STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Seventh Edition 2014 with 2015 & 2016 Interim Revisions.

DESIGN LOADING

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

TRAFFIC DATA

Current (2016) AADT	3320
Future (2036) AADT	3980
DHV - % of AADT	14%
Design Hour Volume	557
Heavy Trucks (% of AADT)	9%
Heavy Trucks (% of DHV)	5%
Directional Distribution (% of DHV)	57%
18 kip Equivalent P 2.0	126
18 kip Equivalent P 2.5	120
Design Speed (mph)	30

HYDROLOGIC DATA

Drainage Area	173 sq mi
Design Discharge (Q50)	10,150 cfs
Check Discharge (Q100)	11,700 cfs
Headwater Elevation (Q1.1)	269.99 ft
Headwater Elevation (Q25)	276.85 ft
Headwater Elevation (Q50)	278.10 ft
Headwater Elevation (Q100)	279.36 ft
Discharge Velocity (Q1.1)	4.16 fps
Discharge Velocity (Q50)	6.96 fps
Discharge Velocity (Q100)	7.14 fps

MATERIALS

Concrete:	
Curbs, Sidewalk, & Transition Barriers	Class "LP"
All Other	Class "A"
Reinforcing Bars:	
Plain Steel	ASTM A 615, Grade 60
Stainless Steel	ASTM A 955, Grade 75
Glass Fiber Reinforced Polymer (GFRP)	CSA S807-10, AC1 440.1r-15
Structural Steel:	
All Material (except as noted)	ASTM A 709, Grade 50W (unpainted)
High Strength Bolts	ASTM F 3125, Grade A325, Type 3

BASIC DESIGN STRESSES

Concrete:	
Class "LP"	f'c = 5,000 psi
Class "A"	f'c = 4,000 psi
Reinforcing Bars:	
ASTM A 615, Grade 60	f y = 60,000 psi
ASTM A 955, Grade 75	f y = 75,000 psi
Glass Fiber Reinforced Polymer (GFRP):	
#5 Bar	f fu = 100,000 psi
#6 Bar	f fu = 100,000 psi
#7 Bar	f fu = 95,000 psi
Minimum Elastic Modulus	E f = 6,150,000 psi
Structural Steel:	
ASTM A 709, Grade 50W	F y = 50,000 psi
ASTM F 3125, Grade A325, Type 3	F μ = 120,000 psi

HNTB

TURNER
ANDROSCOGGIN COUNTY
NORTH PARISH BRIDGE
OVER
NEZINSCOT RIVER
STATE ROUTE 117 \ N. PARISH RD.
FEDERAL AID PROJECT NO. STP-1874(900)
PROJECT LENGTH 0.19 mi.
BRIDGE NO. 2619

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UTILITIES

Central Maine Power — Charter
Oxford Networks

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating one - way traffic on the existing bridge, using temporary traffic signals.

PROJECT LOCATION	North Parish Bridge #2619 in Turner carrying North Parish Rd. (State Rte. 117) over the Nezinscot River, located 0.16 of a mile north of Cobb Rd. Lat./Long. 44° 16' 26" N 70° 13' 09" W
PROGRAM AREA	Bridge
OUTLINE OF WORK	Replacement and re-alignment of North Parish Bridge #2619 in Turner with 1,092' of approach work.

WIN 18749.00

STP-1874(900)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE 12-1-17
COMMISSIONER: — DATE 12-1-17
CHIEF ENGINEER:

STATE OF MAINE — ROLAND A. LAVALLEE — No. 6452 — LICENSED PROFESSIONAL ENGINEER
SIGNATURE — P.E. NUMBER 6452 — DATE 11/8/17

PROJECT INFORMATION	
PROGRAM	BRIDGE
PROJECT MANAGER	MARK PARLIN
DESIGNER	TIM COTE, P.E.
CONSULTANT	HNTB CORP.
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

TURNER
NORTH PARISH BRIDGE

TITLE SHEET

SHEET NUMBER
1
OF 50

Date:11/8/2017
Username:
Division:
Filename:001_Title.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.19	Removing Existing Bridge (Structural Steel = 110 Tons, Concrete = 560 CY)	1	LS
202.202	Removing Pavement Surface	455	SY
203.20	Common Excavation	3,350	CY
203.2318	Disposal of Special Waste	90	TON
203.24	Common Borrow	100	CY
203.25	Granular Borrow	1,370	CY
206.061	Structural Earth Excavation - Drainage Minor Structures Below Grade	50	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	60	CY
304.10	Aggregate Subbase Course - Gravel	2,250	CY
403.208	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size	300	TON
403.209	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (sidewalks, drives, islands & incidentals)	8	TON
403.211	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming)	19	TON
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course)	441	TON
409.15	Bituminous Tack Coat, Applied	134	GAL
411.09	Untreated Aggregate Surface Course	5	CY
501.231	Dynamic Loading Test	2	EA
501.52	Steel H-beam Piles 102 lb/ft, delivered	400	LF
501.521	Steel H-beam Piles 102 lb/ft, in place	335	LF
501.90	Pile Tips	10	EA
501.91	Pile Splices	10	EA
501.92	Pile Driving Equipment Mobilization	1	LS
502.219	Structural Concrete, Abutments and Retaining Walls (158 CY)	1	LS
502.26	Structural Concrete Roadway and Sidewalk Slab on Steel Bridges (214 CY)	1	LS
502.291	Saw Cut Grooving (5,450 SF)	1	LS
502.31	Structural Concrete Approach Slab (25 CY)	1	LS
502.49	Structural Concrete Curbs and Sidewalks (98 CY)	1	LS
502.77	FRP Bridge Drain - Type E	4	EA
503.12	Reinforcing Steel, Fabricated and Delivered	32,400	LB
503.13	Reinforcing Steel, Placing	32,400	LB
503.17	Mechanical/Welded Splice	44	EA
503.26	Stainless Steel Reinforcement, Fabricated and Delivered	20,200	LB
503.27	Stainless Steel Reinforcement, Placing	20,200	LB
504.702	Structural Steel Fabricated and Delivered, Welded (444,300 LBS)	1	LS
504.71	Structural Steel Erection (444,300 LBS)	1	LS
505.08	Shear Connectors (2900 EA)	1	LS
507.0821	Steel Bridge Rail, 3 Bar (184 LF)	1	LS
507.0831	Steel Bridge Rail, 4 Bar (184 LF)	1	LS
511.07	Cofferdam: Abutment 1	1	LS
511.07	Cofferdam: Abutment 2	1	LS
514.06	Curing Box for Concrete Cylinders	1	EA
515.21	Protective Coating for Concrete Surfaces (950 SY)	1	LS
520.232	Expansion Device - Asphaltic Plug Joint	62	LF
524.301	Temporary Structural Support	1	LS
526.301	Temporary Concrete Barrier, Type 1 (640 LF)	1	LS
526.304	Temporary Concrete Barrier, Anchored (220 LF)	1	LS
526.34	Permanent Concrete Transition Barrier	4	EA
527.34	Work Zone Crash Cushions	4	UN
530.30	GFRP, Reinforcement Bars, Fabricated and Delivered	51,000	LF
530.31	GFRP, Reinforcement Bars, Placing	51,000	LF
603.16	15 inch Culvert Pipe Option I	24	LF
603.169	15 inch Culvert Pipe Option III	60	LF
603.179	18 inch Culvert Pipe Option III	48	LF
603.199	24 inch Culvert Pipe Option III	84	LF
604.092	Catch Basin Type B1-C	9	EA
604.262	Catch Basin Type B5-C	1	EA
605.09	6 inch Underdrain Type B	96	LF
605.12	15 inch Underdrain Type C	246	LF
605.13	18 inch Underdrain Type C	739	LF
606.1301	31" W-Beam Guardrail - Mid-Way Splice (Steel Post, 8" Offset Blocks, Single Face)	387.5	LF
606.1305	31" W-Beam Guardrail - Mid-Way Splice Flared Terminal (31" Height)	3	EA
606.1307	Bridge Transition (Asymmetrical) - Type 1	4	EA
606.1308	Buried-in-Slope Guardrail End, Mid-Way Splice	1	EA
606.353	Reflectorized Flexible Guardrail Marker	8	EA
609.31	Curb Type 3	295	LF
610.08	Plain Riprap	5	CY
610.16	Heavy Riprap	1,200	CY
610.18	Stone Ditch Protection	130	CY

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
613.319	Erosion Control Blanket	50	SY
615.07	Loam	220	CY
618.14	Seeding Method Number 2	25	UN
618.141	Seeding Method Number 3	10	UN
619.12	Mulch	35	UN
619.14	Erosion Control Mix	300	CY
620.58	Erosion Control Geotextile	1,520	SY
620.661	Drainage Geocomposite	140	SY
621.273	Large Deciduous Trees Gr. A 2" - 2 1/2" B&B (Acer saccharum 'Green Mt.') G.M. Sugar Maple	1	EA
621.552	Deciduous Shrubs Gr. A 3' - 4' Cont. (Forsythia suspensa 'Northern Gold') Forsythia	24	EA
627.51	6 Inch Temporary Pavement Tape, Yellow or White	1,400	LF
627.57	12 Inch Removable Black Line Masking Tape	1,400	LF
627.733	4" White or Yellow Painted Pavement Marking Line	3,850	LF
627.77	Removing Existing Pavement Marking	650	SF
627.78	Temporary 4" Painted Pavement Marking Line, White or Yellow	950	LF
627.811	Temporary Bi-directional Yellow Delineators	40	EA
627.812	Temporary Bi-directional White Delineators	33	EA
629.05	Hand Labor, Straight Time	40	HR
631.12	All Purpose Excavator (including operator)	20	HR
631.14	Grader (including operator)	20	HR
631.15	Roller, Earth and Base Course (including operator)	20	HR
631.172	Truck-large (including operator)	20	HR
637.071	Dust Control	1	LS
639.18	Field Office, Type A	1	EA
643.72	Temporary Traffic Signal: Route 117	1	LS
652.33	Drum	10	EA
652.34	Cone	10	EA
652.35	Construction Signs	225	SF
652.361	Maintenance of Traffic Control Devices (610 CD)	1	LS
652.38	Flaggers	320	HR
656.75	Temporary Soil Erosion and Water Pollution Control	1	LS
659.10	Mobilization	1	LS

Username:

Division:

Date:11/28/2017

Filename: 002_Estimate.dgn

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Perlin	BY	DATE
DESIGN-DETAILED	J. Olund	P. Bishop	11\17
CHECKED-REVIEWED	T. Poulin	T. Cote	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

ESTIMATED QUANTITIES

SHEET NUMBER

2

OF 50

Date:11/28/2017

Username:

Division:

Filename: 003_Notes.dgn

GENERAL CONSTRUCTION NOTES:

1. 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.

2. Single tree and stump removal shall be considered incidental to Contract Items.

3. For easements, construction limits, and right of way lines, refer to Right of Way Maps.

4. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

5. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.

6. 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.

7. Unless otherwise noted, all embankment material placed below EL. 280.83 at Abutment No. 1 and EL. 282.73 at Abut. No. 2, and beyond the abutment backfill limits shown on sheet 42 shall be Granular Borrow meeting the requirements of Standard Specifications Subsection 703.19, Material for Underwater Backfill.

8. Place loam 2 inches deep on all new or reconstructed side slopes or as directed by the Resident.

9. 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 Item No. 619.14, Erosion Control Mix.

10. Place a 24-inch wide strip of Temporary Erosion Control Blanket on the side slopes along the top of riprap and behind the wingwalls.

11. An NCHRP350 or MASH compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail. End treatments shall be chosen from the Department's Qualified Products List.

12. Extended Use 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, where it is apparent that runoff will cause continual erosion. Payment will be made under the appropriate Contract Items.

13. Plastic end caps shall be used on all dead-ends of 6-inch Underdrain Type B and payment shall be considered incidental to Item 605.09.

14. No existing drainage shall be abandoned, removed, or plugged without prior approval of the Resident. Existing drainage called to be abandoned, removed, or plugged shall be incidental to related 603 items.

15. Protective Coating for Concrete Surfaces shall be applied to the following areas:

    All exposed surfaces of concrete wearing surface.
    All exposed surfaces of concrete curbs, sidewalk, and transition barriers.
    Fascias down to the drip notch.
    Top of abutments and wingwalls and to one foot below the top of backwalls on the back side.

16. Project information referred to below may be accessed at the following MaineDOT web address: http://www.maine.gov/mdot/contractors.

17. 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.

18. The hydrologic report of the bridge site may be accessed at the MaineDOT web address. The hydrologic report is based on the designers 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.

19. The project geotechnical report titled: Geotechnical Design Report, North Parish Bridge No. 2619, North Parish Road over Nezinscot River, Turner, Maine, dated November 6, 2017, 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 Bidder's 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:

    a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

    b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

    c. 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 Contractor shall submit a Bridge Demolition Plan to the Resident at least 10 business days prior to the start of demolition work. The plan shall outline the methods and equipment to be used to remove and dispose of all materials included in the existing bridge. No work related to the removal of the bridge shall be undertaken by the Contractor until MaineDOT has reviewed the Bridge Demolition Plan for appropriateness and completeness. Payment for all work necessary for developing, submitting and finalizing the demolition Plan will be considered incidental to the bridge removal pay item.

23. The existing bridge shall be removed by and become the property of the Contractor. The steel portions of the existing bridge are coated with a lead-based paint system. The Contractor is responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the process of demolishing the bridge. The Contractor is responsible for implementing appropriate OSHA mandated personal protection standards related to this process. Once the existing bridge is removed, the Contractor is solely responsible for the care, custody and control of the components of the existing bridge and any hazardous waste generated as a result of the storage, recycling or disposal of the bridge components, including lead-coated steel. The Contractor shall recycle or reuse the steel in accordance with the Maine Department of Environmental Protection's "Maine Hazardous Waste Management Regulations," Chapter 850. A copy of this regulation is available at MaineDOT's offices on Child Street in Augusta. Payment for all labor, materials, equipment and other costs required to remove and dispose of the existing bridge will be considered incidental to the bridge removal pay item.

24. The existing piers shall be removed to be flush with the stream bed. The existing abutments shall be removed to two feet below finish grade. Cofferdams used for removal of the existing piers and abutments will not be measured for payment and will be considered incidental to the bridge removal pay item.

25. Unpaved entrances shall be constructed with 14" Aggregate Subbase Course-Gravel or 11" Aggregate Subbase Course-Gravel and 3" untreated Aggregate Surface Course unless otherwise noted on the Plans or directed by the Resident.

26. A 3' paved lip shall be placed at all unpaved entrances unless otherwise noted on the Plans or as directed by the Resident.

27. Removing and resetting of all regulatory, warning, confirmation, route marker assembly sign required for construction shall be performed in accordance with Standard Specification Section 645, Highway Signing. Payment will be incidental to Contract Items.

28. The existing 30 mph (approximate Sta. 8+60 Lt.) and 50 mph speed limit signs (approximate Sta. 8+45 Lt.) shall be relocated north of the athletic field complex. Exact location shall be determined in the field by the Resident and the Region Traffic Engineer. Payment will be incidental to related Contract Items.

29. Existing pavement removal is shown on the cross sections beyond the limits of Common Excavation for roadway construction. In these areas, backfill with Common Borrow and 2" of loam and seed.

30. The Contractor shall take precaution when excavating near the existing and proposed abutments to avoid potential undermining of the approach fills and foundations used to maintain traffic. Any damage resulting from the Contractor's excavation procedures shall be repaired at the Contractor's expense. Payment for any temporary structural or earth support systems needed will be made under Item 524.301, Temporary Structural Support.

31. Embankment settlement is anticipated during construction of the roadway north of the bridge. The Contractor shall overbuild to compensate for the anticipated settlement and adjust the final grade of the subbase prior to paving. Payment for all work necessary to compensate for settlement and meet final grade requirements will not be made directly and will be considered incidental to related Contract Items.

32. Reinforcing bars within the Permanent Concrete Transition Barriers shall be stainless steel. Payment shall be incidental to Item 526.34, Permanent Concrete Transition Barrier.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin	BY	DATE
DESIGN-DETAILED	J. Olund	P. Bishop	11\17
CHECKED-REVIEWED	T. Poulin	T. Cote	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

GENERAL NOTES

SHEET NUMBER

3

OF 50

Filename: 004_BDPlan1.dgn Division: Username: Date:11/10/2017

Sta. 4+00.00
Match Existing
Begin Mill and Overlay
Limit Of Work

Sta. 4+50.00
End Mill and Overlay
Begin Transition

Sta. 5+00.00
End Transition
Begin Project
WIN 18749.00

POB = STA. 4+00.00

Existing Utility Pole
(Relocate by Others)

Proposed Utility Pole
(by Others)

Remove and
Reset Sign

Remove Tree

Existing Utility Pole
(To Remain)

Future Curb
(By Others)

11'-0 1/2"

11'-2 1/2"

4+00

To Turner Village

2" Mill
Variable Depth
Shim and 1.5"
Overlay

Existing Utility Pole
(Remove by Others)

4:1

3:1

11'-0"

11'-0"

CB #1

5+00

N 8°07'14.46" E

2%

6+00

CB #2

7+00

CB #3

CB #4

8+00

Rte. 117 / No. Parish Rd.

Existing Utility Pole
(Remove by Others)

Slope Break for Future
Sidewalk (Constructed
by Others)

NEZINSCOT RIVER

CURVE DATA #1
PI = 7+42.68
D = 10°03'06.8"
Δ = 25°21'30.3" Lt.
R = 570.00'
L = 252.28'
T = 128.24'
E = 14.25'

PC = STA. 6+14.44

54" X 24" Culvert
Option III

Existing 30 MPH
Sign to be Relocated
(See General Note 29)

Existing Utility Pole
(Remove by Others)

Existing Utility Pole
(To Remain)

CLL

PT = STA. 8+66.72

6:1

4:1

2:1

Curb Type 3
(8'-0" Transition)
Adjacent to Bridge
Transition Curb

Flow

℄ Brg., Abut. No. 1
Sta. 9+24.20

℄ Brg., Abut. No. 2
Sta. 11+14.20

Stone Ditch Protection
Downspout (Typ.)

Existing Utility
Pole (To Remain)

Curb Type 3
(8'-0" Transition)
Adjacent to Bridge
Transition Curb

190'-0"

1.75:1

3:1

9+00

10+00

11+00

14'-0"

14'-0"

N 17°14'15.86" W

CB

Existing Utility and Stub
Pole (Remove by Others)

31" W-Beam Guardrail
Mid-Way Splice, Flared
Terminal (Typ.)

31" W-Beam Guardrail
Mid-Way Splice,
Single Faced (Typ.)

Existing 50 MPH
Sign to be Relocated
(See General Note 29)

Stone Ditch
Protection

Heavy
Riprap
(Typ.)

Sta. 8+87.56, 51.32' Rt. to
8+99.16, 46.68' Rt. Clear to
Slope Easement Limit

Bridge Transition
Type 1A (Typ.)

NEZINSCOT RIVER

Flow

PLAN

25 0 25 50
Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

GENERAL PLAN

SHEET NUMBER
4
OF 50

Username:

Division:

Filename: 005_BDPlan2.dgn

Date:11/10/2017

℄ Brg., Abut. No. 2
Sta. 11+14.20

3I" W-Beam Guardrail
Mid-way Splice,
Single Faced (Typ.)

3I" W-Beam Guardrail
Mid-way Splice,
Flared Terminal

Future Curb
(By Others)

Existing Reduce Speed
Ahead (30 MPH) to be
Relocated

Existing Utility
Pole (To Remain)

Slope Break for Future
Sidewalk (Constructed
by Town)

Existing Utility
Pole (To Remain)

Curb Type 3
(8'-0" Transition)
Adjacent to Bridge
Transition Curb

36' x 24" Culvert
Option III

190'-0"

Sta. 15+00.00
End Project
WIN 18749.00
Begin Transition

Sta. 15+50.00
End Transition
Begin Mill and Overlay

Sta. 16+96.00
Limit Of Work

Sta. 16+82.00
End Mill and Overlay
Match Existing

Proposed Utility
Pole (by Others)

Existing Utility Pole
(Relocate by Others)

Remove
Culvert

Existing Utility
Pole (by Others)

Proposed Utility Pole
(Relocate by Others)

Remove
Culvert

Remove
Culvert

Tie Into
Existing Ditch

R=15' (Typ.)

2" Mill variable depth
shim and 1½" Overlay

48" x 18" Culvert
Option III

Plain Riprap Inlet (Typ.)

24' x 15" Culvert
Option I

Existing Utility and Stub
Pole (Remove by Others)

Heavy
Riprap
(Typ.)

NEZINSCOT RIVER

Flow

12' x 15" Option III

Stone Ditch
Protection (Typ.)

Bridge Transition Type IA
(Typ.)

Curb Type 3
Mold 2

Buried-In-Slope
Guardrail End,
Mid-way Splice

Existing Utility Pole
(Remove by Others)

Existing Utility
Pole (Remove by
Others)

48" x 15" Culvert
Option III

Remove
Culvert

PC = STA. 13+58.29

PT = STA. 14+84.10

CURVE DATA #2
PI = 14+21.33
D = 7°22'09.2"
Δ = 9°16'15.0" Rt.
R = 777.50'
L = 125.80'
T = 63.04'
E = 2.55'

Landscape Reconstruction Limits. Final locations of plants to be determined by the Resident. Refer to Special Provision 621 for additional information.

CB #5
CB #6
CB #7
CB #8
CB #9
CB #10

10+00
11+00
12+00
13+00
14+00
15+00
16+00

N 17°14'15.86" W

Rte. 117 / No. Parish Rd.

N 7°58'00.82" W

To Livermore

CLL

PLAN

25 0 25 50
Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN
18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Perlin	
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	P. McKechnie	11\17
DESIGN2-DETAILED2	K. Brown	11\17
DESIGN3-DETAILED3	L. Driscoll	11\17
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

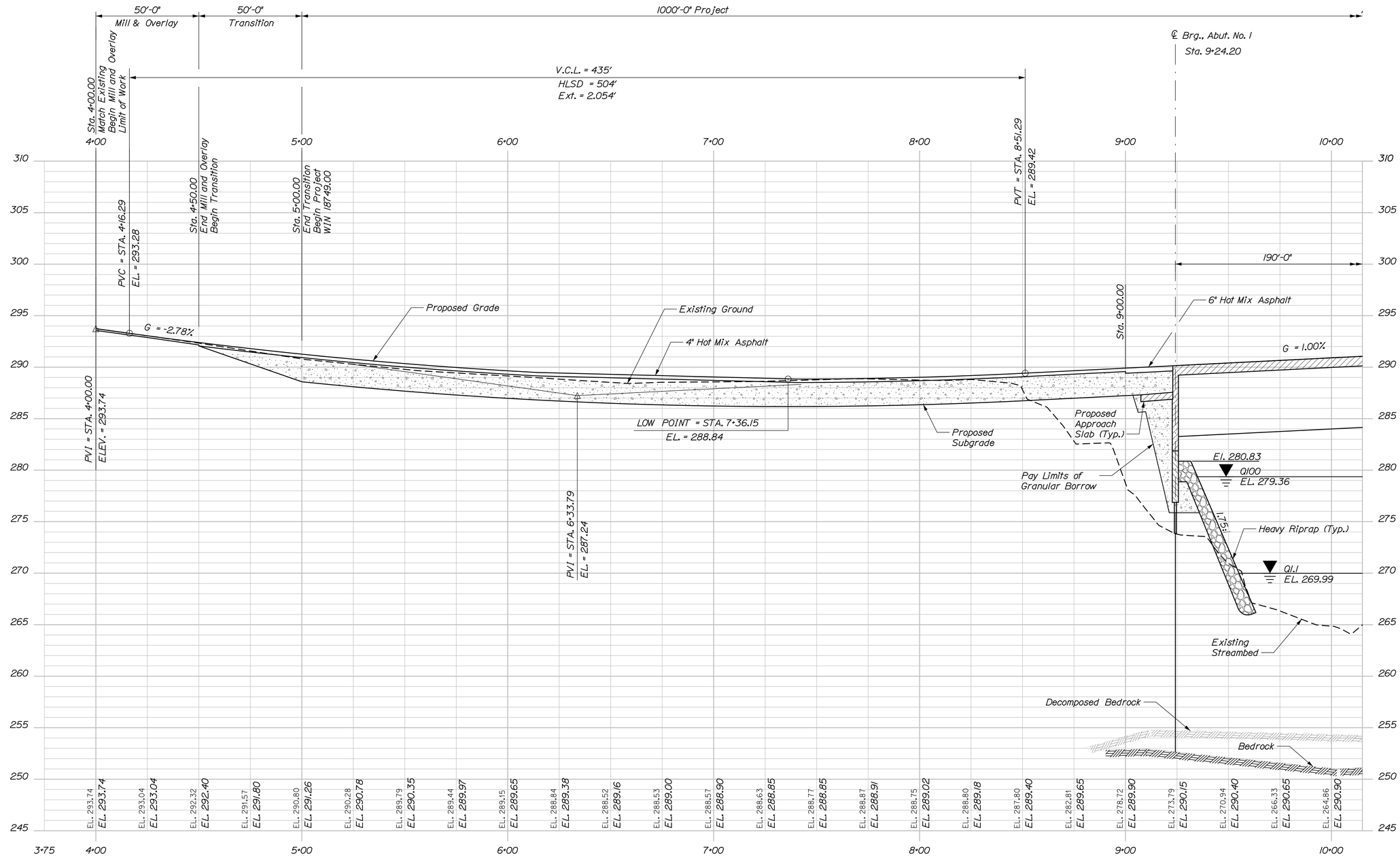
GENERAL PLAN

SHEET NUMBER

5

OF 50

Filename: 006_Profile1.dgn Division: Username: Date:11/28/2017



PROFILE

Horizontal 25 0 25 50
Vertical 5 0 5 10
Scale of Feet

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

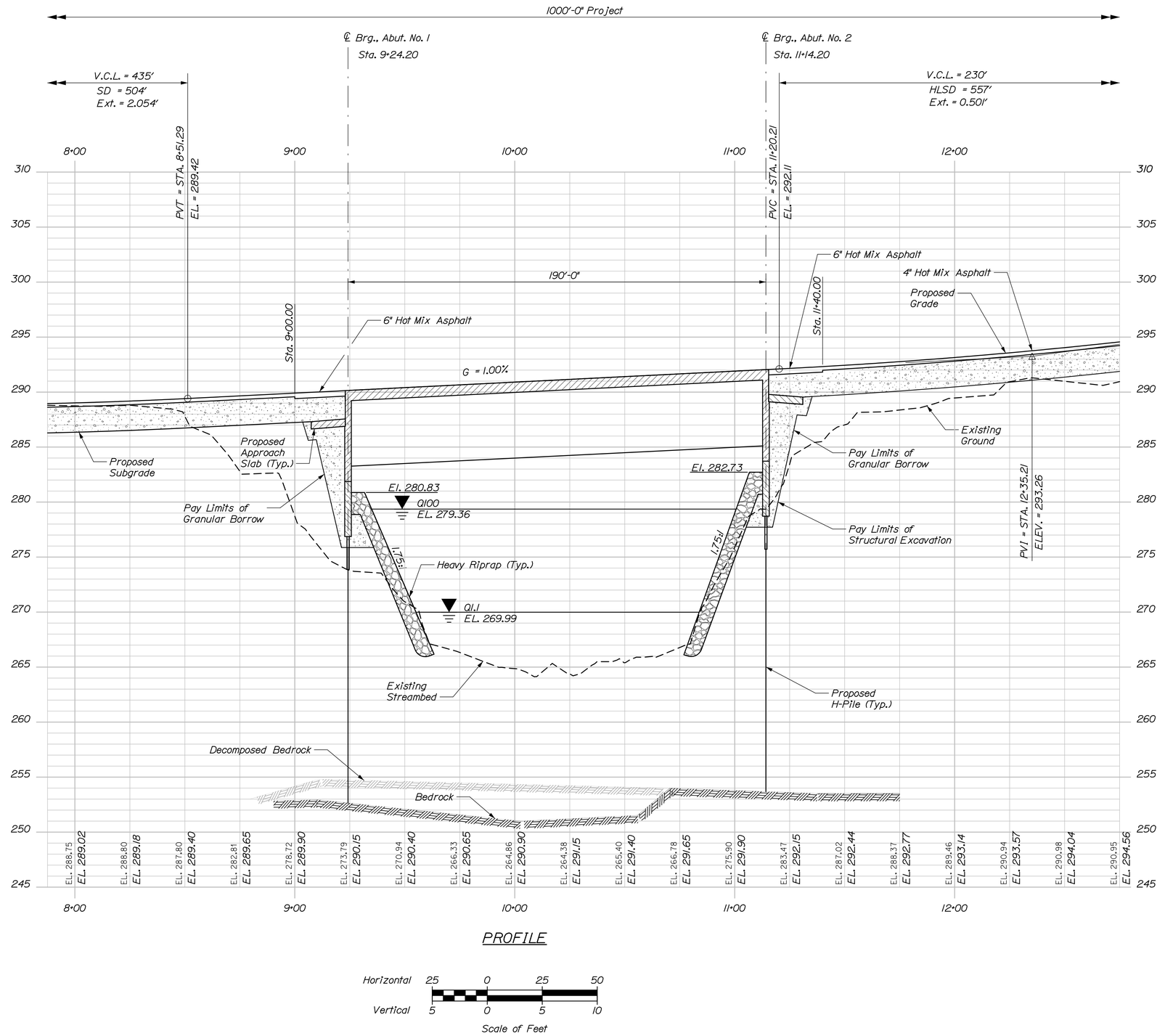
P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

PROFILE

SHEET NUMBER
6
OF 50



PROFILE

Horizontal 25 0 25 50

Vertical 5 0 5 10

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

PROFILE

SHEET NUMBER

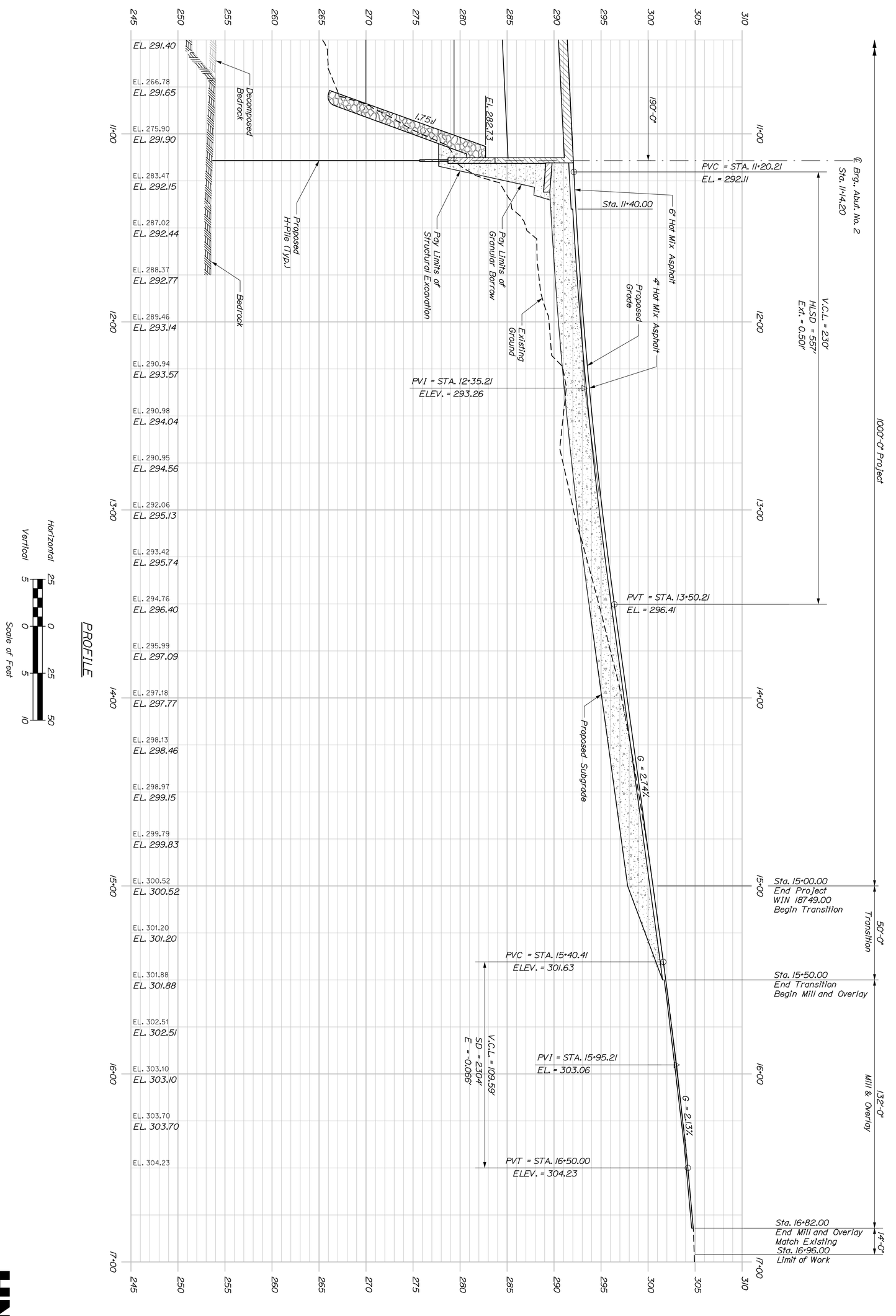
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OF 50

HNTB

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Filename: 008_Profile3.dgn Division: Username: Date:11/28/2017



HNTB

SHEET NUMBER 8 OF 50

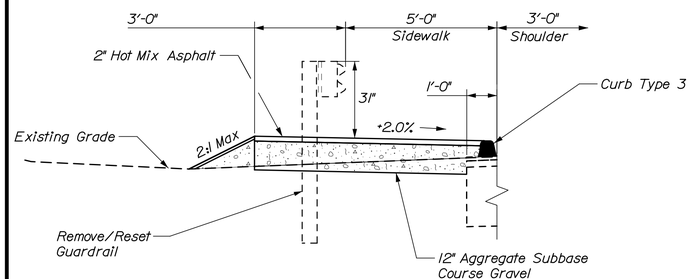
NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

PROFILE

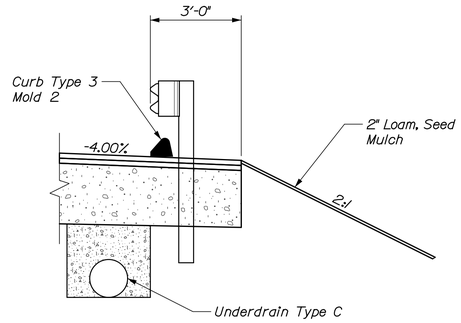
PROJ. MANAGER	Mark Porlin	BY	DATE
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	_		_
REVISIONS 2	_		_
REVISIONS 3	_		_
REVISIONS 4	_		_
FIELD CHANGES	_		_

SIGNATURE
P.E. NUMBER
DATE

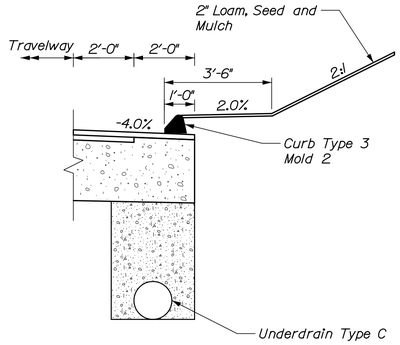
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP - 1874(900)
WIN 18749.00
BRIDGE NO. 2619 BRIDGE PLANS



FUTURE SIDEWALK BY OTHERS DETAIL (NOT IN CONTRACT)



CURB TYPE 3 WITH GUARDRAIL



CURB TYPE 3 DETAIL

NOTES:

1. The pavement, base and subbase depths as shown on the plans are intended to be nominal.

2. When superelevation of the travelway exceeds the slope of the low side shoulder, the low side shoulder pavement shall have the same cross slope as the travelway.

