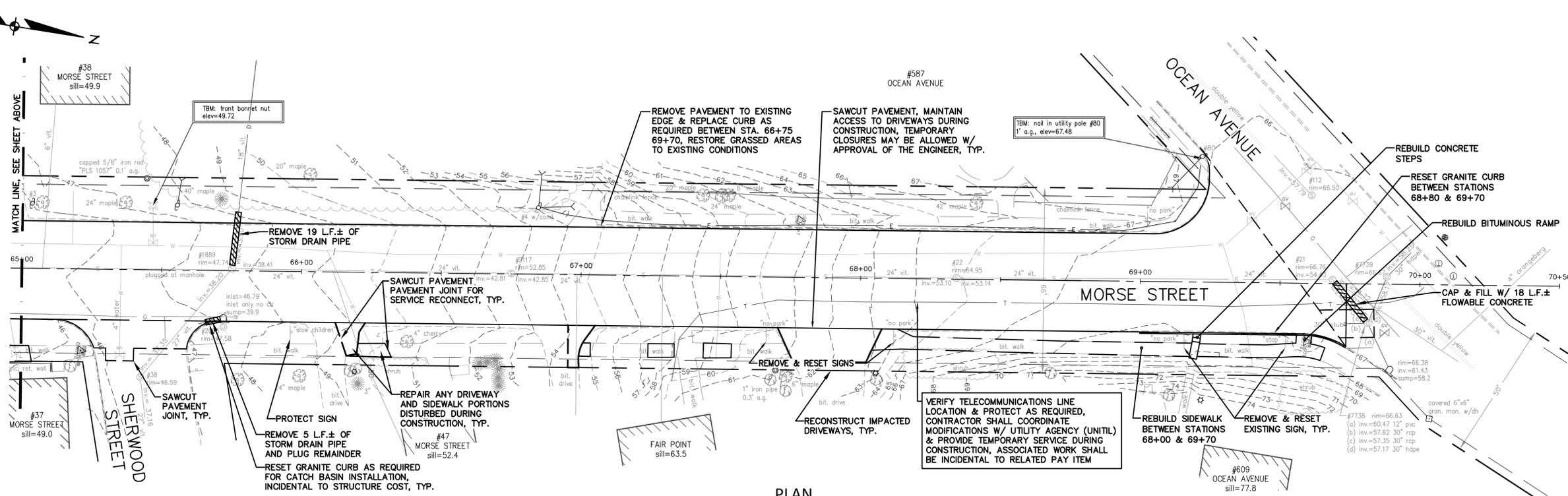




PLAN

SCALE: 1"=20'

- NOTES:
1. ANY REMOVAL OF EXISTING PIPES AND STRUCTURES WILL BE INCIDENTAL TO PAY SECTIONS 603 & 604.
 2. DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY.



PLAN

SCALE: 1"=20'

LDD PROJECT NAME:
MORSE STREET SEWER
SEPARATION PROJECT
DRAWING NAME:
0906106
FIELD BOOK USED:
N/A

REFERENCES:
0906106.dwg, TAB: MORSE 60+00-70+50

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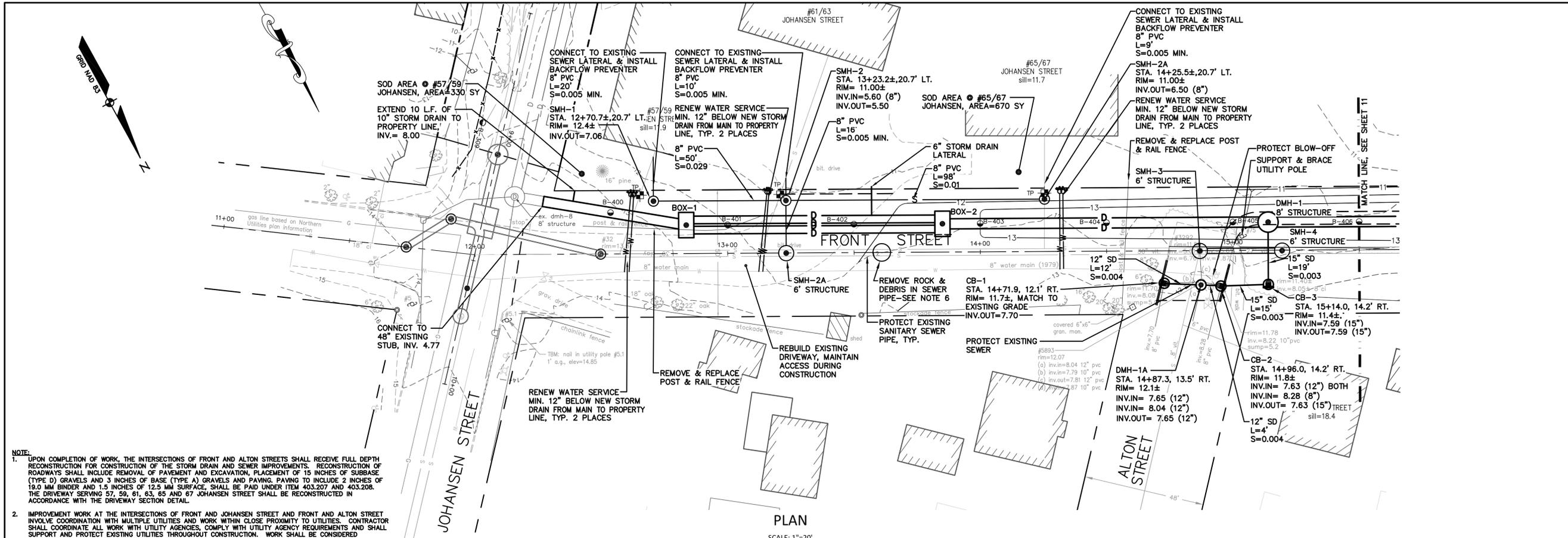


MORSE STREET
SEWER SEPARATION
DEMOLITION & LAYOUT PLAN
MORSE STREET, STATIONS 60+00 TO 70+50

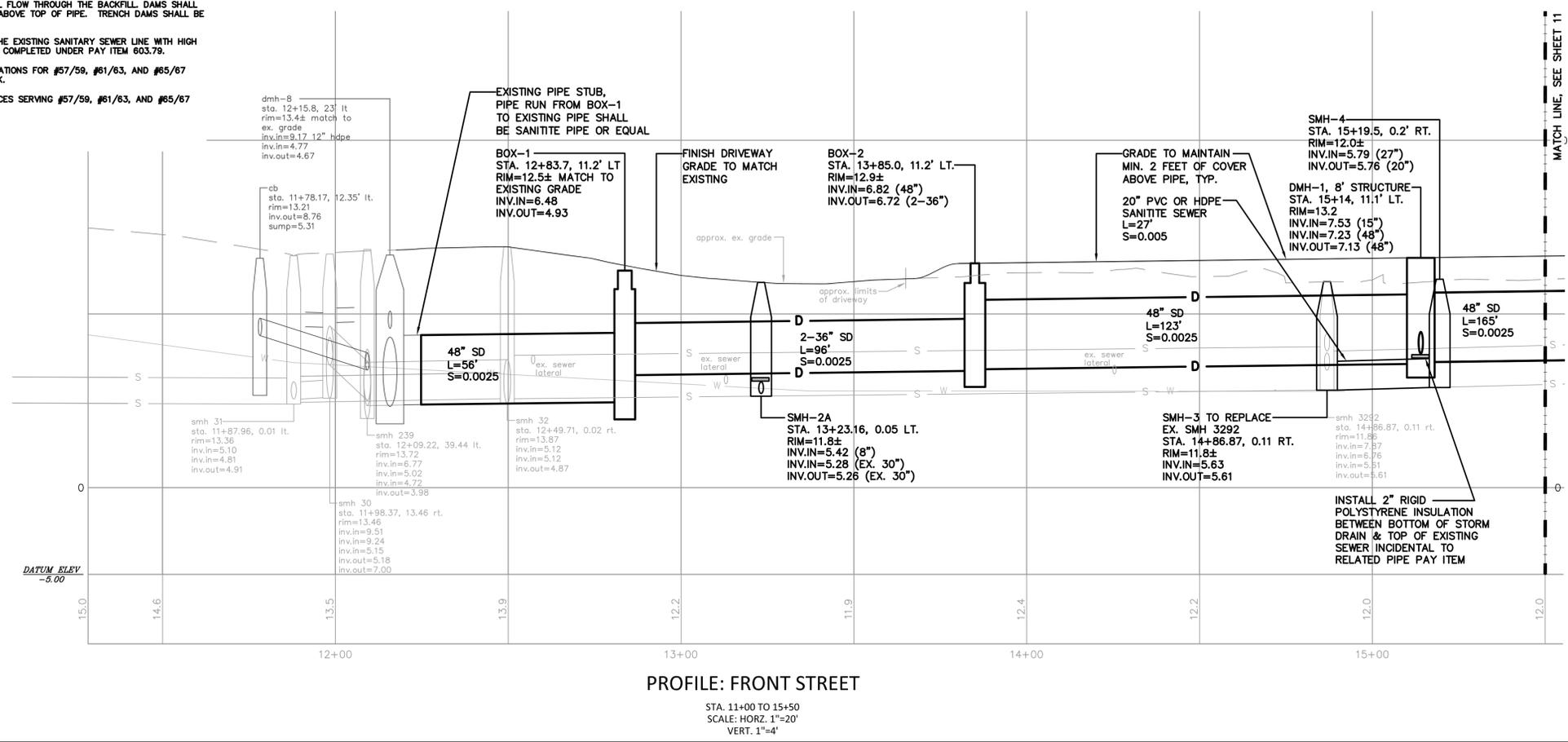
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



SHEET #
9 OF 29
PLAN NUMBER



- NOTE:**
- UPON COMPLETION OF WORK, THE INTERSECTIONS OF FRONT AND ALTON STREETS SHALL RECEIVE FULL DEPTH RECONSTRUCTION FOR CONSTRUCTION OF THE STORM DRAIN AND SEWER IMPROVEMENTS. RECONSTRUCTION OF ROADWAYS SHALL INCLUDE REMOVAL OF PAVEMENT AND EXCAVATION, PLACEMENT OF 15 INCHES OF SUBBASE (TYPE D) GRAVELS AND 3 INCHES OF BASE (TYPE A) GRAVELS AND PAVING. PAVING TO INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE. SHALL BE PAID UNDER ITEM 403.207 AND 403.208. THE DRIVEWAY SERVING 57, 59, 61, 63, 65 AND 67 JOHANSEN STREET SHALL BE RECONSTRUCTED IN ACCORDANCE WITH THE DRIVEWAY SECTION DETAIL.
 - IMPROVEMENT WORK AT THE INTERSECTIONS OF FRONT AND JOHANSEN STREET AND FRONT AND ALTON STREET INVOLVE COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.
 - LOW PERMEABILITY TRENCH DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED EVERY 200 FEET ALONG THE CULVERT TO PREVENT GROUNDWATER/ TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 2 FEET ABOVE TOP OF PIPE. TRENCH DAMS SHALL BE A MINIMUM OF 2 FEET THICK.
 - THE CONTRACTOR SHALL REMOVE ROCKS AND OTHER DEBRIS IN THE EXISTING SANITARY SEWER LINE WITH HIGH PRESSURE SPRAY OR OTHER APPROVED METHOD. WORK SHALL BE COMPLETED UNDER PAY ITEM 603.79.
 - TEST PITS SHALL BE EXCAVATED TO VERIFY SEWER LATERAL ELEVATIONS FOR #57/59, #61/63, AND #65/67 JOHANSEN STREET. WORK SHALL BE INCIDENTAL TO RELATED WORK.
 - INSTALLATION OF BACK FLOW PREVENTERS FOR NEW SEWER SERVICES SERVING #57/59, #61/63, AND #65/67 JOHANSEN STREET SHALL BE PAID FOR UNDER PAY ITEM 603.80.



PROFILE: FRONT STREET
 STA. 11+00 TO 15+50
 SCALE: HORZ. 1"=20'
 VERT. 1"=4'

NOT FOR CONSTRUCTION

CITY OF PORTLAND, MAINE
 PUBLIC SERVICES DEPARTMENT
 ENGINEERING DIVISION

DESIGNED BY: CHAM/CAB
DRAWN BY: BRF/CAB
CHECKED BY: OAM
SCALE: AS NOTED
DATE: 06-27-14

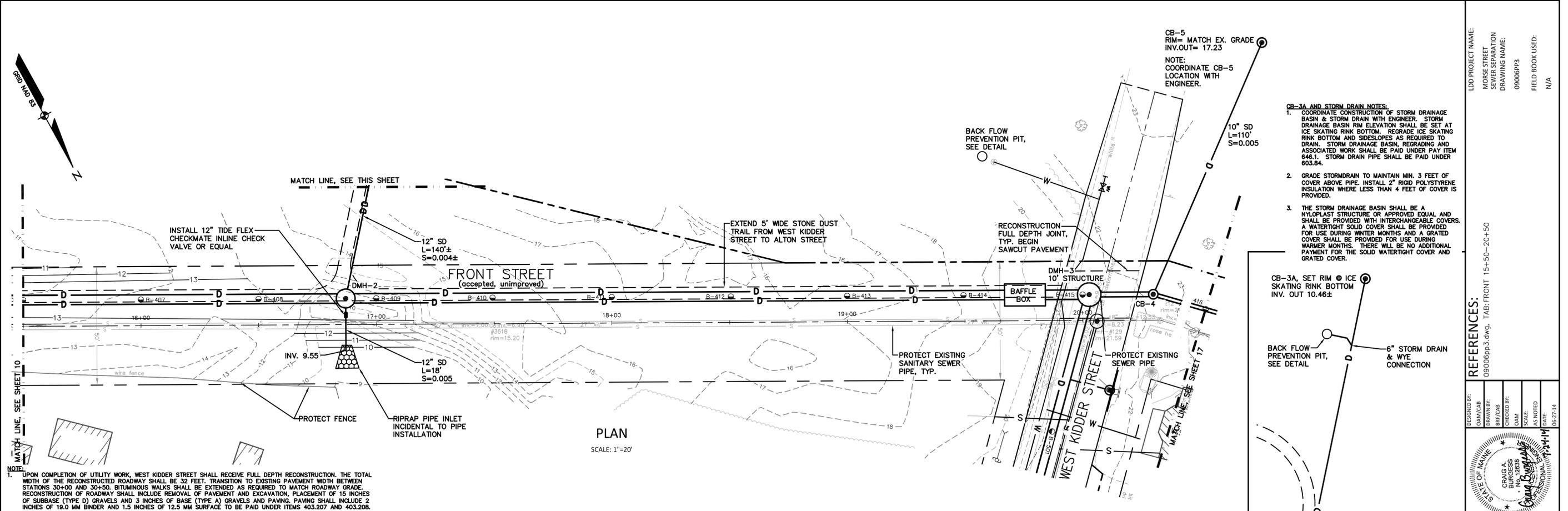
REFERENCES:
 09006pp3.dwg, TAB: FRONT 11+00-15+50

LDD PROJECT NAME: MORSE STREET SEWER SEPARATION
DRAWING NAME: 09006PP3
FIELD BOOK USED: N/A

STATE OF MAINE
 GRAVIS A. BRASS
 No. 12838
 PROFESSIONAL ENGINEER

MORSE STREET SEWER SEPARATION
PLAN & PROFILE
 FRONT STREET, STATIONS 11+00 TO 15+50

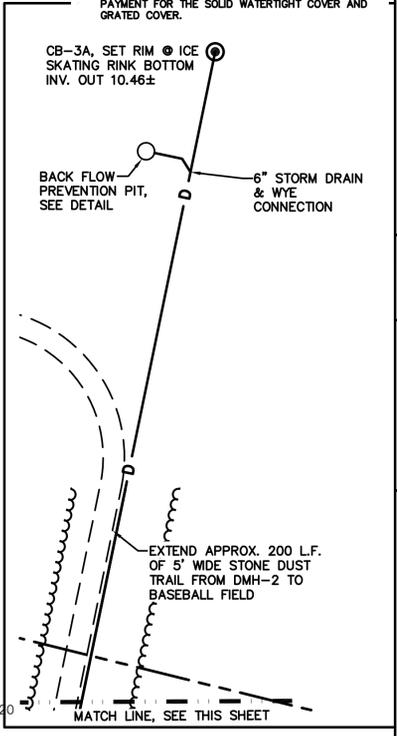
SHEET #
 10 OF 29
PLAN NUMBER



PLAN
SCALE: 1"=20'

NOTE:
 1. UPON COMPLETION OF UTILITY WORK, WEST KIDDER STREET SHALL RECEIVE FULL DEPTH RECONSTRUCTION. THE TOTAL WIDTH OF THE RECONSTRUCTED ROADWAY SHALL BE 32 FEET. TRANSITION TO EXISTING PAVEMENT WIDTH BETWEEN STATIONS 30+00 AND 30+50. BITUMINOUS WALKS SHALL BE EXTENDED AS REQUIRED TO MATCH ROADWAY GRADE. RECONSTRUCTION OF ROADWAY SHALL INCLUDE REMOVAL OF PAVEMENT AND EXCAVATION, PLACEMENT OF 15 INCHES OF SUBBASE (TYPE D) GRAVELS AND 3 INCHES OF BASE (TYPE A) GRAVELS AND PAVING. PAVING SHALL INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE TO BE PAID UNDER ITEMS 403.207 AND 403.208.
 2. IMPROVEMENT WORK AT WEST KIDDER STREET INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 3. DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY UNLESS NOTED OTHERWISE.
 4. CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.
 5. LOW PERMEABILITY TRENCH DAMS OF NATURAL CLAY, CONCRETE OR FLOWABLE FILL SHALL BE INSTALLED EVERY 200 FEET ALONG THE CULVERT TO PREVENT GROUNDWATER/ TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 2 FEET ABOVE TOP OF PIPE. TRENCH DAMS SHALL BE A MINIMUM OF 2 FEET THICK. TRENCH DAMS SHALL BE INCIDENTAL TO THE COST OF INSTALLING PIPES PAY ITEM 603.

CB-3A AND STORM DRAIN NOTES:
 1. COORDINATE CONSTRUCTION OF STORM DRAINAGE BASIN & STORM DRAIN WITH ENGINEER. STORM DRAINAGE BASIN RIM ELEVATION SHALL BE SET AT ICE SKATING RINK BOTTOM. REGRADE ICE SKATING RINK BOTTOM AND SIDESLOPES AS REQUIRED TO DRAIN. STORM DRAINAGE BASIN, REGRADING AND ASSOCIATED WORK SHALL BE PAID UNDER PAY ITEM 646.1. STORM DRAIN PIPE SHALL BE PAID UNDER 603.94.
 2. GRADE STORMDRAIN TO MAINTAIN MIN. 3 FEET OF COVER ABOVE PIPE. INSTALL 2" RIGID POLYSTYRENE INSULATION WHERE LESS THAN 4 FEET OF COVER IS PROVIDED.
 3. THE STORM DRAINAGE BASIN SHALL BE A NYLOPLAST STRUCTURE OR APPROVED EQUAL AND SHALL BE PROVIDED WITH INTERCHANGEABLE COVERS. A WATER-TIGHT SOLID COVER SHALL BE PROVIDED FOR USE DURING WINTER MONTHS AND A GRATED COVER SHALL BE PROVIDED FOR USE DURING WARMER MONTHS. THERE WILL BE NO ADDITIONAL PAYMENT FOR THE SOLID WATER-TIGHT COVER AND GRATED COVER.



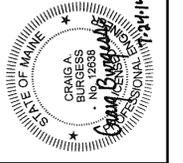
PROFILE: FRONT STREET

STA. 15+50 TO 20+40
 SCALE: HORZ. 1"=20'
 VERT. 1"=4'

LDD PROJECT NAME:
 MORSE STREET
 SEWER SEPARATION
 DRAWING NAME:
 09006PP3
 FIELD BOOK USED:
 N/A

REFERENCES:
 09006pp3.dwg, TAB: FRONT 15+50-20+50

DESIGNED BY:
 DRAWN BY:
 CHECKED BY:
 OAM
 SCALE:
 AS NOTED
 DATE:
 06-27-14

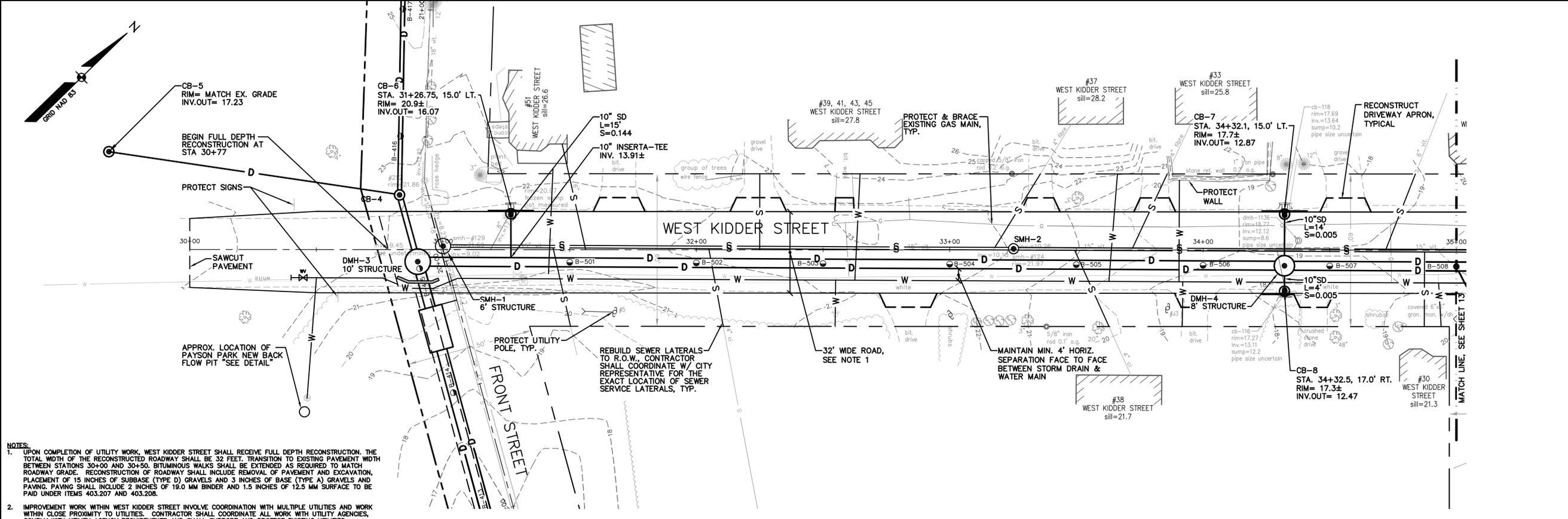


MORSE STREET
 SEWER SEPARATION
 PLAN & PROFILE
 FRONT STREET, STATIONS 15+50 TO 20+50

CITY OF PORTLAND, MAINE
 PUBLIC SERVICES DEPARTMENT
 ENGINEERING DIVISION

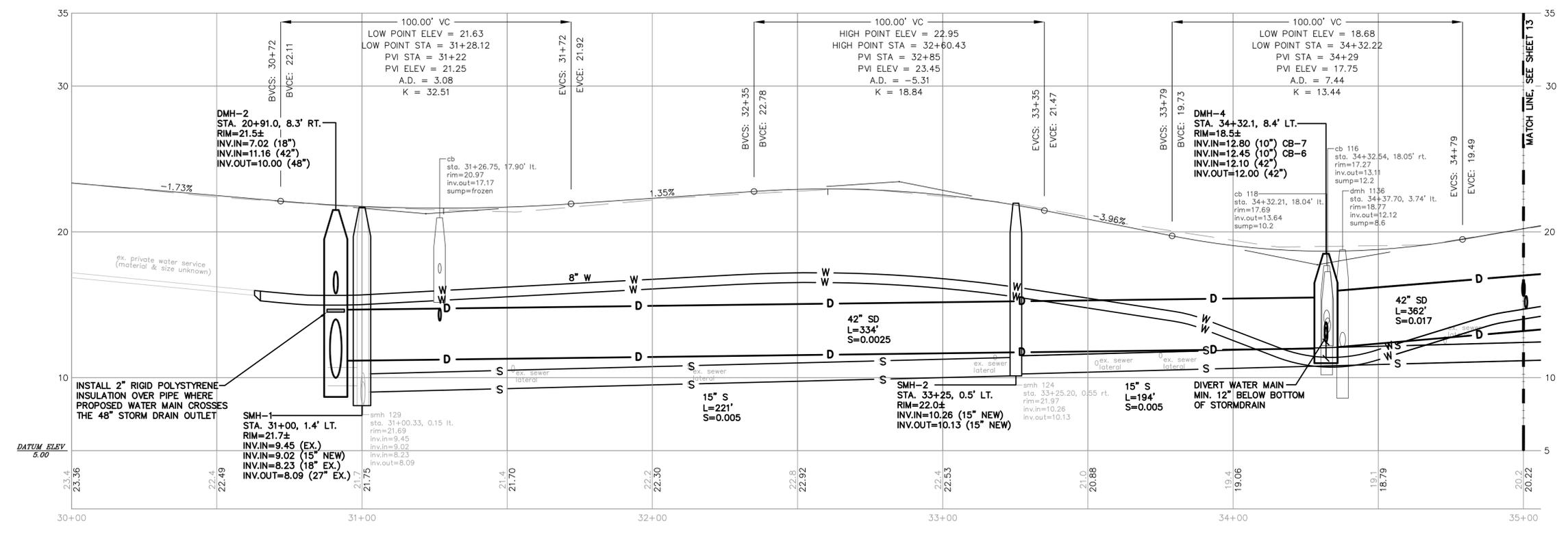


SHEET #
 11 OF 29
 PLAN NUMBER



- NOTES:**
- UPON COMPLETION OF UTILITY WORK, WEST KIDDER STREET SHALL RECEIVE FULL DEPTH RECONSTRUCTION. THE TOTAL WIDTH OF THE RECONSTRUCTED ROADWAY SHALL BE 32 FEET. TRANSITION TO EXISTING PAVEMENT WIDTH BETWEEN STATIONS 30+00 AND 30+50. BITUMINOUS WALKS SHALL BE EXTENDED AS REQUIRED TO MATCH ROADWAY GRADE. RECONSTRUCTION OF ROADWAY SHALL INCLUDE REMOVAL OF PAVEMENT AND EXCAVATION, PLACEMENT OF 15 INCHES OF SUBBASE (TYPE D) GRAVELS AND 3 INCHES OF BASE (TYPE A) GRAVELS AND PAVING. PAVING SHALL INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE TO BE PAID UNDER ITEMS 403.207 AND 403.208.
 - IMPROVEMENT WORK WITHIN WEST KIDDER STREET INVOLVE COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.

