

REPLACEMENT OF BRIDGE NO. 07143 QUAKER FARM ROAD OVER HALEYS BROOK

QUAKER FARM ROAD GROTON, CONNECTICUT

CONTRACT NO. 26-08
CTDOT PROJECT NO. 9058-0015
SLR PROJECT NO. 141.11461.00018
AUGUST 21, 2025

LIST OF DRAWINGS

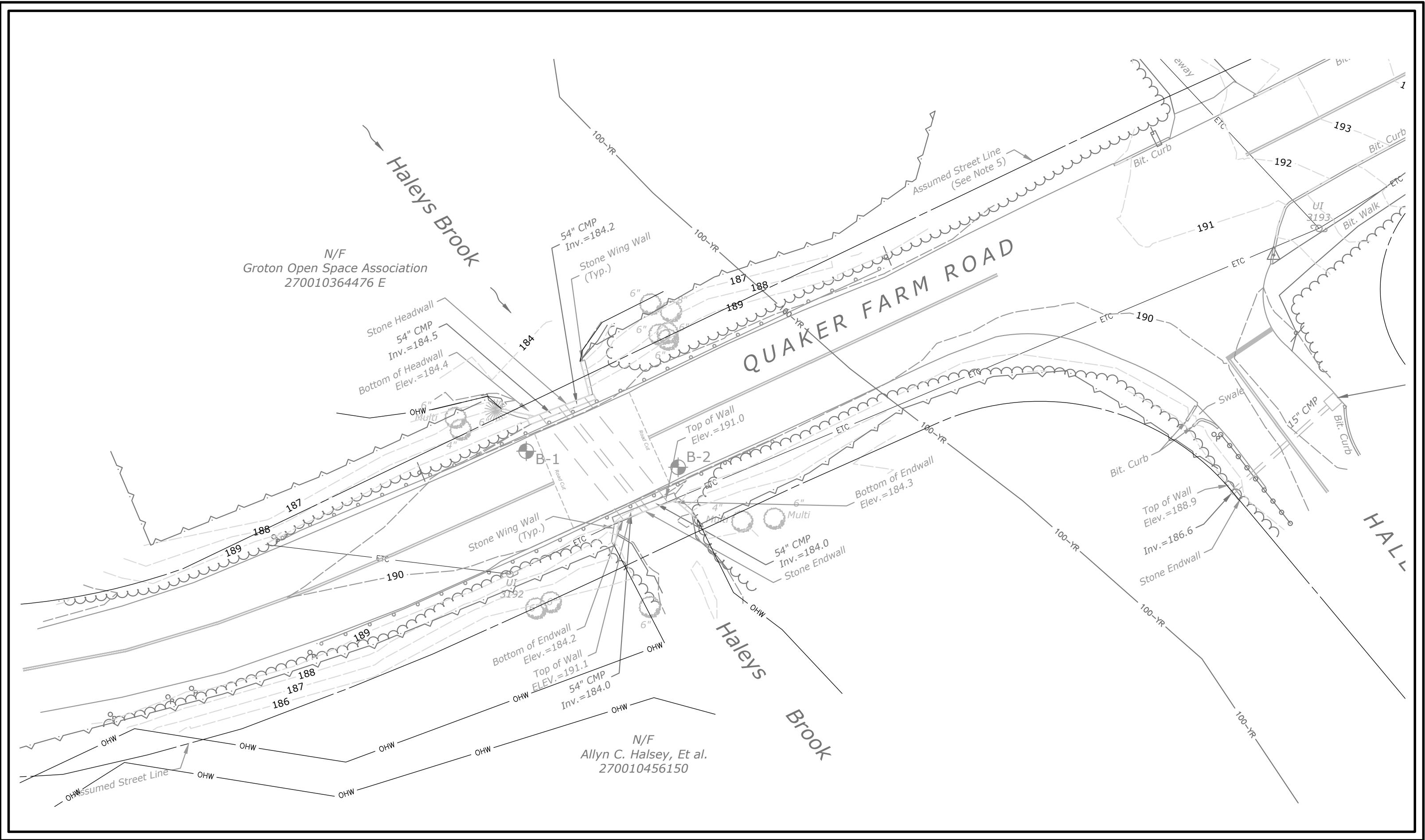
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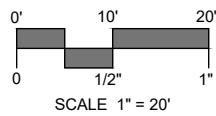
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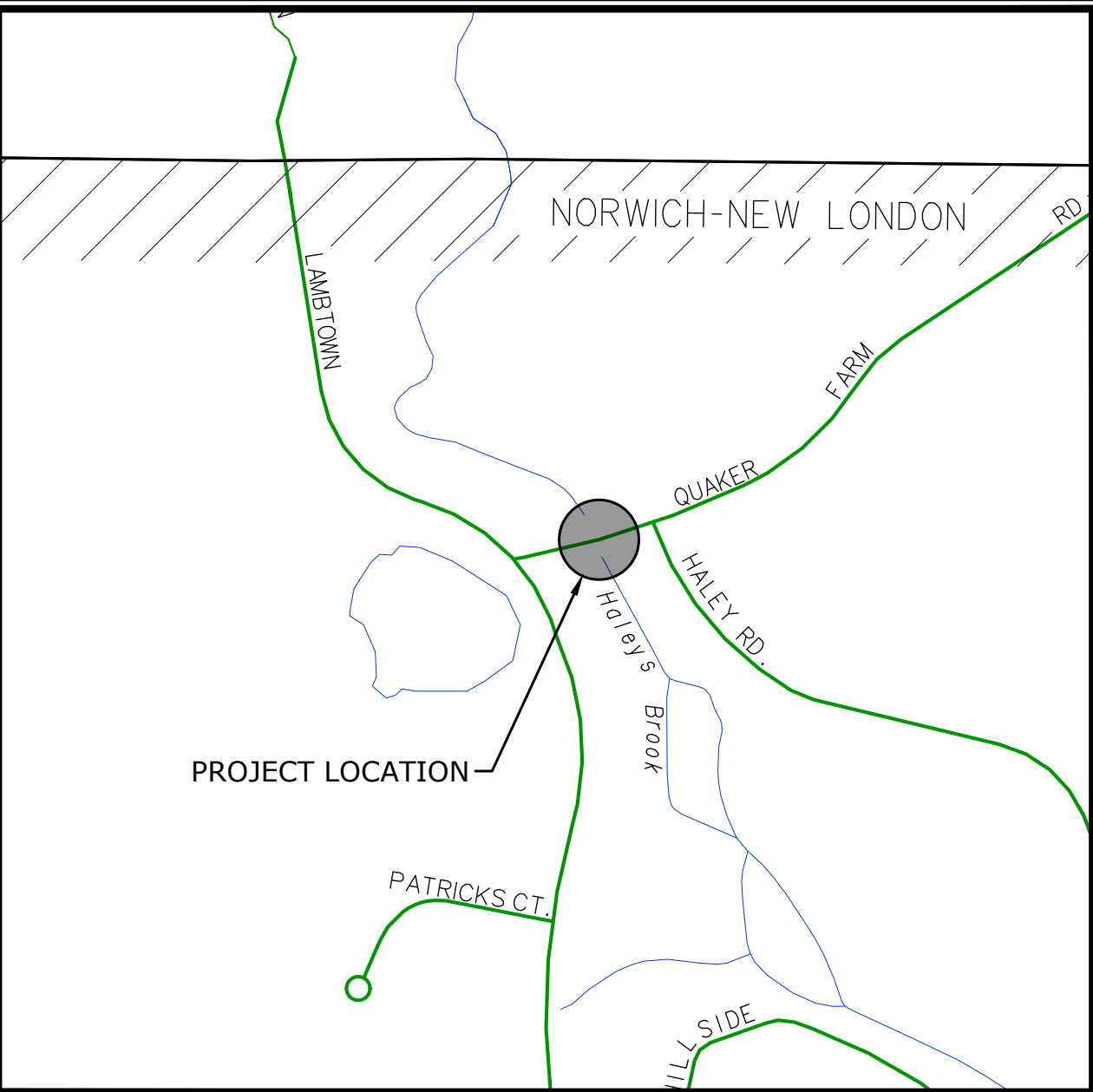


PROJECT SITE VICINITY MAP:

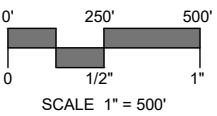


PREPARED BY:

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LOCATION MAP:



PREPARED FOR:

TOWN OF GROTON
45 FORT HILL ROAD
GROTON, CONNECTICUT 06340

TOWN COUNCIL
RACHEL FRANCO, MAYOR
PORTIA BORDELON
DAVID GOODE
BRUCE JONES
DAVID McBRIDE
ROSCOE MERRITT
JULIETTE PARKER
ADAM J. PUCCINO, SR.
JILL RUSK

TOWN MANAGER
JOHN BURT

DIRECTOR OF PUBLIC WORKS
GREG A. HANOVER



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GENERAL NOTES

1.

SLR CONSULTING ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
2.

WETLAND LIMITS SHOWN HAVE BEEN DELINEATED ON JULY 16, 2021 BY MATTHEW SANFORD, RSS, PWS, OF SLR CONSULTING. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE "BEST MANAGEMENT PRACTICES FOR THE PROTECTION OF THE ENVIRONMENT" AS OUTLINED IN THE STANDARD SPECIFICATIONS.
3.

THE PROPERTY LINES DEPICTED HAVE BEEN COMPILED FROM VARIOUS SOURCES INCLUDING TOWN OF GROTON LAND RECORDS AND ARE NOT TO BE CONSTRUED AS BEING OBTAINED AS THE RESULT OF A FIELD SURVEY, NOR DO THEY REPRESENT A PROPERTY/BOUNDARY OPINION.
4.

ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, FACILITIES AND INCIDENTAL CONSTRUCTION, FORM 819 (2024), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2025, AND SPECIAL PROVISIONS.
5.

THE CONTRACTOR SHALL BE AWARE OF THE WORK WHICH IS TO BE PERFORMED WITHIN AND ADJACENT TO PRIVATE PROPERTY RIGHT-OF-WAYS.
6.

SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL", AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
7.

THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE MUNICIPALITY WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
8.

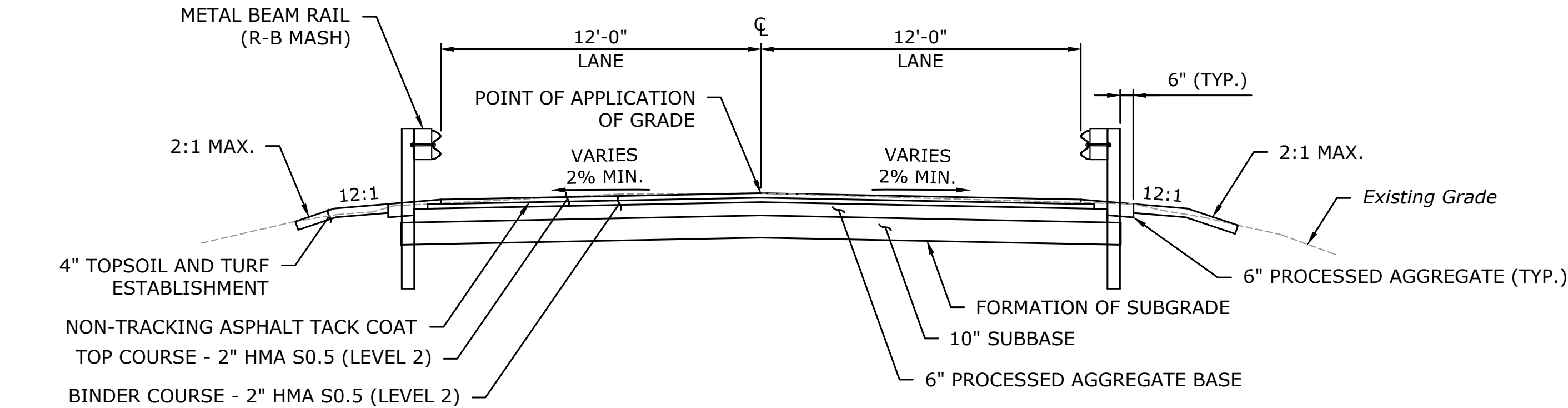
ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
9.

CONSTRUCTION EQUIPMENT SHALL BE STORED OUTSIDE OF AREAS SUBJECT TO FLOODING.

UTILITIES

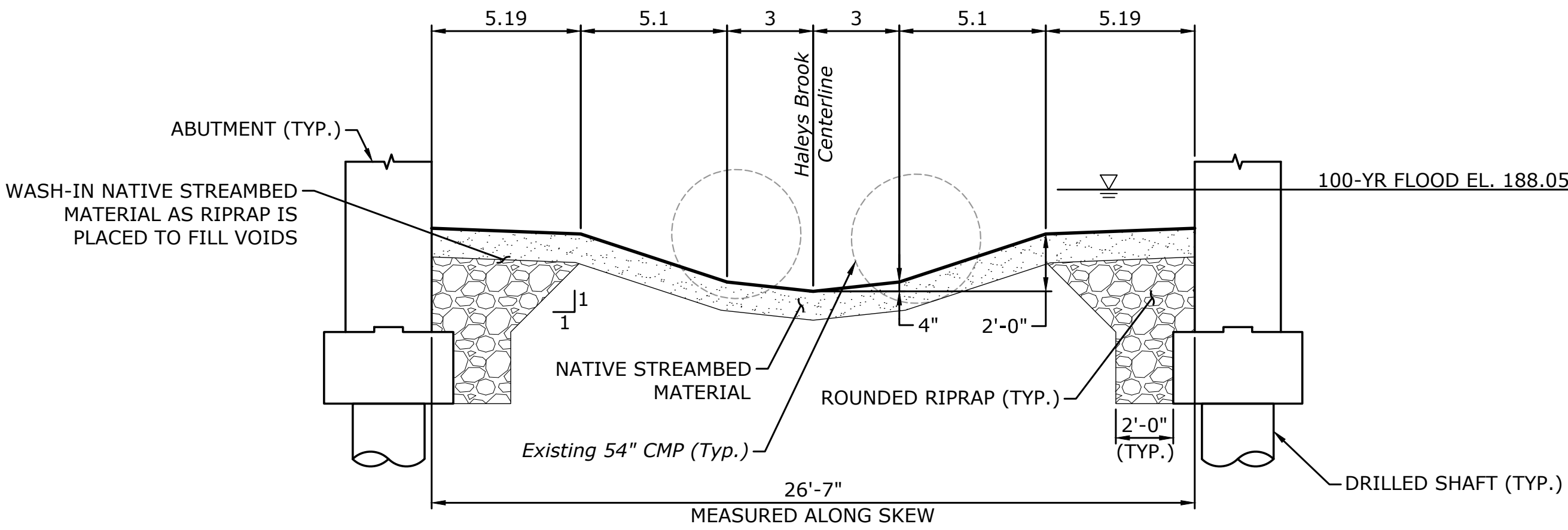
1.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH APPROPRIATE UTILITY COMPANIES REGARDING RELOCATION AND PROTECTION OF THEIR FACILITIES AND SCHEDULING OF SUCH WORK.



TYPICAL ROADWAY SECTION

SCALE: 1/4" = 1'-0"



TYPICAL CHANNEL SECTION

SCALE: 1/4" = 1'-0"

LEGEND

EXISTING		PROPOSED
---	STREET LINE (G.I.S.)	
---	PROPERTY LINE (G.I.S.)	
---155---	CONTOUR	---(155)---
x70	SPOT GRADE	+70.5
---	WATERCOURSE	
---	ORDINARY HIGH WATER	
---	FEDERAL/STATE WETLAND & ORDINARY HIGH WATER	
---	TREELINE	---
---	TREE	
---	SHRUB	
---	WIRE FENCE	
---	GUIDERAIL	
---	OVERHEAD WIRE	
---	CATCH BASIN	
---	POST	
---	UTILITY POLE	
---	SIGN	
---	CONTROL POINT	
---	MAILBOX	
---	CURB	
---	CONSTRUCTION EASEMENT LINE	
---	SEDIMENTATION EROSION CONTROL SYSTEM	
---	CUT LIMIT	---
---	FILL LIMIT	---
---	BORING	---

NOTES & LEGEND

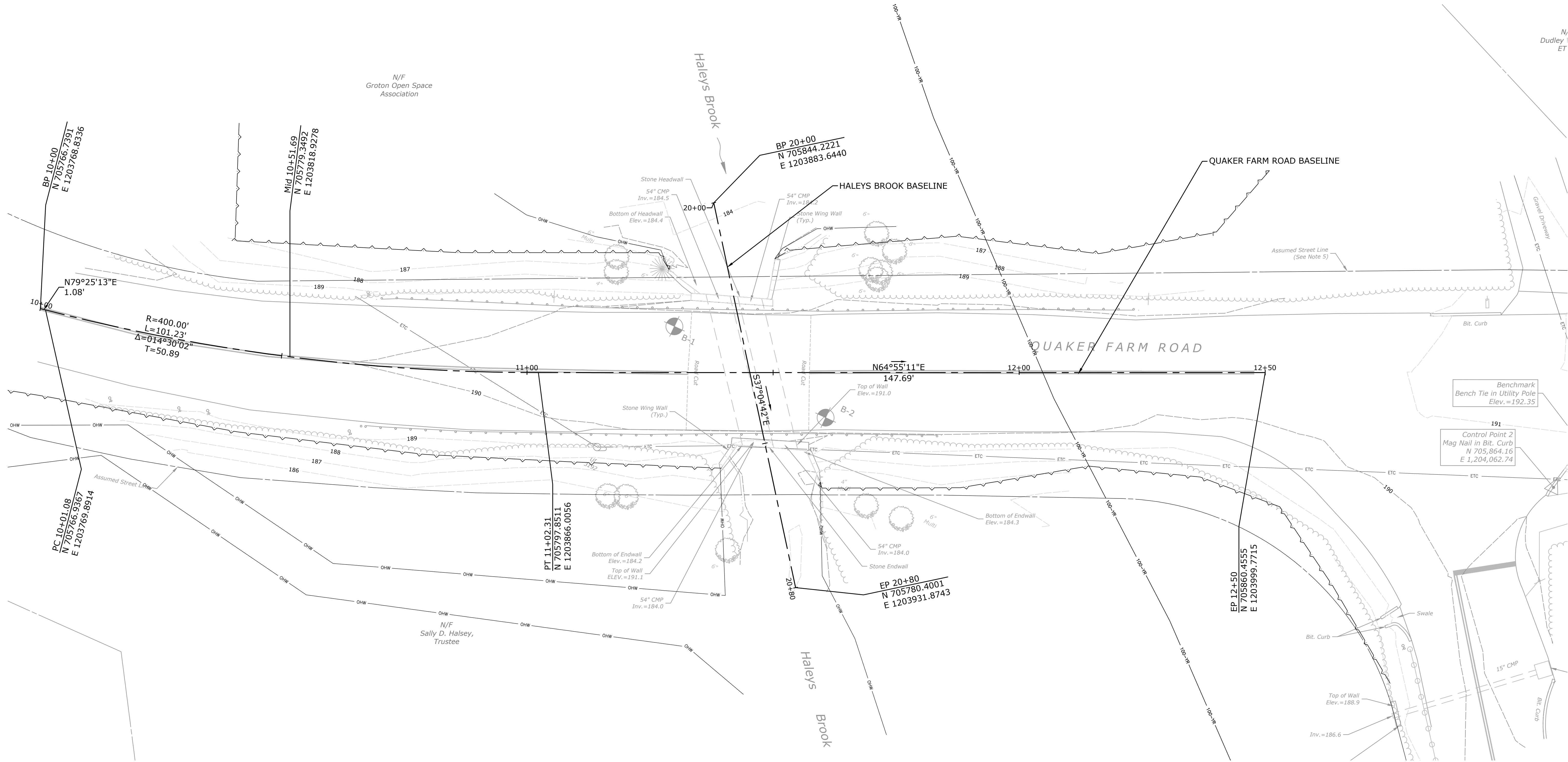
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP	WRS	SEP
DESIGNED	DRAWN	CHECKED
AS SHOWN		
AUGUST 21, 2025		
DATE		
141.11461.00018		
PROJECT NO.		
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DRAWING NO.		

02

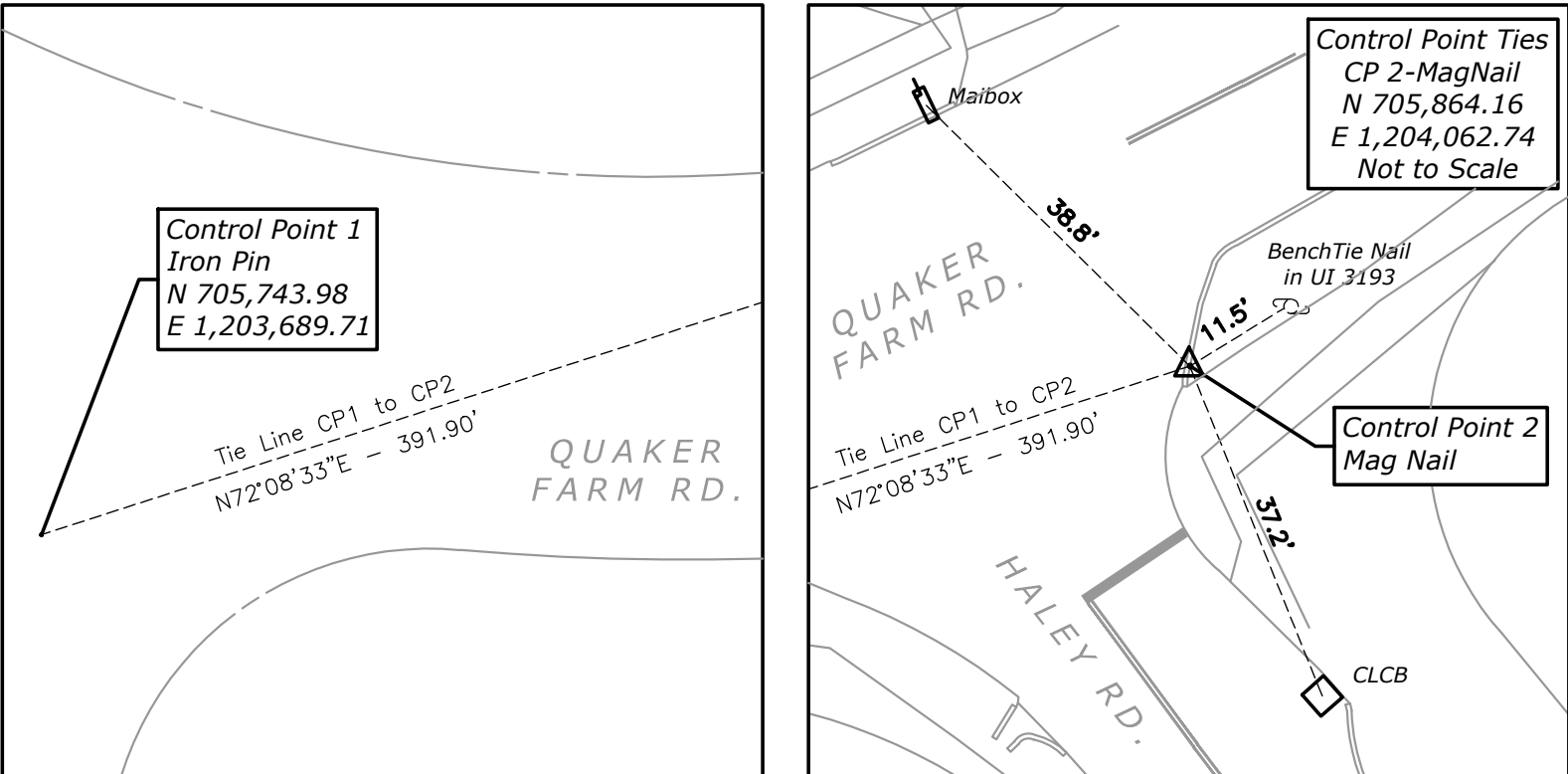
STATE PROJECT NO. 9058-0015

SLR INTERNATIONAL, INC. 1000 WEST 10TH AVENUE, SUITE 100, DENVER, CO 80202
TEL: 303.733.8800 FAX: 303.733.8801 WWW.SLRCONSULTING.COM



NOTES:

- THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019. IT IS A TOPOGRAPHIC SURVEY CONFORMING TO TOPOGRAPHIC ACCURACY CLASS T-2.
- NORTH BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983).
- ELEVATIONS, CONTOURS, AND BENCHMARK ARE BASED UPON NAVD 1988.
- ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING AND OTHER DATA SUPPLIED BY RESPECTIVE UTILITY COMPANIES, GOVERNMENTAL AGENCIES AND/OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO SLR INTERNATIONAL CORPORATION THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO BEGINNING CONSTRUCTION."CALL BEFORE YOU DIG" DIAL 811 OR 1-800-922-4455.
- REFERENCE IS MADE TO "PERIMETER PROPERTY SURVEY PREPARED FOR THE GROTON OPEN SPACE ASSOCIATION, INC. OF THE LAND OF JULIA A. WEBER LAMBTOWN ROAD GROTON & LEDYARD CONNECTICUT" BY ERIC SEITZ, SCALE: 1"=200', MARCH 2014, SHEET 2 OF 2 (G.L.R. MAP S30-256)



STATE PROJECT NO. 9058-0015

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Dudley
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DESCRIPTION	DATE	BY

EXISTING CONDITIONS & BASELINE INFORMATION

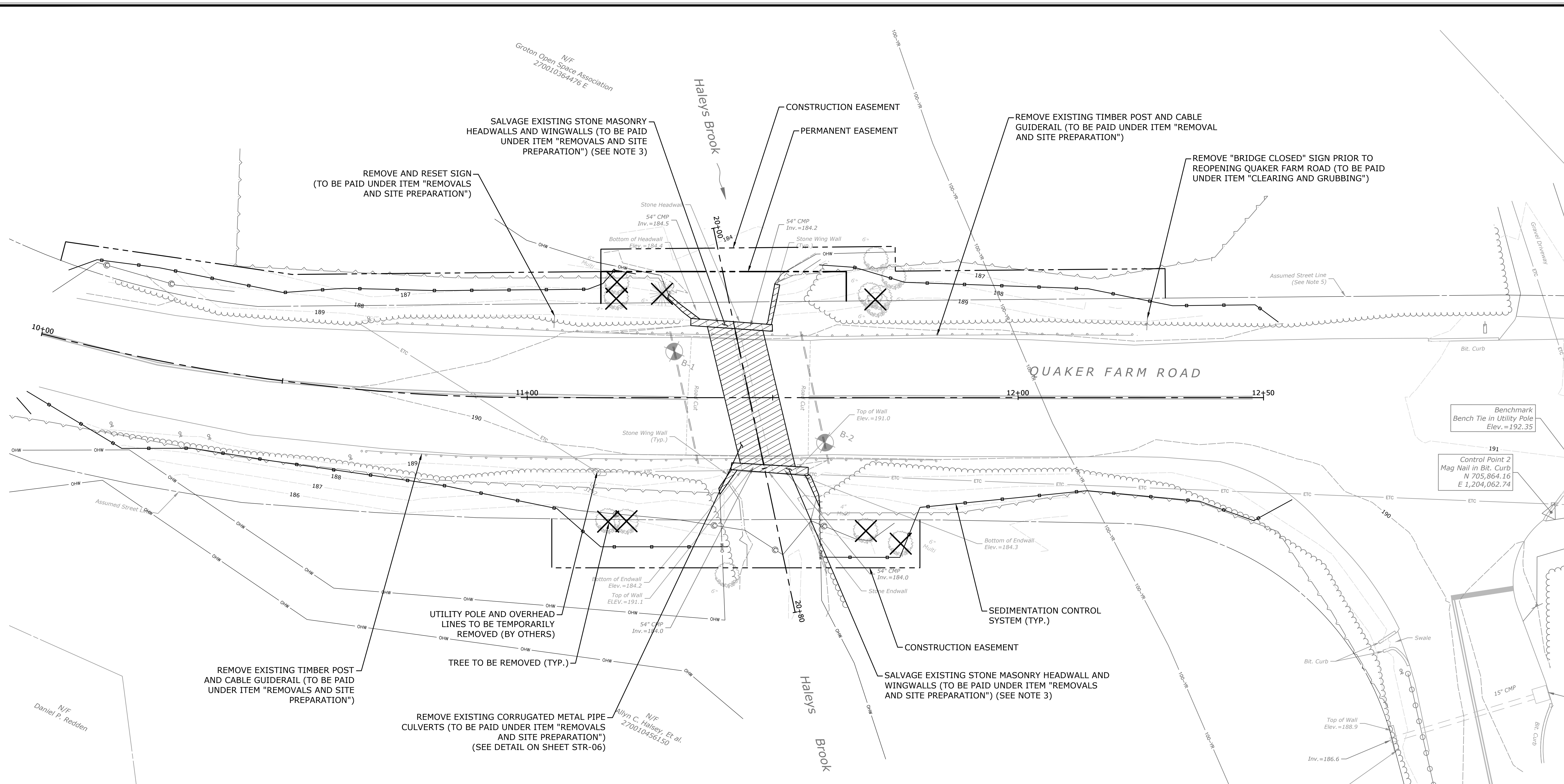
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP	WRS	SEP
DESIGNED	DRAWN	CHECKED
1" = 10'		
AUGUST 21, 2025		
141.11461.00018		
EX-01		

03

SHEET NO.

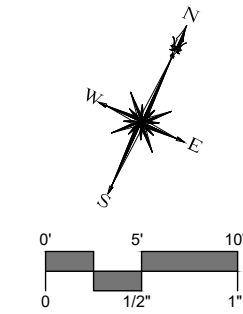
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NOTES:

1. CONTRACTOR RESPONSIBLE FOR CUTTING TREES. STUMPS TO REMAIN OUTSIDE OF EXCAVATION LIMITS.
2. THE CONTRACTOR SHALL NOTIFY THE TOWN OF GROTON TREE WARDEN BEFORE REMOVAL OR PRUNING OF ANY TREES THAT STAND ON TOWN PROPERTY.
3. CONTRACTOR SHALL CAREFULLY REMOVE THE EXISTING STONE MASONRY HEADWALLS AND WINGWALLS AND STOCKPILE THE STONE ON-SITE FOR REMOVAL BY THE TOWN.
4. FOR REMOVAL OF THE EXISTING CULVERT, REFER TO THE SPECIAL PROVISION "REMOVAL OF EXISTING CULVERT (SITE NO. 1)".
5. FOR REMOVING AND RESETING EXISTING SIGNAGE, REFER TO THE SPECIAL PROVISION FOR "REMOVAL AND RELOCATION OF EXISTING SIGNS".
6. REFER TO "RIGHTS-OF-WAY PLAN" FOR EASEMENT LAYOUT.

STATE PROJECT NO. 9058-0015



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REMOVALS PLAN

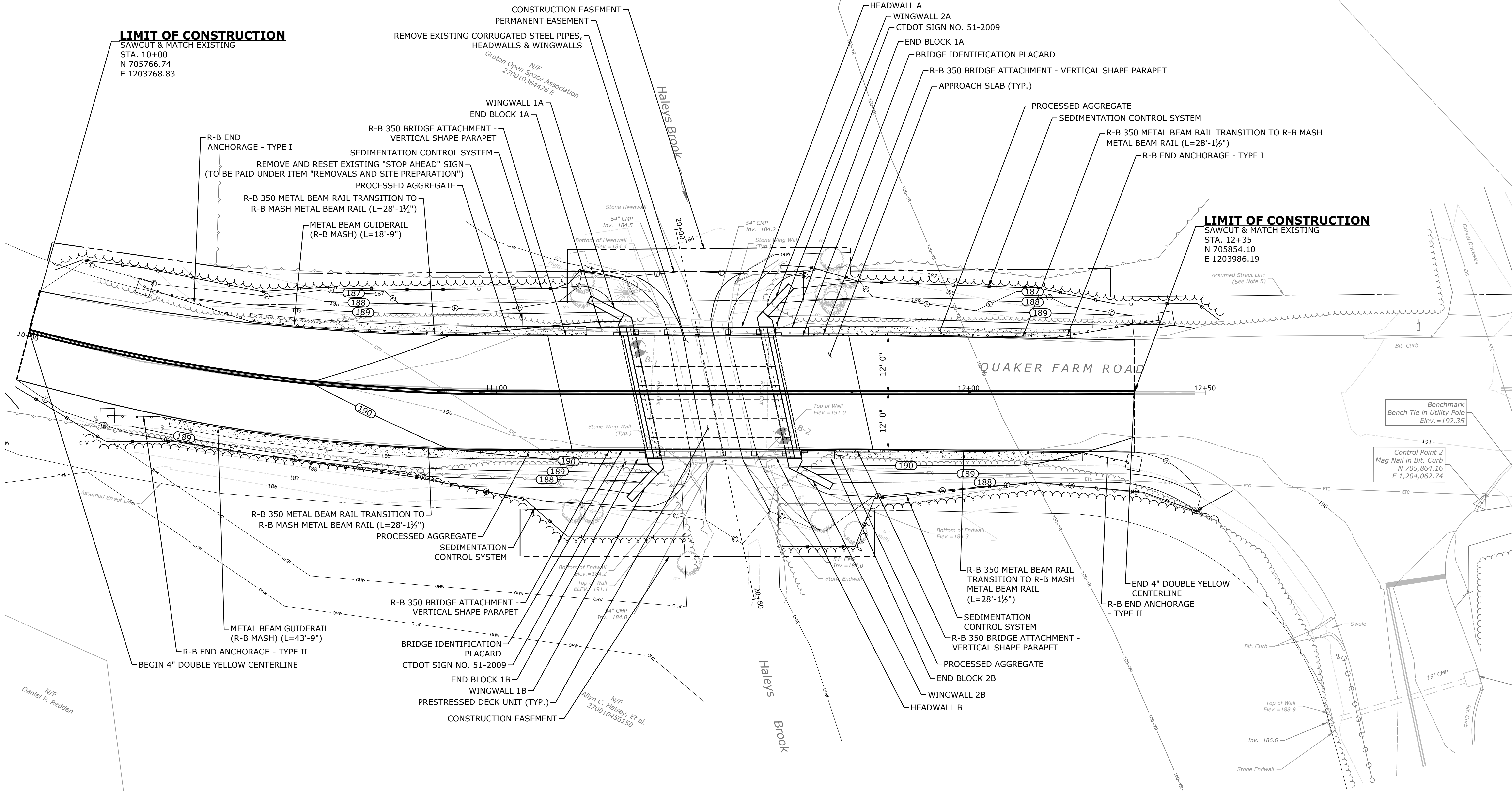
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QUAKER FARM ROAD
GROTON, CONNECTICUT

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1" = 10'		
SCALE		
AUGUST 21, 2025		
DATE		
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PROJECT NO.		
EX-02		
DRAWING NO.		

04

SHEET NO. _____

PROJECT NO. 9058-0015, SHEET NO. 05, DRAWING DATE 08/21/2025, BY SLR CONSULTING, INC.



SCHEDULE OF SIGNS							
CTDOT SIGN NO.	SIZE	LEGEND	LOCATION	ALUMINUM THICKNESS	POSTS	BACKGROUND COLOR	LEGEND COLOR
51-2009	18"x12"	HALEYS BROOK	STA. 11+07±, 13.0'± R	0.0800	1	GREEN	WHITE
N/A	12"x4"	07143	STA. 11+10±, 12.0± R	N/A	N/A	GREEN	WHITE
51-2009	18"x12"	HALEYS BROOK	STA. 11+30±, 12.0'± L	0.0800	1	GREEN	WHITE
N/A	12"x4"	07143	STA. 11+34±, 13.0'± L	N/A	N/A	GREEN	WHITE

BRIDGE IDENTIFICATION PLACARDS:

THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW BRIDGE IDENTIFICATION PLACARDS ON THE SIGN POST BELOW SIGN 51-2009 ON THE LEADING ENDS OF THE BRIDGE AS INDICATED ON THE PLANS. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL. THE SIGNS SHALL BE 4"x12" WITH 3" WHITE REFLECTIVE BLOCK LETTERS ON GREEN REFLECTIVE SHEETING. EACH SIGN SHALL READ: 058015. THE FINAL LOCATION AND ATTACHMENT METHOD FOR THE SIGN SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE BRIDGE IDENTIFICATION PLACARDS SHALL BE PAID UNDER "ROADWAY RECONSTRUCTION" AND IN ACCORDANCE WITH THE SPECIAL PROVISION FOR THE ITEM #1208931 - SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING).

SIGN NOTES:

- POSTS - SEE STANDARD SHEET TR-1208_02 - "METAL SIGN POSTS AND SIGN MOUNTING DETAILS."
- POSTS SHALL BE 4 LB/FT.
- SIGNS SHALL BE FABRICATED FROM ONE CONTINUOUS PIECE OF SHEET ALUMINUM. SPLICING OF SHEET ALUMINUM WILL NOT BE ACCEPTED.
- CTDOT SIGN NO. 51-2009 TO BE PAID FOR UNDER "ROADWAY RECONSTRUCTION" AND IN ACCORDANCE WITH THE SPECIAL PROVISION FOR ITEM "SIGN FACE - SHEET ALUMINUM (TYPE XI RETROREFLECTIVE SHEETING)".

NOTES:

- THE LIMITS OF THE PROPOSED PROJECT FALL ENTIRELY WITHIN THE TOWN OF GROTON'S 100-FT UPLAND REVIEW AREA.
- THE METAL BEAM GUIDERAIL (THRIE BEAM ATTACHMENT, METAL BEAM GUIDERAIL (R-B MASH), R-B END ANCHORAGE - TYPE I, AND R-B END ANCHORAGE - TYPE II) SHALL BE FABRICATED USING WEATHERING STEEL IN ACCORDANCE WITH THE SPECIAL PROVISIONS. REFER TO SHEET RES-01 FOR SURFACE TREATMENTS AND PLANTING PLAN.

