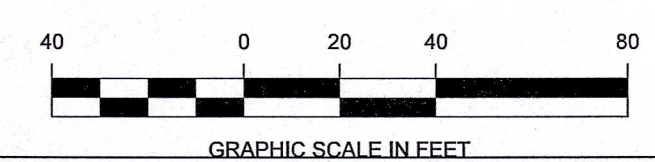


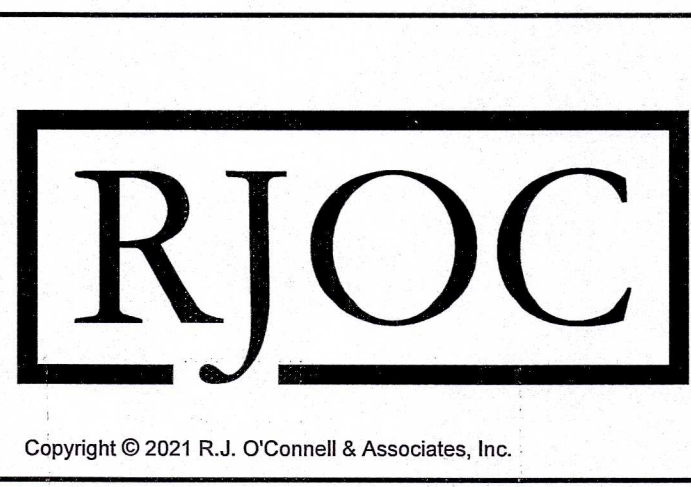
WETLAND & BUFFER ZONE IMPACT CHART		
RESOURCE	HATCH COLORING	AREA IMPACTED
BORDERING VEGETATED WETLAND		480 S.F. (PERMANENT)
BORDERING VEGETATED WETLAND		1,275 S.F. (TEMPORARY)
ISOLATED VEGETATED WETLAND		2,015 S.F. (PERMANENT)
INTERMITTENT STREAM BANK		235 L.F. (PERMANENT)
INTERMITTENT STREAM BANK		105 L.F. (TEMPORARY)
LAND UNDER WATER		1,020 S.F. (TEMPORARY)

TOTAL BVW & IWW PERMANENT WETLAND IMPACTS = 2,495 S.F.

NOT FOR CONSTRUCTION



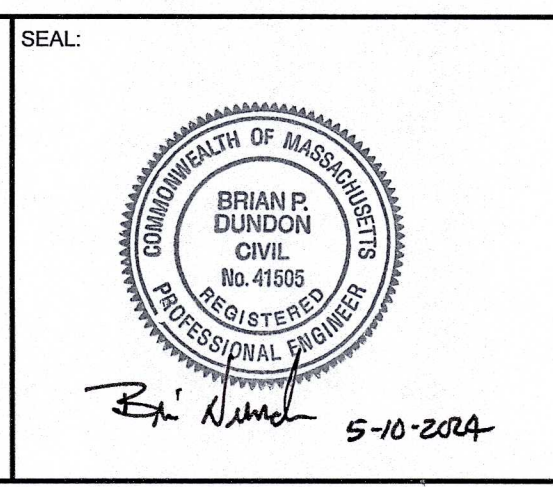
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May 08, 2024 - 12:34pm



NO.	REVISION	DATE
2.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024
1.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781-279-0180 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

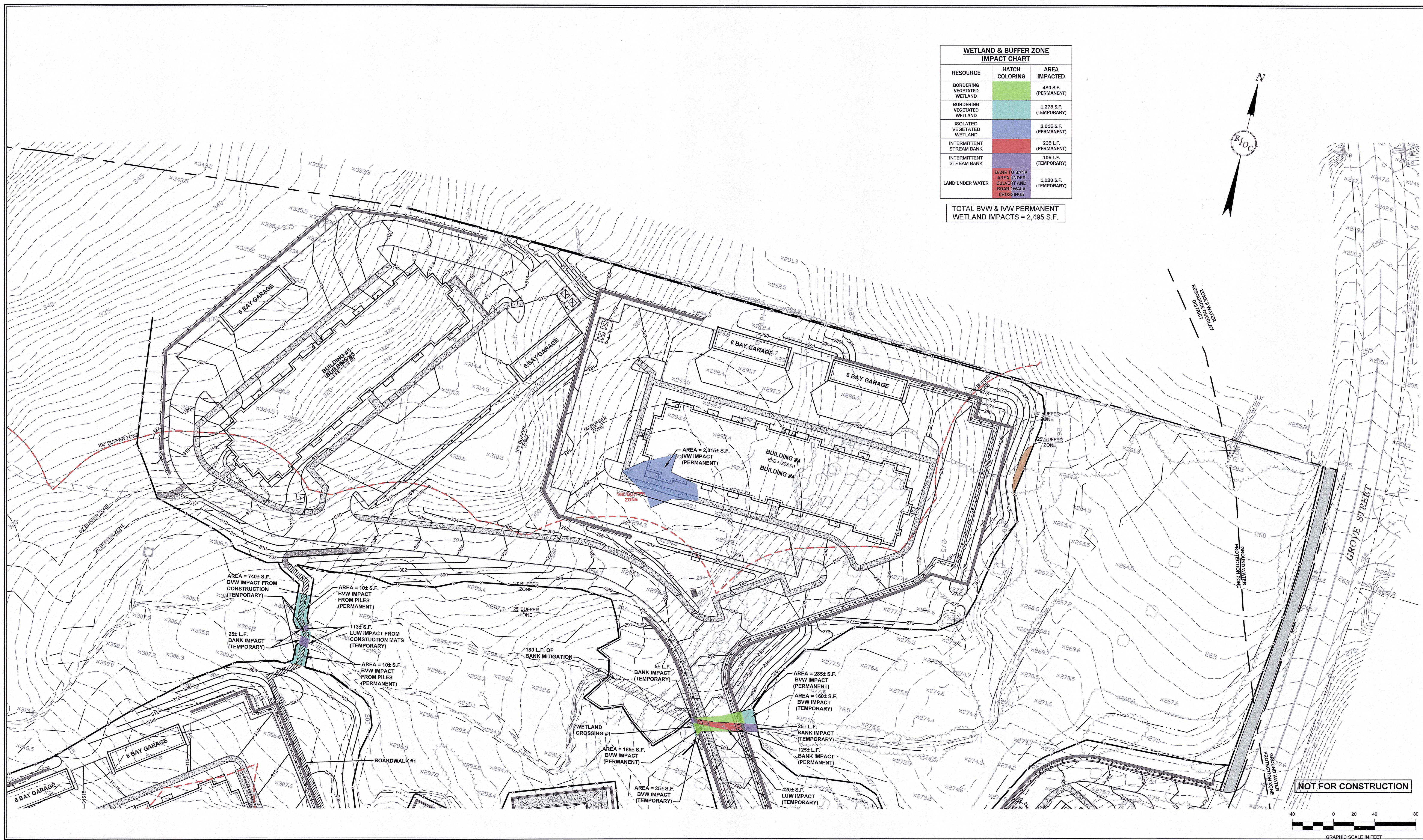
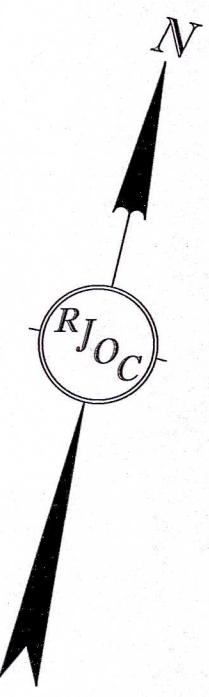
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RESOURCE AREA IMPACT PLAN

DRAWING NUMBER:
C-2D

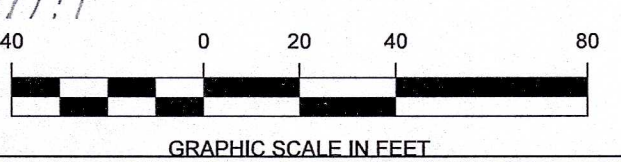
DATE: 03/28/2024 PROJECT NO.: 22016

WETLAND & BUFFER ZONE IMPACT CHART		
RESOURCE	HATCH COLORING	AREA IMPACTED
BORDERING VEGETATED WETLAND		480 S.F. (PERMANENT)
BORDERING VEGETATED WETLAND		1,275 S.F. (TEMPORARY)
ISOLATED VEGETATED WETLAND		2,045 S.F. (PERMANENT)
INTERMITTENT STREAM BANK		235 L.F. (PERMANENT)
INTERMITTENT STREAM BANK		105 L.F. (TEMPORARY)
LAND UNDER WATER		1,020 S.F. (TEMPORARY)

TOTAL BVW & IVW PERMANENT WETLAND IMPACTS = 2,495 S.F.



NOT FOR CONSTRUCTION



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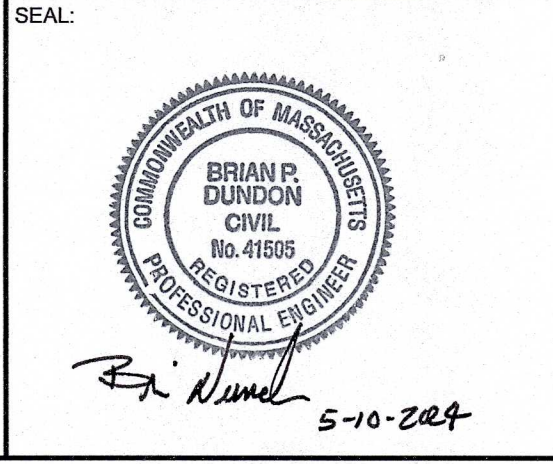


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NO.	REVISION	DATE
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1.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



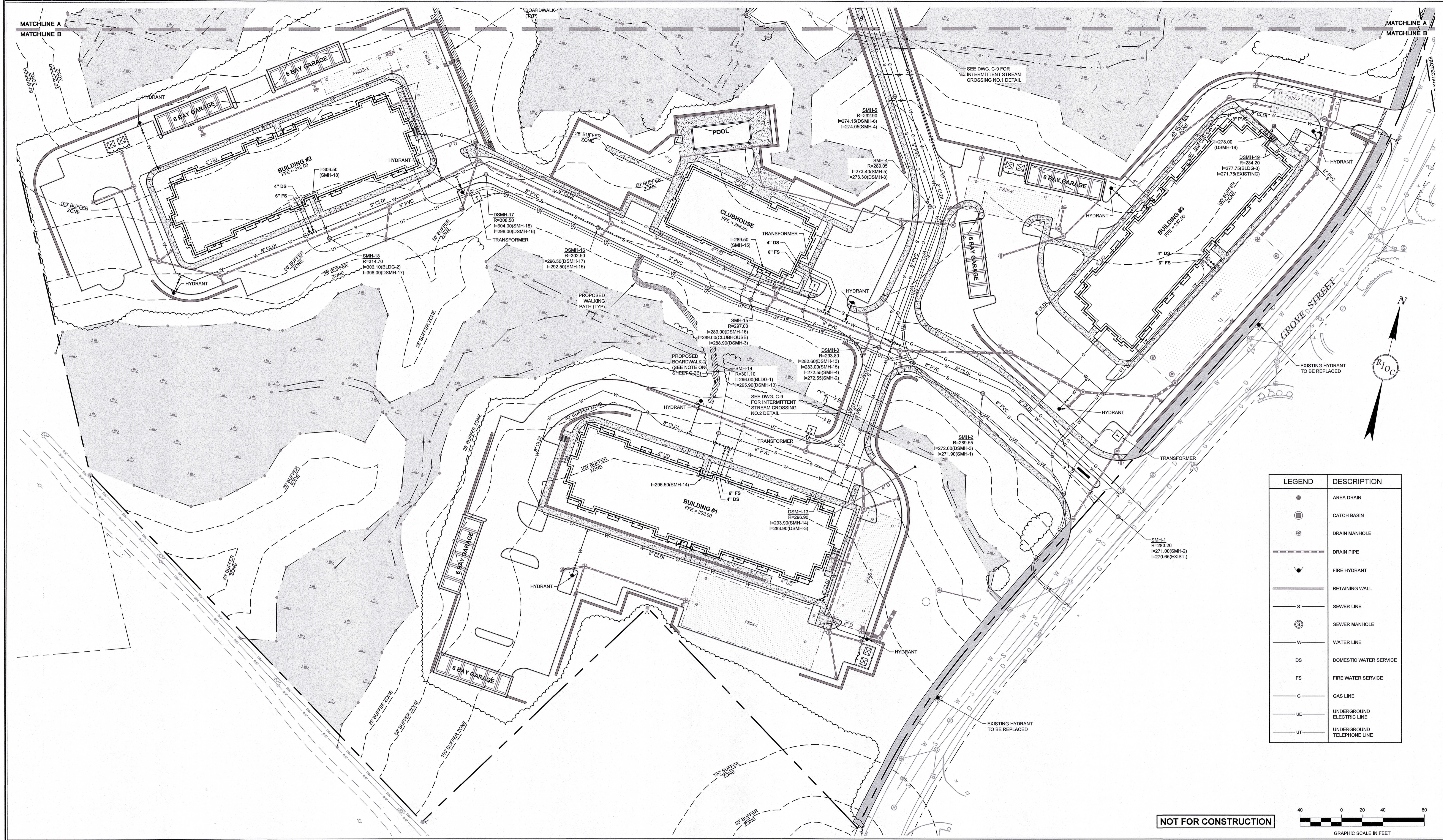
PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02186
PHONE: 781.278.9180 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

DRAWING NAME:
RESOURCE AREA IMPACT PLAN

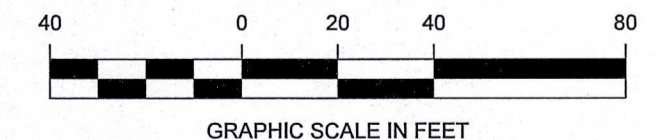
DRAWING NUMBER:
C-2E

DATE: 03/28/2024 PROJECT NO.: 22016

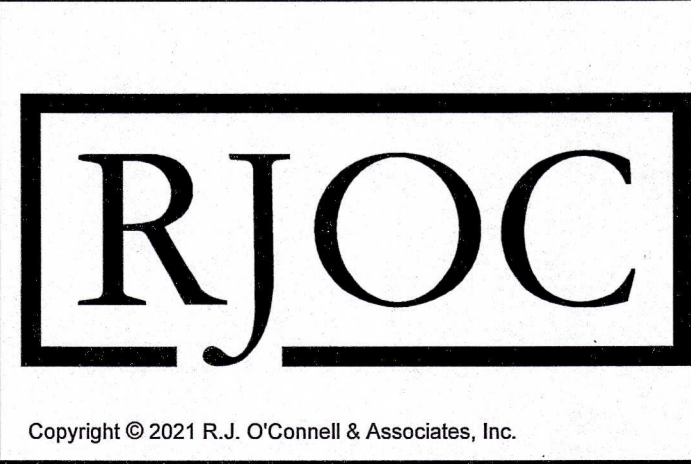


LEGEND	DESCRIPTION
	AREA DRAIN
	CATCH BASIN
	DRAIN MANHOLE
	DRAIN PIPE
	FIRE HYDRANT
	RETAINING WALL
	SEWER LINE
	SEWER MANHOLE
	WATER LINE
	DOMESTIC WATER SERVICE
	FIRE WATER SERVICE
	GAS LINE
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND TELEPHONE LINE

NOT FOR CONSTRUCTION



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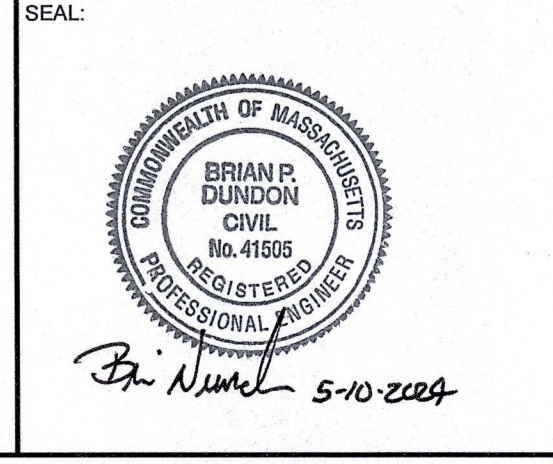


NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023

NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024
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2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023

DESIGNED BY: MAC
 DRAWN BY: MCR
 REVIEWED BY: BJM
 SCALE: 1" = 40'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
 30 BRAINTREE HILL OFFICE PARK
 SUITE 105
 BRAINTREE, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
 80 MONTVALE AVENUE, SUITE 201 STONHAM, MA 02180
 PHONE: 781.279.0190 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
 FRANKLIN, MA

DRAWING NAME:
UTILITY PLAN

DRAWING NUMBER:
C-3A

DATE: 10/30/2023 PROJECT NO.: 22016

LEGEND	DESCRIPTION
⊙	AREA DRAIN
⊕	CATCH BASIN
⊗	DRAIN MANHOLE
—	DRAIN PIPE
⚡	FIRE HYDRANT
—	RETAINING WALL
S	SEWER LINE
⊙	SEWER MANHOLE
W	WATER LINE
DS	DOMESTIC WATER SERVICE
FS	FIRE WATER SERVICE
G	GAS LINE
UE	UNDERGROUND ELECTRIC LINE
UT	UNDERGROUND TELEPHONE LINE

UTILITY NOTES

- 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 ON 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 "DIG SAFE" (1-800-344-7233) AT LEAST 72 BUSINESS 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 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.
- EXISTING SITE FEATURES AND TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A SURVEY PLAN TITLED "EXISTING CONDITIONS SITE PLAN, 121 GROVE STREET, FRANKLIN, MA" BY GUERRIERRE & HANLON, INC. DATED 05/20/2022, REVISED THROUGH 11/09/2023.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL HORIZONTAL CONTROL POINTS AND ELEVATION BENCH MARKS NECESSARY FOR THE WORK.

GAS NOTES

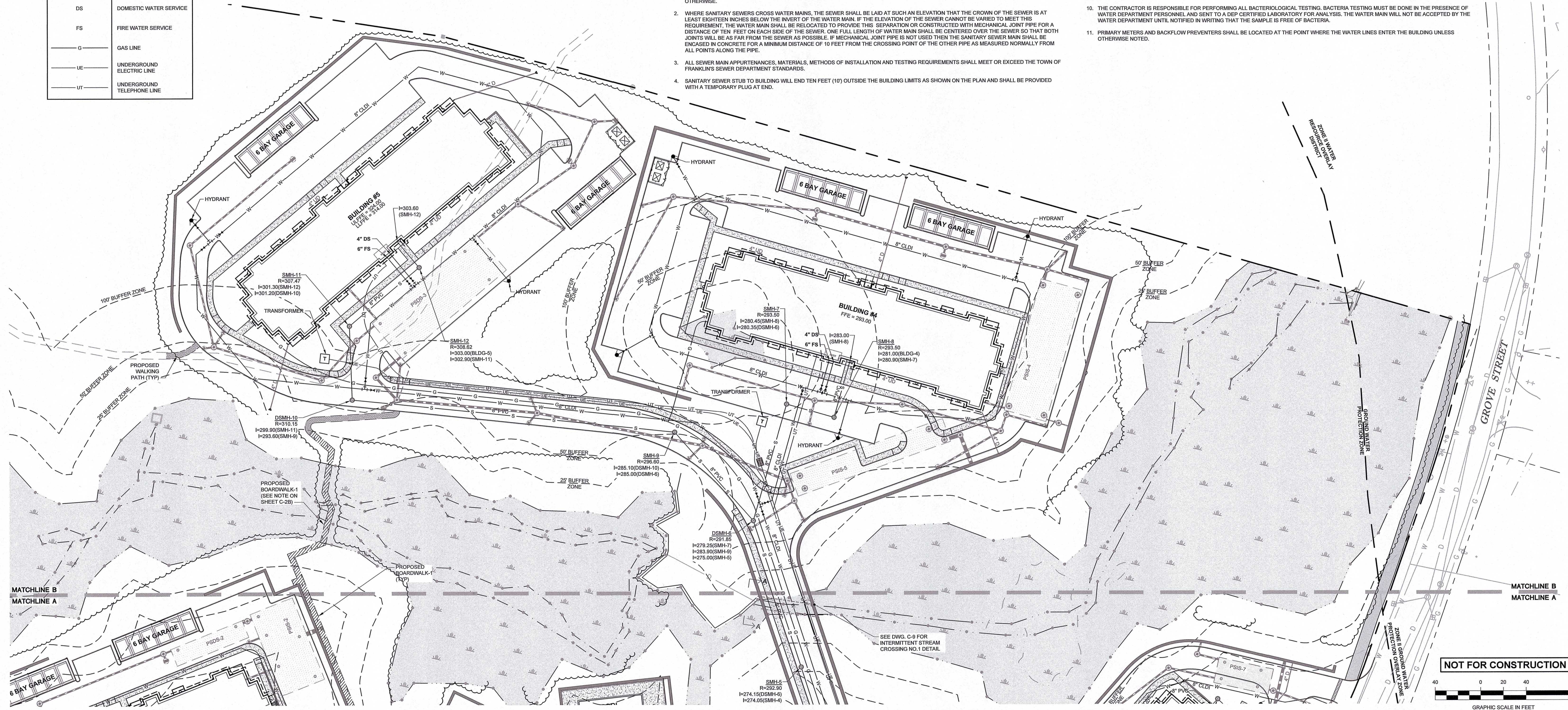
- THE PROPOSED GAS SERVICE LOCATION IS APPROXIMATE ONLY. THE CONTRACTOR SHALL GIVE THE GAS COMPANY ADVANCE NOTICE OF WHEN THE GAS LINE CAN BE INSTALLED. THE CONTRACTOR IS RESPONSIBLE FOR EXCAVATION, BACKFILL AND COMPACTION OF THE GAS LINE IN ACCORDANCE WITH THE SITE WORK AND/OR GAS COMPANY SPECIFICATIONS (MORE STRINGENT SPECIFICATIONS WILL APPLY). THE CONTRACTOR IS ALSO RESPONSIBLE FOR FURNISHING AND INSTALLING PIPE BOLLARDS AS REQUIRED BY THE GAS COMPANY AND/OR LOCAL INSPECTOR IN ORDER TO PROTECT ABOVE GROUND GAS EQUIPMENT.

SEWER NOTES

- ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE PIPE (P.V.C.), S.D.R. 35 AND SHALL CONFORM WITH ASTM-D3034 UNLESS NOTED OTHERWISE.
- WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST EIGHTEEN INCHES BELOW THE INVERT OF THE WATER MAIN. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IF MECHANICAL JOINT PIPE IS NOT USED THEN THE SANITARY SEWER MAIN 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.
- ALL SEWER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED THE TOWN OF FRANKLIN'S SEWER DEPARTMENT STANDARDS.
- SANITARY SEWER STUB TO BUILDING WILL END TEN FEET (10') OUTSIDE THE BUILDING LIMITS AS SHOWN ON THE PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.

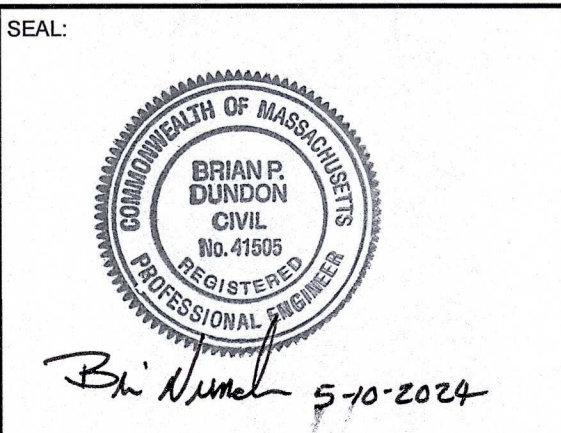
WATER NOTES

- ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 5 FEET OF COVER AND A MAXIMUM OF 6 FEET OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE. GREATER DEPTHS ARE PERMITTED WHERE REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES.
- GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. THE CONTRACTOR SHALL NOTE THAT NOT ALL FITTINGS REQUIRED UNDER THE CONTRACT ARE NOTED, SHOWN, OR INDICATED.
- A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAINS AND WATER MAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN.
- DOMESTIC WATER SERVICE 3" OR SMALLER SHALL BE TYPE K COPPER TUBING AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED CORPORATION STOP WITH APPROVED SADDLE, CURB STOP, AND BOX. DOMESTIC WATER MAIN SHALL BE INSTALLED OVER SEWER MAIN WITH A MINIMUM VERTICAL SEPARATION OF EIGHTEEN INCHES (18") AT THEIR CROSSING.
- ALL WATER MAINS 4" AND LARGER SHALL BE CEMENT LINED DUCTILE IRON CLASS 52 AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED FITTINGS AND GATE VALVES.
- ALL WATER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED THE TOWN OF FRANKLIN WATER STANDARDS.
- PRESSURE AND LEAKAGE TEST, DISINFECTION AND FLUSHING SHALL BE IN ACCORDANCE WITH THE TOWN OF FRANKLIN WATER DEPARTMENT STANDARDS AND REQUIREMENTS. IN THE ABSENCE OF STANDARDS, THEY SHALL CONFORM TO THE REQUIREMENTS OF THE SITE SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN CONNECTION WITH UTILITY TESTS, FLUSHING AND INSPECTIONS AS REQUIRED BY THE TOWN OF FRANKLIN'S WATER DEPARTMENT. COPIES OF TEST RESULTS WILL BE SUBMITTED TO THE FRANKLIN WATER DEPARTMENT FOR THEIR RECORDS.
- ALL WATER LEADS TO THE BUILDING WILL TERMINATE TEN FEET (10') OUTSIDE THE BUILDING LIMITS AS SHOWN ON THE PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
- THE CONTRACTOR SHALL NOTIFY THE FRANKLIN WATER DEPARTMENT BEFORE MAKING ANY CONNECTIONS TO THE MUNICIPAL WATER MAIN.
- THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL BACTERIOLOGICAL TESTING. BACTERIA TESTING MUST BE DONE IN THE PRESENCE OF WATER DEPARTMENT PERSONNEL AND SENT TO A DEP CERTIFIED LABORATORY FOR ANALYSIS. THE WATER MAIN WILL NOT BE ACCEPTED BY THE TOWN OF FRANKLIN'S WATER DEPARTMENT UNTIL NOTIFIED IN WRITING THAT THE SAMPLE IS FREE OF BACTERIA.
- PRIMARY METERS AND BACKFLOW PREVENTERS SHALL BE LOCATED AT THE POINT WHERE THE WATER LINES ENTER THE BUILDING UNLESS OTHERWISE NOTED.



DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
 30 BRAINTREE HILL OFFICE PARK
 SUITE 105
 BRAINTREE, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02186
 PHONE: 781.279.0180 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
 FRANKLIN, MA

DRAWING NAME:
UTILITY PLAN

DRAWING NUMBER:
C-3B

DATE: 10/30/2023 PROJECT NO.: 22016

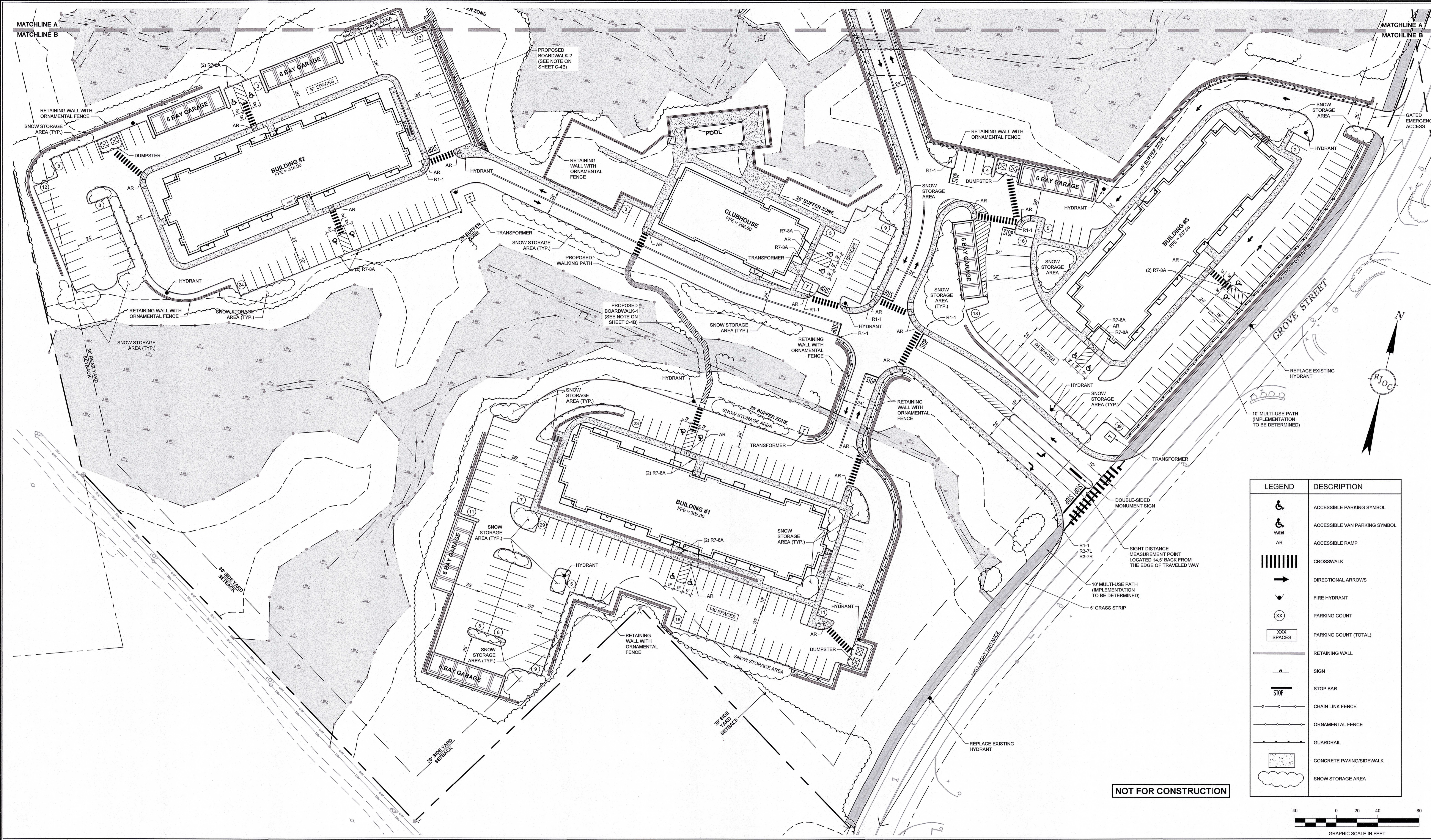


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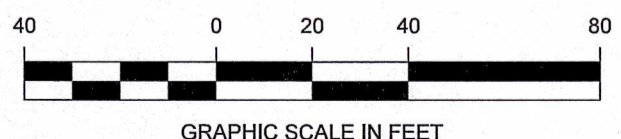
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4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023

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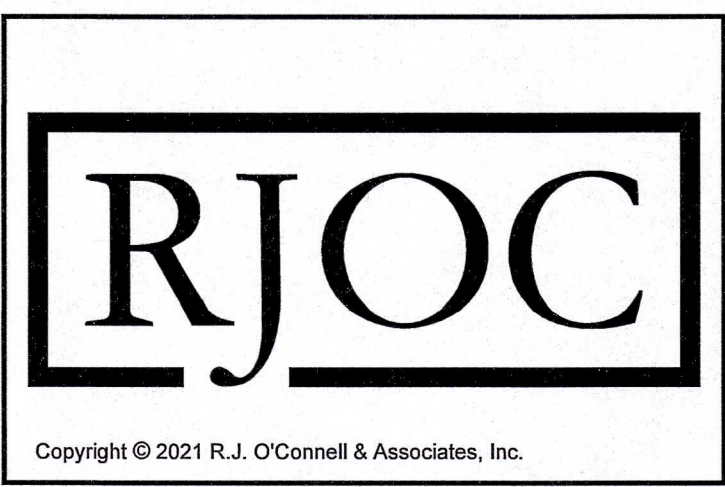
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 May 08, 2024 - 11:35am



LEGEND	DESCRIPTION
	ACCESSIBLE PARKING SYMBOL
	ACCESSIBLE VAN PARKING SYMBOL
	ACCESSIBLE RAMP
	CROSSWALK
	DIRECTIONAL ARROWS
	FIRE HYDRANT
	PARKING COUNT
	PARKING COUNT (TOTAL)
	RETAINING WALL
	SIGN
	STOP BAR
	CHAIN LINK FENCE
	ORNAMENTAL FENCE
	GUARDRAIL
	CONCRETE PAVING/SIDEWALK
	SNOW STORAGE AREA



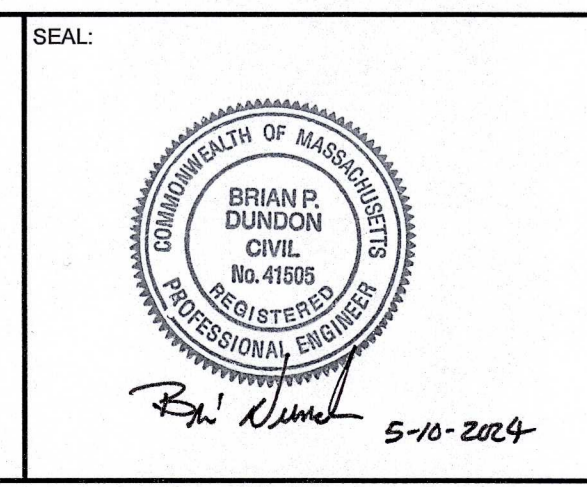
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NO.	REVISION	DATE	NO.	REVISION	DATE
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DESIGNED BY:	MAC
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REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
 30 BRAINTREE HILL OFFICE PARK
 SUITE 105
 BRAINTREE, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
 PHONE: 781.279.0190 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
 FRANKLIN, MA

DRAWING NAME:
PARKING & TRAFFIC CONTROL PLAN

DRAWING NUMBER:
C-4A

DATE: 10/30/2023 PROJECT NO.: 22016

Drawing name: G:\M\Fairfield\Fairfield Residential\121 Grove Street\Main\2024\C_4 Parking and Traffic Control Plan.dwg
 May 06, 2024 - 12:17pm
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TRAFFIC CONTROL SCHEDULE							
SIGN NUMBER	SIGN	SIZE OF SIGN		DESCRIPTION	MOUNT TYPE	MOUNT HEIGHT	REMARKS
		WIDTH	HEIGHT				
R1-1		30"	30"	WHITE ON RED	3" POST	7'-0"	REFLECTORIZED SIGN
R7-8		12"	18"	BLUE & GREEN ON WHITE	3" POST	7'-0"	REFLECTORIZED SIGN
R7-8A		12"	6"	WHITE ON BLUE	3" POST	6'-6"	REFLECTORIZED SIGN
W11-2		30"	30"	YELLOW ON BLACK	3" POST	8'-6"	REFLECTORIZED SIGN
W16-7P		24"	12"	YELLOW ON BLACK	3" POST	6'-0"	REFLECTORIZED SIGN
R3-7L		30"	30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN
R3-7R		30"	30"	BLACK ON WHITE	CHANNEL	7'-0"	REFLECTORIZED SIGN

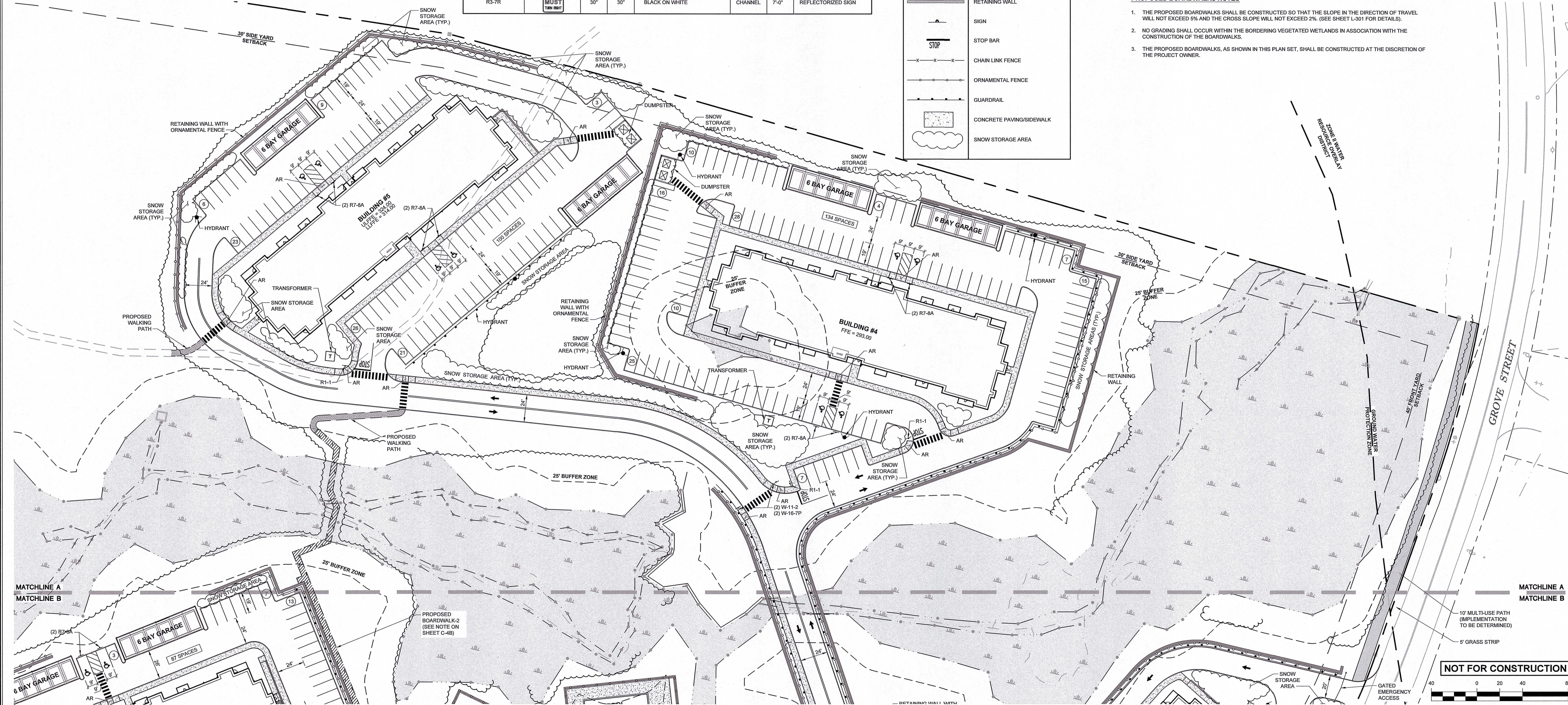
LEGEND	DESCRIPTION
	ACCESSIBLE PARKING SYMBOL
	ACCESSIBLE VAN PARKING SYMBOL
	ACCESSIBLE RAMP
	CROSSWALK
	DIRECTIONAL ARROWS
	FIRE HYDRANT
	PARKING COUNT
	PARKING COUNT (TOTAL)
	RETAINING WALL
	SIGN
	STOP BAR
	CHAIN LINK FENCE
	ORNAMENTAL FENCE
	GUARDRAIL
	CONCRETE PAVING/SIDEWALK
	SNOW STORAGE AREA

PARKING AND TRAFFIC CONTROL NOTES

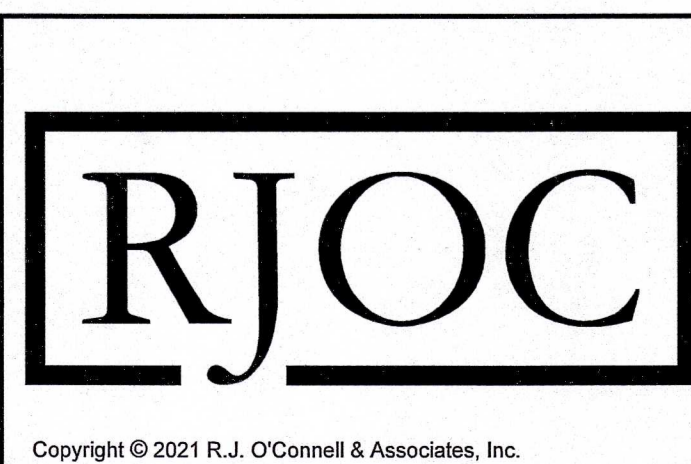
- HANDICAP ACCESSIBLE PARKING SPACES SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (A.D.A.) OF 1990, REVISED SEPT. 15, 2010 AND THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD OF REGULATIONS, 521 CMR UNLESS OTHERWISE NOTED.
- ALL PARKING LOT CURBING SHALL BE PRECAST CONCRETE, UNLESS NOTED OR DETAILED OTHERWISE.
- ALL LIMITS OF PAVEMENT SHALL BE CURBED UNLESS NOTED OR DETAILED OTHERWISE.
- ALL ADA PARKING, CROSS HATCH AREAS AND STANDARD PARKING SPACES SHALL BE 9-FEET IN WIDTH BY 19-FEET IN LENGTH.
- ALL PAVEMENT STRIPING SHALL BE PAINTED WITH 2 COATS OF WHITE PAINT.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL BUILDING PLANS FOR EXACT LOCATIONS, DETAILS AND DIMENSIONS OF CONCRETE SIDEWALKS, EXIT PORCHES, RAMPS, PRECISE BUILDING DIMENSIONS, CONCRETE PADS AND EXACT UTILITY ENTRANCE LOCATIONS.
- PARKING AND TRAFFIC CONTROL PLANS ARE SCHEMATIC AND FOR LOCATION OF MARKINGS ONLY. SPECIFIC DETAILS FOR INSTALLATION OF PAVEMENT MARKINGS ARE PROVIDED AS PART OF THIS PLAN SET.
- FOR PARKING LOT PAVEMENT SECTION SEE DETAILS.

PROPOSED BOARDWALKS NOTES

- THE PROPOSED BOARDWALKS SHALL BE CONSTRUCTED SO THAT THE SLOPE IN THE DIRECTION OF TRAVEL WILL NOT EXCEED 5% AND THE CROSS SLOPE WILL NOT EXCEED 2%. (SEE SHEET L-301 FOR DETAILS).
- NO GRADING SHALL OCCUR WITHIN THE BORDERING VEGETATED WETLANDS IN ASSOCIATION WITH THE CONSTRUCTION OF THE BOARDWALKS.
- THE PROPOSED BOARDWALKS, AS SHOWN IN THIS PLAN SET, SHALL BE CONSTRUCTED AT THE DISCRETION OF THE PROJECT OWNER.