PLAN
SCALE: 1"=20'



PROFILE: WEST KIDDER STREET
STA. 30+00 TO 35+00
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
09006PP4
FIELD BOOK USED:
N/A

REFERENCES:
09006pp4.dwg, TAB: WEST KIDDER 30+00-35+00

DESIGNED BY:
DRAWN BY:
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SCALE:
DATE:

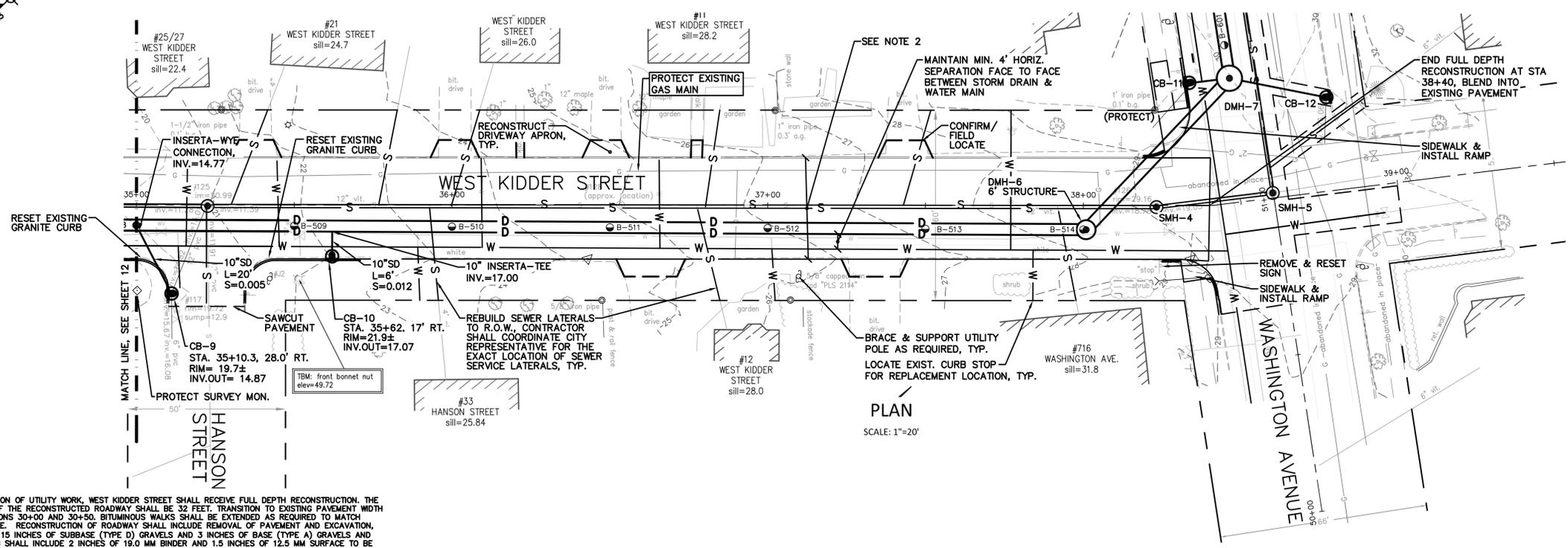
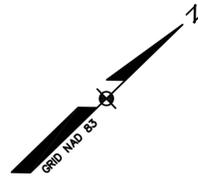


**MORSE STREET
SEWER SEPARATION**
PLAN & PROFILE
WEST KIDDER STREET, STATIONS 30+00 TO 35+00

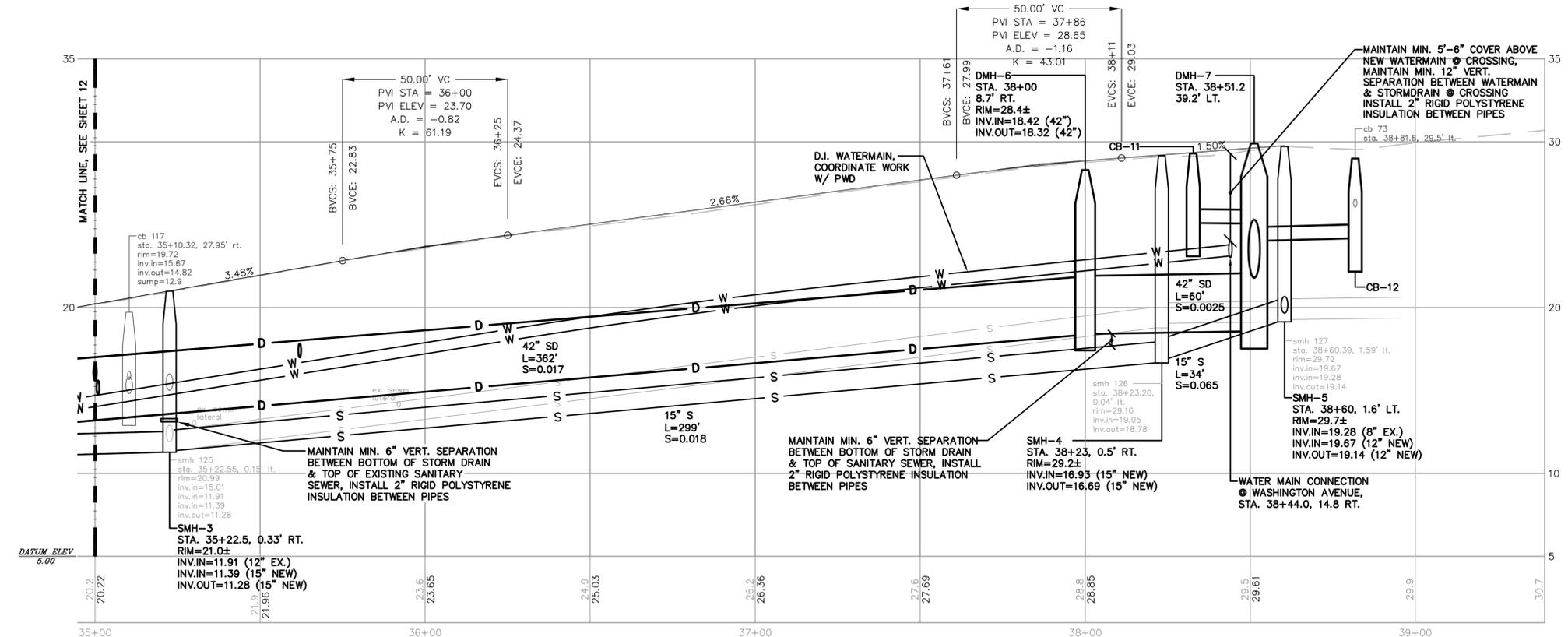
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



SHEET #
12 OF 29
PLAN NUMBER



- NOTES:**
- UPON COMPLETION OF UTILITY WORK, WEST KIDDER STREET SHALL RECEIVE FULL DEPTH RECONSTRUCTION. THE TOTAL WIDTH OF THE RECONSTRUCTED ROADWAY SHALL BE 32 FEET. TRANSITION TO EXISTING PAVEMENT WIDTH BETWEEN STATIONS 30+00 AND 30+50. BITUMINOUS WALKS SHALL BE EXTENDED AS REQUIRED TO MATCH ROADWAY GRADE. RECONSTRUCTION OF ROADWAY SHALL INCLUDE REMOVAL OF PAVEMENT AND EXCAVATION, PLACEMENT OF 15 INCHES OF SUBBASE (TYPE D) GRAVELS AND 3 INCHES OF BASE (TYPE A) GRAVELS AND PAVING. PAVING SHALL INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE TO BE PAID UNDER ITEMS 403.207 AND 403.208.
 - IMPROVEMENT WORK WITHIN WEST KIDDER STREET AND WASHINGTON AVENUE INVOLVE COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.

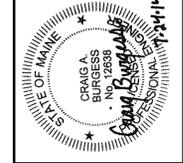


PROFILE: WEST KIDDER STREET
 STA. 35+00 TO 39+50
 SCALE: HORZ. 1"=20'
 VERT. 1"=4'

LDD PROJECT NAME:
 MORSE STREET
 SEWER SEPARATION
 DRAWING NAME:
 09006PP4
 FIELD BOOK USED:
 N/A

REFERENCES:
 09006pp4.dwg, TAB: WEST KIDDER 35+00-39+50

DESIGNED BY: OAM/CAB	DRAWN BY: BRF/CAB	CHECKED BY: OAM	SCALE: AS NOTED	DATE: 06-27-14
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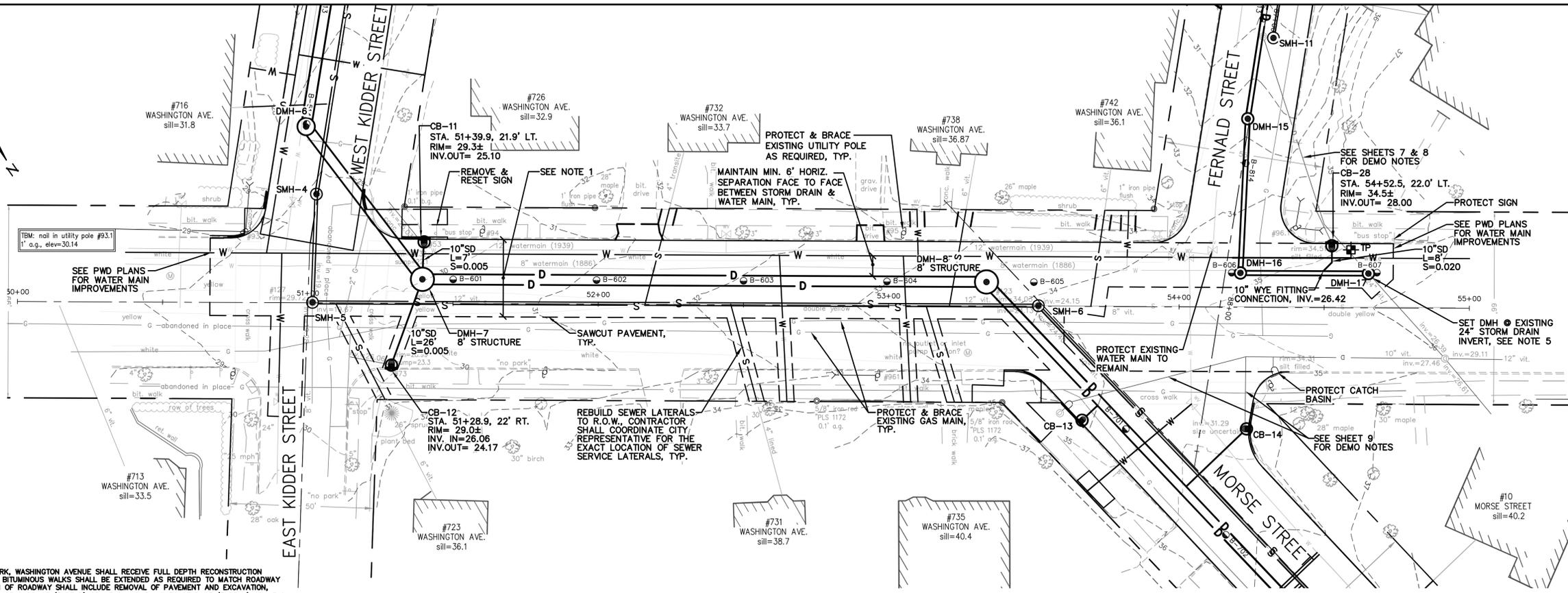


**MORSE STREET
 SEWER SEPARATION
 PLAN & PROFILE**
 WEST KIDDER STREET, STATIONS 35+00 TO 39+50

**CITY OF PORTLAND, MAINE
 PUBLIC SERVICES DEPARTMENT
 ENGINEERING DIVISION**



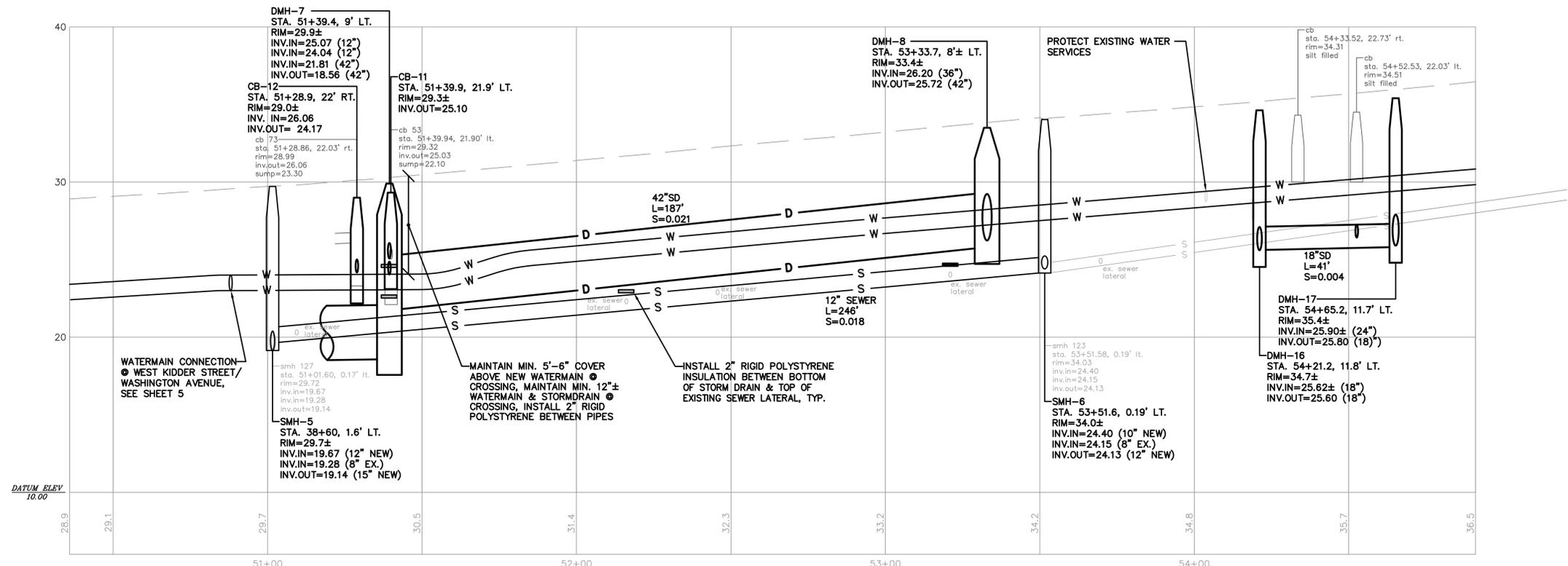
SHEET #
 13 OF 29
 PLAN NUMBER



- NOTES:**
- UPON COMPLETION OF WORK, WASHINGTON AVENUE SHALL RECEIVE FULL DEPTH RECONSTRUCTION WITHIN SAW CUT AREAS. BITUMINOUS WALKS SHALL BE EXTENDED AS REQUIRED TO MATCH ROADWAY GRADE. RECONSTRUCTION OF ROADWAY SHALL INCLUDE REMOVAL OF PAVEMENT AND EXCAVATION. PLACEMENT OF 18 INCHES OF SUBBASE (TYPE D) GRAVELS AND 3 INCHES OF BASE (TYPE A) GRAVELS AND PAVING. PAVING SHALL INCLUDE 5.5 INCHES OF 19.0 MM BINDER TO BE PAID UNDER ITEM 403.207.
 - IMPROVEMENT WORK WITHIN WASHINGTON AVENUE INVOLVE COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.
 - EXCAVATE TEST PIT TO DETERMINE INVERT OF EXISTING STORM DRAIN PIPE.

PLAN

SCALE: 1"=20'



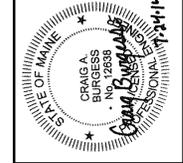
PROFILE: WASHINGTON AVENUE

STA. 50+00 TO 55+00
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME:
MORSE STREET SEWER
SEPARATION PROJECT
DRAWING NAME:
09006PP5
FIELD BOOK USED:
N/A

REFERENCES:
09006pp5.dwg, TAB: WASHINGTON 50+00-55+00

DESIGNED BY:
DRAWN BY:
CHECKED BY:
SCALE:
AS NOTED
DATE:

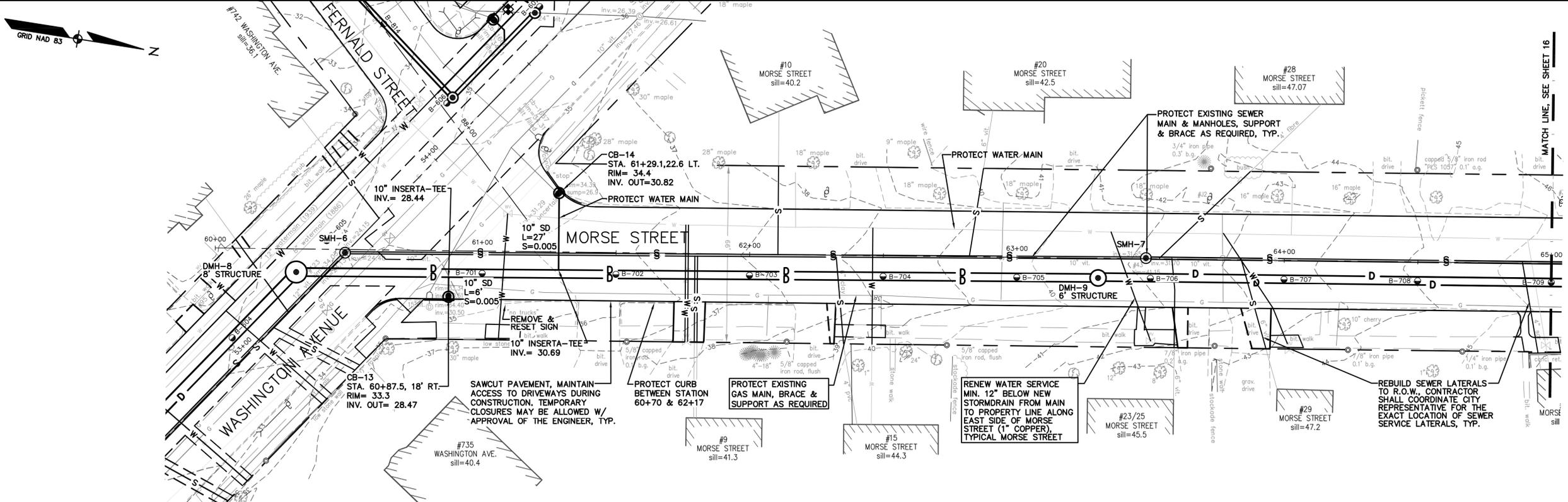


**MORSE STREET
SEWER SEPARATION
PLAN & PROFILE**
WASHINGTON STREET, STATIONS 50+00 TO 55+00

**CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION**

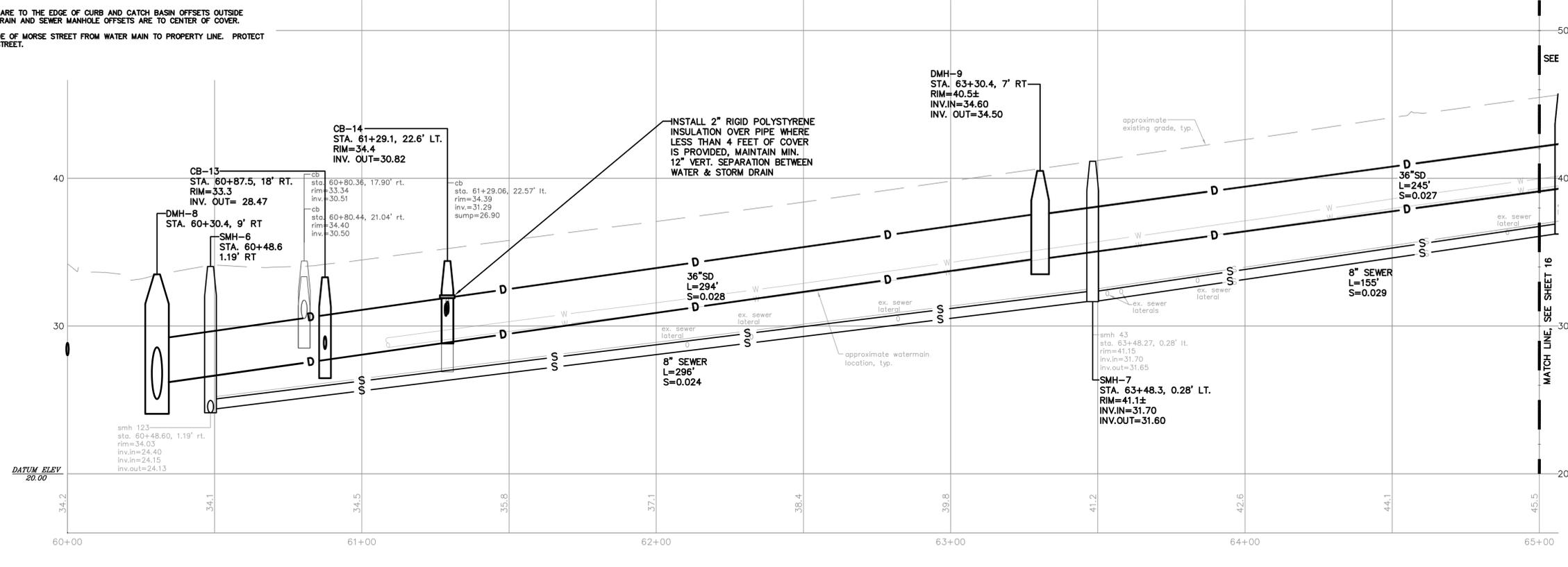


SHEET #
14 OF 29
PLAN NUMBER



- NOTES:**
- UPON COMPLETION OF WORK, MORSE STREET SHALL RECEIVE PARTIAL ROAD RECONSTRUCTION WITHIN THE ENTIRE WIDTH OF PAVEMENT AND EXCAVATION LIMITS. RECONSTRUCTION OF THE ROADWAY, TO INCLUDE REMOVAL OF THE ENTIRE WIDTH OF PAVEMENT AND EXCAVATION OF 3" OF EXISTING GRAVELS TO BE PAID UNDER PAY ITEM 202.20. PLACEMENT OF 3" OF BASE (TYPE A) GRAVELS SHALL BE PAID UNDER PAY ITEM 304.09. PAVING SHALL INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE TO BE PAID UNDER ITEMS 403.207 AND 403.208. MAINTAIN ACCESS TO DRIVEWAYS DURING CONSTRUCTION. TEMPORARY CLOSURES MAY BE ALLOWED WITH APPROVAL OF THE ENGINEER.
 - IMPROVEMENT WORK WITHIN MORSE STREET INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.
 - RENEW WATER SERVICES ALONG EAST SIDE OF MORSE STREET FROM WATER MAIN TO PROPERTY LINE. PROTECT SERVICES ALONG WEST SIDE OF MORSE STREET.

