STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

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

DESIGN LOADING

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

HYDROLOGIC DATA

Drainage Area	2.75 sq mi
Design Discharge (Q50)	500 cfs
Check Discharge (Q100)	580 cfs
Headwater Elevation (Q1.1)	387.25 ft
Headwater Elevation (Q25)	390.05 ft
Headwater Elevation (Q50)	390.57 ft
Headwater Elevation (Q100)	391.05 ft
Discharge Velocity (Q1.1)	3.21 fps
Discharge Velocity (Q50)	7.48 fps
Discharge Velocity (Q100)	8.20 fps

MATERIALS

Concrete:	
Precast	Class "P"
All Other	Class "A"
Reinforcing Steel	ASTM A615, Grade 60

BASIC DESIGN STRESSES

Concrete:	
Class "A"	f 'c = 4,000 psi
Class "P"	f 'c = 5,000 psi
Reinforcing:	
Plain Reinforcing Steel	ASTM A 615/A 615M, f y = 60,000 psi

TRAFFIC DATA

Current (2023) AADT	1990
Future (2043) AADT	2190
DHV - % of AADT	11
Design Hour Volume	241
Heavy Trucks (% of AADT)	13
Heavy Trucks (% of DHV)	16
Directional Distribution (% of DHV)	52
18 kip Equivalent P 2.0	68
18 kip Equivalent P 2.5	65
Design Speed (mph)	55

DIXMONT
PENOBSCOT COUNTY
CROCKER BROOK BRIDGE
OVER
CROCKER BROOK
US ROUTE 202
PROJECT NO. 26097.00
PROJECT LENGTH 0.030 mi.
BRIDGE NO. 5424

LIST OF DRAWINGS

STATE OF MAINE
NATALIE RIGBY
No. 18238
LICENSED PROFESSIONAL ENGINEER
Roadway

UTILITIES

Central Maine Power Company
FirstLight Fiber
Unitil Energy

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating one - way traffic using traffic signals.

PROJECT LOCATION	US Route 202 (Western Avenue) over Crocker Brook Located 0.40 miles east of the Troy/Dixmont town line. Lat./Long. 44°40'26.62" N 69°11'1.10" W
PROGRAM AREA	Bridge Program
OUTLINE OF WORK	Replace existing culvert with a precast concrete box culvert. Rebuild 660 feet of road work and install guardrail around concrete box culvert.

26097.00 WIN 26097.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
ACTING COMMISSIONER: DATE 11-14-25
CHIEF ENGINEER: 11-13-25

STATE OF MAINE
SHANNON BEAUMONT
No. 17116
LICENSED PROFESSIONAL ENGINEER
Bridge

SIGNATURE
17116
P.E. NUMBER
9/29/2025
DATE

PROJECT INFORMATION

PROGRAM	BRIDGE
PROJECT MANAGER	BRIAN NICHOLS
DESIGNER	SHANNON BEAUMONT
CONSULTANT	FUSS & O'NEILL
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

DIXMONT
CROCKER BROOK BRIDGE

TITLE SHEET

SHEET NUMBER
1
OF 26

Date:9/29/2025
Username:
Division: BRIDGE
Filename:\D10\Bentley\ustn\001_Title.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.202	REMOVING PAVEMENT SURFACE	1,900	SY
203.20	COMMON EXCAVATION	1,600	CY
203.21	ROCK EXCAVATION	75	CY
203.2318	DISPOSAL OF SPECIAL WASTE	180	T
203.25	GRANULAR BORROW	165	CY
203.33	SPECIAL FILL - STREAMBED MATERIAL	155	CY
203.35	CRUSHED STONE 3/4-INCH	10	CY
206.07	STRUCTURAL ROCK EXCAVATION - DRAINAGE AND MINOR STRUCTURES	80	CY
304.10	AGGREGATE SUBBASE COURSE-GRAVEL	1,500	CY
403.2081	HOT MIX ASPHALT - 12.5 MM (POLYMER MODIFIED)	240	T
403.209	HOT MIX ASPHALT - 9.5MM (SIDEWALKS, DRIVES, & INCIDENTALS)	2	T
403.2131	HOT MIX ASPHALT - 12.5MM (BASE AND INTERMEDIATE COURSE, POLYMER MODIFIED)	400	T
409.15	BITUMINOUS TACK COAT, APPLIED	157	G
461.131	TEMPORARY PAVEMENT	140	T
508.13	SHEET WATERPROOFING MEMBRANE (185 SY)	1	LS
511.07	COFFERDAM: UPSTREAM	1	LS
511.07	COFFERDAM: DOWNSTREAM	1	LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (65 SY)	1	LS
524.301	TEMPORARY STRUCTURAL SUPPORT, ROADWAY	1	LS
524.301	TEMPORARY STRUCTURAL SUPPORT, EXISTING CULVERT	1	LS
526.301	PORTABLE CONCRETE BARRIER, TYPE 1 (1480 LF)	1	LS
527.34	WORK ZONE CRASH CUSHION	4	UN
534.71	PRECAST CONCRETE BOX CULVERT (180 CY)	1	LS
603.16	15 INCH CULVERT PIPE OPTION 1	56	LF
606.1301	31" W-BEAM GUARDRAIL - MID-WAY SPLICE	550	LF
606.1305	31" W-BEAM GUARDRAIL - MID-WAY SPLICE FLARED TERMINAL	4	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	8	EA
610.16	HEAVY RIPRAP	590	CY
610.18	STONE DITCH PROTECTION	27	CY
610.214	VOID-FILLED HEAVY RIPRAP	145	CY
613.319	EROSION CONTROL BLANKET	30	SY
615.07	LOAM	77	CY
618.13	SEEDING METHOD NUMBER 1	2	UN
618.14	SEEDING METHOD NUMBER 2	10	UN
619.12	MULCH	12	UN
619.14	EROSION CONTROL MIX	77	CY
620.54	STABILIZATION/REINFORCEMENT GEOTEXTILE	295	SY
620.58	EROSION CONTROL GEOTEXTILE	890	SY
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	2,650	LF
627.78	TEMPORARY PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	4,000	LF
629.05	HAND LABOR, STRAIGHT TIME	40	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	25	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	25	HR
639.19	FIELD OFFICE, TYPE B	1	EA
643.72	TEMPORARY TRAFFIC SIGNAL	1	LS
652.312	TYPE III BARRICADE	4	EA
652.33	DRUM	12	EA
652.34	CONE	24	EA
652.35	CONSTRUCTION SIGNS	260	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.38	FLAGGERS	500	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	2	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

1. For easements, construction limits, and right of way lines, refer to the Right of Way Map.

2. 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.

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

4. Existing signs within the Project limits shall be removed and reset as directed by the Resident. Payment for removal and reinstallation of existing signs will be considered incidental to the Contract. No separate payment will be made.

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. All embankment material, except as otherwise shown, placed below EL. 387 shall be Granular Borrow meeting the requirements of Standard Specifications Subsection 703.19, Granular Borrow, for Material for Underwater Backfill, with the additional requirement that the maximum particle size be limited to 4 inches.

8. Place loam 2 inches deep on all new or reconstructed sideslopes 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 Pay Item 619.14, Erosion Control Mix.

10. Place a 24 inch wide strip of Erosion Control Blanket on the sideslopes along the top of the riprap.

11. A MASH compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail.

12. Where it is apparent that runoff will cause continual erosion, Erosion Control Blanket, seeded gutters, riprap downspouts, and other gutters lined with Stone Ditch Protection shall be constructed after paving and shoulder work is completed. Payment will be made under the appropriate Contract items.

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

    On all concrete headwalls and box surfaces that are exposed extending one foot inside the box and to one foot below the ground on vertical walls against earth.

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

15. 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.

16. Reports on hydrology and/or hydraulics applicable to the bridge site may be accessed at the MaineDOT web address. The reports are based on MaineDOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.

17. The project geotechnical report titled: Geotechnical Design Report, Route 202 over Crocker Brook, Bridge No. 5424, MaineDOT WIN 26097.00, Dixmont, Maine, dated September 20, 2024, may be accessed at the MaineDOT web address.

18. Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Constractor'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.

19. 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.

20. Remove and reset the mailbox post and accompanying three mailboxes as directed by the Resident. A temporary relocation may be required. This work will be considered incidental to the Contract. No separate payment will be made.

Filename: ...\BRIDGE\MSTA\002_Estimate.dgn Division: BRIDGE Username: Brian.Nichols Date:10/6/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

ESTIMATED QUANTITIES AND
GENERAL CONSTRUCTION NOTES

SHEET NUMBER

2

OF 26

CURVE DATA #1
PI = 121+93.45
D = 2°29'59.3"
Δ = 32°24'16.8" Lt.
R = 2292.00'
L = 1296.28'
T = 665.99'
E = 94.80'

Match Bankline into Existing Streambank at Downstream End of Special Fill (Typ.)

PT = STA. 128+23.75

Crocker Brook Flow

90°0'0"

Proposed Pole

To Be Removed (By Others)

Remove and Reset Mailbox

W-Beam Guardrail Mid-Way Splice 6-ft Post (Typ.)

W-Beam Guardrail Mid-Way Splice (Typ.)

Top of Slope for Staged Construction (Leave in Place)

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

126+00 127+00 CURVE 1 128+00 129+00 130+00 131+00 N61°39'20.23"E 132+00

To Troy

STATE HIGHWAY "9" / U.S. ROUTE 202 / WESTERN AVE.

To Newburgh

Existing To Remain

To Be Removed By Others

Proposed Pole

Heavy Riprap

Flow Heavy Riprap (Typ.)

Match Bankline into Existing Streambank at Upstream End of Special Fill

Special Fill over Heavy Riprap Apron (Typ.)

Special Fill (Typ.)

℄ 24'-0" Span X 8'-0" Rise Precast Concrete Box Culvert Sta. 128+92.78

Match Bankline into Existing Streambank at Top of Streambank. Approx. El. 388'

Crushed Stone ¾-inch (Typ.)

Proposed Pole

To Be Removed (By Others)

Existing To Remain

PLAN

25 0 25 50

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	B. Nichols	
DESIGN-DETAILED	R. Trudeau	M. Smith 09/25
CHECKED-REVIEWED	S. Beaumont	N. Rigby 09/25
DESIGN2-DETAILED2	R. Lupien	M. Smith 09/25
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

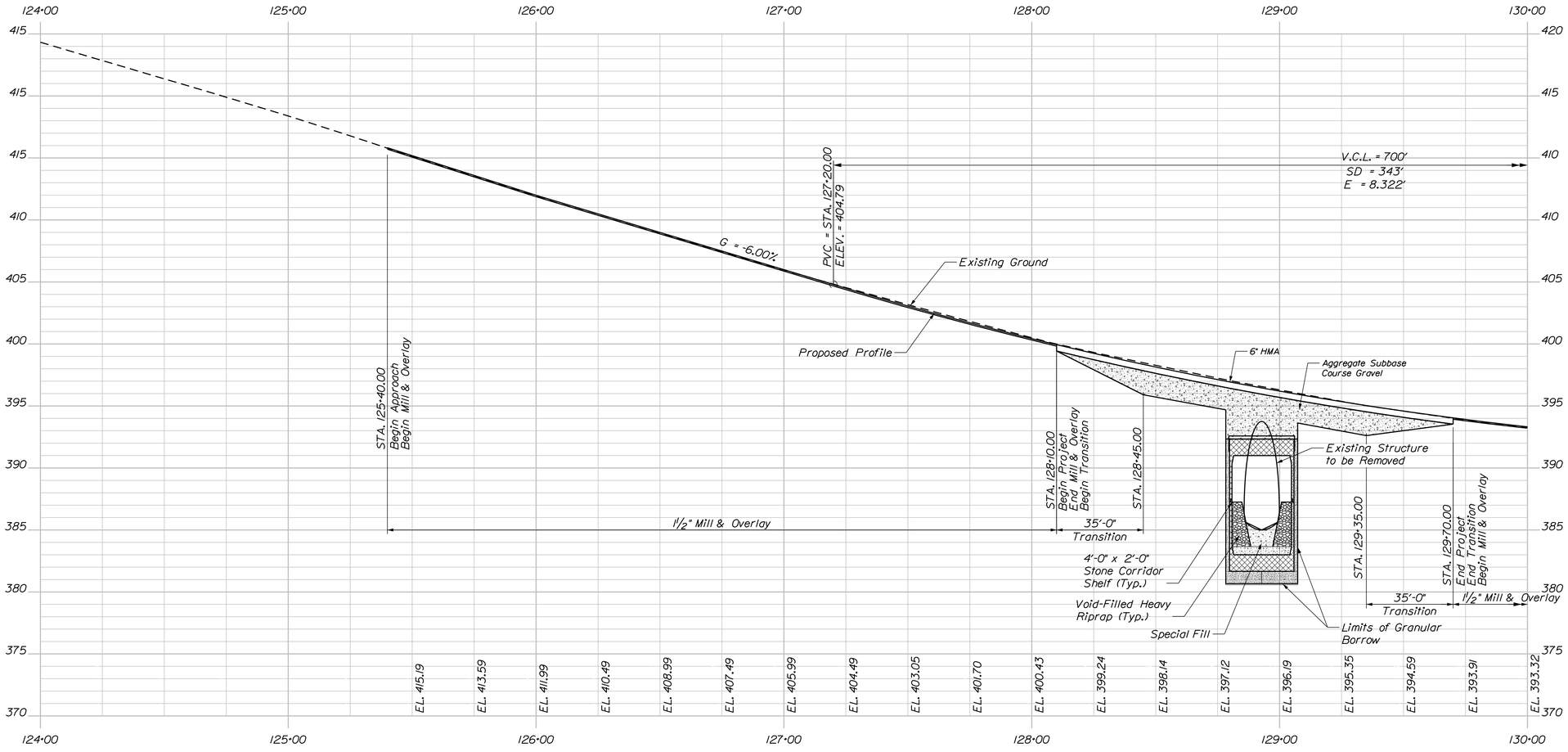
GENERAL PLAN

SHEET NUMBER

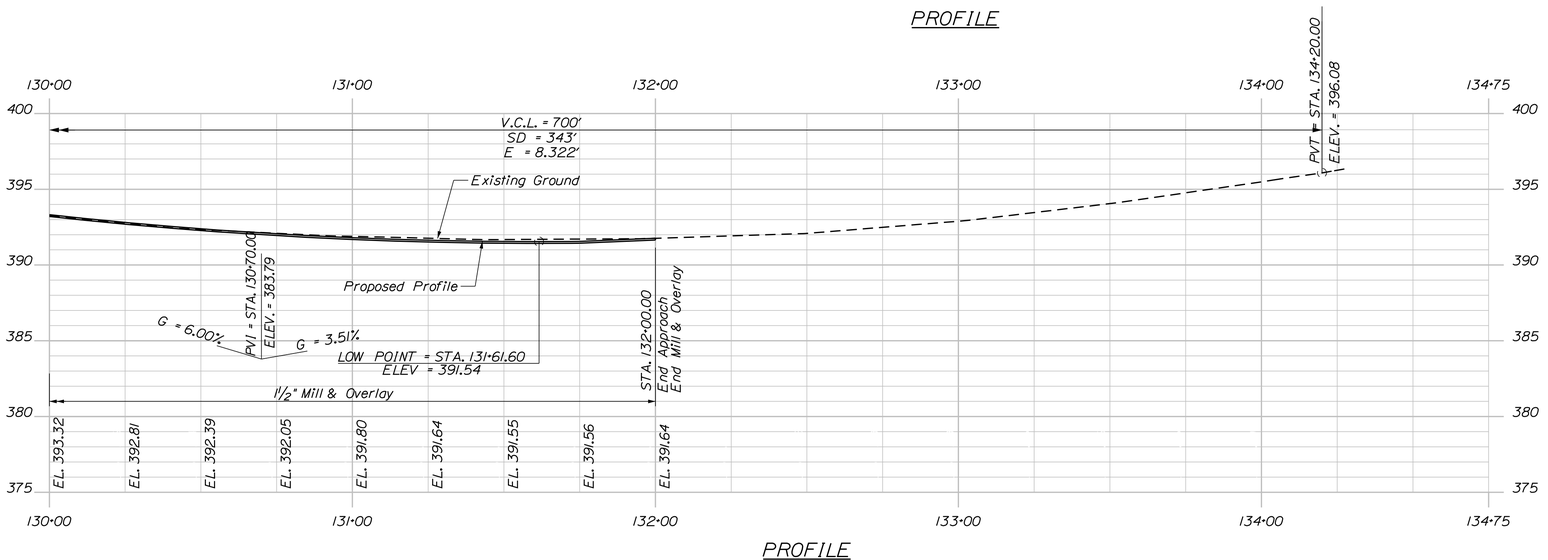
3

OF 26

Filename: ...\Bentley\ustn\003_BOPlan.dgn Division: BRIDGE Username: Date:9/29/2025