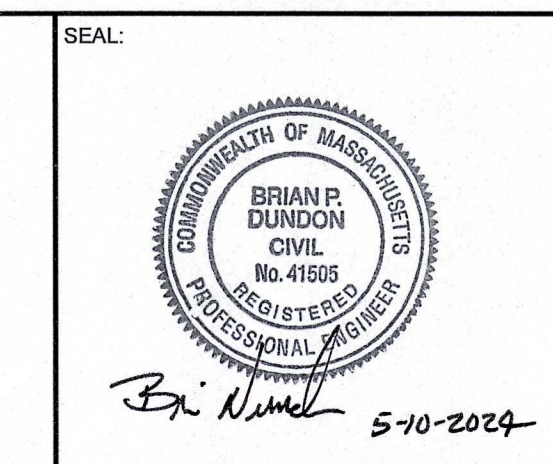
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May 08, 2024 - 12:42pm



NO.	REVISION	DATE	NO.	REVISION	DATE
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1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023			

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	1" = 40'

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
 30 BRAINTREE HILL OFFICE PARK
 SUITE 105
 BRAINTREE, MA 02184



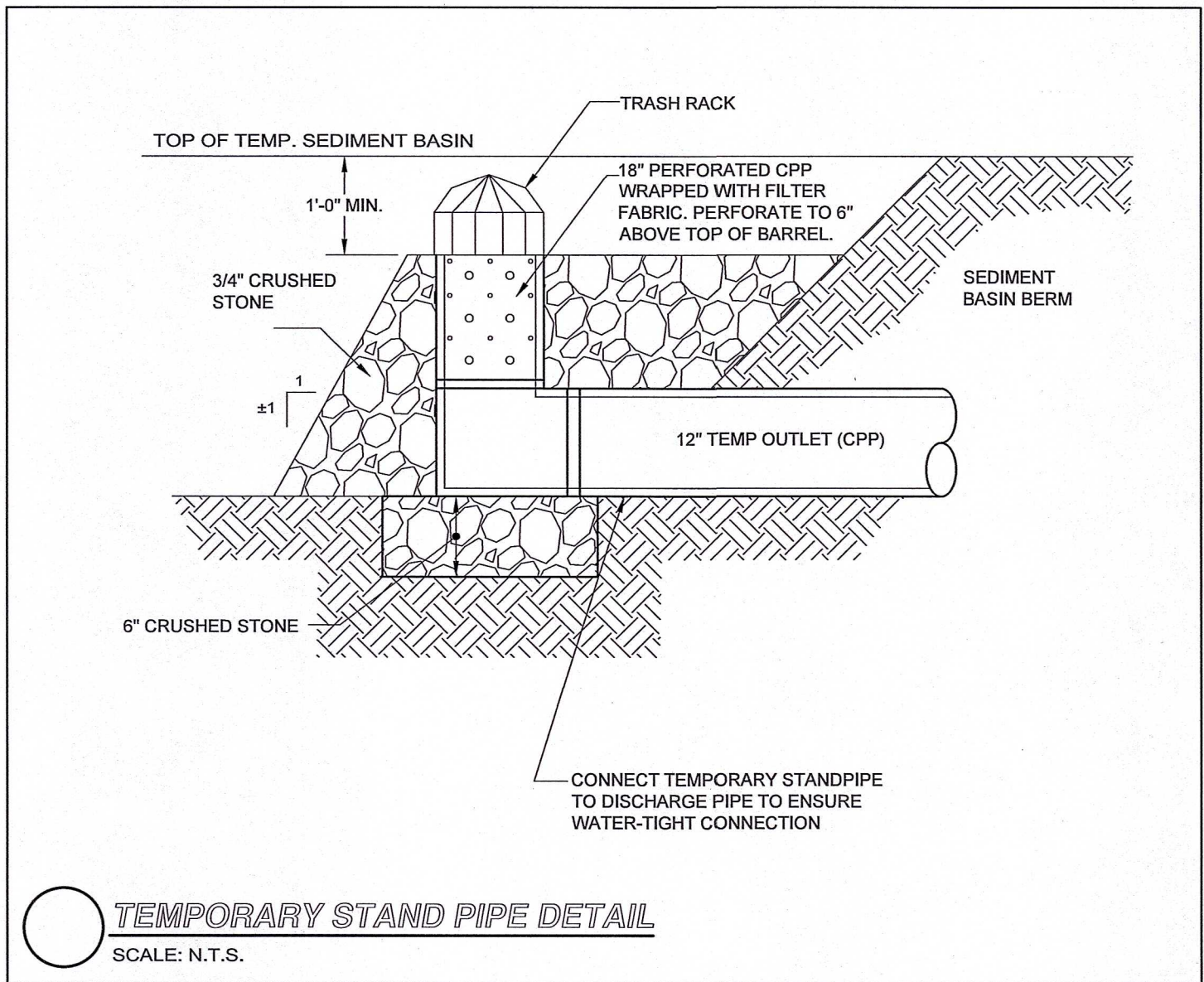
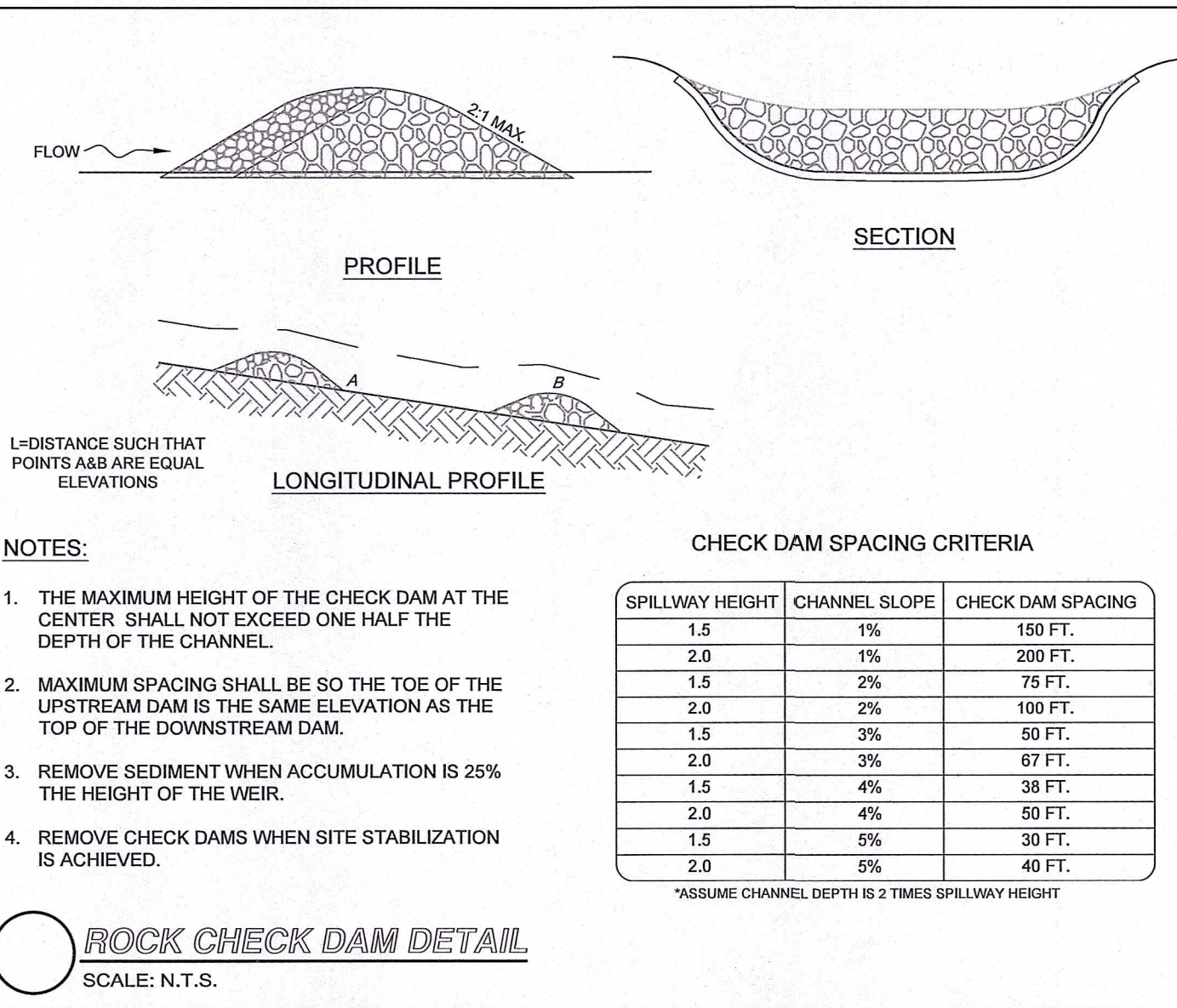
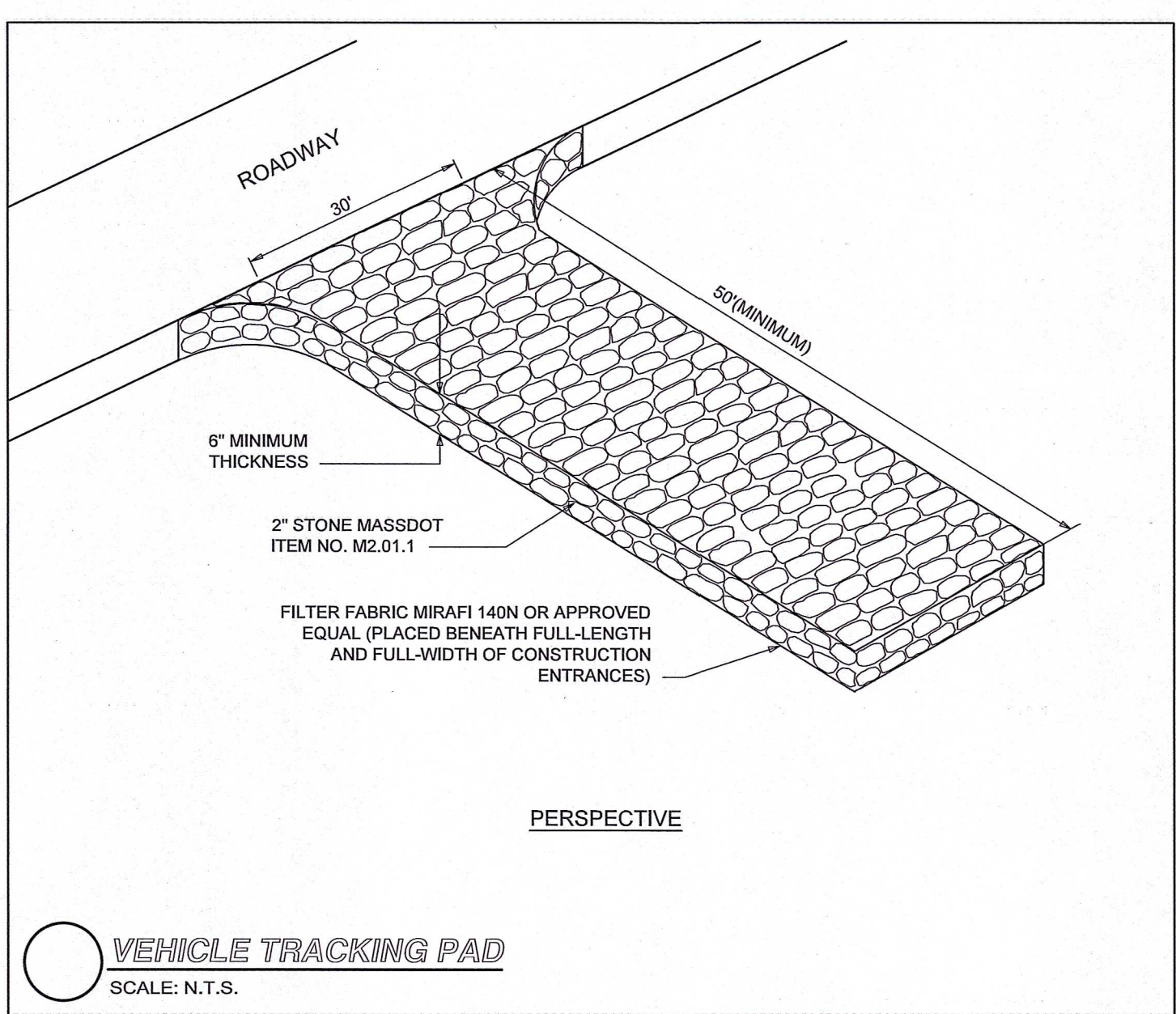
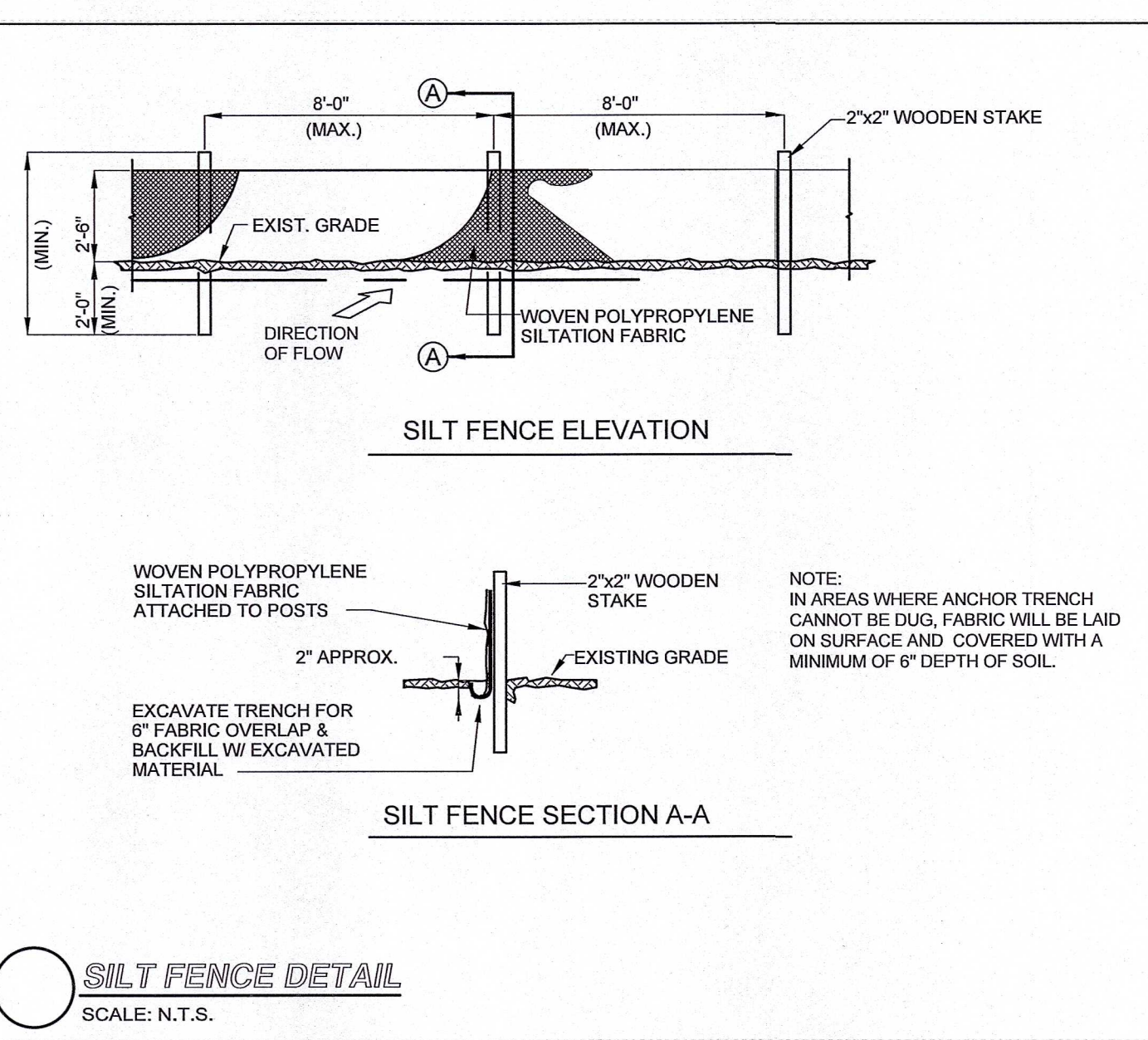
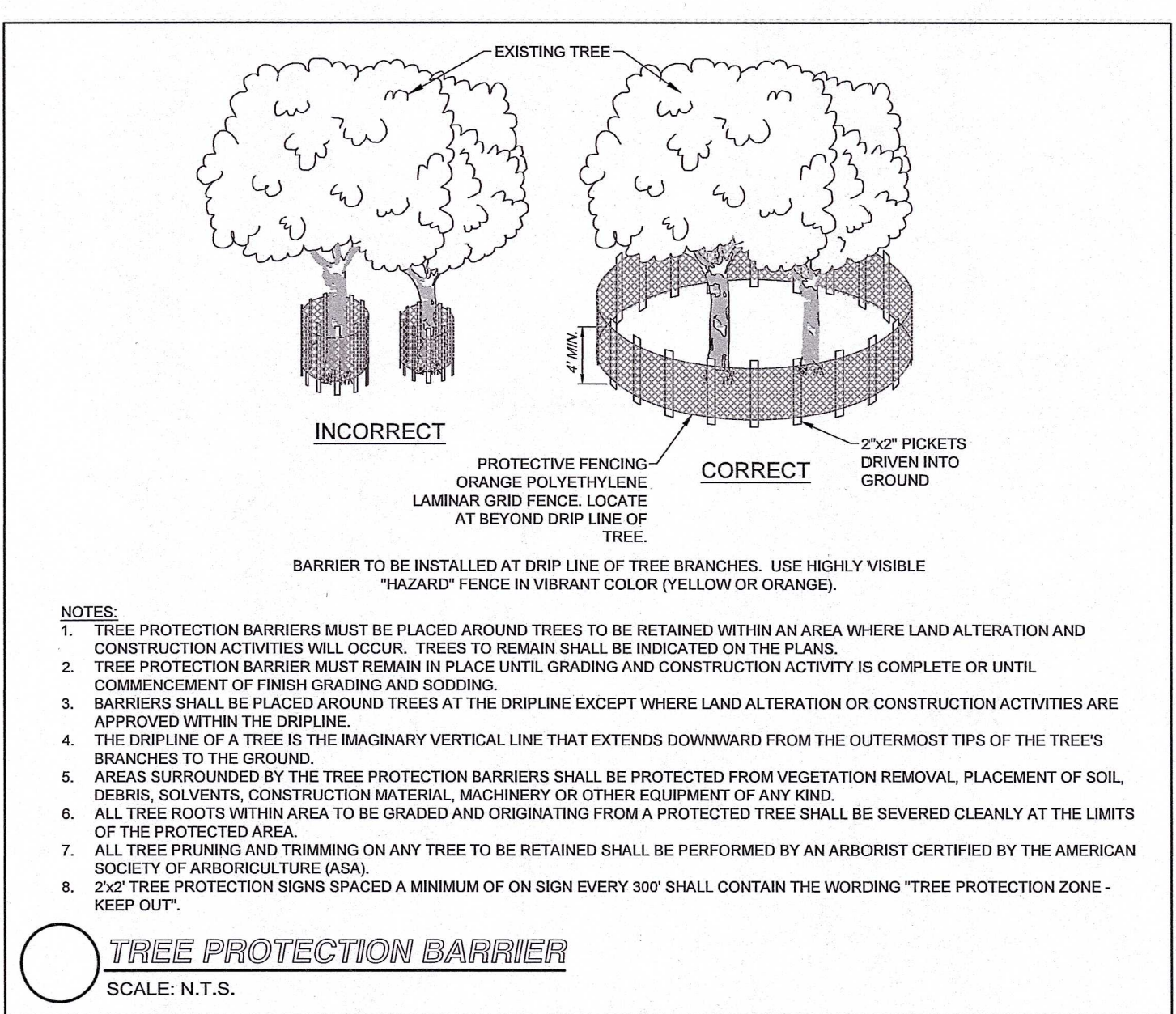
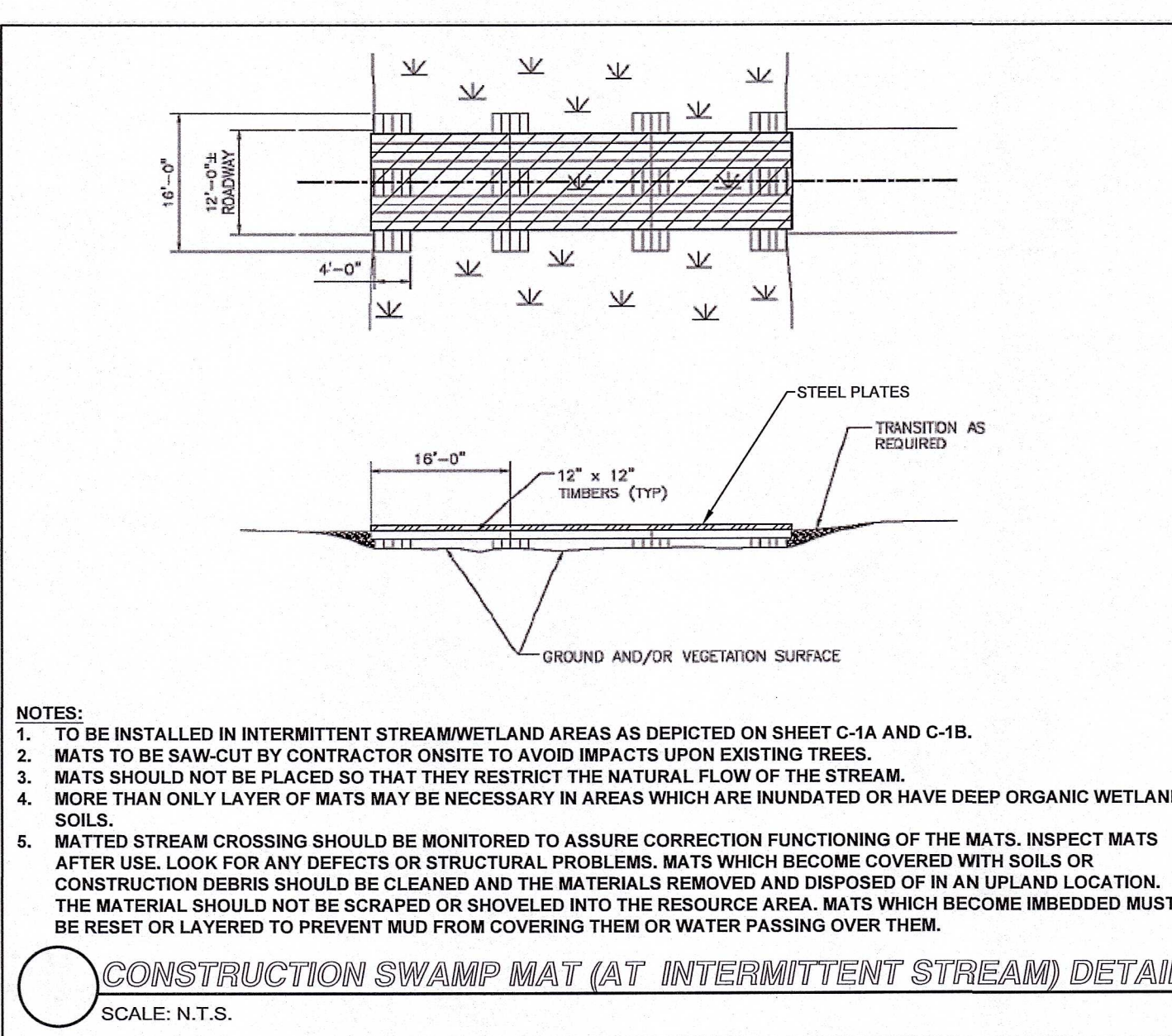
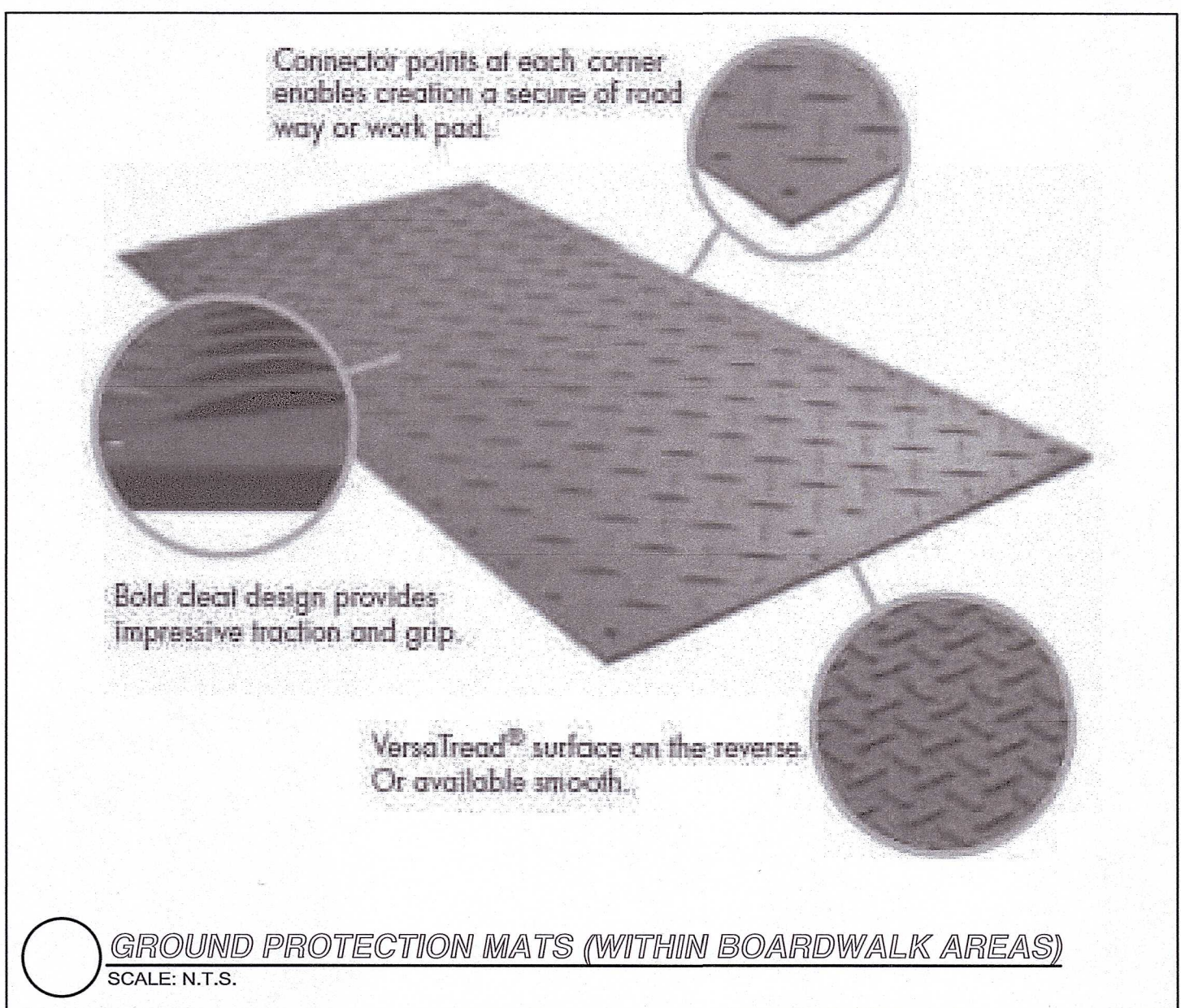
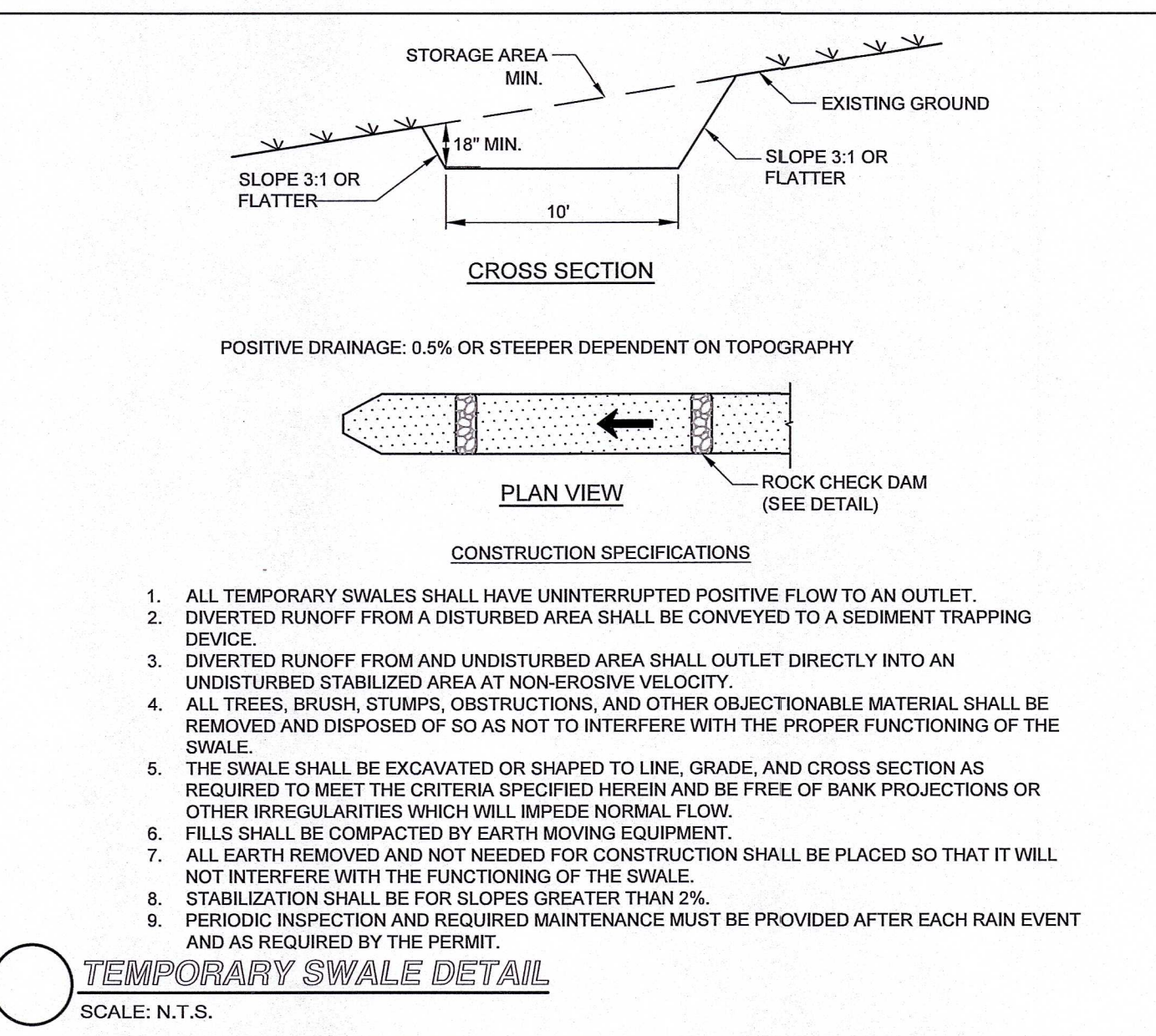
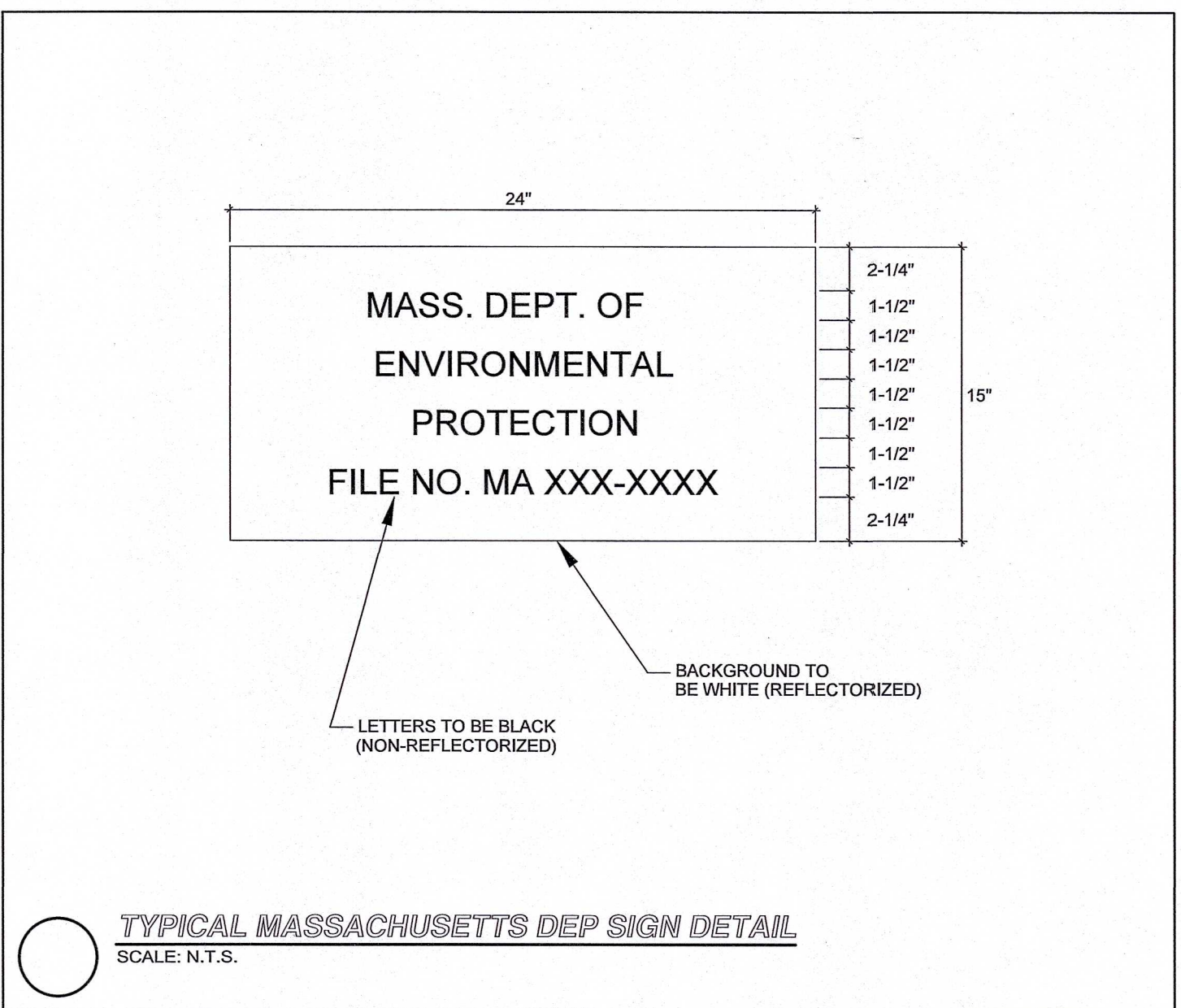
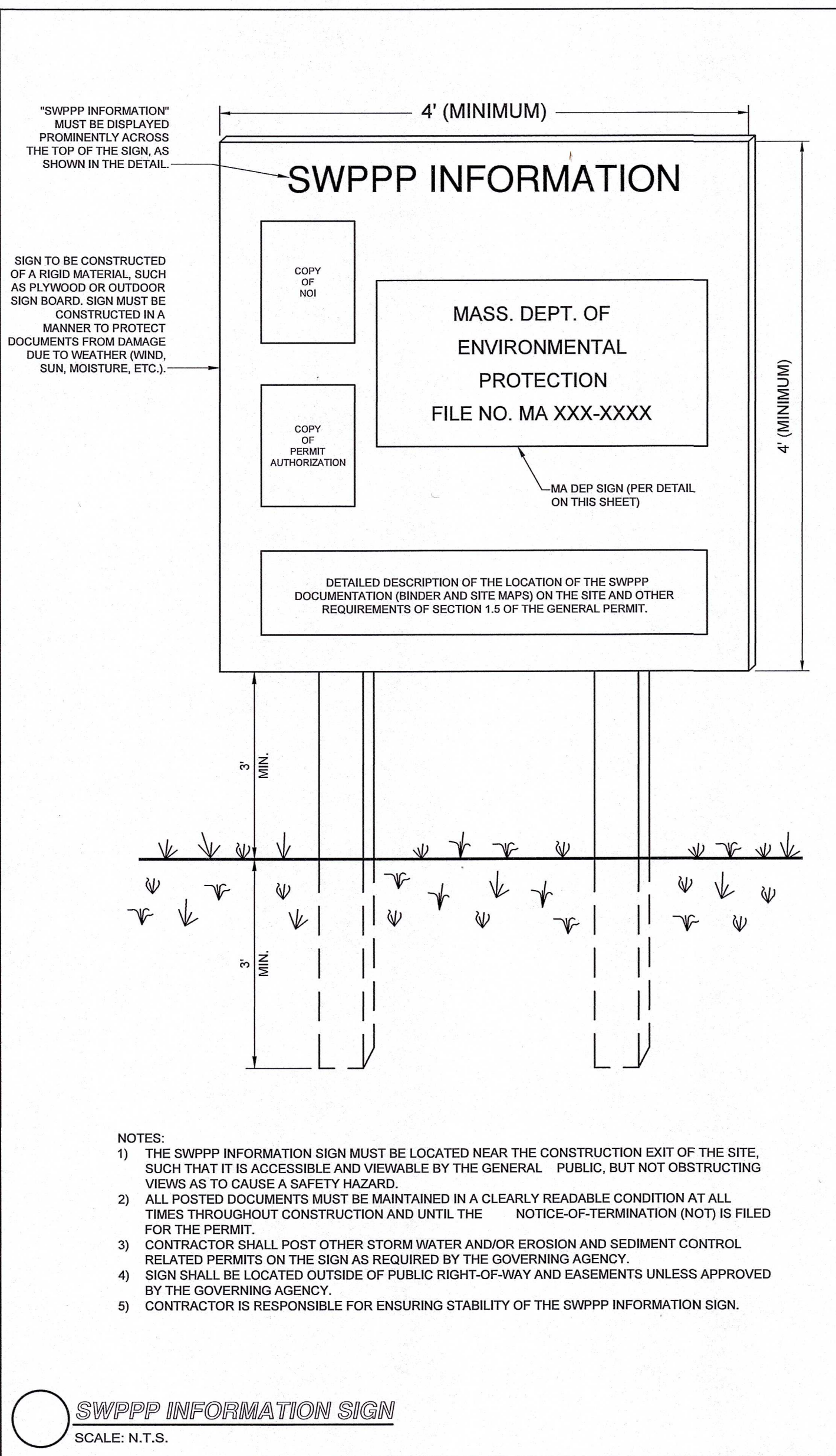
PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
 PHONE: 781-275-0100 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
 FRANKLIN, MA

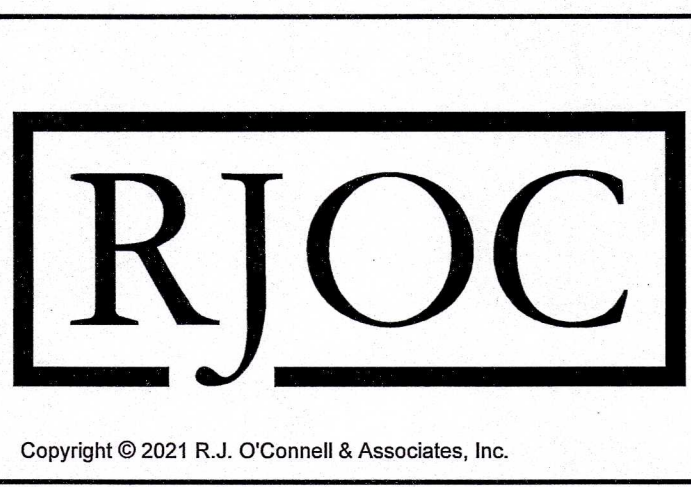
DRAWING NAME:
PARKING & TRAFFIC CONTROL PLAN

DRAWING NUMBER:
C-4B

DATE: 10/30/2023 PROJECT NO.: 22016



Drawing name: G:\MA\Franklin\Fairfield Residential\121 Grove Street\Main\2016_C-5 Site Details - 1.dwg
May 08, 2024 - 12:43pm



NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023

DESIGNED BY: MAC
DRAWN BY: MCR
REVIEWED BY: BJM
SCALE: N.T.S.

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVILLE AVENUE, SUITE 201 STONHAM, MA 02180
PHONE: 781-278-0180 RJOCONNELL.COM

