STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

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

DESIGN LOADING

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

TRAFFIC DATA

Current (2026) AADT	4330
Future (2046) AADT	4760
DHV - % of AADT	9%
Design Hour Volume	428
Heavy Trucks (% of AADT)	11%
Heavy Trucks (% of DHV)	11%
Directional Distribution (% of DHV)	51%
18 kip Equivalent P 2.0	567
18 kip Equivalent P 2.5	540
Design Speed (mph)	55

MATERIALS

Concrete:
- Fill ..... "Fill"
- All Other ..... Class "A"

Reinforcing:
- Plain Reinforcing Steel ..... ASTM A615, Grade 60
- Low-Carbon Chromium Steel: ..... ASTM A1035, Type CS, Grade 100

Structural Steel:
- All Material (except as noted) ..... ASTM A709, Grade 50
- High Strength Bolts ..... ASTM F3125, Grade A325, Type 1

BASIC DESIGN STRESSES

Concrete:
- Class "A" ..... f 'c = 4,000 psi

Reinforcing:
- Plain Reinforcing Steel ..... f y = 60,000 psi
- Low-Carbon Chromium Steel: ..... f y = 100,000 psi

Structural Steel:
- ASTM A709, Grade 50 ..... F y = 50,000 psi
- ASTM F3125, Grade A325 ..... F μ = 120,000 psi

PRESQUE ISLE
AROOSTOOK COUNTY
CONANT ROAD BRIDGE
OVER
CONANT ROAD
PRESQUE ISLE BYPASS
BRIDGE NO. 6491

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PROJECT LOCATION:	Conant Road Bridge (#6491); Presque Isle Bypass over Conant Road Lat./Long. 46°40'29.51" N 67°58'15.97" W
PROGRAM AREA:	Highway
OUTLINE OF WORK:	New bridge construction

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED | DATE
COMMISSIONER:
CHIEF ENGINEER:

PROJECT INFORMATION

PROGRAM	HIGHWAY		
PROJECT MANAGER	L. ROWE		
DESIGNER	E. WALTON		
CONSULTANT	VHB		
PROJECT RESIDENT			
CONTRACTOR			
PROJECT COMPLETION DATE			

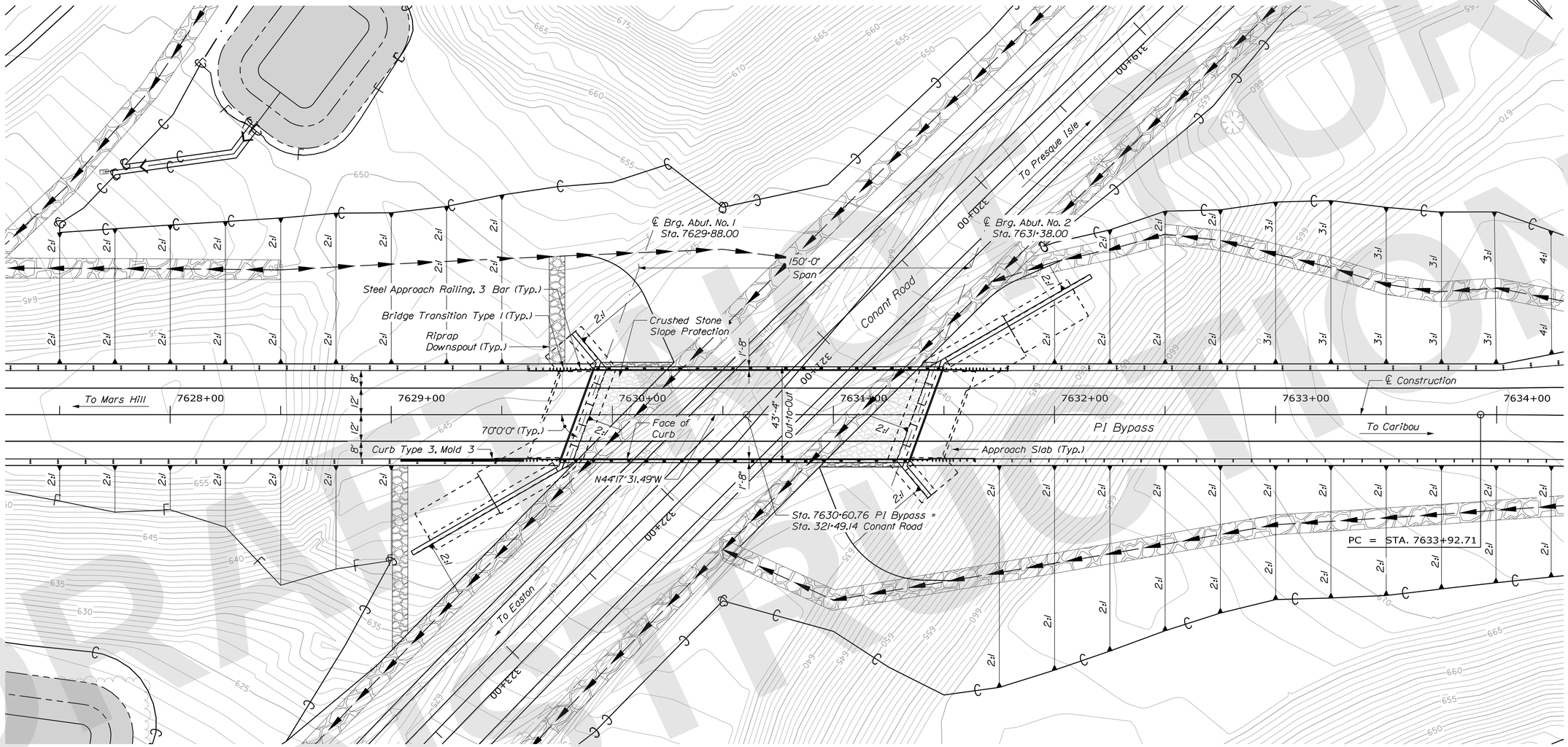
WIN 006462.92
HPP-6462(920)

