

# THE CROSSINGS AT SLEEPY HOLLOW

## SEWER SYSTEM IMPROVEMENTS

ARPA PROJECT #CW-334424.01  
 NEWMARKET, NEW HAMPSHIRE  
 JUNE 2024

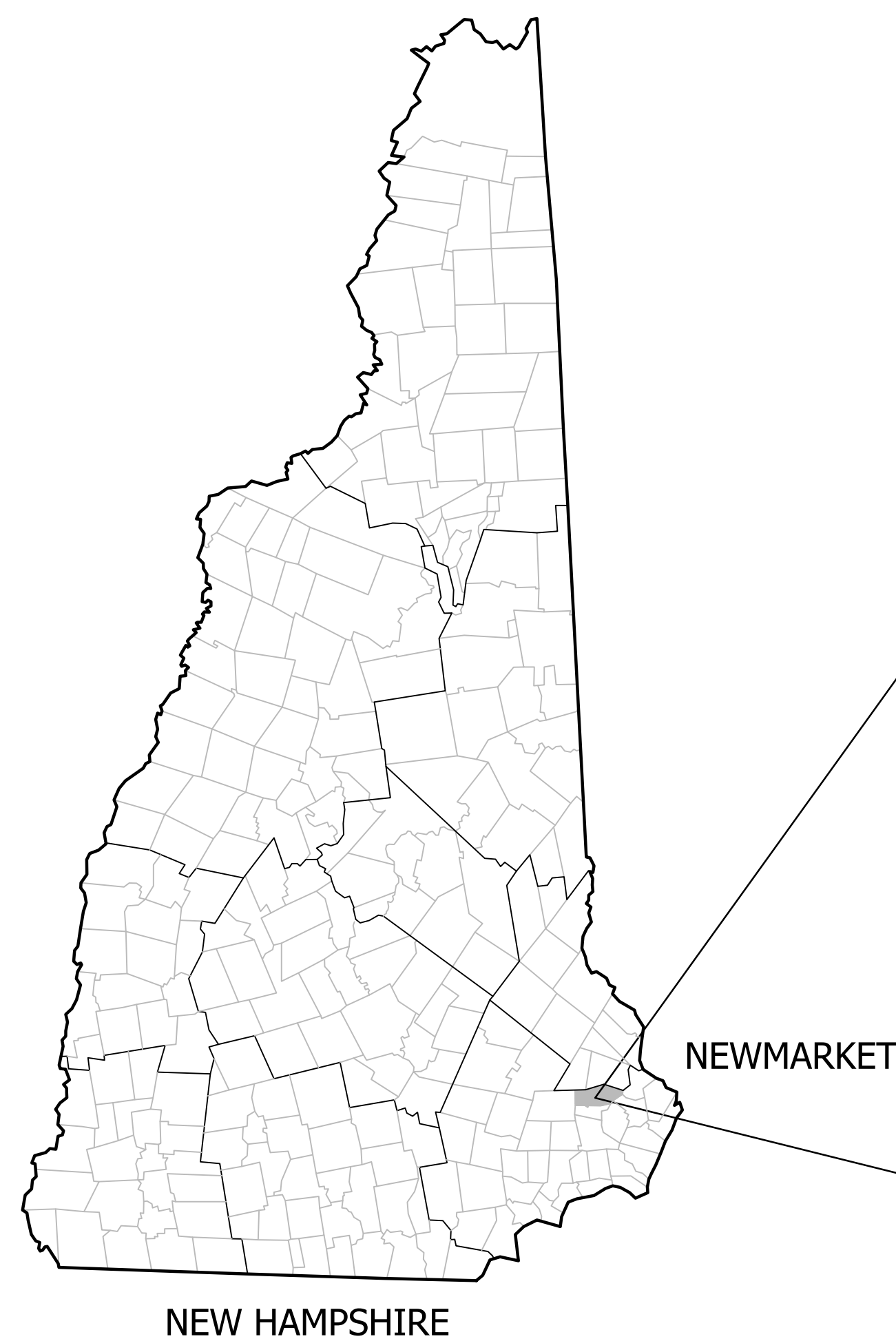
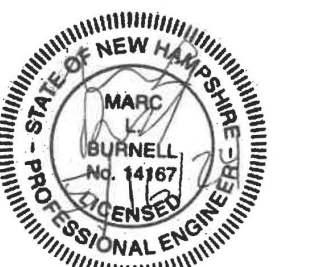
OWNER:

THE CROSSINGS AT SLEEPY HOLLOW  
 83 HARVARD STREET  
 NEWMARKET, NH 03857

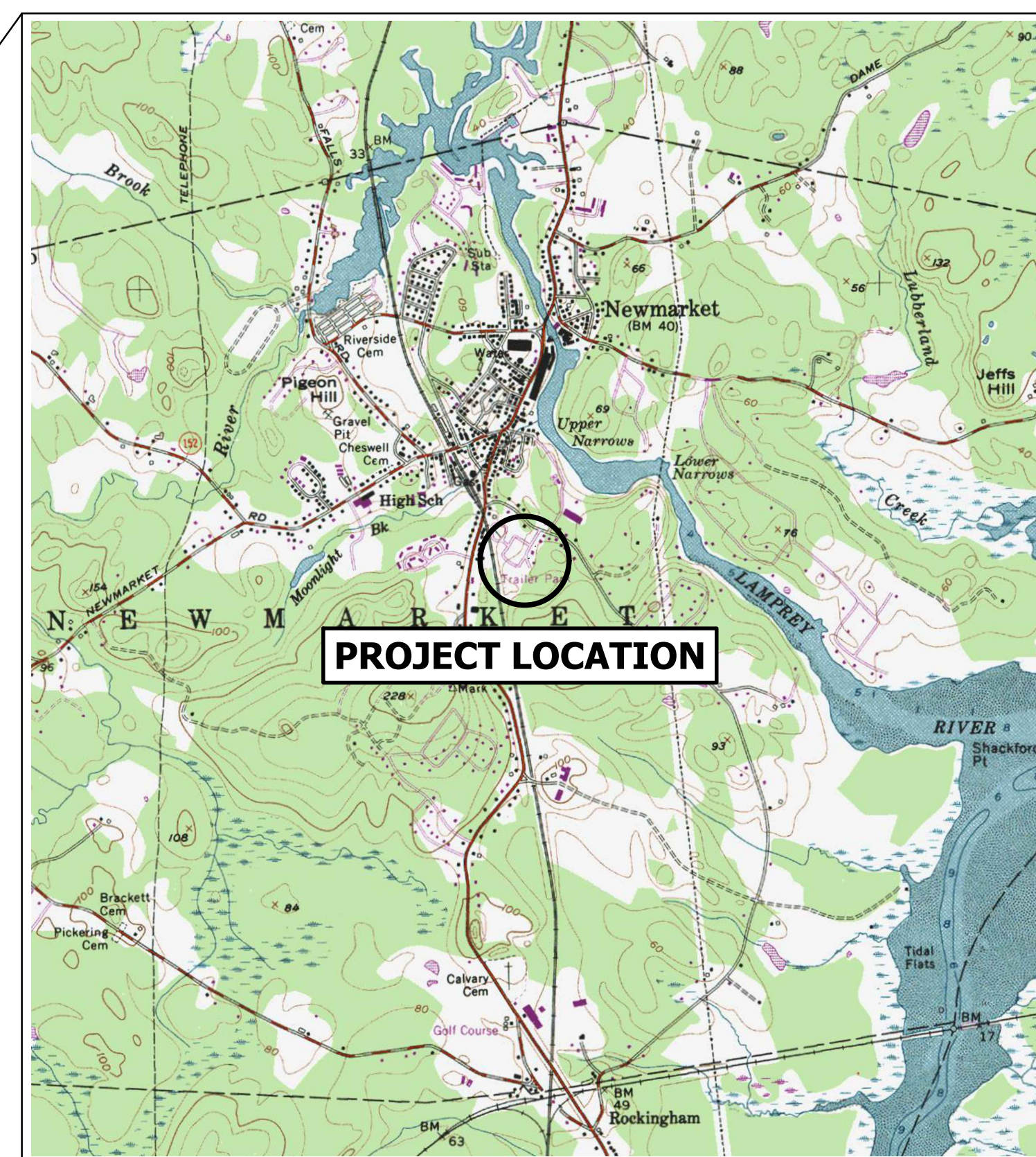
ENGINEER/SURVEYOR:

**horizons**  
*Engineering*

34 SCHOOL STREET  
 LITTLETON, NH 03561  
 (603) 444-4111



NEW HAMPSHIRE



**LOCATION PLAN**

SCALE: 1" = 2000'

SHEET INDEX:

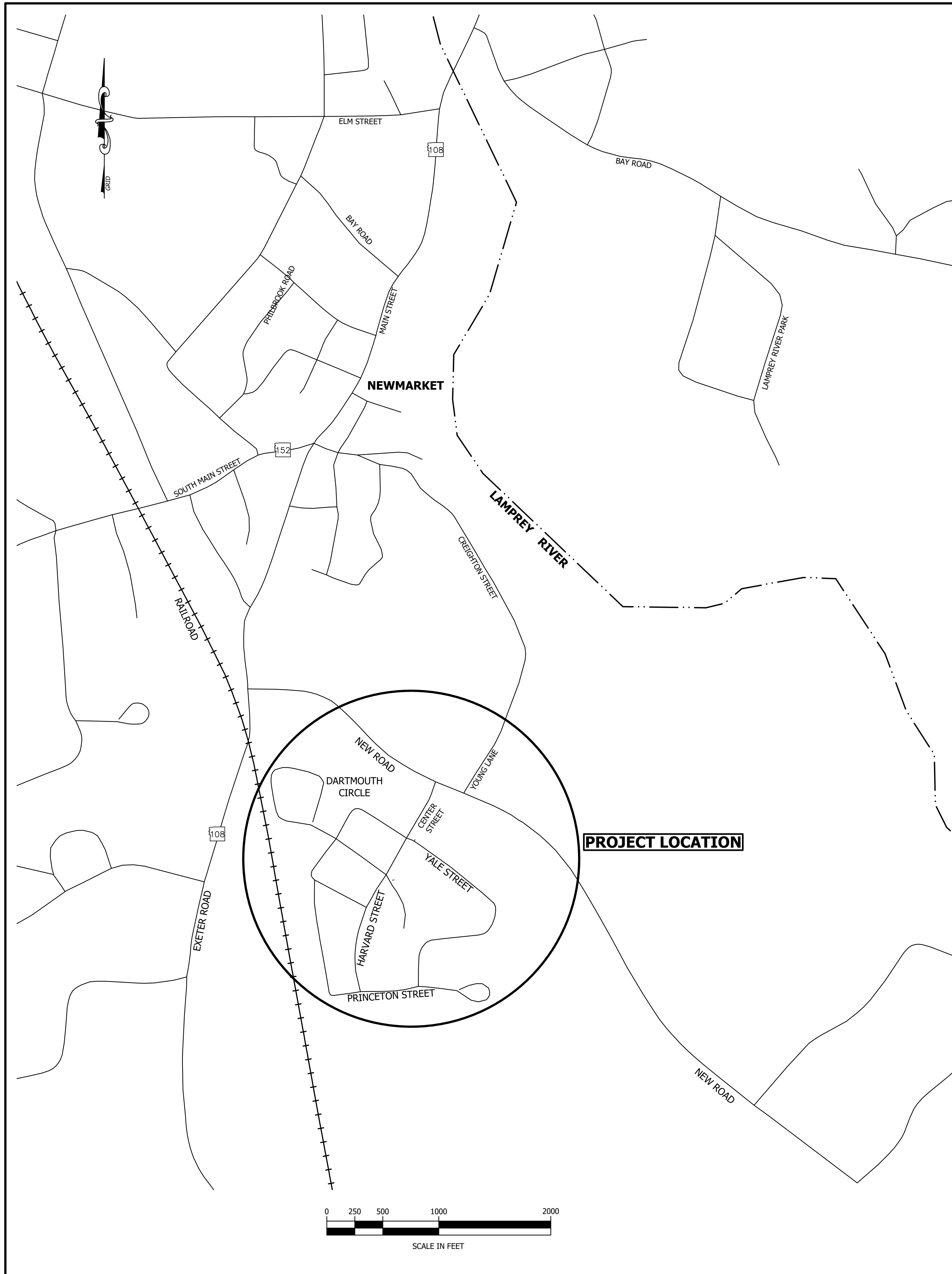
- COVER
- 1.1 SHEET LAYOUT, GENERAL NOTES AND LEGEND
- 1.2 OVERALL EXISTING CONDITIONS
- 1.3 EXISTING SEWER SYSTEM TO REMAIN
- PLAN AND PROFILE SHEETS
- 2.01 HARVARD STREET STA. 0+00 TO STA. 3+00
- 2.02 HARVARD STREET STA. 3+00 TO STA. 7+37
- 2.03 ITHACA LANE
- 2.04 COLBY ROAD
- 2.05 DARTMOUTH CIRCLE
- 2.06 COLGATE ROAD
- 2.07 COLGATE ROAD EXTENSION
- 2.08 PRINCETON STREET
- 2.09 YALE STREET STA. 0+00 TO STA. 4+50
- 2.10 YALE STREET STA. 4+50 TO STA. 9+80 & TUFTS STREET
- 2.11 YALE STREET EXTENSION

**FOR CONSTRUCTION**

- DETAIL SHEETS
- 3.1 SEWER DETAILS
- 3.2 EROSION CONTROL DETAILS

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**GENERAL NOTES**

1. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THESE PLANS AND "TECHNICAL SPECIFICATIONS FOR SLEEPY HOLLOW COOPERATIVE, INC" DATED JUNE 2024."
2. NO EXISTING MONUMENTS, BOUNDS, OR BENCHMARKS SHALL BE DISTURBED WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
3. ALL WORK SHALL BE PERFORMED WITHIN THE PROPERTY OF, AND EASEMENTS SECURED BY, THE OWNER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DATA COLLECTION AND PREPARATION OF RECORD DRAWINGS.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONTROLLING EROSION IN ALL AREAS DISTURBED BY HIS ACTIONS. COSTS FOR REQUIRED EROSION CONTROL, REGARDLESS OF WHETHER OR NOT SUCH MEASURES ARE SHOWN ON THE ENGINEERING DRAWINGS, SHALL BE BORNE BY HIM.
6. UTILITY LOCATIONS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATION AND PROTECTION OF EXISTING UTILITIES AND SHALL REPAIR ANY DAMAGE AS QUICKLY AS POSSIBLE AT HIS OWN EXPENSE. ALL UTILITIES ENCOUNTERED SHALL BE LOCATED BY DEPTH AND TIES AND SHOWN BY THE CONTRACTOR ON HIS "AS BUILT" DRAWINGS. HAND EXCAVATION SHALL BE DONE WHEREVER UNDERGROUND UTILITIES ARE SHOWN OR ANTICIPATED. THE CONTRACTOR SHALL CONTACT DIG SAFE AND THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION IN ORDER TO VERIFY EXISTING CONDITIONS AND UTILITY LOCATIONS. WATER MAIN IS SHOWN WITH 6 FEET OF COVER - THIS IS AS ASSUMED DEPTH.
7. BASE MAP INFORMATION INCLUDING BOUNDARY AND TOPOGRAPHY ON THESE PLANS IS FROM PLANS PREPARED BY HORIZONS ENGINEERING, INC., TITLED "SLEEPY HOLLOW COOPERATIVE EXISTING CONDITIONS PLAN", AND DATED OCTOBER, 2023.
8. WETLAND DELINEATION BY CAITLIN BANASZAK, CERTIFIED WETLAND SCIENTIST, ON SEPTEMBER 20, 2023.
9. CONTRACTOR TO COORDINATE WITH OWNER TO ESTABLISH STAGING AND STOCKPILING LOCATION(S).
10. ALL EXISTING SEWER MAINS AND SERVICES ARE TO REMAIN IN FUNCTIONING CONDITION DURING CONSTRUCTION. EXISTING SEWER MAINS AND SERVICES TO BE ALTERED OR ABANDONED IN PLACE CAN BE SEEN ON THESE PLANS.
11. ALL WORK DEPICTED ON THESE PLANS IS OUTSIDE THE LIMITS OF THE 100 YEAR FLOOD PLAIN AS CONFIRMED USING FEMA'S NATIONAL FLOOD HAZARD LAYER VIEWER.
12. ALL WORK DEPICTED ON THESE SHALL FOLLOW NH CODE OF ADMINISTRATIVE RULES , CHAPTER ENV-WQ 700, "STANDARDS OF DESIGN AND CONSTRUCTION FOR SEWERAGE AND WASTEWATER TREATMENT FACILITIES".
13. THE NEWMARKET ENVIRONMENTAL SERVICES DEPARTMENT: WATER AND SEWER DIVISION (NESD) MUST BE NOTIFIED BY THE CONTRACTOR AT THE START OF EACH NEW ROAD CONSTRUCTION TO PERFORM A SITE VISIT/INSPECTION IF THEY SO CHOOSE WHILE WORK CONTINUES. THE DEPARTMENT MUST ALSO BE NOTIFIED OF THE START DATE AND FINAL COMPLETION DATE AT LEAST WEEK PRIOR.
14. ANY REPLACEMENT, ALTERATION, INTERACTION WITH, OR DAMAGES TO THE EXISTING WATER SYSTEM REQUIRES THE CONTRACTOR TO CONTACT THE NESD TO DISCUSS OPTIONS FOR AN ACTION PLAN TO REMEDY ANY OF THE ABOVE ISSUES. THE NEWMARKET WATER AND SEWER CONTACT: SEAN GREIG (SGREIG@NEWMARKETNH.GOV / (603) 659-8810 EXT 1501)

**PHASING AND CONSTRUCTION NOTES**

- PROPOSED WORK TO BE COMPLETED INCLUDES SEWER MAIN AND SERVICE REPLACEMENT FOR INDICATED SERVICED BUILDINGS. EXISTING WATER LINES ARE TO REMAIN ACTIVE. EXISTING SEWER LINES TO BE REPLACED ARE TO BE ABANDONED IN PLACE UNLESS OTHERWISE STATED.
- A PHASING PLAN OF THE PROPOSED WORK IS NECESSARY TO COMPLETE, ADDRESS, AND DEVISE PROCEDURES TO HANDLE POSSIBLE AREAS OF CONFLICT THROUGHOUT THE PROJECT. LISTED BELOW IS THE SUGGESTED PHASING OF THE PROPOSED WORK TO BE COMPLETED FOR THE SEWER SYSTEM IMPROVEMENTS.
1. INSTALL PROPOSED SEWER MAINS AND MANHOLES AS PER THE PLANS
    - 1.1. IN THE EVENT OF CONFLICT WITH EXISTING SEWER, WATER, OR ELECTRICAL/COMMUNICATIONS SERVICES CONTACT THE ENGINEER TO DETERMINE COURSE OF ACTION IF AVOIDANCE OF CONFLICT IS NOT REASONABLE OR POSSIBLE.
  2. PRESSURE TEST ALL SEWER MAINS AND MANHOLES
  3. INSTALL ALL SEWER SERVICES
    - 3.1. IN THE EVENT OF CONFLICT WITH EXISTING SERVICES, WHERE POSSIBLE, RAISE AND DECREASE SLOPE OF SERVICE LINE TO TRAVEL OVER EXISTING SEWER LINES. IF TRAVELING NEAR EXISTING WATER LINES MAINTAIN A MINIMUM OF 18" OF VERTICAL SEPARATION UNLESS SEWER LINE JOINTS ARE ENCASED IN CONCRETE WITHIN A 10' RADIUS OF CONFLICT.
  4. INSTALL ALL PROPOSED SEWER CLEANOUTS AS SHOWN ON THE PLANS. ENSURE CLEANOUTS ARE AT OR ABOVE GRADE AND EASILY ACCESSIBLE
  5. INSPECT ALL SEWER SERVICES BEFORE PUT INTO USE
  6. CONNECT SEWER SERVICES TO EACH DWELLING/SERVICED BUILDING

**SURVEY GENERAL NOTES**

1. THIS PLAN IS BASED ON A FIELD SURVEY COMPLETED IN APRIL AND JUNE AND JULY OF 2023 WITH CARLSON BRX7 AND SOKKIA GRX3 DUAL FREQUENCY SURVEY GRADE GPS RECEIVERS AND A LEICA TS13 ROBOTIC TOTAL STATION.
2. THE HORIZONTAL DATUM IS ON THE NEW HAMPSHIRE STATE PLANE COORDINATE SYSTEM NAD83 (2011). THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. PROPERTY LINES SHOWN HEREON ARE APPROXIMATE PER THE TOWN OF NEWMARKET TAX ASSESSOR MAPS AT THE TIME THIS PLAN WAS PREPARED.

