

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



MARIAVILLE HANCOCK COUNTY TANNERY BRIDGE OVER TANNERY BROOK ROUTE 181 FEDERAL AID PROJECT NO. 2610700 PROJECT LENGTH 0.099 mi. BRIDGE NO. 3511

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Tenth Edition 2024.

DESIGN LOADING

Live Load..... HL - 93 Modified for Strength I

TRAFFIC DATA

Current (2023) AADT.....	750
Future (2043) AADT.....	830
DHV - % of AADT.....	11%
Design Hour Volume.....	91
Heavy Trucks (% of AADT).....	4%
Heavy Trucks (% of DHV).....	3%
Directional Distribution (% of DHV).....	56%
18 kip Equivalent P 2.0.....	6
18 kip Equivalent P 2.5.....	6
Design Speed (mph).....	45

HYDROLOGIC DATA

Drainage Area.....	18.7 sq mi
Design Discharge (Q50).....	1255 cfs
Check Discharge (Q100).....	1415 cfs
Headwater Elevation (Q1.1).....	110.4 ft
Headwater Elevation (Q25).....	113.1 ft
Headwater Elevation (Q50).....	113.6 ft
Headwater Elevation (Q100).....	114.0 ft
Discharge Velocity (Q1.1).....	4.3 fps
Discharge Velocity (Q50).....	7.8 fps
Discharge Velocity (Q100).....	8.2 fps

MATERIALS

Concrete:	
Precast.....	Class "P"
Seal.....	Class "S"
Deck and Curbs.....	Class "A1"
All Other.....	Class "A"
Reinforcing:	
Plain Reinforcing Steel.....	ASTM A615, Grade 60
Glass Fiber Reinforcing Polymer (GFRP).....	ASTM D7957
Low-Carbon Chromium Steel.....	ASTM A1035, Type CS, Grade 100
Prestressing Strands.....	AASHTO M 203 (ASTM A416), Grade 270, Low Relaxation

BASIC DESIGN STRESSES

Concrete:	
Class "A" and Class "A1".....	$f'c = 4,000$ psi
Class "S".....	$f'c = 3,000$ psi
Class "P".....	$f'c = 8,000$ psi
	$f'ci = 6,500$ psi
Reinforcing:	
Plain Reinforcing Steel.....	$f_y = 60,000$ psi
Glass Fiber Reinforced Polymer.....	
Minimum Tensile Strength.....	$f_{tu} = 100,000$ psi
Minimum Elastic Modulus.....	$E_f = 8,700,000$ psi
Minimum Nominal Design Tensile Strain.....	$\epsilon_{fu} = 1.1\%$
Low-Carbon Chromium Steel.....	$f_y = 100,000$ psi
Prestressing Strand.....	$F_u = 270,000$ psi

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UTILITIES

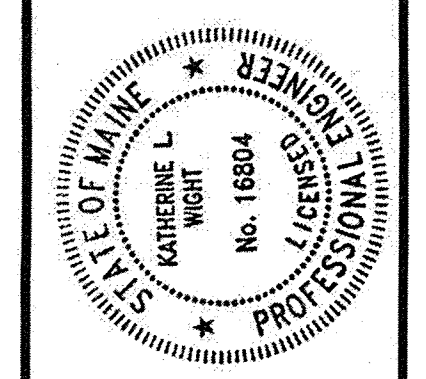
Versant Power
Union River Telephone

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating traffic using on site special detour with temporary traffic signals.

<u>PROJECT LOCATION</u>	Tannery Bridge (#3511) over Tannery Brook. Located 0.16 of a mile north of Olive Carr Road. Lat./Long. 44°42'3.9" N 68°24' 46.6" W
<u>PROGRAM AREA</u>	Bridge
<u>OUTLINE OF WORK</u>	Bridge Replacement and Associated Approach Work

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	DATE 11-17-25
APPROVED	ACTING COMMISSIONER <i>[Signature]</i>
	CHIEF ENGINEER <i>[Signature]</i>



Katherine L. Wright
SIGNATURE
16804
P.E. NUMBER
October 10, 2025
DATE

PROJECT INFORMATION
PROGRAM: BRIDGE PROGRAM
PROJECT MANAGER: CHARLES GUY
DESIGNER: KATHERINE WRIGHT
CONSULTANT: STANTEC
PROJECT RESIDENT:
CONTRACTOR:
PROJECT COMPLETION DATE:

MARIAVILLE
TANNERY BRIDGE
TITLE SHEET

SHEET NUMBER

1
OF 35



DATE: 10/7/2025 USERNAME: PHARRIMAN

ESTIMATE QUANTITIES			
ITEM NO.	DESCRIPTION	QTY	UNIT
202.19	REMOVING EXISTING BRIDGE	(250 CY)	1 LS
202.202	REMOVING PAVEMENT SURFACE		280 SY
203.20	COMMON EXCAVATION		700 CY
203.2318	DISPOSAL OF SPECIAL WASTE		570 T
203.25	GRANULAR BORROW		610 CY
206.082	STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES, PLAN QUANTITY		1250 CY
206.092	STRUCTURAL ROCK EXCAVATION - MAJOR STRUCTURES		50 CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL		930 CY
403.208	HOT MIX ASPHALT - 12.5 mm		150 T
403.209	HOT MIX ASPHALT - 9.5 mm (SIDEWALKS, DRIVES, & INCIDENTALS)		2 T
403.213	HOT MIX ASPHALT - 12.5 mm (BASE AND INTERMEDIATE COURSE)		200 T
409.15	BITUMINOUS TACK COAT, APPLIED		79 G
461.131	TEMPORARY PAVEMENT		120 T
502.219	STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	(161 CY)	1 LS
502.22	STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS (PLACED UNDER WATER)		219 CY
502.261	STRUCTURAL CONCRETE ROADWAY AND SIDEWALK SLAB ON CONCRETE BRIDGES	(59 CY)	1 LS
502.291	SAW CUT GROOVING	(1450 SF)	1 LS
502.31	STRUCTURAL CONCRETE APPROACH SLAB	(21 CY)	1 LS
502.49	STRUCTURAL CONCRETE CURBS AND SIDEWALKS	(5 CY)	1 LS
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED		17100 LB
503.13	REINFORCING STEEL, PLACING		17100 LB
503.19	LOW-CARBON CHROMIUM REINFORCEMENT, FABRICATED AND DELIVERED		3500 LB
503.20	LOW-CARBON CHROMIUM REINFORCEMENT, PLACING		3500 LB
507.0821	STEEL BRIDGE RAILING, 3 BAR	(103 LF)	1 LS
507.0822	STEEL APPROACH RAIL, 3-BAR		4 EA
510.10	SPECIAL DETOUR 18FT ROADWAY WIDTH VEHICULAR AND PEDESTRIAN TRAFFIC NOT SEPARATED		1 LS
511.07	COFFERDAM: ABUTMENT NO. 1		1 LS
511.07	COFFERDAM: ABUTMENT NO. 2		1 LS
512.081	FRENCH DRAINS	(120 LF)	1 LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES	(320 SY)	1 LS
527.34	WORK ZONE CRASH CUSHIONS		4 UN
530.30	GFRP, REINFORCEMENT BARS, FABRICATED & DELIVERED		10600 LF
530.31	GFRP, REINFORCEMENT BARS, PLACING		10600 LF
535.622	PRESTRESSED STRUCTURAL CONCRETE NEXT BEAM	(46 CY)	1 LS
606.1301	31" W-BEAM GUARDRAIL - MID-WAY SPLICE - SINGLE FACED		187.5 LF
606.1303	31" W-BEAM GUARDRAIL - MID-WAY SPLICE, 15' RADIUS AND LESS		12.5 LF
606.1304	31" W-BEAM GUARDRAIL - MID-WAY SPLICE, OVER 15' RADIUS		25 LF
606.1305	31" W-BEAM GUARDRAIL - MID-WAY SPLICE FLARED TERMINAL		2 EA
606.1721	BRIDGE TRANSITION - TYPE I		4 EA
606.265	TERMINAL END-SINGLE RAIL- GALVANIZED STEEL		2 EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER		8 EA
606.51	MULTIPLE MAILBOX SUPPORT		1 EA
610.08	PLAIN RIPRAP		90 CY
610.18	STONE DITCH PROTECTION		9 CY
610.213	VOID-FILLED RIPRAP		200 CY
613.319	EROSION CONTROL BLANKET		120 SY
615.07	LOAM		41 CY
618.13	SEEDING METHOD NUMBER 1		1 UN
618.14	SEEDING METHOD NUMBER 2		7 UN
619.12	MULCH		7 UN
619.14	EROSION CONTROL MIX		82 CY
620.58	EROSION CONTROL GEOTEXTILE		360 SY
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE		1600 LF
627.77	REMOVING EXISTING PAVEMENT MARKING		54 SF
627.78	TEMPORARY 4" PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW		1750 LF
629.05	HAND LABOR, STRAIGHT TIME		40 HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)		40 HR
631.172	TRUCK-LARGE (INCLUDING OPERATOR)		40 HR
639.19	FIELD OFFICE, TYPE B		1 EA
643.72	TEMPORARY TRAFFIC SIGNAL		1 LS
652.312	TYPE III BARRICADES		4 EA
652.33	DRUM		50 EA
652.34	CONE		50 EA
652.35	CONSTRUCTION SIGNS		210 SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES		1 LS
652.38	FLAGGERS		520 HR
652.41	PORTABLE-CHANGEABLE MESSAGE SIGN		2 EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL		1 LS
659.10	MOBILIZATION		1 LS

GENERAL CONSTRUCTION NOTES

- For easements, construction limits, and right of way lines, refer to the Right of Way Map.
- The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.
- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- Existing signs within the Project limits shall be removed and reset as directed by the Resident. Payment for removal and reinstallation of existing signs will be considered incidental to the Contract. No separate payment will be made.
- Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.
- In areas where the Resident directs the Contractor not to excavate to the subgrade line shown on the plans, payment for removing existing pavement, grubbing, shaping, ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rental items.
- All embankment material, except as otherwise shown, placed below EL 113.60 shall be Granular Borrow meeting the requirements of Standard Specification Subsection 703.19, Granular Borrow, for Material for Underwater Backfill, with the additional requirement that the maximum particle size be limited to 4 inches.
- Place Void Filled Riprap at and below EL. 110.40, unless noted otherwise, see Special Provision 610. Place Plain Riprap on sideslopes up to EL 113.60.
- Construct the riprap shelf at each abutment at EL. 110.40.
- Place loam 2 inches deep on all new or reconstructed sideslopes or as directed by the Resident.
- Unless otherwise noted, Seeding Method No. 1 shall be utilized on all lawns and developed areas; Seeding Method No. 2 shall be utilized on all other areas.
- Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Pay Item 619.14, Erosion Control Mix.
- Place a 24 inch wide strip of Erosion Control Blanket on the sideslopes along the top of the riprap and behind the wingwalls.
- A MASH compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail.
- Where it is apparent that runoff will cause continual erosion, Erosion Control Blanket, seeded gutters, riprap downspouts, and other gutters lined with Stone Ditch Protection shall be constructed after paving and shoulder work is completed. Payment will be made under the appropriate Contract items.
- Protective Coating for Concrete Surfaces shall be applied to the following areas:
 - All exposed surfaces of concrete curbs,
 - Fascias down to the drip notch,
 - Concrete wearing surfaces,
 - Top of abutment backwalls and wingwalls, and
 - To one foot below the ground on vertical walls against earth.
- Project information referred to below may be accessed at the following MaineDOT web address:
<http://www.maine.gov/mdot/contractors/>
- The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

- Reports on hydrology and/or hydraulics applicable to the bridge site may be accessed at the MaineDOT web address. The reports are based on MaineDOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.
- The project geotechnical report titled: Geotechnical Design Report, Tannery Brook Bridge No. 3511, Mariaville Road Over Tannery Brook, Mariaville, Maine; Dated August 2025 may be accessed at the MaineDOT web address.
- Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations
- Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:
 - If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
 - If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
 - If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation and Time.
- The Contractor will be responsible for maintaining all existing mailboxes during construction to ensure that the mail will be deliverable. Payment for this work will be considered incidental to the contract.
- Residential paved entrances shall be constructed with 2 inches of hot mix asphalt and 12 inches of aggregate subbase course gravel.
- Gravel entrances shall be constructed with 14 inches of aggregate subbase course gravel or 11 inches of aggregate subbase course gravel and 3 inches of untreated aggregate surface course unless otherwise noted in the Plans or directed by the Resident.
- A 3-foot paved lip shall be placed at all unpaved entrances unless otherwise noted in the Plans or directed by the Resident.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700

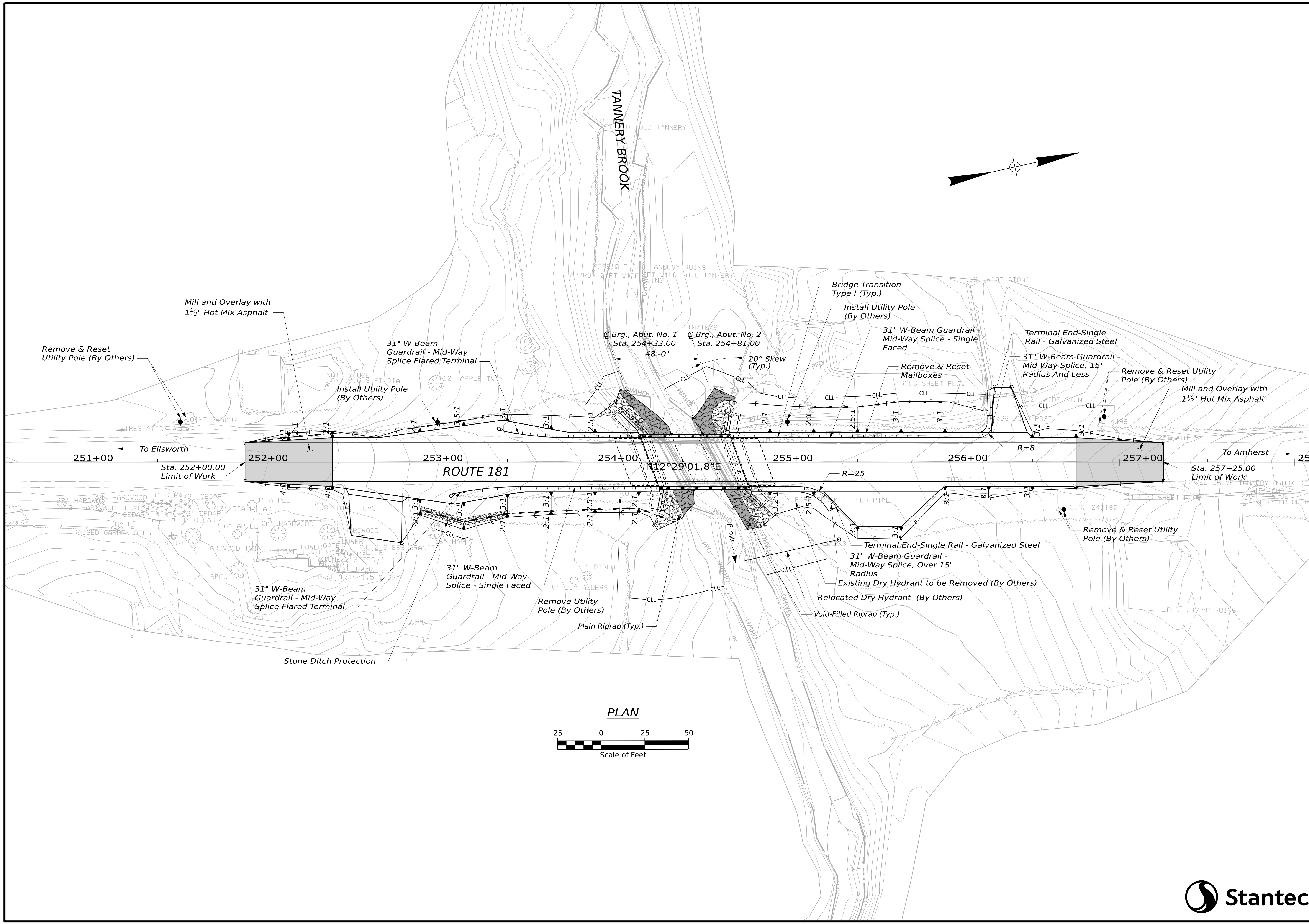
WIN 26107.00

PROJ. MANAGER	DATE
DESIGN-DETAILED	OCT 2025
CHECKED-REVIEWED	OCT 2025
DESIGN-DETAILED02	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
ESTIMATED QUANTITIES AND
GENERAL CONSTRUCTION NOTES

SHEET NUMBER
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OF 35





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700

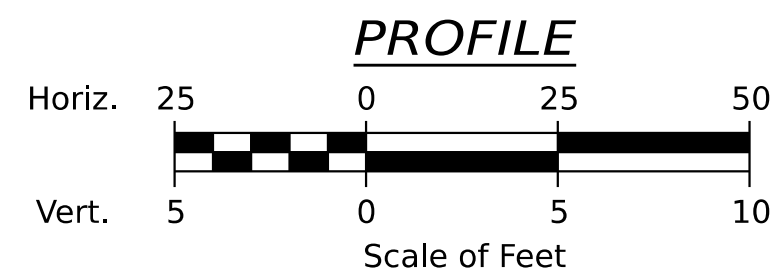
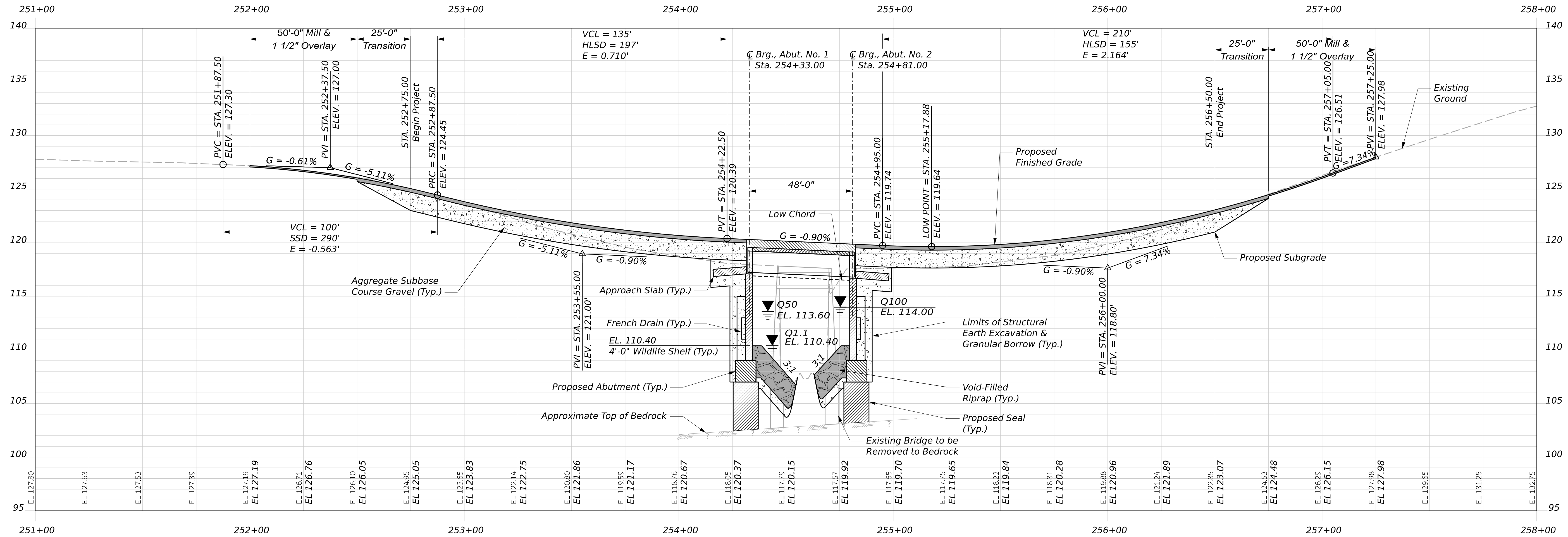
DATE	BY	DESCRIPTION	SIGNATURE	P.E. NUMBER	DATE
OCT 2025	ALW/CHL	DESIGN-REVIEWED			
OCT 2025	SAW/R/P	CHECKED-REVIEWED			
	SAW/R/P	DESIGN-REVIEWED			
		DESIGN-REVIEWED			
		REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			
		REVISIONS 4			
		FIELD CHANGES			

PROJ. MANAGER	C. GUY	DATE

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
GENERAL PLAN

SHEET NUMBER
3
OF 35





PROJ. MANAGER	DATE	BY	DATE	SIGNATURE
DESIGN-DETAILED	OCT 2025	KLW/CHL	OCT 2025	
CHECKED-REVIEWED		KLW/CHL		
DESIGN-DETAILED		SAW/PLP		
DESIGN-DETAILED		SAW/PLP		
REVISIONS 1				P.E. NUMBER
REVISIONS 2				DATE
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE
DESIGN-DETAILED	OCT 2025	KLW/CHL	OCT 2025	
CHECKED-REVIEWED		KLW/CHL		
DESIGN-DETAILED		SAW/PLP		
DESIGN-DETAILED		SAW/PLP		
REVISIONS 1				P.E. NUMBER
REVISIONS 2				DATE
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

TANNERY BRIDGE NO. 3511
 CROSSING TANNERY BROOK
 MARIAVILLE
PROFILE



Maine Department of Transportation		Project: Mariaville Road over Tannery Brook Bridge #3511		Boring No.: BB-MTB-101	
Soil/Rock Exploration Log		Location: Mariaville, Maine		WIN: 26107.00	
Driller:	New England Boring Contractors	Elevation (ft.):	118	Auger ID/DD:	6.0"
Operator:	M. D'Amrosio	Datum:	NAVD88	Sampler:	Standard Split/Spoon
Logged By:	L. Navarrete	Rig Type:	G-Tech G18 Truck	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/25/22-10/25/22	Drilling Method:	Drive & Wash	Core Barrel:	ND
Boring Location:	254+29.5, 5.8' LT	Casing ID/DD:	4.25/4.5"	Water Level*:	8.0
Hammer Efficiency Factor:	0.87	Hammer Type:	Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>		
<p>Definitions: R = Rock Core Sample, SSA = Solid Stem Auger, U = Unconfined Compressive Strength (psi), L = Liquid Limit, W = Unsuccessful Thin Wall Tube Sample attempt, V = In Situ Vane Shear Test, MV = Unsuccessful In Situ Vane Shear Test attempt, WVP = Weight of one person.</p> <p>Notes: 1. Coordinates N316760.5, E2156699.2, Datum NAD83 (2011) Maine 2000 East. As-drilled boring locations were surveyed by MaineDOT. 2. Fine grained soil descriptions on this log are based on plasticity estimated using visual manual classification techniques or Laboratory Atterberg Limit Tests if available, rather than the Unified Soil Classification System based percentages passing specific grain sizes. 3. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87. 4. 6" solid stem Finless auger utilized to drill through pavement. 5. Offset 1.5' north of BB-MTB-101.</p>					

Maine Department of Transportation		Project: Mariaville Road over Tannery Brook Bridge #3511		Boring No.: BB-MTB-102C	
Soil/Rock Exploration Log		Location: Mariaville, Maine		WIN: 26107.00	
Driller:	New England Boring Contractors	Elevation (ft.):	117.4	Auger ID/DD:	6.0"
Operator:	M. D'Amrosio	Datum:	NAVD88	Sampler:	Standard Split/Spoon
Logged By:	L. Navarrete	Rig Type:	G-Tech G18 Truck	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/25/22-10/25/22	Drilling Method:	Drive & Wash	Core Barrel:	ND
Boring Location:	254+48.7, 6.0' RT	Casing ID/DD:	4.25/4.5"	Water Level*:	8.0
Hammer Efficiency Factor:	0.87	Hammer Type:	Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>		
<p>Definitions: R = Rock Core Sample, SSA = Solid Stem Auger, U = Unconfined Compressive Strength (psi), L = Liquid Limit, W = Unsuccessful Thin Wall Tube Sample attempt, V = In Situ Vane Shear Test, MV = Unsuccessful In Situ Vane Shear Test attempt, WVP = Weight of one person.</p> <p>Notes: 1. Coordinates N316826.6, E2156724.1, Datum NAD83 (2011) Maine 2000 East. As-drilled boring locations were surveyed by MaineDOT. 2. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87. 3. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87. 4. Offset 3.5' north of BB-MTB-102 for BB-MTB-102C. Encountered refusal just below the asphalt, so the boring was abandoned and relocated to BB-MTB-102E.</p>					

