

ZONING:
THE SUBJECT PROPERTY IS LISTED AS BEING IN THE INDUSTRIAL (I1) ZONING DISTRICT AND THE SMART GROWTH OVERLAY DISTRICT, ACCORDING TO THE CITY OF NEWBURYPORT ASSESSORS DEPARTMENT.

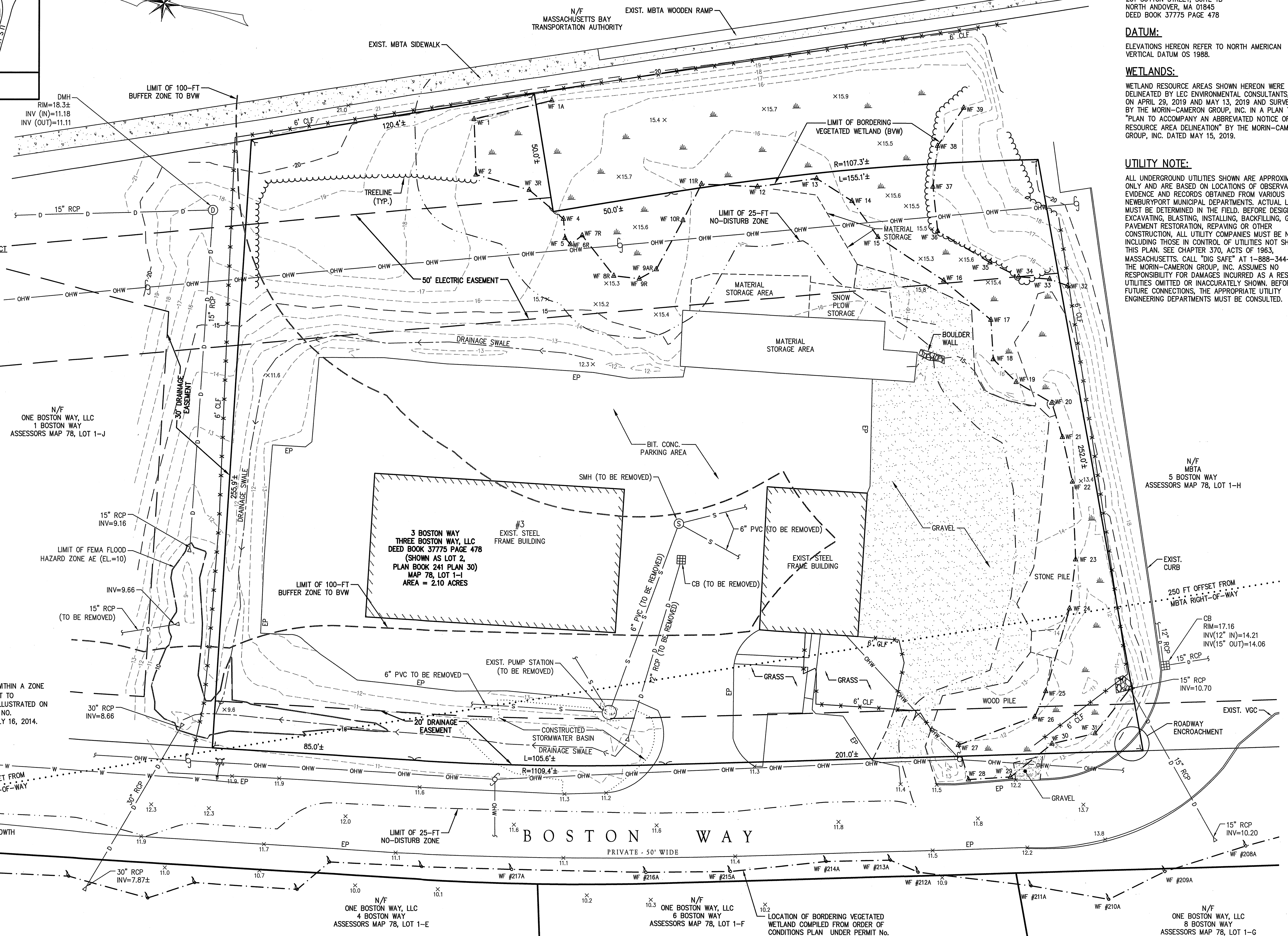
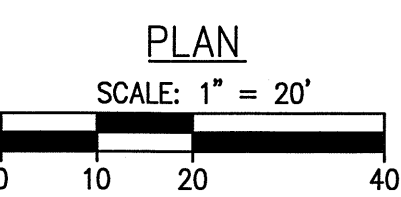
- REFERENCES:**
- ESSEX COUNTY REGISTRY OF DEEDS, SOUTH DISTRICT
 - DEED BOOK 12045 PAGE 541
 - DEED BOOK 14148 PAGE 279
 - DEED BOOK 15081 PAGE 486
 - DEED BOOK 15081 PAGE 499
 - CITY OF NEWBURYPORT ENGINEERING RECORDS
 - GIS AND ASSESSORS MAP

- PLAN BOOK 309 PLAN 78
- PLAN BOOK 246 PLAN 82
- PLAN BOOK 241 PLAN 30
- PLAN BOOK 232 PLAN 2
- PLAN BOOK 150 PLAN 11
- PLAN 450 OF 1950
- PLAN 349 OF 1950
- 1983 COUNTY LAYOUT NO. 2960
- BOSTON AND MAINE RAILROAD RIGHT OF WAY AND TRACK MAP V.3M/34

- ABBREVIATIONS:**
- | | |
|--------|-----------------------------|
| APPROX | APPROXIMATE |
| BIT | BITUMINOUS |
| BVW | BORDERING VEGETATED WETLAND |
| CB | CATCH BASIN |
| CLF | CHAIN LINK FENCE |
| CONC | CONCRETE |
| DIA | DIAMETER |
| DMH | DRAIN MANHOLE |
| EL | ELEVATION |
| EP | EDGE OF PAVEMENT |
| EXIST | EXISTING |
| FT | FEET |
| HYD | HYDRANT |
| INVT | INVERT |
| L | LENGTH |
| N/F | NOW OR FORMERLY |
| OHW | OVERHEAD WIRES |
| PVC | POLYVINYL CHLORIDE |
| RCP | REINFORCED CONCRETE PIPE |
| SMH | SEWER MANHOLE |
| TYP | TYPICAL |
| VGC | VERTICAL GRANITE CURB |
| WF | WETLAND FLAG |
| WG | WATER GATE |

FLOOD NOTE:
A PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN A ZONE AE (EL.=10): SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD AS ILLUSTRATED ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 25009C0117G, WHICH HAS AN EFFECTIVE DATE OF JULY 16, 2014.

TREE NOTE:
NO TREES WERE OBSERVED OVER 12" CALIPER



GENERAL NOTES:

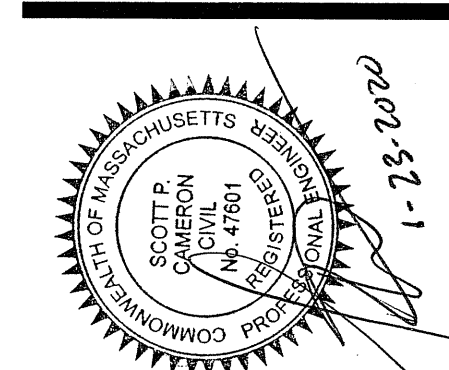
- THIS PLAN IS PREPARED FOR OUR CLIENTS USE ONLY FOR THE SPECIFIC PURPOSE OF DEPICTING EXISTING CONDITIONS OBTAINED BY AN ON-THE-GROUND FIELD SURVEY BY THE MORIN-CAMERON GROUP, INC. IN MAY 2019.
- ADJUTER INFORMATION SHOW HEREON WAS TAKEN FROM THE NEWBURYPORT GIS DATABASE.

RECORD OWNER:
THREE BOSTON WAY, LLC
231 SUTTON STREET, SUITE 1B
NORTH ANDOVER, MA 01845
DEED BOOK 37775 PAGE 478

DATUM:
ELEVATIONS HEREON REFER TO NORTH AMERICAN VERTICAL DATUM OS 1988.

WETLANDS:
WETLAND RESOURCE AREAS SHOWN HEREON WERE DELINEATED BY LEC ENVIRONMENTAL CONSULTANTS, INC. ON APRIL 29, 2019 AND MAY 13, 2019 AND SURVEYED BY THE MORIN-CAMERON GROUP, INC. IN A PLAN TITLED "PLAN TO ACCOMPANY AN ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION" BY THE MORIN-CAMERON GROUP, INC. DATED MAY 15, 2019.

UTILITY NOTE:
ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY AND ARE BASED ON LOCATIONS OF OBSERVABLE FIELD EVIDENCE AND RECORDS OBTAINED FROM VARIOUS NEWBURYPORT MUNICIPAL DEPARTMENTS. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD. BEFORE DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION, REPAIRING OR OTHER CONSTRUCTION. ALL UTILITY COMPANIES MUST BE NOTIFIED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS. CALL "DIG SAFE" AT 1-888-344-7233. THE MORIN-CAMERON GROUP, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN. BEFORE FUTURE CONNECTIONS, THE APPROPRIATE UTILITY ENGINEERING DEPARTMENTS MUST BE CONSULTED.



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sheet title:
EXISTING CONDITIONS PLAN

project name:
3 BOSTON WAY
NEWBURYPORT, MA

issue date: 10/23/19
revisions:
□ 12-20-19 - NOI SUBMISSION
□ 1-23-20 - PLANNING BOARD REVIEW

job number:
MCG-3856

C-1

DIMENSIONAL & DENSITY TABLE FOR 3 BOSTON WAY SMART GROWTH DISTRICT: SUBDISTRICT "A"		
CRITERIA	REQUIRED	PROPOSED
MAX. DENSITY	40 UNITS PER ACRE	84 UNITS IN 2.1 ACRES (40 UNITS PER ACRE)
LOT AREA	10,000 S.F.	91,489± S.F. (2.1± AC.)
MINIMUM FRONTAGE	40 FEET	391.6'
MIN. FRONT SETBACK	NO REQUIREMENT	20'
MAX. FRONT SETBACK	10 FEET (1)	32'
MIN. SIDE SETBACK	NO REQUIREMENT	10'
MIN. REAR SETBACK	10 FEET	114'
UNDEVELOPED AREA	20% (2)	51%
MAXIMUM BUILDING HEIGHT	5 STORIES & 60 FEET (3)	5 STORIES & 60 FEET
MAX. BUILDING FOOTPRINT	22,000 SF (4)	18,400 SF

DIMENSIONAL & DENSITY TABLE NOTES:

- EXCEPT WHERE UTILITY EASEMENTS MAKE THIS SETBACK INFEASIBLE, SITE IS SUBJECT TO AN EXISTING 20' WIDE DRAINAGE EASEMENT ALONG THE PARCEL FRONTAGE ON BOSTON WAY AND A 50' ELECTRIC EASEMENT ACROSS THE ENTIRE PROPERTY. BUILDING IS SITUATED AS CLOSE TO THE 20' DRAINAGE EASEMENT AS POSSIBLE WITH AN ORIENTATION THAT IS CONSISTENT WITH THE ESTABLISHED BUILDING STREET LINE ON BOSTON WAY (1 BOSTON WAY).
- AT LEAST 20% OF THE DEVELOPABLE LAND SHALL BE LEFT UNDEVELOPED AS PUBLIC OR SEMI-PUBLIC COMMON SPACE OR VEGETATED LANDSCAPE AND SUCH AREAS SHALL NOT INCLUDE BUILDINGS, STRUCTURES, PARKING AREAS, OR INTERNAL LANDSCAPING IN PARKING LOTS BUT MAY INCLUDE WETLANDS, WETLAND BUFFER AREAS AND FLOOD PLAINS.
- SITE IS SITUATED WITHIN 250 FEET OF THE MBTA RIGHT-OF-WAY.
- SITE IS SITUATED WITHIN 250 FEET OF THE COMMUTER RAIL STATION.

REQUESTED WAIVERS:

- SECTION XXIX-F.2.a.(iv): MAXIMUM FRONT YARD SETBACK EQUALS 10 FEET. A WAIVER IS REQUESTED TO INCREASE THIS TO 20 FEET TO ACCOMMODATE AN EXISTING DRAINAGE EASEMENT AND TO MAINTAIN A CONSISTENT BUILDING STREET LINE ALONG BOSTON WAY (IN LINE WITH 1 BOSTON WAY).
- SECTION XXIX-I-7.a.(1): 60% OF THE FRONT BUILDING FACADE MUST BE AT THE FRONT LINE. IF NOT MET, CAN ALLOW UP TO MAXIMUM SETBACK FOR PEDESTRIAN USE. A WAIVER IS REQUESTED TO ALLOW NO FACADE AT THE FRONT LINE ON BOSTON WAY DUE TO THE EXISTING DRAINAGE EASEMENT AND LOT GEOMETRY. A NEW PEDESTRIAN SIDEWALK WILL BE CONSTRUCTED ALONG BOSTON WAY FOR PEDESTRIAN USE.
- SECTION XXIX-I-7.b.(1): A WAIVER IS REQUESTED TO ALLOW CHANGES IN PLANE, COLOR AND MATERIALS TO BE LESS THAN 1 FOOT DEEP WHERE A MINIMUM OF 1 FOOT IS REQUIRED AND TO OCCUR AT 38'-FT SPACING WHERE 30'-FT IS REQUIRED.
- SECTION XXIX-I-8.c.(ii): A WAIVER IS REQUESTED TO USE CAPE COD STYLE BITUMINOUS BERM OR NO CURBING IN CERTAIN AREAS OF THE PARKING AREA WHERE VERTICAL GRANITE CURB OR CONCRETE CURB IS REQUIRED. BITUMINOUS BERM OR NO CURB IS REQUESTED ALONG THE PERIMETER EDGES OF THE PARKING AREA TO ACCOMMODATE LOW-IMPACT STORMWATER MANAGEMENT MEASURES AND SNOW PUSH AREAS.

PARKING LOT LANDSCAPING CALCULATIONS:

- STREET TREES = PROVIDE 30 FEET ON CENTER ALONG STREET. - PROVIDED: 30 FEET ON CENTER
- 1 SHADE TREE PER 5 SPACES: 54 SURFACE SPACES/5 = 11 TREES REQUIRED / 13 PROVIDED
- 5% OF INTERIOR PARKING AREA SHALL BE LANDSCAPED: TOTAL PARKING LOT AREA = 24,069 SF
TOTAL LANDSCAPED AREA = 2,310 SF = 9.6%
- MINIMUM LANDSCAPED ISLAND WIDTH = 9 FEET; PROVIDED MINIMUM OF 9 FEET
- MAXIMUM PARKING SPACES WITHOUT LANDSCAPE ISLAND; 10 MAXIMUM REQUIRED, 10 MAXIMUM PROVIDED

PARKING CALCULATION:

REQUIRED:	# OF UNITS	REQUIRED SPACES
RESIDENTIAL MULTI-FAMILY		
1 PER STUDIO OR ONE-BEDROOM UNIT	48	48
1.3 PER TWO-BEDROOM UNIT	24	32
1.5 PER UNIT W/ THREE BEDROOMS OR MORE	12	18
PROVIDED:		98 SPACES
52 REGULAR SURFACE SPACES		
3 SURFACE HANDICAP SPACES (INCLUDING 1 VAN SPACE)		
2 GARAGE HANDICAP SPACES (INCLUDING 1 VAN SPACE)		
44 GARAGE SPACES		
12 PARALLEL PARKING SPACES IN BOSTON WAY		
TOTAL:		113 PARKING SPACES

PARKING NOTES:

SURFACE SPACE: 9' x 18'
 COMPACT GARAGE SPACE: 8' x 16'
 HANDICAP SPACE: 8' x 18'
 VAN HANDICAP LOADING AREA: 8' x 18'
 HANDICAP LOADING AREA: 5' x 18'

BICYCLE PARKING CALCULATION:

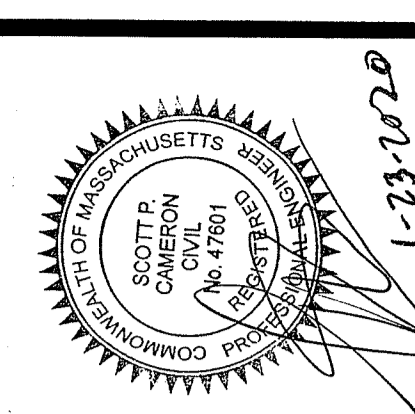
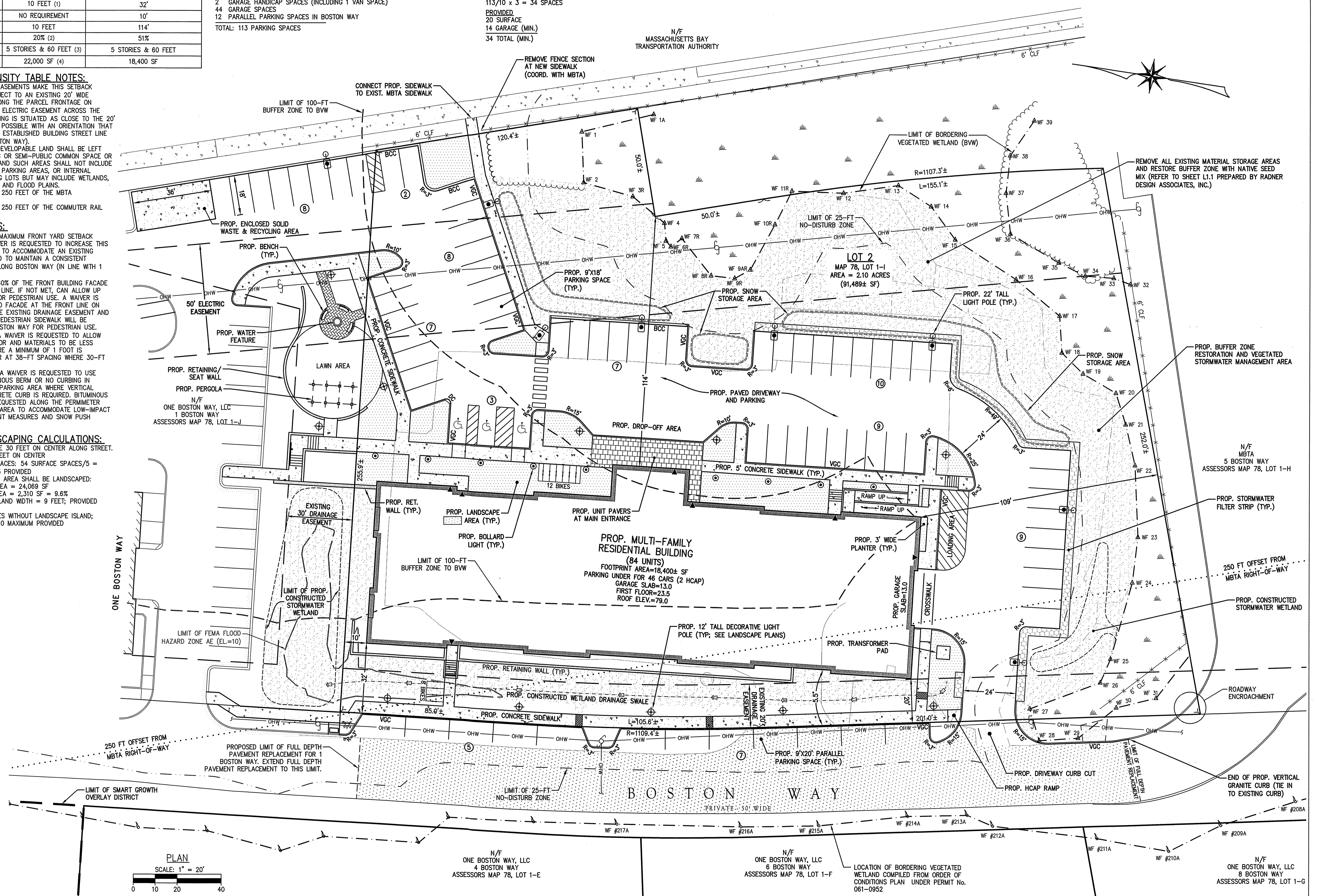
REQUIRED:
 3 SPACES PER 10 CAR SPACES
 113/10 x 3 = 34 SPACES

PROVIDED:
 20 SURFACE
 14 GARAGE (MIN.)
 34 TOTAL (MIN.)

SCHEDULE OF LOT COVERAGES

	LOT AREA	OPEN AREA (2)	IMPERVIOUS AREA (1)	% OPEN SPACE
EXISTING	91,489 SF	60,959 SF	30,530 SF	67%
PROPOSED	NO CHANGE	44,421 SF	47,068 SF	49%

- BUILDING, PAVEMENT, SIDEWALKS & RAMPS.
- ALL OTHER LAND NOT INCLUDED IN (1).



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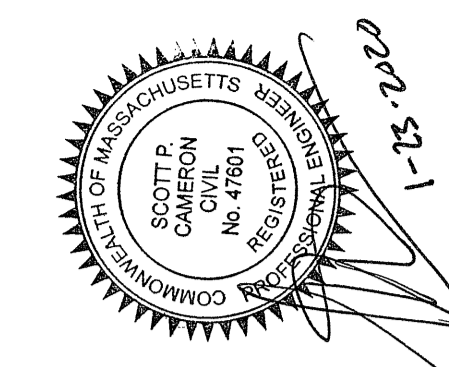
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 3 BOSTON WAY
 3 BOSTON WAY
 NEWBURYPORT, MA
 SITE LAYOUT PLAN

project name:
 3 BOSTON WAY
 3 BOSTON WAY
 NEWBURYPORT, MA

issue date: 10/23/19
revisions:
 □ 12-20-19 - NOI SUBMISSION
 □ 1-23-20 - PLANNING BOARD REVIEW
 dr. chk.