PLAN
SCALE: 1"=20'



PROFILE: MORSE STREET
STA. 60+00 TO 65+00
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME:
MORSE STREET SEWER SEPARATION PROJECT
DRAWING NAME:
09006PP6
FIELD BOOK USED:
N/A

REFERENCES:
09006pp6.dwg, TAB: MORSE 60+00-65+00

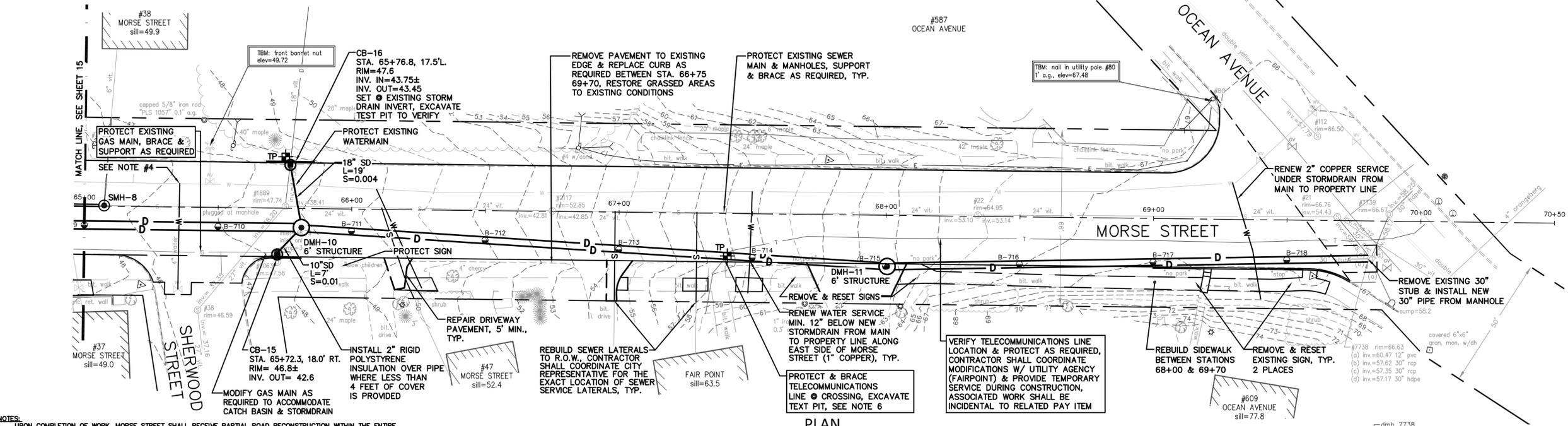
DESIGNED BY:	ORAM/CAB
DRAWN BY:	BRF/CAB
CHECKED BY:	OAM
SCALE:	AS NOTED
DATE:	06-27-14



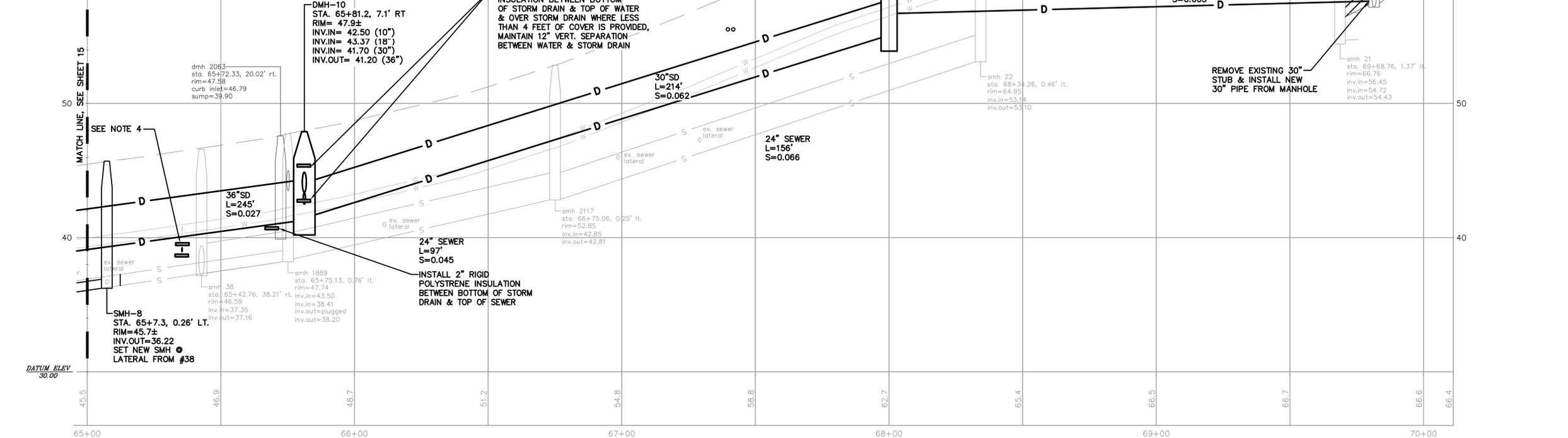
MORSE STREET SEWER SEPARATION
PLAN & PROFILE
MORSE STREET, STATIONS 60+00 TO 65+00

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION





- NOTES:**
- UPON COMPLETION OF WORK, MORSE STREET SHALL RECEIVE PARTIAL ROAD RECONSTRUCTION WITHIN THE ENTIRE WIDTH OF EXISTING PAVEMENT LIMITS. RECONSTRUCTION OF THE ROADWAY TO INCLUDE REMOVAL OF THE ENTIRE WIDTH OF PAVEMENT AND EXCAVATION OF 3" OF EXISTING GRAVELS TO BE PAID UNDER PAY ITEM 202.20. PLACEMENT OF 3" OF BASE (TYPE A) GRAVELS SHALL BE PAID UNDER PAY ITEM 304.09. PAVING SHALL INCLUDE 2 INCHES OF 18.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE TO BE PAID UNDER ITEMS 403.207 AND 403.208. MAINTAIN ACCESS TO DRIVEWAYS DURING CONSTRUCTION. TEMPORARY CLOSURES MAY BE ALLOWED WITH APPROVAL OF THE ENGINEER.
 - IMPROVEMENT WORK WITHIN MORSE STREET INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.
 - THE EXISTING 4" WATERMAIN IS APPROXIMATELY 5 FEET DEEP. REBUILD 4" WATER MAIN BELOW STORM DRAIN AND ABOVE SANITARY SEWER TO PROVIDE MINIMUM 12" VERTICAL SEPARATION. INSTALL 2" RIGID POLYSTYRENE INSULATION BETWEEN PIPES. CUT IN 4" GATE VALVE AND OFFSET 4" WATERMAIN UNDER STORM DRAIN USING FOUR (4) 45° BENDS. SHUT DOWN WILL BE REQUIRED. COORDINATE CONSTRUCTION WITH PWD AND CITY REPRESENTATIVE.
 - RENEW WATER SERVICES ALONG EAST SIDE OF MORSE STREET FROM WATER MAIN TO PROPERTY LINE. PROTECT SERVICES ALONG WEST SIDE OF MORSE STREET.
 - PRIOR TO ORDERING PIPES AND STRUCTURES FOR MORSE STREET STORM DRAIN INSTALLATION THE CONTRACTOR SHALL EXCAVATE A TEST PIT OVER FAIRPOINT TELECOMMUNICATIONS LINE TO DETERMINE SIZE AND ELEVATION OF THE CONDUIT. THIS INFORMATION SHALL BE FORWARDED TO THE DESIGN ENGINEER TO DETERMINE IF THE STORM DRAIN ELEVATIONS NEED TO BE ADJUSTED.

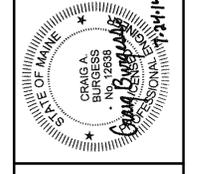


PROFILE: MORSE STREET
 STA. 65+00 TO 70+00
 SCALE: HORZ. 1"=20'
 VERT. 1"=4'

LDD PROJECT NAME:
 MORSE STREET SEWER SEPARATION PROJECT
 DRAWING NAME:
 09006ppb
 FIELD BOOK USED:
 N/A

REFERENCES:
 09006ppb.dwg, TAB: MORSE 65+00-70+00

DESIGNED BY: CAM/FCB
 DRAWN BY: BRF/CAB
 CHECKED BY: OAM
 SCALE: AS NOTED
 DATE: 06-27-14

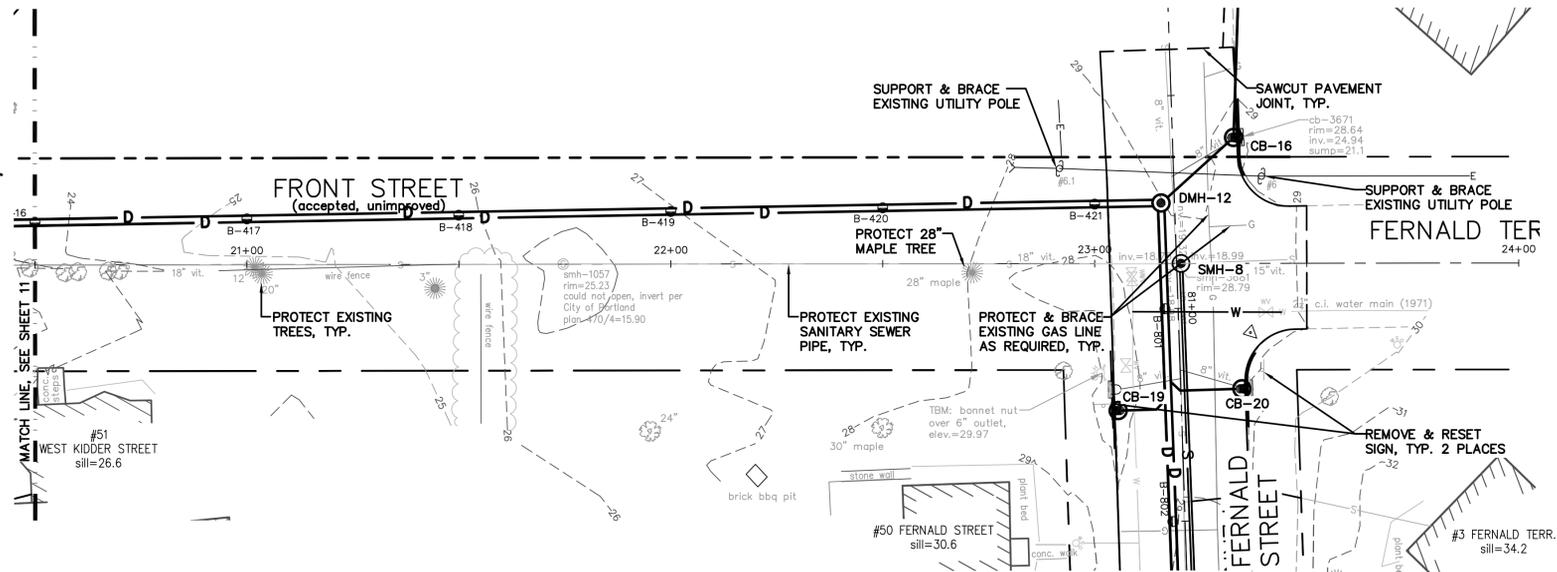
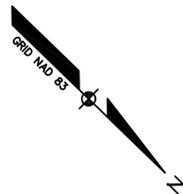


**MORSE STREET
 SEWER SEPARATION
 PLAN & PROFILE**
 MORSE STREET, STATIONS 65+00 TO 70+00

CITY OF PORTLAND, MAINE
 PUBLIC SERVICES DEPARTMENT
 ENGINEERING DIVISION

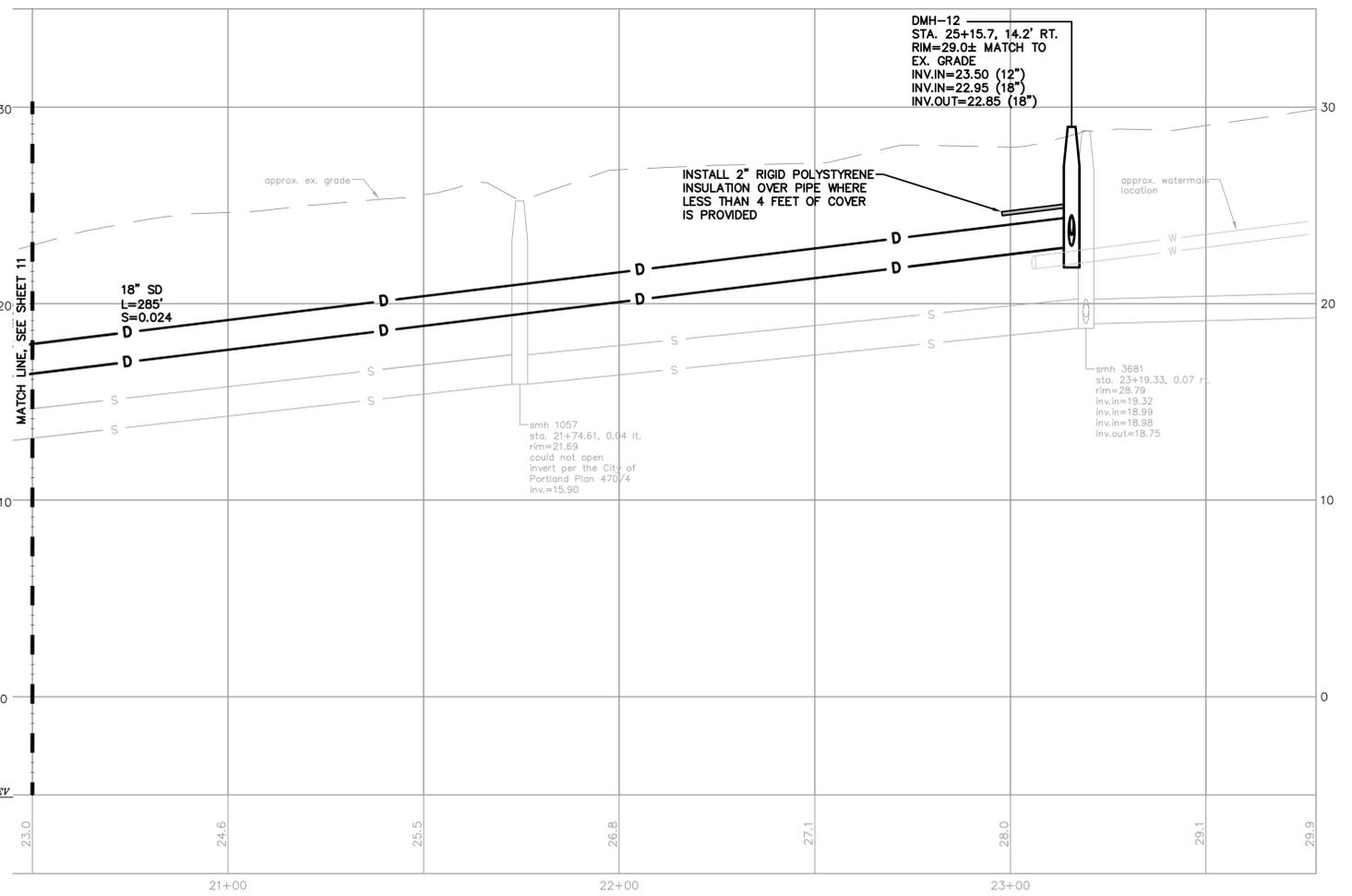


SHEET #
 16 OF 29
 PLAN NUMBER



PLAN
SCALE: 1"=20'

- NOTE:**
- UPON COMPLETION OF WORK, FERNALD STREET SHALL RECEIVE PARTIAL ROAD RECONSTRUCTION WITHIN THE ENTIRE WIDTH OF EXISTING PAVEMENT LIMITS. RECONSTRUCTION OF THE ROADWAY, TO INCLUDE REMOVAL OF THE ENTIRE WIDTH OF PAVEMENT AND EXCAVATION OF 3" OF EXISTING GRAVELS TO BE PAID UNDER PAY ITEM 202.20. PLACEMENT OF 3" OF BASE (TYPE A) GRAVELS SHALL BE PAID UNDER PAY ITEM 304.09. PAVING SHALL INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE TO BE PAID UNDER ITEMS 403.207 AND 403.208. MAINTAIN ACCESS TO DRIVEWAYS DURING CONSTRUCTION. TEMPORARY CLOSURES MAY BE ALLOWED WITH APPROVAL OF THE ENGINEER.
 - IMPROVEMENT WORK AT FERNALD STREET INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - DISTURBANCE LIMITS SHALL NOT EXTEND OUTSIDE THE CITY RIGHT-OF-WAY UNLESS NOTED OTHERWISE.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.



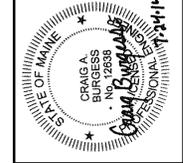
PROFILE: FRONT STREET

SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
09006PP3
FIELD BOOK USED:
N/A

REFERENCES:
09006pp3.dwg, TAB: FRONT 20+50-23+50

DESIGNED BY:
OAM/CAB
DRAWN BY:
BRF/CAB
CHECKED BY:
OAM
SCALE:
AS NOTED
DATE:
06-27-14



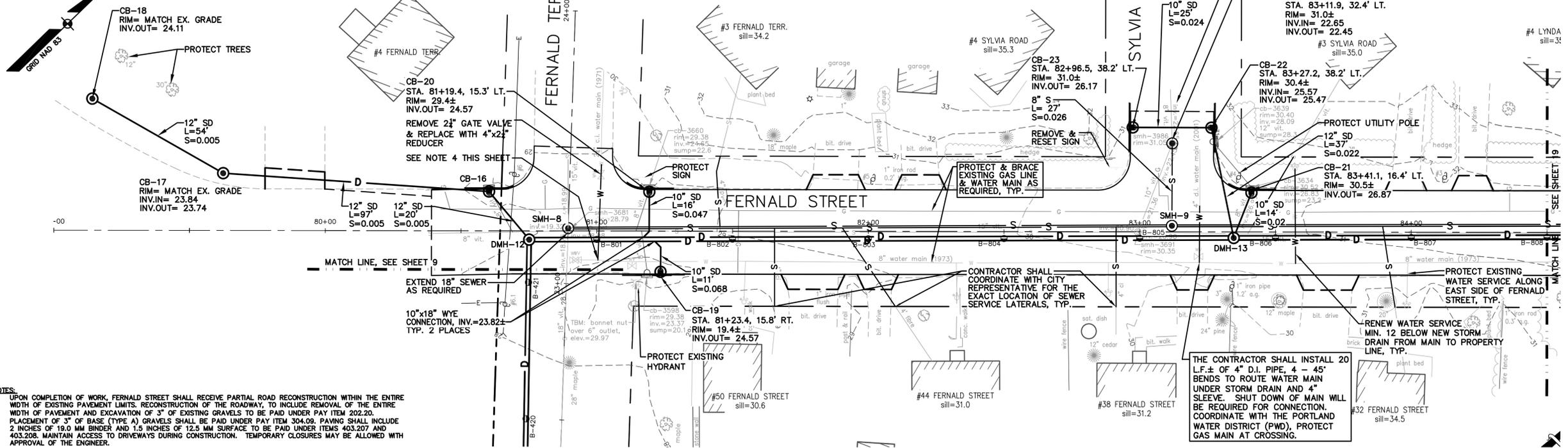
MORSE STREET
SEWER SEPARATION
PLAN & PROFILE
FRONT STREET, STATIONS 20+50 TO 23+50

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



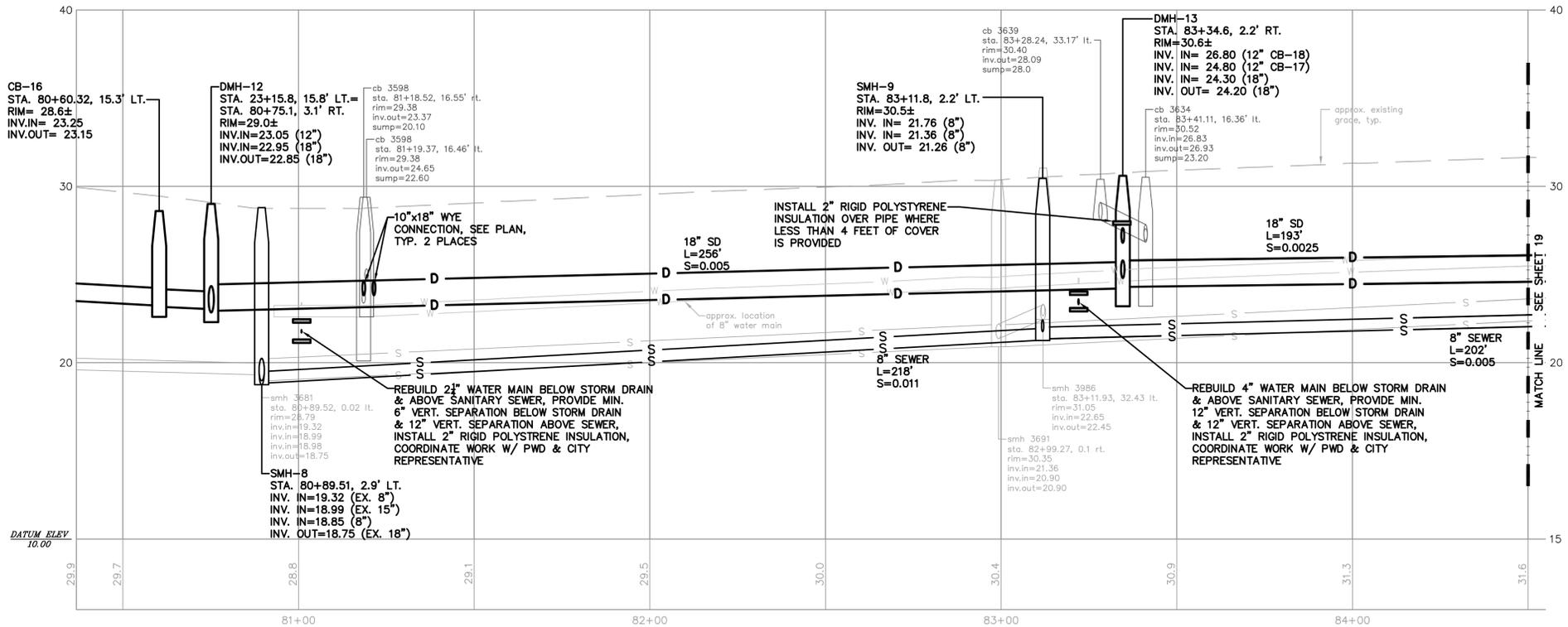
SHEET #
17 OF 29
PLAN NUMBER

NOTE:
COORDINATE CB-17 AND
CB-18 LOCATIONS WITH
ENGINEER.



- NOTES:**
- UPON COMPLETION OF WORK, FERNALD STREET SHALL RECEIVE PARTIAL ROAD RECONSTRUCTION WITHIN THE ENTIRE WIDTH OF EXISTING PAVEMENT LIMITS. RECONSTRUCTION OF THE ROADWAY, TO INCLUDE REMOVAL OF THE ENTIRE WIDTH OF PAVEMENT AND EXCAVATION OF 3" OF EXISTING GRAVELS TO BE PAID UNDER PAY ITEM 202.20. PLACEMENT OF 3" OF BASE (TYPE A) GRAVELS SHALL BE PAID UNDER PAY ITEM 304.09. PAVING SHALL INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE TO BE PAID UNDER ITEMS 403.207 AND 403.208. MAINTAIN ACCESS TO DRIVEWAYS DURING CONSTRUCTION. TEMPORARY CLOSURES MAY BE ALLOWED WITH APPROVAL OF THE ENGINEER.
 - IMPROVEMENT WORK WITHIN FERNALD STREET INVOLVES COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.
 - THE CONTRACTOR SHALL INSTALL 8"x4" TEE, 4" GATE VALVE, 35 L.F.± OF 4" D.I. PIPE AND 4 - 45° BENDS TO ROUTE WATER MAIN UNDER STORM DRAIN. SHUT DOWN OF MAIN WILL BE REQUIRED FOR CONNECTION AND TEMPORARY WATER FOR FERNALD TERRACE RESIDENTS SHALL BE PROVIDED. COORDINATE WITH THE PORTLAND WATER DISTRICT (PWD). PROTECT GAS MAIN AT CROSSING.
 - RENEW WATER SERVICES ALONG WEST SIDE OF FERNALD STREET FROM MAIN TO PROPERTY LINE. PROTECT SERVICES ALONG EAST SIDE OF FERNALD STREET.

