

MONMOUTH COUNTY PARK SYSTEM

HENRY HUDSON TRAIL EXTENSION

AND PEDESTRIAN SAFETY IMPROVEMENTS

BID PACKAGE #1

IN THE BOROUGH OF FREEHOLD

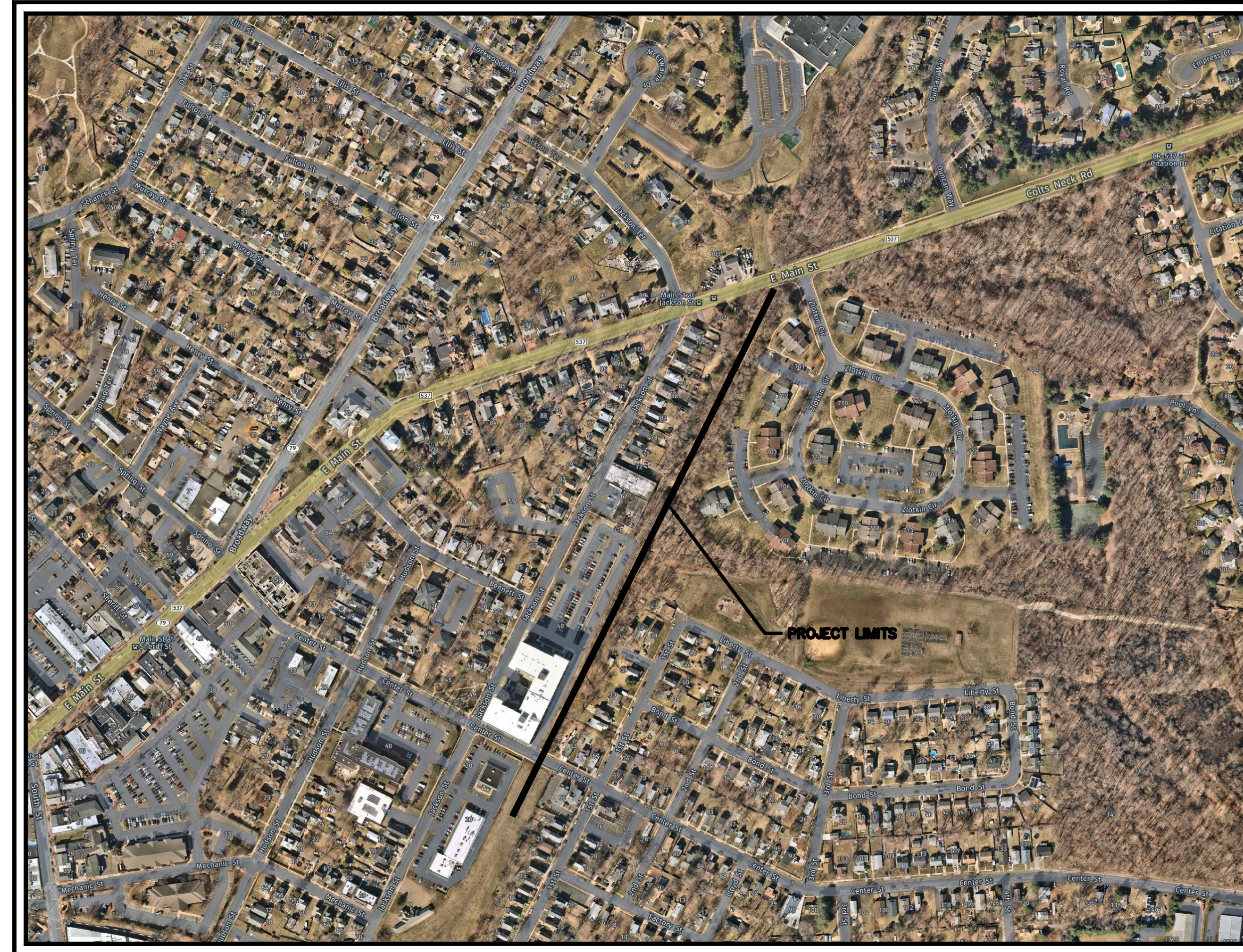
MONMOUTH COUNTY, NEW JERSEY

3	3/27/2023	PER USER PERMIT CONDITIONS	MJD	Checked By
2	3/23/23	PER USER COMMENTS	SFI	Revised By
1	9/20/22	PER USER COMMENTS	SFI	Revised By
No.	Date	Revision		

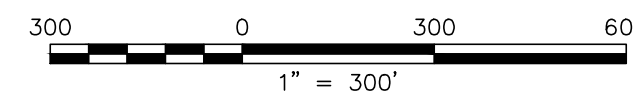
PLOTTED ON: 3/28/2023 12:09:28 PM
PLOTTED BY: SARA IRICK

UTILITY OWNERS		
SERVICE	OWNER	PHONE
COMMUNICATION	OPTIMUM/ALTICE 1111 STEWART AVENUE BETHPAGE, NY 11714 ATTN: GLENN CISEK GLENN.CISEK@ALTICEUSA.COM	(855) 267-8468
COMMUNICATION	AT&T 400 HAMILTON AVENUE WHITE PLAINS, NY 10601 ATTN: LOU MORELLO LM5215@ATT.COM	(914) 397-3744
COMMUNICATION	LUMEN (CENTURY LINK/L3) 71 CLINTON ROAD GARDEN CITY, NY 11530 ATTN: SAMANTHA MEYER SAMANTHA.MEYER@LUMEN.COM FILE #: P-077360 NJ	(516) 712-3041
COMMUNICATION	COMCAST 1250 HADDONFIELD BERLIN ROAD CHERRY HILL, NJ 08034 ATTN: WYATT PARRISH WYATT_PARRISH@COMCAST.COM	(484) 368-4391
COMMUNICATION	VERIZON 999 W MAIN STREET FREEHOLD, NJ 07728 ATTN: ARTURO CABRERA ARTURO.CABRERA@VERIZON.COM	(732) 683-5124
ELECTRIC	JERSEY CENTRAL POWER & LIGHT (JCP&L) 101 CRAWFORD'S CORNER ROAD BLDG. #1, FIFTH FLOOR, SUITE 1-511 HOLMDEL, NJ 07733 ATTN: PATRICK CARFANO PCARFANO@FIRSTENERGYCORP.COM	(732) 212-4262
GAS	NEW JERSEY NATURAL GAS 1415 WYCKOFF ROAD PO BOX 1464 WALL, NJ 07719 ATTN: XAVIER ROBLES-GIRON XROBLESGIRON@NJNG.COM	(732) 962-3433
MUNICIPAL UTILITY	BOROUGH OF FREEHOLD WATER AND SEWER 51 W MAIN STREET FREEHOLD, NJ, 07728 ATTN: TRACI DIBENEDETTO TDIBENEDETTO@FREEHOLDBORO.ORG	(732) 462-4200
RIGHT-OF-WAY	NJ TRANSIT ONE PENN PLAZA EAST NEWARK, NJ 07105 ATTN: JOSEPH HADDAD JHADDAD@NJTRANSIT.COM LEASE #: L313-1133-01	(973) 491-8410
ONE CALL SYSTEM	NEW JERSEY ONE CALL 1 CORPORATE PLACE SOUTH, SUITE 150 PISCATAWAY, NJ 08854	(800) 272-1000

LOCATION OF UTILITIES SHOWN ON THE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND ARE NOT WARRANTED AS TO EXACTNESS. CONTRACTOR IS TO DETERMINE EXACT LOCATION AND DEPTH OF UTILITIES AT ALL CROSSINGS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS.




MONMOUTH COUNTY, NEW JERSEY (SCALE 1"=500')



2019 NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS MODIFIED BY SPECIAL PROVISIONS TO GOVERN.

NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD ROADWAY CONSTRUCTION / TRAFFIC CONTROL / BRIDGE CONSTRUCTION DETAILS (2016) AND STANDARD ELECTRICAL DETAILS (2007) ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	KEY SHEET
2	LEGEND
3	ESTIMATE AND DISTRIBUTION OF QUANTITIES & GENERAL NOTES
4	TYPICAL SECTIONS & PERMIT CONDITIONS
5 - 6	PROFILES
7 - 9	CONSTRUCTION PLANS
10 - 14	SOIL EROSION AND SEDIMENT CONTROL PLANS
15 - 17	MAINTENANCE AND PROTECTION OF TRAFFIC PLANS
18 - 20	UTILITY ACCOMMODATION PLANS
21 - 27	CROSS SECTIONS
28 - 34	BRIDGE PLANS AND DETAILS

 <p>Corporate Office: 1800 Rt 34, Suite 101 Wall, New Jersey 07719 732.312.9800</p> <p>FPAengineers.com</p> <p>New Jersey ▲ New York ▲ Pennsylvania ▲ Georgia</p>		KEY SHEET	
		HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1 FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19 IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY	
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 1 of 34

C:\15830\15830 - HENRY HUDSON TRAIL EXTENSION\15830.001 SAFETY IMPROVEMENTS\CADD\DWG\01\15830.001 - KEY.DWG - Key Sheet

NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD LEGEND

Linear Features

Table with columns for Existing and PROPOSED symbols for Linear Features. Includes items like Water Main (Size), Gas Main (Size), Telephone Conduit, Electric Conduit, Cable TV, Fiber Optic, Sanitary Sewers or Storm Drains, Pavement, Shoulders, Curbs, Slopes, Base Line, Right of Way Lines, Easements, Property Line, Fence, Beam Guide Rail, Noise Walls, Wetland Limit Line, Silt Fence, Ditches, Railroad Tracks, Tree Line, and Limit Of Disturbance.

Topographical Features

Table with columns for Existing and PROPOSED symbols for Topographical Features. Includes items like Inlets (Label Type), Inlets (Type ES), Manholes (Label Type or Utility), Reset (Inlets or Manholes), Reconstructed (Inlets or Manholes), Cast Iron Extension (Frame or Ring), New Manhole Casting, Square Frame, Circular Cover, R.C. End Section or C.M. Headwall, Headwalls, Headwalls & Aprons, Water Gate Valves, Reset Water Gate Valves, Gas Gate Valves, Reset Gas Gate Valves, Hydrants, Reset Hydrants, Utility Pole (Type & Number), Temporary Utility Pole, Traffic Signal, Junction Box, Junction Box Foundation, Signs, Vertical Panels, Guide Rail End Terminals, and Beam Guide Rail Anchorages.

Topographical Features

Table with columns for Existing and PROPOSED symbols for Topographical Features. Includes items like Monuments, Row Monument (ROW Control Point), Test Pit, Borings (Boring Number), Deciduous Tree (Size, Kind), Evergreens, Hedges, Swamp, and Inlet w/new Eco-Grate.

Miscellaneous Symbols

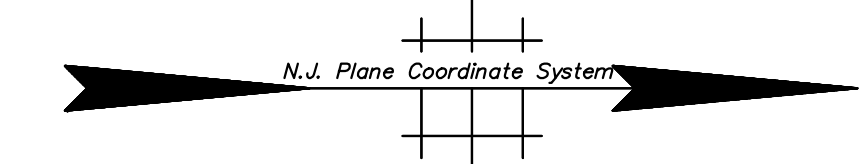
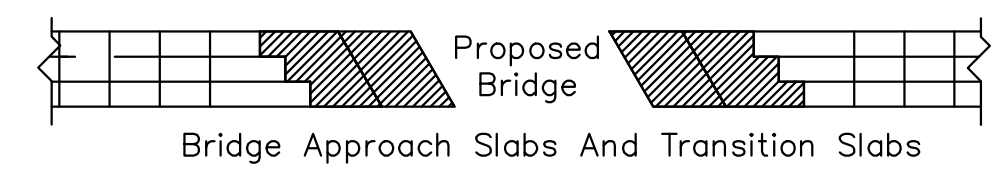
Table of Miscellaneous Symbols including Items With No Alternate, Alternate Items, Milling, Full Depth Pavement, Building to be Demolished, Removal of Bituminous Concrete Base Course & Bituminous Concrete Surface Courses, Driveway Reconstruction, Demolition No. & Parcel No. of Building to be Demolished, High Point, Low Point, and Bench Mark.

Double Reference Codes

- Code list including: E-DOQ - EST. & DIST. OF QTY - ROADWAY, TS - TYPICAL SECTIONS, PSI - PLAN SHEET INDEX, C - CONSTRUCTION PLANS, EP - ENVIRONMENTAL PLANS, D - DRAINAGE PLANS, P - PROFILES, TC - TRAFFIC CONTROL (AND STAGING PLANS), E - ELECTRICAL PLANS, TSP - TRAFFIC SIGNAL PLANS, HL - HIGHWAY LIGHTING PLANS, L - LANDSCAPE PLANS, SL - SIGN LOCATION PLANS, TSS - TRAFFIC SIGNING AND STRIPING PLANS, STD - SIGN TEXT DETAILS, MS - METHOD OF CROSS SECTIONS, X - CROSS SECTIONS, DTL - CONSTRUCTION DETAILS, EOQB - ESTIMATE OF QUANTITIES - BRIDGE, B - BRIDGE PLANS, OS - OFFSITE IMPROVEMENT PLANS, U - UTILITY RELOCATION PLANS.

ABBREVIATIONS USED IN THIS CONTRACT

Large table of abbreviations used in the contract, organized in columns. Includes terms like AHEAD, BACK, ACCESSIBLE PEDESTRIAN SIGNAL, BASELINE, BENCH MARK, BELL TELEPHONE, BITUMINOUS, BUILDING, CENTERLINE, CAST IRON PIPE, CORRUGATED METAL PIPE, CONCRETE, CULVERT, DIAMETER, DROP CURB, DITCH EXCAVATION, DEPRESSED CURB, DRILL HOLE, DRIVEWAY, EASTBOUND, WESTBOUND, NORTHBOUND, SOUTHBOUND, ELEVATION, EXISTING, GRATE, HEIGHT, HEADWALL, HYDRANT, INVERT, IRON PIN, LIMIT OF DISTURBANCE, JUNCTION BOX, LEFT, RIGHT, LIMIT OF PAVEMENT (PAVING), LIMIT OF MILLING, MAILBOX, MILE POST, MAXIMUM, MINIMUM, NUMBER, NOT TO SCALE, PAVEMENT, PERFORATED, PROFILE GRADE LINE, PROPERTY LINE, PROFILE LINE, PARKER KAYLON MASONRY NAIL, POINT ON CURVE, POINT ON LINE, POINT ON TANGENT, POINT OF REVERSE CURVE, PROPOSED, POINT OF TANGENCY, POLYVINYL CHLORIDE PIPE, POINT OF VERTICAL CURVATURE, POINT OF VERTICAL INTERSECTION, POINT OF VERTICAL TANGENCY, PAVEMENT, RADIUS, REINFORCED CONCRETE CULVERT PIPE, REINFORCED CONCRETE PIPE, RIGID METALLIC CONDUIT, RIGID NON-METALLIC CONDUIT, RIGHT OF WAY, RAILROAD, ROUTE, SANITARY, SIDEWALK, STATE HIGHWAY DEPARTMENT, SHOULDER, SURVEY LINE, SUBBASE OUTLET DRAIN, STORY, TANGENT, TO BE ABANDONED, TO BE REMOVED, TO BE RELOCATED, TELEPHONE, TEMPORARY, THICK, TYPICAL, UNDERDRAIN, UTILITY POLE, VARIABLE, VARIES, WHITE CONCRETE VERTICAL CURB, WATER METER, WORKING POINT, CROSS SECTION.



North Arrow To Be Used On Standard Construction Sheets Where Bearings Refer To N.J. Plane Coordinate System

Project information block including FPA logo, project name 'HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1', location 'FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19', date 'MARCH 2023', scale 'AS SHOWN', and sheet number '2 of 34'.

Vertical text on the left margin: PLOTTED ON: 3/28/2023 12:06:36 PM, PLOTTED BY: SARA IRICK, 3/27/2023, 3/28/23, 3/29/23, 3/30/23, 3/31/23, 4/1/23, 4/2/23, 4/3/23, 4/4/23, 4/5/23, 4/6/23, 4/7/23, 4/8/23, 4/9/23, 4/10/23, 4/11/23, 4/12/23, 4/13/23, 4/14/23, 4/15/23, 4/16/23, 4/17/23, 4/18/23, 4/19/23, 4/20/23, 4/21/23, 4/22/23, 4/23/23, 4/24/23, 4/25/23, 4/26/23, 4/27/23, 4/28/23, 4/29/23, 4/30/23, 5/1/23, 5/2/23, 5/3/23, 5/4/23, 5/5/23, 5/6/23, 5/7/23, 5/8/23, 5/9/23, 5/10/23, 5/11/23, 5/12/23, 5/13/23, 5/14/23, 5/15/23, 5/16/23, 5/17/23, 5/18/23, 5/19/23, 5/20/23, 5/21/23, 5/22/23, 5/23/23, 5/24/23, 5/25/23, 5/26/23, 5/27/23, 5/28/23, 5/29/23, 5/30/23, 5/31/23, 6/1/23, 6/2/23, 6/3/23, 6/4/23, 6/5/23, 6/6/23, 6/7/23, 6/8/23, 6/9/23, 6/10/23, 6/11/23, 6/12/23, 6/13/23, 6/14/23, 6/15/23, 6/16/23, 6/17/23, 6/18/23, 6/19/23, 6/20/23, 6/21/23, 6/22/23, 6/23/23, 6/24/23, 6/25/23, 6/26/23, 6/27/23, 6/28/23, 6/29/23, 6/30/23, 7/1/23, 7/2/23, 7/3/23, 7/4/23, 7/5/23, 7/6/23, 7/7/23, 7/8/23, 7/9/23, 7/10/23, 7/11/23, 7/12/23, 7/13/23, 7/14/23, 7/15/23, 7/16/23, 7/17/23, 7/18/23, 7/19/23, 7/20/23, 7/21/23, 7/22/23, 7/23/23, 7/24/23, 7/25/23, 7/26/23, 7/27/23, 7/28/23, 7/29/23, 7/30/23, 7/31/23, 8/1/23, 8/2/23, 8/3/23, 8/4/23, 8/5/23, 8/6/23, 8/7/23, 8/8/23, 8/9/23, 8/10/23, 8/11/23, 8/12/23, 8/13/23, 8/14/23, 8/15/23, 8/16/23, 8/17/23, 8/18/23, 8/19/23, 8/20/23, 8/21/23, 8/22/23, 8/23/23, 8/24/23, 8/25/23, 8/26/23, 8/27/23, 8/28/23, 8/29/23, 8/30/23, 8/31/23, 9/1/23, 9/2/23, 9/3/23, 9/4/23, 9/5/23, 9/6/23, 9/7/23, 9/8/23, 9/9/23, 9/10/23, 9/11/23, 9/12/23, 9/13/23, 9/14/23, 9/15/23, 9/16/23, 9/17/23, 9/18/23, 9/19/23, 9/20/23, 9/21/23, 9/22/23, 9/23/23, 9/24/23, 9/25/23, 9/26/23, 9/27/23, 9/28/23, 9/29/23, 9/30/23, 10/1/23, 10/2/23, 10/3/23, 10/4/23, 10/5/23, 10/6/23, 10/7/23, 10/8/23, 10/9/23, 10/10/23, 10/11/23, 10/12/23, 10/13/23, 10/14/23, 10/15/23, 10/16/23, 10/17/23, 10/18/23, 10/19/23, 10/20/23, 10/21/23, 10/22/23, 10/23/23, 10/24/23, 10/25/23, 10/26/23, 10/27/23, 10/28/23, 10/29/23, 10/30/23, 10/31/23, 11/1/23, 11/2/23, 11/3/23, 11/4/23, 11/5/23, 11/6/23, 11/7/23, 11/8/23, 11/9/23, 11/10/23, 11/11/23, 11/12/23, 11/13/23, 11/14/23, 11/15/23, 11/16/23, 11/17/23, 11/18/23, 11/19/23, 11/20/23, 11/21/23, 11/22/23, 11/23/23, 11/24/23, 11/25/23, 11/26/23, 11/27/23, 11/28/23, 11/29/23, 11/30/23, 12/1/23, 12/2/23, 12/3/23, 12/4/23, 12/5/23, 12/6/23, 12/7/23, 12/8/23, 12/9/23, 12/10/23, 12/11/23, 12/12/23, 12/13/23, 12/14/23, 12/15/23, 12/16/23, 12/17/23, 12/18/23, 12/19/23, 12/20/23, 12/21/23, 12/22/23, 12/23/23, 12/24/23, 12/25/23, 12/26/23, 12/27/23, 12/28/23, 12/29/23, 12/30/23, 12/31/23.

3	3/27/2023	PER NUDGE PERMIT CONDITIONS	MJD	Checked By
2	3/28/23	PER NUDGE COMMENTS	SFI	Revised By
1	8/20/22	PER NUDGE COMMENTS	SFI	Revised By
No.	Date	Revision		


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PLOTTED BY: SARA IRICK

DISTRIBUTION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	PLAN SHEET TOTALS	IF AND WHERE DIRECTED	AS-BUILT QUANTITY	PLAN SHEET QUANTITIES				
							C-1	C-2	C-3	X-8	GPE
1	GENERAL REQUIREMENTS (MOBILIZATION)	LS	1	-	-	-	-	-	-	-	-
2	SOIL EROSION AND SEDIMENT CONTROL	LS	1	-	-	-	-	-	-	-	-
3	CLEARING SITE	LS	1	-	-	-	-	-	-	-	-
4	EXCAVATION, TEST PIT (IF & WHERE DIRECTED)	UN	4	-	4	-	-	-	-	-	-
5	EXCAVATION, UNCLASSIFIED	CY	2,400	2,206	194	-	-	-	431	-	1,775
6	I-9 SOIL AGGREGATE	CY	800	765	35	-	-	-	-	-	765
7	COARSE AGGREGATE, SIZE NO. 3	CY	410	332	78	84	121	127	-	-	-
8	COARSE AGGREGATE, SIZE NO. 57	CY	250	223	27	29	41	43	-	-	110
9	MODIFIED OPEN-GRADED 12.5MM FRICTION COURSE	TON	520	477	43	121	174	182	-	-	-
10	TEMPORARY COFFERDAM	LS	1	1	-	-	-	-	-	-	1
11	REINFORCEMENT STEEL, GALVANIZED	LB	61,200	61,200	-	-	-	-	-	-	61,200
12	CONCRETE FOOTING	CY	200	193	7	-	-	-	-	-	193
13	CONCRETE WING WALL	CY	120	118	2	-	-	-	-	-	118
14	CONCRETE ABUTMENT WALL	CY	45	40	5	-	-	-	-	-	40
15	CONCRETE PIER COLUMN AND CAP	CY	20	19	1	-	-	-	-	-	19
16	EPOXY WATERPROOFING	SY	20	17	3	-	-	-	-	-	17
17	STEEL PEDESTRIAN BRIDGE (200'-0" X 10'-0")	LS	1	1	-	-	-	-	-	-	1
18	CONCRETE BRIDGE DECK	CY	40	38	2	-	-	-	-	-	38
19	CHAIN-LINK FENCE, TYPE IV, PVC-COATED STEEL, BRIDGE, 6' 3" HIGH	LF	100	91	9	-	-	-	-	-	91
20	CHAIN-LINK FENCE, 6' HIGH	LF	20	15	5	15	-	-	-	-	-
21	SPLIT RAIL FENCE, 54" HIGH	LF	1,600	1,441	159	538	903	-	-	-	-
22	REGULATORY AND WARNING SIGN	SF	10	8	2	2	3	3	-	-	-
23	TOPSOIL SPREADING, 5" THICK	SY	3,800	3,453	347	1,132	1,492	829	-	-	-
24	BORROW TOPSOIL	CY	600	483	117	160	207	116	-	-	-
25	FERTILIZING AND SEEDING, TYPE A-3	SY	50	-	50	-	-	-	-	-	-
26	FERTILIZING AND SEEDING, TYPE NJDEP	SY	3,800	3,453	347	1,132	1,492	829	-	-	-
27	TOPSOIL STABILIZATION, TYPE 2 MAT	SY	2,730	2,472	258	980	1,492	-	-	-	-
28	STRAW MULCHING	SY	3,800	3,453	347	1,132	1,492	829	-	-	-
29	BOLLARD	UN	3	3	-	-	-	3	-	-	-

GENERAL NOTES:

- UNLESS OTHERWISE NOTED, ALL WORK SHALL BE IN ACCORDANCE WITH THE 2019 NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS MODIFIED BY THE SPECIAL PROVISIONS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
- ALL BIDDERS SHOULD INSPECT THE PROJECT SITE PRIOR TO SUBMITTING BIDS TO VERIFY THE FIELD CONDITIONS WHICH MAY BE ENCOUNTERED AND THE NATURE OF THE WORK TO BE DONE UNDER THIS CONTRACT. NO COMPENSATION WILL BE ALLOWED TO THE BIDDER FOR FAILURE TO INCLUDE ALL ITEMS, LABOR, MATERIALS AND EQUIPMENT COST NECESSARY TO COMPLETE THE WORK.
- NO PAYMENT WILL BE MADE FOR WORK CALLED FOR BY NOTES IN THE PLANS OR UNDER THE HEADING GENERAL NOTES AND/OR SPECIAL NOTES UNLESS PAYMENT IS SPECIFICALLY INCLUDED BY A CONTRACT ITEM.
- THE CONTRACTOR MUST NOTIFY THE ENGINEER OF ANY UNUSUAL CIRCUMSTANCES FOUND DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT MATERIALS WHICH ARE TO REMAIN IN PLACE OR WHICH ARE TO REMAIN THE PROPERTY OF THE COUNTY WILL NOT BE DAMAGED.
- A PRE-CONSTRUCTION MEETING SHALL BE HELD WITH REPRESENTATIVES OF THE COUNTY PRIOR TO BEGINNING ANY CONSTRUCTION OF THE PROJECT.
- THE CONTRACTOR SHALL SCHEDULE A FIELD VISIT, BEFORE START OF ANY WORK, TO PERFORM A PRE-CONDITION SURVEY OF THE ENTIRE PROJECT AREA, IN THE PRESENCE OF THE COUNTY OR AUTHORIZED REPRESENTATIVE OF THE COUNTY. THE PURPOSE OF THIS SURVEY IS TO PREPARE AN INVENTORY OF THE EXISTING CONDITIONS ALONG THE PROJECT AREA. THE CONTRACTOR SHALL REPLACE OR REPAIR (AS DETERMINED BY THE ENGINEER), AT NO ADDITIONAL COST TO THE COUNTY, ALL DAMAGED ASSETS AND FACILITIES, WHICH WERE IN WORKING ORDER OR GOOD CONDITION PRIOR TO THE COMMENCEMENT OF WORK. THE PRE-CONDITION SURVEY SHALL BE PERFORMED USING DIGITAL AND/OR VIDEO CAMERAS TO DOCUMENT EXISTING CONDITIONS.
- ALL EXISTING DIMENSIONS, PIPE SIZES, AND ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD. ANY DEVIATIONS SHALL BE REPORTED TO THE ENGINEER.
- IN THE EVENT THAT A STAGING AREA, THAT IS NOT IDENTIFIED IN THE CONTRACT PLANS, IS REQUESTED BY THE CONTRACTOR FOR THIS CONTRACT WITHIN THE COUNTY'S PROPERTY, THE FINAL LOCATION OF THE STAGING AREA SHALL BE DETERMINED AFTER THE AWARD OF THE CONTRACT, SUBJECT TO APPROVAL OF THE COUNTY. SETUP AND RESTORATION OF AN AREA NOT IDENTIFIED IN THE CONTRACT PLANS WILL BE PERFORMED AT THE CONTRACTOR'S EXPENSE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPLY/SECURE STORAGE AREA FOR MATERIALS AND EQUIPMENT.
- A STAGING AREA RESTORATION PLAN SHALL BE SUBMITTED TO THE COUNTY FOR APPROVAL BEFORE COMMENCING ACTUAL SETUP.
- ANY AREA DAMAGED BY THE CONTRACTOR SHALL BE RESTORED BY THE CONTRACTOR AS ORDERED BY THE ENGINEER AT NO ADDITIONAL COST TO THE COUNTY.
- WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THESE ITEMS.
- THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID FILLING DRAINAGE FEATURES WITHIN THE CONTRACT LIMITS WITH DEBRIS RESULTING FROM CONTRACTOR OPERATIONS. IN THE EVENT THAT THE CONTRACTOR'S OPERATION DAMAGES OR BLOCKS THE DRAINAGE SYSTEM, THE CONTRACTOR SHALL, AS ITS OWN EXPENSE, IMMEDIATELY REPAIR OR RESTORE THE DRAINAGE SYSTEM AS DIRECTED BY THE ENGINEER.
- THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR SHALL VERIFY THEIR LOCATION AND COMPLETENESS PRIOR TO BEGINNING OF WORK. NO WORK SHALL BEGIN UNTIL THE CONTRACTOR PROVIDES THE ENGINEER WITH THE CONFIRMATION NUMBER OBTAIN FROM THE ONE-CALL SYSTEM IN ACCORDANCE WITH THE UNDERGROUND FACILITY PROTECTION ACT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TAKE NECESSARY PRECAUTIONS TO PREVENT INTERFERENCE WITH OR DAMAGE TO UTILITIES OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION. THE COST OF ALL WORK RELATED WITH MAINTAINING AND PROTECTING UTILITIES AFFECTED BY THE WORK OF THE CONTRACT SHALL BE BORNE BY THE CONTRACTOR AND THIS COST SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS IN THE CONTRACT.
- IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY OR INTERRUPTS UTILITY SERVICE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY ITS OWNER AND THE ENGINEER AND SHALL COMMENCE REPAIR/REPLACEMENT WORK AS INSTRUCTED BY THE ENGINEER. IN THE EVENT THE CONTRACTOR CAUSES AN INTERRUPTION IN UTILITY SERVICE, THE CONTRACTOR SHALL IMMEDIATELY ARRANGE FOR SERVICE TO BE RESTORED. THE CONTRACTOR MAY NOT CONTINUE OPERATIONS UNTIL SERVICE IS RESTORED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ALL CORRECTIVE UTILITY WORK SHALL BE ACCEPTABLE TO THE ENGINEER. THE WORK MAY BE PERFORMED BY THE RESPECTIVE UTILITY COMPANY AND THE COST THEREOF CHARGED AGAINST THE CONTRACTOR. THE COST ASSOCIATED WITH THE REPAIR OF THE UTILITY OR THE RESTORATION OF SERVICE SHALL BE AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE ACCESS TO THE TRAIL DURING CONSTRUCTION. TEMPORARY CLOSURES OF TRAIL SEGMENTS DURING CONSTRUCTION SHALL BE COORDINATED WITH THE COUNTY. THE COST FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR THE ITEM "CLEARING SITE".
- THE COST FOR THE REMOVAL OF ALL ITEMS NECESSARY TO COMPLETE THE PROJECT AND NOT OTHERWISE INDICATED AS A PAY ITEM, SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR THE ITEM "CLEARING SITE".
- WORK ZONE TRAFFIC CONTROL ALONG ROADWAYS SHALL BE PERFORMED IN ACCORDANCE WITH THE NJDOT STANDARD TRAFFIC CONTROL DETAILS.
- ALL REGULATORY AND WARNING SIGNS, AS WELL AS PAVEMENT STRIPING AND MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- TREE CLEARING SHALL BE AVOIDED AND ONLY COMPLETED AS APPROVED BY THE COUNTY. NO SEPARATE PAYMENT WILL BE MADE FOR TREE CLEARING OR TRIMMING AND THE COST SHALL BE INCLUDED IN THE ITEM BID FOR "CLEARING SITE".
- THE LIMITS OF ANY TREE OR BRUSH CLEARING SHALL BE APPROVED BY THE COUNTY PRIOR TO THE START OF THE CLEARING. CLEARING SHALL INCLUDE REMOVAL OF ALL TREES AND BRUSH WITHIN THE CLEARING LIMITS, WHETHER SHOWN ON THE PLANS INDIVIDUALLY OR NOT.
- THE CONTRACTOR SHALL EXERCISE CAUTION SO AS NOT TO DAMAGE THE ROOT SYSTEM OF ANY TREES AND PLANTINGS TO REMAIN. ALL ROOTS OF ANY PLANTS OR TREE TO REMAIN, WHICH ARE EXPOSED DURING CONSTRUCTION, SHALL BE WATERED AND KEPT SHADED OR COVERED WITH WET STRAW, MOSS, OR OTHER SUITABLE MATERIAL UNTIL THE FINAL GRADING IS COMPLETED. THE CONTRACTOR SHALL REPLACE ANY EXISTING PLANTINGS DAMAGED DURING CONSTRUCTION, AS IN THE OPINION OF THE COUNTY, WITH A PLANTING OF SIMILAR SPECIES TO THE SATISFACTION OF THE COUNTY, AT NO ADDITIONAL COST TO THE COUNTY.
- STRIPPED MATERIAL SUITABLE FOR USE AS TOPSOIL SHALL BE STORED AND REUSED AS REQUIRED FOR THE PROJECT. EXCESS STRIPPED MATERIAL SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR. THE COST OF STRIPPING SHALL BE INCLUDED IN THE PRICE BID FOR THE ITEM "EXCAVATION, UNCLASSIFIED". NO SEPARATE PAYMENT WILL BE MADE FOR THE VOLUME OF MATERIAL STRIPPED.
- EXCAVATED MATERIAL SATISFYING THE REQUIREMENTS FOR I-14 SOIL AGGREGATE SHALL BE PERMITTED TO BE UTILIZED AS EMBANKMENT UPON APPROVAL FROM THE ENGINEER.
- EXISTING FEATURES TO BE RESET/OR RELOCATED IN THE PROJECT FOR WHICH THERE IS NO PAY ITEM SHALL BE RESET/RELOCATED UNDER THE PRICE BID FOR THE ITEM "CLEARING SITE".
- THE CONTRACTOR SHALL NOTIFY THE MUNICIPAL CLERK AT LEAST 7 DAYS IN ADVANCE AND 24 HOURS PRIOR TO THE START OF WORK SO THEY CAN NOTIFY THE PUBLIC OF THE CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF THE NJDEP PERMITS FOR THE PROJECT. WORK WITHIN REGULATED AREAS SHALL BE CONFINED TO THE LIMITS SHOWN ON THE APPROVED PERMIT PLANS.
- THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF THE NJDOT PERMIT FOR WORK WITHIN THE ROUTE 57 RIGHT OF WAY. THE CONTRACTOR SHALL NOTIFY AND ATTEND A PRECONSTRUCTION MEETING WITH NJDOT PRIOR TO THE START OF WORK AS REQUIRED IN THE PERMIT CONDITIONS.
- THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF THE SOIL EROSION AND SEDIMENT CONTROL PERMIT. THE CONTRACTOR SHALL NOTIFY THE SOIL CONSERVATION DISTRICT PRIOR TO THE START OF WORK AS REQUIRED IN THE PERMIT CONDITIONS. SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN GOOD CONDITION THROUGHOUT CONSTRUCTION. ANY DAMAGED SOIL EROSION MEASURES SHALL BE RESTORED AT NO COST TO THE COUNTY.



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ESTIMATE AND DISTRIBUTION OF QUANTITIES & GENERAL NOTES

HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1

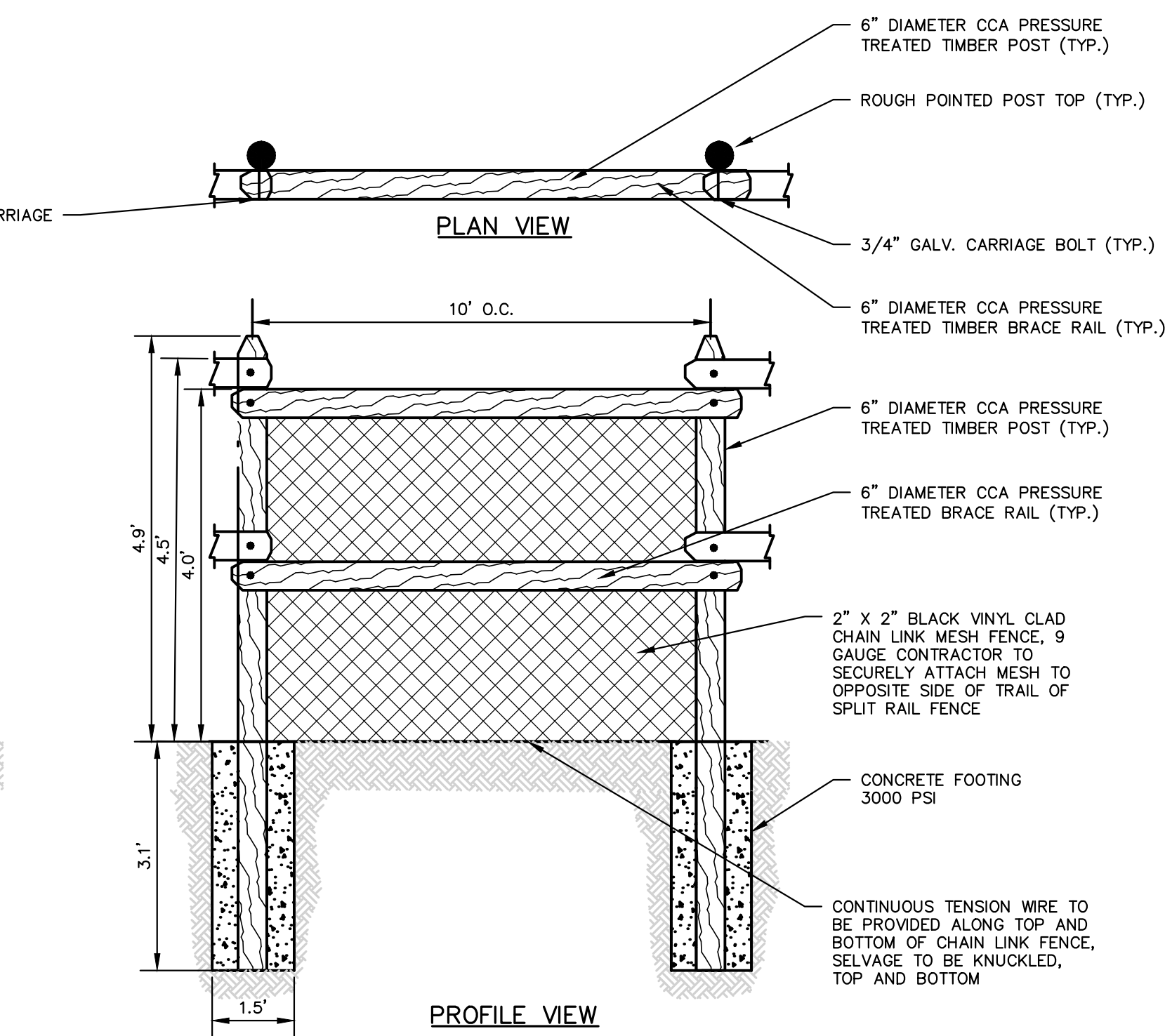
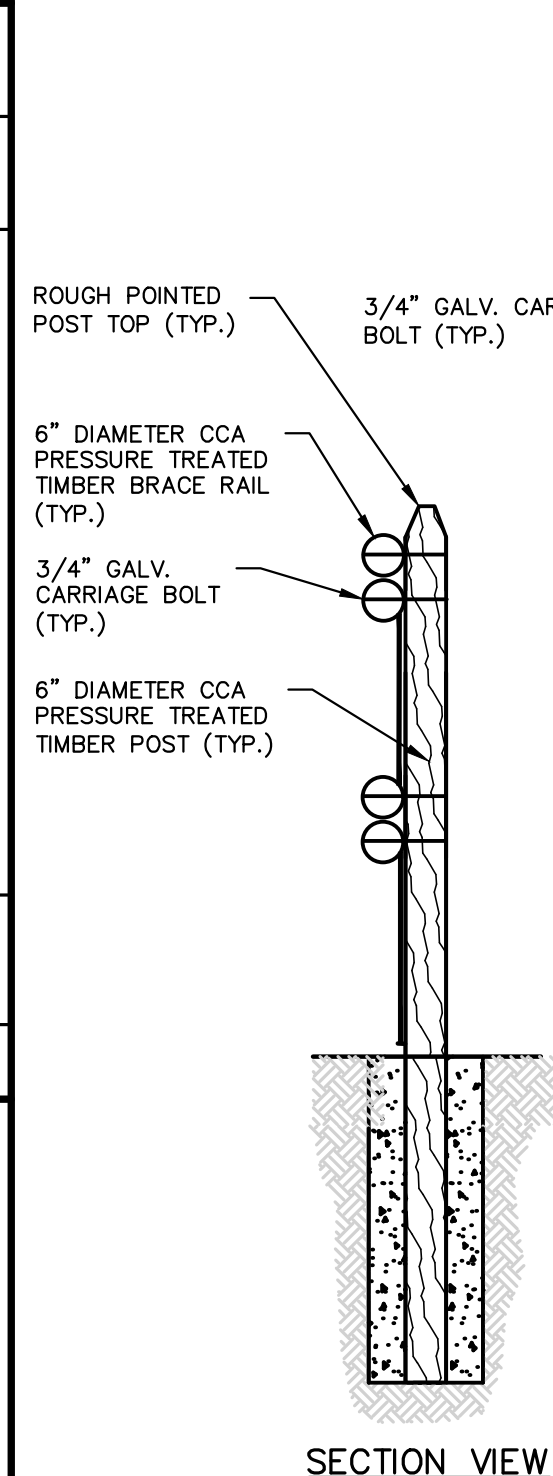
FOR THE MONMOUTH COUNTY PARKS SYSTEM
PS#103-19

IN THE BOROUGH OF FREEHOLD
MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 3 of 34

PLOTTED ON: 3/28/2023 12:08:47 PM
PLOTTED BY: SARA IRICK

NO.	DATE	REVISION
3	3/27/2023	PER NJDEP PERMIT CONDITIONS
2	3/8/23	PER NJDEP COMMENTS
1	8/20/22	PER NJDEP COMMENTS



- NOTES:**
- THE CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVED BY THE COUNTY PRIOR TO PURCHASING ANY MATERIALS.
 - ALL WOOD EMBEDDED IN CONCRETE OR IN CONTACT WITH GROUND TO BE PRESURE TREATED WITH ACO TREATMENT USING CATEGORY UC4B AS PER THE AMERICAN WOOD PRESERVERS ASSOCIATION STANDARDS.

SPLIT RAIL FENCE DETAIL
NTS

NJDEP PERMIT CONDITIONS:

STATEMENT OF AUTHORIZED IMPACTS:

THE AUTHORIZED ACTIVITIES ALLOW FOR THE PERMITTEE TO UNDERTAKE IMPACTS TO REGULATED AREAS AS DESCRIBED BELOW. ADDITIONAL IMPACTS TO REGULATED AREAS WITHOUT PRIOR DEPARTMENT APPROVAL SHALL CONSTITUTE A VIOLATION OF THE RULES UNDER WHICH THIS DOCUMENT IS ISSUED AND MAY SUBJECT THE PERMITTEE AND/OR PROPERTY OWNER TO ENFORCEMENT ACTION, PURSUANT TO N.J.A.C. 7:7A-22.

	FRESHWATER WETLANDS	TRANSITION AREAS	STATE OPEN WATERS
FRESHWATER WETLANDS	0.0040	0	0
TRANSITION AREAS	0.1570	0	0
STATE OPEN WATERS	0	0	0

PRE-CONSTRUCTION CONDITIONS:

- PRIOR TO THE COMMENCEMENT OF SITE CLEARING, GRADING, OR CONSTRUCTION ONSITE, ALL EXISTING TREES NEAR THE PROJECT AREA WHICH ARE NOT TO BE REMOVED SHALL BE MARKED AND A PROTECTIVE CONSTRUCTION FENCE SHALL BE PLACED AROUND EACH TREE FOR THE DURATION OF CONSTRUCTION UNTIL THE SITE IS STABILIZED.
- PRIOR TO THE COMMENCEMENT OF SITE CLEARING, GRADING, OR CONSTRUCTION ONSITE, THE PERMITTEE SHALL INSTALL A SEDIMENT BARRIER AT THE LIMITS OF DISTURBANCE AUTHORIZED HEREIN, WHICH IS SUFFICIENT TO PREVENT THE SEDIMENTATION OF THE REMAINING FRESHWATER WETLANDS AND TRANSITION AREAS AND SHALL SERVE AS A PHYSICAL BARRIER PROTECTING THESE AREAS FROM ENCROACHMENT BY CONSTRUCTION VEHICLES OR OTHER SOIL-DISTURBING ACTIVITIES. ALL SEDIMENT BARRIERS AND SOIL EROSION CONTROL MEASURES SHALL BE KEPT IN PLACE AND MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION, UNTIL SUCH TIME THAT THE SITE IS STABILIZED.

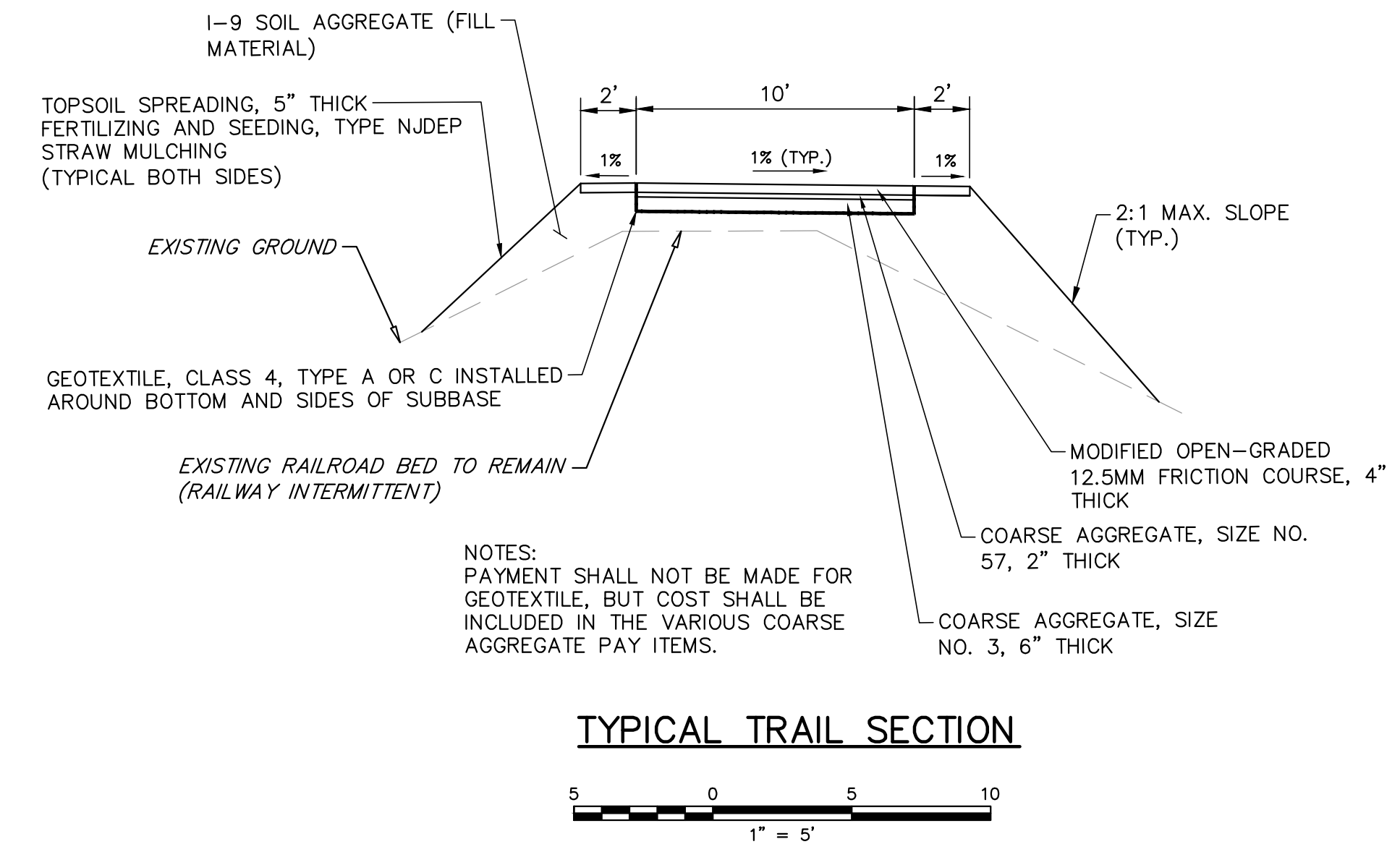
SPECIAL CONDITIONS:

- UPON COMPLETION OF THE PROJECT, THE PERMITTEE SHALL INCORPORATE TRAIL FEATURES DESIGNED TO EDUCATE USERS ABOUT THE IMPORTANCE OF FRESHWATER WETLAND AND OPEN WATER ECOSYSTEMS.
- THE PERMITTEE SHALL TAKE ALL MEASURES NECESSARY TO ENSURE THE AUTHORIZED ACTIVITIES DO NOT ALTER OR INTERFERE WITH THE NATURAL HYDROLOGY OF THE AREA.
- ALL TEMPORARY DISTURBANCES WITHIN FRESHWATER WETLANDS AND TRANSITION AREAS SHALL BE REPLANTED WITH NATIVE, NON-INVASIVE HERBACEOUS AND/OR WOODY VEGETATION APPROPRIATE FOR THE HYDROLOGIC CONDITIONS OF THE AREA AS NOTED ON THE APPROVED PLANS.
- CONSTRUCTION EQUIPMENT SHALL NOT BE STORED, STAGED, OR DRIVEN WITHIN ANY REGULATED AREAS ONSITE, UNLESS EXPRESSLY APPROVED BY THIS PERMIT OR DESCRIBED ON THE APPROVED PLANS.
- THE DEPARTMENT HAS DETERMINED THAT THE FRESHWATER WETLANDS AFFECTED BY THIS PERMIT AUTHORIZATION ARE OF INTERMEDIATE RESOURCE VALUE AND THE STANDARD TRANSITION AREA OR BUFFER REQUIRED ADJACENT TO THESE WETLANDS IS 50 FEET. THIS AUTHORIZATION INCLUDES A LIMITED TRANSITION AREA WAIVER, WHICH ALLOWS ENCROACHMENT ONLY IN THAT PORTION OF THE TRANSITION AREA DETERMINED BY THE DIVISION TO BE NECESSARY TO ACCESS AND ACCOMPLISH THE REGULATED ACTIVITIES. ANY ADDITIONAL REGULATED ACTIVITIES CONDUCTED WITHIN THE STANDARD TRANSITION AREA ONSITE SHALL REQUIRE A SEPARATE TRANSITION AREA WAIVER FROM THE DIVISION. REGULATED ACTIVITIES WITHIN A TRANSITION AREA ARE DEFINED AT N.J.A.C. 7:7A-2.3. PLEASE REFER TO THE FRESHWATER WETLANDS PROTECTION ACT (N.J.S.A. 13:9B-1 ET SEQ.) AND IMPLEMENTING RULES (N.J.A.C. 7:7A) FOR ADDITIONAL INFORMATION.
- THE AUTHORIZED ACTIVITIES SHALL COMPLY WITH THE APPLICABLE CONDITIONS SET FORTH UNDER N.J.A.C. 7:7A-5.7, 7.17, AND 20.2. FAILURE TO COMPLY WITH THESE CONDITIONS SHALL CONSTITUTE A VIOLATION OF THE FRESHWATER WETLANDS PROTECTION ACT (N.J.S.A. 13:9B-1 ET SEQ.). ANY ADDITIONAL UN-PERMITTED DISTURBANCE OF FRESHWATER WETLANDS, STATE OPEN WATERS, OR TRANSITION AREAS BESIDES THAT SHOWN ON THE APPROVED PLANS SHALL BE CONSIDERED A VIOLATION OF THE FRESHWATER WETLANDS PROTECTION ACT RULES UNLESS THE ACTIVITY IS EXEMPT OR A PERMIT IS OBTAINED FROM THE DEPARTMENT PRIOR TO THE START OF THE DISTURBANCE.
- THIS AUTHORIZATION FOR A GENERAL PERMIT IS VALID FOR A TERM NOT TO EXCEED FIVE YEARS FROM THE DATE OF THIS PERMIT. IF THE PERMITTEE WISHES TO CONTINUE AN ACTIVITY COVERED BY THE PERMIT AFTER THE EXPIRATION DATE OF THE PERMIT, THE PERMITTEE MUST APPLY FOR AND OBTAIN A PERMIT EXTENSION OR A NEW PERMIT, PRIOR TO THE PERMIT'S EXPIRATION. IF THE TERM OF THE AUTHORIZATION EXCEEDS THE EXPIRATION DATE OF THE GENERAL PERMIT ISSUED BY RULE, AND THE PERMIT UPON WHICH THE AUTHORIZATION IS BASED IS MODIFIED BY RULE TO INCLUDE MORE STRINGENT STANDARDS OR CONDITIONS, OR IS NOT REISSUED, THE APPLICANT MUST COMPLY WITH THE REQUIREMENTS OF THE NEW REGULATIONS BY APPLYING FOR A NEW APPLICABLE PERMIT AUTHORIZATION.

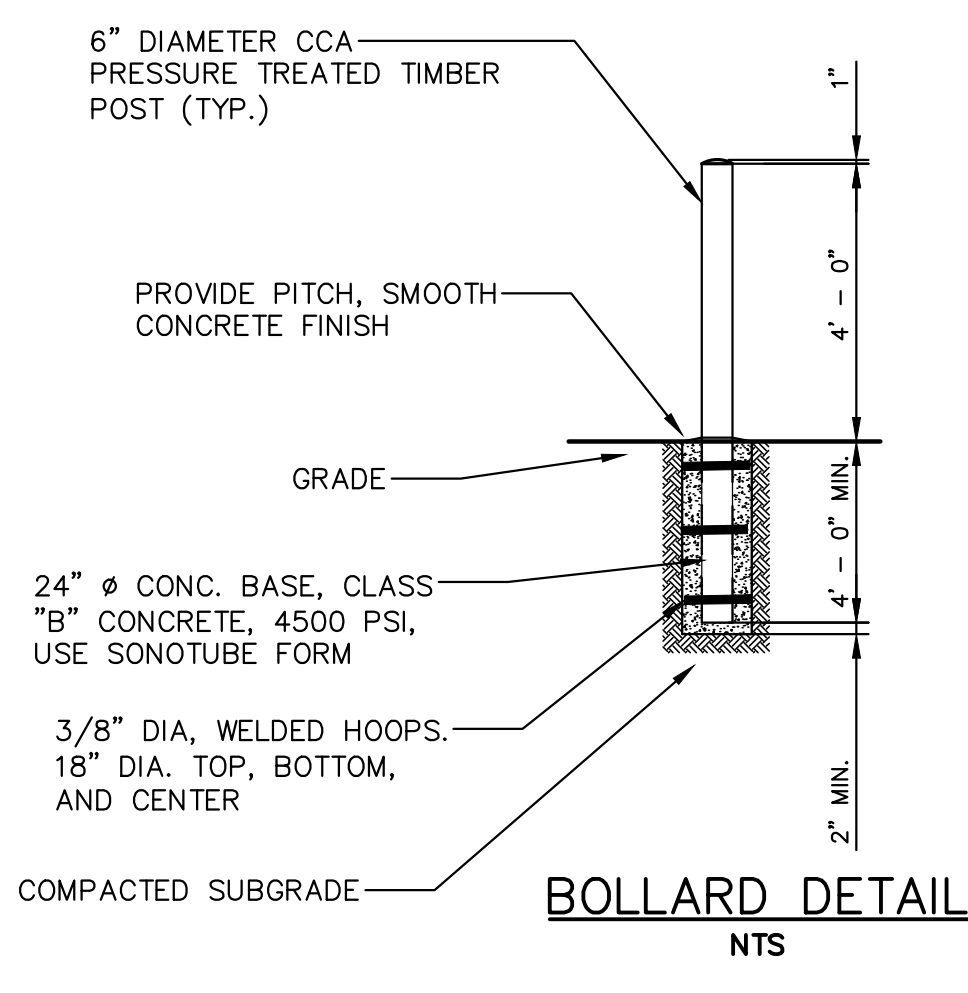
STANDARD CONDITIONS:

- THE ISSUANCE OF A PERMIT SHALL IN NO WAY EXPOSE THE STATE OF NEW JERSEY OR THE DEPARTMENT TO LIABILITY FOR THE SUFFICIENCY OR CORRECTNESS OF THE DESIGN OF ANY CONSTRUCTION OR STRUCTURE(S). NEITHER THE STATE NOR THE DEPARTMENT SHALL, IN ANY WAY, BE LIABLE FOR ANY LOSS OF LIFE OR PROPERTY THAT MAY OCCUR BY VIRTUE OF THE ACTIVITY OR PROJECT CONDUCTED AS AUTHORIZED UNDER A PERMIT.
- THE ISSUANCE OF A PERMIT DOES NOT CONVEY ANY PROPERTY RIGHTS OR ANY EXCLUSIVE PRIVILEGE.
- THE PERMITTEE SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE, AND LOCAL APPROVALS PRIOR TO COMMENCEMENT OF REGULATED ACTIVITIES AUTHORIZED UNDER A PERMIT.
- A PERMITTEE CONDUCTING AN ACTIVITY INVOLVING SOIL DISTURBANCE, THE CREATION OF DRAINAGE STRUCTURES, OR CHANGES IN NATURAL CONTOURS SHALL OBTAIN ANY REQUIRED APPROVALS FROM THE SOIL CONSERVATION DISTRICT OR DESIGNEE HAVING JURISDICTION OVER THE SITE.
- THE PERMITTEE SHALL TAKE ALL REASONABLE STEPS TO PREVENT, MINIMIZE, OR CORRECT ANY ADVERSE IMPACT ON THE ENVIRONMENT RESULTING FROM ACTIVITIES CONDUCTED PURSUANT TO THE PERMIT, OR FROM NONCOMPLIANCE WITH THE PERMIT.

