

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



### SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020.

### DESIGN LOADING

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

### TRAFFIC DATA

Current (2023) AADT.....	630
Future (2043) AADT.....	760
DHV - % of AADT.....	11%
Design Hour Volume.....	84
Heavy Trucks (% of AADT).....	10%
Heavy Trucks (% of DHV).....	13%
Directional Distribution (% of DHV).....	51%
18 kip Equivalent P 2.0.....	26
18 kip Equivalent P 2.5.....	25
Design Speed (mph).....	45

### HYDROLOGIC DATA

Drainage Area.....	12.4 sq mi
Design Discharge (Q50).....	1,444 cfs
Check Discharge (Q100).....	1,683 cfs
Headwater Elevation (Q1.1).....	526.34 ft
Headwater Elevation (Q10).....	528.08 ft
Headwater Elevation (Q25).....	528.40 ft
Headwater Elevation (Q50).....	528.63 ft
Headwater Elevation (Q100).....	528.88 ft
Discharge Velocity (Q1.1).....	1.26 fps
Discharge Velocity (Q10).....	3.36 fps
Discharge Velocity (Q25).....	4.17 fps
Discharge Velocity (Q50).....	4.82 fps
Discharge Velocity (Q100).....	5.53 fps

### MATERIALS

Concrete:  
 Precast..... Class "P"  
 Curbs and Deck..... Class "A1"  
 All Other..... Class "A"

Reinforcing Steel:  
 Plain Reinforcing Steel..... ASTM A615 / A 615M, Grade 60  
 Low-Carbon Chromium..... ASTM A 1035, Type CS, Grade 100  
 Glass Fiber Reinforcing Polymer (GFRP)..... ASTM D7957  
 Prestressing Strands..... AASHTO M 203 (ASTM A416),  
 Grade 270, Low Relaxation

### BASIC DESIGN STRESSES

Concrete:  
 Class "A1".....  $f'c = 4,000$  psi  
 Class "A".....  $f'c = 4,000$  psi  
 Class "P".....  $f'ci = 6,500$  psi  
 $f'c = 8,000$  psi

Reinforcing:  
 Plain Reinforcing Steel.....  $f_y = 60,000$  psi  
 Low-Carbon Chromium Reinforcing Steel.....  $f_y = 100,000$  psi  
 Prestressing Strands.....  $f_\mu = 270,000$  psi  
 Glass Fiber Reinforced Polymer  
 Minimum Tensile Strength.....  $f_{fu} = 100,000$  psi  
 Minimum Elastic Modulus.....  $E = 8,700,000$  psi  
 Minimum Nominal Design Tensile Strain.....  $e_{fu} = 1.1\%$

## VAN BUREN AROOSTOOK COUNTY ST. MARY'S BRIDGE OVER VIOLETTE BROOK CASTONGUAY ROAD FEDERAL AID PROJECT NO. 2608300 PROJECT LENGTH 0.05 mi. BRIDGE NO: 5309

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### UTILITIES

Consolidated Communications  
 Charter Communications  
 Van Buren Light & Power

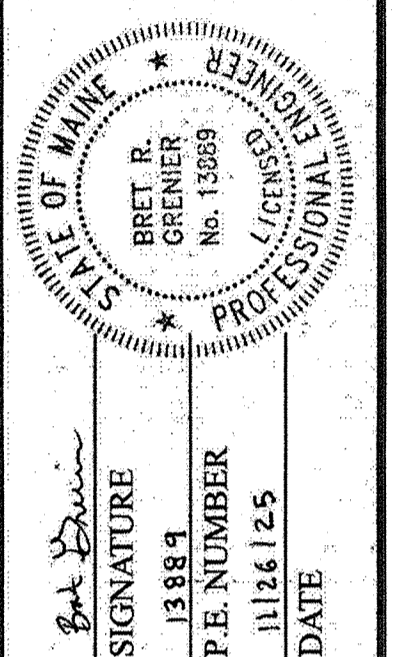
### MAINTENANCE OF TRAFFIC

Bridge will be closed to traffic during construction and traffic detoured.



<u>PROJECT LOCATION</u>	St. Mary's Bridge (#5309) in Van Buren carrying Castonguay Road over Violette Brook. Lat. 47°09'03.54" N Long. 67°58'07.56" W
<u>OUTLINE OF WORK</u>	Bridge Replacement with associated approach work.

STATE OF MAINE	DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
		ACTING COMMISSIONER: [Signature] 12-22-25	
		CHIEF ENGINEER: [Signature] 12-22-25	



PROJECT INFORMATION	BRIDGE	Michael Wright
PROGRAM	PROJECT MANAGER	BRET GRENIER, P.E.
DESIGNER	CONSULTANT	HNTB
PROJECT RESIDENT	CONTRACTOR	
PROJECT COMPLETION DATE		

VAN BUREN  
ST. MARY'S BRIDGE  
TITLE SHEET

SHEET NUMBER  
**1**  
OF 33

WIN 026083.00  
2608300

Date: 11/25/2025

Username: ctobin

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.19	Removing Existing Bridge (60 CY)	1	LS
202.202	Removing Pavement Surface	380	SY
203.20	Common Excavation	2,060	CY
203.2318	Disposal of Special Waste	330	TON
203.25	Granular Borrow	370	CY
203.33	Special Fill - Streambed Material	110	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	520	CY
304.10	Aggregate Subbase Course - Gravel	890	CY
403.208	Hot Mix Asphalt, 12.5 mm	150	TON
403.209	Hot Mix Asphalt 9.5 mm (Sidewalks, Drives, Islands & Incidentals)	14	TON
403.213	Hot Mix Asphalt, 12.5 mm (Base and Intermediate Base course)	200	TON
409.15	Bituminous Tack Coat, Applied	65	GAL
501.231	Dynamic Loading Test	2	EA
501.50	Steel H-beam Piles 89 lb/ft, delivered	1,375	LF
501.501	Steel H-beam Piles 89 lb/ft, in place	1,375	LF
501.90	Pile Tips	10	EA
501.91	Pile Splices	30	EA
501.92	Pile Driving Equipment Mobilization	1	LS
502.219	Structural Concrete, Abutments and Retaining Walls (105 CY)	1	LS
502.261	Structural Concrete Roadway and Sidewalk Slab on Concrete Bridges (100 CY)	1	LS
502.291	Saw Cut Grooving - Longitudinal (2230 SF)	1	LS
502.31	Structural Concrete Approach Slab (22 CY)	1	LS
502.49	Structural Concrete Curbs and Sidewalks (7 CY)	1	LS
503.12	Reinforcing Steel, Fabricated and Delivered	17,500	LB
503.13	Reinforcing Steel, Placing	17,500	LB
503.19	Low-Carbon Chromium Reinforcement, Fabricated and Delivered	14,700	LB
503.20	Low-Carbon Chromium Reinforcement, Placing	14,700	LB
507.0821	Steel Bridge Railing, 3 Bar (151 LF)	1	LS
507.0822	Steel Approach Railing, 3-Bar	4	EA
511.07	Cofferdam: Abutment 1	1	LS
511.07	Cofferdam: Abutment 2	1	LS
512.081	French Drains (102 LF)	1	LS
515.21	Protective Coating for Concrete Surfaces (300 SY)	1	LS
526.301	Temporary Concrete Barrier, Type I (40 LF)	1	LS
530.30	GFRP, Reinforcement Bars, Fabricated and Delivered	16,300	LF
530.31	GFRP, Reinforcement Bars, Placing	16,300	LF
535.622	Prestressed Structural Concrete NEXT Beam (89 CY)	1	LS
603.199	24 inch Culvert Pipe Option III	56	LF
603.209	30 inch Culvert Pipe Option III	56	LF
606.1301	31" W-Beam Guardrail-Midway Splice - Single Faced	240	LF
606.1304	31" W-Beam Guardrail-Midway Splice, Over 15' Radius	88	LF
606.1305	31" W-Beam Guardrail-Midway Splice Flared Terminal	2	EA
606.1721	Bridge Transition - Type 1	4	EA
606.265	Terminal End - Single Rail - Galvanized Steel	2	EA
606.353	Reflectorized Flexible Guardrail Marker	7	EA
606.47	Single Wood Post	1	EA
610.08	Plain Riprap	750	CY
610.18	Stone Ditch Protection	10	CY
613.319	Erosion Control Blanket	340	SY
615.07	Loam	65	CY
618.13	Seeding Method Number 1	3	UNIT
618.14	Seeding Method Number 2	5	UNIT
619.12	Mulch	8	UNIT
619.14	Erosion Control Mix	130	CY
620.58	Erosion Control Geotextile	640	SY
627.733	4" White Or Yellow Painted Pavement Marking Line	1,170	LF
629.05	Hand Labor, Straight Time	40	HR
631.12	All Purpose Excavator (including operator)	40	HR
631.14	Grader (including operator)	40	HR
631.15	Roller, earth and base (including operator)	40	HR
631.172	Truck-large (including operator)	40	HR
639.19	Field Office, Type B	1	EA
652.312	Type III Barricades	6	EA
652.33	Drum	25	EA
652.34	Cone	25	EA
652.35	Construction Signs	350	SF
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	600	HR
656.75	Temporary Soil Erosion and 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, and ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rentals.
- All embankment material, except as otherwise shown, placed below EL. 528.26 shall be Granular Borrow meeting the requirements of Standard Specifications Subsection 703.19, Granular Borrow, for Material for Underwater Backfill.
- Construct riprap shelf at EL. 526.91 at Abutment No. 1 and EL. 527.26 at Abutment No. 2.
- Stones which cannot be rolled or compacted into the surface of the shoulder shall be removed by hand raking. Payment for hand raking will be considered incidental to Pay Item 304.10, Aggregate Subbase Course - Gravel.
- Place loam 2 inches deep on all new or reconstructed sideslopes in non-residential areas. Place loam 4 inches deep on all new or reconstructed sideslopes in residential areas or as directed by the Resident.
- 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/dot/doing-business>
- 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 the Designer'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 for the Replacement of St. Mary's Bridge, Van Buren, Maine, Soils Report 2025-25, dated August 12, 2025, may be accessed at the MaineDOT web address.

20. 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.

21. 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.

22. The existing structural plate pipe culvert shall be removed and become property of the Contractor. The Contractor is responsible for the proper management and disposal in the process of demolishing the culvert.

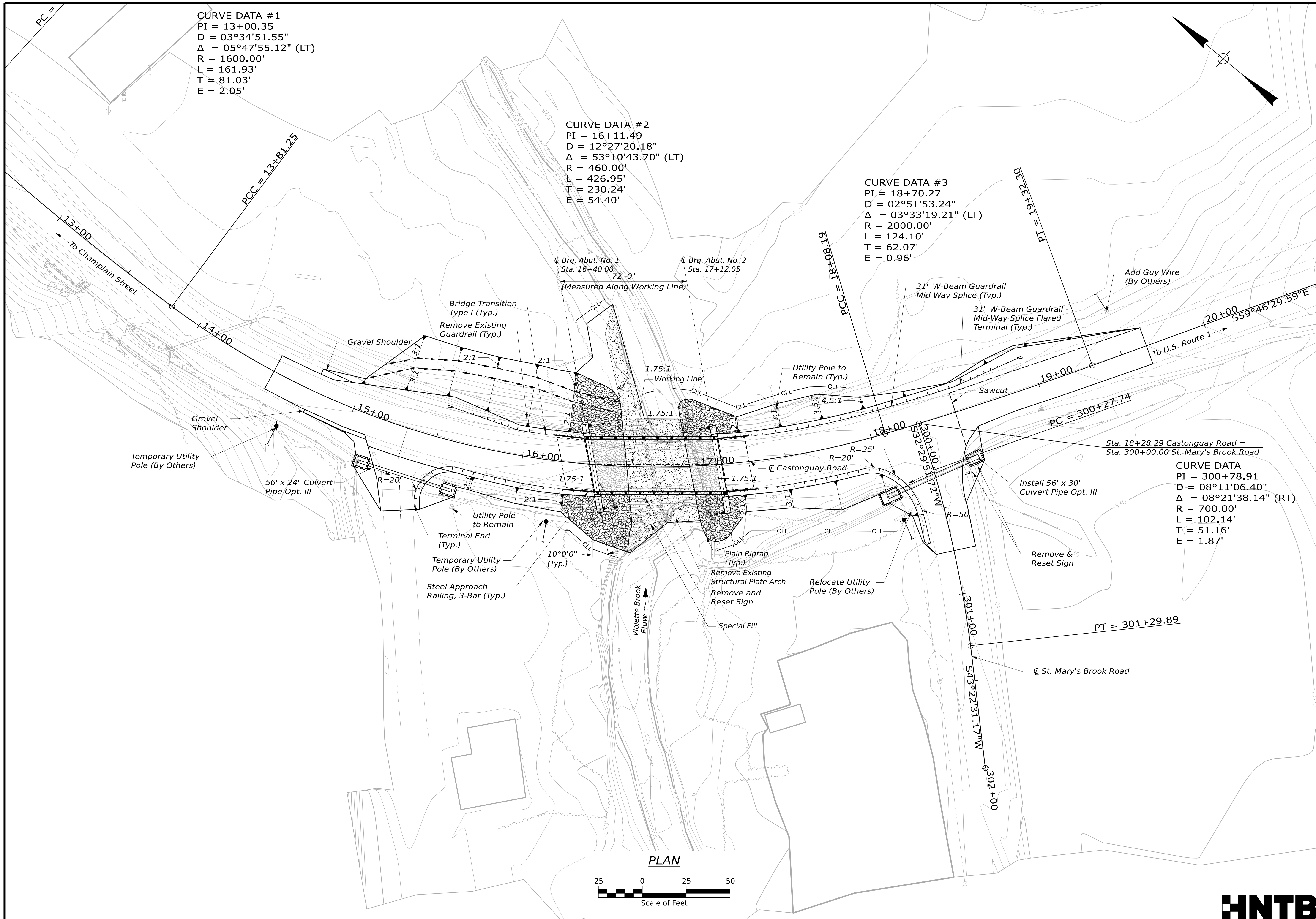
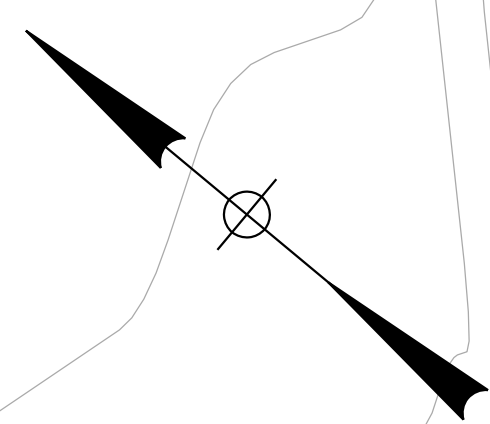
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
2608300		BRIDGE NO. 5309	
WIN		026083.00	
BRIDGE PLANS			
DATE	BY	MICHAEL WIGHT	SIGNATURE
11/20/25	C. Tobin	C. Tobin	
11/20/25	B. Gerner	L. Pheol	
			P.E. NUMBER
			DATE
PROJ. MANAGER	CHECKED-DETAILED	CHECKED-REVIEWED	DESIGNED-DETAILED
			REVISIONS 1
			REVISIONS 2
			REVISIONS 3
			REVISIONS 4
			FIELD CHANGES
<b>VAN BUREN ST. MARY'S BRIDGE ESTIMATED QUANTITIES &amp; GENERAL NOTES</b>			
SHEET NUMBER			
2			
OF 33			



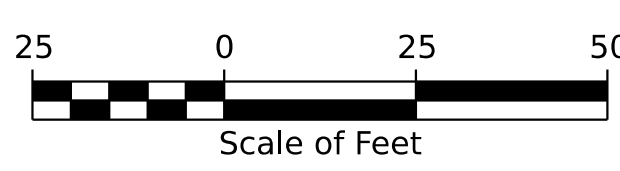
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 PI = 13+00.35  
 D = 03°34'51.55"  
 Δ = 05°47'55.12" (LT)  
 R = 1600.00'  
 L = 161.93'  
 T = 81.03'  
 E = 2.05'

CURVE DATA #2  
 PI = 16+11.49  
 D = 12°27'20.18"  
 Δ = 53°10'43.70" (LT)  
 R = 460.00'  
 L = 426.95'  
 T = 230.24'  
 E = 54.40'

CURVE DATA #3  
 PI = 18+70.27  
 D = 02°51'53.24"  
 Δ = 03°33'19.21" (LT)  
 R = 2000.00'  
 L = 124.10'  
 T = 62.07'  
 E = 0.96'



PLAN



STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 2608300  
 WIN  
 026083.00  
 BRIDGE NO. 5309  
 BRIDGE PLANS

PROJ. MANAGER	DATE	BY	DATE
C. Tobin	11/2025	C. Tobin	11/2025
B. Gerner	11/2025	B. Gerner	11/2025

SIGNATURE	P.E. NUMBER	DATE

Michael Wight  
 C. Tobin  
 B. Gerner

**VAN BUREN  
 ST. MARY'S BRIDGE**

**GENERAL PLAN**

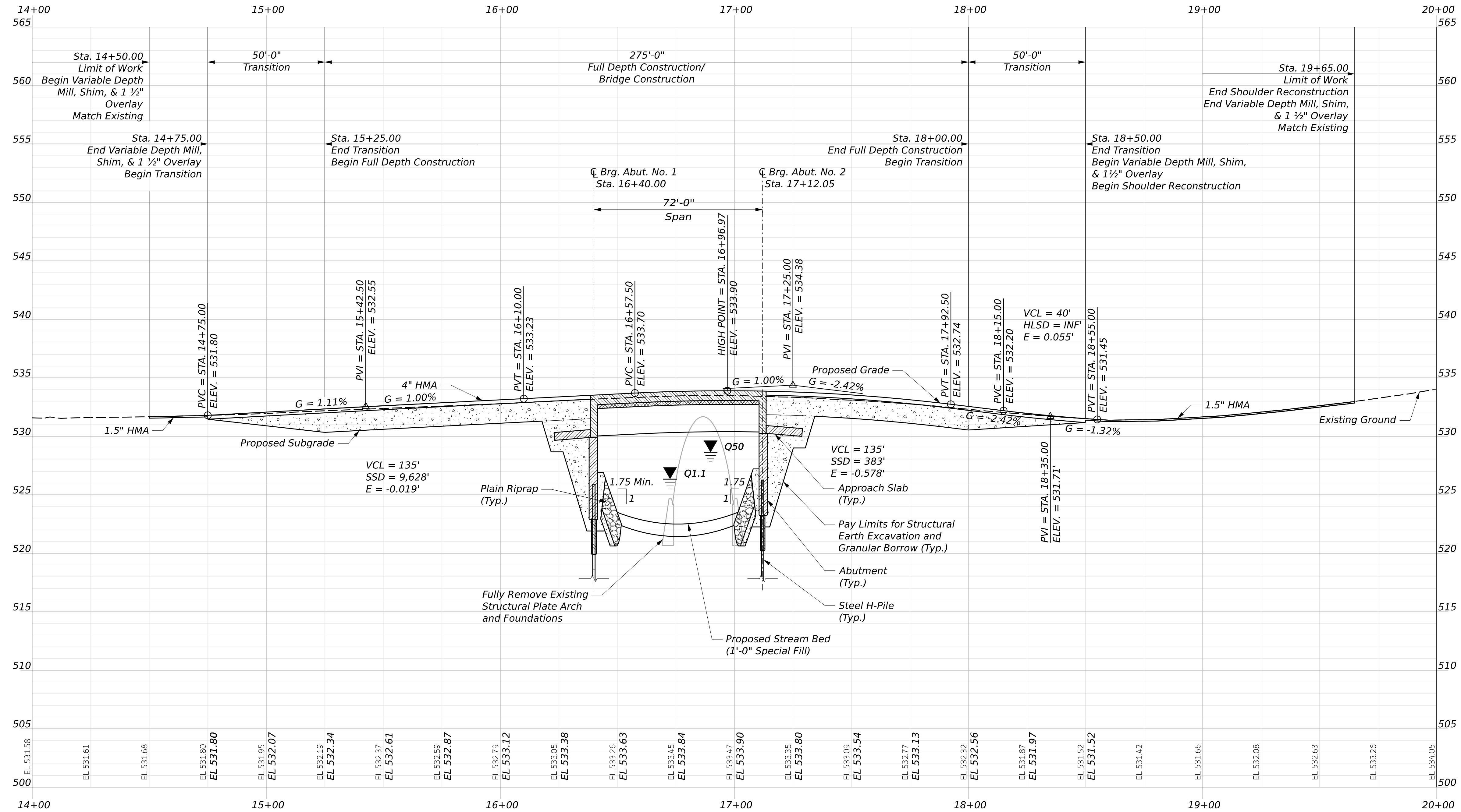
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3

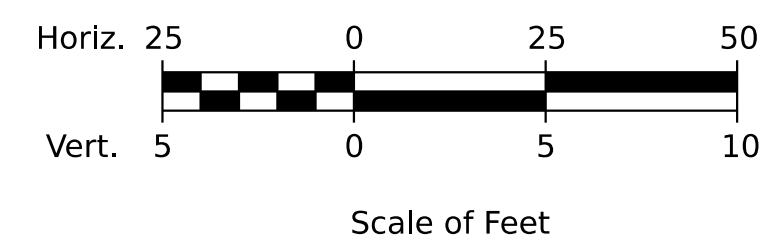
OF 33



Username: crobini Date: 11/25/2025



PROFILE - Castonguay Road

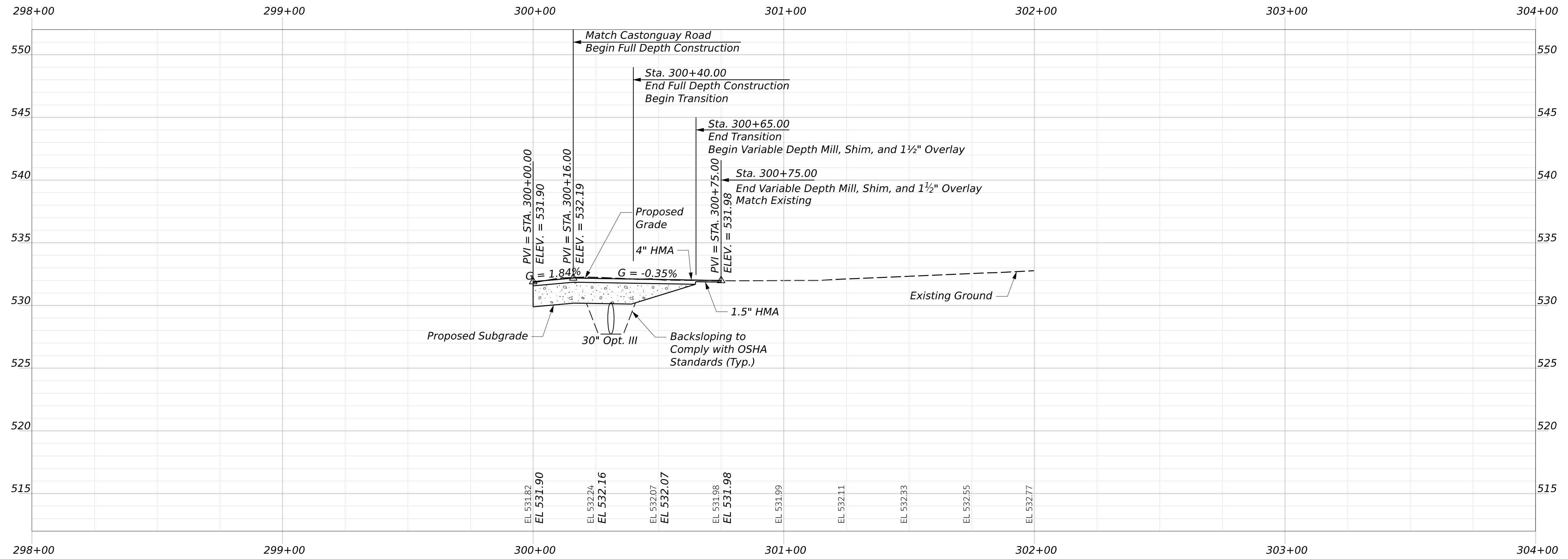


PROJ. MANAGER	Michael Wight
DESIGN-DETAILED	C. Tabin
CHECKED-REVIEWED	L. Phipps
DESIGN-DETAILED	B. Gerner
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

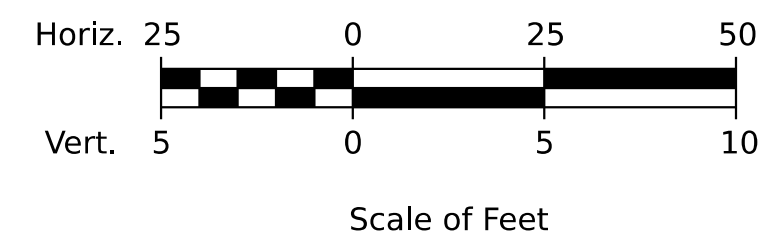
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BY	C. Tabin
DATE	11/20/25
BY	B. Gerner
SIGNATURE	
P.E. NUMBER	
DATE	

VAN BUREN  
ST. MARY'S BRIDGE  
PROFILE I





PROFILE - St. Mary's Brook Road



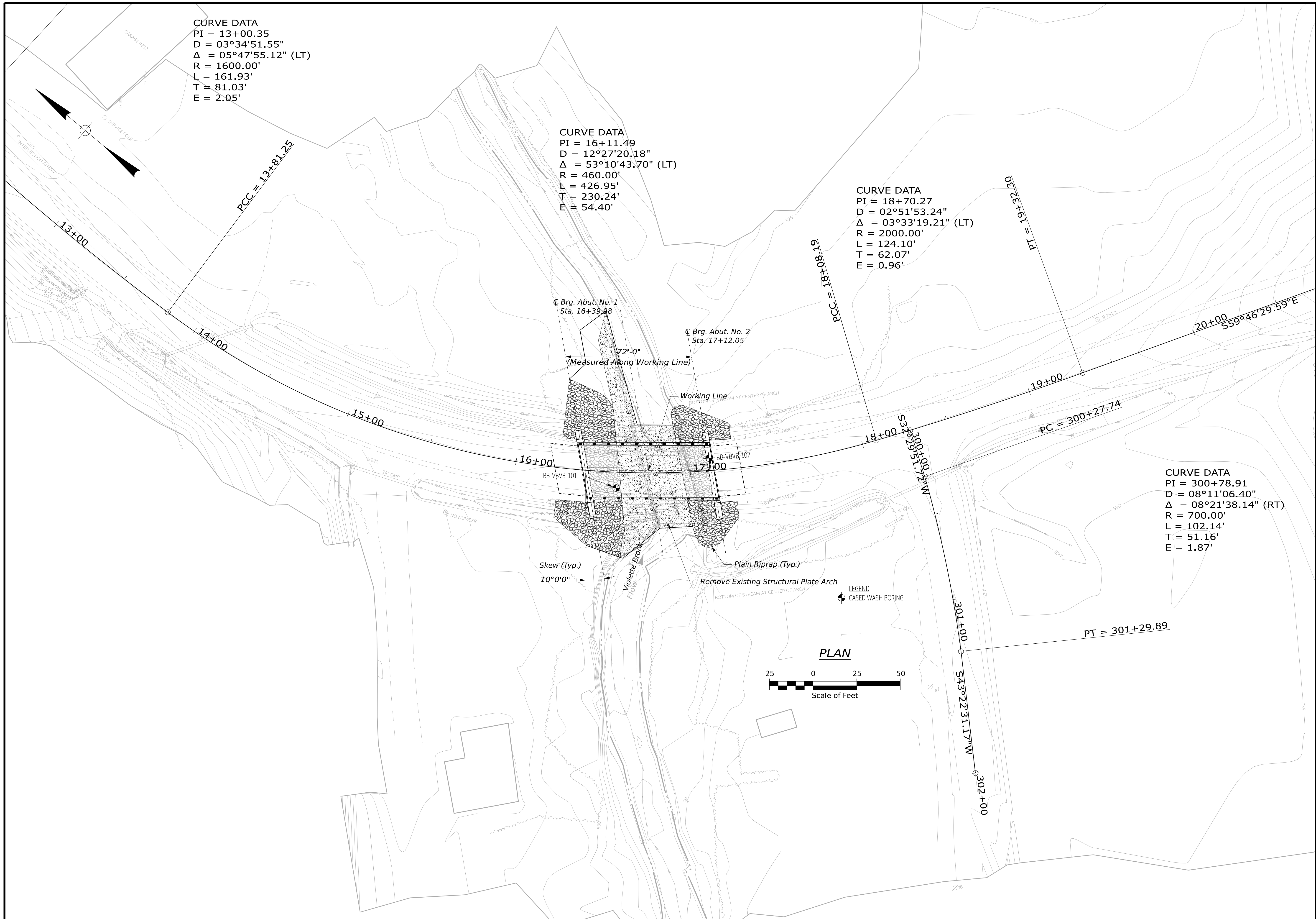
PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	C. Tobin	11/2025
CHECKED-REVIEWED	L. Pheasant	11/2025
DESIGN-DETAILED02		
DESIGN-DETAILED03		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE	P.E. NUMBER	DATE

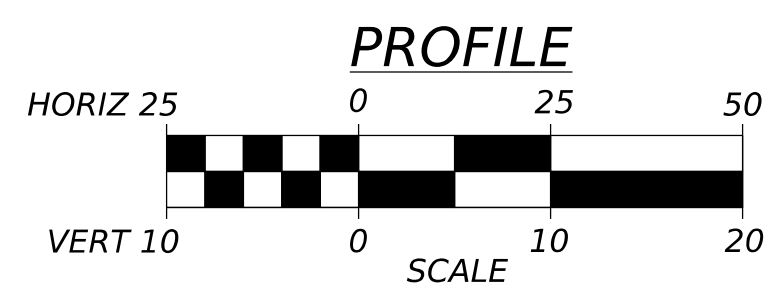
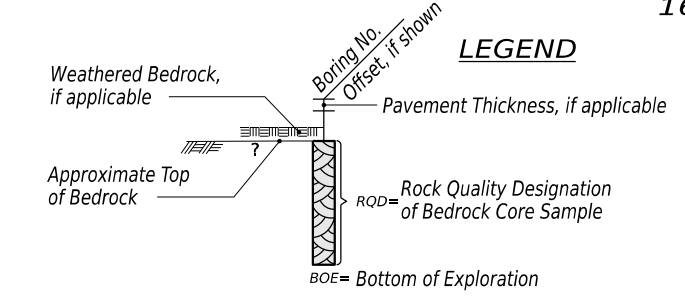
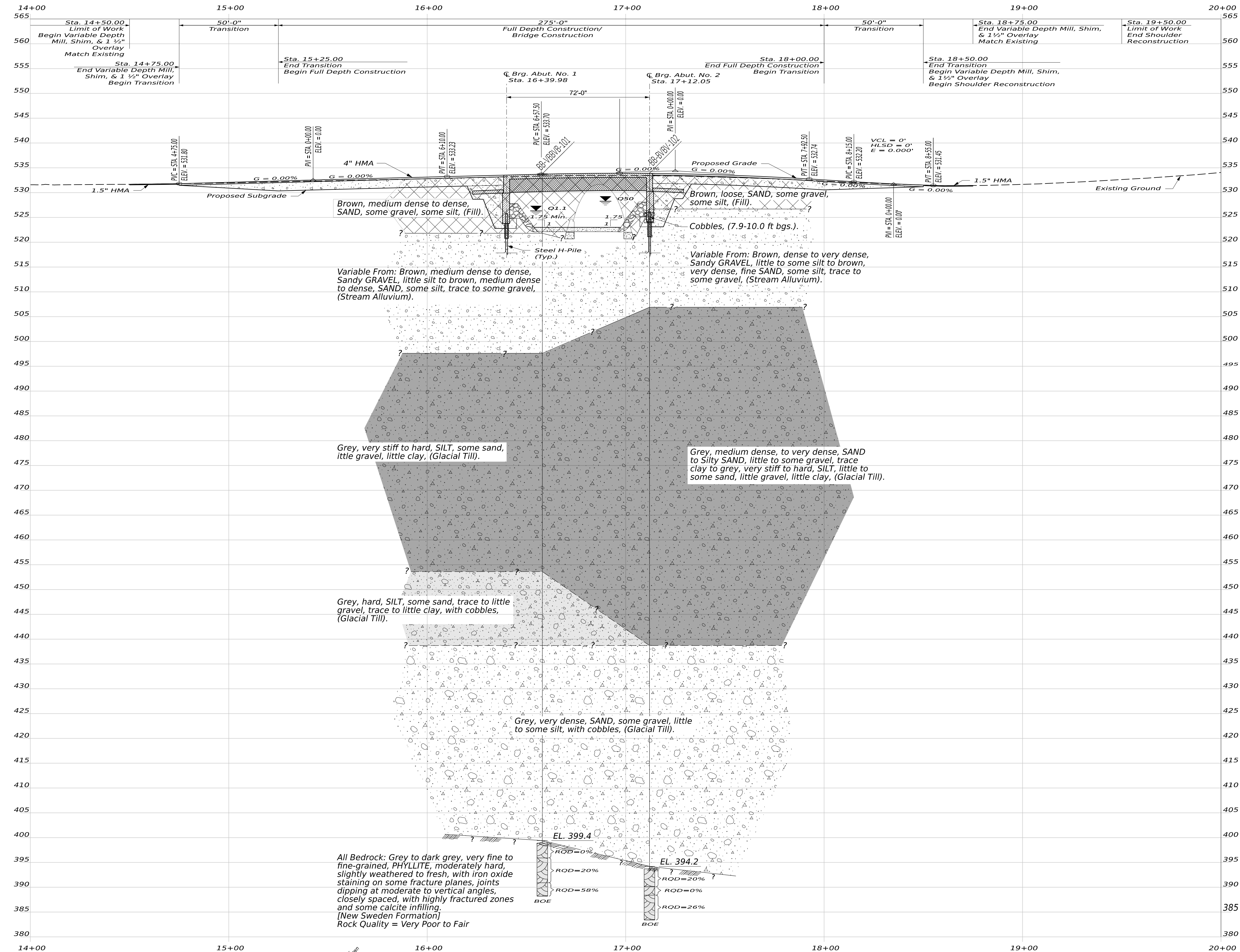
VAN BUREN  
ST. MARY'S BRIDGE  
PROFILE II

SHEET NUMBER  
**5**  
OF 33





STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
2608300		BRIDGE NO. 5309	
WIN		BRIDGE PLANS	
26083.00		26083.00	
PROJ. MANAGER	CHECKED-REVIEWED	DESIGNED-DETAILED	IN PUKAY
DESIGNED-DETAILED	IN PUKAY	DATE	OCT 2025
REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4
FIELD CHANGES			
BY	DATE	SIGNATURE	P.E. NUMBER
VAN BUREN		BORING LOCATION PLAN	
ST. MARY'S BRIDGE		SHEET NUMBER	
		6	
		OF 33	



**Notes:** This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

"Varying Amounts" term = Portion is 0 to 50 percent of total.