Maine Department of Transportation		Project: Mariaville Road over Tannery Brook Bridge #3511		Boring No.: BB-MTB-102E	
Soil/Rock Exploration Log		Location: Mariaville, Maine		WIN: 26107.00	
Driller:	New England Boring Contractors	Elevation (ft.):	117.4	Auger ID/DD:	6.0"
Operator:	M. D'Amrosio	Datum:	NAVD88	Sampler:	Standard Split/Spoon
Logged By:	L. Navarrete	Rig Type:	G-Tech G18 Truck	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/26/22-10/26/22	Drilling Method:	Spin & Wash	Core Barrel:	ND
Boring Location:	254+96.9, 6.0' RT	Casing ID/DD:	4.25/4.5"	Water Level*:	8.3
Hammer Efficiency Factor:	0.87	Hammer Type:	Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>		
<p>Definitions: R = Rock Core Sample, SSA = Solid Stem Auger, U = Unconfined Compressive Strength (psi), L = Liquid Limit, W = Unsuccessful Thin Wall Tube Sample attempt, V = In Situ Vane Shear Test, MV = Unsuccessful In Situ Vane Shear Test attempt, WVP = Weight of one person.</p> <p>Notes: 1. Coordinates N316840.5, E2156727.2, Datum NAD83 (2011) Maine 2000 East. As-drilled boring locations were surveyed by MaineDOT. 2. Fine grained soil descriptions on this log are based on plasticity estimated using visual manual classification techniques or Laboratory Atterberg Limit Tests if available, rather than the Unified Soil Classification System based percentages passing specific grain sizes. 3. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87. 4. 6" solid stem Finless auger utilized to drill through pavement. 5. Offset 1.5' north of BB-MTB-102.</p>					

Maine Department of Transportation		Project: Mariaville Road over Tannery Brook Bridge #3511		Boring No.: BB-MTB-102B	
Soil/Rock Exploration Log		Location: Mariaville, Maine		WIN: 26107.00	
Driller:	New England Boring Contractors	Elevation (ft.):	117.4	Auger ID/DD:	6.0"
Operator:	M. D'Amrosio	Datum:	NAVD88	Sampler:	Standard Split/Spoon
Logged By:	L. Navarrete	Rig Type:	G-Tech G18 Truck	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/25/22-10/25/22	Drilling Method:	Drive & Wash	Core Barrel:	ND
Boring Location:	254+91.5, 6.3' RT	Casing ID/DD:	4.25/4.5"	Water Level*:	8.0
Hammer Efficiency Factor:	0.87	Hammer Type:	Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>		
<p>Definitions: R = Rock Core Sample, SSA = Solid Stem Auger, U = Unconfined Compressive Strength (psi), L = Liquid Limit, W = Unsuccessful Thin Wall Tube Sample attempt, V = In Situ Vane Shear Test, MV = Unsuccessful In Situ Vane Shear Test attempt, WVP = Weight of one person.</p> <p>Notes: 1. Coordinates N316835.2, E2156726.2, Datum NAD83 (2011) Maine 2000 East. As-drilled boring locations were surveyed by MaineDOT. 2. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87. 3. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87.</p>					

Maine Department of Transportation		Project: Mariaville Road over Tannery Brook Bridge #3511		Boring No.: BB-MTB-102A	
Soil/Rock Exploration Log		Location: Mariaville, Maine		WIN: 26107.00	
Driller:	New England Boring Contractors	Elevation (ft.):	117.4	Auger ID/DD:	6.0"
Operator:	M. D'Amrosio	Datum:	NAVD88	Sampler:	Standard Split/Spoon
Logged By:	L. Navarrete	Rig Type:	G-Tech G18 Truck	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/25/22-10/25/22	Drilling Method:	Drive & Wash	Core Barrel:	ND
Boring Location:	254+09.9, 6.3' RT	Casing ID/DD:	4.25/4.5"	Water Level*:	8.0
Hammer Efficiency Factor:	0.87	Hammer Type:	Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>		
<p>Definitions: R = Rock Core Sample, SSA = Solid Stem Auger, U = Unconfined Compressive Strength (psi), L = Liquid Limit, W = Unsuccessful Thin Wall Tube Sample attempt, V = In Situ Vane Shear Test, MV = Unsuccessful In Situ Vane Shear Test attempt, WVP = Weight of one person.</p> <p>Notes: 1. Coordinates N316844.3, E2156728.3, Datum NAD83 (2011) Maine 2000 East. As-drilled boring locations were surveyed by MaineDOT. 2. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87. 3. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87.</p>					

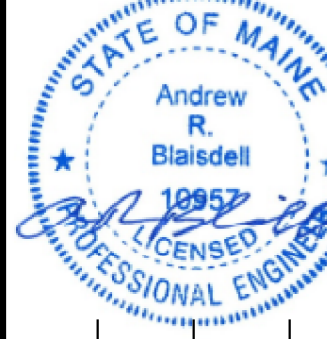
Maine Department of Transportation		Project: Mariaville Road over Tannery Brook Bridge #3511		Boring No.: BB-MTB-102	
Soil/Rock Exploration Log		Location: Mariaville, Maine		WIN: 26107.00	
Driller:	New England Boring Contractors	Elevation (ft.):	117.4	Auger ID/DD:	6.0"
Operator:	M. D'Amrosio	Datum:	NAVD88	Sampler:	Standard Split/Spoon
Logged By:	L. Navarrete	Rig Type:	G-Tech G18 Truck	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/25/22-10/25/22	Drilling Method:	Drive & Wash	Core Barrel:	ND
Boring Location:	254+95.6, 6.3' RT	Casing ID/DD:	4.25/4.5"	Water Level*:	8.0
Hammer Efficiency Factor:	0.87	Hammer Type:	Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>		
<p>Definitions: R = Rock Core Sample, SSA = Solid Stem Auger, U = Unconfined Compressive Strength (psi), L = Liquid Limit, W = Unsuccessful Thin Wall Tube Sample attempt, V = In Situ Vane Shear Test, MV = Unsuccessful In Situ Vane Shear Test attempt, WVP = Weight of one person.</p> <p>Notes: 1. Coordinates N316839.2, E2156727.2, Datum NAD83 (2011) Maine 2000 East. As-drilled boring locations were surveyed by MaineDOT. 2. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87.</p>					

Maine Department of Transportation		Project: Mariaville Road over Tannery Brook Bridge #3511		Boring No.: BB-MTB-102	
Soil/Rock Exploration Log		Location: Mariaville, Maine		WIN: 26107.00	
Driller:	New England Boring Contractors	Elevation (ft.):	117.4	Auger ID/DD:	6.0"
Operator:	M. D'Amrosio	Datum:	NAVD88	Sampler:	Standard Split/Spoon
Logged By:	L. Navarrete	Rig Type:	G-Tech G18 Truck	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	10/25/22-10/25/22	Drilling Method:	Drive & Wash	Core Barrel:	ND
Boring Location:	254+95.6, 6.3' RT	Casing ID/DD:	4.25/4.5"	Water Level*:	8.0
Hammer Efficiency Factor:	0.87	Hammer Type:	Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>		
<p>Definitions: R = Rock Core Sample, SSA = Solid Stem Auger, U = Unconfined Compressive Strength (psi), L = Liquid Limit, W = Unsuccessful Thin Wall Tube Sample attempt, V = In Situ Vane Shear Test, MV = Unsuccessful In Situ Vane Shear Test attempt, WVP = Weight of one person.</p> <p>Notes: 1. Coordinates N316839.2, E2156727.2, Datum NAD83 (2011) Maine 2000 East. As-drilled boring locations were surveyed by MaineDOT. 2. Automatic hammer NEB #4712-A-G18-P energy transfer rate = 0.87.</p>					

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

Federal Project No. 2610700

WIN 26107.00



Andrew R. Blaisdell
Professional Engineer

PROJ. MANAGER	DESIGNED	REVIEWED	DATE	BY	DATE
			OCT 2025		OCT 2025
			OCT 2025		OCT 2025

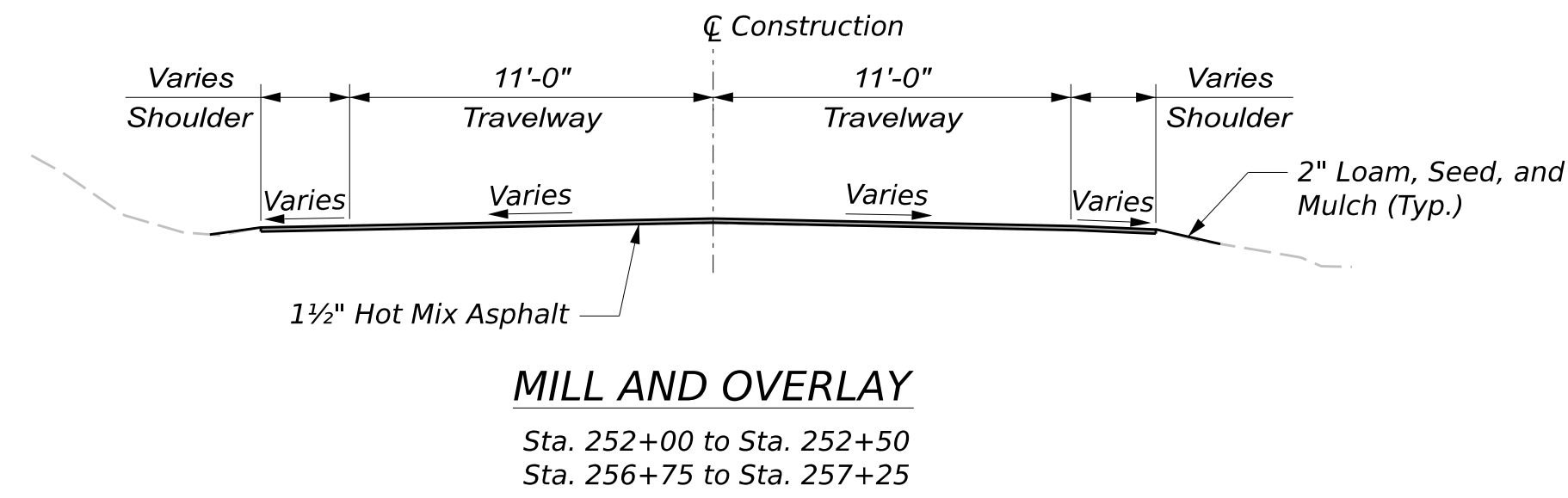
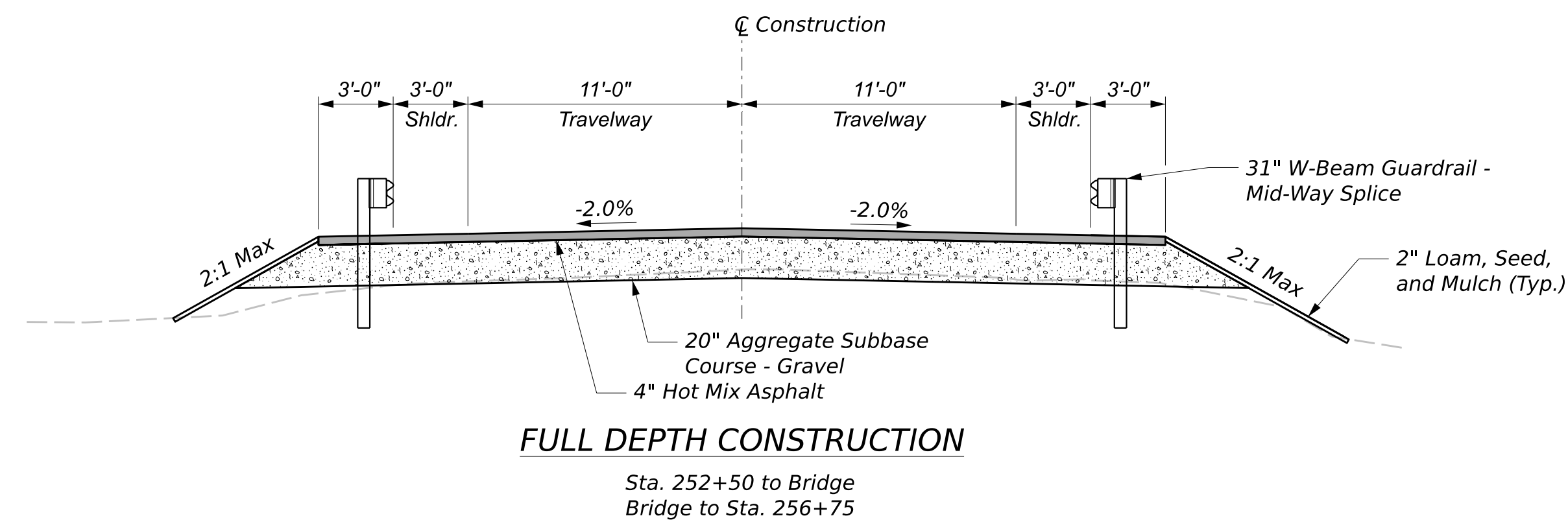
TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE

BORING LOGS

SHEET NUMBER

6

OF 35



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700
WIN 26107.00

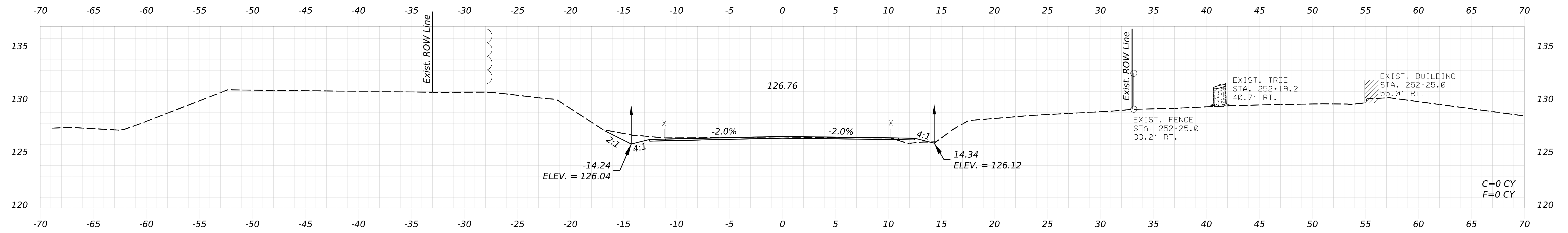
SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	C. GUY	BY	DATE
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CHECKED-REVIEWED	SAW/PLP	SAW/PLP	OCT 2025
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DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

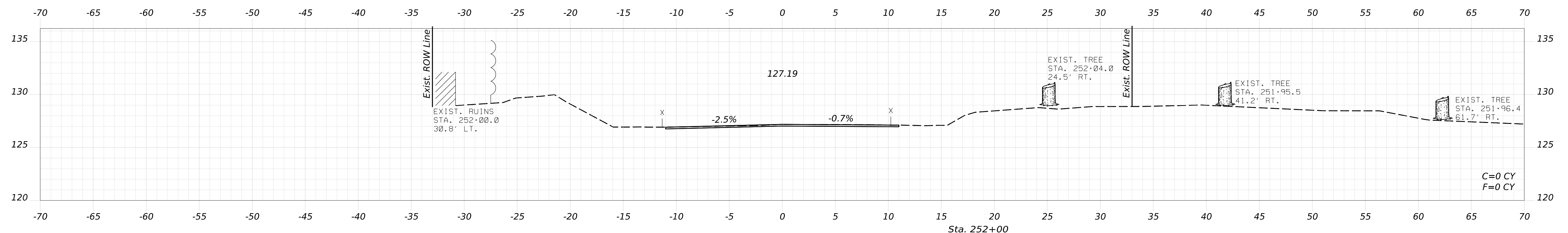
TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
TYPICAL SECTIONS

SHEET NUMBER
7
OF 35



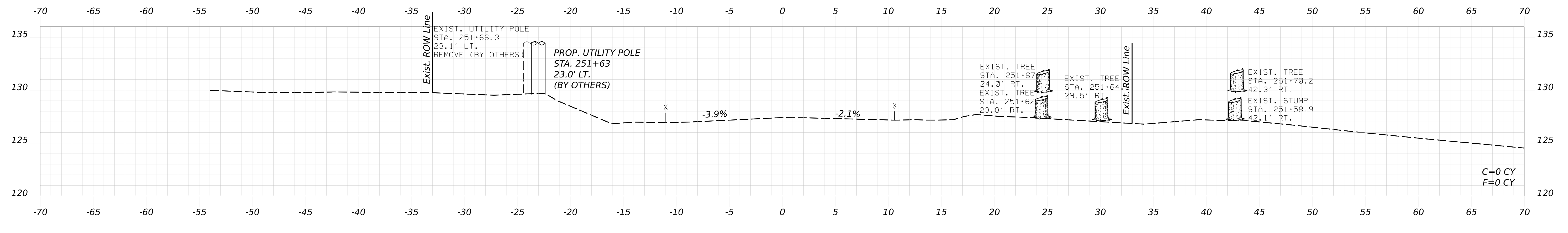


252+25.00



252+00.00

Sta. 252+00
Limit of Work
Begin Mill and 1 1/2" Overlay



251+75.00

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	CHL/AFS	CHL/AFS	OCT 2025
CHECKED-REVIEWED	PLP	PLP	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
CROSS SECTIONS

SHEET NUMBER
8
OF 35

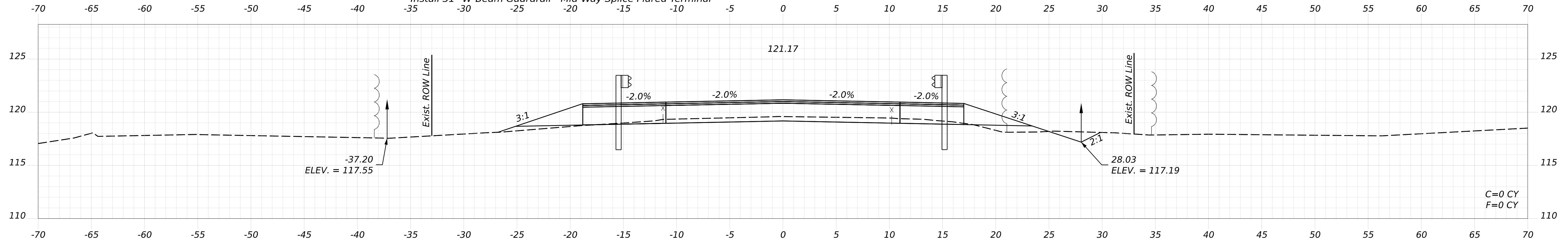


Username: pharriman Date: 10/16/2025

Sta. 253+97.24, 14.00' Lt. to Sta. 254+26.32, 14.00' Lt.
Install Bridge Transition - Type I and Steel Approach Rail, 3-Bar

Sta. 253+84.74, 14.00' Lt. to Sta. 253+97.24, 14.00' Lt.
Install 12.5' 31" W-Beam Guardrail - Mid-Way Splice - Single Faced

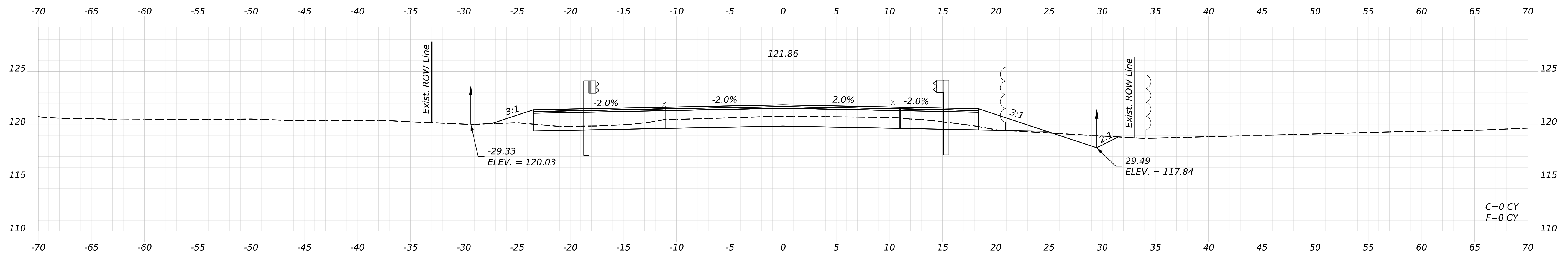
Sta. 253+84.74, 14.00' Lt.
Install 31" W-Beam Guardrail - Mid-Way Splice Flared Terminal



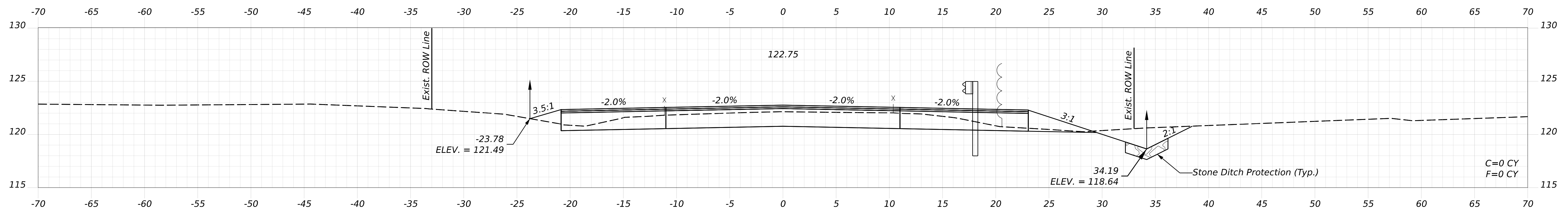
253+75.00

Sta. 253+57.43, 14.00' Rt. to Sta. 254+07.43, 14.00' Rt.
Install 50' 31" W-Beam Guardrail - Mid-Way Splice - Single Faced

Sta. 253+57.43, 14.00' Rt.
Install 31" W-Beam Guardrail - Mid-Way Splice Flared Terminal



253+50.00



253+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700
BRIDGE PLANS
WIN 26107.00

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	CHK/AFS	CHK/AFS	OCT 2025
CHECKED-REVIEWED	PLP	PLP	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

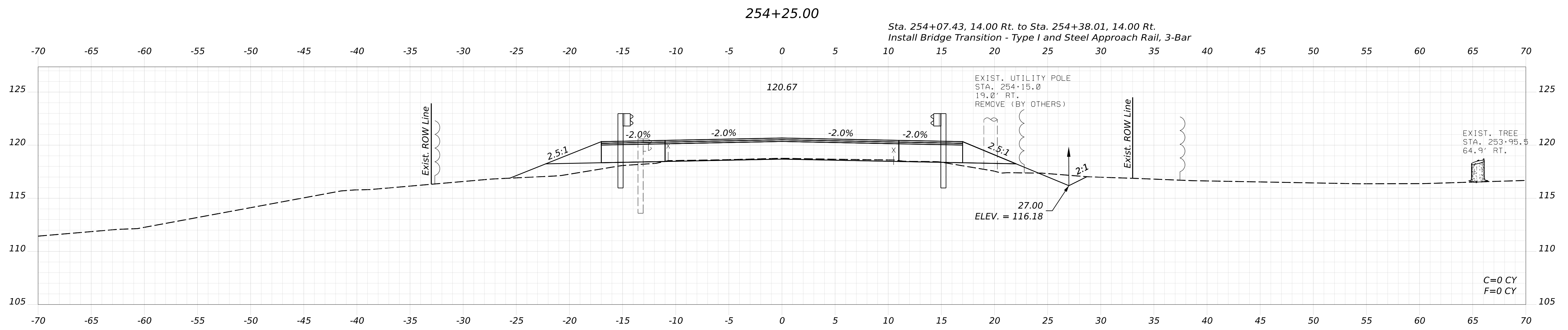
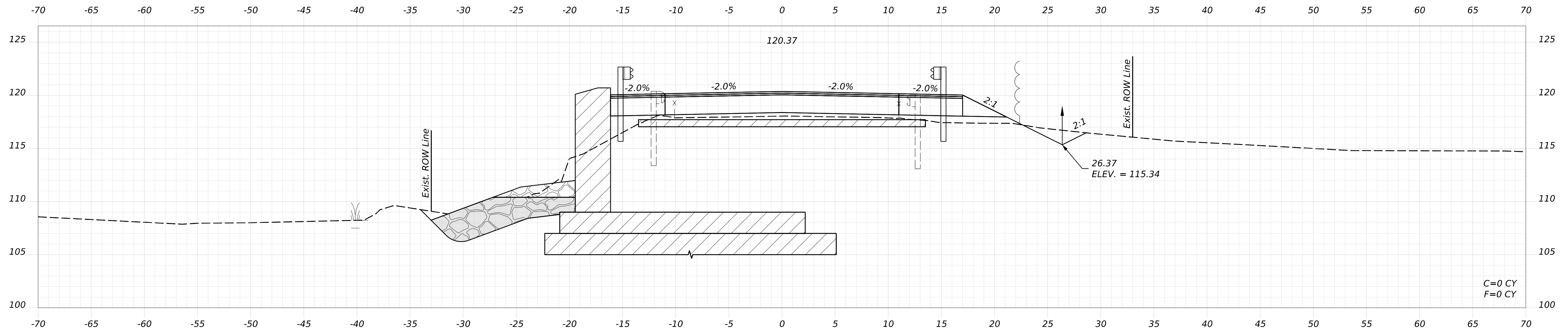
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TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
CROSS SECTIONS