CTDOT SIGN NO. 51-2009
NOT TO SCALE

BRIDGE IDENTIFICATION PLACARD
NOT TO SCALE

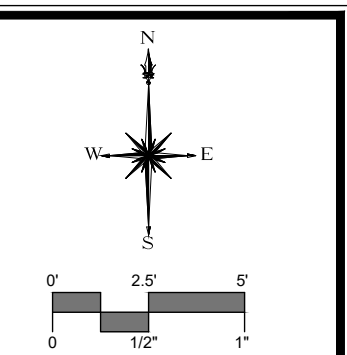
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1"=10'		
AUGUST 21, 2025		
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RWY-01		
05		

ROADWAY PLAN
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

STATE PROJECT NO. 9058-0015

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RIGHTS-OF-WAY PLAN

REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK

QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP DESIGNED	WRS DRAWN	SEP CHECKED
1"=5'		
AUGUST 21, 2025		
141.11461.00018		
ROW-01		

07

GROTON OPEN SPACE ASSOCIATION

CONSTRUCTION EASEMENT FOR THE PURPOSE OF PROVIDING A WORK AREA FOR HTE
REPLACEMENT OF BRIDGE NO. 07143. TO INCLUDE TEMPORARY WATER HANDLING,
COFFERDAM AND BYPASS PIPE, CHANNEL GRADING, RIPRAP PLACEMENT, GUIDERAIL
INSTALLATION, TEMPORARY SEDIMENTATION CONTROL SYSTEM, AND PLACEMENT OF
TOPSOIL AND TURF ESTABLISHMENT. CONSTRUCTION EASEMENT TAKEN UNDER THIS
PARAGRAPH WILL BE RESTORED BY REMOVING ALL TEMPORARY CONSTRUCTION
EQUIPMENT AND BY GRADING AND SEEDING ANY DISTURBED AREAS. SAID EASEMENT
WILL BE EXTINGUISHED UPON COMPLETION OF THE PROJECT, UNLESS SOONER
EXTINGUISHED BY THE TOWN.
AREA = ±1,400 SQ.FT.

PERMANENT EASEMENT
AREA = ±312 SQ.FT.

N/F
Groton Open Space Association
270010364476 E

PERMANENT EASEMENT

CONSTRUCTION EASEMENT —

Haleys Brook

QUAKER FARM ROAD

CONSTRUCTION FASEMEN

SALLY D. HALSEY, TRUSTEE

CONSTRUCTION EASEMENT FOR THE PURPOSE OF PROVIDING A WORK AREA FOR THE REPLACEMENT OF BRIDGE NO. 058015. TO INCLUDE TEMPORARY WATER HANDLING COFFERDAM AND BYPASS PIPE, CHANNEL GRADING, RIPRAP PLACEMENT, GUIDERAIL INSTALLATION, REMOVAL OF TREES, TEMPORARY SEDIMENTATION CONTROL SYSTEM, AND PLACEMENT OF TOPSOIL AND TURF ESTABLISHMENT. CONSTRUCTION EASEMENT TAKEN UNDER THIS PARAGRAPH WILL BE RESTORED BY REMOVING ALL TEMPORARY CONSTRUCTION EQUIPMENT AND BY GRADING AND SEEDING ANY DISTURBED AREAS. SAID EASEMENT WILL BE EXTINGUISHED UPON COMPLETION OF THE PROJECT, UNLESS SOONER EXTINGUISHED BY THE TOWN.
AREA = ±741 SQ.FT.

STATE PROJECT NO. 9058-0015

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SEDIMENT & EROSION CONTROL SPECIFICATIONS

GENERAL

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT.

IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INSOFAR AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

GENERAL

- THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
 - THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
 - THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
 - THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
 - PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
 - EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTILING, OR CRACKING.
 - NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATERBODIES.

EROSION CHECKS

GENERAL

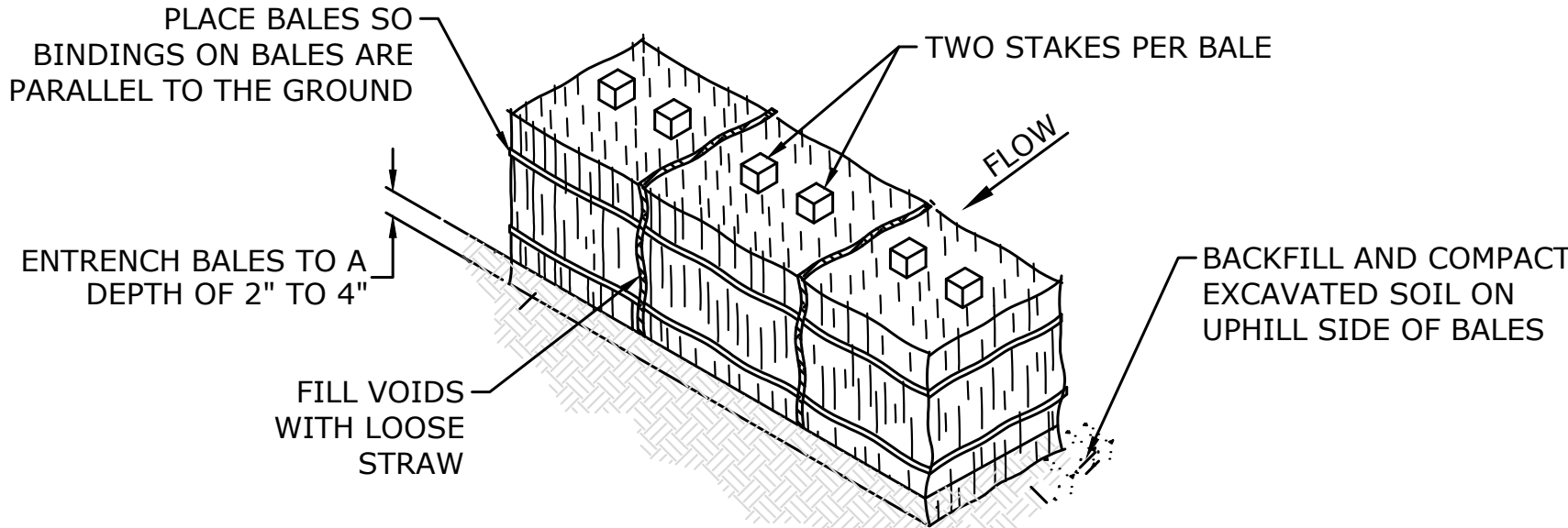
- TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

CONSTRUCTION

- BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR INCHES (4").
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2').

INSTALLATION AND MAINTENANCE

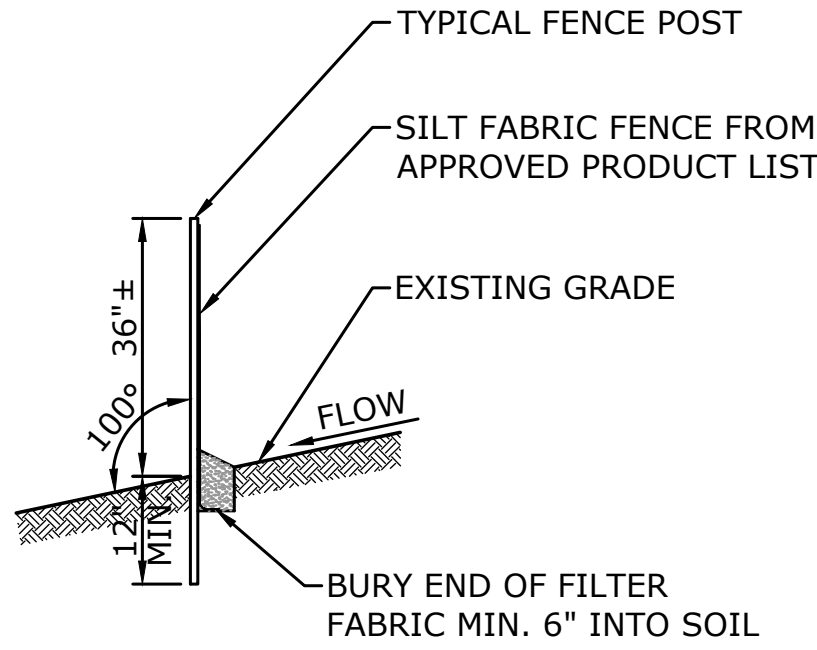
- BALED HAY EROSION BARRIERS AND GEOTEXTILE FENCE SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE PLAN AND IN ADDITIONAL AREAS AS MAY BE DEEMED APPROPRIATE DURING CONSTRUCTION.
- ALL EROSION CHECKS SHALL BE MAINTAINED UNTIL ADJACENT AREAS ARE STABILIZED.
- INSPECTION SHALL BE FREQUENT (AT MINIMUM MONTHLY AND BEFORE AND AFTER HEAVY RAIN) AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- EROSION CHECKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.



- IDEALLY, BALES SHOULD BE ENTRENCHED 2 TO 4 INCHES AND TIGHTLY BUTTED TOGETHER. BALES CAN BE SUCCESSFULLY PLACED WITHOUT A TRENCH IF GOOD GROUND CONTACT IS MADE. REMOVE HEAVY BRUSH AND FILL ALL VOIDS WITH LOOSE STRAW.
- BALES SHALL BE ONLY USED AS A TEMPORARY BARRIER AND FOR NO LONGER THAN 60 DAYS.
- WHEN SEDIMENTATION DEPOSITS REACH WITHIN 3" OF THE TOP OF BALES, REMOVE SEDIMENTATION OR ADD ADDITIONAL BALES ON SEDIMENTATION DIRECTION BEHIND FIRST ROW OF BALES AS DIRECTED BY THE ENGINEER.
- UPON ESTABLISHMENT OF GROUND COVER ON DISTURBED AREAS AND WHEN DIRECTED BY THE ENGINEER, HAY BALES WILL BE REMOVED AND USED AS MULCH. ANY SEDIMENTATION WILL BE THINLY SPREAD UPON ESTABLISHED GROUND COVER.

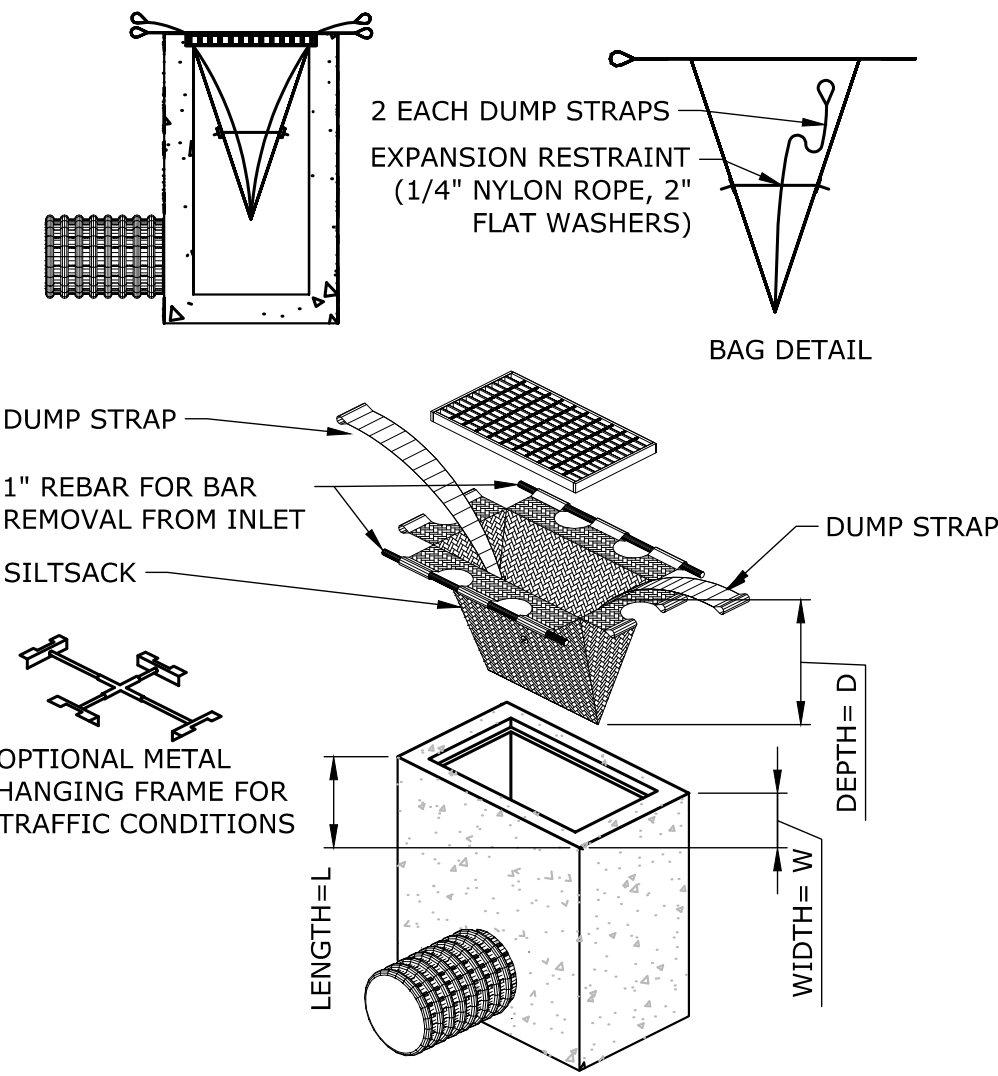
HAYBALE BARRIER PROTECTION

NOT TO SCALE



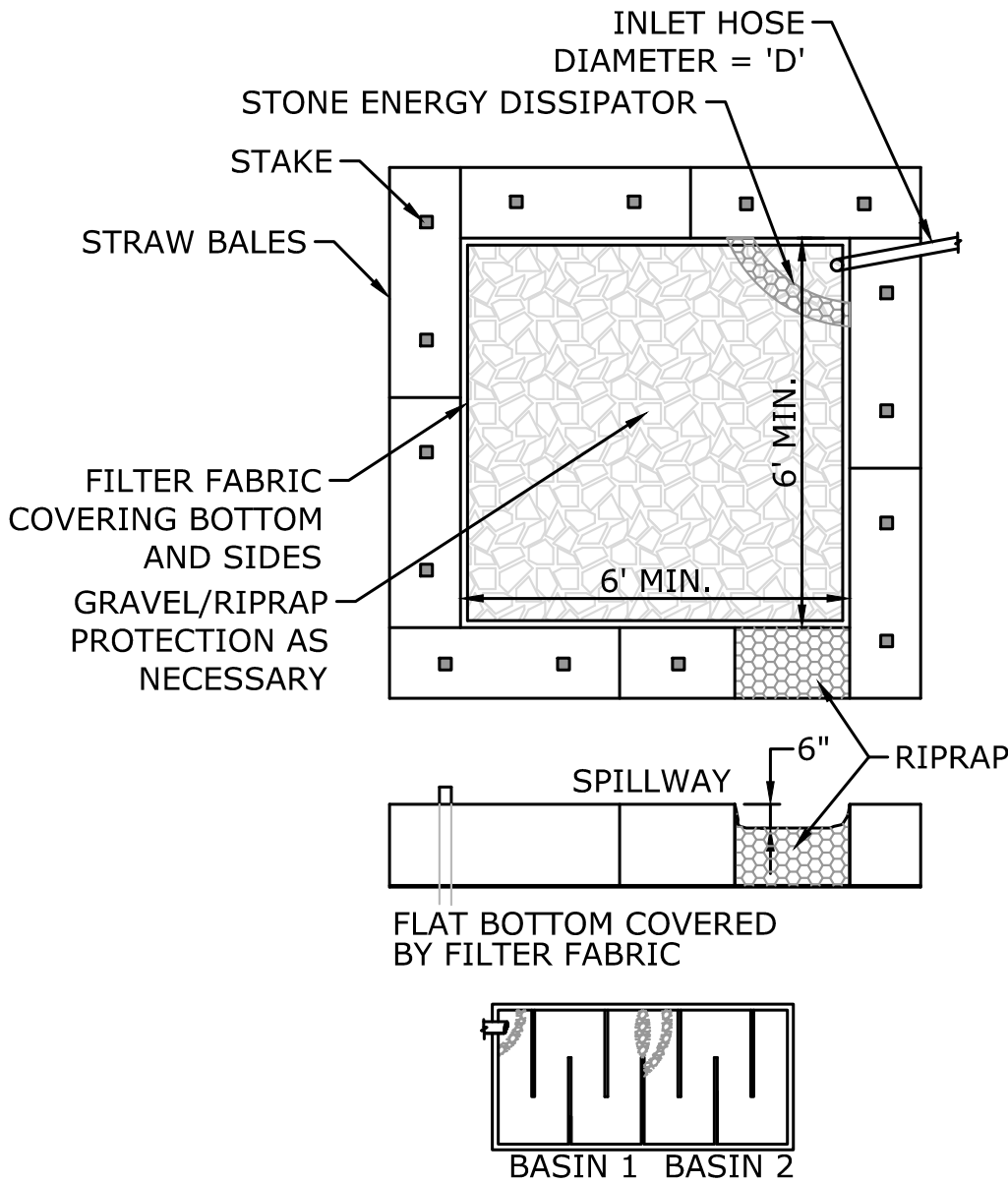
SEDIMENTATION CONTROL SYSTEM

NOT TO SCALE



SEDIMENT CONTROL SYSTEM AT CATCH BASIN

NOT TO SCALE



TEMPORARY DEWATERING BASIN

NOT TO SCALE

NOTE

- IF PUMPING VOLUME EXCEEDS BASIN CAPACITY, BASIN MAY BE USED IN TANDEM OR TIERS.
- INCREASE RIPRAP SIZE ON BASIN BOTTOM AS NECESSARY TO MAINTAIN SEDIMENT-FREE DISCHARGE WATERS.
- TEMPORARY DEWATERING BASIN SHALL BE PAID FOR UNDER "HANDLING WATER".

SLR 98 REALTY DRIVE 208.271.1773 SLRCONSULTING.COM			
DESCRIPTION	DATE	BY	

SEDIMENT & EROSION CONTROL PLAN			
REPLACEMENT OF BRIDGE NO. 07143 QUAKER FARM ROAD OVER HALEY'S BROOK QUAKER FARM ROAD GROTON, CONNECTICUT			

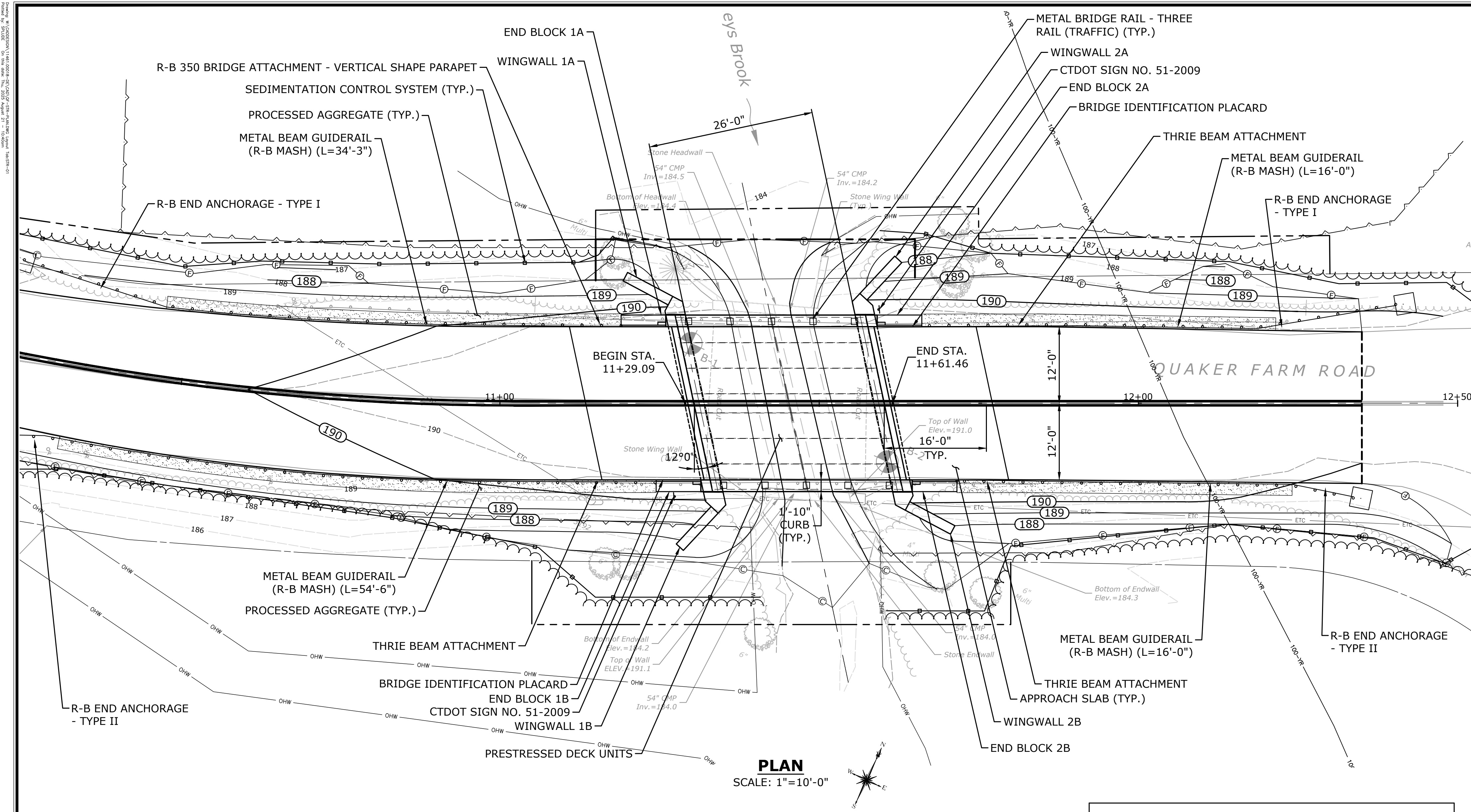
SEP DESIGNED	WRS DRAWN	SEP CHECKED
NOT TO SCALE		
AUGUST 21, 2025		
141.11461.00018		
SE-01		

08

STATE PROJECT NO. 9058-0015

SHEET NO.
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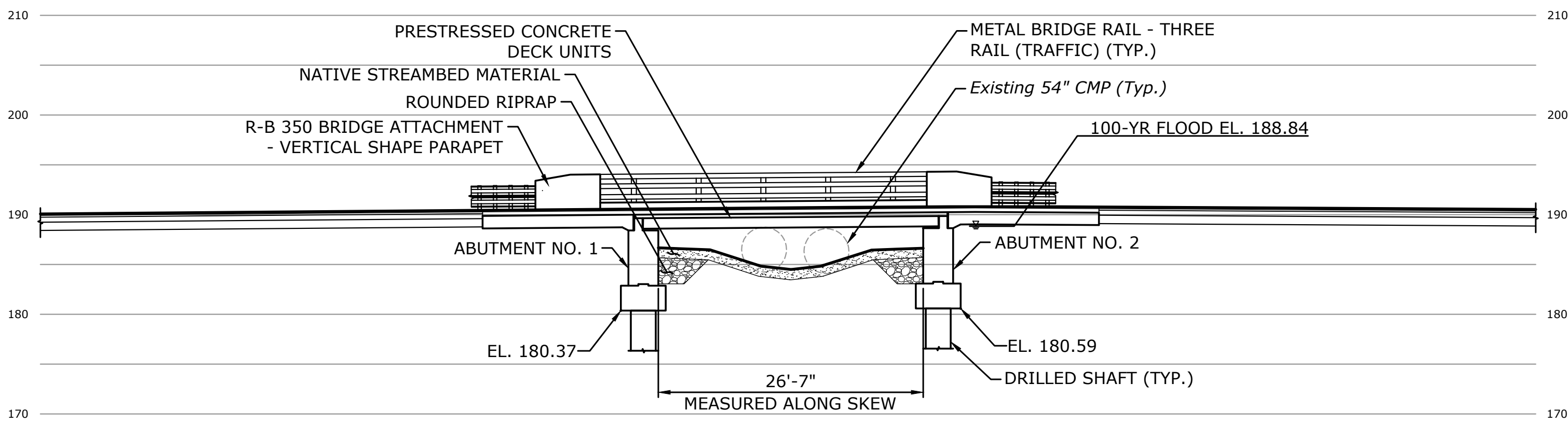
NOTICE TO BRIDGE INSPECTORS

The Department's Bridge Safety procedure require this bridge to be inspected for, but not limited to, all appropriate components indicated in the governing manuals for bridge inspection. Attention must be given to inspecting the following special components and details. (The listing for components for specific attention shall not be construed to reduce the importance of inspection of any other component of the structure.) The frequency of inspection of this structure shall be in accordance with the governing manuals for bridge inspection, unless otherwise directed by the Manager of Bridge Safety and Evaluation.

COMPONENT OR DETAIL	BRIDGE SHEET REFERENCE
NONE	

TRANSPORTATION DIMENSION WEIGHT

PRECAST DECK UNITS				
MEMBER	SHIPPING WIDTH	SHIPPING HEIGHT	SHIPPING LENGTH	SHIPPING WEIGHT
B1-B3,B5-B7	4.0-ft	1.0-ft	29.6-ft	17,316-lb
B4	3.0-ft	1.0-ft	29.6-ft	13,231-lb



HYDRAULIC DATA

DRAINAGE AREA	2.75 SQ. MI.
DESIGN FREQUENCY	100-YR
DESIGN DISCHARGE	390 CFS
UPSTREAM DESIGN WATER SURFACE EL.	188.05 FT
DOWNSTREAM DESIGN WATER SURFACE EL.	187.03 FT
OVERTOPPING FREQUENCY	>500-YR
OVERTOPPING DISCHARGE	>590 CFS
WORST CASE SCOUR SUB-STRUCTURE	WEST ABUTMENT
MAXIMUM SCOUR ELEVATION	179.5
AVERAGE DAILY FLOW	5 CFS
AVERAGE SPRING FLOW	10 CFS

GENERAL NOTES

- SPECIFICATIONS:** CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 819 (2024), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2025, AND SPECIAL PROVISIONS.
- DESIGN SPECIFICATIONS:** AASHTO LRFD DESIGN SPECIFICATIONS, 8TH EDITION, 2017, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003) WITH INTERIM REVISIONS UP TO AND INCLUDING 2024.
- MATERIAL STRENGTHS:**

CONCRETE:	
CLASS PCC03340	f _c = 3,000 PSI
CLASS PCC04460	f _c = 4,000 PSI
CLASS PCC04462	f _c = 4,000 PSI
PRESTRESSED CONCRETE PRC06562	f _c = 6,500 PSI

THE CONCRETE STRENGTH USED IN DESIGN (f_c) OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 6.01 - CONCRETE FOR STRUCTURES AND M.03 - PORTLAND CEMENT CONCRETE.

REINFORCEMENT:	
ASTM A615 GRADE 60	f _y = 60,000 PSI

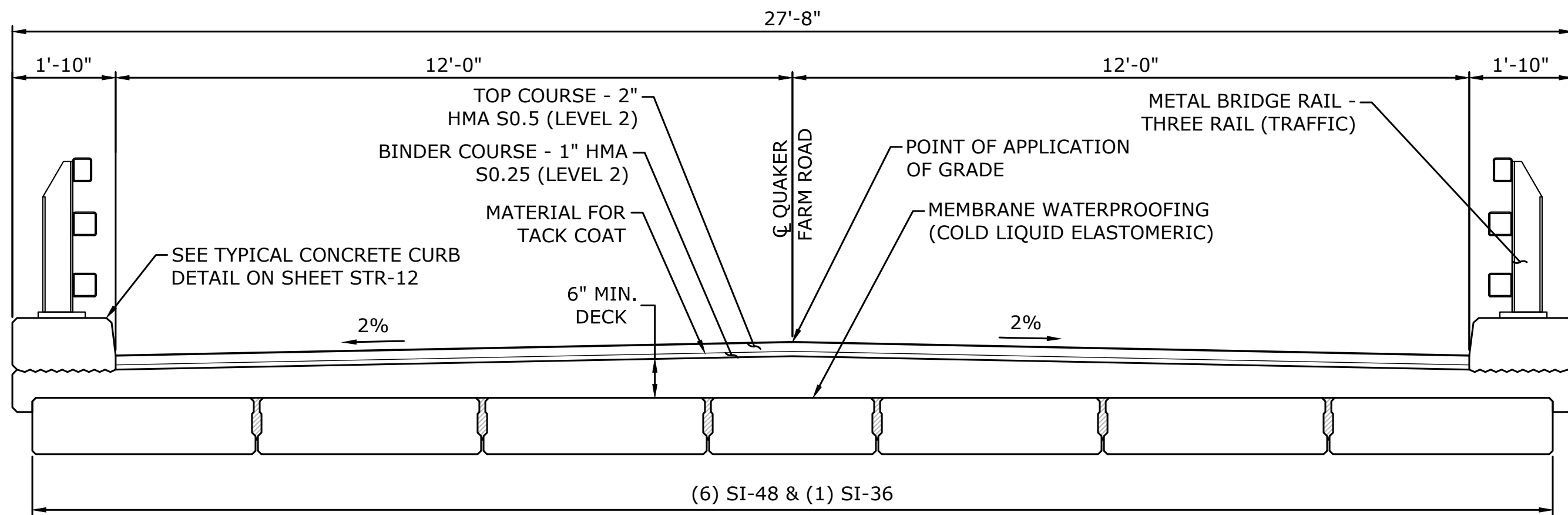
- LIVE LOAD:** HL-93, LEGAL AND PERMIT VEHICLES
- FUTURE PAVING ALLOWANCE:** NONE
- BITUMINOUS CONCRETE OVERLAY:** 2" HMA S0.5, 1" HMA S0.25
- DIMENSIONS:** WHEN DECIMAL DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.
- MASH TEST LEVEL:** THE METAL BRIDGE RAIL - THREE RAIL (TRAFFIC) MEETS THE TL-4 CRITERIA FOR MASH 2016.

CONCRETE NOTES

- REMAIN-IN-PLACE FORMS:** THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE IS NOT ALLOWED.
- THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS:

ITEM	BRIDGE COMPONENTS	PCC CLASS
FOOTING CONCRETE	END BLOCK FOOTINGS	PCC03340
COLUMN AND CAP CONCRETE	ABUTMENT AND WINGWALL FOOTINGS	PCC04460
ABUTMENT AND WALL CONCRETE	ABUTMENT AND WINGWALL STEMS	PCC04460
BARRIER WALL CONCRETE	END BLOCK STEMS	PCC04462
APPROACH SLAB CONCRETE	APPROACH SLABS	PCC04462
BRIDGE DECK CONCRETE	BRIDGE DECK, CURBS	PCC04462

- EXPOSED EDGES:** EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"x1" UNLESS DIMENSIONED OTHERWISE.
- CONCRETE COVER:** ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.
- REINFORCEMENT:** ALL REINFORCEMENT SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE. ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED UNDER THE LUMP SUM COST FOR "BRIDGE SUBSTRUCTURE", "DRILLED SHAFTS", AND "BRIDGE SUPERSTRUCTURE".
- PREFORMED EXPANSION JOINT FILLER:** THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER IS PAID FOR UNDER THE LUMP SUM COST FOR "BRIDGE SUBSTRUCTURE".
- CLOSED CELL ELASTOMER:** FURNISHING AND INSTALLING CLOSED CELL ELASTOMER SHALL BE INCLUDED IN THE LUMP SUM COST FOR "BRIDGE SUBSTRUCTURE".
- CONSTRUCTION JOINTS:** CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.



STATE PROJECT NO. 9058-0015

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DESCRIPTION
DATE
BY

BRIDGE PLAN, ELEVATION & TYPICAL SECTION

REPLACEMENT OF BRIDGE NO. 058015
QUAKER FARM ROAD OVER HALEYS BROOK

QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP DESIGNED	WRS DRAWN	SEP CHECKED
AS SHOWN		
AUGUST 21, 2025		
DATE		
141.11461.00018		
PROJECT NO.		
STR-01		
DRAWING NO.		

10

SHEET NO.