- THE PERMITTEE SHALL IMMEDIATELY INFORM THE DEPARTMENT OF ANY UNANTICIPATED ADVERSE EFFECTS ON THE ENVIRONMENT NOT DESCRIBED IN THE APPLICATION OR IN THE CONDITIONS OF THE PERMIT. THE DEPARTMENT MAY, UPON DISCOVERY OF SUCH UNANTICIPATED ADVERSE EFFECTS, AND UPON THE FAILURE OF THE PERMITTEE TO SUBMIT A REPORT THEREON, NOTIFY THE PERMITTEE OF ITS INTENT TO SUSPEND THE PERMIT.
- THE PERMITTEE SHALL IMMEDIATELY INFORM THE DEPARTMENT BY TELEPHONE AT (877) 927-6337 (WARN DEP HOTLINE) OF ANY NONCOMPLIANCE THAT MAY ENDANGER PUBLIC HEALTH, SAFETY, AND WELFARE, OR THE ENVIRONMENT. THE PERMITTEE SHALL INFORM THE WATERSHED & LAND MANAGEMENT BY TELEPHONE AT (609) 777-0454 OF ANY OTHER NONCOMPLIANCE WITHIN TWO WORKING DAYS OF THE TIME THE PERMITTEE BECOMES AWARE OF THE NONCOMPLIANCE, AND IN WRITING WITHIN FIVE WORKING DAYS OF THE TIME THE PERMITTEE BECOMES AWARE OF THE NONCOMPLIANCE. SUCH NOTICE SHALL NOT, HOWEVER, SERVE AS A DEFENSE TO ENFORCEMENT ACTION IF THE PROJECT IS FOUND TO BE IN VIOLATION OF THIS CHAPTER. THE WRITTEN NOTICE SHALL INCLUDE:
 - A DESCRIPTION OF THE NONCOMPLIANCE AND ITS CAUSE;
 - THE PERIOD OF NONCOMPLIANCE, INCLUDING EXACT DATES AND TIMES;
 - IF THE NONCOMPLIANCE HAS NOT BEEN CORRECTED, THE ANTICIPATED LENGTH OF TIME IT IS EXPECTED TO CONTINUE; AND
 - THE STEPS TAKEN OR PLANNED TO REDUCE, ELIMINATE, AND PREVENT RECURRENCE OF THE NONCOMPLIANCE.
- ANY NONCOMPLIANCE WITH A PERMIT CONSTITUTES A VIOLATION OF THIS CHAPTER AND IS GROUNDS FOR ENFORCEMENT ACTION, AS WELL AS, IN THE APPROPRIATE CASE, SUSPENSION AND/OR TERMINATION OF THE PERMIT.
- IT SHALL NOT BE A DEFENSE FOR A PERMITTEE IN AN ENFORCEMENT ACTION THAT IT WOULD HAVE BEEN NECESSARY TO HALT OR REDUCE THE AUTHORIZED ACTIVITY IN ORDER TO MAINTAIN COMPLIANCE WITH THE CONDITIONS OF THE PERMIT.
- THE PERMITTEE SHALL EMPLOY APPROPRIATE MEASURES TO MINIMIZE NOISE WHERE NECESSARY DURING CONSTRUCTION, AS SPECIFIED IN N.J.S.A. 13:1G-1 ET SEQ. AND N.J.A.C. 7:29.
- THE ISSUANCE OF A PERMIT DOES NOT RELINQUISH THE STATE'S TIDELANDS OWNERSHIP OR CLAIM TO ANY PORTION OF THE SUBJECT PROPERTY OR ADJACENT PROPERTIES.
- THE ISSUANCE OF A PERMIT DOES NOT RELINQUISH PUBLIC RIGHTS TO ACCESS AND USE TIDAL WATERWAYS AND THEIR SHORES.
- THE PERMITTEE SHALL ALLOW AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT, UPON THE PRESENTATION OF CREDENTIALS, TO:
 - ENTER UPON THE PERMITTEE'S PREMISES WHERE A REGULATED ACTIVITY, PROJECT, OR DEVELOPMENT IS LOCATED OR CONDUCTED, OR WHERE RECORDS MUST BE KEPT UNDER THE CONDITIONS OF THE PERMIT;
 - HAVE ACCESS TO AND COPY, AT REASONABLE TIMES, ANY RECORDS THAT MUST BE KEPT UNDER THE CONDITIONS OF THE PERMIT;
 - INSPECT, AT REASONABLE TIMES, ANY FACILITIES, EQUIPMENT, PRACTICES, OR OPERATIONS REGULATED OR REQUIRED UNDER THE PERMIT. FAILURE TO ALLOW REASONABLE ACCESS UNDER THIS PARAGRAPH SHALL BE CONSIDERED A VIOLATION OF THIS CHAPTER AND SUBJECT THE PERMITTEE TO ENFORCEMENT ACTION; AND
 - SAMPLE OR MONITOR AT REASONABLE TIMES, FOR THE PURPOSES OF ASSURING COMPLIANCE OR AS OTHERWISE AUTHORIZED BY THE FEDERAL ACT, BY THE FRESHWATER WETLANDS PROTECTION ACT, OR BY ANY RULE OR ORDER ISSUED PURSUANT THERETO, ANY SUBSTANCES OR PARAMETERS AT ANY LOCATION.
- THE PERMITTEE SHALL NOT CAUSE OR ALLOW ANY UNREASONABLE INTERFERENCE WITH THE FREE FLOW OF A REGULATED WATER BY PLACING OR DUMPING ANY MATERIALS, EQUIPMENT, DEBRIS, OR STRUCTURES WITHIN OR ADJACENT TO THE CHANNEL WHILE THE REGULATED ACTIVITY, PROJECT, OR DEVELOPMENT IS BEING UNDERTAKEN. UPON COMPLETION OF THE REGULATED ACTIVITY, PROJECT, OR DEVELOPMENT, THE PERMITTEE SHALL REMOVE AND DISPOSE OF IN A LAWFUL MANNER ALL EXCESS MATERIALS, DEBRIS, EQUIPMENT, AND SILT FENCES AND OTHER TEMPORARY SOIL EROSION AND SEDIMENT CONTROL DEVICES FROM ALL REGULATED AREAS.
- THE PERMITTEE AND ITS CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH ALL CONDITIONS, SITE PLANS, AND SUPPORTING DOCUMENTS APPROVED BY THE PERMIT.
- ALL CONDITIONS, SITE PLANS, AND SUPPORTING DOCUMENTS APPROVED BY A PERMIT SHALL REMAIN IN FULL FORCE AND EFFECT, SO LONG AS THE REGULATED ACTIVITY, PROJECT, OR DEVELOPMENT, OR ANY PORTION THEREOF, IS IN EXISTENCE, UNLESS THE PERMIT IS MODIFIED PURSUANT TO THE RULES GOVERNING THE HEREIN APPROVED PERMITS.
- THE PERMITTEE SHALL PERFORM ANY MITIGATION REQUIRED UNDER THE PERMIT IN ACCORDANCE WITH THE RULES GOVERNING THE HEREIN APPROVED PERMITS.
- IF ANY CONDITION OR PERMIT IS DETERMINED TO BE LEGALLY UNENFORCEABLE, MODIFICATIONS AND ADDITIONAL CONDITIONS MAY BE IMPOSED BY THE DEPARTMENT AS NECESSARY TO PROTECT PUBLIC HEALTH, SAFETY, AND WELFARE, OR THE ENVIRONMENT.
- ANY PERMIT CONDITION THAT DOES NOT ESTABLISH A SPECIFIC TIMEFRAME WITHIN WHICH THE CONDITION MUST BE SATISFIED (FOR EXAMPLE, PRIOR TO COMMENCEMENT OF CONSTRUCTION) SHALL BE SATISFIED WITHIN SIX MONTHS OF THE EFFECTIVE DATE OF THE PERMIT.
- A COPY OF THE PERMIT AND ALL APPROVED SITE PLANS AND SUPPORTING DOCUMENTS SHALL BE MAINTAINED AT THE SITE AT ALL TIMES AND MADE AVAILABLE TO DEPARTMENT REPRESENTATIVES OR THEIR DESIGNATED AGENTS IMMEDIATELY UPON REQUEST.
- THE PERMITTEE SHALL PROVIDE MONITORING RESULTS TO THE DEPARTMENT AT THE INTERVALS SPECIFIED IN THE PERMIT.
- A PERMIT SHALL BE TRANSFERRED TO ANOTHER PERSON ONLY IN ACCORDANCE WITH THE RULES GOVERNING THE HEREIN APPROVED PERMITS.
- A PERMIT CAN BE MODIFIED, SUSPENDED, OR TERMINATED BY THE DEPARTMENT FOR CAUSE.
- THE SUBMITTAL OF A REQUEST TO MODIFY A PERMIT BY THE PERMITTEE, OR A NOTIFICATION OF PLANNED CHANGES OR ANTICIPATED NONCOMPLIANCE, DOES NOT STAY ANY CONDITION OF A PERMIT.
- WHERE THE PERMITTEE BECOMES AWARE THAT IT FAILED TO SUBMIT ANY RELEVANT FACTS IN AN APPLICATION OR SUBMITTED INCORRECT INFORMATION IN AN APPLICATION OR IN ANY REPORT TO THE DEPARTMENT, IT SHALL PROMPTLY SUBMIT SUCH FACTS OR INFORMATION.
- THE PERMITTEE SHALL SUBMIT EMAIL NOTIFICATION TO THE BUREAU OF COASTAL & LAND USE COMPLIANCE & ENFORCEMENT AT CLU_TOMSRIVER@DEP.NJ.GOV AT LEAST 3 DAYS PRIOR TO COMMENCEMENT OF SITE PREPARATION AND/OR REGULATED ACTIVITIES, WHICHEVER COMES FIRST. THE NOTIFICATION SHALL INCLUDE PROOF OF COMPLETION OF ALL PRE-CONSTRUCTION CONDITIONS, INCLUDING PROOF OF RECORDING OF PERMITS, APPROVED PLANS AND/OR CONSERVATION EASEMENTS, IF REQUIRED. THE PERMITTEE SHALL ALLOW AN AUTHORIZED BUREAU REPRESENTATIVE ON THE SITE TO INSPECT TO ENSURE COMPLIANCE WITH THIS PERMIT.
- THE PERMITTEE SHALL RECORD THE PERMIT, INCLUDING ALL CONDITIONS LISTED THEREIN, WITH THE OFFICE OF THE COUNTY CLERK (THE REGISTRAR OF DEEDS AND MORTGAGES, IF APPLICABLE) OF EACH COUNTY IN WHICH THE SITE IS LOCATED. THE PERMIT SHALL BE RECORDED WITHIN 30 CALENDAR DAYS OF RECEIPT BY THE PERMITTEE, UNLESS THE PERMIT AUTHORIZES ACTIVITIES WITHIN TWO OR MORE COUNTIES, IN WHICH CASE THE PERMIT SHALL BE RECORDED WITHIN 90 CALENDAR DAYS OF RECEIPT. UPON COMPLETION OF ALL RECORDING, A COPY OF THE RECORDED PERMIT SHALL BE FORWARDED TO WATERSHED & LAND MANAGEMENT AT THE ADDRESS LISTED ON PAGE ONE OF THIS PERMIT.



TYPICAL TRAIL SECTION
NTS



BOLLARD DETAIL
NTS

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TYPICAL SECTIONS & PERMIT CONDITIONS

HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1

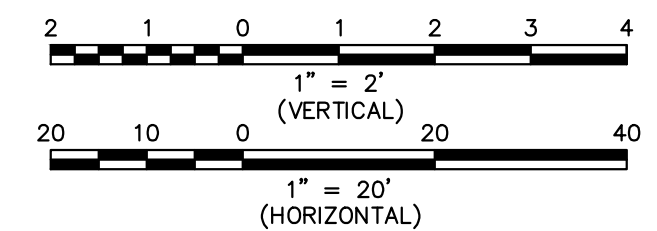
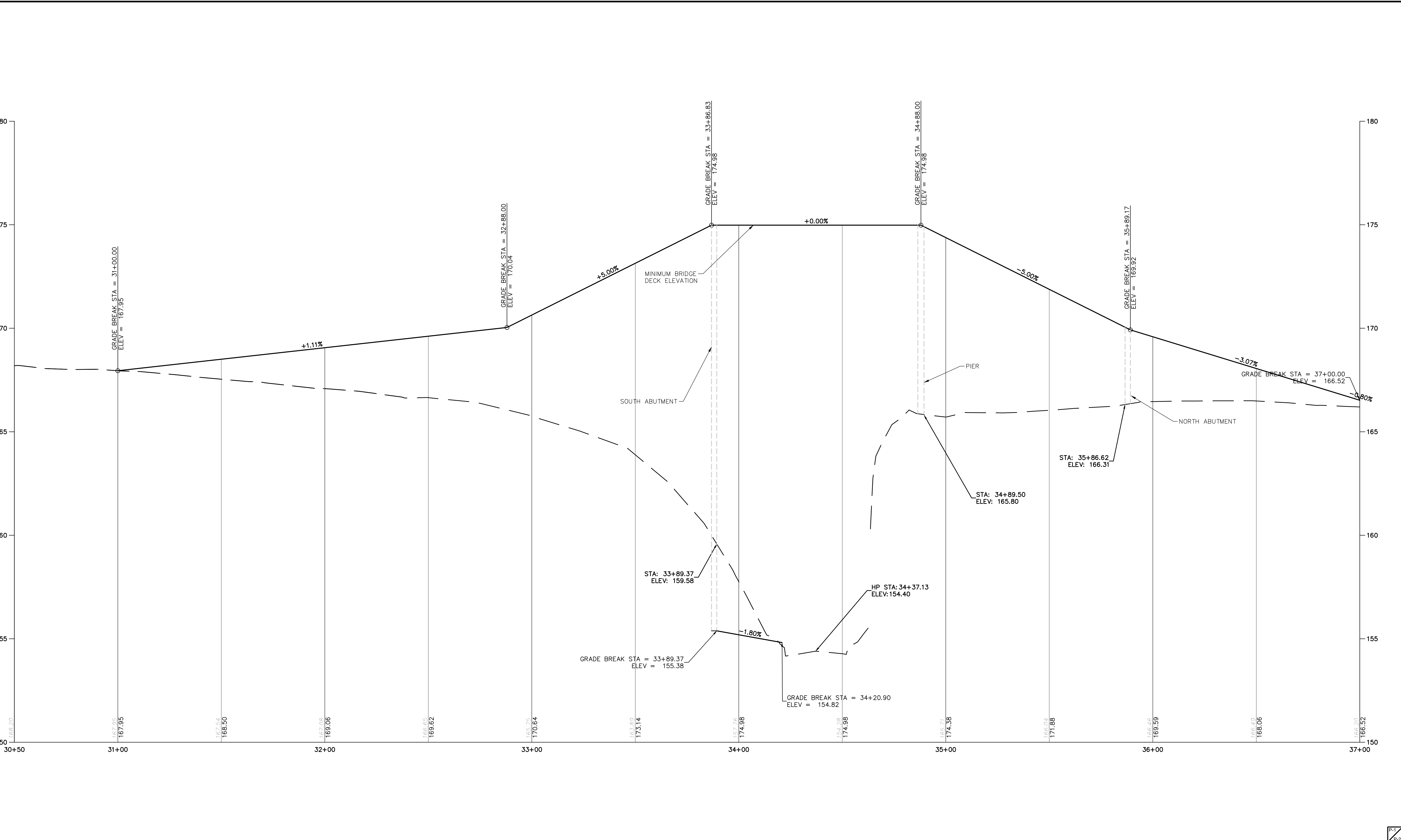
FOR THE MONMOUTH COUNTY PARKS SYSTEM
PS#103-19

IN THE BOROUGH OF FREEHOLD
MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 4 of 34

0:\18K1580015830 - HENRY HUDSON TRAIL EXTENSION\15830.001 SAFETY IMPROVEMENTS\CADD\DWG\BID PACKAGE NO. 1 - FREEHOLD\15830.001 - PROFILE FREEHOLD.DWG - P-1
 PLOTTED ON: 3/28/2023 12:09:08 PM
 PLOTTED BY: SARA IRICK

No.	Date	Revised By	Checked By
3	3/27/2023	SFI	MJD
2	3/8/23	SFI	MJD
1	8/20/22	SFI	MJD



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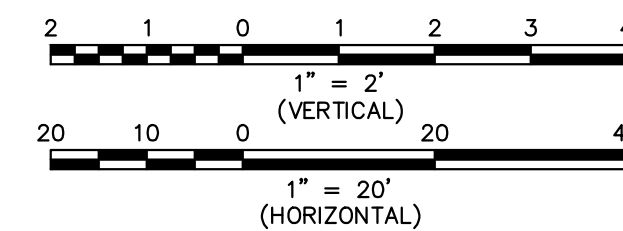
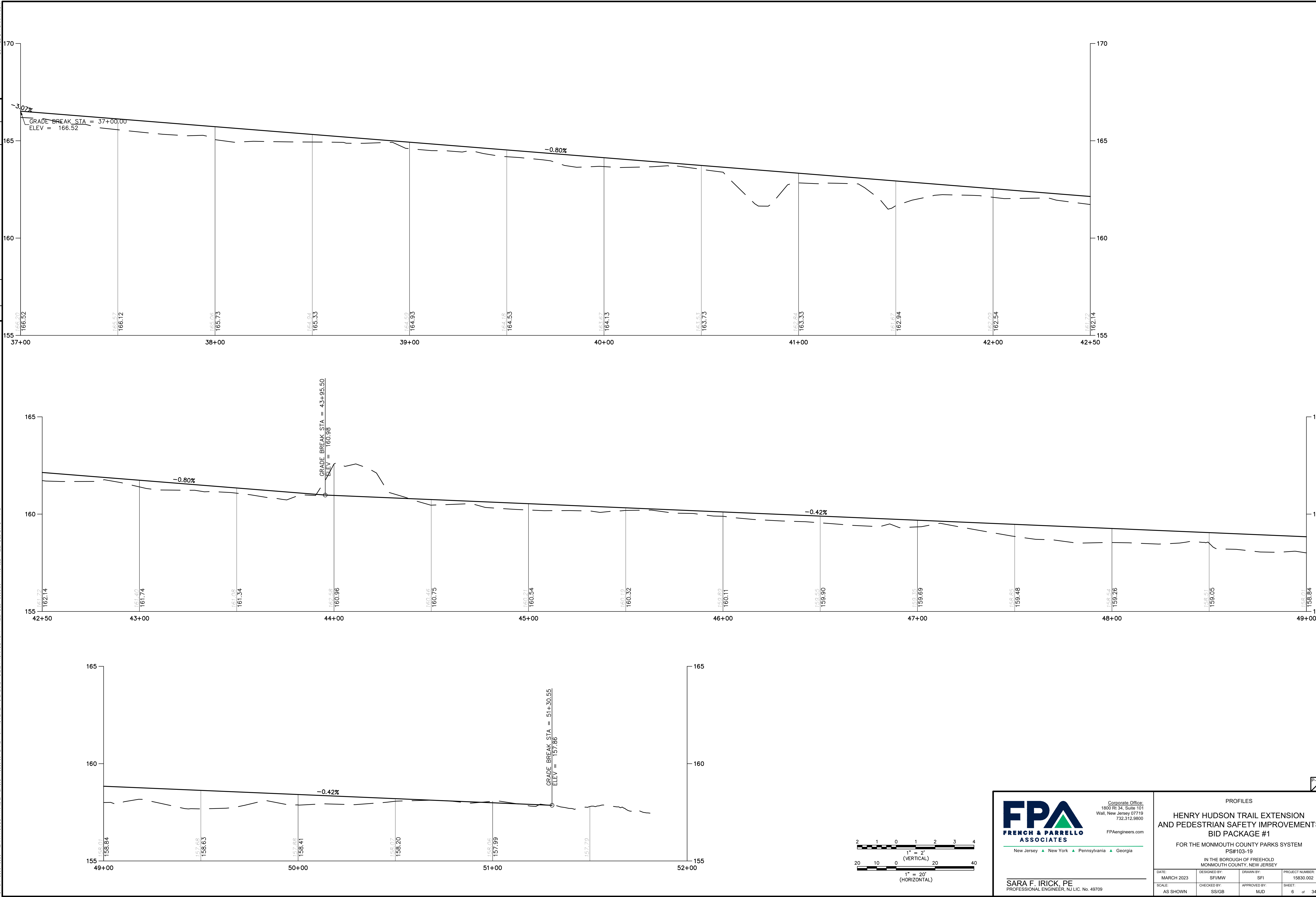
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PROFILES			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
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DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
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No.	Date	Revised By	Checked By
3	3/27/2023	SFI	MJD
2	3/23/23	SFI	MJD
1	8/20/22	SFI	MJD

PLOTTED ON: 3/28/2023 12:09:17 PM
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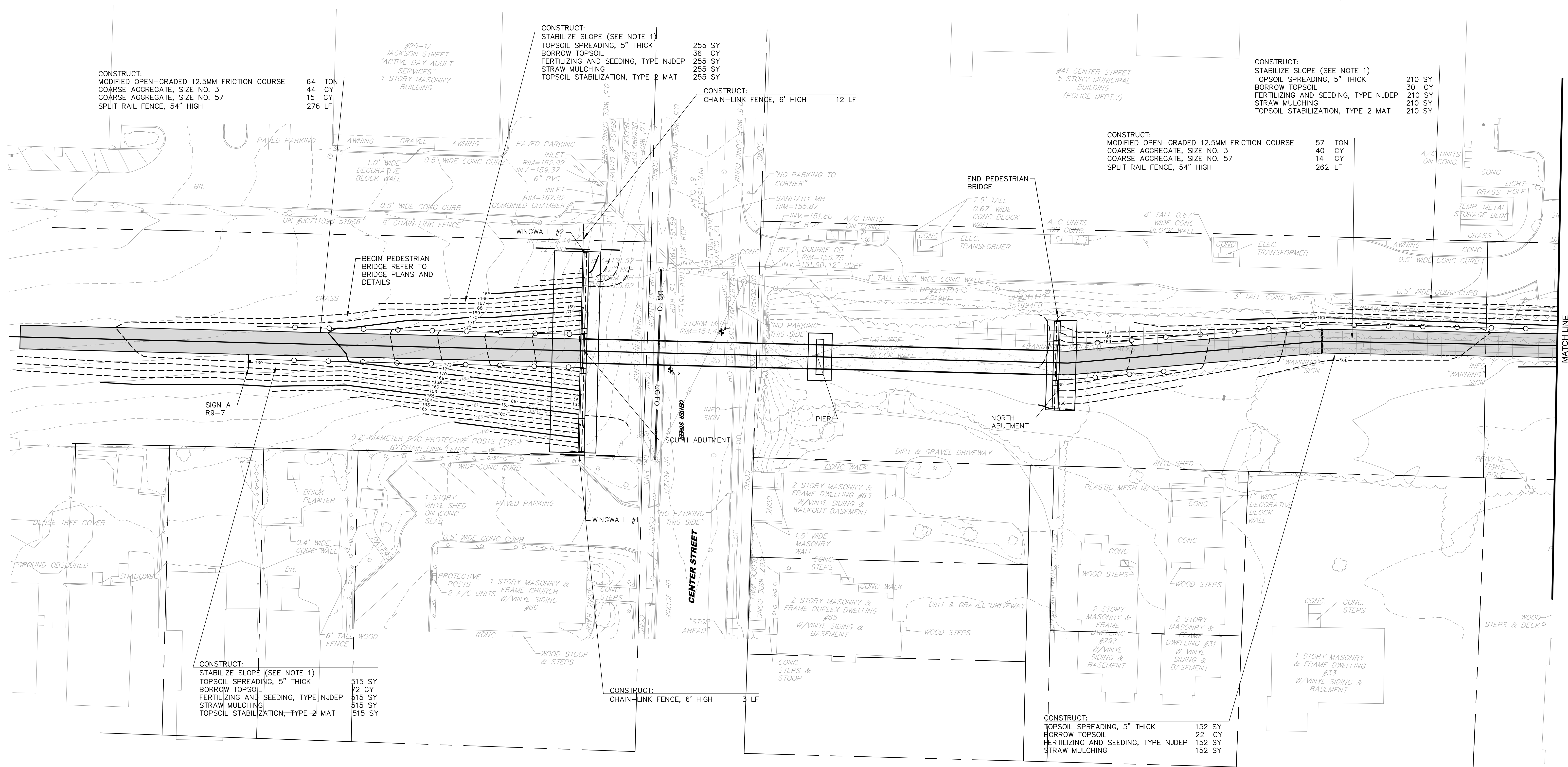
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NO.	DATE	REVISION
3	3/27/2023	PER NDEP PERMIT CONDITIONS
2	3/20/23	PER NDEP COMMENTS
1	9/20/22	PER NDEP COMMENTS

PLOTTED ON: 3/28/2023 12:10:05 PM
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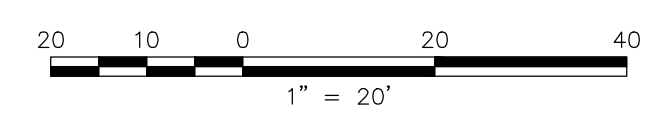


PAY ITEM	TO BE CONSTRUCTED	CONTRACT QUANTITY	UNIT
7	COARSE AGGREGATE, SIZE NO. 3	84	CY
8	COARSE AGGREGATE, SIZE NO. 57	29	CY
9	MODIFIED OPEN-GRADED 12.5MM FRICTION COURSE	121	TON
20	CHAIN-LINK FENCE, 6' HIGH	15	LF
21	SPLIT RAIL FENCE, 54" HIGH	538	LF
22	REGULATORY AND WARNING SIGNS	2	SF
23	TOPSOIL SPREADING, 5" THICK	1,132	SY
24	BORROW TOPSOIL	160	CY
26	FERTILIZING AND SEEDING, TYPE NJDEP	1,132	SY
27	TOPSOIL STABILIZATION, TYPE 2 MAT	980	SY
28	STRAW MULCHING	1,132	SY

LINE #	LENGTH	BEARING	START POINT	END POINT
L1	592.8057	N25° 54' 31.58"E	(556609.5350, 519296.8750)	(556868.5552, 519830.0983)
L2	107.6925	N19° 32' 17.09"E	(556868.5552, 519830.0983)	(556904.5712, 519931.5898)
L3	499.7150	N25° 35' 48.13"E	(556904.5712, 519931.5898)	(557120.4650, 520382.2615)
L4	188.4354	N26° 22' 36.74"E	(557120.4650, 520382.2615)	(557204.1819, 520551.0791)
L5	611.9056	N25° 45' 56.73"E	(557204.1819, 520551.0791)	(557470.1729, 521102.1483)
L6	121.6495	N41° 23' 01.89"E	(557470.1729, 521102.1483)	(557550.5954, 521193.4215)
L7	58.7213	N17° 46' 26.30"W	(557550.5954, 521193.4215)	(557532.6700, 521249.3400)

PLAN
SCALE: 1"=20'

- NOTES:**
- BACKFILL AND COMPACT SLOPE WITHIN FILL AREAS TO ENSURE NO VOIDS ARE PRESENT.
 - REFER TO CROSS SECTIONS FOR EXCAVATION, UNCLASSIFIED AND SOIL AGGREGATE (FILL) QUANTITIES.
 - PAYMENT FOR SITE REMOVAL SHALL BE INCLUDED IN THE COST FOR 'CLEARING SITE'.



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SARA F. IRICK, PE
PROFESSIONAL ENGINEER, N.J. LIC. NO. 49709

CONSTRUCTION PLANS

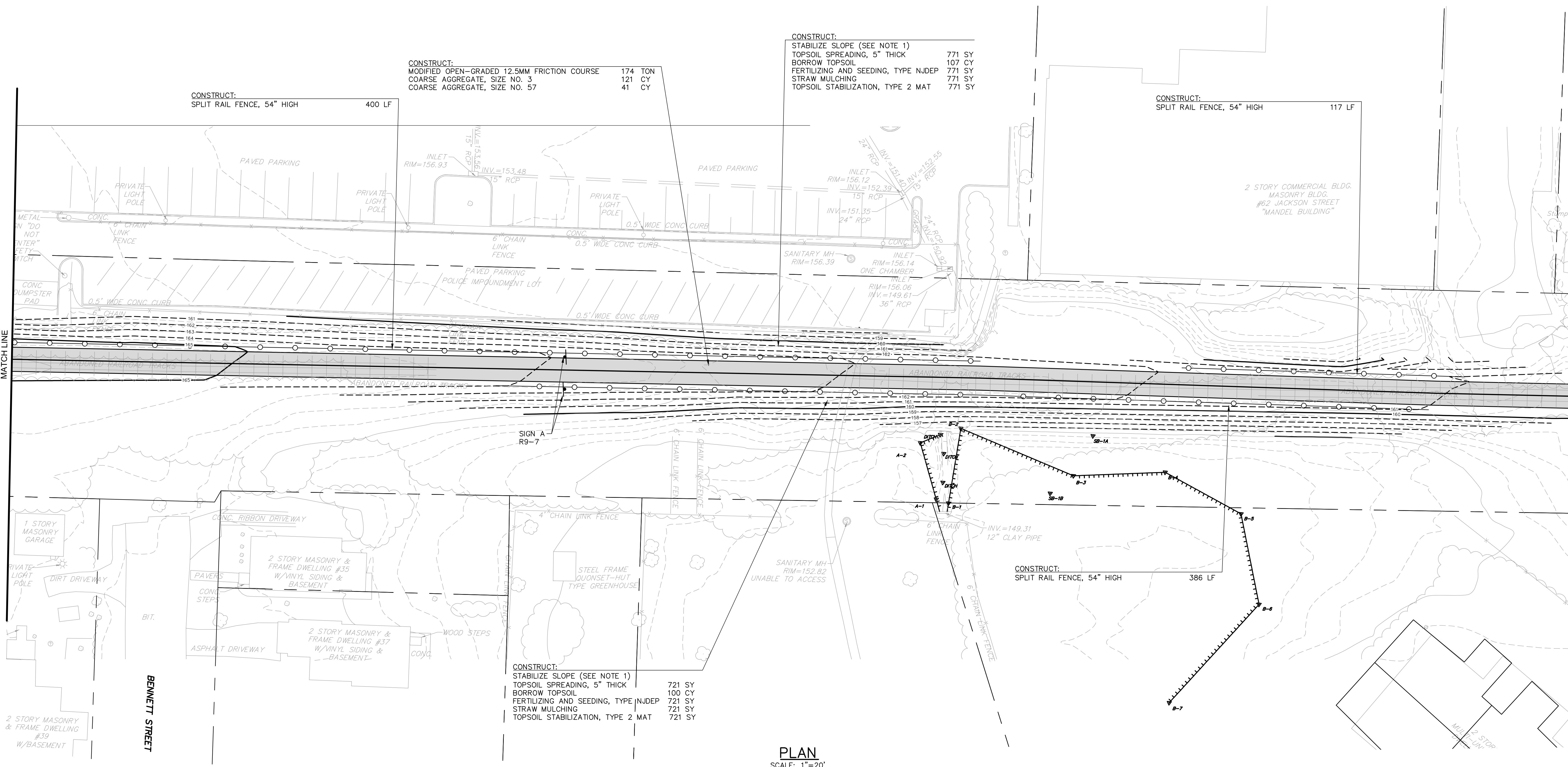
**HENRY HUDSON TRAIL EXTENSION
AND PEDESTRIAN SAFETY IMPROVEMENTS
BID PACKAGE #1**

FOR THE MONMOUTH COUNTY PARKS SYSTEM
PS#103-19

IN THE BOROUGH OF FREEHOLD
MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SFJ/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 7 of 34

3/27/2023 3:28:23 PLOTTED ON: 3/28/2023 12:10:16 PM
 PER USER PERMIT CONDITIONS PER USER COMMENTS PER USER COMMENTS
 3 3/27/2023 3:28:23 PLOTTED BY: SARA IRICK
 2 3/28/23 8:02:22
 1 8/02/22
 No. Date
 Revision
 STA 38+00 MATCH LINE
 STA 44+50 MATCH LINE
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PLAN
SCALE: 1"=20'

PAY ITEM	TO BE CONSTRUCTED	CONTRACT QUANTITY	UNIT
7	COARSE AGGREGATE, SIZE NO. 3	121	CY
8	COARSE AGGREGATE, SIZE NO. 57	41	CY
9	MODIFIED OPEN-GRADED 12.5MM FRICTION COURSE	174	TON
21	SPLIT RAIL FENCE, 54" HIGH	903	LF
22	REGULATORY AND WARNING SIGNS	3	SF
23	TOPSOIL SPREADING, 5" THICK	1,492	SY
24	BORROW TOPSOIL	207	CY
26	FERTILIZING AND SEEDING, TYPE NJDEP	1,492	SY
27	TOPSOIL STABILIZATION, TYPE 2 MAT	1,492	SY
28	STRAW MULCHING	1,492	SY

CONSTRUCT:
 MODIFIED OPEN-GRADED 12.5MM FRICTION COURSE 174 TON
 COARSE AGGREGATE, SIZE NO. 3 121 CY
 COARSE AGGREGATE, SIZE NO. 57 41 CY

CONSTRUCT:
 SPLIT RAIL FENCE, 54" HIGH 400 LF

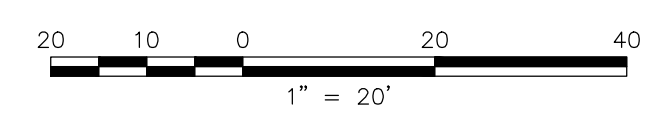
CONSTRUCT:
 STABILIZE SLOPE (SEE NOTE 1) 771 SY
 TOPSOIL SPREADING, 5" THICK 107 CY
 BORROW TOPSOIL 107 CY
 FERTILIZING AND SEEDING, TYPE NJDEP 771 SY
 STRAW MULCHING 771 SY
 TOPSOIL STABILIZATION, TYPE 2 MAT 771 SY

CONSTRUCT:
 SPLIT RAIL FENCE, 54" HIGH 117 LF

CONSTRUCT:
 STABILIZE SLOPE (SEE NOTE 1) 721 SY
 TOPSOIL SPREADING, 5" THICK 100 CY
 BORROW TOPSOIL 100 CY
 FERTILIZING AND SEEDING, TYPE NJDEP 721 SY
 STRAW MULCHING 721 SY
 TOPSOIL STABILIZATION, TYPE 2 MAT 721 SY

CONSTRUCT:
 SPLIT RAIL FENCE, 54" HIGH 386 LF

- NOTES:**
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CONSTRUCTION PLANS
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1
 FOR THE MONMOUTH COUNTY PARKS SYSTEM
 PS#103-19

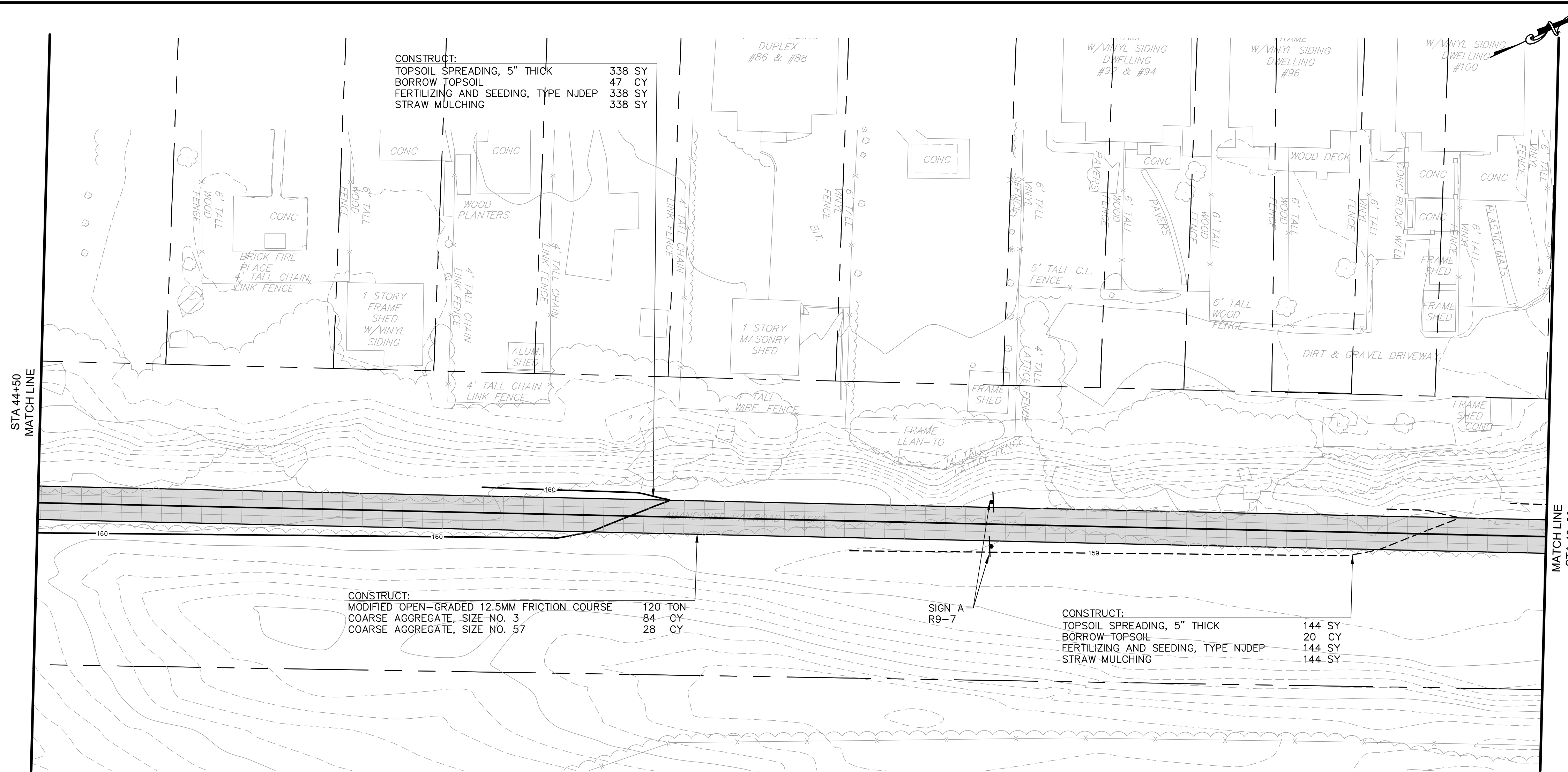
IN THE BOROUGH OF FREEHOLD
 MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 8 of 34

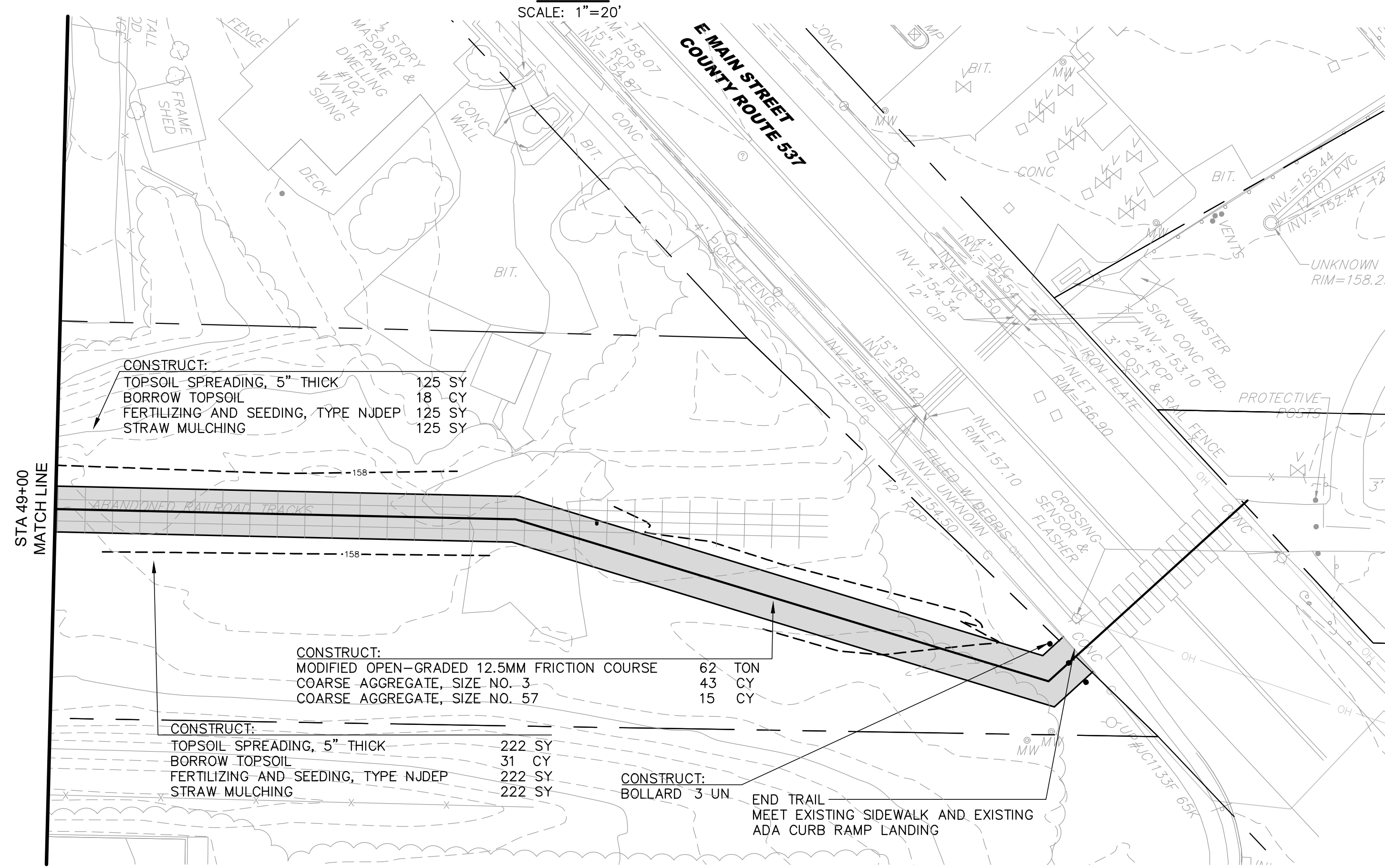
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 PLOTTED BY: SARA IRICK

No.	Date	Revised By	Checked By
3	3/27/2023		
2	3/23/23		
1	9/20/22		

3/27/2023 PER NDEP PERMIT CONDITIONS
 2/3/2023 PER NDEP COMMENTS
 9/20/22 PER NDEP COMMENTS



PLAN
 SCALE: 1"=20'



PLAN
 SCALE: 1"=20'

- NOTES:**
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 - REFER TO CROSS SECTIONS FOR EXCAVATION, UNCLASSIFIED AND SOIL AGGREGATE (FILL) QUANTITIES.
 - PAYMENT FOR TREE REMOVAL SHALL BE INCLUDED IN THE COST FOR "CLEARING SITE".

PAY ITEM	TO BE CONSTRUCTED	CONTRACT QUANTITY	UNIT
7	COARSE AGGREGATE, SIZE NO. 3	127	CY
8	COARSE AGGREGATE, SIZE NO. 57	43	CY
9	MODIFIED OPEN-GRADED 12.5MM FRICTION COURSE	182	TON
22	REGULATORY AND WARNING SIGNS	3	SF
23	TOPSOIL SPREADING, 5" THICK	829	SY
24	BORROW TOPSOIL	116	CY
26	FERTILIZING AND SEEDING, TYPE NJDEP	829	SY
28	STRAW MULCHING	829	SY
29	BOLLARD	3	UN

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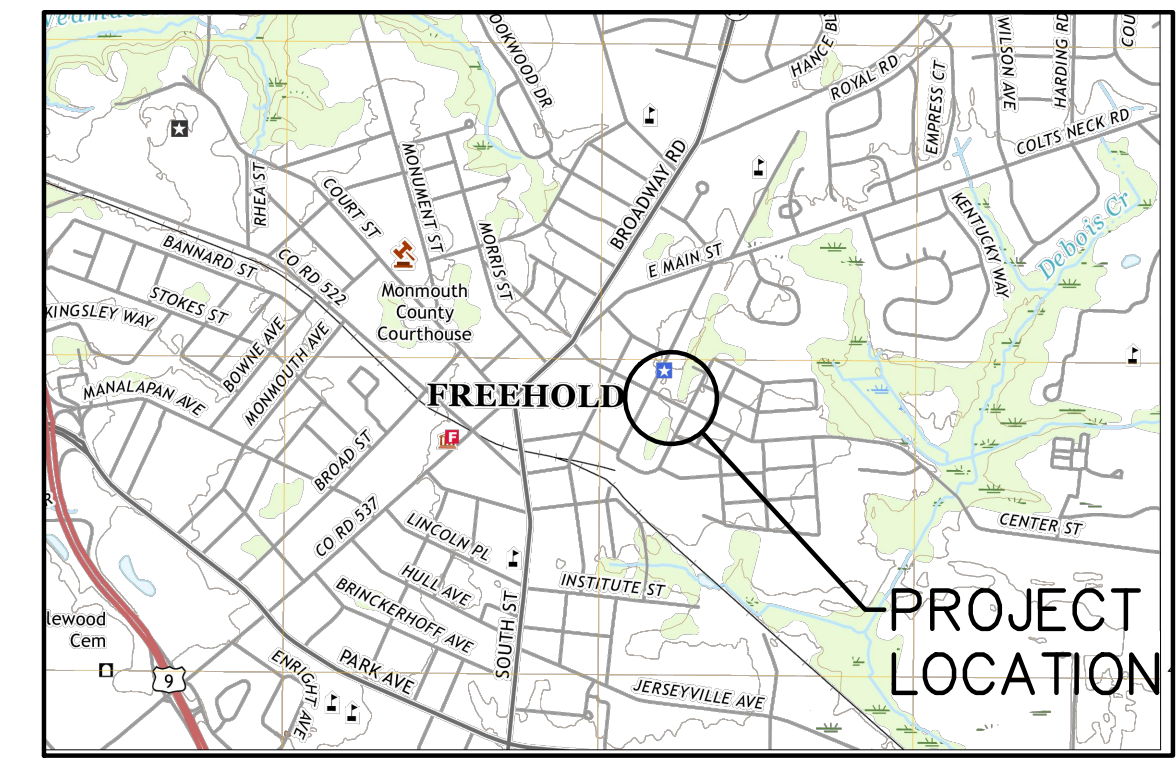
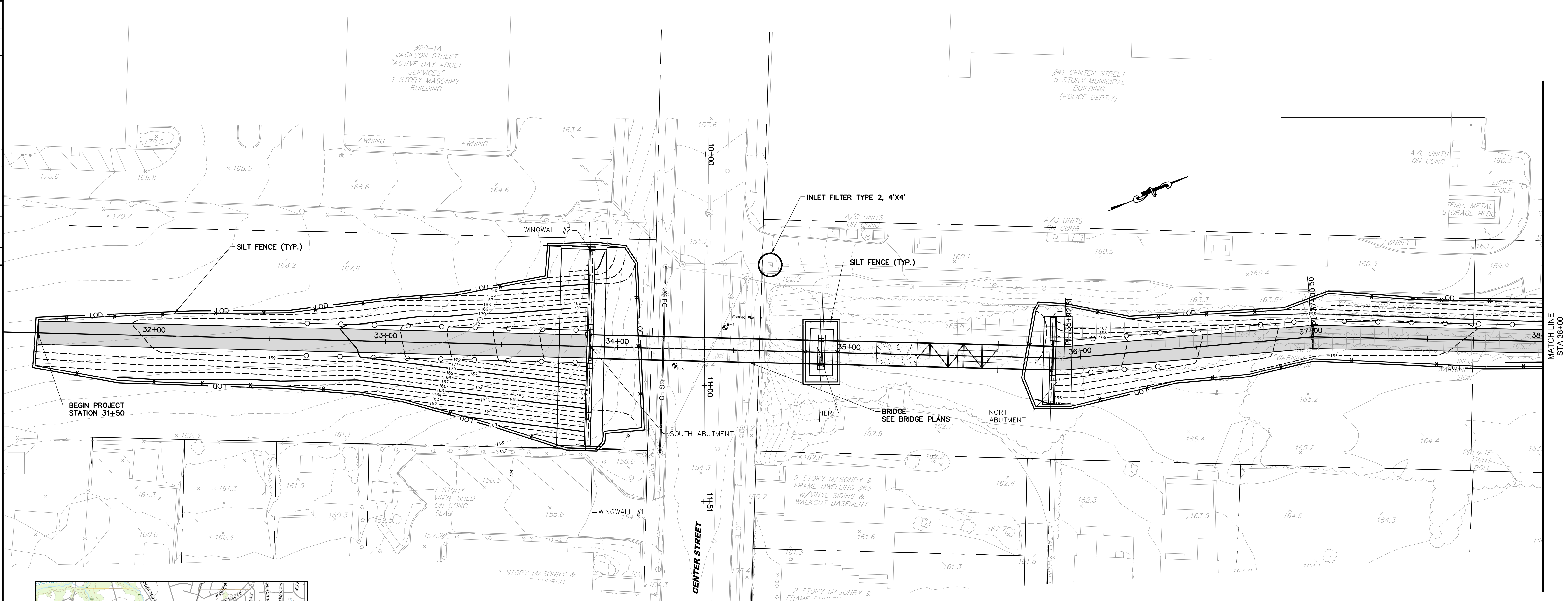
CONSTRUCTION PLANS
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1
 FOR THE MONMOUTH COUNTY PARKS SYSTEM
 PS#103-19

IN THE BOROUGH OF FREEHOLD
 MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SF/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 9 of 34

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No.	Date	Revised By	Checked By
3	3/27/2023		
2	3/28/23		
1	8/20/22		



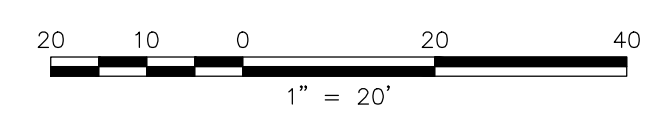
USGS MAP
 SCALE: 1" = 2000'

PLAN
 SCALE: 1" = 20'

LEGEND:

- SILT FENCE
- LOD
- INLET FILTER TYPE 2, 4'X4'

- NOTES:**
- SILT FENCE IS SHOWN ADJACENT TO THE LIMIT OF DISTURBANCE LINE ON THIS PLAN FOR SCHEMATIC PURPOSES ONLY. SILT FENCE IS TO BE PLACED AT THE LIMIT OF DISTURBANCE.
 - TEMPORARY SOIL STOCKPILE AND STABILIZED CONSTRUCTION DRIVEWAY LOCATION TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR WITHIN THE PROJECT LIMITS AND TO BE STABILIZED IN ACCORDANCE WITH THE PROVIDED DETAIL ON SHEET SE-5.
 - NO SEPARATE PAYMENT SHALL BE MADE FOR EROSION CONTROL SEDIMENT REMOVAL. REMOVAL OF ALL SEDIMENT SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS SOIL EROSION AND SEDIMENT CONTROL BID ITEMS.
 - SEE SHEETS SE-4 & SE-5 FOR FURTHER SESC DETAILS & NOTES.



