CITY OF PORTLAND
PUBLIC SERVICES DEPARTMENT

CONTRACT DRAWINGS

BAXTER BOULEVARD
NORTH STORAGE CONDUIT

BID NUMBER: 4213

NOVEMBER 2012

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YEAR APPROVED
NOVEMBER 2012

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11/16/12

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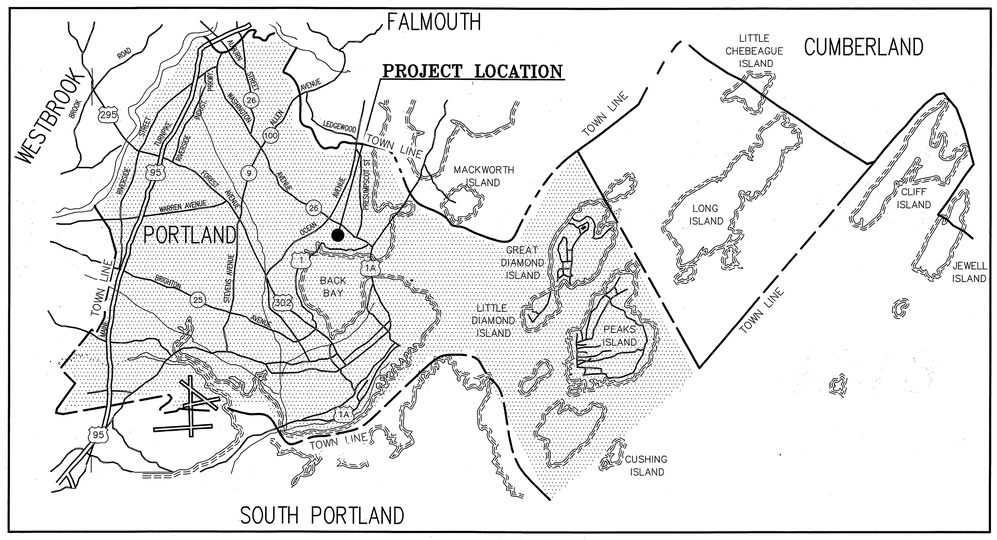

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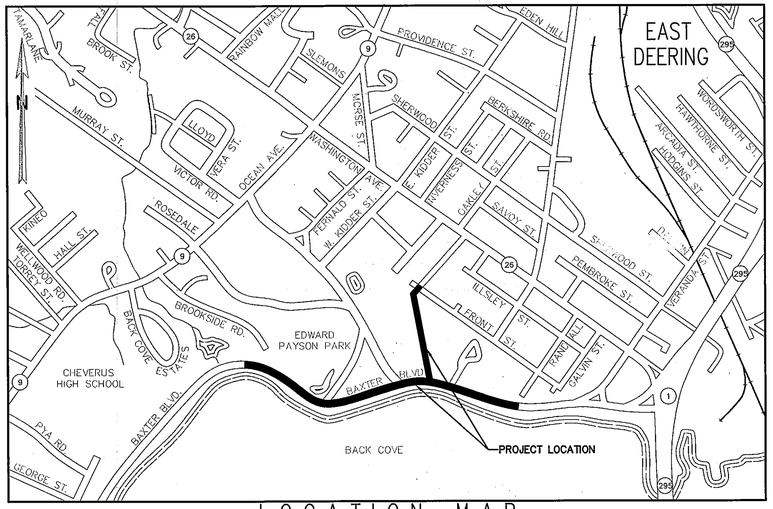

LOCATION MAP

NOT TO SCALE

GENERAL NOTES

1. 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.
2. 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.
3. 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.
4. THE CONTRACTOR IS REQUIRED TO PROVIDE A SECURE PROJECT WORK AREA AND SHALL PROVIDE AND INSTALL 8' TEMPORARY CHAIN LINK SAFETY FENCING (PAY ITEM 607.175) FOR ALL ACTIVE /STAGING AREAS THROUGHOUT CONSTRUCTION. THE BAXTER BOULEVARD TRAIL SHALL BE FENCED THROUGH ALL ACTIVE CONSTRUCTION AREAS INCLUDING SAFETY GATES INSTALLED AT INTERVALS APPROVED BY THE CITY.
5. 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.
6. 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.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES AND SHRUBS ON THE PROJECT WHICH ARE NOT TO BE REMOVED.
8. 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.
9. EXISTING DRAINAGE STRUCTURES SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED IN THE DRAWINGS OR BY THE CITY REPRESENATIVE.
10. 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.
11. NO ADDITIONAL PAYMENT WILL BE MADE FOR GRADING SIDE SLOPES OF DRIVEWAYS.
12. 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.
13. DIVERSION STRUCTURES AND CHECK VALVE VAULTS SHALL BE REINFORCED PRECAST STRUCTURES (PAY ITEMS 543.73 AND 543.75).
14. ALL MANHOLE FRAMES SHALL BE SUPPLIED WITH SOLID MANHOLE COVERS. THE RIM ELEVATION OF PROPOSED STORM AND SEWER MANHOLES SHALL BE SET AT THE NEW FINISHED PAVEMENT SURFACE GRADE. WINTERIZATION WILL BE REQUIRED. SEE STANDARD DETAIL.
15. 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.
16. 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 CONDUIT STORAGE AND ASSOCIATED PIPE PAY ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
17. 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
18. ALL TERMINAL MANHOLES SHALL HAVE CHANNELS CONSTRUCTED STRAIGHT THROUGH THE MANHOLE.
19. 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.
20. 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
21. THE EXISTING COLLECTION SYSTEM INCLUDING PRECAST STORAGE CONDUIT, DIVERSION STRUCTURES, 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.
22. 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.
23. 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).
24. 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.
25. 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 DRIPLINE. 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.
26. 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.
27. 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.
28. 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.
29. 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.
30. ENVIRONMENTAL GEOPROBES AND TEST PITS WERE COMPLETED BETWEEN OCTOBER 2011 AND NOVEMBER 2011. REFERENCE ENVIRONMENTAL SUBSURFACE INVESTIGATION REPORT IN APPENDIX OF THE SPECIFICATIONS. TEST PITS ARE DESIGNATED ON THE DRAWINGS FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT BE SHOWN AT EXACT LOCATIONS ALONG PIPE ALIGNMENT.
31. 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.
32. THE PROJECT IS LOCATED IN OR WITHIN PROXIMITY TO PROTECTED NATURAL RESOURCES, INCLUDING COASTAL WETLANDS, STREAMS AND HABITATS. THE CONTRACTOR SHALL WORK IN COMPLIANCE WITH THE NATURAL RESOURCES PROTECTION ACT (NRPA) PERMIT FROM THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AND INDIVIDUAL PERMIT FROM THE ARMY CORPS OF ENGINEERS. THESE ENVIRONMENTAL PERMIT APPLICATIONS AND CONDITIONS OF APPROVAL ARE INCLUDED IN APPENDIX OF THE SPECIFICATIONS. VARIATION FROM THE WORK DESCRIBED IN THESE PERMITS MUST BE APPROVED IN WRITING FROM THESE REGULATORY AGENCIES PRIOR TO CONSTRUCTION.
33. CSO-007 REGULATOR STRUCTURE ON OCEAN AVENUE: INSTALL 42" X 42" MANUALLY OPERATED SLIDE GATE, WHIPPS SERIES 925 OR APPROVED EQUAL AT 42"ø OUTFALL (INVERT 5.84'±) IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. COORDINATE INSTALLATION WITH CITY REPRESENATIVE.
34. REMOVE AND RESET ELECTRIC SERVICE IN NEW 4" SCHEDULE 40 PVC CONDUIT WHEN DISTURBED DUE TO CONSTRUCTION. COSTS ASSOCIATED WITH THIS WORK SHALL BE INCIDENTAL TO THE RELATED PAY ITEM.
35. 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.
36. 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.
37. 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.

LEGEND

GENERAL LINE TYPE

CENTERLINE
EDGE OF PAVEMENT
LEDGE PROFILE
STREET LINE
SURVEY BASE LINE

EXISTING SYMBOLS		PROPOSED SYMBOLS
UD	UNDERDRAIN	UD
D	STORM DRAIN	
S	SANITARY SEWER	S
CS	COMBINED SEWER	CS
S	HOUSE LATERAL	S
G	GAS LINE	G
W	WATER LINE	W
	CURB	
x	CHAIN LINK FENCE	x
	GUARD RAIL	
	WOOD RAIL FENCE	
	STOCKADE FENCE	
	HYDRAULIC LINE	HL

EXISITING SYMBOLS	PROPOSED SYMBOLS
CATCH BASIN	CATCH BASIN
SEWER MANHOLE	SEWER MANHOLE
DRAIN MANHOLE	DRAIN MANHOLE
UTILITY POLE	UTILITY POLE
LIGHT POLE	LIGHT POLE
WATER GATE OR VALVE	
WATER SHUT OFF	
HYDRANT	HYDRANT
GAS VALVE	
HANDICAP	HANDICAP
HEDGE	HEDGE
SHRUB OR BUSH	SHRUB OR BUSH
DECIDUOUS TREE	DECIDUOUS TREE
CONIFER TREE	CONIFER TREE
PK FOUND	PK SET
DRILL HOLE FOUND	DRILL HOLE SET
MONUMENT FOUND	PROPOSED MONUMENT
HUB FOUND	HUB SET
TEST PIT	
BORING TEST	

S1 = TRAFFIC STOP SIGN

STATE OF MAINE
OWENS A. McCULLOUGH
No. 7122
LICENSED
PROFESSIONAL ENGINEER

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

REFERENCES:

DESIGNED BY:	OAM/CAB
DRAWN BY:	CAB
CHECKED BY:	OAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE
CRAIG A. BURGESS
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BAXTER BOULEVARD NORTH STORAGE CONDUIT

LEGEND, GENERAL NOTES AND LOCATION MAP

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE — RESURGAM

SHEET # 2 OF 54

PLAN NUMBER

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 & SEWER SEPARATION PROJECT ON BAXTER BOULEVARD AND IN PAYSON PARK. 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. STOCKPILES SHALL BE LOCATED WITHIN THE STAGING AREAS IDENTIFIED ON THE DRAWINGS.
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 SWEPT 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 SEEDED 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 SEEDED. 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.

RIPRAP SLOPE CONSTRUCTION NOTES

PRE–CONSTRUCTION

1. MEET ON SITE WITH OWNER, SITE CONTRACTOR, AND THE DESIGN ENGINEER TO DISCUSS SCOPE OF WORK AND EXPECTATIONS. DETERMINE LIMITS OF TIDAL "SPARTINA" GRASS.
2. CONTRACTOR SHALL HAVE ALL MATERIALS APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.
3. SEE LAYOUT & DEMOLITION PLAN FOR LIMITS OF EXISTING PIPE REMOVAL.

CONSTRUCTION PHASE

1. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL BMP MANUAL, LATEST EDITION. SEE THE EROSION & SEDIMENT CONTROL NOTES AND PLAN FOR ADDITIONAL REQUIREMENTS. . PROTECT NEARBY TREES, WHICH ARE PROPOSED TO REMAIN. TO THE EXTENT PRACTICAL, PROTECT THE ROOT ZONE OF THESE TREES.
2. THE CONTRACTOR SHALL CONSIDER THE TIDE SCHEDULE CAREFULLY; AND SHALL SCHEDULE WORK TO AVOID INTERRUPTIONS OF DAYLIGHT WORKING HOURS WITH HIGH TIDES. WORKING WITHIN TIDAL WATERS IS NOT PERMITTED.
3. THE CONTRACTOR SHALL ONLY WORK IN AREAS THAT CAN BE COMPLETED DURING EACH CONSTRUCTION DAY. NO AREAS SHALL BE EXCAVATED BY THE CONTRACTOR AND LEFT EXPOSED, AS THESE AREAS WILL BE SUBJECT TO EROSION FROM TIDAL SURGES OR STORM EVENTS.
4. WITHIN VEGETATIVE AREA PROPOSED TO BE DISTURBED, CAREFULLY REMOVE THE TOP ORGANIC LAYER (12"±) BELOW ELEVATION DETERMINED AT PRECONSTRUCTION MEETING. REMOVE USING METHOD THAT WILL KEEP THE VEGETATION SYSTEM INTACT. STOCKPILE THE ORGANIC LAYER IN A MANNER SO THAT MATERIAL CAN BE REUSED. REMOVE ONLY ENOUGH VEGETATION NEEDED TO INSTALL THE TIDE GATE VAULT AND SEWER PIPE IN ACCORDANCE WITH THE CROSS–SECTION. ORGANIC LAYER REMOVAL, STORAGE AND PLACEMENT SHALL BE INCIDENTAL TO THE RELATED PIPE PAY ITEM.
5. PIPE INSTALLATION: LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED AS SHOWN TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 1 FOOT BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4 OR TOP OF FINISHED GRADE. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS. COSTS OF LOW PERMEABILITY DAMS SHALL BE INCIDENTAL TO THE CONTRACT.
6. INSTALL RIPRAP SLOPE IN ACCORDANCE WITH THE DETAILS. ONCE THE CHECK VALVE VAULT, SEWER PIPE, BOX CULVERT AND RIPRAP SLOPE ARE COMPLETELY INSTALLED, THE CONTRACTOR SHALL GRADE THE DISTURBED AREAS UNIFORMLY TO MATCH EXISTING TOPOGRAPHY (U.N.O.) AND THE NEW RIPRAP EDGE.
7. PLACE EXISTING ORGANIC MATERIAL IN DISTURBED VEGETATIVE AREAS BELOW ELEVATION 10, WORKING FROM THE OUTFALL TO THE VAULT. DISTURBED VEGETATIVE AREAS ABOVE ELEVATION 10 SHALL HAVE LOAM AND SEED. ORGANIC LAYER REMOVAL, STORAGE AND PLACEMENT SHALL BE INCIDENTAL TO THE RELATED PIPE PAY ITEM.
8. INSPECT THE SITE EVERY TWO WEEKS FOR SIGNS OF EROSION AND ESTABLISHMENT OF VEGETATION. REPAIR ERODED AREAS AND REPLANT VEGETATION TO ESTABLISH 75% VEGETATION CATCH, AS REQUIRED.
9. IN AREAS REQUIRING REPLANTING, INSTALL NORTH AMERICAN GREEN C125BN EROSION CONTROL FABRIC OR APPROVED EQUAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (PAY ITEM 613.319).
10. USING RAZOR BLADE, CAREFULLY CUT HOLES 1 FOOT O.C. AND IN ROWS SPACED 1 FOOT APART. LOOSELY OFFSET HOLES BETWEEN ROWS FOR APPROXIMATELY 6–8 HOLES PER SQUARE YARD. PLANT CORD GRASS SPARTINA PATENS (SALT MEADOW GRASS) AND SPARTINA ALTERNIFLORA (SMOOTH CORDGRASS) PLUGS IN ALTERNATING FASHION. COSTS ASSOCIATED WITH CUTTING FABRIC AND PLANTING GRASS PLUGS WILL BE PAID THROUGH THE BID ITEM 615.072.
11. CONTINUE TO INSPECT THE SITE EVERY TWO WEEKS FOR SIGNS OF EROSION AND ESTABLISHMENT OF VEGETATION.

DEMOLITION NOTES

1. DEMOLITION OF EXISTING BRICK SEWER SHALL INCLUDE EXCAVATION, REMOVAL OF SEWER PIPE AND STRUCTURES, CONCRETE CRADLE, INSTALLATION OF COMPACTED GRAVEL (TYPE B), COMPACTION AND SURFACE RESTORATION (EXCLUDING PAVING) TO BE COMPETED UNDER PAY ITEM 534.78.
2. DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE. CONTRACTOR SHALL ENSURE EXISTING ROAD SURFACE DRAINAGE IS MAINTAINED DURING CONSTRUCTION. THE EXISTING 42" DRAIN LINE CROSSING THE ROADWAY AT STATION 0+60± AND ROADWAY CATCH BASIN SYSTEM IS CURRENTLY ACTIVE. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY DRAINAGE PROVISIONS. COSTS FOR TEMPORARY DRAINAGE PROVISIONS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
3. INSTALL 8' CHAIN LINK CONSTRUCTION FENCE ON ROAD SIDE OF EXISTING BOULEVARD TREES (PAY ITEM 607.175). COORDINATE LOCATION WITH CITY REPRESENATIVE. CONTRACTOR SHALL REMOVE AND RESET CONSTRUCTION FENCE AS REQUIRED DURING CONSTRUCTION AND AS NECESSARY TO ACCOMMODATE IMPROVEMENTS. THE CHAIN LINK FENCE SHALL MARK THE LIMITS FOR THE BOX CULVERTS.
4. REMOVE EXISTING COBBLE STONE GUTTER AND REUSE COBBLE STONES TO GREATEST EXTENT POSSIBLE FOR GUTTER RECONSTRUCTION. COBBLE GUTTER REMOVAL, CLEANING, STACKING AND RE–USE SHALL BE INCIDENTAL TO PAY ITEM 609.50.
5. LIMITS OF THE OLD BRIDGE STRUCTURE BETWEEN STATIONS 9+59 AND 10+22 ARE APPROXIMATE AND BASED OFF OF HISTORIC RECORD DRAWINGS. TRUE LIMITS ARE UNKNOWN. TWO TEST PITS WERE EXCAVATED ON AUGUST 16, 2012. TEST PIT #1 (TP–1) REVEALED CONCRETE AT 9'–8" DEPTH. TEST PIT #2 (TP–2) ENCOUNTERED OLD TIMBER PILES AT 5'–0"± AND WATER AT 9'–0"±. CONCRETE WAS NOT ENCOUNTERED AT TEST PIT #2 (TP–2), NEW SEWER PIPE CROSSES THE EXCAVATION LIMITS OF BOTH TEST PITS. REMOVAL OF EXISTING BRIDGE AND ASSOCIATED PIPE INFRASTRUCTURE ENCOUNTERED DURING SEWER PIPE INSTALLATION AND TRAIL IMPROVEMENTS IS INCIDENTAL TO THE CONTRACT.

STATE OF MAINE
OWENS A. McCULLOUGH
No. 7122
LICENSED PROFESSIONAL ENGINEER

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

REFERENCES:

DESIGNED BY:	OAM/CAB
DRAWN BY:	CAB
CHECKED BY:	OAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE
CRAIG A. BURGESS
No. 12638
LICENSED PROFESSIONAL ENGINEER

BAXTER BOULEVARD
NORTH STORAGE CONDUIT

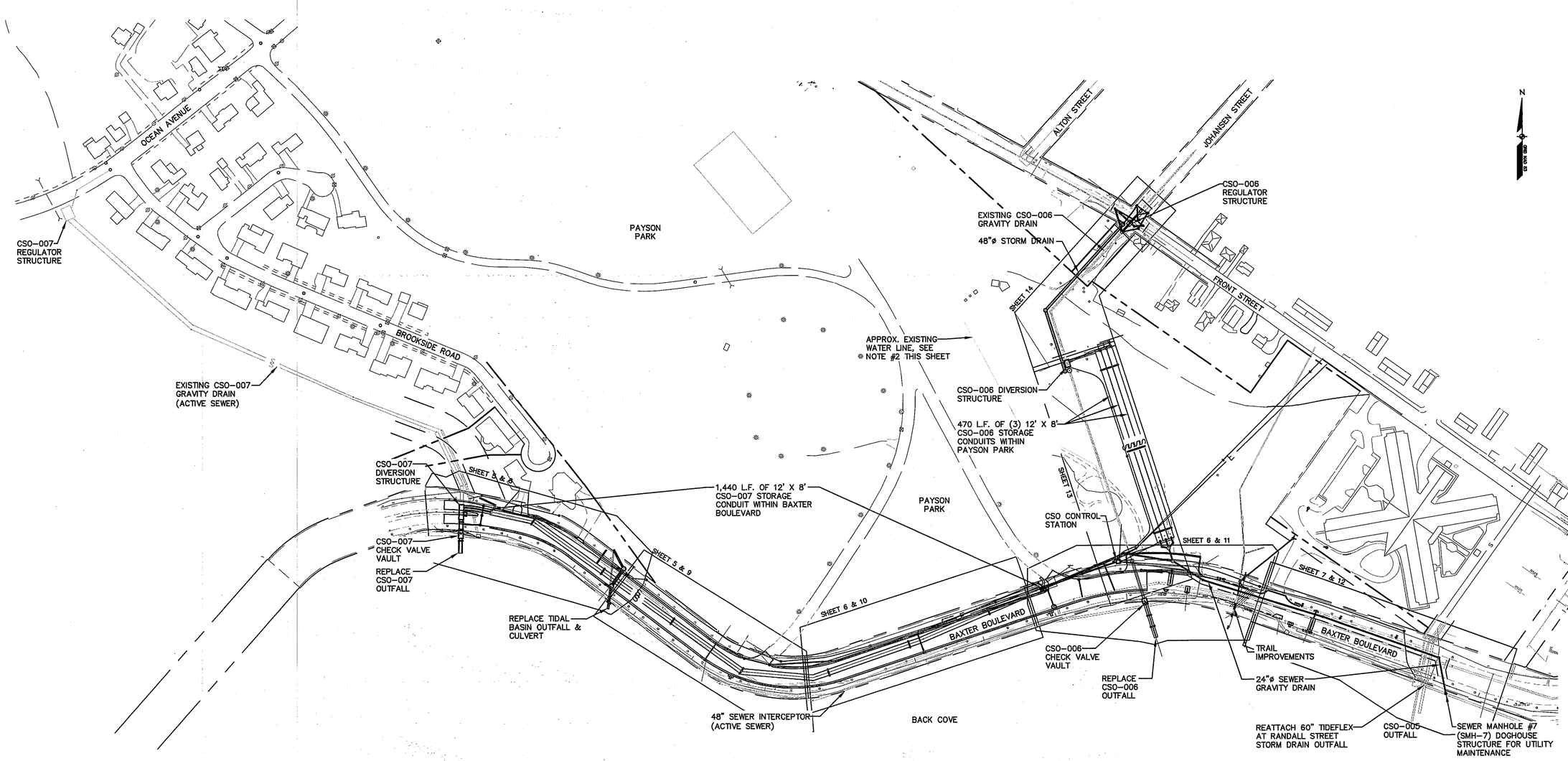
NOTES

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

RESURGAM · CITY OF PORTLAND, MAINE

SHEET # 3 OF 54

PLAN NUMBER



STRUCTURE KEY

STRUCTURE	SHEET(S) #
CSO-006 REGULATOR STRUCTURE	14, 30
CSO-006 DIVERSION STRUCTURE	13, 29
CSO-006 BOX CULVERTS	13, 29
CSO-006 CHECK VALVE VAULT	11, 23
CSO-007 REGULATOR STRUCTURE	30
CSO-007 DIVERSION STRUCTURE	8, 28
CSO-007 BOX CULVERT	8, 9, 10, 11, 28
CSO-007 CHECK VALVE VAULT	8, 24
REPLACE TIDAL BASIN OUTFALL & CULVERT	8
TRAIL IMPROVEMENTS	11, 12
CSO CONTROL STATION	11, 32
24"ø SEWER GRAVITY DRAIN	11, 12, 13
SEWER MANHOLE #7 (SMH-7) DOGHOUSE STRUCTURE	12, 31

NOTES:
1. THE RECREATIONAL TRAIL AROUND BACK COVE SHALL REMAIN OPEN DURING CONSTRUCTION. PEDESTRIAN ACCESS TO THE TRAIL SHALL BE PROVIDED BY THE CONTRACTOR DURING CONSTRUCTION.
2. THE APPROXIMATE LOCATION OF AN EXISTING WATER LINE IS SHOWN. FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION. REMOVAL AND REPLACEMENT OF THE WATERLINE FOR INSTALLATION OF UNDERGROUND ELECTRIC SHALL BE IN ACCORDANCE WITH THE DETAIL.

STATE OF MAINE
OWENS A. McCULLOUGH
No. 7122
LICENSED
PROFESSIONAL ENGINEER

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

REFERENCES:
09006 odp.dwg, TAB:36X24

DESIGNED BY:	OAM/CAB
DRAWN BY:	BBS/CAB
CHECKED BY:	OAM
SCALE:	1"=120'
DATE:	11-15-2012

STATE OF MAINE
CRAIG A. BURGESS
No. 12638
LICENSED
PROFESSIONAL ENGINEER

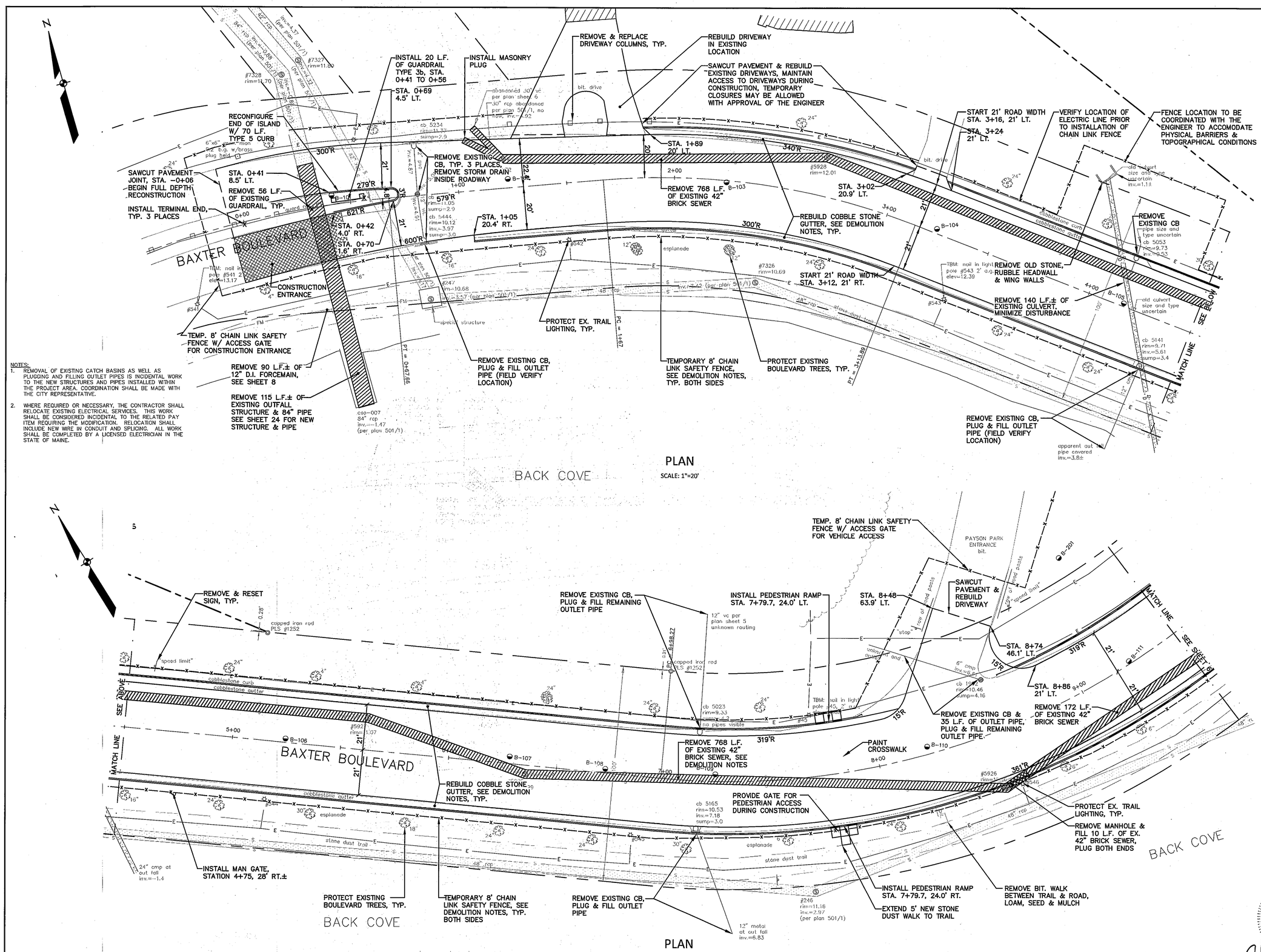
BAXTER BOULEVARD NORTH STORAGE CONDUIT
OVERALL DESIGN PLAN

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE — RESURGAM

SHEET # 4 OF 54

PLAN NUMBER



NOTES:

1. REMOVAL OF EXISTING CATCH BASINS AS WELL AS PLUGGING AND FILLING OUTLET PIPES IS INCIDENTAL WORK TO THE NEW STRUCTURES AND PIPES INSTALLED WITHIN THE PROJECT AREA. COORDINATION SHALL BE MADE WITH THE CITY REPRESENTATIVE.
2. WHERE REQUIRED OR NECESSARY, THE CONTRACTOR SHALL RELOCATE EXISTING ELECTRICAL SERVICES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEM REQUIRING THE MODIFICATION. RELOCATION SHALL INCLUDE NEW WIRE IN CONDUIT AND SPLICING. ALL WORK SHALL BE COMPLETED BY A LICENSED ELECTRICIAN IN THE STATE OF MAINE.