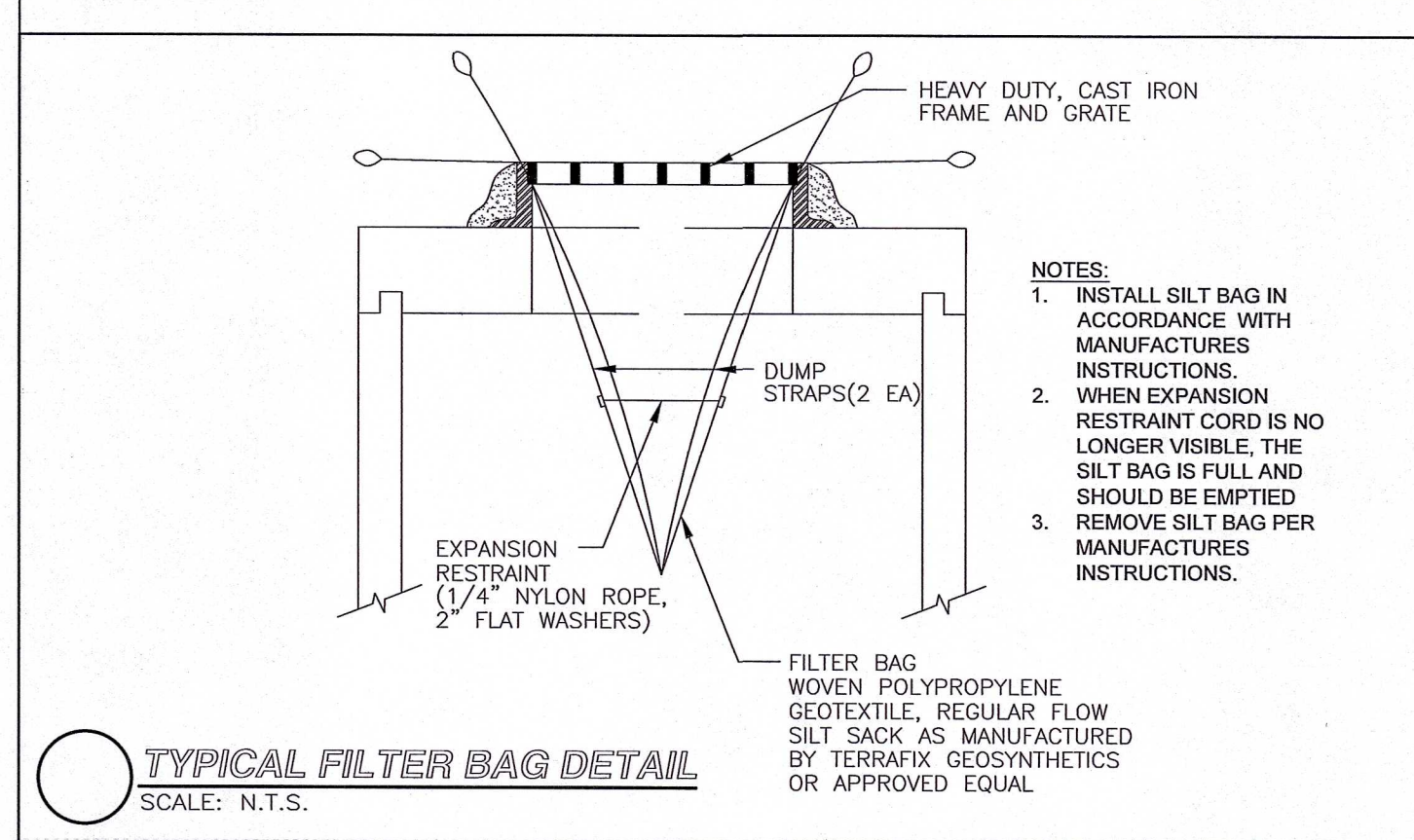
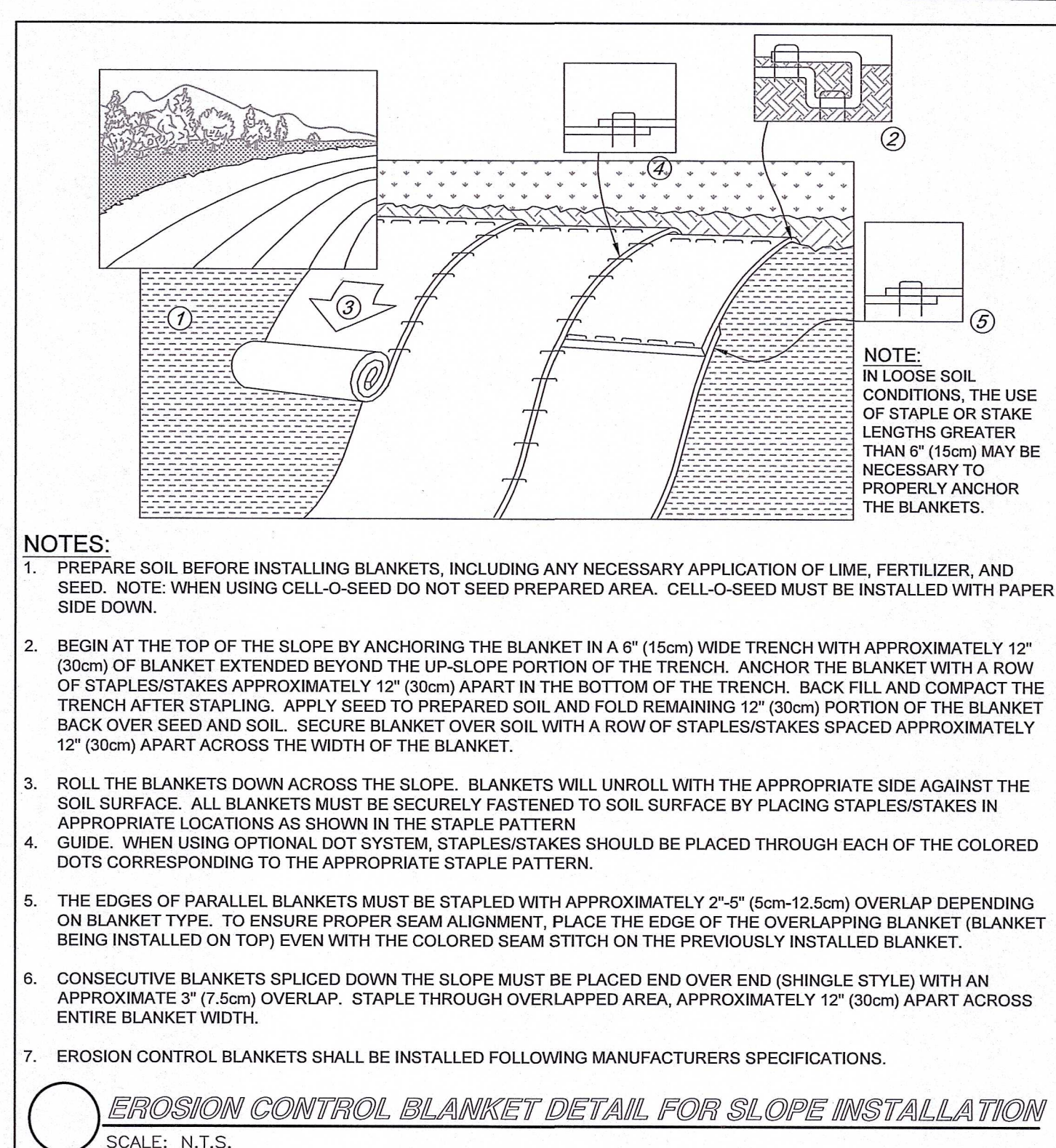
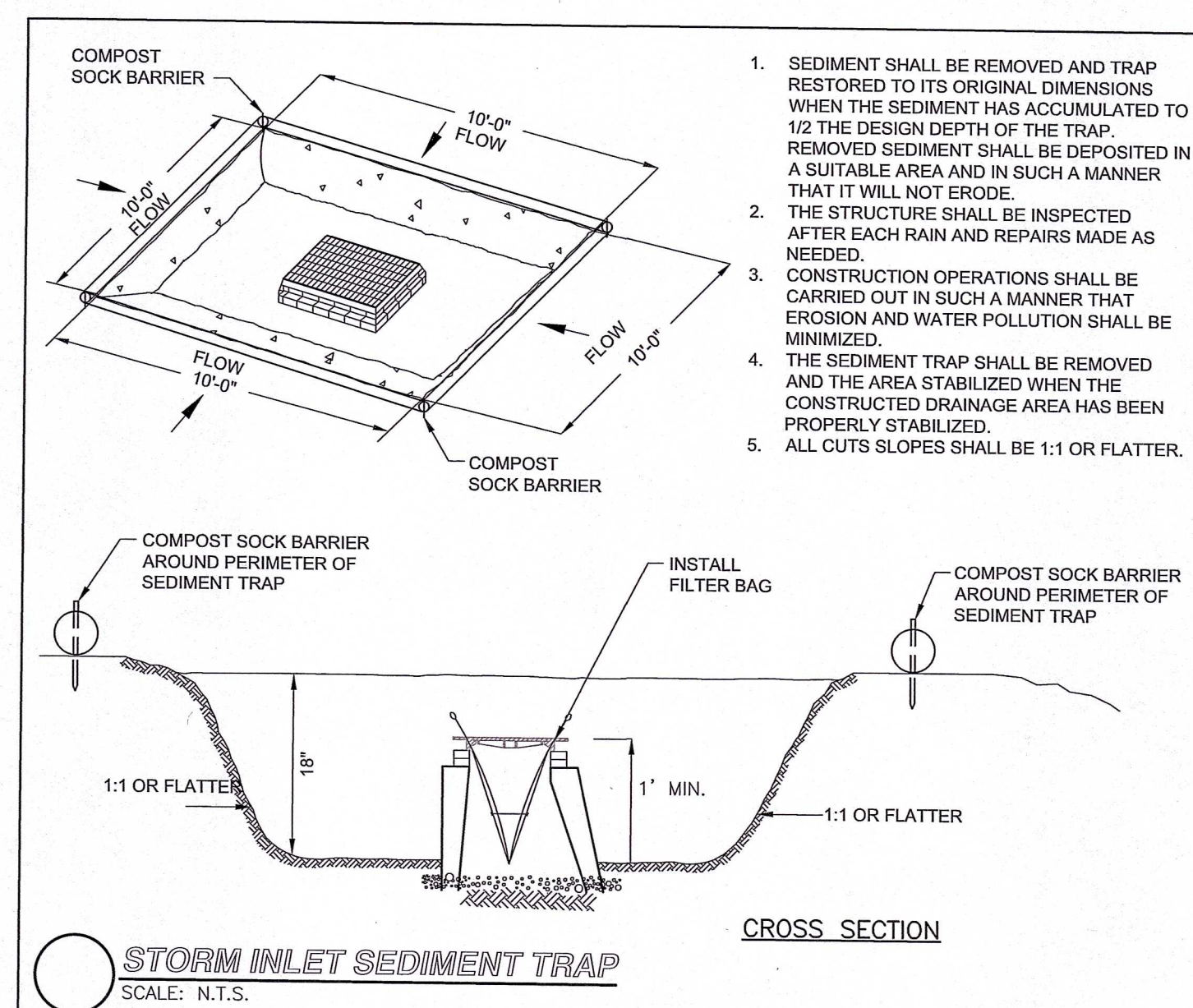
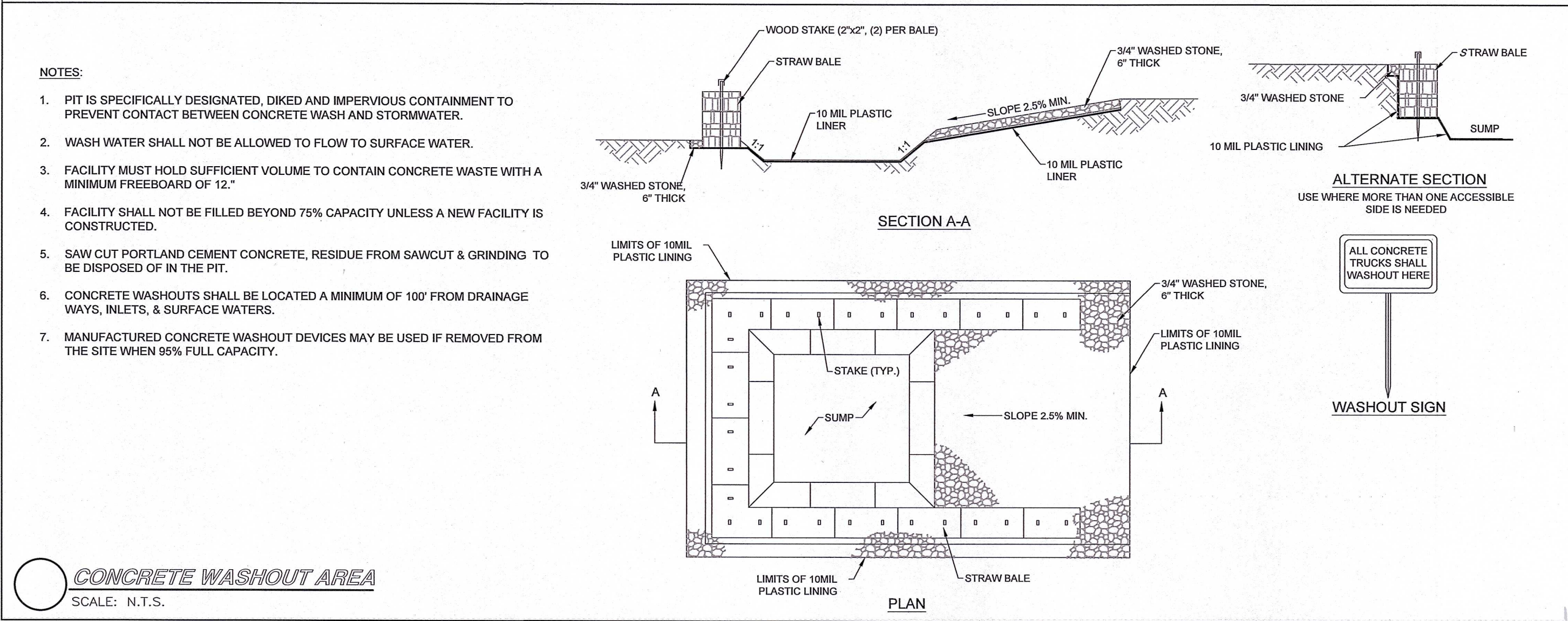
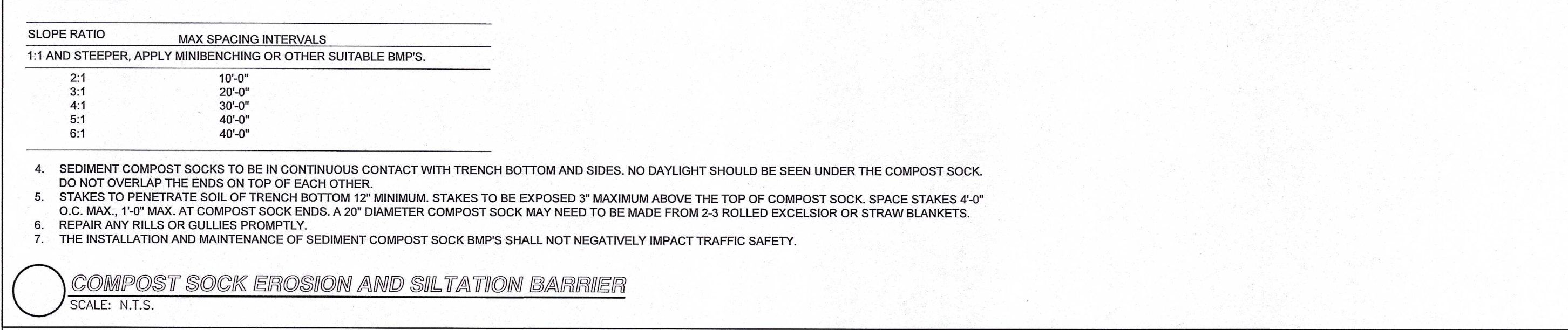
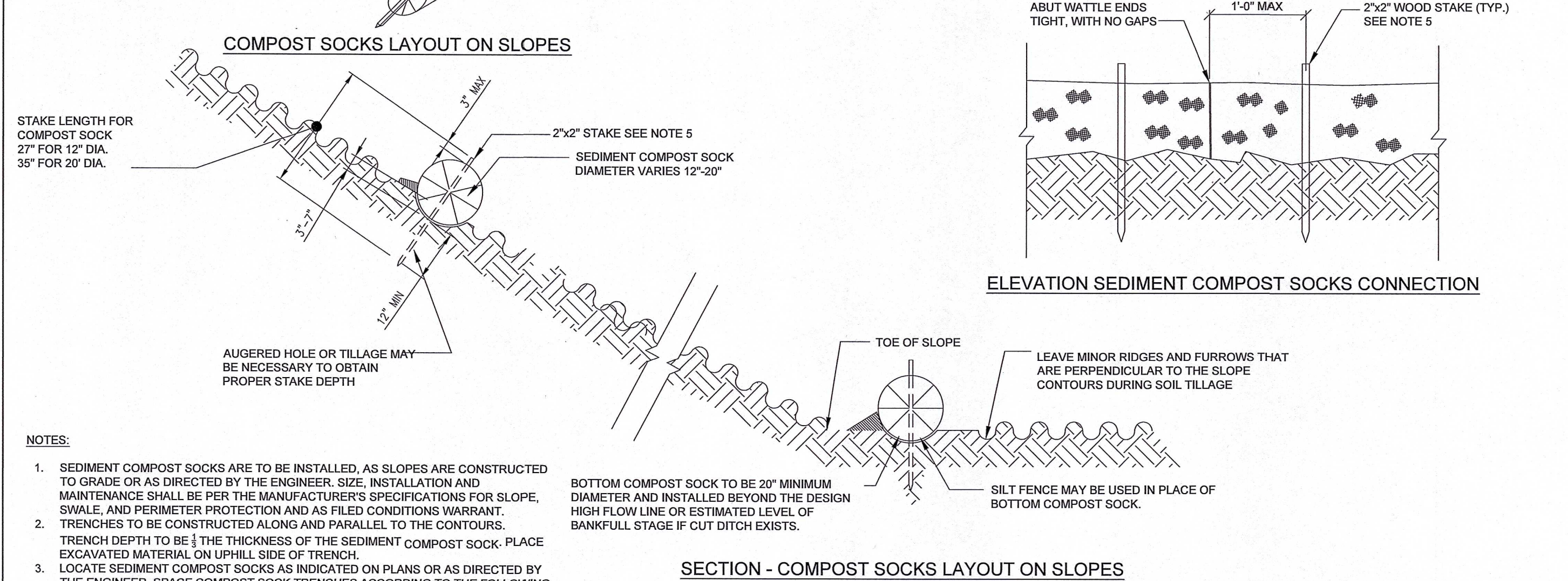
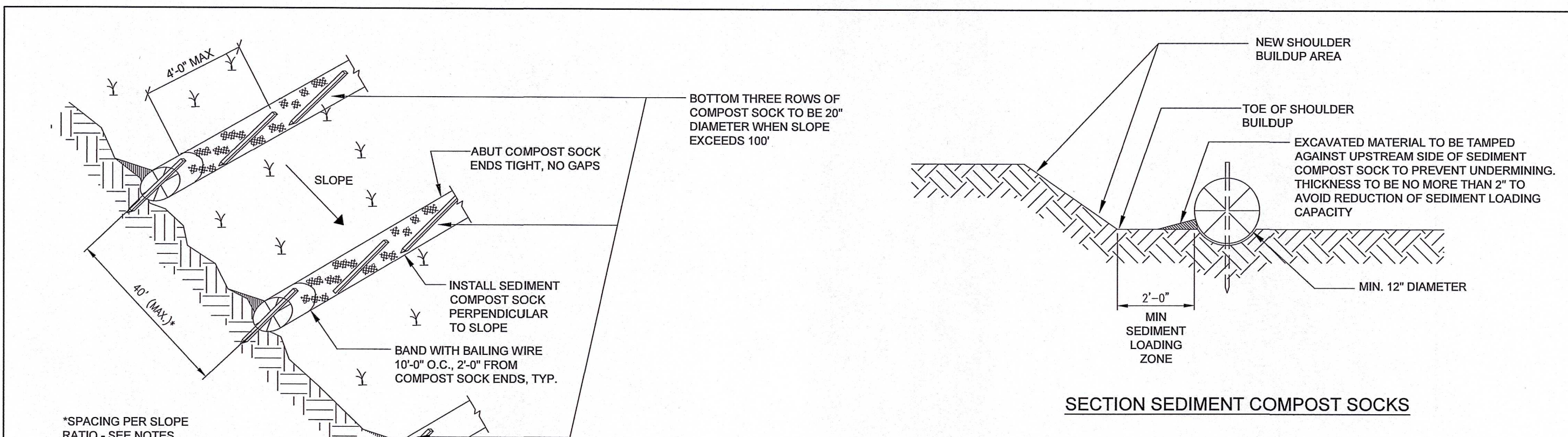
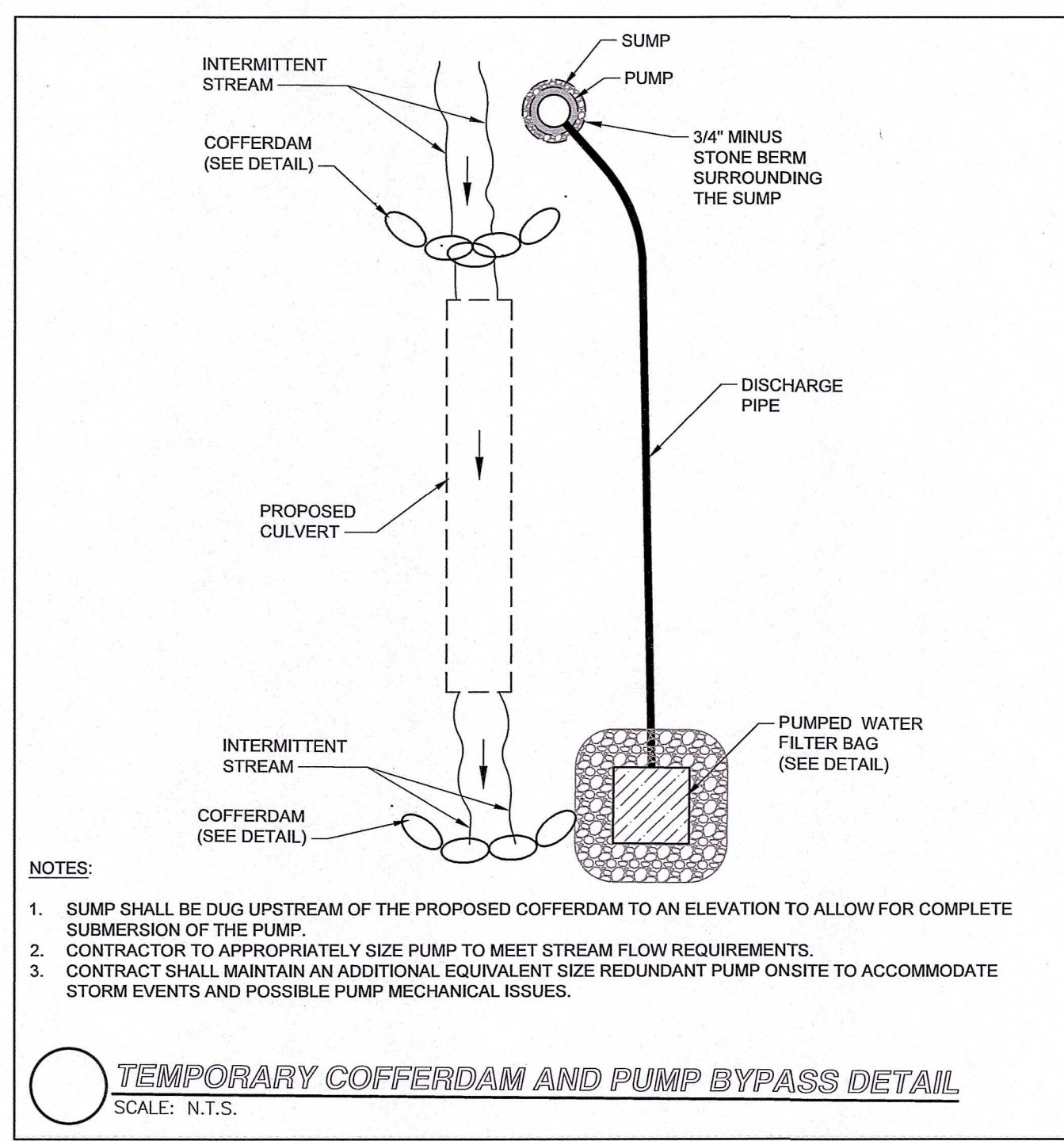
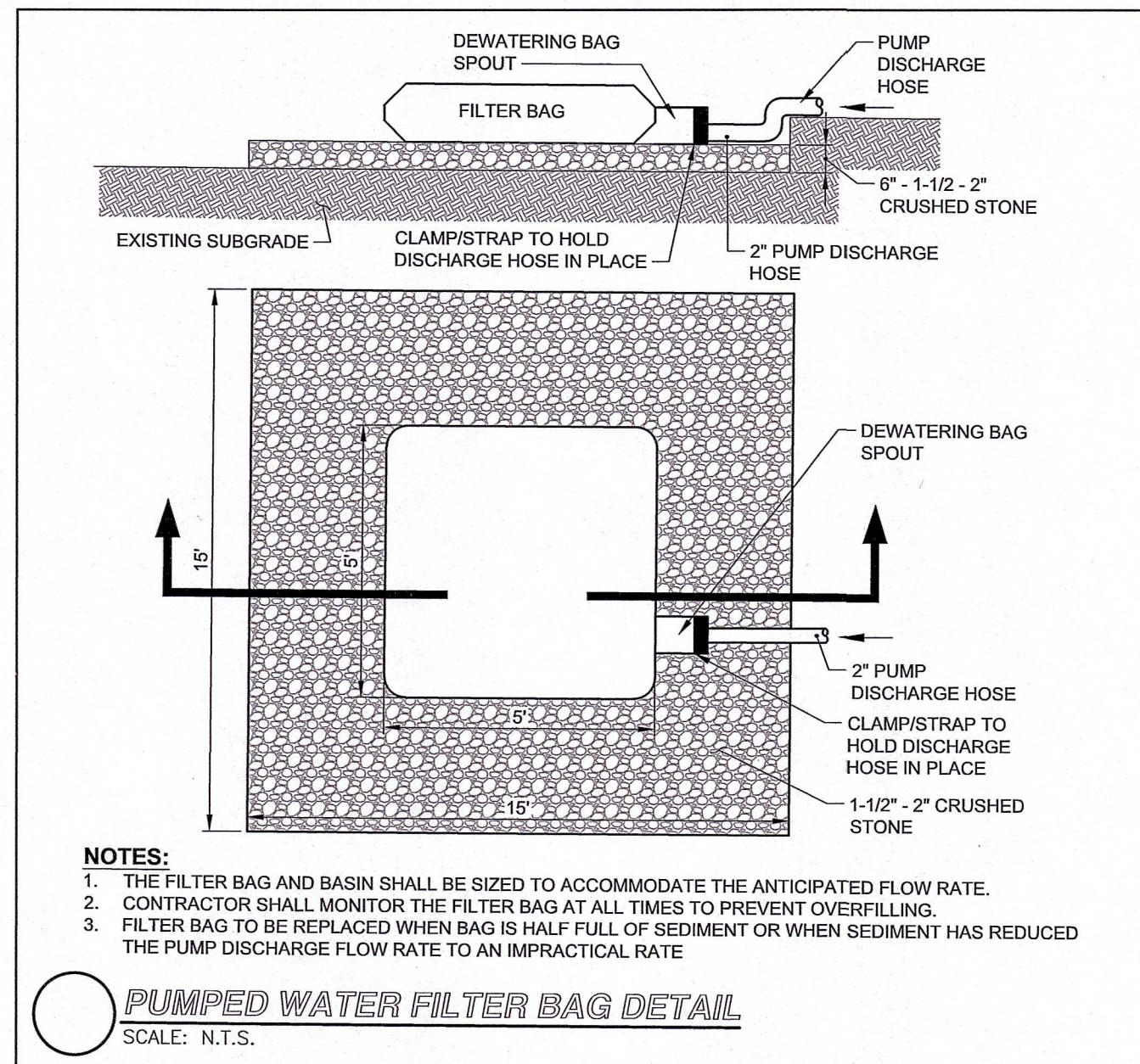
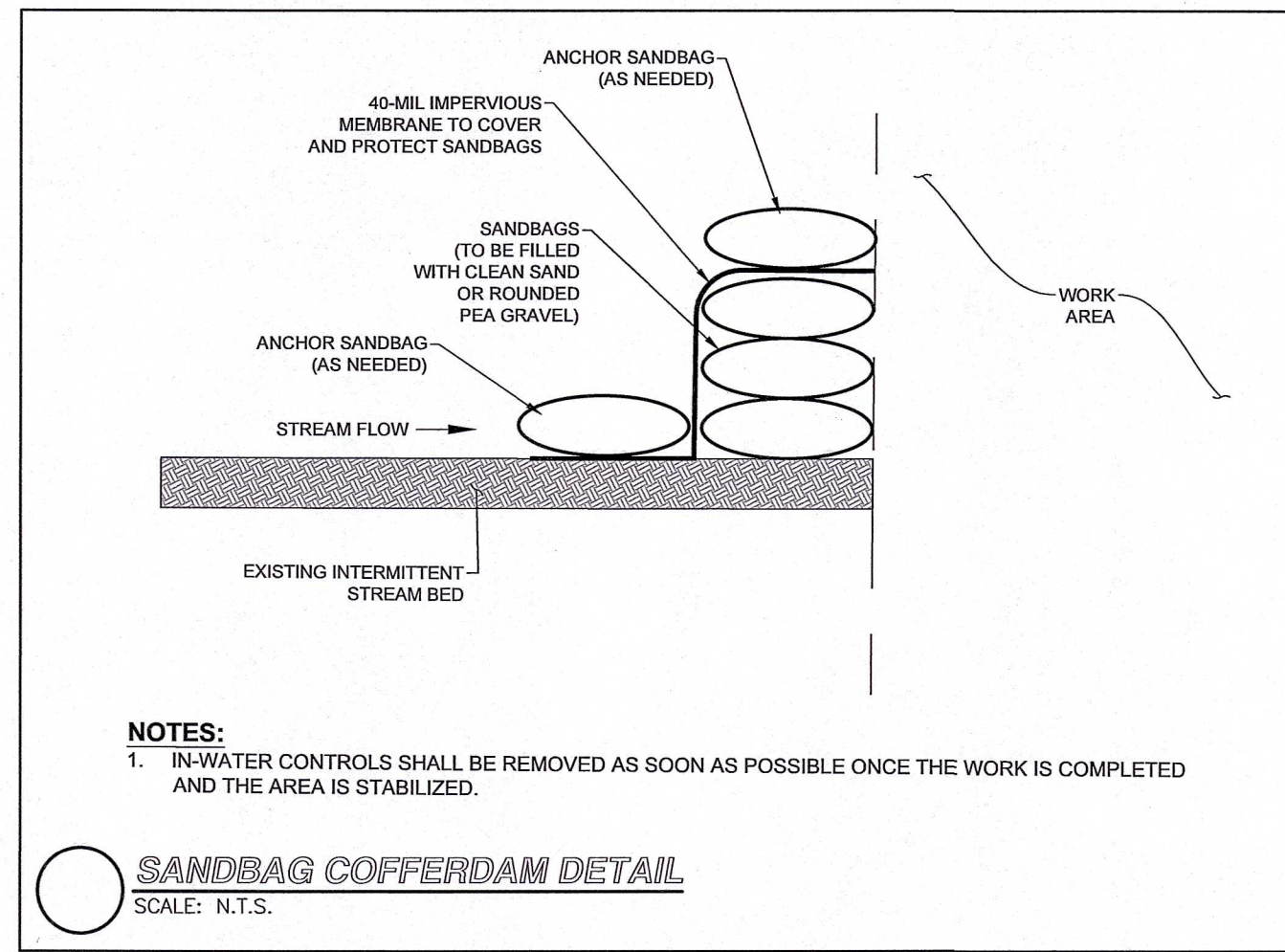
PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

DRAWING NAME:
SITE DETAILS - I

DRAWING NUMBER:
C-5

DATE: 10/30/2023 PROJECT NO.: 22016

NOT FOR CONSTRUCTION

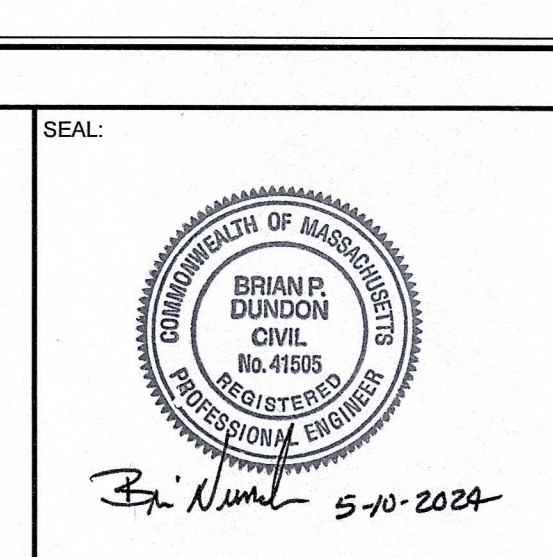


NOT FOR CONSTRUCTION

NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	N.T.S.

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02186
PHONE: 781.279.0180 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

DRAWING NAME:
SITE DETAILS - II

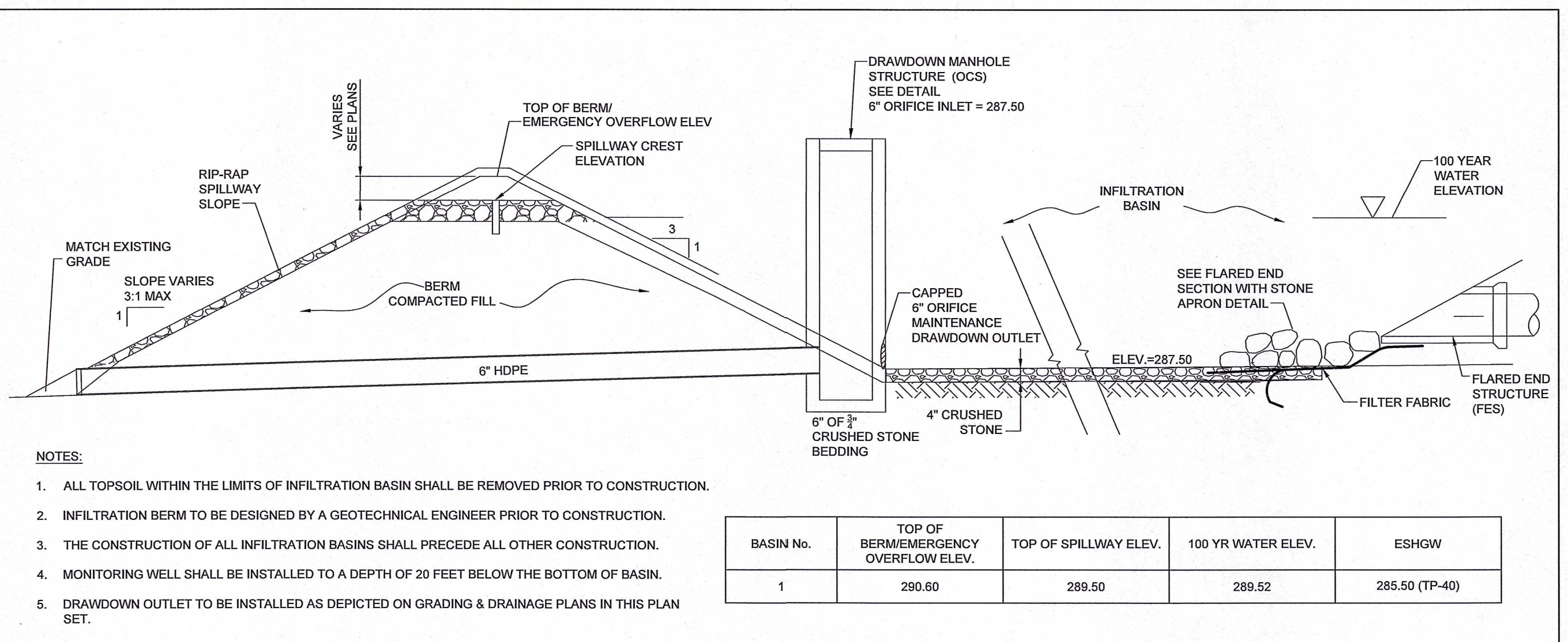
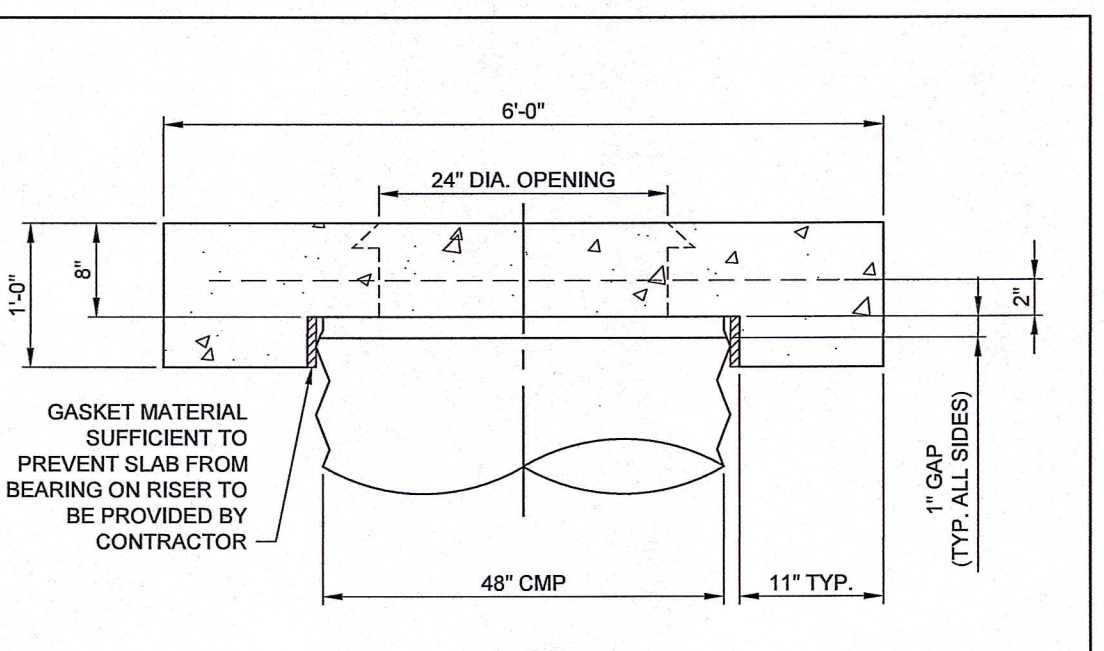
DRAWING NUMBER:
C-6

DATE: 10/30/2023 PROJECT NO.: 22016

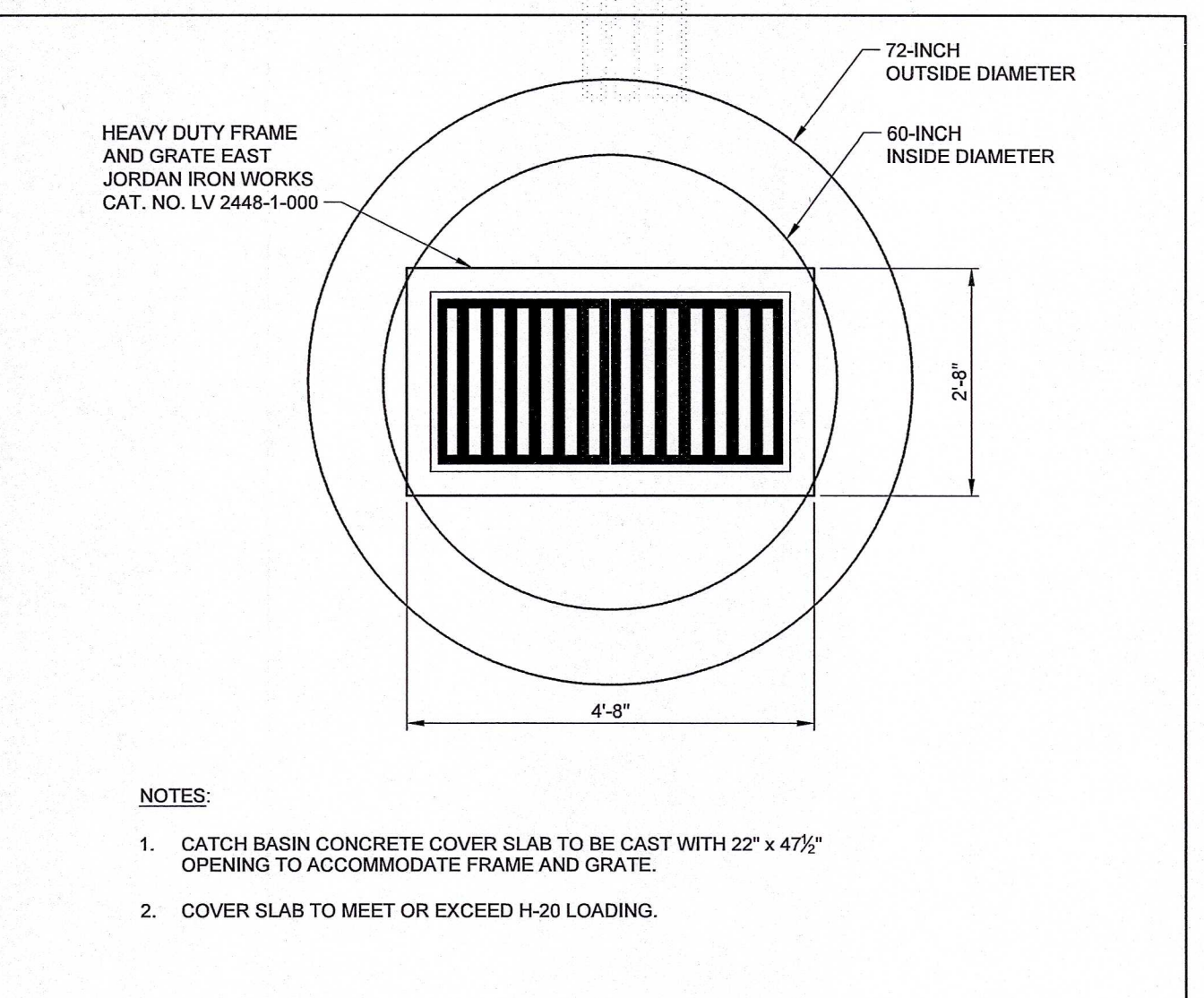
Drawing name: G:\MA\Franklin\Fairfield Residential\121 Grove Street\Main\2016_C-6 Site Details - II.dwg
May 08, 2024 - 12:44pm
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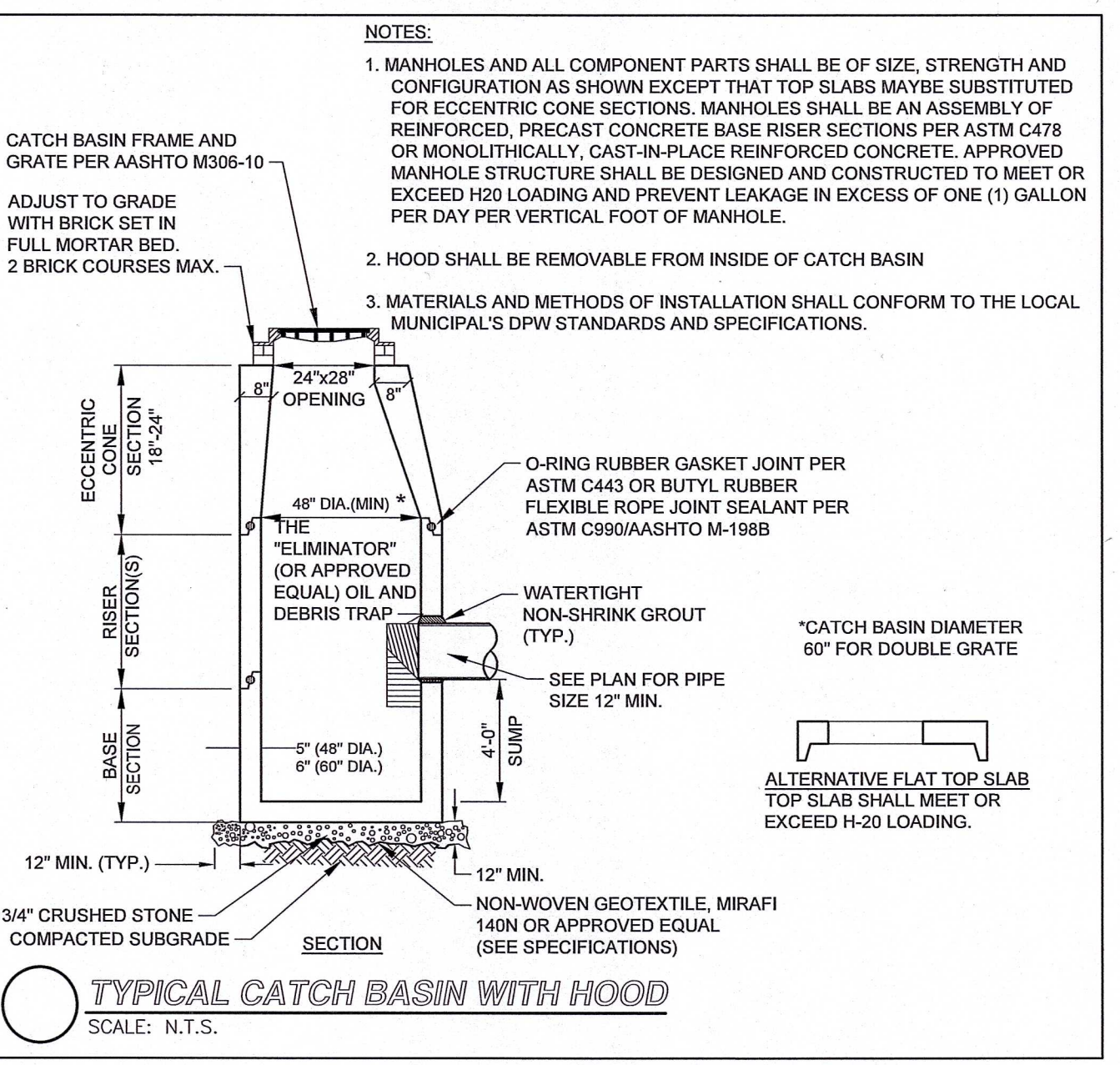
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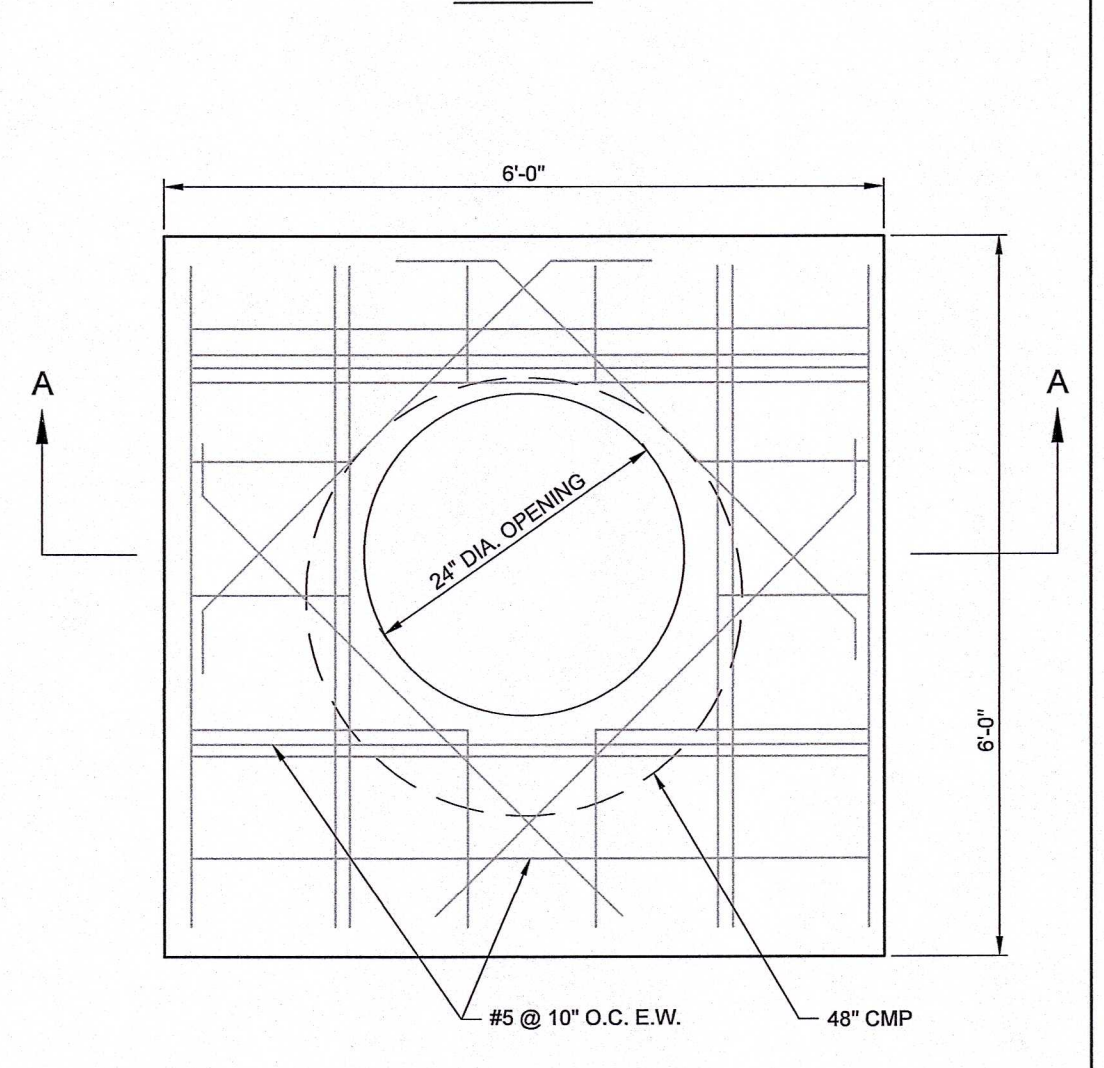
TYPICAL STORMWATER BASIN-1 SECTION
SCALE: N.T.S.



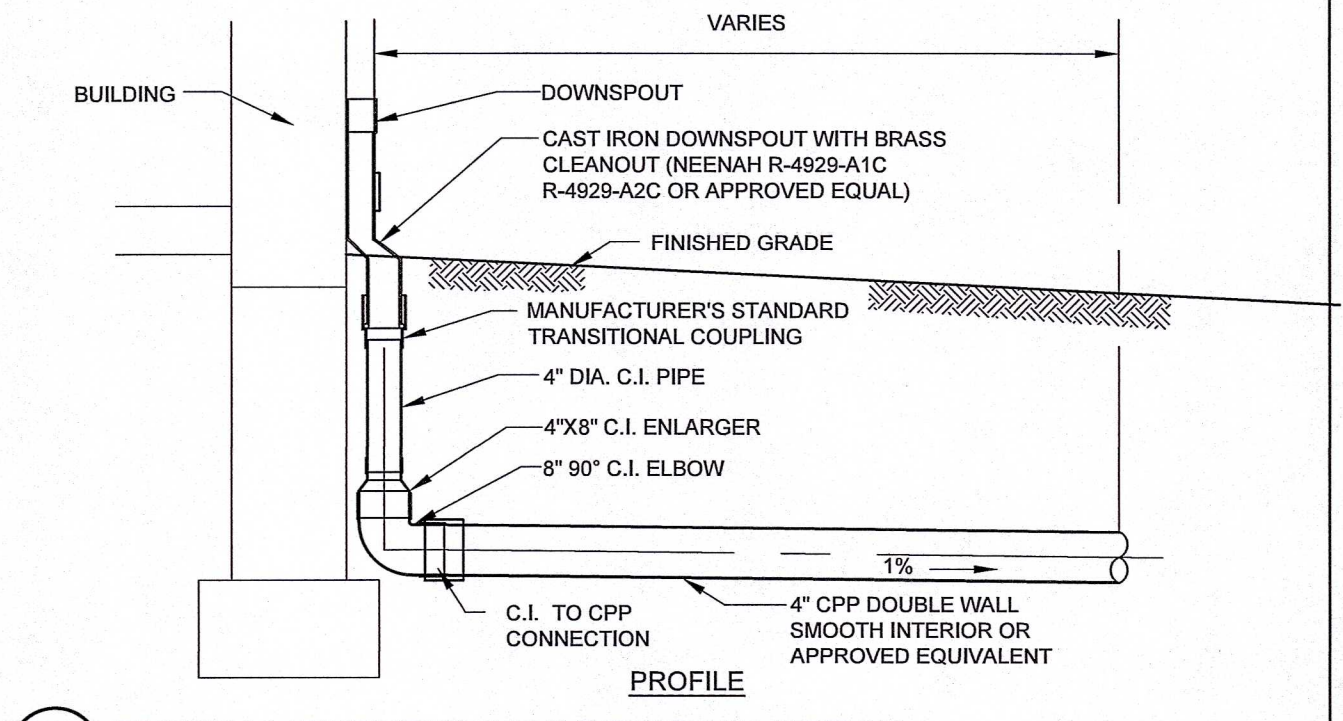
TYPICAL DOUBLE CATCH BASIN GRATE DETAIL
SCALE: N.T.S.



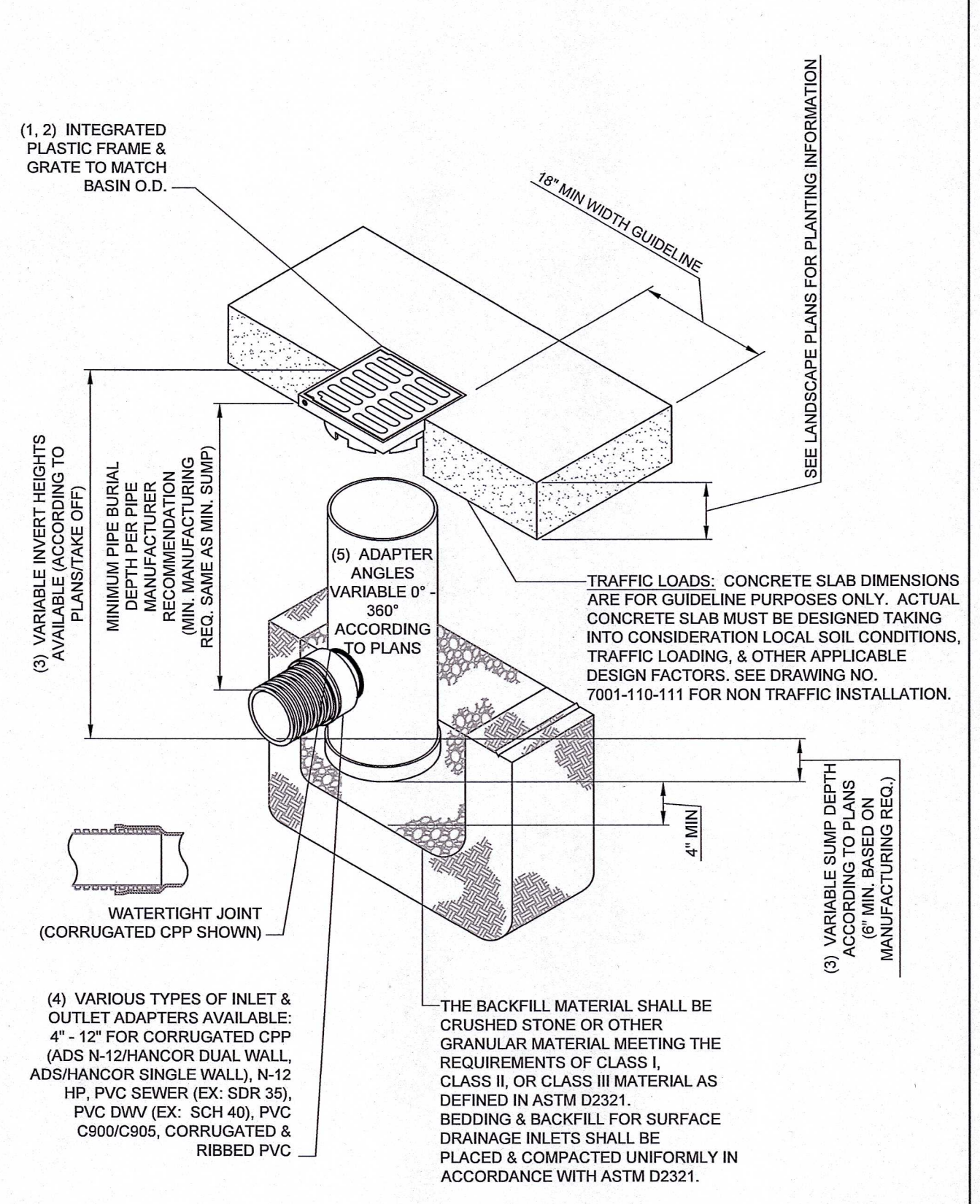
TYPICAL CATCH BASIN WITH HOOD
SCALE: N.T.S.



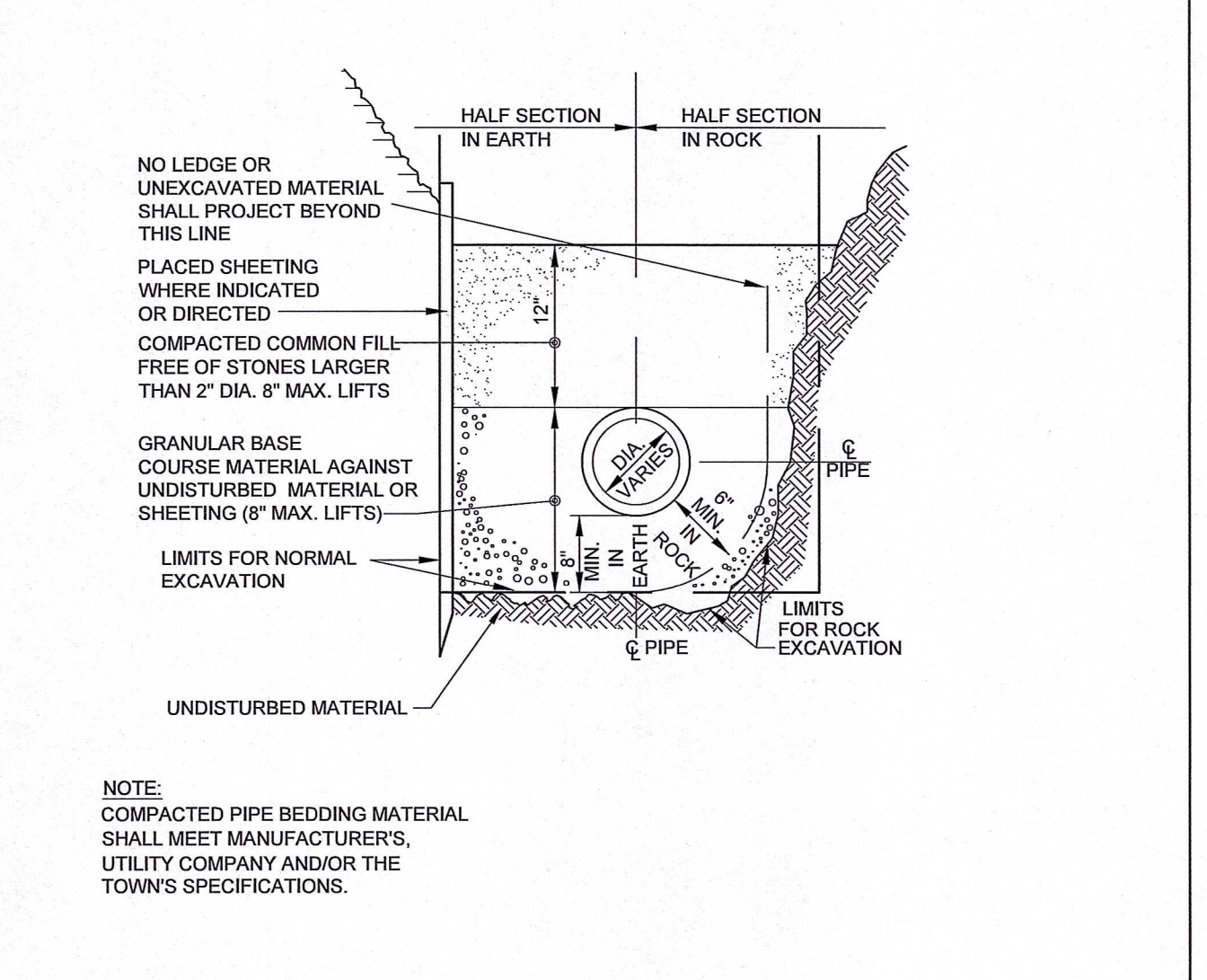
TYPICAL ACCESS MANHOLE FOR SUBSURFACE CMP INFILTRATION SYSTEMS
SCALE: N.T.S.



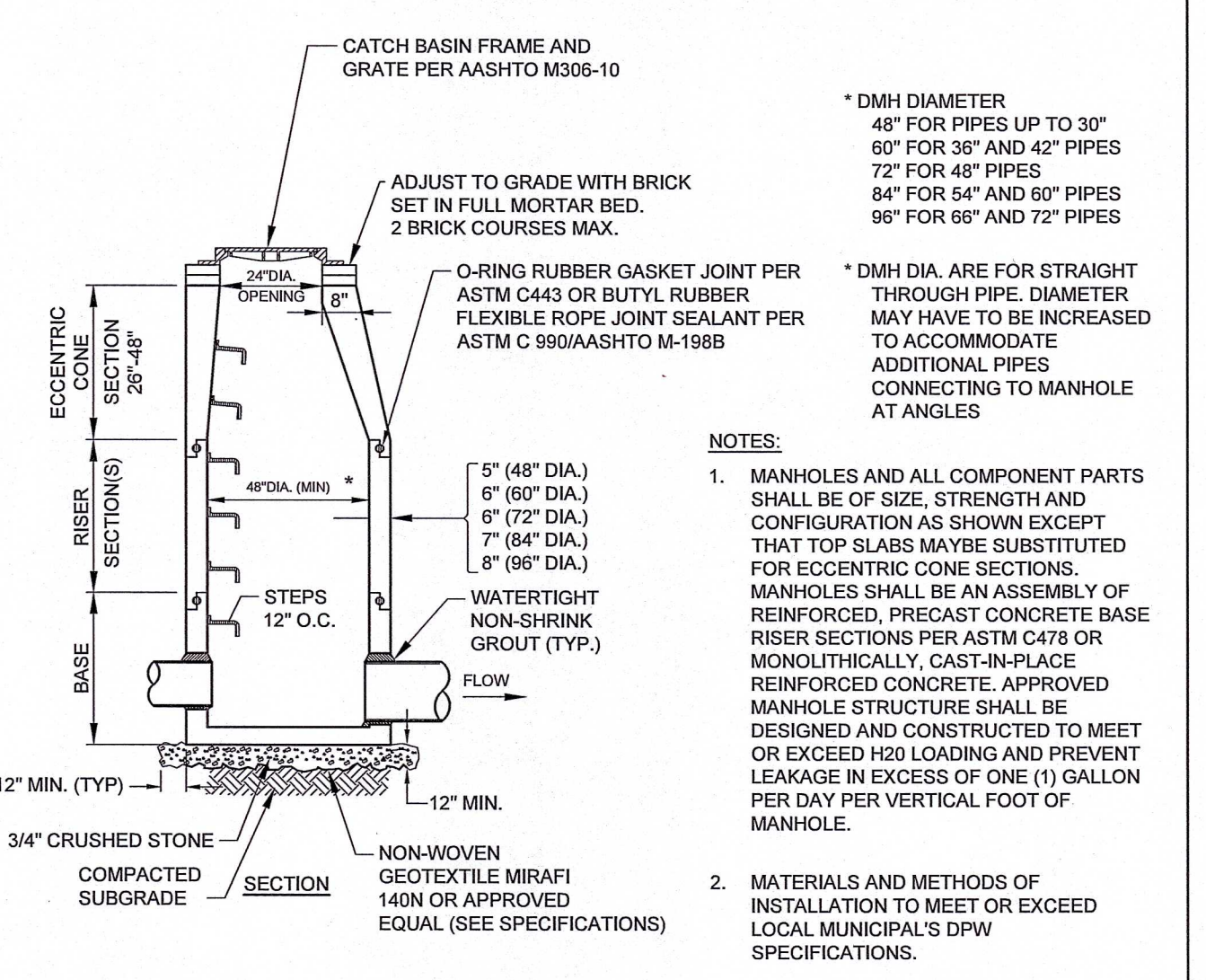
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SCALE: N.T.S.



