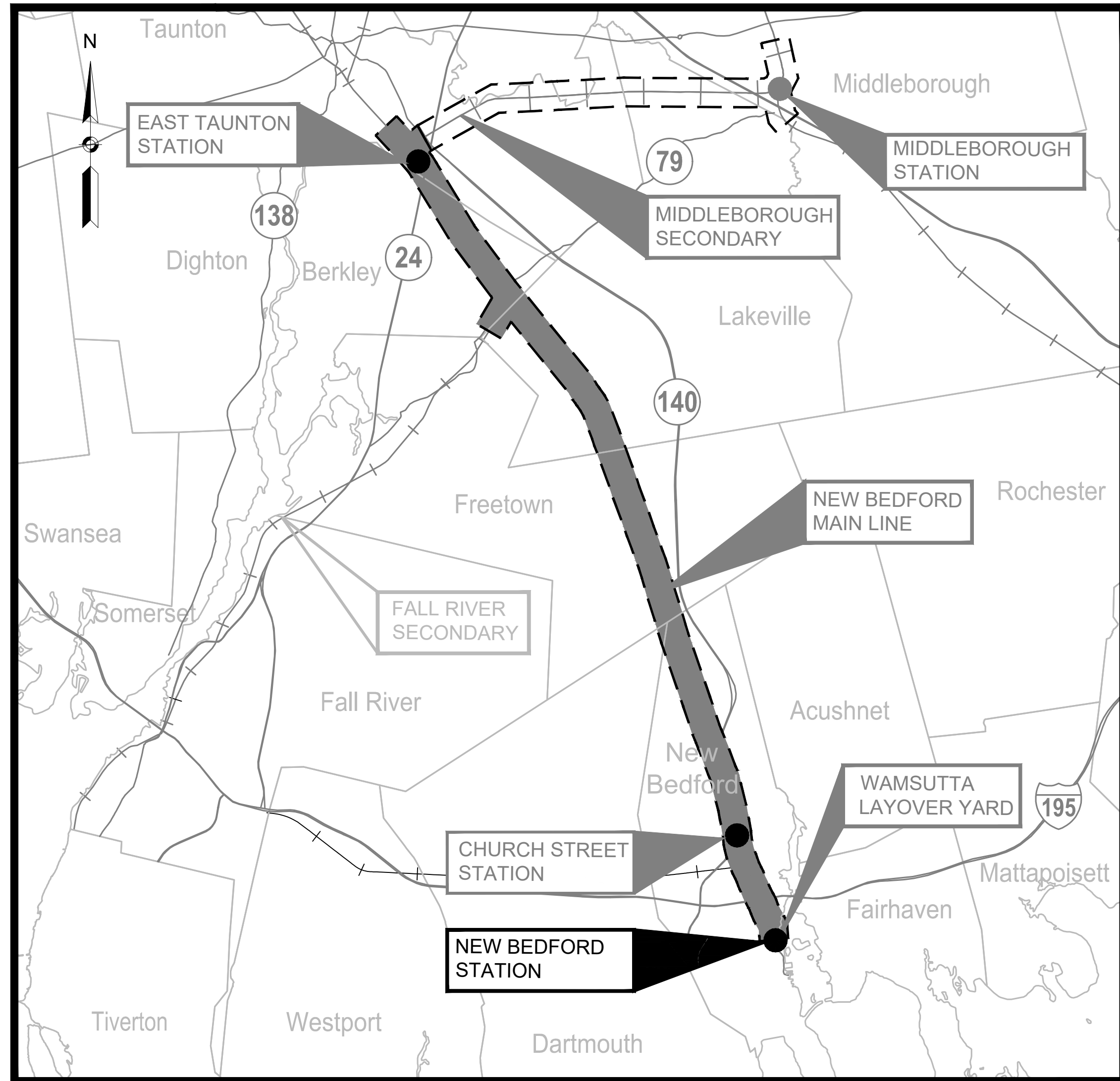
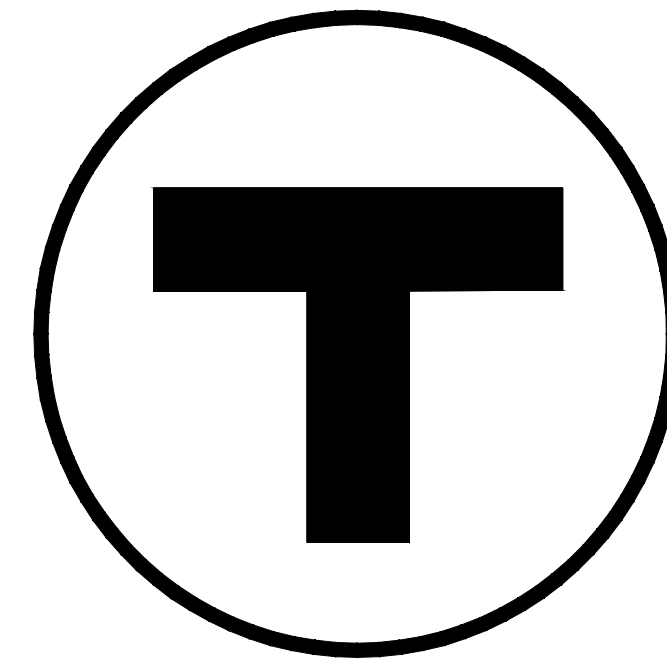




PROJECT LOCATION PLAN

0 5,000 10,000 FEET



**MASSACHUSETTS
BAY
TRANSPORTATION
AUTHORITY**

South Coast Rail - Phase I

SCR MS/NBML Commuter Rail Expansion Project

Middleborough To New Bedford, MA

Volume 2D - New Bedford Station

New Bedford Main Line

MBTA Contract No. K78CN04

ISSUED FOR BID

April 24, 2020

PLAN NUMBERS: 312050 TO 312217

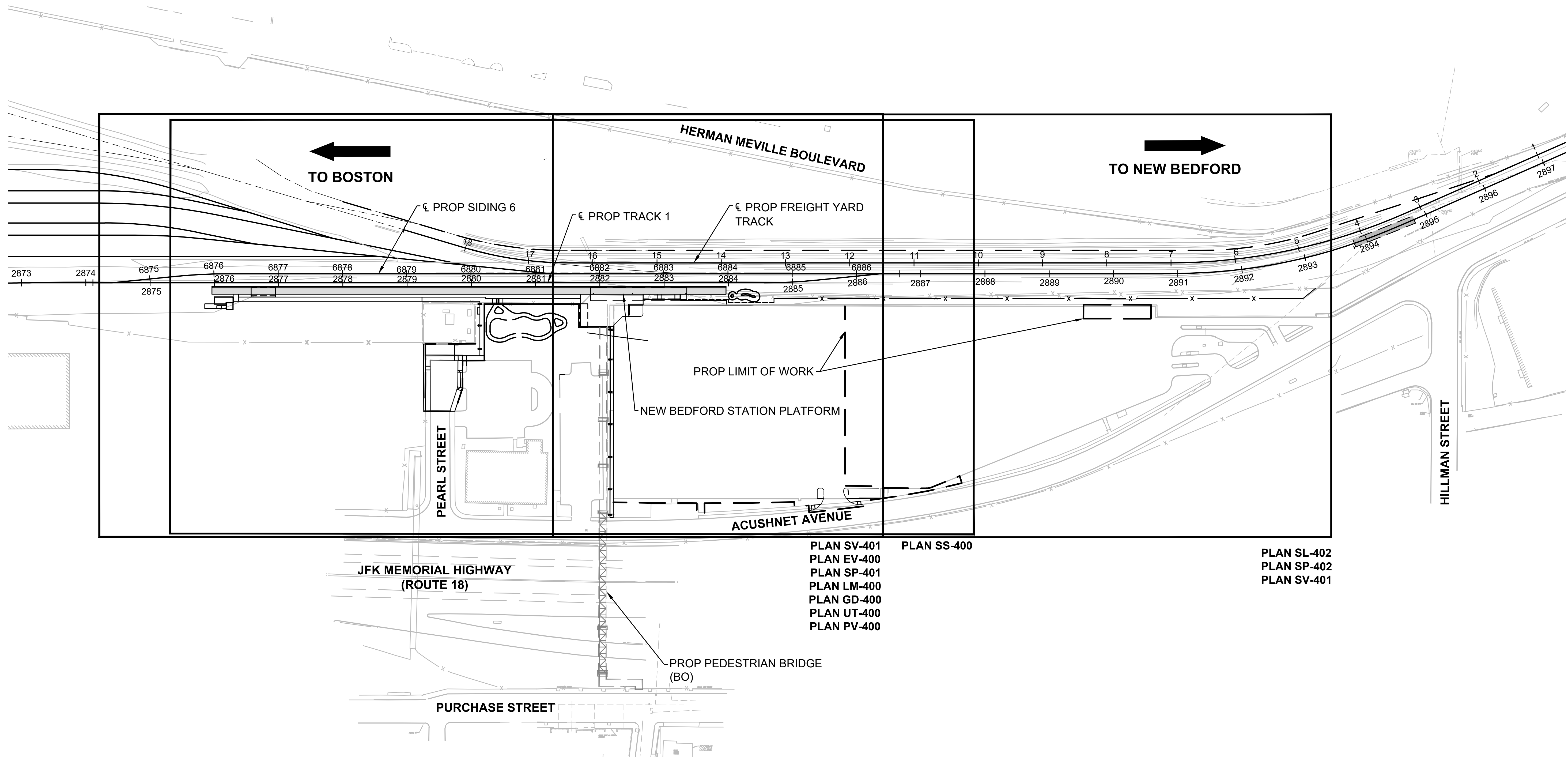


99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

AR-416	312112	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, MISC. DETAILS
AR-430	312113	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGNAGE PLAN
AR-431	312114	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGNAGE TYPES 1
AR-432	312115	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGNAGE TYPES 2
AR-433	312116	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGN FRAME & BENCH DETAILS
AR-434	312117	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGN FRAME ELEVATIONS & SECTIONS
AR-435	312118	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGN DETAILS
AR-436	312119	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, LOLLIPOP SIGN
STRUCTURAL			
ST-401	312123	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, STRUCTURAL GENERAL NOTES 1 OF 2
ST-402	312124	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, STRUCTURAL GENERAL NOTES 2 OF 2
ST-403	312125	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PLATFORM SITE PLAN
ST-404	312126	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, FOUNDATION PLAN 1 OF 4
ST-405	312127	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, FOUNDATION PLAN 2 OF 4
ST-406	312128	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, FOUNDATION PLAN 3 OF 4
ST-407	312129	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, FOUNDATION PLAN 4 OF 4
ST-408	312130	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PLATFORM PLAN 1 OF 2
ST-409	312131	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PLATFORM PLAN 2 OF 2
ST-410	312132	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SUBSTRUCTURE DETAILS 1 OF 5
ST-411	312133	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SUBSTRUCTURE DETAILS 2 OF 5
ST-412	312134	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SUBSTRUCTURE DETAILS 3 OF 5
ST-413	312135	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SUBSTRUCTURE DETAILS 4 OF 5
ST-414	312136	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SUBSTRUCTURE DETAILS 5 OF 5
ST-415	312137	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, MICROPILE DETAILS
ST-416	312138	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PLATFORM DETAILS 1 OF 3
ST-417	312139	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PLATFORM DETAILS 2 OF 3
ST-418	312140	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PLATFORM DETAILS 3 OF 3
ST-419	312141	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CANOPY ROOF PLAN
ST-420	312142	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CANOPY DETAILS 1 OF 3
ST-421	312143	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CANOPY DETAILS 2 OF 3
ST-422	312144	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CANOPY DETAILS 3 OF 3
ST-423	312145	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, MISCELLANEOUS DETAILS
ST-424	312146	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, BIKE SHELTER DETAILS
ST-425	312147	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGN SUPPORT DETAILS 1 OF 3
ST-426	312148	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGN SUPPORT DETAILS 2 OF 3
ST-427	312149	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SIGN SUPPORT DETAILS 3 OF 3
PLUMBING			
PL-401	312151	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION PLUMBING SITE PLAN
ELECTRICAL			
EL-401	312152	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, ELECTRICAL LEGEND, SYMBOLS
EL-402	312153	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, NOTES & ABBREVIATIONS
EL-403	312154	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, LIGHTING SITE PLAN
EL-404	312155	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, LIGHTING CANOPY PLAN
EL-405	312156	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, POWER SITE PLAN
EL-470	312157	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, ELECTRICAL DETAILS SHEET 1
EL-471	312158	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, ELECTRICAL DETAILS SHEET 2
EL-472	312159	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, ELECTRICAL DETAILS SHEET 3
EL-480	312160	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, ELECTRICAL SCHEDULES AND RISERS
EL-490	312161	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, ELECTRICAL SITE PHOTOMETRICS
COMMUNICATIONS			
CM-400	312164	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, GENERAL NOTES
CM-401	312165	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SYMBOLS AND ABBREVIATIONS
CM-402	312166	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, SYSTEMS BLOCK DIAGRAM
CM-403	312167	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PROPOSED FIBER OPTIC NETWORK
CM-404	312168	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PHONE DATA ONE-LINE DIAGRAM & SCHEDULE
CM-405	312169	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CCTV-INTERCOM INTERCONNECT
CM-406	312170	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, ACCESS CONTROL ONE-LINE DIAGRAM
CM-407	312171	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, PA-VMS INTERCONNECT
CM-408	312172	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, NVR CCTV STORAGE
CM-409	312173	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CCTV & CAAP SCHEDULE
CM-410	312174	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, COMMUNICATIONS HOUSE DETAILS 1
CM-411	312175	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, COMMUNICATIONS HOUSE DETAILS 2
CM-412	312176	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, COMMUNICATIONS PLATFORM CABINET
CM-420	312177	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, KEY PLAN
CM-421	312178	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, EQUIPMENT LAYOUT SHEET 1
CM-422	312179	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, EQUIPMENT LAYOUT SHEET 2
CM-423	312180	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, EQUIPMENT LAYOUT SHEET 3
CM-424	312181	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, EQUIPMENT LAYOUT SHEET 4
CM-425	312182	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, EQUIPMENT LAYOUT SHEET 5
CM-426	312183	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CONDUIT AND CABLES LAYOUT 1
CM-427	312184	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CONDUIT AND CABLES LAYOUT 2
CM-428	312185	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CONDUIT AND CABLES LAYOUT 3
CM-429	312186	NEW BEDFORD MAIN LINE	NEW BEDFORD STATION, CONDUIT AND CABLES LAYOUT 4

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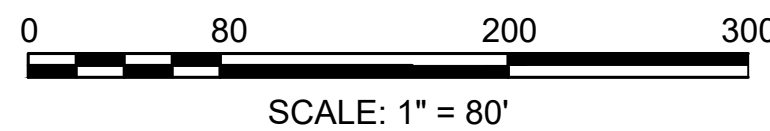
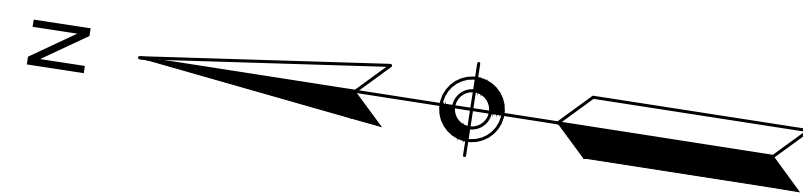
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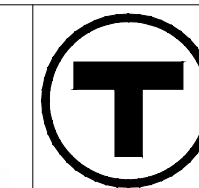
PLAN SV-401
PLAN EV-400
PLAN SP-401
PLAN LM-400
PLAN GD-400
PLAN UT-400
PLAN PV-400

PLAN SS-400

PLAN SL-402
PLAN SP-402
PLAN SV-401

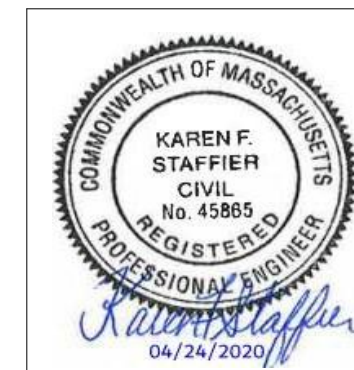


ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
KEY PLAN**



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

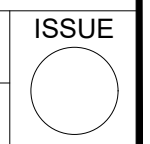
[Signature]

ISSUE	DATE	DESCRIPTION	BY	CHKD.	APP.

PROJECT MANAGER
HORIZ: 1"=80'
VERT: NONE
DATE: 04/24/2020

DES. BY: JHC
DR. BY: MRT
CHK. BY: KSS

PROJECT MANAGER
PLAN NO. 312052
SHEET KP-400



GENERAL

1. EACH PLAN IS PART OF A SET OF DRAWINGS AND SPECIFICATIONS, AND IS NOT TO BE USED AS A SOURCE OF INFORMATION.
2. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED.
3. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R).
4. THE CONTRACTOR SHALL COORDINATE ANY WORK IMPACTING RAILROAD PROPERTY AND / OR RIGHT-OF-WAY WITH MBTA, KEOLIS, MCRR, AND CSX.
5. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. ALL CONSTRUCTION ACTIVITY SHALL BE IN ACCORDANCE WITH MASSDOT, MBTA, OSHA STANDARDS AND LOCAL REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
6. THE CONTRACTOR SHALL PROVIDE 72 HOURS NOTICE TO ALL PRIVATE PROPERTY OWNERS ABUTTING CONSTRUCTION AREAS PRIOR TO COMMENCEMENT OF WORK.
7. ALL WORK PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO APPLICABLE MUNICIPAL AND / OR STATE HIGHWAY STANDARDS.
8. ALL SITE TRAFFIC CONTROL SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE 2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AS AMENDED UNLESS OTHERWISE NOTED.
9. ALL PROPOSED GRANITE BOUNDS AND ANY EXISTING MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE RESET BY A PROFESSIONAL LAND SURVEYOR (PLS) LICENSED IN THE COMMONWEALTH OF MASSACHUSETTS.
10. ALL EXISTING U.S.G.S DISKS, HIGHWAY BOUNDS, RAILROAD MONUMENTS, PROPERTY BOUNDS, AND CITY BOUNDS SHALL BE PROTECTED AND RAISED TO FINISHED GRADE AS REQUIRED BY U.S.G.S., MASSDOT, OR OTHER APPLICABLE AUTHORITY. ANY DAMAGE TO U.S.G.S DISKS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER AND THE U.S. GEOLOGICAL SURVEY AND SHALL BE REPAIRED AT NO COST TO THE RESPECTIVE AUTHORITY. ANY DAMAGE TO TOWN BOUNDS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER AND SHALL BE REPAIRED AT NO COST TO THE AUTHORITY. THE CONTRACTOR SHALL INVENTORY ALL SUCH BOUNDS, DISKS, AND MONUMENTS PRIOR TO THE START OF ANY WORK.
11. CONTRACTOR SHALL INSTALL APPROVED EROSION CONTROL MEASURES PRIOR TO EARTHWORK OPERATION AND MAINTAIN EROSION CONTROL MEASURES DURING CONSTRUCTION. EROSION CONTROL SHALL BE REMOVED ONLY UPON APPROVAL OF THE ENGINEER.
12. TEMPORARY CONSTRUCTION EASEMENT AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITIONS UNLESS OTHERWISE NOTED.
13. CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL, MAINTAIN, AND REMOVE APPROVED EROSION CONTROL MEASURES AROUND CATCH BASIN FRAMES AND GRATES TO PREVENT RUNOFF SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM DURING CONSTRUCTION.
14. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO WETLAND RESOURCE AREAS AND OFFSITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO ADDITIONAL COST TO THE PROJECT.
15. THIS PROJECT DISTURBS MORE THAN ONE ACRE OF LAND AND FALLS WITHIN THE NPDES CONSTRUCTION GENERAL PERMIT (CGP) PROGRAM AND EPA JURISDICTION. PRIOR TO THE START OF CONSTRUCTION CONTRACTOR IS TO FILE A CGP NOTICE OF INTENT WITH THE EPA AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE NPDES REGULATIONS. CONTRACTOR SHALL CONFIRM THE OWNER HAS ALSO FILED A NOTICE OF INTENT WITH THE EPA.
16. CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS.
17. AREAS OUTSIDE THE LIMIT OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE PROJECT.
18. ALL AREAS DISTURBED DURING CONSTRUCTION EXCEPT PAVEMENT AND STRUCTURES SHALL RECEIVE LOAM AND SEEDING PER THE SPECIFICATIONS UNLESS OTHERWISE NOTED.
19. TREES AND SHRUBS OUTSIDE THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON APPROVAL OF THE ENGINEER.
20. JOINTS BETWEEN NEW BITUMINOUS CONCRETE ROADWAY PAVEMENT AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH HOT POURED RUBBERIZED ASPHALT SEALER AND BACKSANDED. SAWCUT SHALL BE VERTICAL, STRAIGHT, AND NOT IRREGULAR.
21. DIMENSIONS ARE FROM FACE OF CURB, FACE OF WALL, AND CENTERLINE OF PAVEMENT MARKINGS UNLESS OTHERWISE NOTED.
22. ALL CHAIN LINK FENCE SHALL BE TYPE I GALVANIZED STEEL, 6 (SIX) FEET IN HEIGHT, UNLESS OTHERWISE NOTED.
23. IN THESE PLANS, THE TERM "NOT IN CONTRACT " (NIC) SHALL BE UNDERSTOOD TO MEAN WORK DONE BY OTHERS CONTRACTED AND COMPLETED AHEAD OF THIS CONTRACT. INFORMATION SHOWN ON THESE PLANS IS BASED ON DESIGN INFORMATION. THE CONTRACTOR SHALL VERIFY AS-BUILTS AND/OR SITE CONDITIONS PRIOR TO CONSTRUCTION IN AREAS LABELED AS SUCH.
24. IN THESE PLANS, THE TERM "BY OTHERS" (BO) SHALL BE UNDERSTOOD TO MEAN WORK DONE BY OTHERS THAT IS COINCIDENT TO, OR TO BE DONE AFTER, WORK ISSUED UNDER THIS CONTRACT. CONTRACTOR SHALL COORDINATE WITH ADJACENT AND INTERSECTING CONTRACTS AS REQUIRED TO COMPLETE WORK ISSUED UNDER THIS CONTRACT IN CONFORMANCE WITH THE CONTRACT DOCUMENTS WITHOUT PRECLUDING THE COMPLETION OF SAID CONTRACTS.
25. THE CONTRACTOR IS RESPONSIBLE FOR DESIGN AND IMPLEMENTATION OF ANY REQUIRED EXCAVATION SUPPORT NECESSARY FOR CONSTRUCTION OF THE PROJECT IN ACCORDANCE WITH SPECIFICATION SECTION 02260.

SITE PREPARATION

1. CONTRACTOR SHALL CLEAR AND GRUB ALL EXISTING VEGETATED AREAS WITHIN LIMIT OF WORK.
 2. CONTRACTOR SHALL REMOVE AND DISPOSE OF EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING BUT NOT LIMITED TO BUILDINGS, STRUCTURES, PAVEMENTS, SLABS, CURBING, FENCES, UTILITY POLES, SIGNS, ETC. UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
 3. MAINTAIN EXISTING DRAINAGE SYSTEM DURING ALL CONSTRUCTION ACTIVITIES.
 4. DEMOLITION TO BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL BUILDING CODE.
 5. ALL DEMOLITION MATERIALS, RUBBISH, EXCAVATED MATERIALS AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
 6. DISPOSAL OF HAZARDOUS WASTE SHALL BE IN ACCORDANCE WITH APPLICABLE CODES, REGULATIONS, AND PROJECT SPECIFICATIONS.
 7. UNLESS OTHERWISE NOTED, DISCONNECT ALL UTILITIES AND CAP EXISTING FIELD LINES SUCH AS GAS MAINS, WATER MAINS, AND ELECTRICAL BEFORE STARTING DEMOLITION. COORDINATE THE UTILITY DISCONNECTS WITH THE APPLICABLE UTILITY COMPANY. EXISTING WATER, SEWER, AND DRAINAGE MAINS TO BE RETAINED AND PROTECTED WHERE NOTED.
 8. CONTRACTOR SHALL RELOCATE EROSION CONTROL MEASURES (INCLUDING PERIMETER CONTROLS AND STABILIZED CONSTRUCTION SITE ENTRANCE/EXIT) AS NEEDED TO PROTECT ANY ADJOINING STRUCTURES AND SAFEGUARD THE NEIGHBORING AREAS (INCLUDING WETLAND RESOURCE AREAS) FROM DUST AND DEBRIS.
 9. ALL EXISTING RETAINING WALLS, FOUNDATIONS, COLUMNS, GRADE BEAMS, GRADE SLABS, ETC. SHALL BE DEMOLISHED UP TO 2' BELOW THE PROPOSED FINISHED GRADE UNLESS OTHERWISE NOTED ON THE PLANS OR SPECIFICATIONS.
 10. THE DEMOLITION LIMITS/LIMIT OF WORK DEPICTED IN THE PLANS IS INTENDED TO AID THE CONTRACTOR DURING THE BIDDING AND CONSTRUCTION PROCESS AND IS NOT INTENDED TO DEPICT EACH AND EVERY ELEMENT OF DEMOLITION. ANY ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING EXECUTION OF THE WORK SHALL BE BROUGHT TO THE ENGINEER'S IMMEDIATE ATTENTION AND, IF APPROVED, COMPENSATED PER THE ALLOWANCE ITEM.
 11. UNLESS OTHERWISE PROVIDED ON THE PLANS OR IN THE SPECIFICATIONS, THE ENGINEER HAS NOT PREPARED DESIGNS FOR AND SHALL HAVE NO RESPONSIBILITY FOR THE PRESENCE, DISCOVERY, REMOVAL, ABATEMENT OR DISPOSAL OF HAZARDOUS MATERIALS, TOXIC WASTE OR POLLUTANTS AT THE PROJECT SITE. ANY ADDITIONAL COMPENSATION FOR CHANGED CONDITIONS OR UNFORESEEN OR LATENT SITE CONDITIONS RELATED TO ANY CONDITIONS DISCOVERED DURING THE WORK SHALL BE BROUGHT TO THE ENGINEER'S IMMEDIATE ATTENTION AND, IF APPROVED, COMPENSATED FOR THE ALLOWANCE ITEM.
 12. EROSION CONTROL LIMITS SHALL BE CONSIDERED THE LIMIT OF WORK, UNLESS OTHERWISE NOTED.
- UTILITIES
1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT "DIG SAFE" 72 HOURS PRIOR TO ANY EXCAVATION AT 811 OR 1-888-344-7233 AND SHALL COORDINATE LOCATION OF NON "DIG SAFE" MEMBER UTILITIES WITHIN THE TIME FRAME SPECIFIED BY THE UTILITY OWNER.
 2. THE CONTRACTOR SHALL MAKE ARRANGEMENTS AND SHALL BE RESPONSIBLE FOR PAYING ANY FEES FOR ANY POLE RELOCATION AND FOR THE ALTERATION OR ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, FIRE ALARM, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANY.
 3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, INVERTS, AND TYPES OF EXISTING PIPES AT ALL PROPOSED POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE ENGINEER FOR THE RESOLUTION OF THE CONFLICT.
 4. FIELD VERIFY EXISTING MANHOLE AND CATCH BASIN INVERTS AND REPORT ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE ENGINEER PRIOR TO START OF ANY GRAVITY UTILITY INSTALLATION.
 5. ALL EXISTING UTILITIES SHALL BE MAINTAINED IN PLACE AND/OR KEPT OPERATIONAL DURING CONSTRUCTION EXCEPT AS NOTED ON THE CONTRACT DRAWINGS. ANY NECESSARY DISRUPTION TO OR ABANDONMENT OF EXISTING UTILITIES SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
 6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES AND CITIES / TOWNS THAT MAY BE AFFECTED BY ANY PORTION OF THIS CONSTRUCTION AND TO COORDINATE ALL WORK INVOLVING UTILITY COMPANIES OR CITY / TOWN FACILITIES, WHETHER THOSE FACILITIES ARE EXISTING OR PROPOSED. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPORT AND PROTECT EXISTING UTILITIES IN AND AROUND EXCAVATIONS. PROTECTION AND/OR SUPPORT SHALL BE CONSIDERED INCIDENTAL WORK AND SHALL BE INCLUDED IN THE BID FOR THE ITEM BEING INSTALLED.
 7. EXISTING UTILITIES TO BE RELOCATED SHALL BE VERIFIED WITH RESPECTIVE CONTROLLING AUTHORITY AS TO THEIR FINAL DISPOSITION.
 8. ALL ABOVE GRADE STRUCTURES, POLES, TRANSFORMERS, ETC. TO BE RELOCATED SHALL BE PLACED AT OR BEYOND THE REQUIRED MBTA STANDARD CLEARANCE FROM THE CENTERLINE OF ANY EXISTING AND FUTURE TRACK.
 9. ALL UTILITY SURFACE CASTINGS (COVERS, GRATES, GATE BOXES, ETC.) TO REMAIN SHALL BE ADJUSTED TO THE NEW SURFACE GRADE AS REQUIRED PER MASSDOT STANDARD SPECIFICATIONS 201.62 LAYING BRICKS AND BLOCKS AND PER 201.63 PLACING CASTINGS, WHETHER OR NOT CALLED FOR ON THE PLANS.
 10. THE CONTRACTOR SHALL ALTER THE MASONRY OF THE TOP SECTION OF ALL EXISTING DRAINAGE STRUCTURES AS NECESSARY FOR CHANGES IN GRADE, AND RESET ALL WATER AND DRAINAGE FRAMES, GRATES AND BOXES TO THE PROPOSED FINISH SURFACE GRADE. REQUIRED NEW MASONRY SHALL BE CLAY BRICK CONFORMING TO M4.05.2 OF THE MASSDOT HIGHWAY STANDARD SPECIFICATIONS.
 11. CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER, AND UTILITY FACILITIES FROM ALL LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS WILL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE PROJECT. REFER TO MASSDOT SECTION 150.64.C.
 12. ALL UTILITIES SHOWN ON PLANS SHALL BE RETAINED UNLESS OTHERWISE INDICATED.

14. GAS INSTALLATION

- A. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL GAS PIPE TRENCHING, SAND BEDDING PROCUREMENT, BACKFILL OF TRENCH AND PERMANENT RESTORATION FOR GAS WORK PER THE UTILITY PROVIDER REQUIREMENTS.
 - B. UTILITY COMPANY SHALL BE RESPONSIBLE FOR PLACEMENT OF SAND BEDDING MATERIAL, CARRIER PIPE PROCUREMENT AND INSTALLATION, SERVICE CONNECTIONS AT THE MAIN AND METER, PROCUREMENT AND INSTALLATION OF THE METER, TESTING AND COMMISSIONING AND ABANDONMENT OF THE EXISTING GAS LINE (IF APPLICABLE).
 - C. UTILITY COMPANY SHALL BE RESPONSIBLE FOR ALL GAS LINE PERMITTING, PROCUREMENT, INSTALLATION, PAVEMENT RESTORATION, ETC. FOR GAS LINE INSTALLATION WITHIN PUBLIC RIGHT OF WAY.
15. GRAVITY PIPE LENGTHS AND INVERTS SHOWN ARE TO INSIDE EDGE OF STRUCTURE, ASSUMING A 4' INTERIOR DIAMETER. ALL GRAVITY STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. FOR MANHOLES THAT ARE 20 FEET IN DEPTH AND GREATER, THE MINIMUM DIAMETER SHALL BE 5 FEET.

EXISTING CONDITIONS

1. HORIZONTAL DATUM IS REFERENCED TO THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM - NORTH AMERICAN DATUM OF 1983(2011). LOCUS IS WITHIN THE MAINLAND ZONE. SOURCE CONTROL FOR THE TIE TO THE DATUMS IS MAINE TECHNICAL SOURCE'S REFERENCE STATIONS IN FOXBOROUGH, MA (XMTS), MassDOT CORS STATION (MAMI) IN MILTON, MA, MassDOT CORS STATION (MADA) IN DARTMOUTH, MA, AND COAST GUARD STATION (ACU6) IN ACUSHNET, MA. COORDINATE VALUES WERE DERIVED USING STATIC METHODS BASED ON VARIOUS COMBINATIONS OF THE AFOREMENTIONED CORS STATIONS.
2. VERTICAL DATUM IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). SOURCE CONTROL FOR THE TIE TO THE VERTICAL DATUM ARE SAME CORS STATIONS REFERENCED IN NOTE 1.
3. RAILROAD RIGHT-OF-WAY LINES THAT ARE SHOWN WITH BEARINGS AND DISTANCES TO THE HUNDREDTH OF A FOOT, WERE CALCULATED BY BRYANT ASSOCIATES, INC., 90 CANAL STREET, SUITE 301, BOSTON, MA 02114 (617)248-0300 AND VANASSE HANGEN BRUSTLIN INC. (VHB), 99 HIGH STREET, 10TH FLOOR, BOSTON, MA 02110 (617)728-7777 FROM AN ON THE GROUND SURVEY. DISTANCES ON LINES THAT ARE SHOWN AS PLUS OR MINUS WERE COMPILED FROM EXISTING RECORD PLAN AND DEED DATA AND ARE APPROXIMATE ONLY. GENERICALLY AND WITH SOME EXCEPTIONS, BRYANT HAS PRODUCED THE DATA NORTH OF COTLEY JUNCTION TO MYRICK'S JUNCTION ON THE NEW BEDFORD MAINLINE, SOUTH OF MYRICK'S JUNCTION ON THE FALL RIVER SECONDARY TO THE TERMINUS IN FALL RIVER, THE MIDDLEBOROUGH SECONDARY EAST OF COTLEY JUNCTION TO AND INCLUDING PORTIONS OF PILGRIM JUNCTION. VHB HAS PRODUCED THE DATA SOUTH OF MYRICK'S JUNCTION ON THE NEW BEDFORD MAINLINE TO THE TERMINUS IN NEW BEDFORD, EAST TAUNTON STATION AND MIDDLEBOROUGH STATION. THE RAILROAD ROW RESEARCH, FIELD SURVEYED MONUMENTS AND THE ROW DETERMINATIONS WERE PERFORMED THROUGHOUT THE DURATION OF THE PROJECT, STARTING IN 2010 AND CONTINUING THROUGH 2019.
4. SURVEY DATA SHOWN HAS BEEN PREPARED BY BRYANT ASSOCIATES, INC., 90 CANAL STREET, SUITE 301, BOSTON, MA 02114 (617) 248-0300 AND PRIME AE GROUP, INC., 55 CAPITAL BOULEVARD, 2ND FLOOR, ROCKY HILL, CT 06067 (860) 436-5600. GENERICALLY AND WITH SOME EXCEPTIONS, BRYANT HAS PRODUCED THE DATA NORTH OF COTLEY JUNCTION AND SOUTH OF MYRICK'S JUNCTION ON THE FALL RIVER SECONDARY TO THE TERMINUS IN FALL RIVER. PRIME HAS PRODUCED THE DATA SOUTH OF MYRICK'S JUNCTION ON THE NEW BEDFORD MAINLINE TO THE TERMINUS IN NEW BEDFORD. THE SURVEY DATA HAS BEEN COMPILED UTILIZING MANY DIFFERENT TECHNOLOGIES TO MATCH THE BEST PRACTICES AND REQUIREMENTS OF THE PROJECT. AERIAL DATA WAS PROVIDED BY COL-EAST, INC. THROUGHOUT THE PROJECT CORRIDOR BASED ON SURVEY CONTROLS PROVIDED BY BRYANT ASSOCIATES. MAPPING WAS SPECIFIED FOR 1"=20' WITH 1" CONTOUR ACCURACY. THE AERIAL SURVEY WAS SUPPLEMENTED WITH GROUND SURVEY PERFORMED USING TOTAL STATIONS AND LASER SCANNING. THE AERIAL PHOTOGRAPHY WAS OBTAINED IN 2015. THE AERIAL MAPPING HAS BEEN AUGMENTED THROUGH A GROUND SURVEY PERFORMED THROUGHOUT THE DURATION OF THE PROJECT, STARTING IN 2014 AND CONTINUING THROUGH 2019.
5. FOR GEOTECHNICAL REPORT, SEE SPECIFICATIONS.
6. THE SURFACE EVIDENCE OF THE UTILITIES SHOWN HAS BEEN LOCATED BY FIELD SURVEY, UNLESS NOTED OTHERWISE. THE LINEWORK REPRESENTING UNDERGROUND STRUCTURES AND PIPES HAS BEEN SHOWN HEREON IN ITS APPROXIMATE LOCATION BASED ON AVAILABLE RECORD PLANS. THE SURVEYORS MAKE NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY DO CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. EVIDENCE OF ADDITIONAL UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR.
7. WETLAND BOUNDARIES WERE DELINEATED AND SURVEYED IN 2012, AND SUPPLEMENTED IN 2015 THROUGH 2019.
8. THE CONTRACTOR SHALL CONFIRM EXISTING CONDITIONS AND REPORT ALL DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE ENGINEER.

ISSUED FOR BID

		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT MIDDLEBOROUGH TO NEW BEDFORD, MA CONTRACT NO. K78CN04
NEW BEDFORD MAIN LINE NEW BEDFORD STATION CIVIL GENERAL NOTES		
 99 HIGH STREET BOSTON, MA 02110 (617) 728-7777		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY APPROVED BY:
 PROJECT MANAGER		PROJECT MANAGER
DATE		DATE
HORIZ: NONE		DES. BY: DR. BY: CHK. BY:
VERT: NONE		PLAN NO. 312053
DATE: 04/24/2020		RLG SJH KSS
SHEET		CN-401

FILE NAME: \\VHB\GEL\PROJ\BOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_4_6_CV(AB).DWG

ABBREVIATIONS

GENERAL	
ABD	ABANDON
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
ACR	ACCESSIBLE CURB RAMP
AD	AREA DRAIN
ADJ	ADJUST
ARCH	ARCHITECT
APPROX.	APPROXIMATE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BCB	BEEHIVE CATCH BASIN
BD.	BOUND
BFP	BACKFLOW PREVENTER
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BP	BELOW PLATFORM
BR.	BRIDGE
CAB.	CABINET
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CIT	CHANGE IN TYPE
CLF	CHAIN LINK FENCE
CL (or C)	CENTERLINE
CO	CLEANOUT
COMMS	COMMUNICATIONS
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CONC	CONCRETE
CONST	CONSTRUCTION
CWK	CONCRETE WALK
DCB	DOUBLE CATCH BASIN
DI	DROP INLET
DIA (or Ø)	DIAMETER
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
DWY	DRIVEWAY
EC	EROSION CONTROL
ELEC	ELECTRICAL
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EMH	ELECTRIC MANHOLE
ENGINEER	MBTA CHIEF ENGINEER
EOP (or EP)	EDGE OF PAVEMENT
EV	ELECTRIC VEHICLE
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
F.E. (or FES)	FLARED END SECTION
FT	FOOT
FO	FIBER OPTIC
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HB	HMA (BITUMINOUS) BERM
HDW	HEADWALL
HDPE	HIGH DENSITY POLYETHYLENE
HH	HANDHOLE
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
IN	INCH
INV (or I)	INVERT
JCT	JUNCTION
L (or LT)	LEFT
L	LENGTH (OF CURVE)
LB	LEACH BASIN
LF	LINEAR FEET
LP	LIGHT POLE
LS	LANDSCAPE
LT	LEFT
MAX	MAXIMUM

ABBREVIATIONS (cont.)

GENERAL	
MB	MAILBOX
MBTA	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
MCC	MONOLITHIC CONCRETE CURB
MCRR	MASSACHUSETTS COASTAL RAILROAD
ME	MATCH EXISTING
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
MOCS	MULTI-STAGE OUTLET CONTROL STRUCTURE
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
NIC	NOT IN CONTRACT
NO.	NUMBER
OCM	OUTLET CONTROL MANHOLE
OCS	OVERHEAD CONTACT SYSTEM
OCS	OUTLET CONTROL STRUCTURE
OFF	OFFSET
OHW	OVERHEAD WIRE
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PED	PEDESTRIAN
PERF	PERFORATED
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PS	PRESSURE SEWER
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R (or RT)	RADIUS OF CURVATURE, RIGHT, RIM
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
RGS	RIGID GALVANIZED STEEL
ROW	RIGHT OF WAY
RR	RAILROAD
RRB	RISK REDUCTION BARRIER
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
S	SLOPE
SB	STONE BOUND
SCB	SHALLOW COVER CATCH BASIN
SDS	STORM DRAIN
SDCB	SHALLOW COVER DOUBLE CATCH BASIN
SGE	SLOPED GRANITE EDGING
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET, STONE
STA	STATION
STRUC	STRUCTURAL
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SIH	SIGNAL INSTRUMENT HOUSE
SW	SIDEWALK
SWL	SOLID WHITE LINE
SWEL	SOLID WHITE EDGE LINE
SWPPP	STORMWATER POLLUTION PREVENTION PLAN
SYL	SOLID YELLOW LINE
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TMH	TELEPHONE MANHOLE
TMLP	TAUNTON MUNICIPAL LIGHT PLANT
TOP	TOP OF PAVEMENT
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
UGND	UNDERGROUND
U.S.G.S.	UNITED STATES GEOLOGICAL SURVEY
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE

ABBREVIATIONS (cont.)

GENERAL	
VGC	VERTICAL GRANITE CURB
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WI	WARNING INDICATOR
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
WMH	WATER MANHOLE
WQS	WATER QUALITY STRUCTURE
X-SECT	CROSS SECTION

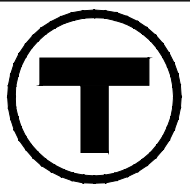
ENVIRONMENTAL ABBREVIATIONS

BF	BANK FLAG
BLSF	BORDERING LAND SUBJECT TO FLOODING
BVW	BORDERING VEGETATED WETLANDS
CVP	CERTIFIED VERNAL POOL
LSCSF	LAND SUBJECT TO COASTAL STORM FLOWAGE
L UW	LAND UNDER WATER
RA	RIVERFRONT AREA
WF	WETLAND FLAG
WL	WETLAND

CIVIL (CV) SHEET ABBREVIATIONS

KP	KEY PLAN
SV	EXISTING CONDITION PLAN
SP	SITE PREPARATION PLAN
LM	LAYOUT AND MATERIALS PLAN
GD	GRADING AND UTILITY PLAN
PV	PAVEMENT PLAN
SL	SITE SIGNAGE PLAN
SS	SNOW STORAGE PLAN
SD	SITE DETAIL PLAN
LD	LANDSCAPE PLAN
TR	TEMPORARY TRAFFIC CONTROL PLAN

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
CIVIL ABBREVIATIONS SHEET



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

[Signature]

PROJECT MANAGER
HORIZ: NONE
VERT: NONE
DATE: 04/24/2020

DES. BY
RLG

DR. BY
SJH

CHK. BY
KSS

PROJECT MANAGER
PLAN NO. 312054
SHEET CN-402

ISSUE
Date

FILE NAME: \\VHB\GEL\PROJBOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_4_6_CV(LG).DWG

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		AREA DRAIN
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE (B), MONITORING WELL (MW), OR OBSERVATION WELL (OW)
		TEST PIT (TP)
		HYDRANT
		LANDSCAPE AREA LIGHT POLE
		VEHICULAR AREA LIGHT POLE
		SECURITY CAMERA
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		STONE BOUND
		TAPPING SLEEVE AND VALVE
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
		GUY WIRE
		BOLLARD WITH LIGHT
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
		SITE BENCH
		SITE TRASH RECEPTACLES
		WATER GATE
		WATER LINE REDUCER
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		LIMIT OF CURB TYPE
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		ARCHITECTURAL FENCE
		TEMPORARY CONSTRUCTION FENCE
		PROTECTION BARRIER
		LINEAR EROSION AND SEDIMENTATION CONTROL BARRIER WITH SILT FENCE AND LIMIT OF WORK
		EROSION CONTROL BARRIER AND LIMIT OF WORK
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT
		EV CHARGING STATION
		LIMIT OF WORK
		CONCRETE SIDEWALK
		ITEM TO BE REMOVED
		PROPANE TANK

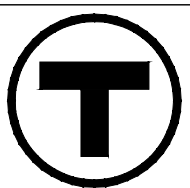
TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
		EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
		RAILROAD SIGNAL
		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
		MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		STOP LINE
		CROSSWALK
		SOLID WHITE LINE
		SOLID YELLOW LINE
		BROKEN WHITE LINE
		BROKEN YELLOW LINE
		DOTTED WHITE LINE
		DOTTED YELLOW LINE
		DOTTED WHITE LINE EXTENSION
		DOTTED YELLOW LINE EXTENSION
		DOUBLE WHITE LINE
		DOUBLE YELLOW LINE

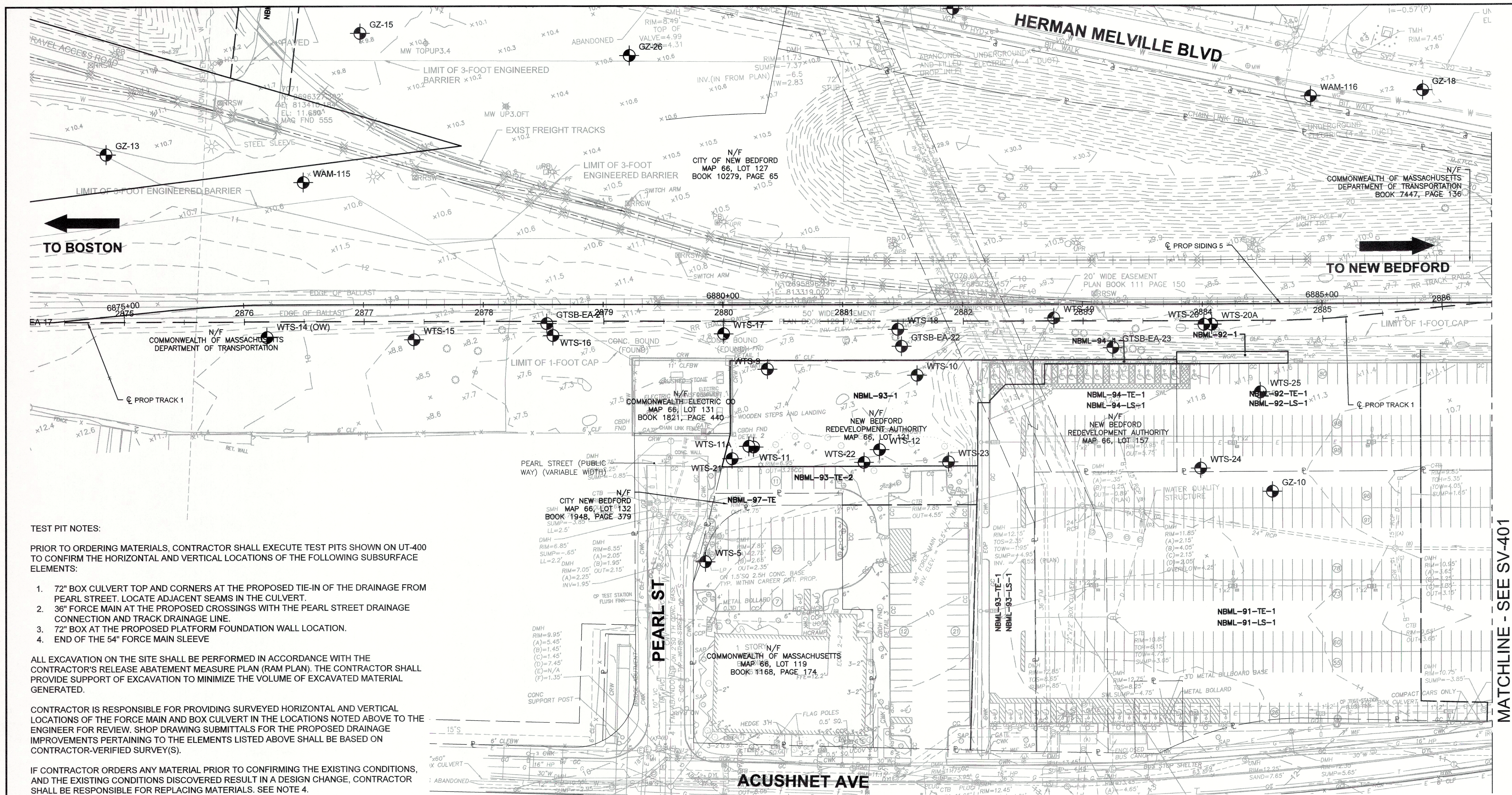
ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
WHALE'S TOOTH STATION
CIVIL LEGEND SHEET

			99 HIGH STREET BOSTON, MA 02110 (617) 728-7777			MASSACHUSETTS BAY TRANSPORTATION AUTHORITY		
APPROVED BY:			PROJECT MANAGER			Date		
HORIZ: NONE			DES. BY			DR. BY		
VERT: NONE			RLG			SJK		
DATE: 04/24/2020			CHK. BY			RM		
PLAN NO. 312055			PROJECT MANAGER			Date		
SHEET CN-403			ISSUE					



TEST PIT NOTES:

PRIOR TO ORDERING MATERIALS, CONTRACTOR SHALL EXECUTE TEST PITS SHOWN ON UT-400 TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATIONS OF THE FOLLOWING SUBSURFACE ELEMENTS:

- 72" BOX CULVERT TOP AND CORNERS AT THE PROPOSED TIE-IN OF THE DRAINAGE FROM PEARL STREET. LOCATE ADJACENT SEAMS IN THE CULVERT.
- 36" FORCE MAIN AT THE PROPOSED CROSSINGS WITH THE PEARL STREET DRAINAGE CONNECTION AND TRACK DRAINAGE LINE.
- 72" BOX AT THE PROPOSED PLATFORM FOUNDATION WALL LOCATION.
- END OF THE 54" FORCE MAIN SLEEVE

ALL EXCAVATION ON THE SITE SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACTOR'S RELEASE ABATEMENT MEASURE PLAN (RAM PLAN). THE CONTRACTOR SHALL PROVIDE SUPPORT OF EXCAVATION TO MINIMIZE THE VOLUME OF EXCAVATED MATERIAL GENERATED.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING SURVEYED HORIZONTAL AND VERTICAL LOCATIONS OF THE FORCE MAIN AND BOX CULVERT IN THE LOCATIONS NOTED ABOVE TO THE ENGINEER FOR REVIEW. SHOP DRAWING SUBMITTALS FOR THE PROPOSED DRAINAGE IMPROVEMENTS PERTAINING TO THE ELEMENTS LISTED ABOVE SHALL BE BASED ON CONTRACTOR-VERIFIED SURVEY(S).