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SOIL EROSION AND SEDIMENT CONTROL PLANS
**HENRY HUDSON TRAIL EXTENSION
 AND PEDESTRIAN SAFETY IMPROVEMENTS
 BID PACKAGE #1**

FOR THE MONMOUTH COUNTY PARKS SYSTEM
 PS#103-19

IN THE BOROUGH OF FREEHOLD
 MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 10 of 34

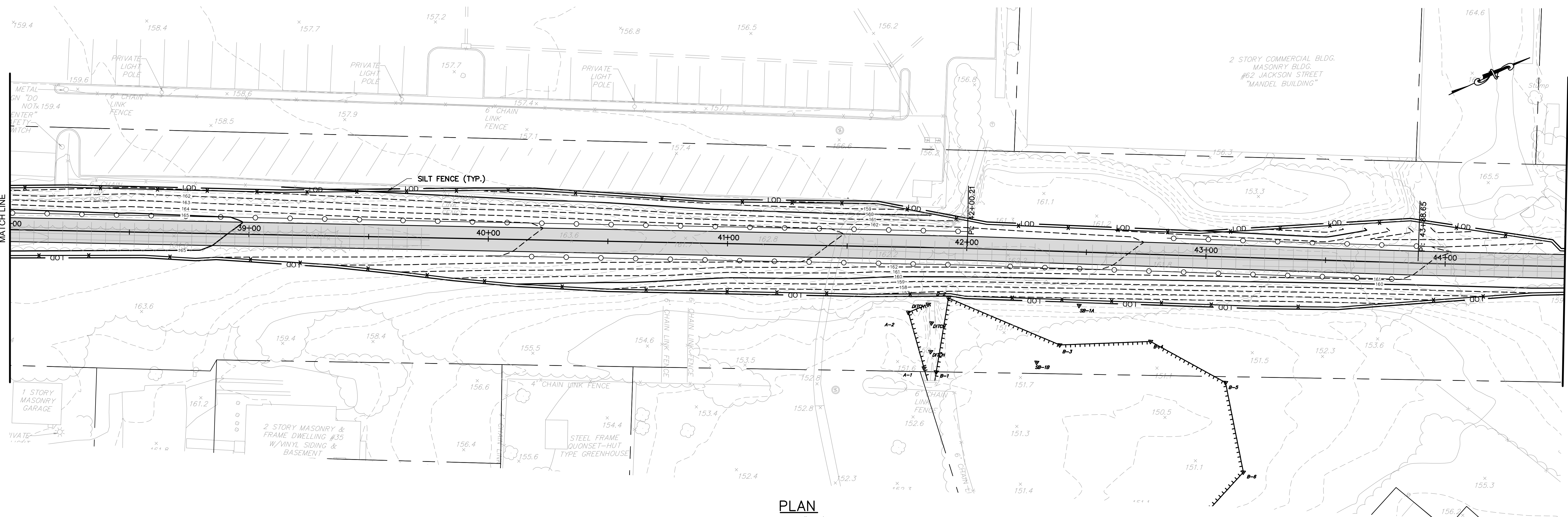
No.	Date	Revised By	Checked By
3	3/27/2023	SFI	MJD
2	3/28/23	SFI	MJD
1	8/20/22	SFI	MJD

3/27/2023
3/28/23
8/20/22

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PER USER COMMENTS
PER USER COMMENTS

3/27/2023
3/28/23
8/20/22

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PLOTTED BY: SARA IRICK

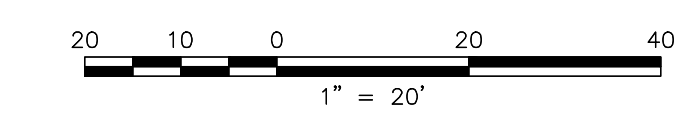


PLAN
SCALE: 1"=20'

LEGEND:

	SILT FENCE
	LIMIT OF DISTURBANCE
	INLET FILTER TYPE 2, 4'X4'

- NOTES:**
- SILT FENCE IS SHOWN ADJACENT TO THE LIMIT OF DISTURBANCE LINE ON THIS PLAN FOR SCHEMATIC PURPOSES ONLY. SILT FENCE IS TO BE PLACED AT THE LIMIT OF DISTURBANCE.
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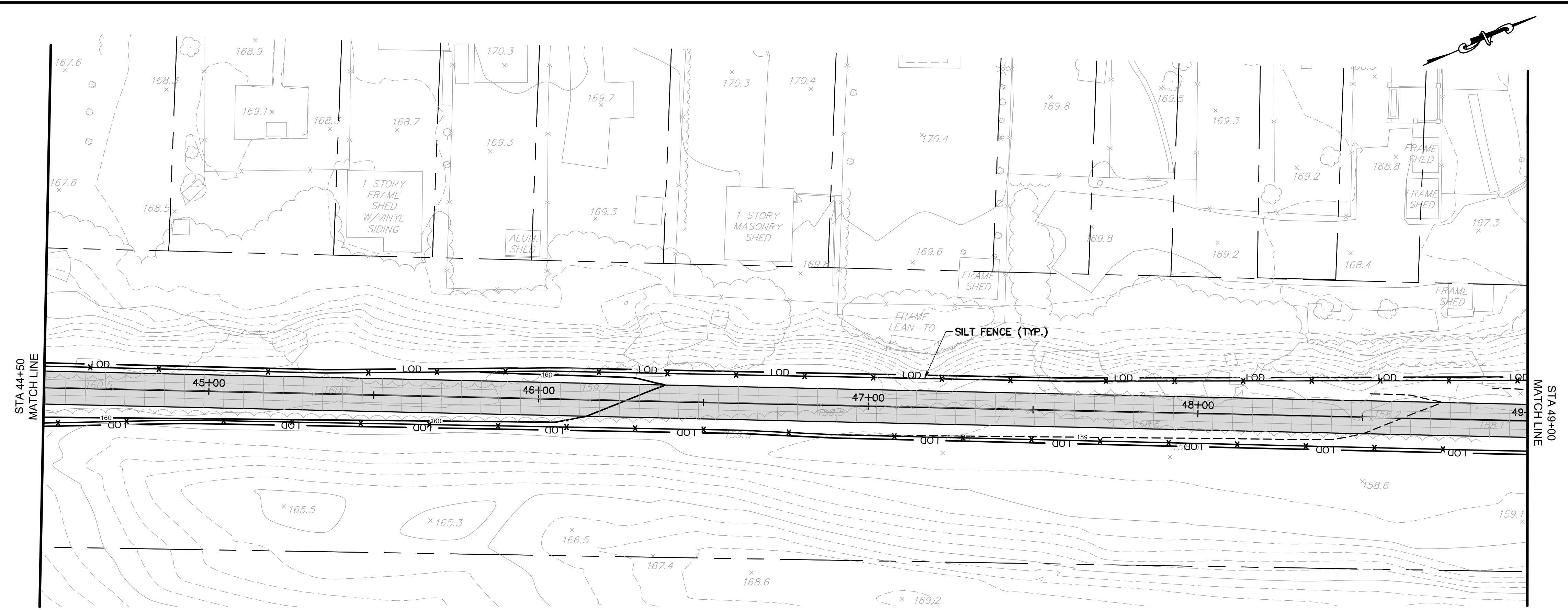
SOIL EROSION AND SEDIMENT CONTROL PLANS			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY			
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 11 of 34

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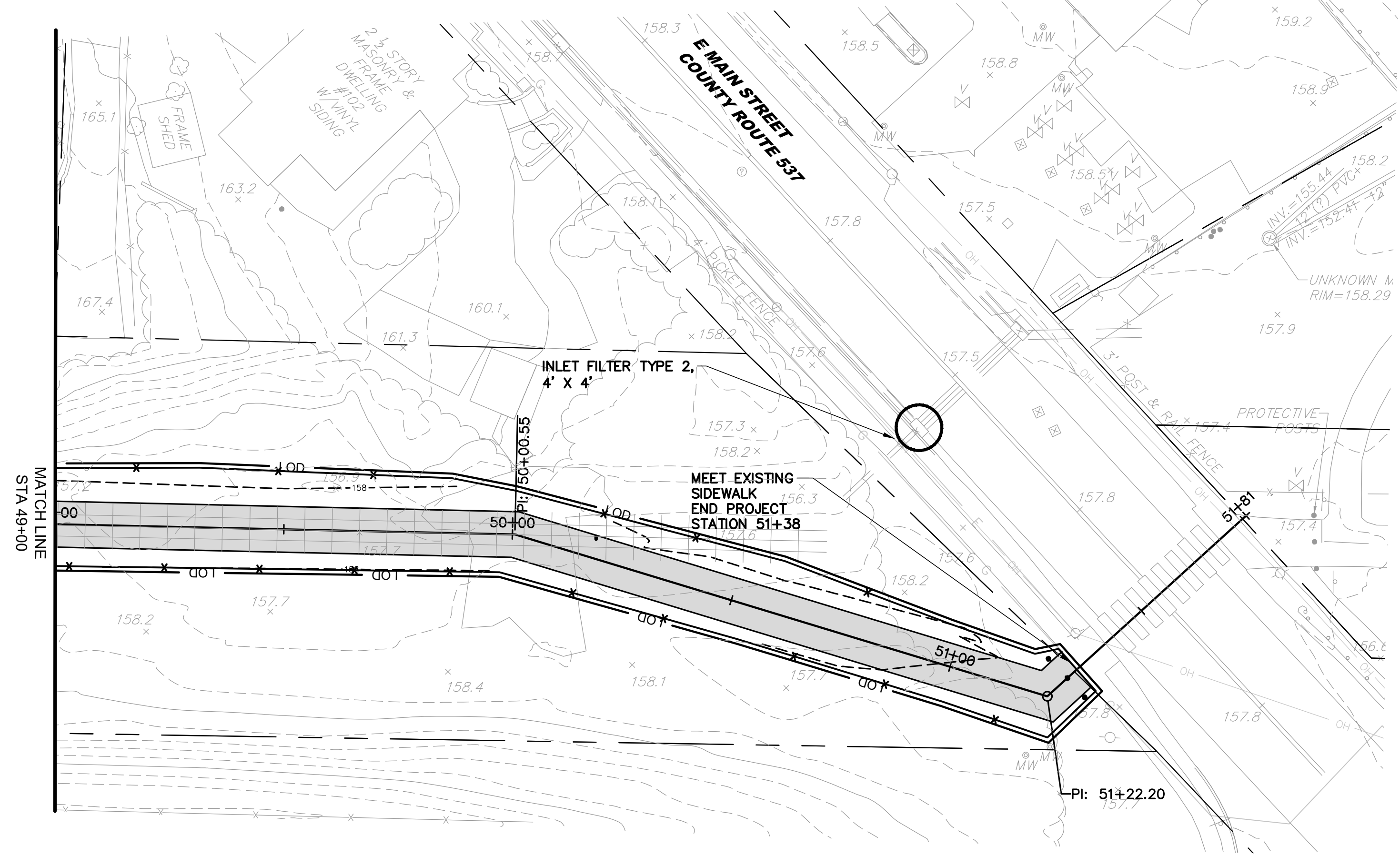
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2	3/23/23	PER USER COMMENTS	SFI	Revised By
1	8/20/22	PER USER COMMENTS	MJD	
No.	Date	Revision		

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PLOTTED BY: SARA IRICK



PLAN
SCALE: 1"=20'

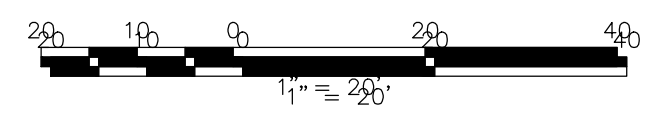


PLAN
SCALE: 1"=20'

LEGEND:

	SILT FENCE
	LIMIT OF DISTURBANCE
	INLET FILTER TYPE 2, 4'X4'

- NOTES:**
1. SILT FENCE IS SHOWN ADJACENT TO THE LIMIT OF DISTURBANCE LINE ON THIS PLAN FOR SCHEMATIC PURPOSES ONLY. SILT FENCE IS TO BE PLACED AT THE LIMIT OF DISTURBANCE.
 2. TEMPORARY SOIL STOCKPILE AND STABILIZED CONSTRUCTION DRIVEWAY LOCATION TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR WITHIN THE PROJECT LIMITS AND TO BE STABILIZED IN ACCORDANCE WITH THE PROVIDED DETAIL ON SHEET SE-5.
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 4. SEE SHEETS SE-4 & SE-5 FOR FURTHER SESC DETAILS & NOTES.



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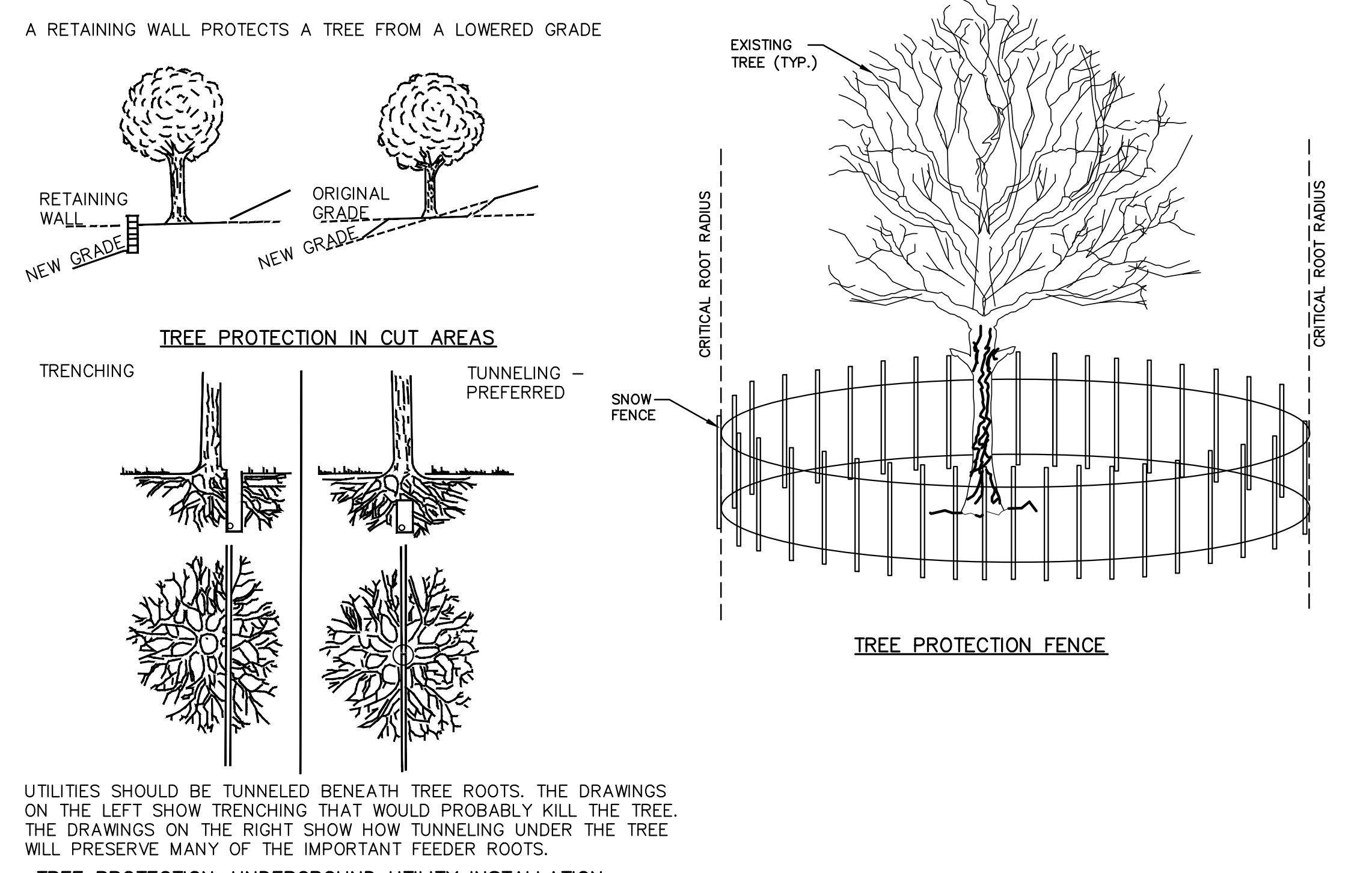
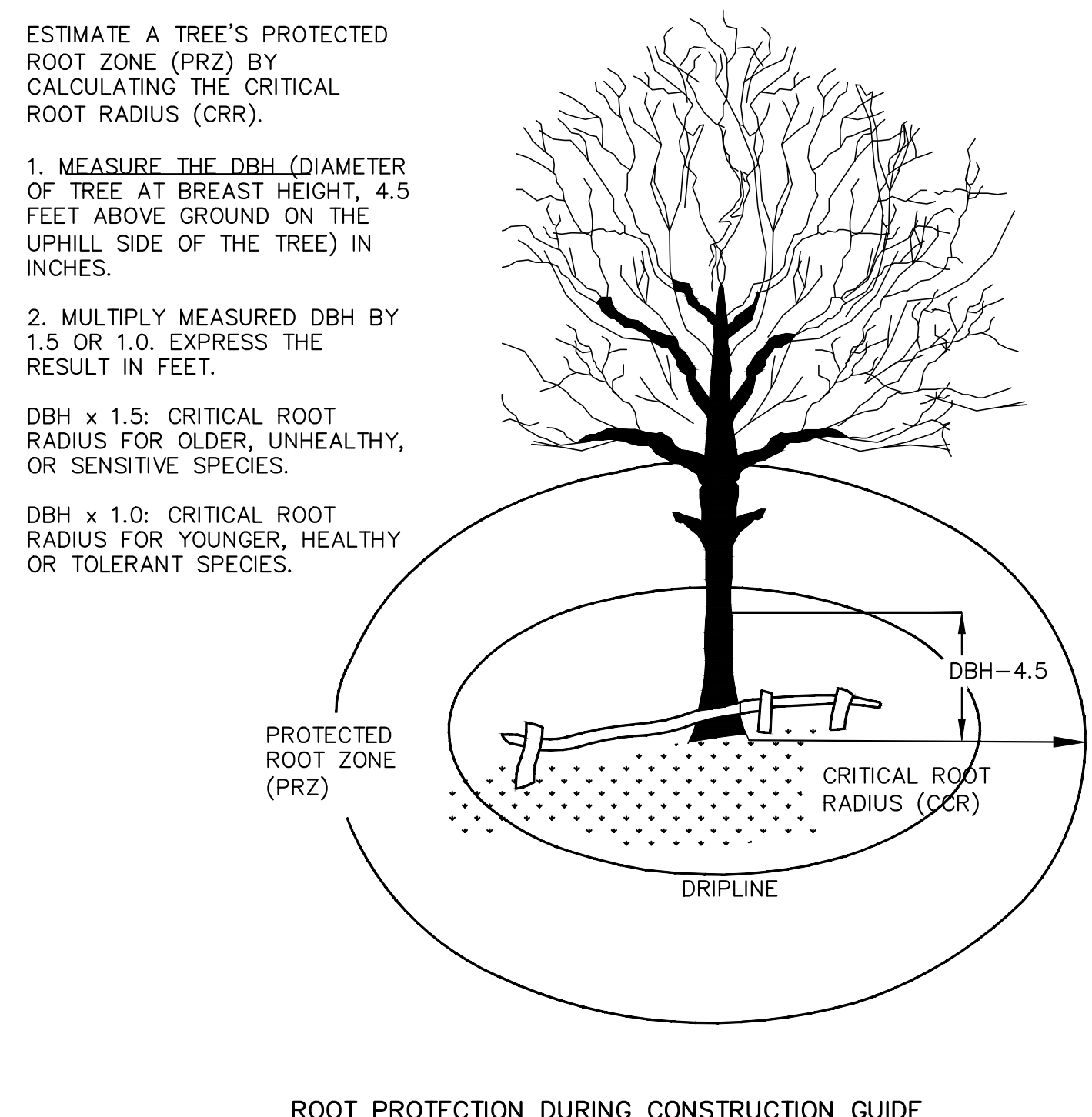
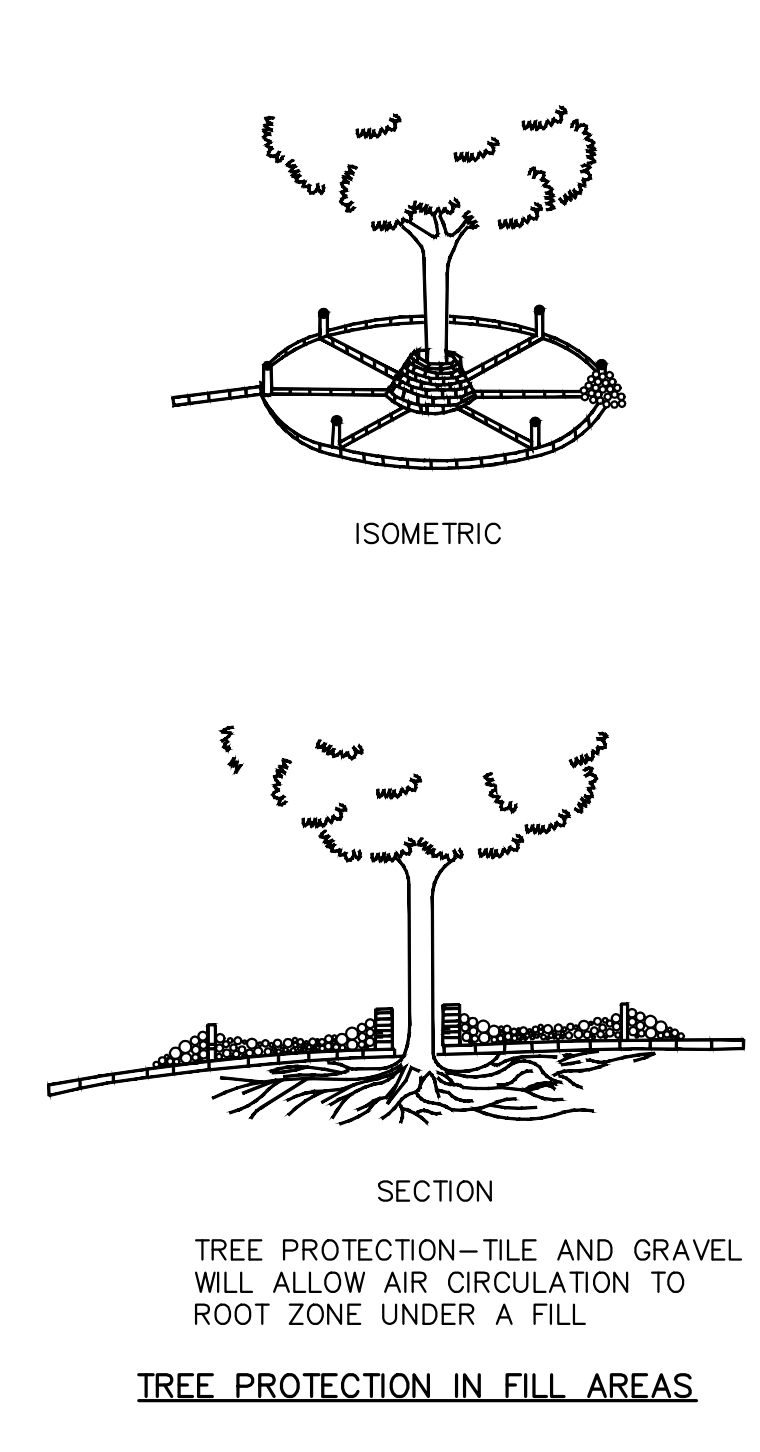
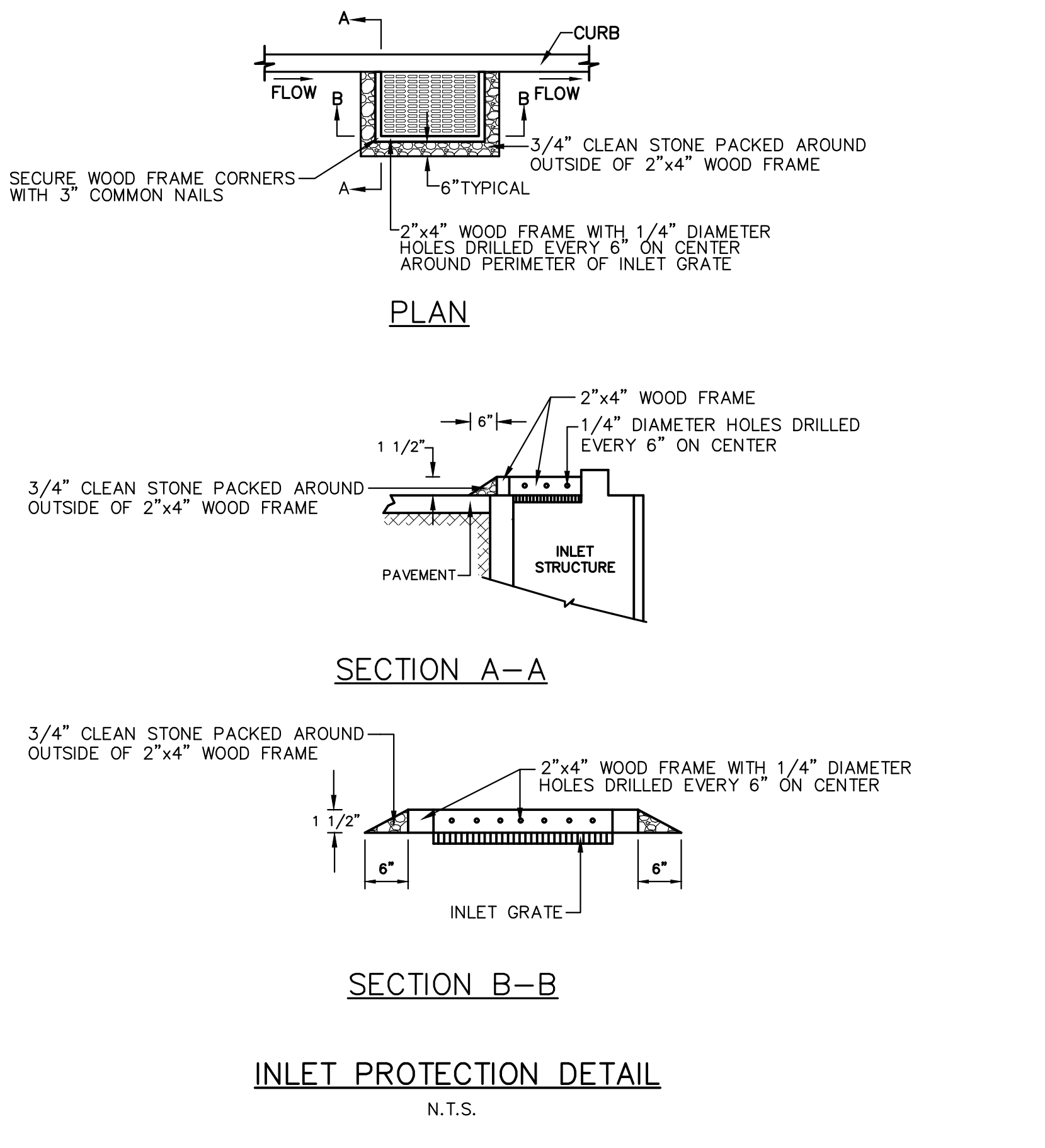
SOIL EROSION AND SEDIMENT CONTROL PLANS
HENRY HUDSON TRAIL EXTENSION
AND PEDESTRIAN SAFETY IMPROVEMENTS
BID PACKAGE #1
FOR THE MONMOUTH COUNTY PARKS SYSTEM
PS#103-19

IN THE BOROUGH OF FREEHOLD
MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
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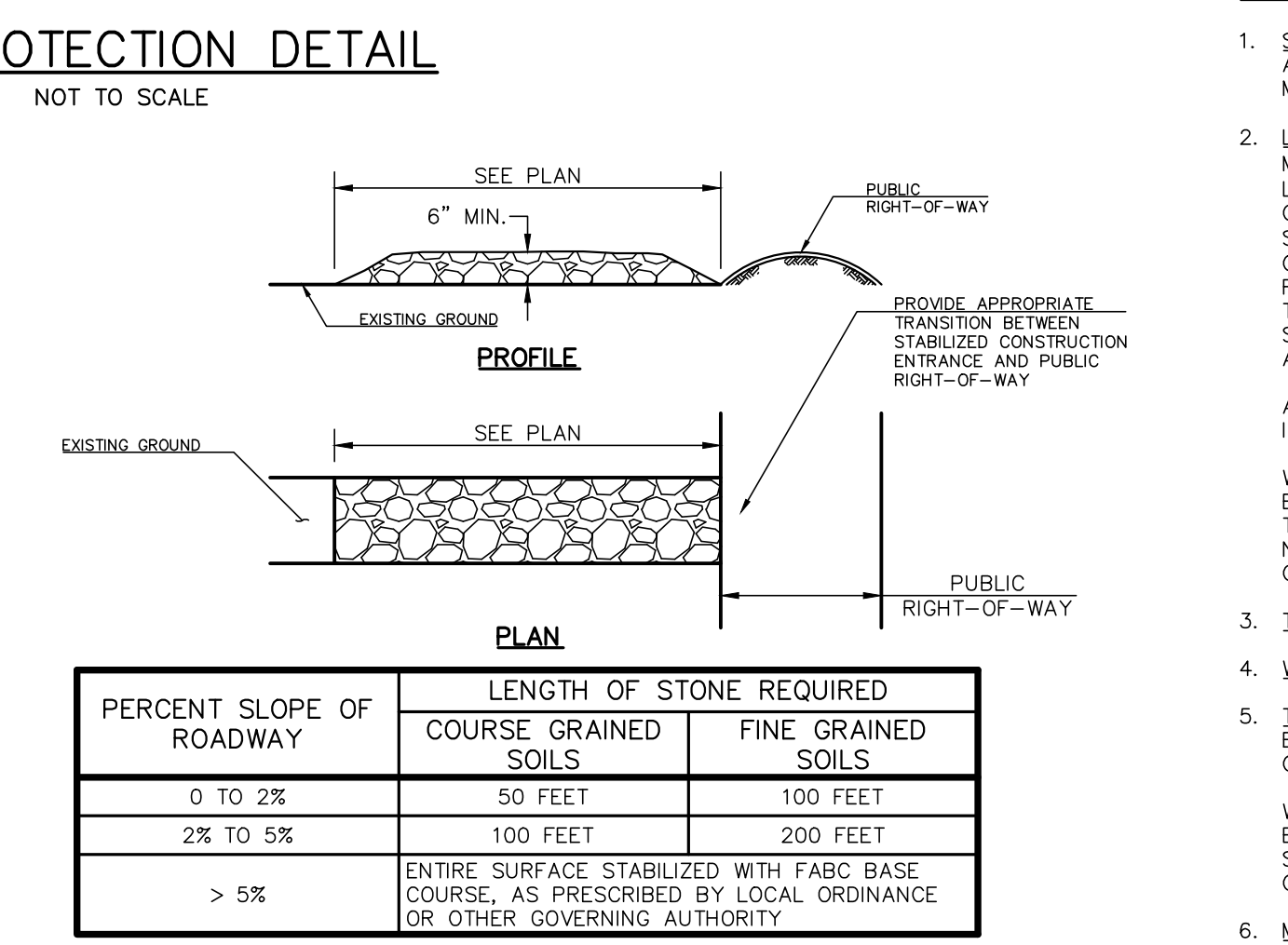
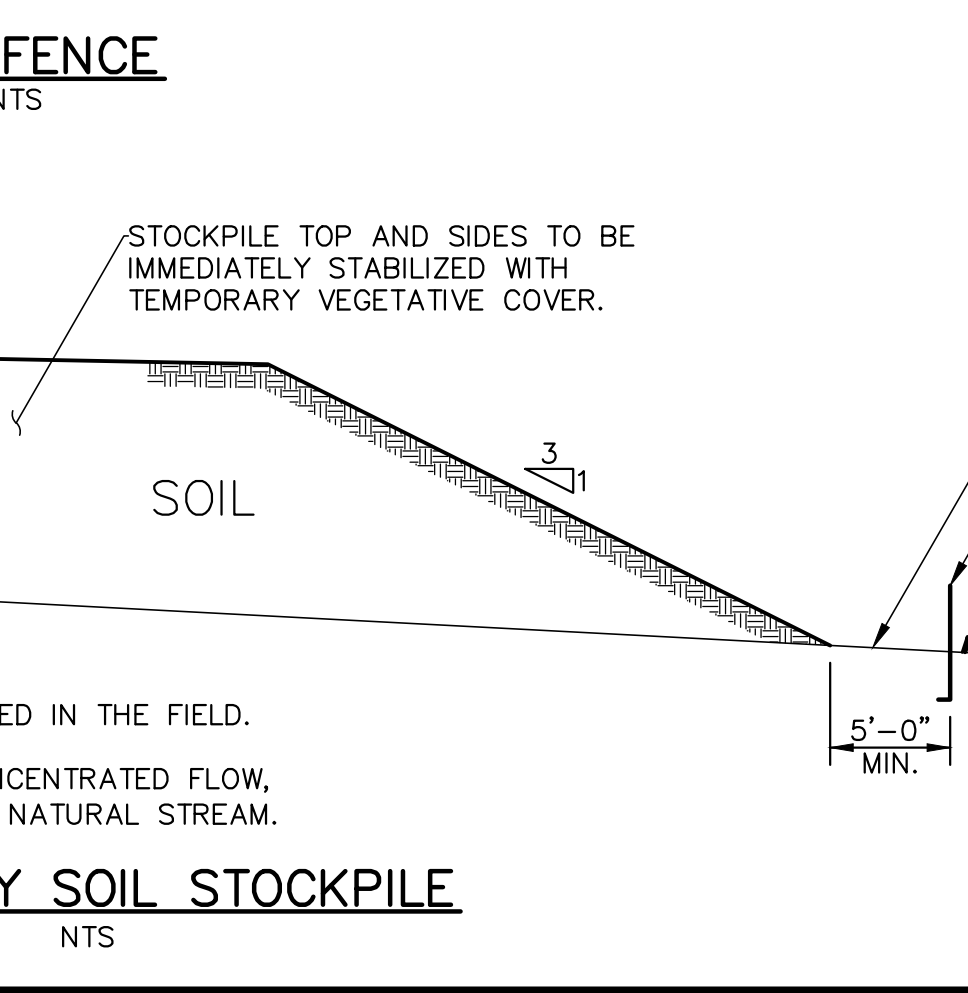
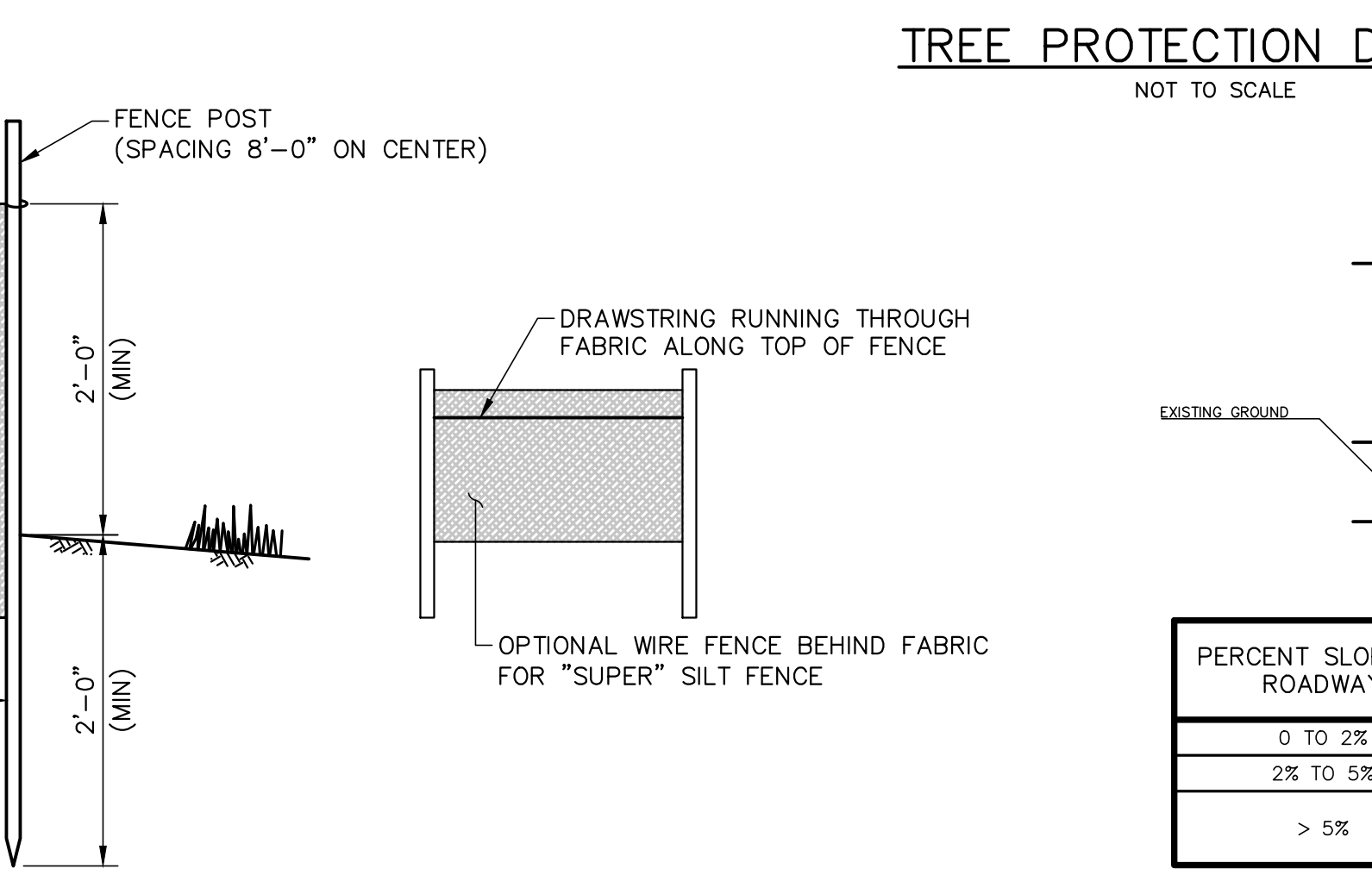
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M.D.	Checked By	
SFI	SFI	
M.D.	Checked By	
SFI	SFI	
Revision		
3	3/27/2023	PER NIDEP PERMIT CONDITIONS
2	3/8/23	PER NIDEP COMMENTS
1	9/20/22	PER NIDEP COMMENTS
No.	Date	



NOTES:

1. TREE PROTECTION SHALL BE PROVIDED FOR ANY AND ALL TREES TO BE PRESERVED DURING AND AFTER CONSTRUCTION AND IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY. THE CONTRACTOR SHALL TAKE WHATEVER ADDITIONAL MEASURES NECESSARY TO PROTECT EXISTING TREES TO REMAIN AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING AND BRUISING OF BARK, SMOTHERING OF TREES AND STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIAL WITHIN DRIP LINE, EXCESS FOOT OR VEHICLE TRAFFIC OR PARKING OF VEHICLES WITHIN DRIP LINE.
2. A FOUR FOOT HIGH SNOW FENCE SHALL BE PLACED BEYOND THE CRITICAL ROOT RADIUS OF TREES DESIGNATED TO BE PRESERVED, TREE ROOT SYSTEMS COMMONLY EXTEND WELL BEYOND THE DRIP LINE. INDIVIDUAL TREES TO BE PRESERVED SHALL BE COMPLETELY ENCIRCLED WITH FENCING.
3. BOARDS OR FENCING SHALL NOT BE NAILED TO TREES DURING CONSTRUCTION.
4. FEEDER ROOTS SHOULD NOT BE CUT IN AN AREA INSIDE THE PROTECTED ROOT ZONE (PRZ).
5. DAMAGED TRUNKS OR EXPOSED ROOTS SHOULD HAVE DAMAGED BARK REMOVED IMMEDIATELY AND NO PAINT SHALL BE APPLIED. EXPOSED ROOTS SHALL BE PRUNED TO GIVE A CLEAN, SHARP, SURFACE AMENABLE TO HEALING. ROOTS EXPOSED DURING HOT WEATHER SHOULD BE IRRIGATED TO PREVENT PERMANENT TREE INJURY. CARE FOR SERIOUS INJURY SHOULD BE PRESCRIBED BY A PROFESSIONAL FORESTER OR LICENSED TREE EXPERT.
6. TREE LIMB REMOVAL, WHERE NECESSARY, WILL BE DONE AS NATURAL TARGET PRUNING TO REMOVE THE DESIRED BRANCH AS CLOSE AS POSSIBLE TO THE BRANCH COLLAR. THERE SHOULD BE NO FLUSH CUTS. FLUSH CUTS DESTROY A MAJOR DEFENSE SYSTEM OF THE TREE. NO TREE PAINT SHALL BE APPLIED. ALL CUTS SHALL BE MADE AT THE OUTSIDE EDGE OF THE BRANCH COLLAR. CUTS MADE TOO FAR BEYOND THE BRANCH COLLAR MAY LEAD TO EXCESS SPROUTING, CRACKS, AND ROT. REMOVAL OF A "V" CROTCH SHOULD BE CONSIDERED FOR FREE STANDING SPECIMEN TREES TO AVOID FUTURE SPLITTING DAMAGE.
7. EXISTING TREES TO REMAIN WITHIN THE LIMITS OF THE CONTRACT WORK SHALL BE REGULARLY WATERED TO MAINTAIN THEIR HEALTH.
8. UTILITIES SHALL BE TUNNELED UNDER TREES TO PREVENT CUTTING OF IMPORTANT FEEDER ROOTS.



PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COURSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FEET	100 FEET
2% TO 5%	100 FEET	200 FEET
> 5%	ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE, AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY	

- ### CONSTRUCTION SPECIFICATIONS
1. **STONE SIZE** - USE ASTM C-33, SIZE NO. 2 (2 1/2 TO 1 1/2 IN.) OR 3 (2 TO 1 IN.). USE CLEAN CRUSHED ANGULAR STONES. CRUSHED CONCRETE OF SIMILAR SIZE MAY BE SUBSTITUTED BUT WILL REQUIRE MORE FREQUENT UPGRADING AND MAINTENANCE.
 2. **LENGTH** - 50 FEET MINIMUM WHERE SOILS ARE COARSE GRAINED (SAND OR GRAVEL), OR 100 FEET MINIMUM WHERE SOILS ARE FINE GRAINED (CLAYS OR SILTS), EXCEPT WHERE THE TRAVEL LENGTH IS LESS THAN 50 OR 100 FEET RESPECTIVELY. THESE LENGTHS MAY BE INCREASED WHERE FIELD CONDITIONS DICTATE. STORMWATER FROM UP-SLOPE AREAS SHALL BE DIVERTED AWAY FROM THE STABILIZED PAD (SEE STANDARD FOR DIVERSIONS). WHERE DIVERSION IS NOT POSSIBLE, THE LENGTH OF THE STABILIZED PAD SHALL BE SHOWN AS IN TABLE ABOVE. WHERE THE SLOPE OF THE ACCESS ROAD EXCEEDS 5%, A STABILIZED BASE OF HOT MIX ASPHALT BASE COURSE SHALL BE INSTALLED. THE TYPE AND THICKNESS OF THE BASE COURSE AND USE OF A DENSE-GRADED AGGREGATE SUBBASE SHALL BE AS PRESCRIBED BY LOCAL MUNICIPAL ORDINANCE OR OTHER GOVERNING AUTHORITY.
 - AT POORLY DRAINED LOCATIONS, SUBSURFACE DRAINAGE GRAVEL FILTER OR GEOTEXTILE SHALL BE INSTALLED BEFORE INSTALLING THE STABILIZED CONSTRUCTION ENTRANCE.
 - WHERE A STABILIZED CONSTRUCTION ENTRANCE EXIT TRAVERSES BETWEEN TWO BUILDINGS, IT SHALL BE STONED THE ENTIRE LENGTH OF THE RIGHT-OF-WAY. MOUNTABLE STONE BERMS PLACED ACROSS THE WIDTH OF THE EXIT MAY ALSO BE REQUIRED AT THE TRANSITION POINT BETWEEN PAVED AND NON-PAVED AREAS TO TRAP SEDIMENTS WHICH ARE CARRIED BY STORMWATER FLOWING ALONG THE CURBLINE.
 3. **THICKNESS** - NOT LESS THAN 6 INCHES.
 4. **WIDTH** - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
 5. **TIRE WASHING** - IF SPACE IS LIMITED, VEHICLE TIRES MAY BE WASHED WITH CLEAN WATER BEFORE ENTERING A PAVED AREA. A WASH STATION MUST BE LOCATED SUCH THAT WATER WILL NOT FLOW ONTO PAVED ROADWAYS OR INTO UNPROTECTED STORM DRAINAGE SYSTEMS.
 - WHEN THE CONSTRUCTION ACCESS EXISTS ONTO A MAJOR ROADWAY, A PAVED TRANSITION AREA MAY BE INSTALLED BETWEEN THE MAJOR ROADWAY AND THE STONED ENTRANCE TO PREVENT LOOSE STONES FROM BEING TRANSPORTED OUT ONTO THE ROADWAY BY THE HEAVY EQUIPMENT ENTERING OR LEAVING THE SITE.
 6. **MAINTENANCE** - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS (PRIVATE OR PUBLIC) OR OTHER IMPERVIOUS SURFACES MUST BE REMOVED IMMEDIATELY.
 - WHERE ACCUMULATION OF DUST/SEDIMENT IS INADEQUATELY CLEANED OR REMOVED BY CONVENTIONAL METHODS, A POWER BROOM OR STREET SWEEPER WILL BE REQUIRED TO CLEAN PAVED OR IMPERVIOUS SURFACES. ALL OTHER ACCESS POINTS WHICH ARE NOT STABILIZED SHALL BE BLOCKED OFF.

NOTES:

1. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED IF AND WHERE REQUIRED.
2. FOR FURTHER SESC DETAILS, SEE NJDOT STANDARD ROADWAY CONSTRUCTION DETAILS CD-158-1 THRU CD-158-4.4.

- ### NOTES:
1. ALL PROPOSED SLOPES STEEPER THAN 2H:1V SHALL BE TREATED WITH SOIL MATTING.
 2. PREPARE SOIL BEFORE INSTALLING TOPSOIL STABILIZATION MATTING, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
 3. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE MAT IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF MATTING EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE MATTING WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF MATTING BACK OVER SEED AND COMPACTED SOIL. SECURE MATTING OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE MATTING.
 4. ROLL THE MAT (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. MAT WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL MATTING MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SPECIFIED BY THE MANUFACTURER.
 5. EDGES OF PARALLEL MATS MUST BE STAPLED WITH AN OVERLAP IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 6. CONSECUTIVE MAT SEGMENTS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE MATTING WIDTH.
 7. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTH GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE MATTING.
 8. ALL COSTS & COMPONENTS ASSOCIATED WITH THE INSTALLATION OF THE TOPSOIL STABILIZATION MATTING SHALL BE INCLUDED IN THE PAY ITEM "TOPSOIL STABILIZATION, TYPE 1 MAT".

TOPSOIL STABILIZATION MATTING

N.T.S.

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New Jersey ■ New York ■ Pennsylvania ■ Georgia		SOIL EROSION AND SEDIMENT CONTROL PLANS HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1 FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19	
DATE: MARCH 2023	DESIGNED BY: SFI/MLW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 14 of 34
SARA F. IRICK, PE PROFESSIONAL ENGINEER, N.J. LIC. No. 49709		IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY	

NO.	DATE		REVISION
	BY	DESCRIBED	
3	SFI	MJD	PER USER PERMIT CONDITIONS
2	SFI	SFI	PER USER COMMENTS
1	SFI	MJD	PER USER COMMENTS

LEGEND

- BREAKAWAY BARRICADES
- BREAKAWAY BARRICADES WITH SIGN
- CONSTRUCTION SIGNS
- DRUMS
- CONE
- DIRECTION OF TRAFFIC FLOW
- FLAGGER
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING CAUTION MODE
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN (Left, Right, Both)
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN (Left, Right, Both)
- BUFFER ZONE
- WORK AREA
- CRASH CUSHION
- CONSTRUCTION BARRIER CURB

GENERAL NOTES:

1. ADVANCE WARNING SIGNS, DISTANCES AND TAPER LENGTHS MAY BE EXTENDED, AT THE DIRECTION OF THE ENGINEER, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
2. THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED AS APPROVED BY ENGINEER TO ADJUST FOR VISIBILITY DUE TO HORIZONTAL OR VERTICAL CURVATURE OF THE ROADWAY OR TO POSITION AT A SAFER LOCATION. ILLUMINATED FLASHING ARROW BOARDS ARE TO BE USED FOR TEMPORARY LANE CLOSINGS AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.
3. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
4. RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-1F SIGN (ROAD WORK AHEAD) AS A MINIMUM.
5. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER.
6. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY, OR PROPOSED TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
7. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE NJDOT "STANDARD TRAFFIC CONTROL DETAILS" AND THE TRAFFIC CONTROL DEVICES - PART 6 "TEMPORARY TRAFFIC CONTROL" UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS, AND SHALL BE APPROVED BY THE ENGINEER.
8. CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
9. A W1-6 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH SHALL BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.
10. FOR THIS PROJECT THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL INTERSECTING STREETS AND PROPERTIES THROUGHOUT CONSTRUCTION, UNLESS OTHERWISE NOTED IN THE PLANS. SHOULD A TEMPORARY DETOUR BE REQUIRED DURING ANY STAGE OF CONSTRUCTION TO ACCOMMODATE CONSTRUCTION ACTIVITIES WRITTEN APPROVAL OF THE DETOUR SHALL BE OBTAINED FROM THE TOWNSHIP ADMINISTRATOR AND TOWNSHIP POLICE DEPARTMENT PRIOR TO IMPLEMENTING THE DETOUR.
11. CONSTRUCTION SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-14A (GROOVED PAVEMENT) SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST. THE PLACEMENT OF THESE SIGNS SHALL BE AS DIRECTED BY THE ENGINEER.
12. MOVING WORK AREAS IN A LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING ARROW TO REMAIN AT THE END OF THE TAPER. THE TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION SHALL MOVE WITH THE WORK AREAS TO KEEP A 60 FEET MIN. AND 150 FEET MAX. BUFFER IN ADVANCE OF EACH WORK AREA.
13. THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE SAFE ACCESS OF CONSTRUCTION VEHICLES THROUGHOUT THE WORK SITE WHERE SPACE CONSTRAINTS PREVENT THE USE OF LANE CLOSURES. THE PLAN SHALL BE SUBMITTED TO THE ENGINEER IN ACCORDANCE WITH SECTION 159 OF THE SUPPLEMENTARY SPECIFICATIONS.
14. TRAFFIC SAFETY SERVICES SHALL BE USED IN ACCORDANCE WITH THE SUPPLEMENTARY SPECIFICATIONS FOR TRAFFIC CONTROL, SECTION 159.
15. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON A MINIMUM 1:6 SLOPE PRIOR TO THE END OF EACH WORK DAY. OTHER EXCAVATED AREAS WITHIN THE CLEAR ZONE ARE TO BE BACKFILLED.
16. WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE ENGINEER. ALL TEMPORARY PEDESTRIAN FACILITIES CONSTRUCTED SHALL BE COMPLIANT WITH CURRENT ADA REGULATIONS FOR ACCESSIBILITY. IN NO CASES SHALL THE TEMPORARY PEDESTRIAN FACILITIES HAVE AN ACCESSIBILITY STANDARD LESS THAN THE CONDITIONS EXISTING AT THE TIME OF THE START OF CONSTRUCTION. A MINIMUM OF ONE CROSSING LOCATION SHALL BE PROVIDED AT THE INTERSECTION ON BOTH WOODBRIDGE CENTER DRIVE AND PLAZA DRIVE AT ALL TIMES WITH AN ACCESSIBILITY STANDARD NO LESS THAN THE EXISTING CONDITION.
17. BITUMINOUS CONCRETE PLACED DURING THE VARIOUS CONSTRUCTION STAGES SHALL BE TRANSITIONED ON A MINIMUM 1:20 SLOPE TO MEET THE ADJACENT EXISTING GRADE AT THE LONGITUDINAL AND TRANSVERSE LIMITS OF THE STAGE CONSTRUCTION AREAS UNLESS OTHERWISE NOTED ON THE STAGE CONSTRUCTION PLANS.
18. THE PLACEMENT AND OR RELOCATION OF PRECAST CONCRETE CURB, CONSTRUCTION BARRIER SHALL BE DONE DURING APPROVED OFF-PEAK HOURS WHEN TRAFFIC MAY BE REDUCED TO ONE LANE IN EACH DIRECTION.
19. CONSTRUCTION ZONE SPEED LIMIT WILL BE 25 MPH AT THE TIME OF OR DURING CONSTRUCTION.
20. THE SPEED LIMIT, R2-1 (BLACK ON ORANGE) SIGN SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE ENGINEER.
21. THE REDUCED SPEED AHEAD SIGN, W3-5(S) (BLACK ON ORANGE) SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
22. TRAFFIC FINES DOUBLED IN WORK AREA R(N)5-17(S), 48"x30" SIGN SHALL BE LOCATED 500 FEET AFTER THE FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN SHALL ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS IN WHICH CASE THE SIGN SHALL BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.
23. THE FINAL HMA SURFACE PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL THE FINAL STAGE OF THE PROJECT UNLESS OTHERWISE DIRECTED BY THE COUNTY ENGINEER OR INDICATED ON THE PLANS. MANHOLES AND INLETS SHALL BE SET TO FINISHED GRADE AND TEMPORARY PAVEMENT RAMPS ARE TO BE CONSTRUCTED AROUND THEM WITH A MINIMUM 1:20 SLOPE IN ALL DIRECTIONS USING HOT MIX ASPHALT PAVEMENT. THIS TEMPORARY MATERIAL WILL BE REMOVED IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE.
24. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
25. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE COUNTY ENGINEER.
26. TRAFFIC IMPACT NOTICES AND CHANGES
 - A. TERMS: WHEN THE FOLLOWING TERMS ARE USED, THE INTENT AND MEANING SHALL BE AS FOLLOWS:
 - i. IMPACTS TO NORMAL TRAFFIC FLOW - WORK THAT REQUIRES A PORTION OF THE PAVED ROADWAY BEING BLOCKED OR CLOSED WITH SAFETY DEVICES OR VEHICLES, INCLUDING, BUT NOT LIMITED TO, FULL OR PARTIAL LANE CLOSURES, FULL OR PARTIAL RAMP CLOSURES, SHOULDER CLOSURES, MOVING OPERATIONS SUCH AS TRAFFIC STRIPING OR SWEEPING, LANE SHIFTS, OR ALTERNATING TRAFFIC. THIS APPLIES EVEN WHEN DETOURS ARE PROVIDED. DETOURS REQUIRE WRITTEN APPROVALS FROM BOTH THE TOWNSHIP ADMINISTRATOR AND POLICE DEPARTMENT.
 - ii. TEMPORARY LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH IS ROUTINELY SET UP AND REMOVED ON A DAILY BASIS.
 - iii. PERMANENT LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH REMAINS IN PLACE CONTINUOUSLY FOR 24 HOURS OR MORE.

STAGE 1 NOTES

1. INSTALL ALL TRAFFIC CONTROL DEVICES TO ACCOMMODATE THIS STAGE OF CONSTRUCTION IN ACCORDANCE WITH MUTCD REQUIREMENTS. REMOVE ANY CONFLICTING TRAFFIC CONTROL DEVICES.
2. PERFORM CONSTRUCTION LAYOUT AND TREE CLEARING.
3. EXCAVATE EXISTING TRAIL WITHIN THE PROJECT LIMITS WHERE SHOWN ON THE PLANS.
4. PERFORM ROUGH GRADING.
5. EXCAVATE AND INSTALL PEDESTRIAN BRIDGE ABUTMENTS, WING WALLS AND PIERS.
6. INSTALL PRECAST PEDESTRIAN BRIDGES.
7. ESTIMATED STAGE DURATION = 180 DAYS
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING A SAFE AND ACCESSIBLE PEDESTRIAN ROUTE AT ALL TIMES.
9. TRAFFIC DETOUR ON CENTER STREET VIA JACKSON STREET AND 1ST STREET SHALL BE PERMISSIBLE ONLY WHEN BRIDGE IS BEING LIFTED AND PLACED INTO POSITION.

STAGE 2 NOTES:

1. CONSTRUCT PERVIOUS ASPHALT TRAIL, SIDEWALK AND ADA CURB RAMPS WHERE SHOWN ON THE PLAN TO PROPOSED FINISHED GRADES.
2. INSTALL CAST-IN-PLACE CONCRETE BRIDGE DECK.
3. INSTALL FINAL SIGNING AND STRIPING.
4. INSTALL LANDSCAPING AND PERFORM FINAL CLEANUP. REMOVE ALL SOIL EROSION AND SEDIMENT CONTROL AND TEMPORARY TRAFFIC CONTROL MEASURES.
5. ESTIMATED STAGE DURATION = 60 DAYS
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING A SAFE AND ACCESSIBLE PEDESTRIAN ROUTE AT ALL TIMES.

CONSTRUCTION STAGING REQUIREMENTS:

THE WORK LISTED UNDER THE VARIOUS CONSTRUCTION STAGE IMPROVEMENTS IS NOT INTENDED TO BE ALL INCLUSIVE BUT IS BEING PROVIDED AS A GUIDE. THE CONTRACTOR IS REQUIRED TO COMPLETE ALL WORK REQUIRED BY THE CONTRACT DOCUMENTS. THE SEQUENCE OF CONSTRUCTION IS SUGGESTED AND THE CONTRACTOR IS PERMITTED TO MODIFY THE STAGES IDENTIFIED FOR ANY WORK TO ACCOMMODATE THEIR SCHEDULE AND WORK PLAN. THE CONTRACTOR SHALL PROVIDE A DETAILED SCHEDULE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS FOR APPROVAL BY THE RESIDENT ENGINEER.