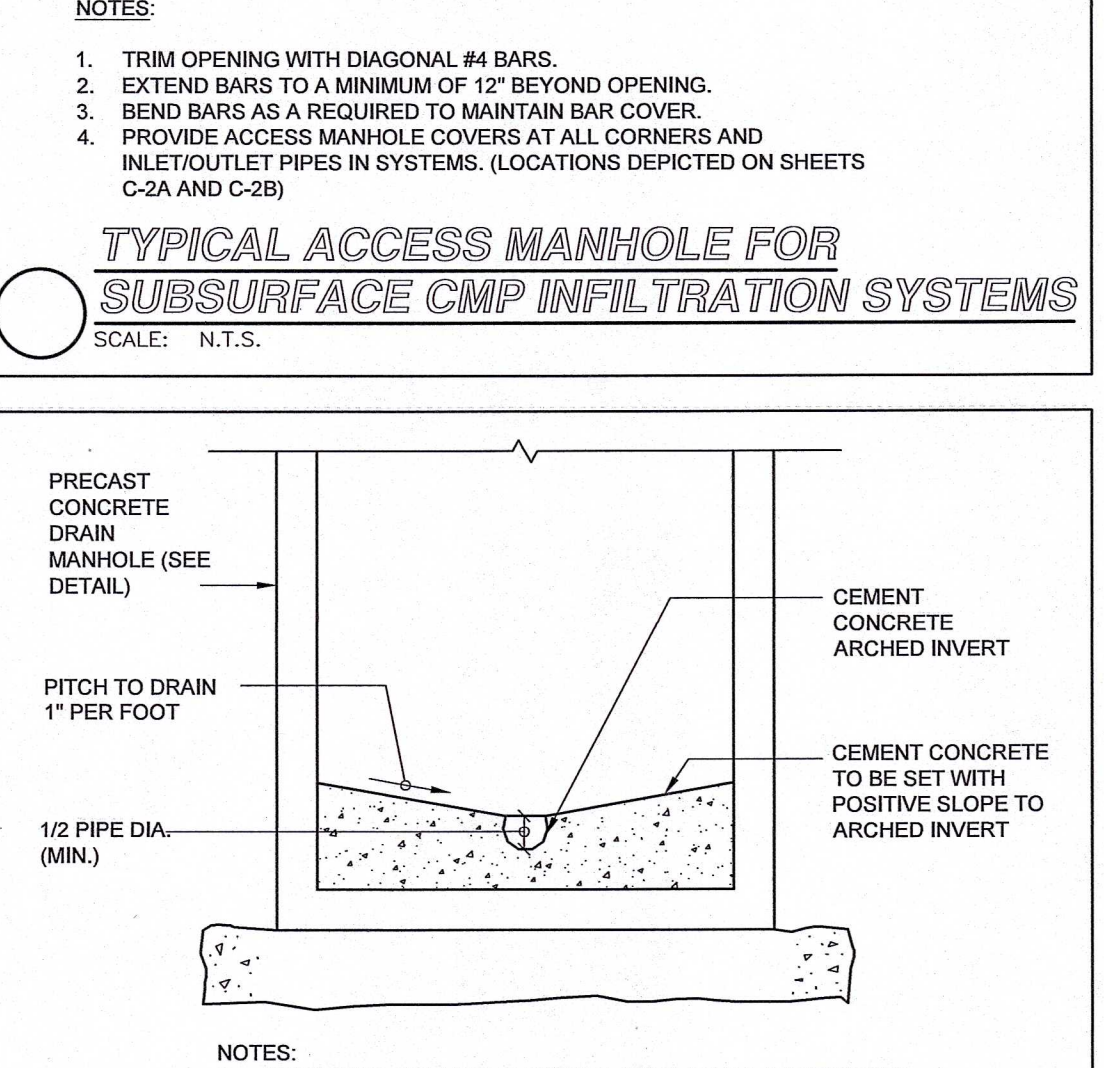
NYLOPLAST 12' AREA DRAIN GRATE ASSEMBLY DETAIL
SCALE: N.T.S.



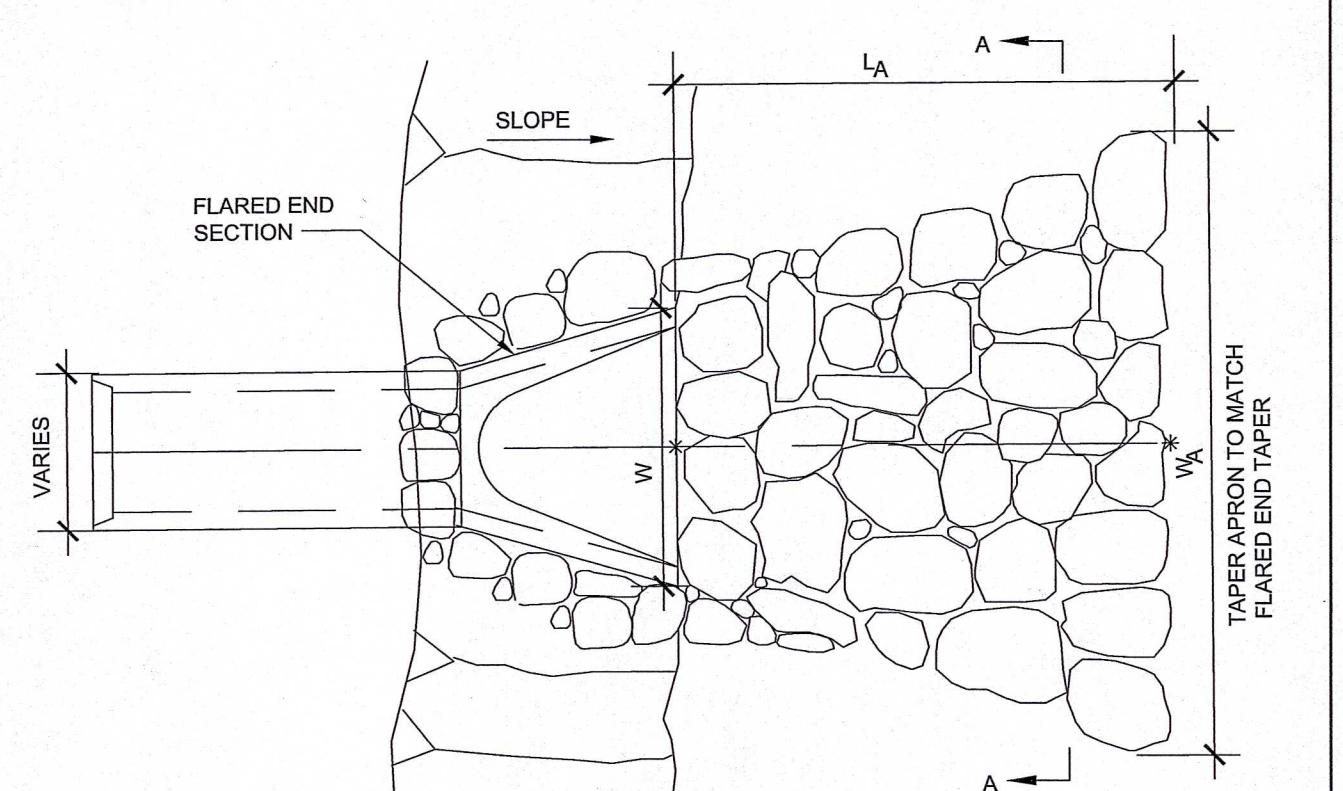
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SCALE: N.T.S.



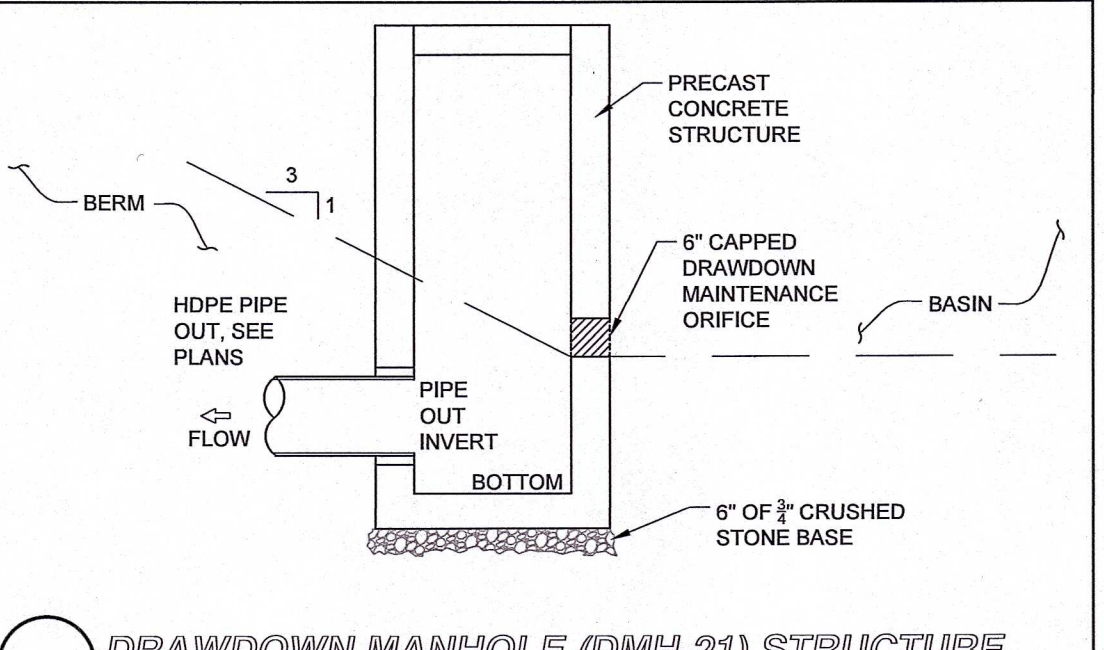
TYPICAL PRECAST CONCRETE DRAIN MANHOLE (DMH)
SCALE: N.T.S.



TYPICAL CEMENT CONCRETE INVERT SECTION FOR DRAIN MANHOLE
SCALE: N.T.S.



FLARED END SECTION WITH STONE APRON
SCALE: N.T.S.

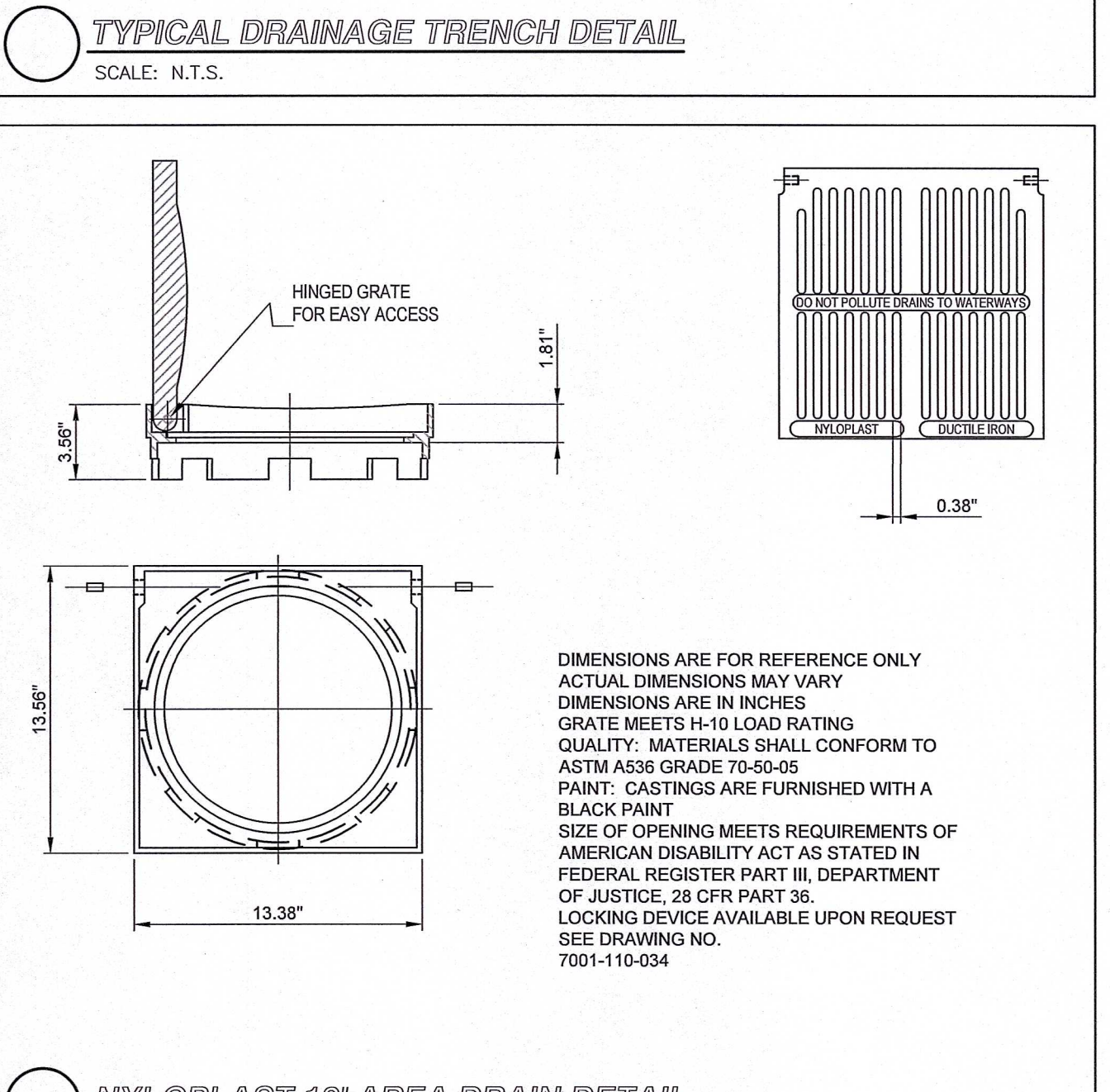


DRAWDOWN MANHOLE (DMH-21) STRUCTURE
SCALE: N.T.S.

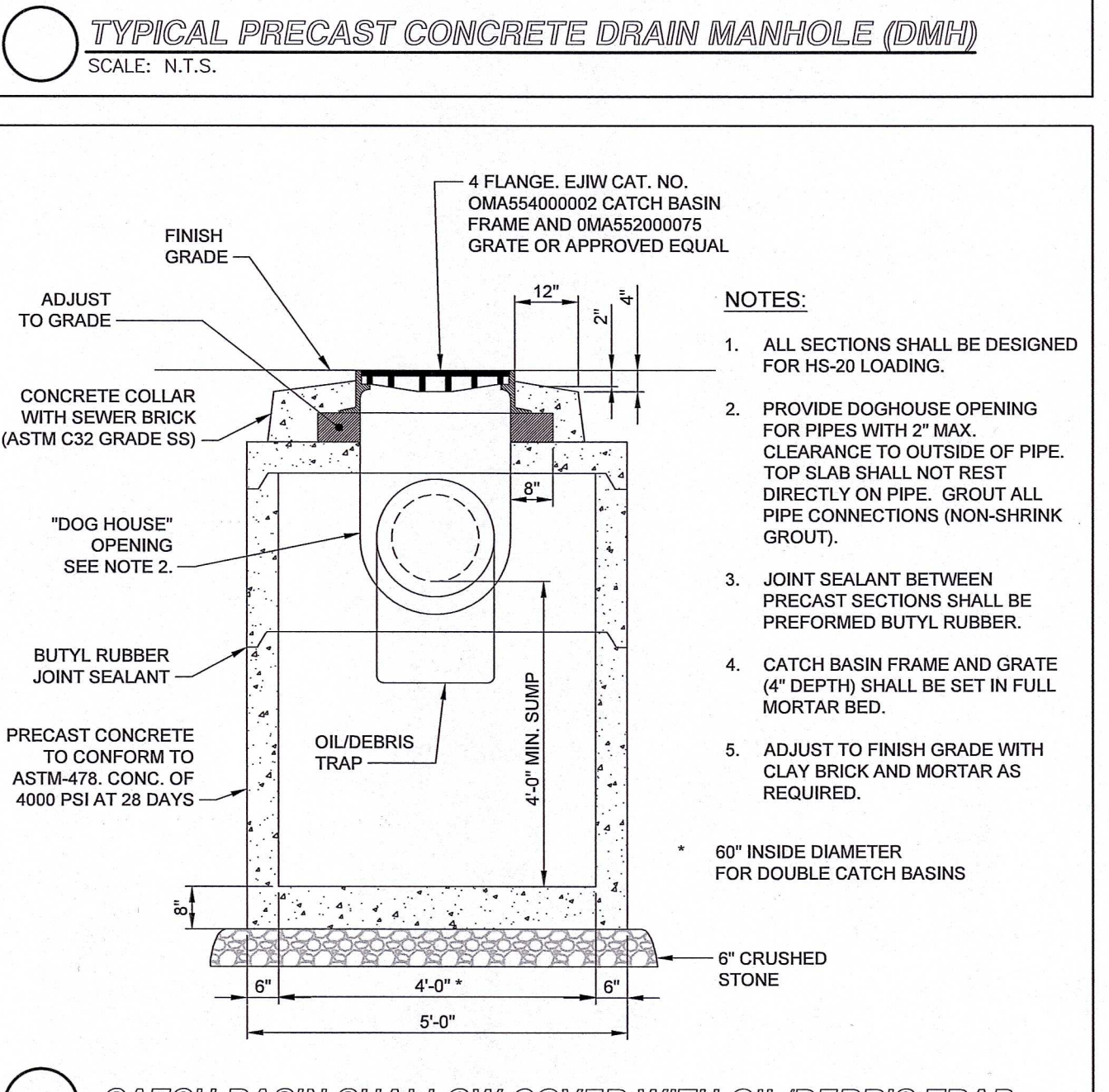
FES SIZING CHART

OUTLET	L ₁ (FT.)	W (FT.)	W ₂ (FT.)
FES-1	20	9	23
FES-2	12	6	14
FES-3	6	3	7
FES-4	20	9	23
FES-5	20	9	23
FES-6	6	3	7
FES-7	6	1.5	6.5

NYLOPLAST 12' AREA DRAIN GRATE ASSEMBLY DETAIL
SCALE: N.T.S.

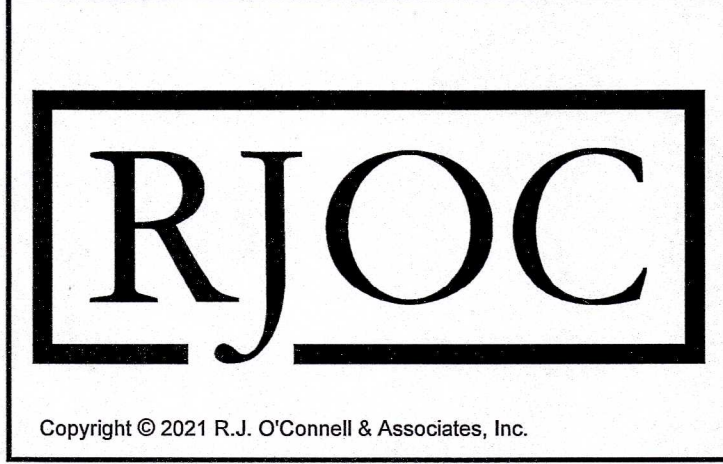


NYLOPLAST 12' AREA DRAIN DETAIL
SCALE: N.T.S.



CATCH BASIN SHALLOW COVER WITH OIL/DEBRIS TRAP
SCALE: N.T.S.

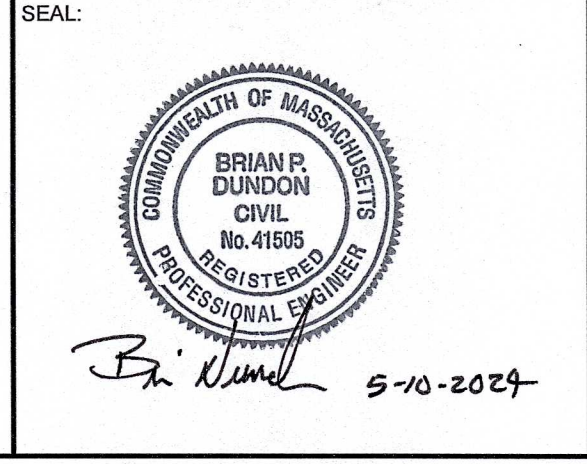
Drawing name: G:\MAN\Franklin\Fairfield Residential\121 Grove Street\Man\22016_C-7_Site Details - III.dwg
May 06, 2024 - 12:24pm



NO.	REVISION	DATE	NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024			
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024			
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024			
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024			
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023			

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	N.T.S.

PREPARED BY:
FAIRFIELD GROVE STREET LLC
30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAINTREE, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0160 - RJOCONNELL.COM

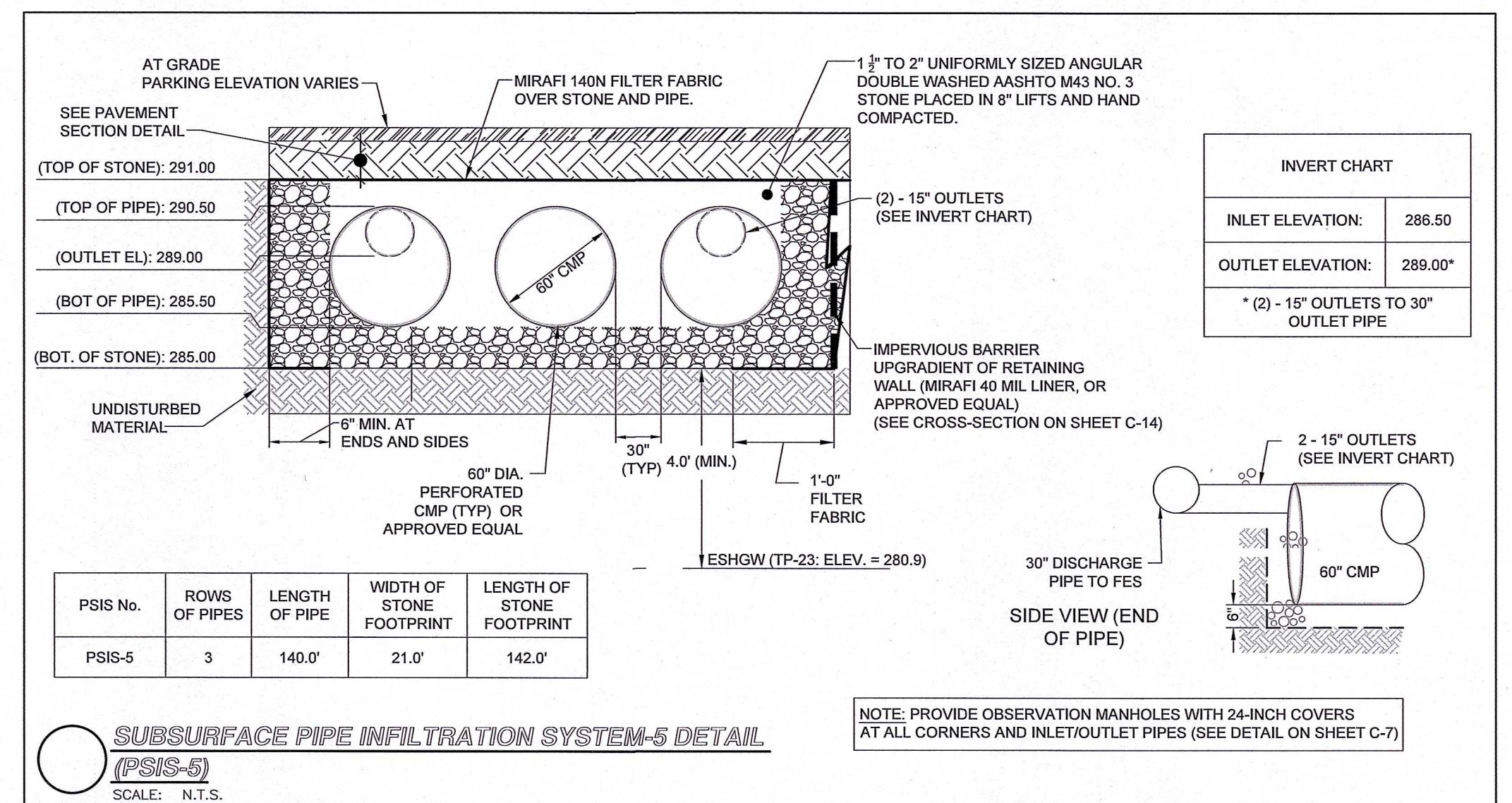
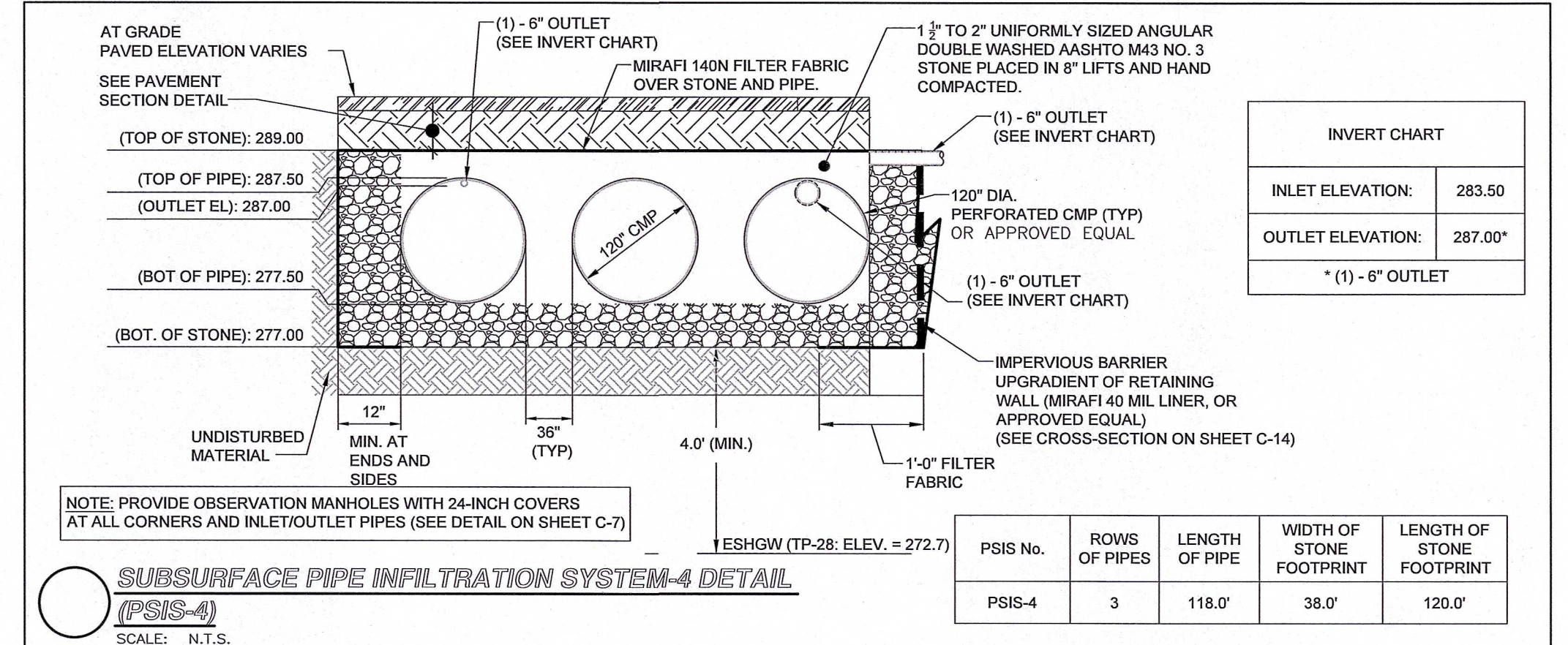
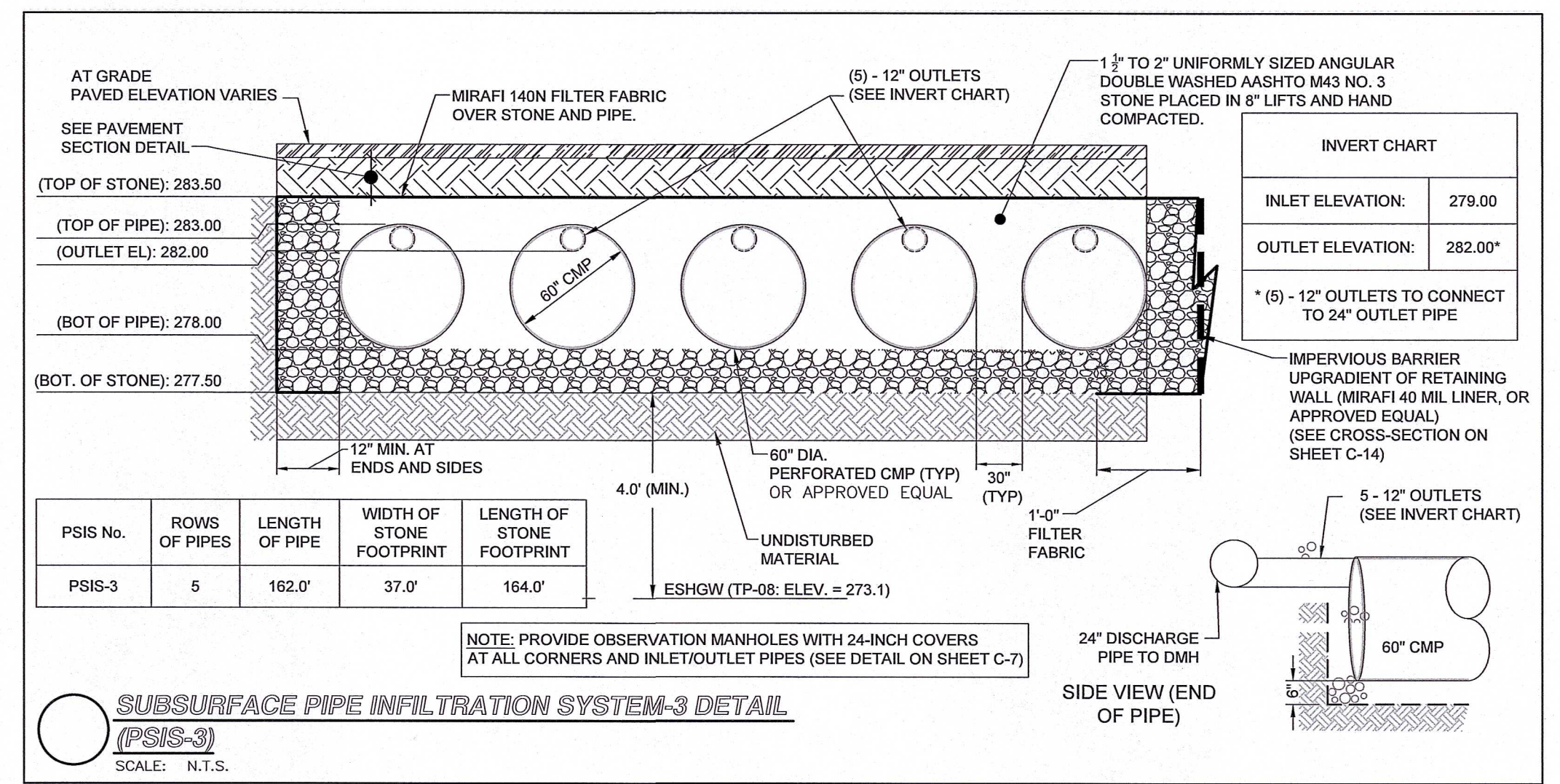
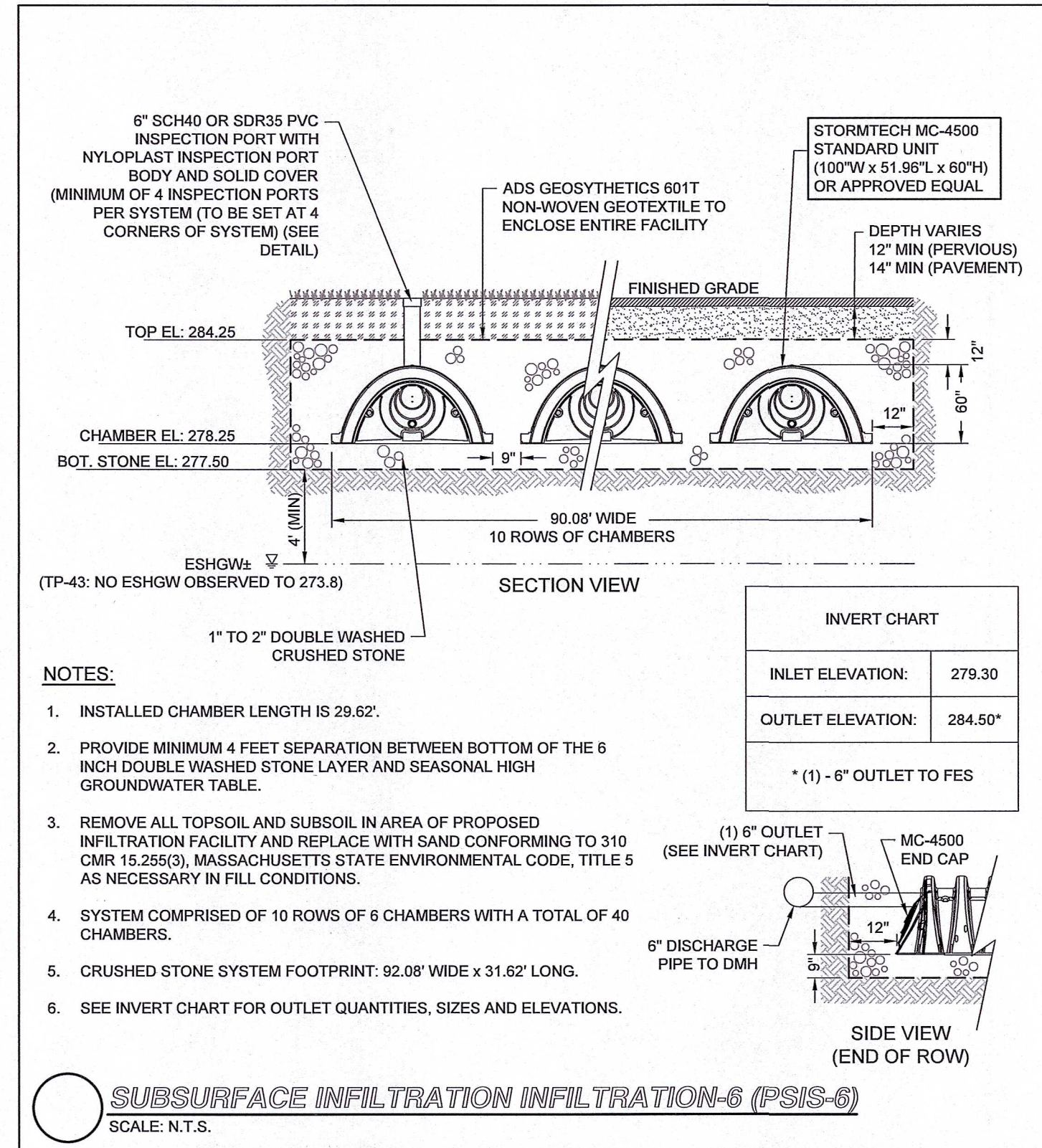
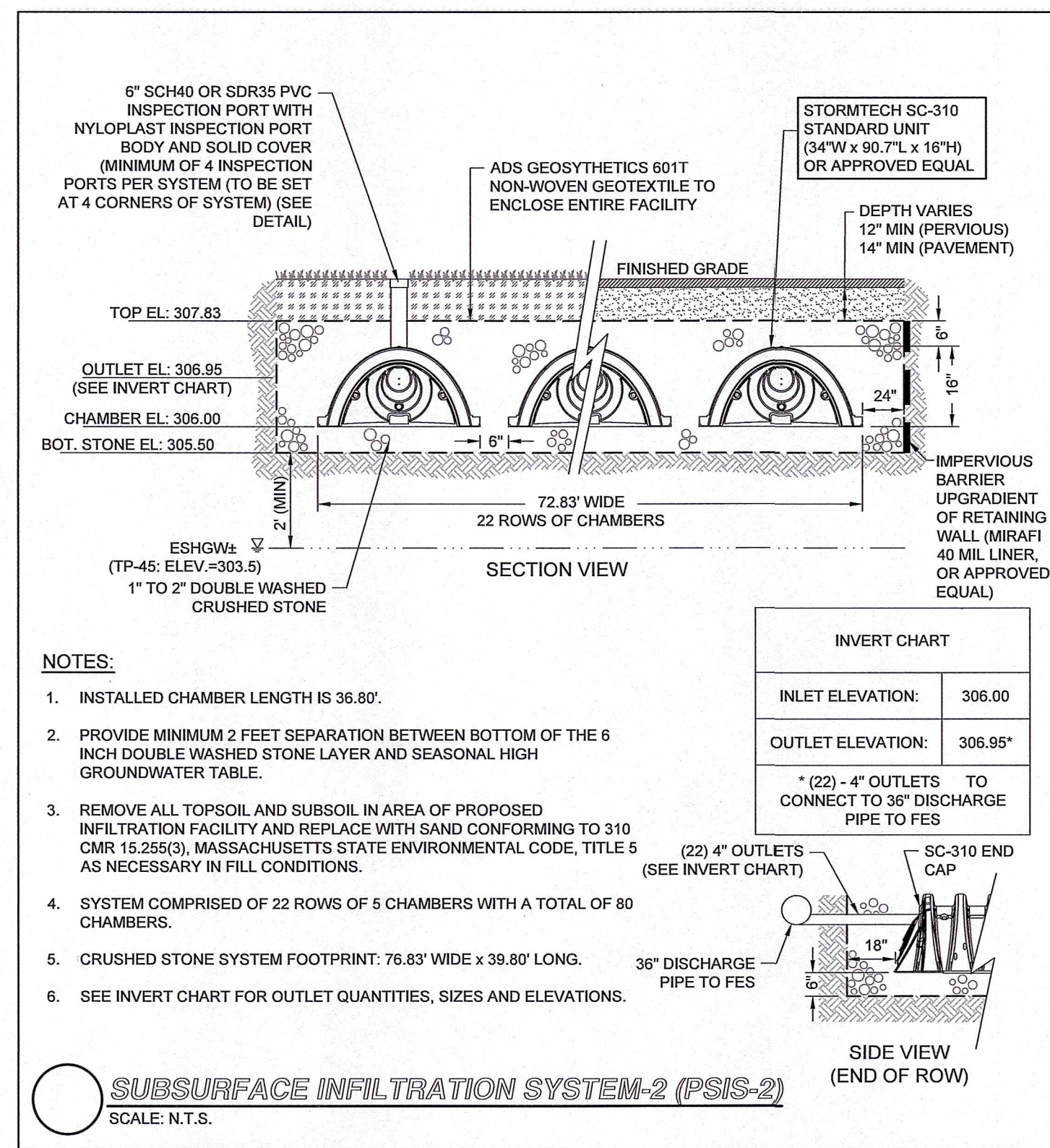
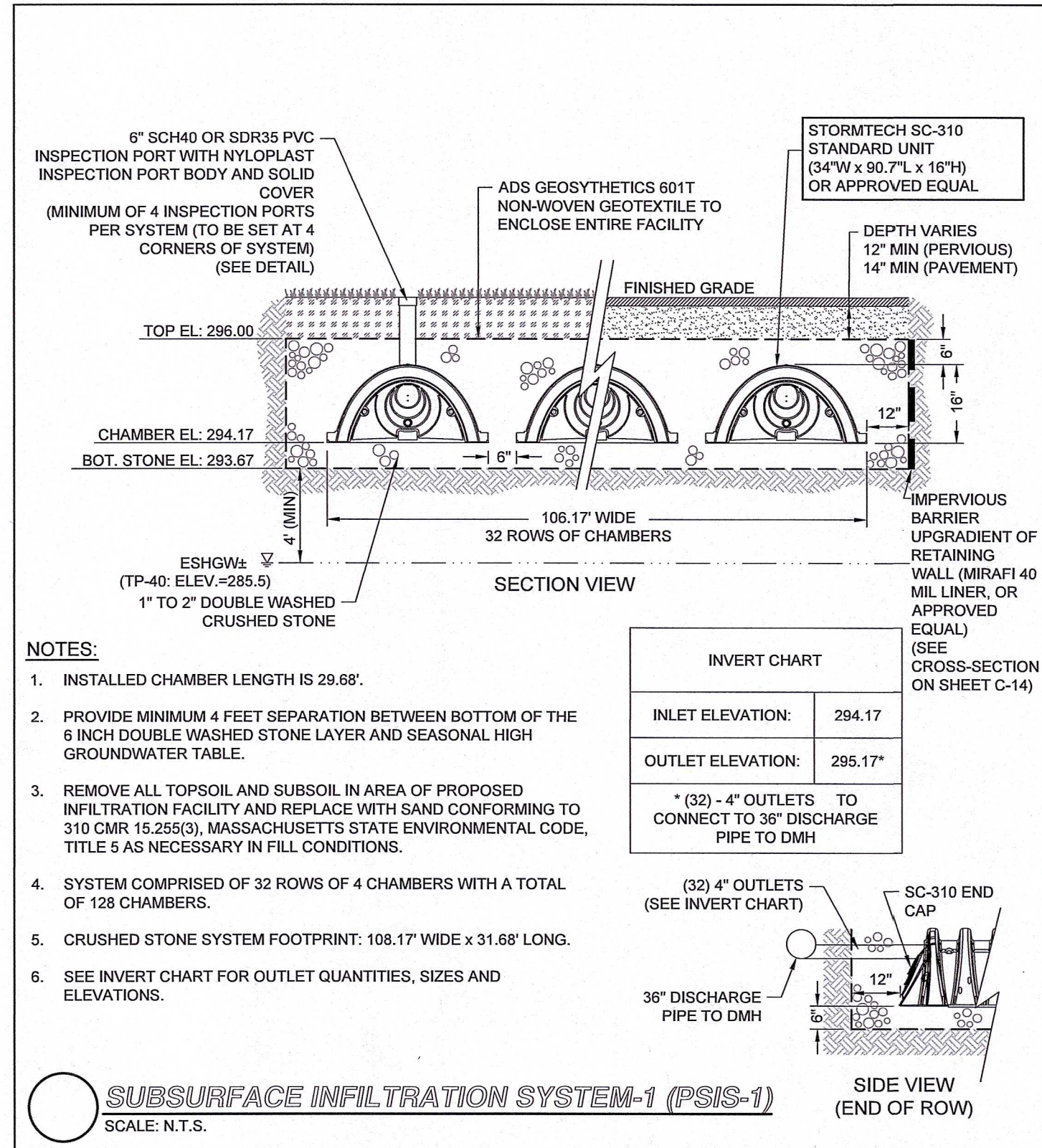
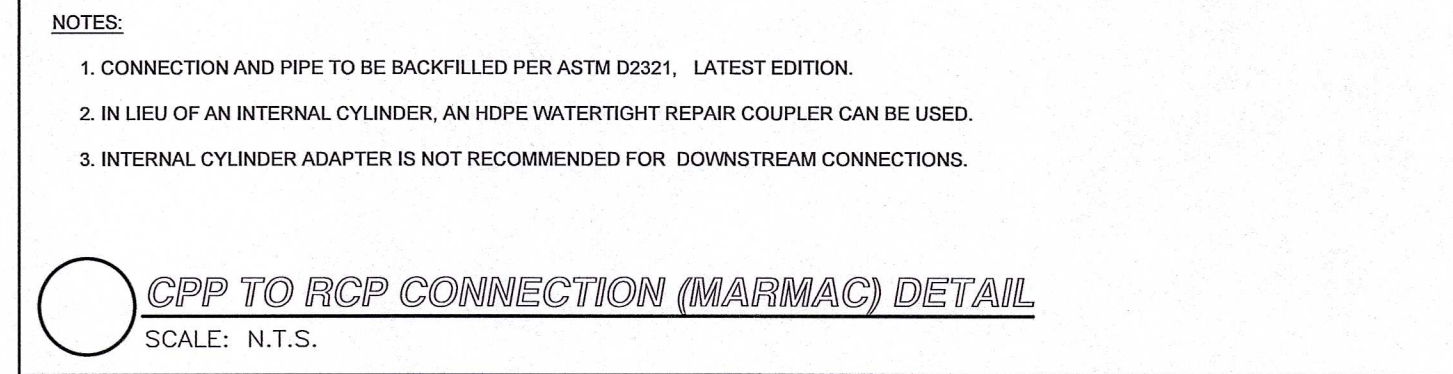
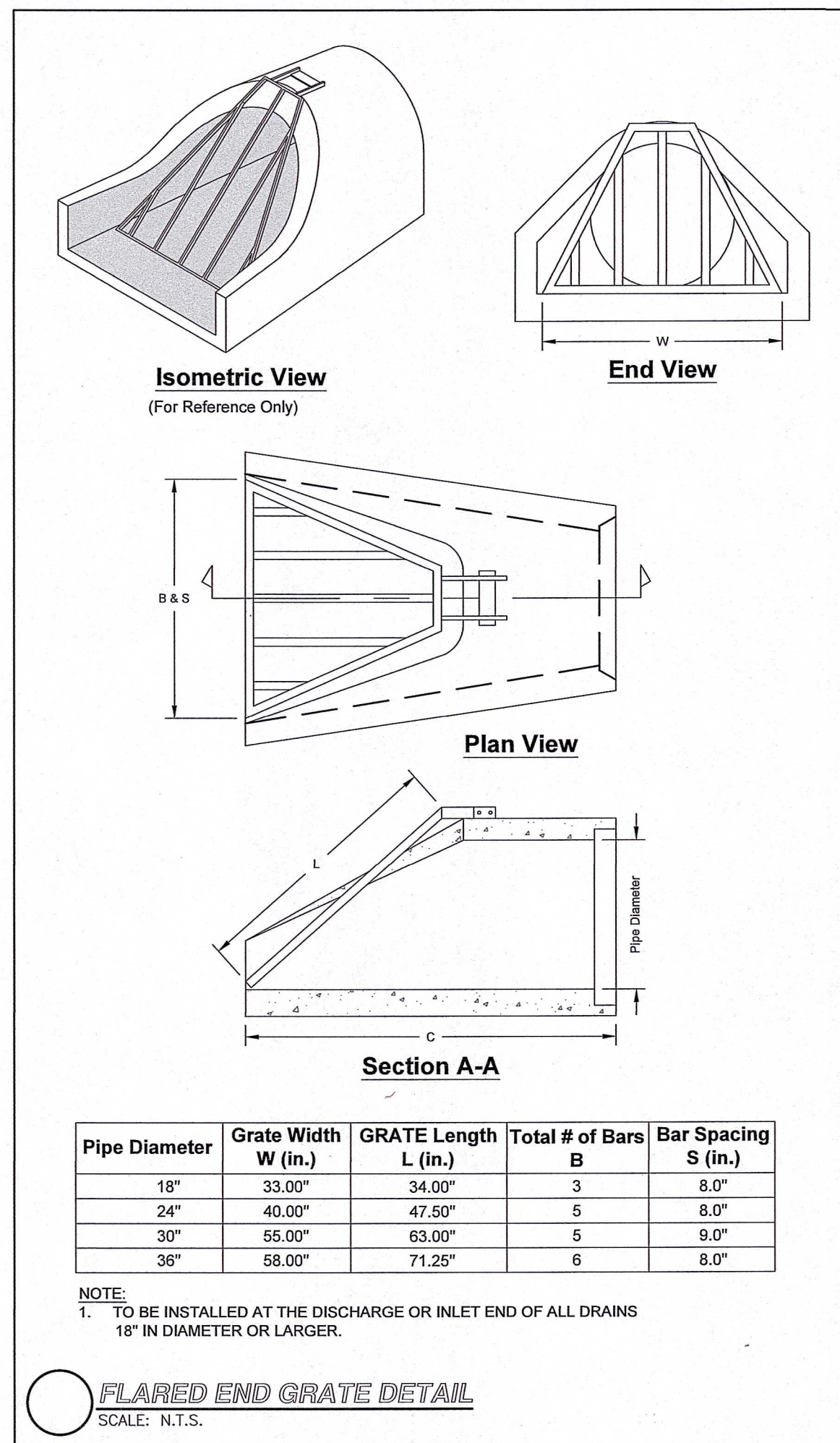
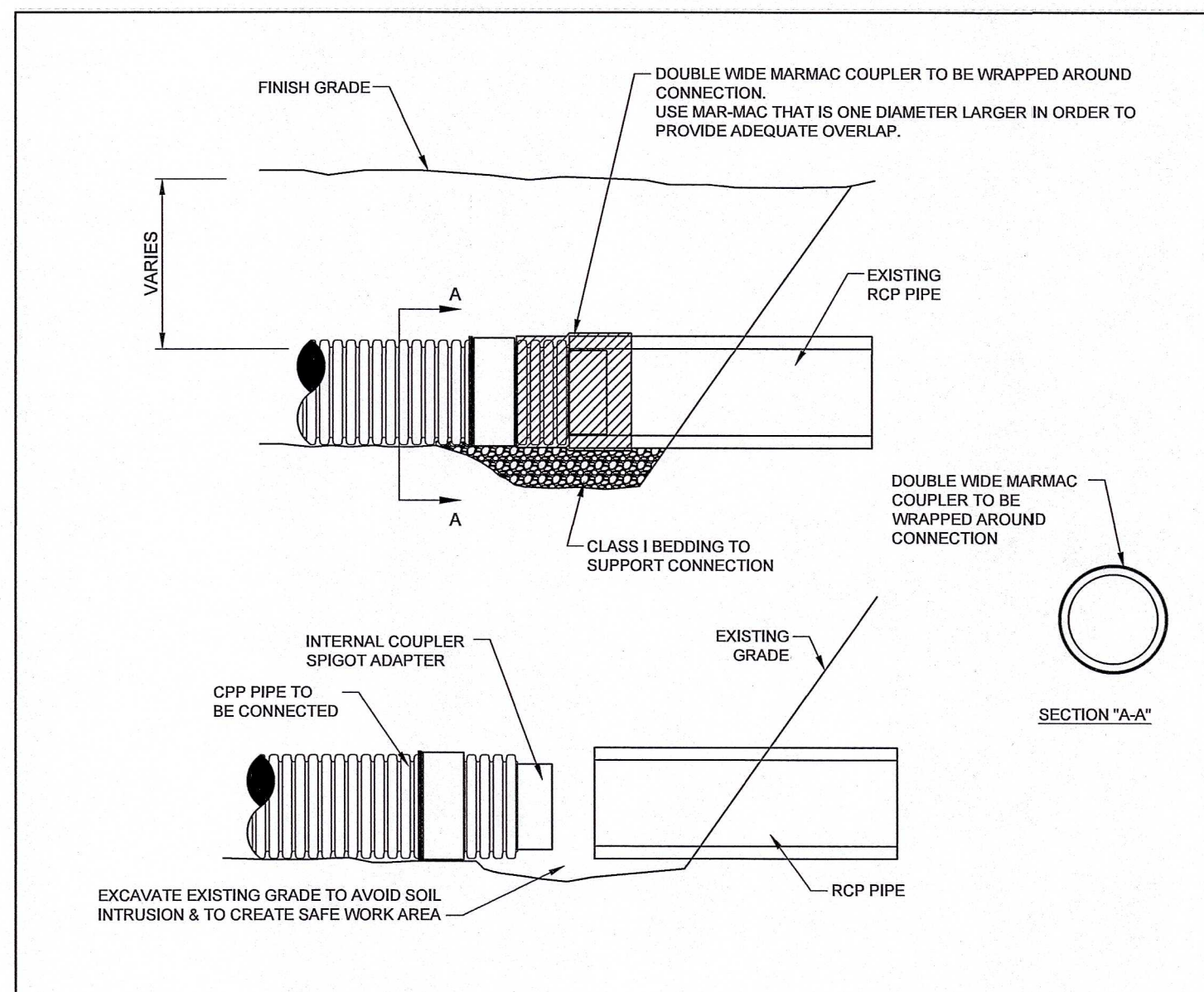
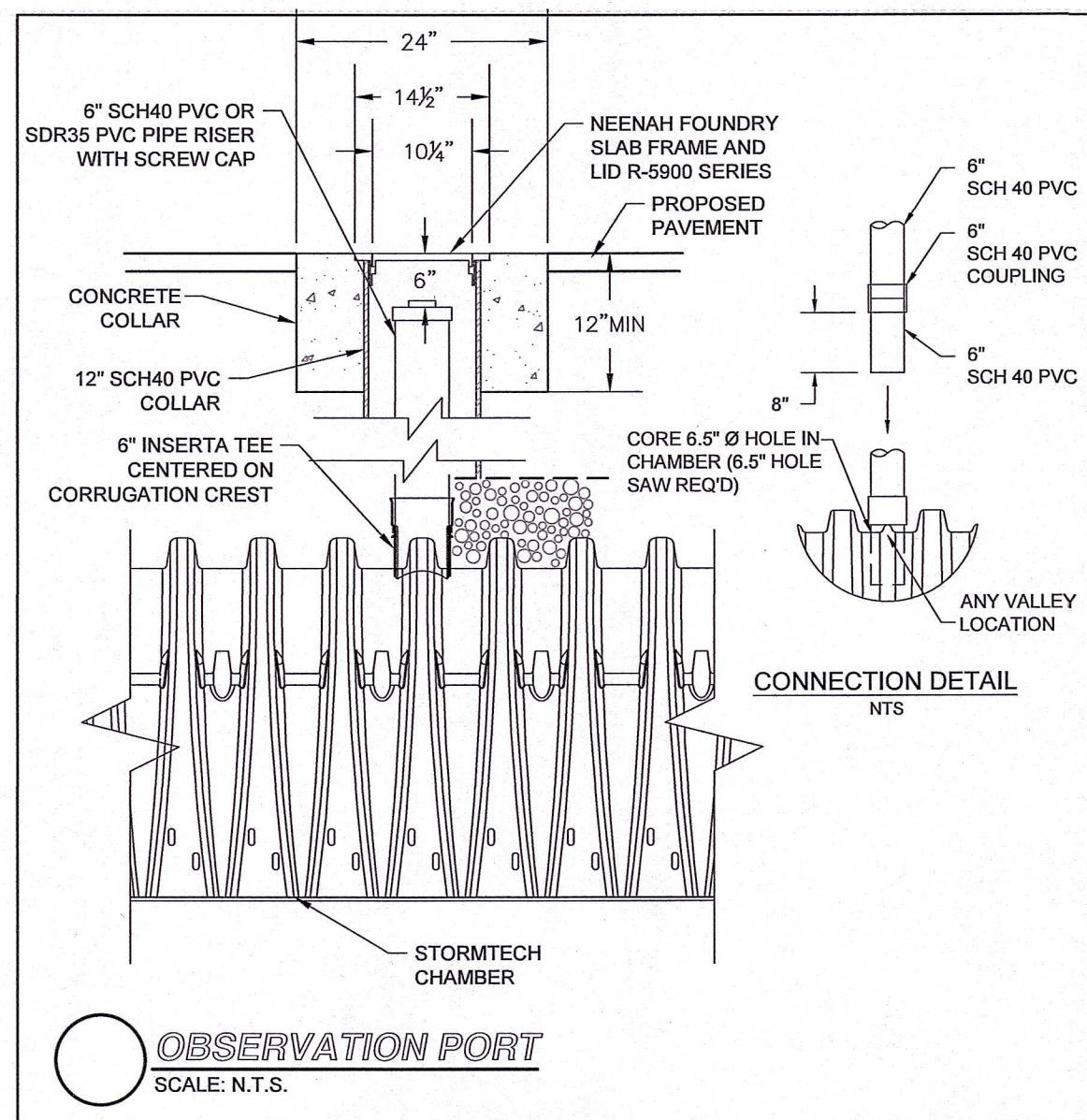
PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