PLAN

SCALE: 1"=20'

PLAN

SCALE: 1"=20'

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006L01
FIELD BOOK USED: N/A

REFERENCES: 09006L01.dwg, TAB: BAXTER 0+0-9+50

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY:	DAM/CAB
DRAWN BY:	BRF/CAB
CHECKED BY:	DAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE CRAIG A. BURGESS No. 12638 PROFESSIONAL ENGINEER 12-7-12

BAXTER BOULEVARD NORTH STORAGE CONDUIT

LAYOUT & DEMOLITION PLAN

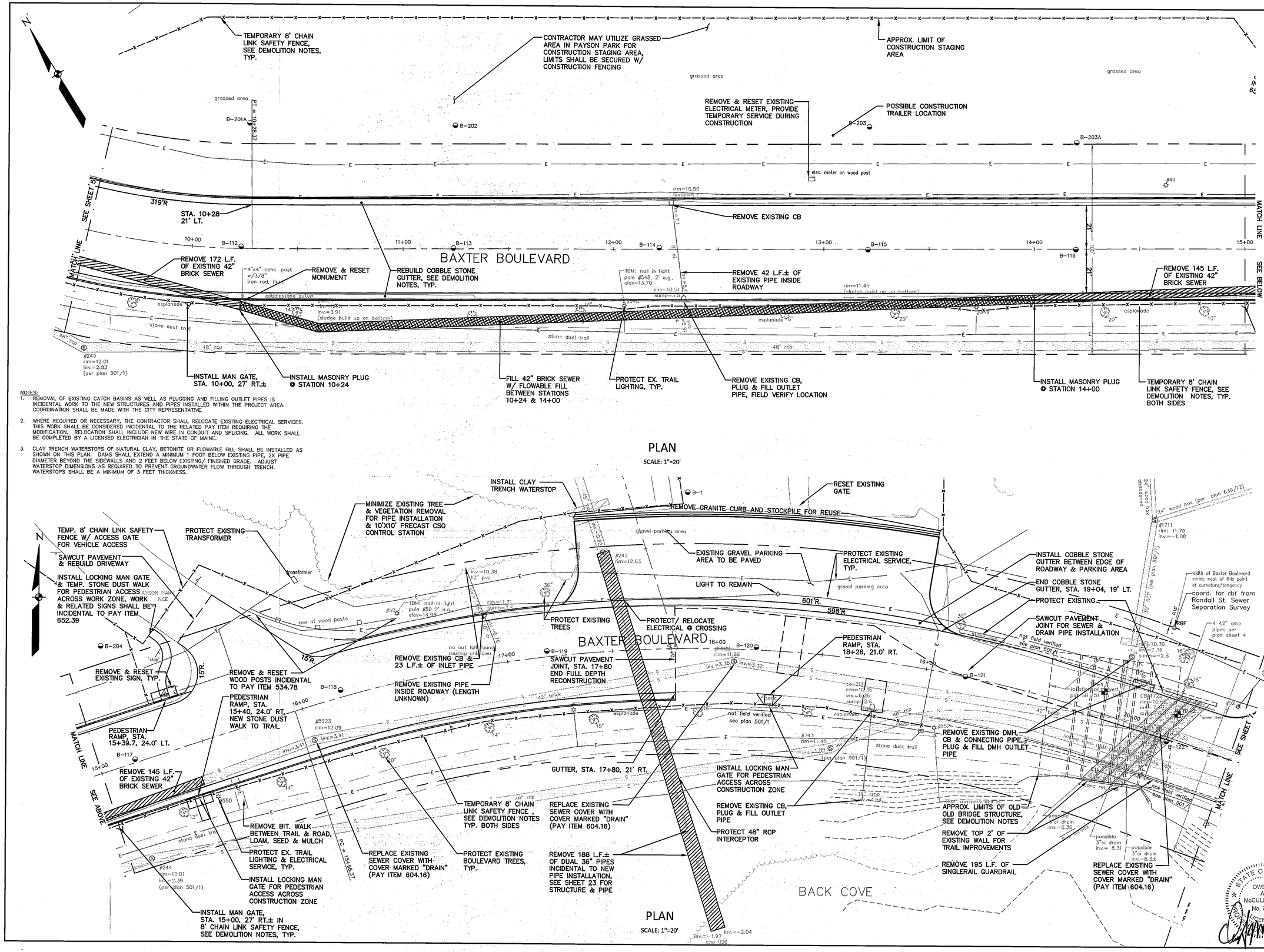
STATIONS 0+00 TO 9+50

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

STATE OF MAINE CHARLES A. McCULLOUGH No. 7122 PROFESSIONAL ENGINEER 12-7-12

SHEET # 5 OF 54

PLAN NUMBER



NOTES:

1. REMOVAL OF EXISTING CATCH BASINS AS WELL AS PLUGGING AND FILLING OUTLET PIPES IS INCIDENTAL WORK TO THE NEW STRUCTURES AND PIPES INSTALLED WITHIN THE PROJECT AREA. COORDINATION SHALL BE MADE WITH THE CITY REPRESENTATIVE.
2. WHERE REQUIRED OR NECESSARY, THE CONTRACTOR SHALL RELOCATE EXISTING ELECTRICAL SERVICES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEM REQUIRING THE MODIFICATION. RELOCATION SHALL INCLUDE NEW WIRE IN CONDUIT AND SPLICING. ALL WORK SHALL BE COMPLETED BY A LICENSED ELECTRICIAN IN THE STATE OF MAINE.
3. CLAY TRENCH WATERSTOPS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED AS SHOWN ON THIS PLAN. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW EXISTING PIPE, 2X PIPE DIAMETER BEYOND THE SIDEWALLS AND 2 FEET BELOW EXISTING/ FINISHED GRADE. ADJUST WATERSTOP DIMENSIONS AS REQUIRED TO PREVENT GROUNDWATER FLOW THROUGH TRENCH. WATERSTOPS SHALL BE A MINIMUM OF 3 FEET THICKNESS.

PLAN

SCALE: 1"=20'

PLAN

SCALE: 1"=20'

NOT FOR CONSTRUCTION

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006L01
FIELD BOOK USED: N/A

REFERENCES: 09006lo1.dwg, TAB: BAXTER 9+50-20+50

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY: OAM/CAB	DRAWN BY: BRF	CHECKED BY: OAM	SCALE: AS NOTED	DATE: 11-16-2012

STATE OF MAINE CRAIG A. BURGESS No. 12638 LICENSED PROFESSIONAL ENGINEER 12-7-12

BAXTER BOULEVARD NORTH STORAGE CONDUIT
LAYOUT & DEMOLITION PLAN
STATIONS 9+50 TO 20+50

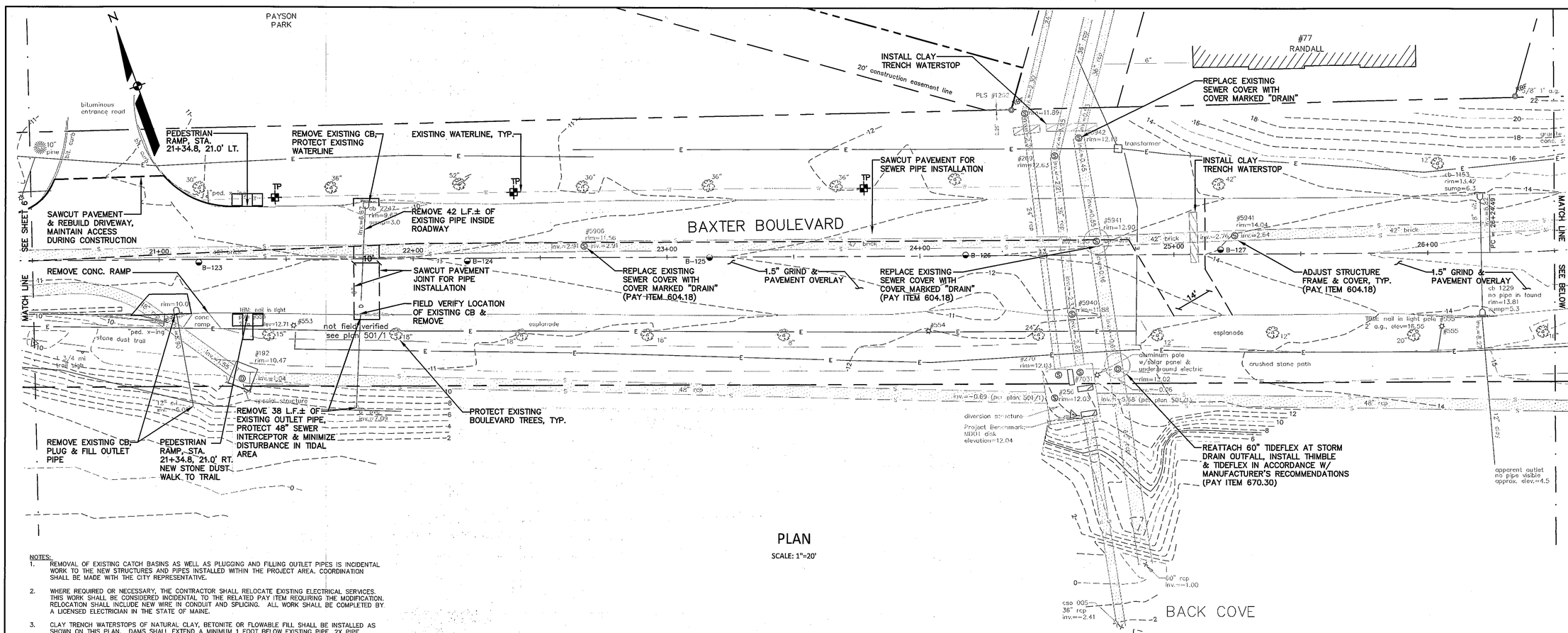
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE RESURGAM

STATE OF MAINE OWENS A. McCULLOUGH No. 7122 LICENSED PROFESSIONAL ENGINEER 12-7-12

SHEET # 6 OF 54

PLAN NUMBER

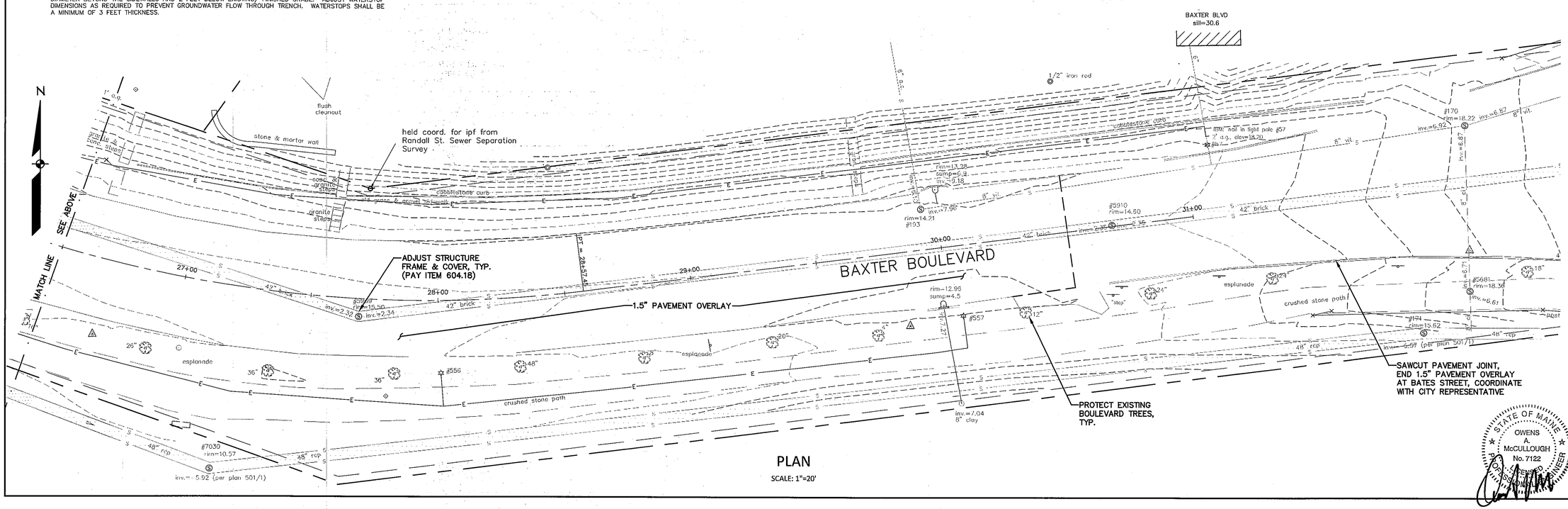


PLAN

SCALE: 1"=20'

NOTES:

1. REMOVAL OF EXISTING CATCH BASINS AS WELL AS PLUGGING AND FILLING OUTLET PIPES IS INCIDENTAL WORK TO THE NEW STRUCTURES AND PIPES INSTALLED WITHIN THE PROJECT AREA. COORDINATION SHALL BE MADE WITH THE CITY REPRESENTATIVE.
2. WHERE REQUIRED OR NECESSARY, THE CONTRACTOR SHALL RELOCATE EXISTING ELECTRICAL SERVICES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEM REQUIRING THE MODIFICATION. RELOCATION SHALL INCLUDE NEW WIRE IN CONDUIT AND SPLICING. ALL WORK SHALL BE COMPLETED BY A LICENSED ELECTRICIAN IN THE STATE OF MAINE.
3. CLAY TRENCH WATERSTOPS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED AS SHOWN ON THIS PLAN. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW EXISTING PIPE, 2X PIPE DIAMETER BEYOND THE SIDEWALLS AND 2 FEET BELOW EXISTING/ FINISHED GRADE. ADJUST WATERSTOP DIMENSIONS AS REQUIRED TO PREVENT GROUNDWATER FLOW THROUGH TRENCH. WATERSTOPS SHALL BE A MINIMUM OF 3 FEET THICKNESS.



PLAN

SCALE: 1"=20'

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006LO1
FIELD BOOK USED: N/A

REFERENCES: 09006lo1.dwg, TAB:BAXTER 20+50-26+50

DESIGNED BY:	DAM/CAB
DRAWN BY:	BR/CAB
CHECKED BY:	DAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE CRAIG A. BURGESS No. 12838 PROFESSIONAL ENGINEER

BAXTER BOULEVARD NORTH STORAGE CONDUIT

DEMOLITION PLAN

STATIONS 20+50 TO 26+50

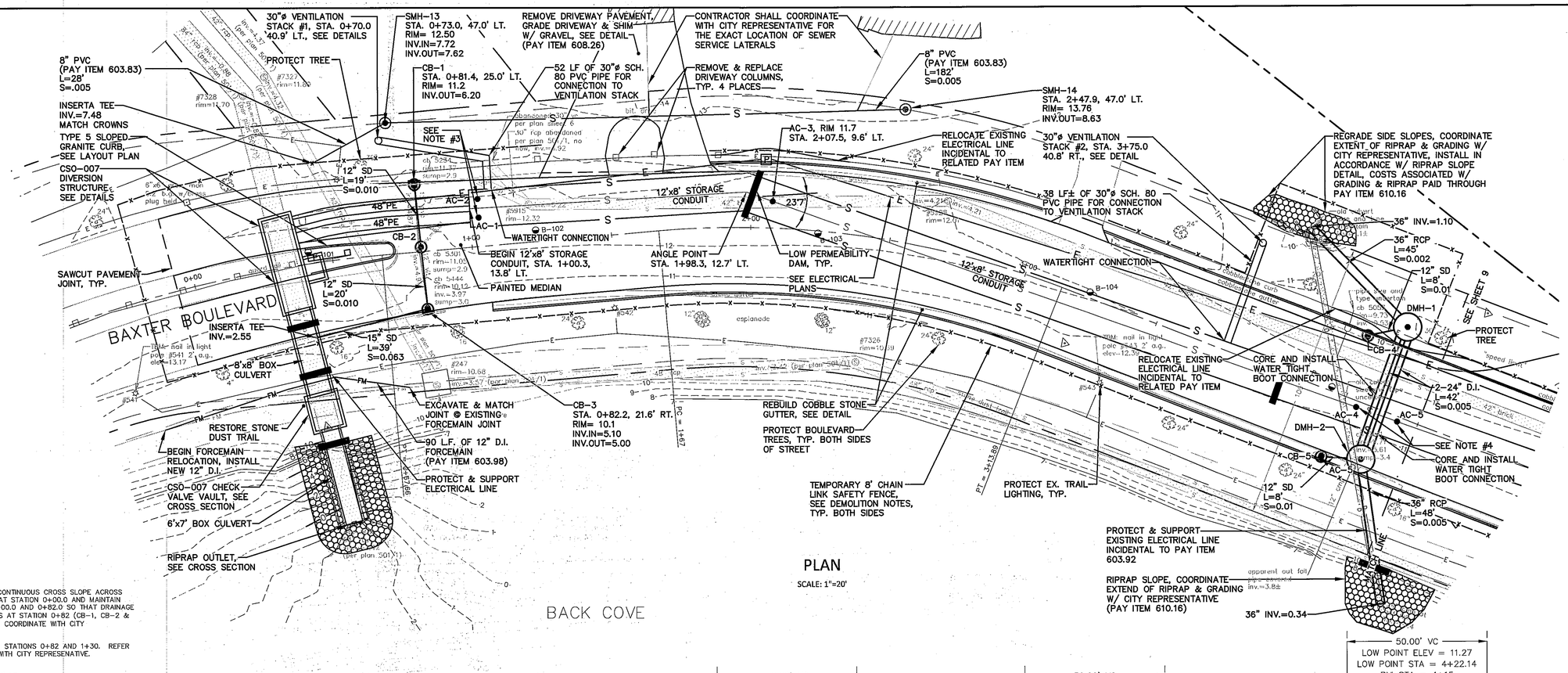
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE

STATE OF MAINE OWENS A. McCULLOUGH No. 7122 PROFESSIONAL ENGINEER

SHEET # 7 OF 54

PLAN NUMBER

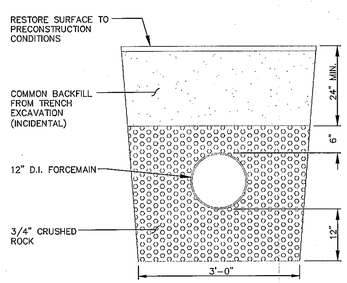


PLAN

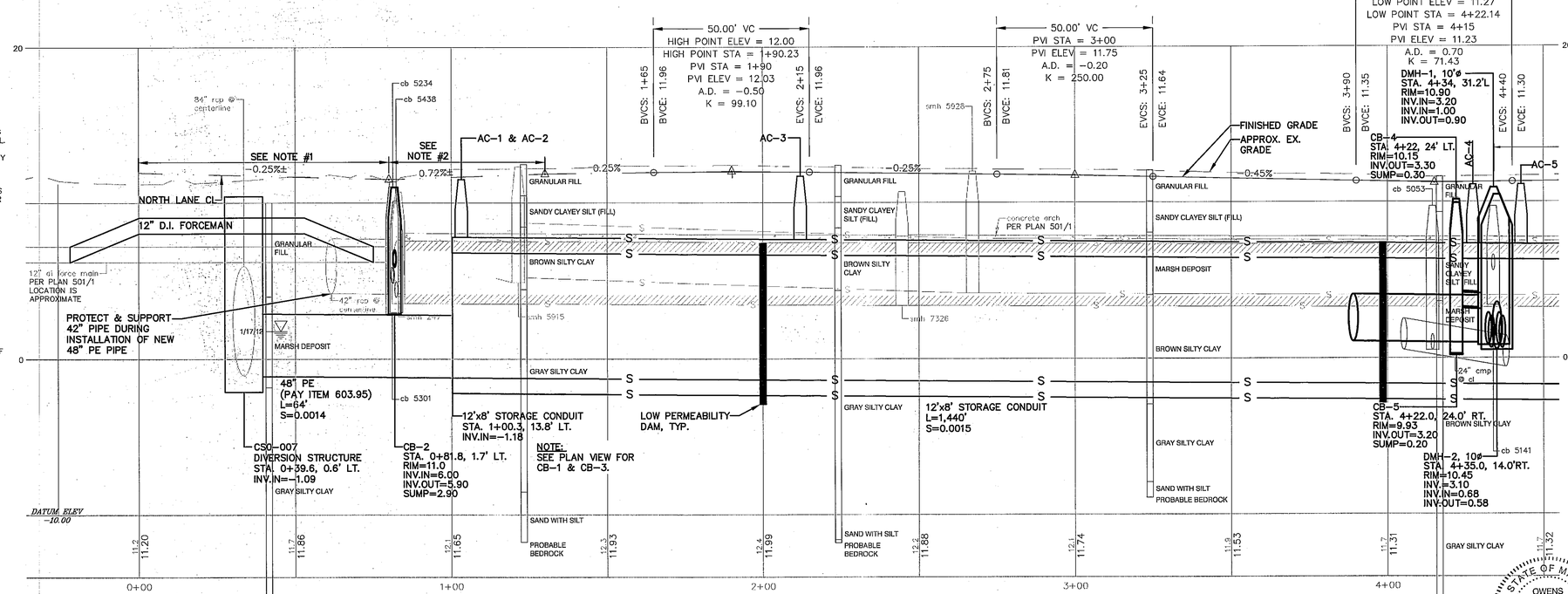
SCALE: 1"=20'

NOTES:

1. MAINTAIN CROWN IN NORTH LANE AND CONTINUOUS CROSS SLOPE ACROSS SOUTH LANE. MATCH EXISTING GRADE AT STATION 0+00.0 AND MAINTAIN NEGATIVE GRADE BETWEEN STATIONS 0+00.0 AND 0+82.0 SO THAT DRAINAGE IS DIRECTED TOWARD THE CATCH BASINS AT STATION 0+82 (CB-1, CB-2 & CB-3). REFER TO CROSS SECTIONS AND COORDINATE WITH CITY REPRESENATIVE.
2. TRANSITION TO A FULL CROWN BETWEEN STATIONS 0+82 AND 1+30. REFER TO CROSS SECTIONS AND COORDINATE WITH CITY REPRESENATIVE.
3. ACCESS COVERS:
   AC-1, RIM 11.4±, STA. 1+03.2, 10.4' LT.
   AC-2, RIM 11.4±, STA. 1+03.4, 17.0' LT.
4. ACCESS COVERS:
   AC-4, RIM 11.1, STA. 4+27.3, 2.2' RT.
   AC-5, RIM 11.1, STA. 4+42.8, 1.7' RT.
5. CONTRACTOR SHALL PROVIDE AND INSTALL BYPASS PUMPING DURING CONSTRUCTION OF CSO-007 DIVERSION STRUCTURE. BYPASS PIPING SHALL BE CAPABLE OF PASSING 340 CFS (PREDICTED 25-YEAR STORM FLOW).
6. DRAINAGE WORK AT STATION 4+35 SHALL INCLUDE SEQUENCING STORAGE CONDUIT INSTALLATION TO ALLOW FOR SURFACE DRAINAGE FLOW AT EXISTING CULVERT CROSSING. CONTRACTOR SHALL SUBMIT WORK PLAN FOR APPROVAL.
7. THE DUAL 24"± DUCTILE IRON (D.I.) PIPES SHALL BE SUPPORTED 24" O.C. BY RIGID PIPE HANGERS SUSPENDED FROM CONDUIT CEILING OR GROUND SUPPORTED. SUBMIT MANUFACTURER INFORMATION FOR APPROVAL.
8. GRADE GRASSED AREAS ALONG NORTH SIDE OF ROADWAY BETWEEN STATIONS 4+50 AND 8+00 SO THAT DRAINAGE IS DIRECTED TOWARD THE ROADWAY OR TIDAL AREA. PROTECT EXISTING BOULEVARD TREES.
9. LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED EVERY 200 FEET ALONG THE STORAGE CONDUIT TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 2 FEET BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS.
10. THE CONTRACTOR SHALL SUBMIT WORK PLAN DETAILING CONNECTION OF EXISTING 84" RCP TO CSO-007 DIVERSION STRUCTURE. ALL WORK ASSOCIATED WITH THE CONNECTION, INCLUDING BUT NOT LIMITED TO SAW CUTTING PIPE, REPLACEMENT OF 84" PIPE SECTION AND WATERTIGHT CONNECTION SHALL BE CONSIDERED INCIDENTAL TO PAY ITEM 534.74.
11. CATCH BASIN OFFSETS ALONG BAXTER BOULEVARD ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE BAXTER BOULEVARD ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.