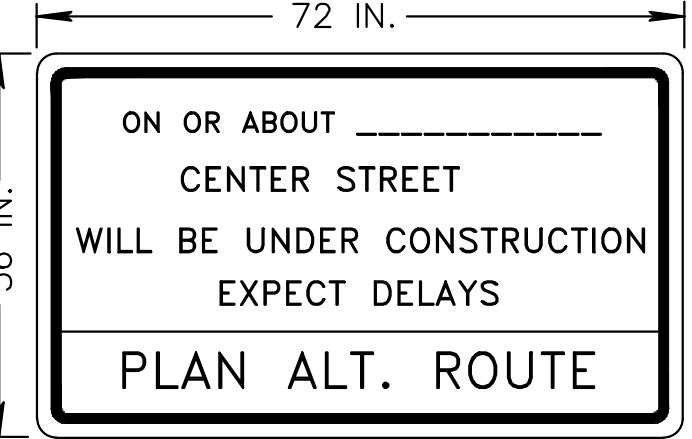
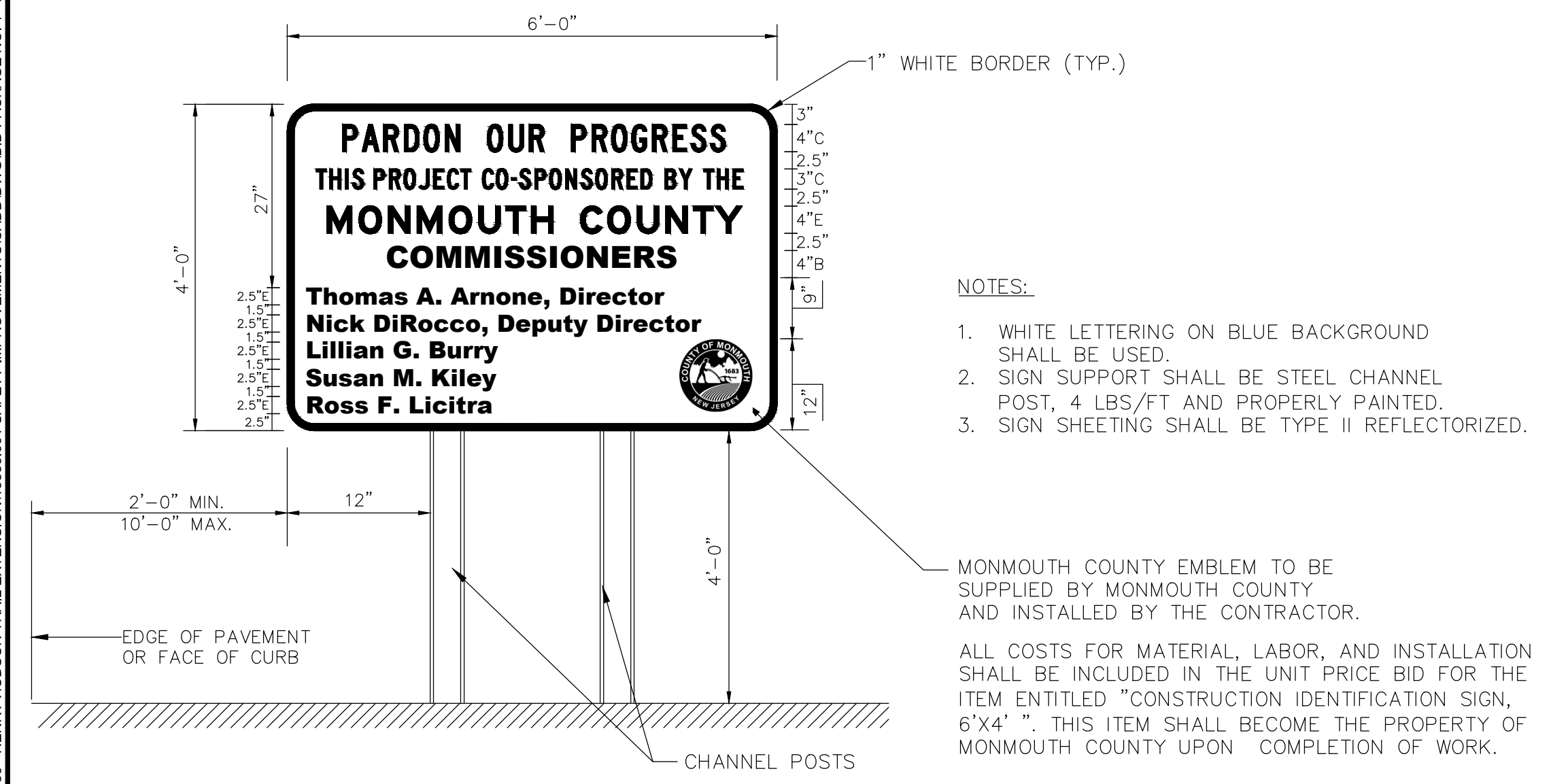
IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND SCHEDULE THE ACTUAL ITEMS OF WORK NECESSARY TO COMPLETE THE PROJECT. ALL WORK IS TO BE PERFORMED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

THE CONTRACTOR SHALL SCHEDULE HIS WORK TO AVOID CONFLICT WITH WORK BEING PERFORMED BY OTHERS. FAILURE TO COMPLETE WORK DUE TO INADEQUATE COORDINATION WITH UTILITIES SHALL NOT BE REASON FOR THE CONTRACTOR TO CLAIM ADDITIONAL TIME OR ADDITIONAL COSTS.

THE CONTRACTOR MUST MAINTAIN PEDESTRIAN ACCESS THROUGH THE PROJECT LIMITS AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING THE FOLLOWING MINIMUM REQUIREMENTS FOR PEDESTRIAN ACCESS:

- TEMPORARY SIDEWALKS WILL BE CONSTRUCTED WHERE NECESSARY TO CONNECT EXISTING WALKWAYS AND PROVIDE A CONTINUOUS SIDEWALK AREA.
- TEMPORARY SIDEWALKS SHALL BE A MINIMUM 5 FEET WIDE. WHERE EXITS ADJACENT TO TRAVELED LANE.
- TEMPORARY SIDEWALKS SHALL BE CONSTRUCTED OF BITUMINOUS PAVEMENT TO MATCH EXISTING PAVEMENT.
- ALL SIDEWALKS WILL BE KEPT CLEAR OF CONSTRUCTION DEBRIS AND OBSTRUCTIONS.
- FLAGMEN SHALL BE POSTED AT ALL POTENTIAL CONFLICT POINTS BETWEEN CONSTRUCTION ACTIVITIES AND PEDESTRIAN TRAFFIC TO CONTROL TRAFFIC.
- ANY TEMPORARY SIDEWALKS CONSTRUCTED SHALL COMPLY WITH THE CURRENT ADA REGULATIONS FOR ACCESSIBILITY.

THE CONTRACTOR SHALL COORDINATE THEIR SCHEDULE WITH UTILITY WORK TO AVOID CONFLICTS AND PREVENT DELAYS. THE CONTRACTOR SHALL PROVIDE NOTIFICATION TO ALL UTILITIES AND ARRANGE FOR NECESSARY RELOCATIONS. THE CONTRACTOR SHALL PROVIDE A COPY OF ALL UTILITY NOTIFICATIONS TO THE RESIDENT ENGINEER. FAILURE TO COMPLETE WORK DUE TO INADEQUATE COORDINATION WITH UTILITIES SHALL NOT BE REASON FOR THE CONTRACTOR TO CLAIM ADDITIONAL TIME OR ADDITIONAL COSTS.



NOTE: CONSTRUCTION ADVANCE WARNING SIGNS SHALL BE PLACED IF AND WHERE DIRECTED BY THE RESIDENT ENGINEER A MINIMUM OF 14 DAYS PRIOR TO COMMENCING WITH CONSTRUCTION.

CONSTRUCTION IDENTIFICATION SIGN, 6'X4' (C.C.I.S.)
 N.T.S.

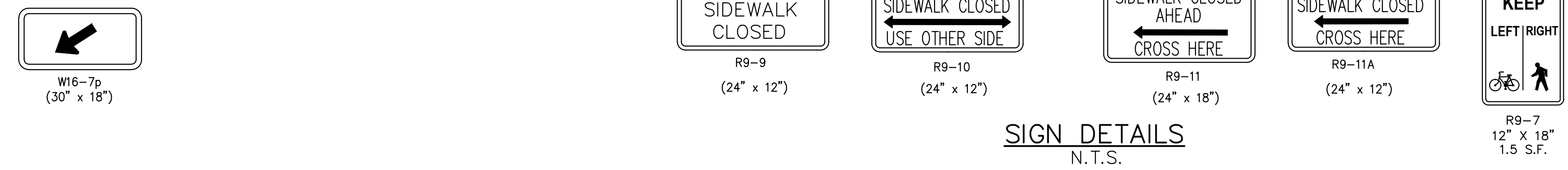
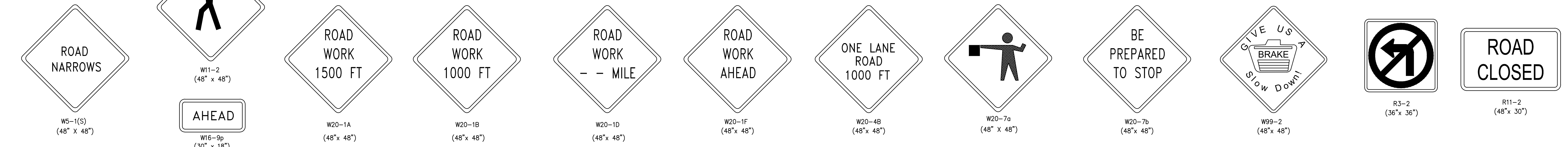
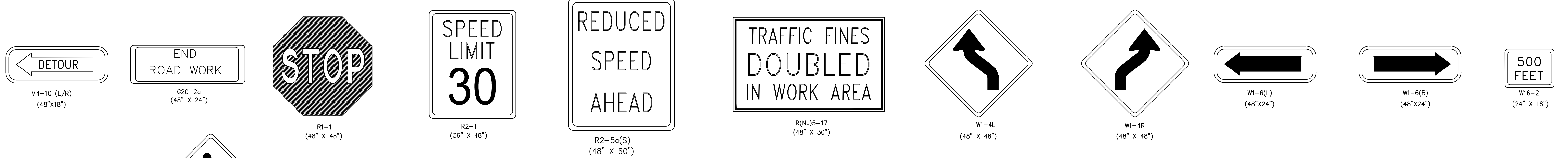
CONSTRUCTION IDENTIFICATION SIGNS, TYPE 2
 N.T.S.

 Corporate Office: 1800 Rt 34, Suite 101 Wall, New Jersey 07719 732.312.9800 FPAengineers.com New Jersey ■ New York ■ Pennsylvania ■ Georgia	MAINTENANCE AND PROTECTION OF TRAFFIC PLANS HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1 FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19 IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY															
	<table border="1"> <tr> <td>DATE:</td> <td>MARCH 2023</td> <td>DESIGNED BY:</td> <td>SFI/MW</td> <td>DRAWN BY:</td> <td>SFI</td> <td>PROJECT NUMBER:</td> <td>15830.002</td> </tr> <tr> <td>SCALE:</td> <td>AS SHOWN</td> <td>CHECKED BY:</td> <td>SS/GB</td> <td>APPROVED BY:</td> <td>MJD</td> <td>SHEET:</td> <td>15 OF 34</td> </tr> </table>	DATE:	MARCH 2023	DESIGNED BY:	SFI/MW	DRAWN BY:	SFI	PROJECT NUMBER:	15830.002	SCALE:	AS SHOWN	CHECKED BY:	SS/GB	APPROVED BY:	MJD	SHEET:
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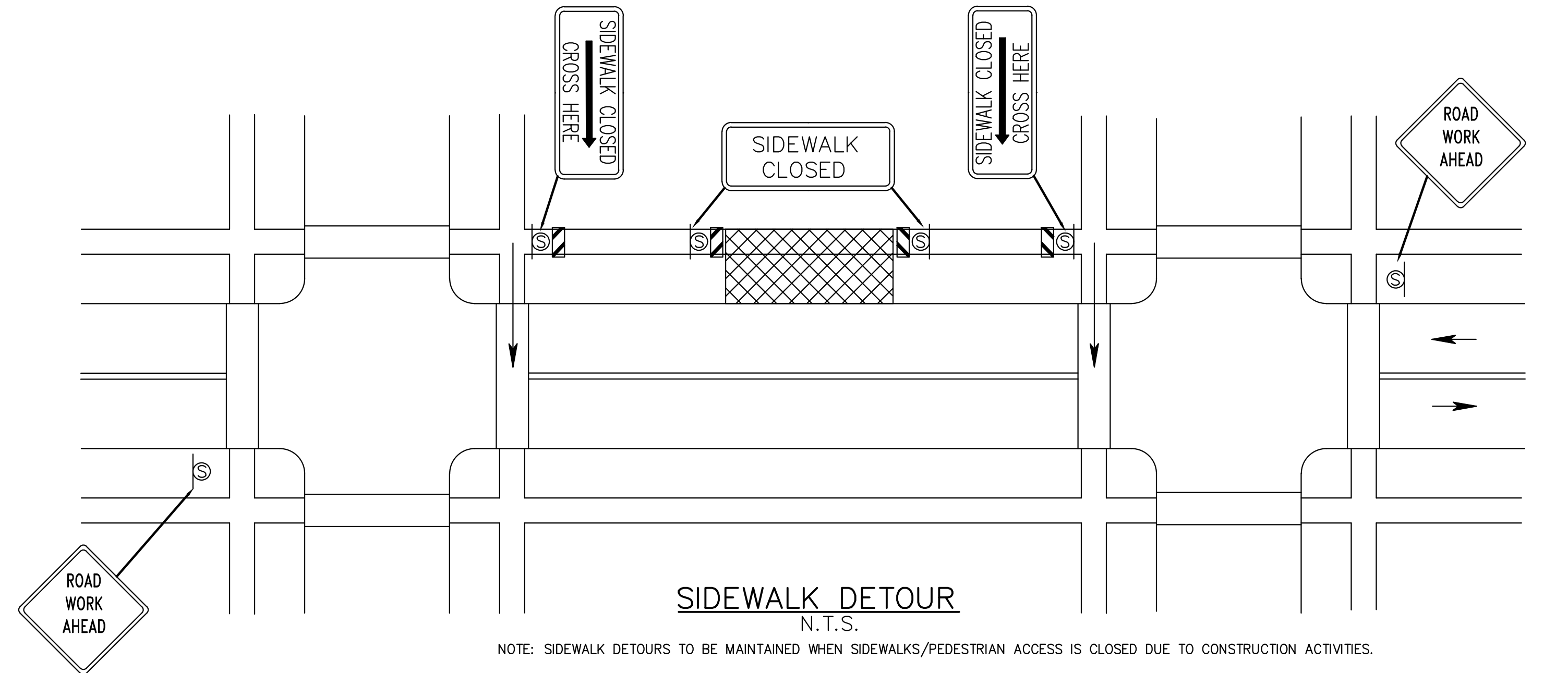
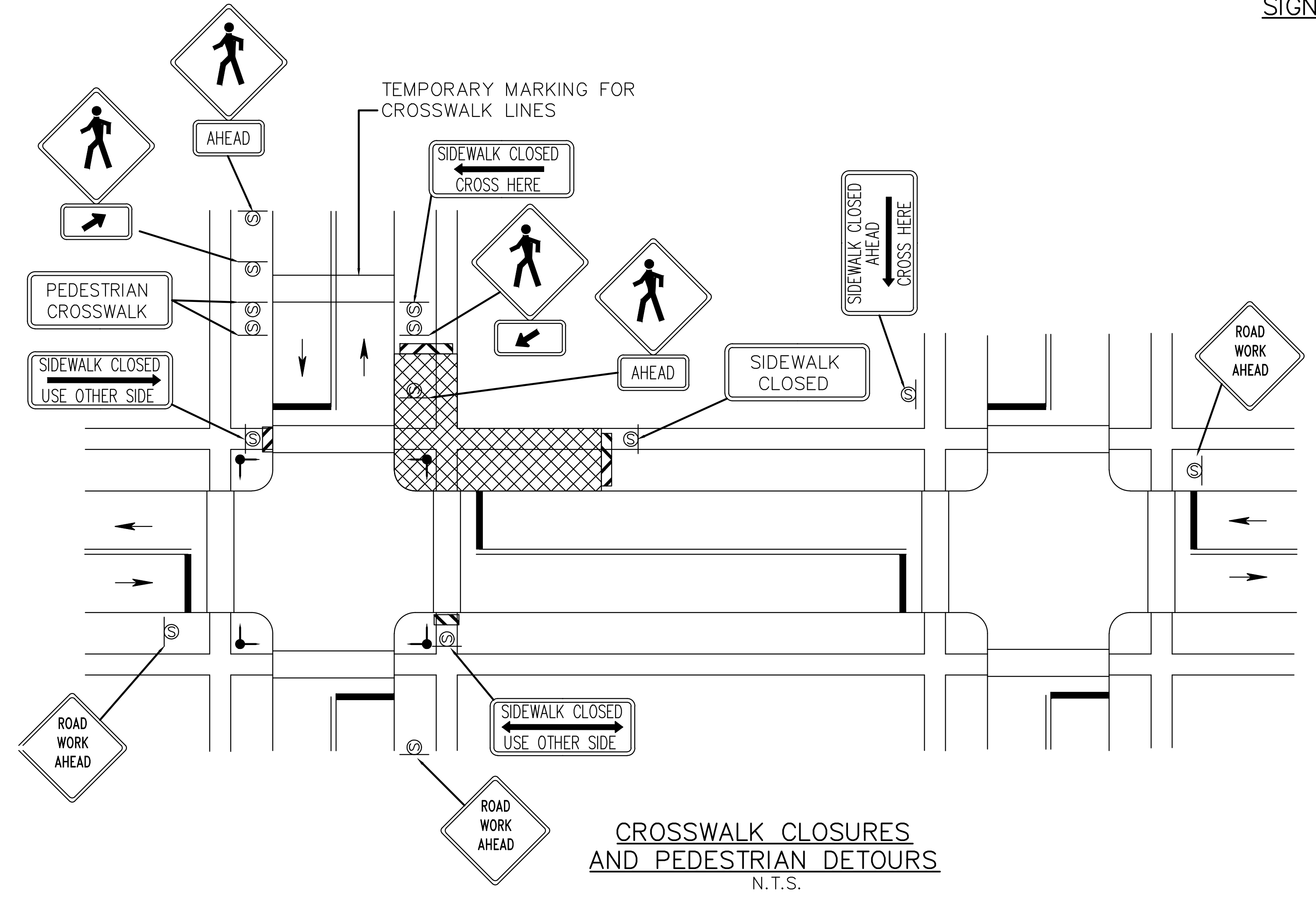
SARA F. IRICK, PE
 PROFESSIONAL ENGINEER, NJ LIC. NO. 49709

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		Checked By	Drawn By
3	3/27/2023	SFI	MJD
2	3/23/23	SFI	MJD
1	8/20/22	SFI	MJD



SIGN DETAILS
N.T.S.



NOTE: SIDEWALK DETOURS TO BE MAINTAINED WHEN SIDEWALKS/PEDESTRIAN ACCESS IS CLOSED DUE TO CONSTRUCTION ACTIVITIES.

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MAINTENANCE AND PROTECTION OF TRAFFIC PLANS
 HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS
 BID PACKAGE #1
 FOR THE MONMOUTH COUNTY PARKS SYSTEM
 PS#103-19

IN THE BOROUGH OF FREEHOLD
 MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SF/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 16 of 34

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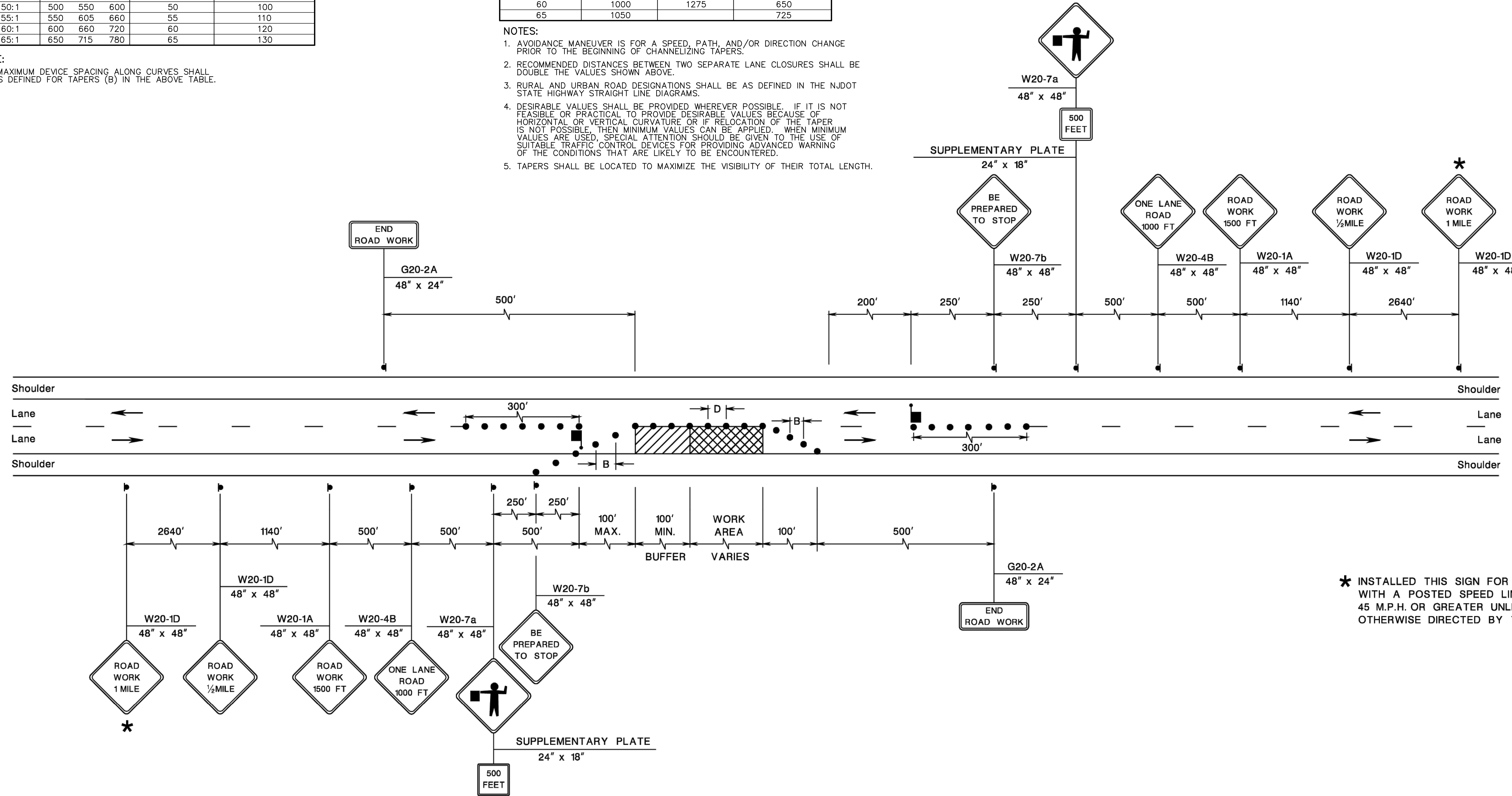
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 PLOTTED BY: SARA IRICK

REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	RECOMMENDED TAPER LENGTH AND SPACING FOR CHANNELIZING TAPERS				RECOMMENDED SPACING ALONG TANGENTS
	MINIMUM TAPER RATIO IN LENGTH PER FOOT OF WIDTH	MINIMUM TAPER LENGTH L - FOR LANE WIDTHS			
		10'	11'	12'	
25	10.5:1	105	115	125	25
30	15:1	150	165	180	30
35	20.5:1	205	225	245	35
40	27:1	270	300	325	40
45	45:1	450	495	540	45
50	50:1	500	550	600	50
55	55:1	550	605	660	55
60	60:1	600	660	720	60
65	65:1	650	715	780	65

NOTE:
 THE MAXIMUM DEVICE SPACING ALONG CURVES SHALL BE AS DEFINED FOR TAPERS (B) IN THE ABOVE TABLE.

REGULATORY APPROACH SPEED OF TRAFFIC MILES/HOUR	RECOMMENDED SIGHT DISTANCE TO BEGINNING OF CHANNELIZING TAPERS		
	DESIRABLE		MINIMUM
	RURAL FEET	URBAN FEET	RURAL AND URBAN FEET
25	375	525	150
30	450	625	200
35	525	725	250
40	600	825	325
45	675	925	400
50	750	1025	475
55	875	1150	550
60	1000	1275	650
65	1050		725

- NOTES:
1. AVOIDANCE MANEUVER IS FOR A SPEED, PATH, AND/OR DIRECTION CHANGE PRIOR TO THE BEGINNING OF CHANNELIZING TAPERS.
 2. RECOMMENDED DISTANCES BETWEEN TWO SEPARATE LANE CLOSURES SHALL BE DOUBLE THE VALUES SHOWN ABOVE.
 3. RURAL AND URBAN ROAD DESIGNATIONS SHALL BE AS DEFINED IN THE NJDOT STATE HIGHWAY STRAIGHT LINE DIAGRAMS.
 4. DESIRABLE VALUES SHALL BE PROVIDED WHEREVER POSSIBLE. IF IT IS NOT FEASIBLE OR PRACTICAL TO PROVIDE DESIRABLE VALUES BECAUSE OF HORIZONTAL OR VERTICAL CURVATURE OR IF RELOCATION OF THE TAPER IS NOT POSSIBLE, THEN MINIMUM VALUES CAN BE APPLIED. WHEN MINIMUM VALUES ARE USED, SPECIAL ATTENTION SHOULD BE GIVEN TO THE USE OF SUITABLE TRAFFIC CONTROL DEVICES FOR PROVIDING ADVANCED WARNING OF THE CONDITIONS THAT ARE LIKELY TO BE ENCOUNTERED.
 5. TAPERS SHALL BE LOCATED TO MAXIMIZE THE VISIBILITY OF THEIR TOTAL LENGTH.



* INSTALLED THIS SIGN FOR ROADS WITH A POSTED SPEED LIMIT OF 45 M.P.H. OR GREATER UNLESS OTHERWISE DIRECTED BY THE RE.

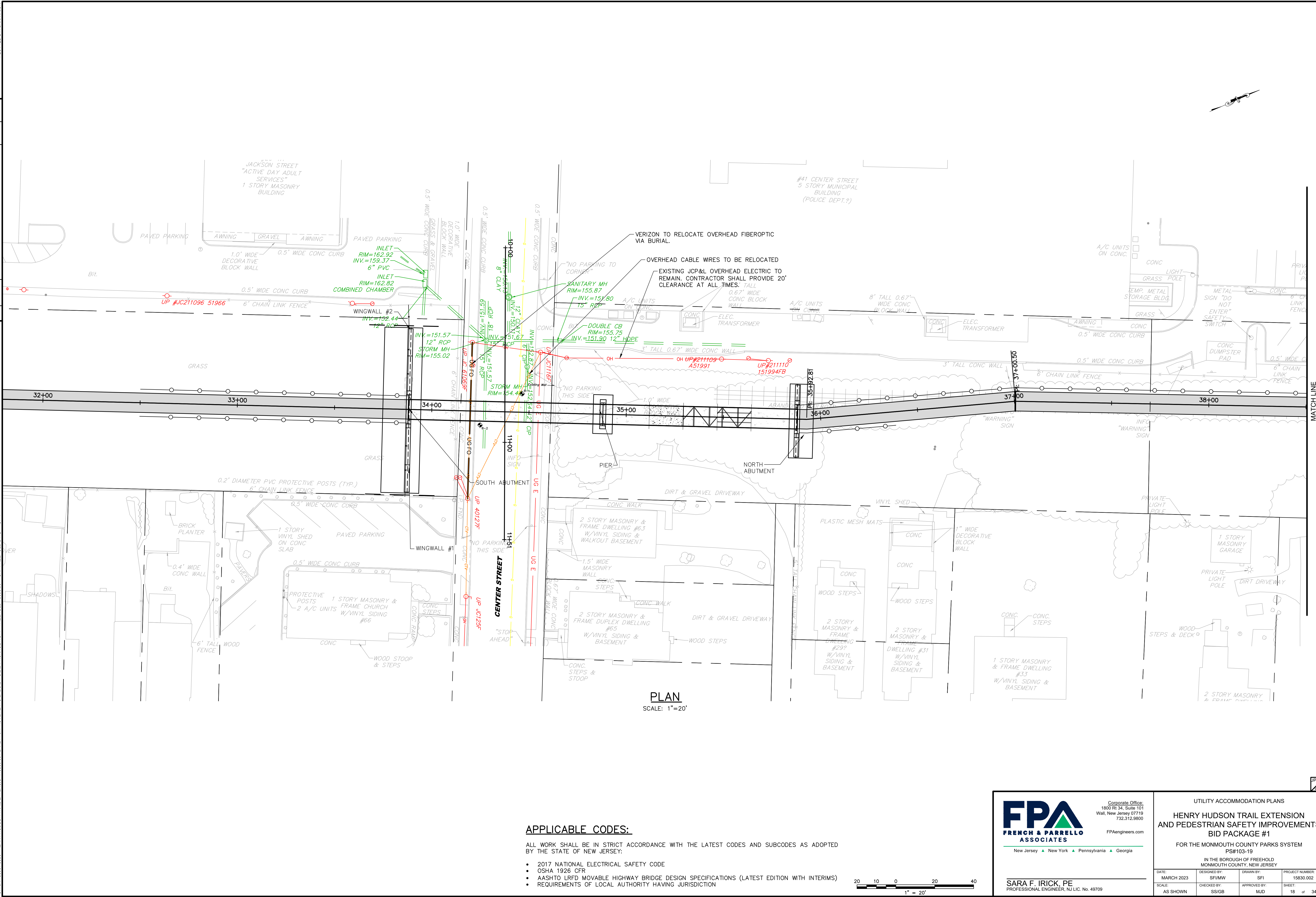
2 LANES, UNDIVIDED, LANE AND SHOULDER CLOSING WITH FLAGGING

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	<p>IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY</p>	<p>DATE: MARCH 2023 SCALE: AS SHOWN</p>
<p>SARA F. IRICK, PE PROFESSIONAL ENGINEER, NJ LIC. NO. 49709</p>	<p>APPROVED BY: MJD</p>	<p>PROJECT NUMBER: 15830.002 SHEET: 17 of 34</p>

No.	Date	Revised By	Checked By
3	3/27/2023		
2	3/23/23		
1	9/20/22		

PER USER PERMIT CONDITIONS
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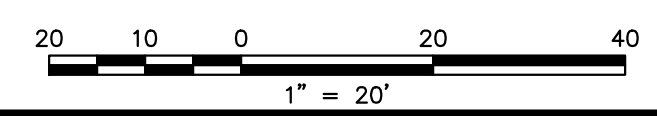


PLAN
 SCALE: 1"=20'

APPLICABLE CODES:

ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST CODES AND SUBCODES AS ADOPTED BY THE STATE OF NEW JERSEY:

- 2017 NATIONAL ELECTRICAL SAFETY CODE
- OSHA 1926 CFR
- AASHTO LRFD MOVABLE HIGHWAY BRIDGE DESIGN SPECIFICATIONS (LATEST EDITION WITH INTERIMS)
- REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION



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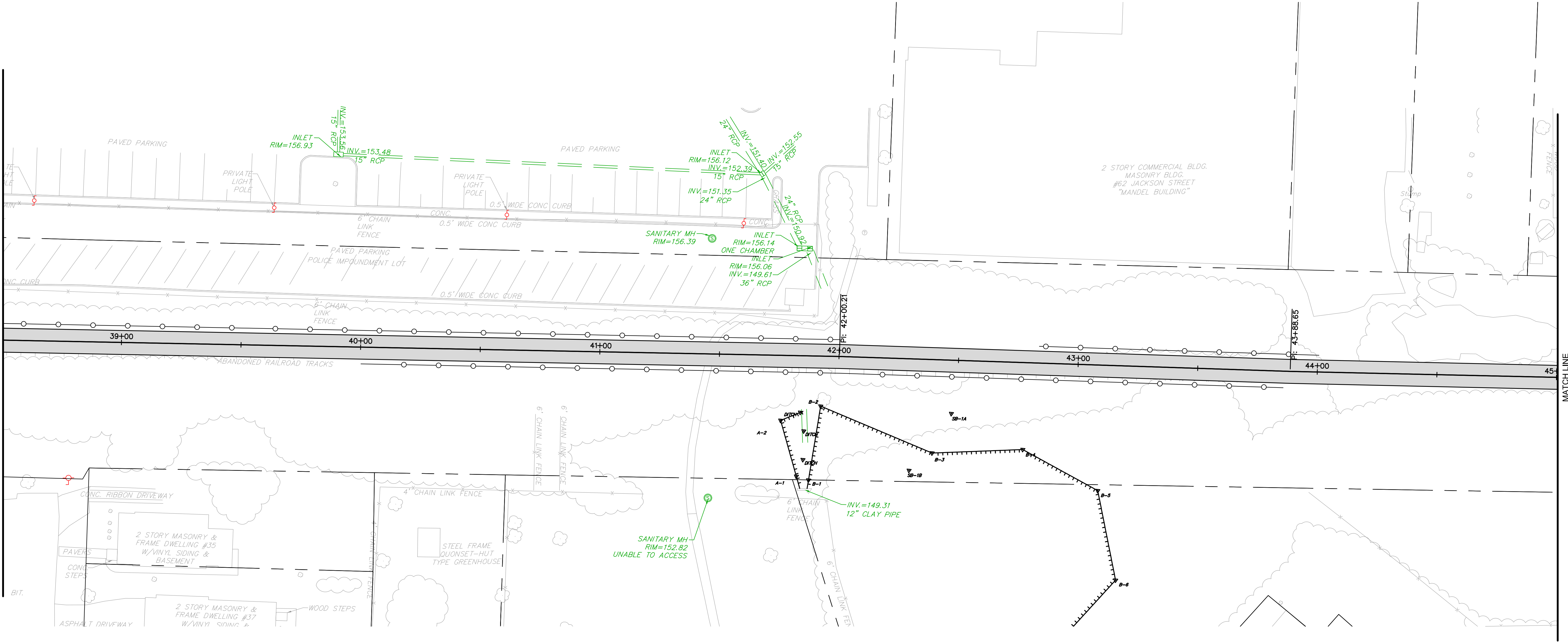
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HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY			
DATE:	DESIGNED BY:	DRAWN BY:	PROJECT NUMBER:
MARCH 2023	SFI/MW	SFI	15830.002
SCALE:	CHECKED BY:	APPROVED BY:	SHEET:
AS SHOWN	SS/GB	MJD	18 of 34

D:\15830\15830 - HENRY HUDSON TRAIL EXTENSION\15830.001 SAFETY IMPROVEMENTS\CADD\DWG\15830.001 - UMP FREEHOLD.DWG - UP-1

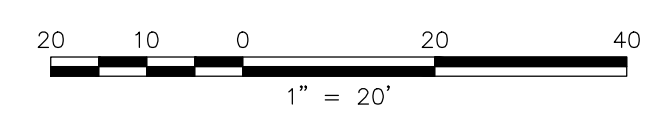
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2	3/23/23	SFI	MJD
1	8/20/22	SFI	MJD

STA 38+50 MATCH LINE
 STA 45+00 MATCH LINE
 0118K11580015830 - HENRY HUDSON TRAIL EXTENSION (15830.001 SAFETY IMPROVEMENTS) CAD DWG - UP-2
 0118K11580015830 - HENRY HUDSON TRAIL EXTENSION (15830.001 SAFETY IMPROVEMENTS) CAD DWG - UP-2



PLAN
 SCALE: 1"=20'



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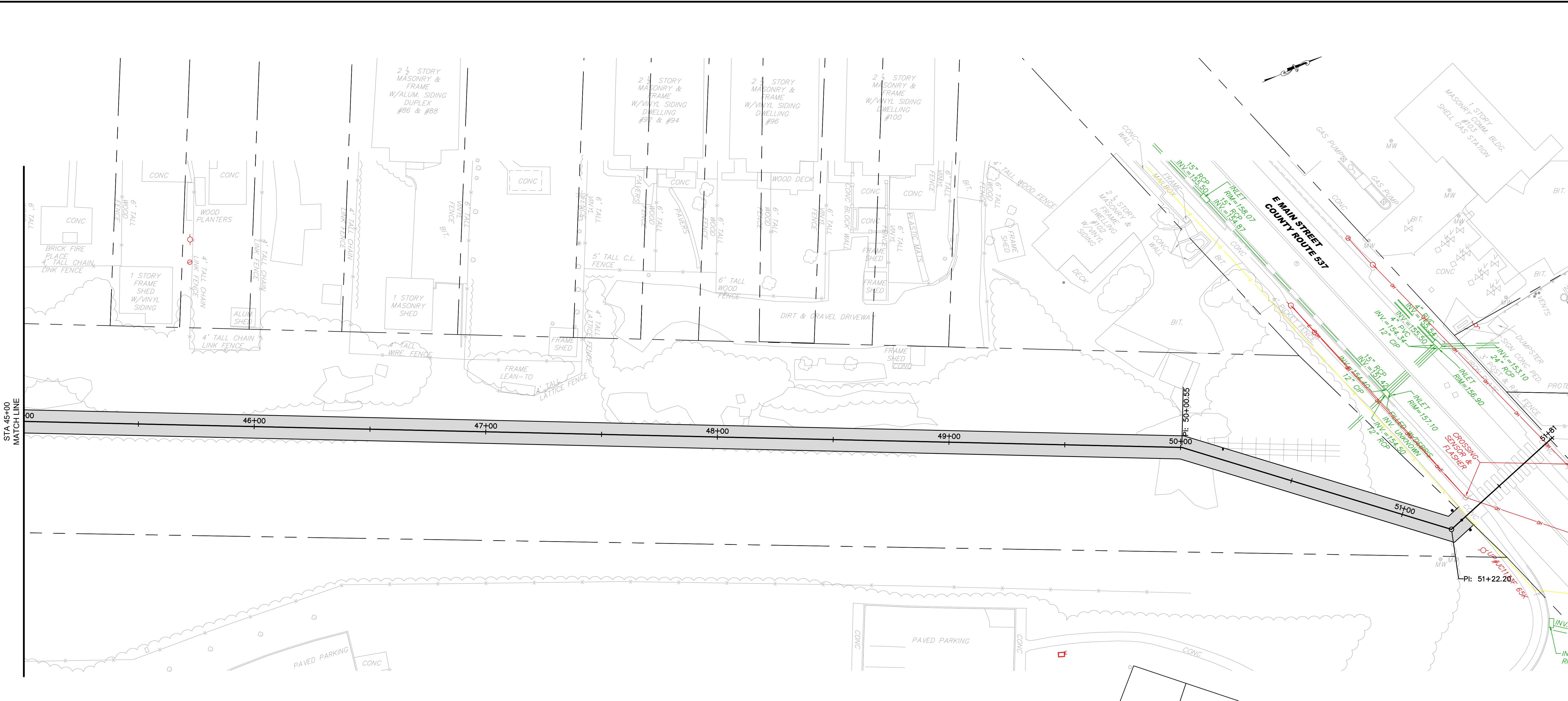
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HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1 FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
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DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 19 of 34

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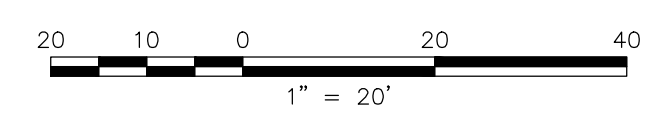
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01/18/1580115830 - HENRY HUDSON TRAIL EXTENSION/15830.001 SAFETY IMPROVEMENTS/CADD/DWG/BID PACKAGE NO. 1 - FREEHOLD/15830.001 - UMP FREEHOLD.DWG - UP-3



PLAN
SCALE: 1"=20'



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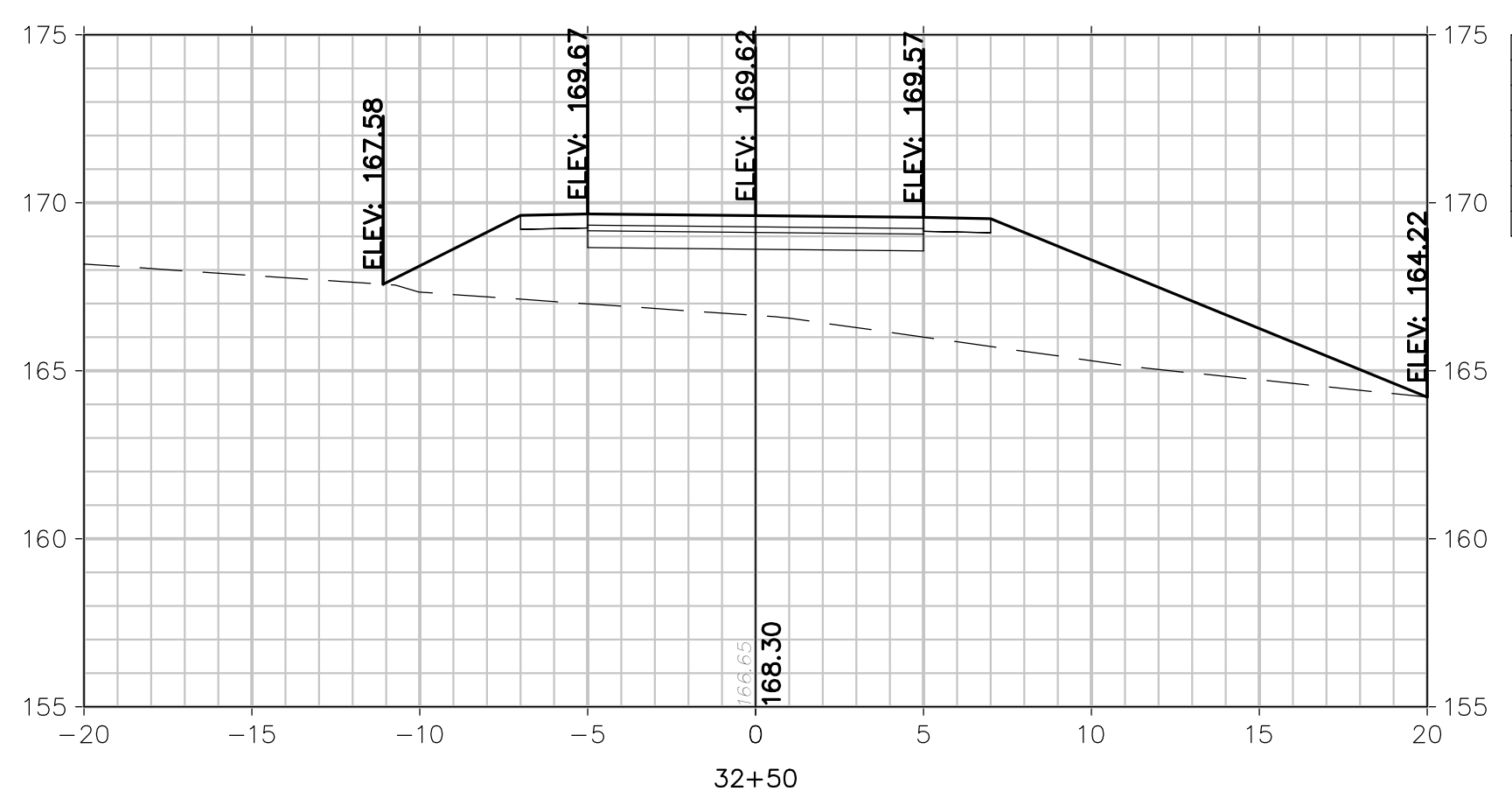
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UTILITY ACCOMMODATION PLANS			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
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SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 20 of 34

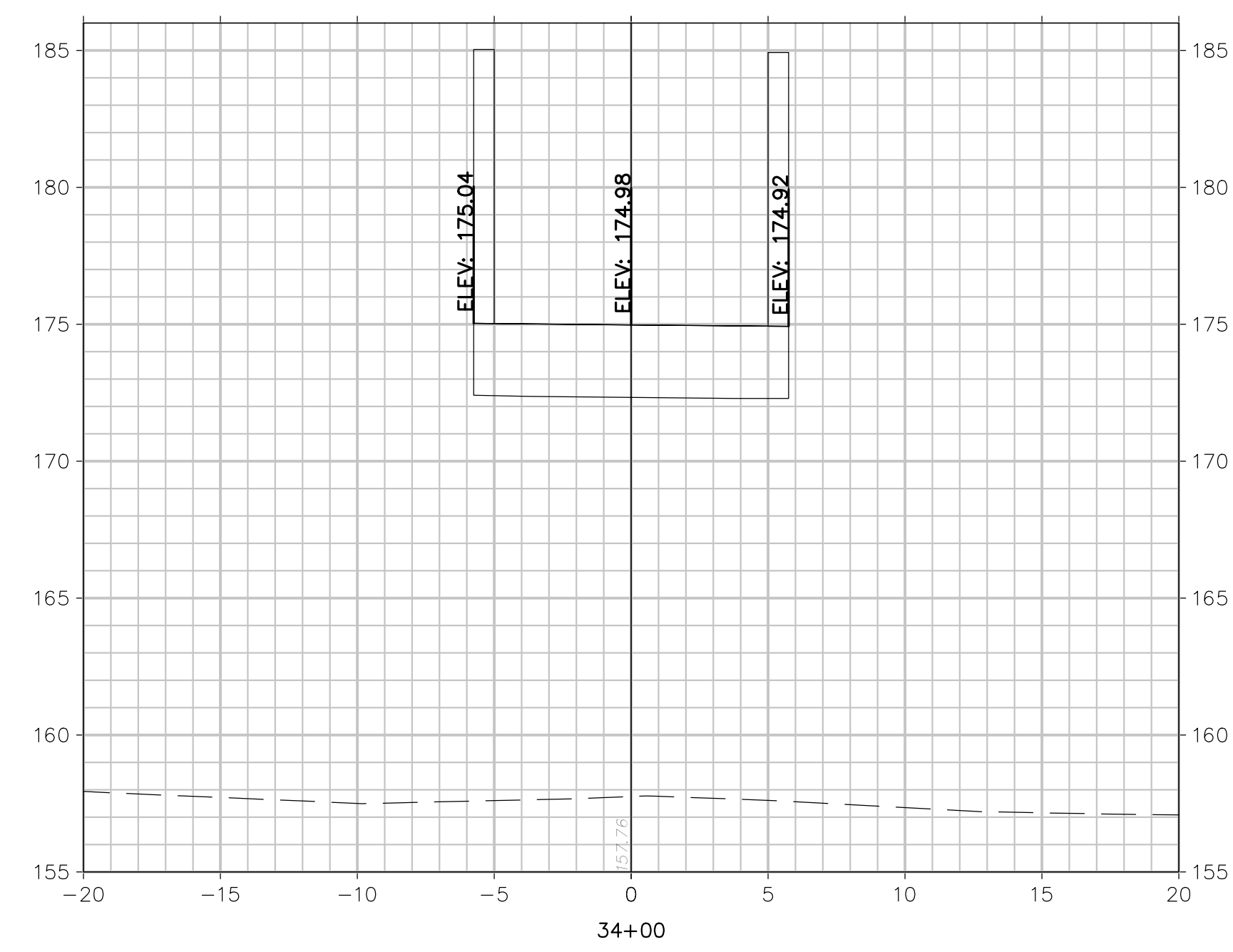
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No.	Date	Revision		

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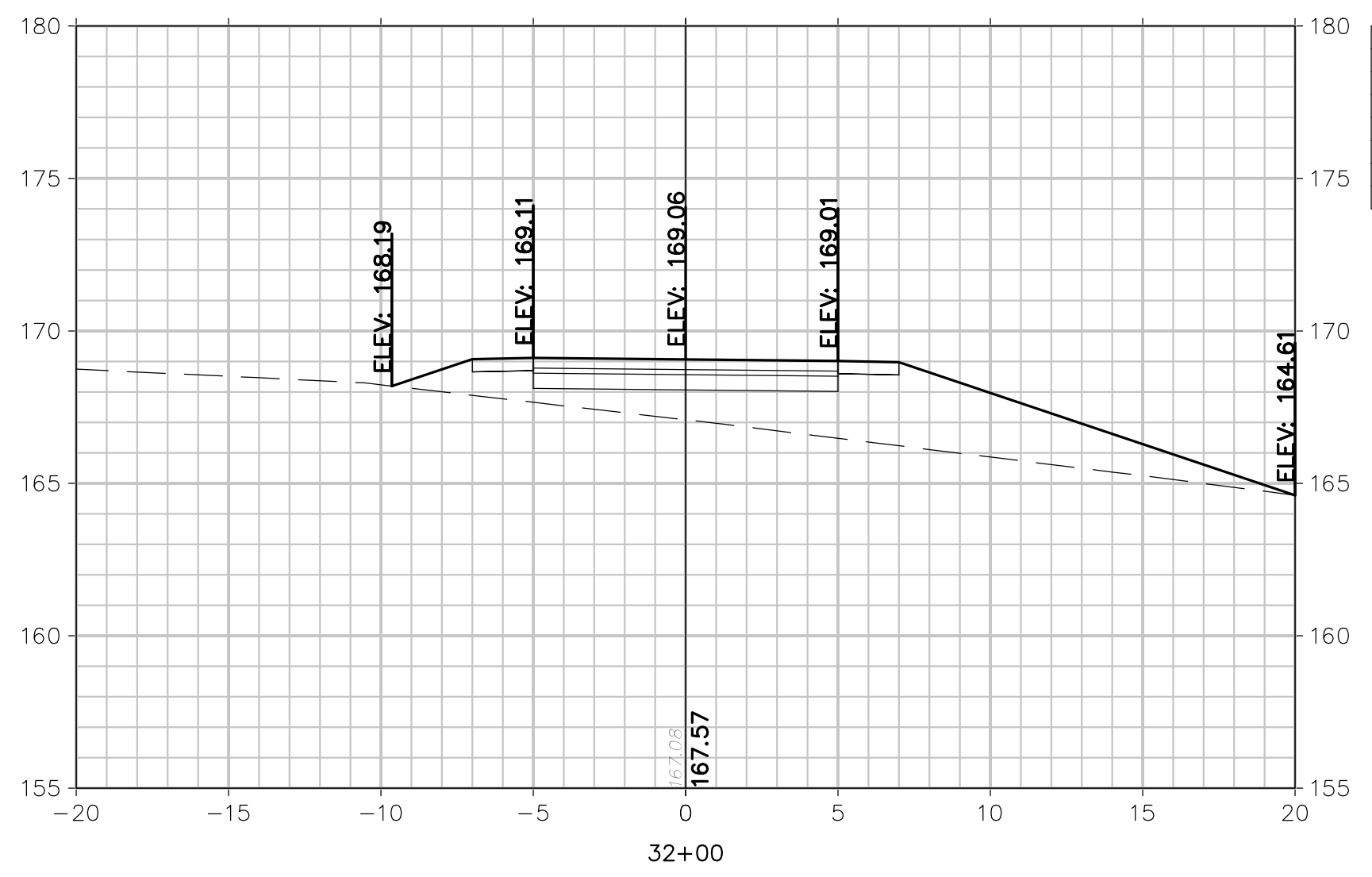
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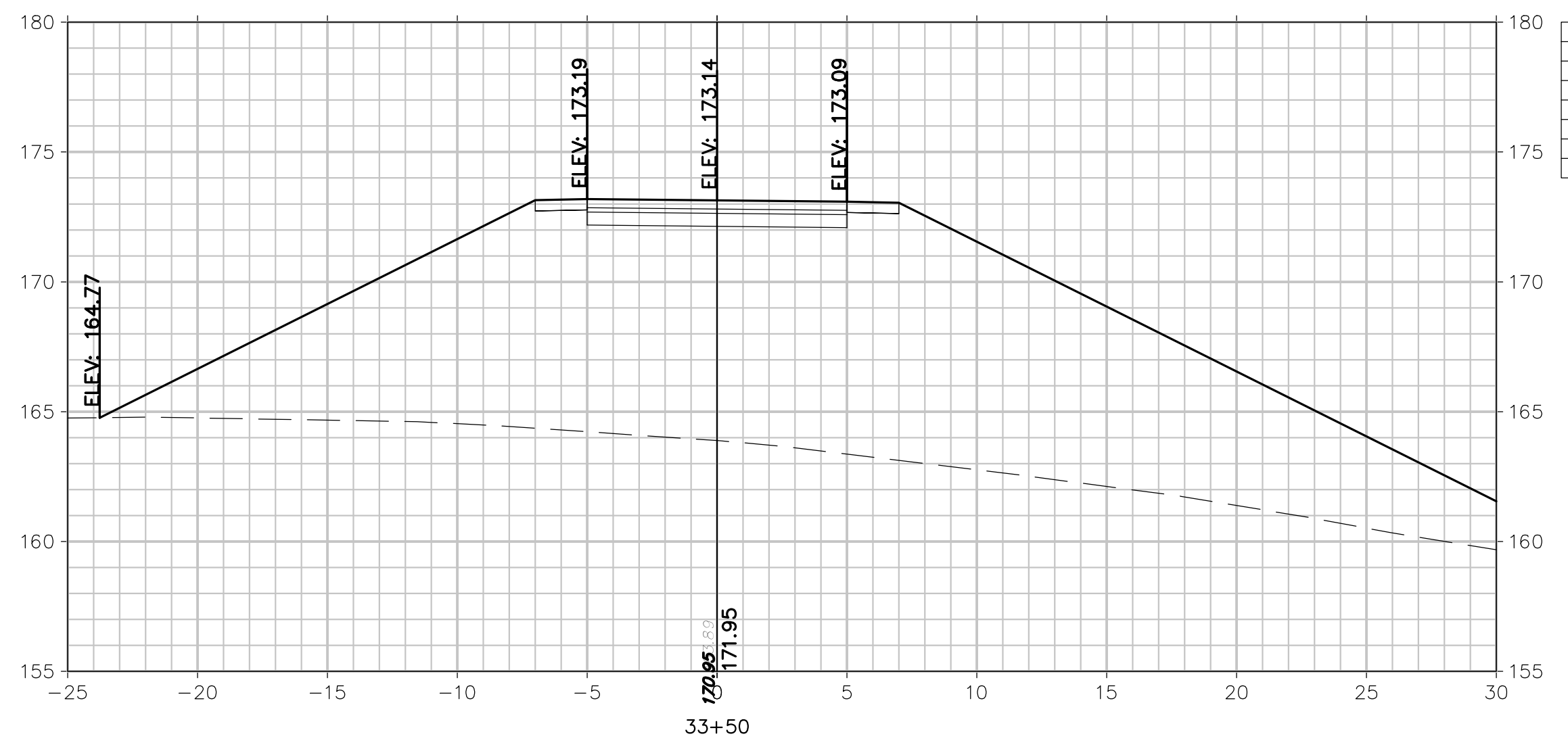
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Cut Area	0.00
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Cum Cut Vol	2.06
Cum Fill Vol	141.55
Net Vol	-139.60



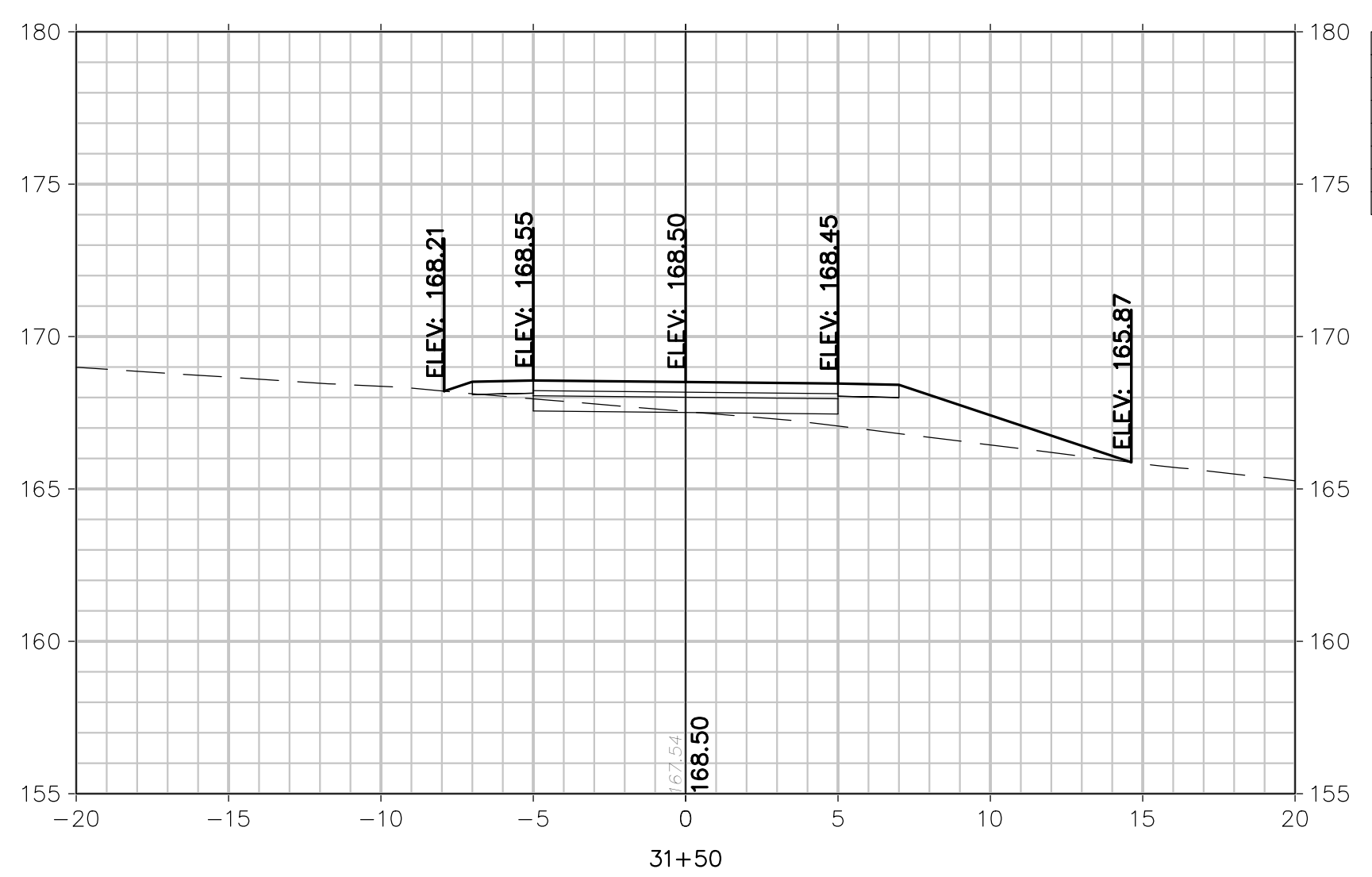
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Cut Area	0.00
Fill Area	0.00
Cut Vol	0.00
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Cum Cut Vol	2.06
Cum Fill Vol	1039.06
Net Vol	-1037.00