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job number:
 MCG-3856



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GRADING & DRAINAGE PLAN

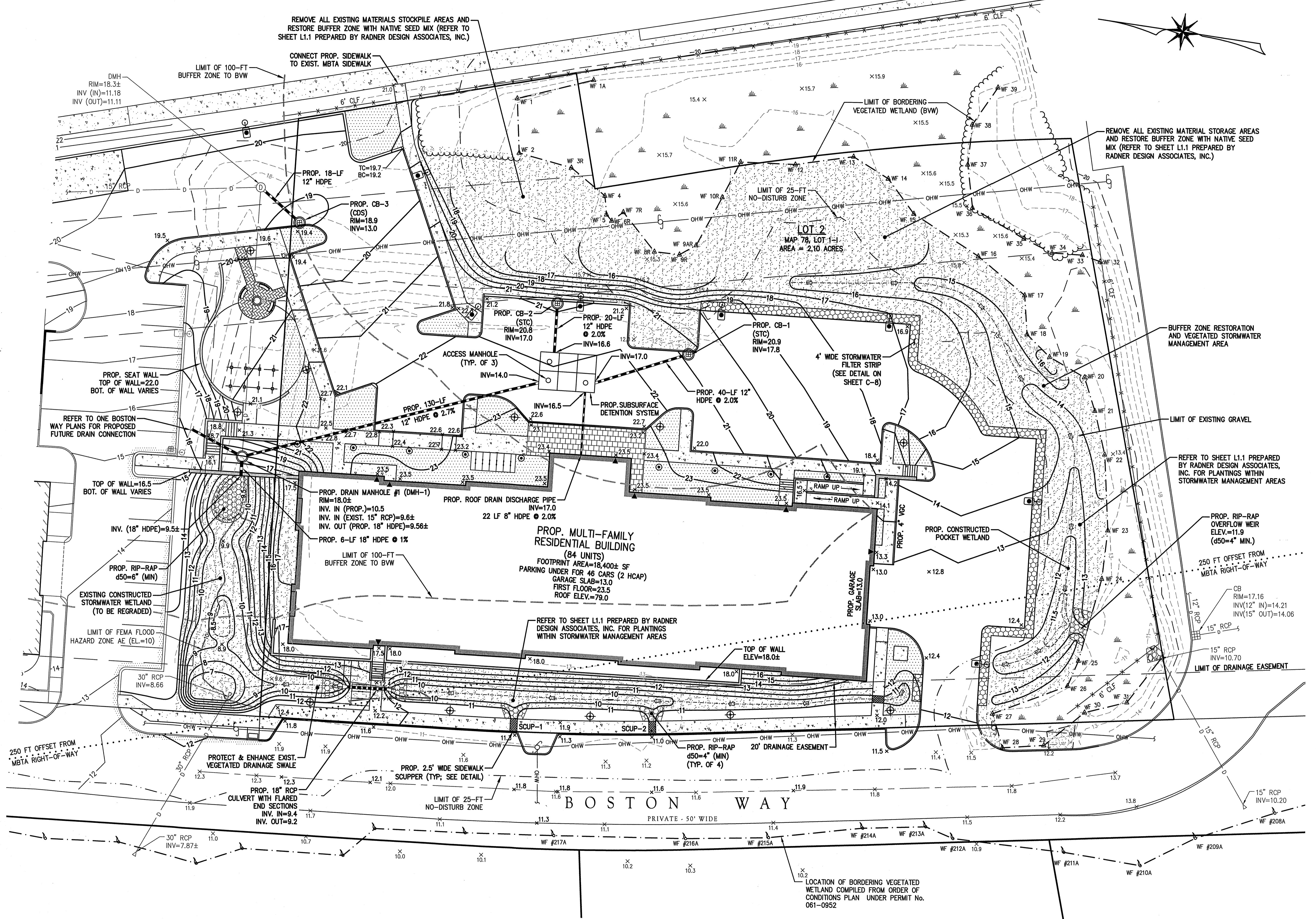
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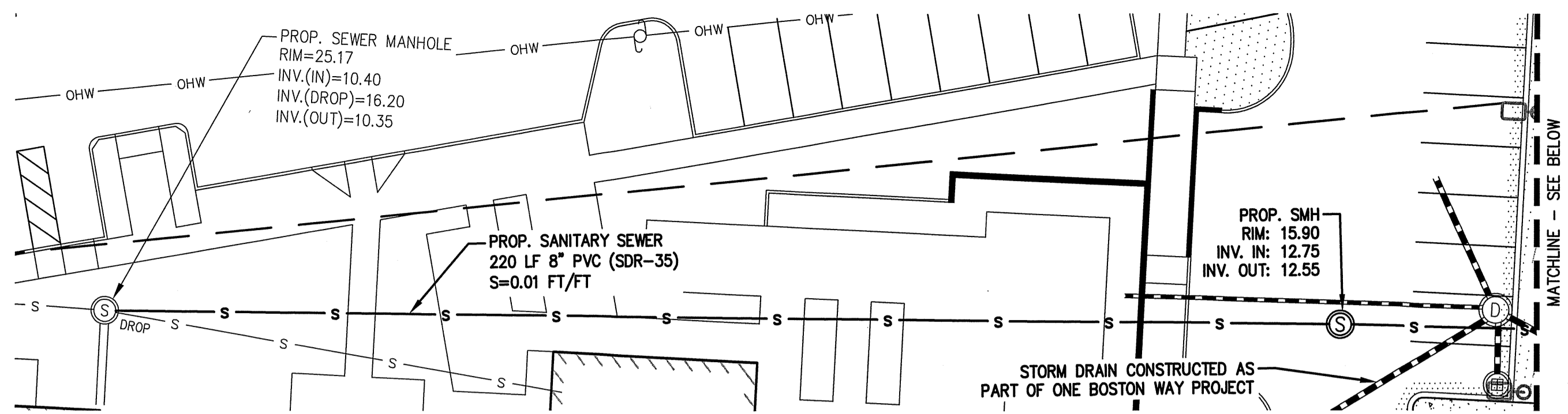
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job number:
MCG-3856

C-3



PLAN
 SCALE: 1" = 20'
 0 10 20 40



SEWER NOTES:

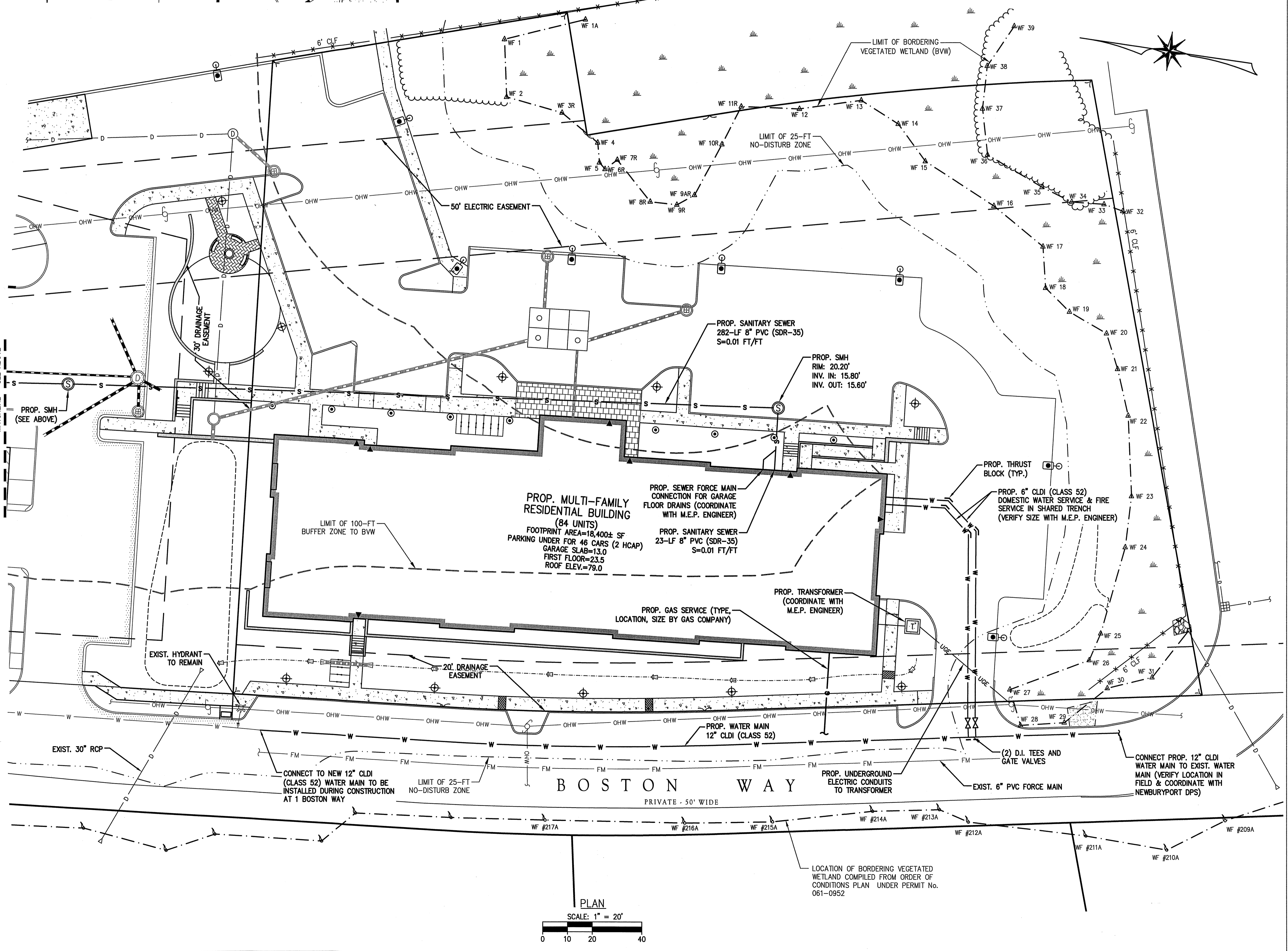
1. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER PIPES AND WATER PIPES. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER PIPE, THE WATER PIPE SHALL BE SLEEVED FOR A DISTANCE OF AT LEAST 10' ON EACH SIDE.
2. ALL GRAVITY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35 UNLESS OTHERWISE NOTED.
3. WHERE SANITARY SEWERS CROSS WATER SERVICES, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER PIPE. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER PIPE SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHENEVER IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER PIPE AND THE SEWER PIPE SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
4. SANITARY SEWER LINES WITH LESS THAN 4 FEET OF COVER SHALL BE INSULATED TO PREVENT FREEZING.

GENERAL UTILITY NOTES:

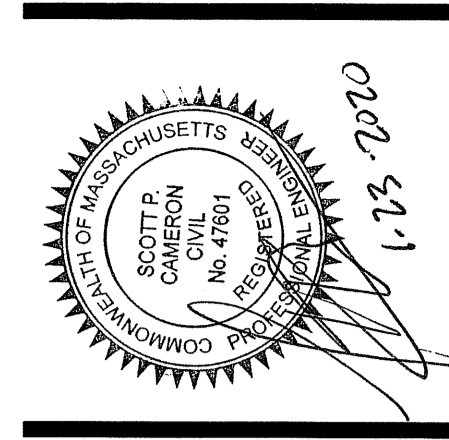
1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DISSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
3. ALL UTILITY PENETRATIONS AT THE FOUNDATION SHALL BE ADJUSTED BASED ON THE FINAL CONSTRUCTION DRAWINGS.
4. ALL NEW ELECTRIC, TELEPHONE AND CABLE CONDUIT SHALL BE INSTALLED UNDERGROUND, CONDUIT HAND-HOLE LOCATIONS AND HORIZONTAL ALIGNMENT OF CONDUIT SHALL BE COORDINATED WITH THE LOCAL UTILITY PROVIDERS DURING CONSTRUCTION.
5. REFER TO ELECTRICAL PLANS PREPARED BY BLW ENGINEERS, INC. FOR DETAILS AND FURTHER INFORMATION REGARDING ELECTRIC, TELEPHONE AND CABLE CONDUIT.
6. DOMESTIC AND FIRE SERVICE LOCATIONS AND SIZES SHALL BE SPECIFIED BY THE MECHANICAL ENGINEER.

NEWBURYPORT DPS WATER NOTES:

1. ALL WATER SYSTEM COMPONENTS MUST BE INSTALLED TO MEET DEP GUIDELINES AND PRACTICES. NEW WATER LINES (MAINS AND SERVICE CONNECTIONS) WILL HAVE 10'-FEET OF HORIZONTAL AND/OR 18 INCHES VERTICAL (WATER 18-INCHES ABOVE SEWER) SEPARATION FROM SEWER LINES. IF THESE CLEARANCES CANNOT BE MET, THEN ALL LINES SHALL BE ENCASED IN CONCRETE FOR THEIR FULL LENGTHS WHERE THE SEPARATION CANNOT BE MET. WATER LINES WILL HAVE AT LEAST FOUR AND ONE HALF (4 1/2) FEET OF COVER. THERE MUST BE AT LEAST SIX (6) INCHES OF CLEARANCE BETWEEN A NEW WATER LINE AND ANY UNDERGROUND ROCK FORMATION.
2. A HYDRANT FLOW TEST AND HYDRAULIC ANALYSIS NEEDS TO BE PERFORMED. THE SYSTEM SHALL BE DESIGNED TO MAINTAIN A MINIMUM OF TWENTY (20) PSI AT ALL POINTS UNDER ALL FLOW CONDITIONS. THIS HYDRAULIC ANALYSIS MUST CONFIRM THAT ADEQUATE CAPACITY EXISTS IN THE EXISTING LINE TO WHICH THE CONNECTION IS BEING MADE. THIS ANALYSIS MUST ALSO CONFIRM THAT SIZING IS ADEQUATE FOR FIRE FLOW REQUIREMENTS, BASED ON INSURANCE SERVICES OFFICE (ISO) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS. THE PROPONENT MUST PROVIDE THIS ANALYSIS FOR REVIEW.
3. ALL WATER MAIN COMPONENTS SHALL MEET AWWA STANDARDS. "ALL DUCTILE IRON PIPE SHALL BE COATED WITH A LAYER OF ARC-SPRAYED ZINC PER ISO 8179. THE MASS OF THE ZINC APPLIED SHALL BE 200 G/M². A FINISHING TOPCOAT SHALL BE APPLIED TO THE ZINC. INTERIOR LINING FOR POTABLE WATER MAIN SHALL HAVE AN INTERIOR PROTECTIVE LINING OF CEMENT-MORTAR IN ACCORDANCE WITH ANSI/AWWA A21.4/C104. WATER AND FIRE PROTECTION MAINS FOUR (4) INCH AND GREATER SHALL BE CLASS 52 DUCTILE IRON CEMENT LINED PIPE AND ZINC COATED. WHERE SOIL CONDITIONS ARE DETERMINED BY THE DEPARTMENT TO BE CORROSIVE, POLY WRAP WILL BE INSTALLED AS AN ADDITIONAL MEANS OF PROTECTION. POLYETHYLENE ENCASEMENT: POLYETHYLENE ENCASEMENT SHALL BE POLYETHYLENE CONSISTING OF THREE LAYERS OF CO-EXTRUDED LINEAR LOW DENSITY POLYETHYLENE (LLDPE), FUSED INTO A SINGLE THICKNESS OF NOT LESS THAN 8 (EIGHT) MILS. ALL MECHANICAL JOINT COMPONENTS WILL BE INSTALLED USING RETAINING GLANDS, SUCH AS, GRIP RING, MEGA LUG OR STAR GRIP. METAL WEDGES MUST BE USED AT ALL BELL JOINTS TO ENSURE CONTINUITY FOR TRACING. ALL FITTINGS (TEES, BENDS, SOLID SLEEVE ETC.) WILL BE ZINC COATED AS WELL FOR PROTECTION PER ISO 8179-2. ZINC RICH PAINT SHALL HAVE A ZINC CONTENT OF AT LEAST 85% BY WEIGHT AND SHALL BE FINISHED WITH AN EXTERIOR BITUMINOUS COATING. A MINIMUM 307SS (STAINLESS STEEL) "T" BOLTS WILL BE USED TO CONNECT ANY APPURTENANCE THAT REQUIRES THE USE OF "T" BOLTS FOR ASSEMBLY.
4. SERVICE CONNECTIONS SHALL BE PERPENDICULAR TO THE MAIN AND FOLLOW A STRAIGHT LINE INTO THE DWELLING. TYPE "K" COPPER TUBING, NO LESS THAN ONE (1) INCH IN DIAMETER, WILL BE USED FROM THE MAIN TO THE CURB STOP. IT IS RECOMMENDED THAT THE ENTIRE SERVICE BE COPPER FOR TRACING. IN INSTANCES WHERE THE STOP TO THE DWELLING IS A LONG DISTANCE, COPPER TUBING SIZE (CTS) POLYETHYLENE (HDPE) MAY BE USED, BUT THE DECISION RESTS SOLELY UPON THE WATER DEPARTMENT CONSTRUCTION FOREMAN. ALL SERVICE FITTINGS WILL BE BRASS. CORPORATIONS WILL BE BALL TYPE WITH COUNTER CLOCKWISE (CC) THREAD BY COMPRESSION.
5. GATE VALVES WILL BE DUCTILE IRON EPOXY COATED (AWWA C550), WITH O-RING SEALS, URETHANE COATED WEDGE, STAINLESS STEEL NUTS AND BOLTS, AND ANTI-ROTATION SEATS TO PREVENT T-BOLTS FROM TURNING. VALVES WILL BE OPEN RIGHT USING A TWO (2) INCH OPERATING NUT WITH AN ARROW CAST IN THE METAL.
6. CURB STOPS WILL BE "NO LEAD" BALL TYPE THAT SEATS BY COMPRESSION AND ARE TO BE INSTALLED WITHIN THE ROADWAY PUBLIC WAY (NOT ON PRIVATE PROPERTY) SO THE WATER DEPARTMENT CAN ACCESS THE VALVE. CURB STOPS WILL BE INSTALLED WITH A BUFFALO-TYPE TELESCOPING (NOT SCREW TYPE) BOX FOR ACCESS AND SHALL BE SELF-DRAINING. CURB STOPS WILL BE NO LESS THAN FOUR AND A HALF (4.5) FEET DEEP AND NO MORE THAN FIVE AND A HALF (5.5) FEET DEEP.
7. ALL WATER VALVE BOX COVERS SHALL BE LABELED "WATER".
8. ALL WATER METERS MUST BE PURCHASED FROM THE NEWBURYPORT DPS, WATER DIVISION. SHUT OFF VALVES ARE REQUIRED BOTH BEFORE AND AFTER THE METER. ALL METERS MUST BE INSTALLED OR REMOVED BY AN EMPLOYEE OF THE NEWBURYPORT DPS WATER DIVISION ONLY. ALL METERS MUST BE LOCATED WITHIN THREE (3) FEET OF WHERE THE SERVICE ENTERS THE BUILDING AND SHALL BE ACCESSIBLE FOR READING, MAINTENANCE AND REPAIR.
9. ALL TAPS ARE TO BE MADE BY AN EMPLOYEE OF THE NEWBURYPORT DPS WATER DIVISION, UNLESS WRITTEN CONSENT IS GIVEN BY THE WATER CONSTRUCTION FOREMAN. IF WRITTEN CONSENT IS GIVEN, AN APPROVED CONTRACTOR MUST DO THE TAPPING, AND THE WATER CONSTRUCTION FOREMAN OR HIS DESIGNEE MUST BE PRESENT DURING THE TAP. TAPS MUST BE EITHER ONE (1) INCH OR TWO (2) INCH DIAMETER AND LARGER - NO INCREMENTS BETWEEN ONE (1) INCH AND TWO (2) INCH ARE ALLOWED.
10. THE SIGNING OF DESIGN/PERMIT PLANS (DRAWINGS) WILL BE CONSIDERED PRELIMINARY PENDING FINAL INSTALLATION INSPECTION.
11. NO WATER WILL BE SUPPLIED TO ANY CONTRACTOR OR BUILDER THROUGH A WATER SERVICE WHICH HAS NOT BEEN PLACED "IN SERVICE" BY THE NEWBURYPORT WATER DIVISION. NO DISTRIBUTION SYSTEM COMPONENT WILL BE OPERATED BY ANYONE OTHER THAN NEWBURYPORT WATER DIVISION PERSONNEL.
12. WATER LINES (MAINS AND SERVICE CONNECTIONS) SHALL BE PRESSURE TESTED TO 150 PSI AND HELD FOR ONE HOUR AND WITNESSED BY THE WATER CONSTRUCTION FOREMAN OR HIS DESIGNEE. ALL INSTALLATIONS MUST BE INSPECTED BY THE WATER CONSTRUCTION FOREMAN OR HIS DESIGNEE.
13. NEW WATER MAINS SHALL BE CHLORINATED FOLLOWING INSTALLATION. CHLORINATION WILL MEET AWWA STANDARDS (ANSI/AWWA C651 - 05). BACTERIA SAMPLES WILL BE TAKEN BY THE CONTRACTOR AND TESTED BY AN APPROVED LAB, WHICH WILL SEND RESULTS DIRECTLY TO THE NEWBURYPORT WATER TREATMENT PLANT VIA CERTIFIED MAIL. RESULTS OF BACTERIA TESTING MUST BE RECEIVED BY THE NEWBURYPORT WATER TREATMENT PLANT WITHIN FIVE (5) DAYS OR RE-SAMPLING MUST BE DONE. IF THE BACTERIA TEST COMES BACK POSITIVE, THE WATER MAIN WILL BE FLUSHED AND RE-CHLORINATED PRIOR TO RE-SAMPLING. CONTRACTOR SHALL VERIFY UNDERSTANDING OF THIS REQUIREMENT.
14. AS-BUILT PLANS (HARD COPIES AND DIGITAL) ARE REQUIRED PRIOR TO PLACING A NEW WATER SYSTEM IN SERVICE. AS-BUILT PLANS (CORNER TIES) AND PAYMENTS ARE DUE PRIOR TO TURNING A WATER SERVICE ON.



PLAN
SCALE: 1" = 20'
0 10 20 40



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sheet title:
UTILITY PLAN

project name:
**3 BOSTON WAY
NEWBURYPORT, MA**

issue date: 10/23/19
revisions:
□ 12-20-19 - NOI SUBMISSION
□ 1-23-20 - PLANNING BD. REVIEW
dr. chk.

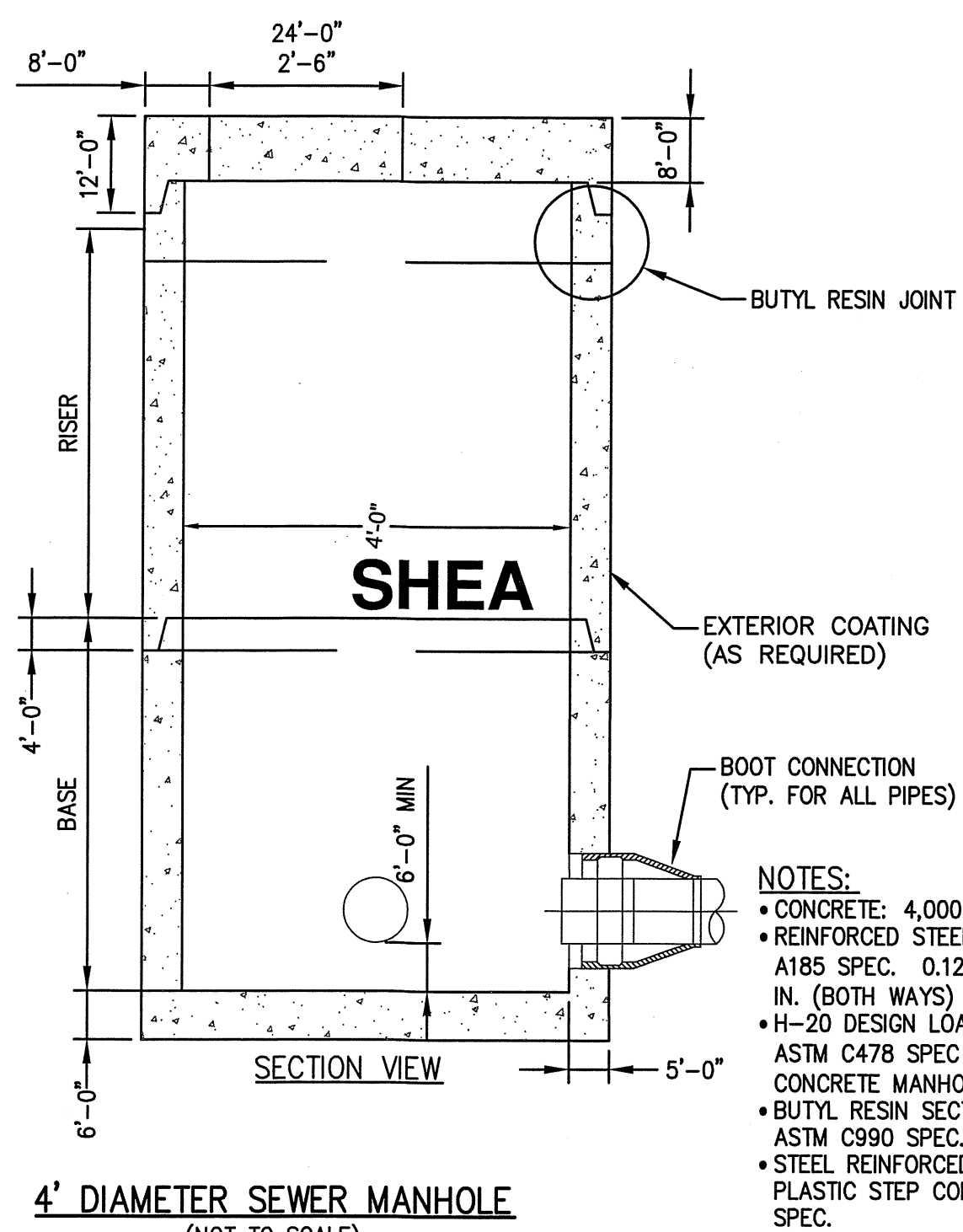
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job number:
MCG-3856