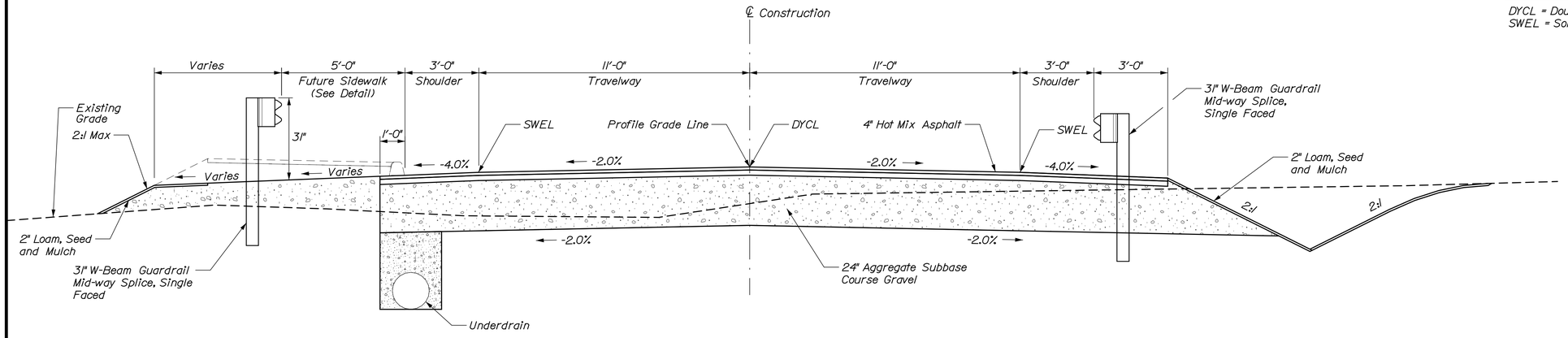
3. Crowns for both normal and superelevated sections for all courses of subbase and pavement shall be straight.

4. The Contractor, at their option, may use Item 304.16 Aggregate Base Course - Type C as an alternative to 304.10 Aggregate Subbase Course - Gravel. No additional compensation will be provided.

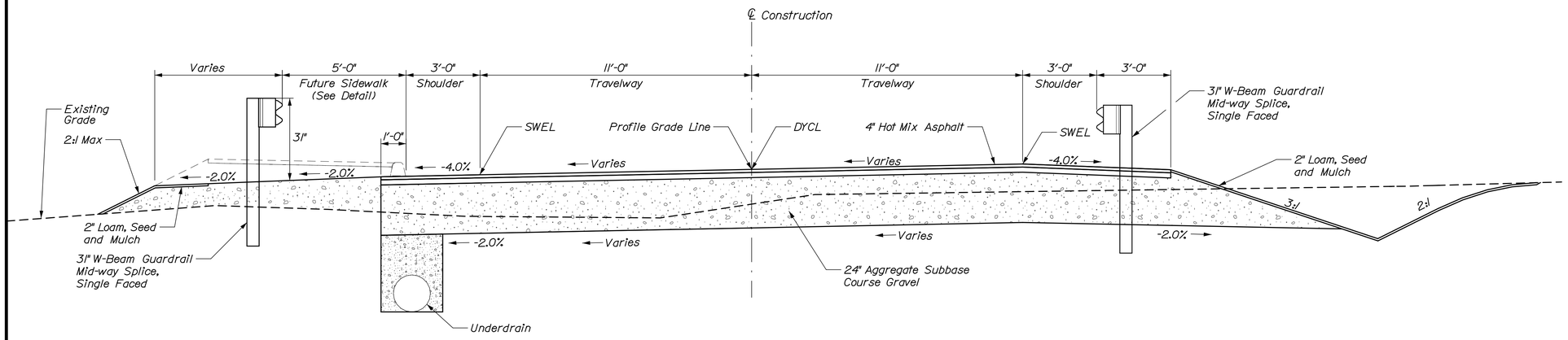
5. The shoulder break location shall transition near the bridge in accordance with Standard Detail 801(10).

LEGEND:

DYCL = Double Yellow Center Line
SWEL = Solid White Edge Line



FULL CONSTRUCTION
Normal



FULL CONSTRUCTION
Superelevated

Route 117 Super (e)		
Left %	Station	Right %
-5.9%	4+00	-2.9%
-5.8%	4+25	-2.9%
-5.3%	4+50	-3.3%
-4.2%	4+75	-2.0%
-3.1%	5+00	-2.0%
-2.0%	5+25	-2.0%
	To	
-2.0%	5+44	-2.0%
-2.0%	5+50	-1.6%
-2.0%	5+75	-0.2%
-2.0%	6+00	1.3%
-2.8%	6+25	2.8%
-3.4%	6+35	3.4%
	To	
-3.4%	8+25	3.4%
-2.0%	8+50	1.9%
-2.0%	8+75	0.4%
-2.0%	9+00	-1.1%
-2.0%	9+16	-2.0%
	To	
-2.0%	12+91	-2.0%
-1.5%	13+00	-2.0%
0.0%	13+25	-2.0%
1.5%	13+50	-2.0%
3.0%	13+75	-3.0%
	To	
3.0%	14+50	-3.0%
3.0%	14+75	-3.0%
	To	
3.0%	14+84.10	-3.0%
1.8%	15+00	-2.3%
0.5%	15+25	-2.3%
-0.7%	15+50	-2.3%
-1.7%	15+75	-2.2%
-2.7%	16+00	-2.5%
-3.7%	16+25	-2.5%
-4.8%	16+50	-3.0%

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STP - 1874(900)
WIN 18749.00
BRIDGE NO. 2619
BRIDGE PLANS

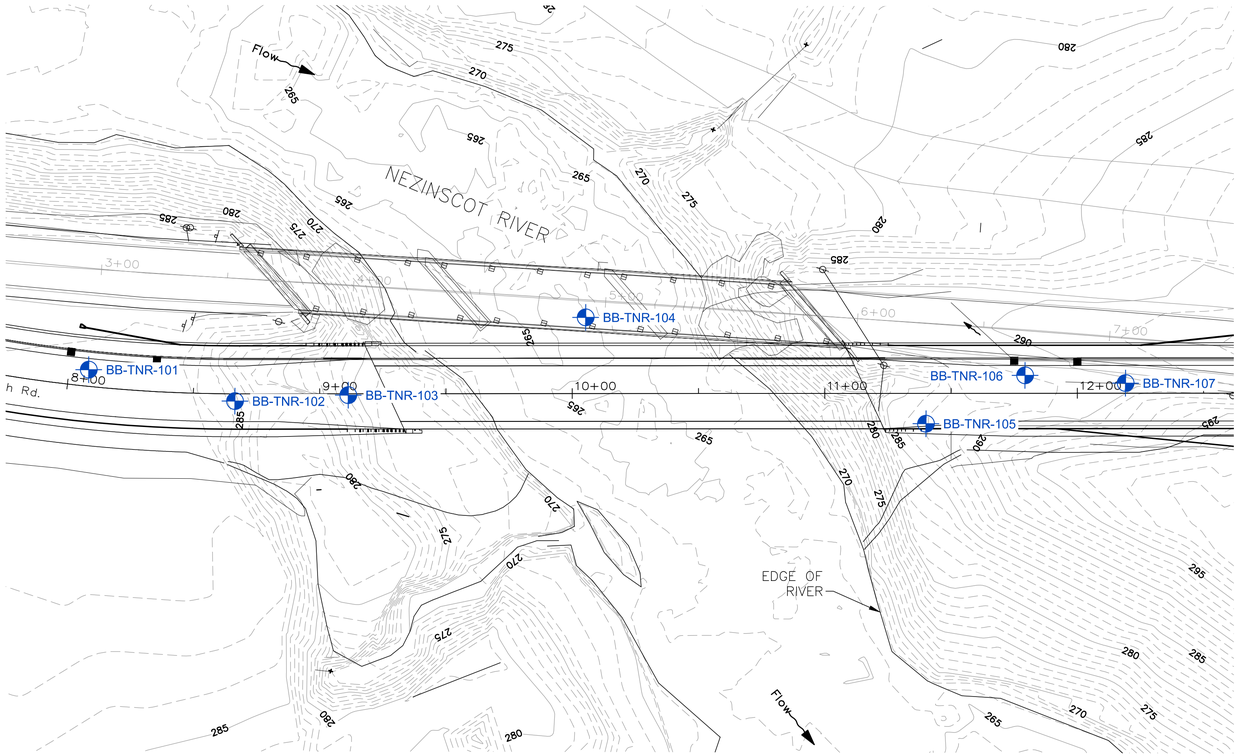
PROJ. MANAGER	Mark Pearlin			
DESIGN-DETAILED	P. McKechnie	BY	DATE	
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17	SIGNATURE
DESIGN2-DETAILED2	-	-	-	
DESIGN3-DETAILED3	-	-	-	P.E. NUMBER
REVISIONS 1	-	-	-	
REVISIONS 2	-	-	-	
REVISIONS 3	-	-	-	DATE
REVISIONS 4	-	-	-	
FIELD CHANGES	-	-	-	

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

TYPICAL SECTION

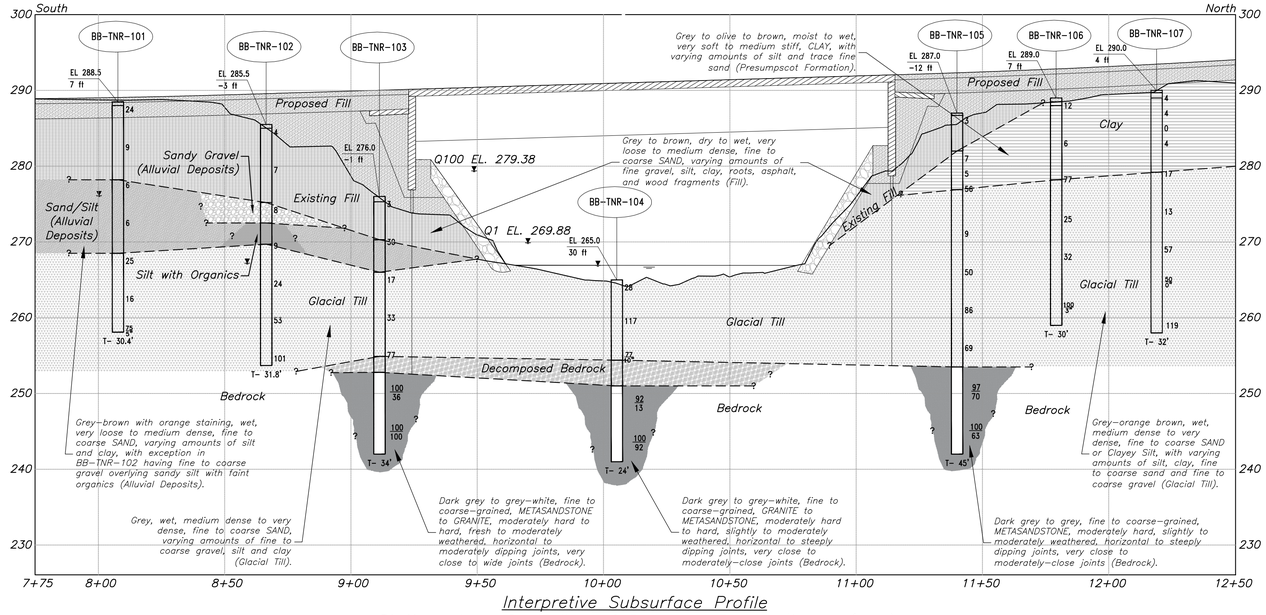
SHEET NUMBER
13
OF 50

Date:11/10/2017
Username:
Division:
Filename: 013_Typ.dgn



Boring Location Plan

SCALE IN FEET
0 30' 60'



Interpretive Subsurface Profile
Station along Centerline of Proposed Bridge #2619 (feet)

HORIZONTAL SCALE IN FEET
0 30' 60'
0 10' 20'
VERTICAL SCALE IN FEET

Legend

BB-TNR-101 — Boring location observed by Nobis

Note:

1. For additional information relating to the nature and results of the test borings observed by Nobis, refer to the Nobis Geotechnical Design Report, dated November, 2017.

Strata Legend

- Proposed Fill
- Existing Fill
- Sandy Gravel
- Sand/Silt
- Silt with Organics
- Glacial Till
- Decomposed Bedrock
- Cored Bedrock

EXPLORATION LEGEND

BB-TNR-101 — EXPLORATION DESIGNATION
EL 288.5 — APPROX. GROUND SURFACE ELEVATION
1 ft — APPROX. OFFSET FROM BASELINE (FEET)*
APPROXIMATE EXISTING GROUND SURFACE
24 — SPT N-VALUE
75/5" — NUMBER OF BLOWS/DEPTH SAMPLER
OBSERVED WATER LEVEL
MAJOR STRATUM BOUNDARY BETWEEN DIFFERENT SOIL TYPES
100/92 — ROCK CORE RECOVERY (%) / ROCK QUALITY DESIGNATION (%)
T- 30.4' — T=TERMINATION DEPTH

*POSITIVE OFFSETS ARE IN THE WEST DIRECTION.
NEGATIVE OFFSETS ARE IN THE EAST DIRECTION.

Note:

1. This 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 subsurface explorations and samples. Actual soil transitions may vary. For more specific information refer to the Nobis Boring Logs.

Nobis
Engineering a Sustainable Future
Nobis Engineering, Inc.
585 Middlesex Street
Lowell, MA 01851
T(978) 683-0891
www.nobiseng.com
Client - Focused, Employee - Owned

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

STATE OF MAINE — KURT JELINEK No. 11746 — REGISTERED PROFESSIONAL ENGINEER

K. Jelinek

	BY	DATE
PROJ. MANAGER	K. JELINEK	
DESIGN–DETAILED	T. HEYMANS	10.04.2017
CHECKED–REVIEWED	B. WATERMAN	10.04.2017
DESIGN2–DETAILED2		
DESIGN3–DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

P.E. NUMBER 11746

11/1/2017 DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER 9 OF 50

Filename: $file$ Division: $wkgroup$ Username: $user$ Date:$date$

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: North Parish Bridge (#2619) over Nezinscot River
Location: Turner, Maine

Boring No.: BB-TNR-101
WIN: 18749.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	288.5	**Auger ID/OD:**	N/A
Operator:	B. Enos	**Datum:**	NAVD-88	**Sampler:**	1-3/8" Split-Spoon
Logged By:	P. Clarke (Nobis)	**Rig Type:**	Diedrich D-50 Track Rig	**Hammer Wt./Fall:**	140#/30"
Date Start/Finish:	Dec. 14, 2016	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	N/A
Boring Location:	Sta 4+06, 2 feet Lt.	**Casing ID/OD:**	4"/4.5"	**Water Level*:**	12.4' bgs
Hammer Efficiency Factor:	0.63	**Hammer Type:**	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WOI/P = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60%(%-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/.6 in.; Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/20	0.00 - 2.00	7/9/15/15	24	25	RC	288.00		1D-A: (6") Dark brown, dry, fine to medium Silty SAND, very few roots, (Topsoil).	
										0.50	
										1D-B: (14") Brown, dry, medium dense, fine to coarse SAND, some clayey silt, trace fine gravel, few asphalt fragments, (Fill).	
5	2D	24/17	5.00 - 7.00	3/5/4/4	9	9				Grey-brown, dry, loose, fine to medium Silty SAND, trace fine gravel, (Fill).	A-4, SM
10	3D	24/8	10.00 - 12.00	4/3/3/4	6	6		278.20		3D-A: (3") Brown, wet, loose, fine to medium SAND, some silt, few wood fragments, (Fill).	
										10.30	
										3D-B: (5") Grey, wet, loose, fine to medium SAND, little silt, (Alluvial Deposit).	
15	4D	24/14	15.00 - 17.00	4/2/4/6	6	6				4D-A: (11") Grey-brown with orange staining, wet, loose, Clayey SILT, little fine to medium sand, (Alluvial Deposit).	A-4, ML
										4D-B: (3") Grey, wet, loose, fine to medium SAND, little silt, (Alluvial Deposit).	
20	5D	24/7	20.00 - 22.00	17/12/13/13	25	26		268.50		20.00	
										Grey, wet, medium dense, fine to coarse Sandy GRAVEL, little silt, (Glacial Till).	
25	6D	24/12	25.00 - 27.00	5/7/9/8	16	17	RC			6D-A: (4") Grey, wet, medium dense, fine to medium Silty SAND, little fine gravel, (Glacial Till).	
										6D-B: (8") Grey, wet, very stiff, Clayey SILT, some fine sand, (Glacial Till).	
30	7D	5/4	30.00 - 30.42	75/5"	---			258.10		Grey, wet, hard, Silty CLAY, some fine to coarse sand, (Glacial Till).	
										30.40	
										Bottom of Exploration at 30.40 feet below ground surface.	

Remarks:
-Borehole backfilled with native soils.
-bgs = below ground surface.
-Automatic Hammer ID # MTBAH3.
-No Casing Blow Counts were recorded.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-TNR-101

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: North Parish Bridge (#2619) over Nezinscot River
Location: Turner, Maine

Boring No.: BB-TNR-102
WIN: 18749.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	285.5	**Auger ID/OD:**	N/A
Operator:	B. Enos	**Datum:**	NAVD-88	**Sampler:**	1-3/8" Split-Spoon
Logged By:	P. Clarke (Nobis)	**Rig Type:**	Diedrich D-50 Track Rig	**Hammer Wt./Fall:**	140#/30"
Date Start/Finish:	Dec. 14, 2016	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	N/A
Boring Location:	Sta 4+65, 5 feet Rt.	**Casing ID/OD:**	4"/4.5"	**Water Level*:**	18.3' bgs
Hammer Efficiency Factor:	0.63	**Hammer Type:**	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WOI/P = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60%(%-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/.6 in.; Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/13	0.00 - 2.00	WOH/2/2/4	4	4	RC	285.00		1D-A: (6") Dark brown, dry, fine to medium Silty SAND, very few roots, (Topsoil).	
										0.50	
										1D-B: (7") Brown, dry, very loose, fine to coarse Silty SAND, trace fine gravel, very few roots, (Fill).	
5	2D	24/9	5.00 - 7.00	3/3/4/10	7	7				Brown, dry, loose, fine to coarse Clayey SAND, trace fine gravel, very few wood fragments, (Fill).	
10	3D	24/2	10.30 - 12.30	5/3/5/6	8	8		275.20		10.30	
										Brown, wet, loose, fine to coarse GRAVEL, some fine to coarse sand, trace silt, (Alluvial Deposit).	
								272.50		13.00	
										Dark brown cuttings with organic odor.	
15	4D	24/13	15.00 - 17.00	WOH/1/8/20	9	9		269.70		4D-A: (9") Grey-brown, wet, very loose, Sandy SILT, very few root fibers, faint organic odor, (Alluvial Deposit).	A-4, ML
										15.80	
										4D-B: (4") Grey, wet, medium dense, fine Sandy GRAVEL, trace silt, (Glacial Till).	
20	5D	24/11	20.00 - 22.00	10/11/13/8	24	25				Grey, wet, medium dense, fine to coarse Sandy GRAVEL, some silt, (Glacial Till).	
25	6D	20/8	25.00 - 26.67	21/25/28/50/2"	53	56	RC	260.50		25.00	
										Grey, wet, very dense, fine to coarse GRAVEL, some fine to coarse sand, little silt, little clay, (Glacial Till).	
30	7D	21/17	30.00 - 31.75	23/58/43/50/3"	101	106		255.50		30.00	
								253.70		Grey, wet, hard, Silty CLAY, some fine to coarse sand, trace fine gravel, (Glacial Till).	
										31.80	
										Bottom of Exploration at 31.80 feet below ground surface.	

Remarks:
-Borehole backfilled with native soils.
-bgs = below ground surface.
-Automatic Hammer ID # MTBAH3.
-No Casing Blow Counts were recorded.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-TNR-102

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: North Parish Bridge (#2619) over Nezinscot River
Location: Turner, Maine

Boring No.: BB-TNR-103
WIN: 18749.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	276.0	**Auger ID/OD:**	N/A
Operator:	B. Enos	**Datum:**	NAVD-88	**Sampler:**	1-3/8" Split-Spoon
Logged By:	P. Clarke (Nobis)	**Rig Type:**	Diedrich D-50 Track Rig	**Hammer Wt./Fall:**	140#/30"
Date Start/Finish:	Dec. 13, 2016	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	NQ2
Boring Location:	Sta 5+10, 1 foot Rt.	**Casing ID/OD:**	3"/3.5"	**Water Level*:**	Not Observed
Hammer Efficiency Factor:	0.63	**Hammer Type:**	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WOI/P = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60%(%-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/.6 in.; Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/8	0.00 - 2.00	1/1/2/1	3	3	RC	275.30		Brown, dry, fine to coarse SAND, some silt, few wood fragments, (Topsoil).	
										0.70	
5	2D	24/12	5.00 - 7.00	11/20/10/10	30	32		270.30		2D-A: (8") Brown, wet, medium dense, Gravelly fine to coarse SAND, little silt, (Fill).	
										5.70	
										2D-B: (4") Grey, wet, medium dense, fine to medium Silty SAND, (Alluvial Deposit).	
10	3D	24/9	10.00 - 12.00	6/7/10/9	17	18		266.00		10.00	
										Grey, wet, very stiff, Clayey SILT, little fine to coarse sand, trace fine gravel, (Glacial Till).	
15	4D	24/14	15.00 - 17.00	8/14/19/22	33	35				Grey, wet, dense, fine to coarse Silty SAND, trace fine gravel, (Glacial Till).	
20	5D	22/15	20.00 - 21.83	14/26/51/50/4"	77	81		254.90		5D-A: (14") Grey, wet, very dense, fine to coarse Silty SAND, little fine gravel, (Glacial Till).	
										21.10	
										5D-B: (1") Grey, wet, DECOMPOSED BEDROCK.	
								252.80		23.20	
										Top of Bedrock Elevation at 252.8 feet.	
25	R1	60/60	24.00 - 29.00	RQD = 36%			NQ2			Roller cored from 23.2' to 24.0' bgs to set core barrel. R1-A (42"): Bedrock: Dark grey, fine to coarse-grained, METASANDSTONE, moderately hard, slightly to moderately weathered, horizontal to moderately-dipping joints, very close to close joints.	
										R1-B (18"): Bedrock: Grey-white, medium to coarse-grained GRANITE, hard, fresh to slightly weathered, horizontal to moderately-dipping joints, very close to moderately-close joints. Sangerville Formation. Rock Mass Quality = Poor. R1: Core Times (min:sec) 24-25 feet (2:30) 25-26 feet (1:00) 26-27 feet (1:00) 27-28 feet (1:00) 28-29 feet (2:15)	
30	R2	60/60	29.00 - 34.00	RQD = 100%						R2: Bedrock: Grey-white, medium to coarse-grained GRANITE, hard, fresh to slightly weathered, horizontal to moderately dipping joints, close to wide joints. Sangerville Formation. Rock Mass Quality = Excellent. R2: Core Times (min:sec) 29-30 feet (1:30) 30-31 feet (1:00) 31-32 feet (1:15) 32-33 feet (1:15) 33-34 feet (1:30)	
								242.00		34.00	
										Bottom of Exploration at 34.00 feet below ground surface.	

UCT q_u= 12,286 psi

Remarks:
-Borehole backfilled with native soils.
-bgs = below ground surface.
-Automatic Hammer ID # MTBAH3.
-No Casing Blow Counts were recorded.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1
Boring No.: BB-TNR-103

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE PLANS

BRIDGE NO. 2619

STATE OF MAINE — KURT JELINEK — No. 11746 — REGISTERED PROFESSIONAL ENGINEER

K. Jelinek

P.E. NUMBER 11746

10/11/2017 DATE

SIGNATURE

	BY	DATE
PROJ. MANAGER	K. JELINEK	
DESIGN–DETAILED	T. HEWANS	10.04.2017
CHECKED–REVIEWED	P. CLARKE	
DESIGN2–DETAILED2	B. WATERMAN	10.04.2017
DESIGN3–DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

BORING LOGS

SHEET NUMBER
10
OF 50

Filename: $file$ Division: $wkgroup$ Username: $user$ Date:$date$

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: North Parish Bridge (#2619) over Nezinscot River
Location: Turner, Maine

Boring No.: BB-TNR-104
WIN: 18749.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	265	**Auger ID/OD:**	N/A
Operator:	C. Dupois	**Datum:**	NAVD-88	**Sampler:**	1-3/8" Split-Spoon
Logged By:	P. Clarke (Nobis)	**Rig Type:**	Truck/ B-53 Mobile	**Hammer Wt./Fall:**	140#/30"
Date Start/Finish:	Dec. 8, 2016	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	NQ2
Boring Location:	Sta 6+04, 30 feet Lt.	**Casing ID/OD:**	4"/4.5"	**Water Level*:**	1.9 feet above mudline
Hammer Efficiency Factor:	0.572	**Hammer Type:**	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WO/P = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60%;1%-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/ (6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/16	0.00 - 2.00	8/14/14/17	28	27	RC			Grey, wet, very stiff, Silty CLAY, some fine to coarse sand, little fine gravel, (Glacial Till).	
5	2D	22/6	4.50 - 6.33	50/65/52/60/4"	117	112				2D-A: (5") Grey, wet, hard, Silty CLAY, some fine to coarse sand, little fine gravel, (Glacial Till). 2D-B: (1") Grey, wet, very dense, cobble/boulder fragments, (Glacial Till).	
10	3D	16/14	9.50 - 10.83	18/22/50/4"	---					3D-A: (13") Grey, wet, hard, Silty CLAY , some fine to coarse sand, little fine gravel, (Glacial Till).	
								254.40		10.60 3D-B: (1") Grey, wet, DECOMPOSED BEDROCK.	
15	R1	60/55	14.00 - 19.00	RQD = 13%			NQ2	251.00		14.00 Top of Bedrock Elevation 251.0 feet. R1-A (18"): Bedrock: Grey-white, medium to coarse grained GRANITE, hard, slightly to moderately weathered, horizontal to low-angle joints, very close to close joints. R1-B (42"): Bedrock: Dark grey, fine to coarse-grained, METASANDSTONE, moderately hard, slightly to moderately weathered, low-angle joints, very close to close joints. Sangerville Formation. Rock Mass Quality = Very Poor. R1: Core Times (min:sec) 14-15 feet (2:30) 15-16 feet (3:30) 16-17 feet (2:30) 17-18 feet (3:15) 18-19 feet (2:15)	UCT q_p= 10,060 psi
20	R2	60/60	19.00 - 24.00	RQD = 92%						R2: Bedrock: Dark grey-grey, fine to coarse-grained METASANDSTONE, moderately hard, slightly to moderately weathered, horizontal to steeply-dipping, close to moderately-close joints. Sangerville Formation. Rock Mass Quality = Excellent. R2: Core Times (min:sec) 19-20 feet (2:00) 20-21 feet (2:00) 21-22 feet (1:45) 22-23 feet (2:15) 23-24 feet (3:30)	UCT q_p= 5,920 psi
								241.00		24.00 **Bottom of Exploration at 24.00 feet below ground surface.**	

Remarks:
-Borehole backfilled with native soils.
-Cored through deck to mudline approximately 23.5 feet below roadway. Concrete deck was 9" thick, 3'7" to bottom of I Beams. Deck was repaired and patched after boring completion.
-bgs = below ground surface.
-Automatic Hammer ID # AH1.
-No Casing Blow Counts were recorded.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-TNR-104

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: North Parish Bridge (#2619) over Nezinscot River
Location: Turner, Maine

Boring No.: BB-TNR-105
WIN: 18749.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	287	**Auger ID/OD:**	N/A
Operator:	B. Enos	**Datum:**	NAVD-88	**Sampler:**	1-3/8" Split-Spoon
Logged By:	P. Clarke (Nobis)	**Rig Type:**	Diedrich D-50 Track Rig	**Hammer Wt./Fall:**	140#/30"
Date Start/Finish:	Dec. 14, 2016/Dec. 15, 2016	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	NQ2
Boring Location:	Sta 7+38, 13 feet Rt.	**Casing ID/OD:**	3"/3.5"	**Water Level*:**	Not Observed
Hammer Efficiency Factor:	0.63	**Hammer Type:**	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WO/P = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60%;1%-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/ (6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/17	0.00 - 2.00	1/1/2/4	3	3	RC	286.70		1D-A: (4") Dark brown, dry, fine to medium Silty SAND, very few roots, (Topsoil). 0.30	
										1D-B: (13") Grey-brown, dry, soft, Silty CLAY, some fine sand, very few root fibers, (Fill).	
5	2D	24/24	5.00 - 7.00	4/3/4/4	7	7		282.00		5.00 Olive-brown, moist, medium stiff, Clayey SILT, trace fine sand, (Presumpscot Formation).	A-6, CL WC=30.0% LL=37 PL= 23 PI=14
10	3D	24/24	7.00 - 9.00	1/2/3/2	5	5				Olive-brown, moist, medium stiff, CLAY, trace fine sand, (Presumpscot Formation).	WC=33.2%
	4D	24/20	9.00 - 11.00	1/5/51/50	56	59				4D-A: (13") Olive-brown, wet, CLAY, trace fine sand, (Presumpscot Formation).	WC=32.0%
								276.90		10.10 4D-B: (7") Grey with orange-brown, wet, very dense, fine to coarse GRAVEL, some fine to coarse sand, trace silt, (Glacial Till).	
15	5D	24/16	15.00 - 17.00	5/4/5/7	9	9				Grey, wet, stiff, Silty CLAY, some fine to coarse sand, trace fine gravel, (Glacial Till).	
20	6D	24/19	20.00 - 22.00	10/22/28/39	50	53				Grey, wet, hard, Clayey SILT, some fine to coarse gravel, some fine to coarse sand, (Glacial Till).	
25	7D	24/24	25.00 - 27.00	24/27/59/52	86	90	RC			Grey, wet, hard, Clayey SILT, some fine to coarse sand, little fine to coarse gravel, (Glacial Till).	
30	8MD	24/0	30.00 - 32.00	22/29/40/44	69	72				Failed sample attempt.	
								253.50		33.50 Top of Bedrock at Elevation 253.5 feet. Roller coned from 33.5' to 35.0' bgs to set core barrel.	
35	9MD	0/0	34.99 - 34.99	50/0"	---					Failed sample attempt.	
	R1	60/58	35.00 - 40.00	RQD = 70%			NQ2			R1: Bedrock: Grey, fine to coarse-grained METASANDSTONE, moderately hard, slightly to moderately weathered, close to moderately-close joints, horizontal to low-angle joints. Sangerville Formation. Rock Mass Quality = Fair. R1: Core Times (min:sec) 35-36 feet (3:00) 36-37 feet (2:30) 37-38 feet (2:15) 38-39 feet (2:45) 39-40 feet (3:00)	UCT q_p= 3,314 psi
40	R2	60/60	40.00 - 45.00	RQD = 63%						R2: Bedrock: Dark grey, fine to coarse-grained METASANDSTONE, moderately hard, moderately weathered, horizontal to steeply-dipping joints, very close to moderately close joints. Sangerville Formation. Rock Mass Quality = Fair. R2: Core Times (min:sec) 40-41 feet (1:15) 41-42 feet (1:00) 42-43 feet (1:00) 43-44 feet (1:15) 44-45 feet (1:15)	
45								242.00		45.00 **Bottom of Exploration at 45.00 feet below ground surface.**	

Remarks:
-Borehole backfilled with native soils.
-bgs = below ground surface.
-Automatic Hammer ID # MTBAH3.
-No Casing Blow Counts were recorded.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-TNR-105

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: North Parish Bridge (#2619) over Nezinscot River
Location: Turner, Maine

Boring No.: BB-TNR-106
WIN: 18749.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	289	**Auger ID/OD:**	N/A
Operator:	C. Dupois	**Datum:**	NAVD-88	**Sampler:**	1-3/8" Split-Spoon
Logged By:	P. Clarke (Nobis)	**Rig Type:**	Truck/ B-53 Mobile	**Hammer Wt./Fall:**	140#/30"
Date Start/Finish:	Dec. 9, 2016	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	N/A
Boring Location:	Sta 7+76, 7 feet Lt.	**Casing ID/OD:**	4"/4.5"	**Water Level*:**	Not Observed
Hammer Efficiency Factor:	0.572	**Hammer Type:**	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WO/P = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60%;1%-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/ (6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/20	0.00 - 2.00	5/5/7/7	12	11	RC	288.50		1D-A: (6") Brown, dry, fine to coarse SAND, little silt, very few root fibers, (Topsoil).	
								288.00		0.50 1D-B:(10") Orange-brown, dry, medium dense, fine to coarse SAND, some silt, very few root fibers, (Subsoil).	
5	2D	24/20	5.00 - 7.00	4/3/3/5	6	6				1.00 Grey, moist, medium stiff, Clayey SILT, trace fine sand, (Presumpscot Formation).	A-6, CL WC=27.1% LL=38 PL=21 PI=17
10	3D	18/17	10.00 - 11.50	1/27/50/6"	---			278.20		10.80 3D-A: (10") Grey, wet, CLAY, (Presumpscot Formation).	WC=33.0%
										3D-B: (7") Grey, wet, very dense, fine Silty GRAVEL, some fine to coarse sand, (Glacial Till).	
15	4D	24/8	15.00 - 17.00	18/13/12/14	25	24				Grey, wet, medium dense, fine to coarse Silty SAND, trace fine gravel, (Glacial Till).	
20	5D	23/16	20.00 - 21.92	15/15/17/50/5"	32	31				Grey, wet, hard, Clayey SILT, some fine to coarse sand, little fine to coarse gravel, (Glacial Till).	
25	R1	60/12	22.50 - 27.50				NQ2			Attempted bedrock core: grey, Clayey SILT, some fine to coarse sand, trace fine gravel, with inferred boulder fragments, (Glacial Till).	
30	6D	3/3	27.50 - 27.75	100/3"	---		RC	259.00		Grey, wet, fine to coarse Gravelly SAND, some clayey silt, (Glacial Till). Roller coned through inferred cobble from 27.8 feet to 29 feet bgs.	
										30.00 **Bottom of Exploration at 30.00 feet below ground surface.**	