PROFILE



PROFILE

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

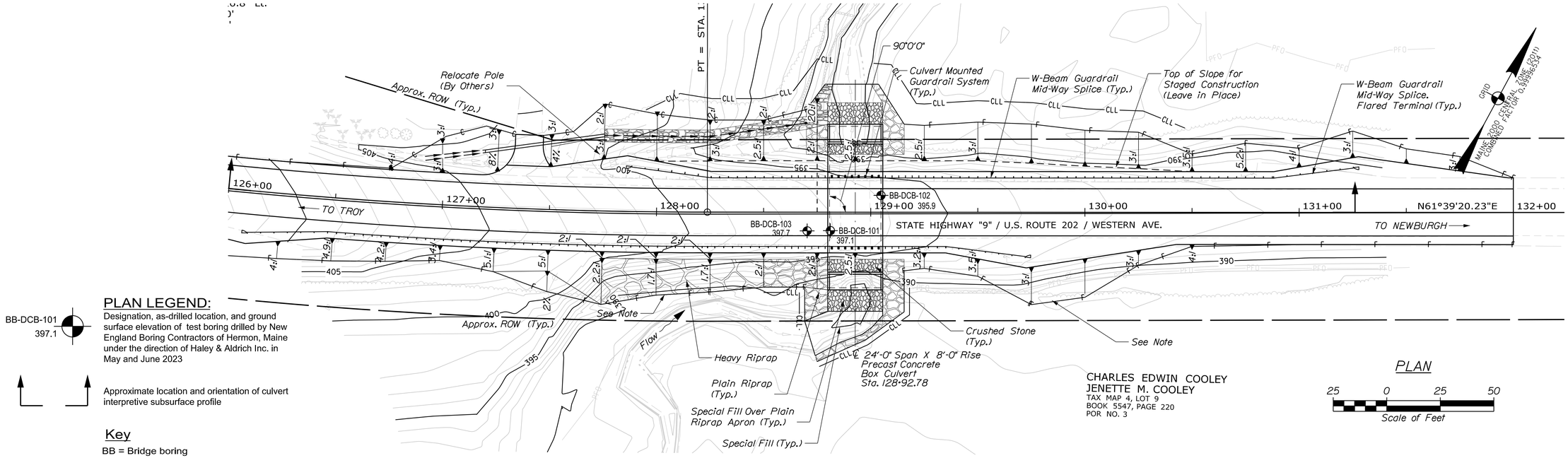
PROFILE

SHEET NUMBER

4

OF 26

Filename: ...\Bentley\us1n\004_Profile.dgn Division: BRIDGE Username: Date:9/29/2025



PLAN LEGEND:

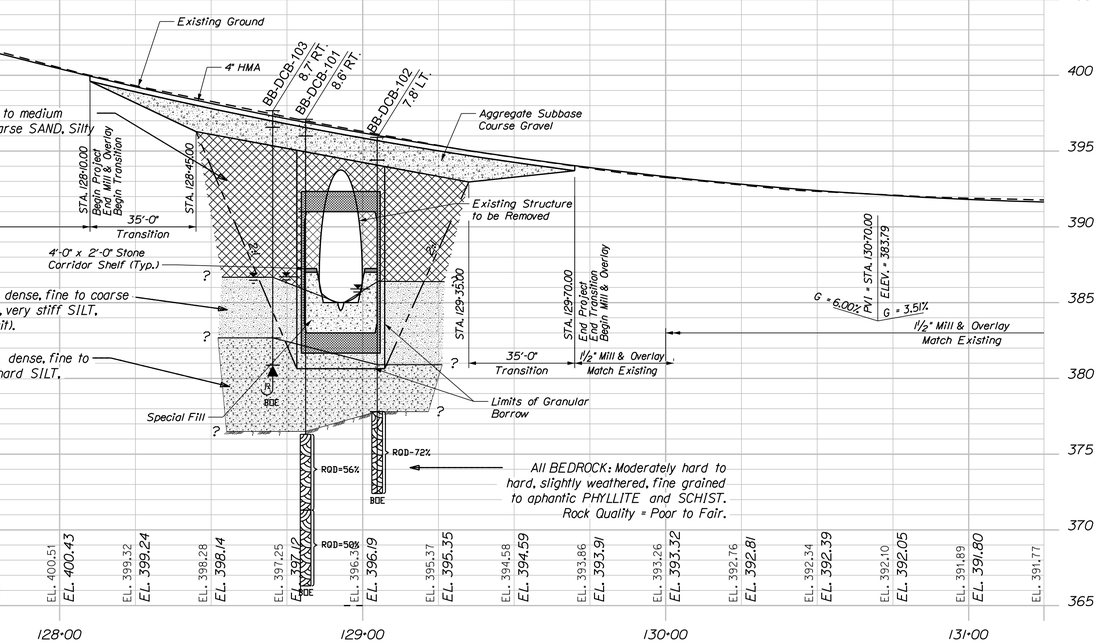
BB-DCB-101
397.1

Designation, as-drilled location, and ground surface elevation of test boring drilled by New England Boring Contractors of Hermon, Maine under the direction of Haley & Aldrich Inc. in May and June 2023

Approximate location and orientation of culvert interpretive subsurface profile

Key

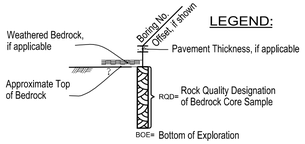
BB = Bridge boring



INTERPRETIVE SUBSURFACE PROFILE

PROFILE
HORIZ 25 0 25 50
VERT 5 0 5 10
SCALE

LEGEND:



NOTES:

1. Exisitng and proposed site conditions, the location and orientation of existing site features, and the proposed strucutres are taken from electronic Microstation files provided by Fuss & O'Neill.
2. The plan locations of and ground surface elevations at test borings shown were determined upon the completion of drilling by the Maine Department of Transportation using GPS survey equipment.
3. Boring offset shown on the profile is based on the proposed Route 202 baseline.
4. The interpretive subsurface proifle is intended to convey generalized trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples. Actual soil and rock transitions may vary and are likely to be more erratic than shown. For more specific information refer to the test boring logs in Appendix A.
5. Elevations are in feet and reference the North American Vertical Datum of 1988 (NAVD 88).
6. Test borings were monitored in the field by a Haley & Aldrich, Inc. geologist.
7. Refer to the geotechnical design report for test boring logs and rock core photographs.

HALEY ALDRICH

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE PLANS

BRIDGE NO. 5424

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER	B. Nichols	
DESIGN-DETAILED	K. Postolowski	08/26/24
CHECKED-REVIEWED	W. Chadbourne	09/18/24
DESIGN2-DETAILED2	E. Hunstein	
DESIGN3-DETAILED3	E. Force	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

EXPLORATION LOCATION PLAN AND INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER
5
OF 26

Filename: ...\0207786_002_PLAN AND PROFILE.dgn Division: Username: Date:9/19/2024

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Crocker Brook Bridge No. 5424 over Crocker Brook
Location: Route 202, Dixmont, Maine

Boring No.: BB-DCB-101
WIN: 026097.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	397.1	**Auger ID/OD:**	--
Operator:	G. McDougl	**Datum:**	NAVD 88	**Sampler:**	Standard Split Spoon
Logged By:	J. Ilunga	**Rig Type:**	Mobile D53 Track	**Hammer Wt./Fall:**	SS-140#/30";HW-140#/30"
Date Start/Finish:	5-30-2023/5-30-2023	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	NQ-2.0 in. ID
Boring Location:	128+81, 9 ft RT	**Casing ID/OD:**	NW-3.0 in. ID	**Water Level*:**	10.4 ft
Hammer Efficiency Factor:	0.742	**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
WO1P = 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%)*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							NW			Bituminous Concrete	
								396.0		1.1	
	1D	23/13	1.1 - 3.0	15/12/19/10	31	38				Brown, dry, dense, fine to coarse SAND, trace gravel, trace silt (Fill).	
	2D	24/12	3.0 - 5.0	8/1/7/7	8	10				Similar to 1D, except loose (Fill).	
5	3D	7/2	5.0 - 5.6	6/50(1")						Brown, moist, medium dense, fine to coarse SAND, some fine gravel, trace silt (Fill). Note: Encountered refusal at 5.6 ft. Advanced rollerbit from 5.6 to 6.1 ft.	
								391.0		6.1	
										Concrete	
10	R1	60/58	10.2 - 15.2							Note: Cored from 10.2 to 15.2 ft with 58 in. recovery.	
15	R2	41/6	15.2 - 18.6							Note: Cored from 15.2 to 18.6 ft with 6 in. recovery.	
								381.3		15.8	
										Note: Driller noted bottom of concrete at 15.8 ft.	
	4D	24/5	18.6 - 20.6	4/5/12/25	17	21				Grey, wet, medium dense, fine to coarse GRAVEL, some fine to coarse sand, little silt (Glacial Till).	
20								376.5		20.6	
	R3	55/55	21.2 - 25.8	RQD = 56%			NQ CORE			Note: Encountered top of bedrock at 20.6 ft. Advance rollerbit from 20.6 to 21. 2 ft. Begin NQ core at 21.2 ft. Top of Bedrock at El. 376.5. R3:Grey, fine-grained to aphanitic PHYLLITE. Moderately hard slightly weathered. Joints horizontal to low angle, planar to undulating, close to moderate, tight to open, frequent 0.5 to 1-in. thick quartz veins. One 5-in. thick silt infilled joint. Single secondary moderately dipping joint. Oxidation on some joint surfaces.	
25											

Remarks:

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-DCB-101

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Crocker Brook Bridge No. 5424 over Crocker Brook
Location: Route 202, Dixmont, Maine

Boring No.: BB-DCB-101
WIN: 026097.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	397.1	**Auger ID/OD:**	--
Operator:	G. McDougl	**Datum:**	NAVD 88	**Sampler:**	Standard Split Spoon
Logged By:	J. Ilunga	**Rig Type:**	Mobile D53 Track	**Hammer Wt./Fall:**	SS-140#/30";HW-140#/30"
Date Start/Finish:	5-30-2023/5-30-2023	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	NQ-2.0 in. ID
Boring Location:	128+81, 9 ft RT	**Casing ID/OD:**	NW-3.0 in. ID	**Water Level*:**	10.4 ft
Hammer Efficiency Factor:	0.742	**Hammer Type:**	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions:
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MD = Unsuccessful Split Spoon Sample Attempt
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MU = Unsuccessful Thin Wall Tube Sample Attempt
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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140 lb. Hammer
WOR/C = Weight of Rods or Casing
WO1P = 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
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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.
25	R4	55/54	25.8 - 30.4	RQD = 50%			NQ CORE			Rock Quality=Fair Recovery=100% R3 Core Times (min:sec): 21.2-22.2' (2:34); 22.2-23.2' (2:50); 23.2-24.2' (3:15); 24.2-25.2' (2:14); 25.2-25.8' (3:10) Note: Begin R4 at 25.8 ft. Core bit broke off in borehole, unable to retrieve bit. R4: Similar to R3, except joints dipping at low to moderate angles, very close to close. Secondary high angle joints. Highly fractured zone from approximately 28.8 to 30.8 ft. Rock Quality=Poor Recovery=90% R2 Core Times (min:sec): 25.8-26.8' (6:31); 26.8-27.8' (6:37); 27.8-28.8' (6:31); 28.8-29.8' (6:52); 29.8-30.8' (7:00)	
30								366.3		30.8 **Bottom of Exploration at 30.8 feet below ground surface.**	
35											
40											
45											
50											

Remarks:

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-DCB-101

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER			
DESIGN-DETAILED	B. Nichols	DATE	
CHECKED-REVIEWED	E. Hunstein	BY	
DESIGN2-DETAILED2	E. Force	K. Postolowski	08/26/24
DESIGN3-DETAILED3		W. Chodbourne	09/18/24
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

BORING LOGS

SHEET NUMBER

6

OF 26

Filename: ...\Bentley\us1n\006_BoringLog.dgn Division: BRIDGE Username: Date:9/29/2025

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Crocker Brook Bridge No. 5424 over Crocker Brook
Location: Route 202, Dixmont, Maine

Boring No.: BB-DCB-103
WIN: 026097.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	397.7	**Auger ID/OD:**	--
Operator:	G. McDougl	**Datum:**	NAVD 88	**Sampler:**	Standard Split Spoon
Logged By:	J. Ilunga	**Rig Type:**	Mobile D53 Track	**Hammer Wt./Fall:**	SS-140#/30";HW-140#/30"
Date Start/Finish:	5-31-2023/6-01-2023	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	--
Boring Location:	128+70, 9 ft RT	**Casing ID/OD:**	NW-3.0 in. ID	**Water Level*:**	11.0 ft
Hammer Efficiency Factor:	0.742	**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
WO1P = 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%)*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							NW				
								396.6		Bituminous	
								396.1		Brown, dry, medium dense, fine SAND, some medium to coarse sand, little silt, trace gravel (Fill).	
	1D	23/15	1.1 - 3.0	7/10/10/9	20	25					
										Similar to 1D (Fill).	
	2D	24/15	3.0 - 5.0	9/6/7/7	13	16					
5										Brown, grey, moist, loose, fine to medium SAND, some silt, little fine gravel (Fill).	G#17569-05 A-2-4(0), SM
	3D	24/14	5.0 - 7.0	4/4/2/2	6	7					
										Brown, moist, medium dense, Silty fine SAND, trace fine gravel (Fill).	
	4D	24/8	7.0 - 9.0	9/7/5/5	12	15					
								388.7		Brown, dry, very dense, fine to coarse SAND, some gravel, trace silt, well graded (Fill).	
	5D	24/13	9.0 - 11.0	11/23/25/12	48	59		386.7		Dark grey, wet, medium dense, fine GRAVEL, little coarse sand, trace fine sand, trace silt, poorly-graded (piece of broken rock) (Glaciomarine Deposit).	
10											
	6D	24/1	11.0 - 13.0	11/6/13/22	19	23		384.7		Brown, wet, very stiff, SILT, little fine gravel, little fine to medium sand, trace coarse sand (Glaciomarine Deposit).	G#17569-06 A-4(0), SM
	7D	24/10	13.0 - 15.0	18/12/6/9	18	22					
15								382.7		Dark grey-brown, wet, very dense, fine to coarse GRAVEL, little fine to coarse sand, trace silt, poorly-graded (Glacal Till).	
	8D	22/6	15.0 - 16.8	37/24/23/50(3")	47	58		380.9		**Bottom of Exploration at 16.8 feet below ground surface.**	
20											
25											