SHEET NUMBER
10
OF 35



Username: pharriman Date: 10/16/2025



PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	CHL/AFS	OCT 2025			
CHECKED-REVIEWED	PLP	OCT 2025			
DESIGN-DETAILED02					
DESIGN-DETAILED03					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	CHL/AFS	OCT 2025			
CHECKED-REVIEWED	PLP	OCT 2025			
DESIGN-DETAILED02					
DESIGN-DETAILED03					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE

CROSS SECTIONS

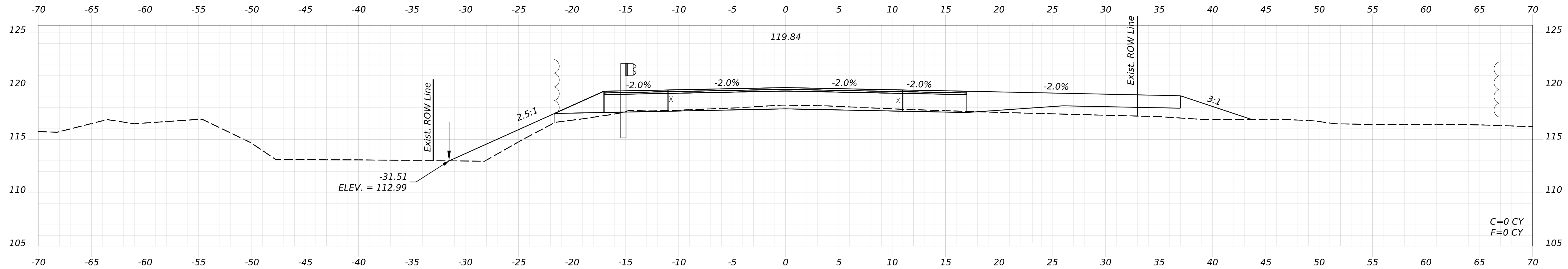
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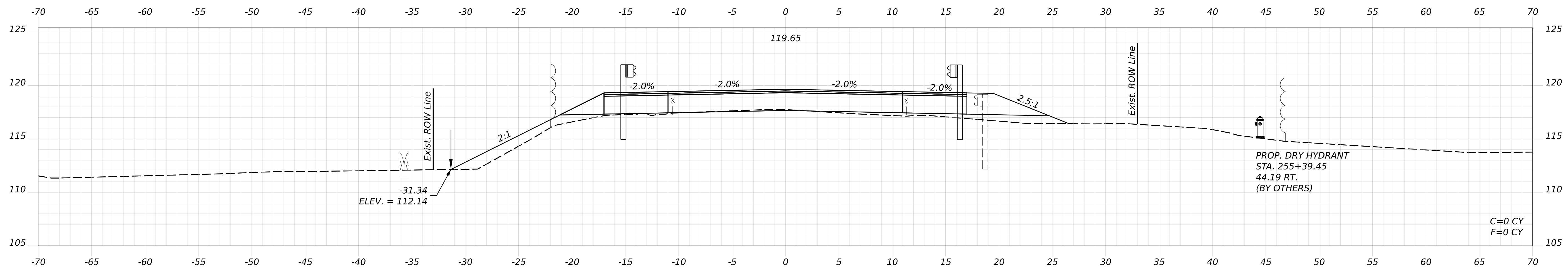
OF 35



Username: pharriman Date: 10/16/2025



255+50.00



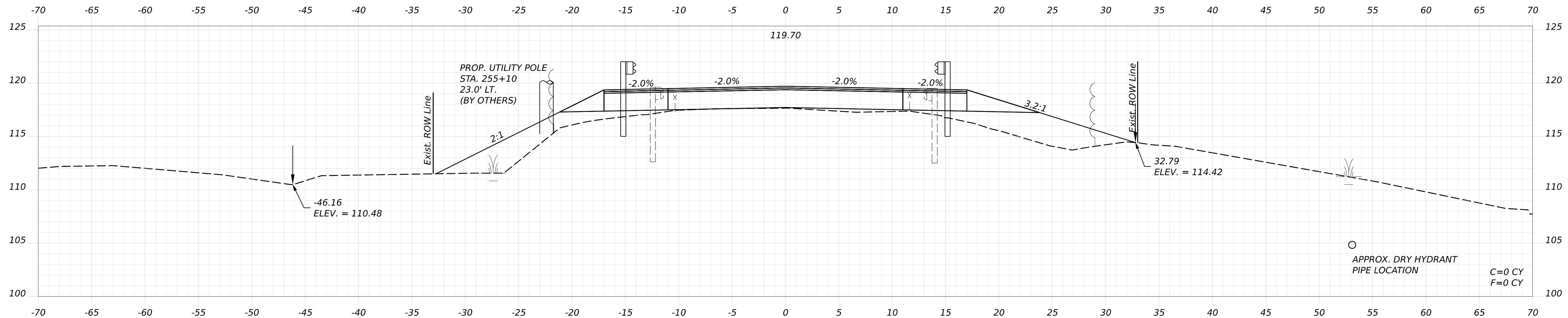
255+25.00

Sta. 255+06.57, 14.00' Lt. to Sta. 256+19.07, 14.00' Lt.
Install 112.5' 31" W-Beam Guardrail - Mid-Way Splice - Single Faced

Sta. 255+16.76, 14.00' Rt. to Sta. 255+37.80, 25.50' Rt.
Install 25' 31" W-Beam Guardrail - Mid-Way Splice, Over 15' Radius

Sta. 254+77.49, 14.00 Lt. to Sta 255+06.57, 14.00 Lt.
Install Bridge Transition - Type I and Steel Approach Rail, 3-Bar

Sta. 254+87.68, 14.00 Rt. to Sta 255+16.76, 14.00 Rt.
Install Bridge Transition - Type I and Steel Approach Rail, 3-Bar



255+00.00

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	CHL/AFS	CHL/AFS	OCT 2025
CHECKED-REVIEWED	PLP	PLP	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

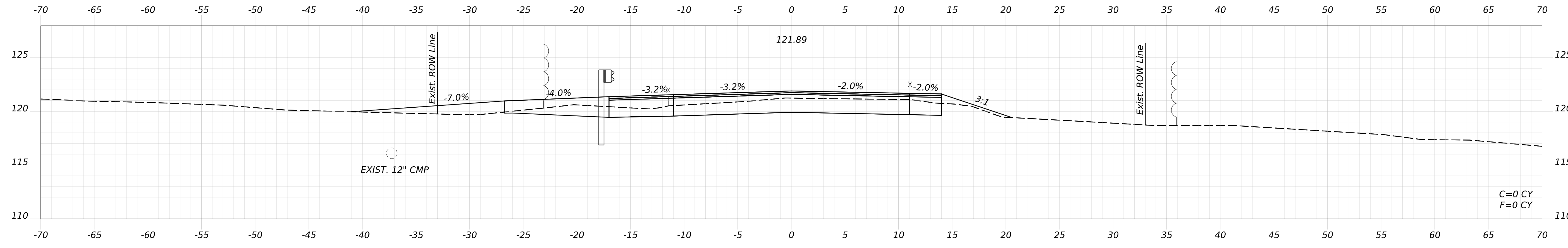
TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
CROSS SECTIONS

SHEET NUMBER

12

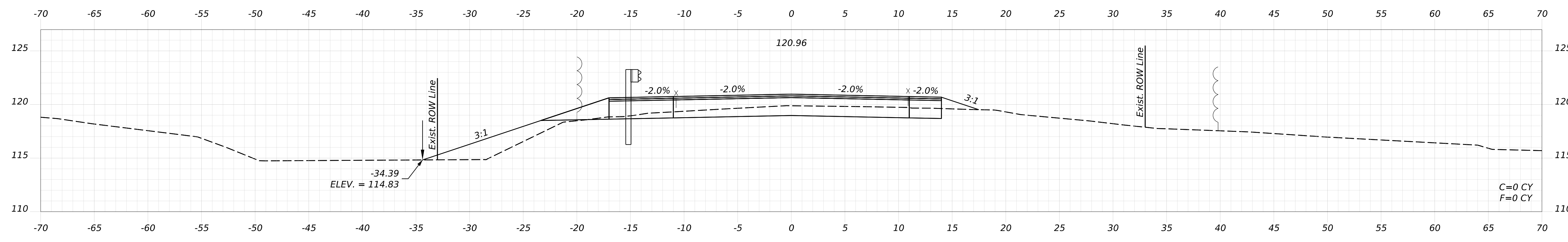
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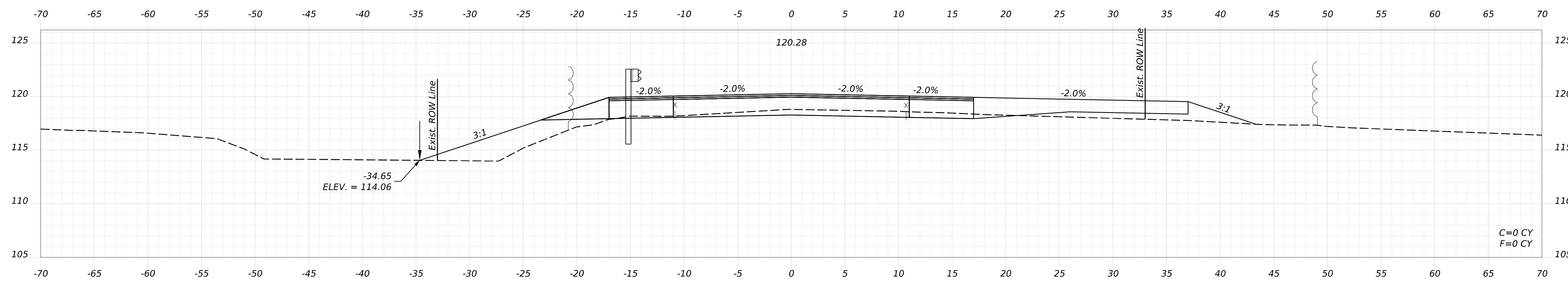


256+25.00

Sta. 256+19.07, 14.00 Lt. to Sta. 256+27.07, 21.93 Lt.
Install 12.5' 31" W-Beam Guardrail - Mid-Way Splice, 15' Radius And Less



256+00.00



255+75.00

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	CHL/AS	CHL/AS	OCT 2025
CHECKED-REVIEWED	PLP	PLP	OCT 2025
DESIGN-DETAILED 2			
DESIGN-DETAILED 3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

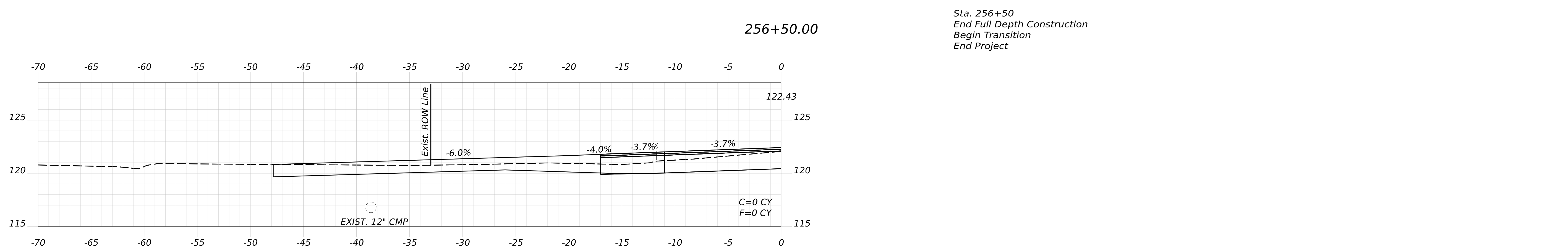
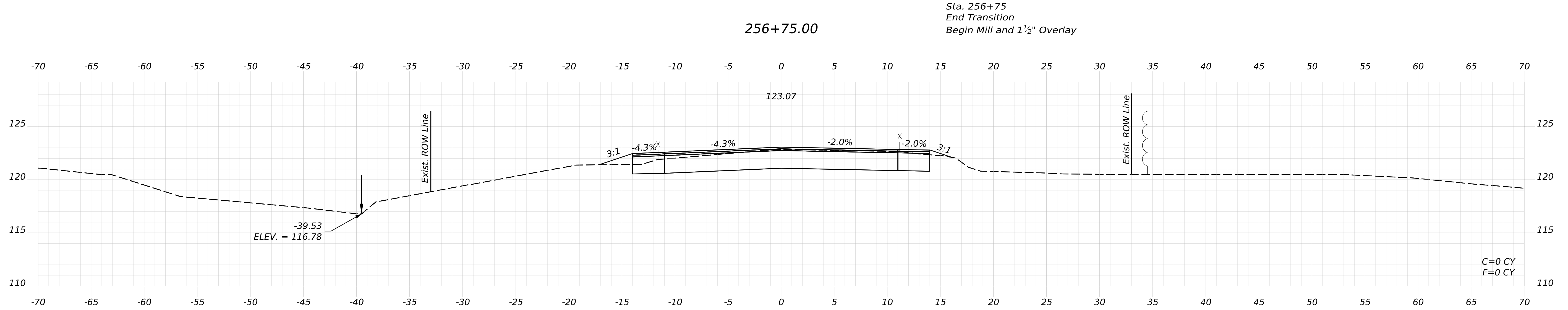
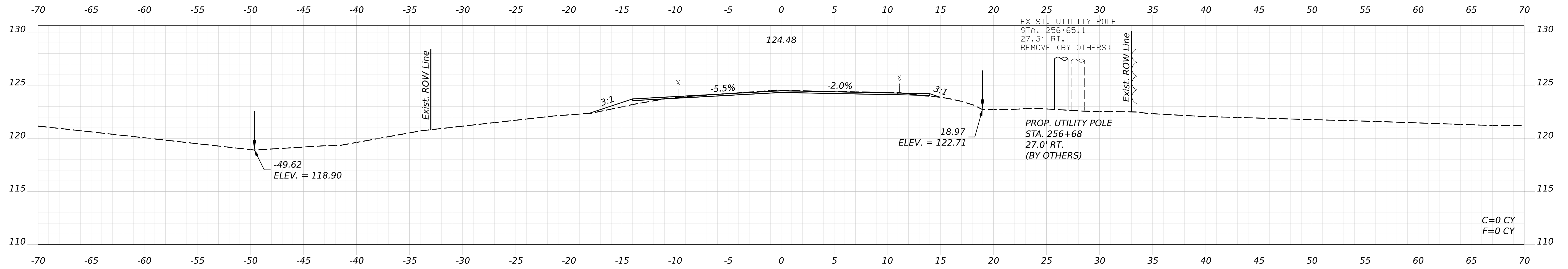
SIGNATURE	P.E. NUMBER	DATE

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
CROSS SECTIONS

SHEET NUMBER
13
OF 35



Username: pharriman Date: 10/16/2025

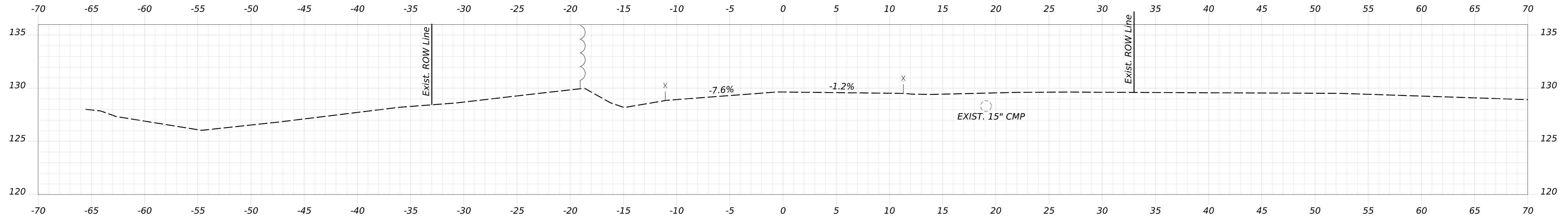


DATE	BY	C. GUY	PROJ. MANAGER	DESIGN-REVIEWED	CHECKED-REVIEWED	CHL/AES	DATE
OCT 2025	PLP	PLP					

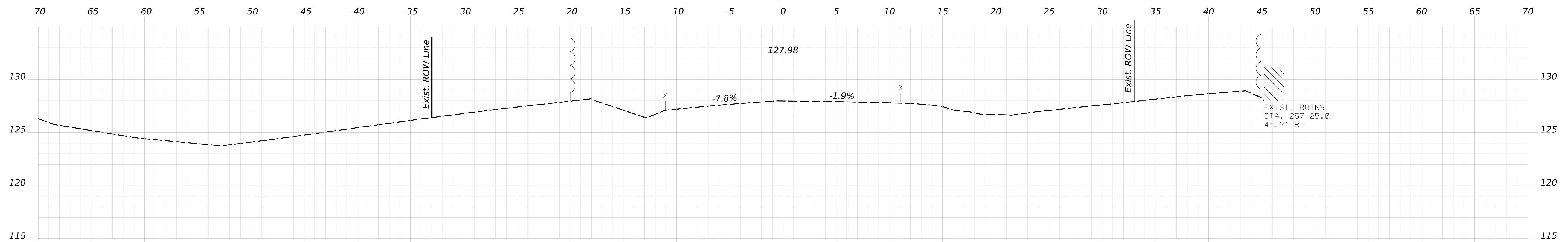
SIGNATURE	P.E. NUMBER	DATE

DESIGN-REVIEWED	DESIGN-REVIEWED	DESIGN-REVIEWED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES



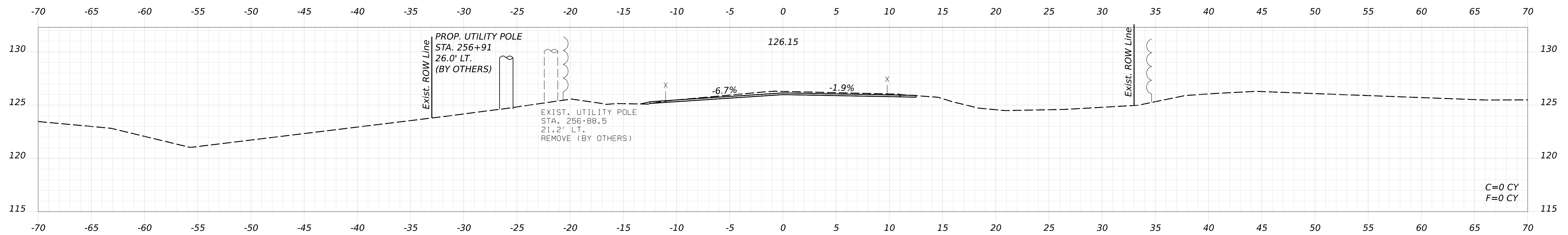


257+50.00



257+25.00

Sta. 257+25
End Mill and 1½" Overlay
Limit of Work



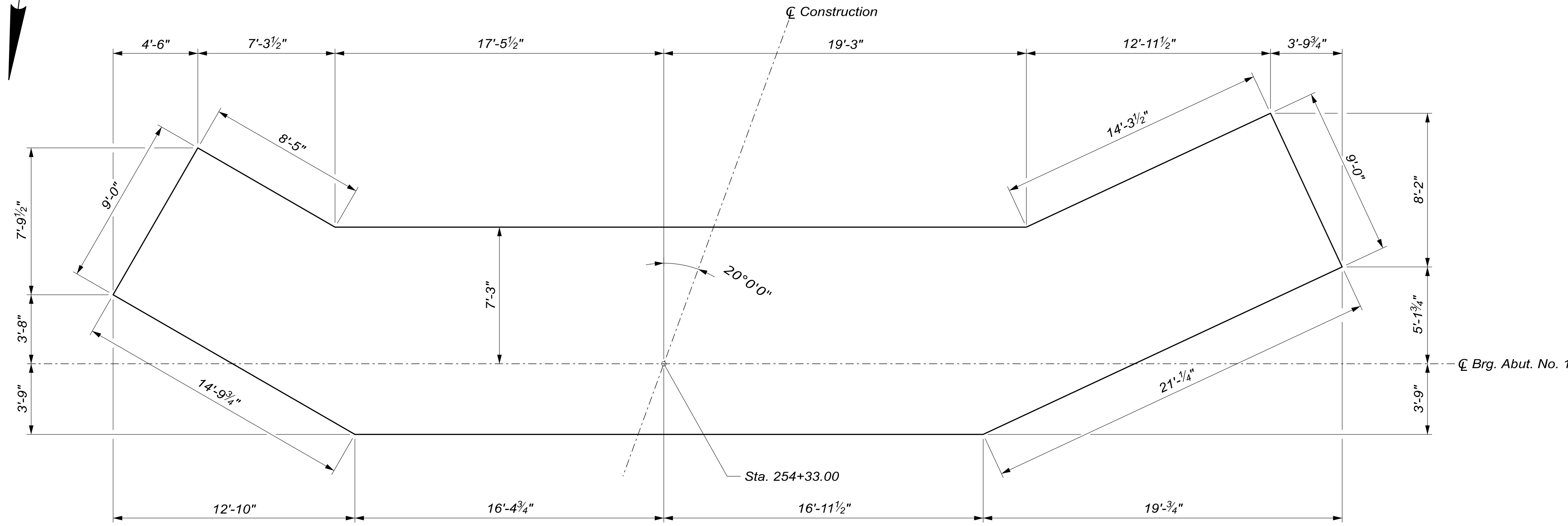
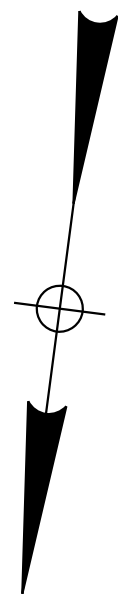
257+00.00

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
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CHECKED-REVIEWED		CHL/AFS				
DESIGN-DETAILED02		PLP				
DESIGN-DETAILED03						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	OCT 2025	CHL/AFS	OCT 2025			
CHECKED-REVIEWED		CHL/AFS				
DESIGN-DETAILED02		PLP				
DESIGN-DETAILED03						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
CROSS SECTIONS





ABUTMENT NO. 1 SEAL PLAN

SEAL COFFERDAM NOTES

- When sheet piling is used for seal cofferdams, appropriate rolled corners shall be used, and the inside face of the sheet piling shall be at or outside of the seal concrete dimensions shown.
- The seal concrete placement dimensions shown represent the minimum seal size necessary to meet design requirements and are not based on the use of any particular sheet pile section.
- The horizontal pay limit for seal concrete will be to the dimensions shown on the plans. No additional payment will be made for concrete placed outside these limits.
- The depth of the seal is set for a maximum water surface elevation of EL. 110.40. If the water elevation at the time of construction is higher, the depth of the seal shall be adjusted.
- Prior to placing the seal, the Contractor shall survey the topography of the prepared bedrock surface and provide the topography to the Resident. Sufficient elevation measurements shall be obtained to demonstrate the prepared surface meets the slope and/or benching requirements. At a minimum, the elevation shall be determined at 20 evenly distributed locations across the seal at a maximum 5 foot spacing. Payment will be incidental to related Contract items.
- If the seal concrete is being placed on exposed bedrock that is not underwater, prior to placing concrete the bedrock shall be washed with high-pressure water and air.
- If the seal concrete is being placed underwater, the seal shall be cored full depth in at least 4 locations per substructure unit to ensure that the seal is satisfactorily placed. Each core run shall sample the bedrock interface and a minimum of 1 foot of bedrock. Seal core locations will be approved by the Department. Seal concrete cores will be a minimum 3 inch outer diameter and be stored in boxes and labeled. In the event of voids or other defects are indicated, the Contractor shall correct the defects in a manner approved by the Department. For each core that reveals a defect, 2 additional cores shall be taken in approximately the same area in locations approved by the Department. All core holes shall be filled using non-shrink grout selected from the MaineDOT Qualified Product List of Grout Materials. The cost of coring and repairs will be considered incidental to related pay items.
- Seals shall be placed on either bedrock cleaned of weathered rock, loose fractured bedrock, boulders and soil or on existing sound cleaned concrete founded on bedrock, as determined by the Resident. Where bedrock inclination is steeper than 4H:1V under the abutment and wingwalls, the bedrock shall be benched in steps to create an effective slope of less than 4H:1V. Dowels may be installed in accordance with an approved design submittal in lieu of meeting the slope requirement; dowels shall be quantified for payment under Items 503.12 Reinforcing Steel, Fabricated and Delivered and 503.13 Reinforcing Steel, Placing. The Resident shall approve the bedrock or other subgrade prior to placement of the seal concrete.
- Roughen the top surface of the seal concrete to a surface roughness of 1/4" ± prior to placing footing concrete.
- If the bedrock elevations vary from the elevations assumed in the development of these Plans, the abutments and/or wingwalls may need to be modified. The Contractor shall grant the Department seven (7) days to modify the plans from the date the Resident accepts the bedrock survey.
- Where the bedrock protrudes above the bottom of the footing, the footing may be raised and vertical reinforcing may be cut in the field with the approval of the Resident. Payment for adjusting the footing elevations and reinforcing steel will be considered incidental to related Contract items. No separate payment will be made.
- At the option of the Resident, bedrock which protrudes above a horizontal plane 12 inches below the proposed bottom of footing elevation may be removed. Payment for bedrock removal shall be made under Item No. 206.092, Structural Rock Excavation - Major Structures.