FORCEMAIN TRENCH DETAIL
NOT TO SCALE



PROFILE: BAXTER BOULEVARD

STA. 0+00 TO 4+50
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006PP 1
FIELD BOOK USED: N/A

REFERENCES: 09006pp1.dwg, TAB:BAXTER 01-0-4+50

DESIGNED BY:	OAM/CAB
DRAWN BY:	BRF/CAB
CHECKED BY:	OAM
SCALE:	AS NOTED
DATE:	11-15-2012

STATE OF MAINE — CRAIG A. BURGESS No. 12638 — LICENSED PROFESSIONAL ENGINEER

BAXTER BOULEVARD NORTH STORAGE CONDUIT

PLAN & PROFILE

STATIONS 0+00 TO 4+50

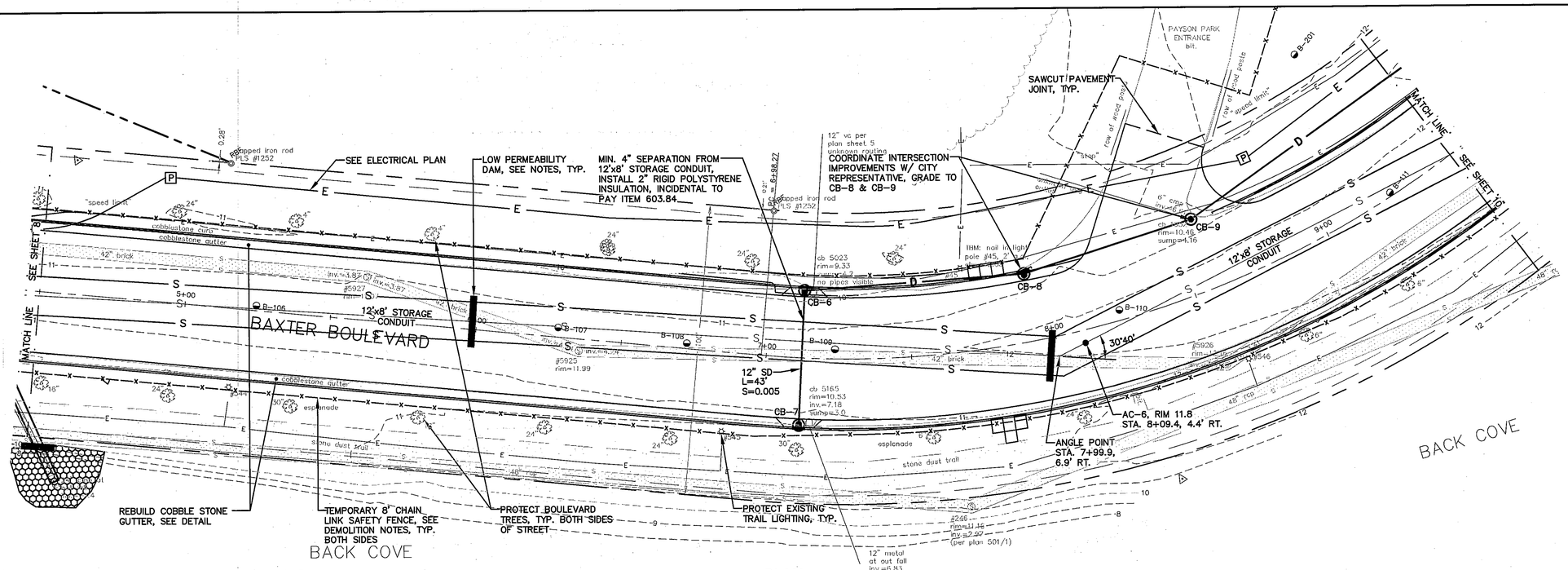
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

RESURGAM — CITY OF PORTLAND, MAINE

STATE OF MAINE — OWENS A. McCULLOUGH No. 7122 — LICENSED PROFESSIONAL ENGINEER

SHEET # 8 OF 54

PLAN NUMBER

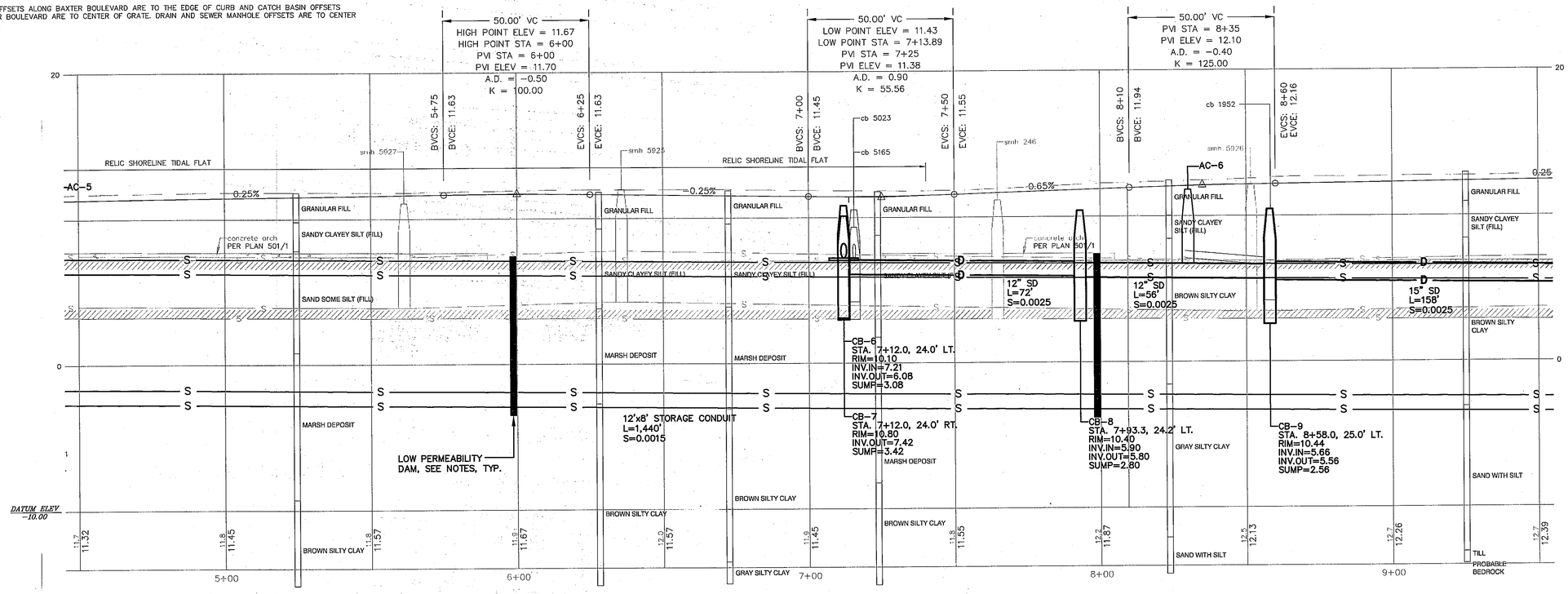


PLAN

SCALE: 1"=20'

NOTES:

1. GRADE GRASSED AREAS ALONG NORTH SIDE OF ROADWAY BETWEEN STATIONS 4+50.0 AND 8+00.0 SO THAT DRAINAGE IS DIRECTED TOWARD THE ROADWAY OR TIDAL AREA. PROTECT EXISTING BOULEVARD TREES.
2. GRADE GRASSED AREAS ALONG NORTH SIDE OF ROADWAY BETWEEN STATIONS 9+00.0 AND 15+50.0 SO THAT DRAINAGE IS DIRECTED TOWARD ROADWAY.
3. LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED EVERY 200 FEET ALONG THE STORAGE CONDUIT TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 2 FEET BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS.
4. CATCH BASIN OFFSETS ALONG BAXTER BOULEVARD ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE BAXTER BOULEVARD ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.



PROFILE: BAXTER BOULEVARD

STA. 4+50 TO 9+50
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006PP1
FIELD BOOK USED: N/A

REFERENCES: 09006pp1.dwg, TAB:BAXTER 4+50-9+50

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY:	CAM/CAB
DRAWN BY:	BBE/CAB
CHECKED BY:	CAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE CRAIG A. BURGESS No. 12838 LICENSED PROFESSIONAL ENGINEER 12-7-12

BAXTER BOULEVARD
NORTH STORAGE CONDUIT
PLAN & PROFILE
STATIONS 4+50 TO 9+50

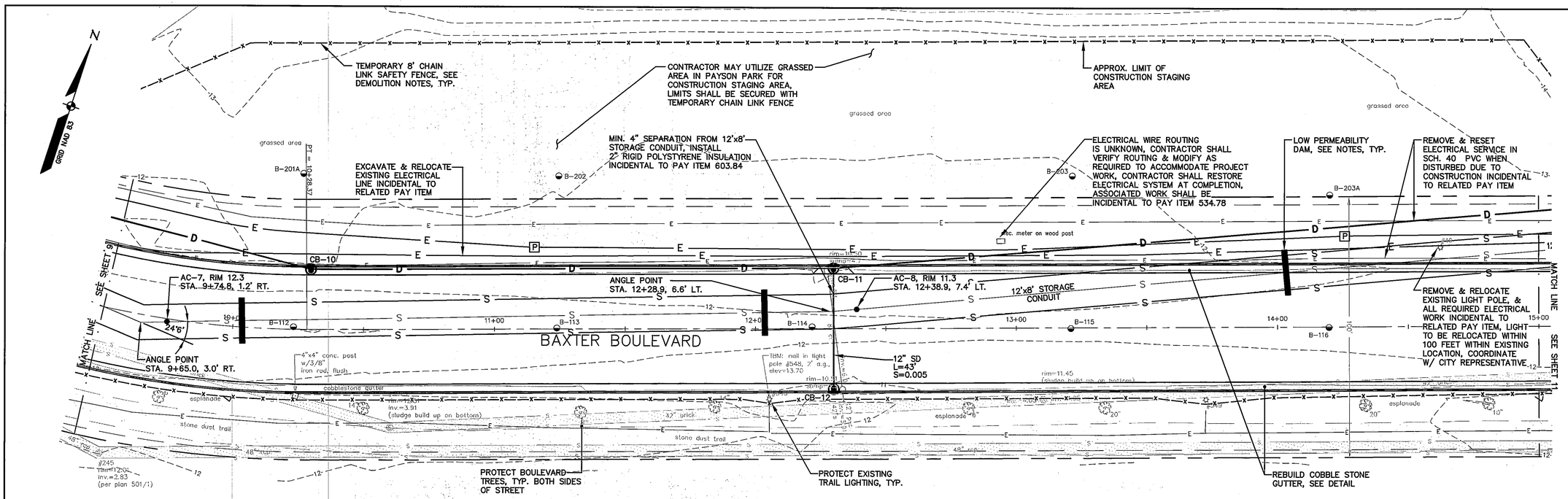
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

RESURGAM CITY OF PORTLAND, MAINE

STATE OF MAINE OWENS A. McCULLOUGH No. 7122 LICENSED PROFESSIONAL ENGINEER 12-7-12

SHEET # 9 OF 54

PLAN NUMBER

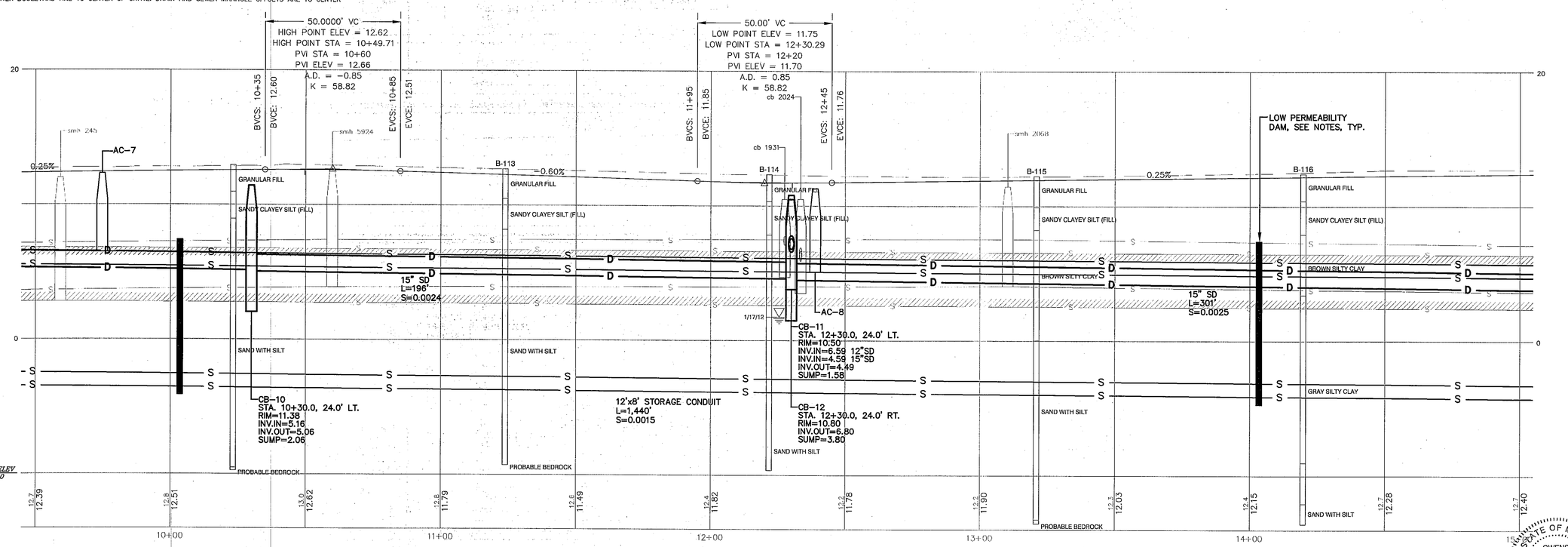


NOTE:

1. GRADE GRASSED AREAS ALONG NORTH SIDE OF ROADWAY BETWEEN STATIONS 9+00.0 AND 15+50.0 SO THAT DRAINAGE IS DIRECTED TOWARD ROADWAY.
2. LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED EVERY 200 FEET ALONG THE STORAGE CONDUIT TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 1 FOOT BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS.
3. CATCH BASIN OFFSETS ALONG BAXTER BOULEVARD ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE BAXTER BOULEVARD ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.

PLAN

SCALE: 1"=20'



PROFILE: BAXTER BOULEVARD

STA. 9+50 TO 15+00
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME:
BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME:
09006PP1
FIELD BOOK USED:
N/A

REFERENCES:
09006pp1.dwg, TAB:BAXTER 9+50-15+00

DESIGNED BY:	OAM/CAB
DRAWN BY:	RBF/CAB
CHECKED BY:	OAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE
CRAIG A. BURGESS
No. 12838
LICENSED
PROFESSIONAL ENGINEER

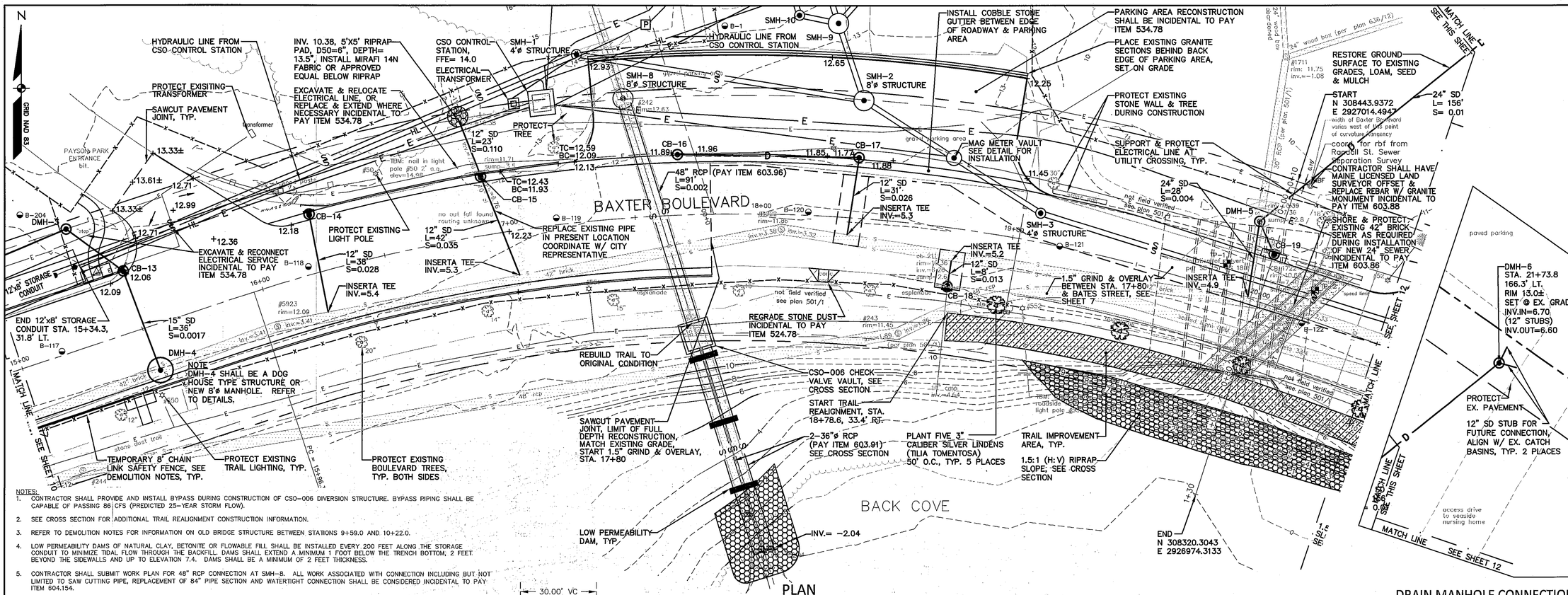
BAXTER BOULEVARD
NORTH STORAGE CONDUIT
PLAN & PROFILE
STATIONS 9+50 TO 15+00

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

RESURGAM
CITY OF PORTLAND, MAINE

STATE OF MAINE
OWENS A. McCULLOUGH
No. 7122
LICENSED
PROFESSIONAL ENGINEER

SHEET # 10 OF 54
PLAN NUMBER

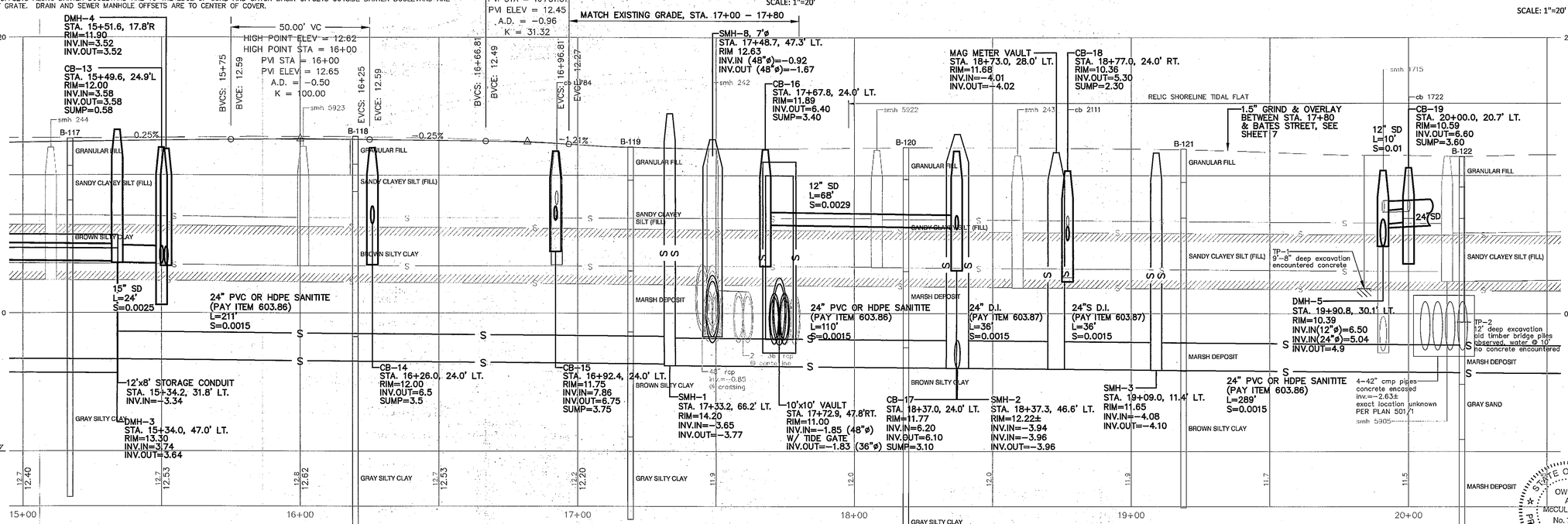


NOTES:

1. CONTRACTOR SHALL PROVIDE AND INSTALL BYPASS DURING CONSTRUCTION OF CSO-006 DIVERSION STRUCTURE. BYPASS PIPING SHALL BE CAPABLE OF PASSING 86 CFS (PREDICTED 25-YEAR STORM FLOW).
2. SEE CROSS SECTION FOR ADDITIONAL TRAIL REALIGNMENT CONSTRUCTION INFORMATION.
3. REFER TO DEMOLITION NOTES FOR INFORMATION ON OLD BRIDGE STRUCTURE BETWEEN STATIONS 9+59.0 AND 10+22.0.
4. LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED EVERY 200 FEET ALONG THE STORAGE CONDUIT TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 2 FEET BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS.
5. CONTRACTOR SHALL SUBMIT WORK PLAN FOR 48" RCP CONNECTION AT SMH-8. ALL WORK ASSOCIATED WITH CONNECTION INCLUDING BUT NOT LIMITED TO SAW CUTTING PIPE, REPLACEMENT OF 84" PIPE SECTION AND WATERTIGHT CONNECTION SHALL BE CONSIDERED INCIDENTAL TO PAY ITEM 604.154.
6. CATCH BASIN OFFSETS ALONG BAXTER BOULEVARD ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE BAXTER BOULEVARD ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.

PLAN
SCALE: 1"=20'

DRAIN MANHOLE CONNECTION
SCALE: 1"=20'



PROFILE: BAXTER BOULEVARD

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

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006PP1
FIELD BOOK USED: N/A

REFERENCES:
09006pp1.dwg, TAB:BAXTER 15+00-20+50

REVISIONS:

A	12-07-12	REISSUED FOR ADDENDUM #2

DESIGNED BY: CAM/CAB
DRAWN BY: BRF/CAB
CHECKED BY: DAM
SCALE: AS NOTED
DATE: 11-16-2012

STATE OF MAINE CRAIG A. BURGESS No. 12638 PROFESSIONAL ENGINEER 12-7-12

BAXTER BOULEVARD NORTH STORAGE CONDUIT

PLAN & PROFILE

STATIONS 15+00 TO 20+50

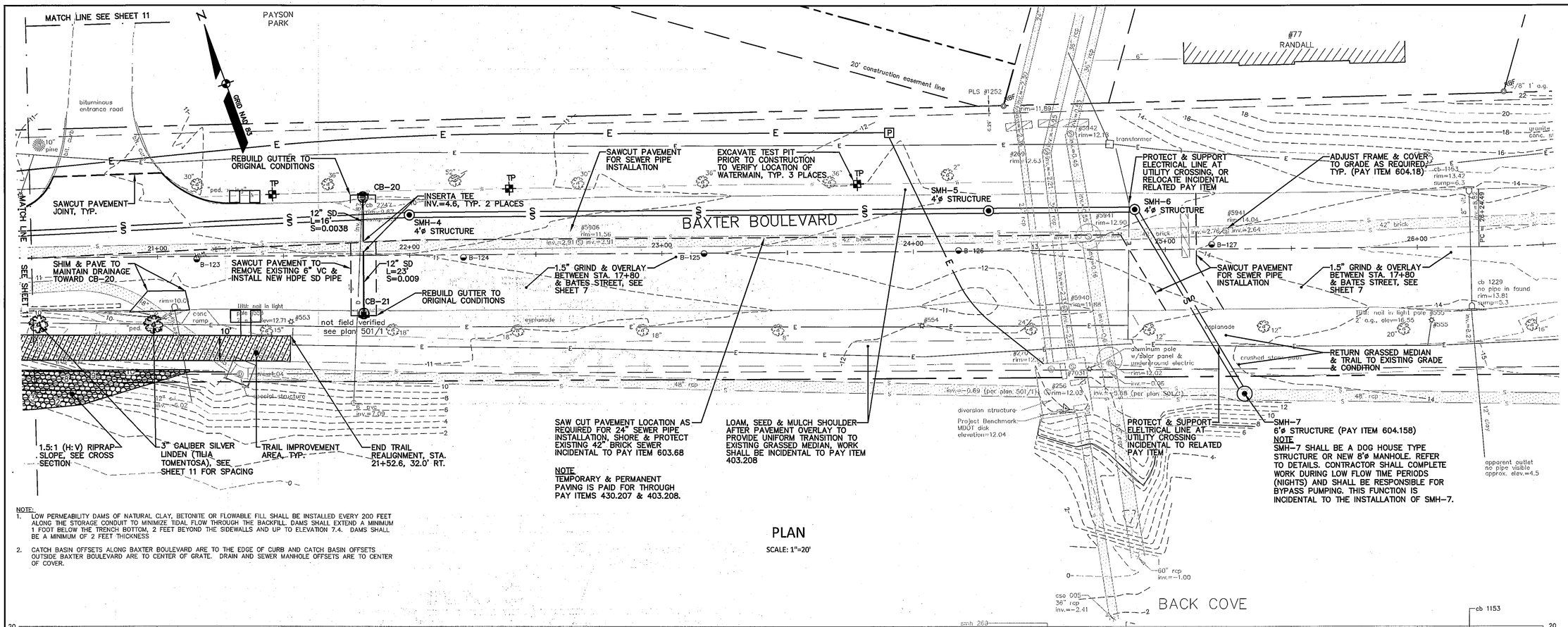
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE RESURGAM

STATE OF MAINE OWENS A. McCULLOUGH No. 7122 LICENSED PROFESSIONAL ENGINEER 12-7-12

SHEET # 11 OF 54

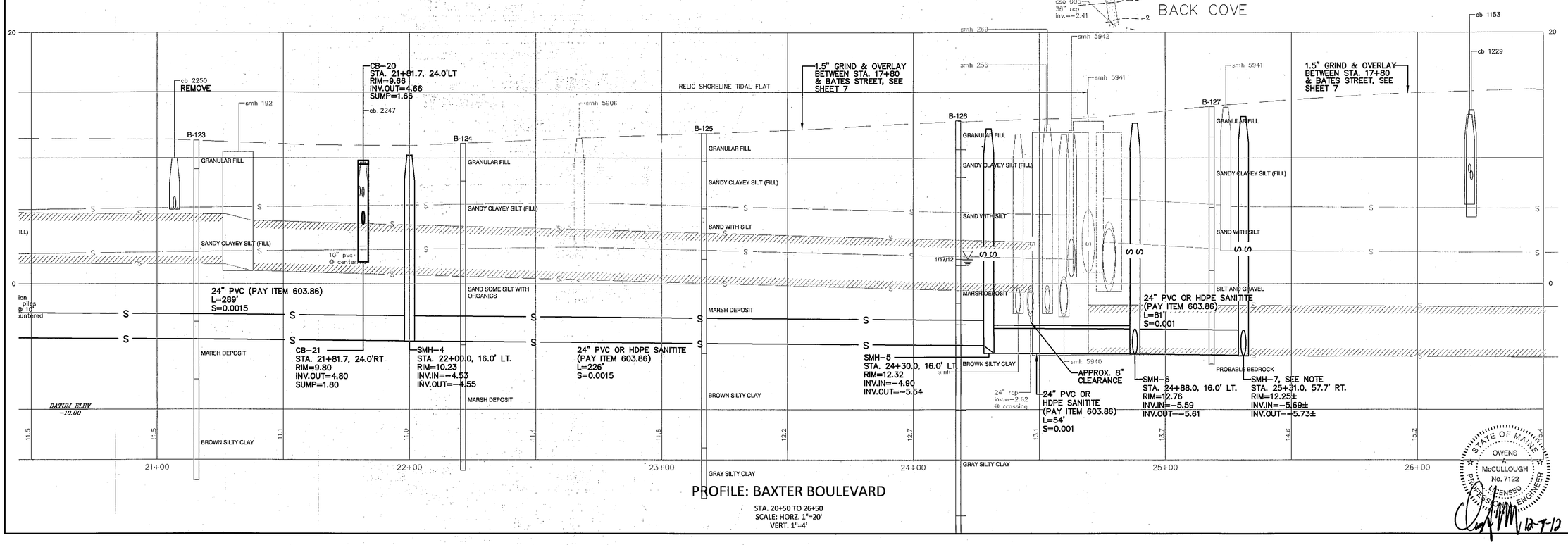
PLAN NUMBER



NOTE:
1. LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED EVERY 200 FEET ALONG THE STORAGE CONDUIT TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 2 FEET BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS
2. CATCH BASIN OFFSETS ALONG BAXTER BOULEVARD ARE TO THE EDGE OF CURB AND CATCH BASIN OFFSETS OUTSIDE BAXTER BOULEVARD ARE TO CENTER OF GRATE. DRAIN AND SEWER MANHOLE OFFSETS ARE TO CENTER OF COVER.