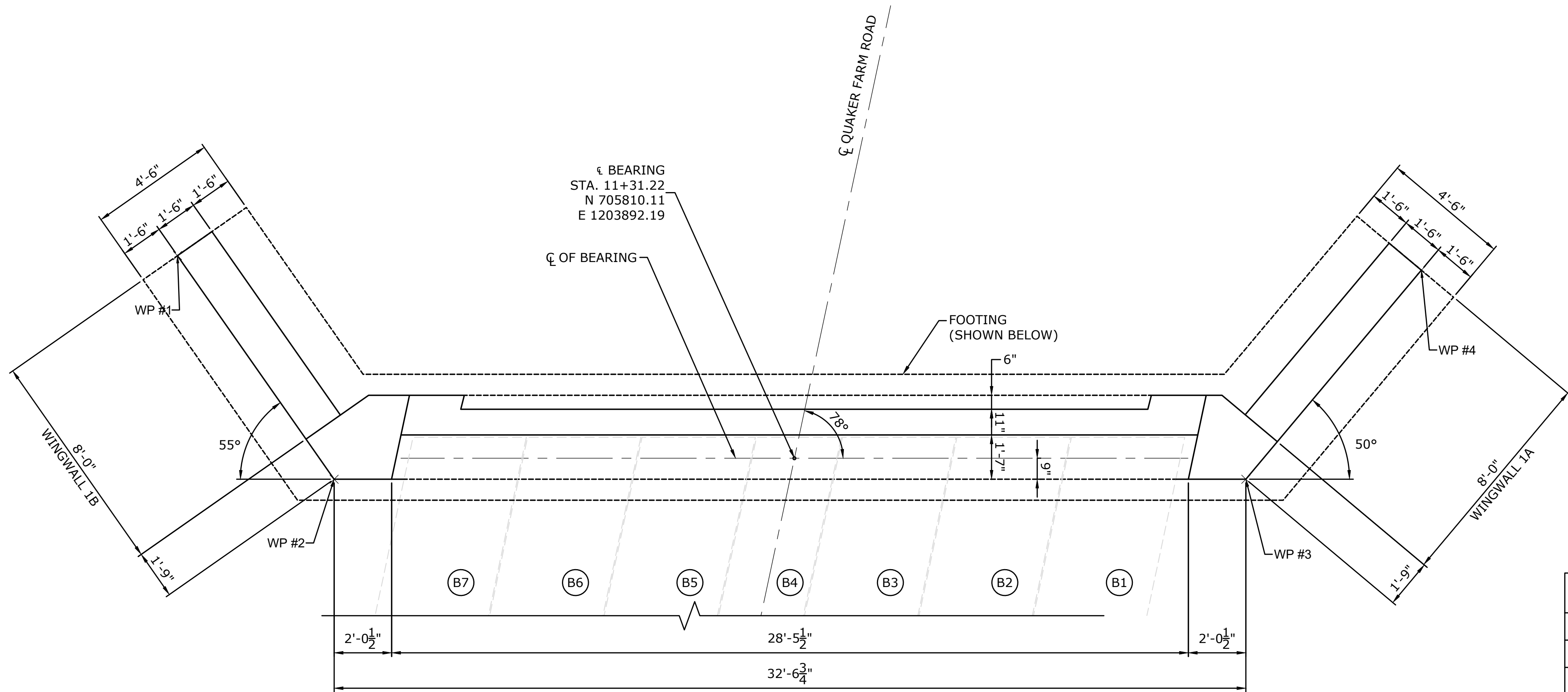
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BORING LOG																			
<div><div>SLR</div><div>SLR International Corporation</div><div>99 Realty Drive, Cheshire, CT 06030</div><div>203.271.1773 www.slrconsulting.com</div></div>			PROJECT: QUAKER FARM ROAD OVER HALEYS BROOK				BORING NO.: B-1				SHEET: 1 of 2								
			LOCATION: QUAKER FARM ROAD, GROTON, CONNECTICUT				CONTRACTOR: GENERAL BORINGS, INC.												
			PROJ. NO: 141.11461.00018				FOREMAN: J. WYANT												
			CLIENT: TOWN OF GROTON				INSPECTOR: R. HENDERSON												
			DATE: JUNE 10, 2021				GROUND SURFACE ELEVATION: ±190.0'												
EQUIPMENT:		AUGER	CASING	SAMPLER	COREBRL	GROUNDWATER DEPTH (FT.)				TYPE OF RIG:									
TYPE		HSA	-	SS	-	DATE		TIME		WATER DEPTH		TRUCK W/ AUTOMATIC HAMMER							
SIZE ID (IN.)		3 1/4	-	1 3/8	-	2021-06-10		9:00 AM		±5.0'		RIG MODEL:							
HMR. WT (LB.)		-	-	140	-							DIEDRICH D-50							
HMR. FALL (IN.)		-	-	30	-														
SOIL AND ROCK CLASSIFICATION-DESCRIPTION																			
BURMISTER SYSTEM (SOIL) U.S. CORPS OF ENGINEERS SYSTEM (ROCK)																			
Top 6": ASPHALT. Bottom 6": Light brown, fine to coarse SAND, little fine to coarse Gravel, trace Silt.																			
1				8	S-1: Medium dense, light brown, fine to coarse SAND, little fine to coarse Gravel, trace Silt.				0.5'	ASPHALT	189.5'								
2	S-1	12		11															
3				6															
4	S-2	8		6	S-2: Medium dense, light brown, fine to coarse SAND, little Silt, trace fine to coarse Gravel.				5.0'	G.W.T	189.0'	FILL							
5				6															
6	S-3	3		8															
7				3	S-3: Medium dense, brown, fine to coarse SAND and fine to coarse GRAVEL, little Silt.				8.5'		181.5'	GLACIAL TILL							
8				3															
9				3															
10				9	S-4: Medium dense, gray, fine to coarse SAND, some fine to coarse Gravel, some Silt.				18.5'		171.5'	WEATHERED BEDROCK							
11	S-4	16		9															
12				9															
13					S-5: Dense, gray-brown, fine to coarse SAND, some fine to coarse Gravel, little Silt.														
14																			
15																			
16	S-5	10		10	S-5: Dense, gray-brown, fine to coarse SAND, some fine to coarse Gravel, little Silt.														
17				16															
18				15															
19				19	S-6: Dense, brown, fine to coarse SAND and fine to coarse GRAVEL, some Silt.														
20																			
21	S-6	8		13															
22				22	S-6: Dense, brown, fine to coarse SAND and fine to coarse GRAVEL, some Silt.														
				24															
				23															
Remarks:																			
NON-PLASTIC (SPT-N)					PLASTIC (SPT-N)					SAMPLE TYPE					PROPORTIONS				
0-4 = VERY LOOSE					0-2 = VERY SOFT					C = ROCK CORE					trace < 10%				
4-10 = LOOSE					2-4 = SOFT					S = SPLIT SPOON					little = 10% - 20%				
10-30 = MEDIUM DENSE					4-8 = MEDIUM					UP = UNDISTURBED PISTON					some = 20% - 35%				
30-50 = DENSE					8-15 = STIFF					UT = UNDISTURBED THINWALL					and = 35% - 50%				
50+ = VERY DENSE					15-30 = VERY STIFF														
					30+ = HARD														

BORING LOG														
<div><div>SLR</div><div>SLR International Corporation</div><div>99 Realty Drive, Cheshire, CT 06030</div><div>203.271.1773 www.slrconsulting.com</div></div>			PROJECT: QUAKER FARM ROAD OVER HALEYS BROOK				BORING NO.: B-1			SHEET: 2 of 2				
			LOCATION: QUAKER FARM ROAD, GROTON, CONNECTICUT				CONTRACTOR: GENERAL BORINGS, INC.							
			PROJ. NO: 141.11461.00018				FOREMAN: J. WYANT							
			CLIENT: TOWN OF GROTON				INSPECTOR: R. HENDERSON							
			DATE: JUNE 10, 2021				GROUND SURFACE ELEVATION: ±190.0'							
EQUIPMENT:		AUGER	CASING	SAMPLER	COREBRL	GROUNDWATER DEPTH (FT.)				TYPE OF RIG:				
TYPE		HSA	-	SS	-	DATE	TIME	WATER DEPTH		TRUCK W/ AUTOMATIC HAMMER				
SIZE ID (IN.)		3 1/4	-	1 3/8	-	2021-06-10 9:00 AM		±5.0'		RIG MODEL:				
HMR. WT (LB.)		-	-	140	-					DIEDRICH D-50				
HMR. FALL (IN.)		-	-	30	-									
SOIL AND ROCK CLASSIFICATION-DESCRIPTION														
BURMISTER SYSTEM (SOIL) U.S. CORPS OF ENGINEERS SYSTEM (ROCK)														
Depth (FT)	SAMPLE NUMBER	RECOVERY (IN)	BLOWS PER 6"	SOIL AND ROCK CLASSIFICATION-DESCRIPTION						DEPTH (FT.)	STRATUM DESCRIPTION	ELEV. (FT.)	Remark	
24				S-7: Dense, gray-brown, fine to coarse SAND, some Silt, trace fine Gravel.							WEATHERED BEDROCK			
25			18											
26	S-7	12	23											
27			23											
28			18											
29				S-8: Very dense, gray, fine to coarse SAND, some Silt, trace fine Gravel.						30.8'				
30														
31	S-8	9	18											
32			50/2"											
33														
Bottom of Exploration ±30.8'														
32														
33														
34														
35														
36														
37														
38														
39														
40														
41														
42														
43														
44														
45														
Remarks:														NON-PLASTIC (SPT-N)
				0-4 = VERY LOOSE	0-2 = VERY SOFT	C = ROCK CORE		1: each = ±10%						
				4-10 = LOOSE	2-4 = SOFT	S = SPLIT SPOON		little = 10% - 20%						
				10-30 = MEDIUM DENSE	4-8 = MEDIUM	UP = UNDISTURBED PISTON		some = 20% - 35%						
				30-50 = DENSE	8-15 = STIFF	UT = UNDISTURBED THINWALL		and = 35% - 50%						
				50+ = VERY DENSE	15-30 = VERY STIFF									
					30+ = HARD									

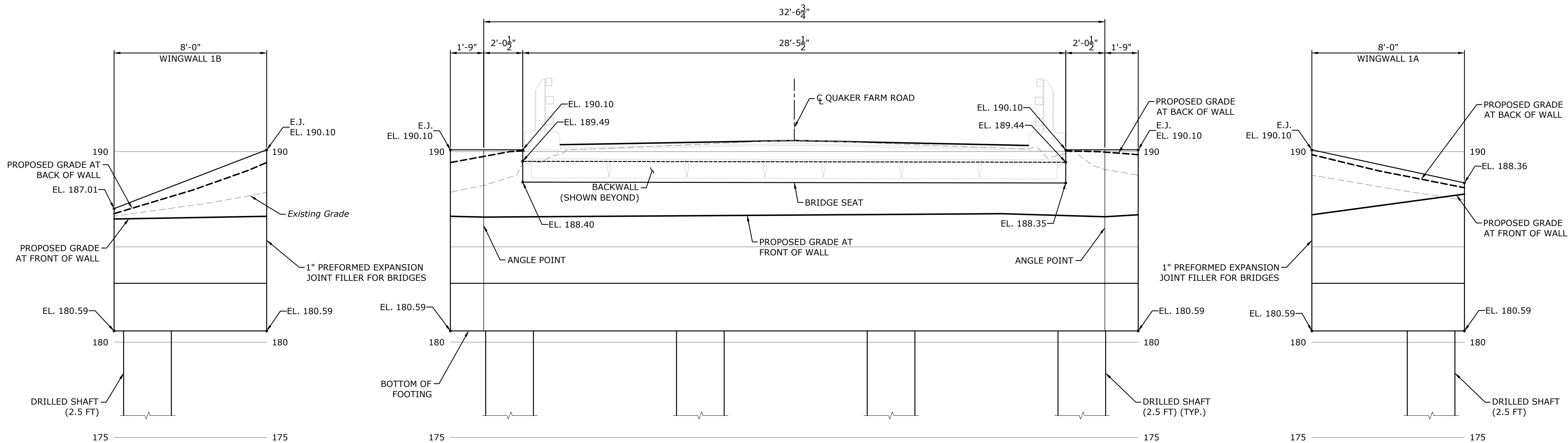
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ABUTMENT NO. 1 PLAN

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

TABLE OF COORDINATES		
WP #	NORTHING	EASTING
1	705788.17	1203899.70
2	705797.44	1203902.70
3	705823.42	1203883.07
4	705823.92	1203873.33



WINGWALL 1B - ELEVATION

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

ABUTMENT NO. 1 - ELEVATION

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

WINGWALL 1A - ELEVATION

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

NOTE:

E.J. - EXPANSION JOINT

ABUTMENT NO. 1 - PLAN & ELEVATION
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP	WRS	SEP
DESIGNED	DRAWN	CHECKED
SCALE: 3/8"=1'-0"		
DATE: AUGUST 21, 2025		
PROJECT NO. 141.11461.00018		
DRAWING NO. STR-03		

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STATE PROJECT NO. 9058-0015

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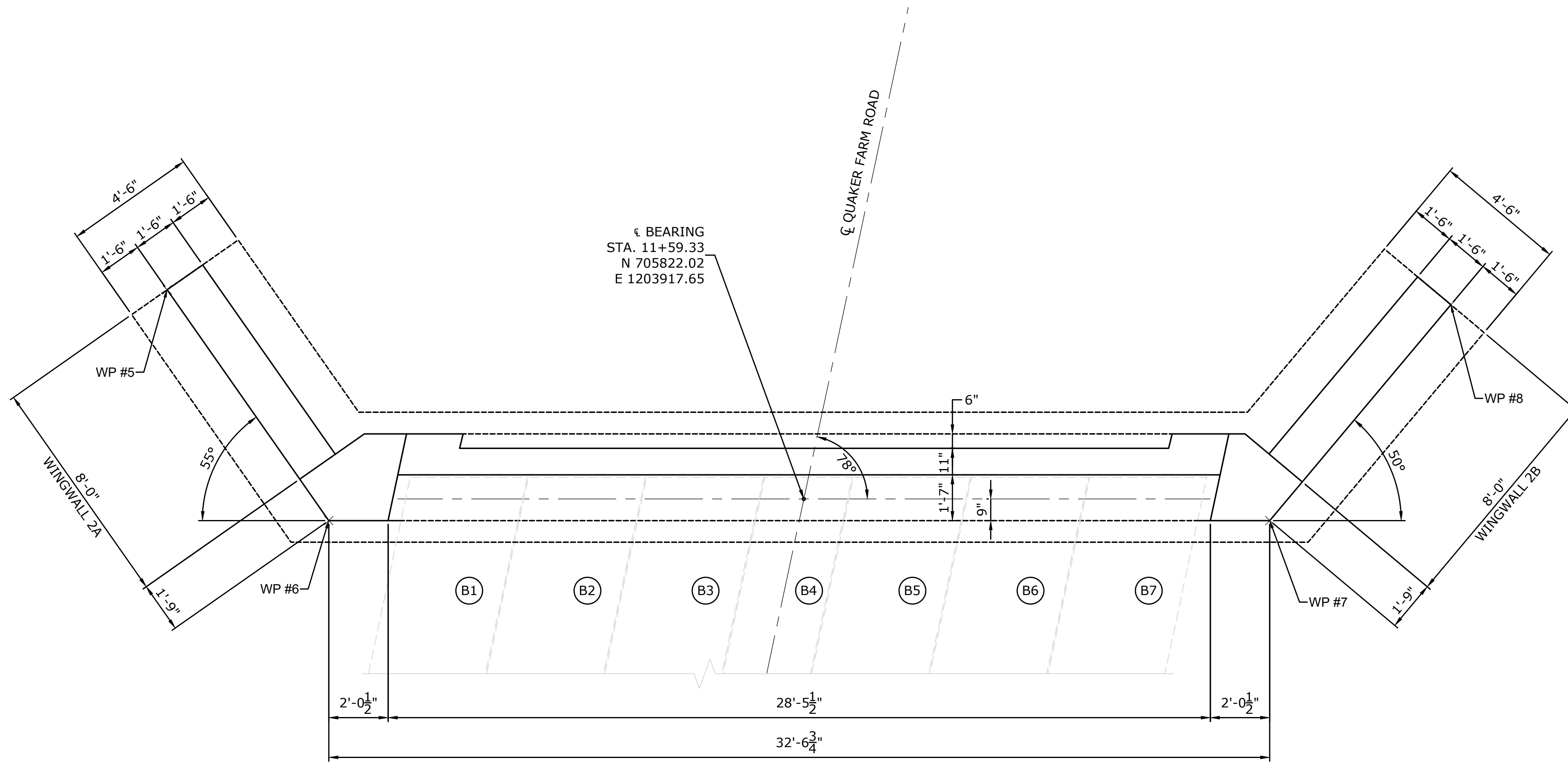
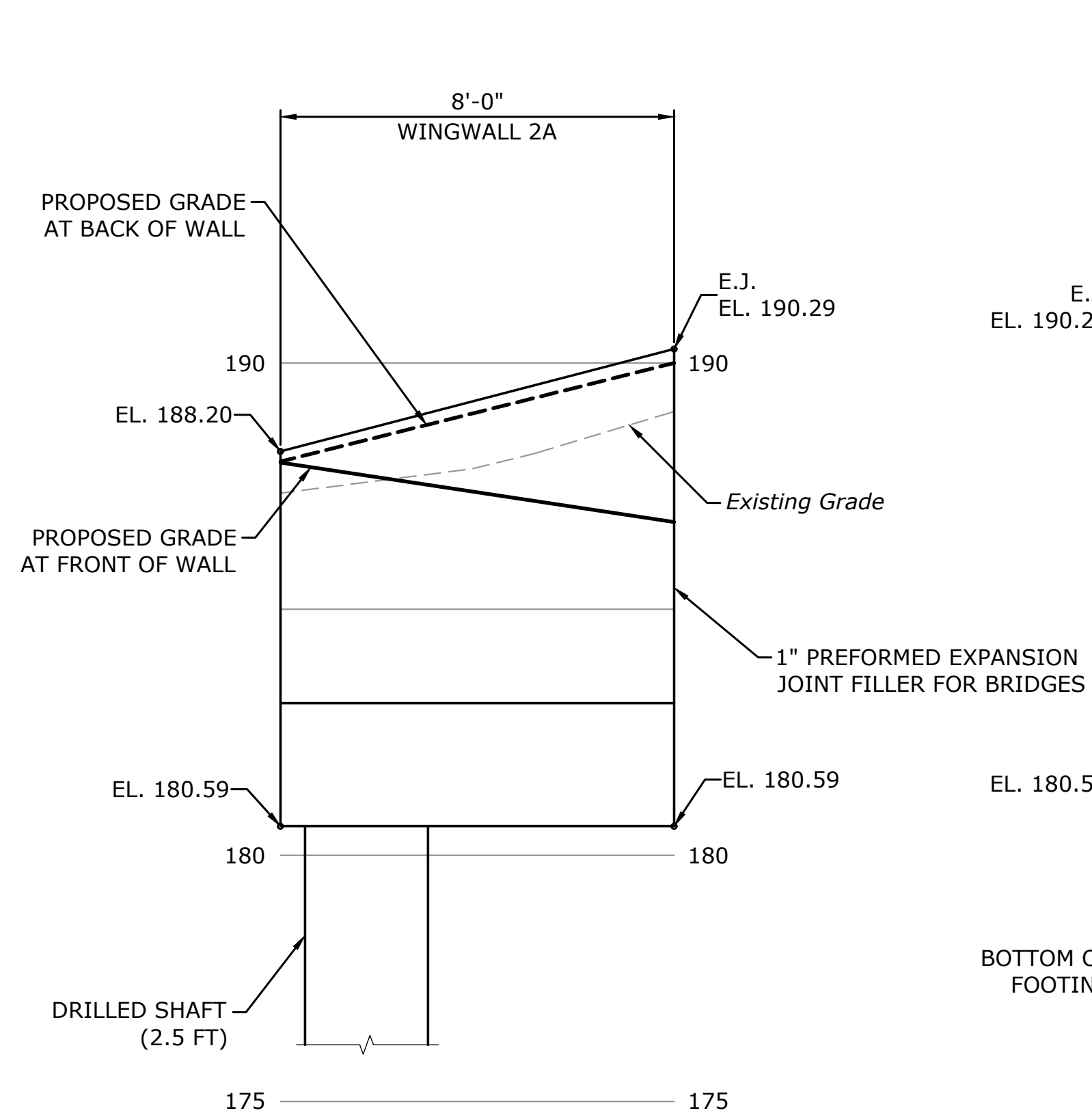
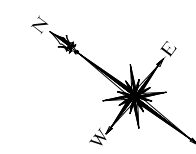


TABLE OF COORDINATES		
WP #	NORTHING	EASTING
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6	705834.69	1203907.14
7	705808.71	1203926.78
8	705808.21	1203936.51

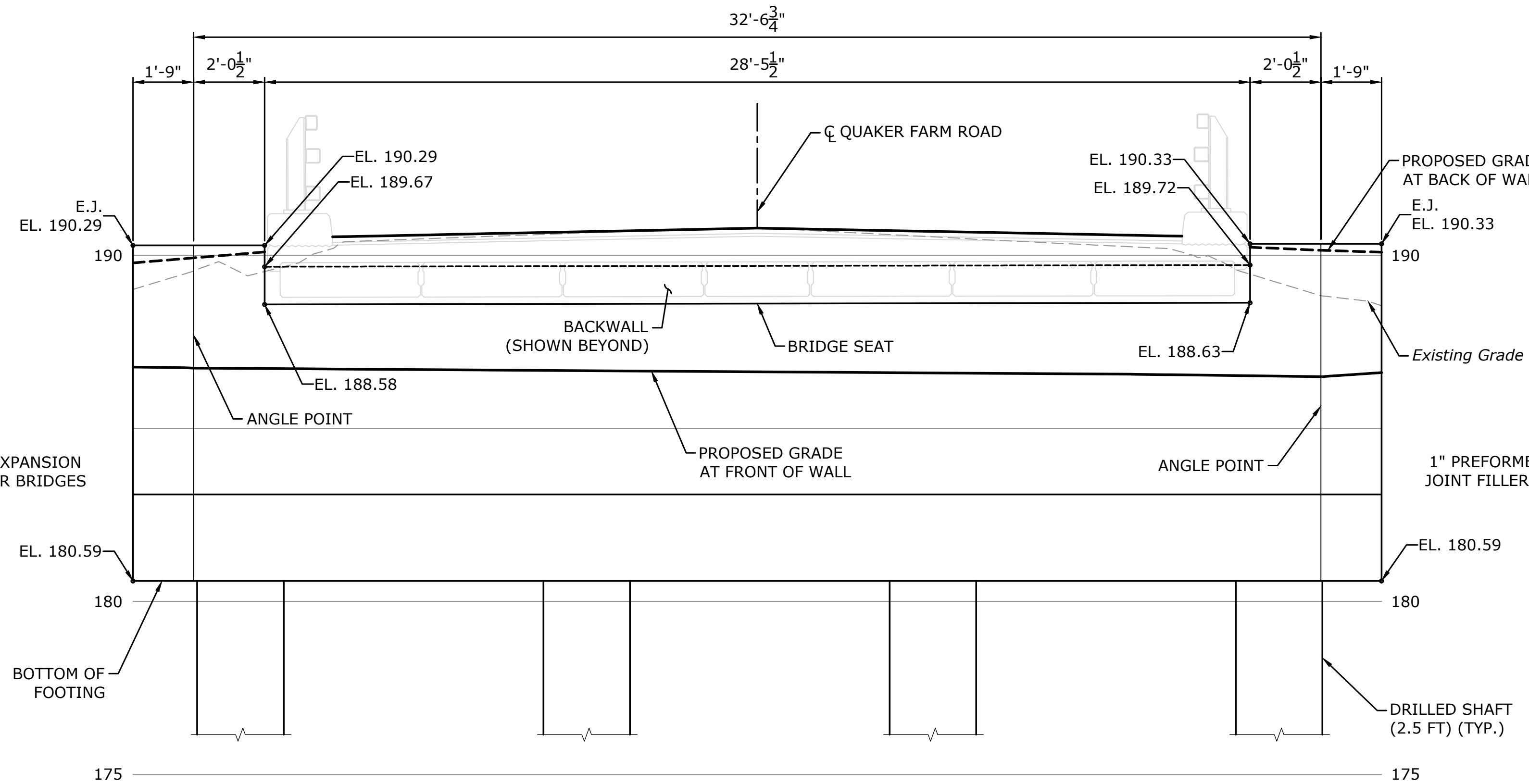
ABUTMENT NO. 2 PLAN

SCALE: $\frac{3}{8}" = 1'-0"$



WINGWALL 2A - ELEVATION

SCALE: $\frac{3}{8}" = 1'-0"$

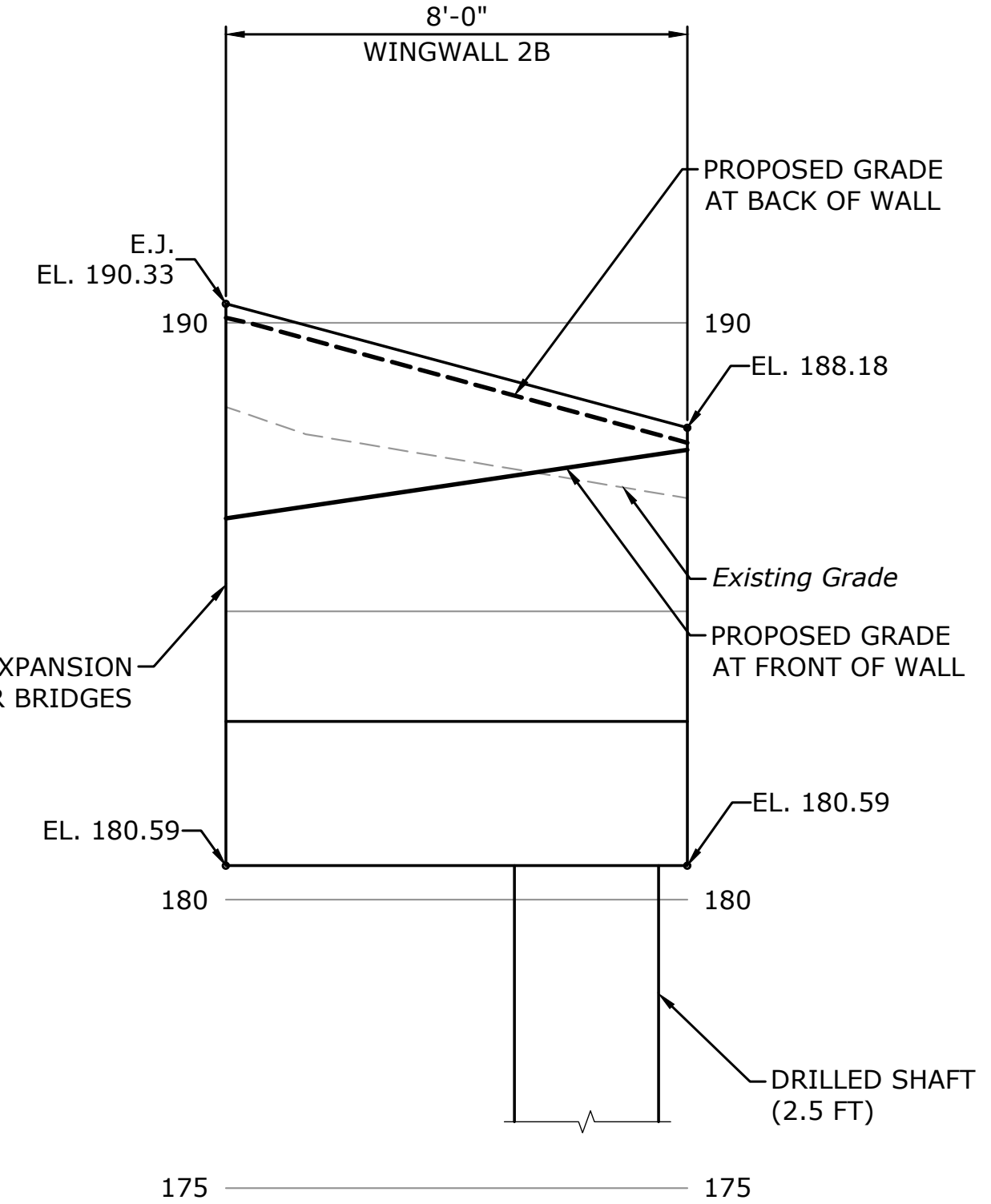


ABUTMENT NO. 2 - ELEVATION

SCALE: $\frac{3}{8}" = 1'-0"$

NOTE:

E.J. - EXPANSION JOINT



WINGWALL 2B - ELEVATION

SCALE: $\frac{3}{8}" = 1'-0"$

STATE PROJECT NO. 9058-0015

[illegible]

ABUTMENT NO. 2 - PLAN & ELEVATION

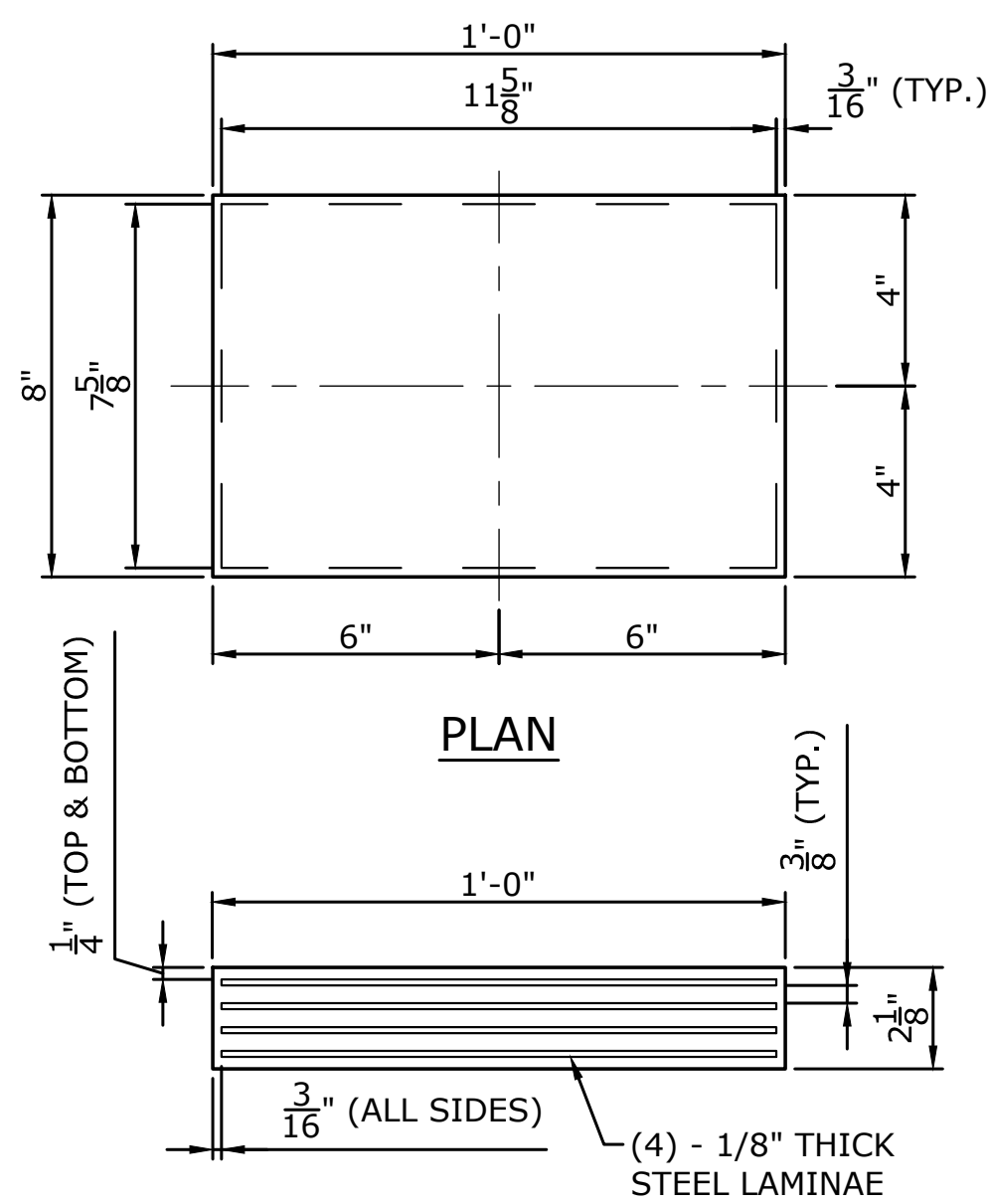
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK

QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP DESIGNED	WRS DRAWN	SEP CHECKED
<p>3/8"=1'-0"</p> <p>SCALE</p>		
<p>AUGUST 21, 2025</p> <p>DATE</p>		
<p>141.11461.00018</p> <p>PROJECT NO.</p>		
<p>STR-04</p> <p>DRAWING NO.</p>		

13

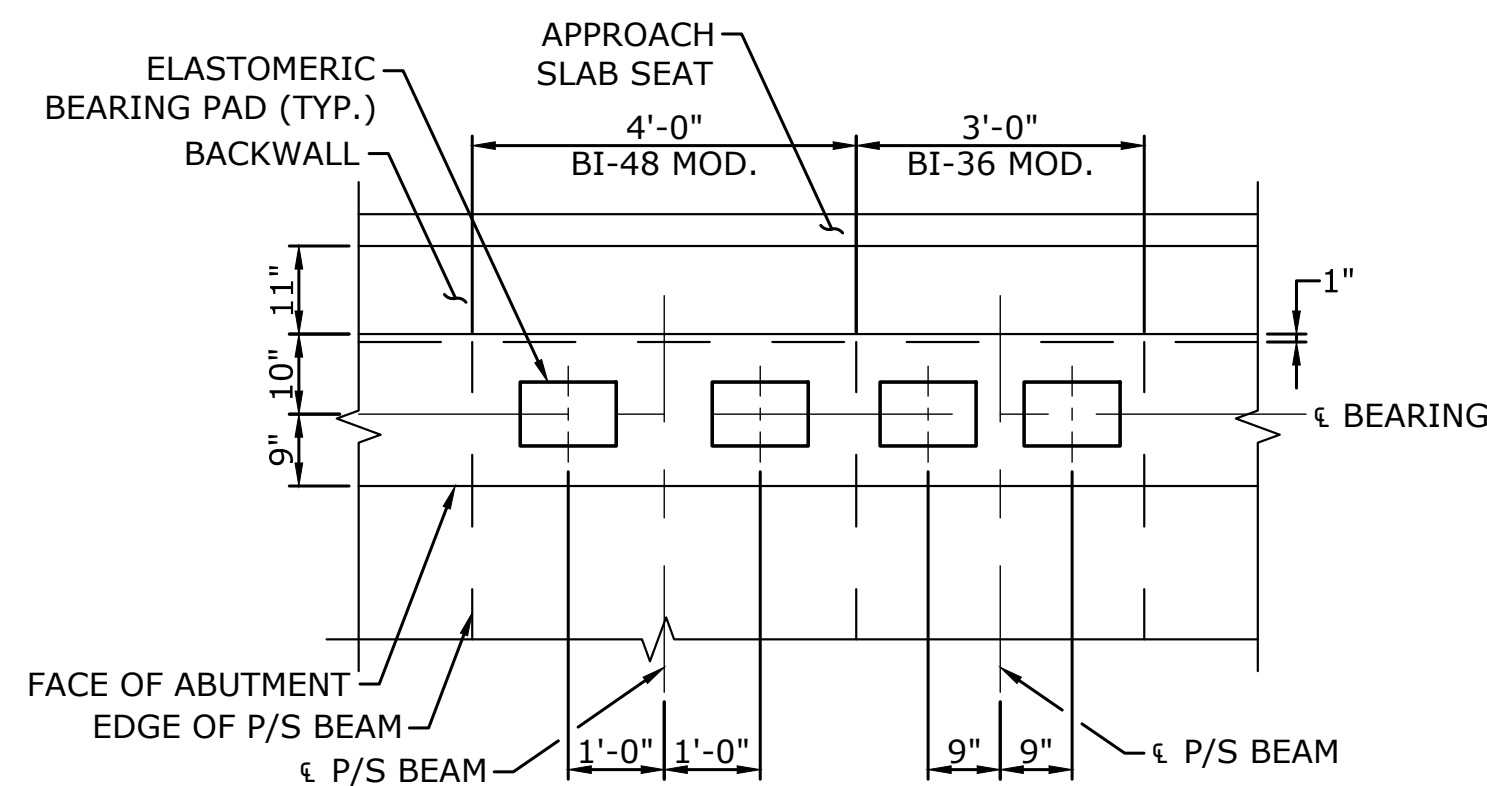
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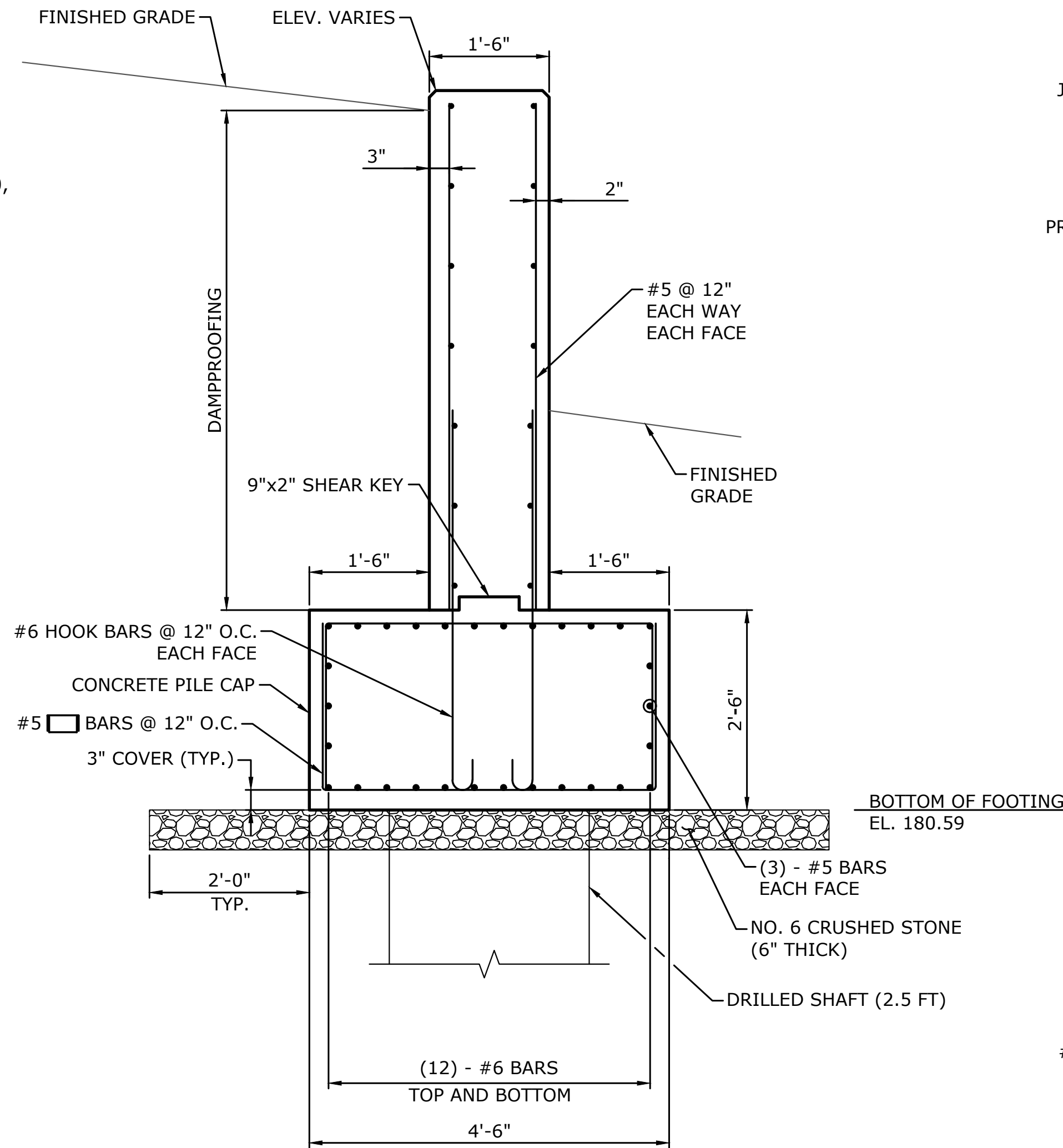
ELASTOMERIC PAD DETAILS
SCALE: 3" = 1'-0"

ELASTOMERIC PAD NOTES

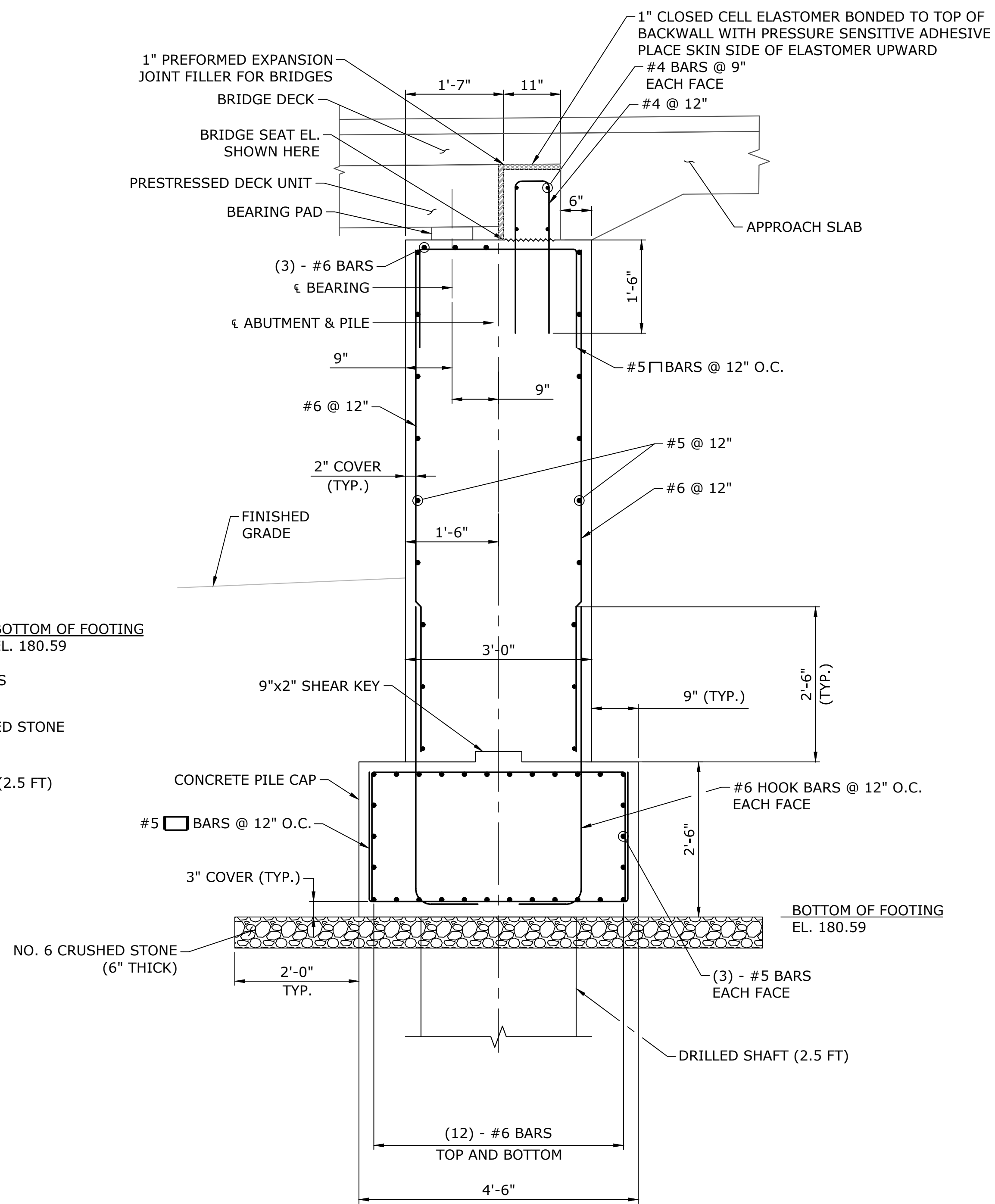
1. THE STEEL LAMINAE SHALL CONFORM TO ASTM 1570, GRADE 36 OR 40; ASTM A611, GRADE C OR D, OR APPROVED EQUAL.
2. THE ELASTOMER SHALL BE TYPE CR, GRADE 3 AS DEFINED BY ASTM D4014 AND SHALL HAVE A SHORE "A" DUROMETER HARDNESS OF 50 +/-5 POINTS AND A SHEAR MODULUS WITHIN THE RANGE OF 95 - 130 PSI AT 73° F.
3. THE ELASTOMERIC BEARINGS SHALL BE INSTALLED WHEN AMBIENT TEMPERATURE IS BETWEEN 40° F AND 80° F AND HAS BEEN WITHIN THIS RANGE FOR AT LEAST TWO HOURS.
4. 1/8" THICK NEOPRENE SHIMS MAY BE USED TO PROVIDE PROPER SEATING OF BEAMS.
5. EACH BEARING SHALL BE BONDED TO THE DECK UNIT AND BRIDGE SEAT.