Username: Nathan P. Pulkey Date: 10/29/2025

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
26083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

PROJ. MANAGER	DATE	BY	DATE
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN-DETAILED02		T. WHITE	OCT 2025
DESIGN-DETAILED03		N. PULKEY	
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

**VAN BUREN  
ST. MARY'S BRIDGE**

**INTERPRETIVE SUBSURFACE PROFILE**

**SHEET NUMBER**  
**7**  
OF 33



Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS		Project: St. Mary's Bridge #5309 carries Catawampus Road over Volette Location: Van Buren, Maine		Boring No.: BB-VBVB-102	
Driller: MenaDOT		Elevation (ft.): 5339	Auger ID/OD: 5" Solid Stem		W/N: 2608300
Station: B0617/0609	Drill Bit: MWD/DB	Drill Bit: MWD/DB	Sampler: Standard Split Spoon		
Logged By: N. Pukay/B. Vitar	Rig Type: CMC 43C	Hummer: M/F/Fall: 1424/20"			
Date Start/Finish: 6/24/2024, 7/2/2024	Drilling Method: Cased Wash Boring	Core Barrel: ND-2"			
Boring Location: 17+12, 7.0 Ft Lt	Casing ID/OD: HW(4/5.5), NW(3/3.5)"	Water Level*: 85 Ft kgs			
Hummer Efficiency Factor: 0.962	Hummer Type: Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Casthead <input type="checkbox"/>				
<p>Deflection: S<sub>1</sub> = Penetration Field View Unmeasured Shear Strength (psi) T<sub>1</sub> = Pocket Torque Shear Strength (psi)                      S<sub>2</sub> = Split Spoon Sample S<sub>3</sub> = Split Spoon Sample S<sub>4</sub> = Split Spoon Sample S<sub>5</sub> = Split Spoon Sample                      S<sub>6</sub> = Split Spoon Sample S<sub>7</sub> = Split Spoon Sample S<sub>8</sub> = Split Spoon Sample S<sub>9</sub> = Split Spoon Sample                      S<sub>10</sub> = Split Spoon Sample S<sub>11</sub> = Split Spoon Sample S<sub>12</sub> = Split Spoon Sample S<sub>13</sub> = Split Spoon Sample                      S<sub>14</sub> = Split Spoon Sample S<sub>15</sub> = Split Spoon Sample S<sub>16</sub> = Split Spoon Sample S<sub>17</sub> = Split Spoon Sample                      S<sub>18</sub> = Split Spoon Sample S<sub>19</sub> = Split Spoon Sample S<sub>20</sub> = Split Spoon Sample S<sub>21</sub> = Split Spoon Sample                      S<sub>22</sub> = Split Spoon Sample S<sub>23</sub> = Split Spoon Sample S<sub>24</sub> = Split Spoon Sample S<sub>25</sub> = Split Spoon Sample                      S<sub>26</sub> = Split Spoon Sample S<sub>27</sub> = Split Spoon Sample S<sub>28</sub> = Split Spoon Sample S<sub>29</sub> = Split Spoon Sample                      S<sub>30</sub> = Split Spoon Sample S<sub>31</sub> = Split Spoon Sample S<sub>32</sub> = Split Spoon Sample S<sub>33</sub> = Split Spoon Sample                      S<sub>34</sub> = Split Spoon Sample S<sub>35</sub> = Split Spoon Sample S<sub>36</sub> = Split Spoon Sample S<sub>37</sub> = Split Spoon Sample                      S<sub>38</sub> = Split Spoon Sample S<sub>39</sub> = Split Spoon Sample S<sub>40</sub> = Split Spoon Sample S<sub>41</sub> = Split Spoon Sample                      S<sub>42</sub> = Split Spoon Sample S<sub>43</sub> = Split Spoon Sample S<sub>44</sub> = Split Spoon Sample S<sub>45</sub> = Split Spoon Sample                      S<sub>46</sub> = Split Spoon Sample S<sub>47</sub> = Split Spoon Sample S<sub>48</sub> = Split Spoon Sample S<sub>49</sub> = Split Spoon Sample                      S<sub>50</sub> = Split Spoon Sample S<sub>51</sub> = Split Spoon Sample S<sub>52</sub> = Split Spoon Sample S<sub>53</sub> = Split Spoon Sample                      S<sub>54</sub> = Split Spoon Sample S<sub>55</sub> = Split Spoon Sample S<sub>56</sub> = Split Spoon Sample S<sub>57</sub> = Split Spoon Sample                      S<sub>58</sub> = Split Spoon Sample S<sub>59</sub> = Split Spoon Sample S<sub>60</sub> = Split Spoon Sample S<sub>61</sub> = Split Spoon Sample                      S<sub>62</sub> = Split Spoon Sample S<sub>63</sub> = Split Spoon Sample S<sub>64</sub> = Split Spoon Sample S<sub>65</sub> = Split Spoon Sample                      S<sub>66</sub> = Split Spoon Sample S<sub>67</sub> = Split Spoon Sample S<sub>68</sub> = Split Spoon Sample S<sub>69</sub> = Split Spoon Sample                      S<sub>70</sub> = Split Spoon Sample S<sub>71</sub> = Split Spoon Sample S<sub>72</sub> = Split Spoon Sample S<sub>73</sub> = Split Spoon Sample                      S<sub>74</sub> = Split Spoon Sample S<sub>75</sub> = Split Spoon Sample S<sub>76</sub> = Split Spoon Sample S<sub>77</sub> = Split Spoon Sample                      S<sub>78</sub> = Split Spoon Sample S<sub>79</sub> = Split Spoon Sample S<sub>80</sub> = Split Spoon Sample S<sub>81</sub> = Split Spoon Sample                      S<sub>82</sub> = Split Spoon Sample S<sub>83</sub> = Split Spoon Sample S<sub>84</sub> = Split Spoon Sample S<sub>85</sub> = Split Spoon Sample                      S<sub>86</sub> = Split Spoon Sample S<sub>87</sub> = Split Spoon Sample S<sub>88</sub> = Split Spoon Sample S<sub>89</sub> = Split Spoon Sample                      S<sub>90</sub> = Split Spoon Sample S<sub>91</sub> = Split Spoon Sample S<sub>92</sub> = Split Spoon Sample S<sub>93</sub> = Split Spoon Sample                      S<sub>94</sub> = Split Spoon Sample S<sub>95</sub> = Split Spoon Sample S<sub>96</sub> = Split Spoon Sample S<sub>97</sub> = Split Spoon Sample                      S<sub>98</sub> = Split Spoon Sample S<sub>99</sub> = Split Spoon Sample S<sub>100</sub> = Split Spoon Sample</p>					
Depth (ft.)	Sample No.	Pen (lb/in)	Sample Depth (ft)	Time (min)	Visual Description and Remarks
0					3" HMA
5	284/11	5.00 - 6.70	5/3/3/2024/7"	6 10	Brown, moist, loose, SAND, some gravel, some silt. (G)
10	24/2	10.00 - 12.00	27/18/20/34	38 61	Grey, wet, very dense, Sandy GRAVEL, some silt. (Stream Alluvium) Set in HW casing at 10.0 ft kgs.
15	24/8	13.00 - 17.00	11/13/14/19	27 43	Brown, wet, dense, Sandy GRAVEL little silt. (Stream Alluvium)
20	24/6	20.00 - 22.00	13/13/18/16	31 50	Brown, wet, dense, Sandy GRAVEL, some silt. (Stream Alluvium)
25	24/11	25.00 - 27.00	11/14/20/25	34 55	Brown, wet, very dense, fine SAND, some silt. (Stream Alluvium)
30	24/8	30.00 - 32.00	13/15/16/15	31 50	Grey, wet, dense, Silty SAND, some gravel. (Glacial Till)
35	24/7	35.00 - 37.00	10/20/21/20	41 66	Grey, wet, very dense, SAND, some gravel, some silt. (Glacial Till)
40					Similar to 70 in wash water.
45					
50					
55	24/1	55.00 - 57.00	7/7/10/13	17 27	Grey, wet, medium dense, SAND, some silt, little gravel. (Glacial Till)
60					
65	90	65.00 - 67.00	7/10/13/19	23 37	Grey, wet, hard, SILT, some sand, little gravel, little clay. (Glacial Till)
70					
75					

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS		Project: St. Mary's Bridge #5309 carries Catawampus Road over Volette Location: Van Buren, Maine		Boring No.: BB-VBVB-102		
Driller: MenaDOT		Elevation (ft.): 5339	Auger ID/OD: 5" Solid Stem		W/N: 2608300	
Station: B0617/0609	Drill Bit: MWD/DB	Drill Bit: MWD/DB	Sampler: Standard Split Spoon			
Logged By: N. Pukay/B. Vitar	Rig Type: CMC 43C	Hummer: M/F/Fall: 1424/20"				
Date Start/Finish: 6/24/2024, 7/2/2024	Drilling Method: Cased Wash Boring	Core Barrel: ND-2"				
Boring Location: 17+12, 7.0 Ft Lt	Casing ID/OD: HW(4/5.5), NW(3/3.5)"	Water Level*: 85 Ft kgs				
Hummer Efficiency Factor: 0.962	Hummer Type: Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Casthead <input type="checkbox"/>					
<p>Deflection: S<sub>1</sub> = Penetration Field View Unmeasured Shear Strength (psi) T<sub>1</sub> = Pocket Torque Shear Strength (psi)                      S<sub>2</sub> = Split Spoon Sample S<sub>3</sub> = Split Spoon Sample S<sub>4</sub> = Split Spoon Sample S<sub>5</sub> = Split Spoon Sample                      S<sub>6</sub> = Split Spoon Sample S<sub>7</sub> = Split Spoon Sample S<sub>8</sub> = Split Spoon Sample S<sub>9</sub> = Split Spoon Sample                      S<sub>10</sub> = Split Spoon Sample S<sub>11</sub> = Split Spoon Sample S<sub>12</sub> = Split Spoon Sample S<sub>13</sub> = Split Spoon Sample                      S<sub>14</sub> = Split Spoon Sample S<sub>15</sub> = Split Spoon Sample S<sub>16</sub> = Split Spoon Sample S<sub>17</sub> = Split Spoon Sample                      S<sub>18</sub> = Split Spoon Sample S<sub>19</sub> = Split Spoon Sample S<sub>20</sub> = Split Spoon Sample S<sub>21</sub> = Split Spoon Sample                      S<sub>22</sub> = Split Spoon Sample S<sub>23</sub> = Split Spoon Sample S<sub>24</sub> = Split Spoon Sample S<sub>25</sub> = Split Spoon Sample                      S<sub>26</sub> = Split Spoon Sample S<sub>27</sub> = Split Spoon Sample S<sub>28</sub> = Split Spoon Sample S<sub>29</sub> = Split Spoon Sample                      S<sub>30</sub> = Split Spoon Sample S<sub>31</sub> = Split Spoon Sample S<sub>32</sub> = Split Spoon Sample S<sub>33</sub> = Split Spoon Sample                      S<sub>34</sub> = Split Spoon Sample S<sub>35</sub> = Split Spoon Sample S<sub>36</sub> = Split Spoon Sample S<sub>37</sub> = Split Spoon Sample                      S<sub>38</sub> = Split Spoon Sample S<sub>39</sub> = Split Spoon Sample S<sub>40</sub> = Split Spoon Sample S<sub>41</sub> = Split Spoon Sample                      S<sub>42</sub> = Split Spoon Sample S<sub>43</sub> = Split Spoon Sample S<sub>44</sub> = Split Spoon Sample S<sub>45</sub> = Split Spoon Sample                      S<sub>46</sub> = Split Spoon Sample S<sub>47</sub> = Split Spoon Sample S<sub>48</sub> = Split Spoon Sample S<sub>49</sub> = Split Spoon Sample                      S<sub>50</sub> = Split Spoon Sample S<sub>51</sub> = Split Spoon Sample S<sub>52</sub> = Split Spoon Sample S<sub>53</sub> = Split Spoon Sample                      S<sub>54</sub> = Split Spoon Sample S<sub>55</sub> = Split Spoon Sample S<sub>56</sub> = Split Spoon Sample S<sub>57</sub> = Split Spoon Sample                      S<sub>58</sub> = Split Spoon Sample S<sub>59</sub> = Split Spoon Sample S<sub>60</sub> = Split Spoon Sample S<sub>61</sub> = Split Spoon Sample                      S<sub>62</sub> = Split Spoon Sample S<sub>63</sub> = Split Spoon Sample S<sub>64</sub> = Split Spoon Sample S<sub>65</sub> = Split Spoon Sample                      S<sub>66</sub> = Split Spoon Sample S<sub>67</sub> = Split Spoon Sample S<sub>68</sub> = Split Spoon Sample S<sub>69</sub> = Split Spoon Sample                      S<sub>70</sub> = Split Spoon Sample S<sub>71</sub> = Split Spoon Sample S<sub>72</sub> = Split Spoon Sample S<sub>73</sub> = Split Spoon Sample                      S<sub>74</sub> = Split Spoon Sample S<sub>75</sub> = Split Spoon Sample S<sub>76</sub> = Split Spoon Sample S<sub>77</sub> = Split Spoon Sample                      S<sub>78</sub> = Split Spoon Sample S<sub>79</sub> = Split Spoon Sample S<sub>80</sub> = Split Spoon Sample S<sub>81</sub> = Split Spoon Sample                      S<sub>82</sub> = Split Spoon Sample S<sub>83</sub> = Split Spoon Sample S<sub>84</sub> = Split Spoon Sample S<sub>85</sub> = Split Spoon Sample                      S<sub>86</sub> = Split Spoon Sample S<sub>87</sub> = Split Spoon Sample S<sub>88</sub> = Split Spoon Sample S<sub>89</sub> = Split Spoon Sample                      S<sub>90</sub> = Split Spoon Sample S<sub>91</sub> = Split Spoon Sample S<sub>92</sub> = Split Spoon Sample S<sub>93</sub> = Split Spoon Sample                      S<sub>94</sub> = Split Spoon Sample S<sub>95</sub> = Split Spoon Sample S<sub>96</sub> = Split Spoon Sample S<sub>97</sub> = Split Spoon Sample                      S<sub>98</sub> = Split Spoon Sample S<sub>99</sub> = Split Spoon Sample S<sub>100</sub> = Split Spoon Sample</p>						
Depth (ft.)	Sample No.	Pen (lb/in)	Sample Depth (ft)	Time (min)	Visual Description and Remarks	
75					Top of Bedrock at Elev. 394.2 ft. (Glacial Till)	
80	100	24/11	75.00 - 77.00	7/7/10/12	17 27	Grey, wet, very stiff, SILT, little clay, little sand. (Glacial Till) Set in casing at 75.0 ft kgs.
85	110	24/8	85.00 - 87.00	4/7/8/10	15 24	Grey, wet, medium dense, Silty, fine SAND, trace clay. (Glacial Till)
90						
95	120	24/10	95.00 - 97.00	23/24/25/26	49 79	Grey, wet, very dense, Silty SAND, little gravel. (Glacial Till)
100					Drilling slowed significantly at approximately 100 ft kgs. 700-1000 psi down pressure required to advance hole.	
105	130	10/8/5	105.00 - 105.90	37/44/48"	---	Grey, wet, very dense, SAND, some silt, some gravel. (Glacial Till)
110					Occasional cobble.	
115	140	12/7	115.00 - 116.00	33/70	---	Similar to 130.
120					Occasional cobble.	
125					Artisan water pressure at 125.0 ft kgs.	
130					Occasional cobble.	
135						
140	R1	43/2-43/2	143.20 - 143.80	R00 + 200	NO-2	Top of Bedrock at Elev. 394.2 ft. (Glacial Till) R1 Bedrock Grey to dark grey, very fine to fine-grained, PHYLITE, moderately hard, slightly weathered joint faces, joints dipping at steep to vertical angles, closely spaced with Fractured zones. (New Sweden Formation) Rock Quality = Very Poor R2 Core Tests (insect) 143.2-143.2 Ft (S19) 143.2-143.2 Ft (S20) 143.2-143.2 Ft (S21) 143.2-143.2 Ft (S22) 143.2-143.2 Ft (S23) 100% Recovery
145	R2	20/4/7	143.80 - 145.50	R00 + 00		R2 Bedrock Grey to dark grey, very fine to fine-grained, PHYLITE, moderately hard, slightly weathered, highly Fractures. (New Sweden Formation) Rock Quality = Very Poor R3 Core Tests (insect) 145.5-145.5 Ft (S24) 145.5-145.5 Ft (S25) 145.5-145.5 Ft (S26) 145.5-145.5 Ft (S27) 100% Recovery
150	R3	60/60	145.50 - 150.50	R00 + 200		R3 Bedrock Grey to dark grey, very fine to fine-grained, PHYLITE, moderately hard, slightly weathered, highly Fractures. (New Sweden Formation) Rock Quality = Very Poor R4 Core Tests (insect) 145.5-145.5 Ft (S28) 145.5-145.5 Ft (S29) 145.5-145.5 Ft (S30) 145.5-145.5 Ft (S31) 100% Recovery
155						
160						
165						
170						
175						

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS		Project: St. Mary's Bridge #5309 carries Catawampus Road over Volette Location: Van Buren, Maine		Boring No.: BB-VBVB-102	
Driller: MenaDOT		Elevation (ft.): 5339	Auger ID/OD: 5" Solid Stem		W/N: 2608300
Station: B0617/0609	Drill Bit: MWD/DB	Drill Bit: MWD/DB	Sampler: Standard Split Spoon		
Logged By: N. Pukay/B. Vitar	Rig Type: CMC 43C	Hummer: M/F/Fall: 1424/20"			
Date Start/Finish: 6/24/2024, 7/2/2024	Drilling Method: Cased Wash Boring	Core Barrel: ND-2"			
Boring Location: 17+12, 7.0 Ft Lt	Casing ID/OD: HW(4/5.5), NW(3/3.5)"	Water Level*: 85 Ft kgs			
Hummer Efficiency Factor: 0.962	Hummer Type: Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Casthead <input type="checkbox"/>				
<p>Deflection: S<sub>1</sub> = Penetration Field View Unmeasured Shear Strength (psi) T<sub>1</sub> = Pocket Torque Shear Strength (psi)                      S<sub>2</sub> = Split Spoon Sample S<sub>3</sub> = Split Spoon Sample S<sub>4</sub> = Split Spoon Sample S<sub>5</sub> = Split Spoon Sample                      S<sub>6</sub> = Split Spoon Sample S<sub>7</sub> = Split Spoon Sample S<sub>8</sub> = Split Spoon Sample S<sub>9</sub> = Split Spoon Sample                      S<sub>10</sub> = Split Spoon Sample S<sub>11</sub> = Split Spoon Sample S<sub>12</sub> = Split Spoon Sample S<sub>13</sub> = Split Spoon Sample                      S<sub>14</sub> = Split Spoon Sample S<sub>15</sub> = Split Spoon Sample S<sub>16</sub> = Split Spoon Sample S<sub>17</sub> = Split Spoon Sample                      S<sub>18</sub> = Split Spoon Sample S<sub>19</sub> = Split Spoon Sample S<sub>20</sub> = Split Spoon Sample S<sub>21</sub> = Split Spoon Sample                      S<sub>22</sub> = Split Spoon Sample S<sub>23</sub> = Split Spoon Sample S<sub>24</sub> = Split Spoon Sample S<sub>25</sub> = Split Spoon Sample                      S<sub>26</sub> = Split Spoon Sample S<sub>27</sub> = Split Spoon Sample S<sub>28</sub> = Split Spoon Sample S<sub>29</sub> = Split Spoon Sample                      S<sub>30</sub> = Split Spoon Sample S<sub>31</sub> = Split Spoon Sample S<sub>32</sub> = Split Spoon Sample S<sub>33</sub> = Split Spoon Sample                      S<sub>34</sub> = Split Spoon Sample S<sub>35</sub> = Split Spoon Sample S<sub>36</sub> = Split Spoon Sample S<sub>37</sub> = Split Spoon Sample                      S<sub>38</sub> = Split Spoon Sample S<sub>39</sub> = Split Spoon Sample S<sub>40</sub> = Split Spoon Sample S<sub>41</sub> = Split Spoon Sample                      S<sub>42</sub> = Split Spoon Sample S<sub>43</sub> = Split Spoon Sample S<sub>44</sub> = Split Spoon Sample S<sub>45</sub> = Split Spoon Sample                      S<sub>46</sub> = Split Spoon Sample S<sub>47</sub> = Split Spoon Sample S<sub>48</sub> = Split Spoon Sample S<sub>49</sub> = Split Spoon Sample                      S<sub>50</sub> = Split Spoon Sample S<sub>51</sub> = Split Spoon Sample S<sub>52</sub> = Split Spoon Sample S<sub>53</sub> = Split Spoon Sample                      S<sub>54</sub> = Split Spoon Sample S<sub>55</sub> = Split Spoon Sample S<sub>56</sub> = Split Spoon Sample S<sub>57</sub> = Split Spoon Sample                      S<sub>58</sub> = Split Spoon Sample S<sub>59</sub> = Split Spoon Sample S<sub>60</sub> = Split Spoon Sample S<sub>61</sub> = Split Spoon Sample                      S<sub>62</sub> = Split Spoon Sample S<sub>63</sub> = Split Spoon Sample S<sub>64</sub> = Split Spoon Sample S<sub>65</sub> = Split Spoon Sample                      S<sub>66</sub> = Split Spoon Sample S<sub>67</sub> = Split Spoon Sample S<sub>68</sub> = Split Spoon Sample S<sub>69</sub> = Split Spoon Sample                      S<sub>70</sub> = Split Spoon Sample S<sub>71</sub> = Split Spoon Sample S<sub>72</sub> = Split Spoon Sample S<sub>73</sub> = Split Spoon Sample                      S<sub>74</sub> = Split Spoon Sample S<sub>75</sub> = Split Spoon Sample S<sub>76</sub> = Split Spoon Sample S<sub>77</sub> = Split Spoon Sample                      S<sub>78</sub> = Split Spoon Sample S<sub>79</sub> = Split Spoon Sample S<sub>80</sub> = Split Spoon Sample S<sub>81</sub> = Split Spoon Sample                      S<sub>82</sub> = Split Spoon Sample S<sub>83</sub> = Split Spoon Sample S<sub>84</sub> = Split Spoon Sample S<sub>85</sub> = Split Spoon Sample                      S<sub>86</sub> = Split Spoon Sample S<sub>87</sub> = Split Spoon Sample S<sub>88</sub> = Split Spoon Sample S<sub>89</sub> = Split Spoon Sample                      S<sub>90</sub> = Split Spoon Sample S<sub>91</sub> = Split Spoon Sample S<sub>92</sub> = Split Spoon Sample S<sub>93</sub> = Split Spoon Sample                      S<sub>94</sub> = Split Spoon Sample S<sub>95</sub> = Split Spoon Sample S<sub>96</sub> = Split Spoon Sample S<sub>97</sub> = Split Spoon Sample                      S<sub>98</sub> = Split Spoon Sample S<sub>99</sub> = Split Spoon Sample S<sub>100</sub> = Split Spoon Sample</p>					
Depth (ft.)	Sample No.	Pen (lb/in)	Sample Depth (ft)	Time (min)	Visual Description and Remarks
175					3834
180					R3 Bedrock Grey to dark grey, very fine to fine-grained, PHYLITE, moderately hard, slightly weathered joint faces, joints dipping at steep to moderate angles, closely spaced. (New Sweden Formation) Rock Quality = Poor R3 Core Tests (insect) 145.5-145.5 Ft (S31) 145.5-145.5 Ft (S32) 145.5-145.5 Ft (S33) 145.5-145.5 Ft (S34) 145.5-145.5 Ft (S35) 100% Recovery
185					Bottom of Exploration at 185.5 feet below ground surface.
190					
195					
200					
205					
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480					
485					
490					
495					
500					

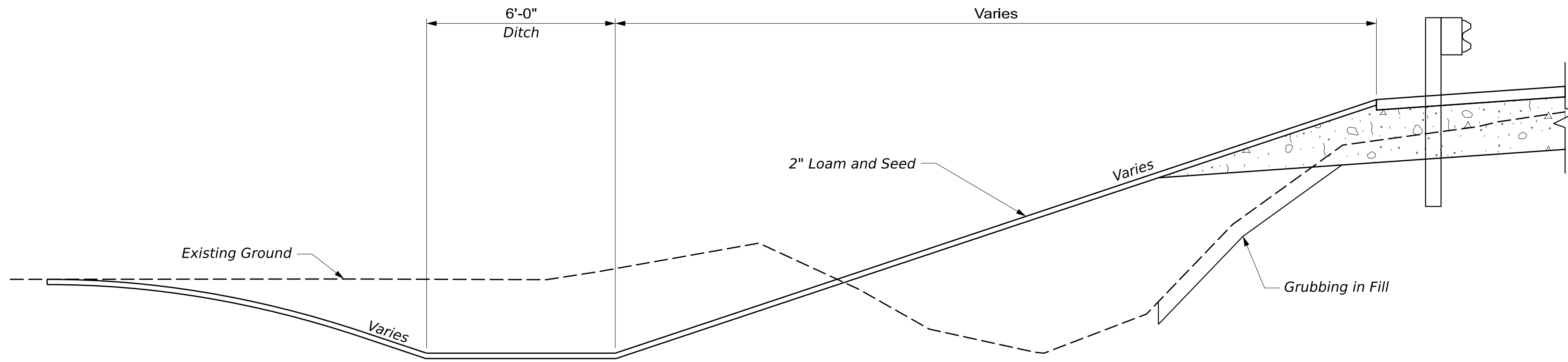
**STATE OF MAINE**  
**DEPARTMENT OF TRANSPORTATION**  
**2608300**  
**WIN**  
**26083.00**  
**BRIDGE NO. 5309**  
**BRIDGE PLANS**

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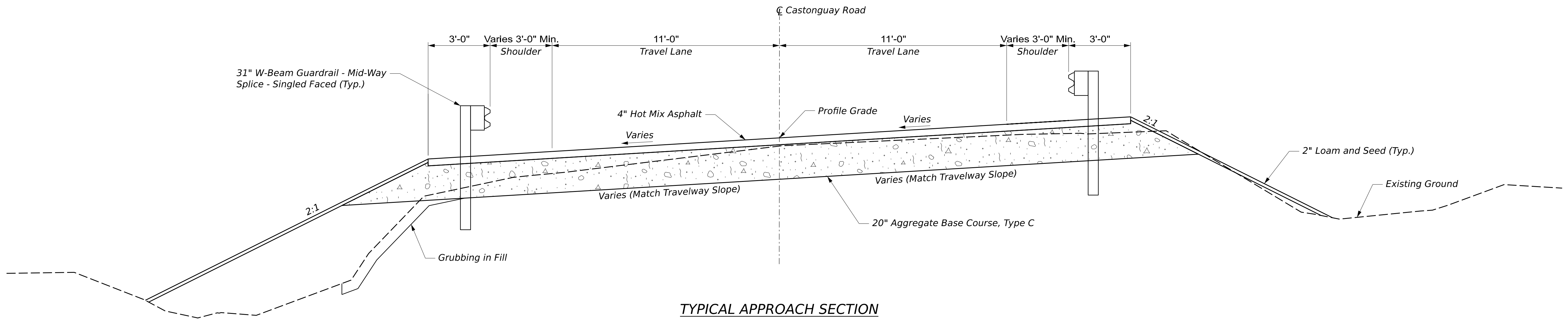
Castonguay Road Cross Slope Table				
Left Shoulder	Left Travel Lane	Station	Right Travel Lane	Right Shoulder
Match Existing	Match Existing	14+65	Match Existing	Match Existing
-9.9%	-9.9%	14+75	2.0%	2.0%
-9.9%	-9.9%	15+00	3.0%	3.0%
-9.9%	-9.9%	15+25	4.0%	4.0%
-8.9%	-8.9%	15+50	5.0%	5.0%
-8.0%	-8.0%	15+75	6.0%	6.0%
-7.0%	-7.0%	16+00	6.0%	6.0%
-6.0%	-6.0%	16+25	6.0%	6.0%
-	-	17+00	-	-
-6.0%	-6.0%	17+25	6.0%	6.0%
-6.0%	-6.0%	17+50	4.8%	4.8%
-6.0%	-6.0%	17+75	3.7%	3.7%
-6.0%	-6.0%	18+00	2.5%	2.5%
-6.0%	-6.0%	18+25	1.9%	1.9%
-5.4%	-5.4%	18+50	0.8%	-4.0%
Match Existing	Match Existing	18+60	Match Existing	Match Existing

**NOTES:**

- The pavement, base, and subbase depths as shown on the plans are intended to be nominal.
- When superelevation exceeds the slope of the low side shoulder, the low side shoulder's pavement shall have the same cross slope as the travelway.
- Crowns for the normal and superelevation sections for all courses of the subbase and pavement shall be straight, unless otherwise noted on the plans.