PLAN

SCALE: 1"=20'



PROFILE: BAXTER BOULEVARD

STA. 20+50 TO 26+50
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006PP1
FIELD BOOK USED: N/A

REFERENCES: 09006ppl.dwg, TAB: BAXTER 20+50-26+50

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY:	OAM/CAB
DRAWN BY:	OAM
CHECKED BY:	BRG/CAB
SCALE:	AS NOTED
DATE:	11-06-2012

STATE OF MAINE CRAIG A. BURGESS No. 12638 PROFESSIONAL ENGINEER 12-7-12

BAXTER BOULEVARD NORTH STORAGE CONDUIT

PLAN & PROFILE

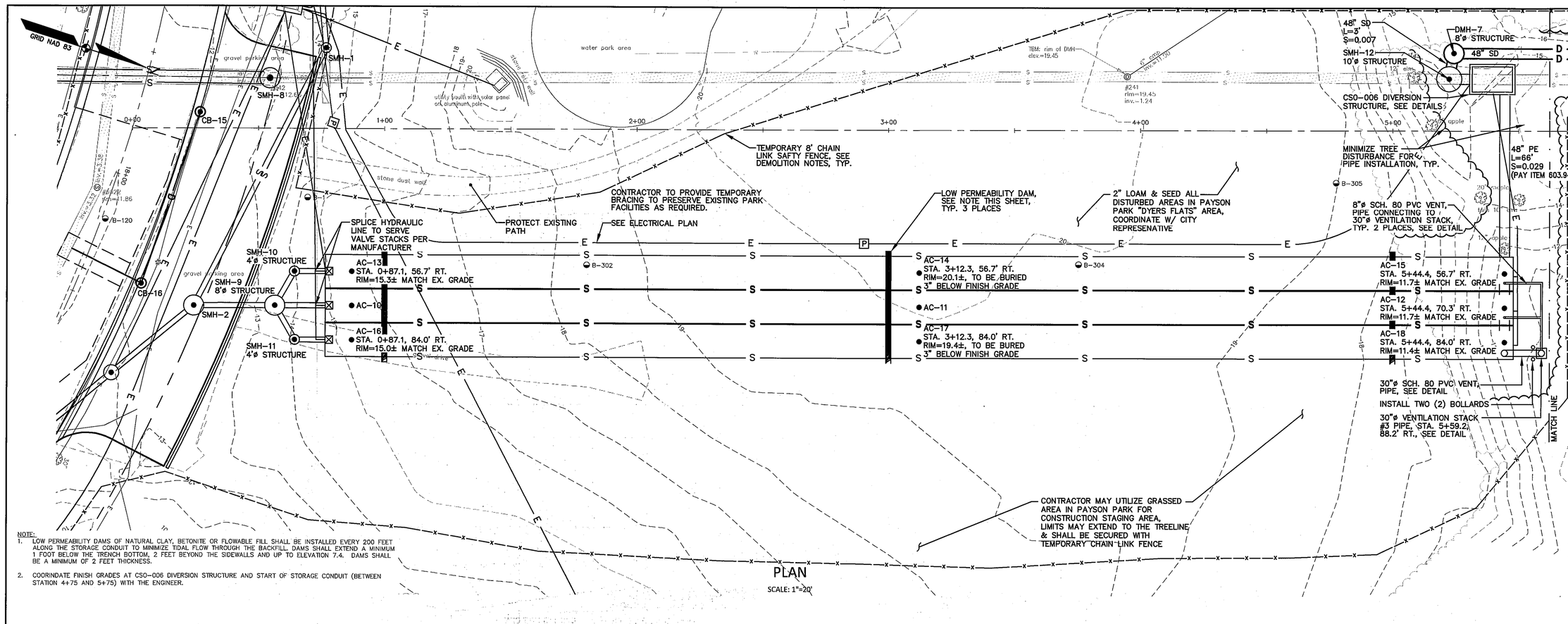
STATIONS 20+50 TO 26+50

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

RESURGAM CITY OF PORTLAND, MAINE

STATE OF MAINE OWENS A. McCULLOUGH No. 7122 LICENSED PROFESSIONAL ENGINEER 12-7-12

SHEET # 12 OF 54
PLAN NUMBER

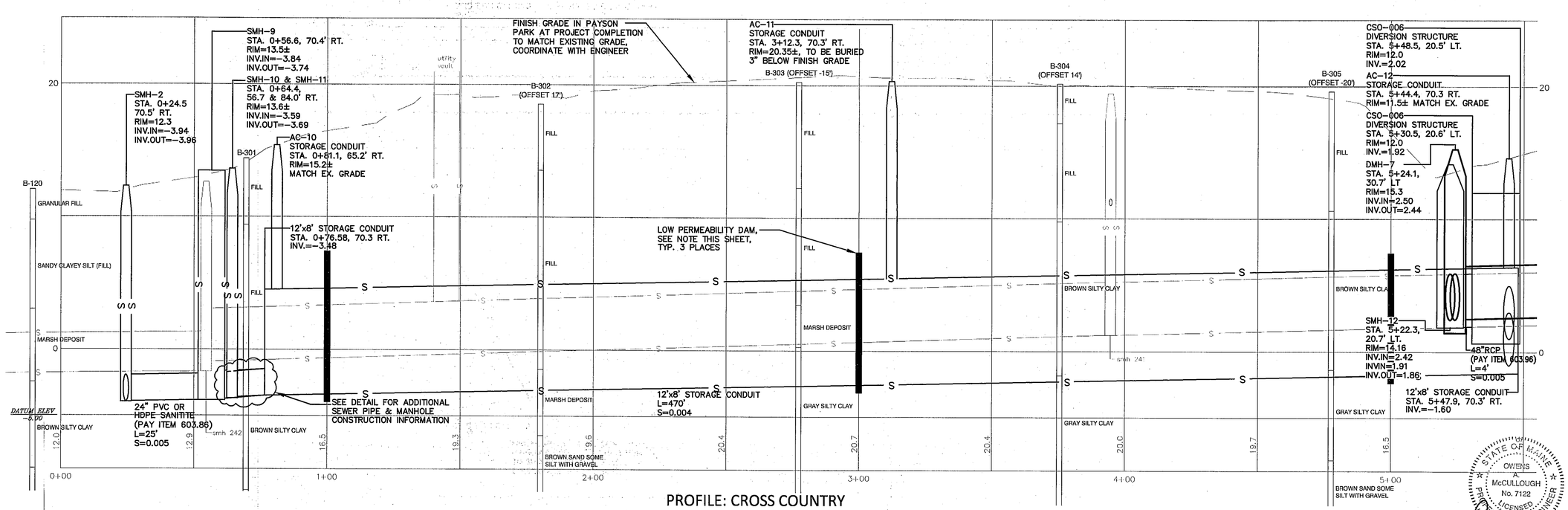


NOTE:

1. LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED EVERY 200 FEET ALONG THE STORAGE CONDUIT TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 2 FEET BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS.
2. COORINDATE FINISH GRADES AT CSO-006 DIVERSION STRUCTURE AND START OF STORAGE CONDUIT (BETWEEN STATION 4+75 AND 5+75) WITH THE ENGINEER.

PLAN

SCALE: 1"=20'



PROFILE: CROSS COUNTRY

STA. 0+00 TO 5+50
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006PP2
FIELD BOOK USED: N/A

REFERENCES: 09006pp2.dwg, TAB: X-CONTRY 0+00-5+50

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY:	OAM/CAB
DRAWN BY:	BRF/CAB
CHECKED BY:	
DATE:	
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE — CRAIG A. BURGESS No. 12638 — LICENSED PROFESSIONAL ENGINEER — 12-7-12

CROSS COUNTRY OFF BAXTER BOULEVARD

PLAN & PROFILE

STATIONS 0+00 TO 5+50

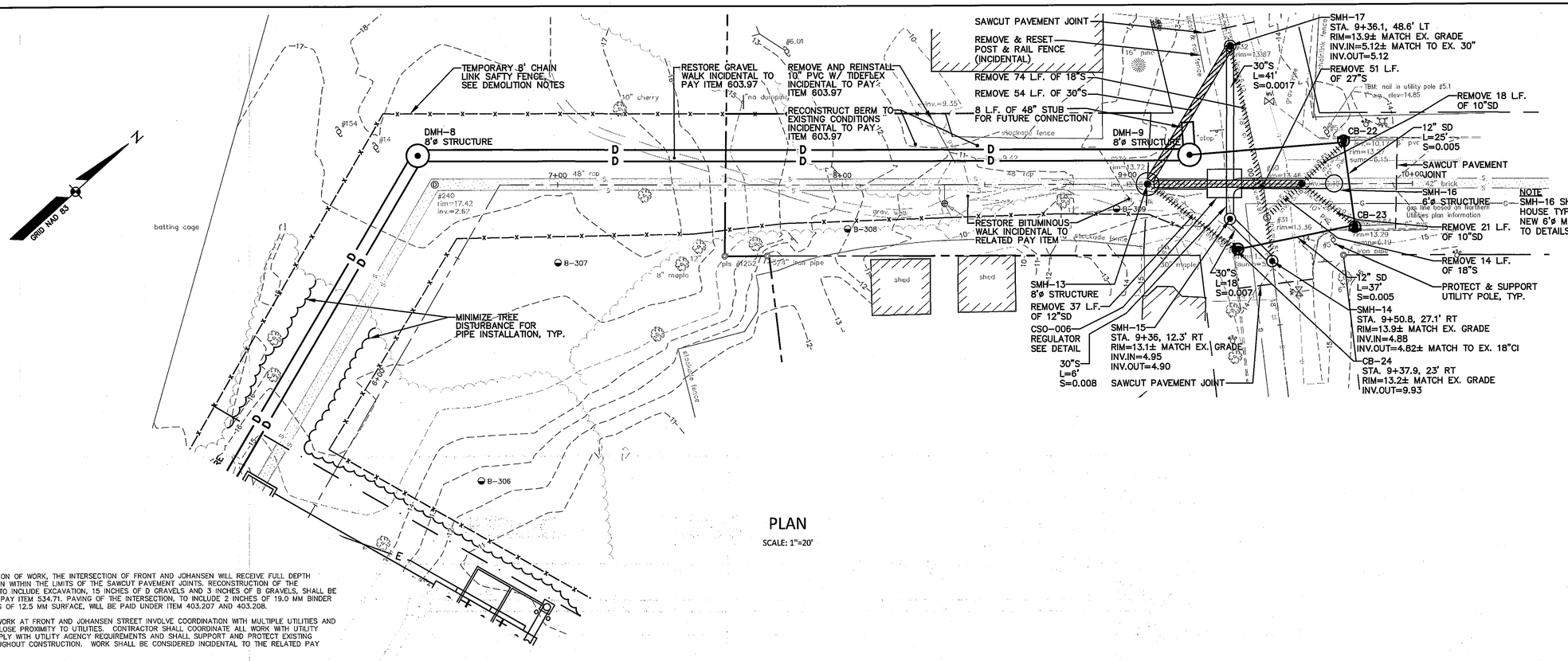
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

OTIO RESURGAM NE — OF PORTLAND MAINE

STATE OF MAINE — OWENS A. McCULLOUGH No. 7122 — LICENSED PROFESSIONAL ENGINEER — 12-7-12

SHEET # 13 OF 54

PLAN NUMBER

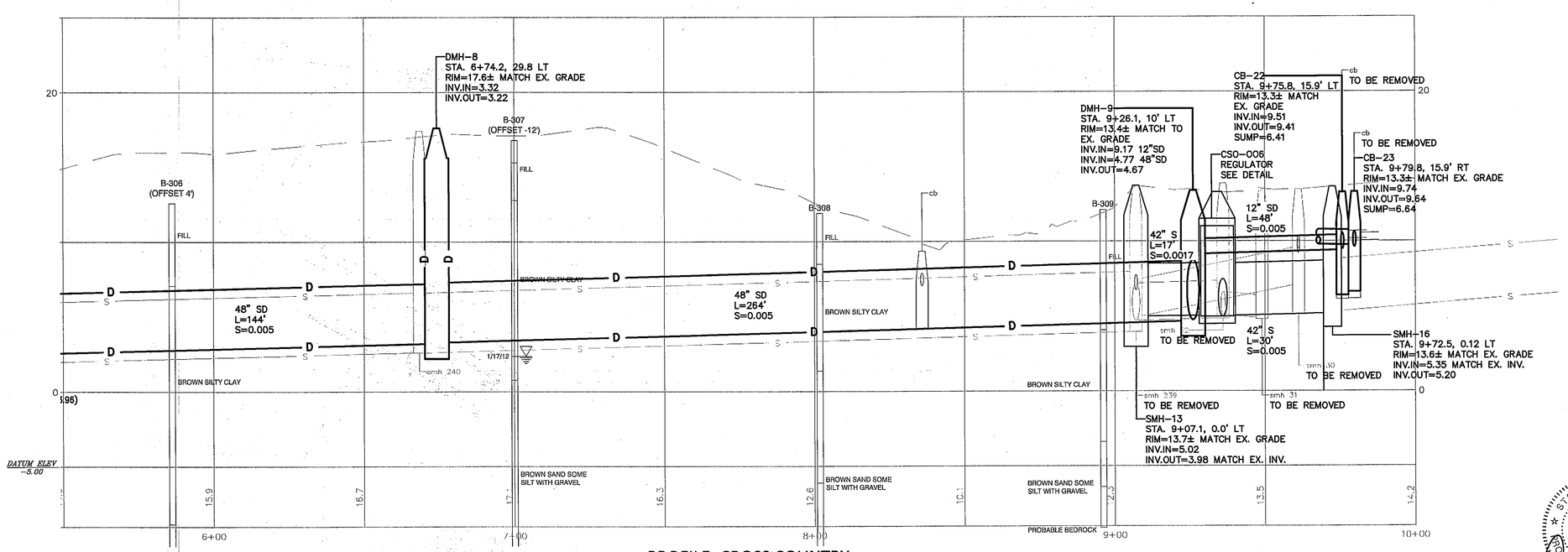


PLAN

SCALE: 1"=20'

NOTE:

1. UPON COMPLETION OF WORK, THE INTERSECTION OF FRONT AND JOHANSEN WILL RECEIVE FULL DEPTH RECONSTRUCTION WITHIN THE LIMITS OF THE SAWCUT PAVEMENT JOINTS. RECONSTRUCTION OF THE INTERSECTION, TO INCLUDE EXCAVATION, 15 INCHES OF D GRAVELS AND 3 INCHES OF B GRAVELS, SHALL BE INCIDENTAL TO PAY ITEM 534.71. PAVING OF THE INTERSECTION, TO INCLUDE 2 INCHES OF 19.0 MM BINDER AND 1.5 INCHES OF 12.5 MM SURFACE, WILL BE PAID UNDER ITEM 403.207 AND 403.208.
2. IMPROVEMENT WORK AT FRONT AND JOHANSEN 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.
3. PRIOR TO INTERSECTION IMPROVEMENTS, CONTRACTOR SHALL SUBMIT A WORK PLAN DETAILING CONSTRUCTION TIMING, BYPASS PUMPING, TRAFFIC CONTROL AND SEQUENCING/ TIMING OF WORK. CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE OF TRAFFIC THROUGH INTERSECTION AT ALL TIMES. WORK FOR IMPROVEMENTS SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEMS.



PROFILE: CROSS COUNTRY

STA. 0+00 TO 5+50
SCALE: HORZ. 1"=20'
VERT. 1"=4'

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006PP2
FIELD BOOK USED: N/A

REFERENCES: 09006pp2.dwg, TAB:X-CONTRY 5+50-10+00

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY:	DAM/CAB
DRAWN BY:	BRF/CAB
CHECKED BY:	CAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE CRAIG A. BURGESS No. 12638 LICENSED PROFESSIONAL ENGINEER 12-7-12

CROSS COUNTRY OFF BAXTER BOULEVARD

PLAN & PROFILE

STATIONS 5+50 TO 26+50

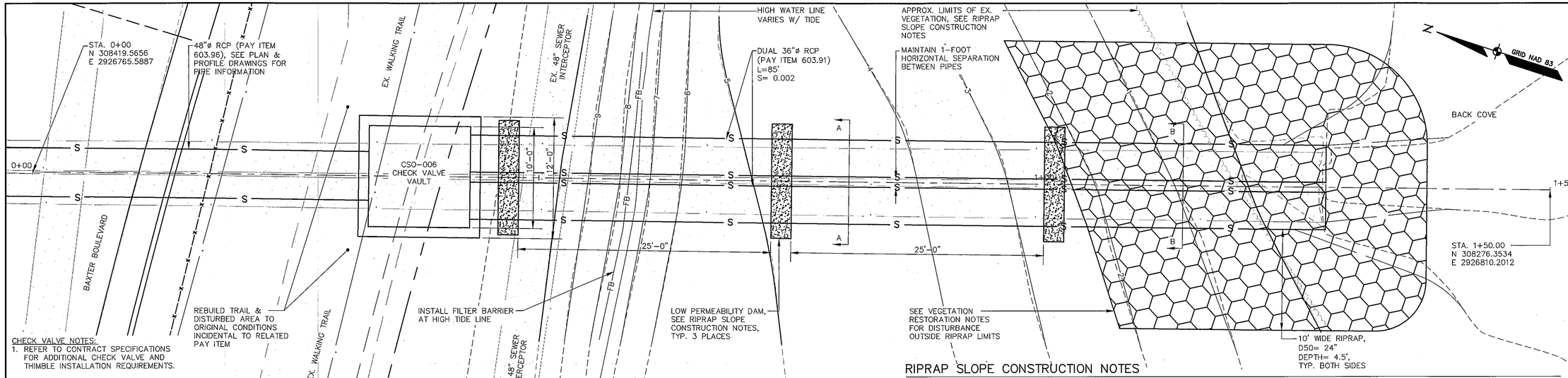
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE RESURGAM

STATE OF MAINE OWENS A. McCULLOUGH No. 7122 LICENSED PROFESSIONAL ENGINEER 12-7-12

SHEET # 14 OF 54

PLAN NUMBER

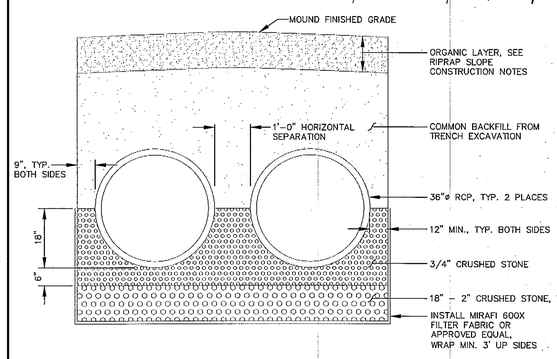


CHECK VALVE NOTES:

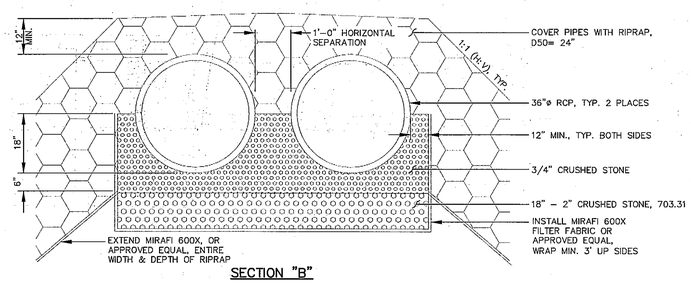
1. REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL CHECK VALVE AND THIMBLE INSTALLATION REQUIREMENTS.
2. ADDITIONAL TOP AND/OR BOTTOM SUPPORTS MAY BE REQUIRED TO SUPPORT WEIGHT OF CHECK VALVE, OR APPROVED EQUAL. COORDINATE INSTALLATION WITH MANUFACTURER.

PLAN

SCALE: 1"=5'



SECTION "A"



SECTION "B"

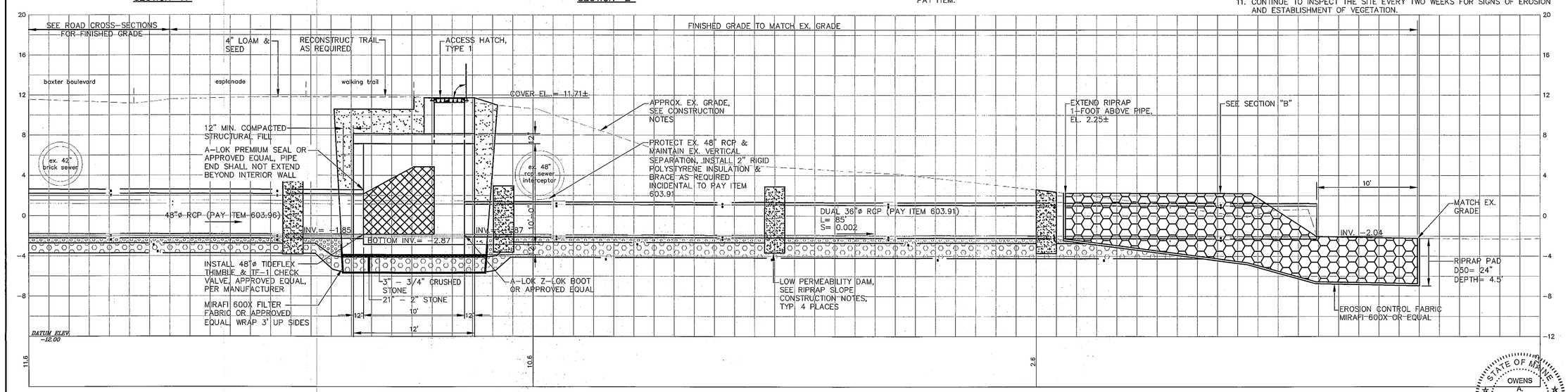
RIPRAP SLOPE CONSTRUCTION NOTES

PRE-CONSTRUCTION

1. MEET ON SITE WITH OWNER, SITE CONTRACTOR, AND THE DESIGN ENGINEER TO DISCUSS SCOPE OF WORK AND EXPECTATIONS. DETERMINE LIMITS OF TIDAL "SPARTINA" GRASS.
2. CONTRACTOR SHALL HAVE ALL MATERIALS APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.
3. SEE LAYOUT & DEMOLITION PLAN FOR LIMITS OF EXISTING PIPE REMOVAL.

CONSTRUCTION PHASE

1. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL BMP MANUAL, LATEST EDITION. SEE THE EROSION & SEDIMENT CONTROL NOTES AND PLAN FOR ADDITIONAL REQUIREMENTS. . PROTECT NEARBY TREES, WHICH ARE PROPOSED TO REMAIN. TO THE EXTENT PRACTICAL, PROTECT THE ROOT ZONE OF THESE TREES.
2. THE CONTRACTOR SHALL CONSIDER THE TIDE SCHEDULE CAREFULLY; AND SHALL SCHEDULE WORK TO AVOID INTERRUPTIONS OF DAYLIGHT WORKING HOURS WITH HIGH TIDES. WORKING WITHIN TIDAL WATERS IS NOT PERMITTED.
3. THE CONTRACTOR SHALL ONLY WORK IN AREAS THAT CAN BE COMPLETED DURING EACH CONSTRUCTION DAY. NO AREAS SHALL BE EXCAVATED BY THE CONTRACTOR AND LEFT EXPOSED, AS THESE AREAS WILL BE SUBJECT TO EROSION FROM TIDAL SURGES OR STORM EVENTS.
4. WITHIN VEGETATIVE AREA PROPOSED TO BE DISTURBED, CAREFULLY REMOVE THE TOP ORGANIC LAYER (12"±) BELOW ELEVATION DETERMINED AT PRECONSTRUCTION MEETING. REMOVE USING METHOD THAT WILL KEEP THE VEGETATION SYSTEM INTACT. STOCKPILE THE ORGANIC LAYER IN A MANNER SO THAT MATERIAL CAN BE REUSED. REMOVE ONLY ENOUGH VEGETATION NEEDED TO INSTALL THE TIDE GATE VAULT AND SEWER PIPE IN ACCORDANCE WITH THE CROSS-SECTION. ORGANIC LAYER REMOVAL, STORAGE AND PLACEMENT SHALL BE INCIDENTAL TO THE RELATED PIPE PAY ITEM.
5. PIPE INSTALLATION: LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED AS SHOWN TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 1 FOOT BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4 OR TOP OF FINISHED GRADE. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS. COSTS OF LOW PERMEABILITY DAMS SHALL BE INCIDENTAL TO THE CONTRACT.
6. INSTALL RIPRAP SLOPE IN ACCORDANCE WITH THE DETAILS. ONCE THE CHECK VALVE VAULT, SEWER PIPE, STORAGE CONDUIT AND RIPRAP SLOPE ARE COMPLETELY INSTALLED, THE CONTRACTOR SHALL GRADE THE DISTURBED AREAS UNIFORMLY TO MATCH EXISTING TOPOGRAPHY (U.N.O.) AND THE NEW RIPRAP EDGE.
7. PLACE EXISTING ORGANIC MATERIAL IN DISTURBED VEGETATIVE AREAS BELOW ELEVATION 10, WORKING FROM THE OUTFALL TO THE VAULT. DISTURBED VEGETATIVE AREAS ABOVE ELEVATION 10 SHALL HAVE LOAM AND SEED. ORGANIC LAYER REMOVAL, STORAGE AND PLACEMENT SHALL BE INCIDENTAL TO THE RELATED PIPE PAY ITEM.
8. INSPECT THE SITE EVERY TWO WEEKS FOR SIGNS OF EROSION AND ESTABLISHMENT OF VEGETATION. REPAIR ERODED AREAS AND REPLANT VEGETATION TO ESTABLISH 75% VEGETATION CATCH, AS REQUIRED.
9. IN AREAS REQUIRING REPLANTING, INSTALL NORTH AMERICAN GREEN C125BN EROSION CONTROL FABRIC OR APPROVED EQUAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (PAY ITEM 613.319).
10. USING RAZOR BLADE, CAREFULLY CUT HOLES 1 FOOT O.C. AND IN ROWS SPACED 1 FOOT APART. LOOSELY OFFSET HOLES BETWEEN ROWS FOR APPROXIMATELY 6–8 HOLES PER SQUARE YARD. PLANT CORD GRASS SPARTINA PATENS (SALT MEADOW GRASS) AND SPARTINA ALTERNIFLORA (SMOOTH CORDGRASS) PLUGS IN ALTERNATING FASHION. COSTS ASSOCIATED WITH CUTTING FABRIC AND PLANTING GRASS PLUGS WILL BE PAID THROUGH THE BID ITEM 615.072.
11. CONTINUE TO INSPECT THE SITE EVERY TWO WEEKS FOR SIGNS OF EROSION AND ESTABLISHMENT OF VEGETATION.