DRAWING NAME:
SITE DETAILS - III

DRAWING NUMBER:
C-7

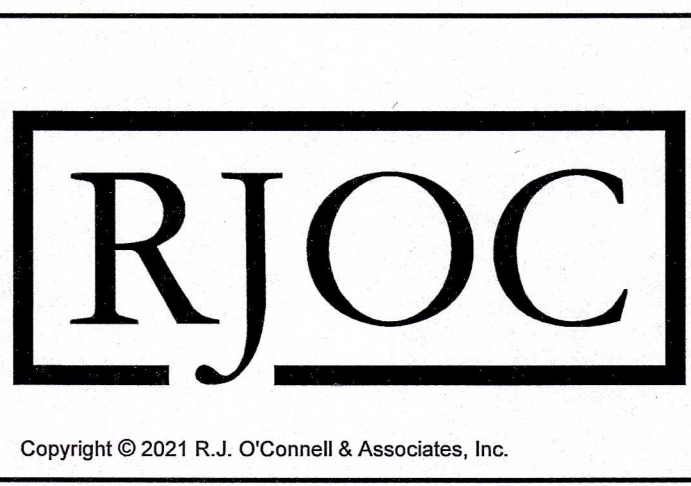
DATE: 10/30/2023 PROJECT NO.: 22016

NOT FOR CONSTRUCTION



NOT FOR CONSTRUCTION

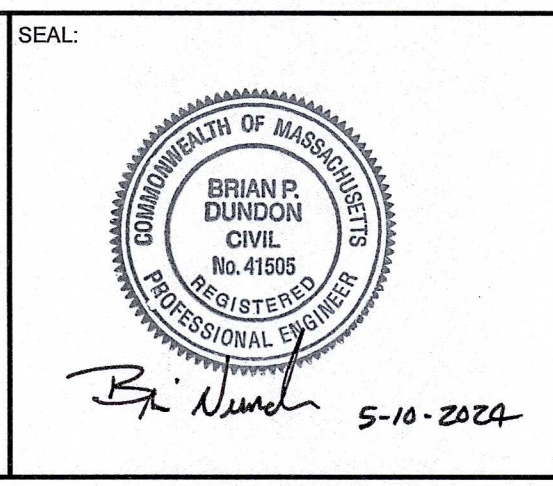
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May 08, 2024 - 12:23pm



NO.	REVISION	DATE	NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024			
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024			
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024			
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024			
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023			

DESIGNED BY: MAC
DRAWN BY: MCR
REVIEWED BY: BJM
SCALE: N.T.S.

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



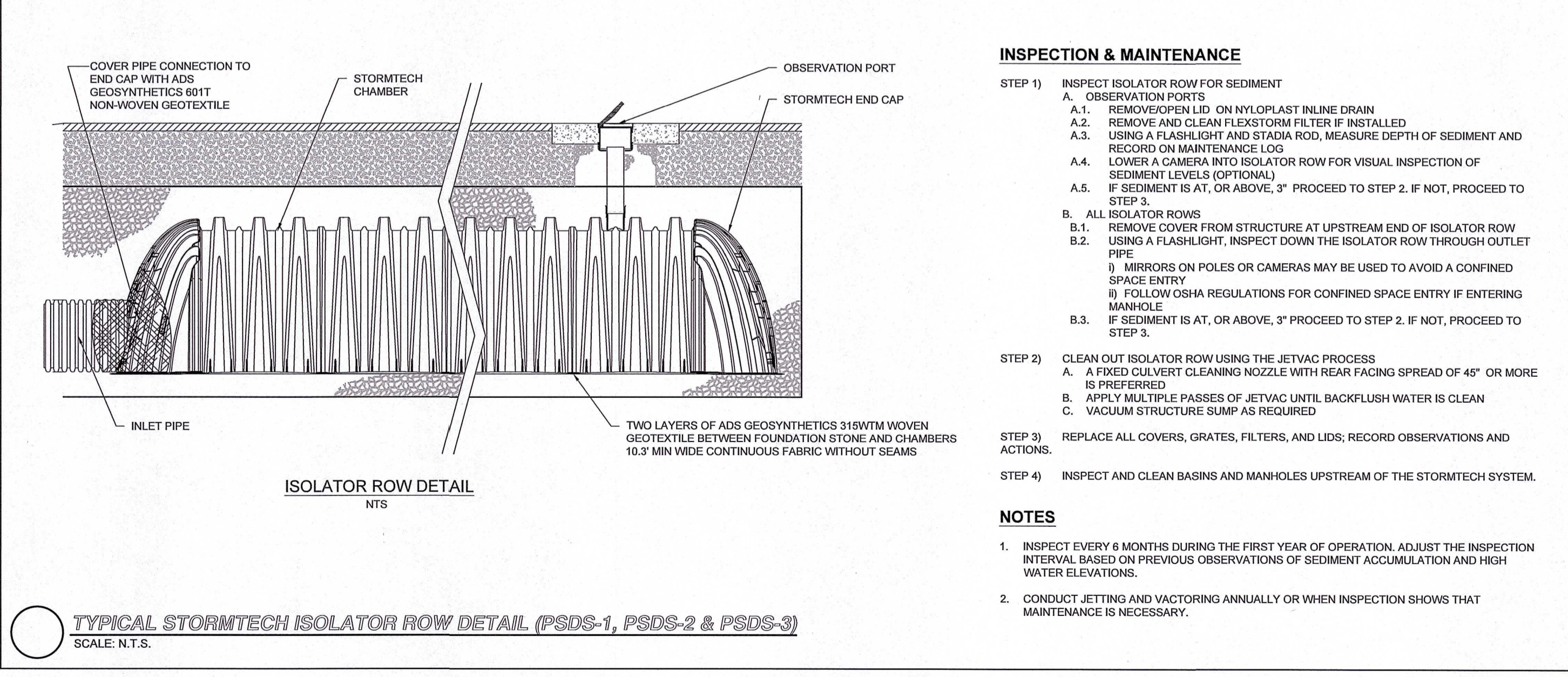
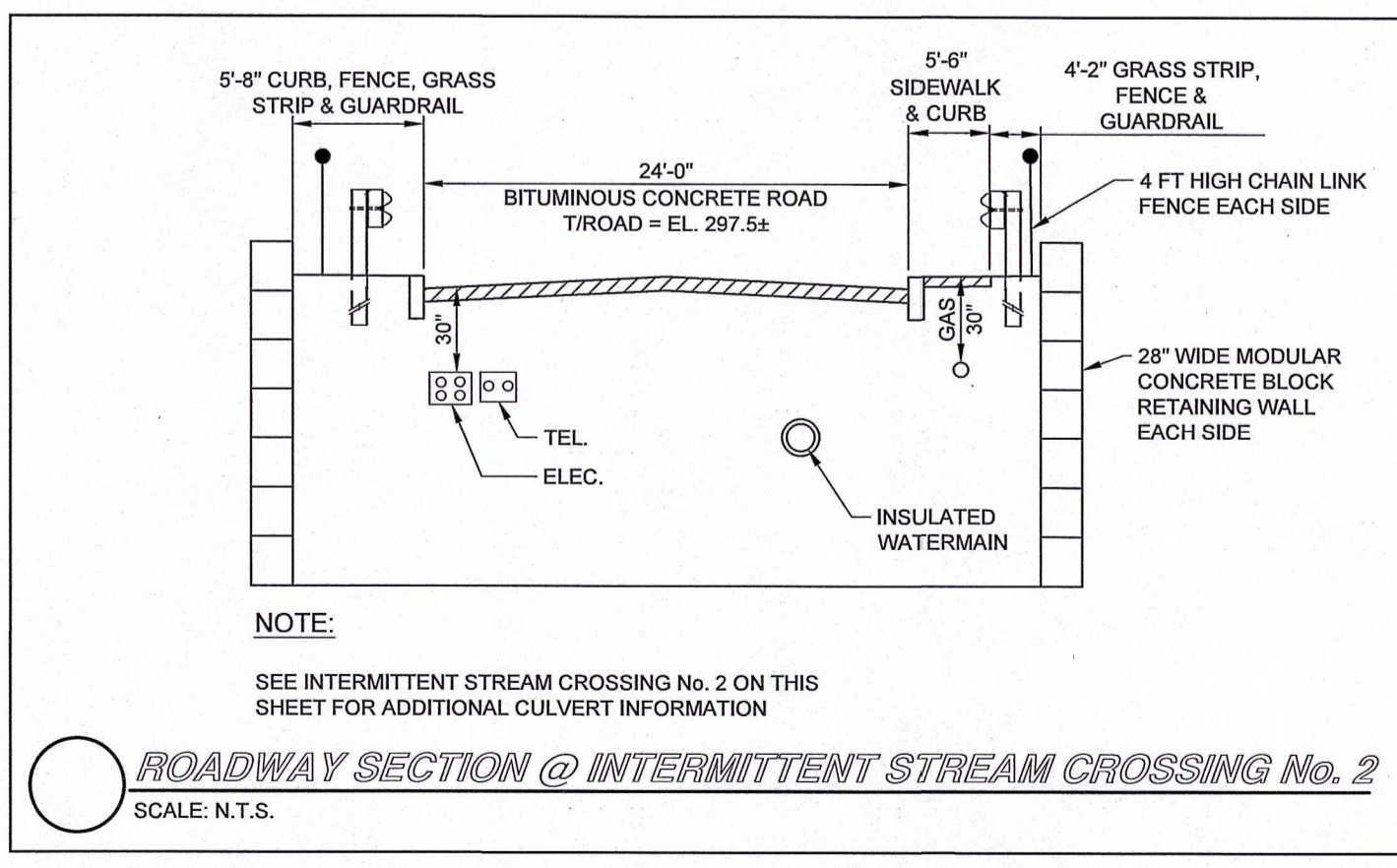
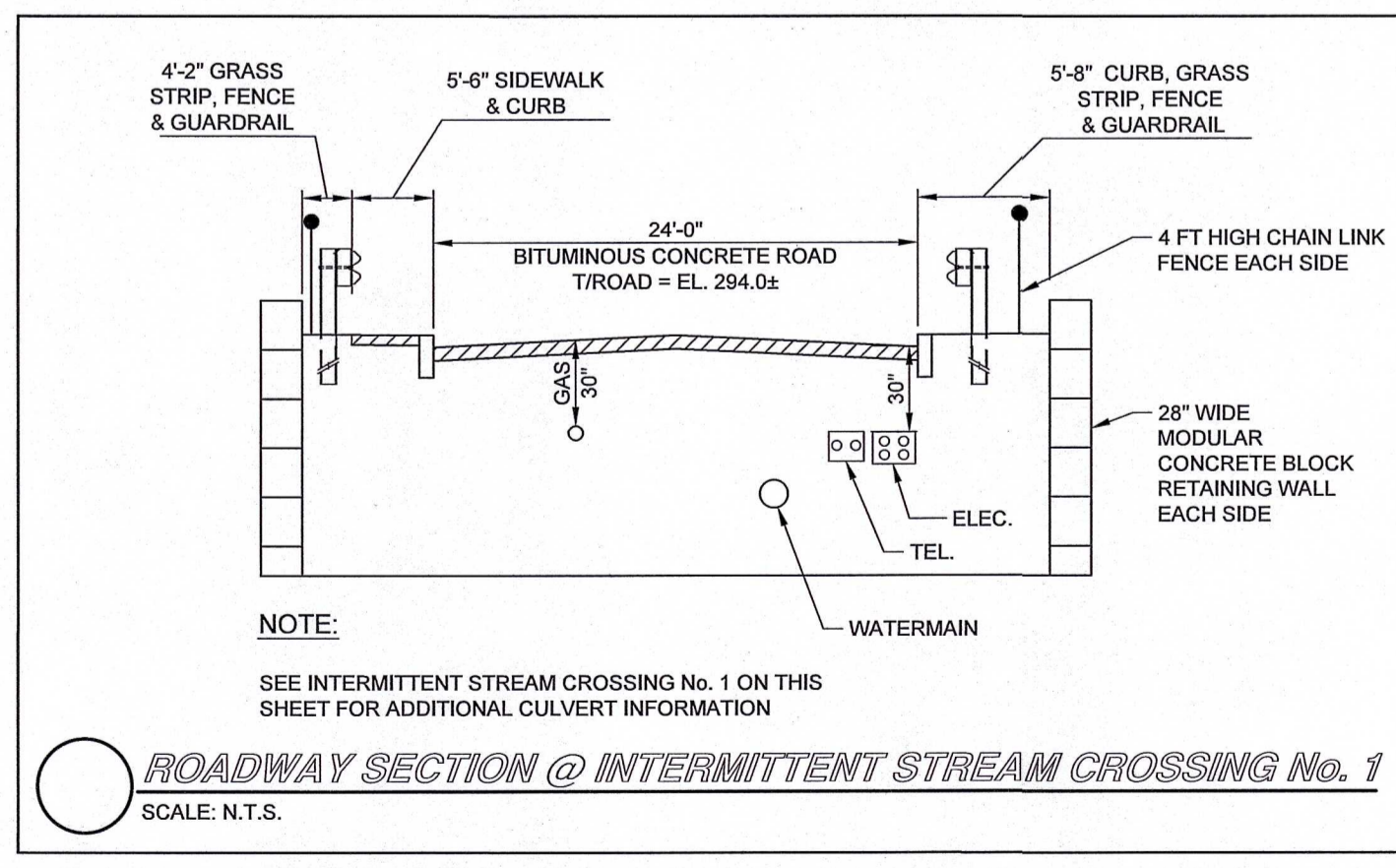
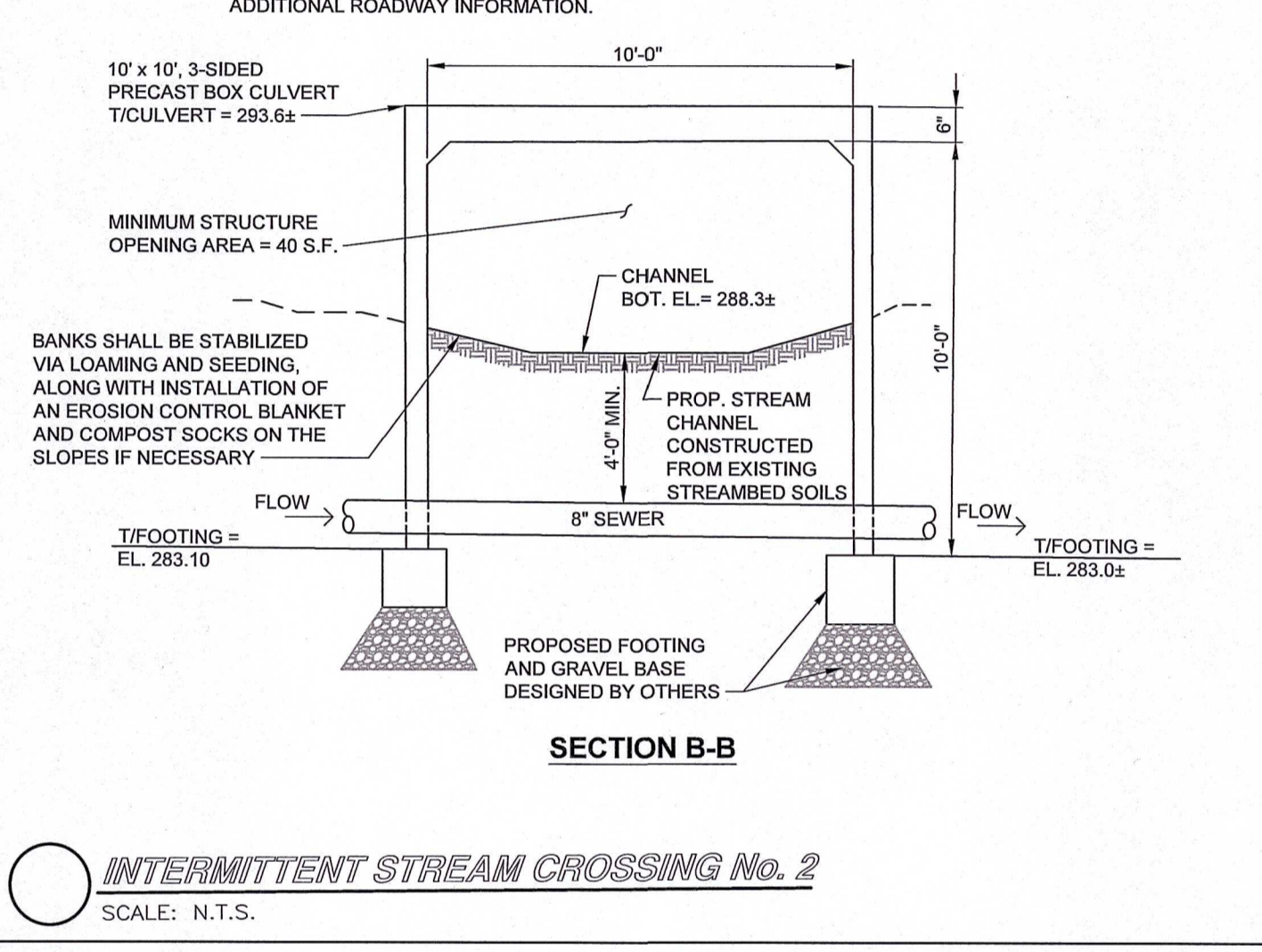
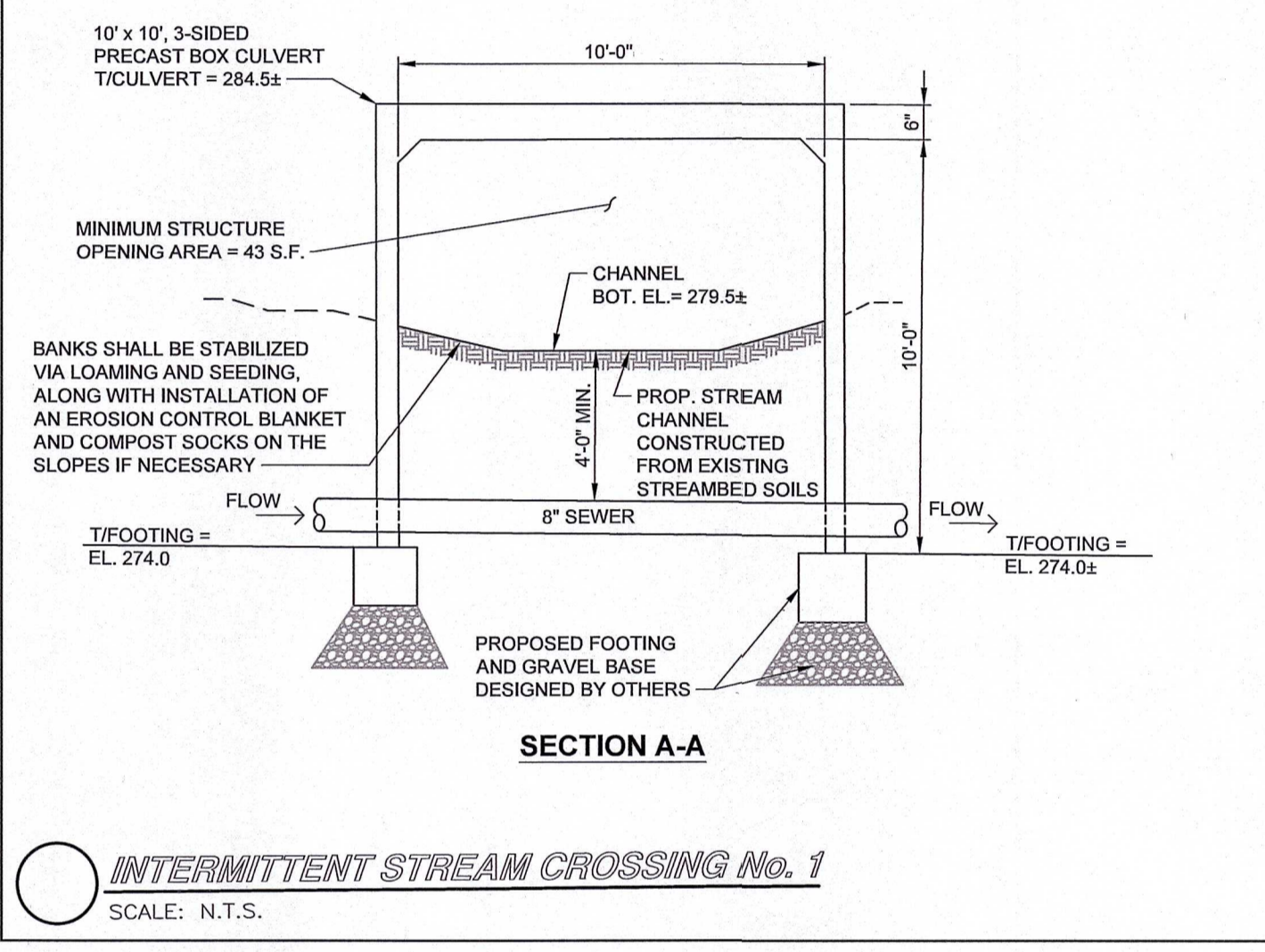
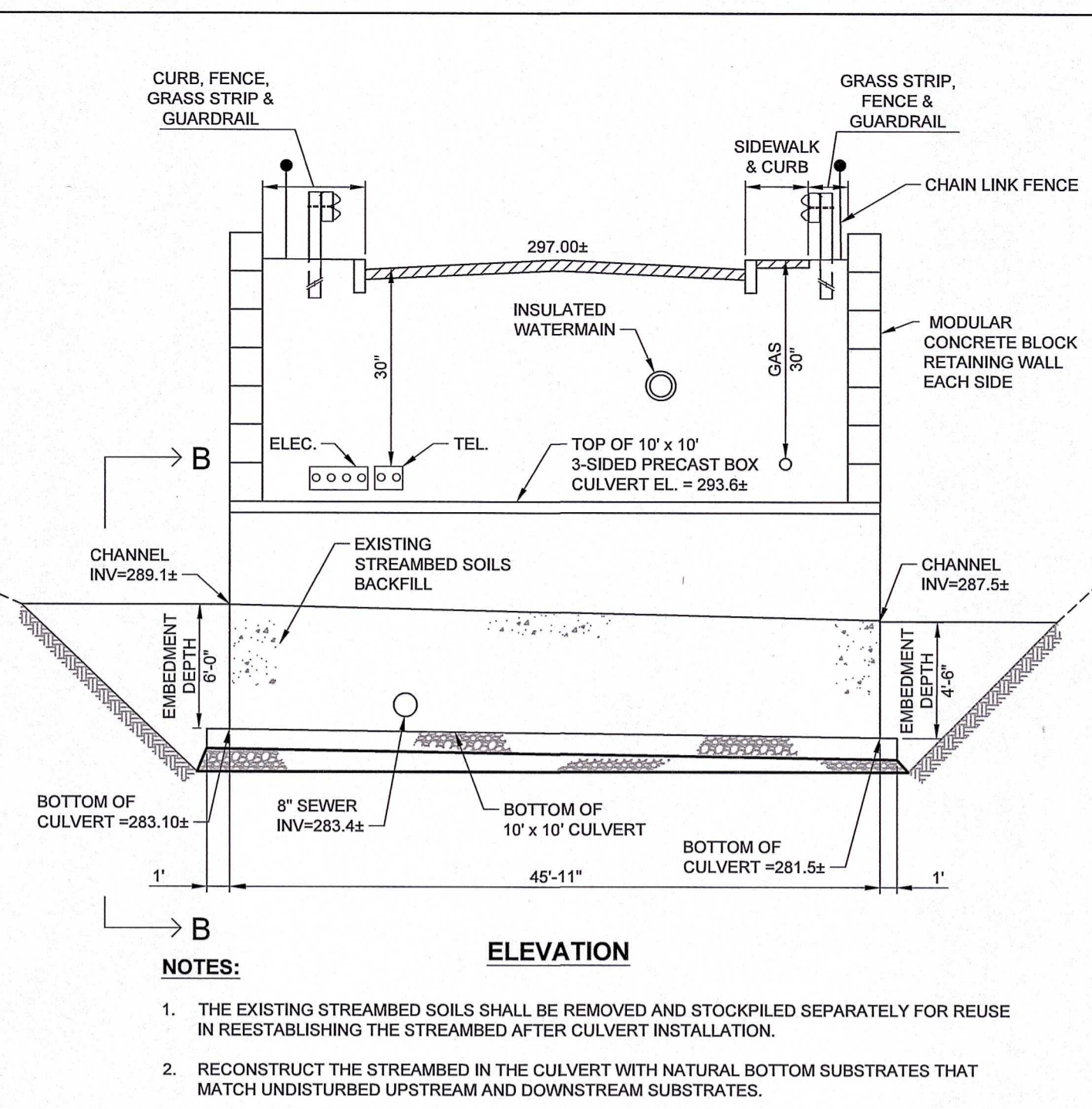
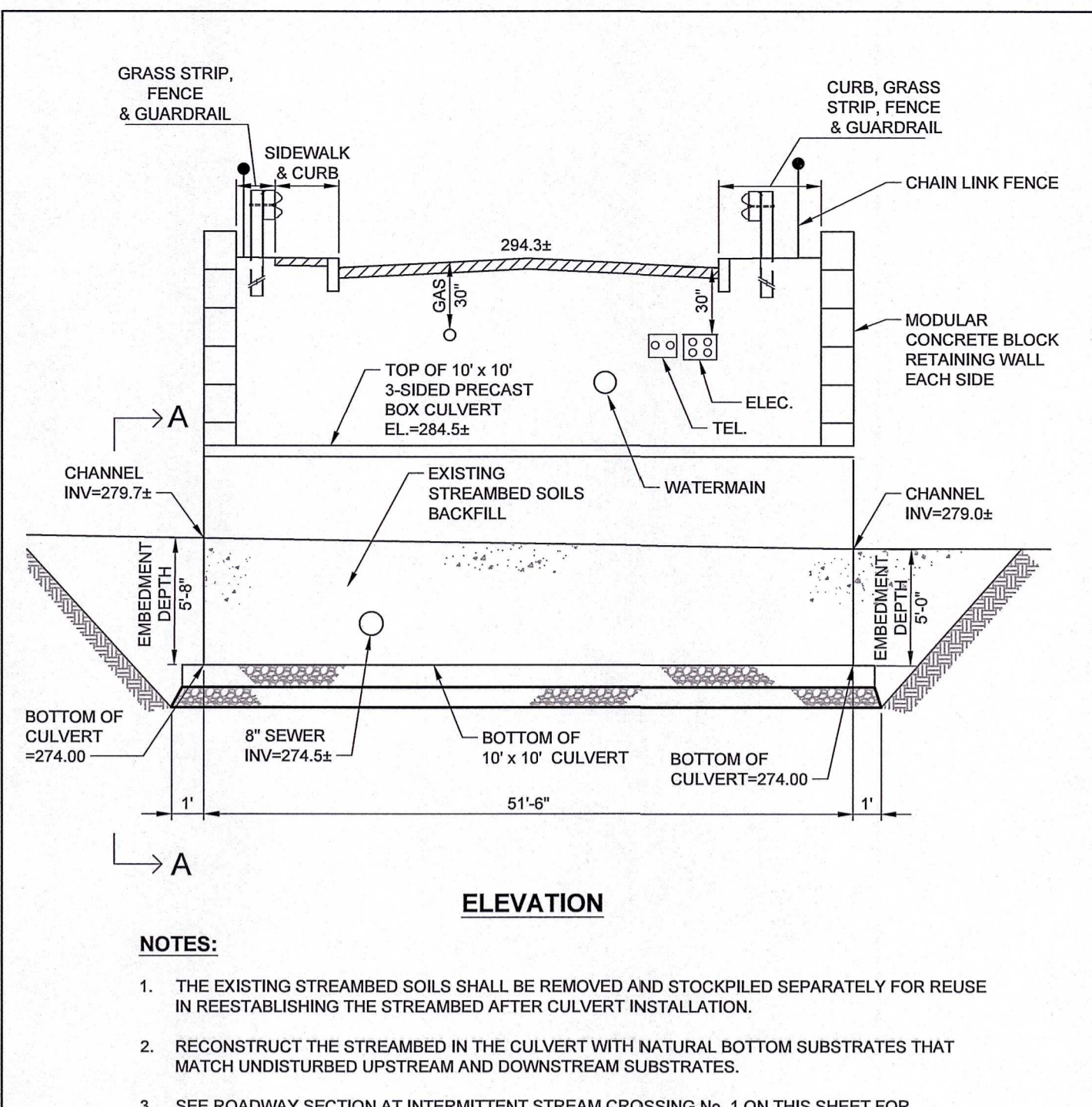
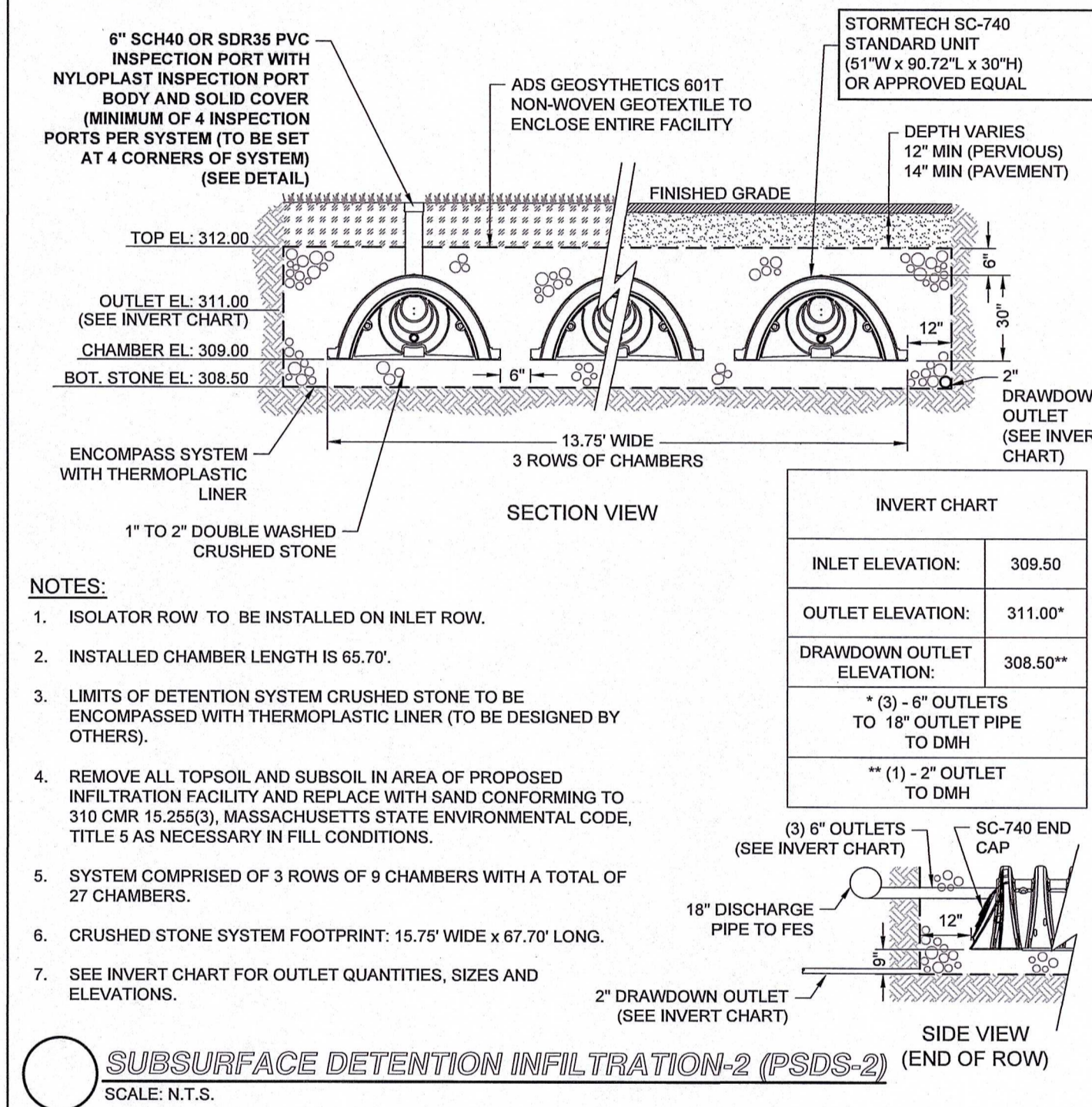
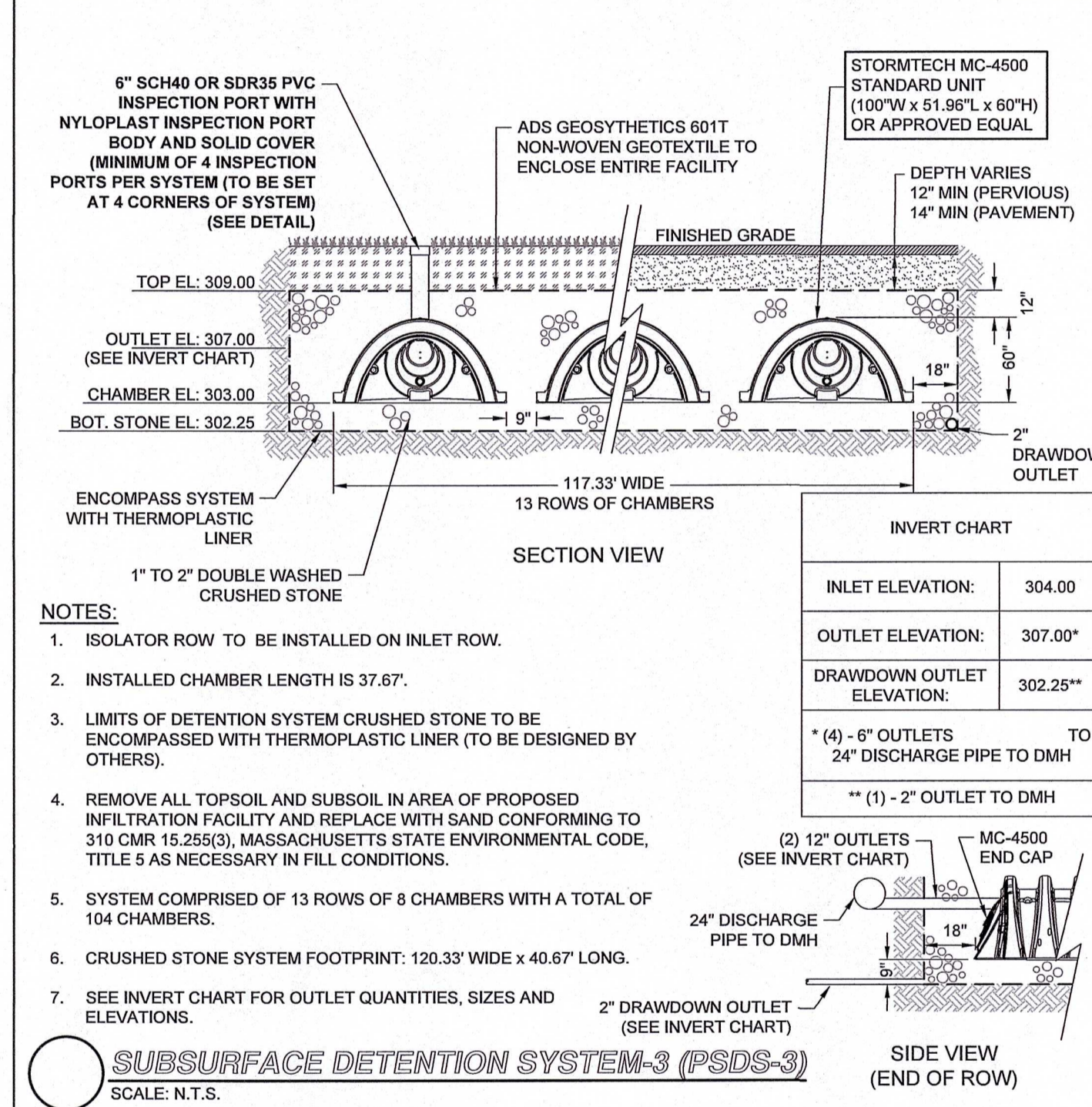
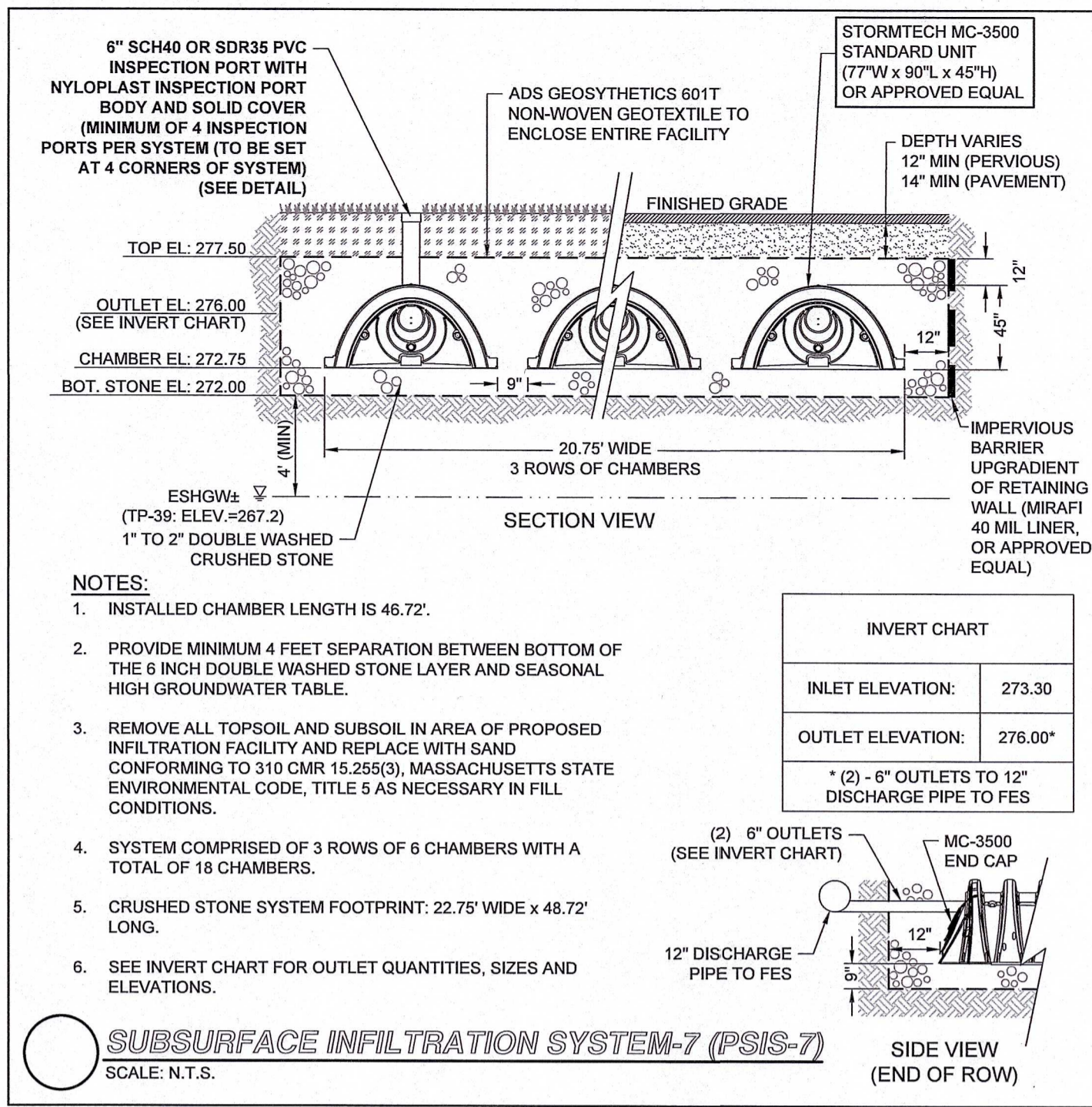
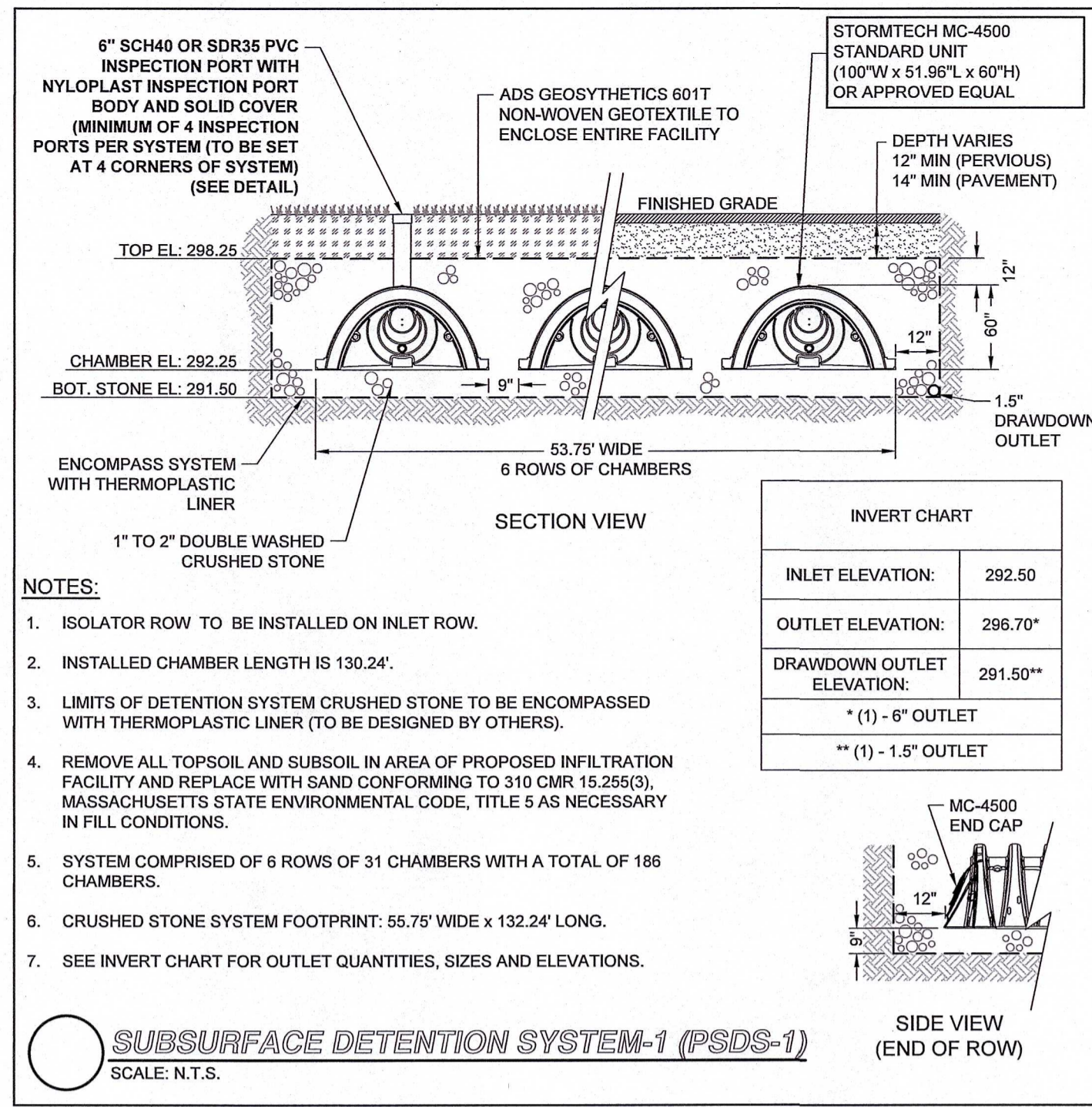
PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVILE AVENUE, SUITE 201 STONHAM, MA 02180
PHONE: 781-276-0180 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

DRAWING NAME:
SITE DETAILS - IV

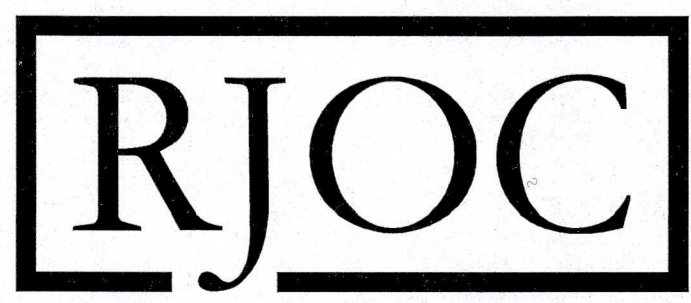
DRAWING NUMBER:
C-8

DATE: 10/30/2023 PROJECT NO.: 22016



NOT FOR CONSTRUCTION

Drawing name: G:\MA\Franklin\Fairfield\Residential\121 Grove Street\Main\2016_C-9_Site_Details - V.dwg
May 08, 2024 - 12:22pm

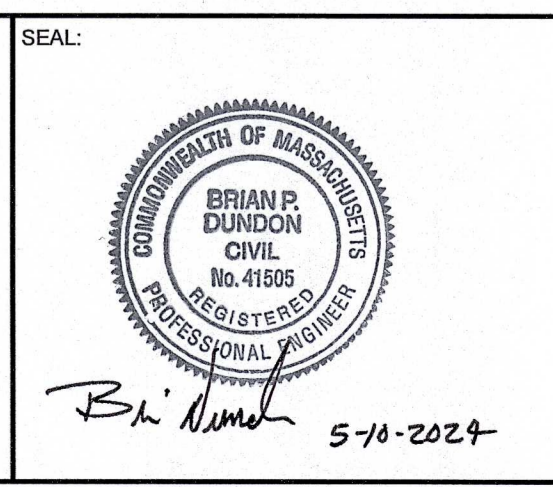


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NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	N.T.S.

