

# SITE PLAN

## 140 HAVERHILL STREET

ASSESSOR'S MAP 18 LOT 104A

ANDOVER, MA 01810

DATE: DECEMBER 18, 2024

REVISED TO: MARCH 31, 2025

PREPARED FOR:

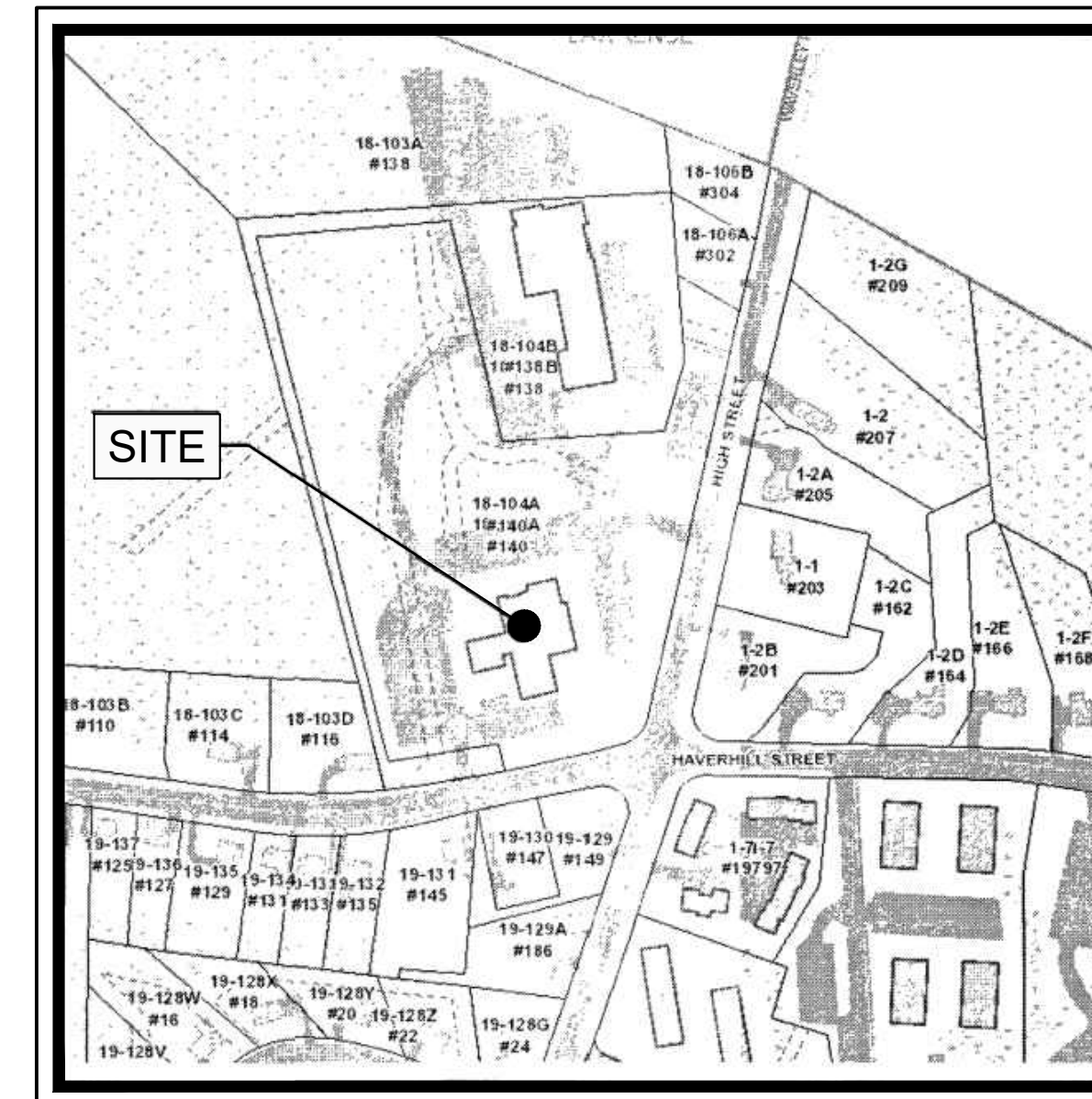
## MEDICO 140, LLC

355 MIDDLESEX AVE, SUITE 7

WILMINGTON, MA 01887

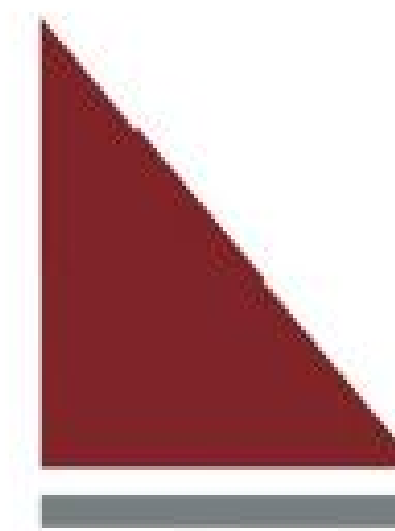
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LOCUS MAP  
N.T.S.

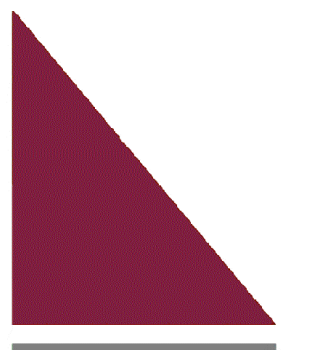
PREPARED BY:



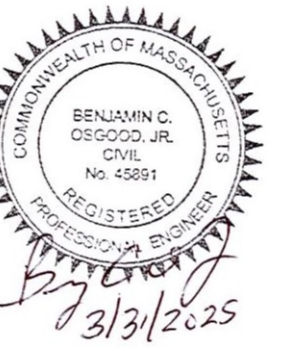
**RANGER ENGINEERING GROUP, INC.**  
130 Main Street, Suite 202  
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ANDOVER PLANNING BOARD:

DATE:



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SITE PLAN  
140 HAVERHILL STREET  
ANDOVER MA, 01810

COVER SHEET

MEDICO 140, LLC  
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WILMINGTON, MA 01887

DATE	NO.	REVISIONS
3/31/2025	2	FINAL PEER REVIEW COMMENTS
2/21/25	1	PEER REVIEW COMMENTS

PROJECT: 19-152  
DATE: DECEMBER 18, 2024  
DRAWING SCALE: 1"= 40'  
DRAWN BY: OMR  
APPROVED BY: BCO

**CS0001**  
SHEET 1 OF 19

Z:\PROJECTS\CHC\_CHANNEL\_BUILDING\182\_Documents\Andover\ADVANCE\_CORRESPONDENCE\2024\181\_HIRE\_PARK\140'S\_RENDERING\BUSH\_LCS001.dwg PLOTTED: 2/25/2025 12:28 PM BY: JAC FOR STYLE: ITTERR\_NCS.dwg PROJECT STATUS: —

Z:\PROJECTS\CHC\_CHANNEL\_BUILDING\142\_Documents\444\444\INVOICE\_CORRESPONDENCE\2024\19\_DRS\_PARK\_TURKS\_PARADE\BIBLISH2\_CS002.dwg PLOTTED: 2/25/2025 12:28 PM BY: JAE FORTSYLE TITEN, NSJ-06 PROJECT STATUS: —

EXISTING	LEGEND	PROPOSED
	BUILDING	
	PROPERTY LINE	
	RIGHT-OF-WAY LINE	
	ADJACENT PROPERTY LINE	
	SETBACK LINE	
	EASEMENT LINE	
	WOOD FENCE	
	CONCRETE	
	RIP RAP	
	BIT. CONC. PAVEMENT	
	SIGN	
	BOLLARD	
	SPOT ELEVATION	
	CONTOUR	
	WATER LINE DOMESTIC	
	SANITARY SEWER	
	STORM SEWER	
	OVERHEAD ELECTRIC	
	UNDERGROUND GAS	
	UTILITY POLE	
	SANITARY MANHOLE	
	SANITARY SEWER CLEANOUT	
	STORM DRAIN MANHOLE	
	STORM DRAIN INLET	
	STORM DRAIN FLARED END SECTION	
	STORM DRAIN CLEANOUT	
	FIRE HYDRANT	
	WATER VALVE	
	TREE LINE	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	CONSTRUCTION ENTRANCE	
	SILT SACK	
	EROSION CONTROL	
	HANDICAP MARKING	
	DETECTABLE WARNING STRIP	
	STONE BOUND	

**FLOOD ZONE INFORMATION**

BY GRAPHIC PLOTTING ONLY, SUBJECT PARCEL IS LOCATED IN ZONE X OF THE FLOOD INSURANCE RATE MAP, COMMUNITY-PANEL NUMBER 25009C0217F WHICH BEARS AN EFFECTIVE DATE OF JULY 3, 2012. NO FIELD ELEVATION SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE AND AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION.

**SURVEYOR NOTES**

- THE LOCUS IS SHOWN ON TOWN OF ANDOVER ASSESSOR'S MAP 18 LOT 104A, LOCATED IN ZONING DISTRICT OP - OFFICE PARK AND IS KNOWN AS 140 HAVERHILL STREET.
- DEED REFERENCE: BOOK 16214 PAGE 202, ESSEX NORTH REGISTRY OF DEEDS.
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE.
- THE BASIS OF BEARING FOR THIS PLAN IS THE MASSACHUSETTS STATE PLANE COORDINATES

**REFERENCE DEEDS:**

- BOOK 16214 PAGE 202 ESSEX NORTH REGISTRY OF DEEDS

**REFERENCE PLANS:**

- PL-8987
- PL-15440

**EASEMENTS AND ENCUMBRANCES:**

EXISTING 25' SEWER EASEMENT  
BOOK 16214 PAGE 202  
PLAN BOOK PL-8987

EXISTING 25' RIGHT OF WAY  
BOOK 16214 PAGE 202  
PLAN BOOK PL-8987

EXISTING DRAINAGE EASEMENT  
BOOK 16214 PAGE 202  
PLAN BOOK PL-8987

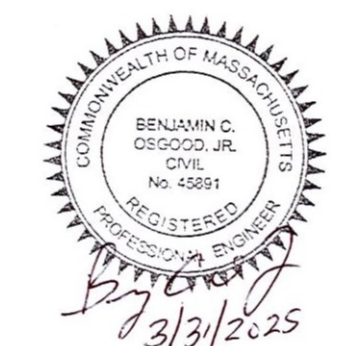
**CONSTRUCTION NOTES:**

- CONSTRUCTION**
  - TOPSOIL:**  
EXISTING TOPSOIL AND SUBSOIL SHALL BE REMOVED FROM ROADWAY AND BUILDING AREAS AND STOCKPILED.
  - TREES AND STUMPS:**  
TREES AND STUMPS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN AN APPROVED MANNER. STUMPS SHALL NOT BE BURIED ON SITE.
- MATERIALS**
  - BITUMINOUS CONCRETE PAVEMENT:**  
**PARKING AREAS:**  
SURFACE COURSE: 1-1/2 INCHES CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1 WEARING COURSE  
BINDER COURSE: 2-1/2 INCHES CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1 BINDER COURSE  
GRAVEL BASE COURSE: 4 INCHES COMPACTED DENSE GRADED CRUSHED STONE FOR SUB-BASE (M 2.01.7)  
8 INCHES COMPACTED SUB-BASE, M1.030 TYPE C
  - LANDSCAPE AREAS:**  
DISTURBED AREAS NOT COVERED BY STRUCTURES OR PAVEMENT AND NOT OTHERWISE SPECIFIED ON THE LANDSCAPE PLAN SHALL RECEIVE 6 INCHES OF TOPSOIL. THESE AREAS ARE TO BE SEEDED AND WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. LANDSCAPE AREAS ADJACENT TO THE BUILDING SHALL BE FINISHED WITH 3" OF 1-1/2" RIVER ROCK.
  - TRAFFIC CONTROLS:**  
ALL SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.)
  - ADA CONFORMANCE:**  
ALL HANDICAPPED ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB), WHICHEVER IS MORE RESTRICTIVE.
- UTILITIES**
  - EXISTING UTILITIES:**  
THE LOCATION AND ELEVATIONS OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON THE SURVEY NOTED ABOVE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND PRIOR TO ORDERING STRUCTURES.
  - PRIVATE UTILITIES:**  
THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS FOR CONSTRUCTION OF PROPOSED PRIVATE UTILITY SERVICES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS PROVIDED BY, AND APPROVED BY, THE RESPECTIVE UTILITY COMPANY (GAS, TELEPHONE OR ELECTRIC). FINAL DESIGN AND LOCATIONS AT THE BUILDING WILL BE PROVIDED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE UTILITY CONNECTIONS WITH THE RESPECTIVE UTILITY COMPANIES PRIOR TO ANY UTILITY CONSTRUCTION OR DEMOLITION.
  - STORM DRAINAGE:**  
STORM DRAIN PIPING SHALL BE MIN 12" HIGH DENSITY POLYETHYLENE PIPE (HDPE) WITH CORRUGATED EXTERIOR, SMOOTH LINED (n=0.013) WITH SOIL TIGHT JOINTS OR REINFORCED CONCRETE PIPE.  
  
THE PROJECT'S STORMWATER MANAGEMENT SYSTEM SHALL COMPLY WITH THE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S (DEP) STORMWATER MANAGEMENT POLICY AND REQUIREMENTS OF TOWN OF ANDOVER DEPARTMENT OF PUBLIC WORKS STREET OPENING/UTILITY CONNECTION RULES AND REGULATIONS.  
  
THE STORM WATER BMP'S WILL BE INSPECTED BY DESIGN ENGINEER AND CERTIFIED THAT HAS BEEN BUILT IN COMPLIANCE WITH PLANS. DOCUMENTATION INCLUDING PHOTOS, FIELD BOOKS ENTRIES, AND ENGINEER'S DAILY REPORTS SHALL BE PROVIDED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY  
  
STORMWATER SYSTEMS SHALL BE THE PROPERTY OF THE PROPERTY OWNER WHO IS RESPONSIBLE FOR COMPLETING THE REQUIRED ANNUAL INSPECTIONS, REPAIRS, AND MAINTENANCE OF THE SYSTEM.
  - PROPOSED STRUCTURES:**  
RIM ELEVATIONS OF PROPOSED DRAINAGE MANHOLES AND ASSOCIATED STRUCTURES ARE APPROXIMATE. FINAL ELEVATIONS, ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLAN. ADJUST ALL OTHER RIM ELEVATIONS OF MANHOLES, WATER GATES, GAS GATES AND OTHER UTILITIES TO FINISH GRADE WITHIN LIMITS OF WORK.
  - WATER**
    - ANY WATER METER GREATER THAN 5/8" WILL NEED TO BE PROPERLY RIGHT-SIZED AND THE CALCULATIONS SHOULD BE SUBMITTED BASED ON AWWA M22 STANDARDS TO SHOW THAT THE EXISTING OR PROPOSED WATER METER IS SIZED PROPERLY.
    - THE INSTALLATION OF THE WATER METER SHOULD BE INSTALLED IN A LOCATION THAT IS UN-OBSTRICTED AND EASILY ACCESSIBLE.
    - PRIOR TO THE ISSUANCE OF ANY UTILITY PERMIT, THE METER CONFIGURATION DIAGRAM MUST BE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS.
    - THE DPW OFFICE MUST APPROVE ANY BACKFLOW PREVENTION DEVICE FOR IRRIGATION SYSTEMS, FIRE SUPPRESSION SYSTEMS, CHEMICAL INJECTION SYSTEMS, OR ANY OTHER CASE WHICH BACKFLOW PREVENTION IS REQUIRED.
    - ALL NEW WATER LINES WILL NEED TO BE PRESSURE TESTED TO THE TOWN OF ANDOVER STANDARDS.
    - PROPOSED WATER MAIN MUST BE CONSTRUCTED TO A MINIMUM DEPTH OF 5' OF COVER.
  - SEWER**
    - SEWER LINES SHALL BE CONSTRUCTED OF SDR 35 PVC OR CEMENT LINED DUCTILE IRON PIPE AS INDICATED ON THE PLANS.

**GENERAL NOTES**

- AS-BUILT PLANS SHOULD BE SUBMITTED ON MYLAR UPON COMPLETION OF THE PROJECT, PRIOR TO THE CERTIFICATE OF COMPLIANCE.
- THE LONG TERM AND PERPETUAL CARE OF THE DUMPSTER, INCLUDING THE EMPTYING, AND THE ENCLOSURE WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.
- ANY WORK THAT TAKES PLACE IN THE TOWN RIGHT OF WAY WILL REQUIRE BOTH A STREET OPENING AND TRENCH PERMIT.
- APPLICANT MUST SCHEDULE PRE-CONSTRUCTION MEETING WITH THE DPW/ ENGINEERING DIVISION PRIOR TO THE START OF WORK.

**Ranger Engineering Group, Inc.**  
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**SITE PLAN**  
140 HAVERHILL STREET  
ANDOVER MA, 01810

**NOTES AND LEGEND**

MEDICO 140, LLC  
355 MIDDLESEX AVE, SUITE 7  
WILMINGTON, MA 01887

DATE	NO.	REVISIONS	BY
3/31/2025	2	FINAL PEER REVIEW COMMENTS	BCO
2/21/25	1	PEER REVIEW COMMENTS	BCO

PROJECT: 19-152  
DATE: DECEMBER 18, 2024  
DRAWING SCALE: 1"= 40'  
DRAWN BY: OMR  
APPROVED BY: BCO

**CS0002**

SHEET 2 OF 19



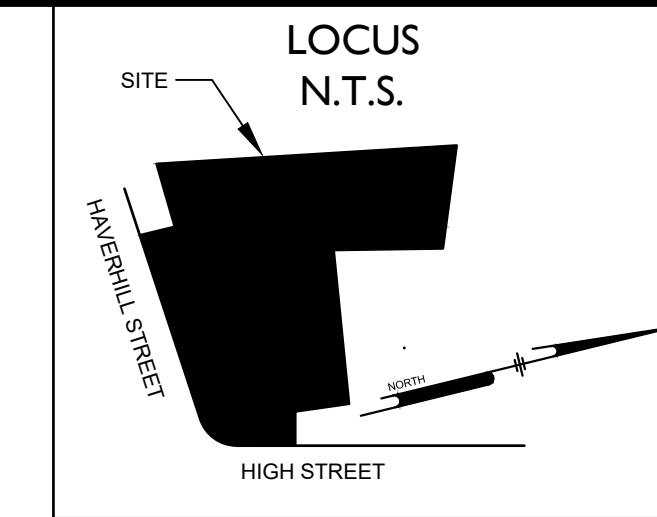
APPROVAL UNDER THE SUBDIVISION  
CONTROL LAW NOT REQUIRED

TOWN OF ANDOVER PLANNING BOARD

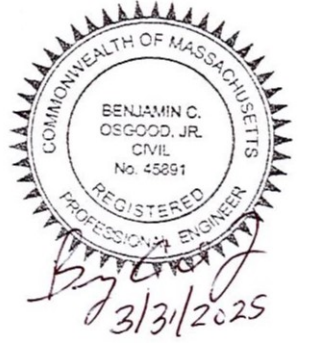
NAME \_\_\_\_\_ DATE \_\_\_\_\_

THE PLANNING BOARD'S ENDORSEMENT OF THE PLANS AS NOT REQUIRING APPROVAL UNDER THE SUBDIVISION CONTROL LAW IS NOT A DETERMINATION AS TO CONFORMANCE WITH THE TOWN OF ANDOVER ZONING BYLAW REGULATIONS

ZONING TABLE - OFFICE PARK DISTRICT			
DIMENSION	REQUIRED	LOT 1	LOT 2
LOT AREA	43,560 S.F.	236,953 S.F. ±	70,717 S.F. ±
FRONTAGE	180'	180.13'	353.98'
FRONT SETBACK	30'	198'	93'
SIDE SETBACK	50'	10'	10'
REAR SETBACK	50'	187'	50'
MAX HEIGHT	40'	30'	30'
MAX STORIES	3	2	2
BUILDING COVERAGE	MAX 33.33%	4.05%	12.5%



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**SITE PLAN**  
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ANDOVER MA, 01810

**FORM A PLAN**  
MEDICO 140, LLC  
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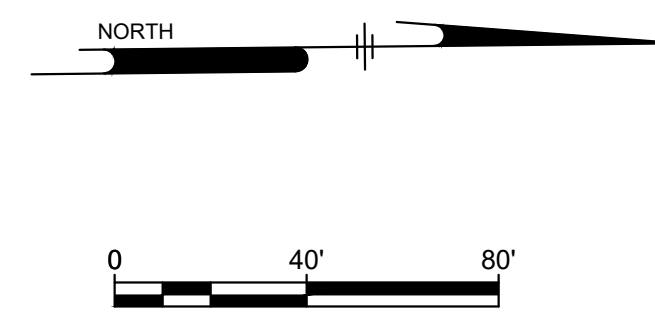
- NOTES:**
- THE LOCUS IS SHOWN ON TOWN OF ANDOVER ASSESSOR'S MAP 18 LOT 104A, LOCATED IN ZONING DISTRICT OF - OFFICE PARK, AND IS KNOWN AS 140 HAVERHILL STREET.
  - THE BASIS OF BEARING FOR THIS PLAN IS THE MASSACHUSETTS STATE PLANE COORDINATES.
  - NO PORTION OF BUILDING IS LOCATED IN A FLOOD HAZARD ZONE AS MAPPED BY FEMA. (ESSEX COUNTY, MASSACHUSETTS, FIRM MAP NO. 25009C0217F, EFFECTIVE DATE JULY 3, 2012).
  - THE PURPOSE OF THIS PLAN IS TO DIVIDE THE EXISTING PROPERTY INTO TWO PARCELS.
  - SEE PLANS ON FILE AT THE TOWN OF ANDOVER PLANNING BOARD.
  - THE PROPOSED UTILITY EASEMENTS OVER LOT 1 ARE FOR THE BENEFIT OF LOT 2 AND THE UTILITY EASEMENTS OVER LOT 2 ARE FOR THE BENEFIT OF LOT 1.
  - THE WETLANDS SHOWN HAVE BEEN DELINEATED BY NORSE ENVIRONMENTAL IN NOVEMBER 2019.
  - EXISTING DRIVEWAY, STREAM, AND SEWER EASEMENTS TAKEN FROM PLAN #15440 ESSEX COUNTY NORTH REGISTRY OF DEEDS

- REFERENCE DEEDS:**
- BOOK 16214 PAGE 202 ESSEX NORTH REGISTRY OF DEEDS (OWNER OF RECORD FOR THE SUBJECT PARCEL)

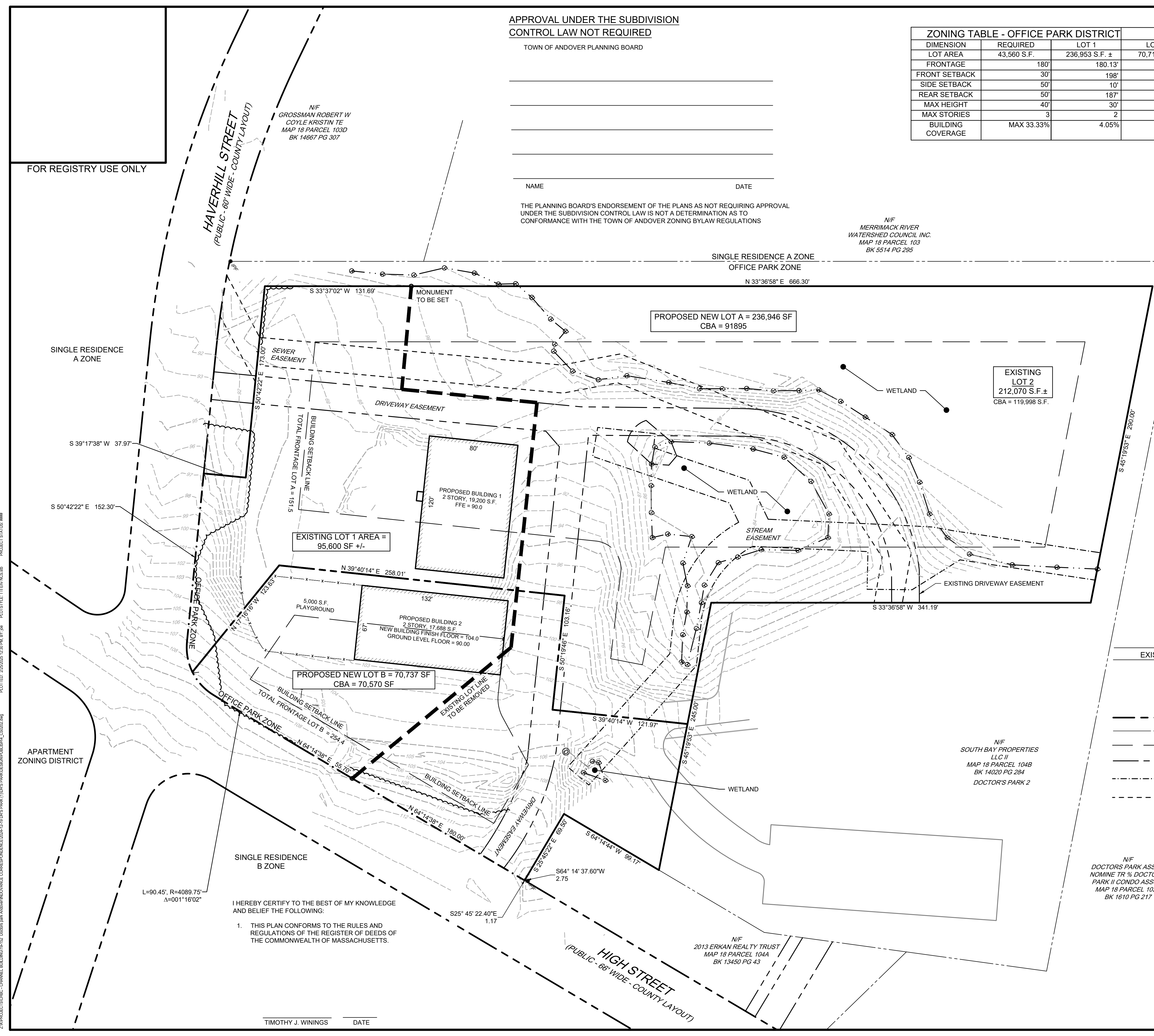
- REFERENCE PLANS:**
- PL-8987
  - PL-15440
  - PL-18377

**LEGEND**

EXISTING	PROPOSED
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FOR REGISTRY USE ONLY



I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FOLLOWING:

- THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTER OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

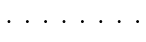


TIMOTHY J. WININGS \_\_\_\_\_ DATE \_\_\_\_\_

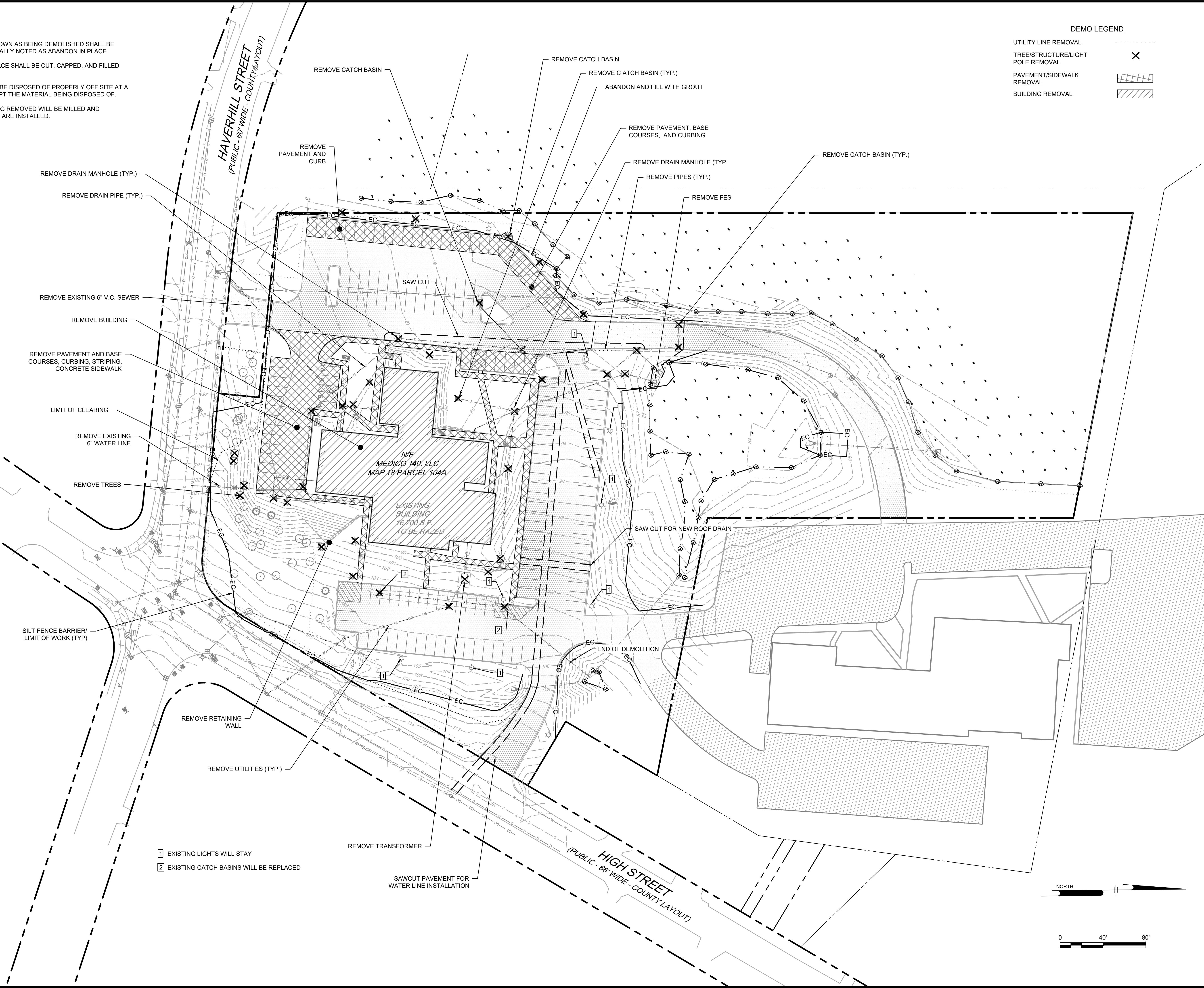
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 PLOTTED: 2/25/2025 12:30 PM BY: JAW  
 PROJECT STATUS: N/A  
 PROJECT TITLE: N/A  
 PROJECT NO.: N/A

**NOTES:**

1. DRAIN AND SEWER LINES SHOWN AS BEING DEMOLISHED SHALL BE REMOVED, UNLESS SPECIFICALLY NOTED AS ABANDON IN PLACE.
2. UTILITIES ABANDONED IN PLACE SHALL BE CUT, CAPPED, AND FILLED WITH GROUT.
3. ANY ITEMS REMOVED SHALL BE DISPOSED OF PROPERLY OFF SITE AT A FACILITY LICENSED TO ACCEPT THE MATERIAL BEING DISPOSED OF.
4. PAVEMENT THAT IS NOT BEING REMOVED WILL BE MILLED AND OVERLAYED AFTER UTILITIES ARE INSTALLED.

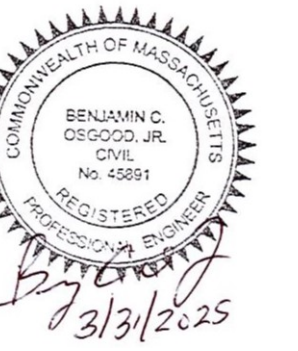
**DEMO LEGEND**

- UTILITY LINE REMOVAL 
- TREE/STRUCTURE/LIGHT POLE REMOVAL 
- PAVEMENT/SIDEWALK REMOVAL 
- BUILDING REMOVAL 



- 1 EXISTING LIGHTS WILL STAY
- 2 EXISTING CATCH BASINS WILL BE REPLACED

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**SITE PLAN**  
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 ANDOVER MA, 01810

**DEMOLITION PLAN**  
 MEDICO 140, LLC  
 355 MIDDLESEX AVE SUITE 7  
 WILMINGTON, MA 01887

NO.	DATE	REVISIONS	BY
2	3/31/2025	FINAL PEER REVIEW COMMENTS	BCO
1	2/21/25	PEER REVIEW COMMENTS	BCO

PROJECT: 19-152  
 DATE: DECEMBER 18, 2024  
 DRAWING SCALE: 1"= 40'  
 DRAWN BY: OMR  
 APPROVED BY: BCO

**CS0501**  
 SHEET 5 OF 19

Z:\PROJECTS\CH- CHANNEL BUILDING\142 -Demos\140 -Medico 140\DWG\140-18-DEMOLITION\140-18-DEMOLITION.DWG  
 PLOTTED: 2/25/2025 12:38 PM BY: JAC BOSTYLE (TTEB.NKS)

NO DISTURB ZONE AREAS		
AREA	EXISTING	PROPOSED
PARKING 0-25' NDZ	1030 S.F.	0 S.F.
DRIVE AISLE 0-25' NDZ	146 S.F.	76 S.F.
PARKING 25-50' NDZ	4450 S.F.	2520 S.F.
DRIVE AISLE 25-50' NDZ	3519 S.F.	1746 S.F.