SECTION: CSO-006 CHECK VALVE VAULT

SCALE: HORZ. 1"=5'
VERT. 1"=5'

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 09006XS1
FIELD BOOK USED: N/A

REFERENCES: 09006xs1.dwg, TAB:xsec 9.

DESIGNED BY: CAM/CAB	
DRAWN BY: BEF/CAB	
CHECKED BY: CAM	
SCALE: AS NOTED	
DATE: 11-16-2012	

STATE OF MAINE CRAIG A. BURGESS No. 12838 LICENSED PROFESSIONAL ENGINEER

BAXTER BOULEVARD NORTH STORAGE CONDUIT
CROSS SECTIONS

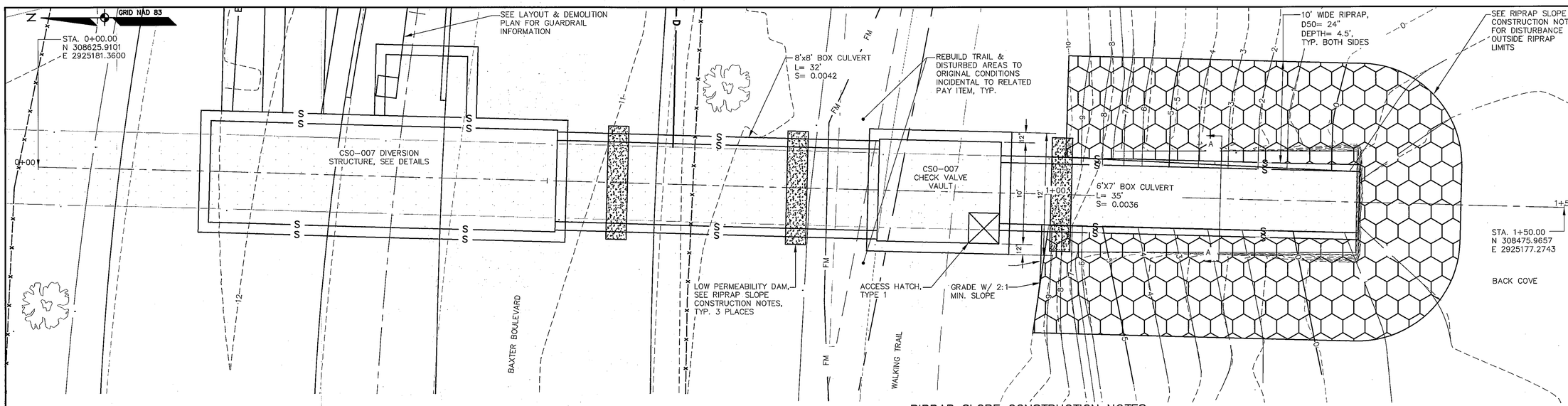
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE RESURGAM

STATE OF MAINE OWENS A. McCULLOUGH No. 7122 PROFESSIONAL ENGINEER

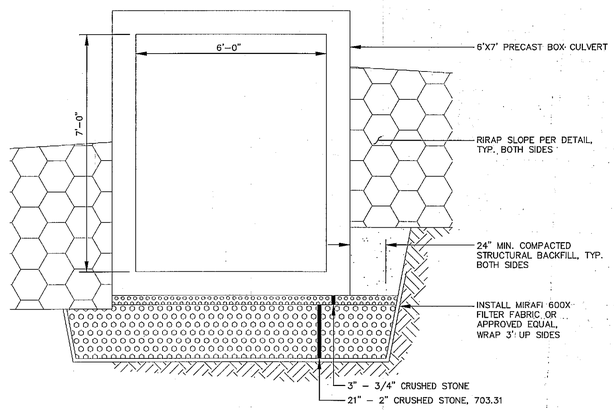
SHEET # 23 OF 54

PLAN NUMBER



PLAN

SCALE: 1"=5'



SECTION "A"

CHECK VALVE INSTALLATION NOTES:

1. REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL CHECK VALVE AND THIMBLE INSTALLATION REQUIREMENTS.
2. ADDITIONAL TOP AND/OR BOTTOM SUPPORTS MAY BE REQUIRED TO SUPPORT WEIGHT OF CHECK VALVE, OR APPROVED EQUAL. COORDINATE INSTALLATION WITH MANUFACTURER.

CHECK VALVE VAULT NOTES:

1. EXTEND 8'x8' BOX CULVERT END SECTION THROUGH CHECK VALVE VAULT STRUCTURE AND PROVIDE GROUTED WATERTIGHT CONNECTION. STORAGE CONDUIT END SECTION SHALL HAVE 84"ø DIAMETER HOLE WITH EQUAL INVERT FOR CHECK VALVE CONNECTION.
2. PLACE 24" MINIMUM COMPACTED STRUCTURAL BACKFILL ON ALL SIDES OF VAULT.
3. MAINTAIN MINIMUM 6" VERTICAL CLEARANCE BETWEEN TOP OF 8'X8' BOX CULVERT AND BOTTOM OF 12" D.I. FORCEMAIN. SEE SHEET 8 FOR FORCEMAIN REALIGNMENT INFORMATION AND DETAIL.

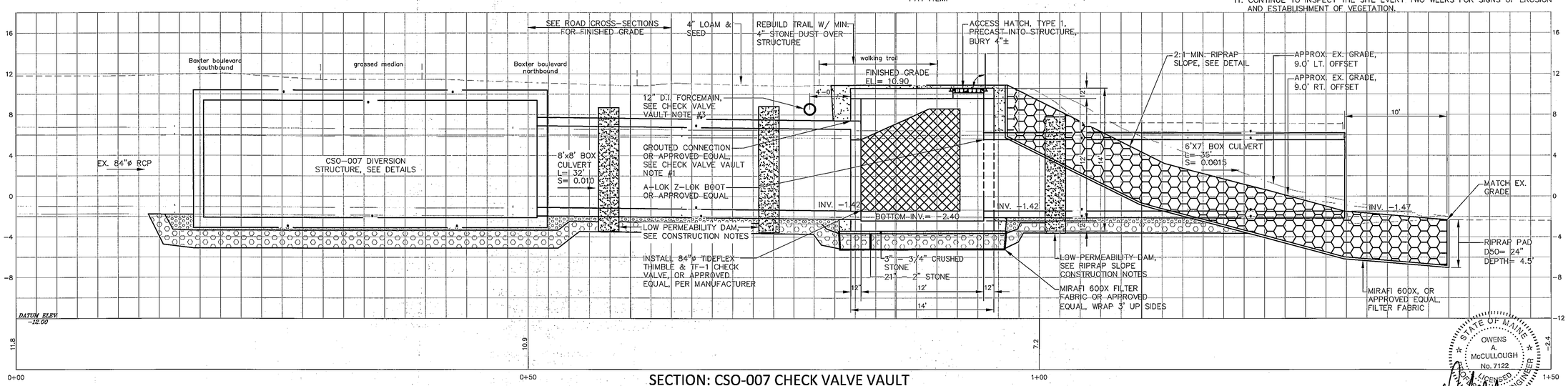
RIPRAP SLOPE CONSTRUCTION NOTES

PRE-CONSTRUCTION

1. MEET ON SITE WITH OWNER, SITE CONTRACTOR, AND THE DESIGN ENGINEER TO DISCUSS SCOPE OF WORK AND EXPECTATIONS. DETERMINE LIMITS OF TIDAL "SPARTINA" GRASS.
2. CONTRACTOR SHALL HAVE ALL MATERIALS APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.
3. SEE LAYOUT & DEMOLITION PLAN FOR LIMITS OF EXISTING PIPE REMOVAL.

CONSTRUCTION PHASE

1. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL BMP MANUAL, LATEST EDITION. SEE THE EROSION & SEDIMENT CONTROL NOTES AND PLAN FOR ADDITIONAL REQUIREMENTS. PROTECT NEARBY TREES, WHICH ARE PROPOSED TO REMAIN. TO THE EXTENT PRACTICAL, PROTECT THE ROOT ZONE OF THESE TREES.
2. THE CONTRACTOR SHALL CONSIDER THE TIDE SCHEDULE CAREFULLY; AND SHALL SCHEDULE WORK TO AVOID INTERRUPTIONS OF DAYLIGHT WORKING HOURS WITH HIGH TIDES. WORKING WITHIN TIDAL WATERS IS NOT PERMITTED.
3. THE CONTRACTOR SHALL ONLY WORK IN AREAS THAT CAN BE COMPLETED DURING EACH CONSTRUCTION DAY. NO AREAS SHALL BE EXCAVATED BY THE CONTRACTOR AND LEFT EXPOSED, AS THESE AREAS WILL BE SUBJECT TO EROSION FROM TIDAL SURGES OR STORM EVENTS.
4. WITHIN VEGETATIVE AREA PROPOSED TO BE DISTURBED, CAREFULLY REMOVE THE TOP ORGANIC LAYER (12"±) BELOW ELEVATION DETERMINED AT PRECONSTRUCTION MEETING. REMOVE USING METHOD THAT WILL KEEP THE VEGETATION SYSTEM INTACT. STOCKPILE THE ORGANIC LAYER IN A MANNER SO THAT MATERIAL CAN BE REUSED. REMOVE ONLY ENOUGH VEGETATION NEEDED TO INSTALL THE TIDE GATE VAULT AND SEWER PIPE IN ACCORDANCE WITH THE CROSS-SECTION. ORGANIC LAYER REMOVAL, STORAGE AND PLACEMENT SHALL BE INCIDENTAL TO THE RELATED PIPE PAY ITEM.
5. PIPE INSTALLATION: LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED AS SHOWN TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 1 FOOT BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4 OR TOP OF FINISHED GRADE. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS. COSTS OF LOW PERMEABILITY DAMS SHALL BE INCIDENTAL TO THE CONTRACT.
6. INSTALL RIPRAP SLOPE IN ACCORDANCE WITH THE DETAILS. ONCE THE CHECK VALVE VAULT, SEWER PIPE, BOX CULVERT AND RIPRAP SLOPE ARE COMPLETELY INSTALLED, THE CONTRACTOR SHALL GRADE THE DISTURBED AREAS UNIFORMLY TO MATCH EXISTING TOPOGRAPHY (U.N.O.) AND THE NEW RIPRAP EDGE.
7. PLACE EXISTING ORGANIC MATERIAL IN DISTURBED VEGETATIVE AREAS BELOW ELEVATION 10, WORKING FROM THE OUTFALL TO THE VAULT. DISTURBED VEGETATIVE AREAS ABOVE ELEVATION 10 SHALL HAVE LOAM AND SEED. ORGANIC LAYER REMOVAL, STORAGE AND PLACEMENT SHALL BE INCIDENTAL TO THE RELATED PIPE PAY ITEM.
8. INSPECT THE SITE EVERY TWO WEEKS FOR SIGNS OF EROSION AND ESTABLISHMENT OF VEGETATION. REPAIR ERODED AREAS AND REPLANT VEGETATION TO ESTABLISH 75% VEGETATION CATCH, AS REQUIRED.
9. IN AREAS REQUIRING REPLANTING, INSTALL NORTH AMERICAN GREEN C125BN EROSION CONTROL FABRIC OR APPROVED EQUAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (PAY ITEM 613.319).
10. USING RAZOR BLADE, CAREFULLY CUT HOLES 1 FOOT O.C. AND IN ROWS SPACED 1 FOOT APART. LOOSELY OFFSET HOLES BETWEEN ROWS FOR APPROXIMATELY 6-8 HOLES PER SQUARE YARD. PLANT CORD GRASS SPARTINA PATENS (SALT MEADOW GRASS) AND SPARTINA ALTERNIFLORA (SMOOTH CORDGRASS) PLUGS IN ALTERNATING FASHION. COSTS ASSOCIATED WITH CUTTING FABRIC AND PLANTING GRASS PLUGS WILL BE PAID THROUGH THE BID ITEM 615.072.
11. CONTINUE TO INSPECT THE SITE EVERY TWO WEEKS FOR SIGNS OF EROSION AND ESTABLISHMENT OF VEGETATION.



SECTION: CSO-007 CHECK VALVE VAULT

SCALE: HORZ. 1"=5'
VERT. 1"=5'

LDD PROJECT NAME: BAXTER BOULEVARD, NORTH STORAGE CONDUIT
DRAWING NAME: 09006XS1
FIELD BOOK USED: N/A

REFERENCES: 09006xs1.dwg, TAB: xsec 10

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY: CAM/CAB
DRAWN BY: BRF/CAB
CHECKED BY: CAM
SCALE: AS NOTED
DATE: 11-16-2012

STATE OF MAINE CRAIG A. BURGESS No. 12638 LICENSED PROFESSIONAL ENGINEER 12-7-12

BAXTER BOULEVARD NORTH STORAGE CONDUIT

CROSS SECTIONS

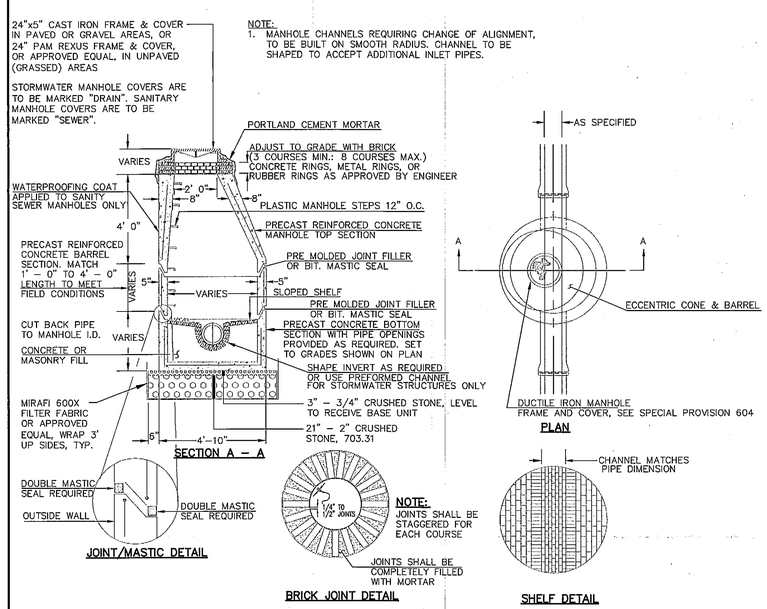
CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE RESURGAM

STATE OF MAINE OWENS A. McCULLOUGH No. 7122 LICENSED PROFESSIONAL ENGINEER 12-7-12

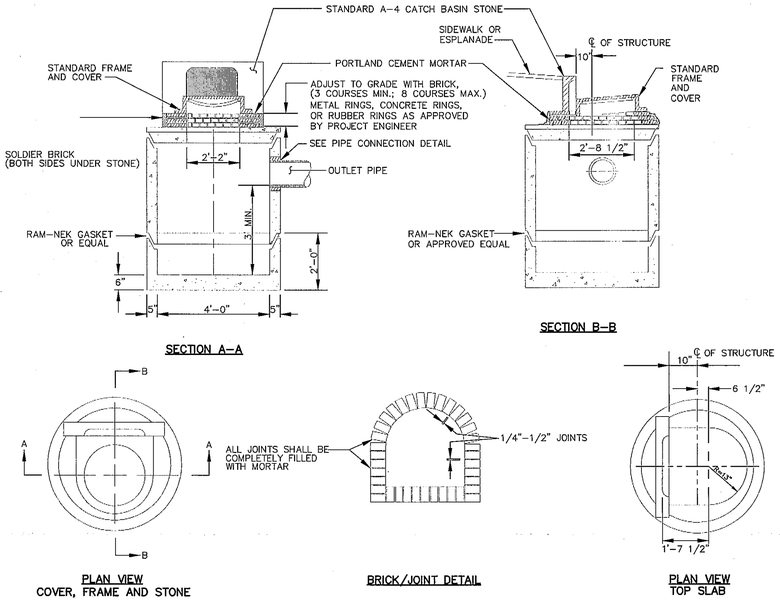
SHEET # 24 OF 54

PLAN NUMBER

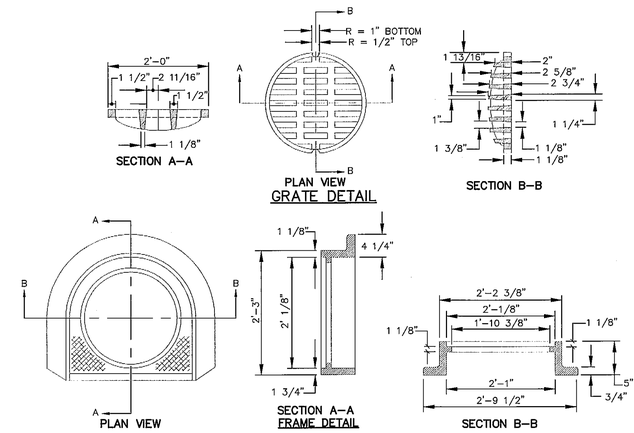


NOTE:
1. MANHOLE CHANNELS REQUIRING CHANGE OF ALIGNMENT, TO BE BUILT ON SMOOTH RADIUS. CHANNEL TO BE SHAPED TO ACCEPT ADDITIONAL INLET PIPES.

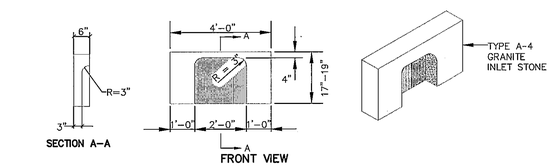
PRECAST CONCRETE MANHOLE TYPE "A"
NOT TO SCALE



PRECAST CONCRETE CATCH BASIN – TYPE E
NOT TO SCALE



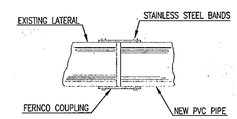
CATCH BASIN TYPE "D" – FRAME & COVER DETAIL
NOT TO SCALE



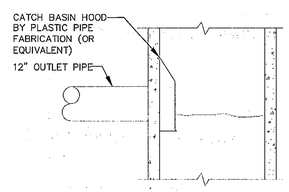
TYPE A-4 GRANITE CATCH BASIN INLET STONE DETAIL
NOT TO SCALE

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.

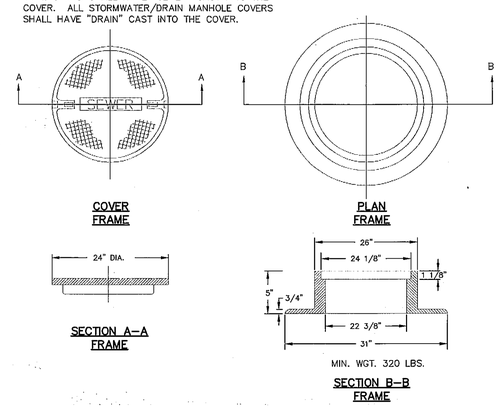


FERNCO COUPLING FOR REPAIR OR REPLACEMENT
NOT TO SCALE

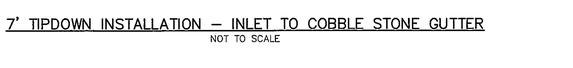


PPF CATCH BASIN HOOD
NOT TO SCALE

NOTE:
1. 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.

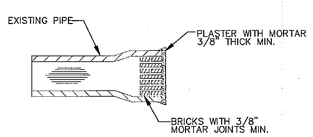


CAST IRON MANHOLE FRAME AND COVER
NOT TO SCALE

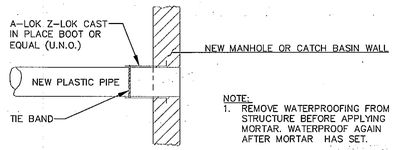


7' TIPDOWN INSTALLATION – INLET TO COBBLE STONE GUTTER
NOT TO SCALE

NOTE:
1. USE CAP OR PLUG FOR PVC PIPE

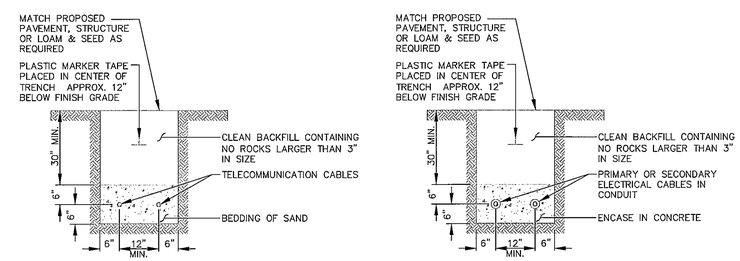


MASONRY PLUG DETAIL
NOT TO SCALE



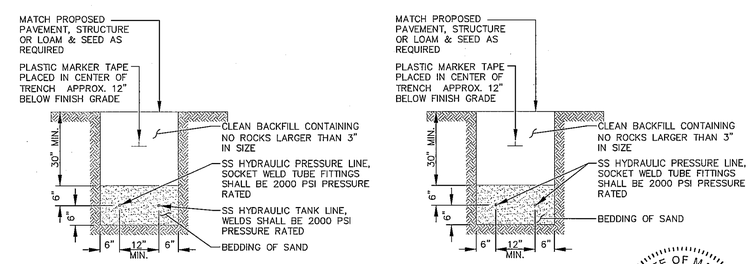
NOTE:
1. REMOVE WATERPROOFING FROM STRUCTURE BEFORE APPLYING MORTAR. WATERPROOF AGAIN AFTER MORTAR HAS SET.

PIPE CONNECTION DETAIL
NOT TO SCALE



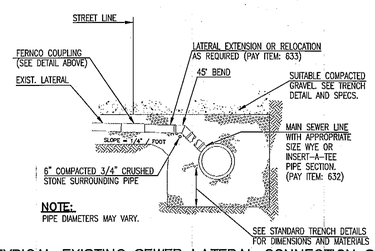
TYPICAL UNDERGROUND CABLE INSTALLATION
NOT TO SCALE

TYPICAL UNDERGROUND ELECTRIC INSTALLATION
NOT TO SCALE



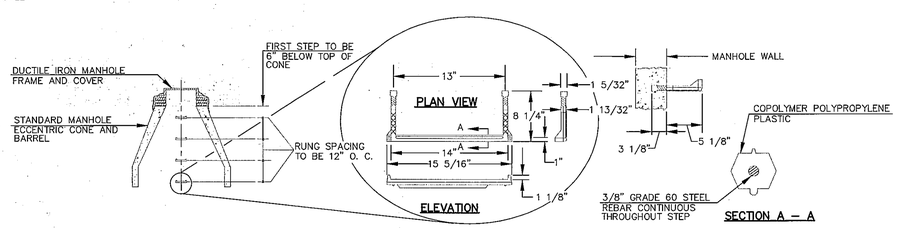
NOTE:
1. COORDINATE HYDRAULIC LINE SIZE WITH MANUFACTURER.

TYPICAL HYDRAULIC LINE INSTALLATION
NOT TO SCALE



NOTE:
PIPE DIAMETERS MAY VARY.

TYPICAL EXISTING SEWER LATERAL CONNECTION SECTION
NOT TO SCALE



PLASTIC MANHOLE STEPS
NOT TO SCALE

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 0900GD
FIELD BOOK USED: N/A

REFERENCES: 0900GD.dwg, TAB:DETAIL1

DESIGNED BY:	OAM/CAB
DRAWN BY:	CAB
CHECKED BY:	OAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE — CRAIG A. BURGESS No. 12638 — LICENSED PROFESSIONAL ENGINEER

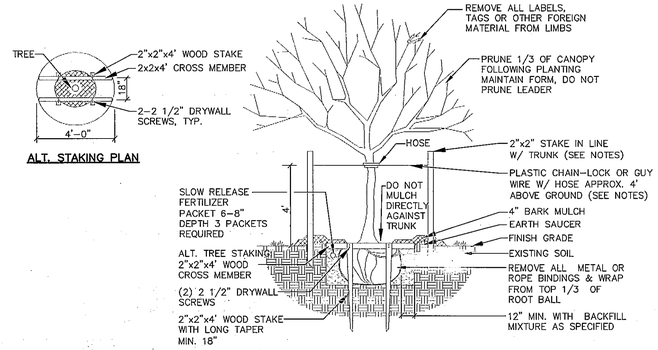
BAXTER BOULEVARD NORTH STORAGE CONDUIT
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

STATE OF MAINE — OWENS A. McCULLOUGH No. 7122 — LICENSED PROFESSIONAL ENGINEER

SHEET # 25 OF 54

PLAN NUMBER



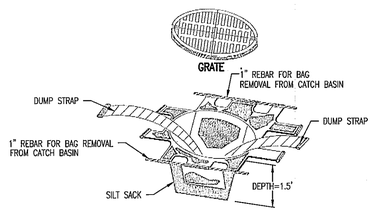
ALT. STAKING PLAN

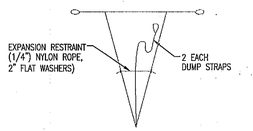
NOTES:
INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY:

1. THE TREE IS OF SUBSTANTIAL SIZE.
2. THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
3. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
4. IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.
5. TREE PLANTING AND ASSOCIATED WORK SHALL BE INCIDENTAL TO 230.40.

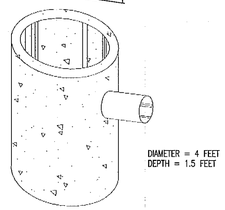
3" CALIBER SILVER LINDEN TREE (TILIA TOMENTOSA)

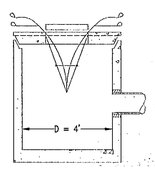
NOT TO SCALE





BAG DETAIL





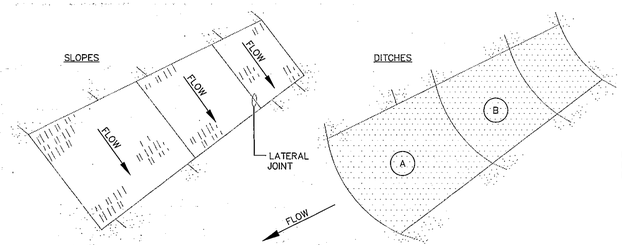
INSTALLATION DETAIL

NOTES:

1. 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.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND MAINTAINING THIS SEDIMENT CONTROL DEVICE. THE SACK IS CONSIDERED FULL AND READY TO EMPTY WHEN THE THE "RESTRAINT CORD" IS NO LONGER VISIBLE.
3. THE "SILT SACK" IS REMOVED BY PLACING TWO (2) PIECES IF 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.
4. 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.
5. 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

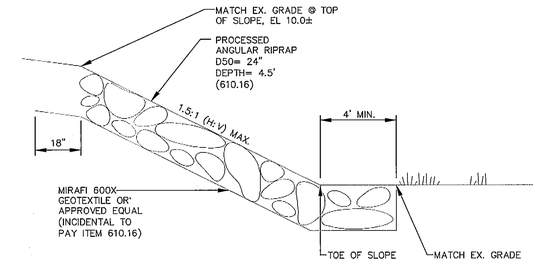


NOTES:

1. 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.
2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND STAPLED. OVERLAP B OVER A.
3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.
4. STAPLE OUTSIDE LATERAL EDGE 2' ON CENTER.
5. WIRE STAPLES TO BE MIN. OF # 11 WIRE 6" LONG AND 1-1/2" WIDE.
6. USE NORTH AMERICAN GREEN 125BN OR APPROVED EQUAL.
7. 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

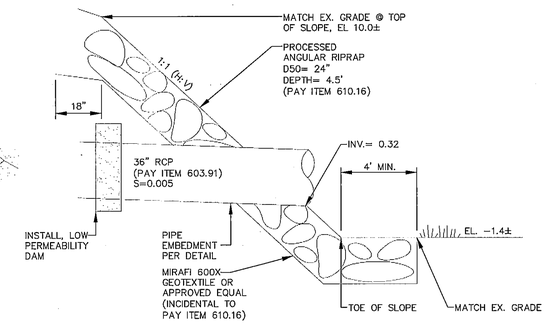


NOTES:

1. UNLESS NOTED OTHERWISE, RIPRAP SLOPE SHALL MATCH EXISTING GRADE, UNLESS SLOPE IS STEEPER THAN 1.5:1 (H:V).
2. INSTALL GEOTEXTILE FABRIC PER MANUFACTURER'S RECOMMENDATIONS.
3. RIPRAP AND ASSOCIATED WORK REQUIRED FOR PEDESTRIAN TRAIL IMPROVEMENTS SHALL BE CONSIDERED INCIDENTAL TO PAY ITEM 203.40.