**TYPICAL DITCH SECTION**



**TYPICAL APPROACH SECTION**

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
026083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MANAGER	BY	DATE
Michael Wight	C. Tobin	11/2025
DESIGN-DETAILED	C. Tobin	11/2025
CHECKED-REVIEWED	L. Pheasant	
DESIGN-DETAILED02		
DESIGN-DETAILED03		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

VAN BUREN  
ST. MARY'S BRIDGE  
TYPICAL SECTIONS

SHEET NUMBER

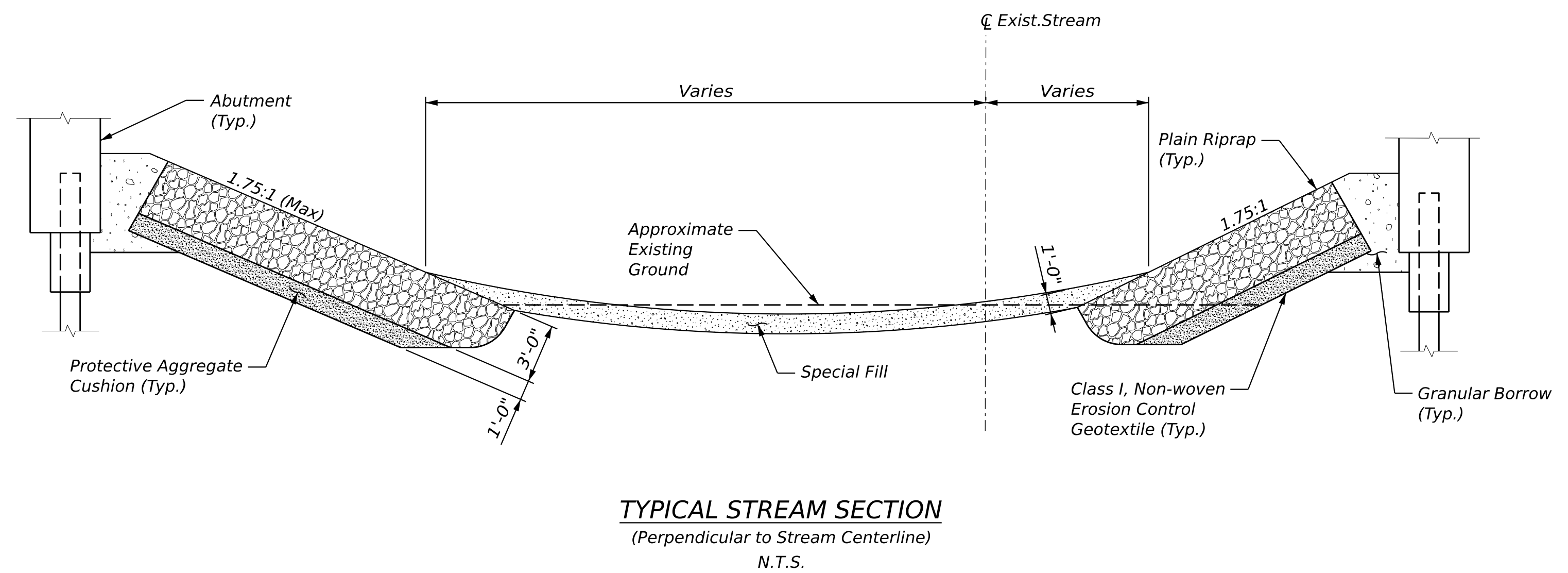
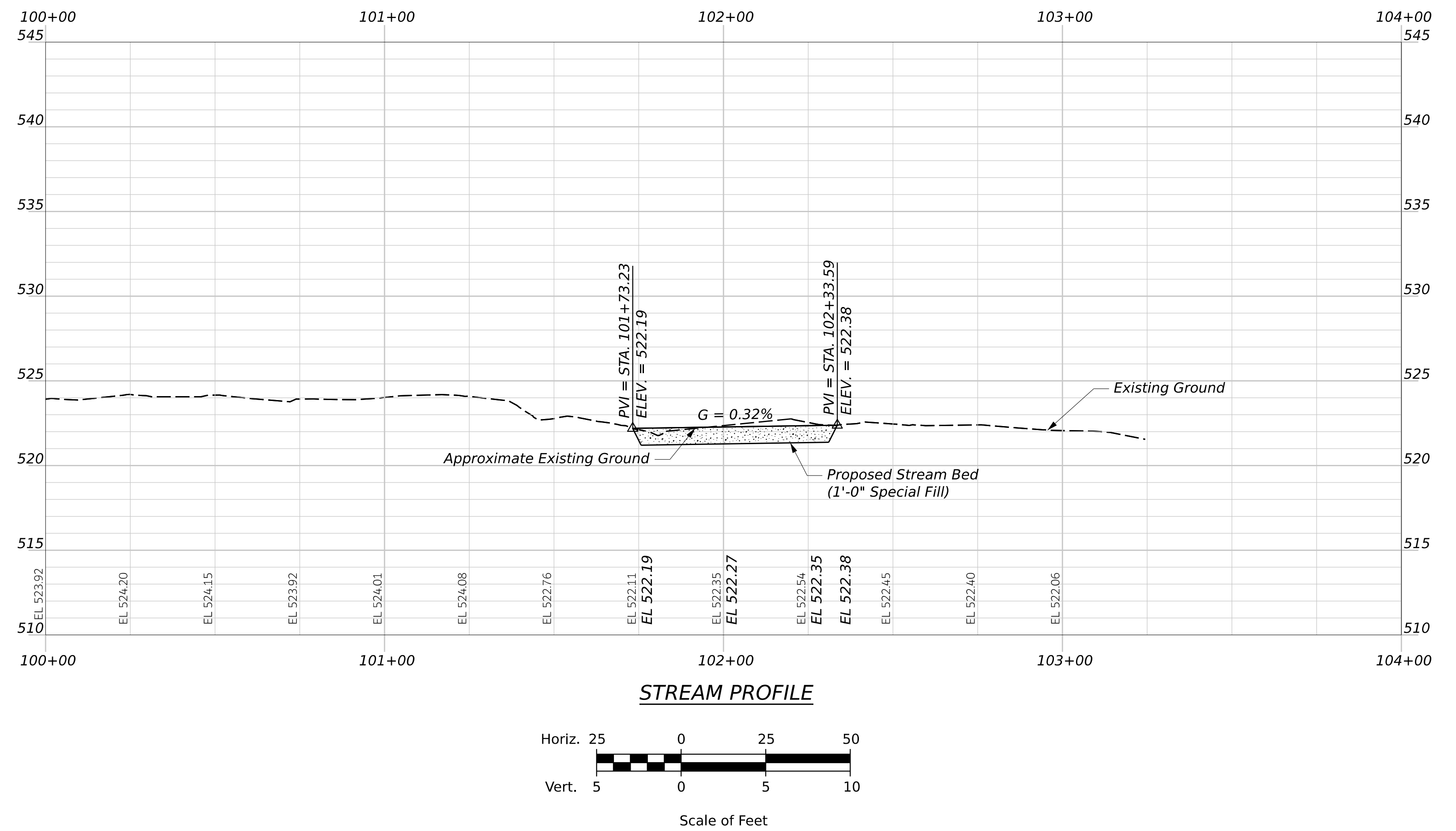
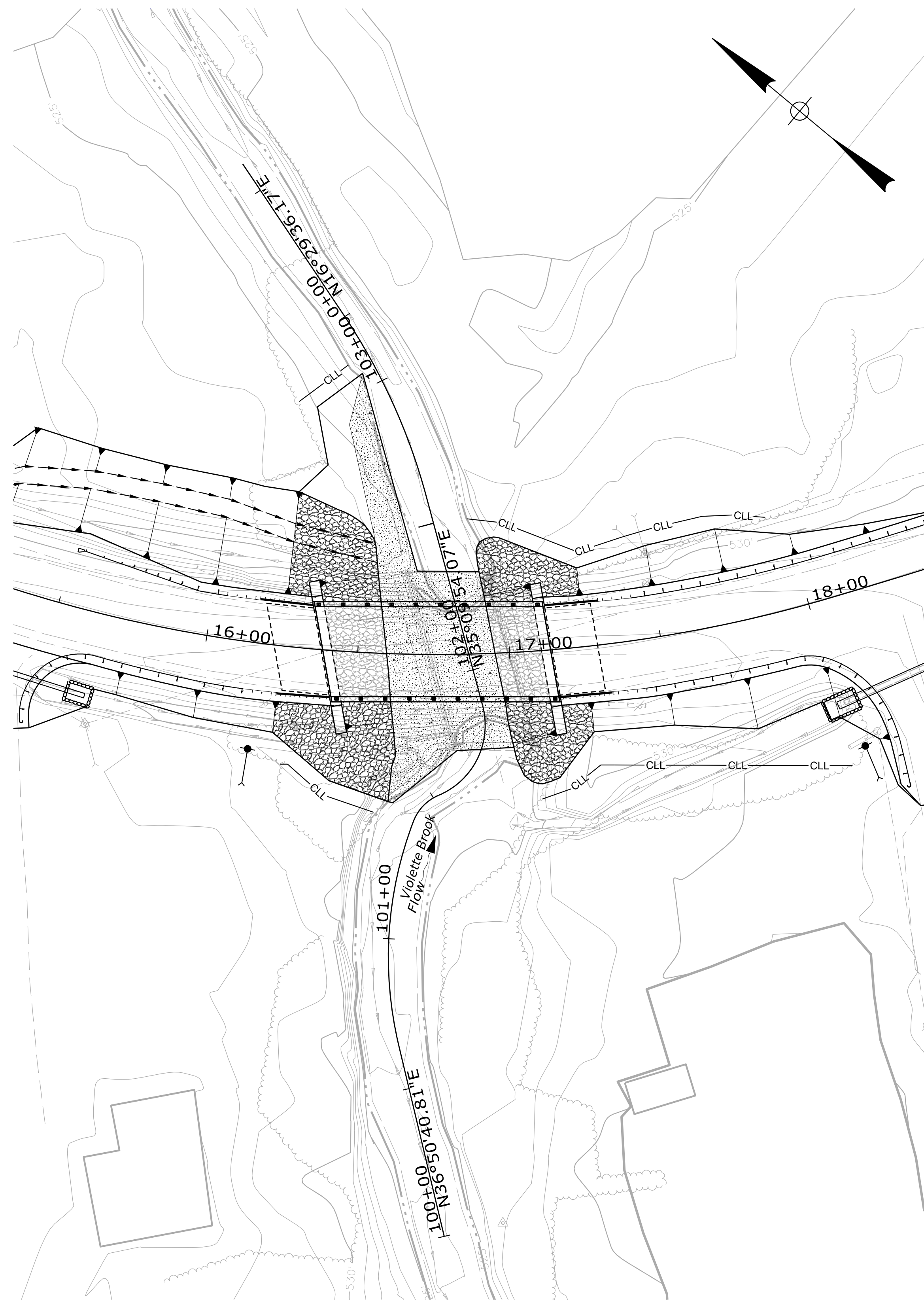
10

OF 33



Date: 11/25/2025

Username: ctobin



**NOTES:**  
1. Do not excavate for Special Fill where existing streambed is suitable as determined by the Resident.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
BRIDGE NO. 5309 026083.00  
BRIDGE PLANS

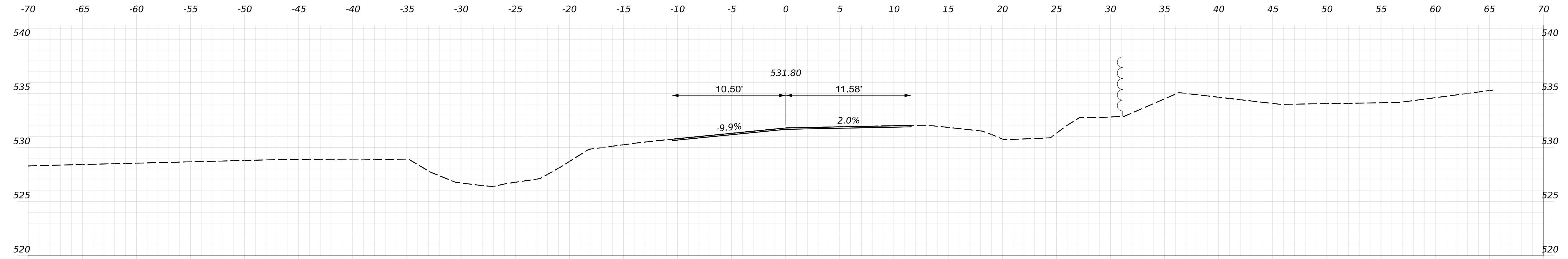
PROJ. MANAGER	BY	DATE	SIGNATURE
DESIGN-REVIEWED	C. Tobin	11/2025	
CHECKED-REVIEWED	L. Phipps	11/2025	
DESIGN-REVIEWED	B. Gerner		
DESIGN-REVIEWED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

**AROOSTOOK  
CASTONGUAY ROAD  
CHANNEL PROFILE &  
TYPICAL SECTION**

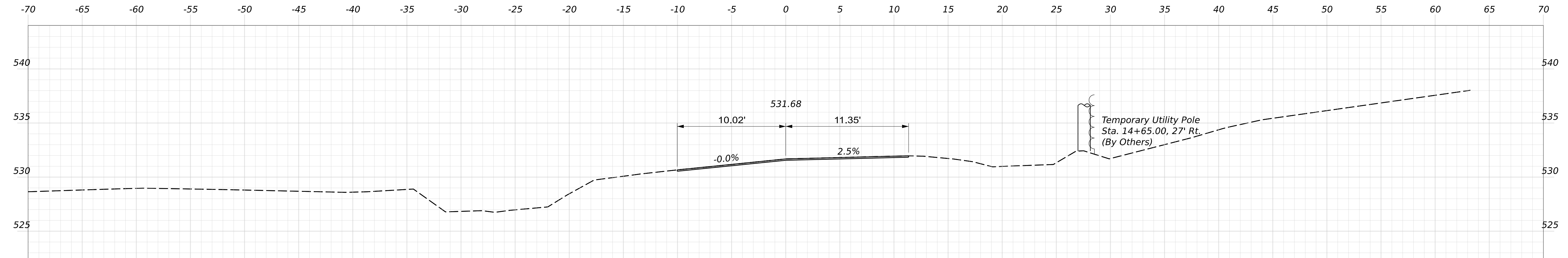
**SHEET NUMBER**  
**11**  
OF 33



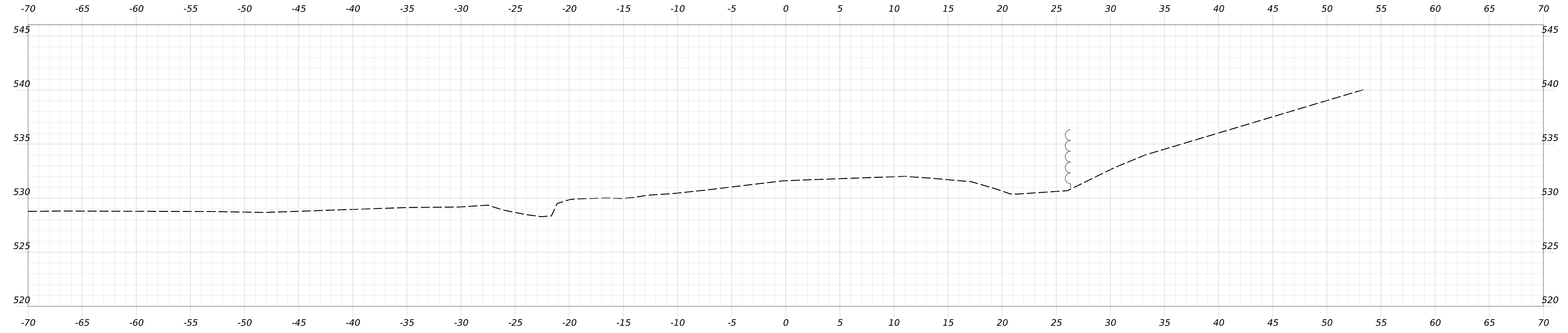
Username: crobini Date: 11/25/2025



Sta. 14+75.00  
End Variable Depth Mill, Shim, & 1 1/2" Overlay  
Begin Transition



Sta. 14+50.00  
Limit of Work  
Begin Variable Depth Mill, Shim, & 1 1/2" Overlay  
Match Existing



14+25.00



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
BRIDGE NO. 5309 WIN 026083.00 BRIDGE PLANS

PROJ. MANAGER	Michael Wight
DESIGN-DETAILED	C. Tobin
CHECKED-REVIEWED	L. Phipps
DESIGN-DETAILED02	
DESIGN-DETAILED03	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

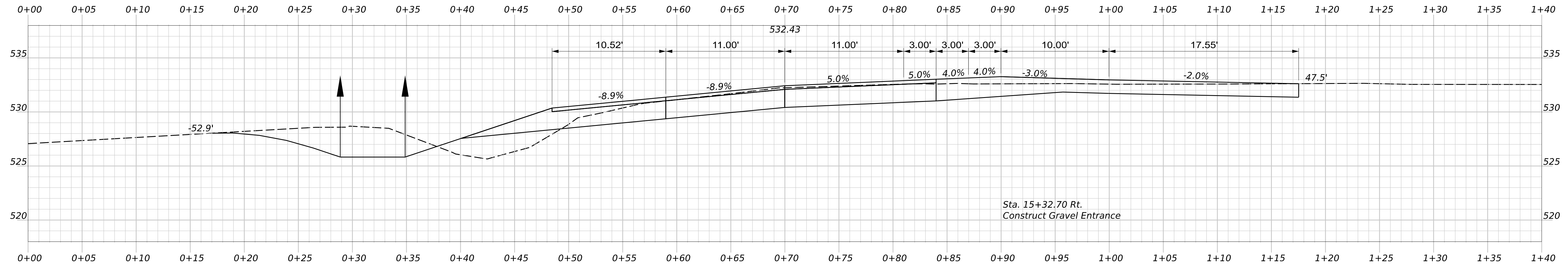
DATE	11/2025
BY	C. Tobin
BY	B. Grenier
SIGNATURE	
P.E. NUMBER	
DATE	

VAN BUREN  
ST. MARY'S BRIDGE  
CASTONGUAY ROAD  
CROSS SECTIONS

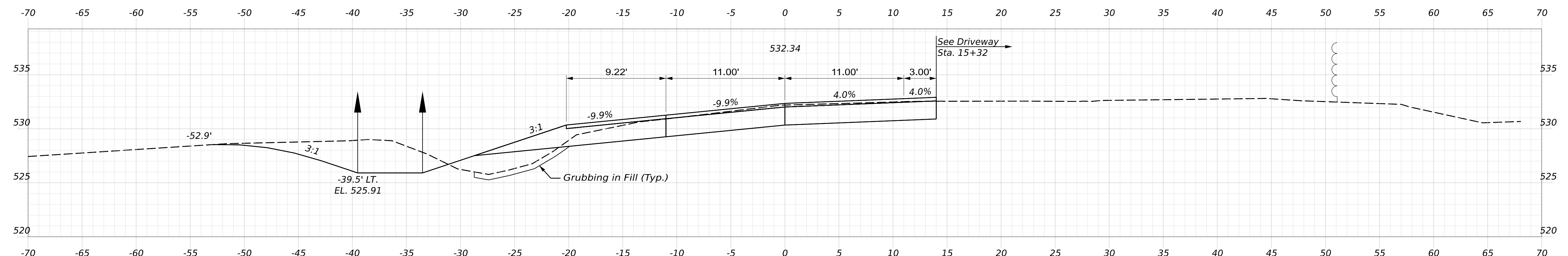
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12  
OF 33

Date: 11/25/2025

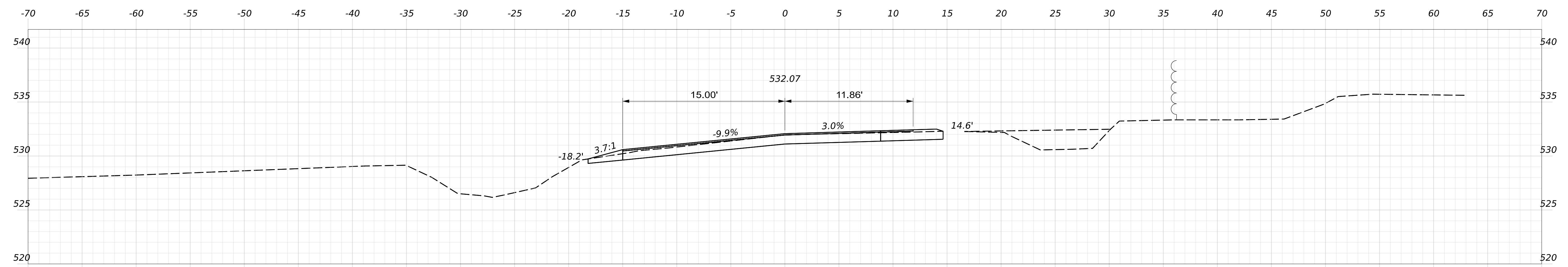
Username: crobini



15+32.00



15+25.00



15+00.00



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
026083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

SIGNATURE	P.E. NUMBER	DATE

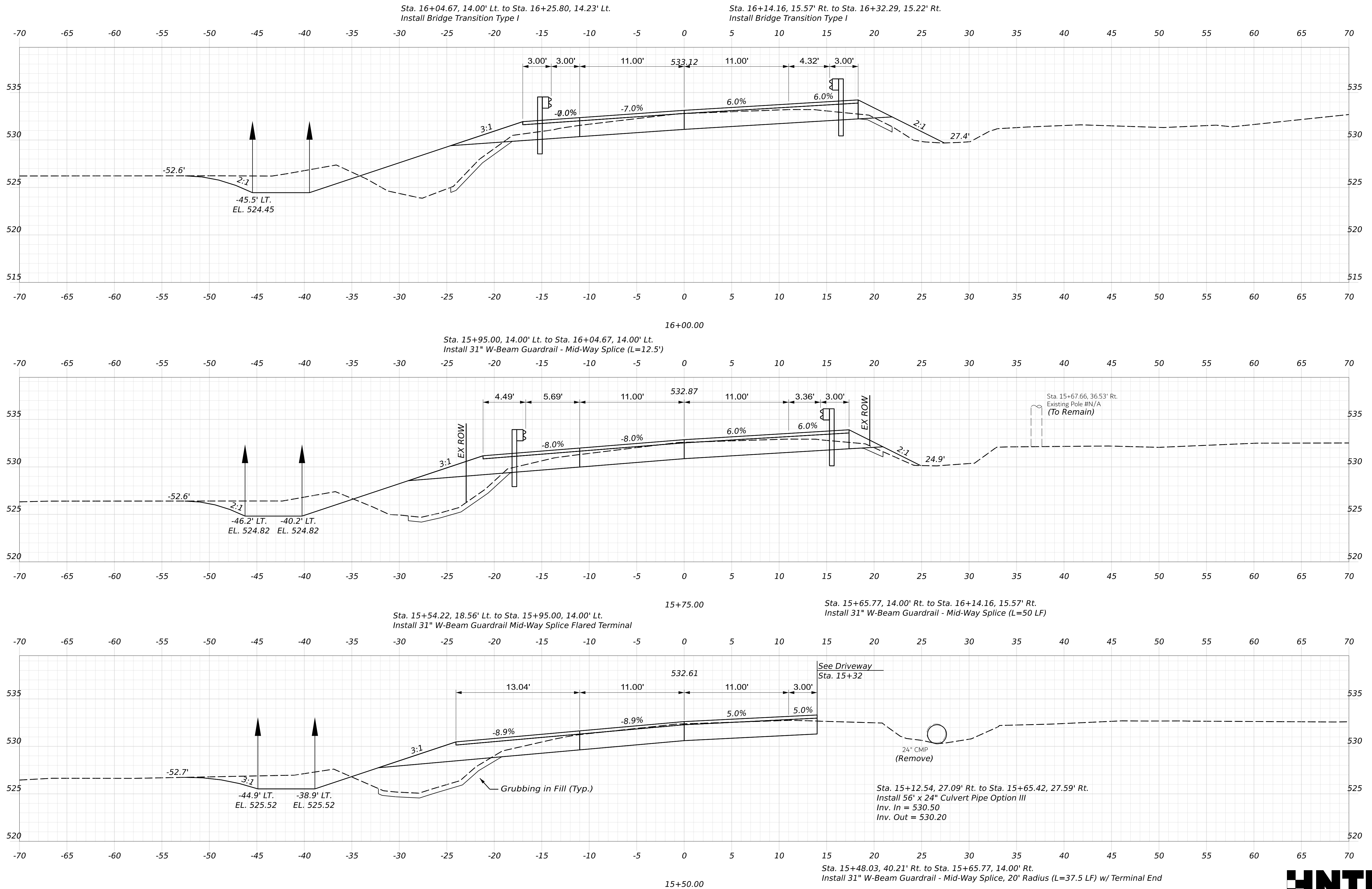
PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	C. Tobin	11/2025
CHECKED-REVIEWED	L. Phipps	11/2025
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

VAN BUREN  
ST. MARY'S BRIDGE  
CASTONGUAY ROAD  
CROSS SECTIONS

SHEET NUMBER  
**13**  
OF 33

Date: 11/25/2025

Username: crobini



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
026083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

PROJ. MANAGER	DATE
CHECKED-REVIEWED	11/2025
DESIGNED-DETAILED	11/2025
DESIGNED-DETAILED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

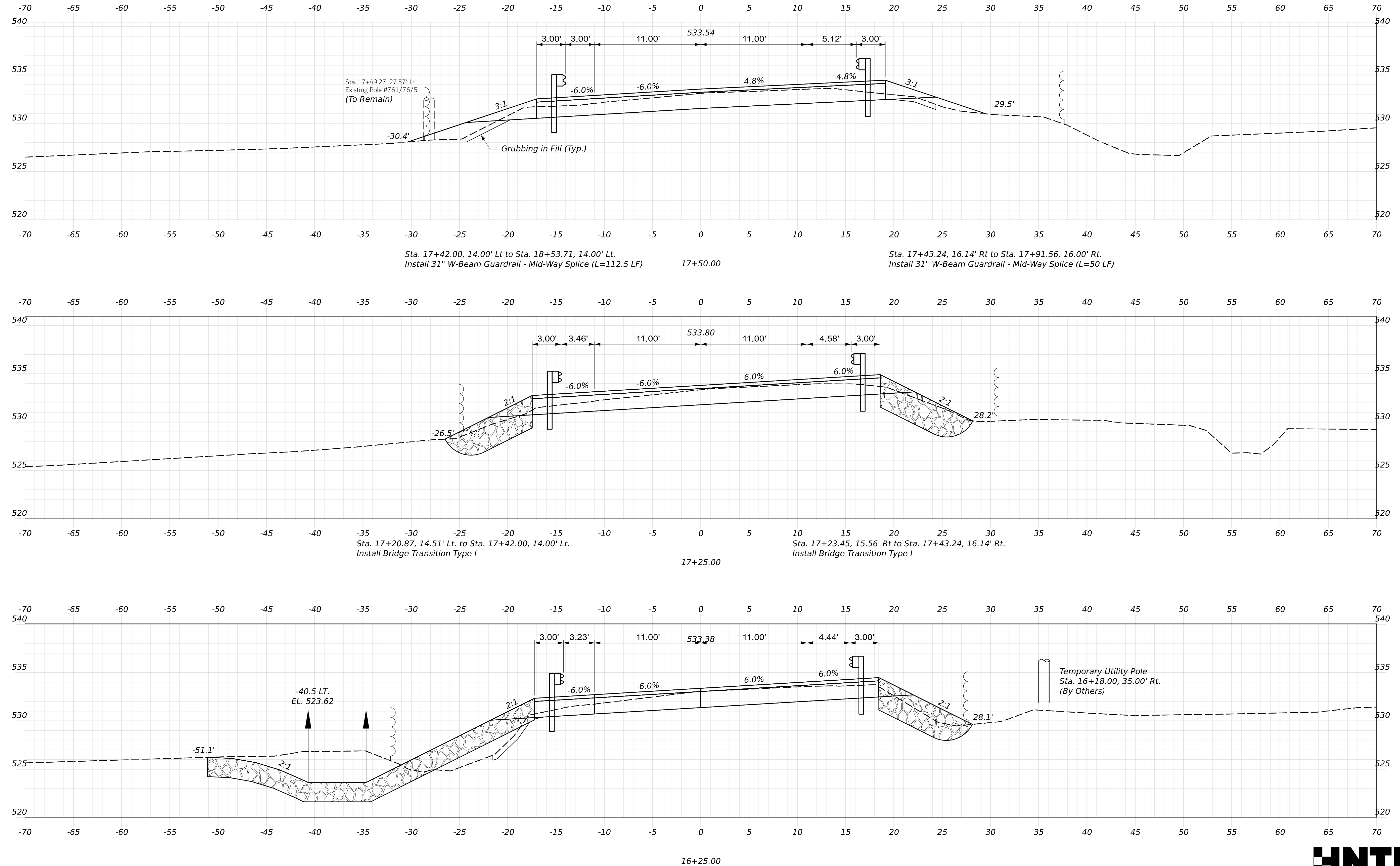
BY	DATE
C. Tobin	11/2025
B. Gerner	
Michael Wright	
C. Tobin	
L. Phipps	
PROJ. MANAGER	
CHECKED-REVIEWED	
DESIGNED-DETAILED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