FLAT TOP		
ITEM NO	WEIGHT	
1 HOLE	MH4-FT4ID	1,820#
2 HOLE	MH4-FT4ID2H	930#

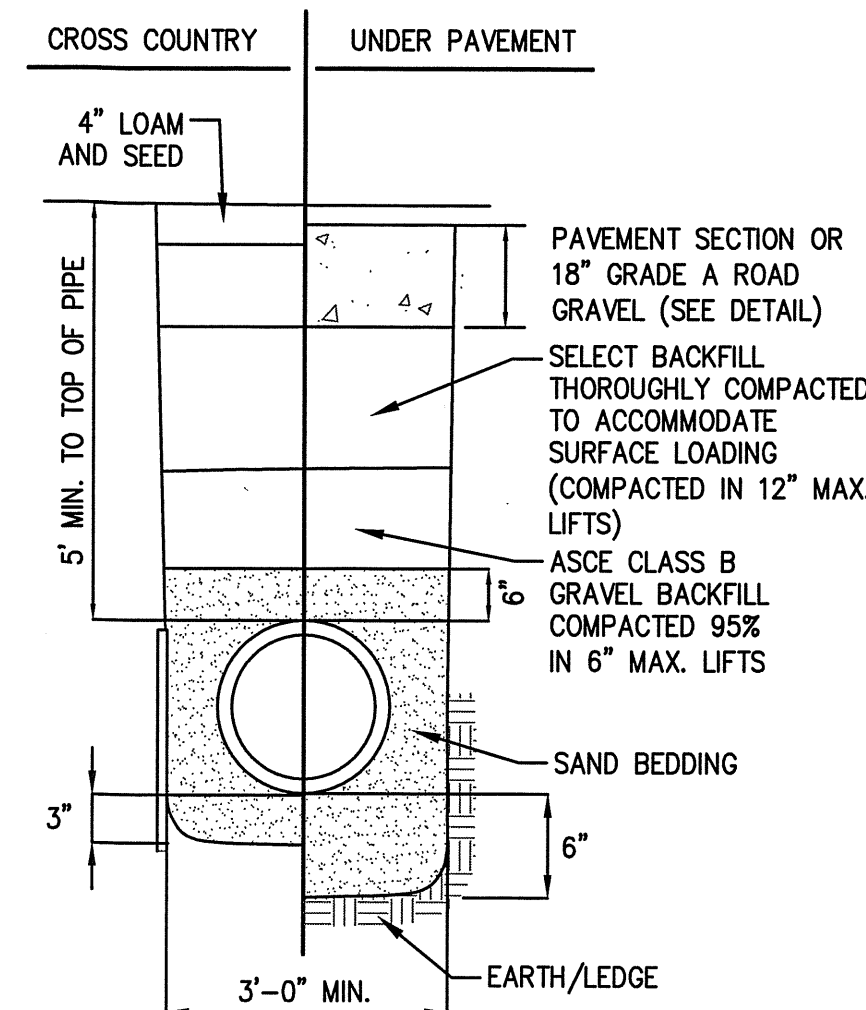
RISER SECTION		
HEIGHT	ITEM NO	WEIGHT
1'-0"	MH4-12CS4ID	856#
2'-0"	MH4-24CS4ID	1,712#
2'-6"	MH4-30CS4ID	2,140#
3'-0"	MH4-36CS4ID	2,568#
4'-0"	MH4-48CS4ID	3,424#
5'-0"	MH4-60CS4ID	4,280#

BASE SECTION		
HEIGHT	ITEM NO	WEIGHT
2'-0"	MH4-24S4ID	2,640#
2'-6"	MH4-30S4ID	3,067#
3'-0"	MH4-36S4ID	3,495#
3'-6"	MH4-42S4ID	3,922#
4'-0"	MH4-48S4ID	4,350#
4'-6"	MH4-54S4ID	4,777#
5'-0"	MH4-60S4ID	5,205#
5'-6"	MH4-66S4ID	5,633#
6'-0"	MH4-72S4ID	6,060#

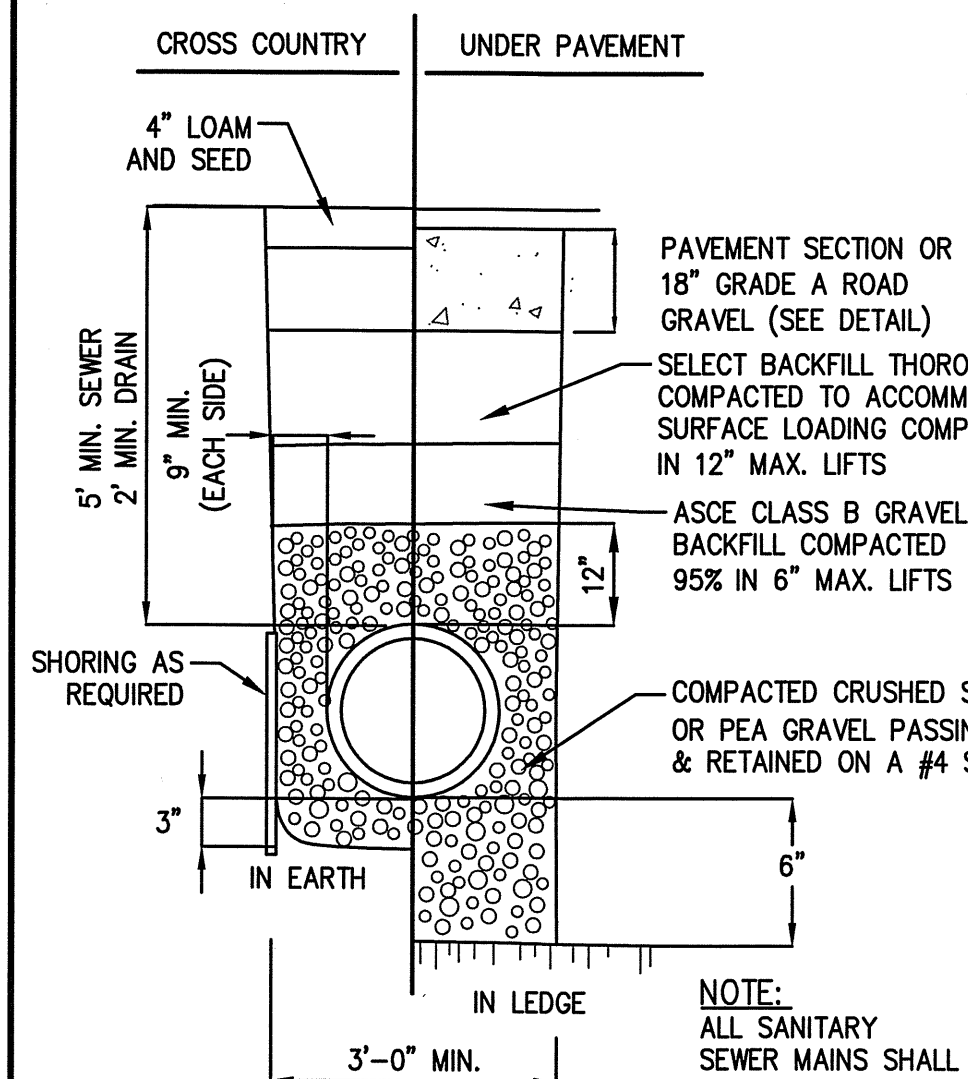


- NOTES:**
- CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
 - REINFORCED STEEL CONFORMS TO LATEST ASTM A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM.
 - H-20 DESIGN LOADING PER AASHTO HS-20-44; ASTM C478 SPEC FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
 - BUTYL RESIN JOINT CONFORMS TO LATEST ASTM C990 SPEC.
 - STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEP CONFORMS TO LATEST ASTM C478 SPEC.

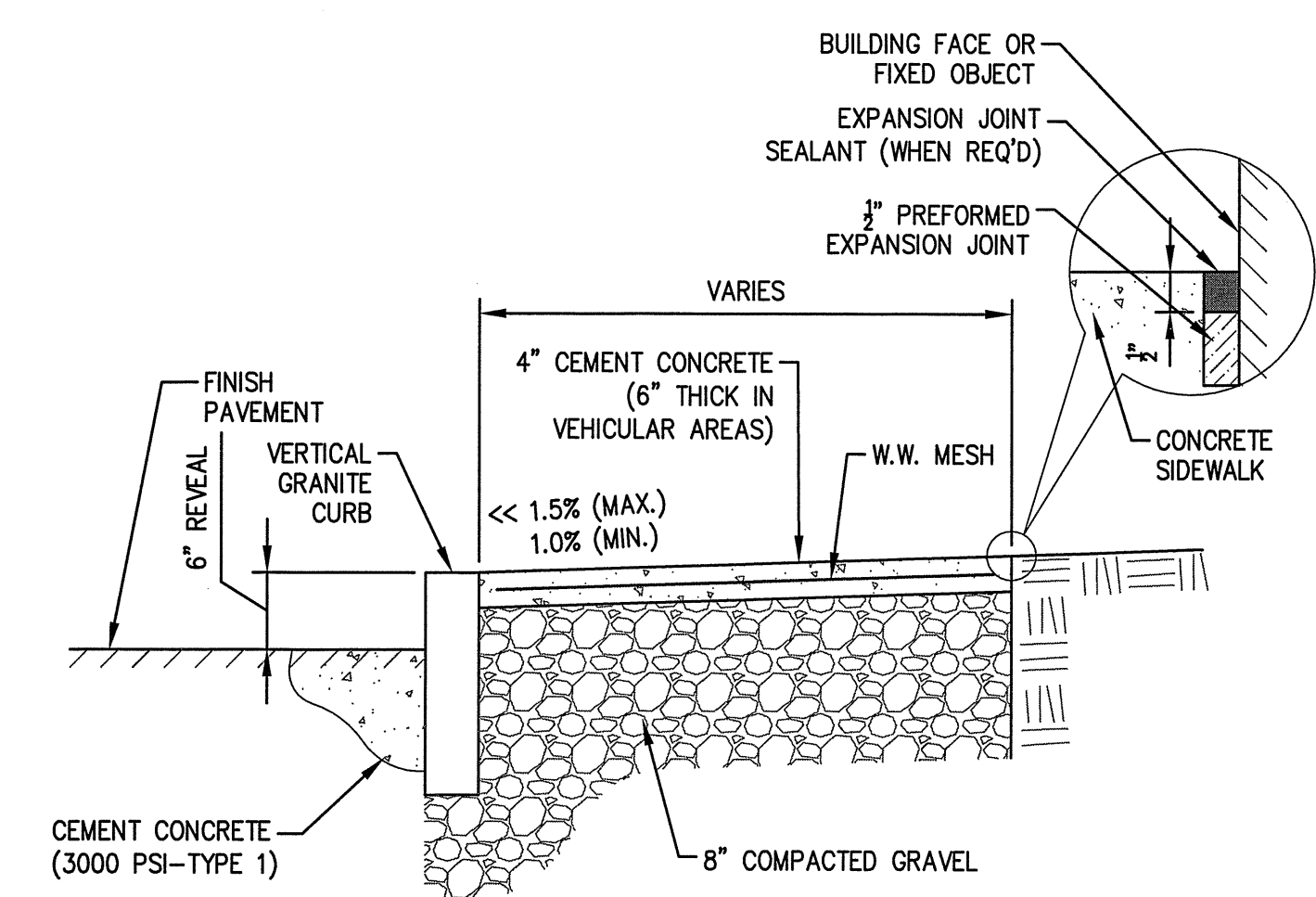
4' DIAMETER SEWER MANHOLE
(NOT TO SCALE)



TYPICAL WATER TRENCH DETAIL
(NOT TO SCALE)

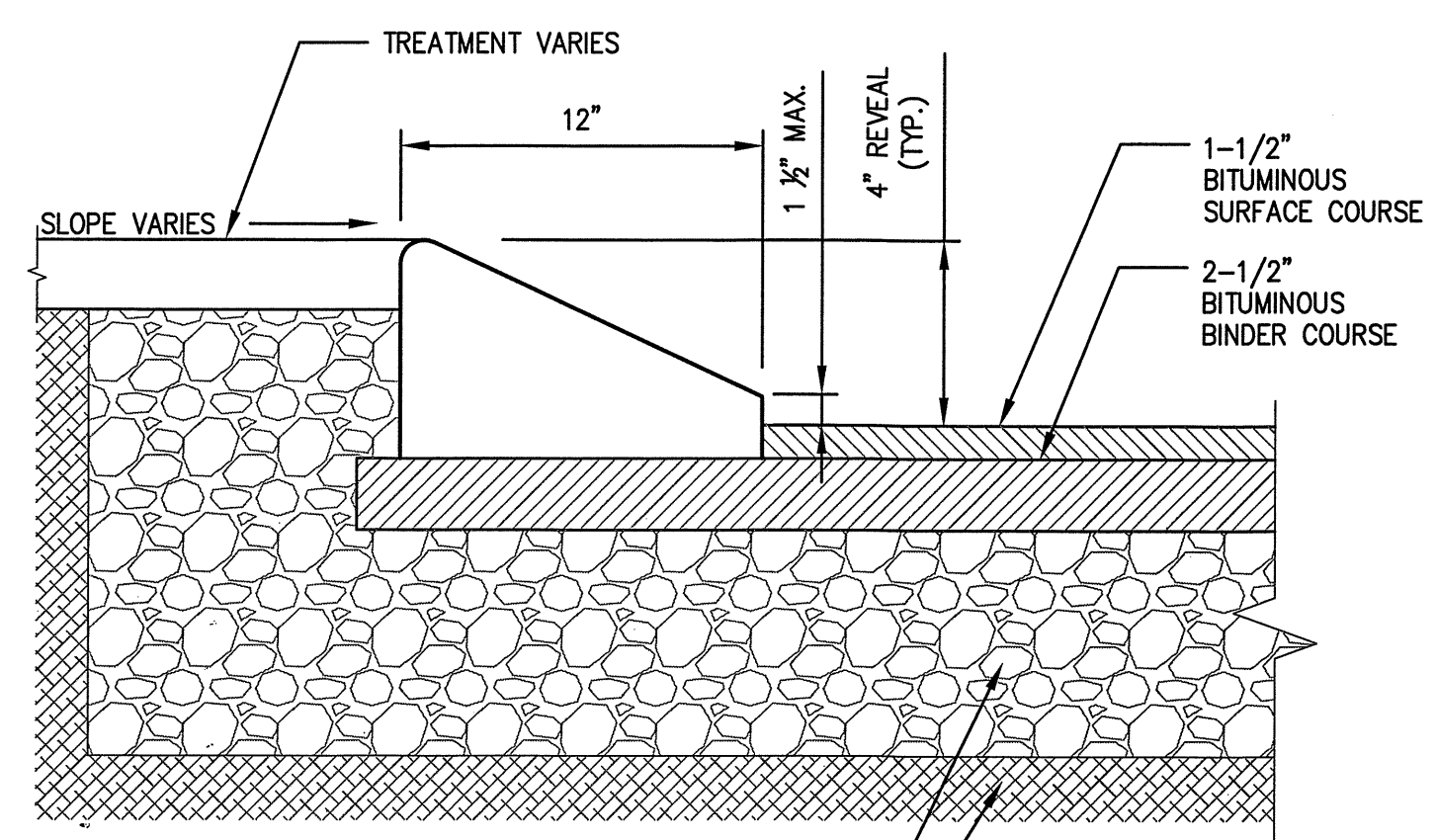


TYPICAL SEWER/RAIN TRENCH DETAIL
(NOT TO SCALE)



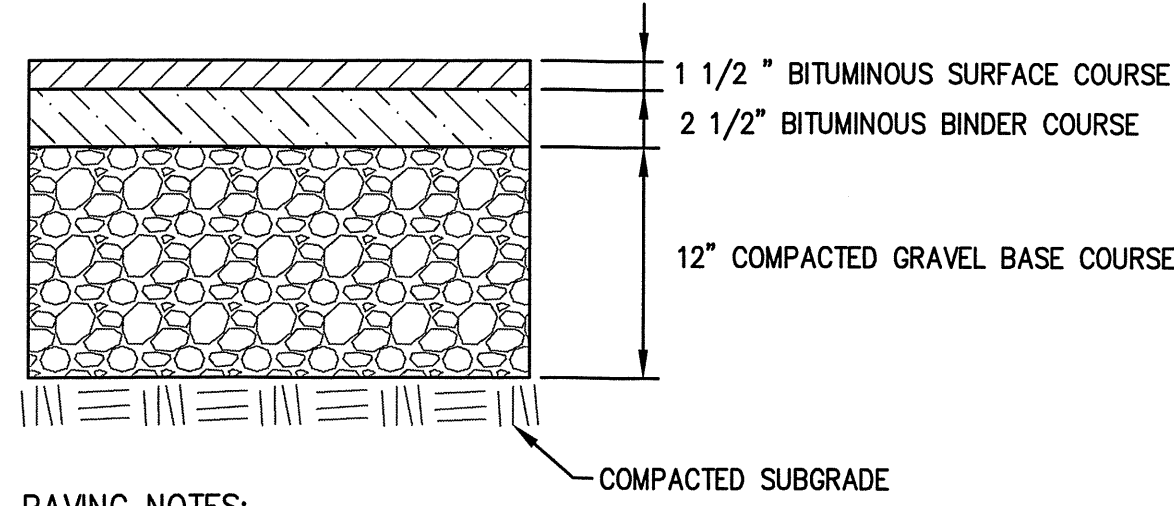
- NOTES:**
1. PROVIDE EXPANSION JOINTS AT MIN. 30 FT. O.C. WITH PRE-MOULDED JOINT FILLER.
 2. PROVIDE CONTROL JOINTS AT 6' O.C.
 3. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
 4. CEMENT CONCRETE SHALL BE 4,000 PSI-TYPE II.

CONCRETE SIDEWALK
(NOT TO SCALE)



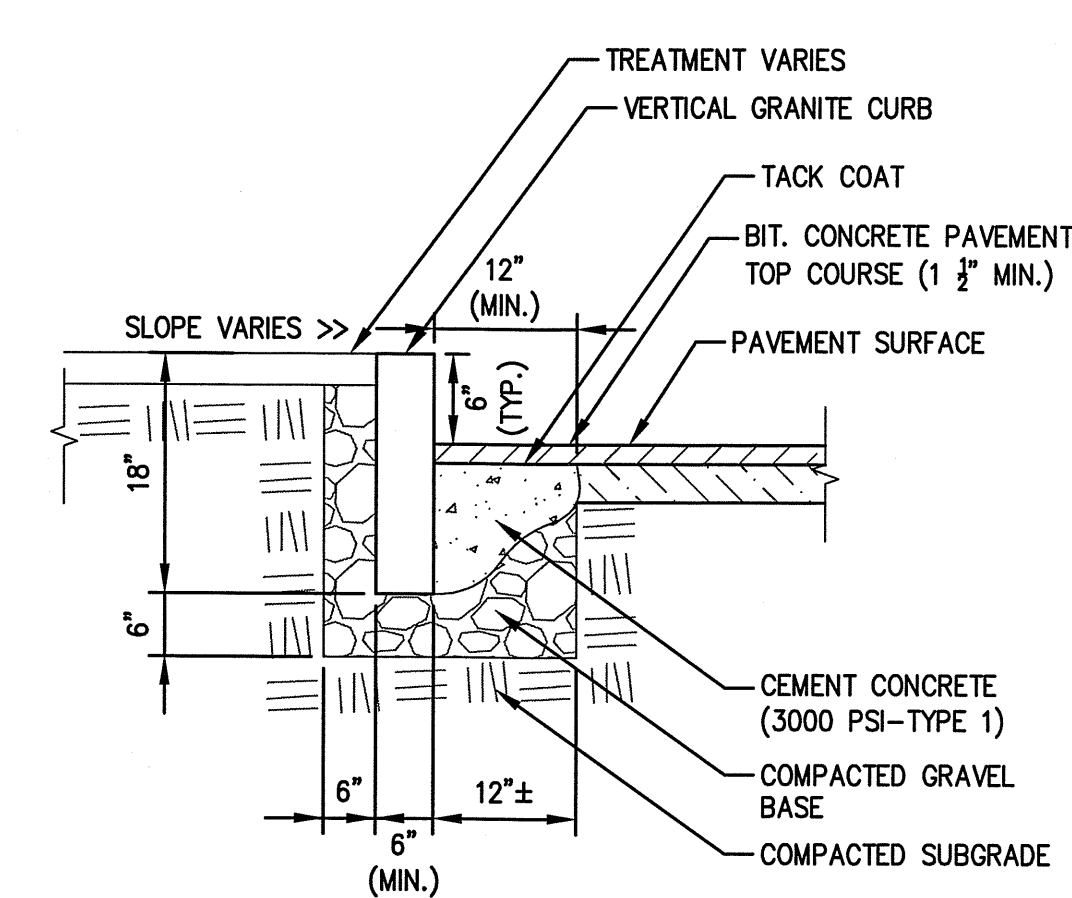
- NOTE:**
1. ALL CURBING TO BE MACHINE EXTRUDED

CAPE COD BERM (CCB)
(NOT TO SCALE)

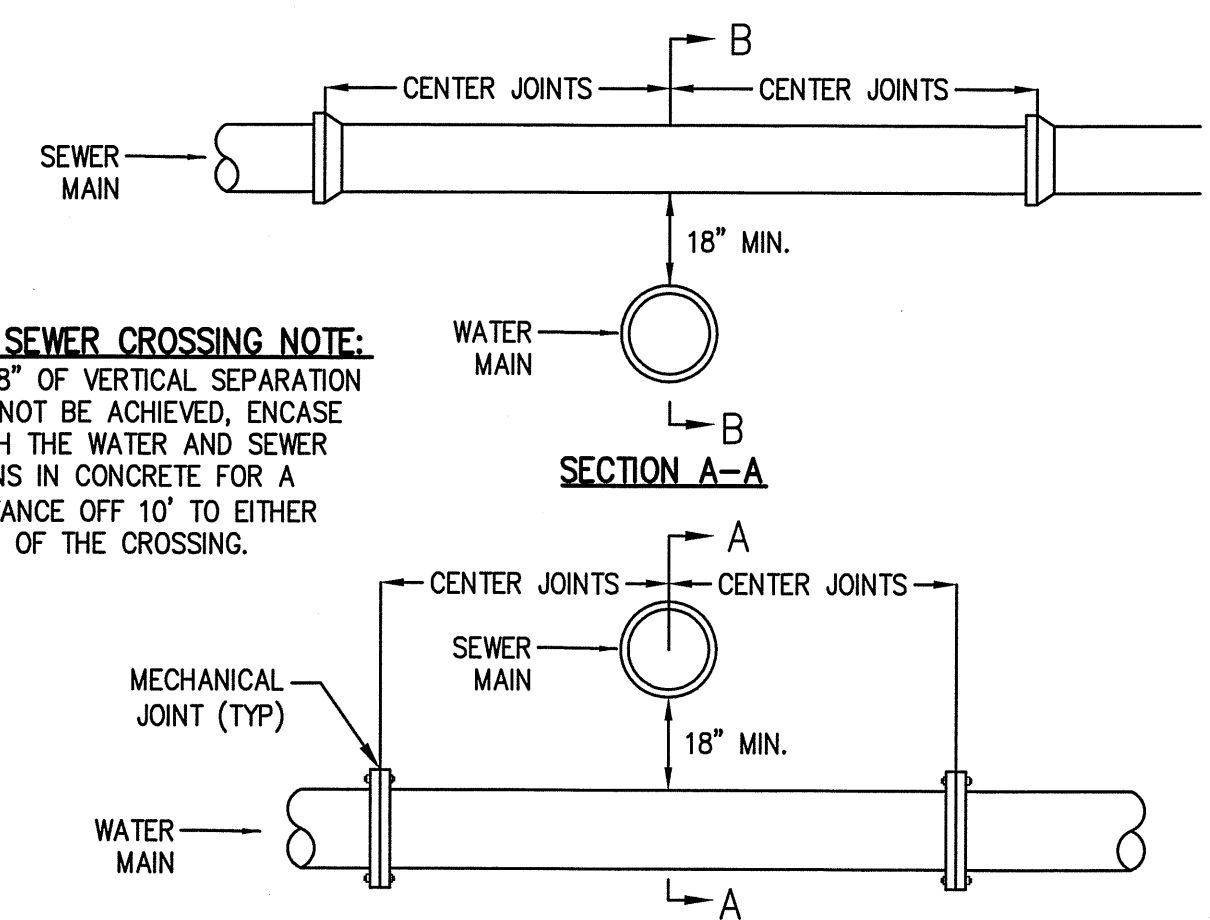


- PAVING NOTES:**
1. PAVEMENT SHALL BE TYPE 1, CLASS 1 BITUMINOUS CONCRETE
 2. PAVEMENT THICKNESS AFTER ROLLING
- SUBSOIL NOTE:**
- SUBSOILS TO BE INSPECTED PRIOR TO INSTALLATION OF PAVEMENT SUBBASE. IF UNCOMPACTED FILL OR UNSUITABLE SOIL IS PRESENT IT SHALL BE REMOVED TO UNDISTURBED NATIVE SOIL AND REPLACED WITH STRUCTURAL FILL COMPACTED TO 95% R.C.