TYPICAL RIPRAP SLOPE

NOT TO SCALE



36" OUTFALL, STA. 4+61, 65' RT.

NOT TO SCALE

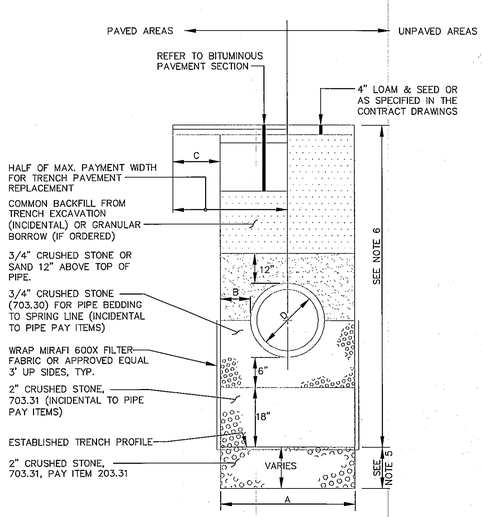
RIPRAP SLOPE CONSTRUCTION NOTES

PRE-CONSTRUCTION

1. MEET ON SITE WITH OWNER, SITE CONTRACTOR, AND THE DESIGN ENGINEER TO DISCUSS SCOPE OF WORK AND EXPECTATIONS. DETERMINE LIMITS OF TIDAL "SPARTINA" GRASS.
2. CONTRACTOR SHALL HAVE ALL MATERIALS APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.
3. SEE LAYOUT & DEMOLITION PLAN FOR LIMITS OF EXISTING PIPE REMOVAL.

CONSTRUCTION PHASE

1. STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL BMP MANUAL, LATEST EDITION. SEE THE EROSION & SEDIMENT CONTROL NOTES AND PLAN FOR ADDITIONAL REQUIREMENTS. . PROTECT NEARBY TREES, WHICH ARE PROPOSED TO REMAIN. TO THE EXTENT PRACTICAL, PROTECT THE ROOT ZONE OF THESE TREES.
2. THE CONTRACTOR SHALL CONSIDER THE TIDE SCHEDULE CAREFULLY; AND SHALL SCHEDULE WORK TO AVOID INTERRUPTIONS OF DAYLIGHT WORKING HOURS WITH HIGH TIDES. WORKING WITHIN TIDAL WATERS IS NOT PERMITTED.
3. THE CONTRACTOR SHALL ONLY WORK IN AREAS THAT CAN BE COMPLETED DURING EACH CONSTRUCTION DAY. NO AREAS SHALL BE EXCAVATED BY THE CONTRACTOR AND LEFT EXPOSED, AS THESE AREAS WILL BE SUBJECT TO EROSION FROM TIDAL SURGES OR STORM EVENTS.
4. WITHIN VEGETATIVE AREA PROPOSED TO BE DISTURBED, CAREFULLY REMOVE THE TOP ORGANIC LAYER (12"±) BELOW ELEVATION DETERMINED AT PRECONSTRUCTION MEETING. REMOVE USING METHOD THAT WILL KEEP THE VEGETATION SYSTEM INTACT. STOCKPILE THE ORGANIC LAYER IN A MANNER SO THAT MATERIAL CAN BE REUSED. REMOVE ONLY ENOUGH VEGETATION NEEDED TO INSTALL THE TIDE GATE VAULT AND SEWER PIPE IN ACCORDANCE WITH THE CROSS-SECTION. ORGANIC LAYER REMOVAL, STORAGE AND PLACEMENT SHALL BE INCIDENTAL TO THE RELATED PIPE PAY ITEM.
5. PIPE INSTALLATION: LOW PERMEABILITY DAMS OF NATURAL CLAY, BETONITE OR FLOWABLE FILL SHALL BE INSTALLED AS SHOWN TO MINIMIZE TIDAL FLOW THROUGH THE BACKFILL. DAMS SHALL EXTEND A MINIMUM 1 FOOT BELOW THE TRENCH BOTTOM, 1 FOOT BEYOND THE SIDEWALLS AND UP TO ELEVATION 7.4 OR TOP OF FINISHED GRADE. DAMS SHALL BE A MINIMUM OF 2 FEET THICKNESS. COSTS OF LOW PERMEABILITY DAMS SHALL BE INCIDENTAL TO THE CONTRACT.
6. INSTALL RIPRAP SLOPE IN ACCORDANCE WITH THE DETAILS. ONCE THE CHECK VALVE VAULT, SEWER PIPE, BOX CULVERT AND RIPRAP SLOPE ARE COMPLETELY INSTALLED, THE CONTRACTOR SHALL GRADE THE DISTURBED AREAS UNIFORMLY TO MATCH EXISTING TOPOGRAPHY (U.N.O.) AND THE NEW RIPRAP EDGE.
7. PLACE EXISTING ORGANIC MATERIAL IN DISTURBED VEGETATIVE AREAS BELOW ELEVATION 10, WORKING FROM THE OUTFALL TO THE VAULT. DISTURBED VEGETATIVE AREAS ABOVE ELEVATION 10 SHALL HAVE LOAM AND SEED. ORGANIC LAYER REMOVAL, STORAGE AND PLACEMENT SHALL BE INCIDENTAL TO THE RELATED PIPE PAY ITEM.
8. INSPECT THE SITE EVERY TWO WEEKS FOR SIGNS OF EROSION AND ESTABLISHMENT OF VEGETATION. REPAIR ERODED AREAS AND REPLANT VEGETATION TO ESTABLISH 75% VEGETATION CATCH, AS REQUIRED.
9. IN AREAS REQUIRING REPLANTING, INSTALL NORTH AMERICAN GREEN C125BN EROSION CONTROL FABRIC OR APPROVED EQUAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS (PAY ITEM 613.319).
10. USING RAZOR BLADE, CAREFULLY CUT HOLES 1 FOOT O.C. AND IN ROWS SPACED 1 FOOT APART. LOOSELY OFFSET HOLES BETWEEN ROWS FOR APPROXIMATELY 6-8 HOLES PER SQUARE YARD. PLANT CORD GRASS SPARTINA PATENS (SALT MEADOW GRASS) AND SPARTINA ALTERNIFLORA (SMOOTH CORDGRASS) PLUGS IN ALTERNATING FASHION. COSTS ASSOCIATED WITH CUTTING FABRIC AND PLANTING GRASS PLUGS WILL BE PAID THROUGH BID ITEM 615.072.
11. CONTINUE TO INSPECT THE SITE EVERY TWO WEEKS FOR SIGNS OF EROSION AND ESTABLISHMENT OF VEGETATION.



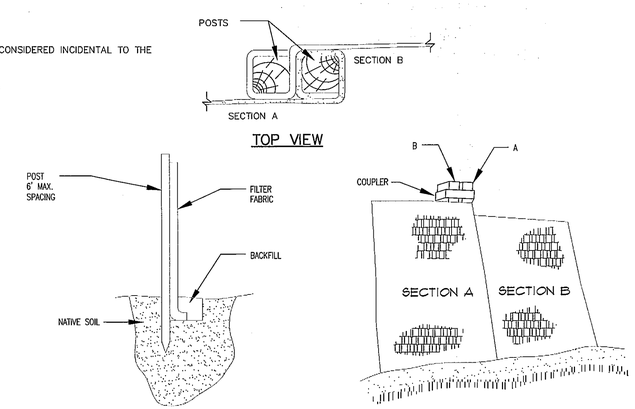
NOTES:

1. ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
2. IN PAVED AREAS REFER TO BITUMINOUS PAVEMENT SECTION FOR DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT BASED ON THE CORRESPONDING STREET CLASSIFICATION.
3. DIMENSION "B" SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE; BUT IN ALL CASES "B" SHALL BE AT LEAST 9".
4. DIMENSION "A" IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION "A" SHALL BE BASED ON PIPE DIAMETER "D", AS SET FORTH IN THE FOLLOWING TABLE.
5. EXCAVATION BELOW ESTABLISHED TRENCH PROFILE (IF ORDERED). PAY ITEM 206.061.
6. EXCAVATION INCIDENTAL TO PIPE PAY ITEMS (PAVED AND SEEDED AREAS)
7. DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.
8. ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES..

PIPE DIAMETER, "D" (INCHES)	MAX. TRENCH WIDTH, "A" (FEET)	PAVEMENT WIDTH OUTSIDE TRENCH, "C" (FEET)
4	4.0	2.5
6	4.0	2.5
8	4.0	2.5
10	4.0	2.5
12	4.0	2.5
15	4.0	2.5
18	5.0	2.0
21	5.0	2.0
24	5.5	1.75
27	6.0	1.5
30	6.0	1.5
36	7.0	1.0
42	8.0	1.0
48	8.0	1.0

TYPICAL PIPE INSTALLATION DETAIL

NOT TO SCALE

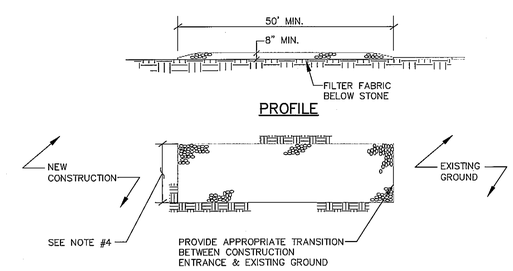


INSTALLATION NOTES:

1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
4. 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.
5. JOIN SECTION AS SHOWN ABOVE.
6. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

SILT FENCE

NOT TO SCALE



NOTES:

1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
2. LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
3. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
5. 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

STATE OF MAINE
OWENS A. McCULLOUGH
No. 7122
LICENSED
PROFESSIONAL ENGINEER

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

REFERENCES: 09006D.dwg, TAB: DETAIL2

DESIGNED BY: OAM/CAB	DRAWN BY: CAB	CHECKED BY: OAM	SCALE: AS NOTED	DATE: 11-16-2012

STATE OF MAINE
CRAIG A. BURGESS
No. 12638
LICENSED
PROFESSIONAL ENGINEER

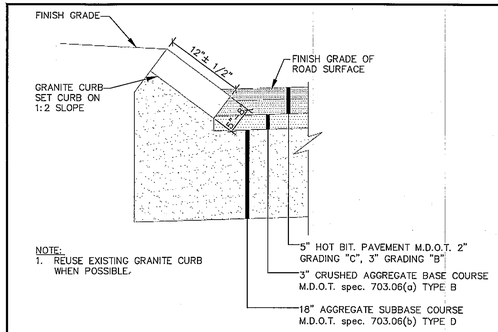
BAXTER BOULEVARD
NORTH STORAGE CONDUIT
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE
RESURGAM

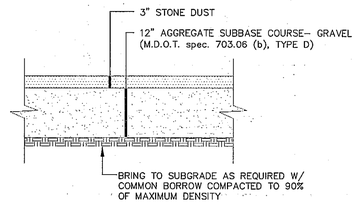
SHEET # 26 OF 54

PLAN NUMBER



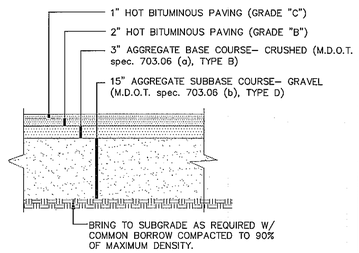
NOTE:
1. REUSE EXISTING GRANITE CURB WHEN POSSIBLE.

TYPE 5 GRANITE CURB SECTION
NOT TO SCALE



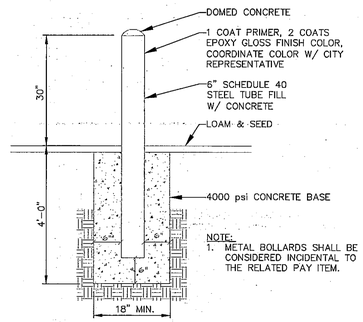
NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. MATCH EXISTING TRAIL WIDTH.

TYPICAL TRAIL SECTION
NOT TO SCALE



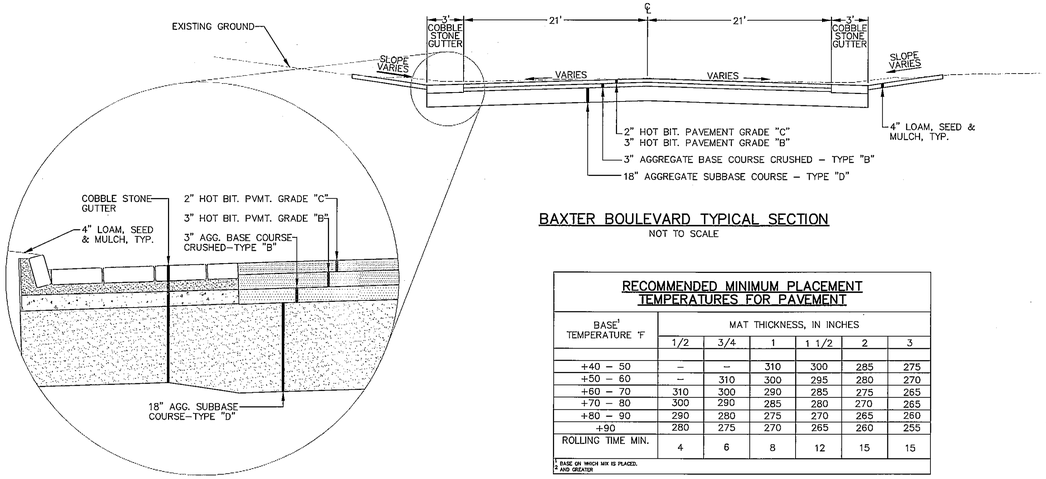
NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

TYPICAL PAVED PARKING AREA SECTION
NOT TO SCALE



NOTE:
1. METAL BOLLARDS SHALL BE CONSIDERED INCIDENTAL TO THE RELATED PAY ITEM.

METAL BOLLARD
NOT TO SCALE

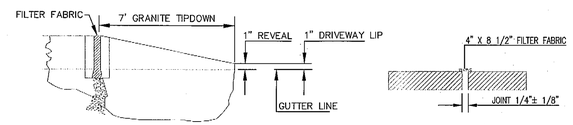


BAXTER BOULEVARD TYPICAL SECTION
NOT TO SCALE

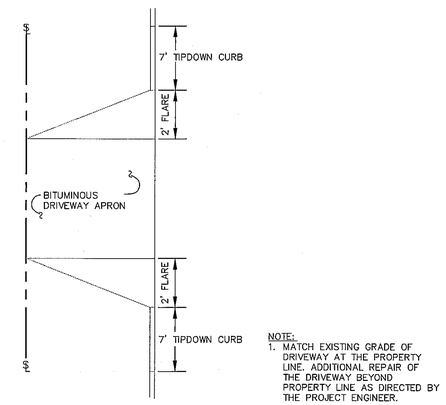
RECOMMENDED MINIMUM PLACEMENT TEMPERATURES FOR PAVEMENT

BASE[1] 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	270
+60 – 70	310	300	290	285	275	265
+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

1 BASE ON WHICH MIX IS PLACED.
* AND GREATER

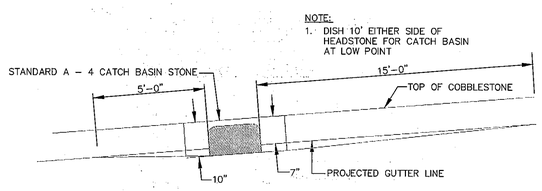


TYPICAL TIPDOWN CURB INSTALLATION
NOT TO SCALE



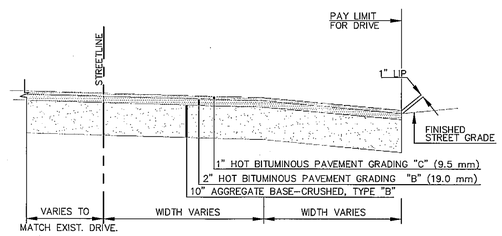
NOTE:
1. MATCH EXISTING GRADE OF DRIVEWAY AT THE PROPERTY LINE. ADDITIONAL REPAIR OF THE DRIVEWAY BEYOND PROPERTY LINE AS DIRECTED BY THE PROJECT ENGINEER.

TYPICAL DRIVEWAY APRON LAYOUT
NOT TO SCALE

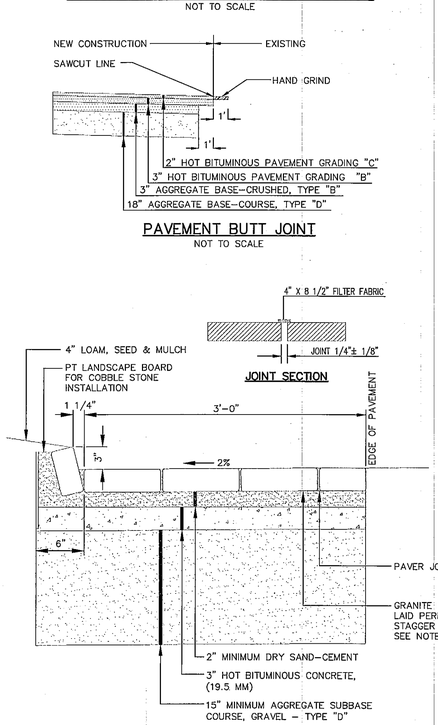


NOTE:
1. DISH 10' EITHER SIDE OF HEADSTONE FOR CATCH BASIN AT LOW POINT

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

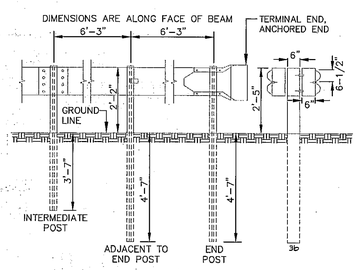


BITUMINOUS DRIVEWAY SECTION
NOT TO SCALE



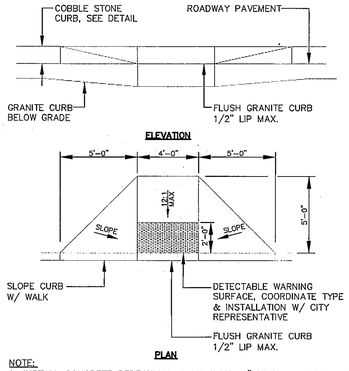
NOTES:
1. DRY SAND–CEMENT MIX SHALL BE: SIX (6) PARTS OF WASHED MORTAR SAND TO ONE (1) PART PORTLAND CEMENT.
2. DRY SAND–CEMENT SHALL BE PLACED AND SWEPT INTO THE JOINTS TO WITHIN 1/4" TO 1/2" OF PAVER SURFACE.
3. ALL SURPLUS SAND–CEMENT SHALL BE SWEPT FROM THE GRANITE PAVER SURFACE.
4. A FINAL APPLICATION OF SAND ONLY SHALL BE SPREAD ON THE GRANITE PAVER SURFACE.
5. REUSE EXISTING GRANITE PAVERS TO GREATEST EXTENT POSSIBLE.

COBBLE STONE GUTTER SECTION
NOT TO SCALE



NOTES:
1. GUARDRAIL SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 606 AND MEET THE REQUIREMENTS OF MDOT TYPE 3B – DOUBLERAIL (PAY ITEM 606.18).
2. POSTS AND OFFSET BRACKETS FOR TYPE 3b GUARD RAIL SHALL BE W 6x9.
3. ALL HOLES IN BEAM TO BE SHOP–PUNCHED BEFORE GALVANIZING.

GUARDRAIL TYPE 3b (DOUBLE RAIL)
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

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

REFERENCES:
09006D.dwg, TAB:DETAIL3

DESIGNED BY:	DAM/CAB
DRAWN BY:	CAB
CHECKED BY:	CAM
SCALE:	AS NOTED
DATE:	11-16-2012

STATE OF MAINE
CRAIG A. BURGESS
No. 12838
LICENSED
PROFESSIONAL ENGINEER

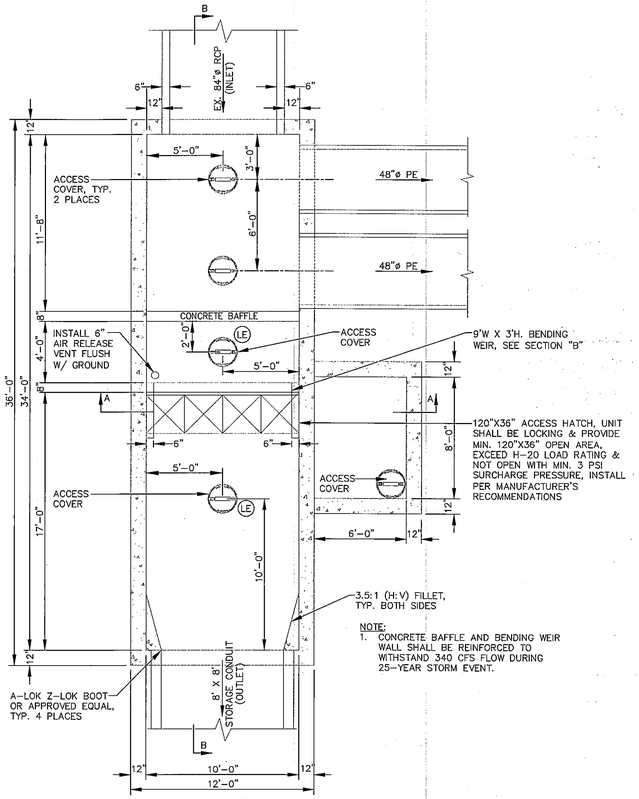
BAXTER BOULEVARD NORTH STORAGE CONDUIT
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE
RESURGAM

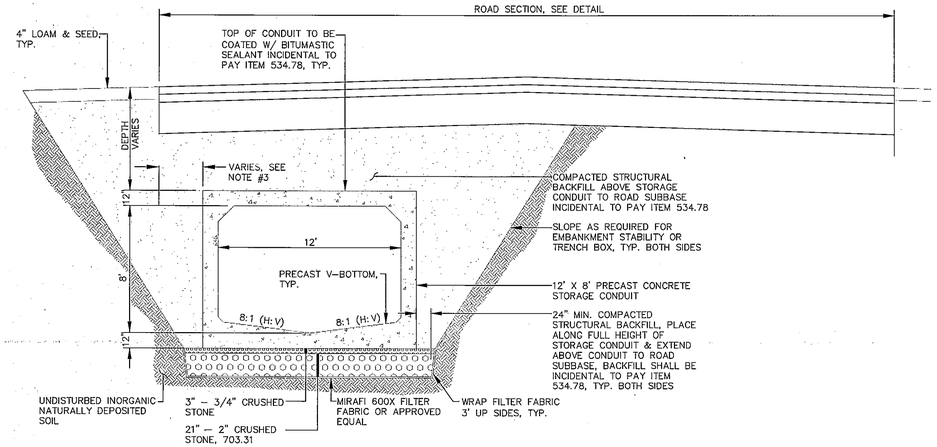
STATE OF MAINE
OWENS A. McCULLOUGH
No. 7122
LICENSED
PROFESSIONAL ENGINEER

SHEET # 27 OF 54
PLAN NUMBER



PLAN VIEW

NOTE:
1. CONCRETE BAFFLE AND BENDING WEIR WALL SHALL BE REINFORCED TO WITHSTAND 340 CFS FLOW DURING 25-YEAR STORM EVENT.

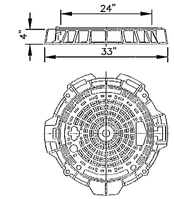


TYPICAL SECTION – CS0-007 12' X 8' STORAGE CONDUIT

NOT TO SCALE

REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS

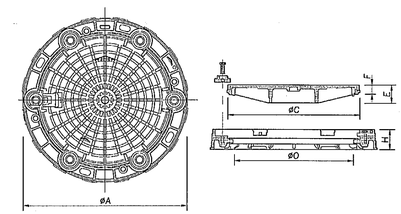
NOTES – ALL STRUCTURES AND STORAGE CONDUIT:
1. CONTRACTOR SHALL USE SMOOTH BUCKET TO EXCAVATE BOTTOM OF TRENCH TO SUBGRADE ELEVATIONS.
2. STORAGE CONDUIT AND STRUCTURES WILL BE WITHIN TIDAL AREAS. CONTRACTOR SHALL BE RESPONSIBLE TO ADDRESS TIDAL CONDITIONS WORK SCHEDULE TIMES, DEWATERING OR OTHER MEANS WORK SCHEDULE TIMES, DEWATERING OR OTHER MEANS INCIDENTAL TO BOX CONDUIT INSTALLATION.
3. SEE PLAN & PROFILE DRAWINGS FOR STORAGE CONDUIT HORIZONTAL ALIGNMENT AND INVERT INFORMATION.
4. ROADWAY FULL DEPTH RECONSTRUCTION LIMITS SHOWN ON PLAN & PROFILE DRAWINGS. SEE BAXTER BOULEVARD ROAD SECTION DETAIL FOR PAVEMENT, BASE AND SUBBASE THICKNESSES.
5. EXCAVATION, SHORING, DEWATERING, STONE BEDDING, COMMON BORROW, STRUCTURAL FILL, ROADWAY BASE AND SUBBASE SHALL BE INCIDENTAL TO STORAGE CONDUIT INSTALLATION (REFER TO CONTRACT SPECIFICATIONS).