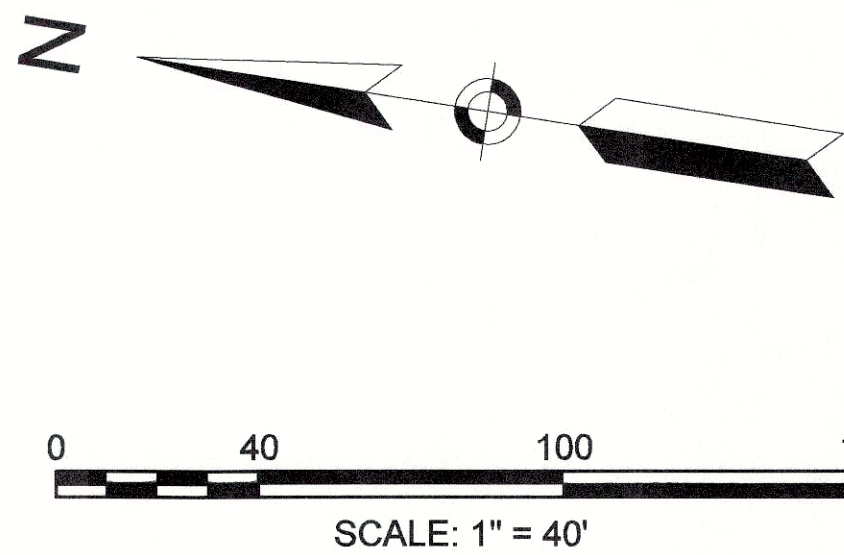
IF CONTRACTOR ORDERS ANY MATERIAL PRIOR TO CONFIRMING THE EXISTING CONDITIONS, AND THE EXISTING CONDITIONS DISCOVERED RESULT IN A DESIGN CHANGE, CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING MATERIALS. SEE NOTE 4.

LEGEND & SYMBOLS

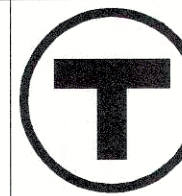
PROPERTY LINE	---
RIGHT OF WAY	---
WETLAND	---
BANK	---
CL STREAM	---
BLSF/LSCSF	---
25' / 200' RIVERFRONT AREA	---
100' BUFFER	---
TREE	---
CONTOUR MINOR	---
CONTOUR MAJOR	---

NOTE:

- SEE SHEET CN-401 FOR EXISTING CONDITION NOTES.
- TRACK BASELINE SHOWN FOR INFORMATION ONLY.
- REFER TO PROJECT SPECIFICATIONS APPENDIX FOR BORING LOGS AND GEOTECHNICAL REPORTS.
- THE CONTRACTOR SHALL NOTIFY NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON OR AROUND THE EXISTING 36" SEWER FORCE MAIN OR 72" BOX DRAINAGE CULVERT.



ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
EXISTING CONDITIONS PLAN 1



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

APPROVED BY:

PROJECT MANAGER
Date

HORIZ: 1" = 40'

VERT: NONE

DATE: 04/24/2020

PROJECT MANAGER
Date

PLAN NO. 312056

SHEET SV-400

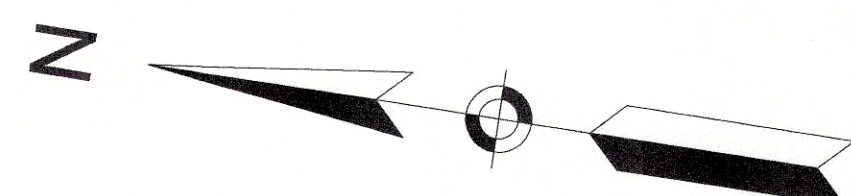
MATCHLINE - SEE SV-401

LEGEND & SYMBOLS

PROPERTY LINE	
RIGHT OF WAY	
WETLAND	
BANK	
CL STREAM	
BLSF/LSCSF	
25' / 200' RIVERFRONT AREA	
100' BUFFER	
TREE	
CONTOUR MINOR	
CONTOUR MAJOR	

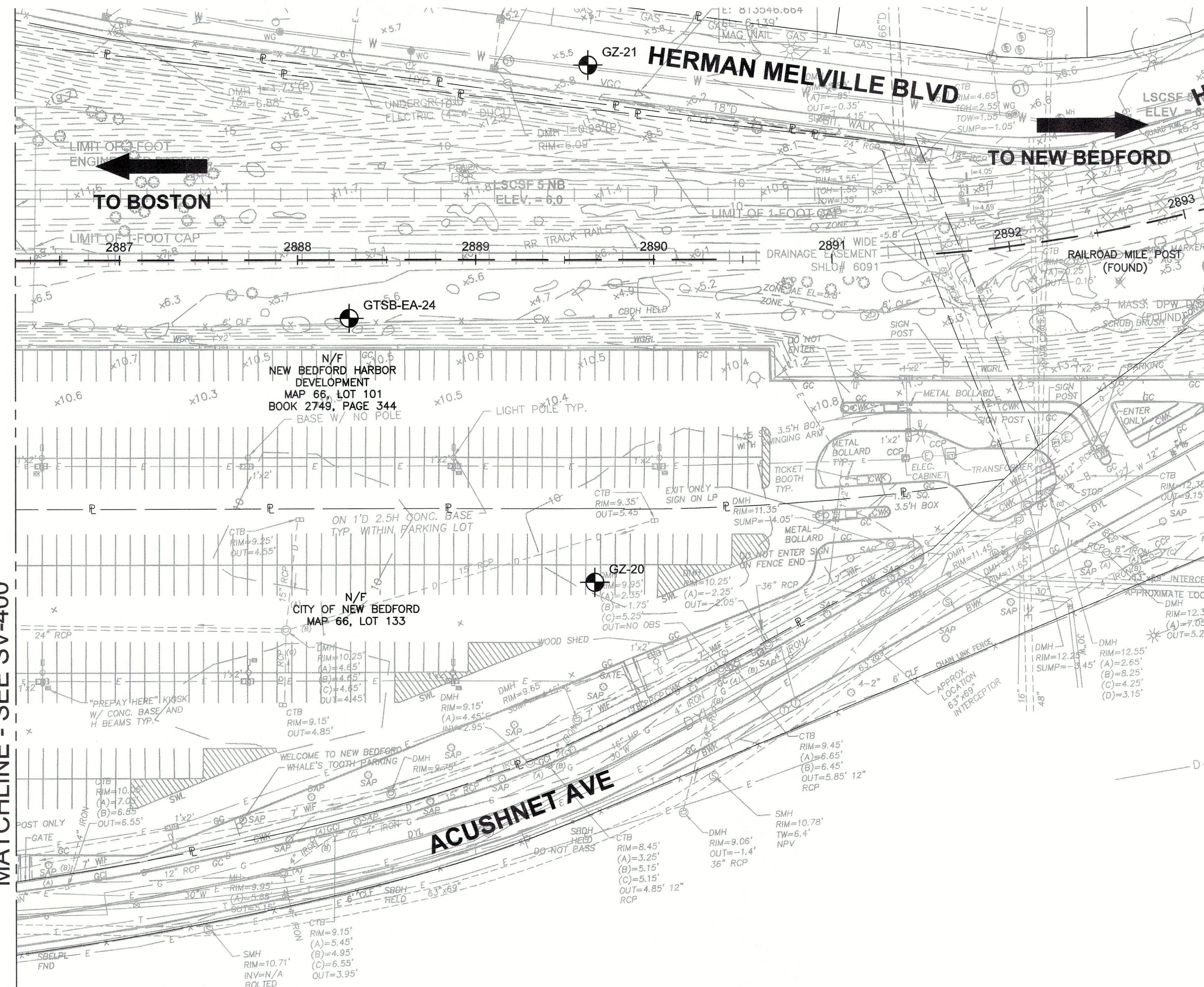
NOTE:

- SEE SHEET CN-401 FOR EXISTING CONDITION NOTES.
- TRACK BASELINE SHOWN FOR INFORMATION ONLY.
- REFER TO PROJECT SPECIFICATIONS APPENDIX FOR BORING LOGS AND GEOTECHNICAL REPORTS.



0 40 100 160
SCALE: 1" = 40'

MATCHLINE - SEE SV-400



ISSUED FOR BID

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE NEW BEDFORD STATION EXISTING CONDITIONS PLAN 2

vhb HNTB

99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

[Signature]
PROJECT MANAGER

DATE

HORIZ: 1" = 40'

VERT: NONE

DATE: 04/24/2020

DES. BY

DR. BY

WRC CAV

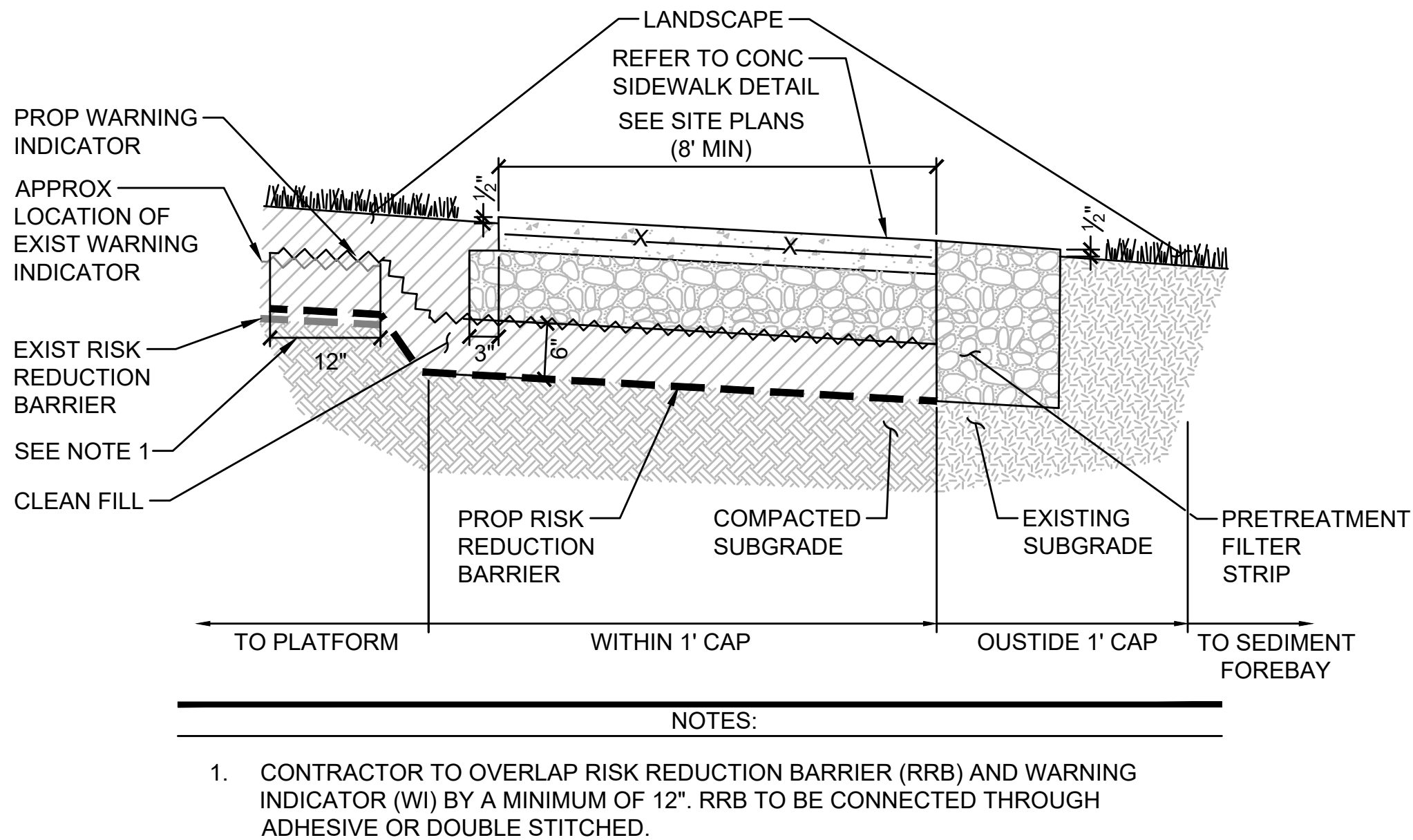
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SHEET SV-401

ISSUE

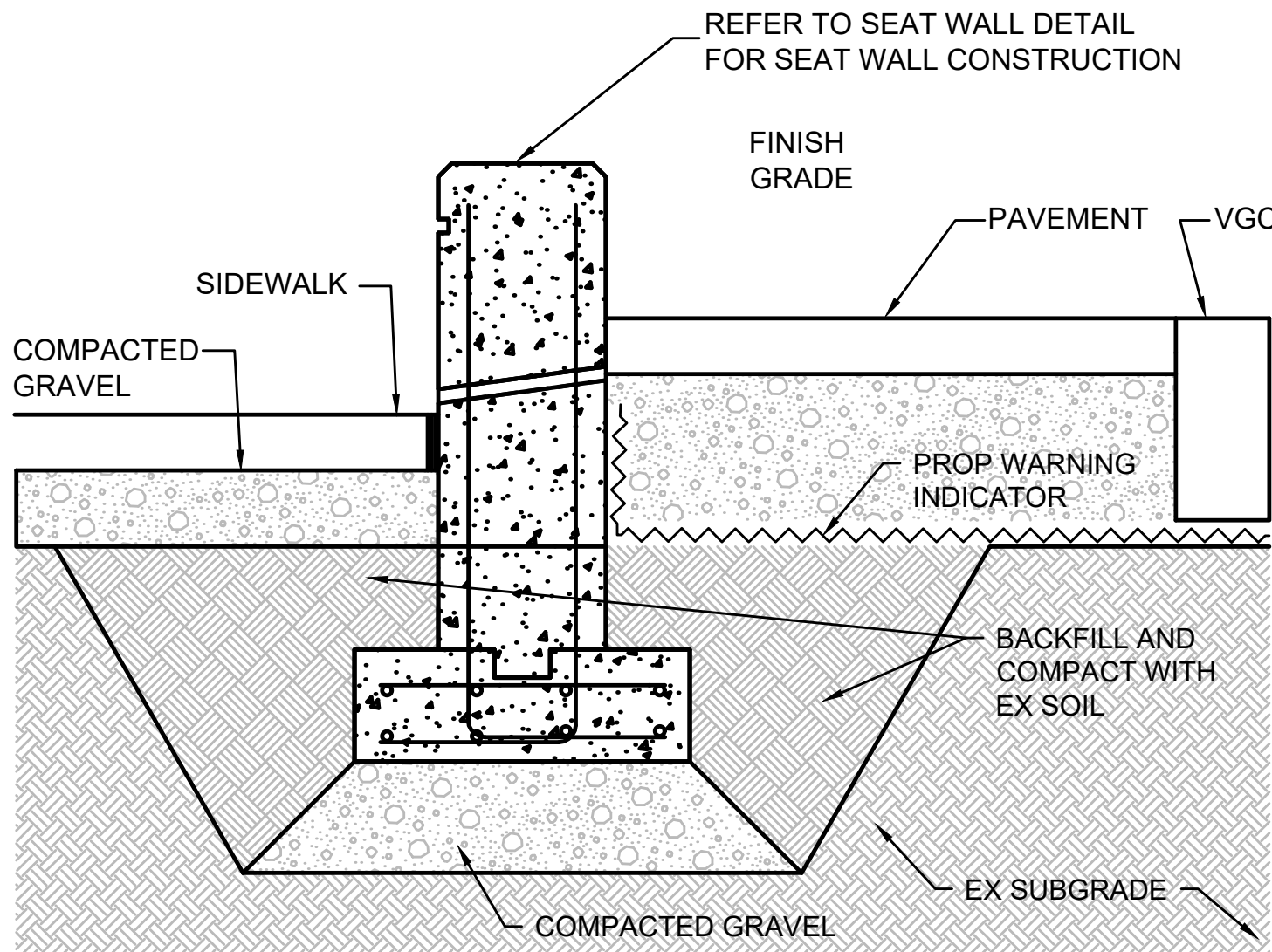
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FILE NAME: \\VHB\GEL\PROJBOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_CV(EV_WHALESTOOTH).DWG



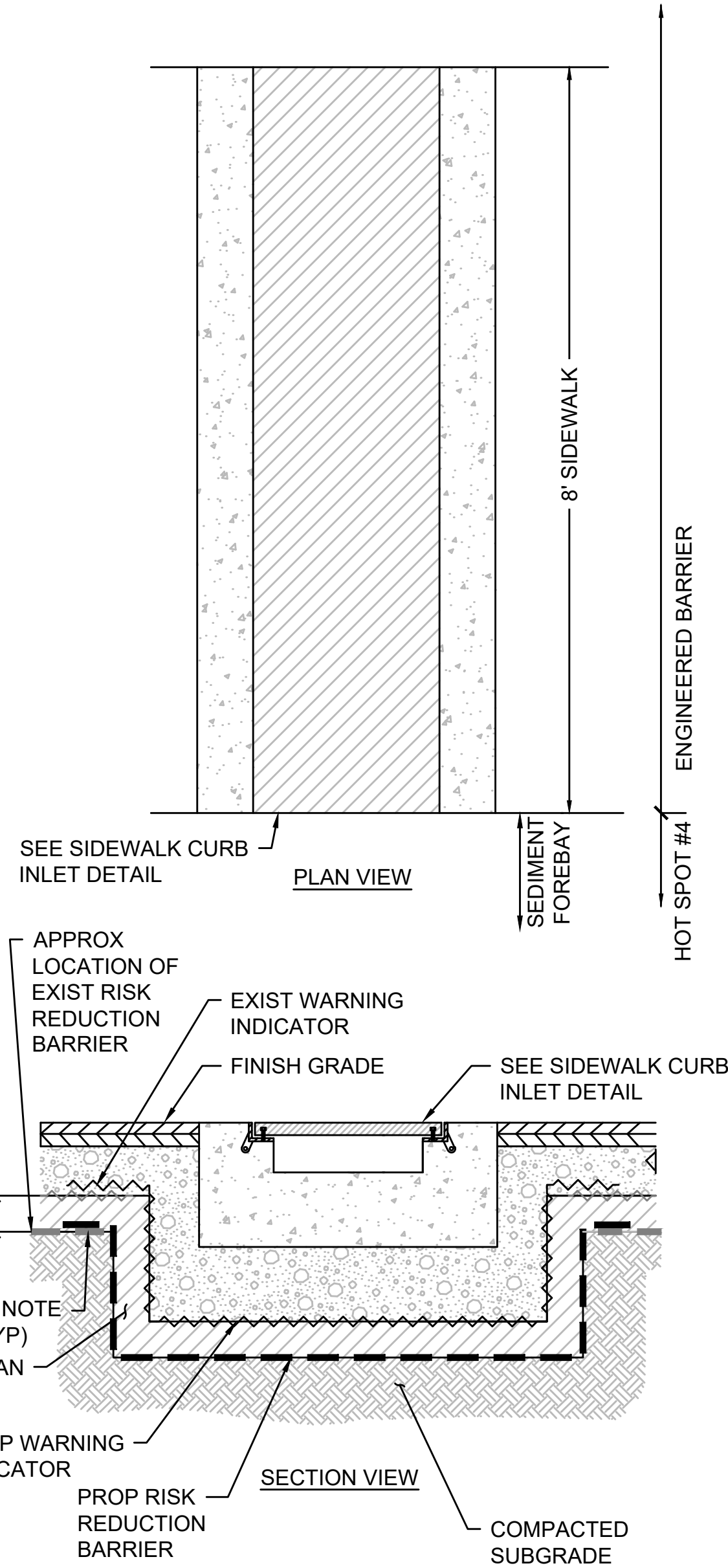
SECTION B-B: CONCRETE SIDEWALK WITH PRETREATMENT FILTER STRIP IN ENGINEERED BARRIER SECTION

SCALE: N.T.S.



SEAT WALL IN CONTAMINATED SOIL

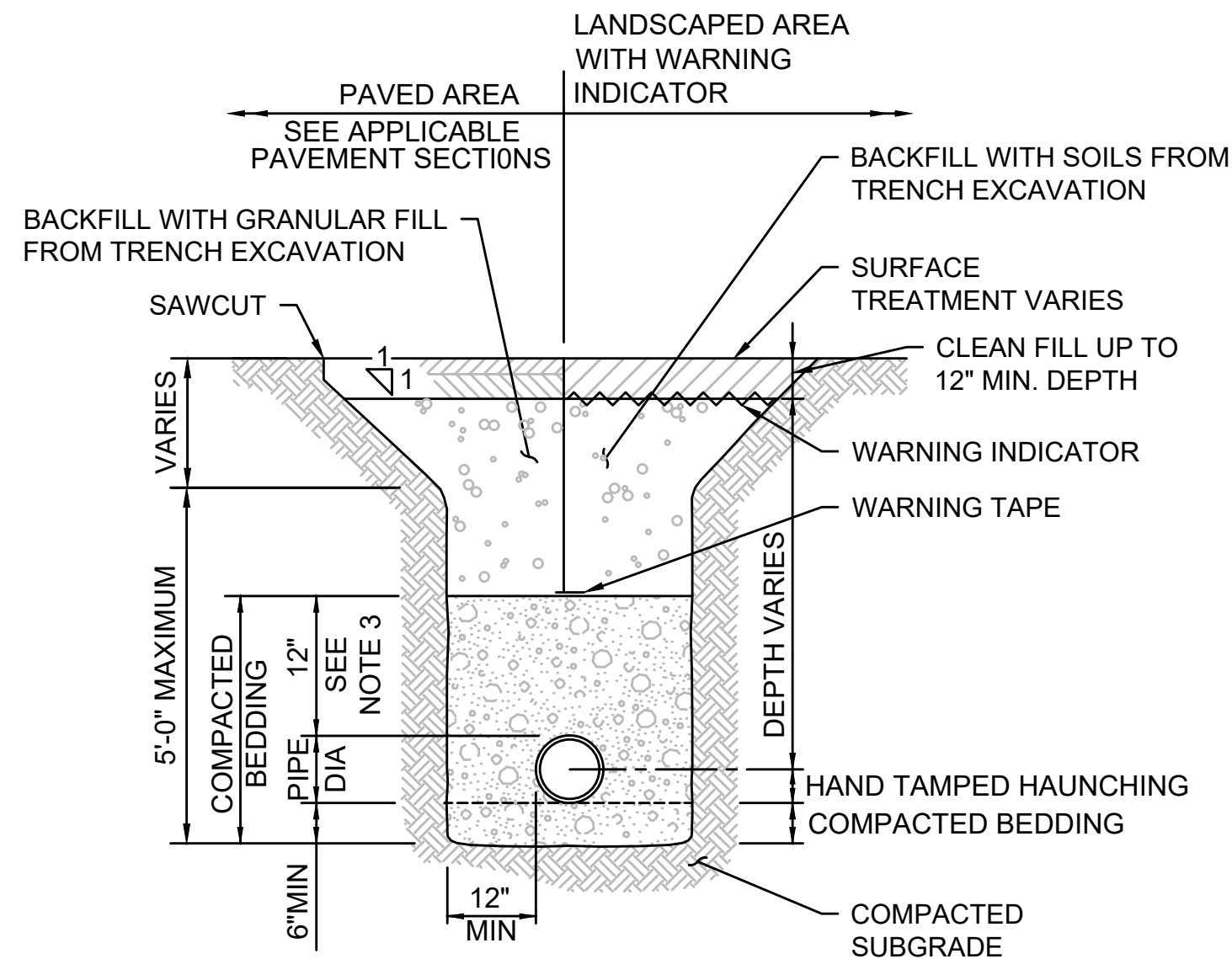
SCALE: N.T.S.



- NOTES:
- CONTRACTOR TO OVERLAP RISK REDUCTION BARRIER (RRB) AND WARNING INDICATOR (WI) A MINIMUM OF 12". RRB TO BE CONNECTED THROUGH ADHESIVE OR DOUBLE STITCHED.

SECTION A-A: SIDEWALK CURB INLET IN ENGINEERED BARRIER SECTION

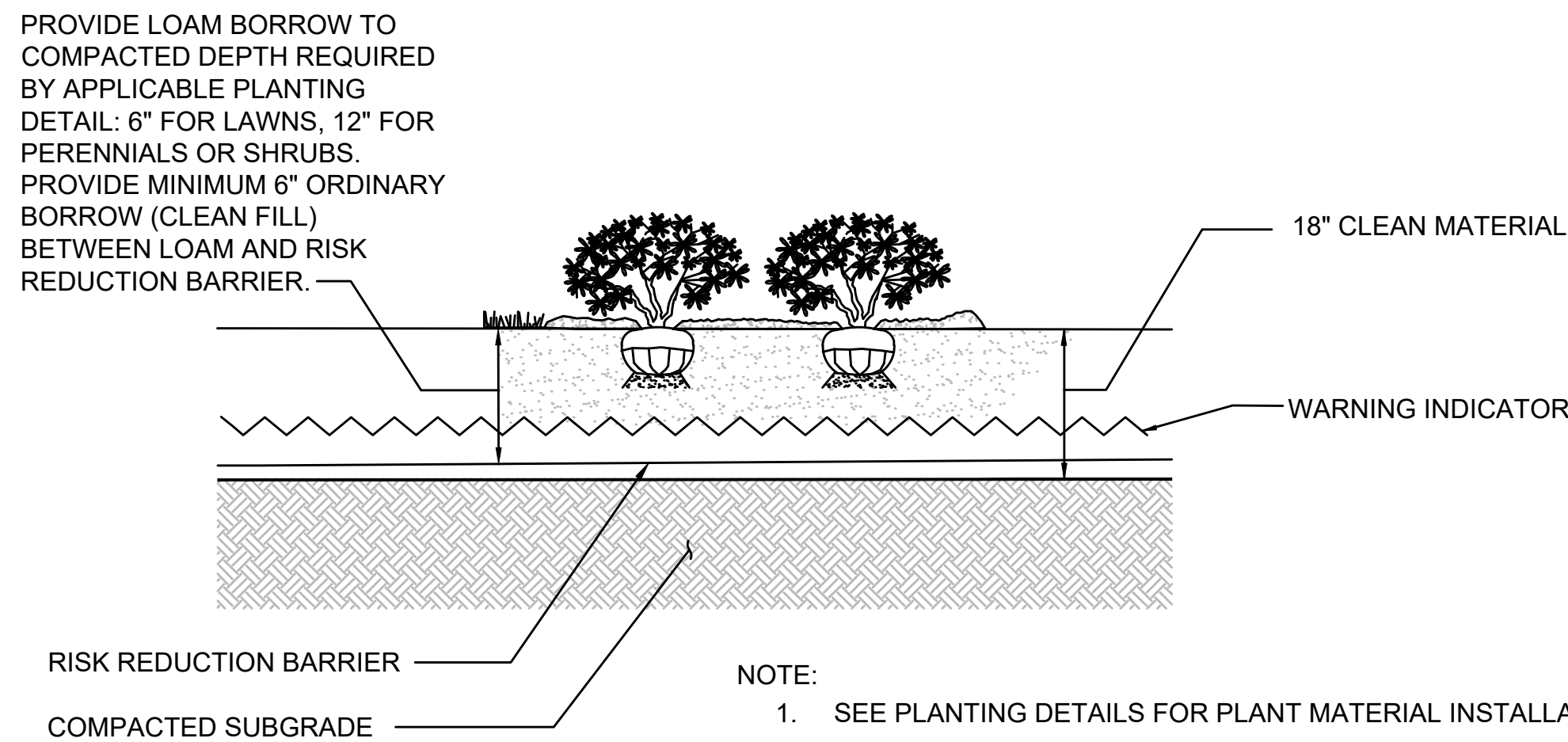
SCALE: N.T.S.



- NOTES:
- WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
 - USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
 - FOR HDPE PIPE, DIMENSION IS 24 INCHES.

UTILITY TRENCH - CONTAMINATED SOIL

SCALE: N.T.S.



- NOTE:
- SEE PLANTING DETAILS FOR PLANT MATERIAL INSTALLATION.

LANDSCAPING IN ENGINEERED BARRIER SECTION

SCALE: N.T.S.

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE NEW BEDFORD STATION ENVIRONMENTAL DETAILS



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

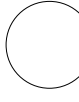
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
APPROVED BY:

[Signature]
PROJECT MANAGER

HORIZ: NONE
VERT: NONE
DATE: 04/24/2020

DES. BY: JHC
DR. BY: BEL
CHK. BY: RTW

PROJECT MANAGER
Date
PLAN NO. 312059
SHEET EV-401



THIS BASE PLAN ILLUSTRATES THE MINIMUM PERIMETER EROSION & SEDIMENTATION CONTROLS. THE CONTRACTOR'S BID SHALL INCLUDE ANY/ALL EROSION CONTROLS NEEDED TO CONTROL EROSION WITHIN THE PROJECT PER THE EPA CONSTRUCTION GENERAL PERMIT REQUIREMENTS AND PROJECT SPECIFICATIONS. THE SWPPP OPERATOR SHALL UPDATE THIS PLAN THROUGHOUT THE DURATION OF CONSTRUCTION TO SHOW THE LOCATIONS OF PROPOSED/CONSTRUCTED E&S CONTROLS DEEMED NECESSARY TO MEET THE REQUIREMENTS OF THE NPDES CGP.

THE APPROXIMATELY 1.7 ACRE SITE WILL BE DEVELOPED AS A SINGLE-PHASE PROJECT. THE PROJECT DISTURBANCE EXCEEDS 1 ACRE THEREFORE IS SUBJECT TO THE REQUIREMENTS OF THE EPA CONSTRUCTION GENERAL PERMIT.

THE EROSION AND SEDIMENTATION CONTROLS SHOWN HEREON ARE PERIMETER MEASURES ONLY AND ARE PROVIDED AS A STARTING POINT FOR CONTRACTOR'S STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR IS REQUIRED TO PROVIDE ADDITIONAL INTERIM EROSION AND SEDIMENTATION CONTROLS, INCLUDING BUT NOT LIMITED TO THOSE LISTED BELOW. THE CONTRACTOR SHALL MANAGE EROSION AND SEDIMENTATION DURING CONSTRUCTION TO PREVENT IMPACTS TO RESOURCE AREAS, ROADWAYS, AND ABUTTING PROPERTIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE EROSION AND SEDIMENTATION CONTROLS THROUGHOUT THE DURATION OF CONSTRUCTION.

CONTRACTOR SHALL INSTALL APPROVED INLET PROTECTION IN NEWLY CONSTRUCTED AND EXISTING CATCH BASINS AND OTHER DRAINAGE AND MAINTAIN THROUGHOUT CONSTRUCTION.

A TEMPORARY CRUSHED-STONE CONSTRUCTION ENTRANCE/EXIT WILL BE CONSTRUCTED. A CROSS SLOPE WILL BE PLACED IN THE ENTRANCE TO DIRECT RUNOFF.

STABILIZATION OF OPEN SOIL SURFACES WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, UNLESS THERE IS SUFFICIENT SNOW COVER TO PROHIBIT IMPLEMENTATION. VEGETATIVE SLOPE STABILIZATION WILL BE USED TO MINIMIZE EROSION ON SLOPES OF 3:1 OR FLATTER. ANNUAL GRASSES, SUCH AS ANNUAL RYE, WILL BE USED TO ENSURE RAPID GERMINATION AND PRODUCTION OF ROOT MASS. PERMANENT STABILIZATION WILL BE COMPLETED WITH THE PLANTING OF PERENNIAL GRASSES OR LEGUMES. ESTABLISHMENT OF TEMPORARY AND PERMANENT VEGETATIVE COVER MAY BE ESTABLISHED BY HYDRO-SEEDING OR SODDING. A SUITABLE TOPSOIL, GOOD SEEDBED PREPARATION, AND ADEQUATE LIME, FERTILIZER AND WATER WILL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF THESE VEGETATIVE STABILIZATION METHODS. MULCH WILL ALSO BE USED AFTER PERMANENT SEEDING TO PROTECT SOIL FROM THE IMPACT OF FALLING RAIN AND TO INCREASE THE CAPACITY OF THE SOIL TO ABSORB WATER.

TEMPORARY SEDIMENT BASINS WILL BE DESIGNED EITHER AS EXCAVATIONS OR BERMED STORMWATER DETENTION STRUCTURES (DEPENDING ON GRADING) THAT WILL RETAIN RUNOFF FOR A SUFFICIENT PERIOD OF TIME TO ALLOW SUSPENDED SOIL PARTICLES TO SETTLE OUT PRIOR TO DISCHARGE. THESE TEMPORARY BASINS WILL BE LOCATED BASED ON CONSTRUCTION NEEDS AS DETERMINED BY THE CONTRACTOR AND OUTLET DEVICES WILL BE DESIGNED TO CONTROL VELOCITY AND SEDIMENT. POINTS OF DISCHARGE FROM SEDIMENT BASINS WILL BE STABILIZED TO MINIMIZE EROSION. AT A MINIMUM, SEDIMENTATION BASINS SHALL BE DESIGNED AND CONSTRUCTED TO PROVIDE STORAGE FOR THE VOLUME OF RUNOFF GENERATED FROM A 2-YR, 24-HR DESIGN STORM, OR AT LEAST 3,600 CUBIC FEET OF STORAGE PER ACRE DRAINING TO THE BASIN.

SIDESLOPES OF STOCKPILED MATERIAL SHALL BE NO STEEPER THAN 2:1. STOCKPILES NOT USED WITHIN 30 DAYS NEED TO BE SEEDDED AND MULCHED IMMEDIATELY AFTER FORMATION OF THE STOCKPILE. STRAW BALES AND SILT FENCE ARE TO BE PLACED AROUND THE STOCKPILE AREA APPROXIMATELY 10 FEET FROM THE TOE OF SLOPE.

PERIODICALLY MOISTEN EXPOSED SURFACES ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAY DAMP AND REDUCE DUST.

THE SITE CONTRACTOR SHALL INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS (MINIMUM) OR AS REQUIRED PER THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL ADDRESS DEFICIENCIES AND MAINTENANCE ITEMS WITHIN TWENTY-FOUR HOURS OF INSPECTION. CONTRACTOR SHALL PROPERLY DISPOSE OF SEDIMENT SUCH THAT IT DOES NOT ENCUMBER OTHER DRAINAGE STRUCTURES AND PROTECTED AREAS. RECORDS OF THE INSPECTIONS WILL BE PREPARED AND MAINTAINED ON-SITE BY THE CONTRACTOR.

SILT SHALL BE REMOVED FROM BEHIND BARRIERS IF GREATER THAN 6-INCHES DEEP OR AS NEEDED.

SEDIMENT THAT IS COLLECTED IN STRUCTURES SHALL BE DISPOSED OF PROPERLY OR COVERED IF STORED ON-SITE.

EROSION CONTROL STRUCTURES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED EARTH HAS BEEN SECURELY STABILIZED. AFTER REMOVAL OF STRUCTURES, DISTURBED AREAS SHALL BE REGRADED AND STABILIZED AS SOON AS PRACTICAL.

MAINTAIN THE CONSTRUCTION ENTRANCE IN A CONDITION WHICH WILL PREVENT TRACKING AND WASHING OF SEDIMENTS ONTO PAVED SURFACES.

FOR THE LONG-TERM FUNCTION OF THE INFILTRATION BASIN(S)/STRUCTURE(S), CARE SHALL BE TAKEN IN THE INFILTRATION AREAS DURING CONSTRUCTION THE CONTRACTOR SHALL EMPLOY THE FOLLOWING MINIMUM BEST MANAGEMENT PRACTICES (BMPs):

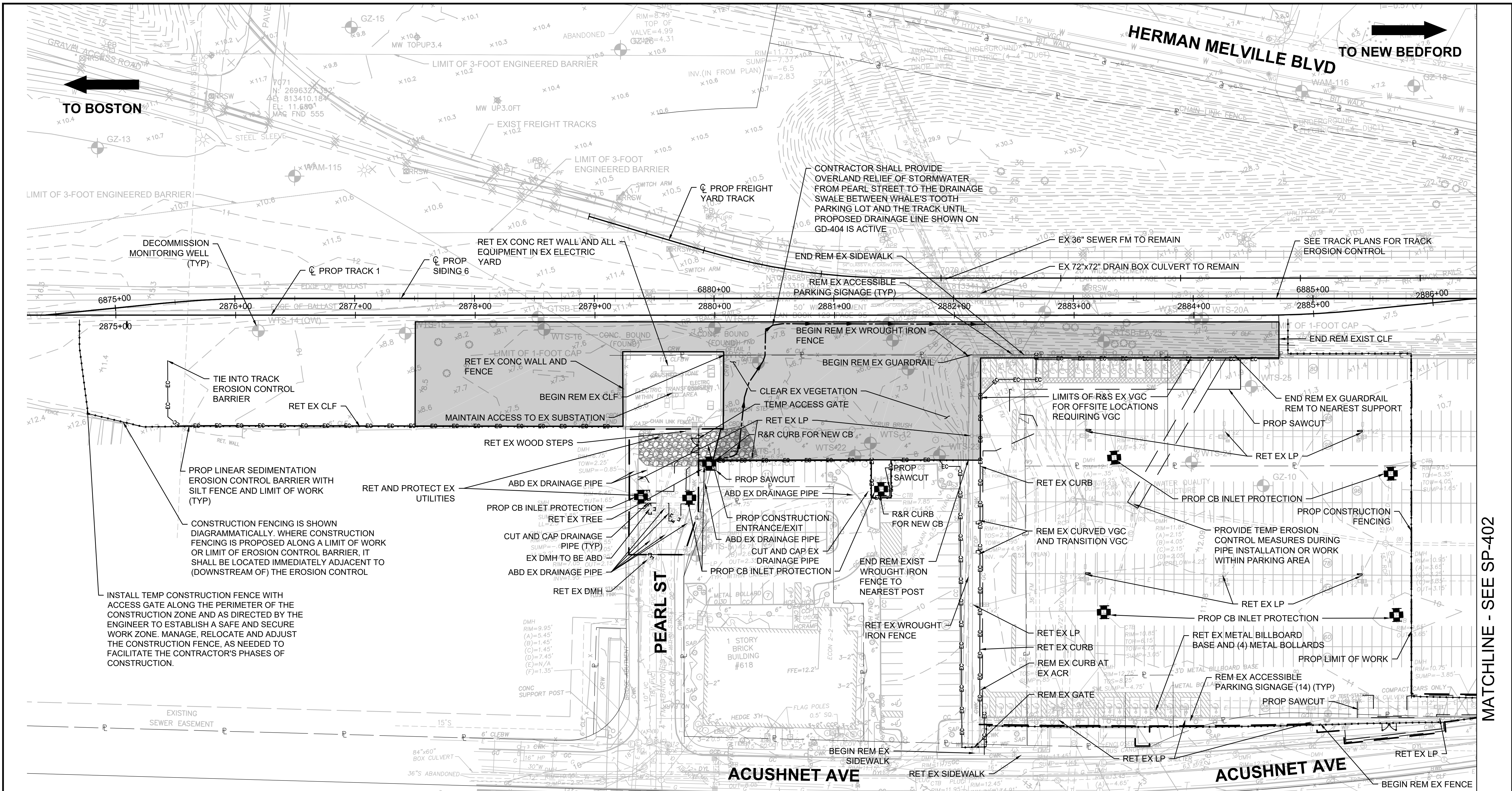
- SWPPP NOTES:**

1. THE QUANTITIES, SIZE, AND LOCATIONS OF EROSION/SEDIMENTATION CONTROL MEASURES (INCLUDING TEMPORARY SEDIMENTATION BASINS) SHOWN ON THIS SITE MAP ARE APPROXIMATE. THIS SITE PREPARATION PLAN, LIKE THE SWPPP, IS A DYNAMIC DOCUMENT, AND MUST BE CONTINUALLY UPDATED BY THE OPERATOR(S) THROUGHOUT CONSTRUCTION. PROJECT OPERATOR(S) SHALL UPDATE SITE MAP TO SHOW FINAL LOCATIONS OF STORMWATER CONTROL MEASURES AND PROVIDE INFORMATION FOR TYPES OF CONTROLS PROVIDED. PROJECT OPERATORS ARE RESPONSIBLE TO SIZE, IMPLEMENT, INSPECT, MAINTAIN, REPAIR, AND MODIFY EROSION/SEDIMENTATION CONTROL MEASURES (INCLUDING TEMPORARY SEDIMENTATION BASINS).
2. STORMWATER CONTROLS MUST BE DESIGNED, INSTALLED AND MAINTAINED IN COMPLIANCE WITH PART 2.1 OF THE 2017 CGP.
3. EROSION AND SEDIMENT CONTROLS MUST BE IMPLEMENTED TO ADDRESS THE REQUIREMENTS OF PART 2.2 OF THE 2017 CGP.
4. IF ANY STORMWATER CONTROLS MUST BE DESIGNED (E.G., SEDIMENT BASINS OR CONVEYANCE CHANNELS), THE DESIGN DOCUMENTATION MUST BE INCLUDED IN ATTACHMENTS OF THE SWPPP MANUAL.
5. THE ITEMS LISTED BELOW ARE REQUIRED TO BE SHOWN ON THIS SITE MAP PER PART 7.2.4 OF THE 2017 CGP. THIS SITE MAP ALREADY INCLUDES SOME OF THE ITEMS IDENTIFIED BELOW, BUT IT IS THE RESPONSIBILITY OF THE PROJECT OPERATOR(S) TO SUPPLEMENT THE INFORMATION INCLUDED HEREON TO ENSURE THAT ALL REQUIRED ITEMS ARE PROVIDED. PROJECT OPERATOR(S) SHALL CONTINUALLY UPDATE THIS SITE PLAN TO DOCUMENT THESE ITEMS THROUGHOUT CONSTRUCTION, INCLUDING BUT NOT LIMITED TO:

- BOUNDARIES OF THE AREA OF DISTURBANCE
- 50-FOOT BUFFER AROUND THE AREA OF DISTURBANCE
- IDENTIFY AREAS OF STEEP SLOPE
- LOCATIONS OF STOCKPILES
- LOCATIONS OF CONSTRUCTION VEHICLE ACCESS
- ALL STORMWATER DISCHARGE POINTS FROM THE AREA OF DISTURBANCE (TO WATERBODIES AND TO STORM DRAIN INLETS)
- LOCATION OF ALL SURFACE WATERS WHERE THE AREA OF DISTURBANCE DISCHARGES
- THE LOCATION AND NATURE OF ALL EROSION AND SEDIMENT CONTROLS
- PERIMETER CONTROLS
- STORM DRAIN INLET CONTROLS
- A NOTE THAT INDICATES THAT THE CONTRACTOR WILL PROVIDE INFORMATION FOR ANY OTHER TYPES OF CONTROLS REQUIRED.
- LOCATION OF ON-SITE AND OFF-SITE CONSTRUCTION SUPPORT ACTIVITY AREAS COVERED BY THIS PERMIT
- AREAS OF FEDERALLY LISTED CRITICAL HABITAT WITHIN THE SITE AND/OR AT DISCHARGE LOCATIONS
- DRAINAGE PATTERNS OF STORMWATER AND AUTHORIZED NON-STORMWATER BEFORE AND AFTER MAJOR GRADING ACTIVITIES.
- LOCATIONS OF ALL POTENTIAL POLLUTANT GENERATING ACTIVITIES.
- LOCATIONS WHERE ANY CHEMICALS WILL BE USED AND STORED.

IN THE AREA INDICATED, FILL SHALL BE PLACED TO THE DESIGN ELEVATION 3 MONTHS BEFORE STARTING SITE CONSTRUCTION.

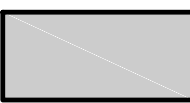
		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT MIDDLEBOROUGH TO NEW BEDFORD, MA CONTRACT NO. K78CN04
NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE PREPARATION NOTES		
		99 HIGH STREET BOSTON, MA 02110 (617) 728-7777
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY		
APPROVED BY:		
PROJECT MANAGER	Date	PROJECT MANAGER
DATE	DATE	ISSUE
HORIZ: NONE	DES. BY	PLAN NO. 312060
VERT: NONE	DR. BY	SHEET SP-400
DATE: 04/24/2020	JHC	MRT
	KSS	



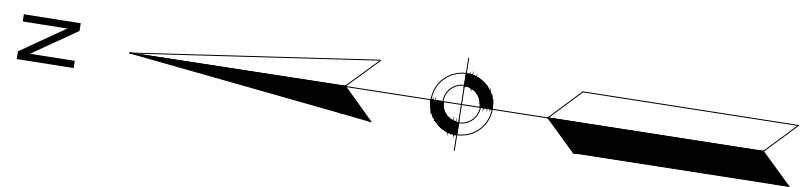
NOTES:

1. TRACK CENTERLINE SHOWN FOR INFORMATION ONLY. REFER TO TRACK PLANS FOR MORE INFORMATION.
2. LIMIT OF WORK AND EROSION CONTROL LIMITS SHOWN AND HEREON ARE FOR THE STATION CONSTRUCTION. REFER TO VOLUME 1B FOR LIMIT OF WORK AND EROSION CONTROLS RELATED TO TRACK WORK.
3. STAGING AREA TO BE COORDINATED WITH FERRY PARKING OWNER.
4. MONITORING WELL DECOMMISSIONING TO BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02290.
5. ALL EXISTING UTILITIES AND DRAINAGE INFRASTRUCTURE WITHIN THE LIMIT OF WORK ARE TO BE RETAINED AND PROTECTED UNLESS OTHERWISE NOTED HEREON OR INDICATED IN THE PLANS.
6. SEE TRACK PLANS IN VOLUME 1B FOR ADDITIONAL TRACK DETAILS.
7. EROSION CONTROL LIMITS ALONG THE ROW SHALL BE PLACED AND RE-PLACED BY THE CONTRACTOR TO ACCOMMODATE THE ACTIVE LIMIT OF DISTURBED AREA ON SITE AND IN COORDINATION WITH THE ADJACENT WORK IN THE TRACK ROW.
8. EROSION CONTROL LIMITS SHALL BE CONSIDERED THE LIMIT OF WORK, UNLESS OTHERWISE NOTED.
9. CONSTRUCTION SHALL BE PHASED TO ALLOW USE OF THE PARKING AREA FOR FERRY PATRONS BETWEEN MEMORIAL DAY AND LABOR DAY.
10. ABANDONED STRUCTURES SHALL HAVE UPPER SECTIONS REMOVED TO A DEPTH OF 4' MIN BELOW PROPOSED GRADE. PIPES TO BE ABANDONED SHALL BE CUT AND PLUGGED WITH BRICK AND MORTAR. PIPE AND STRUCTURES TO BE ABANDONED SHALL BE FILLED WITH CONTROLLED DENSITY FILL (FLOW FILL).