Remarks:

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Page 1 of 1

Boring No.: BB-DCB-103

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Crocker Brook Bridge No. 5424 over Crocker Brook
Location: Route 202, Dixmont, Maine

Boring No.: BB-DCB-102
WIN: 026097.00

Driller:	New England Boring Contractors	**Elevation (ft.)**	395.9	**Auger ID/OD:**	--
Operator:	G. McDougl	**Datum:**	NAVD 88	**Sampler:**	Standard Split Spoon
Logged By:	J. Ilunga	**Rig Type:**	Mobile D53 Track	**Hammer Wt./Fall:**	SS-140#/30";HW-140#/30"
Date Start/Finish:	5-31-2023/5-31-2023	**Drilling Method:**	Cased Wash Boring	**Core Barrel:**	NQ-2.0 in. ID
Boring Location:	129+05, 8 ft LT	**Casing ID/OD:**	NW-3.0 in. ID	**Water Level*:**	10.0 ft
Hammer Efficiency Factor:	0.742	**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
WO1P = 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%)*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							NW				
								394.4		Bituminous Concrete	
	1D	24/14	1.5 - 3.5	7/8/9/7	17	21		393.9		Brown, dry, medium dense, fine SAND, little medium to coarse sand, little gravel, trace silt (Fill).	
										Brown, dry, medium dense, fine SAND, little gravel, trace medium to coarse sand, trace silt (Fill).	
	2D	24/15	3.5 - 5.5	7/7/6/9	13	16					
5										Brown, dry, loose, fine to coarse SAND, little gravel, trace silt (Fill).	
	3D	24/15	5.5 - 7.5	5/4/3/4	7	9					
										Brown, dry, medium dense, fine to coarse SAND, some gravel, little silt (Fill).	G#17569-03 A-1-b, SM
	4D	24/12	7.5 - 9.5	4/5/4/2	9	11					
								386.4		Brown, wet, medium dense, medium to coarse SAND, some gravel, trace fine sand, trace silt, poorly-graded (Glaciomarine Deposit).	
	5D	24/3	9.5 - 11.5	5/8/8/9	16	20		384.4		Brown, grey, wet, medium dense, fine SAND, some gravel, some silt, trace medium to coarse sand (Glaciomarine Deposit).	
10											
	6D	24/13	11.5 - 13.5	8/6/7/9	13	16					
								380.9		Grey, wet, hard, SILT, some fine gravel, little fine sand, trace medium to coarse sand, trace coarse gravel, moderately bonded (Glacial Till).	G#17569-04 A-4(0), GM
15	7D	24/11	15.0 - 17.0	7/10/24/30	34	42					
								377.8		Note: Encountered top of bedrock at 18.1 ft. Advance rollerbit to 18.5 ft. Begin NQ core at 18.5 ft. Top of Bedrock El. 377.8.	
	R1	60/60	18.5 - 23.5	RQD = 72%			NQ CORE			R1: Grey, white, fine-grained SCHIST. Hard, slightly weathered. Joints dipping at moderate to vertical angles, planar to undulating, close to moderate, tight to open. Frequent quartz veins 0.25 to 0.5-in. thick. Rock Quality=Fair Recovery=100% R1 Core Times (min:sec): 18.5-19.5' (4:10); 19.5-20.5' (6:30); 20.5-21.5' (8:15); 21.5-22.5' (7:40); 22.5-23.5' (5:04)	
20								372.4		**Bottom of Exploration at 23.5 feet below ground surface.**	
25											

Remarks:

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Page 1 of 1

Boring No.: BB-DCB-102

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00
WIN
26097.00
BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	E. Hunstein	K. Postolowski	08/26/24
CHECKED-REVIEWED	E. Force	W. Chodbourne	09/18/24
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

P.E. NUMBER

SIGNATURE

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

BORING LOGS

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OF 26

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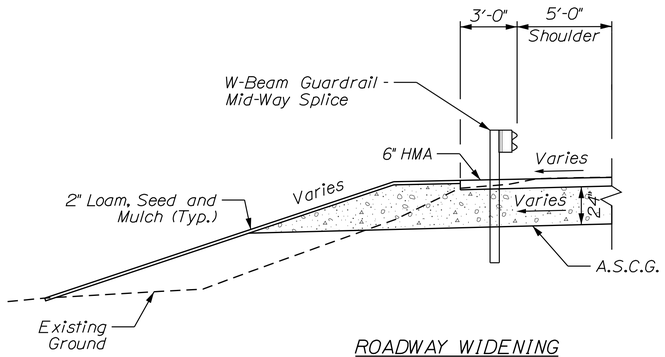

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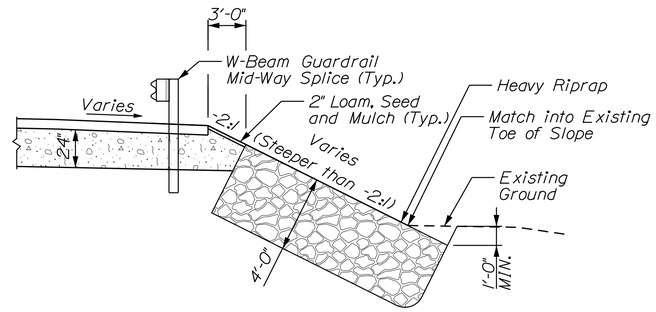

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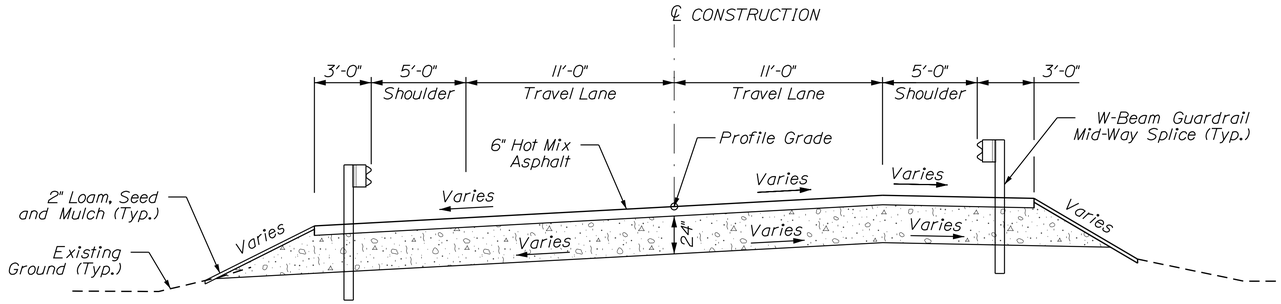

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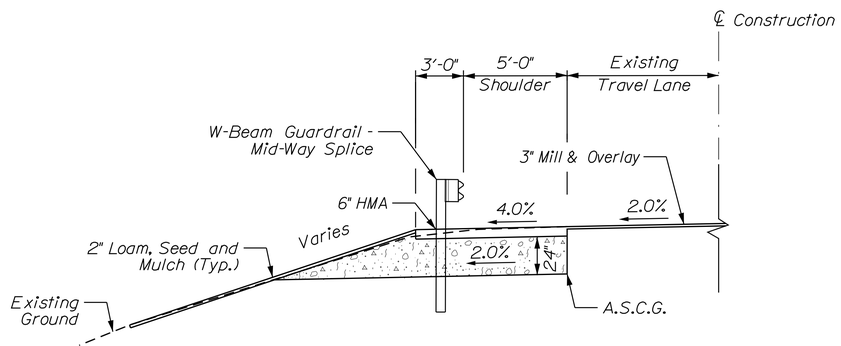

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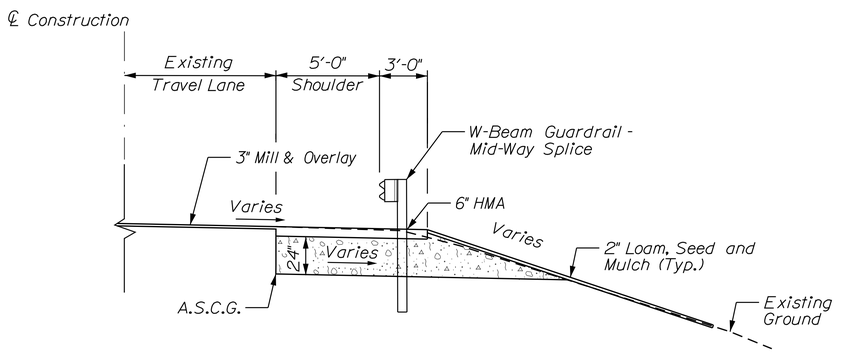
130+50 TO 132+00 LT



SHOULDER RECONSTRUCTION
127+50 TO 128+00 LT
125+40 TO 128+45 RT

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols	BY	DATE
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

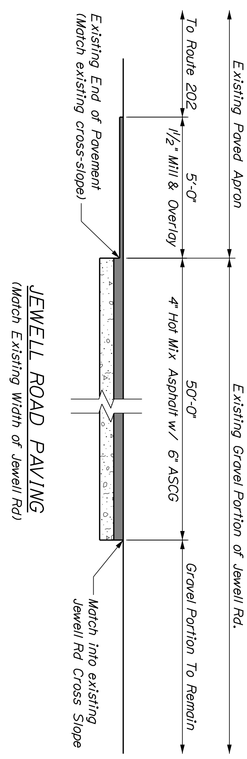
TYPICAL ROADWAY SECTIONS

SHEET NUMBER

8

OF 26

NOT TO SCALE



PROJ. MANAGER	B. Nichols	BY	DATE
DESIGN-DETAILED	B. Nichols	B. Nichols	09\25
CHECKED-REVIEWED	B. Nichols	B. Nichols	09\25
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

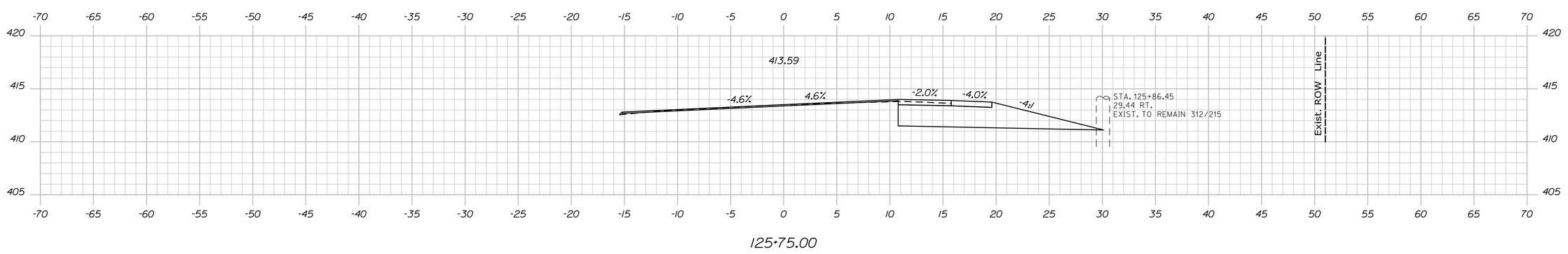
TYPICAL ROADWAY SECTIONS

SHEET NUMBER 9 OF 26

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

BRIDGE NO. 5424 WIN 26097.00 BRIDGE PLANS



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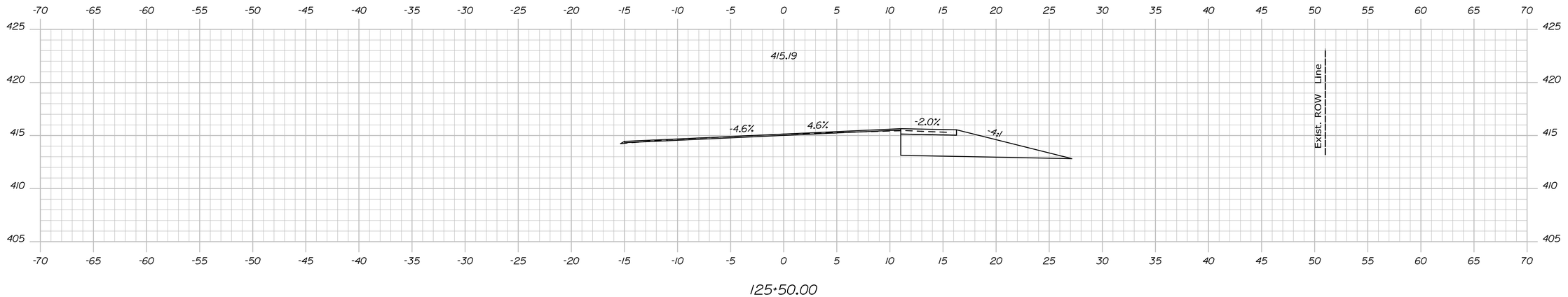

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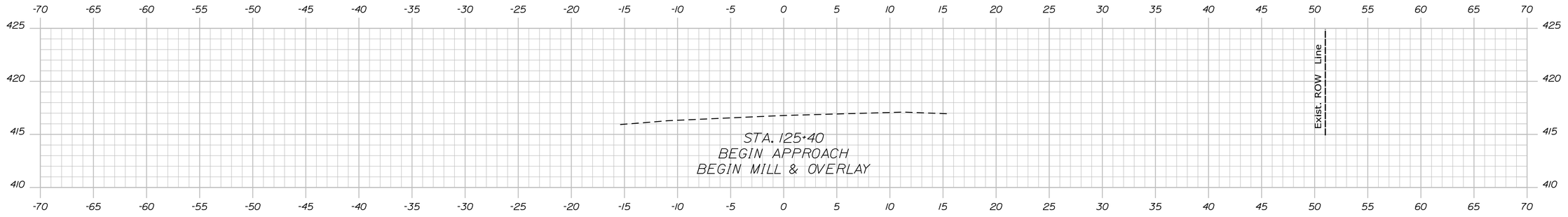

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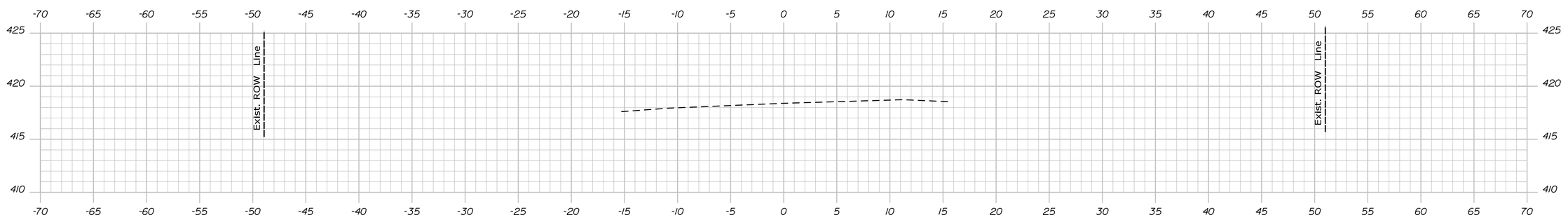

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Division: BRIDGE

Filename: ...\ustn\010_Xsect_Draft.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