**REQUIRED OFF-STREET PARKING SPACES:**

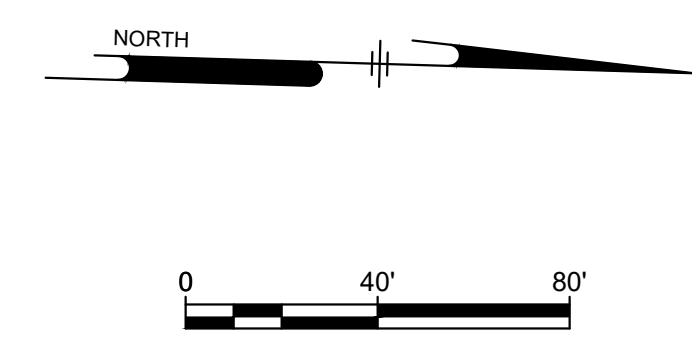
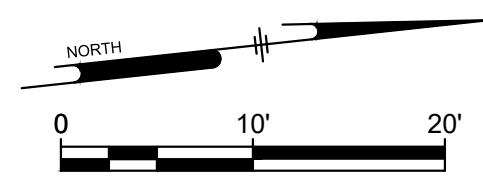
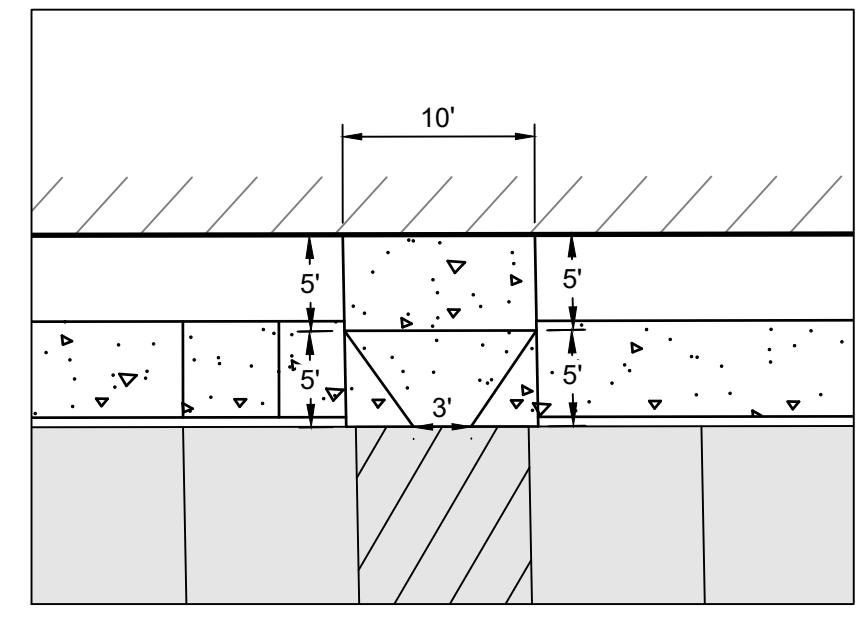
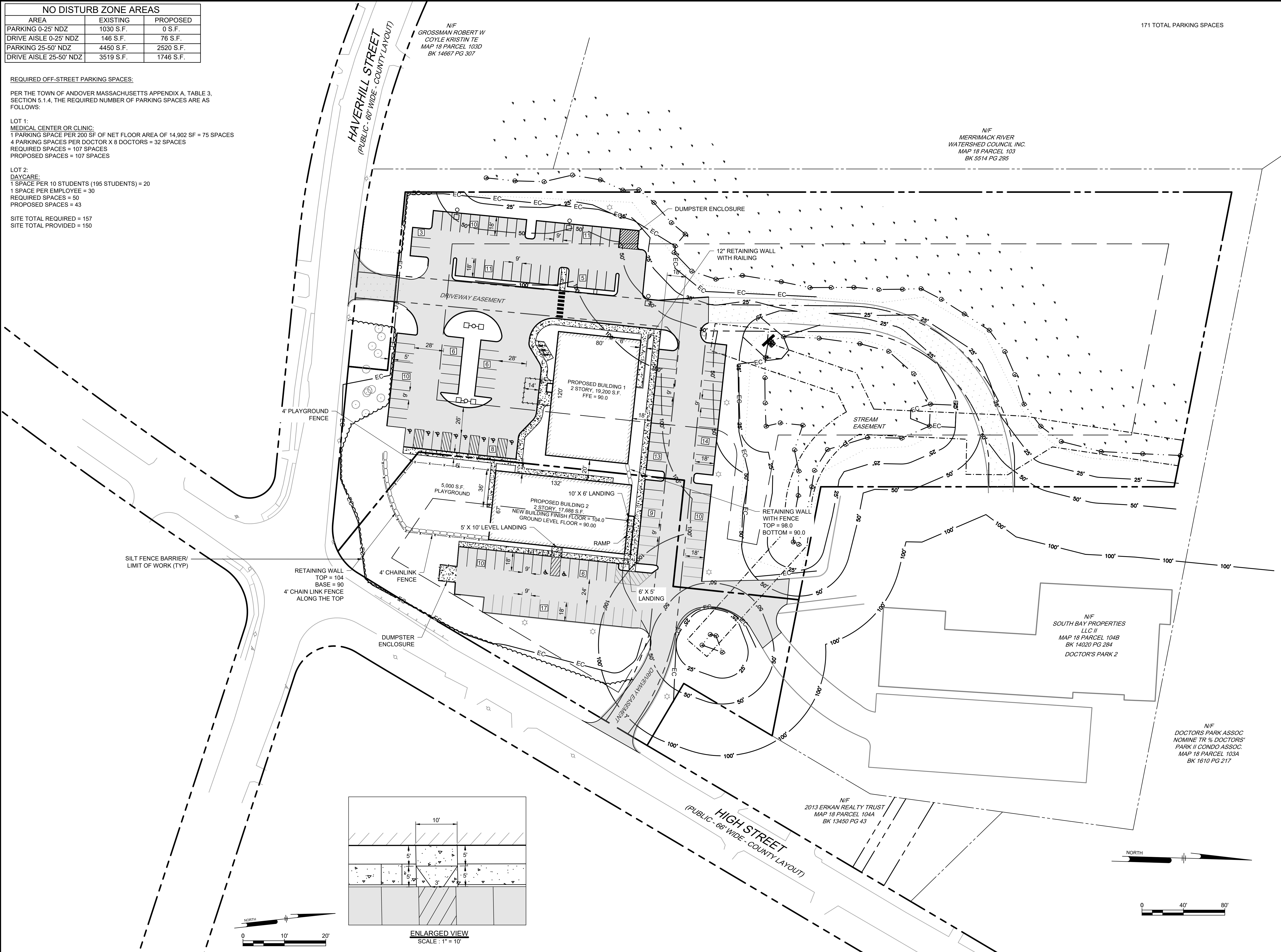
PER THE TOWN OF ANDOVER MASSACHUSETTS APPENDIX A, TABLE 3, SECTION 5.1.4, THE REQUIRED NUMBER OF PARKING SPACES ARE AS FOLLOWS:

LOT 1:  
 MEDICAL CENTER OR CLINIC:  
 1 PARKING SPACE PER 200 SF OF NET FLOOR AREA OF 14,902 SF = 75 SPACES  
 4 PARKING SPACES PER DOCTOR X 8 DOCTORS = 32 SPACES  
 REQUIRED SPACES = 107 SPACES  
 PROPOSED SPACES = 107 SPACES

LOT 2:  
 DAYCARE:  
 1 SPACE PER 10 STUDENTS (195 STUDENTS) = 20  
 1 SPACE PER EMPLOYEE = 30  
 REQUIRED SPACES = 50  
 PROPOSED SPACES = 43

SITE TOTAL REQUIRED = 157  
 SITE TOTAL PROVIDED = 150

171 TOTAL PARKING SPACES



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**LAYOUT AND MATERIALS PLAN**

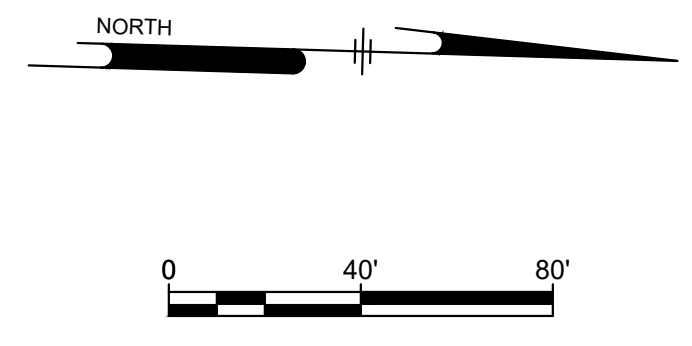
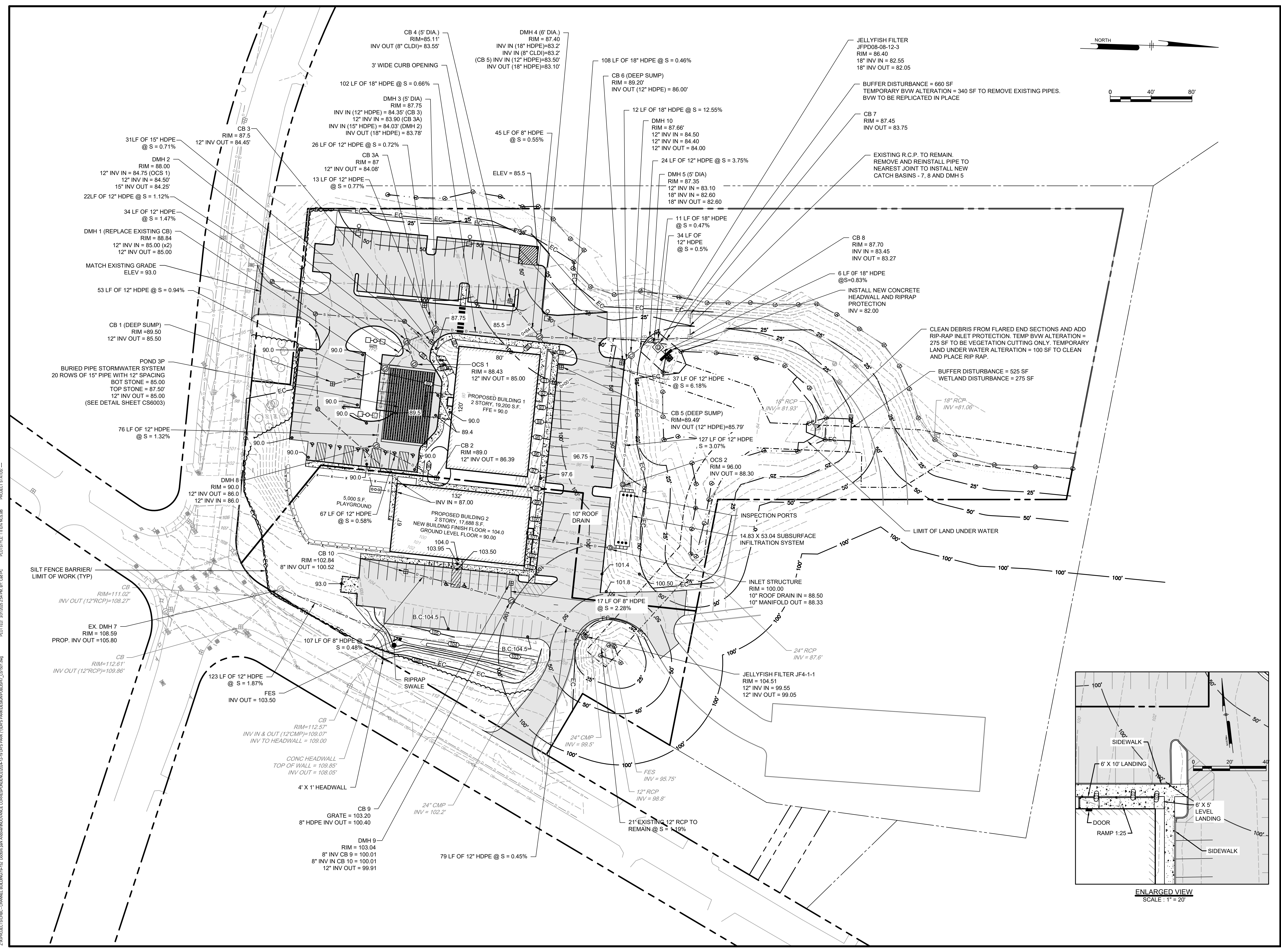
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3/31/2025	2	FINAL PEER REVIEW COMMENTS	BCO
2/21/25	1	PEER REVIEW COMMENTS	BOO

PROJECT: 19-152  
 DATE: DECEMBER 18, 2024  
 DRAWING SCALE: 1" = 40'  
 DRAWN BY: OMR  
 APPROVED BY: BCO

**CS1001**  
 SHEET 6 OF 19

Z:\PROJECTS\CHC - CHANNEL BUILDING\142 - Doctors Park Andover\INVOICE CORRESPONDENCE\2024\19 - DR'S PARK (1)DR'S PARK\DESIGN\BUSH\_CS1001.dwg PLOTTED: 2/25/2025 12:30 PM BY: JAE EDITOR: TITEN, KES-AB PROJECT STATUS: -



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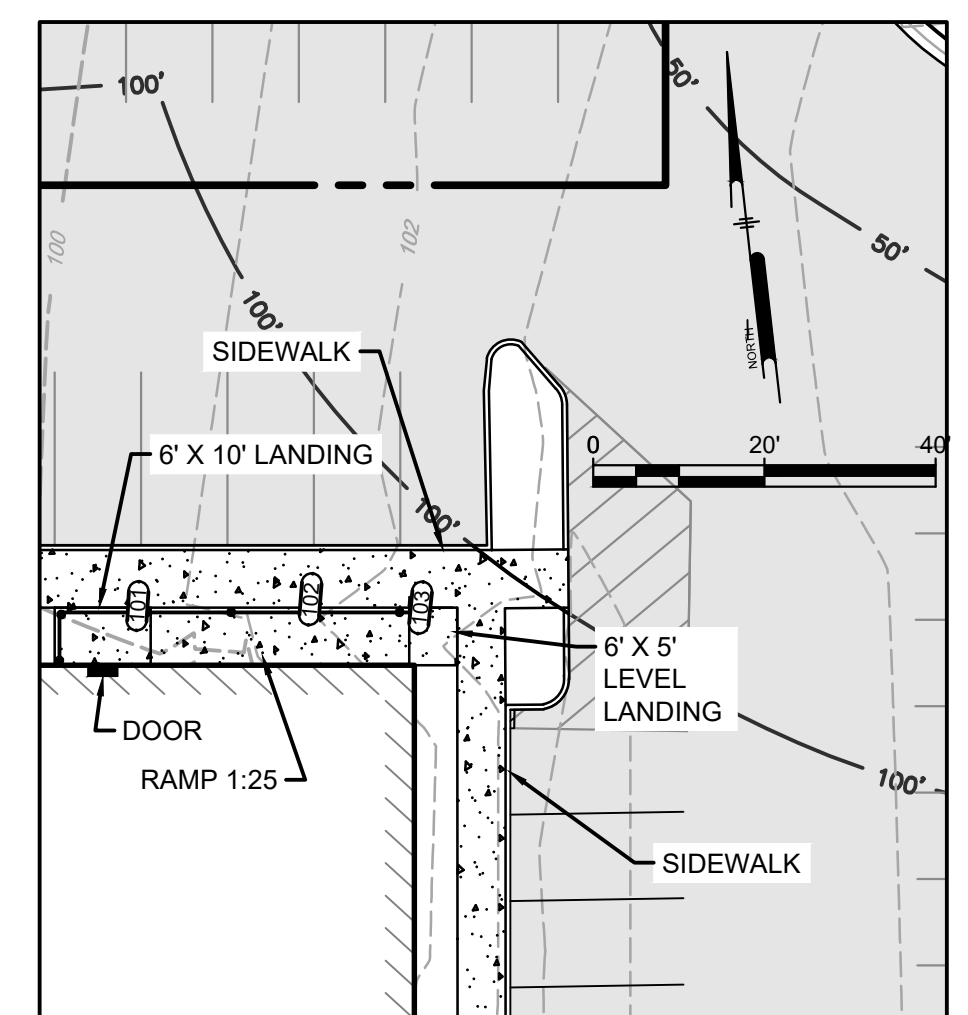


**SITE PLAN**  
140 HAVERHILL STREET  
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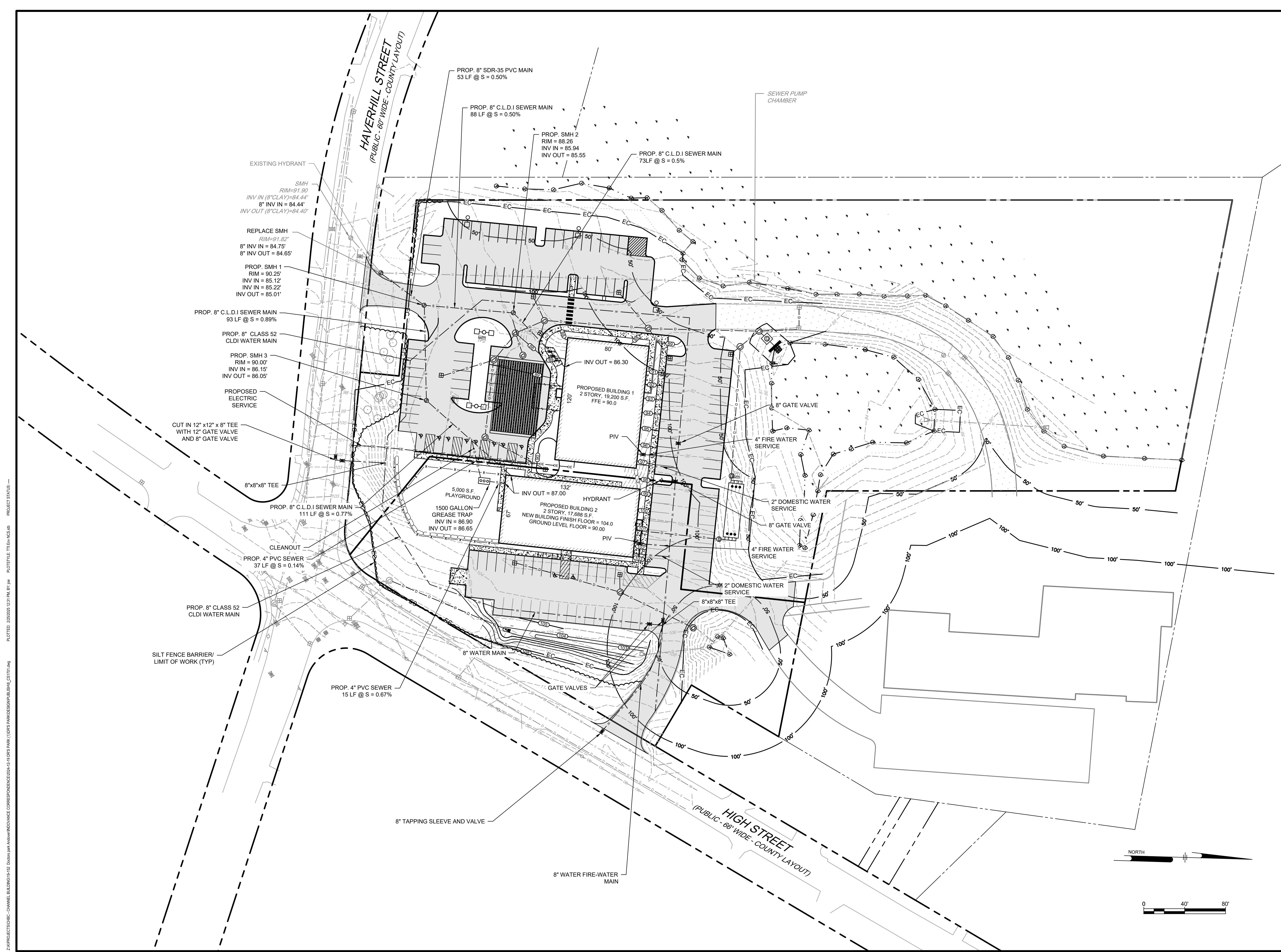
**GRADING AND DRAINAGE PLAN**

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1	2/21/25	PEER REVIEW COMMENTS	BCO



Z:\PROJECTS\CHC - CHANNEL BUILDING\140 - DREW PARK (100'S) \DWG\GRADING\DRN\SHD\_CS1501.dwg  
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 PLOT STYLE: T11enV10.ctb



Z:\PROJECTS\CHC - CHANNEL BUILDING\1812 - DOWNSIDE AND WINDMILL CORRESPONDENCE\1812-18 DREW PARK (100'S PARK) AND WINDMILL\1812-18 SITE PLAN.dwg  
 PLOTTED: 2/25/2025 12:31 PM BY: JAC  
 E:\DSTYLE\TITEN\K25.dwg  
 PROJECT STATUS:

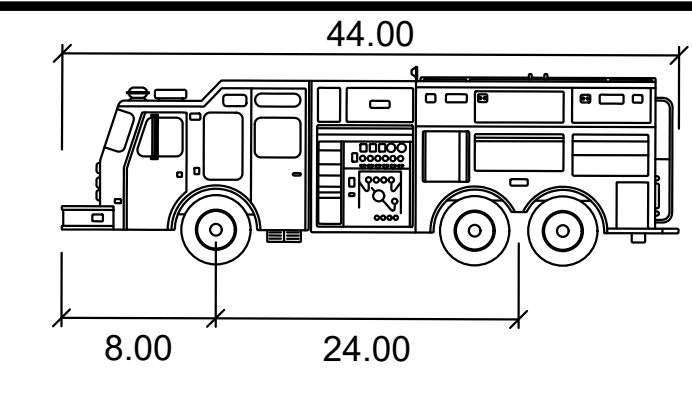


**SITE PLAN**  
 140 HAVERHILL STREET  
 ANDOVER MA, 01810  
**UTILITY PLAN**  
 MEDICO 140, LLC  
 355 MIDDLESEX AVE SUITE 7  
 WILMINGTON, MA 01887

DATE	NO.	REVISIONS	BY
3/31/2025	2	FINAL PEER REVIEW COMMENTS	BCO
2/21/25	1	PEER REVIEW COMMENTS	BOO

PROJECT: 19-152  
 DATE: DECEMBER 18, 2024  
 DRAWING SCALE: 1" = 40'  
 DRAWN BY: OMR  
 APPROVED BY: BCO

Town of Andover, Massachusetts  
 Fire Truck Turning Radius  
 Scale 1 inch = 40 feet

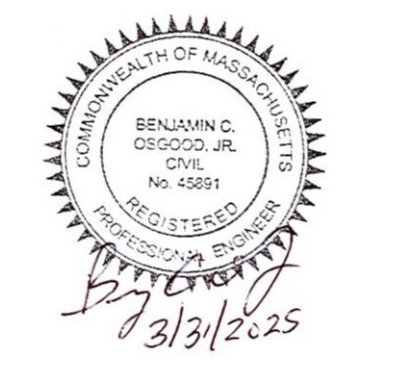
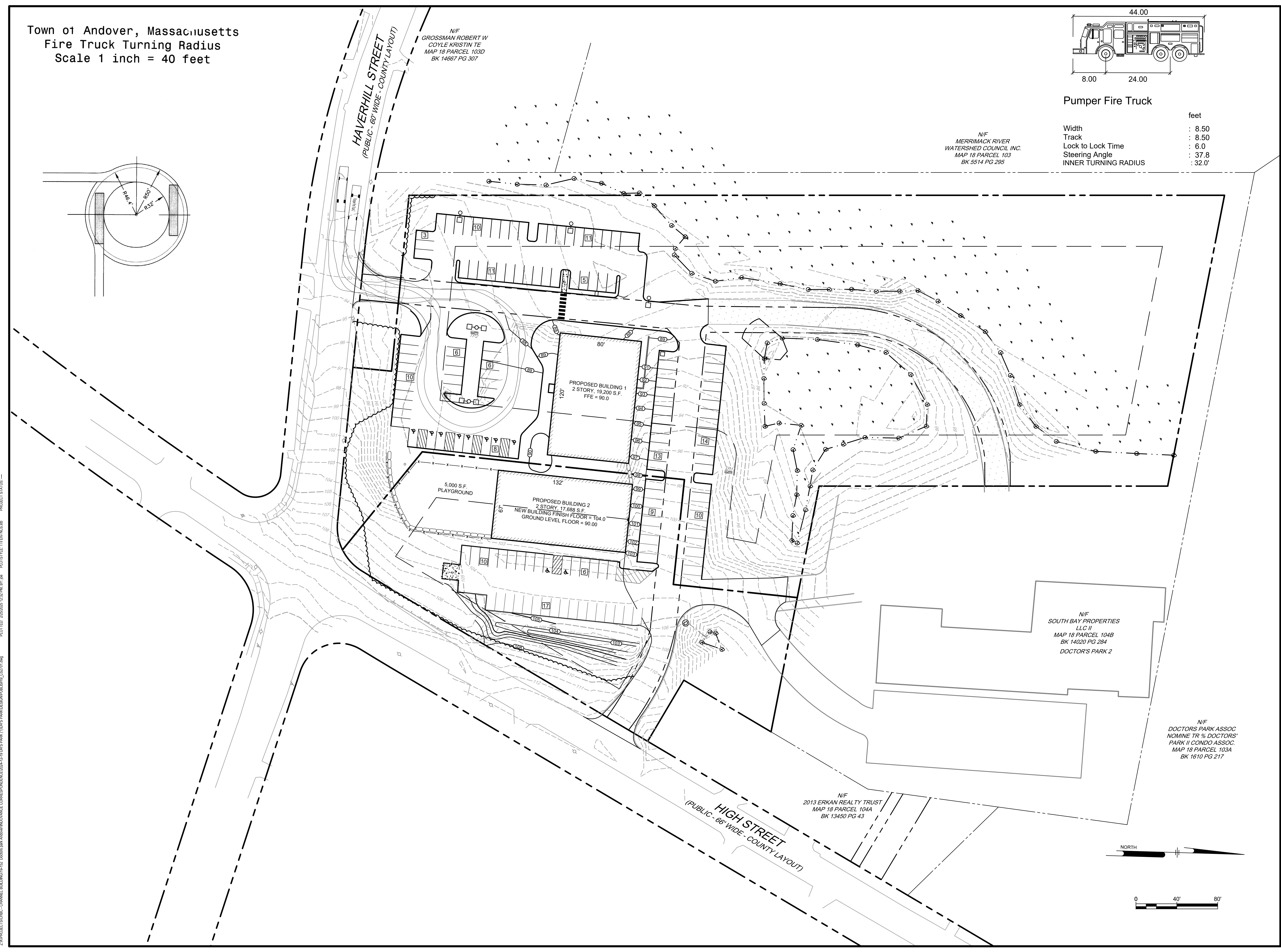
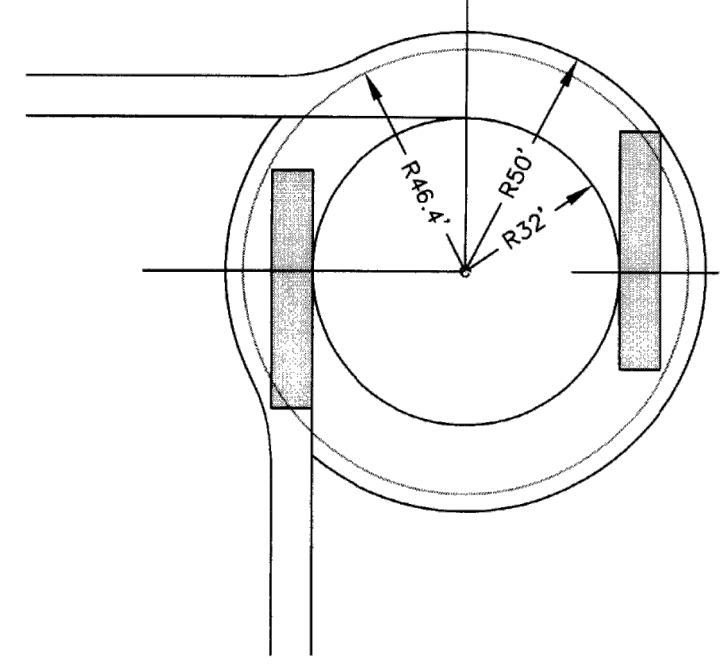


**Pumper Fire Truck**

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8
INNER TURNING RADIUS	: 32.0'

N/F  
 MERRIMACK RIVER  
 WATERSHED COUNCIL INC.  
 MAP 18 PARCEL 103  
 BK 5514 PG 295

N/F  
 GROSSMAN ROBERT W  
 COYLE KRISTIN TE  
 MAP 18 PARCEL 103D  
 BK 14667 PG 307



**Ranger Engineering Group, Inc.**  
 130 Main Street, Suite 202  
 Salem NH, 03079  
 Tel: 978-208-1762  
 rangereng.com