**VAN BUREN**  
**ST. MARY'S BRIDGE**  
**CASTONGUAY ROAD**  
**CROSS SECTIONS**

SHEET NUMBER  
**14**  
OF 33



Username: crobini Date: 11/25/2025



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
026083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED C. Tobin	C. Tobin	11/2025
CHECKED-REVIEWED L. Pheasant	L. Pheasant	11/2025
DESIGN-DETAILED02		
DESIGN-DETAILED03		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

VAN BUREN  
ST. MARY'S BRIDGE  
CASTONGUAY ROAD  
CROSS SECTIONS

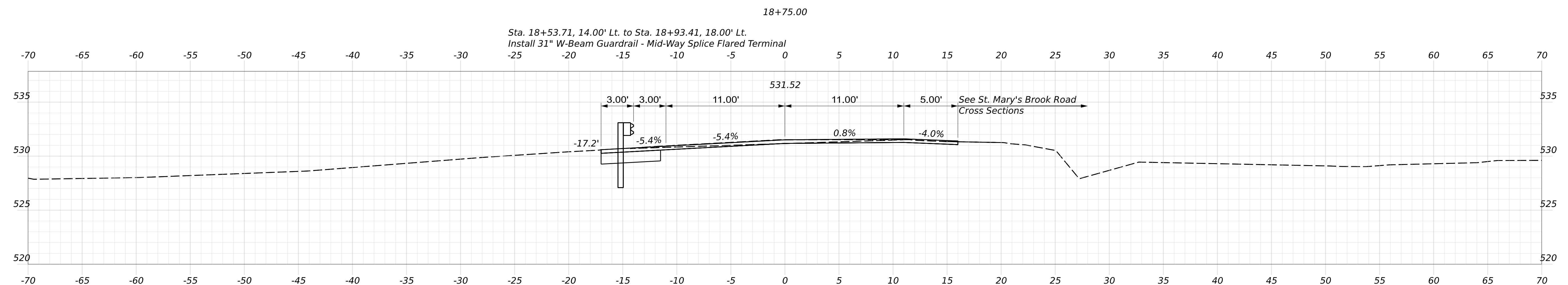
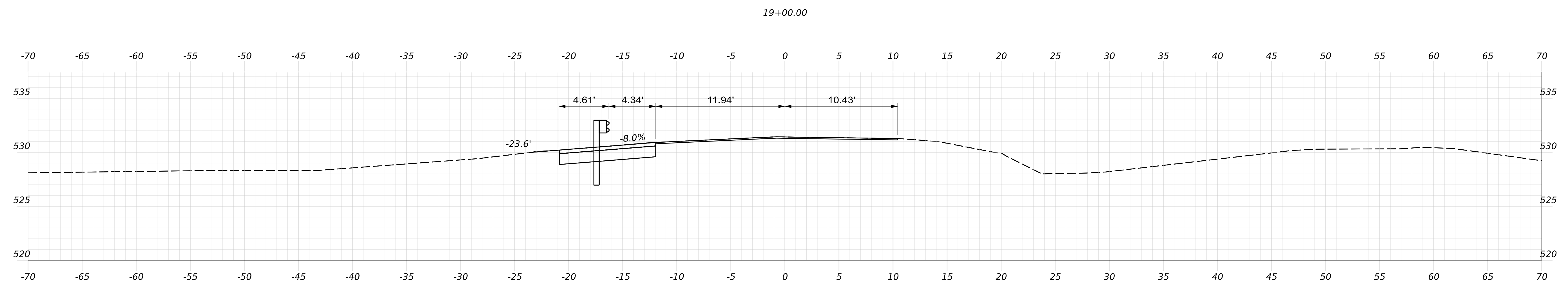
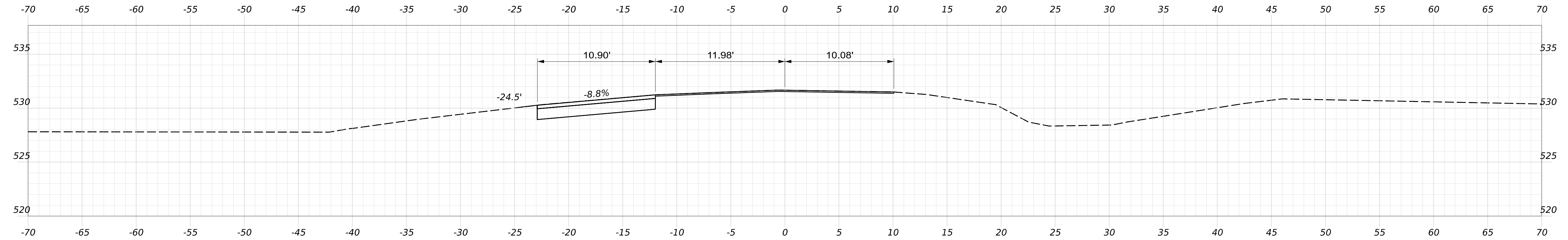
SHEET NUMBER  
15  
OF 33





Date: 11/25/2025

Username: crobini



Sta. 18+50.00  
 End Transition  
 Begin Variable Depth Mill, Shim, & 1 1/2" Overlay  
 Begin Shoulder Construction

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 2608300  
 WIN  
 026083.00  
 BRIDGE NO. 5309  
 BRIDGE PLANS

DATE: 11/20/25  
 BY: C. Tobin  
 MICHAEL WIGHT: C. Tobin, L. Phipps  
 SIGNATURE: \_\_\_\_\_  
 P.E. NUMBER: \_\_\_\_\_  
 DATE: \_\_\_\_\_

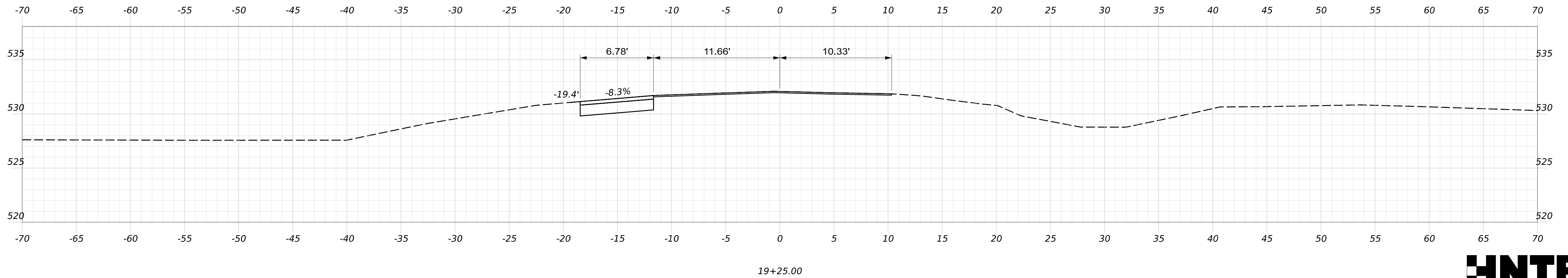
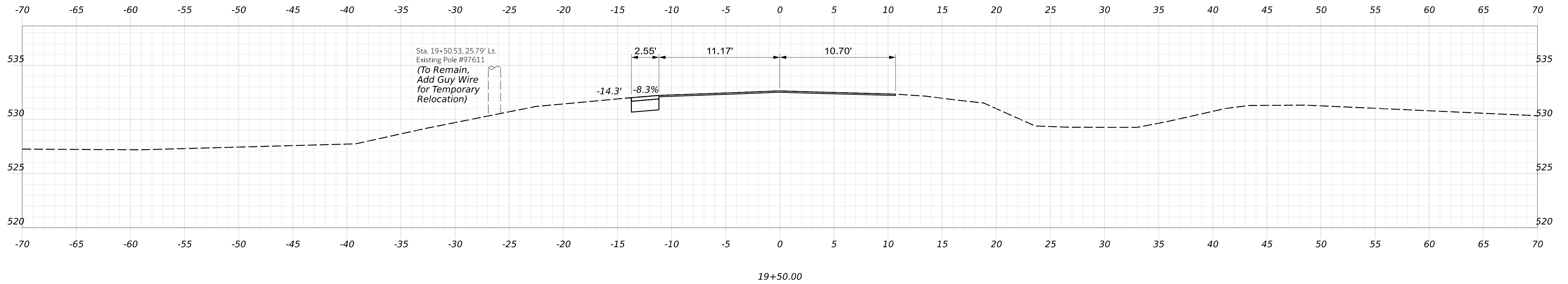
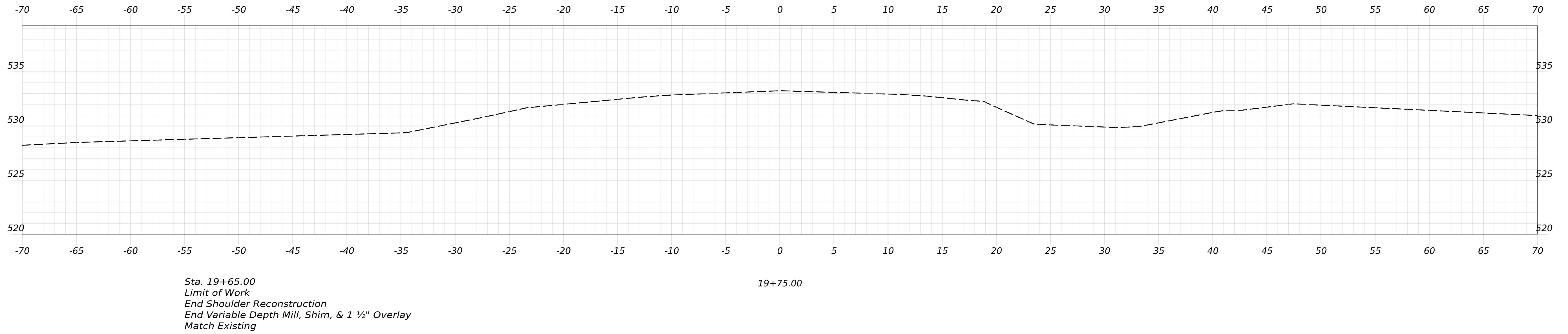
PROJ. MANAGER	DATE
DESIGN-DETAILED	11/20/25
CHECKED-REVIEWED	11/20/25
DESIGN-DETAILED02	
DESIGN-DETAILED03	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

VAN BUREN  
 ST. MARY'S BRIDGE  
 CASTONGUAY ROAD  
 CROSS SECTIONS

SHEET NUMBER  
 17  
 OF 33



Username: ctabin Date: 11/25/2025



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
026083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

SIGNATURE  
P.E. NUMBER  
DATE

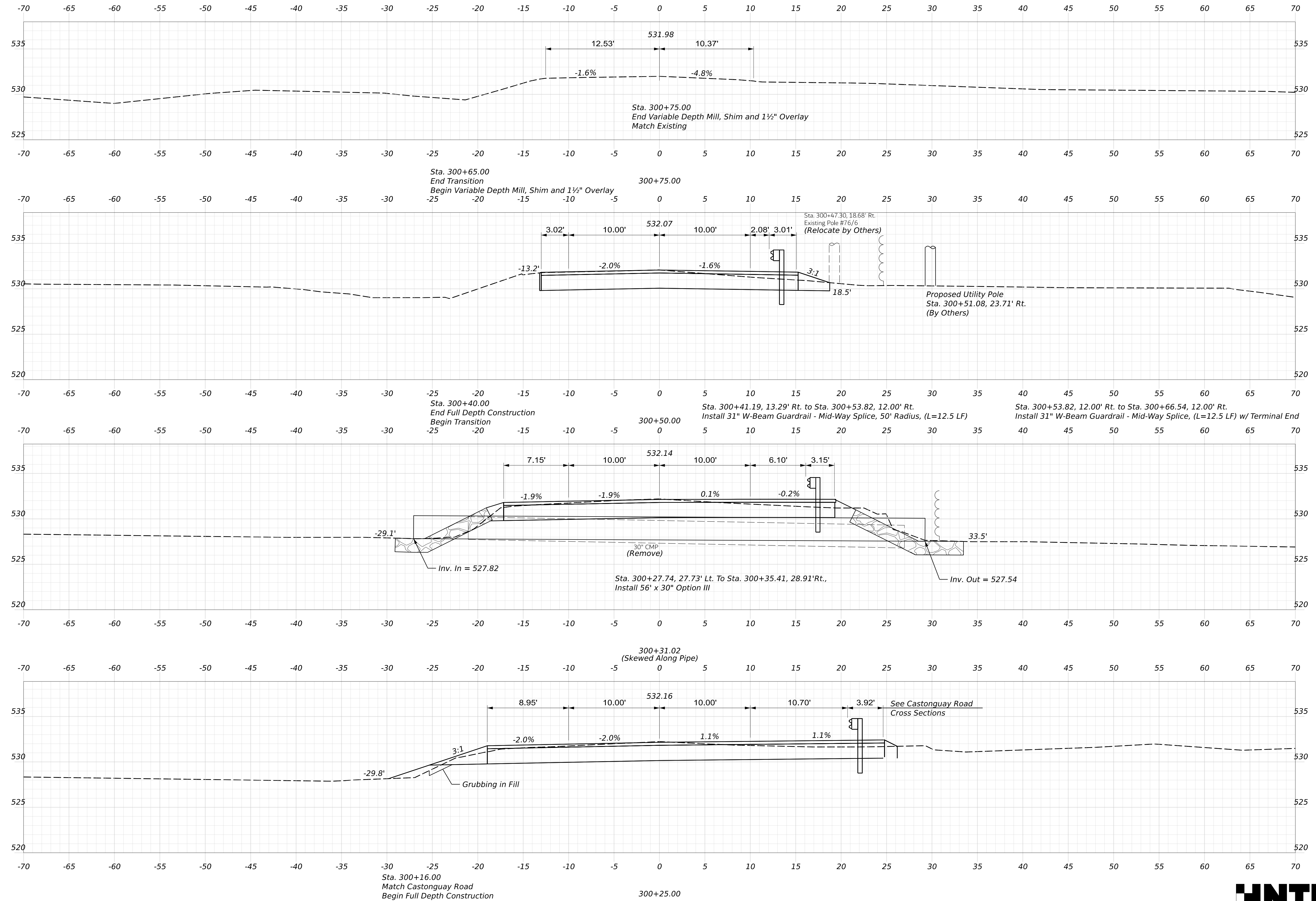
PROJ. MANAGER	Michael Wright	BY	DATE
DESIGN-DETAILED	C. Tobin		11/2025
CHECKED-REVIEWED	L. Pheasant		11/2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

VAN BUREN  
ST. MARY'S BRIDGE  
CASTONGUAY ROAD  
CROSS SECTIONS

SHEET NUMBER  
**18**  
OF 33



Username: crobini Date: 11/25/2025



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
026083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

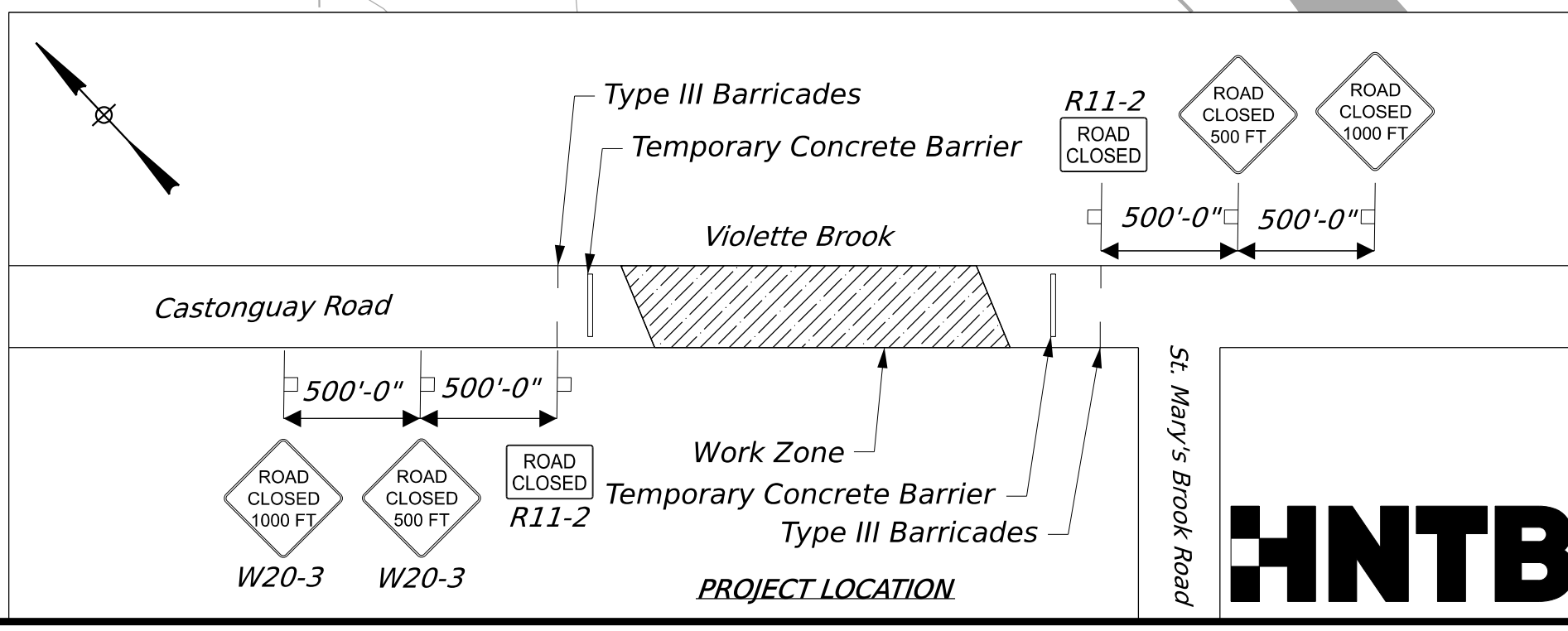
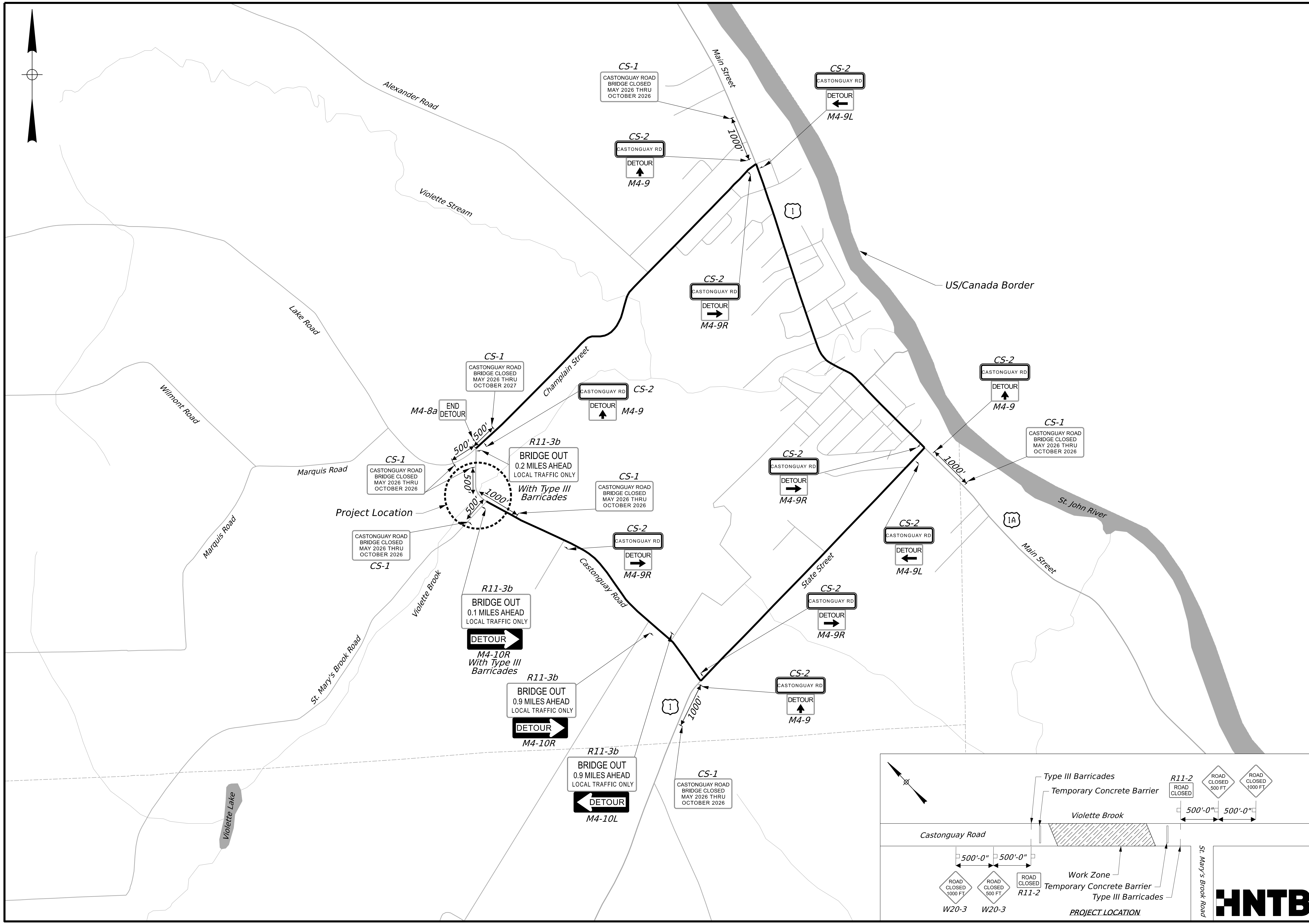
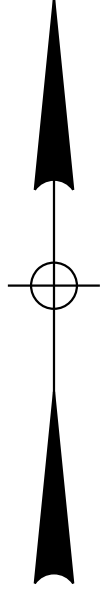
PROJ. MGR.	DATE	SIGNATURE	P.E. NUMBER	DATE
Michael Wright	11/2025			
C. Tobin	11/2025			
L. Phipps				
B. Gerner				

BY	DATE	REVISIONS
C. Tobin	11/2025	
B. Gerner	11/2025	

**VAN BUREN**  
**ST. MARY'S BRIDGE**  
**ST. MARY'S BROOK ROAD**  
**CROSS SECTIONS**

SHEET NUMBER  
**19**  
OF 33





STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2608300	
PROJECT NUMBER		BRIDGE NO. 5309	
SIGNATURE		WIN	
P.E. NUMBER		026083.00	
DATE		BRIDGE PLANS	
PROJ. MANAGER	BY	DATE	
DESIGN-DETAILED	B. Brown	11/2025	
CHECKED-REVIEWED	C. Tobin	11/2025	
DESIGN-DETAILED	L. Phipps		
DESIGN-DETAILED	B. Greiner		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
VAN BUREN ST. MARY'S BRIDGE		SHEET NUMBER	
		20	
DETOUR PLAN		OF 33	
		HNTB	

Username: crobini Date: 11/25/2025

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		TOTAL AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER	
CS-1	60"	36"		4"C 4"C 4"C 4"C	3" 3" 3"		8	ORANGE	BLACK	15.00 (120.00)
CS-2	42"	12"		4"C			10	ORANGE	BLACK	3.00 (30.00)
M4-8a	24"	18"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			1	ORANGE	BLACK	3.00 (3.00)
M4-9	30"	24"					4	ORANGE	BLACK	5.00 (20.00)
M4-9L	30"	24"					2	ORANGE	BLACK	5.00 (10.00)
M4-9R	30"	24"					4	ORANGE	BLACK	5.00 (20.00)
M4-10L	48"	18"					1	ORANGE	BLACK	6.00 (6.00)
M4-10R	48"	18"					2	ORANGE	BLACK	6.00 (12.00)
R11-2	48"	30"					2	ORANGE	BLACK	10.00 (20.00)
R11-3b (0.1) (0.2) (0.9)	60"	30"					1 1 2	ORANGE	BLACK	12.50 (12.50) (12.50) (25.00)
W20-3 (500 FT) (1000 FT)	48"	48"					2 2	ORANGE	BLACK	16.00 (32.00) (32.00)

**Notes:**

1. Sign locations are approximate and to be verified in the field by the Contractor and approved by the Resident.
2. Information shown reflects signage for detour plans only. Additional signage may be necessary for other maintenance of traffic activities.

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER

DESIGN-DETAILED

CHECKED-REVIEWED

DESIGN-DETAILED02

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

DATE

11/2025

BY

Michael Wight

C. Tobin

L. Pheasant

B. Brown

B. Grenier

11/2025

11/2025

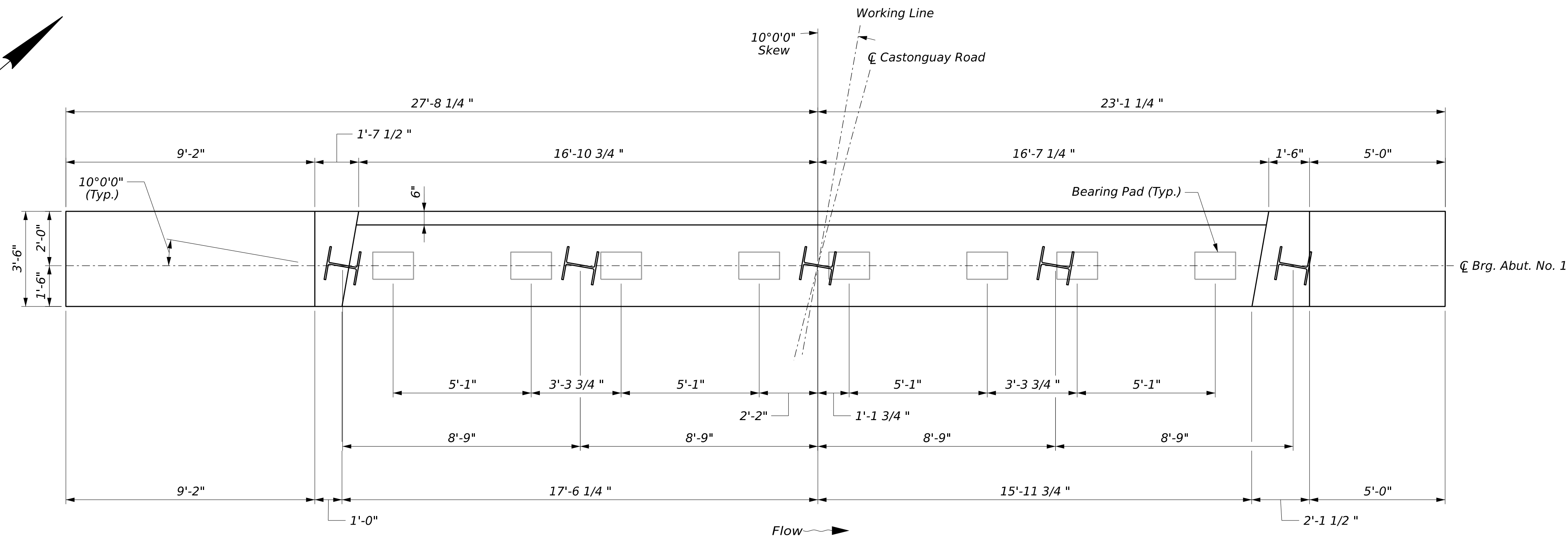
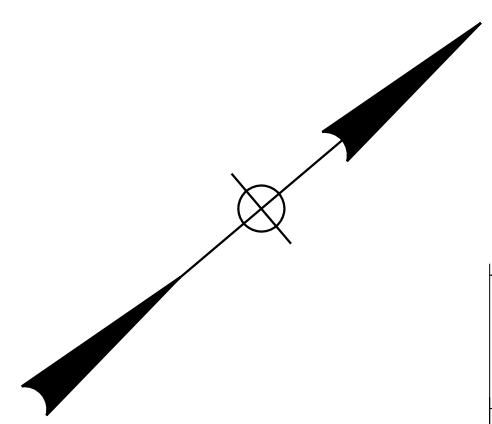
VAN BUREN  
ST. MARY'S BRIDGE

SIGN SUMMARY

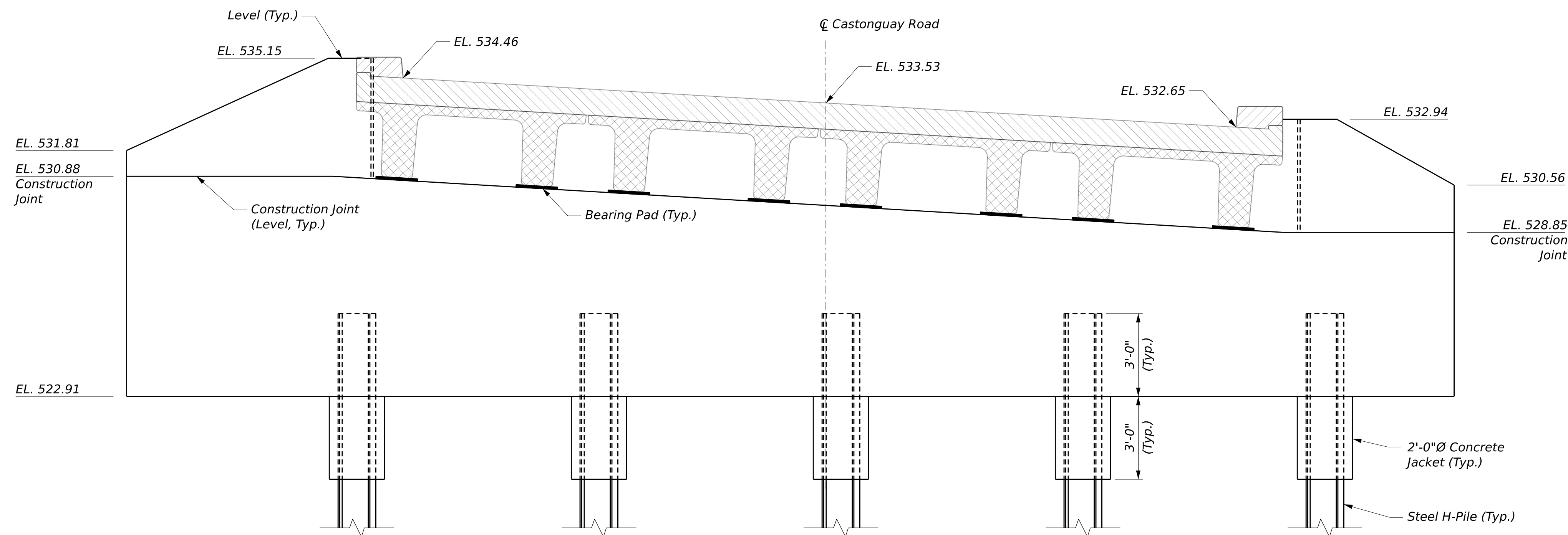
SHEET NUMBER

21

OF 33



**ABUTMENT NO. 1 PLAN**



**ABUTMENT NO. 1 ELEVATION**  
(Superstructure shown screened for clarity)

**ABUTMENT NOTES:**

1. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
2. Cover joints where waterstops are not required in accordance with Standard Details Section 502.
3. Place 4 inch diameter drains in abutment and wingwalls at 10 feet maximum spacing. The exact location will be determined by the Resident.
4. All elevations are provided at centerline of bearing unless otherwise noted.
5. Payment for concrete jacket around the tops of the H-piles will not be paid for directly. Payment shall be incidental to Item 502.219, Structural Concrete, Abutments and Retaining Walls. Fill concrete may be used for the concrete jackets.