Username: pharriman Date: 10/16/2025

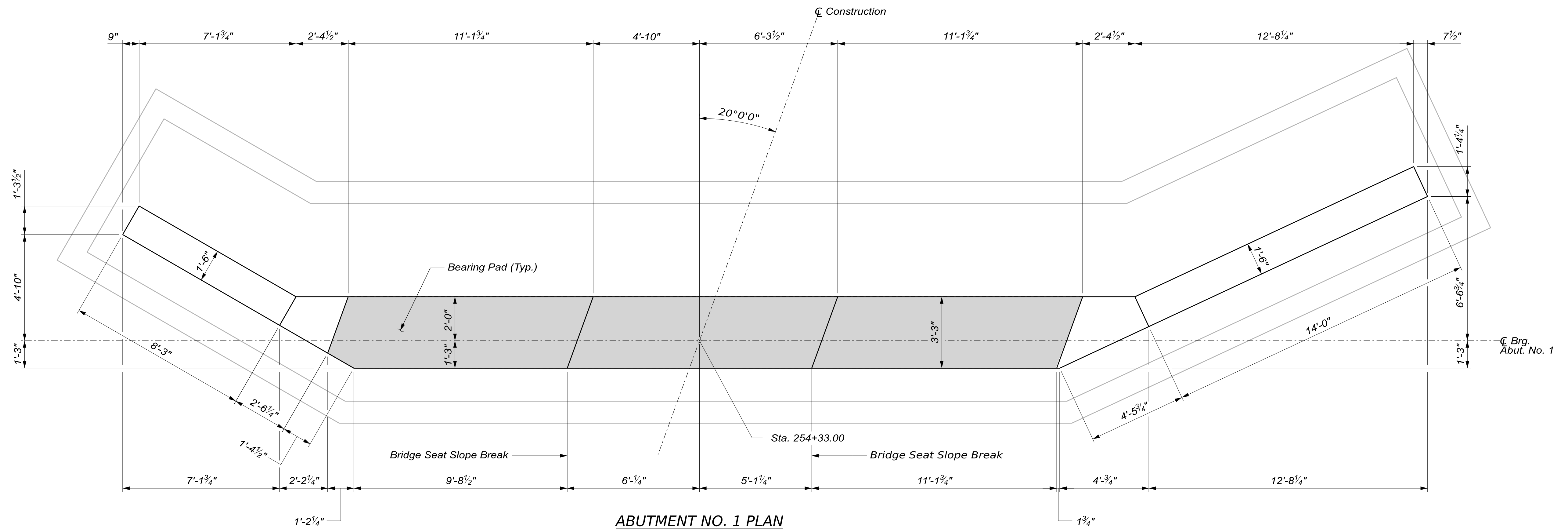
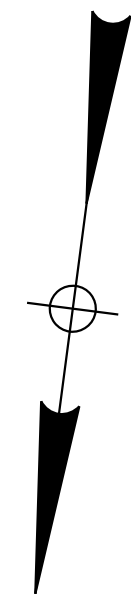
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700
WIN 26107.00

DATE: OCT 2025
BY: RBH
C. GUY: RBH
PROJ. MANAGER: RBH
DESIGN-DETAILED: RBH
CHECKED-REVIEWED: RBH
DESIGN-DETAILED02: RBH
REVISIONS 1: RBH
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P.E. NUMBER: RBH
DATE: RBH

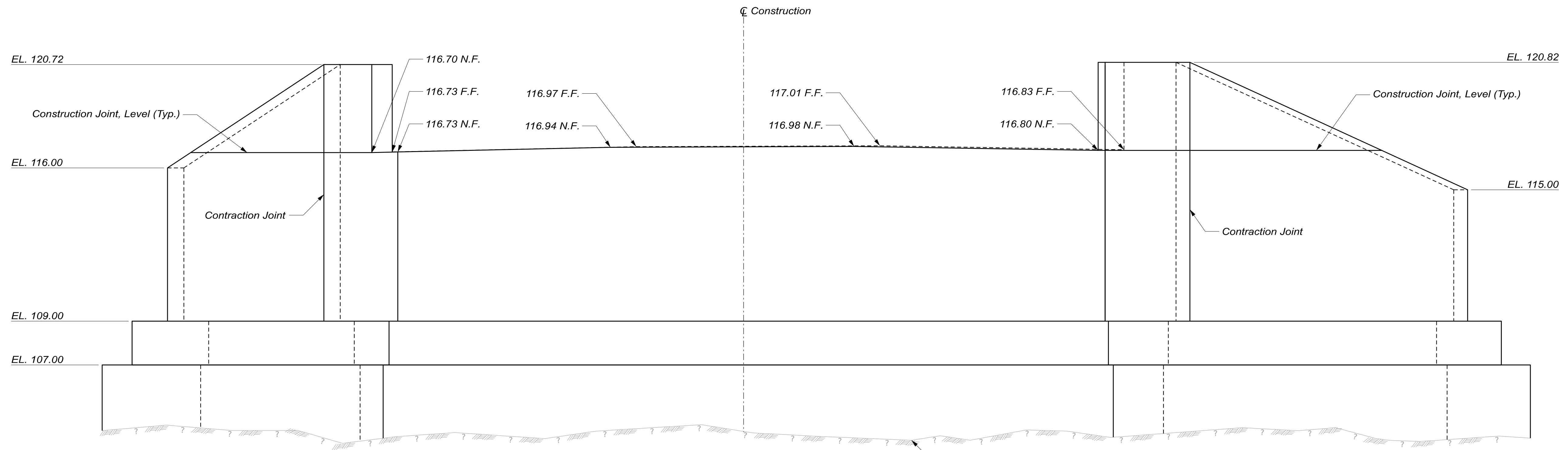
TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
ABUTMENT NO. 1
SEAL PLAN

SHEET NUMBER
16
OF 35





ABUTMENT NO. 1 PLAN



ABUTMENT NO. 1 ELEVATION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700
WIN 26107.00

DATE	SIGNATURE	P.E. NUMBER	DATE
OCT 2025			
OCT 2025			

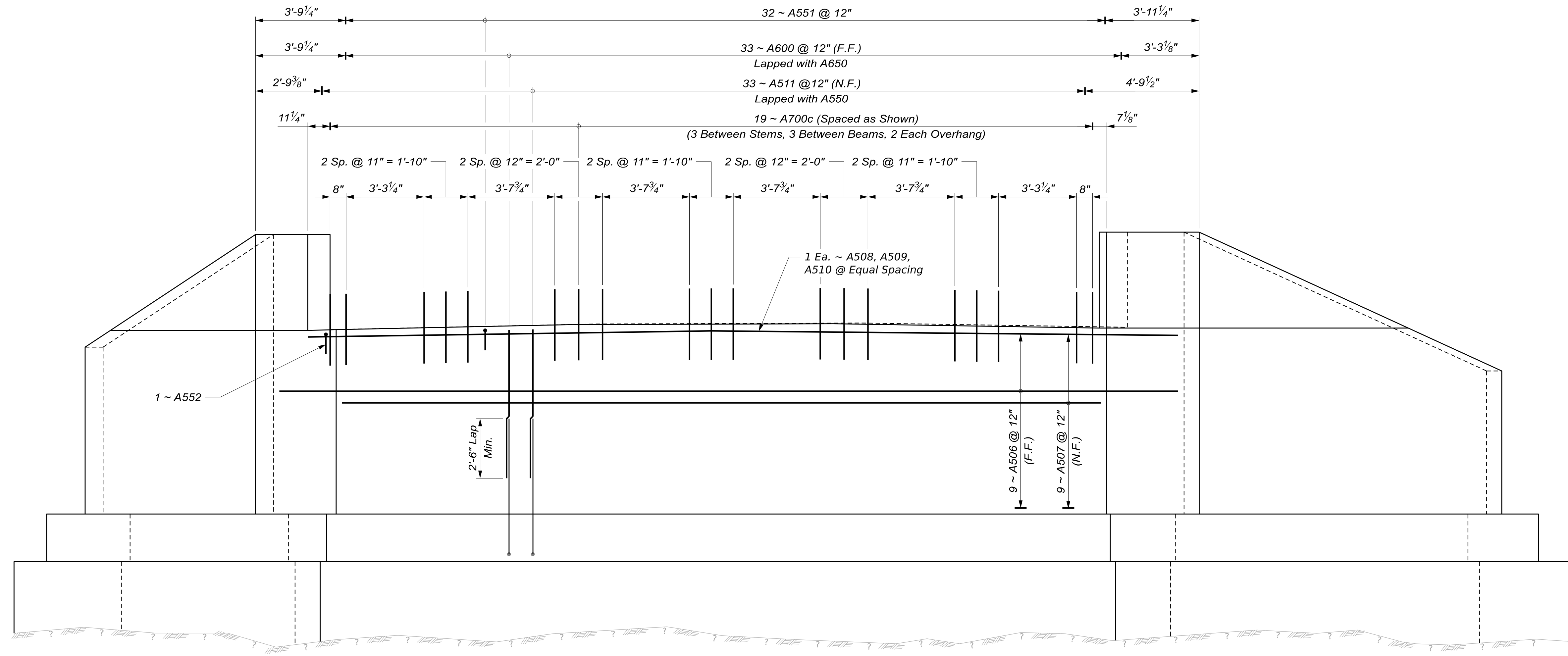
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CHECKED-REVIEWED	KLW	KLW	OCT 2025
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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
ABUTMENT NO. 1
PLAN & ELEVATION

SHEET NUMBER
18
OF 35



Username: pharriman Date: 10/16/2025



ABUTMENT NO. 1 REINFORCING ELEVATION

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	AA	AA	OCT 2025
CHECKED-REVIEWED	KLW	KLW	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
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REVISIONS 4			
FIELD CHANGES			

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE

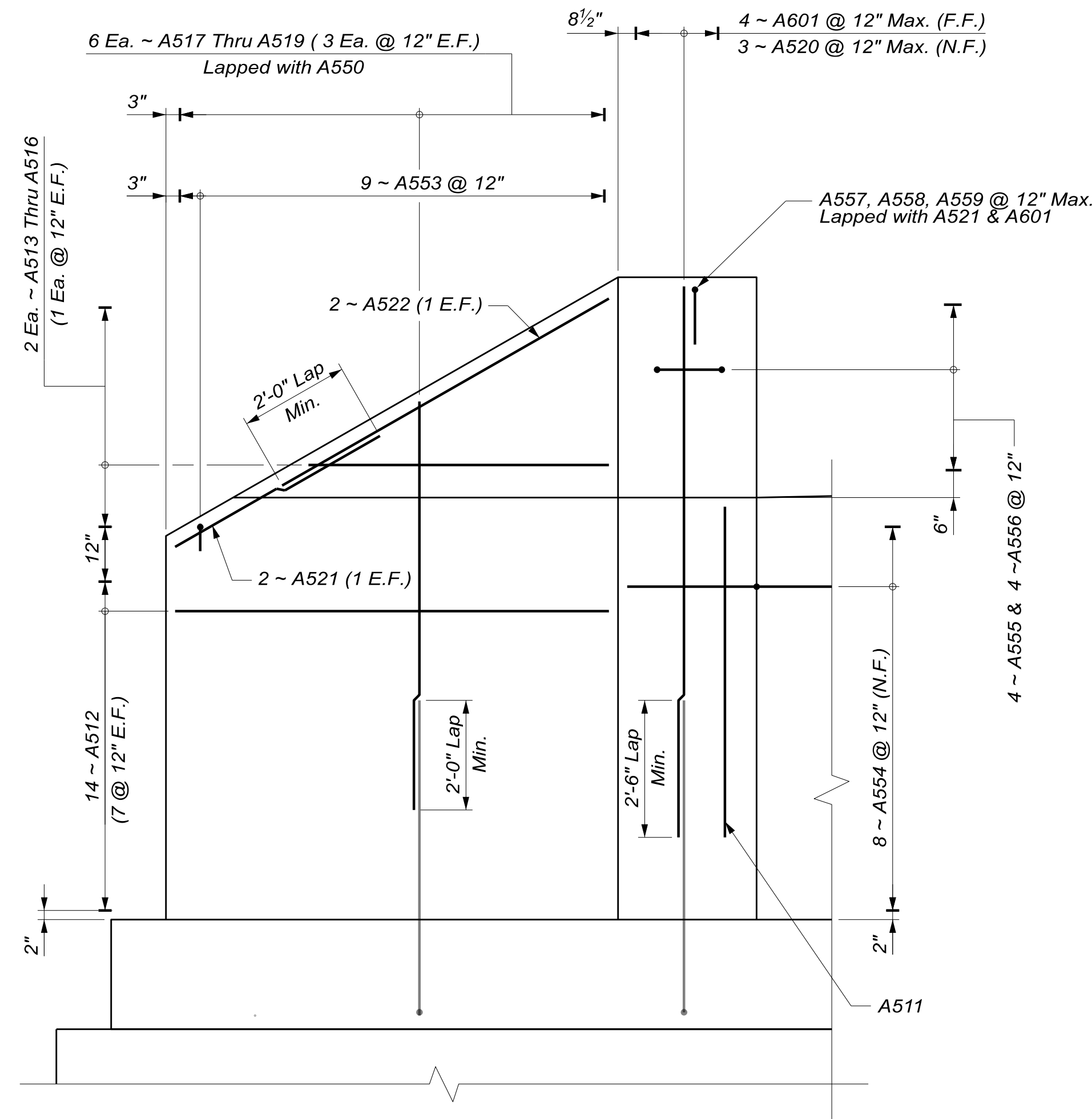
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REINFORCING ELEVATION

SHEET NUMBER

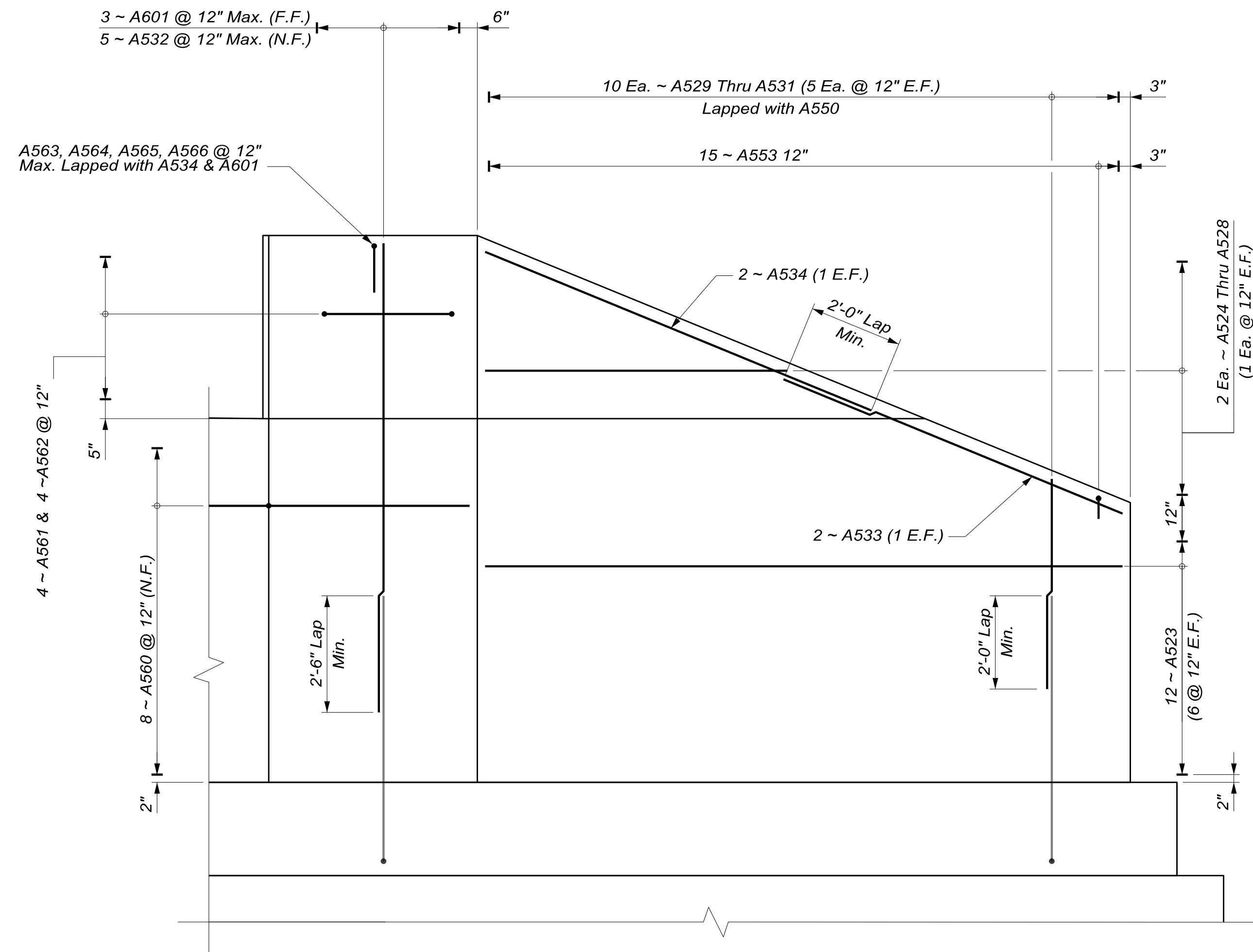
19

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SOUTHEAST WINGWALL REINFORCING ELEVATION



SOUTHWEST WINGWALL REINFORCING ELEVATION

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	AA	AA	OCT 2025
CHECKED-REVIEWED	KLW	KLW	OCT 2025
DESIGN-DETAILED			
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE	P.E. NUMBER	DATE

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
ABUTMENT NO. 1
WINGWALL REINFORCING

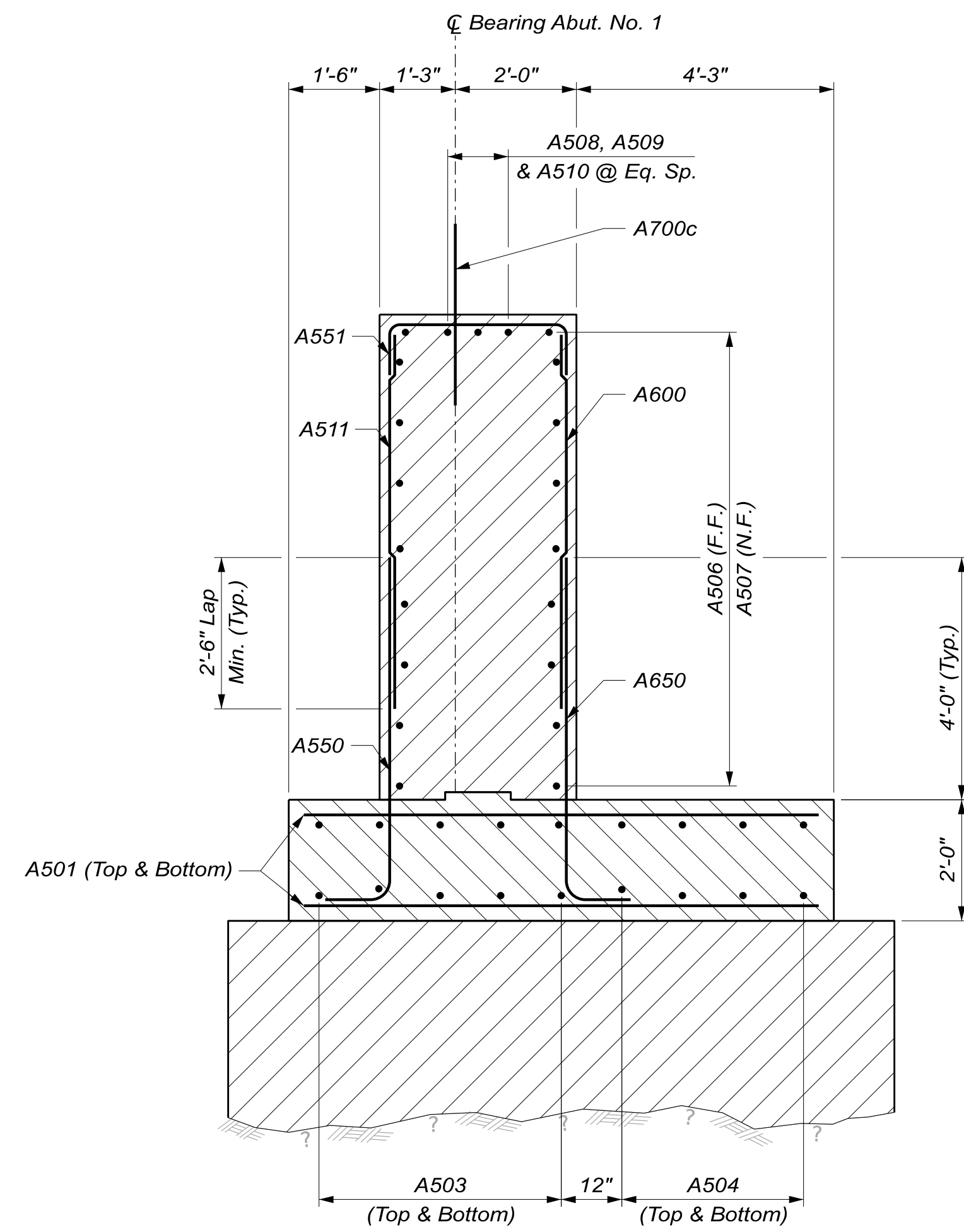
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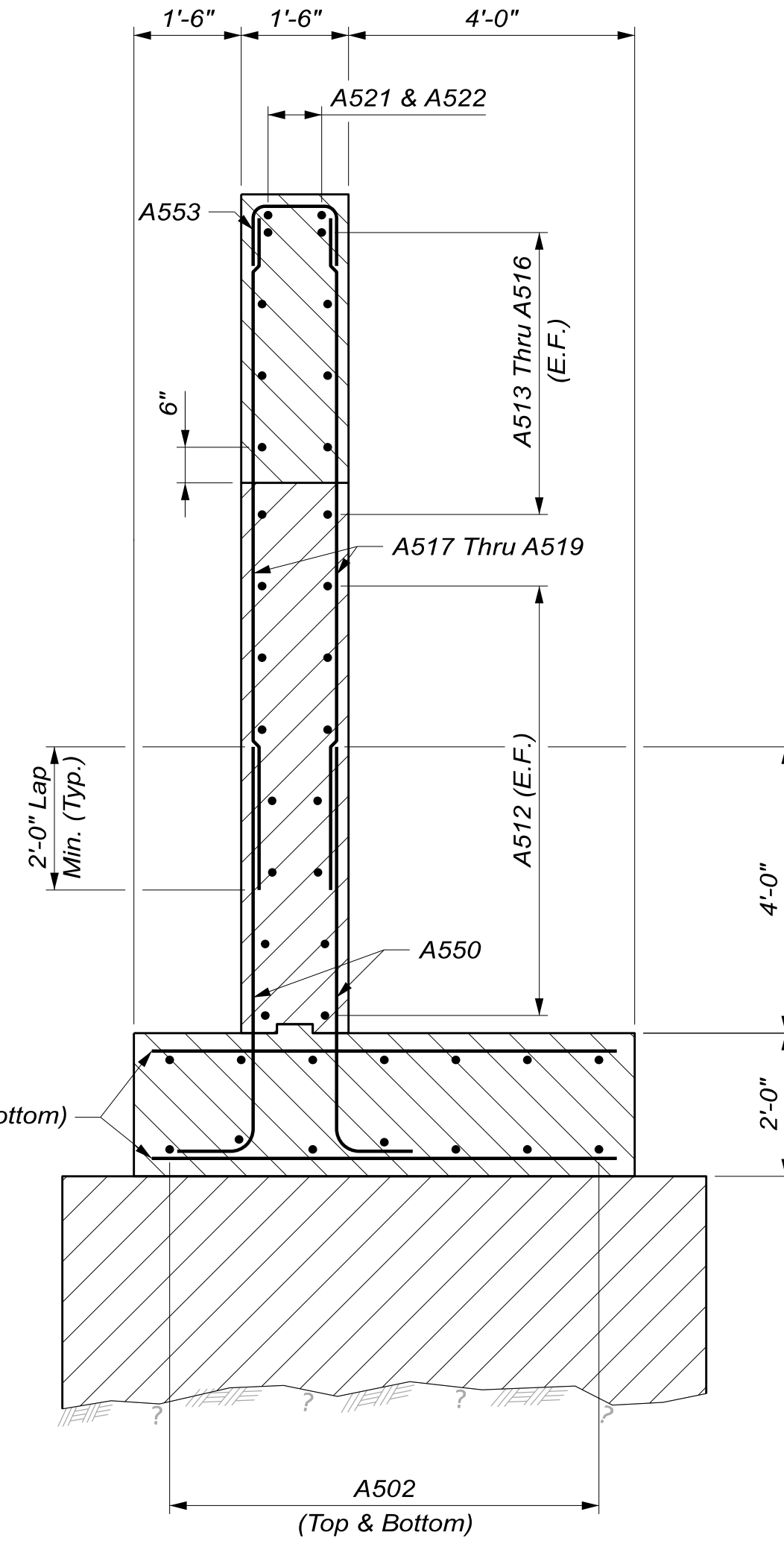
OF 35