TYPICAL PAVEMENT SECTION
(NOT TO SCALE)

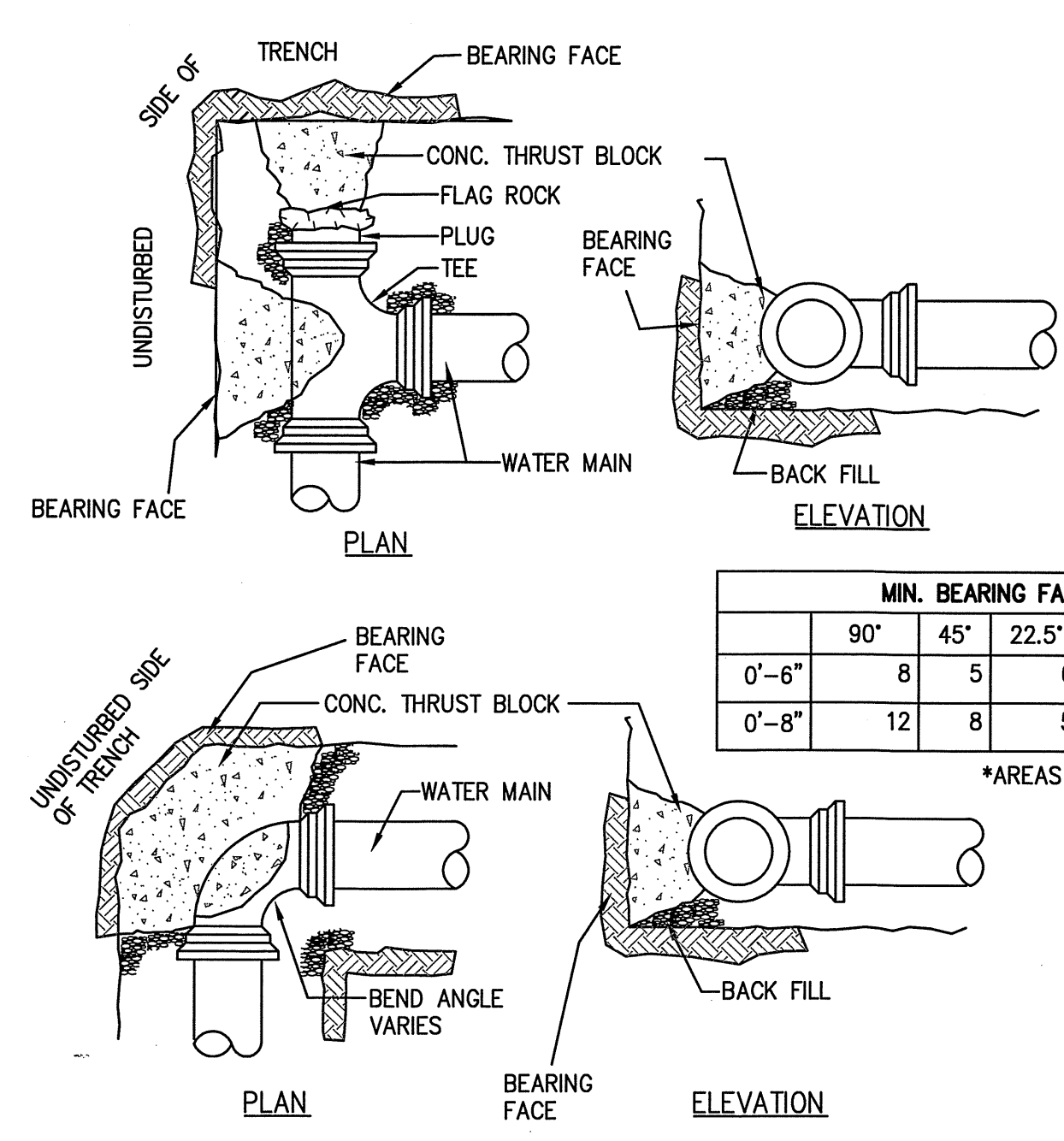


VERTICAL GRANITE CURB
(NOT TO SCALE)



- WATER/SEWER CROSSING NOTE:**
1. IF 18" OF VERTICAL SEPARATION CANNOT BE ACHIEVED, ENCASE BOTH THE WATER AND SEWER MAINS IN CONCRETE FOR A DISTANCE OFF 10' TO EITHER SIDE OF THE CROSSING.

WATER/SEWER CROSSING DETAIL
(NOT TO SCALE)

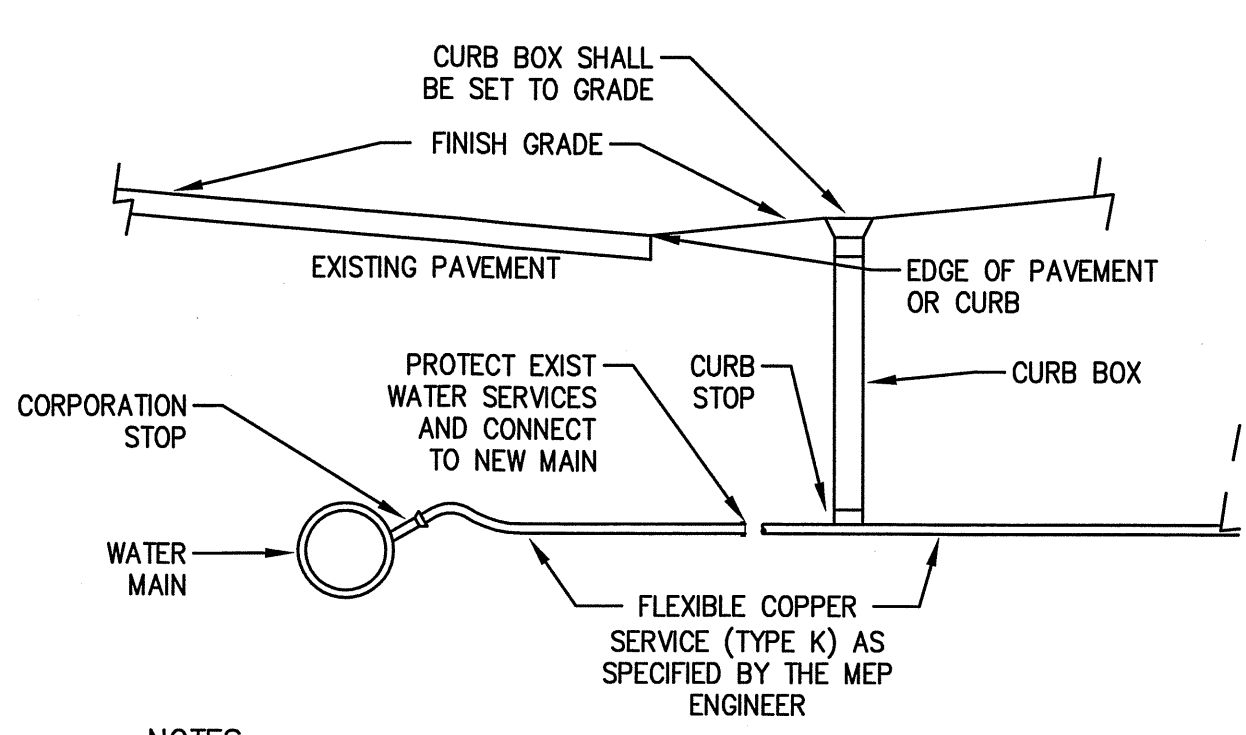


MIN. BEARING FACE AREAS FOR THRUSTBLOCKS							
	90°	45°	22.5°	TEES	PLUGS	CAPS	HYDRANTS
0'-6"	8	5	6	4	4	4	4
0'-8"	12	8	5	6	6	6	6

*AREAS IN SQUARE FEET

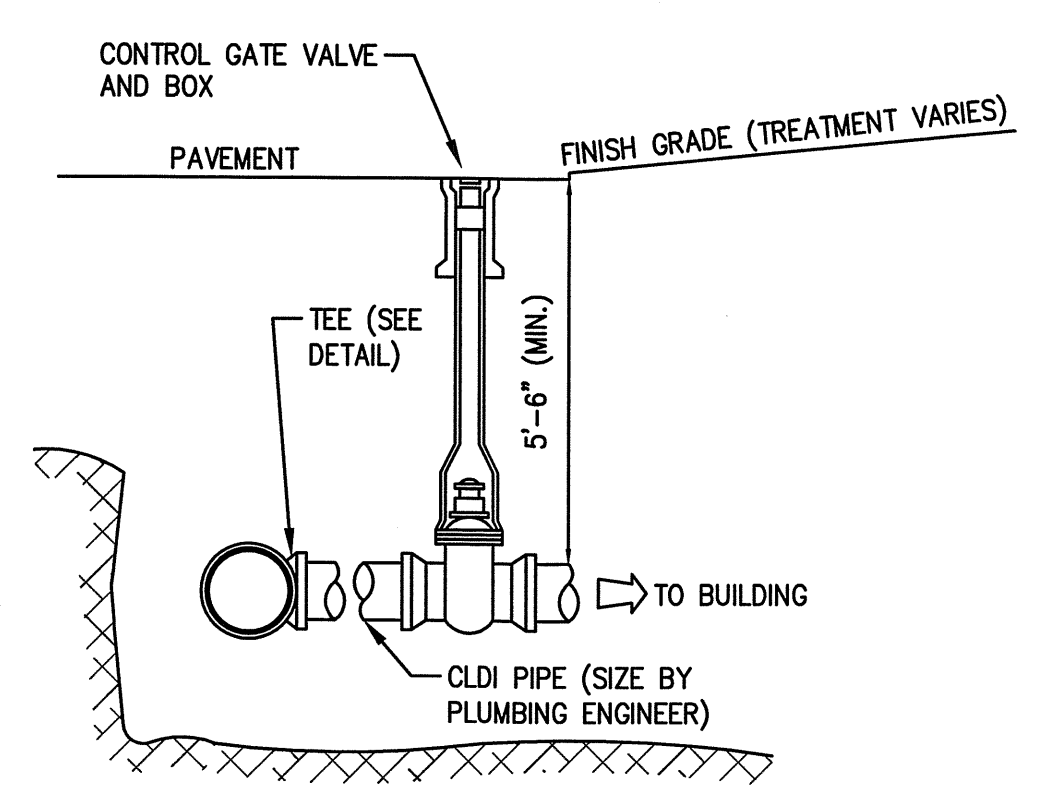
- NOTES:**
1. ALL WATER MAIN FITTINGS, BENDS, TEES, PLUGS ETC. SHALL BE RESTRAINED W/ THRUST BLOCKS EXCEPT WHERE NOTED.
 2. ALL THRUST BLOCKS & COLLARS SHALL BE INSTALLED SO THAT THEY BEAR AGAINST UNDISTURBED EARTH.
 3. MINIMUM COMPRESSIVE STRENGTH OF THRUST BLOCK CONCRETE SHALL BE 3,000 P.S.I.
 4. KEEP CONCRETE CLEAR OF MECHANICAL JOINTS.

THRUST BLOCK DETAIL
(NOT TO SCALE)

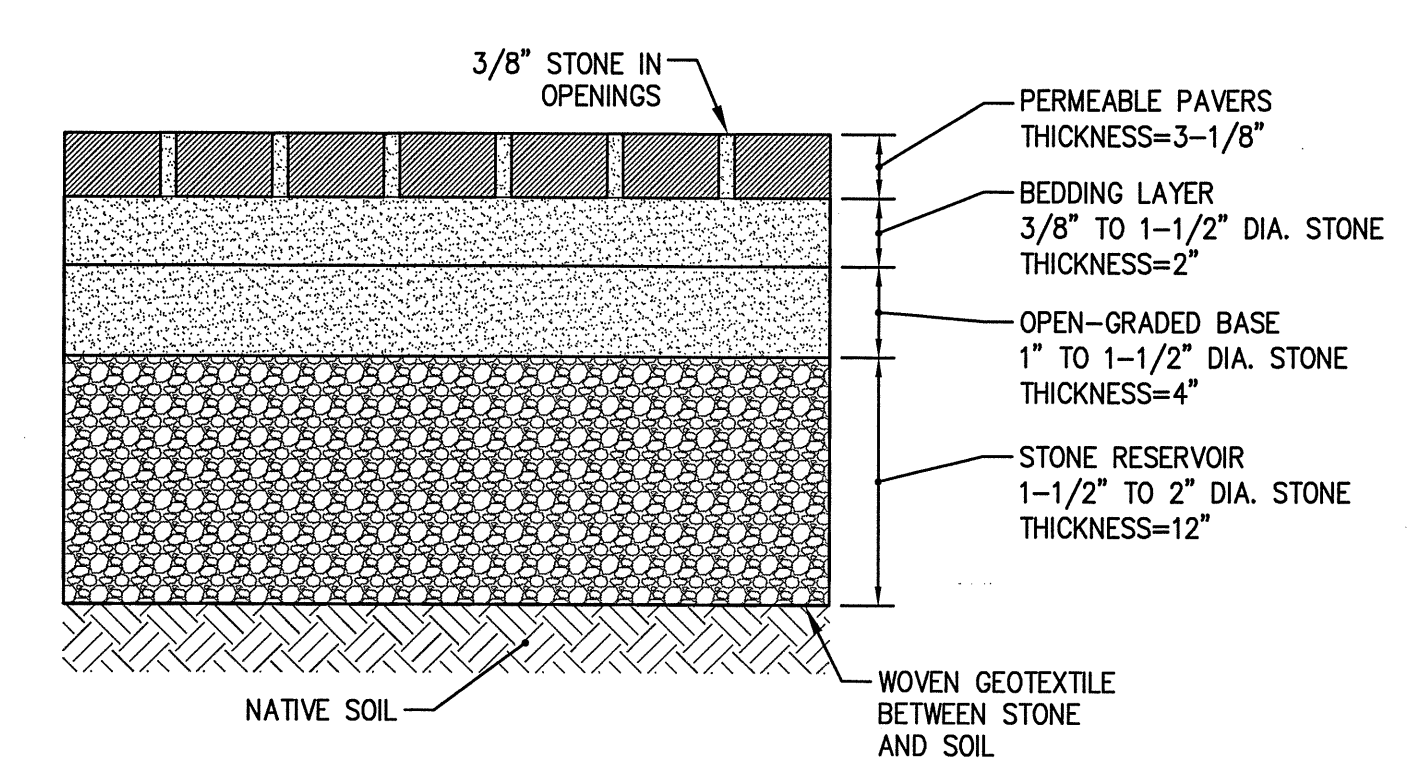


- NOTES:**
1. EXISTING WATER SERVICE SHALL BE SHUT OFF AT EXISTING CURB STOP AND SERVICE LINE CUT AND CAPPED JUST BEYOND CURB STOP.
 2. TAP EXISTING WATER MAIN WITH NEW CORPORATION STOP AND INSTALL NEW CURB STOP AND CURB BOX WITHIN EXISTING SIDEWALK
 3. SAW CUT EXISTING PAVEMENT AND SIDEWALK TO MINIMIZE REPAIRS. REPLACE ASPHALT PAVEMENT AND CONCRETE SIDEWALK TO MATCH EXISTING ELEVATIONS.

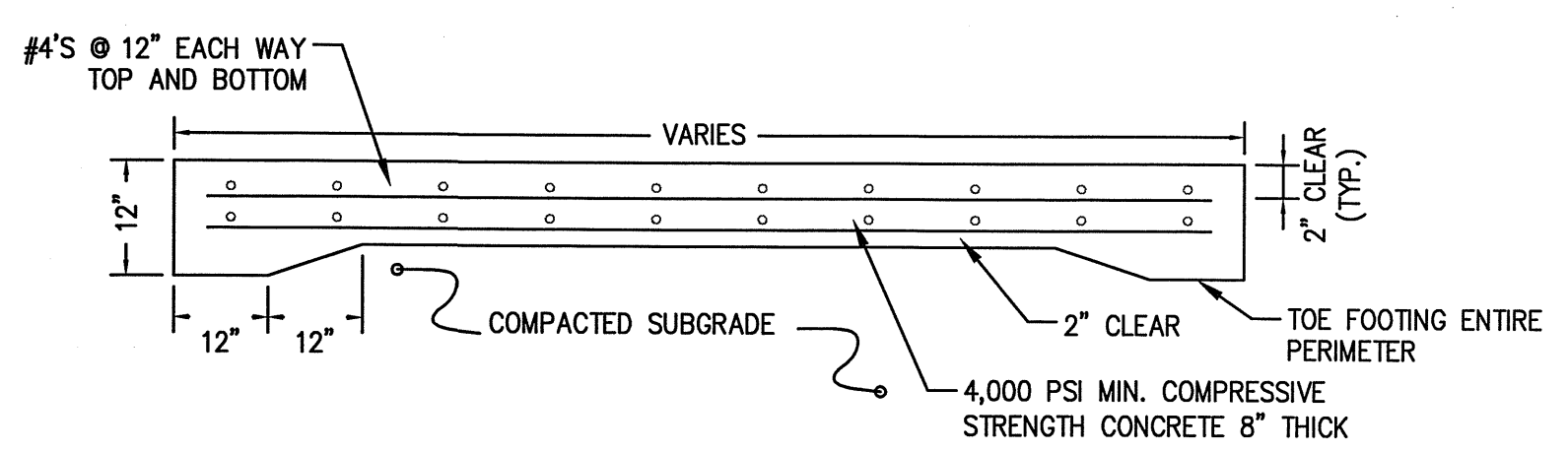
WATER SERVICE CORPORATION
(NOT TO SCALE)



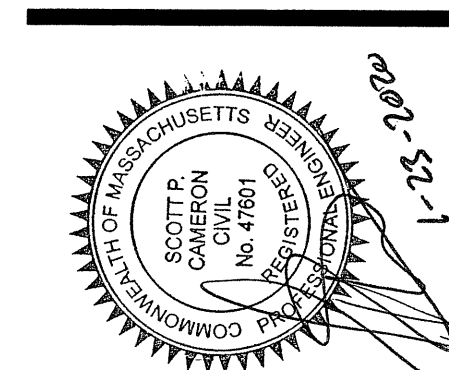
GATE VALVE DETAIL
(NOT TO SCALE)



UNIT PAVER DETAIL
(NOT TO SCALE)



CONCRETE DUMPSTER PAD
(NOT TO SCALE)



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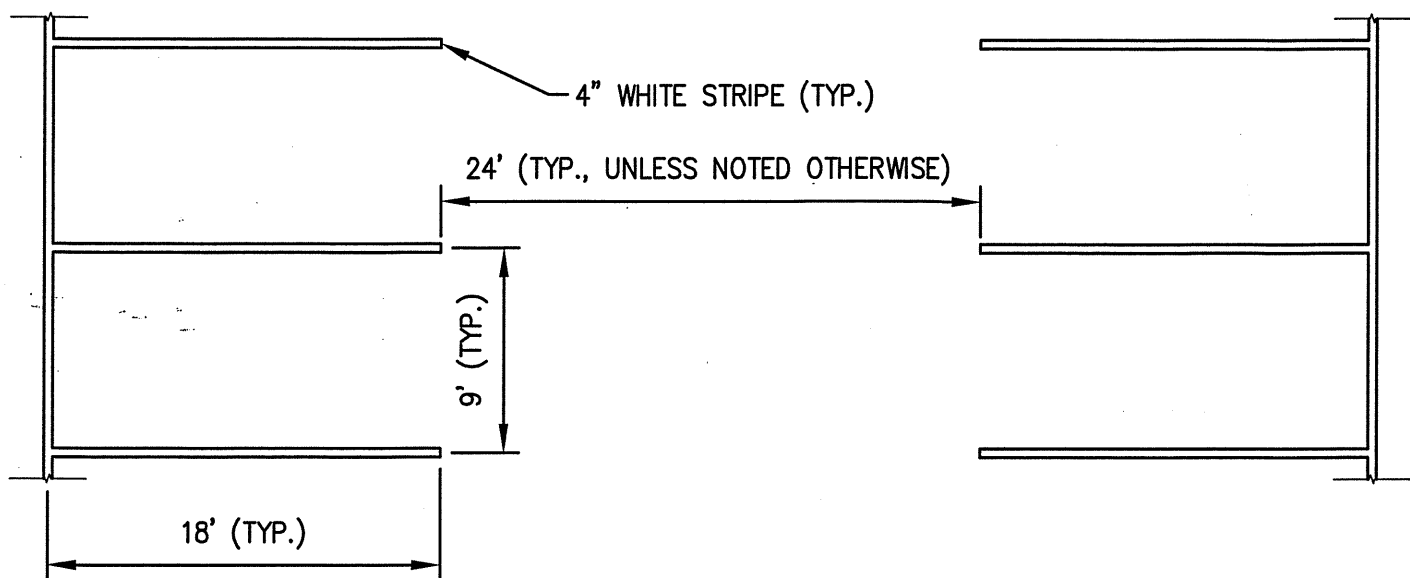
project name:
3 BOSTON WAY
3 BOSTON WAY
NEWBURYPORT, MA

sheet title:
CONSTRUCTION DETAILS I

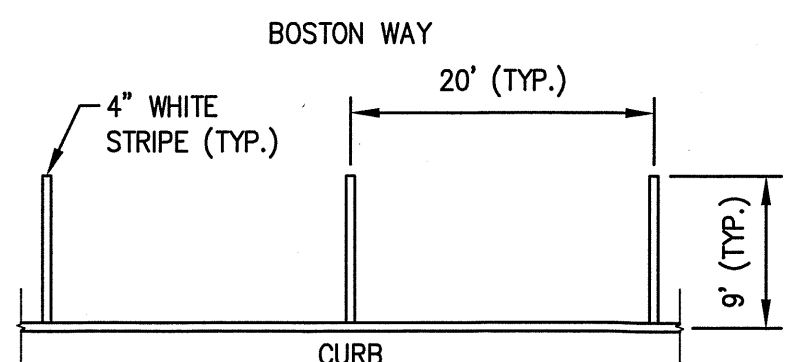
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revisions:
□ 12-20-19 - NOI SUBMISSION
□ 1-23-20 - PLANNING BD. REVIEW

dr. chk.
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job number: MCG-3856