**PILE NOTES:**

1. The maximum factored pile load is 337 kips at the Strength Limit State.
  2. Piles shall be driven to the required nominal resistance on or within bedrock in accordance with Standard Specification Section 501.
  3. Estimate of Piles required (in-place):  
Abutment No. 1: 5 - HP 14x89 @ 128 ft  
Abutment No. 2: 5 - HP 14x89 @ 133 ft
- The order lengths of the piles shall include an additional 5 feet of length for each test pile to accommodate dynamic pile testing equipment and any additional pile length needed to accommodate leads, template and driving system.
4. H-pile material shall be ASTM A572, Grade 50.
  5. H-pile splices shall be in accordance with Standard Detail 501(03).
  6. Piles shall not be out of position shown by more than 2 inches in any direction.
  7. All piles shall be equipped with a pile tip in accordance with Standard Specification Subsections 501.048, Prefabricated Pile Tips and 711.10 H-Beam Piles, Spliced and Tips.
  8. The Contractor shall perform and submit a wave equation analysis for review and acceptance by the Resident. The maximum allowable driving stress is 0.90 times F<sub>y</sub>. The submittal analyses shall include the proposed stopping criteria based on the wave equation analysis and the proposed driving system.
  9. The Contractor shall perform 2 dynamic load test(s) with 24-hour (minimum) restrike tests to confirm the nominal resistance of the piles. The required nominal resistance for the pile is the factored axial pile load divided by a resistance factor of 0.65 per LRFD Specifications. The dynamic test shall be performed on the first production pile driven at each abutment.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
BRIDGE NO. 5309 026083.00  
BRIDGE PLANS

SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MANAGER	CHECKED-REVIEWED	DESIGNED-DETAILED	BY	DATE
Michael Wright	K. Schweser	E. Basakal	E. Basakal	11/2025
	N. Bart	B. Goner	B. Goner	11/2025
REVISIONS 1	DESIGNED-DETAILED			
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

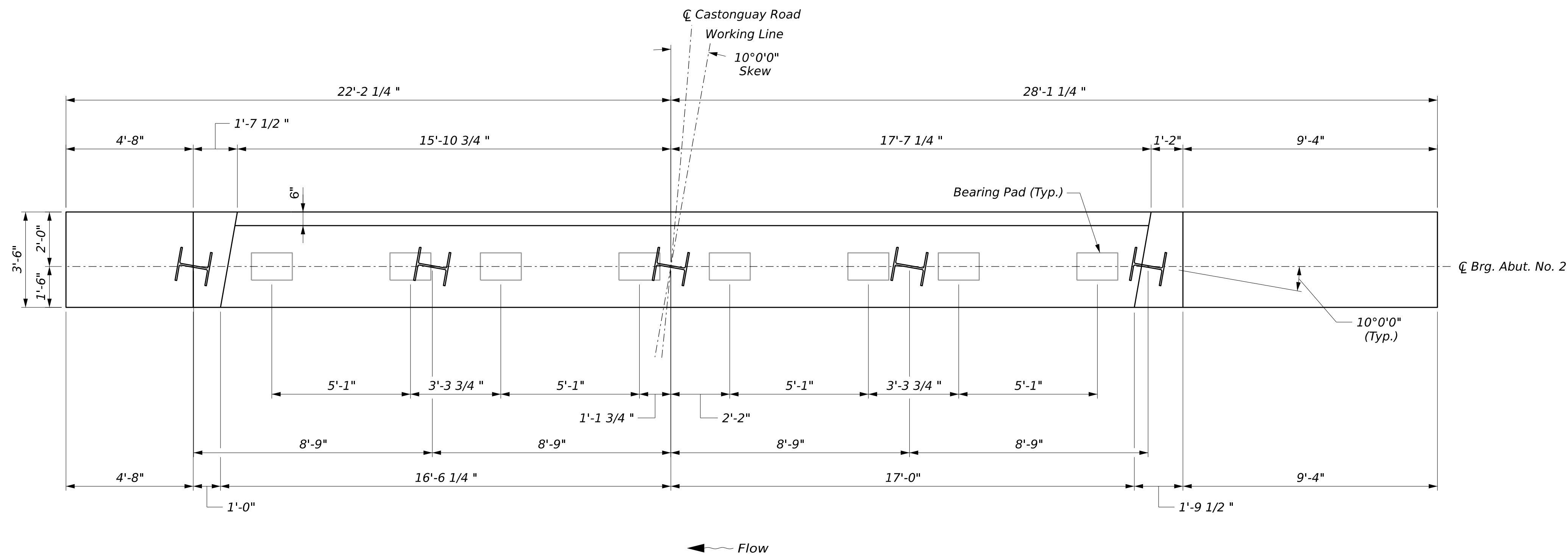
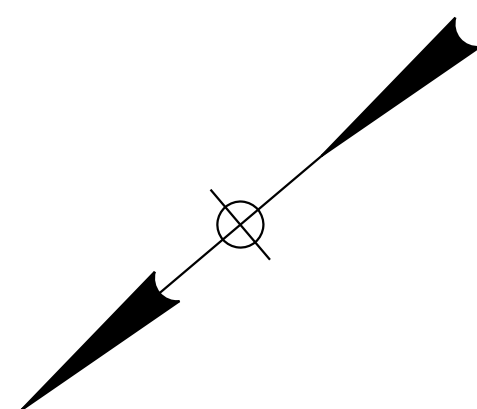
**VAN BUREN  
ST. MARY'S BRIDGE  
ABUTMENT NO. 1**

SHEET NUMBER

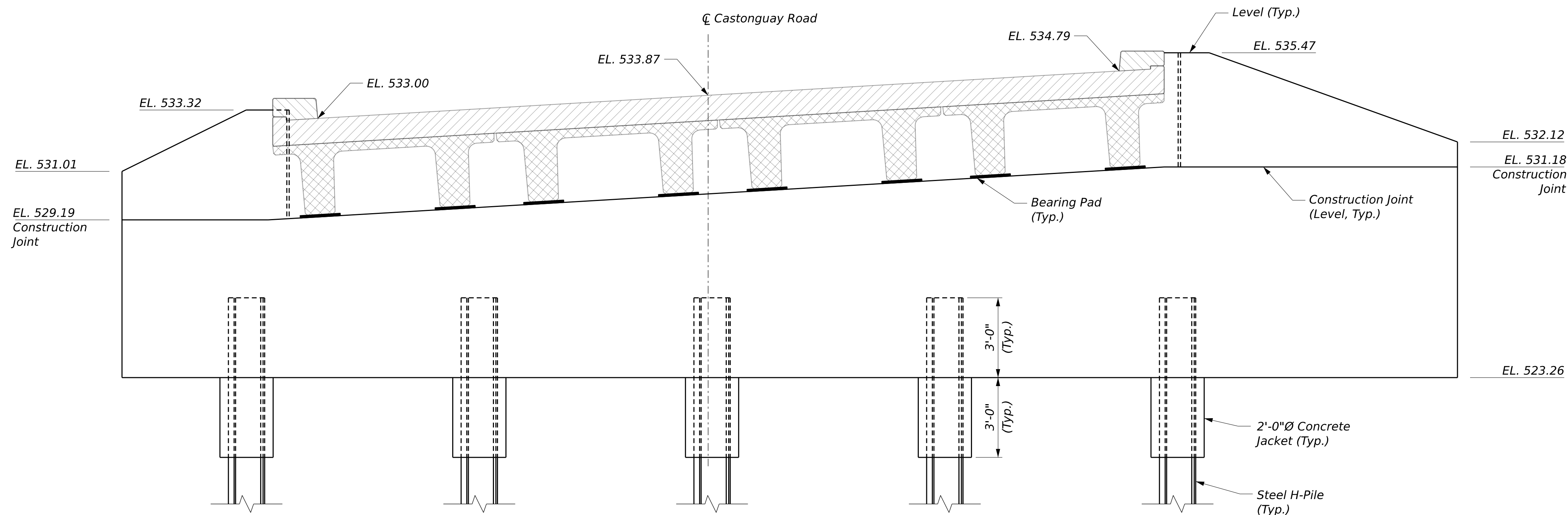
22

OF 33





ABUTMENT NO. 2 PLAN



ABUTMENT NO. 2 ELEVATION  
(Superstructure shown screened for clarity)

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
BRIDGE NO. 5309 026083.00  
BRIDGE PLANS

SIGNATURE	P.E. NUMBER	DATE

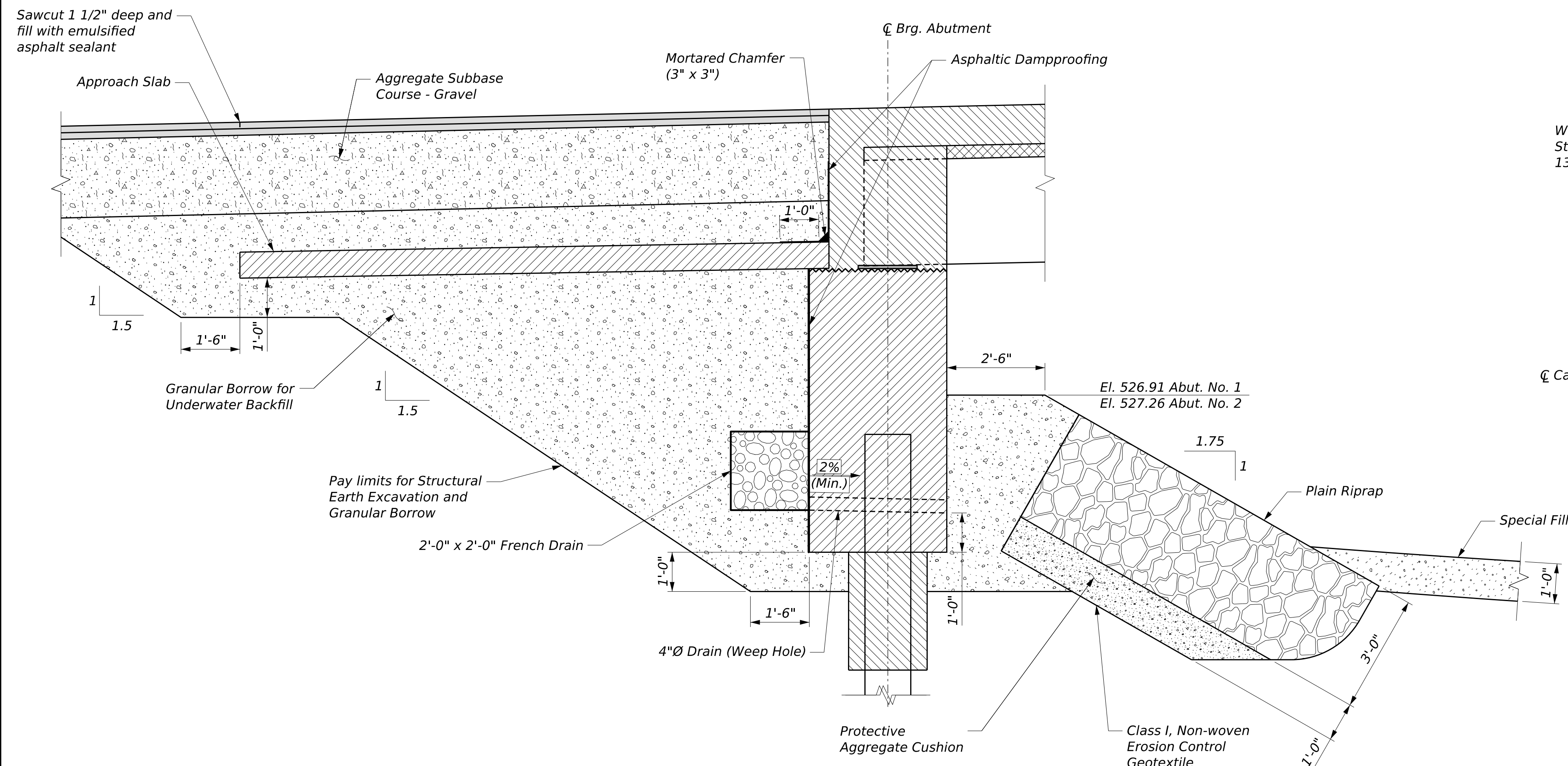
PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	E. Bauschall	11/2025
CHECKED-REVIEWED	K. Schweser	11/2025
DESIGN-DETAILED02	N. Bart	
DESIGN-DETAILED03		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

VAN BUREN  
ST. MARY'S BRIDGE  
ABUTMENT NO. 2

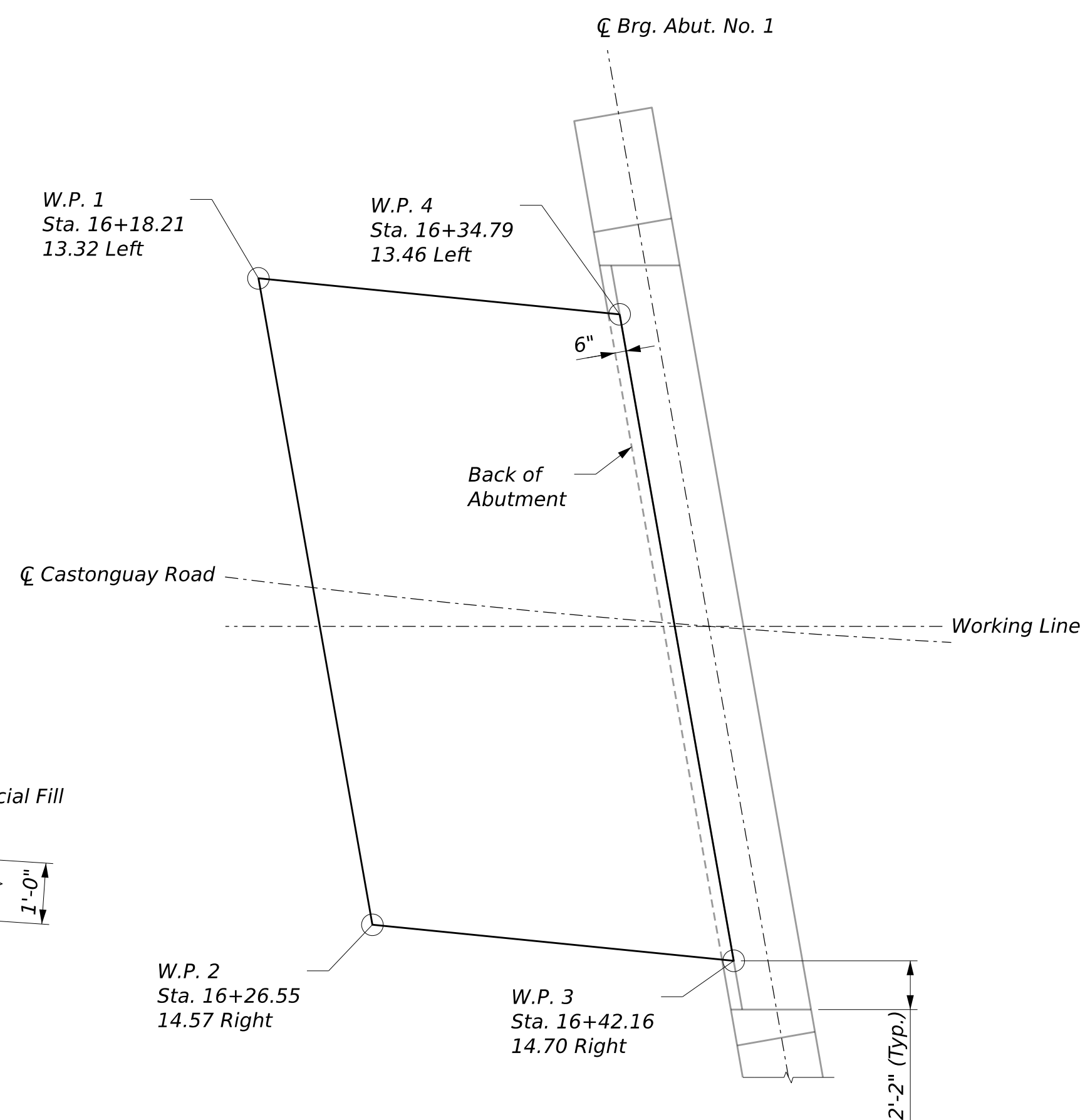
SHEET NUMBER  
**23**  
OF 33



Username: crobini Date: 11/25/2025

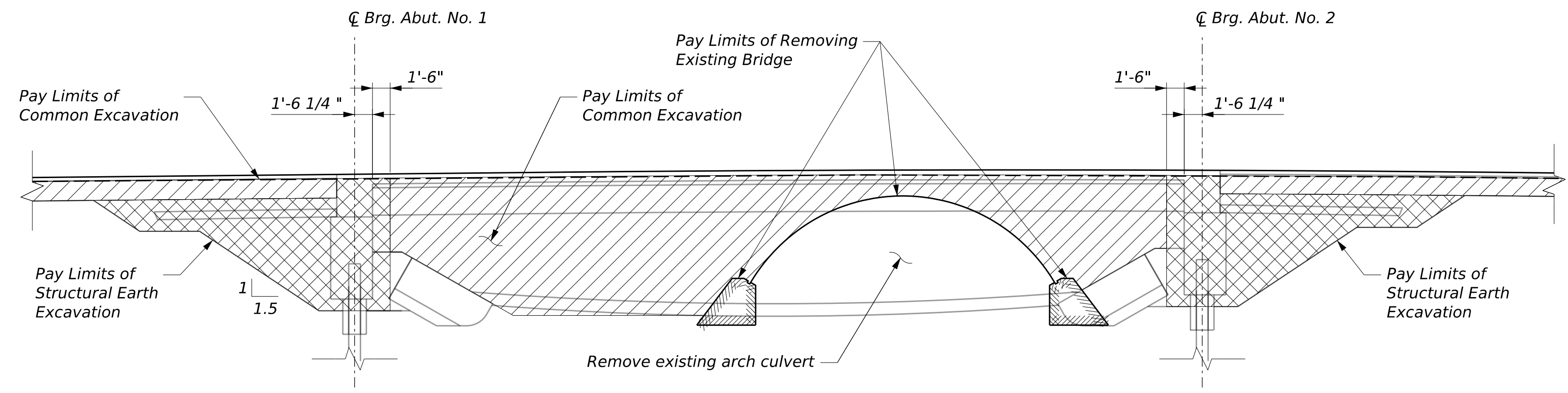


**ABUTMENT BACKFILL DETAIL**

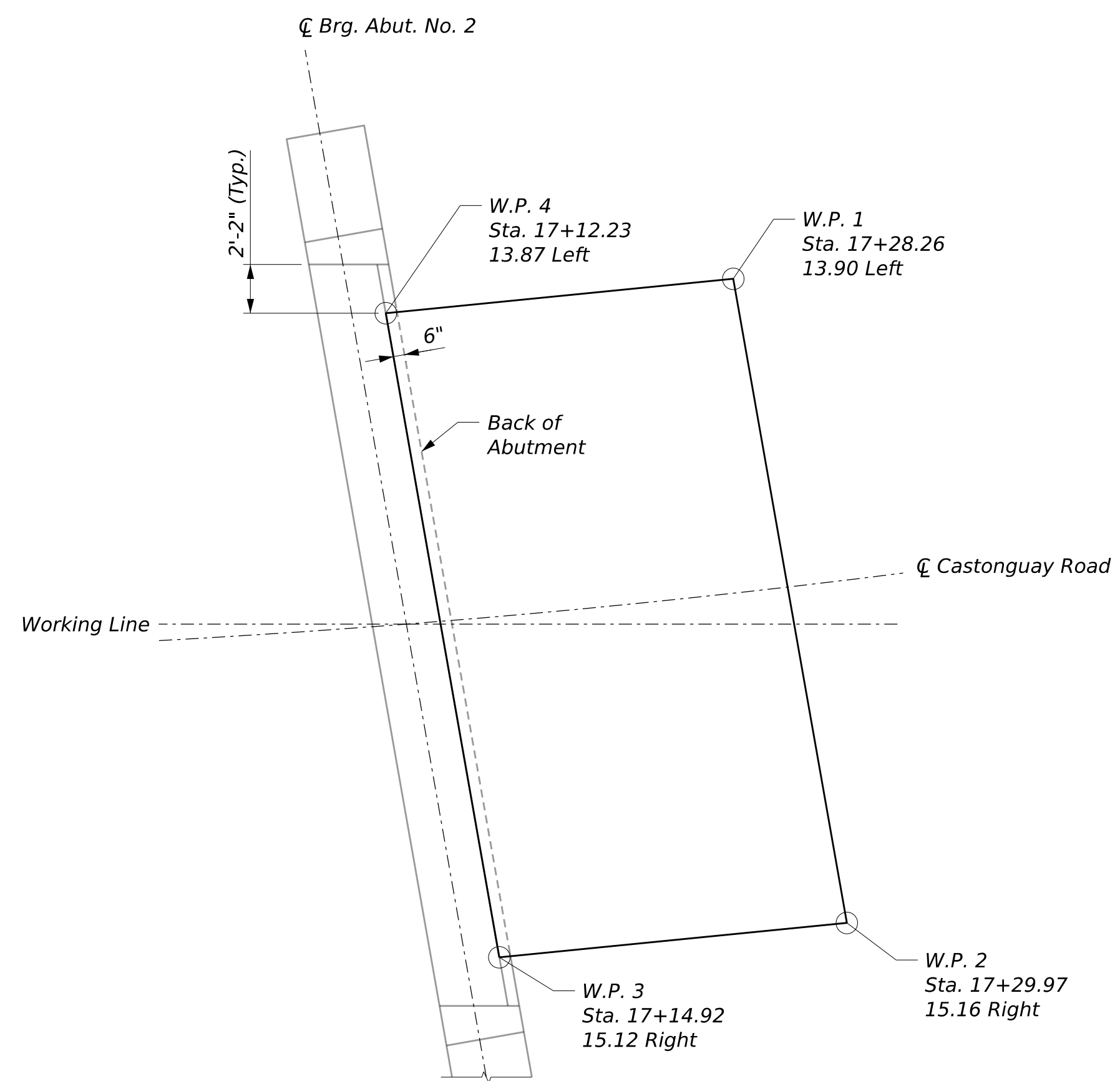


**APPROACH SLAB PLAN - ABUTMENT NO. 1**

- NOTES:**
1. Transverse saw cuts in the pavement at the ends of approach slabs shall be sealed with emulsified asphalt sealing compound conforming to Specification 702.12. The sawcut and emulsified asphalt sealing shall not be paid for directly, but considered incidental to related contract items.
  2. Payment for mortared chamfer at approach slabs shall not be paid for directly, but shall be considered incidental to the related Contract items.
  3. Asphalt Dampproofing shall meet the requirements of either ASTM D449 Type II, ASTM D1227 Type II - Class I, or ASTM D1227 Type III - Class I. The product shall be applied in accordance with the manufacturer's recommendations.
  4. Asphalt Dampproofing shall be applied to the far face of wingwalls up to 1 foot below grade.
  5. Payment for Asphalt Dampproofing will not be made directly, but will be considered incidental to related Contract Items.



**BRIDGE REMOVAL DETAIL**



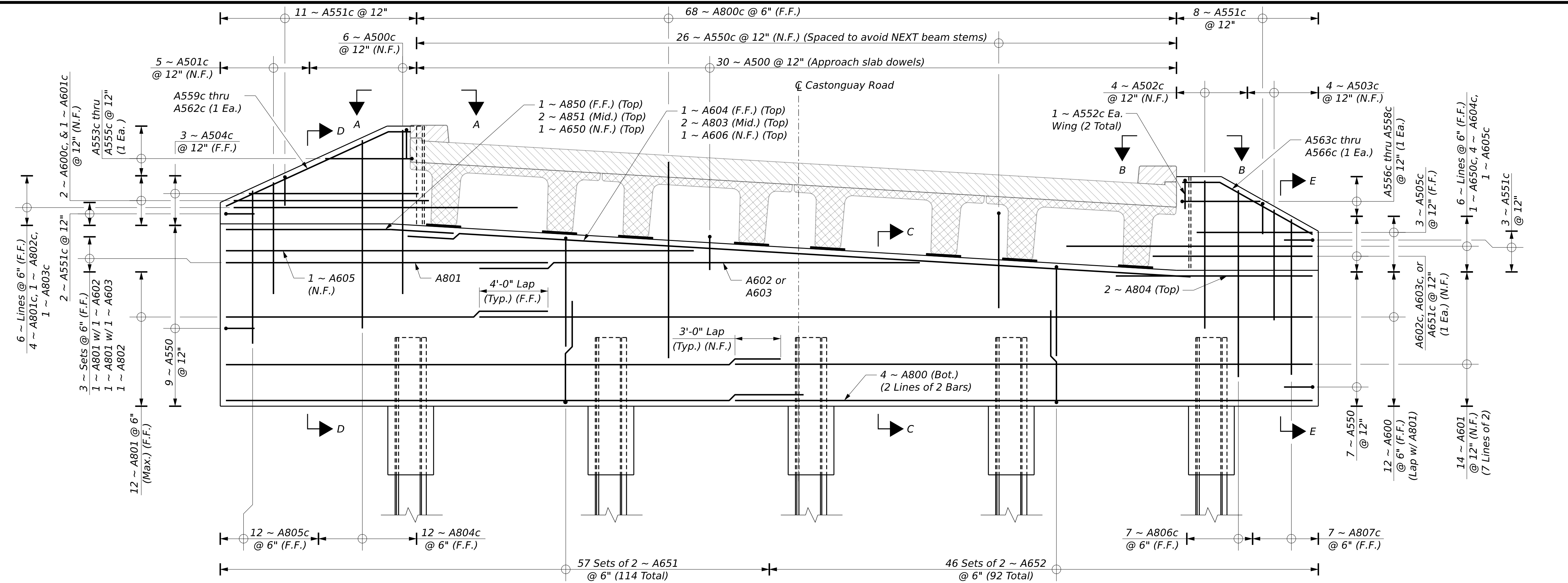
**APPROACH SLAB PLAN - ABUTMENT NO. 2**

PROJ. MANAGER	DATE	BY	DATE
Michael Wight	11/2025	E. Bausakal	11/2025
K. Schweser		B. Gerner	
N. Bart			
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

**VAN BUREN  
ST. MARY'S BRIDGE  
ABUTMENT DETAILS**

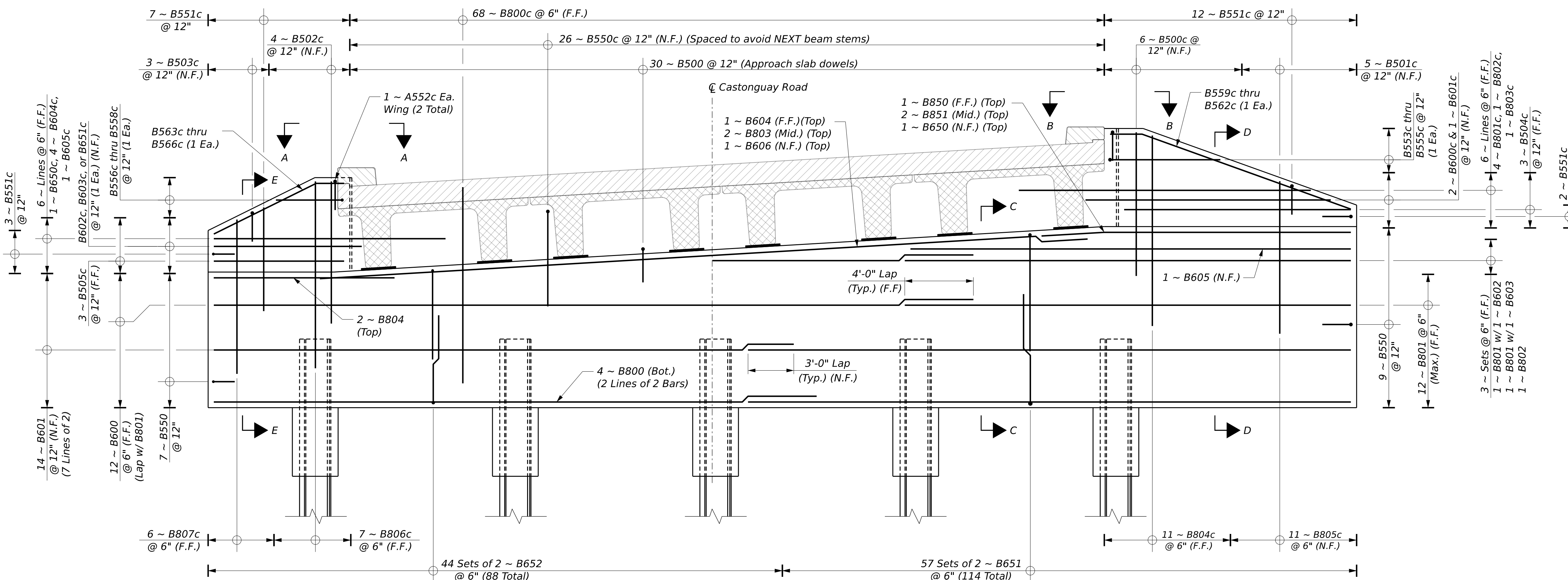


Date: 11/25/2025  
Username: crobini



**ABUTMENT NO. 1 REINFORCING ELEVATION**

(See "End Diaphragm Reinforcing" sheet for additional bars within end diaphragm)