Remarks:
-Borehole backfilled with native soils.
-bgs = below ground surface.
-Automatic Hammer ID # AH1.
-No Casing Blow Counts were recorded.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: BB-TNR-106

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE PLANS

BRIDGE NO. 2619

STATE OF MAINE — KURT JELINEK — No. 11746 — REGISTERED PROFESSIONAL ENGINEER

BY	DATE
K. JELINEK	
T. HEYMANS	10.04.2017
B. WATERMAN	10.04.2017
P. CLARKE	

K. Jelinek
P.E. NUMBER 11746
SIGNATURE
11/1/2017
DATE

PROJ. MANAGER	
DESIGN--DETAILED	
CHECKED--REVIEWED	
DESIGN2--DETAILED2	
DESIGN3--DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

BORING LOGS

SHEET NUMBER
11
OF 50

Filename: $file$ Division: $wkgroup$ Username: $user$ Date:$date$

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: North Parish Bridge (#2619) over Nezinscot River
Location: Turner, Maine

Boring No.: BB-TNR-107
WIN: 18749.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	290	**Auger ID/OD:**	N/A
Operator:	B. Enos	**Datum:**	NAVD-88	**Sampler:**	1-3/8" Split-Spoon
Logged By:	P. Clarke (Nobis)	**Rig Type:**	Diedrich D-50 Track Rig	**Hammer Wt./Fall:**	140#/30"
Date Start/Finish:	Dec. 15, 2016	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	N/A
Boring Location:	Sta 8+18, 4 feet Rt.	**Casing ID/OD:**	4"/4.5"	**Water Level*:**	Not Observed
Hammer Efficiency Factor:	0.63	**Hammer Type:**	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WOW = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = (Hammer Efficiency Factor/60)*N-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/20	0.00 - 2.00	3/2/2/3	4	4	RC	289.70		1D-A: (4") Brown, dry, fine to coarse SAND, some silt, very few root fibers, (Topsoil).	
								289.00		0.30	
										1D-B: (8") Brown, moist, very loose, fine to coarse SAND, little silt, very few root fibers, (Subsoil).	
	2D	24/21	2.00 - 4.00	WOH/2/2/2	4	4				1.00	
										1D-C: (8") Brown, moist, soft, Silty CLAY, trace fine sand, (Presumpscot Formation). Olive-brown, wet, soft, Silty CLAY, (Presumpscot Formation). Grey, wet, very soft, Silty CLAY, (Presumpscot Formation).	
5	3D	24/24	4.00 - 6.00	WOH/WOH/WOH/1	---						WC=34.1%
										Grey, wet, very soft, Clayey SILT, trace fine sand, (Presumpscot Formation) .	
	4D	24/24	6.00 - 8.00	1/2/2/2	4	4					A-6, CL WC=31.5% LL=35 PL=20 PI=15
	V1		8.00 - 8.43	S_u=843/155 psf						65x130mm vane raw torque readings: V1: 30/5.5 ft-lbs V2: 24.5/4 ft-lbs	
	V2		9.00 - 9.43	S_u=689/112 psf							
10	5D	24/15	10.00 - 12.00	WOH/2/15/18	17	18		279.20		5D-A: (10") Grey, wet, medium stiff, Silty CLAY, (Presumpscot Formation).	WC=36.4%
										10.80	
										5D-B: (5") Grey, wet, medium dense, fine to coarse GRAVEL, some fine to coarse sand, little silt, (Glacial Till).	
										Grey, wet, stiff, Silty CLAY, some fine to coarse sand, trace fine gravel, (Glacial Till).	
15	6D	24/14	15.00 - 17.00	6/6/7/8	13	14					
										Grey, wet, hard, Clayey SILT, some fine to coarse sand, trace fine gravel, (Glacial Till).	
20	7D	24/20	20.00 - 22.00	12/16/41/44	57	60					
										Grey, wet, Clayey SILT, trace fine to coarse sand, coarse piece of gravel in spoon tip, (Glacial Till).	
25	8D	6/4	25.00 - 25.50	50-50/0"	---		RC				
										Grey, wet, very dense, fine to coarse Silty SAND, little fine gravel, (Glacial Till).	
30	9D	24/18	30.00 - 32.00	45/47/72/67	119	125					
								258.00		32.00	
35										**Bottom of Exploration at 32.00 feet below ground surface.**	
40											
45											

Remarks:
-Borehole backfilled with native soils.
-bgs = below ground surface.
-Automatic Hammer ID # MTBAH3.
-No Casing Blow Counts were recorded.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Boring No.: BB-TNR-107

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

STATE OF MAINE · KURT JELINEK · No. 11746 · REGISTERED PROFESSIONAL ENGINEER

K. Jelinek

		DATE
PROJ. MANAGER	K. JELINEK	
DESIGN-DETAILED	P. CLARKE	10.04.2017
CHECKED-REVIEWED	T. HEYMANS	10.04.2017
DESIGN2-DETAILED2	B. WATERMAN	10.04.2017
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

11746
P.E. NUMBER

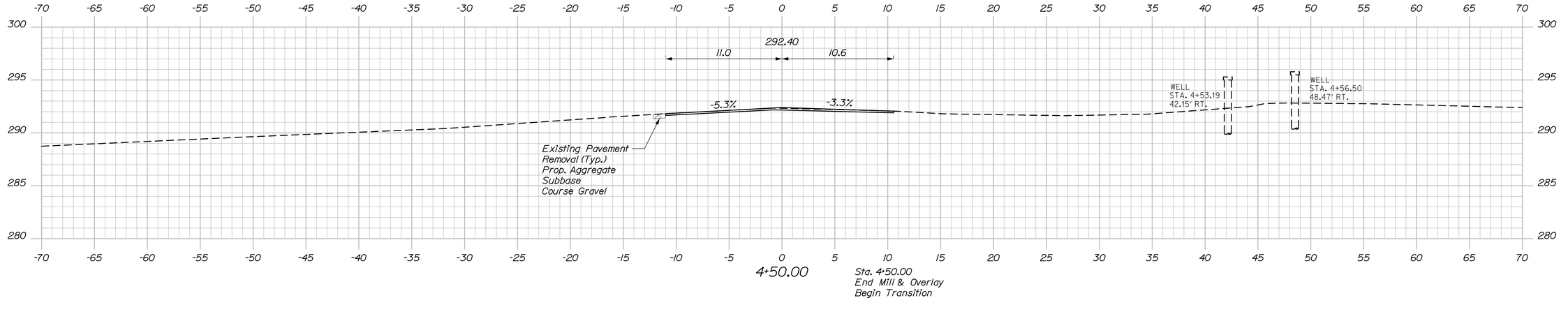
11/11/2017
DATE

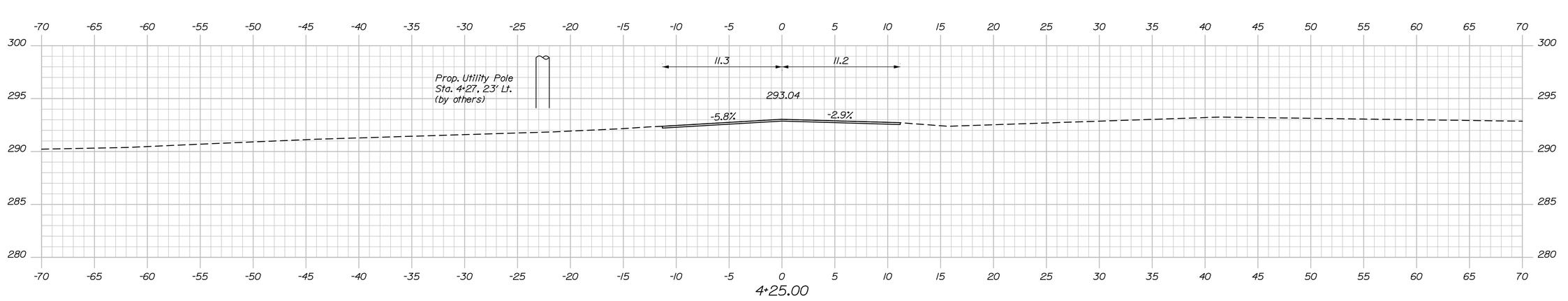
NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

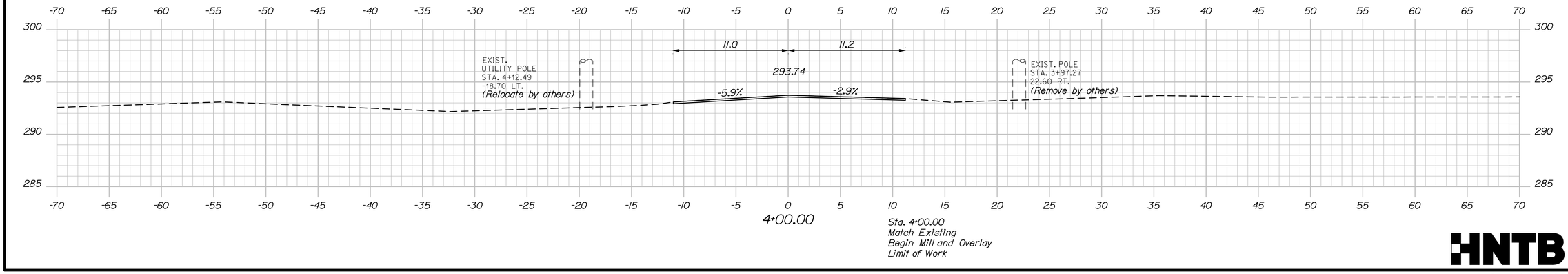
BORING LOGS

SHEET NUMBER
12
OF 50

Username: $user$ Division: $wkgroup$ Filename: $file$ Date:$date$







HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN **18749.00**

BRIDGE NO. 2619 — BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	-
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

CROSS SECTIONS

SHEET NUMBER

14

OF 50

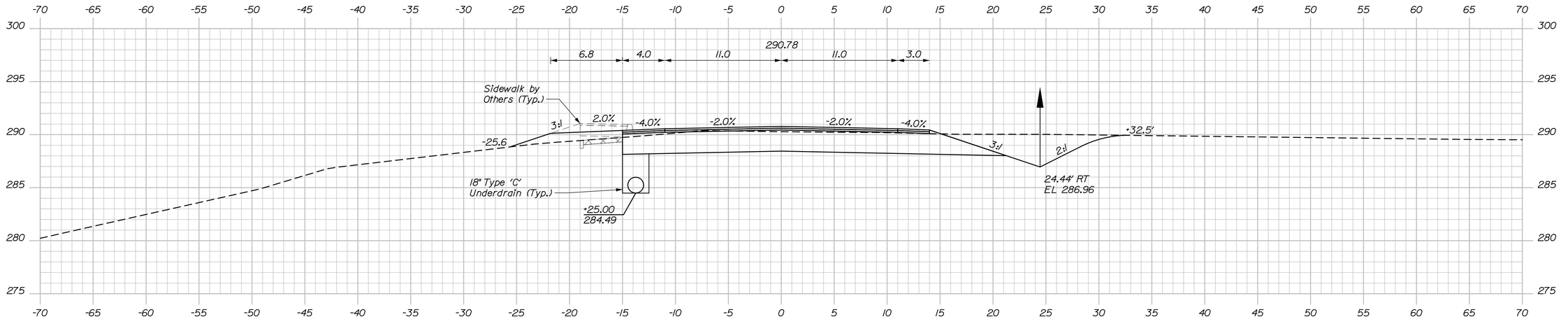
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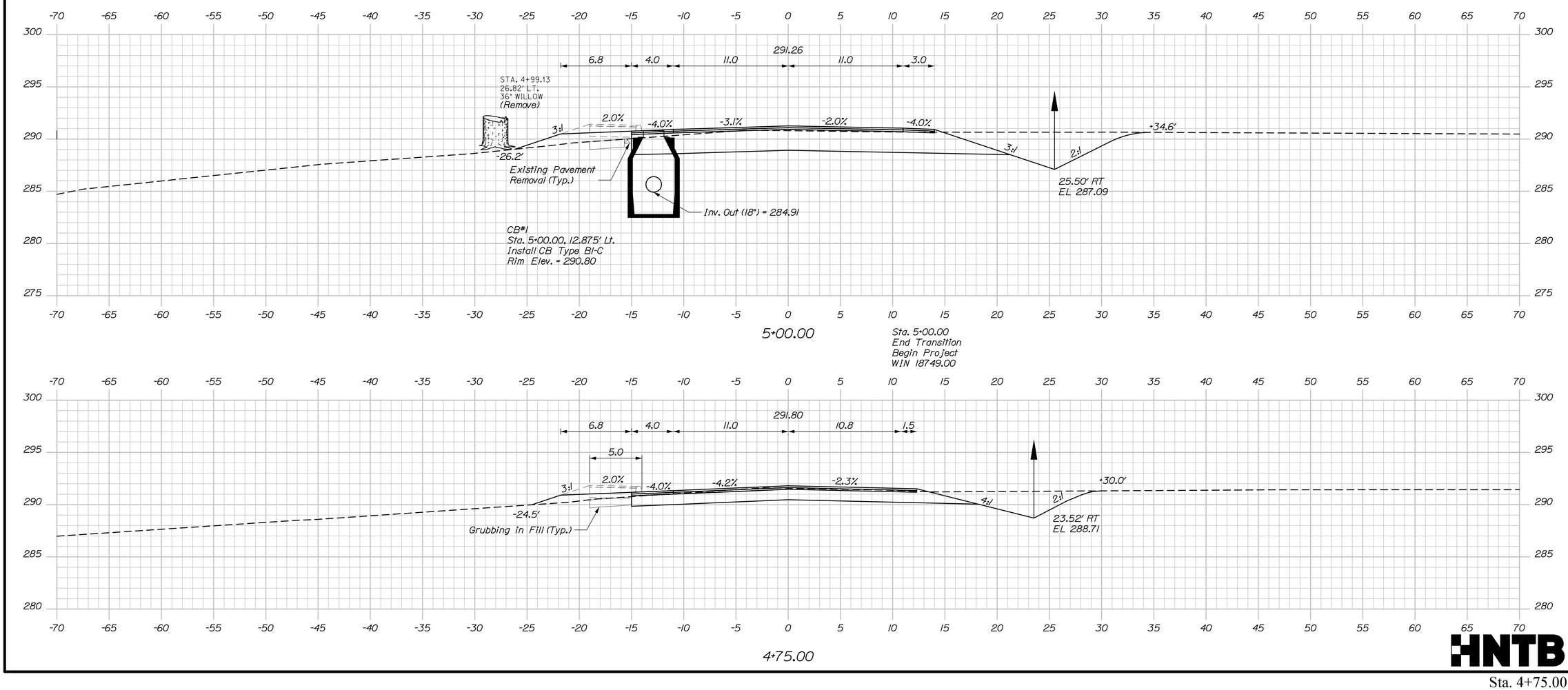
Username:

Division:

Filename: Xsect.dgn

Sta. 4+00.00 to Sta. 4+50.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin	BY	DATE
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-		
REVISIONS 2	-		
REVISIONS 3	-		
REVISIONS 4	-		
FIELD CHANGES	-		

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

CROSS SECTIONS

SHEET NUMBER

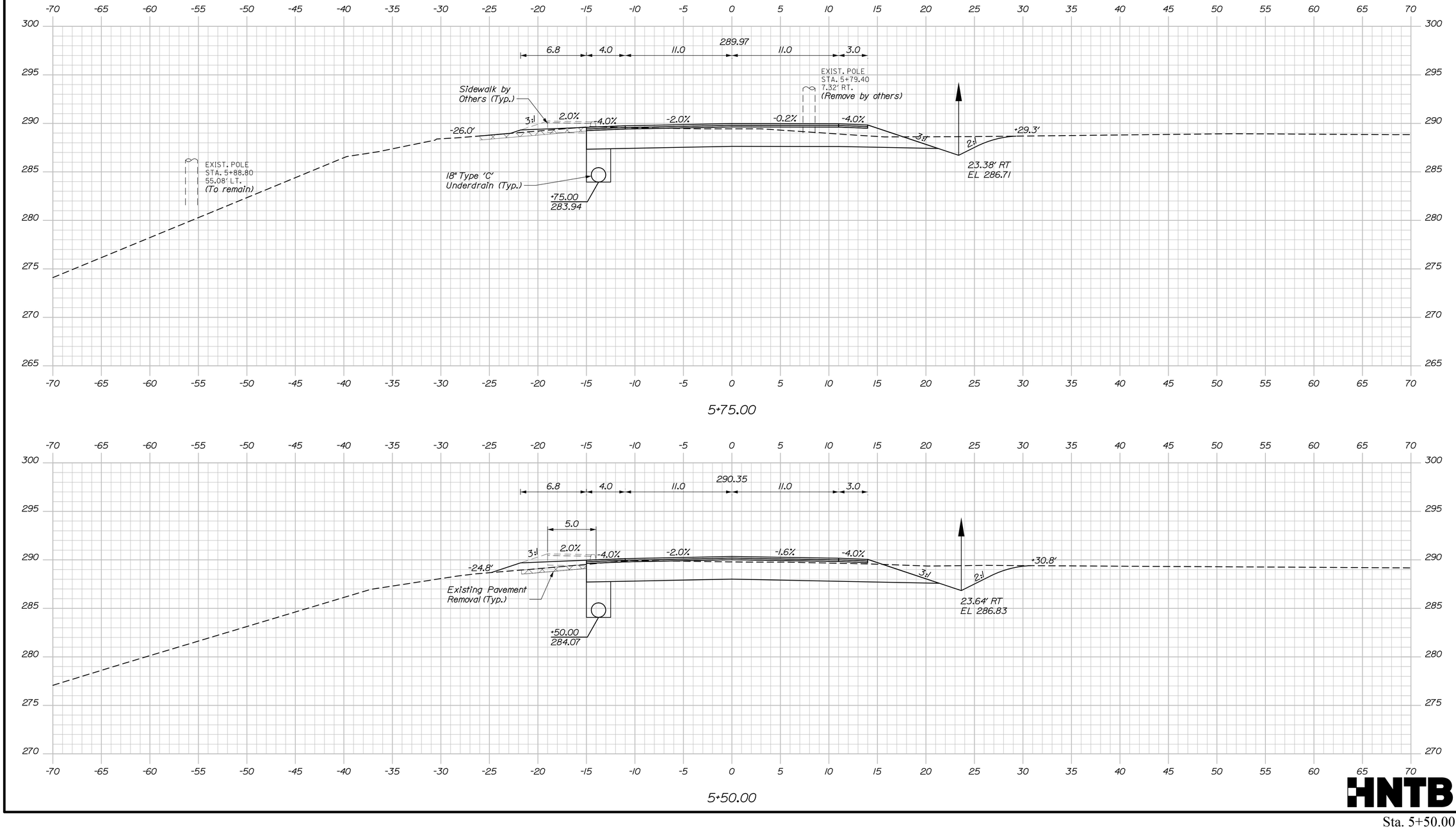
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OF 50

HNTB

Sta. 4+75.00 to Sta. 5+25.00

Username:
Division:
Filename: Xsect.dgn
Date:11/10/2017



Sta. 5+50.00 to Sta. 5+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	P. McKechnie	BY	DATE
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

16

OF 50

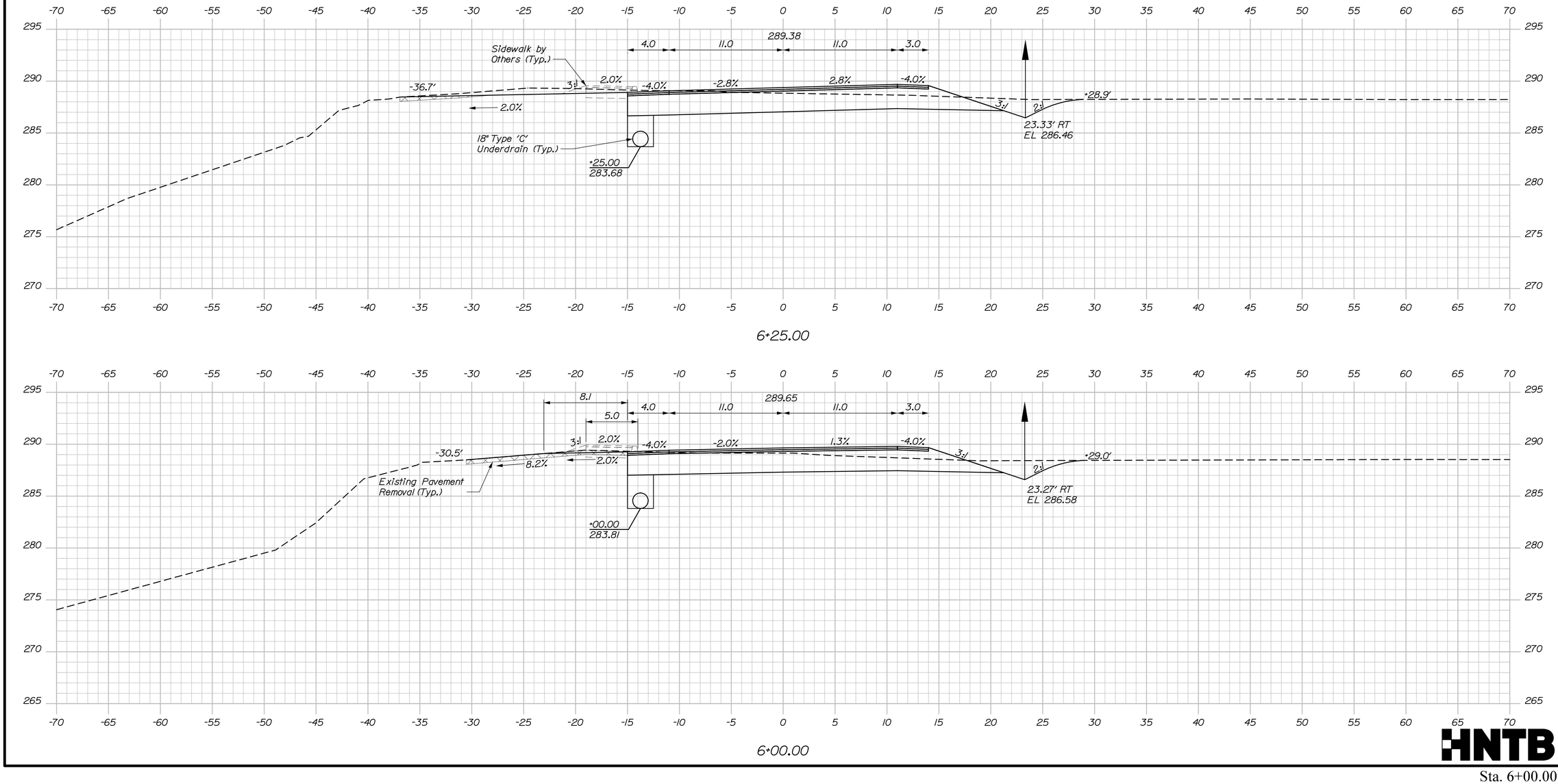
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Date:11/10/2017

Username:

Division:

Filename: Xsect.dgn



Sta. 6+00.00 to Sta. 6+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619 — BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin			
DESIGN-DETAILED	P. McKechnie	BY	DATE	
CHECKED-REVIEWED	K. Brown	P. McKechnie	11\17	SIGNATURE
DESIGN2-DETAILED2	-	L. Driscoll	11\17	
DESIGN3-DETAILED3	-	-	-	P.E. NUMBER
REVISIONS 1	-	-	-	
REVISIONS 2	-	-	-	
REVISIONS 3	-	-	-	DATE
REVISIONS 4	-	-	-	
FIELD CHANGES	-	-	-	

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER — ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

17

OF 50

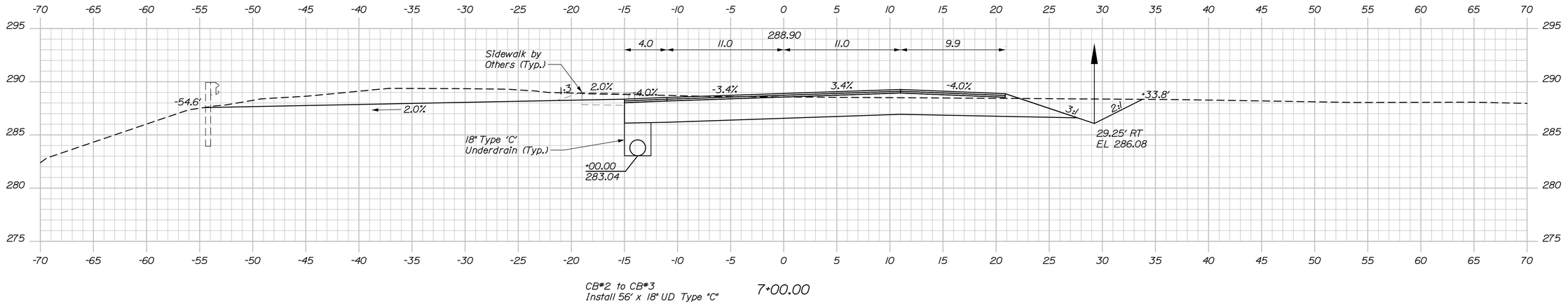
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Date:11/10/2017

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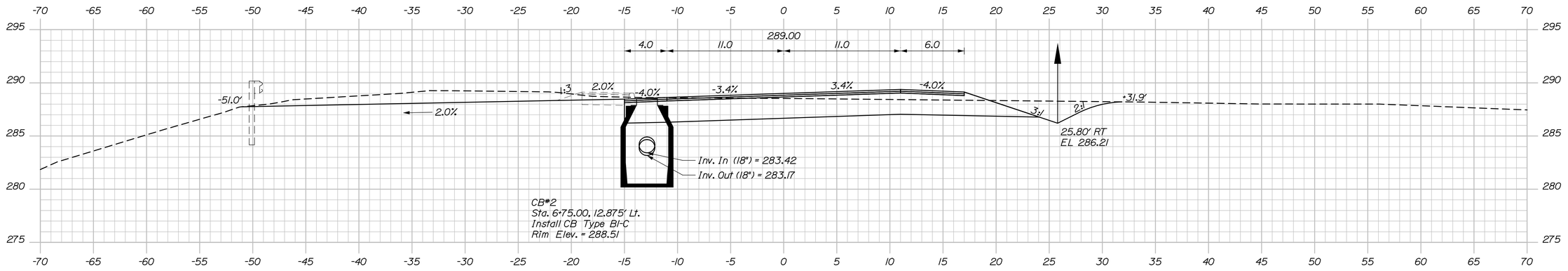
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Filename: Xsect.dgn



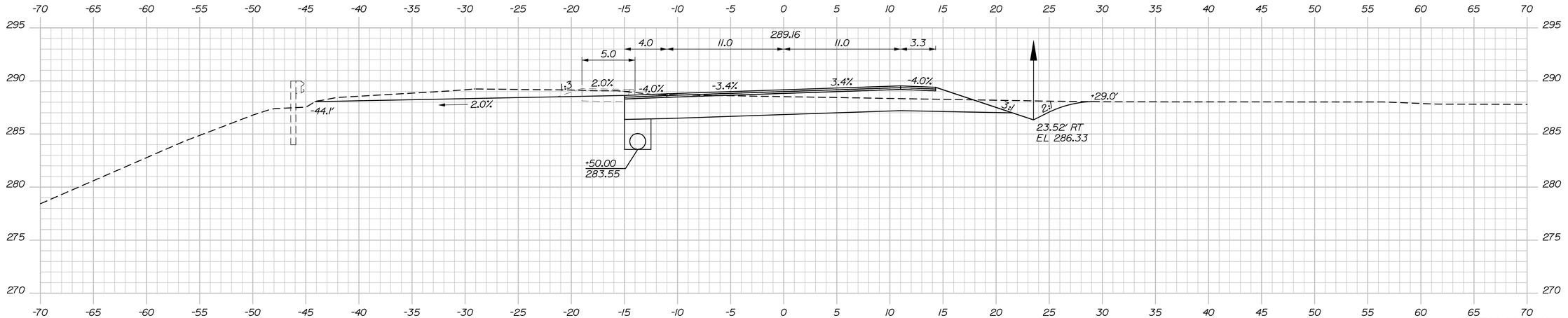
CB#2 to CB#3
Install 56' x 18" UD Type "C"

7+00.00



CB#2
Sta. 6+75.00, 12.875' Lt.
Install CB Type BI-C
Rim Elev. = 288.51

6+75.00



6+50.00

HNTB

Sta. 6+50.00 to Sta. 7+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Perlin
DESIGN-DETAILED	P. McKechnie
CHECKED-REVIEWED	K. Brown
DESIGN2-DETAILED2	-
DESIGN3-DETAILED3	-
REVISIONS 1	-
REVISIONS 2	-
REVISIONS 3	-
REVISIONS 4	-
FIELD CHANGES	-

	BY	DATE
DESIGNED	P. McKechnie	11\17
DRAWN	L. Driscoll	11\17
CHECKED2	-	-
CHECKED3	-	-
	-	-
	-	-
	-	-
	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

18

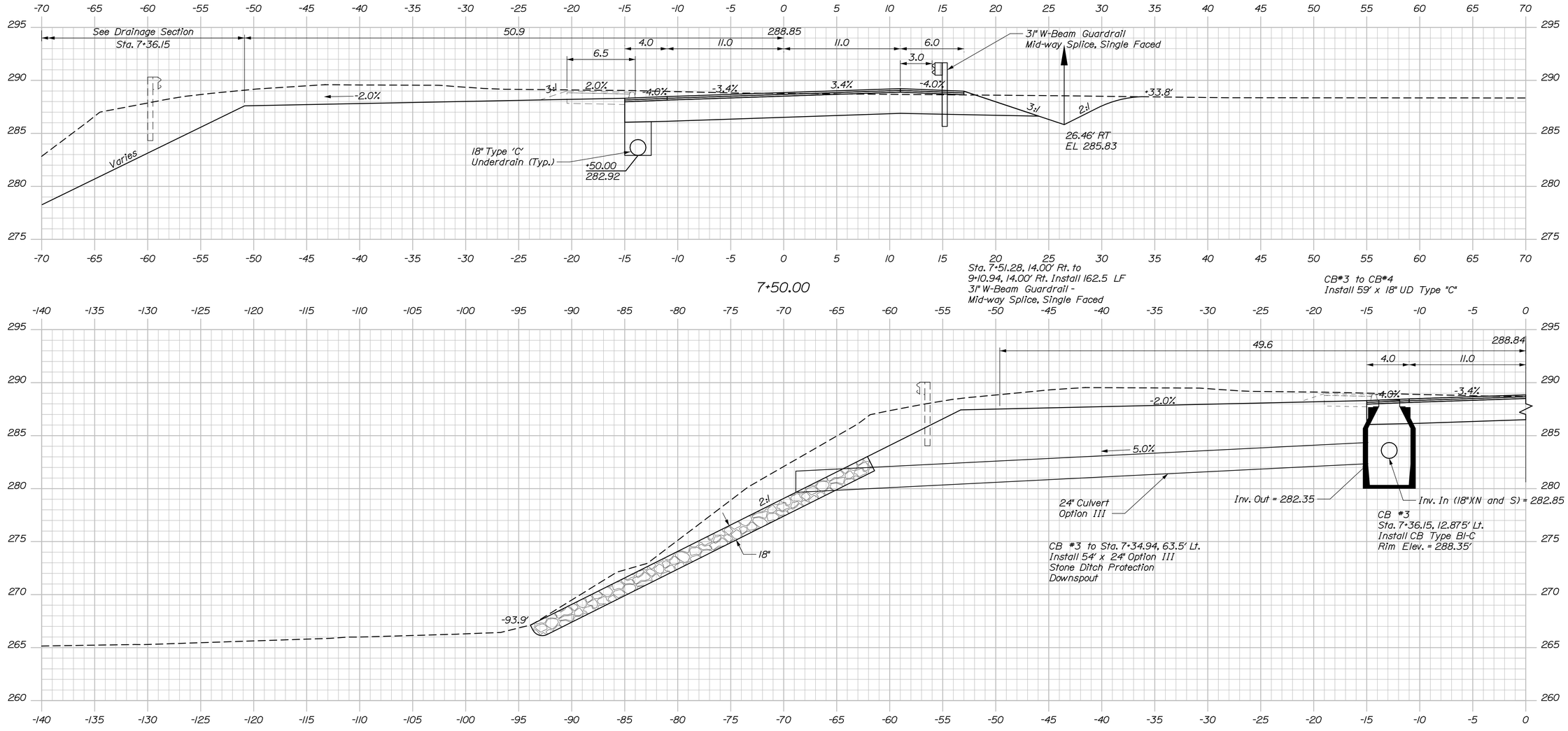
OF 50

Date:11/10/2017

Username:

Division:

Filename: Xsect.dgn



Sta. 7+25.00 to Sta. 7+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Perlin			
DESIGN-DETAILED	P. McKechnie	11\17		
CHECKED-REVIEWED	K. Brown	11\17		
DESIGN2-DETAILED2	-	-		
DESIGN3-DETAILED3	-	-		
REVISIONS 1	-	-		
REVISIONS 2	-	-		
REVISIONS 3	-	-		
REVISIONS 4	-	-		
FIELD CHANGES	-	-		

BY | DATE | SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

19

OF 50

HNTB

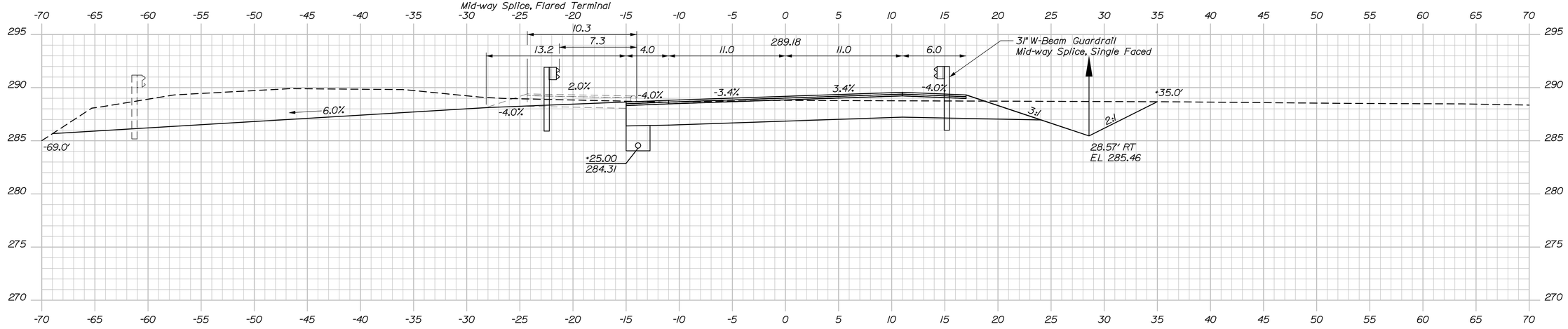
Username:

Division:

Date:11/10/2017

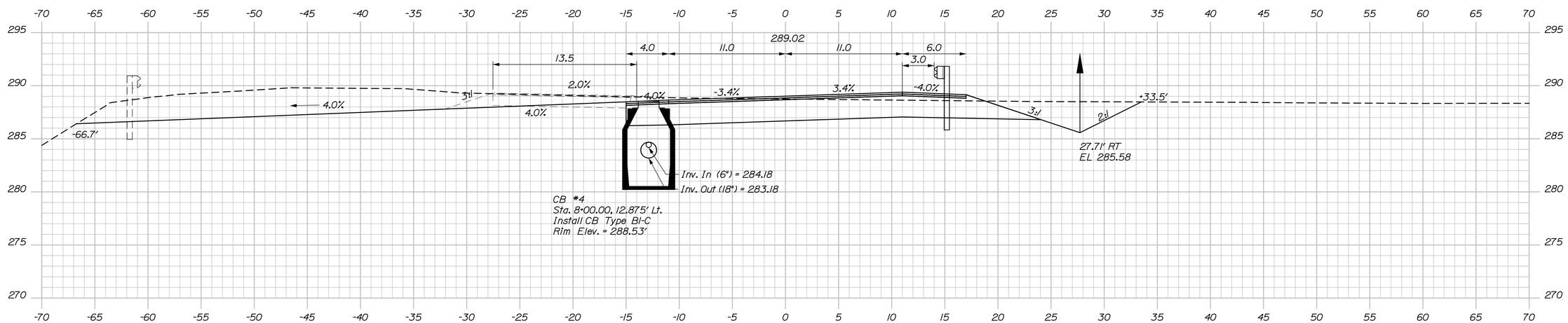
Filename: Xsect.dgn

Sta. 8+05.15, 23.00' Lt. to
Sta. 8+43.87, 19.00' Lt.
Install 31" W-Beam Guardrail
Mid-way Splice, Flared Terminal



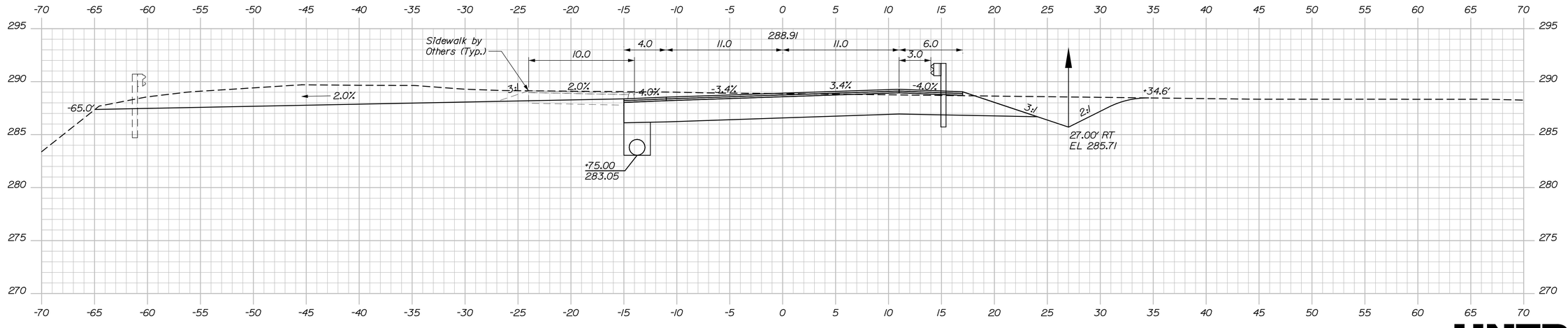
CB#4 to Sta. 8+95.73, 13.875' LT.
Install 96" x 6" UD Type "B"

8+25.00



CB #4
Sta. 8+00.00, 12.875' Lt.
Install CB Type BI-C
Rim Elev. = 288.53'

8+00.00



7+75.00

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin	BY	DATE
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

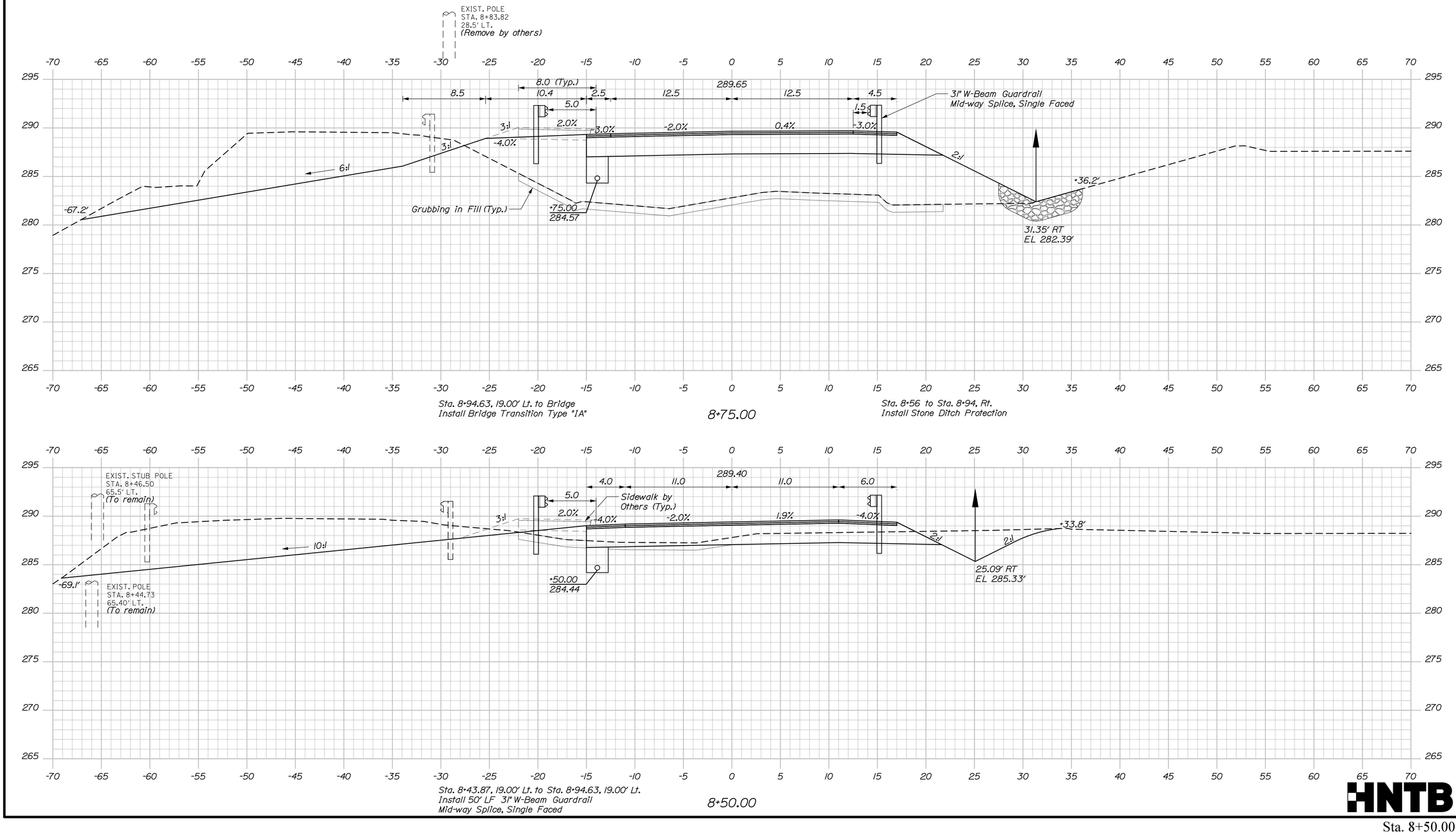
SHEET NUMBER

20

OF 50

Sta. 7+75.00 to Sta. 8+25.00

Username:
Division:
Date:11/10/2017
Filename: Xsect.dgn



Sta. 8+50.00 to Sta. 8+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619 — BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	P. McKechnie	BY	DATE
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER — ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

21

OF 50

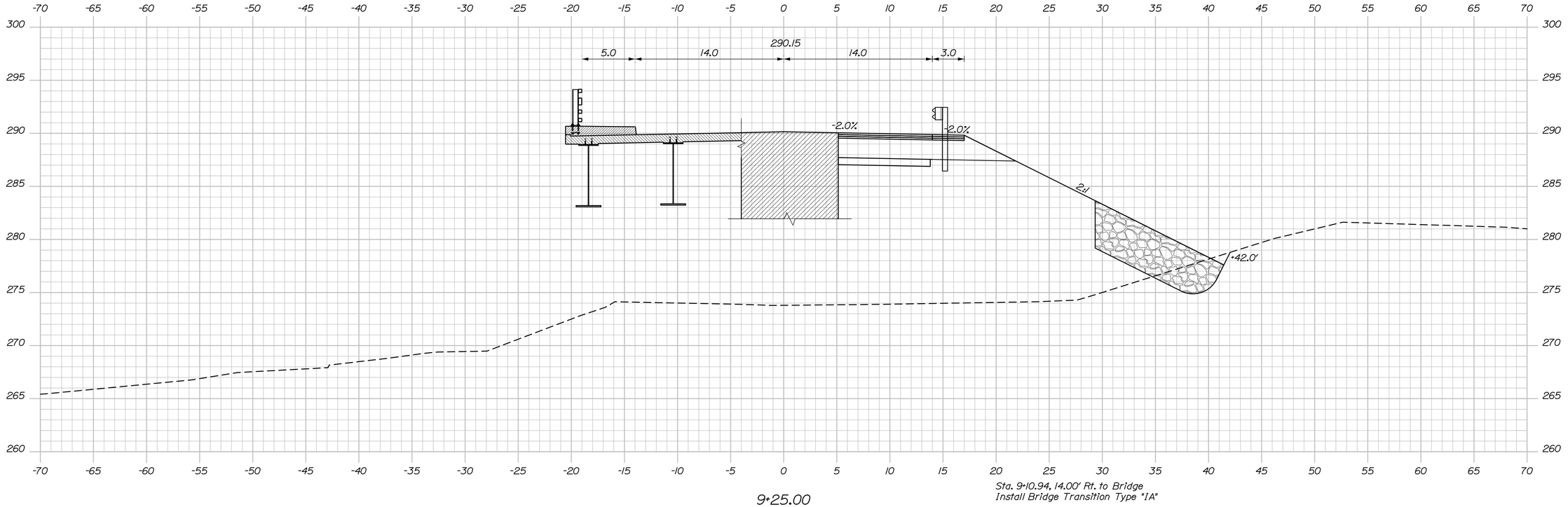
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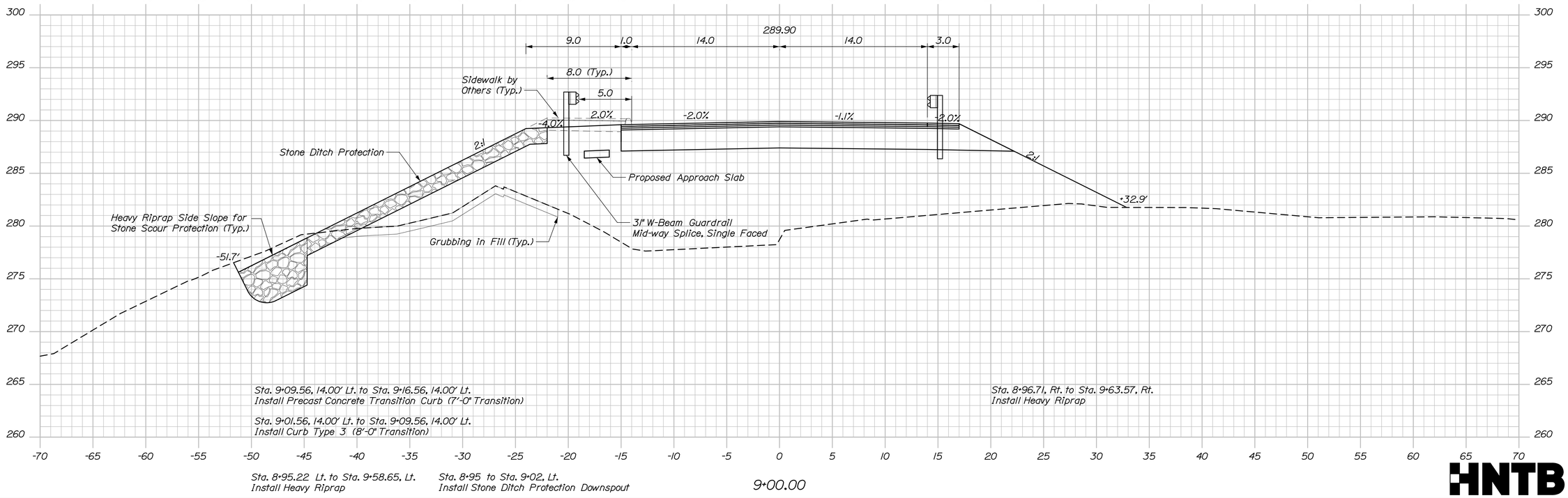
Username:

Division:

Date:11/10/2017

Filename: Xsect.dgn





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin	BY	DATE
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-		

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

22

OF 50

HNTB

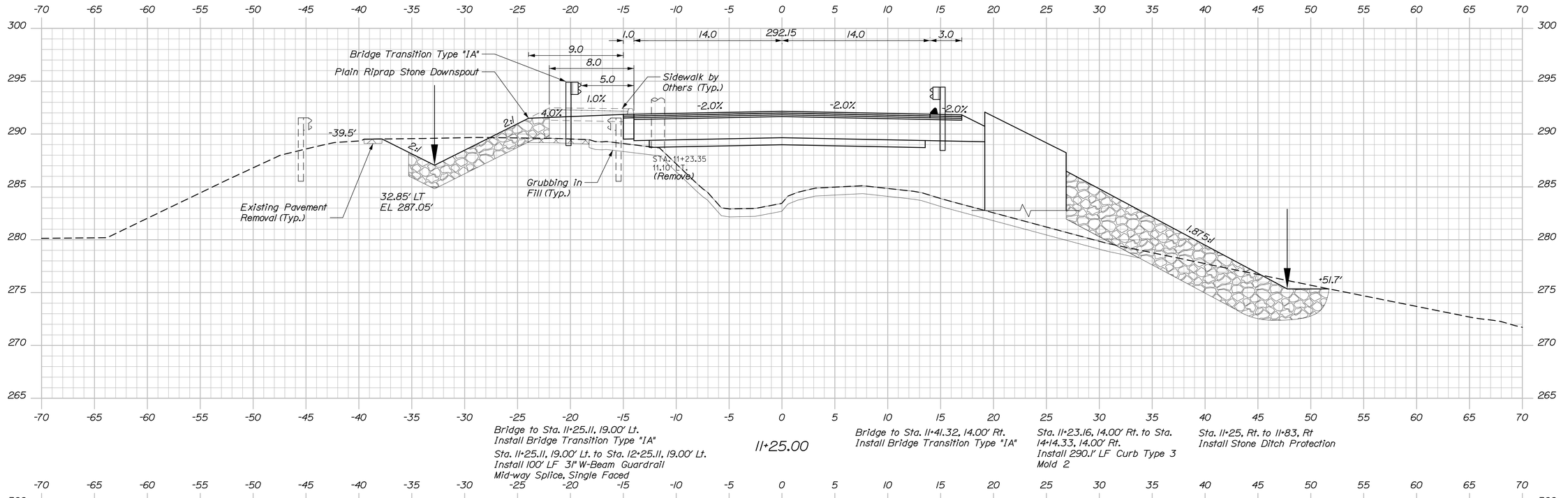
Sta. 9+00.00 to Sta. 9+25.00

Username:

Date:11/28/2017

Division:

Filename: Xsect.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

23

OF 50

HNTB

Sta. 11+00.00 to Sta. 11+25.00

Date:11/28/2017

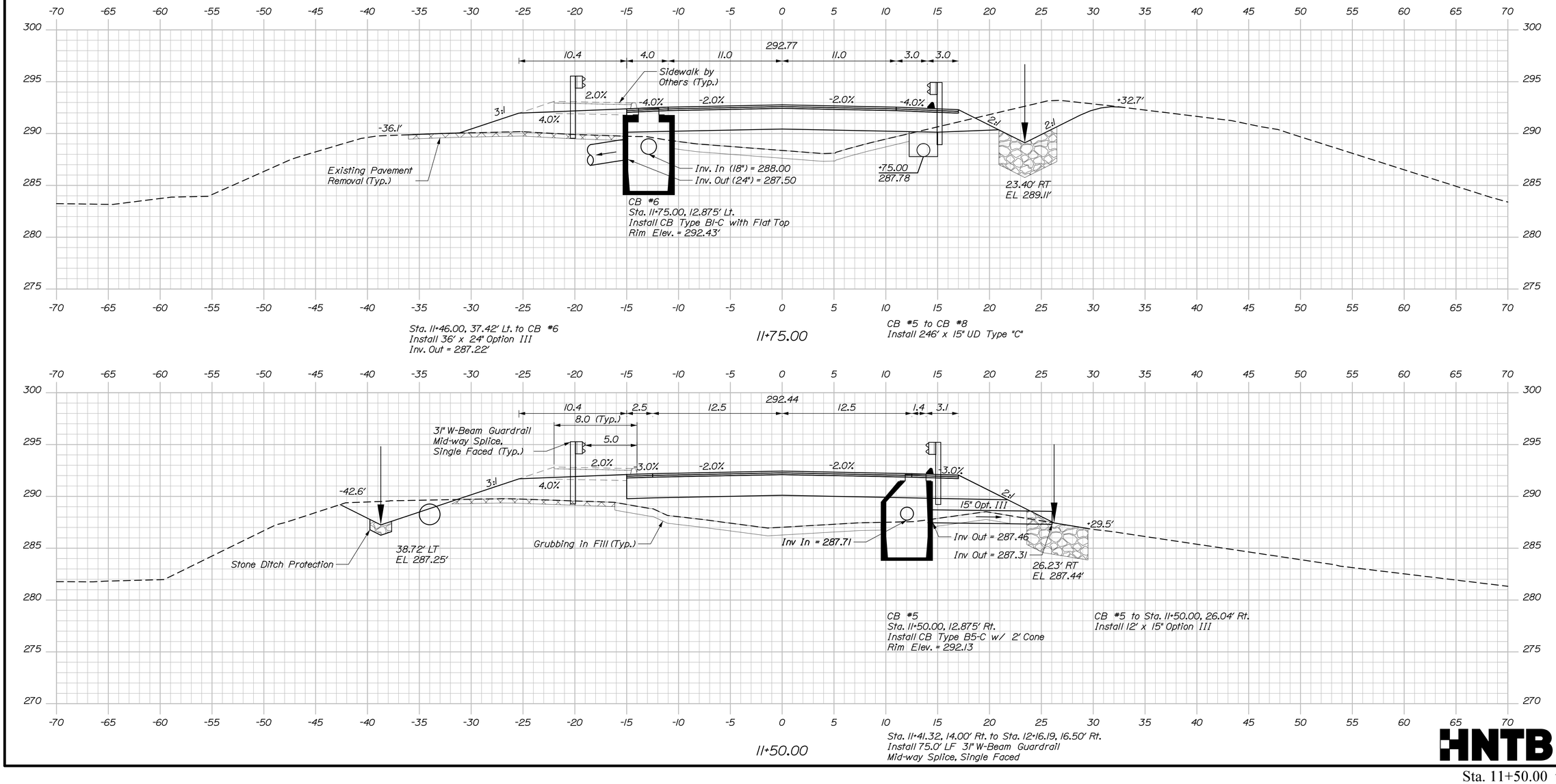
Username:

Division:

Filename: Xsect.dgn

Date:11/10/2017
Username:
Division:
Filename: Xsect.dgn

CB #6 to CB #7
Install 12l' x 18" UD Type "C"



Sta. 11+50.00 to Sta. 11+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619 — BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	Mark Parlin		
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-		-
REVISIONS 2	-		-
REVISIONS 3	-		-
REVISIONS 4	-		-
FIELD CHANGES	-		-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER — ANDROSCOGGIN COUNTY

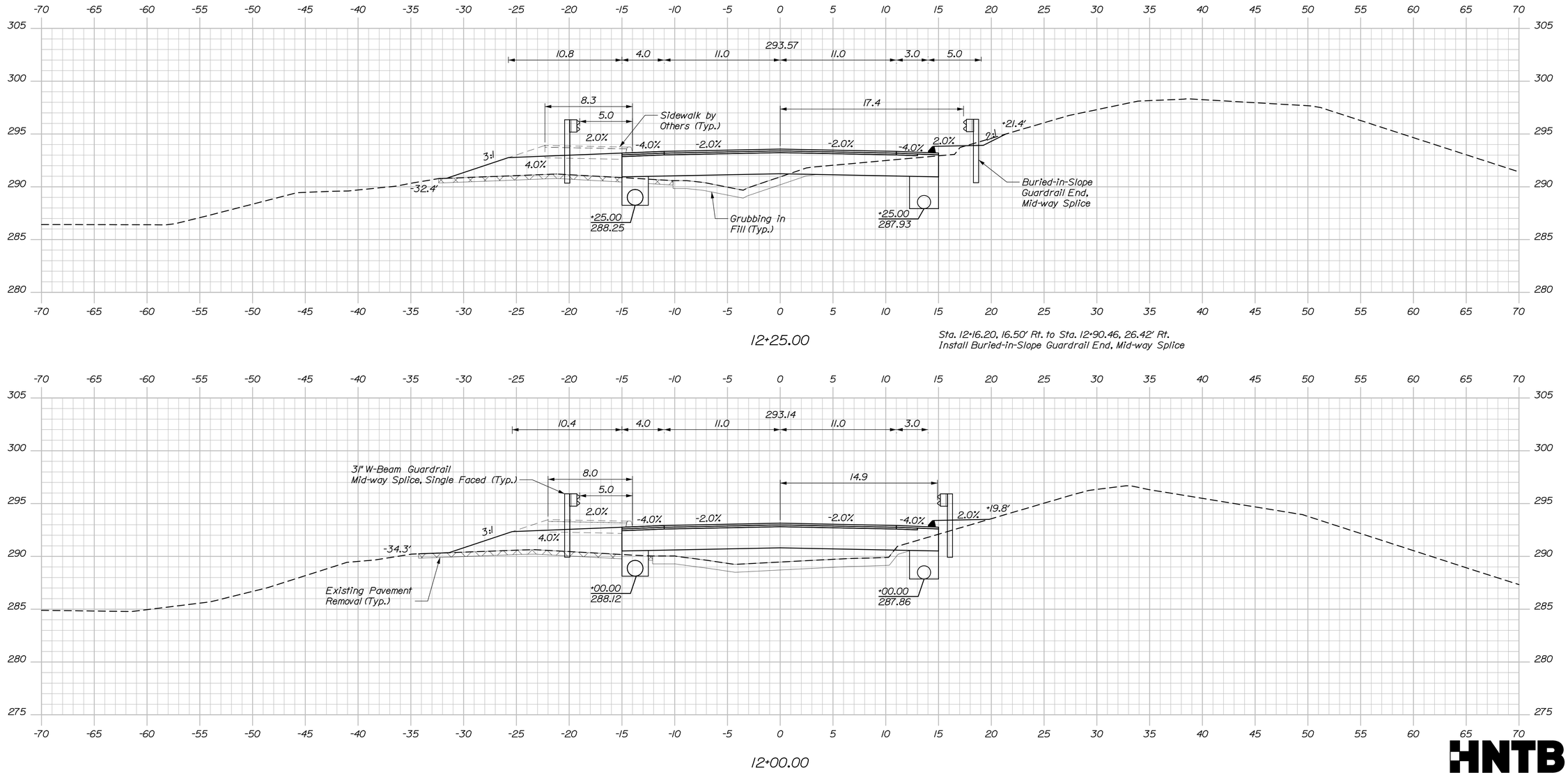
CROSS SECTIONS

SHEET NUMBER

24

OF 50

HNTB



Sta. 12+00.00 to Sta. 12+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN **18749.00**

BRIDGE NO. 2619 — BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	Mark Parlin		
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-		-
REVISIONS 2	-		-
REVISIONS 3	-		-
REVISIONS 4	-		-
FIELD CHANGES	-		-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER — ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

25

OF 50

HNTB

Username:

Date:11/10/2017

Division:

Filename: Xsect.dgn

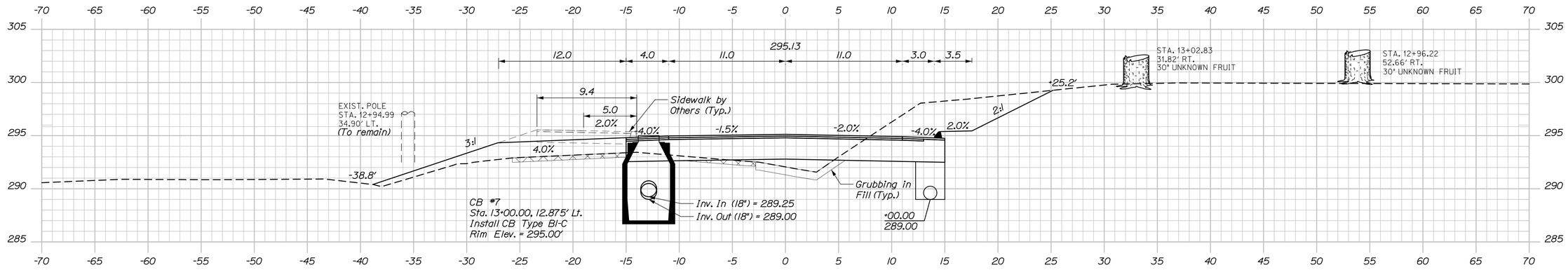
Date:11/10/2017

Username:

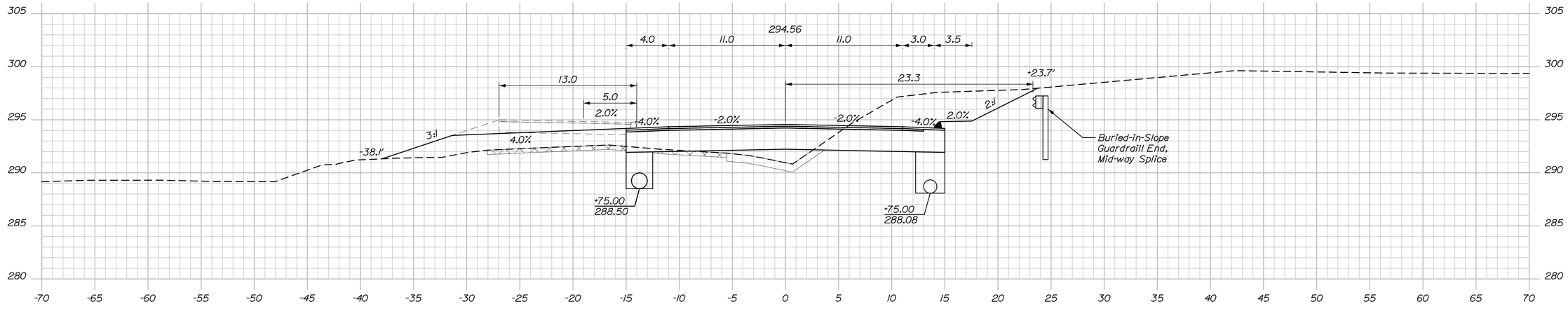
Division:

Filename: Xsect.dgn

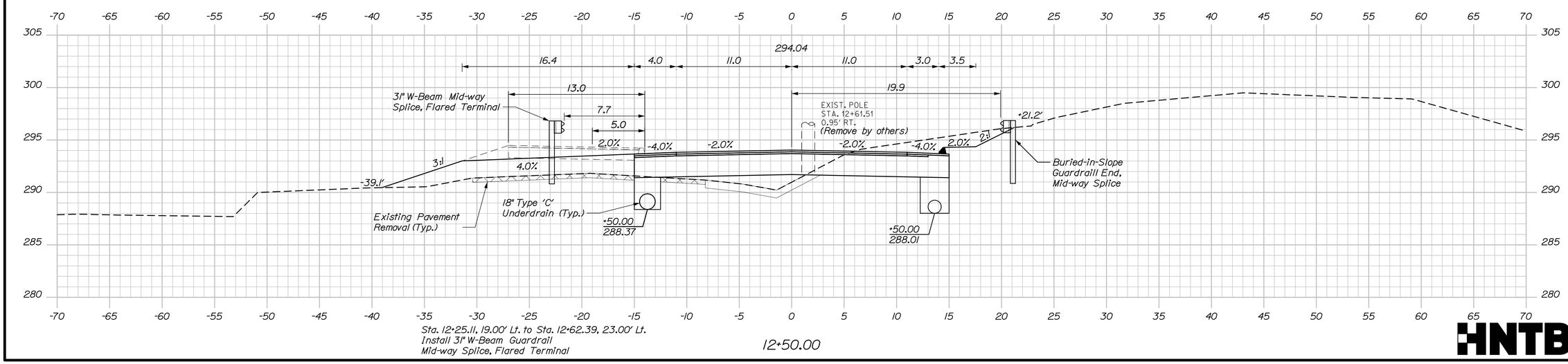
CB #7 to CB #9
Install 122' x 18" UD Type "C"



13+00.00



12+75.00



Sta. 12+25.11, 19.00' Lt. to Sta. 12+62.39, 23.00' Lt.
Install 31" W-Beam Guardrail
Mid-way Splice, Flared Terminal

12+50.00

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	Mark Parlin		
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

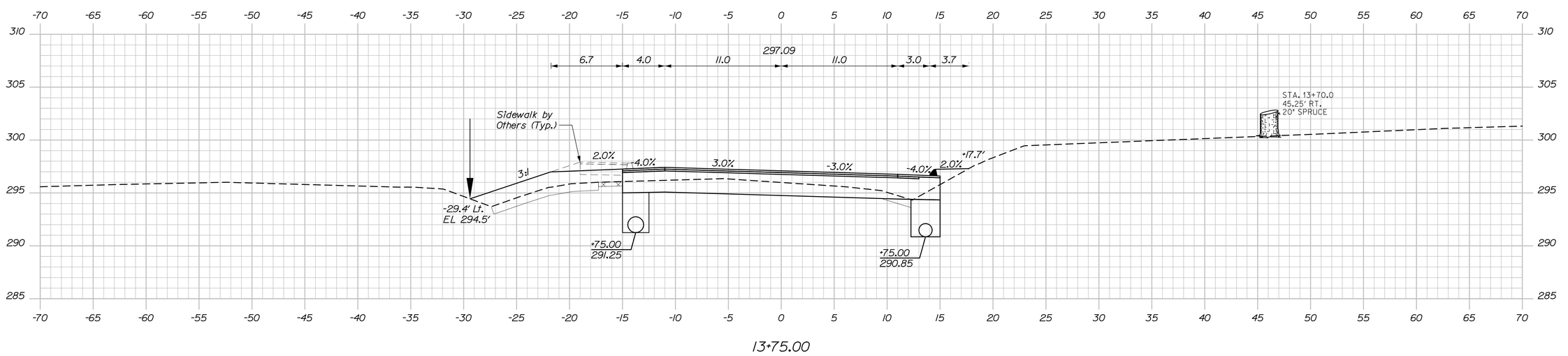
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SHEET NUMBER

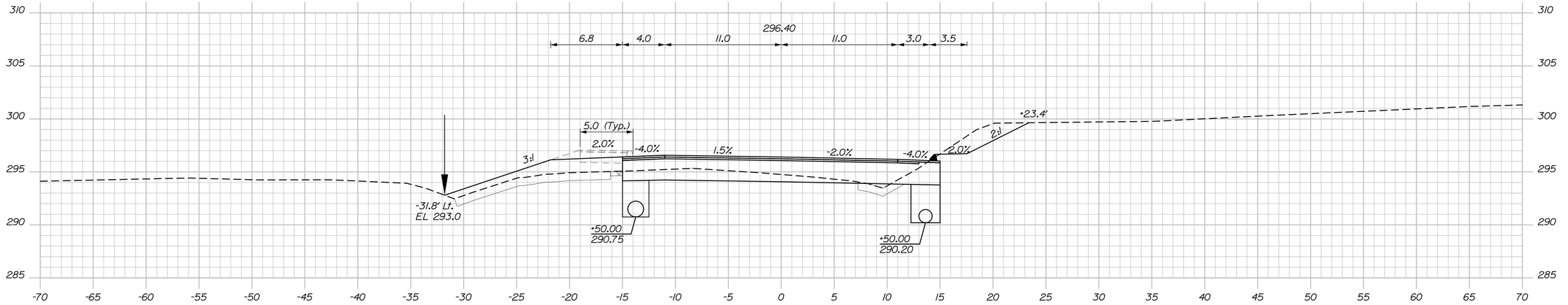
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OF 50

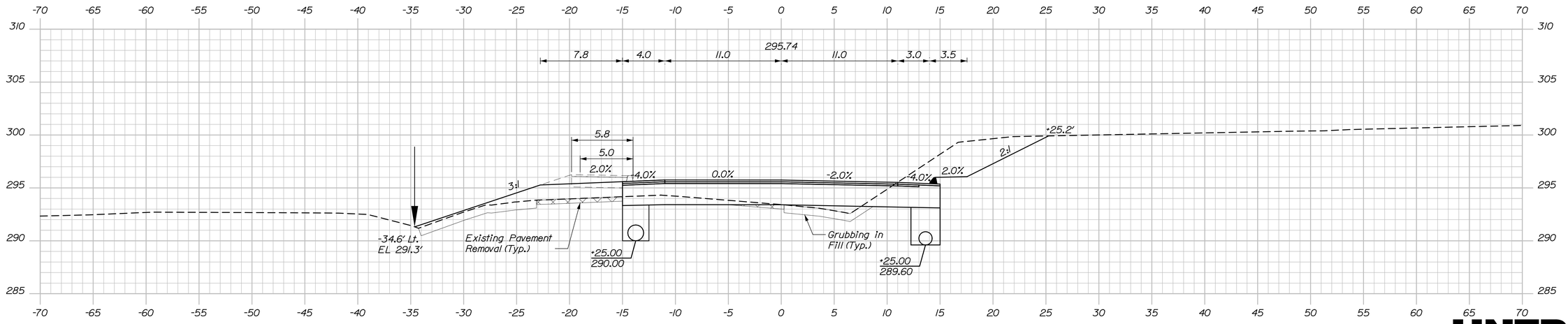
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13+75.00