PLAN
SCALE: 1"=20'

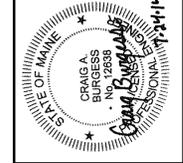


PROFILE: FERNALD STREET
STA. 80+00 TO 84+50
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME:
BAXTER BOULEVARD
NORTH STORAGE CONDUIT
DRAWING NAME:
09006pp7
FIELD BOOK USED:
N/A

REFERENCES:
09006pp7.dwg, TAB: FERNALD 80+00-84+50

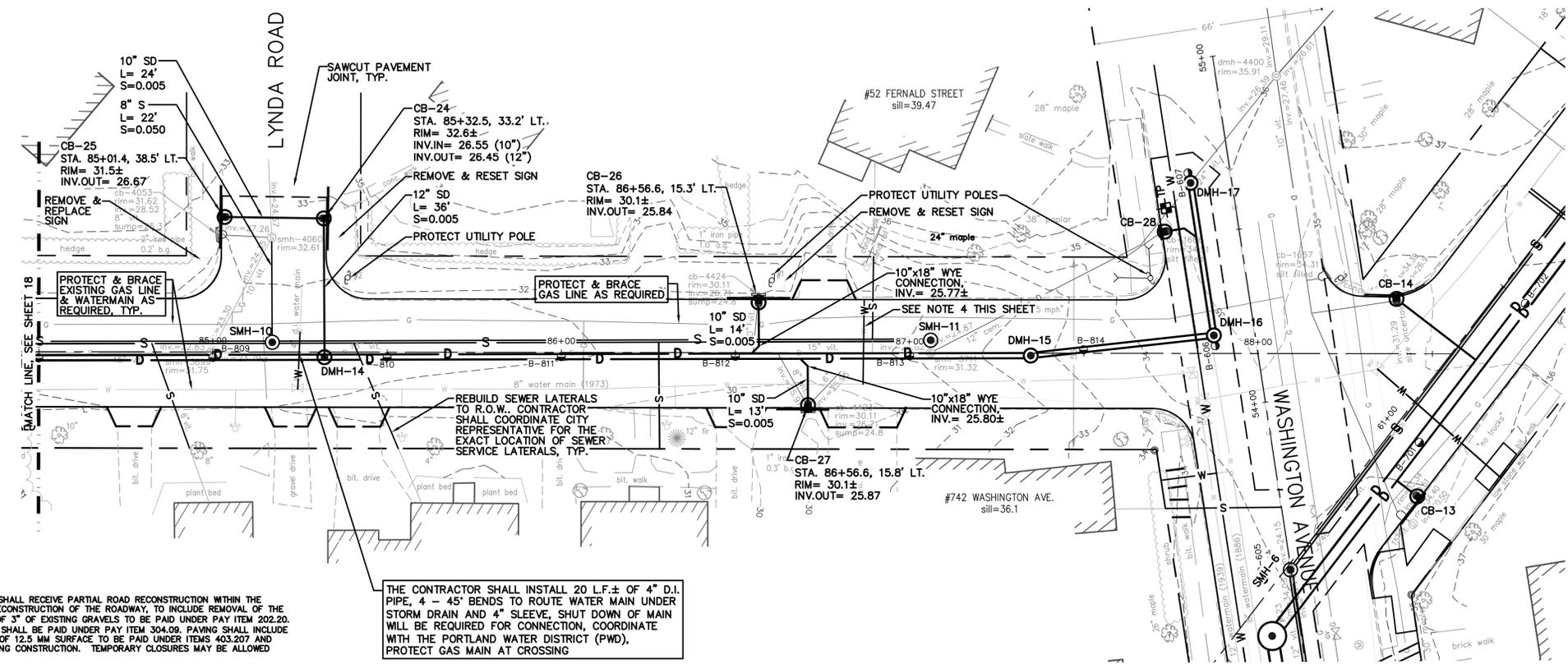
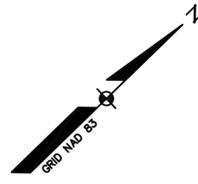
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DRAWN BY:	BRF/CAB
CHECKED BY:	OAM
SCALE:	AS NOTED
DATE:	06-27-14



SEWER SEPARATION
MORSE STREET
PLAN & PROFILE
FERNALD STREET STATIONS 80+00 TO 84+50

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

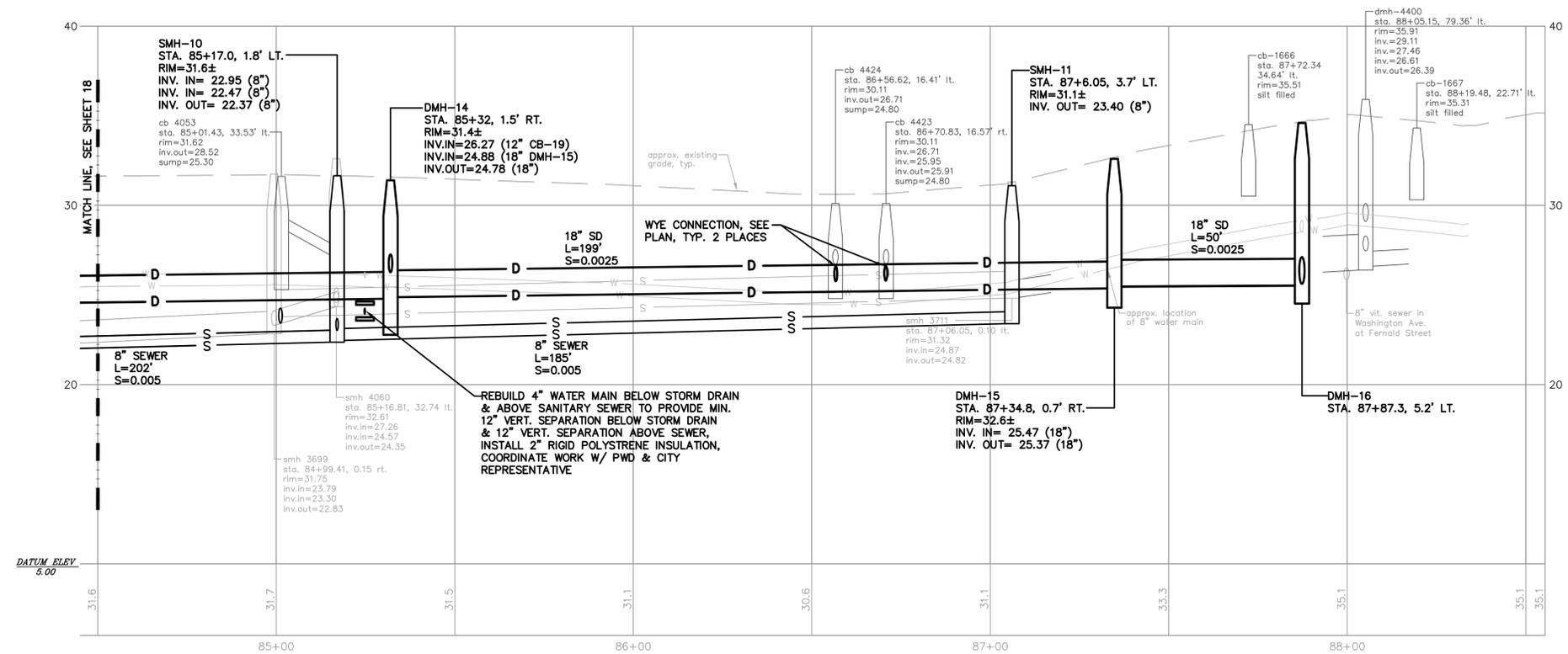




- NOTES:**
- UPON COMPLETION OF WORK, FERNALD STREET SHALL RECEIVE PARTIAL ROAD RECONSTRUCTION WITHIN THE ENTIRE WIDTH OF EXISTING PAVEMENT LIMITS. RECONSTRUCTION OF THE ROADWAY, TO INCLUDE REMOVAL OF THE ENTIRE WIDTH OF PAVEMENT AND EXCAVATION OF 3" OF EXISTING GRAVELS TO BE PAID UNDER PAY ITEM 202.20. PLACEMENT OF 3" OF BASE (TYPE A) GRAVELS SHALL BE PAID UNDER PAY ITEM 304.09. PAVING SHALL INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE TO BE PAID UNDER ITEMS 403.207 AND 403.208. MAINTAIN ACCESS TO DRIVEWAYS DURING CONSTRUCTION. TEMPORARY CLOSURES MAY BE ALLOWED WITH APPROVAL OF THE ENGINEER.
 - IMPROVEMENT WORK WITHIN FERNALD STREET INVOLVE COORDINATION WITH MULTIPLE UTILITIES AND WORK WITHIN CLOSE PROXIMITY TO UTILITIES. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY AGENCIES, COMPLY WITH UTILITY AGENCY REQUIREMENTS AND SHALL SUPPORT AND PROTECT EXISTING UTILITIES THROUGHOUT CONSTRUCTION. WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.
 - CATCH BASIN OFFSETS WITHIN ROADWAY ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE ROADWAY ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.
 - RENEW WATER SERVICES ALONG WEST SIDE OF FERNALD STREET FROM MAIN TO PROPERTY LINE. PROTECT SERVICES ALONG EAST SIDE OF FERNALD STREET.

THE CONTRACTOR SHALL INSTALL 20 L.F.± OF 4" D.I. PIPE, 4 - 45° BENDS TO ROUTE WATER MAIN UNDER STORM DRAIN AND 4" SLEEVE, SHUT DOWN OF MAIN WILL BE REQUIRED FOR CONNECTION, COORDINATE WITH THE PORTLAND WATER DISTRICT (PWD), PROTECT GAS MAIN AT CROSSING

PLAN
SCALE: 1"=20'



PROFILE: FERNALD STREET
STA. 84+50 TO 88+55
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME:
BAXTER BOULEVARD
NORTH STORAGE CONDUIT
DRAWING NAME:
09006PP7
FIELD BOOK USED:
N/A

REFERENCES:
09006pp7.dwg, TAB: FERNALD 84+50-88+55

DESIGNED BY: GMM/CAB
DRAWN BY: BRF/CAB
CHECKED BY: OAM
SCALE: AS NOTED
DATE: 06-27-14



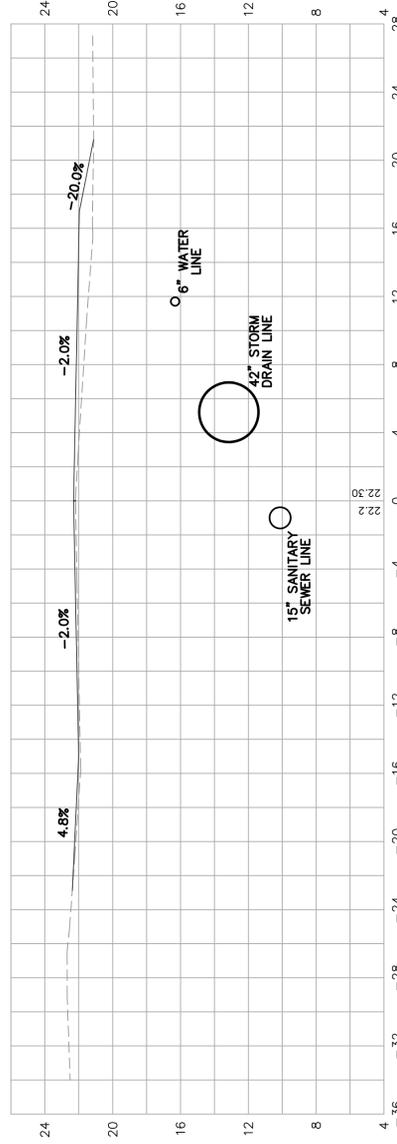
SEWER SEPARATION
MORSE STREET
PLAN & PROFILE
FERNALD STREET STATIONS 84+50 TO 88+55

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

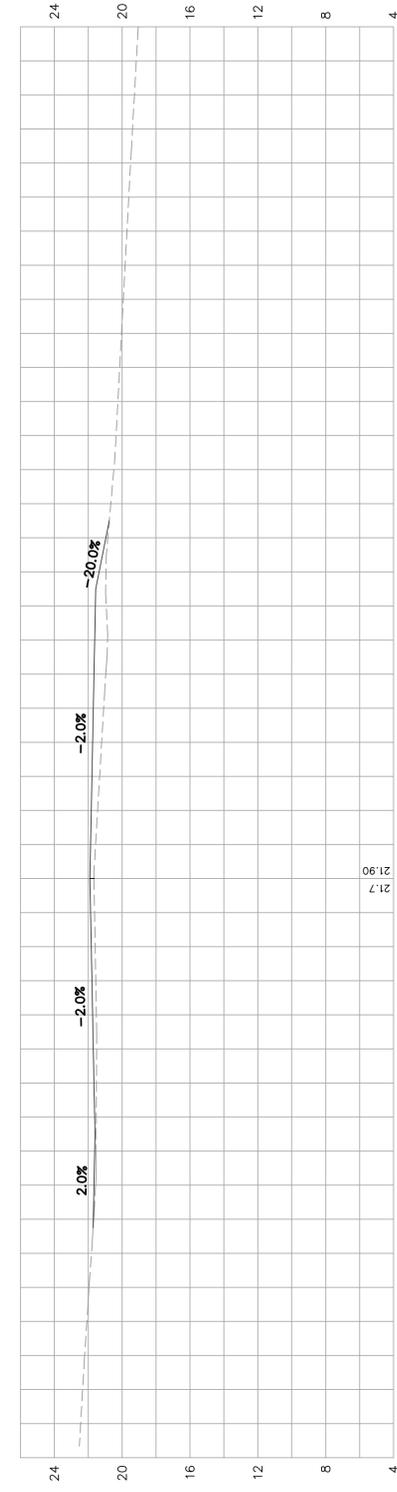


SHEET #
19 OF 29
PLAN NUMBER

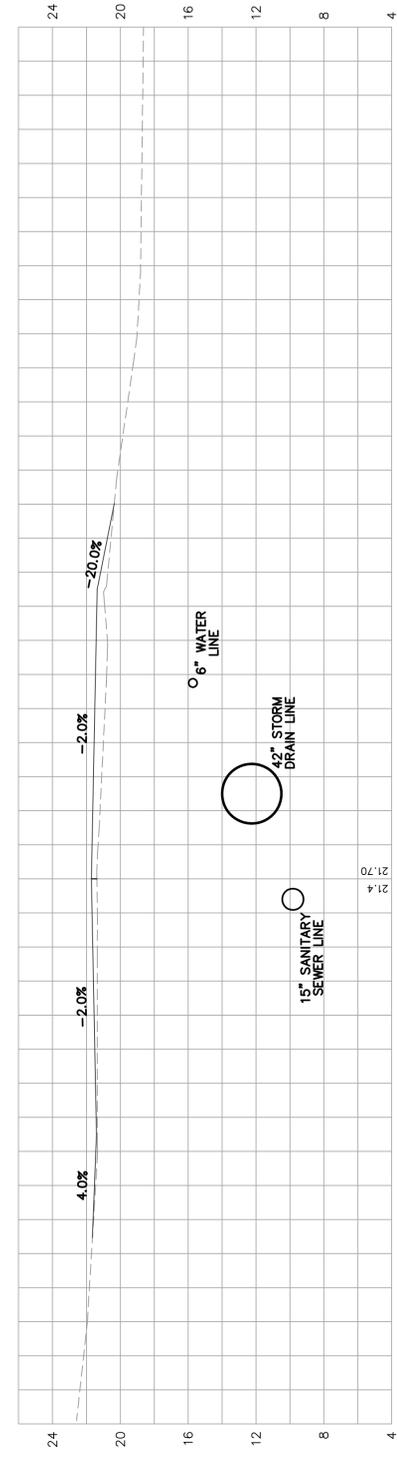
32+00



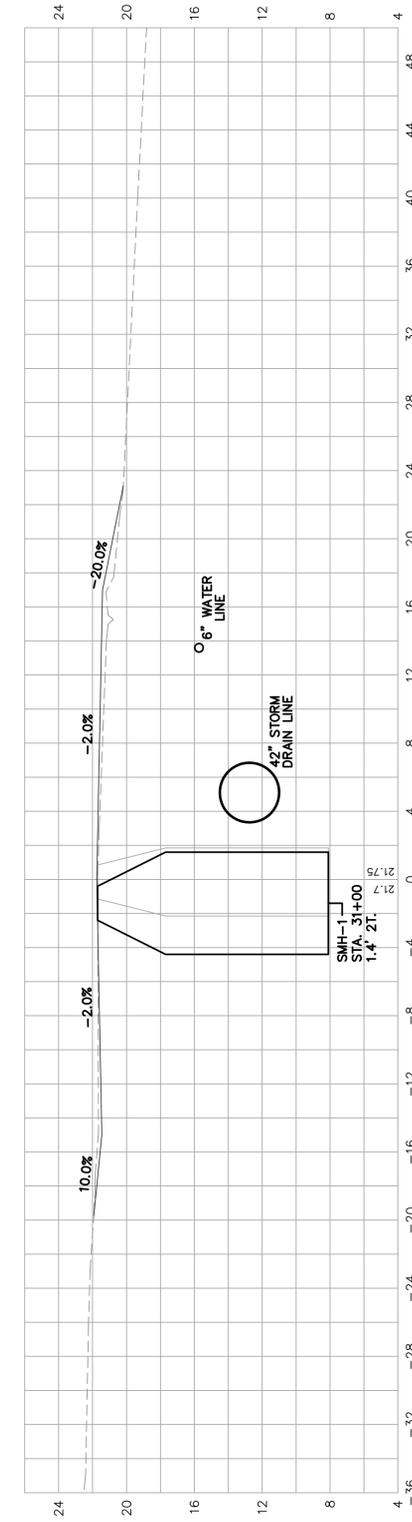
31+70



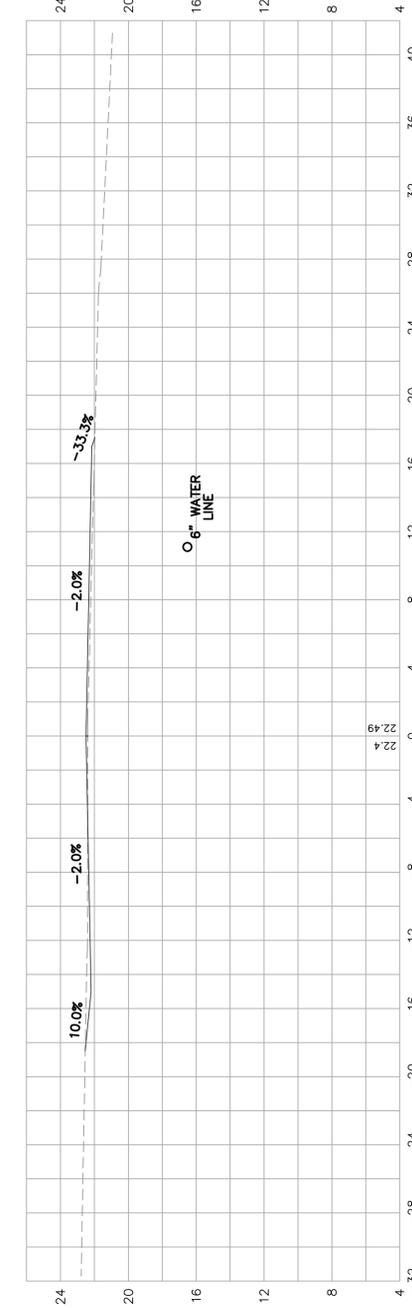
31+50



31+00



30+50

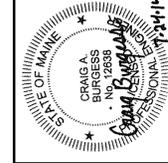


NOTE: ONLY MAJOR SUBSURFACE UTILITIES ARE SHOWN IN THE CROSS-SECTIONS. SEE PLAN AND PROFILE DRAWINGS FOR ADDITIONAL UTILITY INFORMATION.



CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

MORSE STREET
SEWER SEPARATION
CROSS SECTIONS
WEST KIDDER STREET, STATIONS 30+50 TO 32+00



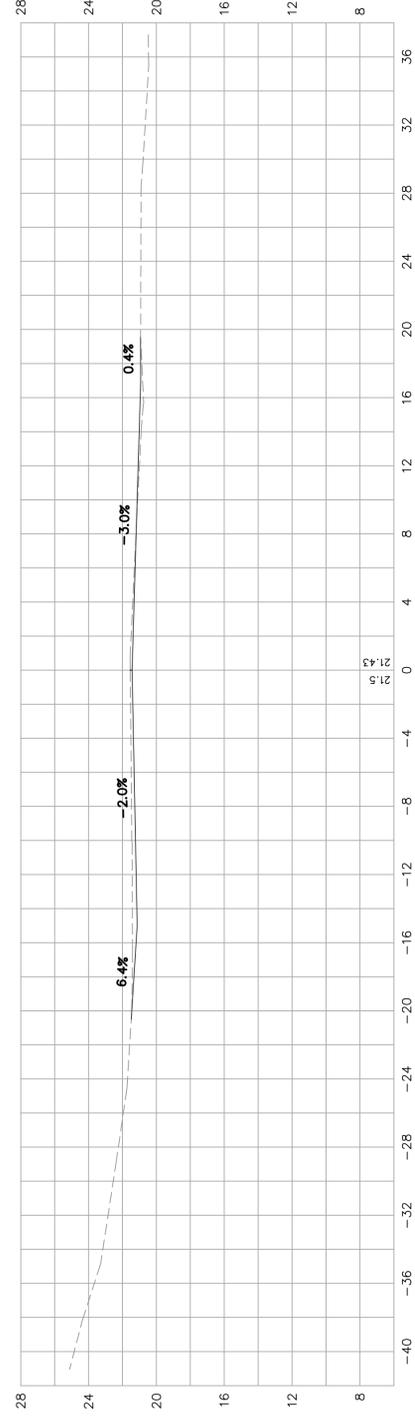
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DATE: 06-27-18

REFERENCES:
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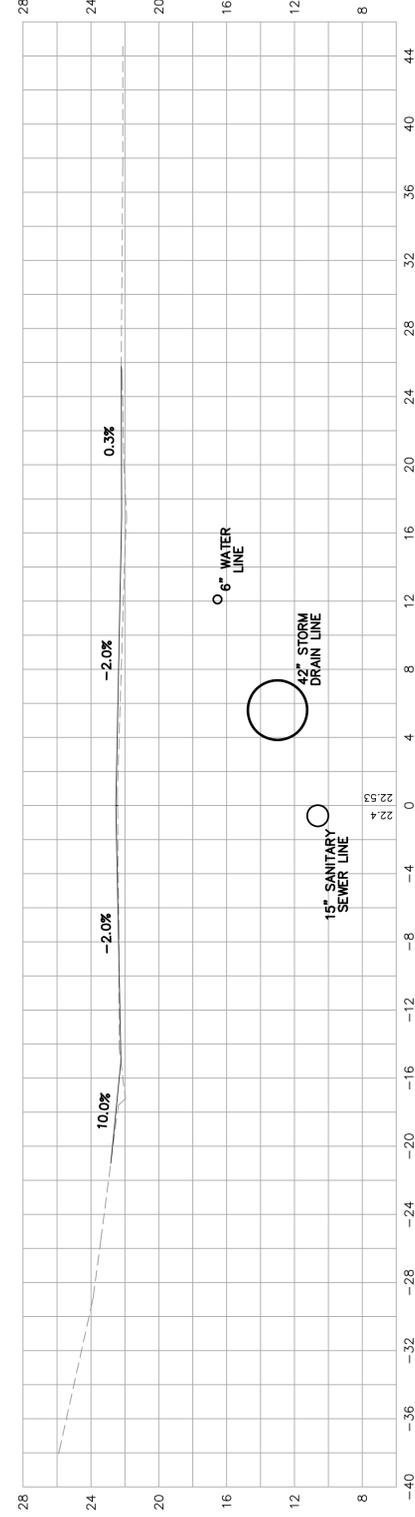
LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
09006X62
FIELD BOOK USED:
N/A