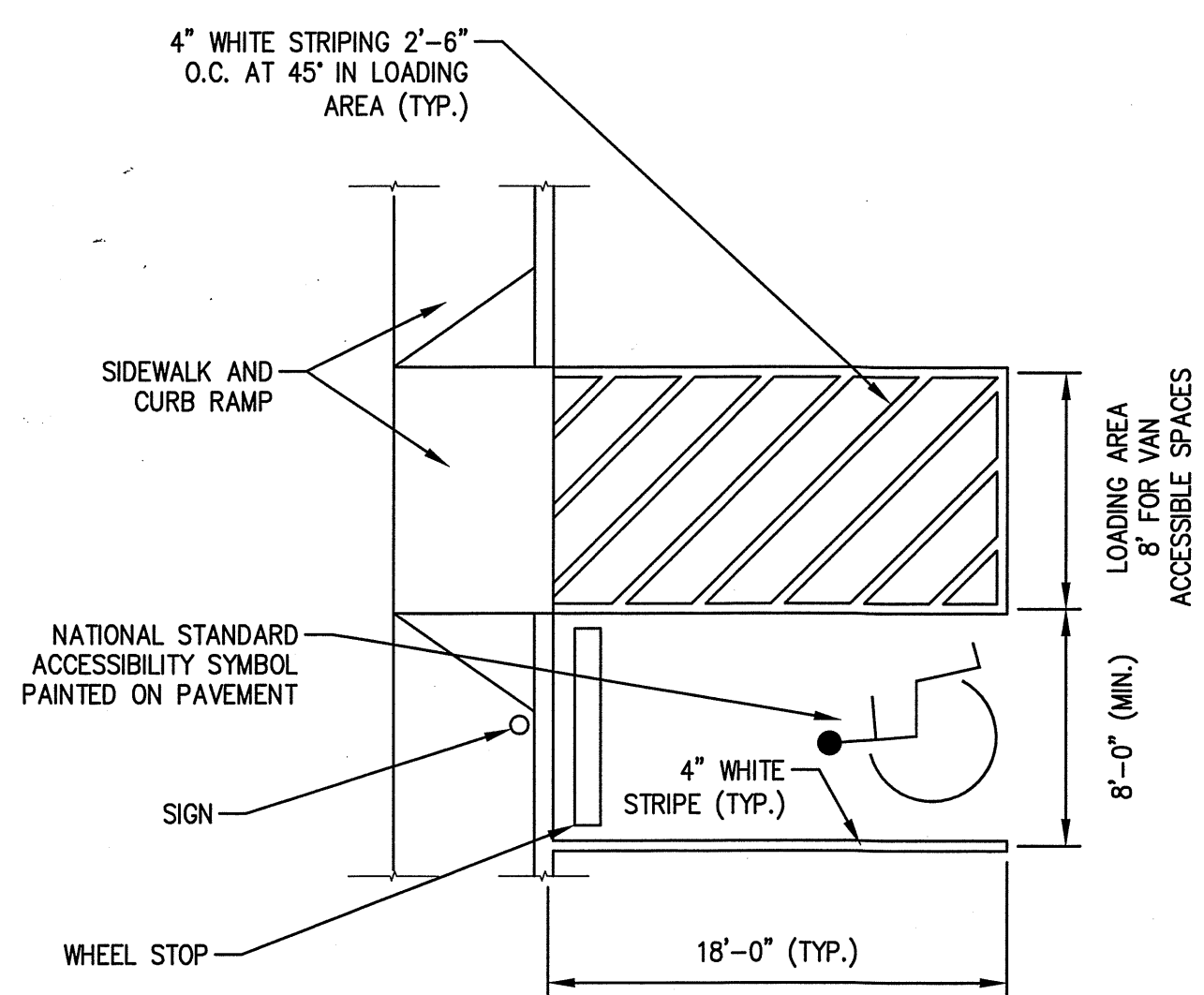


OFF-STREET SPACES



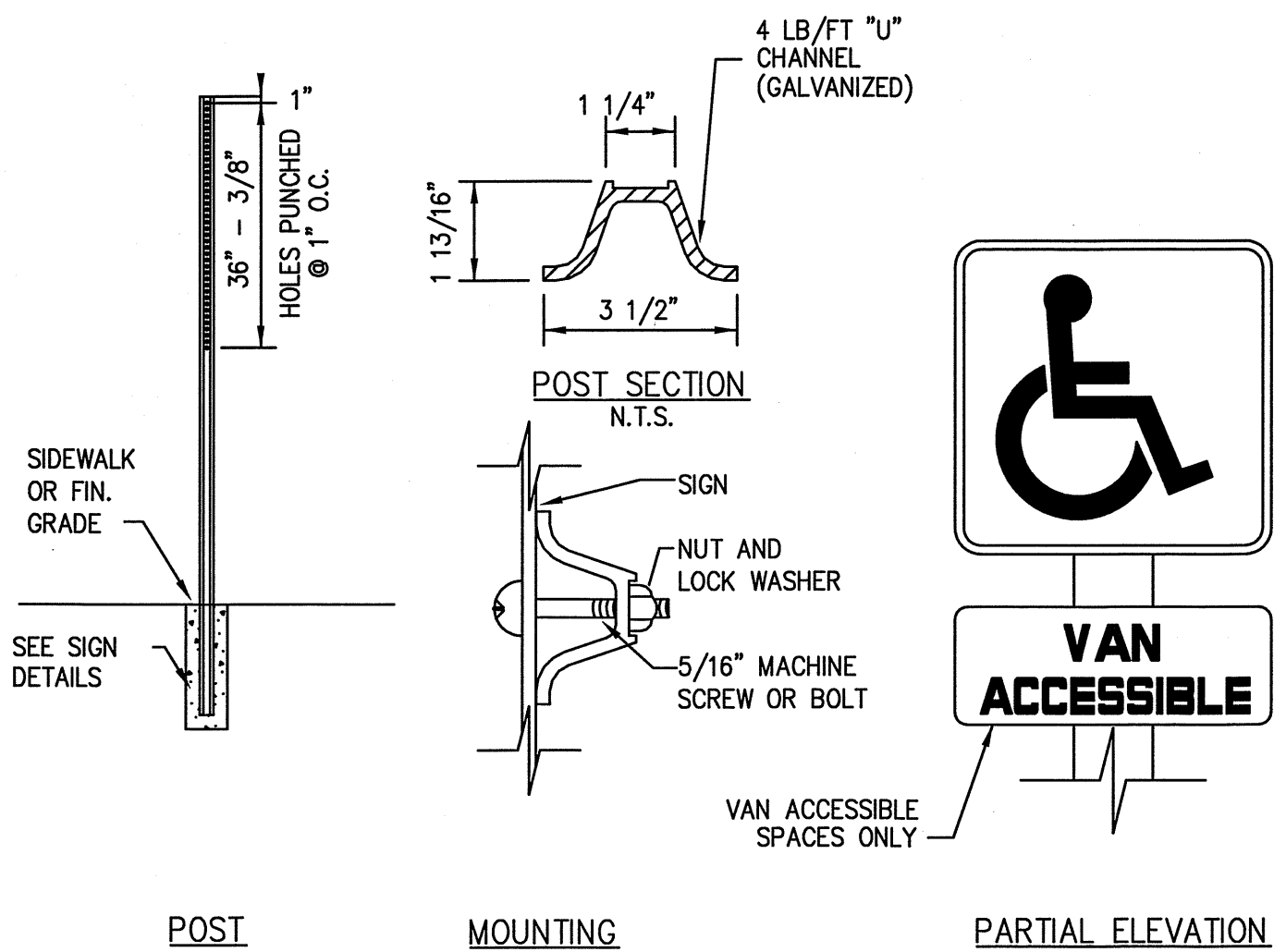
ON-STREET SPACES

PARKING SPACE STRIPING
(NOT TO SCALE)

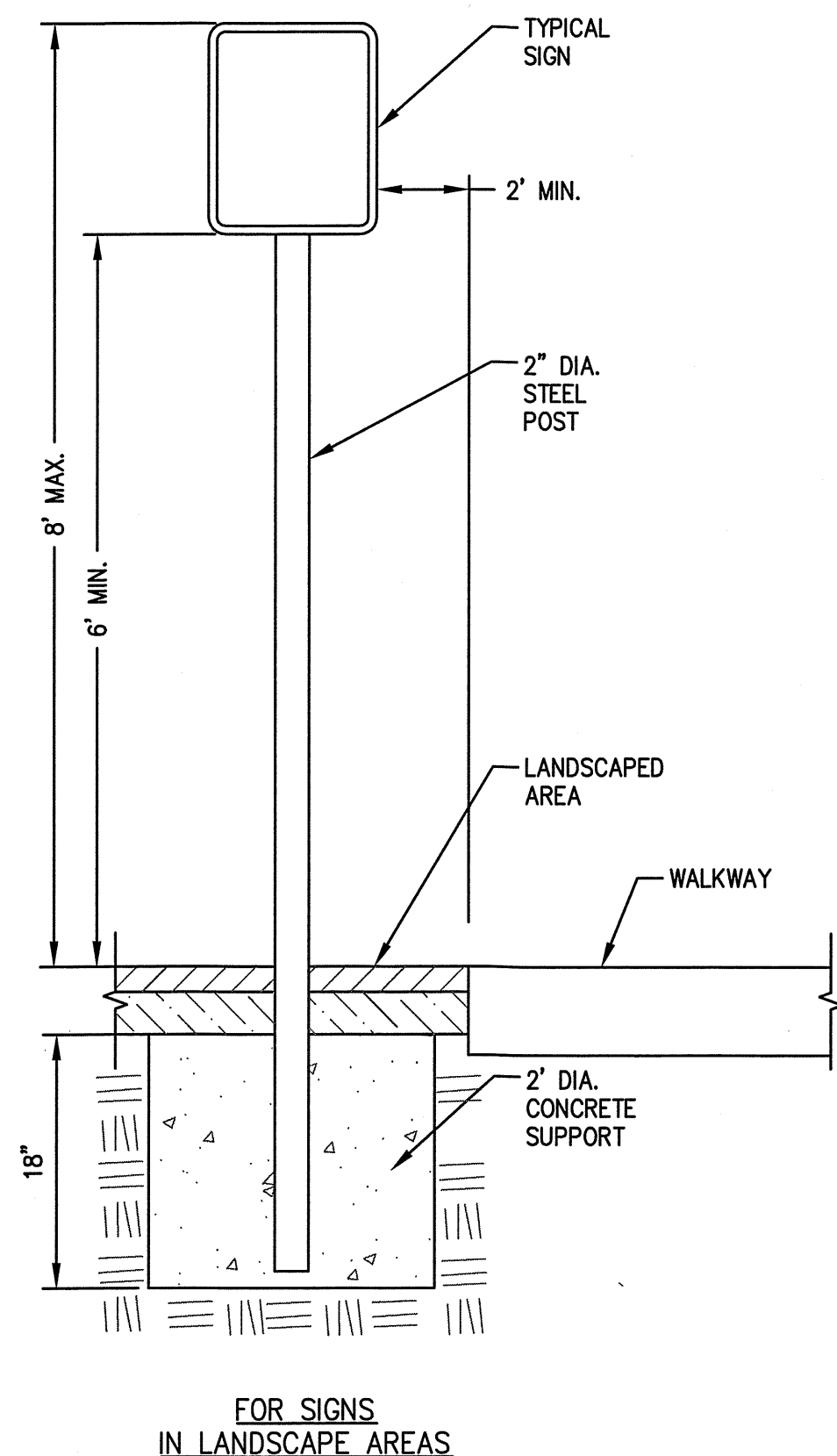


NOTE:
1. PAVEMENT MAX SLOPE 2% IN ALL DIRECTIONS.

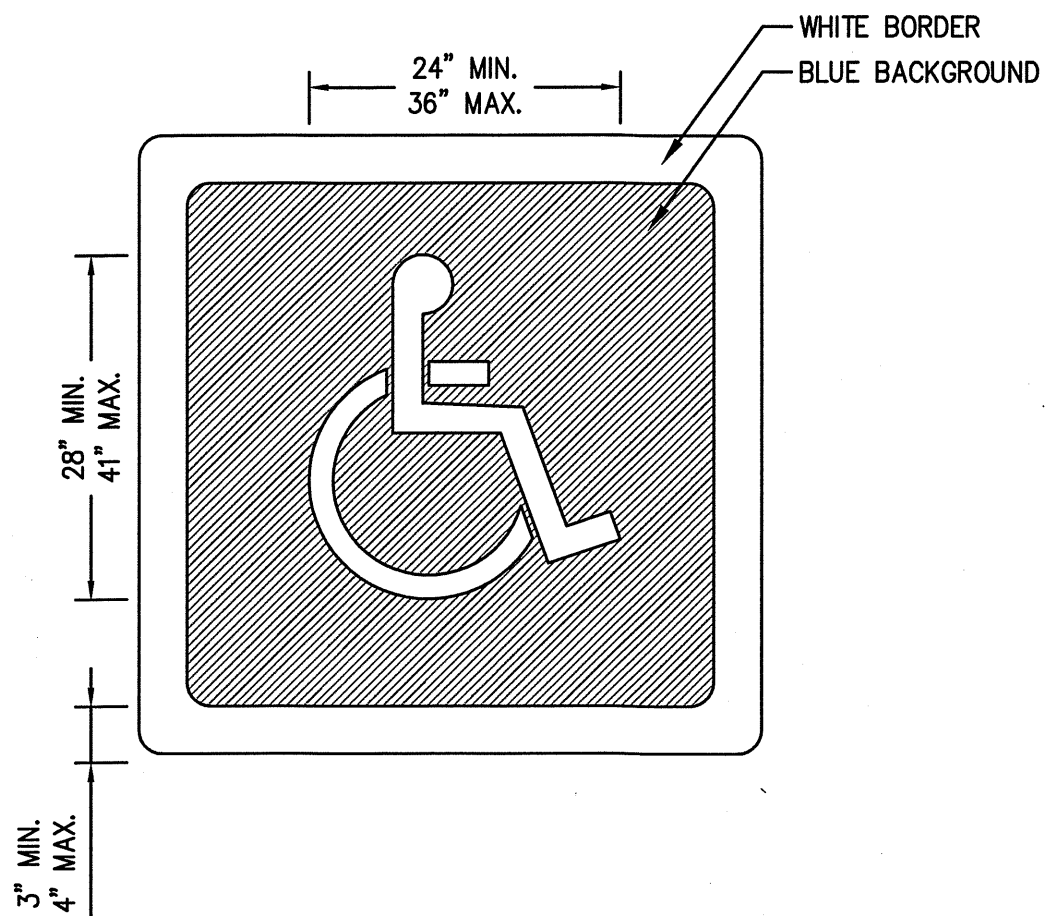
ACCESSIBLE PARKING SPACE
(NOT TO SCALE)



ACCESSIBLE PARKING SPACE SIGN
(NOT TO SCALE)

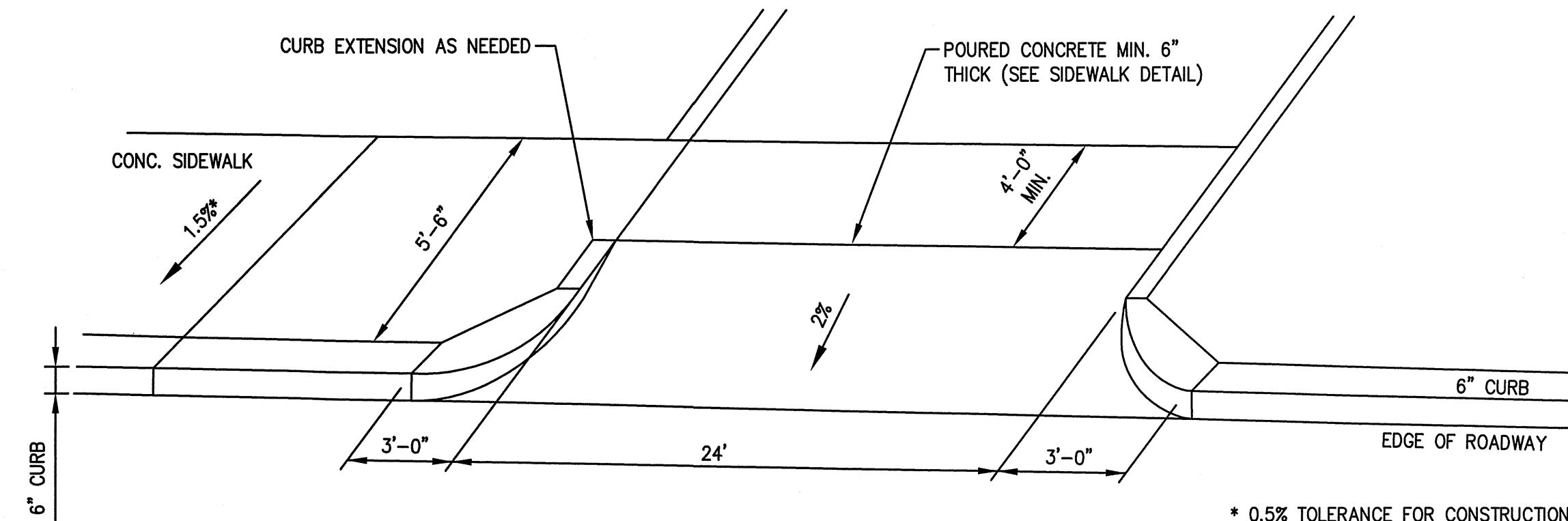


SIGN POST
(NOT TO SCALE)

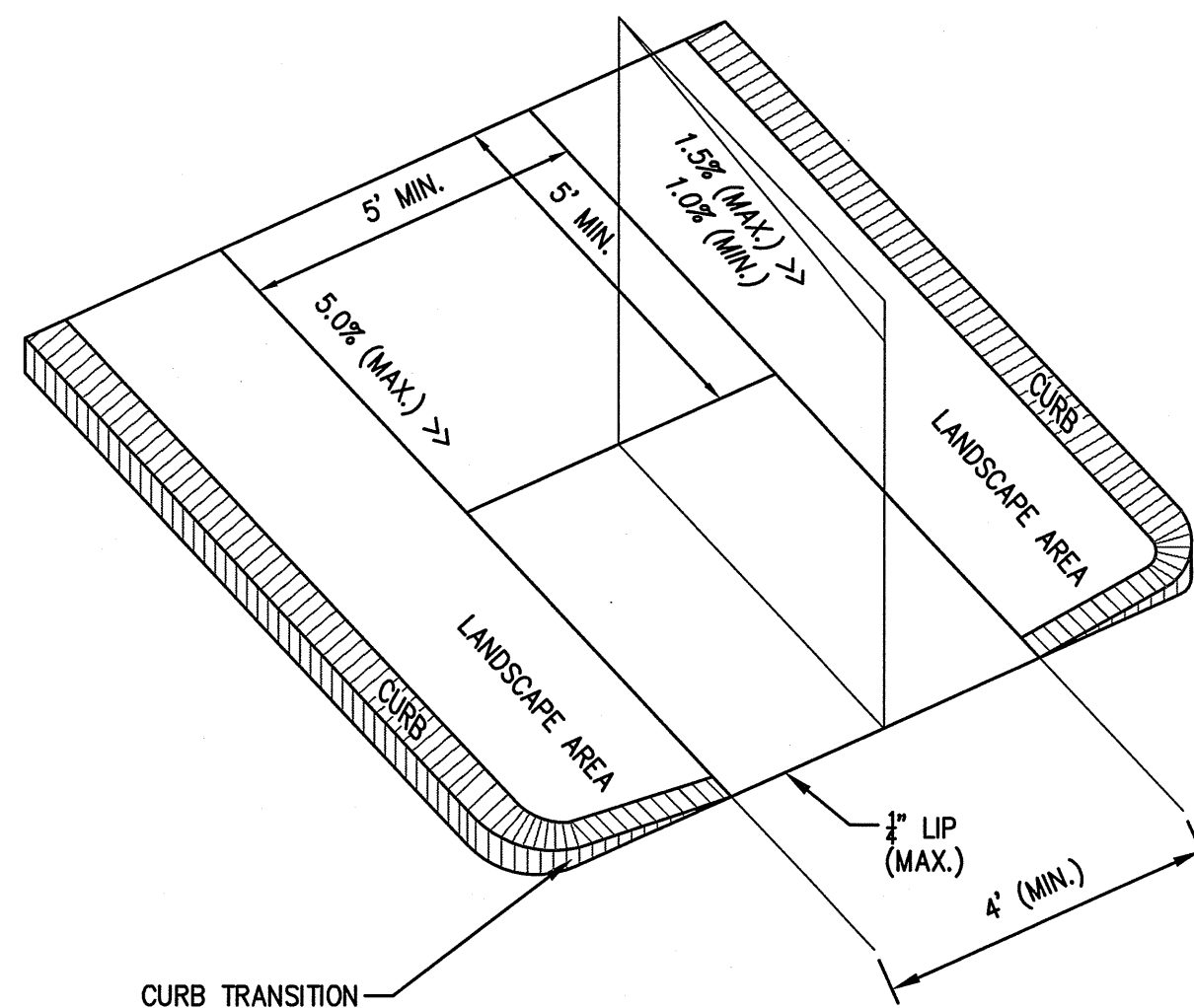


NOTE:
1. THE STROKE WIDTH OF THE PAINTED SYMBOL AND THE WHITE BORDER MUST BE A MINIMUM THICKNESS OF 3\"/>

INTERNATIONAL ACCESSIBILITY PARKING SPACE SYMBOL
(NOT TO SCALE)

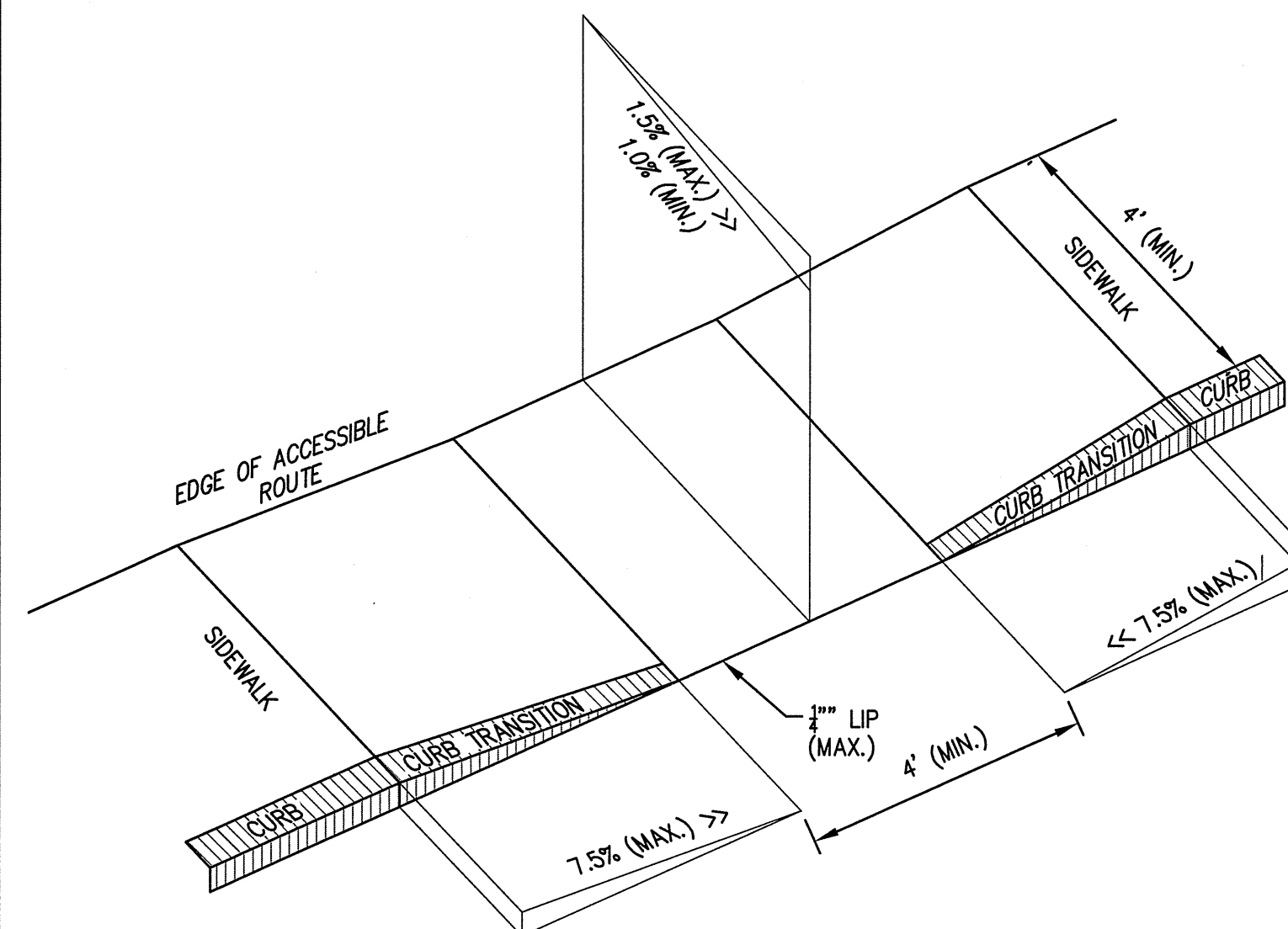


DRIVEWAY APRON
(NOT TO SCALE)



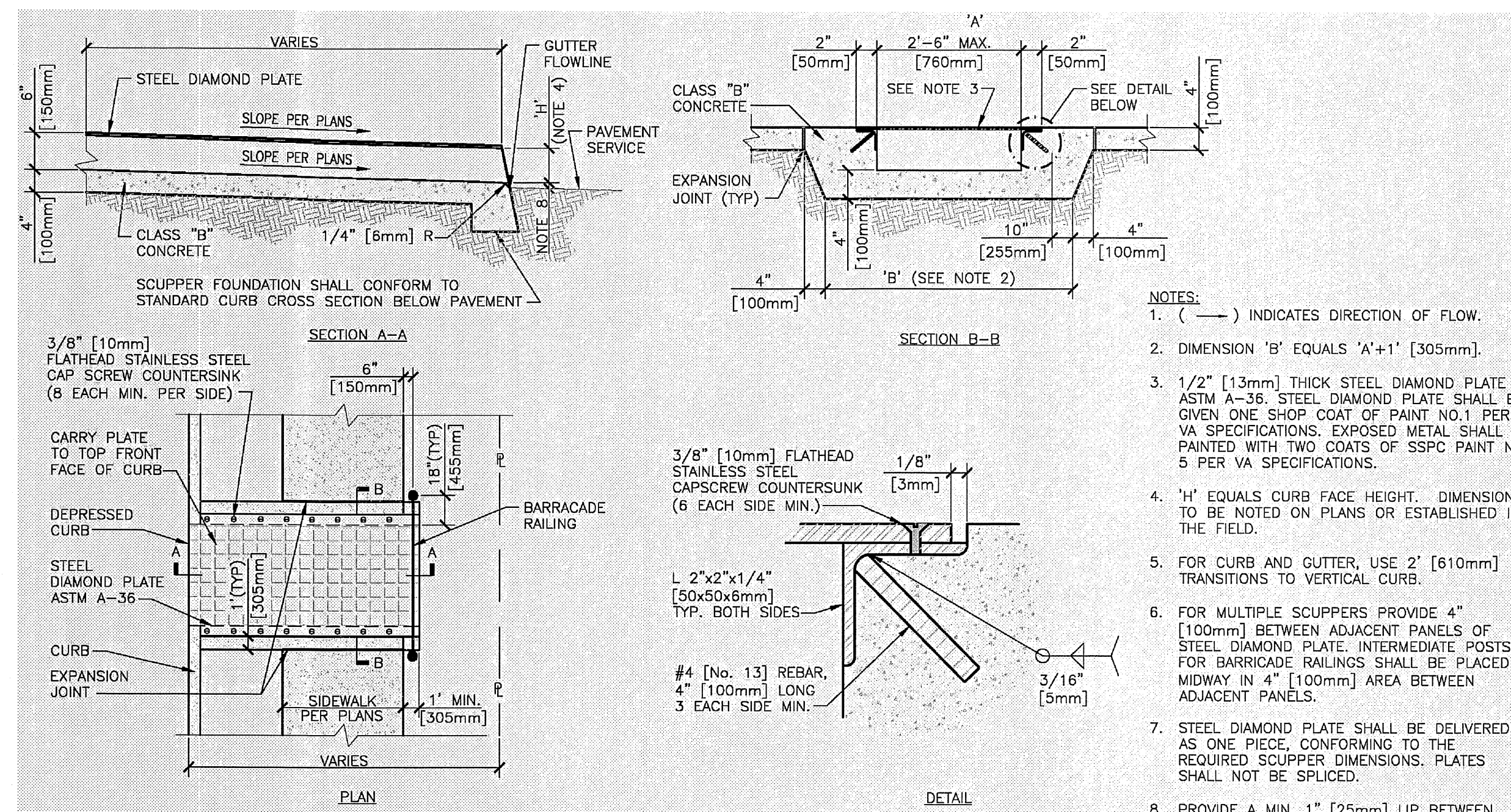
ACCESSIBLE CURB RAMP (TYPE 'A')
(NOT TO SCALE)

NOTES:
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5% (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
5. CURB TREATMENT VARIES. SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5'x5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.