LEGEND:

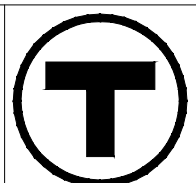
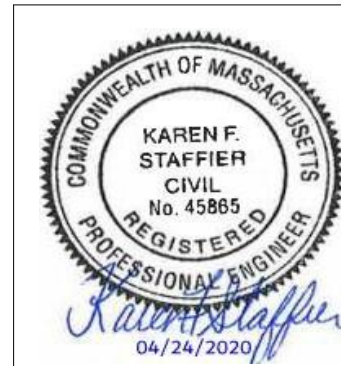


AREA OF PRELOADING: CONTRACTOR SHALL PRELOAD FILL AREAS IN ACCORDANCE WITH EARTHWORK SPECIFICATION 02300



0 40 100 160
SCALE: 1" = 40'

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
SITE PREPARATION PLAN 1



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

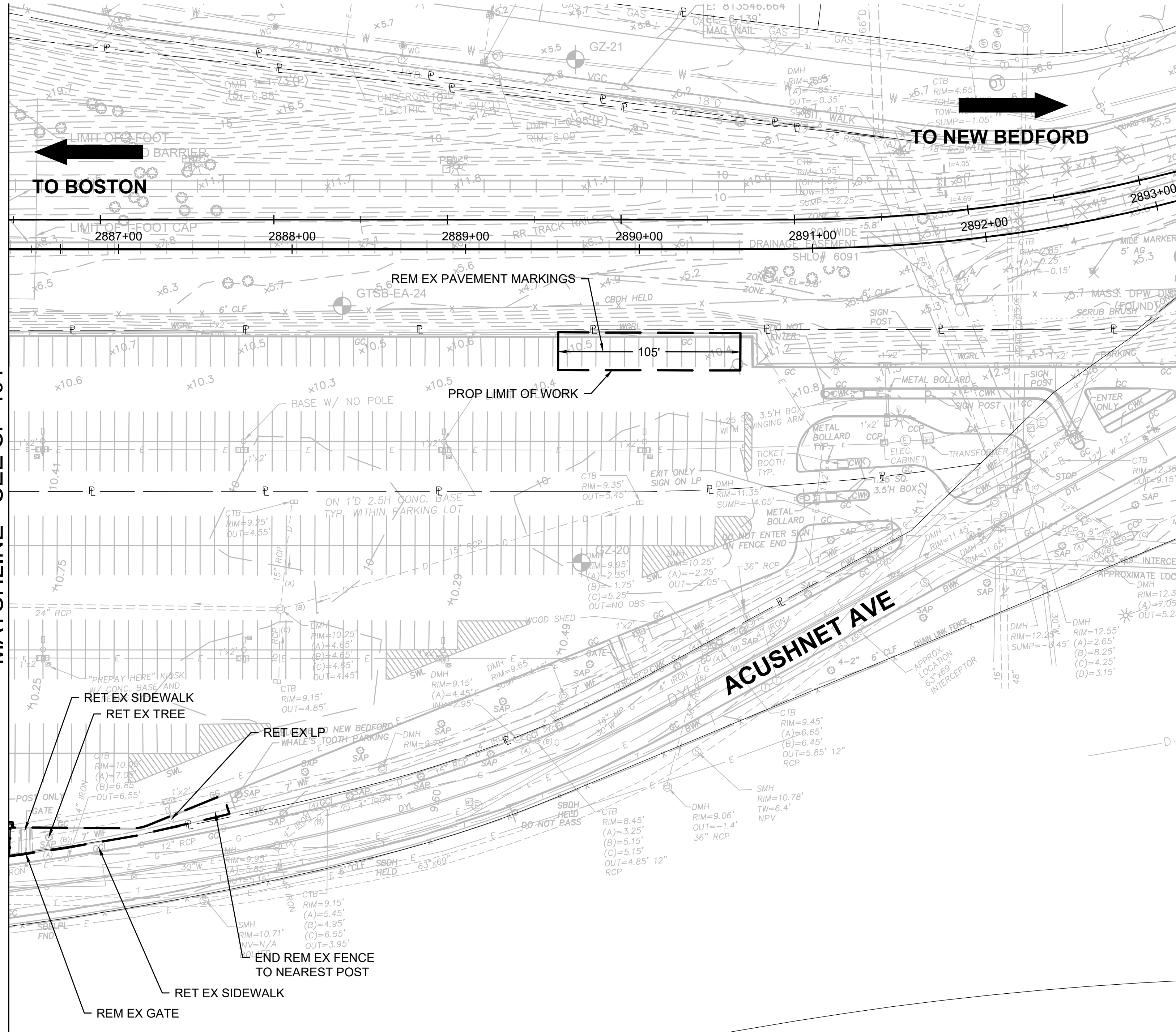
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
APPROVED BY:

PROJECT MANAGER
HORIZ: 1" = 40'
VERT: NONE
DATE: 04/24/2020

PLAN NO. 312061
SHEET SP-401
DATE: 04/24/2020
JHC MRT KSS

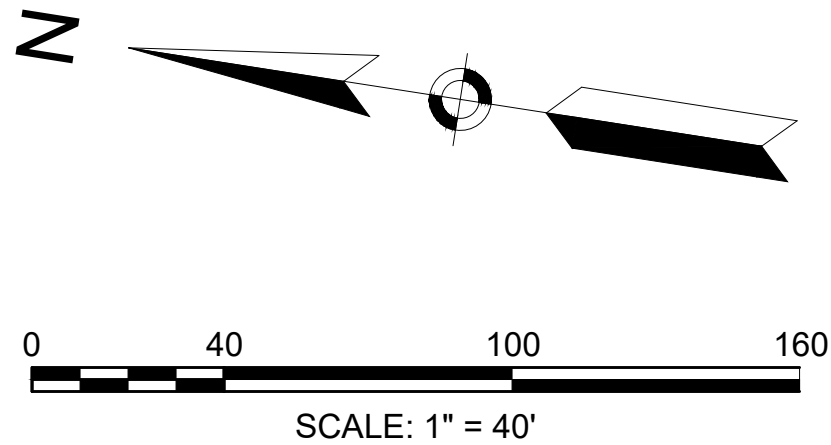
MATCHLINE - SEE SP-402

MATCHLINE - SEE SP-401



NOTES:

1. TRACK CENTERLINE SHOWN FOR INFORMATION ONLY. REFER TO TRACK PLANS FOR MORE INFORMATION.
2. LIMIT OF WORK AND EROSION CONTROL LIMITS SHOWN AND HEREON AREA FOR THE STATION CONSTRUCTION. REFER TO VOLUME 1B FOR LIMIT OF WORK AND EROSION CONTROLS RELATED TO TRACK WORK.
3. STAGING AREA TO BE COORDINATED WITH FERRY PARKING OWNER.
4. MONITORING WELL DECOMMISSIONING TO BE PERFORMED BY MASSACHUSETTS LICENSED WELL DRILLER HIRED BY CONTRACTOR, AND IN ACCORDANCE WITH MASSDEP POLICY #WSC-310-91 FOLLOWING APPROVAL OF CLIENT'S ENVIRONMENTAL ENGINEER/CONSULTANT AND/OR WELL OWNER. RECORD OF DECOMMISSIONING MUST BE SUBMITTED BY WELL DRILLER VIA eDEP.
5. ALL EXISTING UTILITIES AND DRAINAGE INFRASTRUCTURE WITHIN THE LIMIT OF WORK ARE TO BE RETAINED AND PROTECTED UNLESS OTHERWISE NOTED HEREON OR INDICATED IN THE PLANS.
6. SEE TRACK PLANS IN VOLUME 1B FOR ADDITIONAL TRACK DETAILS.
7. EROSION CONTROL LIMITS ALONG THE ROW SHALL BE PLACED AND RE-PLACED BY THE CONTRACTOR TO ACCOMMODATE THE ACTIVE LIMIT OF DISTURBED AREA ON SITE AND IN COORDINATION WITH THE ADJACENT WORK IN THE TRACK ROW.
8. EROSION CONTROL LIMITS SHALL BE CONSIDERED THE LIMIT OF WORK, UNLESS OTHERWISE NOTED.
9. CONSTRUCTION SHALL BE PHASED TO ALLOW USE OF THE PARKING AREA FOR FERRY PATRONS BETWEEN MEMORIAL DAY AND LABOR DAY.
10. BUILDING, SELECTIVE UTILITY DEMOLITION, AND SELECTIVE MONITORING WELL DECOMMISSIONING IS NIC. CONTRACTOR TO COORDINATE WITH EARLY BUILDING DEMOLITION PROJECT, MBTA CONTRACT NO. K78CN02 TO UNDERSTAND WHAT WORK HAS BEEN PREVIOUSLY COMPLETED.



ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
SITE PREPARATION PLAN 2



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

APPROVED BY:

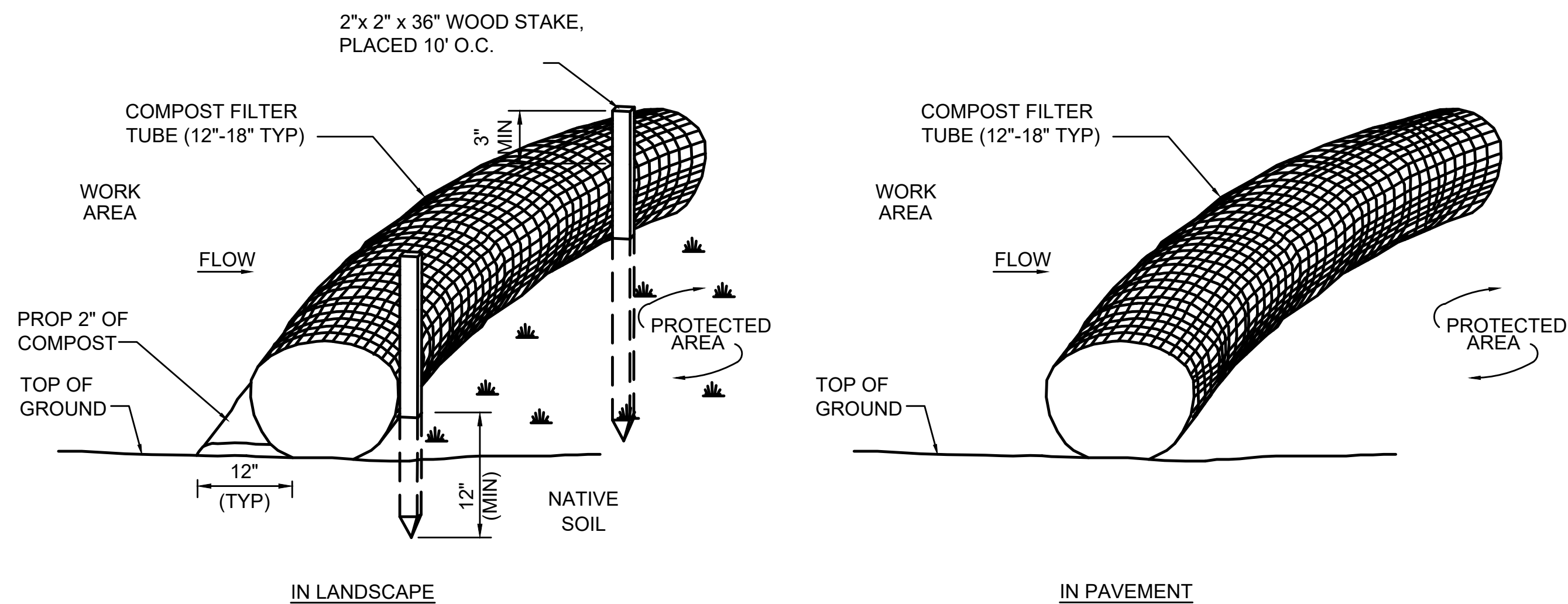
[Signature]

PROJECT MANAGER
HORIZ: 1" = 40'
VERT: NONE
DATE: 04/24/2020

DES BY: JHC
DR. BY: MAM
CHK. BY: KSS

PROJECT MANAGER
Date
PLAN NO. 312062
SHEET SP-402

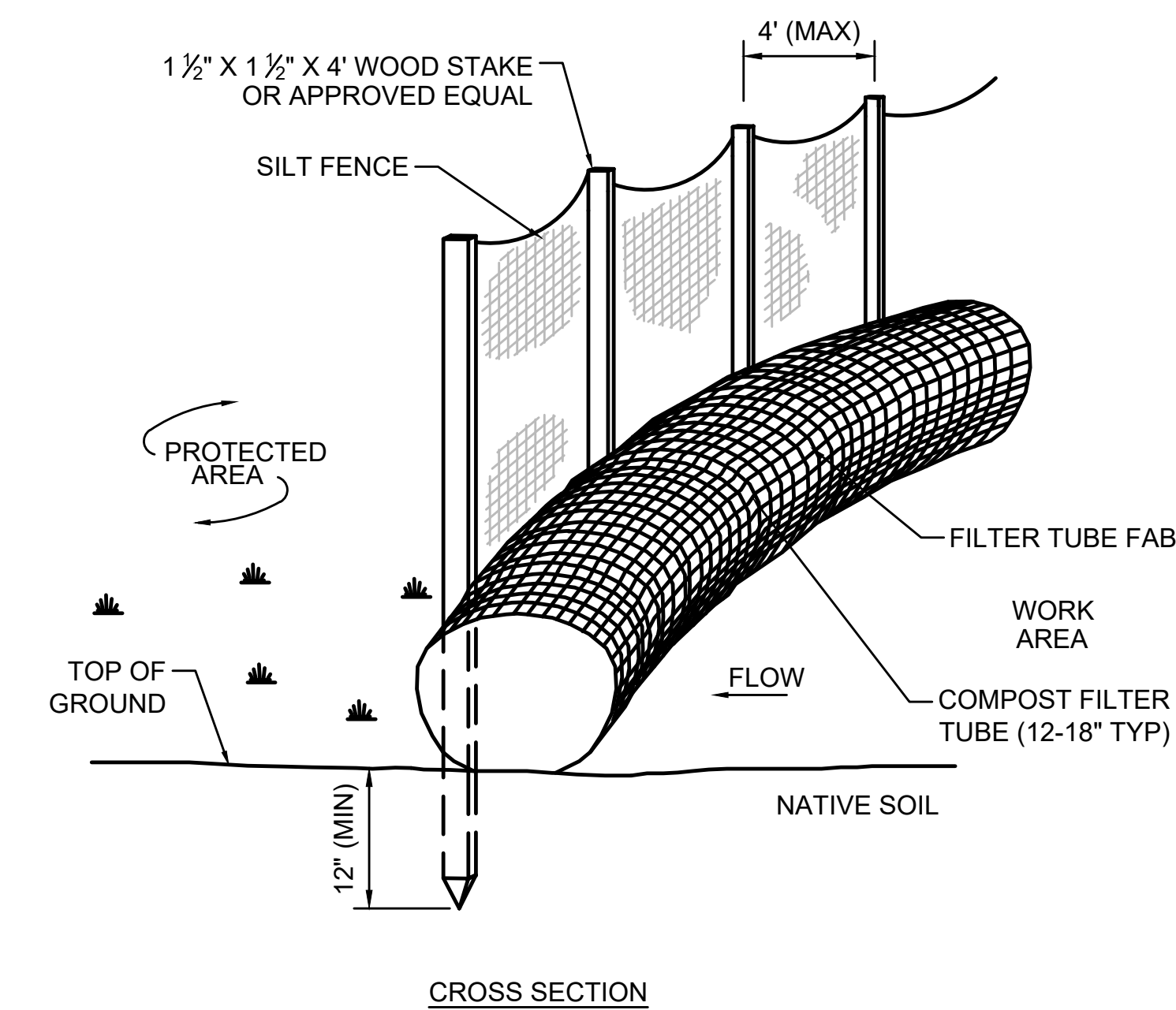
ISSUE
Date



1. FILTER TUBE SHALL MADE OF BIODEGRADABLE FABRIC AND BE FILLED BY BLOWN IN ORGANIC COMPOST AND PLACED AS ILLUSTRATED ON THE PROJECT PLANS.
2. COMPOST FILTER TUBES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIRED OR REPLACED AS NEEDED.
3. AT COMPLETION OF PROJECT, COMPOST FILTER TUBES SHALL BE CUT OPEN AND COMPOST MATERIAL SHALL BE DISPERSED ON SITE.
4. THE EMPTY FILTER TUBE FABRIC SHALL BE COLLECTED AND DISPOSED OF PROPERLY.
5. CONTRACTOR TO OVERLAP OR ABUT COMPOST FILTER TUBES A MIN OF 3 FEET TO PROVIDE A CONTINUOUS BARRIER

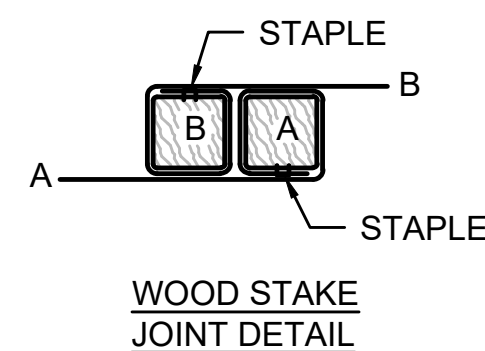
LINEAR SEDIMENTATION AND EROSION CONTROL

SCALE: N.T.S.



LINEAR SEDIMENTATION AND EROSION CONTROL WITH SILT FENCE

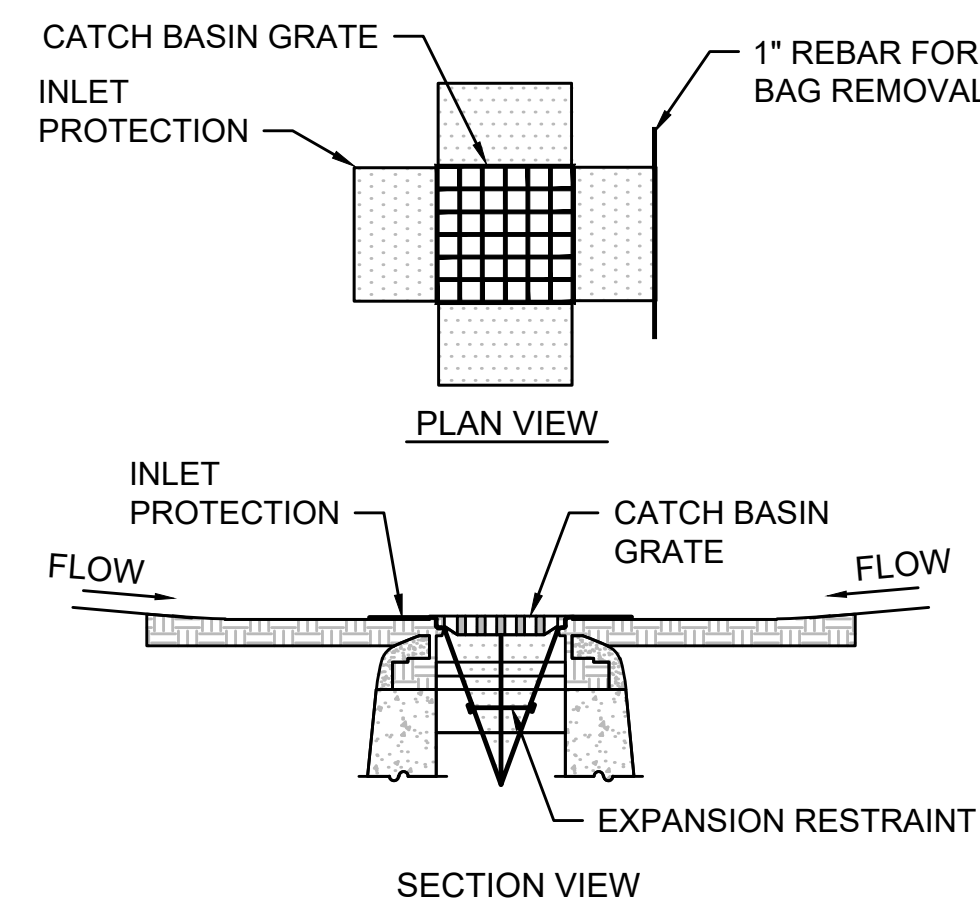
SCALE: N.T.S.



1. FILTER TUBE SHALL BE MADE OF BIODEGRADABLE FABRIC AND BE FILLED BY BLOWN IN ORGANIC COMPOST AND PLACED AS ILLUSTRATED ON THE PROJECT PLANS.
2. COMPOST FILTER TUBES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIRED OR REPLACED AS NEEDED.
3. AT COMPLETION OF PROJECT, COMPOST FILTER TUBES SHALL BE CUT OPEN AND COMPOST MATERIAL SHALL BE DISPERSED ON SITE.
4. THE EMPTY FILTER TUBE FABRIC SHALL BE COLLECTED AND DISPOSED OF PROPERLY.
5. CONTRACTOR TO OVERLAP OR ABUT COMPOST FILTER TUBES A MIN OF 3 FEET TO PROVIDE A CONTINUOUS BARRIER

CATCH BASIN SEDIMENT TRAP

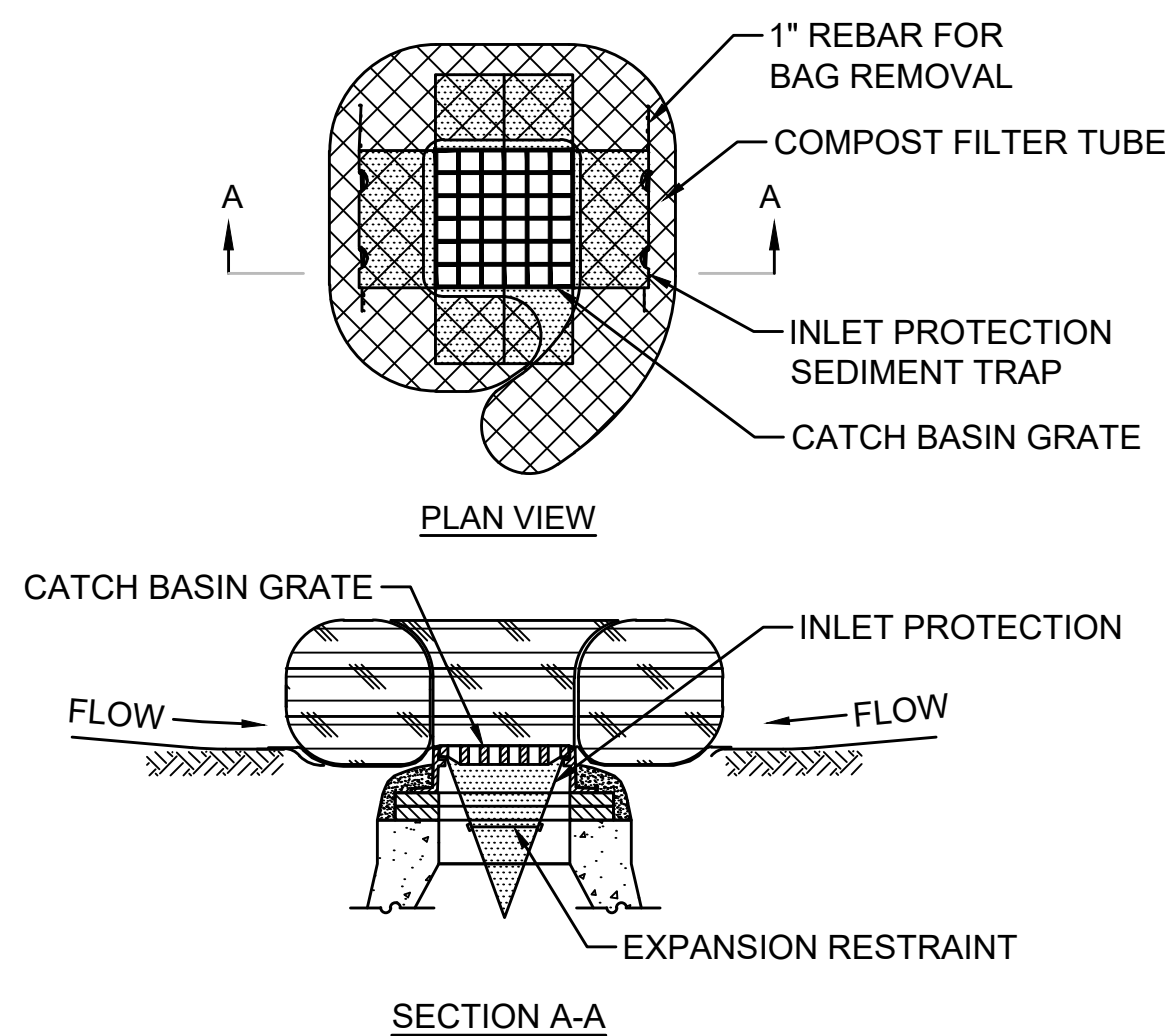
SCALE: N.T.S.



1. INSTALL INLET PROTECTION IN EXISTING CATCH BASINS, BEFORE COMMENCING WORK, AND IN NEW CATCH BASINS IMMEDIATELY AFTER INSTALLATION OF STRUCTURE. MAINTAIN UNTIL BINDER COURSE PAVING IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
2. GRATE TO BE PLACED OVER INLET PROTECTION.
3. CATCH BASIN INLET PROTECTION SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED.
4. WHERE CATCH BASINS HAVE GUTTER INLETS, COMPOST FILTER TUBES SHALL BE PLACED ACROSS THE LENGTH OF THE OPENING.

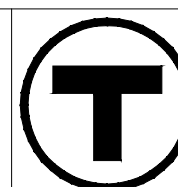
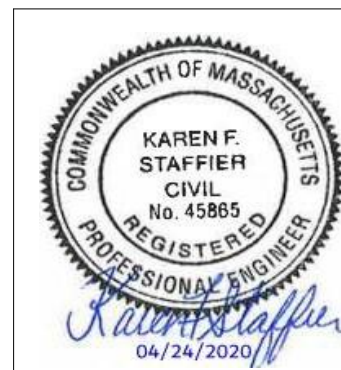
CATCH BASIN INLET PROTECTION

SCALE: N.T.S.



1. ENCLOSE STRUCTURE WITH COMPOST FILTER TUBES IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION. MAINTAIN UNTIL PAVING INTERMEDIATE COURSE IS COMPLETE OR A PERMANENT STAND OF GRASS HAS BEEN ESTABLISHED.
2. IF GRADE IS AGAINST EXISTING CURB THEN TUBE IS TO BE PLACED AROUND THREE SIDES OF GRATE ONLY.
3. COMPOST TUBES SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND REPAIR OR REPLACEMENT SHALL BE PERFORMED PROMPTLY AS NEEDED.

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT MIDDLEBOROUGH TO NEW BEDFORD, MA CONTRACT NO. K78CN04
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NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE PREPARATION DETAILS



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY

Richard K. ...
PROJECT MANAGER

PROJECT MANAGER				Date
		DESIGN	CONSTRUCTION	OPERATION

HORIZ: NONE	DES. BY	DR. BY	CHK. BY

VERT: NONE	BLO	MRT	K20
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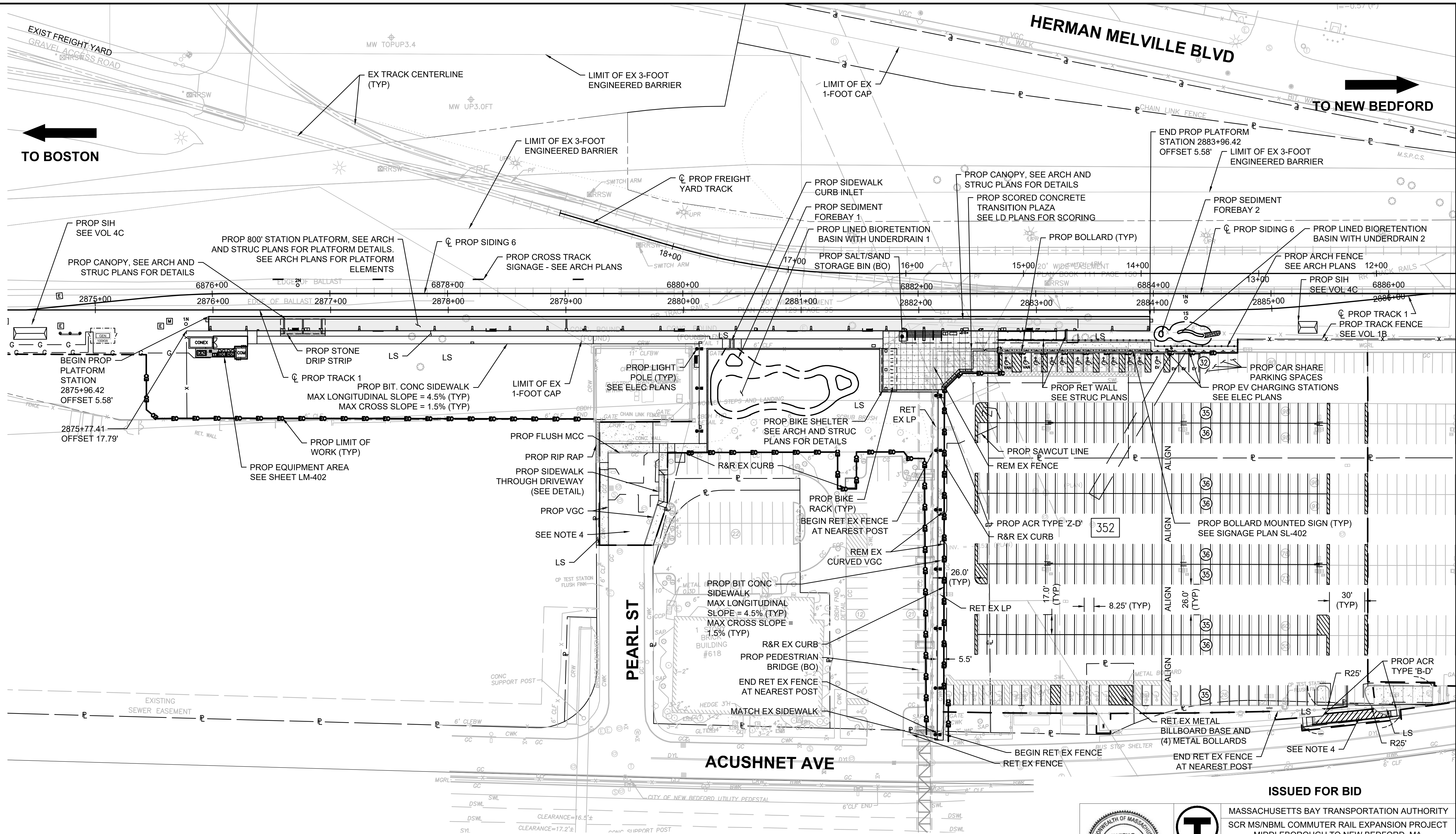
PROJECT MANAGER	Date
	ISSUE

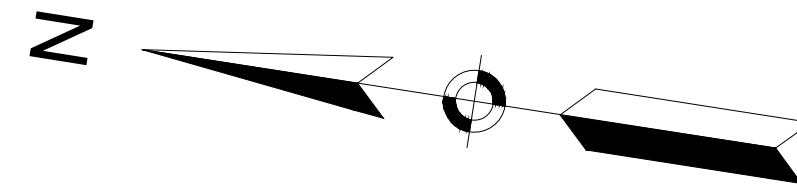
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PLAN NO. 512005	(

SHEET SP-403

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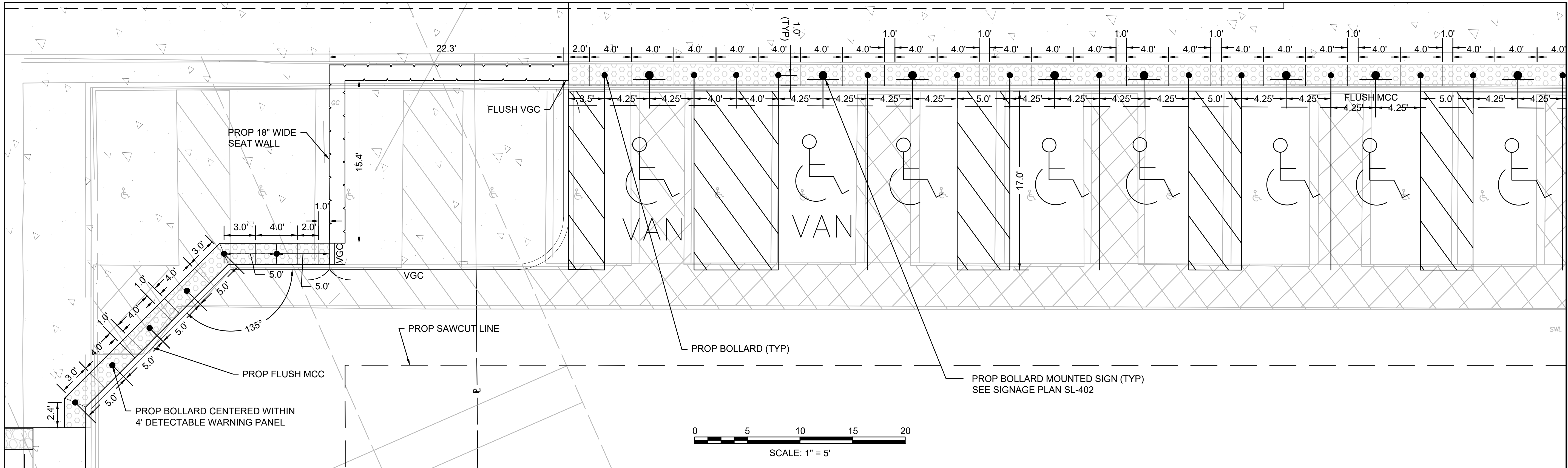




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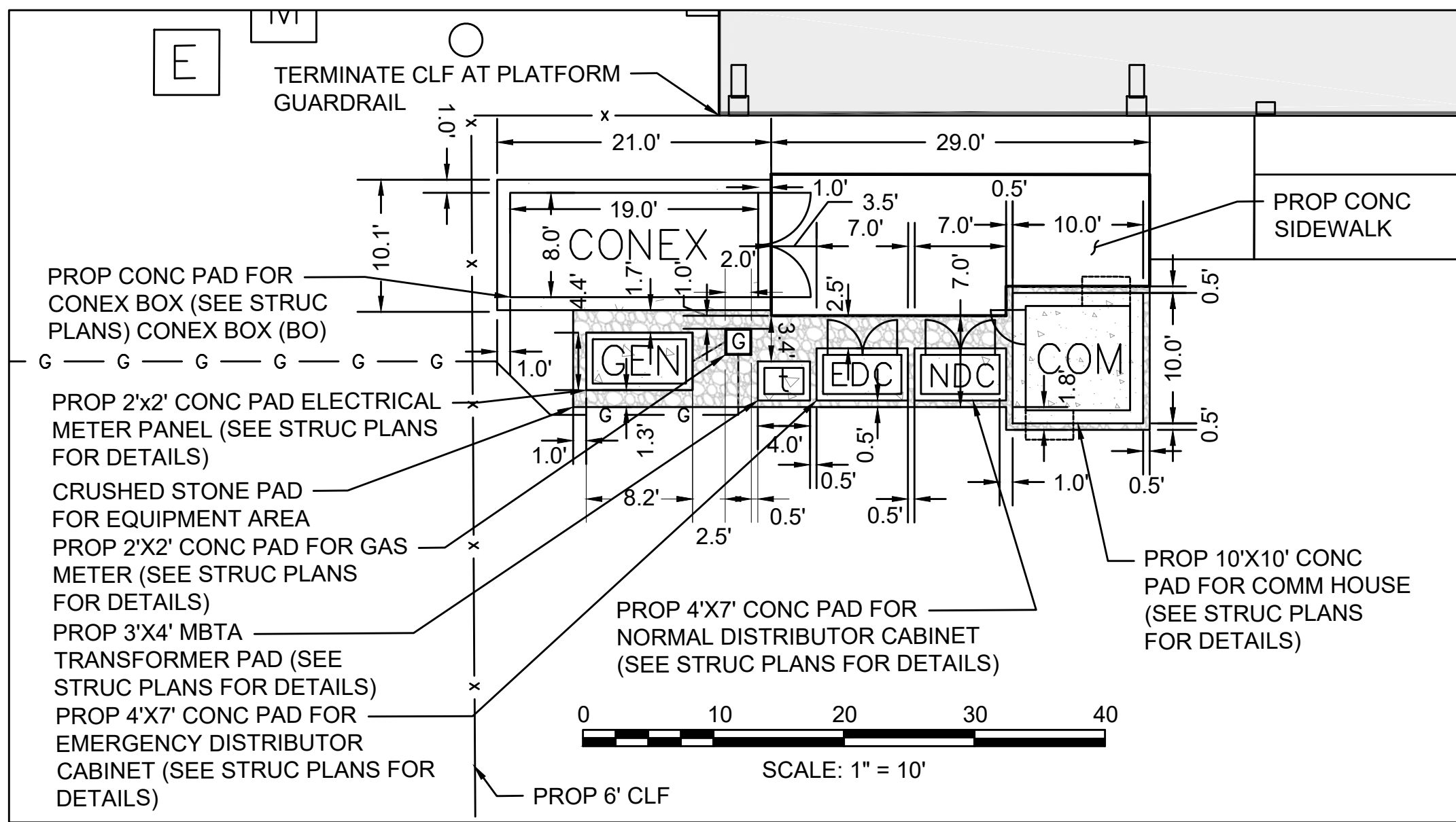
ISSUE	DATE	DESCRIPTION						BY	CHKD.	APP.

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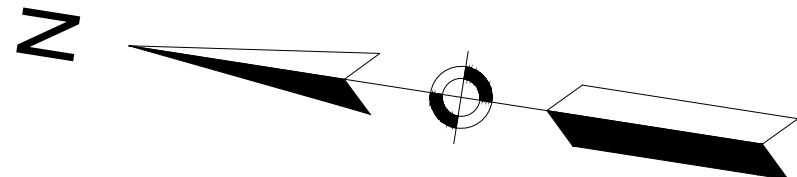


MATCHLINE - SEE BELOW

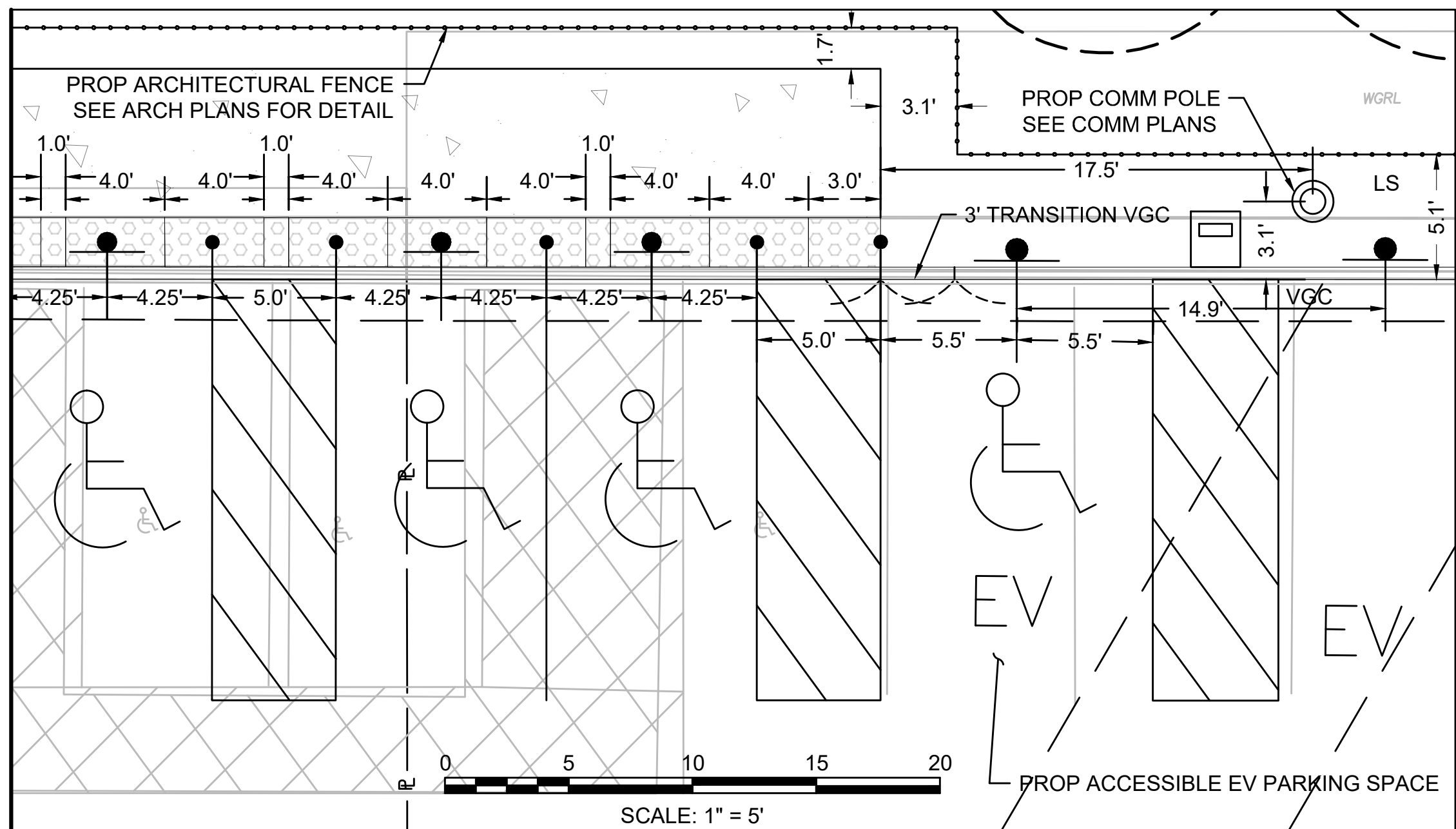
LAYOUT ENLARGEMENT 1



LAYOUT ENLARGEMENT 2



MATCHLINE - SEE ABOVE



LAYOUT ENLARGEMENT 3

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
LAYOUT & MATERIALS ENLARGEMENT PLAN**



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

APPROVED BY:

[Signature]

PROJECT MANAGER
HORIZ: VARIES
VERT: NONE
DATE: 04/24/2020

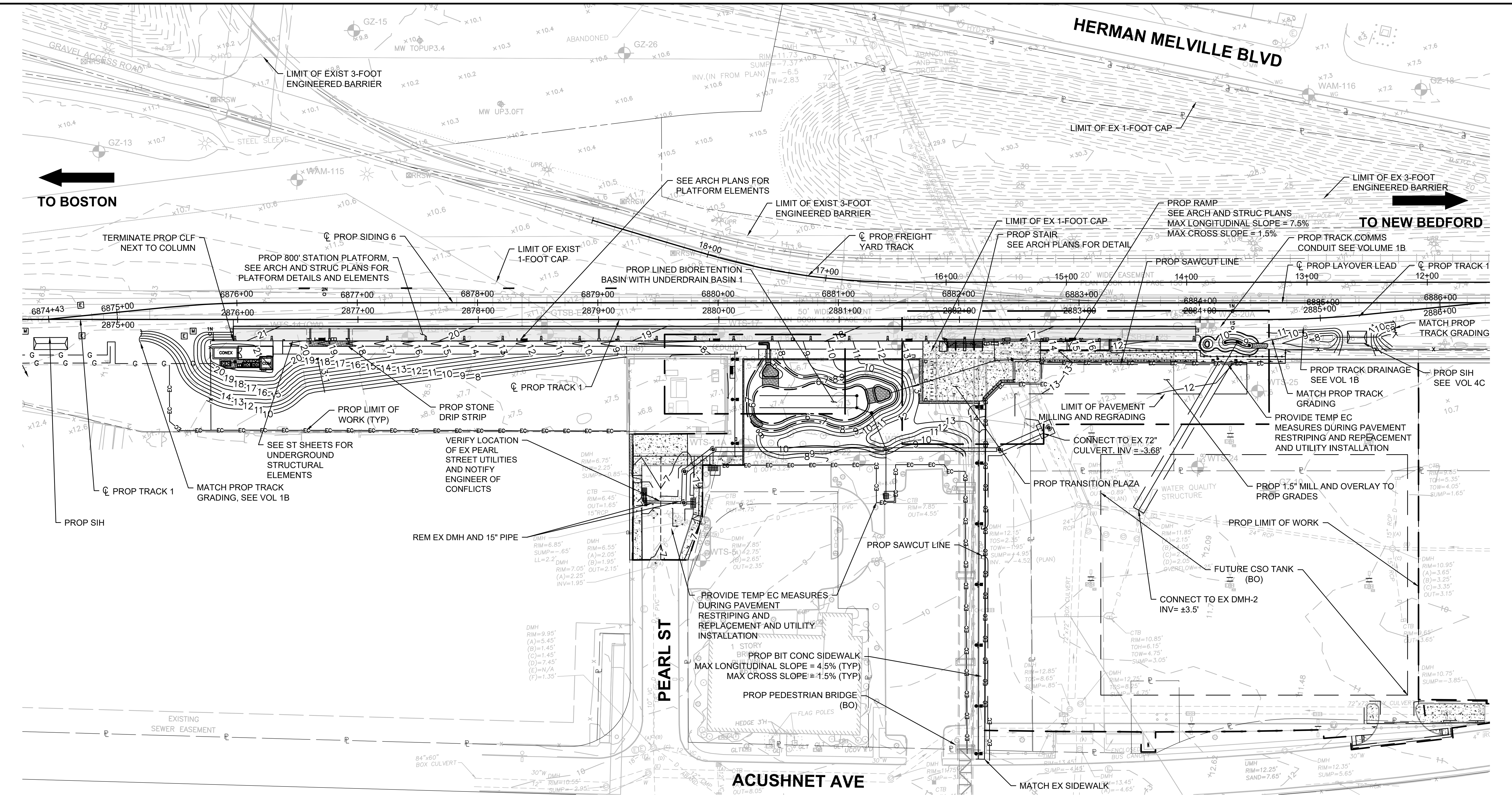
DES BY: JHC
DR. BY: BEL
CHK BY: KSS

PROJECT MANAGER
PLAN NO. 312066
SHEET LM-402

DATE
ISSUE

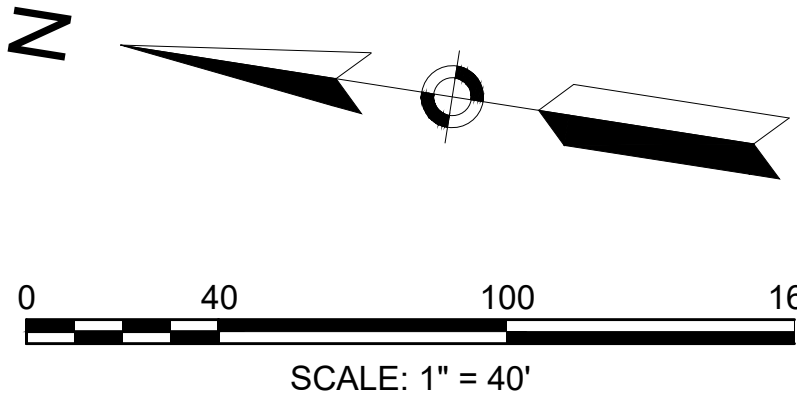
NOTES:

1. IN NO CASE SHALL THE CLEAR WIDTH BETWEEN BOLLARDS BE LESS THAN 3 FEET



NOTES:

1. TRACK CENTERLINE SHOWN FOR INFORMATION ONLY.
2. CONTRACTOR SHALL PRELOAD FILL AREAS SHOWN ON SHEET SP-401 IN ACCORDANCE WITH EARTHWORK SPECIFICATION 02300. FILL SHALL BE PLACED TO THE DESIGN ELEVATION 3 MONTHS BEFORE STARTING SITE CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY THE NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON/AROUND THE EXISTING SEWER FORCE MAIN OR 72" DRAINAGE CULVERT.



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
OVERALL GRADING & DRAINAGE PLAN**



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

Karen F. Staffier

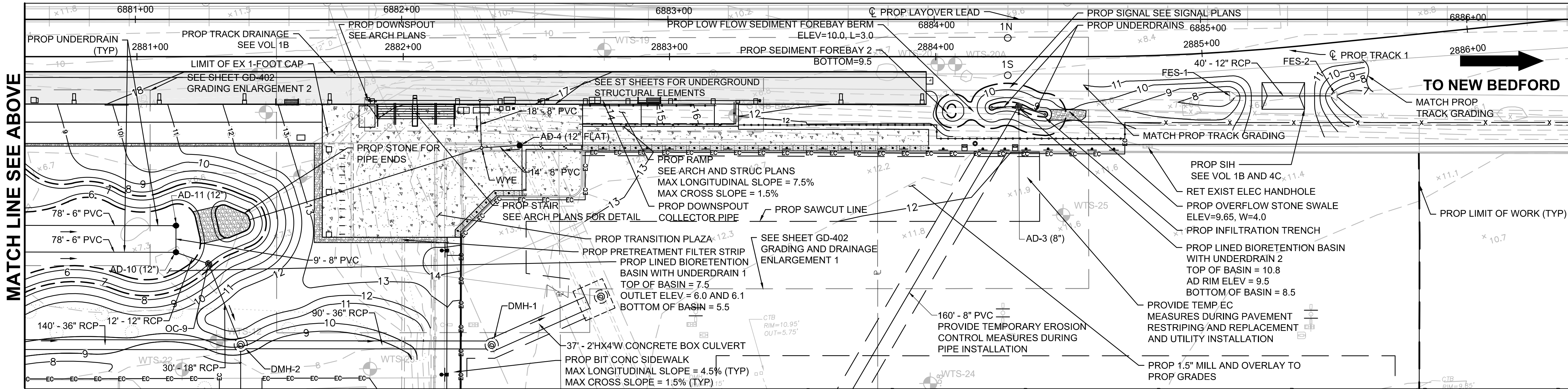
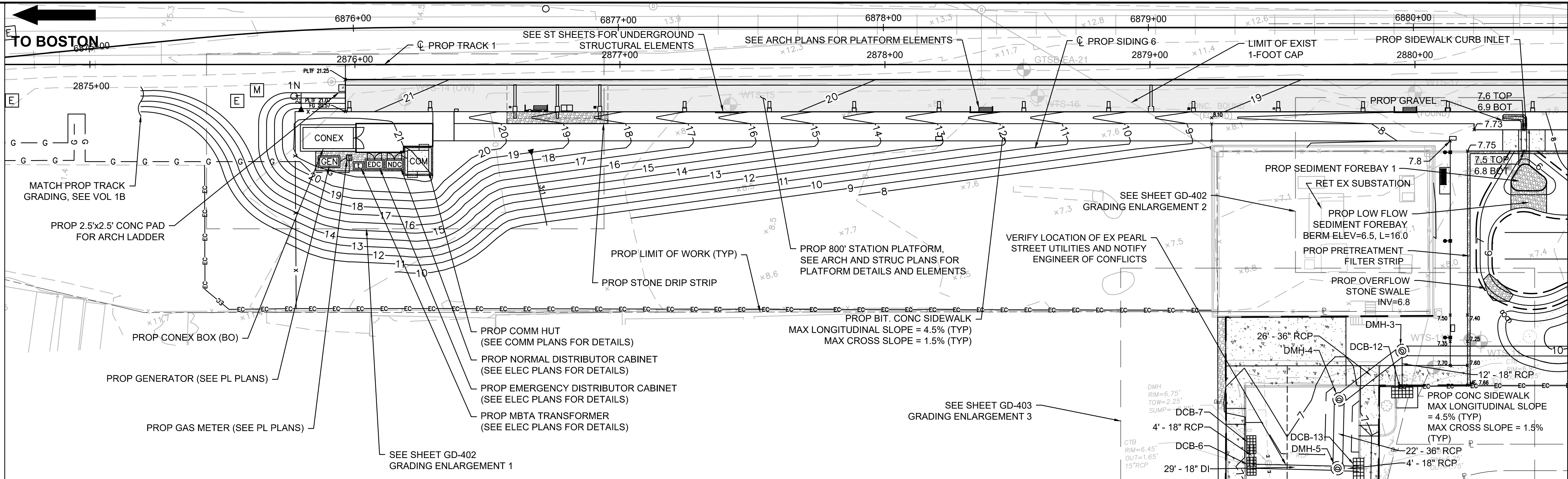
PROJECT MANAGER
HORIZ: 1"=40'
VERT: NONE
DATE: 04/24/2020

DES BY: JHC
DR BY: BEL
CHK BY: KSS

PROJECT MANAGER
PLAN NO. 312067
SHEET GD-400

ISSUE

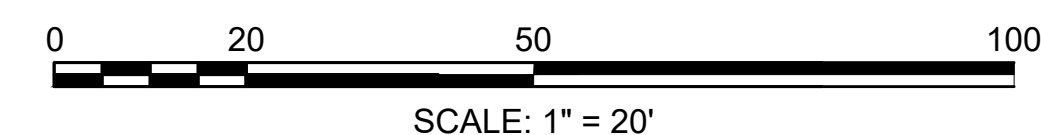
FILE NAME: \\VHB\GEL\PROJBOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_CV(GD_WHALESTOOTH).DWG



DRAINAGE STRUCTURE TABLE			
NAME	RIM	INCOMING PIPES	OUTGOING PIPES
AD-3 (8")	9.5		I=5.00' (EX DMH-2) I=5.10' (CO) I=5.10' (CO)
AD-4 (12" FLAT)	13.4		I=10.40' (WYE)
AD-10 (12")	6.1	I=2.50' (UD)	I=2.50' (AD-11 (12")) I=2.00' (OC-9)
AD-11 (12")	6.1	I=2.40' (AD-10 (12")) I=2.50' (UD)	
CB-8	7.8		I=4.40' (DMH-2)
COLLECTOR TEE	14.6	I=11.10' () I=11.10' (DS-2)	I=11.10' (WYE)
DCB-6	6.4	I=1.80' (DCB-7)	I=1.65' (DMH-5)

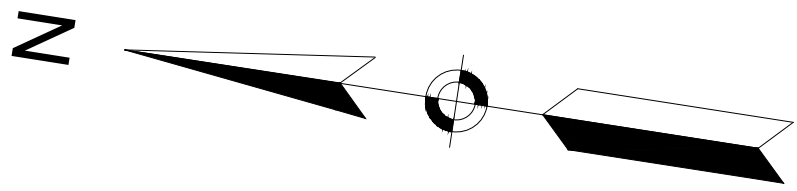
DRAINAGE STRUCTURE TABLE			
NAME	RIM	INCOMING PIPES	OUTGOING PIPES
DCB-7	6.6		I=1.90' (DCB-6)
DCB-12	7.0		I=2.90' (DMH-3)
DCB-13	6.2		I=1.75' (DMH-5)
DMH-1	13.2	I=3.80' (DMH-2)	I=3.90' ()
DMH-2	10.0	I=2.50' (DMH-3) I=4.00' (CB-8) I=0.70' (OC-9)	I=2.60' (DMH-1)
DMH-3	7.6	I=0.80' (DMH-4) I=2.60' (DCB-12)	I=0.90' (DMH-2)
DMH-4	6.7	I=0.40' (DMH-5)	I=0.50' (DMH-3)

DRAINAGE STRUCTURE TABLE			
NAME	RIM	INCOMING PIPES	OUTGOING PIPES
DMH-5	6.5	I=1.60' (DCB-13) I=1.40' (DCB-6)	I=0.10' (DMH-4)
EX DMH-2	11.8	I=3.50' (AD-3 (8"))	
FES-1			I=7.15' (FES-2)
FES-2		I=6.95' (FES-1)	
OC-9	7.0	I=1.70' (AD-10 (12"))	I=1.20' (DMH-2)
WYE	11.7	I=10.10' (AD-4 (12" FLAT)) I=10.80' (COLLECTOR TEE)	I=10.10' (PIPE END)

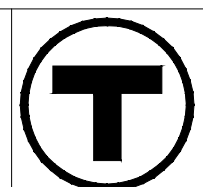
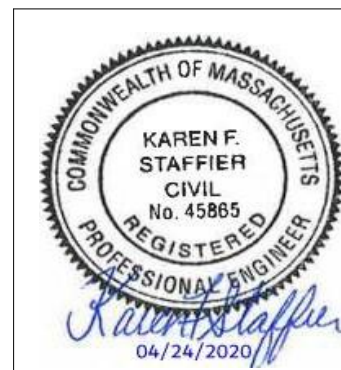


NOTE:

1. TRACK CENTERLINE SHOWN FOR INFORMATION ONLY.
2. THE CONTRACTOR SHALL NOTIFY THE NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON/AROUND THE EXISTING SEWER FORCE MAIN OR 72" DRAINAGE CULVERT.



ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
GRADING & DRAINAGE PLAN**

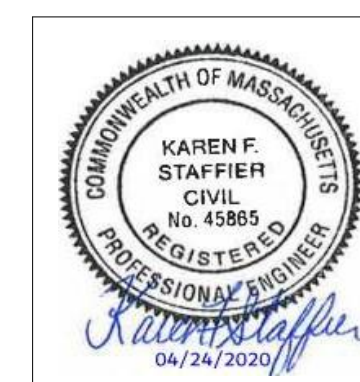
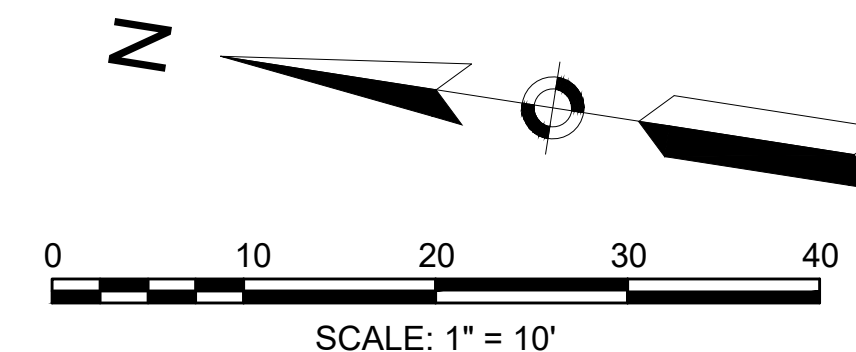


APPROVED BY: *[Signature]*
PROJECT MANAGER: *[Signature]*
HORIZ: 1"=20'
VERT: NONE
DATE: 04/24/2020

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
APPROVED BY: *[Signature]*
PROJECT MANAGER: *[Signature]*
PLAN NO. 312068
SHEET GD-401



DRAINAGE STRUCTURE TABLE			
NAME	RIM	INCOMING PIPES	OUTGOING PIPES
AD-3 (8")	9.5		I=5.00' (EX DMH-2) I=5.10' (CO) I=5.10' (CO)
AD-4 (12" FLAT)	13.4		I=10.40' (WYE)
AD-10 (12")	6.1	I=2.50' (UD)	I=2.50' (AD-11 (12")) I=2.00' (OC-9)
AD-11 (12")	6.1	I=2.40' (AD-10 (12")) I=2.50' (UD)	
COLLECTOR TEE	14.6	I=11.10' (I) I=11.10' (DS-2)	I=11.10' (WYE)
EX DMH-2	11.8	I=3.50' (AD-3 (8"))	
WYE	11.7	I=10.10' (AD-4 (12" FLAT)) I=10.80' (COLLECTOR TEE)	I=10.10' (PIPE END)



ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
 SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
 MIDDLEBOROUGH TO NEW BEDFORD, MA
 CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
GRADING ENLARGEMENT PLAN 1**

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

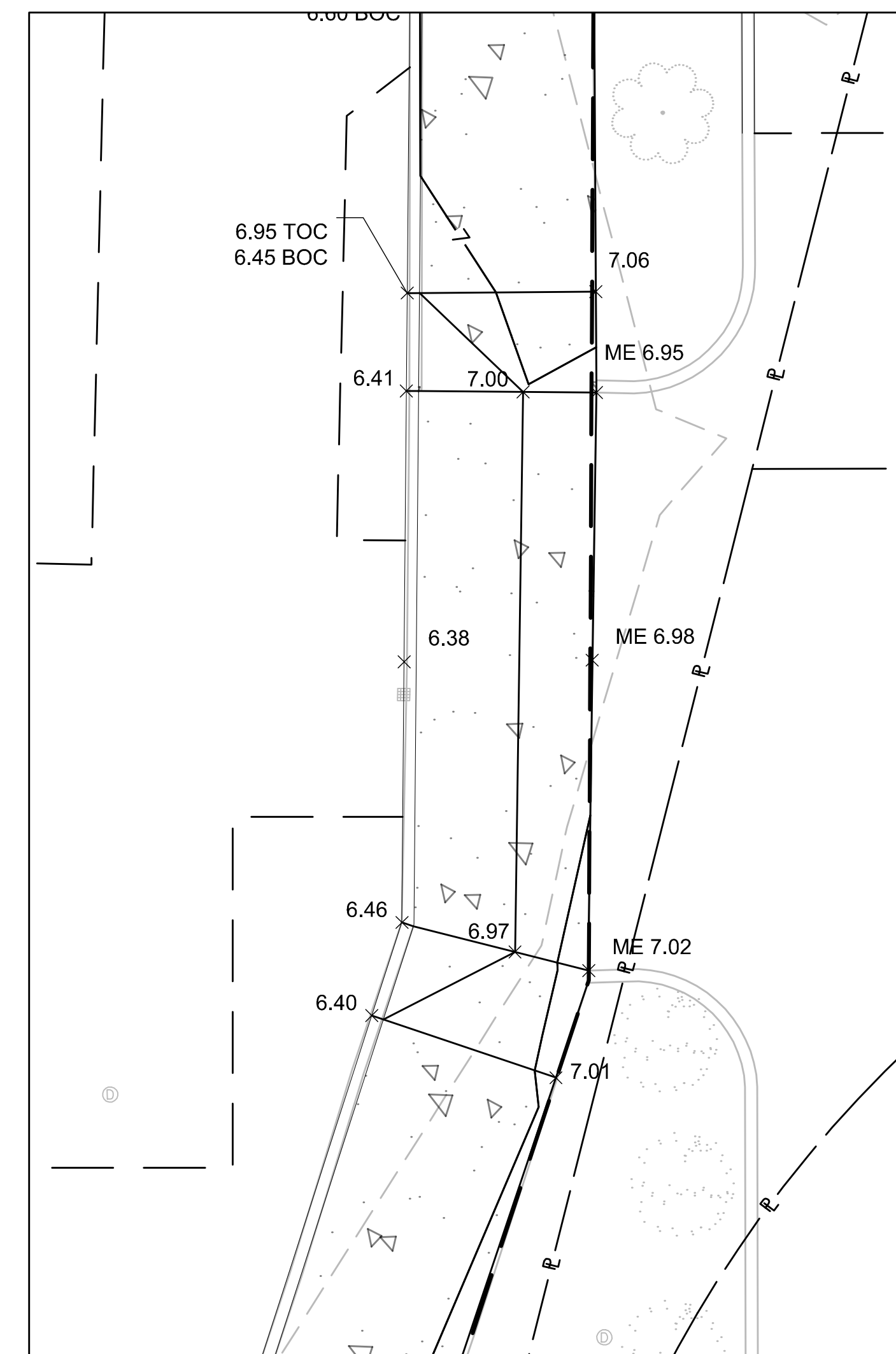
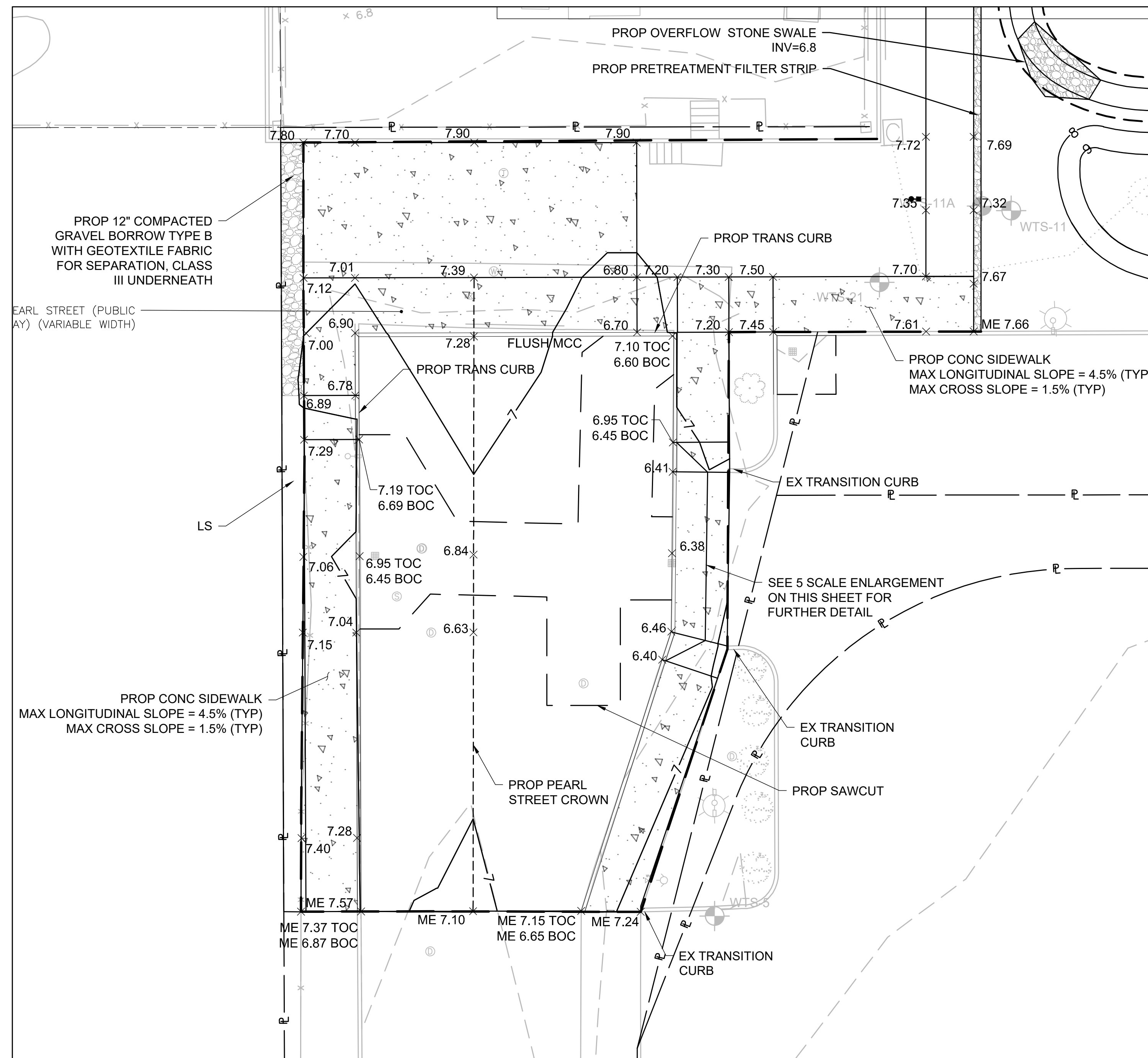
APPROVED BY:

P.	<i>Vidaforsky</i>			Date
PROJECT MANAGER				
HORIZ: 1" = 10'	DES. BY	DR. BY	CHK. BY	
VERT: NONE	JHC	BEL	KSS	
DATE: 04/24/2020				

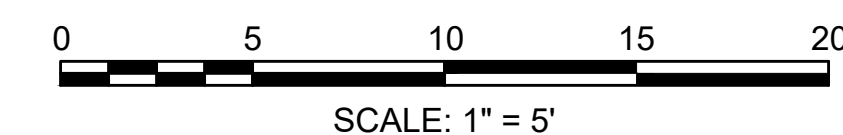
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PLAN NO. 312069		ISSUE 
SHEET GD-402		

NOTE:

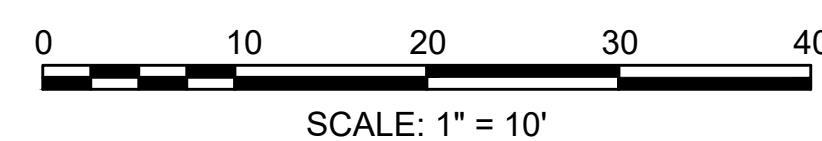
1. TRACK CENTERLINE SHOWN FOR INFORMATION ONLY.



GRADING ENLARGEMENT 4

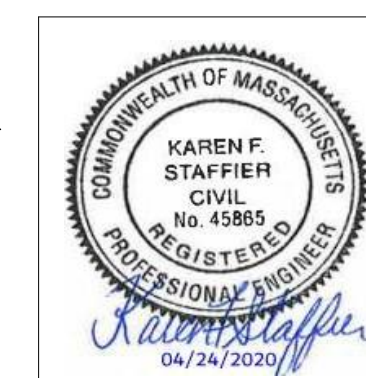
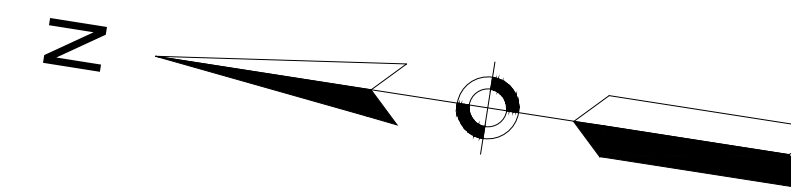


GRADING ENLARGEMENT 3



NOTE:

1. TRACK CENTERLINE SHOWN FOR INFORMATION ONLY.



ISSUED FOR BID

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
 SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
 MIDDLEBOROUGH TO NEW BEDFORD, MA
 CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
GRADING ENLARGEMENT PLAN 2**

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

APPROVED BY:

Richard Karsney

PP.	PROJECT MANAGER	Date		
	HORIZ: VARIES	DES. BY	DR. BY	CHK. BY
	VERT: NONE	JHC	MAM	KSS
	DATE: 04/24/2020			

Date		
DES. BY	DR. BY	CHK. BY
JHC	MAM	KSS

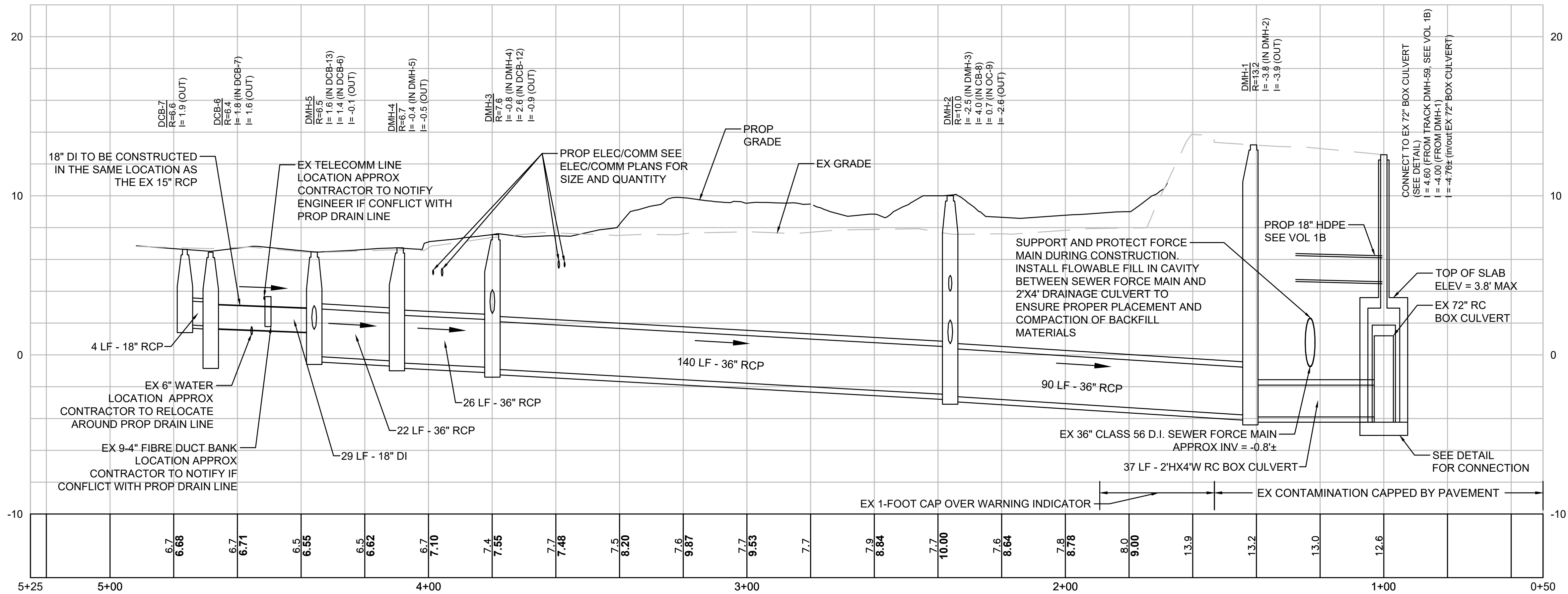
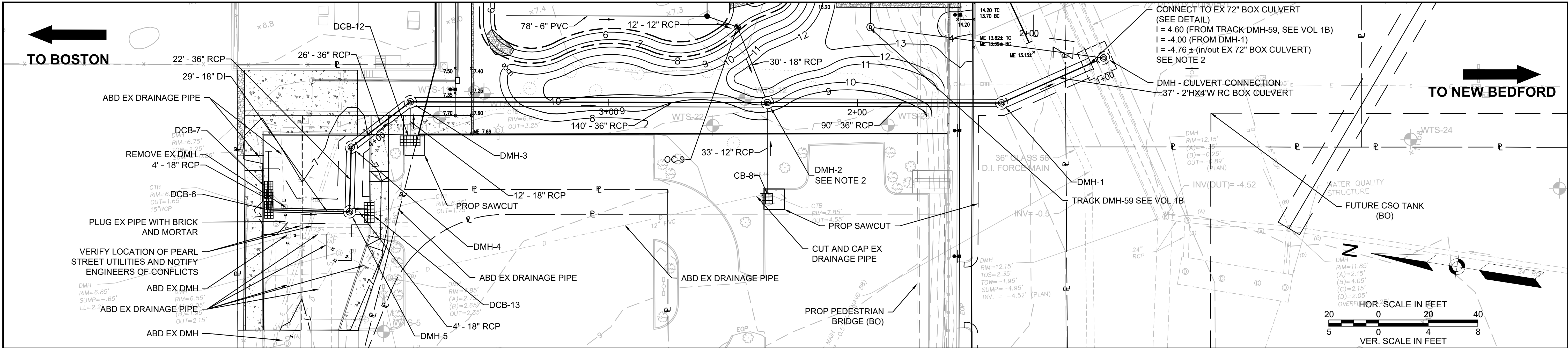
e	PROJECT MANAGER		Date
BY	PLAN NO. 312070		ISSUE
S	SHEET GD-403		

Date _____

ISSUE



FILE NAME: \\VHB\GEL\PROJBOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_CV(GD_WHALESTOOTH)_PEARLSTREET.DWG

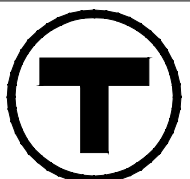


NOTE: VERTICAL DATUM IS BASED ON NAVD88.

DRAINAGE STRUCTURE TABLE			
NAME	RIM	INCOMING PIPES	OUTGOING PIPES
CB-8	7.8		I=4.40' (DMH-2)
DCB-6	6.4	I=1.80' (DCB-7)	I=1.65' (DMH-5)
DCB-7	6.6		I=1.90' (DCB-6)
DCB-12	7.0		I=2.90' (DMH-3)
DCB-13	6.2		I=1.75' (DMH-5)
DMH-1	13.2	I=-3.80' (DMH-2)	I=-3.90' ()
DMH-2	10.0	I=-2.50' (DMH-3) I=4.00' (CB-8) I=0.70' (OC-9)	I=2.60' (DMH-1)
DMH-3	7.6	I=-0.80' (DMH-4) I=2.60' (DCB-12)	I=-0.90' (DMH-2)
DMH-4	6.7	I=-0.40' (DMH-5)	I=-0.50' (DMH-3)
DMH-5	6.5	I=1.60' (DCB-13) I=1.40' (DCB-6)	I=-0.10' (DMH-4)
OC-9	7.0	I=1.70' (AD-10 (12"))	I=1.20' (DMH-2)

NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON OR AROUND THE 36" EXISTING SEWER FORCE MAIN OR 72" BOX DRAINAGE CULVERT.
2. CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIALS BENEATH PROPOSED DRAINAGE MANHOLE TO AVOID RISK OF SETTLEMENT.



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
DRAINAGE PLAN & PROFILE**



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

APPROVED BY:

[Signature]

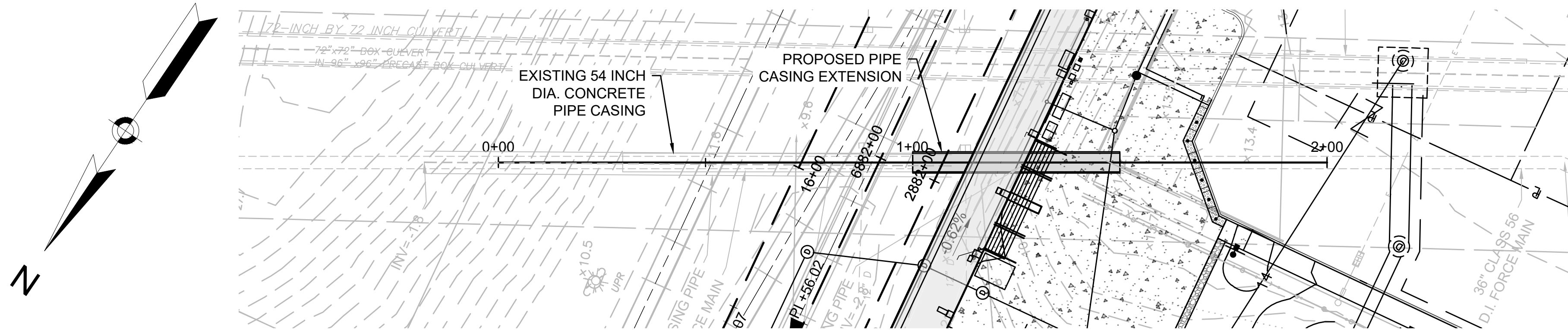
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HORIZ: 1" = 20'
VERT: 1" = 4'
DATE: 04/24/2020

DES. BY: JHC
DR. BY: MAM
CHK. BY: KSS

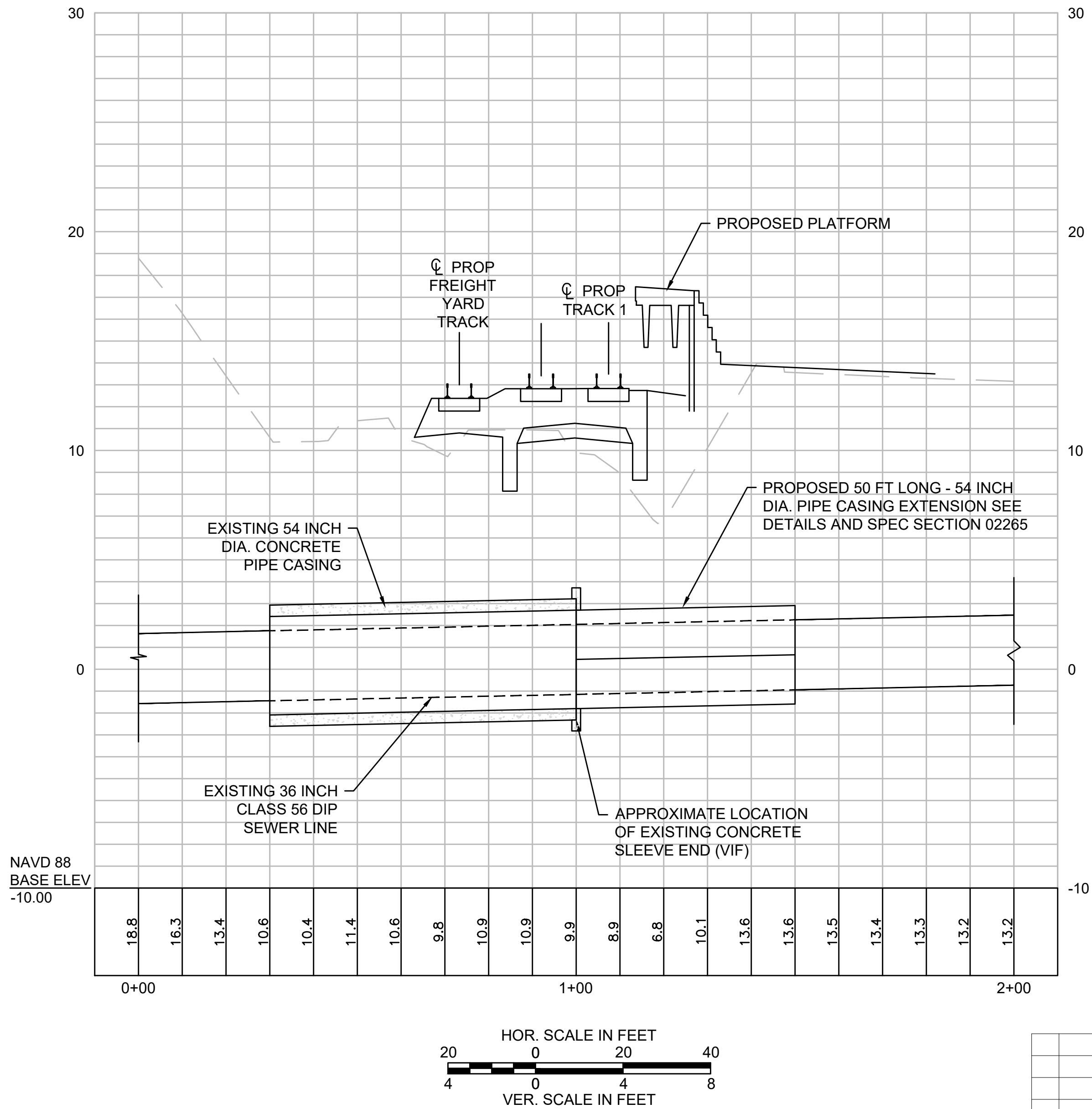
PLAN NO. 312071
SHEET GD-404

ISSUE

FILE NAME: \\VHB\GEL\PROJ\BOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_CV(GD_WHALES_TOOTH)_CASING.DWG



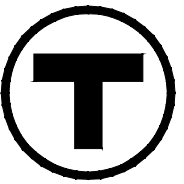
Sewer Force Main Pipe Casing Extension



NOTES:

1. SEE SHEET UT-400 FOR TEST PITS REQUIRED PRIOR TO ORDERING MATERIALS. THE CONTRACTOR SHALL NOTIFY THE NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE AT LEAST ONE WEEK PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON/AROUND THE EXISTING SEWER FORCE MAIN OR 72" DRAINAGE CULVERT.
2. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE EXISTING SEWER FORCE MAIN REMAINS OPERATIONAL DURING CONSTRUCTION.
3. CONTRACTOR SHALL PROVIDE SUPPORTIVE EXCAVATION.

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
SEWER CASING PLAN & PROFILE



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

APPROVED BY:

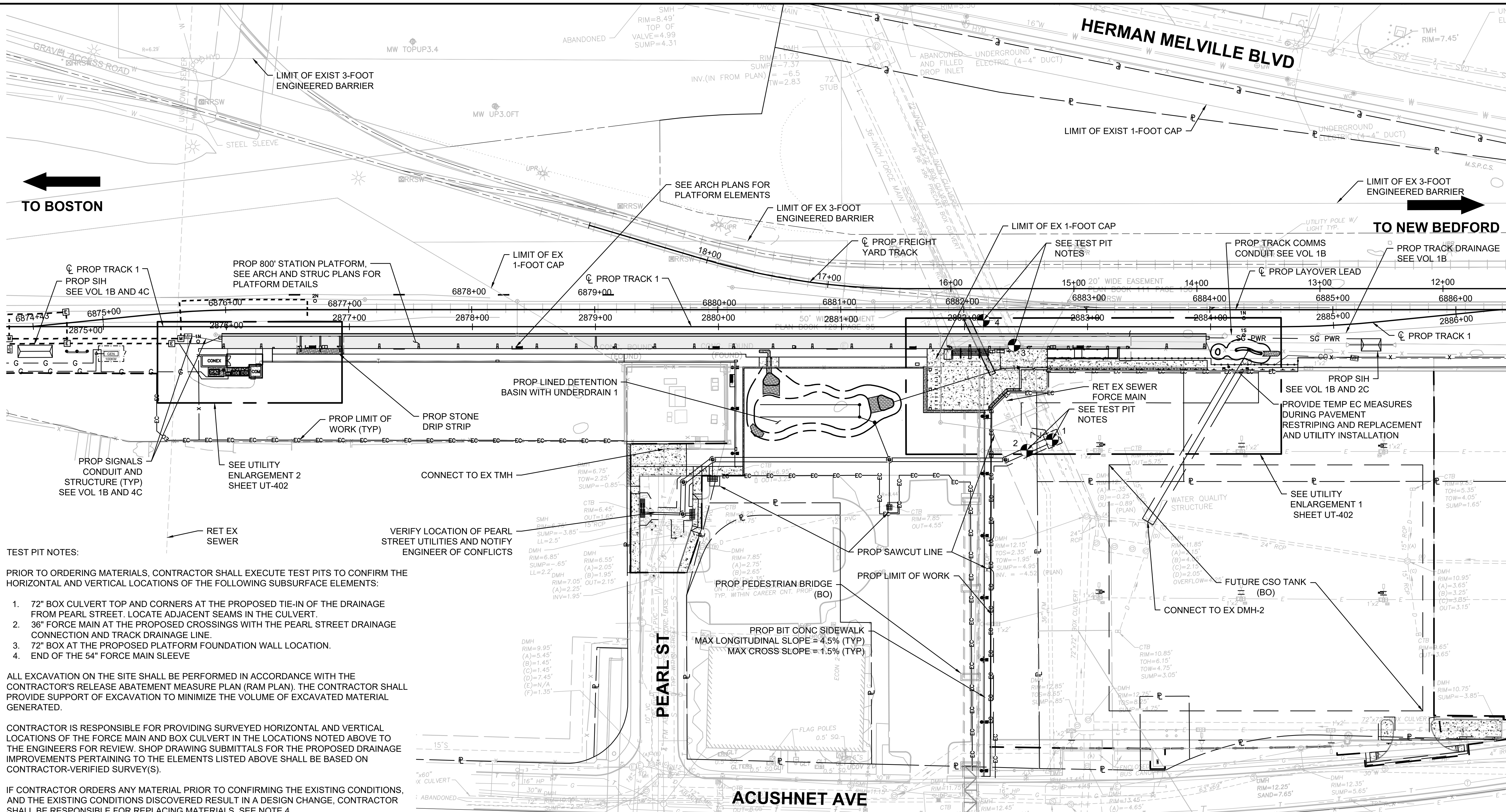
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ISSUE	DATE	DESCRIPTION	BY	CHKD.	APP.

PROJECT MANAGER
HORIZ: 1" = 20'
VERT: 1" = 4'
DATE: 04/24/2020

DES. BY: MJV
DR. BY: MJV
CHK. BY: KSS

PROJECT MANAGER
Date
PLAN NO. 312072
SHEET GD-405



TEST PIT NOTES:

PRIOR TO ORDERING MATERIALS, CONTRACTOR SHALL EXECUTE TEST PITS TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATIONS OF THE FOLLOWING SUBSURFACE ELEMENTS:

- 72" BOX CULVERT TOP AND CORNERS AT THE PROPOSED TIE-IN OF THE DRAINAGE FROM PEARL STREET. LOCATE ADJACENT SEAMS IN THE CULVERT.
- 36" FORCE MAIN AT THE PROPOSED CROSSINGS WITH THE PEARL STREET DRAINAGE CONNECTION AND TRACK DRAINAGE LINE.
- 72" BOX AT THE PROPOSED PLATFORM FOUNDATION WALL LOCATION.
- END OF THE 54" FORCE MAIN SLEEVE

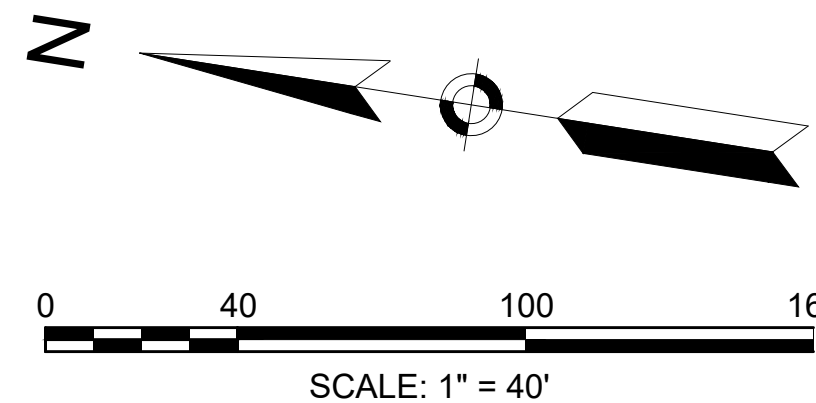
ALL EXCAVATION ON THE SITE SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACTOR'S RELEASE ABATEMENT MEASURE PLAN (RAM PLAN). THE CONTRACTOR SHALL PROVIDE SUPPORT OF EXCAVATION TO MINIMIZE THE VOLUME OF EXCAVATED MATERIAL GENERATED.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING SURVEYED HORIZONTAL AND VERTICAL LOCATIONS OF THE FORCE MAIN AND BOX CULVERT IN THE LOCATIONS NOTED ABOVE TO THE ENGINEERS FOR REVIEW. SHOP DRAWING SUBMITTALS FOR THE PROPOSED DRAINAGE IMPROVEMENTS PERTAINING TO THE ELEMENTS LISTED ABOVE SHALL BE BASED ON CONTRACTOR-VERIFIED SURVEY(S).

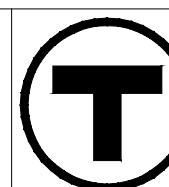
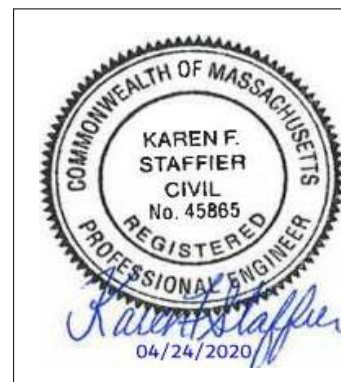
IF CONTRACTOR ORDERS ANY MATERIAL PRIOR TO CONFIRMING THE EXISTING CONDITIONS, AND THE EXISTING CONDITIONS DISCOVERED RESULT IN A DESIGN CHANGE, CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING MATERIALS. SEE NOTE 4.

NOTES:

- TRACK CENTERLINE SHOWN FOR INFORMATION ONLY.
- ELECTRICAL AND COMMUNICATION RELATED INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO CONDUIT, HANDHOLES, MANHOLES, DUCT BANK DETAILS, AND UTILITY POLES ARE SHOWN HEREON FOR COORDINATION PURPOSES ONLY. REFER TO EL AND CM PLANS FOR ALL DETAILS RELATED THERETO INCLUDING CONDUIT AND OTHER FEATURES THAT ARE NOT SHOWN HEREON SUCH AS SITE LIGHTING OR CAMERA CONDUIT.
- ELECTRIC AND COMMUNICATION DUCT BANKS SHALL BE ROUTED OVER OTHER UTILITIES AT CROSSINGS WITH A MINIMUM SEPARATION OF 6" UNLESS OTHERWISE NOTED ON THE PLAN.
- THE CONTRACTOR SHALL NOTIFY NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON OR AROUND THE EXISTING 36" SEWER FORCE MAIN OR 72" BOX DRAINAGE CULVERT.
- CONTRACTOR SHALL DESIGN AND IMPLEMENT EXCAVATION SUPPORT TO MINIMIZE THE DISTURBANCE OF SOIL AND DEWATERING DURING UTILITY INSTALLATION.



ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
OVERALL UTILITY PLAN



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

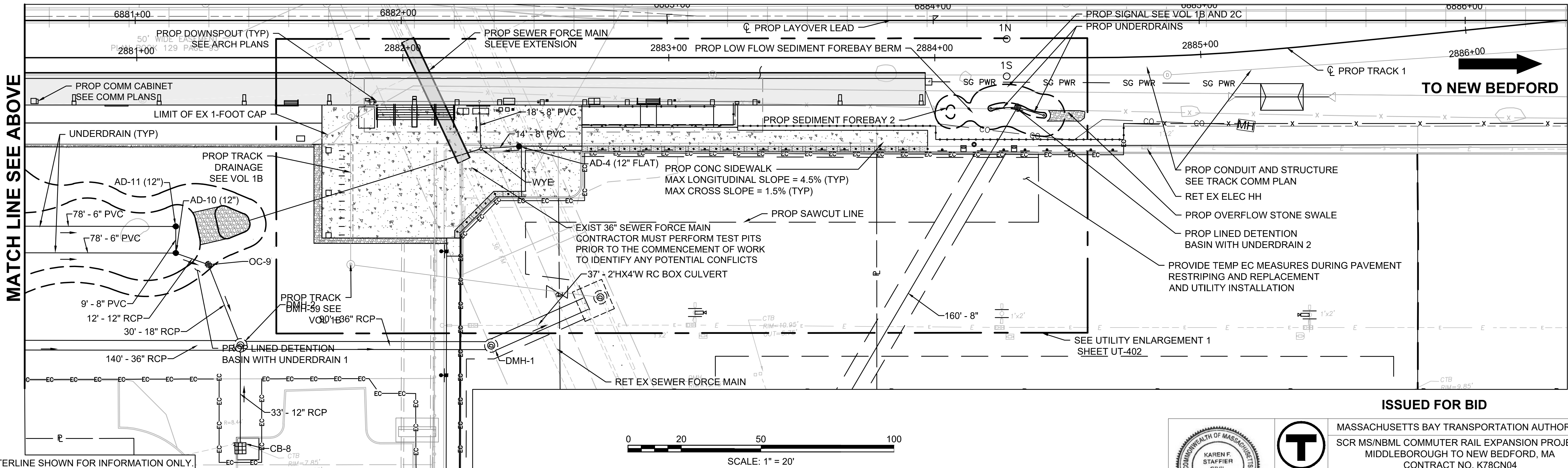
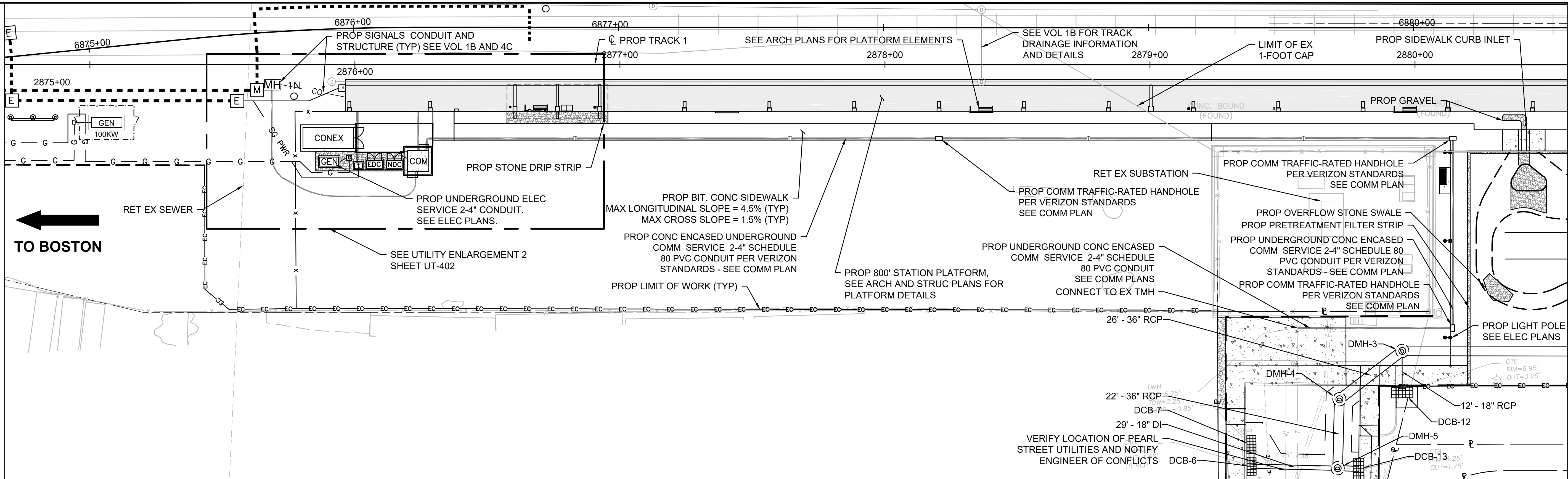
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Date
HORIZ: 1" = 40'
VERT: NONE
DATE: 04/24/2020

DES BY: JHC
DR BY: MAM
CHK BY: KSS

APPROVED BY:
Date
PROJECT MANAGER
Date
PLAN NO. 312073
SHEET UT-400

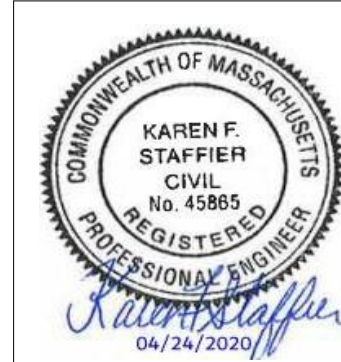
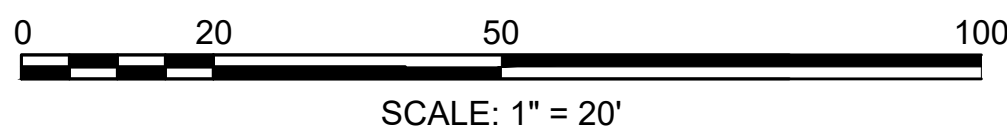
ISSUE

FILE NAME: \\VHB\GEL\PROJBOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_CV\UT_WHALESTOOTH.DWG



NOTES:

1. TRACK CENTERLINE SHOWN FOR INFORMATION ONLY.
2. ELECTRICAL AND COMMUNICATION RELATED INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO CONDUIT, HANDHOLES, MANHOLES, DUCT BANK DETAILS, AND UTILITY POLES ARE SHOWN HEREON FOR COORDINATION PURPOSES ONLY. REFER TO EL AND CM PLANS FOR ALL DETAILS RELATED THERETO INCLUDING CONDUIT AND OTHER FEATURES THAT ARE NOT SHOWN HEREON SUCH AS SITE LIGHTING OR CAMERA CONDUIT.
3. ELECTRIC AND COMMUNICATION DUCT BANKS SHALL BE ROUTED OVER OTHER UTILITIES AT CROSSINGS WITH A MINIMUM SEPARATION OF 6" UNLESS OTHERWISE NOTED ON THE PLAN.
4. THE CONTRACTOR SHALL NOTIFY THE NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON OR AROUND THE EXISTING SEWER FORCE MAIN OR 72" DRAINAGE CULVERT.
5. THE CONTRACTOR SHALL NOTIFY THE NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON/AROUND THE EXISTING SEWER FORCE MAIN OR 72" DRAINAGE CULVERT.



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
UTILITY PLAN**



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

[Signature]

PROJECT MANAGER
HORIZ: 1"=20'
VERT: NONE
DATE: 04/24/2020

DES. BY: JHC
DR. BY: MAM
CHK. BY: KSS

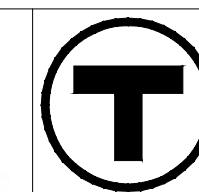
PROJECT MANAGER
PLAN NO. 312074
SHEET UT-401

ISSUE



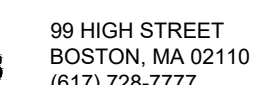
1. TRACK CENTERLINE SHOWN FOR INFORMATION ONLY.
2. ELECTRICAL AND COMMUNICATION RELATED INFRASTRUCTURE INCLUDING BUT NOT LIMITED TO CONDUIT, HANDHOLES, MANHOLES, DUCT BANK DETAILS, AND UTILITY POLES ARE SHOWN HEREON FOR COORDINATION PURPOSES ONLY. REFER TO EL AND CM PLANS FOR ALL DETAILS RELATED THERETO INCLUDING CONDUIT AND OTHER FEATURES THAT ARE NOT SHOWN HEREON SUCH AS SITE LIGHTING OR CAMERA CONDUIT.
3. ELECTRIC AND COMMUNICATION DUCT BANKS SHALL BE ROUTED OVER OTHER UTILITIES AT CROSSINGS WITH A MINIMUM SEPARATION OF 6" UNLESS OTHERWISE NOTED ON THE PLAN.
4. THE CONTRACTOR SHALL NOTIFY THE NEW BEDFORD DEPARTMENT OF PUBLIC INFRASTRUCTURE PRIOR TO EXCAVATING ANY EXPLORATORY TEST PITS OR PERFORMING OTHER WORK ON/AROUND THE EXISTING SEWER FORCE MAIN OR 72" DRAINAGE CULVERT. SEE SHEET UT-400 AND SPEC SECTION 02300 EARTHWORK FOR TEST PIT WORK.