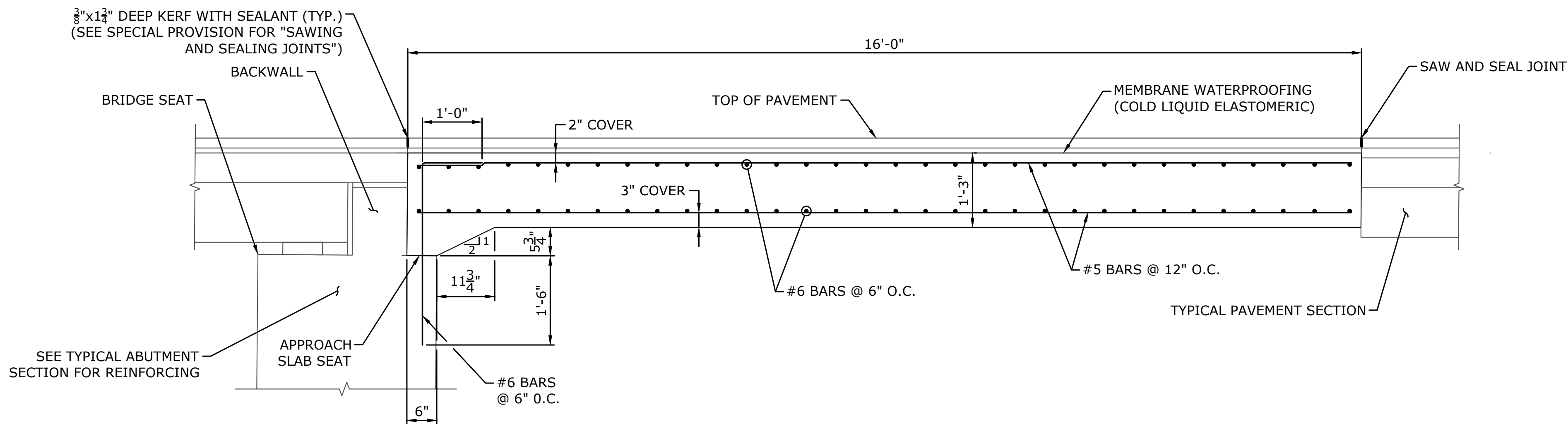
ELASTOMERIC PAD LAYOUT
SCALE: 1/2" = 1'-0"



WINGWALL TYPICAL SECTION
SCALE: 3/4" = 1'-0"



TYPICAL ABUTMENT SECTION
SCALE: 3/4" = 1'-0"

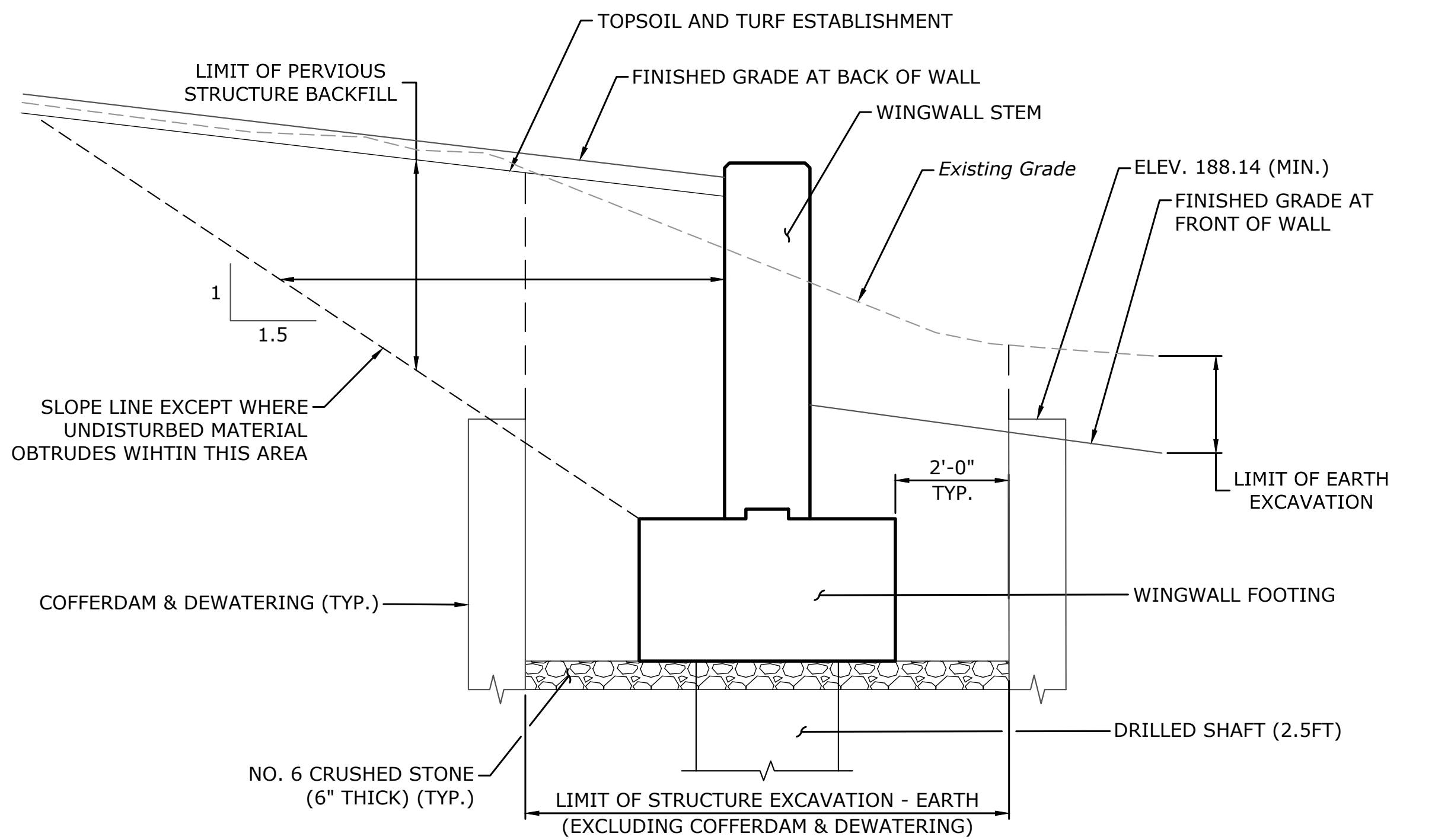


APPROACH SLAB DETAIL
SCALE: 3/4" = 1'-0"

DESCRIPTION	DATE	BY

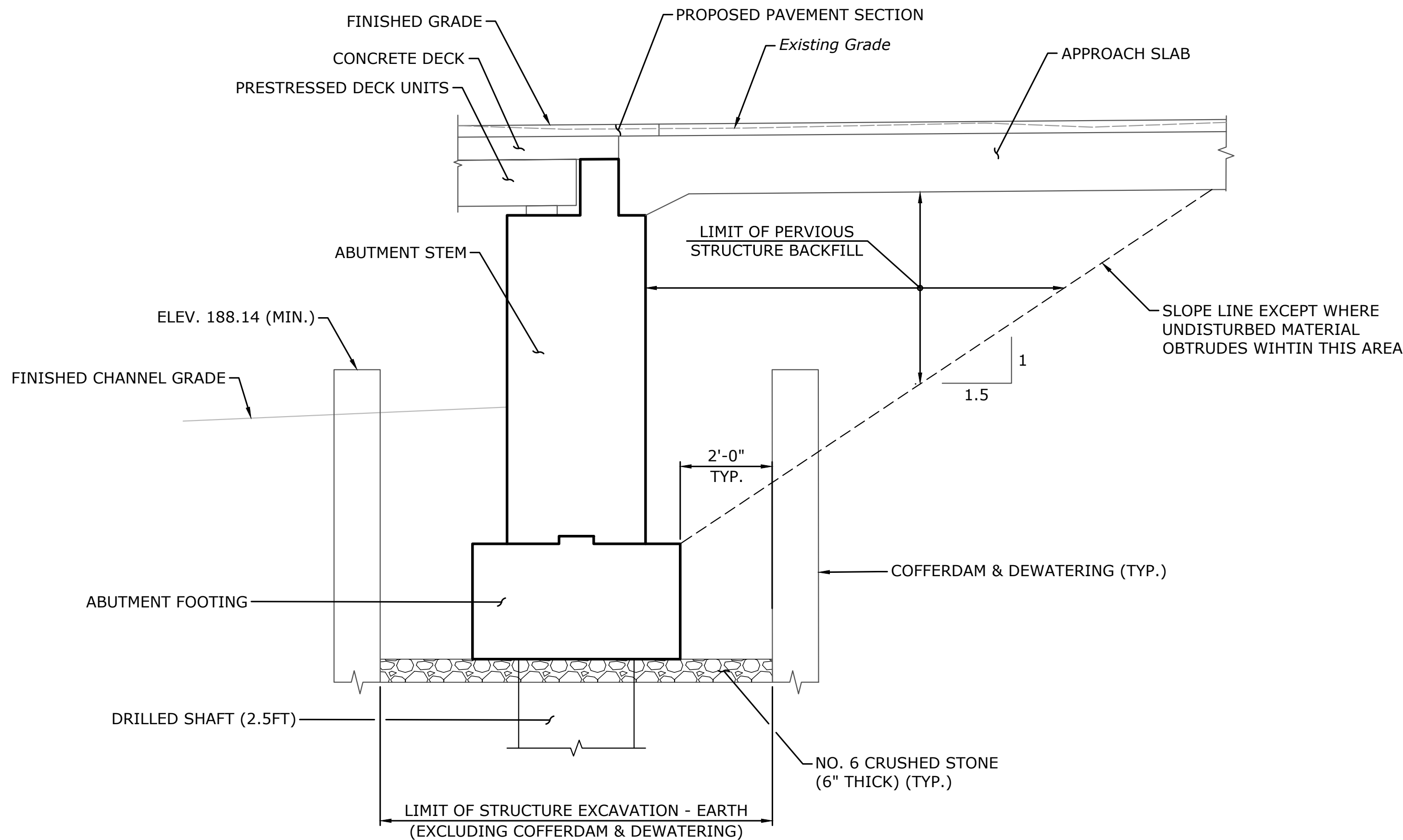
SEP	WRS	KP
DESIGNED	DRAWN	CHECKED
AS SHOWN		
AUGUST 21, 2025		
141.11461.00018		
STR-05		

WINGWALL PAY LIMITS - 1/2"=1'-0" SCALE
ABUTMENT PAY LIMITS - 1/2"=1'-0" SCALE
EXISTING CULVERT REMOVAL PAY LIMITS - 1/4"=1'-0" SCALE



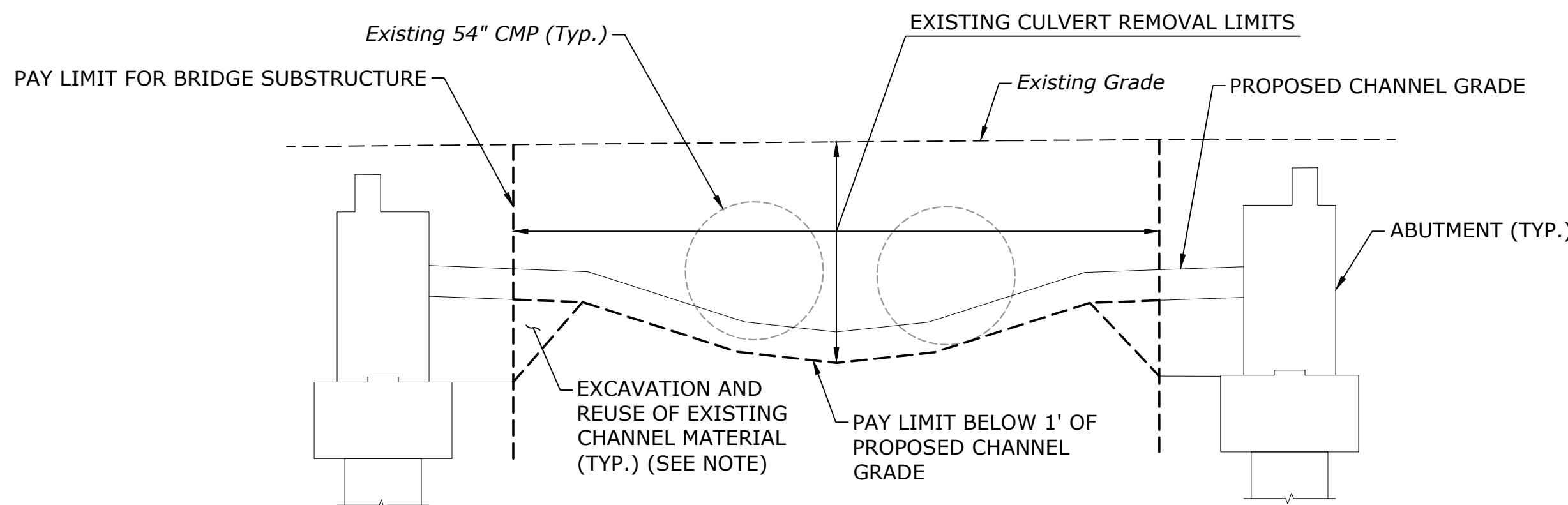
WINGWALL PAY LIMITS

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



ABUTMENT PAY LIMITS

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



EXISTING CULVERT REMOVAL PAY LIMITS

SCALE: 1/4"=1'-0"

NOTES:

- EXCAVATION AND REUSE OF EXISTING CHANNEL MATERIAL FOR THE PLACEMENT OF RIPRAP SHALL BE PAID UNDER THE LUMP SUM COST OF THE ITEM "CHANNEL RESTORATION".
- REMOVAL OF THE EXISTING PIPE CULVERTS INCLUDING PIPES, OVERBURDEN MATERIAL, AND HEADWALLS SHALL BE INCLUDED IN THE COST OF "REMOVALS AND SITE PREPARATION".



95 REALTY DRIVE
SUITE 200
203.271.1773
SLRCONSULTING.COM

DESCRIPTION	DATE	BY

SUBSTRUCTURE PLANS & DETAILS

REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

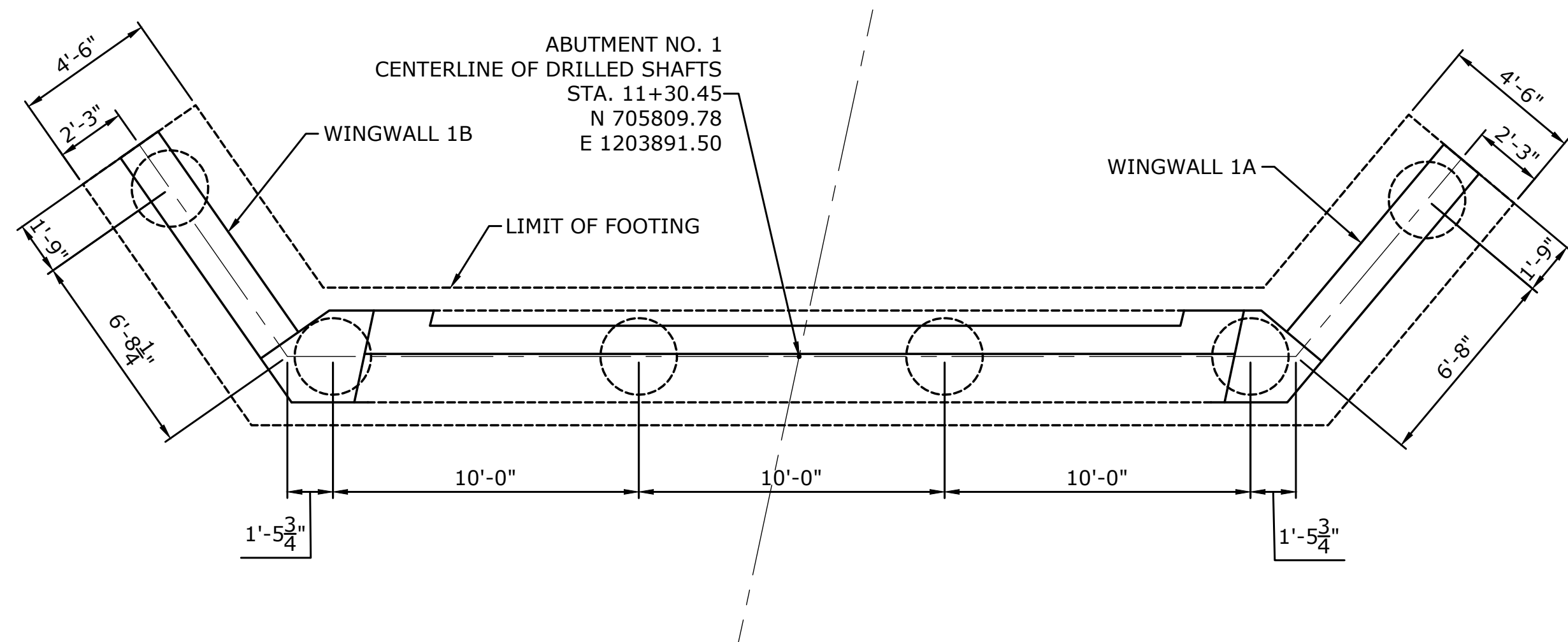
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AS SHOWN		
AUGUST 21, 2025		
141.11461.00018		
STR-06		

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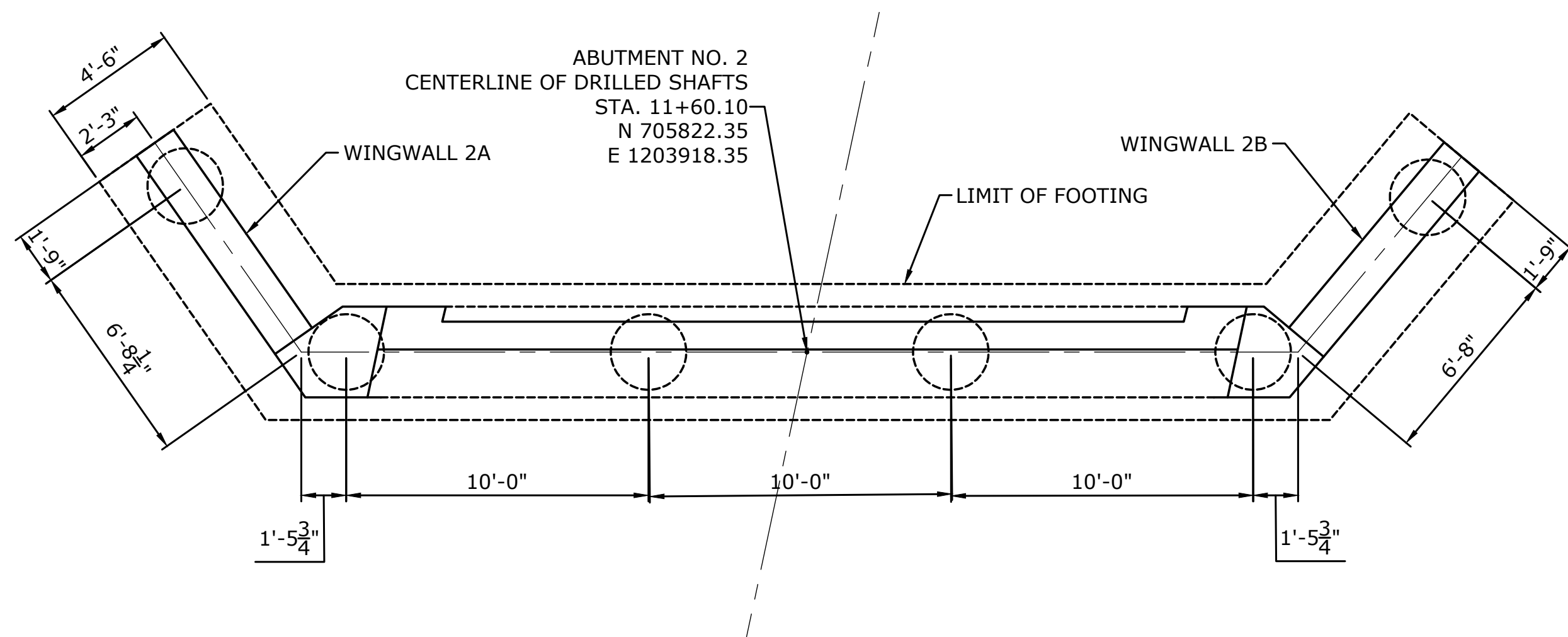
STATE PROJECT NO. 9058-0015

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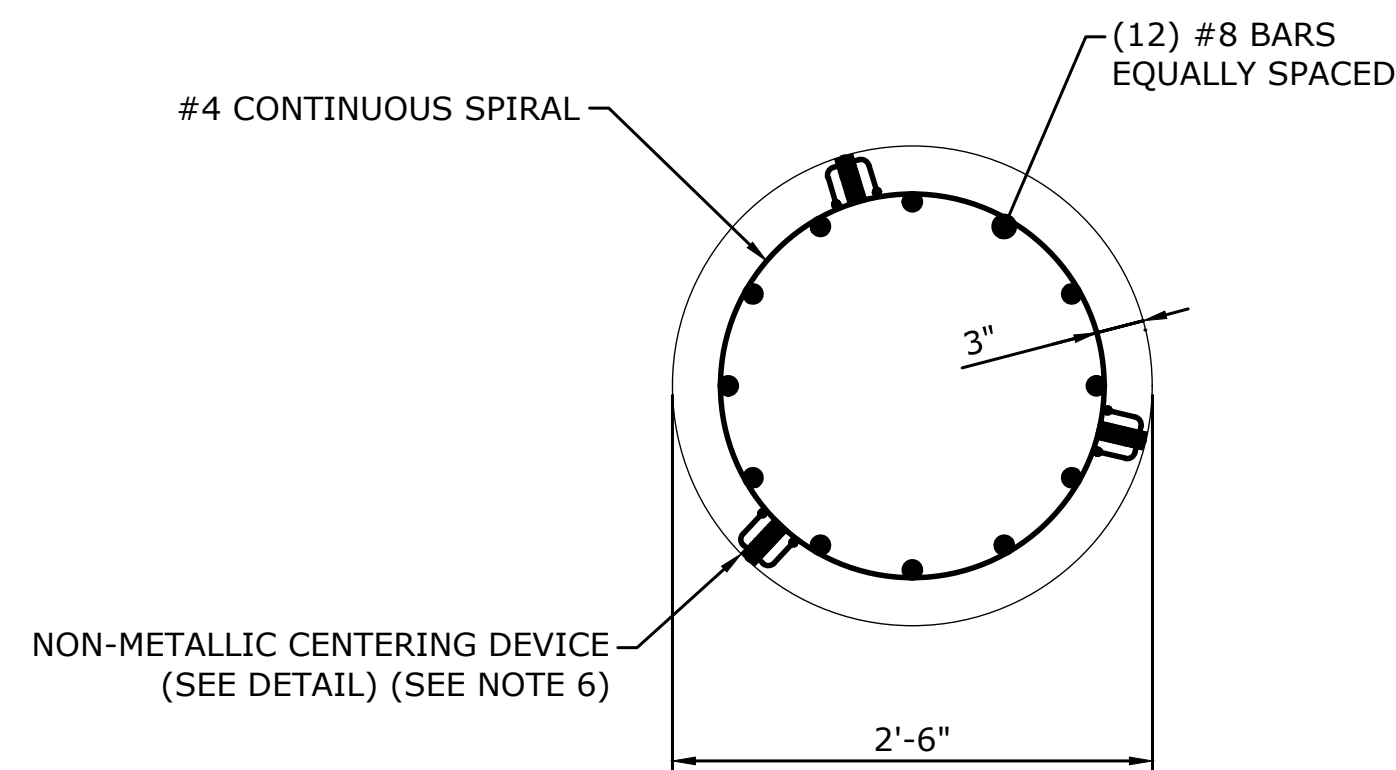
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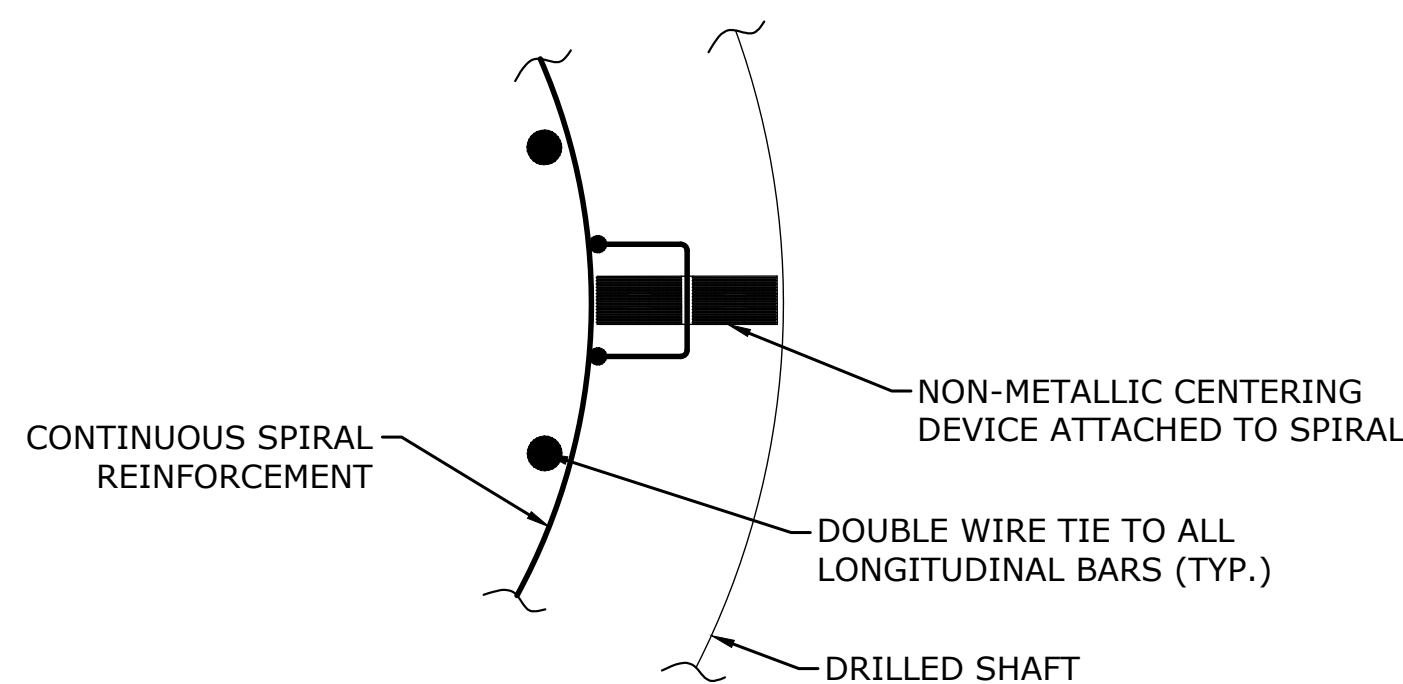
DRILLED SHAFT LAYOUT - ABUTMENT NO. 1 & WINGWALLS 1A/1B
SCALE: 3/4"=1'-0"



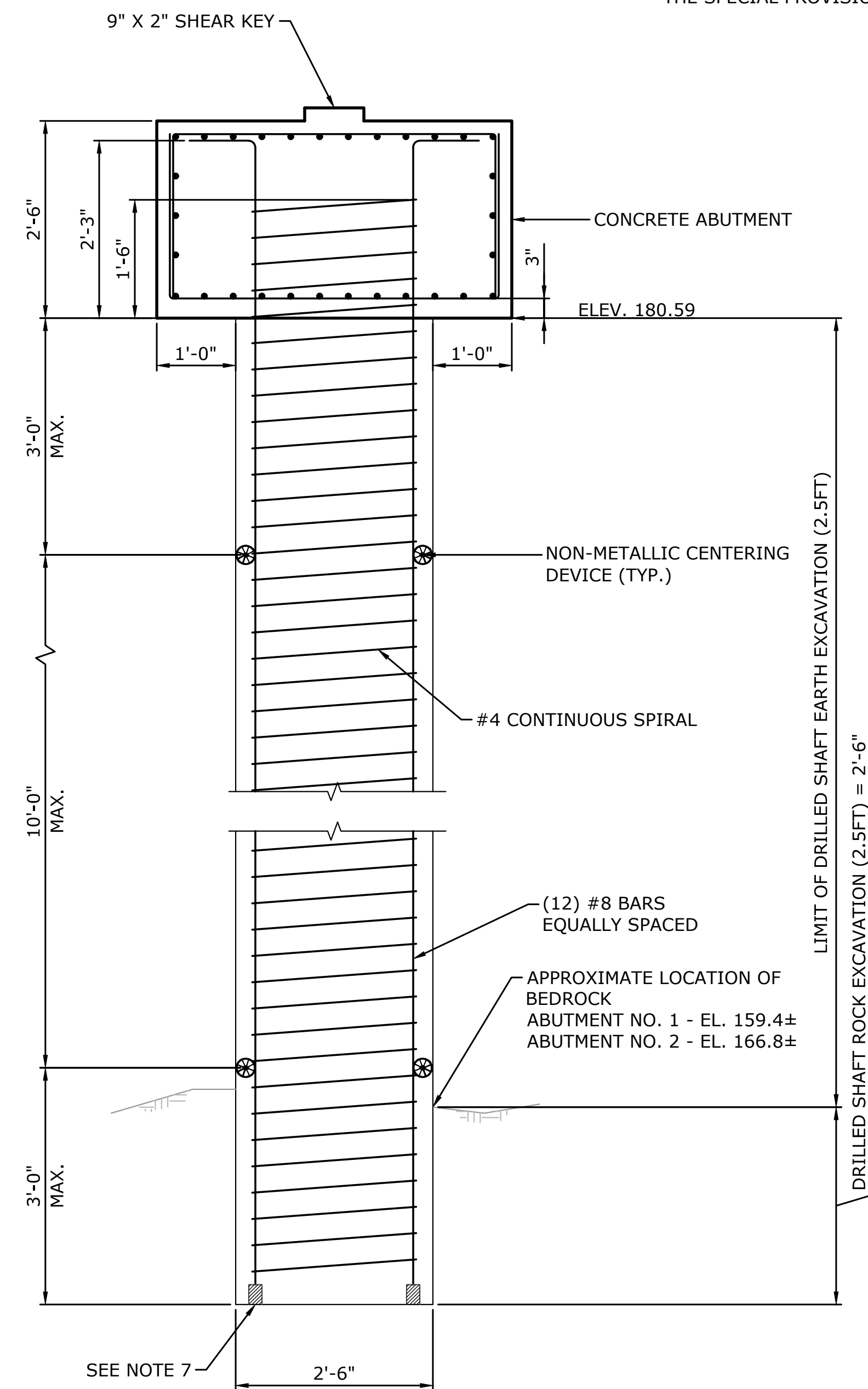
DRILLED SHAFT LAYOUT - ABUTMENT NO. 2 & WINGWALLS 2A/2B
SCALE: 3/4"=1'-0"



TYPICAL DRILLED SHAFT SECTION
SCALE: 1" = 1'-0"



CENTERING DEVICE DETAIL
SCALE: 1" = 1'-0"



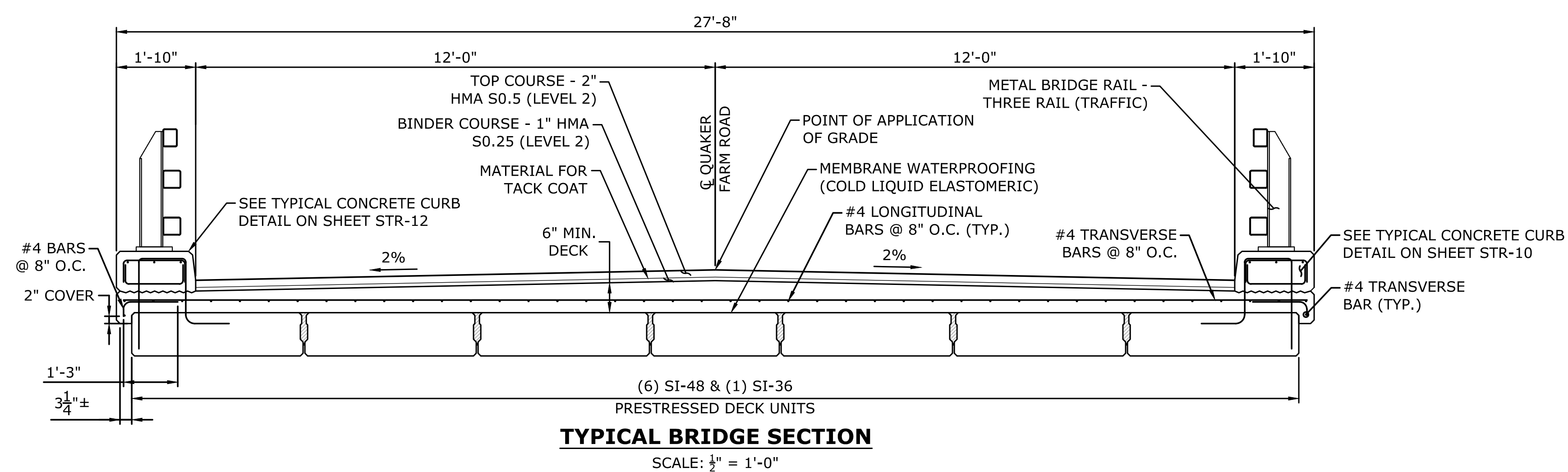
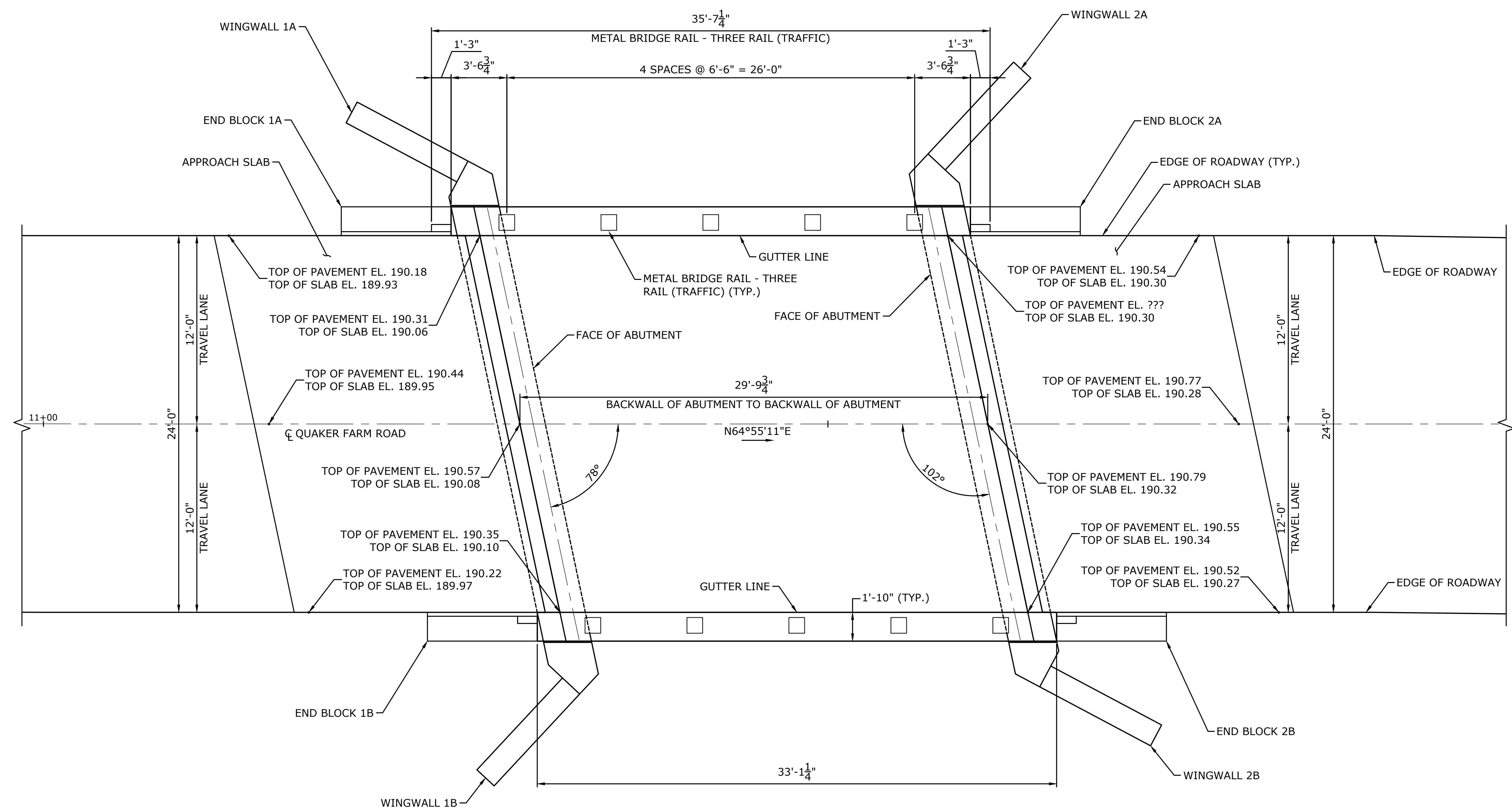
DRILLED SHAFT DETAIL
SCALE: 3/4" = 1'-0"

DRILLED SHAFT NOTES

1. DRILLED SHAFT CONCRETE SHALL BE PCC04460 CONCRETE.
2. DRILLED SHAFT REINFORCEMENT SHALL BE GALVANIZED AND CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE ITEM "DRILLED SHAFT (2.5FT)".
3. THE FACTORED DESIGN AXIAL LOAD PER SHAFT IS 171.4 KIPS FOR STRENGTH I. THE FACTORED DESIGN LATERAL LOAD PER SHAFT IS 27.9 KIPS FOR STRENGTH I.
4. CENTERING DEVICES SHALL BE CONSTRUCTED OF NON-METALLIC DURABLE MATERIAL.
5. THE NON-METALLIC CENTERING DEVICES SHALL BE OF ADEQUATE SIZE TO INSURE A MINIMUM OF 3" ANNULAR SPACE BETWEEN THE OUTSIDE OF THE REINFORCEMENT CAGE AND THE SIDES OF THE DRILLED SHAFT.
6. THERE SHALL BE A MINIMUM OF 3 GROUPS OF NON-METALLIC CENTERING DEVICES FOR SHAFTS LESS THAN 26'-0" IN LENGTH.
7. NON-METALLIC CENTERING DEVICES SHALL BE PLACED AT A MAXIMUM SPACING OF 2'-6" AROUND THE CIRCUMFERENCE OF THE SHAFT.
8. EACH LONGITUDINAL BAR SHALL BE SUPPORTED BY A 3" HIGH BOLSTER OF NON-METALLIC DURABLE MATERIAL.
9. SPLICES IN THE LONGITUDINAL REINFORCEMENT, IF REQUIRED, SHALL BE MADE WITH MECHANICAL REINFORCING BAR SPLICERS AND SHALL BE STAGGERED A MINIMUM OF 2'-0".
10. WELDING OF LONGITUDINAL REINFORCEMENT SHALL NOT BE PERMITTED.
11. THE DRILLED SHAFTS WILL BE INSTALLED BELOW THE WATER TABLE. ANY TEMPORARY CASING NECESSARY TO PROVIDE STABILITY TO THE EXCAVATION DURING THE INSTALLATION OF THE DRILLED SHAFTS SHALL BE IN ACCORDANCE WITH FORM 819 AND PAID FOR UNDER ITEM "DRILLED SHAFTS".
12. EACH DRILLED SHAFT SHALL UNDERGO REFLECTION (SONIC ECHO) INTEGRITY TESTING UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE INTEGRITY TESTING SHALL BE PAID FOR UNDER THE ITEM "DRILLED SHAFTS" AND PERFORMED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR "INTEGRITY TESTING - REFLECTION."