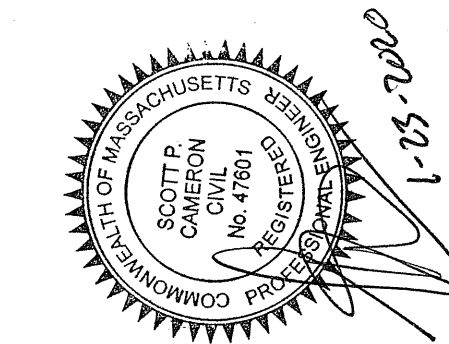
ACCESSIBLE CURB RAMP (TYPE 'B')
(NOT TO SCALE)

NOTES:
1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5% (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
5. CURB TREATMENT VARIES. SEE PLANS FOR CURB TYPE.
6. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.



SIDEWALK SCUPPER
(NOT TO SCALE)

NOTES:
1. (---) INDICATES DIRECTION OF FLOW.
2. DIMENSION 'B' EQUALS 'A+1' [305mm].
3. 1/2\"/>



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sheet title:
CONSTRUCTION
DETAILS II

project name:
3 BOSTON WAY
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□ 1-23-20 - PLANNING BD. REVIEW
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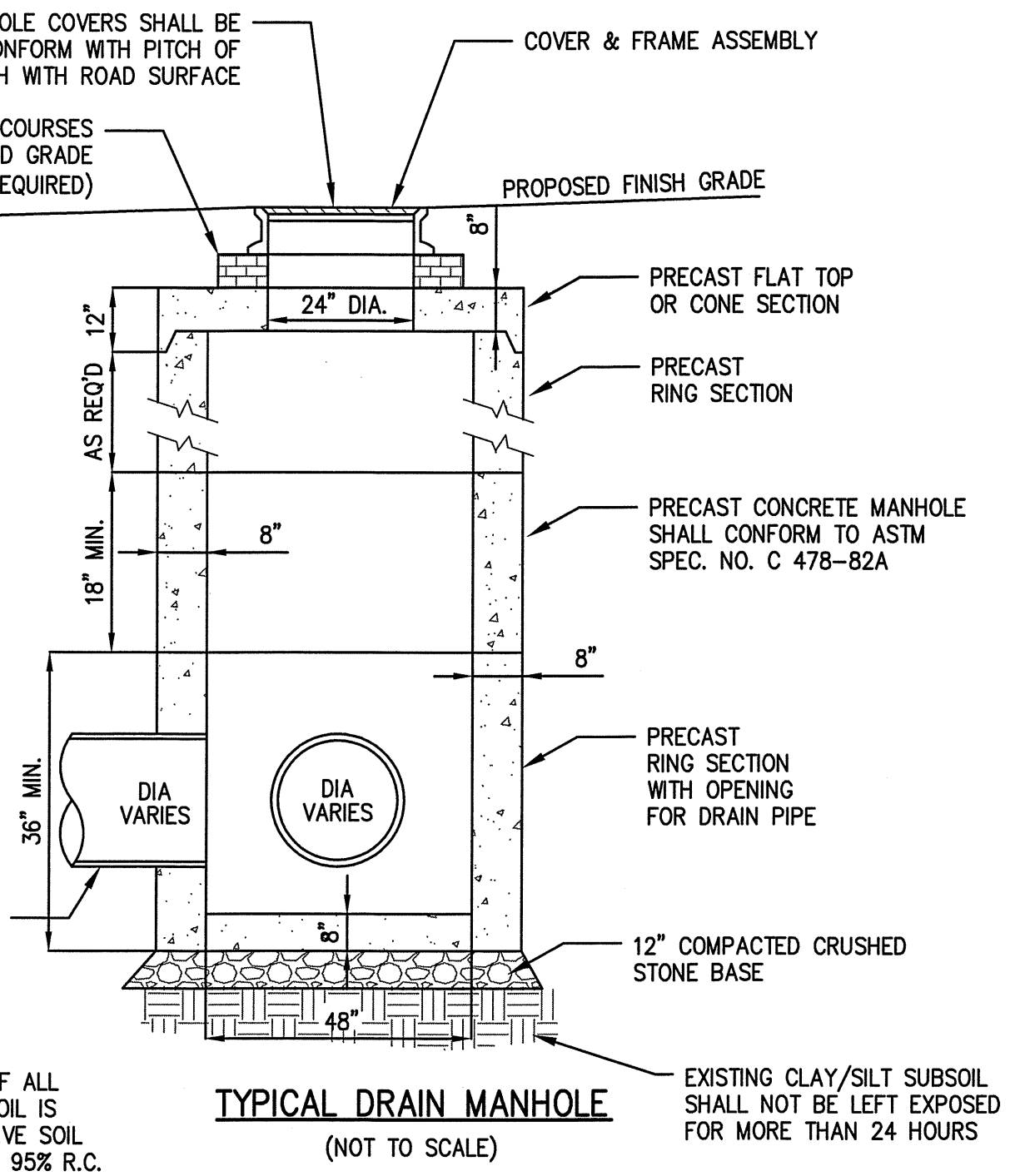
ALL DRAIN MANHOLE COVERS SHALL BE INSTALLED TO CONFORM WITH PITCH OF ROADWAY AND FLUSH WITH ROAD SURFACE

FRAME AND COVER NOTE:

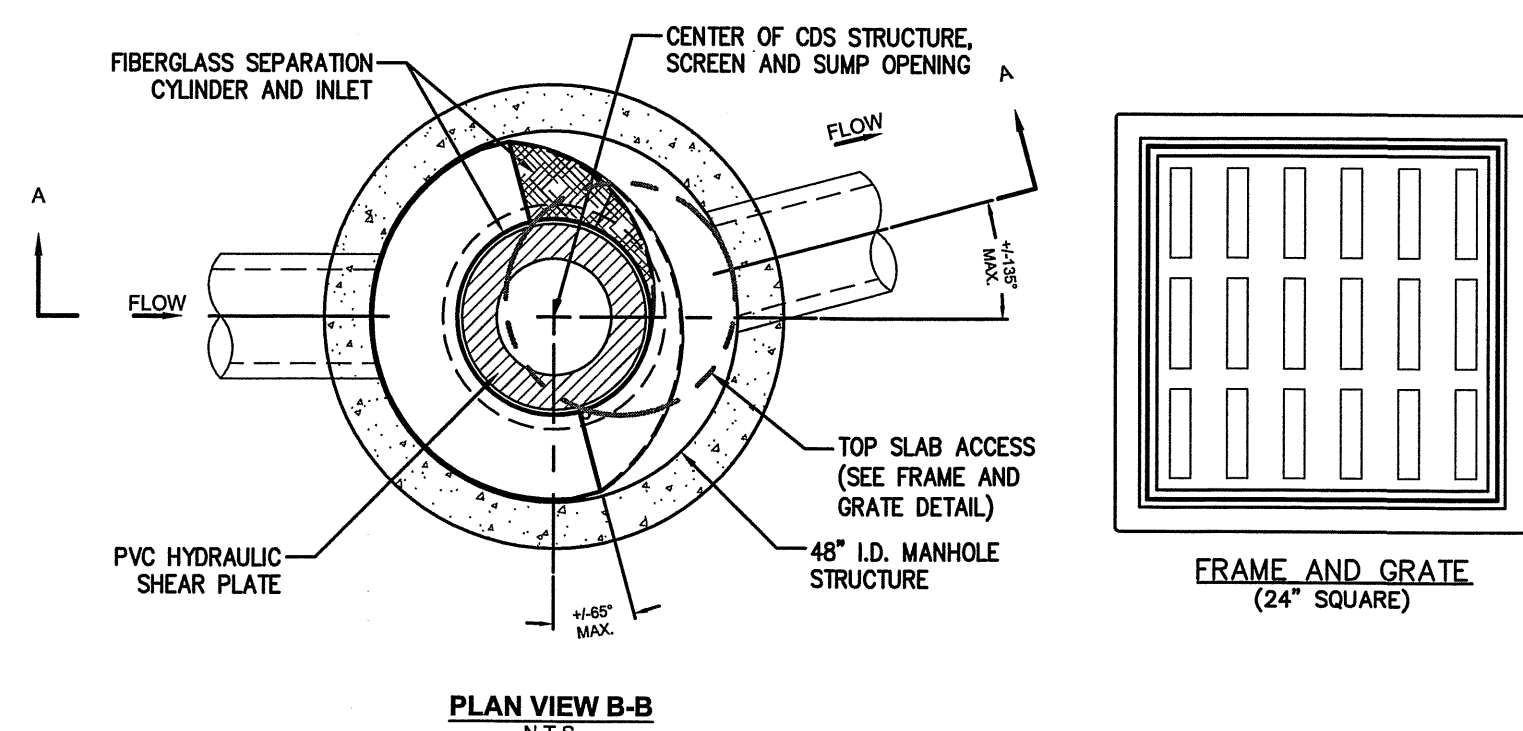
- 4" FRAME AND COVER SHALL BE NEENAH FOUNDRY MODEL No. R-1706-1 OR APPROVED EQUIVALENT.
- 8" FRAME AND COVER SHALL BE NEENAH FOUNDRY MODEL No. R-1670-A OR APPROVED EQUIVALENT.

SUBSOIL NOTE:

SUBSOILS TO BE INSPECTED PRIOR TO INSTALLATION OF ALL STRUCTURES. IF UNCOMPACTED FILL OR UNSUITABLE SOIL IS PRESENT IT SHALL BE REMOVED TO UNDISTURBED NATIVE SOIL AND REPLACED WITH STRUCTURAL FILL COMPACTED TO 95% R.C.

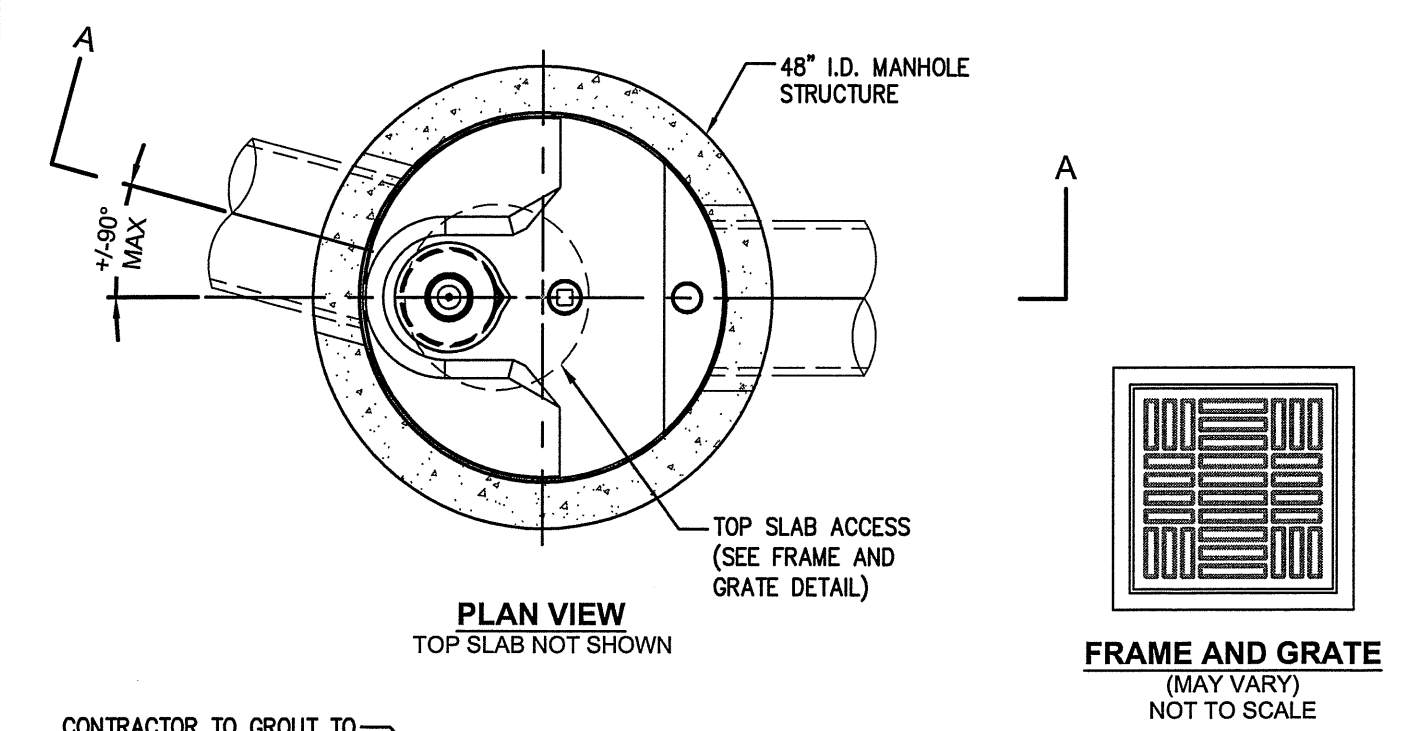


TYPICAL DRAIN MANHOLE
(NOT TO SCALE)



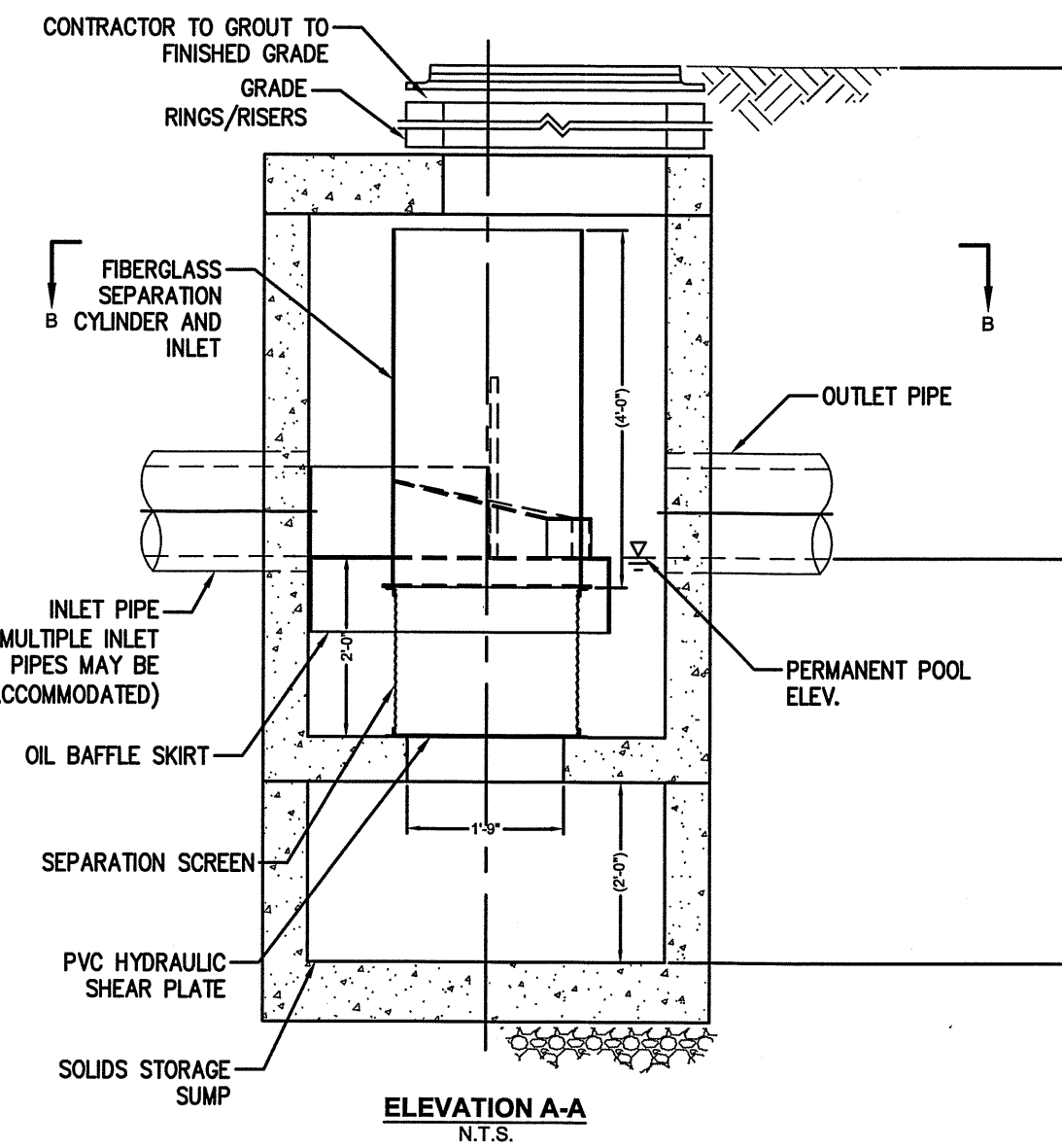
PLAN VIEW B-B
N.T.S.

FRAME AND GRATE
(24" SQUARE)



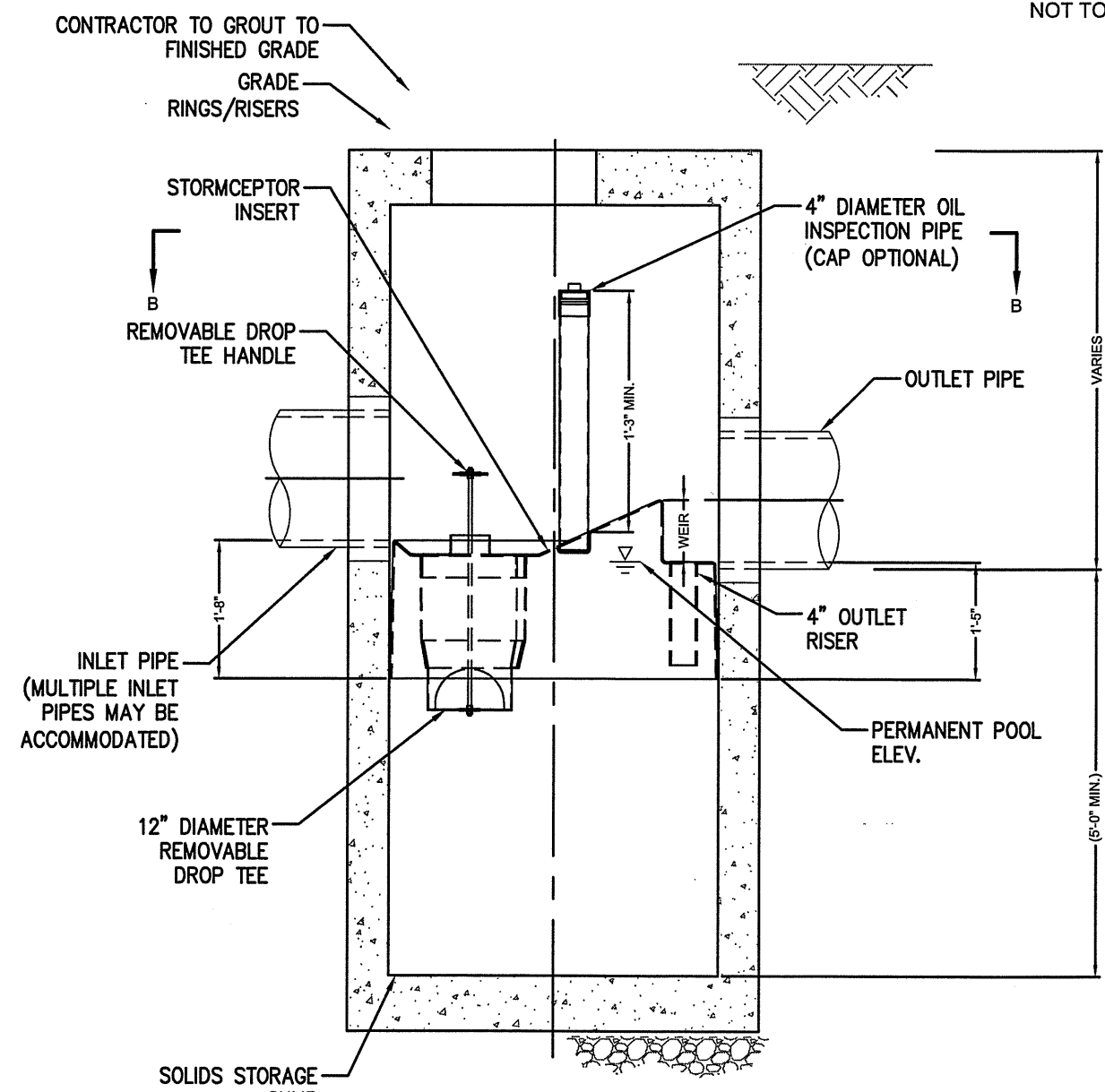
PLAN VIEW
TOP SLAB NOT SHOWN

FRAME AND GRATE
(MAY VARY)
NOT TO SCALE



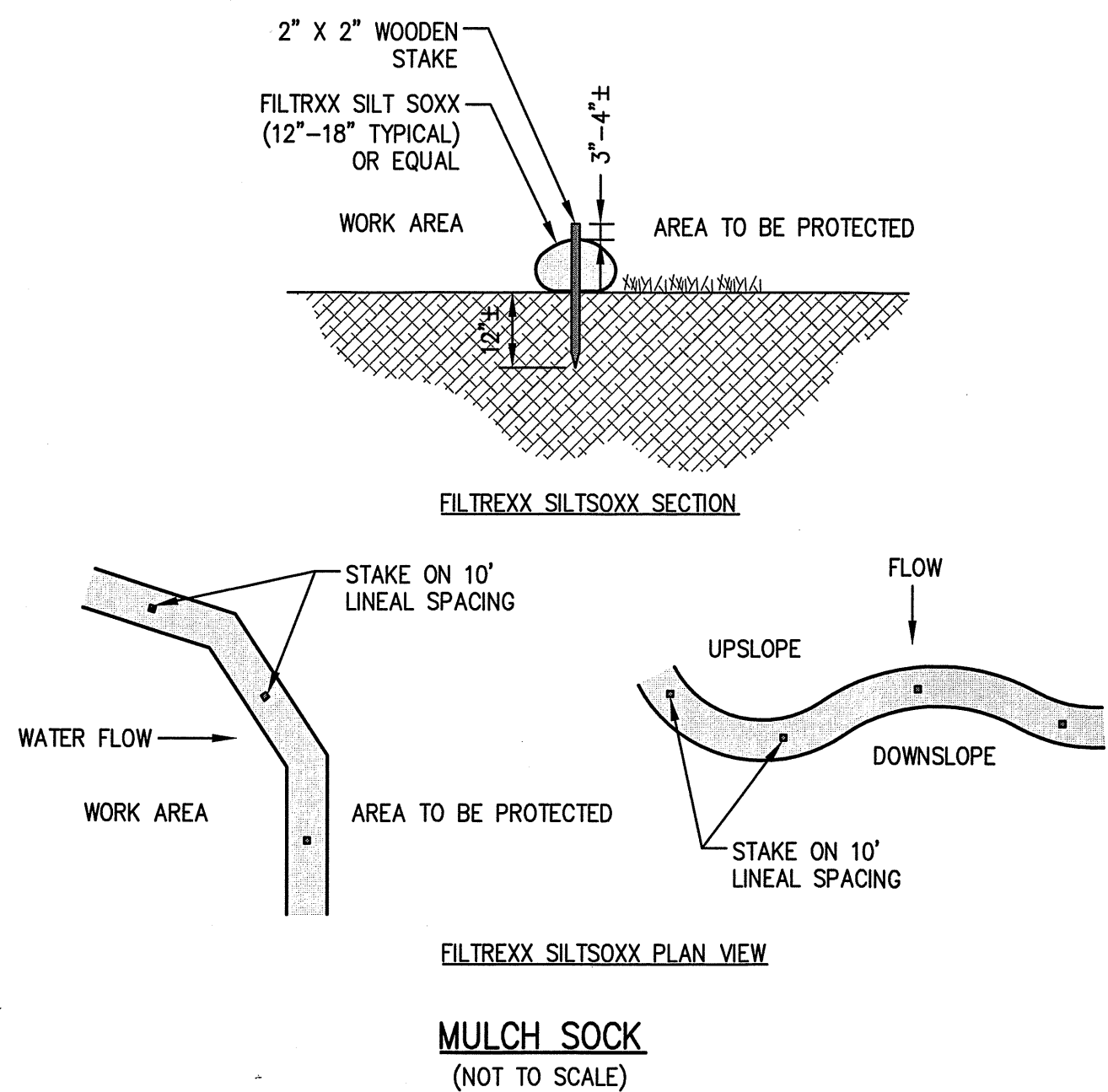
ELEVATION A-A
N.T.S.