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
1	06/2024	NHDES DESIGN REVIEW - 1	CLB	CLB
2	06/2024	NHDES DESIGN REVIEW - 2	CLB	CLB
3	06/2024	ADDITION #1	CLB	CLB

PROJECT #:	230125
DATE:	JUNE 2024
MAP LOT (OR ARCHIVE)	-
SURVEYED BY:	HEI
ENGINEERED BY:	HEI
DRAWN BY:	CLB
CHECKED BY:	MLB



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 NEWMARKET, NEW HAMPSHIRE  
 SEWER SYSTEM IMPROVEMENTS

**SHEET LAYOUT, GENERAL NOTES AND LEGEND**

**FOR CONSTRUCTION**

DATE OF PRINT  
**JUNE 28 2024**  
 HORIZONS ENGINEERING

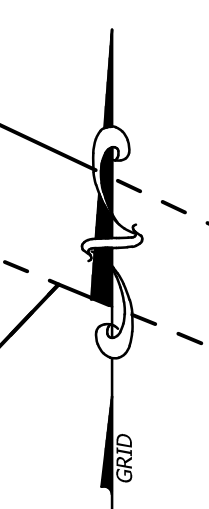
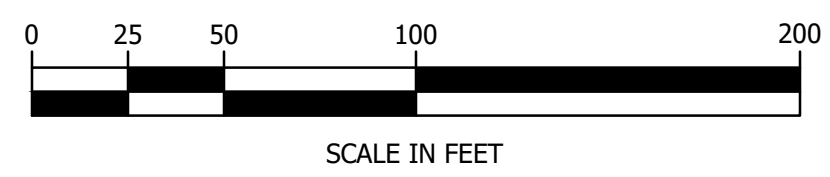


**SHEET 1.1**

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**LEGEND**

- APPROXIMATE PROPERTY LINE (TAX MAP)
- MAJOR CONTOUR, 10-FOOT INTERVAL
- MINOR CONTOUR, 2-FOOT INTERVAL
- TREE LINE
- EDGE OF POND
- WETLAND (APPROXIMATE)
- OVERHEAD UTILITY LINE
- EXISTING SEWER MAIN (APPROX.)
- EXISTING WATER MAIN (APPROX.)
- BOLLARD OR GATE POST
- UTILITY POLE
- GUY WIRE
- WATER SHUTOFF
- GATE VALVE
- HYDRANT
- EXISTING MANHOLE
- EXISTING SEWER MANHOLE
- CATCH BASIN
- DRAIN MANHOLE
- ELECTRIC METER
- CABLE CABINET
- PROPANE TANK
- HEAT PUMP
- MAILBOX
- DECIDUOUS TREE
- CONIFER TREE
- SHRUB
- GRAVEL
- PAVEMENT
- PROPOSED SEWER MAIN, (SIZE VARIES)
- PROPOSED SEWER SERVICE
- LIMIT OF DISTURBANCE
- PROPOSED SEWER MANHOLE
- PROPOSED SEWER CLEAN OUT
- LIMITS OF SAWCUT



**FOR CONSTRUCTION**

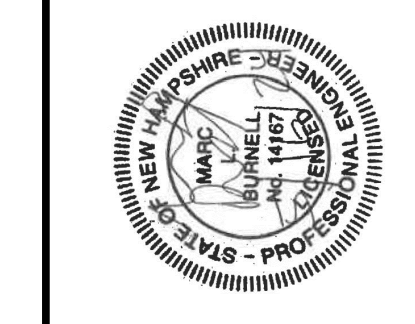
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1	05/2024	INPDS DESIGN REVIEW - 1	CLB	CEB
2	05/2024	INPDS DESIGN REVIEW - 2	CLB	CEB

PROJECT #:	230125
DATE:	JUNE 2024
MAP LOT (OR ARCHIVE):	
SURVEYED BY:	HEI
ENGINEERED BY:	HEI
DRAWN BY:	CLB
CHECKED BY:	MLB

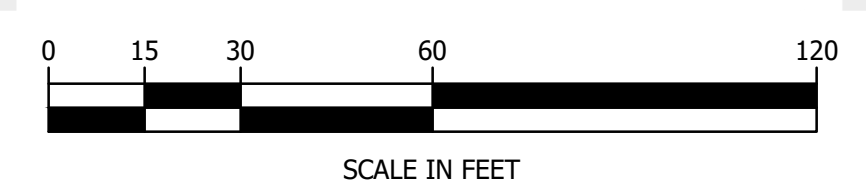
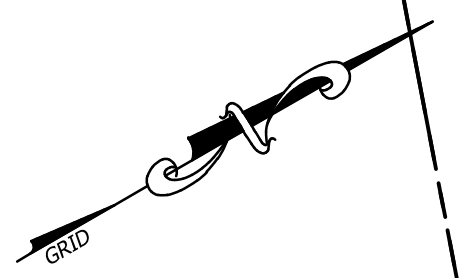
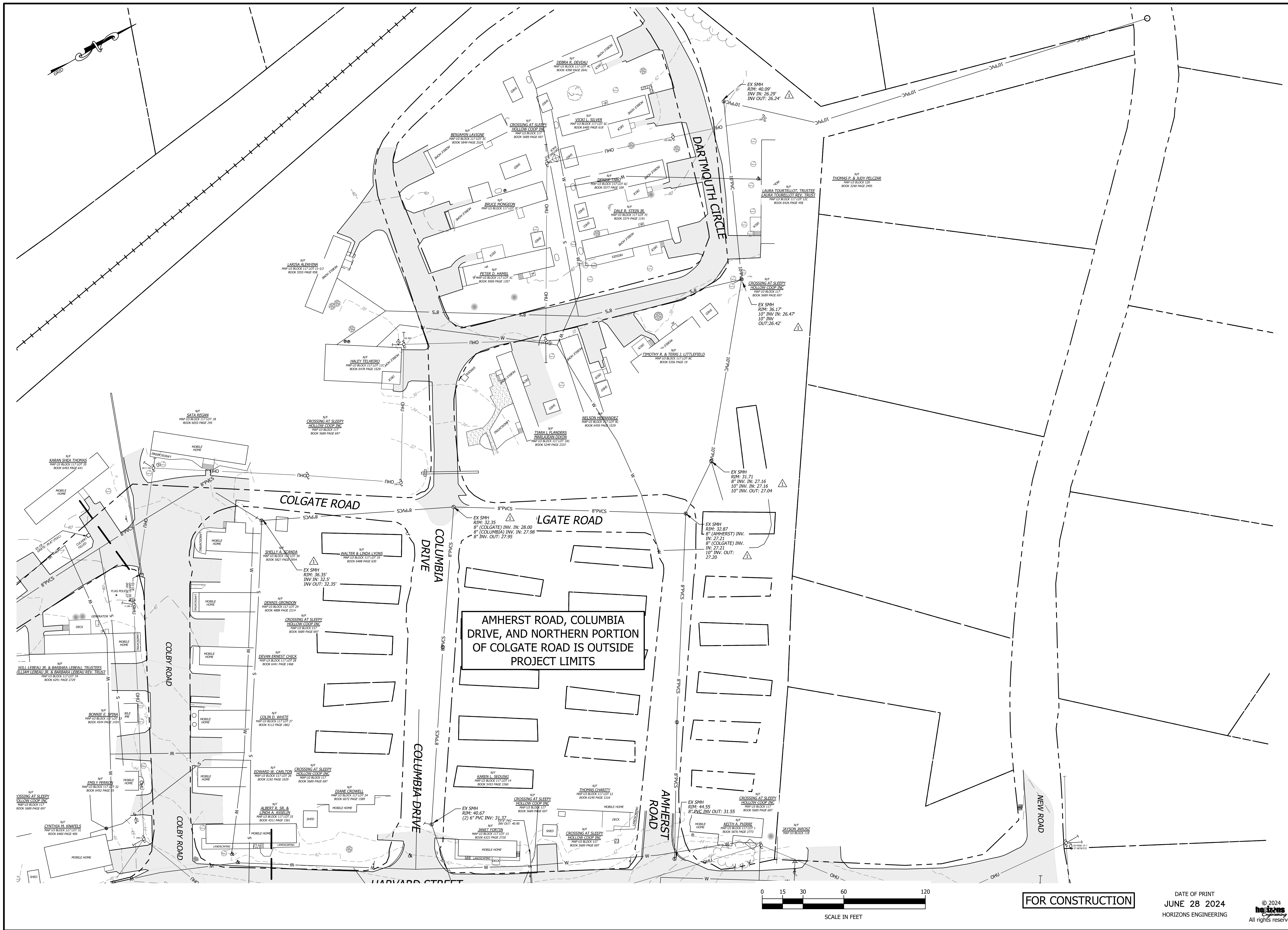


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SEWER SYSTEM IMPROVEMENTS  
OVERALL EXISTING CONDITIONS

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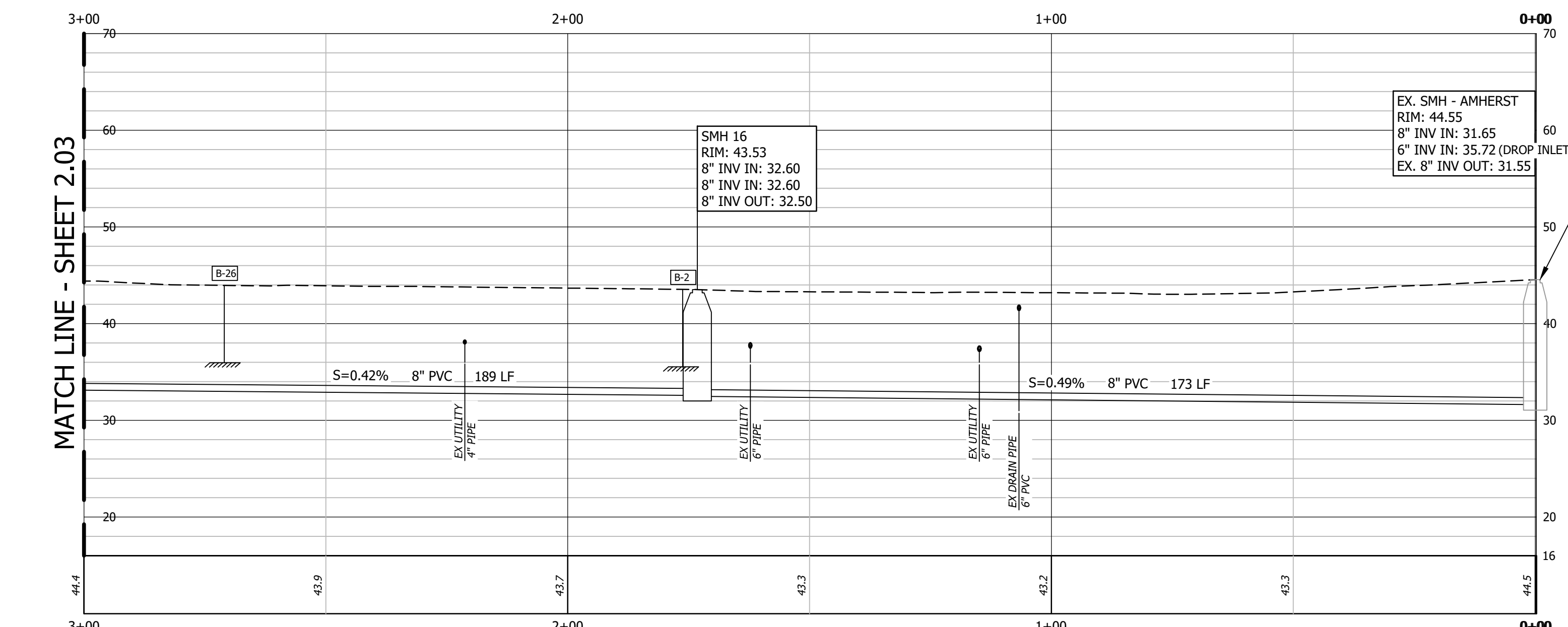
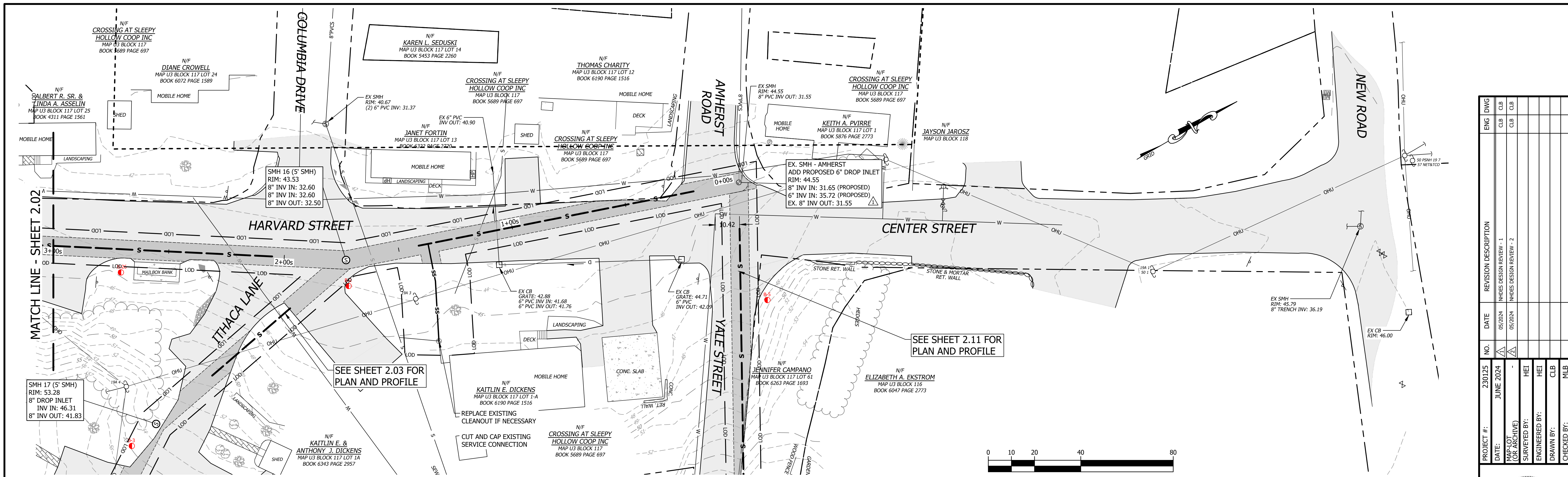
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SURVEYED BY:	HEI	05/2024	NHDS DESIGN REVIEW - 2	CLB	CLB
ENGINEERED BY:	HEI				
DRAWN BY:	CLB				
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SEWER SYSTEM IMPROVEMENTS  
EXISTING SEWER SYSTEM TO REMAIN





▲ CORE PROPOSED CONNECTIONS INTO EXISTING MANHOLE AT ELEVATIONS SHOWN

MAINTAIN MINIMUM 18" OF VERTICAL SEPARATION AT WATER MAIN AND SEWER PIPE CROSSINGS. ALL UTILITIES SHOWN ARE APPROXIMATE LOCATION AND ELEVATION, CONTRACTOR SHALL VERIFY BEFORE INSTALLATION OF PROPOSED SEWER MAIN. IN AREAS WHERE MINIMUM CANNOT BE MAINTAINED, WATER MAIN IS BELOW SEWER PIPE, OR DEPICTED EXISTING CONDITIONS DIFFER FROM FIELD VERIFIED LOCATIONS, THE CONTRACTOR MUST CONTACT THE ENGINEER FOR CHANGES TO THE DESIGN.

MAINTAIN MINIMUM 18" OF VERTICAL SEPARATION AT DRAINAGE PIPE CROSSINGS. IN AREAS WHERE MINIMUM CANNOT BE MAINTAINED, PROVIDE 4" (2 BOARD THICKNESSES) x 2 FEET WIDE x 8 FEET LONG RIGID POLYSTYRENE INSULATION CENTERED OVER SEWER PIPE, TYPICAL.

HARVARD STREET  
STA: -0+00 TO STA: 3+00

NO.	DATE	REVISION DESCRIPTION	ENG	DWG
1	05/2024	INRDS DESIGN REVIEW - 1	CEB	CEB
2	05/2024	INRDS DESIGN REVIEW - 2	CEB	CEB

PROJECT #:	230125
DATE:	JUNE 2024
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SURVEYED BY:	HEI
ENGINEERED BY:	CEB
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SEWER SYSTEM IMPROVEMENTS  
HARVARD STREET PLAN AND PROFILE

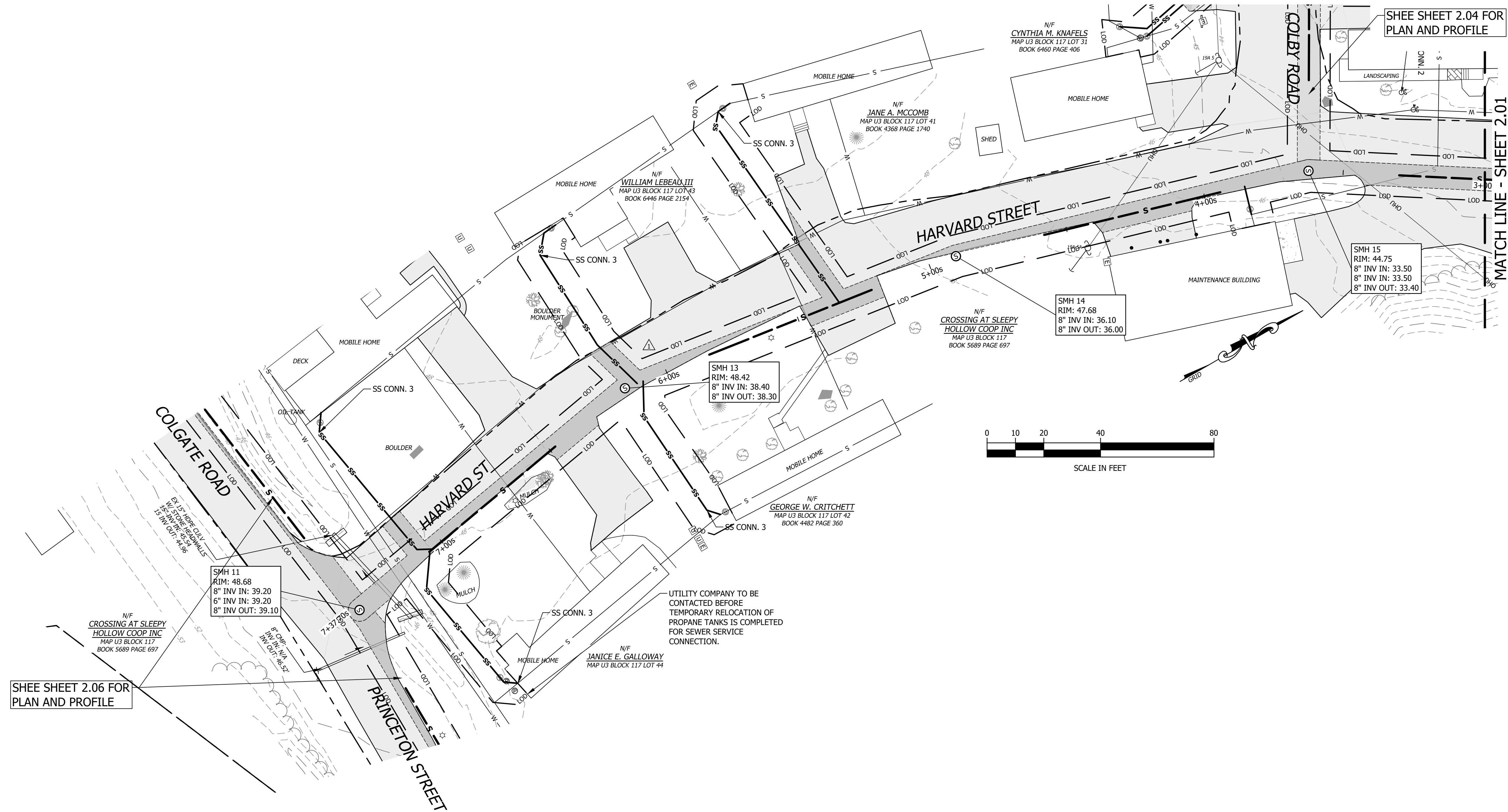
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SHEET 2.01

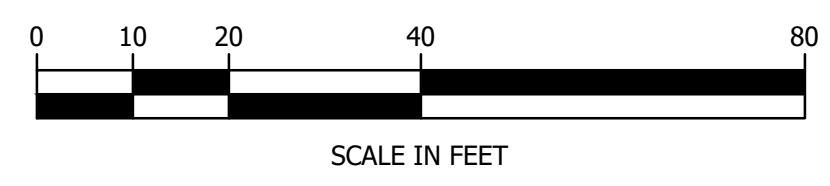




SHEET 2.06 FOR PLAN AND PROFILE

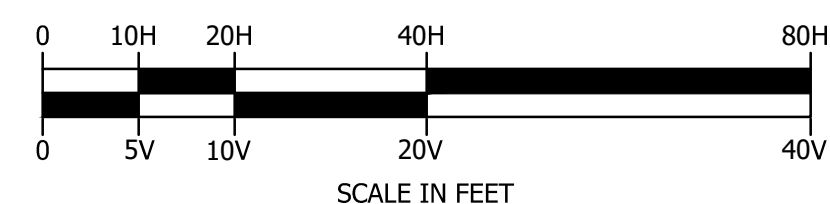
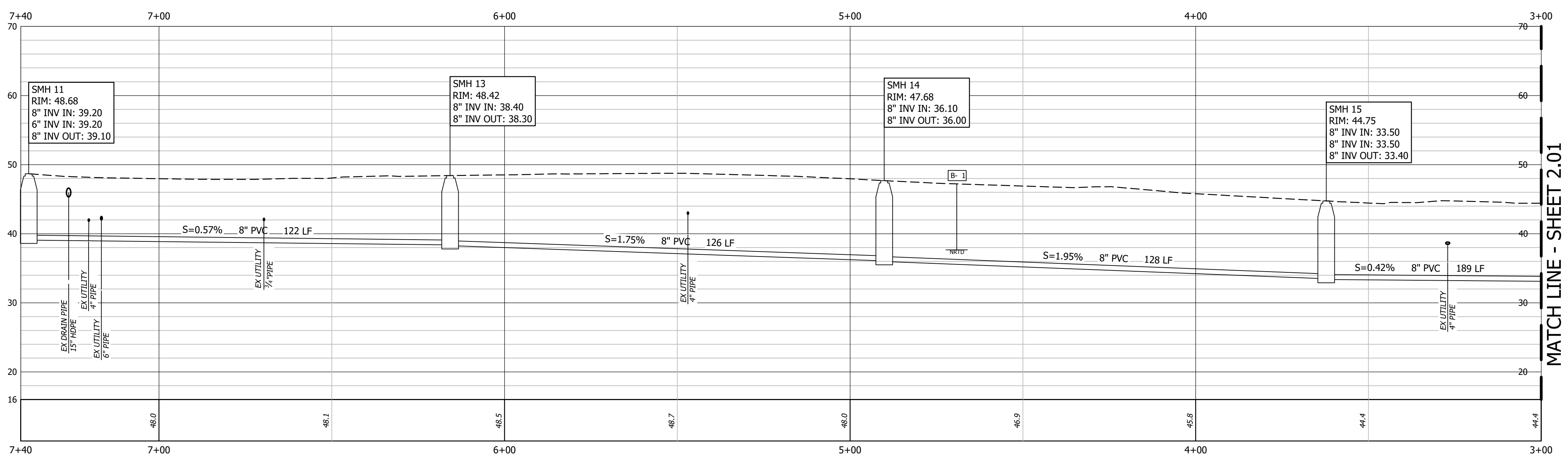
SHEET 2.04 FOR PLAN AND PROFILE

MATCH LINE - SHEET 2.01



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HARVARD STREET  
STA: 3+00 TO STA: 7+40

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1	05/2024	INPDS DESIGN REVIEW - 1	CLB	CLB
2	05/2024	INPDS DESIGN REVIEW - 2	CLB	CLB

PROJECT #:	230125
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MAP LOT (OR ARCHIVE):	HEI
SURVEYED BY:	HEI
ENGINEERED BY:	CLB
DRAWN BY:	CLB
CHECKED BY:	MLB