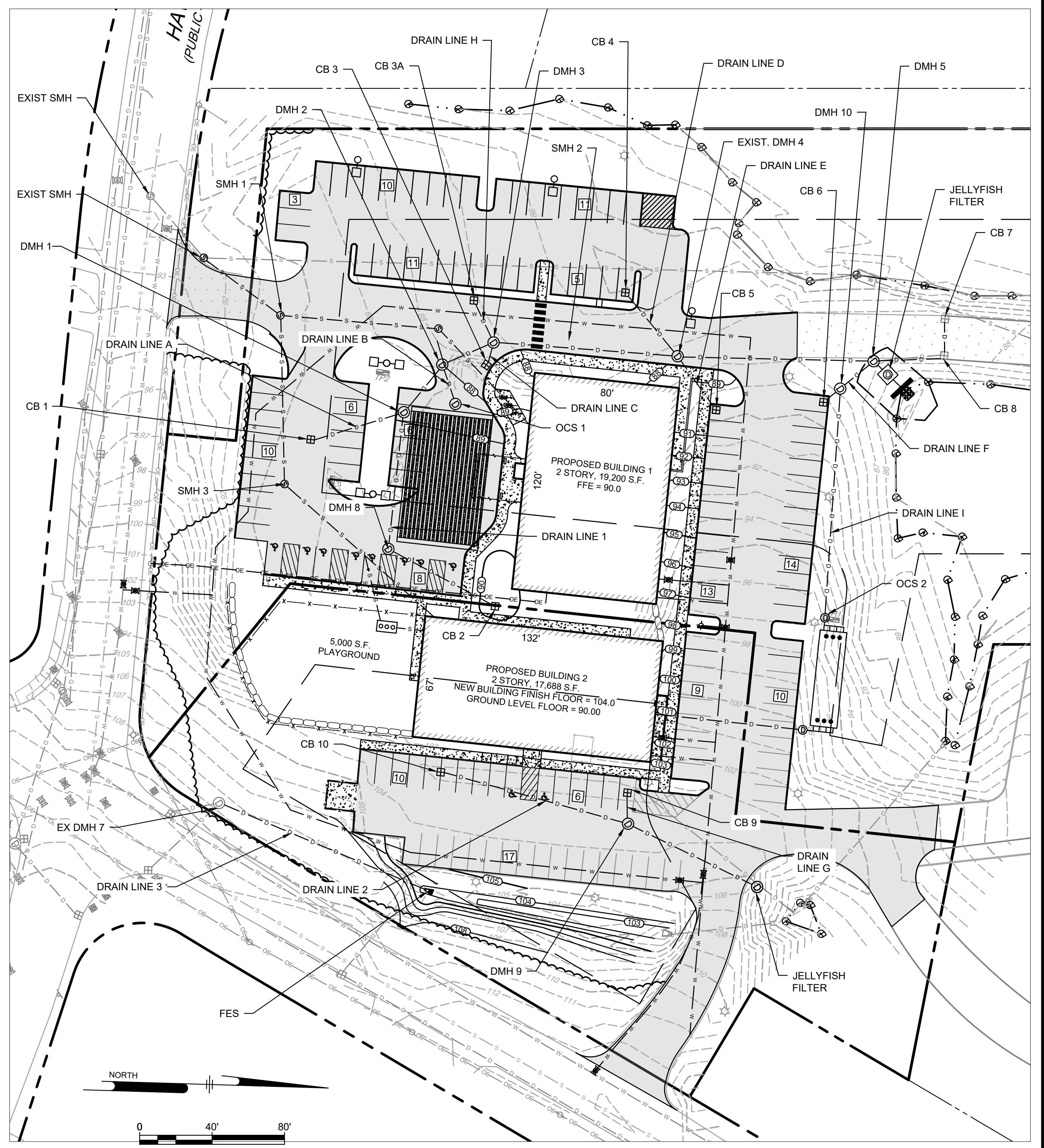
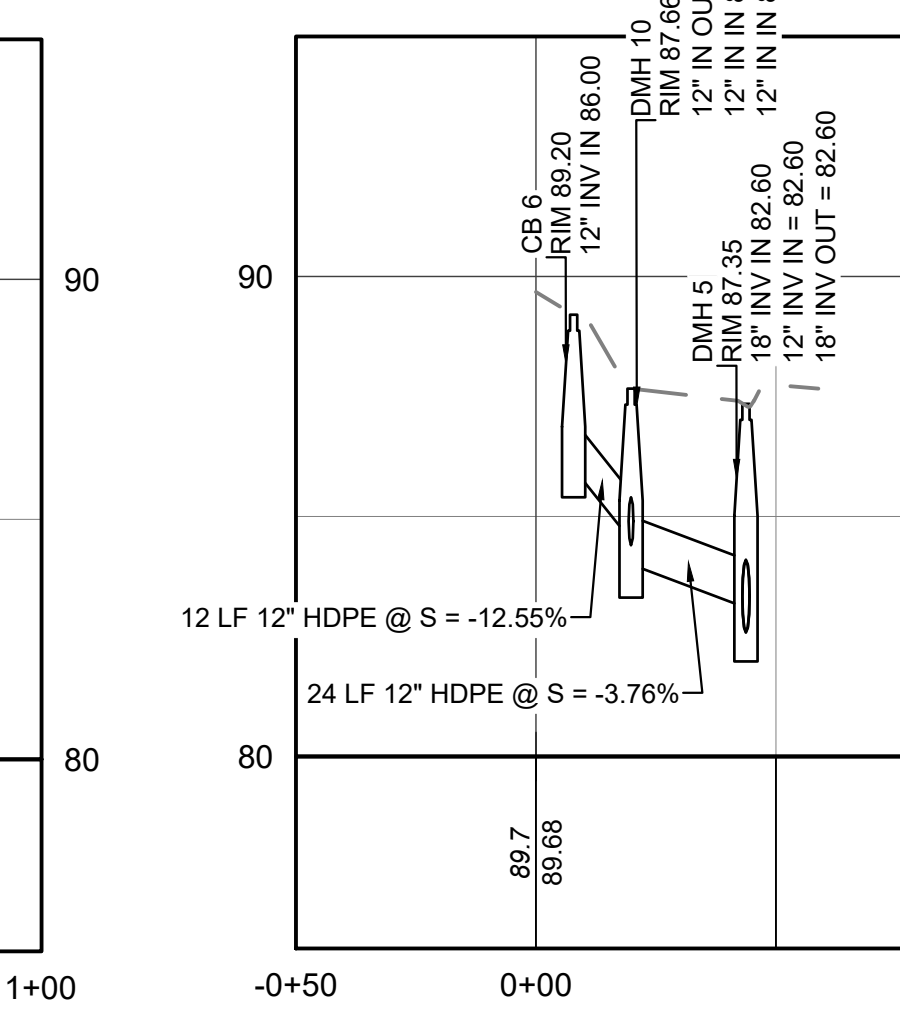
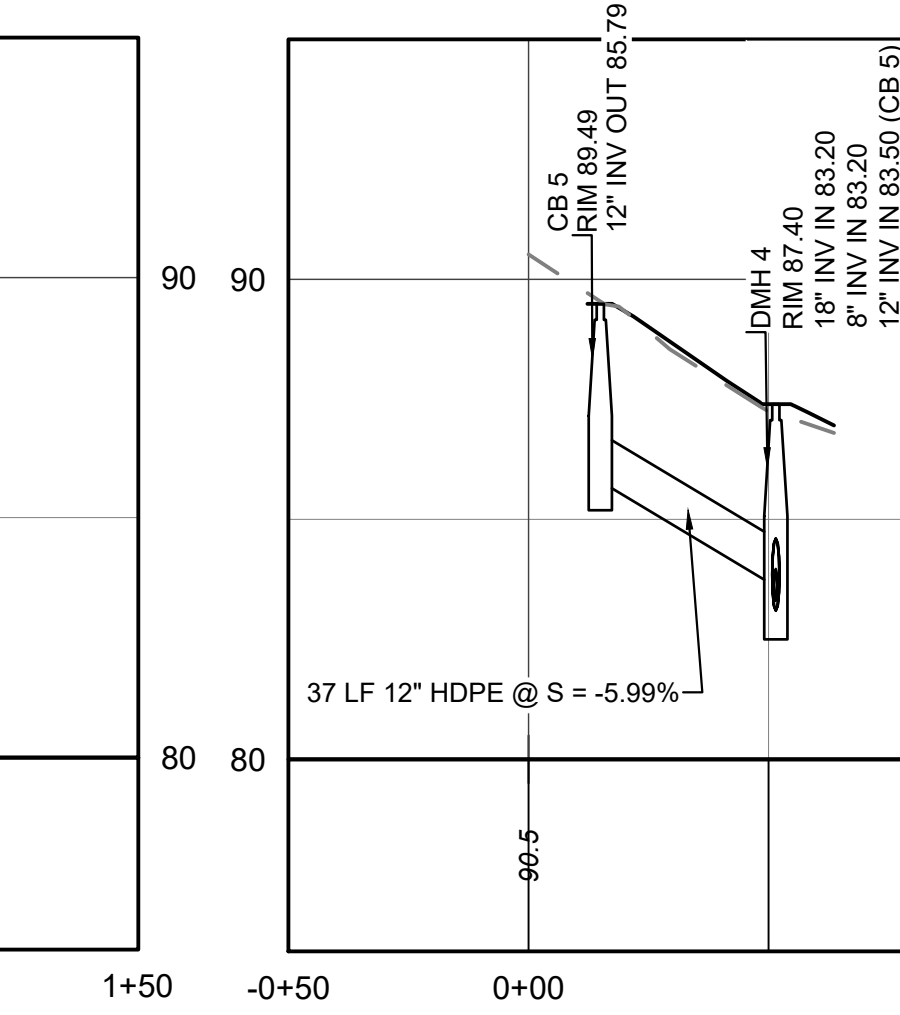
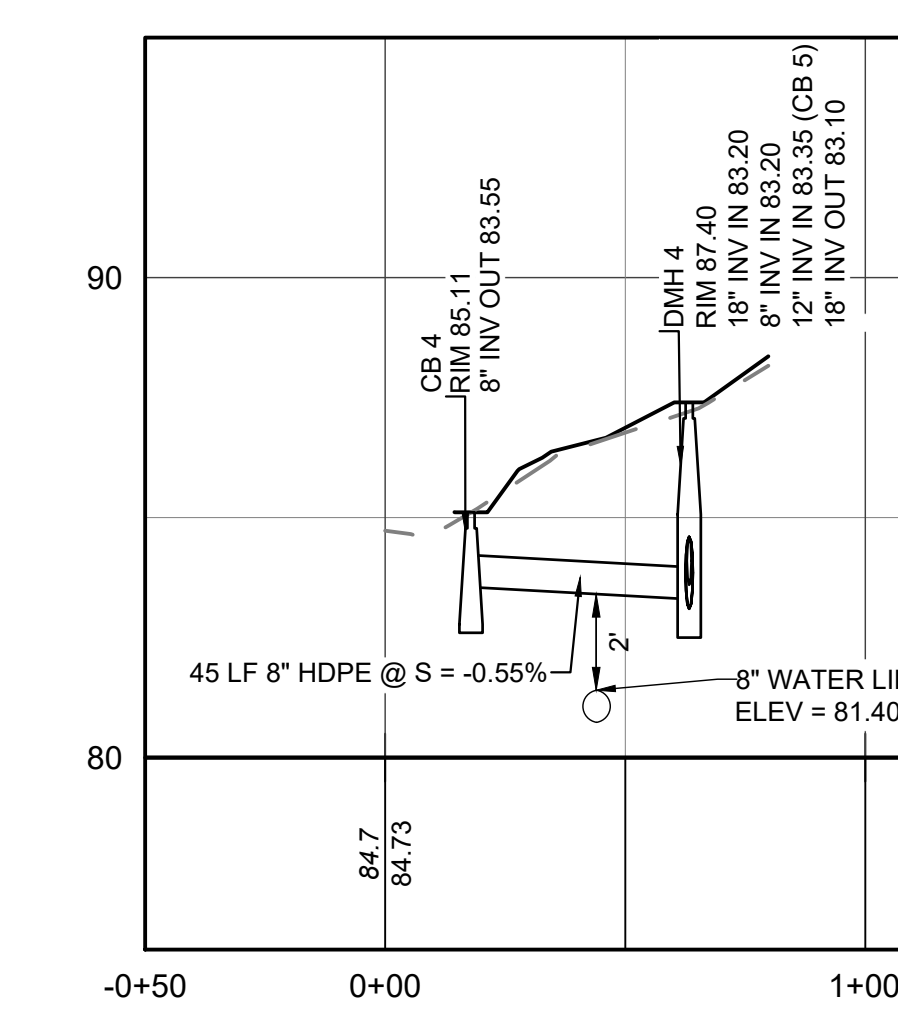
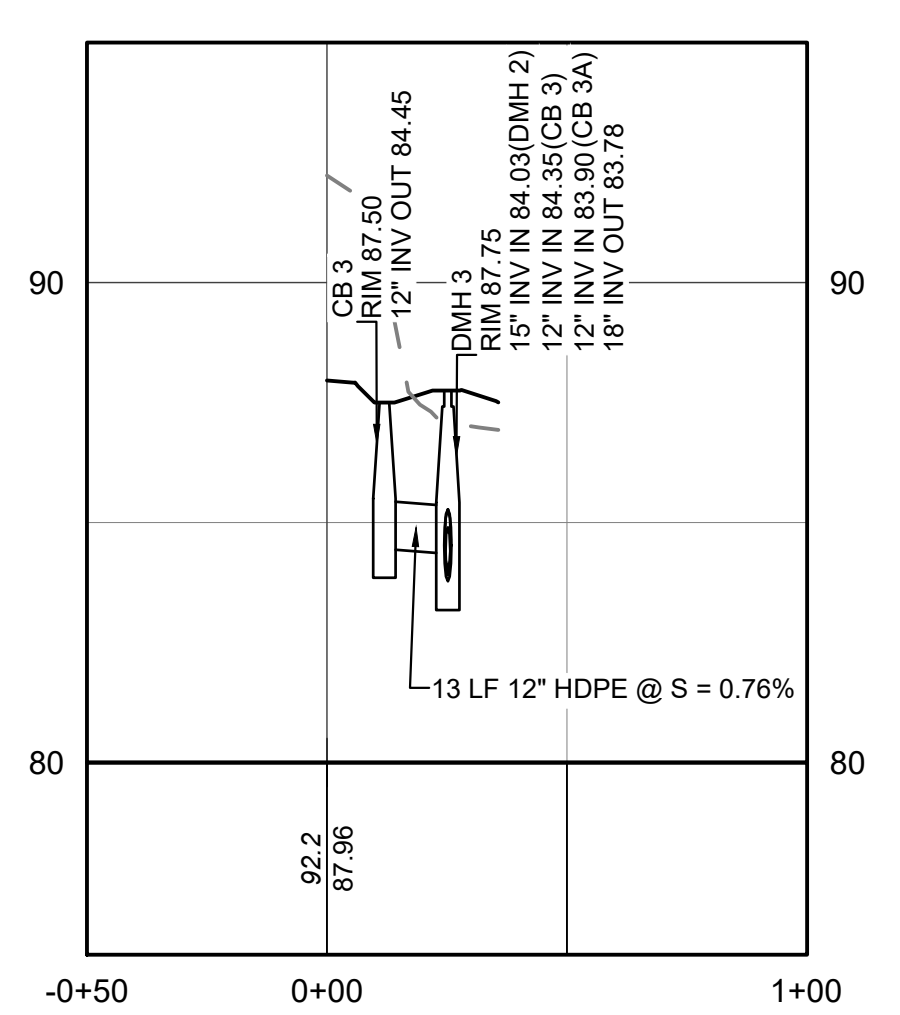
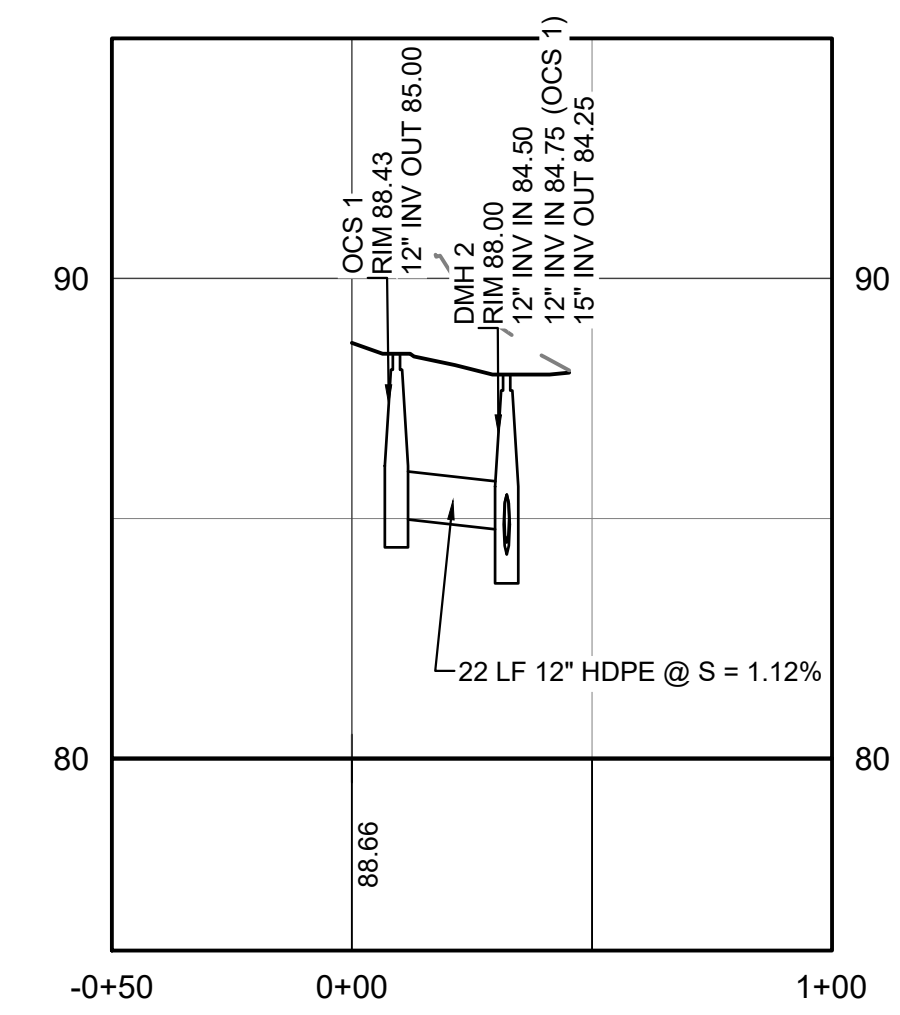
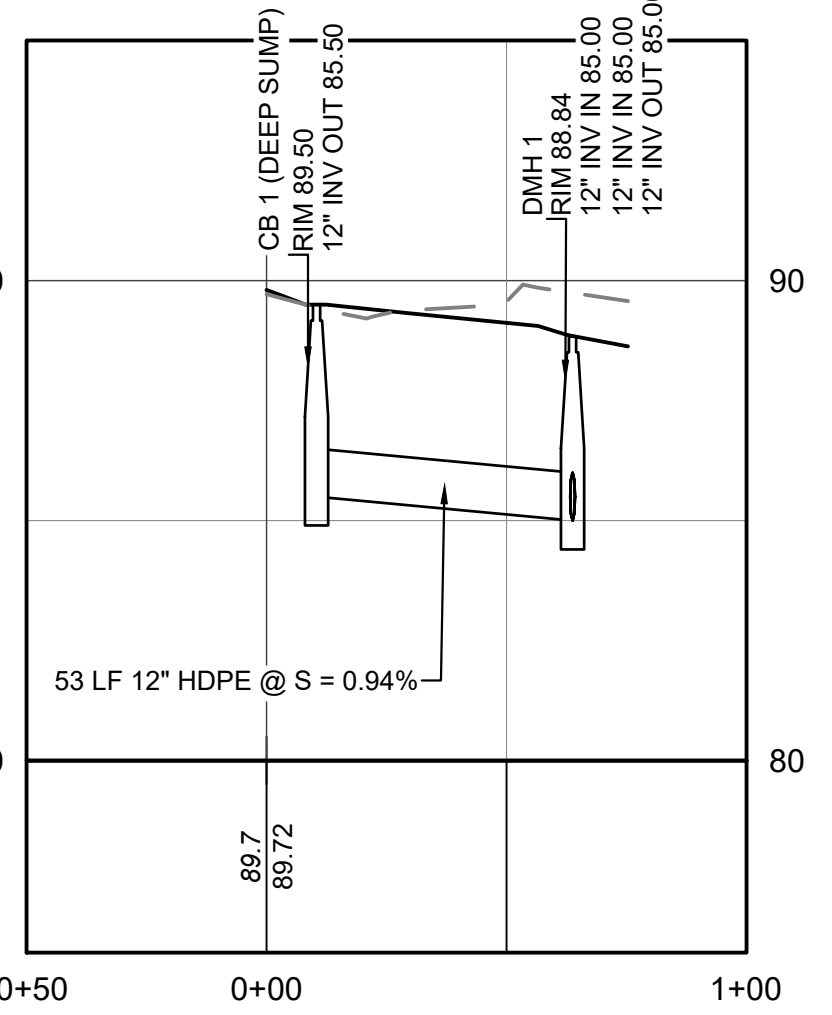
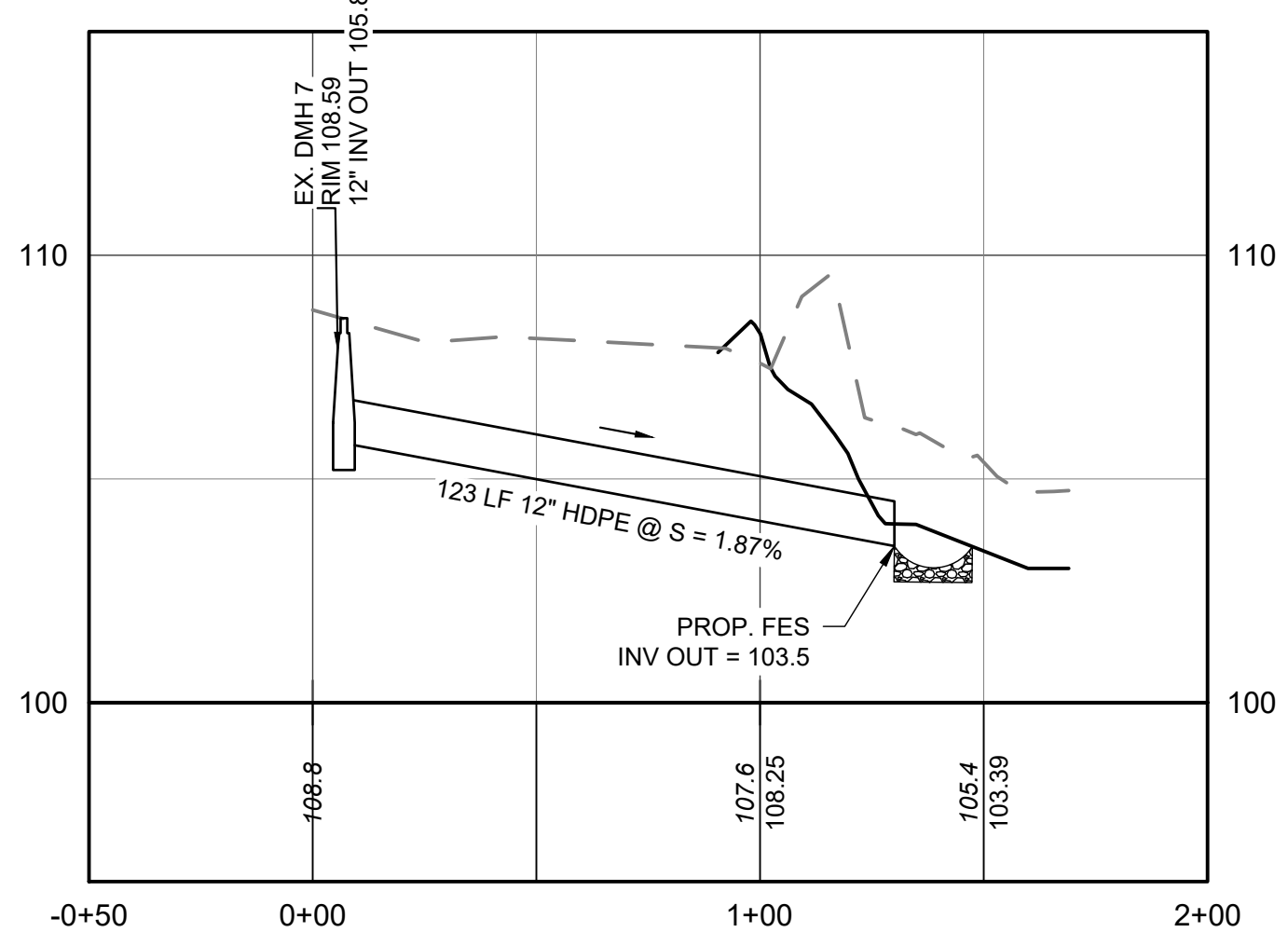
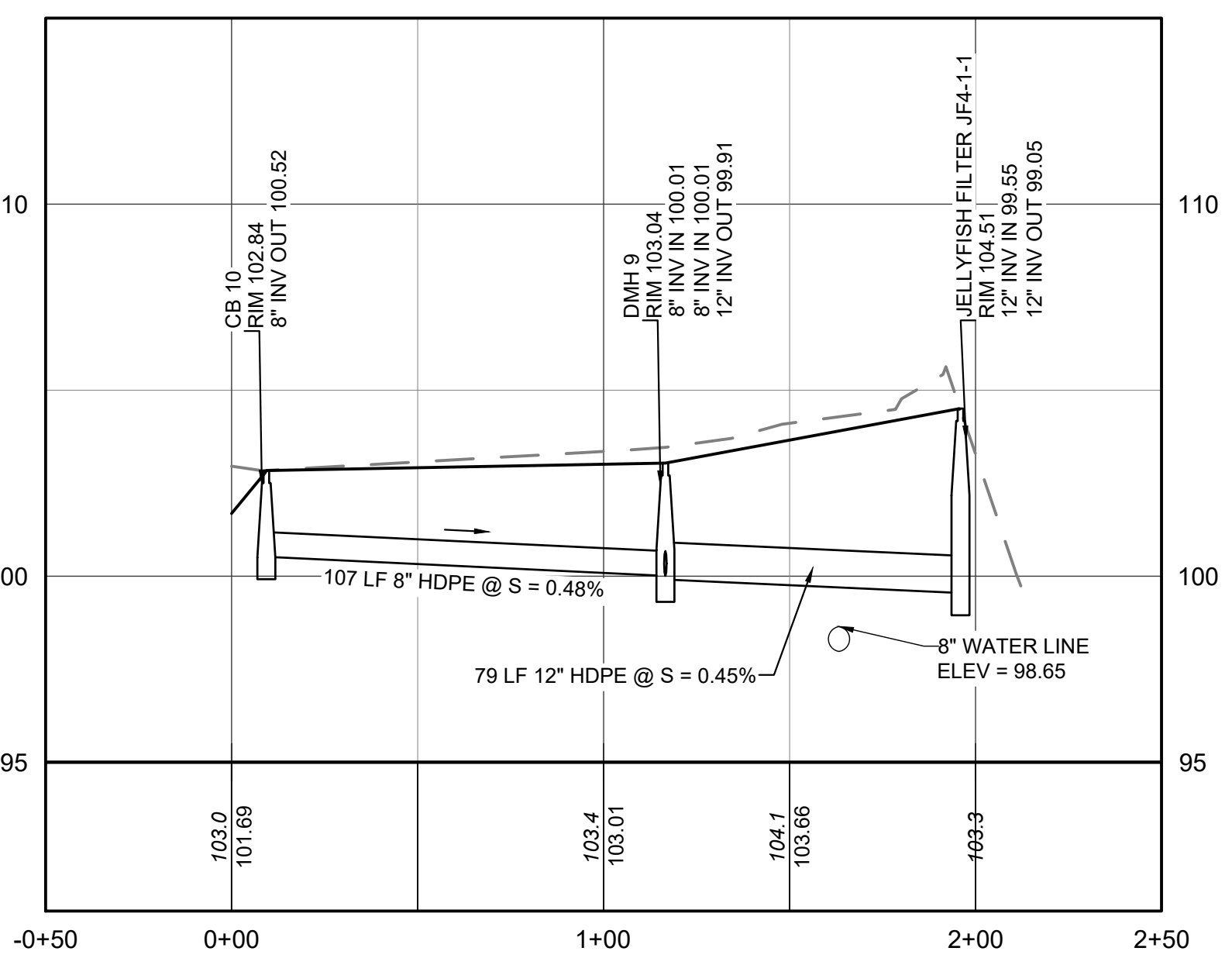
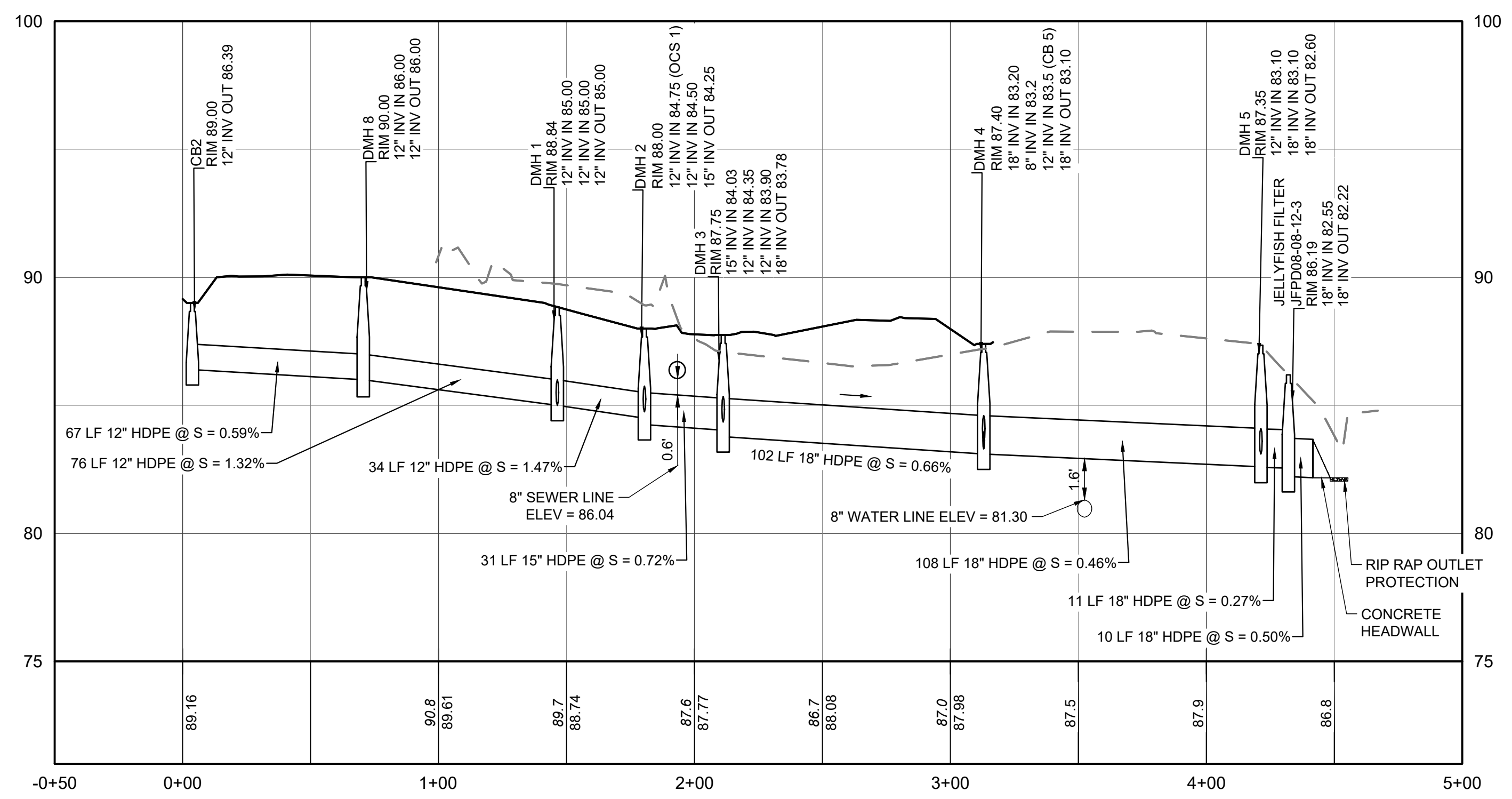
**SITE PLAN**  
 140 HAVERRHILL STREET  
 ANDOVER MA, 01810

**TURNING PLAN**  
 MEDICO 140, LLC  
 355 MIDDLESEX AVE SUITE 7  
 WILMINGTON, MA 01887

DATE	NO.	REVISIONS	BY
3/31/2025	2	FINAL PEER REVIEW COMMENTS	BCO
2/21/25	1	PEER REVIEW COMMENTS	BCO

PROJECT: 19-152  
 DATE: DECEMBER 18, 2024  
 DRAWING SCALE: 1" = 40'  
 DRAWN BY: OMR  
 APPROVED BY: BCO

Z:\PROJECTS\CHC - CHANNEL BUILDING\142 - Doctor's Park Andover\INVOICE CORRESPONDENCE\2024\19 - DR'S PARK (100'S PARCELS)\BIBLISH\_CS2701.dwg  
 PLOTTED: 2/25/2025 12:33 PM BY: JAC BOSTYLE TITEN, NS3-49 PROJECT STATUS:



**Ranger Engineering Group, Inc.**  
 130 Main Street, Suite 202  
 Salem NH, 03079  
 Tel: 978-208-1762  
 rangereg.com



**SITE PLAN**  
 140 HAVERHILL STREET  
 ANDOVER MA, 01810

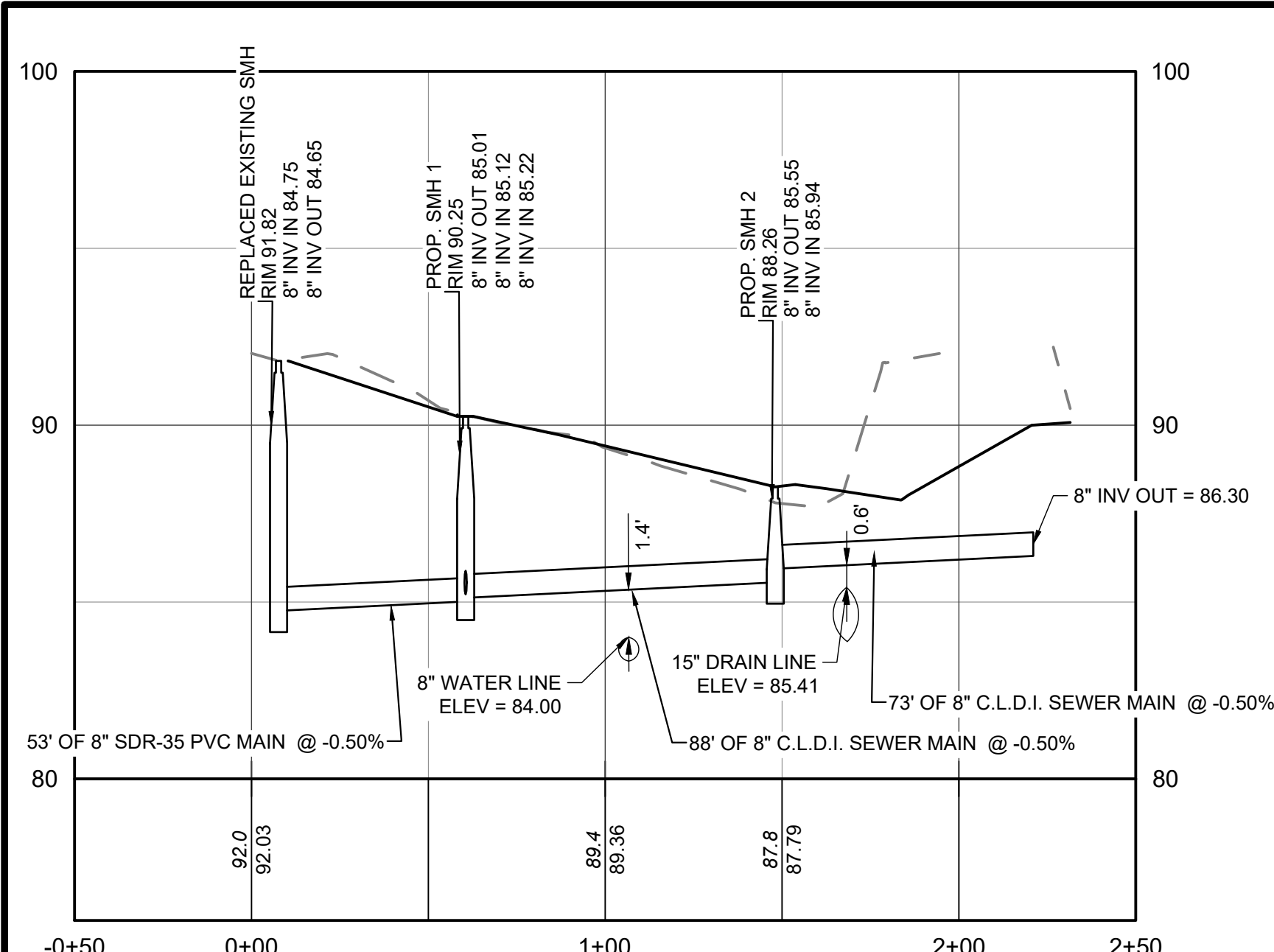
**DRAIN PROFILES**

**MEDICO 140, LLC**  
 355 MIDDLESEX AVE SUITE 7  
 WILMINGTON, MA 01887

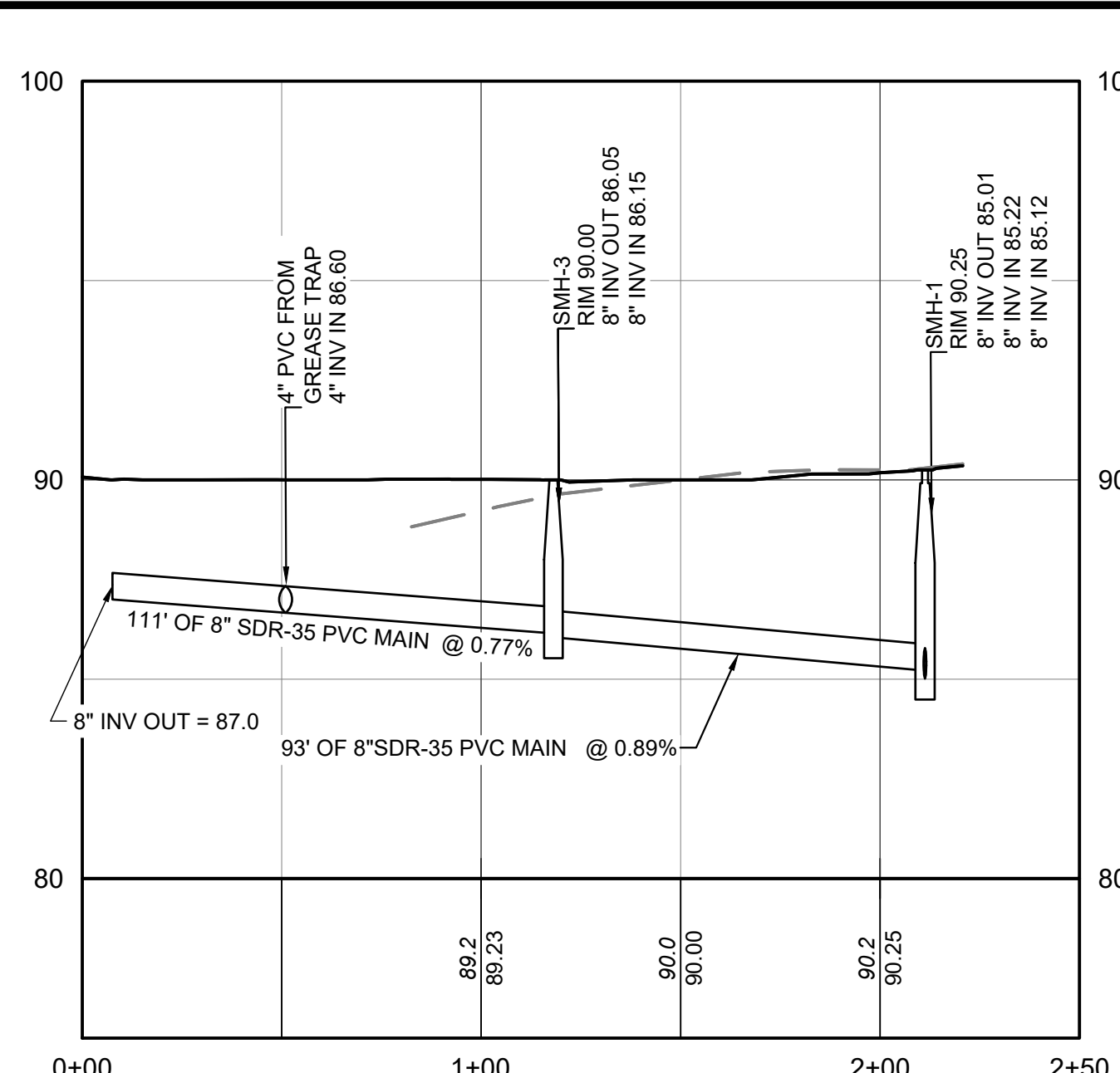
NO.	DATE	REVISIONS
2	3/31/2025	FINAL PEER REVIEW COMMENTS
1	2/21/25	PEER REVIEW COMMENTS

PROJECT: 19-152  
 DATE: DECEMBER 18, 2024  
 DRAWING SCALE: 1" = 40'  
 DRAWN BY: OMR  
 APPROVED BY: BCO

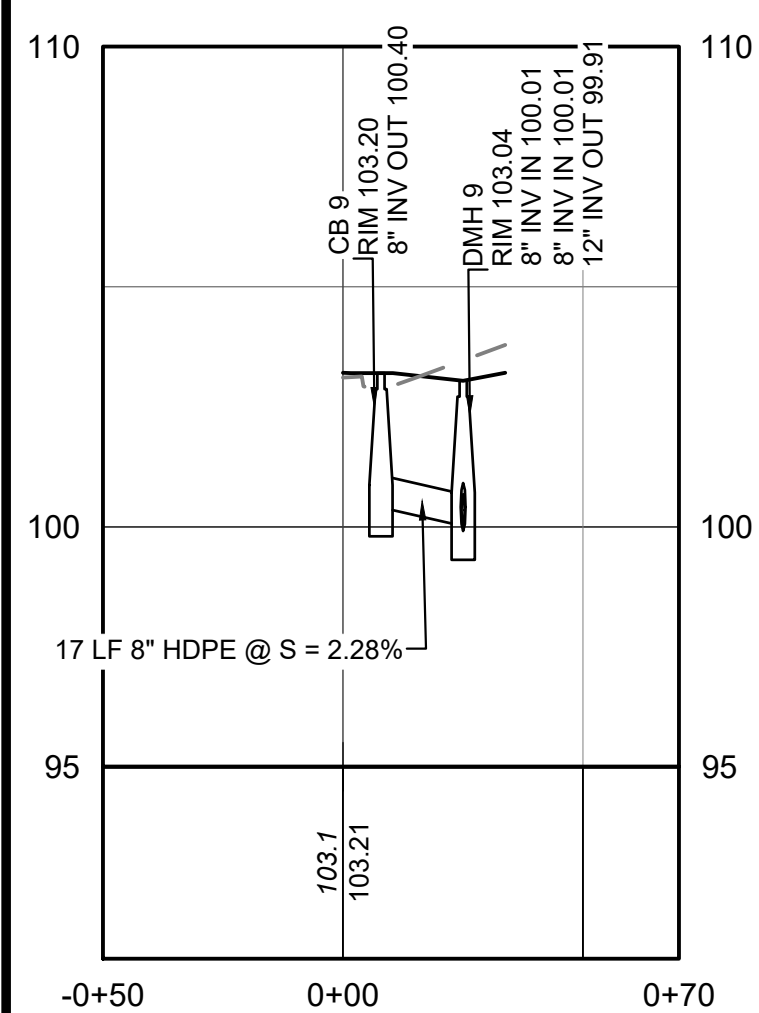
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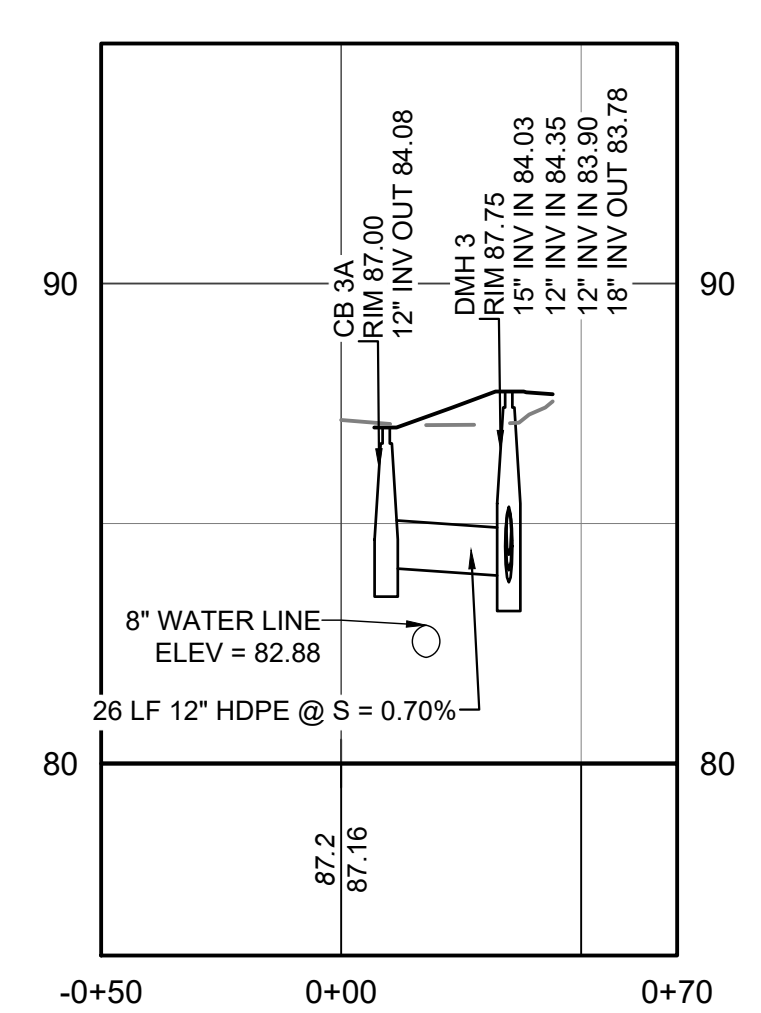
**SEWER PROFILE A**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'



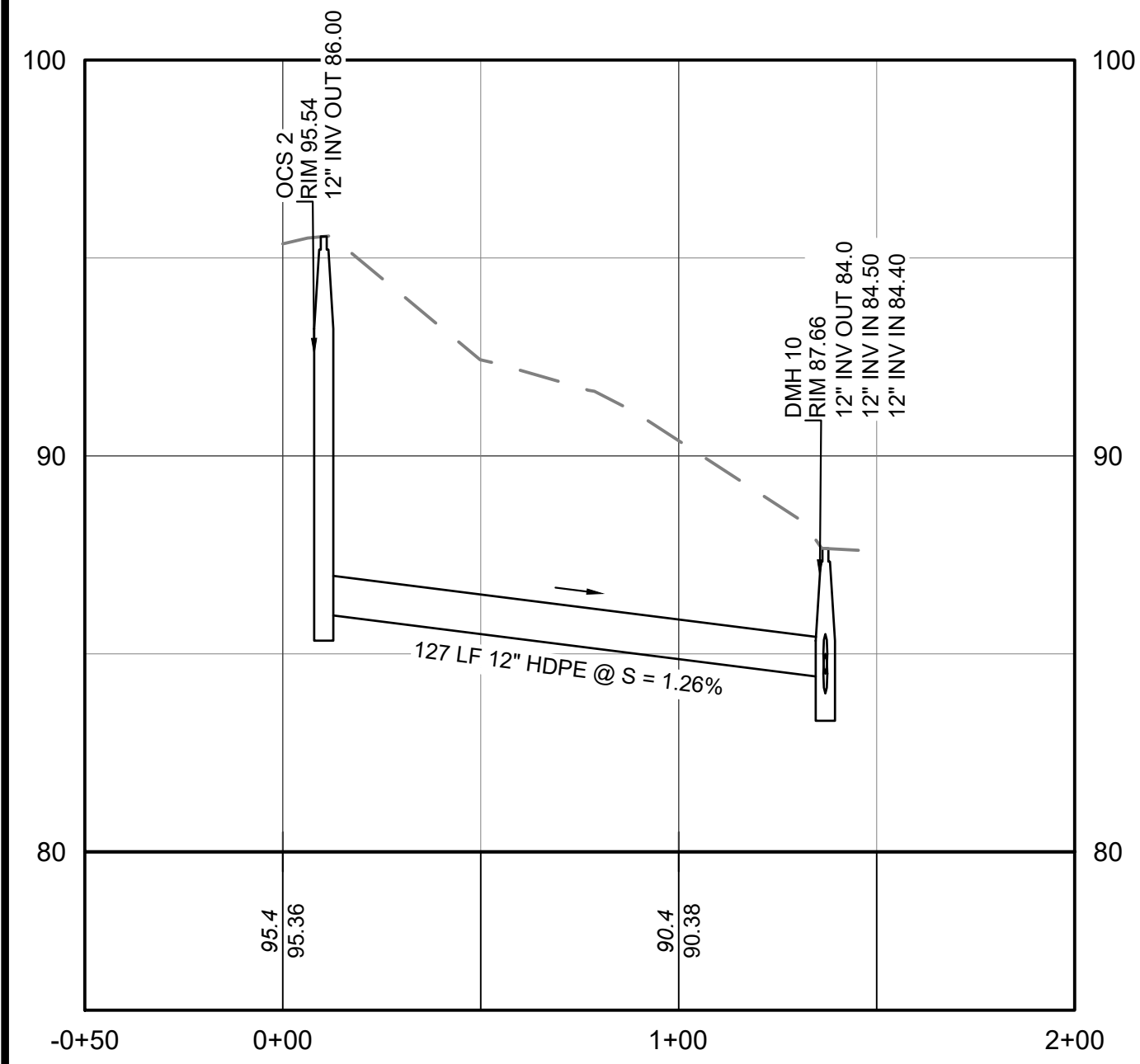
**SEWER PROFILE B**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'