DESCRIPTION	DATE	BY

SEP	WRS	SEP
DESIGNED	DRAWN	CHECKED
AS SHOWN		
AUGUST 21, 2025		
DATE		
141.11461.00018		
PROJECT NO.		
STR-07		
DRAWING NO.		

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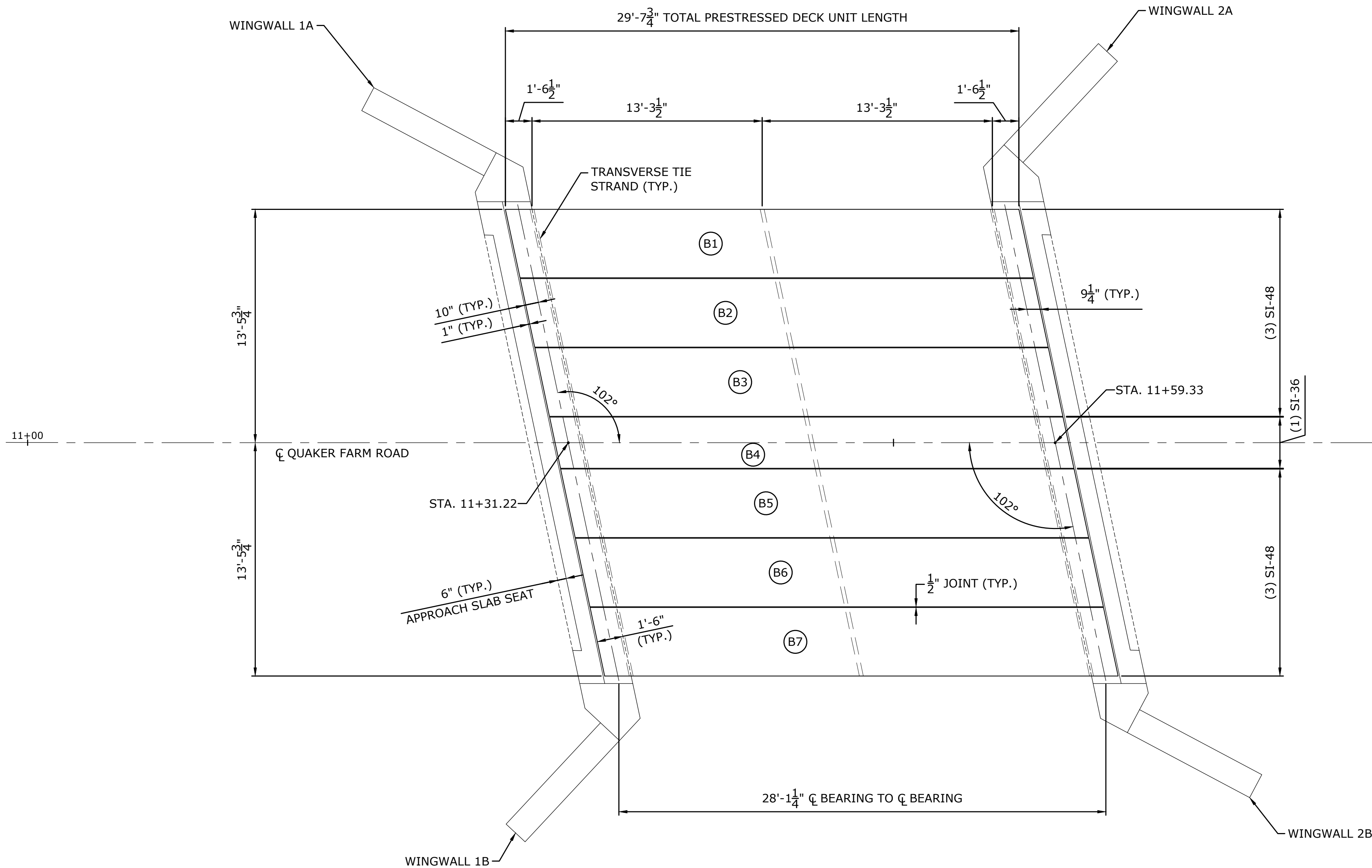
DECK PLAN

REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEY'S BROOK

QUAKER FARM ROAD
GROTON, CONNECTICUT

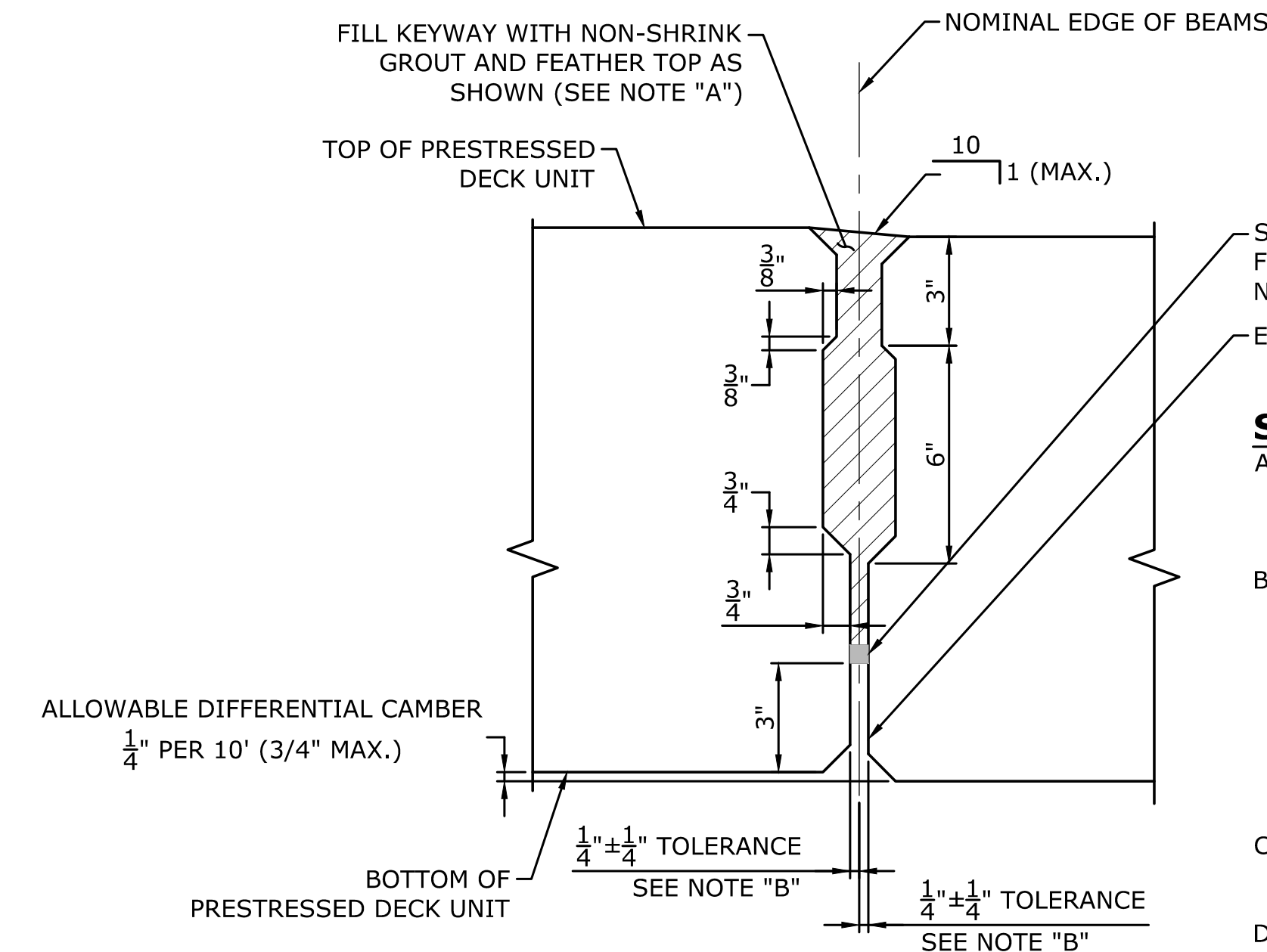
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SCALE		
AUGUST 21, 2025		
DATE		
141.11461.00018		
PROJECT NO.		
STR-08		
DRAWING NO.		

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FRAMING PLAN

SCALE: 1/4" = 1'-0"



TYPICAL LONGITUDINAL JOINT

SCALE: 3" = 1'-0"

SHEAR KEY NOTES

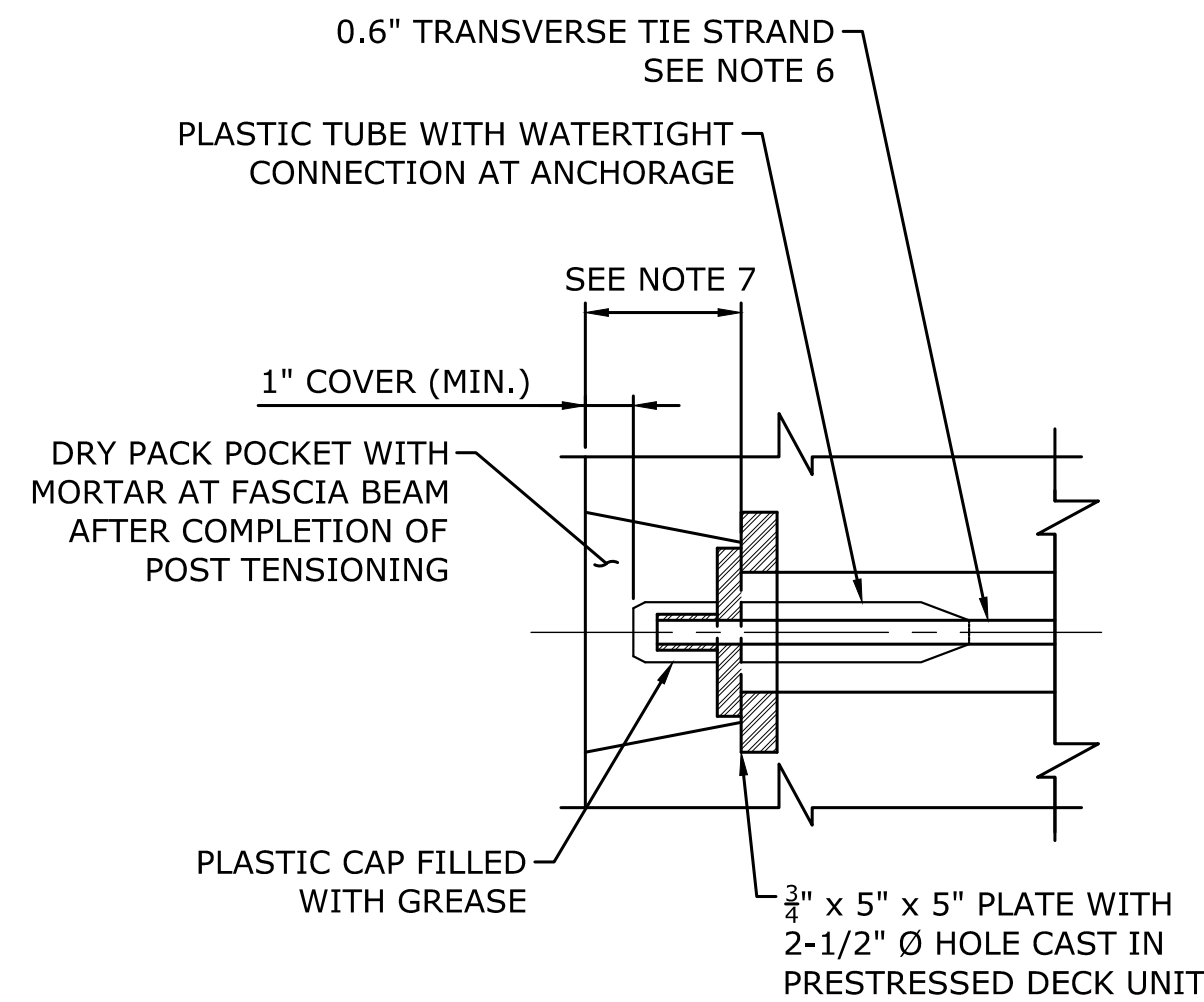
- THE GROUT FOR SHEAR KEYS SHALL BE RODDED OR VIBRATED TO ENSURE THAT ALL VOIDS IN THE SHEAR KEYS ARE FILLED.
- THE ALLOWABLE DIFFERENTIAL IN THE BOTTOM OF THE TOP SLAB SHALL BE 1/4" PER 10 FEET (3/4" MAX.) DUE TO FABRICATION TOLERANCES OF THE PRESTRESSED DECK UNITS. THE PRESTRESSED DECK UNITS SHALL BE PLACED AT THE NOMINAL SPACING SHOWN ON THE PLANS WITH A GAP BETWEEN SECTIONS. THE WIDTH OF THE GAP CAN VARY DUE TO THE SWEEP OF THE SECTIONS.
- VARIATION INDICATED IS DUE TO FABRICATION TOLERANCES FOR THE PRESTRESSED DECK UNITS.
- SHEAR KEY SHALL BE OMITTED ON THE OUTSIDE FACE OF FASCIA SECTIONS AND THE TOP EDGE OF THE EXTERIOR FASCIA SHALL HAVE A 3/4"X3/4" CHAMFER.

PRESTRESSED CONCRETE NOTES

- PRESTRESSED DECK UNITS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
f'c = 6,500 PSI (MIN. 28 DAY COMPRESSIVE STRENGTH)
f'ci = 5,000 PSI (MIN. COMPRESSIVE STRENGTH AT TRANSFER)
- PRESTRESSING STRANDS SHALL BE 0.6" DIAMETER, 7 WIRE LOW RELAXATION STRANDS, CONFORMING TO THE REQUIREMENTS OF AASHTO M203 (ASTM A416), GRADE 270.
ULTIMATE STRENGTH F_s = 270 KSI
JACKING FORCE F_j = 43.9 KIPS PER STRAND
- PRESTRESSING STRANDS SHALL BE PLACED 2" ON CENTERS MINIMUM AND SHALL HAVE A MINIMUM 1-1/2" COVER.
- ENDS OF PRESTRESSED DECK UNITS SHALL BE VERTICAL AFTER APPLICATION OF FULL DEAD LOAD.
- THE DRILLING OF HOLES IN PRESTRESSED DECK UNITS OR USE OF POWER ACTUATED TOOLS WILL NOT BE PERMITTED.
- NO ADDITIONAL DEAD LOADS OR LIVE LOADS SHALL BE APPLIED TO THE BUTTED DECK UNITS UNTIL TRANSVERSE TIES HAVE FULLY TENSIONED AND THE GROUT IN THE LONGITUDINAL SHEAR KEYS HAS REACHED A SEVEN DAY COMPRESSIVE STRENGTH OF 4500 PSI.
- THE ERECTION OF DECK UNITS SHALL BEGIN AT THE CENTER AND PROCEED IN SEQUENCE TOWARDS THE FASCIA.
- THE TOP OF THE DECK UNITS SHALL RECEIVE A TRANSVERSE RAKE FINISH .

NOTE

ALL NON-PRESTRESSED REINFORCEMENT IN THE PRESTRESSED DECK UNITS SHALL BE GALVANIZED. THE COST OF THE PRESTRESSED DECK UNITS, INCLUDING PRESTRESSING, NON-PRESTRESSING REINFORCING, AND POST-TENSIONING SHALL BE INCLUDED IN THE LUMP SUM COST FOR "BRIDGE SUPERSTRUCTURE".



TRANSVERSE TENSIONING DETAIL

SCALE: 3" = 1'-0"

TRANSVERSE TIE NOTES

- AFTER ALL BEAMS HAVE BEEN ERECTED, TENSION EACH TRANSVERSE TIE TO 5 KIPS.
- FILL KEYWAYS WITH NON-SHRINK GROUT. THE CONTRACTOR SHALL COVER AND PROTECT THE KEYWAYS FROM THE WEATHER AND DEBRIS UNTIL THEY ARE FILLED.
- AFTER THE GROUT ATTAINED STRENGTH OF 1500 PSI (BASED ON THE MANUFACTURERS DIRECTIONS) TENSION EACH TRANSVERSE TIE TO 30 KIPS. NO TRAFFIC OR HEAVY EQUIPMENT WILL BE PERMITTED ON THE BEAMS UNTIL TIES HAVE BEEN FULLY TENSIONED.
- CONCRETE FOR CURBS AND SLAB SHALL NOT BE PLACED UNTIL THE TRANSVERSE TIES HAVE BEEN FULLY TENSIONED.
- OTHER ANCHORAGE SYSTEMS MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. ALTERNATE ANCHORAGE SYSTEMS SHALL BE WATERTIGHT AND CORROSION PROOF.
- TRANSVERSE TIES SHALL BE COVERED BY A SEAMLESS POLYPROPYLENE SHEATH, WITH CORROSION INHIBITING GREASE BETWEEN THE STRAND AND SHEATH, FOR FULL LENGTH OF THE STRAND EXCEPT AT THE ANCHORAGE LOCATION.
- DIMENSION TO BE DETERMINED BY THE FABRICATOR BASED ON THE ANCHORAGE USED.

STATE PROJECT NO. 9058-0015

DESCRIPTION

DATE

BY

FRAMING PLAN

REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP DESIGNED WRS DRAWN SEP CHECKED

AS SHOWN

AUGUST 21, 2025

141.11461.00018

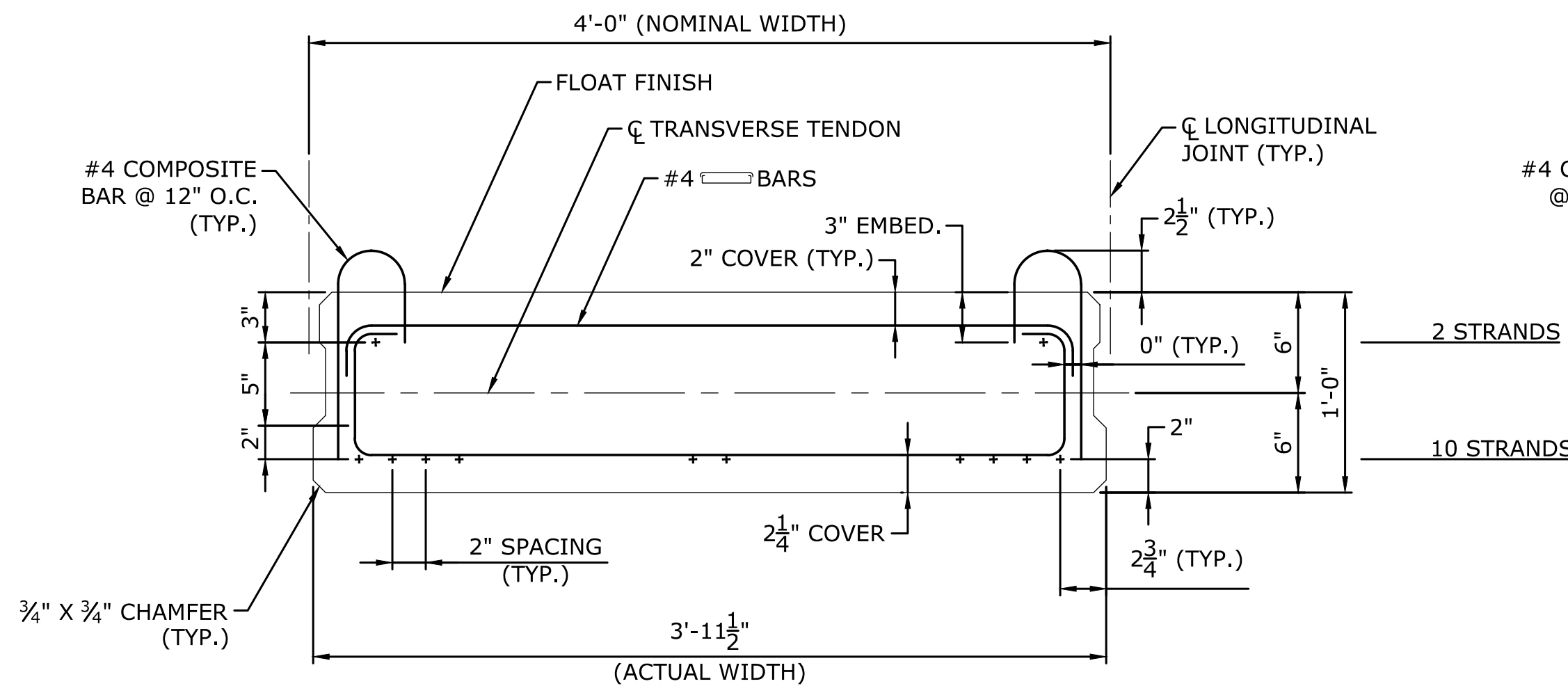
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SHEET NO.

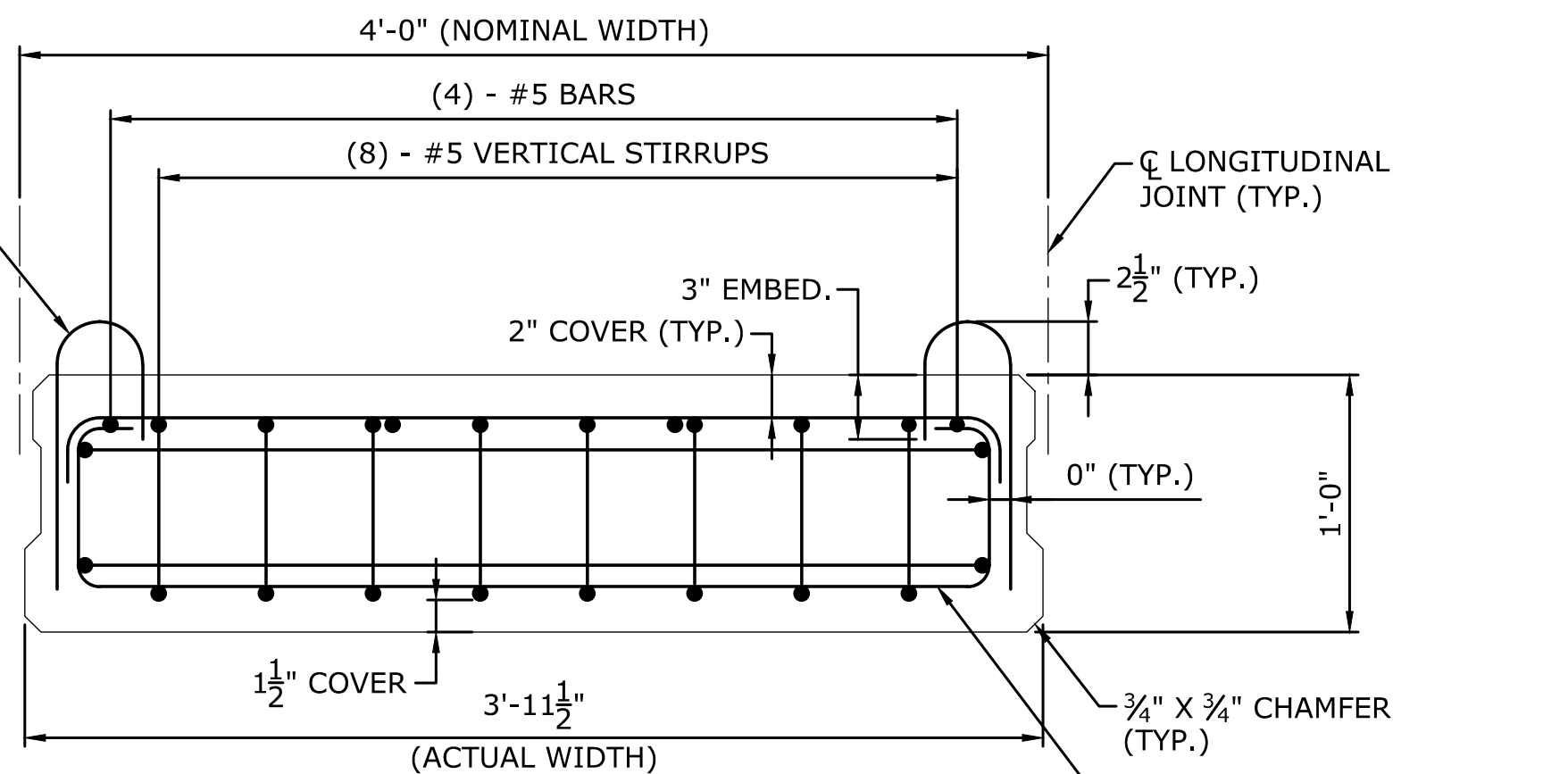
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TYPICAL SECTION SI-48 DECK UNITS (B1-B3 & B5-B7) AT MIDSPAN

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

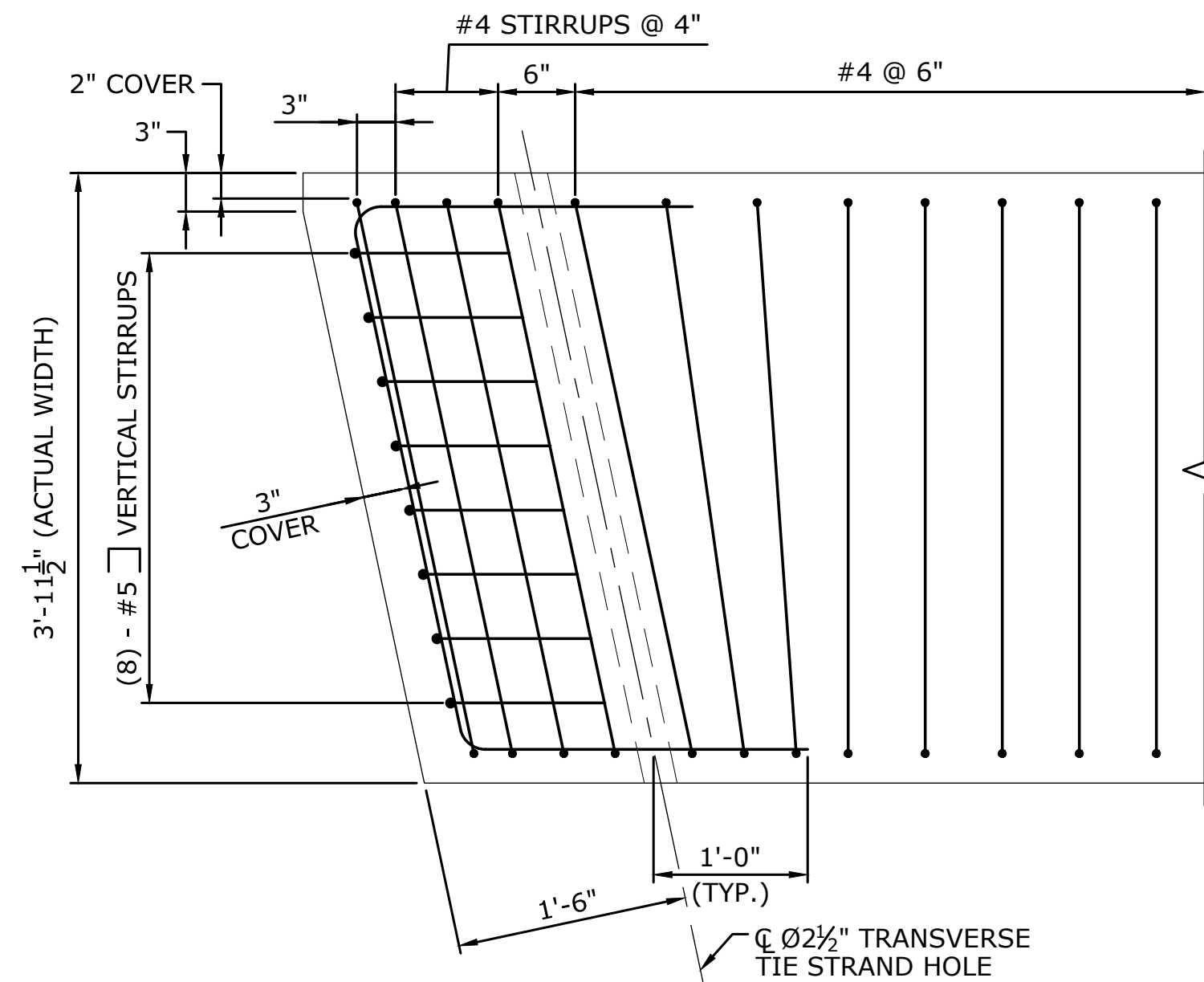


TYPICAL SECTION SI-48 DECK UNITS (B1-B3 & B5-B7) AT END

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

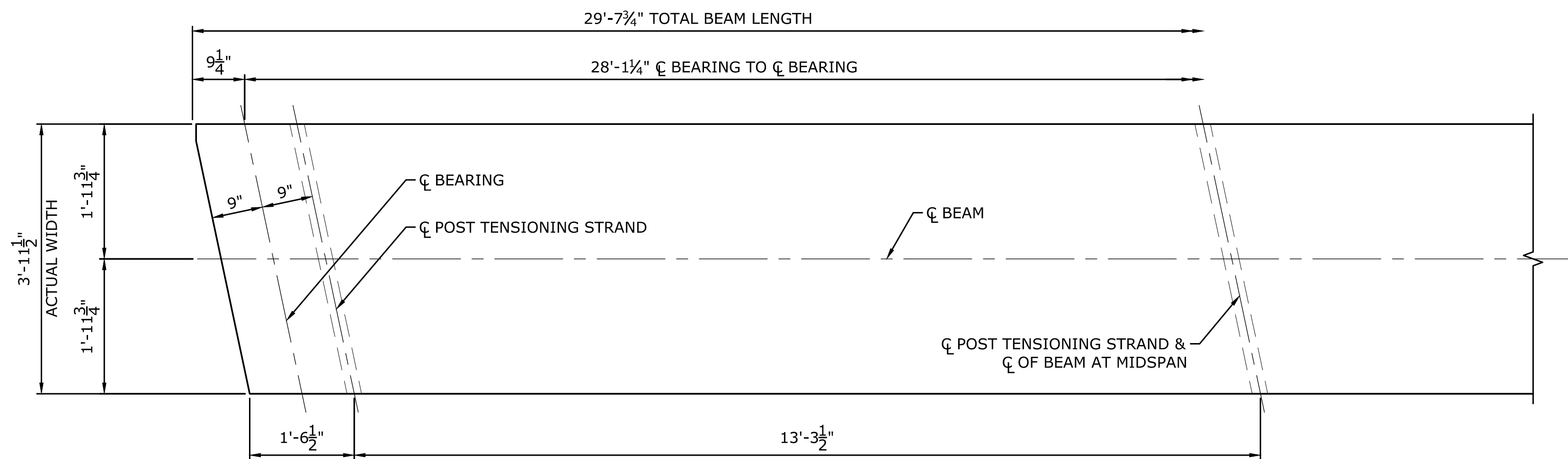
NOTE:

THE HORIZONTAL LEGS OF THE VERTICAL STIRRUPS SHALL BE EQUAL TO THE DEPTH OF THE BEAM (12-INCHES).