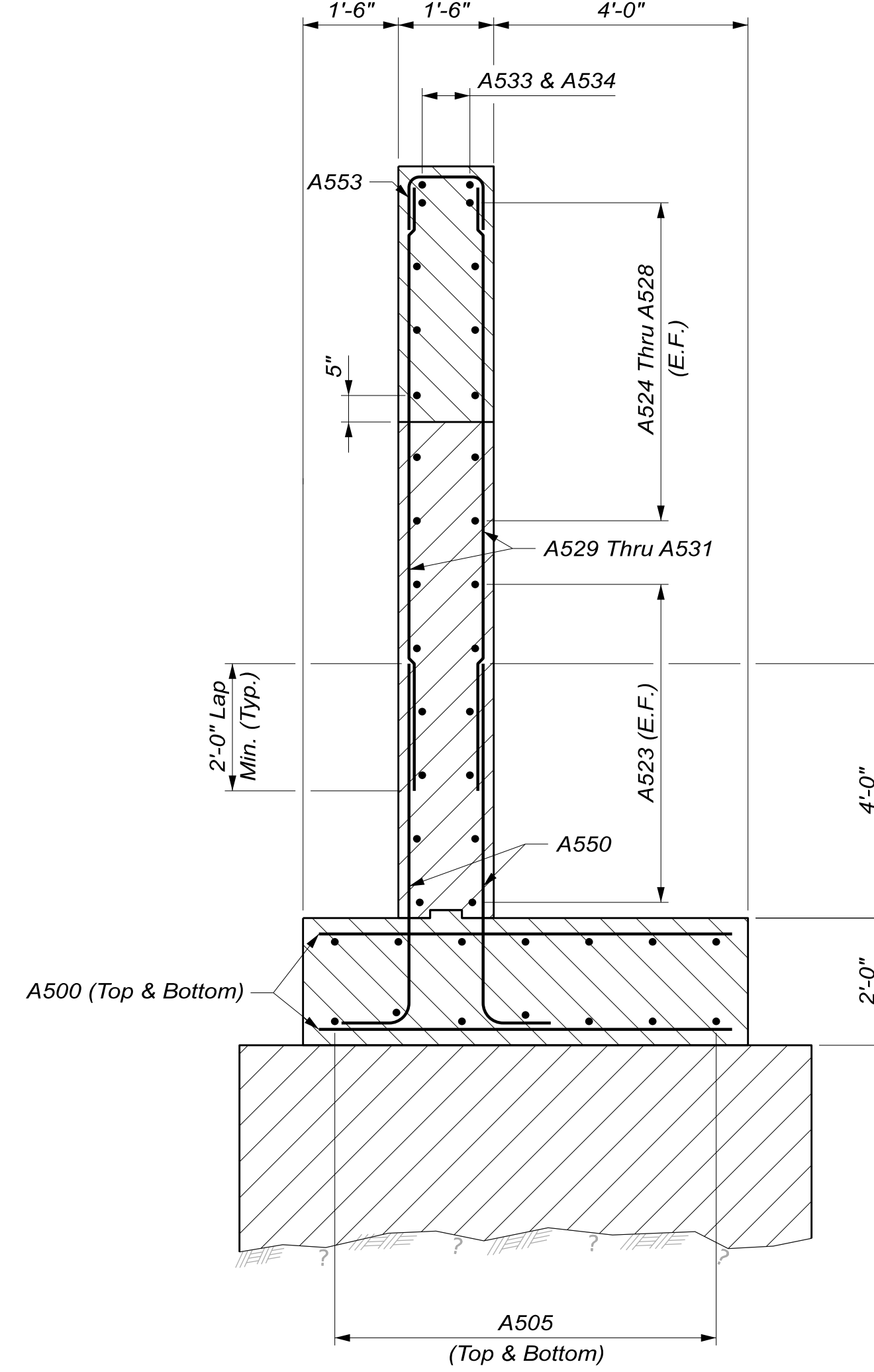
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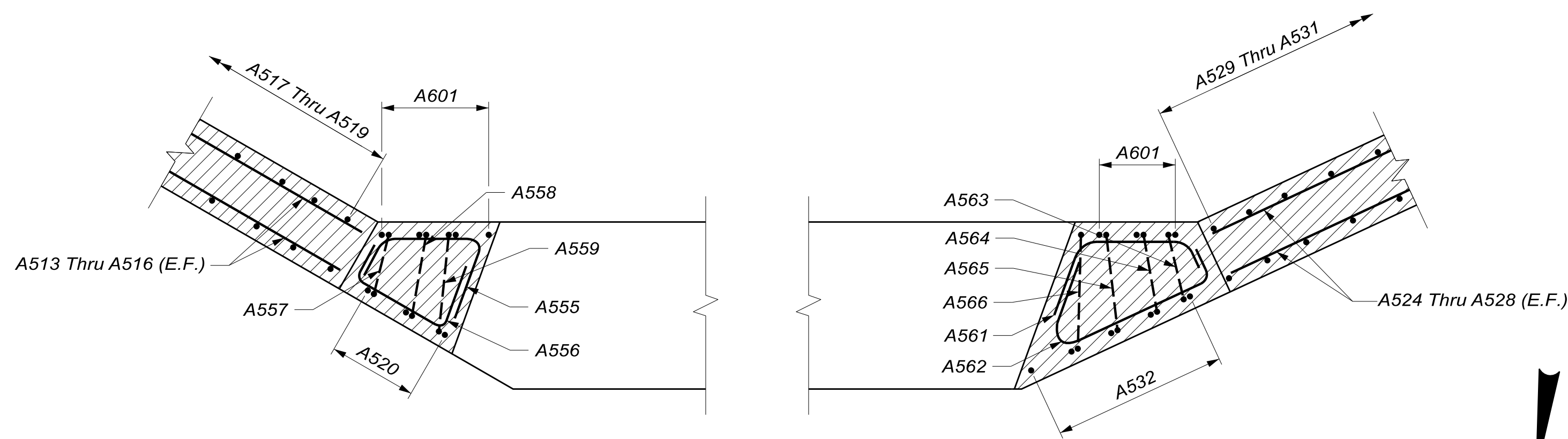
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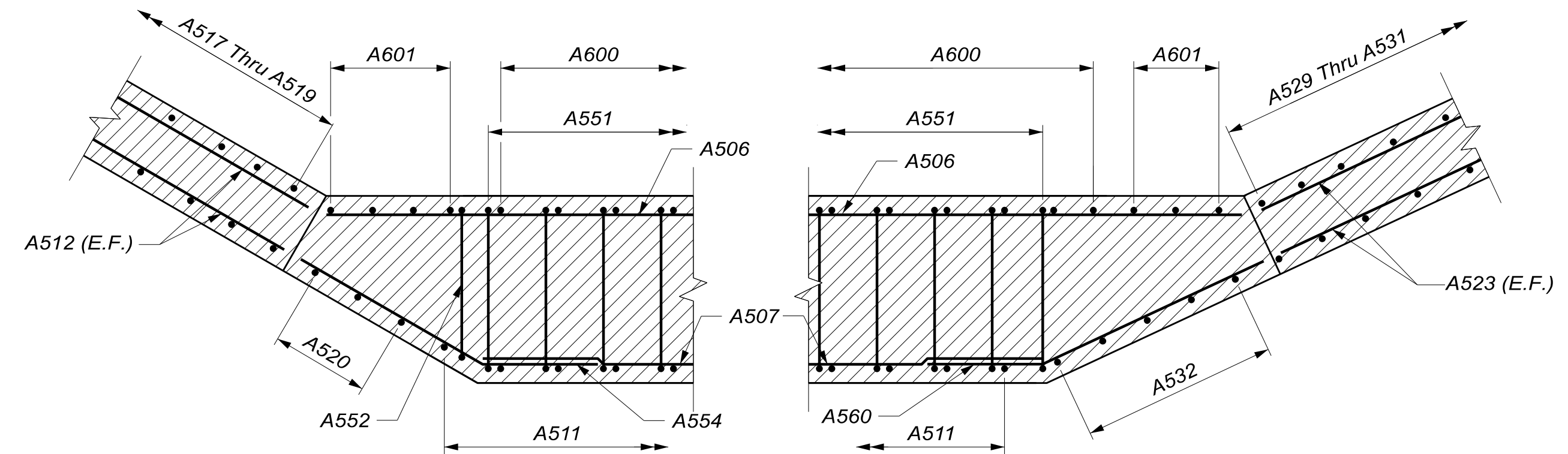
SOUTHEAST WINGWALL SECTION



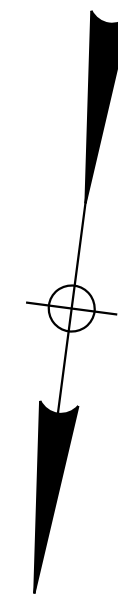
SOUTHWEST WINGWALL SECTION



CORNER REINFORCING ABOVE BEAM SEAT



CORNER REINFORCING BELOW BEAM SEAT



PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	AA	AA	OCT 2025
CHECKED-REVIEWED	KLW	KLW	OCT 2025
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE	P.E. NUMBER	DATE

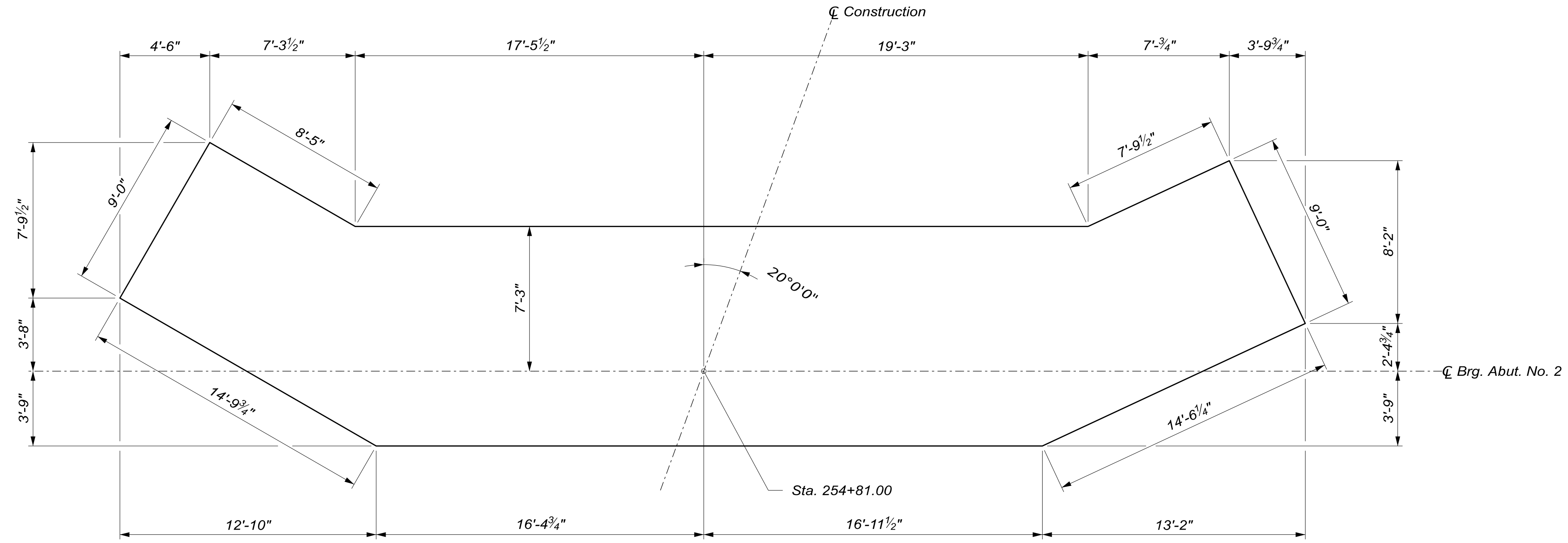
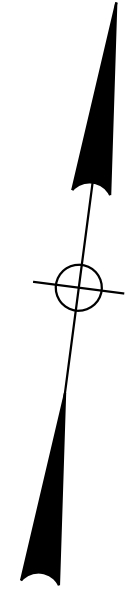
TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIVILLE
ABUTMENT NO. 1
SECTIONS

SHEET NUMBER

21

OF 35





ABUTMENT NO. 2 SEAL PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700
WIN 26107.00

SIGNATURE
P.E. NUMBER
DATE

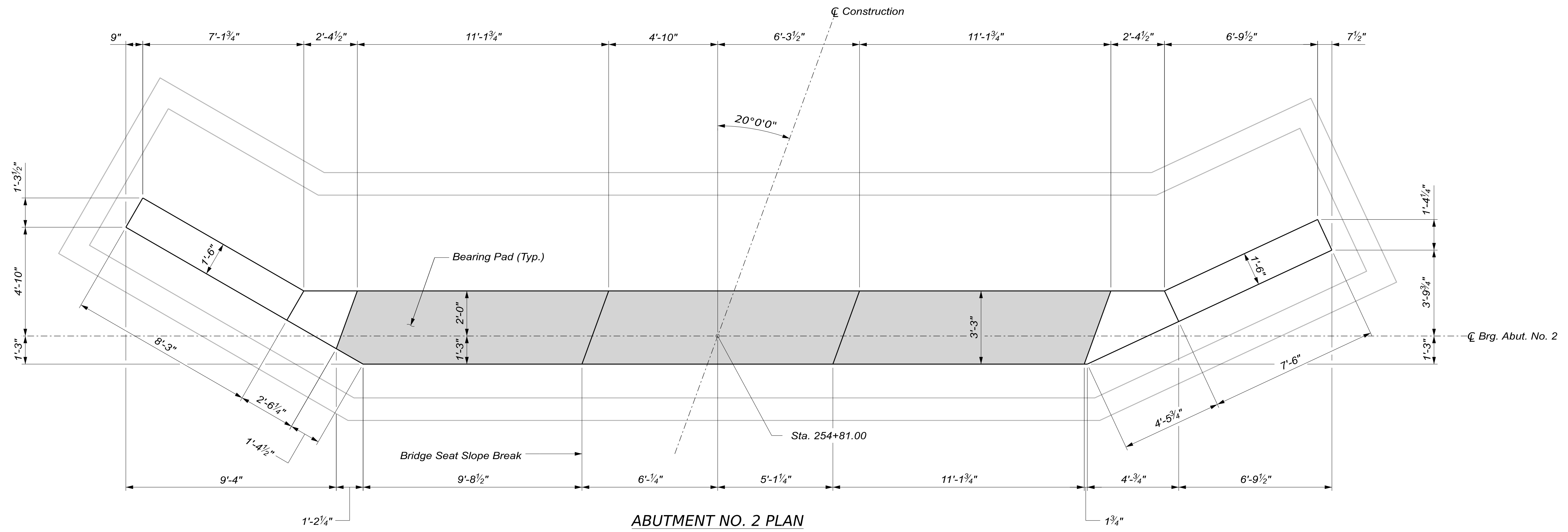
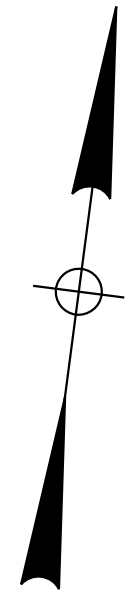
PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	PEH	PEH	OCT 2025
CHECKED-REVIEWED	KLW	KLW	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
ABUTMENT NO. 2
SEAL PLAN

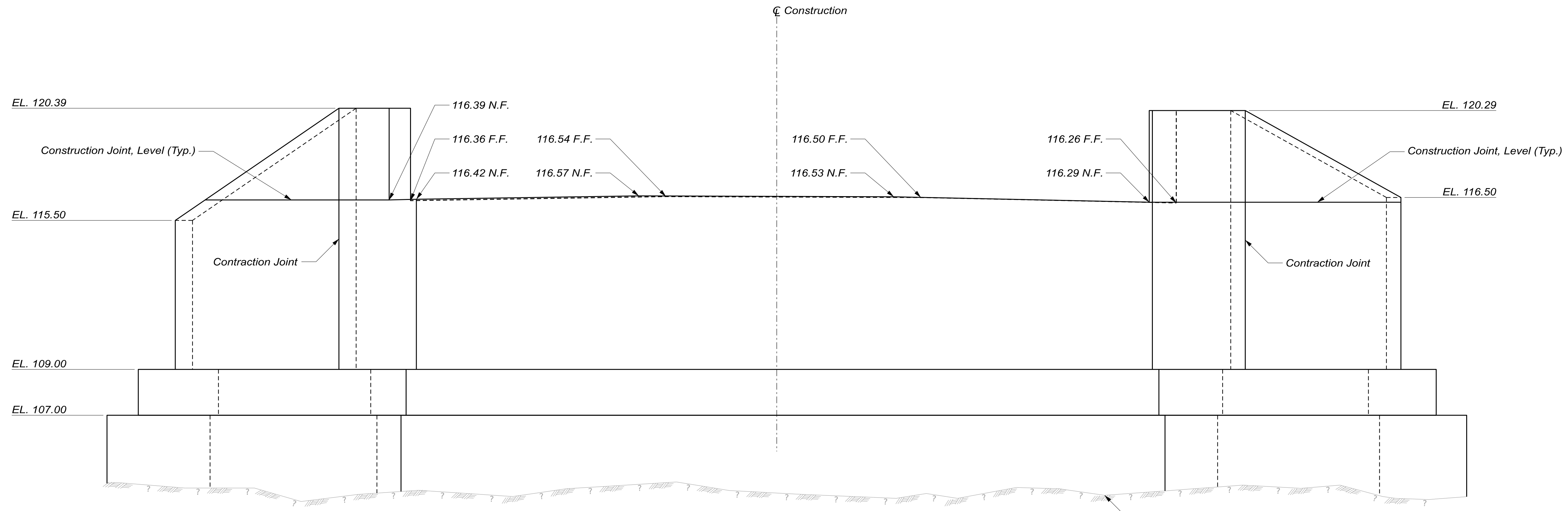
SHEET NUMBER

22
OF 35





ABUTMENT NO. 2 PLAN



ABUTMENT NO. 2 ELEVATION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700
WIN 26107.00

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	PEH	PEH	OCT 2025
CHECKED-REVIEWED	KLW	KLW	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

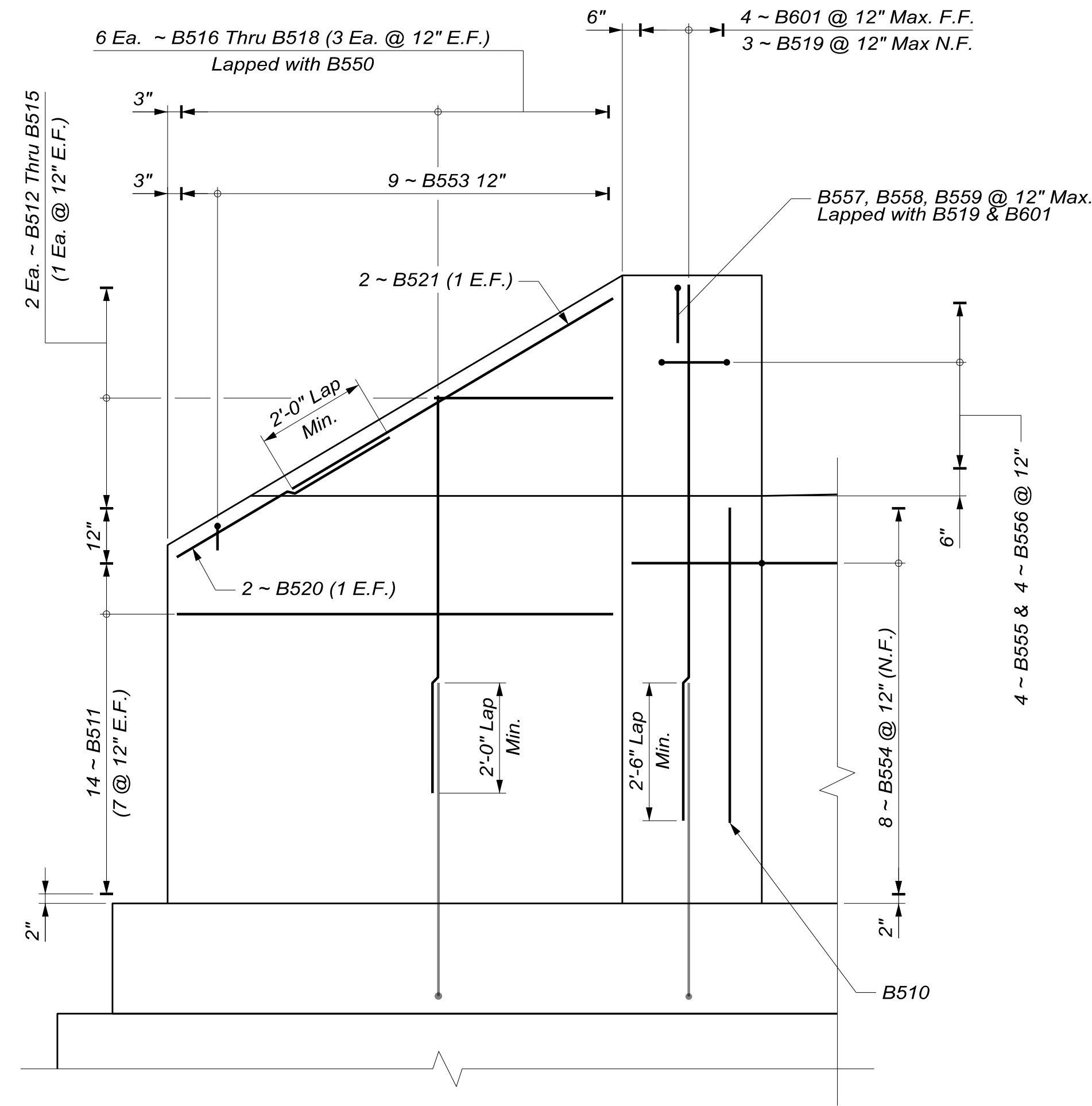
SIGNATURE	P.E. NUMBER	DATE

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
ABUTMENT NO. 2
PLAN & ELEVATION