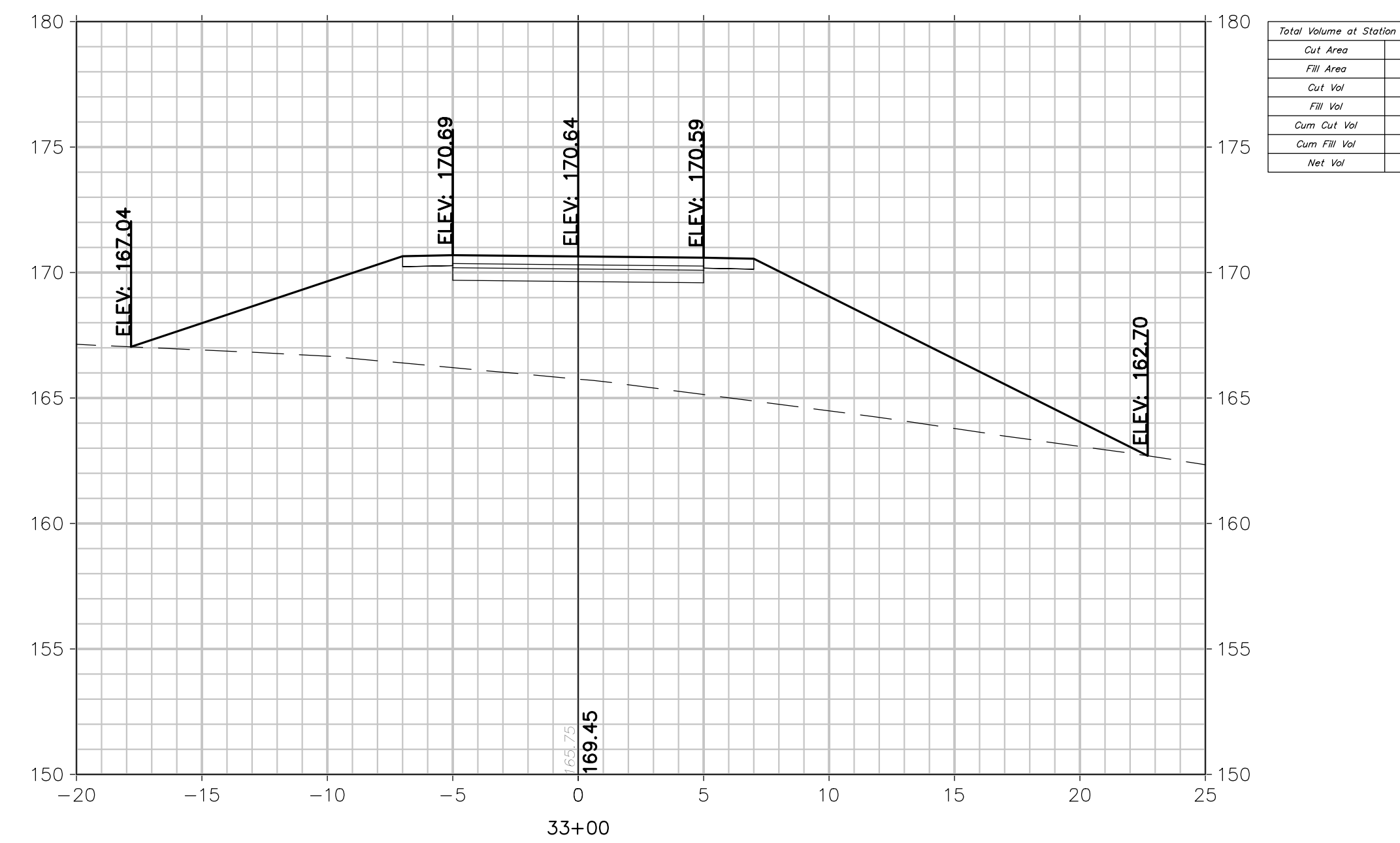
Total Volume at Station 32+00.00	
Cut Area	0.00
Fill Area	35.69
Cut Vol	1.02
Fill Vol	42.25
Cum Cut Vol	3.08
Cum Fill Vol	51.05
Net Vol	-49.01



Total Volume at Station 33+50.00	
Cut Area	0.00
Fill Area	328.95
Cut Vol	0.00
Fill Vol	419.88
Cum Cut Vol	3.08
Cum Fill Vol	734.47
Net Vol	-732.42

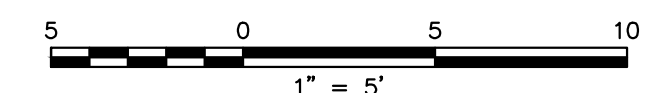


Total Volume at Station 31+50.00	
Cut Area	1.10
Fill Area	9.72
Cut Vol	1.02
Fill Vol	9.00
Cum Cut Vol	4.10
Cum Fill Vol	9.00
Net Vol	-7.98



Total Volume at Station 33+00.00	
Cut Area	0.00
Fill Area	124.52
Cut Vol	0.00
Fill Vol	172.94
Cum Cut Vol	4.10
Cum Fill Vol	314.60
Net Vol	-312.54

CROSS SECTIONS



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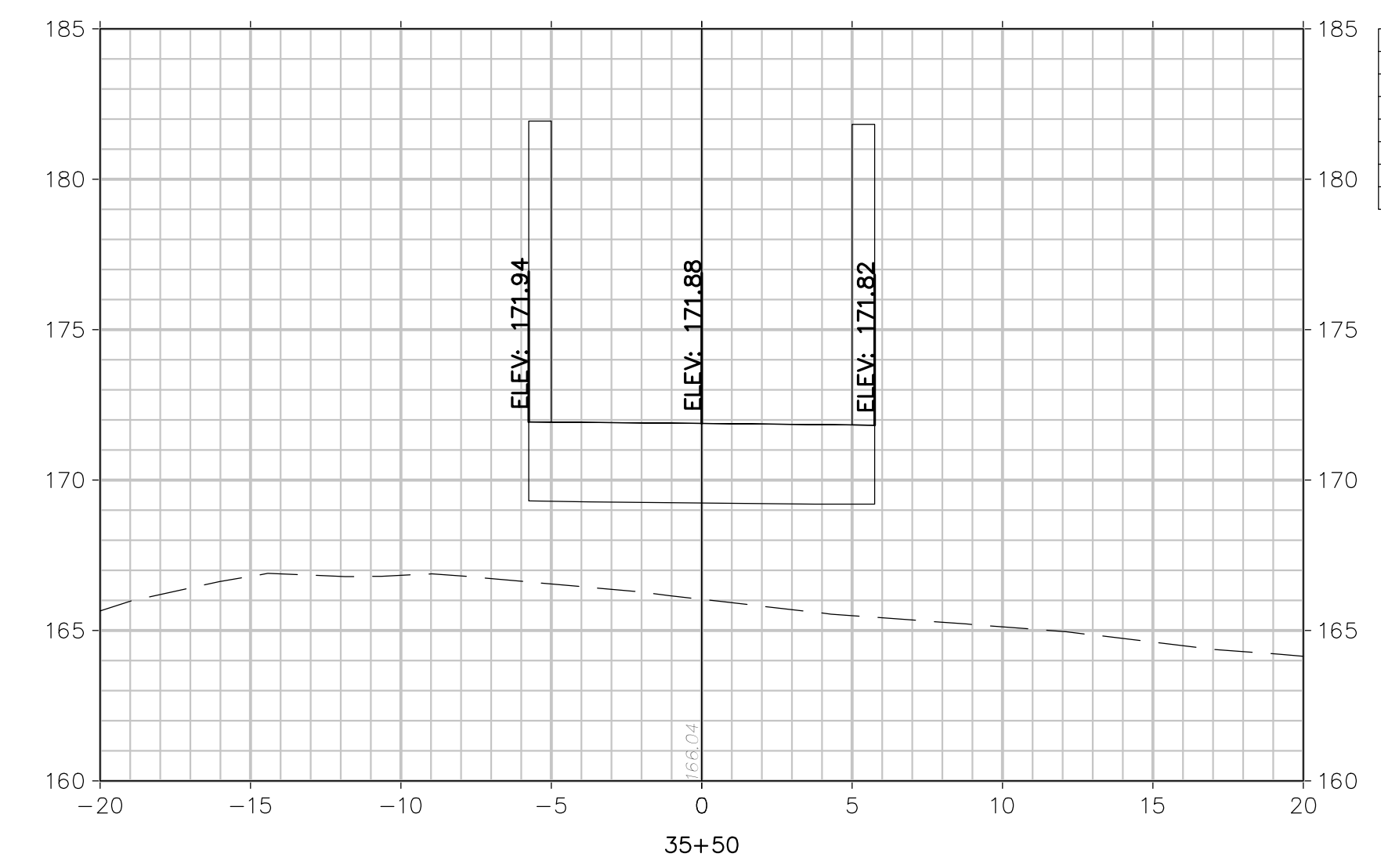
SARA F. IRICK, PE
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CROSS SECTIONS			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY			
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 21 of 34

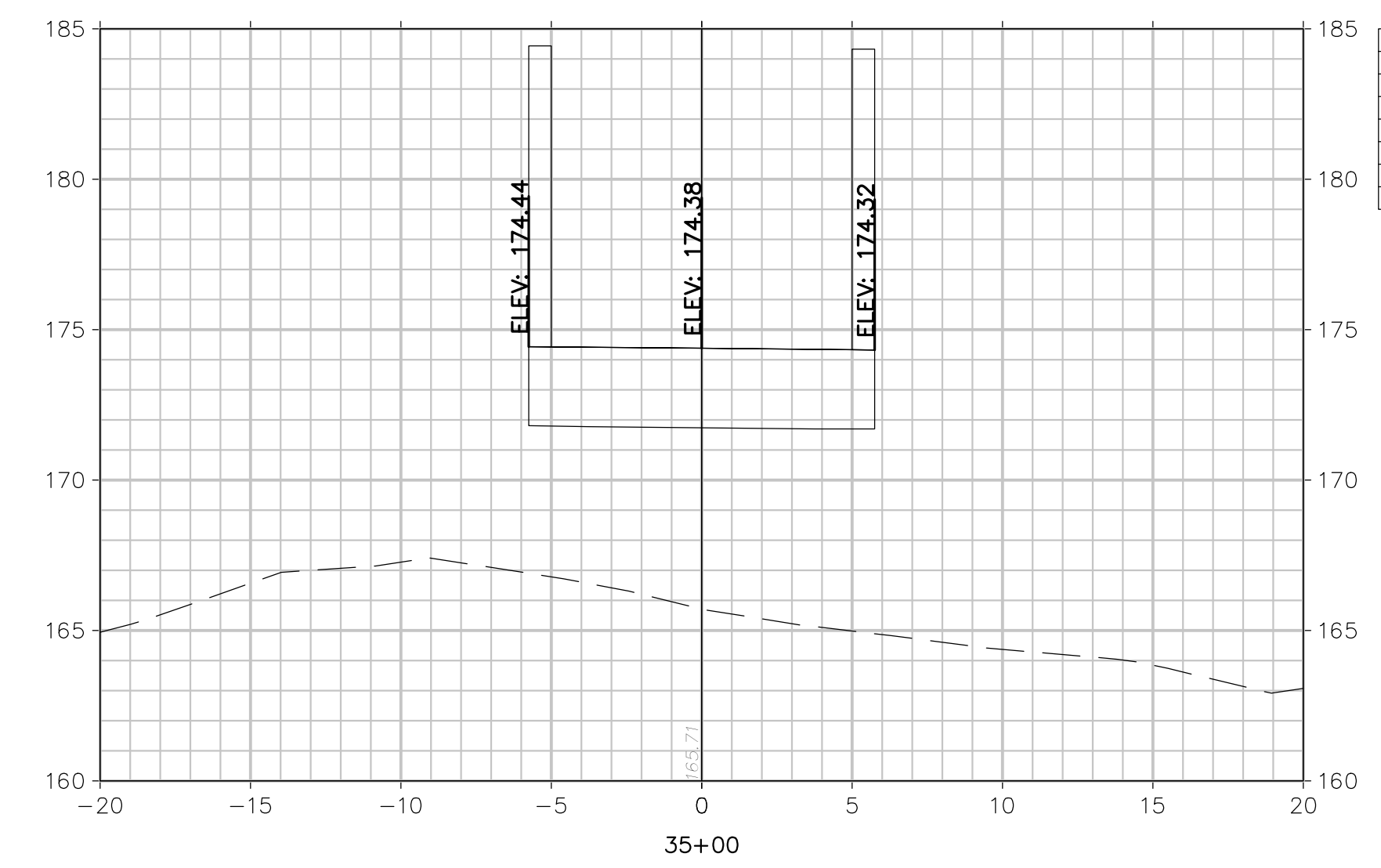
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2	3/20/23	PER UNDER COMMENTS	SFI	Revised By
1	8/20/22	PER UNDER COMMENTS	SFI	
No.	Date	Revision		

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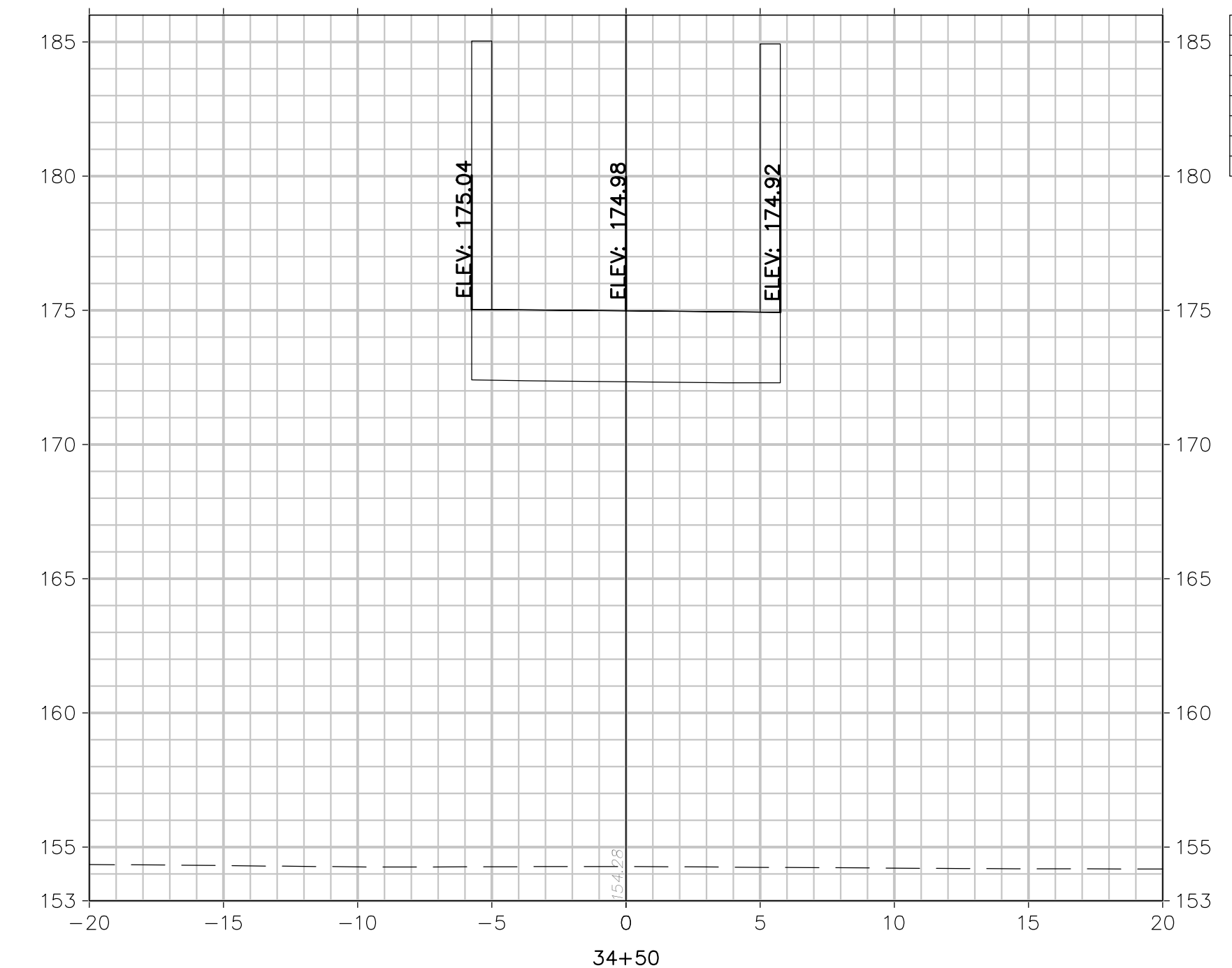
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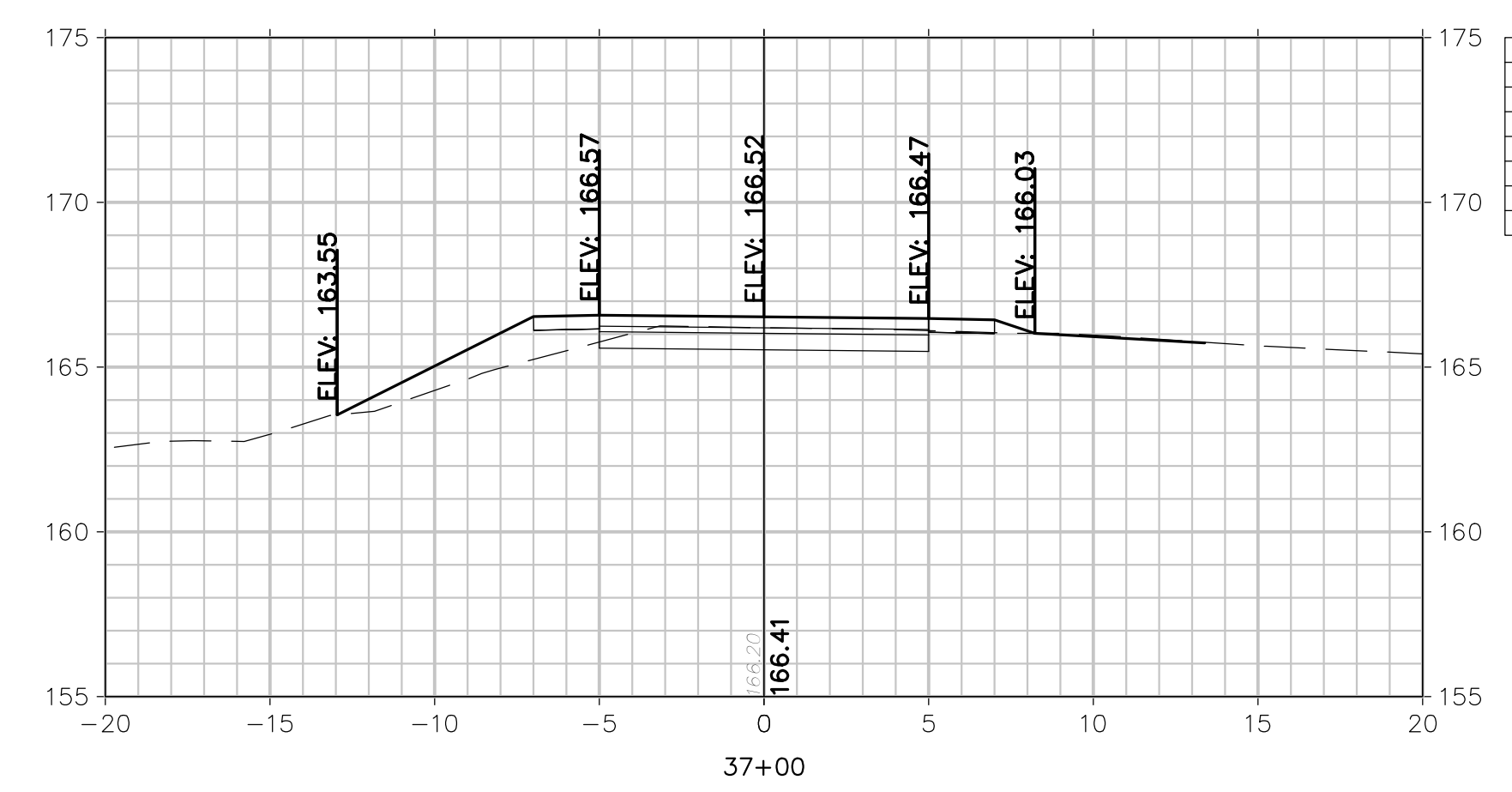
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Cum Fill Vol	1039.07
Net Vol	-1037.01



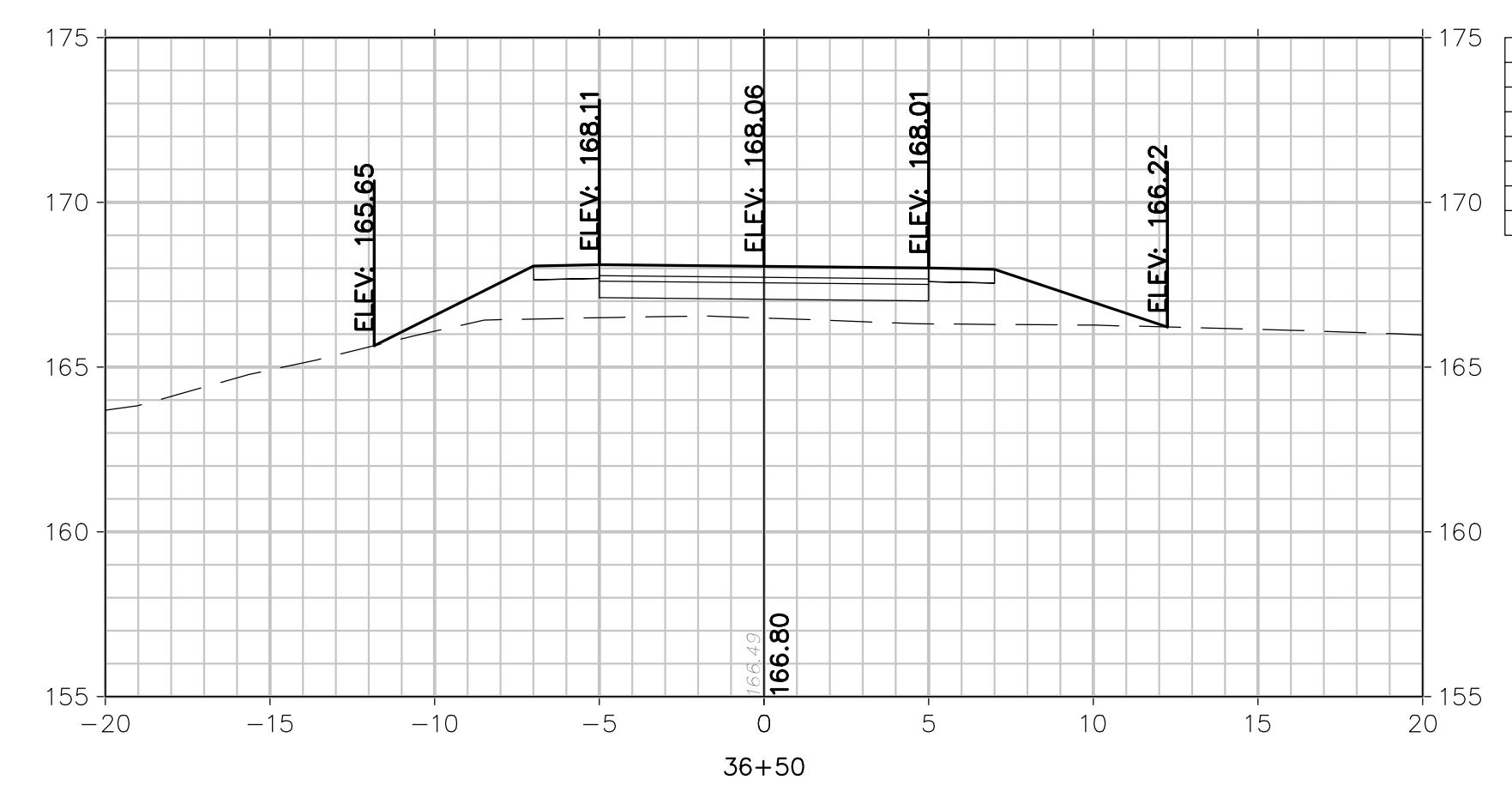
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Cut Vol	0.00
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Cum Cut Vol	2.08
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Net Vol	-1037.01



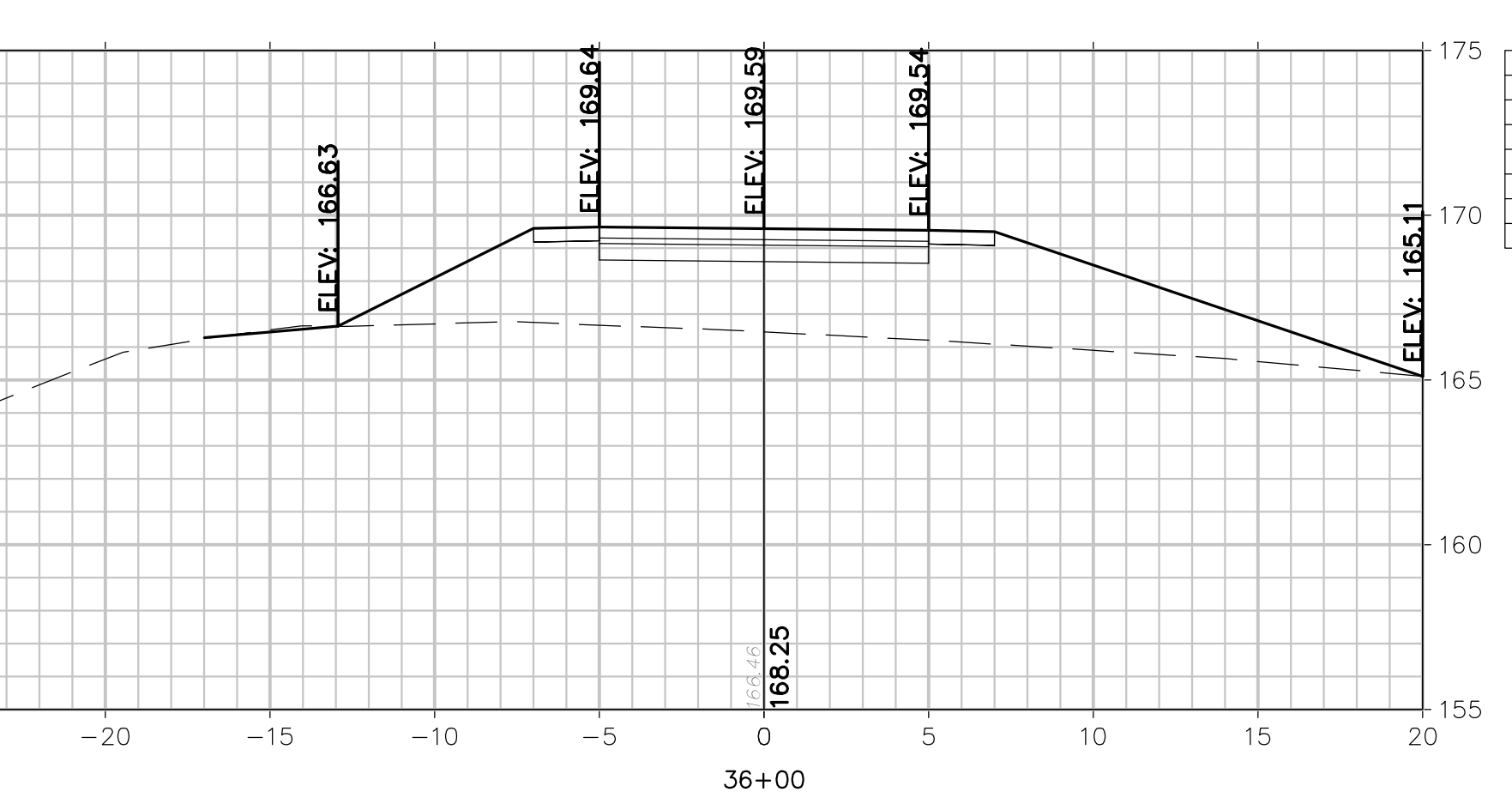
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Cut Area	0.00
Fill Area	0.00
Cut Vol	0.00
Fill Vol	0.00
Cum Cut Vol	2.08
Cum Fill Vol	1039.06
Net Vol	-1037.01



Total Volume at Station 37+00.00	
Cut Area	6.49
Fill Area	6.09
Cut Vol	6.01
Fill Vol	23.10
Cum Cut Vol	8.43
Cum Fill Vol	1196.02
Net Vol	-1187.59

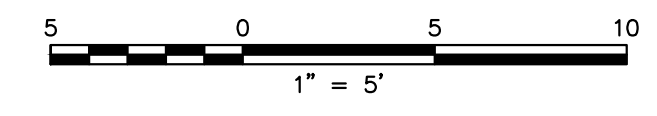


Total Volume at Station 36+50.00	
Cut Area	0.00
Fill Area	18.86
Cut Vol	0.18
Fill Vol	75.47
Cum Cut Vol	2.42
Cum Fill Vol	1172.92
Net Vol	-1170.50



Total Volume at Station 36+00.00	
Cut Area	0.20
Fill Area	62.65
Cut Vol	0.18
Fill Vol	58.57
Cum Cut Vol	2.23
Cum Fill Vol	1097.45
Net Vol	-1095.21

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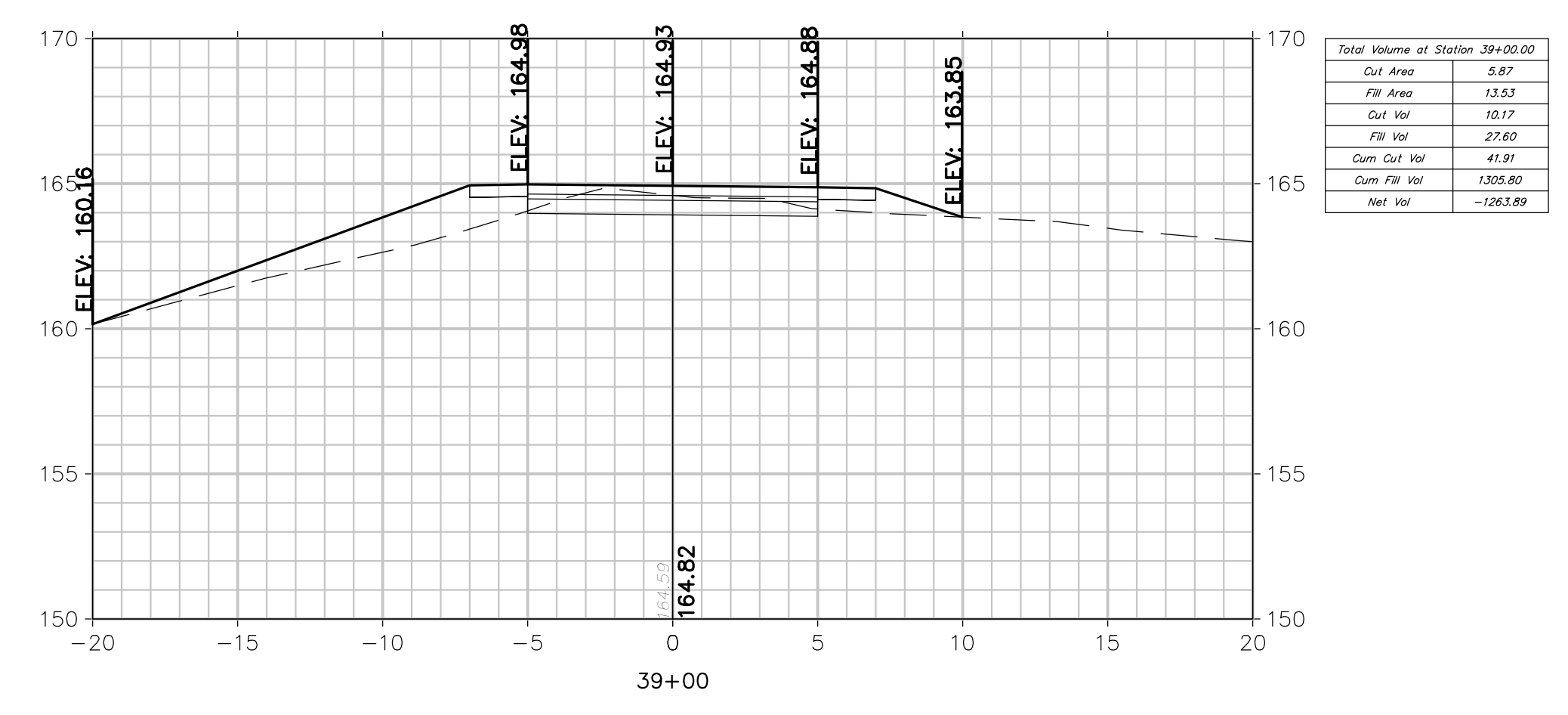
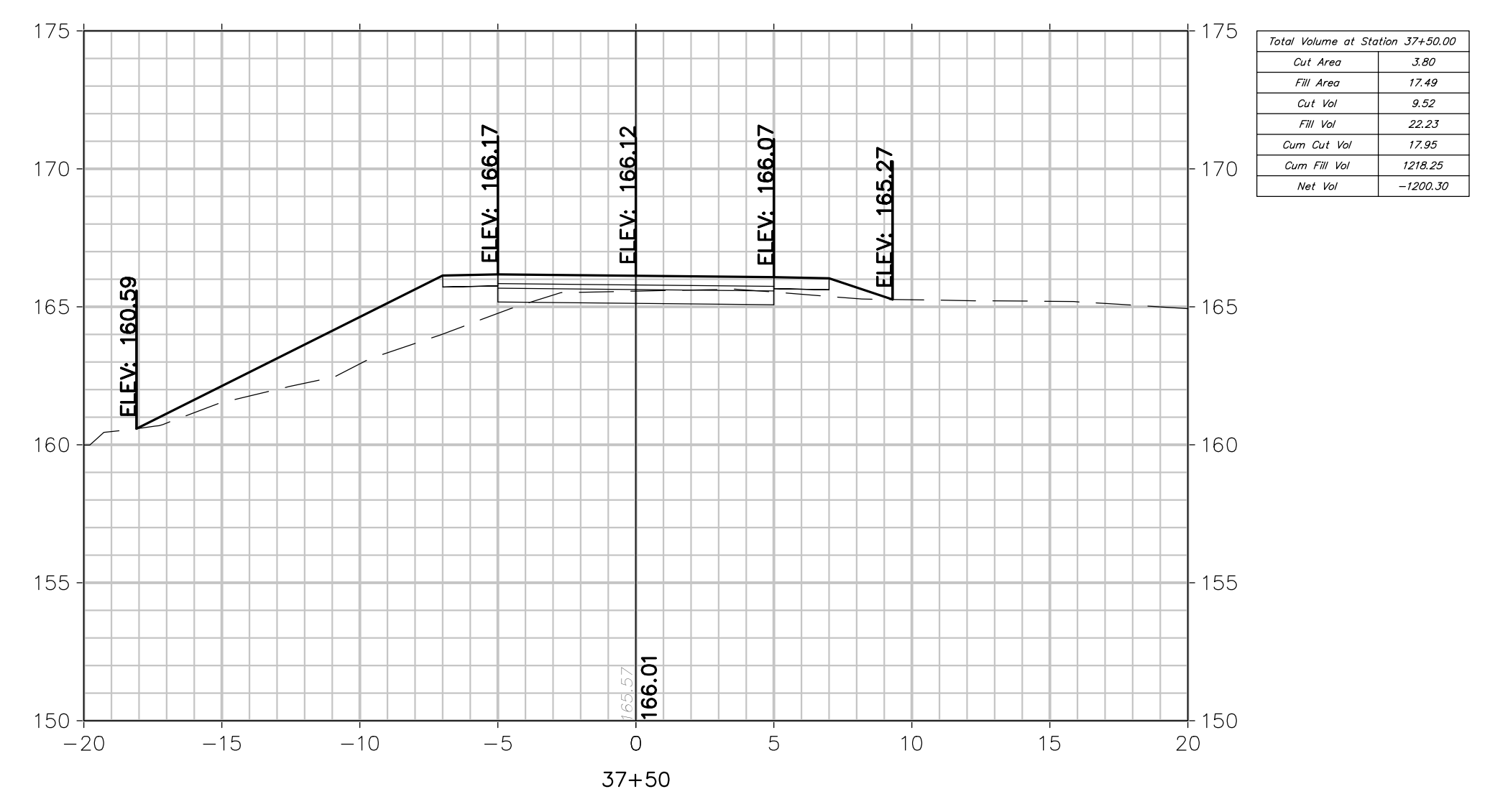
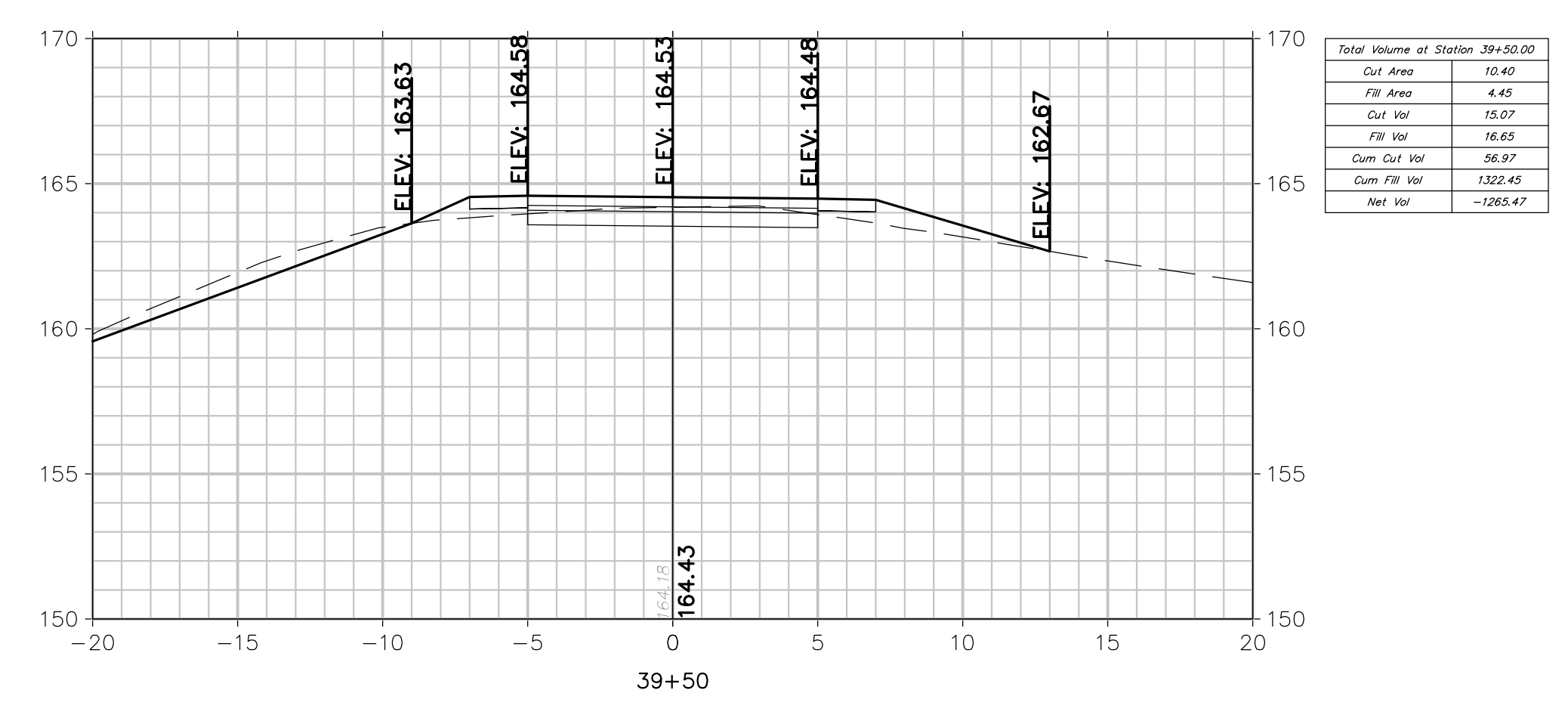
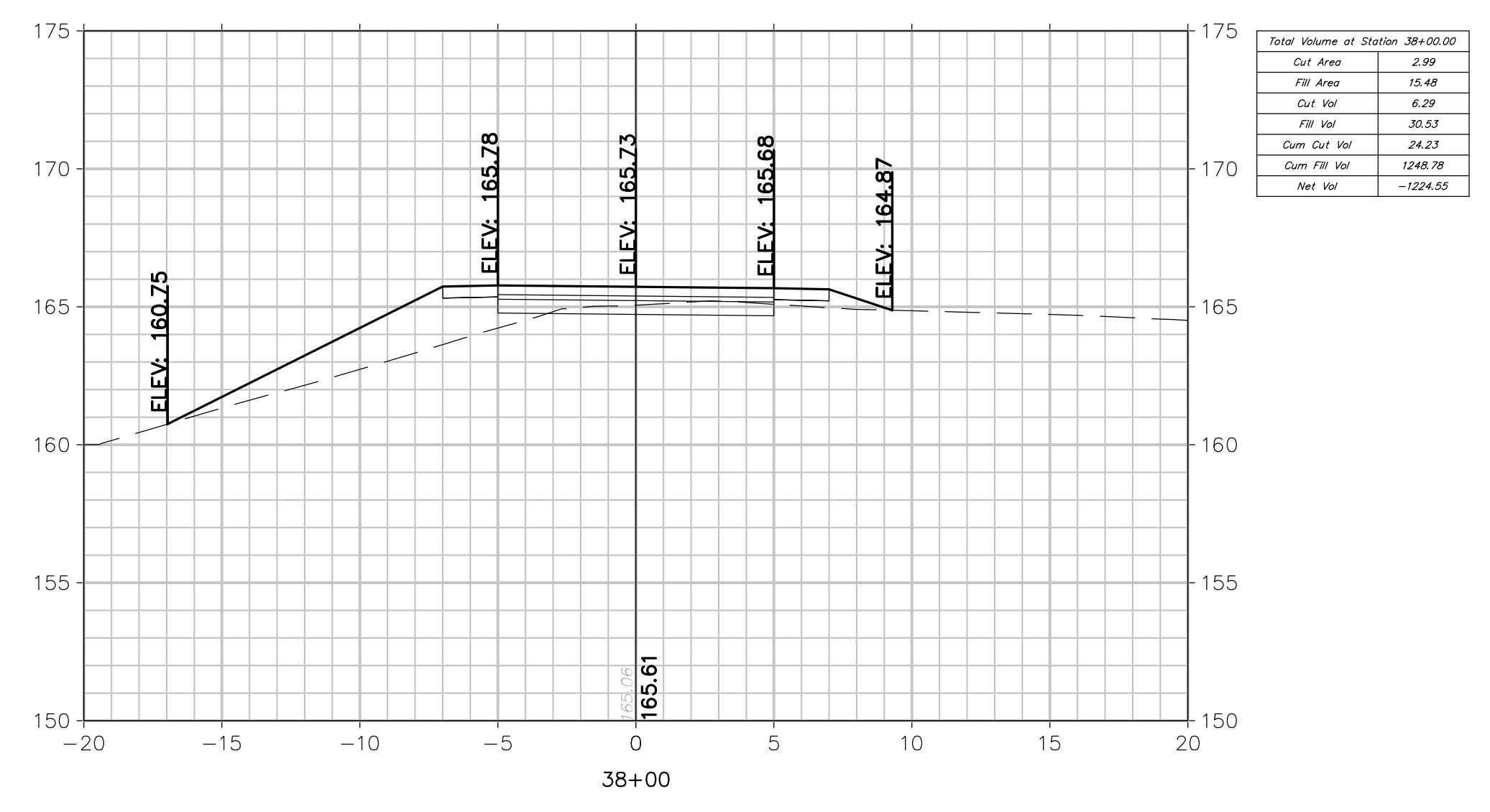
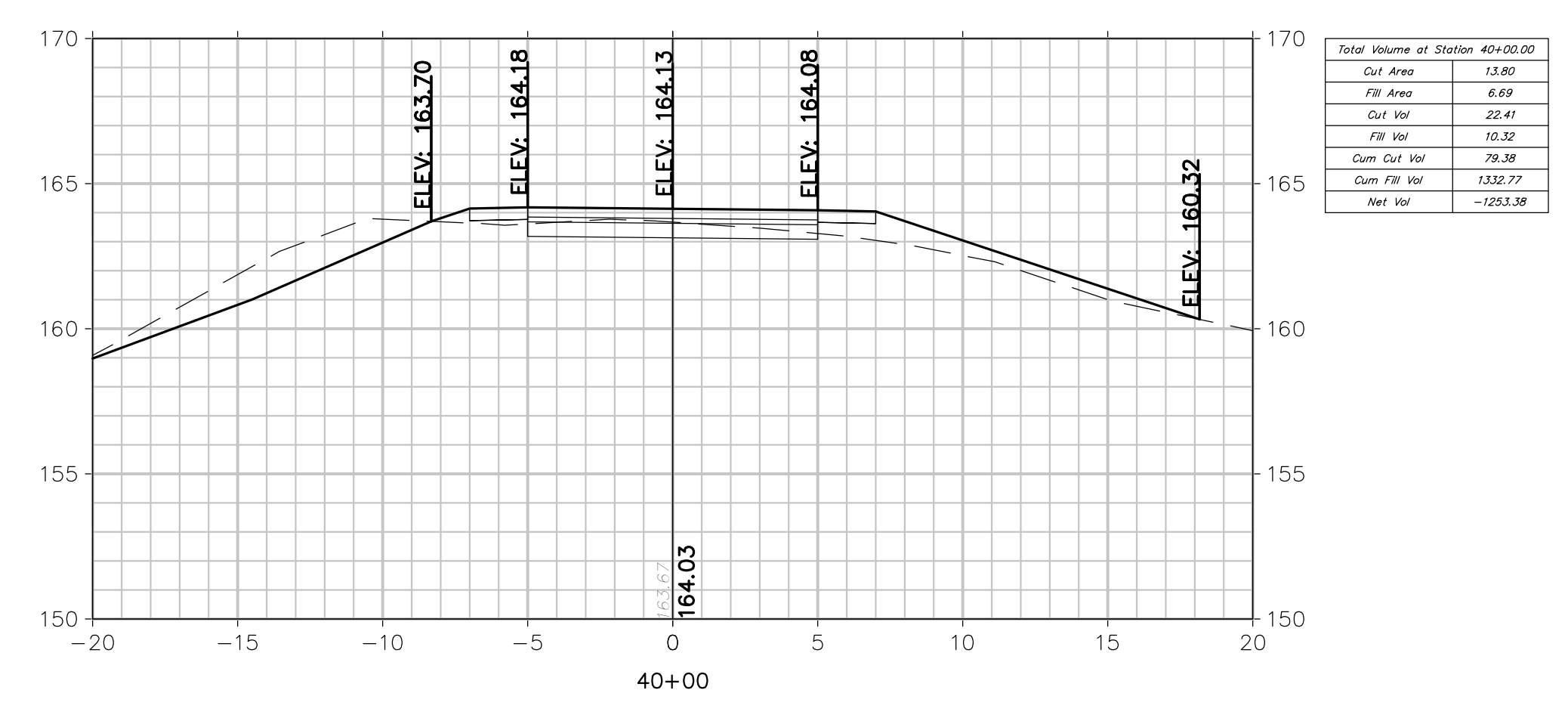
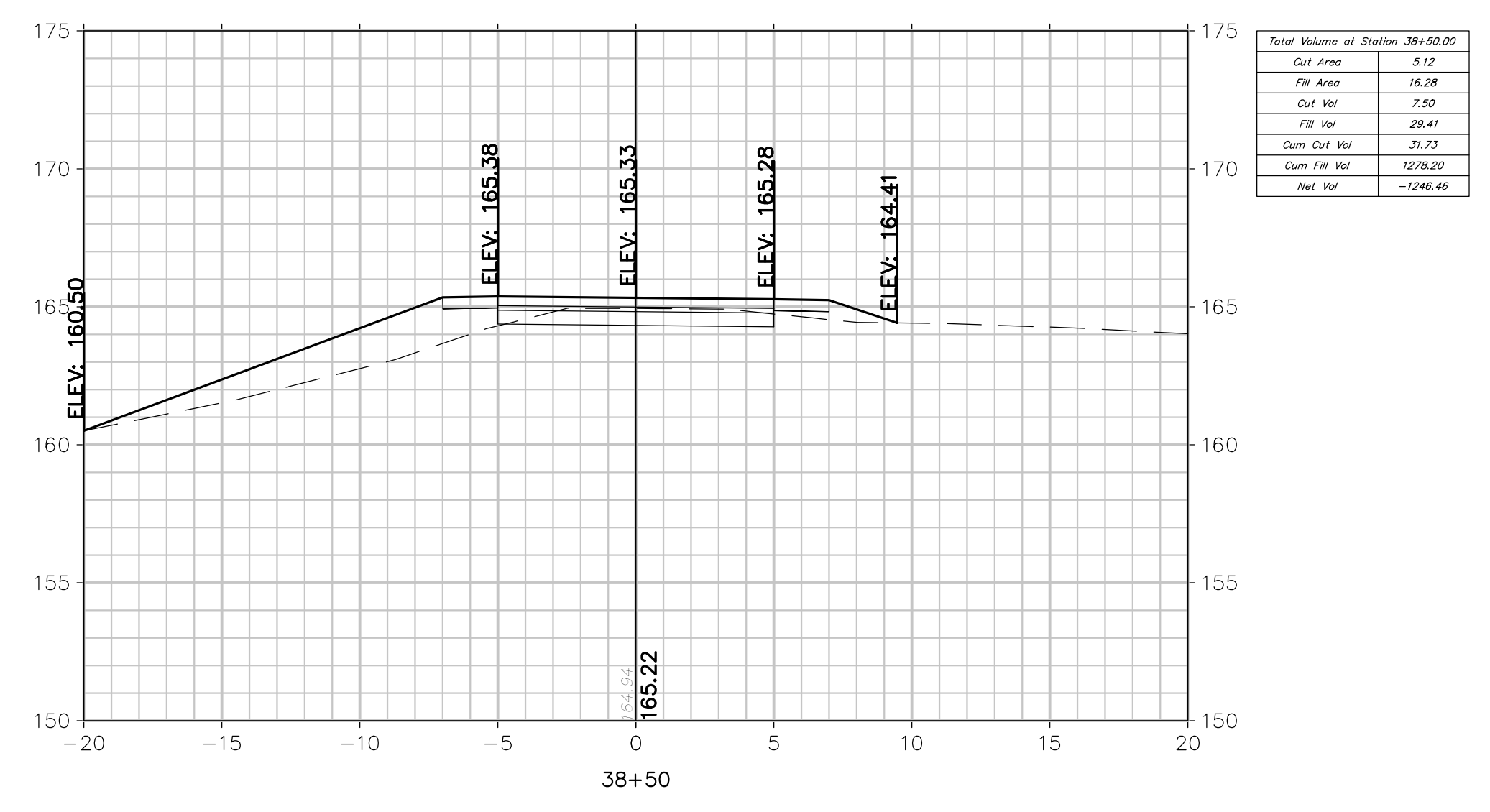
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PROFESSIONAL ENGINEER, NJ LIC. No. 49709

CROSS SECTIONS			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1 FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY			
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 22 of 34

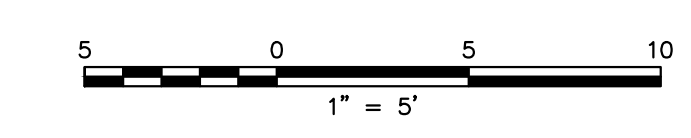
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No.	Date	Revision			