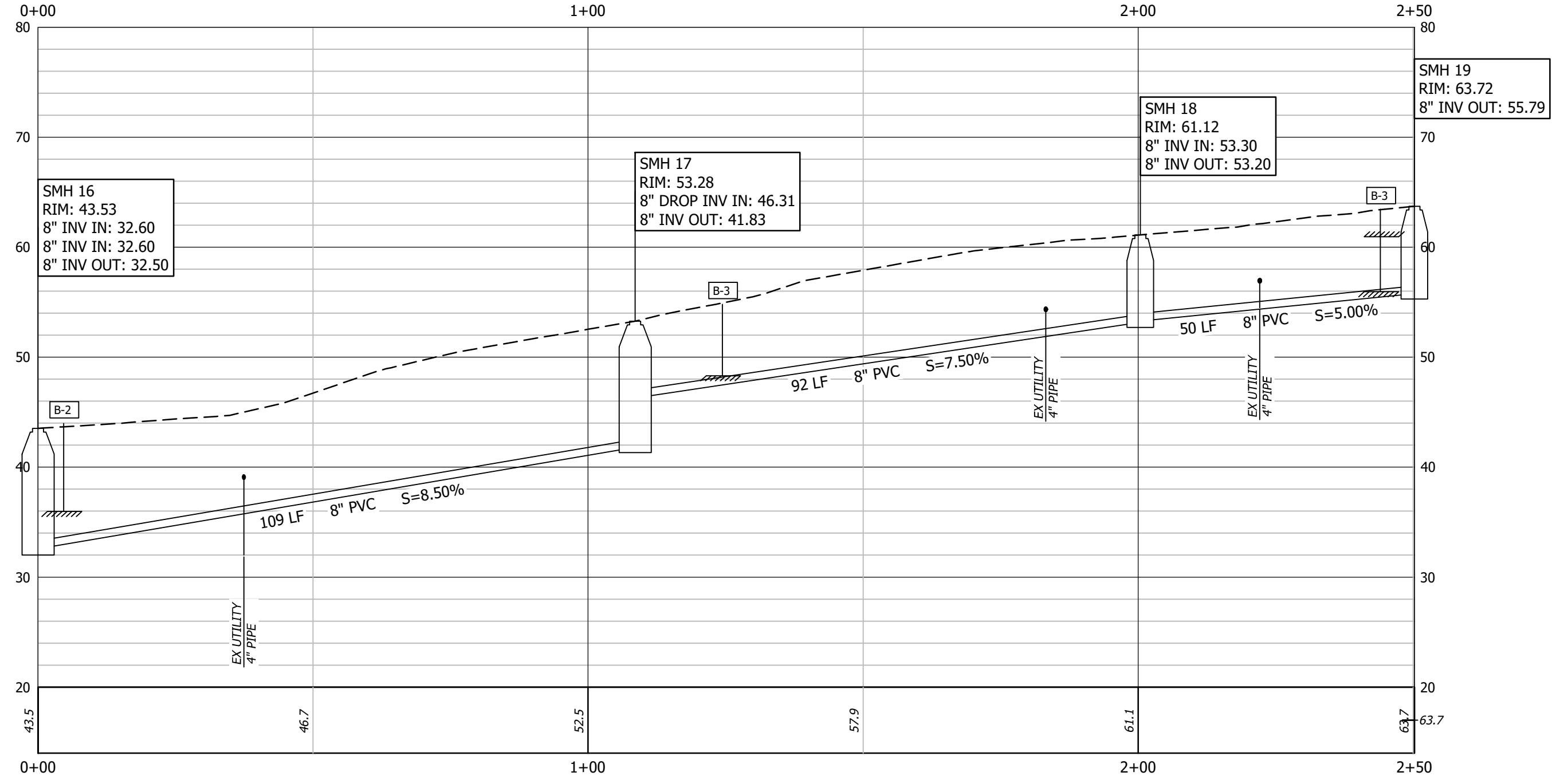
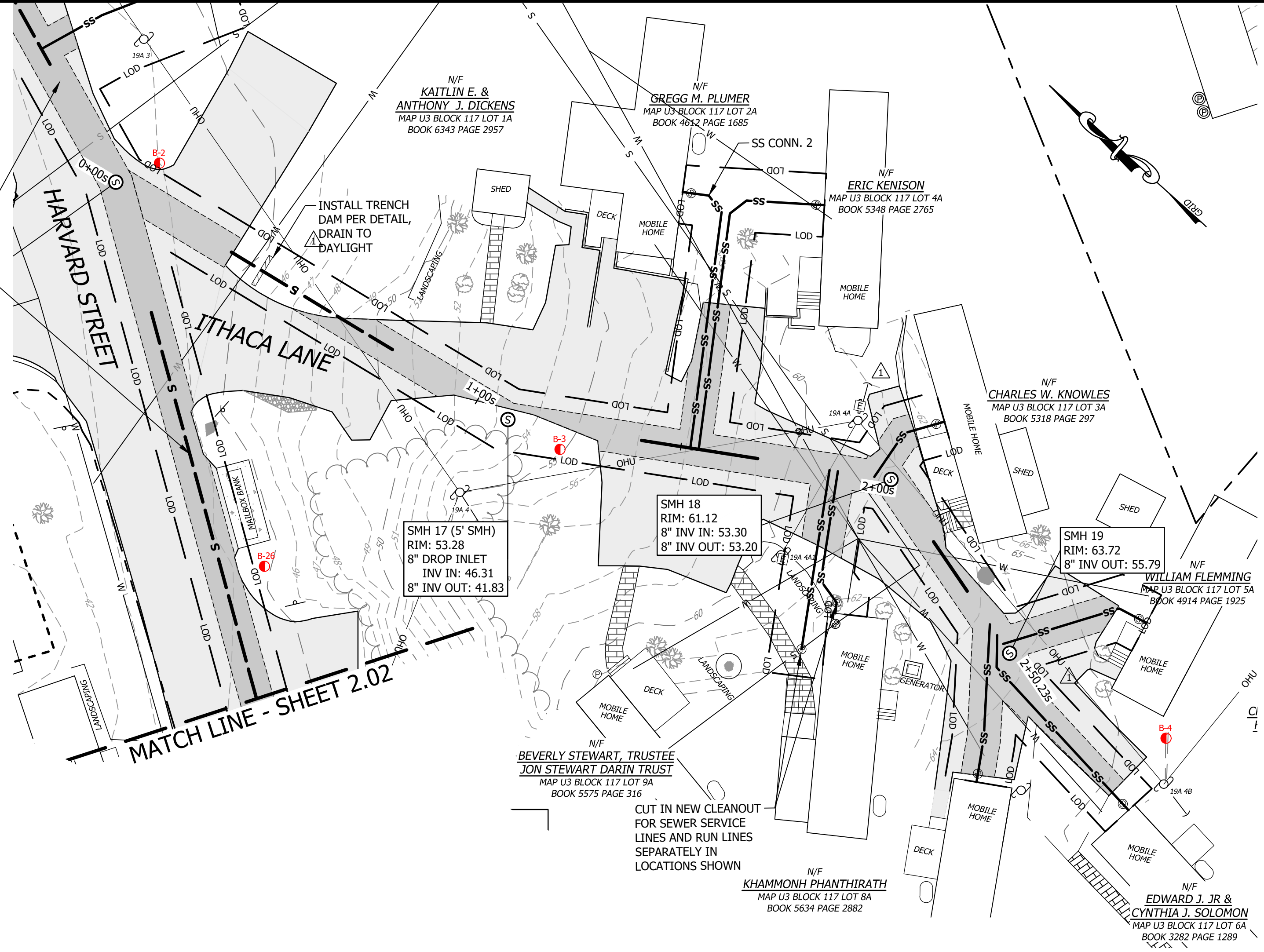
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SHEET 2.02

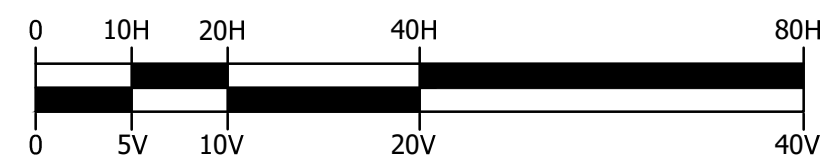


SEE SHEET 2.01 FOR PLAN AND PROFILE



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230125	JUNE 2024	05/2024	INDIS DESIGN REVIEW - 1	CLB	CLB
		05/2024	INDIS DESIGN REVIEW - 2	CLB	CLB

MAP LOT (OR ARCHIVE)	HEI
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DRAWN BY:	MLB
CHECKED BY:	



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 ITHACA LANE - PLAN AND PROFILE

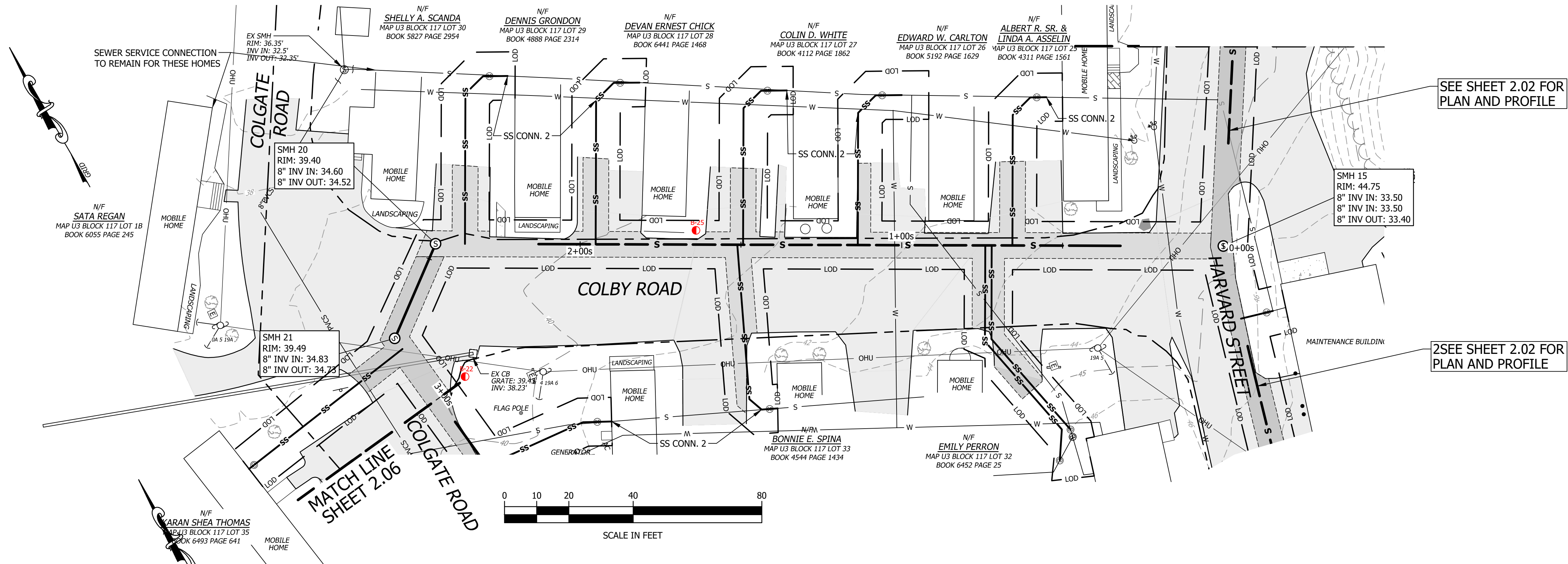
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SHEET 2.03



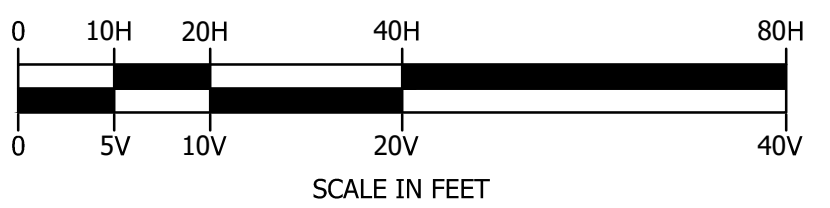
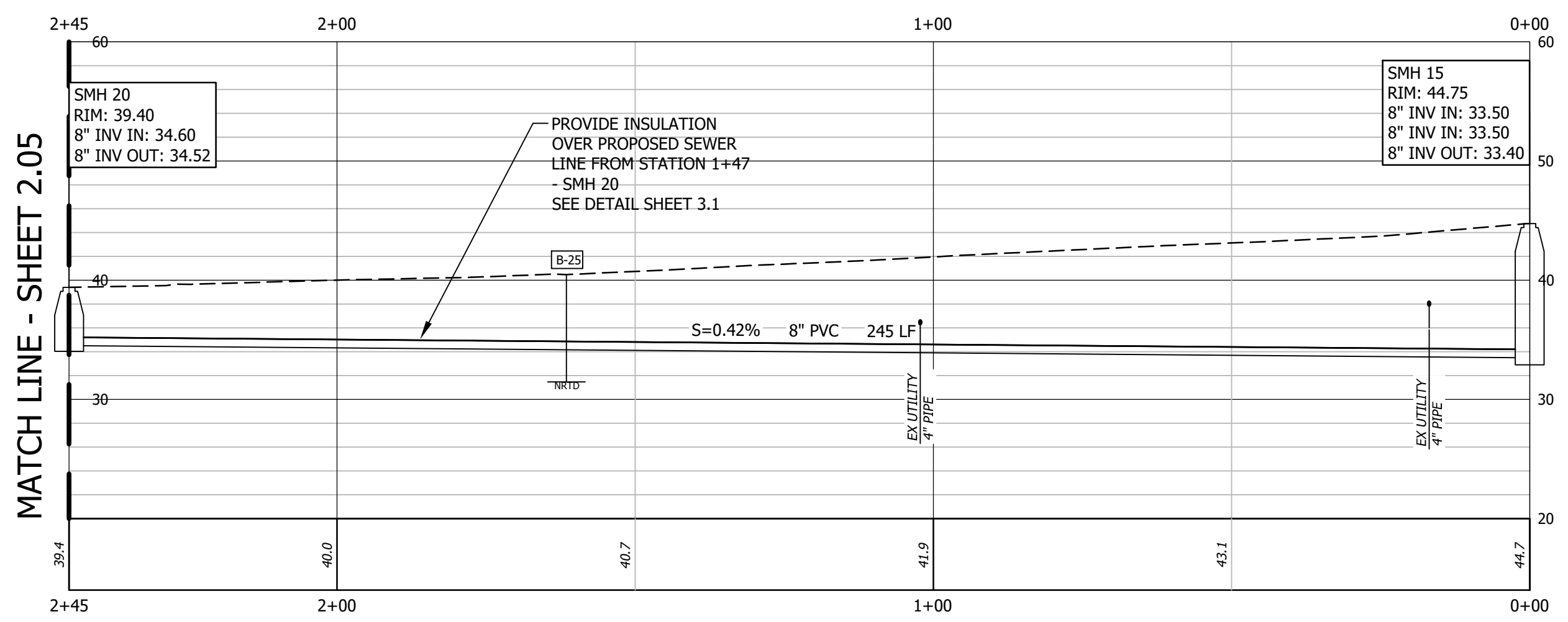


SEE SHEET 2.02 FOR PLAN AND PROFILE

SEE SHEET 2.02 FOR PLAN AND PROFILE

SEWER COVER DEPTH OF 6' IS NOT ACHIEVABLE IN THIS AREA AS SLOPE LIMITATIONS ON HARVARD STREET'S CONNECTION TO THE EXISTING SMH ON AMHERST ROAD PREVENT THE REQUIRED DEPTH TO OBTAIN 6' OF COVER ON COLBY ROAD AND PORTIONS OF COLGATE ROAD.

△ PROVIDE 4" OF BOARD INSULATION CENTERED OVER SEWER PIPE IN AREAS WITH LESS THAN 6' OF VERTICAL COVER, SEE DETAIL ON SHEET 3.1



COLBY  
STA: 0+00 TO STA: 2+45

△ MAINTAIN MINIMUM 18" OF VERTICAL SEPARATION AT WATER MAIN AND SEWER PIPE CROSSINGS. ALL UTILITIES SHOWN ARE APPROXIMATE LOCATION AND ELEVATION. CONTRACTOR SHALL VERIFY BEFORE INSTALLATION OF PROPOSED SEWER MAIN. IN AREAS WHERE MINIMUM CANNOT BE MAINTAINED, WATER MAIN IS BELOW SEWER PIPE, OR DEPICTED EXISTING CONDITIONS DIFFER FROM FIELD VERIFIED LOCATIONS; THE CONTRACTOR MUST CONTACT THE ENGINEER FOR CHANGES TO THE DESIGN.

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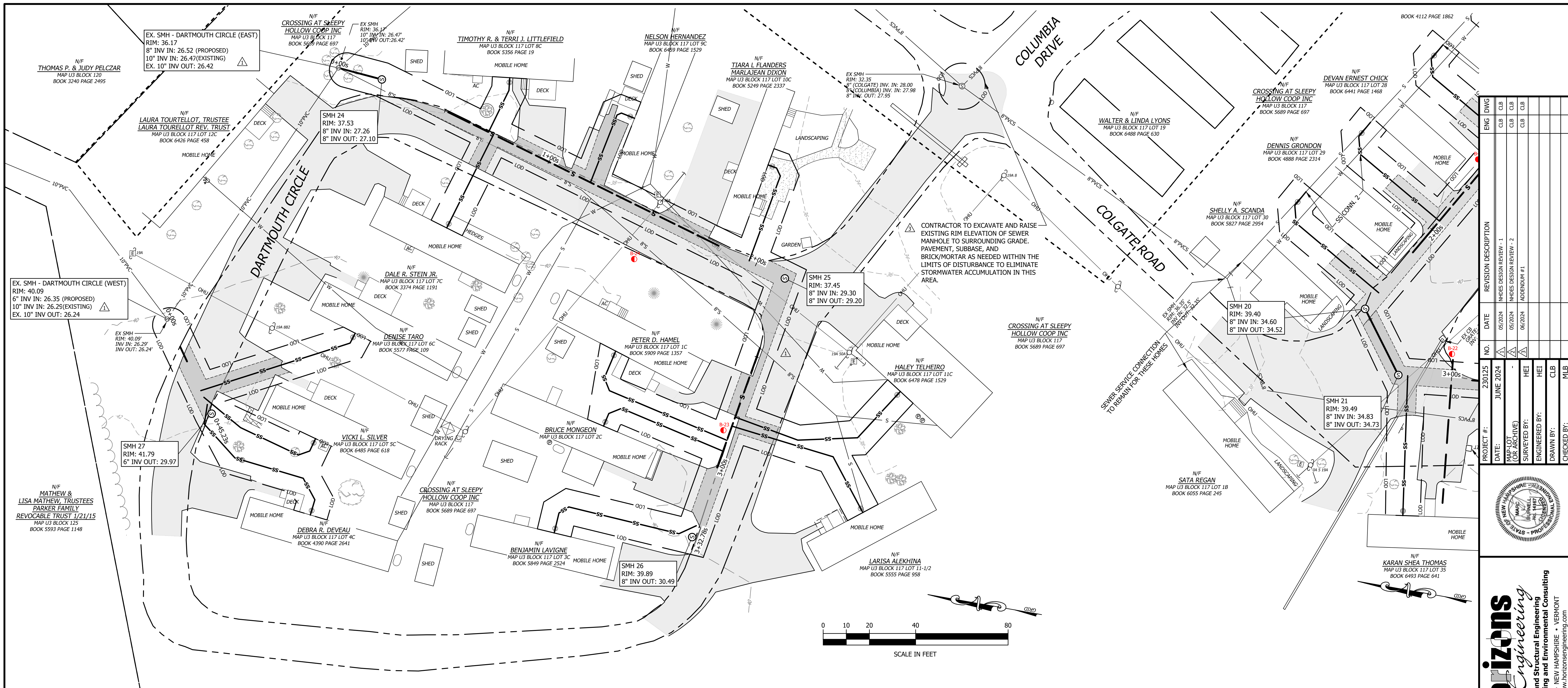
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SURVEYED BY:	HEI
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DRAWN BY:	CLB
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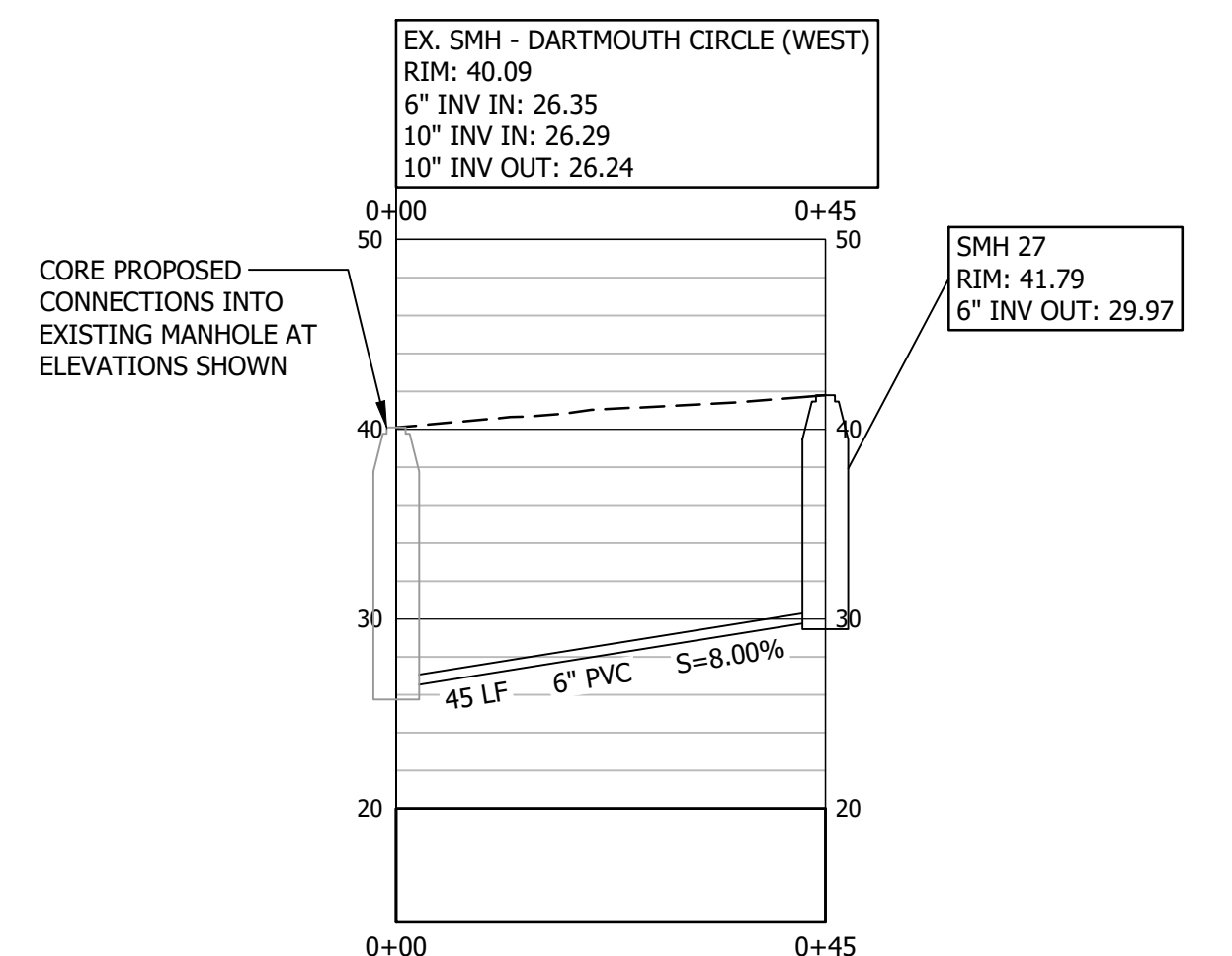
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COLBY ROAD PLAN AND PROFILE