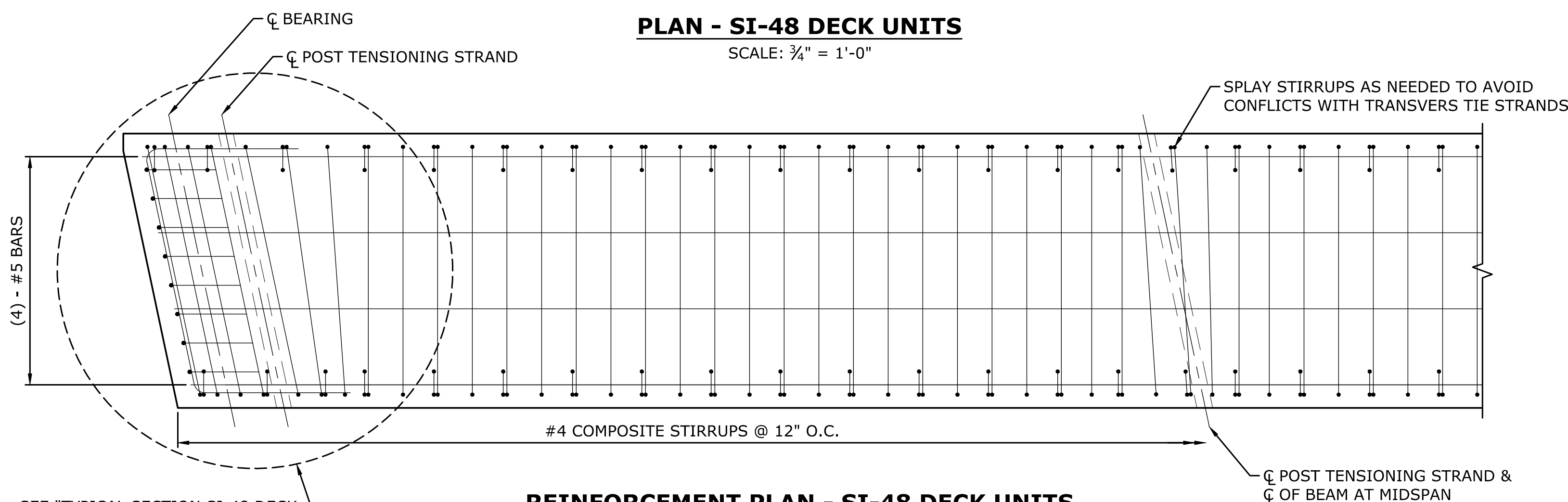
**TYPICAL SECTION SI-48 DECK UNITS
END REINFORCEMENT PLAN VIEW**

SCALE: 1" = 1'-0"



PLAN - SI-48 DECK UNITS

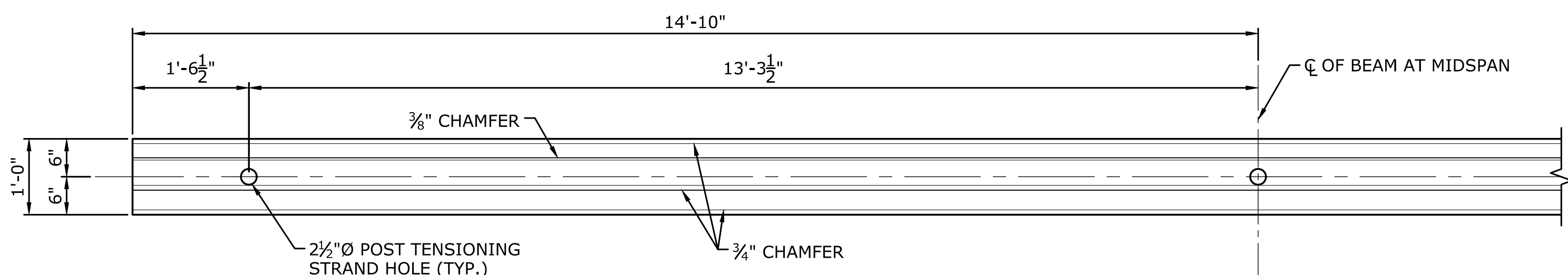
SCALE: 3/4" = 1'-0"



REINFORCEMENT PLAN - SI-48 DECK UNITS

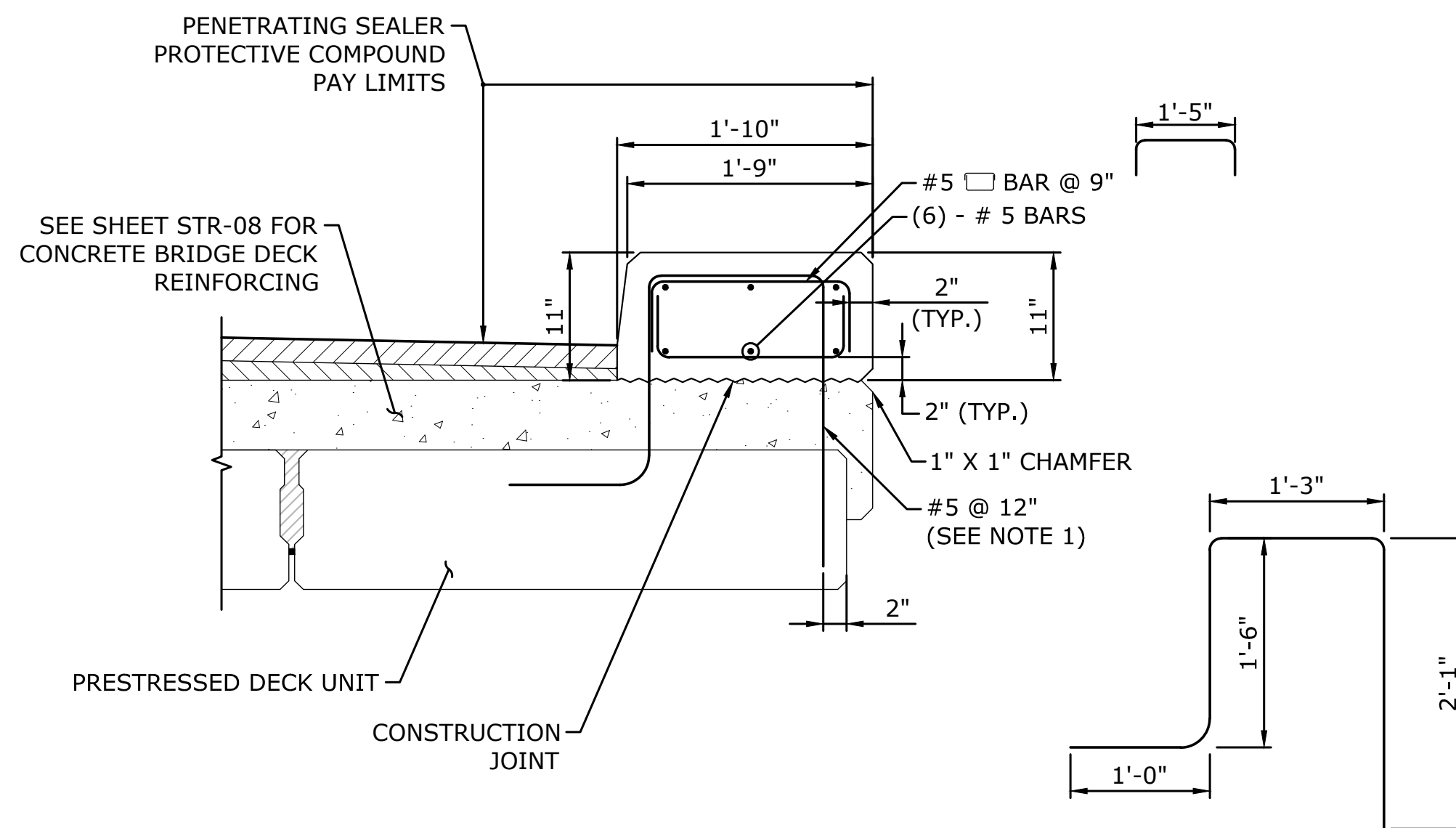
SCALE: 3/4" = 1'-0"

SEE "TYPICAL SECTION SI-48 DECK UNITS END REINFORCEMENT PLAN VIEW" THIS SHEET



ELEVATION - SI-48 DECK UNITS

SCALE: 3/4" = 1'-0"



TYPICAL CONCRETE CURB DETAIL

SCALE: 1"=1'-0"

NOTE

- ALL REINFORCEMENT SHOWN IN CURB SHALL BE GALVANIZED.
- 2" COVER IN CURB TYPICAL.

ESTIMATED CAMBER AT MIDSPAN

BEAM NO.	AT TRANSFER	AT ERECTION	AT FINAL
B1, B7	0.39"	0.51"	0.38"
B2-B3, B5-B6	0.39"	0.52"	0.40"

CAMBER NOTES

- AT TRANSFER:** CAMBER DUE TO PRESTRESS FORCE AT TRANSFER MINUS THE DEFLECTION DUE TO BEAM WEIGHT.
- AT ERECTION:** CAMBER DUE TO PRESTRESS FORCE AT TRANSFER MINUS DEFLECTION DUE TO BEAM WEIGHT) THAT IS PRESENT AT APPROXIMATELY 30 DAYS AFTER TRANSFER.
- FINAL:** LONG TERM CAMBER THAT IS PRESENT AFTER ALL DEAD LOADS ARE APPLIED TO THE STRUCTURE AND AFTER LONG TERM CREEP AND RELAXATION HAVE TAKEN PLACE.
- CAMBER IS IN INCHES.

NUMBER OF STRANDS REQUIRED

BEAM NO.	NUMBER OF STRANDS	CENTER OF GRAVITY	JACKING FORCE PER STRAND
B1-B3, B5-B7	12	3.17"	31 KIPS

NOTES

- ALL LONGITUDINAL REINFORCEMENT SHALL BE CONTINUOUS.
- ALL REINFORCEMENT SHALL CLEAR TRANSVERSE TIE HOLES.
- LIFTING HOOKS SHALL BE PLACED IN LINE WITH THE CENTERLINE OF THE BEARINGS AND SHALL BE INSTALLED PER FABRICATORS STRAND DETAILS.
- AFTER BEAMS ARE IN PLACE AND SECURED, BURN OFF EXPOSED PORTION OF LIFTING HOOKS. GROUT CONCRETE SURFACE OF BEAM TO SMOOTH FINISH.
- SHEAR KEY SHALL BE OMITTED ON AN OUTSIDE FACE OF FASCIA BEAMS.

STATE PROJECT NO. 9058-0015

PRESTRESSED DECK UNIT DETAILS
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP WRS SEP
DESIGNED DRAWN CHECKED

AS SHOWN

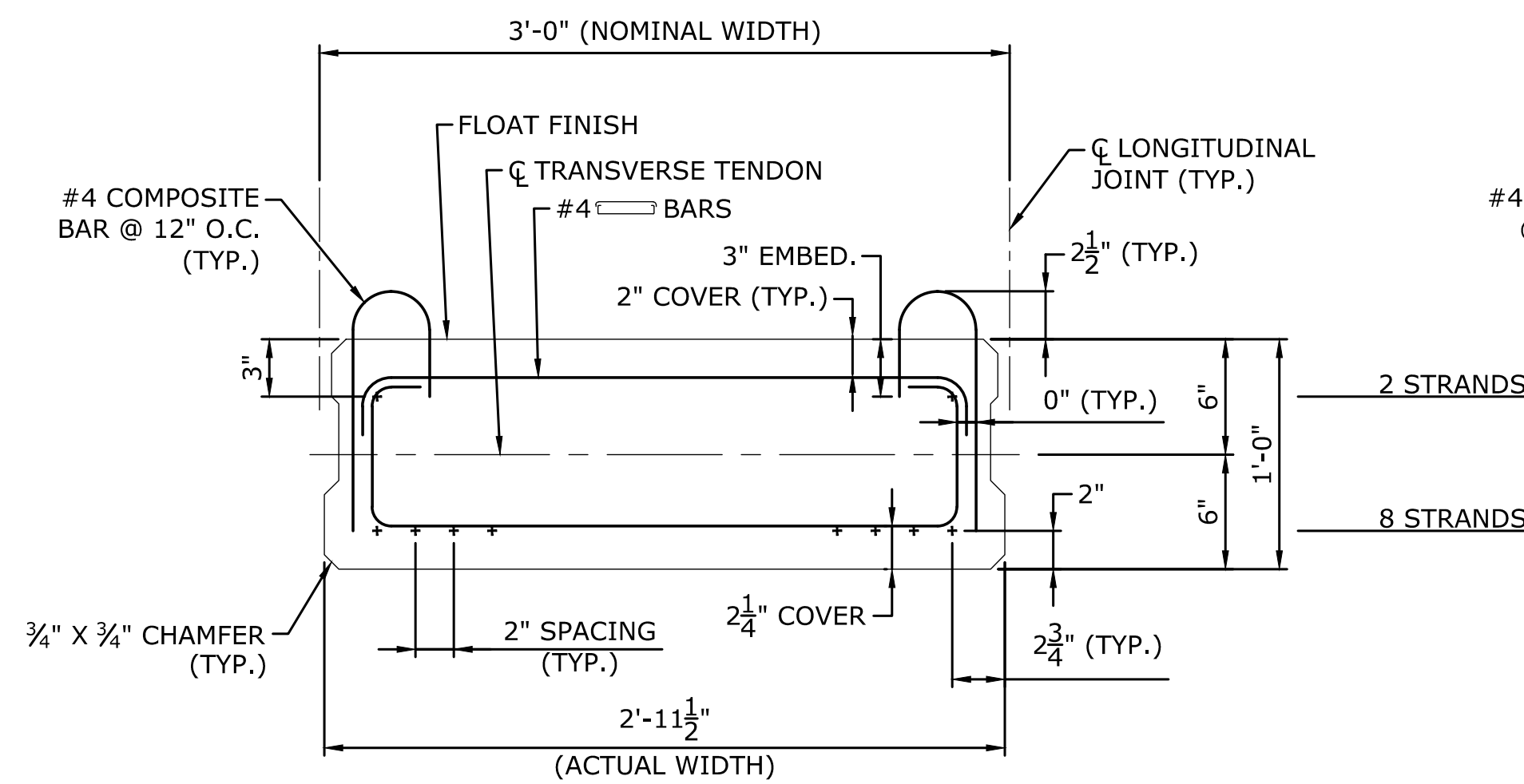
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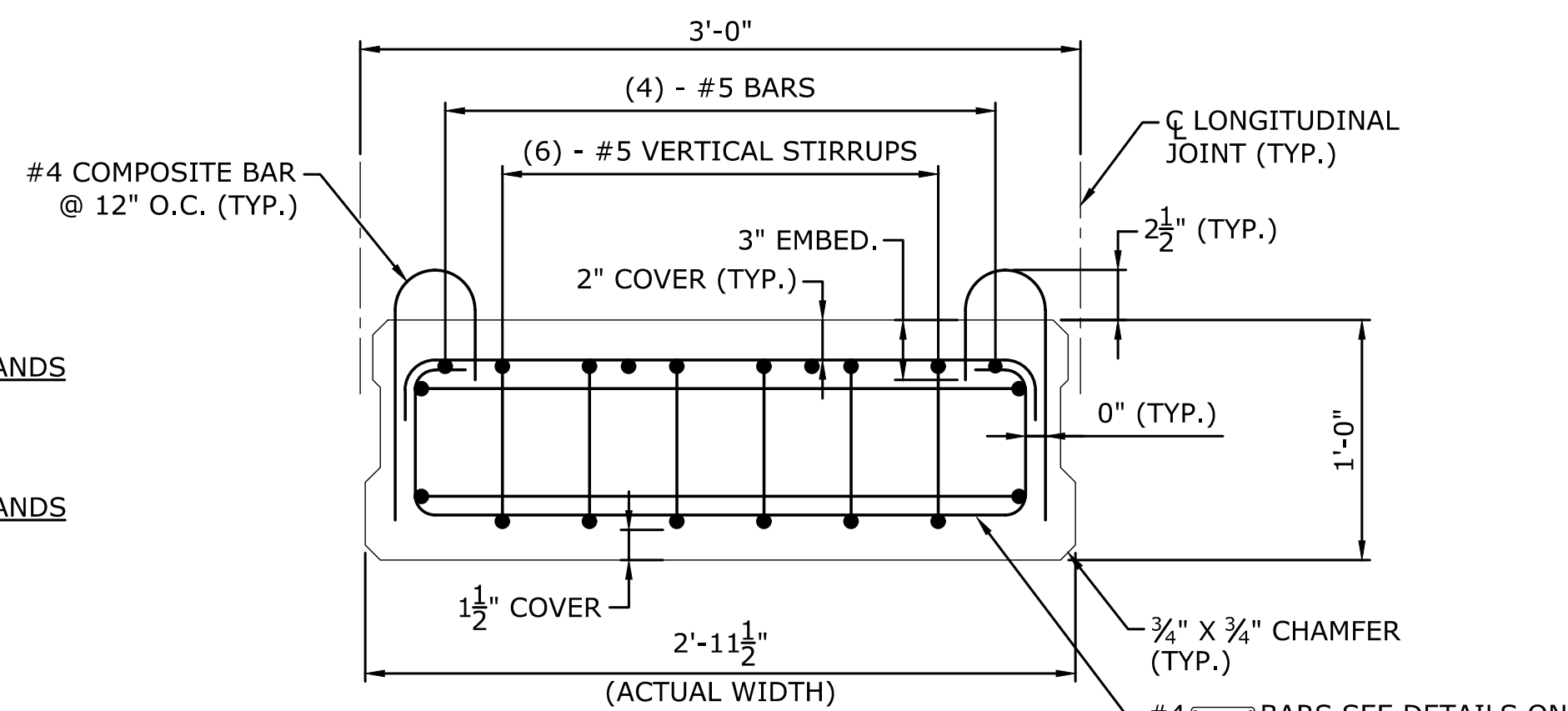
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SHEET NO.



TYPICAL SECTION SI-36 DECK UNITS (B4) AT MIDSPAN

SCALE: 1½" = 1'-0"

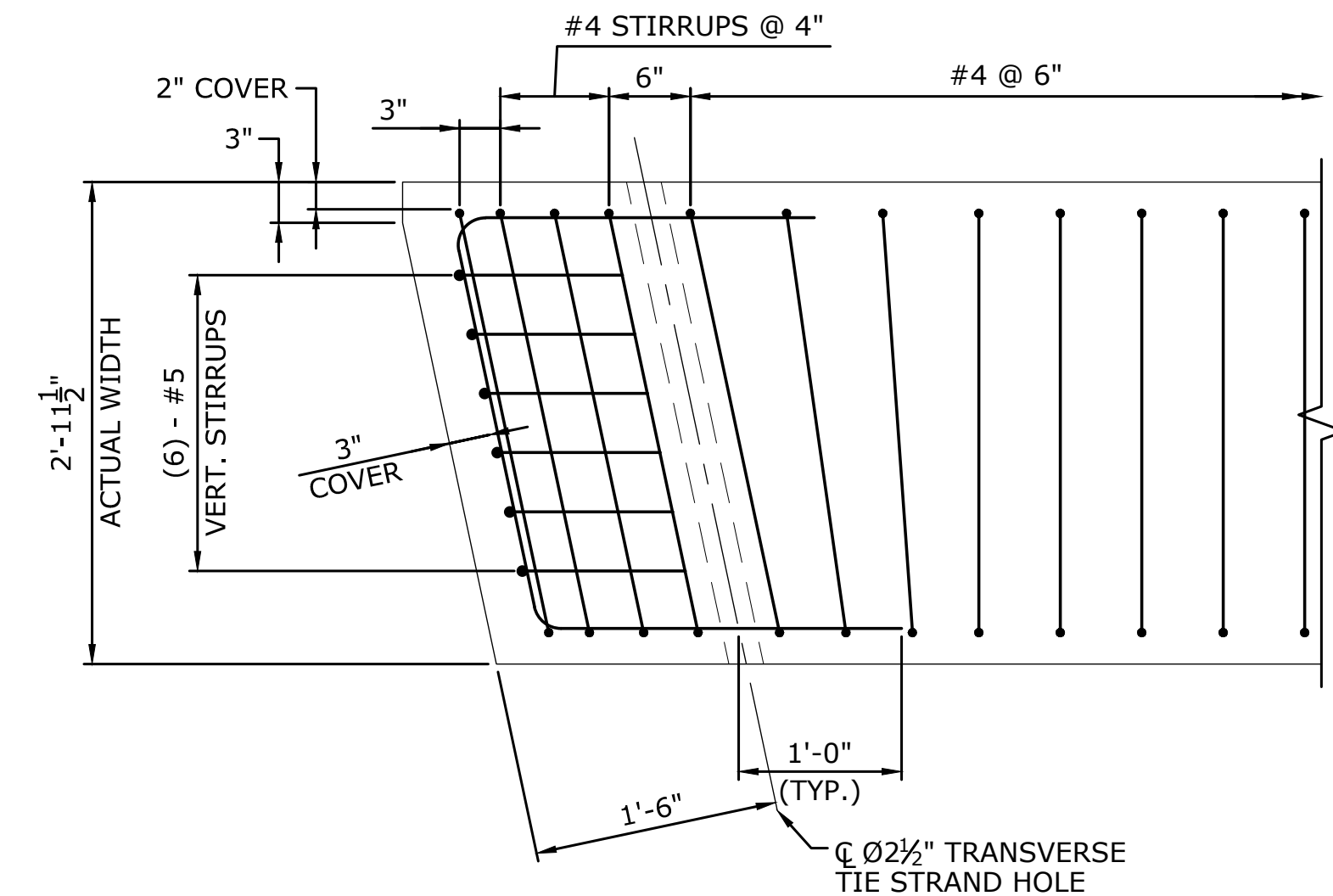


**TYPICAL SECTION SI-36 DECK
UNITS (B4) AT END**

SCALE: $1\frac{1}{2}" = 1'-0"$

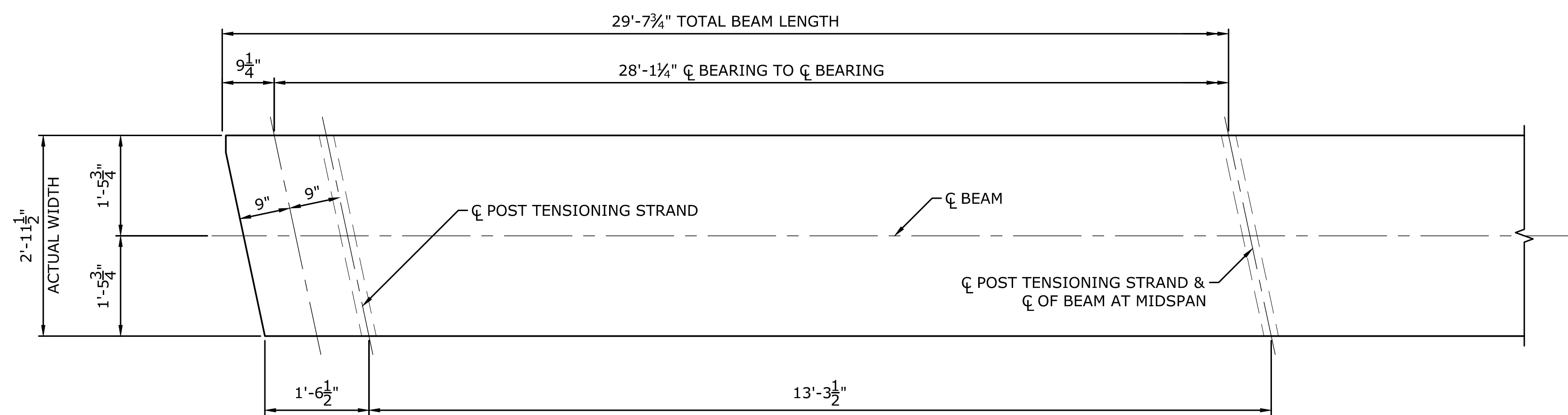
NOTE:

THE HORIZONTAL LEGS OF THE VERTICAL STIRRUPS SHALL BE EQUAL TO THE DEPTH OF THE BEAM (12-INCHES).



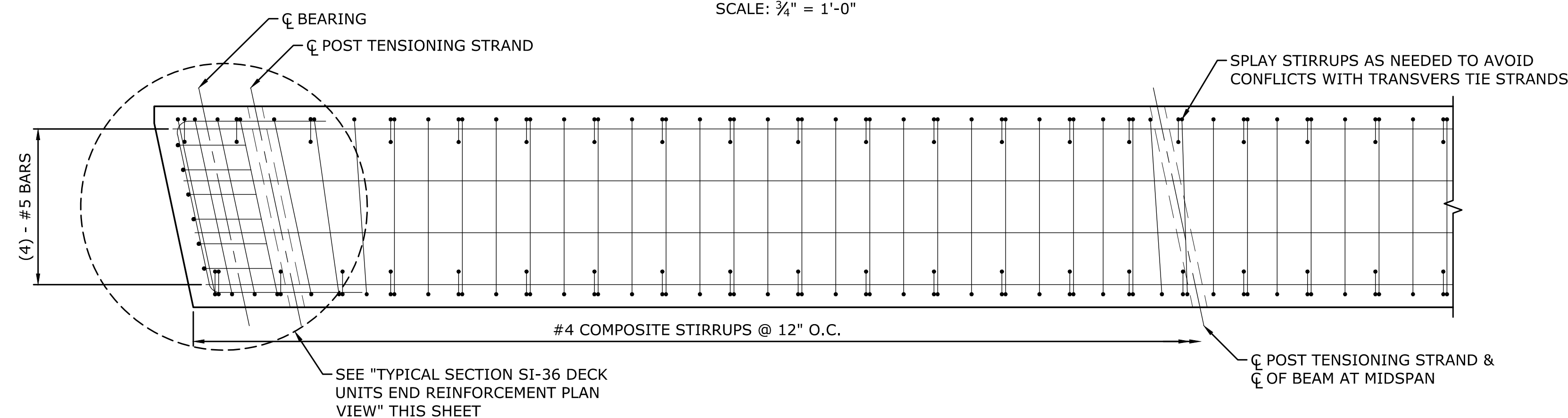
TYPICAL SECTION SI-36 DECK UNITS
END REINFORCEMENT PLAN VIEW

SCALE: 1" = 1'-0"



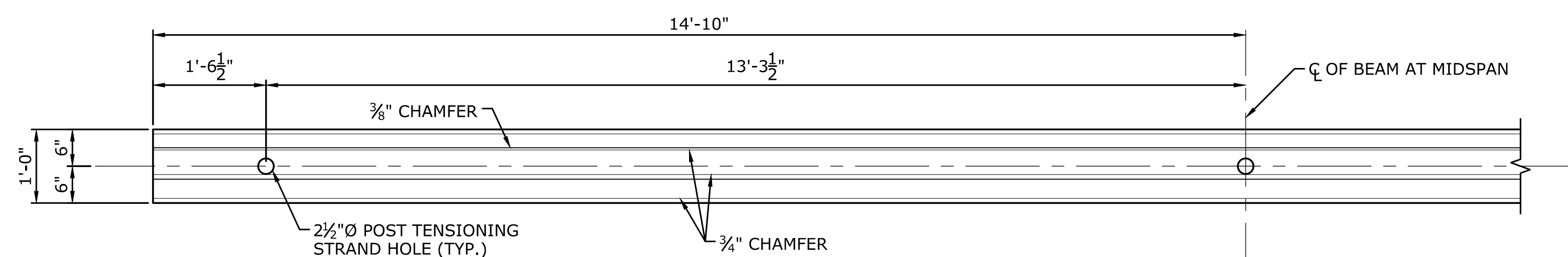
PLAN - SI-36 DECK UNITS

SCALE: $\frac{3}{4}" = 1'-0"$



REINFORCEMENT PLAN - SI-36 DECK UNITS

SCALE: $\frac{3}{4}" = 1'-0"$



ELEVATION - SI-36 DECK UNITS

SCALE: $\frac{3}{4}" = 1'-0"$

ESTIMATED CAMBER AT MIDSPAN			
BEAM NO.	AT TRANSFER	AT ERECTION	AT FINAL
B4	0.40"	0.54"	0.40"

CAMBER NOTES

1. AT TRANSFER: CAMBER DUE TO PRESTRESS FORCE AT TRANSFER MINUS THE DEFLECTION DUE TO BEAM WEIGHT.
2. AT ERECTION: CAMBER DUE TO PRESTRESS FORCE AT TRANSFER MINUS DEFLECTION DUE TO BEAM WEIGHT) THAT IS PRESENT AT APPROXIMATELY 30 DAYS AFTER TRANSFER.
3. FINAL: LONG TERM CAMBER THAT IS PRESENT AFTER ALL DEAD LOADS ARE APPLIED TO THE STRUCTURE AND AFTER LONG TERM CREEP AND RELAXATION HAVE TAKEN PLACE.
4. CAMBER IS IN INCHES.

NUMBER OF STRANDS REQUIRED			
BEAM NO.	NUMBER OF STRANDS	CENTER OF GRAVITY	JACKING FORCE PER STRAND
B4	10	3.4"	31 KIPS

NOTES

1. ALL LONGITUDINAL REINFORCEMENT SHALL BE CONTINUOUS.
2. ALL REINFORCEMENT SHALL CLEAR TRANSVERSE TIE HOLES.
3. LIFTING HOOKS SHALL BE PLACED IN LINE WITH THE CENTERLINE OF THE BEARINGS AND SHALL BE INSTALLED PER FABRICATORS STRAND DETAILS.
4. AFTER BEAMS ARE IN PLACE AND SECURED, BURN OFF EXPOSED PORTION OF LIFTING HOOKS. GROUT CONCRETE SURFACE OF BEAM TO SMOOTH FINISH.
5. SHEAR KEY SHALL BE OMITTED ON AN OUTSIDE FACE OF FASCIA BEAMS.

STATE PROJECT NO. 9058-0015

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PRESIRESSED DECK UNIT DETAILS

QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP	WRS	SEP
DESIGNED	DRAWN	CHECKED

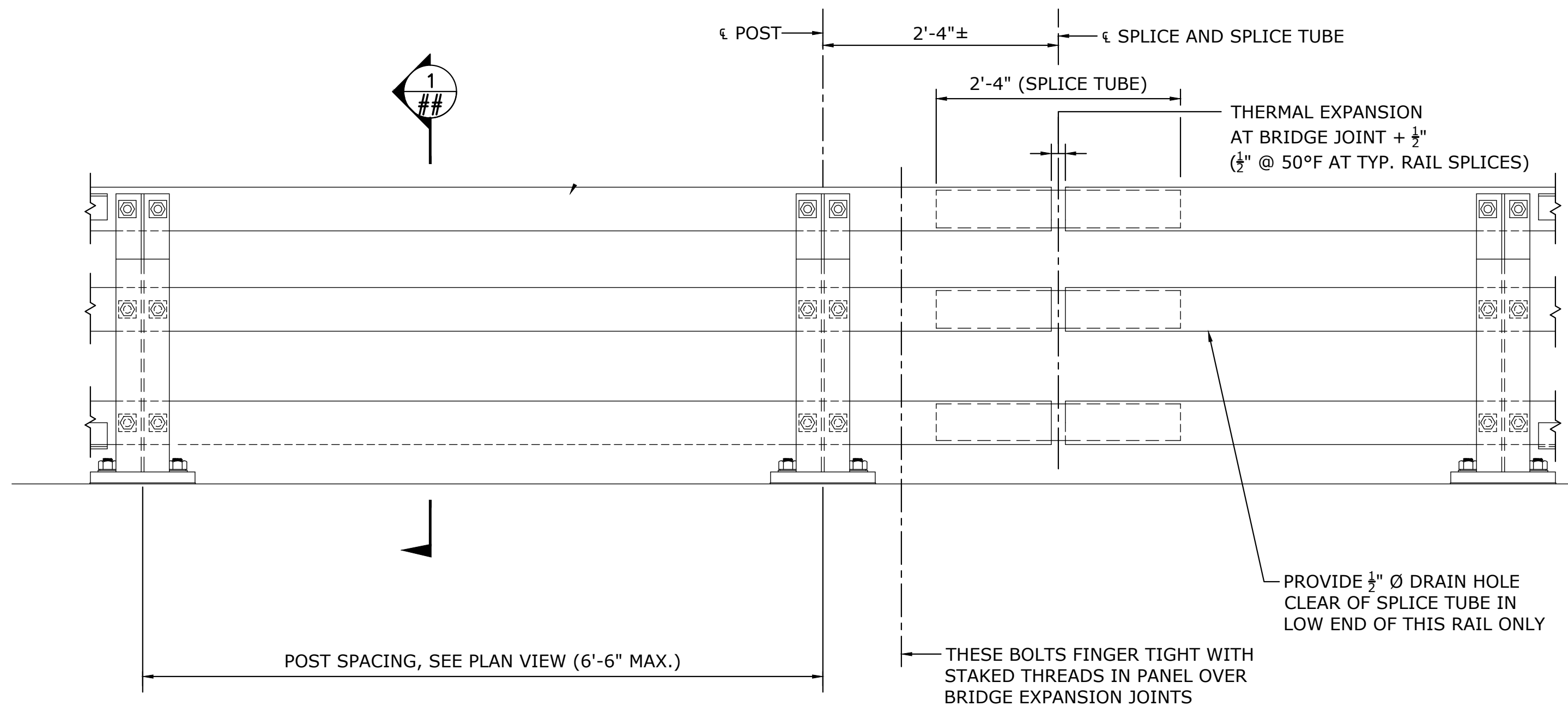
AS SHOWN

AUGUST 21, 2025

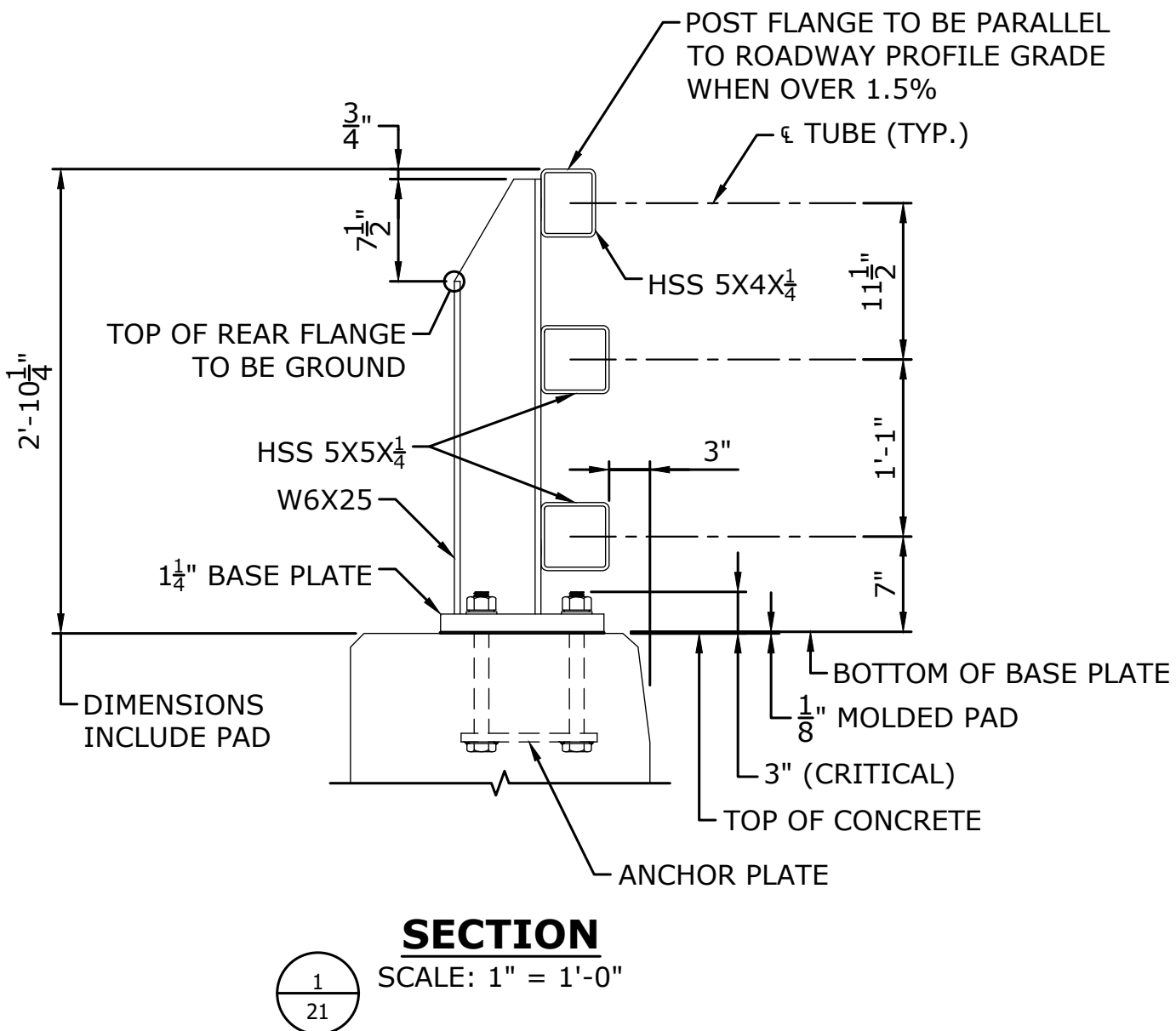
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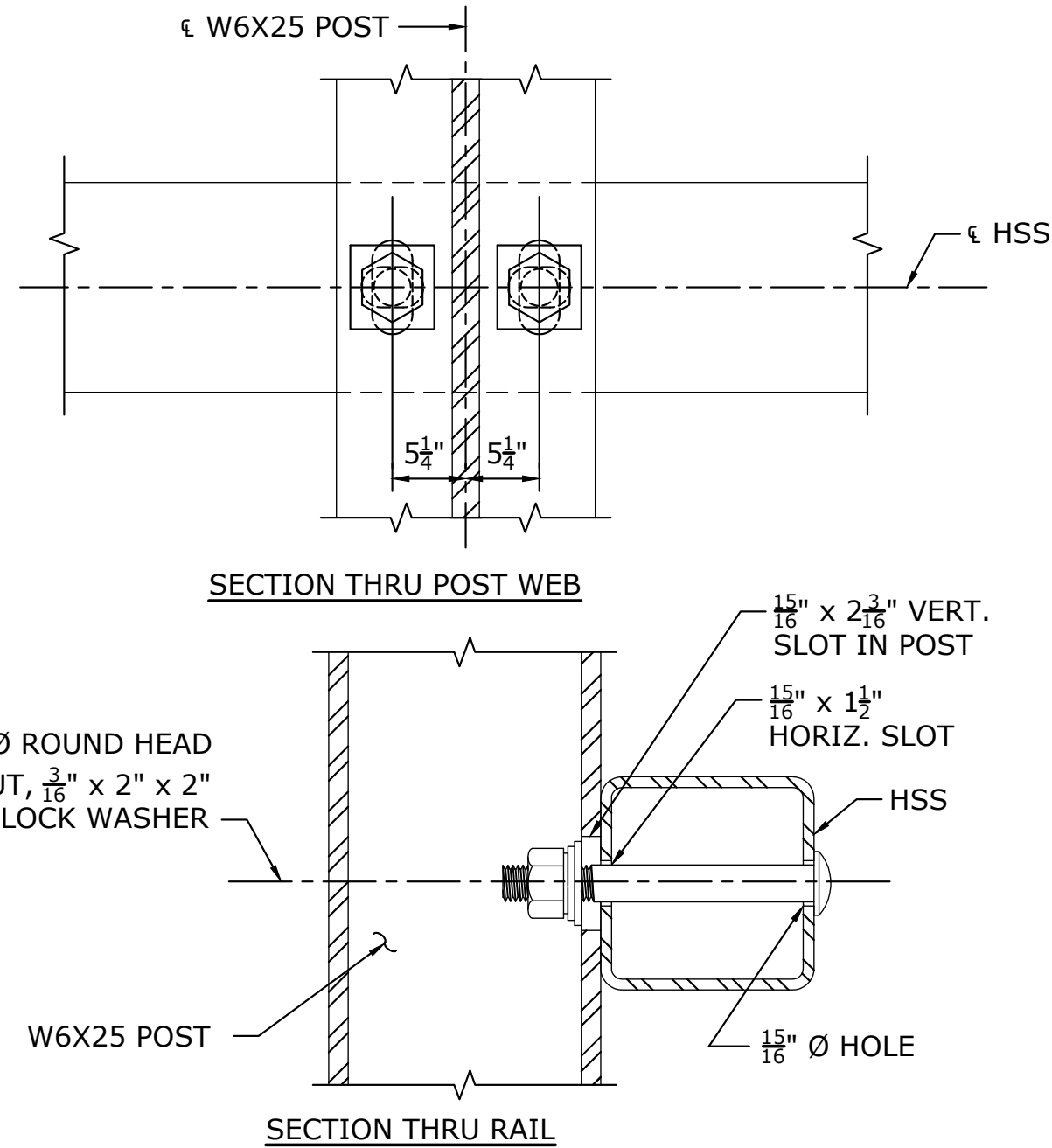
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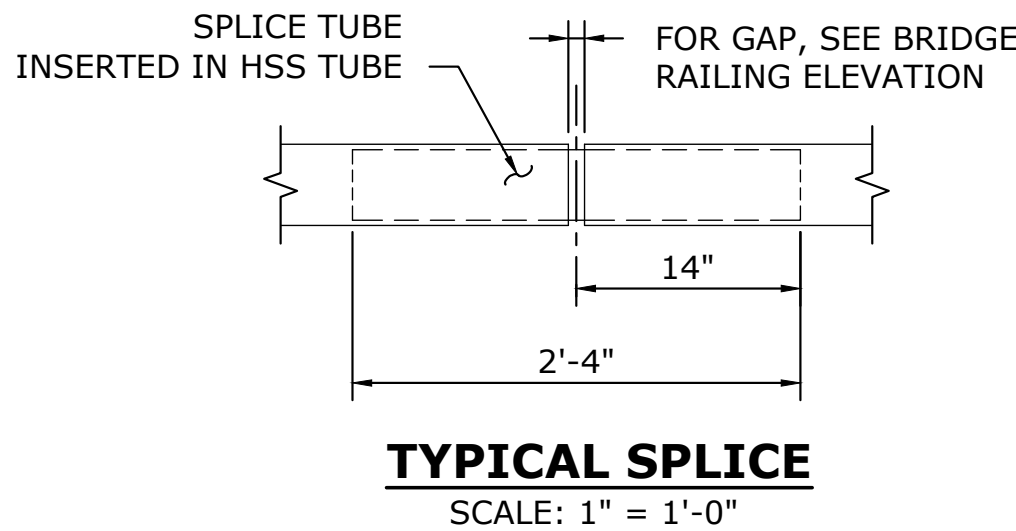
BRIDGE RAILING ELEVATION
SCALE: 1" = 1'-0"