13+50.00



13+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

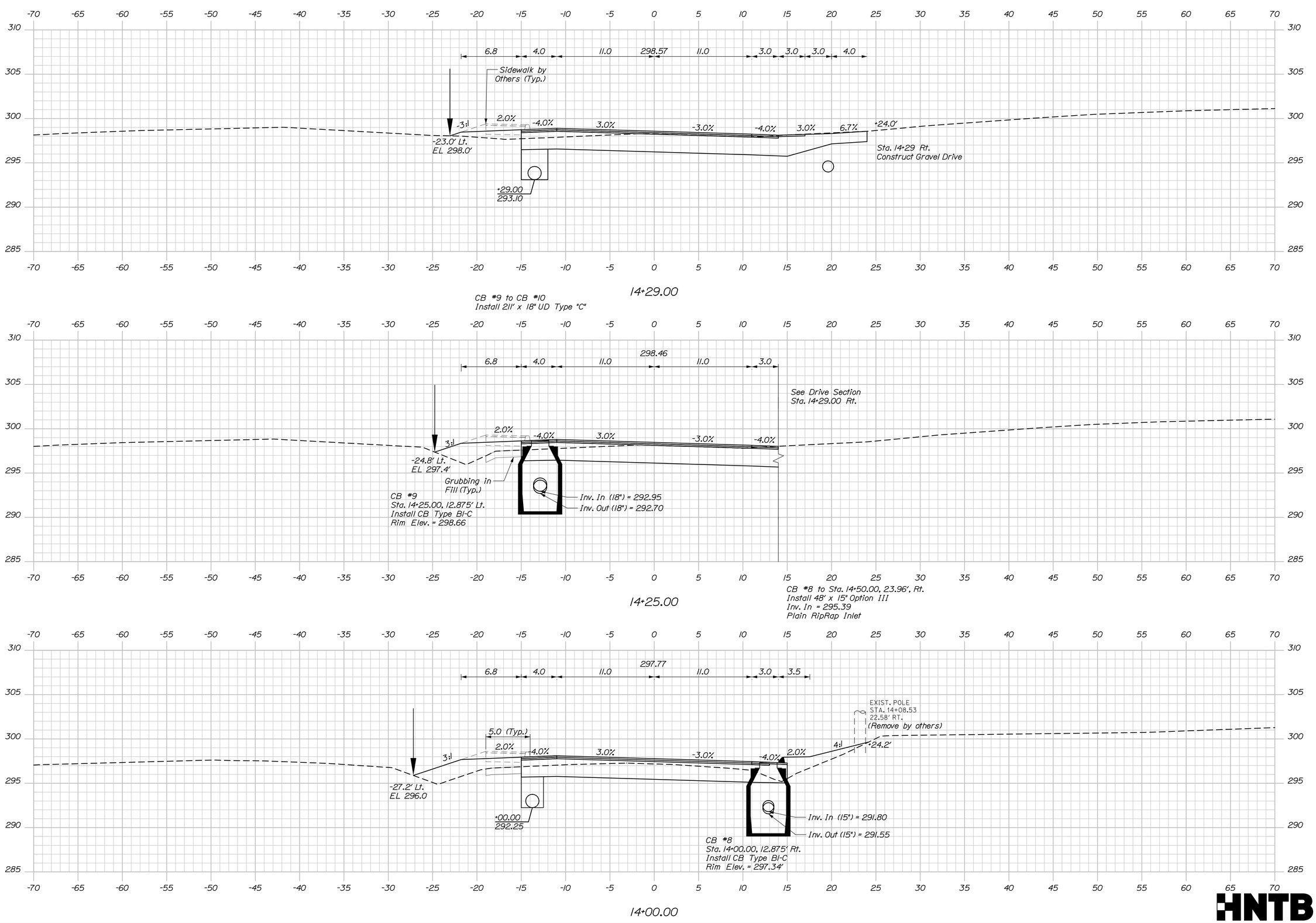
27

OF 50

HNTB

Sta. 13+25.00 to Sta. 13+75.00

Date:11/10/2017
Username:
Division:
Filename: Xsect.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	Mark Parlin		
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

28

OF 50

HNTB

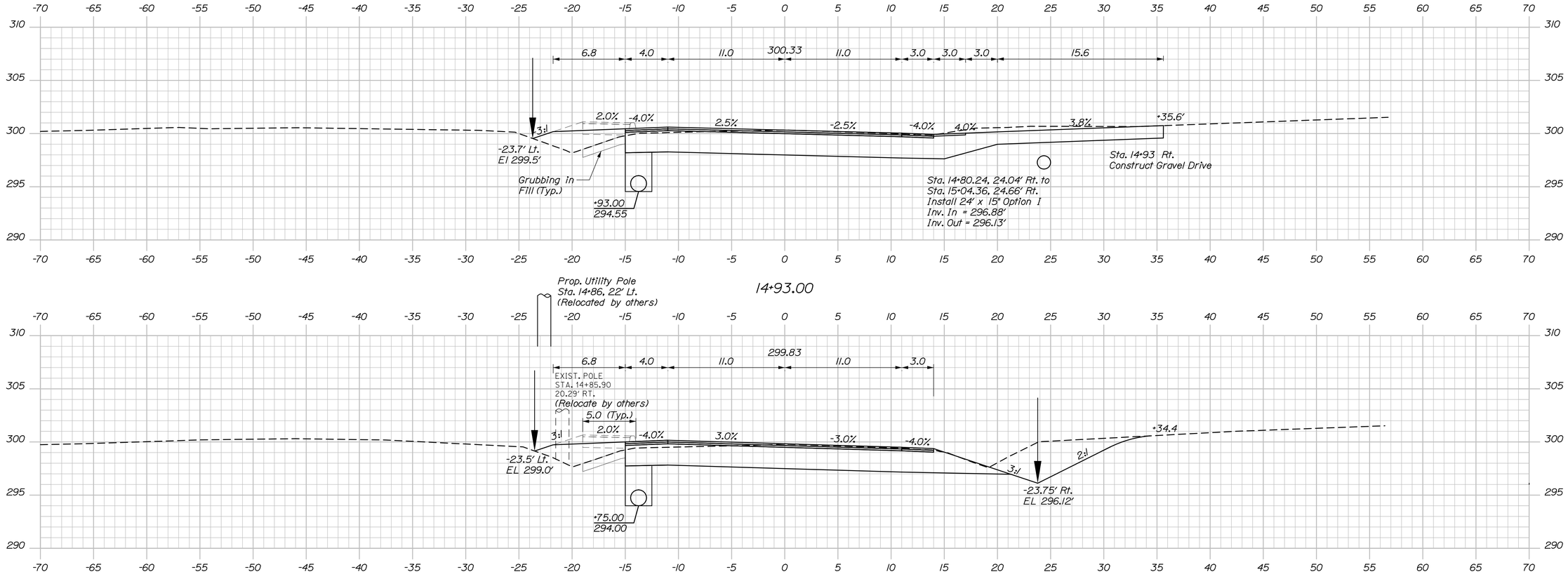
Sta. 14+00.00 to Sta. 14+29.00

Date:11/10/2017

Username:

Division:

Filename: Xsect.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
Mark Parlin		
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

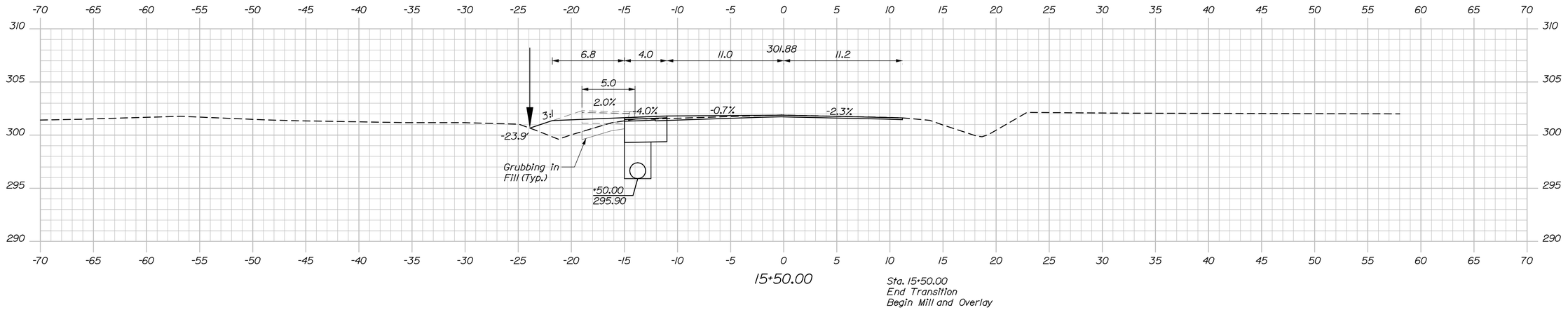
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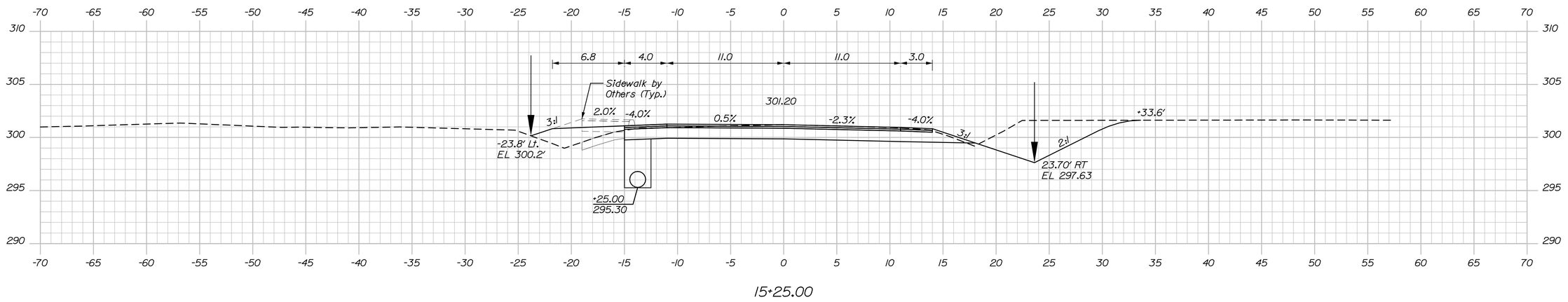
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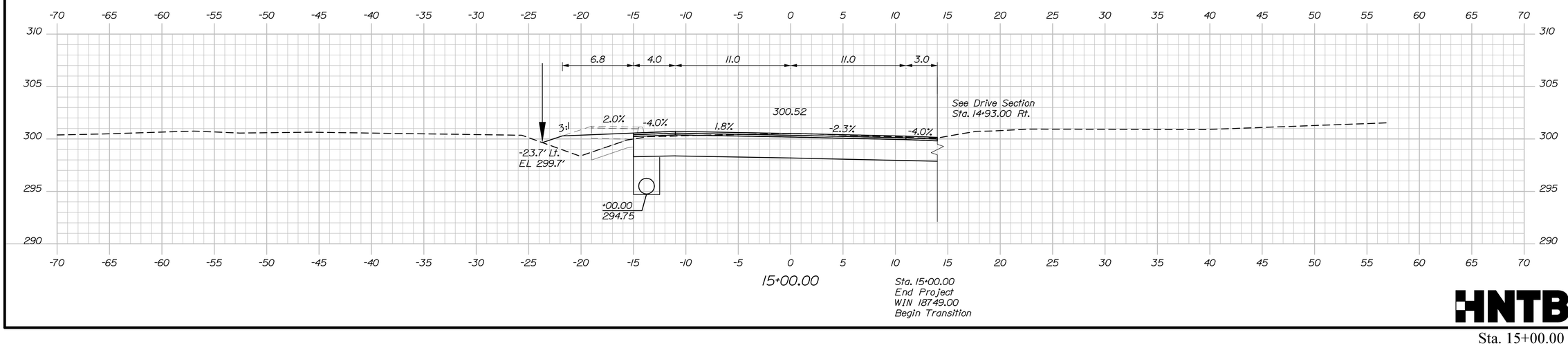
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Sta. 14+50.00 to Sta. 14+93.00

Filename: Xsect.dgn Division: Username: Date:11/10/2017







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	L. Driscoll	11\17
DESIGN2-DETAILED2	P. McKechnie	-
DESIGN3-DETAILED3	K. Brown	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

30

OF 50

HNTB

Sta. 15+00.00 to Sta. 15+50.00

Date:11/10/2017

Username:

Division:

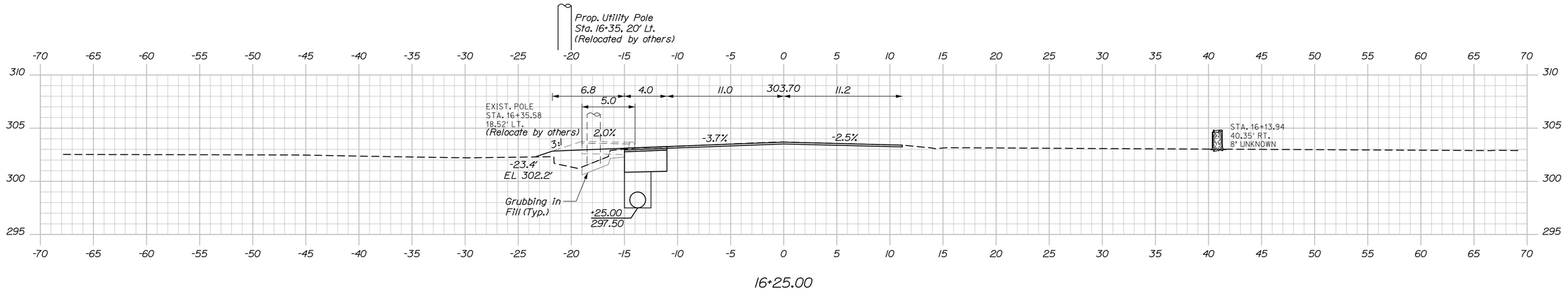
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Date:11/10/2017

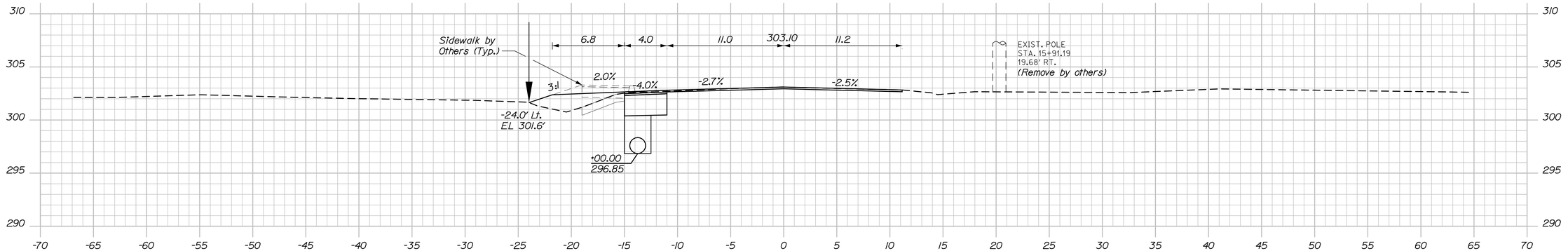
Username:

Division:

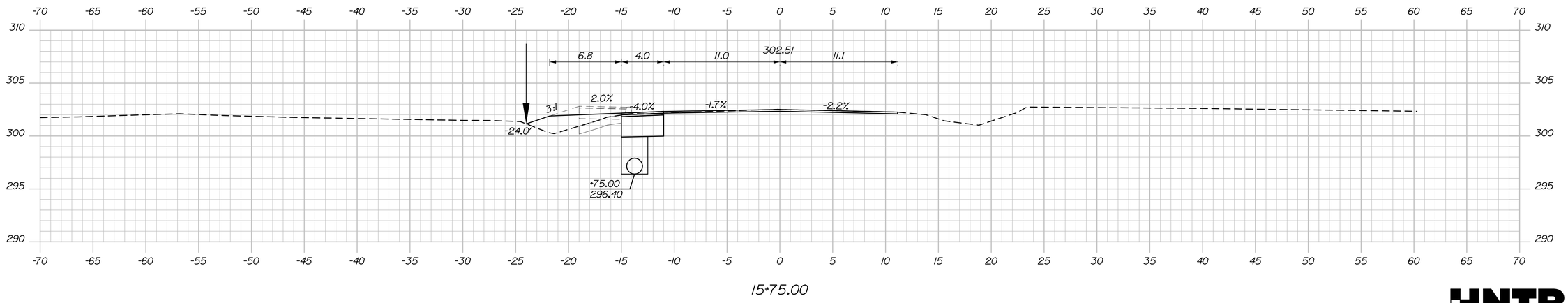
Filename: Xsect.dgn



16+25.00



16+00.00



15+75.00

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin
DESIGN-DETAILED	P. McKechnie
CHECKED-REVIEWED	K. Brown
DESIGN2-DETAILED2	-
DESIGN3-DETAILED3	-
REVISIONS 1	-
REVISIONS 2	-
REVISIONS 3	-
REVISIONS 4	-
FIELD CHANGES	-

	BY	DATE
	P. McKechnie	11\17
	L. Driscoll	11\17
	-	-
	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

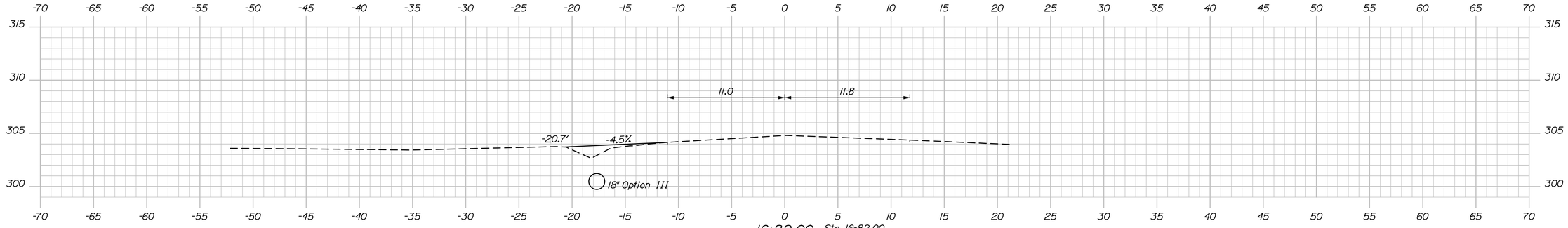
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31

OF 50

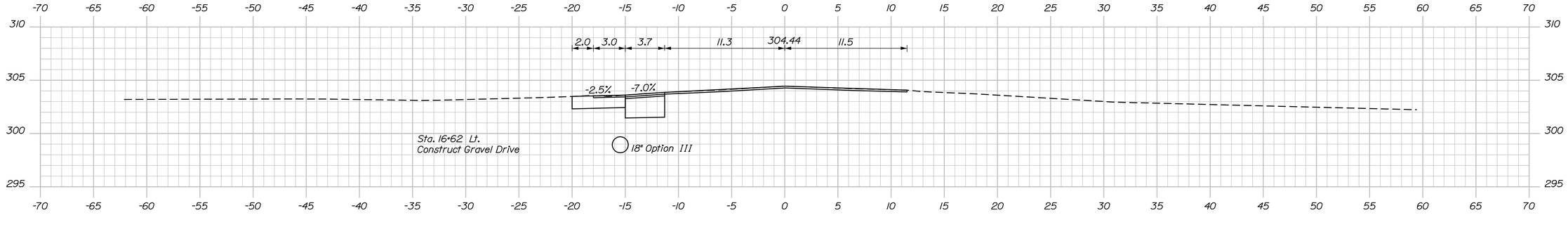
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Sta. 16+96.00
Limit of Work

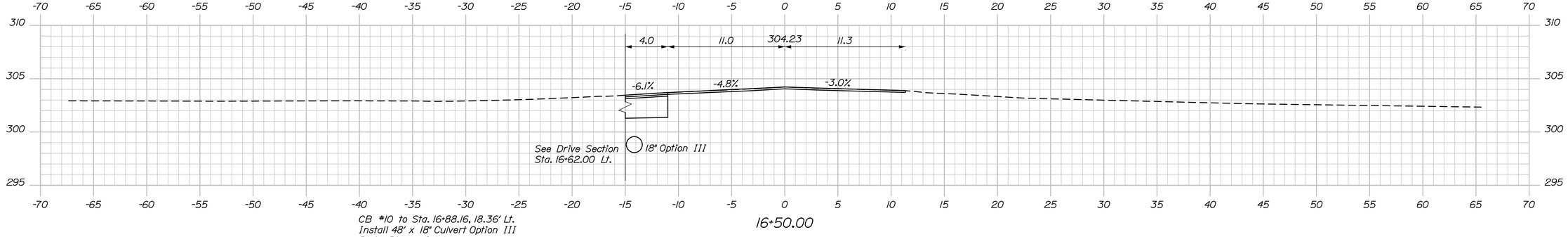


16+82.00

Sta. 16+82.00
End Mill and Overlay
Match Existing

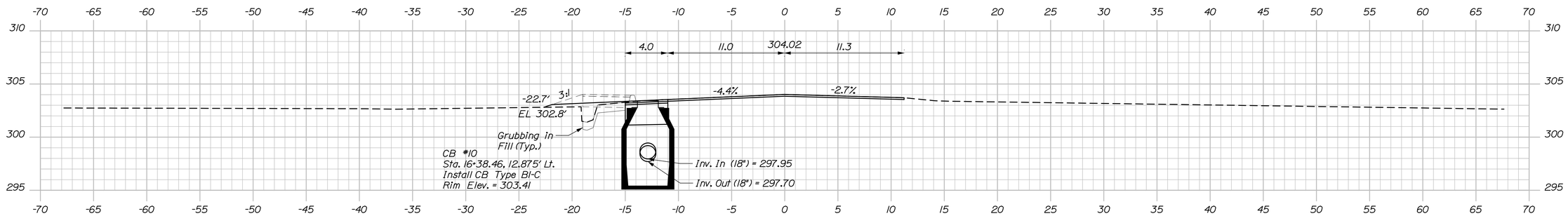


16+62.00



16+50.00

CB #10 to Sta. 16+88.16, 18.36' Lt.
Install 48' x 18" Culvert Option III
Plain Riprap Inlet
Inv. In = 300.00



16+38.46

HNTB

Sta. 16+38.46 to Sta. 16+82.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin	BY	DATE
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	L. Driscoll	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

CROSS SECTIONS

SHEET NUMBER

32

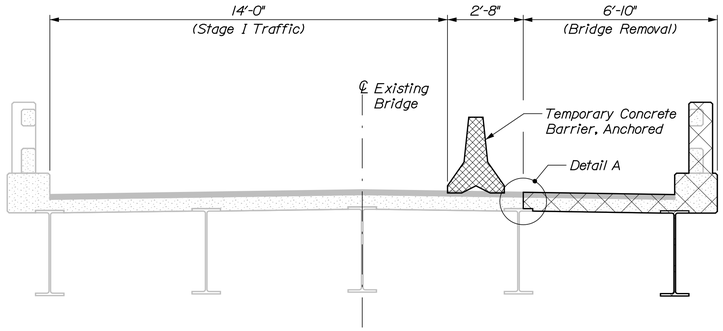
OF 50

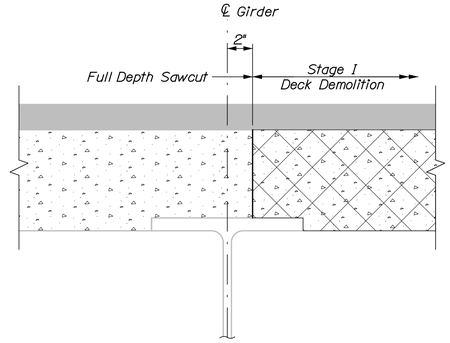
Date:11/10/2017

Username:

Division:

Filename: Xsect.dgn



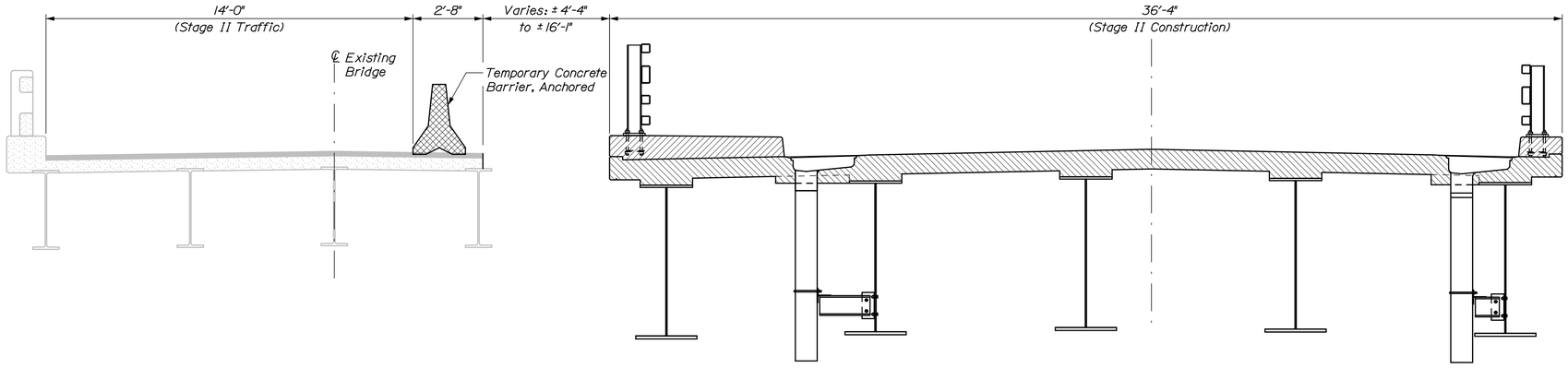


Note:
The Contractor shall be responsible for accurately field locating the proposed sawcut line.

DETAIL A

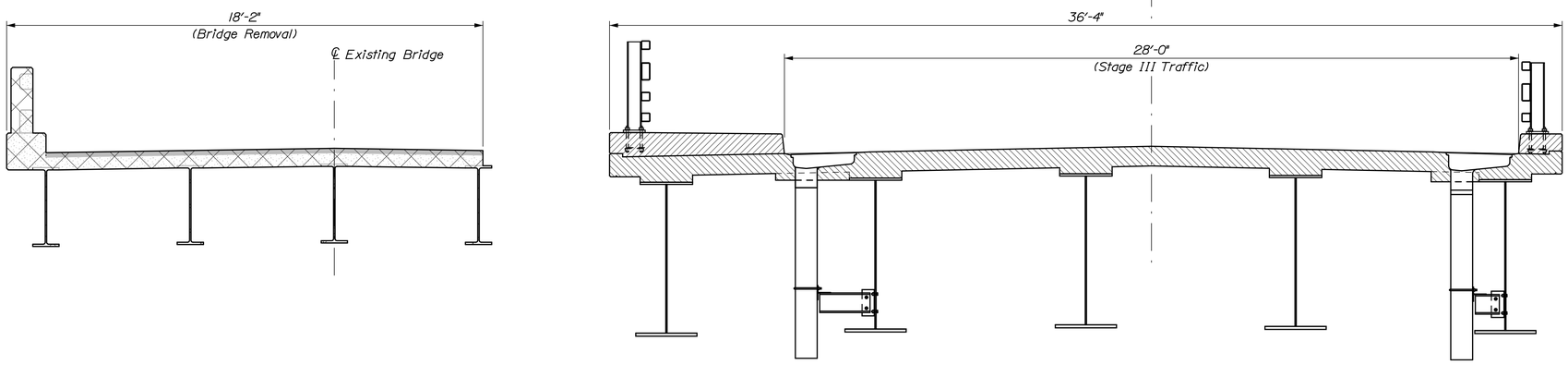
STAGE I CONSTRUCTION

Install Temporary Concrete Barrier, Anchored and maintain one, 14'-0" travelway of alternating one-way traffic. Sawcut and remove eastern portion of existing superstructure and abutments.



STAGE II CONSTRUCTION

Construct proposed superstructure and substructure, with the exception of the western wingwall at Abutment No. 2.



STAGE III CONSTRUCTION

Remove remaining portions of the existing bridge to the limits identified on the General Notes sheet. Construct western wingwall at Abutment No. 2.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619 BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin	BY	DATE
DESIGN-DETAILED	J. Olund	P. Bishop	11\17
CHECKED-REVIEWED	T. Poulin	T. Cote	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

STAGED CONSTRUCTION

SHEET NUMBER
33
OF 50

Username:
Date:11/10/2017
Division:
Filename: 033_StageConstr.dgn

MOT AND TRAFFIC SIGNAL GENERAL NOTES

1. Sign and signal locations shown are approximate. Actual locations shall be determined in the field and approved by the Resident.

2. The Contractor shall cover all existing signs that conflict with work zone signs and signals.

3. All traffic control shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways", (MUTCD), U.S.D.O.T, FHWA, latest edition.

4. The Contractor shall remove or cover with tape all existing pavement markings that conflict with proposed markings. Payment will be made under Item 622.77 Remove Existing Pavement Marking or Item 627.57 12 Inch Removable Black Line Masking Tape.

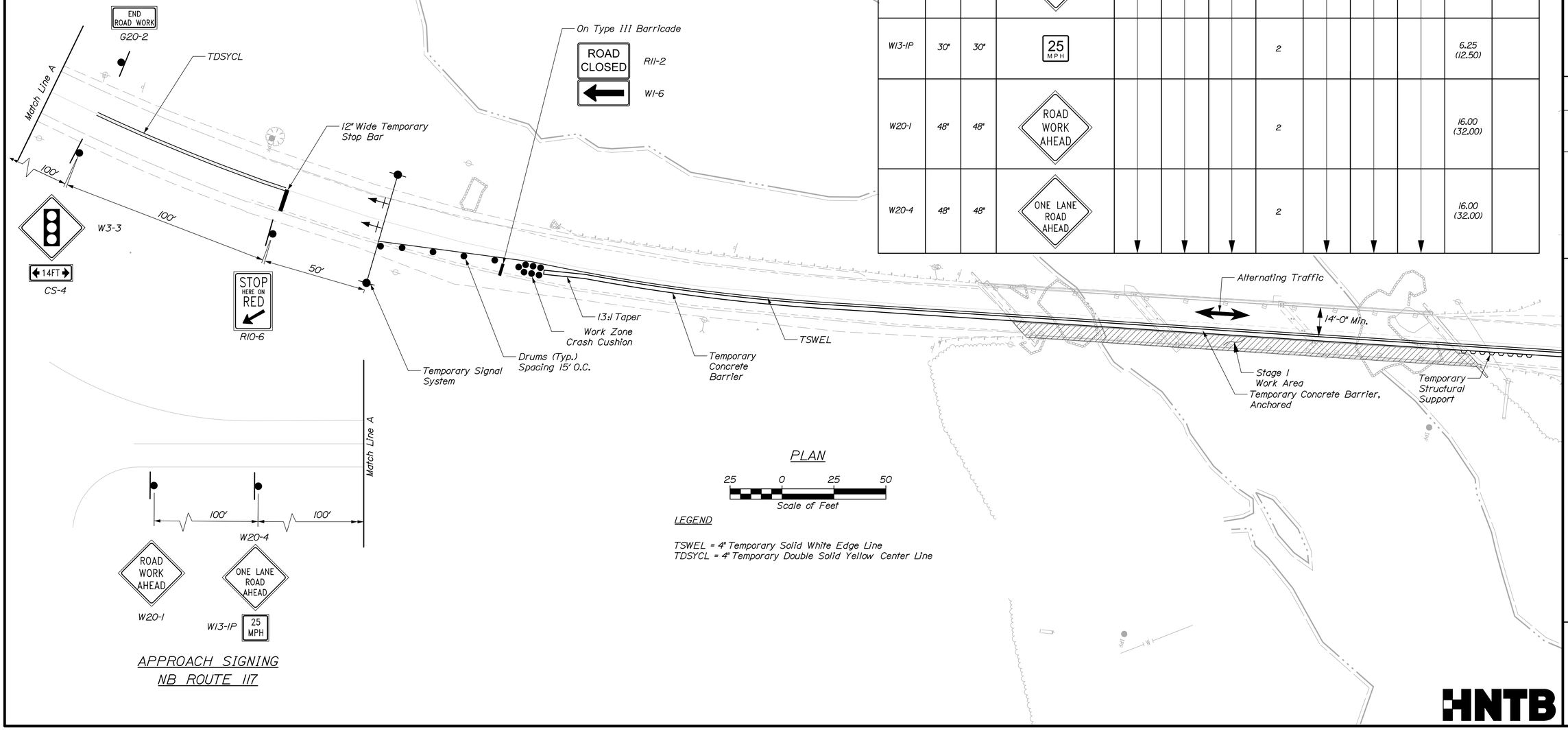
5. Not all maintenance of traffic phases and staged construction work efforts are shown herein. Additional maintenance of traffic phases may be necessary for work efforts associated with, but not limited to, installation of closed drainage, removal of the existing bridge, construction of the northwest wingwall, and ancillary items. The Contractor is responsible for development and submittal of Maintenance of Traffic plans in accordance with Section 652.

6. Traffic signal work shall be completed in a manner and order that will minimize disruption to traffic.

7. Delineate face of barrier when next to travelway (reflective markings). Payment will be made under Item 627.811, Temporary Bi-directional Yellow Delineators and Item 627.812, Temporary Bi-directional White Delineators.