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
 SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
 MIDDLEBOROUGH TO NEW BEDFORD, MA
 CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
UTILITY ENLARGEMENT PLAN**

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

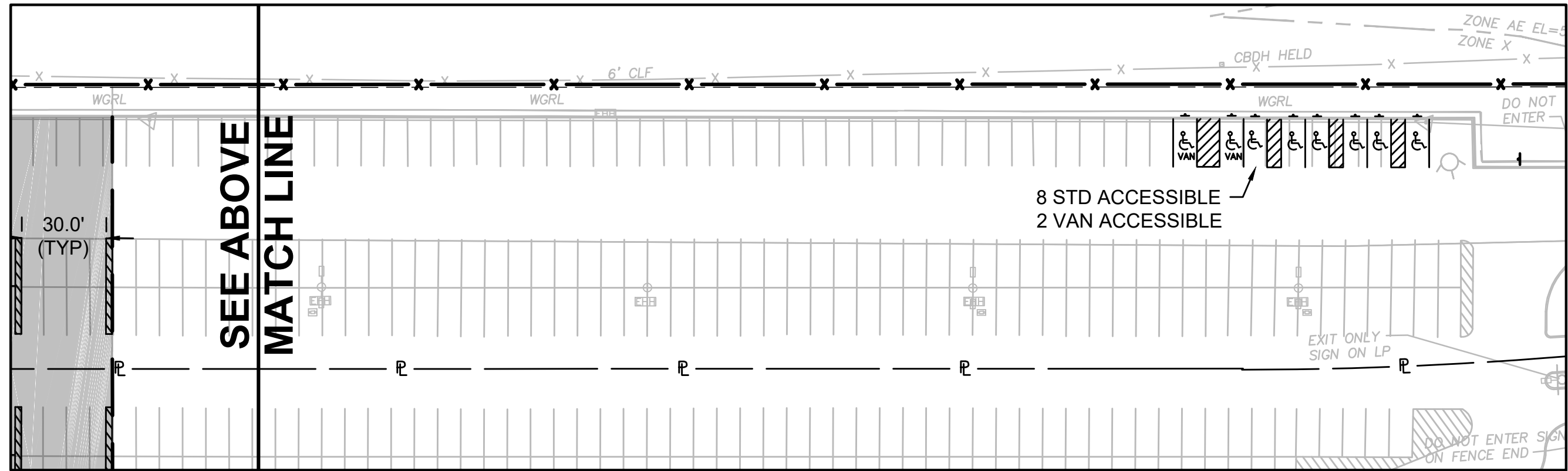
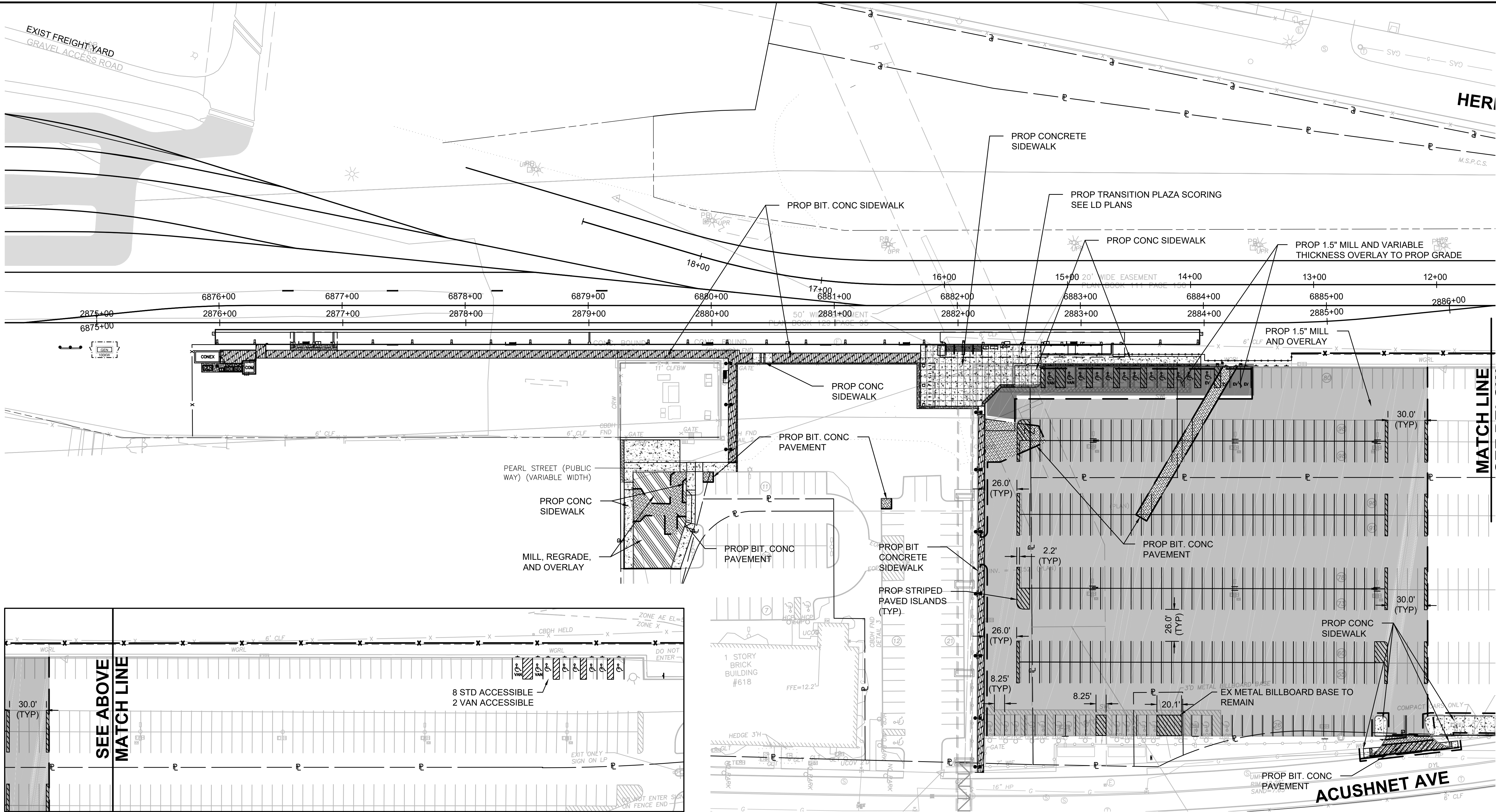
APPROVED BY:

Richard Karsny

	DES. BY	DR. BY	CHK. B
	JHC	MAM	KSS

PROJECT MANAGER	Date
PLAN NO. 312075	ISSUE 
SHEET UT-402	

[illegible]

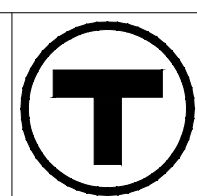
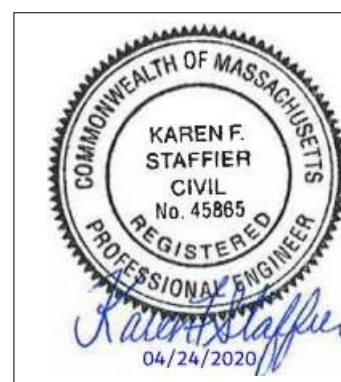
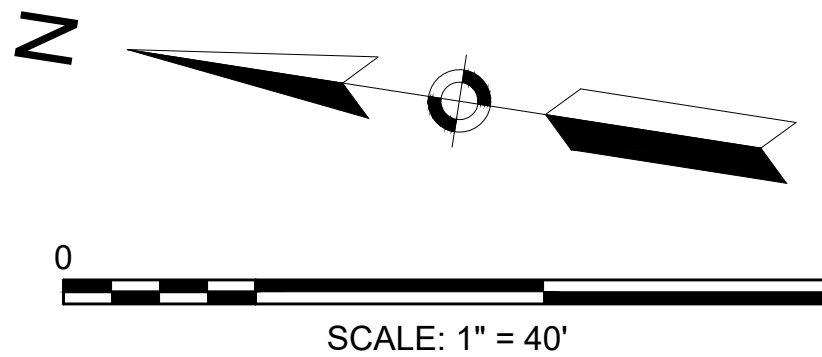


LEGEND

	PROP 1.5" MILL AND VARIABLE THICKNESS OVERLAY TO PROP GRADE		PROP SCORED CONCRETE PAVEMENT
	PROP 1.5" MILL AND OVERLAY		PROP CONCRETE SIDEWALK
	PROP MILL, REGRADE, AND OVERLAY		PROP BITUMINOUS CONC PAVEMENT
	PROP BITUMINOUS CONC SIDEWALK		

NOTE:

- IF PAVEMENT IS PLACED AT DIFFERENT TIMES, PROVIDE SAWCUT BETWEEN PAVEMENT TYPES.
- 4' WIDE PAVEMENT MARKINGS ASSOCIATED WITH ACCESSIBLE PARKING SPACES SHALL BE WHITE. ALL OTHER PAVEMENT MARKINGS ASSOCIATED WITH PARKING SPACES SHALL BE YELLOW UNLESS OTHERWISE NOTED.



ISSUED FOR BID

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
PAVEMENT PLAN**



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

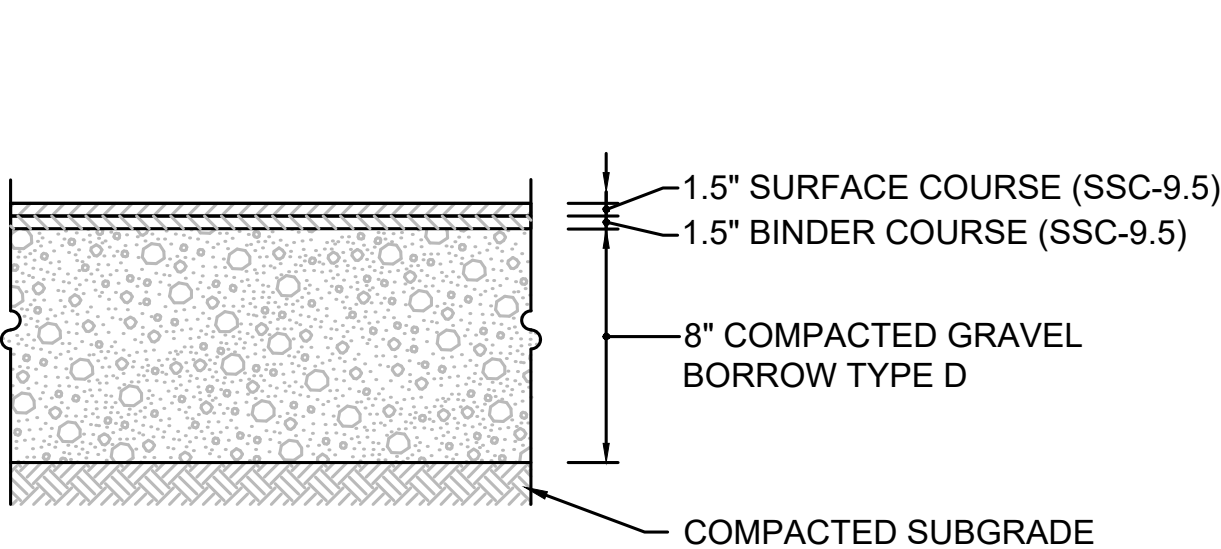
MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

PROJECT MANAGER
Date
HORIZ: 1" = 40'
VERT: NONE
DATE: 04/24/2020

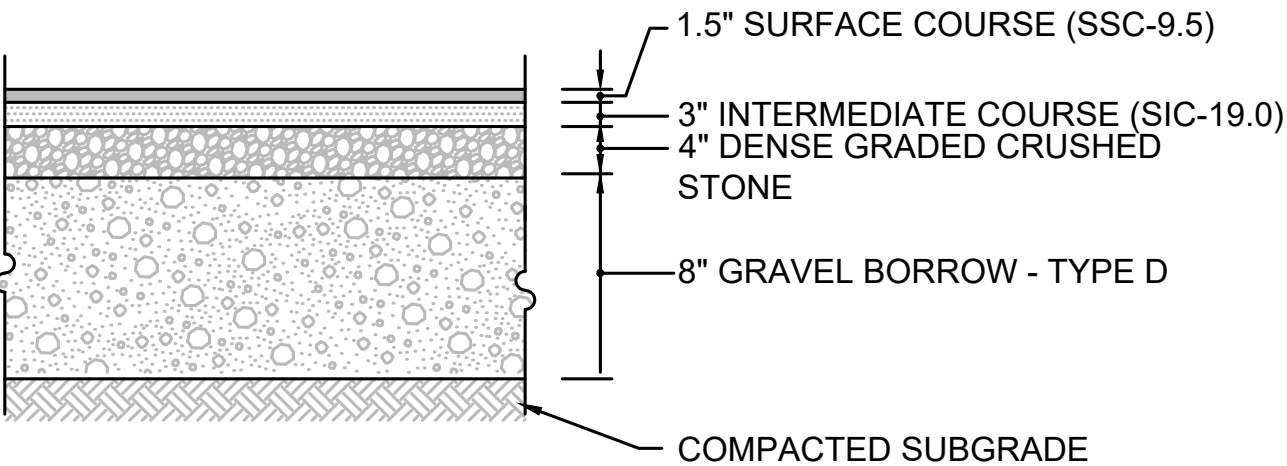
PROJECT MANAGER
Date
PLAN NO. 312076
SHEET PV-400

FILE NAME: \\VHB\GEL\PROJ\BOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_SD(WTS).DWG



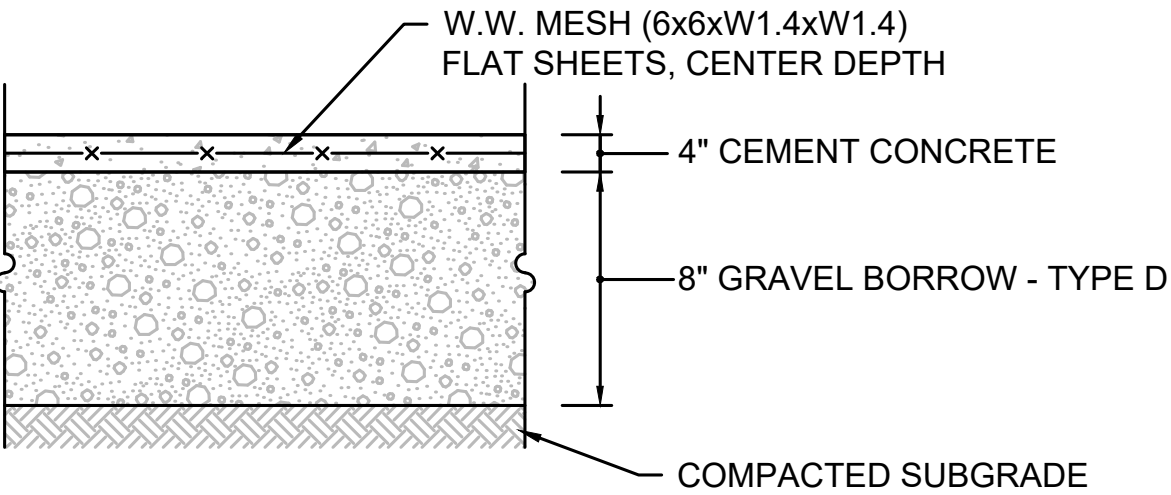
BITUMINOUS CONCRETE SIDEWALK SECTION

SCALE: N.T.S.



BITUMINOUS CONCRETE PAVEMENT SECTION

SCALE: N.T.S.



NOTES:

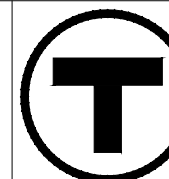
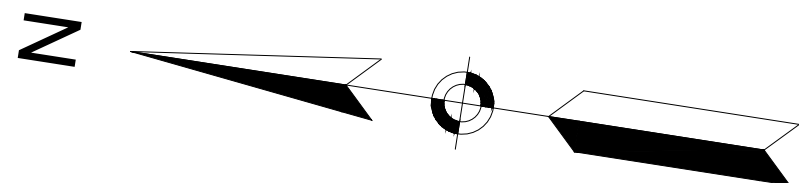
1. CONCRETE TO BE 4000 PSI TYP II, 6% ($\pm 1.5\%$) AIR ENTRAINED.

CONCRETE SIDEWALK (SLAB ON GRADE) SECTION

SCALE: N.T.S.

ISSUED FOR BID

			MASSACHUSETTS BAY TRANSPORTATION AUTHORITY SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT MIDDLEBOROUGH TO NEW BEDFORD, MA CONTRACT NO. K78CN04	
	NEW BEDFORD MAIN LINE NEW BEDFORD STATION PAVEMENT DETAILS			
		99 HIGH STREET BOSTON, MA 02110 (617) 728-7777		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
		APPROVED BY:		
PROJECT MANAGER		Date		PROJECT MANAGER
HORIZ: NONE		DES. BY	DR. BY	CHK. BY
VERT: NONE		JHC	MAM	KSS
DATE: 04/24/2020				
		PLAN NO. 312077		ISSUE
		SHEET PV-401		

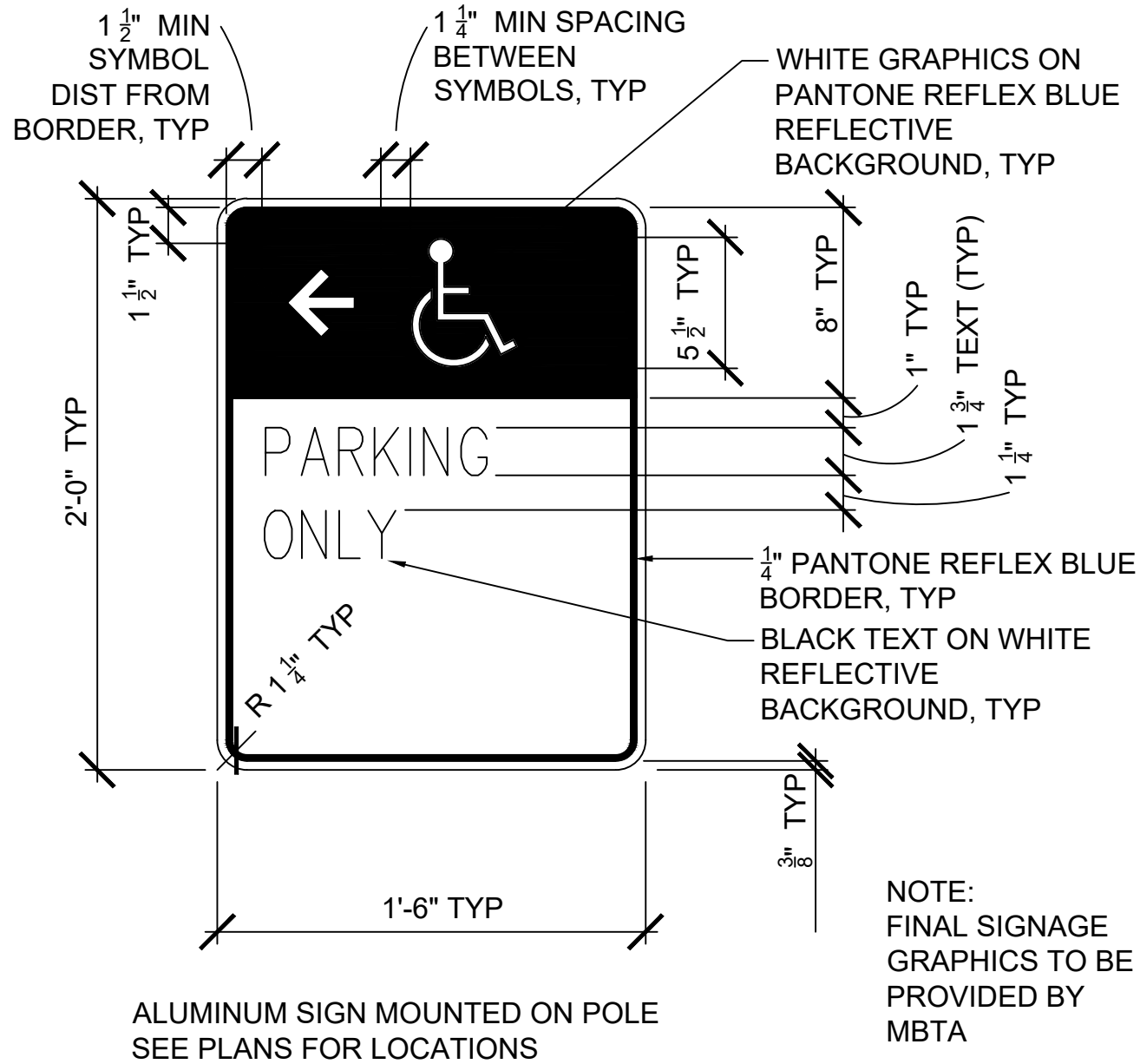


**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
SITE SIGNAGE & PAVEMENT STRIPING PLAN**

Richard Kany

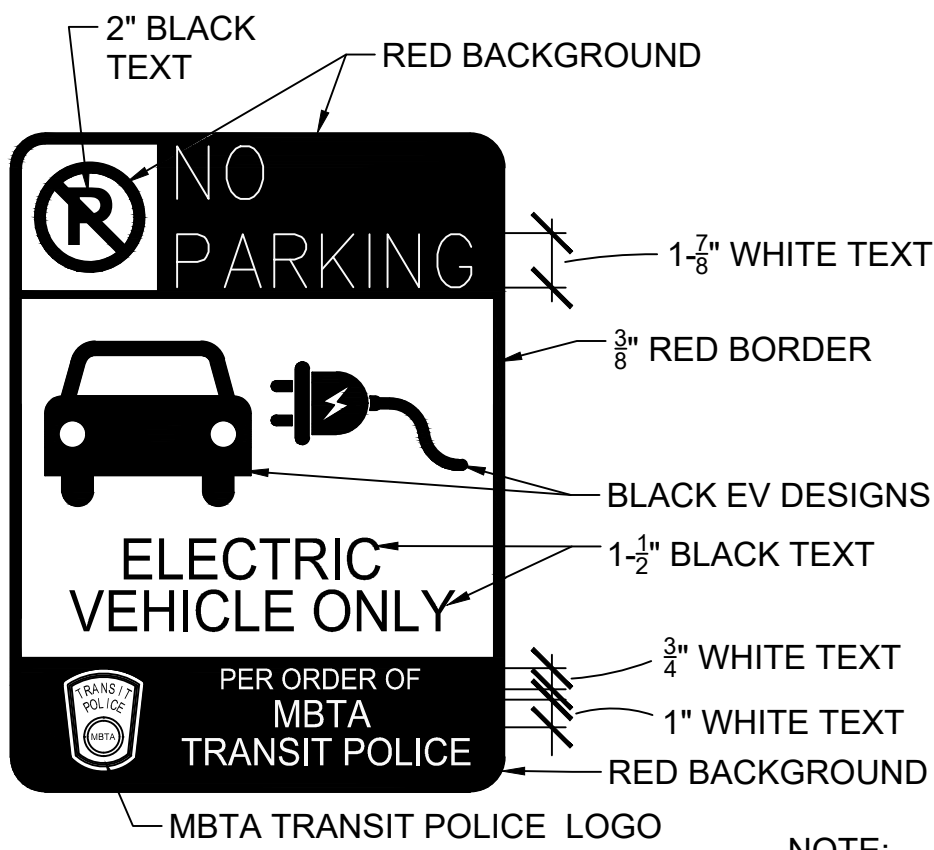
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1. 4" WIDE PAVEMENT MARKINGS ASSOCIATED WITH ACCESSIBLE PARKING SPACES SHALL BE WHITE. ALL OTHER PAVEMENT MARKINGS ASSOCIATED WITH PARKING SPACES SHALL BE YELLOW UNLESS OTHERWISE NOTED.



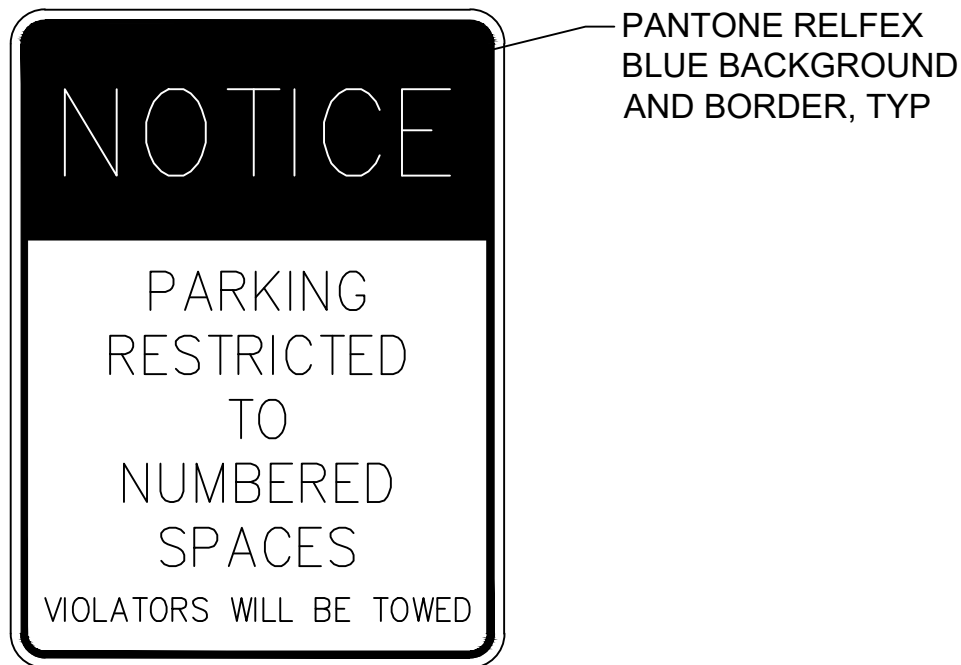
MBTA TYPICAL SIGN DIMENSIONS

SCALE: N.T.S.



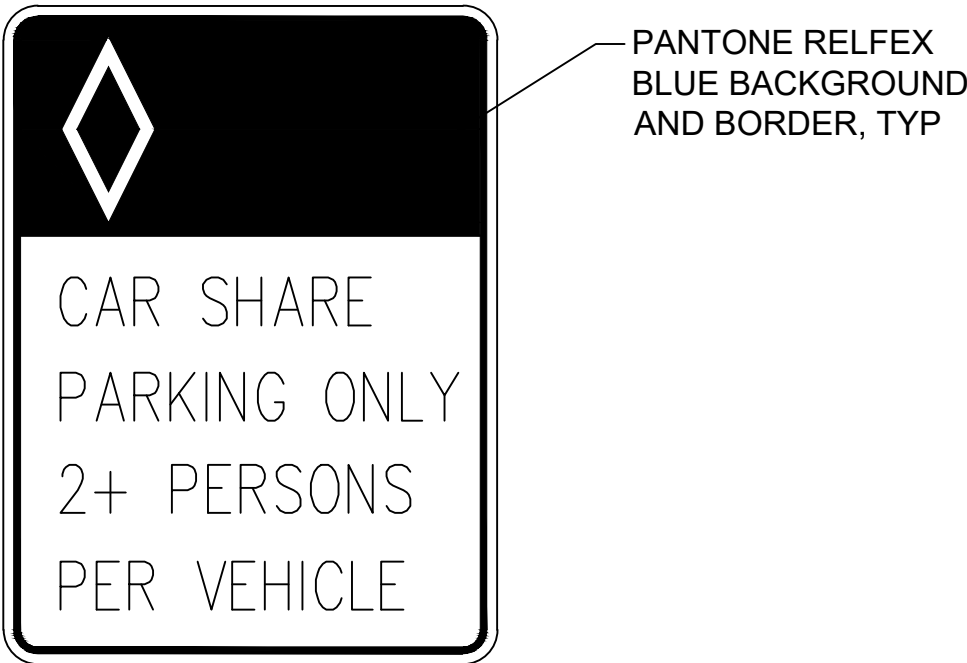
MBTA-3 MBTA ELECTRIC VEHICLE PARKING SIGN

SCALE: N.T.S.



MBTA-4 MBTA PARKING PAYMENT SIGN

SCALE: N.T.S.



MBTA-5 MBTA CAR SHARE PARKING SIGN

SCALE: N.T.S.

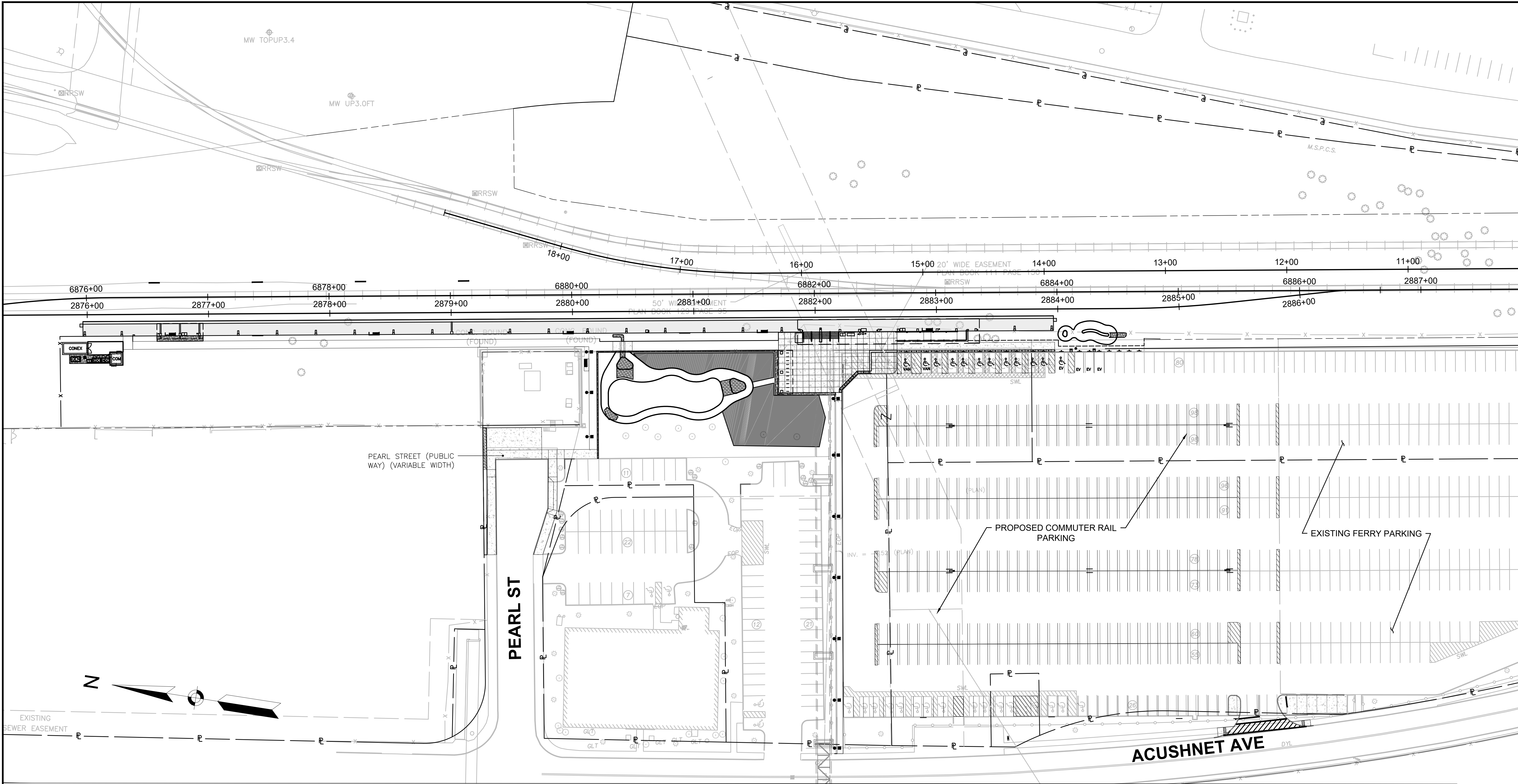
M.U.T.C.D. SIGN SUMMARY			
M.U.T.C.D. NUMBER	SPECIFICATION		DESC.
	WIDTH	HEIGHT	
R1-1	30"	30"	
R7-1	12"	18"	
R7-8	12"	18"	
R7-8P	12"	6"	

- NOTES:
- CONTRACTOR SHALL OBTAIN ALL NON-MUTCD SIGNAGE GRAPHICS FROM THE MBTA.
 - ALL MBTA SIGNS ARE TO BE MADE OF ALUMINUM AND SHALL BE MOUNTED ON POLE. SEE PLANS FOR LOCATIONS.

ISSUED FOR BID

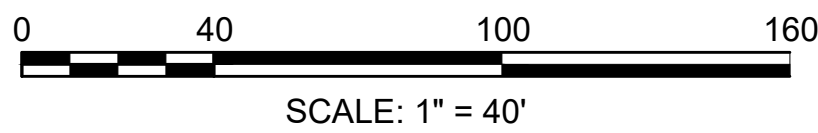
		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT MIDDLEBOROUGH TO NEW BEDFORD, MA CONTRACT NO. K78CN04
NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE SIGNAGE DETAILS		
		99 HIGH STREET BOSTON, MA 02110 (617) 728-7777
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY		APPROVED BY:
		PROJECT MANAGER
DATE: 04/24/2020		DATE
HORIZ: NONE		DES. BY
VERT: NONE		DR. BY
DATE: 04/24/2020		CHK. BY
RLG		MRT
KSS		PLAN NO. 312079
SHEET SL-402		ISSUE

FILE NAME: \\VHB\B\PROJECTS\BOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_CV(SS_WHALESTOOTH).DWG

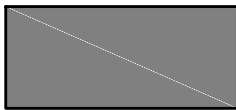


NOTES:

1. SNOW STORAGE PLAN PROVIDED FOR RAILROAD OPERATOR'S REFERENCE ONLY. NO ACTION NEEDED FROM CONTRACTOR.
2. THE NEW BEDFORD STATION AREA HAS APPROXIMATELY 0.5 ACRES OF SIDEWALK AND PLATFORM. THE PLAN DOES NOT INCLUDE SNOW STORAGE FOR THE ROOF, PERVIOUS AREAS, OR PARKING LOT.
3. SNOW FROM PARKING LOT IS TO BE MANAGED BY HDC. SURPLUS FERRY PARKING CAN BE USED FOR SNOW STORAGE IN THE WINTER.
4. THE PLAN DEPICTS APPROXIMATELY 5,000 SF OF AREA AVAILABLE FOR SNOW STORAGE WITHIN THE STATION AREA. THIS AREA IS ESTIMATED TO ACCOMMODATE AN APPROXIMATE 4' SNOWFALL, ASSUMING 5:1 COMPACTION AND AN AVERAGE SNOW PILE HEIGHT OF 3.5'. ADDITIONAL SNOW STORAGE IS AVAILABLE IN PERVIOUS AREAS THROUGHOUT THE PROJECT AREA.
5. UNDER NO CIRCUMSTANCE SHALL SNOW BE STORED IN ANY WETLAND RESOURCE AREA OR PROPOSED STORMWATER BEST MANAGEMENT PRACTICE.
6. SNOW STORAGE WILL BE IMPLEMENTED TO AVOID HYDRANTS, FENCES, LANDSCAPING, AND OTHER PERMANENT FEATURES.

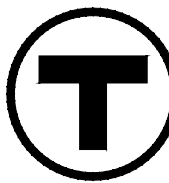


LEGEND



AVAILABLE SNOW STORAGE AREA

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
SNOW STORAGE PLAN



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

PROJECT MANAGER

Date

PROJECT MANAGER
HORIZ: 1" = 40'
VERT: NONE
DATE: 04/24/2020

DES BY: KSS
GR BY: BGA
CHK BY: KSS

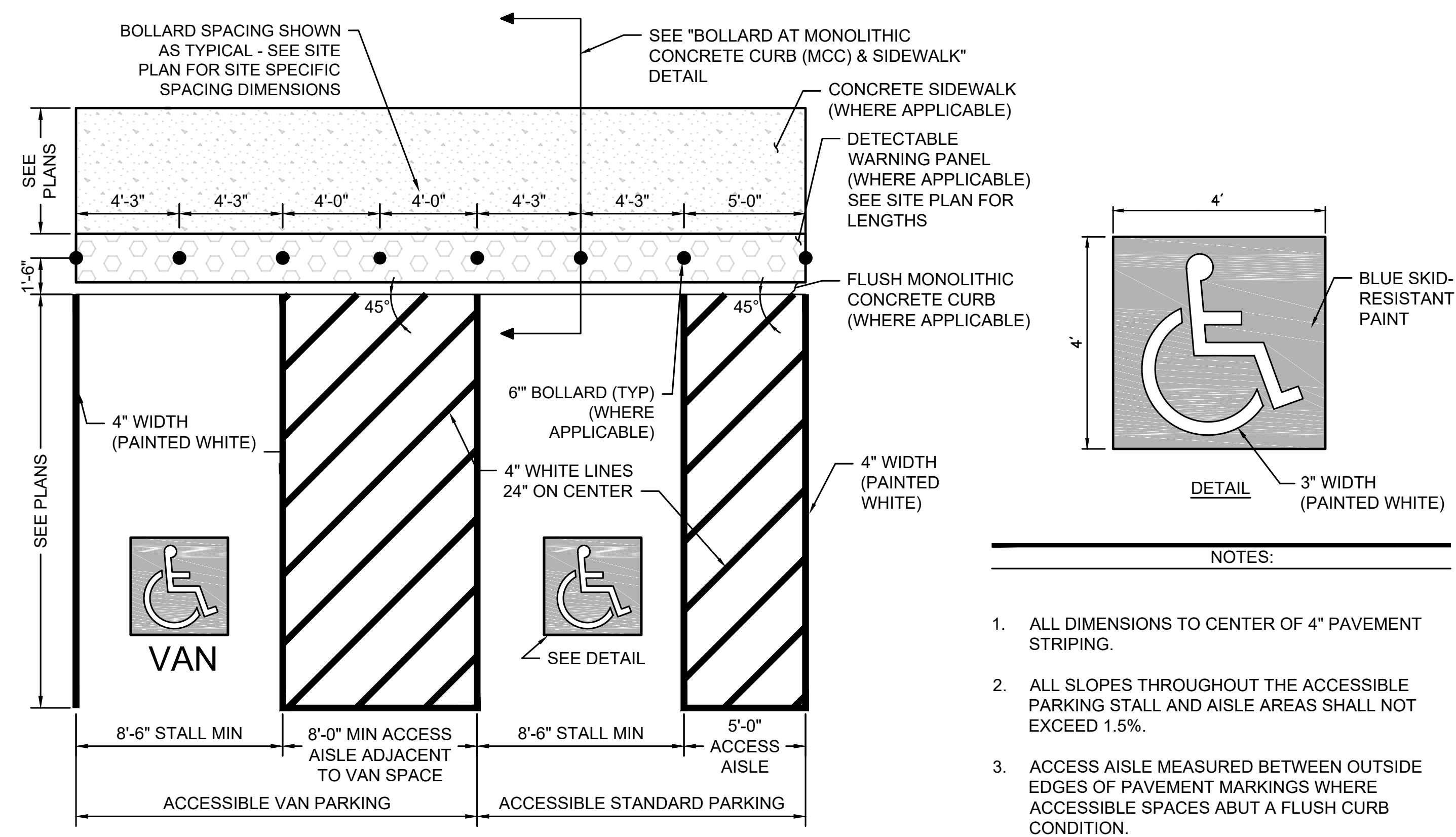
PLAN NO. 312080

SHEET SS-400

ISSUE

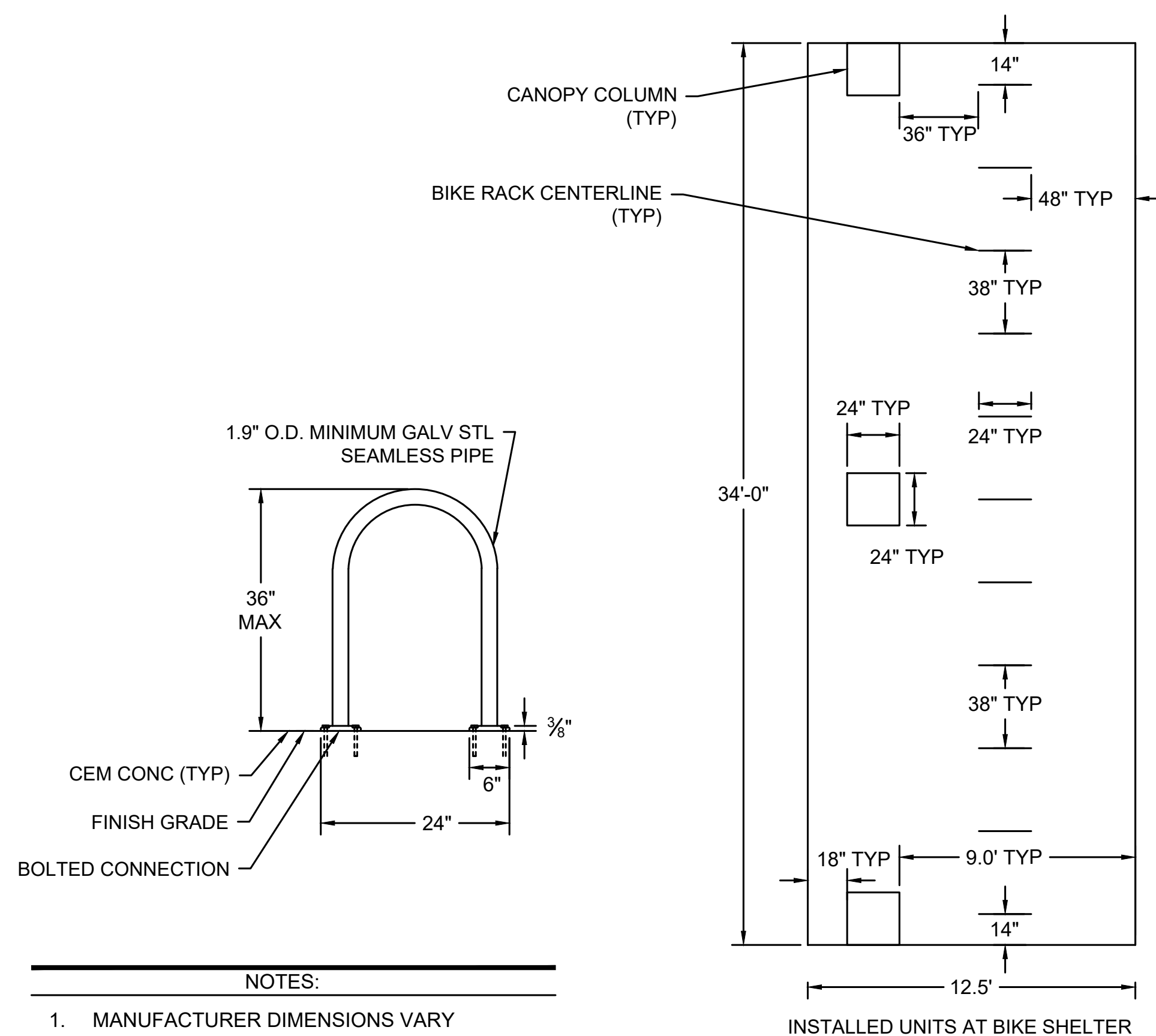
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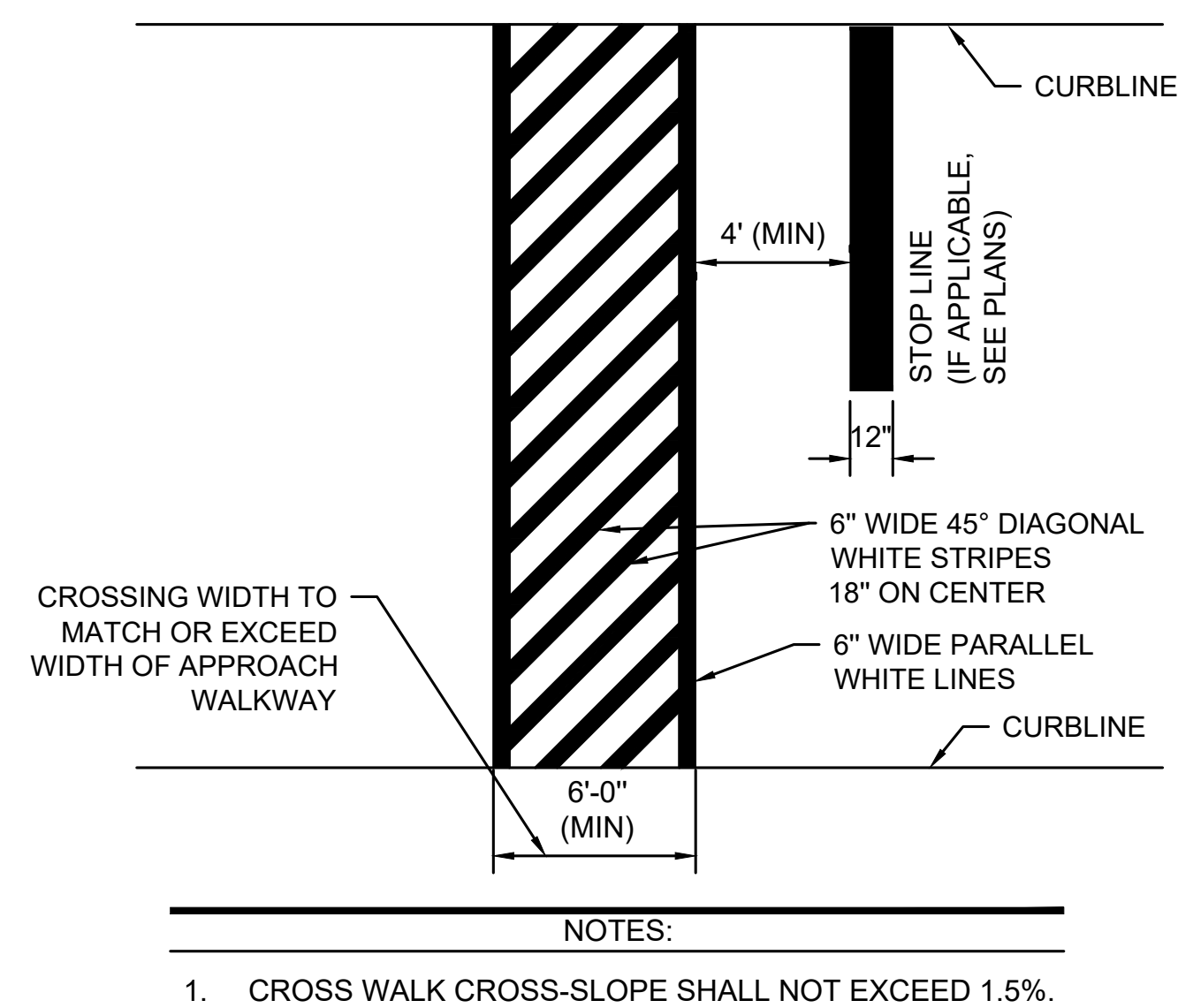
ACCESSIBLE PARKING SPACE

SCALE: N.T.S.



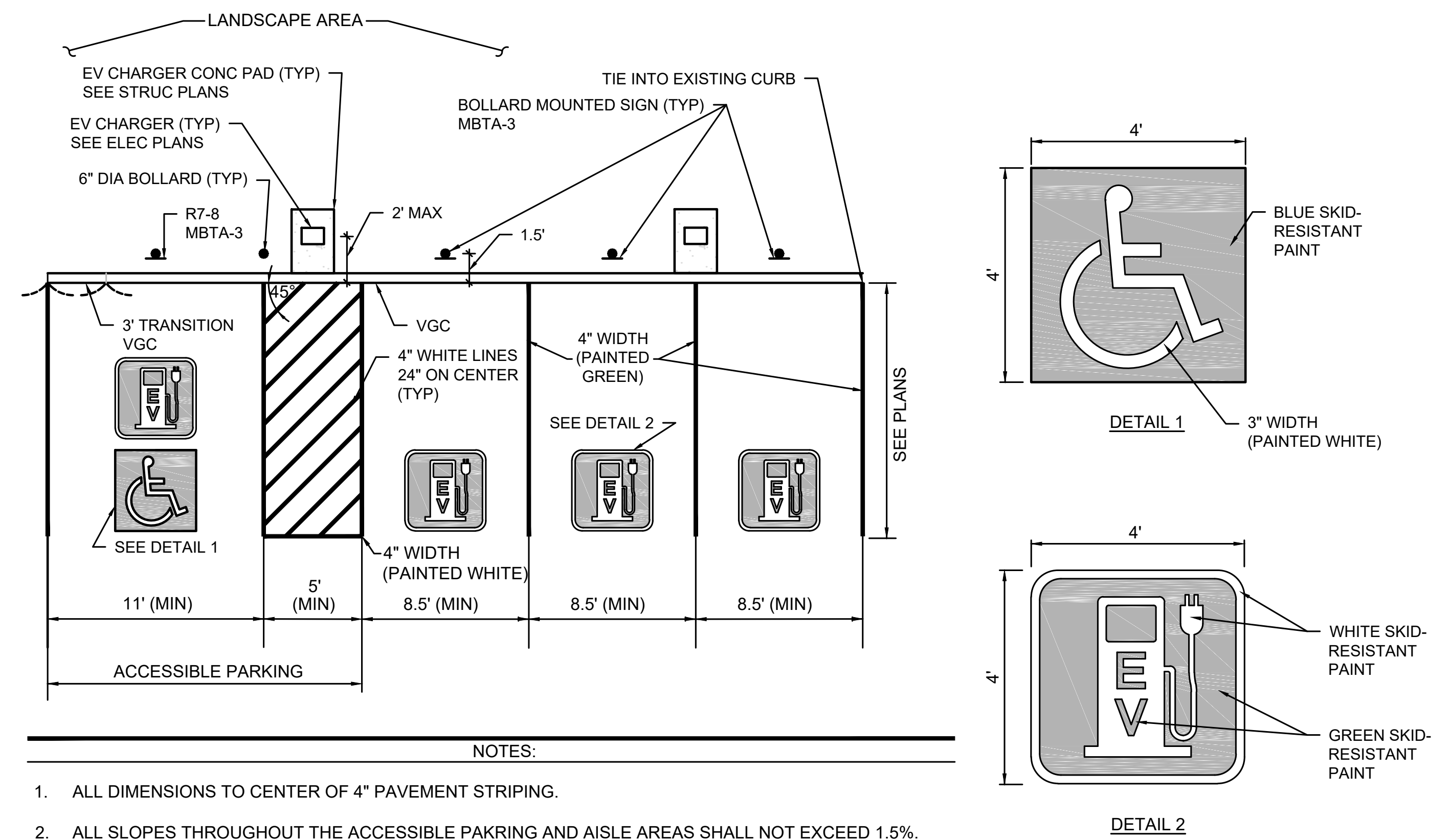
BIKE RACK

SCALE: N.T.S.