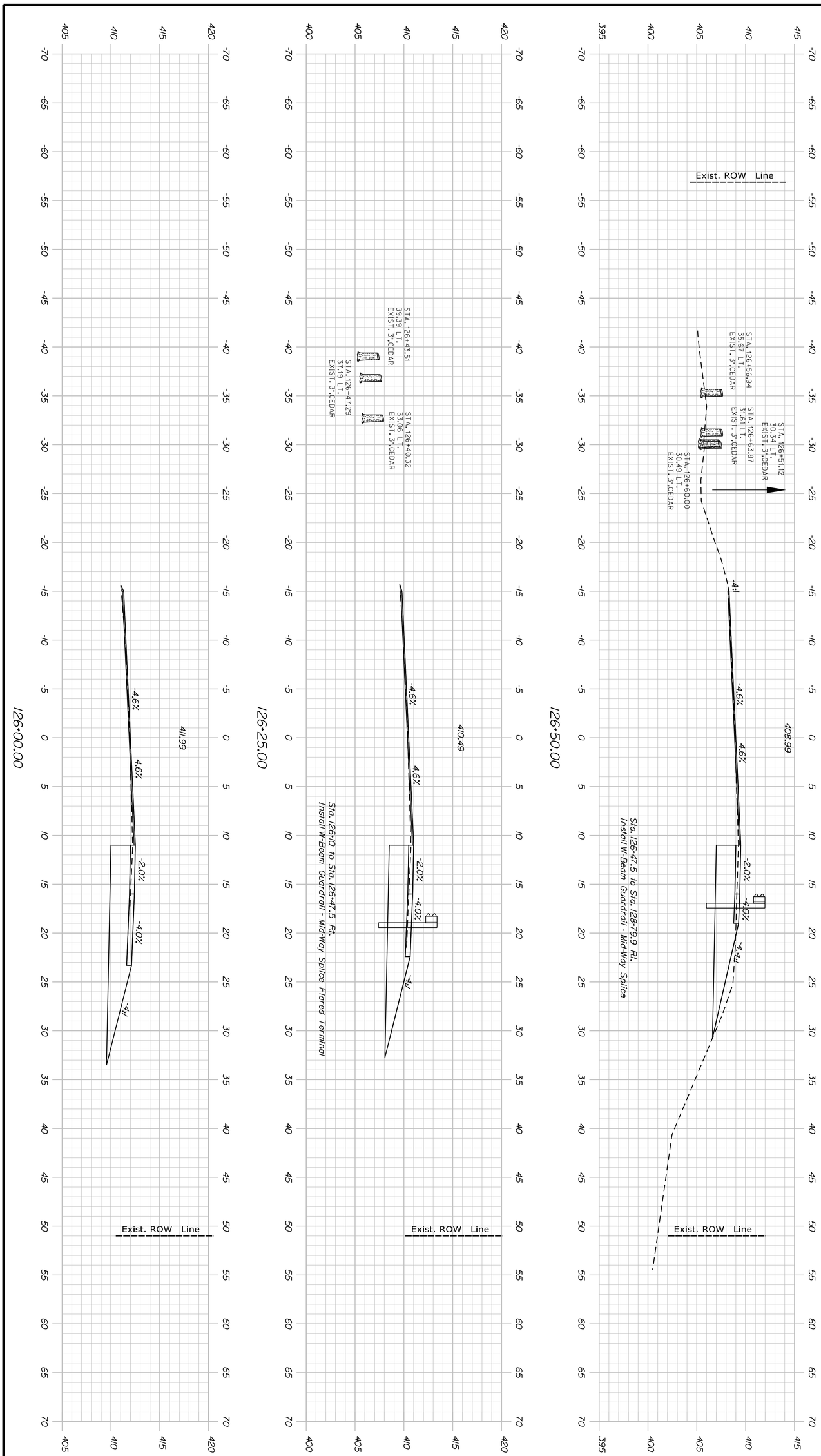
CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

CROSS SECTIONS

SHEET NUMBER

10

OF 26



CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

CROSS SECTIONS

		BY	DATE
PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
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FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

BRIDGE NO. 5424 WIN 26097.00 BRIDGE PLANS

SHEET NUMBER 11 OF 26

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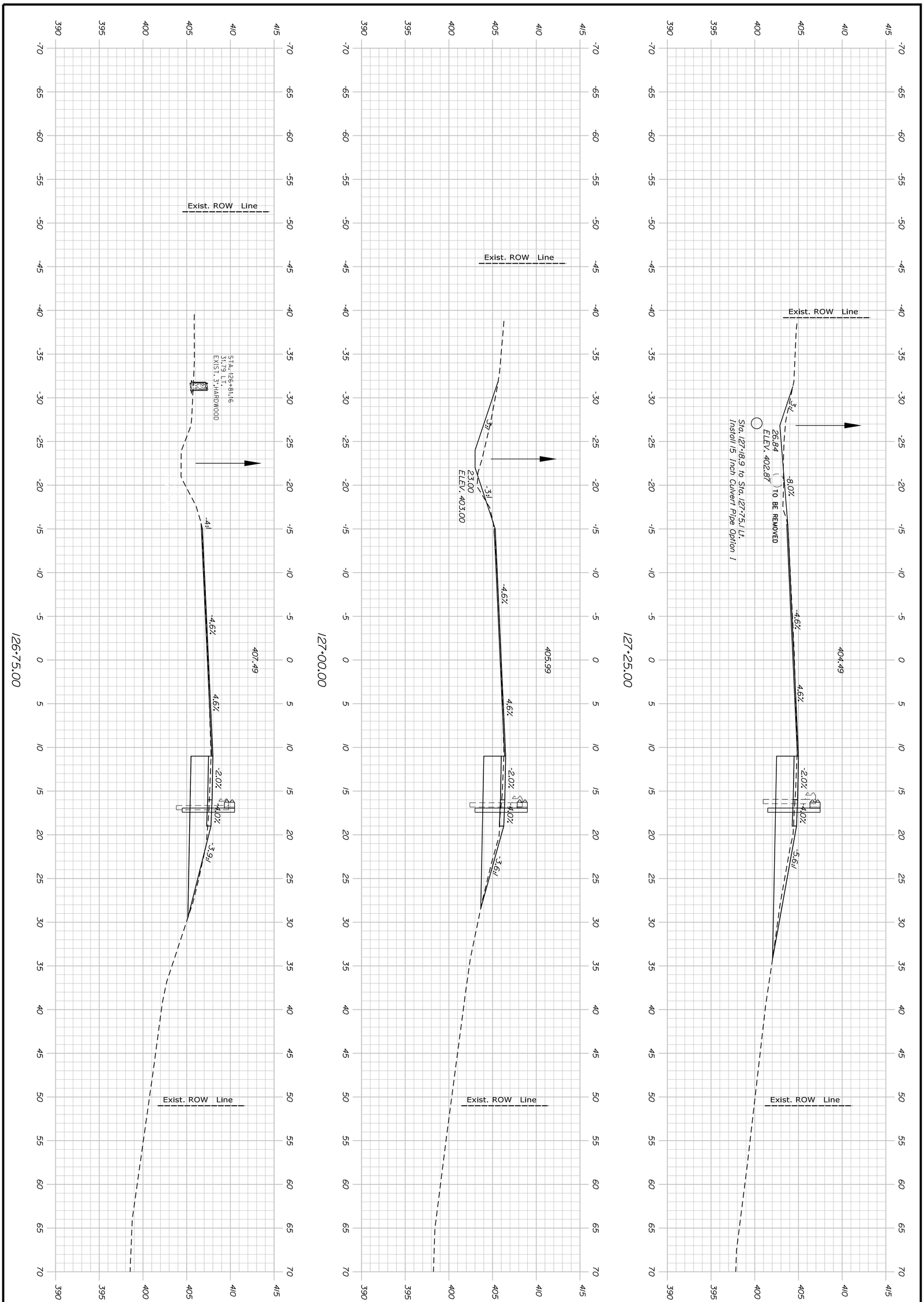


CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

CROSS SECTIONS

PROJ. MANAGER	B. Nichols	BY	DATE
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

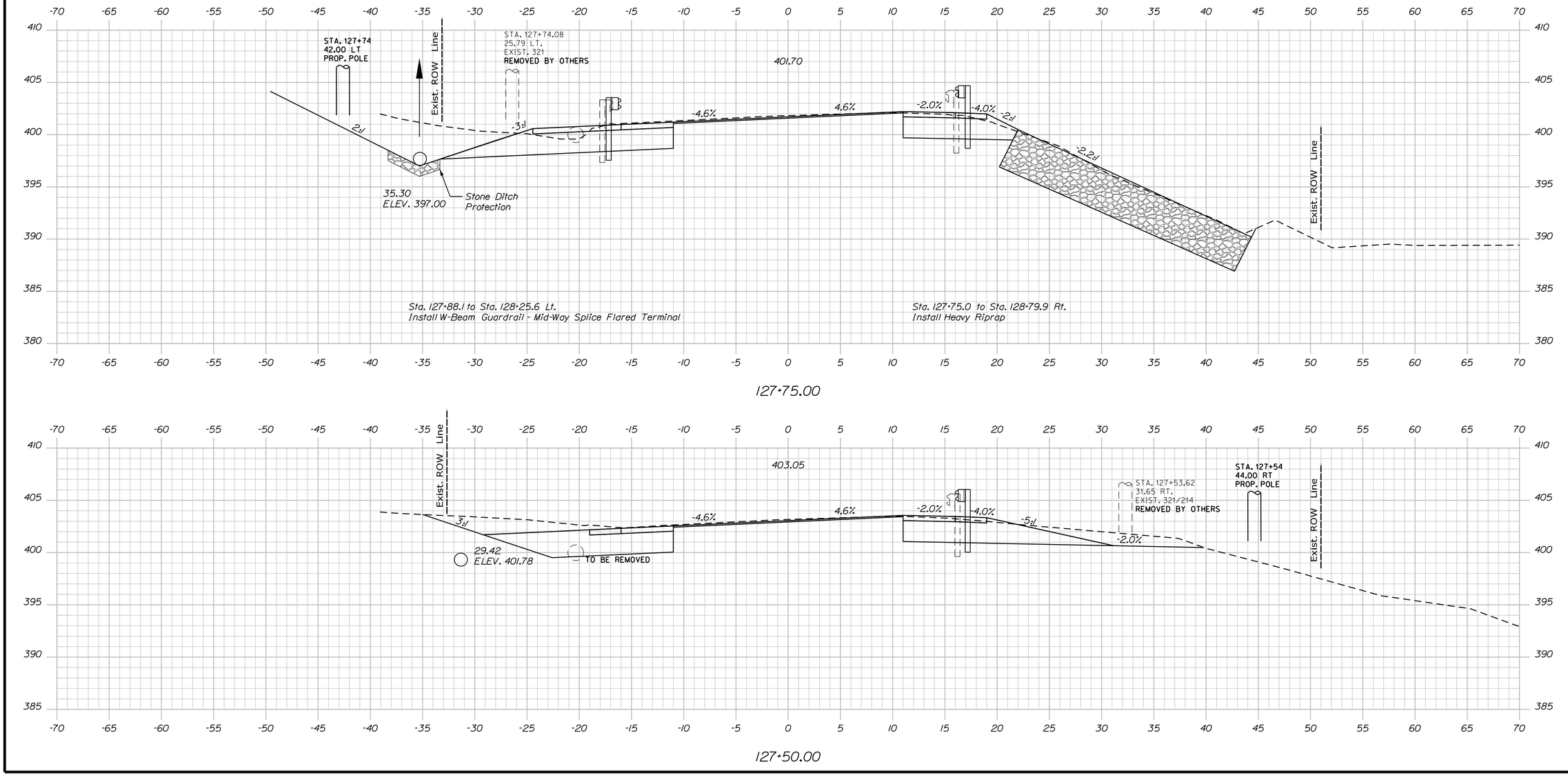
DATE

SHEET NUMBER 12 OF 26

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

BRIDGE NO. 5424 WIN 26097.00 BRIDGE PLANS



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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424 BRIDGE PLANS

			DATE
PROJ. MANAGER	B. Nichols	BY	
DESIGN-DETAILED	R. Trudeau	M. Smith	09/25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09/25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09/25
DESIGN3-DETAILED3			
REVISIONS 1			
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

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DATE

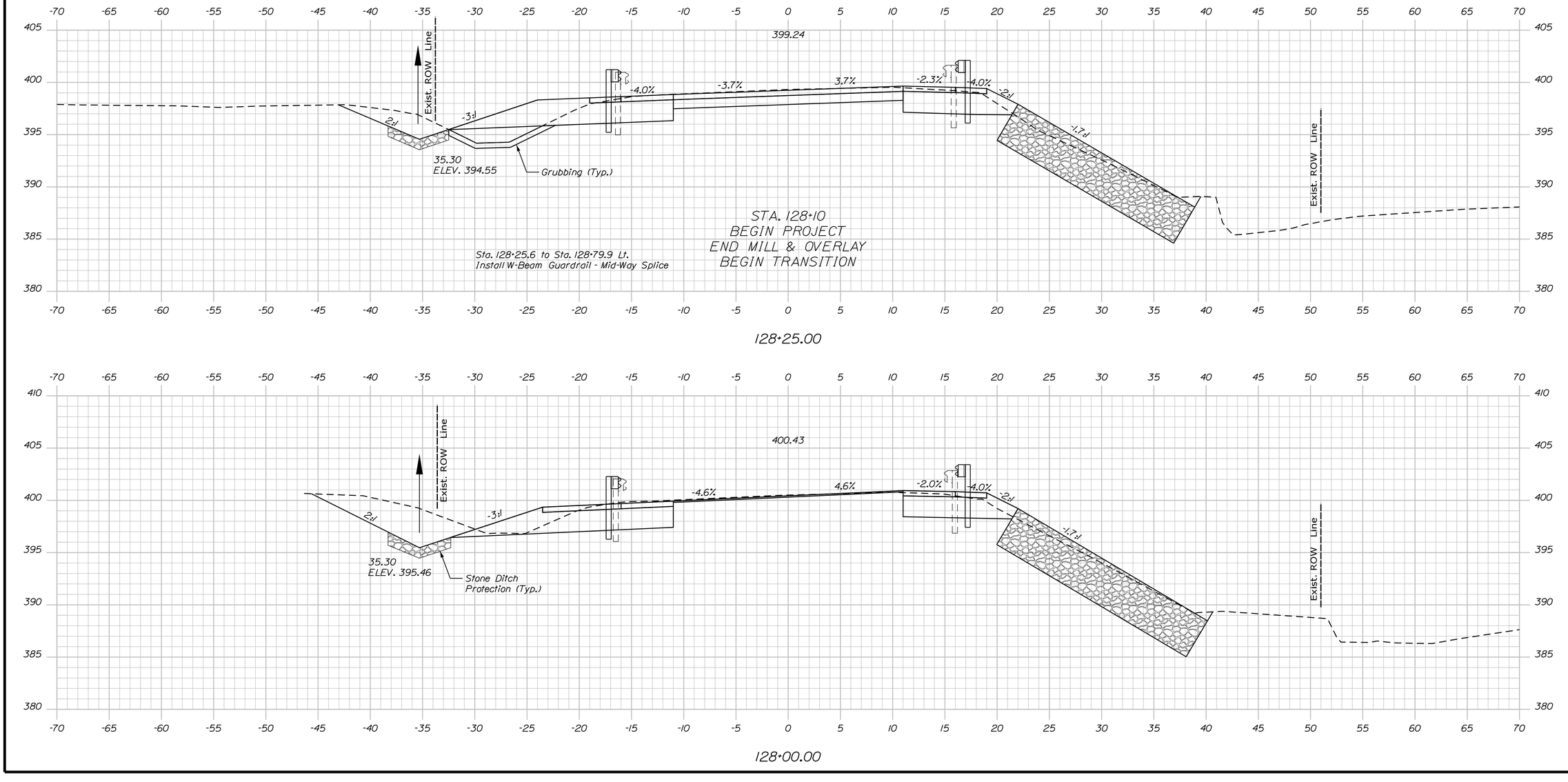
CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

CROSS SECTIONS

SHEET NUMBER

13

OF 26



Division: BRIDGE

Username:

Date:9/29/2025

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

BRIDGE NO. 5424 | **WIN 26097.00** | BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
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FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

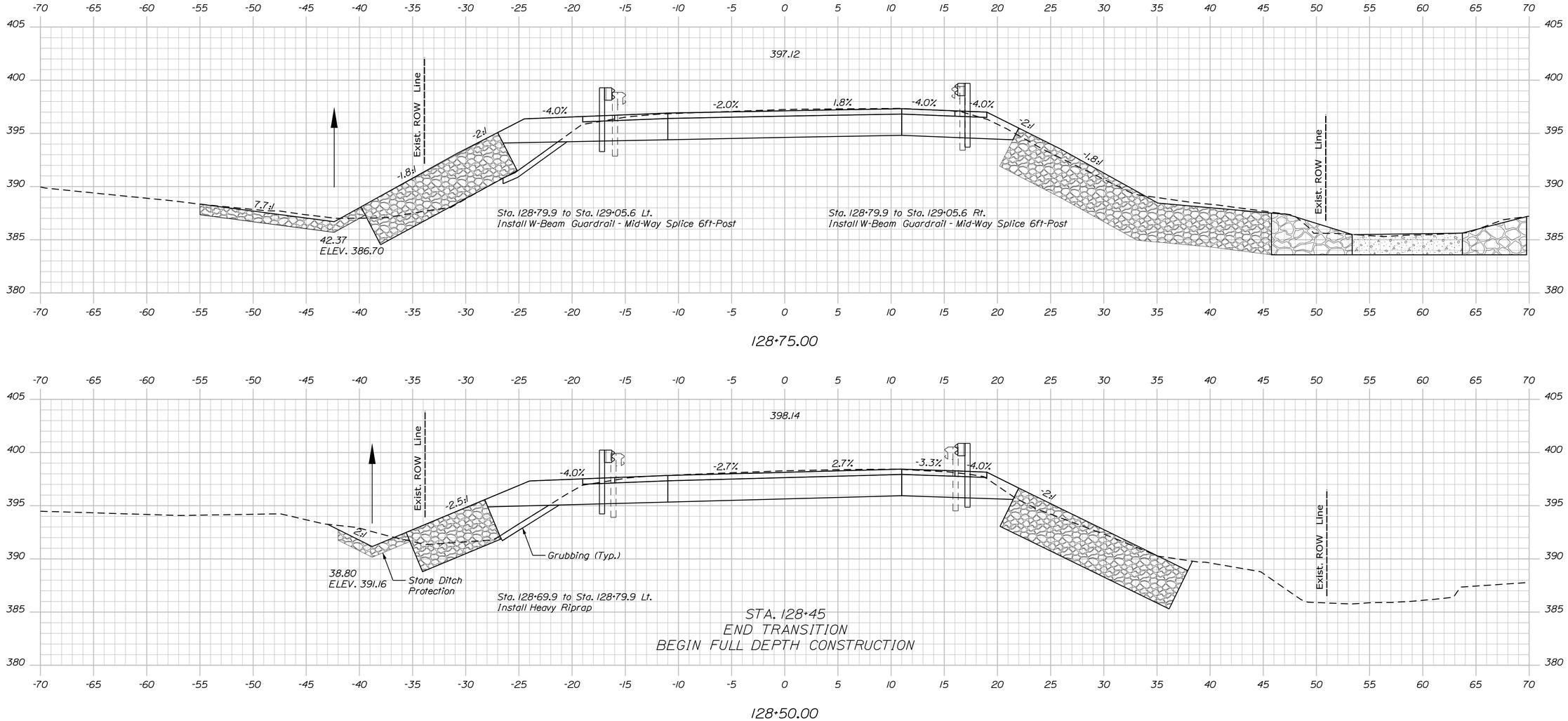
CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

CROSS SECTIONS

SHEET NUMBER

14

OF 26



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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424 BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lugten	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

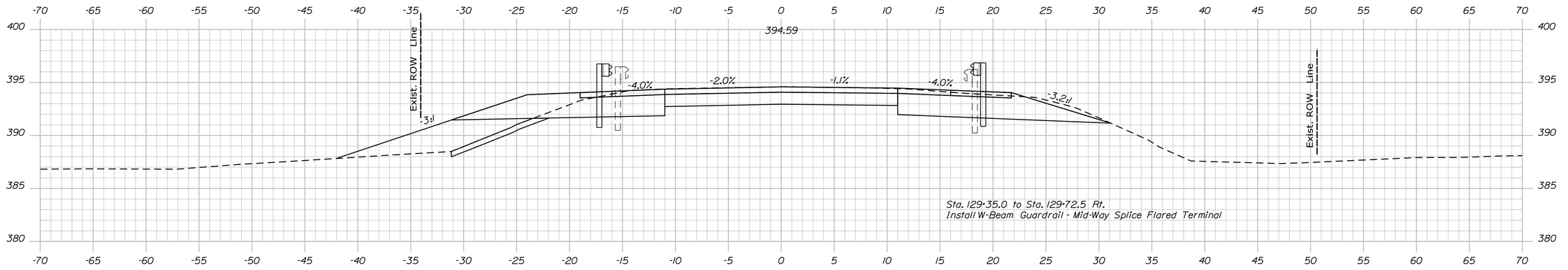
CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

CROSS SECTIONS

SHEET NUMBER

15

OF 26



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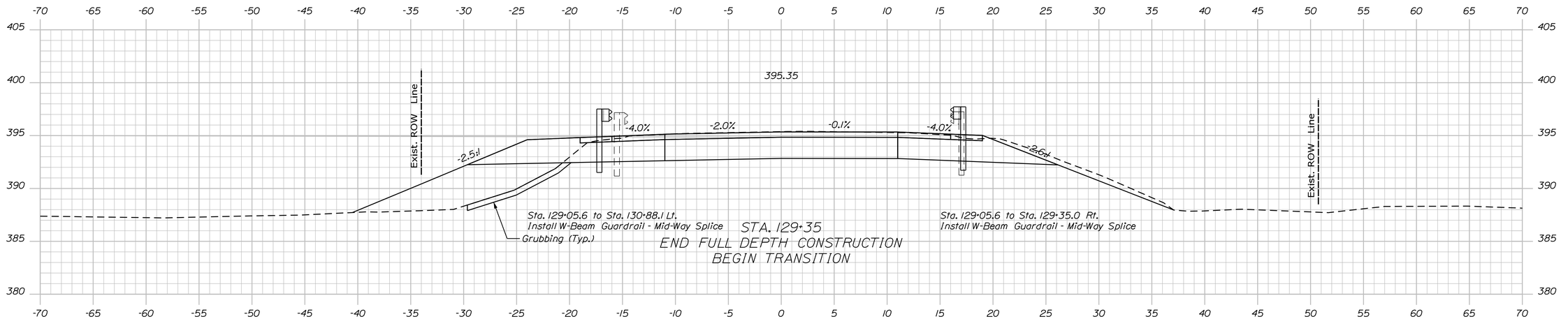

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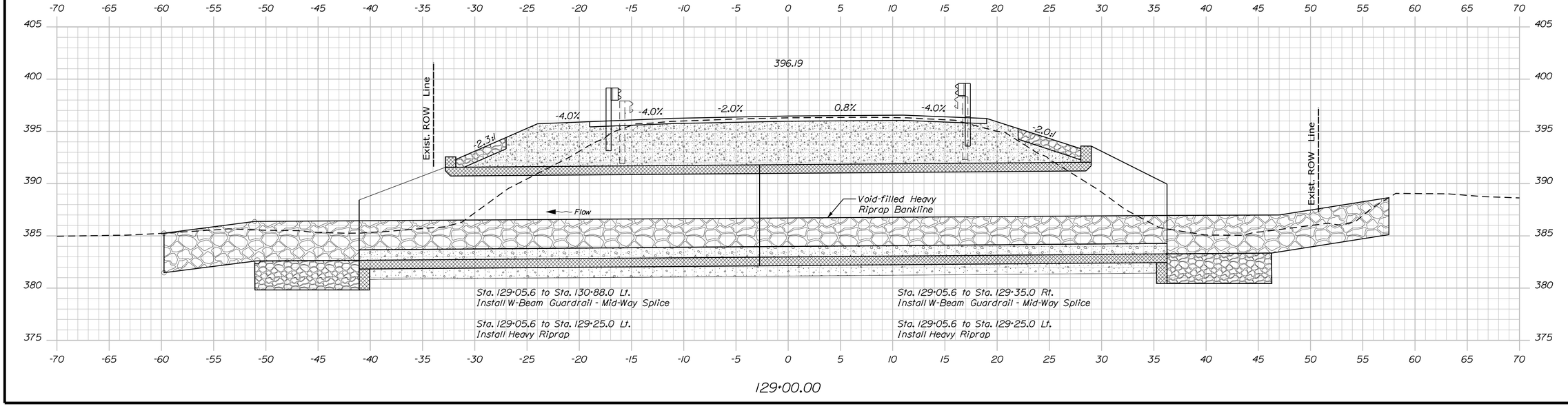


129+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

CROSS SECTIONS

SHEET NUMBER

16

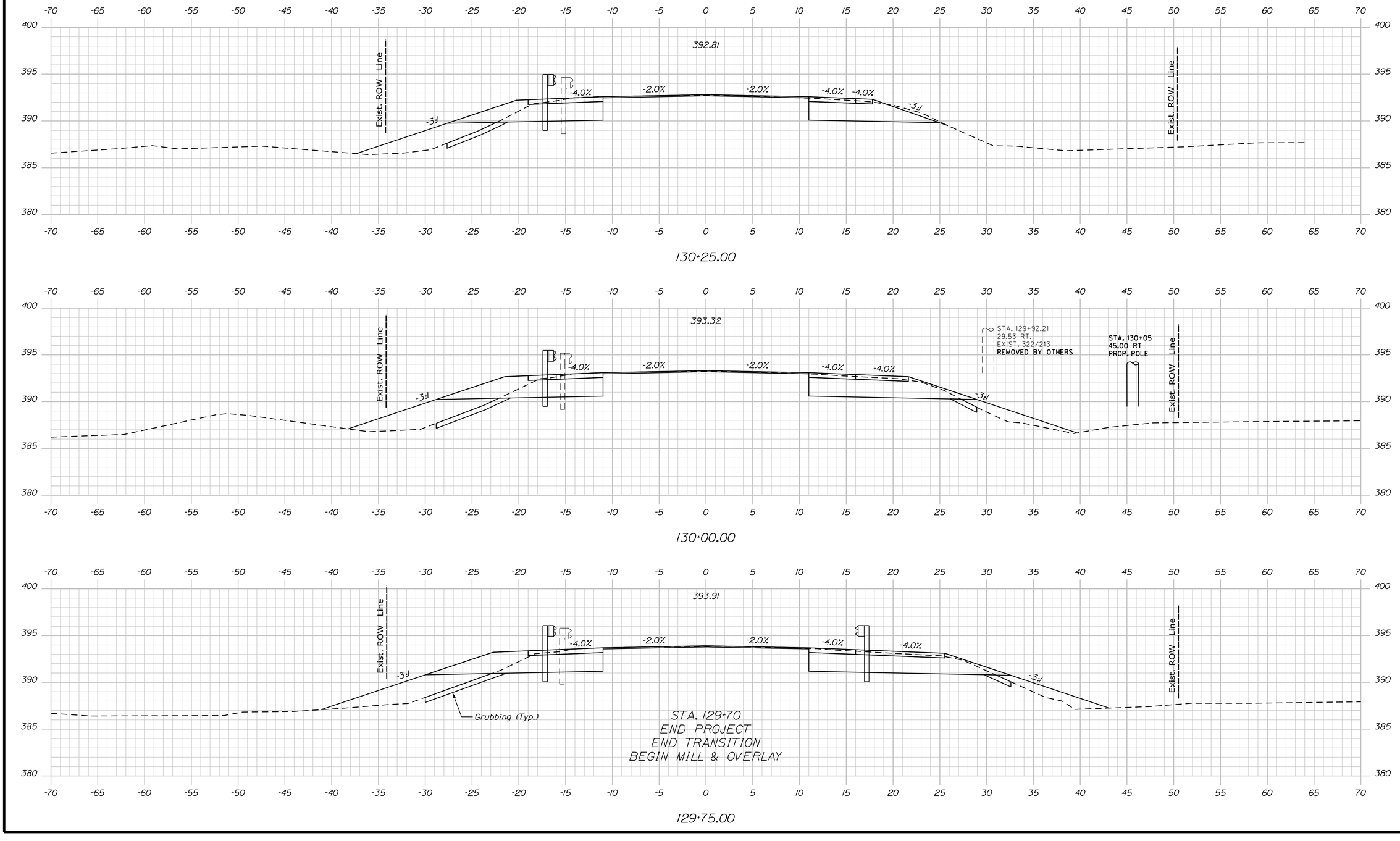
OF 26

Date:9/29/2025

Username:

Division: BRIDGE

Filename: ...\ustn\016_Xsect_Draft.dgn



Date:9/29/2025

Username:

Division: BRIDGE

Filename: ...\ustn\017_Xsect_Draft.dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lugten	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

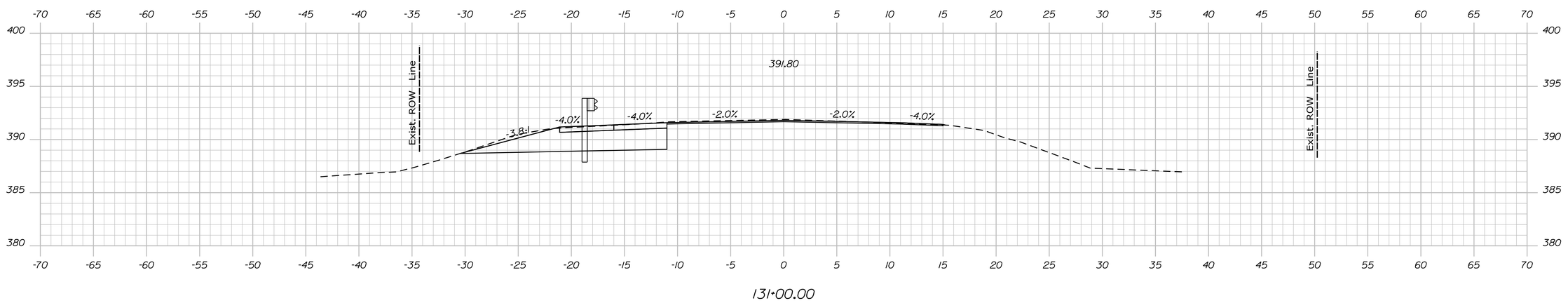
CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

CROSS SECTIONS

SHEET NUMBER

17

OF 26



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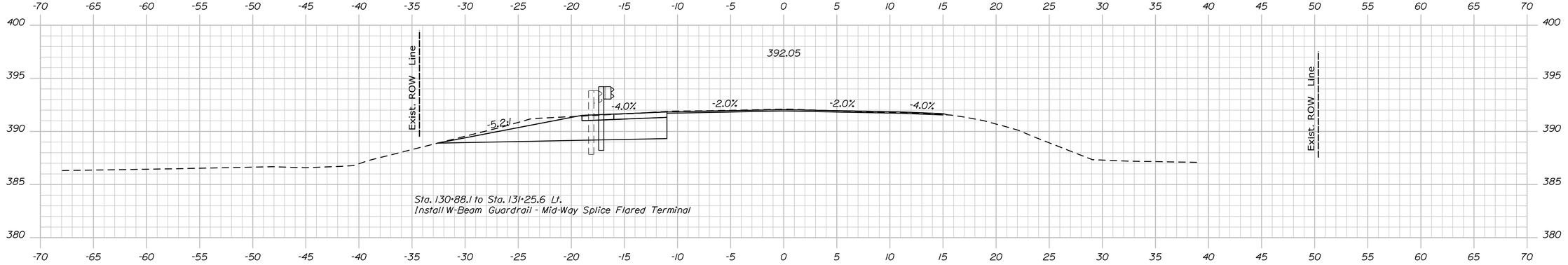