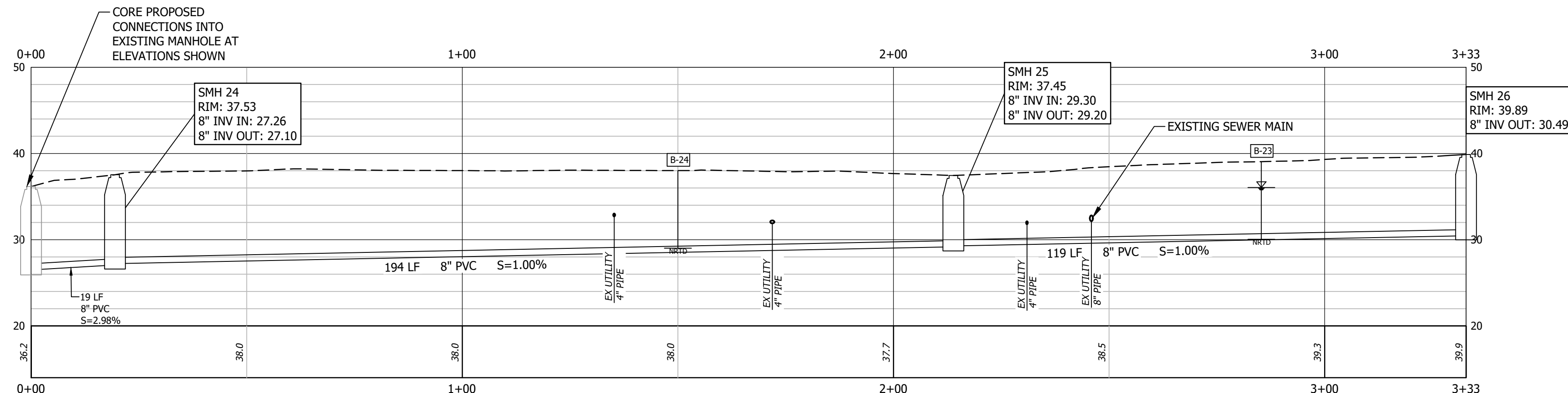


CONTRACTOR TO EXCAVATE AND RAISE EXISTING RIM ELEVATION OF SEWER MANHOLE TO SURROUNDING GRADE. PAVEMENT, SUBBASE, AND BRICK/MORTAR AS NEEDED WITHIN THE LIMITS OF DISTURBANCE TO ELIMINATE STORMWATER ACCUMULATION IN THIS AREA.

SEWER SERVICE CONNECTION TO REMAIN FOR THESE HOMES



**SEWER PROFILE DARTMOUTH (WEST)**  
STA: 0+00 to STA: 0+45



**SEWER PROFILE DARTMOUTH (EAST)**  
STA: 0+00 to STA: 3+33

NO.	DATE	REVISION DESCRIPTION	ENG.	DWG.
1	05/2024	INPDS DESIGN REVIEW - 1	CEB	CEB
2	06/2024	INPDS DESIGN REVIEW - 2	CEB	CEB
3	06/2024	ADDITION #1	CEB	CEB

PROJECT #:	230125
DATE:	JUNE 2024
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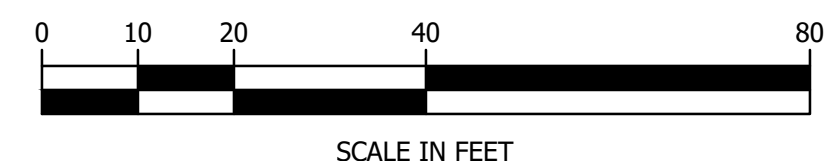
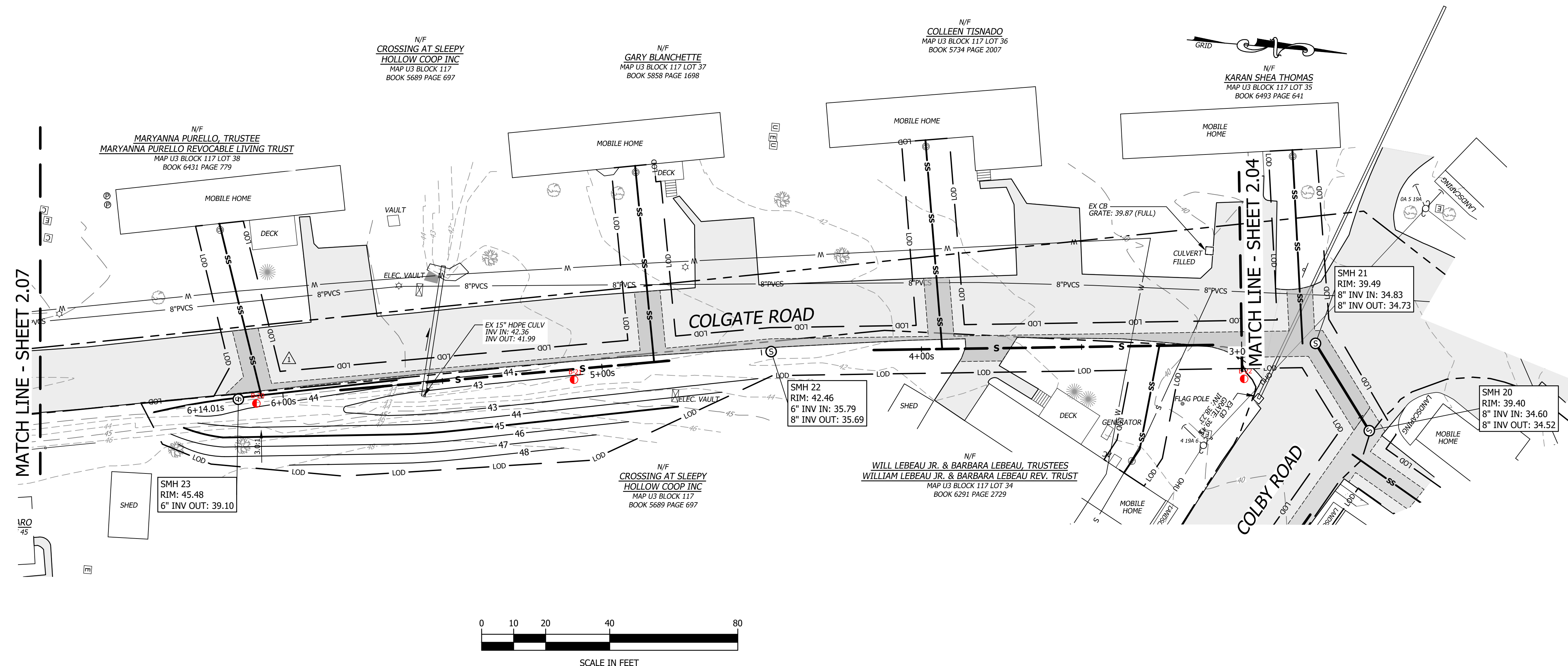
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SEWER SYSTEM IMPROVEMENTS  
DARTMOUTH CIRCLE PLAN AND PROFILE

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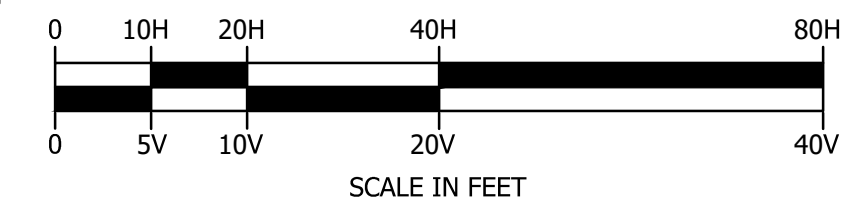
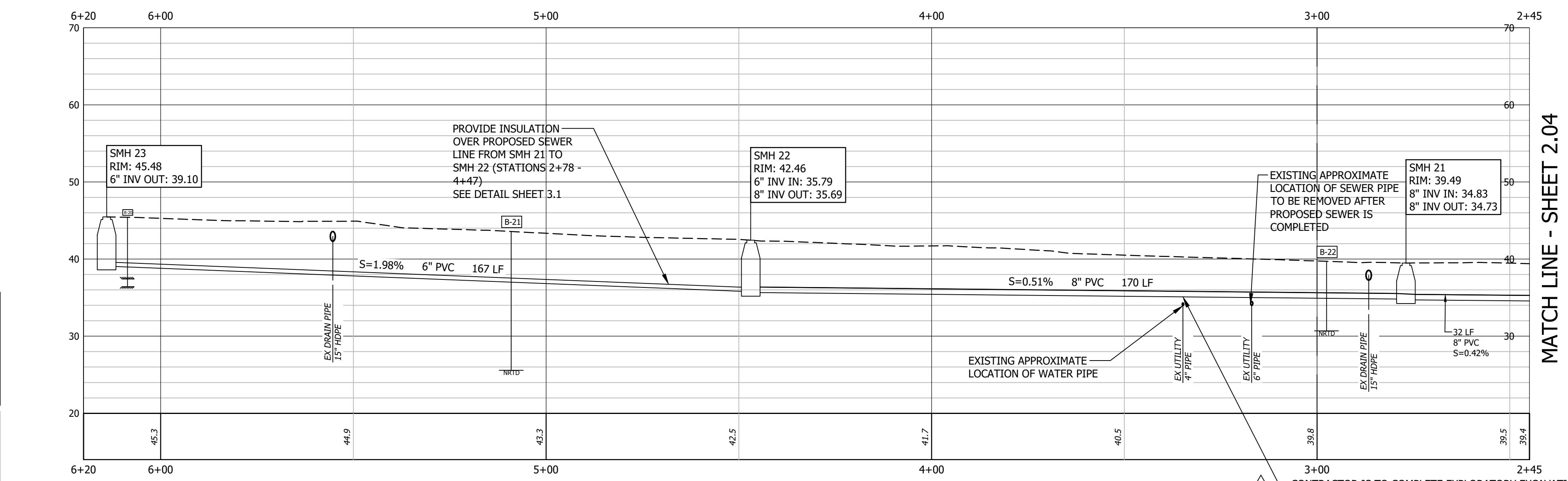




SEWER COVER DEPTH OF 6' IS NOT ACHIEVABLE IN THIS AREA AS SLOPE LIMITATIONS ON HARVARD STREET'S CONNECTION TO THE EXISTING SMH ON AMHERST ROAD PREVENT THE REQUIRED DEPTH TO OBTAIN 6' OF COVER ON COLBY ROAD AND PORTIONS OF COLGATE ROAD.

MAINTAIN MINIMUM 18" OF VERTICAL SEPARATION AT WATER MAIN AND SEWER PIPE CROSSINGS. ALL UTILITIES SHOWN ARE APPROXIMATE LOCATION AND ELEVATION. CONTRACTOR SHALL VERIFY BEFORE INSTALLATION OF PROPOSED SEWER MAIN. IN AREAS WHERE MINIMUM CANNOT BE MAINTAINED, WATER MAIN IS BELOW SEWER PIPE, OR DEPICTED EXISTING CONDITIONS DIFFER FROM FIELD VERIFIED LOCATIONS; THE CONTRACTOR MUST CONTACT THE ENGINEER FOR CHANGES TO THE DESIGN.

MAINTAIN MINIMUM 18" OF VERTICAL SEPARATION AT DRAINAGE PIPE CROSSINGS. IN AREAS WHERE MINIMUM CANNOT BE MAINTAINED, PROVIDE 4" (2 BOARD THICKNESSES) x 2 FEET WIDE x 8 FEET LONG RIGID POLYSTYRENE INSULATION CENTERED OVER SEWER PIPE, TYPICAL.



COLGATE  
STA: 2+45 TO STA: 6+20

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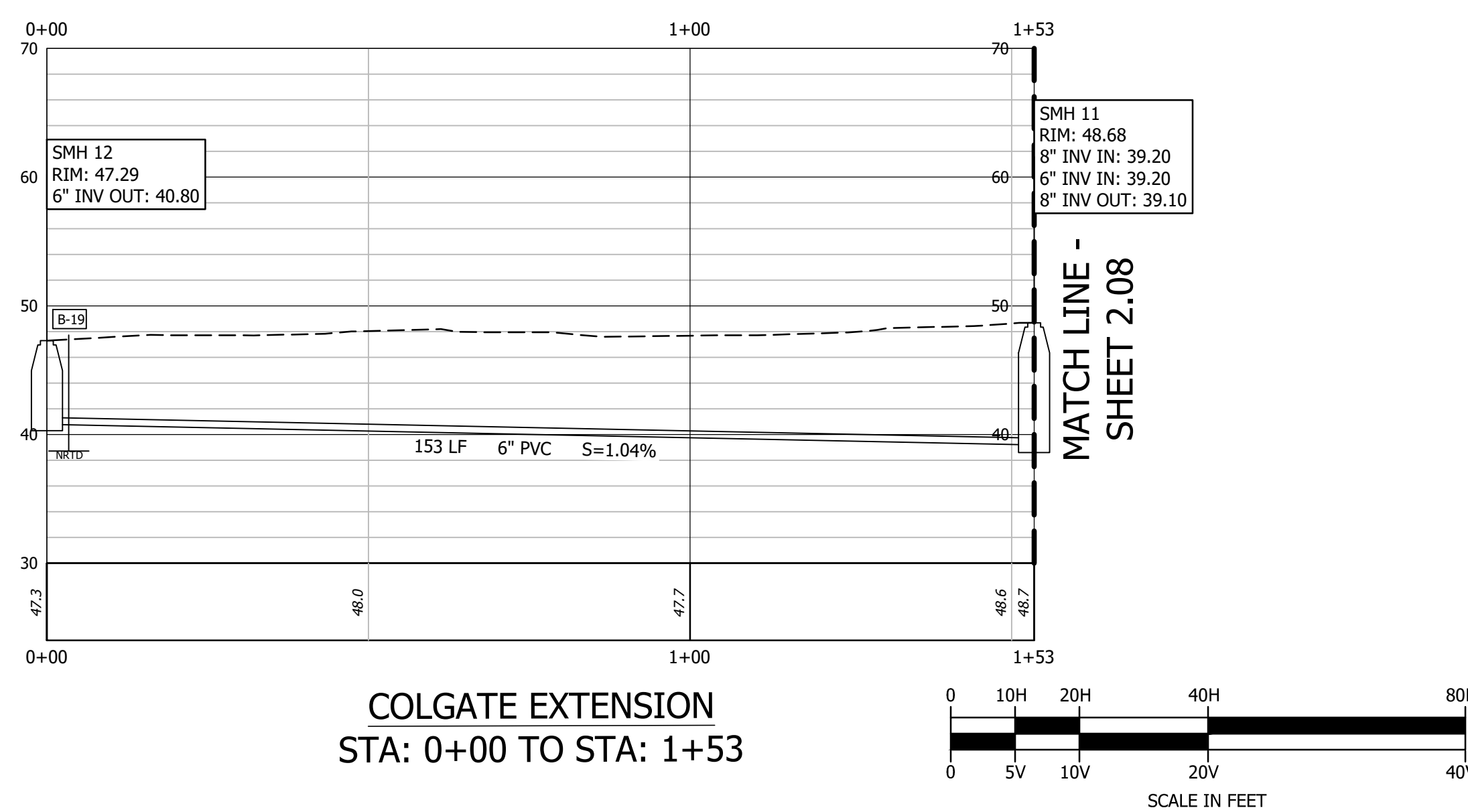
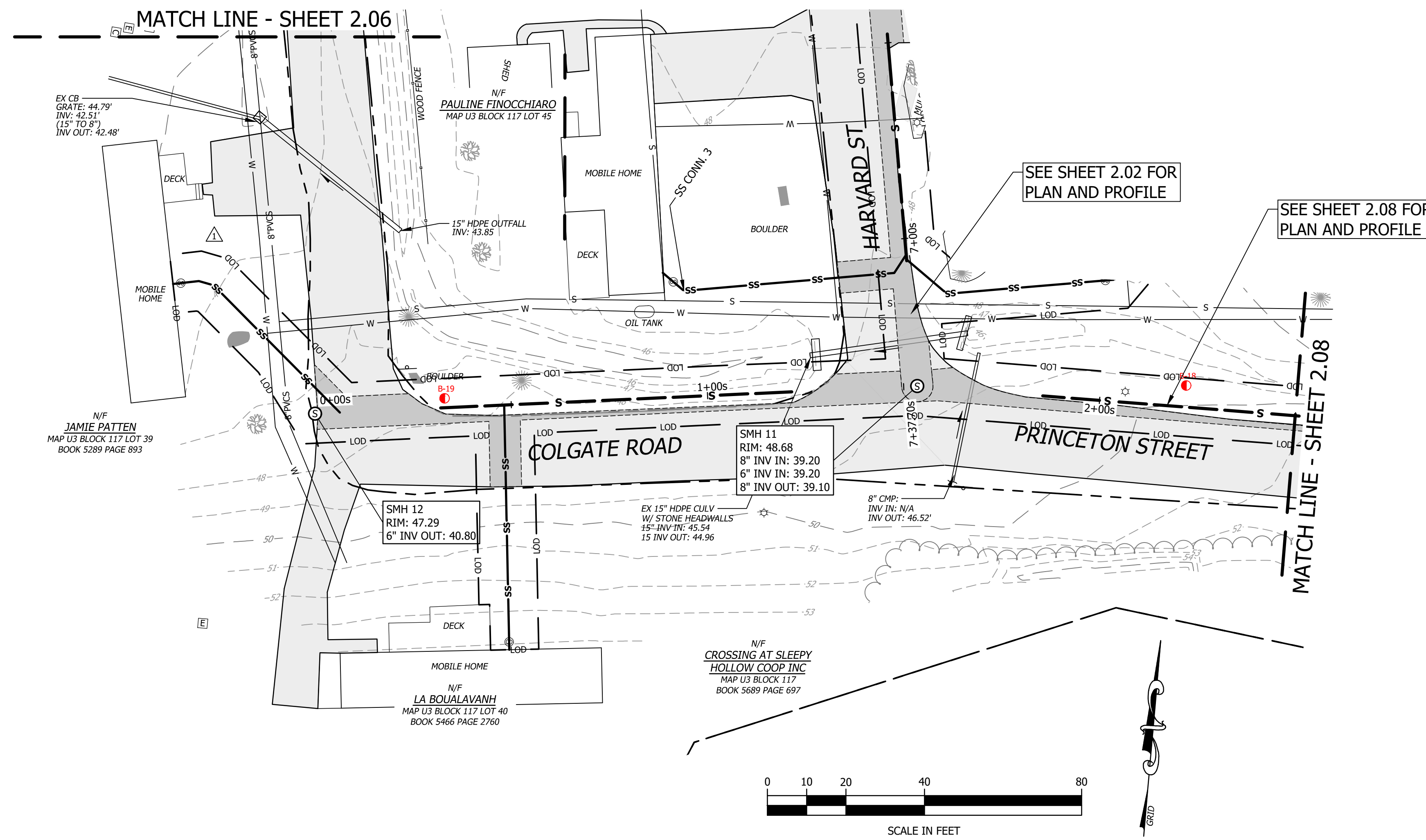
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SURVEYED BY:	HEI	DATE:	05/2024	NO.:	2	INDIS DESIGN REVIEW - 2
ENGINEERED BY:	HEI	DATE:		NO.:		
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SEWER SYSTEM IMPROVEMENTS  
ADDITIVE ALTERNATE #1: COLGATE ROAD  
PLAN AND PROFILE