PREPARED BY:
FAIRFIELD GROVE STREET LLC
30 BRAintree HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



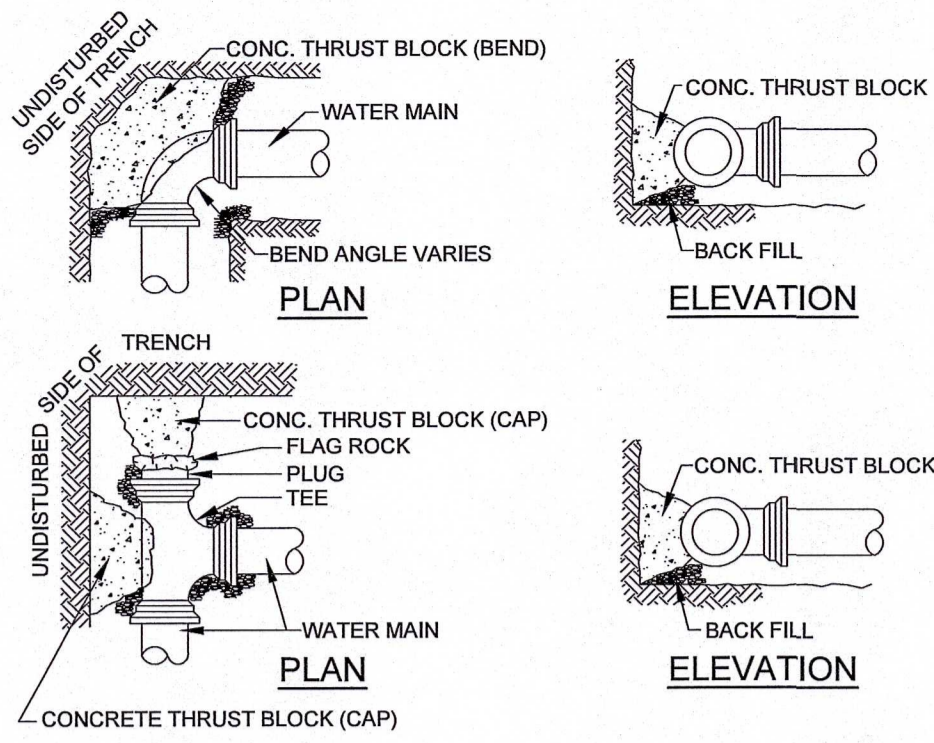
PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALL AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0190 RJOCONNELL.COM

PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

DRAWING NAME:
SITE DETAILS - V

DRAWING NUMBER:
C-9

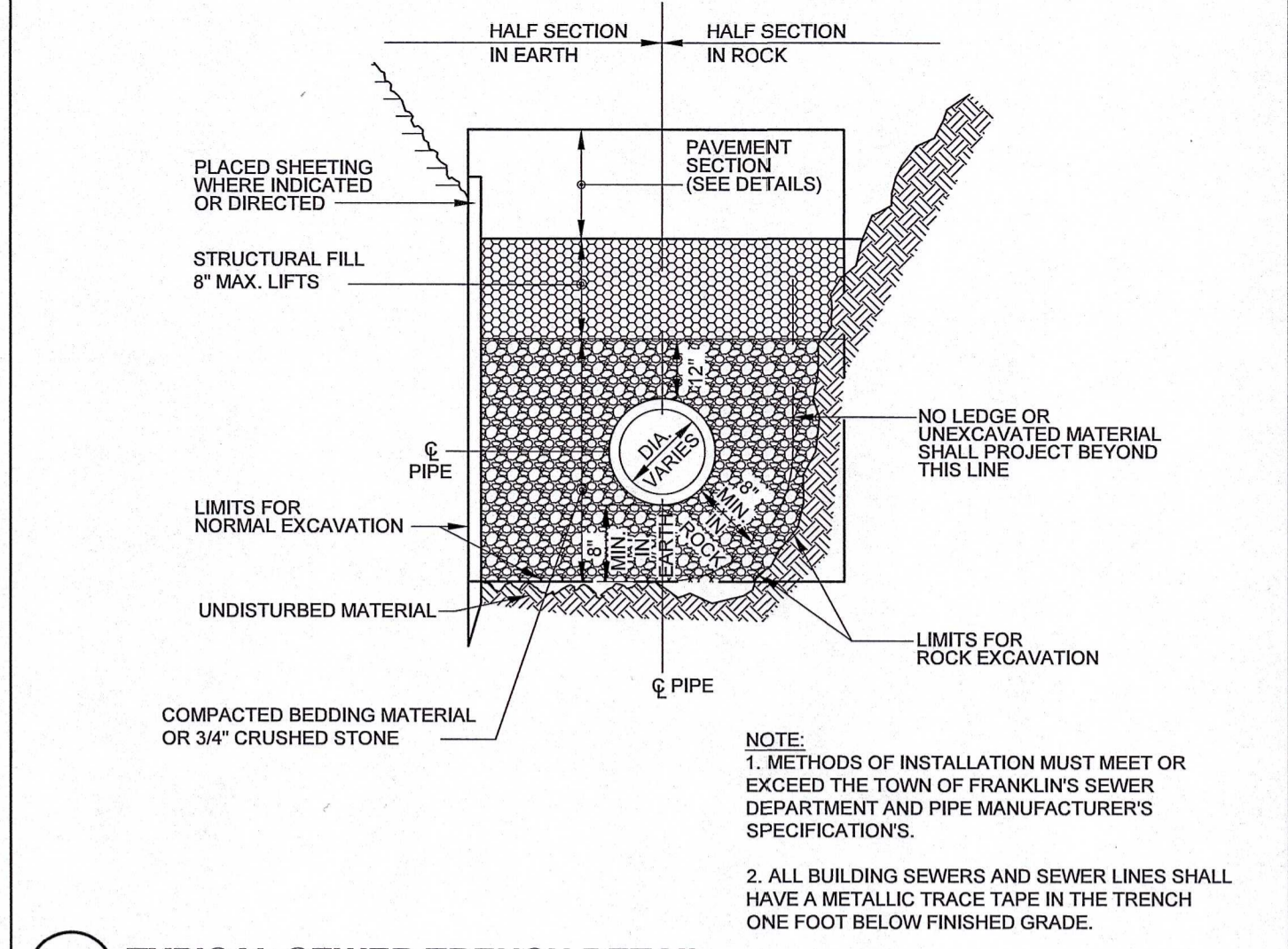
DATE: 10/30/2023 PROJECT NO.: 22016



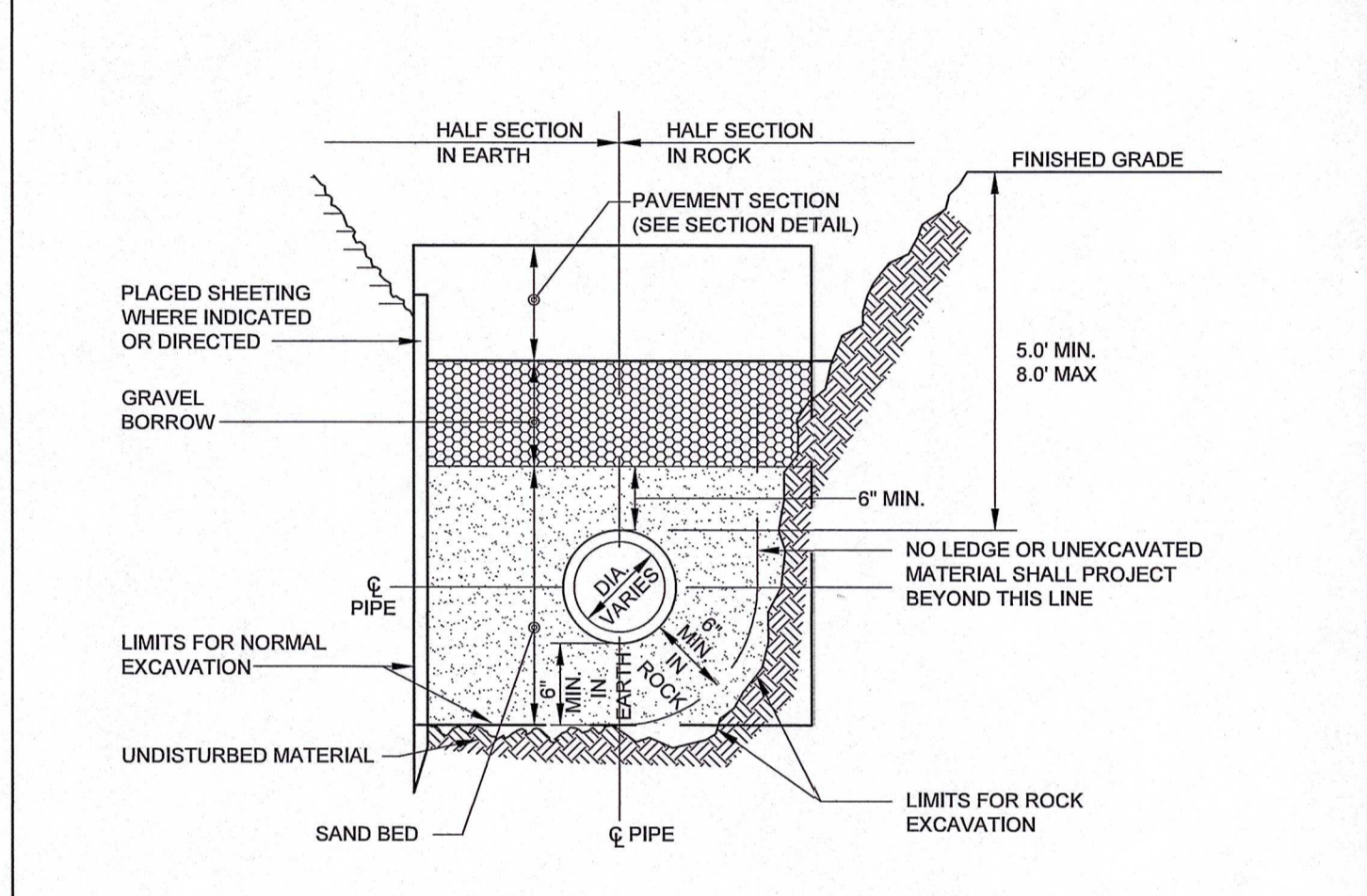
MINIMUM THRUST BLOCKING BEARING AREAS IN SQUARE FEET					
PIPE DIA.	TEES/CAP/PLUG	90° BEND	45° BEND	22.5° BEND	11.25° BEND
4"	2	2	2	2	1
6"	4	5	3	3	1
8"	6	8	5	2	1
10"	9	13	7	3	2
12"	13	18	10	4	3
14"	18	25	14	6	4
16"	23	32	18	8	6

- 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. SIZE OF CONCRETE THRUST BLOCKS AS NOTED BELOW.
 4. MINIMUM COMPRESSIVE STRENGTH OF THRUST BLOCK CONCRETE SHALL BE 4,000 P.S.I.
 5. MINIMUM BEARING AREA BASED ON 2000 LBS/SF ALLOWABLE SOIL BEARING PRESSURE WITH A 1.5 SAFETY FACTOR.
 6. A MINIMUM OF 1/3 CUBIC YARD OF CONCRETE MUST BE USED FOR THRUST BLOCKS
 7. MATERIALS, METHOD INSTALLATION SHALL CONFORM TO THE TOWN OF FRANKLIN'S WATER/SEWER DEPARTMENT'S SPECIFICATIONS.

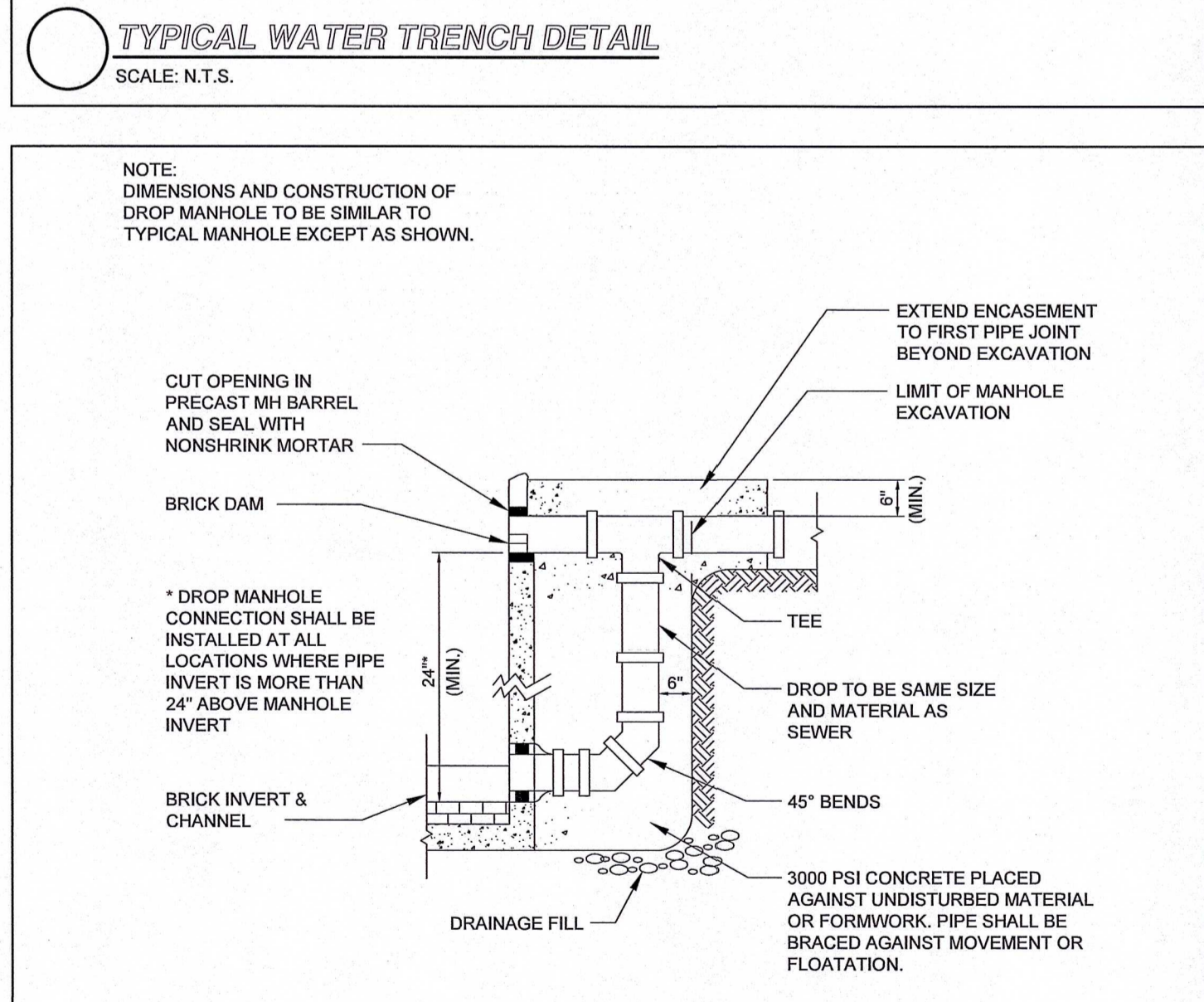
TYPICAL THRUST BLOCK DETAIL
SCALE: N.T.S.



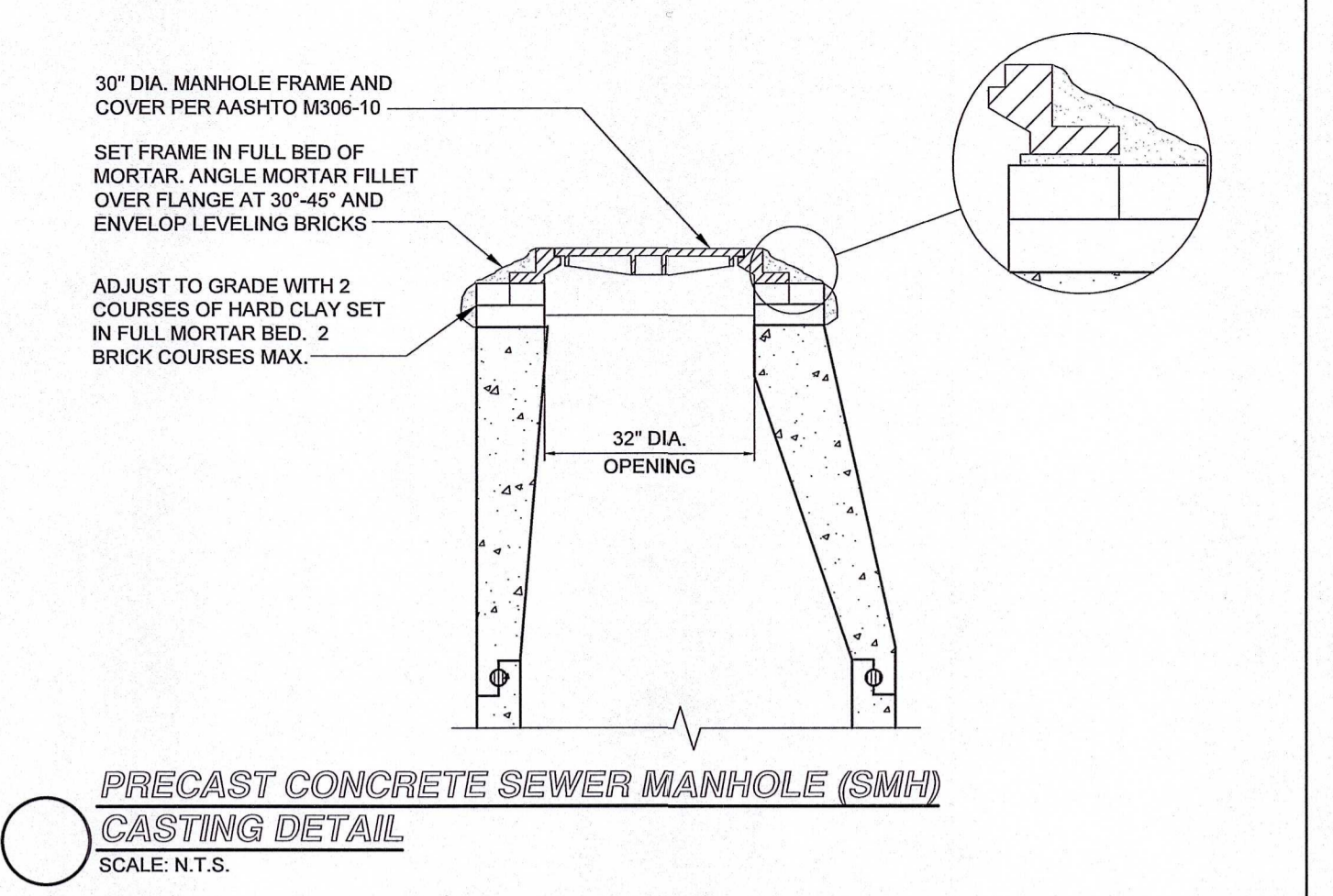
TYPICAL SEWER TRENCH DETAIL
SCALE: N.T.S.



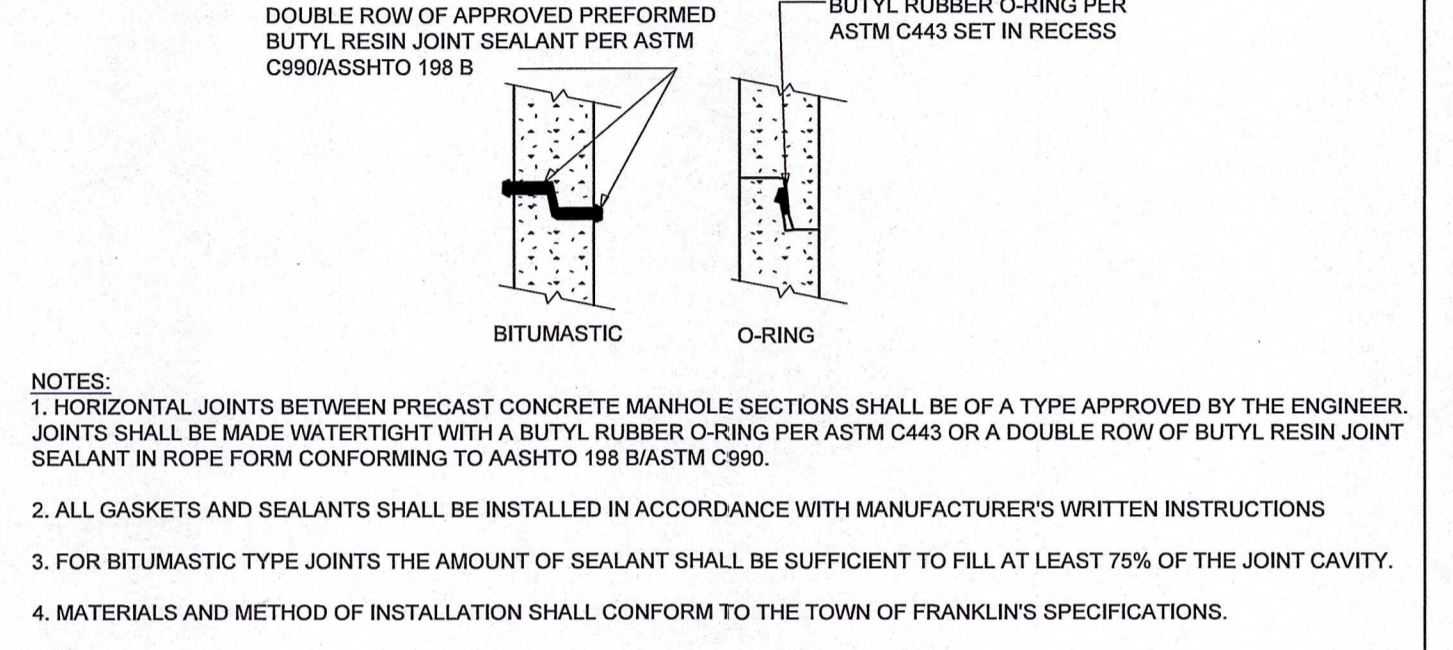
TYPICAL WATER TRENCH DETAIL
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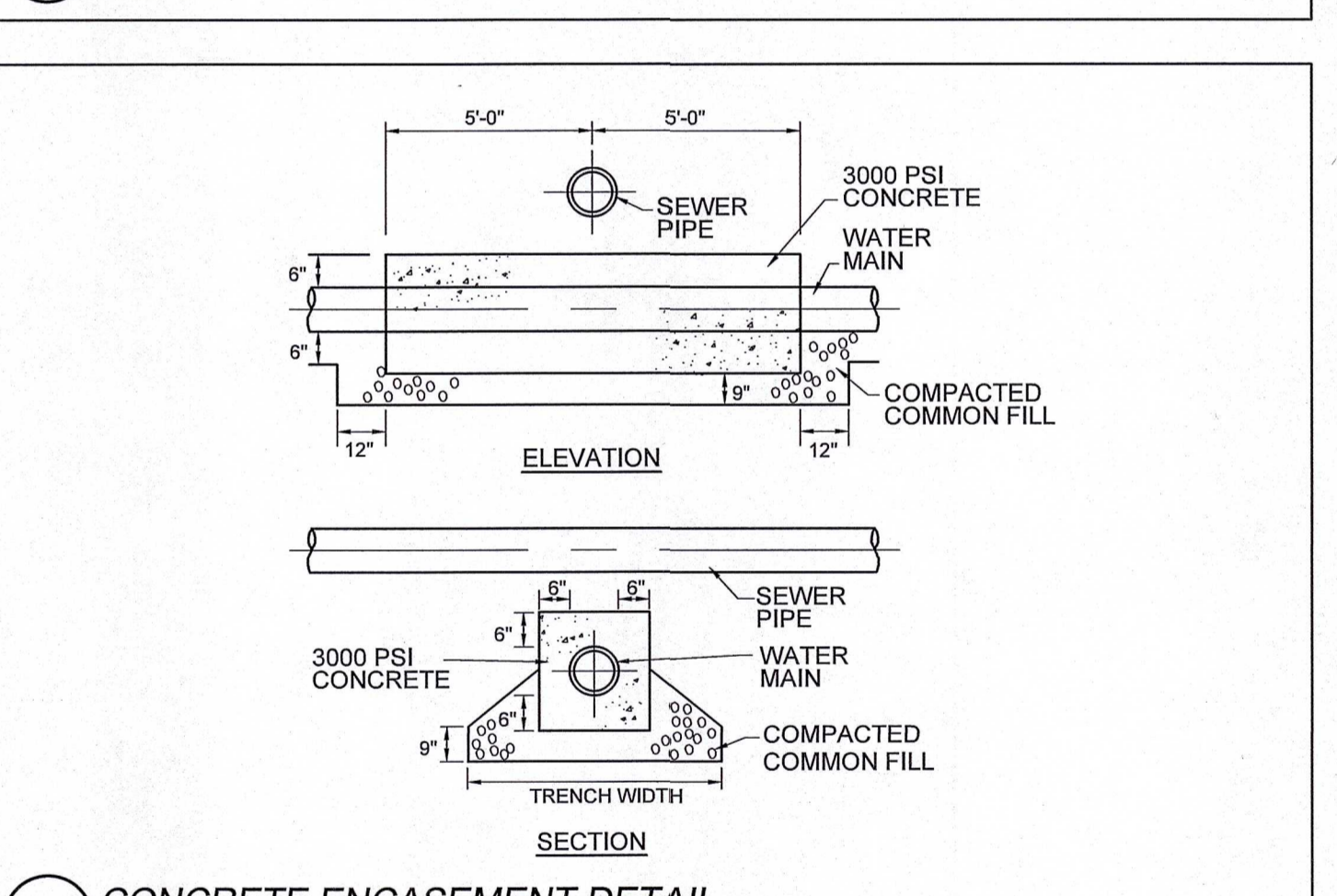
TYPICAL EXTERIOR DROP SEWER MANHOLE CONNECTION DETAIL
SCALE: N.T.S.



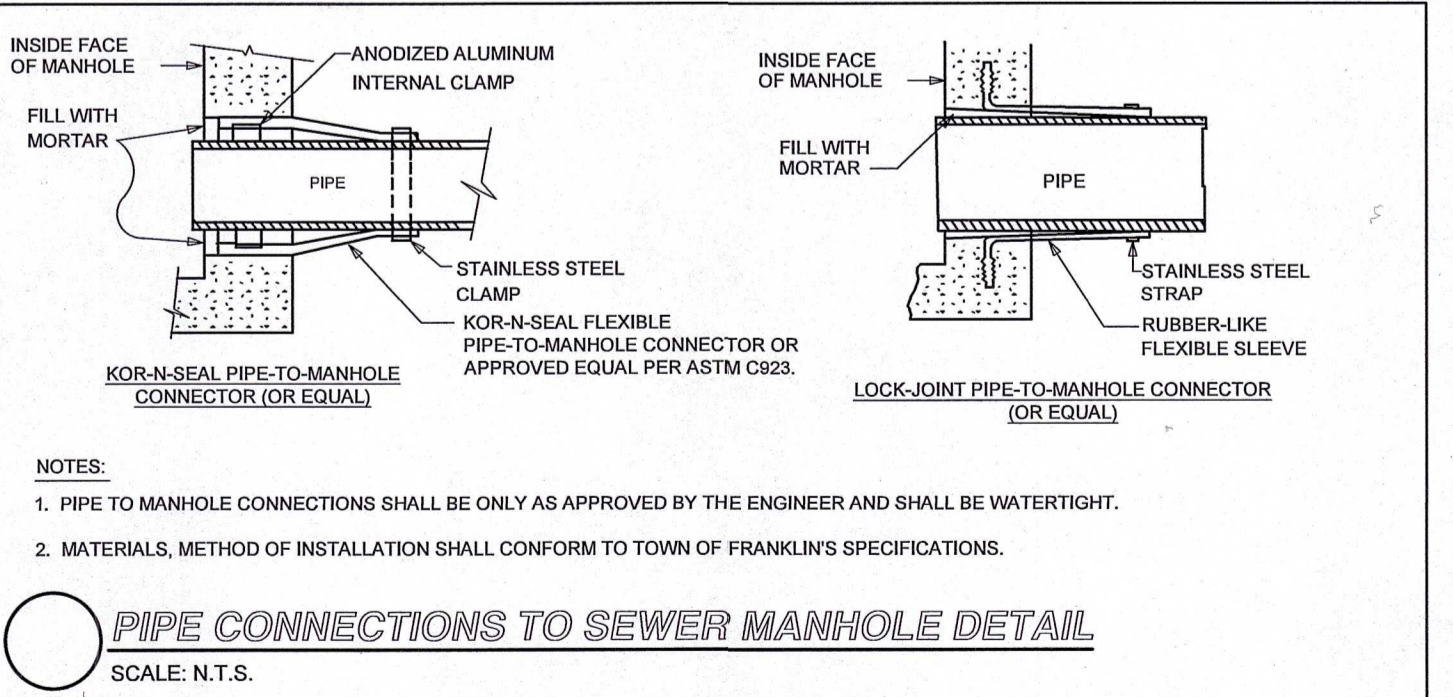
PRECAST CONCRETE SEWER MANHOLE (SMH) CASTING DETAIL
SCALE: N.T.S.



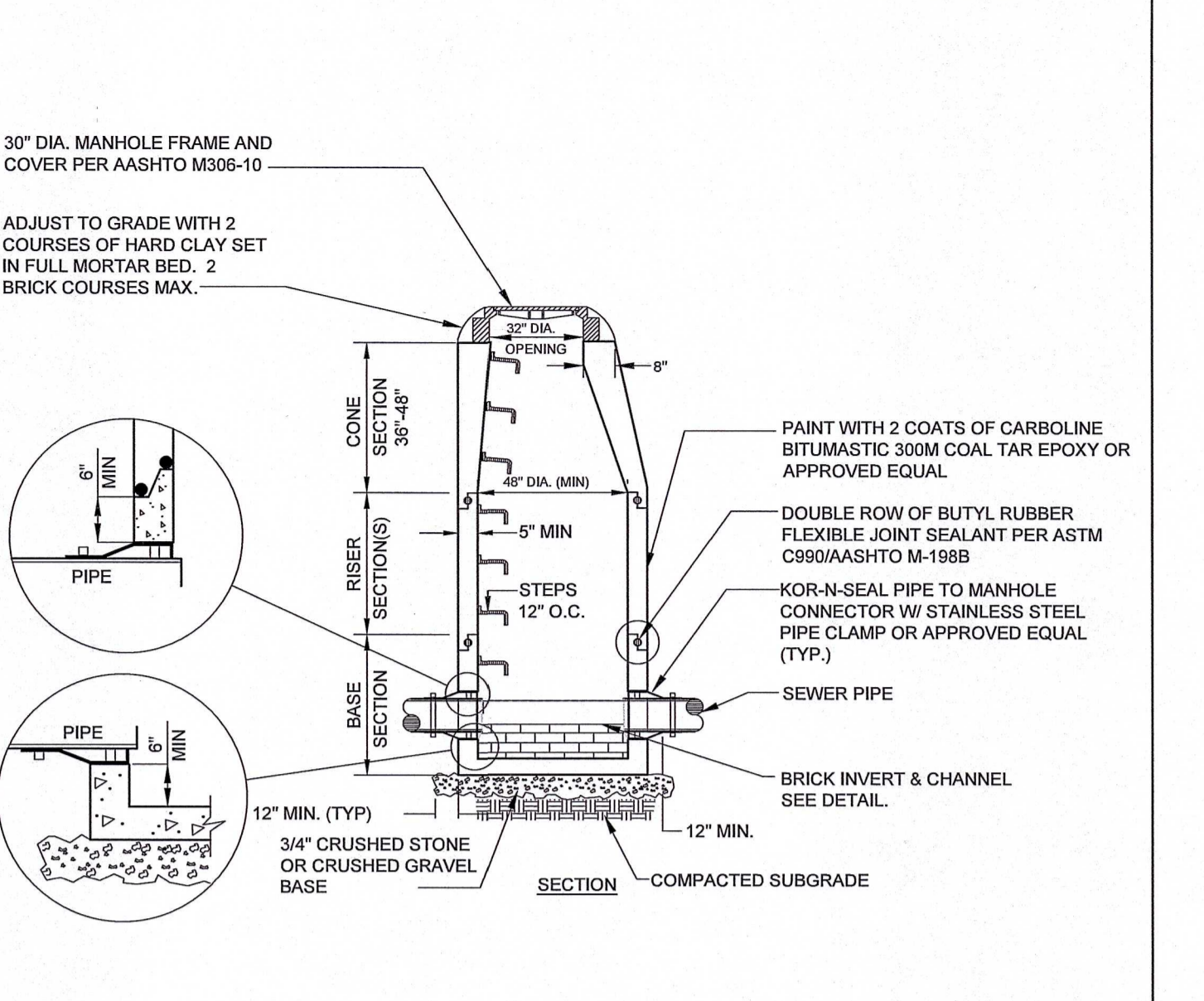
DETAIL 'A' SEWER MANHOLE JOINTING METHODS
SCALE: N.T.S.



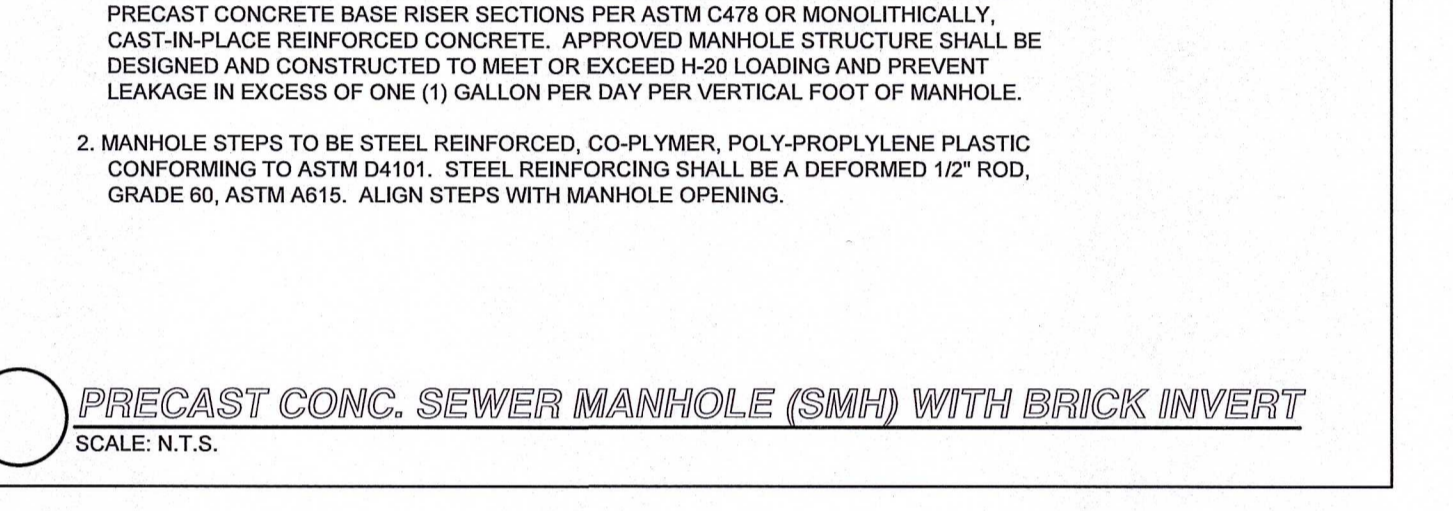
CONCRETE ENCASUREMENT DETAIL
SCALE: N.T.S.



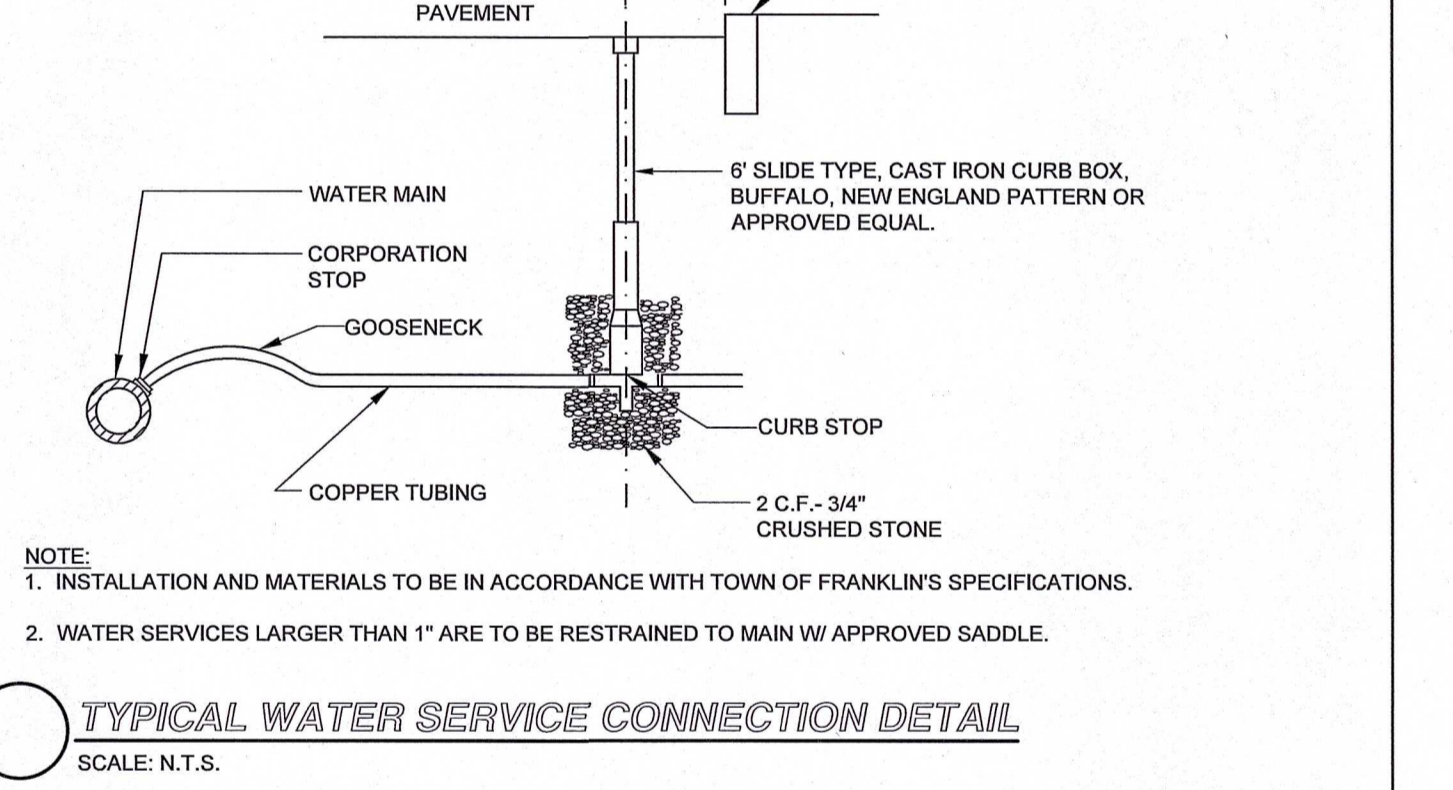
PIPE CONNECTIONS TO SEWER MANHOLE DETAIL
SCALE: N.T.S.



PRECAST CONC. SEWER MANHOLE (SMH) WITH BRICK INVERT
SCALE: N.T.S.



TYPICAL WATER SERVICE CONNECTION DETAIL
SCALE: N.T.S.



TYPICAL BRICK INVERT SECTION FOR SEWER MANHOLE
SCALE: N.T.S.

NOT FOR CONSTRUCTION

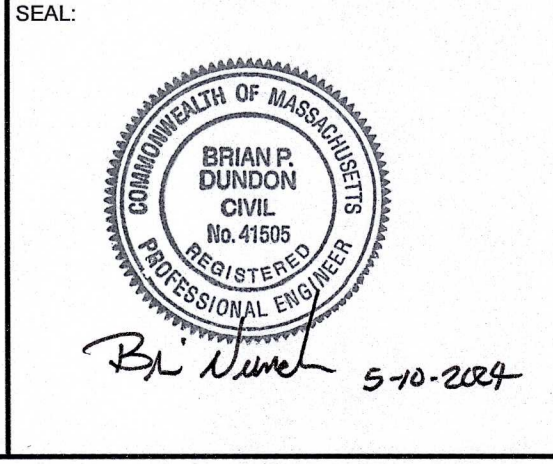


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NO.	REVISION	DATE	NO.	REVISION	DATE
5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024			
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024			
3.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024			
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024			
1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023			

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	N.T.S.