8. Temporary Pavement Masking Tape shall be utilized in all areas that will not be receiving proposed pavement.

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH	SIZE OF SIGN HEIGHT	TEXT	TEXT DIMENSIONS (INCHES) LETTER HEIGHT	TEXT DIMENSIONS (INCHES) VERTICAL SPACING	TEXT DIMENSIONS (INCHES) ARROW RTE. MKR.	NUMBER OF SIGNS REQUIRED	COLOR BACK-GROUND	COLOR LEGEND BORDER	BORDER RADIUS	AREA IN SQUARE FEET	NOTES
CS-4	30"	15"	← 14FT →	7"D			2	ORANGE	BLACK	1.875"	3.125 (6.25)	
G20-2	48"	24"	END ROAD WORK	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			2	SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" - 2000			8.00 (16.00)	
R10-6	24"	36"	STOP HERE ON RED				2				6.00 (12.00)	
R11-2	48"	30"	ROAD CLOSED				2				10.00 (20.00)	
W1-6	48"	24"	←				2				8.00 (16.00)	
W3-3	48"	48"					2				16.00 (32.00)	
W13-1P	30"	30"	25 MPH				2				6.25 (12.50)	
W20-1	48"	48"	ROAD WORK AHEAD				2				16.00 (32.00)	
W20-4	48"	48"	ONE LANE ROAD AHEAD				2				16.00 (32.00)	



PLAN

25 0 25 50

Scale of Feet

LEGEND

TSWEL = 4" Temporary Solid White Edge Line
TDSYCL = 4" Temporary Double Solid Yellow Center Line

APPROACH SIGNING
NB ROUTE 117

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin	BY	DATE
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	J. Olund	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

MAINTENANCE OF TRAFFIC STAGE I

SHEET NUMBER

34

OF 50

HNTB

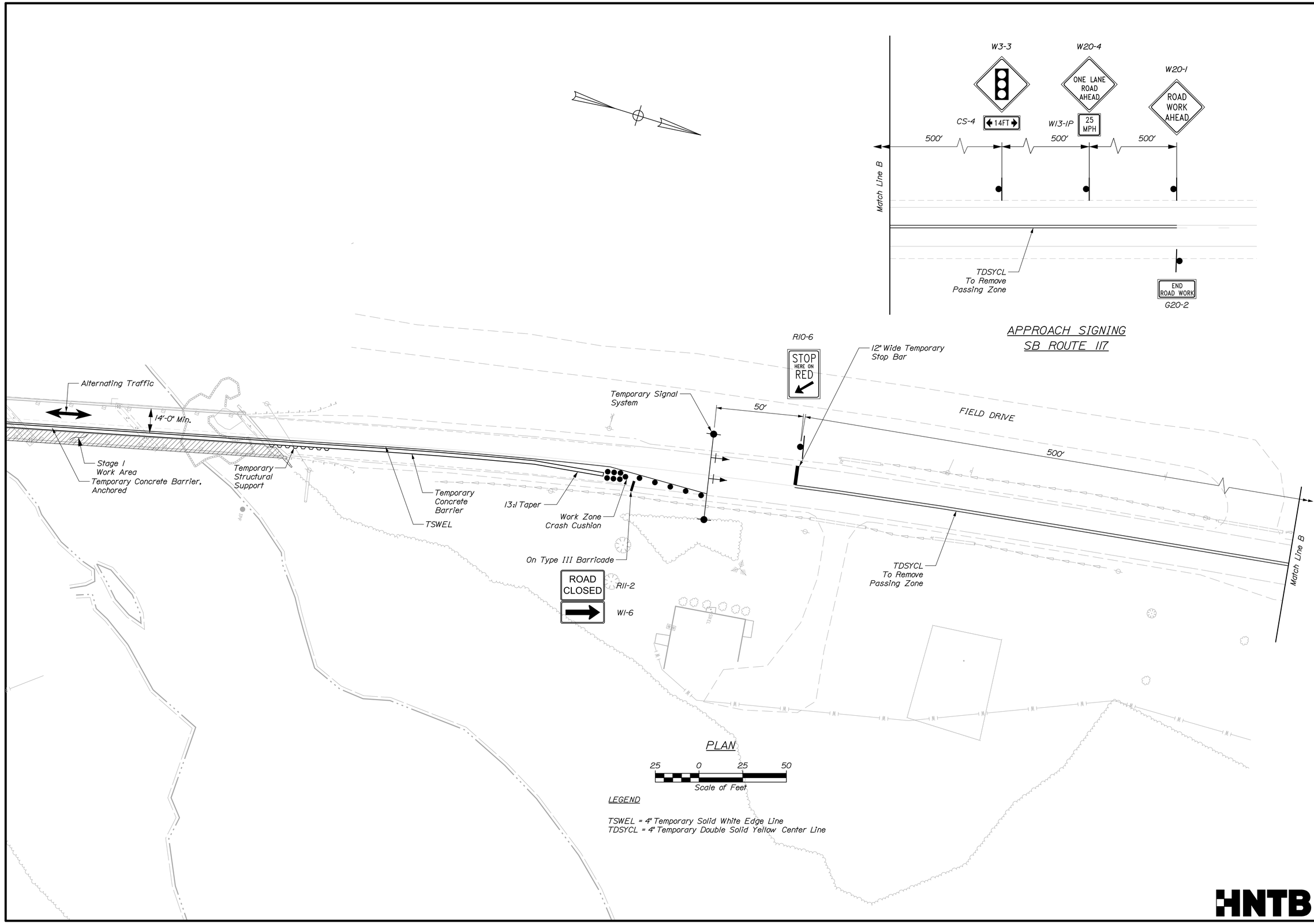
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Division:
Filename: 034_Sign_01.dgn

Username:

Date:11/10/2017

Division:

Filename: 035_Sign_02.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	Mark Parlin		
DESIGN-DETAILED	P. McKechnie	P. McKechnie	11\17
CHECKED-REVIEWED	P. McKechnie	K. Brown	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

MAINTENANCE OF TRAFFIC STAGE I

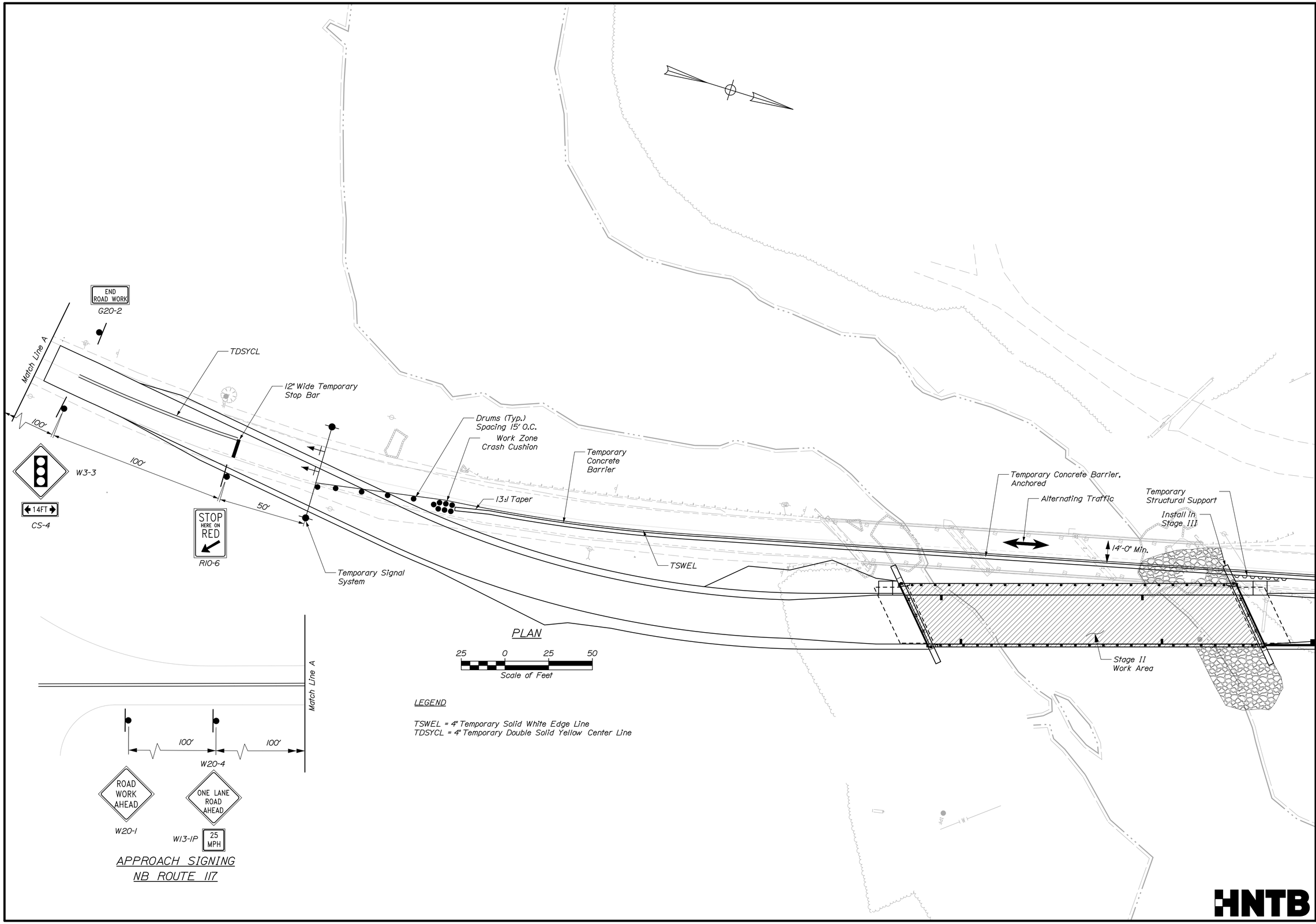
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OF 50

HNTB

Filename: 036_Sign_03.dgn Division: Username: Date:11/10/2017



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619 — BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	J. Olund	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

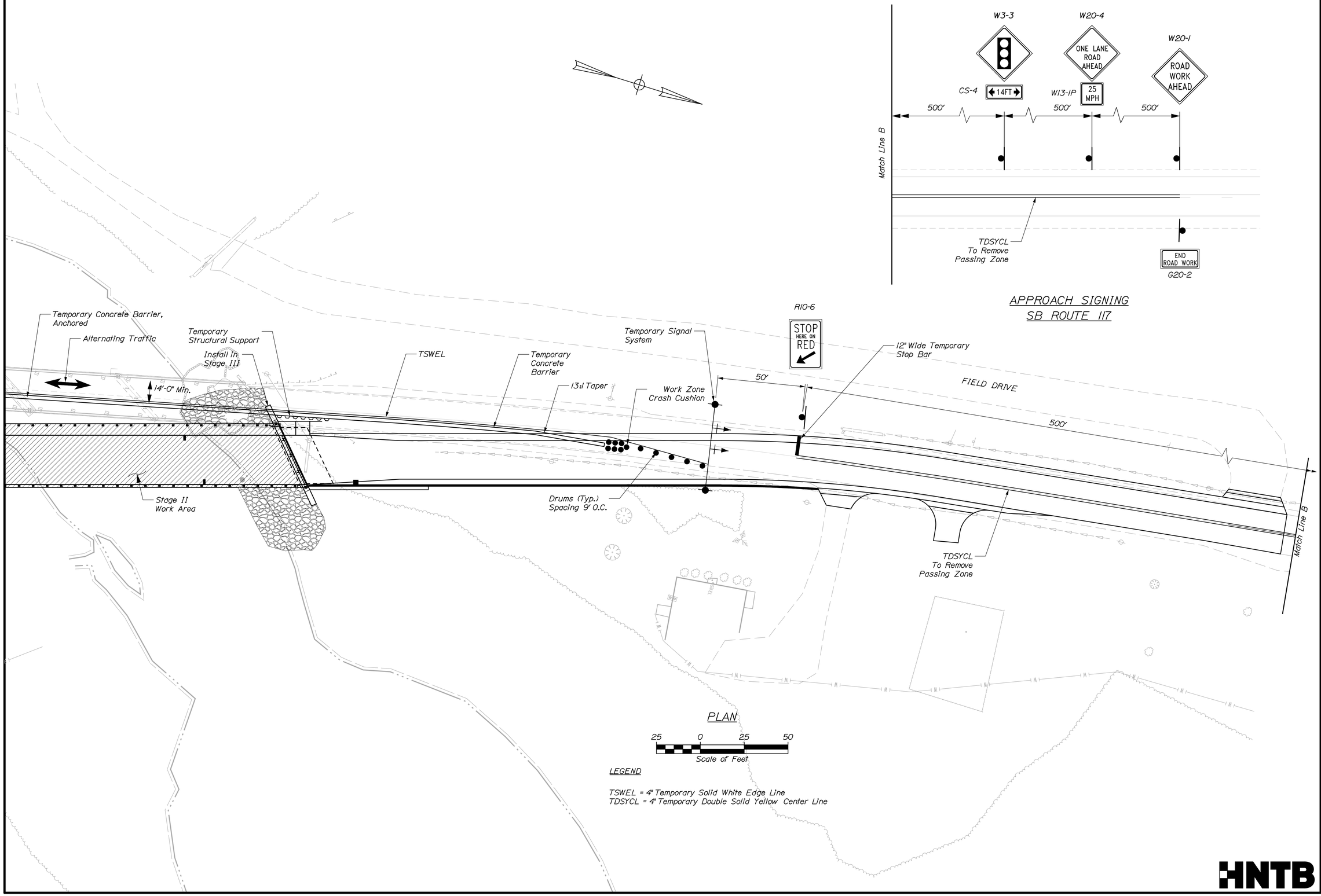
MAINTENANCE OF TRAFFIC STAGE II

SHEET NUMBER

36

OF 50

HNTB



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	-
DESIGN-DETAILED	P. McKechnie	11\17
CHECKED-REVIEWED	K. Brown	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

MAINTENANCE OF TRAFFIC STAGE II

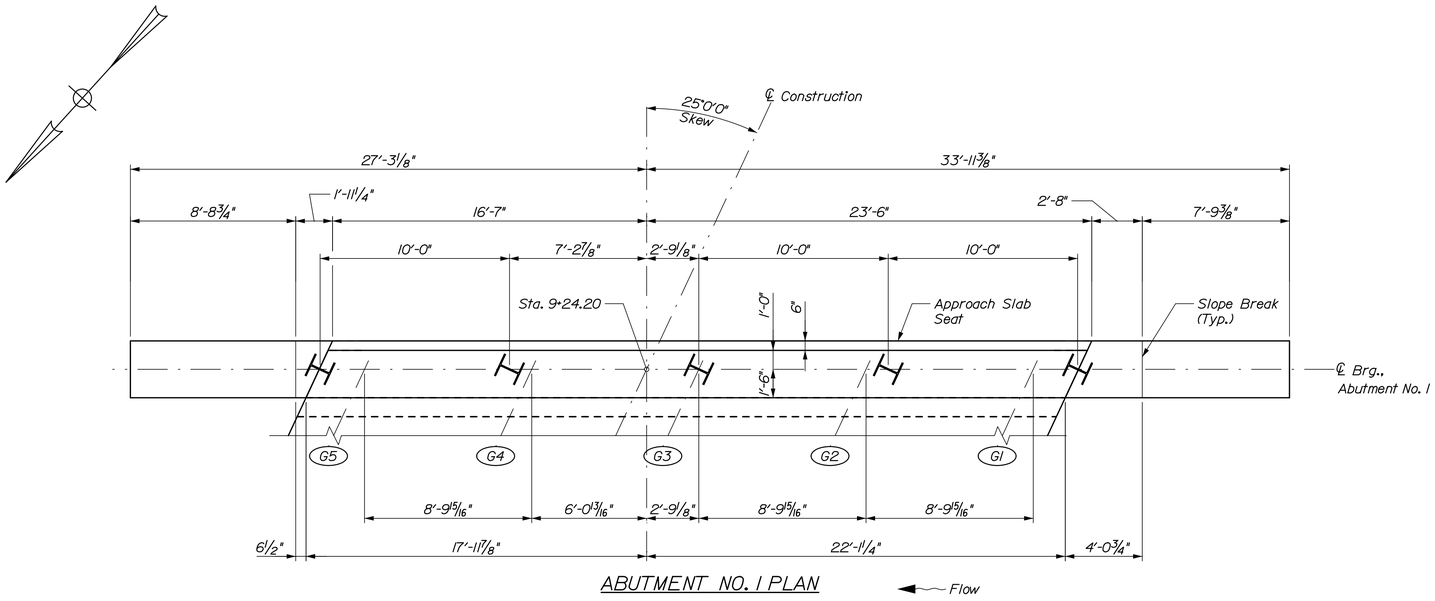
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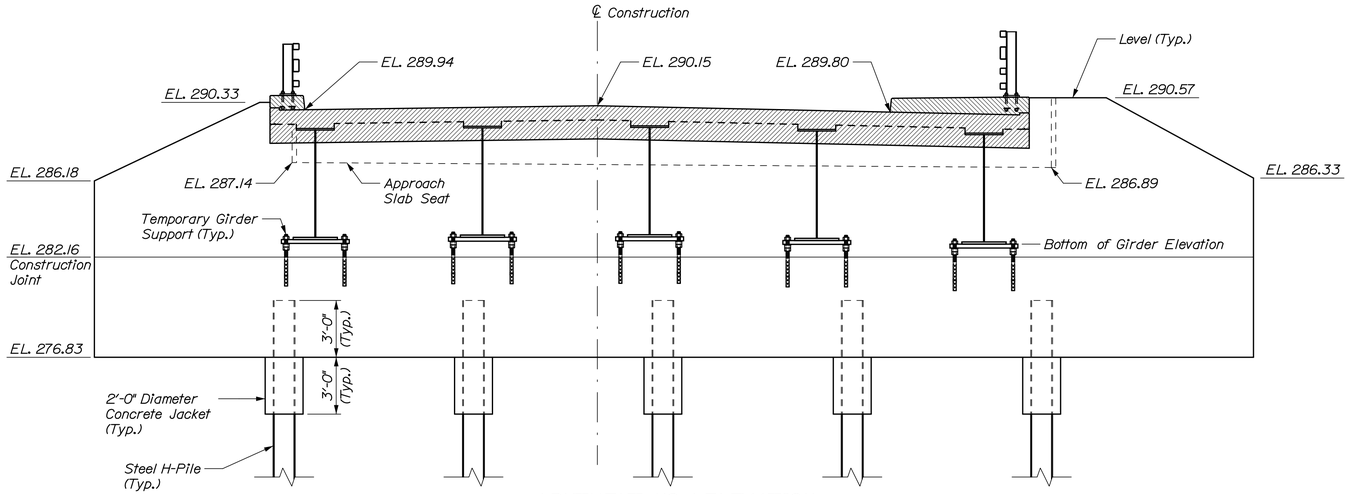
OF 50

HNTB

Filename: 037_Sign_04.dgn Division: Username: Date:11/10/2017



ABUTMENT NO. 1 PLAN



ABUTMENT NO. 1 ELEVATION

ABUTMENT NOTES:

1. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.

2. All elevations are provided at centerline of bearing unless otherwise noted.

3. Cover joints where waterstops are not required in accordance with Standard Detail 502(01).

4. Place 4-inch diameter drains in breastwall and wingwalls at 10 feet maximum spacing. The exact location will be determined by the Resident.

5. Construct Drainage Geocomposite behind the abutments and wingwalls in accordance with Special Provision Section 620, Geotextiles - Drainage Geocomposite.

6. Abutments and wingwalls shall be backfilled with Granular Borrow for Underwater Backfill. Pay limits will be as shown on the "Abutment Details" sheet.

7. Payment for concrete jacket around the tops of the H-piles will not be paid for directly. Payment shall be incidental to Pay Item 502.219, Structural Concrete Abutment and Retaining Walls. Fill concrete may be used for the concrete jackets.

8. Formwork for casting the northwest wingwall (Abutment No. 2) shall be positively attached to the abutment to prevent differential thermal movement during the concrete cure period.

PILE NOTES:

1. The maximum calculated factored axial pile load is 450 kips (Strength I).

2. H-pile material shall be ASTM A572, Grade 50.

3. Estimate of piles required (includes extra 5 feet per pile as contingency):

   Abutment No. 1: 5 ~ HP 14x102 @ 33 feet
   Abutment No. 2: 5 ~ HP 14x102 @ 34 feet

4. All piles shall be equipped with a pile tip in accordance with Standard Specification Subsection 501.048, Prefabricated Pile Tips.

5. 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 Fy. The submittal analyses shall include the proposed stopping criteria based on the wave equation analysis and the proposed driving system. The stopping criteria shall include the blows per inch and the number of 1-inch intervals at which pile installation may be terminated. The cost of performing the wave equation analysis will be considered incidental to Item No. 501.92, Pile Driving Equipment Mobilization.

6. The Contractor shall perform 2 dynamic load test(s), one at each abutment, to confirm the ultimate capacity 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. Minimum 24 hour pile restrikes shall be conducted on all test piles in order to ensure the required nominal resistance has been achieved and verify pile relaxation has not occurred. The Contractor may drive production piles to the preliminary driving criteria, however pile cut-off will not be permitted until completion of restrike testing and establishment of final driving criteria.

7. The temporary girder supports, including anchor rods, leveling plates and any associated hardware and labor required for installation shall not be paid for directly. Payment shall be incidental to Pay Item No. 502.219, Structural Concrete, Abutments and Retaining Walls.

ABUTMENT NO. 1
BOTTOM OF GIRDER ELEVATIONS

Girder	Elevation
G1	282.83
G2	283.03
G3	283.22
G4	283.20
G5	283.08

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Perkins	
DESIGN-DETAILED	P. Bishop	11\17
CHECKED-REVIEWED	T. Cote	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

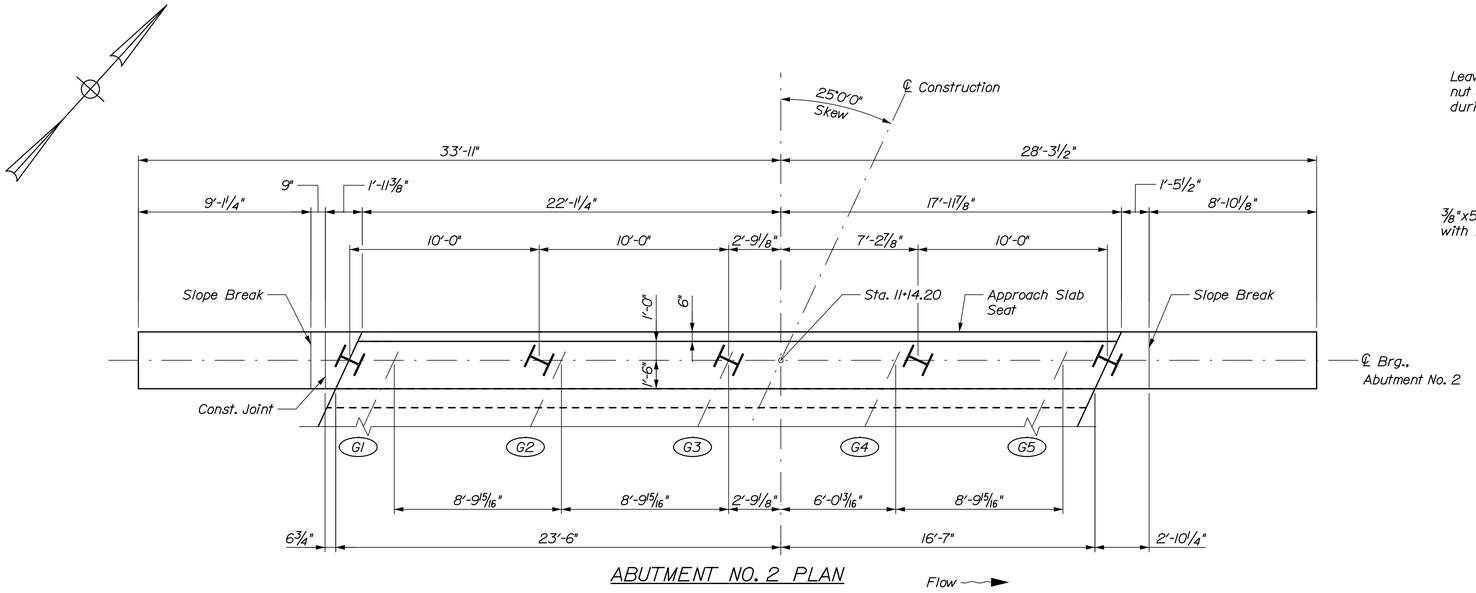
ABUTMENT NO. 1

SHEET NUMBER

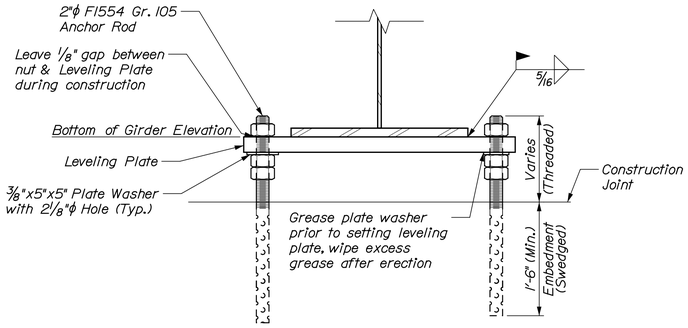
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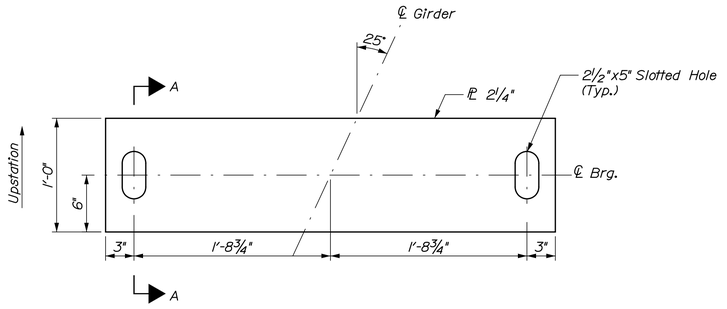
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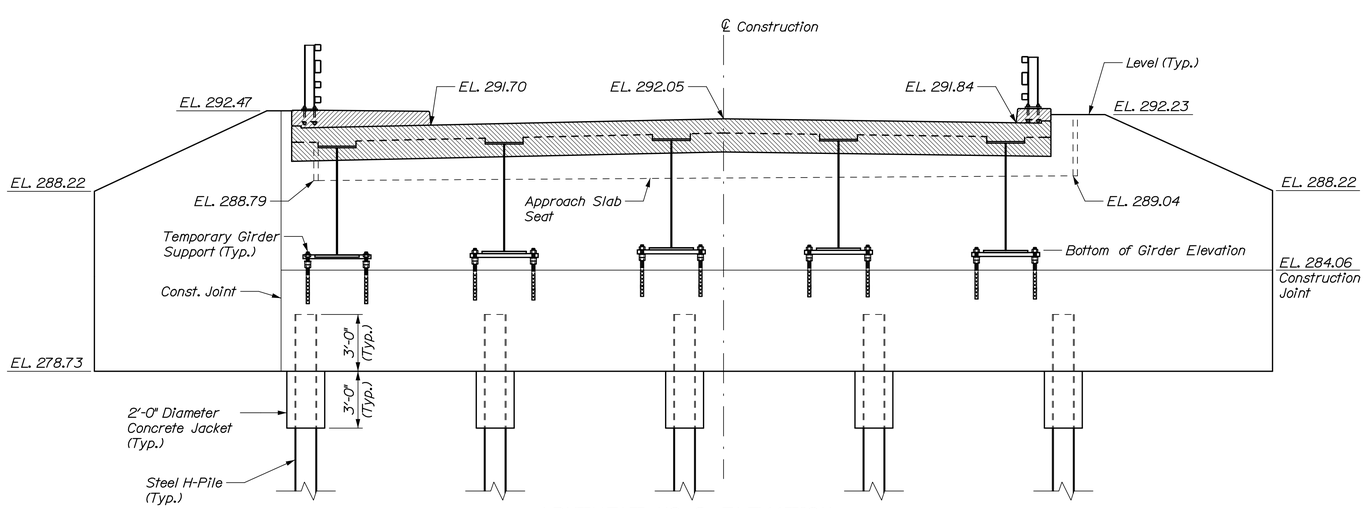
ABUTMENT NO. 2 PLAN



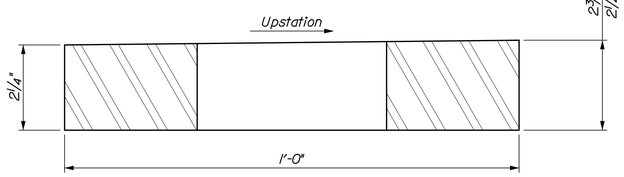
TEMPORARY GIRDER SUPPORT DETAIL



LEVELING PLATE



ABUTMENT NO. 2 ELEVATION



SECTION A-A

ABUTMENT NO. 2 BOTTOM OF GIRDER ELEVATIONS	
Girder	Elevation
G1	284.73
G2	284.93
G3	285.12
G4	285.10
G5	284.98

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. Bishop	11\17
CHECKED-REVIEWED	T. Cote	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

ABUTMENT NO. 2

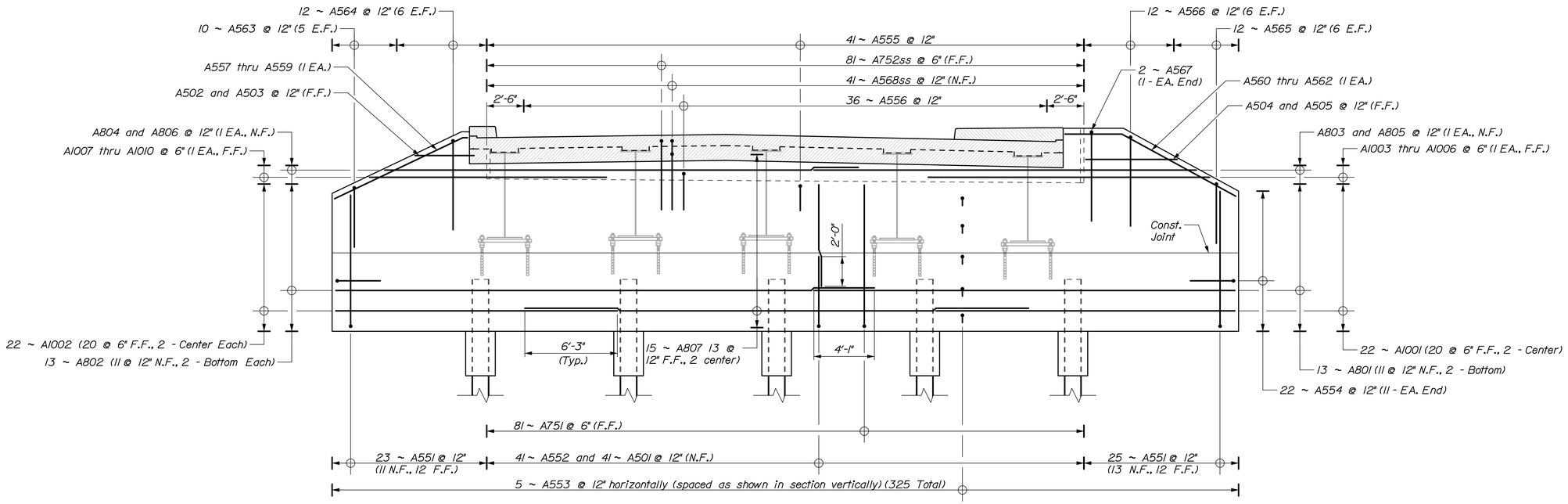
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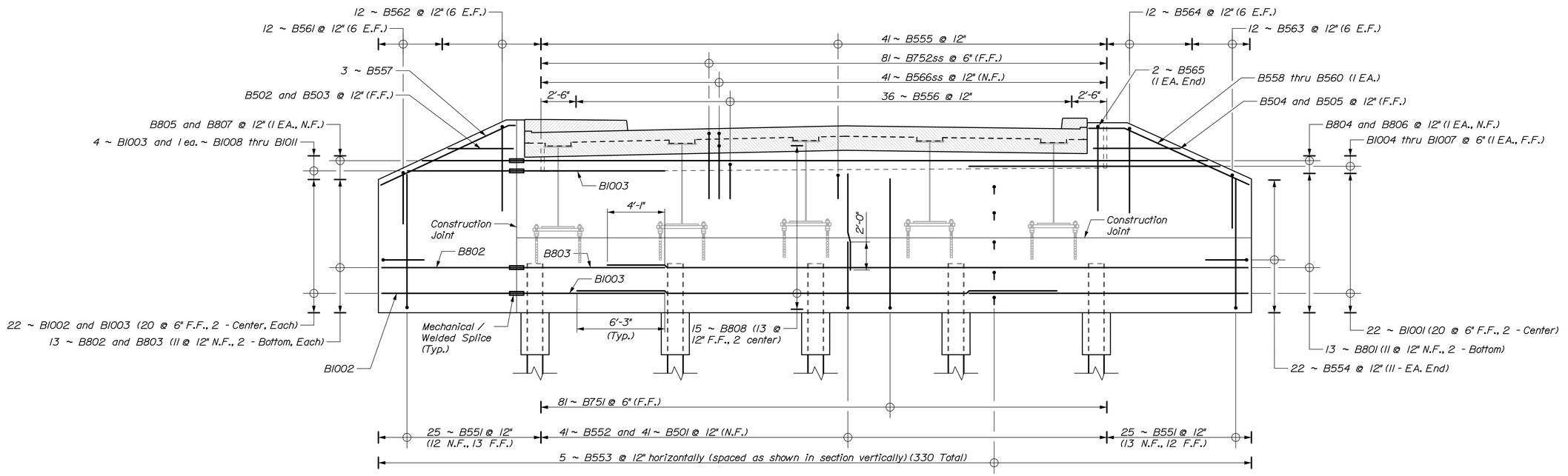
OF 50

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Filename: 039_Abut_02.dgn Division: Username: Date:11/10/2017



ABUTMENT NO. 1 REINFORCING



ABUTMENT NO. 2 REINFORCING

LEGEND

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	J. Olund	BY	DATE
CHECKED-REVIEWED	T. Poulin	P. Bishop	11\17
DESIGN2-DETAILED2	-	T. Cote	11\17
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

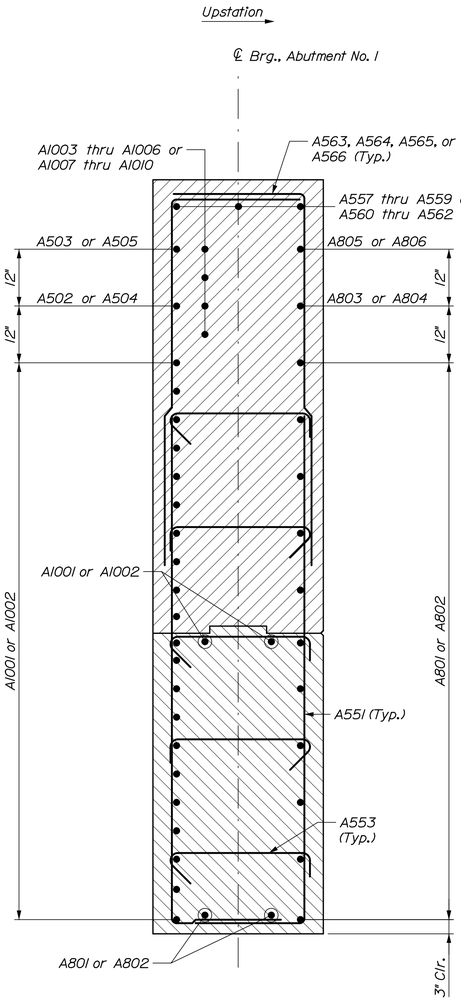
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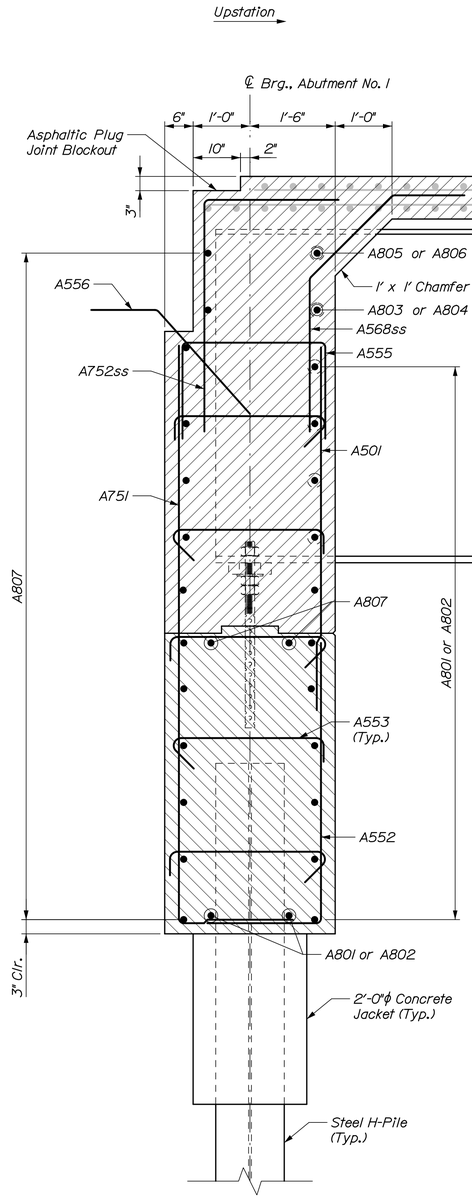
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OF 50