**ABUTMENT NO. 2 REINFORCING ELEVATION**

(See "End Diaphragm Reinforcing" sheet for additional bars within end diaphragm)

DATE	11/2025
BY	E. Bauschell
CHECKED/REVIEWED	K. Schweser
DESIGNED/DETAILED	N. Bart
DESIGNED/DETAILED	
REVISIONS	
REVISIONS	
REVISIONS	
REVISIONS	
FIELD CHANGES	

SIGNATURE	
P.E. NUMBER	
DATE	

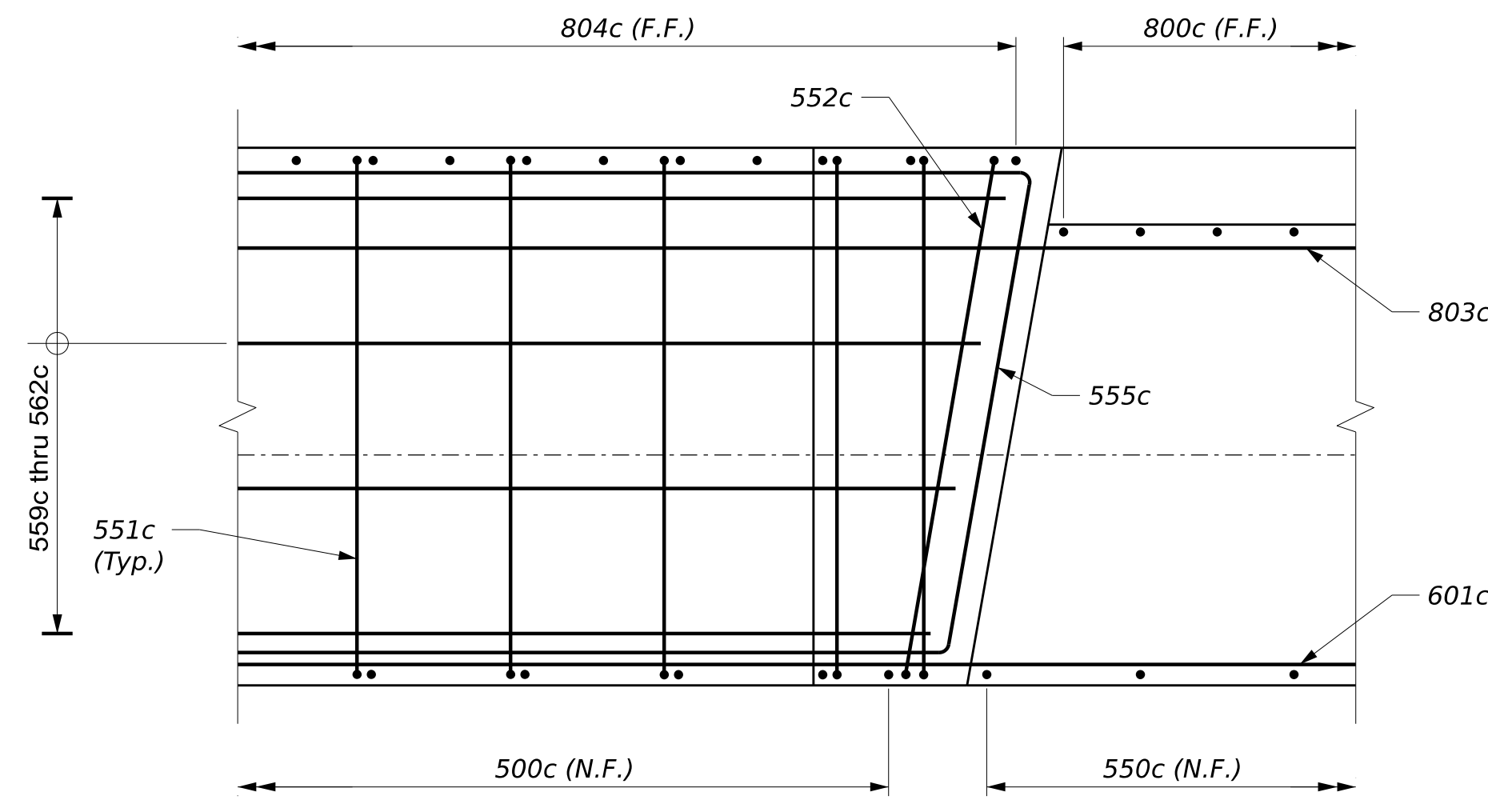
**VAN BUREN  
ST. MARY'S BRIDGE  
ABUTMENT REINFORCING I**

SHEET NUMBER

**25**

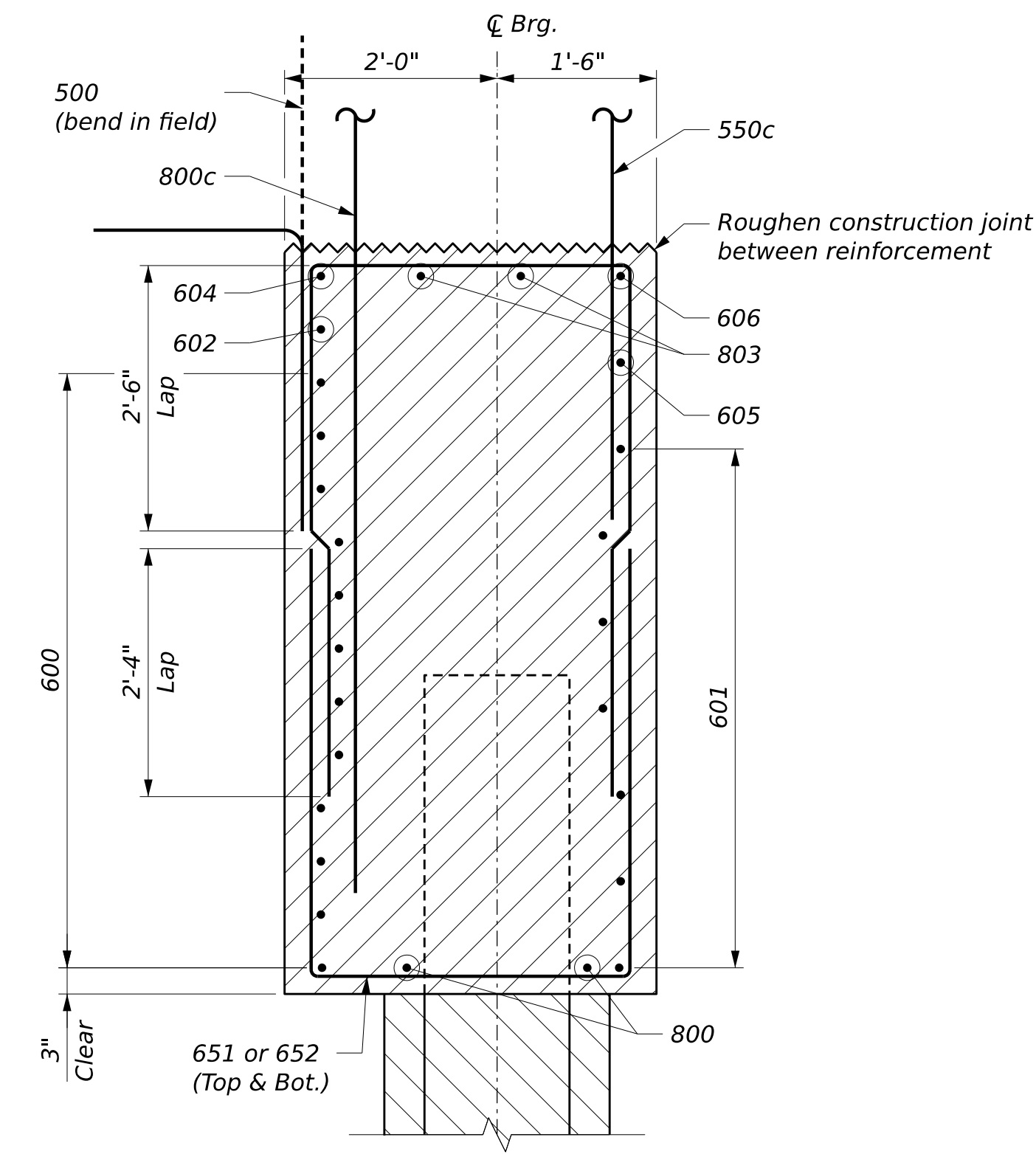
OF 33





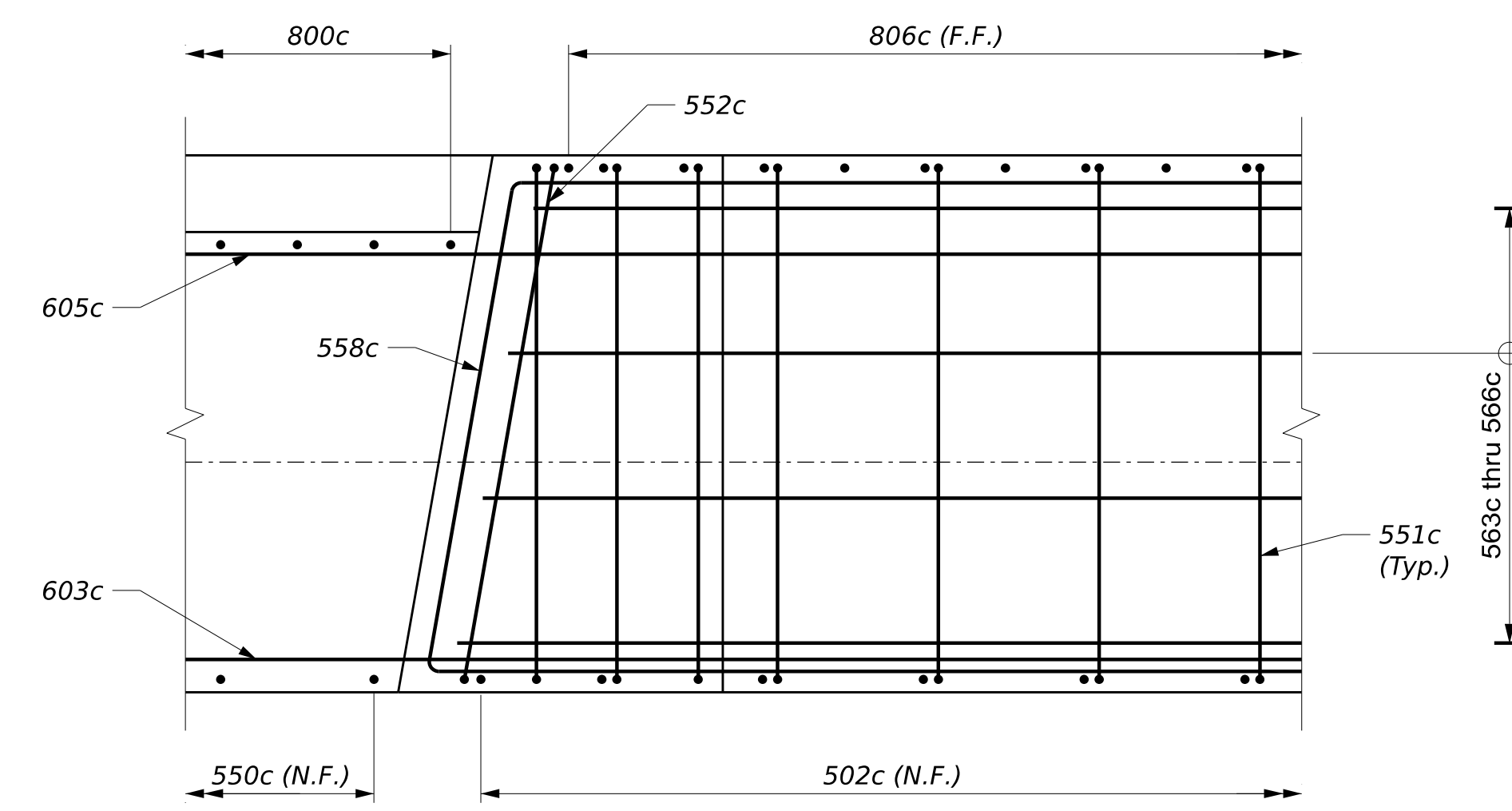
**SECTION A-A  
ACUTE CORNER DETAIL**

("A" & "B" Prefixes omitted from bar marks when bar has same numerical designation in each abutment)



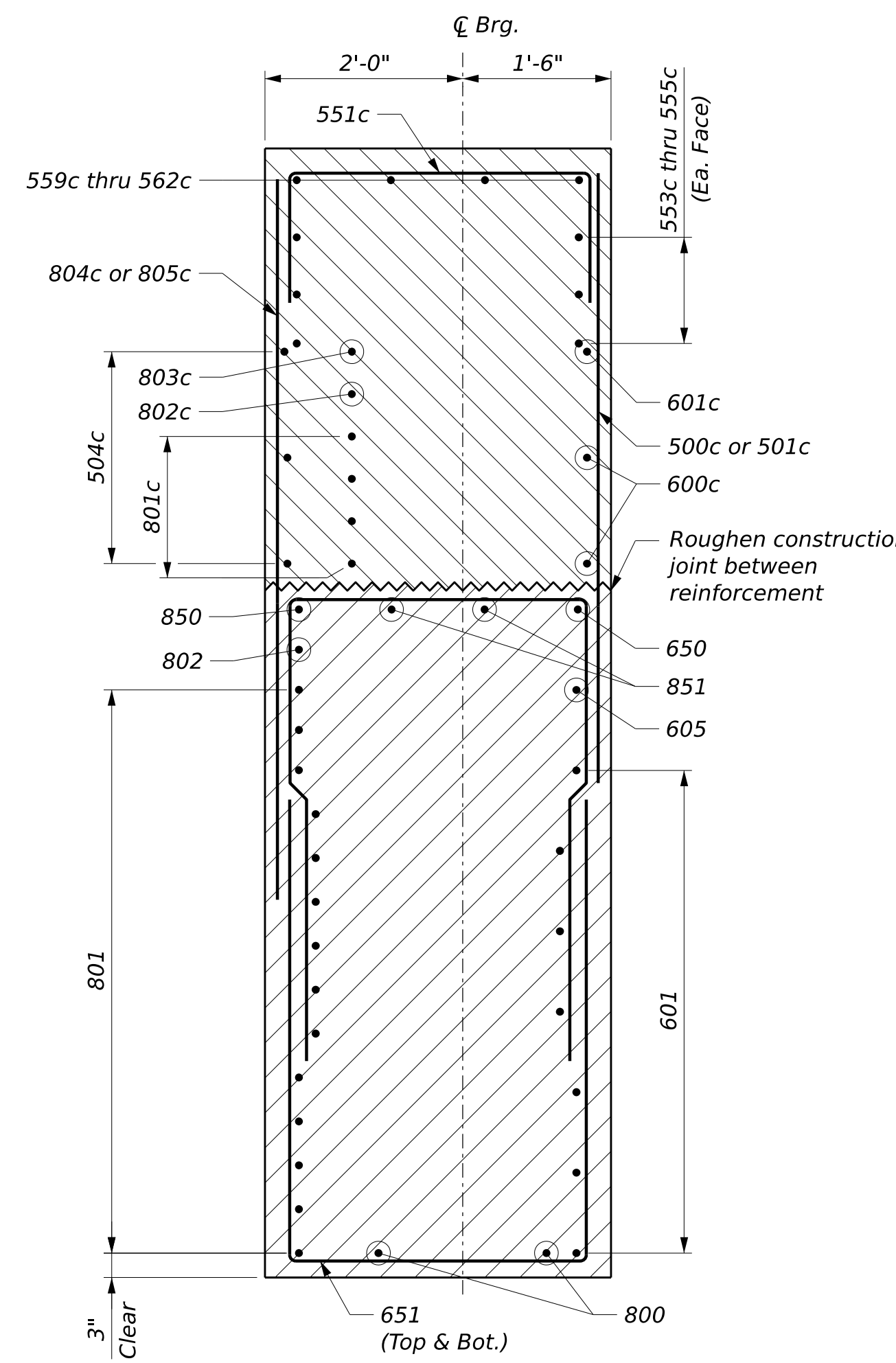
**SECTION C-C  
ABUTMENT SECTION**

("A" & "B" Prefixes omitted from bar mark)



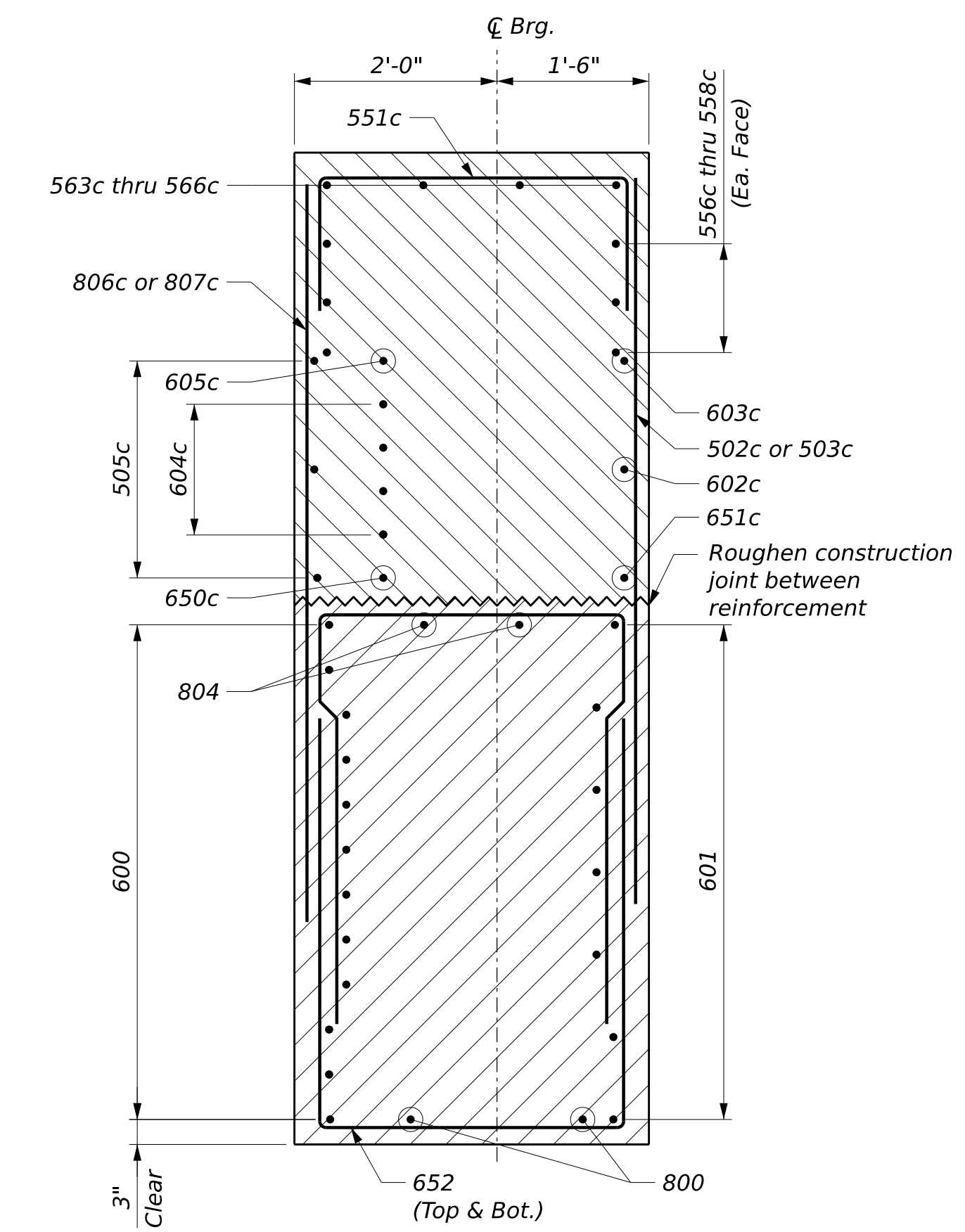
**SECTION B-B  
OBTUSE CORNER**

("A" & "B" Prefixes omitted from bar marks when bar has same numerical designation in each abutment)



**SECTION D-D  
WINGWALL SECTION**

("A" & "B" Prefixes omitted from bar mark)



**SECTION E-E  
WINGWALL SECTION**

("A" & "B" Prefixes omitted from bar mark)

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	E. Bauschell	11/2015
CHECKED-REVIEWED	K. Schweser	11/2015
DESIGN-DETAILED	N. Bart	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE	P.E. NUMBER	DATE

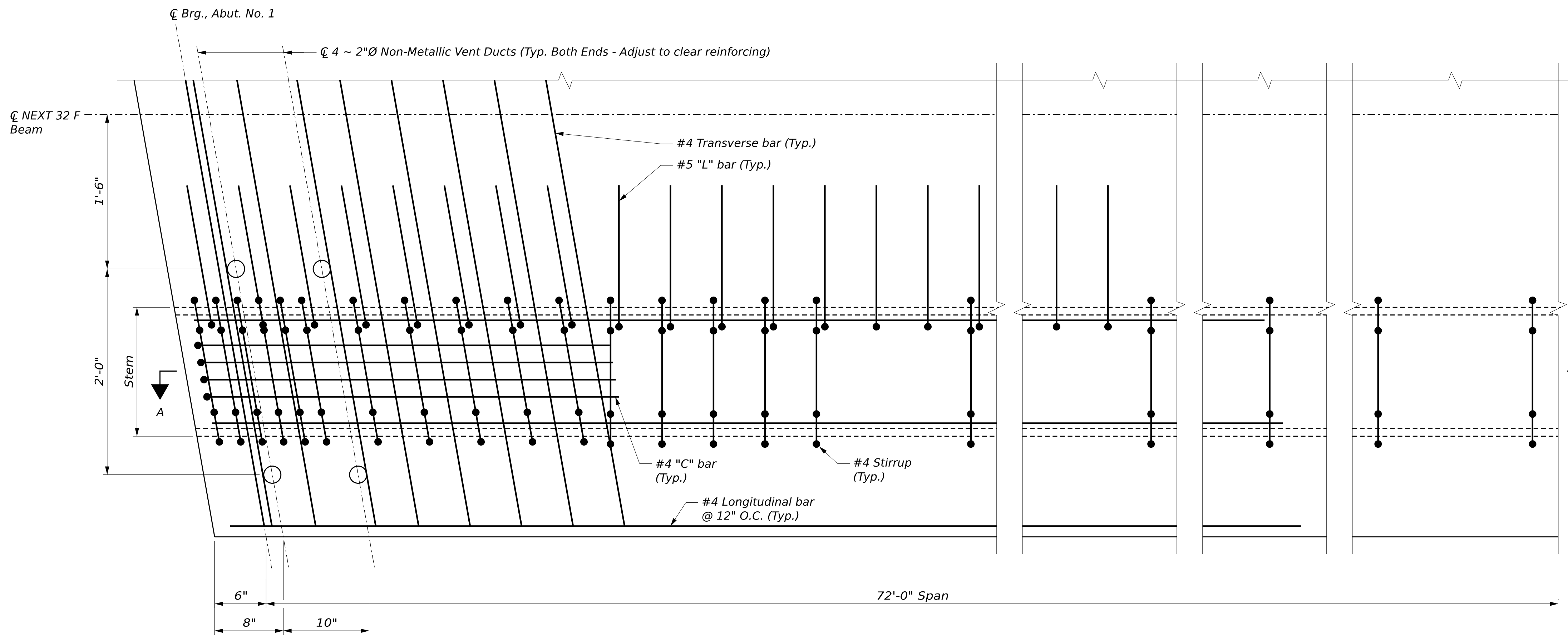
**VAN BUREN  
ST. MARY'S BRIDGE  
ABUTMENT REINFORCING II**

SHEET NUMBER

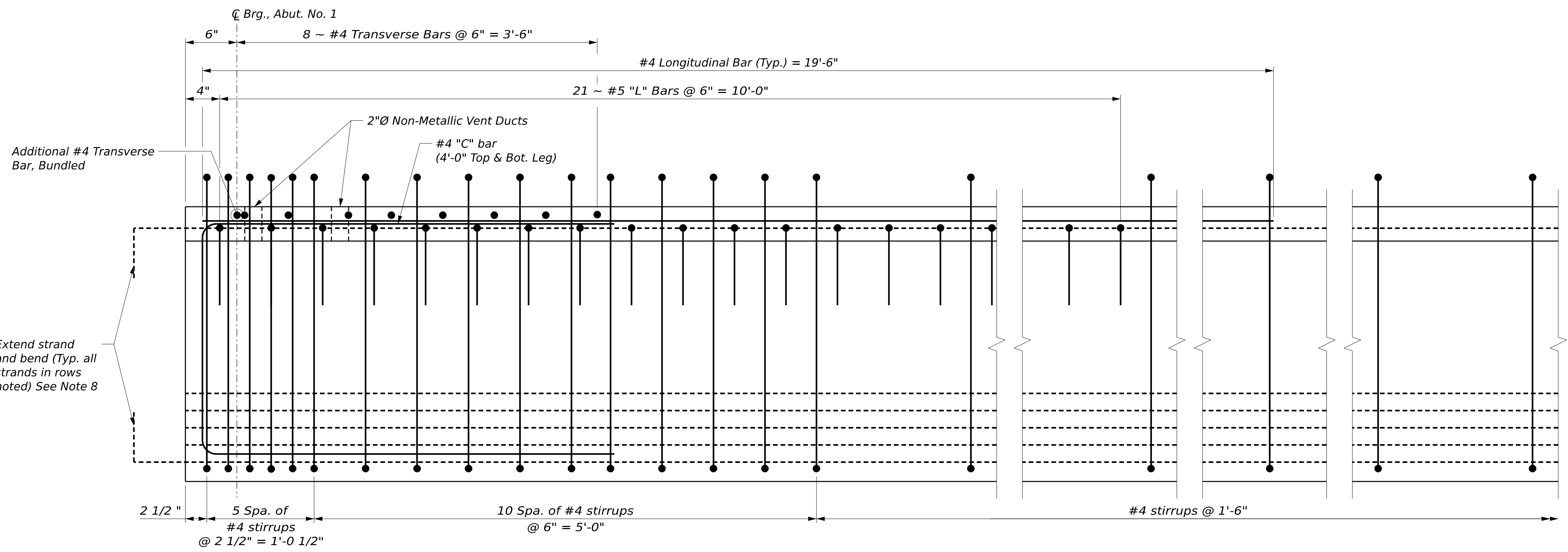
**26**

OF 33





**NEXT 32 F BEAM PLAN**  
(Strands and WWF not shown for clarity)



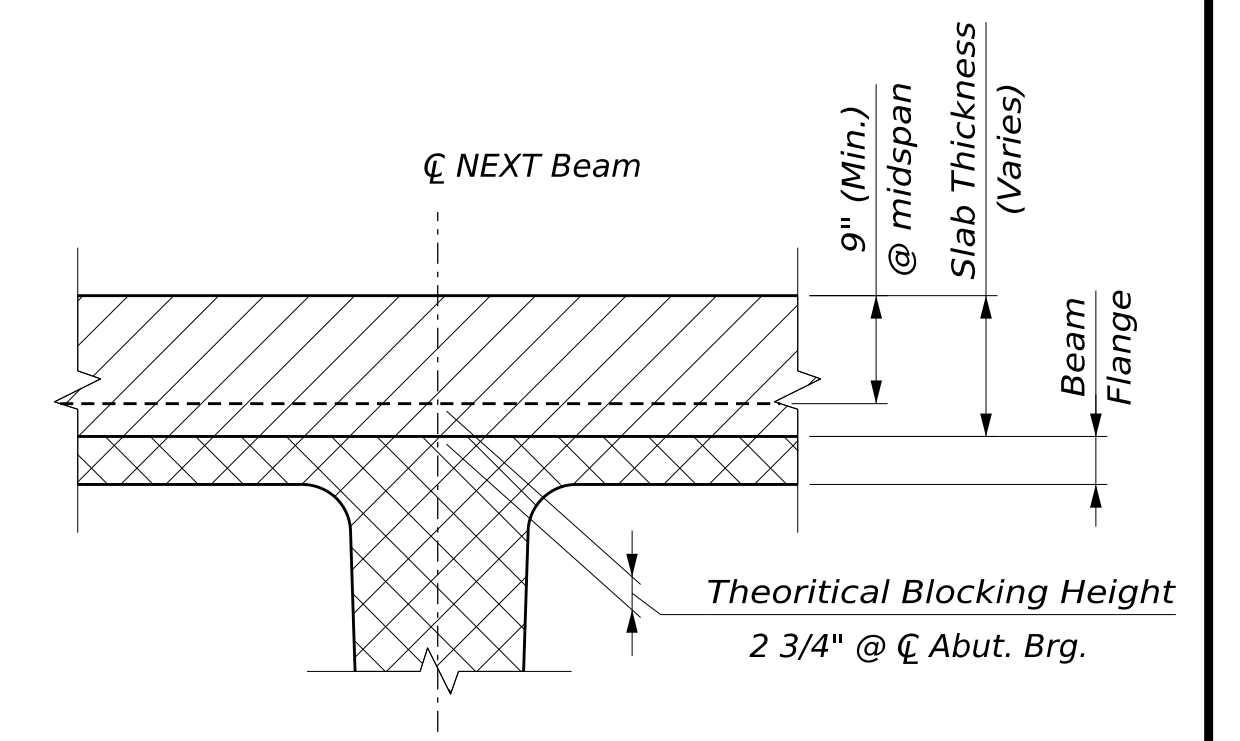
**SECTION A-A**  
(WWF not shown for clarity)

**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>.
- The estimated camber at release is 2.16 inches; the estimated camber at erection is 3.83 inches; and the estimated final camber at completion of the project is 2.35 inches. Refer to Special Provision Section 535, Precast, Prestressed Concrete Superstructure - Camber.
- 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.
- A mat of mild reinforcing steel, #4 bars @ 12 inches in both directions, may be substituted for the welded wire fabric. Reinforcing steel shall be ASTM A615, Grade 60.
- Girder reinforcement detailed in plan and elevation is typical about the midspan and centerline of each girder.
- Strands extending past the end of the beam shall extend a distance of 16" past the precast concrete beam at release, and be bent to fit within the end diaphragm.
- A maximum of 8 additional strands per beam (4 per stem) may be debonded for a distance of 6 inches within the bottom 4 rows to reduce the potential for end cracking during release.
- Lifting loops and temporary storage/shipping dunnage shall be a maximum of 2 feet from each beam end.
- 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.
- Payment for Sheet Waterproofing Membrane over joints between adjacent NEXT Beams will not be made directly, but will be considered incidental to related Contract items. Alternate methods of sealing the gap between flanges may be substituted to the Resident for approval.