PROJECT #:	NO.	DATE	REVISION DESCRIPTION
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 PLAN AND PROFILE

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**SHEET 2.07**

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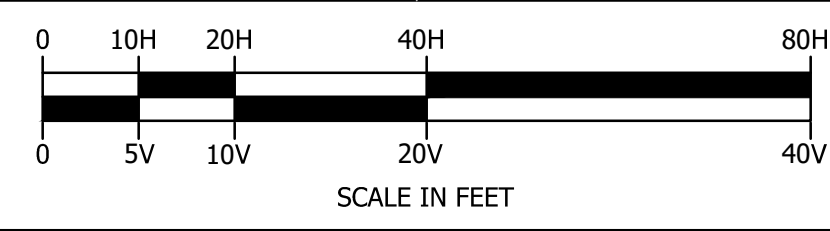
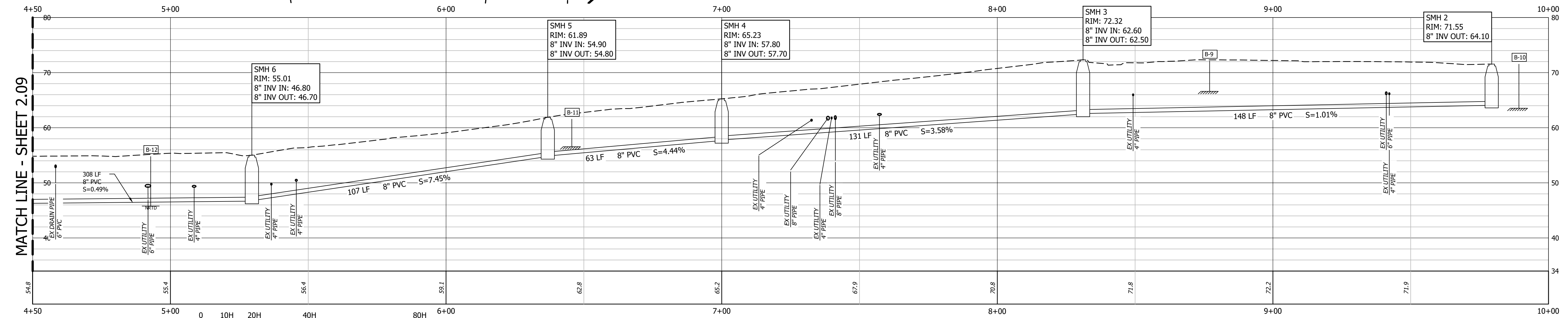
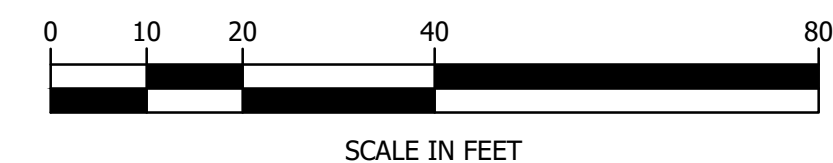
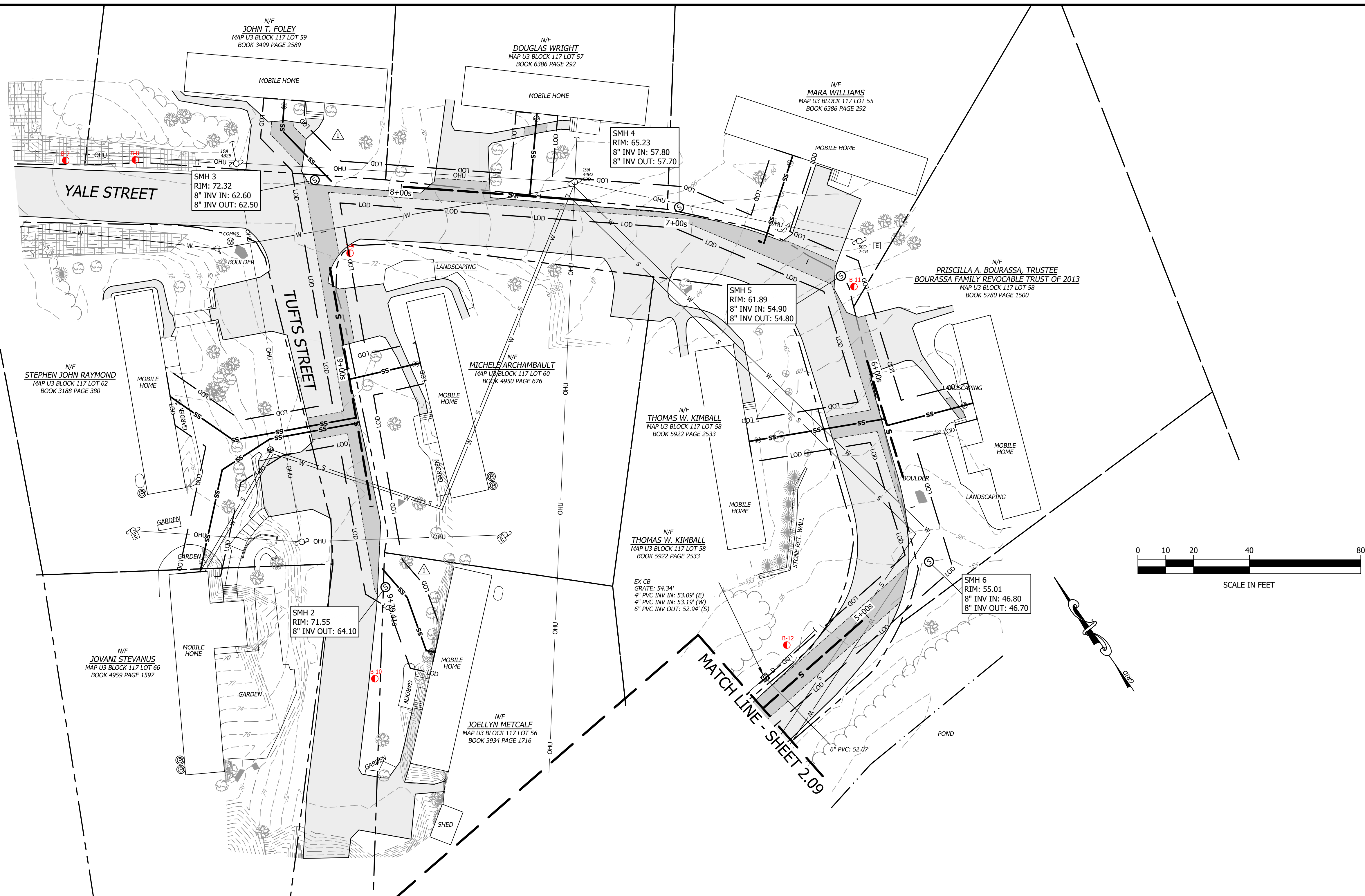












TUFTS - YALE  
STA: 4+50 TO STA: 10+00

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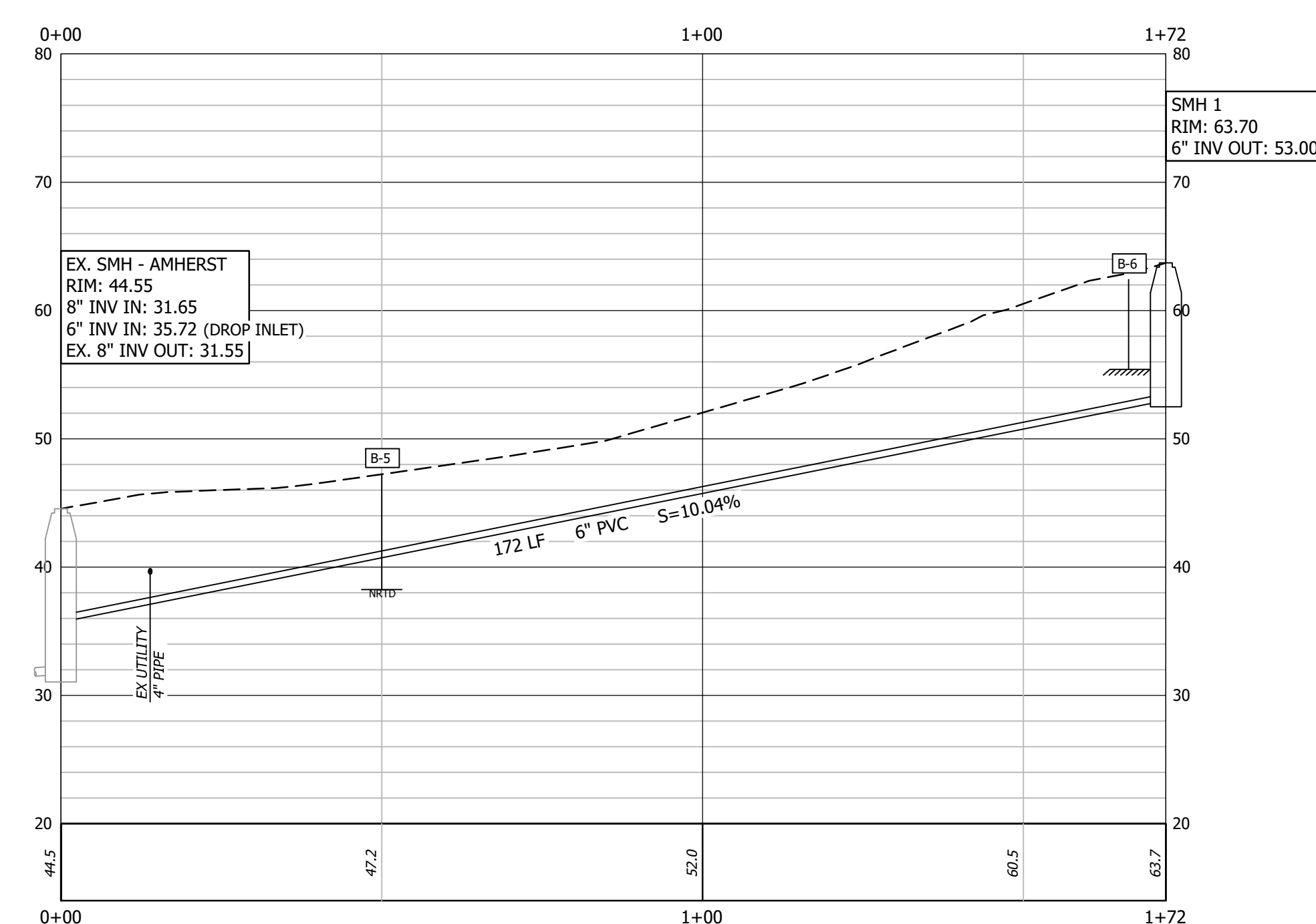
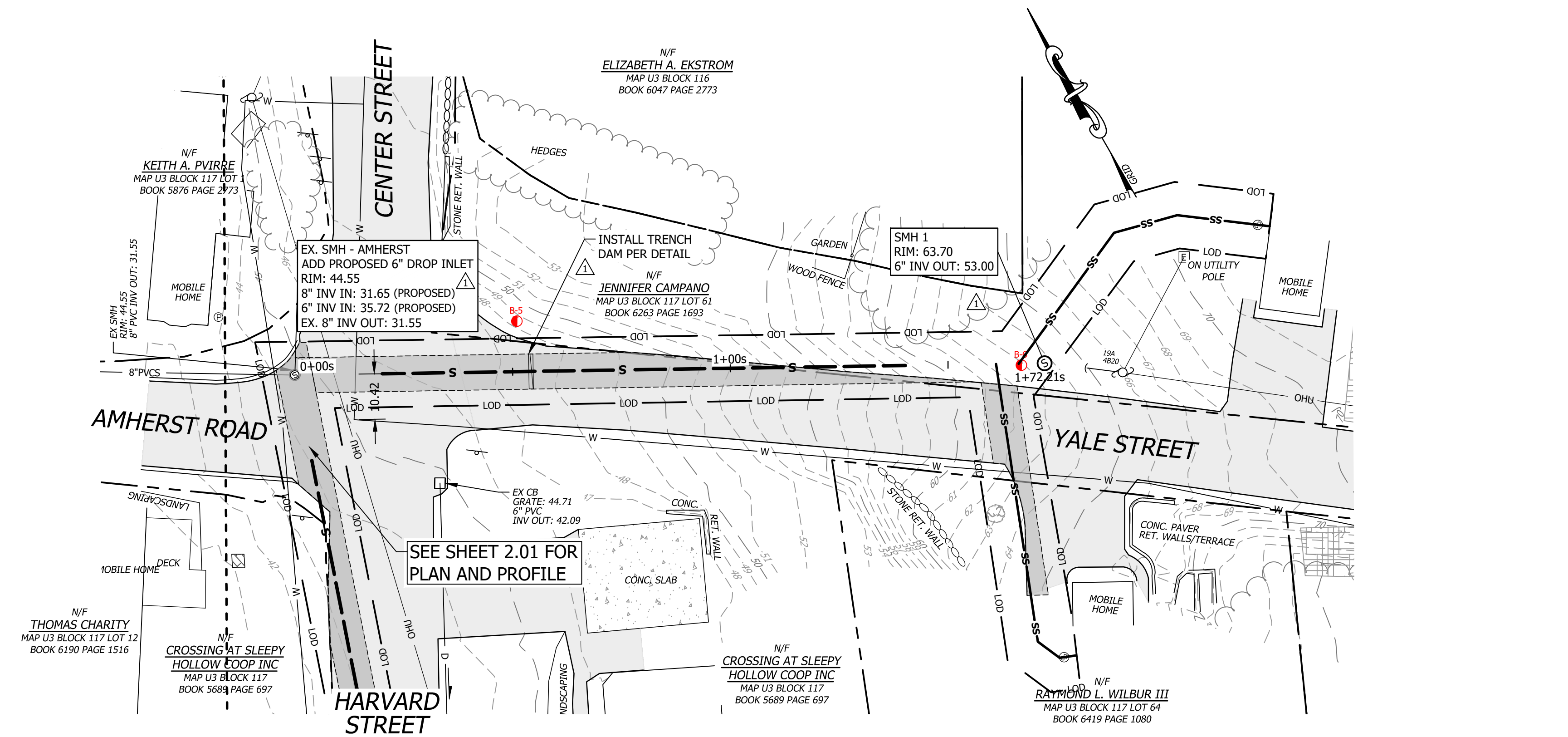


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 ADDITIVE ALTERNATE #3: YALE STREET & TUFTS STREET  
 PLAN AND PROFILE