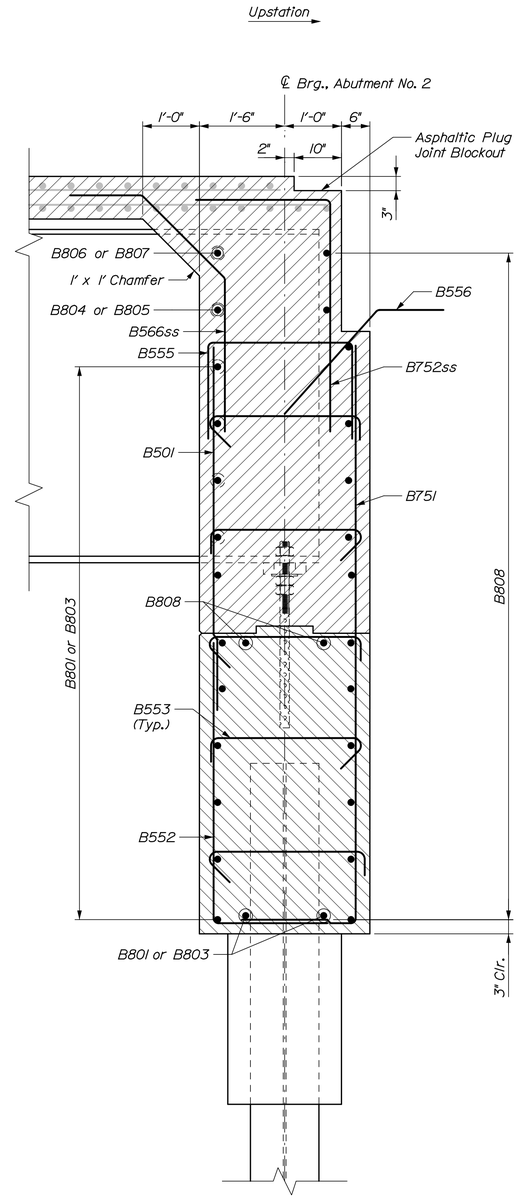
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Division:
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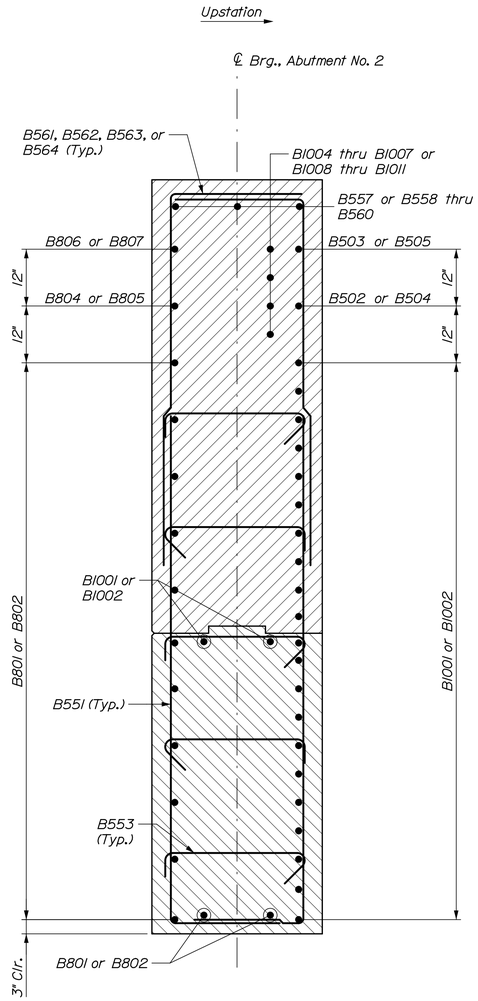
ABUTMENT NO. 1 WINGWALL SECTION



ABUTMENT NO. 1 SECTION



ABUTMENT NO. 2 SECTION



ABUTMENT NO. 2 WINGWALL SECTION

NOTES:

1. Deck reinforcing shown screened for clarity.
2. The blockout for the asphaltic plug joint shall extend transversely from gutterline to gutterline.
3. Adjust vertical reinforcing bars to fit around girders and piles.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin		
DESIGN-DETAILED	J. Olund	BY	DATE
CHECKED-REVIEWED	T. Poulin	P. Bishop	11\17
DESIGN2-DETAILED2	-	T. Cote	11\17
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

ABUTMENT SECTIONS

SHEET NUMBER

41

OF 50

Filename: 041_Abut_04.dgn Division: Username: Date:11/10/2017

Filename: 042_ Abut_05.dgn Username: Division: Date:11/28/2017

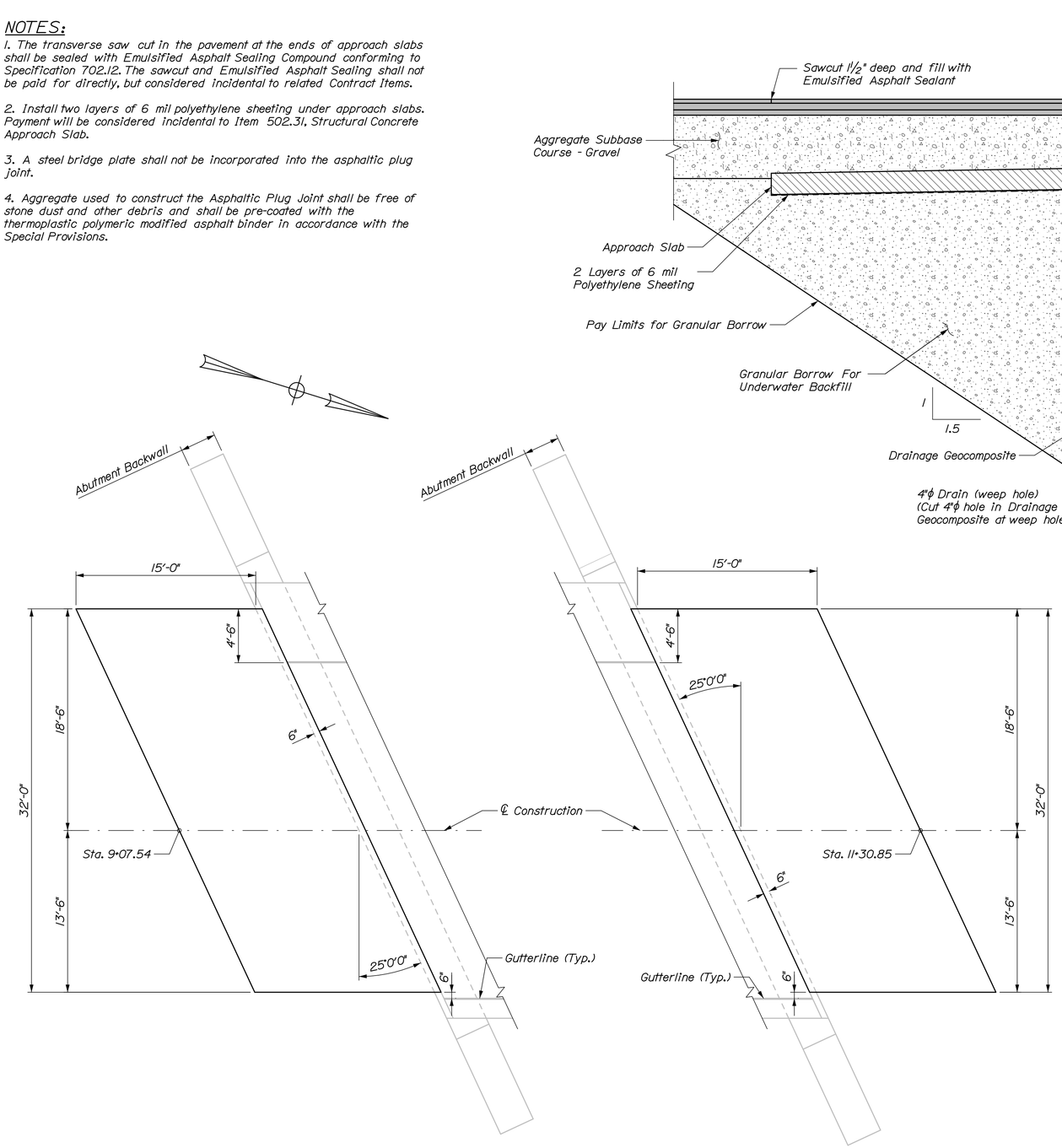
NOTES:

1. The transverse saw cut 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. Install two layers of 6 mil polyethylene sheeting under approach slabs. Payment will be considered incidental to Item 502.31, Structural Concrete Approach Slab.

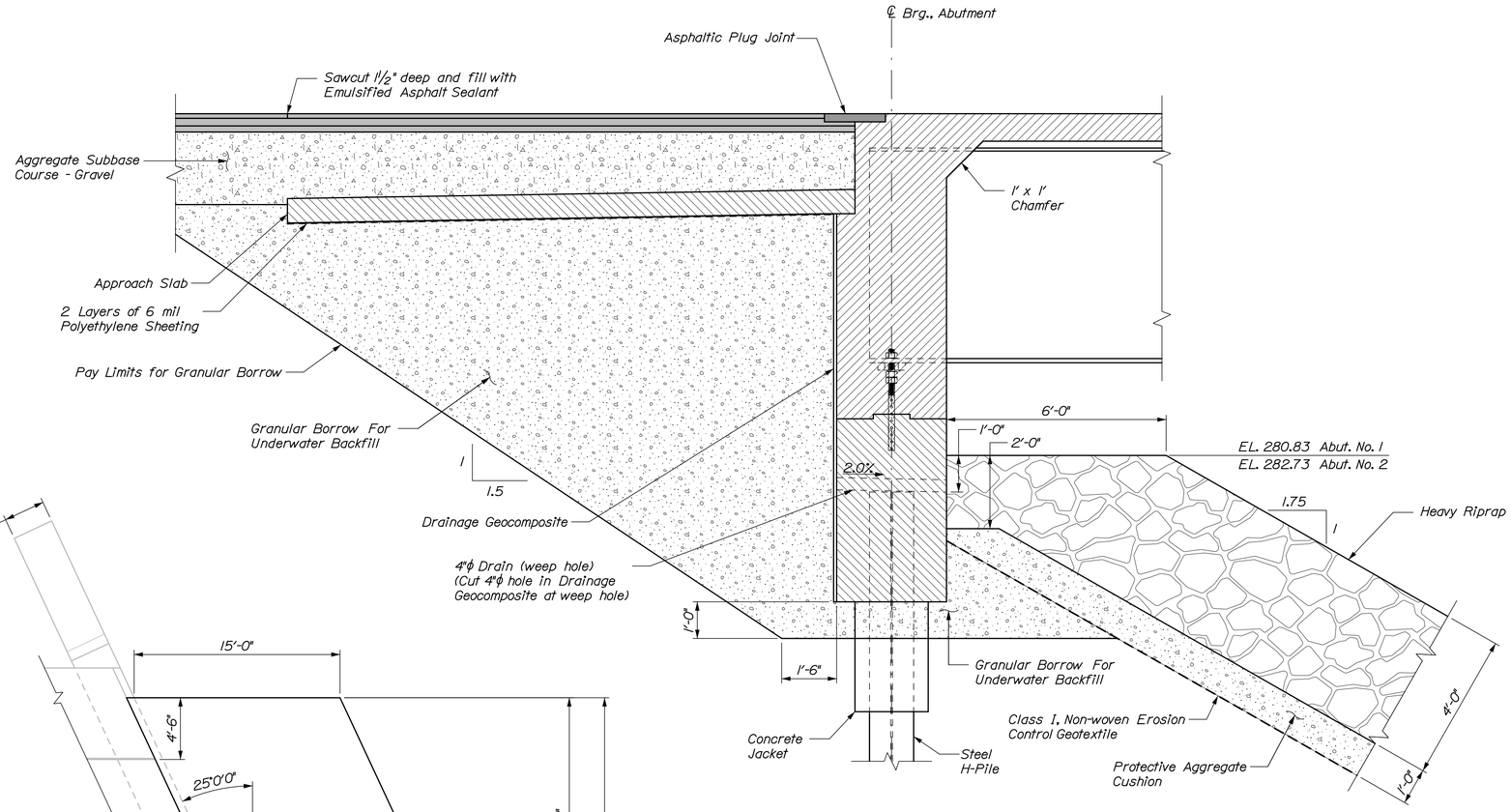
3. A steel bridge plate shall not be incorporated into the asphaltic plug joint.

4. Aggregate used to construct the Asphaltic Plug Joint shall be free of stone dust and other debris and shall be pre-coated with the thermoplastic polymeric modified asphalt binder in accordance with the Special Provisions.



APPROACH SLAB PLAN - ABUTMENT NO. 1

APPROACH SLAB PLAN - ABUTMENT NO. 2



ABUTMENT BACKFILL DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE	SIGNATURE
PROJ. MANAGER	Mark Parlin		
DESIGN-DETAILED	J. Olund	11\17	
CHECKED-REVIEWED	T. Poulin	11\17	
DESIGN2-DETAILED2	-	-	
DESIGN3-DETAILED3	-	-	
REVISIONS 1	-	-	P.E. NUMBER
REVISIONS 2	-	-	
REVISIONS 3	-	-	DATE
REVISIONS 4	-	-	
FIELD CHANGES	-	-	

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

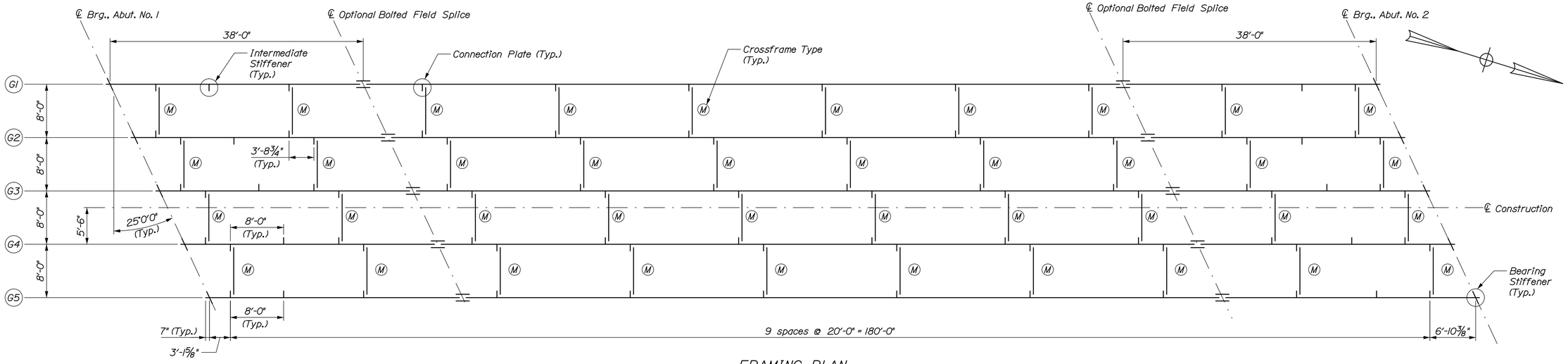
ABUTMENT DETAILS

SHEET NUMBER

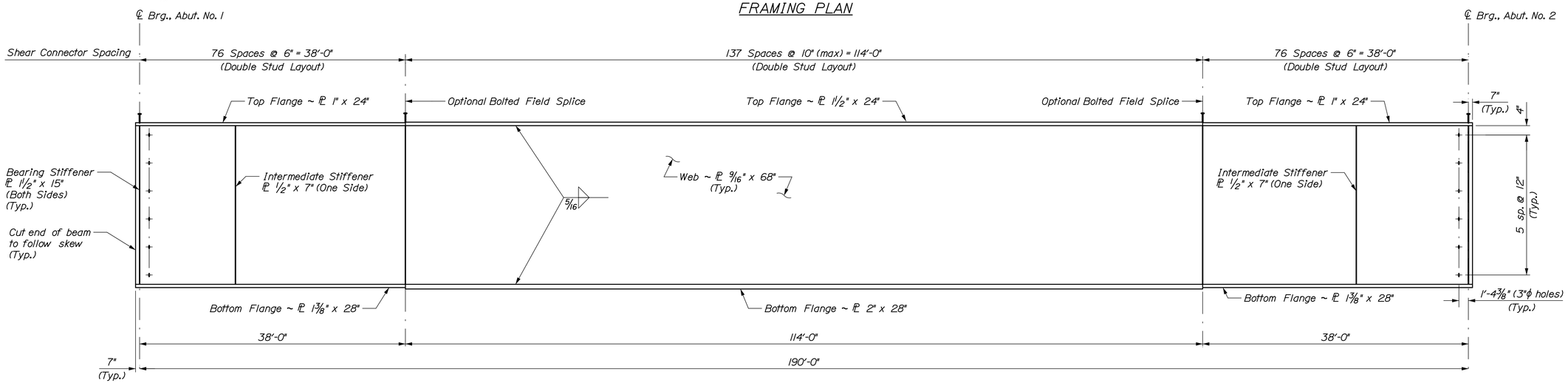
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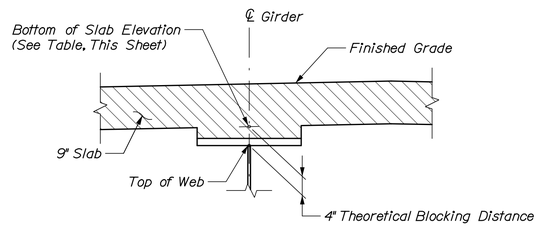
FRAMING PLAN



GIRDER ELEVATION

580 studs per girder (2900 studs total)

GIRDER	BOTTOM OF SLAB ELEVATIONS																				
	℄ Brg., Abut. No. 1	0.05 x L	0.10 x L	0.15 x L	0.20 x L	0.25 x L	0.30 x L	0.35 x L	0.40 x L	0.45 x L	0.50 x L	0.55 x L	0.60 x L	0.65 x L	0.70 x L	0.75 x L	0.80 x L	0.85 x L	0.90 x L	0.95 x L	℄ Brg., Abut. No. 2
G1	288.94	289.16	289.38	289.59	289.78	289.97	290.13	290.29	290.43	290.55	290.65	290.74	290.81	290.86	290.90	290.92	290.93	290.92	290.90	290.88	290.84
G2	289.14	289.36	289.58	289.79	289.99	290.18	290.35	290.50	290.64	290.76	290.87	290.96	291.02	291.08	291.11	291.13	291.14	291.13	291.11	291.08	291.04
G3	289.34	289.56	289.78	290.00	290.20	290.38	290.55	290.71	290.85	290.97	291.07	291.16	291.23	291.28	291.31	291.33	291.34	291.33	291.30	291.27	291.24
G4	289.31	289.54	289.76	289.97	290.17	290.35	290.53	290.68	290.82	290.94	291.04	291.13	291.20	291.25	291.28	291.30	291.31	291.30	291.28	291.25	291.21
G5	289.19	289.41	289.63	289.84	290.04	290.22	290.39	290.54	290.68	290.80	290.90	290.99	291.06	291.11	291.14	291.16	291.17	291.17	291.15	291.12	291.09



BLOCKING DETAIL

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Parlin	BY	DATE
DESIGN-DETAILED	G. Standley	P. Bishop	11\17
CHECKED-REVIEWED	T. Poulin	T. Cote	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

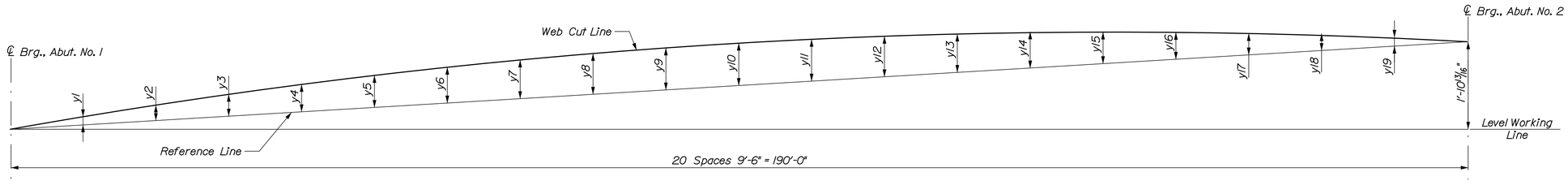
FRAMING PLAN

SHEET NUMBER

43

OF 50

Filename: 043_Framing_01.dgn Division: Username: Date:11/10/2017



CAMBER DIAGRAM

GIRDER	CAMBER ORDINATES (INCHES)																				
	℄ Brg. Abut. 1	y1	y2	y3	y4	y5	y6	y7	y8	y9	y10	y11	y12	y13	y14	y15	y16	y17	y18	y19	℄ Brg. Abut. 2
G1 - G5	0	2 1/4	4 3/8	6 3/8	8 1/8	9 11/16	11	12	12 13/16	13 1/4	13 3/8	13 1/4	12 13/16	12	11	9 11/16	8 1/8	6 3/8	4 3/8	2 1/4	0

GIRDER	DEAD LOAD COMPONENT	DEAD LOAD DEFLECTIONS (INCHES)																			
		℄ Brg. Abut. 1	y1	y2	y3	y4	y5	y6	y7	y8	y9	y10	y11	y12	y13	y14	y15	y16	y17	y18	y19	℄ Brg. Abut. 2
G1 - G5	Steel Dead Load	0.00	-0.68	-1.34	-1.95	-2.50	-2.97	-3.37	-3.70	-3.93	-4.07	-4.12	-4.07	-3.93	-3.70	-3.37	-2.97	-2.50	-1.95	-1.34	-0.68	0.00
	Deck Concrete Load	0.00	-1.30	-2.55	-3.70	-4.73	-5.61	-6.37	-6.97	-7.41	-7.68	-7.77	-7.68	-7.41	-6.97	-6.37	-5.61	-4.73	-3.70	-2.55	-1.30	0.00
	Superimposed Dead Load	0.00	-0.25	-0.49	-0.72	-0.92	-1.09	-1.24	-1.36	-1.45	-1.50	-1.52	-1.50	-1.45	-1.36	-1.24	-1.09	-0.92	-0.72	-0.49	-0.25	0.00

STRUCTURAL STEEL NOTES:

1. Camber ordinates, as shown, are computed to compensate for all dead load deflections and for the finished grade profile.

2. Butt-weld splices in flanges shall be not less than 1 foot from transverse butt-welds in the web plates and no transverse web or flange butt-welds shall be located within 1 foot of other transverse welds (e.g. connection plates to web welds) on either flange or web. No transverse butt-weld splices will be allowed in areas of stress reversal.

3. Sections of flange plates or web plates between transverse shop splices or between a transverse shop splice and a field splice shall be not less than 20 feet in length unless otherwise shown on the plans.

4. Bearing stiffeners shall be plumb after erection and dead loading of the structure. Transverse web stiffeners may be either plumb or normal to the top flange.

5. Crossframe connection plates may be either plumb or normal to the top flange and shall be 1/2" thick.

6. All connection plates shall be welded to the web and top and bottom flanges using 5/16" fillet welds.

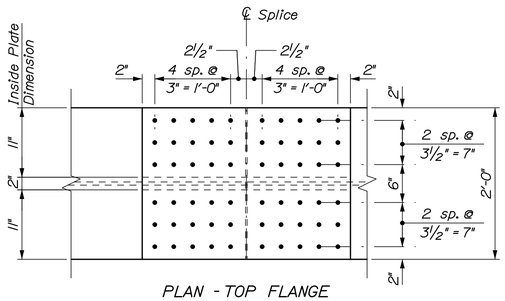
7. Bolted field splice connections shall be made using 7/8"ϕ, ASTM F3125, Grade A325, Type 3 bolts. Hole size shall be 15/16"ϕ. Bolts shall be installed with heads down at all bottom flange connections and heads up at all top flange connections. Bolt threads shall be excluded from the shear plane of the field splice connection.

8. The ends of the girders shall be coated with a zinc-rich coating system in accordance with Standard Specifications Section 506, Shop Applied Protective Coating - Steel (Zinc Rich Coating System), to a distance of 10 feet from the face of the abutments. All costs related to coating will not be paid for directly but will be considered incidental to related structural steel contract items. Paint color shall meet Federal Color Standard 30045 (Brown).

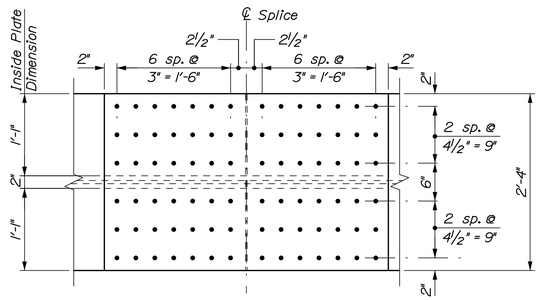
9. Shear Connectors shall be installed per Standard Detail 505(01).

10. Filler plates shall be weathering steel conforming to the requirements of ASTM A709, Grade 50W.

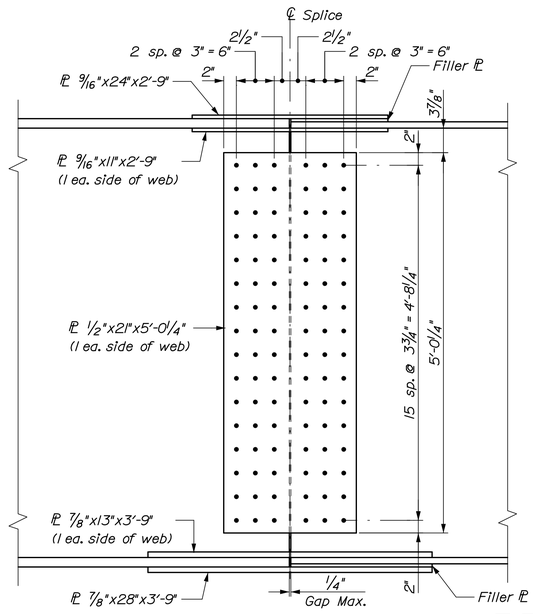
11. Drip bars shall be installed in accordance with Standard Detail 504(10).



PLAN - TOP FLANGE



PLAN - BOTTOM FLANGE



ELEVATION

BOLTED FIELD SPLICE

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin	BY	DATE
DESIGN-DETAILED	G. Standley	P. Bishop	11\17
CHECKED-REVIEWED	T. Poulin	T. Cote	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

STRUCTURAL STEEL DETAILS

SHEET NUMBER

44

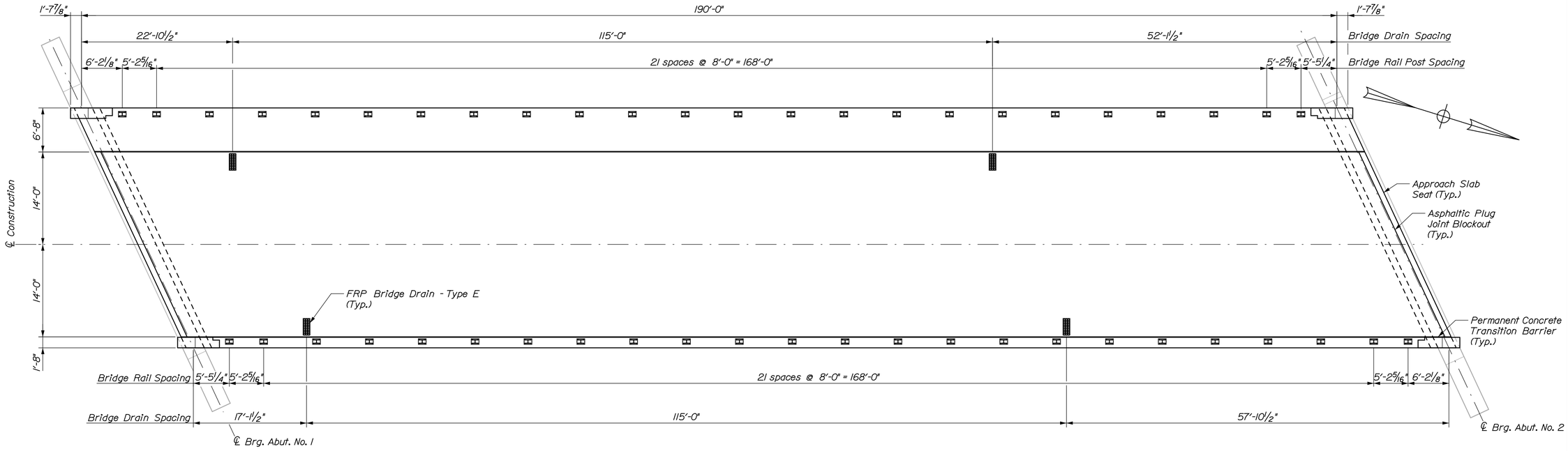
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Date:11/10/2017

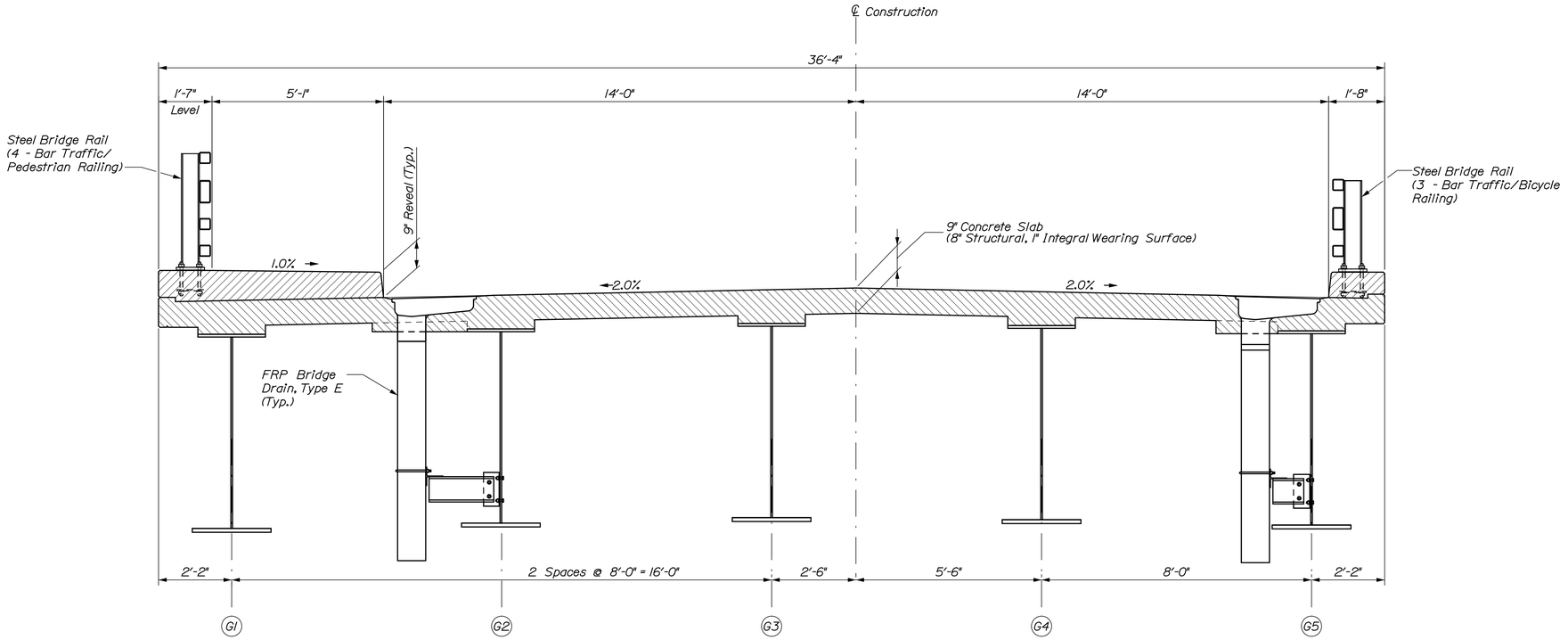
Username:

Division:

Filename: 044_Framing_02.dgn



SUPERSTRUCTURE PLAN



TRANSVERSE SECTION

SUPERSTRUCTURE NOTES:

1. The theoretical blocking used for design of the structure is 4" (3" clear) at the centerline of bearing of the abutments. Refer to Standard Detail 502(03) for blocking details.

2. Reinforcing bars shall have a minimum concrete cover of 2" unless otherwise noted.

3. Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.

4. The superstructure slab and upper portions of the abutments shall be placed in one continuous operation and shall be kept plastic until the entire placement has been made.

5. The Contractor shall install Concrete Transition Barrier vertical closed stirrups, as shown in Standard Details Section 526, prior to the placement of the curb or sidewalk concrete.

6. Bars TB651 and TB652 detailed in Standard Detail 526(37) shall be reduced in height by 3-inches to account for the difference in curb height between a bare deck and one with an HMA overlay. The corrected dimensions are provided on the reinforcing schedule sheet.

7. Adjust reinforcing bars to fit around the bridge drains in a manner approved by the Resident. Do not cut the reinforcing bars.