**ELASTOMERIC BEARING PAD NOTES**

- Elastomeric Bearing Pads shall be 3/4" x 1'-5" x 1'-2" (Thickness x Width x Length)
- The elastomer shall have a shear modulus of 115 psi and a Shore A durometer hardness of 50.
- Elastomeric Bearing Pads shall conform to the requirements of the latest edition of the AASHTO LRFD Bridge Construction Specifications, Section 18.2.
- Elastomeric Bearing Pads will not be paid for directly but will be considered incidental to related Contract items. No separate payment will be made.



**DECK THICKNESS DETAIL**  
Not to Scale

STATE OF MAINE	BRIDGE PLANS
DEPARTMENT OF TRANSPORTATION	2608300
	WIN 026083.00
	BRIDGE NO. 5309

DATE	SIGNATURE	P.E. NUMBER	DATE
11/2025			
11/2025			

PROJ. MANAGER	BY	DATE
Michael Wight	E. Basakal	11/2025
DESIGN-DETAILED	K. Schweser	
CHECKED-REVIEWED	N. Bart	
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

**VAN BUREN  
ST. MARY'S BRIDGE  
GIRDER DETAILS I**

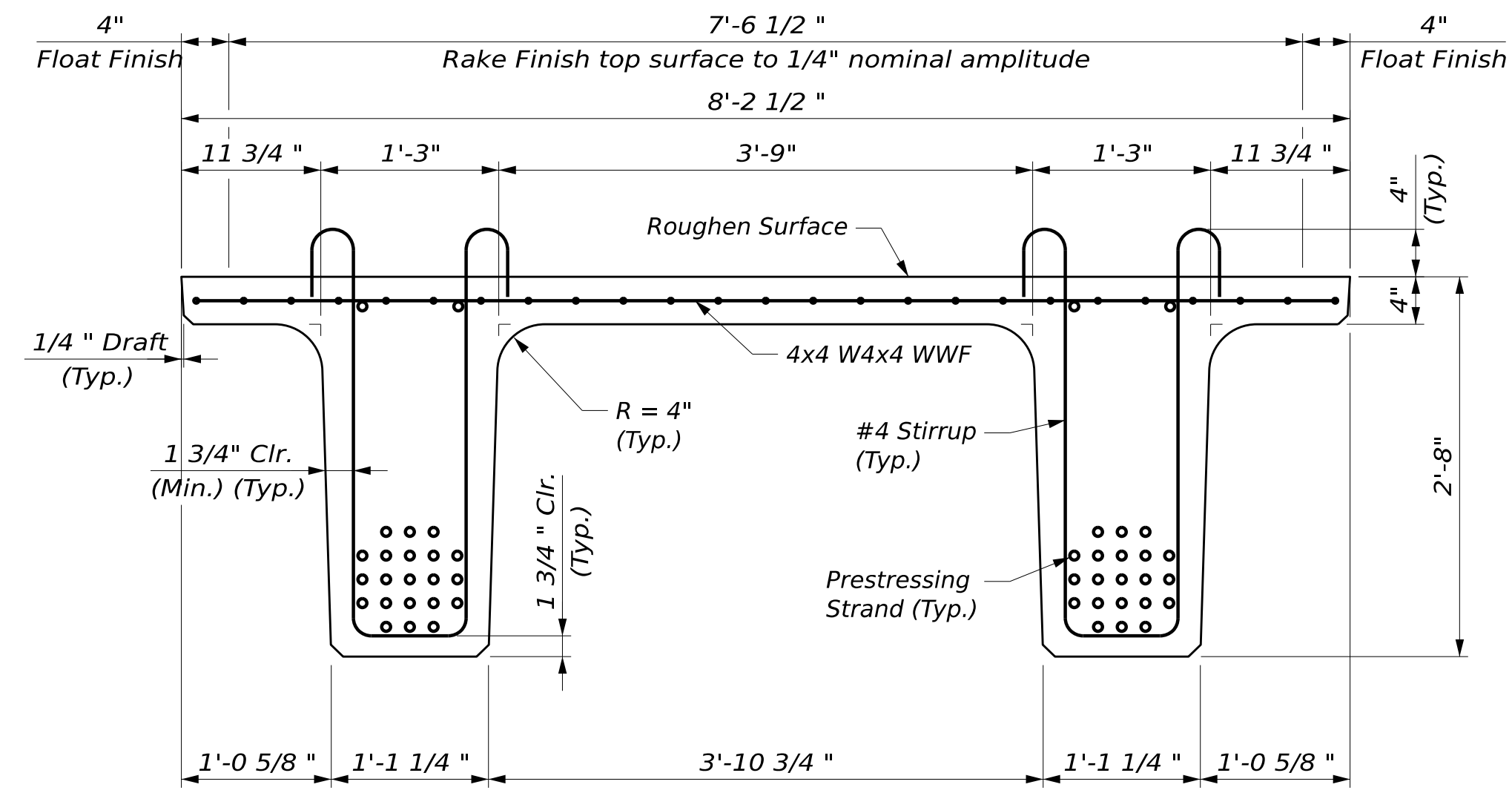
SHEET NUMBER

**27**

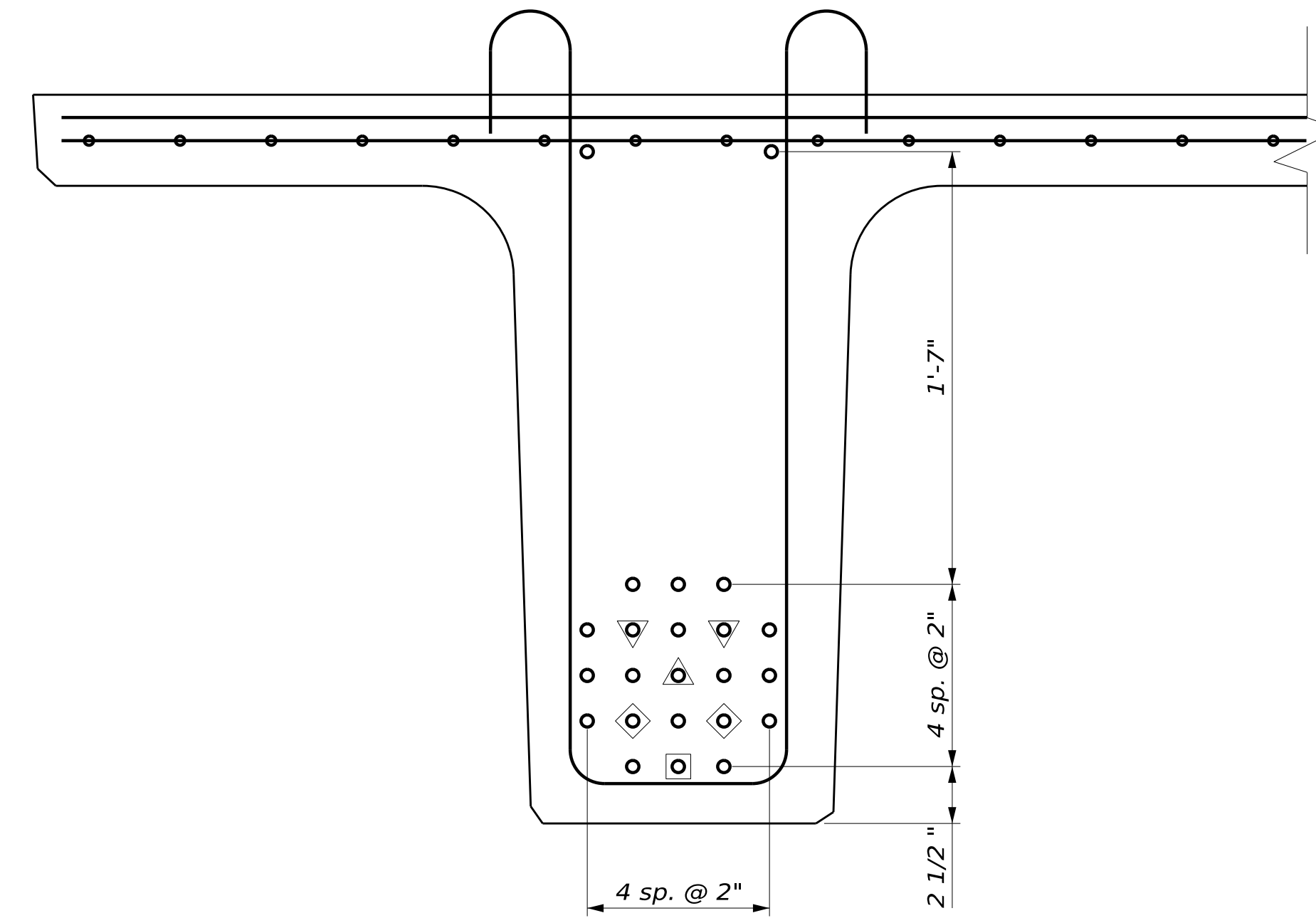
OF 33



Username: ctobin Date: 11/25/2025

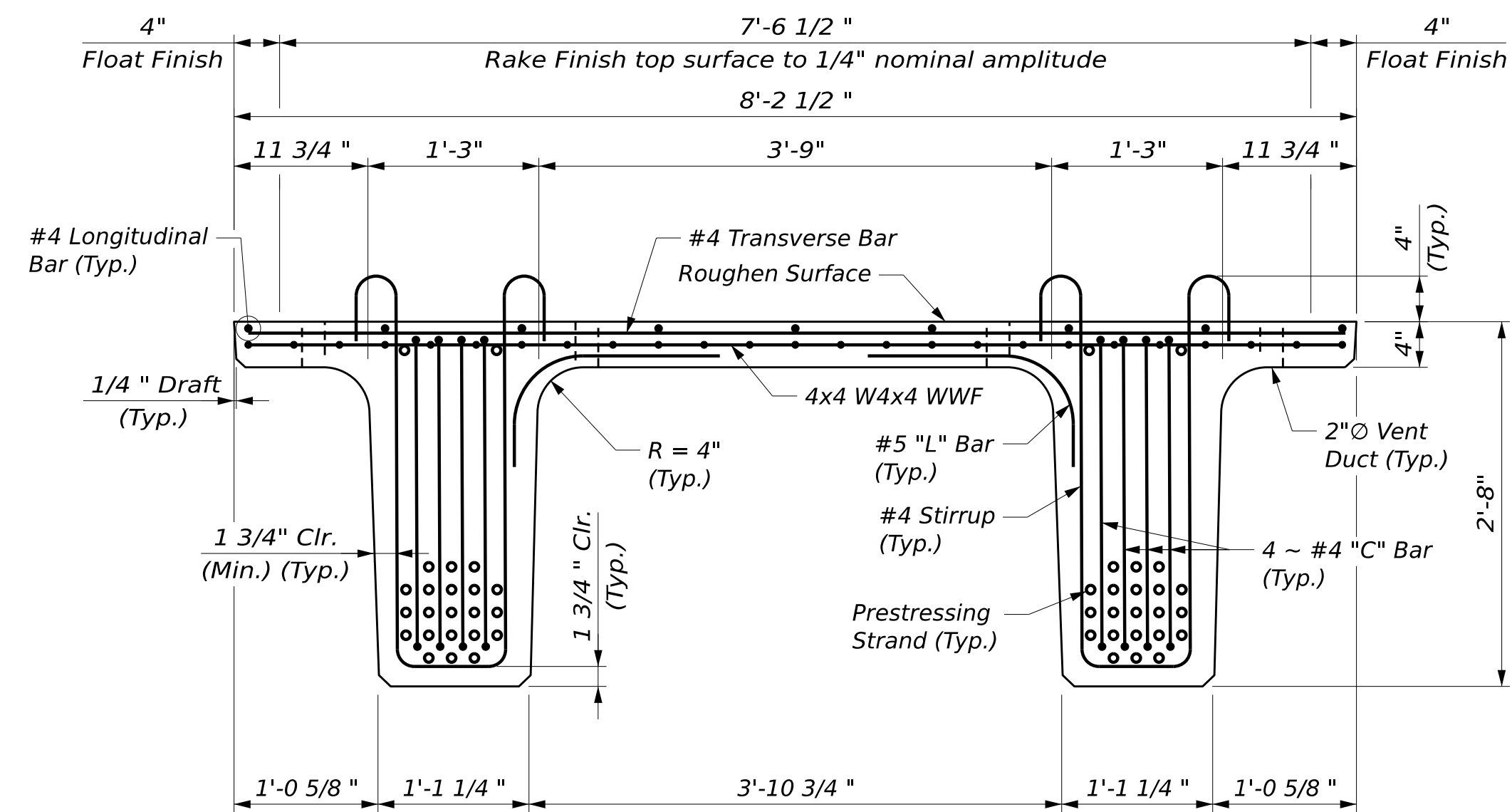


NEXT 32 F BEAM TYPICAL SECTION - AT MIDSPAN

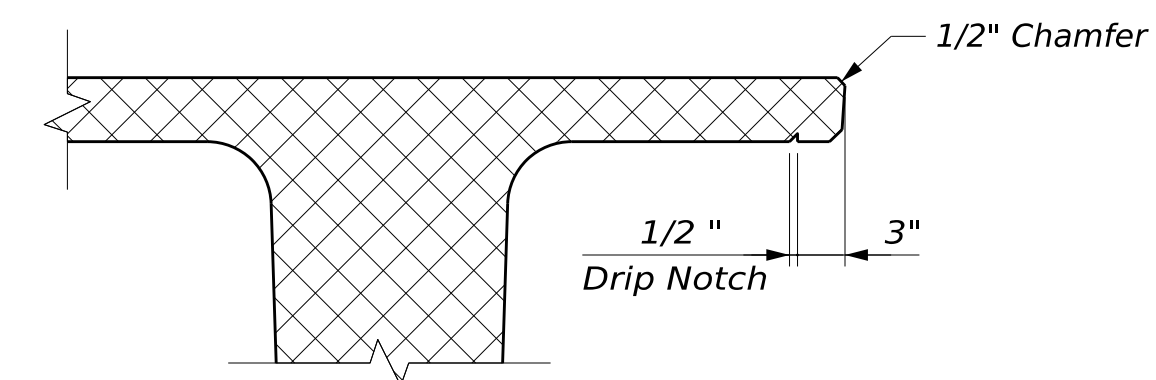


NEXT 32 F BEAM STRAND PATTERN

- Strands debonded 12ft
- ◇ Strands debonded 9ft
- △ Strands debonded 6ft
- ▽ Strands debonded 3ft

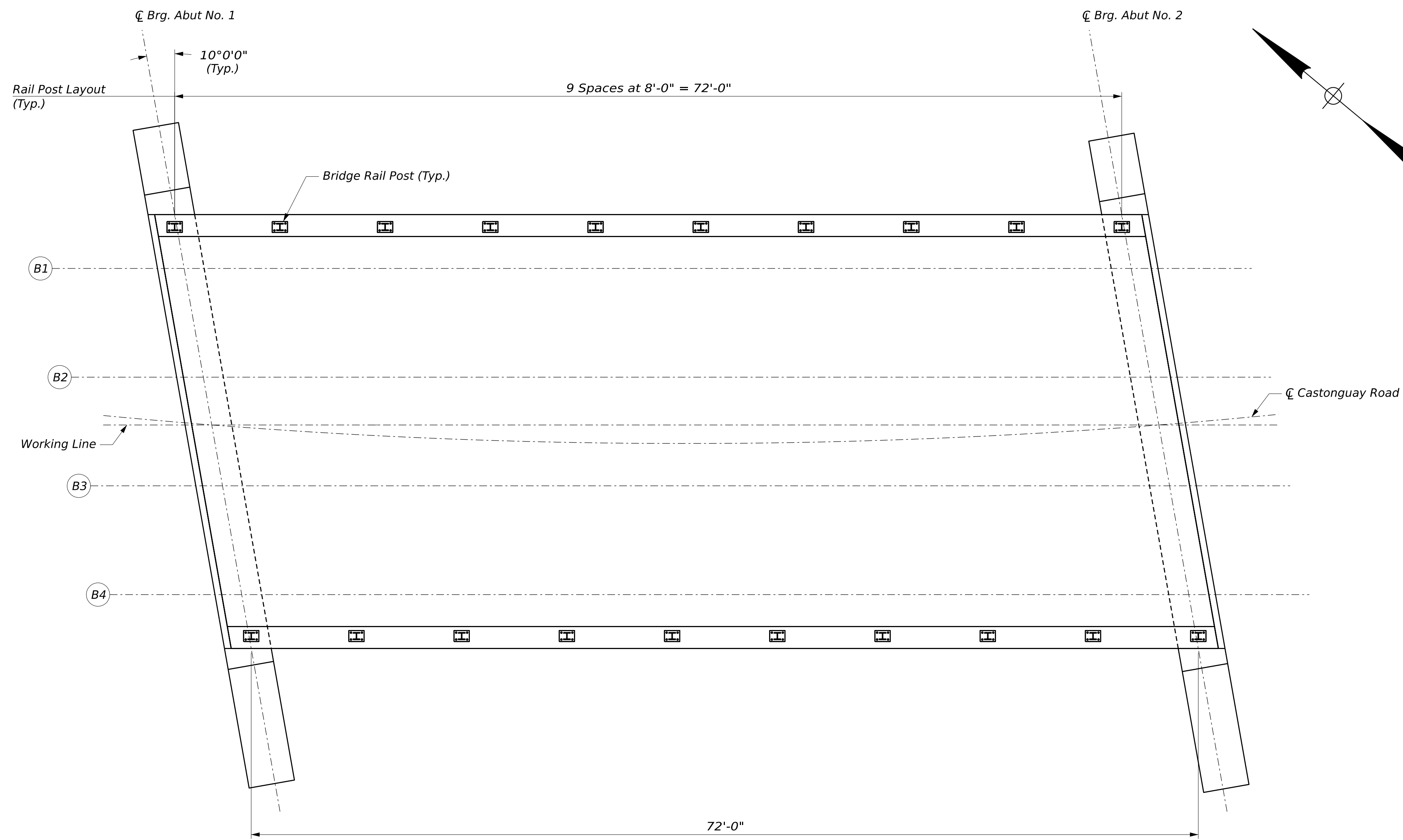


NEXT 32 F BEAM TYPICAL SECTION - AT ENDS

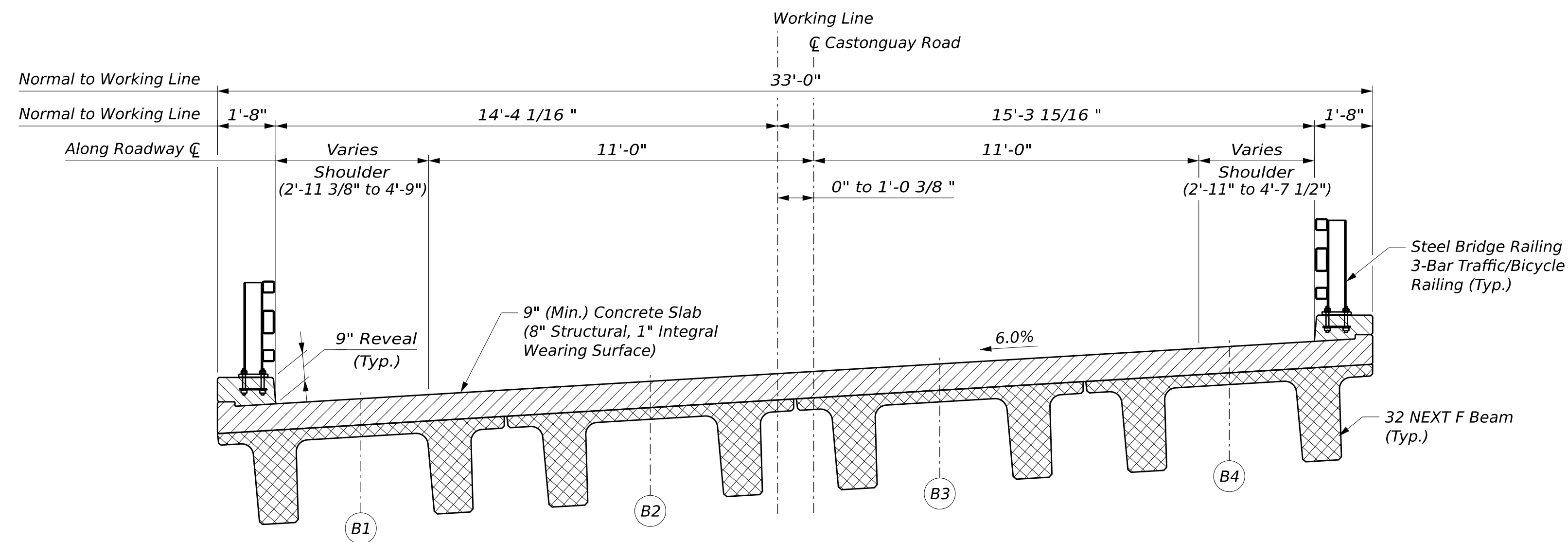


FASCIA OVERHANG DETAIL

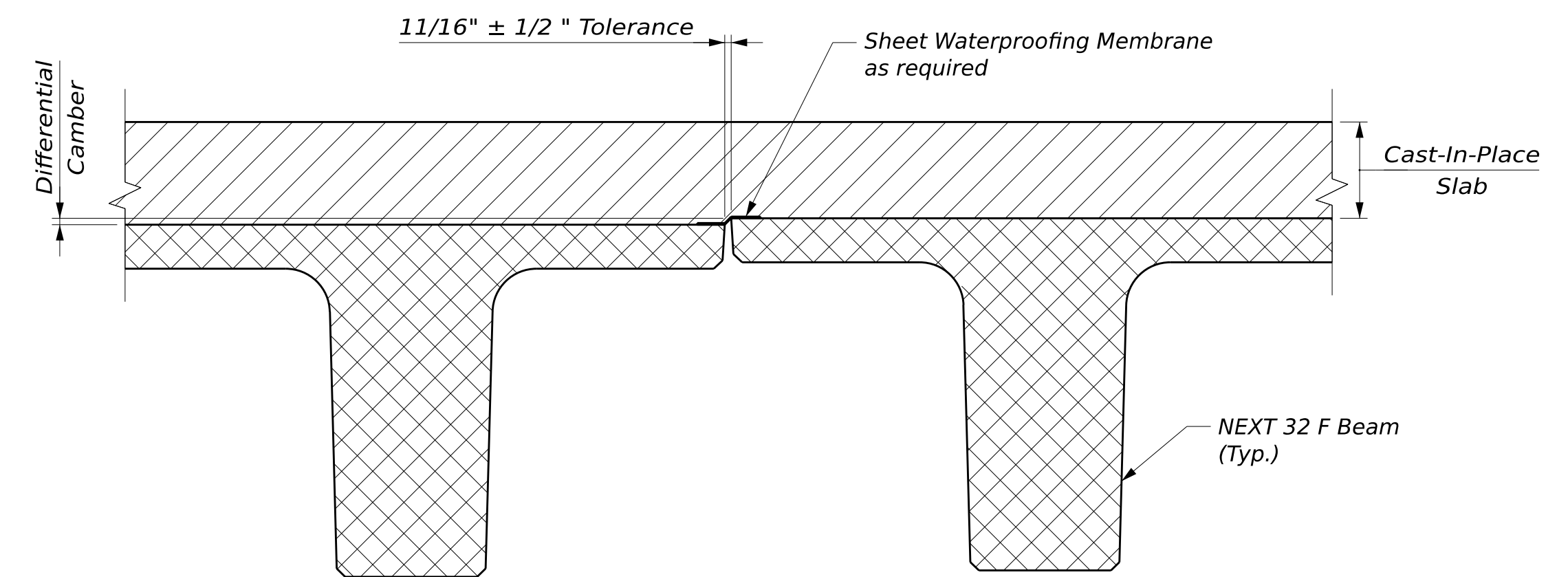
PROJ. MANAGER	BY	DATE
Michael Wight	E. Bauschell	11/2025
DESIGN-DETAILED	K. Schweser	11/2025
CHECKED-REVIEWED	N. Bart	
DESIGN-DETAILED02		
DESIGN-DETAILED03		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		



SUPERSTRUCTURE PLAN



TRANSVERSE SECTION



NEXT BEAM GAP FORM DETAIL

**SUPERSTRUCTURE NOTES:**

1. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
2. Reinforcing bars shall have a minimum concrete cover of 2 inches unless otherwise noted.
3. 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.
4. End diaphragm concrete will be paid for under Item No. 502.261, Structural Concrete Roadway and Sidewalk Slabs on Concrete Bridges and shall be placed with the deck.
5. Payment for Preformed Expansion Joint Filler between the end diaphragms and the wingwalls will not be made directly, but will be considered incidental to Item 502.261, Structural Concrete Roadway and Sidewalk Slab on Concrete Bridges.
6. The Saw Cut Grooving shall be in the longitudinal direction.
7. The bearing elevation and deck thickness shall be adjusted in accordance with Special Provision Section 535, Precast, Prestressed Concrete Superstructure, Camber.
8. Bar supports for GFRP reinforcement shall be plastic, dielectric material, or other approved material. See Special Provision Subsection 530.06 for additional requirements.
9. Payment for Sheet Waterproofing Membrane over the joints between adjacent NEXT Beams will not be made directly but will be considered incidental to related Contract Items. Alternate methods of sealing the gap between the flanges may be submitted to the Resident for approval.

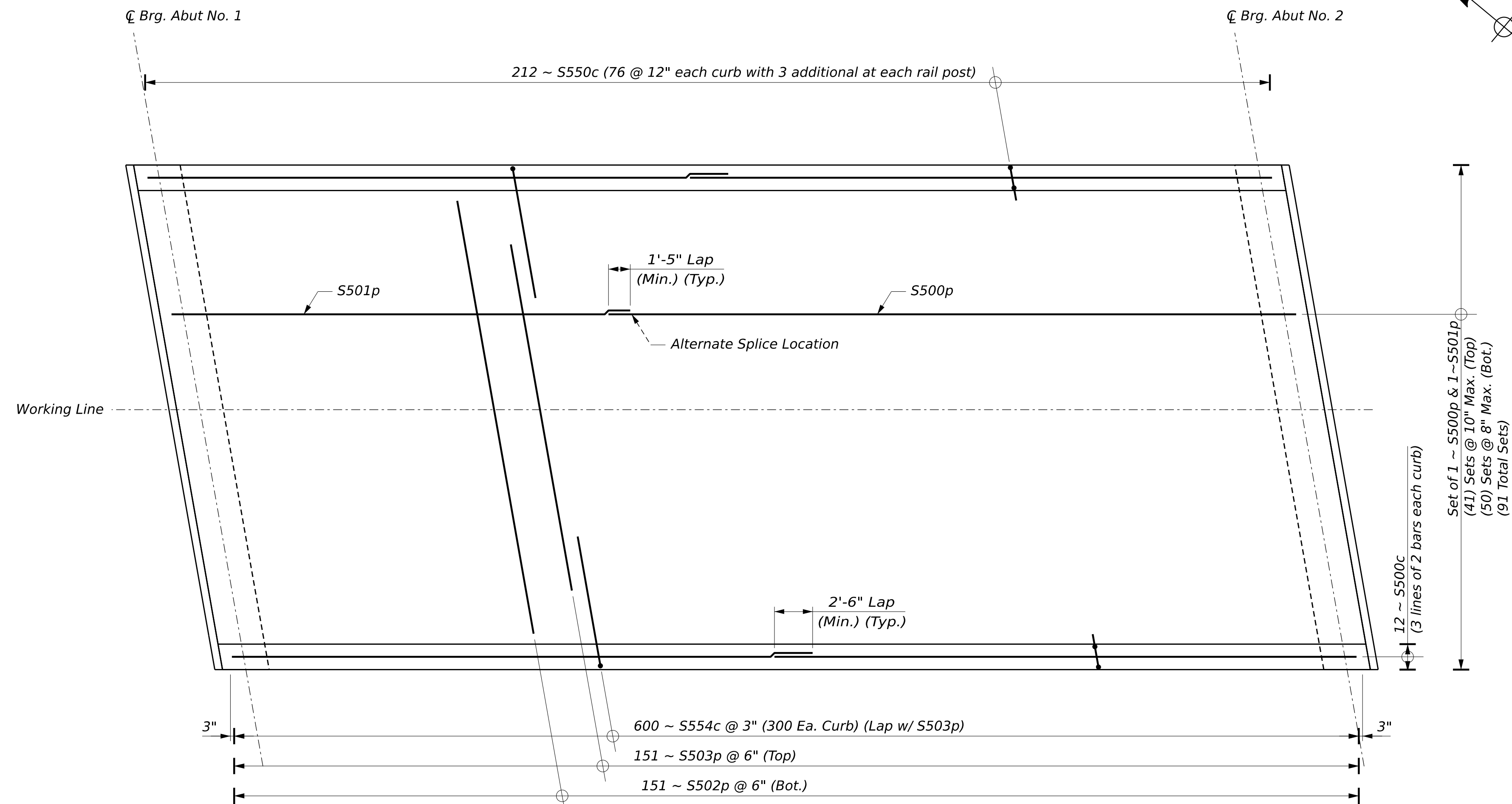
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2608300  
WIN  
026083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

PROJ. MANAGER	DATE	BY	DATE
DESIGN-DETAILED	11/2025	E. Bauschell	11/2025
CHECKED-REVIEWED		B. Greiner	
DESIGN-DETAILED		N. Bart	
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

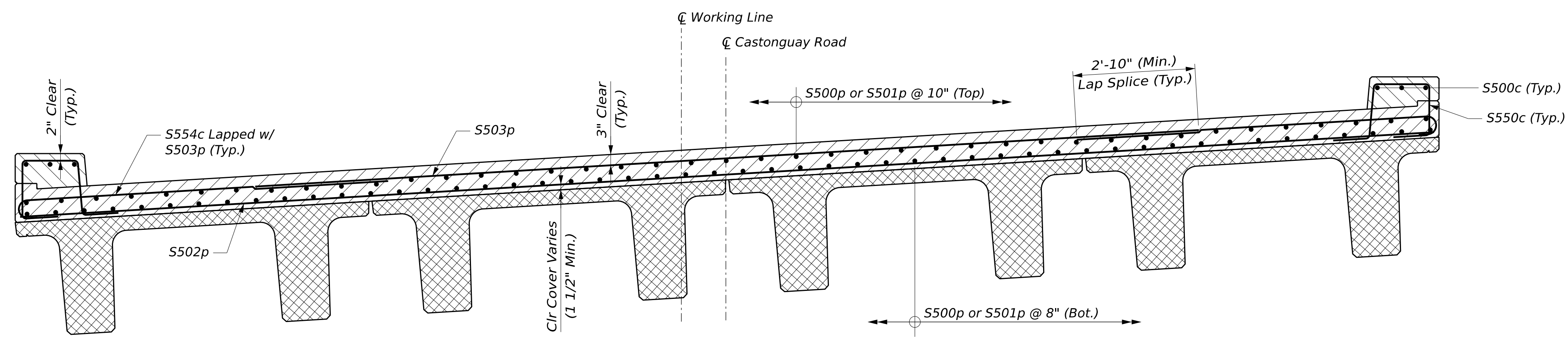
VAN BUREN  
ST. MARY'S BRIDGE  
SUPERSTRUCTURE PLAN