SHEET #
20 OF 29
PLAN NUMBER

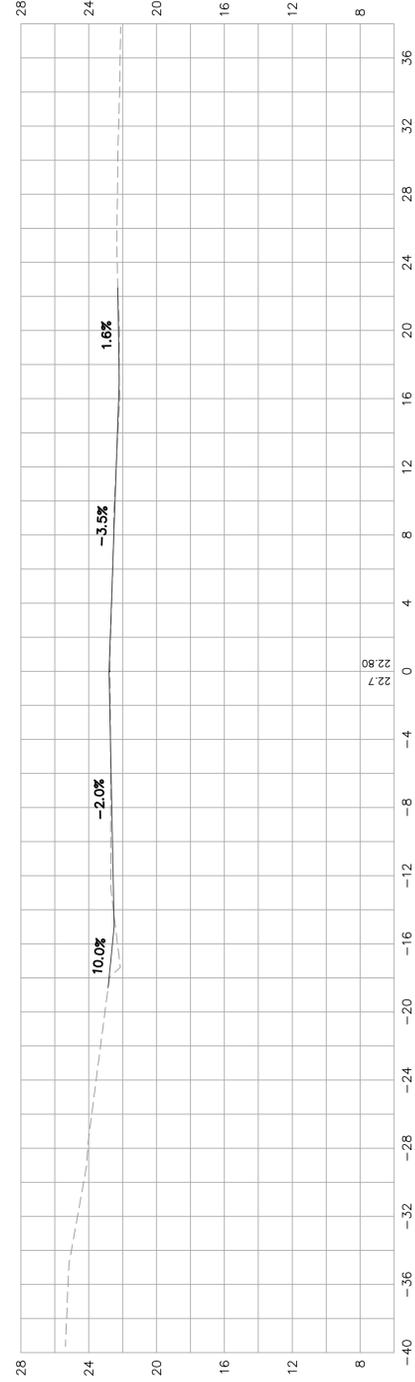
33+36



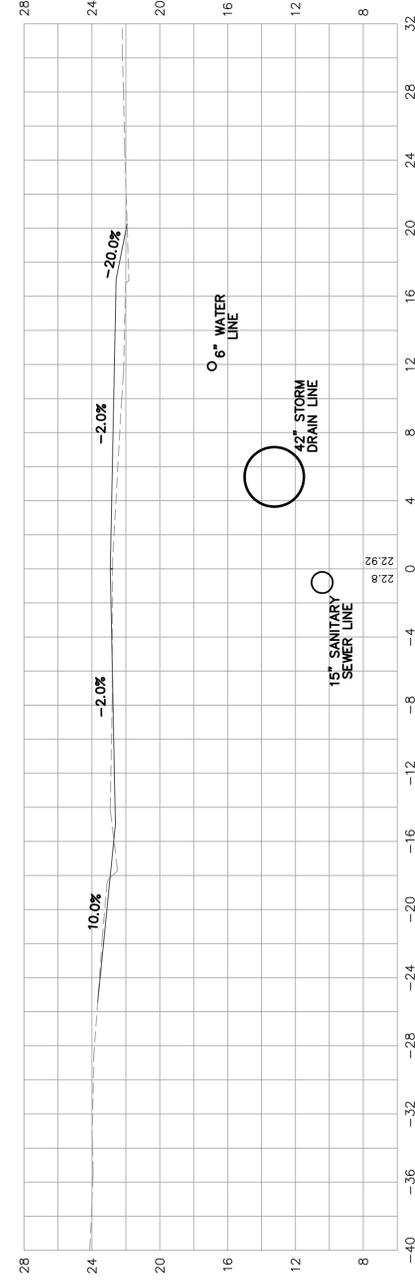
33+00



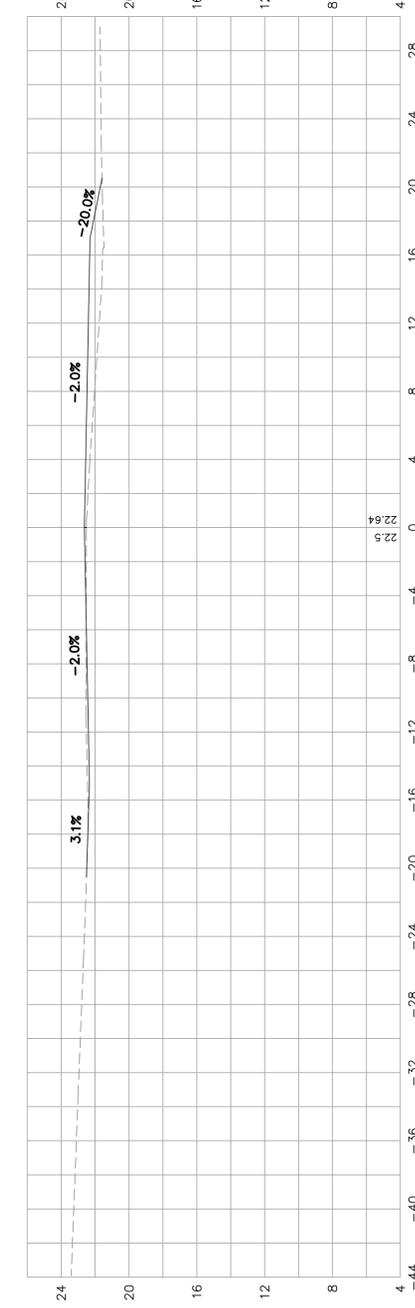
32+84



32+50



32+25

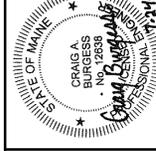


NOTE:
ONLY MAJOR SUBSURFACE UTILITIES ARE SHOWN IN THE CROSS-SECTIONS. SEE PLAN AND PROFILE DRAWINGS FOR ADDITIONAL UTILITY INFORMATION.



CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

MORSE STREET
SEWER SEPARATION
CROSS SECTIONS
WEST KIDDER STREET, STATIONS 32+25 TO 33+36



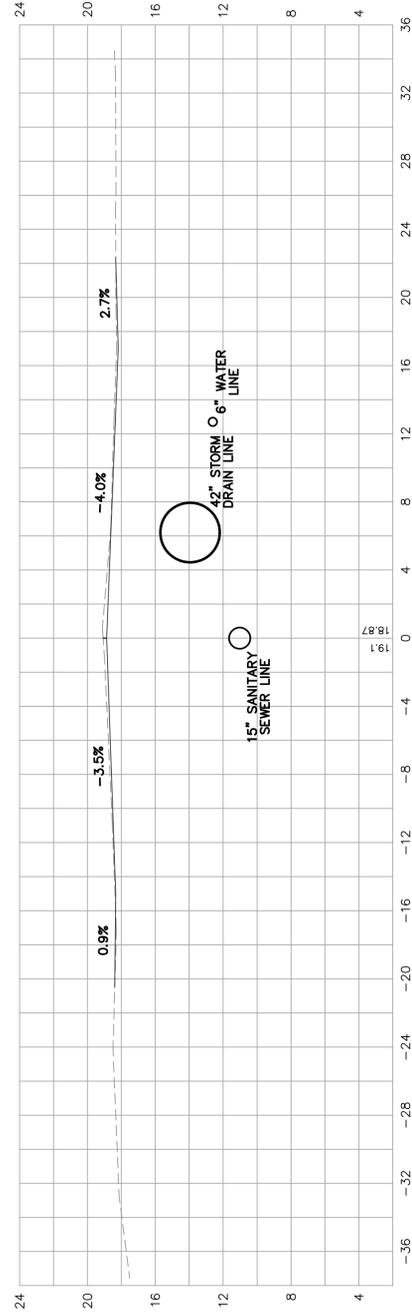
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DRAWN BY: BRB
CHECKED BY: OAM
SCALE: 1"=5'
DATE: 05-13-2014

REFERENCES:
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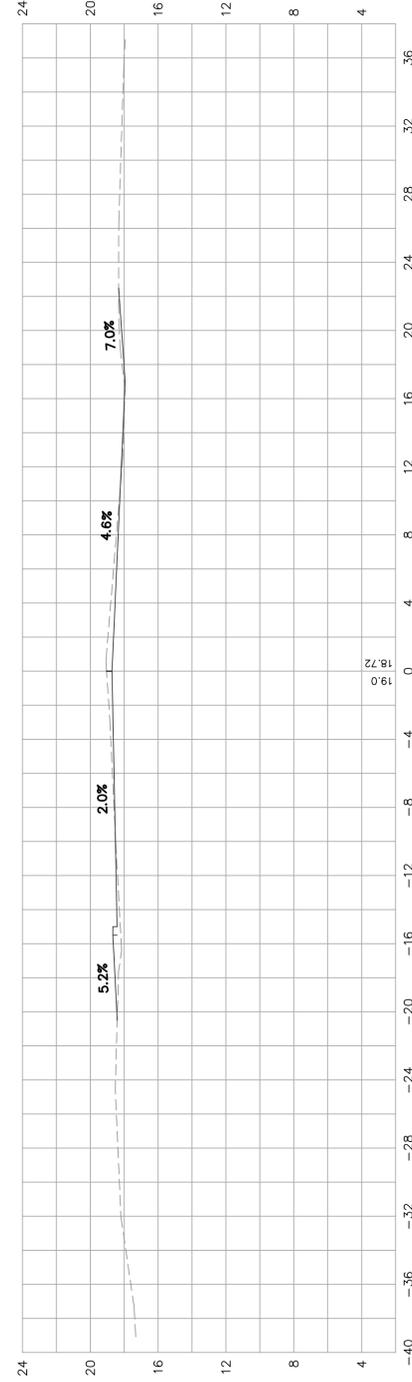
LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
09006X62
FIELD BOOK USED:
N/A

SHEET #
21 OF 29
PLAN NUMBER

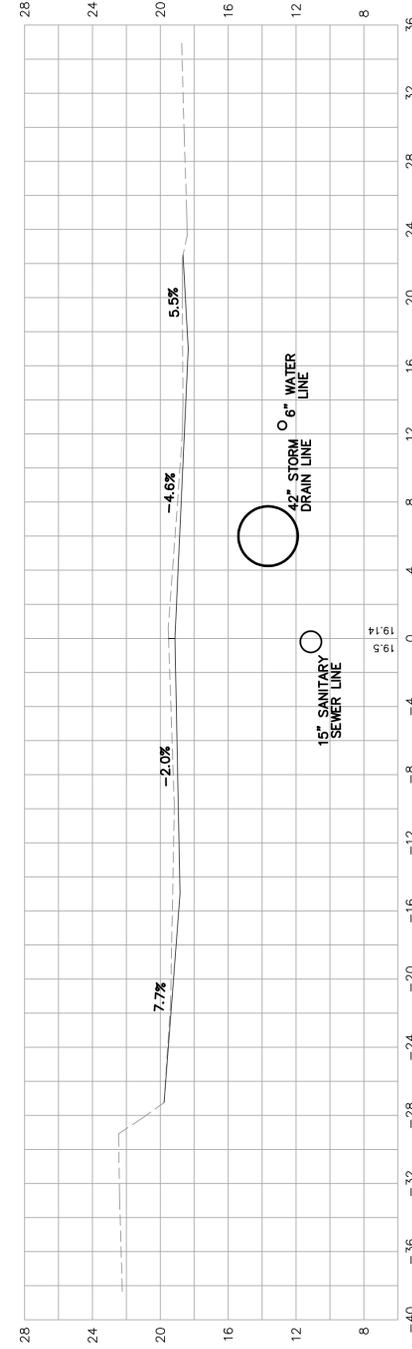
34+55



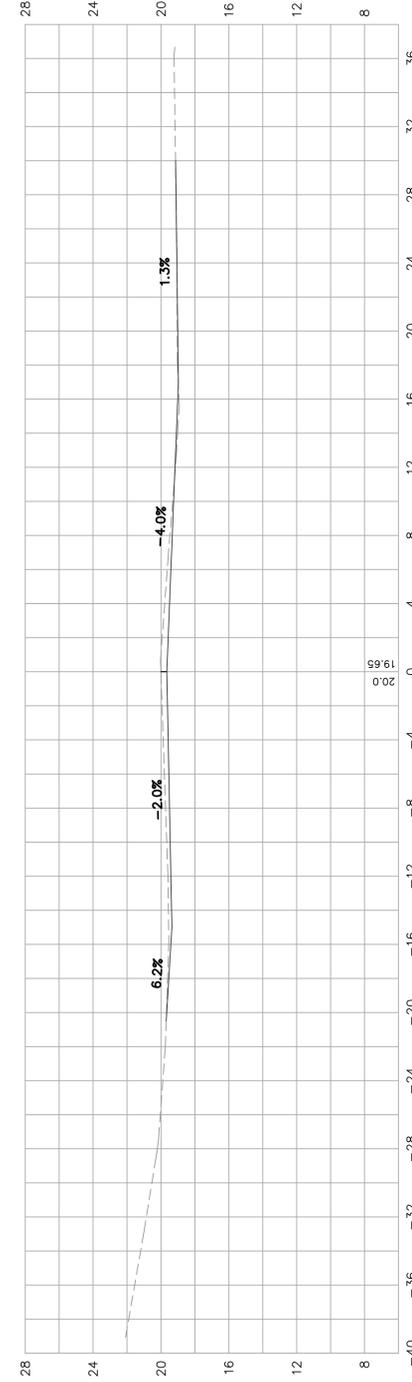
34+43



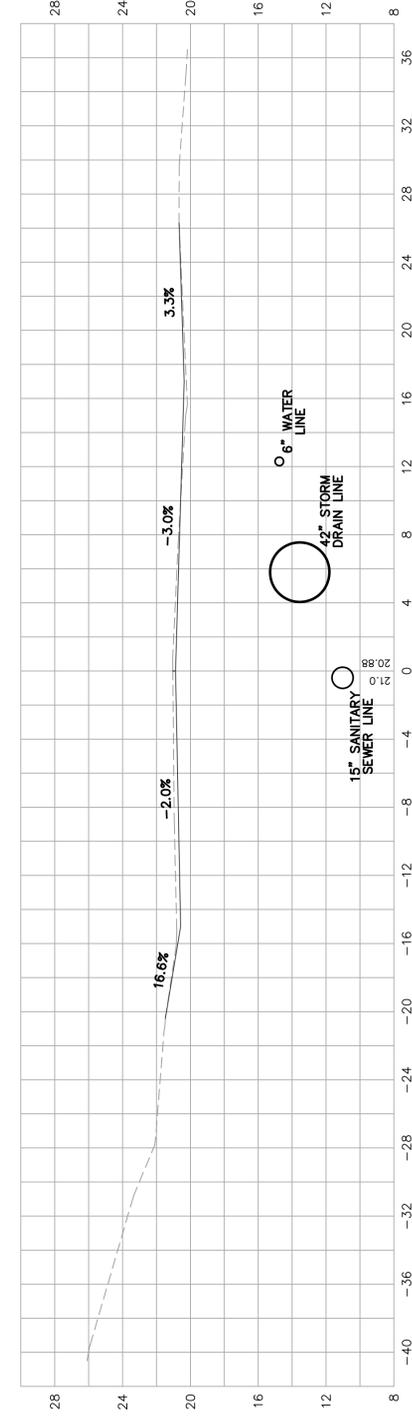
33+97



33+81



33+50



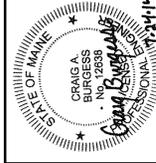
NOTE:
ONLY MAJOR SUBSURFACE UTILITIES ARE SHOWN IN THE CROSS-SECTIONS. SEE PLAN AND PROFILE DRAWINGS FOR ADDITIONAL UTILITY INFORMATION.



CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

MORSE STREET
SEWER SEPARATION
CROSS SECTIONS

WEST KIDDER STREET, STATIONS 33+50 TO 34+55



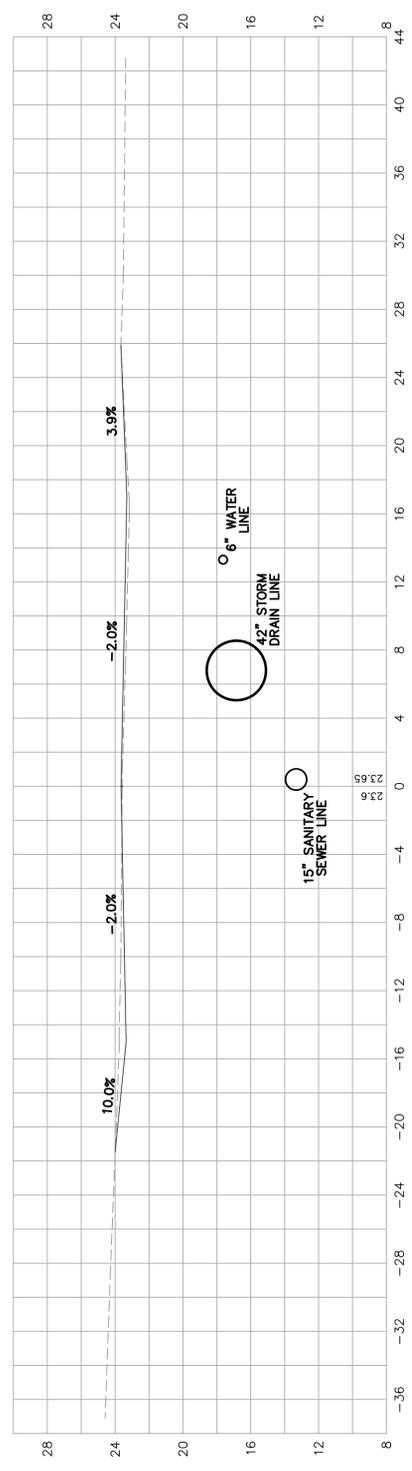
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DATE: 06-27-14

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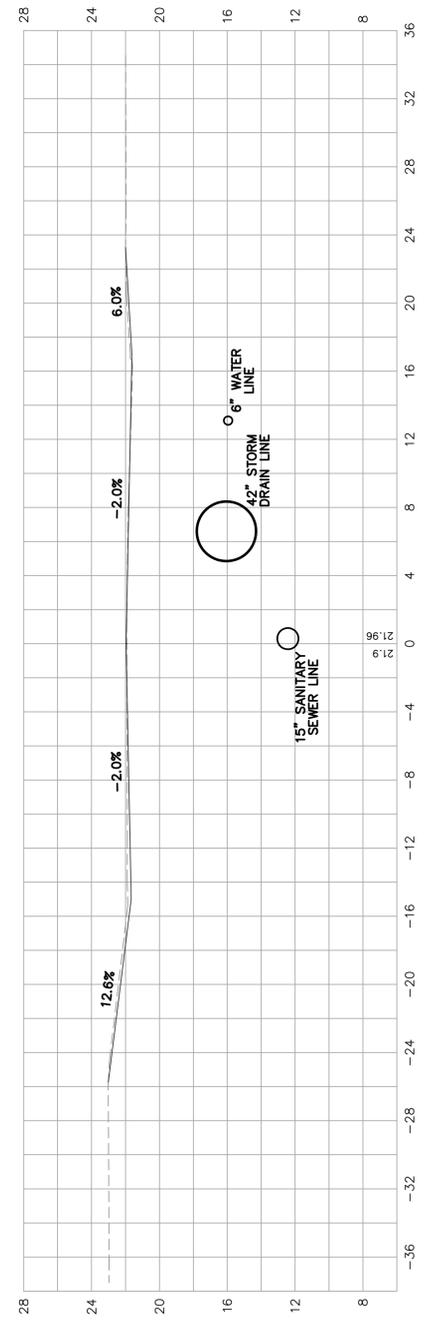
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MORSE STREET
SEWER SEPARATION
DRAWING NAME:
09006X62
FIELD BOOK USED:
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SHEET #
22 OF 29
PLAN NUMBER

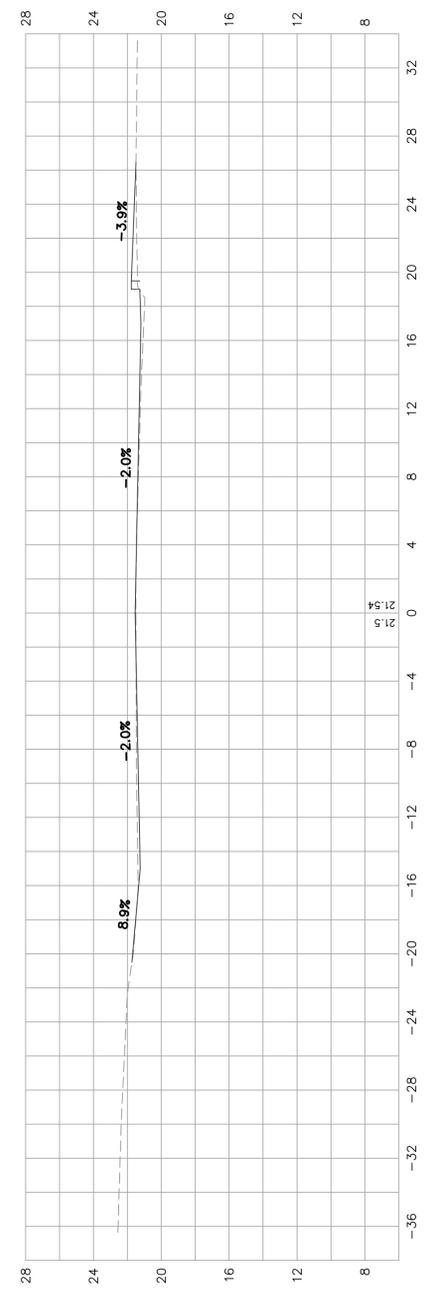
36+00



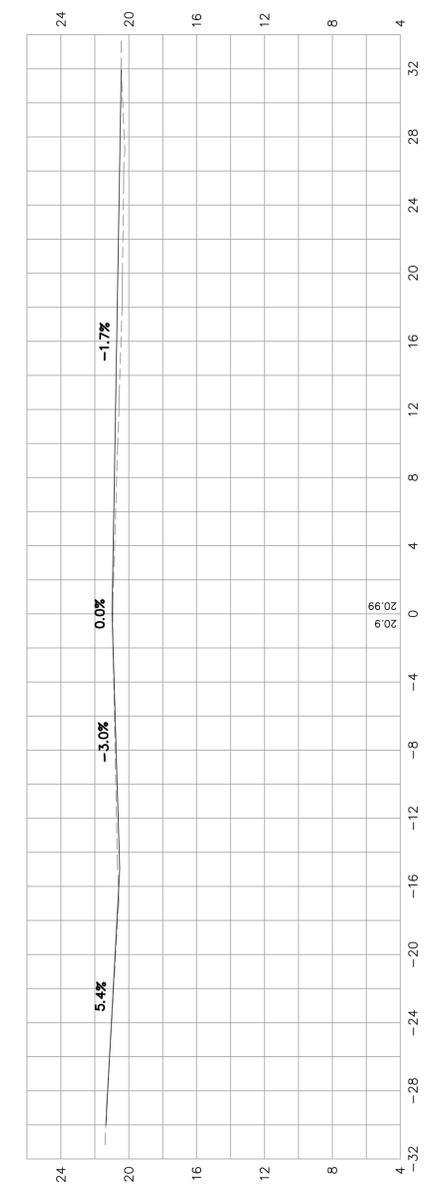
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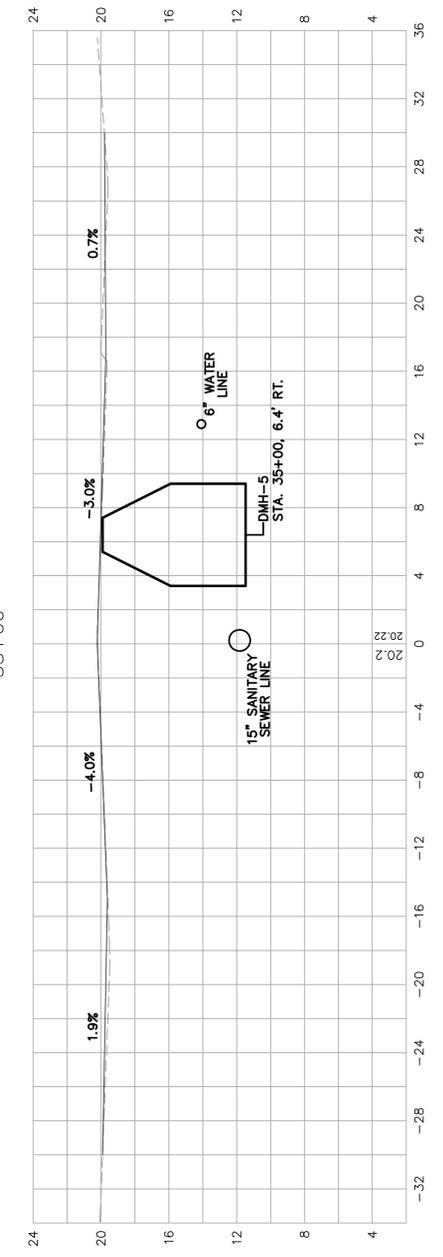
35+38



35+22



35+00

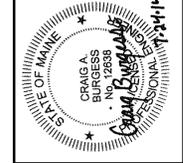


NOTE:
ONLY MAJOR SUBSURFACE UTILITIES ARE SHOWN IN THE CROSS-SECTIONS. SEE PLAN AND PROFILE DRAWINGS FOR ADDITIONAL UTILITY INFORMATION.



CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

MORSE STREET
SEWER SEPARATION
CROSS SECTIONS
WEST KIDDER STREET, STATIONS 35+00 TO 36+00



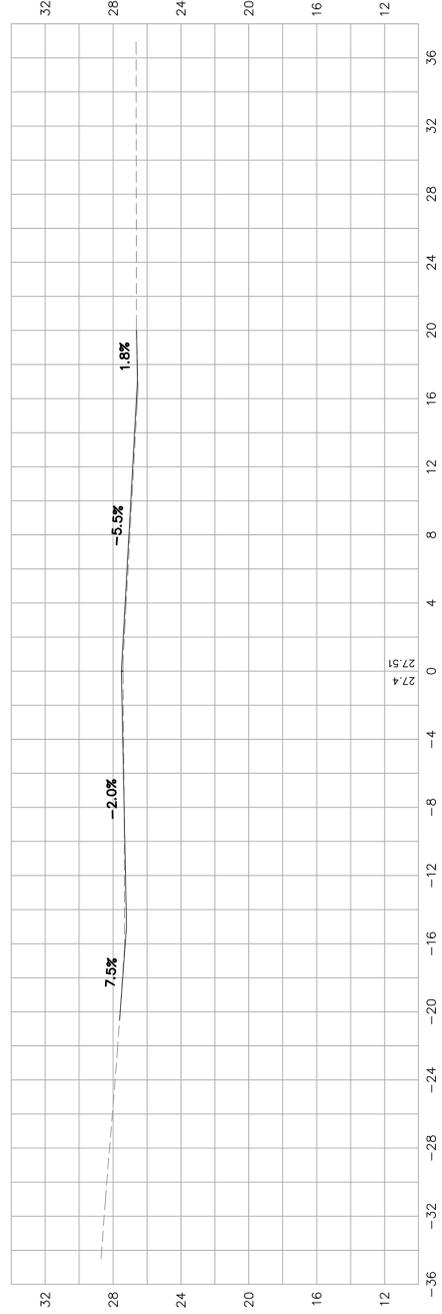
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DATE: 06-27-14

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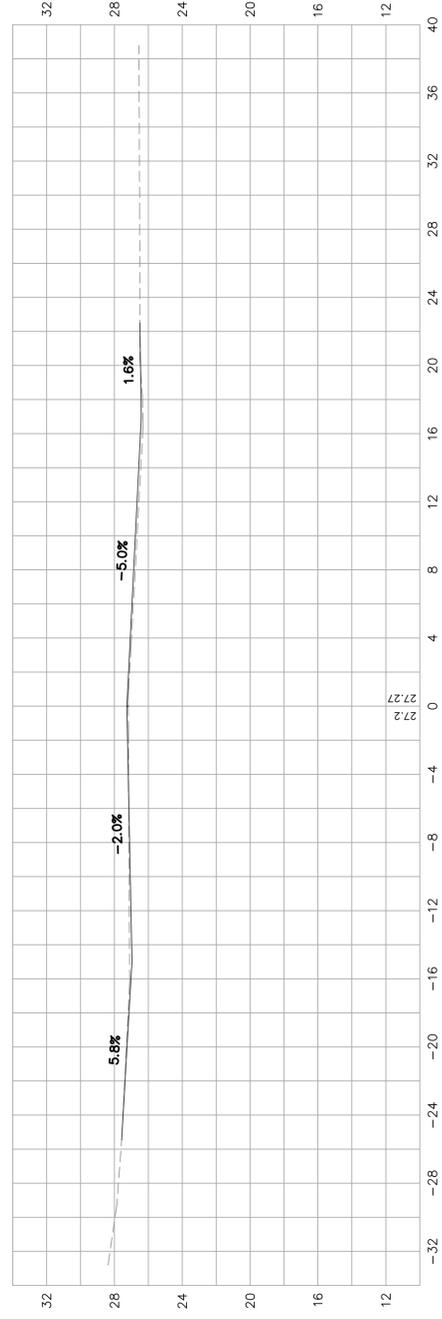
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DRAWING NAME:
09006XSZ
FIELD BOOK USED:
N/A

SHEET #
23 OF 29
PLAN NUMBER

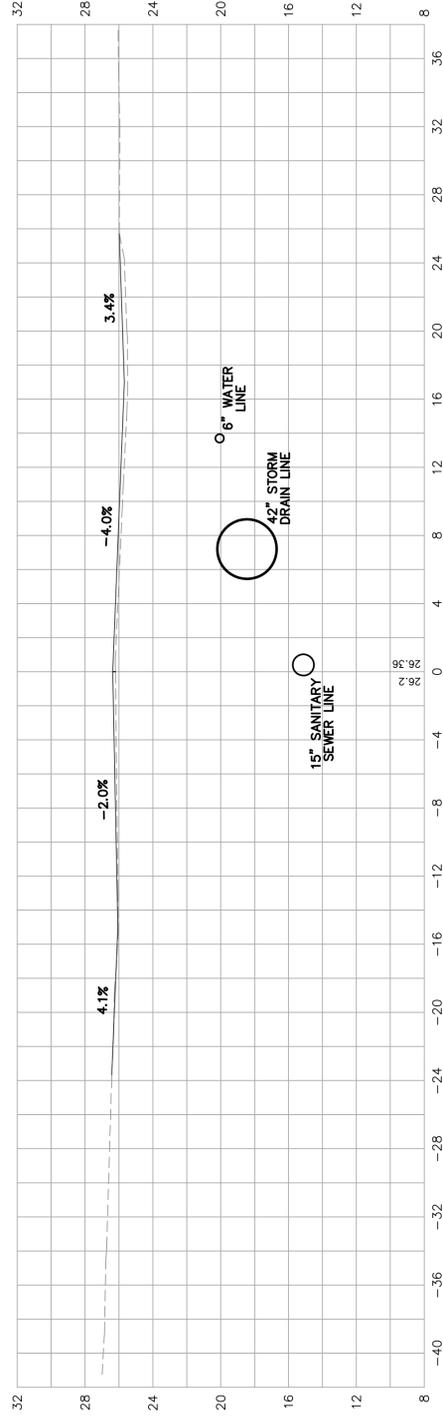
37+43



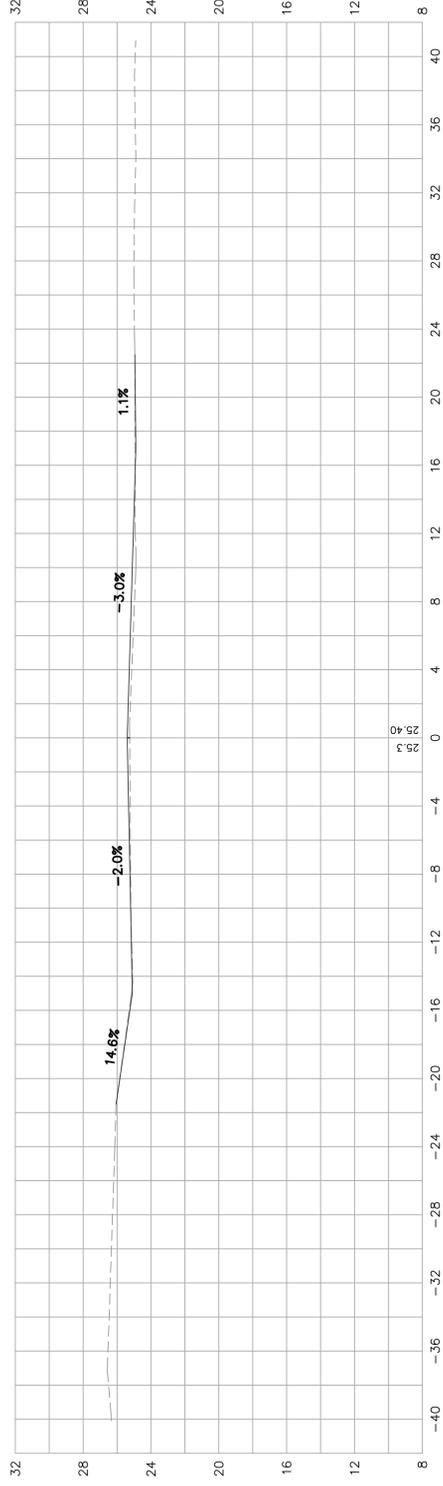
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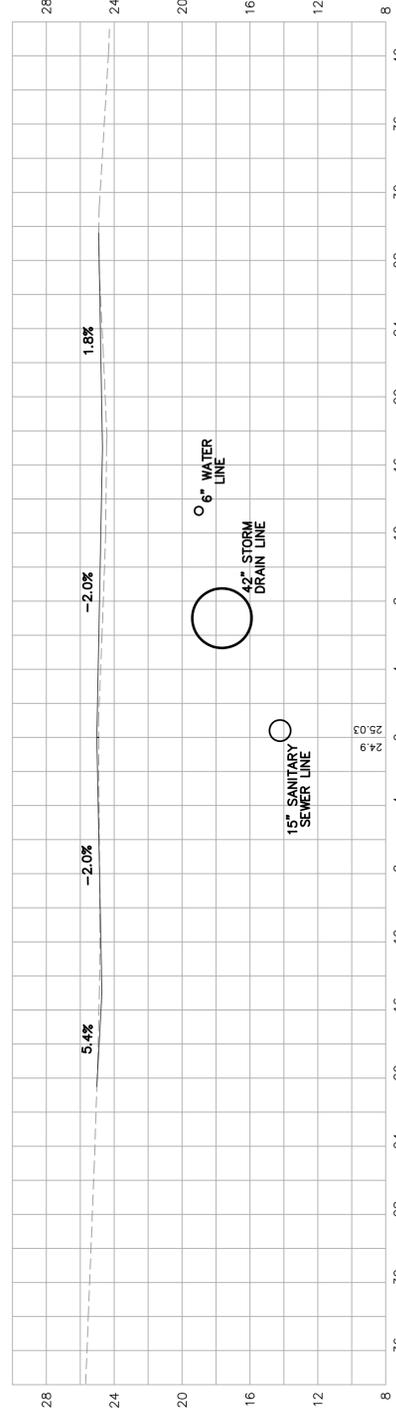
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36+64



36+50

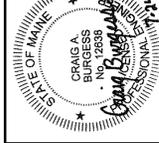


NOTE:
ONLY MAJOR SUBSURFACE UTILITIES ARE SHOWN IN THE CROSS-SECTIONS. SEE PLAN AND PROFILE DRAWINGS FOR ADDITIONAL UTILITY INFORMATION.



CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

MORSE STREET
SEWER SEPARATION
CROSS SECTIONS
WEST KIDDER STREET, STATIONS 36+50 TO 37+43



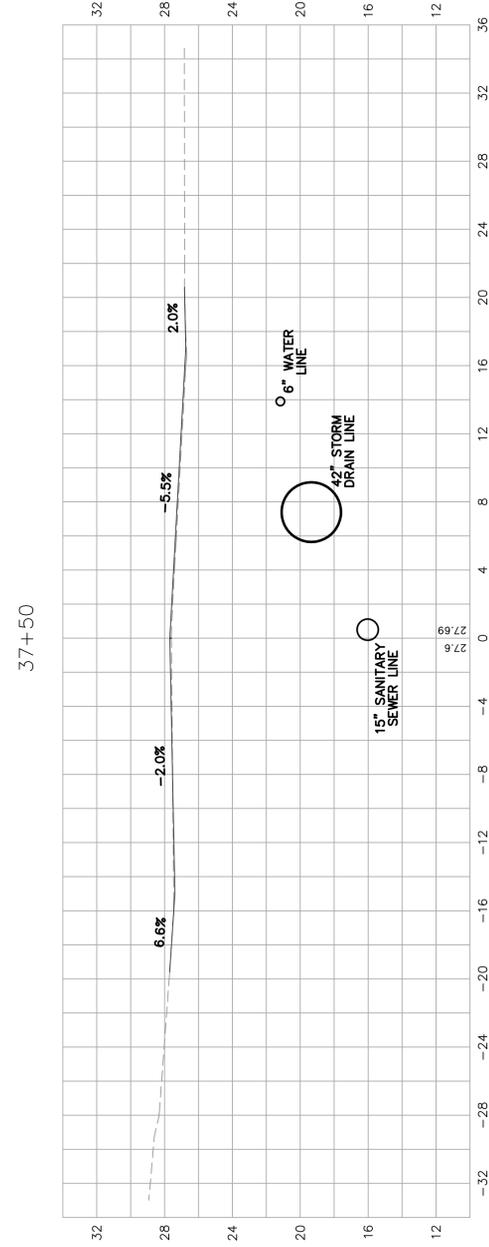
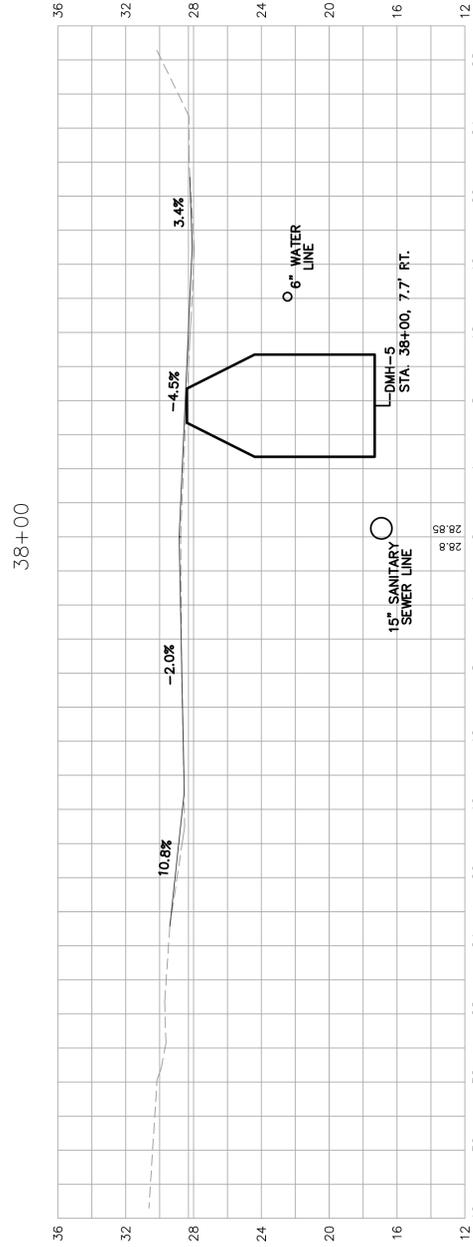
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LDD PROJECT NAME:
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SEWER SEPARATION
DRAWING NAME:
09006X62
FIELD BOOK USED:
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SHEET #
24 OF 29
PLAN NUMBER

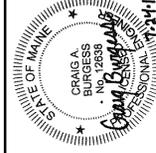
NOTE:
 ONLY MAJOR SUBSURFACE UTILITIES ARE SHOWN IN THE CROSS-SECTIONS. SEE PLAN
 AND PROFILE DRAWINGS FOR ADDITIONAL UTILITY INFORMATION.



CITY OF PORTLAND, MAINE
 PUBLIC SERVICES DEPARTMENT
 ENGINEERING DIVISION

MORSE STREET
 SEWER SEPARATION
 CROSS SECTIONS

WEST KIDDER STREET, STATIONS 37+50 TO 38+00



DESIGNED BY: OAM/CAB
 DRAWN BY: BRJ
 CHECKED BY: OAM
 SCALE: 1"=5'
 DATE: 06-27-14

REFERENCES:
 09006x62.dwg, TAB: xsec 6

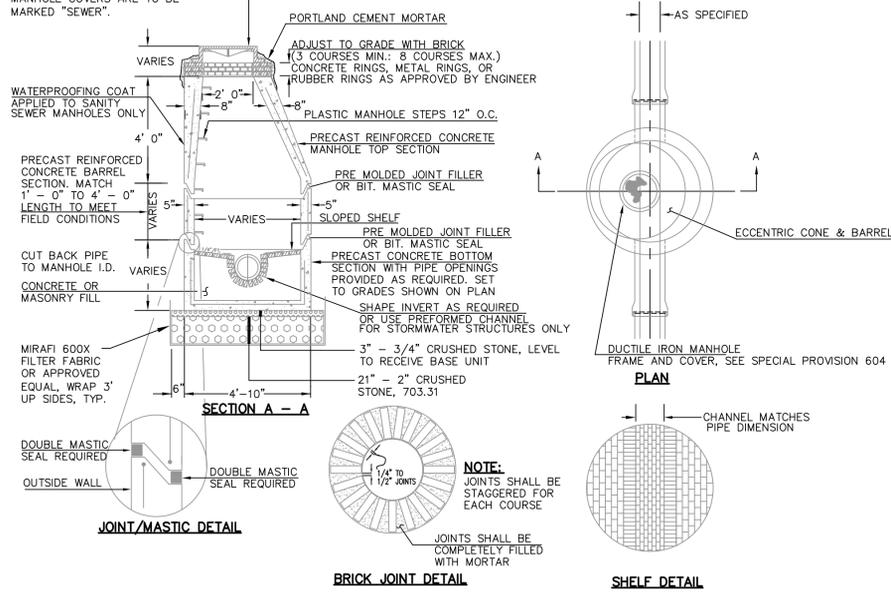
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SHEET #
 25 OF 29
 PLAN NUMBER

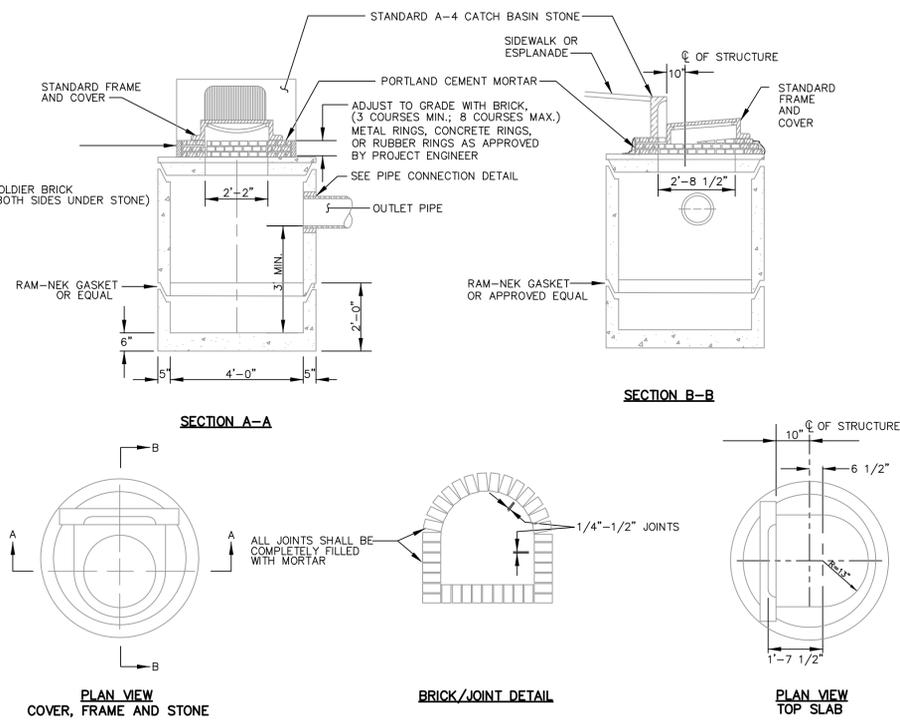
BOLTED FRAME & COVER IN PAVED OR GRAVEL AREAS, OR 24" HINGED FRAME & COVER IN UNPAVED (GRASS) AREAS

STORMWATER MANHOLE COVERS ARE TO BE MARKED "DRAIN". SANITARY MANHOLE COVERS ARE TO BE MARKED "SEWER".

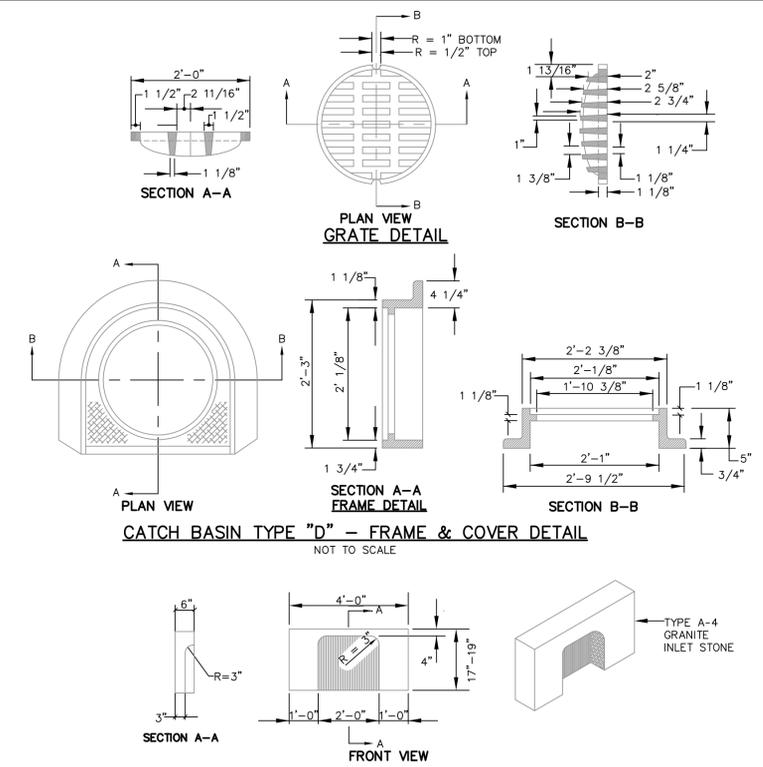
NOTE:
1. MANHOLE CHANNELS REQUIRING CHANGE OF ALIGNMENT, TO BE BUILT ON SMOOTH RADIUS CHANNEL TO BE SHAPED TO ACCEPT ADDITIONAL INLET PIPES.