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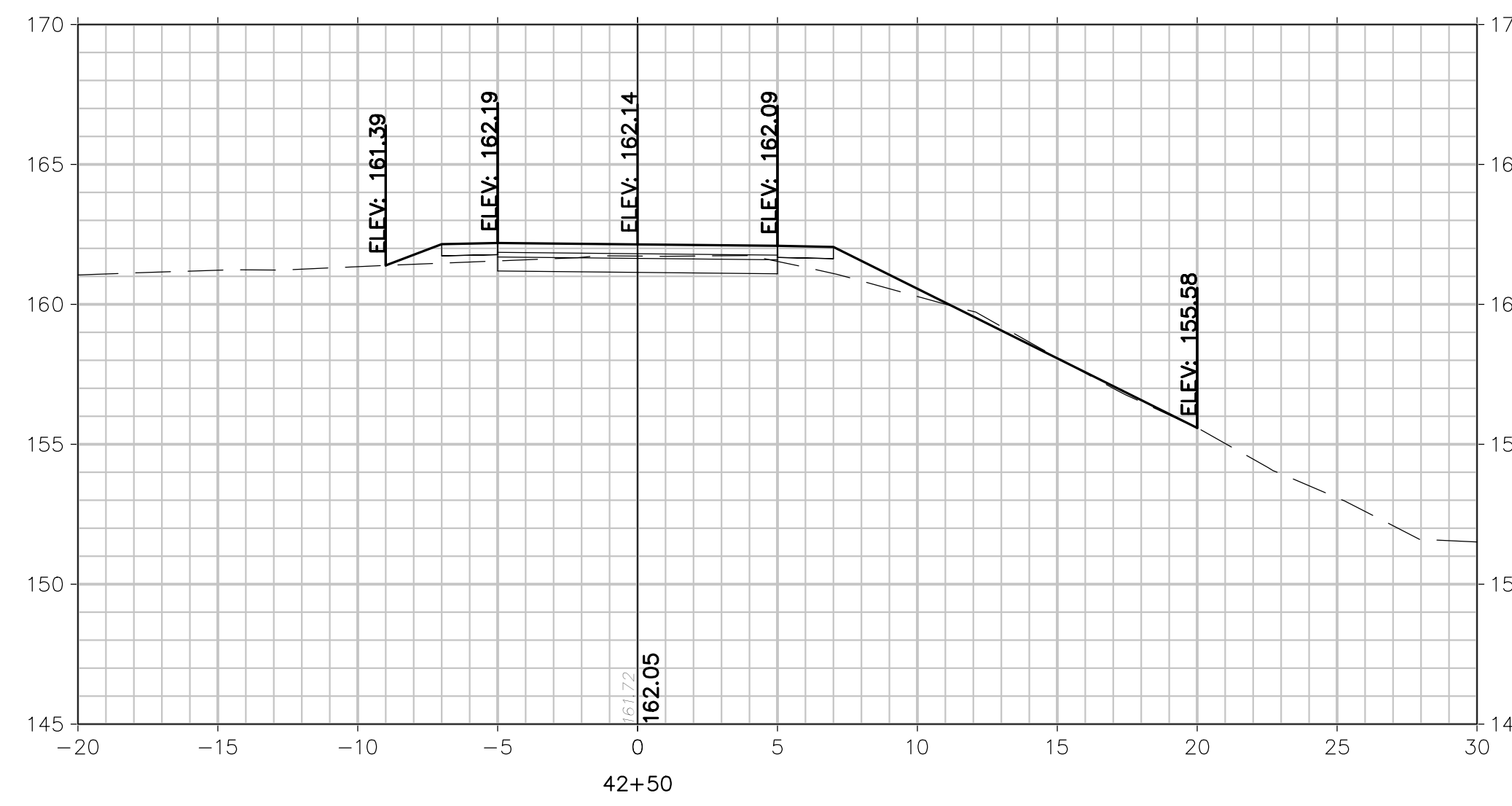
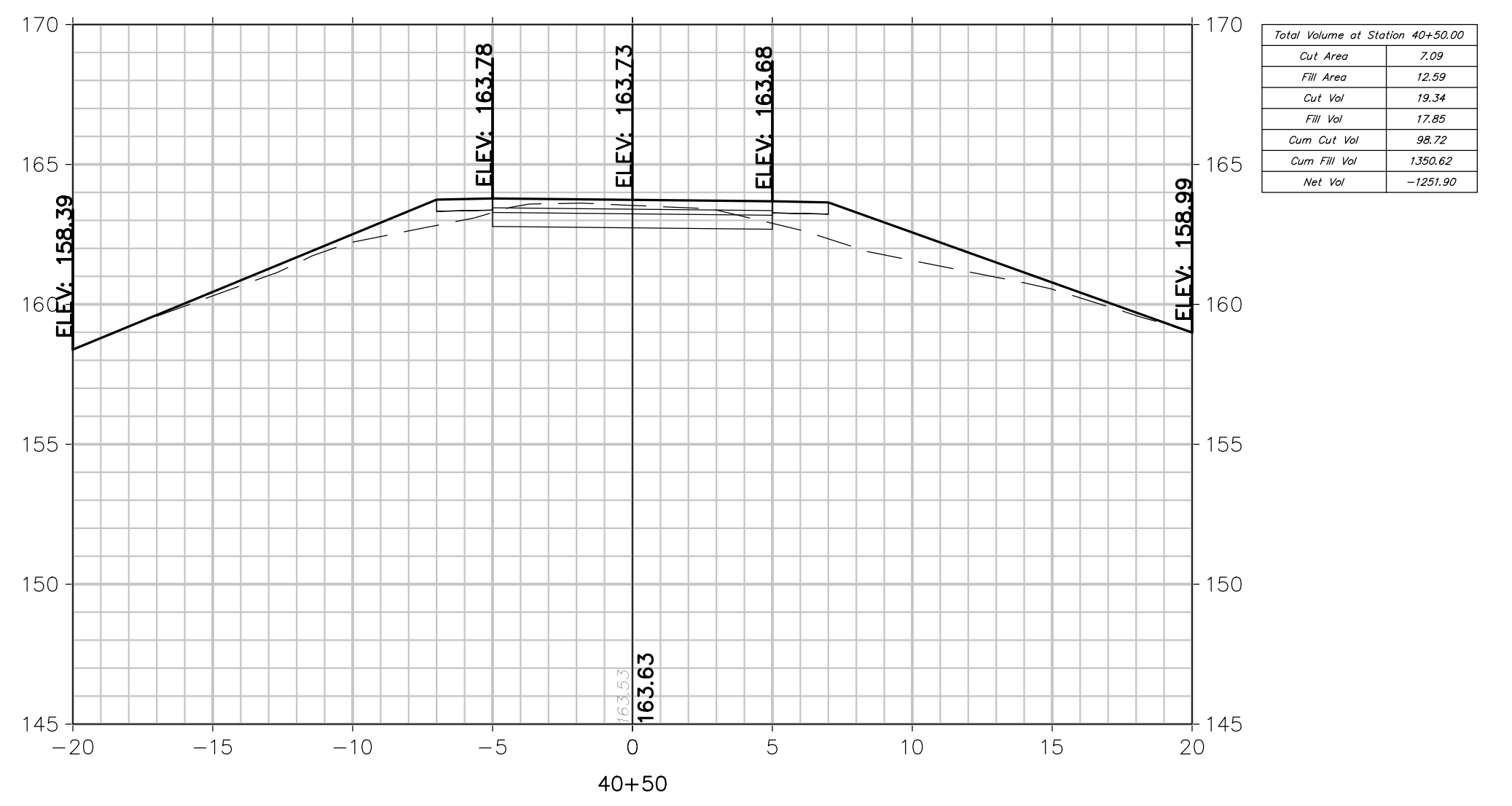
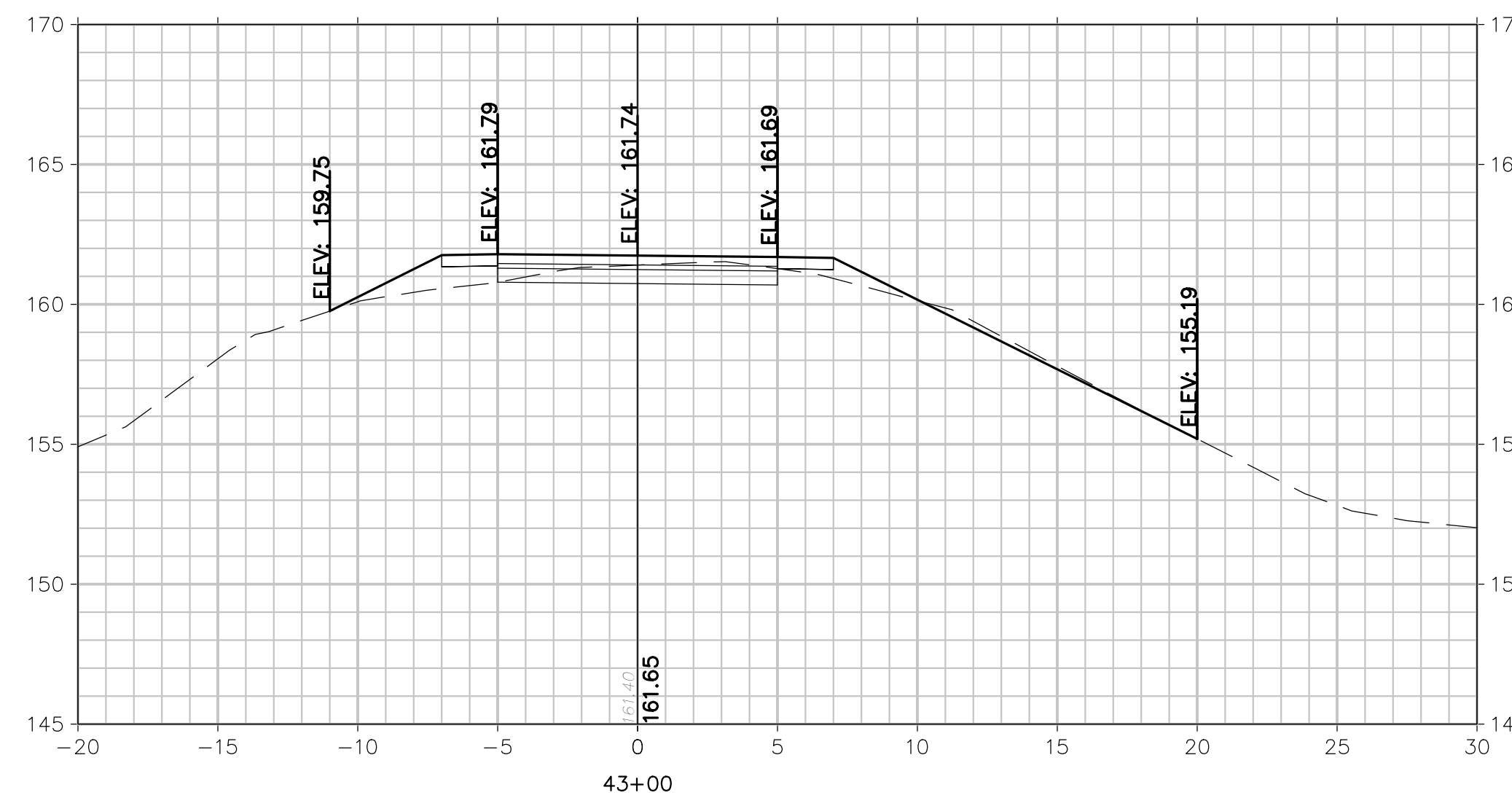
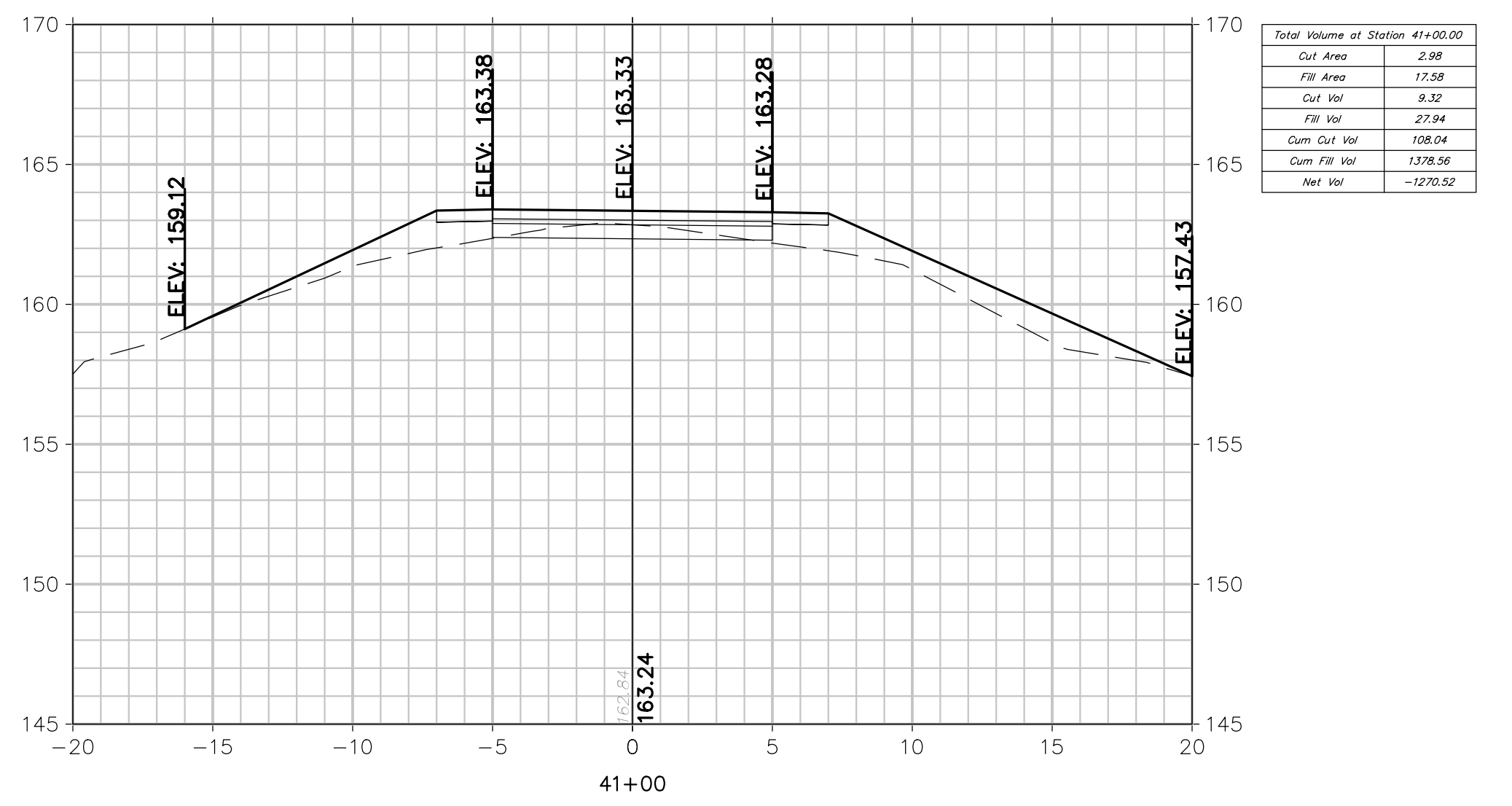
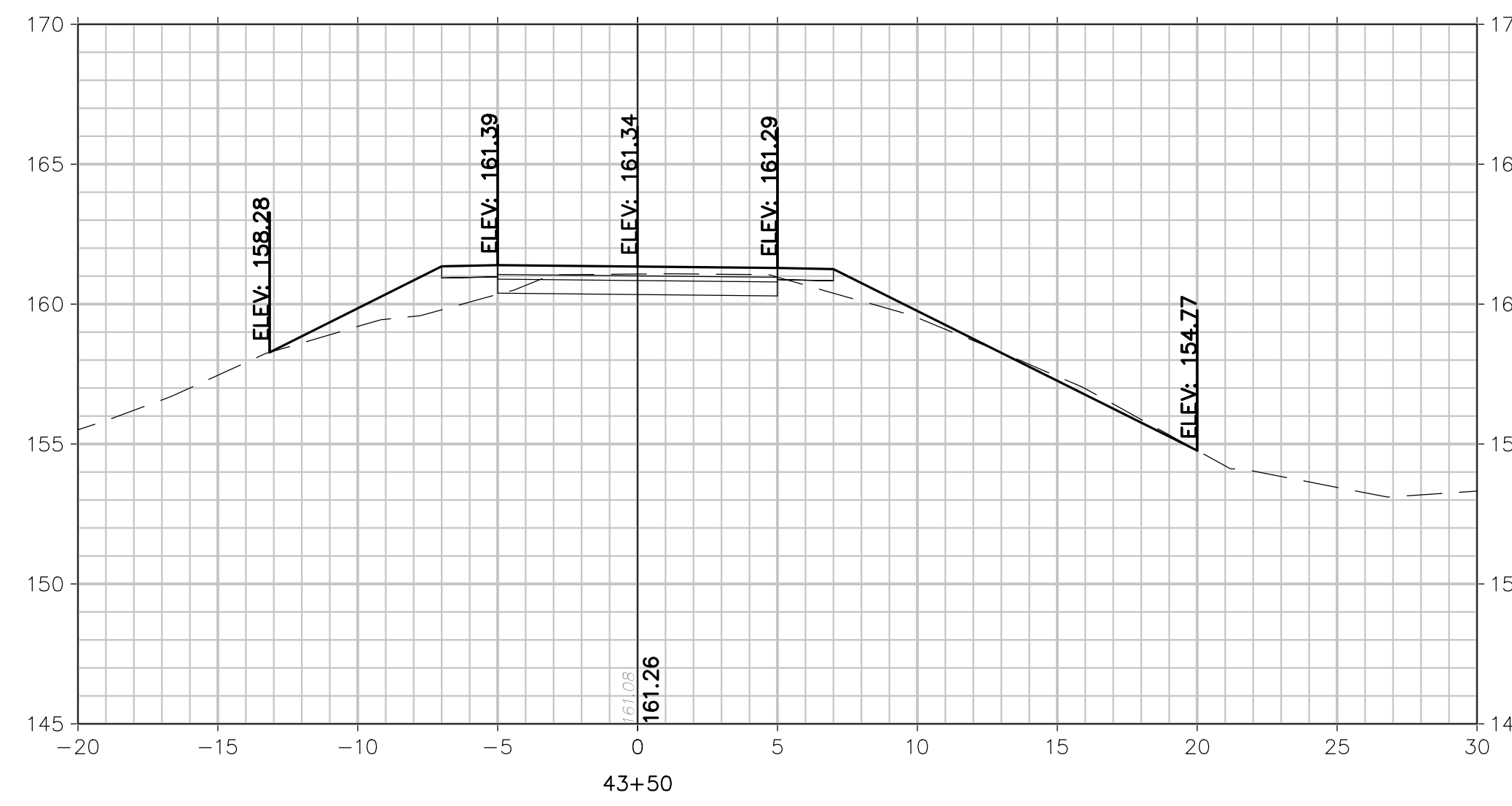
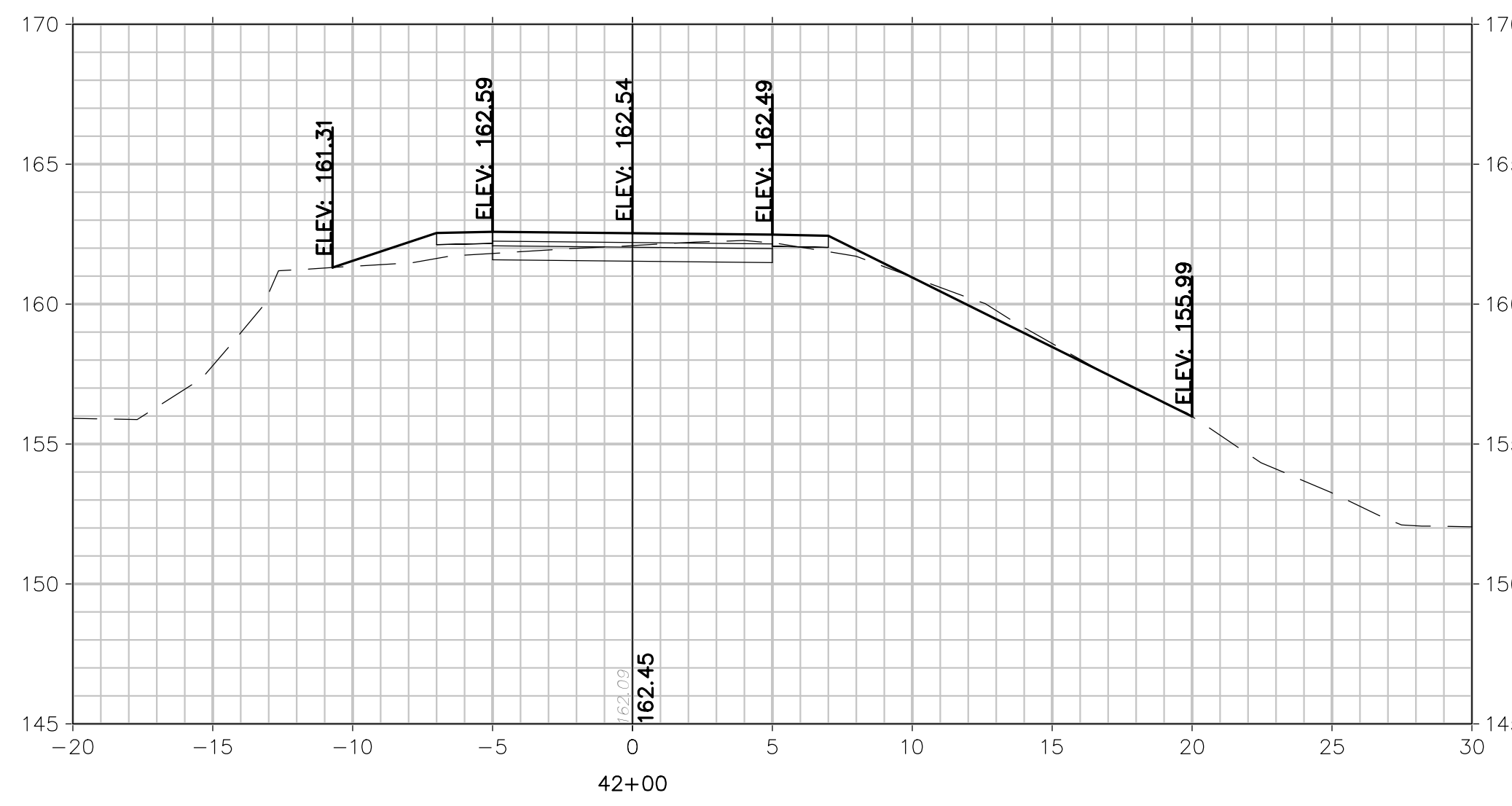
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DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
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1	8/20/22	SFI	Revised By
No.	Date		

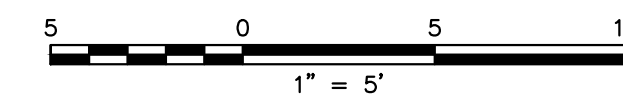
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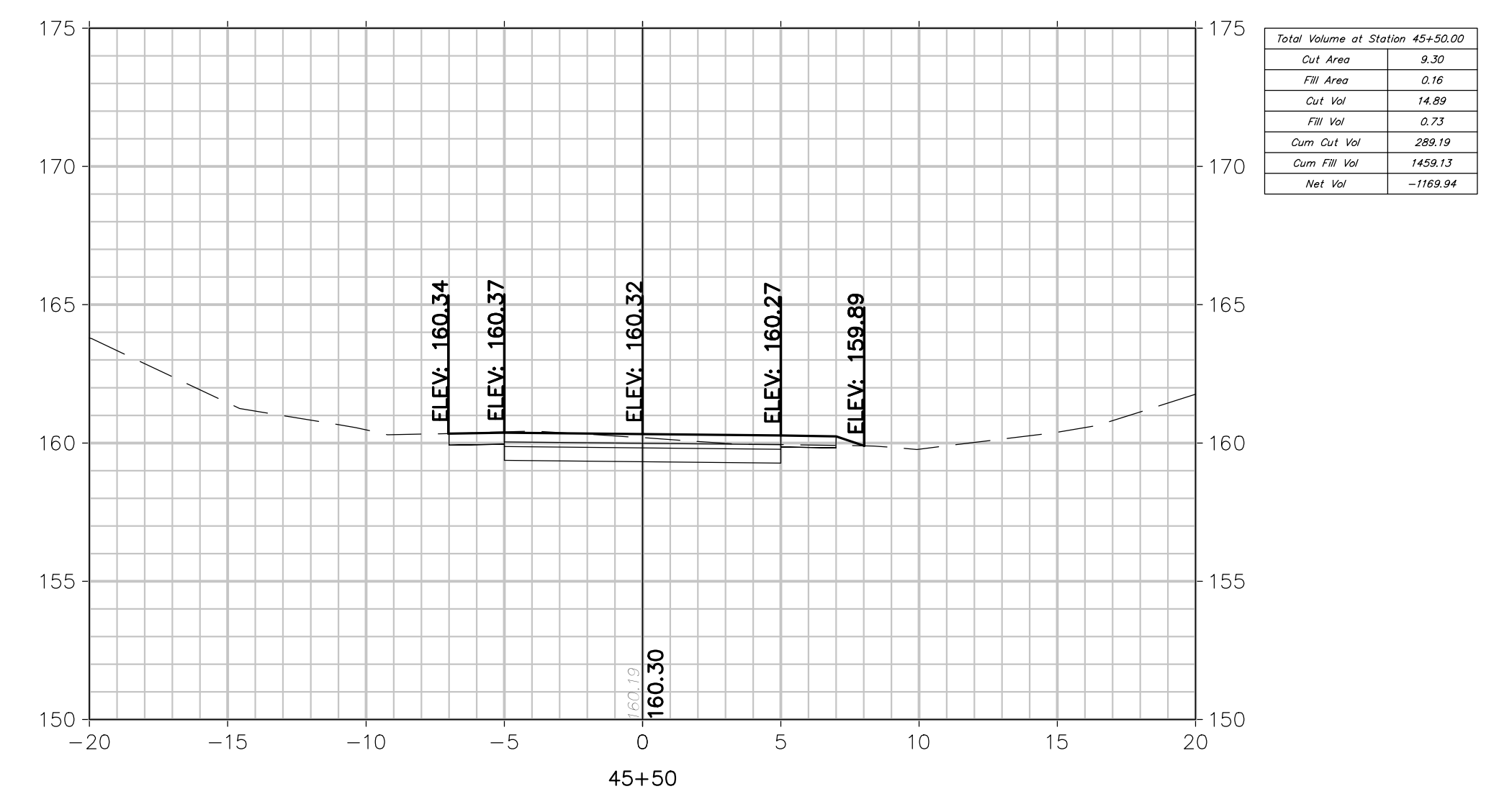
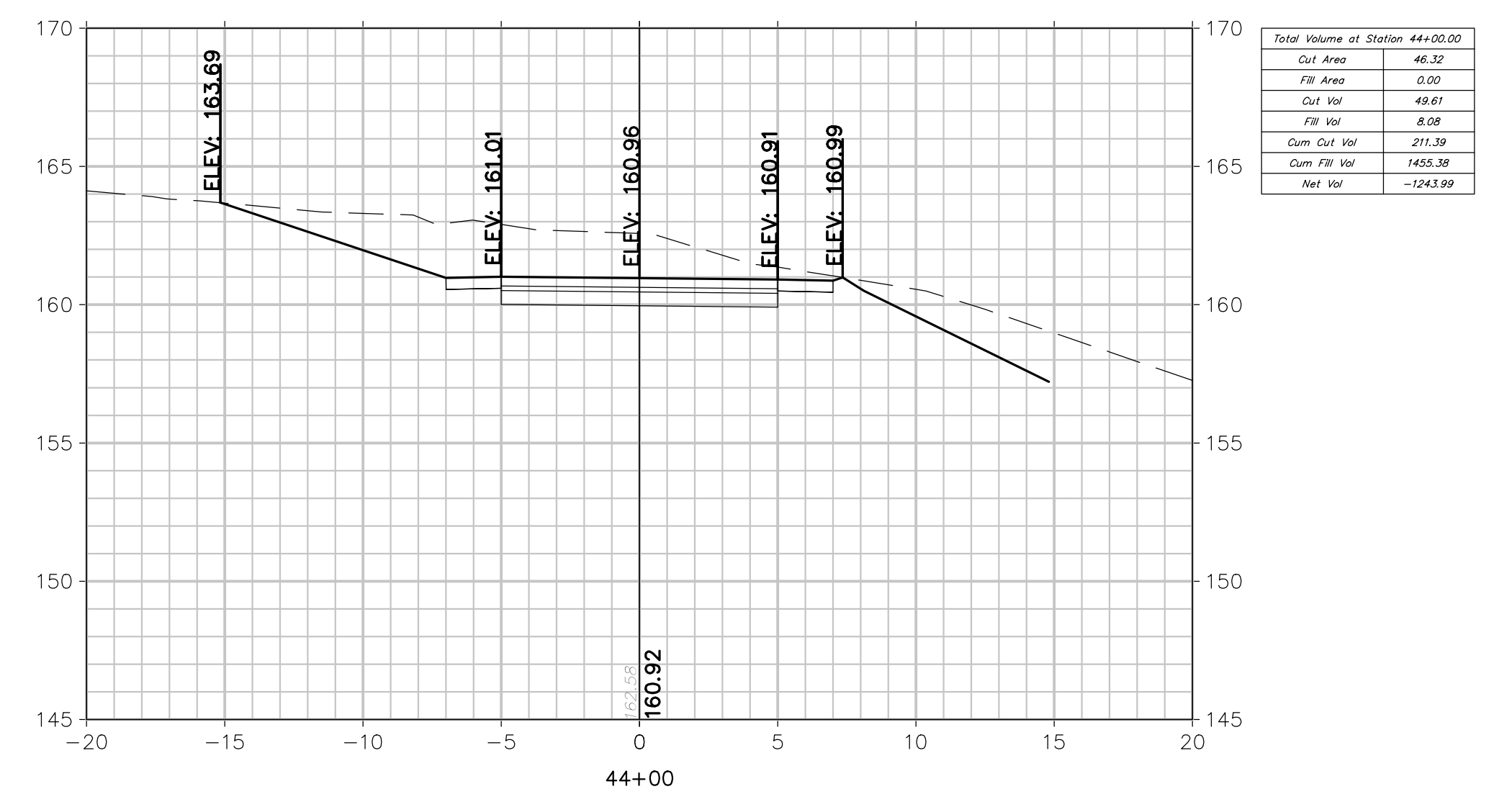
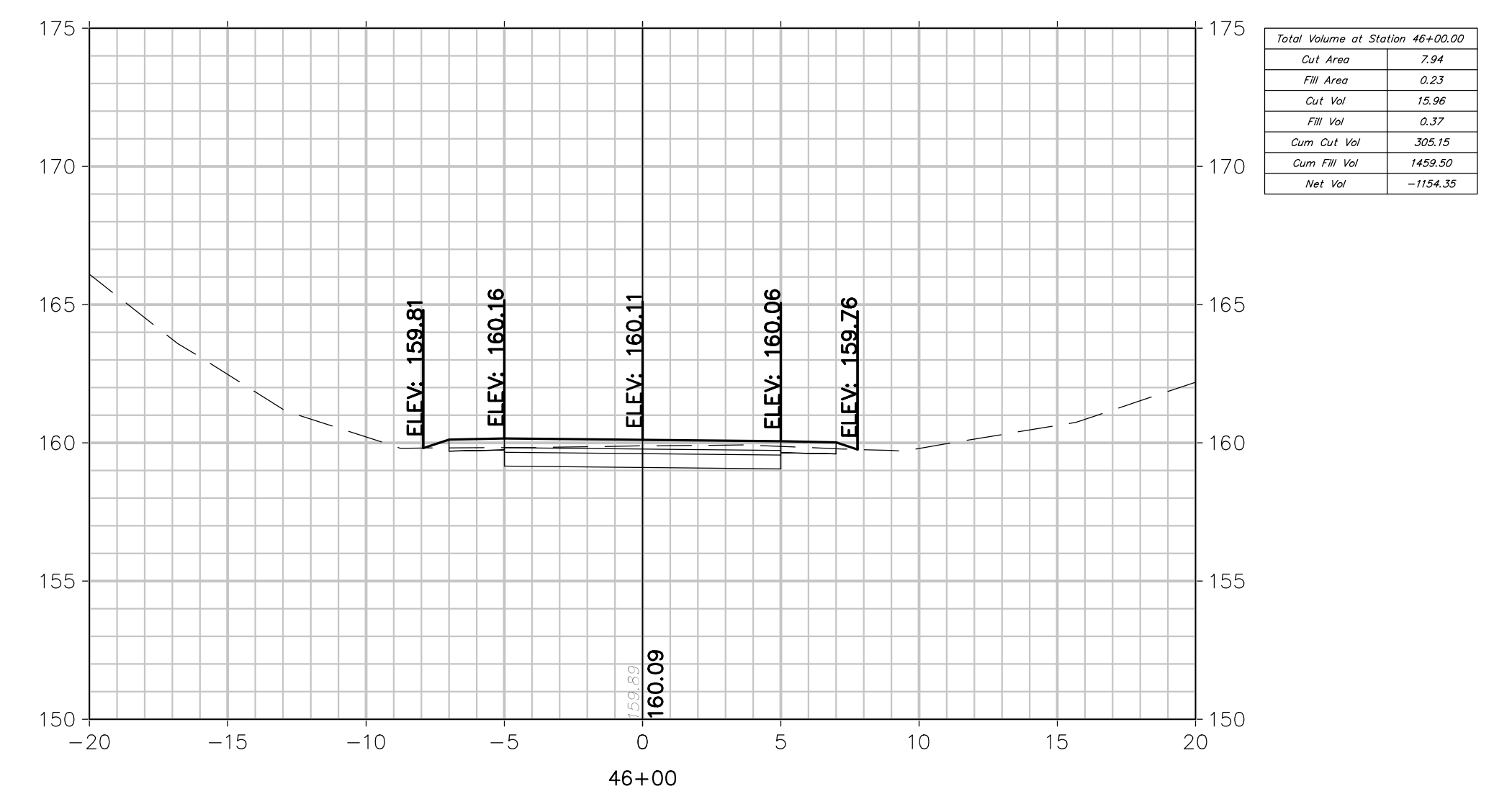
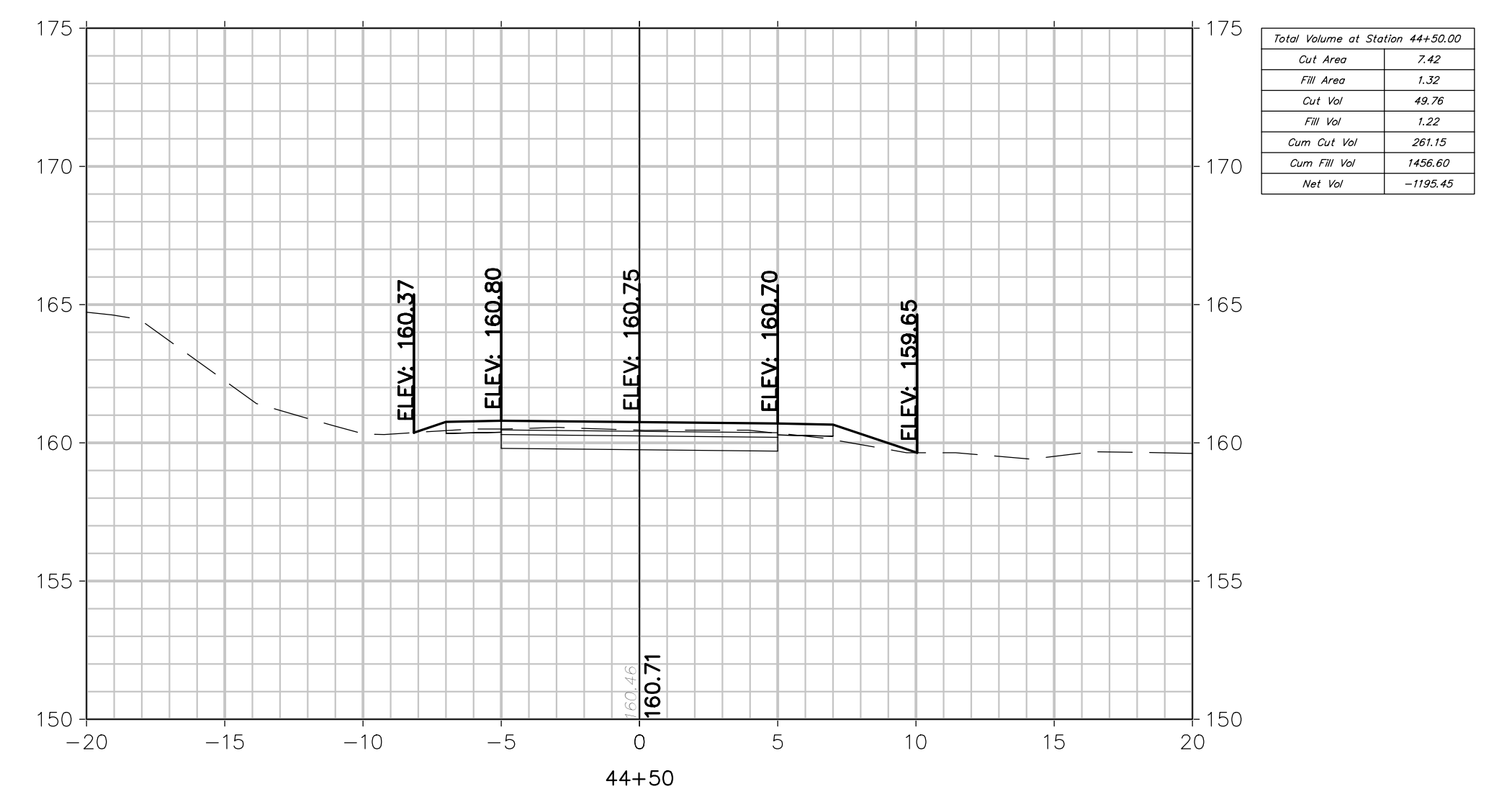
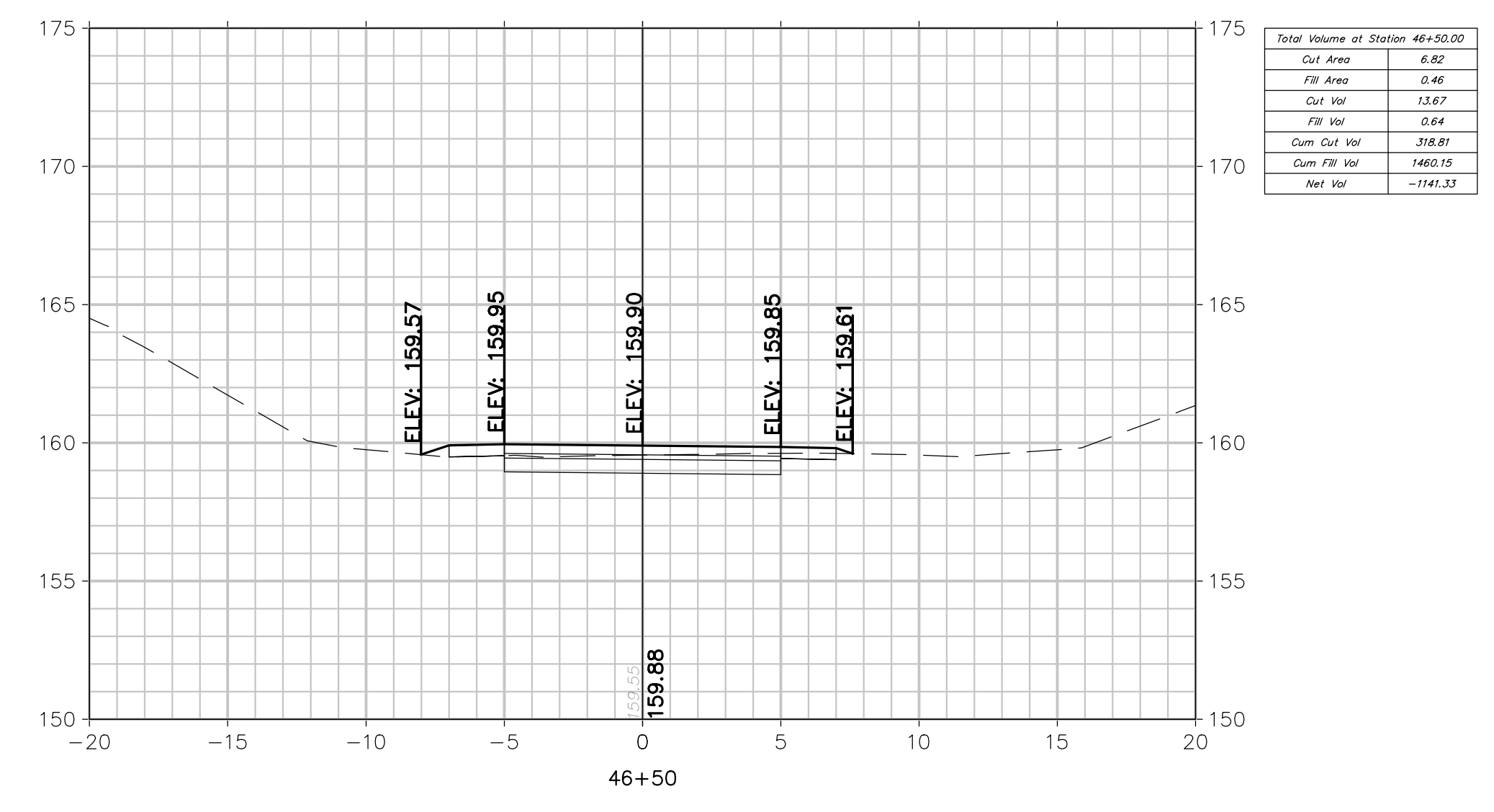
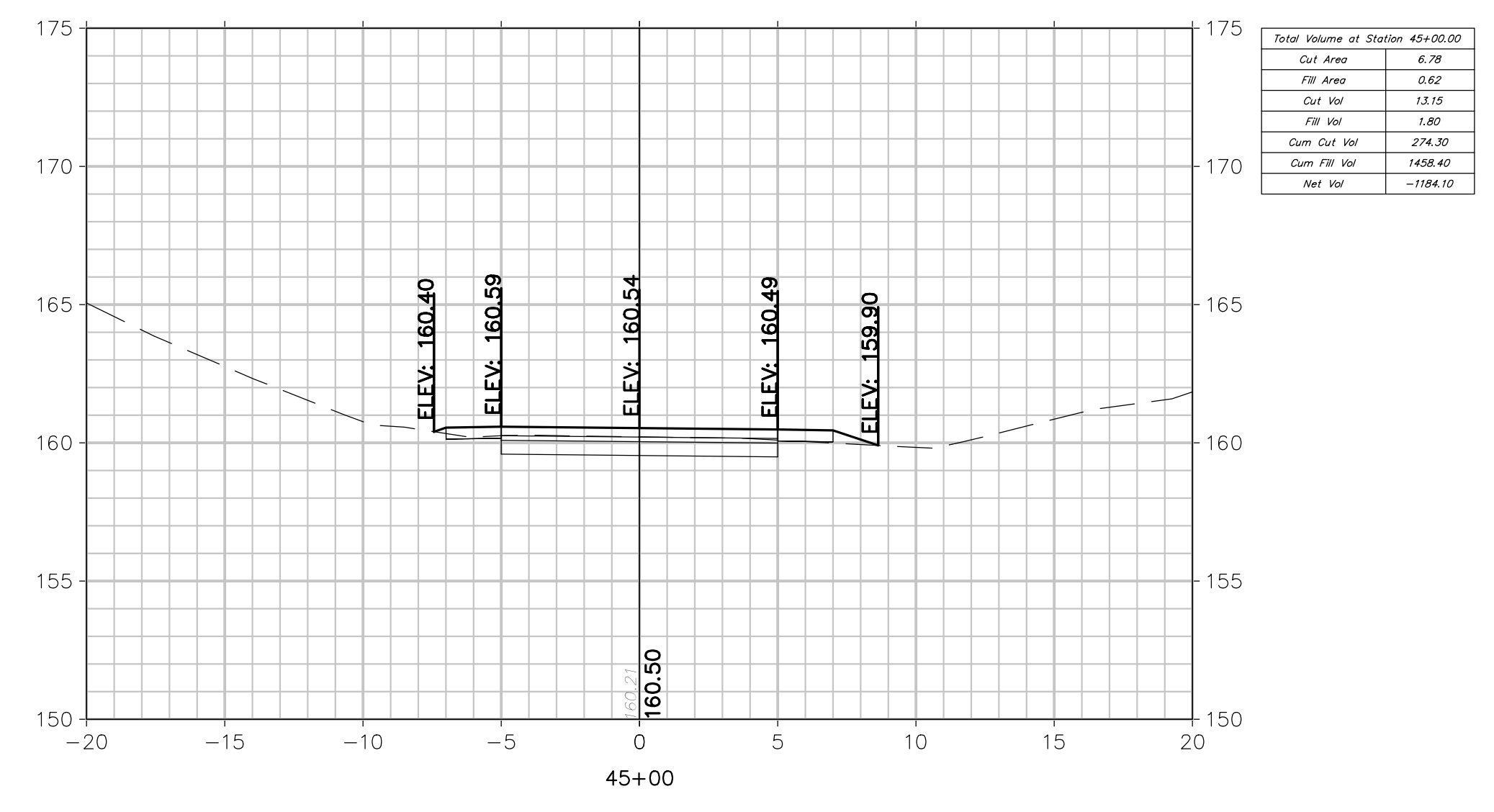
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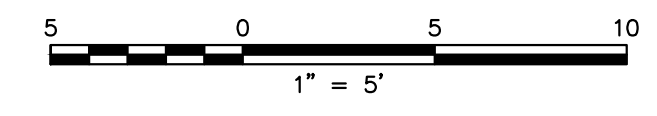
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2	3/23/23	PER NUDE COMMENTS	SFI	MJD
1	9/20/22	PER NUDE COMMENTS	SFI	MJD
No.	Date	Revision	Revised By	Checked By

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PLOTTED BY: SARA IRICK

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CROSS SECTIONS			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY			
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 25 of 34

No.	Date	Revised By	Checked By
3	3/27/2023	SFI	MJD
2	3/20/23	SFI	MJD
1	8/20/22	SFI	MJD

PER NDEP PERMIT CONDITIONS
 PER NDEP COMMENTS
 PER NDEP COMMENTS

3/27/2023
 3/20/23
 8/20/22

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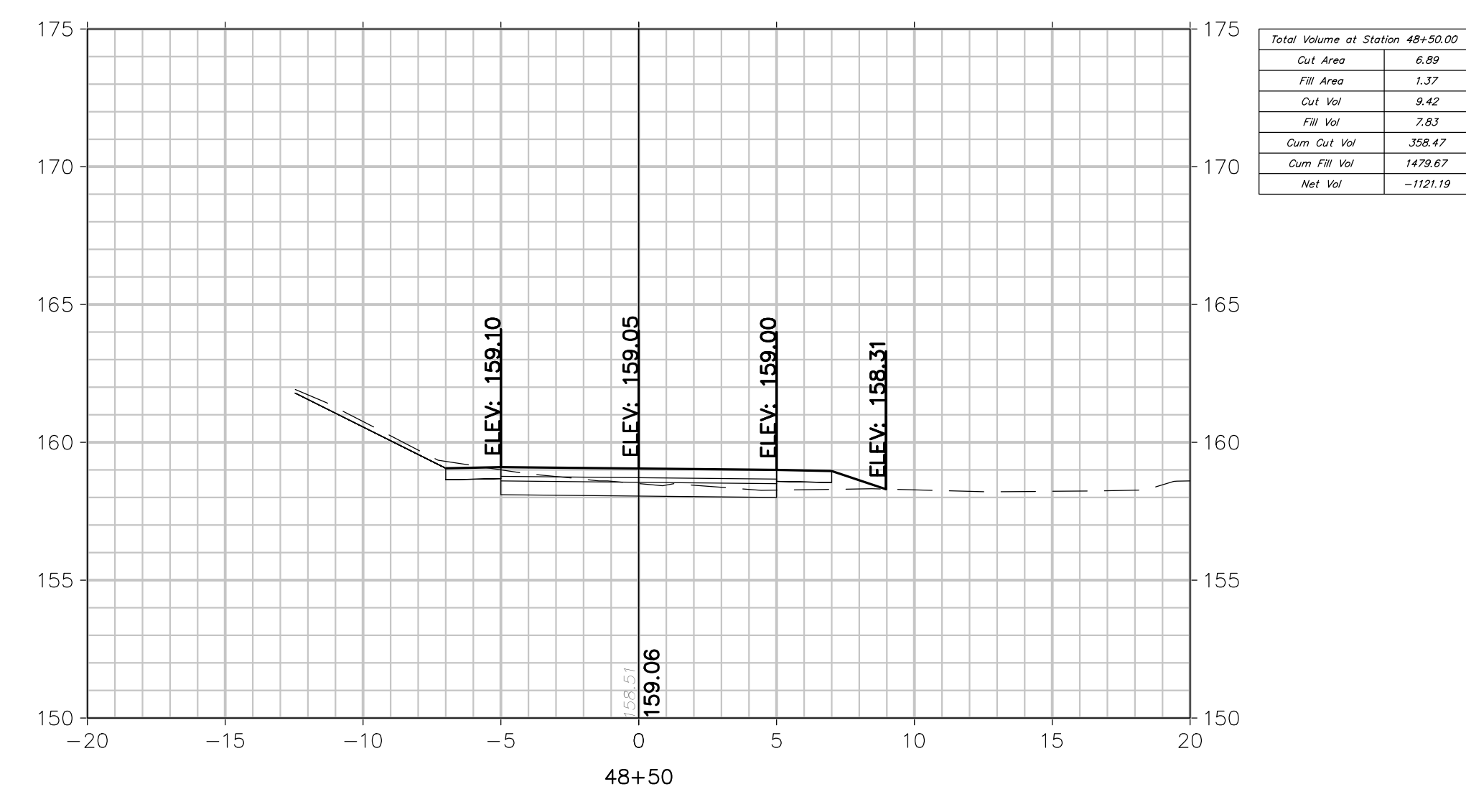
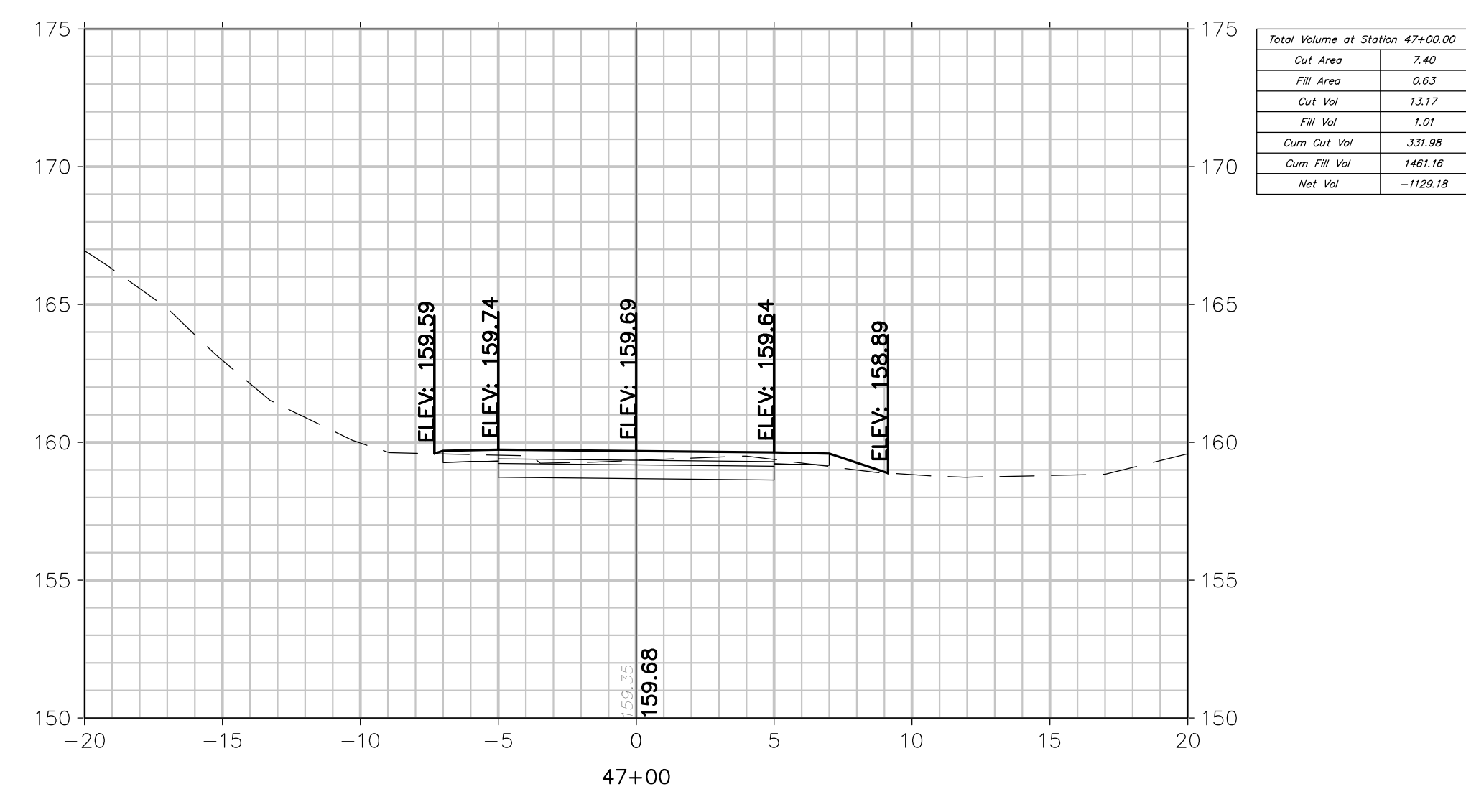
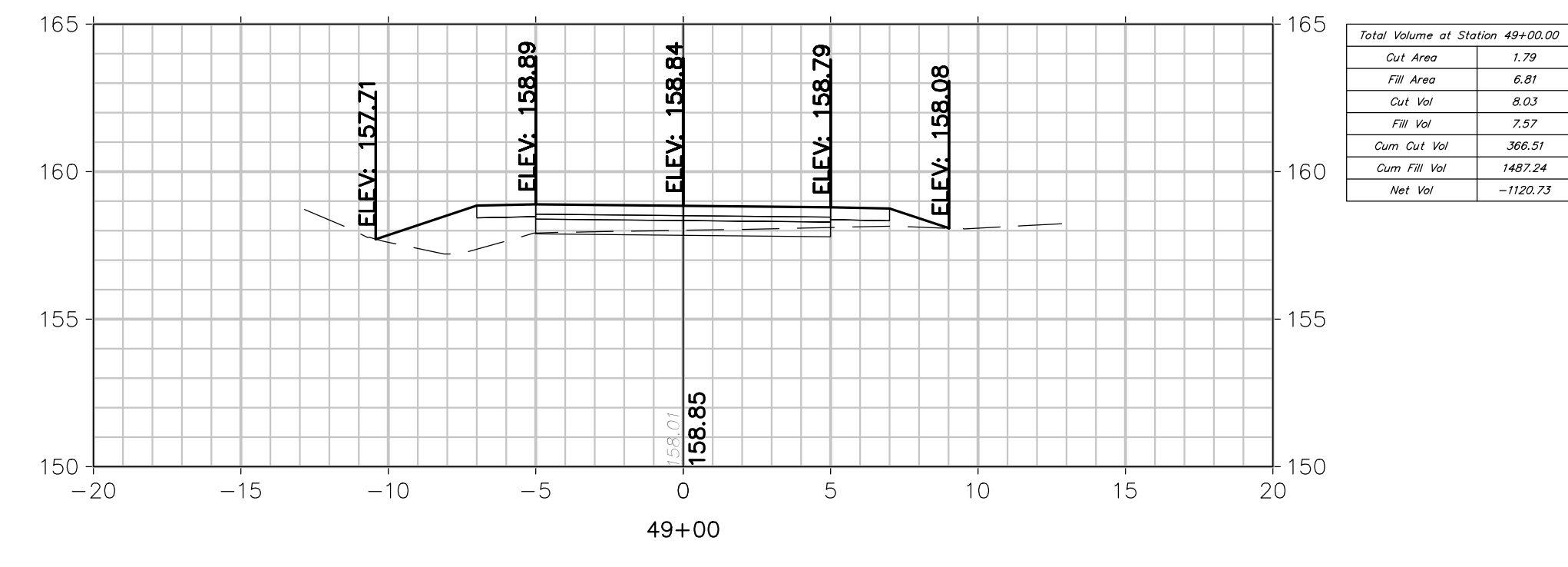
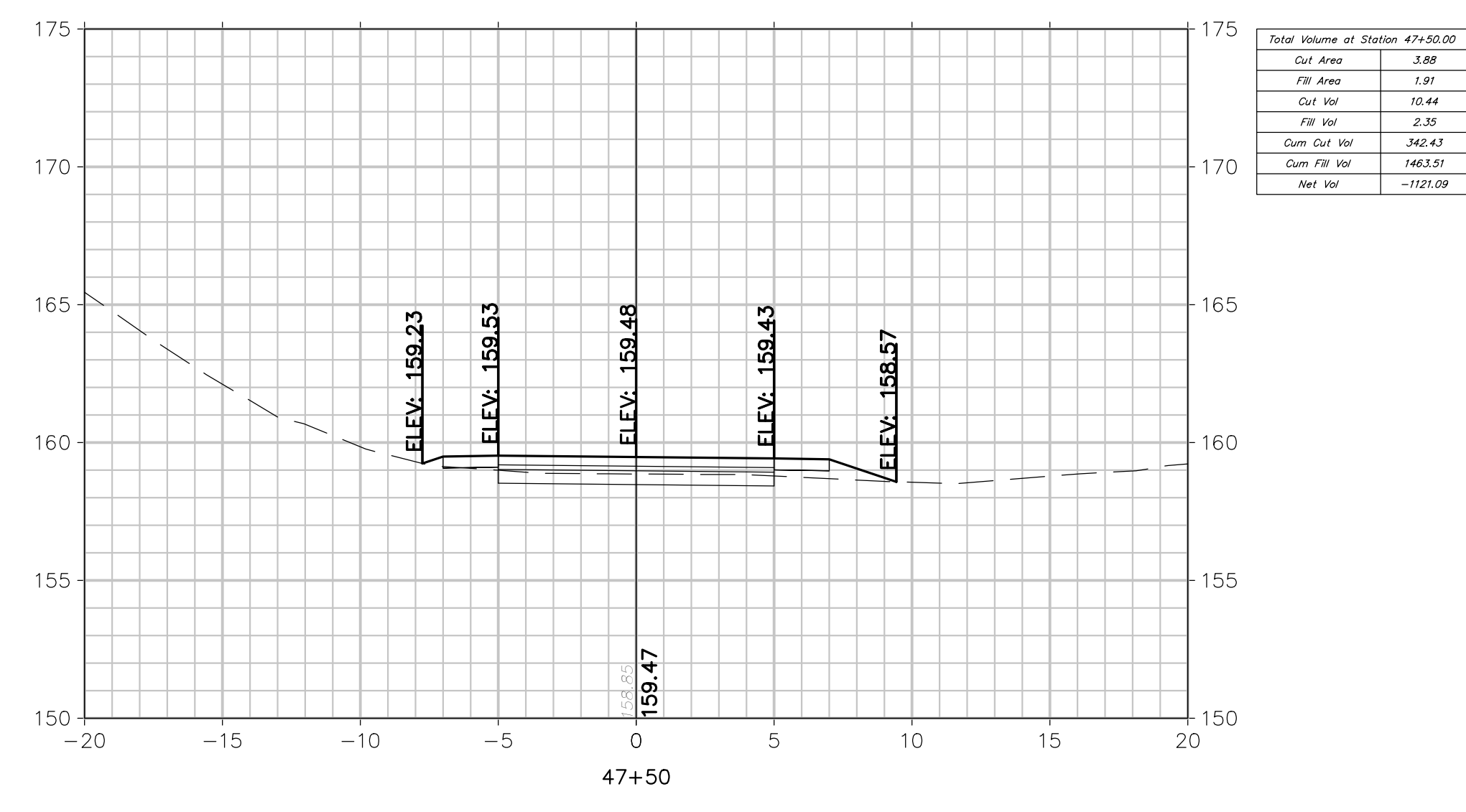
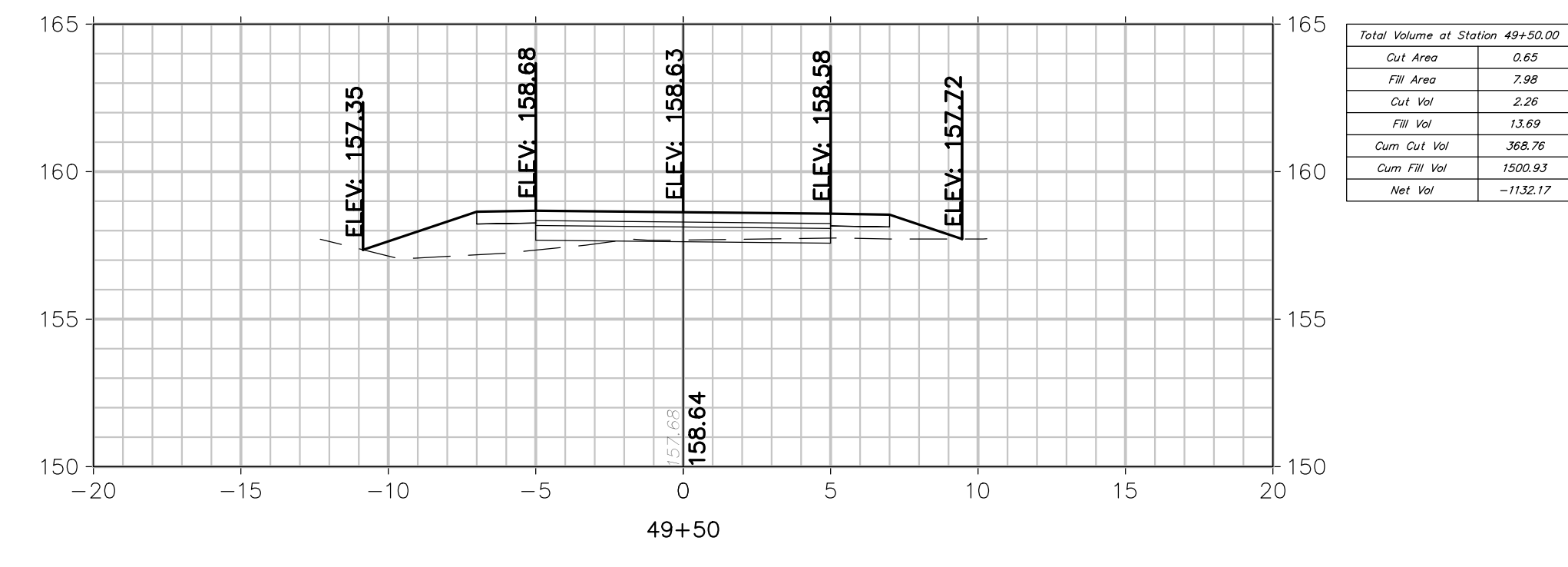
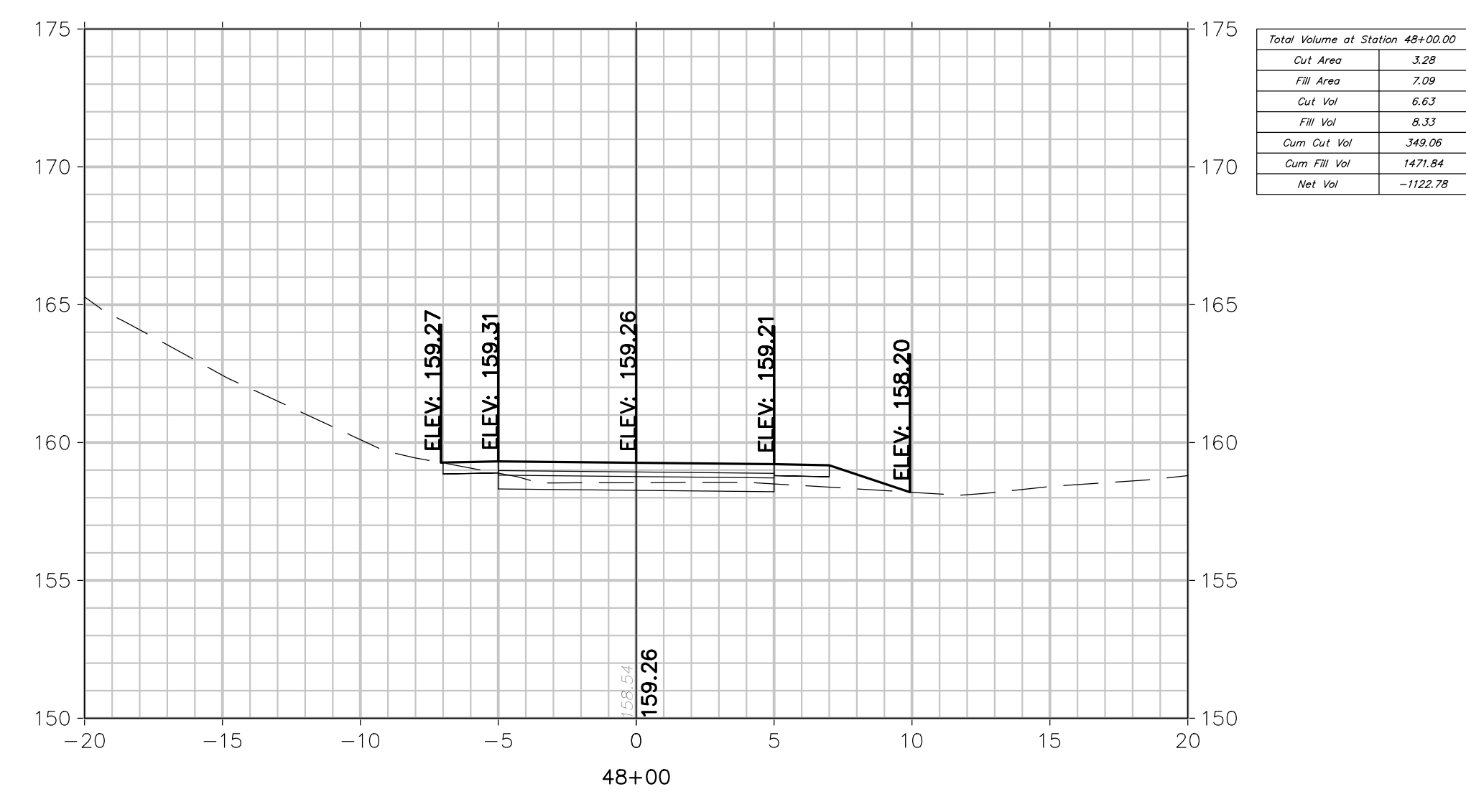
MJD
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Revised By
 Checked By