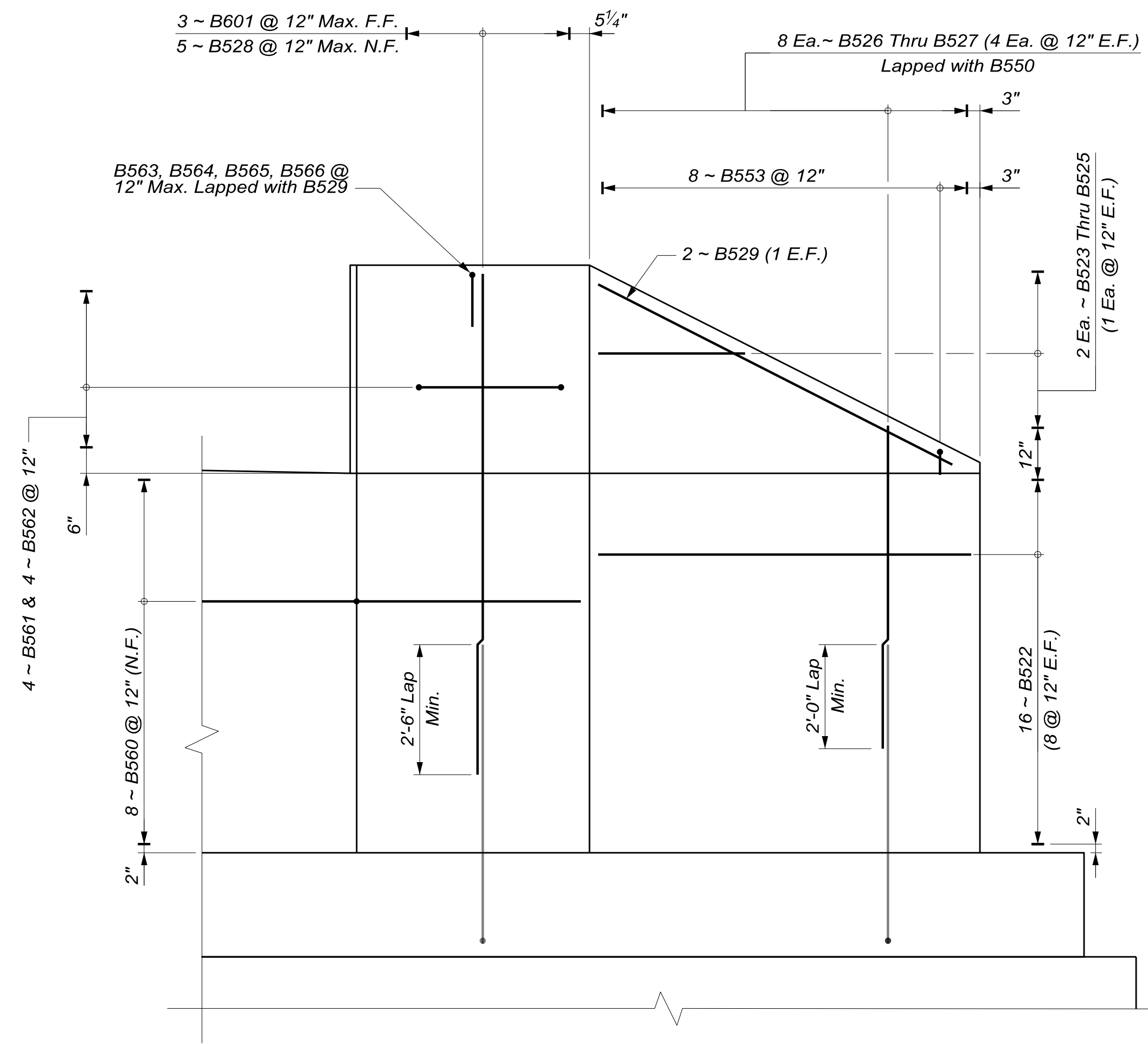
SHEET NUMBER
24
OF 35



Username: pharriman Date: 10/16/2025



NORTHWEST WINGWALL REINFORCING ELEVATION



NORTHEAST WINGWALL REINFORCING ELEVATION

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	AA	AA	OCT 2025
CHECKED-REVIEWED	KLW	KLW	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE	P.E. NUMBER	DATE

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE

**ABUTMENT NO. 2
WINGWALL REINFORCING**

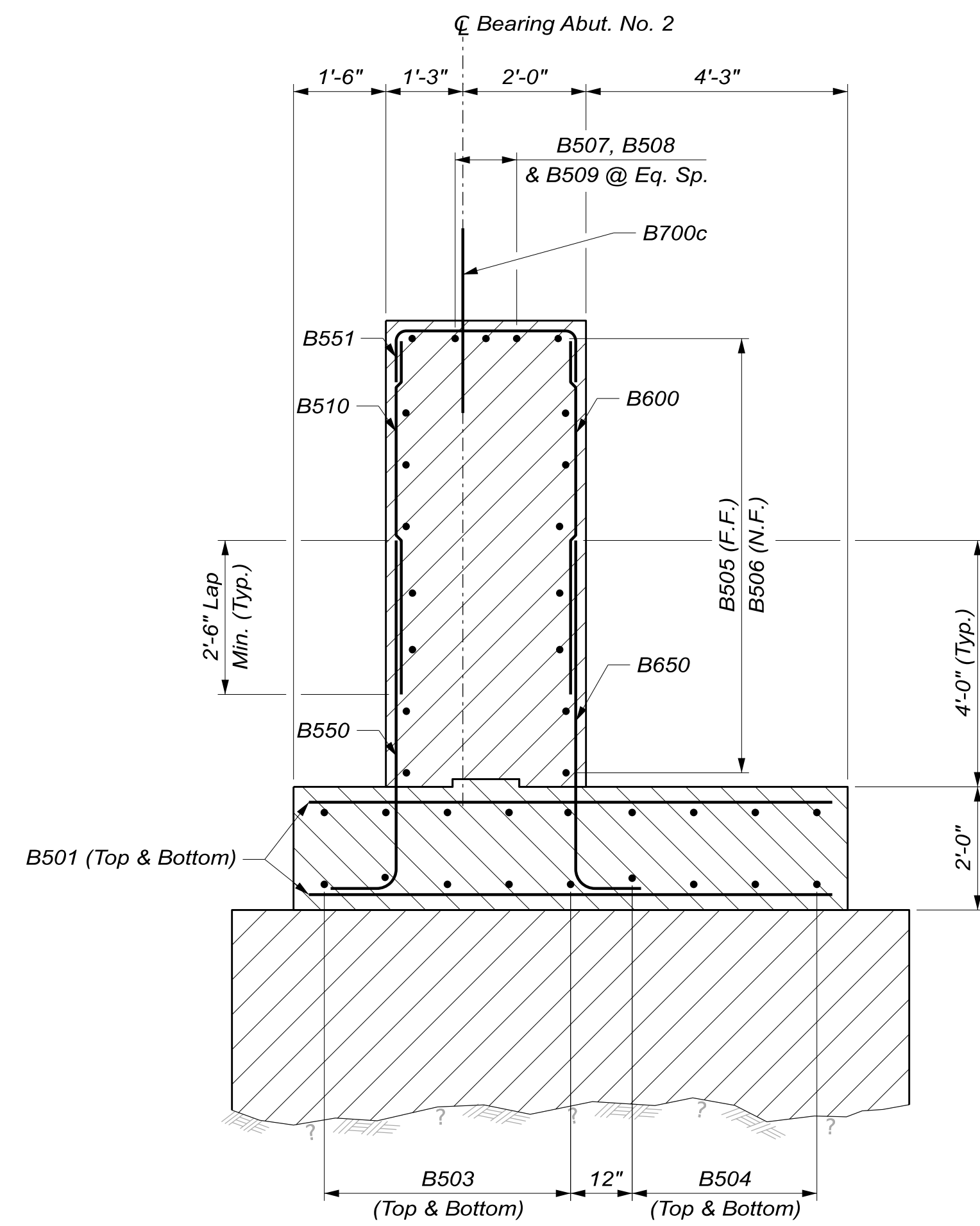
SHEET NUMBER

26

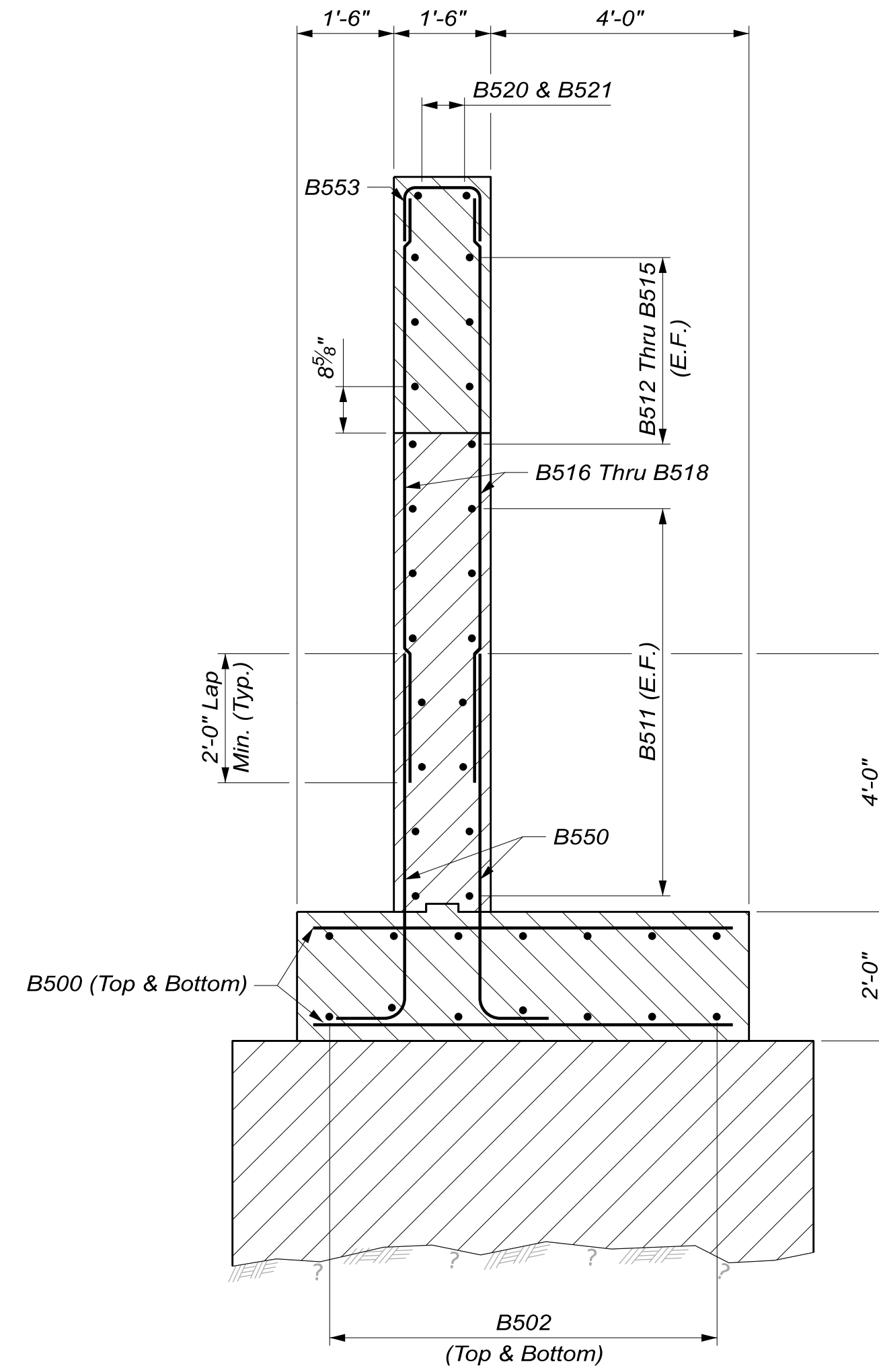
OF 35



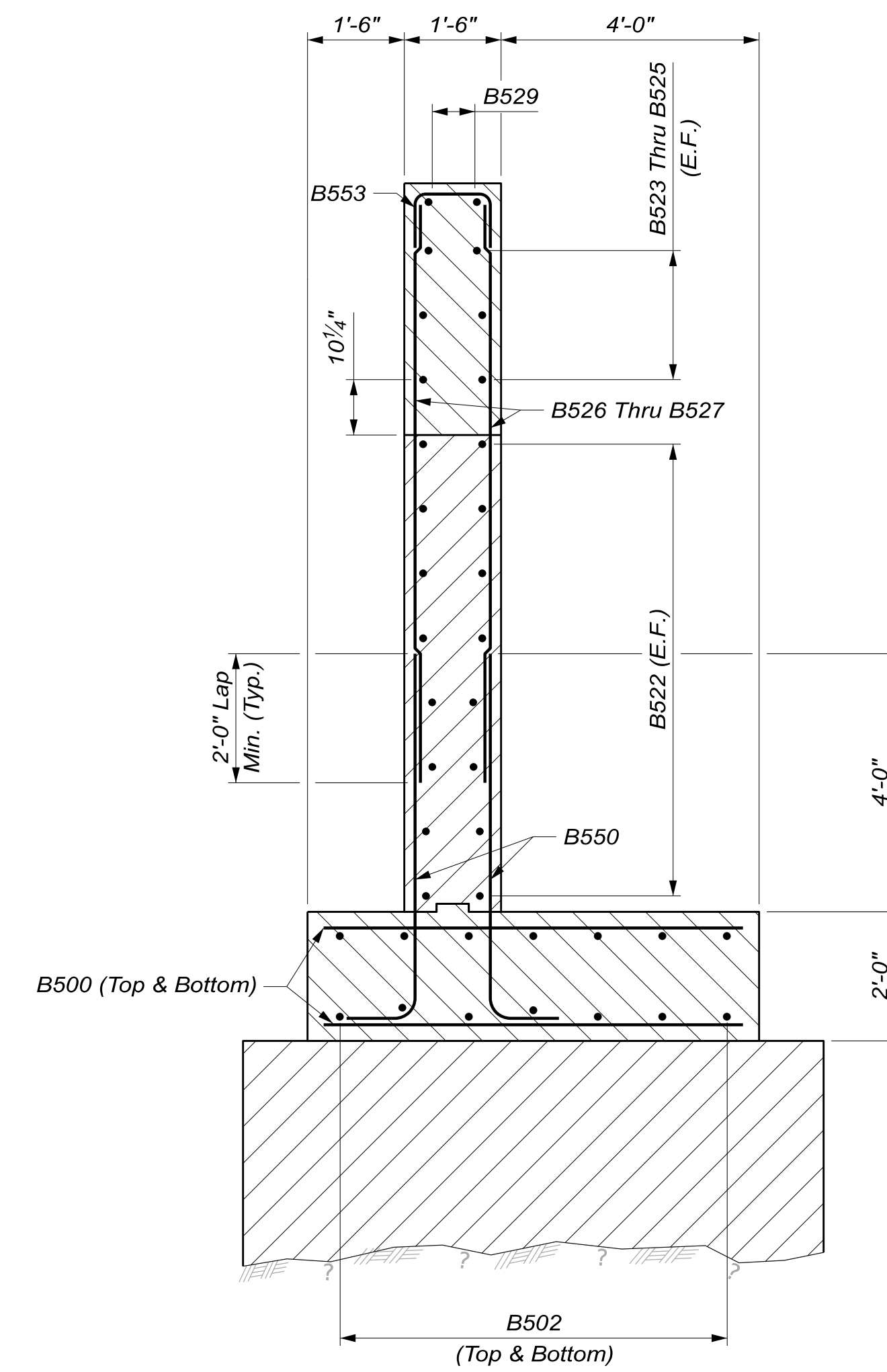
Username: pharriman Date: 10/16/2025



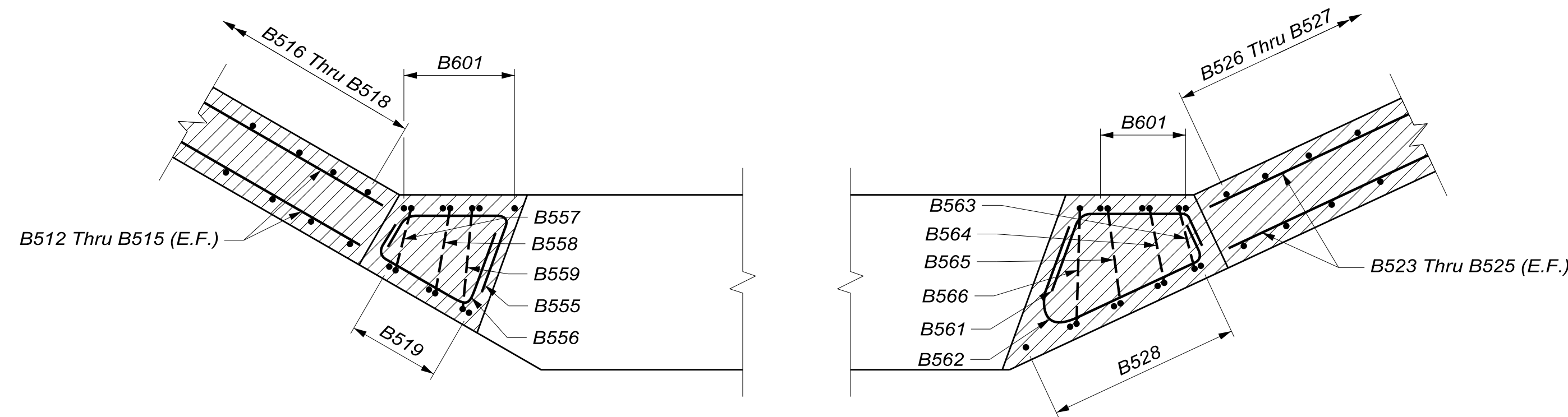
ABUTMENT NO. 2 SECTION



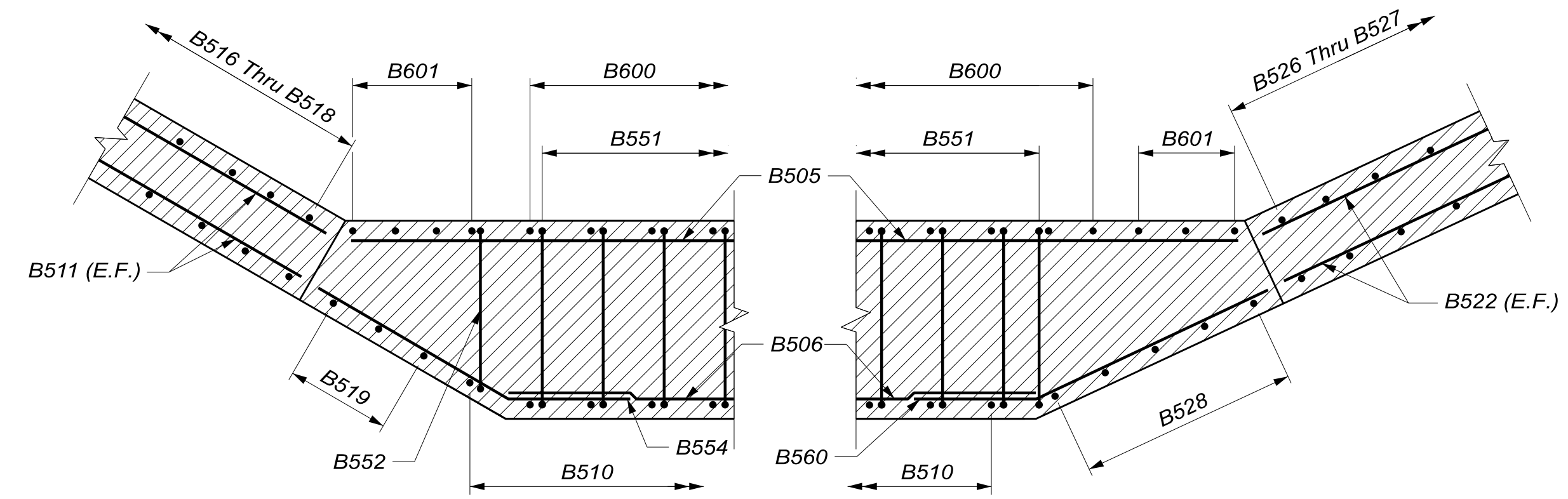
NORTHWEST WINGWALL SECTION



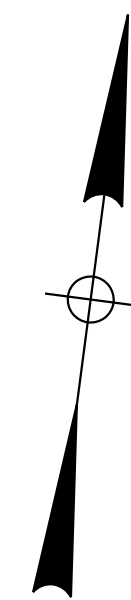
NORTHEAST WINGWALL SECTION



CORNER REINFORCING ABOVE BEAM SEAT



CORNER REINFORCING BELOW BEAM SEAT



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700
WIN 26107.00

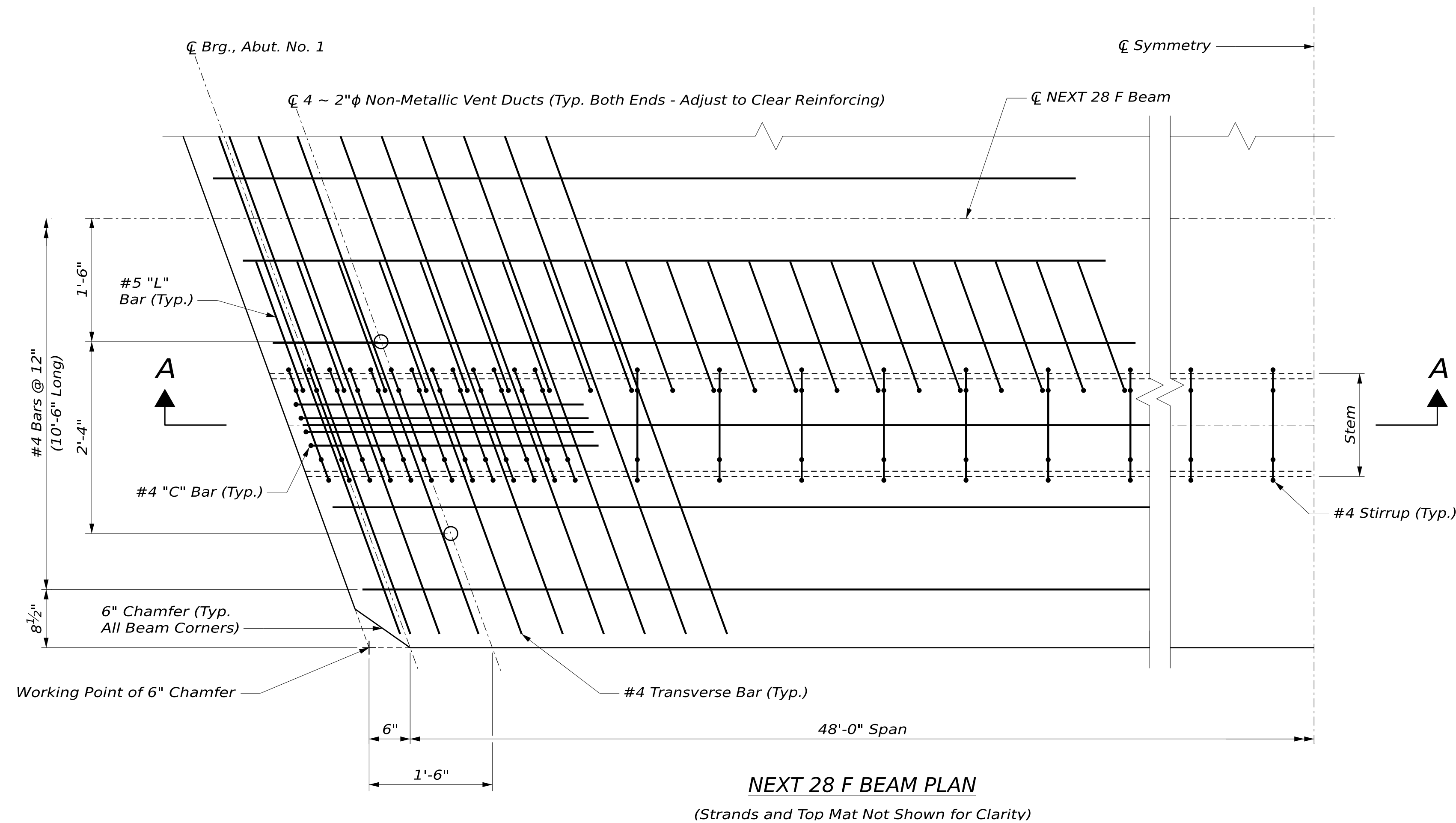
SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	AA	AA	OCT 2025
CHECKED-REVIEWED	KLW	KLW	OCT 2025
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