SHEET 2.10





SEWER PROFILE YALE - AMHERST  
 STA: 0+00 TO STA: 1+72

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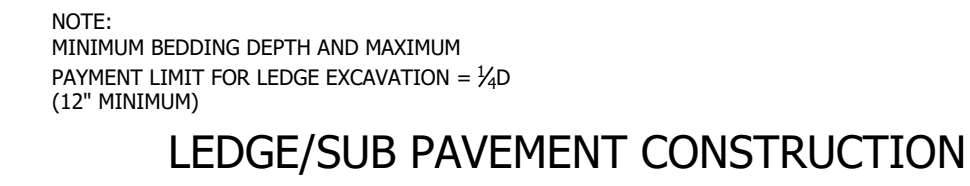
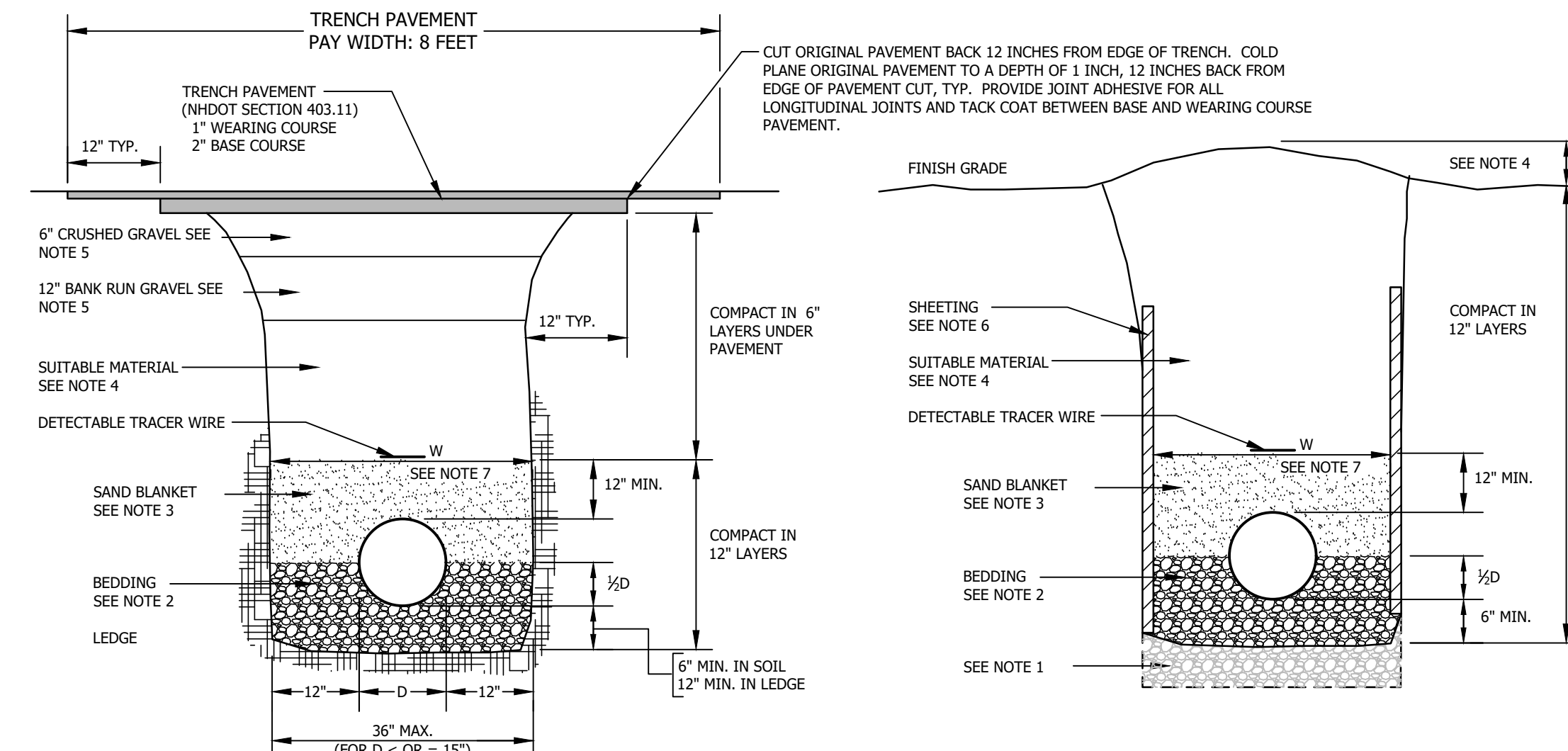
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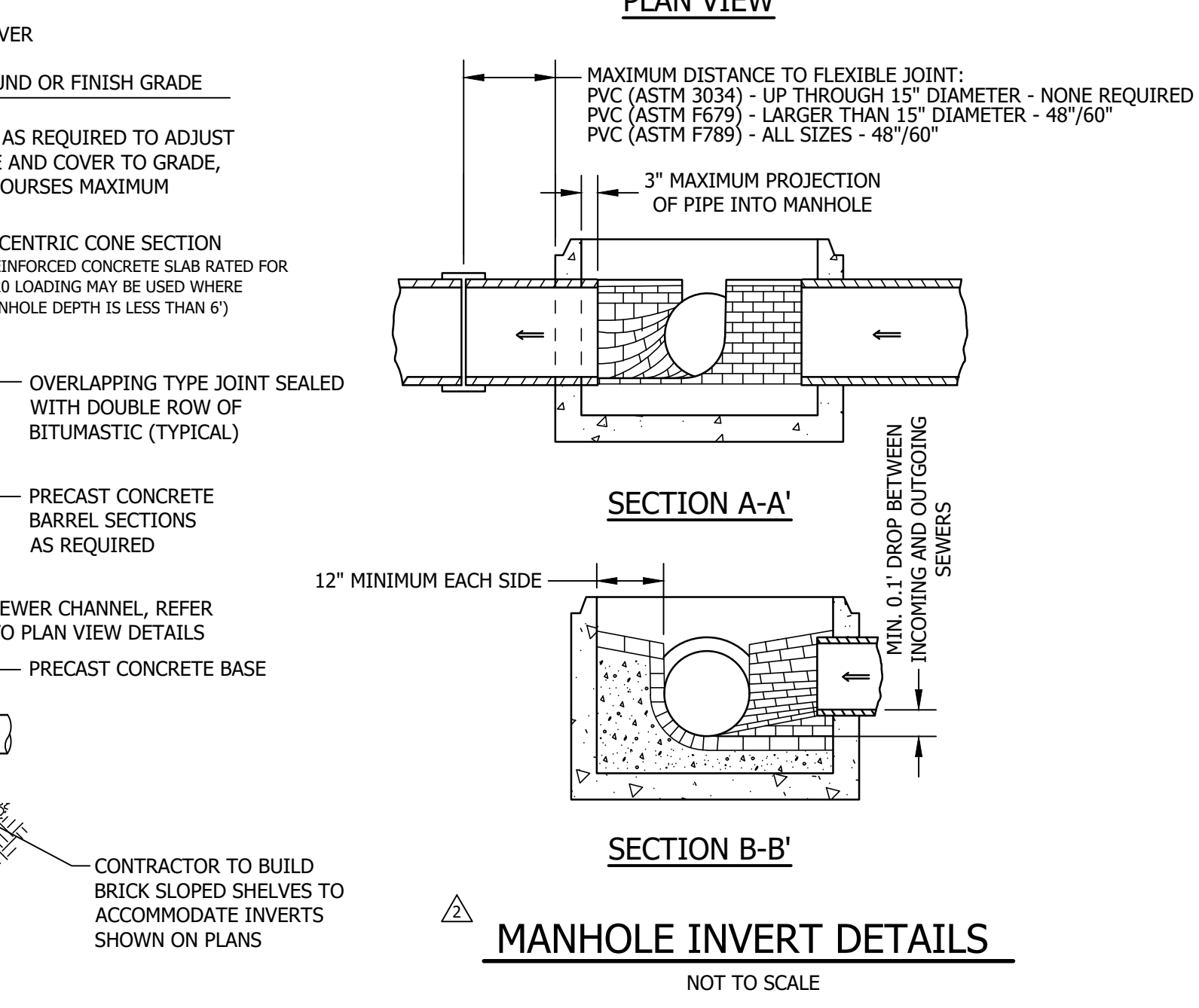
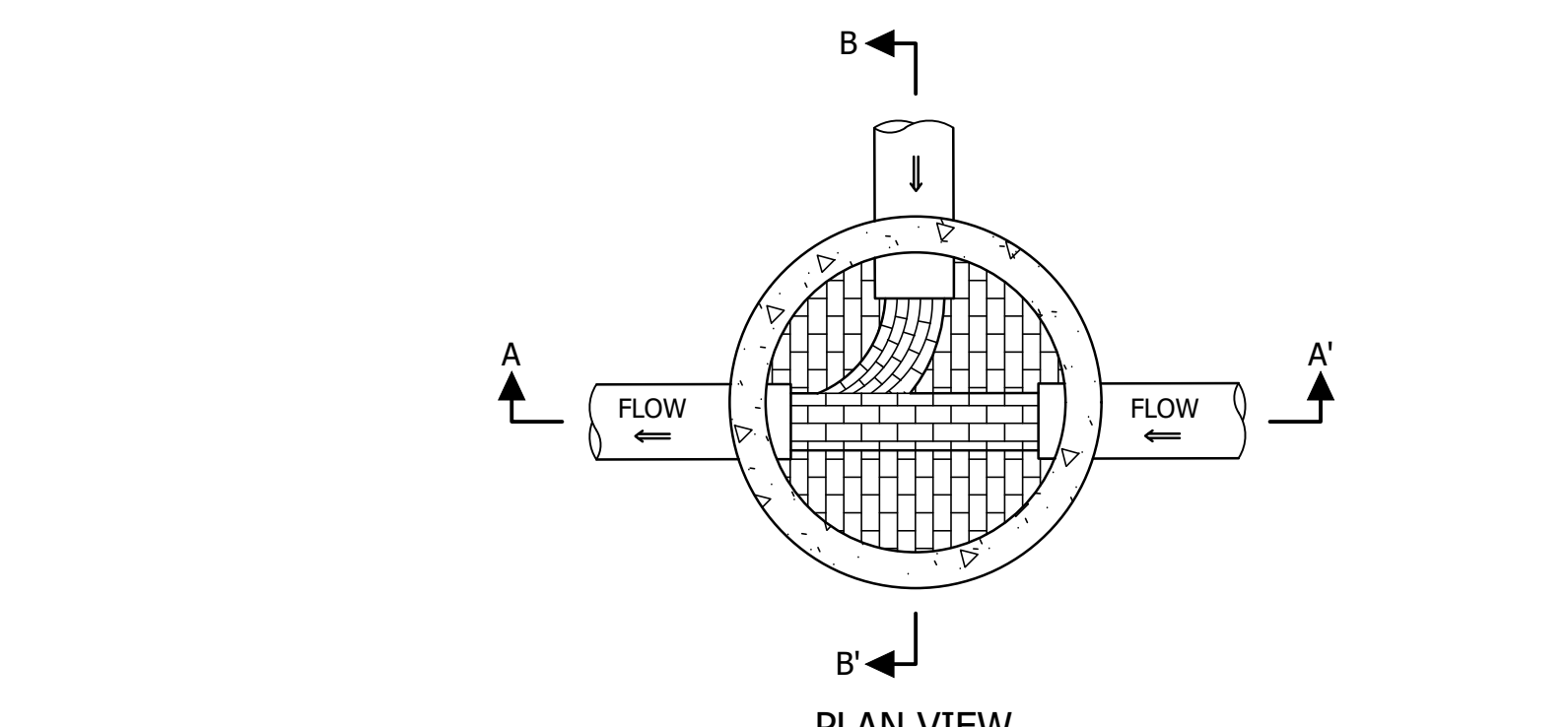
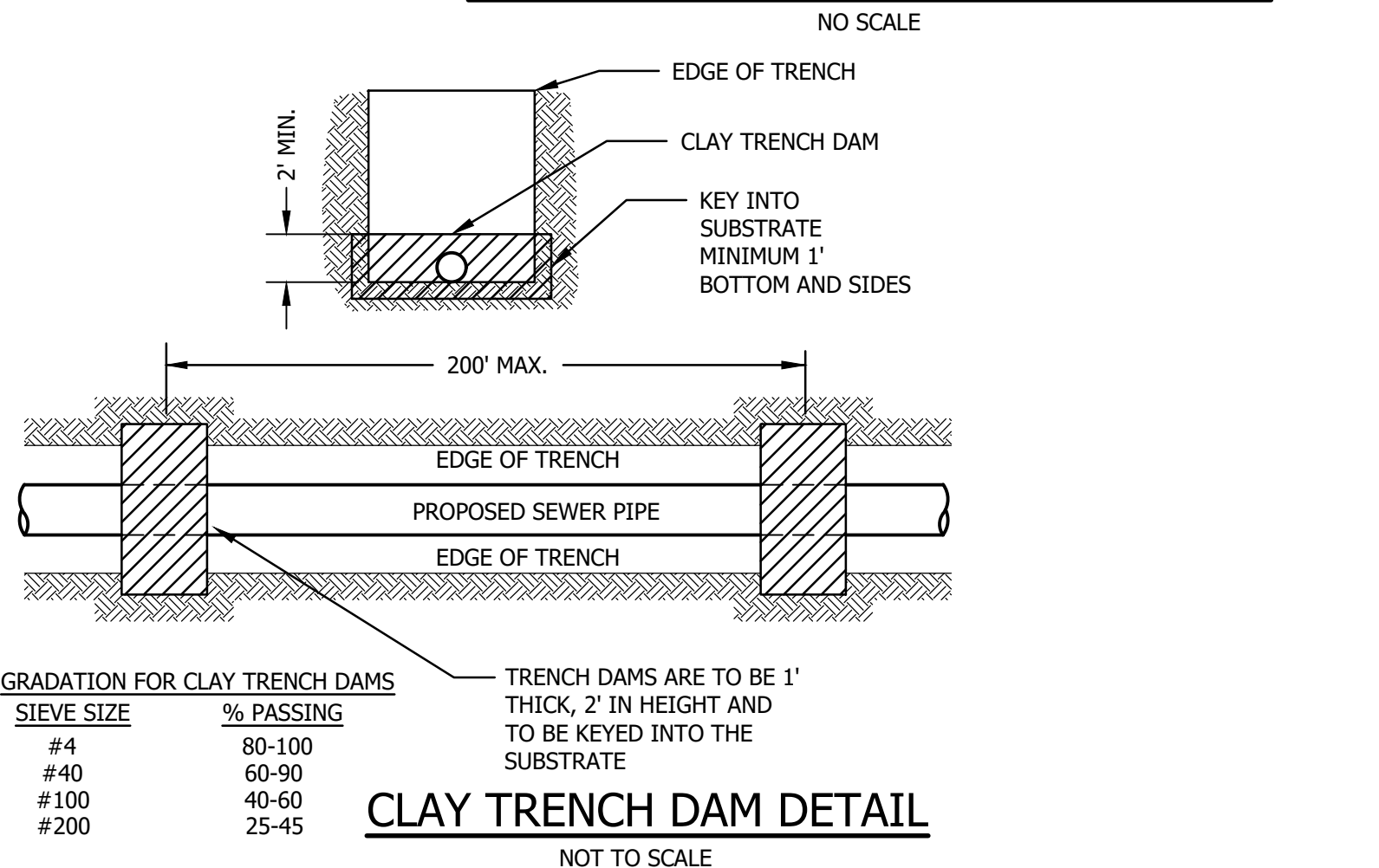
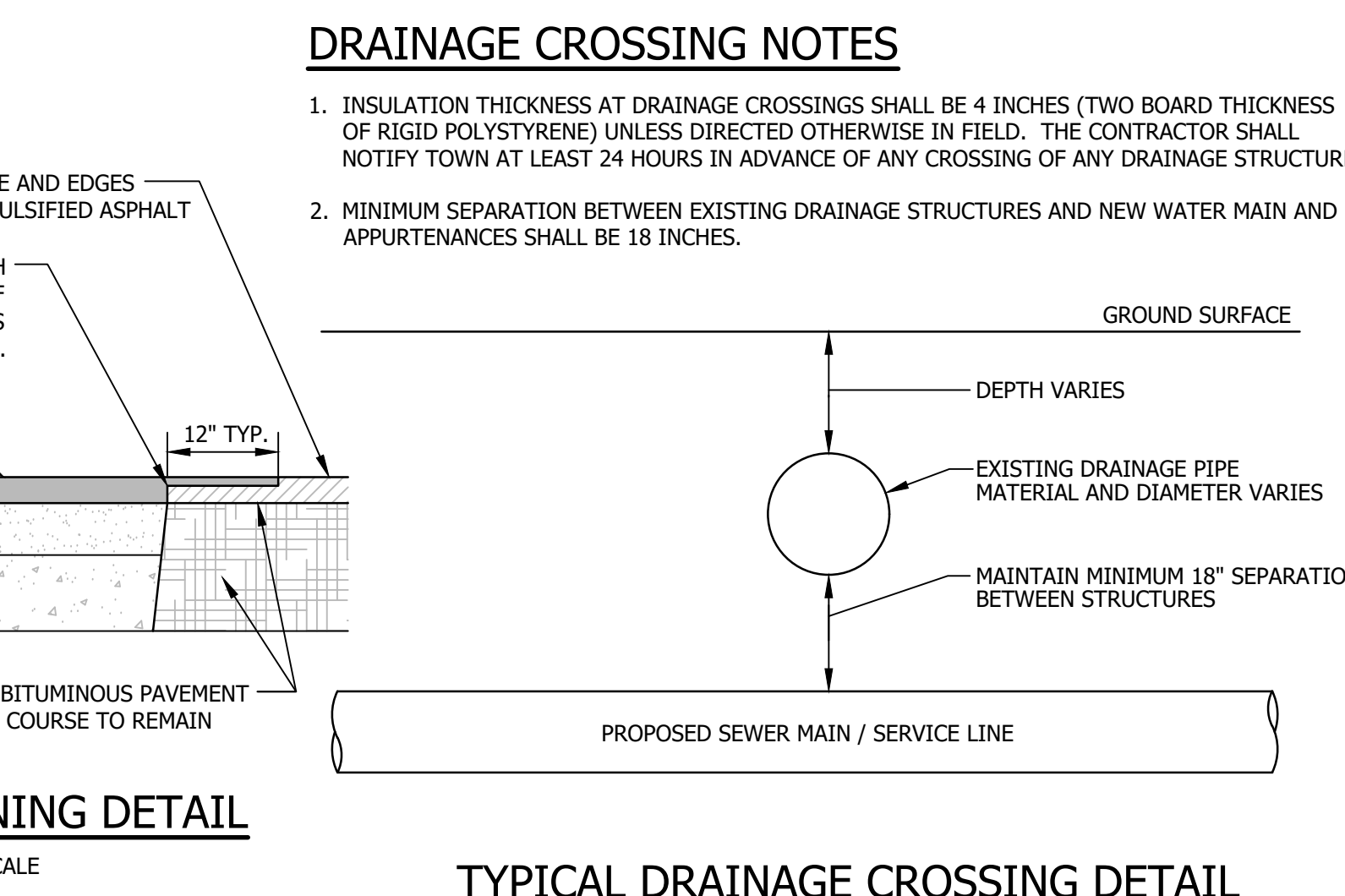
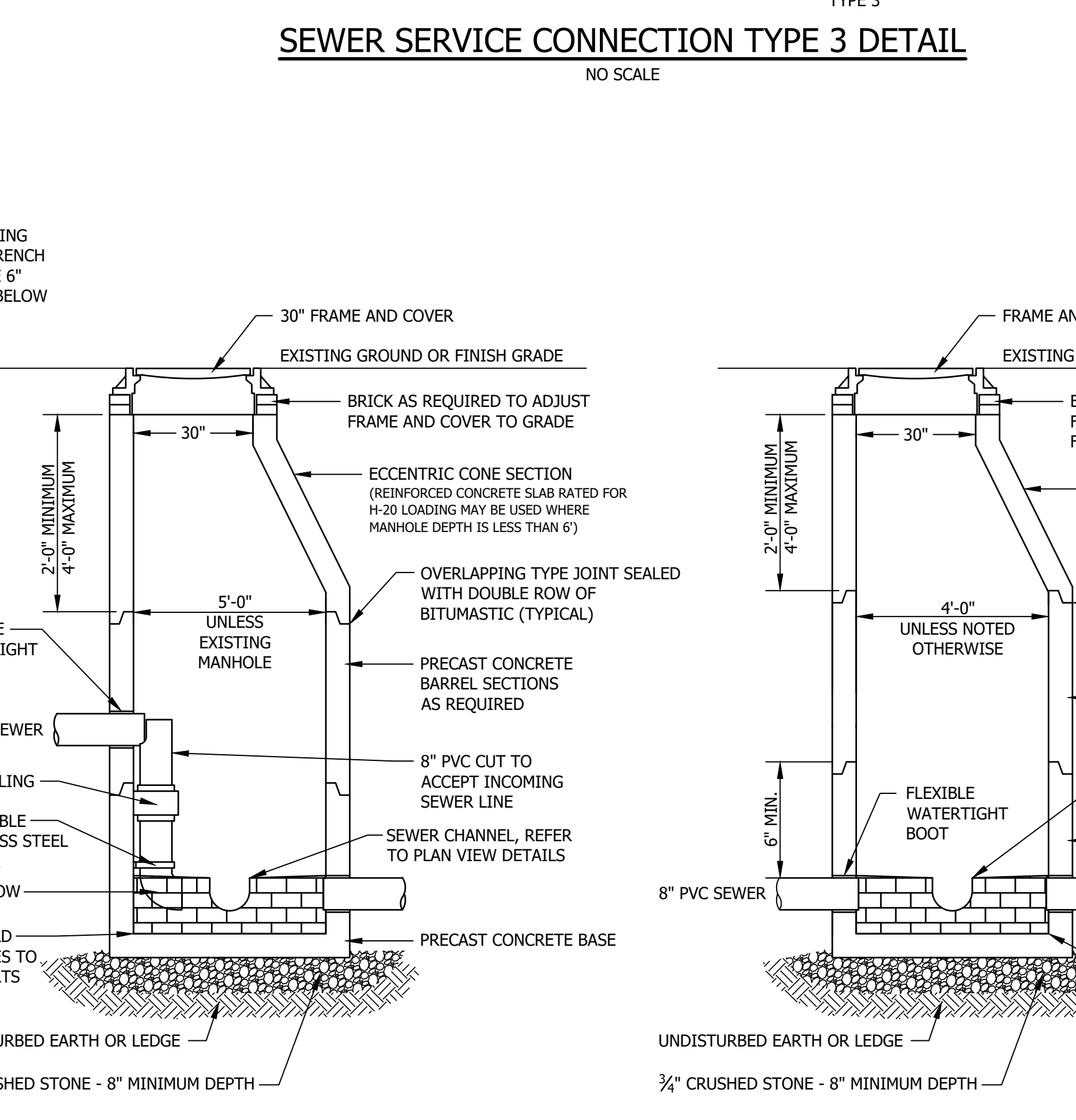
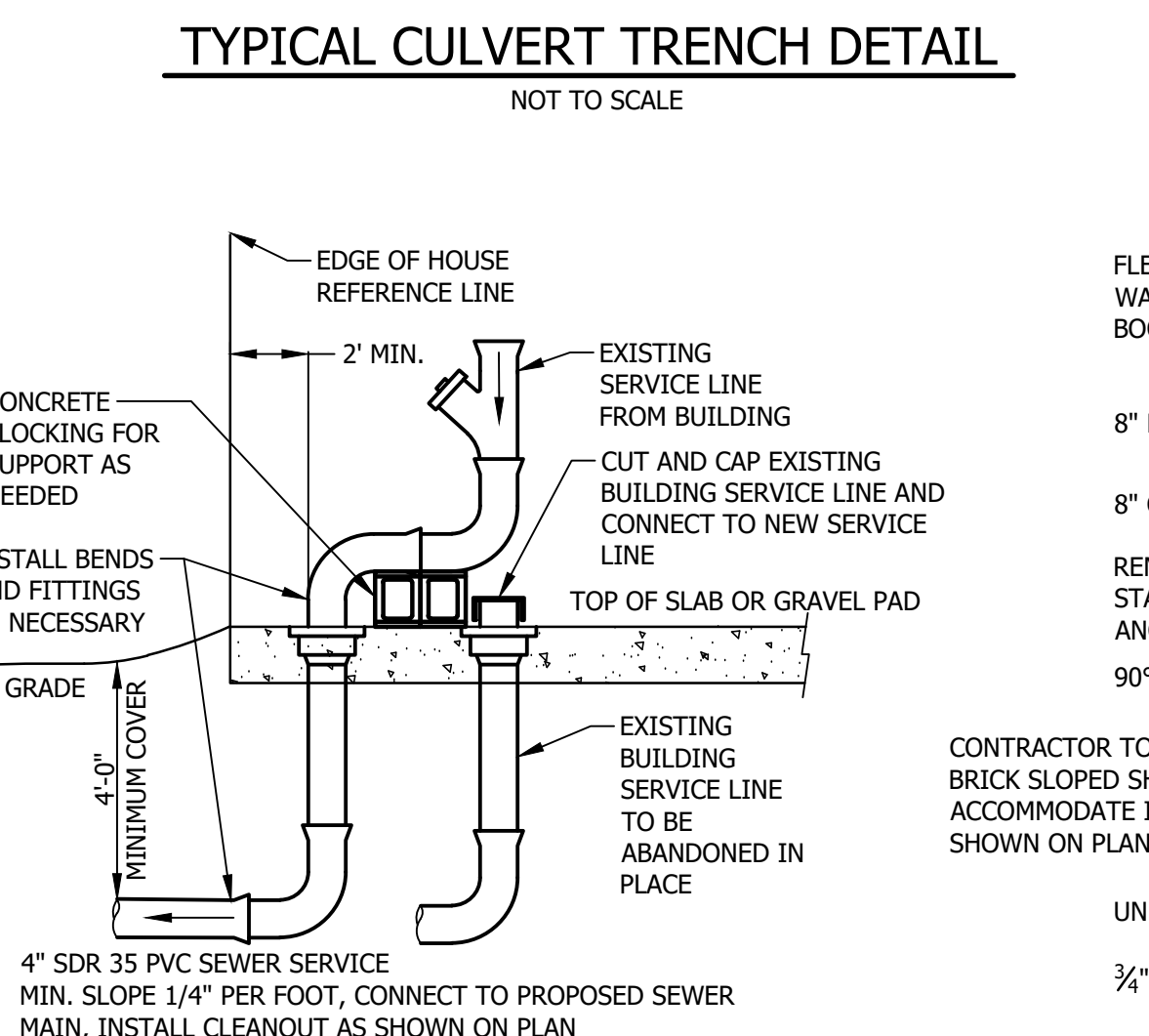
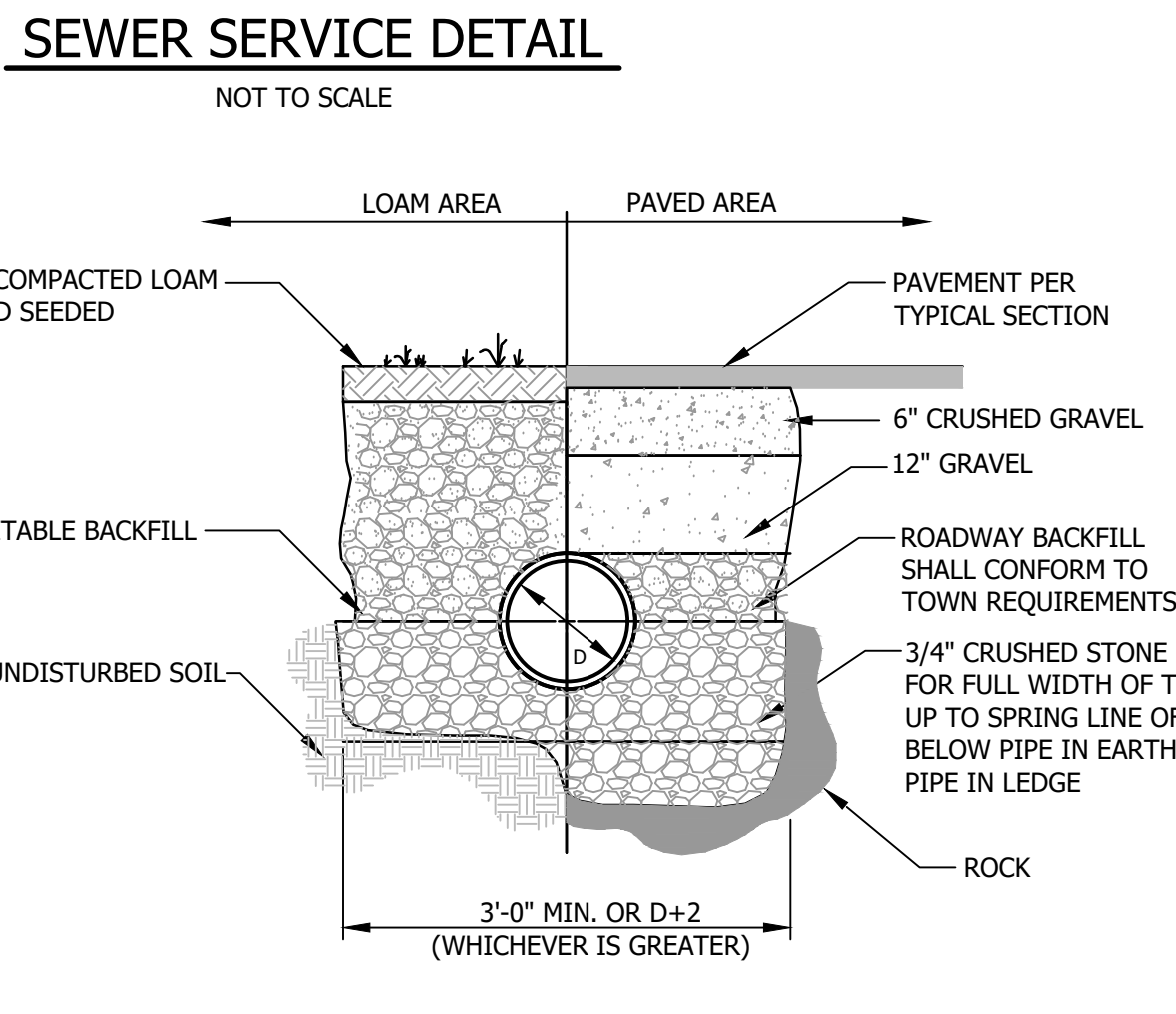
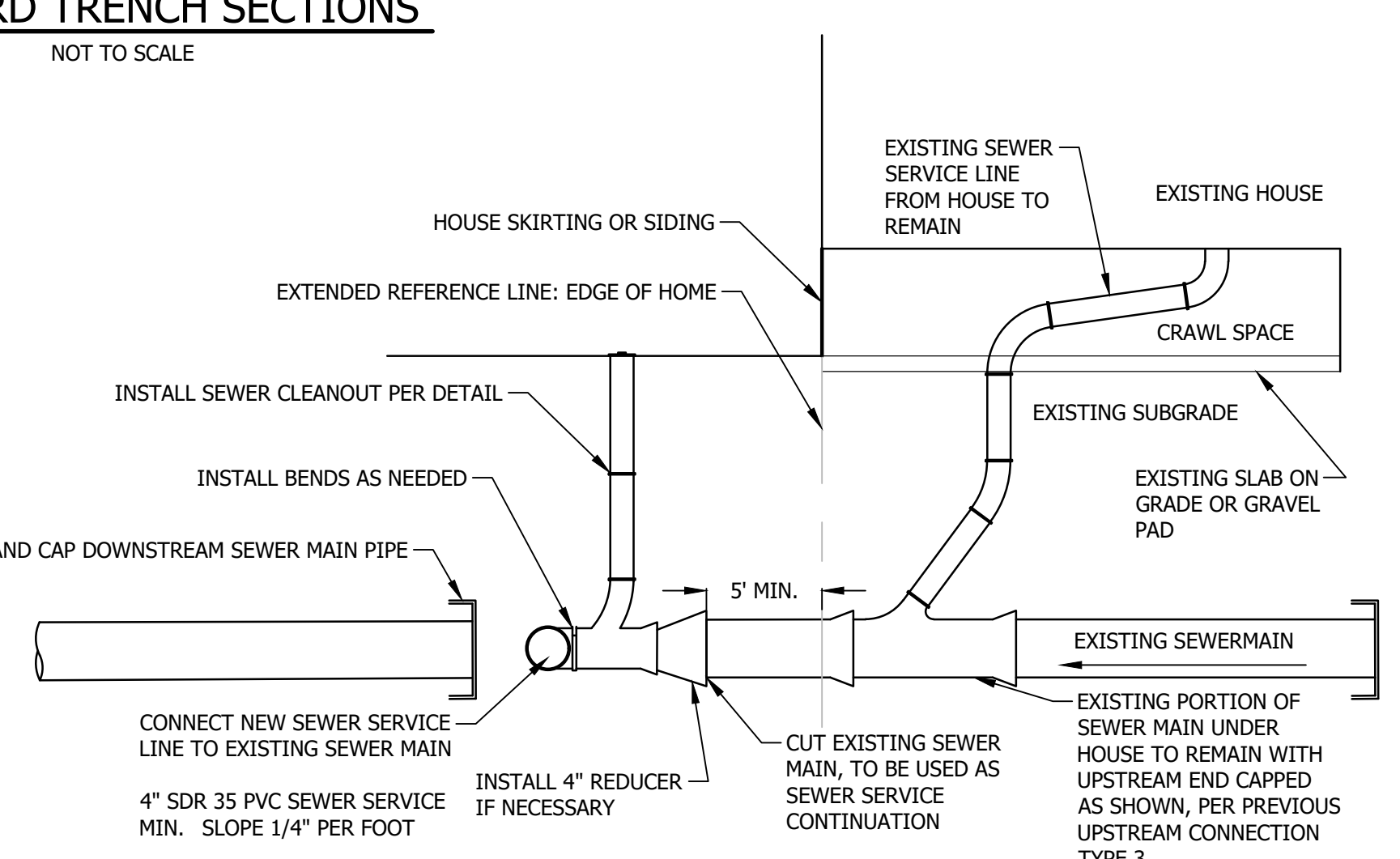
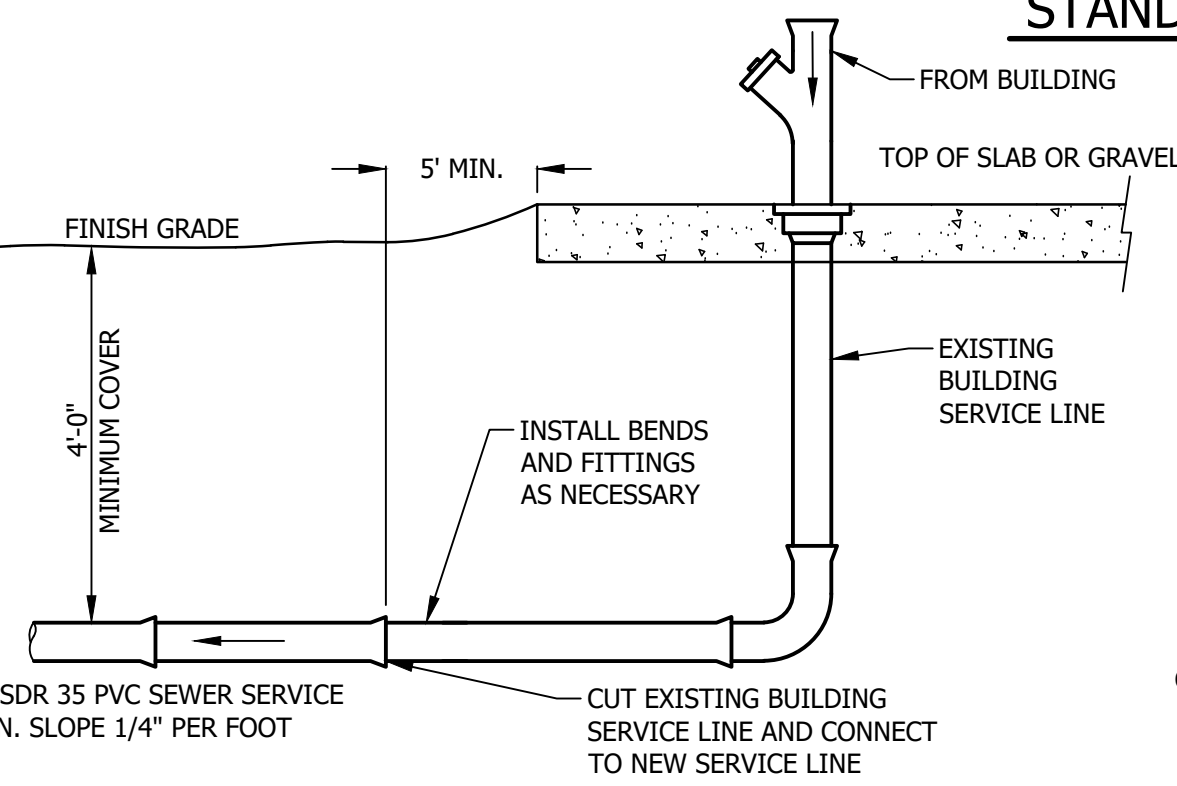
## STANDARD TRENCH NOTES - SEWER