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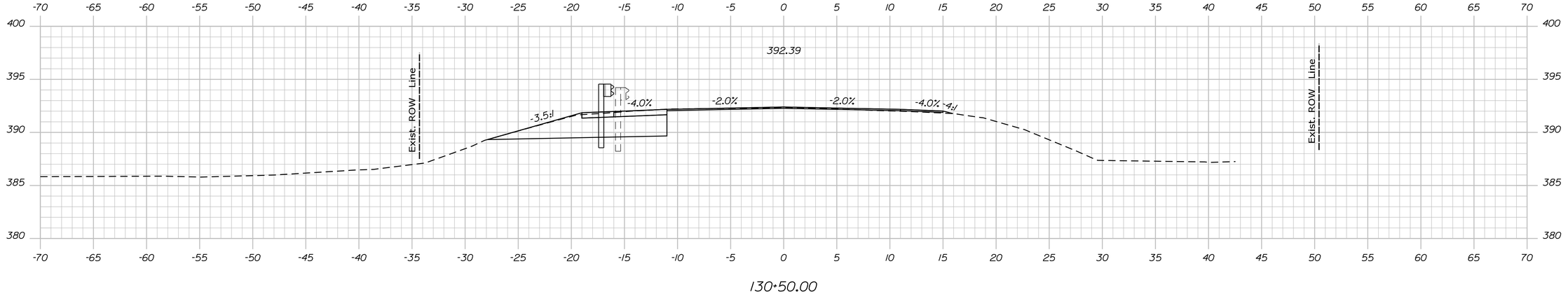


130+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER	B. Nichols	
DESIGN-DETAILED	R. Trudeau	09\25
CHECKED-REVIEWED	S. Beaumont	09\25
DESIGN2-DETAILED2	R. Lyglen	09\25
DESIGN3-DETAILED3		
REVISIONS 1	M. Smith	09\25
REVISIONS 2	N. Rigby	09\25
REVISIONS 3	M. Smith	09\25
REVISIONS 4		
FIELD CHANGES		

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

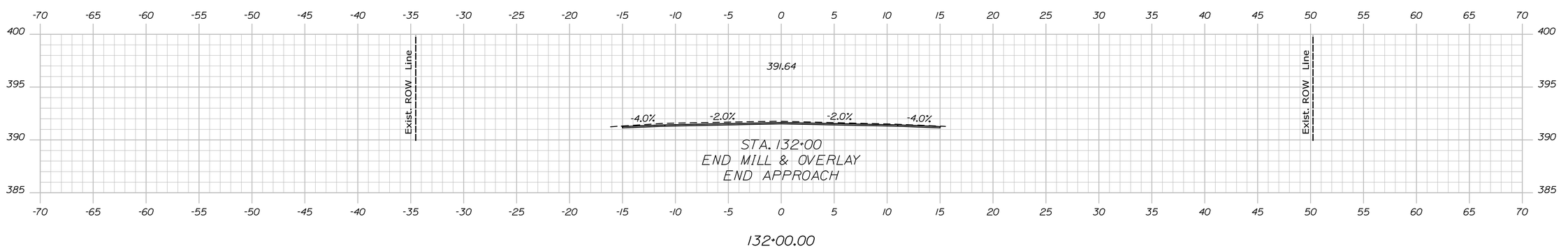
CROSS SECTIONS

SHEET NUMBER

18

OF 26

Filename: ...\ustn\018_Xsect_Draft.dgn Division: BRIDGE Username: Date:9/29/2025



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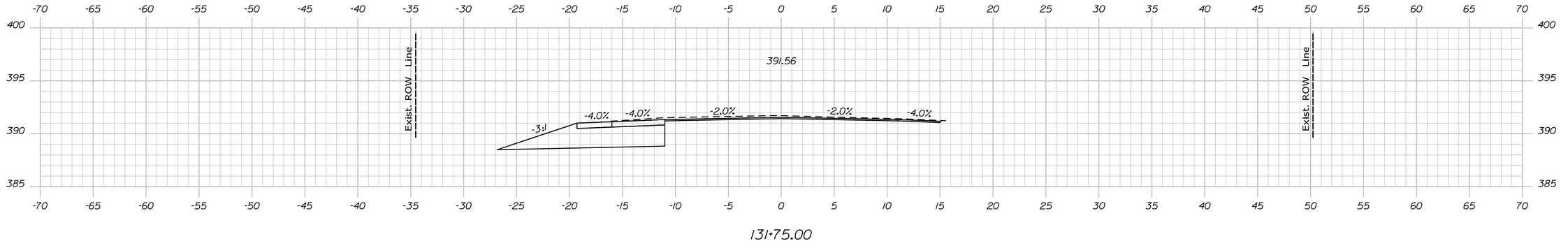

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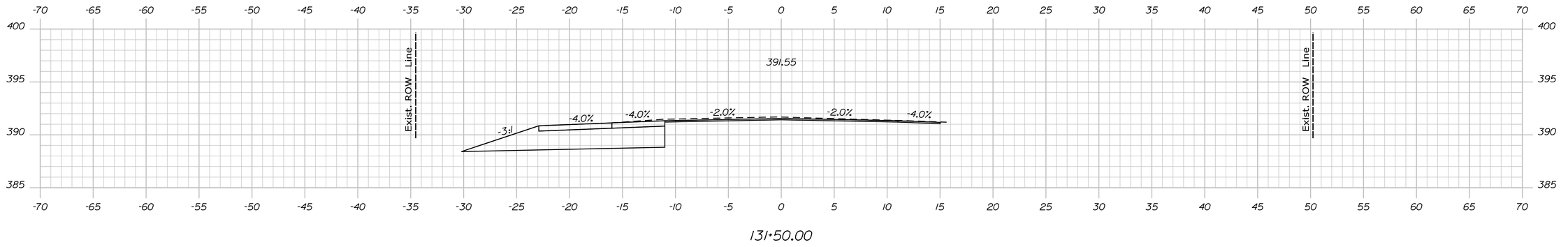

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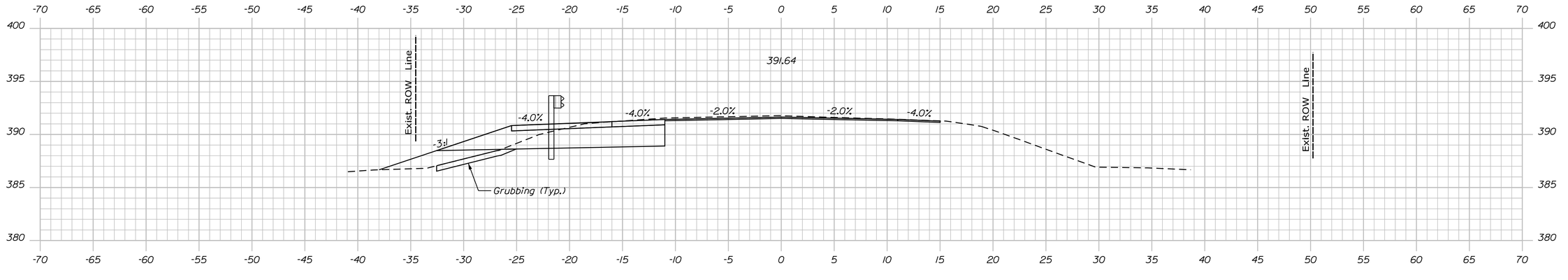


131+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

	BY	DATE
B. Nichols	M. Smith	09\25
R. Trudeau	N. Rigby	09\25
S. Beaumont	M. Smith	09\25
R. Lupien		

PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN2-DETAILED2
DESIGN3-DETAILED3

REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

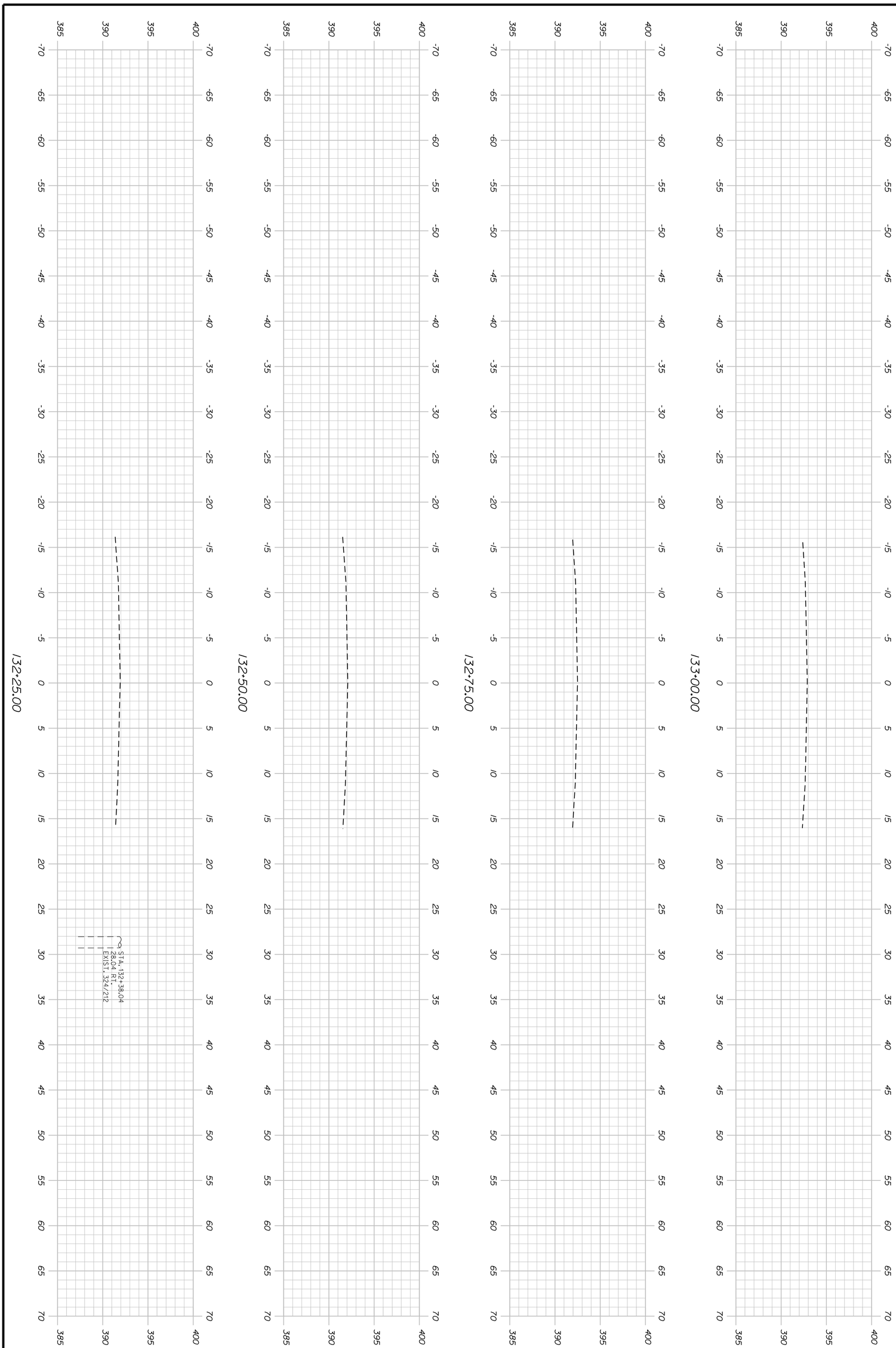
CROSS SECTIONS

SHEET NUMBER

19

OF 26

Date:9/29/2025 Username: Division: BRIDGE Filename: ...\ustn\019_Xsect_Draft.dgn



SHEET NUMBER 20 OF 26

CROCKER BROOK BRIDGE
CROCKER BROOK
DIXMONT PENOBSCOT COUNTY

CROSS SECTIONS

		BY	DATE
PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

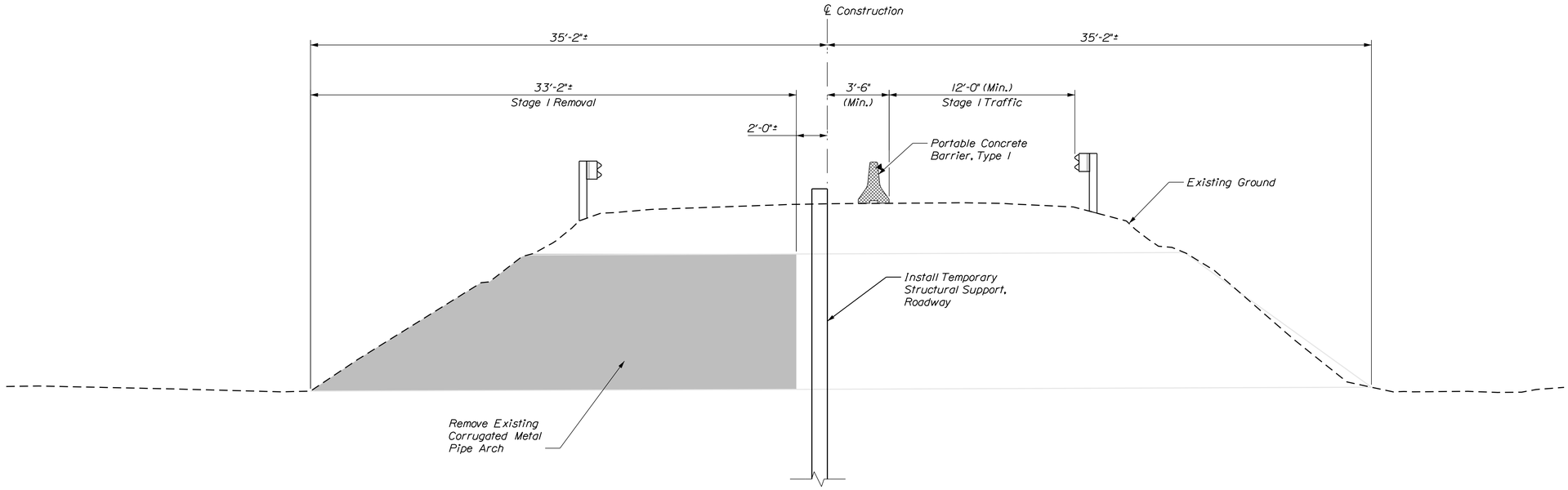
P.E. NUMBER

DATE

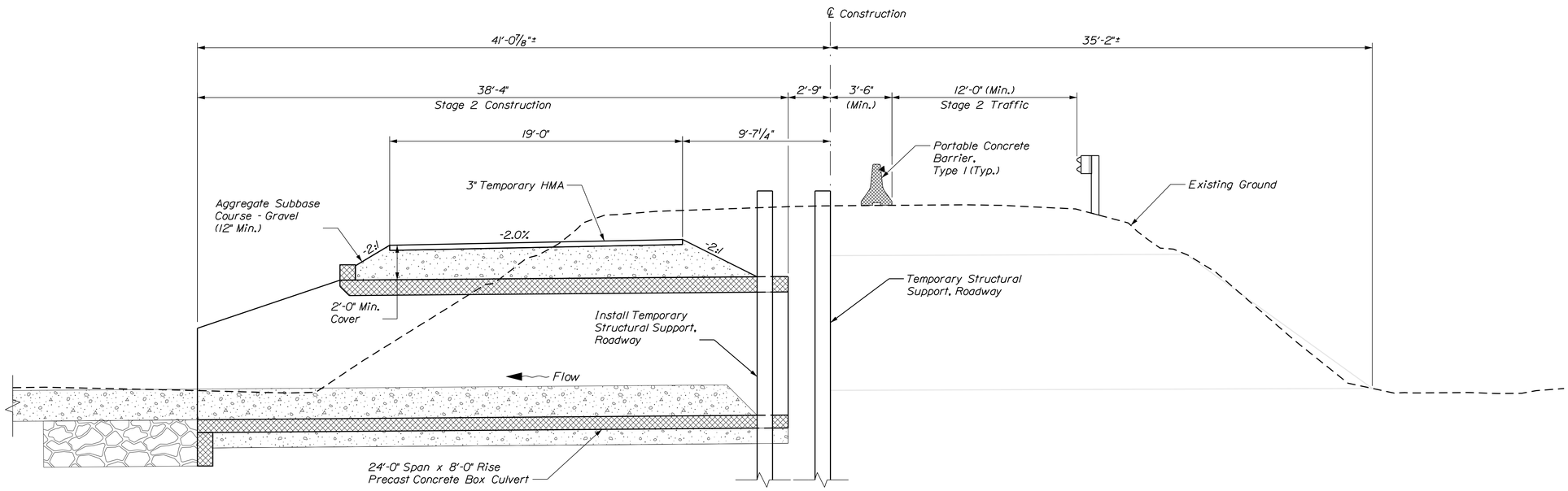
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