CONTECH CDS 2015-4-C
(NOT TO SCALE)



SECTION A-A

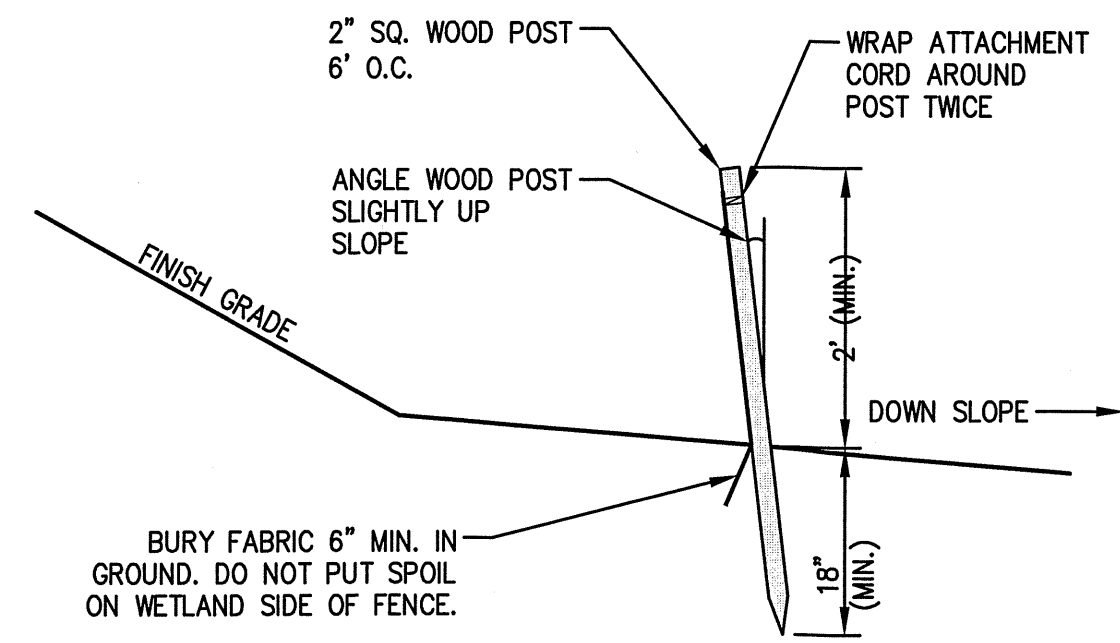
STORMCEPTOR STC450i
(NOT TO SCALE)



FILTRXX SILT SOCK SECTION

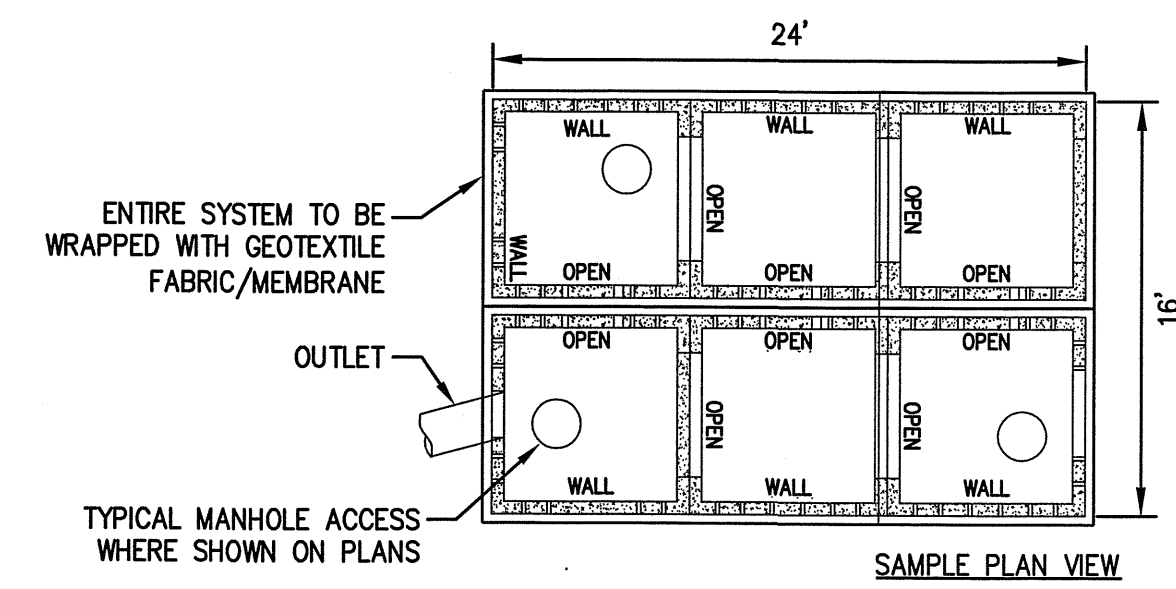
FILTRXX SILT SOCK PLAN VIEW

MULCH SOCK
(NOT TO SCALE)



SILT FENCE
(NOT TO SCALE)

NOTES
SILT FENCE TO BE INSTALLED AROUND LIMIT OF WORK TO PREVENT OFFSITE MIGRATION OF SEDIMENT DURING CONSTRUCTION.



SAMPLE PLAN VIEW

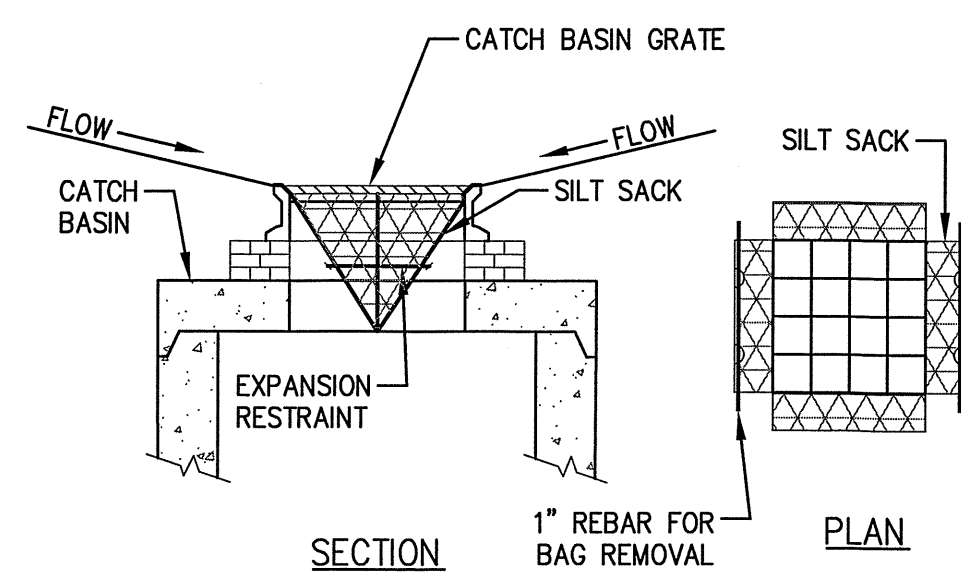
SAMPLE CROSS SECTION

SUBSURFACE DETENTION SYSTEM (RETAIN-IT MODULES)
(NOT TO SCALE)

STORM EVENTS
2-YEAR ELEVATION = 15.80
10-YEAR ELEVATION = 16.78
100-YEAR ELEVATION = 18.27

SILT SACK NOTES:

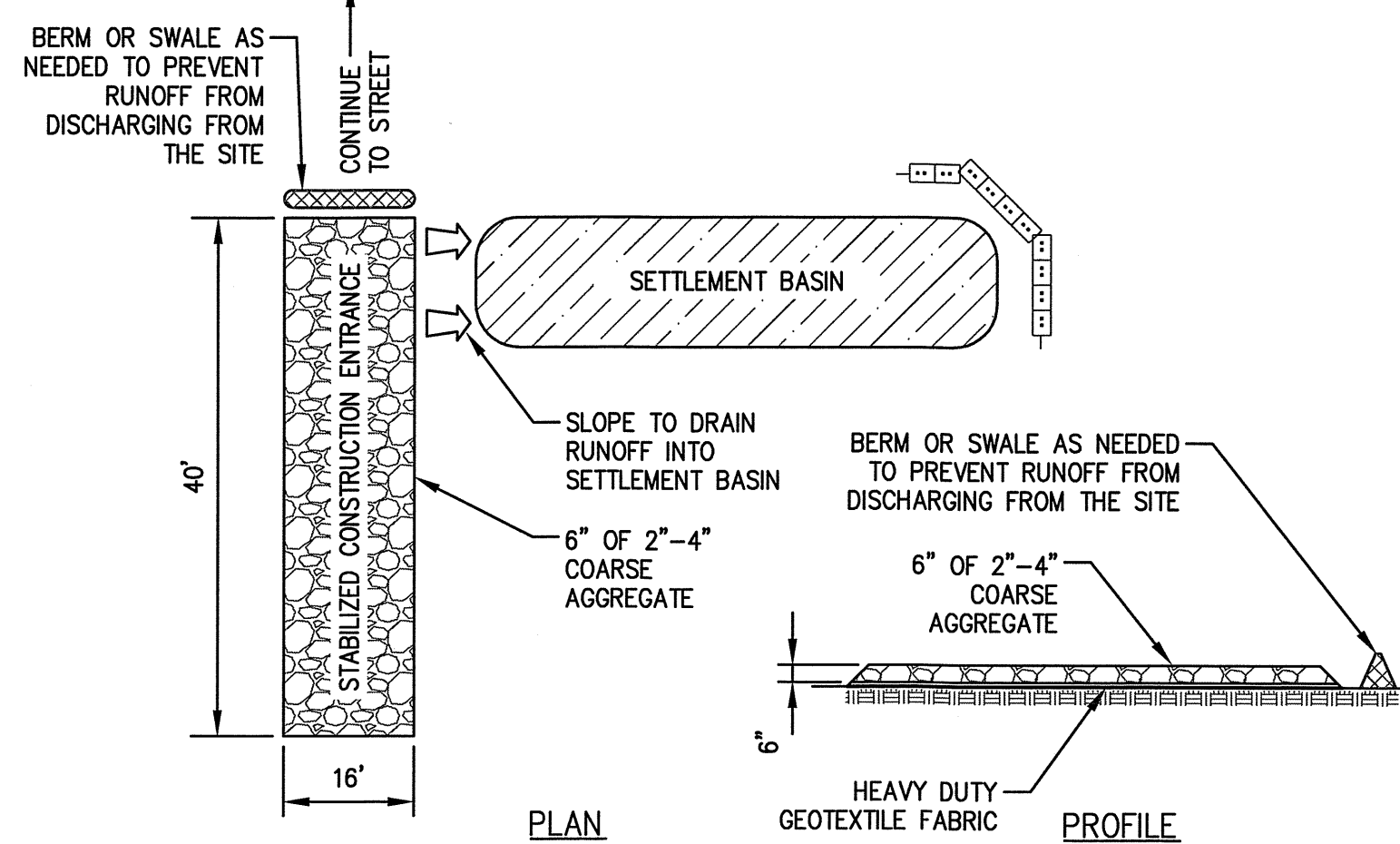
- INSTALL SILT SACKS IN EXISTING CATCH BASINS. INSTALL SILT SACKS IN NEW CATCH BASINS AFTER INSTALLATION.
- GRATES TO BE PLACED OVER SILT SACKS.
- SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED WHEN DEPTH OF SEDIMENT IS WITHIN 6" OF GRATE.



SECTION

PLAN

SILT SACK SEDIMENT TRAP
(NOT TO SCALE)



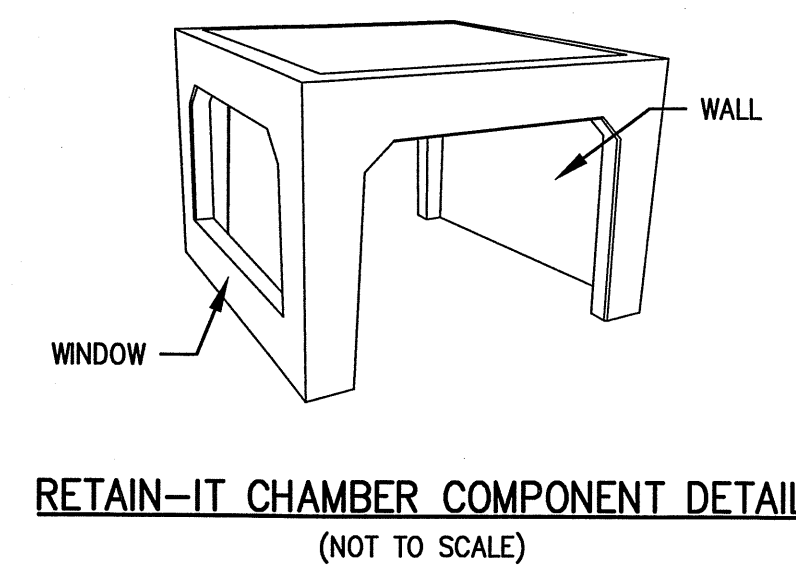
PLAN

PROFILE

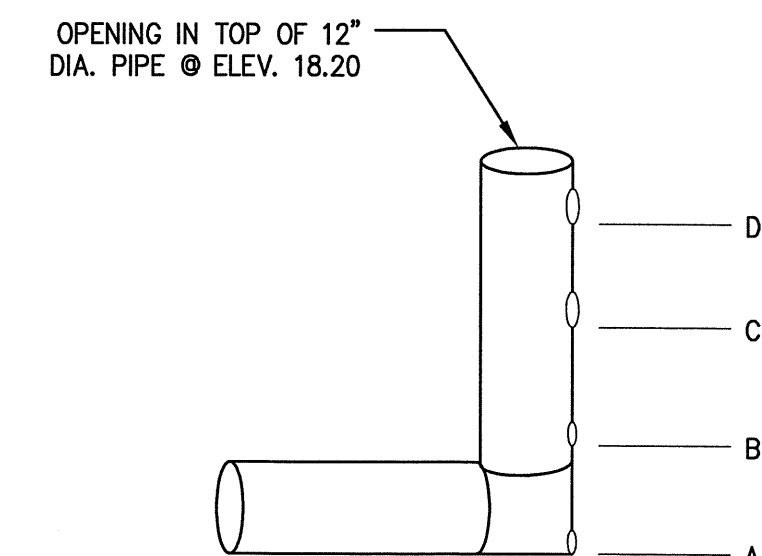
SITE CONSTRUCTION EXIT SPECIFICATIONS FOR BOSTON WAY:

- STONE FOR STABILIZATION CONSTRUCTION ENTRANCE SHALL BE 2"-4" STONE. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 40 FEET.
- THE WIDTH OF THE ENTRANCE SHALL BE NO LESS THAN THE WIDTH OF THE INGRESS OR EGRESS DRIVE, OR 16 FEET, WHICHEVER IS GREATER.
- GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH MINIMUM 1 TO 5 SLOPES THAT CAN BE CROSSED BY VEHICLES CAN BE SUBSTITUTED.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO RIGHTS OF WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT, SEDIMENT SPILLED, WASHED OR TRACKED ONTO THE RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
(NOT TO SCALE)

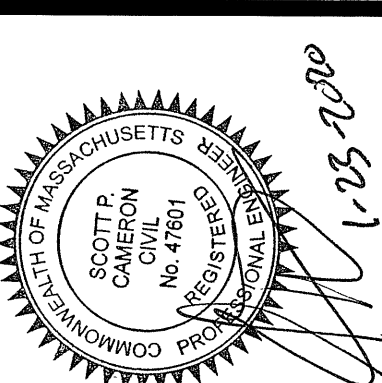


RETAIN-IT CHAMBER COMPONENT DETAIL
(NOT TO SCALE)



ORIFICE DETAIL
(NOT TO SCALE)

SCHEDULE OF ORIFICE INVERTS		
	ORIFICE SIZE	ELEVATION
A	4"	14.00
B	4"	14.75
C	6"	15.75
D	6"	17.00



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sheet title:
CONSTRUCTION DETAILS III

project name:
3 BOSTON WAY
NEWBURYPORT, MA

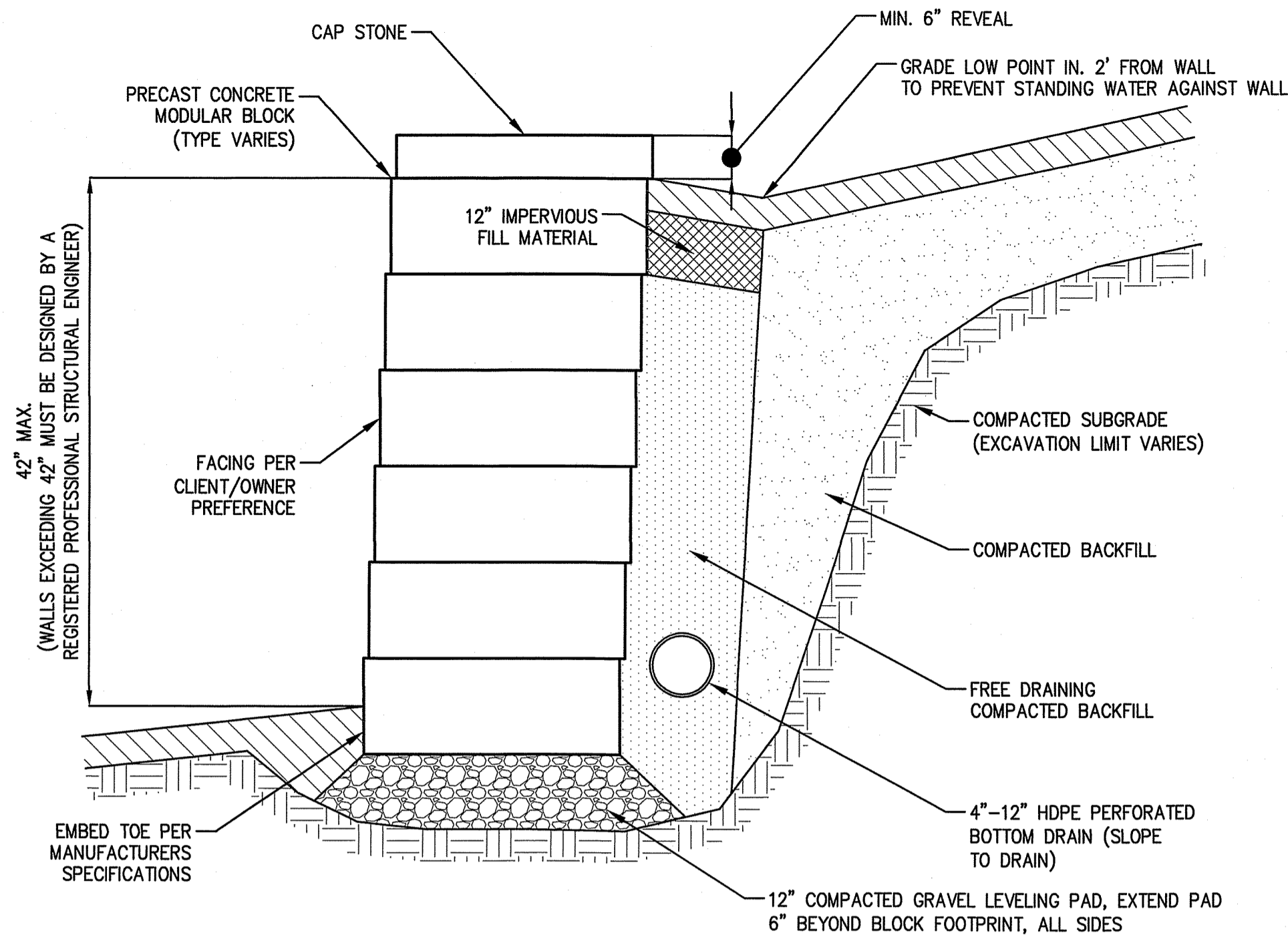
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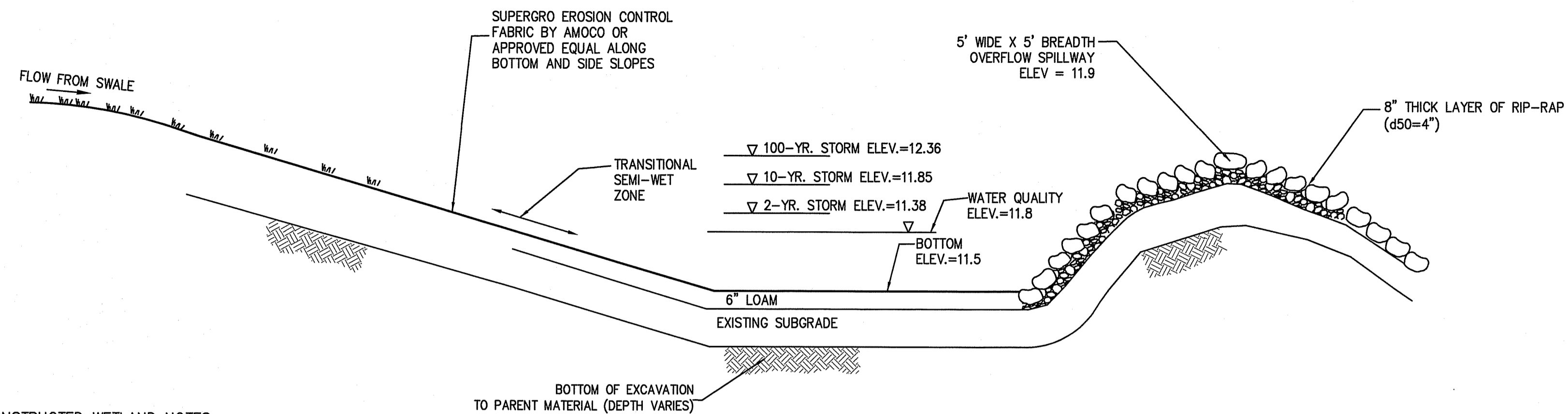
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- NOTES:**
- THIS MODULAR BLOCK RETAINING WALL DETAIL FOR DEMONSTRATIONAL PURPOSES ONLY. REFER TO MANUFACTURERS RECOMMENDED INSTALLATION PROCEDURES.
 - PRECAST CONCRETE MODULAR BLOCK UNIT DIMENSIONS, COLOR AND FACING CAN VARY PER CLIENT/OWNER PREFERENCE.
 - BOTTOM DRAIN SHALL DAYLIGHT AND/OR WEEP HOLES SHALL BE PROVIDED AT THE TOE OF FINISHED GRADE. THE INSTALLER SHALL TAKE CARE TO STABILIZE THE BOTTOM DRAIN DISCHARGE POINT TO PREVENT EROSION.
 - BOTTOM DRAIN SIZE SHALL BE DETERMINED IN THE FIELD BASED ON ANTICIPATED GROUNDWATER/SURFACE WATER CONDITIONS TO ENSURE ADEQUATE CAPACITY.