NOTES:
1. MANHOLE COVER AND FRAME SHALL BE CALLED PAM REXUS OR APPROVED EQUAL. COVER AND FRAMES SHALL BE MANUFACTURED FROM DUCTILE IRON.
2. COVERS SHALL BE HINGED AND INCORPORATE A 90 DEGREE BLOCKING SYSTEM TO PREVENT ACCIDENTAL CLOSURE. COVERS SHALL BE ONE MAN OPERABLE USING STANDARD TOOLS AND SHALL BE CAPABLE OF WITHSTANDING A TEST LOAD OF 80,000 LBS. THE COVER SHALL INCORPORATE A SPRING BAR LOCKING SYSTEM, WHICH AUTOMATICALLY ACTIVATES WHEN THE COVER IS CLOSED. ADDITIONAL SECURITY FEATURES TO INCLUDE A DEVICE TO PREVENT THE COVER FROM BEING COMPLETELY REMOVED FROM THE FRAME. THIS DEVICE SHALL BE CAPABLE OF BEING DEACTIVATED IF REQUIRED.
3. FRAMES SHALL BE CIRCULAR, INCORPORATE A SEATING RING, AND HAVE A 24 INCH CLEAR OPENING. FRAME DEPTH SHALL NOT EXCEED 4 INCHES, AND THE FLANGE SHALL INCORPORATE BEDDING SLOTS AND BOLTS HOLES.
4. ALL COMPONENTS SHALL BE BLACK COATED.
5. FRAME WEIGHT: 84 LBS., COVER WEIGHT: 71 LBS., TOTAL WEIGHT: 155 LBS.
6. ACCESS FRAME AND COVERS SHALL BE INCIDENTAL TO THE RELATED PAY ITEM.

PAM REXUS ACCESS FRAME & COVER

NOT TO SCALE

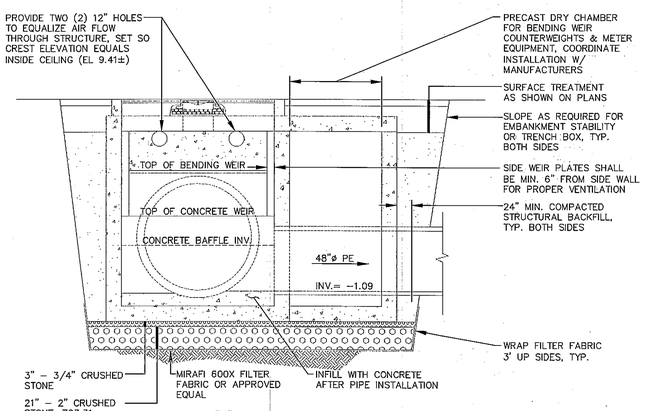


DIMENSIONS (INCHES)						ASSEMBLY		COVER
A	C	E	F	H	O	REFERENCE	WEIGHT (LBS)	WEIGHT (LBS)
35	28	4	2	4	24	RE 61 R1 FD	225	116

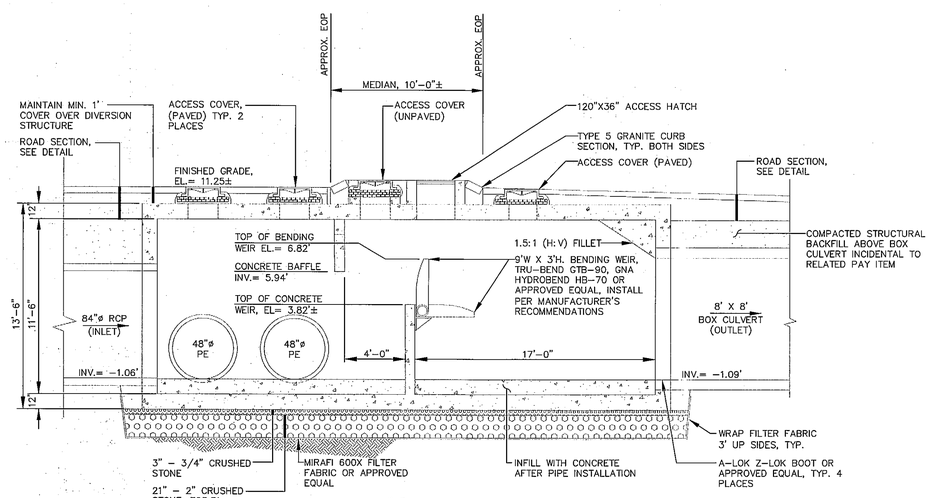
NOTES:
1. MANHOLE COVER AND FRAME SHALL BE CALLED PAMTIGHT OR APPROVED EQUAL. COVER AND FRAME SHALL BE MANUFACTURED FROM DUCTILE IRON.
2. COVERS SHALL BE FASTENED TO THE FRAME BY SIX CLAMPING CLAWS HELD BY STAINLESS STEEL BOLTS. COVERS SHALL INCORPORATE A SEALED HANDLING BOX AND BE ONE MAN OPERABLE USING STANDARD TOOLS, AND SHALL BE CAPABLE OF WITHSTANDING A TEST LOAD OF 80,000 LBS.
3. FRAMES SHALL BE CIRCULAR AND BE AVAILABLE IN A 24 INCH CLEAR OPENING. THE FRAME DEPTH SHALL NOT EXCEED 4 INCHES, AND THE FLANGE SHALL INCORPORATE BEDDING SLOTS AND BOLT HOLES.
4. COVER AND FRAME SHALL INCORPORATE A SEATING RING TO PREVENT THE INGRESS AND ESCAPE OF AIR AND WATER TO 14 PSI (1 BAR) POSITIVE OR NEGATIVE RATING.
5. COVER AND FRAME SHALL BE BLACK COATED.
6. FRAME WEIGHT: 109 LBS., COVER WEIGHT: 116 LBS., TOTAL WEIGHT: 225 LBS.
6. ACCESS FRAME AND COVERS SHALL BE INCIDENTAL TO THE RELATED PAY ITEM.

PAMTIGHT ACCESS FRAME & COVER

NOT TO SCALE



SECTION "A"

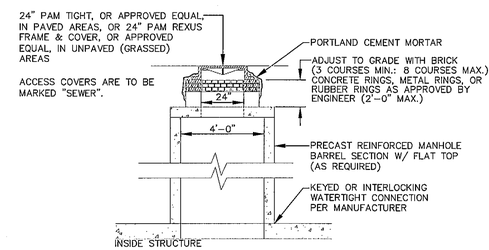


SECTION "B"

CS0-007 – DIVERSION STRUCTURE (PAY ITEM 534.74)

NOT TO SCALE

REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS



NOTE:
1. INSTALL 24" PAM TIGHT FRAME AND COVER, OR APPROVED EQUAL, IN ALL PAVED AREAS. INSTALL 24" PAM REXUS FRAME AND COVER WITH PENTA LOCKING KIT, OR APPROVED EQUAL, IN ALL UNPAVED (GRASSED) AREAS. FRAME AND COVER SYSTEMS IN PAVED AREAS SHALL BE LOCKING, WATERTIGHT, EXCEED H-20 AASHTO LOAD RATING AND EXCEED 3 PSI PRESSURE RATING. FRAME AND COVER SYSTEMS IN UNPAVED (GRASSED) AREAS SHALL BE LOCKING, WATERTIGHT AND EXCEED 3 PSI PRESSURE RATING.
2. ACCESS COVER INSTALLATION SHALL BE INCIDENTAL TO RELATED PAY ITEM.

ACCESS COVER INSTALLATION

NOT TO SCALE

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 0900GD
FIELD BOOK USED: N/A

REFERENCES: 0900GD.dwg, TAB:DETAIL4

DESIGNED BY:	DAM/CAB
DRAWN BY:	CAB
CHECKED BY:	DAM
SCALE:	AS NOTED
DATE:	11-15-2012

STATE OF MAINE — CRAIG A. BURGESS No. 12636 — LICENSED PROFESSIONAL ENGINEER

BAXTER BOULEVARD NORTH STORAGE CONDUIT

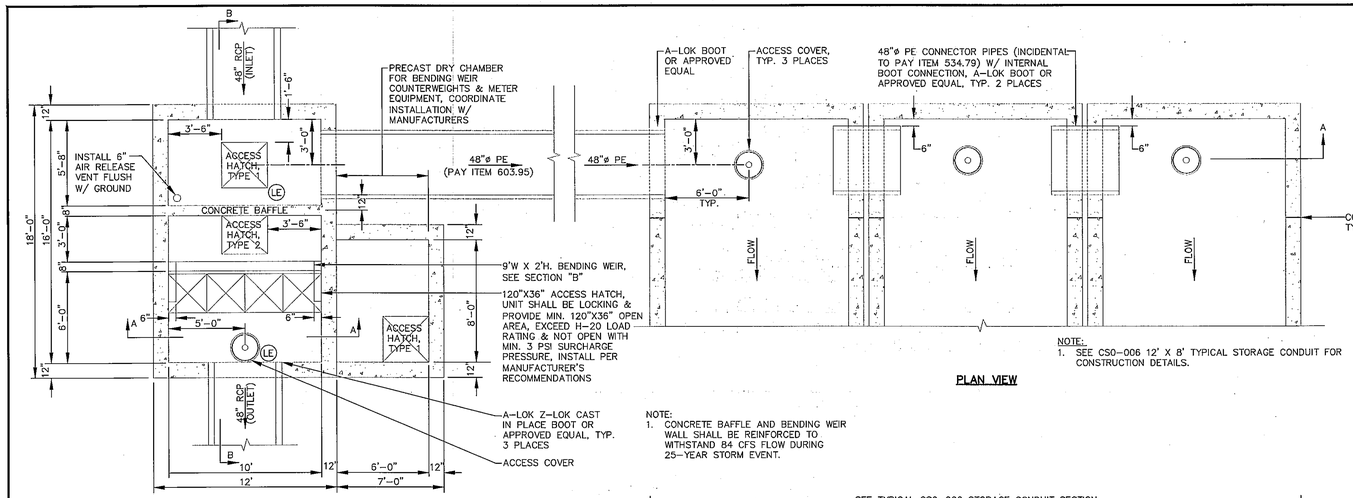
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

STATE OF MAINE — OWENS A. McCULLOUGH No. 7122 — LICENSED PROFESSIONAL ENGINEER

SHEET # 28 OF 54

PLAN NUMBER

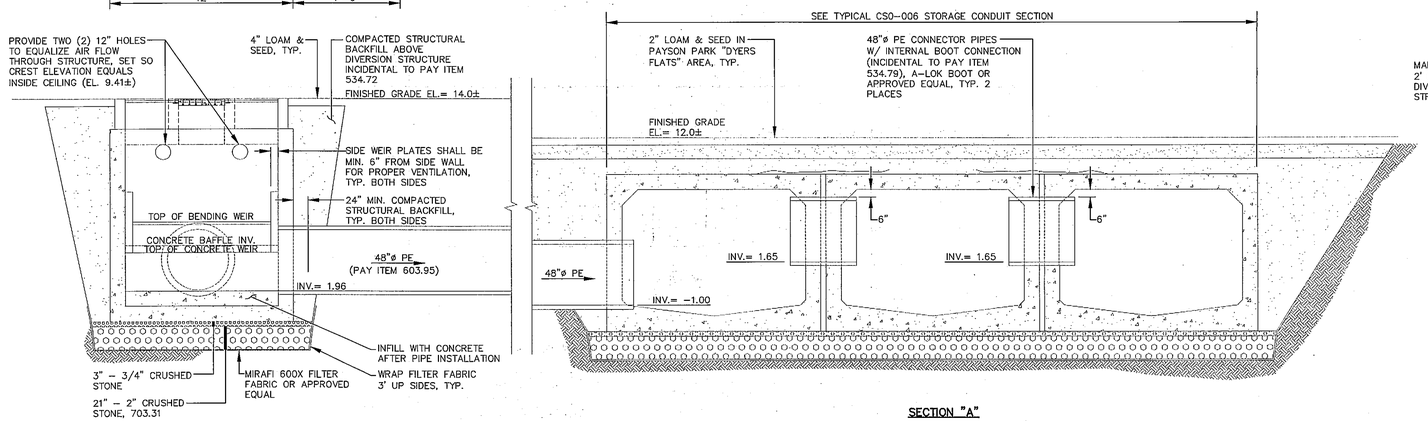


NOTE:
1. SEE CSO-006 12' X 8' TYPICAL STORAGE CONDUIT FOR CONSTRUCTION DETAILS.

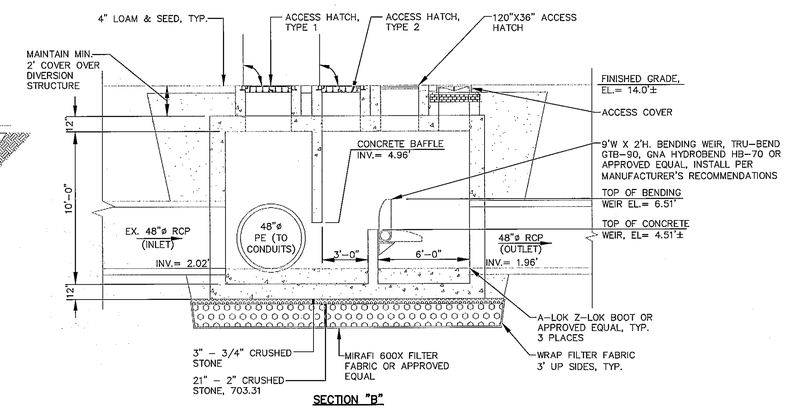
PLAN VIEW

NOTE:
1. CONCRETE BAFFLE AND BENDING WEIR WALL SHALL BE REINFORCED TO WITHSTAND 84 CFS FLOW DURING 25-YEAR STORM EVENT.

NOTES – ALL STRUCTURES AND STORAGE CONDUIT:
1. CONTRACTOR SHALL USE SMOOTH BUCKET TO EXCAVATE BOTTOM OF TRENCH TO SUBGRADE ELEVATIONS.
2. STORAGE CONDUIT AND STRUCTURES WILL BE WITHIN TIDAL AREAS. CONTRACTOR SHALL BE RESPONSIBLE TO ADDRESS TIDAL CONDITIONS WORK SCHEDULE TIMES, DEWATERING OR OTHER MEANS WORK SCHEDULE TIMES, DEWATERING OR OTHER MEANS INCIDENTAL TO BOX CONDUIT INSTALLATION.
3. SEE PLAN & PROFILE DRAWINGS FOR STORAGE CONDUIT 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).

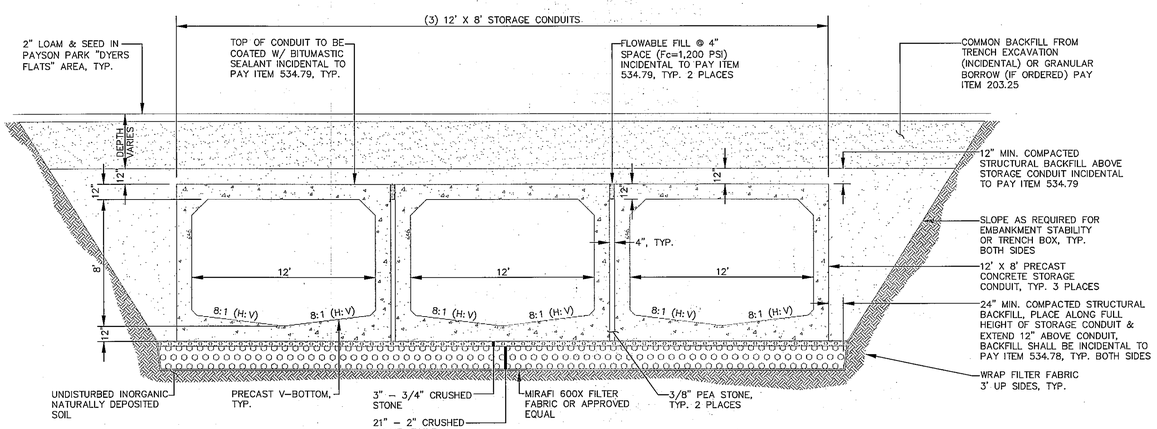


SECTION "A"

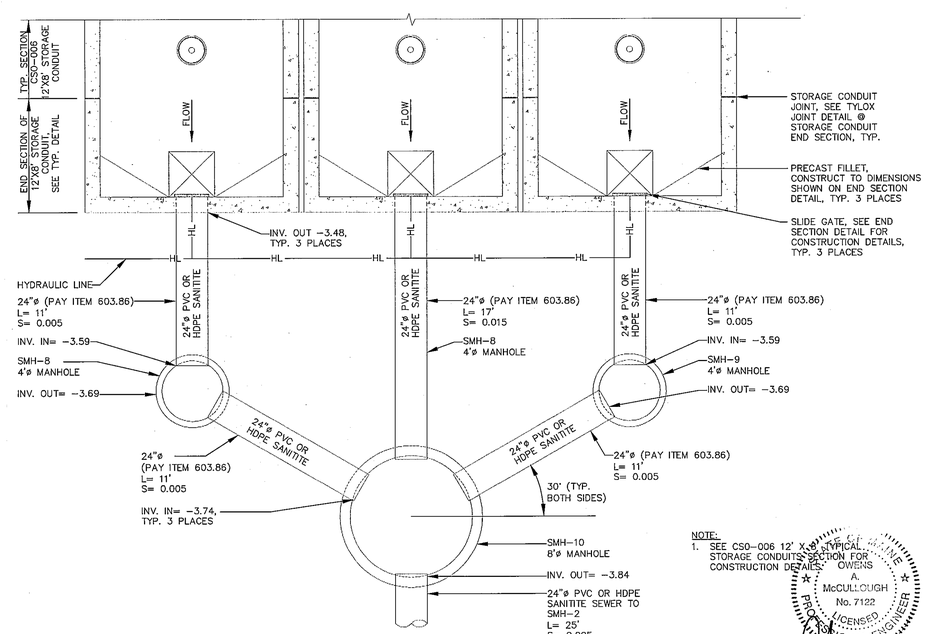


SECTION "B"

CSO-006 DIVERSION STRUCTURE & STORAGE CONDUITS (PAY ITEMS 534.72 & 534.79)
NOT TO SCALE
REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS



TYPICAL SECTION – CSO-006 12' X 8' STORAGE CONDUITS (PAY ITEM 534.79)
NOT TO SCALE
REFER TO CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS



NOTE:
1. SEE CSO-006 12' X 8' TYPICAL STORAGE CONDUITS SECTION FOR CONSTRUCTION DETAILS.

CSO-006 OUTLET DETAIL
NOT TO SCALE

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

REFERENCES: 09006D.dwg, TAB:DETAIL5

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY: OAM/CAB
DRAWN BY: CAB
CHECKED BY: OAM
SCALE: AS NOTED
DATE: 11-16-2012

STATE OF MAINE CRAIG A. BURGESS No. 12638 LICENSED PROFESSIONAL ENGINEER 12-7-12

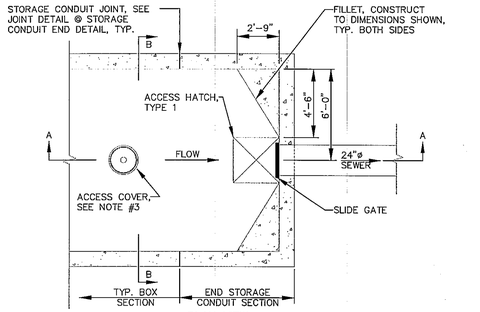
BAXTER BOULEVARD NORTH STORAGE CONDUIT
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE RESURGAM

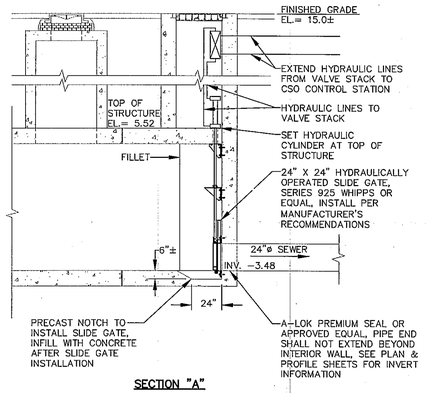
STATE OF MAINE OWENS A. McCULLOUGH No. 7122 LICENSED PROFESSIONAL ENGINEER 12-7-12

SHEET # 29 OF 54
PLAN NUMBER

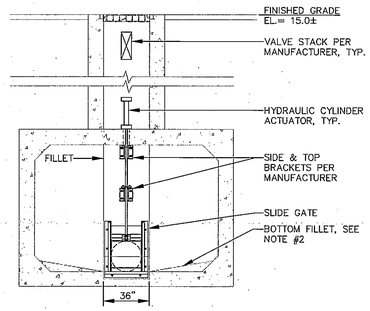


PLAN VIEW

NOTE:
1. HYDRAULIC LINES SHALL BE EXTENDED FROM THE CONTROL STATION TO VALVE STACKS FOR CSO-006 SLIDE GATES.
2. BOTTOM FILLET SHALL BE MODIFIED TO ACCOMMODATE SLIDE GATE ASSEMBLY.
3. INSTALL ACCESS COVER STRUCTURE ON BOX SECTION IMMEDIATELY ADJACENT TO END SECTION.



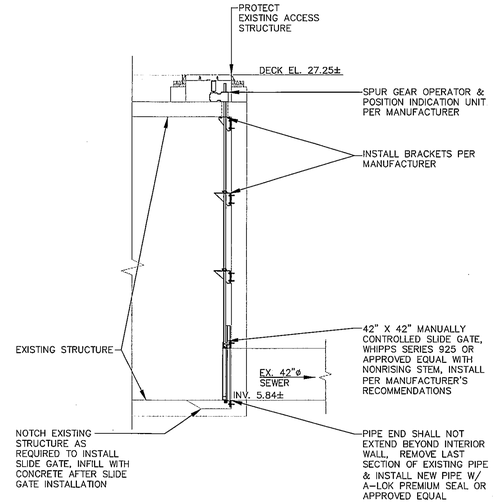
SECTION "A"



SECTION "B"

CSO-006 END SECTION OF CSO-006 12' X 8' STORAGE CONDUIT

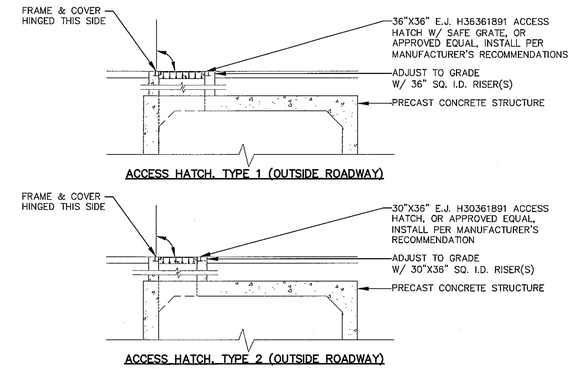
NOT TO SCALE



NOTE:
1. REMOVE AND DISPOSE OF EXISTING SLIDE GATE FROM CSO-007 REGULATOR STRUCTURE (INCIDENTAL).
2. COORDINATE INSTALLATION OF 42" X 42" MANUALLY CONTROLLED SLIDE GATE WITH CITY REPRESENATIVE.

CSO-007 – REGULATOR STRUCTURE (OCEAN AVE.)

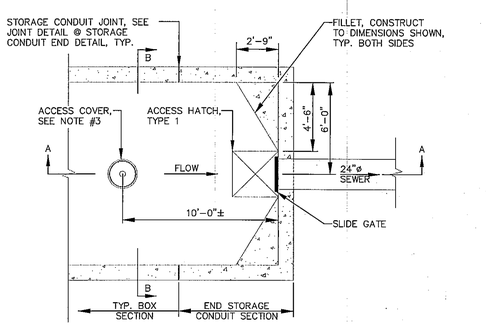
NOT TO SCALE



NOTES:
1. INSTALL HATCH IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

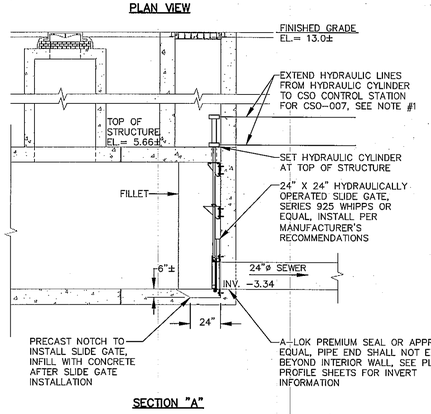
SAFETY HATCH DETAIL

NOT TO SCALE

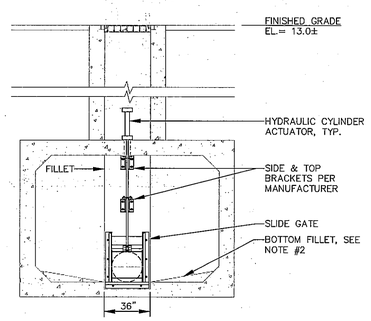


PLAN VIEW

NOTE:
1. HYDRAULIC LINES SHALL BE EXTENDED FROM THE CONTROL STATION TO HYDRAULIC CYLINDER FOR CSO-007 SLIDE GATES.
2. BOTTOM FILLET SHALL BE MODIFIED TO ACCOMMODATE SLIDE GATE ASSEMBLY.
3. INSTALL ACCESS COVER ON BOX SECTION IMMEDIATELY ADJACENT TO END SECTION.



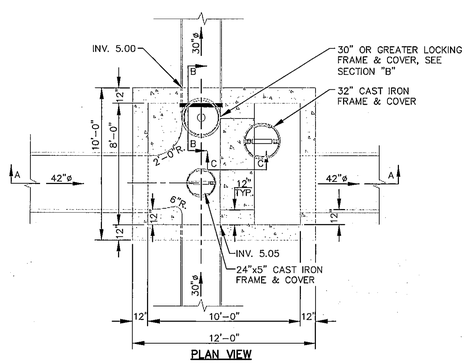
SECTION "A"



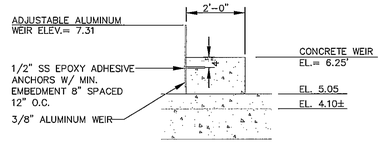
SECTION "B"

END SECTION OF CSO-007 12' X 8' STORAGE CONDUIT

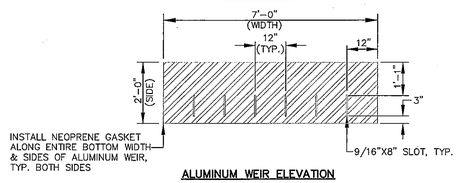
NOT TO SCALE



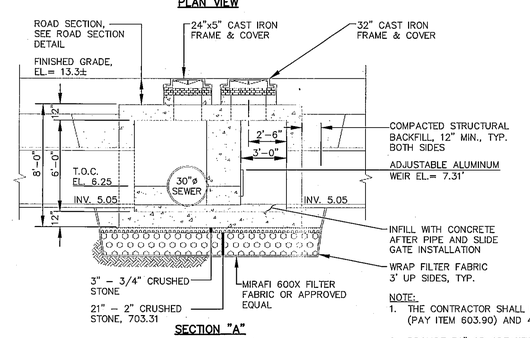
PLAN VIEW



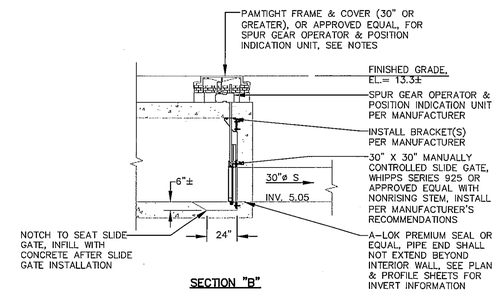
SECTION "C"



ALUMINUM WEIR ELEVATION



SECTION "A"



SECTION "B"

NOTE:
1. THE CONTRACTOR SHALL USE PVC, PE OR HDPE PIPE FOR THE 30"ø (PAY ITEM 603.90) AND 42"ø PIPE (PAY ITEM 603.93).
2. PROVIDE 30" OR GREATER FRAME AND COVER FOR ACCESS TO MANUAL SLIDE GATE CONTROLS INCLUDING SPUR GEAR OPERATOR & POSITION INDICATION UNIT). FRAME AND COVER SHALL BE LOCKING AND EXCEED H-20 AASHTO LOAD RATING.