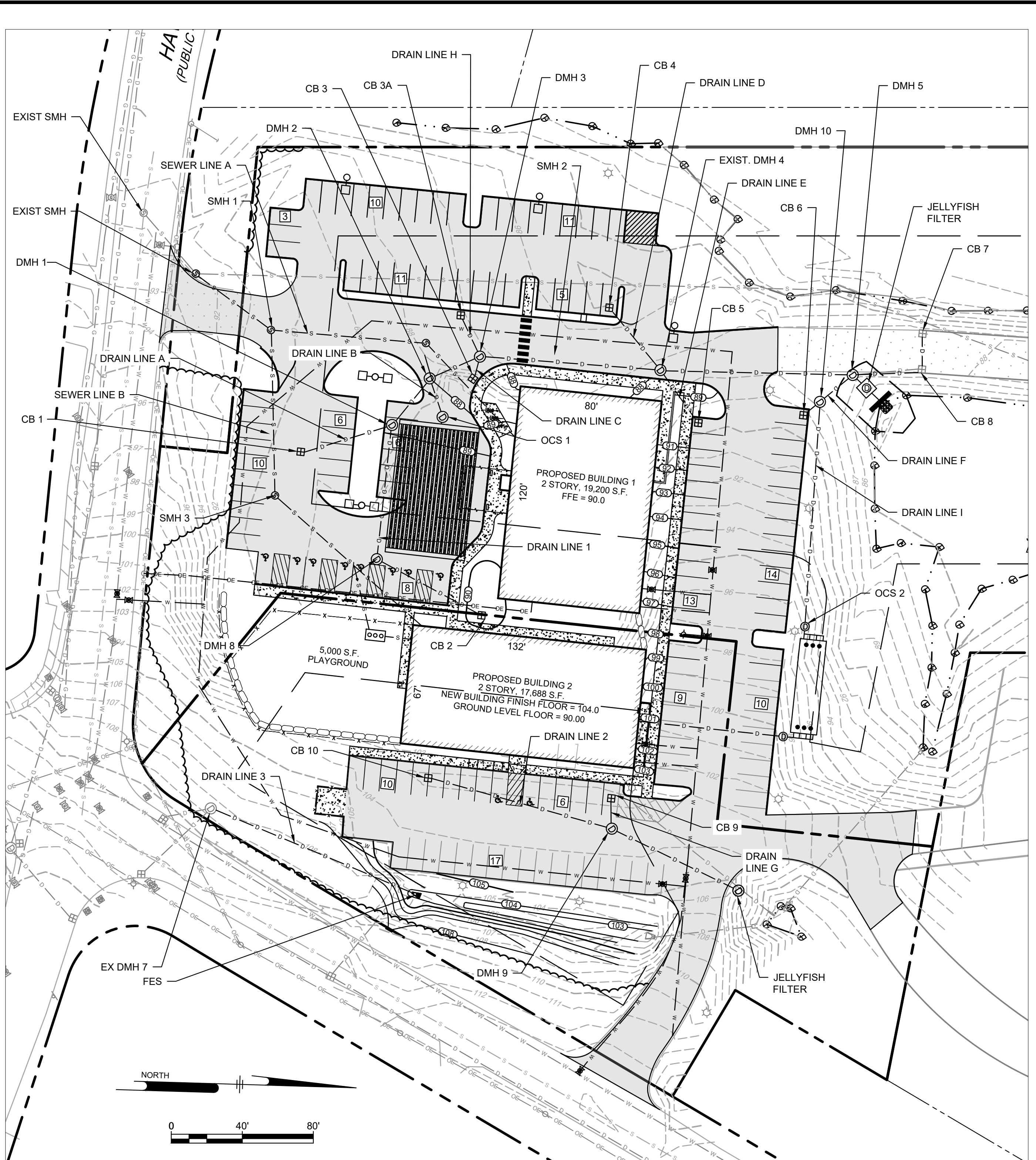
**DRAIN LINE G**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'



**DRAIN LINE H**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'



**DRAIN LINE I**  
HORIZONTAL SCALE: 1" = 40'  
VERTICAL SCALE: 1" = 4'



**Ranger Engineering Group, Inc.**  
130 Main Street, Suite 202  
Salem NH, 03079  
Tel: 978-208-1762  
rangereng.com



**SITE PLAN**  
140 HAVERHILL STREET  
ANDOVER MA, 01810

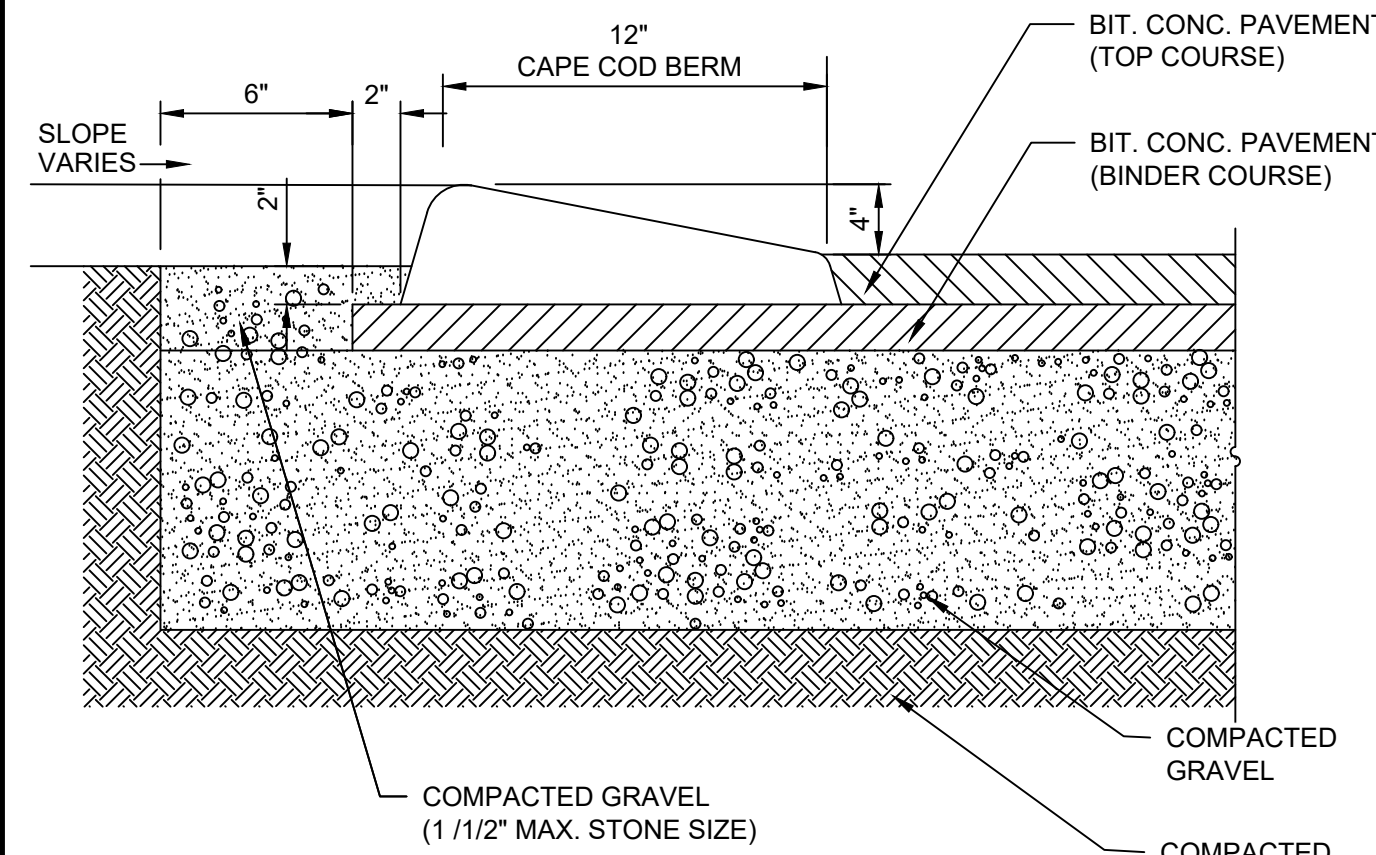
**SEWER AND DRAIN PROFILES**

MEDICO 140, LLC  
355 MIDDLESEX AVE SUITE 7  
WILMINGTON, MA 01887

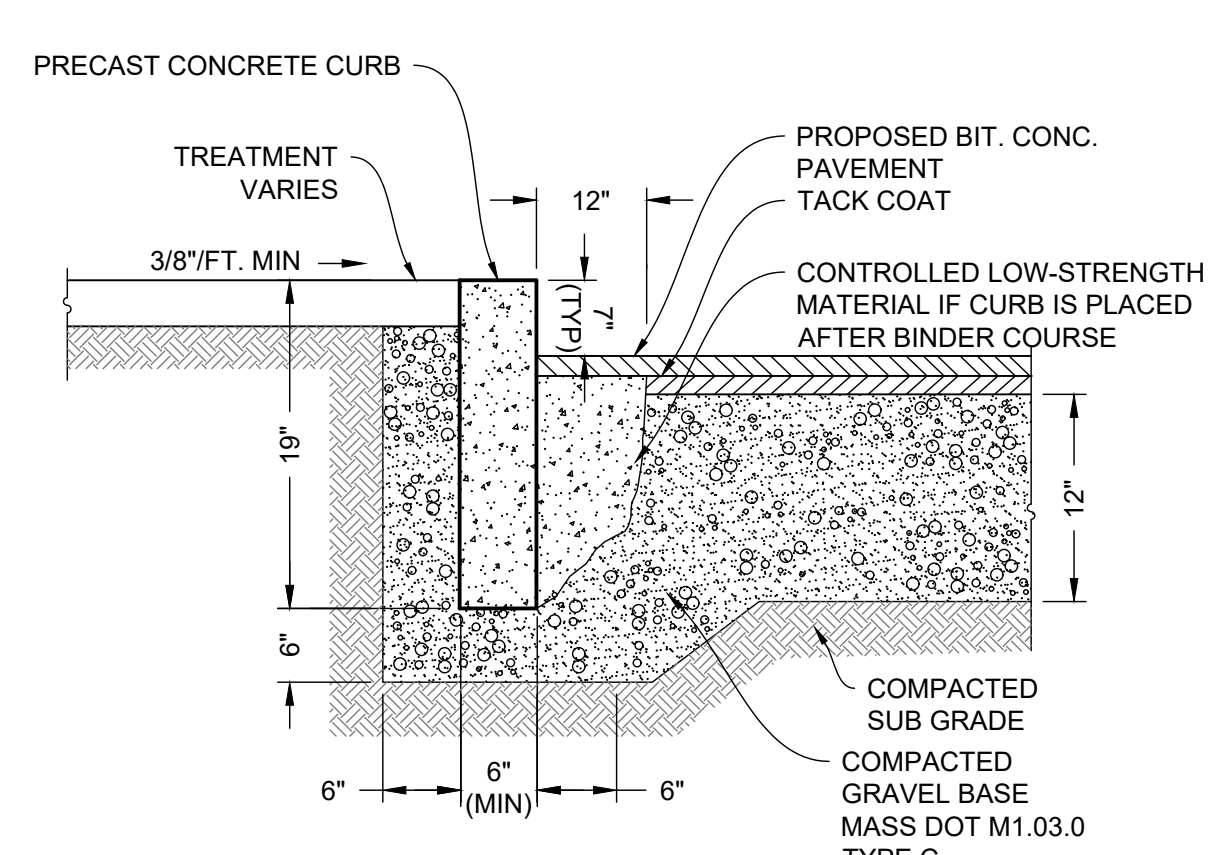
NO.	DATE	REVISIONS	BY
2	3/31/2025	FINAL PEER REVIEW COMMENTS	BCO
1.	2/21/25	PEER REVIEW COMMENTS	BOO

PROJECT: 19-152  
DATE: DECEMBER 18, 2024  
DRAWING SCALE: 1" = 40'  
DRAWN BY: OMR  
APPROVED BY: BCO

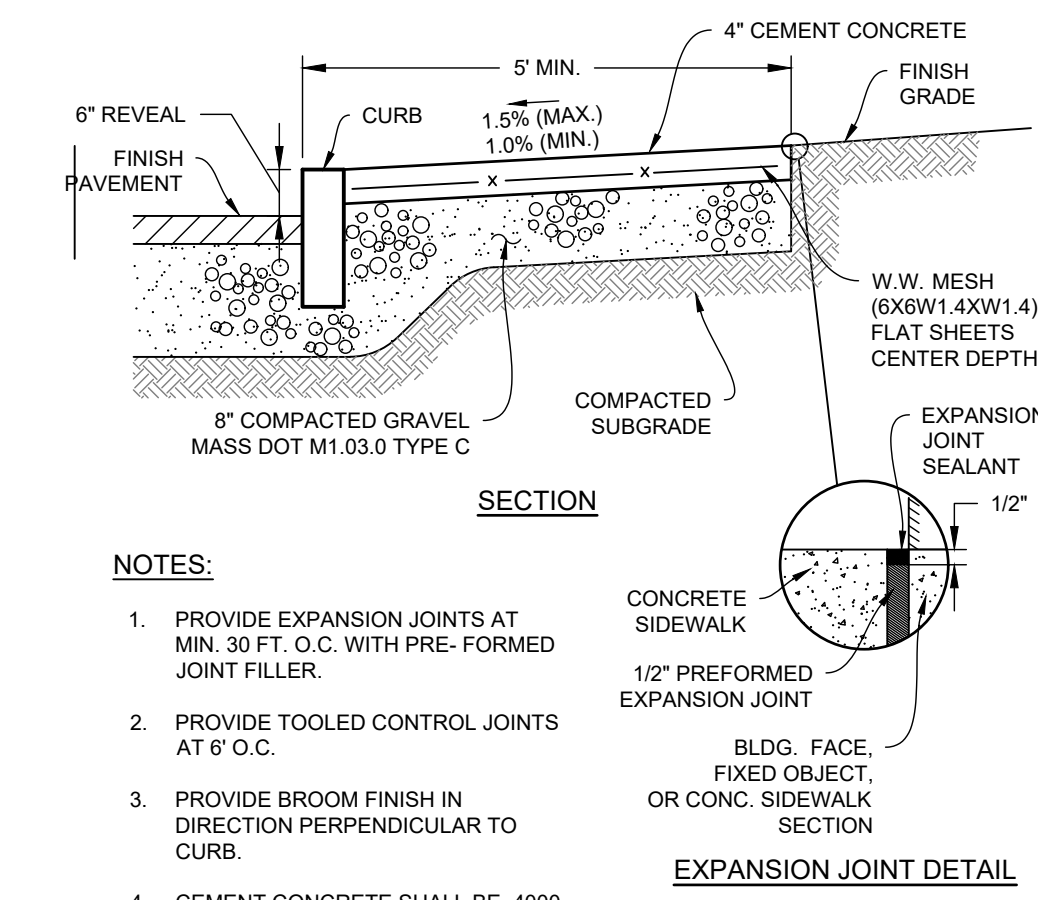
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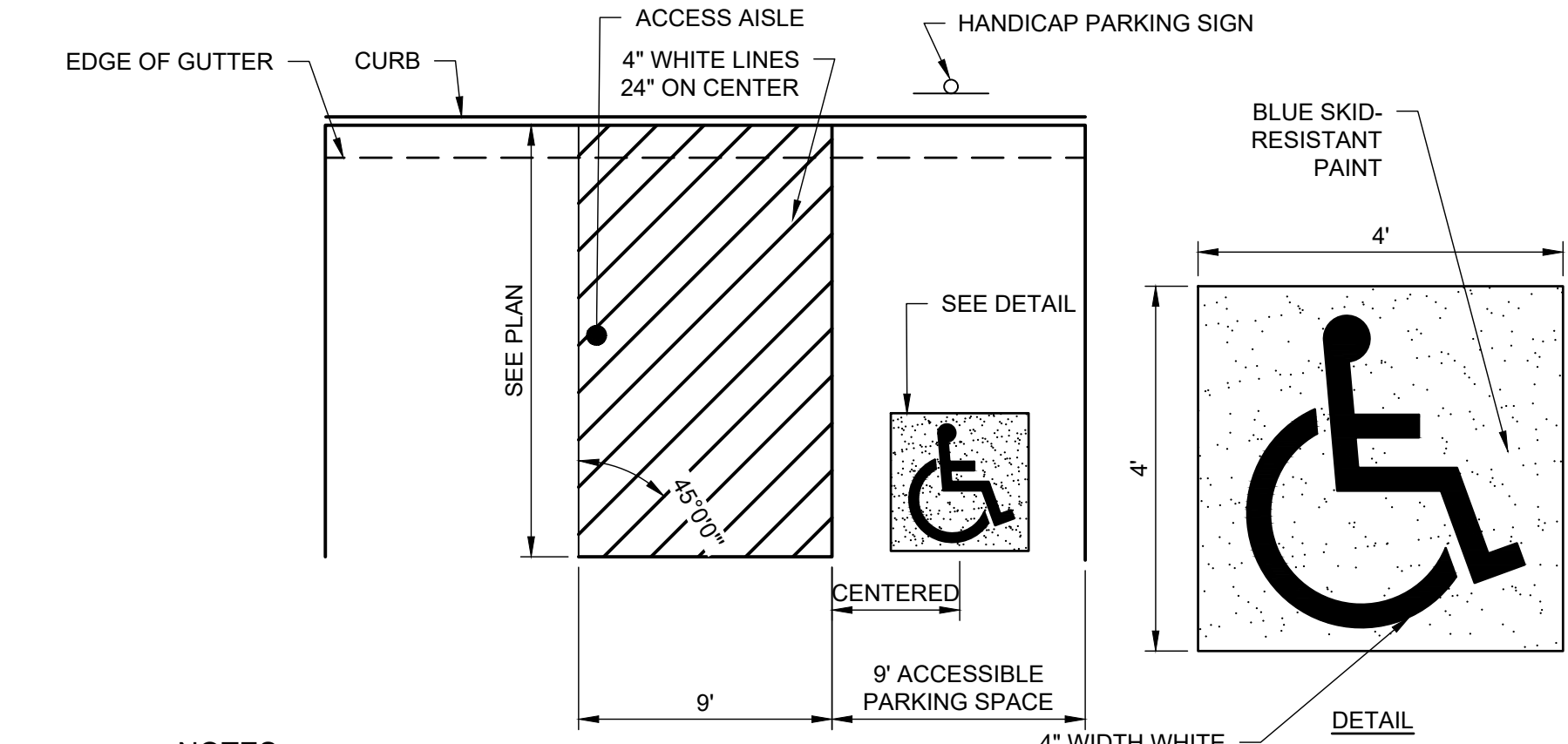
**1 CAPECOD BERM**  
NOT TO SCALE



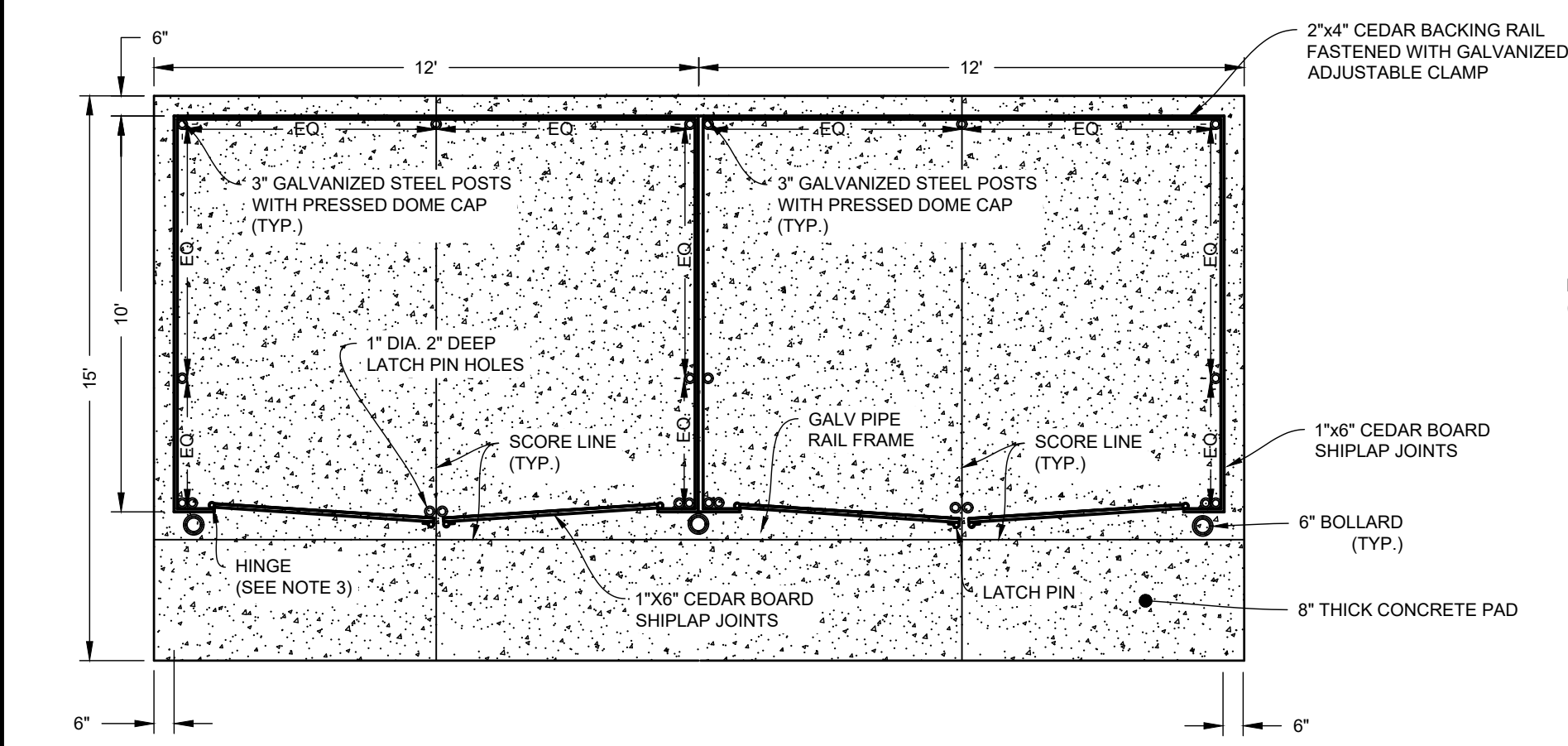
**2 PRECAST CONCRETE CURB**  
NOT TO SCALE



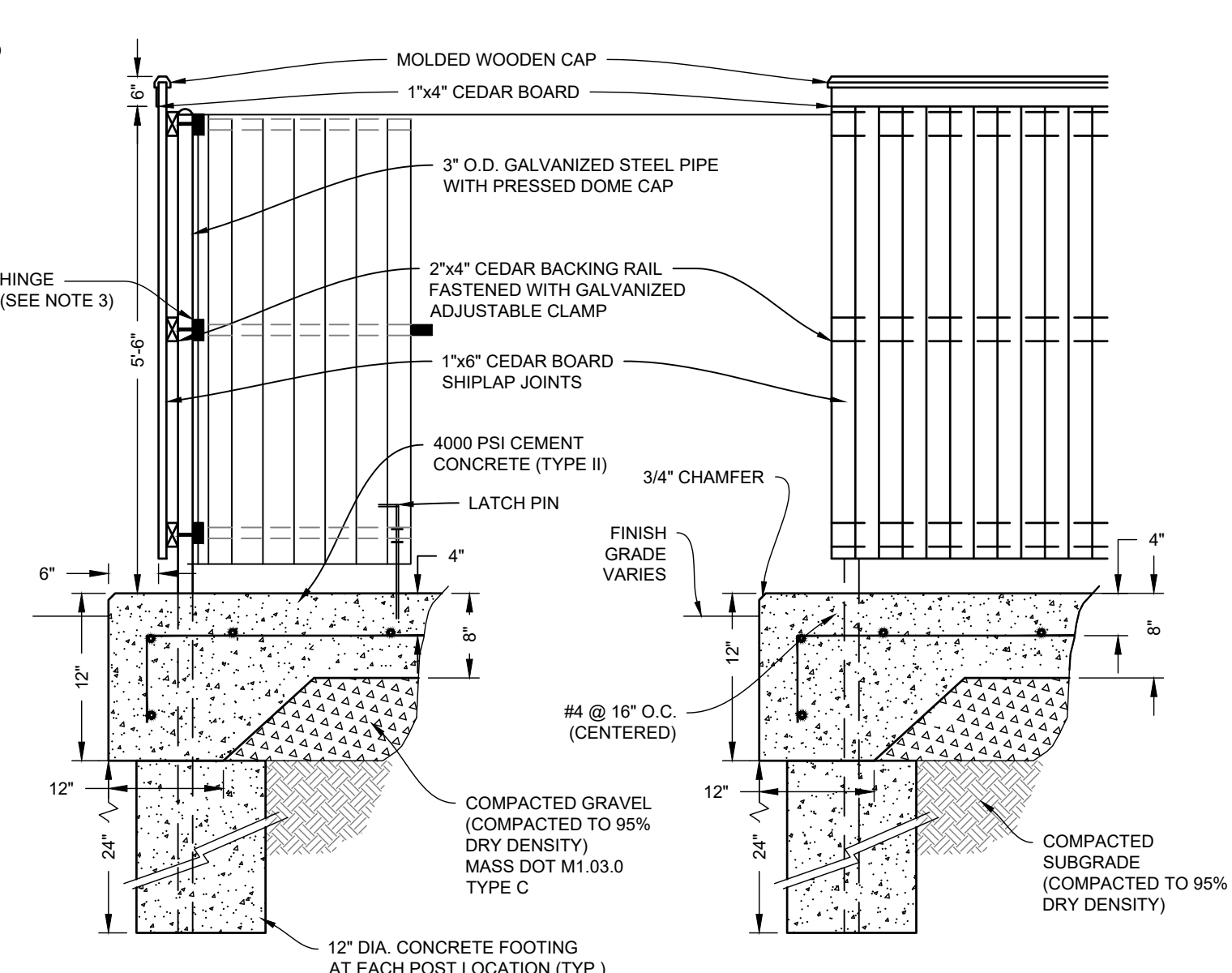
**3 CONCRETE SIDEWALK**  
NOT TO SCALE



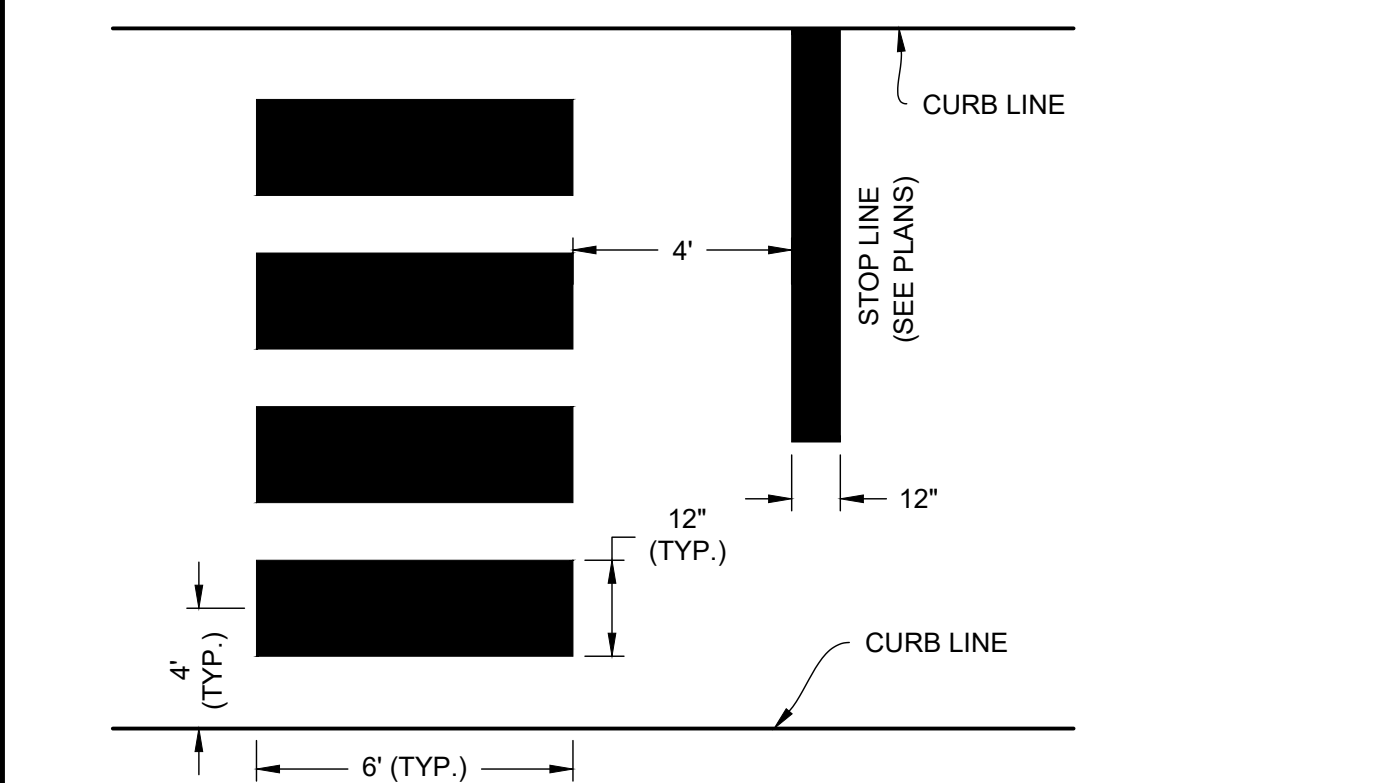
**4 ACCESSIBLE PARKING SPACE**  
NOT TO SCALE



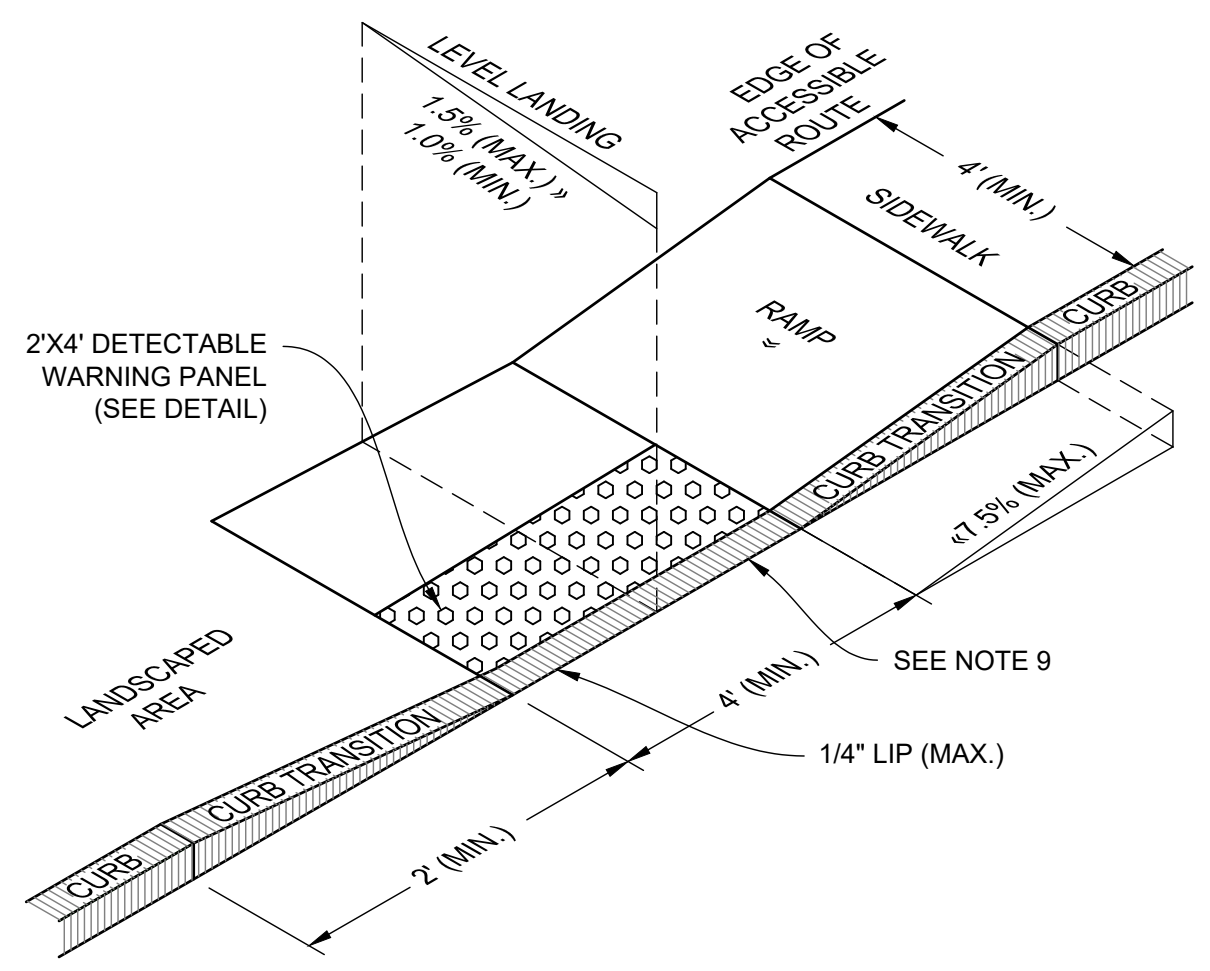
**5 DUMPSTER PAD WITH ENCLOSURE**  
NOT TO SCALE



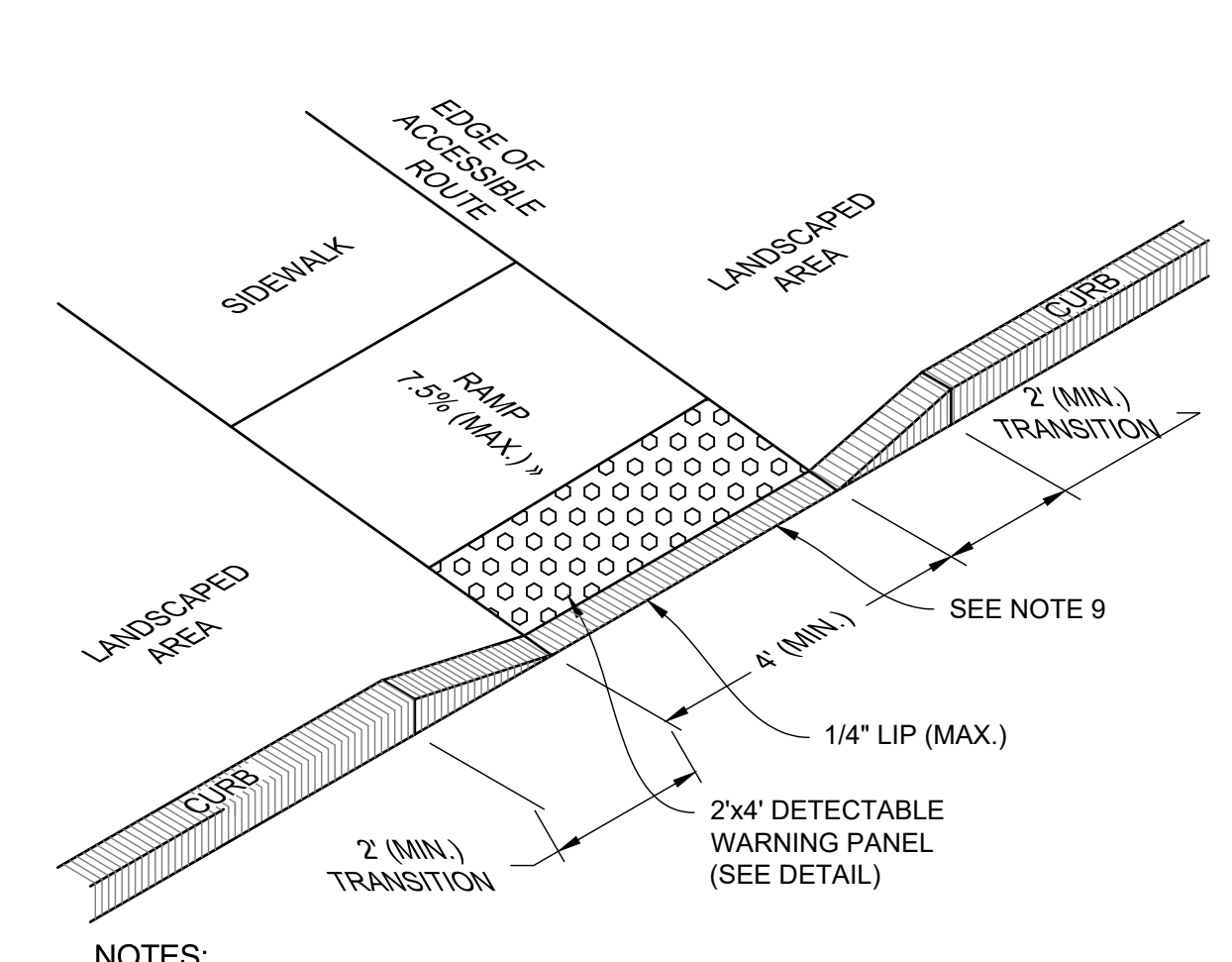
**6 BIT. CONC. PAVEMENT REPAIR DETAIL**  
NOT TO SCALE