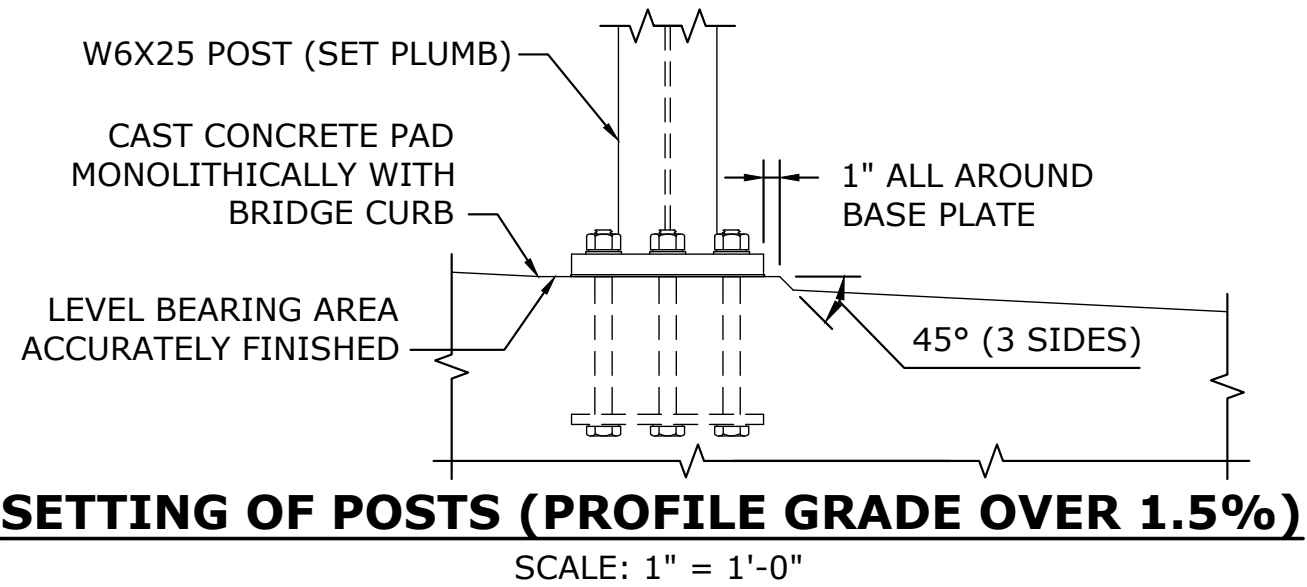
SECTION
SCALE: 1" = 1'-0"



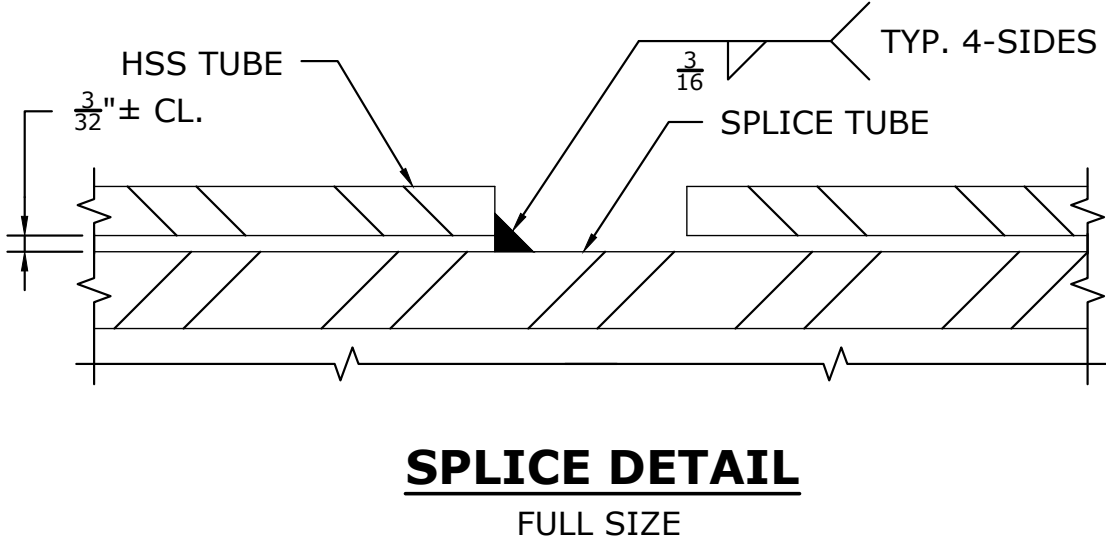
TYPICAL RAIL TO POST CONNECTIONS
SCALE: 1" = 1'-0"



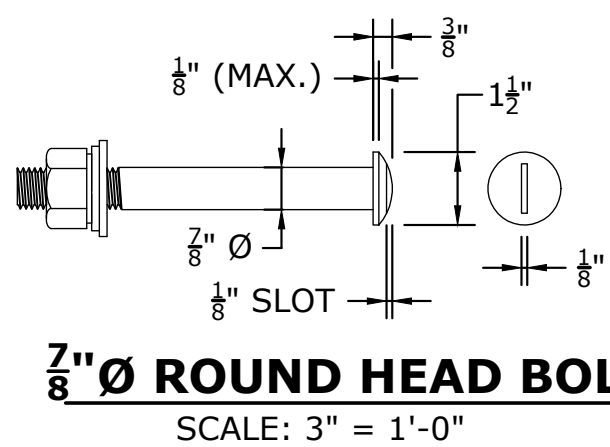
TYPICAL SPLICE
SCALE: 1" = 1'-0"



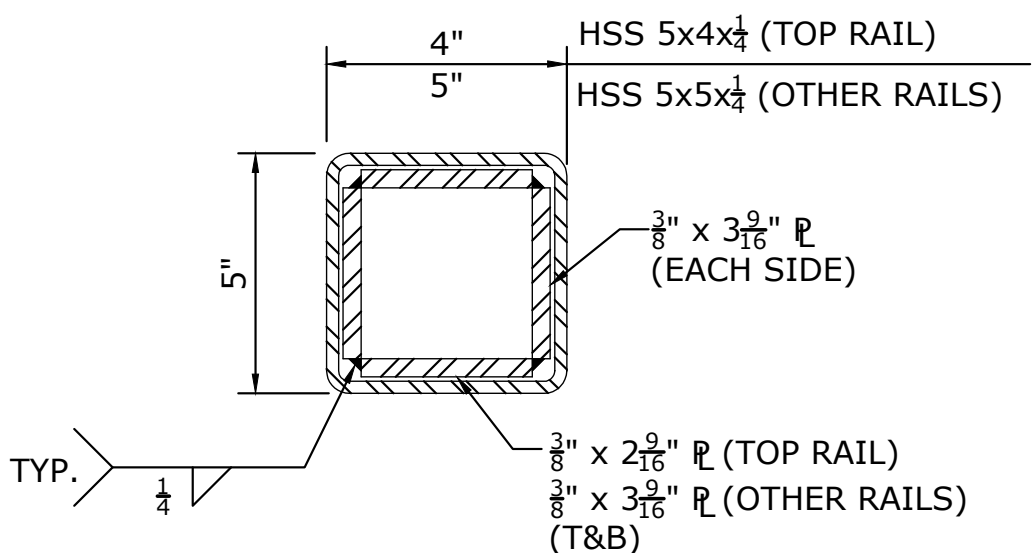
SETTING OF POSTS (PROFILE GRADE OVER 1.5%)
SCALE: 1" = 1'-0"



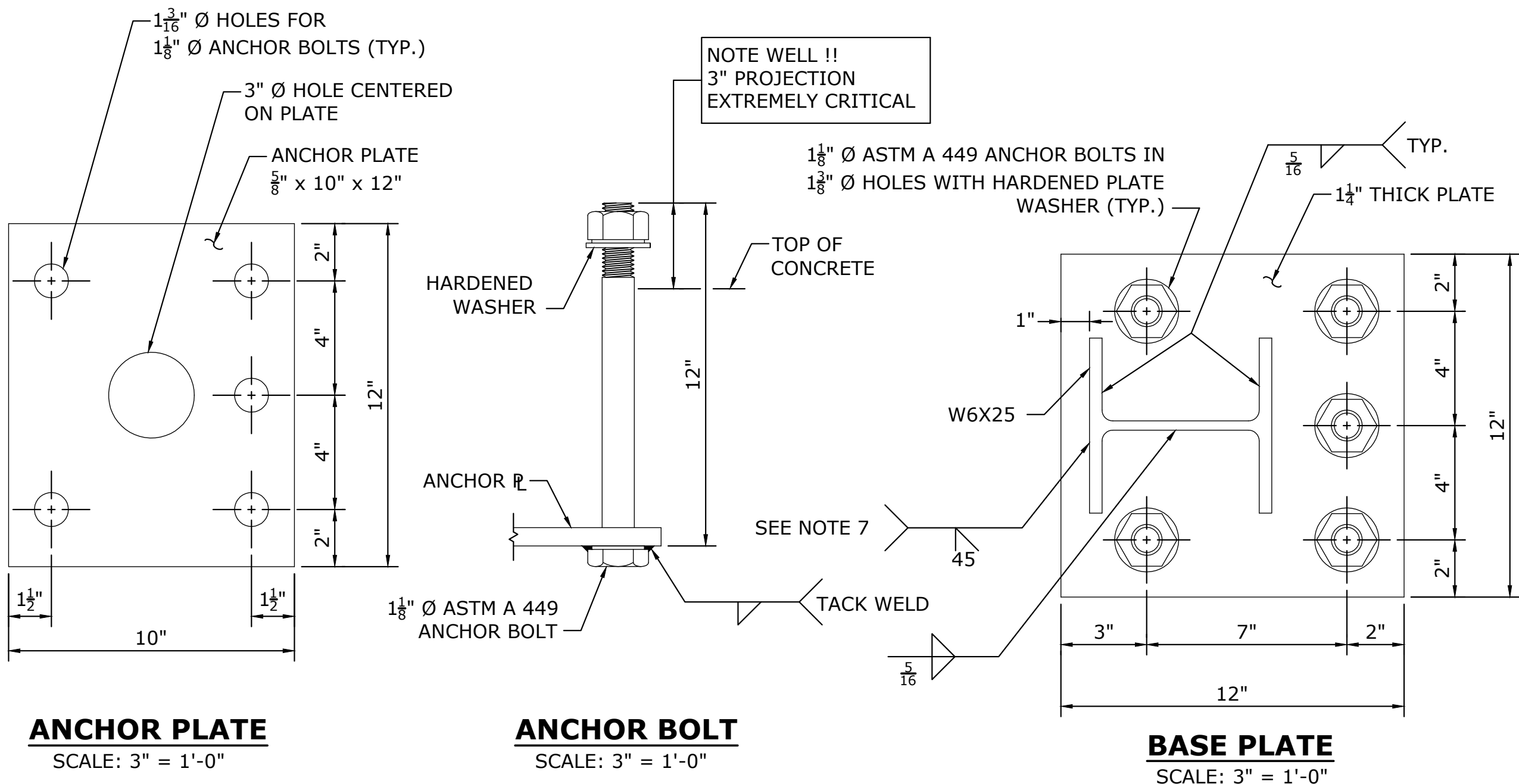
SPLICE DETAIL
FULL SIZE



7/8" ROUND HEAD BOLT
SCALE: 3" = 1'-0"



SPLICE TUBE DETAILS
SCALE: 3" = 1'-0"



ANCHOR PLATE
SCALE: 3" = 1'-0"

ANCHOR BOLT
SCALE: 3" = 1'-0"

BASE PLATE
SCALE: 3" = 1'-0"

RAILING NOTES:

- CONCRETE FOR THE CURB AND ENDBLOCK SHALL BE CLASS PCC04462. THE COMPRESSIVE STRENGTH OF THE CONCRETE, BASED ON TEST CYLINDERS, SHALL BE NO LESS THAN 4,000 PSI PRIOR TO INSTALLING THE RAILING.
- THE REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60 AND BE HOT-DIP GALVANIZED.
- THE 1 IN. DIAMETER PIPE SHALL CONFORM TO ASTM A53, GRADE B OR ASTM A501 AND SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A123 (SEE SHEET STR-13 FOR DETAILS).
- HOLLOW STRUCTURAL SHAPES SHALL CONFORM TO ASTM A500 GRADE C OR ASTM A501, GRADE B.
- ALL OTHER STEEL SHALL CONFORM TO ASTM A572, GRADE 50 UNLESS NOTED OTHERWISE.
- THE SILICON CONTENT OF THE STEEL USED FOR THE EXPOSED MEMBERS AND PLATE COMPONENTS SHALL FALL WITHIN THE RANGE OF 0% TO 0.04% OR 0.15% TO 0.25%.
- ALL STEEL SHAPES, PLATES, AND HOLLOW STRUCTURAL SECTIONS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 AND PAINTED DARK BRONZE (FEDERAL STD. 595B COLOR NO. 10045). ANCHOR PLATES SHALL BE GALVANIZED ONLY. HEADS OF 7/8" ROUND BOLTS SHALL BE PAINTED TO MATCH RAIL.
- THE ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, GRADE 105. THE NUTS SHALL CONFORM TO ASTM A563, GRADE DH. THE WASHERS SHALL CONFORM TO ASTM F436. THE BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.
- ALL HIGH STRENGTH BOLTS SHALL CONFIRM TO ASTM F3125 GRADE A325, TYPE 1. NUTS SHALL CONFORM TO ASTM A563, GRADE DH. CIRCULAR, FLAT, HARDENED STEEL WASHERS SHALL CONFORM TO ASTM F436. THE BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329 OR ASTM B695, CLASS 55.
- DOVE HEAD BOLTS SHALL CONFORM TO ASTM F3125 GRADE A325, TYPE 1 OR ASTM A449, GRADE 1. SUBSTITUTION OF DOVE HEAD BOLTS WITH BOLTS MEETING DIFFERENT MATERIAL REQUIREMENTS IS NOT PERMITTED. NUTS SHALL CONFORM TO ASTM A536, GRADE DH. CIRCULAR, FLAT, HARDENED STEEL WASHERS SHALL CONFORM TO ASTM F436. THE BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM F2329 OR ASTM B695, CLASS 55.
- ANCHOR BOLTS SHALL BE SET WITH TEMPLATES. THE NUT SECURING THE POST BASE PLATE TO THE CONCRETE SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL 1/8 TURN AFTER STEEL IS IN PLACE.
- RAILS SHALL BE CONTINUOUS OVER A MINIMUM OF FOUR (4) POSTS WITHOUT SPLICES WHERE POSSIBLE. RAILS SHALL BE SPLICED IN THE PANELS OVER EXPANSION JOINT.
- ENDS OF TUBE SECTIONS SHALL BE SAWED. GRIND SMOOTH EXPOSED EDGES. ALL CUT ENDS SHALL BE TRUE AND SMOOTH.
- ALL POSTS TO BE PLUMB WHEN PROFILE GRADE EXCEEDS 1.5%. FOR PROFILE GRADES LESS THAN 1.5%, POSTS SHALL BE SET PERPENDICULAR TO GRADE.
- MOLDED PADS SHALL BE MANUFACTURED FROM NEW UNVULCANIZED ELASTOMER AND UNUSED SYNTHETIC FIBERS, WITH A WEIGHT PROPORTION OF FIBER CONTENT EQUAL TO APPROXIMATELY ONE-HALF OF THE TOTAL WEIGHT OF THE PAD.
- ALL BRIDGE RAIL MATERIALS, INCLUDING ANCHOR PLATES, ANCHOR BOLTS, CONCRETE INSERTS, AND HARDWARE SHALL BE PAID FOR UNDER THE ITEM "BRIDGE RAIL AND GUIDE RAIL SYSTEMS".
- SEE SPECIAL PROVISIONS FOR ADDITIONAL MATERIAL REQUIREMENTS.

STATE PROJECT NO. 9058-0015

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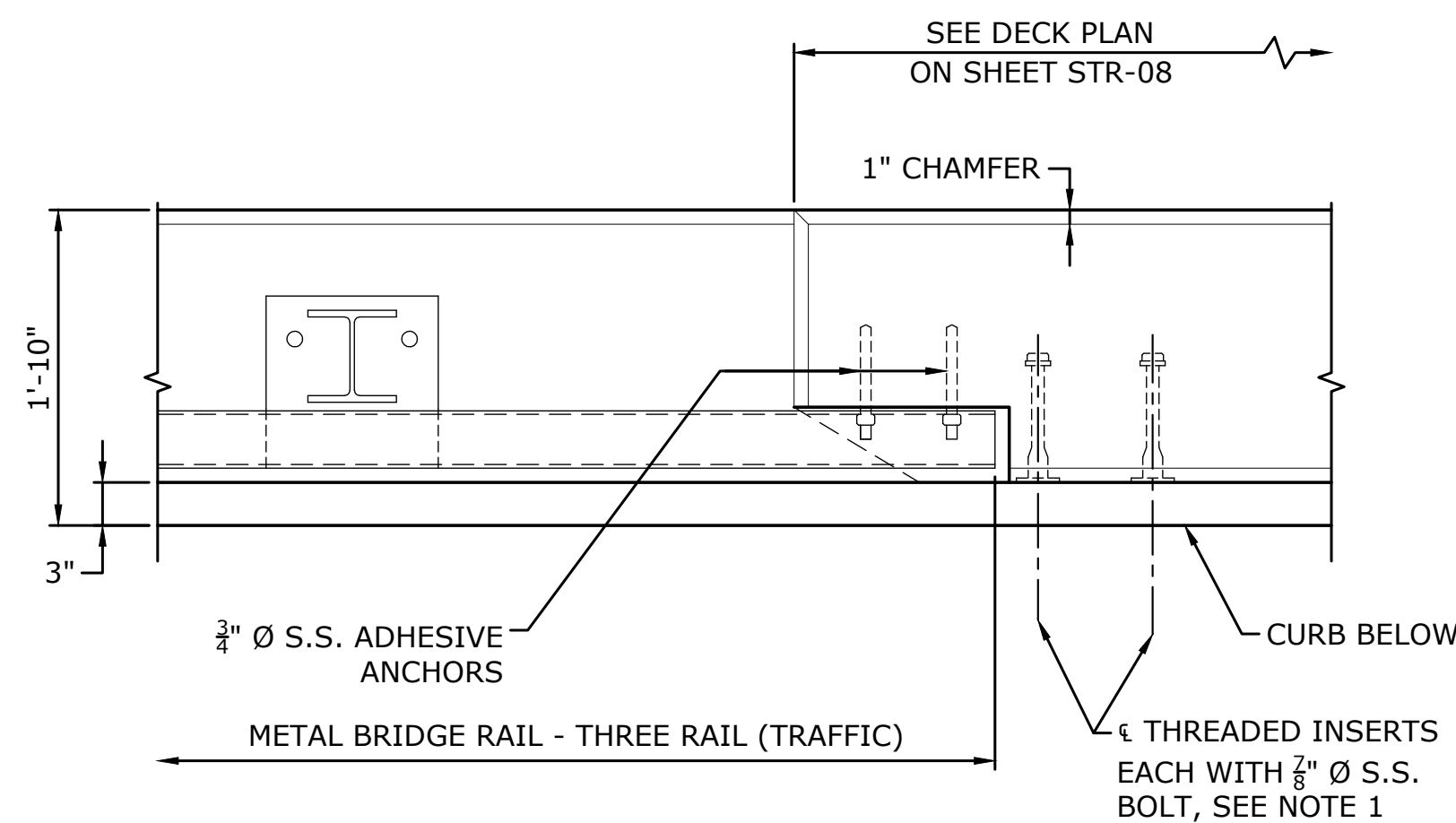
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ADDENDUM NO. 1	12/19/2022	SEP

BRIDGE RAILING DETAILS

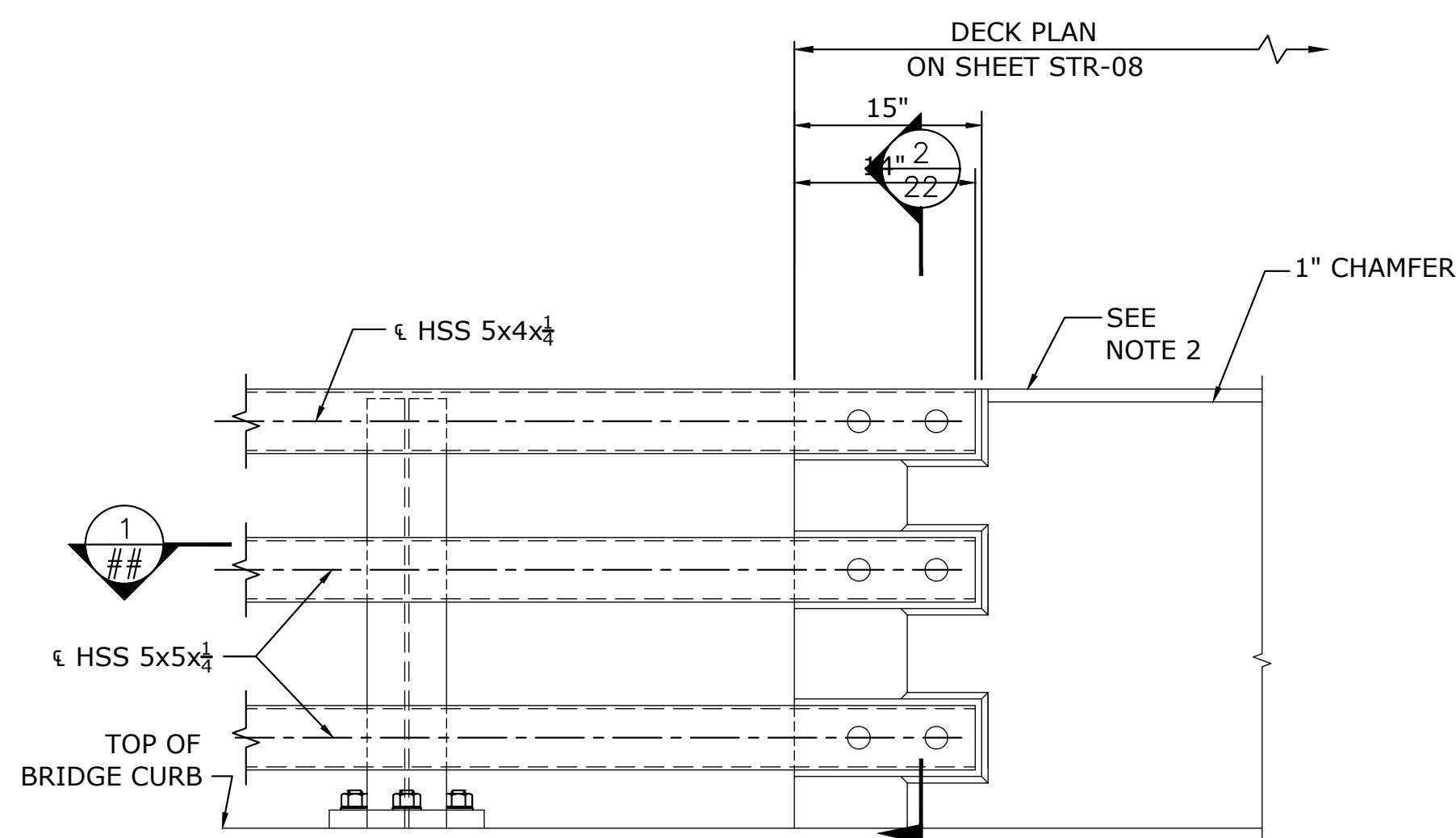
**REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK**

GROTON, CONNECTICUT

DESIGNED	WRS	SEP
SCALE	AS SHOWN	
DATE	AUGUST 21, 2025	
PROJECT NO.	141.11461.00018	
DRAWING NO.	STR-12	
SHEET NO.	21	

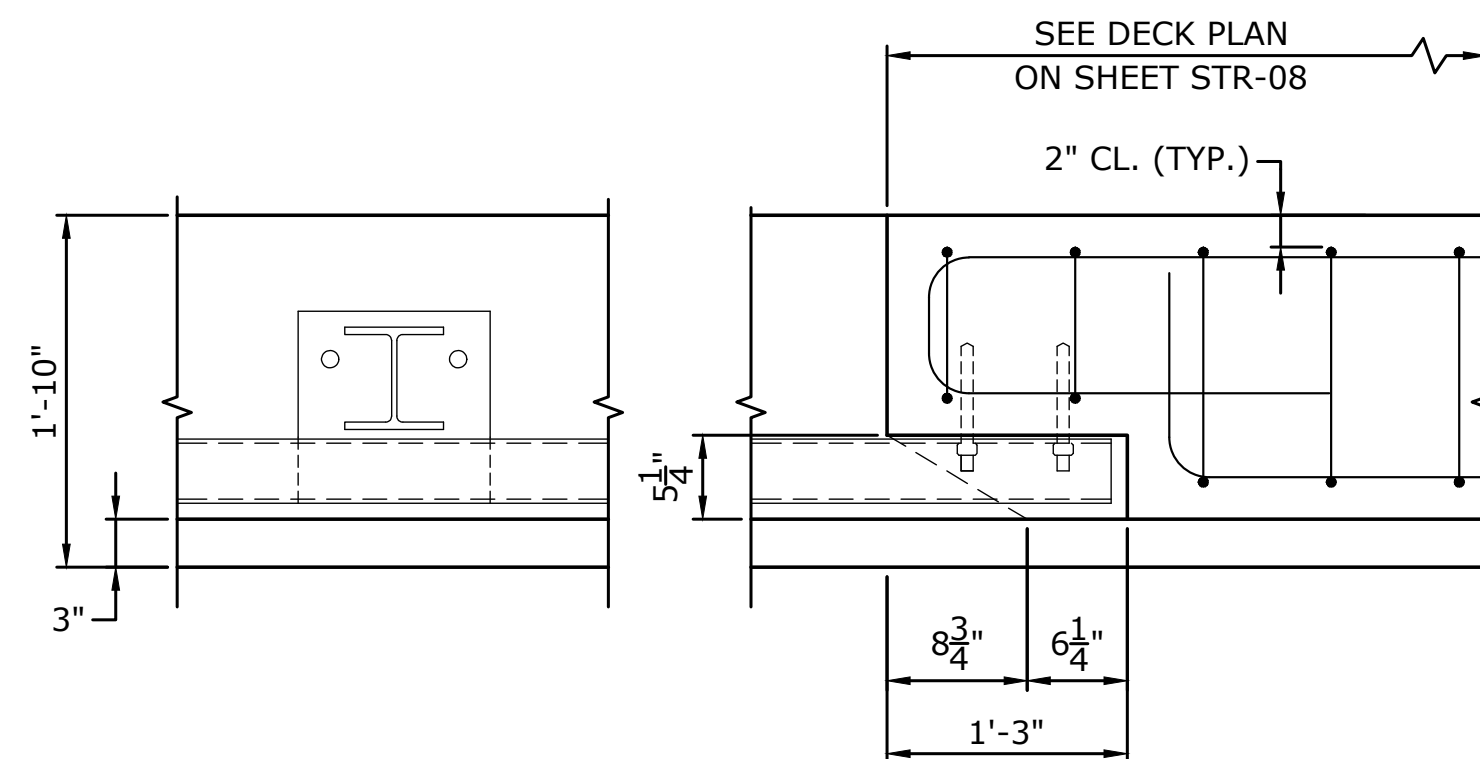


PLAN AT BRIDGE CURB
SCALE: 1" = 1'-0"



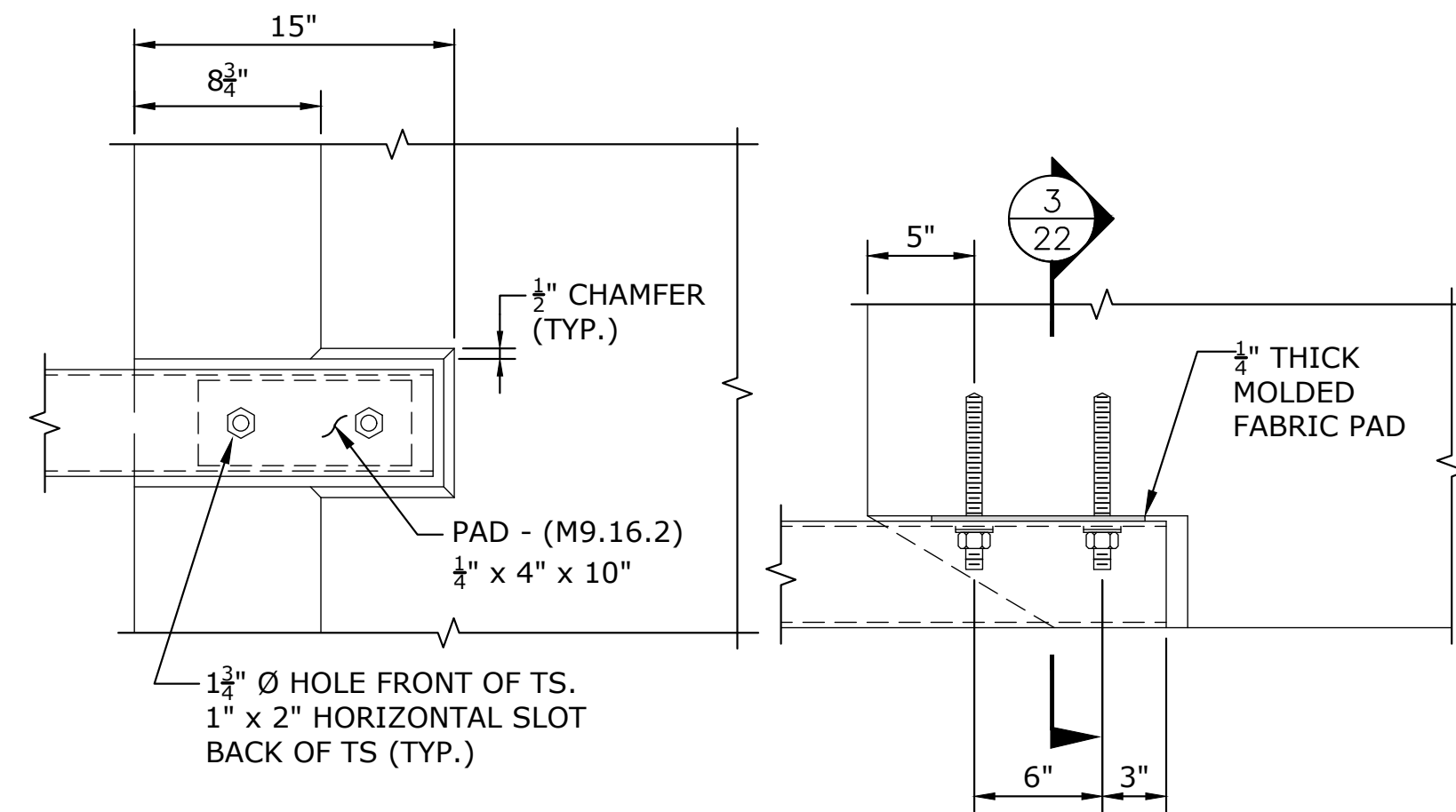
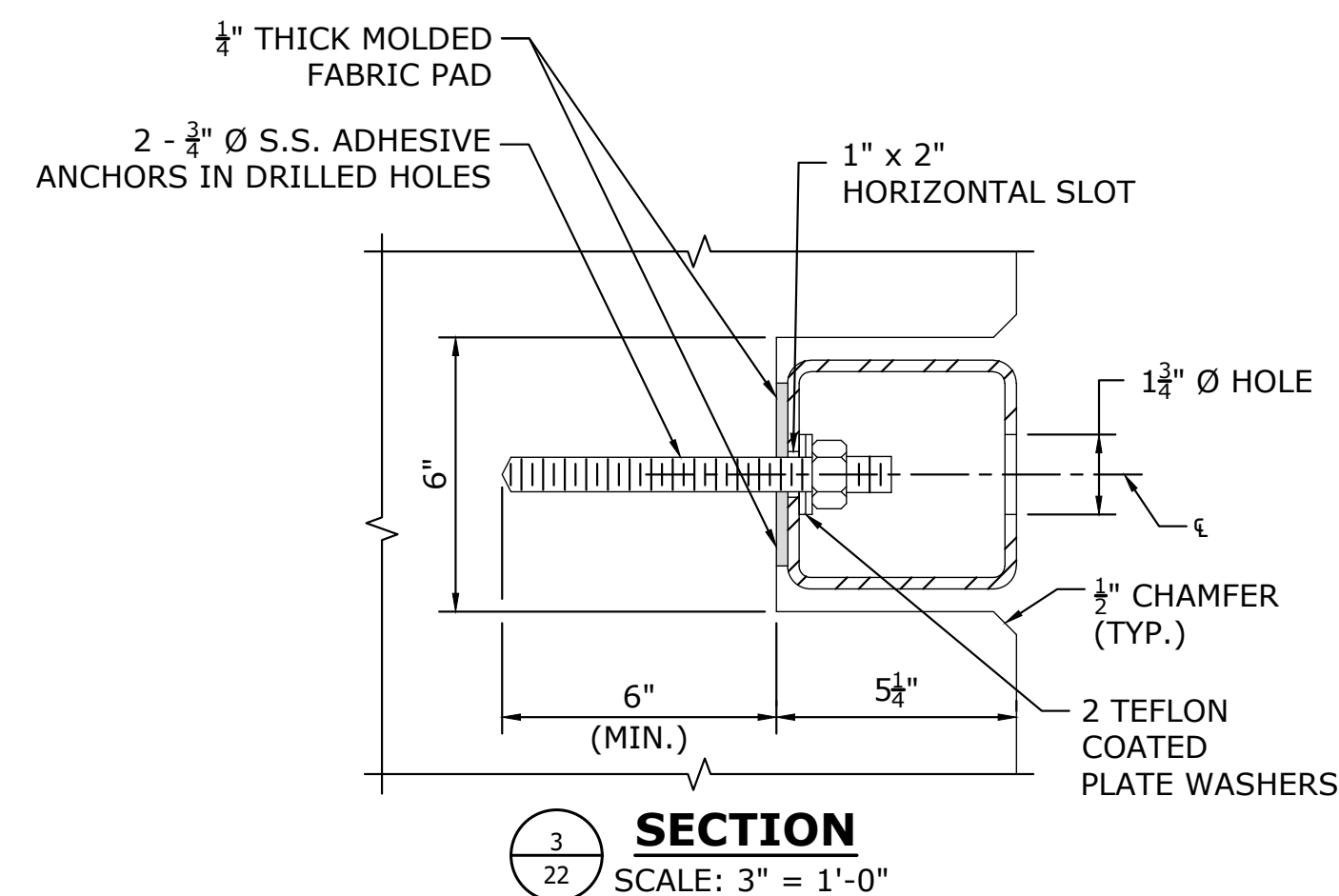
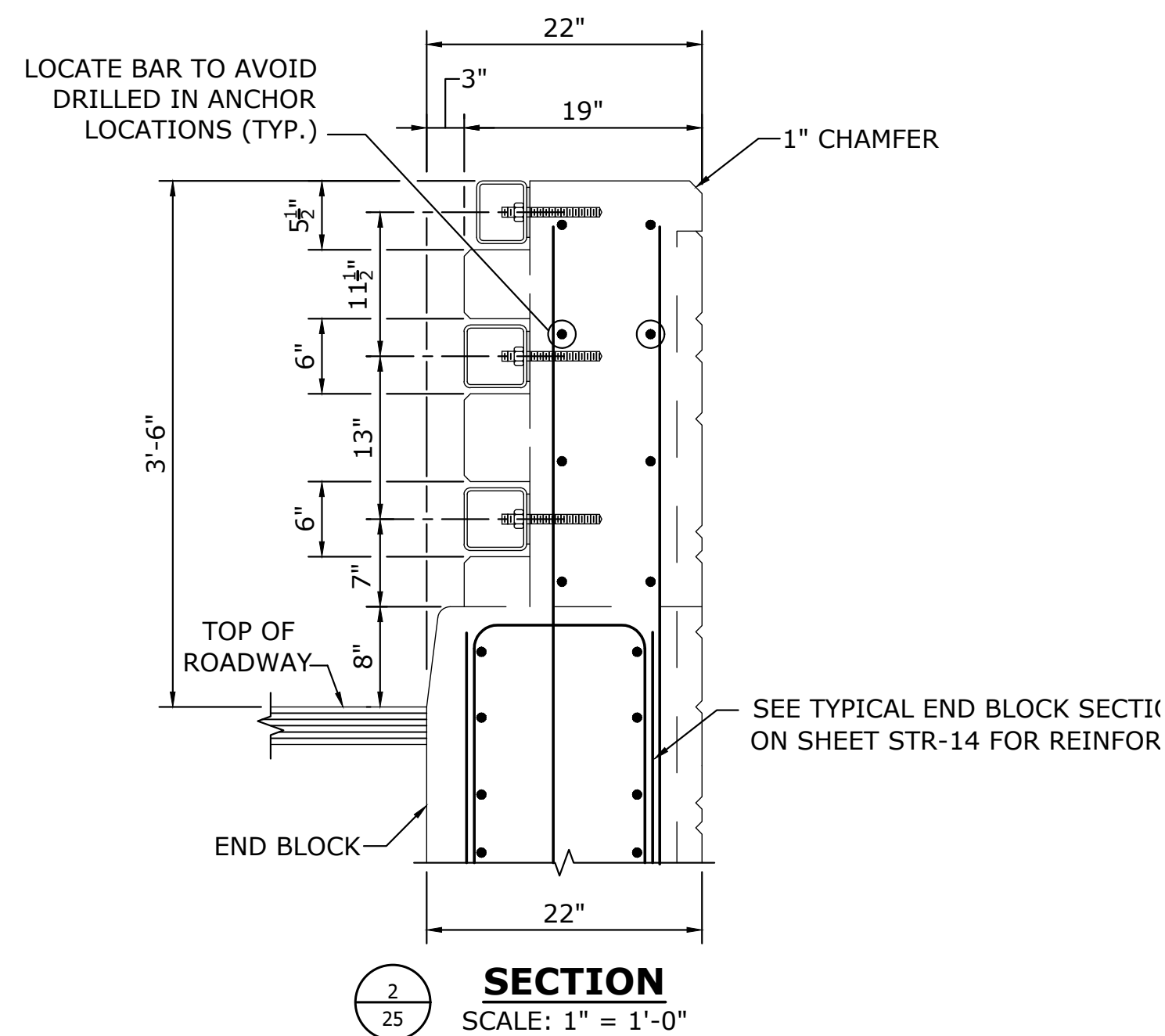
ELEVATION AT BRIDGE CURB

SCALE: 1" = 1'-0"



1
22

SECTION
SCALE: 1" = 1'-0"



RAIL ATTACHMENT

SCALE: $1\frac{1}{2}" = 1'-0"$

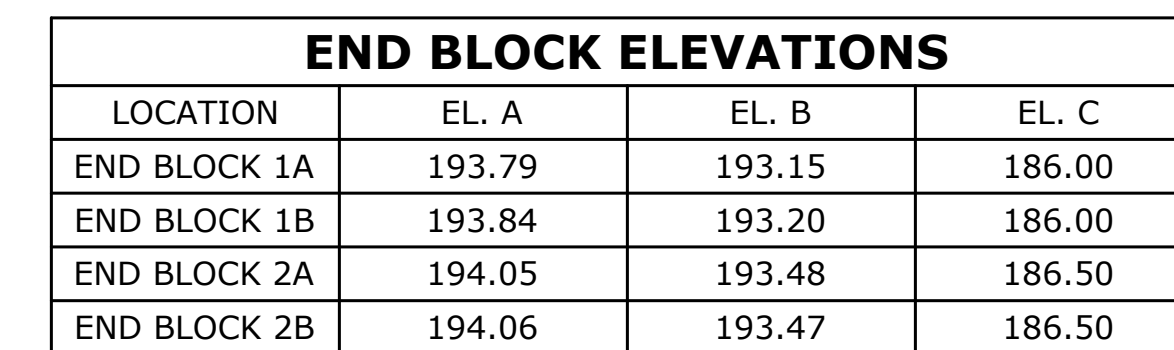
NOTES:

1. THREADED INSERTS SHALL BE PREQUALIFIED BY THE MANUFACTURER AS BEING CAPABLE OF DEVELOPING A NOMINAL SHEAR RESISTANCE OF 20 KIPS PER $\frac{7}{8}$ " Ø S.S. BOLT. S.S. BOLTS SHALL BE $\frac{7}{8}$ " Ø x $1\frac{1}{4}$ " LONG FULLY THREADED AISI TYPE 304N STAINLESS STEEL. INSERTS FOR $\frac{7}{8}$ " S.S. BOLTS SHALL BE GALVANIZED AND CAST INTO THE WINGWALL.