BRIDGE NO. 5424 **WIN 26097.00** BRIDGE PLANS



STAGE 1



STAGE 2

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols	BY	DATE
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

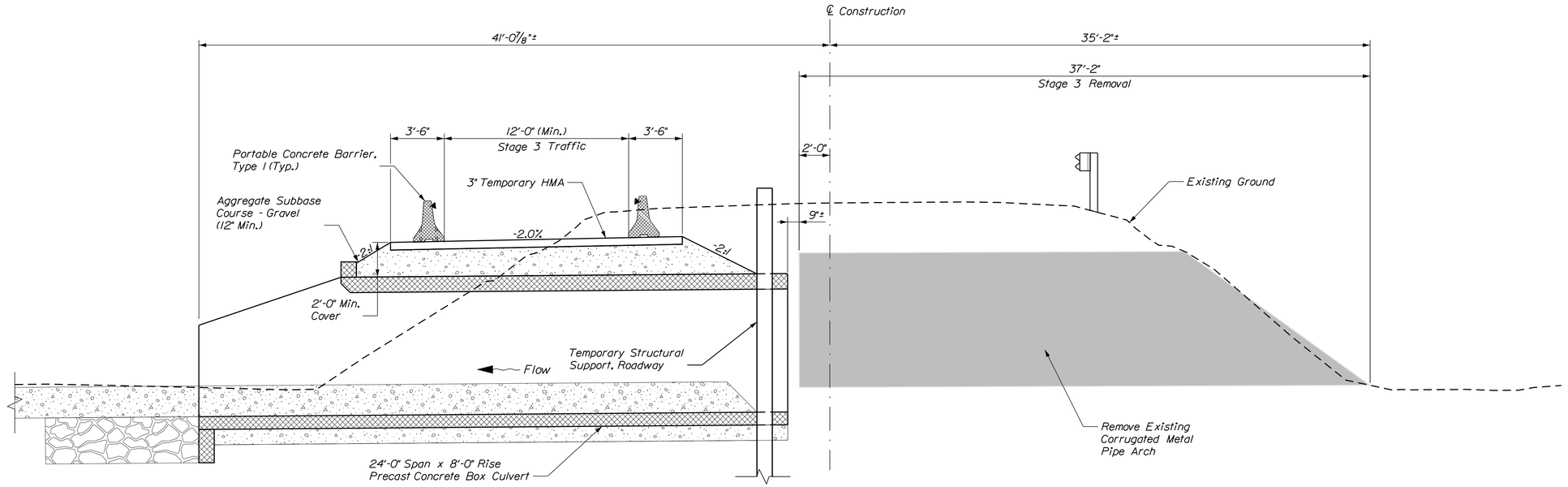
STAGED CONSTRUCTION 1

SHEET NUMBER

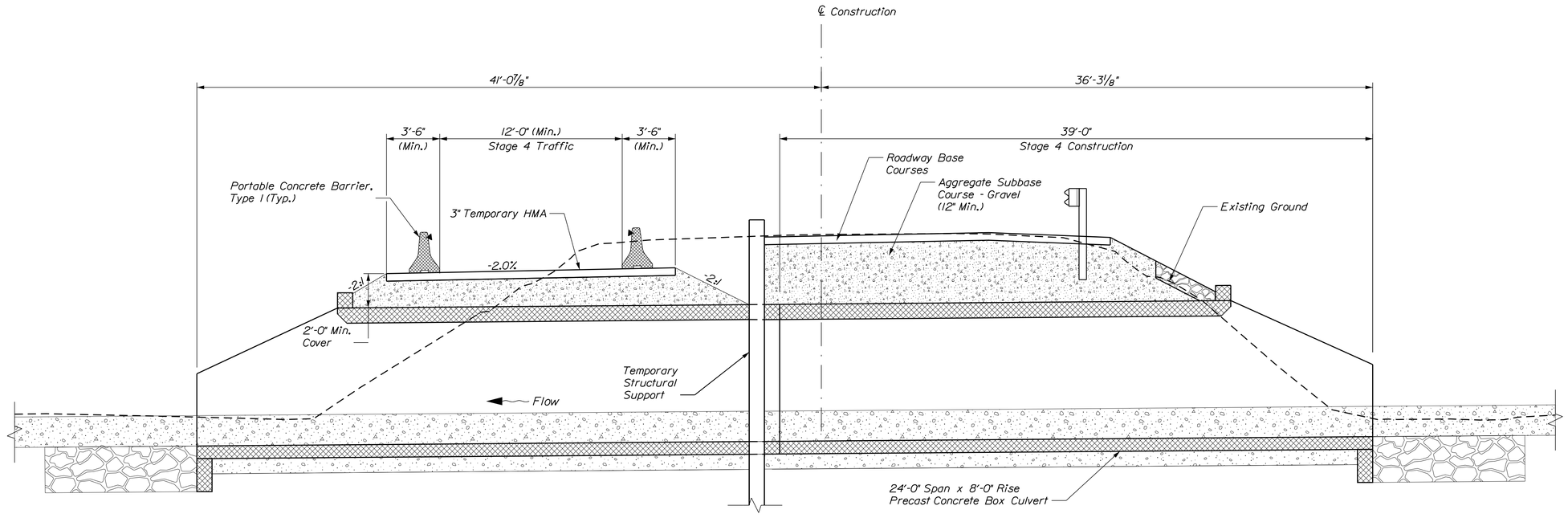
21

OF 26

Filename: ...\ustn\021_StogeConstr.dgn Division: BRIDGE Username: Date:9/29/2025



STAGE 3



STAGE 4

Filename: ...\us1n\022_StageConstr.dgn Division: BRIDGE Username: Date:9/29/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424 BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

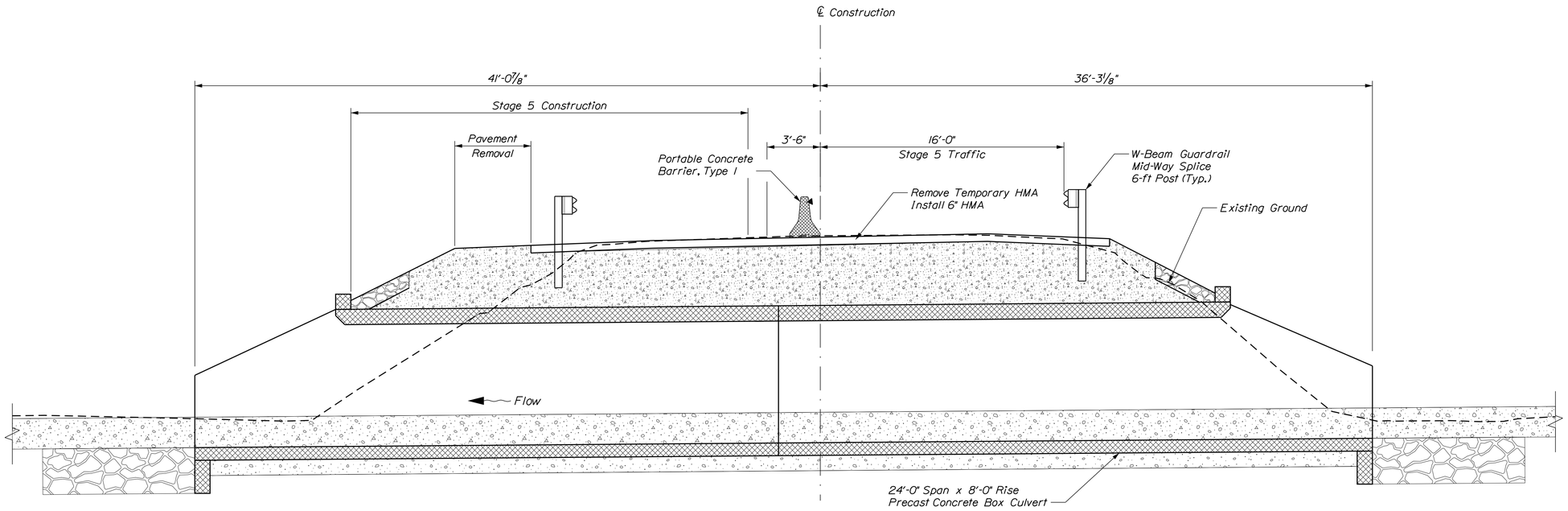
CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

STAGED CONSTRUCTION 2

SHEET NUMBER

22

OF 26



STAGE 5

PROJ. MANAGER	B. Nichols	BY	DATE
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

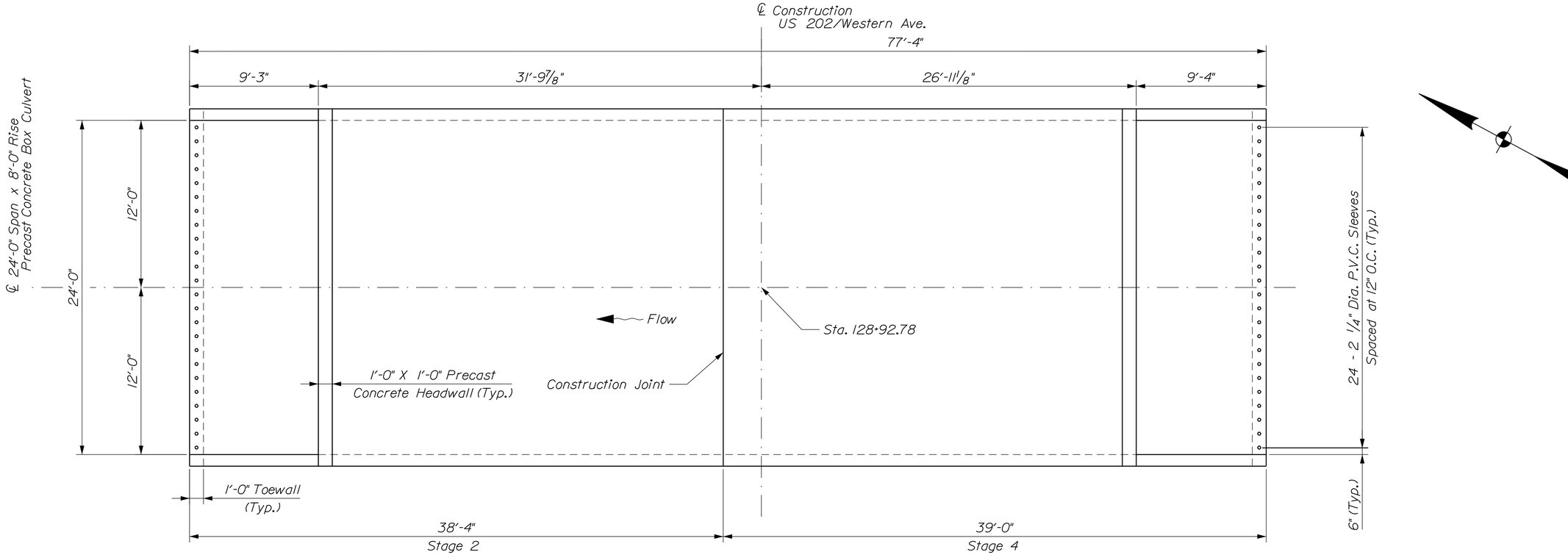
STAGED CONSTRUCTION 3

SHEET NUMBER

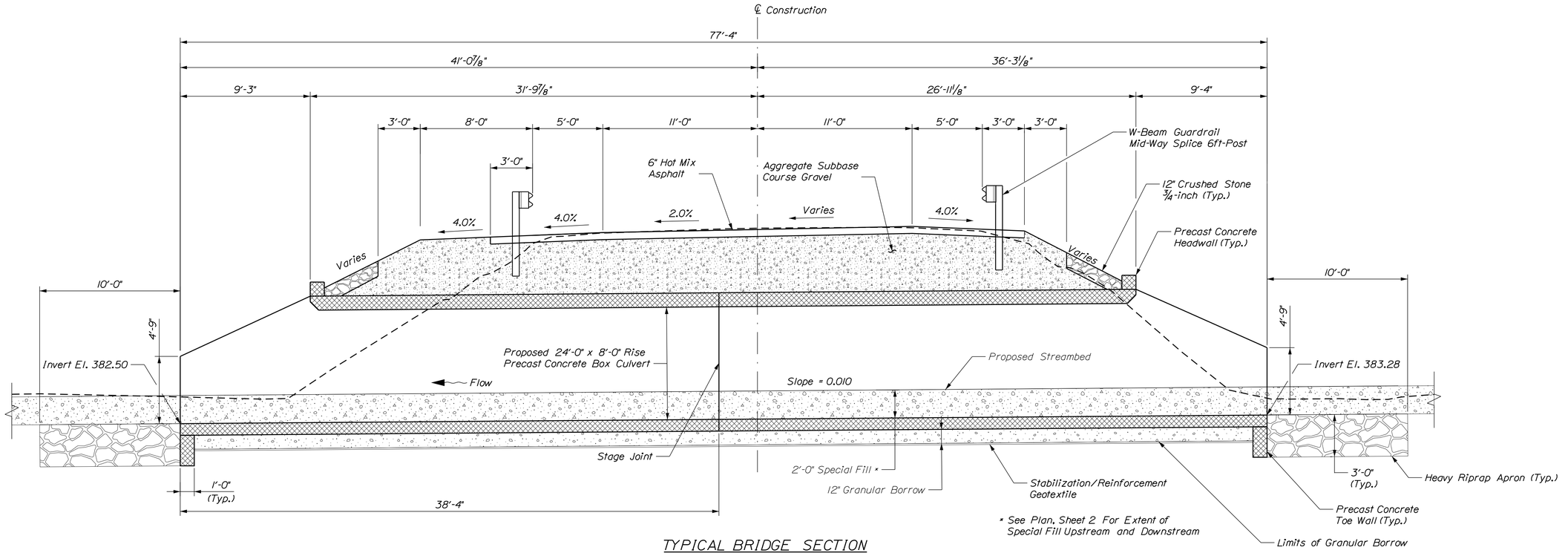
23

OF 26

Filename: ...\ustin\023_StageConstr.dgn Division: BRIDGE Username: Date:9/29/2025