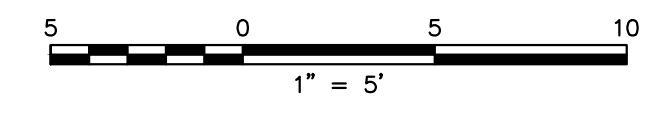
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 PLOTTED BY: SARA IRICK

D:\1830\15830\15830 - HENRY HUDSON TRAIL EXTENSION\15830.001 SAFETY IMPROVEMENTS\CADD\DWG\BID PACKAGE NO. 1 - FREEHOLD\15830.001 - CROSS SECTIONS - FREEHOLD.DWG - X-8



CROSS SECTIONS



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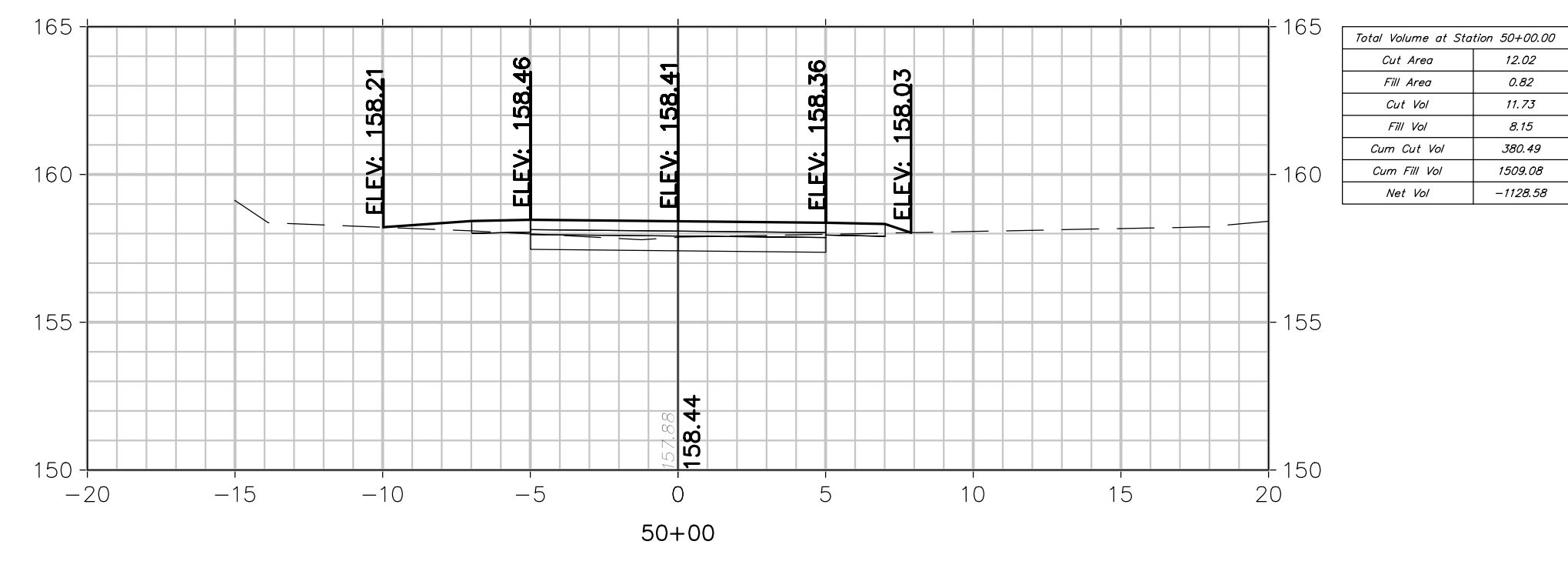
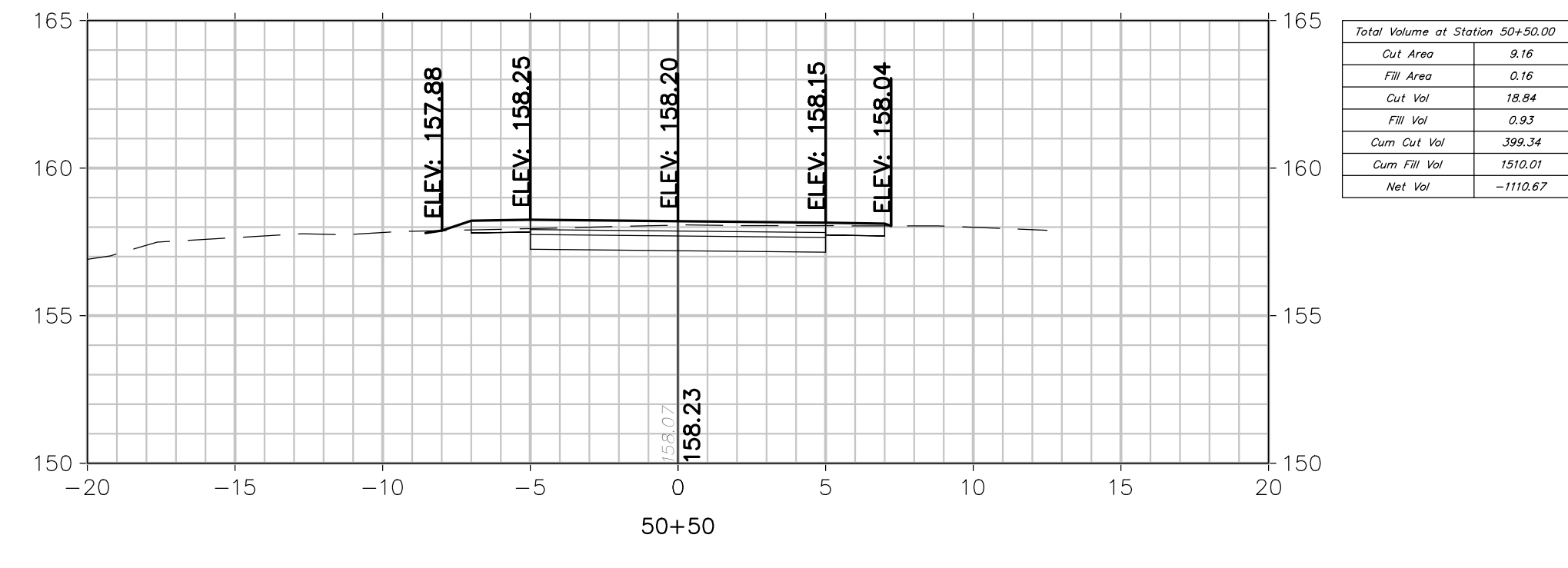
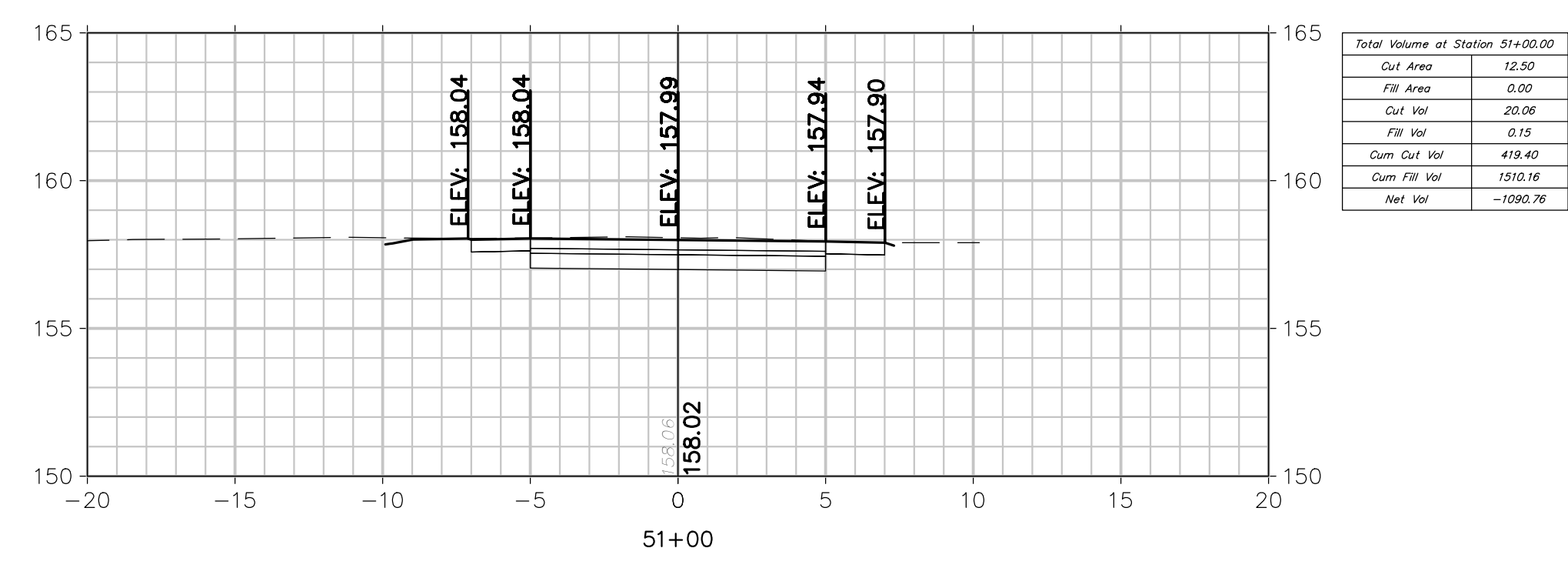
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SARA F. IRICK, PE
 PROFESSIONAL ENGINEER, NJ LIC. No. 49709

CROSS SECTIONS			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY			
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 26 of 34

3	3/27/2023	PER USER PERMIT CONDITIONS	MJD	Checked By
2	3/23/23	PER USER COMMENTS	SFI	Revised By
1	9/20/22	PER USER COMMENTS	SFI	Checked By
No.	Date	Revision		

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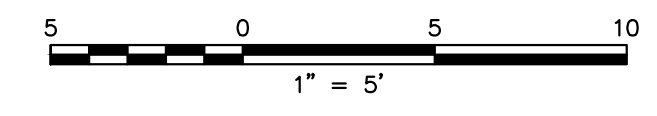


CROSS SECTIONS

Total Volume Table							
Station	Cut Area (SF)	Fill Area (SF)	Cut Vol (CY)	Fill Vol (CY)	Cum Cut Vol (CY)	Cum Fill Vol (CY)	Net Vol (CY)
30+50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31+00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31+50	1.10	9.72	1.02	9.00	1.02	9.00	-7.98
32+00	0.00	35.69	1.02	42.05	2.04	51.05	-49.01
32+19	0.02	44.61	0.01	28.91	2.05	79.96	-77.91
32+37	0.00	56.63	0.01	32.84	2.06	112.80	-110.75
32+38	0.00	57.86	0.00	3.15	2.06	115.95	-113.90
32+50	0.00	62.26	0.00	25.70	2.06	141.65	-139.60
33+00	0.00	124.52	0.00	172.94	2.06	314.60	-312.54
33+50	0.00	328.95	0.00	419.88	2.06	734.47	-732.42
34+00	0.00	0.00	0.00	304.58	2.06	1039.06	-1037.01
34+50	0.00	0.01	0.00	0.01	2.06	1039.06	-1037.01
35+00	0.00	0.00	0.00	0.01	2.06	1039.07	-1037.01
35+50	0.00	0.00	0.00	0.00	2.06	1039.07	-1037.02
36+00	0.20	62.65	0.18	58.37	2.23	1097.45	-1095.21
36+50	0.00	18.86	0.18	75.47	2.42	1172.92	-1170.50
37+00	6.49	6.09	6.01	23.10	8.43	1196.02	-1187.59
37+50	3.80	17.49	9.52	22.23	17.95	1218.25	-1200.30
38+00	2.99	15.48	6.29	30.53	24.23	1248.78	-1224.55
38+50	5.12	16.28	7.50	29.41	31.73	1278.20	-1246.46
39+00	5.87	13.53	10.17	27.60	41.91	1305.80	-1263.89
39+50	10.40	4.45	15.07	16.65	56.97	1322.45	-1265.47
40+00	13.80	6.69	22.41	10.32	79.38	1332.77	-1253.38
40+50	7.09	12.59	19.34	17.85	98.72	1350.62	-1251.90
41+00	2.98	17.58	9.32	27.94	108.04	1378.56	-1270.52
42+00	6.57	3.73	17.67	39.47	125.70	1418.04	-1292.33
42+50	5.83	4.38	11.48	7.51	137.18	1425.55	-1288.37
43+00	6.74	5.19	11.64	8.86	148.82	1434.41	-1285.59
43+50	7.26	8.73	12.96	12.88	161.78	1447.29	-1285.51
44+00	46.32	0.00	49.61	8.08	211.39	1455.38	-1243.99
44+50	7.42	1.32	49.76	1.22	261.15	1456.60	-1195.45
45+00	6.78	0.62	13.15	1.80	274.30	1458.40	-1184.10
45+50	9.30	0.16	14.89	0.73	289.19	1459.13	-1169.94
46+00	7.94	0.23	15.96	0.37	305.15	1459.50	-1154.35
46+50	6.82	0.46	13.67	0.64	318.81	1460.15	-1141.33
47+00	7.40	0.63	13.17	1.01	331.98	1461.16	-1129.18
47+50	3.88	1.91	10.44	2.35	342.43	1463.51	-1121.09
48+00	3.28	7.09	6.63	8.33	349.06	1471.84	-1122.78
48+50	6.89	1.37	9.42	7.83	358.47	1479.67	-1121.19
49+00	1.79	6.81	8.03	7.57	366.51	1487.24	-1120.73
49+50	0.65	7.98	2.26	13.69	368.76	1500.93	-1132.17
50+00	12.02	0.82	11.73	8.15	380.49	1509.08	-1128.58
50+50	9.16	0.16	18.84	0.93	399.34	1510.01	-1110.67
51+00	12.50	0.00	20.06	0.15	419.40	1510.16	-1090.76
51+50	0.00	0.00	11.59	0.00	430.99	1510.16	-1079.17

CROSS SECTIONS EARTHWORK SUMMARY		
DESCRIPTION	CONTRACT QUANTITY	
EXCAVATION		
(A) EXCAVATED MATERIALS		
(1) EXCAVATION, UNCLASSIFIED AVAILABLE		
EXCAVATION FROM CROSS SECTIONS	431	CY
EXCAVATION FROM BRIDGE	1,775	CY
TOTAL EXCAVATION, UNCLASSIFIED	2,206	CY
(B) EMBANKMENT QUANTITY REQUIRED		
EMBANKMENT FROM CROSS SECTIONS	1,510	CY
EMBANKMENT FROM BRIDGE (I-9 SOIL AGGREGATE MUST BE USED)	765	CY
TOTAL EMBANKMENT REQUIRED	2,275	CY
EXCAVATED MATERIALS TO BE BORROWED	1,510	CY
EXCAVATED MATERIALS FOR DISPOSAL	696	CY
TOTALS		
TOTAL EXCAVATION, UNCLASSIFIED	2206	CY
TOTAL I-9 SOIL AGGREGATE FOR FILL	765	CY

NOTES: 1. ANY MATERIAL PROPOSED TO BE REUSED AS EMBANKMENT SHALL BE APPROVED BY THE ENGINEER.



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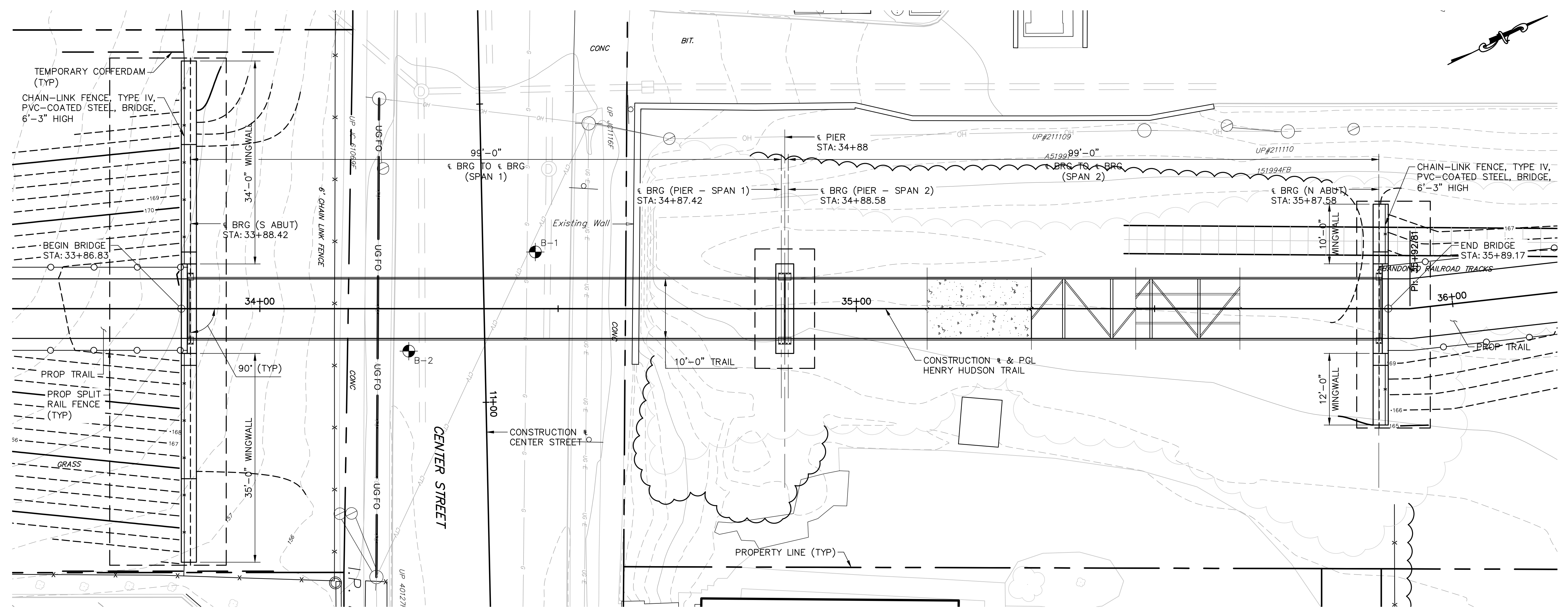
CROSS SECTIONS
**HENRY HUDSON TRAIL EXTENSION
AND PEDESTRIAN SAFETY IMPROVEMENTS
BID PACKAGE #1**
FOR THE MONMOUTH COUNTY PARKS SYSTEM
PS#103-19

IN THE BOROUGH OF FREEHOLD
MONMOUTH COUNTY, NEW JERSEY

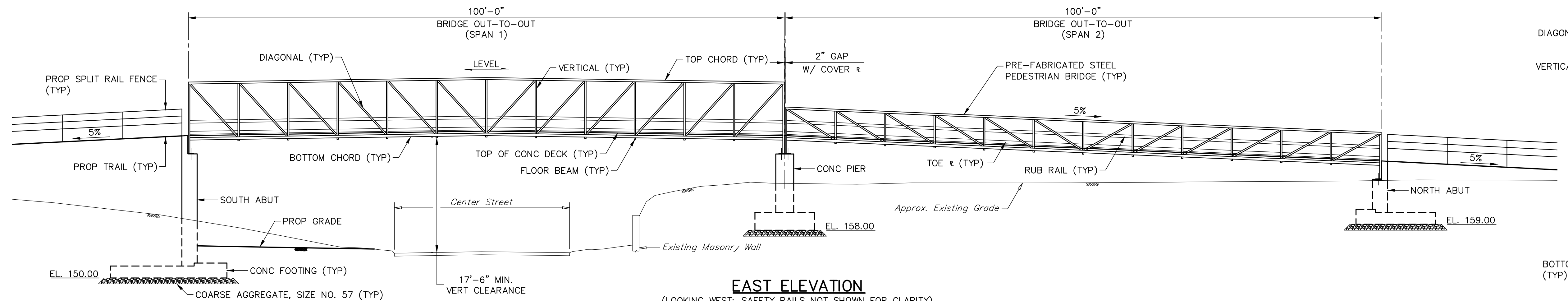
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 27 of 34

NO.	DATE	REVISION
3	3/27/2023	PER NUDOT PERMIT CONDITIONS
2	3/28/23	PER NUDOT COMMENTS
1	8/20/22	PER NUDOT COMMENTS

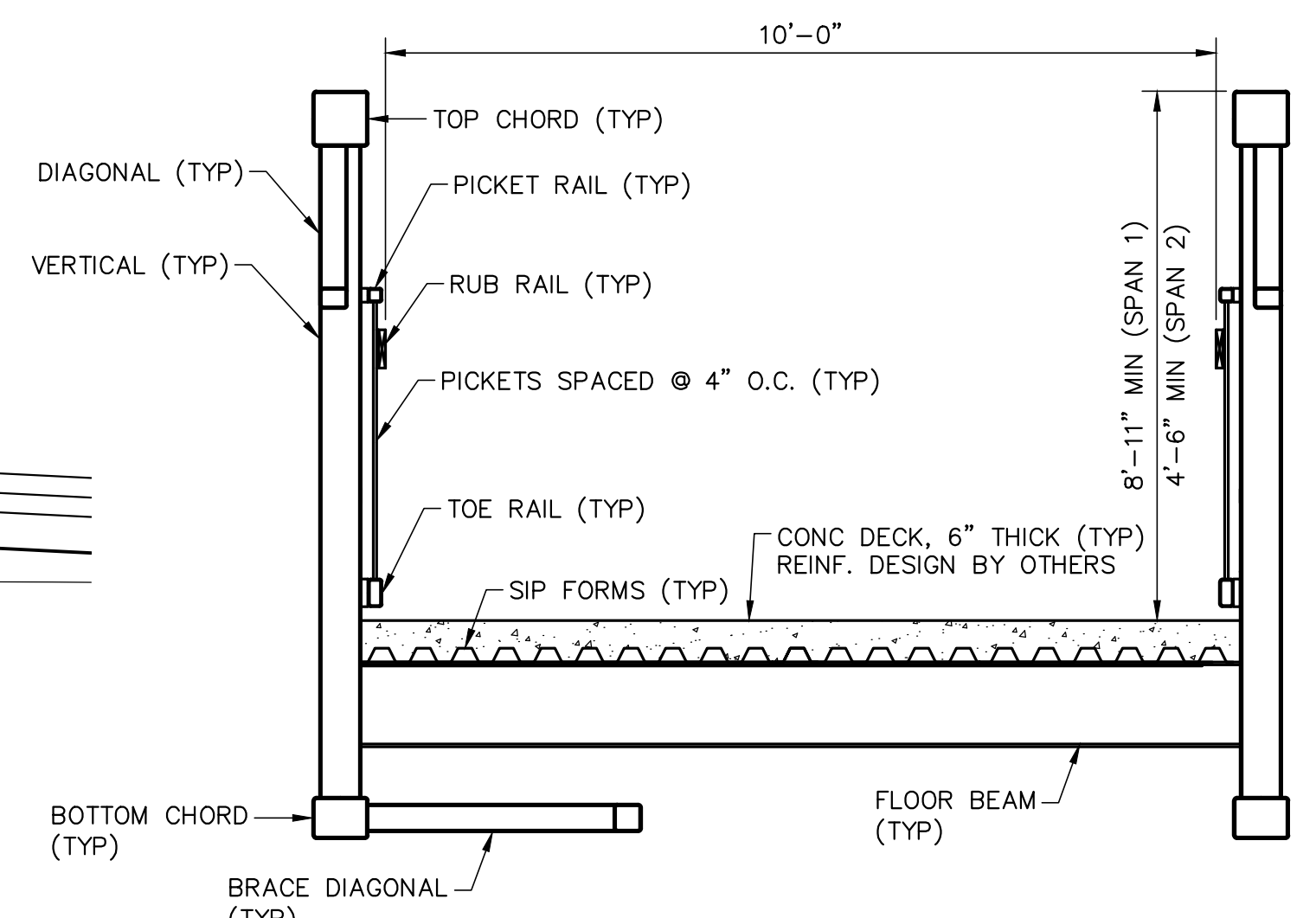
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 1-FREEHOLD\15830\001 - GPE\FREEHOLD\DWG - General Plan & Elevation
 01\ENR\158001\15830 - HENRY HUDSON TRAIL EXTENSION\15830\001 SAFETY IMPROVEMENTS\CADD\DWG\BID PACKAGE #1



PLAN
SCALE: 1"=10'



EAST ELEVATION
(LOOKING WEST; SAFETY RAILS NOT SHOWN FOR CLARITY)
SCALE: 1"=10'



TYPICAL BRIDGE SECTION
SCALE: 1/2"=1'-0"

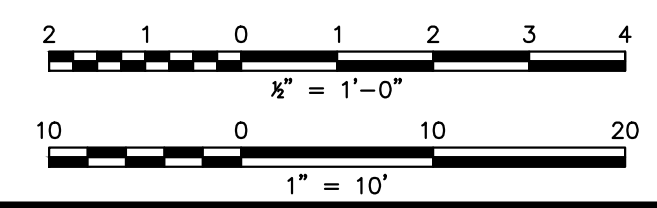
GENERAL NOTES:

- DESIGN SPECIFICATIONS:**
AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS - NINTH EDITION, 2020 & SUBSEQUENT INTERIMS, AS MODIFIED BY SECTION 3 OF THE NJDOT DESIGN MANUAL FOR BRIDGES AND STRUCTURES. - SIXTH EDITION, 2016.
AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES - SECOND EDITION, 2009 & SUBSEQUENT INTERIMS.
- CONSTRUCTION SPECIFICATIONS:**
2019 NJDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH CURRENT SUPPLEMENTAL SPECIFICATIONS, AS MODIFIED BY THE SPECIAL PROVISIONS FOR THIS CONTRACT.
- LIVE LOADING:**
PEDESTRIAN LOAD: 90 PSF
MAINTENANCE VEHICLE: H-10 TRUCK LOADING
- LIVE LOAD DEFLECTION:**
MAX 1/360 X SPAN LENGTH
- CONCRETE DESIGN STRESSES:**
 - DESIGN COMPRESSIVE STRENGTH (F'C)**
CLASS A.....4,000 PSI
CLASS B.....3,000 PSI
 - CLASS DESIGN STRENGTHS**
CLASS A.....4,600 PSI
CLASS B.....3,700 PSI

CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" BY 3/4", UNLESS NOTED OTHERWISE.
CONCRETE PROVIDED FOR FOOTING, ABUTMENTS, WINGWALLS AND PIER SHALL BE CLASS B.
ALL OTHER CONCRETE ITEMS SHALL BE CLASS A.

- REINFORCEMENT STEEL:**
 - ALL REINFORCEMENT STEEL FOR CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE ASTM A615 "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT" AND SHALL BE GRADE 60 (Fy = 60 KSI) UNLESS OTHERWISE NOTED.
 - ALL REINFORCEMENT STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A767 (CLASS 1) "STANDARD SPECIFICATIONS FOR ZINC-COATED (GALVANIZED) STEEL BARS FOR CONCRETE REINFORCEMENT". FABRICATE BENDS AND DETAILS BEFORE GALVANIZING.
 - ANY DAMAGE DONE TO THE GALVANIZING DURING PLACEMENT SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780 "STANDARD PRACTICE FOR REPAIR OF DAMAGED AND UNCOATED AREAS OF HOT-DIP GALVANIZED COATINGS" PRIOR TO CONCRETE PLACEMENT. ALL COSTS FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PAY ITEM "REINFORCEMENT STEEL, GALVANIZED".
 - DEVELOPMENT LENGTH AND SPLICES FOR REINFORCEMENT SHALL BE PROVIDED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 5.10.8, UNLESS OTHERWISE NOTED.
- PREFABRICATED PEDESTRIAN BRIDGE SUPERSTRUCTURE (DESIGNED BY CONTRACTOR):**
PREFABRICATED PEDESTRIAN TRUSS SHALL BE MANUFACTURED BY CONTECH ENGINEERED SOLUTIONS, PIONEER BRIDGES, EXCEL BRIDGE MANUFACTURING COMPANY, OR APPROVED EQUAL.
STEEL TRUSS SHALL BE UNPAINTED WEATHERING STEEL.
NO CABLES OR WIRE ROPES MAY BE USED AS PART OF THE BRIDGE SYSTEM.
RUB RAIL AND SAFETY RAIL SHALL MEET ALL APPLICABLE SECTIONS OF THE AASHTO BRIDGE DESIGN SPECIFICATION FOR PEDESTRIAN AND BICYCLE RAILING, INCLUDING LOADING AND GEOMETRIC REQUIREMENTS.
THE FOLLOWING SHALL BE PAID FOR UNDER THE "STEEL PEDESTRIAN BRIDGE (200'-0" X 10'-0") PAY ITEM: TRUSSES, FLOOR BEAMS, RAILINGS, TOE PLATE, AND RUB RAIL, LABOR, TRANSPORTATION, AND INSTALLATION.

- BORINGS:**
INDICATES LOCATION OF BORINGS
- DATUM:**
VERTICAL DATUM IS NAVD88
HORIZONTAL DATUM IS NAD83
TO CONVERT VERTICAL DATUM FROM NGVD 1929 TO NAVD 1988, SUBTRACT 1.266'.
- FOUNDATION DESIGN CRITERIA:**
 - NOMINAL BEARING RESISTANCE (qn).....26,900 PSF
 - SERVICE LIMIT STATE BEARING RESISTANCE (qser).....4,000 PSF
 - UNIT WEIGHT OF SOIL (γs).....125 PCF
 - SUBMERGED UNIT WEIGHT (γsub).....65 PCF
 - ANGLE OF INTERNAL FRICTION (φ).....32'
- SEISMIC LOAD**
 - PEAK GROUND ACCELERATION (PGA)0.08g
 - SHORT PERIOD SPECTRAL ACCELERATION (Ss).....0.150g
 - SPECTRAL ACCELERATION @ 1 SECOND (S1).....0.034g
 - SITE CLASS.....D



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SARAH STEIB, PE
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GENERAL PLAN & ELEVATION
**HENRY HUDSON TRAIL EXTENSION
AND PEDESTRIAN SAFETY IMPROVEMENTS
BID PACKAGE #1**
FOR THE MONMOUTH COUNTY PARKS SYSTEM
PS#103-19

IN THE BOROUGH OF FREEHOLD
MONMOUTH COUNTY, NEW JERSEY

DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 28 of 34

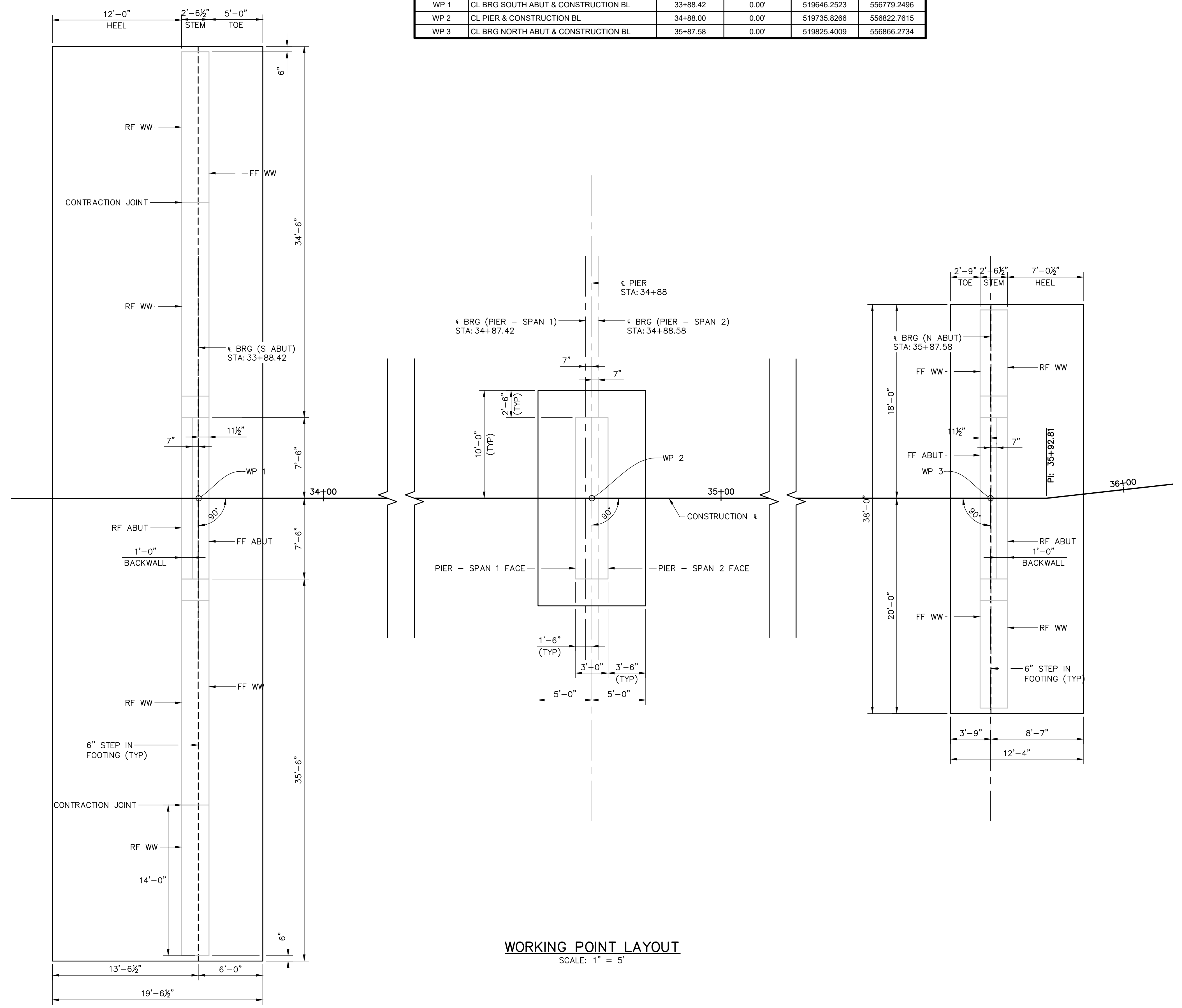
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PLOTTER BY: SARAH RICK

No.	Date	Revision
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2	3/20/23	PER NUIDEP COMMENTS
1	9/20/22	PER NUIDEP COMMENTS

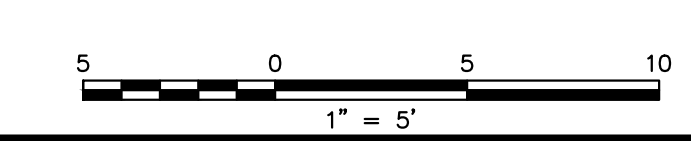
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WORKING POINT TABLE

WP #	DESCRIPTION	STATION	OFFSET	NORTHING	EASTING
WP 1	CL BRG SOUTH ABUT & CONSTRUCTION BL	33+88.42	0.00'	519646.2523	556779.2496
WP 2	CL PIER & CONSTRUCTION BL	34+88.00	0.00'	519735.8266	556822.7615
WP 3	CL BRG NORTH ABUT & CONSTRUCTION BL	35+87.58	0.00'	519825.4009	556866.2734



WORKING POINT LAYOUT
SCALE: 1" = 5'



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FOUNDATION PLAN & WORKING POINTS
**HENRY HUDSON TRAIL EXTENSION
AND PEDESTRIAN SAFETY IMPROVEMENTS
BID PACKAGE #1**
FOR THE MONMOUTH COUNTY PARKS SYSTEM
PS#103-19

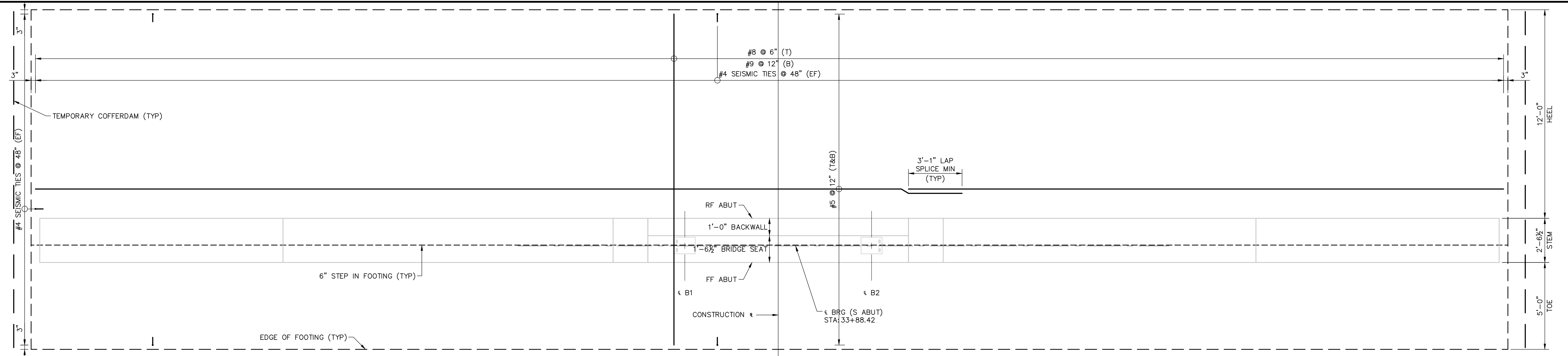
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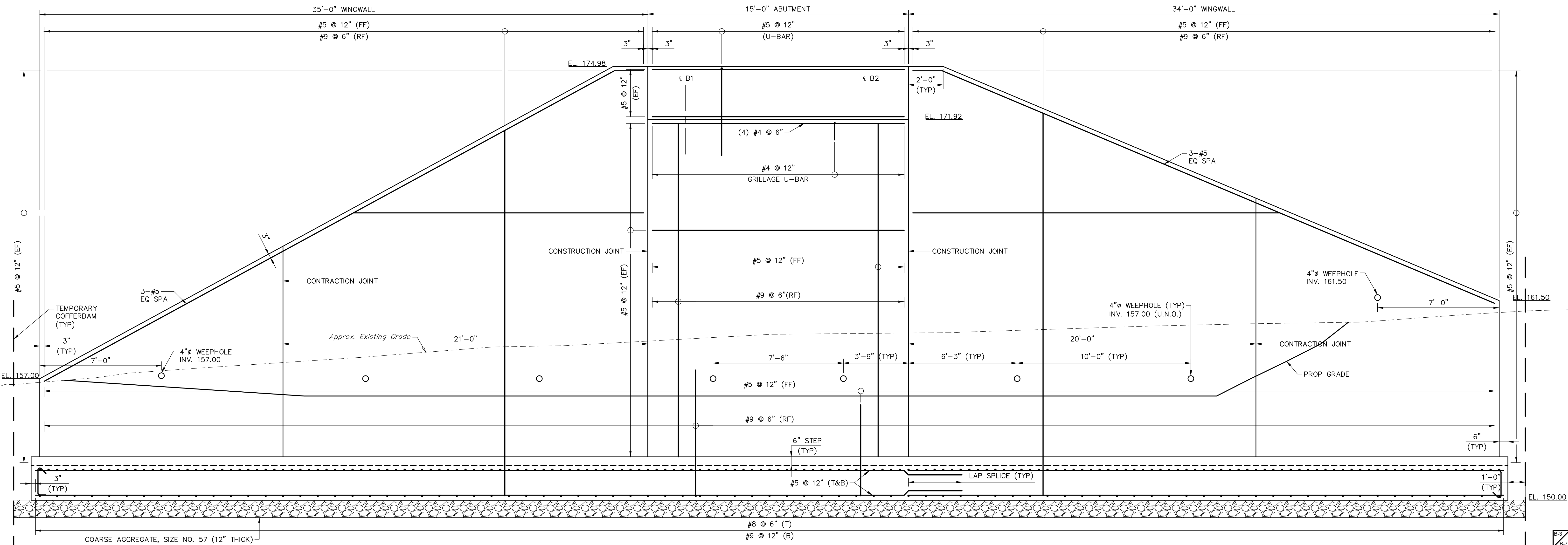
No.	Date	Revised By	Checked By
3	3/27/2023	SFI	MJD
2	3/20/23	SFI	MJD
1	8/20/22	SFI	MJD

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PLOTTED BY: SARAH RICK

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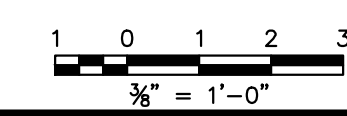
FOOTING PLAN
SCALE: 3/8" = 1'-0"



ELEVATION
(LOOKING SOUTH)
SCALE: 3/8" = 1'-0"

NOTES:

1. PLACE GRILLAGE REINFORCEMENT TO CLEAR ANCHOR BOLTS.
2. CENTERLINE OF BEARING LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED WITH MANUFACTURER'S DESIGN AND SPECIFICATIONS.
3. CHAIN-LINK FENCE SHALL BE STRUCTURALLY MOUNTED TO THE TOP OF THE WINGWALLS. SEE NJDOT BCD-506-2 FOR DETAIL.



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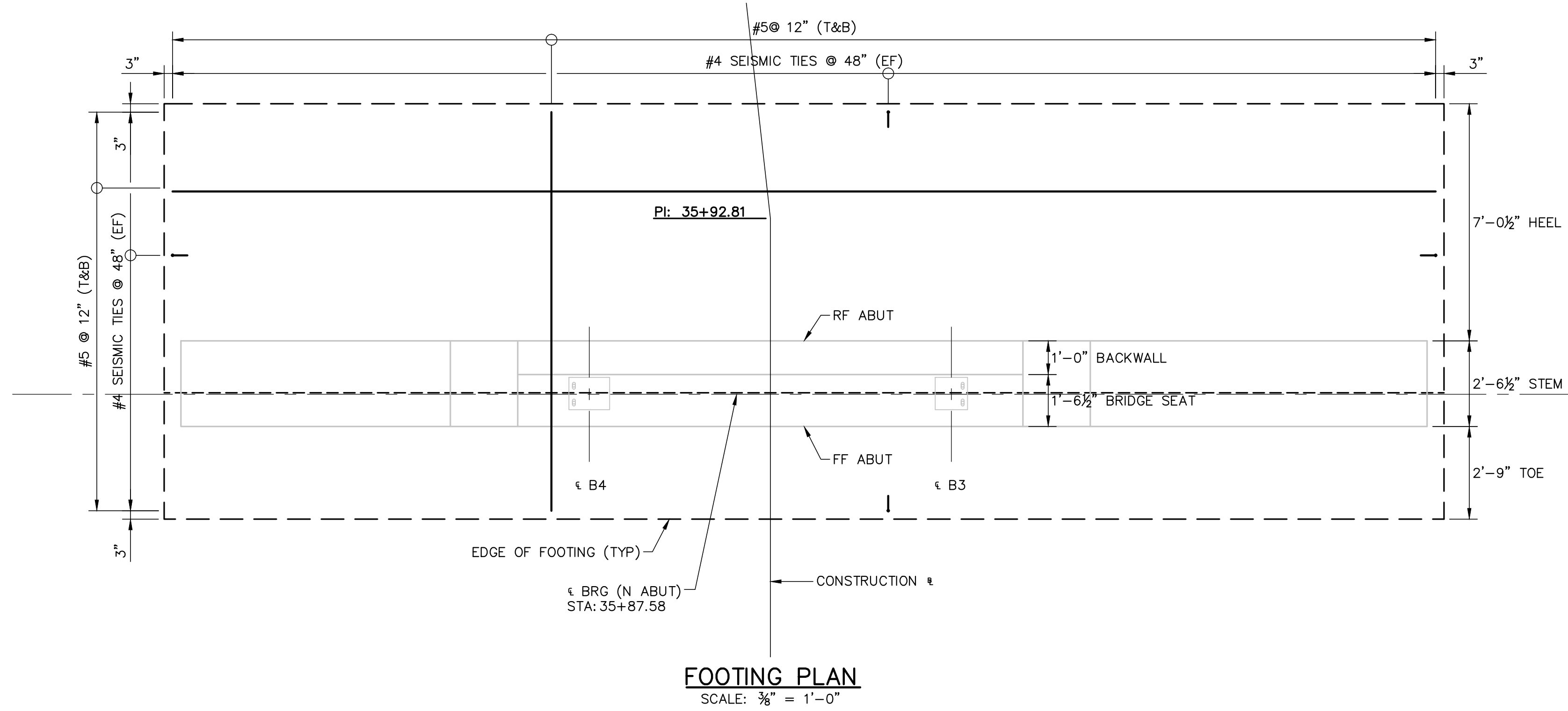
SARAH STEIBE, PE
PROFESSIONAL ENGINEER, NJ LIC. No. 50128

SOUTH ABUTMENT PLAN & ELEVATION			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY			
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830 002
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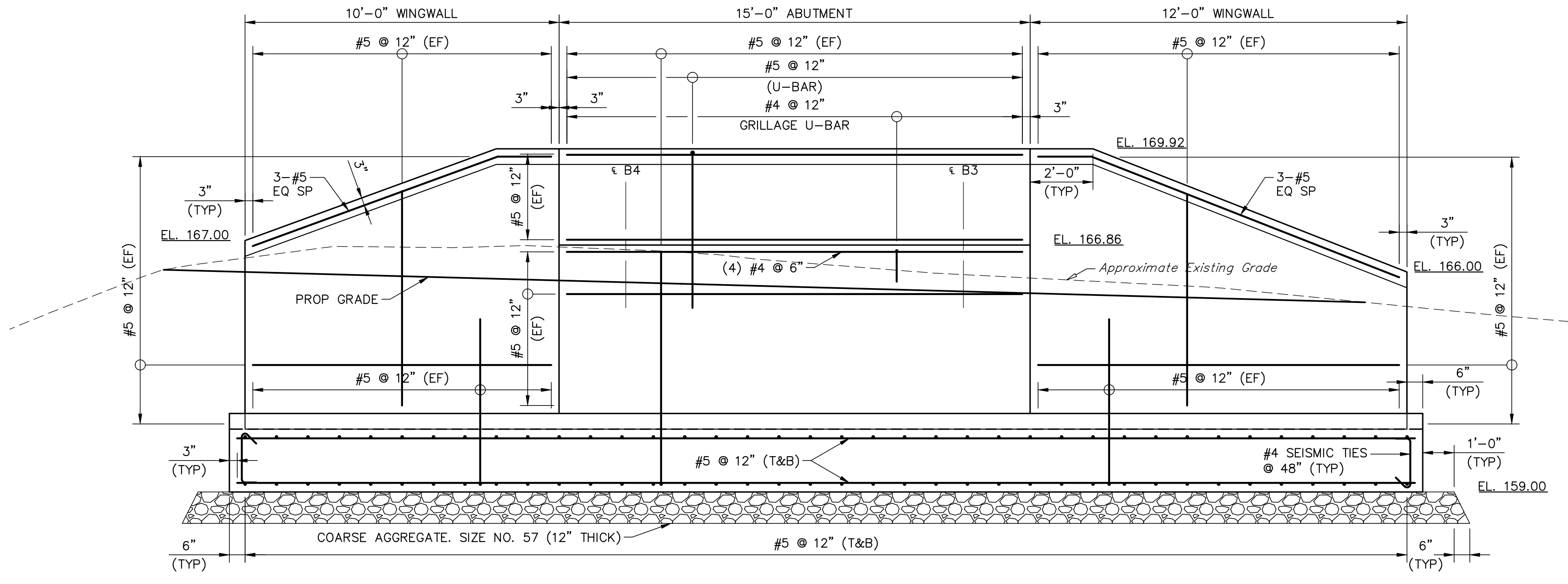
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PER NUMBER PERMIT CONDITIONS	Revision
PER NUMBER COMMENTS	
PER NUMBER COMMENTS	

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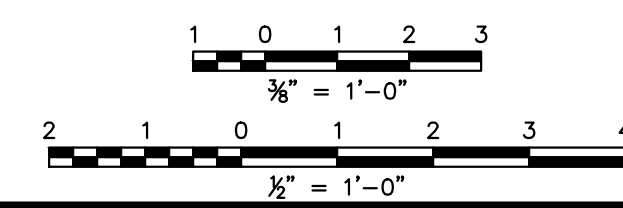
FOOTING PLAN
SCALE: 3/8" = 1'-0"



ELEVATION
(LOOKING NORTH)
SCALE: 3/8" = 1'-0"

NOTES:

- PLACE GRILLAGE REINFORCEMENT TO CLEAR ANCHOR BOLTS.
- CENTERLINE OF BEARING LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED WITH MANUFACTURER'S DESIGN AND SPECIFICATIONS.
- ABUTMENT SEATS SHALL BE SLOPED 5% BETWEEN THE LEVEL BEARING SEAT AREAS.
- TOP OF BACKWALL SHALL BE SLOPED TO MATCH THE GRADE TRANSITION BETWEEN THE PEDESTRIAN PATH AND BRIDGE DECK.
- THE CONTRACTOR'S ENGINEER SHALL DESIGN THE ANCHOR BOLT DIAMETER AND EMBEDMENT LENGTH FOR WIND IN ACCORDANCE WITH THE MANUFACTURER OF THE PREFABRICATED STEEL PEDESTRIAN BRIDGE. EITHER SWEDGED OR THREADED ANCHOR BOLTS SHALL BE USED. ANCHOR BOLTS SHALL BE DESIGNED ACCORDING TO AASHTO AND BE A MINIMUM OF 2 BOLTS; 1" DIAMETER; AND SET 12" IN THE MASONRY AT EACH BEARING.
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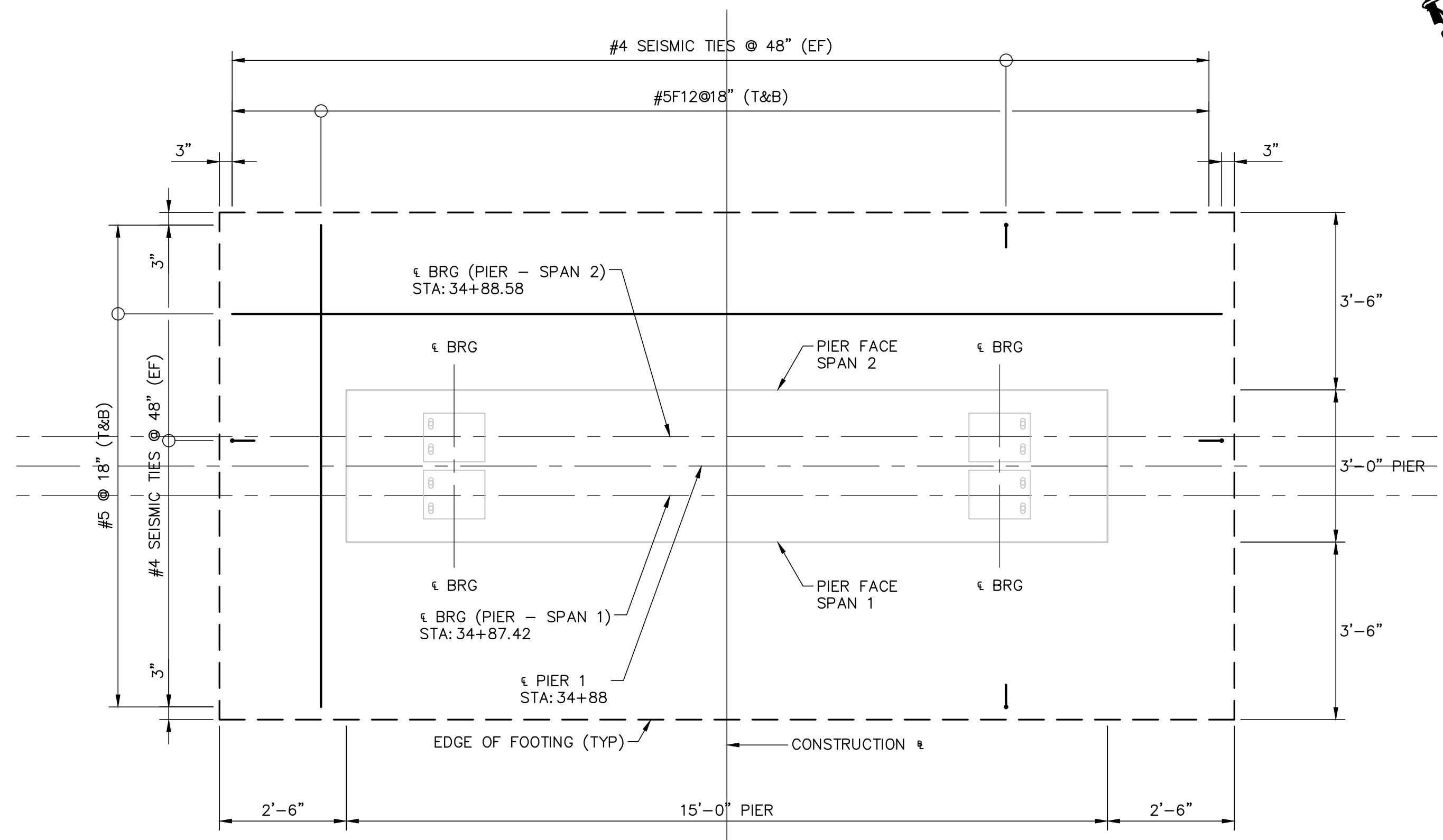
SARAH STEIB, PE
PROFESSIONAL ENGINEER, NJ LIC. No. 50128