SHEET NUMBER  
29  
OF 33

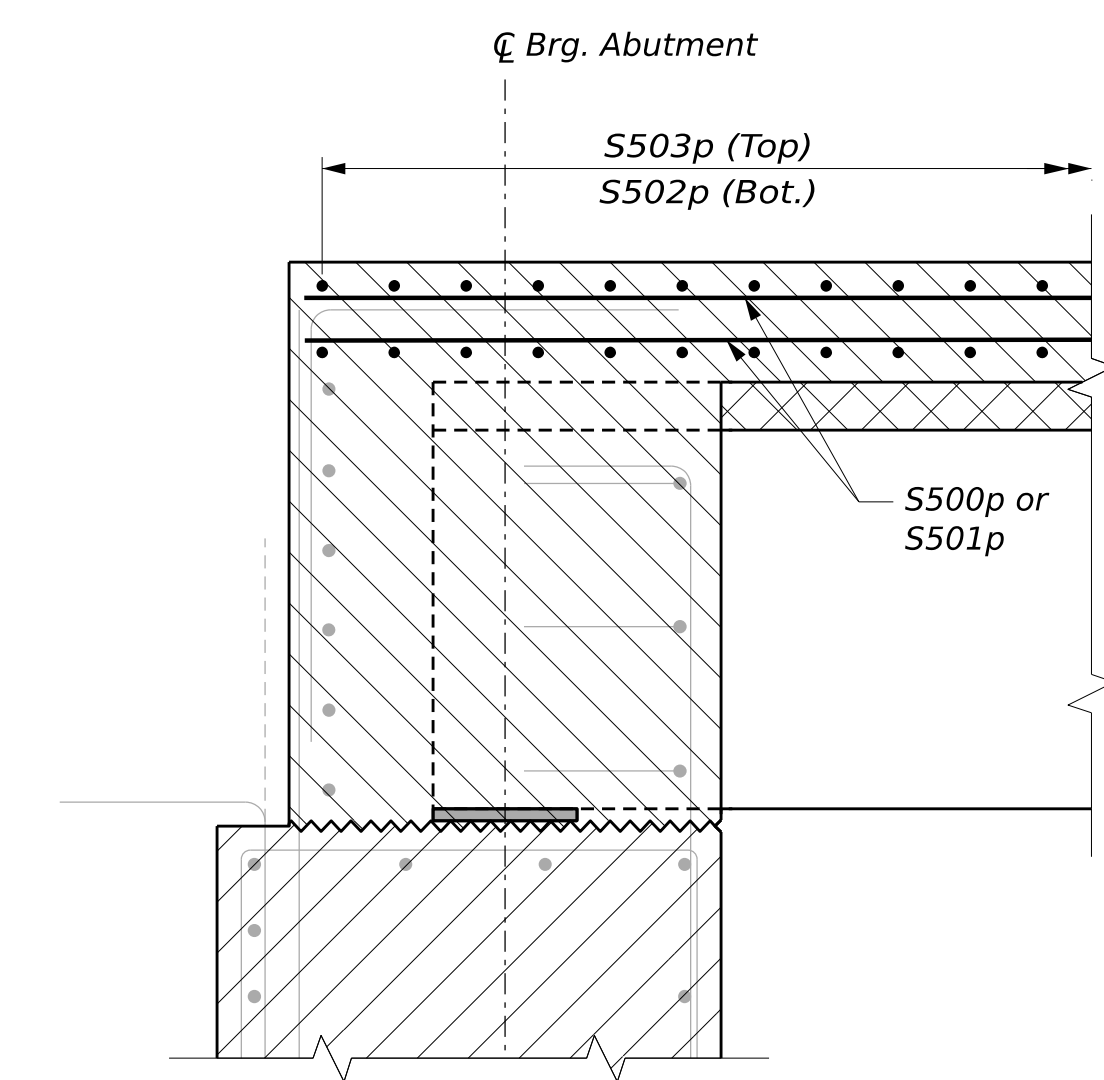




**SUPERSTRUCTURE REINFORCING PLAN**  
(NEXT Beam limits not shown for clarity)



**TRANSVERSE REINFORCING SECTION**



**PARTIAL LONGITUDINAL SECTION**  
(Abutment reinforcing shown screened for clarity)

PROJ. MANAGER	DATE	BY	DATE
Michael Wight	11/2025	E. Bauschall	11/2025
DESIGN-DETAILED		K. Schweser	
CHECKED-REVIEWED		N. Bart	
DESIGN-DETAILED2			
DESIGN-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

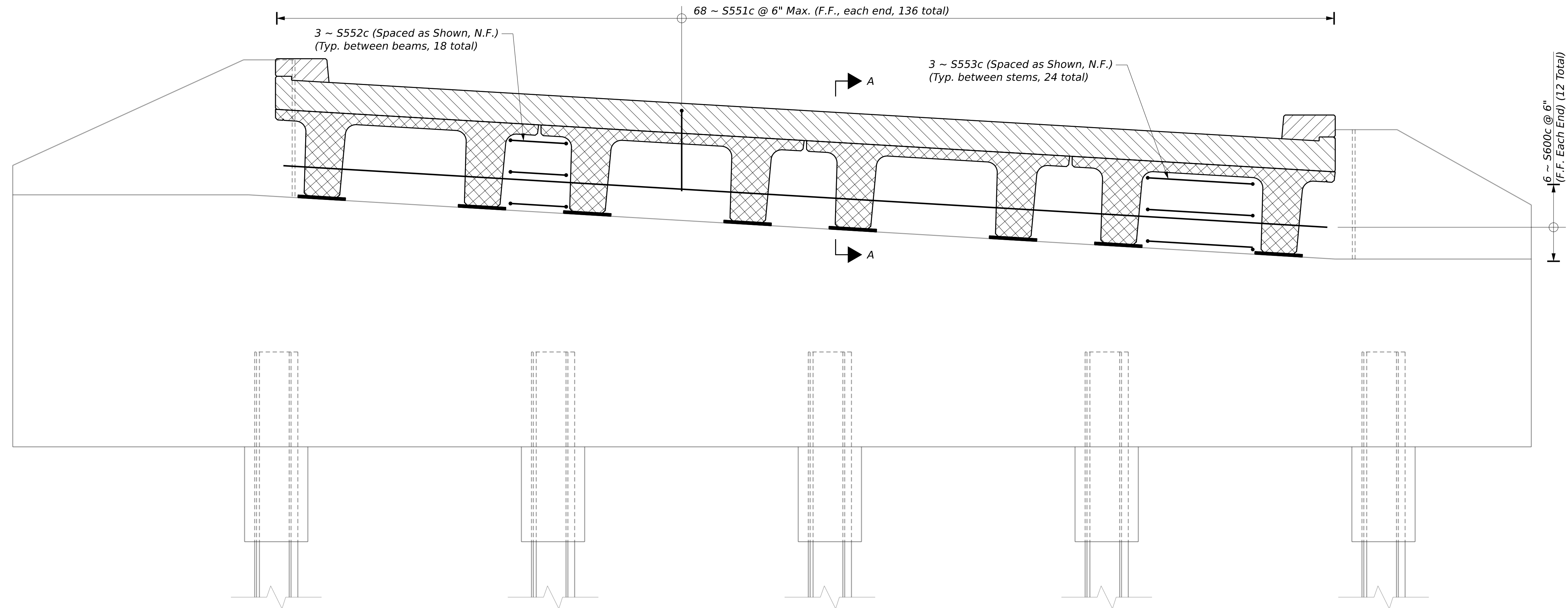
**VAN BUREN  
ST. MARY'S BRIDGE  
SUPERSTRUCTURE  
REINFORCING**

SHEET NUMBER

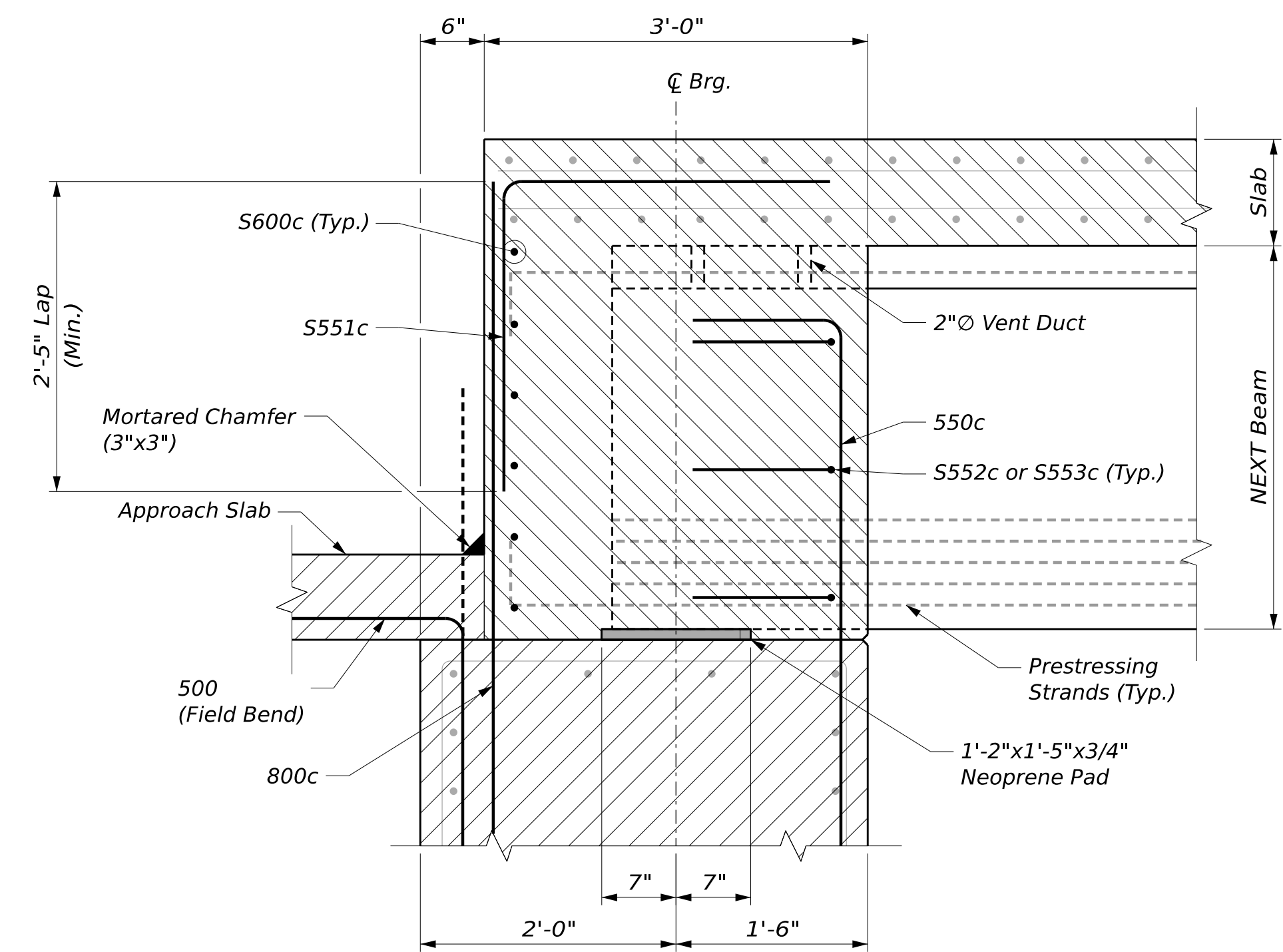
**30**

OF 33





**END DIAPHRAGM REINFORCEMENT ELEVATION**  
 (Abutment No. 1 shown looking downstation, Abutment No. 2 Opposite Hand)  
 (Wingwall bars and Abutment bars extending into Diaphragm not shown for clarity)



SECTION A-A



STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 2608300  
 BRIDGE NO. 5309 026083.00  
 WIN  
 BRIDGE PLANS

PROJ. MANAGER	Michael Wight	BY	DATE
DESIGN-DETAILED	E. Bauschall		11/2025
CHECKED-REVIEWED	N. Bart		11/2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

**VAN BUREN  
 ST. MARY'S BRIDGE  
 END DIAPHRAGM  
 REINFORCING**

SHEET NUMBER

31

OF 33

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 (Plain Rebar)								Abutment No. 1 (Plain Rebar)															
A500	30	3'-11"	Approach Slab Hook (Field Bend)	S500p	91	45'-0"	Deck Slab, Longitudinal, Top & Bot.	A550	16	4'-10"	S	0'-0"	0'-10"	3'-2"	0'-10"								Abut. End T&S
A600	12	35'-9"	Abut. Horiz., F.F. (Abut. & D.S. Side)	S502p	151	33'-2"	Deck Slab, Longitudinal, Top & Bot.	A650	1	13'-2"	V				10'-0"	3'-2"						Abut. Horiz. Below C.J., U.S., N.F.	
A601	14	26'-9"	Abut. Horiz., N.F.	S503p	151	28'-9"	Deck Slab, Transverse, Top	A651	114	13'-0"	S	0'-0"	4'-11"	3'-2"	4'-11"							Vert. U-Bars, U.S., Below C.J.	
A602	1	23'-8"	Abut. Horiz., U.S., F.F.					A652	92	12'-0"	S	0'-0"	4'-5"	3'-2"	4'-5"							Vert. U-Bars, D.S., Below C.J.	
A603	1	15'-4"	Abut. Horiz., U.S., F.F.																				
A604	1	29'-3"	Abut. Horiz., F.F., Below C.J.	S500c	12	38'-8"	Superstructure (Low-Carbon Chromium) Curb Longitudinal Bar	A850	1	18'-6"	V				10'-5"	8'-1"						Abut. Horiz. Below C.J., U.S., F.F.	
A605	1	26'-7"	Abut. Horiz., U.S., N.F.					A851	2	14'-3"	V				10'-1"	4'-2"						Abut. Horiz., Below C.J.	
A606	1	36'-4"	Abut. Horiz., N.F., Below C.J.	S600c	12	38'-1"	End Diaphragm Horiz. (F.F.)																
Abutment No. 1 (Low-Carbon Chromium)								Abutment No. 1 (Low-Carbon Chromium)															
A500c	6	6'-4"	Wingwall Vert., U.S., N.F.					A550c	26	5'-1"	L	4'-2"	0'-10"									Abut. Vertical L-Bars, N.F.	
A501c	5	4'-4"	Wingwall Vert., U.S., N.F.					A551c	24	4'-10"	S	0'-0"	0'-10"	3'-2"	0'-10"							Wingwall Top T&S Bars	
A502c	4	6'-2"	Wingwall Vert., D.S., N.F.					A552c	2	4'-11"	S	0'-0"	0'-10"	3'-3"	0'-10"							Skewed Wingwall Top U-Bars	
A503c	4	5'-0"	Wingwall Vert., D.S., N.F.					A553c	1	17'-1"	P6	7'-3"	3'-3"	6'-7"								Wingwall Horiz., U.S., T&S	
A504c	3	10'-5"	Wingwall Horiz., U.S., F.F.	A5601	59	15'-9"	Approach Slab, Longitudinal, Abut. 1	A554c	1	11'-7"	P6	4'-6"	3'-3"	3'-10"								Wingwall Horiz., U.S., T&S	
A505c	3	6'-2"	Wingwall Horiz., D.S., F.F.	A5602	59	15'-2"	Approach Slab, Longitudinal, Abut. 2	A555c	1	5'-3"	P6	1'-4"	3'-3"	0'-8"								Wingwall Horiz., U.S., T&S	
A600c	2	10'-9"	Wingwall Horiz., U.S., N.F.					A556c	1	17'-1"	P6	6'-8"	3'-3"	7'-2"								Wingwall Horiz., D.S., T&S	
A601c	1	7'-4"	Wingwall Horiz., U.S., N.F.					A557c	1	11'-11"	P6	4'-1"	3'-3"	4'-7"								Wingwall Horiz., D.S., T&S	
A602c	1	7'-7"	Wingwall Horiz., D.S., N.F.					A558c	1	6'-1"	P6	1'-2"	3'-3"	1'-8"								Wingwall Horiz., D.S., T&S	
A603c	1	6'-3"	Wingwall Horiz., D.S., N.F.					A559c	1	10'-10"	V				1'-5"	9'-5"						Wingwall Horiz. Above C.J., U.S., Top	
A604c	4	11'-0"	Wingwall Horiz., D.S., F.F.					A560c	1	10'-8"	V				1'-3"	9'-5"						Wingwall Horiz. Above C.J., U.S., Top	
A605c	1	9'-9"	Wingwall Horiz., D.S., F.F.					A561c	1	10'-6"	V				1'-1"	9'-5"						Wingwall Horiz. Above C.J., U.S., Top	
A800c	68	8'-7"	Abutment Vert., F.F. at C.J.					A562c	1	10'-3"	V				0'-10"	9'-5"						Wingwall Horiz. Above C.J., U.S., Top	
A801c	4	16'-3"	Wingwall Horiz., U.S., F.F.					A563c	1	7'-0"	V				1'-10"	5'-2"						Wingwall Horiz. Above C.J., D.S., Top	
A802c	1	13'-11"	Wingwall Horiz., U.S., F.F.					A564c	1	6'-10"	V				1'-8"	5'-2"						Wingwall Horiz. Above C.J., D.S., Top	
A803c	1	12'-9"	Wingwall Horiz., U.S., F.F.					A565c	1	6'-8"	V				1'-5"	5'-2"						Wingwall Horiz. Above C.J., D.S., Top	
A804c	12	8'-4"	Wingwall Vert., U.S., F.F.					A567c	1	6'-6"	V				1'-4"	5'-2"						Wingwall Horiz. Above C.J., D.S., Top	
A805c	12	6'-8"	Wingwall Vert., U.S., F.F.					A650c	1	10'-10"	V				6'-2"	4'-8"						Wingwall Horiz., D.S., F.F.	
A806c	7	8'-2"	Wingwall Vert., D.S., F.F.					A651c	1	7'-6"	V				6'-8"	0'-10"						Wingwall Horiz., D.S., N.F.	
A807c	7	7'-0"	Wingwall Vert., D.S., F.F.																				
Abutment No. 2 (Plain Rebar)								Abutment No. 2 (Plain Rebar)															
B500	30	3'-11"	Approach Slab Hook (Field Bend)					B550	16	4'-10"	S	0'-0"	0'-10"	3'-2"	0'-10"							Abut. End T&S	
B600	12	35'-5"	Abut. Horiz., F.F. (Abut. & D.S. Side)					B650	1	14'-0"	V				10'-0"	3'-2"						Abut. Horiz. Below C.J., U.S., N.F.	
B601	14	26'-6"	Abut. Horiz., N.F.					B651	114	13'-0"	S	0'-0"	4'-11"	3'-2"	4'-11"							Vert. U-Bars, U.S., Below C.J.	
B602	1	24'-1"	Abut. Horiz., U.S., F.F.					B652	88	12'-0"	S	0'-0"	4'-5"	3'-2"	4'-5"							Vert. U-Bars, D.S., Below C.J.	
B603	1	15'-8"	Abut. Horiz., U.S., F.F.					B850	1	18'-2"	V				10'-2"	8'-0"						Abut. Horiz. Below C.J., U.S., f.F.	
B604	1	29'-4"	Abut. Horiz., F.F., Below C.J.					B851	2	14'-5"	V				10'-3"	4'-2"						Abut. Horiz., Below C.J.	
B605	1	27'-5"	Abut. Horiz., U.S., N.F.																				
B606	1	33'-2"	Abut. Horiz., N.F., Below C.J.																				
B800	4	27'-0"	Abut. Horiz., Bot.																				
B801	14	18'-6"	Wingwall Horiz., U.S., F.F.																				
B802	1	21'-4"	Abut. Horiz., U.S., F.F.																				
B803	2	36'-8"	Abut. Horiz., Below C.J.																				
B804	2	8'-10"	Abut. Horiz., D.S., Below C.J.																				
Abutment No. 2 (Low-Carbon Chromium)								Abutment No. 2 (Low-Carbon Chromium)															
B500c	6	6'-3"	Wingwall Vert., U.S., N.F.					B550c	26	5'-1"	L	4'-3"	0'-10"									Abut. Vertical L-Bars, N.F.	
B501c	5	4'-7"	Wingwall Vert., U.S., N.F.					B551c	24	4'-10"	S	0'-0"	0'-10"	3'-2"	0'-10"							Wingwall Top T&S Bars	
B502c	4	6'-2"	Wingwall Vert., D.S., N.F.					B552c	2	4'-11"	S	0'-0"	0'-10"	3'-3"	0'-10"							Skewed Wingwall Top U-Bars	
B503c	3	4'-6"	Wingwall Vert., D.S., N.F.					B553c	1	17'-8"	P6	6'-10"	3'-3"	7'-6"								Wingwall Horiz., U.S., T&S	
B504c	3	10'-2"	Wingwall Horiz., U.S., F.F.					B554c	1	12'-2"	P6	4'-1"	3'-3"	4'-9"								Wingwall Horiz., U.S., T&S	
B505c	3	5'-11"	Wingwall Horiz., D.S., F.F.					B555c	1	5'-6"	P6	0'-10"	3'-3"	1'-5"								Wingwall Horiz., U.S., T&S	
B600c	2	11'-7"	Wingwall Horiz., U.S., N.F.					B556c	1	13'-11"	P6	5'-8"	3'-3"	5'-0"								Wingwall Horiz., D.S., T&S	
B601c	1	8'-1"	Wingwall Horiz., U.S., N.F.					B557c	1	9'-11"	P6	3'-8"	3'-3"	3'-0"								Wingwall Horiz., D.S., T&S	
B602c	1	6'-3"	Wingwall Horiz., D.S., N.F.					B558c	1	5'-2"	P6	1'-3"	3'-3"	0'-8"								Wingwall Horiz., D.S., T&S	
B603c	1	5'-6"	Wingwall Horiz., D.S., N.F.					B559c	1	10'-11"	V				1'-5"	9'-5"						Wingwall Horiz. Above C.J., U.S., Top	
B604c	4	10'-9"	Wingwall Horiz., D.S., F.F.					B560c	1	10'-9"	V				1'-3"	9'-5"						Wingwall Horiz. Above C.J., U.S., Top	
B605c	1	10'-0"	Wingwall Horiz., D.S., F.F.					B561c	1	10'-6"	V				1'-0"	9'-5"						Wingwall Horiz. Above C.J., U.S., Top	
B800c	68	8'-7"	Abut. Vert., F.F. at C.J.					B562c	1	10'-4"	V				0'-10"	9'-5"						Wingwall Horiz. Above C.J., U.S., Top	
B801c	4	15'-11"	Wingwall Horiz., U.S., F.F.					B563c	1	6'-1"	V				1'-3"	5'-2"						Wingwall Horiz. Above C.J., D.S., Top	
B802c	1	13'-7"	Wingwall Horiz., U.S., F.F.					B564c	1	5'-11"	V				1'-1"	5'-2"						Wingwall Horiz. Above C.J., D.S., Top	
B803c	1	12'-5"	Wingwall Horiz., U.S., F.F.					B565c	1	5'-8"	V				0'-10"	5'-2"						Wingwall Horiz. Above C.J., D.S., Top	
B804c	11	8'-4"	Wingwall Vert., U.S., F.F.					B566c	1	5'-6"	V				0'-8"	5'-2"						Wingwall Horiz. Above C.J., D.S., Top	
B805c	11	6'-8"	Wingwall Vert., U.S., F.F.					B650c	1	10'-6"	V				5'-11"	4'-8"						Wingwall Horiz., D.S., F.F.	
B806c	7	8'-2"	Wingwall Vert., D.S., F.F.					B651c	1	6'-2"	V				5'-4"	0'-10"						Wingwall Horiz., D.S., N.F.	
B807c	6	6'-9"	Wingwall Vert., D.S., F.F.																				
Superstructure (Low-Carbon Chromium)								Superstructure (Low-Carbon Chromium)															
S550c	212	5'-4"	SC					S551c	136	4'-10"	L	2'-5"	2'-5"									Curb Stirrup	
S552c	18	3'-5"	S					S553c	24	5'-1"	S	0'-0"	0'-10"	1'-9"	0'-10"							End Diaphragm Deck Hook	
S554c	600	7'-9"	P1					S555c	24	5'-1"	S	0'-0"	0'-10"	3'-5"	0'-10"							Stirrup between Beams	
								S556c	600	7'-9"	P1	0'-7"	7'-2"									Stirrup between Beams	
																						Deck Overhang Bar	

### TYPE - BENDING DIAGRAMS

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

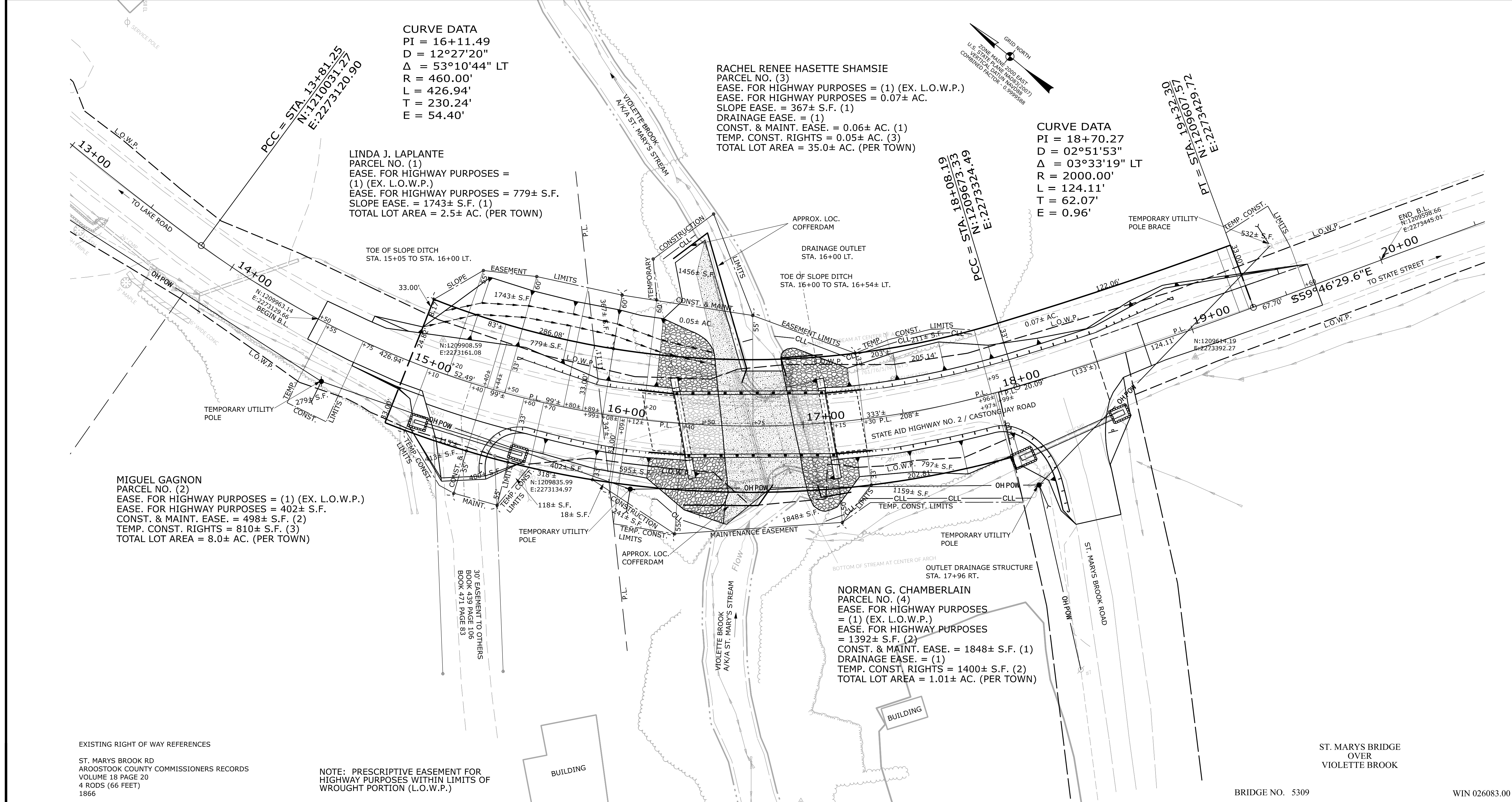
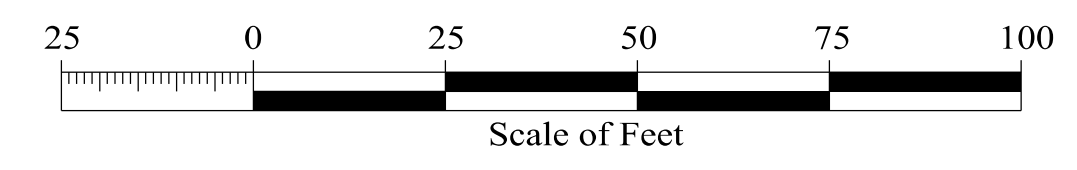
2608300  
WIN  
026083.00  
BRIDGE NO. 5309  
BRIDGE PLANS

PLAN LEGEND	
Town, County, State	Existing
Approx. Property Lines	Proposed
Existing Right of Way	Existing
Limits of Wrought Portion	Proposed
Control Of Access	Existing
New Right of Way	Proposed
New Easement	Existing
New Temporary Rights	Proposed
New R/W Within Existing R/W	Existing

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



CHECKED	JDF	PS	KDM
TECH	SAN	SAN	SAN
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

VAN BUREN  
RIGHT OF WAY MAP

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

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

DATE \_\_\_\_\_

STATE AID HIGHWAY NO. 2  
CASTONGUAY ROAD

VAN BUREN AROOSTOOK COUNTY  
FEDERAL AID PROJECT NO. 2608300

AUGUST 2025 RIGHT-OF-WAY MAP  
SCALE 1"= 25' SHEET 1 OF 1

D.O.T FILE NO. 2-665

SHEET NUMBER  
**33**  
OF 33

Date: 12/9/2025  
Username: Shawn.Noyes