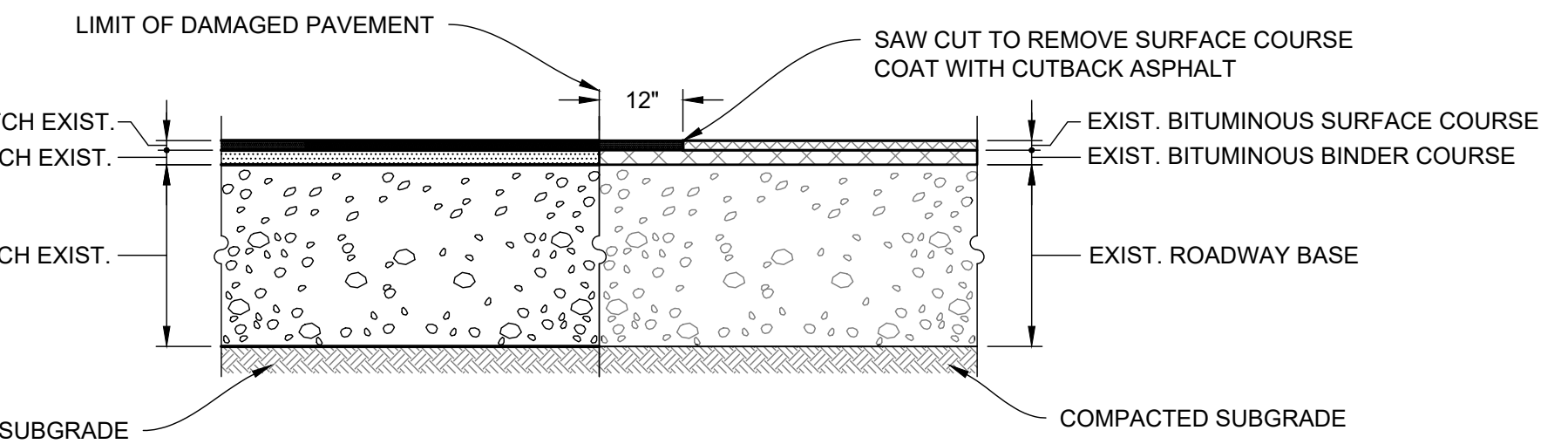
**7 CROSSWALK**  
NOT TO SCALE



**8 ACCESSIBLE CURB RAMP (ACR) - TYPE 'G' W/ DETECTABLE WARNING PANEL**  
NOT TO SCALE



**9 ACCESSIBLE CURB RAMP (ACR) - TYPE 'M' WITH DETECTABLE WARNING PANEL**  
NOT TO SCALE



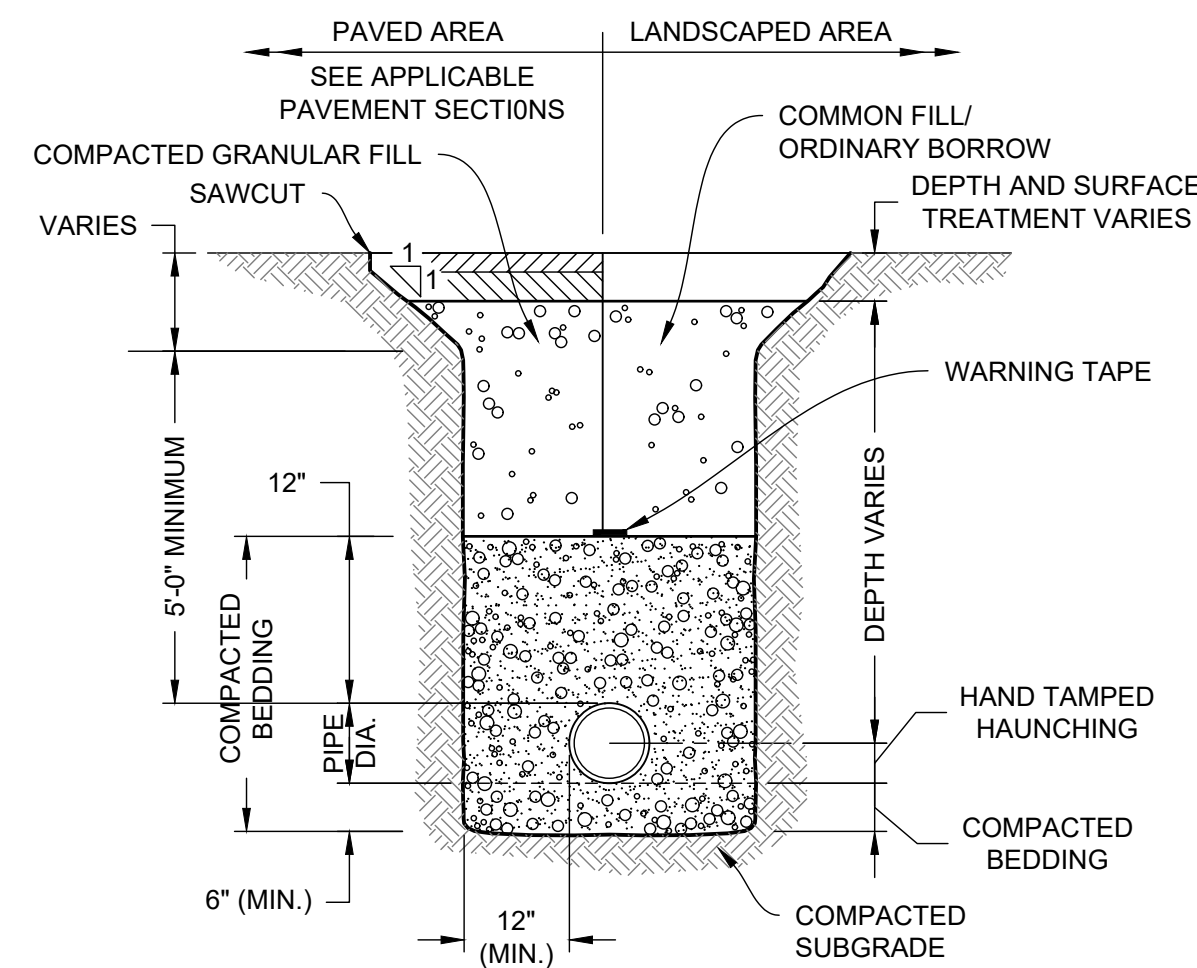
**10 CHAIN LINK FENCE FOOTING DETAIL**  
NOT TO SCALE



NO.	DATE	REVISIONS	BY
1.	3/31/2025	FINAL PEER REVIEW COMMENTS	BCO
2.	2/21/25	PEER REVIEW COMMENTS	BOO

PROJECT	19-152
DATE	DECEMBER 18, 2024
DRAWING SCALE	1"= 40'
DRAWN BY	OMR
APPROVED BY	BCO

Z:\PROJECTS\CHC CHANNEL BUILDING\1812\_Dumpster Area And Enclosure\DWG\1812\_CS6001.dwg  
 PLOTTED: 2/25/2025 12:35 PM BY: JAC  
 PROJECT STATUS: 02/25/2025 12:35 PM BY: JAC

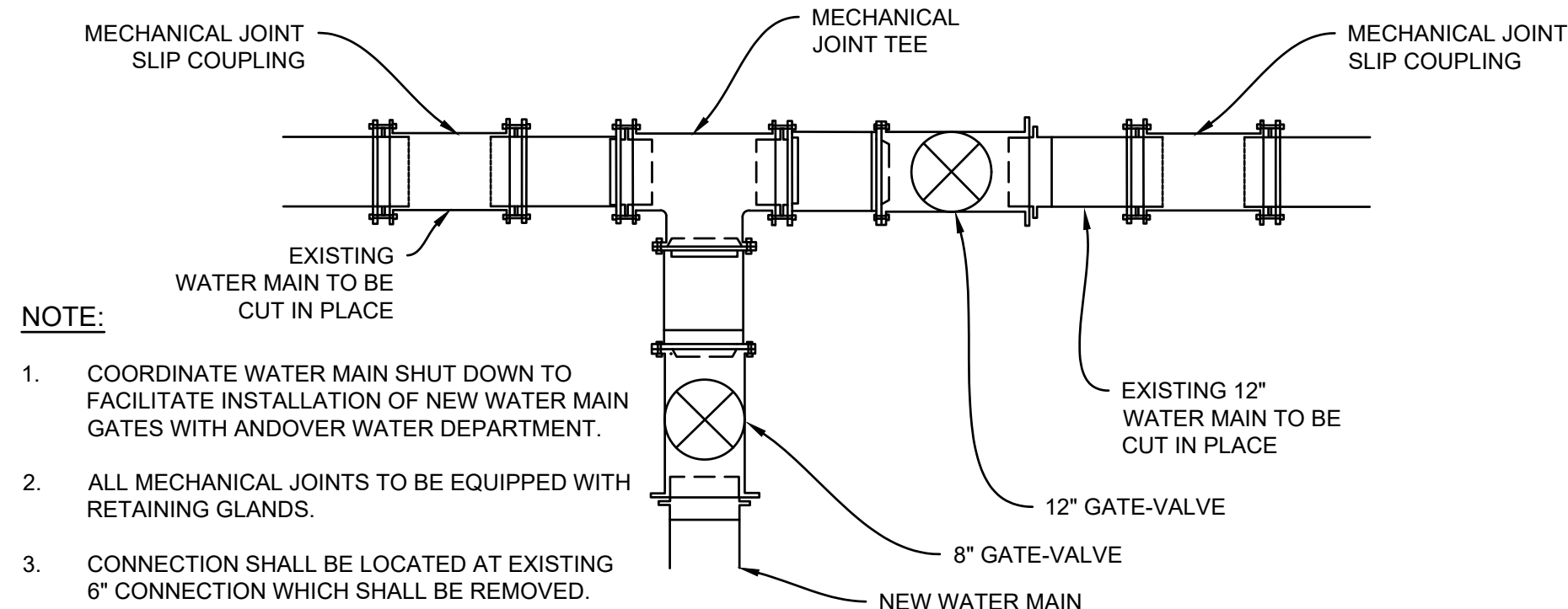


- NOTES:**
- WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
  - USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.

**1 WATER TRENCH**  
NOT TO SCALE

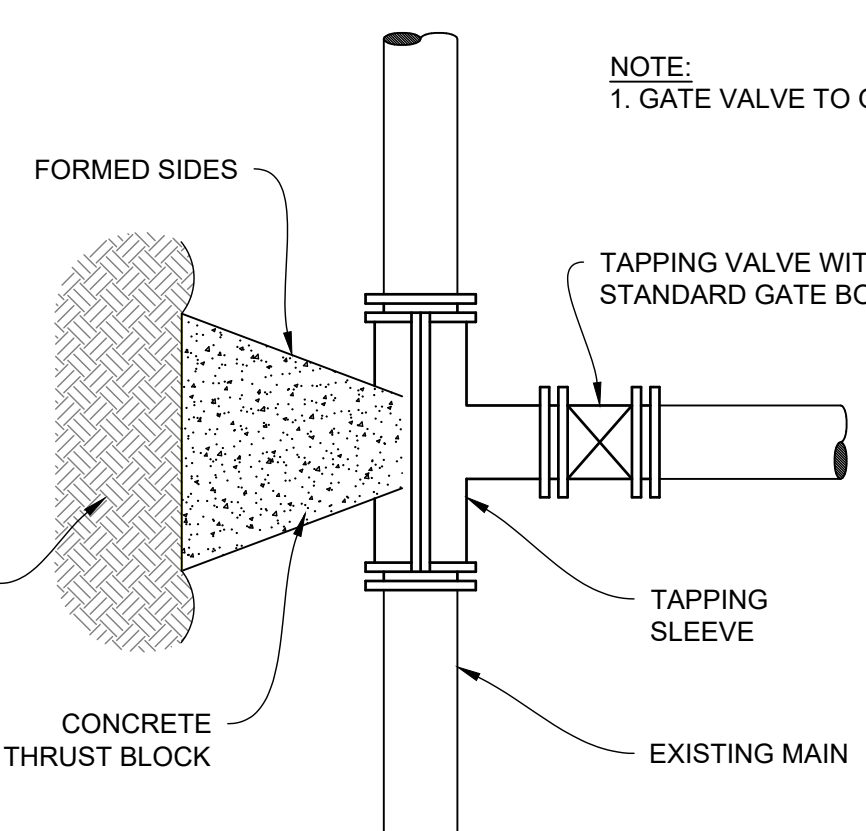
LIMITS OF RESTRAINED JOINTS	
FITTING	MIN. LINEAR FEET TO BE RESTRAINED
6"-1/4 BEND	21 (EACH SIDE OF FITTING)
6"-1/8 BEND	9 (EACH SIDE OF FITTING)
6"-1/16 BEND	4 (EACH SIDE OF FITTING)
6"-1/32 BEND	2 (EACH SIDE OF FITTING)
8"-1/4 BEND	27 (EACH SIDE OF FITTING)
8"-1/8 BEND	11 (EACH SIDE OF FITTING)
8"-1/16 BEND	6 (EACH SIDE OF FITTING)
8"-1/32 BEND	3 (EACH SIDE OF FITTING)
8"x6" REDUCER	32 (EACH SIDE OF FITTING)
8"x6" TEE	54 (ALONG BRANCH)
8"x8" TEE	27 (ALONG BRANCH)
12"-1/4 BEND	38 (EACH SIDE OF FITTING)
12"-1/8 BEND	16 (EACH SIDE OF FITTING)
12"-1/16 BEND	8 (EACH SIDE OF FITTING)
12"-1/32 BEND	4 (EACH SIDE OF FITTING)
12"x6" REDUCER	75 (EACH SIDE OF FITTING)
12"x8" REDUCER	62 (EACH SIDE OF FITTING)
12"x12" TEE	96 (ALONG BRANCH)
12"x6" TEE	52 (ALONG BRANCH)
12"x8" TEE	72 (ALONG BRANCH)
HYDRANT	ENTIRE BRANCH RESTRAINED

**2 RESTRAINED JOINT DUCTILE IRON PIPE FITTINGS**  
NOT TO SCALE

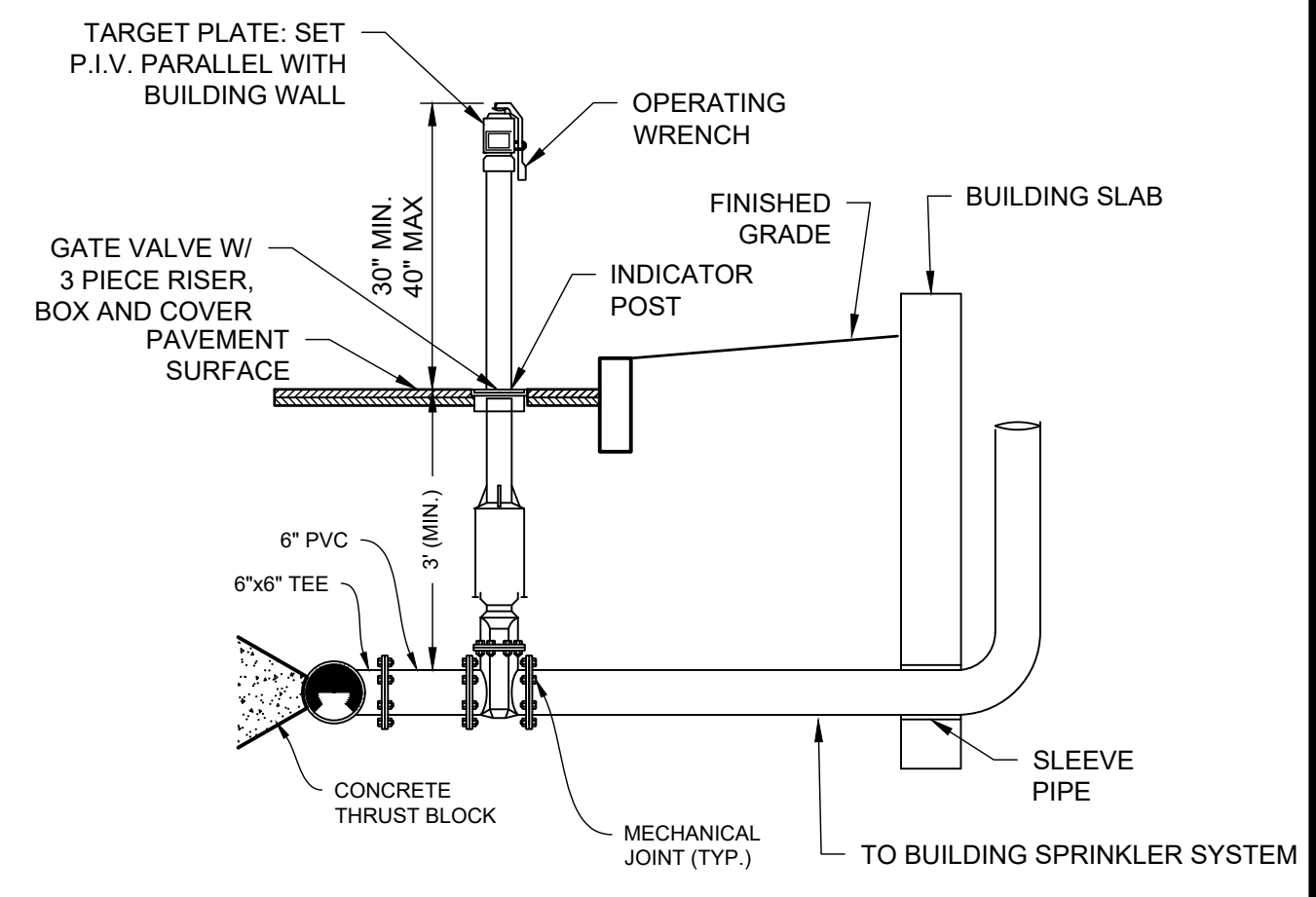


- NOTE:**
- COORDINATE WATER MAIN SHUT DOWN TO FACILITATE INSTALLATION OF NEW WATER MAIN GATES WITH ANDOVER WATER DEPARTMENT.
  - ALL MECHANICAL JOINTS TO BE EQUIPPED WITH RETAINING GLANDS.
  - CONNECTION SHALL BE LOCATED AT EXISTING 6" CONNECTION WHICH SHALL BE REMOVED.

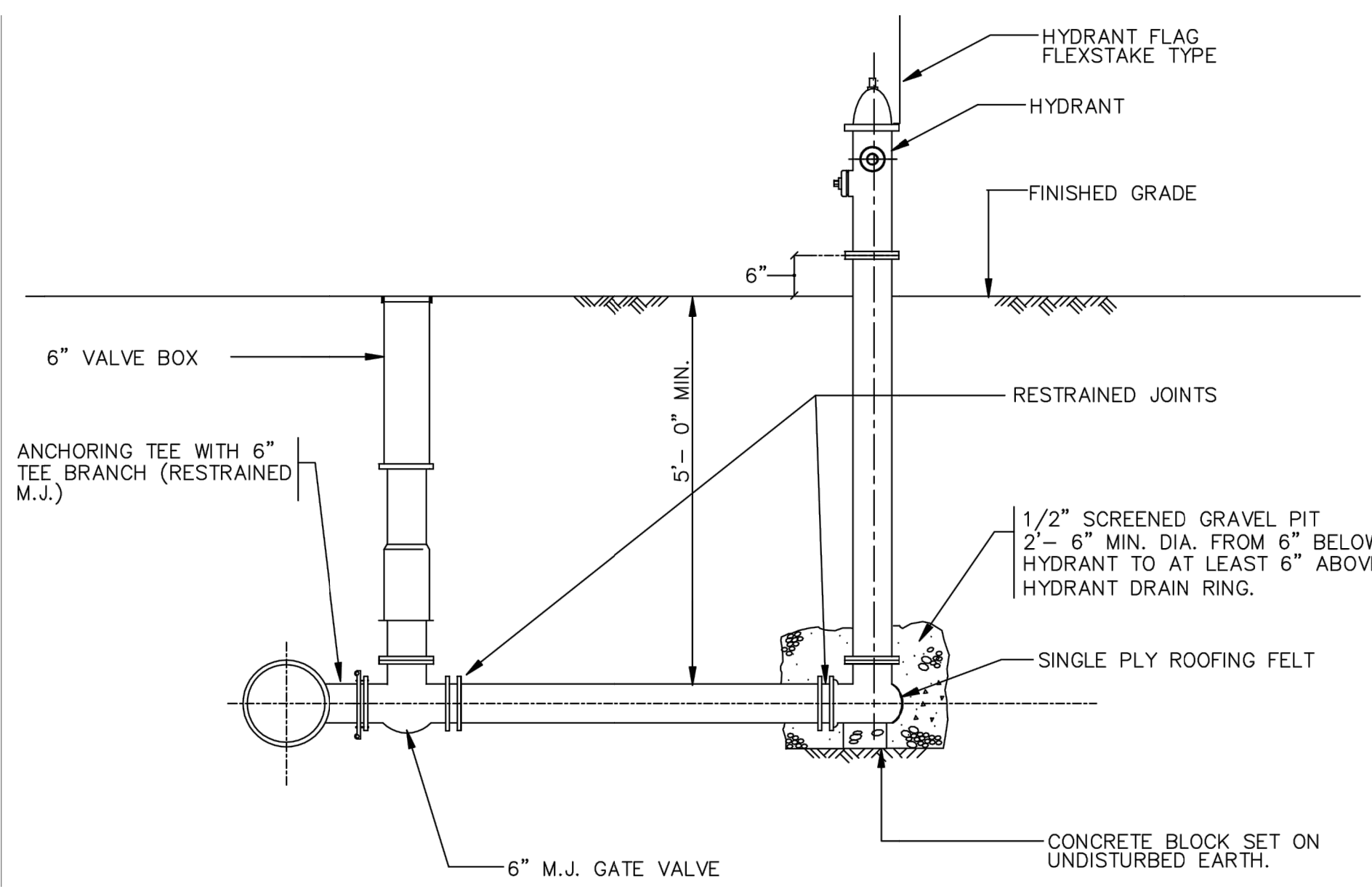
**3 WATER MAIN CONNECTION HAVERHILL STREET**  
NOT TO SCALE



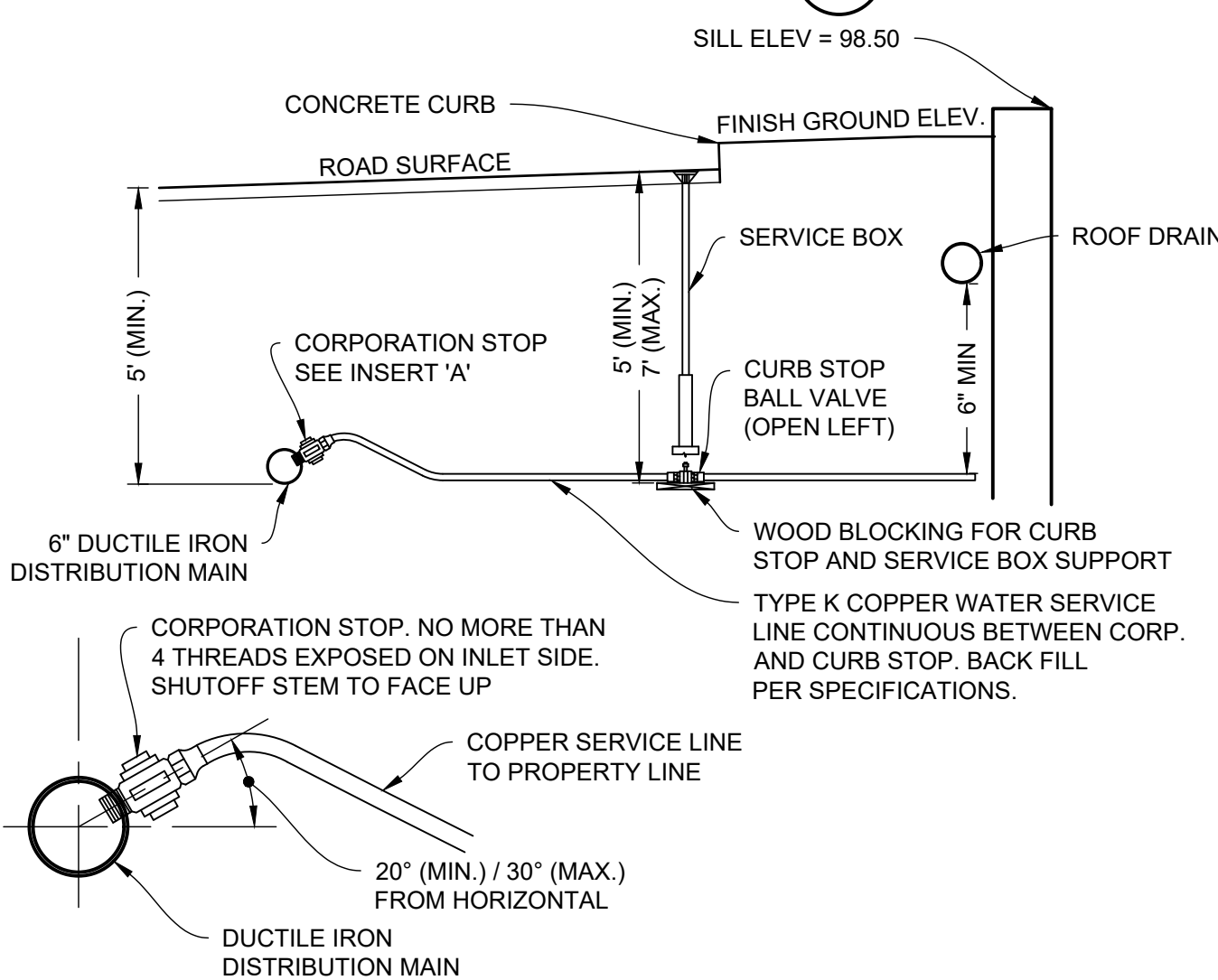
**4 TAPPING SLEEVE & VALVE CONNECTION**  
NOT TO SCALE



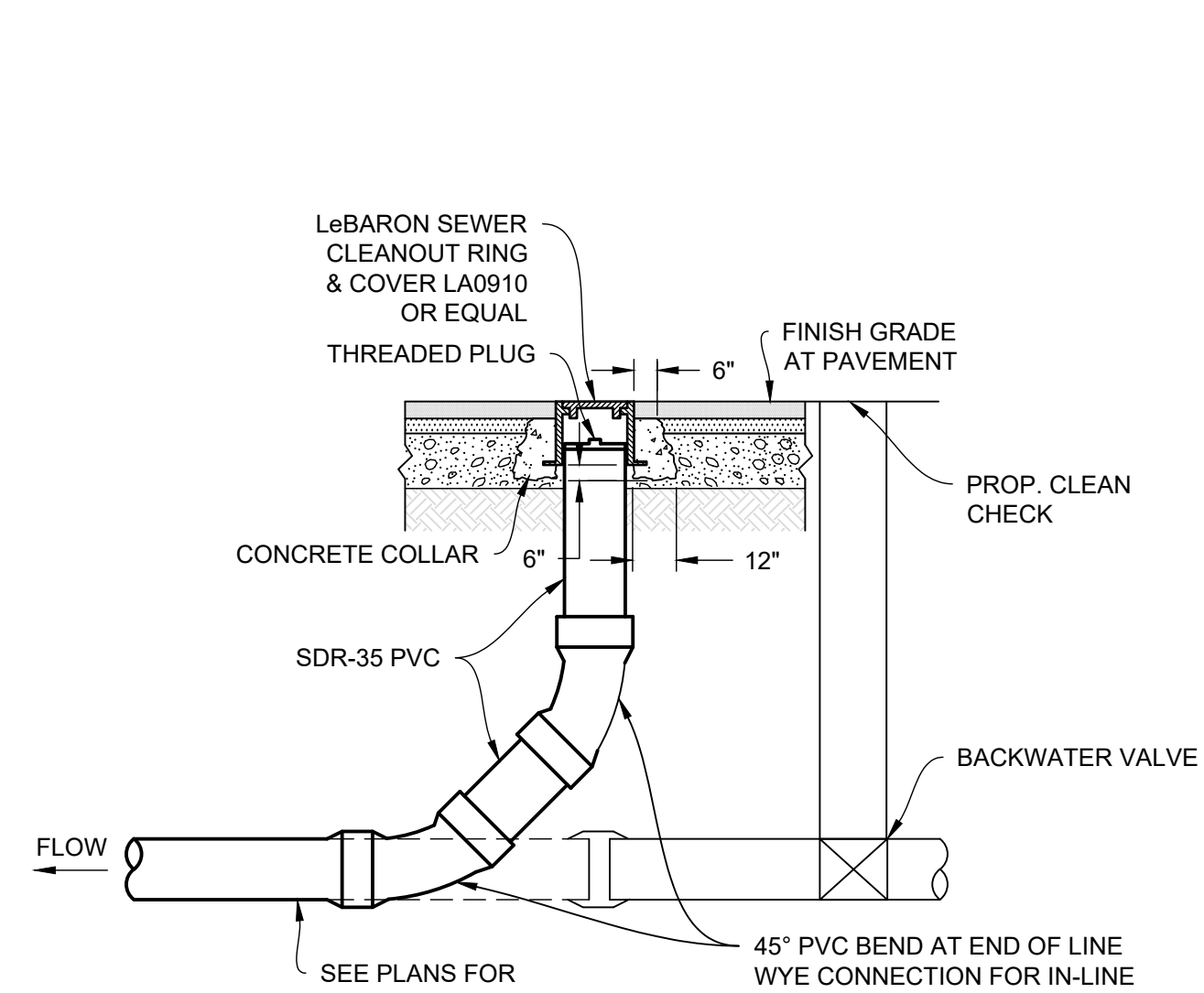
**5 SPRINKLER CONNECTION DETAIL**  
NOT TO SCALE



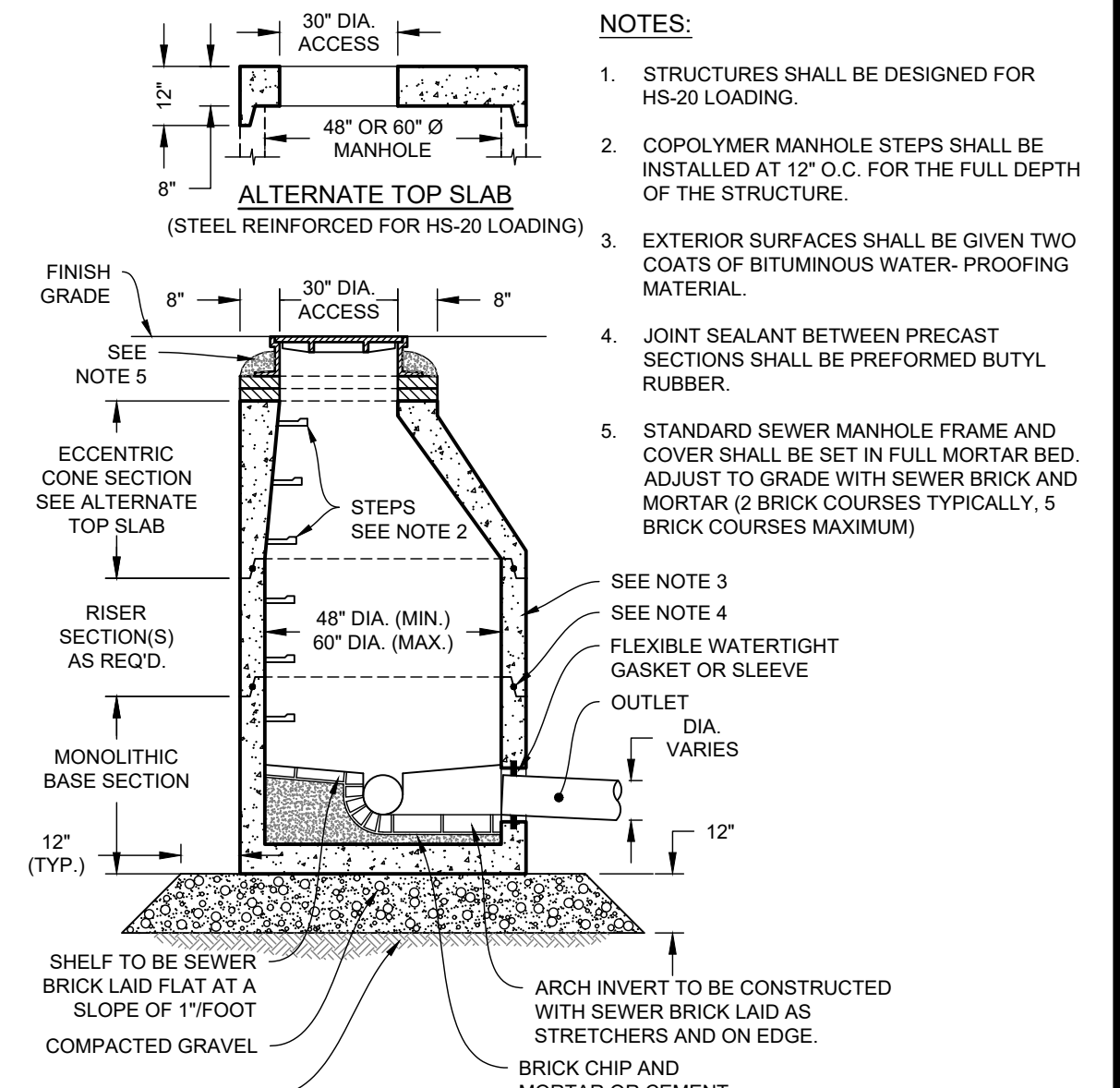
**6 HYDRANT**  
NOT TO SCALE



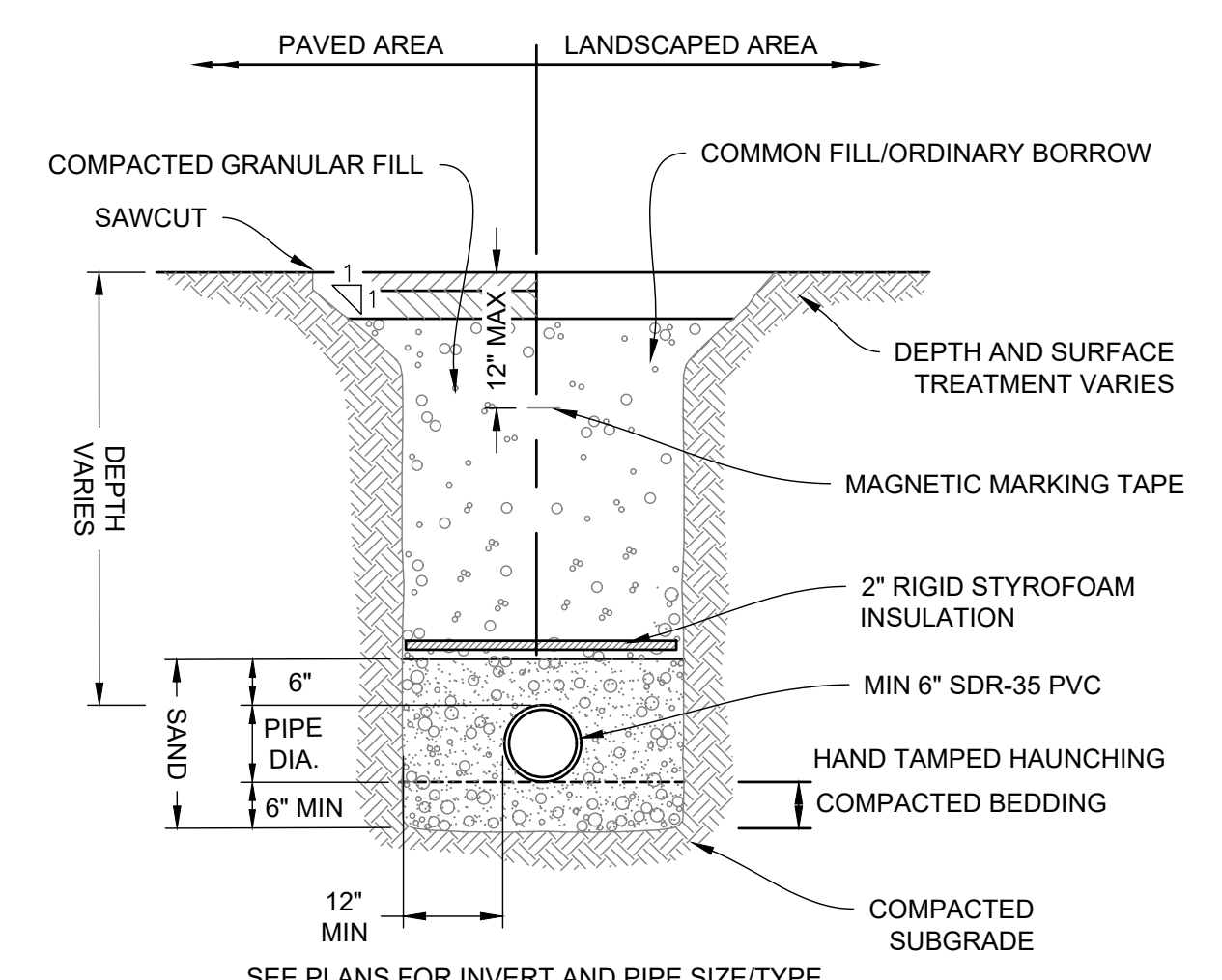
**7 WATER SERVICE INSTALLATION**  
NOT TO SCALE