CSO-006 – REGULATOR STRUCTURE (FRONT ST. & JOHANSEN ST. INTERSECTION)

NOT TO SCALE

STATE OF MAINE
OWENS A. McCULLOUGH
No. 7122
LICENSED
PROFESSIONAL ENGINEER

LDD PROJECT NAME:
BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME:
090D6D
FIELD BOOK USED:
N/A

REFERENCES:
090D6D.dwg, TAB:DETAIL6

DESIGNED BY: DAM/CAB	
DRAWN BY: CAB	
CHECKED BY: DAM	
SCALE: AS NOTED	
DATE: 11-16-2012	

STATE OF MAINE
CRAIG A. BURGESS
No. 12638
LICENSED
PROFESSIONAL ENGINEER

BAXTER BOULEVARD
NORTH STORAGE CONDUIT
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND MAINE
RESURGAM

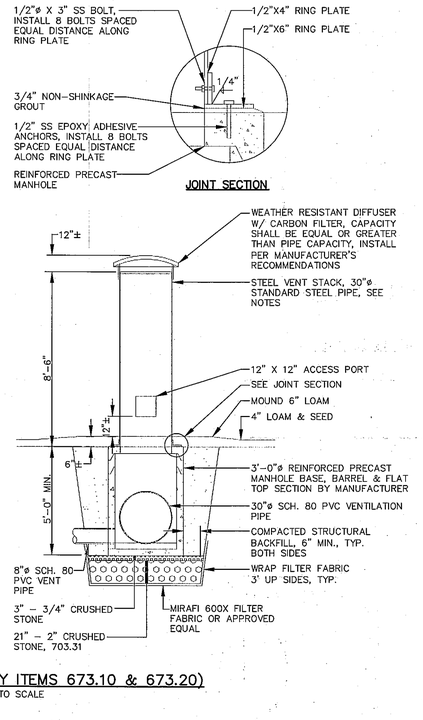
SHEET # 30 OF 54

PLAN NUMBER

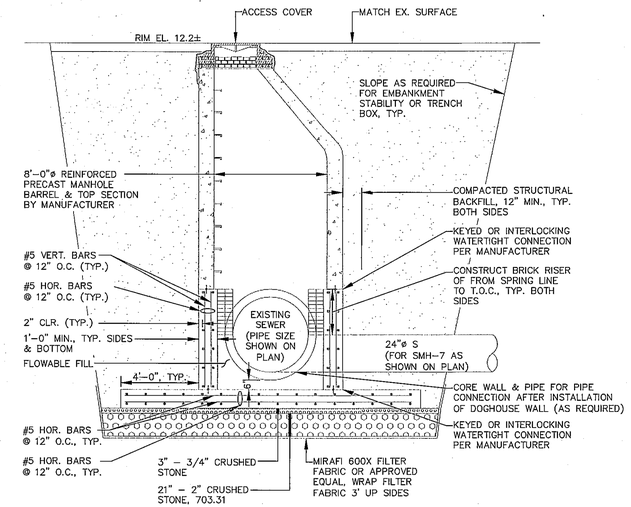
NOTES:
1. COORDINATE EXTERIOR APPEARANCE OF STACK WITH CITY REPRESENTATIVE TO BEST MATCH LIGHTING STANDARD FOR BAXTER BOULEVARD. SEE FIGURE X-7D OF THE CITY OF THE PORTLAND MUNICIPAL LIGHTING STANDARDS, SECTION X.
2. STEEL PIPE SHALL BE 3/8" OR THICKER. EXTERIOR SURFACE SHALL BE ABRASIVE FOR FINISH PAINTS.
3. LINE PIPE INTERIOR WITH PVC, ALUMINUM OR GALVANIZED IRON. APPLY EPOXY FINISH COAT TO ALUMINUM OR GALVANIZED IRON.
4. APPLY ONE (1) FINISH COAT OF CUSTOM PAINT TO THE ENTIRE EXTERIOR SURFACE OF THE VENT STACK. PAINT COLOR FOR STACK SHALL BE EQUAL TO BEHR BASE 5340 AND IT IS CALLED EVENING HUSH (BAR CODE ON THE CAN IS 24011129368).
5. ALL WELDING SHALL CONFORM TO AWS CODE AND SHALL BE PERFORMED BY CERTIFIED WELDERS.
6. INSTALL L-BRACKET AS ALTERNATE TO WELDED RINGS SHOWN IN JOINT SECTION DETAIL.
7. INFILL MANHOLE TO PIPE INVERT WITH CONCRETE OR CRUSHED ROCK.
8. PLANTING REQUIREMENTS:

   CSO-007 VENTILATION STACK #1
   PLANT THE FOLLOWING PLANTS IN ALTERNATING FASHION IN FRONT OF STACK AND FACING BAXTER BOULEVARD:
   - FIVE (5) PV/ PANICUM VIRGATUM 'NORTHWIND' / SWITCH GRASS / #2
   - FIVE (5) CA / CLETHERA ALNIFOLIA / SWEET PEPPERBUSH (SUMMERSWEET) / #5

   CSO-007 VENTILATION STACK #2
   PLANT THE FOLLOWING PLANTS IN ALTERNATING FASHION IN FRONT OF STACK AND FACING BAXTER BOULEVARD:
   - SIX (6) PV/ PANICUM VIRGATUM 'NORTHWIND' / SWITCH GRASS / #2
   - EIGHT (8) CA / CLETHERA ALNIFOLIA / SWEET PEPPERBUSH (SUMMERSWEET) / #5
9. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL.
10. VENT STACKS SHALL HAVE A SMOOTH SURFACE WHEN FINISHED. NO PIPE RIBS.

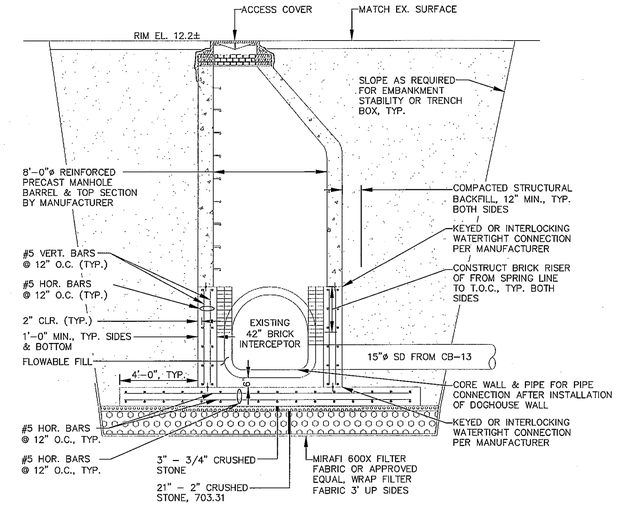


VENTILATION STACK (PAY ITEMS 673.10 & 673.20)
NOT TO SCALE



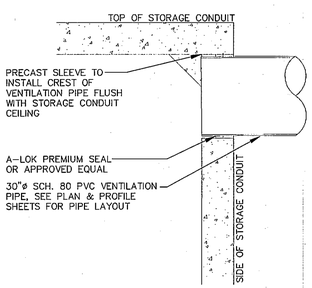
NOTES:
1. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL.
2. INSTALL 8'ø PRECAST MANHOLE REINFORCED PRECAST MANHOLE IN LIEU OF DOGHOUSE SECTION UPON APPROVAL BY CITY REPRESENATIVE.

SEWER MANHOLE DOGHOUSE STRUCTURE
NOT TO SCALE

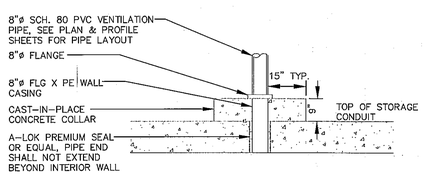


NOTES:
1. CONTRACTOR SHALL SUBMIT SHOP DRAWING FOR APPROVAL.
2. INSTALL 8'ø PRECAST MANHOLE REINFORCED PRECAST MANHOLE IN LIEU OF DOGHOUSE SECTION UPON APPROVAL BY CITY REPRESENATIVE.

DRAIN MANHOLE #4 (DMH-4) DOGHOUSE STRUCTURE
NOT TO SCALE



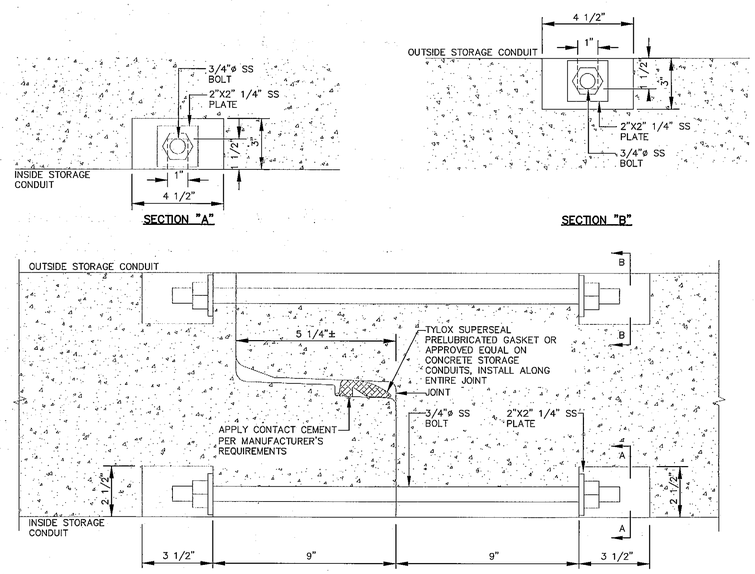
CSO-006 & CSO-007 30"ø VENTILATION PIPE



CSO-006, STORAGE CONDUIT "A" & "B" - 8"ø VENTILATION PIPE

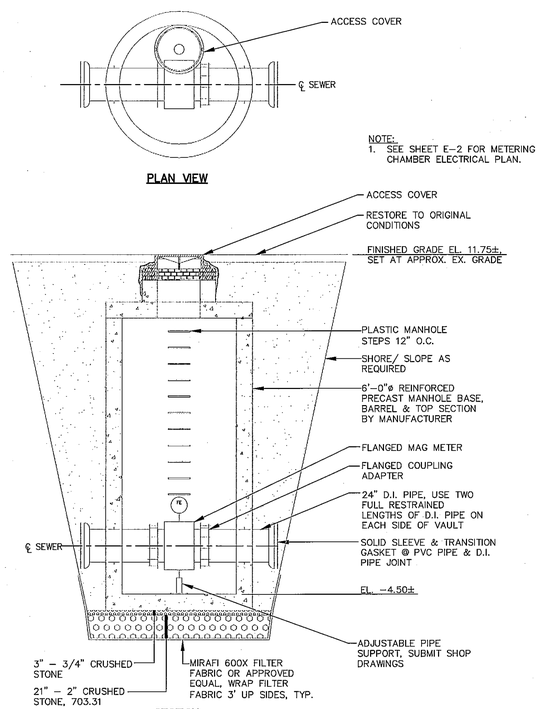
NOTES:
1. INSTALL PIPE IN ACCORDANCE WITH TYPICAL PIPE INSTALLATION DETAIL.
2. INSTALL VENTILATION PIPE WITH POSITIVE SLOPE (0.0025 '/' MIN.) TO DIRECT DRAINAGE TOWARD STORAGE CONDUIT.
3. 90° BENDS FOR 8"ø SCH. 80 PVC VENTILATION PIPE SHALL HAVE MINIMUM 4' OF COVER.

VENTILATION CONNECTION DETAIL
NOT TO SCALE



NOTES:
1. TYLOX SUPERSEAL GASKET AND BOLTS SHALL BE INCIDENTAL TO STORAGE CONDUIT INSTALLATION (PAY ITEMS 534.78 AND 534.79) .
2. A TOTAL OF FOUR (4) BOLTS SHALL BE INSTALLED AT JOINTS INSIDE BOX CULVERT; TWO (2) ON FLOOR AND TWO (2) ON WALLS. TWO (2) BOLTS SHALL BE INSTALLED AT JOINTS ON CEILING OUTSIDE STORAGE CONDUIT. LOCATE WALL BOLTS HALFWAY IN CULVERT. MAINTAIN 6 FEET HORIZONTAL SEPARATION BETWEEN BOLTS ON FLOOR INSIDE STORAGE CONDUIT AND CEILING OUTSIDE STORAGE CONDUIT.
3. BOLTS SHALL REMAIN IN PLACE AND THE VOID SPACE FILLED WITH GROUT. APPLY EPOXY FINISH COAT OVER GROUT FOR A SMOOTH SURFACE FINISH. GROUT AND EPOXY WORK SHALL BE COMPLETED PRIOR TO JOINT TESTING.
4. CONTRACTOR TO SUBMIT SHOP DRAWING FOR APPROVAL.

JOINT DETAIL @ STORAGE CONDUIT DETAIL
NOT TO SCALE



NOTE:
1. SEE SHEET E-2 FOR METERING CHAMBER ELECTRICAL PLAN.

METERING CHAMBER (PAY ITEM 604.153)
NOT TO SCALE

STATE OF MAINE
OWEN A. McCULLOUGH
No. 7122
LICENSED
PROFESSIONAL ENGINEER
12-7-12

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT
DRAWING NAME: 0900GD
FIELD BOOK USED: N/A

REFERENCES: 0900GD.dwg, TAB:DETAIL7

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY:	DAM/CAB
DRAWN BY:	CAB
CHECKED BY:	DAM
SCALE:	AS NOTED
DATE:	11-16-2012

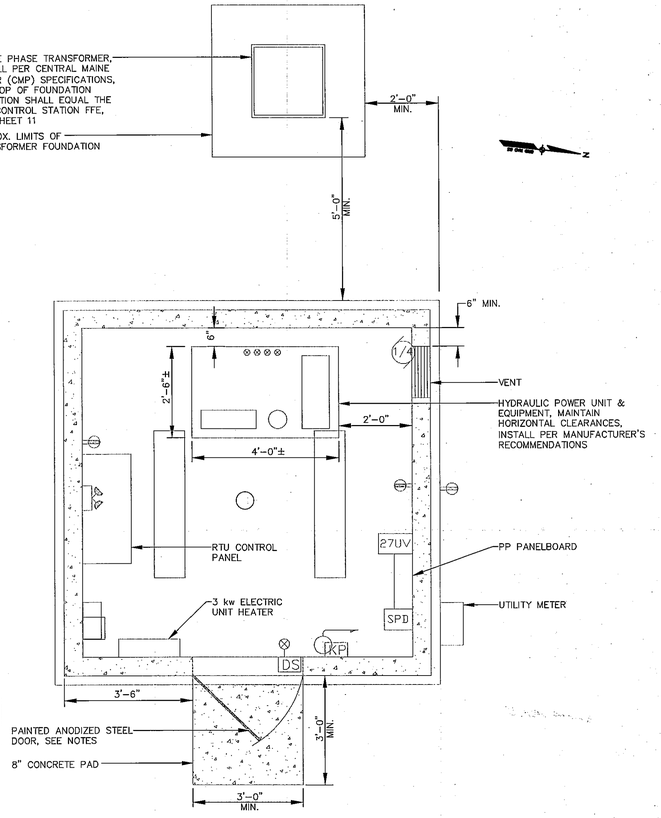
STATE OF MAINE
CRAIG A. BURGESS
No. 12638
LICENSED
PROFESSIONAL ENGINEER
12-7-12

BAXTER BOULEVARD
NORTH STORAGE CONDUIT
STANDARD CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE — RESURGAM

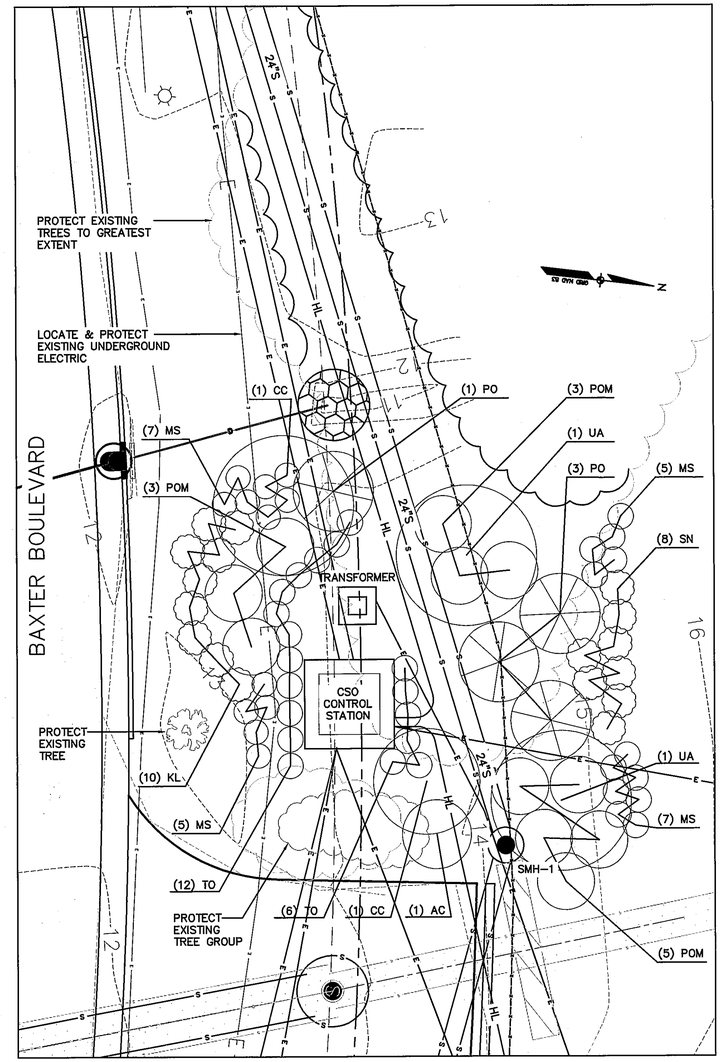
SHEET # 31 OF 54
PLAN NUMBER



PLAN

NOTES:

1. PRECAST BUILDING DRAWINGS SHALL BE SUBMITTED FOR APPROVAL.
2. INSTALL PRECAST CONCRETE BUILDING PER MANUFACTURER'S RECOMMENDATIONS.
3. ROOF, FLOOR, AND WALL PANELS MUST EACH BE PRODUCED AS SINGLE COMPONENT MONOLITHIC PANELS. NO ROOF, FLOOR, OR VERTICAL WALL JOINTS WILL BE ALLOWED, EXCEPT AT CORNERS. WALL PANELS SHALL BE SET ON TOP OF FLOOR PANEL.
4. ONE (1) SCREENED ALUMINUM VENT TO BE CAST IN REAR WALL PER DETAIL. VENT SHALL BE SUNVENT #168FL OR APPROVED EQUAL.
5. ALL PANELS SHALL BE SECURELY FASTENED TOGETHER WITH 3/8" THICK STEEL BRACKETS. STEEL IS TO BE OF STRUCTURAL QUALITY, HOT-ROLLED CARBON COMPLYING WITH ASTM A283, GRADE C AND HOT DIPPED GALVANIZED AFTER FABRICATION. ALL FASTENERS TO BE ½" DIAMETER BOLTS COMPLYING WITH ASTM A307 FOR LOW-CARBON STEEL BOLTS. CAST-IN ANCHORS USED FOR PANEL CONNECTIONS TO BE DAYTON-SUPERIOR #F-63, OR EQUAL. ALL INSERTS FOR CORNER CONNECTIONS MUST BE SECURED DIRECTLY TO FORM BEFORE CASTING PANELS. NO FLOATING-IN OF CONNECTION INSERTS SHALL BE ALLOWED.
6. DOOR AND FRAME SHALL COMPLY WITH STEEL DOOR INSTITUTE "RECOMMENDED SPECIFICATIONS FOR STANDARD STEEL DOORS AND FRAMES" (SDI-100) AND AS HEREIN SPECIFIED. THE BUILDING SHALL BE EQUIPPED WITH SINGLE 3'-0" X 6'-8" X 1-3/4", 18-GAUGE GALVANIZED/INSULATED DOMINION IMPERIAL RIGHT HAND REVERSE METAL DOORS WITH 16-GAUGE GALVANIZED FRAMES. DOOR AND FRAME SHALL BE BONDERIZED AND PAINTED ONE COAT OF RUST INHIBITIVE PRIMER AND ONE FINISH COAT OF ENAMEL PAINT; COLOR SHALL BE COORDINATED WITH CITY REPRESENATIVE.
7. INTERIOR OF BUILDING SHALL BE SMOOTH STEEL FORM FINISH ON ALL INTERIOR PANEL SURFACES.
8. EXTERIOR SURFACE FINISH SHALL BE BE IMPRINTED IN TOP FACE OF PANEL. COORDINATE WITH CITY REPRESENATIVE.
9. PROVIDE POSITIVE DRAINAGE FOR THE BUILDING.
10. COORDINATE KNOCKOUT LOCATIONS FOR HYDRAULIC EQUIPMENT AND ELECTRIC LINES WITH HYDRAULIC EQUIPMENT AND SCADA PANEL MANUFACTURERS.
11. REMOVE ONLY ENOUGH VEGETATION NEEDED TO INSTALL THE PRECAST CONCRETE BUILDING. PROTECT ADJACENT TREES, PAYING CAREFUL ATTENTION TO THE 38" TREE SOUTH OF THE BUILDING AND ALONG BAXTER BOULEVARD. FINISHED GRADE AT PERIMETER OF BUILDING SHALL MATCH EXISTING GRADE.
12. PRECAST BUILDING CONCRETE PAD, VENT, DOOR AND OTHER APPURTENANCES SHALL BE INCIDENTAL TO THE PRECAST BUILDING PAY ITEM.
13. ANTENNAS FOR THE CSO CONTROL STATION SHALL BE MOUNTED ON THE SOLAR PANEL POLE SHOWN ON SHEET E-2. SEE SHEET IC-13 FOR ANTENNA INSTALLATION DETAILS.
14. PAINT COLOR FOR ENTRY DOOR SHALL BE A NEUTRAL COLOR AND SHALL MATCH BUILDING COLOR.
15. PAINT COLOR FOR TRANSFORMER PAD SHALL BE EQUAL TO BEHR BASE 5340 AND IT IS CALLED EVENING HUSH (BAR CODE ON THE CAN IS 24011129368).

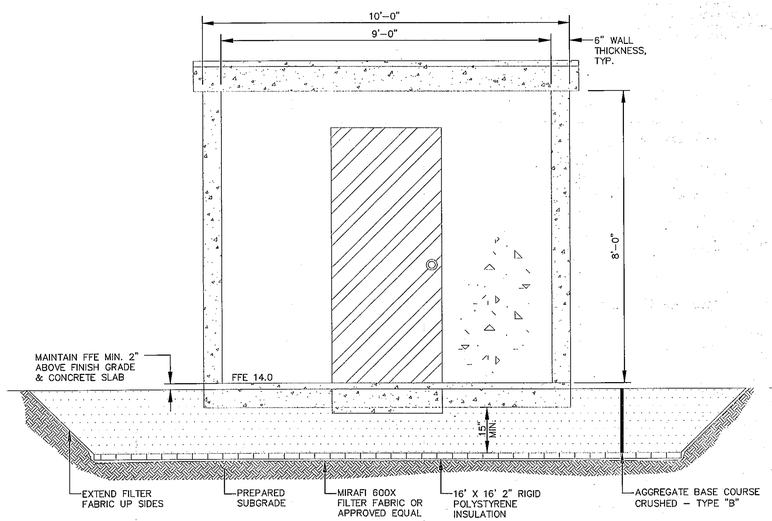


CSO CONTROL STATION LANDSCAPE PLAN

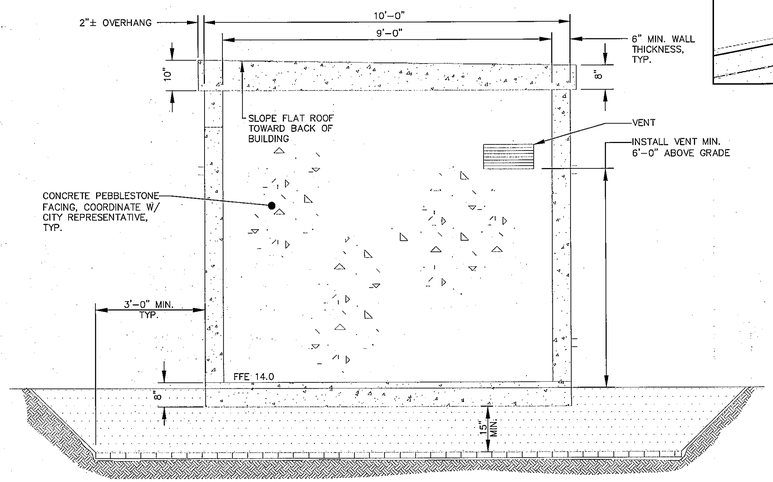
1"=8'

LANDSCAPE LIST

KEY	BOTANICAL NAME	COMMON NAME	SIZE
AC	ABIES CONCOLOR	WHITE FIR	6-8' HGT
CC	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	3" -CAL
KL	KALMIA LATIFOLIA 'BRIDESMAID'	MOUNTAIN LAUREL	4-36"
MS	MISCANTHUS SINENSIS 'MORNING LIGHT'	MAIDEN GRASS	#2
PO	PICEA OMORIKA	SERBIAN SPRUCE	6-8' HGT
POM	PHYSOCARPUS OPULIFOLIUS 'MONLO'	DIABOLO NINEBARK	36"
SN	SPIREA NIPPONICA 'SNOWMOUND'	SNOWMOUND SPIREA	36"
TO	THUJA OCCIDENTALIS 'SMARAGD'	EMERALD GREEN ARBORVITAE	7-8' HGT
UA	ULMUS AMERICANA 'VALLEY FORGE'	VALLEY FORGE ELM	3"-CAL.



FRONT VIEW



SIDE VIEW

CSO CONTROL STATION (PAY ITEM 534.80)

NOT TO SCALE

STATE OF MAINE
OWENS A. McCULLOUGH
No. 7122
LICENSED
PROFESSIONAL ENGINEER

12-7-12

LDD PROJECT NAME: BAXTER BOULEVARD NORTH STORAGE CONDUIT

DRAWING NAME: 09006D

FIELD BOOK USED: N/A

REFERENCES: 09006D.dwg, TAB:DETAIL8

REVISIONS:
A 12-07-12 REISSUED FOR ADDENDUM #2

DESIGNED BY: DAM/CAB
DRAWN BY: CAB
CHECKED BY: DAM
SCALE: AS NOTED
DATE: 11-16-2012

STATE OF MAINE
CRAIG A. BURGESS
No. 12638
LICENSED
PROFESSIONAL ENGINEER

12-7-12

BAXTER BOULEVARD
NORTH STORAGE CONDUIT

CSO CONTROL STATION
CONSTRUCTION DETAILS

CITY OF PORTLAND, MAINE
PUBLIC SERVICES DEPARTMENT
ENGINEERING DIVISION

CITY OF PORTLAND, MAINE
RESURGAM

SHEET # 32 OF 54

PLAN NUMBER