CONCRETE BOX PLAN



TYPICAL BRIDGE SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424 BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

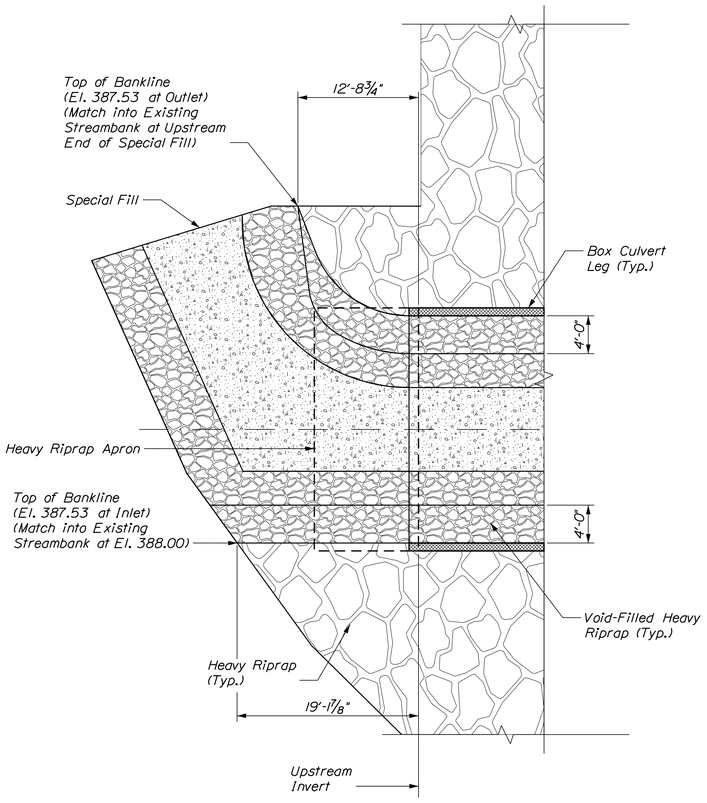
CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

PRECAST CONCRETE BOX DETAILS 1

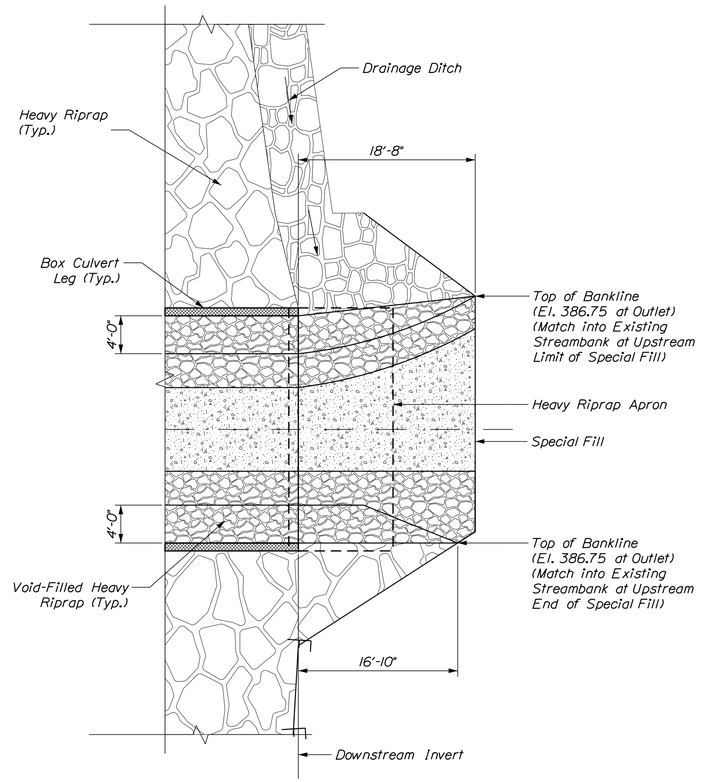
SHEET NUMBER

24

OF 26



UPSTREAM BANKLINES



DOWNSTREAM BANKLINES

PRECAST CONCRETE BOX NOTES

1. The precast units shall be designed to carry construction loadings with a minimum fill cover of 2 feet over the top of the units.

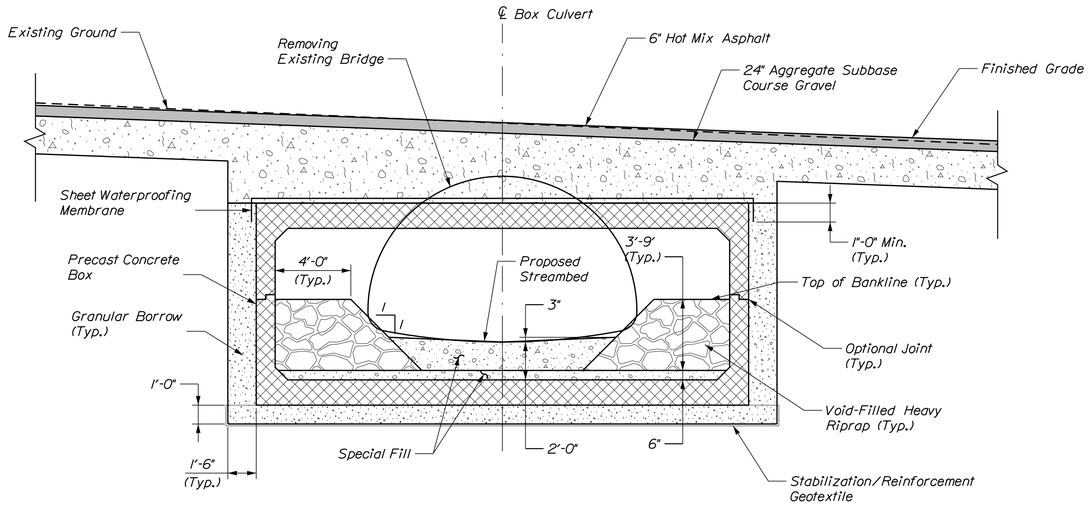
2. The construction, handling, and assembly of the precast units shall be in accordance with Special Provision Section 534 Precast Structural Concrete, and the Manufacturer's Specifications as applicable.

3. In accordance with Standard Specification Subsection 534.04, Precast Structural Concrete, the Contractor shall submit design calculations for the precast structure to the Department for review. The calculations shall demonstrate that the factored bearing pressures at the Strength Limit and Service Limits States shall not exceed the factored geotechnical bearing resistances provided in the project geotechnical design report.

4. Install waterproofing membrane over the top and to 12 inches down the exterior sides of the precast units. Completely fill the exterior face of the joints between precast units and cover with a minimum 12-inch-wide joint wrap. All materials shall be selected from the Department QPL. Joint wrap will be incidental to related pay items.

5. The Contractor shall maintain the excavation so that the box culvert and the culvert bedding layer are installed in-the-dry. Groundwater shall be controlled by pumping from sumps or other dewatering systems selected by the Contractor. Cofferdams may be required to divert flow away from the excavation during construction. Where excavation side slopes are cut back, excavation slope geometries shall be in accordance with OSHA regulations, or flatter.

6. The Stabilization/Reinforcement Geotextile shall be deployed onto the prepared subgrade prior to installing the culvert bedding material. Adjoining sections of the geotextile shall be overlapped by a minimum of 2 feet. The culvert bedding material shall be placed in maximum 6-inch-thick lifts and each lift compacted with several passes of a walk-behind roller or large plate compactor.



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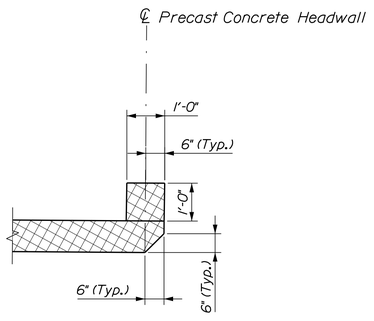
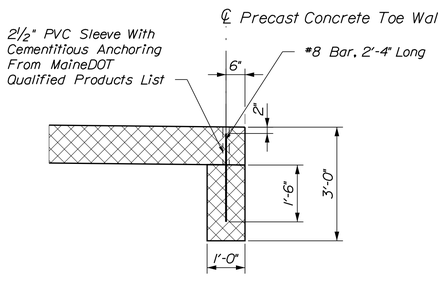


PRECAST CONCRETE HEADWALL DETAIL



PRECAST CONCRETE TOE WALL DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26097.00

WIN 26097.00

BRIDGE NO. 5424

BRIDGE PLANS

PROJ. MANAGER	B. Nichols		
DESIGN-DETAILED	R. Trudeau	M. Smith	09\25
CHECKED-REVIEWED	S. Beaumont	N. Rigby	09\25
DESIGN2-DETAILED2	R. Lupien	M. Smith	09\25
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

CROCKER BROOK BRIDGE
CROCKER BROOK
PENOBSCOT COUNTY
DIXMONT

PRECAST CONCRETE BOX DETAILS 2

SHEET NUMBER

25

OF 26

Filename: ...\Bentley\us1n\025_Btypical.dgn Division: BRIDGE Username: Date:9/29/2025

PLAN LEGEND

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

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

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

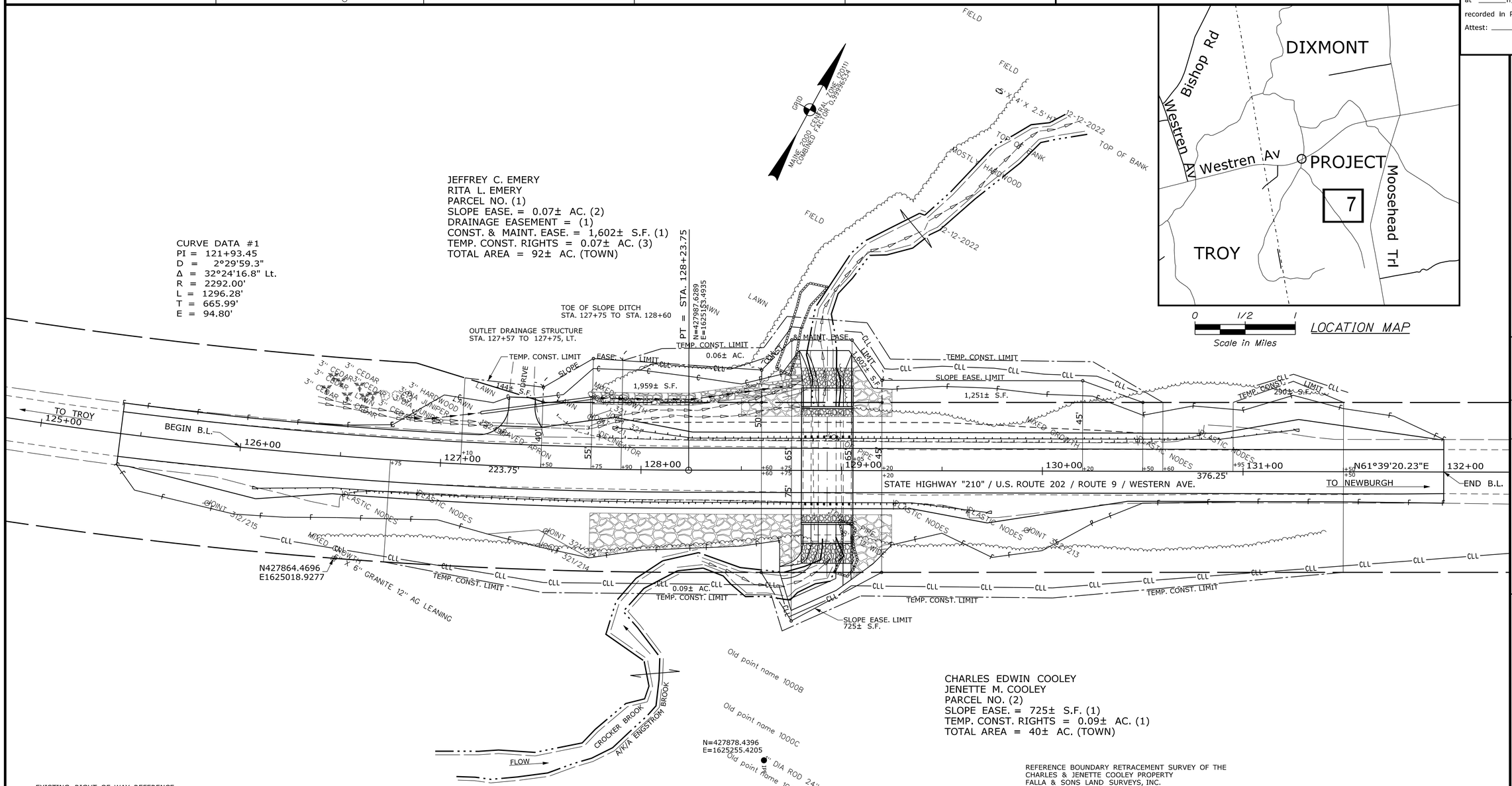
STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and
recorded in Plan Bk _____, Pg._____
Attest: _____
REGISTER

0 1/2 1
Scale in Miles
LOCATION MAP

JEFFREY C. EMERY
RITA L. EMERY
PARCEL NO. (1)
SLOPE EASE. = 0.07± AC. (2)
DRAINAGE EASEMENT = (1)
CONST. & MAINT. EASE. = 1,602± S.F. (1)
TEMP. CONST. RIGHTS = 0.07± AC. (3)
TOTAL AREA = 92± AC. (TOWN)

CURVE DATA #1
PI = 121+93.45
D = 2°29'59.3"
Δ = 32°24'16.8" Lt.
R = 2292.00'
L = 1296.28'
T = 665.99'
E = 94.80'



CHARLES EDWIN COOLEY
JENETTE M. COOLEY
PARCEL NO. (2)
SLOPE EASE. = 725± S.F. (1)
TEMP. CONST. RIGHTS = 0.09± AC. (1)
TOTAL AREA = 40± AC. (TOWN)

REFERENCE BOUNDARY RETRACEMENT SURVEY OF THE
CHARLES & JENETTE COOLEY PROPERTY
FALLA & SONS LAND SURVEYS, INC.
4/27/2006
P.C.R.D. PLAN FILE NO. 2006-97

EXISTING RIGHT OF WAY REFERENCE

S.H.C. FILE NO. 10-105, SHEETS 1 & 2
MARCH 1952

P.C.R.D. PLAN FILE 19, PAGES 68 AND 69

CROCKER BROOK BRIDGE
OVER
CROCKER BROOK

BRIDGE NO. 5424 WIN 026097.00

TECH	CHECKED
C.D.P.	D.H.
C.D.P.	P.N.S.
C.D.P.	J.D.F.

ITEM	
EXISTING CONDITION PLAN	
FINAL RIGHT OF WAY	
AREAS	

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

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	05-12-25	17485	233

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE OF MAINE
GUY L. LAIDD 2484
PROFESSIONAL LAND SURVEYOR

To the best of my knowledge and belief the Highway Right of Way lines depicted hereon are based upon a survey conforming to the Standards of Practice promulgated by the Maine Board of Licensure for Professional Land Surveyors 02-360 CMR, Chapter 90; Exceptions: (1) No separate survey report, (2) Monumentation only as shown on plan. ~~See sheet 2 of this plan set for coordinates.~~ (3) Other boundary lines, including lines between abutters are approximate and for general reference purposes only.

STATE HIGHWAY "210"
U.S. ROUTE 202 / ROUTE 9 / WESTERN AVENUE
DIXMONT PENOBSCOT COUNTY
FEDERAL AID PROJECT NO. 2609700

MARCH 2025	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 10-542
SCALE 1" = 25'	SHEET 1 OF 1	

SHEET NUMBER
26
OF 26

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