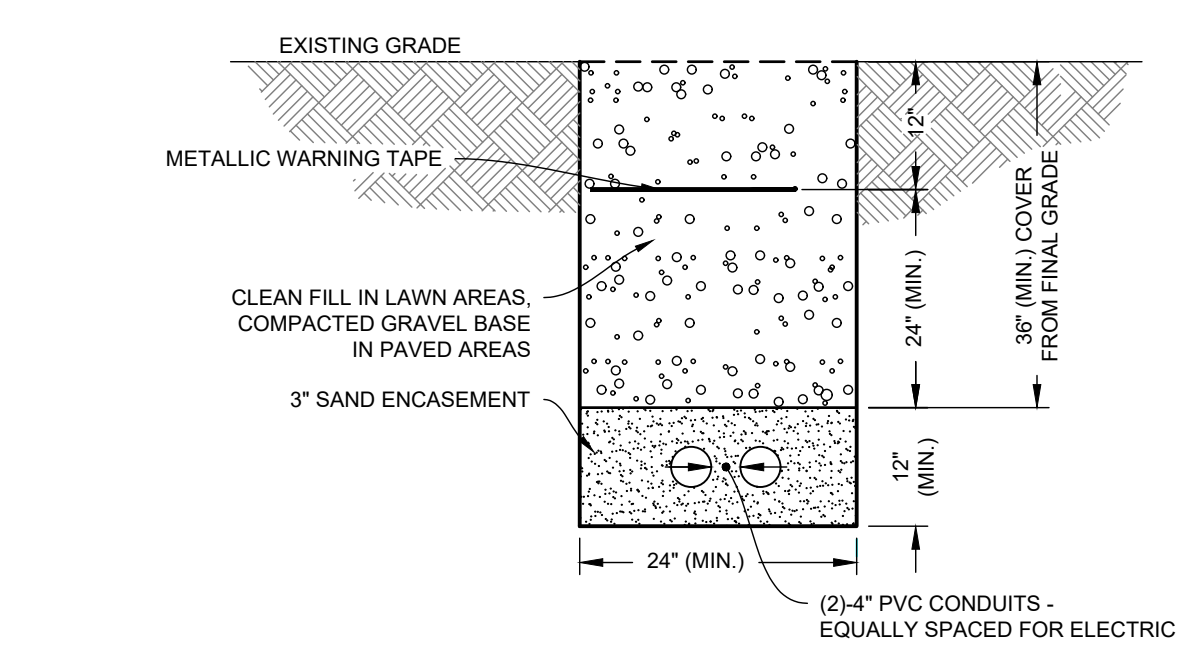
**8 SEWER CLEANOUT - PAVED AREA**  
NOT TO SCALE



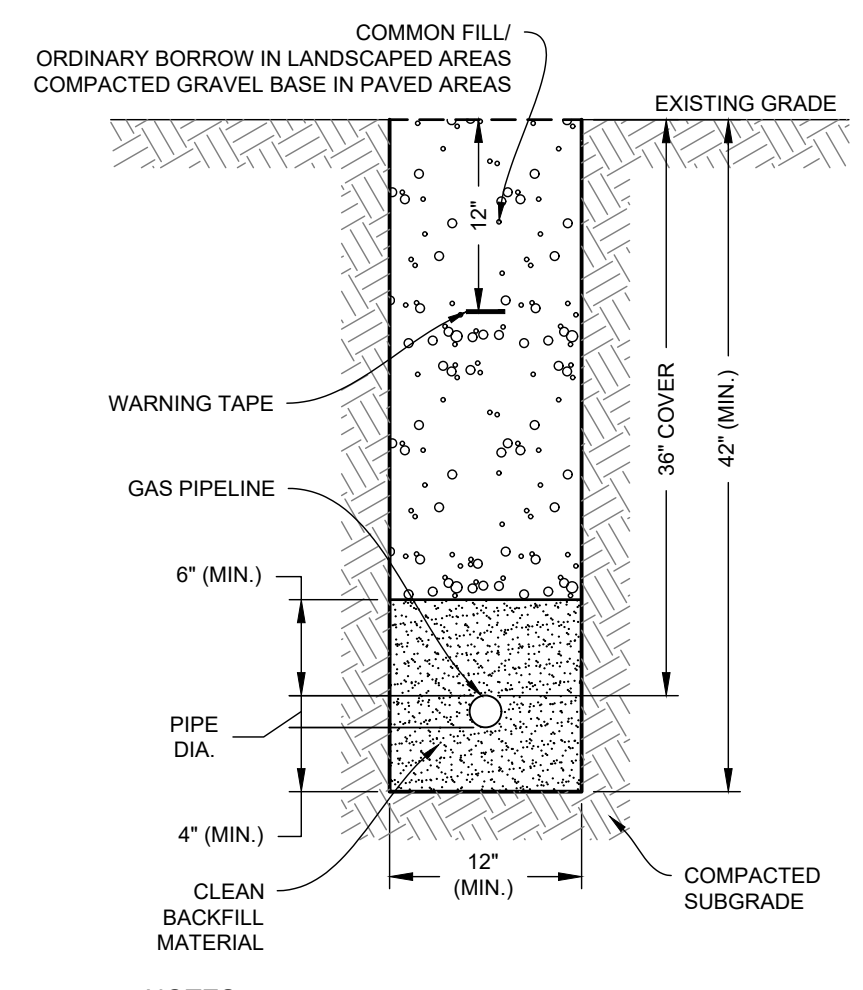
**9 SANITARY SEWER MANHOLE (SMH)**  
NOT TO SCALE



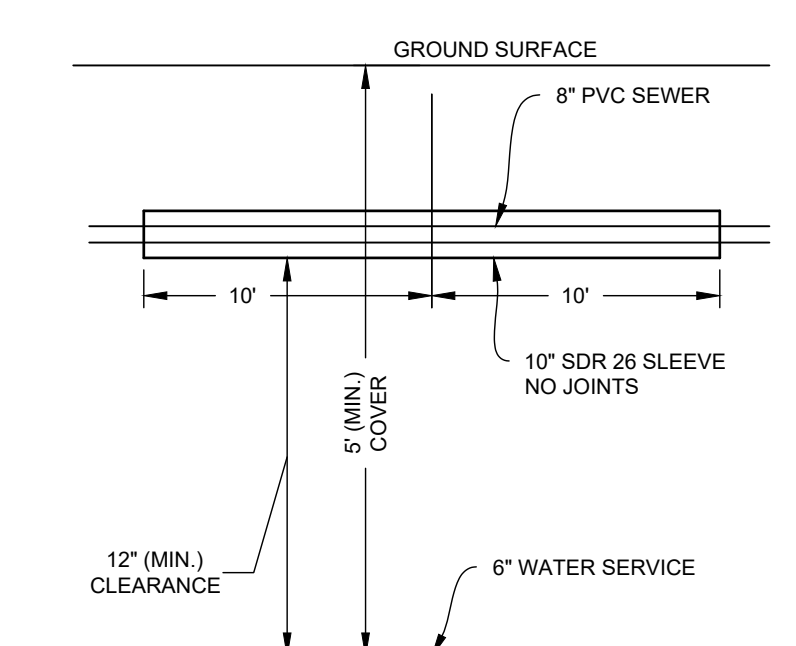
**10 SEWER MAIN TRENCH**  
NOT TO SCALE



**11 ELECTRIC/ TELECOMMUNICATION DUCT BANK**  
NOT TO SCALE



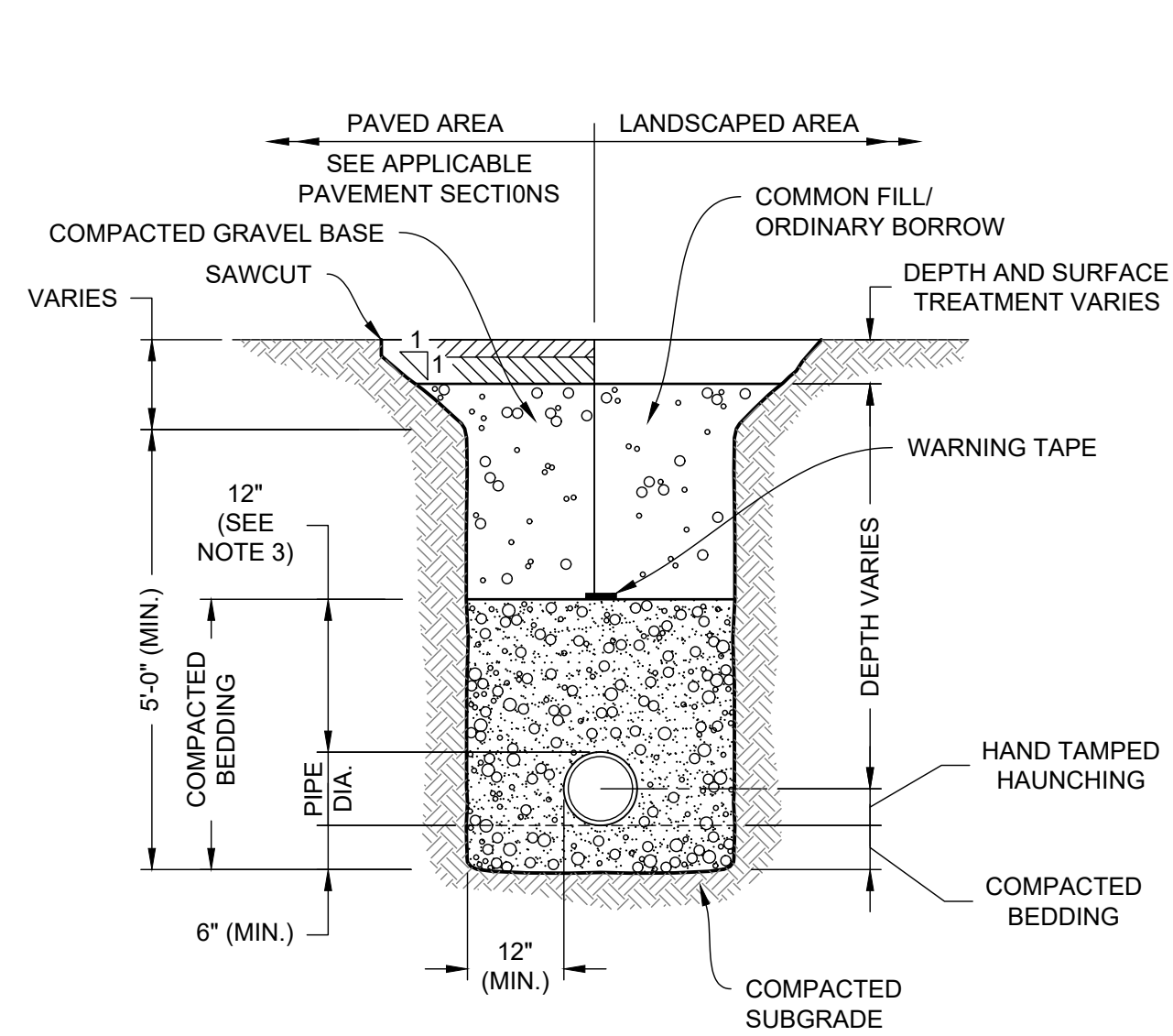
**12 GAS LINE TRENCH**  
NOT TO SCALE



**13 SEWER/WATER LINE CROSSING DETAIL**  
NOT TO SCALE

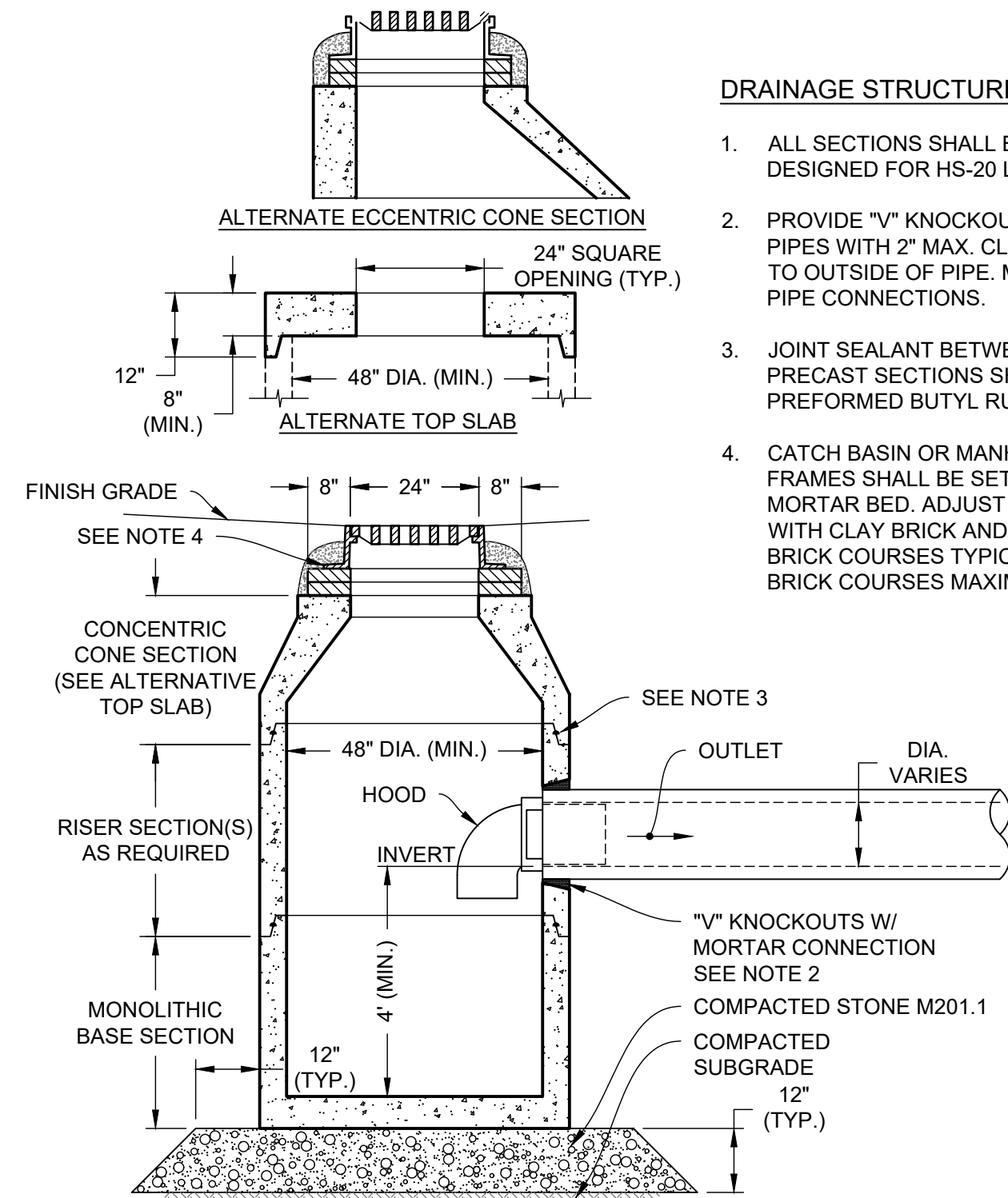


NO.	DATE	REVISIONS	BY
1.	2/21/25	PEER REVIEW COMMENTS	BCO
2.	3/31/2025	FINAL PEER REVIEW COMMENTS	BCO



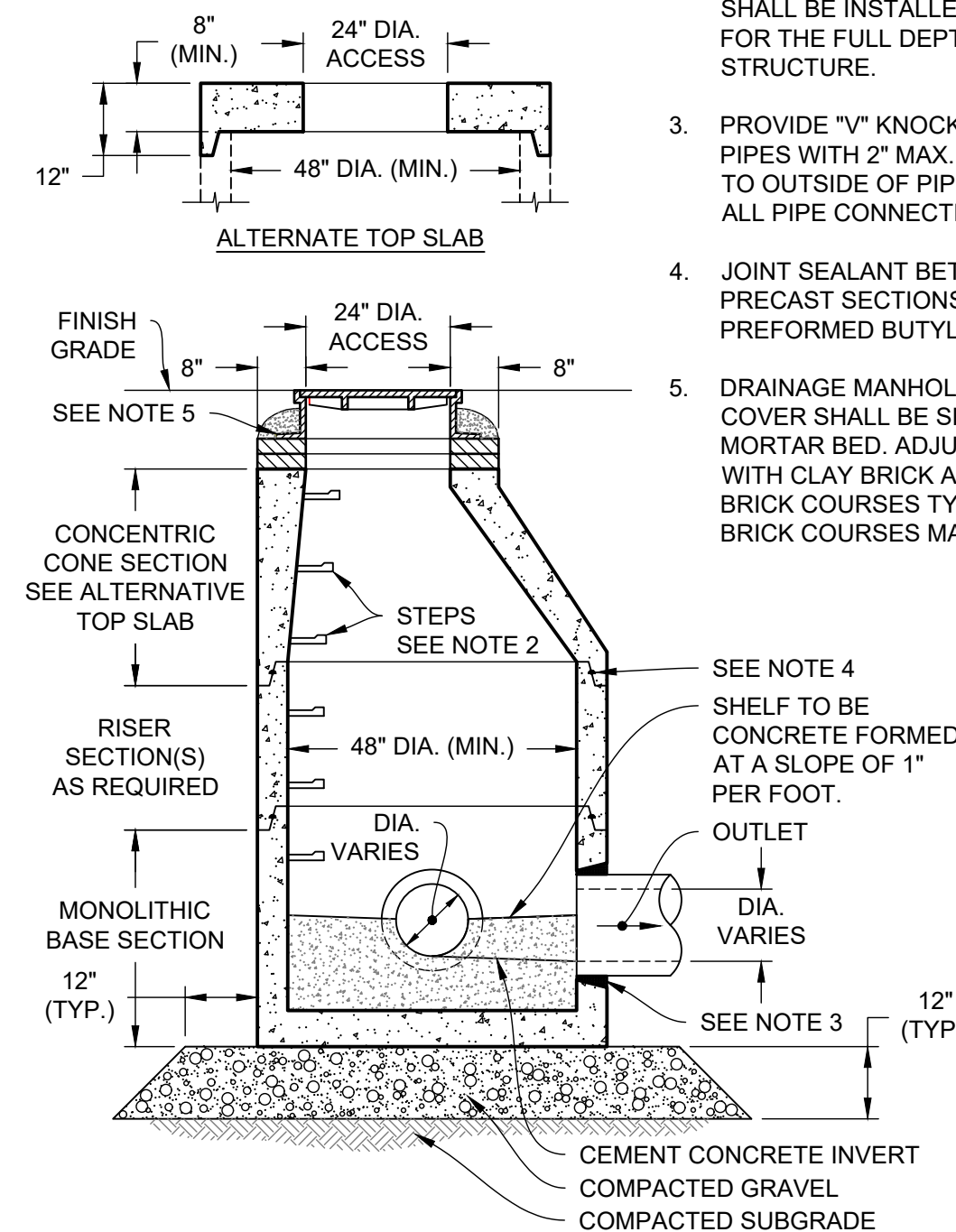
- NOTES:**
- WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
  - USE METALLIC TRACING/WARNING TAPE OVER ALL PIPES.
  - FOR HDPE PIPE, DIMENSION IS 24 INCHES.

**1 DRAINAGE TRENCH**  
NOT TO SCALE



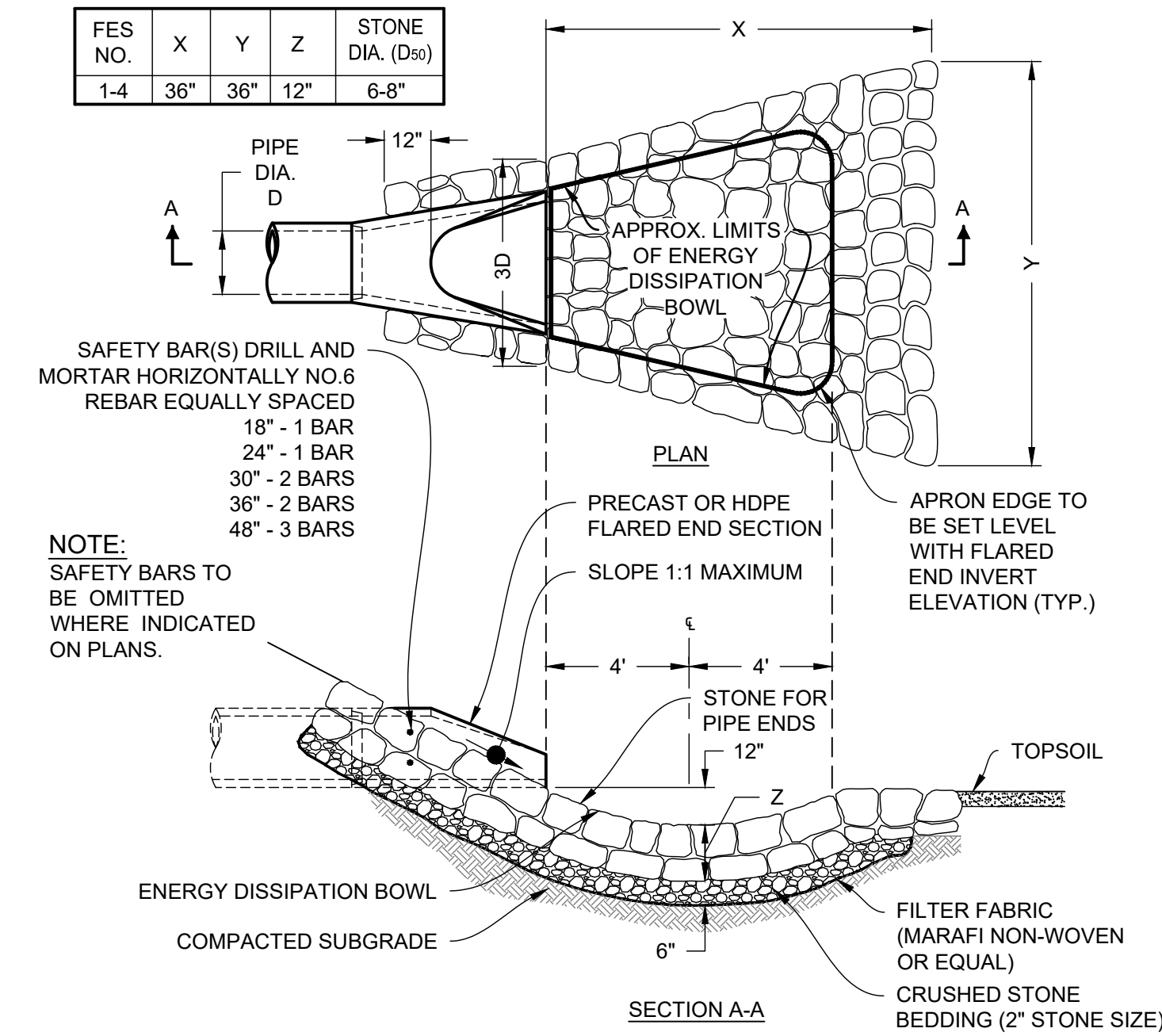
- DRAINAGE STRUCTURE NOTES:**
- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
  - PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
  - JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
  - CATCH BASIN OR MANHOLE FRAME SHALL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

**2 CATCH BASIN (CB) WITH HOOD**  
NOT TO SCALE

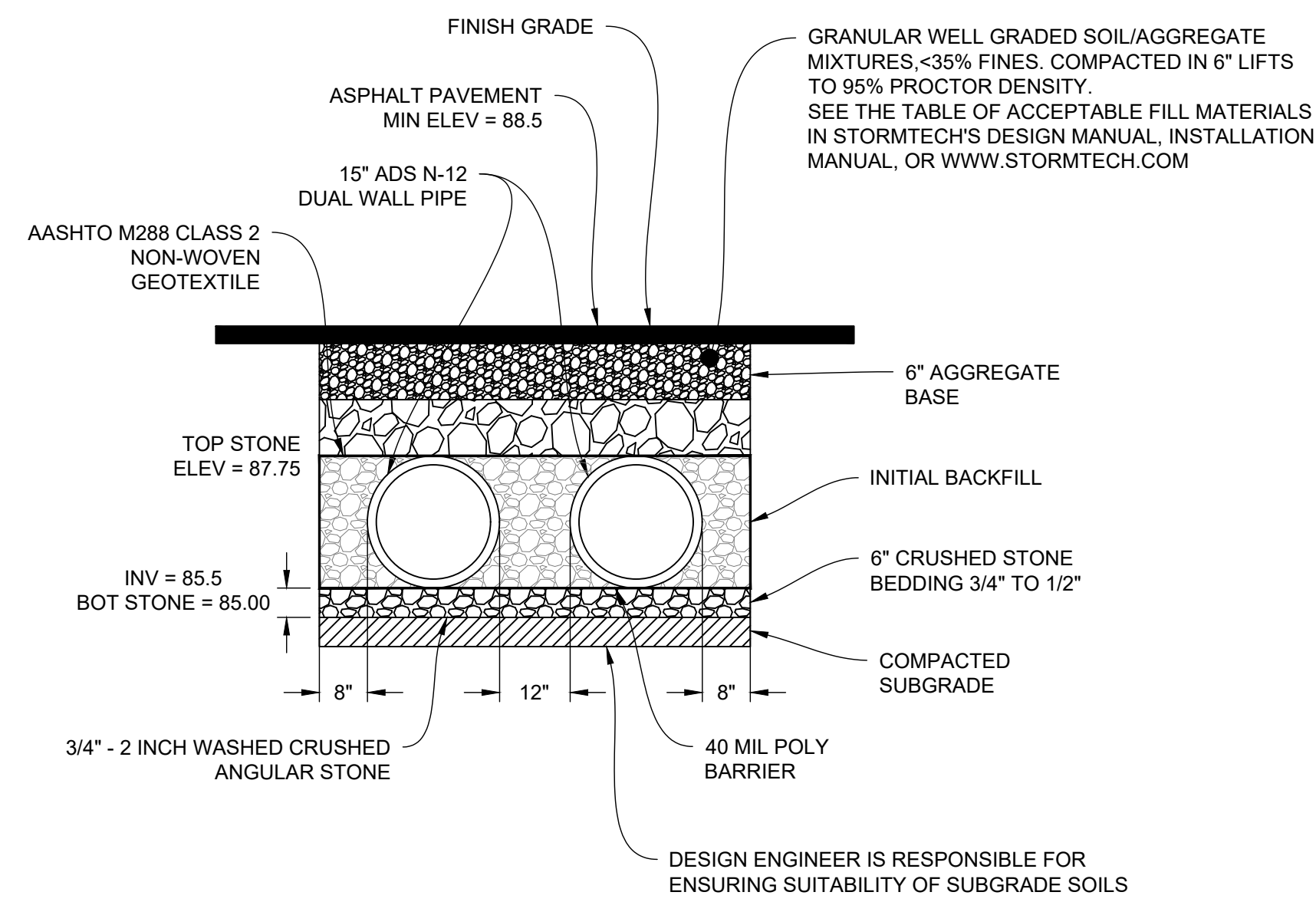


- NOTES:**
- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
  - COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE FULL DEPTH OF THE STRUCTURE.
  - PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
  - JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
  - DRAINAGE 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 MAXIMUM).

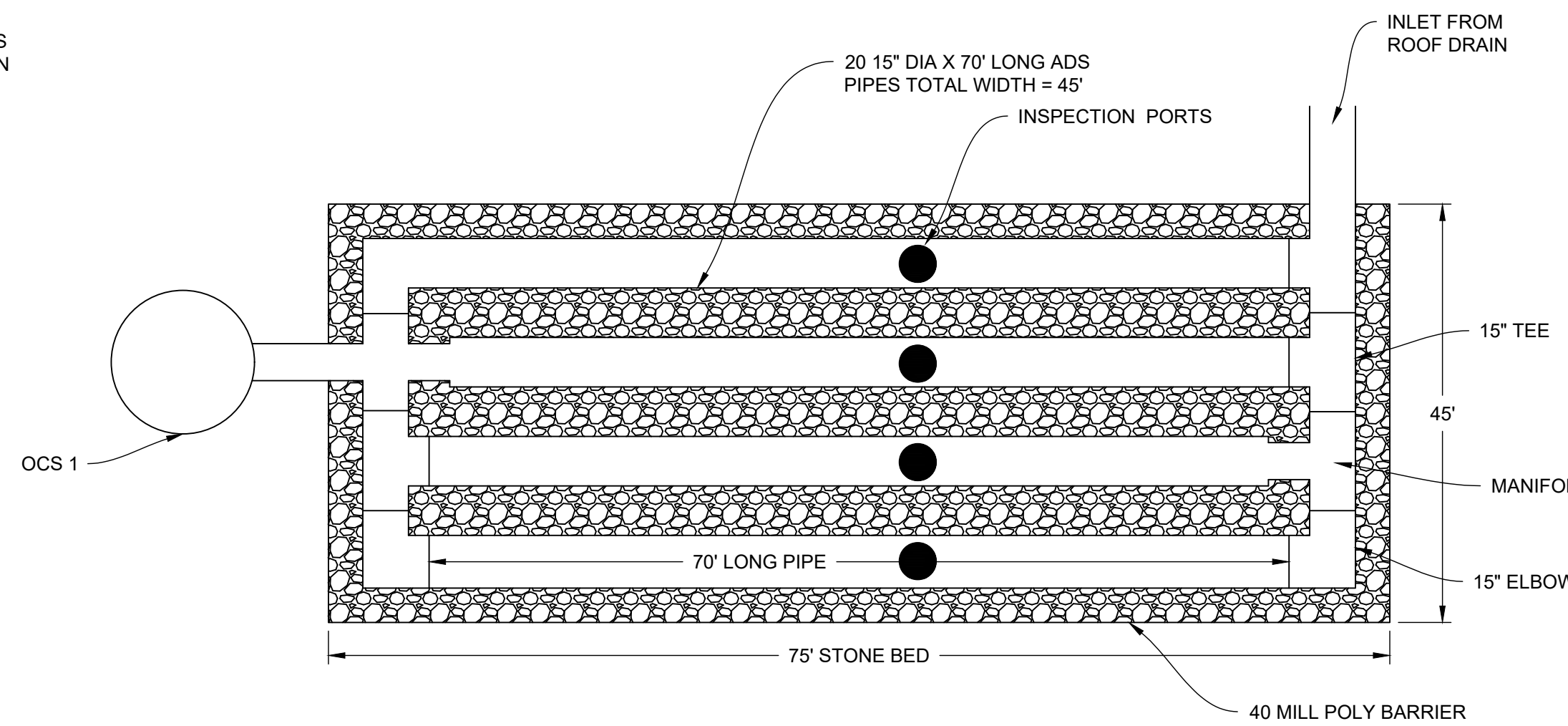
**3 DRAINAGE MANHOLE (DMH)**  
NOT TO SCALE



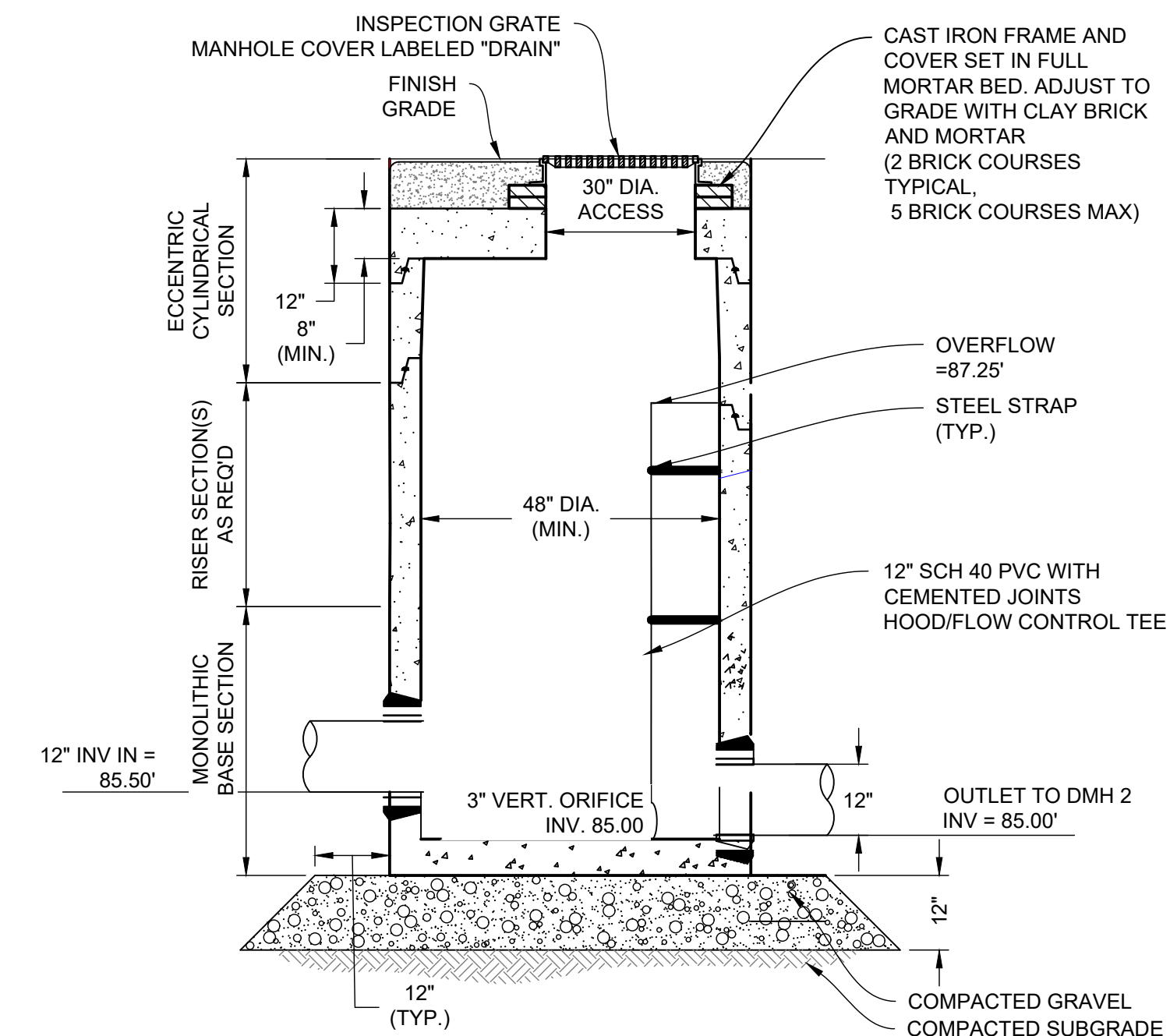
**4 FLARED END SECTION (FES) WITH STONE PROTECTION**  
NOT TO SCALE



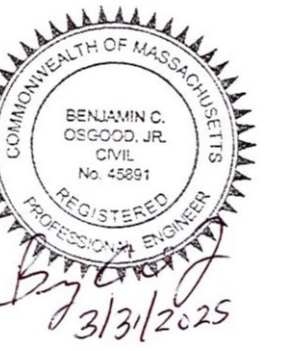
**5 BURIED PIPE SYSTEM - POND 3P**  
NOT TO SCALE



**6 BURIED PIPE SYSTEM DETAIL (PLAN VIEW) - POND 3P**  
NOT TO SCALE

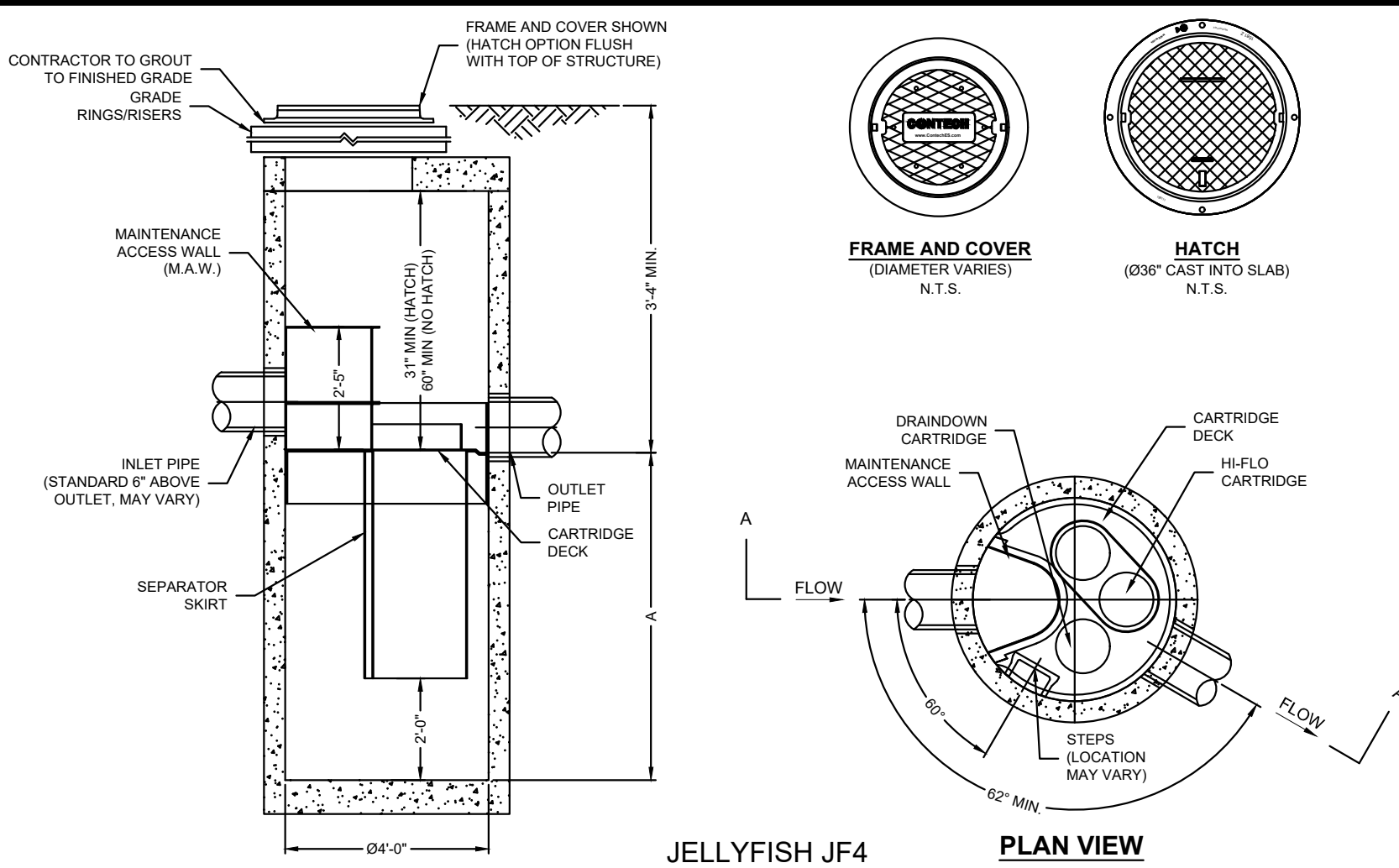


**7 OCS 1 - POND P1**  
NOT TO SCALE



NO.	DATE	REVISIONS	BY
1.	2/21/25	PEER REVIEW COMMENTS	BCO
2.	3/31/2025	FINAL PEER REVIEW COMMENTS	BCO

Z:\PROJECTS\CHC - CHANNEL BUILDING\142 - Dover Area Andover\ADVANCE CORRESPONDENCE\2024-19 - POND 3P\140'S RAINWATER\BIB\BIB14\_CS6003.dwg PLOTTED: 2/25/2025 12:38 PM BY: JAE PLOTSTYLE: ITTEN.NC500.dwg PROJECT STATUS: —



JELLYFISH JF4  
STANDARD DETAIL  
OFFLINE CONFIGURATION

### JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. THE STANDARD MANHOLE STYLE IS SHOWN. Ø48" MANHOLE JELLYFISH PEAK TREATMENT CAPACITY IS 0.45 CFS. IF THE SITE CONDITIONS EXCEED 0.45 CFS AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

**CARTRIDGE SELECTION**

CARTRIDGE DEPTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-5"	5'-3"	4'-2"	3'-2"
FLOW RATE HIGH-FLO / DRAINDOWN (cfs) (per cart)	0.18 / 0.09	0.13 / 0.065	0.09 / 0.045	0.05 / 0.025
MAX. CARTS HIGH-FLO / DRAINDOWN	2 / 1			

- 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 REPRESENTATIVE. [www.ContechES.com](http://www.ContechES.com)
  - JELLYFISH 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 HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 3', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
  - STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.
  - NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.
- 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 STRUCTURE (LIFTING CLUTCHES PROVIDED)
  - CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)
  - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
  - CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 740-3318.

### SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	ID
WATER QUALITY FLOW RATE (cfs)	WQFLOW
PEAK FLOW RATE (cfs)	PEAK
RETURN PERIOD OF PEAK FLOW (yrs)	RETURN
# OF CARTRIDGES REQUIRED (HF / DD)	CART
CARTRIDGE SIZE	SIZE

PIPE DATA:	I.E.	MATL	DIA	SLOPE %	HGL
INLET PIPE #1	99.55	HDPE	18"	0.5%	HGL
OUTLET PIPE	99.05	RCP	12"		

RIM ELEVATION: 103.5

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT

NOTES/SPECIAL REQUIREMENTS:  
\* PER ENGINEER OF RECORD

### SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	ID
WATER QUALITY FLOW RATE (cfs)	WQFLOW
PEAK FLOW RATE (cfs)	PEAK
RETURN PERIOD OF PEAK FLOW (yrs)	RETURN
# OF CARTRIDGES REQUIRED (HF / DD)	CART
CARTRIDGE LENGTH	SIZE

PIPE DATA:	I.E.	MATL	DIA	SLOPE %	HGL
INLET #1	82.55	HDPE	18"	0.5%	HGL
OUTLET	82.05	HDPE	18"	0.5%	HGL

RIM ELEVATION: 86.25

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT

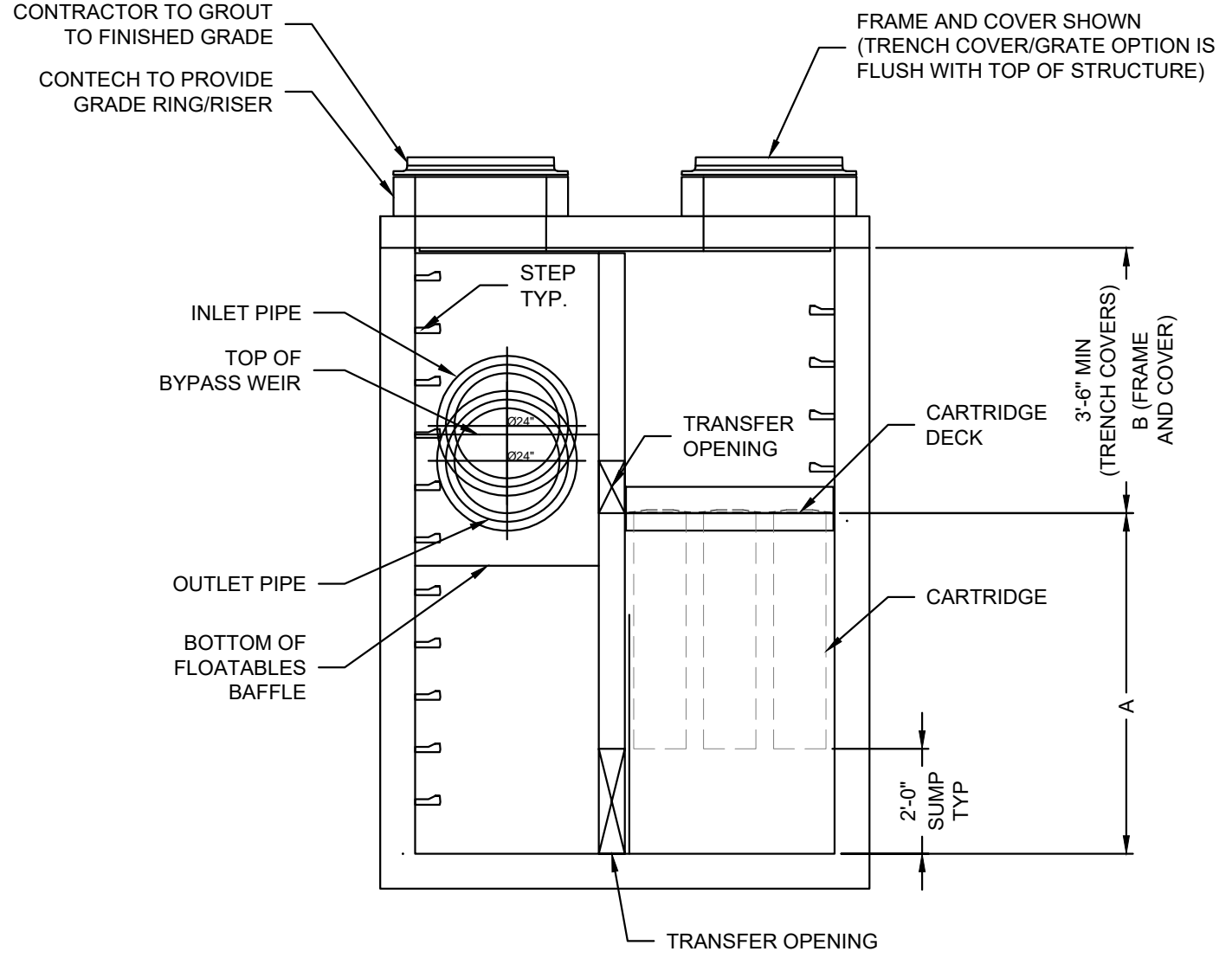
NOTES/SPECIAL REQUIREMENTS:  
\* PER ENGINEER OF RECORD

### JELLYFISH DESIGN NOTES

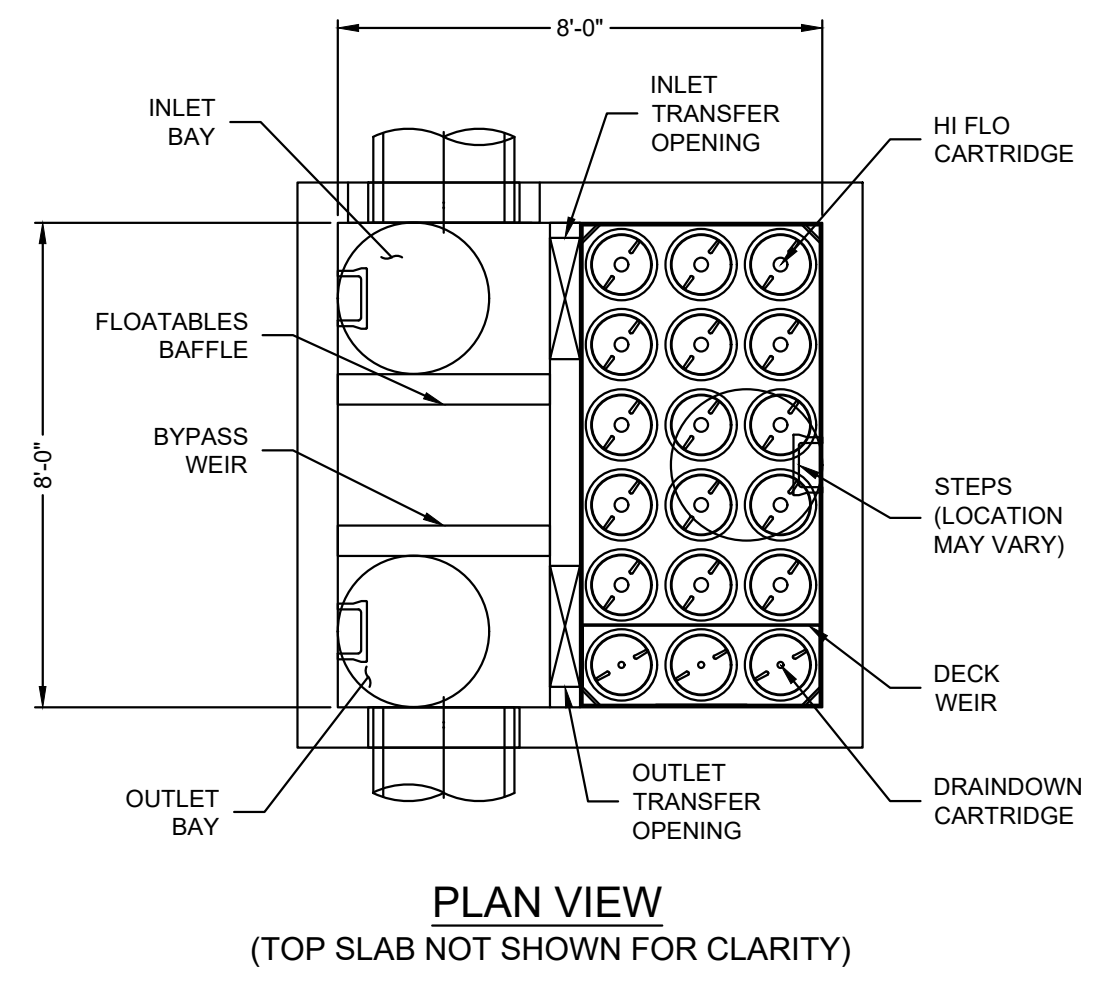
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD

**CARTRIDGE SELECTION**

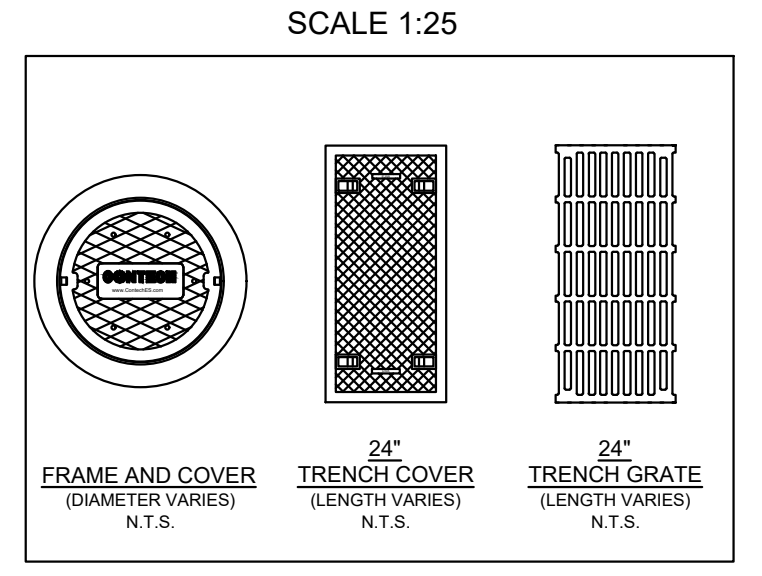
CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	2.94	2.21	1.47	0.81
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00



ELEVATION VIEW

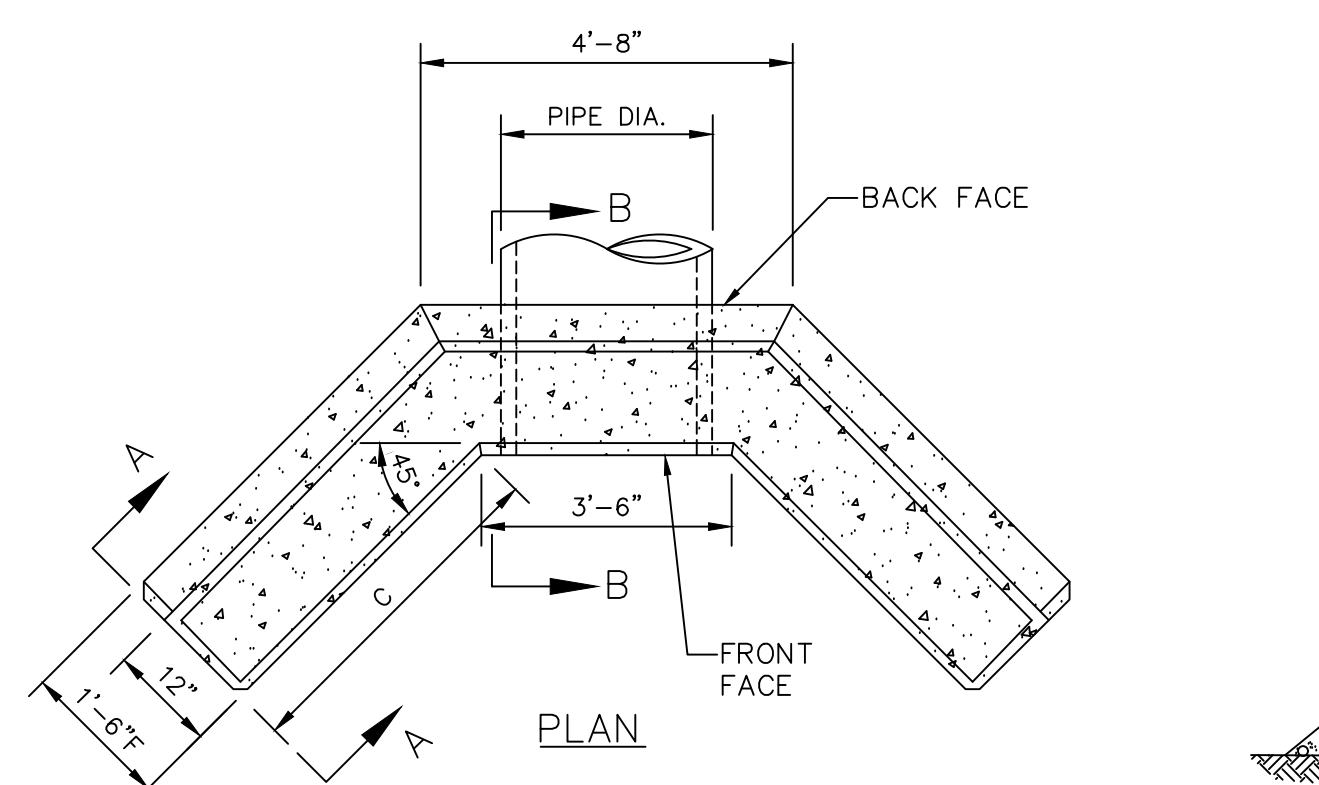


JELLYFISH JFPD0808  
STANDARD DETAIL  
PEAK DIVERSION CONFIGURATION

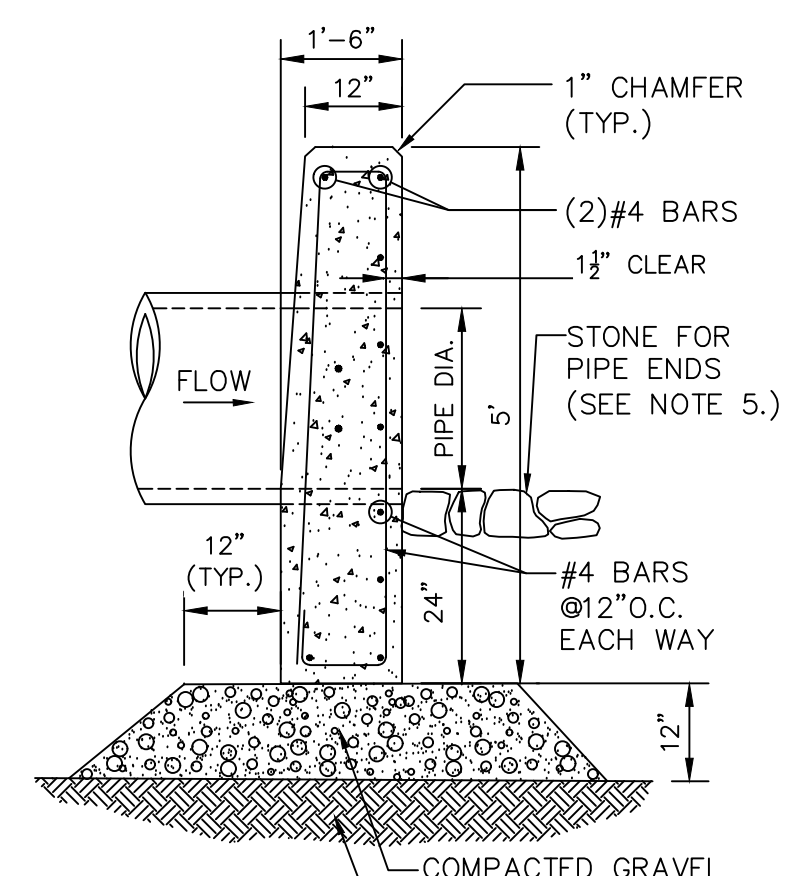


- GENERAL NOTES:**
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  - STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
  - OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
  - THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
  - NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

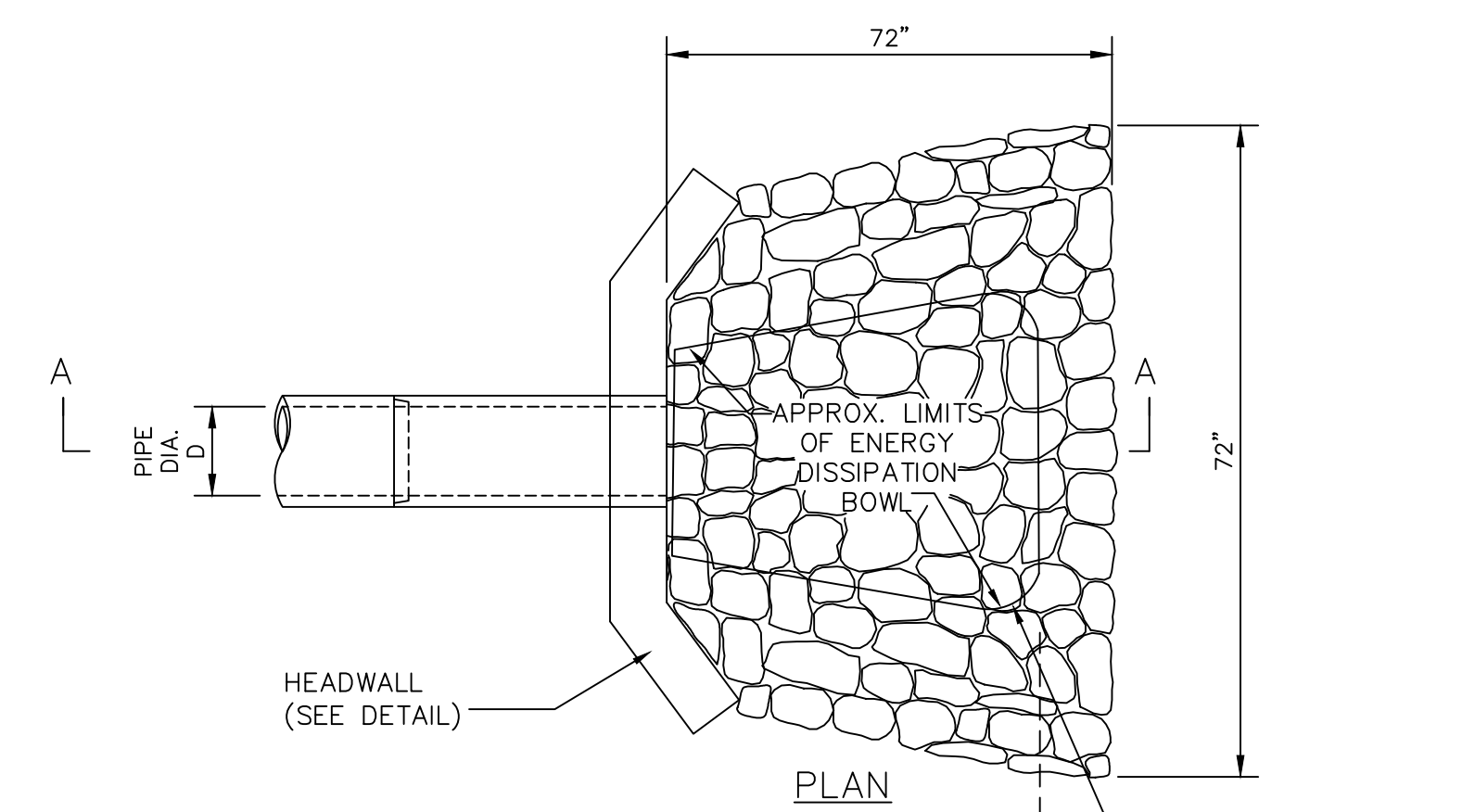
- INSTALLATION NOTES:**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
  - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
  - CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
  - CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.



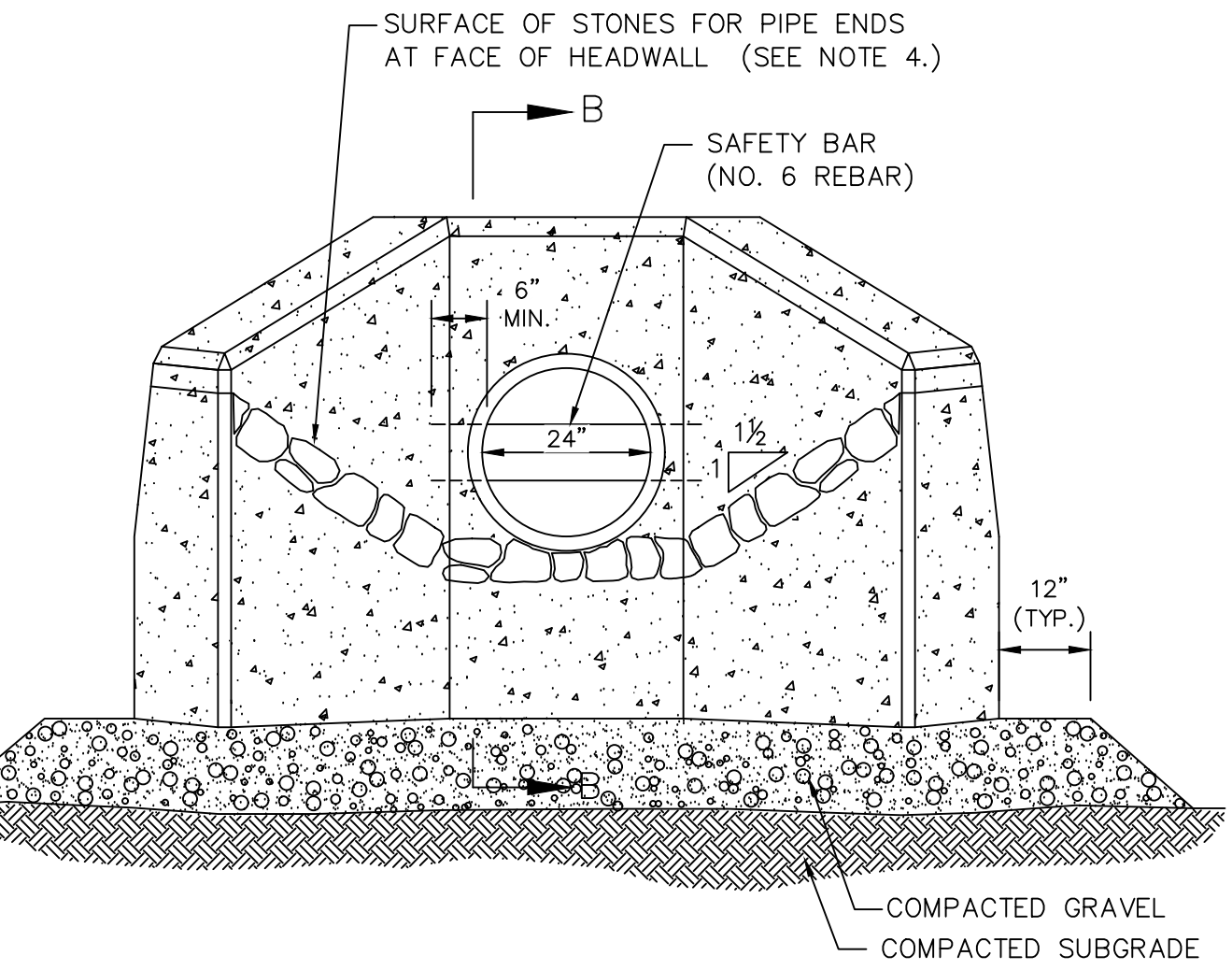
PLAN



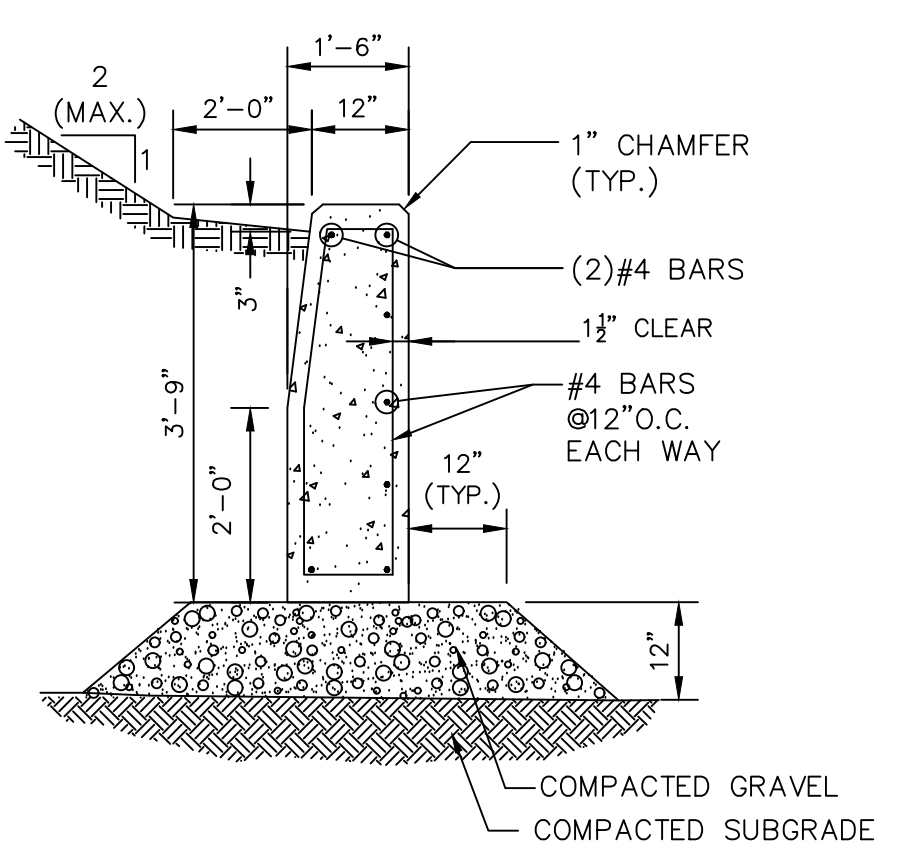
SECTION B-B



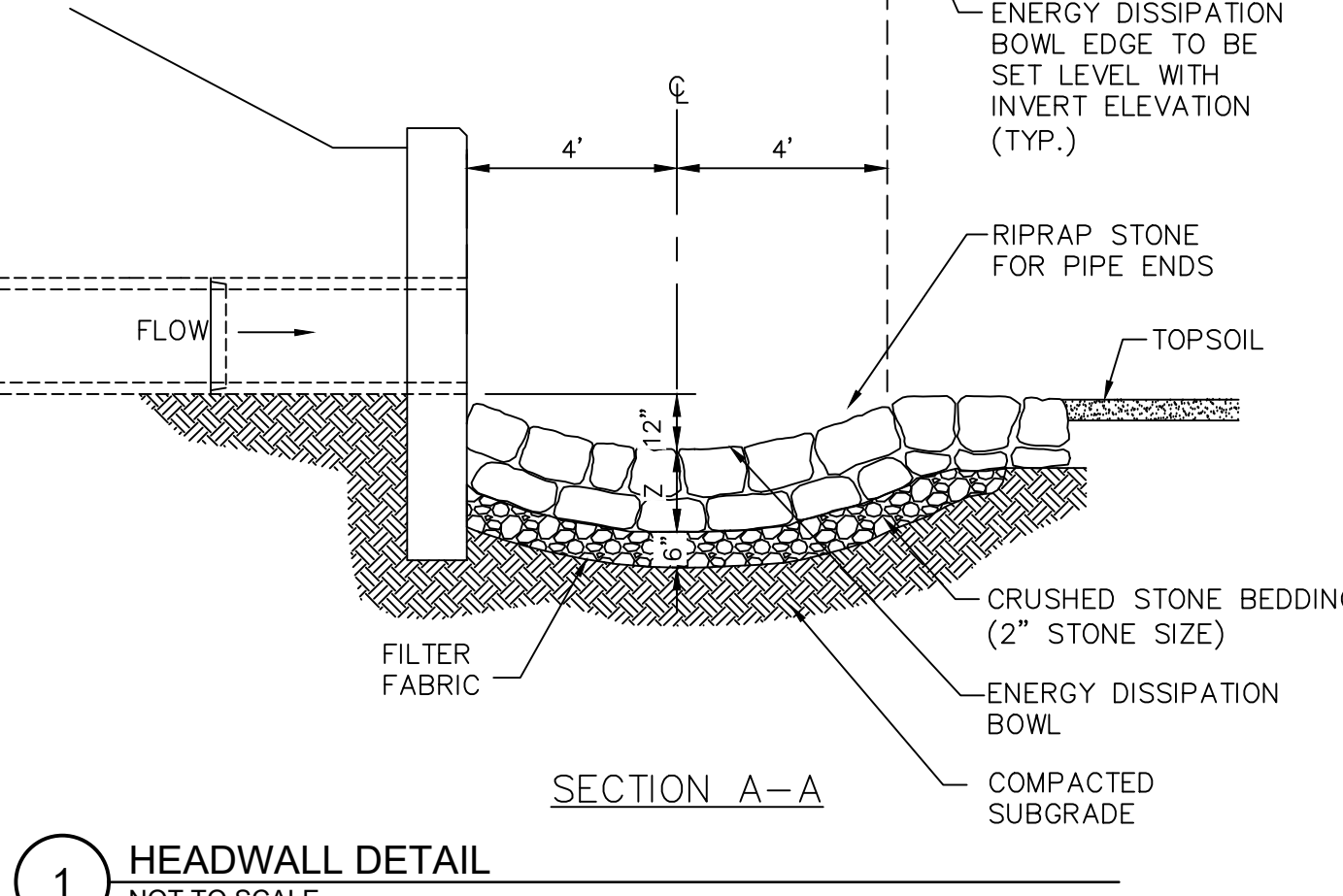
PLAN



FRONT ELEVATION



SECTION A-A



SECTION A-A

1 HEADWALL DETAIL  
NOT TO SCALE

**Ranger Engineering Group, Inc.**  
130 Main Street, Suite 202  
Salem NH, 03079  
Tel: 978-208-1762  
[rangereg.com](http://rangereg.com)



**SITE PLAN**  
140 HAVERHILL STREET  
ANDOVER MA, 01810

**DRAINAGE DETAILS**

**MEDICO 140, LLC**  
355 MIDDLESEX AVE. SUITE 7  
WILMINGTON, MA 01887

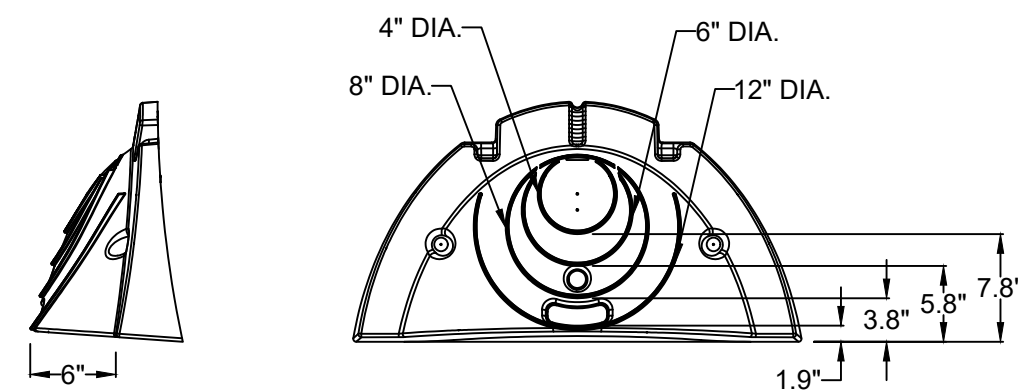
NO.	DATE	REVISIONS	BY
1.	2/21/25	PEER REVIEW COMMENTS	BCO
2.	3/31/2025	FINAL PEER REVIEW COMMENTS	BCO

PROJECT: 19-152  
DATE: DECEMBER 18, 2024  
DRAWING SCALE: 1"= 40'  
DRAWN BY: OMR  
APPROVED BY: BCO

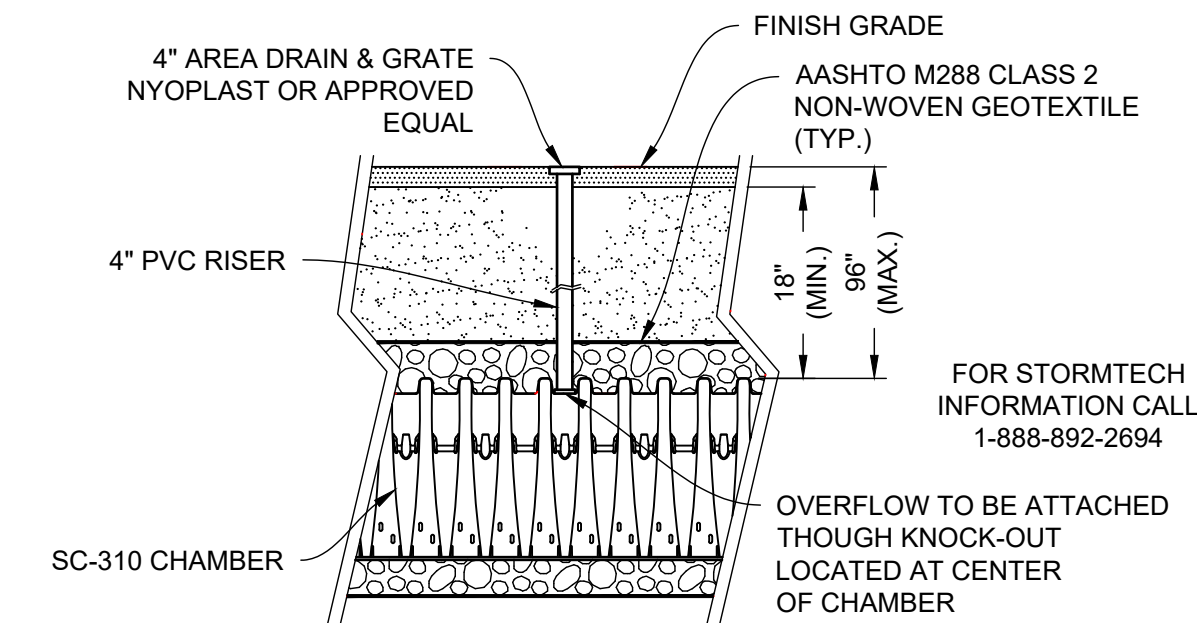
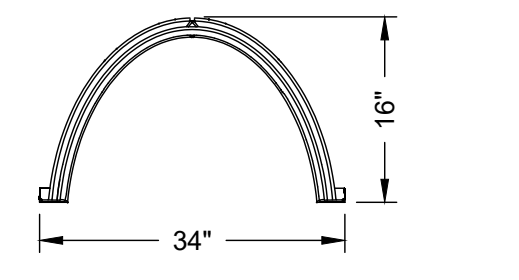
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SHEET 15 OF 19