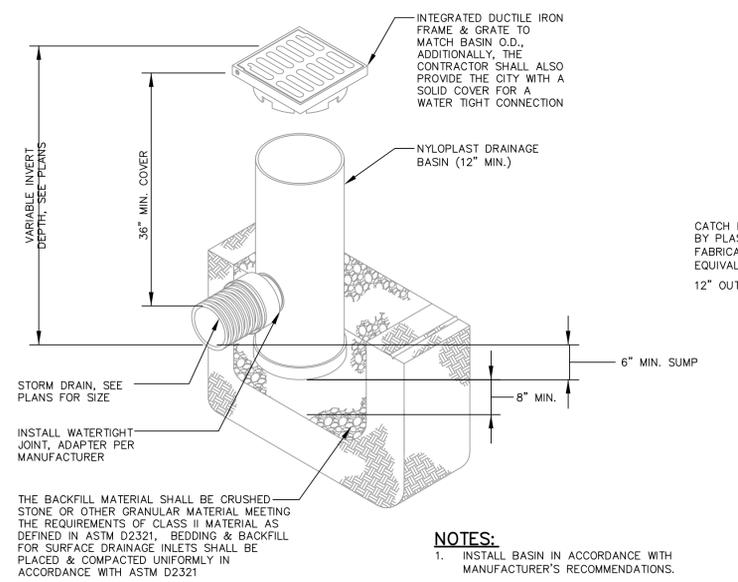
PRECAST CONCRETE MANHOLE TYPE "A"
NOT TO SCALE



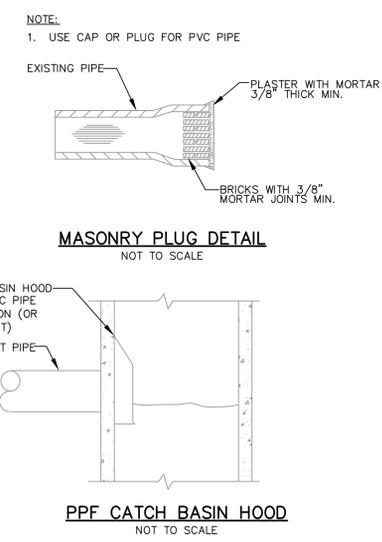
PRECAST CONCRETE CATCH BASIN - TYPE E
NOT TO SCALE



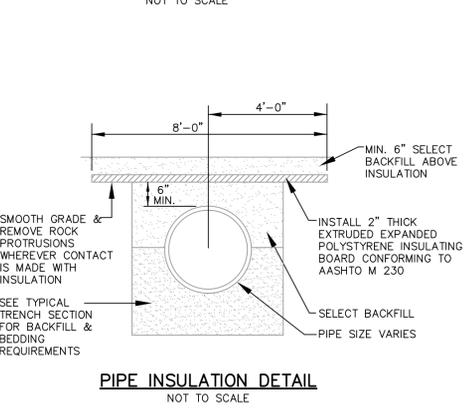
TYPE A-4 GRANITE CATCH BASIN INLET STONE DETAIL
NOT TO SCALE



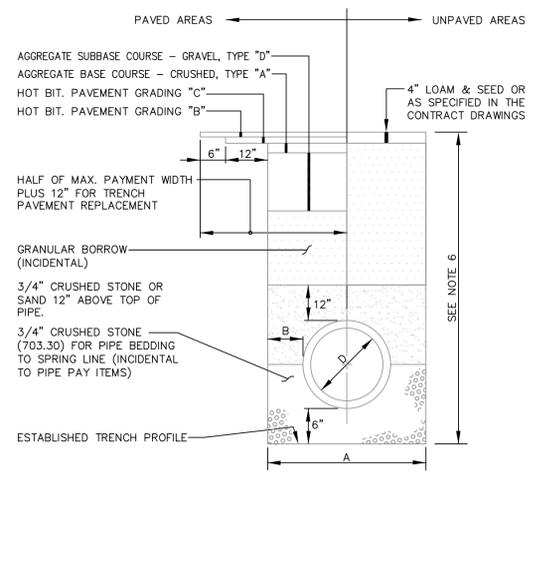
NYLOPLAST DRAIN @ ICE SKATING AREA
NOT TO SCALE



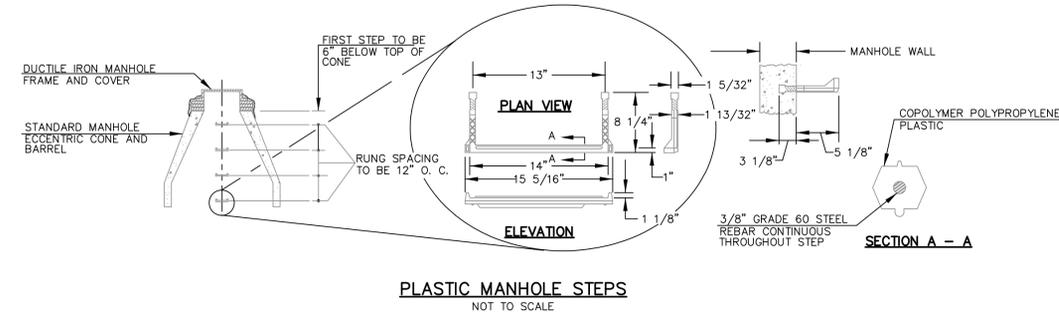
PPF CATCH BASIN HOOD
NOT TO SCALE



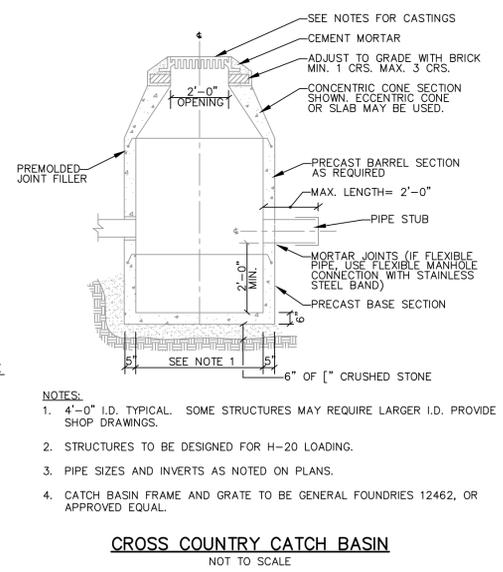
PIPE INSULATION DETAIL
NOT TO SCALE



TYPICAL PIPE INSTALLATION DETAIL
NOT TO SCALE



PLASTIC MANHOLE STEPS
NOT TO SCALE



CROSS COUNTRY CATCH BASIN
NOT TO SCALE

GENERAL NOTES FOR MANHOLES & CATCH BASINS

1. ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 LBS. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478-67
3. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
4. SANITARY SEWER MANHOLES SHALL HAVE A BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE. IF CONSTRUCTED OF BRICK MASONRY, SURFACE SHALL BE PLASTERED WITH A SMOOTH MORTAR FINISH 3/8" THICK. AFTER THE MORTAR HAS SET, THE SURFACE SHALL BE WATERPROOFED AS REQUIRED BY SUPPLEMENTAL SPECIFICATIONS SECTION 604.
5. MANHOLES MAY BE CONSTRUCTED OF MASONRY, PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
6. ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY STATION AND OFFSET, PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.
7. EXISTING FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND. CONTRACTOR SHALL DELIVER TO CITY STOCKYARD AT NO COST.
8. EXISTING GRANITE COBBLE STONE AND PAVERS SHALL BE STOCKPILE BY THE CONTRACTOR, AND REUSED FOR CONSTRUCTION OF NEW COBBLE STONE GUTTER. GRANITE NOT USED SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.

LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
12398D
FIELD BOOK USED:
N/A

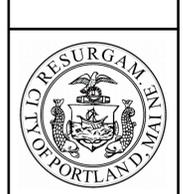
REFERENCES:
12398D.dwg, TAB:DETAIL1

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DAM
SCALE:
AS NOTED
DATE:
06-27-14

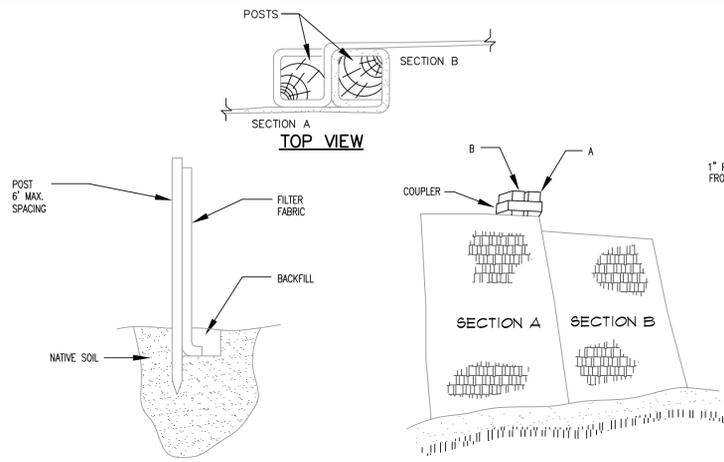


MORSE STREET
SEWER SEPARATION
STANDARD
CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



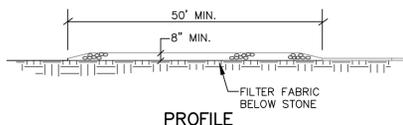
SHEET #
26 OF 29
PLAN NUMBER



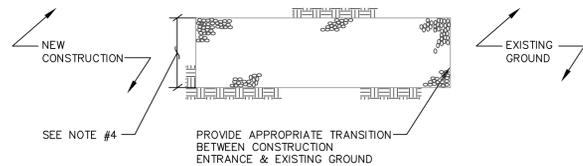
- INSTALLATION NOTES:**
- EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
 - UNROLL A SECTION A AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
 - DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
 - LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
 - JOIN SECTION AS SHOWN ABOVE.
 - BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

SILT FENCE

NOT TO SCALE



PROFILE

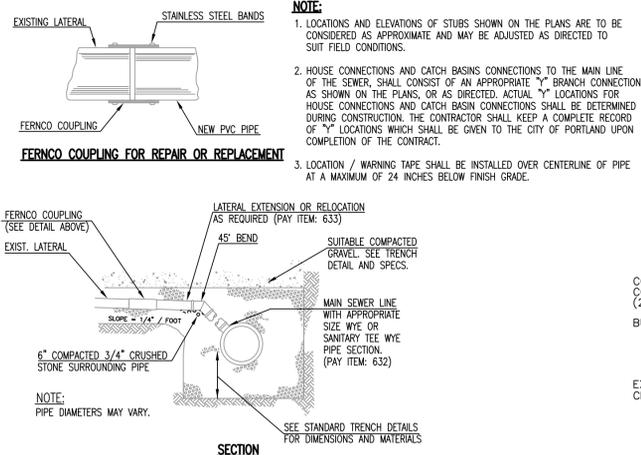


PLAN

- NOTES:**
- STONE SIZE-- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
 - LENGTH-- AS SHOWN ON PLANS, MIN. 50 FEET.
 - THICKNESS-- NOT LESS THAN EIGHT (8) INCHES.
 - WIDTH-- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
 - MAINTENANCE-- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

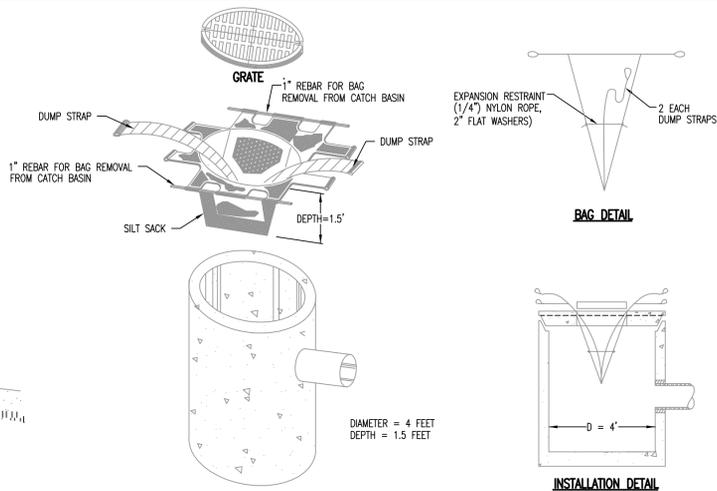
STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



TYPICAL EXISTING SEWER LATERAL CONNECTION DETAILS

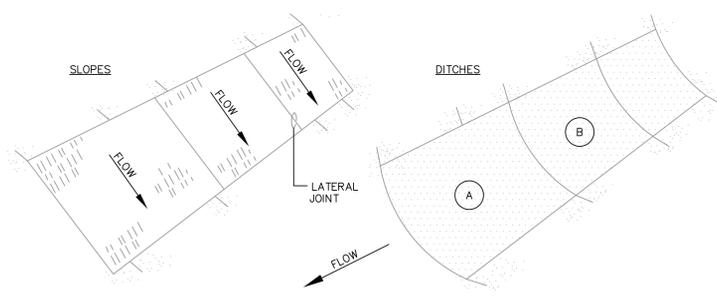
NOT TO SCALE



- NOTES:**
- REMOVE THE CATCH BASIN GRATE AND PLACE THE SACK INTO THE OPENING. HOLD OUT APPROXIMATELY SIX (6) INCHES OF THE SACK BEYOND THE BASIN FRAME TO ALLOW ACCESS TO THE "SILT SACK" LIFTING STRAPS. REPLACING THE GRATE BACK INSIDE OF ITS FRAME WILL HOLD THE SACK IN PLACE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND MAINTAINING THIS SEDIMENT CONTROL DEVICE. THE SACK IS CONSIDERED FULL AND READY TO EMPTY WHEN THE "RESTRAINT CORD" IS NO LONGER VISIBLE.
 - THE "SILT SACK" IS REMOVED BY PLACING TWO (2) PIECES OF 1 INCH DIAMETER REBAR THROUGH THE LIFTING LOOPS LOCATED ON EACH SIDE OF THE SACK AND LIFTING WITH AN APPROPRIATE PIECE OF CONSTRUCTION EQUIPMENT. THE LIFTING STRAPS ARE CONNECTED TO THE BOTTOM OF THE SACK AND THE LIFTING ACTION WILL CAUSE THE SACK TO TURN INSIDE OUT, AND EMPTYING THE CONTENTS. THE SACK SHOULD THEN BE CLEANED, RINSED AND RETURNED TO ITS ORIGINAL SHAPE AND PLACED BACK IN THE BASIN.
 - THE "SILT SACK" IS REUSABLE, THEREFORE, ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE THE SACK FROM THE BASIN, CLEAN AND STORE OUT OF DIRECT SUNLIGHT UNTIL ITS NEXT USE.
 - THE "SILT SACK" SEDIMENT CONTROL DEVICE IS MANUFACTURED BY: ACF ENVIRONMENTAL 1801-A WILLIS ROAD RICHMOND, VA. 23237 PHONE: 800-644-9223 FAX: 804-271-3074

SEDIMENT CONTROL DEVICE "SILT SACK" FOR CATCH BASINS

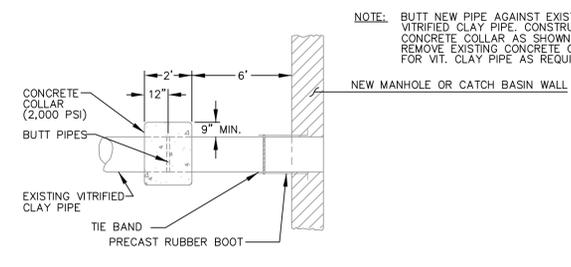
NOT TO SCALE



- NOTES:**
- BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END.
 - FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A.
 - LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
 - STAPLE OUTSIDE LATERAL EDGE 2' ON CENTER.
 - WIRE STAPLES TO BE MIN. OF # 11 WIRE 6" LONG AND 1-1/2" WIDE.
 - USE NORTH AMERICAN GREEN 125BN OR APPROVED EQUAL.
 - WHERE EROSION CONTROL BLANKET IS REQUIRED OR NEEDED, IT SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEM OR COSTS OF CONSTRUCTION.

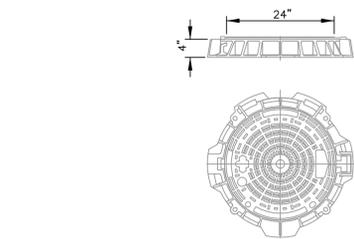
EROSION CONTROL BLANKET DETAIL

NOT TO SCALE



EXISTING VITRIFIED CLAY PIPE INTO NEW STRUCTURE

NOT TO SCALE

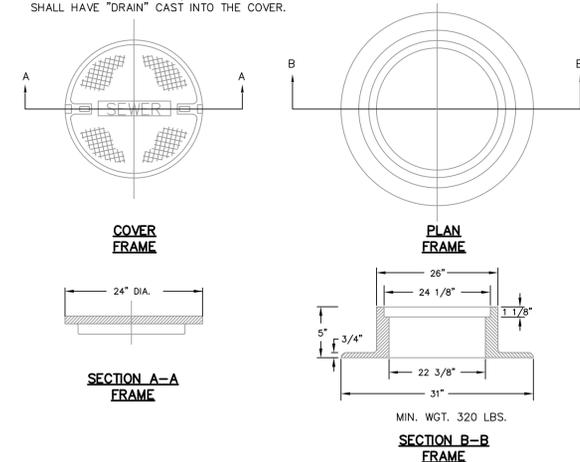


- NOTES:**
- USE HINGED FRAME AND COVER IN UNPAVED (GRASSED) AREAS.
 - MANHOLE FRAME AND COVER SHALL BE MANUFACTURED FROM DUCTILE IRON.
 - COVERS SHALL BE HINGED AND INCORPORATE A 90 DEGREE BLOCKING SYSTEM TO PREVENT ACCIDENTAL CLOSURE. COVERS SHALL OPEN TO A MINIMUM 120 DEGREES, BE ONE MAN OPERABLE USING STANDARD TOOLS AND BE AASHTO H-20 LOAD RATED. COVER SHALL AUTOMATICALLY LOCK WHEN CLOSED.
 - FRAMES SHALL BE CIRCULAR AND HAVE A MINIMUM 24 INCH CLEAR OPENING. FRAME DEPTH SHALL NOT EXCEED 4 INCHES, AND THE FLANGE SHALL INCORPORATE BEDDING SLOTS AND BOLTS HOLES.
 - COVER AND FRAME SHALL INCORPORATE A SEATING RING/ GASKET TO PREVENT THE INGRESS AND ESCAPE OF AIR AND WATER TO 3 PSI POSITIVE OR NEGATIVE RATING.
 - ACCESS FRAME AND COVERS SHALL BE INCIDENTAL TO THE RELATED PAY ITEM.

HINGED ACCESS FRAME & COVER

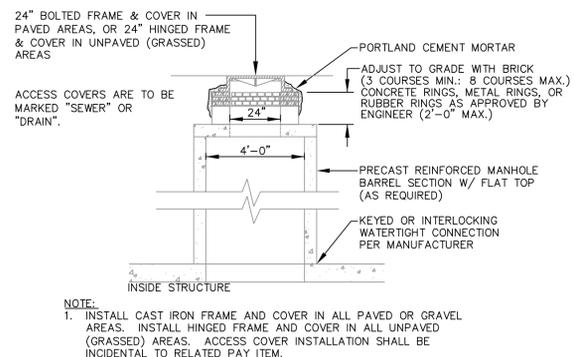
NOT TO SCALE

- NOTE:**
- ALL SANITARY AND STORMWATER/DRAIN MANHOLE COVERS SHALL BE 24" x 5", ALL SANITARY MANHOLE COVERS AND SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.



CAST IRON MANHOLE FRAME AND COVER

NOT TO SCALE

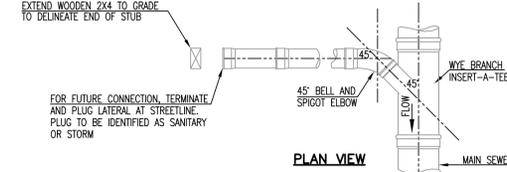


- NOTE:**
- INSTALL CAST IRON FRAME AND COVER IN ALL PAVED OR GRAVEL AREAS. INSTALL HINGED FRAME AND COVER IN ALL UNPAVED (GRASSED) AREAS. ACCESS COVER INSTALLATION SHALL BE INCIDENTAL TO RELATED PAY ITEM.

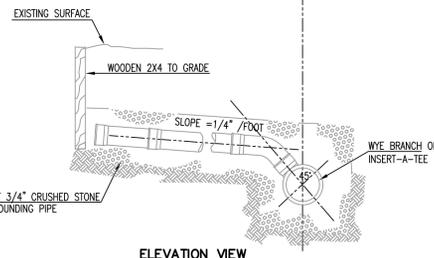
ACCESS COVER INSTALLATION

NOT TO SCALE

NOTE: LOCATION / WARNING TAPE SHALL BE INSTALLED OVER CENTERLINE OF PIPE AT A MAXIMUM OF 24 INCHES BELOW FINISH GRADE.



PLAN VIEW

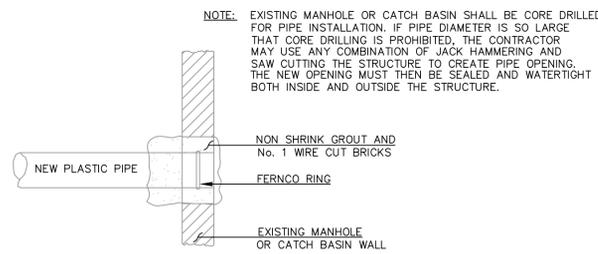


ELEVATION VIEW

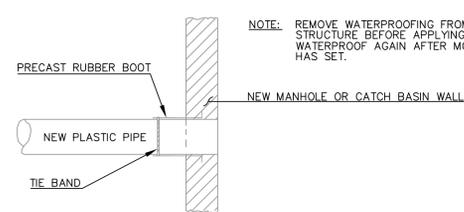
- NOTE:**
- LOCATIONS AND ELEVATIONS OF STUBS SHOWN ON THE PLANS ARE TO BE CONSIDERED AS APPROXIMATE AND MAY BE ADJUSTED AS DIRECTED TO SUIT FIELD CONDITIONS.
 - HOUSE CONNECTIONS AND CATCH BASIN CONNECTIONS TO THE MAIN LINE OF THE STORM DRAIN, SHALL CONSIST OF AN APPROPRIATE "Y" BRANCH OR INSERT-A-TEE CONNECTION AS SHOWN ON THE PLANS, OR AS DIRECTED. ACTUAL CONNECTION LOCATIONS FOR HOUSE SERVICES AND CATCH BASIN CONNECTIONS SHALL BE DETERMINED DURING CONSTRUCTION. THE CONTRACTOR SHALL KEEP A COMPLETE RECORD OF THESE LOCATIONS WHICH SHALL BE GIVEN TO THE CITY OF PORTLAND UPON COMPLETION OF THE CONTRACT.

TYPICAL EXISTING STORM DRAIN LATERAL CONNECTION DETAILS

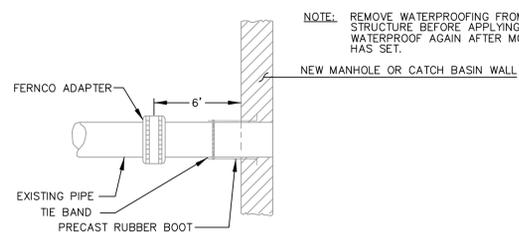
NOT TO SCALE



METHOD 3 -- NEW PIPE INTO EXISTING STRUCTURE



METHOD 2 -- NEW CONSTRUCTION



METHOD 1 -- EXISTING PIPE INTO NEW STRUCTURE

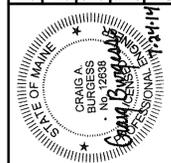
PLASTIC PIPE CONNECTION DETAIL

NOT TO SCALE

LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
12398D
FIELD BOOK USED:
N/A

REFERENCES:
12398D.dwg, TAB:DETAIL2

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DRAWN BY:
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CHECKED BY:
DAM
SCALE:
AS NOTED
DATE:
06-27-14

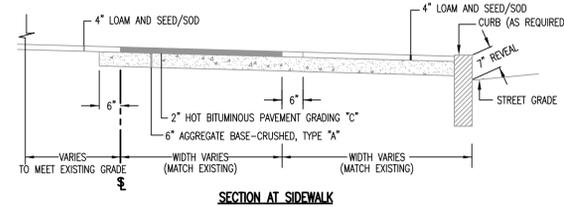


MORSE STREET
SEWER SEPARATION
STANDARD
CONSTRUCTION DETAILS

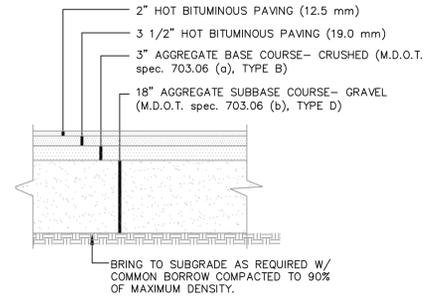
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



SHEET #
27 OF 29
PLAN NUMBER

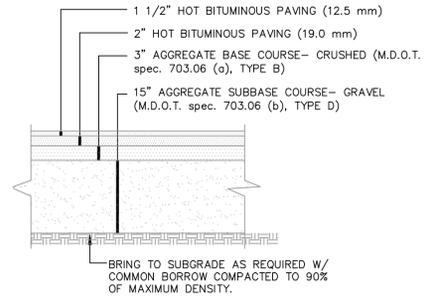


BITUMINOUS SIDEWALK WITH ESPLANADE
NOT TO SCALE



- NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
 2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

WASHINGTON AVENUE ROADWAY AREA SECTION
NOT TO SCALE



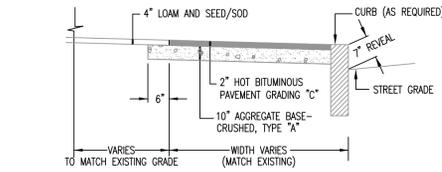
- NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
 2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

TYPICAL ROADWAY AREA SECTION (LOCAL STREET)
NOT TO SCALE

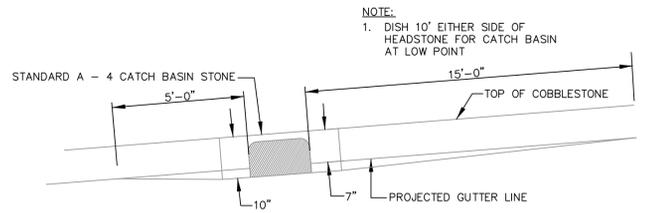
RECOMMENDED MINIMUM PLACEMENT TEMPERATURES FOR PAVEMENT

BASE TEMPERATURE °F	MAT THICKNESS, IN INCHES					
	1/2	3/4	1	1 1/2	2	3
+40 - 50	-	-	310	300	285	275
+50 - 60	-	-	310	300	295	280
+60 - 70	-	-	310	300	290	285
+70 - 80	300	290	285	280	270	265
+80 - 90	290	280	275	270	265	260
+90	280	275	270	265	260	255
ROLLING TIME MIN.	4	6	8	12	15	15

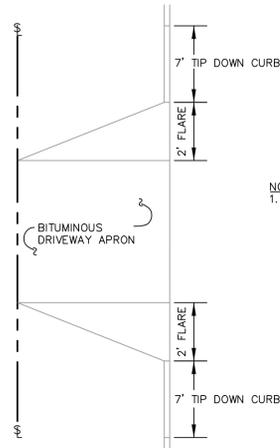
BASE ON WHICH MAT IS PLACED:
1. HOT MIX ASPHALT



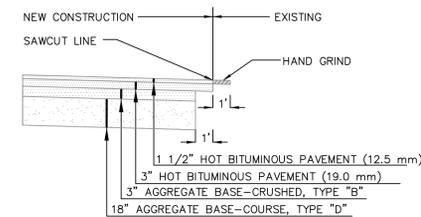
BITUMINOUS SIDEWALK DETAIL - NO ESPLANADE
NOT TO SCALE



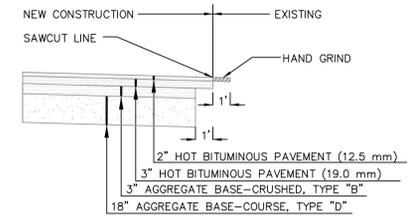
TYPICAL PAVEMENT GRADING ON SLOPES FOR CATCH BASIN & INLET
NOT TO SCALE



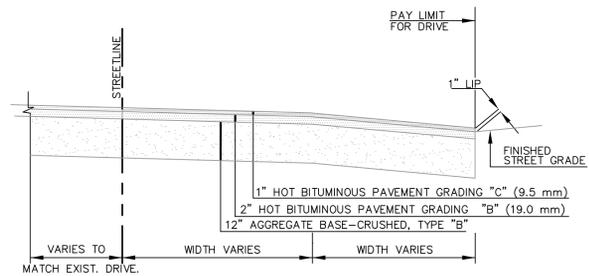
PLAN VIEW
TYPICAL DRIVEWAY APRON LAYOUT
NOT TO SCALE



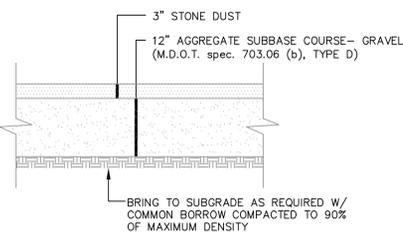
PAVEMENT BUTT JOINT (LOCAL STREET)
NOT TO SCALE



PAVEMENT BUTT JOINT (ARTERIAL STREET)
NOT TO SCALE

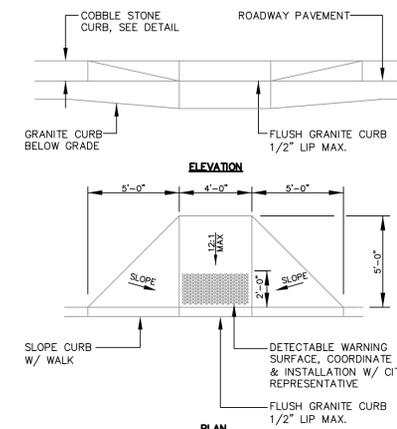


BITUMINOUS DRIVEWAY SECTION
NOT TO SCALE



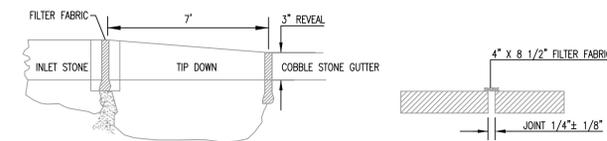
- NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
 2. MATCH EXISTING TRAIL WIDTH.