- ORDERED EXCAVATION OF UNSUITABLE MATERIAL** BELOW GRADE SHALL BE REPLACED WITH BEDDING MATERIAL. SEE ALSO NOTE 4.
- BEDDING:** SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM ORGANIC MATTER, CLAY, AND/OR LOAM MEETING ASTM C33 STONE SIZE NO. 67.
 

100% PASSING	1 INCH SCREEN
90-100% PASSING	3/4 INCH SCREEN
20-55% PASSING	3/8 INCH SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE
- SAND BLANKET:** CLEAN SAND FREE FROM ORGANIC MATTER, SO GRADED THAT 100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% PASSES A #200 SIEVE.
- SUITABLE MATERIAL:** IN ROADS, ROAD SHOULDERS, WALKWAYS, AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED FROM THE TRENCH DURING THE COURSE OF CONSTRUCTION, AFTER EXCLUDING DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT OR CLAY, EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL NOT APPROVED BY THE ENGINEER.  
TRENCH BACKFILL IN CROSS-COUNTRY LOCATIONS SHALL BE SUITABLE MATERIAL AS DESCRIBED ABOVE, EXCEPT THAT TOP SOIL, LOAM, MUCK, OR PEAT MAY BE USED PROVIDED THAT THE COMPLETED CONSTRUCTION WILL BE STABLE AND ACCESS TO THE PIPE FOR MAINTENANCE AND RECONSTRUCTION IS PRESERVED. BACKFILL SHALL BE MOUND TO A HEIGHT OF SIX INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- BASE COURSE FOR TRENCH REPAIR** SHALL MEET THE REQUIREMENTS OF SECTION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.
- SHEETING:** ALL TRENCH SUPPORTS SHALL CONFORM TO OSHA STANDARDS. CONTRACTOR IS RESPONSIBLE FOR OSHA COMPLIANCE AND WORKER SAFETY THROUGHOUT CONSTRUCTION.
- TRENCH DIMENSIONS:** W = MAXIMUM ALLOWABLE TRENCH WIDTH MEASURED 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER (D) OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS THE PIPE OUTSIDE DIAMETER. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE. THE MAXIMUM ALLOWABLE TRENCH PAVEMENT PAYMENT WIDTH SHALL BE 8 FEET CENTERED OVER PIPE.
- PIPE INSULATION AT STORM DRAIN CROSSING:** INSTALL 2" THICK RIGID FOAM INSULATION CENTERED OVER SEWER AT STORM DRAIN CROSSINGS, EXTEND INSULATION 4 FEET EITHER SIDE OF STORM DRAIN ALONG SEWER. INSULATION SHALL BE PLACED 12" ABOVE SEWER PIPE ABOVE BEDDING MATERIAL.



## EARTH CONSTRUCTION WITH OR WITHOUT SHEETING



## DRAINAGE CROSSING NOTES

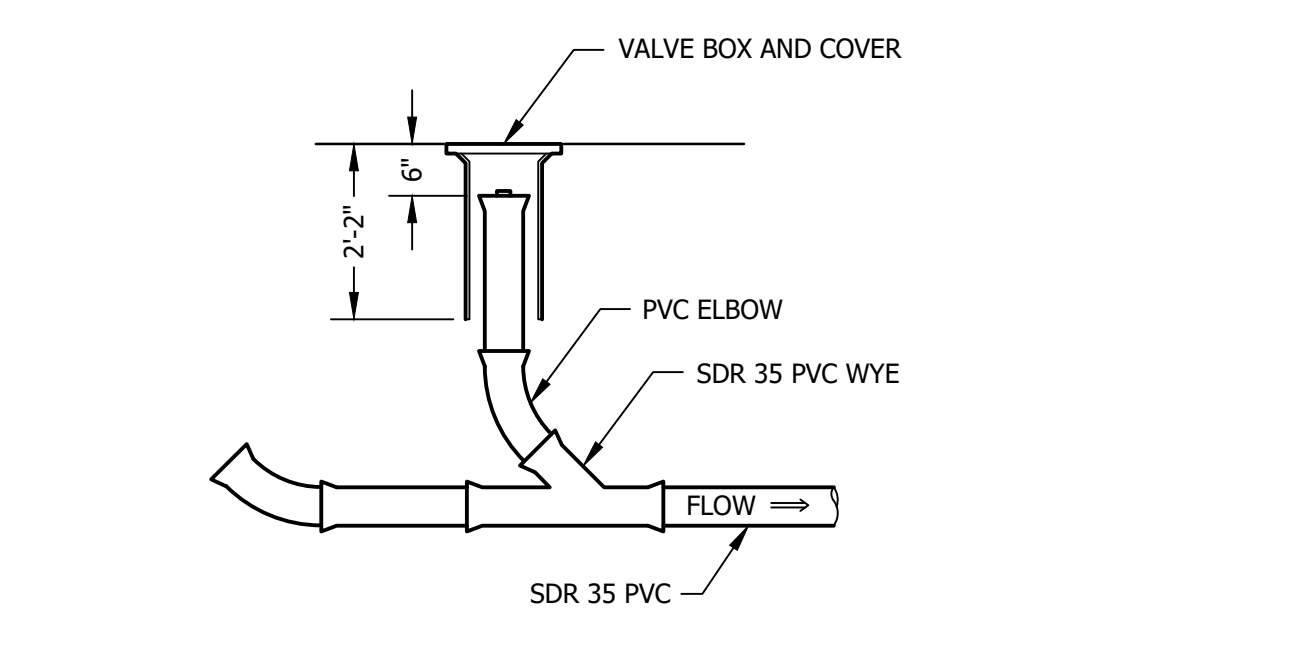
- INSULATION THICKNESS AT DRAINAGE CROSSINGS SHALL BE 4 INCHES (TWO BOARD THICKNESS OF RIGID POLYSTYRENE) UNLESS DIRECTED OTHERWISE IN FIELD. THE CONTRACTOR SHALL NOTIFY TOWN AT LEAST 24 HOURS IN ADVANCE OF ANY CROSSING OF ANY DRAINAGE STRUCTURE.
- MINIMUM SEPARATION BETWEEN EXISTING DRAINAGE STRUCTURES AND NEW WATER MAIN AND APPURTENANCES SHALL BE 18 INCHES.

## SEWER SERVICE CONNECTION TYPE 2

THE DETAIL SHOWN AND ACCOMPANYING NOTES BELOW ARE REPRESENTATIVE OF THE SECOND OF THE TWO TYPES OF SEWER SERVICE CONNECTIONS TO BE IMPLEMENTED ACCORDING TO THESE PLANS. THIS CONNECTION IS TO BE IMPLEMENTED WHERE NOTED ON THE PLANS TO AVOID EXCAVATION AND GENERAL DISTURBANCE BENEATH HOUSES IN THE COOPERATIVE.

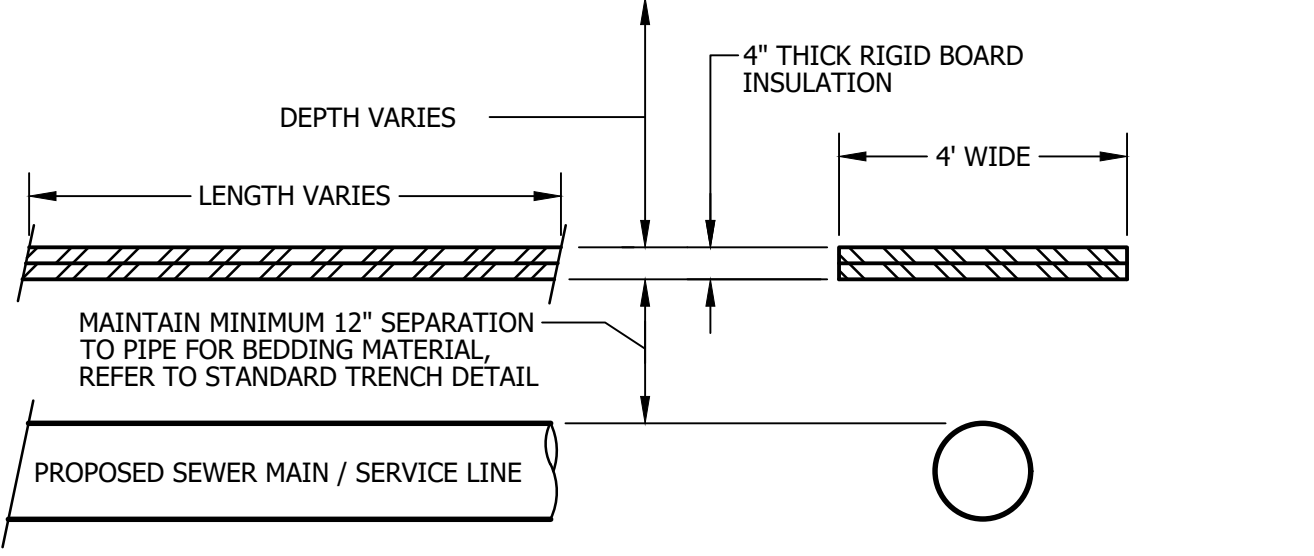
EXISTING SEWER MAINS, ACCORDING TO BEST AVAILABLE INFORMATION, WERE PLACED IN SOME AREAS BELOW EXISTING HOUSES. THE CONTRACTOR SHALL FIRST LOCATE AND IDENTIFY THE SIZE, MATERIAL AND CONDITION OF THE EXISTING SEWER MAINS LOCATED IN THE AREAS WHERE SEWER SERVICE CONNECTION TYPE 2 IS EXPECTED. THE FOLLOWING IS A SUGGESTED PROCEDURE FOR COMPLETING THIS TYPE OF CONNECTION.

- THE CONTRACTOR SHALL PRESSURE TEST THE SEWER MAIN BEFORE ESTABLISHING SEWER SERVICE CONNECTION.
- THE CONTRACTOR SHALL CUT THE PIPE AT A MINIMUM OF 5' FROM THE EDGE OF THE HOUSE ON THE DOWNSTREAM SIDE OF THE SEWER MAIN.
- CAP THE DOWNSTREAM PORTION OF PIPE TO PREVENT SEDIMENT AND GROUNDWATER FROM ENTERING THE SEWER PIPES.
- INSTALL A 4" REDUCER WHERE REQUIRED TO THE UPSTREAM PORTION OF SEWER MAIN TO ESTABLISH A CONNECTION POINT FOR THE NEW SERVICE LINE.
- INSTALL SEWER CLEANOUTS AND BENDS AS SHOWN ON PLANS.
- THE CONTRACTOR SHALL BEGIN TYPE 2 CONNECTIONS AT THE FURTHEST CONNECTION UPSTREAM AND CONTINUE DOWNSTREAM AS SHOWN ON PLANS.



## SEWER PIPE WITH LESS THAN 6' VERTICAL COVER

- INSULATION THICKNESS FOR SEWER PIPE WITH LESS THAN 6' OF VERTICAL COVER SHALL BE 4 INCHES (TWO BOARD THICKNESS OF RIGID POLYSTYRENE, 2" THICK x 4' WIDE) UNLESS DIRECTED OTHERWISE IN FIELD.
- THE CONTRACTOR SHALL CENTER THE INSULATION OVER THE PROPOSED PIPE ALONG ITS LENGTH.
- CONTRACTOR SHALL MAINTAIN MINIMUM 12" COVER OF BLANKET MATERIAL BEFORE INSTALLING RIGID INSULATION BOARD.
- CONTRACTOR SHALL STAGGER JOINTS EQUALLY BETWEEN TOP AND BOTTOM LAYER OF RIGID INSULATION BOARD.



## SEWER SERVICE CONN. TYPE 2

NOT TO SCALE

## INSIDE DROP MANHOLE DETAIL

NOT TO SCALE

## SANITARY SEWER MANHOLE DETAIL

NOT TO SCALE

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## SEEDING RECOMMENDATIONS

- 1. GRADING AND SHAPING**  
A. SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- 2. SEEDBED PREPARATION**  
A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.  
B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME THOROUGHLY INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- 3. ESTABLISHING VEGETATION**  
A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:  
-AGRICULTURAL LIMESTONE, 2 TONS PER ACRE OR 100 LBS. PER 1,000 SQ. FT.  
-NITROGEN (N), 50 LBS. PER ACRE OR 1.1 LBS. PER 1,000 SQ. FT.  
-PHOSPHATE (P<sub>2</sub>O<sub>5</sub>), 100 LBS. PER ACRE OR 2.02 LBS. PER 1,000 SQ. FT.  
-POTASH (K<sub>2</sub>O), 100 LBS. PER ACRE OR 2.02 LBS. PER 1,000 SQ. FT.  
(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10).
- B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.

**C. SEEDING GUIDE:**

USE	SEEDING MIXTURE (SEE 3D)	SOIL TYPE			
		DROUGHTY	WELL DRAINED	MOD. WELL DRAINED	POORLY DRAINED
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	A	FAIR	GOOD	GOOD	FAIR
	B	POOR	GOOD	FAIR	FAIR
	C	FAIR	EXCELLENT	EXCELLENT	POOR
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR
LIGHTLY USED PARKING LOTS, ODD AREAS, UNUSED LANDS, AND LOW INTENSITY USE RECREATION SITES	A	GOOD	GOOD	GOOD	FAIR
	B	GOOD	GOOD	FAIR	POOR

**D. SEEDING RATES:**

MIXTURE	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A TALL FESCUE	20	0.45
CREeping RED FESCUE	20	0.45
REDTOP	2	0.05
TOTAL:	42	0.95
B TALL FESCUE	15	0.35
CREeping RED FESCUE	10	0.25
CROWN VETCH OR FLATPEA	15 OR 30	0.35 OR 0.75
TOTAL:	40 OR 55	0.95 OR 1.35
C TALL FESCUE	30	0.45
FLATPEA	30	0.75
TOTAL:	50	1.20

- E. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO NOVEMBER 15. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO NOVEMBER 1.

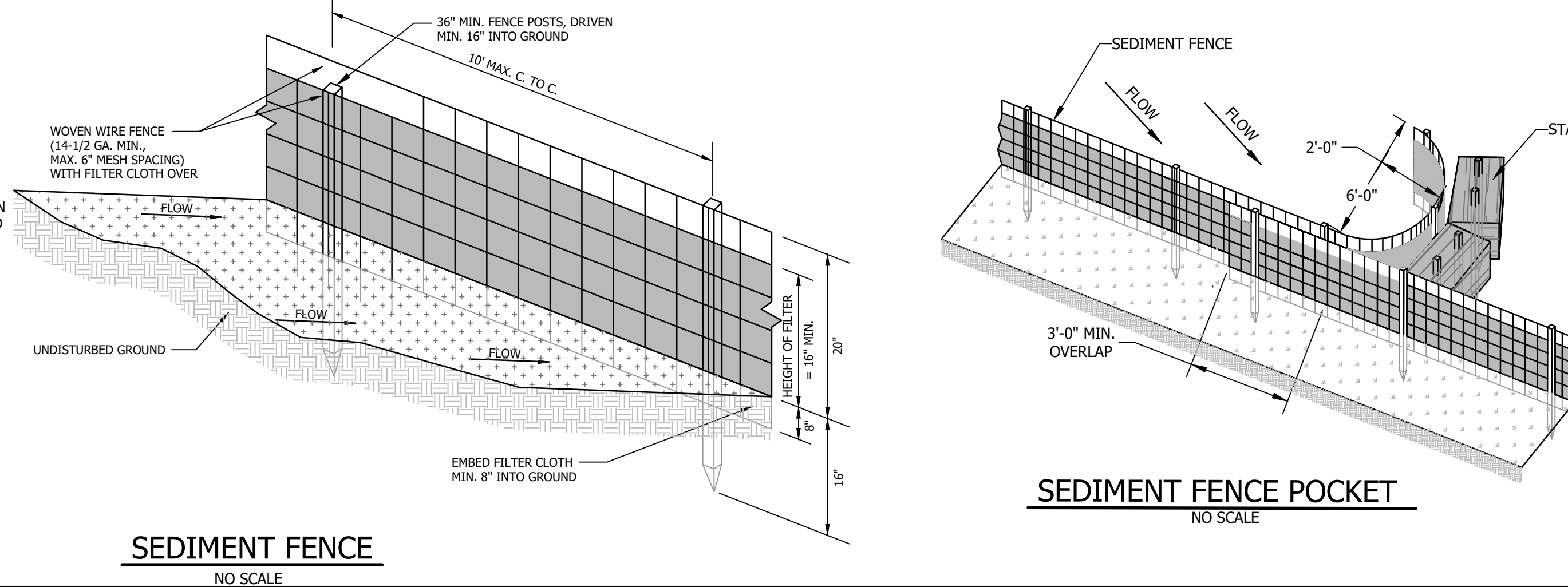
**F. TEMPORARY SEEDING RATES:**

SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.	REMARKS
WINTER RYE	112	2.05	BEST FOR FALL SEEDING. SEED FROM AUGUST TO NOVEMBER 5TH FOR BEST COVER. SEED TO A DEPTH OF 1 INCH.
OATS	80	2.00	BEST FOR SPRING SEEDING. SEED NO LATER THAN MAY 15TH FOR SUMMER PROTECTION. SEED TO A DEPTH OF 1 INCH.
ANNUAL RYEGRASS	40	1.0	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE IMPORTANT. SEED EARLY SPRING AND/OR BETWEEN AUGUST 15TH AND NOVEMBER 15TH. COVER SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	30	0.7	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1ST AND JUNE 1ST AND/OR BETWEEN AUGUST 15TH AND NOVEMBER 15TH. MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

- 4. MULCH**  
A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.  
B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING.
- 5. MAINTENANCE TO ESTABLISH A STAND**  
A. PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.  
B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ON SITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.  
C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

## CONSTRUCTION NOTES FOR SEDIMENT FENCE

- WOVEN WIRE FENCE, IF REQUIRED, TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP, MID SECTION, AND BOTTOM.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SEDIMENT FENCE, OR 50% OF ITS STORAGE IS USED.