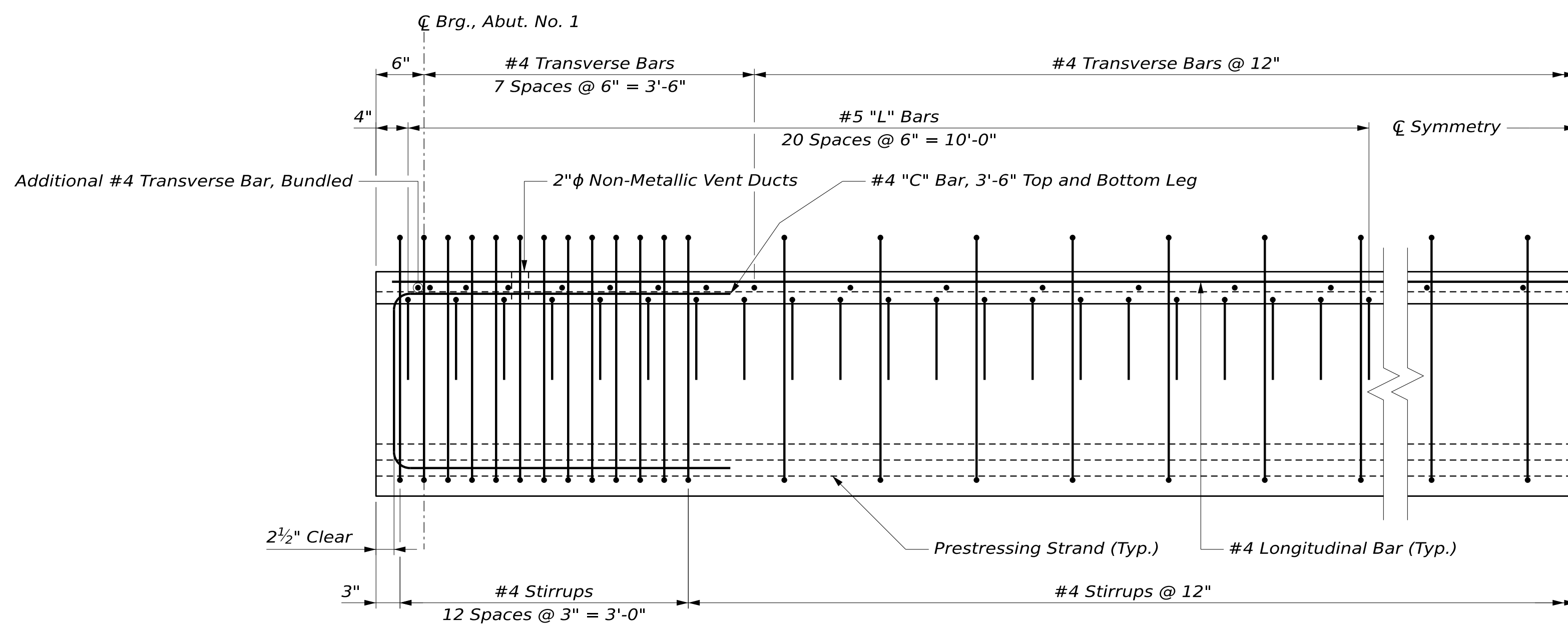
TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
ABUTMENT NO. 2
SECTIONS

SHEET NUMBER
27
OF 35





NEXT 28 F BEAM PLAN
(Strands and Top Mat Not Shown for Clarity)

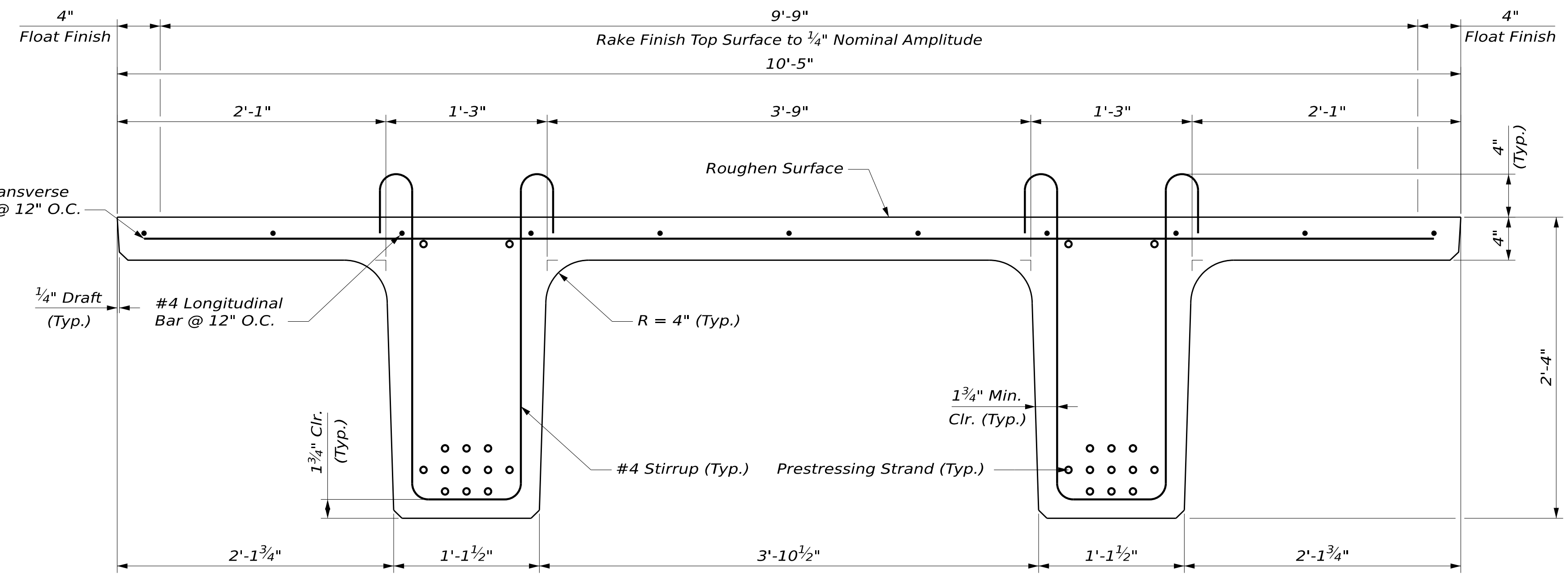


SECTION A-A

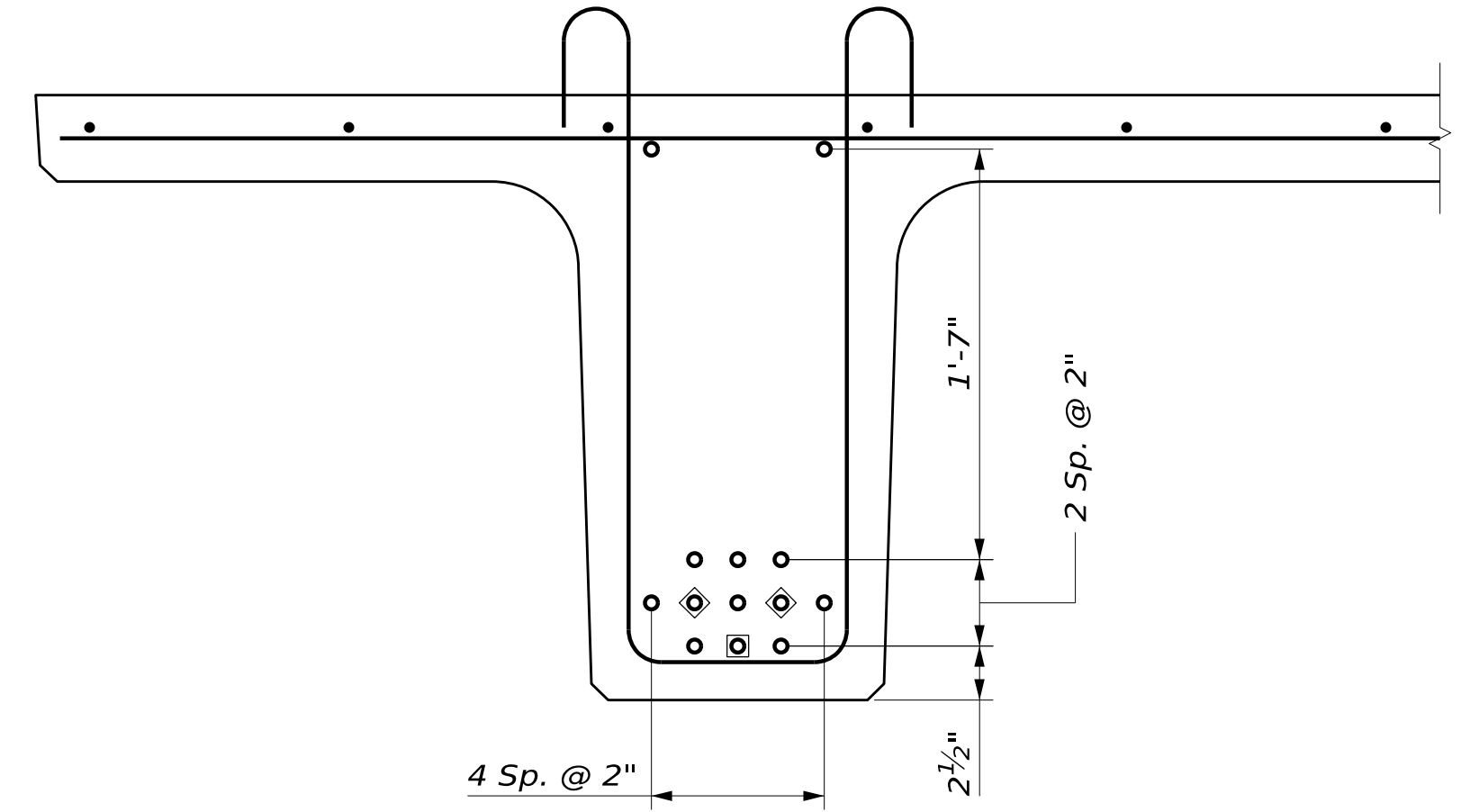
PRECAST NEXT BEAM NOTES

- NEXT F Beams are a non-proprietary shape developed by PCI Northeast (PCINE). Standardized section properties and details may be found at <http://www.pcine.org/pcine>.
- The estimated camber at release is 0.72 inches; the estimated camber at erection is 0.92 inches; and the estimated final camber at completion of the project is 0.63 inches.
- Prestressing strands shall be 0.6 inch diameter. The tensioning force is 44 kips per prestressing strand, including the top strands.
- Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
- Do not drill holes or use powder actuated tools on the prestressed beams without the approval of the Fabrication Engineer.
- Unless otherwise noted, rake the top surface of the upper flange of the prestressed beams to a surface roughness of $\pm 1/4$ inch, except at locations corresponding to the blocking points. At these locations, finish a flattened area of sufficient size to facilitate taking elevations for setting the bottom of slab elevations.
- Neoprene pad shall be either polychloroprene or natural polyisoprene of 50 ± 5 Shore A durometer hardness, and shall confirm to the requirements of Division 2, Section 18.2 of AASHTO Standard Specifications for Highway Bridges. Neoprene pads will not be paid for directly but will be considered incidental to related Contract items.
- Lifting loops and temporary storage/shipping dunnage shall be a maximum of 2 feet from each beam end.
- Additional strands may be debonded, provided that the latest provisions for debonding in the AASHTO LRFD Bridge Design Specifications (Article 5.9.4.3.3) are followed.

PROJ. MANAGER	C. GUY	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	PEH	PEH	OCT 2025			
CHECKED-REVIEWED	LSF	BLW	OCT 2025			
DESIGN-DETAILED						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						



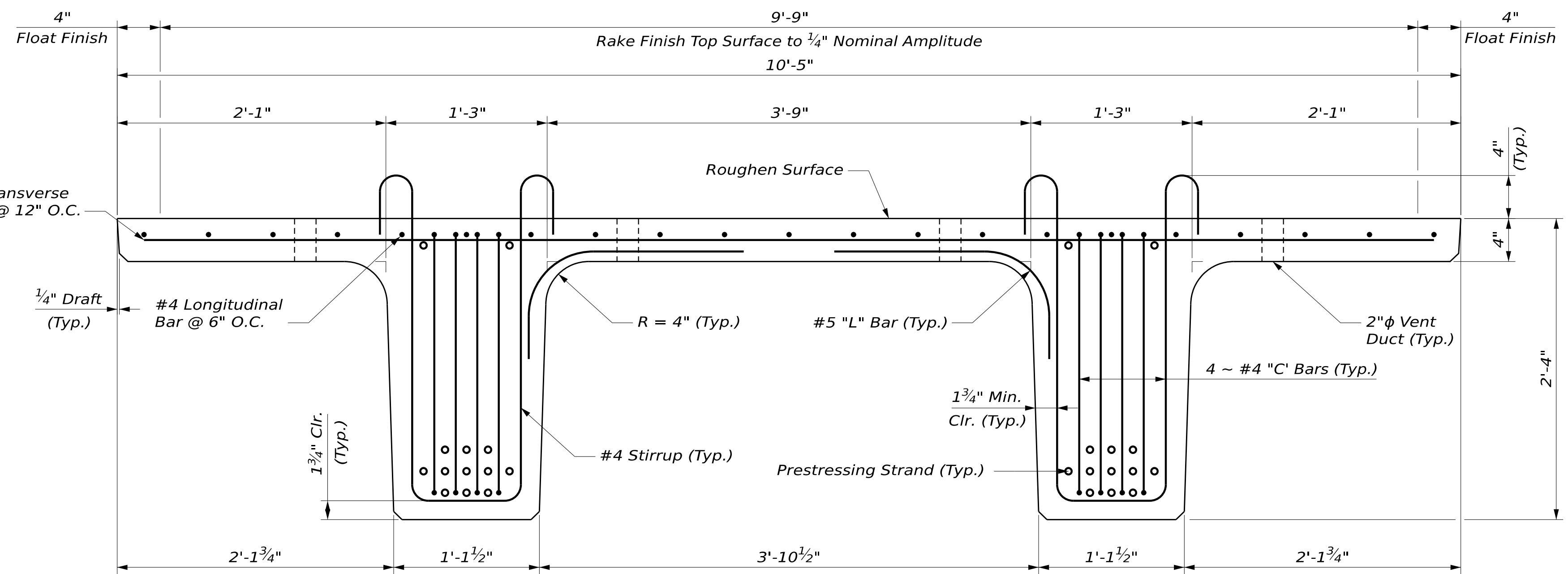
NEXT 28 F BEAM TYPICAL SECTION - MIDSPAN



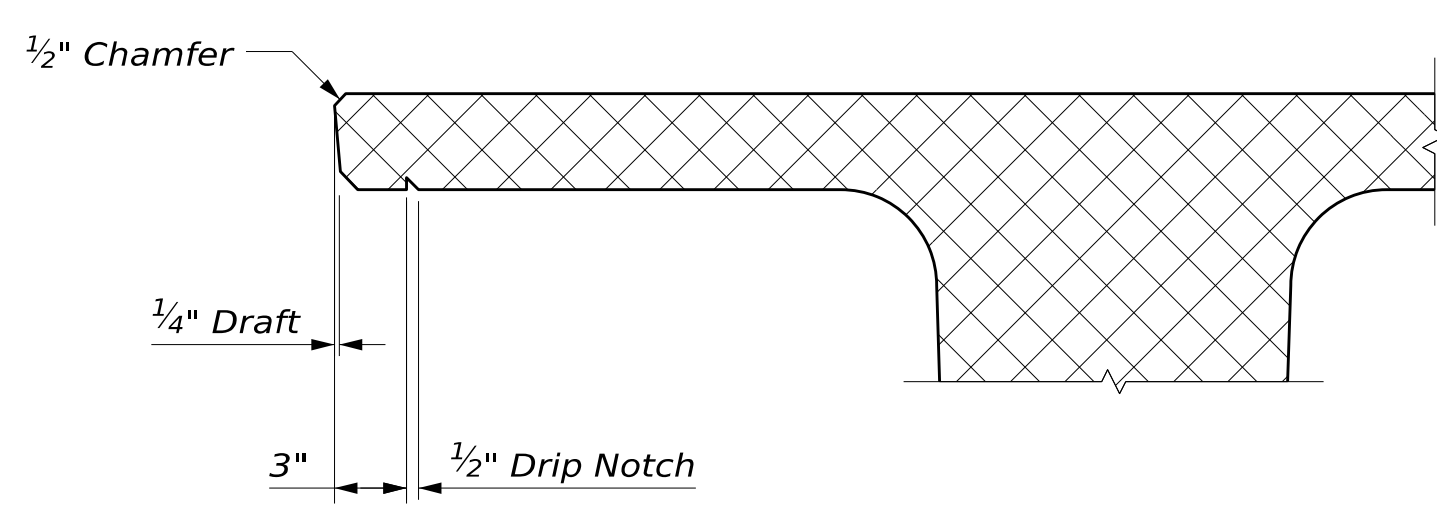
NEXT 28 F BEAM STRAND PATTERN

(Left Stem Shown, Right Stem is Similar Mirrored about Beam Centerline)

- ◻ Strands Debonded 6ft
- ◊ Strands Debonded 3ft



NEXT 28 F BEAM TYPICAL SECTION - AT ENDS



FASCIA OVERHANG DETAIL

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	REH	REH	OCT 2025
CHECKED-REVIEWED	LSF	BLW	OCT 2025
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

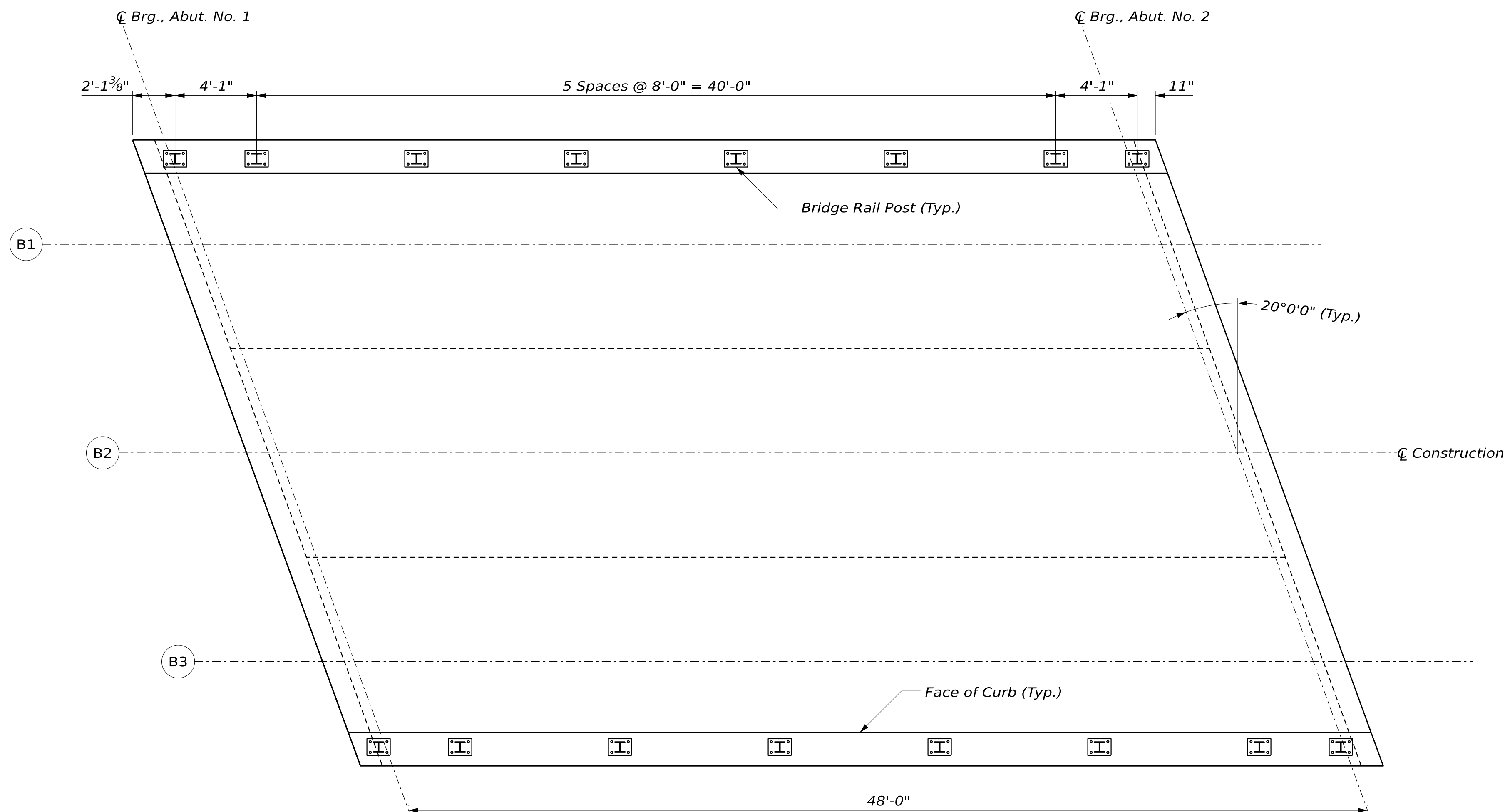
SIGNATURE	P.E. NUMBER	DATE

TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
BEAM DETAILS (2 OF 2)

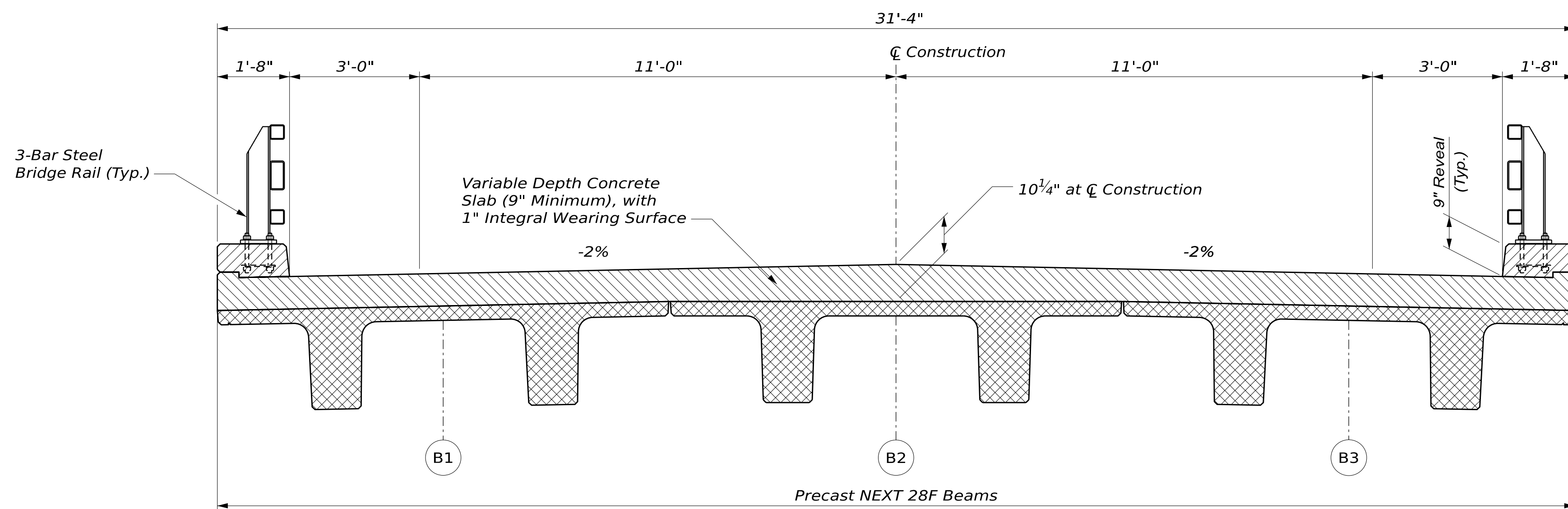


SUPERSTRUCTURE NOTES

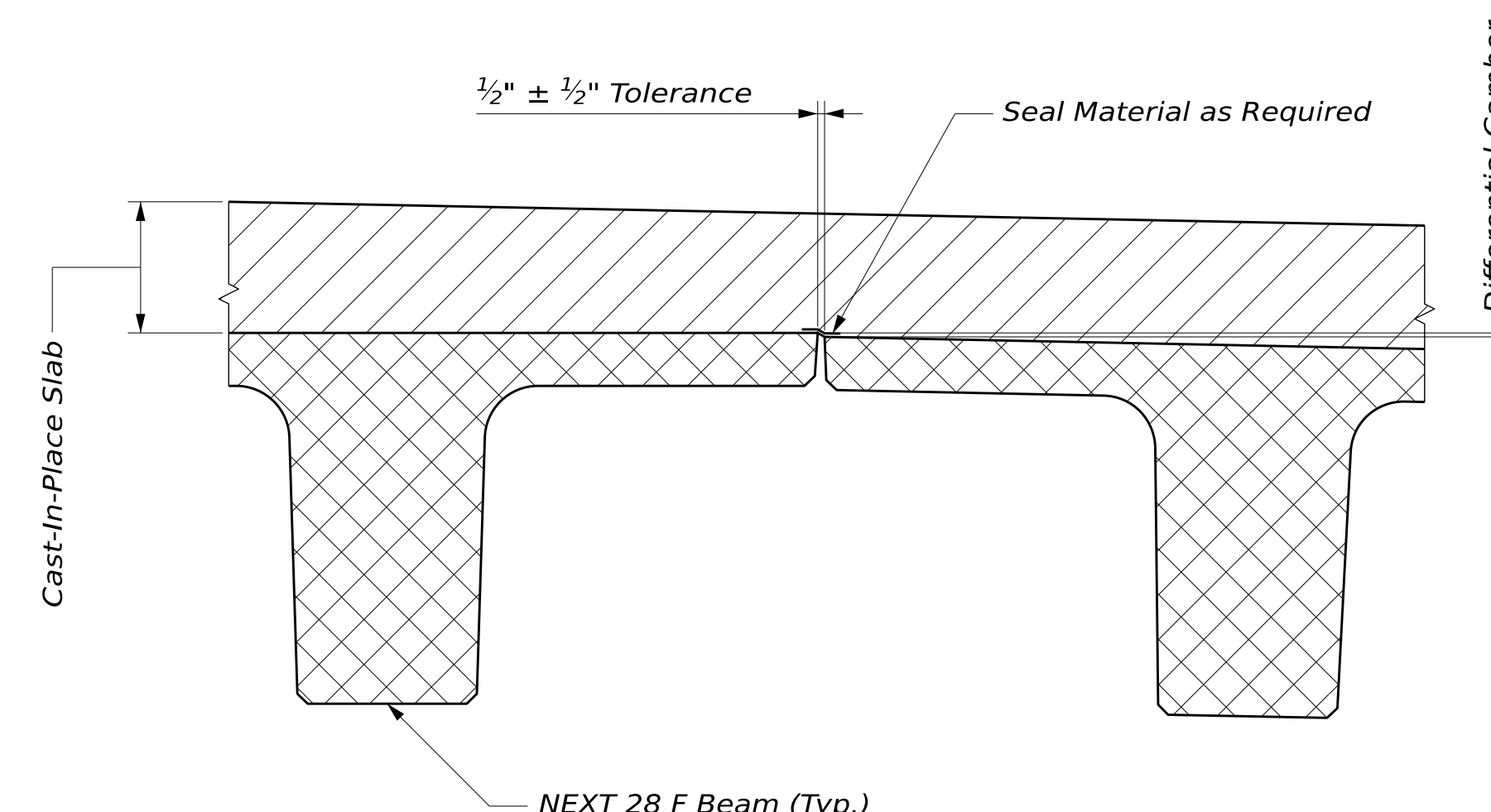
1. The bearing elevation and deck thickness shall be adjusted in accordance with Special Provision 535 - Precast, Prestressed Concrete Superstructure (Camber).
2. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
3. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
4. Payment for End Diaphragm Concrete will be made under Item No. 502.261 Structural Concrete Roadway and Sidewalk Slabs on Concrete Bridges.
5. The superstructure slab and end diaphragm concrete shall be placed in one continuous operation and shall be kept plastic until the entire placement has been made.
6. The Saw Cut Grooving shall be in the longitudinal direction.
7. Payment for Seal Material over joints between adjacent NEXT Beams will not be made directly and shall be considered incidental to related Contract Items. Material used shall be submitted to the Resident for approval.
8. Payment for Preformed Expansion Joint Filler between parapets and the superstructure will not be made directly and shall be considered incidental to related Contract Items.