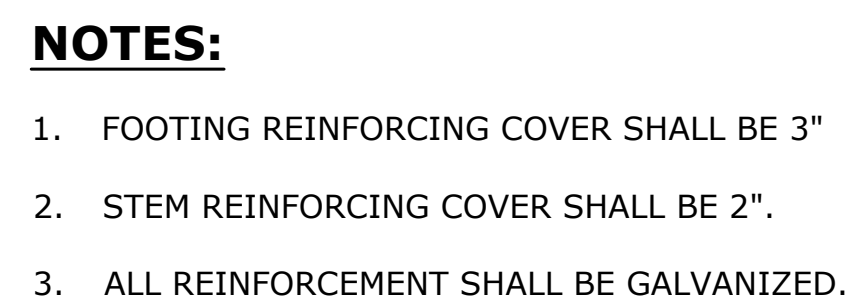
2. FOR AN APPROACH GRADE UP TO 3%, THE WINGWALL MAY BE CAST SQUARE AND SET PLUMB WITH THE MINIMUM EMBEDMENT DEPTH SHOWN. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SQUARE TO THE POST.

FOR AN APPROACH GRADE IN EXCESS OF 3%, THE WINGWALL TOP AND THE TOP OF CURB SHALL FOLLOW THE APPROACH GRADE. THE HEIGHT OF THE WINGWALL TOP SHALL VARY PROVIDED THAT THE MINIMUM DIMENSIONS SHOWN ON THE CONSTRUCTION DRAWINGS ARE MET. THE TERMINAL CONNECTOR INSERT GROUP SHALL BE SLOPED TO FOLLOW THE APPROACH GRADE.

3. THE COST TO LOCATE REINFORCING AND TO DRILL AND INSTALL THE ADHESIVE ANCHORS IS TO BE PAID FOR UNDER THE ITEM "BRIDGE RAIL AND GUIDE RAIL SYSTEM".



TYPICAL END BLOCK ELEVATION
SCALE: 1/2" = 1'-0"



TYPICAL END BLOCK PAY LIMITS
SCALE: $\frac{1}{2}" = 1'-0"$

STATE PROJECT NO. 9058-0015

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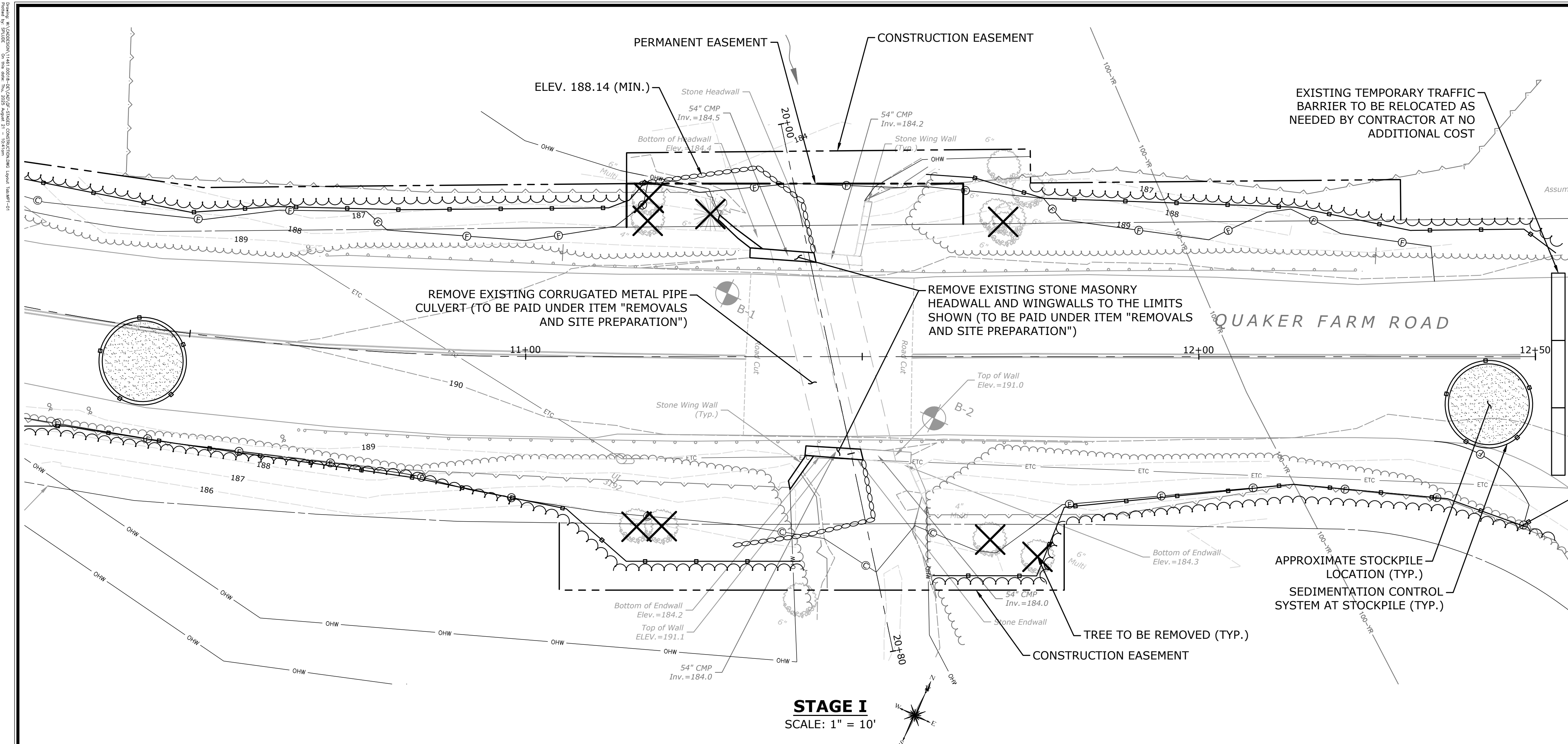
BRIDGE RAILING DETAILS

REPLACEMENT OF BRIDGE NO. 07143

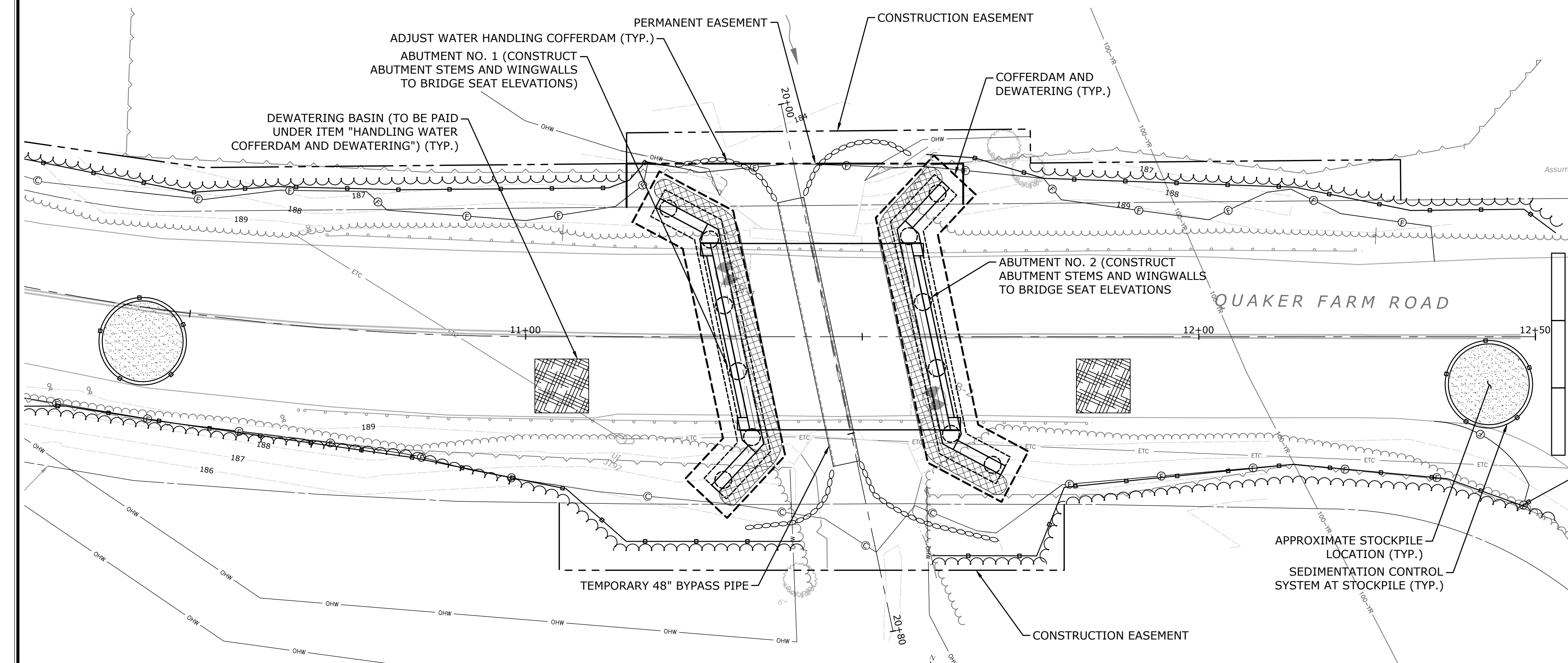
QUAKER FARM ROAD OVER HALEYS BROOK

GROTON, CONNECTICUT

SEP DESIGNED	WRS DRAWN	KP CHECKED
AS SHOWN		
SCALE		
AUGUST 21, 2025		
DATE		
141.11461.00018		
PROJECT NO.		
STR-14		
DRAWING NO.		



STAGE I
SCALE: 1" = 10'



STAGE II
SCALE: 1" = 10'

SUGGESTED CONSTRUCTION SEQUENCE

UTILITY COORDINATION STAGE

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE WITH THE APPLICABLE UTILITIES TO RELOCATE THE EXISTING AERIAL UTILITIES WITHIN THE PROJECT LIMITS.

STAGE I

1. INSTALL SEDIMENTATION CONTROL SYSTEM.
2. PERFORM CLEARING AND GRUBBING AS SHOWN ON THE PLANS.
3. INSTALL WATER HANDLING COFFERDAM AS SHOWN.
4. REMOVE EXISTING STONE MASONRY HEADWALLS AND WINGWALLS TO THE LIMITS SHOWN.
5. REMOVE WESTERN CORRUGATED METAL PIPE CULVERT.

STAGE II

1. INSTALL 48" TEMPORARY BYPASS PIPE AND ADJUST WATER HANDLING COFFERDAM AS SHOWN.
2. REMOVE REMAINING CORRUGATED METAL PIPE CULVERT.
3. INSTALL COFFERDAM AND DEWATERING FOR ABUTMENT AND WINGWALL FOUNDATIONS.
4. INSTALL DRILLED SHAFTS FOR ABUTMENT NOS. 1 AND 2.
5. CONSTRUCT ABUTMENT STEMS AND WINGWALLS.
6. REMOVE COFFERDAM AND DEWATERING. BACKFILL ABUTMENTS AND WINGWALLS.
7. PLACE CHANNEL MATERIAL AND ESTABLISH FINISHED CHANNEL GRADE. ADJUST TEMPORARY 48" BYPASS PIPE AND WATER HANDLING COFFERDAM AS REQUIRED.
8. REMOVE TEMPORARY 48" BYPASS PIPE AND WATER HANDLING COFFERDAM.

GENERAL NOTES

1. CONTRACTOR MAY PROPOSE ALTERNATE CONSTRUCTION SEQUENCE FOR APPROVAL BY ENGINEER.
2. THE CONTRACTOR'S ATTENTION IS DRAWN TO THE BORING LOGS AND THE PRESENCE OF GROUNDWATER. THE CONTRACTOR SHALL DEWATER TO CONSTRUCT THE WORK IN THE DRY. FOR THE INSTALLATION OF THE CONCRETE FOOTINGS, THE COST OF DEWATERING THE WORK AREA WILL BE PAID UNDER THE ITEM "HANDLING WATER COFFERDAM AND DEWATERING."
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINING APPROPRIATE MEANS AND METHODS, MATERIAL SELECTION, DESIGN, AND MAINTENANCE OF A COFFERDAM AND DEWATERING SYSTEM AS NEEDED FOR THE INSTALLATION OF THE INTEGRAL ABUTMENTS.
4. QUAKER FARM ROAD IS PRESENTLY CLOSED TO TRAFFIC DUE TO THE DETERIORATED CONDITION OF THE EXISTING CULVERT. NO DETOUR OR DETOUR SIGNAGE IS REQUIRED FOR THIS PROJECT.
5. MOVING TEMPORARY TRAFFIC BARRIERS AND CONSTRUCTION BARRICADES FOR DAILY ACCESS TO THE WORK AREA WILL NOT BE MEASURED FOR PAYMENT AND SHALL BE INCLUDED UNDER THE ITEM "MAINTENANCE & PROTECTION OF TRAFFIC."

TOWN OF GROTON MANDATORY MEETING, NOTIFICATION, AND INSPECTION SCHEDULE

1. THE CONTRACTOR SHALL COORDINATE WITH THE TOWN TO HAVE REPRESENTATIVES PRESENT FOR THE PRE-CONSTRUCTION MEETING.
2. THE CONTRACTOR SHALL COORDINATE WITH THE TOWN TO INSPECT THE SITE AT THE FOLLOWING MILESTONES:
 - FLAGGED CLEARING LINE INSPECTION
 - SEDIMENTATION CONTROL SYSTEM INSPECTION
 - INSPECTION OF COMPLETED CHANNEL (PRIOR TO SUPERSTRUCTURE INSTALLATION)
 - PLANTING/SEEDING INSPECTION
3. THE CONTRACTOR SHALL NOTIFY THE TOWN PRIOR TO THE COMMENCEMENT OF EXCAVATION FOR COFFERDAM/ABUTMENT/WINGWALL INSTALLATION

SLR

95 REALTY DRIVE
SUITE 200
203.271.1773
SLRCONSULTING.COM

DESCRIPTION	DATE	BY

STAGED CONSTRUCTION PLAN

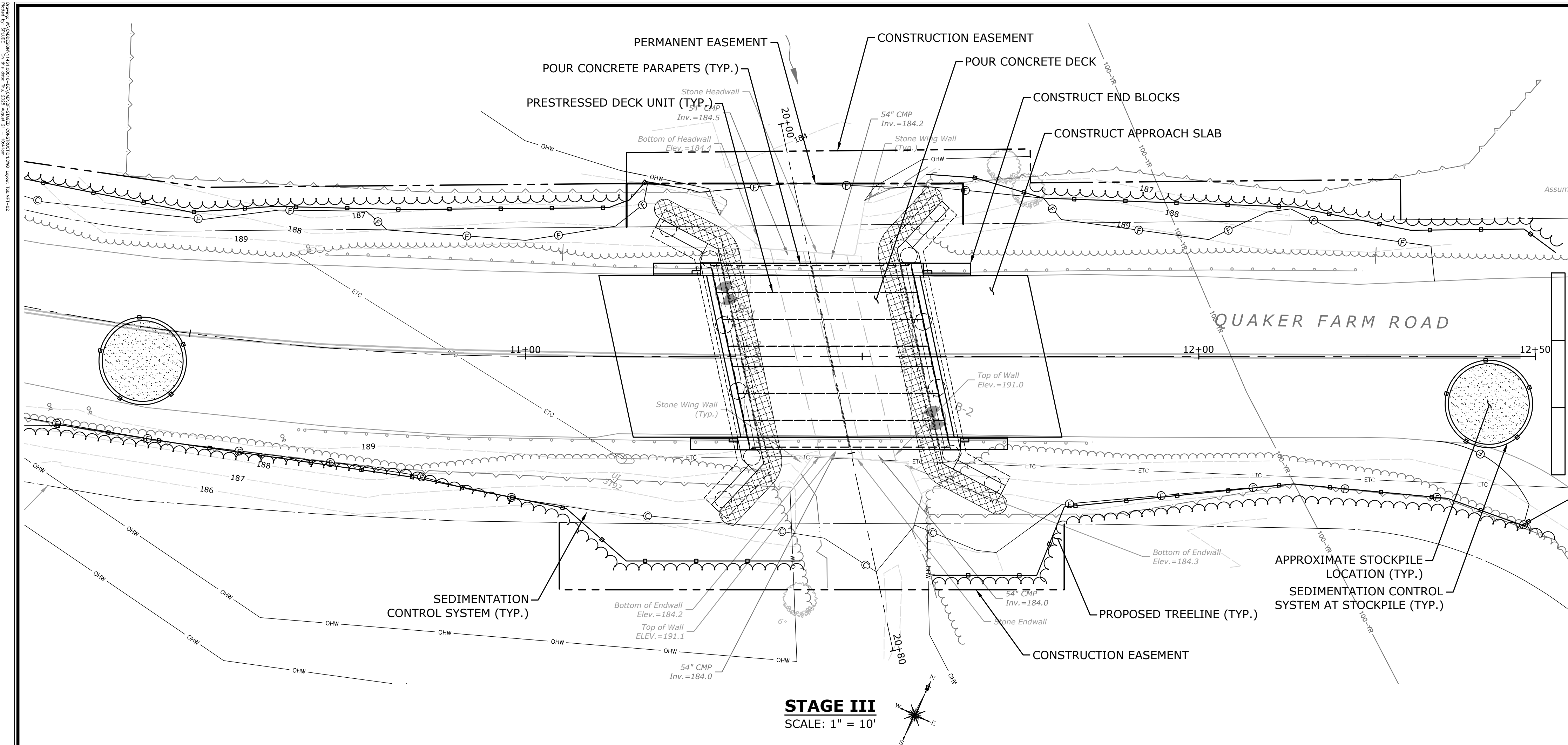
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEY'S BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP	WRS	SEP
DESIGNED	DRAWN	CHECKED
AS SHOWN		
AUGUST 21, 2025		
141.11461.00018		
MPT-01		

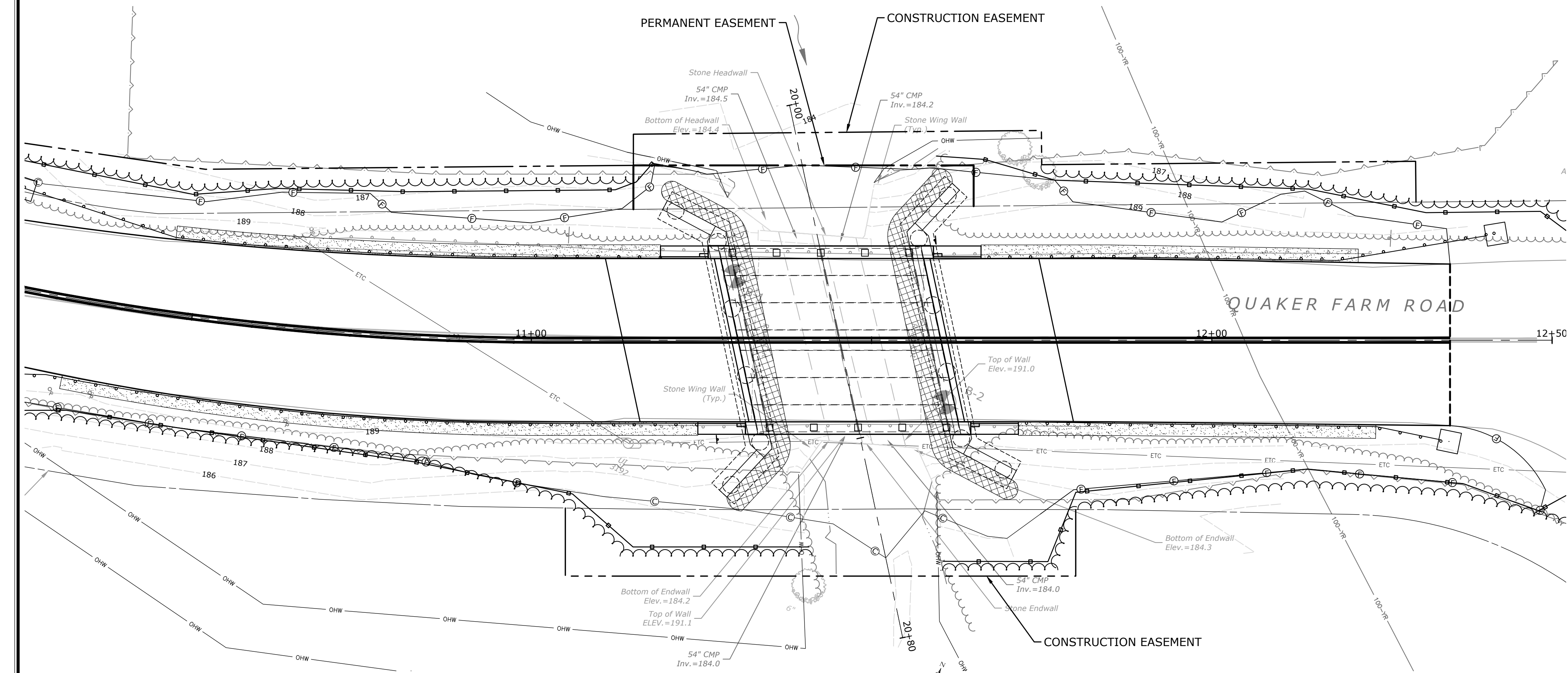
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STAGE III
SCALE: 1" = 10'



STAGE IV
SCALE: 1" = 10'

SUGGESTED CONSTRUCTION SEQUENCE

STAGE III

1. INSTALL PRESTRESSED DECK UNITS.
2. POUR CONCRETE DECK.
3. CONSTRUCT END BLOCKS.
4. CONSTRUCT APPROACH SLABS.
5. CONSTRUCT BRIDGE CURBS
6. INSTALL MEMBRANE WATERPROOFING.

STAGE IV

1. COMPLETE ROADWAY RECONSTRUCTION AND PAVE.
2. FINALIZE GRADING.
3. INSTALL PLANTINGS AND PLACE TOPSOIL, TURF ESTABLISHMENT, AND NEW ENGLAND CONSERVATION/WILDLIFE MIX AS SHOWN ON THE PLANS.
4. INSTALL APPROACH GUIDERAIL AND BRIDGE RAIL.
5. REMOVE SEDIMENTATION AND EROSION CONTROL SYSTEMS.
6. REMOVE EXISTING ROAD CLOSURE SIGNAGE AND REOPEN QUAKER FARM ROAD TO TRAFFIC.



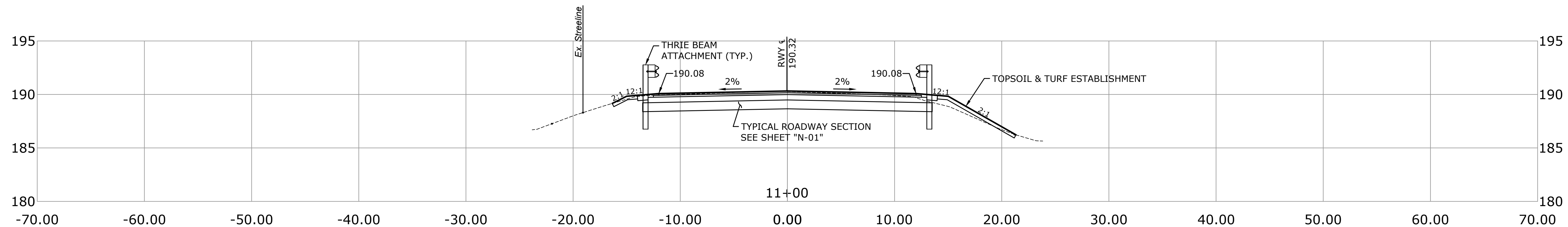
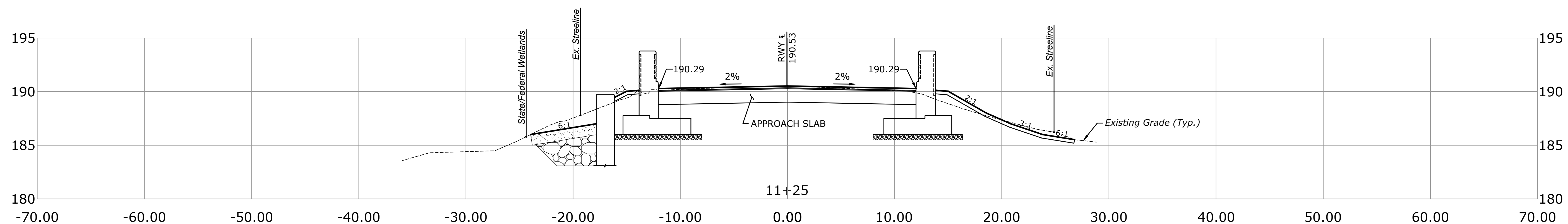
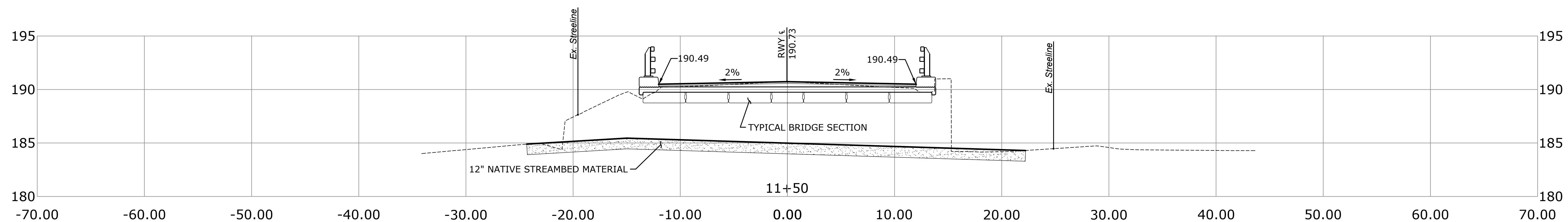
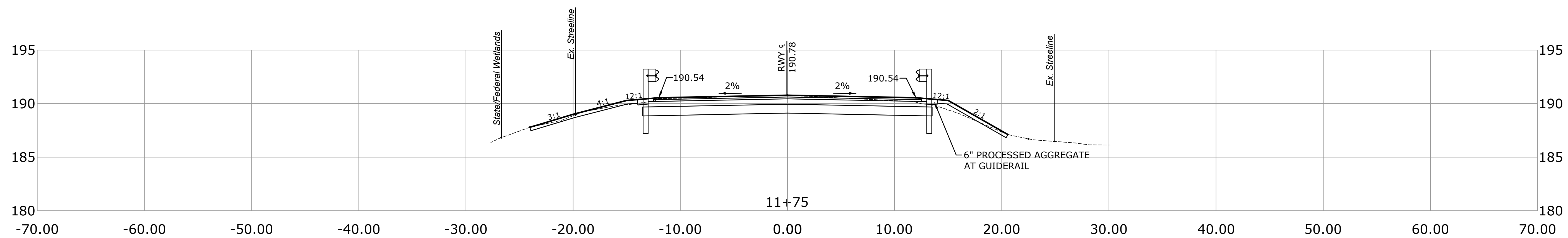
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SUITE 200
263.271.1773
SLRCONSULTING.COM

DESCRIPTION	DATE	BY

STAGED CONSTRUCTION PLAN
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEY'S BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

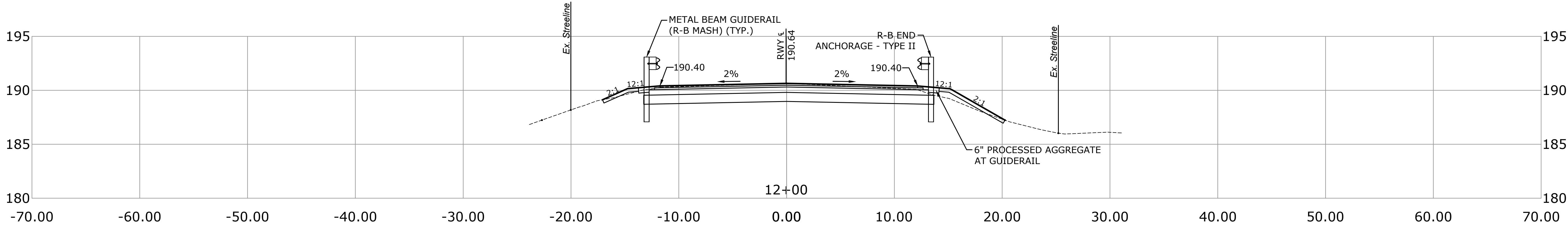
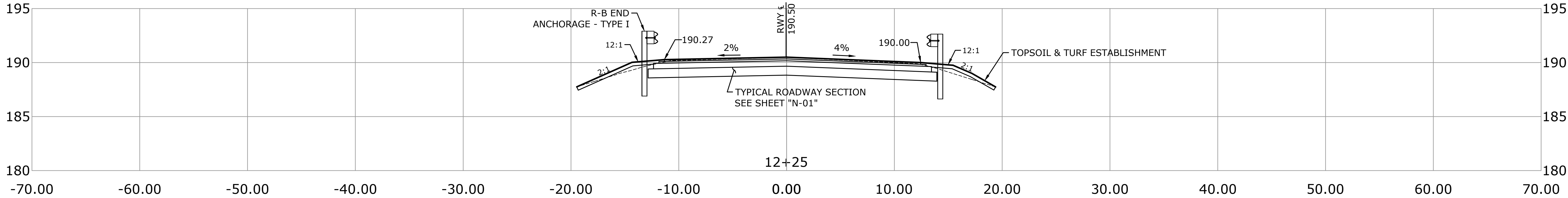
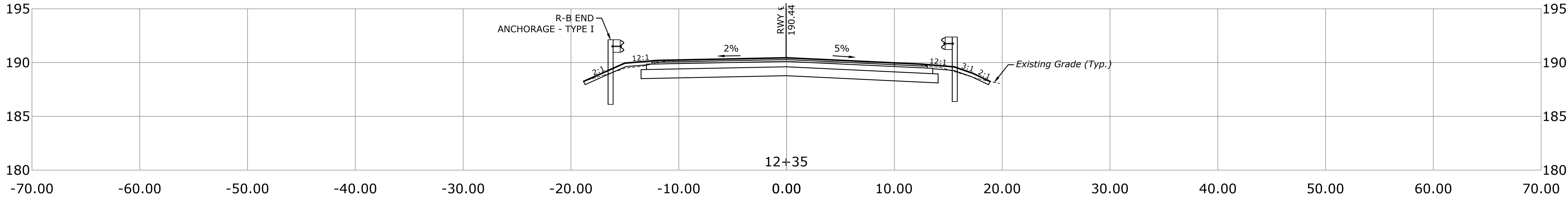
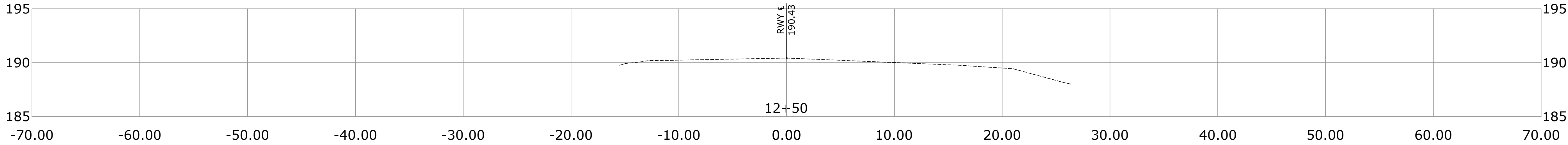
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AUGUST 21, 2025		
DATE		
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PROJECT NO.		
MPT-02		
DRAWING NO.		

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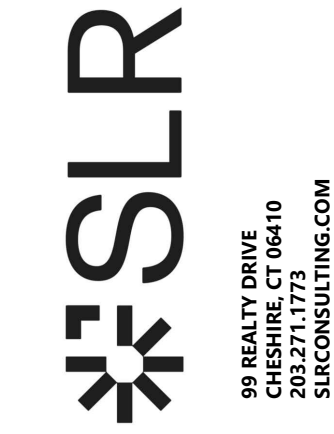


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STATE PROJECT NO. 9058-0015



DESCRIPTION	DATE	BY

ROADWAY CROSS SECTIONS
REPLACEMENT OF BRIDGE NO. 07143
QUAKER FARM ROAD OVER HALEYS BROOK
QUAKER FARM ROAD
GROTON, CONNECTICUT

SEP	WRS	SEP
DESIGNED	DRAWN	CHECKED
1"=5'		
AUGUST 21, 2025		
141.11461.00018		
XSC-03		
28		

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