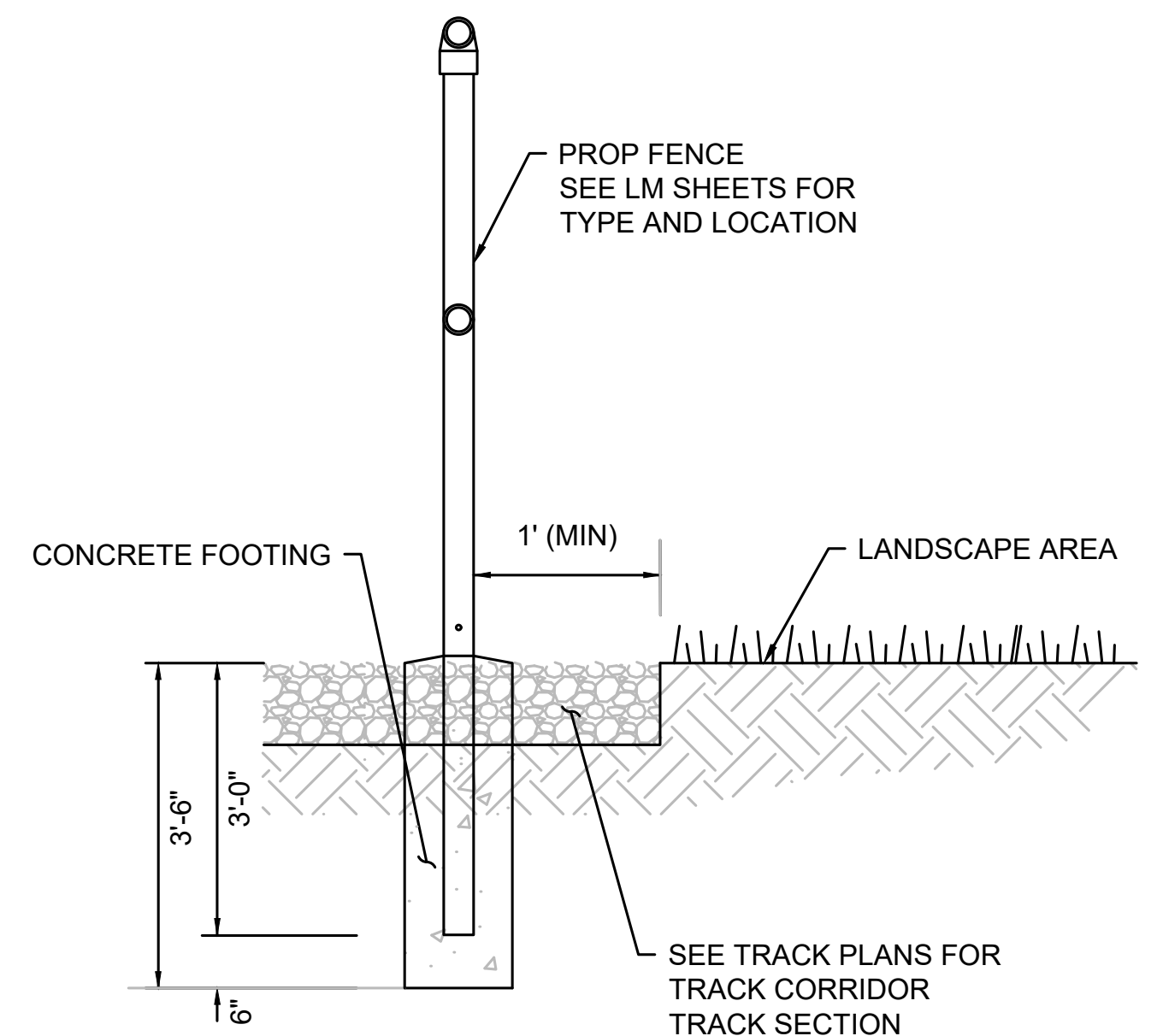
CROSSWALK

SCALE: N.T.S.



ACCESSIBLE AND STANDARD ELECTRIC VEHICLE PARKING SPACES - NEW BEDFORD STATION

SCALE: N.T.S.

**LANDSCAPE/BALLAST INTERFACE AT FENCE**

SCALE: N.T.S.

ISSUED FOR BID

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT MIDDLEBOROUGH TO NEW BEDFORD, MA CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE DETAILS 3

99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

Litho Karu

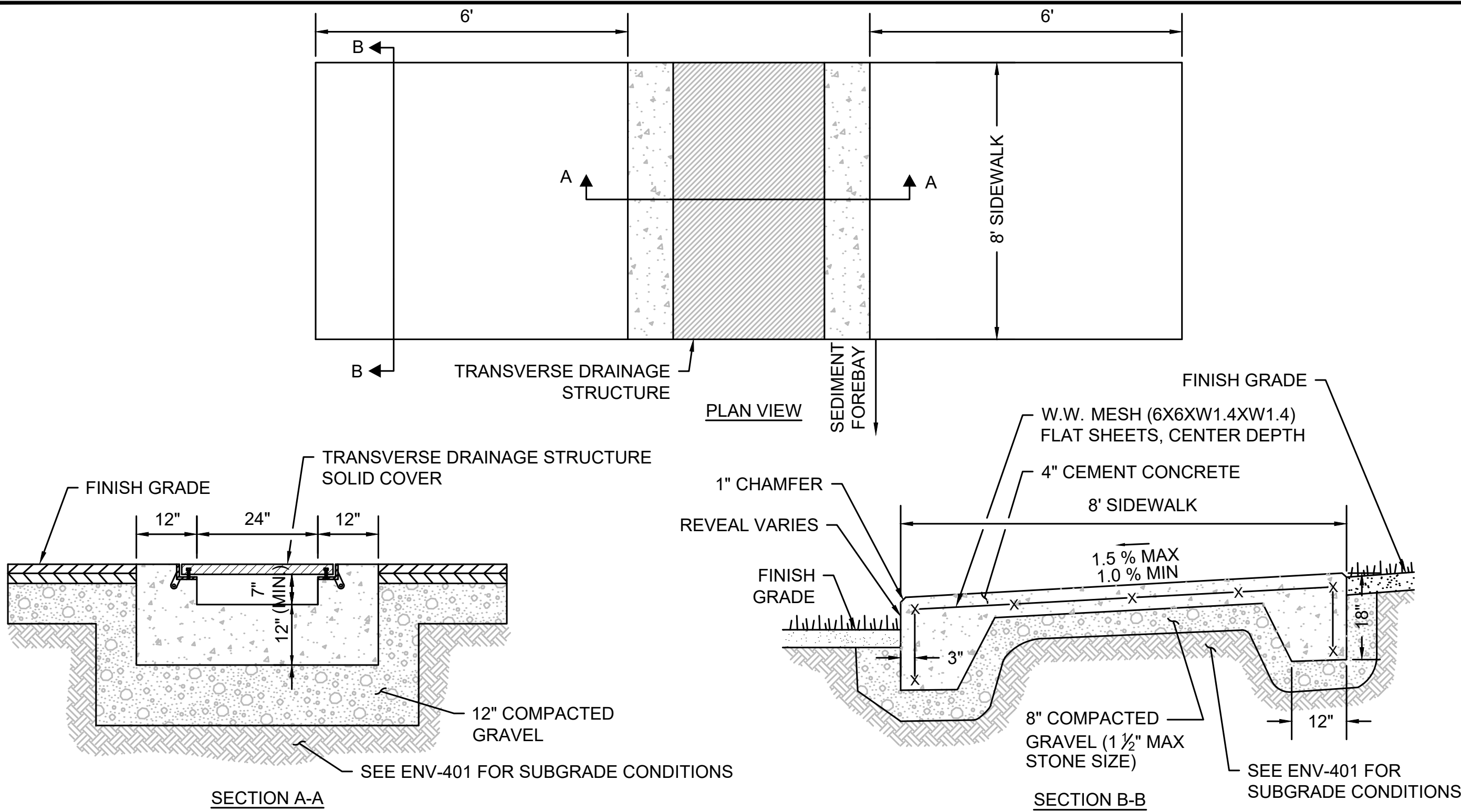
PROJECT MANAGER		Date	
HORIZ: NONE	DES. BY	DR. BY	CHK. I
VERT: NONE	JHC	MRT	KS
DATE: 04/24/2020			

	DES. BY	DR. BY	CHK. BY
	JHC	MRT	KS

PROJECT MANAGER		Date
PLAN NO. 312083		ISSUE 
SHEET	SD-403	

SOL

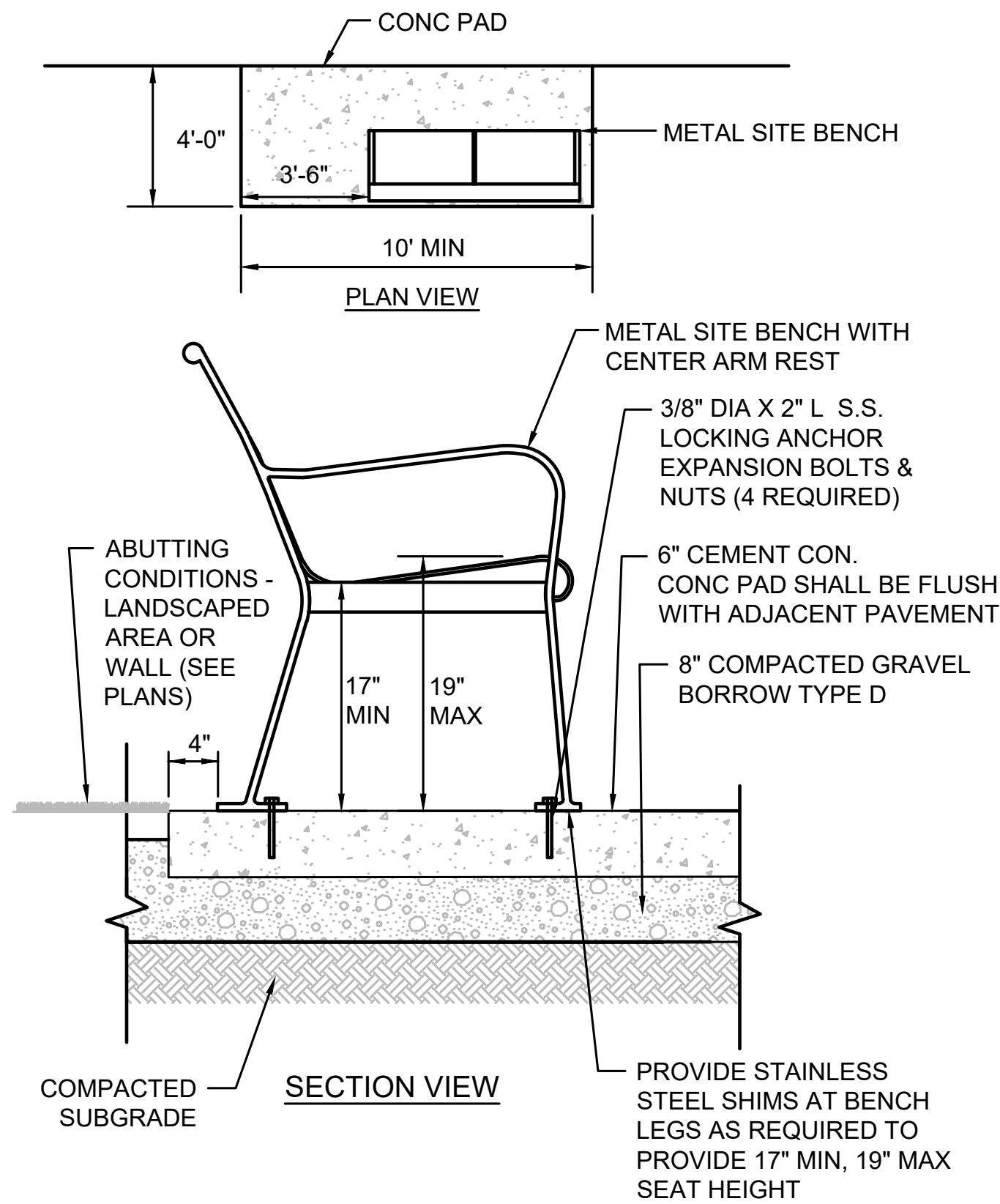
FILE NAME: \\VHB\GEL\PROJBOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_SD(WTS).DWG



- NOTES:
- CONSTRUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. SEE SPEC SECTION 02524 CURBING.
 - INVERT SLOPE SHALL BE SET TO SLOPE AT 1% TOWARD SEDIMENT FOREBAY.
 - CONCRETE FOR SIDEWALKS TO BE 4000 PSI TYPE II, 6% (1.5±) AIR ENTRAINED.
 - PROVIDE EXPANSION JOINTS AT EACH END WITH PRE-FORMED EXPANSION JOINT FILLER AND SEALER.
 - PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO LINE OF TRAVEL.

SIDEWALK CURB INLET IN LANDSCAPE

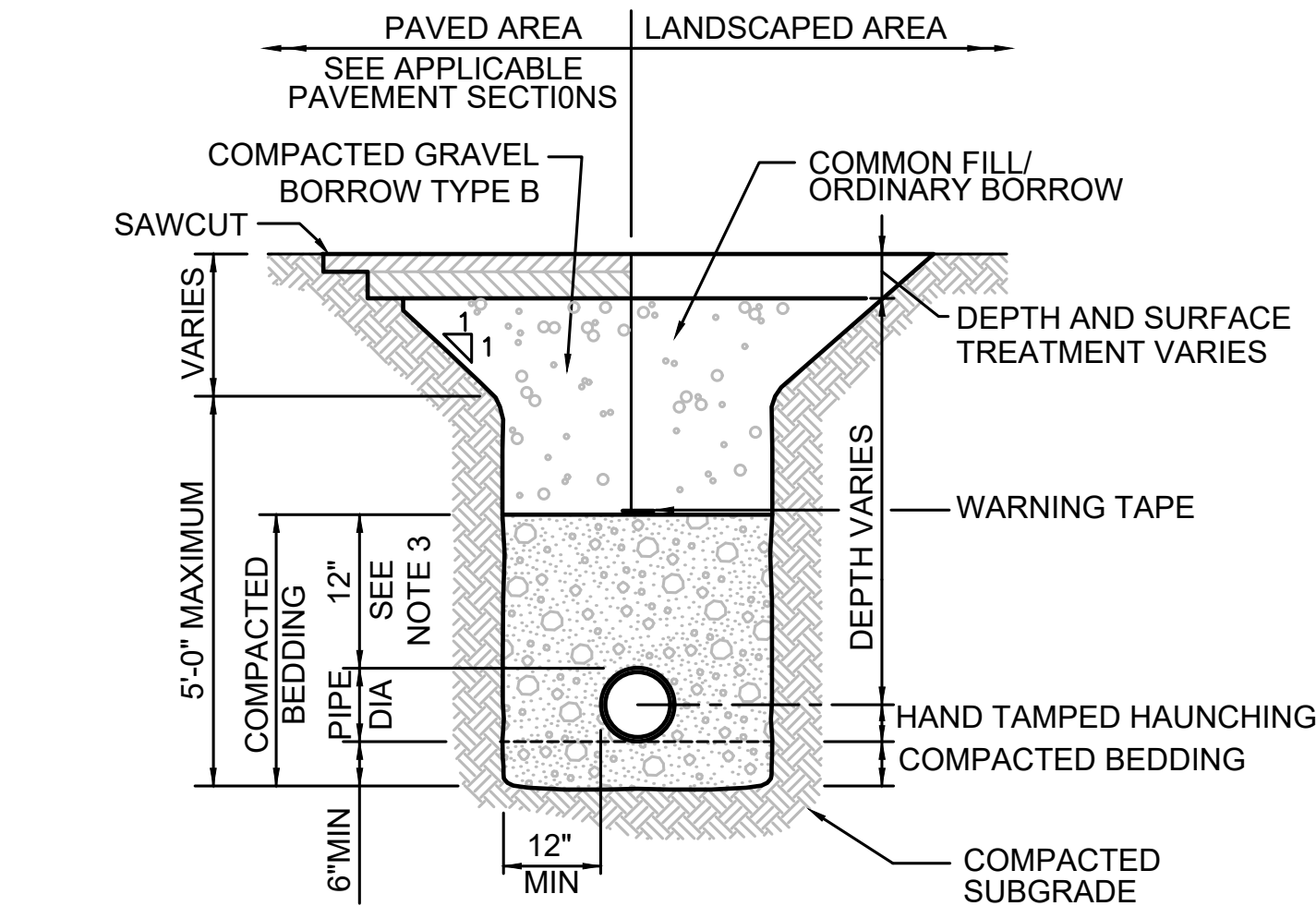
SCALE: N.T.S.



- NOTES:
- SEE SPECIFICATION SECTION 02470 SITE IMPROVEMENTS

SITE BENCH

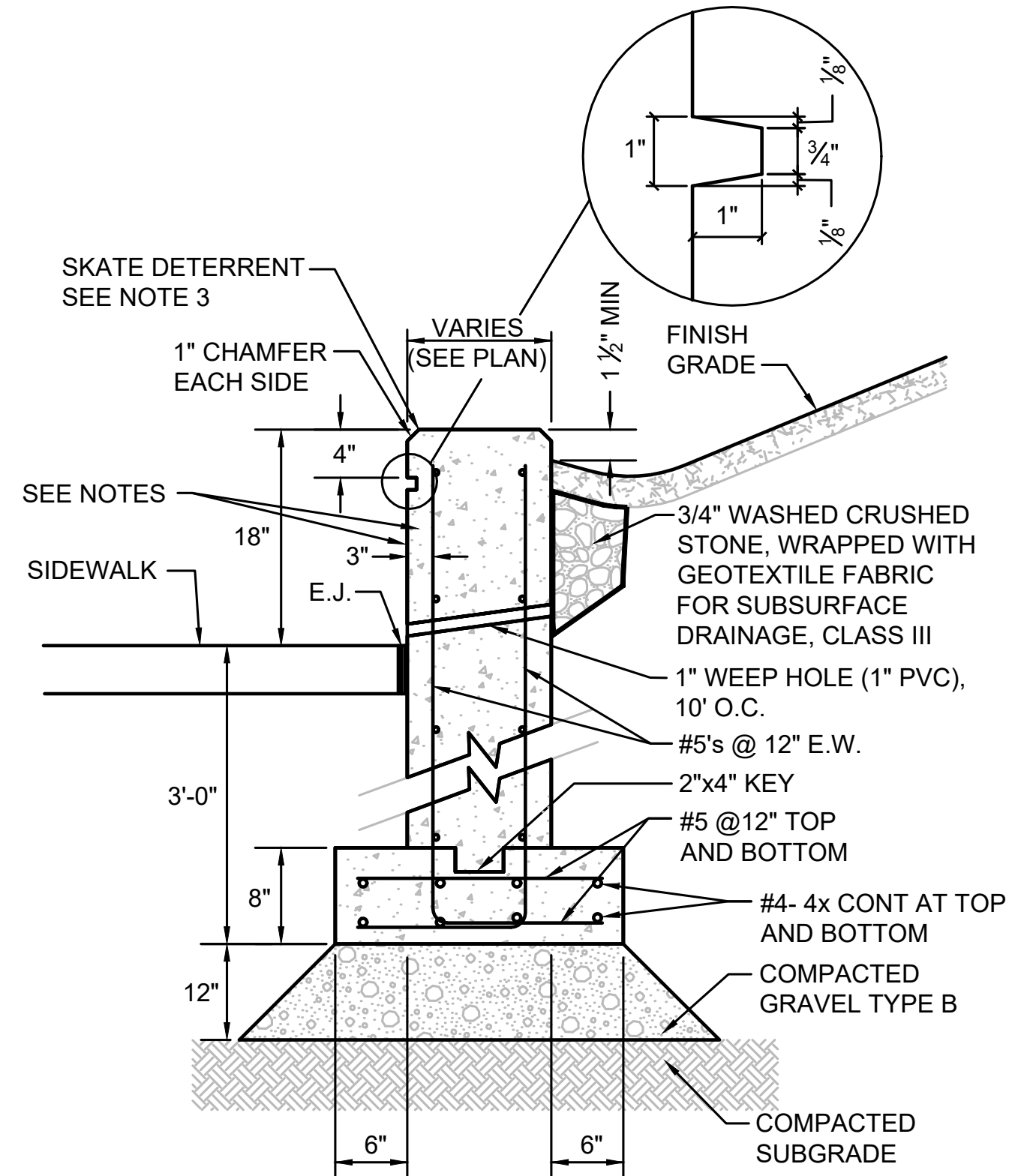
SCALE: N.T.S.



- NOTES:
- WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
 - USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
 - FOR HDPE PIPE, DIMENSION IS 24 INCHES.
 - UTILITY TRENCH FOR GAS PIPING SHALL COMPLY WITH GAS COMPANY REQUIREMENTS INCLUDING BUT NOT LIMITED TO THE USE OF SAND BEDDING AND WARNING TAPE PLACEMENT.
 - REFER TO SPECIFICATION SECTION 02300-EARTHWORK FOR MORE DETAILS.
 - WHERE TRENCHING OCCURS IN EXISTING PAVED SURFACES, SAWCUT JOINTS SHALL BE STAGGERED IN ACCORDANCE WITH MASSDOT SPECIFICATIONS.
 - JOINTS BETWEEN NEW BITUMINOUS CONCRETE ROADWAY PAVEMENT AND SAWCUT OF EXISTING PAVEMENT SHALL BE SEALED WITH HOT POURED RUBBERIZED ASPHALT SEALER AND BACKSANDS.

UTILITY TRENCH

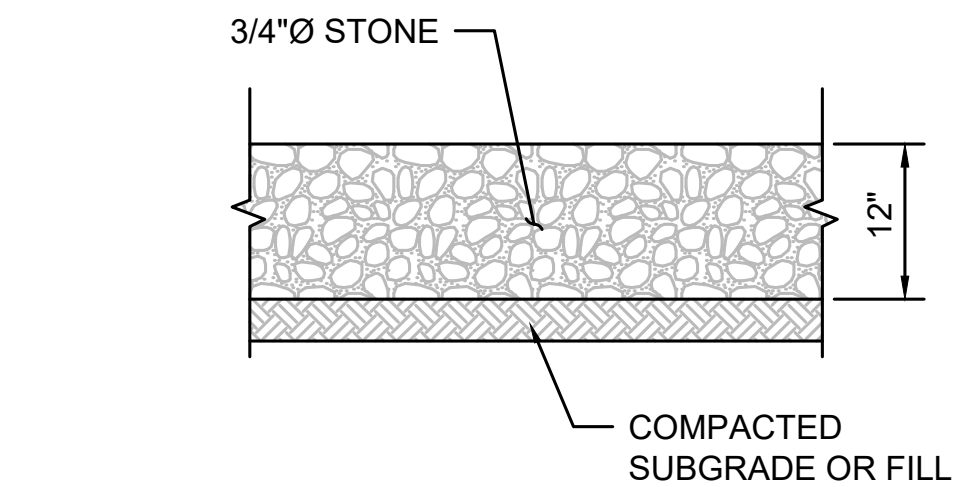
SCALE: N.T.S.



- NOTES:
- CLEAR COVER TO REBAR SHALL BE 3" MIN TYP.
 - PROVIDE FORMLINER TYPE C FOR SEATWALL.
 - SKATE DETERRENTS SHALL BE PROVIDED AND SPACED 36" O.C. AND 12" FROM END OF WALL.
 - SKATE DETERRENTS SHALL BE PROVIDED IN ACCORDANCE WITH SPECIFICATIONS SECTION 05500, AND SHALL BE INSTALLED 36" O.C. AND 12" FROM ENDS OF WALLS.

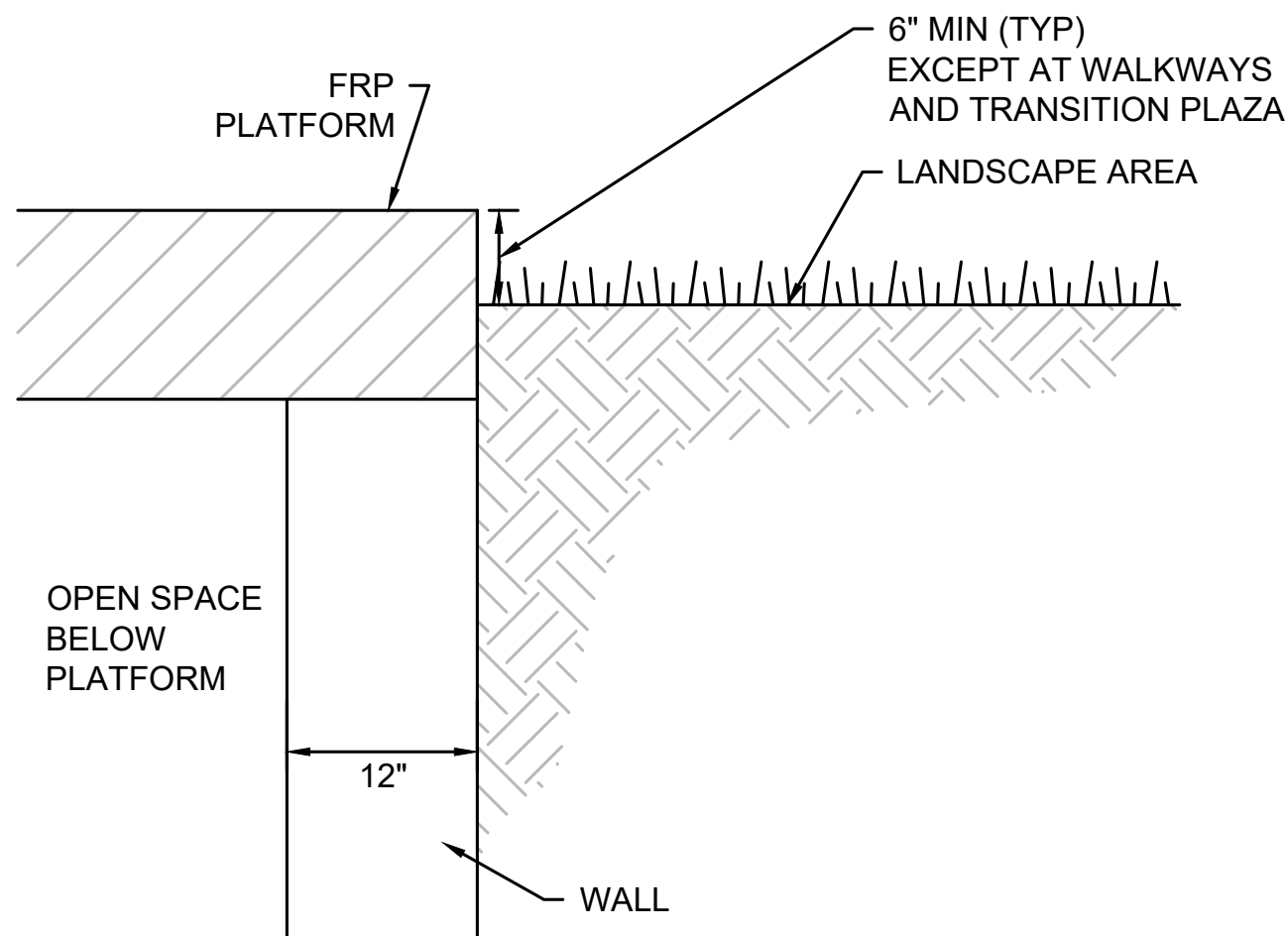
SEAT WALL

SCALE: N.T.S.



CRUSHED STONE PAD FOR EQUIPMENT AREA

SCALE: N.T.S.



TYPICAL PLATFORM EDGE AT LANDSCAPE

SCALE: N.T.S.

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE DETAILS 4



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

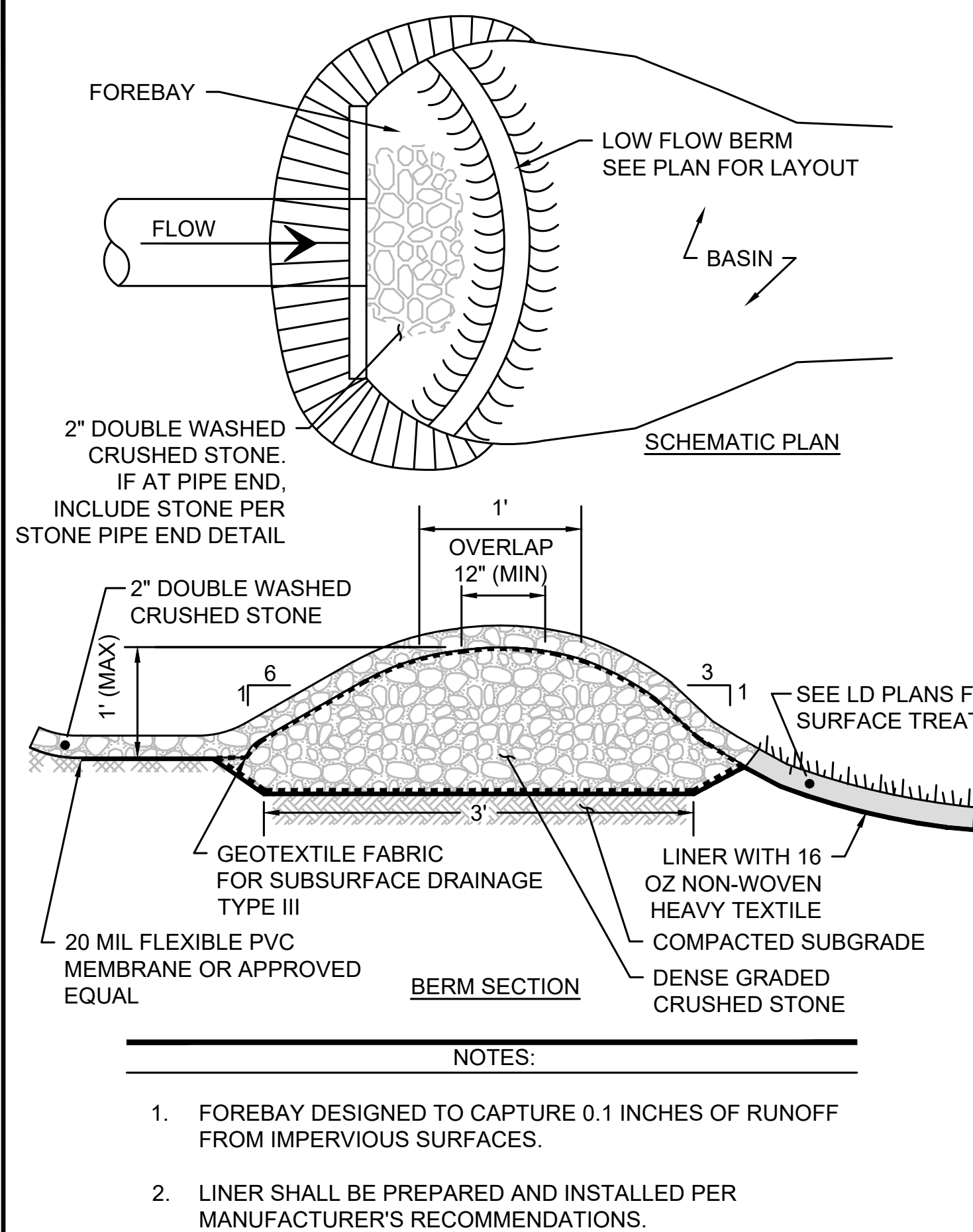
APPROVED BY:

[Signature]

ISSUE	DATE	DESCRIPTION	BY	CHKD.	APP.

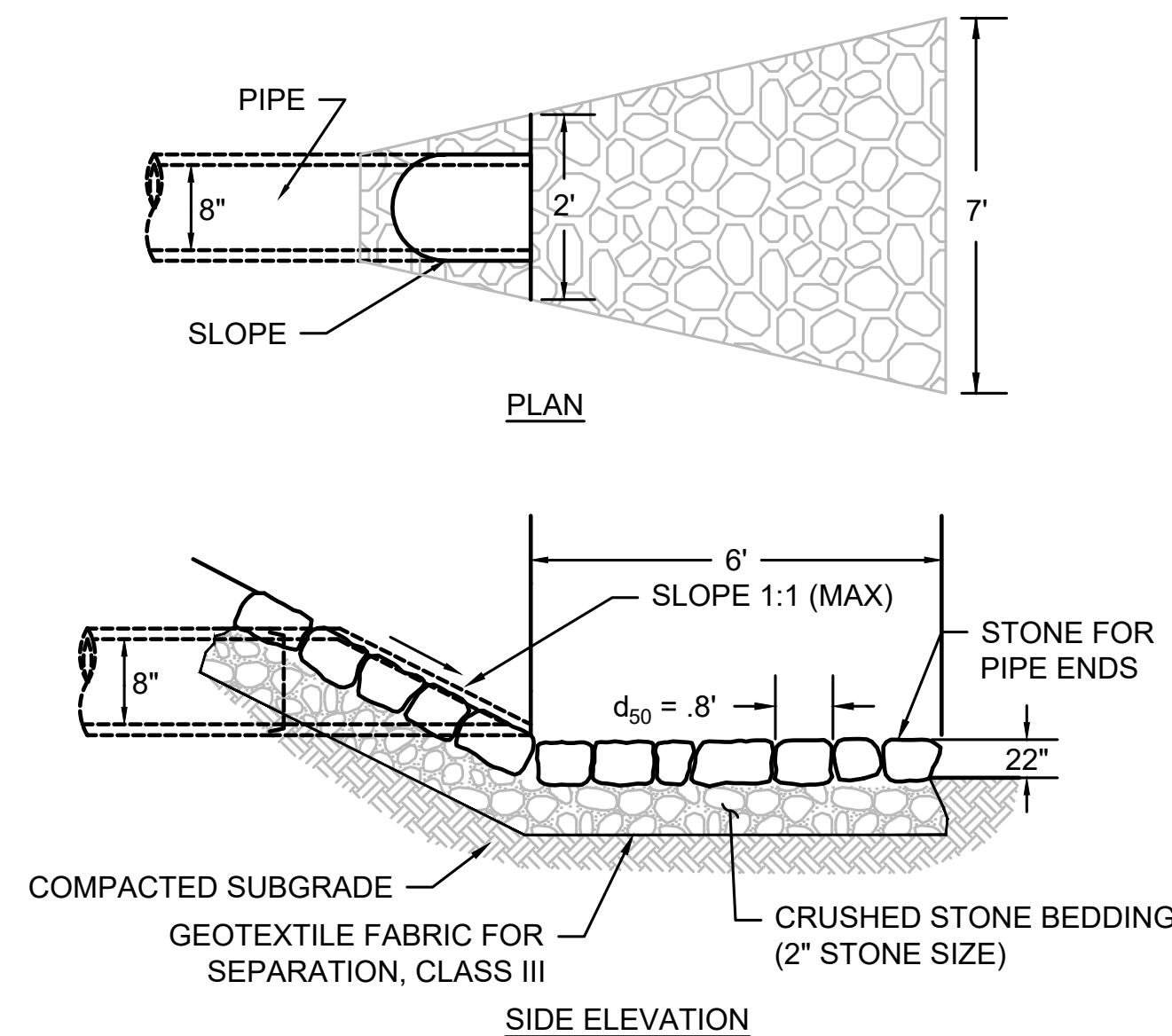
PROJECT MANAGER	DATE	DR. BY	CHK. BY
HORIZ: NONE		JHC	MRT
VERT: NONE			
DATE: 04/24/2020			

PROJECT MANAGER	DATE
PLAN NO. 312084	
SHEET SD-404	



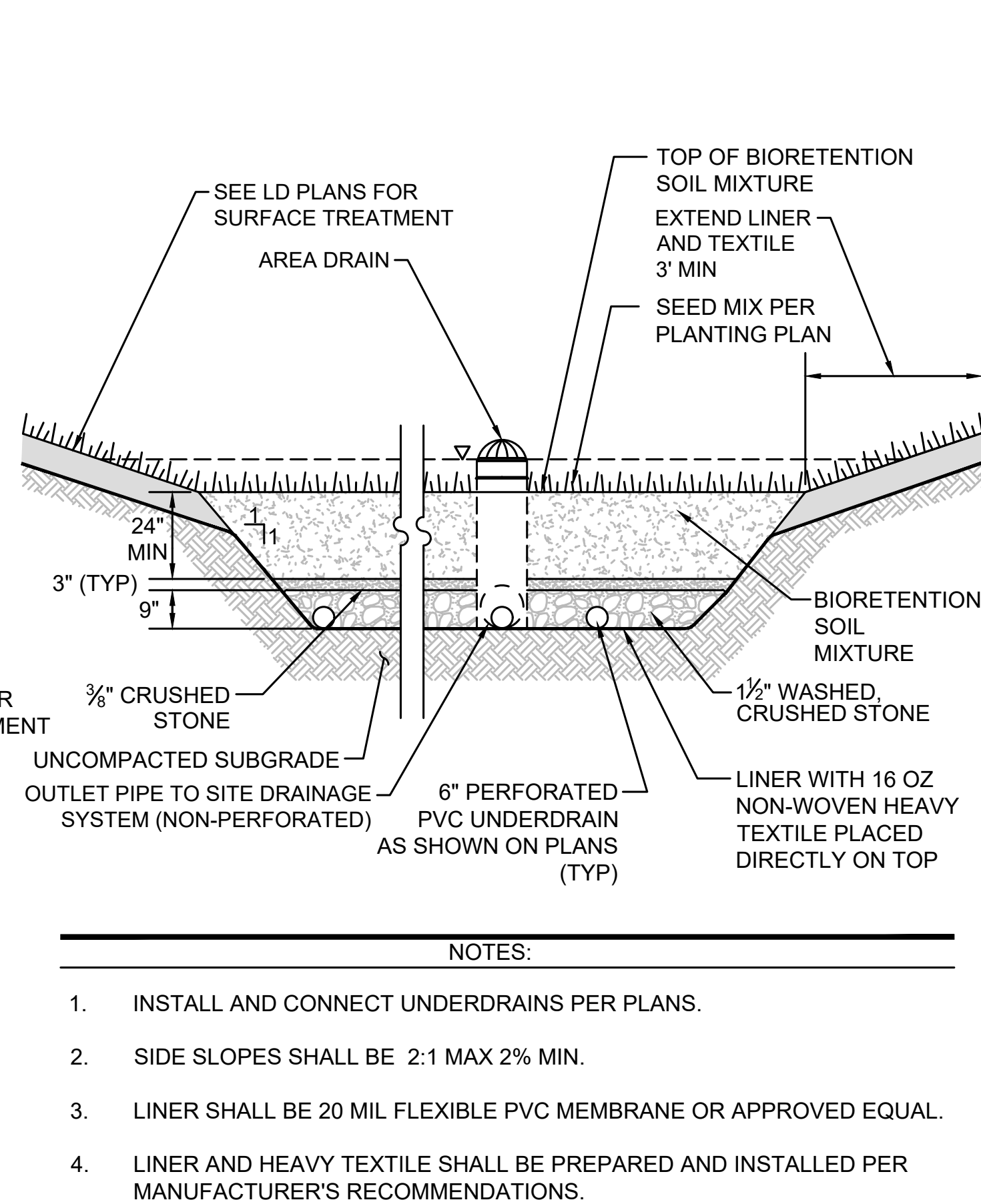
LOW FLOW SEDIMENT FOREBAY BERM

SCALE: N.T.S.



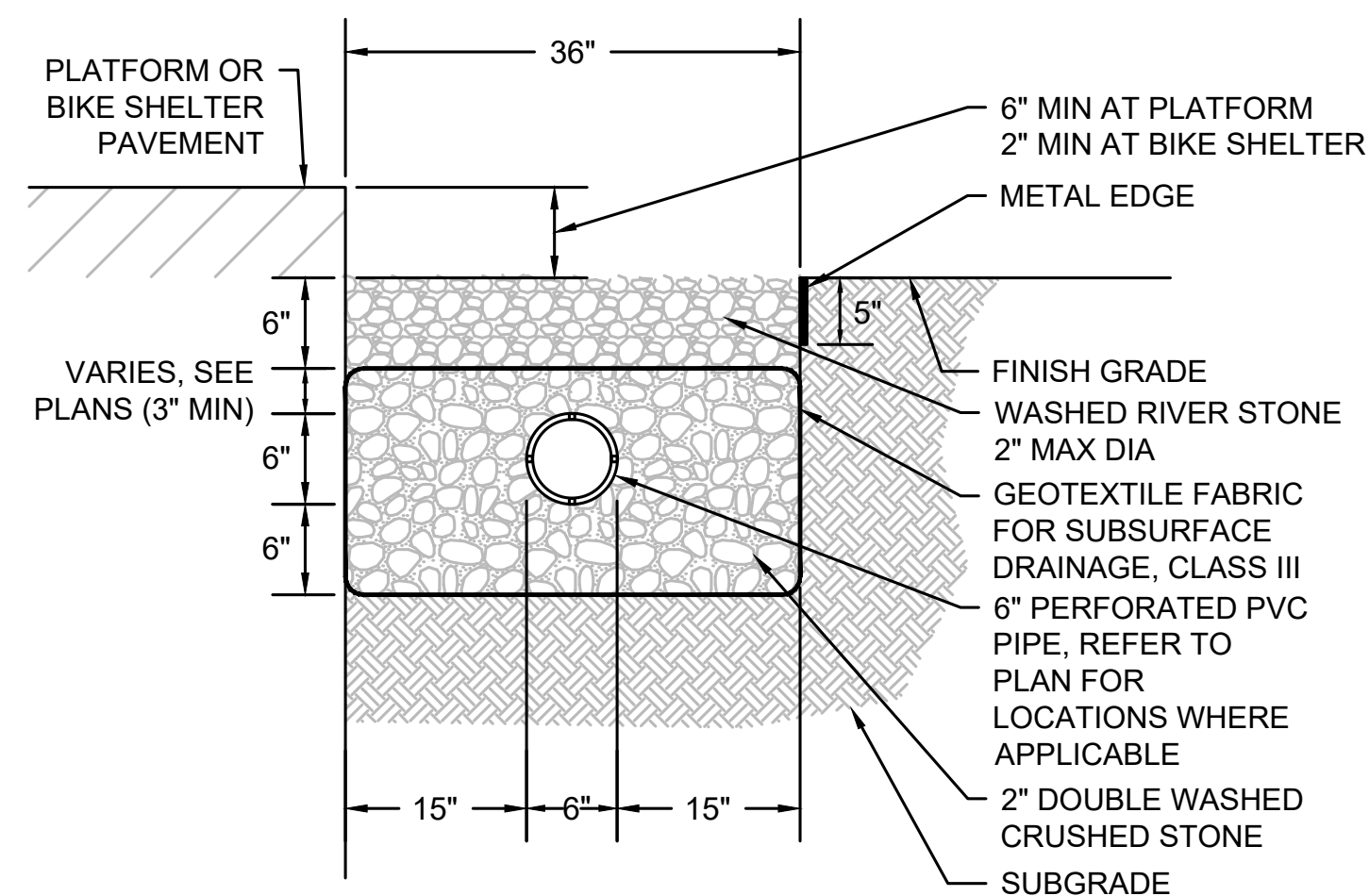
STONE FOR PIPE END - 8"

SCALE: N.T.S.



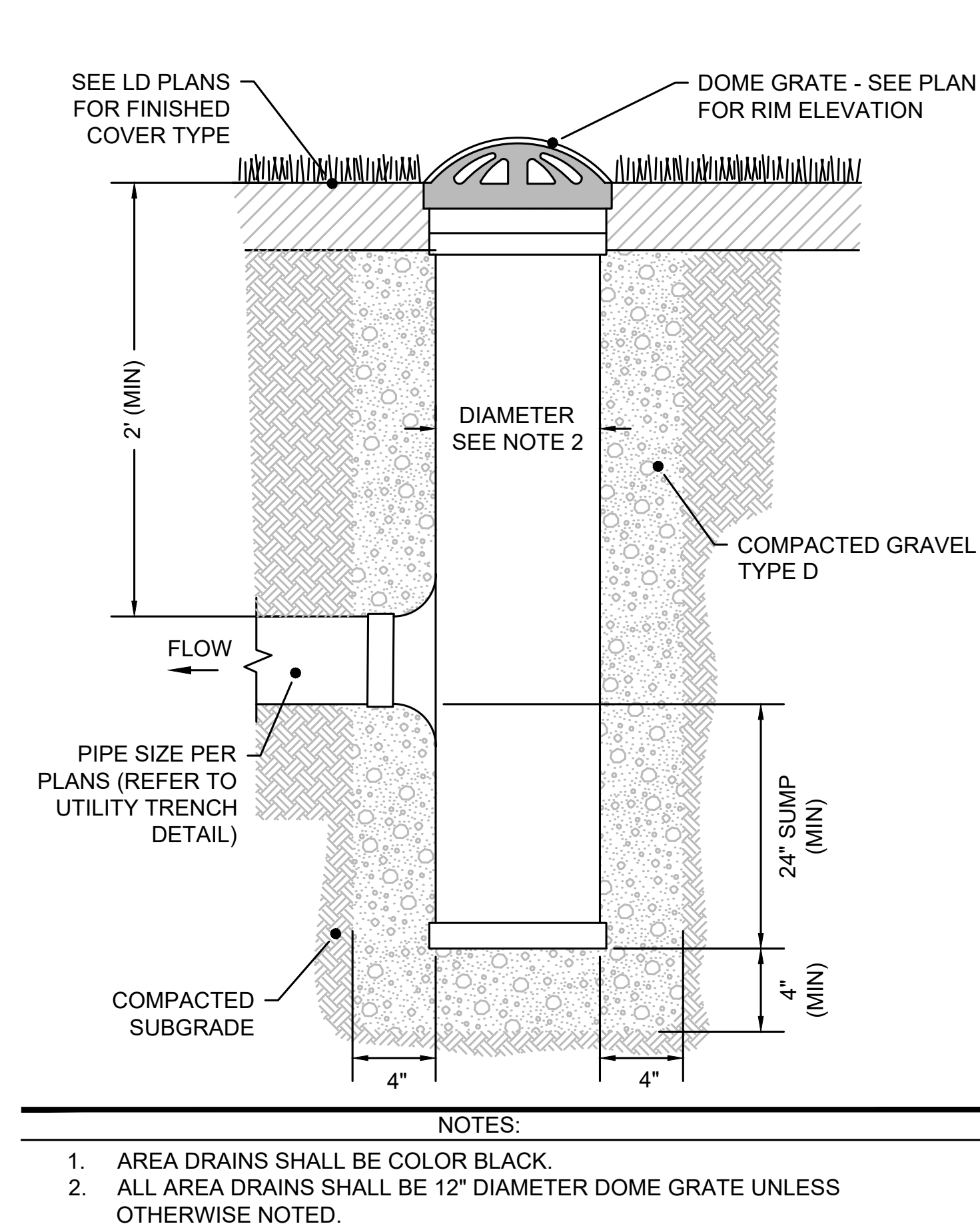
LINED BIORETENTION BASIN WITH UNDERDRAIN

SCALE: N.T.S.



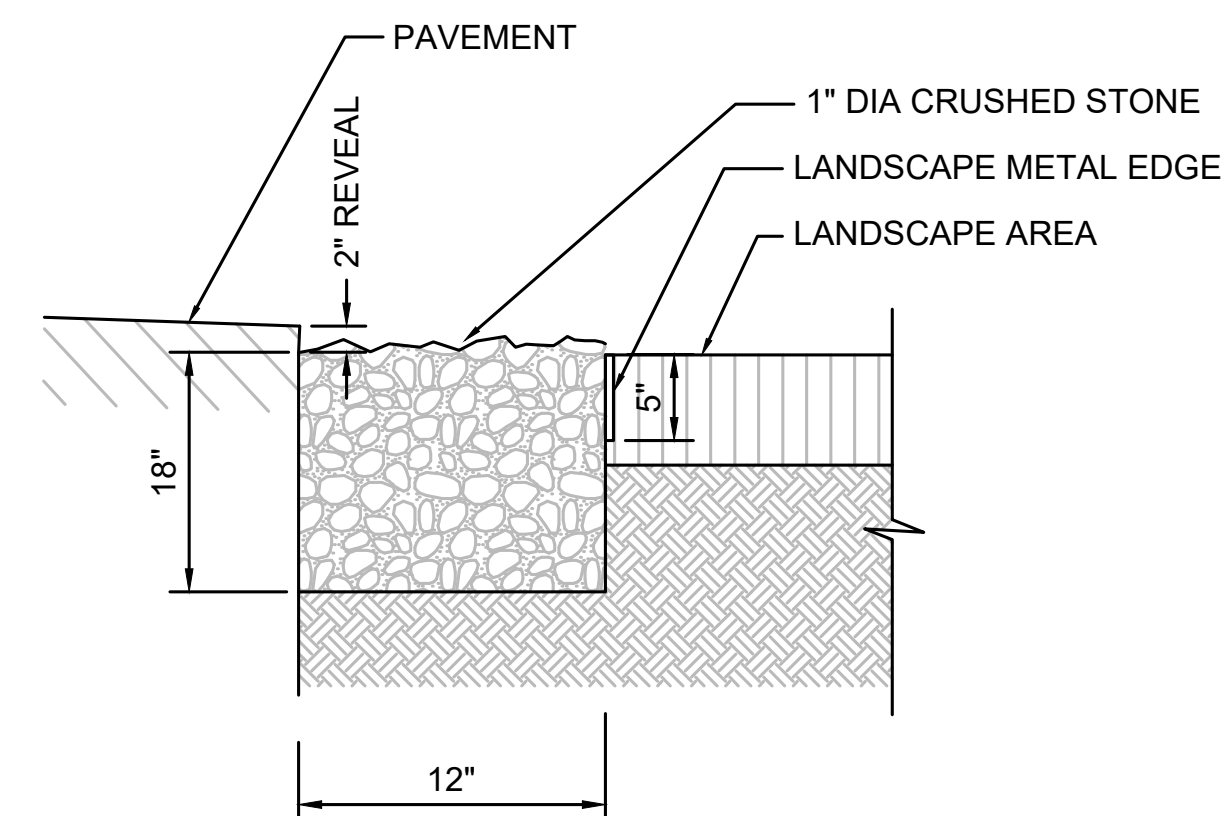
STONE DRIP STRIP

SCALE: N.T.S.