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
30 BRAintree HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781-279-0180 RJO'CONNELL.COM

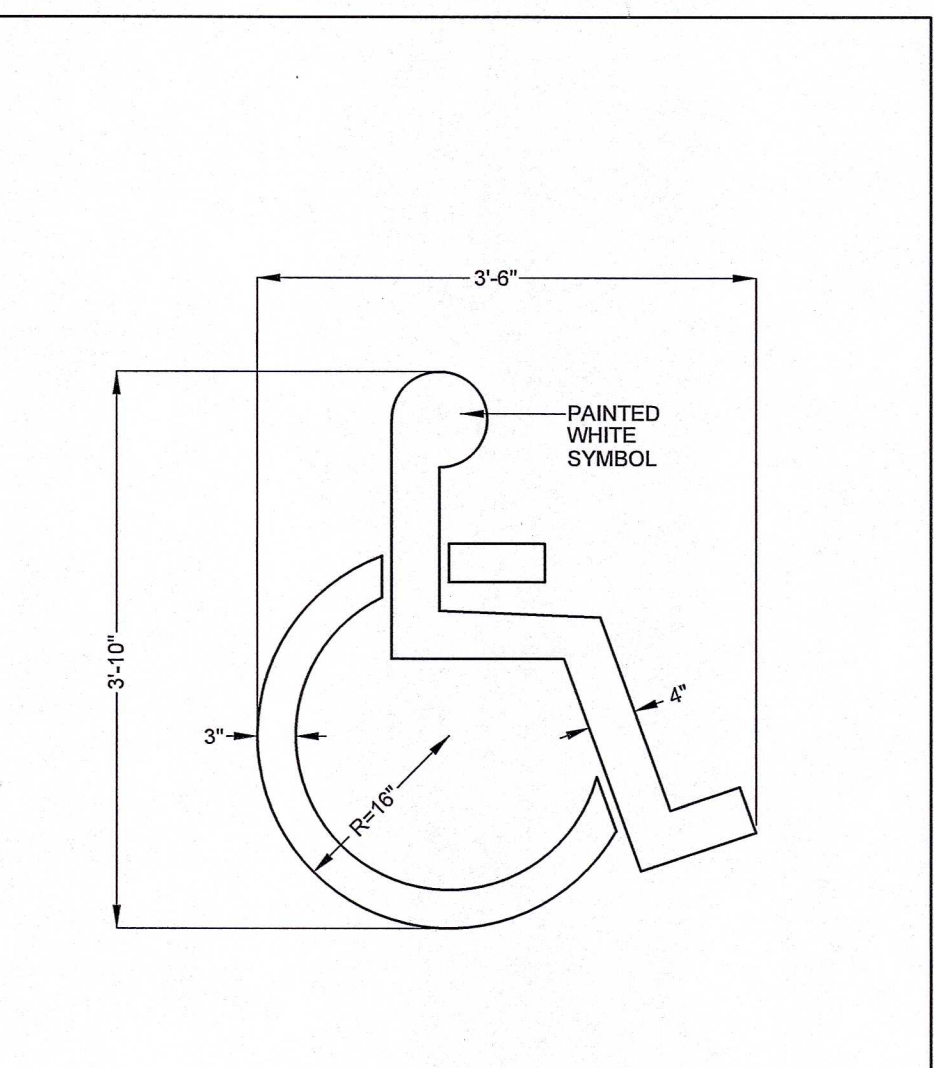
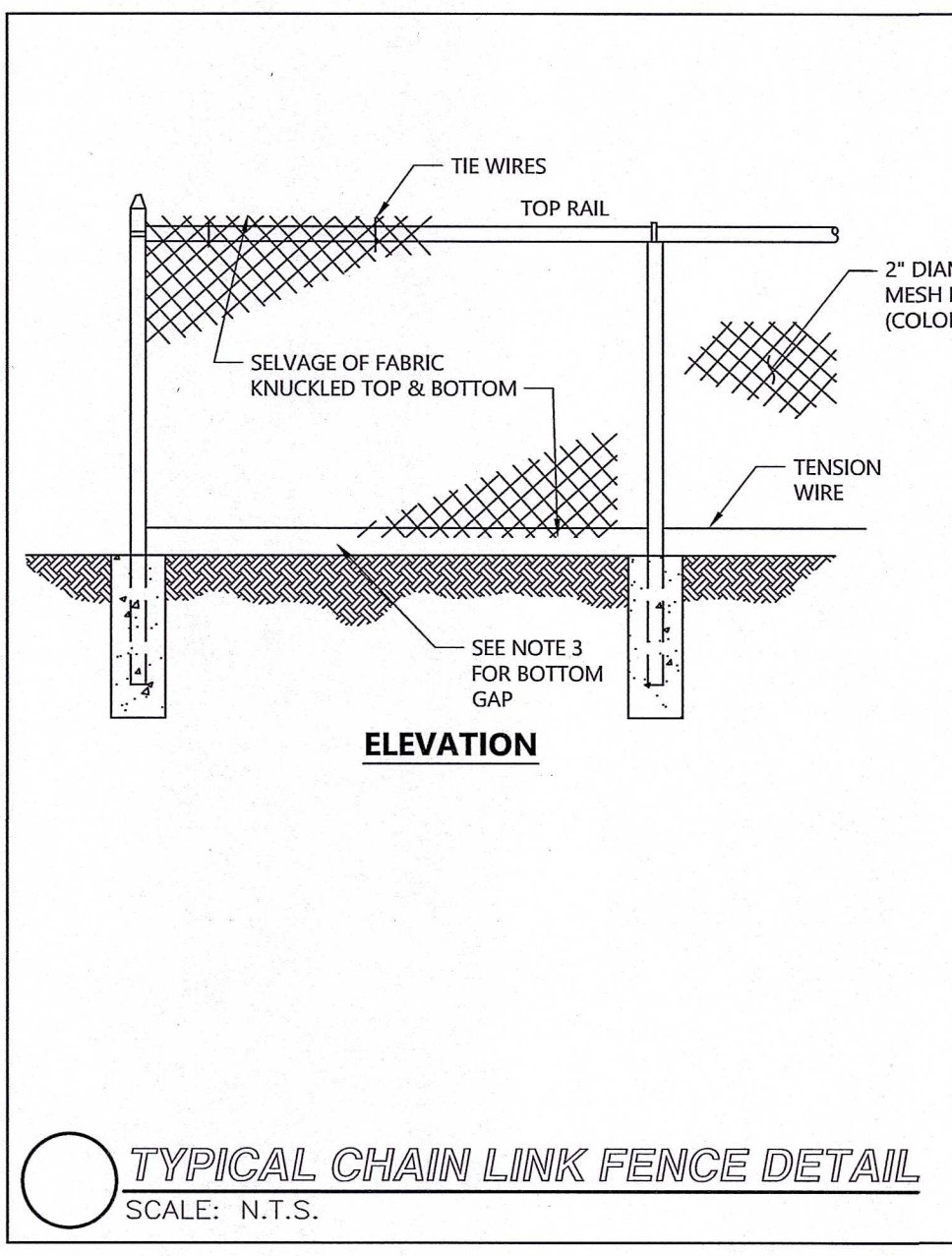
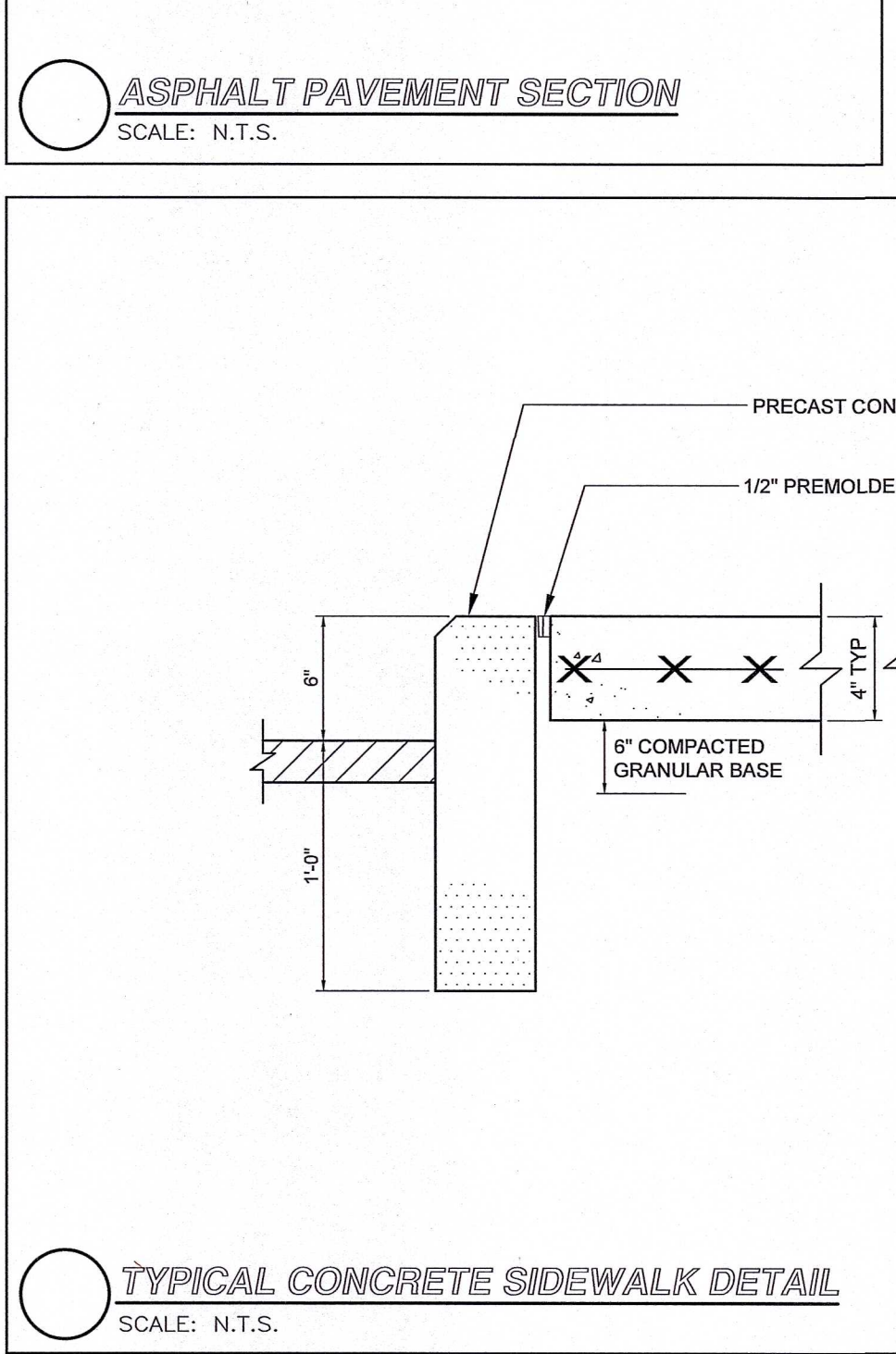
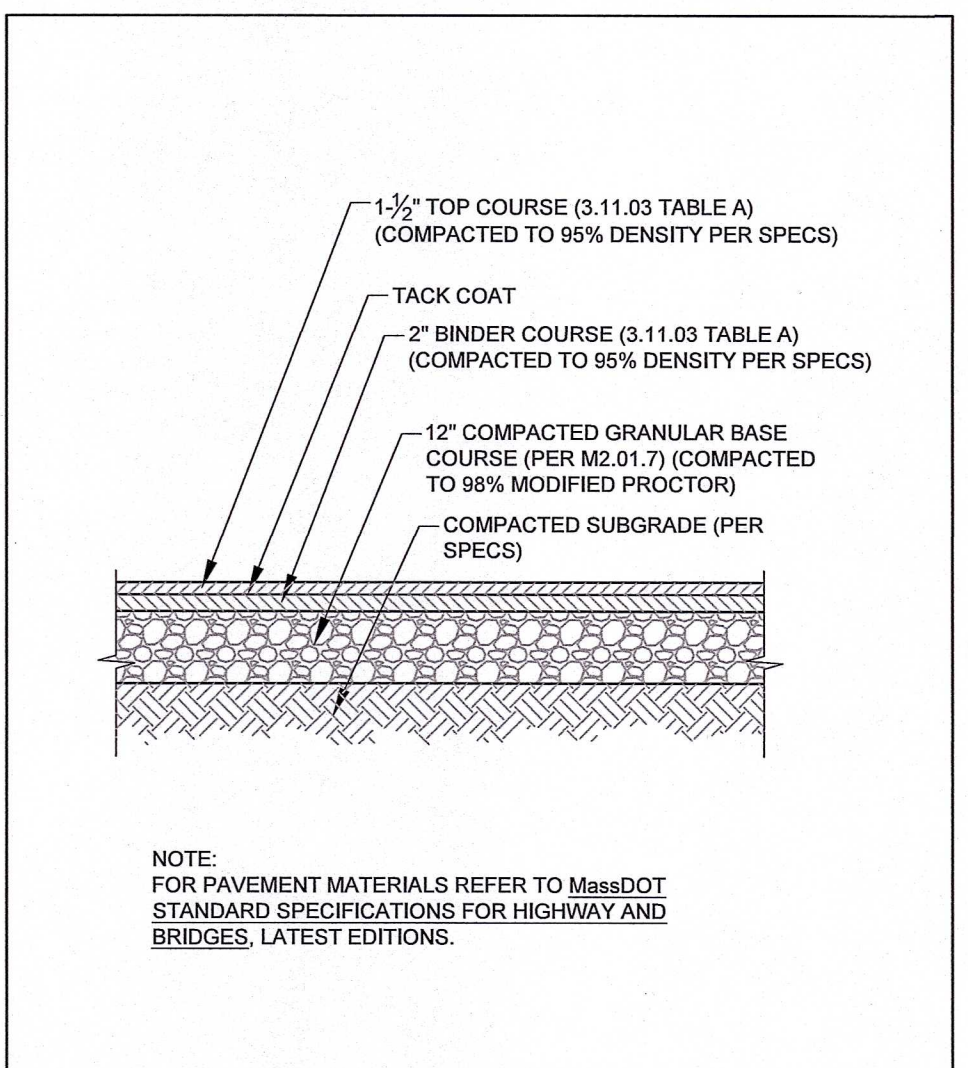
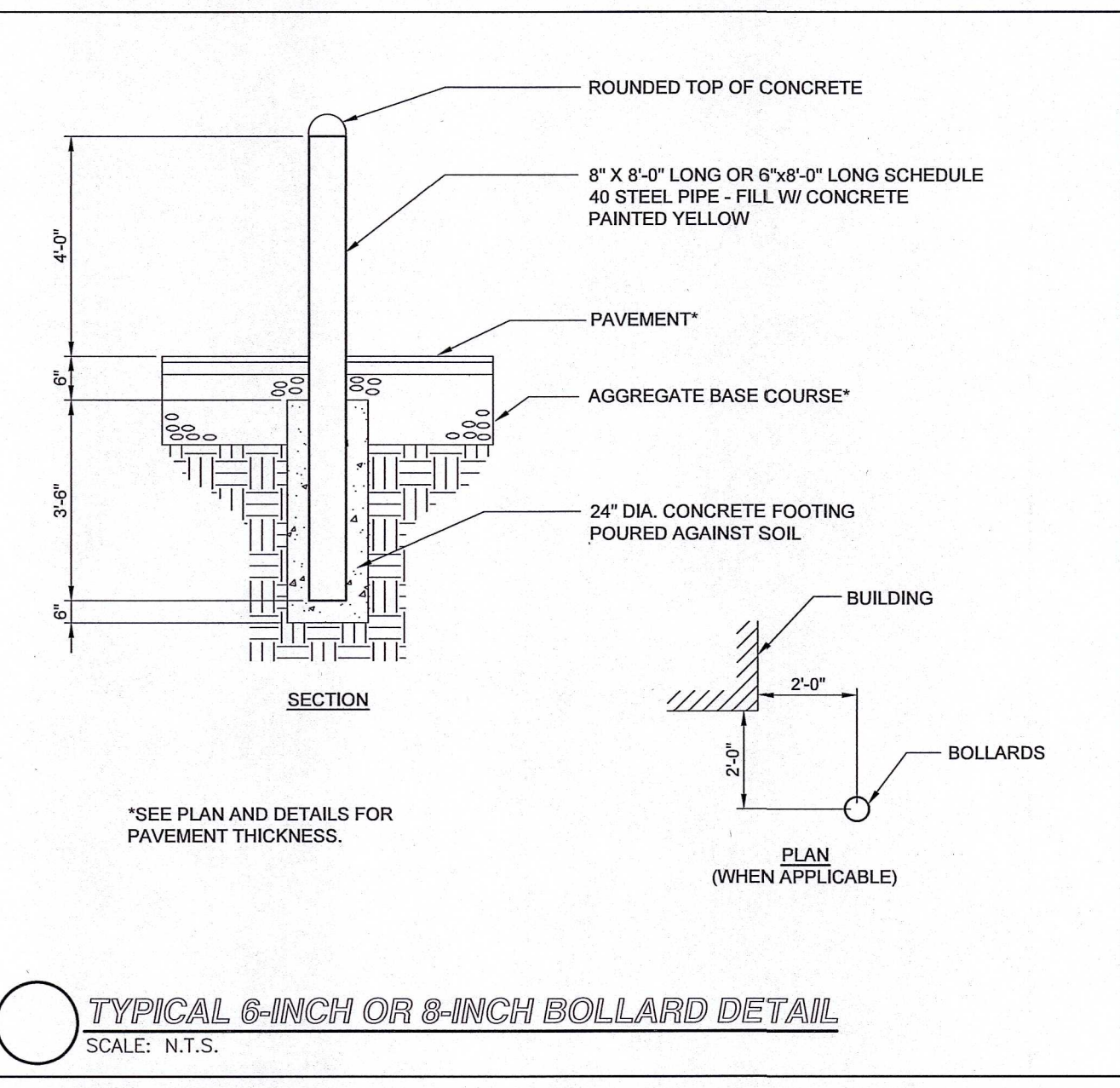
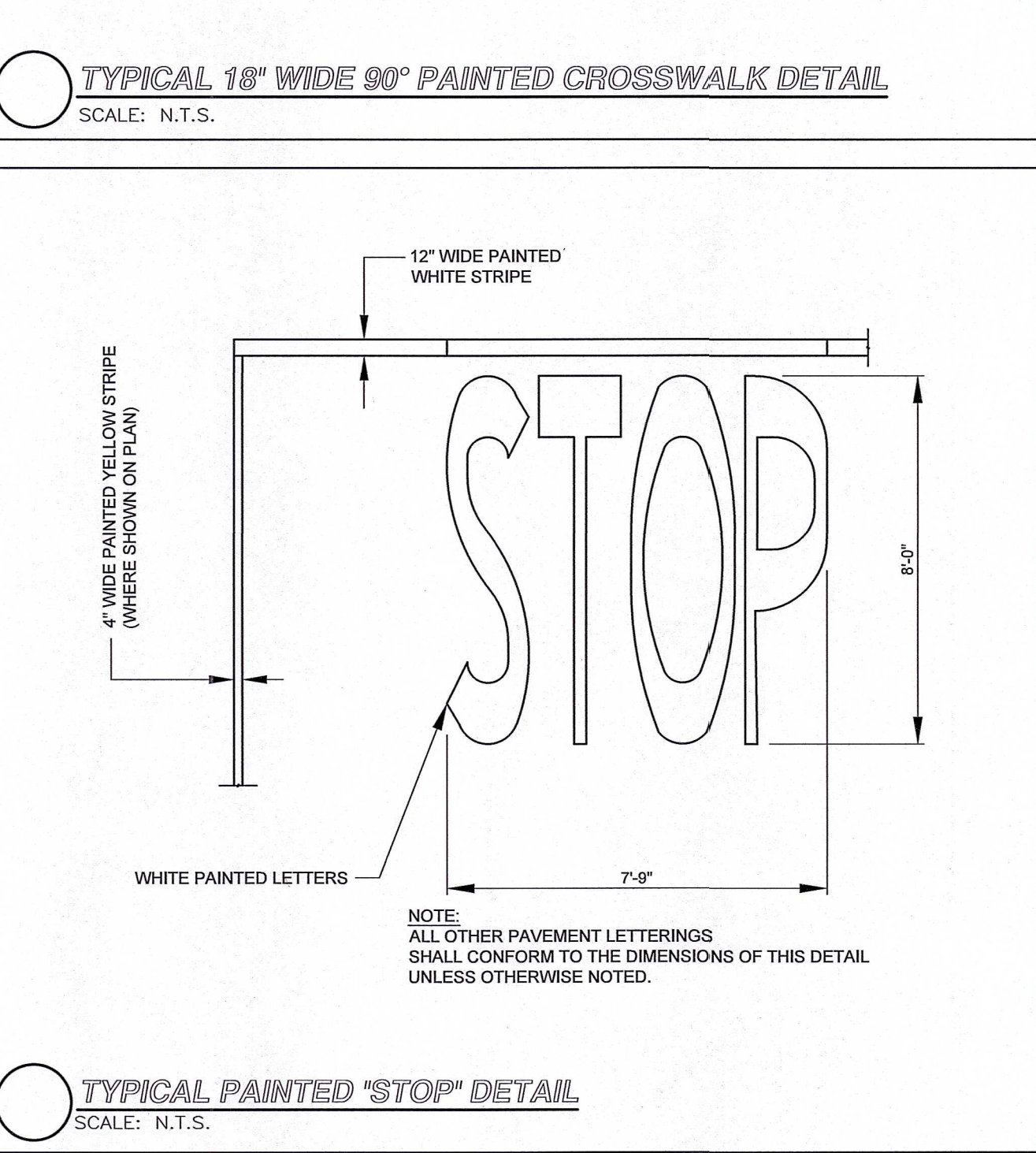
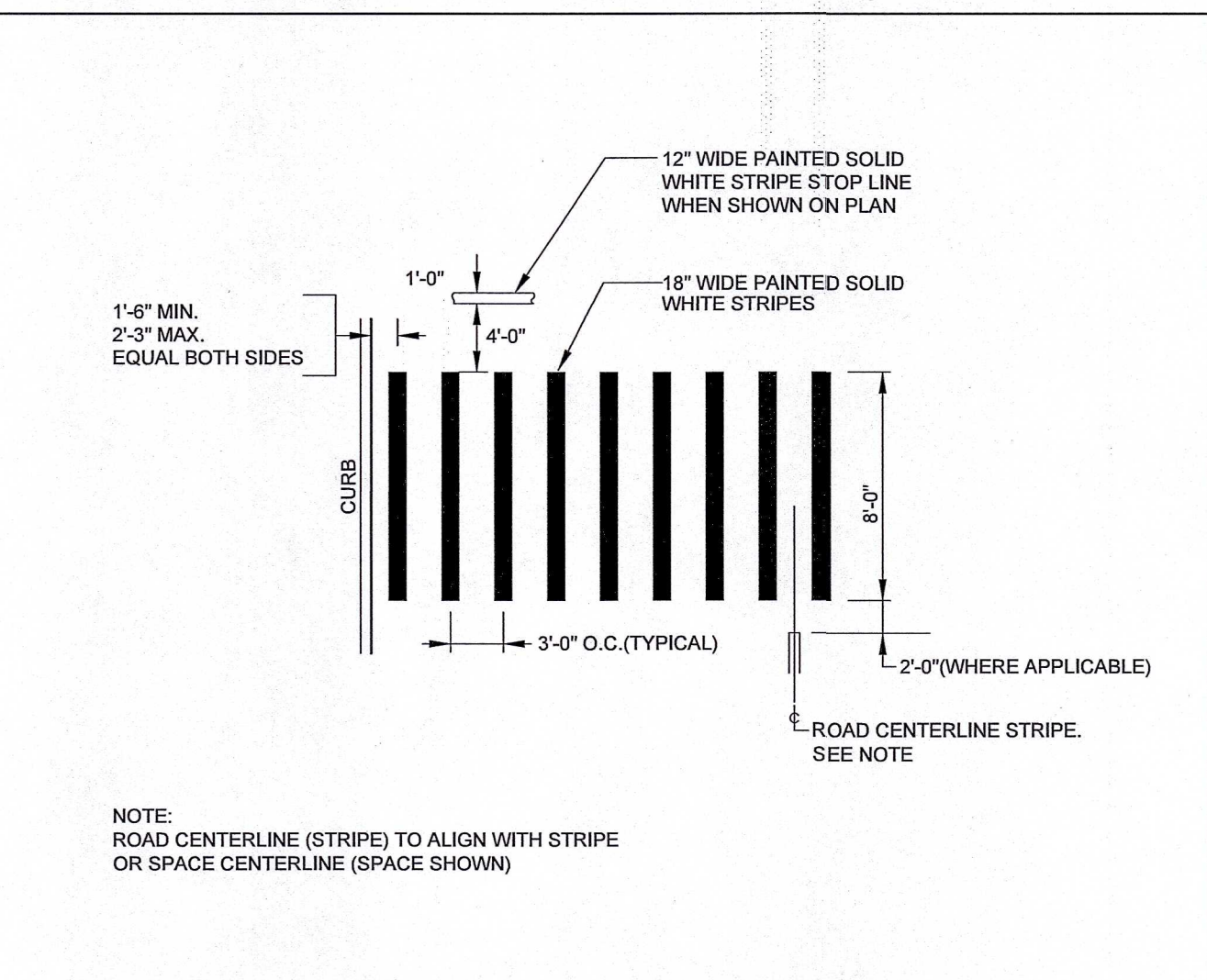
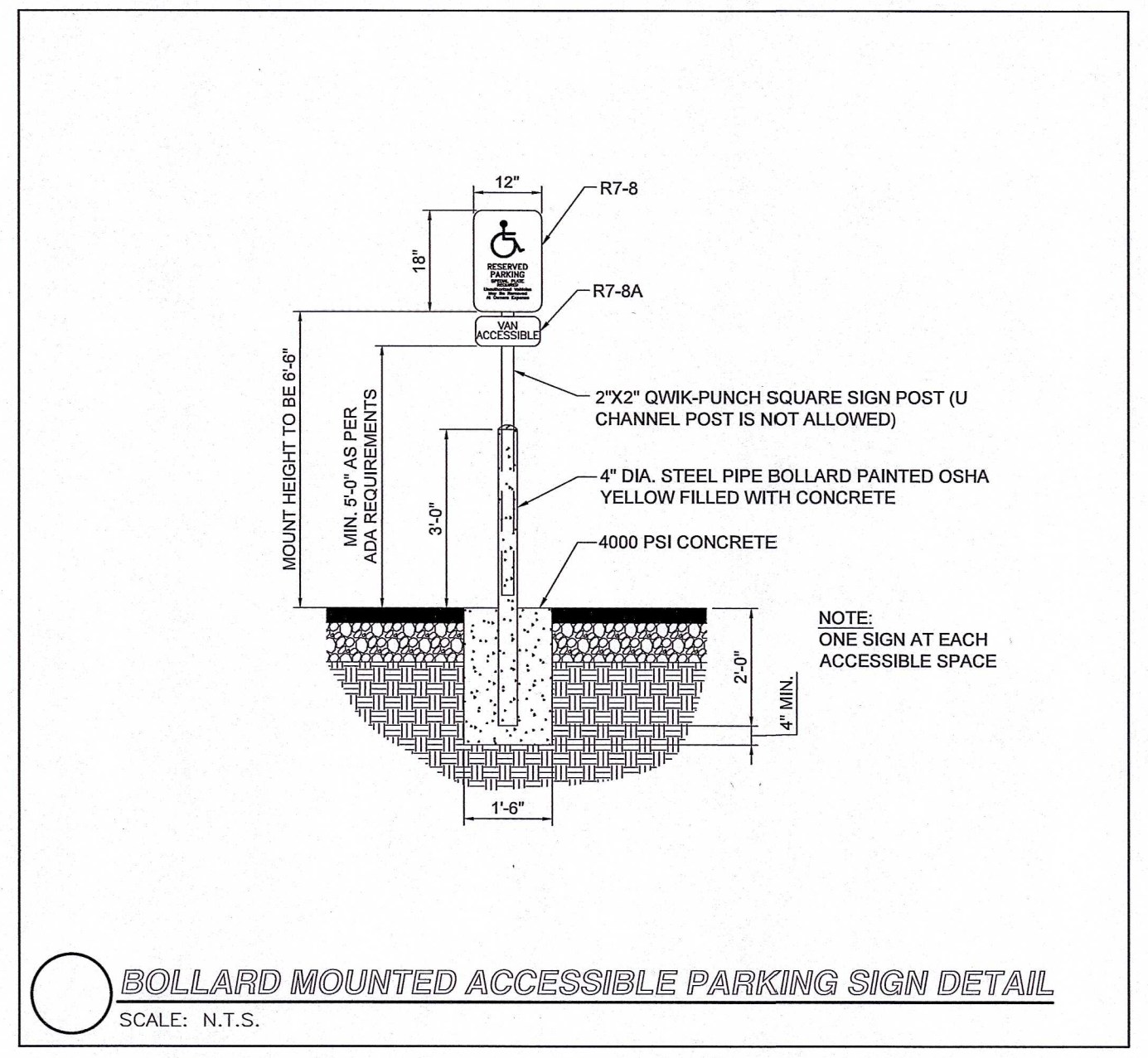
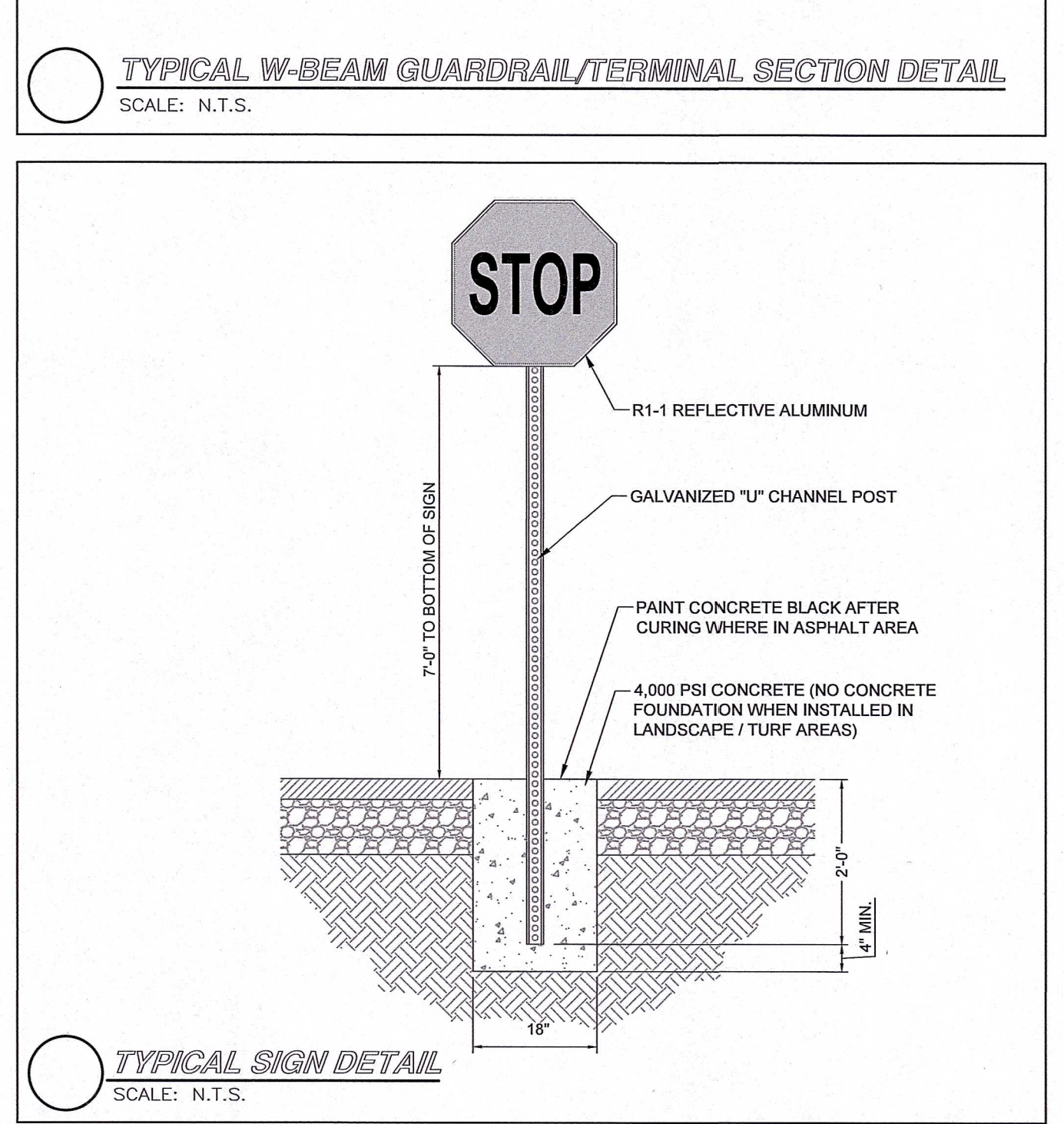
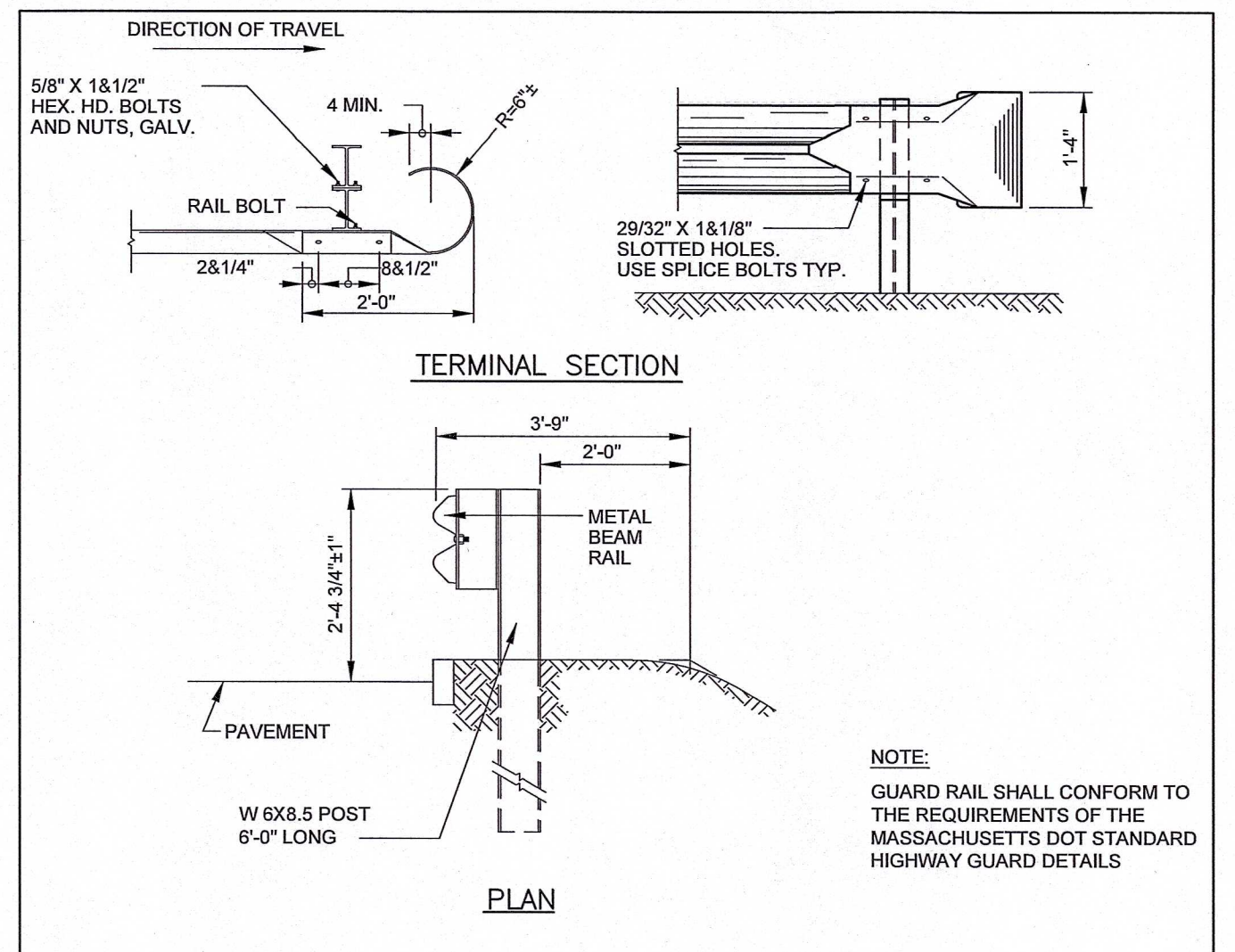
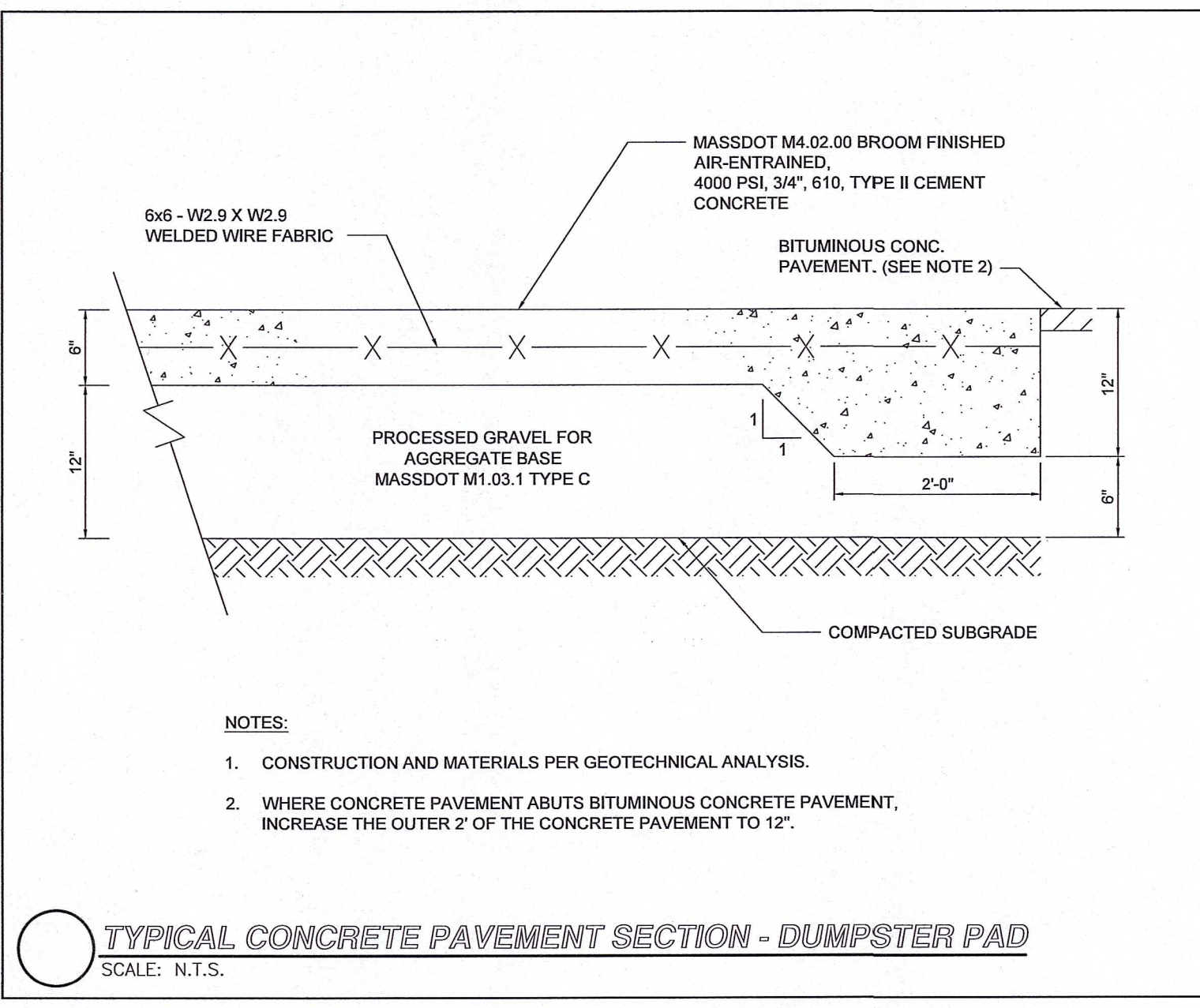
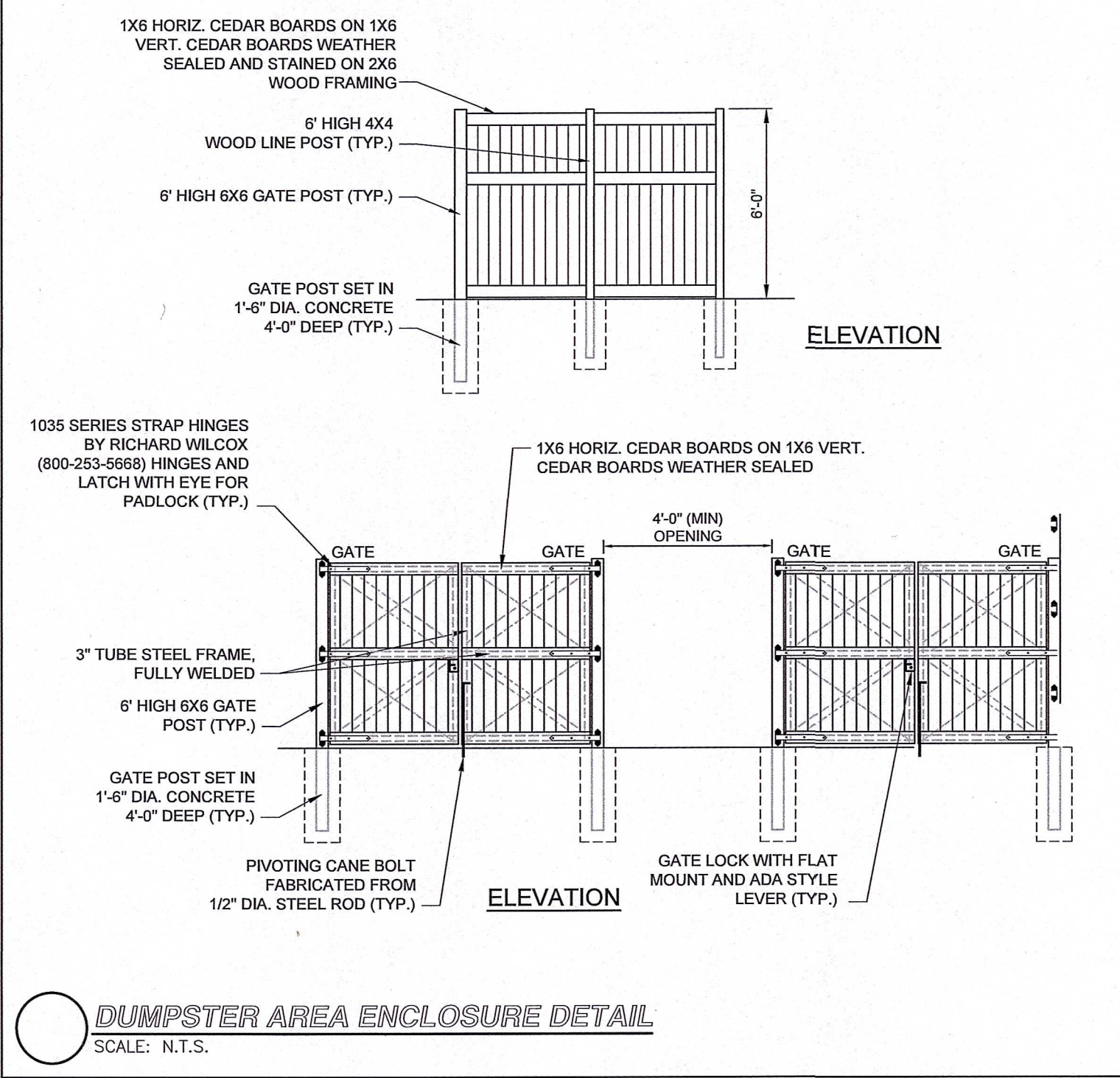
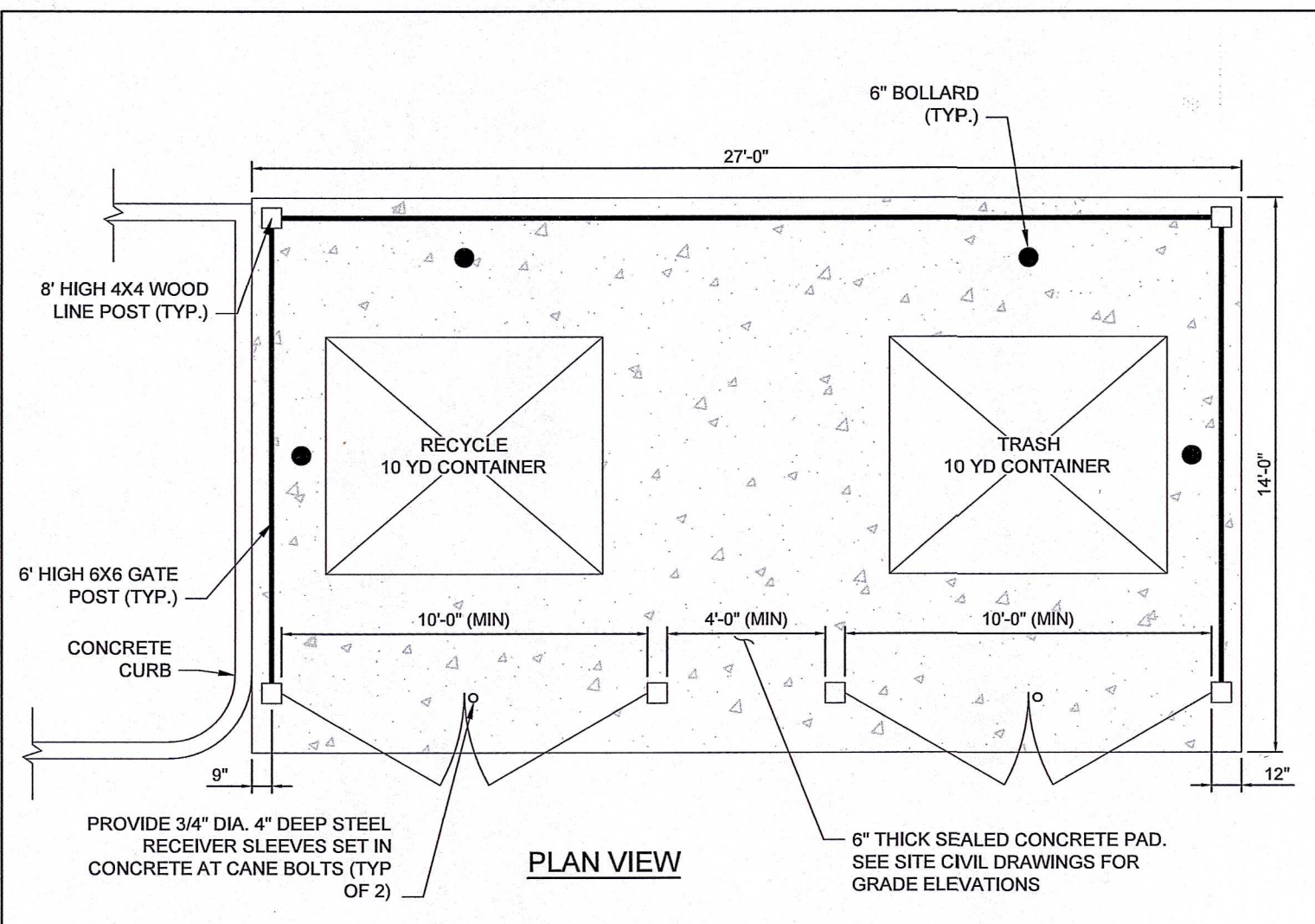
PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

DRAWING NAME:
SITE DETAILS - VI

DRAWING NUMBER:
C-10

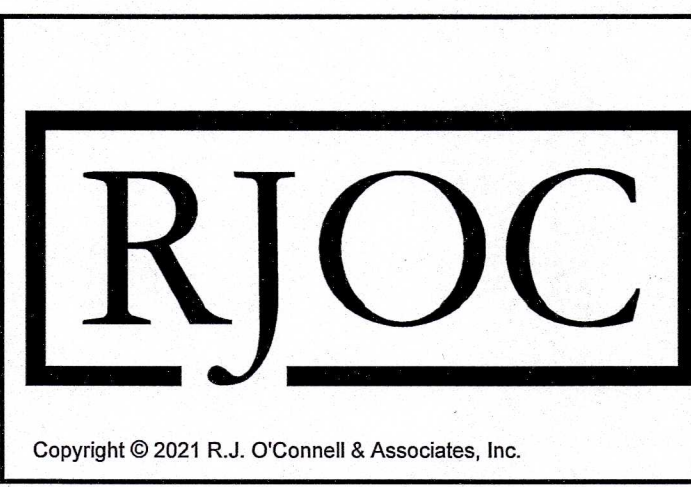
DATE: 10/30/2023 PROJECT NO.: 22016

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NOT FOR CONSTRUCTION

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May 08, 2024 - 12:48pm



NO.	REVISION	DATE

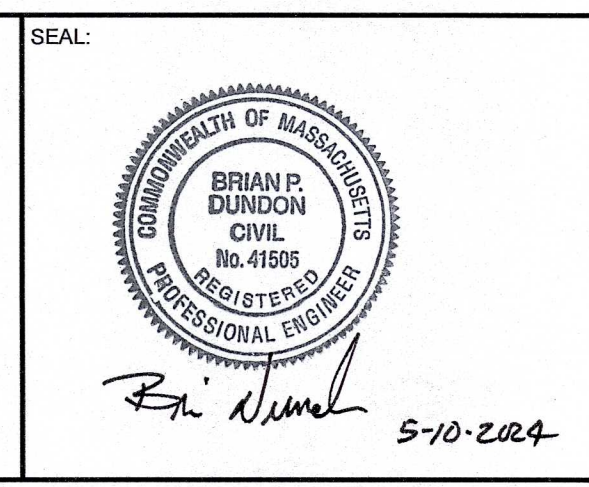
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5.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024
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1.	REVISED PER ONSITE SOIL TESTING RESULTS/NOI SUBMISSION	12/18/2023

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	N.T.S.

PREPARED FOR:

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30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



PREPARED BY:

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80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02186
PHONE: 781-278-0180 RJOCONNELL.COM

PROJECT NAME:

GROVE STREET RESIDENCES

FRANKLIN, MA

DRAWING NAME:

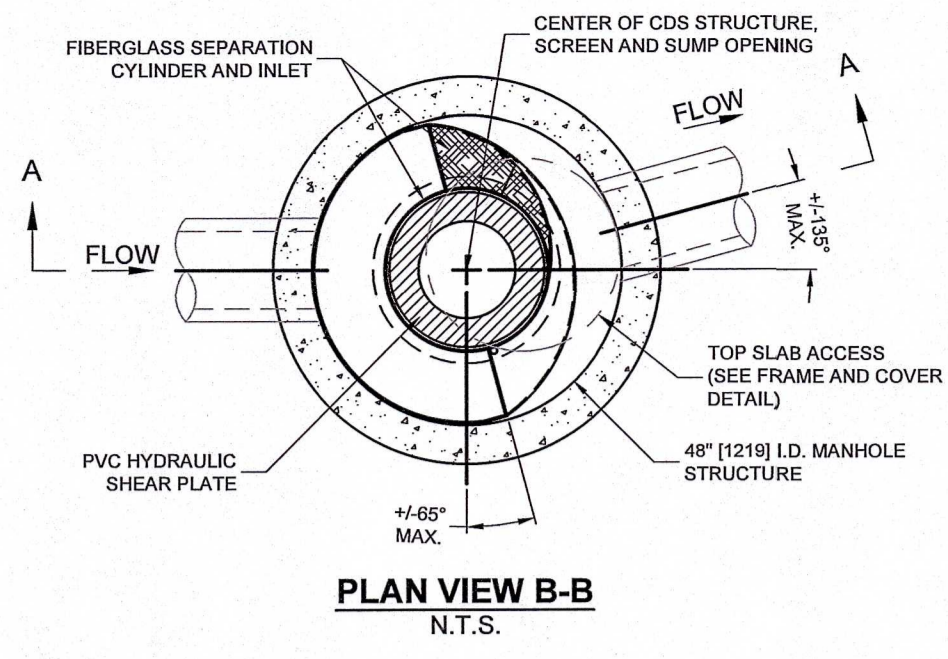
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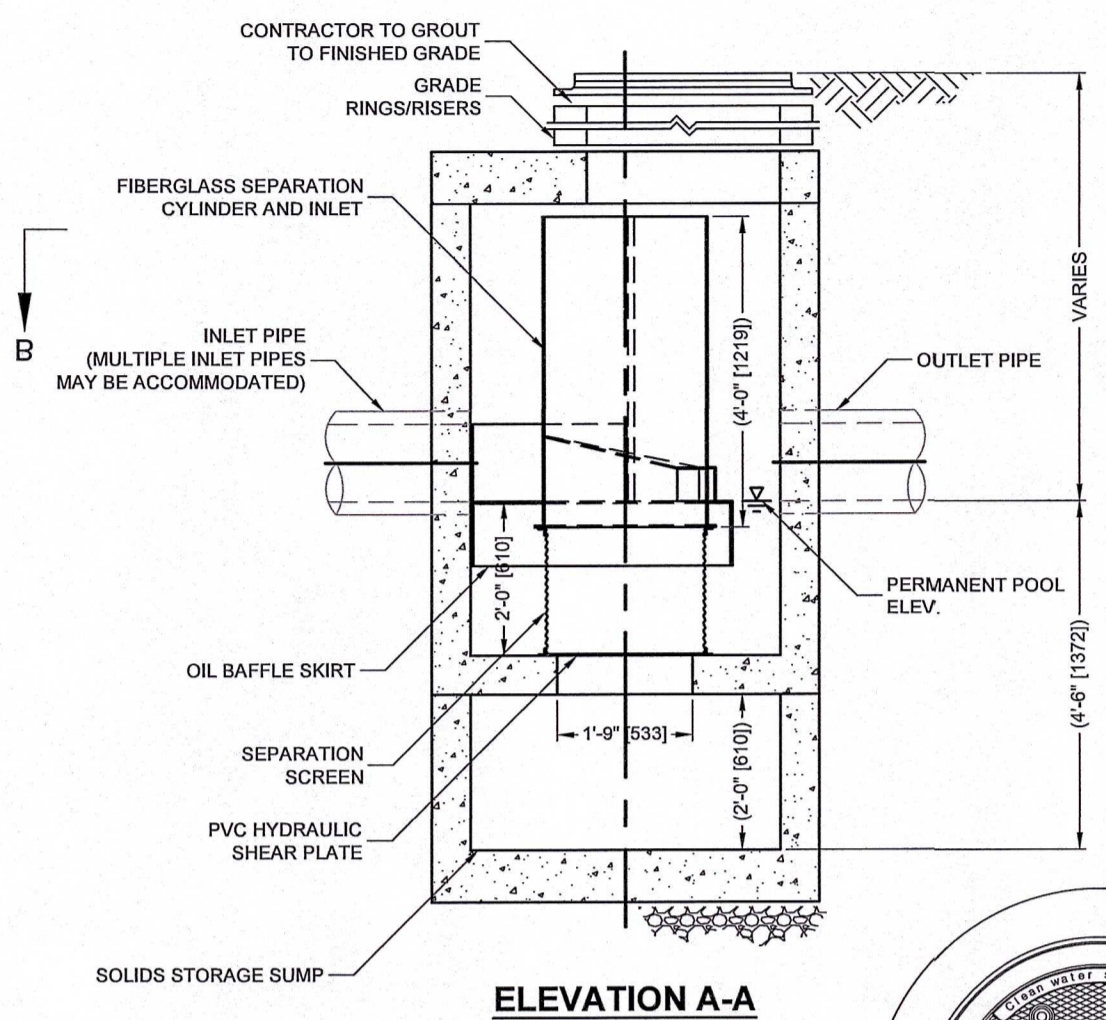
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DATE: 10/30/2023 PROJECT NO.: 22016

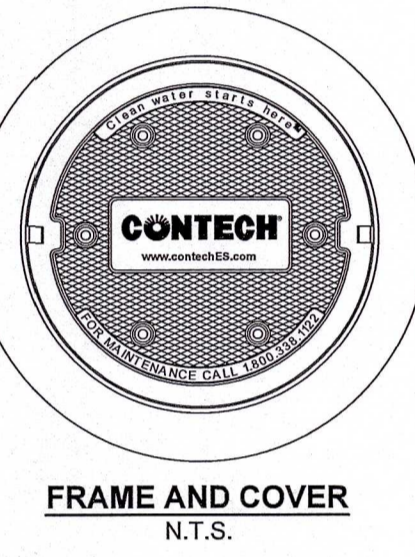
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PLAN VIEW B-B
N.T.S.