TYPICAL TRAIL SECTION
NOT TO SCALE

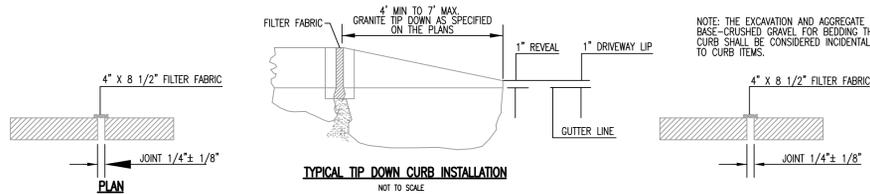


- NOTE:
1. INSTALL CONCRETE PEDESTRIAN RAMP WITH 10" MINIMUM AGGREGATE BASE COURSE, GRAVEL - TYPE "B".
 2. CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MDOT CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE CONCRETE SHALL BE SEALED PRIOR TO SETTING PANELS. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A GROOVED EDGE BETWEEN THE TILE AND CONCRETE, ALONG WITH A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.

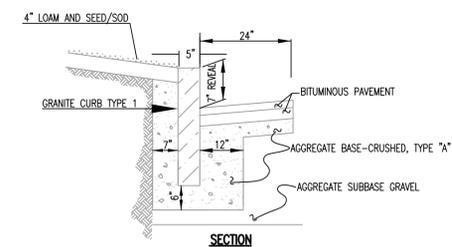
CONCRETE PEDESTRIAN RAMP @ CROSSWALK
NOT TO SCALE



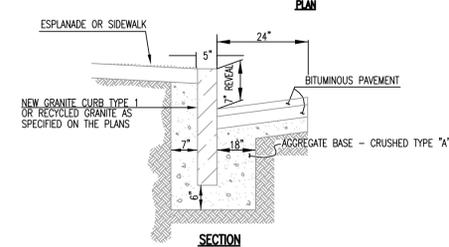
7' TIP DOWN INSTALLATION - INLET TO COBBLE STONE GUTTER
NOT TO SCALE



TYPICAL TIP DOWN CURB INSTALLATION
NOT TO SCALE

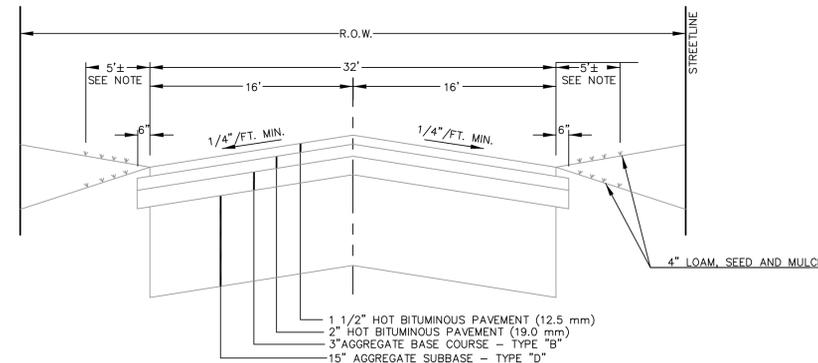


INSTALLATION OF CURB
NOT TO SCALE



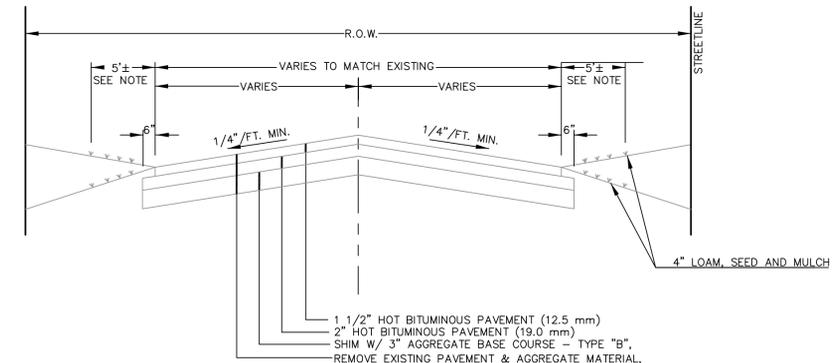
CURB REPLACEMENT DETAIL
NOT TO SCALE

TYPICAL INSTALLATION OF CURB
NOT TO SCALE



- NOTE:
1. MATCH EXISTING GRADE IN CUT AND FILL SLOPES WITH 5:1 (H:V) MAXIMUM GRADE.

WEST KIDDER STREET ROADWAY SECTION
NOT TO SCALE



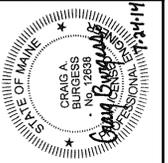
- NOTE:
1. MATCH EXISTING GRADE IN CUT AND FILL SLOPES WITH 5:1 (H:V) MAXIMUM GRADE.

PARTIAL ROADWAY SECTION - MORSE & FERNALD STREETS
NOT TO SCALE

LDD PROJECT NAME:
MORSE STREET
SEWER SEPARATION
DRAWING NAME:
12398D
FIELD BOOK USED:
N/A

REFERENCES:
12398D.dwg, TAB:DETAIL3

DESIGNED BY:
0544/CAS
DRAWN BY:
CAS
CHECKED BY:
DAM
SCALE:
AS NOTED
DATE:
06-27-14



MORSE STREET
SEWER SEPARATION
STANDARD
CONSTRUCTION DETAILS

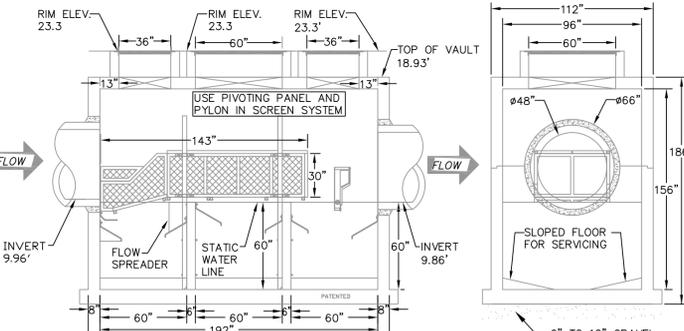
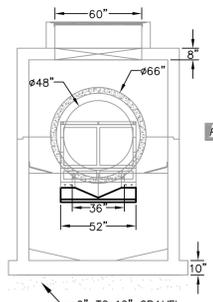
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION



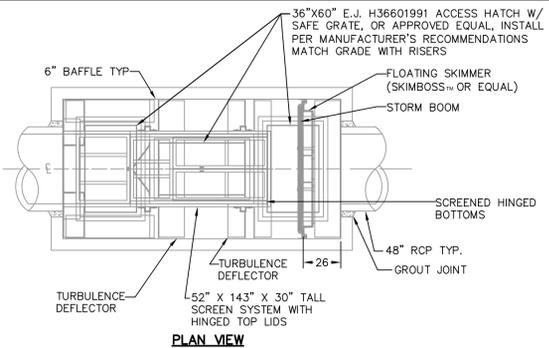
SHEET #
28 OF 29
PLAN NUMBER

FLOW & BY-PASS SPECIFICATIONS FOR BIOMASS SEPARATING SCREEN SYSTEM, SEDIMENT COLLECTION CHAMBERS, AND SKIMMER SPECIFICATIONS

1. PIPE INFLOW AREA (DRAWN AS 48" RCP) 12.56 SQ.FT.
 SCREEN SPECIFICATIONS:
 2. OPEN ORIFICE AREA IN SCREEN SYSTEM 74.88 SQ.FT.
 3. OPEN ORIFICE AREA IN SCREEN SYSTEM WITH 50% BLOCKAGE 37.44 SQ.FT.
 4. OPEN ORIFICE AREA IN SCREEN SYSTEM WITH 75% BLOCKAGE 18.72 SQ.FT.
 5. MINIMUM BY-PASS THROUGH SCREEN SYSTEM BELOW THE TOP SURFACE OF THE PIPE 23.32 SQ.FT.
 6. MINIMUM BY-PASS AROUND SCREEN SYSTEM BELOW THE TOP SURFACE OF THE PIPE 19.47 SQ.FT.
 7. SCREEN SYSTEM STORAGE VOLUME 117.43 CU.FT.
 SEDIMENT STORAGE:
 8. VOLUME OF FIRST SEDIMENT CHAMBER 200 CU.FT.
 9. VOLUME OF SECOND SEDIMENT CHAMBER 200 CU.FT.
 10. VOLUME OF THIRD SEDIMENT CHAMBER 600 CU.FT.
 TOTAL SEDIMENT VOLUME
 SKIMMER SPECIFICATIONS:
 11. FLOW AREA UNDER SKIMMER 19.58 SQ.FT.
 12. AREA OF PIPE IN LINE WITH SKIMMER 9.30 SQ.FT.
 13. AREA BETWEEN THE SKIMMER AND THE OUTFLOW PIPE PARALLEL WITH THE SURFACE OF THE PIPE 27.21 SQ.FT.



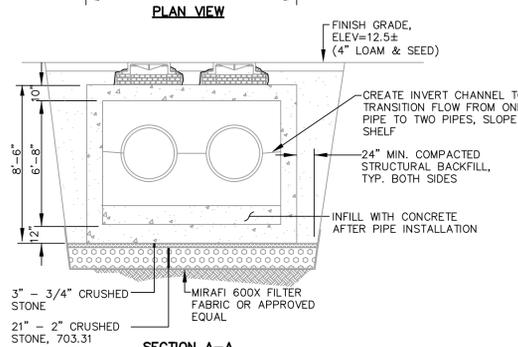
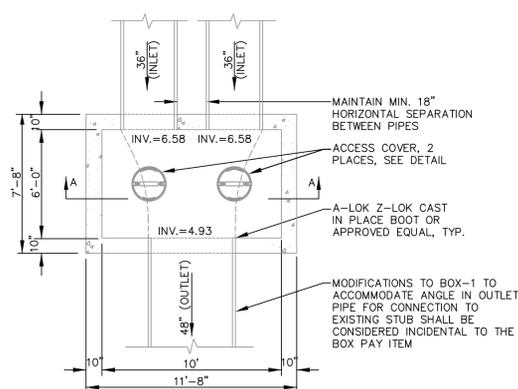
BAFFLE BOX DETAIL
NOT TO SCALE



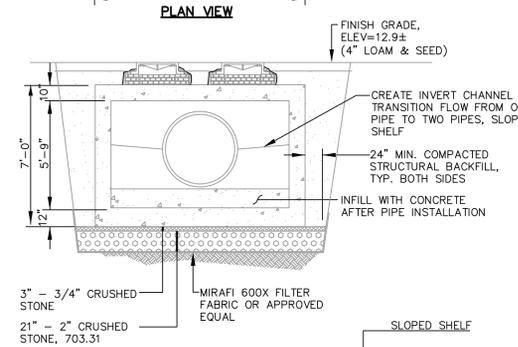
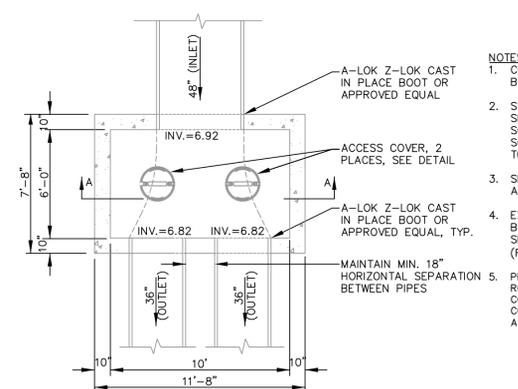
- NOTES:**
 1. BAFFLE BOX SHALL BE EQUAL TO SUNTREE TECHNOLOGIES INC.® NUTRIENT SEPARATING BAFFLE BOX™, MODEL NO. NSBB-8-16-138. INSTALL BAFFLE BOX IN GENERAL CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 2. CONCRETE 28 DAY COMPRESSIVE STRENGTH FC=5000 PSI
 3. REINFORCING: ASTM A-615 GRADE 60
 4. SUPPORTS AN H20 LOADING AS INDICATED BY AASHTO.
 5. JOINT SEALANT: BUTYL RUBBER SS-S-00210
 6. ALL WALLS & TOP TO BE 8" THICK, BOTTOM TO BE 10" THICK.
 7. TREATMENT DESIGN FLOW FOR 90% REMOVAL EFFICIENCY OF TSS IS 45 CFS.
 8. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CAN NOT INTRUDE BEYOND FLUSH)
 9. BAFFLES ARE TO BE SEALED WITH GROUT TO FORM 3 WATER TIGHT CHAMBERS.

- INSTALLATION NOTES:**
 1. INFLOW AND OUTFLOW PIPES ARE TO BE FLUSH WITH THE INSIDE SURFACE OF THE CONCRETE STRUCTURE. (CAN NOT INTRUDE BEYOND FLUSH)
 2. INVERT OF OUTFLOW PIPE SHOULD BE EVEN WITH THE TOP OF THE BAFFLES.
 3. BAFFLES SHOULD BE SEALED WITH GROUT.
 4. THE BOTTOM OF THE SKIMMER SHOULD BE 6" BELOW THE INVERT OF THE OUTFLOW PIPE.
 5. INVERT OF THE INFLOW PIPE BE BELOW THE NOT SHOULD INVERT OF THE OUTFLOW PIPE.

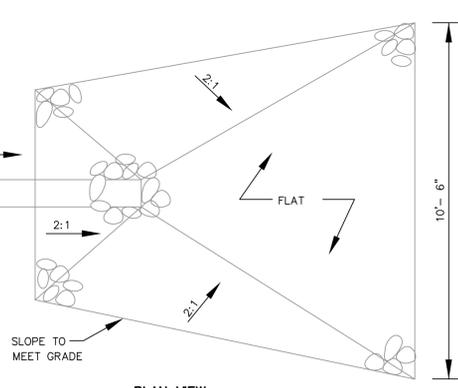
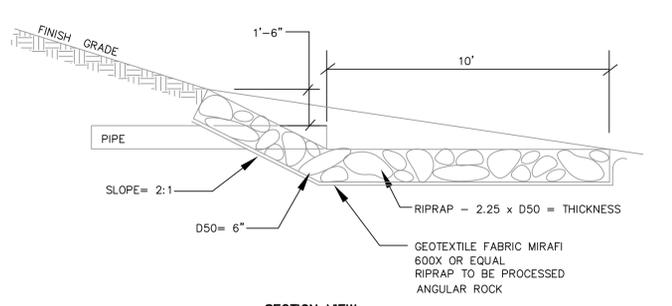
- NOTES - ALL SPECIAL STRUCTURES:**
 1. CONTRACTOR SHALL USE SMOOTH BUCKET TO EXCAVATE BOTTOM OF TRENCH TO SUBGRADE ELEVATIONS.
 2. STRUCTURES MAY BE WITHIN TIDAL AREAS. CONTRACTOR SHALL BE RESPONSIBLE TO ADDRESS TIDAL CONDITIONS WORK SCHEDULE TIMES, DEWATERING OR OTHER MEANS INCIDENTAL TO STRUCTURE INSTALLATION.
 3. SEE PLAN & PROFILE DRAWINGS FOR HORIZONTAL ALIGNMENT AND INVERT INFORMATION.
 4. EXCAVATION, SHORING, DEWATERING, STONE BEDDING, COMMON BORROW, STRUCTURAL FILL, ROADWAY BASE AND SUBBASE SHALL BE INCIDENTAL TO STORAGE CONDUIT INSTALLATION (REFER TO CONTRACT SPECIFICATIONS).
 5. PRECAST STRUCTURES SHALL HAVE WALL THICKNESS FOR THE ROOF, FLOOR AND SIDEWALLS AS REQUIRED FOR THE LOADING CONDITIONS TO ACCOMMODATE ALL APPURTENANCES. PRECAST CONCRETE SUPPLIER IS REQUIRED TO PROVIDE CALCULATIONS AND A STRUCTURAL DESIGN CERTIFIED BY A MAINE LICENSED PE.



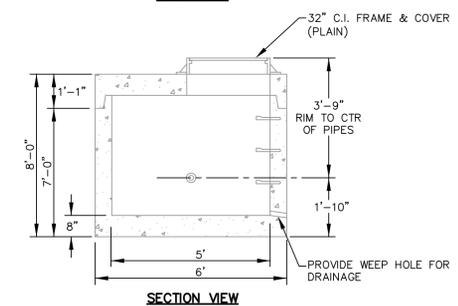
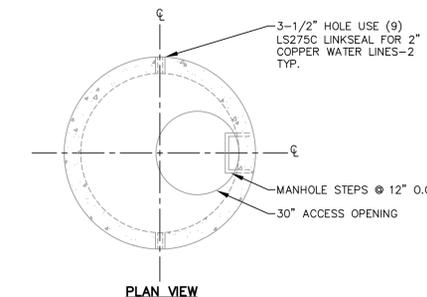
CONCRETE BOX (BOX-1) DETAIL
NOT TO SCALE



CONCRETE BOX (BOX-2) DETAIL
NOT TO SCALE

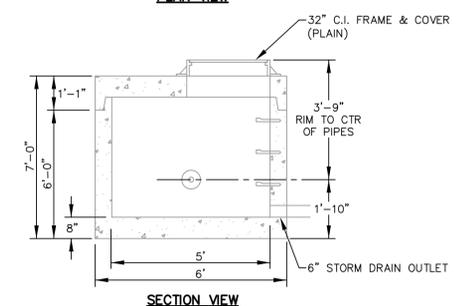
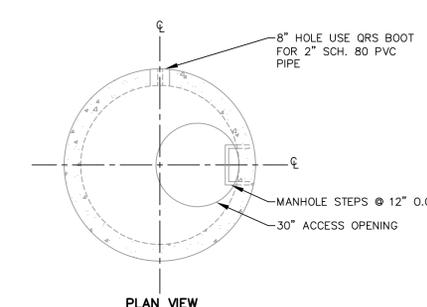


RIPRAP APRON
NOT TO SCALE



BACK FLOW PREVENTION METER PIT @ END OF WEST KIDDER STREET (NON-SRF)
NOT TO SCALE

- NOTES:**
 1. DISCONNECT THE 2" PIPE IN THE METER PIT THAT SUPPLIES THE SOFTBALL FIELD.
 2. REMOVE THE TEE FOR THE SOFTBALL FIELD LINE AND THE BLOWOUT CONNECTION AND RUN 2" COPPER OUT OF THE METER PIT AND INTO THE NEW PIT FOR THE BACK FLOW.
 3. PROVIDE A SHUT OFF VALVE INSIDE THE BACK FLOW PIT BEFORE THE BACK FLOW.
 4. THE BACK FLOW NEEDS TO BE A TESTABLE DOUBLE CHECK VALVE (2") SUCH AS A WATTS 007 ASSEMBLY OR EQUAL. AN RPZ WOULD BE UNACCEPTABLE.
 5. THE BACK FLOW NEEDS TO BE BRACKETED BY BRASS UNIONS.
 6. AFTER THE DOWNSTREAM UNION TWO BRASS TEES WILL BE INSTALLED.
 7. THE FIRST TEE WILL HAVE A 3/4" MALE THREADED BOILER DRAIN INSTALLED SO IT IS ORIENTATED ON TOP OF THE TEE.
 8. THE SECOND TEE WILL SUPPLY THE SOFTBALL FIELD. A SHUT OFF VALVE FOR THAT LINE WILL BE INSTALLED NEXT TO THE TEE.
 9. A SHUT-OFF VALVE WILL BE INSTALLED AFTER THE SECOND TEE ON THE SUPPLY LINE THAT GOES TOWARDS THE PLAYGROUND.
 10. ALL THREE SHUT OFF VALVES IN THIS PIT ARE TO BE BRASS CURB STOP STYLE BALL VALVES.
 11. AFTER THE OUT FLOWING SHUT OFF VALVES THE SYSTEM CAN SWITCH TO BLAK OR HDPE PLASTIC TO CONNECT TO THE SYSTEM.



BACK FLOW PREVENTION METER PIT NEAR CB-3A (NON-SRF)
NOT TO SCALE

- NOTES:**
 1. DISCONNECT THE 2" PIPE IN THE METER PIT THAT SUPPLIES THE SOFTBALL FIELD.
 2. REMOVE THE TEE FOR THE SOFTBALL FIELD LINE AND THE BLOWOUT CONNECTION AND RUN 2" COPPER OUT OF THE METER PIT AND INTO THE NEW PIT FOR THE BACK FLOW.
 3. PROVIDE A SHUT OFF VALVE INSIDE THE BACK FLOW PIT BEFORE THE BACK FLOW.
 4. THE BACK FLOW NEEDS TO BE BRACKETED BY BRASS UNIONS.
 5. AFTER THE DOWNSTREAM UNION TWO BRASS TEES WILL BE INSTALLED.
 6. THE FIRST TEE WILL HAVE A 3/4" MALE THREADED BOILER DRAIN INSTALLED SO IT IS ORIENTATED ON TOP OF THE TEE.
 7. THE SECOND TEE WILL SUPPLY THE SOFTBALL FIELD. A SHUT OFF VALVE FOR THAT LINE WILL BE INSTALLED NEXT TO THE TEE.
 8. A SHUT-OFF VALVE WILL BE INSTALLED AFTER THE SECOND TEE ON THE SUPPLY LINE THAT GOES TOWARDS THE PLAYGROUND.
 9. ALL THREE SHUT OFF VALVES IN THIS PIT ARE TO BE BRASS CURB STOP STYLE BALL VALVES.
 10. AFTER THE OUT FLOWING SHUT OFF VALVES THE SYSTEM CAN SWITCH TO BLAK OR HDPE PLASTIC TO CONNECT TO THE SYSTEM.

LDD PROJECT NAME:
 MORSE STREET
 SEWER SEPARATION
 DRAWING NAME:
 12398D
 FIELD BOOK USED:
 N/A

REFERENCES:
 12398D.dwg, TAB:DETAIL 4

DESIGNED BY: OAM/CAS
 DRAWN BY: CAS
 CHECKED BY: DAM
 SCALE: AS NOTED
 DATE: 06-27-14



MORSE STREET
 SEWER SEPARATION
 STANDARD
 CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
 PUBLIC SERVICES DEPARTMENT
 ENGINEERING DIVISION



SHEET #
 29 OF 29
 PLAN NUMBER