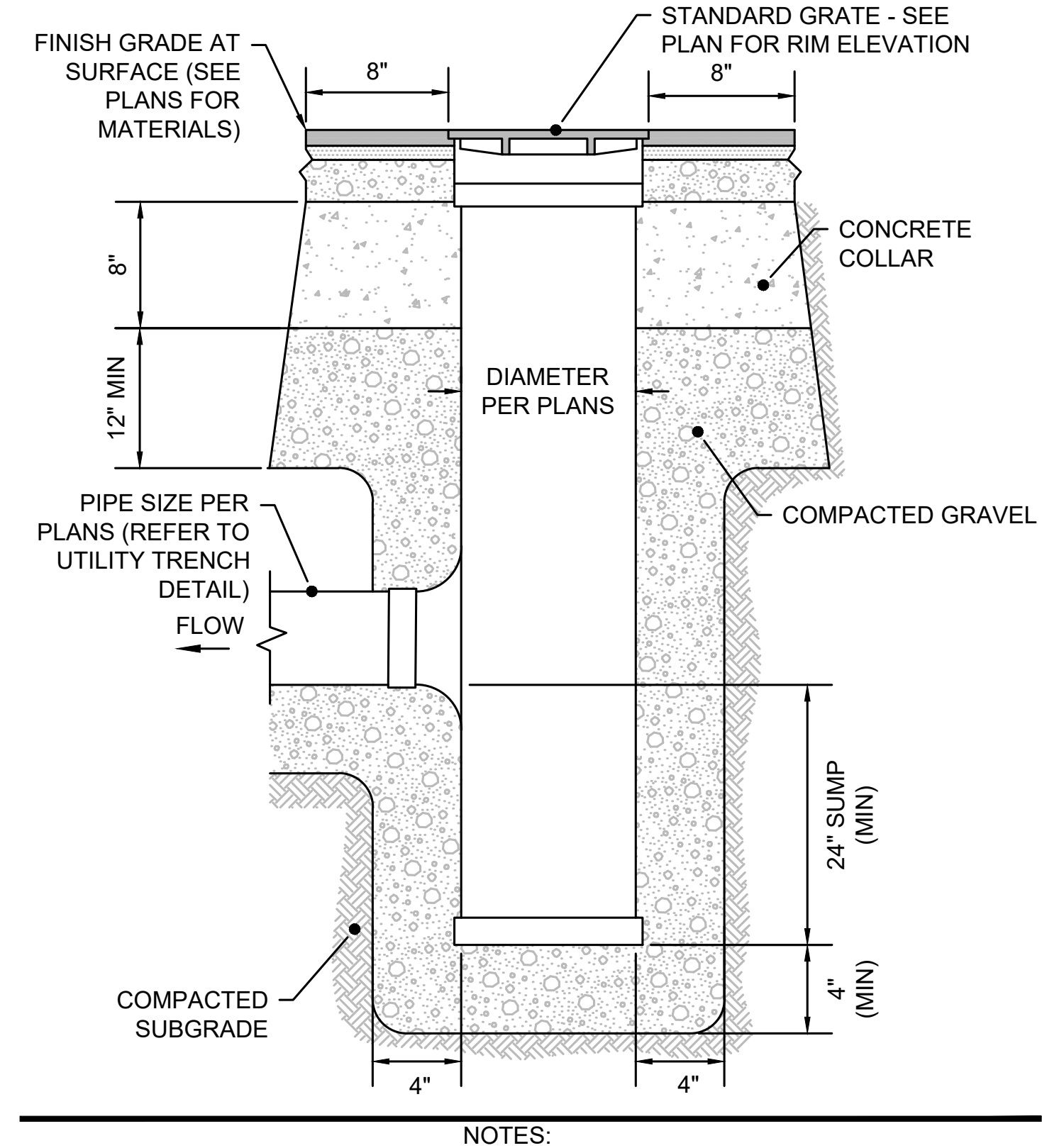
AREA DRAIN (AD) IN LANDSCAPE

SCALE: N.T.S.



PRETREATMENT FILTER STRIP

SCALE: N.T.S.



AREA DRAIN (AD) IN PAVEMENT

SCALE: N.T.S.

ISSUED FOR BID

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE DETAILS 5

99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

Richard Perry
PROJECT MANAGER

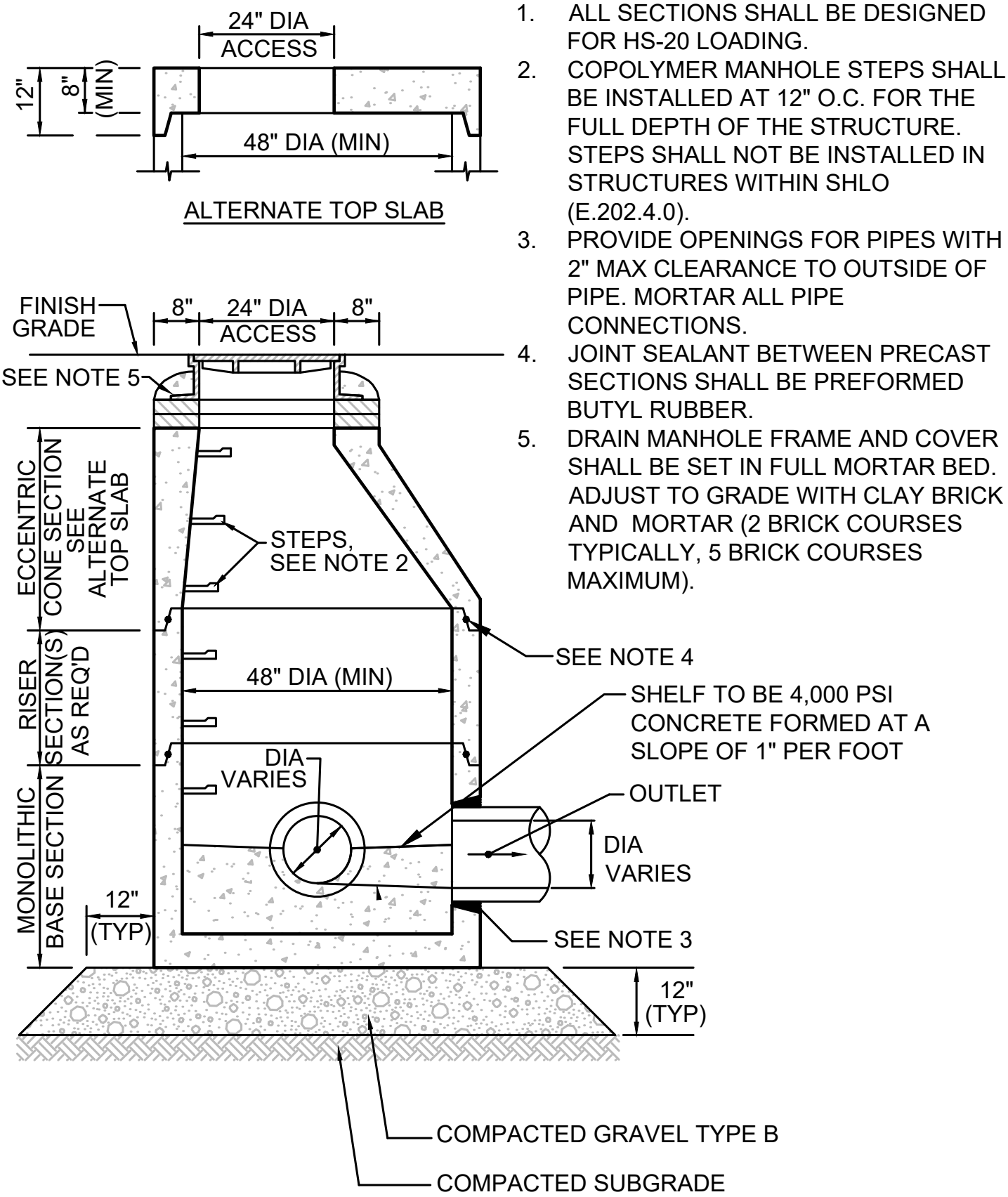
PROJECT MANAGER		Date		
HORIZ: NONE	DES. BY	DR. BY	CHK. BY	
VERT: NONE	JHC	MRT	KSS	
DATE: 04/24/2020				

DES. BY	DR. BY	CHK. BY
JHC	MRT	KSS

PROJECT MANA
PLAN NO. 3120
SHEET SD-4

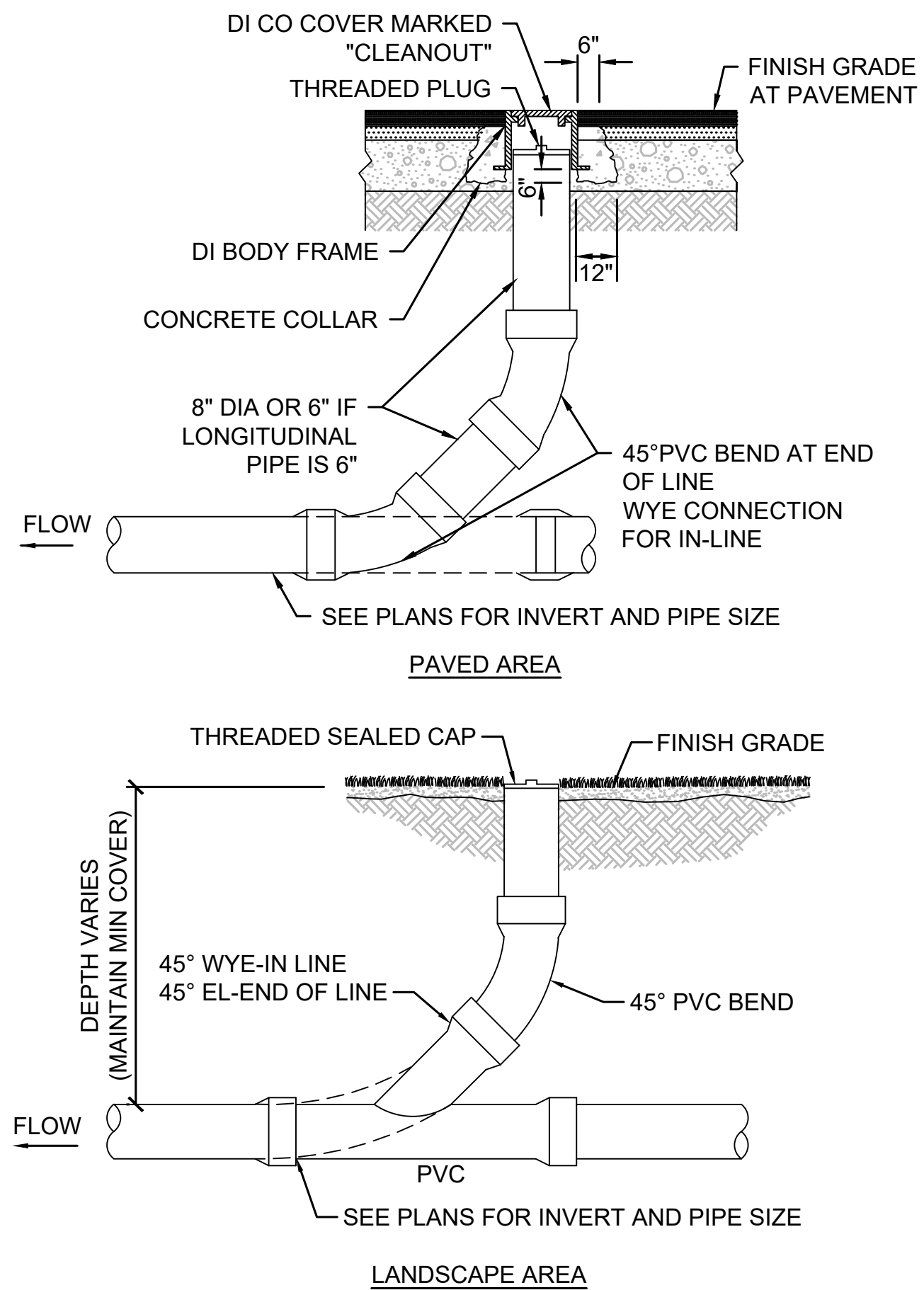
ISSUE

FILE NAME: \\VHB\GEL\PROJ\BOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_SD(WTS).DWG



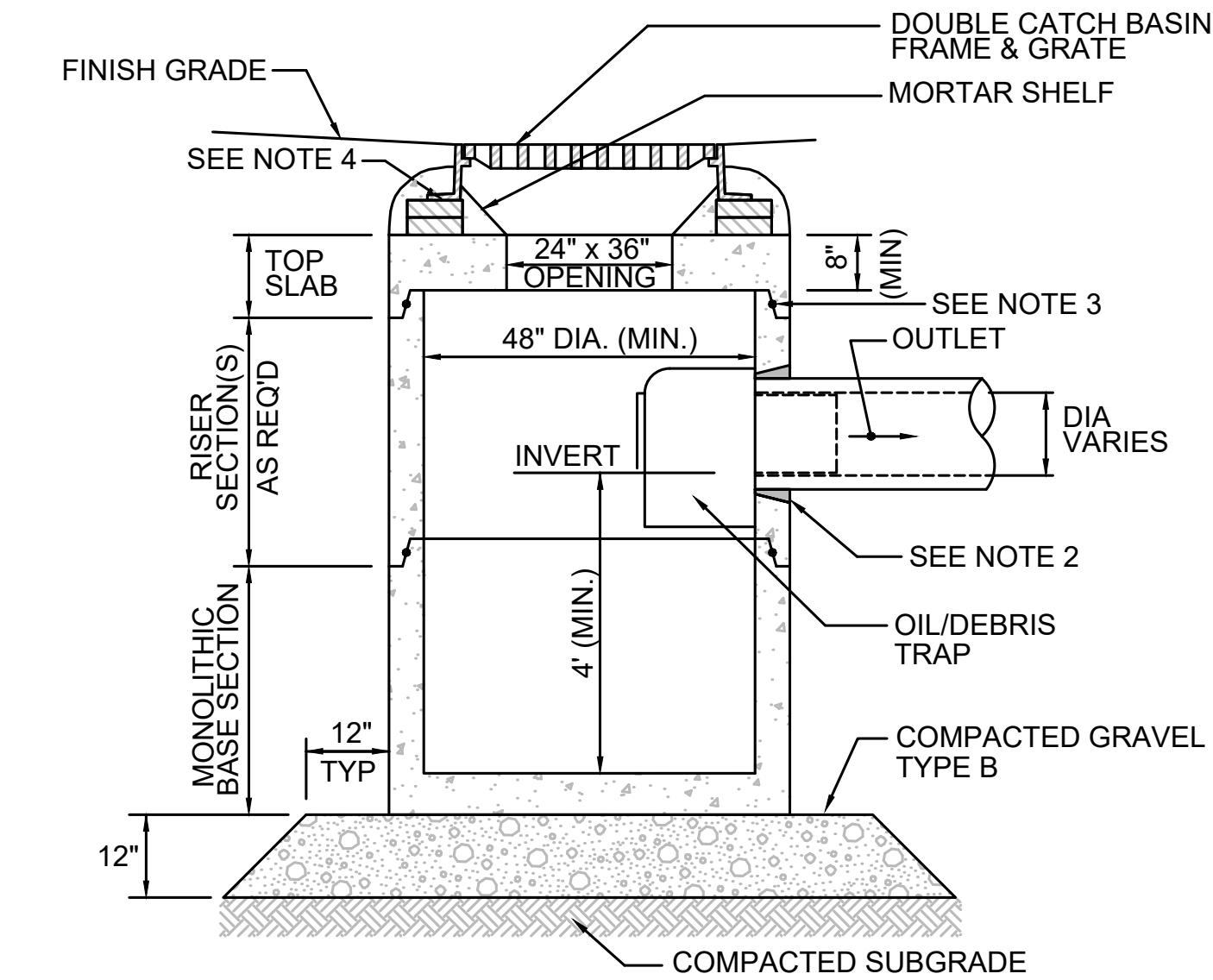
DRAIN MANHOLE (DMH)

SCALE: N.T.S.



CLEANOUT (CO)

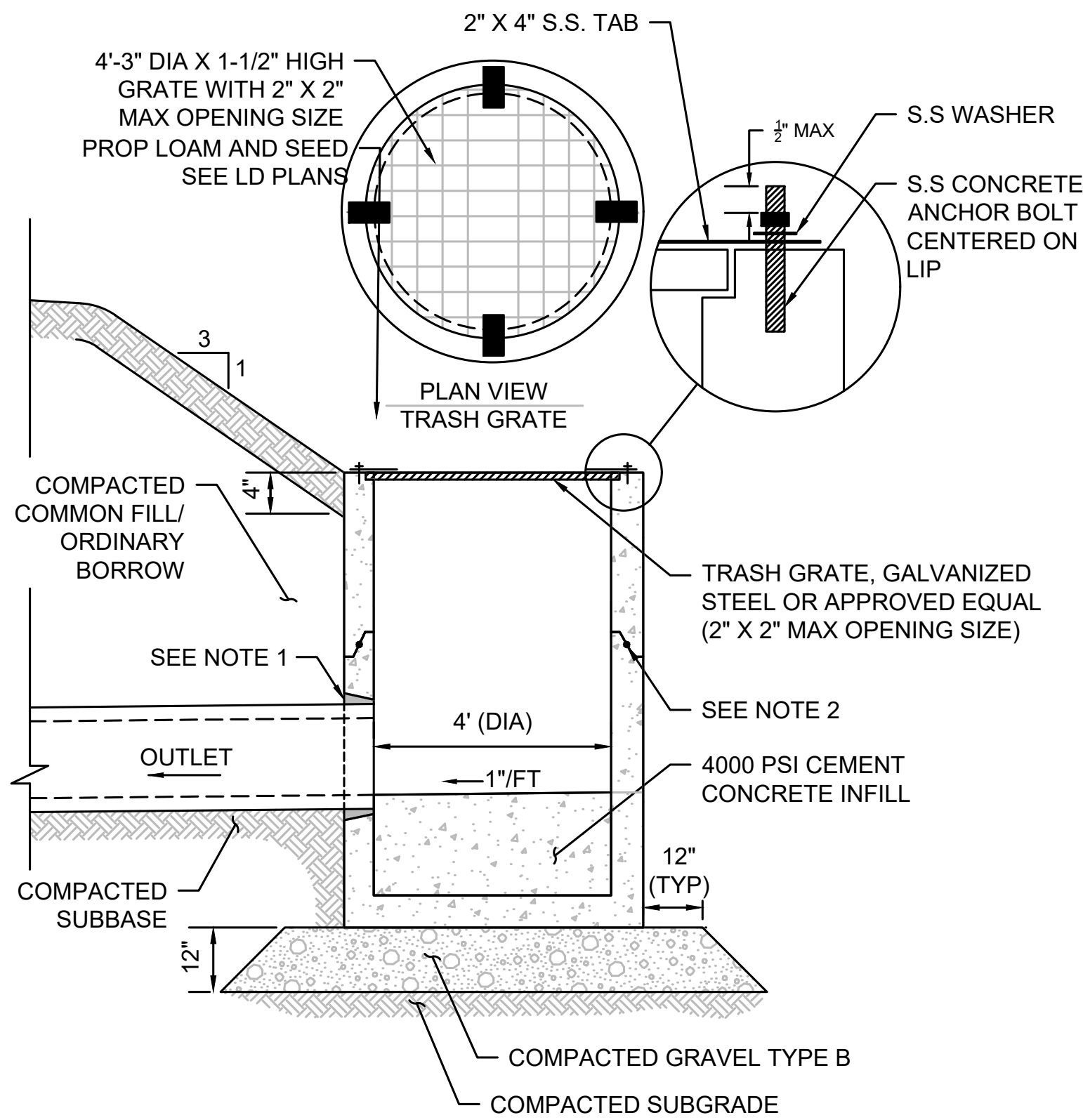
SCALE: N.T.S.



DOUBLE GRATE CATCH BASIN (DCB) WITH OIL/DEBRIS TRAP

- NOTES:**
- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 - PROVIDE OPENINGS FOR PIPES WITH 2" MAX CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 - JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE BUTYL RUBBER.
 - DOUBLE CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICKS TYPICALLY, 5 BRICK COURSES MAXIMUM).

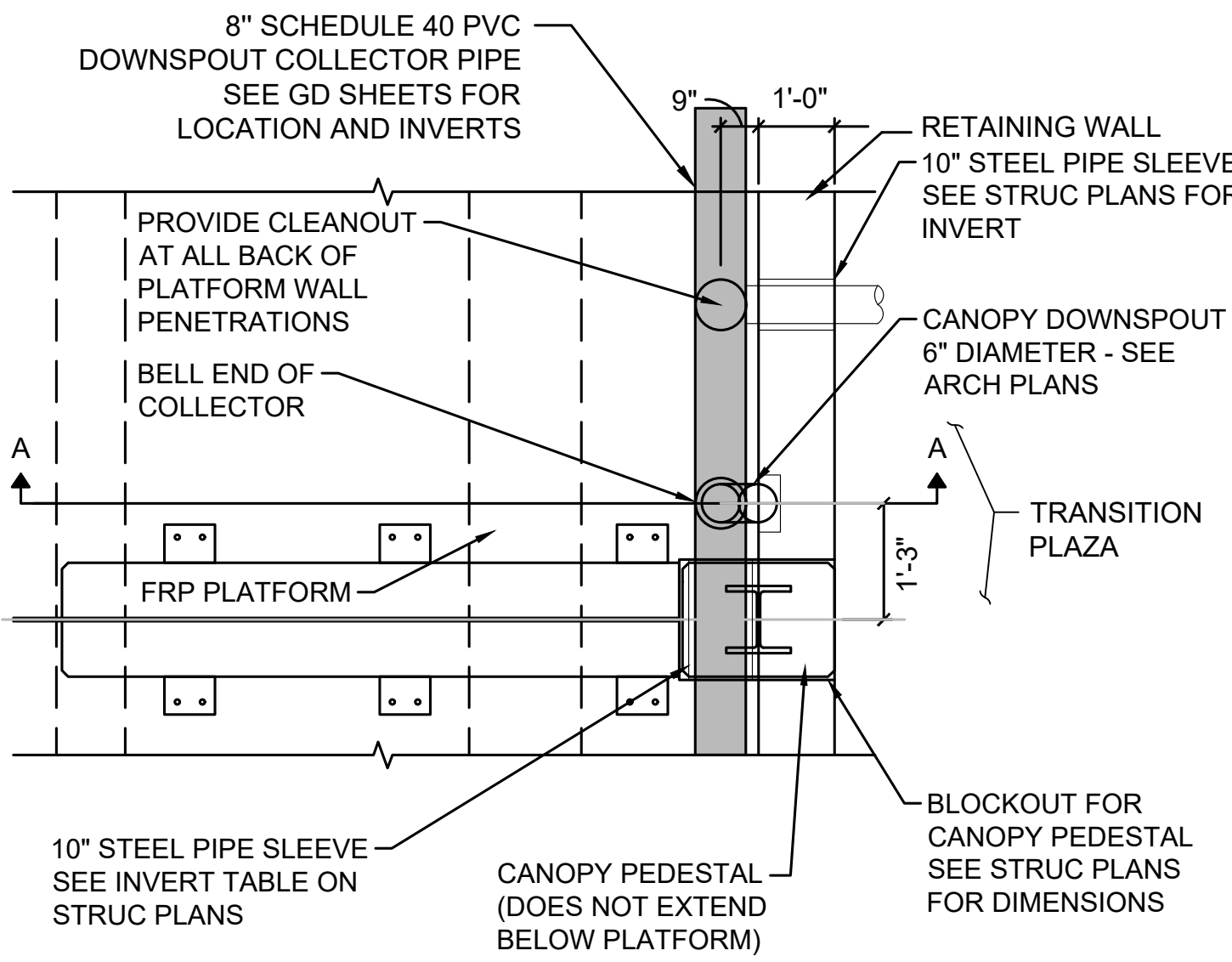
SCALE: N.T.S.



- NOTES:**
- PROVIDE OPENINGS FOR PIPES WITH 2" MAX CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 - JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.

OUTLET CONTROL STRUCTURE (OCS)

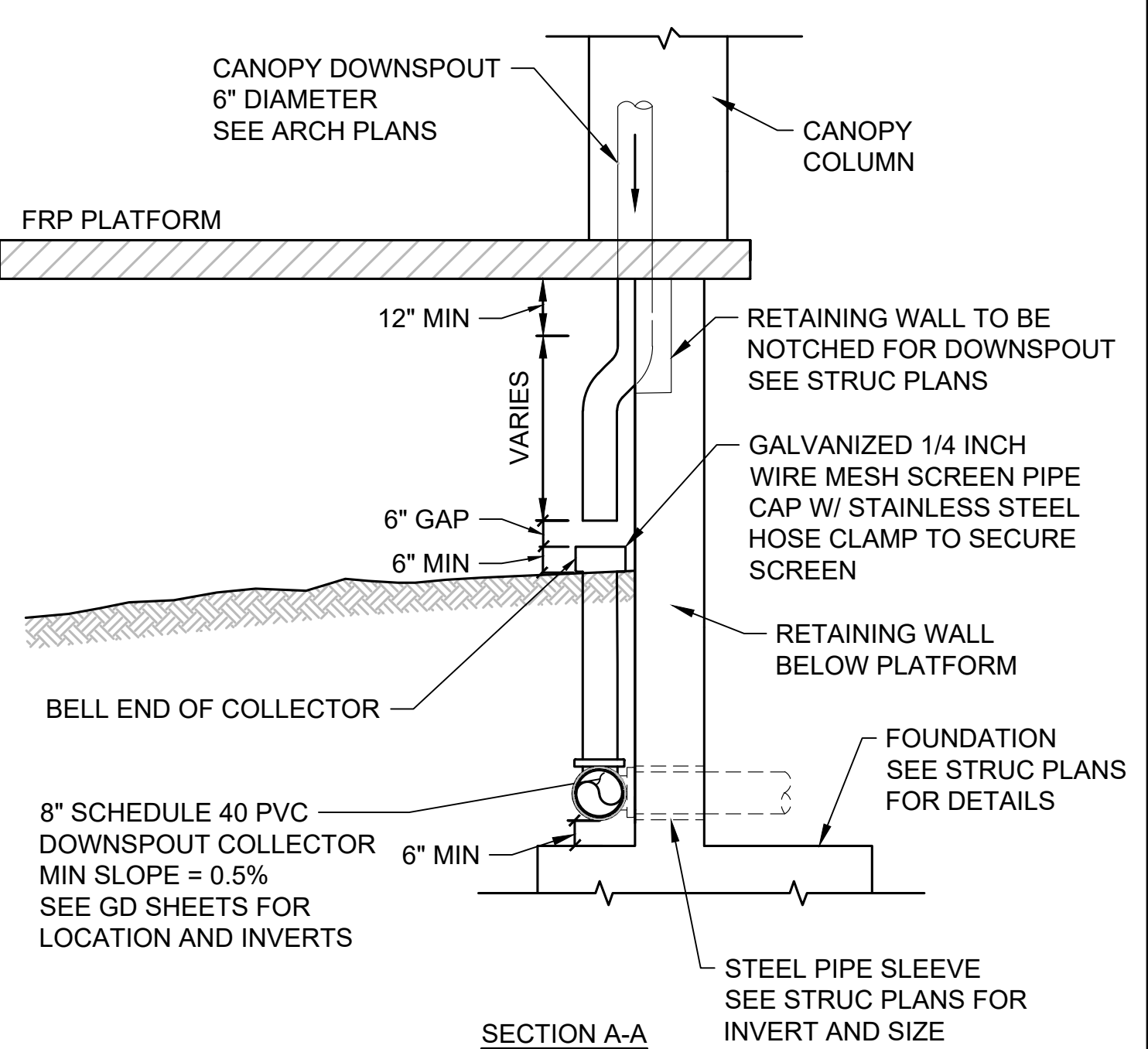
SCALE: N.T.S.



PLAN VIEW

DOWNSPOUT CONNECTION TO COLLECTOR

SCALE: N.T.S.



SECTION A-A

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE DETAILS 6



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

APPROVED BY:

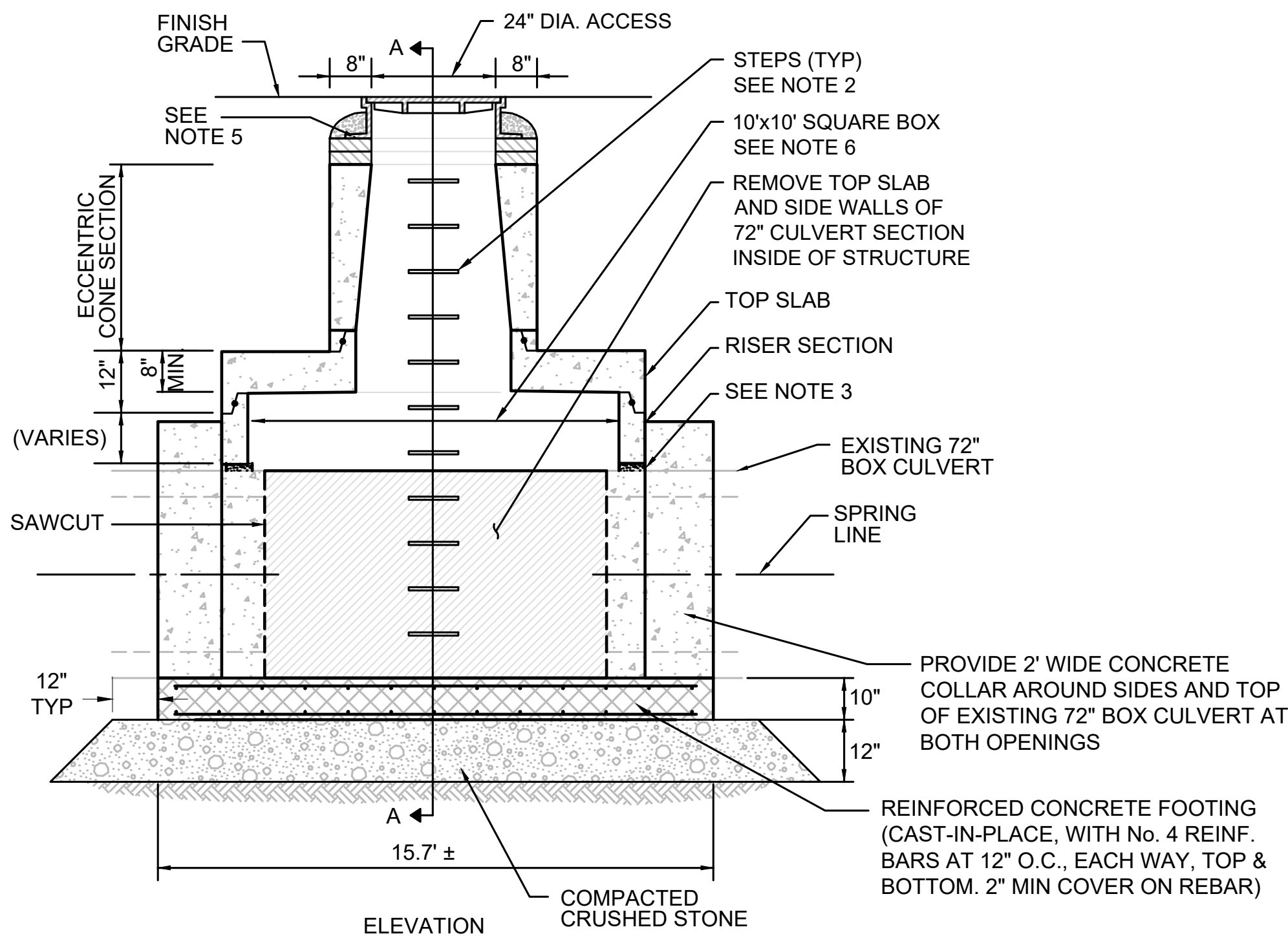
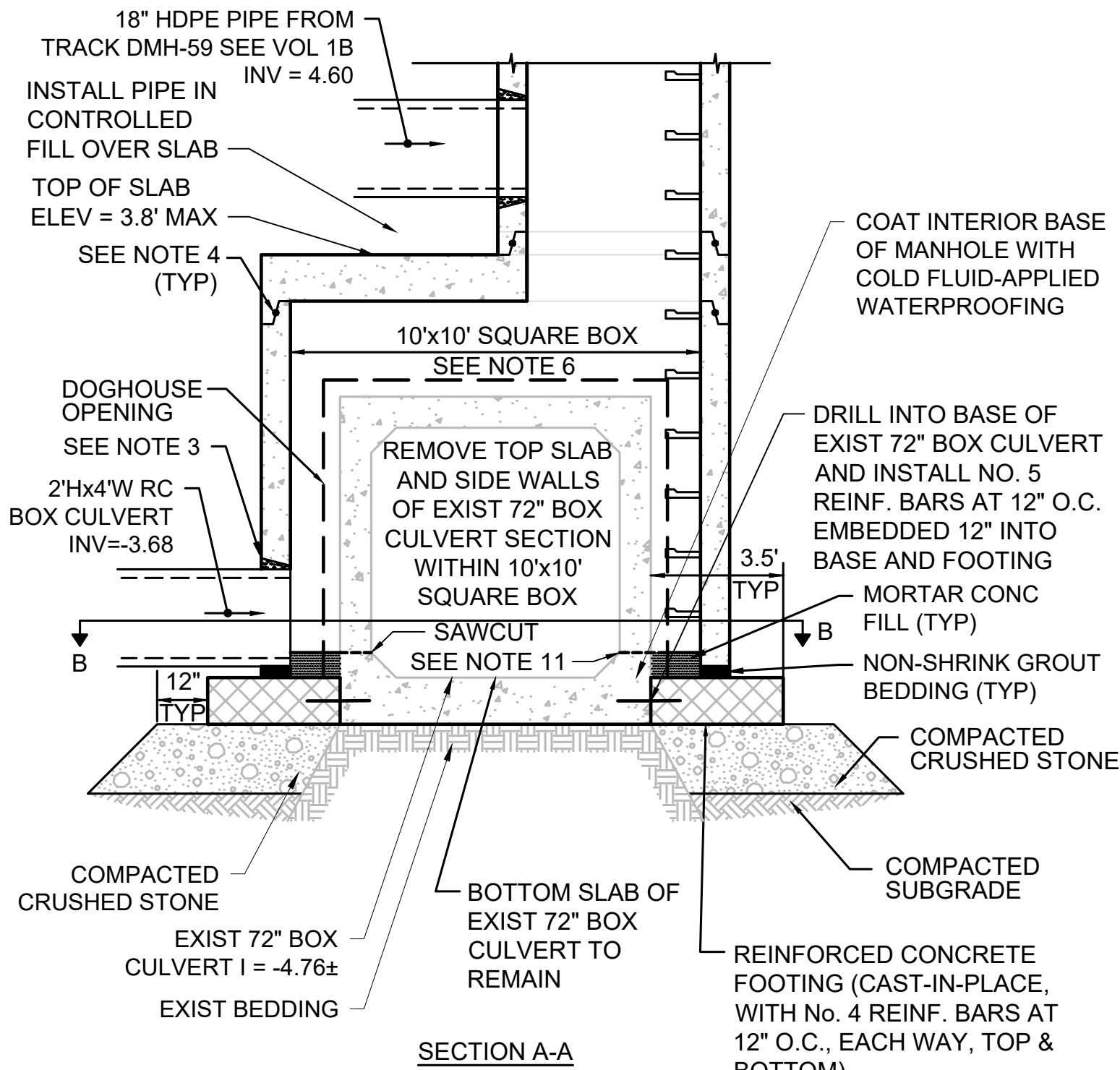
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PROJECT MANAGER
HORIZ: NONE
VERT: NONE
DATE: 04/24/2020

DES. BY
RLG
MRT
KSS

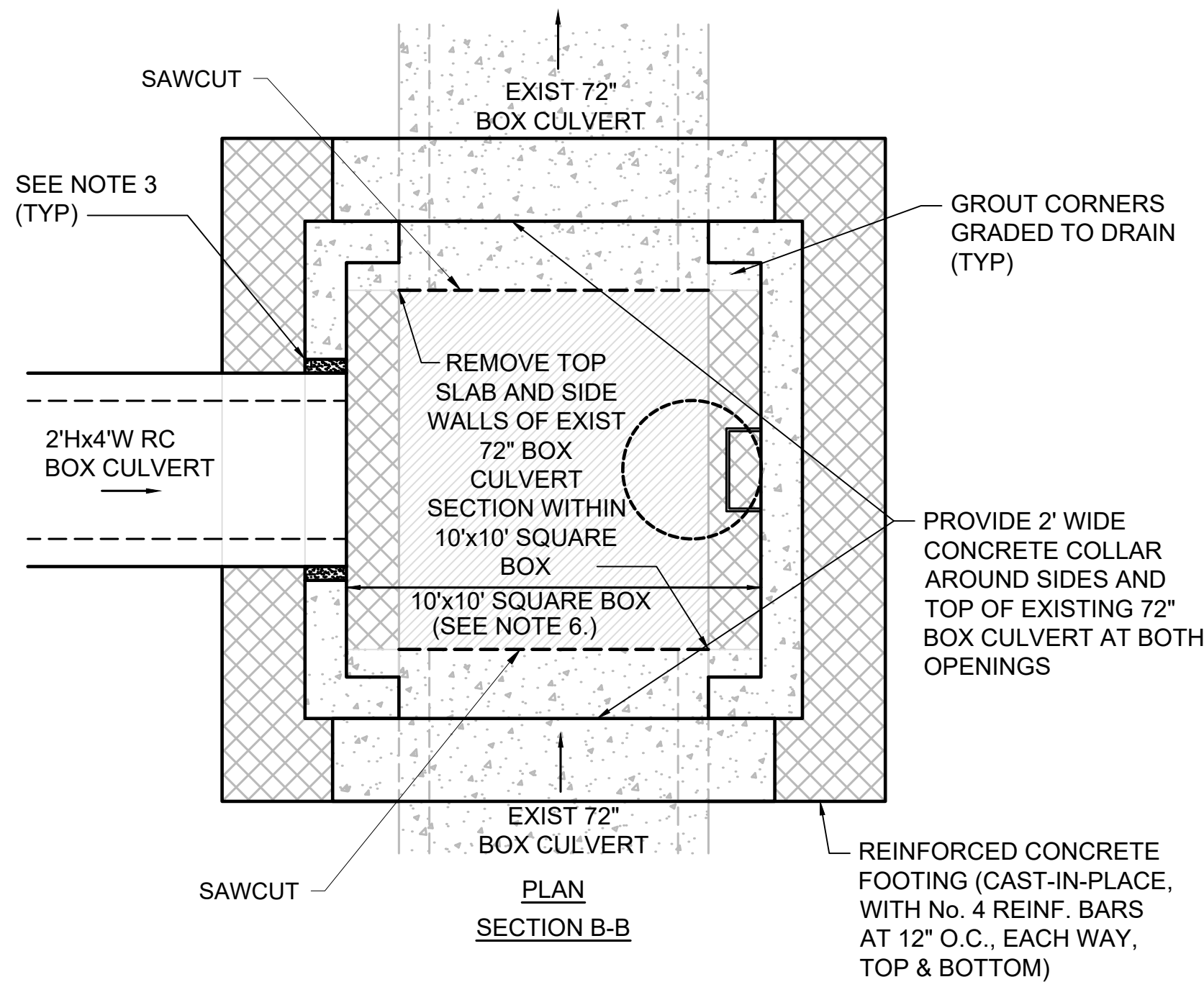
PROJECT MANAGER
Date
PLAN NO. 312086
SHEET SD-406

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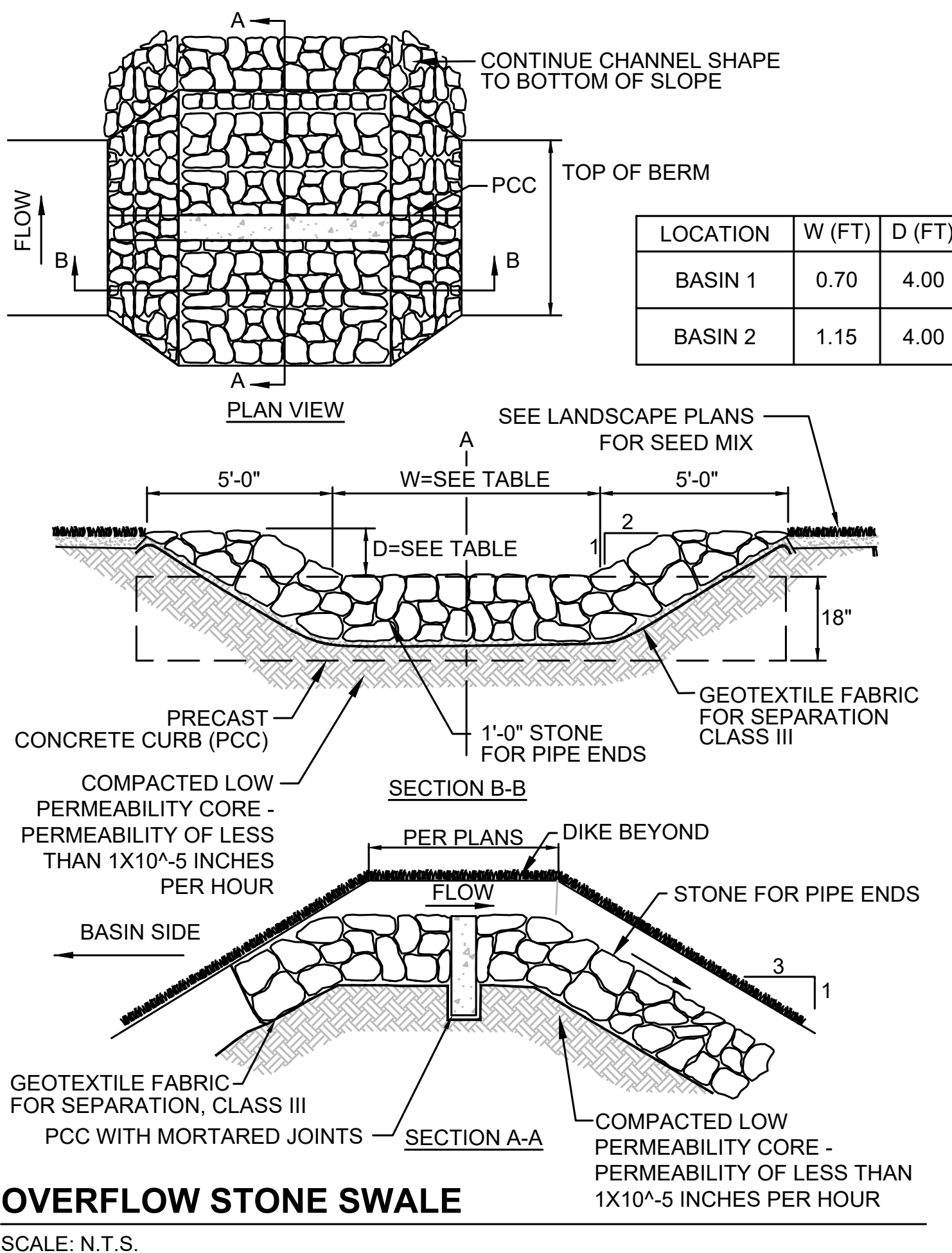
MANHOLE CONNECTION TO EXISTING 72" BOX CULVERT

SCALE: N.T.S.



NOTES:

- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS CERTIFYING THAT STRUCTURE IS DESIGNED FOR HS-20 LOADING.
- COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
- PROVIDE OPENINGS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS WITH HIGH STRENGTH NON-SHRINK GROUT THAT HAS A 28 DAY COMPRESSIVE STRENGTH OF 8,000 PSI MIN.
- JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- DRAIN MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK MAX).
- BASE SECTION SHALL HAVE AN INSIDE DIMENSION VERIFIED BY THE CONTRACTOR/ MANUFACTURER TO BE CONSISTENT WITH THE PIPE GEOMETRY AND SIZES. VERIFY IN FIELD PRIOR TO ORDERING.
- DETAIL IS SUBJECT TO CHANGE BASED ON FIELD VERIFICATION OF EXISTING PIPE GEOMETRY, FURTHER CITY COORDINATION, AND CONTRACTOR INPUT.
- SELECTIVE DEMOLITION OF THE EXISTING 72" BOX CULVERT MUST BE DONE DURING DRY PERIOD WHERE THERE IS LITTLE OR NO FLOW THROUGH EXISTING 72" BOX CULVERT. CONTRACTOR SHALL PREPARE A SEQUENCING PLAN FOR THIS WORK AND INCLUDE ANY NECESSARY PROVISIONS FOR TEMPORARY BYPASS PUMPING THAT MAY BE REQUIRED.
- CONTRACTOR SHALL FIELD VERIFY THE CONDITIONS OF EXISTING CULVERT AND NOTIFY ENGINEER OF ANY EXISTING DEFECTS.
- CENTER MANHOLE AND DRAINAGE CONNECTION ON 8' SECTION OF EXISTING 72" BOX CULVERT.
- AFTER SAWCUT, CONTRACTOR TO COAT ANY EXPOSED REBAR WITH EPOXY COATING.
- FINAL DESIGN AND DETAILING OF MANHOLE CONNECTION CHAMBER INCLUDING FOOTING, CHAMBER, AND MANHOLE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- STRUCTURAL DESIGN CALCULATIONS AND SHOP DRAWINGS SHALL BE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS, AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.



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MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE DETAILS 7



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

Richard P. ...

ISSUE	DATE	DESCRIPTION	BY	CHKD.	APP.