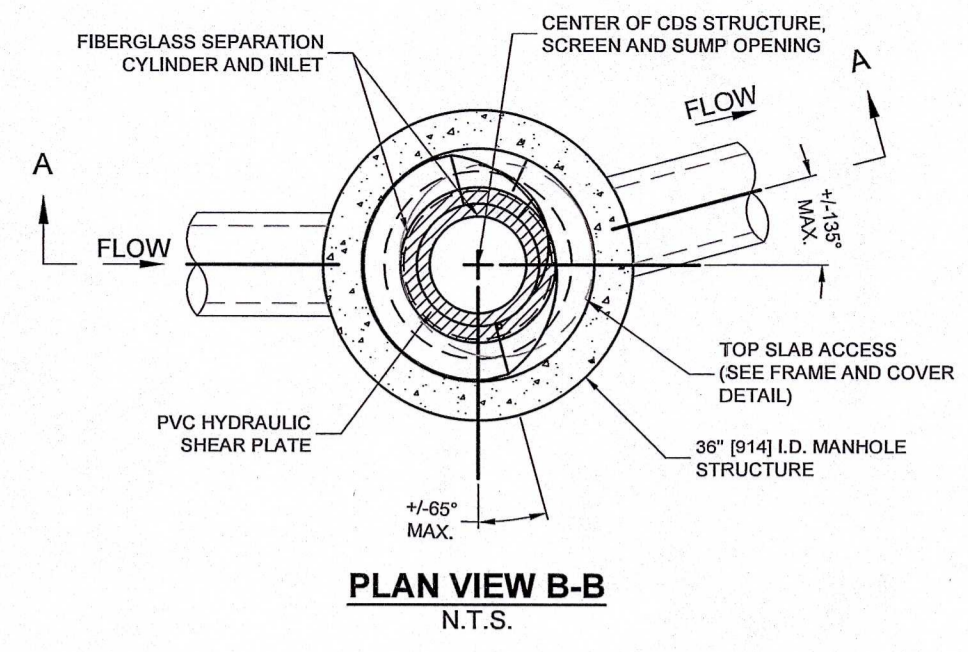
ELEVATION A-A
N.T.S.



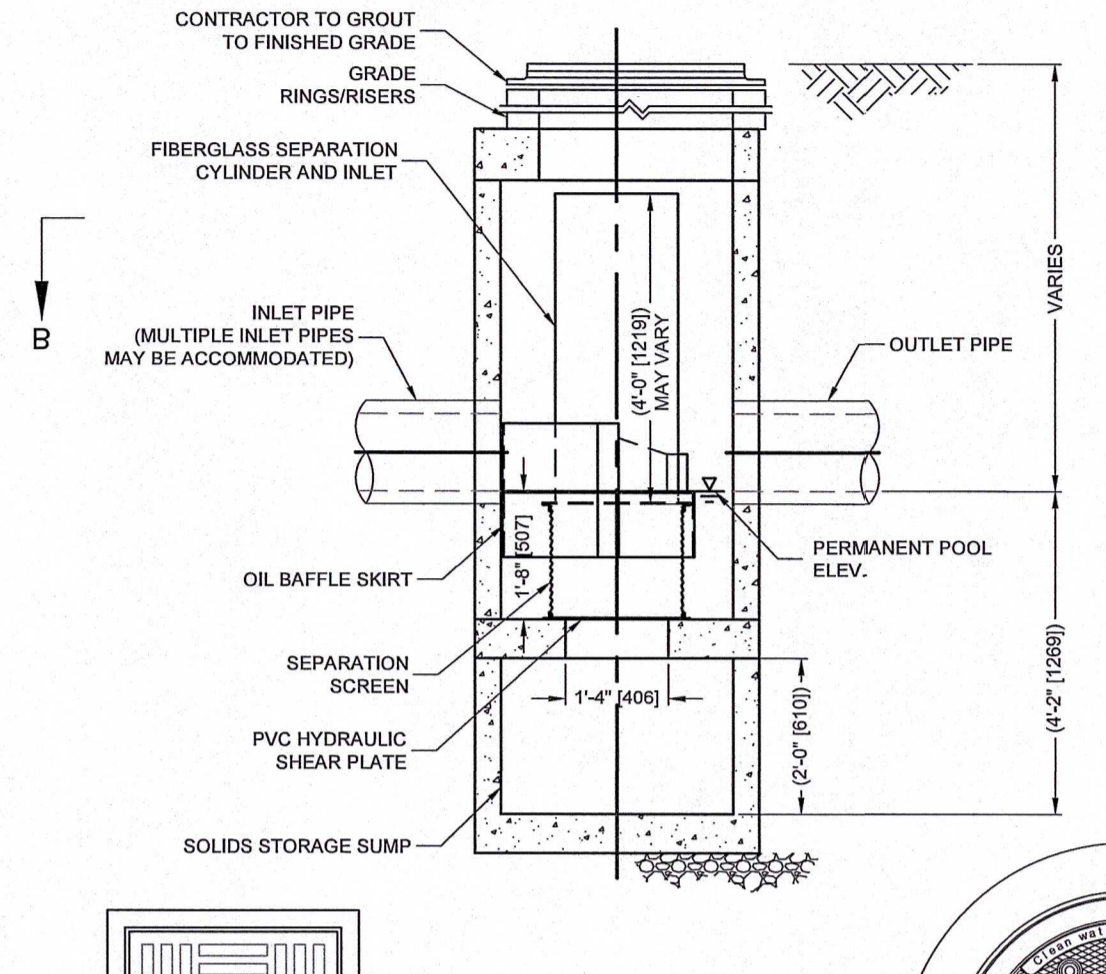
FRAME AND COVER
N.T.S.

- GENERAL NOTES**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
 - CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - STRUCTURE SHALL MEET AASHTO H200 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M508 AND BE CAST WITH THE CONTECH LOGO.
 - IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
 - CDS STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- INSTALLATION NOTES**
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 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
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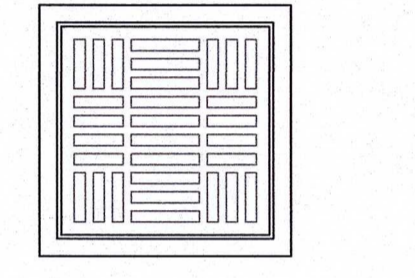
CDS-2 (CDS2015-4-C) DETAIL
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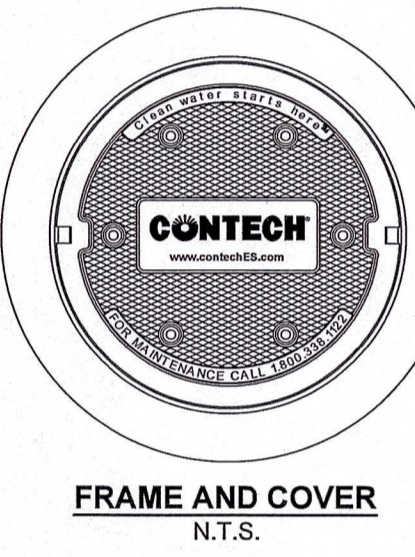
PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.



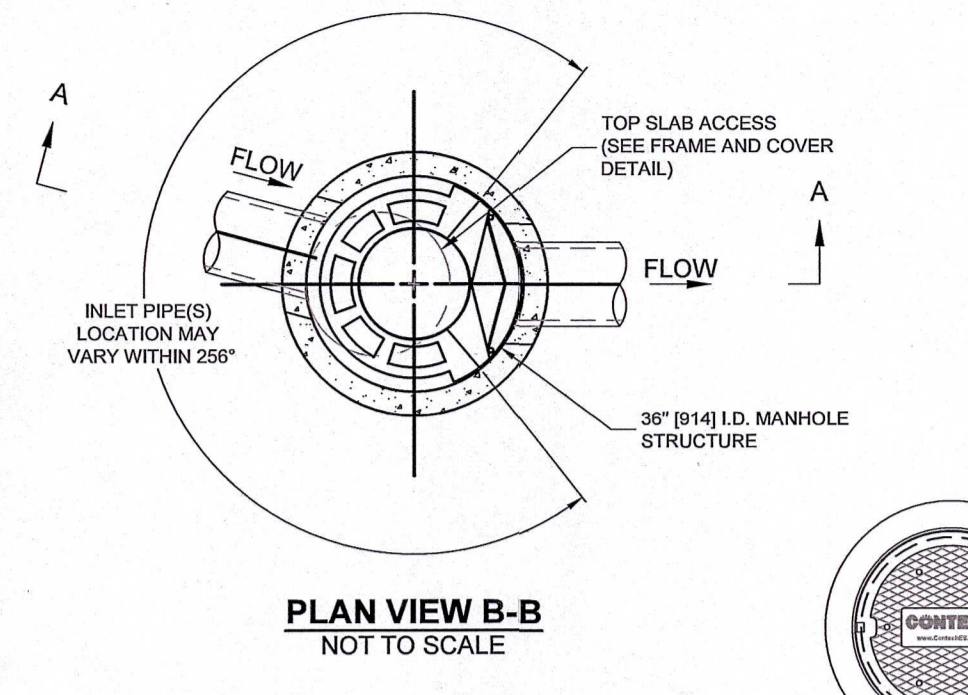
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(MAY VARY)
NOT TO SCALE



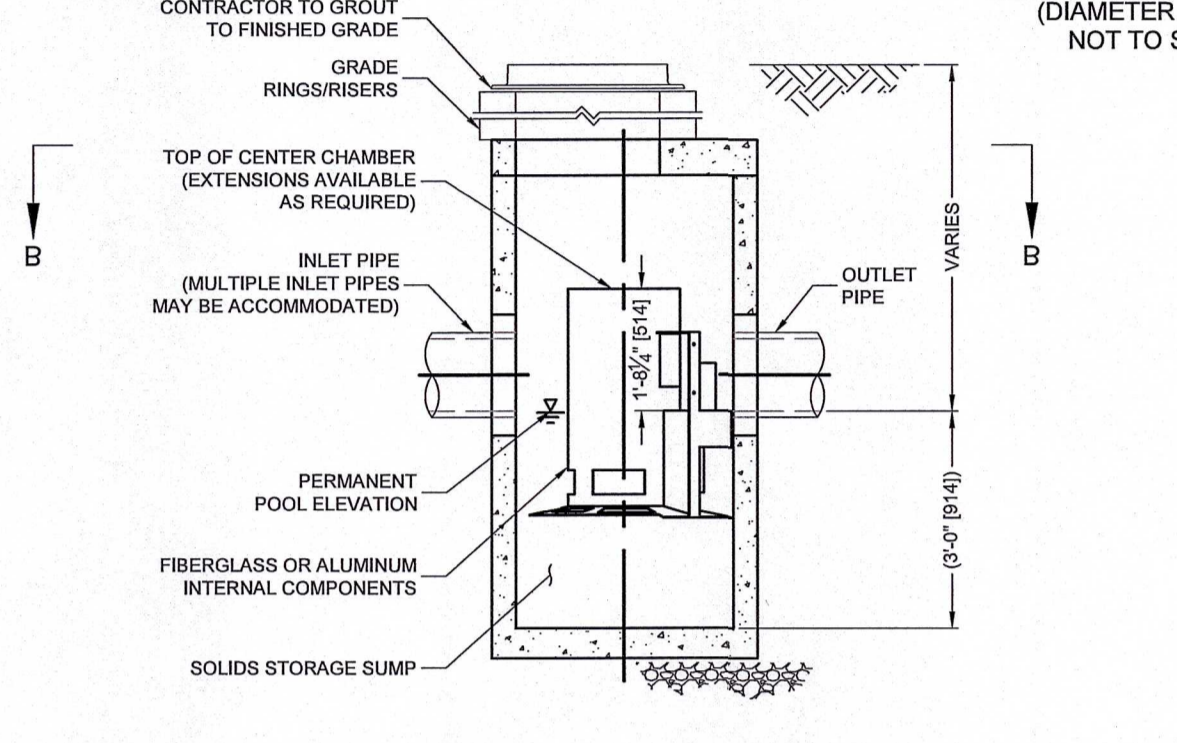
FRAME AND COVER
NOT TO SCALE

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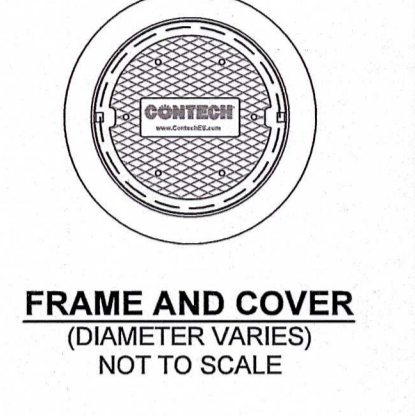
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SCALE: N.T.S.



PLAN VIEW B-B
NOT TO SCALE



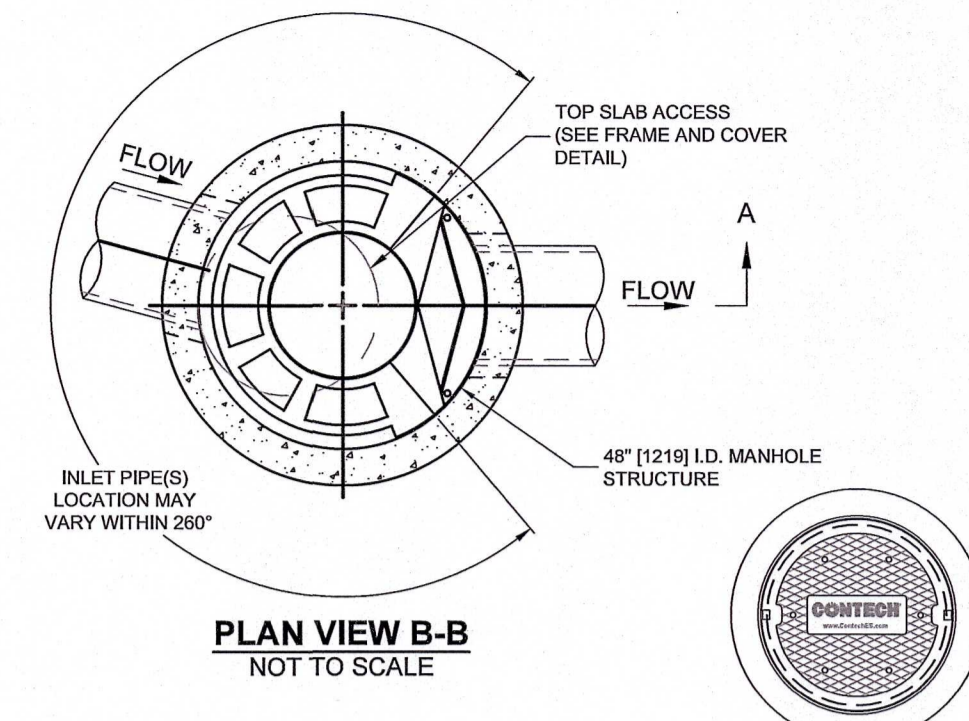
ELEVATION A-A
NOT TO SCALE



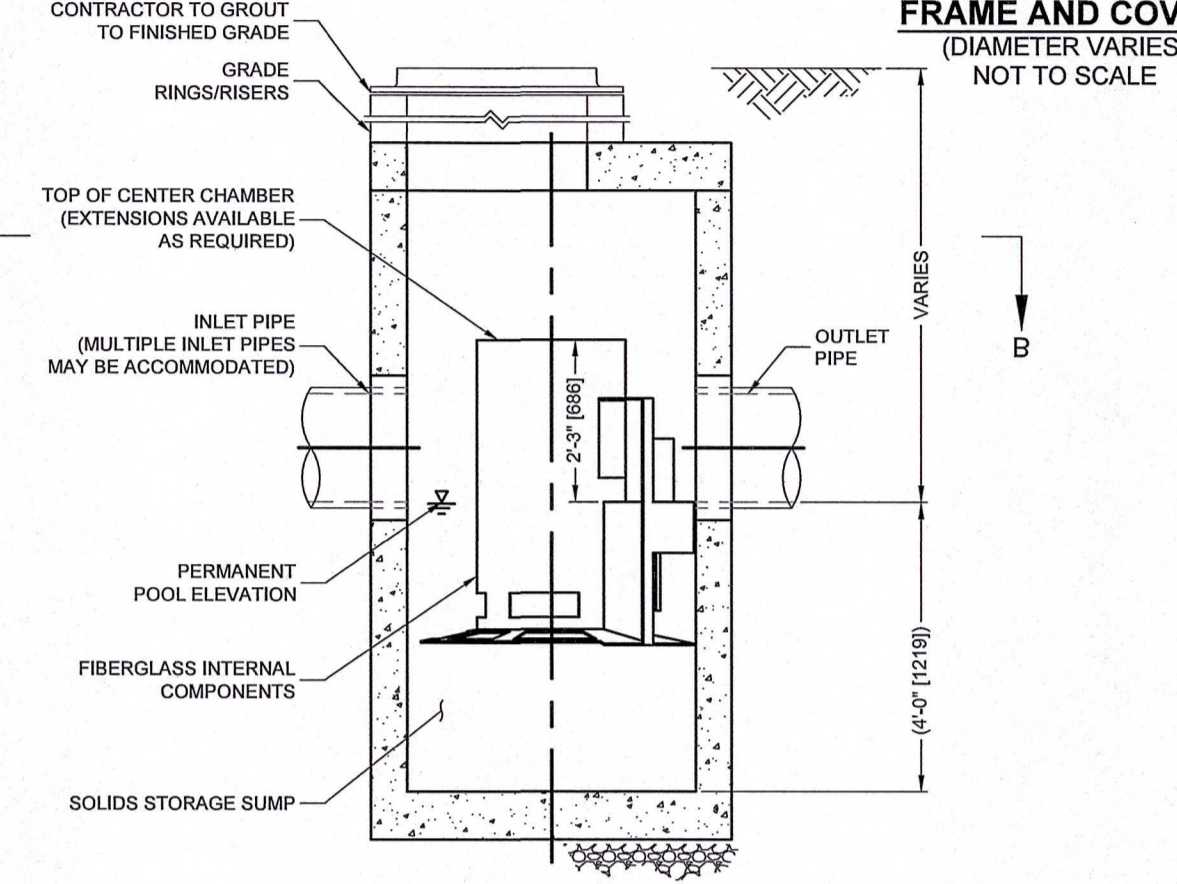
FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

- GENERAL NOTES**
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 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
 - CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
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 - CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
 - ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].
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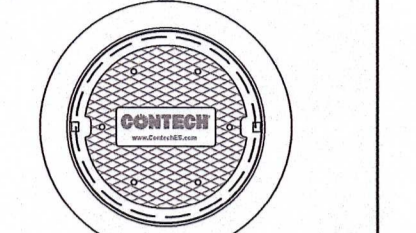
CDS-9 (CS-3) CASCADE SEPARATOR STANDARD DETAIL
SCALE: N.T.S.



PLAN VIEW B-B
NOT TO SCALE



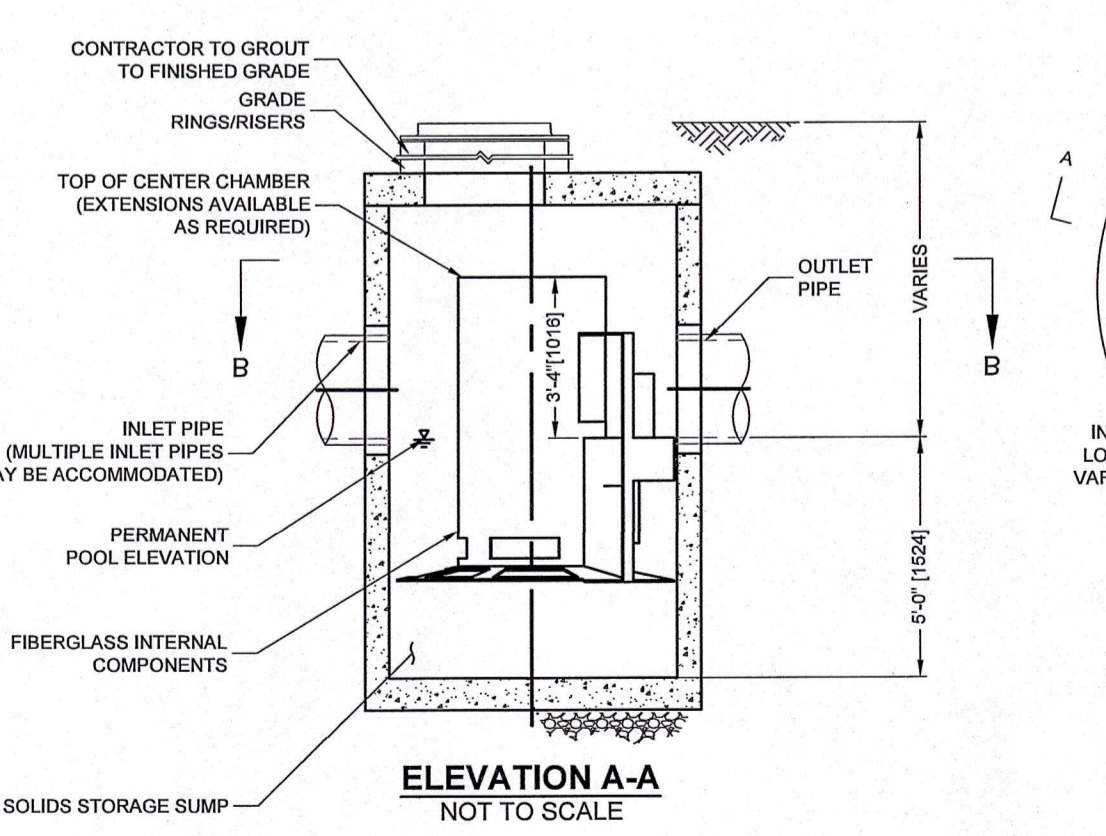
ELEVATION A-A
NOT TO SCALE



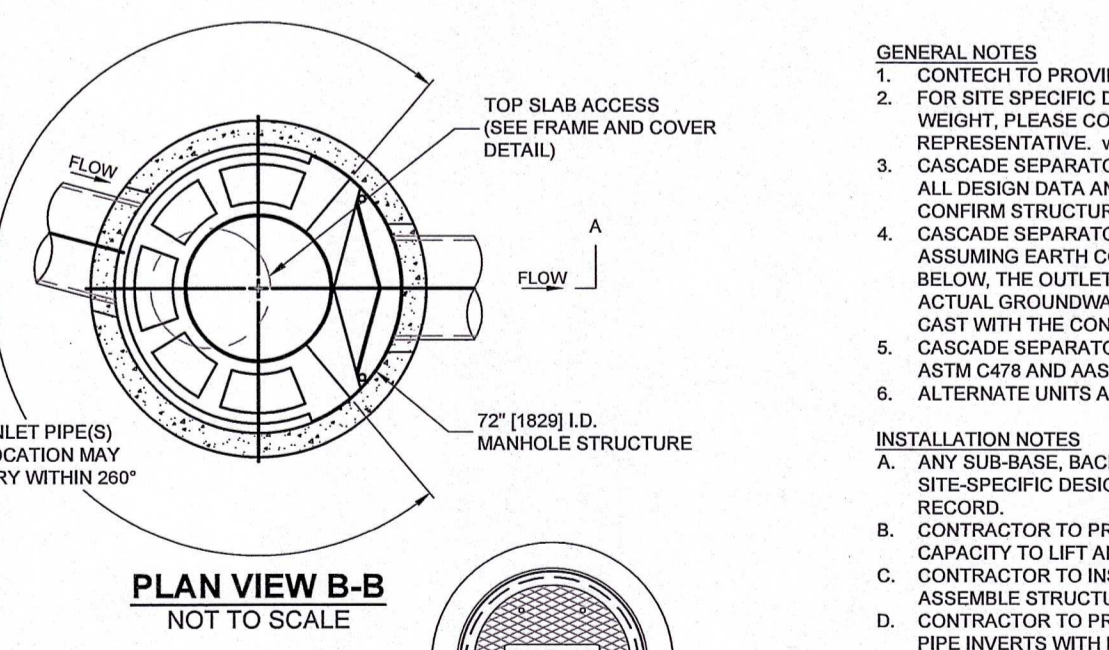
FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

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 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CDS-11 (CS-4) CASCADE SEPARATOR STANDARD DETAIL
SCALE: N.T.S.



ELEVATION A-A
NOT TO SCALE



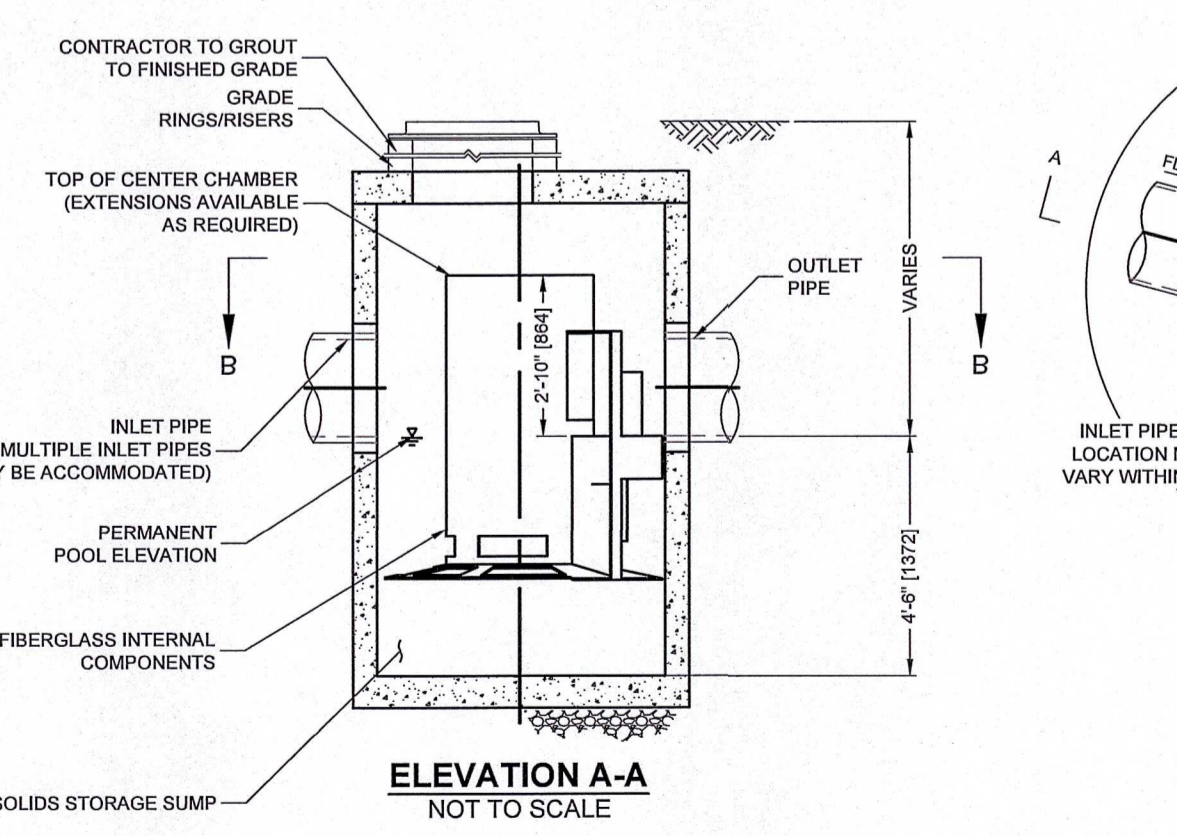
PLAN VIEW B-B
NOT TO SCALE



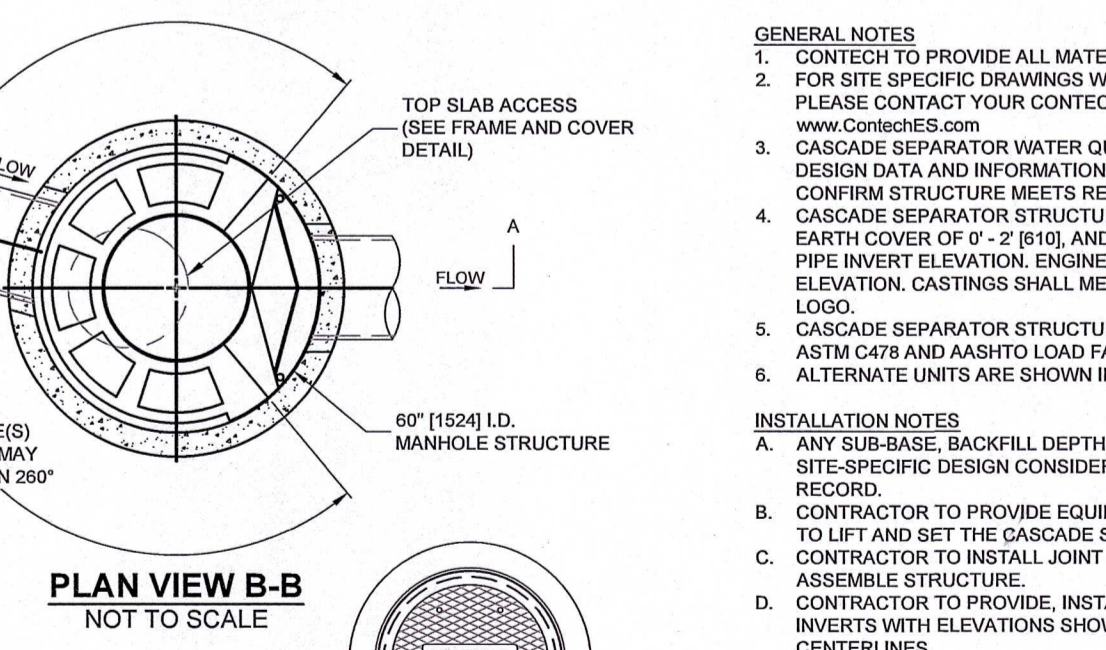
FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

CDS-7 (CS-6) CASCADE SEPARATOR STANDARD DETAIL
SCALE: N.T.S.

- GENERAL NOTES**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
 - CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO H200 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [810], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M508 AND BE CAST WITH THE CONTECH LOGO.
 - CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
 - ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.



ELEVATION A-A
NOT TO SCALE



PLAN VIEW B-B
NOT TO SCALE



FRAME AND COVER
(DIAMETER VARIES)
NOT TO SCALE

CDS-3 (CS-5) CASCADE SEPARATOR STANDARD DETAIL
SCALE: N.T.S.

- GENERAL NOTES**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
 - CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO H200 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' [810], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M508 AND BE CAST WITH THE CONTECH LOGO.
 - CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
 - ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].
- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

NOT FOR CONSTRUCTION

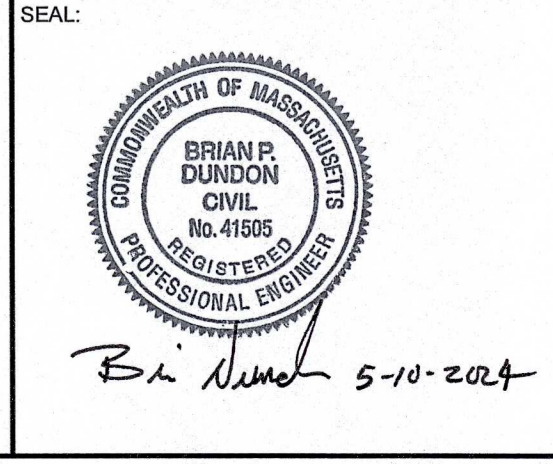


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NO.	REVISION	DATE	NO.	REVISION	DATE
4.	REVISED PER CONCOM PEER REVIEW COMMENTS	05/10/2024			
3.	REVISED PER CONCOM PEER REVIEW COMMENTS	03/28/2024			
2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024			
1.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024			

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	N.T.S.

PREPARED FOR:
FAIRFIELD GROVE STREET LLC
30 BRAINTREE HILL OFFICE PARK
SUITE 105
BRAintree, MA 02184



PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781-278-0160 RJOCONNELL.COM

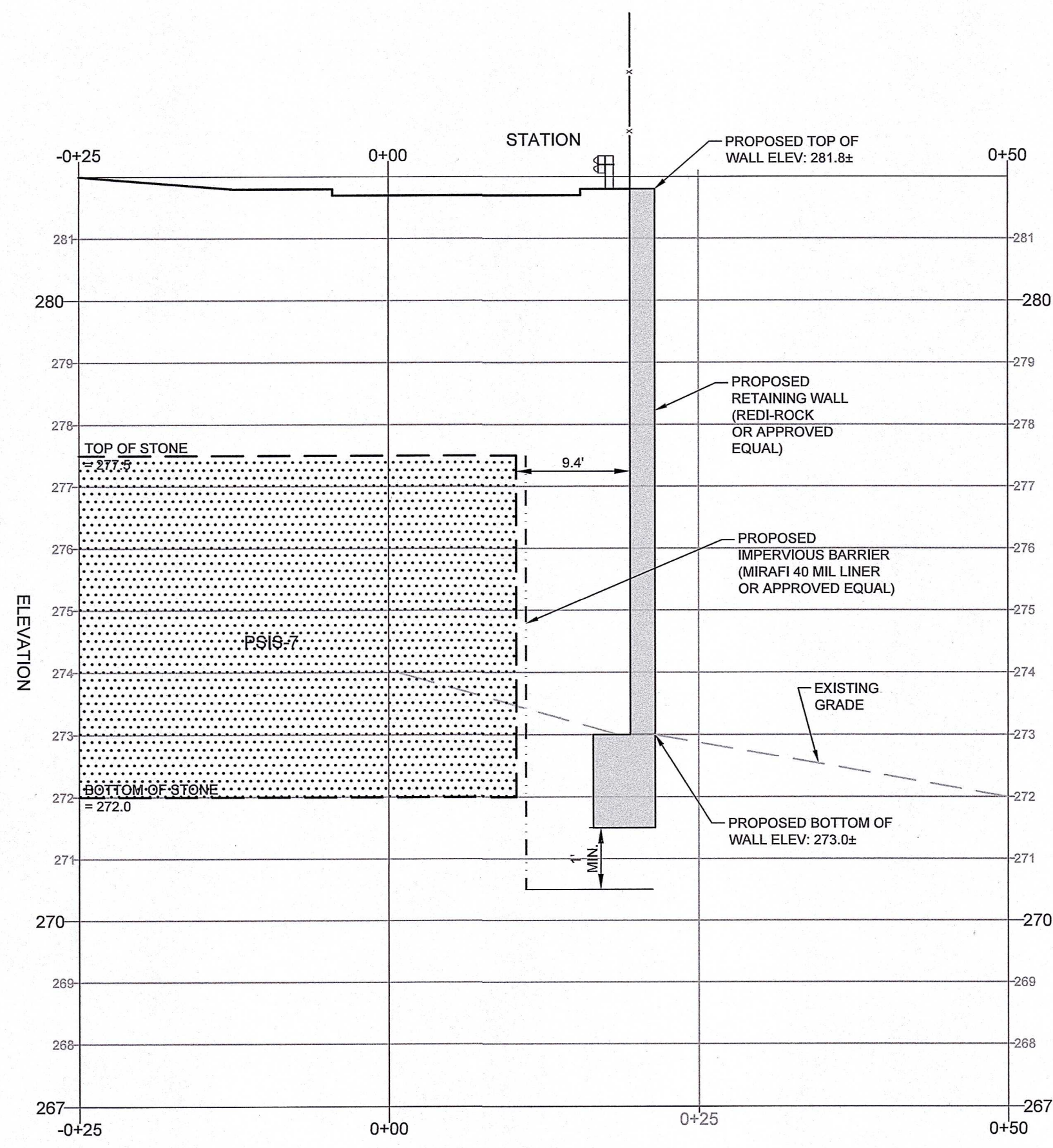
PROJECT NAME:
GROVE STREET RESIDENCES
FRANKLIN, MA

DRAWING NAME:
SITE DETAILS - IX

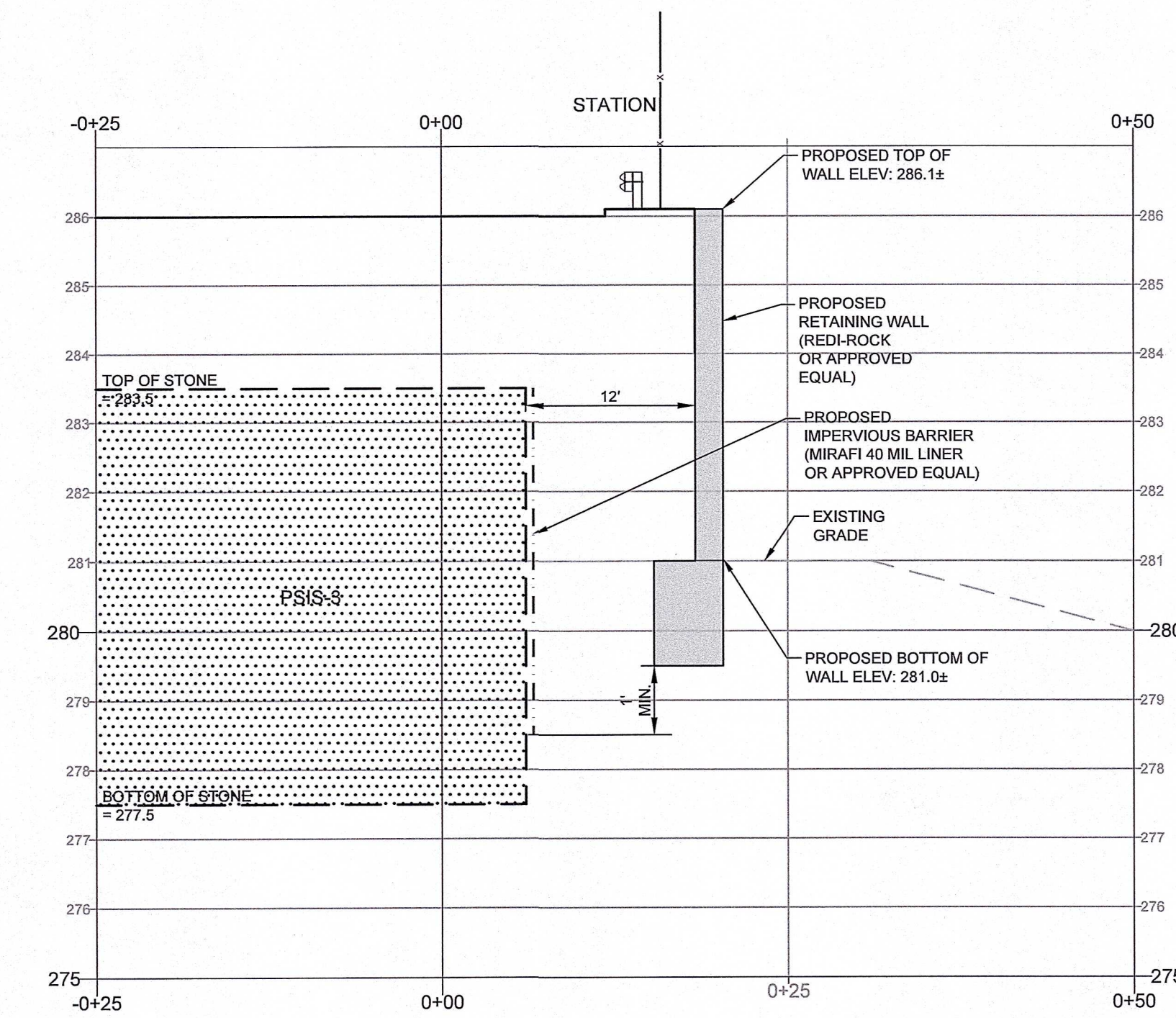
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C-13

DATE: 02/02/2024 PROJECT NO.: 22016

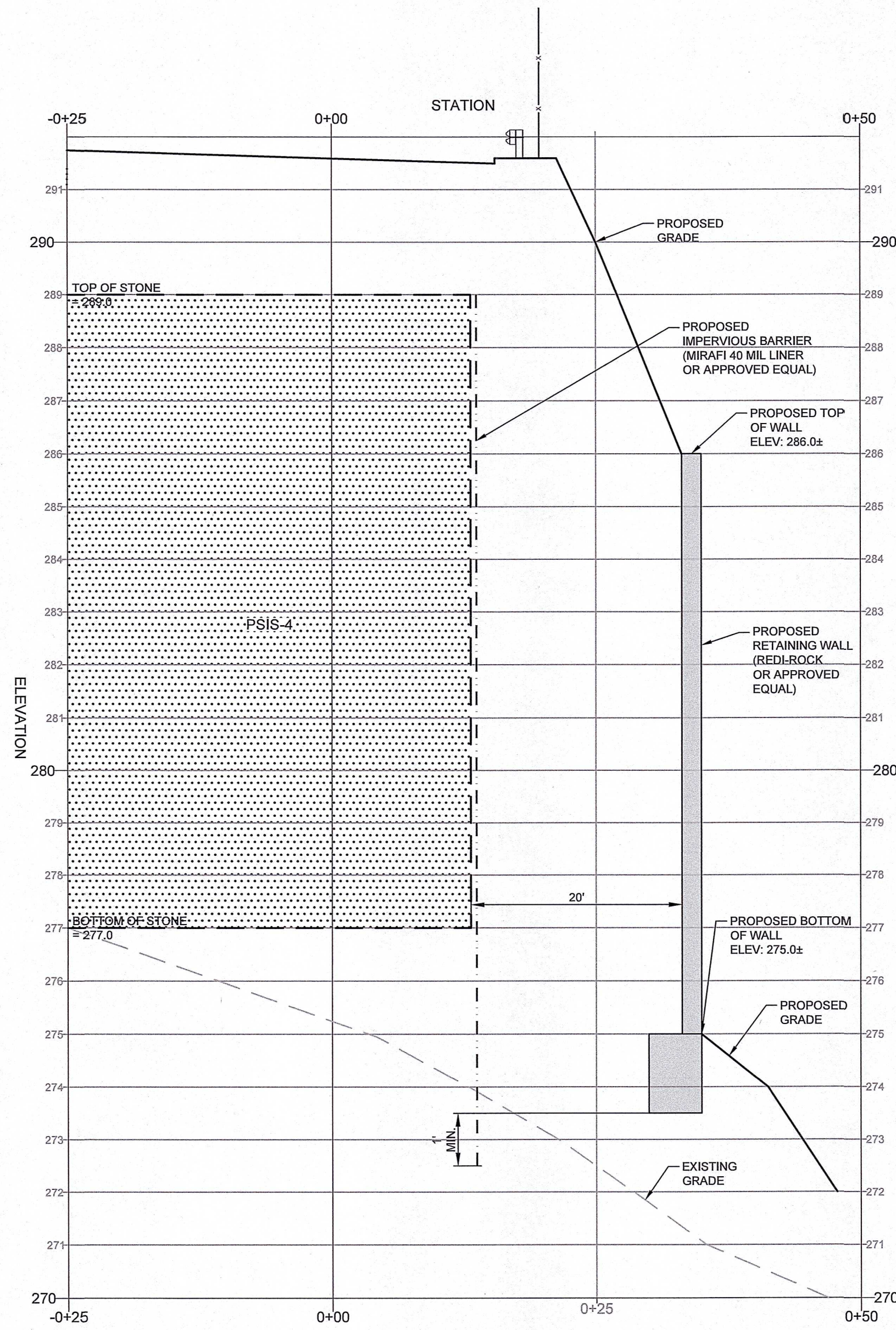
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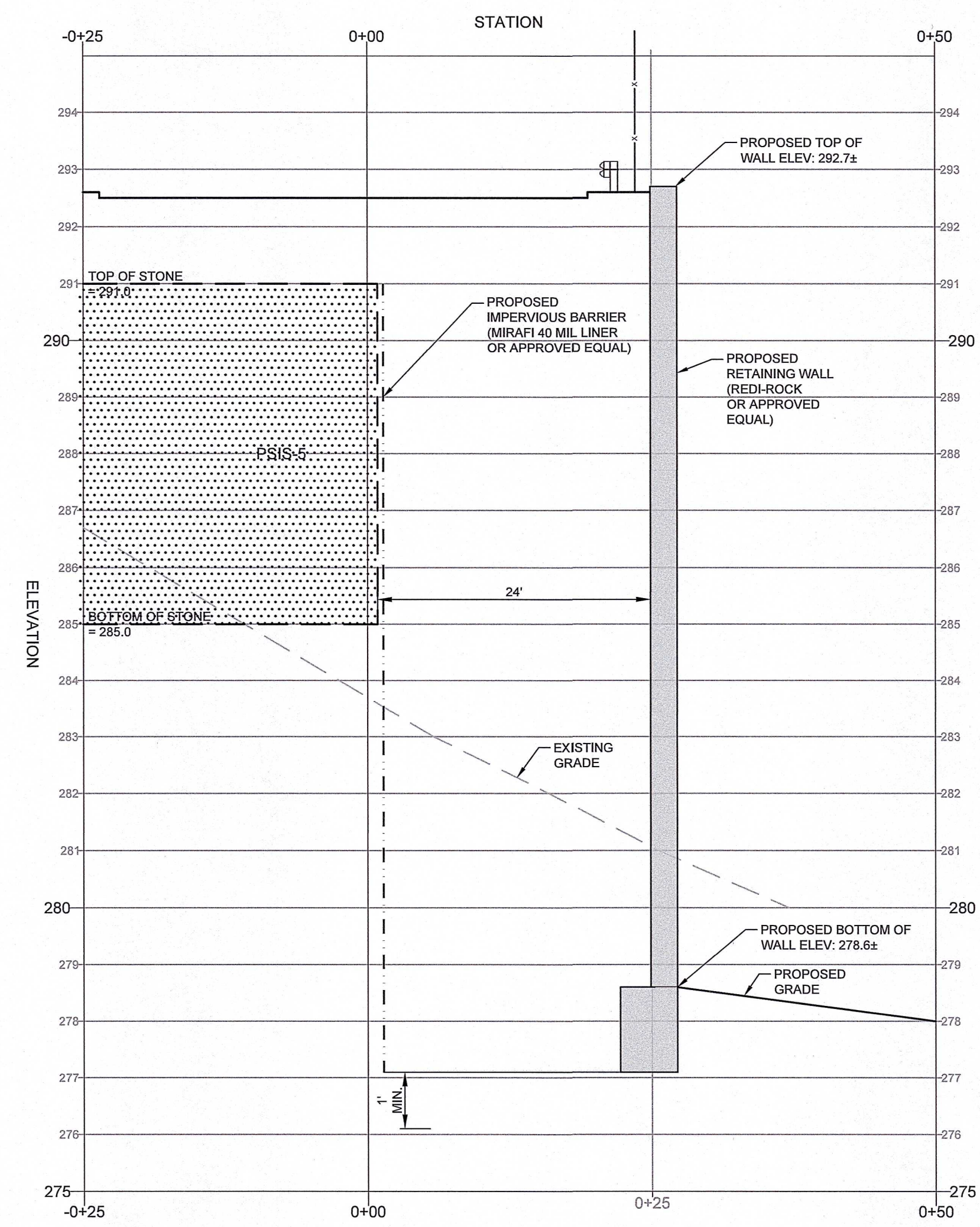
PROPOSED CROSS SECTION A-A
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 1'



PROPOSED CROSS SECTION B-B
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 1'

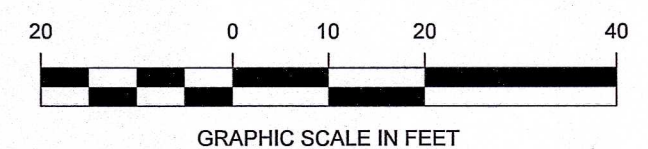


PROPOSED CROSS SECTION C-C
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 1'



PROPOSED CROSS SECTION D-D
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 1'

NOT FOR CONSTRUCTION



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2.	REVISED PER ZBA PEER REVIEW COMMENTS	02/12/2024			
1.	REVISED PER ZBA PEER REVIEW COMMENTS	02/02/2024			

DESIGNED BY:	MAC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	AS NOTED

PREPARED FOR:

FAIRFIELD GROVE STREET LLC
 30 BRAINTREE HILL OFFICE PARK
 SUITE 105
 BRAINTREE, MA 02184

SEAL:



Brian P. Dundon
 5-10-2024

PREPARED BY:

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 CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
 80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
 PHONE: 781.278.0180 RJOCONNELL.COM

PROJECT NAME:

GROVE STREET RESIDENCES
 FRANKLIN, MA

DRAWING NAME:

RETAINING WALL CROSS SECTION PLAN

DRAWING NUMBER:

C-14

DATE: 02/02/2024

PROJECT NO.: 22016

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Drawing name: G:\MA\Fairfield\Fairfield Residential\121 Grove Street\Main\Fairfield Residential\121 Grove Street\Main\C-14 Retaining Wall Cross Sections.dwg
 May 08, 2024 - 1:25:10pm