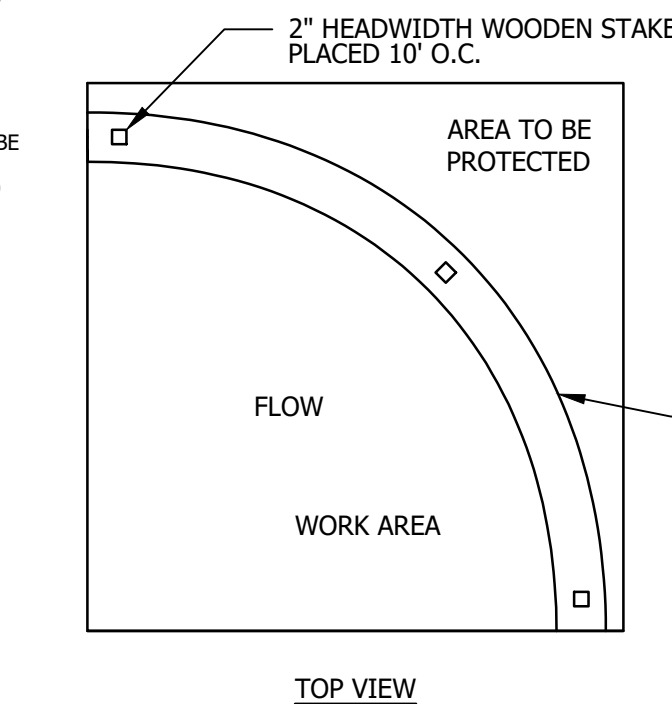
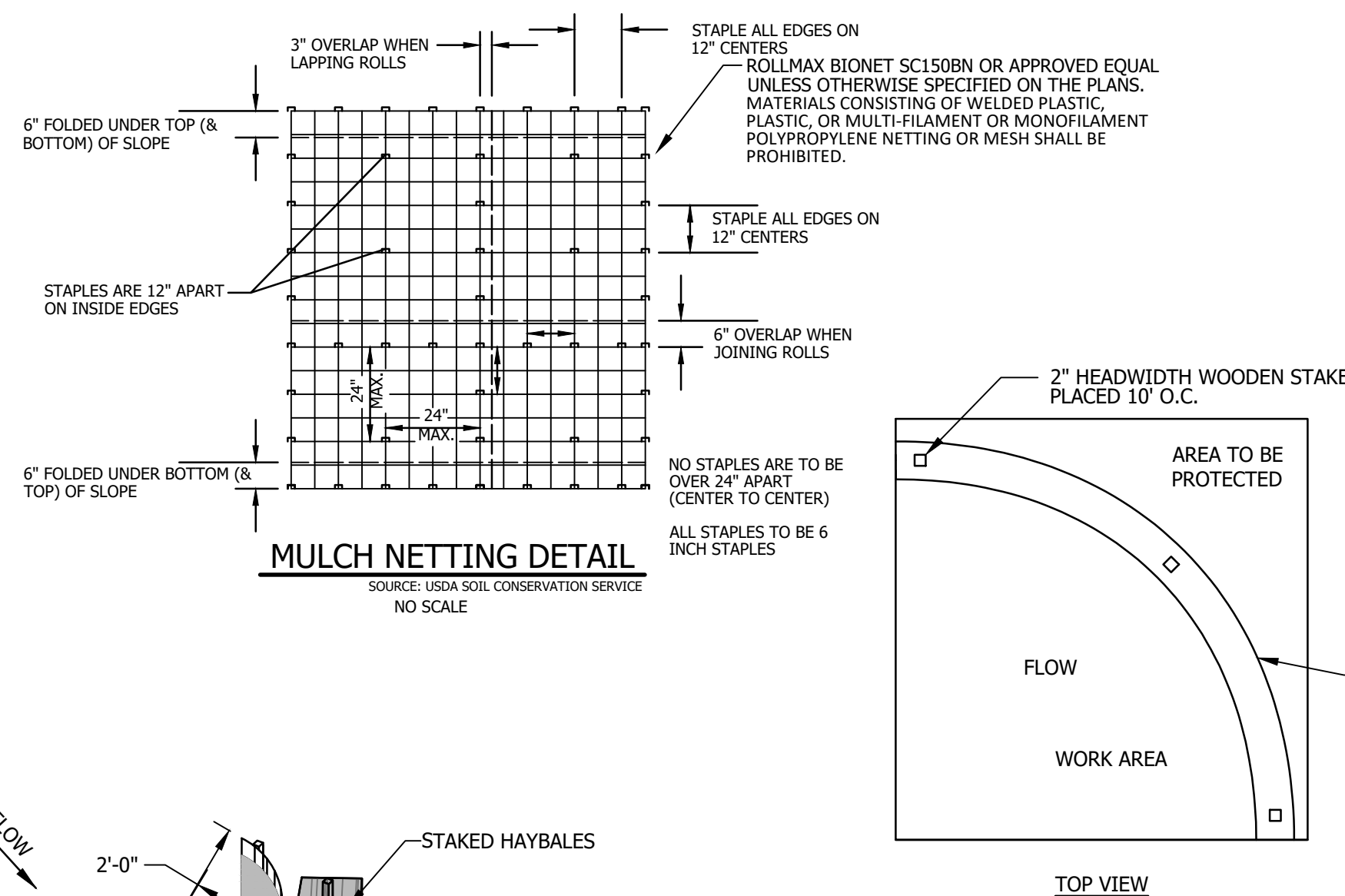
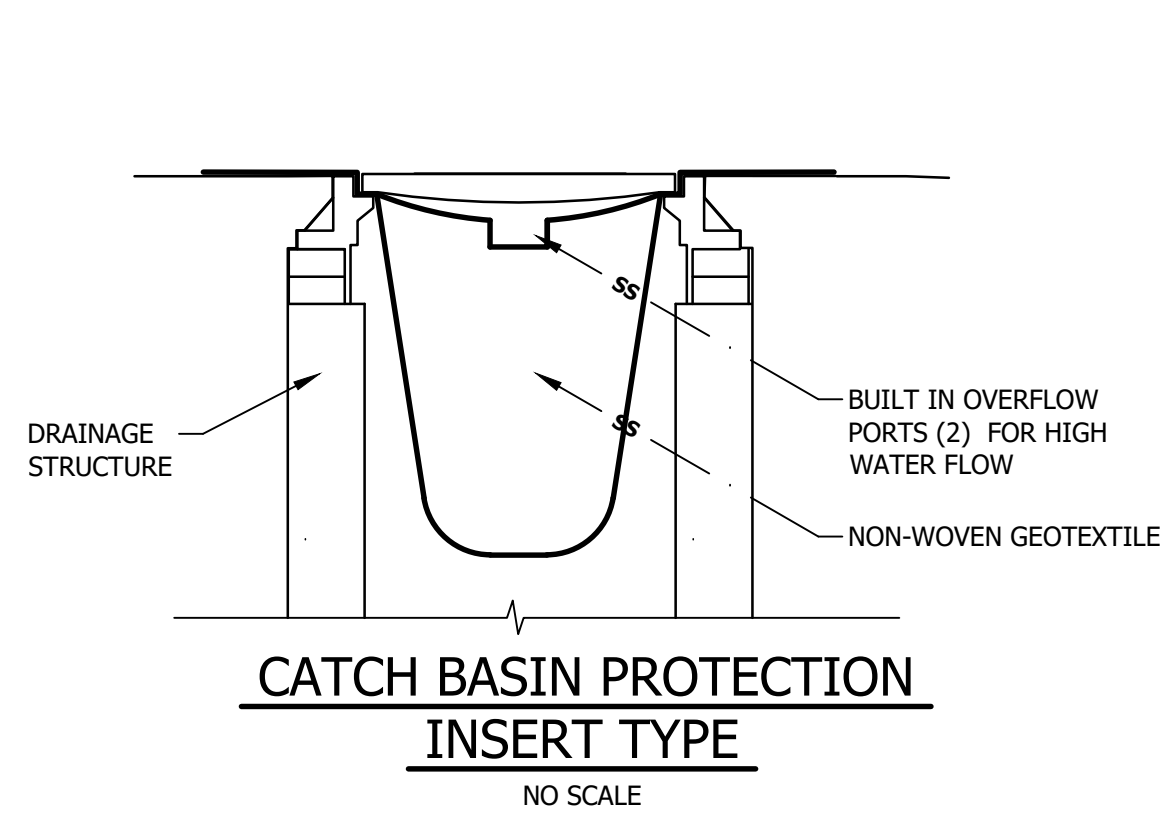


## EROSION CONTROL GENERAL NOTES

- A. KEEP SITE MODIFICATION TO A MINIMUM**  
1. CONSIDER FITTING THE BUILDINGS AND STREETS TO THE NATURAL TOPOGRAPHY. THIS REDUCES THE NEED FOR CUTS AND FILLS. AVOID EXTENSIVE GRADING THAT WOULD ALTER DRAINAGE PATTERNS OR CREATE VERY STEEP SLOPES.  
2.0 EXPOSE AREAS OF BARE SOIL TO EROSION ELEMENTS FOR THE SHORTEST TIME POSSIBLE.  
3. SAVE AND PROTECT DESIRABLE EXISTING VEGETATION WHERE POSSIBLE. ERECT BARRIERS TO PREVENT DAMAGE FROM CONSTRUCTION EQUIPMENT.  
4. LIMIT THE GRADES OF SLOPES SO VEGETATION CAN BE EASILY ESTABLISHED AND MAINTAINED.  
5.0 AVOID SUBSTANTIAL INCREASE IN RUNOFF LEAVING THE SITE.
- B. MINIMIZE POLLUTION OF WATER DURING CONSTRUCTION ACTIVITIES**  
1. STOCKPILE TOPSOIL REMOVED FROM CONSTRUCTION AREA AND SPREAD OVER ANY DISTURBED AREAS PRIOR TO REVEGETATION. TOPSOIL STOCKPILES MUST BE PROTECTED FROM EROSION.  
2.0 PROTECT BARE SOIL AREAS EXPOSED BY GRADING ACTIVITIES WITH TEMPORARY VEGETATION OR MULCHES.  
3. USE SEDIMENT BASINS TO TRAP DEBRIS AND SEDIMENT WHICH WILL PREVENT THESE MATERIALS FROM MOVING OFF SITE.  
4. USE DIVERSIONS TO DIRECT WATER AROUND THE CONSTRUCTION AREA AND AWAY FROM EROSION PRONE AREAS TO POINTS OF SAFE DISPOSAL.  
5. USE TEMPORARY CULVERTS OR BRIDGES WHEN CROSSING STREAMS WITH EQUIPMENT.  
6. PLACE CONSTRUCTION FACILITIES, MATERIALS, AND EQUIPMENT STORAGE AND MAINTENANCE AREAS AWAY FROM DRAINAGE WAYS.
- C. PROTECT AREA AFTER CONSTRUCTION.**  
1. ESTABLISH GRASS OR OTHER SUITABLE VEGETATION ON ALL DISTURBED AREAS. SELECT SPECIES ADAPTED TO THE SITE CONDITIONS AND THE FUTURE USE OF THE AREA. FINAL GRADES SHALL BE SEED WITHIN 72 HOURS. STABILIZATION SHALL BE DEFINED AS 85% VEGETATIVE COVER.  
2.0 MAINTAIN VEGETATED AREAS USING PROPER VEGETATIVE 'BEST MANAGEMENT PRACTICES' DURING THE CONSTRUCTION PERIOD.  
3. MAINTAIN NEEDED STRUCTURAL 'BEST MANAGEMENT PRACTICES' AND REMOVE SEDIMENT FROM DETENTION PONDS AND SEDIMENT BASINS AS NEEDED.  
4. DETERMINE RESPONSIBILITY FOR LONG TERM MAINTENANCE OF PERMANENT 'BEST MANAGEMENT PRACTICES'.  
5. IF CONSTRUCTION IS ANTICIPATED DURING WINTER MONTHS, GRADED AREAS ARE TO BE STABILIZED WITH NORTH AMERICAN GREEN DS150 MATTING OR EQUAL.
- D. INVASIVE SPECIES MONITORING / ELIMINATION**  
1. PRECAUTIONS SHALL BE TAKEN TO PREVENT IMPORT OR TRANSPORT OF SOIL OR SEED STOCK CONTAINING NUISANCE OR INVASIVE SPECIES SUCH AS PURPLE LOOSESTRIFE, KNOTWEED OR PHRAGMITES. THE CONTRACTOR SHALL ADDRESS INVASIVE SPECIES IN ACCORDANCE WITH THE REPORT "NH DOT BEST MANAGEMENT PRACTICES FOR ROADSIDE INVASIVE PLANTS (2008)".  
2. TO PREVENT THE INTRODUCTION OF INVASIVE PLANT SPECIES TO THE SITE, THE CONTRACTOR SHALL CLEAN ALL SOILS AND VEGETATION FROM CONSTRUCTION EQUIPMENT AND MATTING BEFORE SUCH EQUIPMENT IS MOVED TO THE SITE.  
3. IF ANY INVASIVE OR NUISANCE SPECIES ARE FOUND DURING CONSTRUCTION OR DURING THE EARLY STAGES OF VEGETATIVE ESTABLISHMENT, THE CONTRACTOR WILL COORDINATE WITH NHDOT AND THE NH WETLANDS BUREAU TO DETERMINE AGREED TO CONTROL MEASURES.  
E. POST CONSTRUCTION MONITORING  
1. AFTER CONSTRUCTION IS COMPLETE THE DISTURBED AREAS WILL BE MONITORED FOR INVASIVE SPECIES DURING THE FIRST GROWING SEASON BUT BEFORE SEED SET. ANY INVASIVE SPECIES WILL BE MECHANICALLY REMOVED AND DISPOSED OF ACCORDING TO STANDARDS IN THE REPORT "NH DOT BEST MANAGEMENT PRACTICES FOR ROADSIDE INVASIVE PLANTS (2008)".  
2. HORIZONS ENGINEERING, INC. WILL BE RESPONSIBLE FOR POST CONSTRUCTION MONITORING OF EROSION CONTROL, REVEGETATION, AND INVASIVE SPECIES. A MONITORING REPORT WITH PHOTOS AND RECOMMENDED REMEDIAL ACTIONS, IF ANY, WILL BE SUBMITTED TO THE NH WETLANDS BUREAU WITH COPIES SENT TO NHDOT, AND THE TOWN OF NEWPORT. THE REPORT WILL BE SUBMITTED WITH 30 DAYS OF NOTIFICATION OF PROJECT COMPLETION.

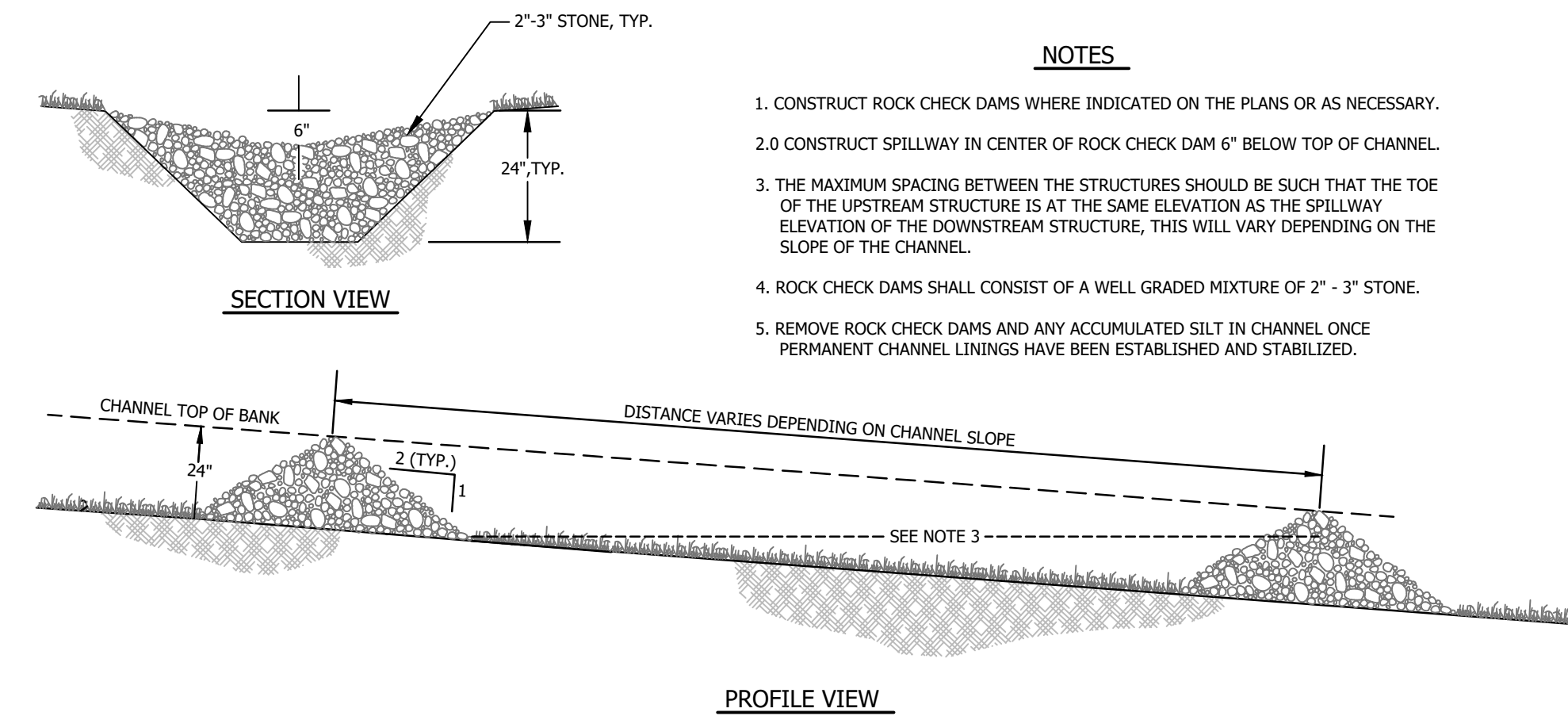
## COLD WEATHER SITE STABILIZATION REQUIREMENTS

- TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING ADDITIONAL STABILIZATION TECHNIQUES SHALL BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15 THROUGH MAY 1:
- THE AREA OF EXPOSED, UNSTABILIZED SOIL SHALL BE LIMITED TO 1 ACRE AND SHALL BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF A WINTER CONSTRUCTION PLAN, DEVELOPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, IS REVIEWED AND APPROVED BY NHDES.
  - ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE, SECURED WITH ANCHORED NETTING OR TACKIFIER, OR 2 INCHES OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
  - ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 15% WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE SEED AND COVERED WITH PROPERLY INSTALLED AND ANCHORED EROSION CONTROL MATTING OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H).
  - INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX, MEETING THE CRITERIA OF ENV-WQ 1506.05(D) THROUGH (H), SHALL NOT OCCUR OVER SNOW OF GREATER THAN 1 INCH IN DEPTH.
  - INSTALLATION OF EROSION CONTROL MATTING SHALL NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
  - ALL PROPOSED STABILIZATION IN ACCORDANCE WITH NOTES 2 OR 3 ABOVE, SHALL BE COMPLETED WITHIN 1 DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 5 DAYS.
  - ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY THE OWNER'S ENGINEERING CONSULTANT.
  - AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING AREAS WHERE ACTIVE CONSTRUCTION OF THE ROAD OR PARKING AREA HAS STOPPED FOR THE WINTER SEASON SHALL BE PROTECTED WITH A MINIMUM 3 INCH LAYER OF BASE COURSE GRAVELS MEETING THE GRADATION REQUIREMENTS OF NHDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM NO. 304.1 OR 304.2.0



## CONSTRUCTION SEQUENCE

- CUT AND CLEAR TREES WITHIN THE CLEARING LIMITS.
- PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND NOTICE OF INTENT (NOI) FOR THE PROJECT.
- INSTALL SEDIMENT FENCES, ROCK CHECK DAMS, AND OTHER APPROPRIATE EROSION CONTROL MEASURES AT LOCATIONS SHOWN ON THE PLANS AND AS NEEDED.
- PROCEED WITH WORK, LIMITING THE DURATION OF DISTURBANCE. THE MAXIMUM WORK UNIT AREA SHALL BE ONE ACRE IN SIZE. THE MAXIMUM LENGTH OF TIME THAT A WORK UNIT MAY BE LEFT UNSTABILIZED IS 30 DAYS.
- BEGIN SEEDING AND MULCHING IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED WITH APPROVED METHODS WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.  
AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:  
A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;  
B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;  
C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR  
D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- INSPECT ALL EROSION CONTROL MEASURES ON A DAILY BASIS AND AFTER EVERY 0.5 INCHES OF PRECIPITATION. MAINTAIN SEDIMENT FENCE, SEDIMENT TRAPS, HAY BALES, ETC., AS NECESSARY.
- PLACE TOPSOIL, SEED AND MULCH.
- COMPLETE ALL REMAINING PERMANENT EROSION CONTROL STRUCTURES.
- MONITOR THE SITE AND MAINTAIN STRUCTURES AS NEEDED UNTIL FULL VEGETATION IS ESTABLISHED.



## ROCK CHECK DAM DETAIL

NO SCALE

PROJECT #:	DATE:	NO.	REVISION DESCRIPTION
230125	JUNE 2024	1	INITIAL DESIGN REVIEW - 1
		2	INITIAL DESIGN REVIEW - 2



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**SLEEPY HOLLOW COOPERATIVE, INC**  
NEW MARKET, NEW HAMPSHIRE  
SEWER SYSTEM IMPROVEMENTS  
EROSION CONTROL DETAILS

**FOR CONSTRUCTION**

DATE OF PRINT  
JUNE 28 2024  
HORIZONS ENGINEERING



SHEET 3.2