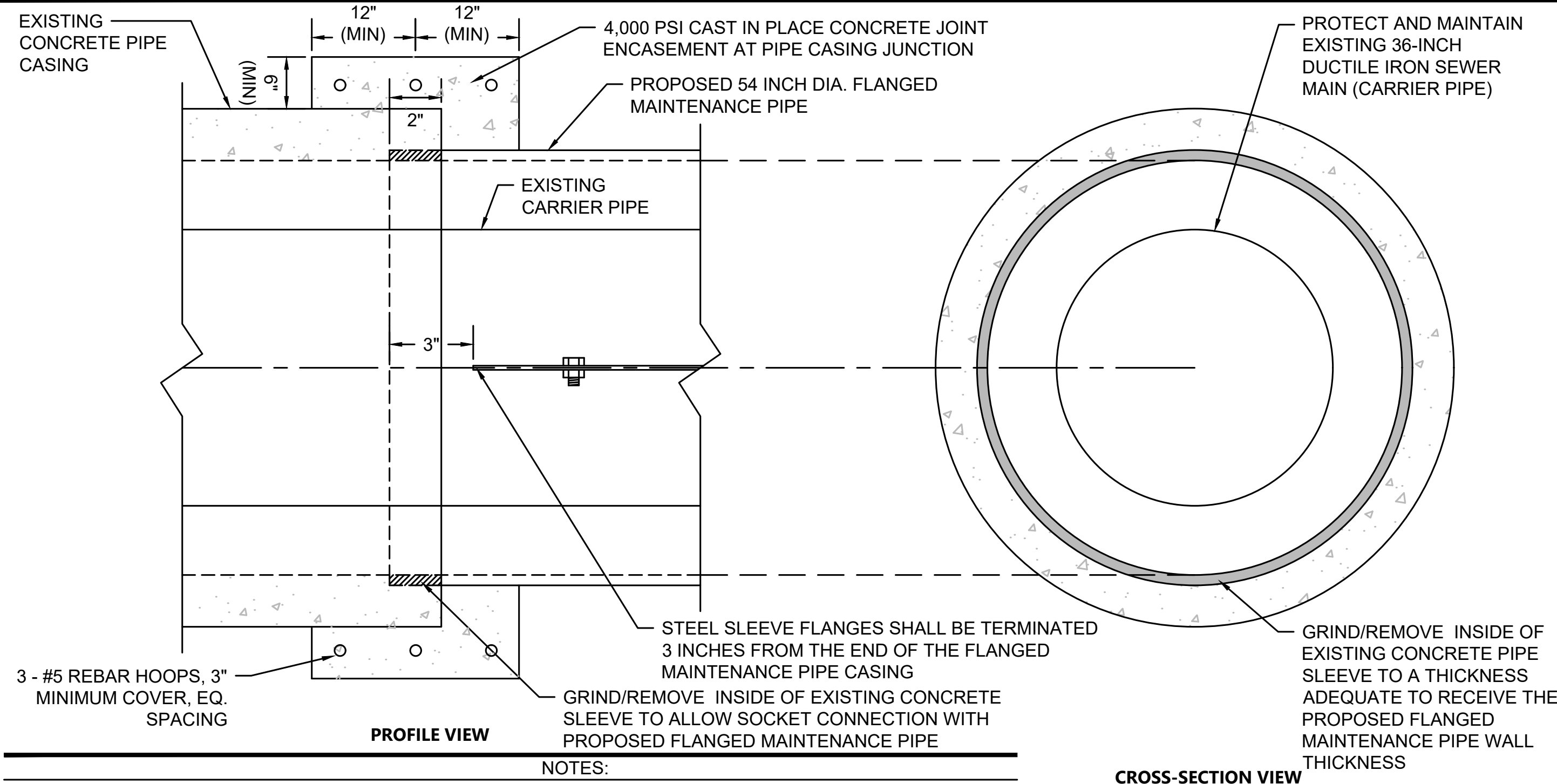
PROJECT MANAGER
HORIZ: NONE
VERT: NONE
DATE: 04/24/2020

DES. BY
RLG
CHK. BY
MRT
KSS

PROJECT MANAGER
Date
PLAN NO. 312087
SHEET SD-407



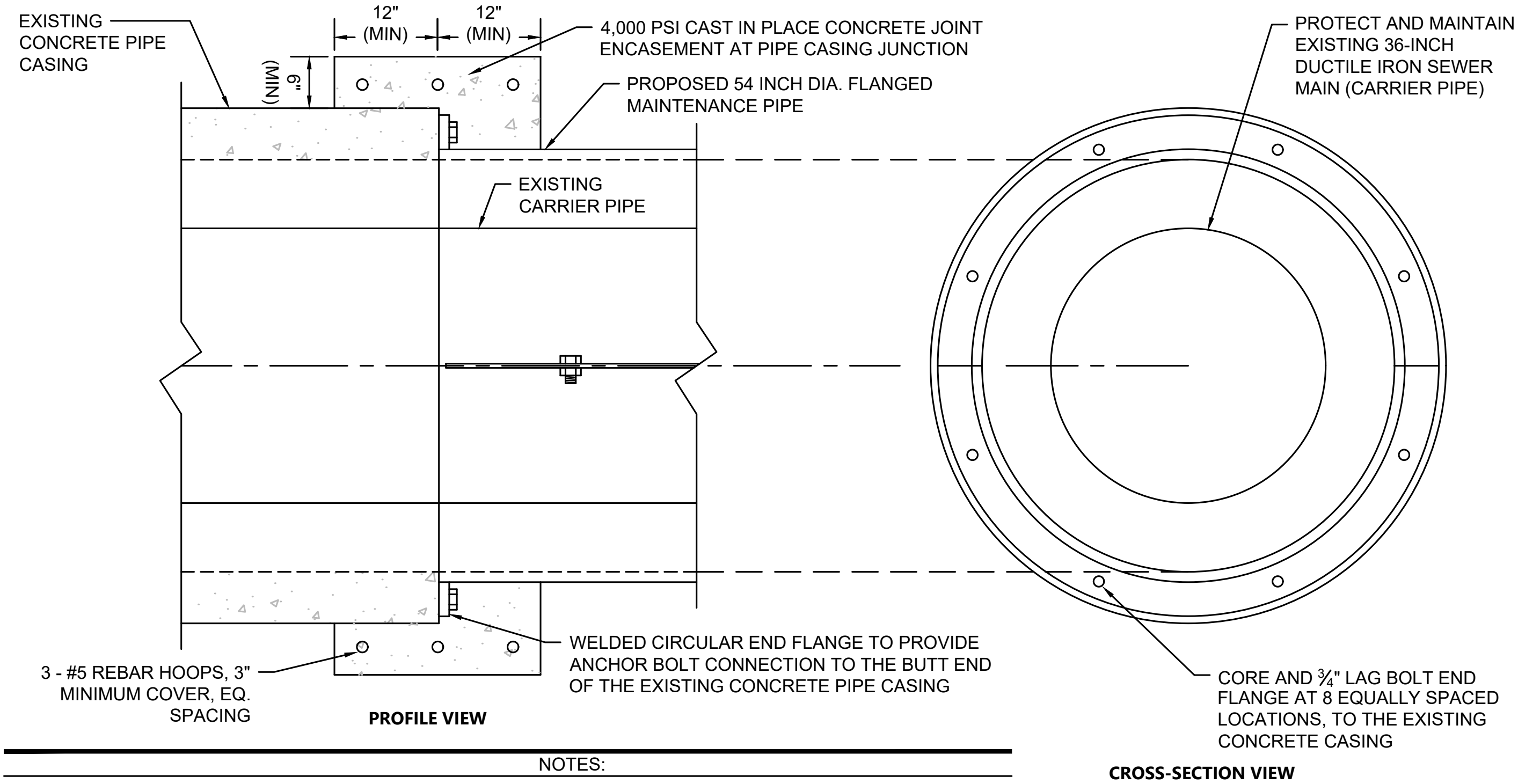
FILE NAME: \\VHB\GEL\PROJ\BOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_SD(WTS).DWG



- NOTES:
- CONTRACTOR SHALL FIELD VERIFY INSIDE DIAMETER OF EXISTING PIPE CASING TO ENSURE THE INSIDE DIAMETER OF THE PROPOSED FLANGED MAINTENANCE PIPE WILL MATCH.
 - CONSTRUCT 8" THICK BRICK BULKHEAD AT THE END OF THE PROPOSED PIPE CASING OR PROVIDE APPROVED EQUIVALENT END SEAL IN CONFORMANCE WITH MBTA RAILROAD OPERATIONS DIRECTORATE, PART IV - PIPELINE OCCUPANCY SPECIFICATIONS SECTION 6.
 - EXTERIOR SURFACE OF STEEL PIPE CASING SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL

PIPE CASING EXTENSION CONNECTION

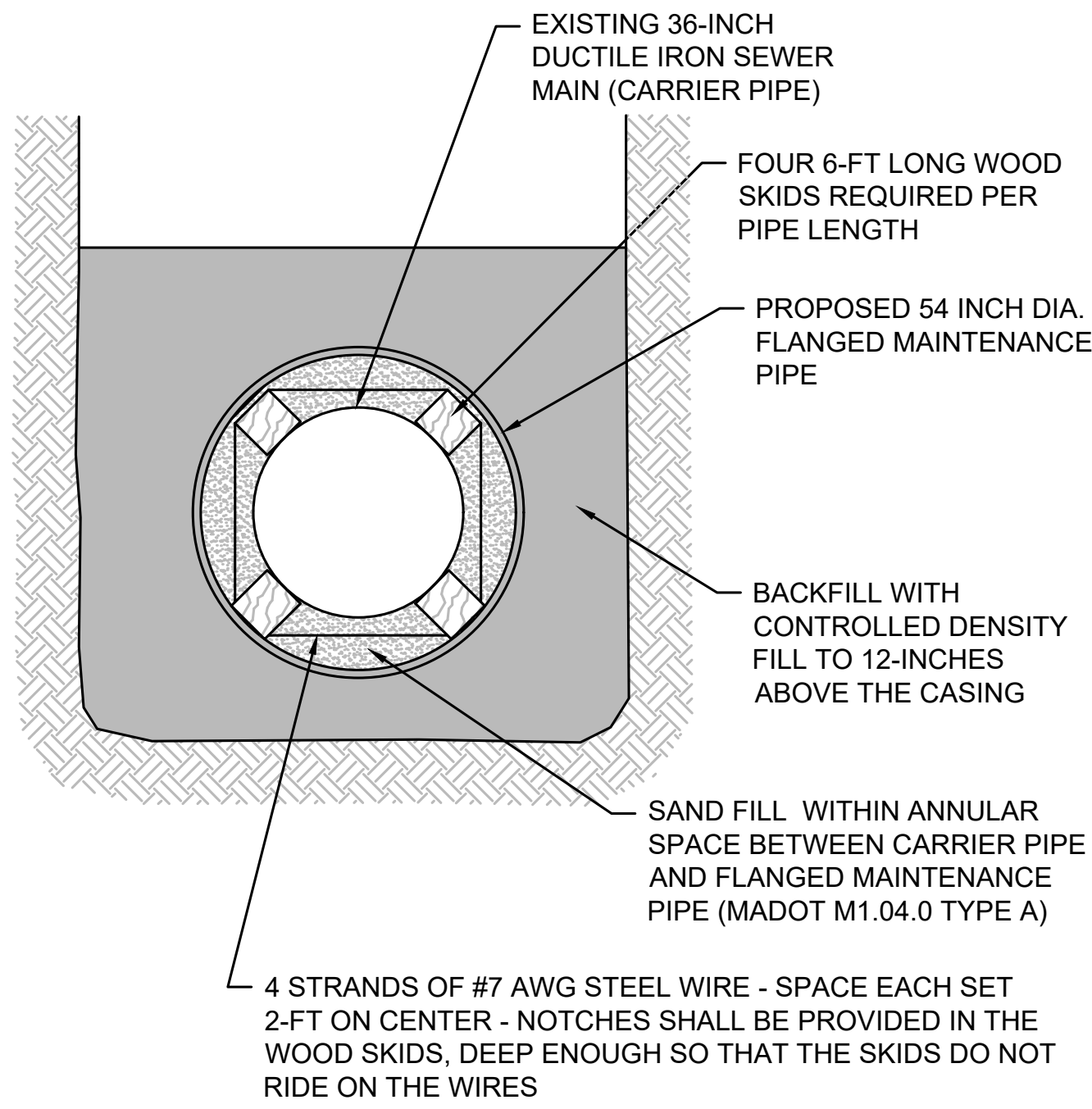
SCALE: N.T.S.



- NOTES:
- CONTRACTOR SHALL FIELD VERIFY INSIDE DIAMETER OF EXISTING PIPE CASING TO ENSURE THE INSIDE DIAMETER OF THE PROPOSED FLANGED MAINTENANCE PIPE WILL MATCH.
 - CONSTRUCT 8" THICK BRICK BULKHEAD AT THE END OF THE PROPOSED PIPE CASING OR PROVIDE APPROVED EQUIVALENT END SEAL IN CONFORMANCE WITH MBTA RAILROAD OPERATIONS DIRECTORATE, PART IV - PIPELINE OCCUPANCY SPECIFICATIONS SECTION 6.
 - EXTERIOR SURFACE OF STEEL PIPE CASING SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL

PIPE CASING EXTENSION ALTERNATE CONNECTION

SCALE: N.T.S.



- NOTES:
- THE SKIDS SHOULD BE SIZED TO ALLOW A VERTICAL DEFLECTION OF THE PIPE CASING OF 3 PERCENT OF THE CASING DIAMETER PLUS 1/2" SO THAT NO LOADS FROM THE TRACK, TRAFFIC OR CASING PIPE ARE TRANSMITTED TO THE CARRIER PIPE.
 - SEE UTILITY TRENCH DETAIL FOR ADDITIONAL INFORMATION

PIPE CASING EXTENSION CROSS-SECTION

SCALE: N.T.S.

ISSUED FOR BID



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE DETAILS 8



99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

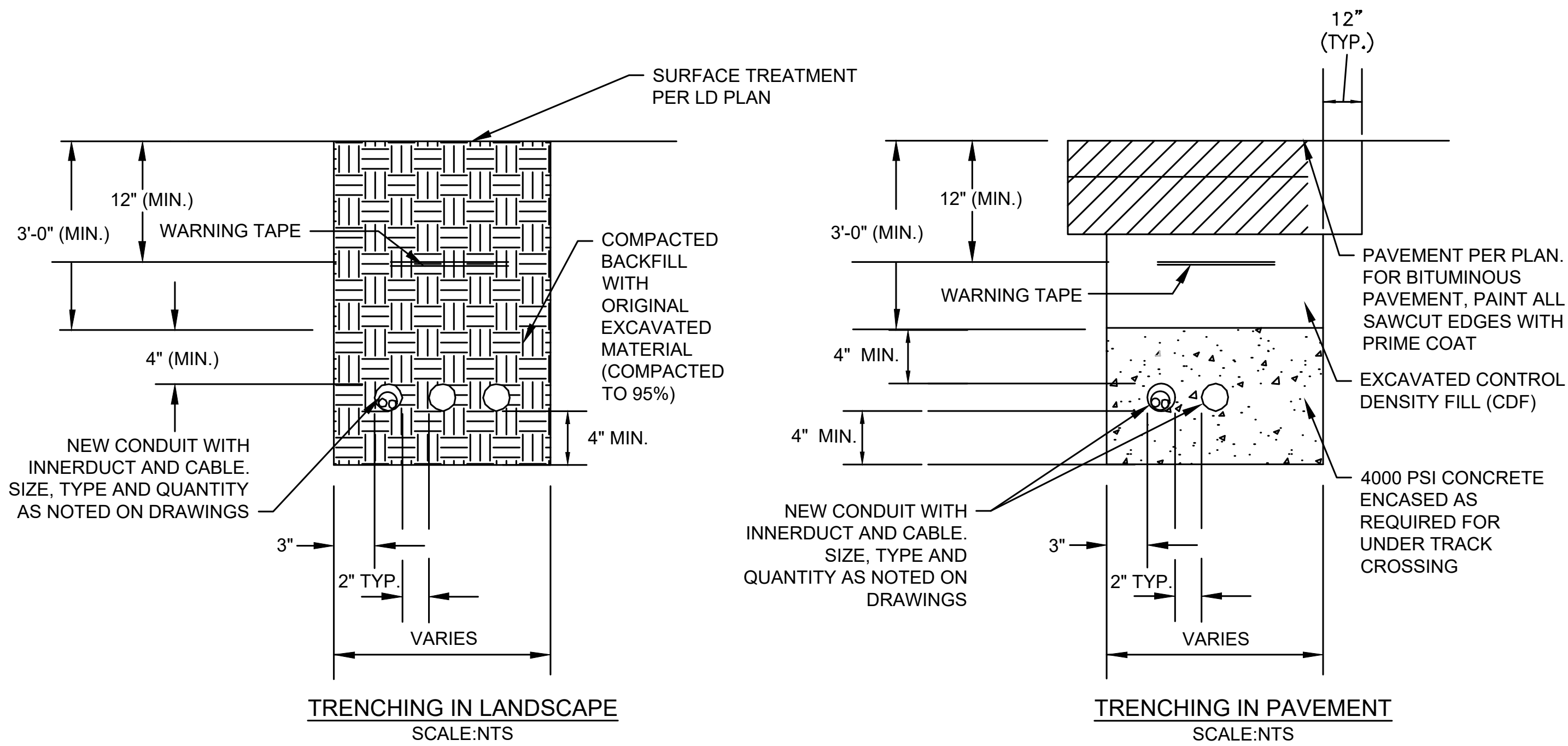
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ISSUE	DATE	DESCRIPTION	BY	CHKD.	APP.

PROJECT MANAGER	DES. BY	DR. BY	CHK. BY
HORIZ: NONE			
VERT: NONE			
DATE: 04/24/2020			

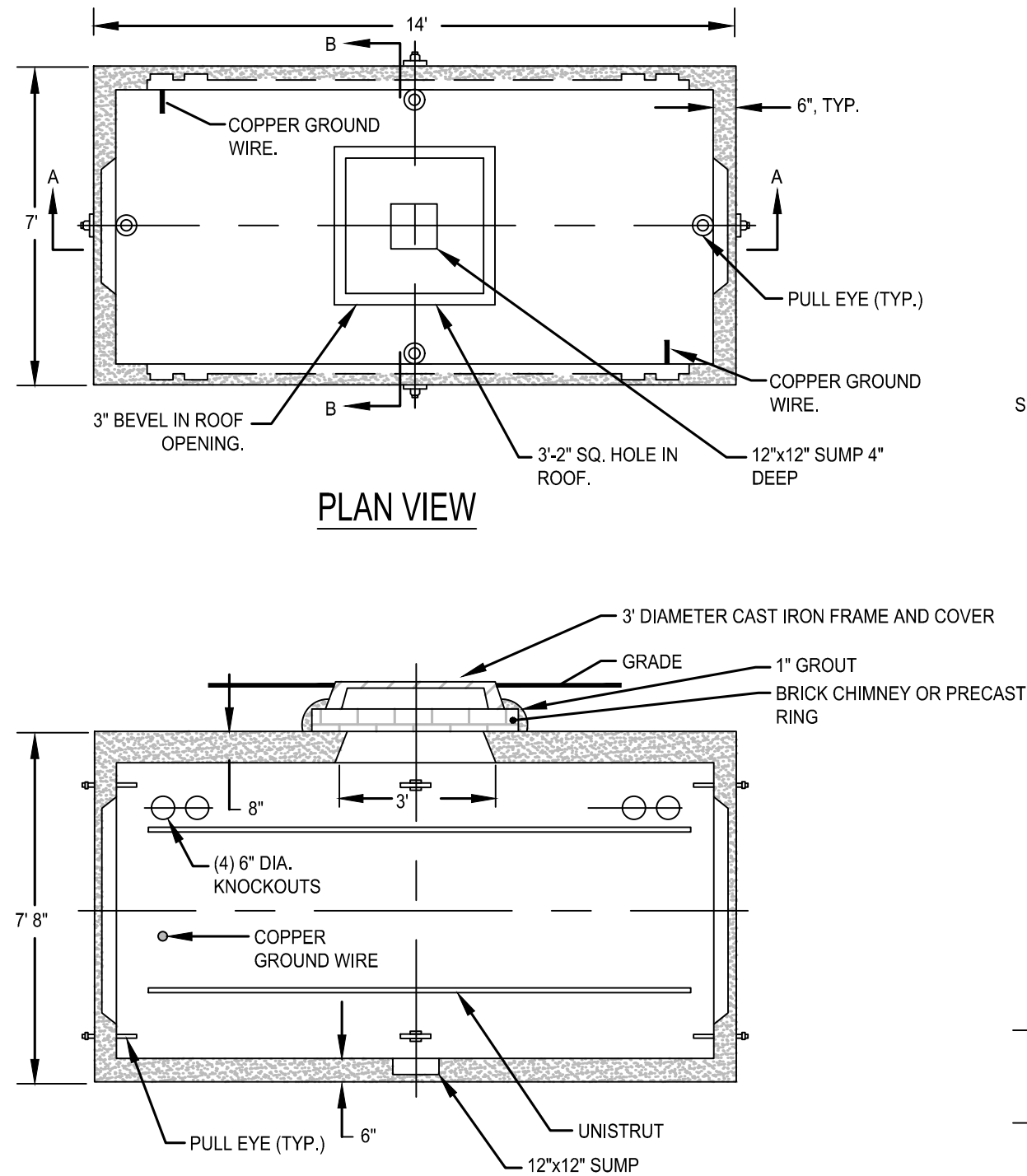
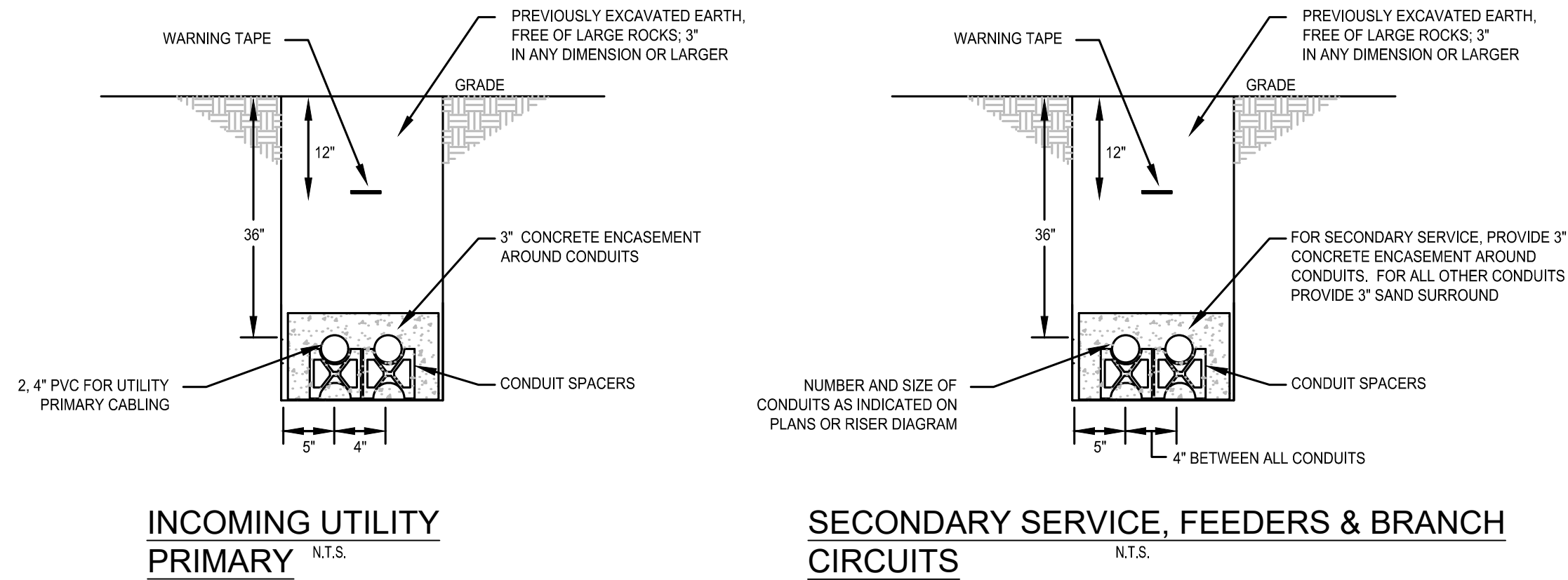
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PLAN NO. 312088	
SHEET SD-408	

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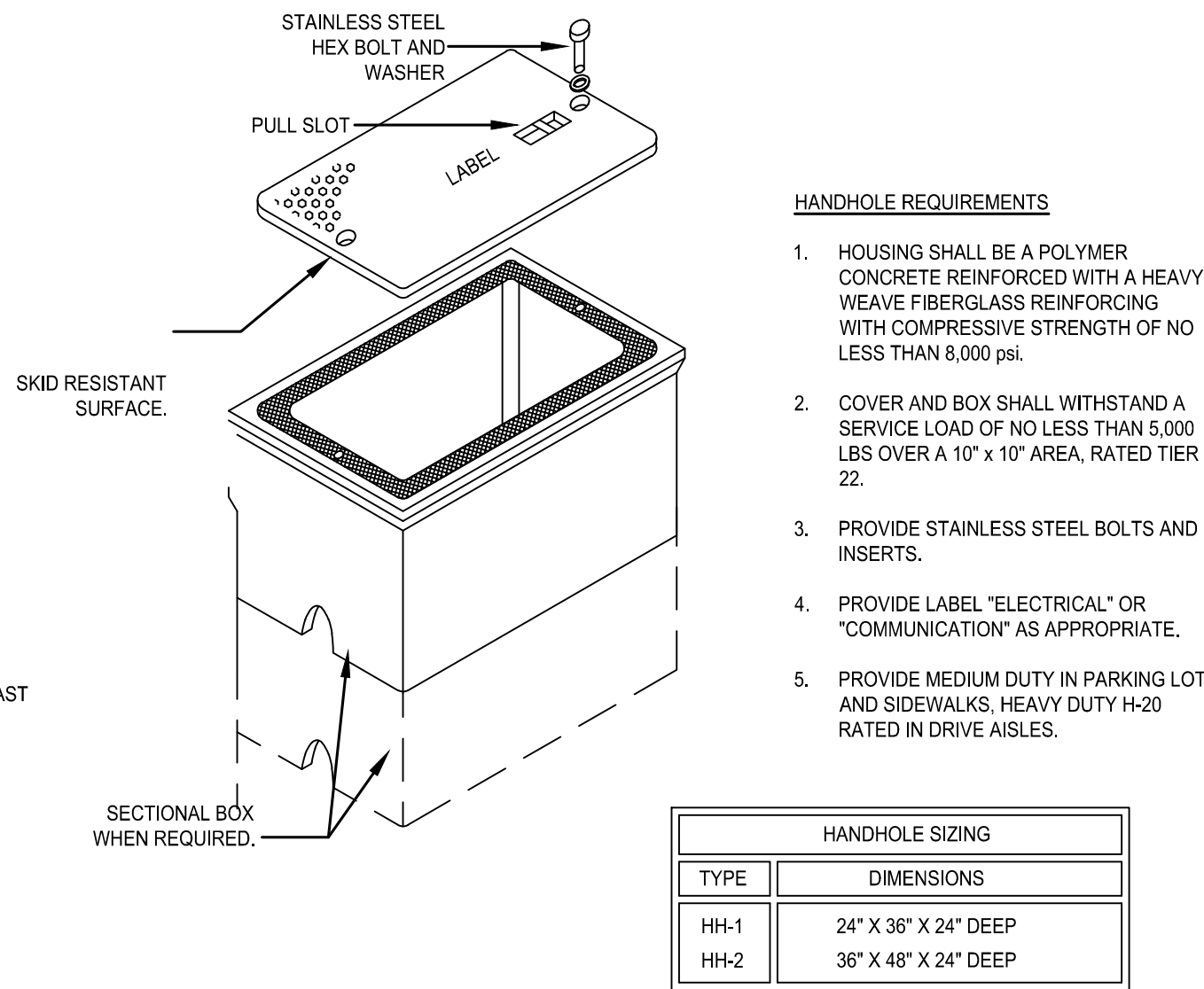
2 COMMUNICATION CONDUIT TRENCH

1 ELECTRIC CONDUIT TRENCH



NOTES:

- CHIMNEY HEIGHT IS KEPT TO A MINIMUM TO FACILITATE PLACING COMPLETED SPLICES IN HANDHOLE ABOVE GRADE.
- ROOF OPENING 3'-2" x 3'-2".



3 HANDHOLE DETAIL

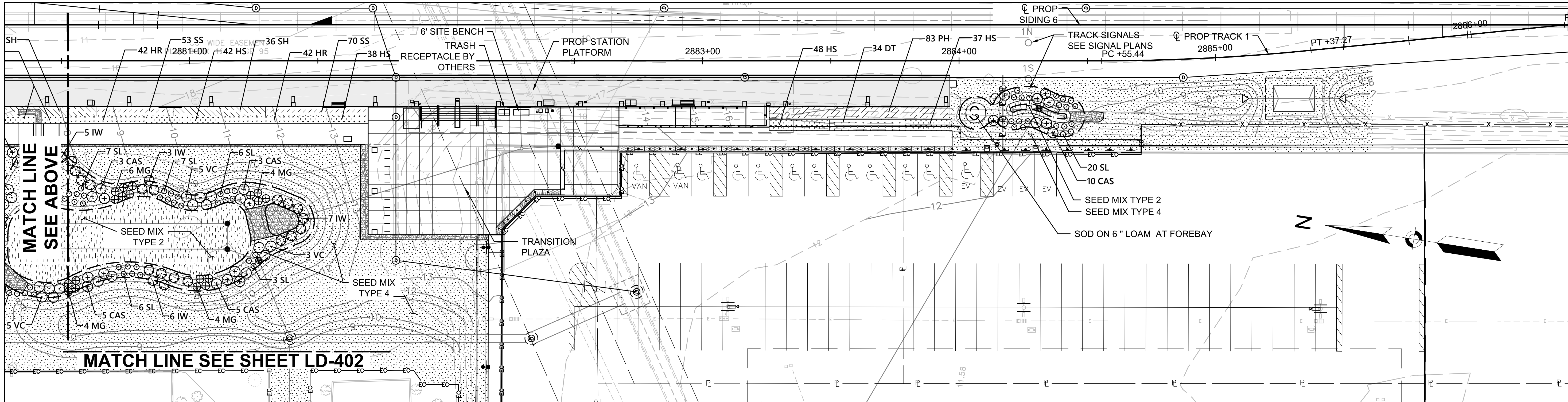
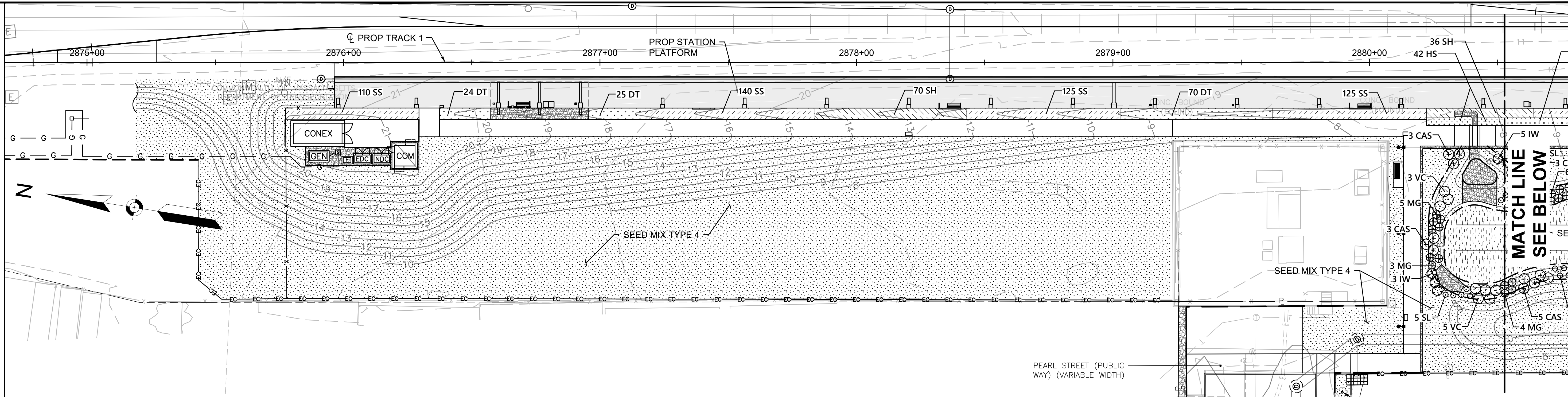
4 MANHOLE DETAIL

NOTE:

ELECTRICAL AND COMMUNICATION DETAILS SHOWN HEREON ARE FOR COORDINATION PURPOSES ONLY. REFER TO EL AND CM PLANS FOR ADDITIONAL INFORMATION.

				MASSACHUSETTS BAY TRANSPORTATION AUTHORITY SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT MIDDLEBOROUGH TO NEW BEDFORD, MA CONTRACT NO. K78CN04			
				NEW BEDFORD MAIN LINE NEW BEDFORD STATION SITE DETAILS 9			
				99 HIGH STREET BOSTON, MA 02110 (617) 728-7777			
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY				APPROVED BY: _____			
PROJECT MANAGER _____ Date _____				PROJECT MANAGER _____ Date _____			
HORIZ: NONE				DES. BY DR. BY CHK. BY			
VERT: NONE				RLG MRT KSS			
DATE: 04/24/2020				PLAN NO. 312089			
				SHEET SD-409			

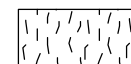
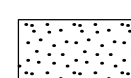
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NOTES:

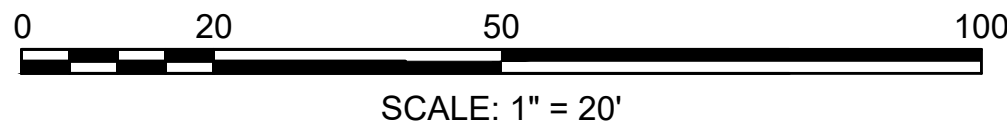
- WHERE PLANTING SOILS ARE NOT OTHERWISE INDICATED ON BASIN OR SWALE DETAILS PROVIDE 6" LOAM FOR SEED BED.
- ALL LOAM AND SEEDING AND PLANTING WORK SHALL BE IN ACCORDANCE WITH SPECIFICATIONS 02920 - LOAM AND SEED, AND 02932 - PLANTING.
- SEE EV-400 SERIES SHEETS FOR LANDSCAPE PLANTING OVER RISK REDUCTION BARRIER.

SEED MIXTURES:

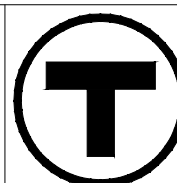
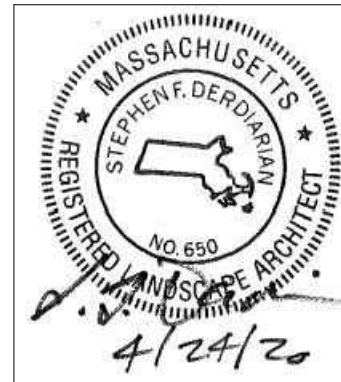
-  TYPE 2 DETENTION BASIN EROSION CONTROL AND RESTORATION MIX
-  TYPE 4 NO-MOW SEED MIX

PLANT SCHEDULE

<u>SHRUBS</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	
CAS	32	Clethra alnifolia	Summersweet Clethra	2 - 3' HT.	
IW	24	Ilex verticillata	Winterberry	2 - 3' HT.	
MG	26	Myrica gale	Sweetgale	18 - 24' HT.	
SL	54	Spiraea latifolia	Meadow-Sweet	#2 POT	
VC	16	Vaccinium corymbosum	Highbush Blueberry	2 - 3' HT.	
<u>GRASSES</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	<u>SPACING</u>
DT	153	Deschampsia cespitosa	Tufted Hair Grass	#1 POT	24" o.c.
PH	83	Pennisetum alopecuroides `Hameln`	Hameln Dwarf Fountain Grass	#2 POT	24" o.c.
SS	623	Schizachyrium scoparium `The Blues`	The Blues Little Bluestem	#1 POT	18" o.c.
SH	142	Sporobolus heterolepis	Prairie Dropseed	#1 POT	24" o.c.
<u>PERENNIALS</u>	<u>QTY</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	<u>SPACING</u>
HR	84	Hemerocallis x `Rosy Returns`	Rosy Returns Daylily	#1 POT	18" o.c.
HS	207	Hemerocallis x `Stella de Oro`	Stella de Oro Daylily	#1 POT	18" o.c.



ISSUED FOR BID



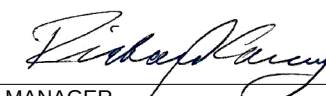
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
LANDSCAPE PLAN 1



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

APPROVED BY:

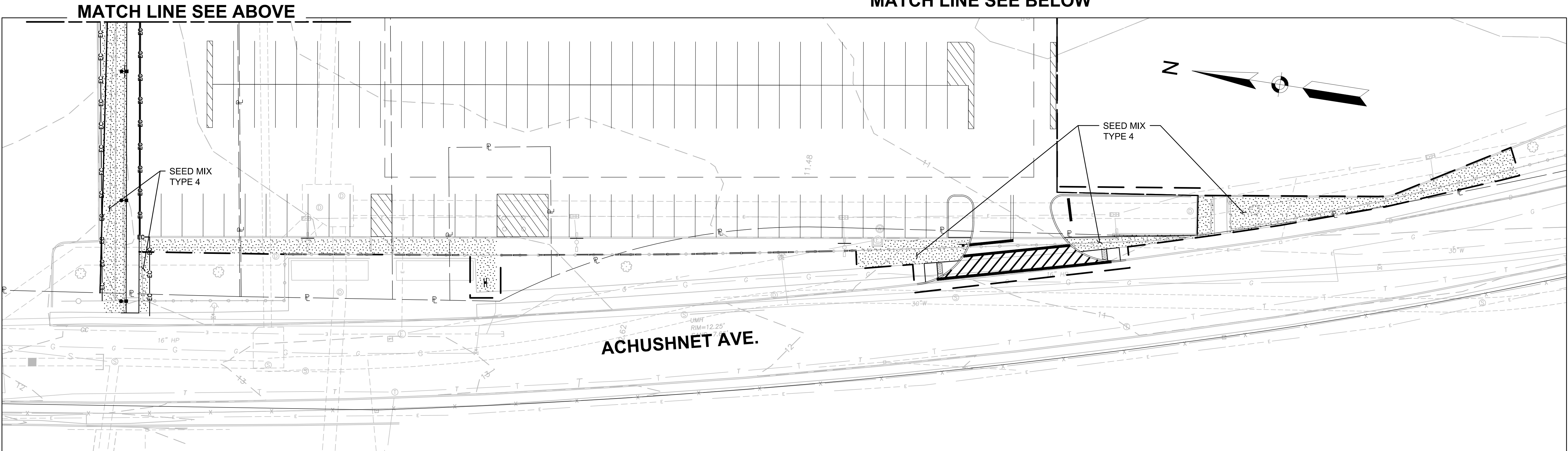
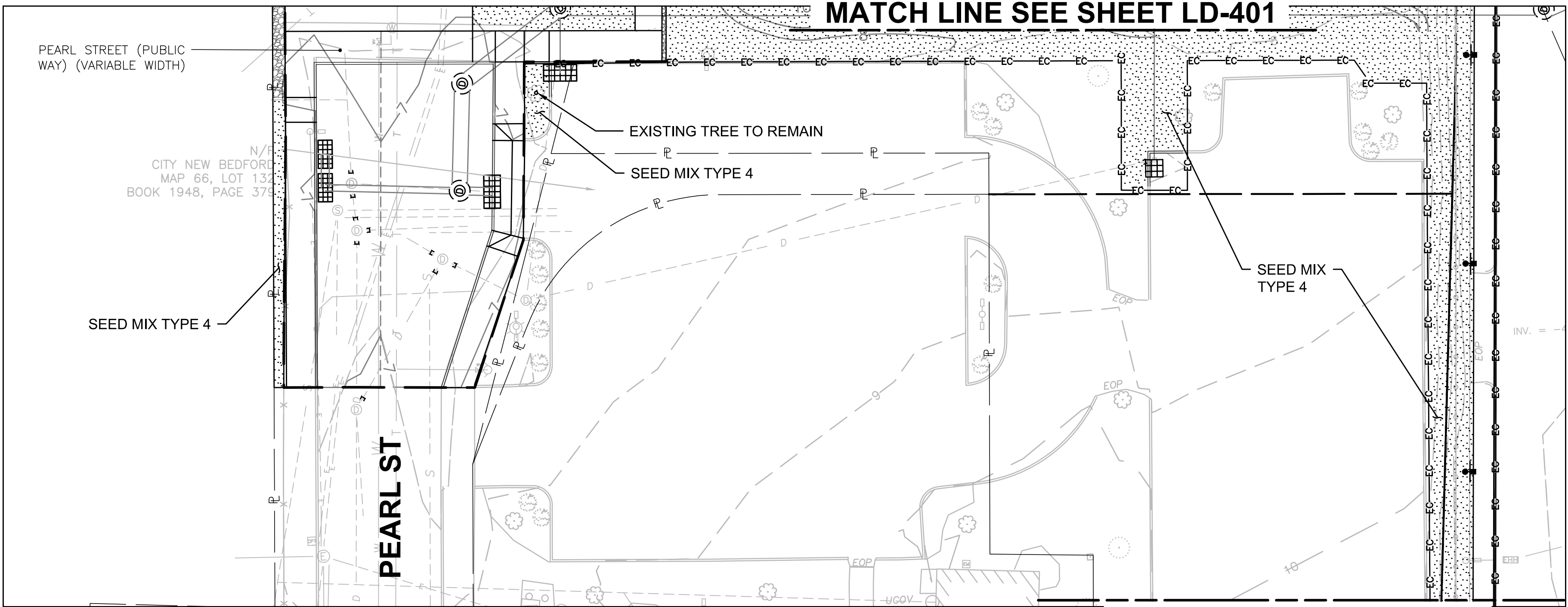


PROJECT MANAGER
HORIZ: 1" = 20'
VERT: NONE
DATE: 04/24/2020

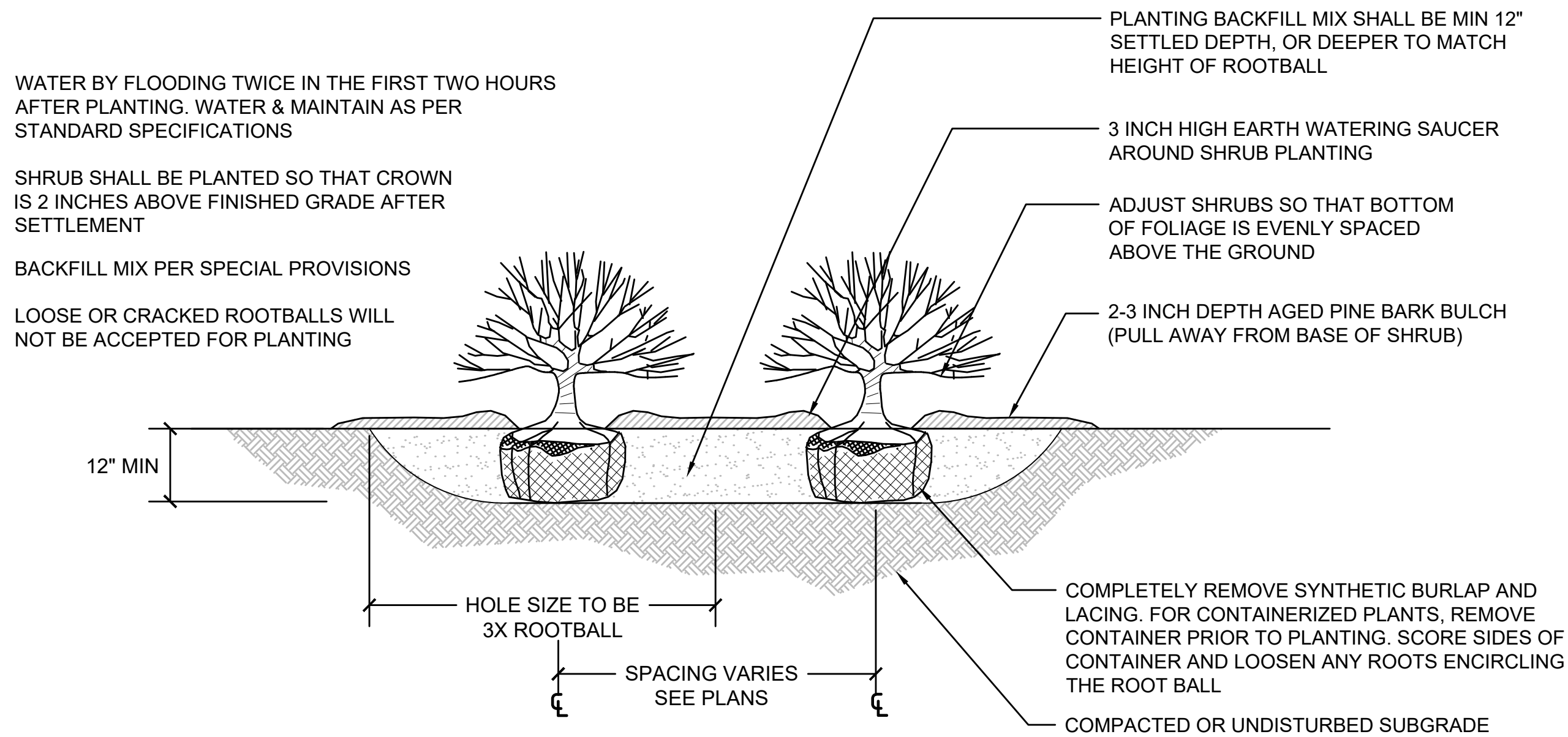
DES BY: SFD
DR. BY: WHH
CHK BY: KML

PROJECT MANAGER
PLAN NO. 312092
SHEET LD-401

FILE NAME: \\VHB\GEL\PROJ\BOSTON\12815.00 SCR PM & CM\CAD\SEGMENT3\DWG\CV\STATIONS\SEGMENT3_LD(LA_WHALESTOOTH).DWG

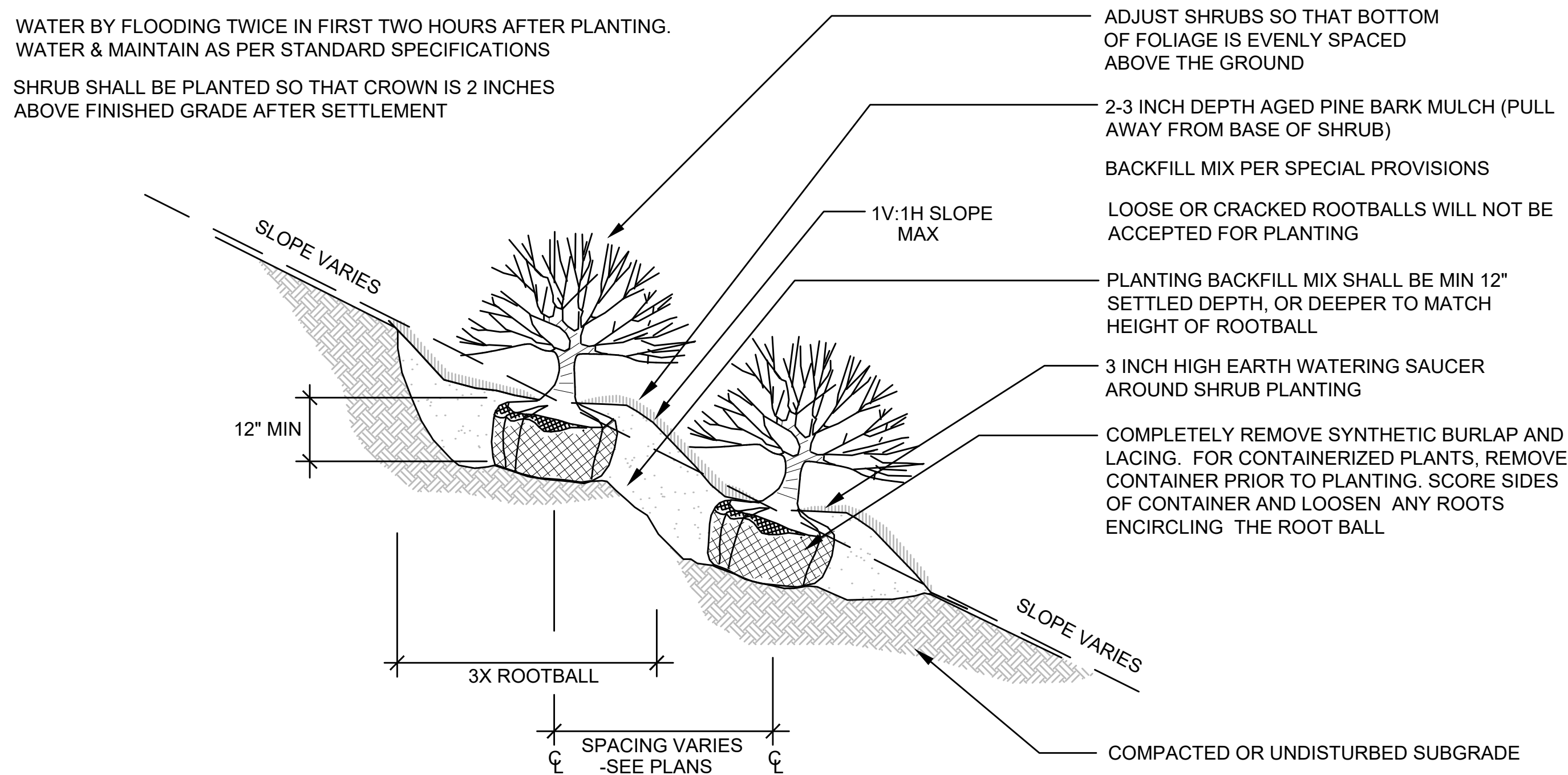


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SHRUB PLANTING

SCALE: N.T.S.



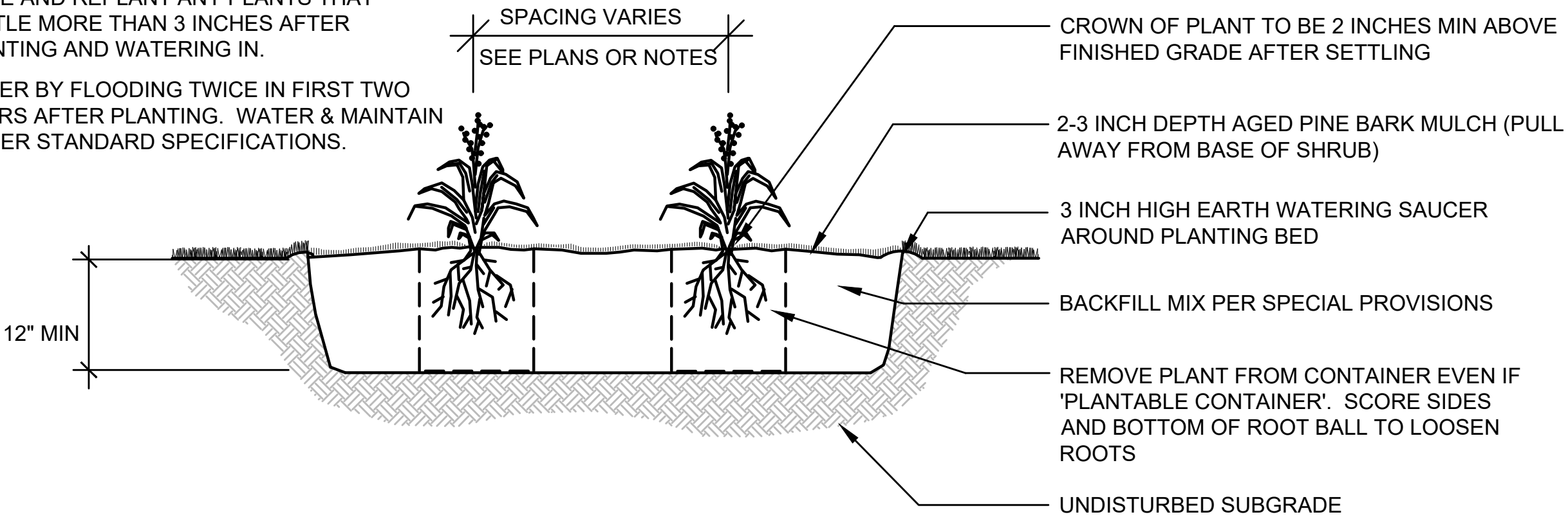
SHRUB PLANTING ON SLOPE

SCALE: N.T.S.

EXCAVATE TO REQUIRED DEPTH AND BACKFILL WITH PLANTING MIX.

RAISE AND REPLANT ANY PLANTS THAT SETTLE MORE THAN 3 INCHES AFTER PLANTING AND WATERING IN.

WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS.



PERENNIAL PLANTING

SCALE: N.T.S.

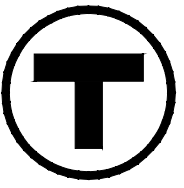
NOTE:

ALL LOAM AND SEEDING AND PLANTING WORK SHALL BE IN ACCORDANCE WITH SPECIFICATIONS SECTIONS 02920 - LOAM AND SEED, AND 02932 - PLANTING.

ISSUED FOR BID

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
SCR MS/NBML COMMUTER RAIL EXPANSION PROJECT
MIDDLEBOROUGH TO NEW BEDFORD, MA
CONTRACT NO. K78CN04

**NEW BEDFORD MAIN LINE
NEW BEDFORD STATION
LANDSCAPE DETAILS**



vhb HNTB
99 HIGH STREET
BOSTON, MA 02110
(617) 728-7777

MASSACHUSETTS BAY TRANSPORTATION
AUTHORITY

APPROVED BY:

Stephen Derom

ISSUE	DATE	DESCRIPTION	BY	CHKD.	APP.

PROJECT MANAGER
HORIZ: NONE
VERT: NONE
DATE: 04/24/2020

DES. BY
DR. BY
CHK. BY
SFD WHH KML

PROJECT MANAGER
Date
PLAN NO. 312094
SHEET LD-403