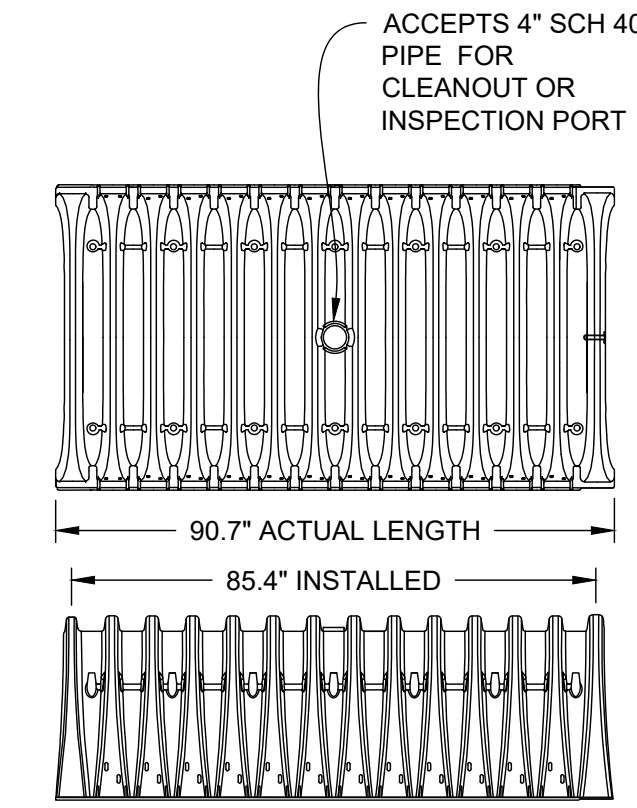
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 PLOT STYLE: T11En\_Vis.dwt  
 PROJECT STATUS: --



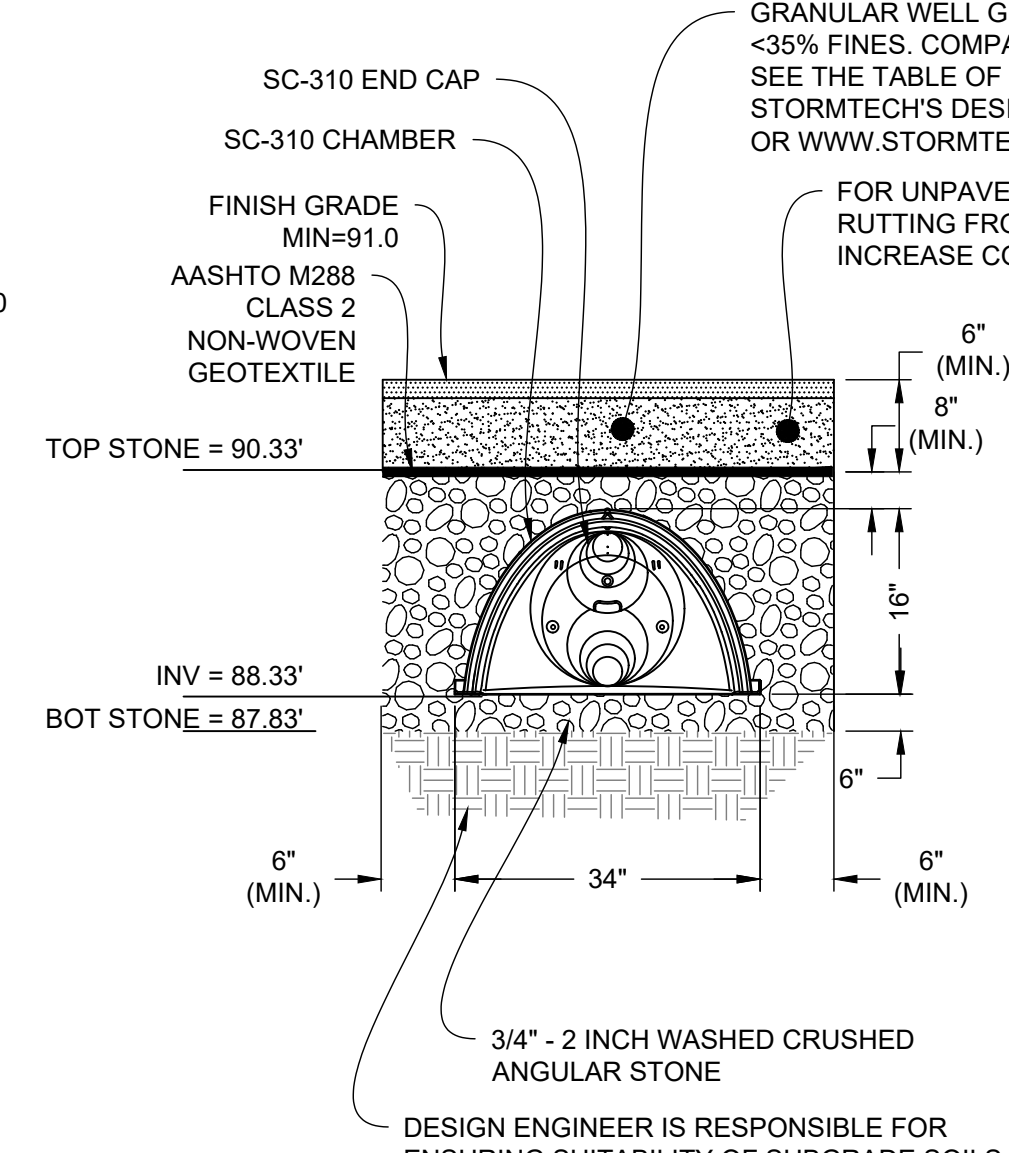
1 STORMTECH SC-310 CHAMBER - END CAP DETAIL  
NOT TO SCALE



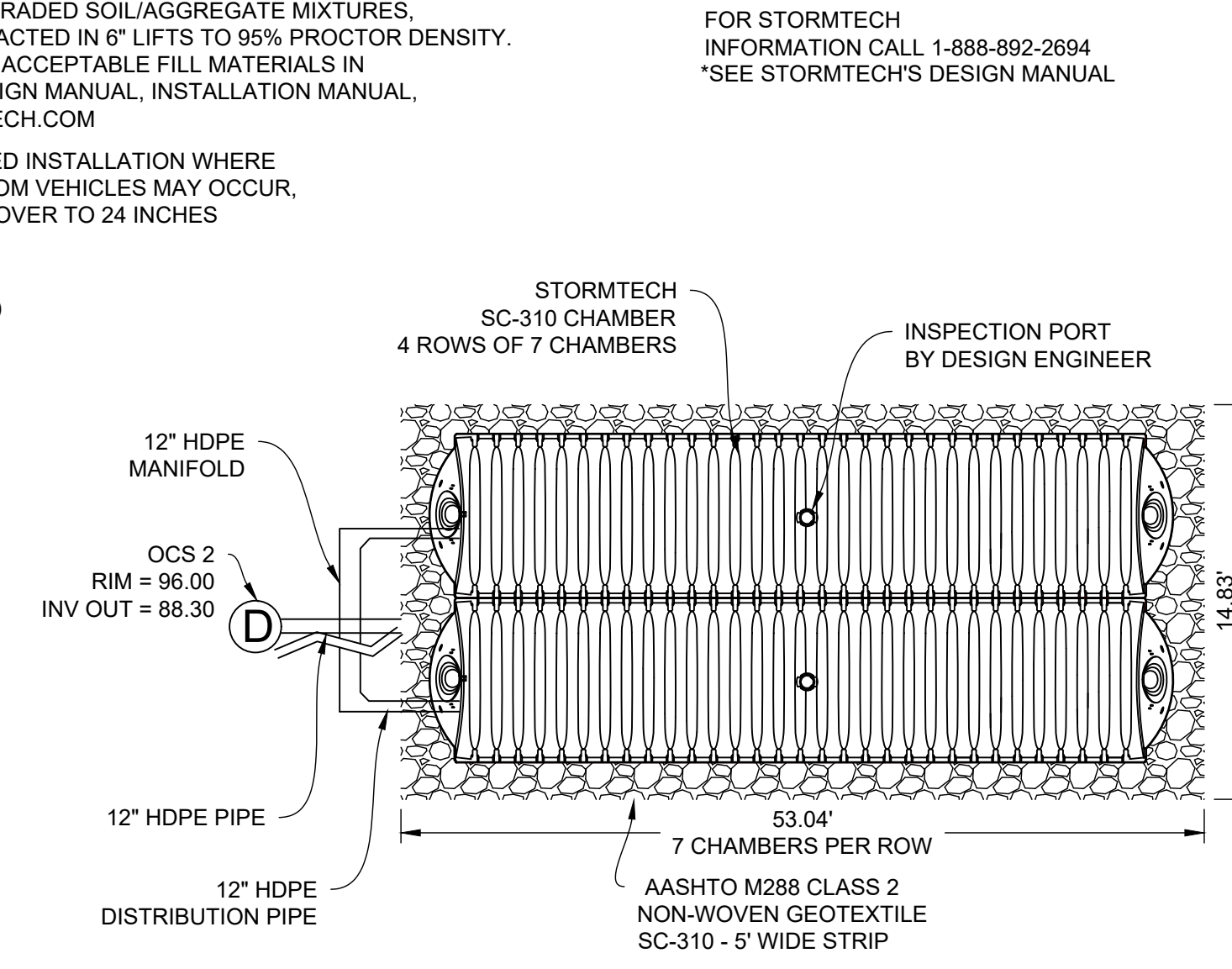
2 STORMTECH SC-310 CHAMBER - OVERFLOW DETAIL  
NOT TO SCALE



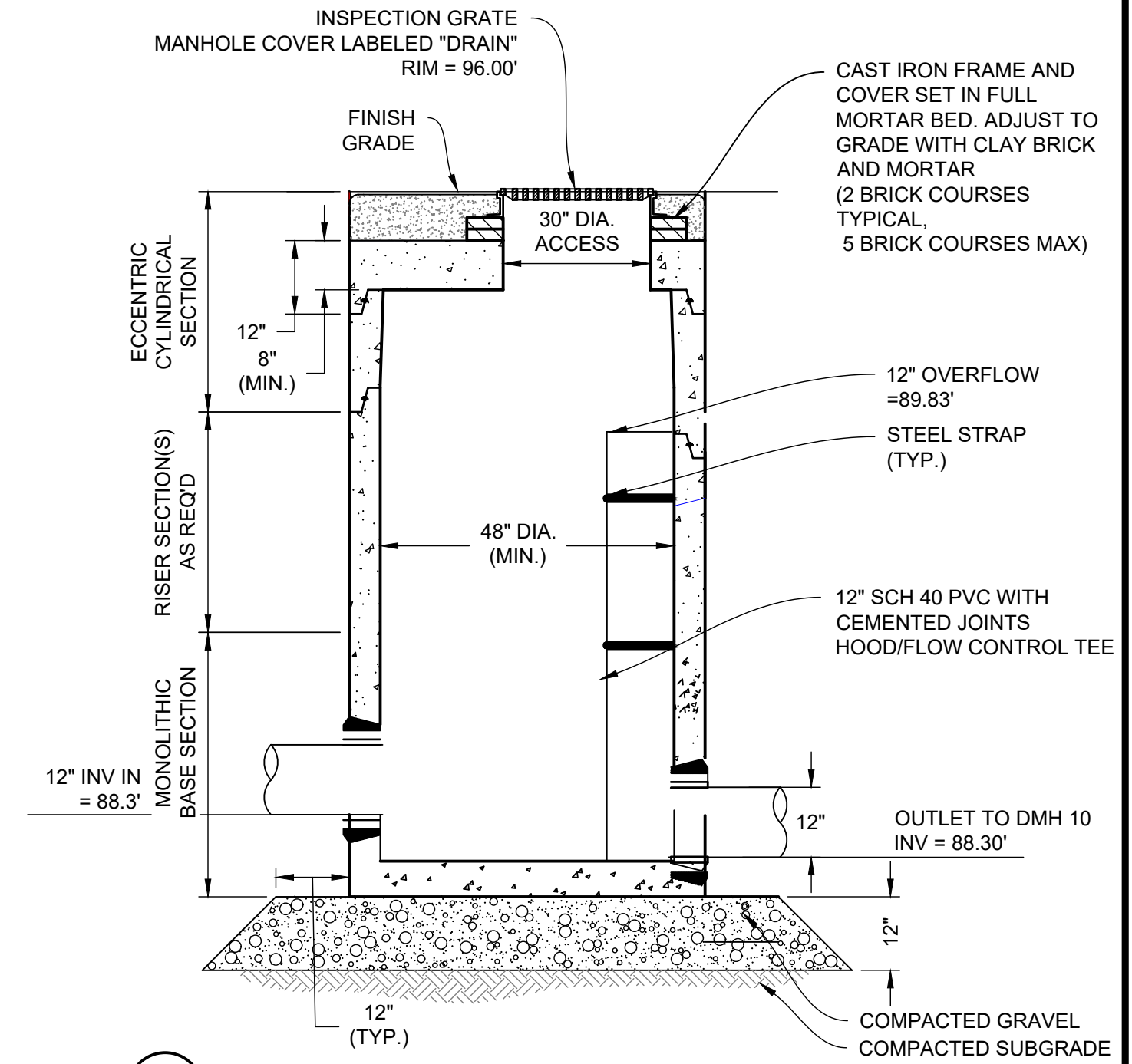
3 STORMTECH SC-310 CHAMBER DETAIL  
NOT TO SCALE



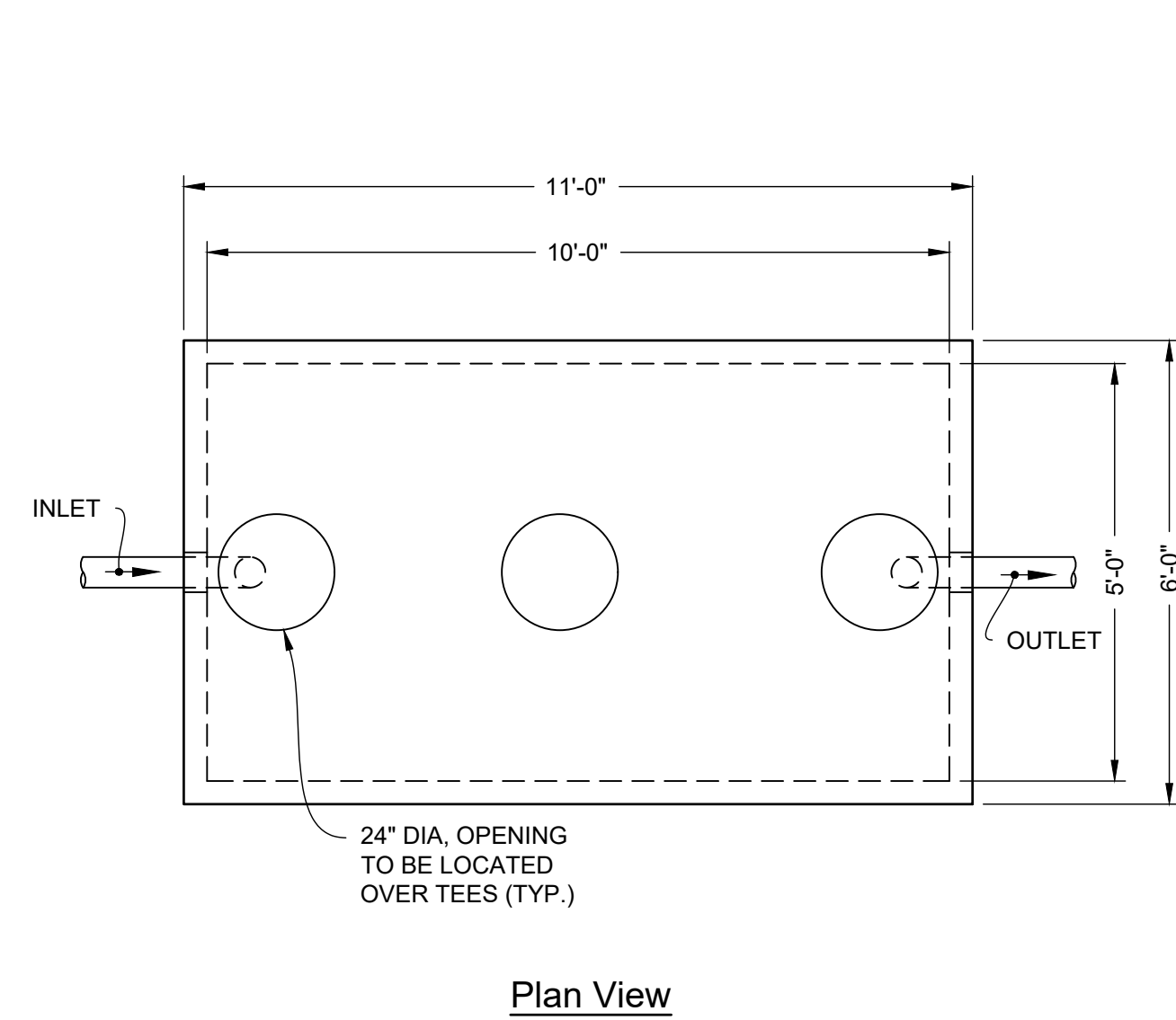
4 STORMTECH SC-310 CHAMBER SYSTEM - POND P2  
NOT TO SCALE



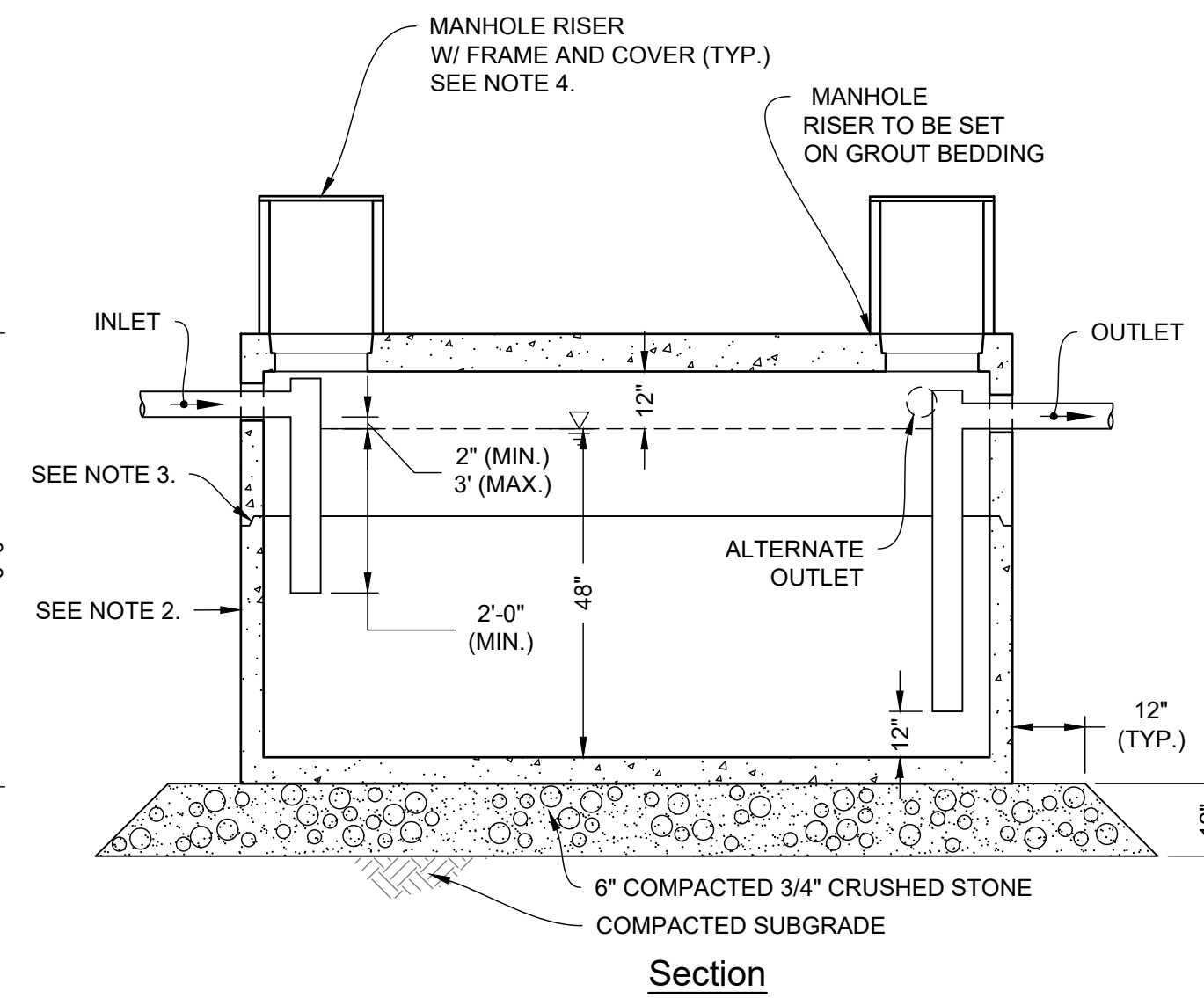
5 STORMTECH SC-310 CHAMBER DETAIL (PLAN VIEW) - POND P2  
NOT TO SCALE



6 OCS 2 - POND P2  
NOT TO SCALE

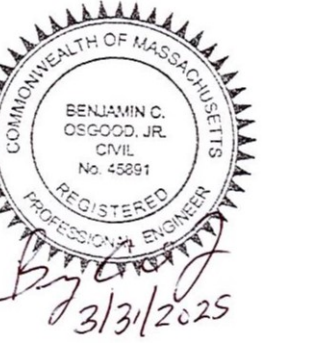


7 PRECAST CONCRETE GREASE TRAP - 1,500 GALLON  
NOT TO SCALE



NOTES:

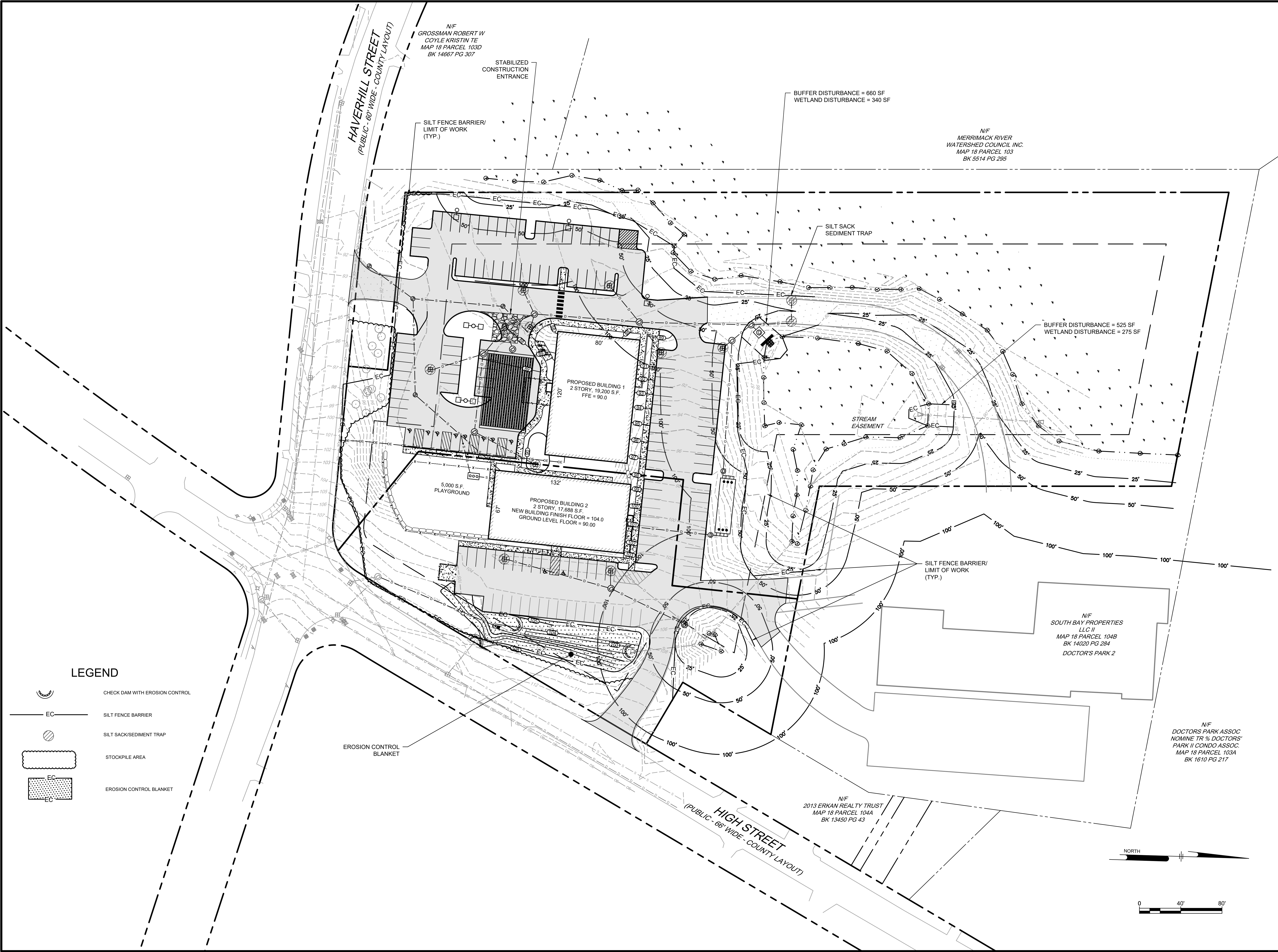
- STRUCTURE SHALL BE DESIGNED FOR HS-20 LOADING.
- EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATER-PROOFING MATERIAL.
- JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
- STANDARD 24-INCH SEWER MANHOLE FRAME AND COVER SHALL BE LOCATED OVER TEES AND SET IN FULL MORTAR BED. ADJUST TO GRADE WITH SEWER BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM)
- PIPING SHALL BE SCH 40 PVC. INTERNAL PIPE DIAMETER SHALL BE SAME SIZE AS OUTLET PIPE.




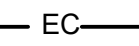


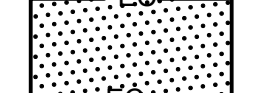
NO.	DATE	REVISIONS	BY
2	3/31/2025	FINAL PEER REVIEW COMMENTS	BCO
1	2/21/25	PEER REVIEW COMMENTS	BCO

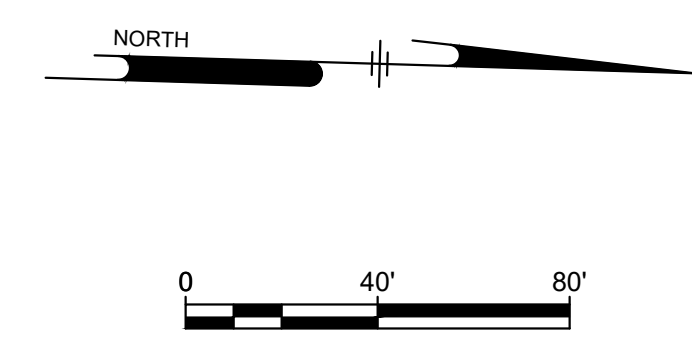
PROJECT	19-152
DATE	DECEMBER 18, 2024
DRAWING SCALE	1"= 40'
DRAWN BY	OMR
APPROVED BY	BCO

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**LEGEND**

-  CHECK DAM WITH EROSION CONTROL
-  SILT FENCE BARRIER
-  SILT SACK/SEDIMENT TRAP
-  STOCKPILE AREA
-  EROSION CONTROL BLANKET



**Ranger Engineering Group, Inc.**  
 130 Main Street, Suite 202  
 Salem NH, 03079  
 Tel: 978-208-1762  
 rangereng.com



**SITE PLAN**  
 140 HAVERHILL STREET  
 ANDOVER MA, 01810

**EROSION AND SEDIMENT CONTROL PLAN**

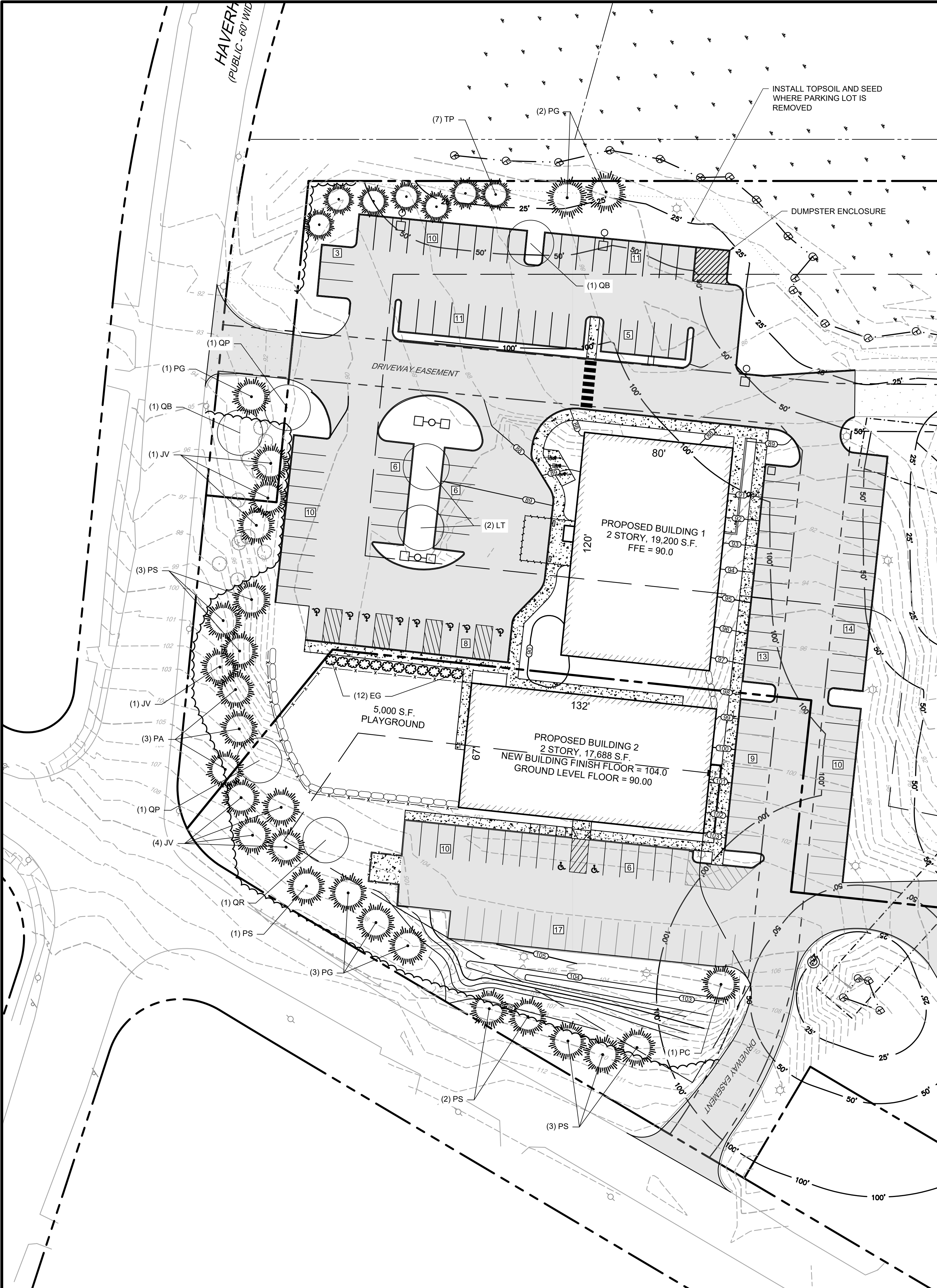
MEDICO 140, LLC  
 355 MIDDLESEX AVE SUITE 7  
 WILMINGTON, MA 01887

DATE	NO.	REVISIONS	BY
3/31/2025	2	FINAL PEER REVIEW COMMENTS	BCO
2/21/25	1	PEER REVIEW COMMENTS	BCO

PROJECT: 19-152  
 DATE: DECEMBER 18, 2024  
 DRAWING SCALE: 1" = 40'  
 DRAWN BY: OMR  
 APPROVED BY: BCO



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**PLANT SCHEDULE**

**EVERGREEN TREE:**

TREES KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE
IV	8	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	5-6' HT
PA	3	PICEA ABIES	NORWAY SPRUCE	5-6' HT
PG	7	PICEA GLAUCA	WHITE SPRUCE	5-6' HT
PS	8	PINUS STROBUS	EASTERN WHITE PINE	5-6' HT
TP	7	THUJA PLICATA	GREEN GIANT ARBORVITAE	5-6' HT
EG	12	THUJA OCCIDENTALIS	EMERALD GREEN ARBORVITAE	5-6' HT

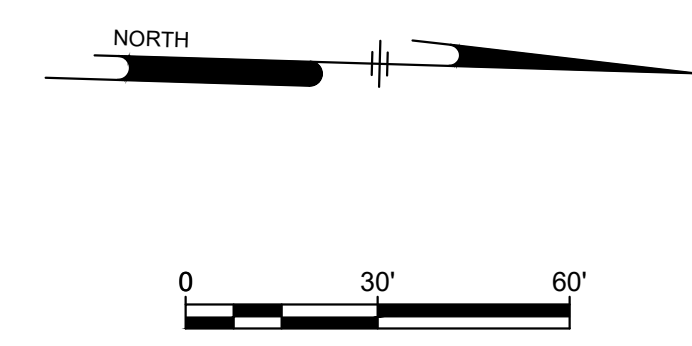
**DECIDUOUS TREE:**

TREES KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE
AR	1	ACER RUBRUM 'AUTUMN BLAZE'	AUTUMN BLAZE MAPLE	3" CAL.
CC	3	CERCIS CANADENSIS 'MINNESOTA STRAIN'	MINN. STRAIN EASTERN REDBUD	3" CAL.
CK	1	CLADRASTIS KENTUCKEA	YELLOWWOOD	3" CAL.
CF	2	CORNUS FLORIDA	FLOWERING DOGWOOD	2.5" CAL.
LS	1	LIDQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA'	FRUITLESS SWEETGUM	3" CAL.
LT	2	LIRIODENDRON TULIPIFERA	TULIPTREE	3" CAL.
NS	1	NYSSA SYLVATICA	WHITE SPRUCE	3" CAL.
OB	4	QUERCUS BICOLOR	SWAMP WHITE OAK	3" CAL.
QP	3	QUERCUS PALUSTRIS	PIN OAK	3" CAL.
QR	1	QUERCUS RUBRA	NORTHERN RED OAK	3" CAL.
SJ	1	SOPHORA JAPONICA	SCHOLAR TREE	2.5" CAL.
SP	1	STEWARTIA PSEUDOCAMELLIA	JAPANESE STEWARTIA	2.5" CAL.

THE EASTERN RED CEDAR WILL GROW TO A MATURE SIZE OF 15-20' WIDE AND 40-50' TALL. THE EASTERN WHITE PINE WILL GROW TO A MATURE SIZE OF 20-40' WIDE AND 50-80' TALL. THE NORWAY SPRUCE WILL GROW TO A MATURE SIZE OF 25-30' WIDE AND 40-60' TALL. THE WHITE SPRUCE WILL GROW TO A MATURE SIZE OF 10-20' WIDE AND 40-60' TALL. THE LANDSCAPE INSTALLER SHALL MAKE EVERY EFFORT TO REMOVE INVASIVE SPECIES SUCH AS ORIENTAL BITTERSWEET FROM LANDSCAPE AREAS AND ADJOINING WOODLANDS. THE PROPERTY OWNER SHALL DEVELOP A PLAN TO PERIODICALLY INSPECT AND REMOVE INVASIVE SPECIES THAT RE-EMERGES AS PART OF THE REGULAR LANDSCAPE MANAGEMENT PLAN.

**LEGEND**

- LAWN
- POLLINATOR SEED MIX



**Ranger Engineering Group, Inc.**  
 130 Main Street, Suite 202  
 Salem NH, 03079  
 Tel: 978-208-1762  
 rangereng.com



**SITE PLAN**  
 140 HAVERHILL STREET  
 ANDOVER MA, 01810

**LANDSCAPE AND LIGHTING PLAN**

MEDICO 140, LLC  
 355 MIDDLESEX AVE SUITE 7  
 WILMINGTON, MA 01887

DATE	NO.	REVISIONS	BY
3/31/2025	2	FINAL PEER REVIEW COMMENTS	BCO
2/21/25	1	PEER REVIEW COMMENTS	BCO

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