NORTH ABUTMENT PLAN & ELEVATION			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
FOR THE MONMOUTH COUNTY PARKS SYSTEM PS#103-19			
IN THE BOROUGH OF FREEHOLD MONMOUTH COUNTY, NEW JERSEY			
DATE: MARCH 2023	DESIGNED BY: SFI/MW	DRAWN BY: SFI	PROJECT NUMBER: 15830.002
SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 31 of 34

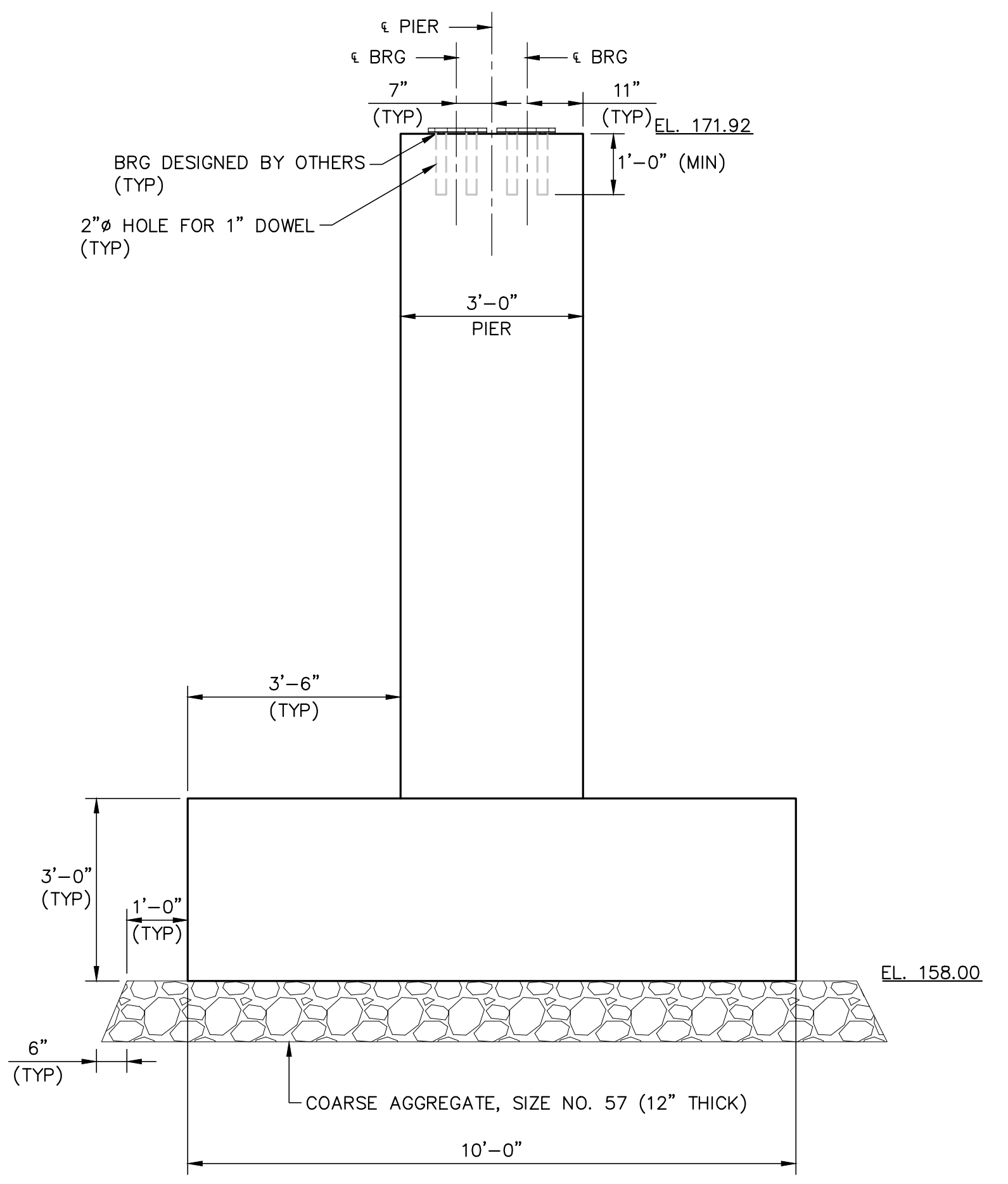
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2	3/23/23	PER USER COMMENTS	SFI	Revised By
1	8/20/22	PER USER COMMENTS	SFI	Revised By
No.	Date	Revision		

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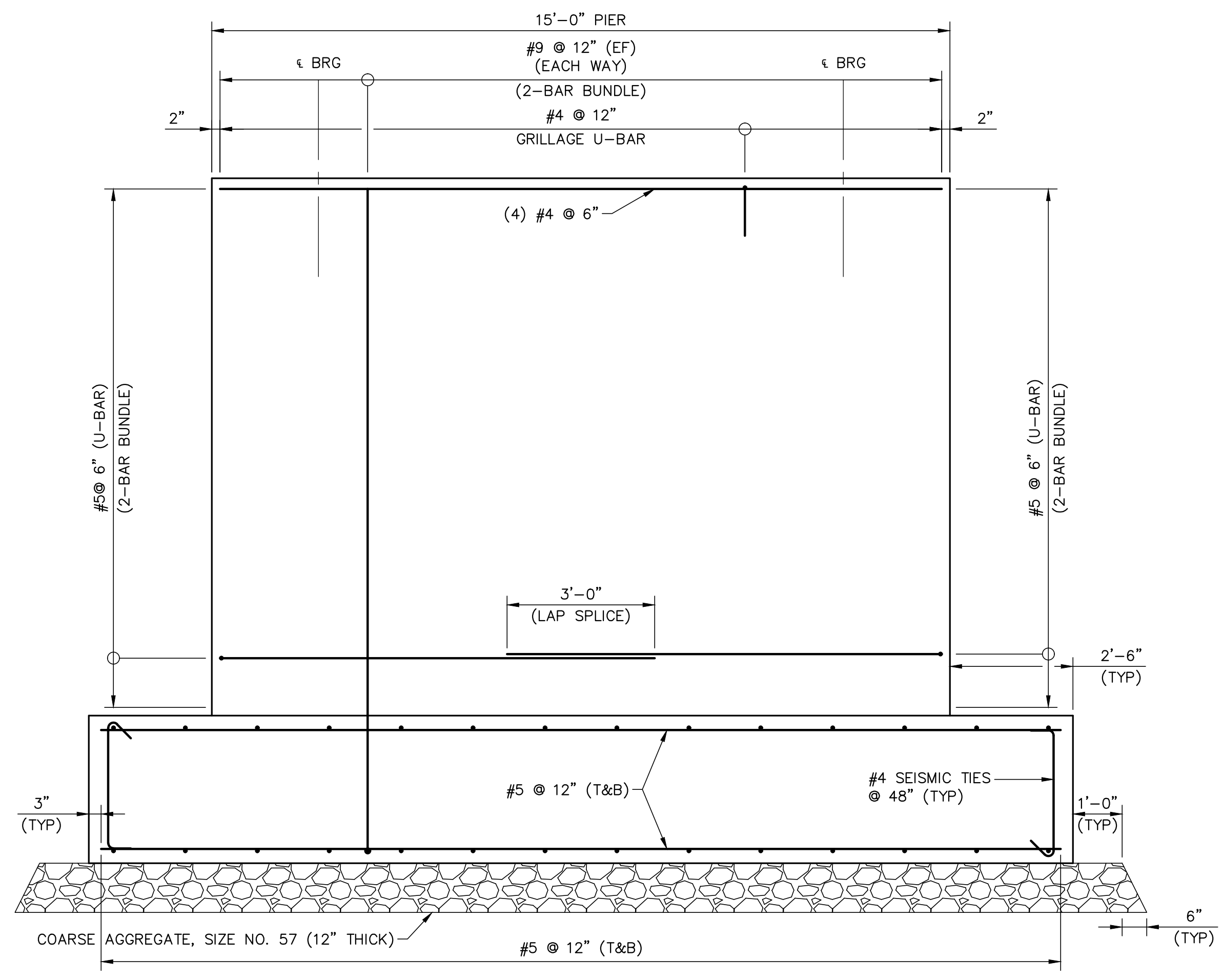
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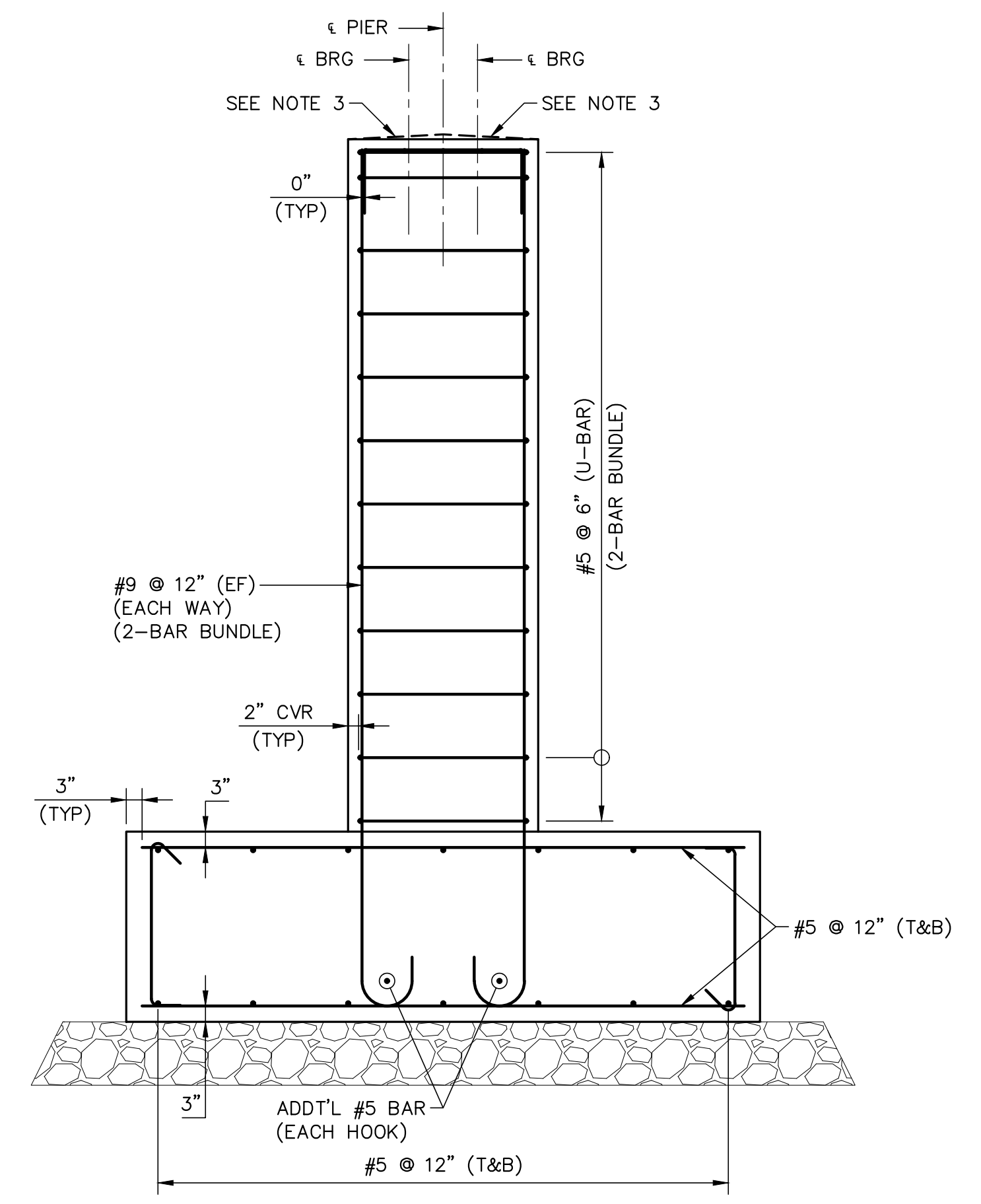
FOOTING PLAN
SCALE: 1/2" = 1'-0"



TYPICAL PIER SECTION
SCALE: 1/2" = 1'-0"



ELEVATION
(LOOKING NORTH)
SCALE: 1/2" = 1'-0"



TYPICAL PIER REINFORCEMENT
SCALE: 1/2" = 1'-0"

NOTES:

1. PLACE GRILLAGE REINFORCEMENT TO CLEAR ANCHOR BOLTS.
2. CENTERLINE OF BEARING LOCATIONS ARE APPROXIMATE, SHOWN AS MIDPOINT BETWEEN ANCHOR BOLTS, AND SHALL BE CONFIRMED WITH MANUFACTURER'S DESIGN AND SPECIFICATION.
3. PIER WALL SHALL BE SLOPED 5% BETWEEN THE LEVEL BEARING SEAT AREAS.
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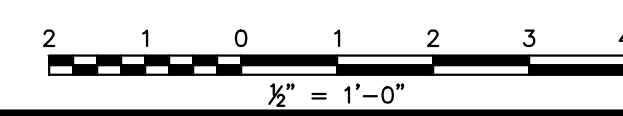
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PIER PLAN & ELEVATION
**HENRY HUDSON TRAIL EXTENSION
AND PEDESTRIAN SAFETY IMPROVEMENTS
BID PACKAGE #1**
FOR THE MONMOUTH COUNTY PARKS SYSTEM
PS#103-19

IN THE BOROUGH OF FREEHOLD
MONMOUTH COUNTY, NEW JERSEY

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SCALE: AS SHOWN	CHECKED BY: SS/GB	APPROVED BY: MJD	SHEET: 32 of 34

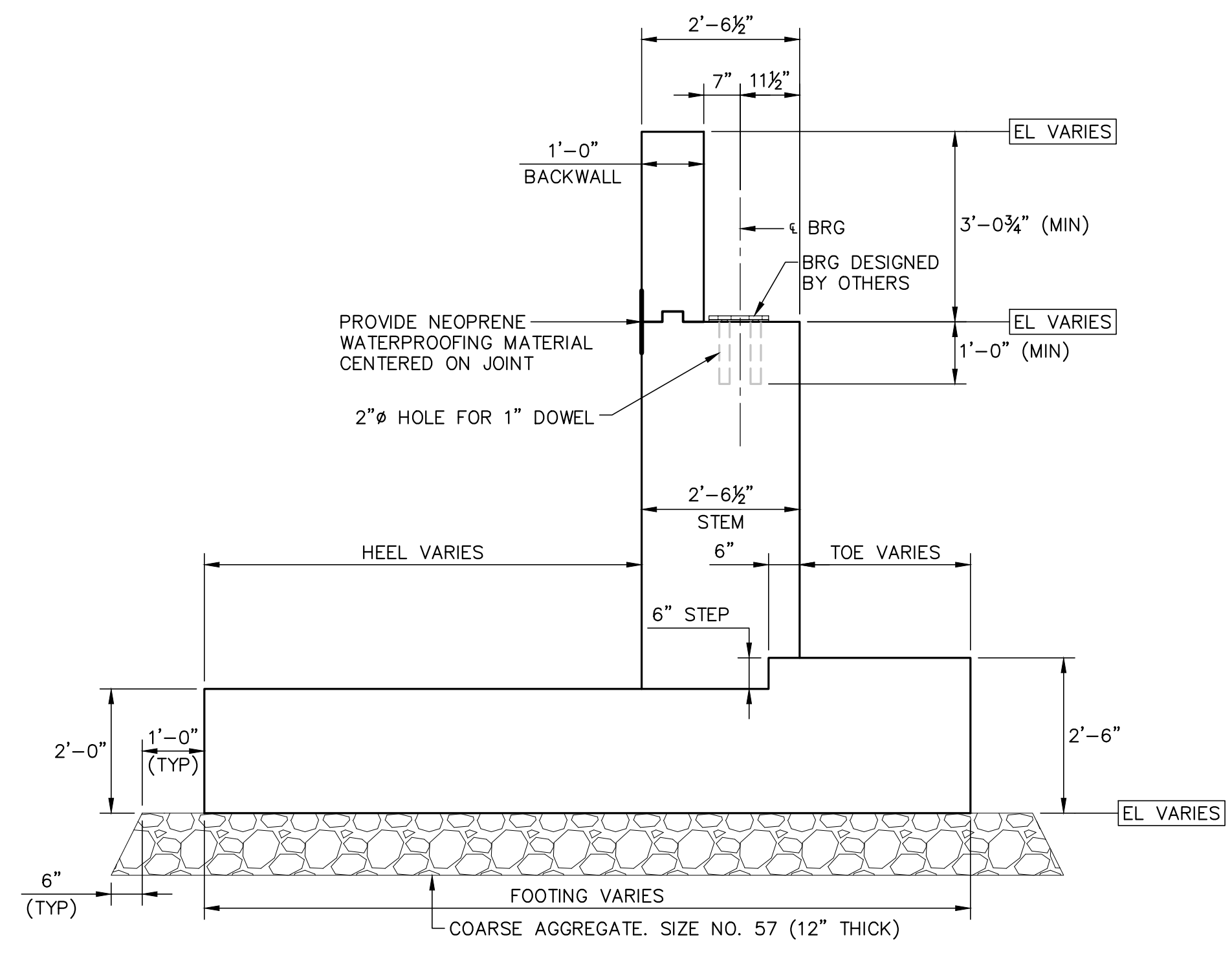
SARAH STEIB, PE
PROFESSIONAL ENGINEER, NJ LIC. No. 50128



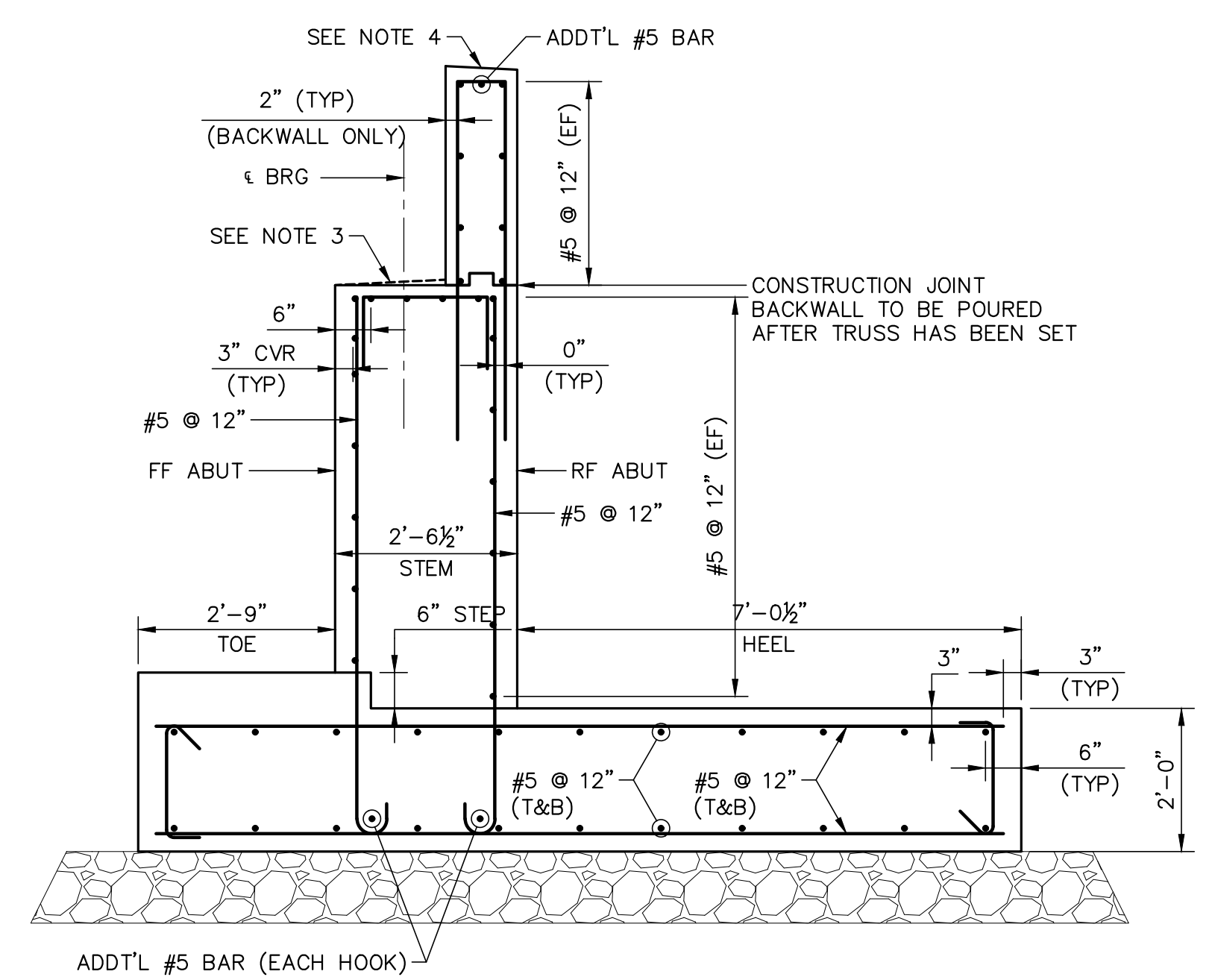
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No.	Date	Revision		

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PLOTTED BY: SARAH RICK

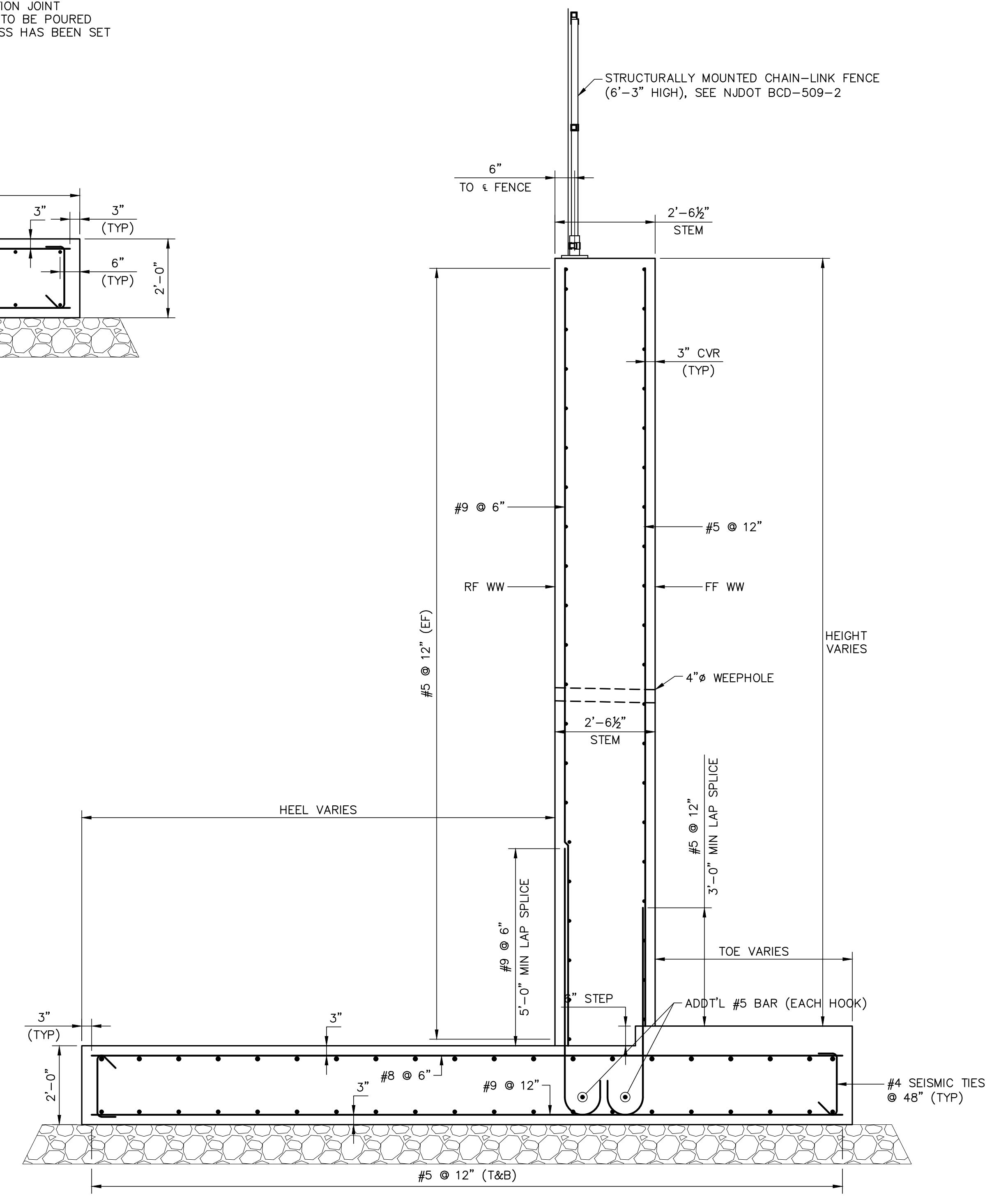
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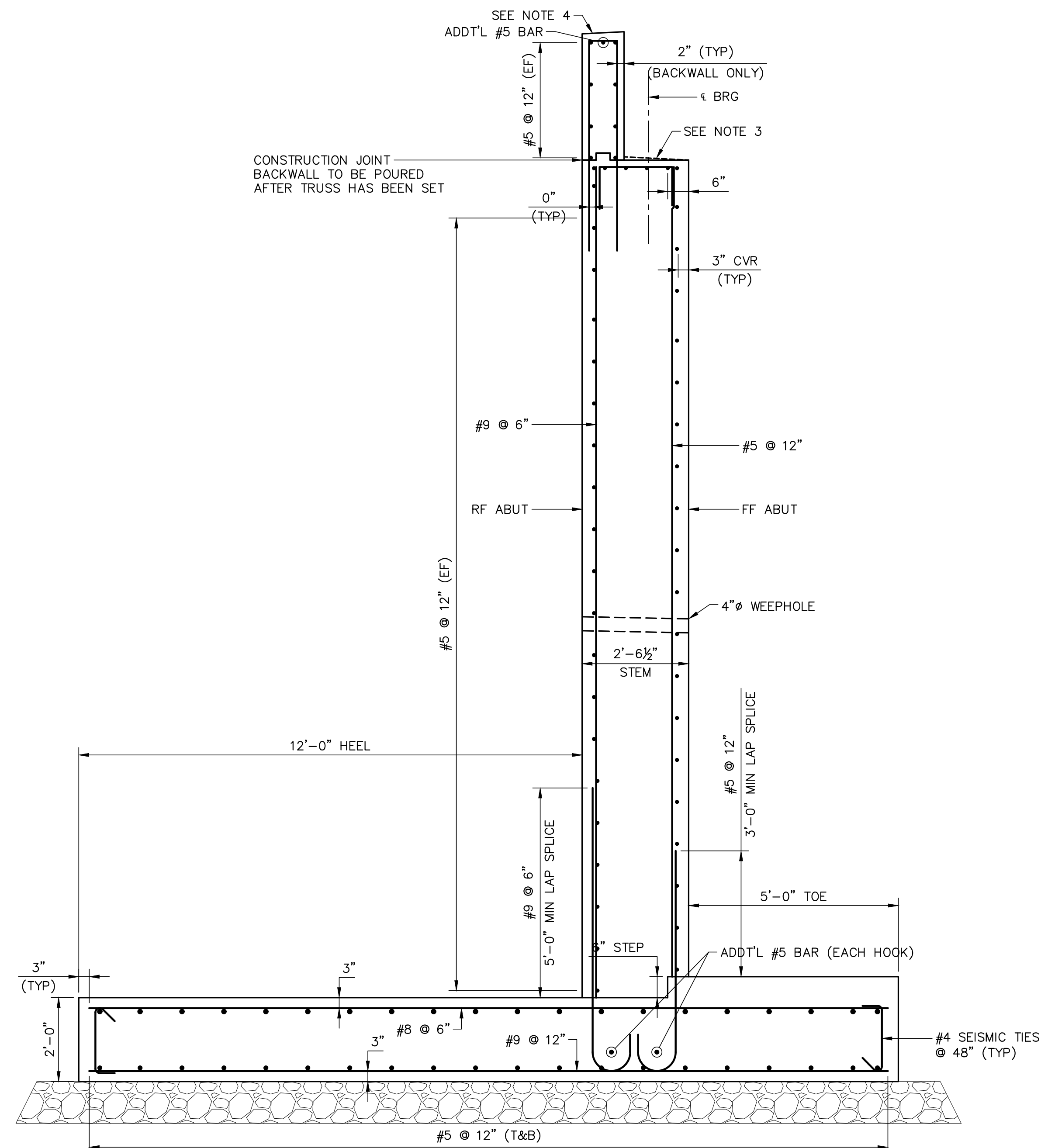
TYPICAL ABUTMENT SECTION
SCALE: 1/2" = 1'-0"



NORTH ABUTMENT REINFORCEMENT SECTION
SCALE: 1/2" = 1'-0"

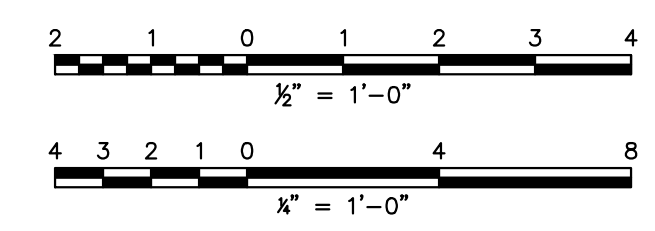


TYPICAL WINGWALL REINFORCEMENT
SCALE: 1/2" = 1'-0"



SOUTH ABUTMENT REINFORCEMENT SECTION
SCALE: 1/2" = 1'-0"

- NOTES:**
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 2. CENTERLINE OF BEARING LOCATIONS ARE APPROXIMATE, SHOWN AS MIDPOINT BETWEEN ANCHOR BOLTS, AND SHALL BE CONFIRMED WITH MANUFACTURER'S DESIGN AND SPECIFICATIONS.
 3. ABUTMENT SEATS SHALL BE SLOPED 5% BETWEEN THE LEVEL BEARING SEAT AREAS.
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 5. BRIDGE SEAT ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR PER THE DESIGN OF THE PREFABRICATED STEEL PEDESTRIAN BRIDGE AND BEARINGS BY OTHERS.
 6. ALL EXPOSED FACES OF ABUTMENTS AND WINGWALLS SHALL BE COATED WITH CONCRETE STAIN AT A MINIMUM OF ONE FOOT BELOW FINISHED GROUND LINES.



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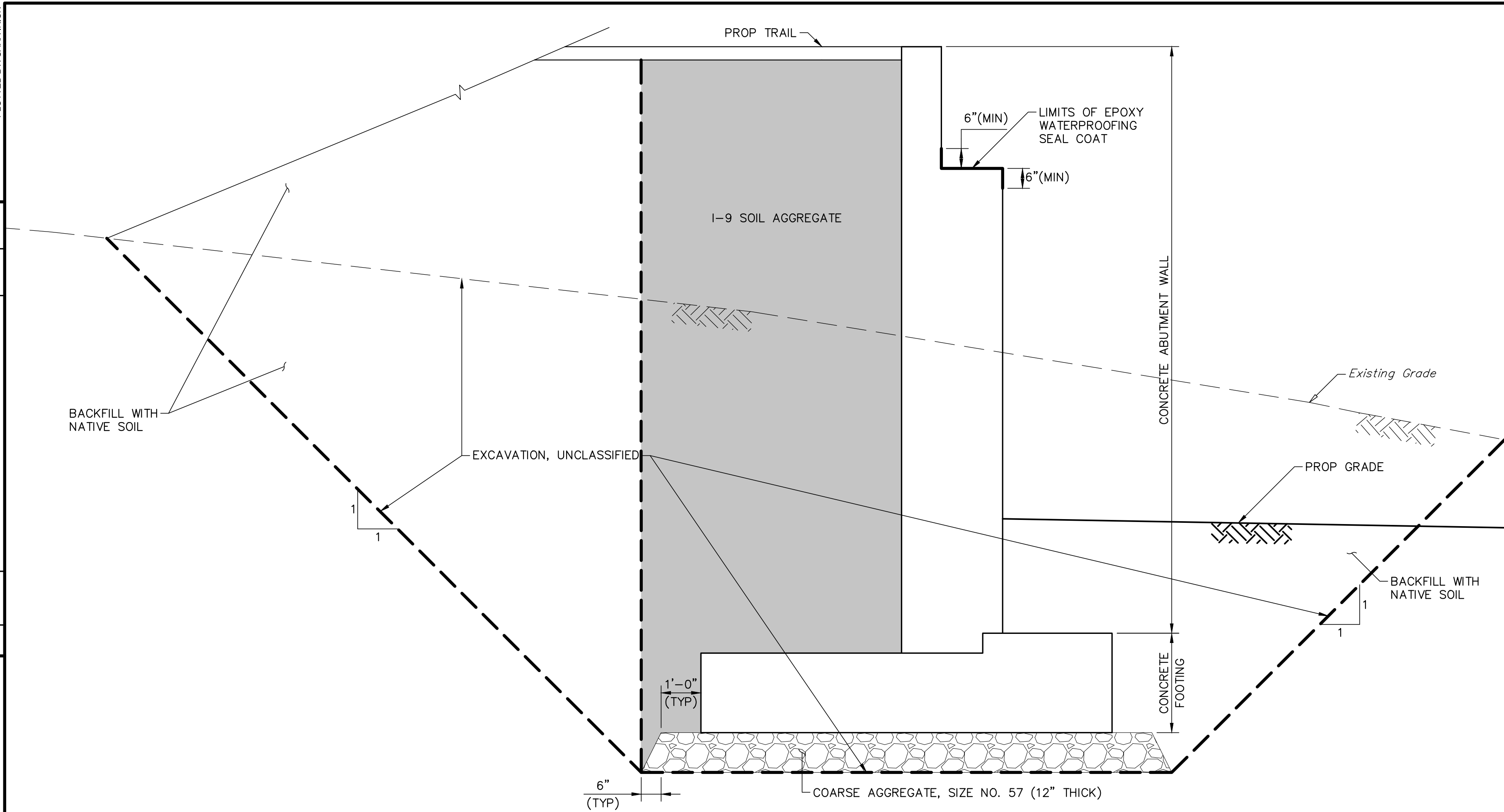
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ABUTMENT & WINGWALL SECTIONS			
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1			
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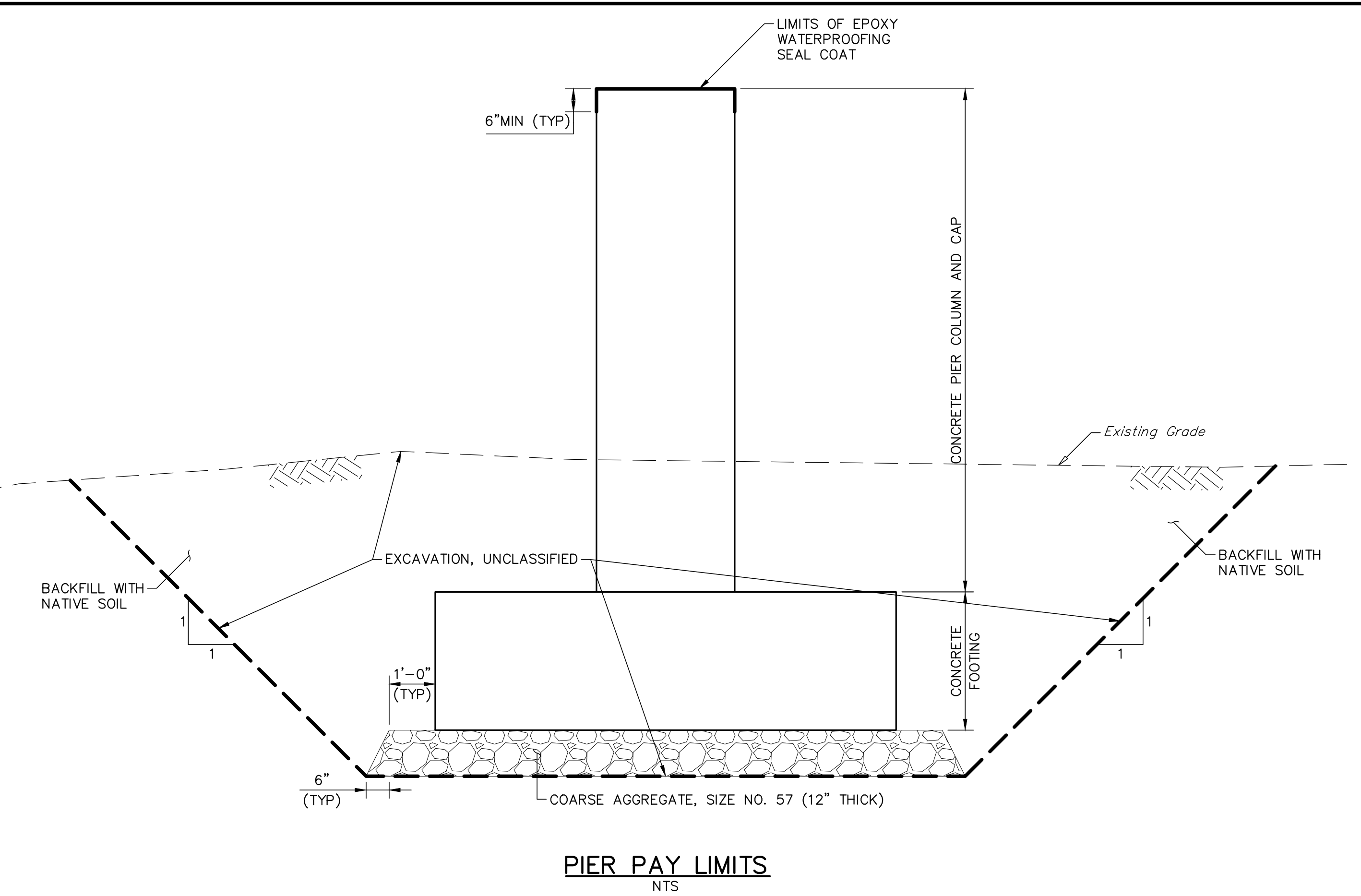
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2	3/28/23	SFI	MJD
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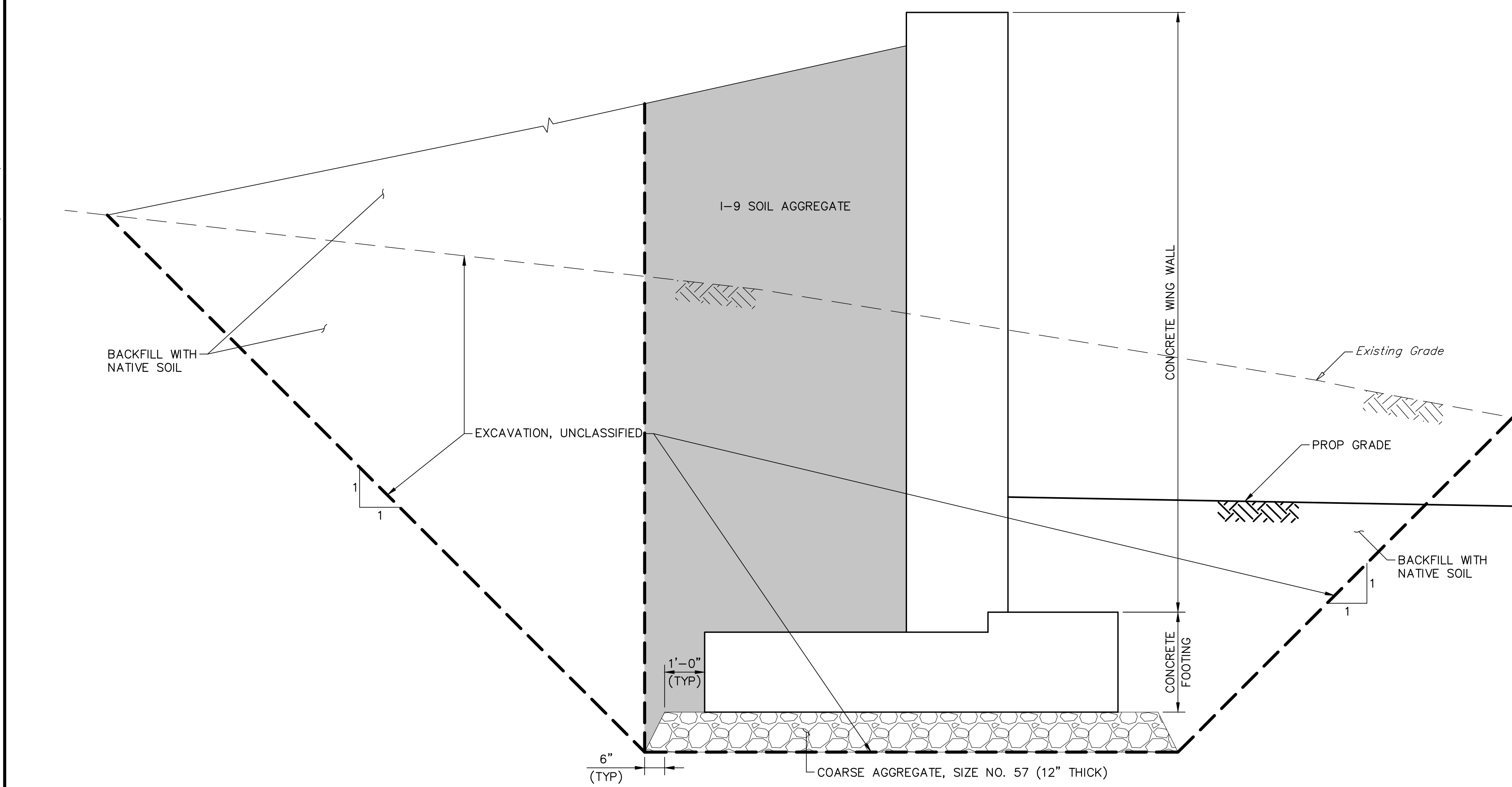
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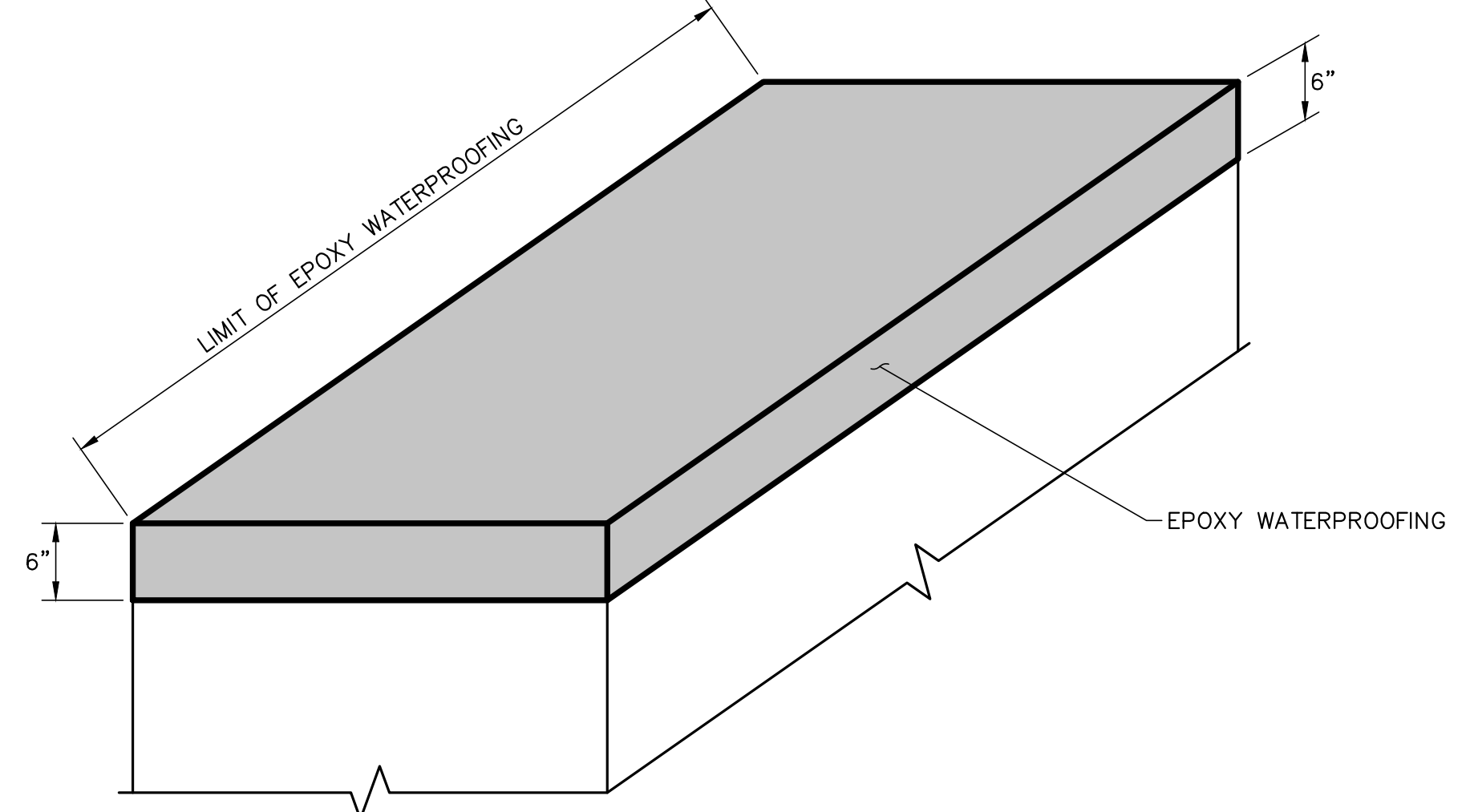
ABUTMENT PAY LIMITS
NTS



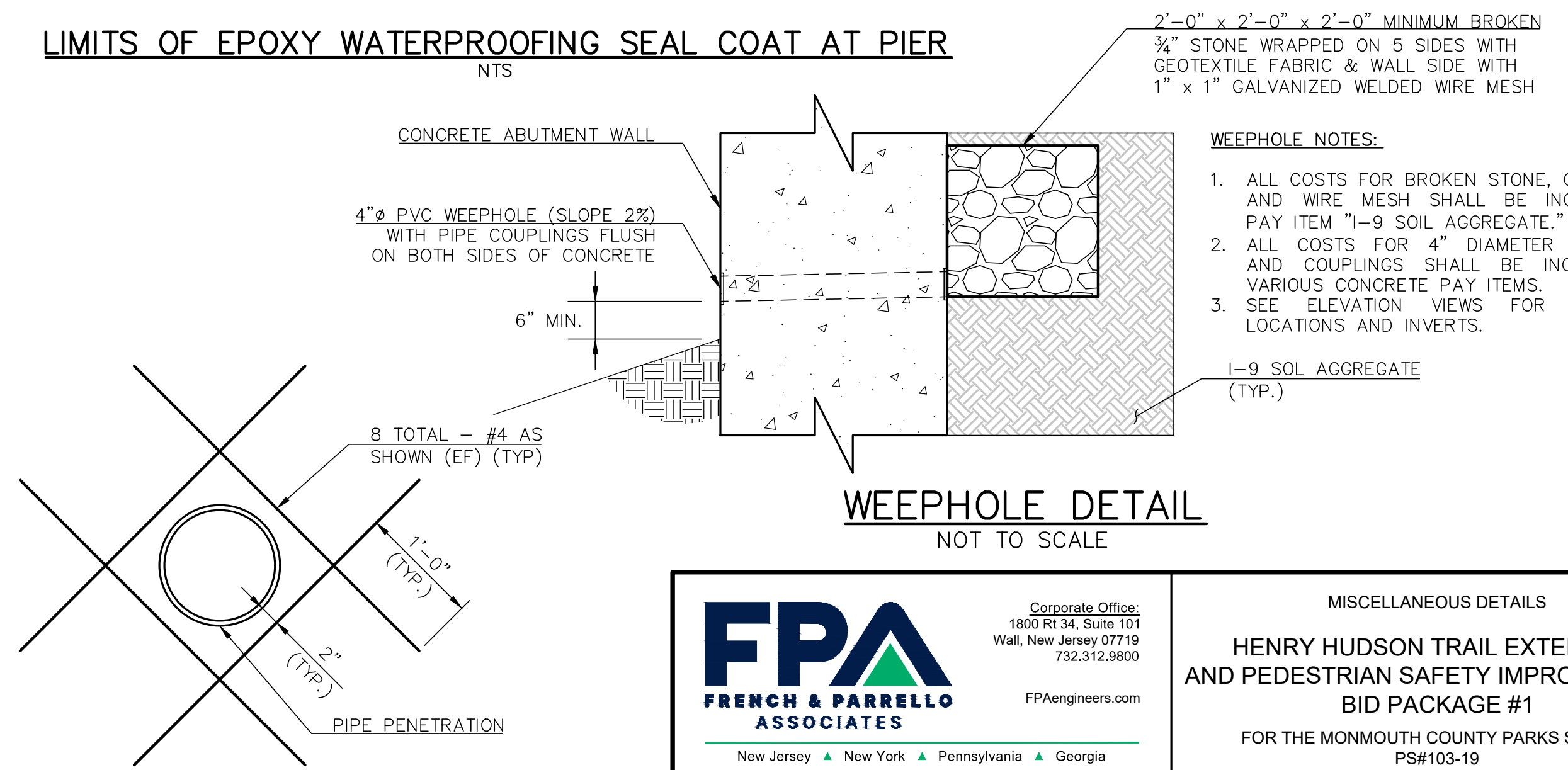
PIER PAY LIMITS
NTS



WINGWALL PAY LIMITS
NTS



LIMITS OF EPOXY WATERPROOFING SEAL COAT AT PIER
NTS



- WEEPHOLE NOTES:**
1. ALL COSTS FOR BROKEN STONE, GEOTEXTILE AND WIRE MESH SHALL BE INCLUDED IN PAY ITEM "I-9 SOIL AGGREGATE."
 2. ALL COSTS FOR 4" DIAMETER PVC PIPE AND COUPLINGS SHALL BE INCLUDED IN VARIOUS CONCRETE PAY ITEMS.
 3. SEE ELEVATION VIEWS FOR WEEPHOLE LOCATIONS AND INVERTS.

ADDITIONAL REINFORCEMENT STEEL AT WEEPHOLES
N.T.S.

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MISCELLANEOUS DETAILS

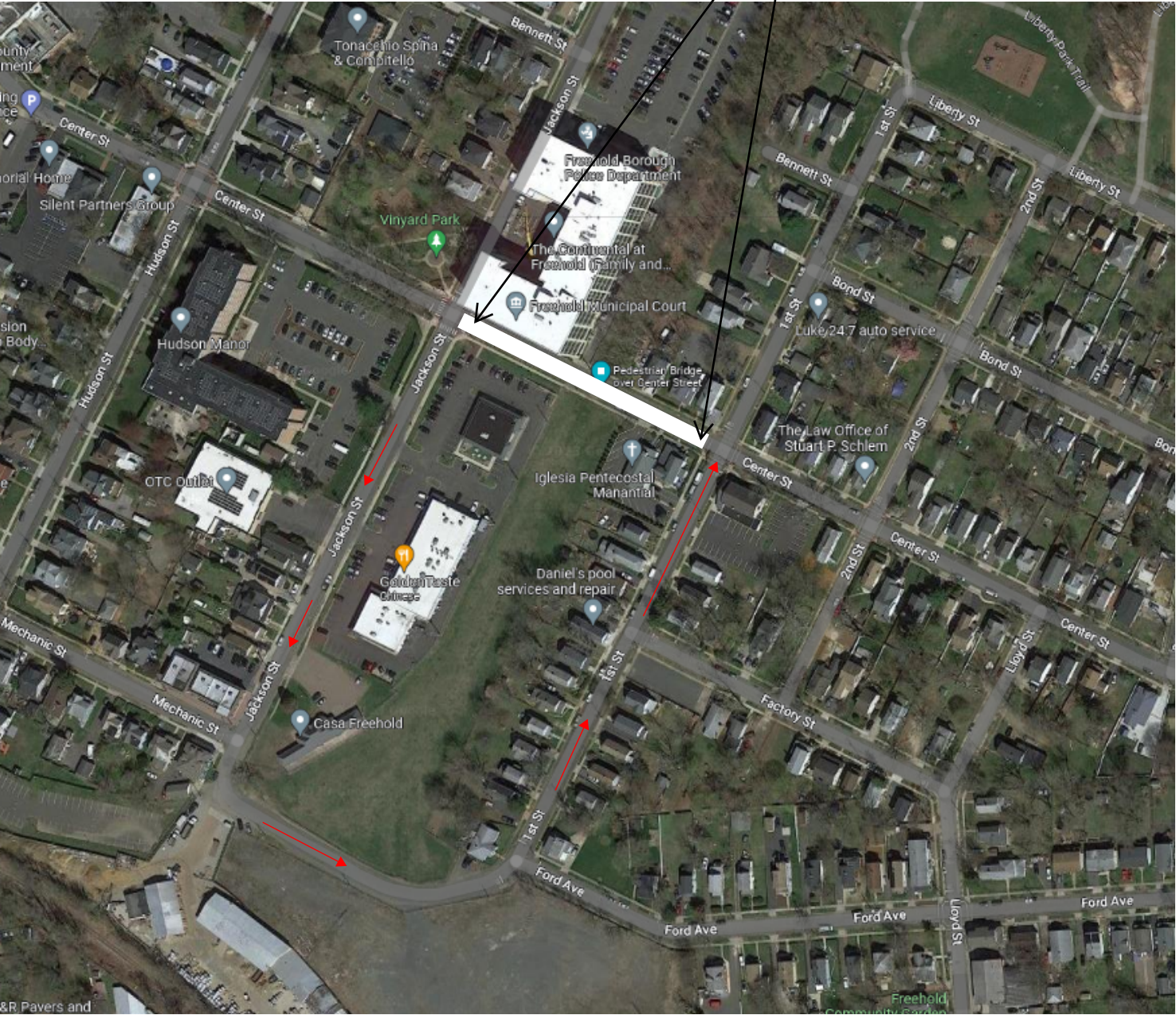
HENRY HUDSON TRAIL EXTENSION AND PEDESTRIAN SAFETY IMPROVEMENTS BID PACKAGE #1

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Road Closure - Center Street from Jackson Street to 1st Street



Detour Map

Henry Hudson Trail Extension
Bid Package #1
Borough of Freehold, Monmouth County, New Jersey