SUPERSTRUCTURE PLAN



TYPICAL BRIDGE SECTION



NEXT BEAM GAP FORM DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2610700

PROJ. MANAGER	C. GUY	BY	DATE
DESIGN-DETAILED	PEH	PEH	OCT 2025
CHECKED-REVIEWED	KLW	KLW	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

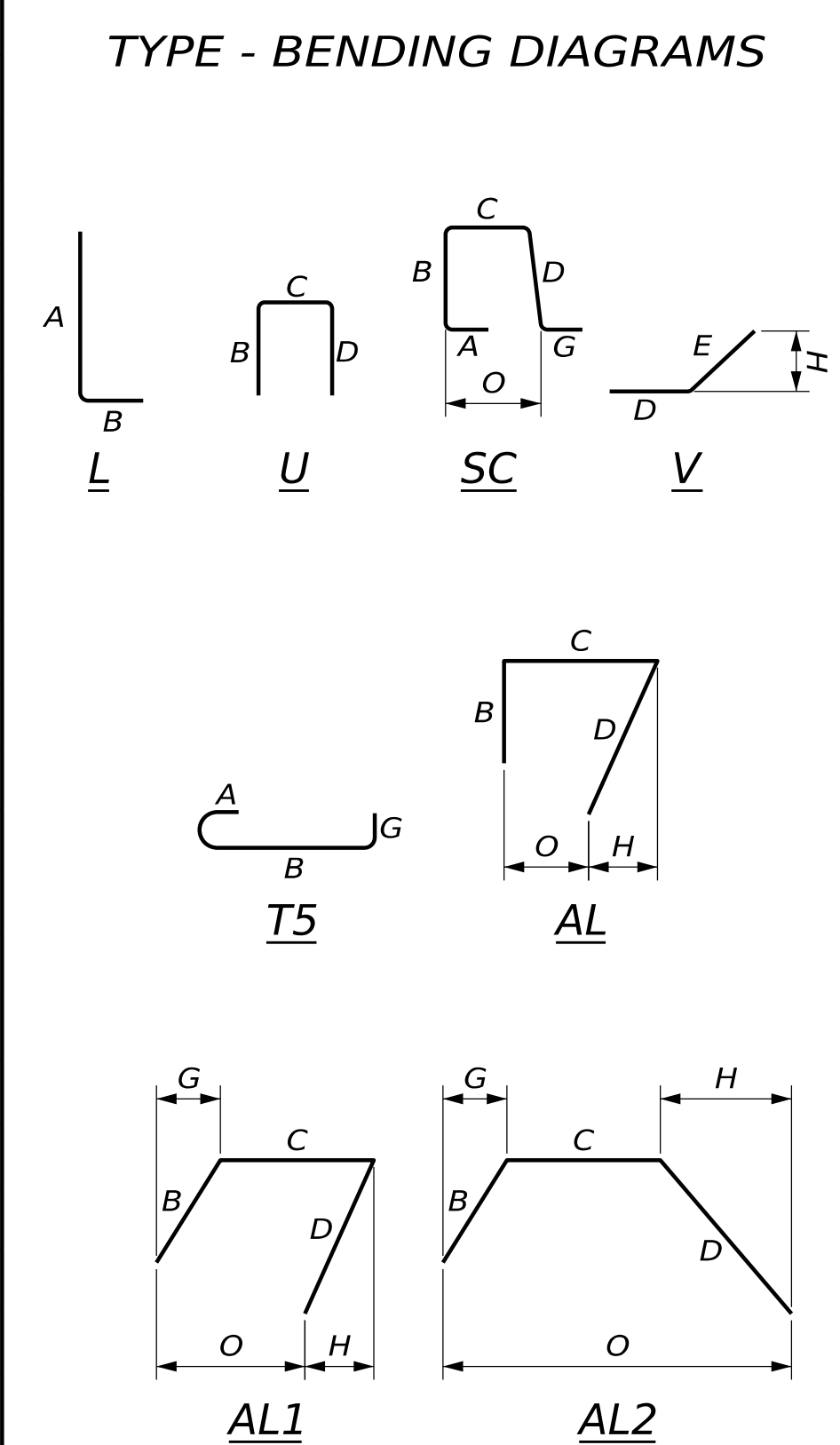
TANNERY BRIDGE NO. 3511
CROSSING TANNERY BROOK
MARIAVILLE
SUPERSTRUCTURE PLAN

SHEET NUMBER
31
OF 35



Username: pharriman Date: 10/16/2025

STRAIGHT BARS								BENT BARS															
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION	
Abutment No. 1				Abutment No. 2				Abutment No. 1															
A500	60	6'-6"	Footing	B500	39	6'-6"	Footing	A550	112	6'-7"	L	5'-9"	10"										Footing
A501	140	8'-6"	Footing	B501	141	8'-6"	Footing	A551	32	4'-7"	U		10"	2'-11"	10"								Abutment Stem Cap
A502	14	13'-8"	Footing	B502	28	13'-4"	Footing	A552	1	4'-2"	U		10"	2'-6"	10"								Abutment Stem Cap
A503	10	33'-8"	Footing	B503	10	33'-0"	Footing	A553	24	2'-10"	U		10"	1'-2"	10"								Wing, Stem Cap
A504	8	39'-0"	Footing	B504	8	39'-0"	Footing	A554	8	5'-8"	V				2'-0"	3'-8"				1'-10"			SE Wing Horizontal
A505	14	20'-0"	Footing	B505	8	38'-0"	Stem, Horizontal F.F.	A555	4	5'-2"	AL1		1'-2"	1'-11"	2'-1"			6 5/8"	8 1/2"	1'-9 1/8"			SE Wing Parapet Stirrup
A506	9	38'-0"	Stem, Horizontal F.F.	B506	8	32'-0"	Stem, Horizontal N.F.	A556	4	5'-3"	AL		1'-1"	2'-1"	2'-1"				4 3/8"	1'-8 5/8"			SE Wing Parapet Stirrup
A507	9	32'-0"	Stem, Horizontal N.F.	B507	1	35'-0"	Stem Cap, Horizontal	A557	1	3'-0"	U		10"	1'-4"	10"								SE Wing Parapet Cap
A508	1	38'-9"	Stem Cap, Horizontal	B508	1	37'-8"	Stem Cap, Horizontal	A558	1	3'-5"	U		10"	1'-9"	10"								SE Wing Parapet Cap
A509	1	37'-8"	Stem Cap, Horizontal	B509	1	38'-9"	Stem Cap, Horizontal	A559	1	3'-8"	U		10"	2'-0"	10"								SE Wing Parapet Cap
A510	1	35'-0"	Stem Cap, Horizontal	B510	33	6'-0"	Stem, Vertical N.F.	A560	8	6'-3"	V				2'-0"	4'-3"				1'-9 1/2"			SW Wing Horizontal
A511	33	6'-6"	Stem, Vertical N.F.	B511	14	7'-11"	NW Wing, Horizontal	A561	4	6'-0"	AL2		1'-1"	2'-1"	2'-10"			5 1/2"	11 5/8"	3'-6 1/8"			SW Wing Parapet Stirrup
A512	14	7'-11"	SE Wing, Horizontal	B512	2	6'-7"	NW Wing, Horizontal	A562	4	7'-10"	AL		1'-2"	3'-10"	2'-10"				1'-11 3/8"	1'-10 5/8"			SW Wing Parapet Stirrup
A513	2	7'-5"	SE Wing, Horizontal	B513	2	4'-11"	NW Wing, Horizontal	A563	1	3'-1"	U		10"	1'-5"	10"								SW Wing Parapet Cap
A514	2	5'-8"	SE Wing, Horizontal	B514	2	3'-3"	NW Wing, Horizontal	A564	1	3'-4"	U		10"	1'-8"	10"								SW Wing Parapet Cap
A515	2	3'-11"	SE Wing, Horizontal	B515	2	1'-6"	NW Wing, Horizontal	A565	1	3'-8"	U		10"	2'-0"	10"								SW Wing Parapet Cap
A516	2	2'-2"	SE Wing, Horizontal	B516	6	6'-0"	NW Wing, Vertical	A566	1	4'-0"	U		10"	2'-4"	10"								SW Wing Parapet Cap
A517	6	6'-3"	SE Wing, Vertical	B517	6	7'-9"	NW Wing, Vertical																
A518	6	8'-0"	SE Wing, Vertical	B518	6	9'-6"	NW Wing, Vertical	A650	82	6'-9"	L	5'-9"	1'-0"										Footing
A519	6	9'-9"	SE Wing, Vertical	B519	3	9'-8"	NW Parapet, Vertical N.F.																
A520	3	10'-2"	SE Parapet, Vertical N.F.	B520	2	4'-6"	NW Wing, Stem Cap	Abutment No. 2															
A521	2	4'-3"	SE Wing, Stem Cap	B521	2	6'-9"	NW Wing, Stem Cap	B550	92	6'-7"	L	5'-9"	10"										Footing
A522	2	7'-0"	SE Wing, Stem Cap	B522	16	7'-1"	NE Wing, Horizontal	B551	32	4'-7"	U		10"	2'-11"	10"								Abutment Stem Cap
A523	12	13'-8"	SW Wing, Horizontal	B523	2	5'-8"	NE Wing, Horizontal	B552	1	4'-2"	U		10"	2'-6"	10"								Abutment Stem Cap
A524	2	12'-11"	SW Wing, Horizontal	B524	2	3'-9"	NE Wing, Horizontal	B553	17	2'-10"	U		10"	1'-2"	10"								Wing, Stem Cap
A525	2	10'-6"	SW Wing, Horizontal	B525	2	1'-9"	NE Wing, Horizontal	B554	8	5'-8"	V				2'-0"	3'-8"				1'-10"			NW Wing Horizontal
A526	2	8'-1"	SW Wing, Horizontal	B526	8	7'-3"	NE Wing, Vertical	B555	4	5'-4"	AL1		1'-2"	2'-0"	2'-2"			6"	8 1/4"	1'-9 3/4"			NW Wing Parapet Stirrup
A527	2	5'-7"	SW Wing, Horizontal	B527	8	9'-3"	NE Wing, Vertical	B556	4	5'-4"	AL		1'-2"	2'-0"	2'-2"				4 3/8"	1'-7 3/4"			NW Wing Parapet Stirrup
A528	2	3'-2"	SW Wing, Horizontal	B528	5	9'-10"	NE Parapet, Vertical N.F.	B557	1	3'-0"	U		10"	1'-4"	10"								NW Wing Parapet Cap
A529	10	9'-9"	SW Wing, Vertical	B529	2	7'-10"	NE Wing, Stem Cap	B558	1	3'-5"	U		10"	1'-9"	10"								NW Wing Parapet Cap
A530	10	7'-9"	SW Wing, Vertical					B559	1	3'-8"	U		10"	2'-0"	10"								NW Wing Parapet Cap
A531	10	5'-9"	SW Wing, Vertical	B600	34	6'-0"	Stem, Vertical F.F.	B560	8	6'-3"	V				2'-0"	4'-3"				1'-9 1/2"			NE Wing Horizontal
A532	5	10'-2"	SW Parapet, Vertical N.F.	B601	7	9'-10"	Parapet, Vertical F.F.	B561	4	6'-0"	AL2		1'-1"	2'-1"	2'-10"			5 1/2"	11 5/8"	3'-6 1/8"			NE Wing Parapet Stirrup
A533	2	8'-0"	SW Wing, Stem Cap					B562	4	7'-10"	AL		1'-2"	3'-10"	2'-10"				2'-0"	1'-10"			NE Wing Parapet Stirrup
A534	2	9'-0"	SW Wing, Stem Cap					B563	1	2'-11"	U		10"	1'-3"	10"								NE Wing Parapet Cap
								B564	1	3'-2"	U		10"	1'-6"	10"								NE Wing Parapet Cap
A600	33	6'-6"	Stem, Vertical F.F.					B565	1	3'-7"	U		10"	1'-11"	10"								NE Wing Parapet Cap
A601	7	10'-2"	Parapet, Vertical F.F.					B566	1	3'-11"	U		10"	2'-3"	10"								NE Wing Parapet Cap
Abutment No. 1				Abutment No. 2				Abutment No. 2															
A700c	19	3'-0"	Superstructure Dowel	B700c	19	3'-0"	Superstructure Dowel	B650	81	6'-9"	L	5'-9"	1'-0"										Footing
Superstructure				Superstructure				Superstructure															
S500g	204	33'-0"	Deck, Transverse	S500c	6	33'-2"	End Diaphragm, F.F. Horizontal	S450c	204	6'-6"	T5	7"	5'-5"							0"			Transverse Overhang
S501g	6	40'-0"	EB & WB Curb, Longitudinal																				
S502g	6	13'-11"	EB & WB Curb, Longitudinal	Approach Slab				S550c	152	5'-4"	SC	10"	1'-1 1/2"	1'-3"	1'-3 1/2"				10"		1'-5"	Curb, Transverse & Railing	
				A5500	32	28'-4 1/2"	Approach Slab, Transverse	S551c	12	3'-7"	U		10"	1'-11"	10"								End Diaphragm, Horizontal
S600g	64	40'-0"	Deck, Longitudinal					S552c	18	5'-3"	U		10"	3'-7"	10"								End Diaphragm, Horizontal
S601g	64	13'-11"	Deck, Longitudinal	A5600	108	15'-0"	Approach Slab, Longitudinal	S553c	12	5'-9"	U		10"	4'-1"	10"								End Diaphragm, Horizontal
								S554c	62	6'-8"	U		2'-6"	1'-8"	2'-6"								End Diaphragm, NF Vert.
								S555c	62	7'-10"	U		2'-7"	2'-8"	2'-7"								End Diaphragm, FF Vert.
								S556c	24	5'-6"	L	2'-9"	2'-9"										End Diaphragm, FF Vert.
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION	



All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 318.

Reinforcing Bar: ASTM A615/A615M, Grade 60
 Stainless Steel Reinforcing: ASTM A955, Grade 75
 Glass-Fiber Reinforced Polymer: ASTM D7957
 Low-Carbon Chromium Steel: ASTM A1035, Type CS, Grade 100

GENERAL NOTES

- The first two digits following the letter(s) of the mark indicate the size of the bar:
 Mark "A502" = bar size #5
 Mark "P805" = bar size #8
 Mark "S650" = bar size #6
 Mark "P1404" = bar size #14
- The lower case letter following the bar number indicates the material of the bar.
 "A500b", b = (Black) Plain Steel
 "A550s", s = Stainless Steel
 "S500g", g = Glass Fiber Reinforced Polymer
 "P510c", c = Low-carbon Chromium Steel

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 Federal Project No. 2610700
 WIN 26107.00

TANNERY BRIDGE NO. 3511
 CROSSING TANNERY BROOK
 MARIAVILLE

REINFORCING SCHEDULE

SHEET NUMBER
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 OF 35

Stantec

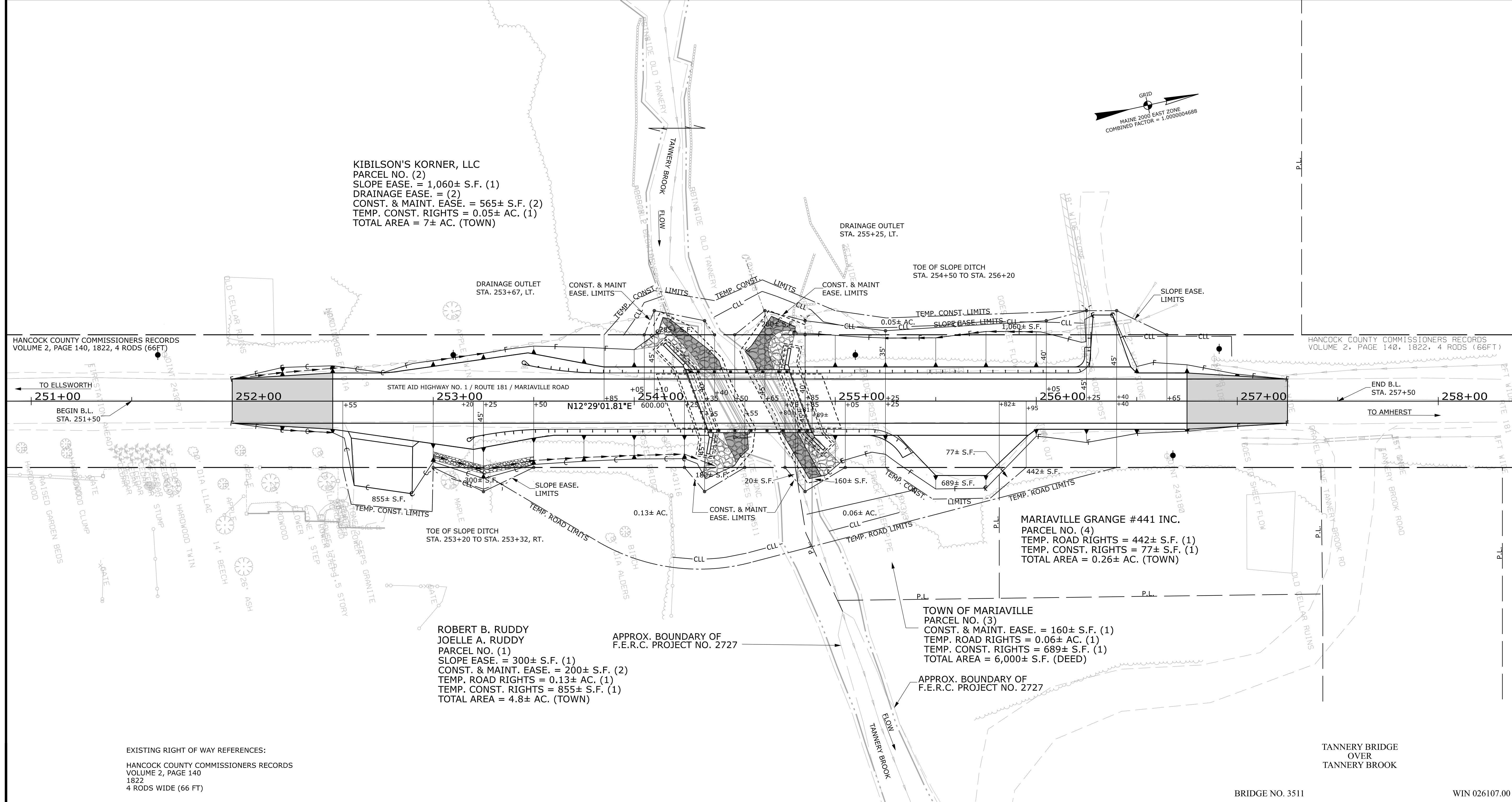
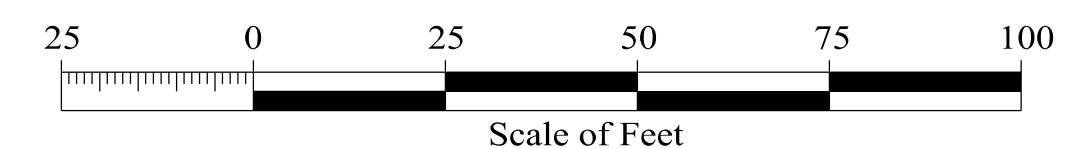
Date: 10/16/2025
 Username: pharriman

PLAN LEGEND

Town, County, State	New R/W Along Existing R/W	Existing	Proposed	Existing	Proposed	Existing	Proposed
Approx. Property Lines	Building	Sanitary Sewer	SA	Traveled Way		Cut Line	Fill Line
Existing Right of Way	Clearing Limit Line - CLL	Com. Line UG	UG COMM	Ditch		Stonewall	Retaining Wall
Limits of Wrought Portion	Trees	Electric Line	UG POW	Catch Basin		Baseline	
Control of Access	Conifer	Water Line	WL	Manhole		Monument	Traverse Point
New Right of Way	Deciduous	Underdrain Line		Sewer Manhole		Iron Rod Set	Pipe Found
New Easement	Tree Line	Gas Line	GAS	Utility Pole			
New Temporary Rights	Bush Line	Guardrail		Fire Hydrant			
New R/W Within Existing R/W	Water Edge	Culvert		Curbing			
	Ledge						
	Fence						
	Sign						

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ADJUTING PROPERTY OWNERS.

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY OF _____
RECEIVED _____, 20____
AT _____ HRS. _____ MINS. _____ M.
AND RECORDED IN _____
PLAN BOOK (OR FILE NO.) _____, PAGE _____
ATTEST: _____ REGISTER



Date: 10/17/2025
Username: Benjamin.Singer

CHECKED	J.D.F.	P.N.S.	S.A.N.
TECH	C.D.P.	C.D.P.	C.D.P.
ITEM	EXISTING CONDITION PLAN	FINAL RIGHT OF WAY	AREAS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA,
ME 04333-0016 - 207-624-3460
MARIAVILLE
RIGHT OF WAY MAP

REVISIONS			PLAN FILED IN PLAN BOOK				COUNTY RECORD			
NO.	DATE	DESCRIPTION	BY	NO.	GRANTOR	PAGE	INSTRUMENT	DATE	BOOK	PAGE

DALE F. DOUGHTY
ACTING COMMISSIONER
WILLIAM A. PULVER
CHIEF ENGINEER
DATE _____

STATE AID HIGHWAY NO. 1
ROUTE 181 / MARIAVILLE ROAD
MARIAVILLE HANCOCK COUNTY
FEDERAL AID PROJECT NO. 2610700
APRIL 2025 RIGHT-OF-WAY MAP
SCALE 1" = 25' SHEET 1 OF 1
D.O.T. FILE NO. 5-323

SHEET NUMBER
35
OF 35