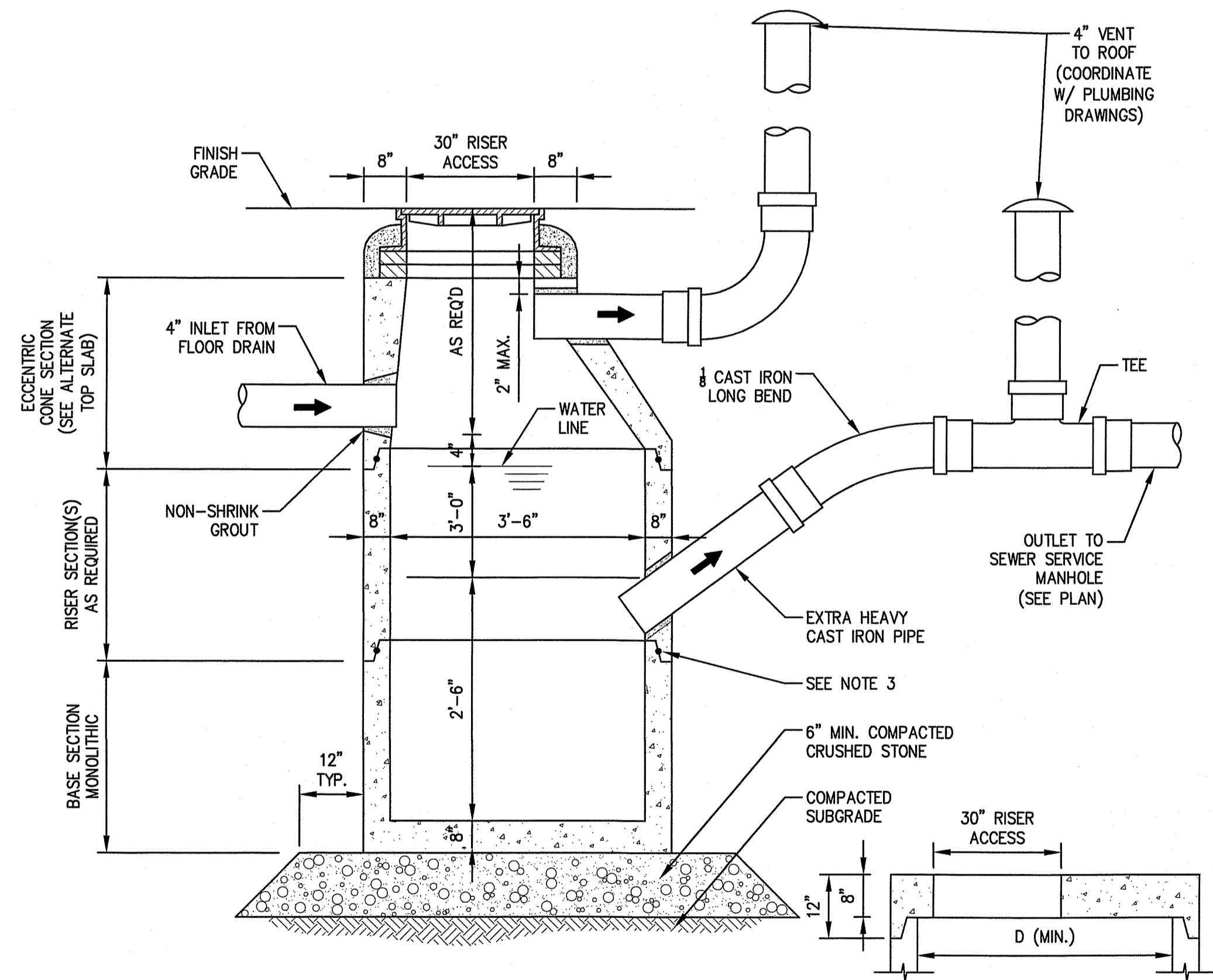
TYPICAL MODULAR BLOCK RETAINING WALL
NOT TO SCALE



CONSTRUCTED WETLAND NOTES:

- ENTIRE CONSTRUCTED WETLAND AREA SHALL BE EXCAVATED TO THE NATIVE SOIL LAYER.
- SEE PLANTING PLAN FOR PLANT LOCATIONS, QUANTITIES AND SPECIES AND LOAM SPECIFICATION.
- SEE DESIGN PLANS FOR CONSTRUCTED WETLAND GRADING.
- CONTRACTOR SHALL NOT DISCHARGE ANY CONSTRUCTION STORMWATERS TO CONSTRUCTED WETLAND. PROVIDE CONSTRUCTION SEDIMENT FOREBAY IN LOCATION OF PERMANENT FOREBAY WITH DISCHARGE TO WETLAND UPGRADIENT OF CONSTRUCTED WETLAND FOOTPRINT.
- ALL AREAS WITHIN THE CONSTRUCTED WETLAND SHALL BE FULLY STABILIZED BEFORE BEING PLACED INTO SERVICE.
- GRADING AND PLANTING OF THE CONSTRUCTED WETLAND SHALL BE OVERSEEN BY THE PROJECT WETLAND SCIENTIST AND DESIGN ENGINEER.
- CONTRACTOR TO PRESERVE EXISTING TREES AND VEGETATION TO EXTENT PRACTICABLE. ANY TREES REMOVED AS A RESULT OF CONSTRUCTION SHALL BE REPLACED WITH AN EQUIVALENT SPECIES OF TREE PER THE PROJECT WETLAND SCIENTIST.
- SEED AREAS ABOVE CONSTRUCTION WETLAND SYSTEM WITH SEED MIX SPECIFIED BY PROJECT WETLAND SCIENTIST. MAY REQUIRE ADDITIONAL SLOPE STABILIZATION WHILE VEGETATION BECOMES ESTABLISHED TO PREVENT EROSION.

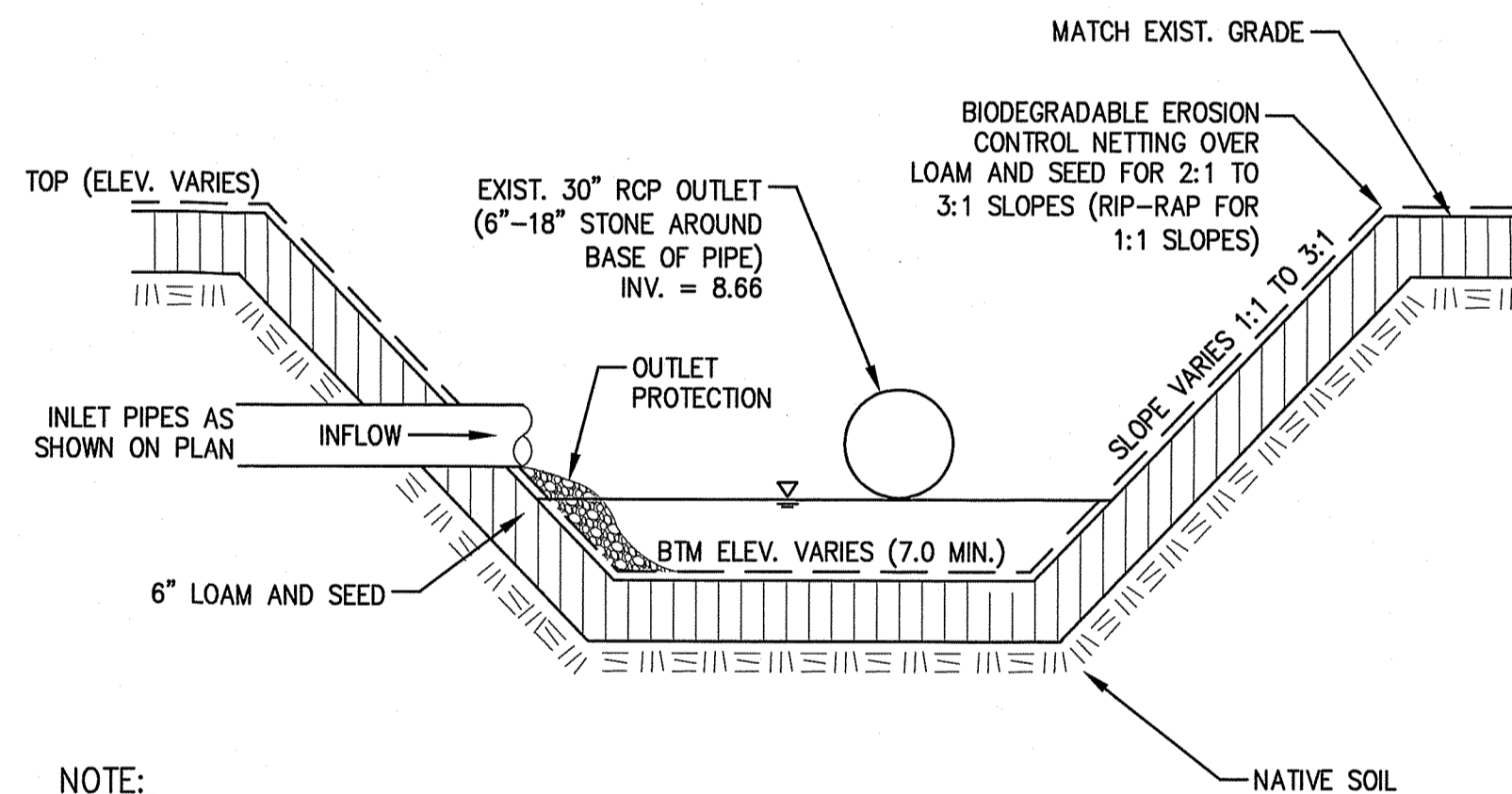
CONSTRUCTED POCKET WETLAND
(NOT TO SCALE)



NOTES:

- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
- ALL EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
- JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PERFORMED BUTYL RUBBER.
- STANDARD SEWER 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 COURSES MAX).
- STRUCTURE TO BE LOCATED OUTSIDE OF BUILDING WHERE POSSIBLE, COVER TO HAVE A CENTER HOLE.
- GAS, SAND & OIL SEPARATOR CONSTRUCTION SHALL CONFORM TO 248 CMR: BOARD OF STATE EXAMINERS OF PLUMBERS AND GAS FITTERS FUEL GAS AND PLUMBING CODE AND APPLICABLE TOWN OF DANVERS REGULATIONS.
- THE STRUCTURE SHALL BE SO LOCATED AND CONSTRUCTED THAT SURFACE WATER SHALL BE EXCLUDED.
- INLET PIPE SHALL BE AT LEAST FOUR INCHES ABOVE NORMAL WATER LINE.
- WHERE SUBJECT TO FROST OR CRUSHING CONDITIONS, OUTLET SHALL BE AT LEAST THREE FEET BELOW THE SURFACE.
- THE GSO MUST BE FILLED WITH CLEAN WATER BEFORE USING AND AFTER BEING EMPTIED FOR PERIODIC CLEANING.
- ALL OIL AND GASOLINE MUST BE REMOVED BEFORE CLEANING OUT THE BASIN AND MUST NOT BE DISCHARGED INTO THE SEWER THROUGH OTHER FIXTURES.
- SPECIFICATIONS FOR COVERING SPECIAL CASES OR CONDITIONS SHALL BE APPROVED BY THE LOCAL AUTHORITIES.
- BOTH VENTS SHALL BE EXTENDED INDEPENDENTLY 15" ABOVE THE ROOF OR AS APPROVED BY THE LOCAL AUTHORITIES.
- ALL PIPING AND VENT MATERIAL TO BE EXTRA HEAVY CAST IRON OR DUCTILE IRON.

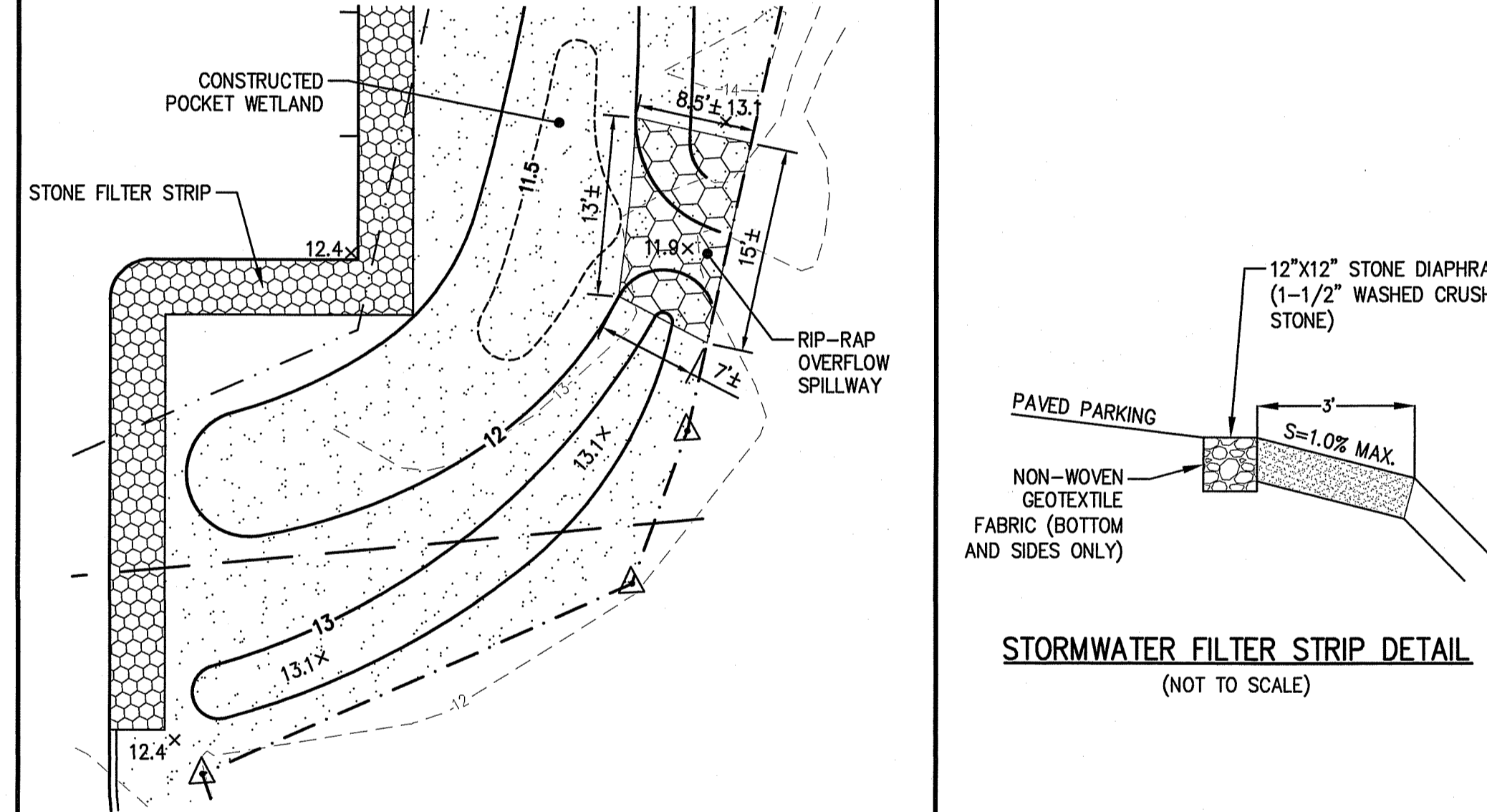
SAND, OIL & GAS SEPARATOR
NOT TO SCALE



NOTE:

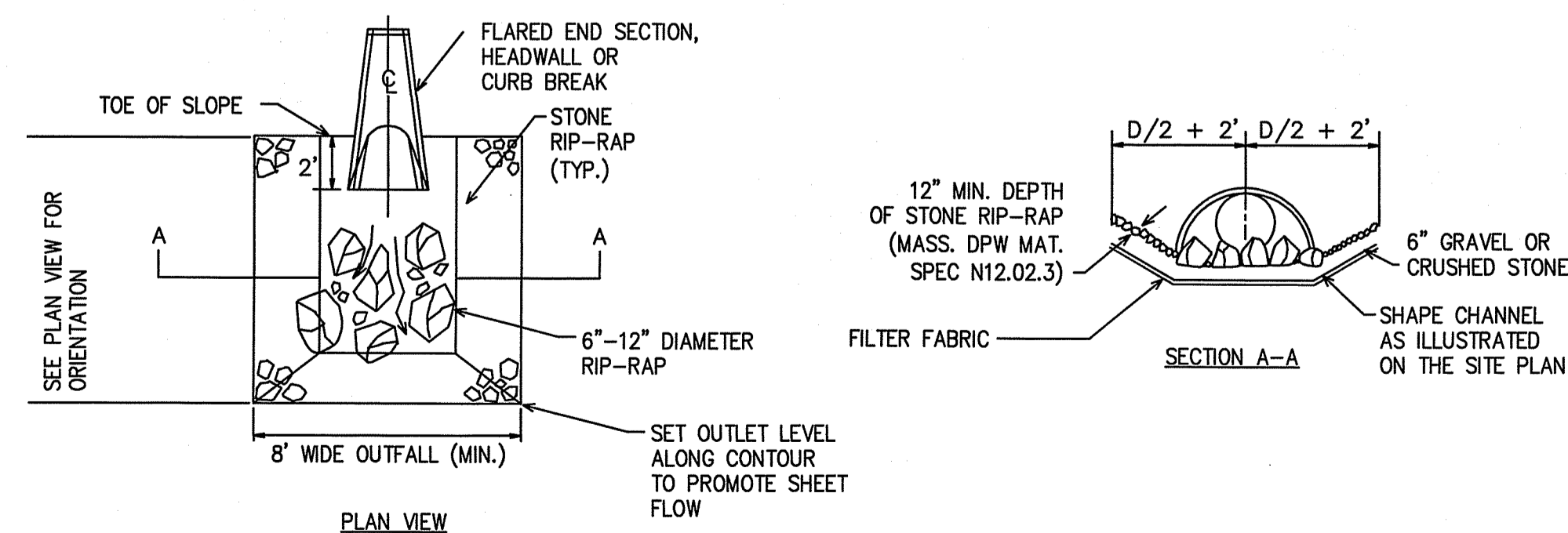
- COORDINATE WETLAND PLANTINGS WITH THE PROJECT WETLAND SCIENTIST AND NEWBURYPORT CONSERVATION COMMISSION.

CONSTRUCTED STORMWATER WETLAND CROSS SECTION
(NOT TO SCALE)

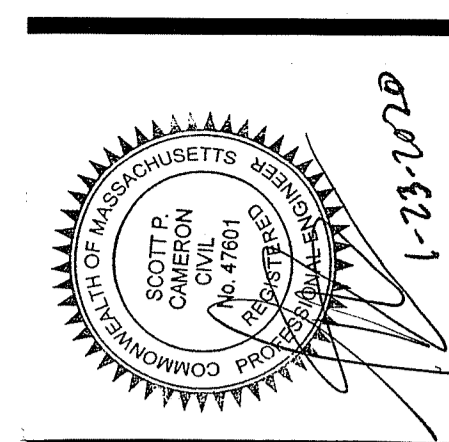


STORMWATER FILTER STRIP DETAIL
(NOT TO SCALE)

CONSTRUCTED POCKET WETLAND OVERFLOW SPILLWAY DETAIL
NOT TO SCALE



STONE ENERGY DISSIPATOR (INLET/OUTLET PROTECTION)
(NOT TO SCALE)



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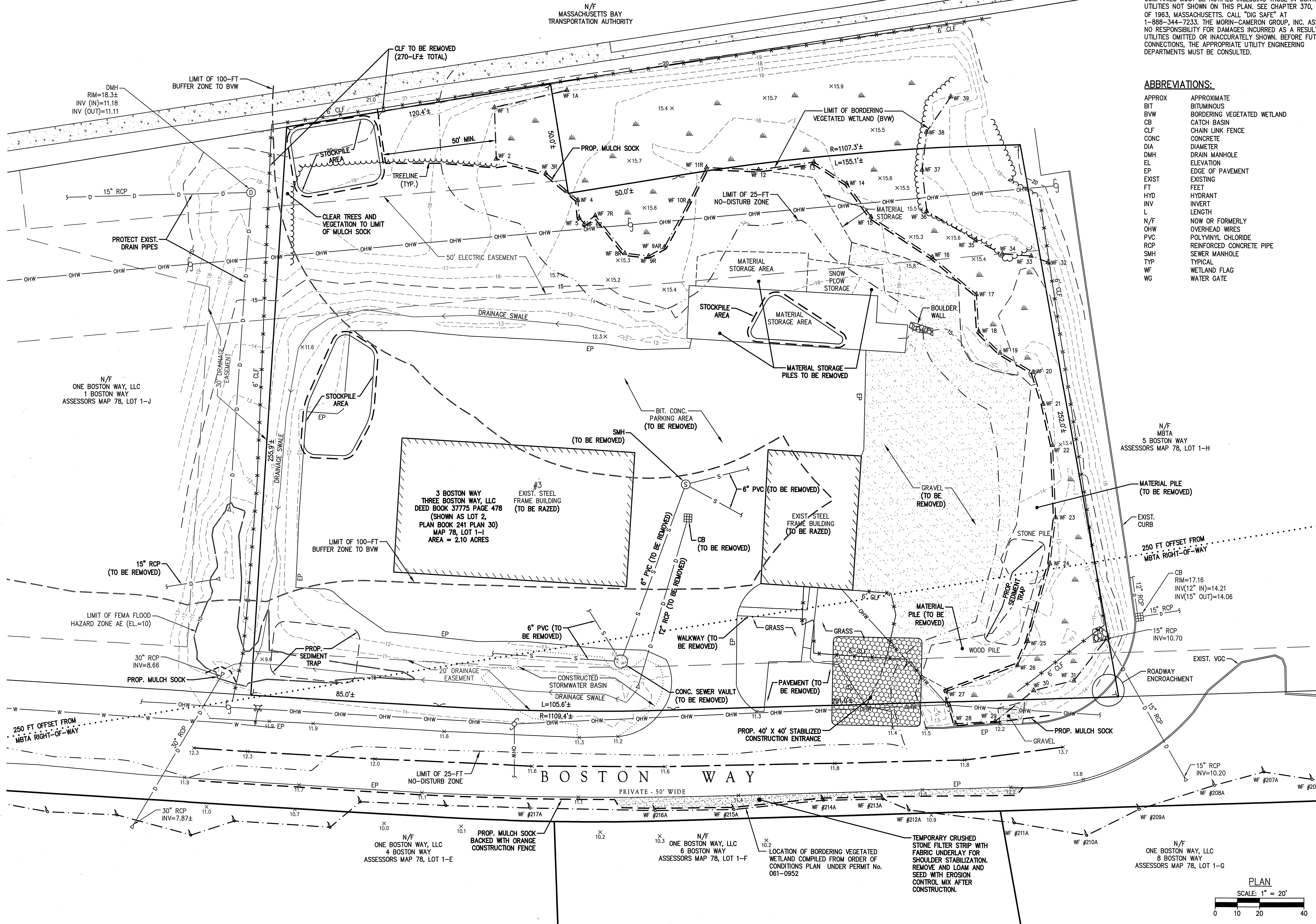
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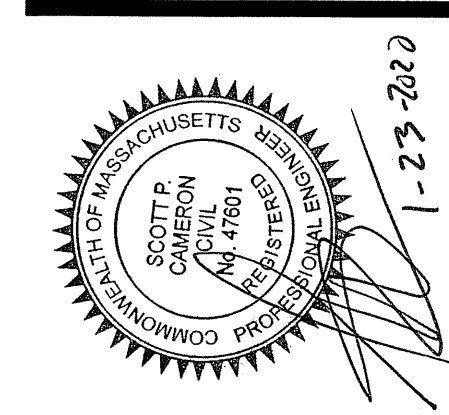
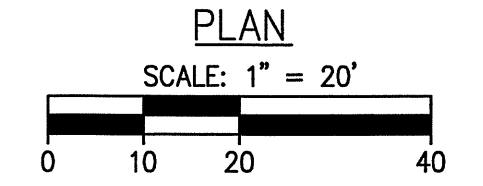
job number:
MCG-3856



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ABBREVIATIONS:

APPROX	APPROXIMATE
BIT	BITUMINOUS
BVW	BORDERING VEGETATED WETLAND
CB	CATCH BASIN
CLF	CHAIN LINK FENCE
CONC	CONCRETE
DIA	DIAMETER
DMH	DRAIN MANHOLE
EL	ELEVATION
EP	EDGE OF PAVEMENT
EXIST	EXISTING
FT	FEET
HYD	HYDRANT
INV	INVERT
L	LENGTH
N/F	NOW OR FORMERLY
OHW	OVERHEAD WIRES
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
SMH	SEWER MANHOLE
TYP	TYPICAL
WF	WETLAND FLAG
WG	WATER GATE



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