8. The use of Precast Concrete Deck Panels will not be allowed on this project.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	J. Olund	P. Bishop	11\17
CHECKED-REVIEWED	T. Poulin	T. Cote	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

SUPERSTRUCTURE PLAN

SHEET NUMBER

45

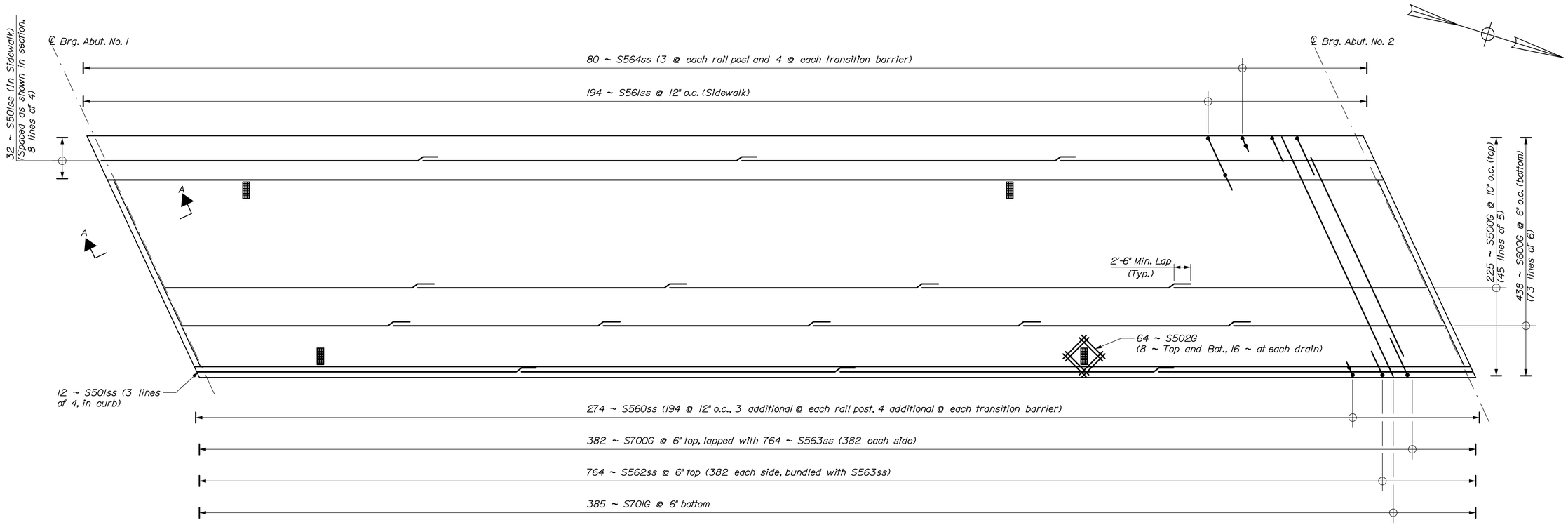
OF 50

Date:11/10/2017

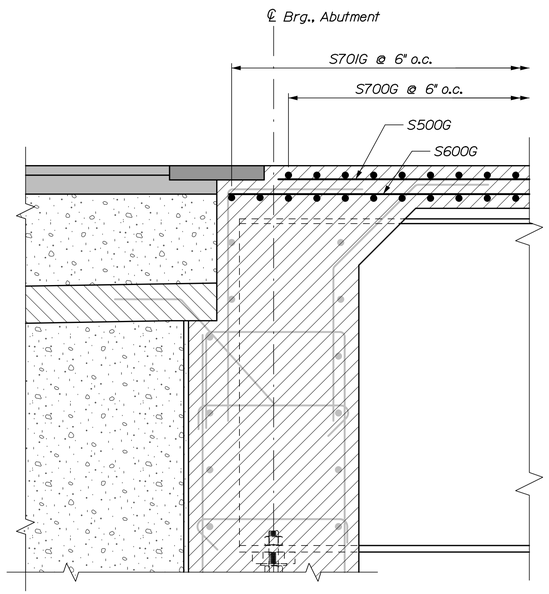
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Division:

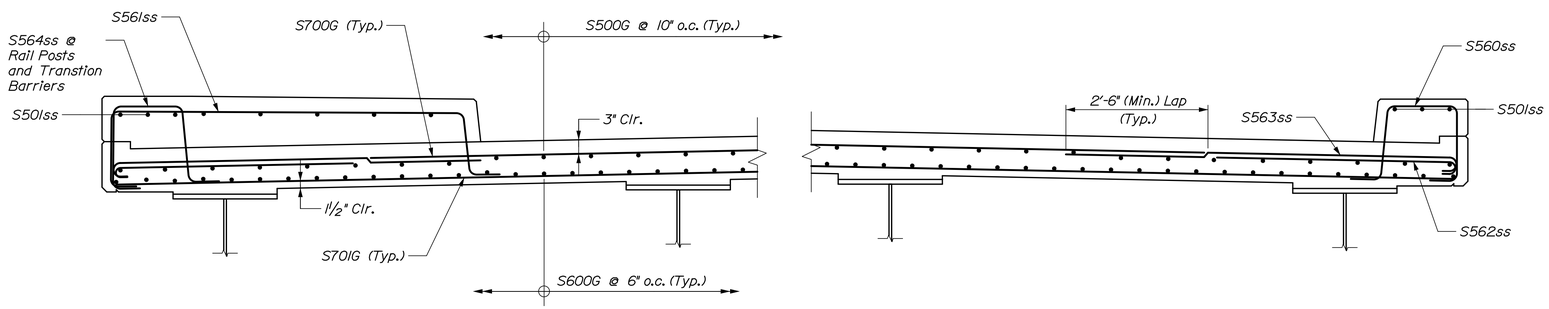
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SUPERSTRUCTURE REINFORCING PLAN



SECTION A-A



TRANSVERSE SECTION

NOTE:

Abutment and approach slab reinforcing shown screened for clarity.

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN **18749.00**

BRIDGE NO. 2619 — BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin	BY	DATE
DESIGN-DETAILED	J. Olund	P. Bishop	11\17
CHECKED-REVIEWED	T. Poulin	T. Cote	11\17
DESIGN2-DETAILED2	-	-	-
DESIGN3-DETAILED3	-	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER — ANDROSCOGGIN COUNTY

SUPERSTRUCTURE REINFORCING

SHEET NUMBER

46

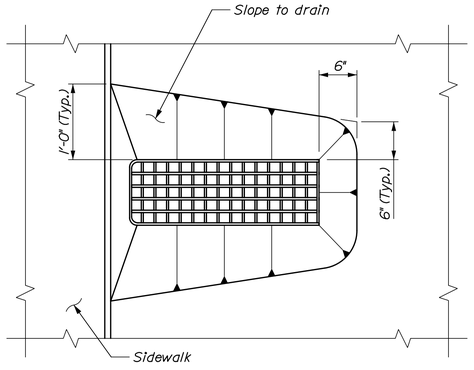
OF 50

Username:

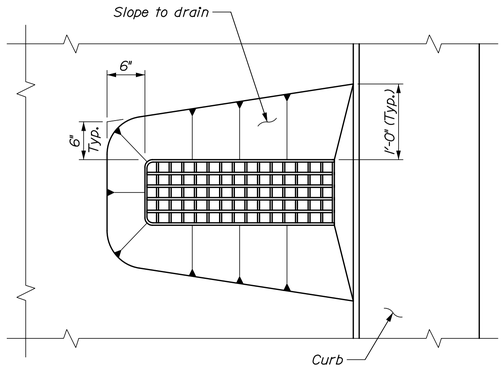
Division:

Date:11/10/2017

Filename: 046_Sup_02.dgn

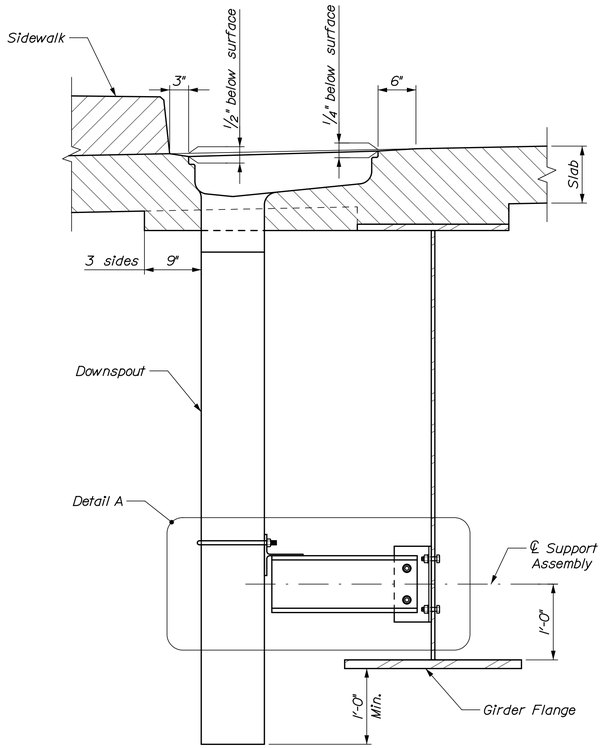


SIDEWALK

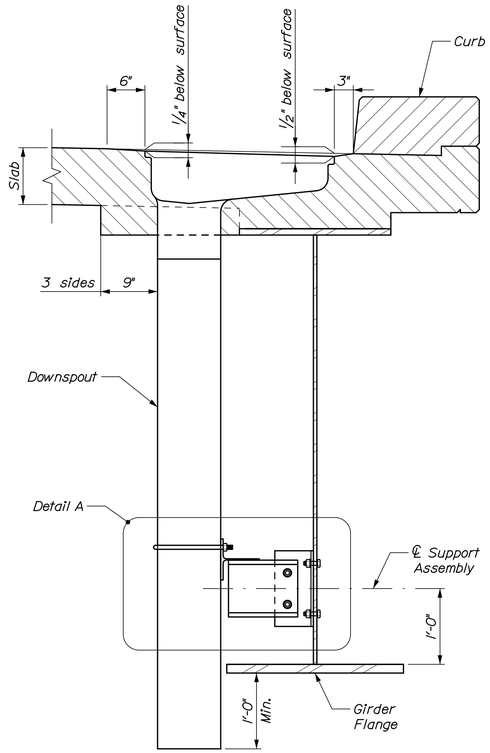


CURB

BRIDGE DRAIN PLAN



SIDEWALK



CURB

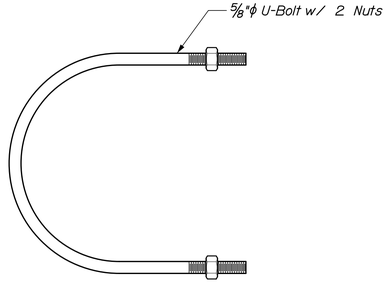
BRIDGE DRAIN ELEVATION

BRIDGE DRAIN NOTES

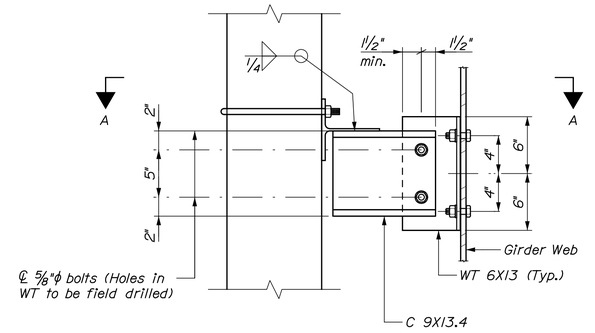
1. FRP Bridge Drains shall be designed and detailed based on the dimensions for the bridge drain details shown, and in accordance with Special Provisions Section 502, Fiber Reinforced Polymer Bridge Drains and Downspouts.

2. Shear connectors welded to the top flange of steel beams may require adjustment to clear the bridge drains. No extra payment will be made for needed adjustment to the studs.

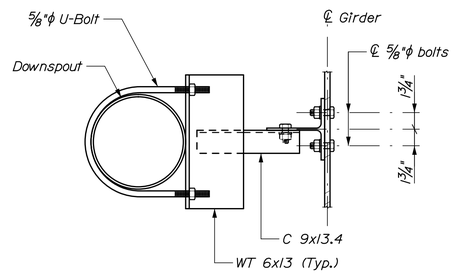
3. Support Assembly components and hardware shall meet the grade and protective coating requirements identified on Standard Detail 502(24).



U-BOLT DETAIL



DETAIL A



SECTION A-A

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Perlin	
DESIGN-DETAILED	P. Bishop	11\17
CHECKED-REVIEWED	T. Cote	11\17
DESIGN2-DETAILED2	-	-
DESIGN3-DETAILED3	-	-
REVISIONS 1	-	-
REVISIONS 2	-	-
REVISIONS 3	-	-
REVISIONS 4	-	-
FIELD CHANGES	-	-

SIGNATURE

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
TURNER ANDROSCOGGIN COUNTY

BRIDGE DRAIN DETAILS

SHEET NUMBER

47

OF 50

Filename: 047_Sup_03.dgn Division: Username: Date:11/10/2017

STRAIGHT BARS

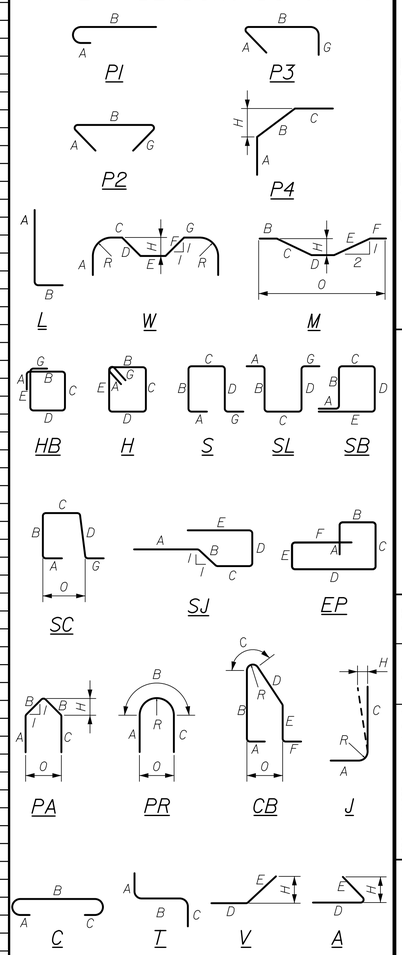
MARK	QTY.	LENGTH	LOCATION
Abutment No. 1 (Plain Steel)			
A501	41	7'-0"	Abutment NF Vertical
A502	1	6'-4"	Left Wingwall Horizontal
A503	1	4'-3"	Left Wingwall Horizontal
A504	1	6'-11"	Right Wingwall Horizontal
A505	1	5'-1"	Right Wingwall Horizontal
A801	13	28'-3"	Horizontal NF Reinforcing
A802	13	37'-1"	Horizontal NF Reinforcing
A803	1	26'-11"	Horizontal NF Reinforcing
A804	1	35'-2"	Horizontal NF Reinforcing
A805	1	25'-1"	Horizontal NF Reinforcing
A806	1	33'-1"	Horizontal NF Reinforcing
A807	15	34'-2"	Abutment FF Reinforcing
A1001	22	20'-4"	Wingwall FF Reinforcing
A1002	22	19'-2"	Wingwall FF Reinforcing
A1003	1	19'-10"	Wingwall FF Reinforcing
A1004	1	18'-11"	Wingwall FF Reinforcing
A1005	1	18'-0"	Wingwall FF Reinforcing
A1006	1	17'-1"	Wingwall FF Reinforcing
A1007	1	18'-4"	Wingwall FF Reinforcing
A1008	1	17'-3"	Wingwall FF Reinforcing
A1009	1	16'-3"	Wingwall FF Reinforcing
A1010	1	15'-2"	Wingwall FF Reinforcing
Abutment No. 2 (Plain Steel)			
B501	41	7'-0"	Abutment NF Vertical
B502	1	5'-9"	Left Wingwall Horizontal
B503	1	3'-7"	Left Wingwall Horizontal
B504	1	6'-1"	Right Wingwall Horizontal
B505	1	3'-11"	Right Wingwall Horizontal
B801	13	48'-1"	Horizontal NF Reinforcing
B802	13	10'-2"	Horizontal NF Reinforcing
B803	15	8'-4"	Horizontal NF Reinforcing
B804	1	46'-5"	Horizontal NF Reinforcing
B805	1	8'-6"	Horizontal NF Reinforcing
B806	1	44'-2"	Horizontal NF Reinforcing
B807	1	6'-7"	Horizontal NF Reinforcing
B808	15	34'-2"	Abutment FF Reinforcing
B1001	22	20'-2"	Wingwall FF Reinforcing
B1002	22	10'-2"	Wingwall FF Reinforcing
B1003	26	10'-7"	Wingwall FF Reinforcing
B1004	1	19'-7"	Wingwall FF Reinforcing
B1005	1	18'-6"	Wingwall FF Reinforcing
B1006	1	17'-5"	Wingwall FF Reinforcing
B1007	1	16'-3"	Wingwall FF Reinforcing
B1008	1	9'-7"	Wingwall FF Reinforcing
B1009	1	8'-7"	Wingwall FF Reinforcing
B1010	1	7'-6"	Wingwall FF Reinforcing
B1011	1	6'-5"	Wingwall FF Reinforcing
Superstructure (Glass Fiber Reinforced Polymer)			
S500G	225	40'-3"	Top Longitudinal
S502G	64	3'-0"	Drain Reinforcement
S600G	438	34'-3"	Bottom Longitudinal
S700G	382	29'-10"	Top Transverse
S701G	385	39'-9"	Bottom Transverse
Superstructure (Stainless Steel)			
S501ss	44	50'-0"	Curb Longitudinal
Approach Slabs (Plain Steel)			
AS500	32	25'-0"	Transverse
AS501	32	11'-8"	Transverse
AS600	142	15'-0"	Longitudinal

BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
Abutment No. 1 (Plain Steel)														
A551	48	11'-6"	L	8'-10"	2'-8"									Wingwall Bottom Stirrup
A552	41	7'-6"	L	4'-10"	2'-8"									Abutment N.F. Bottom Stirrup
A553	325	3'-7 1/2"	P3	5 1/2"	2'-8"					6"				Abutment Ties
A554	22	6'-8"	S	0"	2'-0"	2'-8"	2'-0"			0"				Wingwall End Bar
A555	41	7'-0"	S	0"	2'-0"	3'-0"	2'-0"			0"				Abutment Top Stirrup
A556	36	3'-9"	V				1'-6"	2'-3"			2'-0"			Approach Slab Dowels
A557	1	9'-10"	V				4"	9'-6"			4'-2"			Left Wingwall Top Bar
A558	1	10'-6"	V				1'-0"	9'-6"			4'-2"			Left Wingwall Top Bar
A559	1	11'-3"	V				1'-9"	9'-6"			4'-2"			Left Wingwall Top Bar
A560	1	12'-6"	V				3'-10"	8'-9"			4'-3"			Right Wingwall Top Bar
A561	1	11'-10"	V				3'-2"	8'-9"			4'-3"			Right Wingwall Top Bar
A562	1	11'-2"	V				2'-6"	8'-9"			4'-3"			Right Wingwall Top Bar
A563	10	6'-9"	L	4'-1"	2'-8"									Left Wing Top End Stirrup
A564	12	8'-10"	L	6'-2"	2'-8"									Left Wing Top Tall Stirrup
A565	12	6'-10"	L	4'-2"	2'-8"									Right Wing Top End Stirrup
A566	12	8'-11"	L	6'-3"	2'-8"									Right Wing Top Tall Stirrup
A567	2	15'-6"	S	0"	6'-3"	3'-0"	6'-3"			0"				Wing End Stirrup
A751	81	12'-3"	L	9'-7"	2'-8"									Back Wall Vertical (F.F.)
Abutment No. 1 (Stainless Steel)														
A568ss	41	6'-0"	P4	2'-0"	2'-0"	2'-0"					1'-4"			Deck Corbel
A752ss	81	5'-11"	L	2'-7"	3'-4"									Deck Back Wall
Abutment No. 2 (Plain Steel)														
B551	50	11'-8"	L	9'-0"	2'-8"									Wingwall Bottom Stirrup
B552	41	7'-6"	L	4'-10"	2'-8"									Abutment N.F. Bottom Stirrup
B553	330	3'-7 1/2"	P3	5 1/2"	2'-8"					6"				Abutment Ties
B554	22	6'-8"	S	0"	2'-0"	2'-8"	2'-0"			0"				Wingwall End Bar
B555	41	7'-0"	S	0"	2'-0"	3'-0"	2'-0"			0"				Abutment Top Stirrup
B556	36	3'-9"	V				1'-6"	2'-3"			2'-0"			Approach Slab Dowels
B557	3	10'-6"	V				7"	9'-11"			4'-3"			Left Wingwall Top Bar
B558	1	12'-2"	V				2'-8"	9'-7"			4'-0"			Right Wingwall Top Bar
B559	1	11'-5"	V				1'-11"	9'-7"			4'-0"			Right Wingwall Top Bar
B560	1	10'-9"	V				1'-3"	9'-7"			4'-0"			Right Wingwall Top Bar
B561	12	6'-10"	L	4'-2"	2'-8"									Left Wing Top End Stirrup
B562	12	8'-11"	L	6'-3"	2'-8"									Left Wing Top Tall Stirrup
B563	12	6'-9"	L	4'-1"	2'-8"									Right Wing Top End Stirrup
B564	12	8'-9"	L	6'-1"	2'-8"									Right Wing Top Tall Stirrup
B565	2	15'-6"	S	0"	6'-3"	3'-0"	6'-3"			0"				Wing End Stirrup
B751	81	12'-3"	L	9'-7"	2'-8"									Back Wall Vertical (F.F.)
Abutment No. 2 (Stainless Steel)														
B566ss	41	6'-0"	P4	2'-0"	2'-0"	2'-0"					1'-4"			Deck Corbel
B752ss	81	5'-11"	L	2'-7"	3'-4"									Deck Back Wall
Superstructure (Stainless Steel)														
S560ss	274	5'-5 1/2"	SC	10"	1'-2 1/2"	1'-4 1/2"	1'-2 1/2"			10"		1'-5 1/2"		Curb Stirrup
S561ss	194	11'-1 3/4"	SC	10"	1'-4 1/2"	6'-10 3/4"	1'-2 1/2"			10"		6'-11 3/4"		Sidewalk Stirrup
S562ss	764	5'-7"	C	7"	5'-0"	0"								Overhang Hook
S563ss	764	8'-4"	C	7"	7'-9"	0"								Overhang Hook (Lapped)
S564ss	80	5'-9 1/2"	SC	10"	1'-4 1/2"	1'-4 1/2"	1'-4 1/2"			10"		1'-5 1/2"		Sidewalk Stirrup
Transition Barriers (Stainless Steel)														
TB651*	8	7'-5"	H	6"	8 1/2"	2'-6"	8 1/2"	2'-6"		6"				Barrier Stirrup
TB652*	20	8'-3"	H	6"	1'-1 1/2"	2'-6"	1'-1 1/2"	2'-6"		6"				Barrier Stirrup

* Bar is incidental to Item 526.34, Permanent Concrete Transition Barrier

TYPE - BENDING DIAGRAMS



All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A615/A615M, Grade 60
ASTM A955, GRADE 75
CSA S807-10, AC1 440.1r-15

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size ofthe bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6
   Mark "S650ss" = bar size #6 Stainless Steel
   Mark "S600G" = bar size #6 GFRP

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with "G" indicate GFRP. Bar marks ending with "ss" indicate stainless steel. All other bars are plain (uncoated).

HNTB

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP - 1874(900)

WIN 18749.00

BRIDGE NO. 2619

BRIDGE PLANS

	BY	DATE	SIGNATURE
PROJ. MANAGER	Mark Perlin		
DESIGN-DETAILED	J. Oland	11\17	-
CHECKED-REVIEWED	P. Bishop	11\17	-
DESIGN2-DETAILED2	T. Poulin	-	-
DESIGN3-DETAILED3	T. Cote	-	-
REVISIONS 1	-	-	-
REVISIONS 2	-	-	-
REVISIONS 3	-	-	-
REVISIONS 4	-	-	-
FIELD CHANGES	-	-	-

P.E. NUMBER

DATE

NORTH PARISH BRIDGE
NEZINSCOT RIVER
ANDROSCOGGIN COUNTY
TURNER

REINFORCING SCHEDULE

SHEET NUMBER

48

OF 50

Date:11/10/2017

Username:

Division:

Filename: 048_Rebar_01.dgn

Filename: ...\00\ROW\MSTA\049_RWPLAN1.dgn Username: Perry.Silvermon Date:11/8/2017 Division: ROW

PLAN LEGEND

Town, County, State		New R/W Along Existing R/W		Sanitary Sewer		Traveled Way	
Approx. Property Lines	P.L.	Building	Clearing Limit Line CLL	Telephone Line	T	Ditch	
Existing Right of Way		Trees Conifer	Deciduous	Electric Line	E	Catch Basin	
Limits of Wrought Portion	L.O.W.P.	Tree Line	Bush Line	Water Line	W	Manhole	
Control Of Access	C.O.A.	Water Edge		Underdrain Line		Sewer Manhole	
New Right of Way		Ledge	Rock/Boulder	Gas Line	G	Utility Pole	
New Easement		Fence CHAIN LINK	BARB WIRE STOCKADE	Guardrail		Fire Hydrant	
New Temporary Rights		Sign	Well WELL	Culvert		Curbing	
New R/W Within Existing R/W			Mailbox				

Existing / Proposed

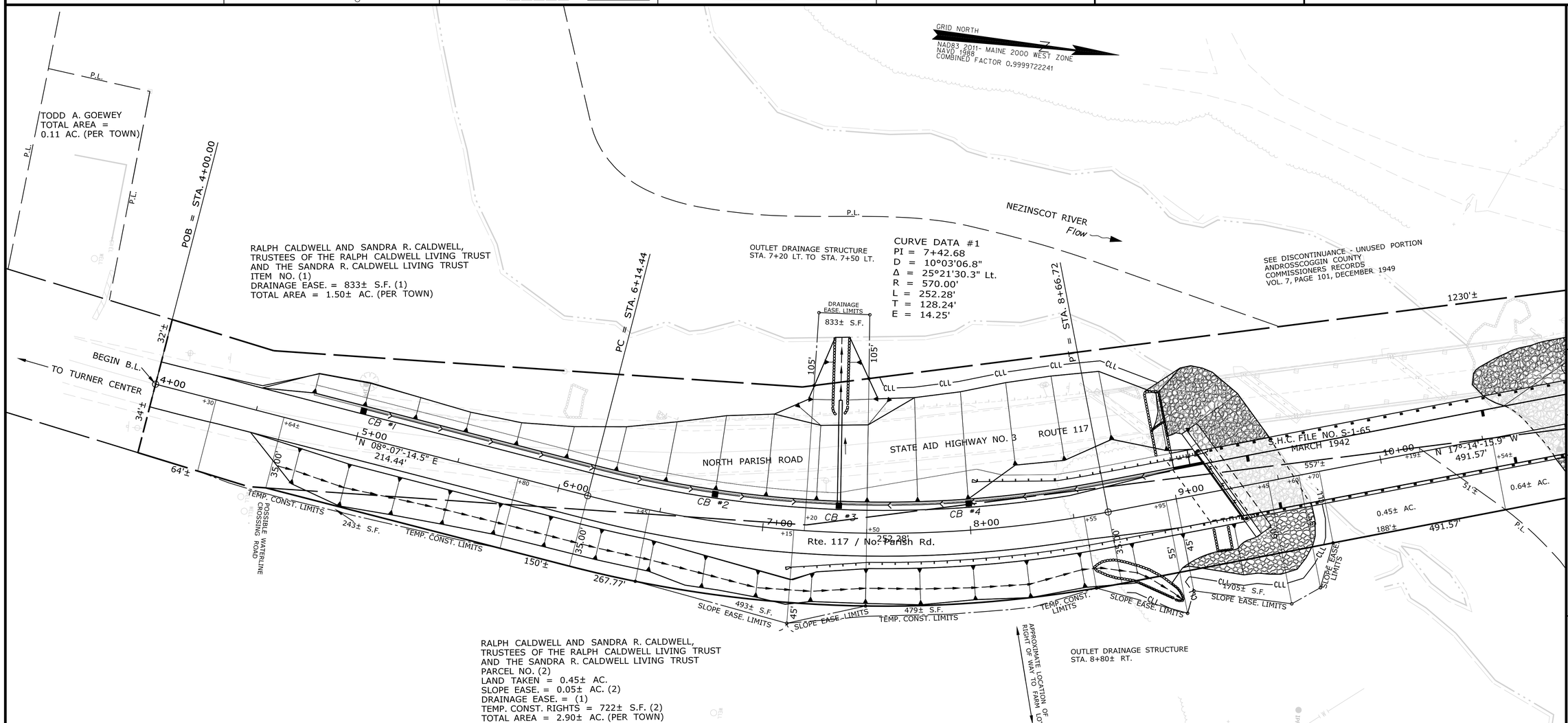
Cut Line C—C—C		Fill Line F—F—F	
Stonewall		Retaining Wall	
Baseline	10+00 11+00 12+00		
Monument		Traverse Point	
Iron Rod Found	IRF	Pipe Found	IPF
Replacement Pin Set			

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

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 ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet



EXISTING RIGHT OF WAY REFERENCES:

CUMBERLAND COUNTY
COMMISSIONERS RECORDS
VOLUME 3, PAGE 299
1804, 4 RODS WIDE

ANDROSCOGGIN COUNTY
COMMISSIONERS RECORDS
VOLUME 2, PAGE 268
1870, 4 RODS WIDE

SEE ALSO:
S.H.C. FILE NO. S-1-56, MARCH 1942

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	PNS	
FINAL RIGHT OF WAY	PNS	
AREAS		

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

REVISIONS			
NO.	DATE	DESCRIPTION	BY

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

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE AID HIGHWAY NO. 3
ROUTE 117 NORTH PARISH ROAD
TURNER ANDROSSCOGGIN COUNTY
FEDERAL AID PROJECT NO. STP-1874(900)

AUGUST 2017	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 1-332
SCALE 1" = 25'	SHEET 1 OF 2	

SHEET NUMBER
49
OF 50

Usernome: Perry.Silvermon Date:11/8/2017
Filename: ...\00\ROW\MSTA\050_RWPLAN2.dgn Division: ROW

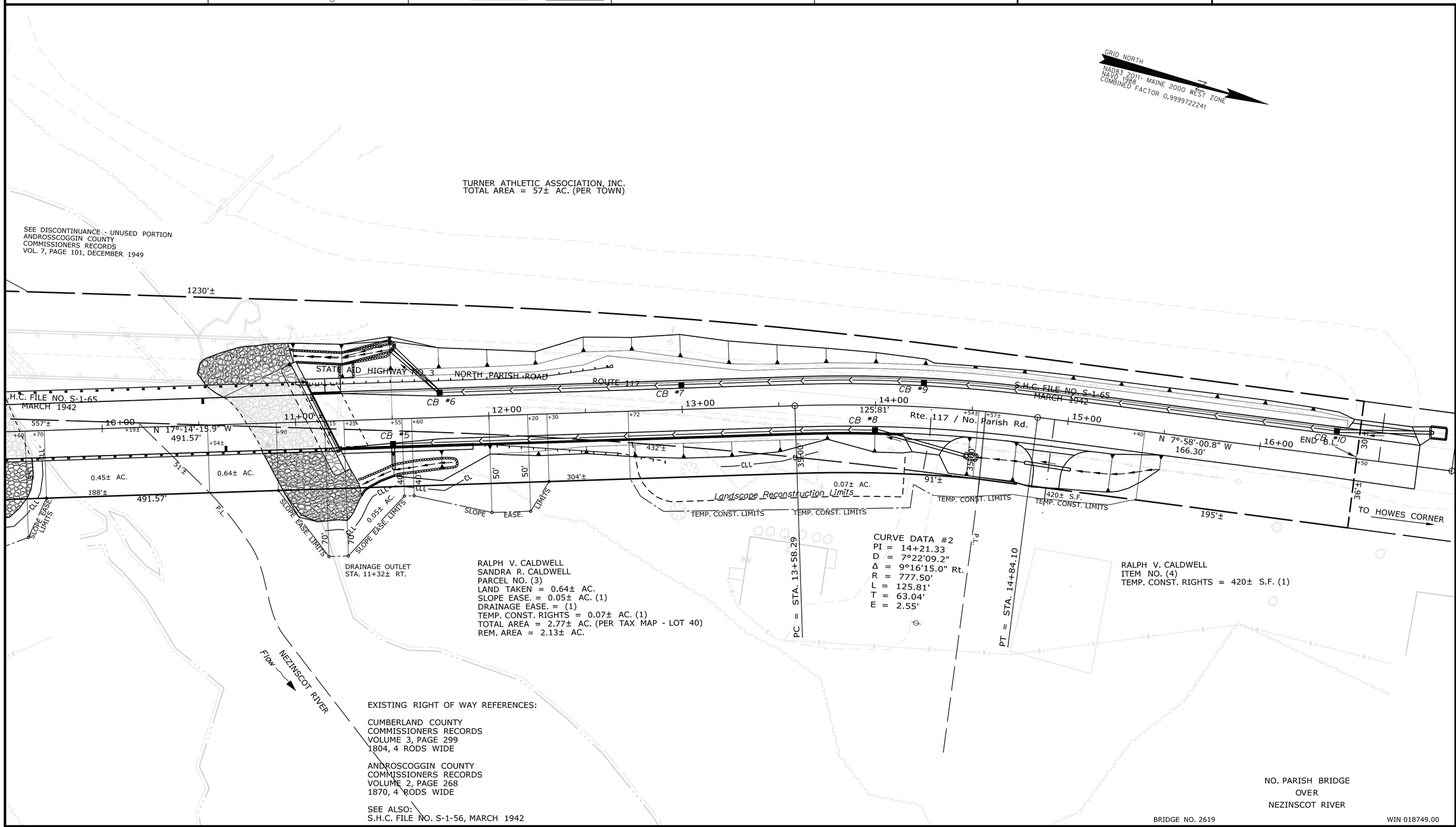
PLAN LEGEND

Town, County, State	New R/W Along Existing R/W	Existing	Proposed	Existing	Proposed	Cut Line	Fill Line
Approx. Property Lines P.L.	Building	Sanitary Sewer		Traveled Way		Stonewall	Retaining Wall
Existing Right of Way	Clearing Limit Line CLL	Telephone Line		Ditch		Baseline 10+00 11+00 12+00	
Limits of Wrought Portion L.O.W.P.	Trees Conifer Deciduous	Electric Line		Catch Basin		Monument	Traverse Point
Control Of Access C.O.A.	Tree Line Bush Line	Water Line		Manhole		Iron Rod Found IRF	Pipe Found IPF
New Right of Way	Water Edge	Underdrain Line		Sewer Manhole		Replacement Pin Set	
New Easement	Ledge Rock/Boulder Flag Pole	Gas Line		Utility Pole			
New Temporary Rights	Fence CHAIN LINK BARB WIRE STOCKADE	Guardrail		Fire Hydrant			
New R/W Within Existing R/W	Sign Well WELL Mailbox	Culvert		Curbing			

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

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 ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet



ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	PNS	PNS
FINAL RIGHT OF WAY	PNS	
AREAS		

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

REVISIONS			
NO.	DATE	DESCRIPTION	BY

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

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE AID HIGHWAY NO. 3
ROUTE 117 NORTH PARISH ROAD
TURNER ANDROSSCOGGIN COUNTY
FEDERAL AID PROJECT NO. STP-1874(900)

AUGUST 2017	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 1-332
SCALE 1" = 25'	SHEET 2 OF 2	

SHEET NUMBER
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