PRESQUE ISLE
CONANT ROAD BRIDGE

TITLE SHEET

SHEET NUMBER
B-97
631
OF 747

Filename: ...\MST\A\Conant Rd\B40_Title.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



PLAN

25 0 25 50

Scale of Feet

BRIDGE CONSTRUCTION NOTES

1. For additional information and General Notes, refer to Highway Plans

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

3. Place a 24 inch wide strip of Temporary Erosion Control Blanket on the sideslopes along the berm and behind the wingwalls.

4. 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.

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

All exposed surfaces of concrete curbs.
Fascias down to the drip notch.
All exposed abutment and wingwall faces.
Top of wingwalls and to one foot below the ground of vertical walls.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	JEP	JAH	08/2025
CHECKED-REVIEWED	ELW	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

BRIDGE PLAN

SHEET NUMBER
B-98
632
OF 747

PRELIMINARY NOT FOR CONSTRUCTION

Filename: B41_GenPlan.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

Filename: ...\Conant Rd\xx4_Profile_01.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

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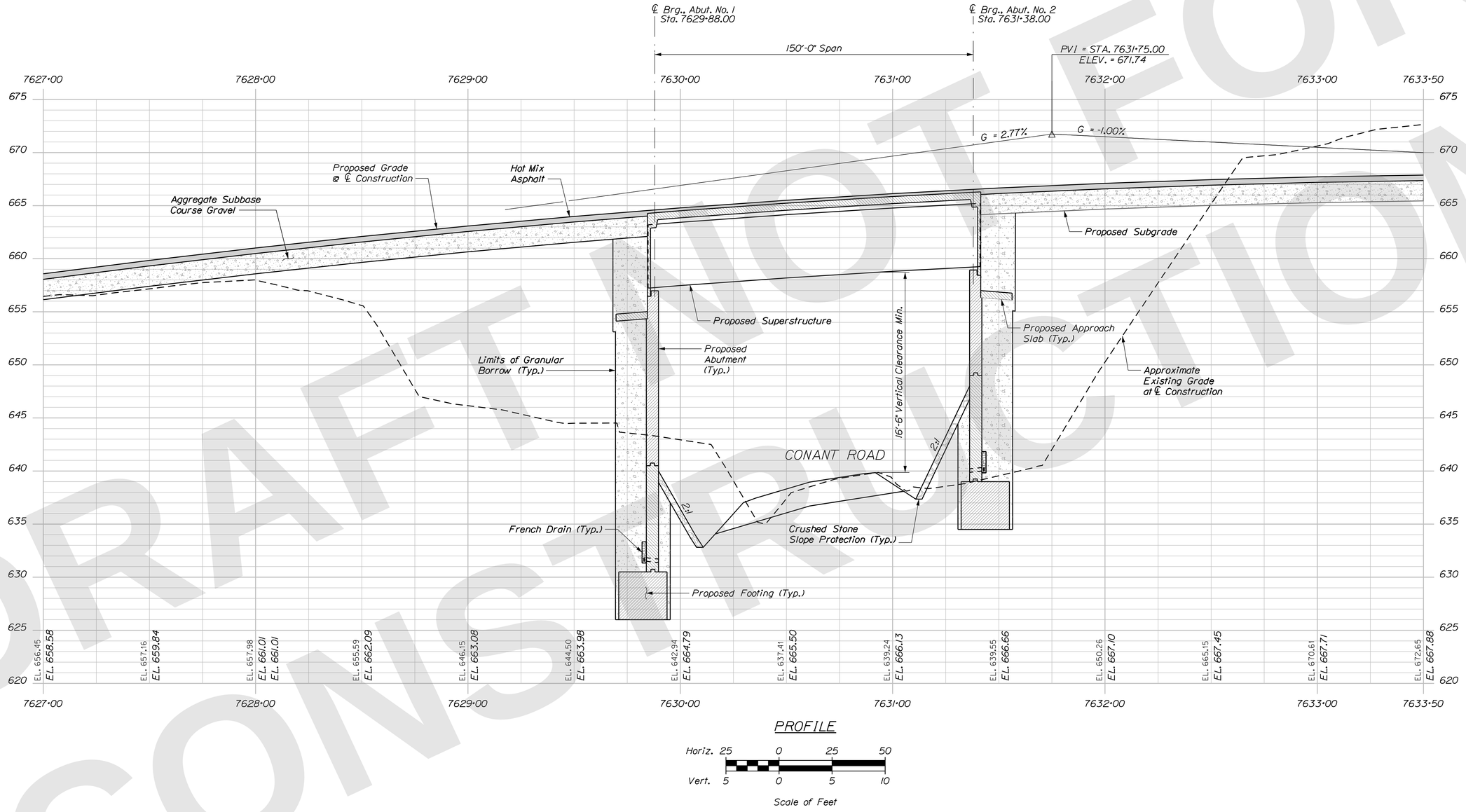


PROFILE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

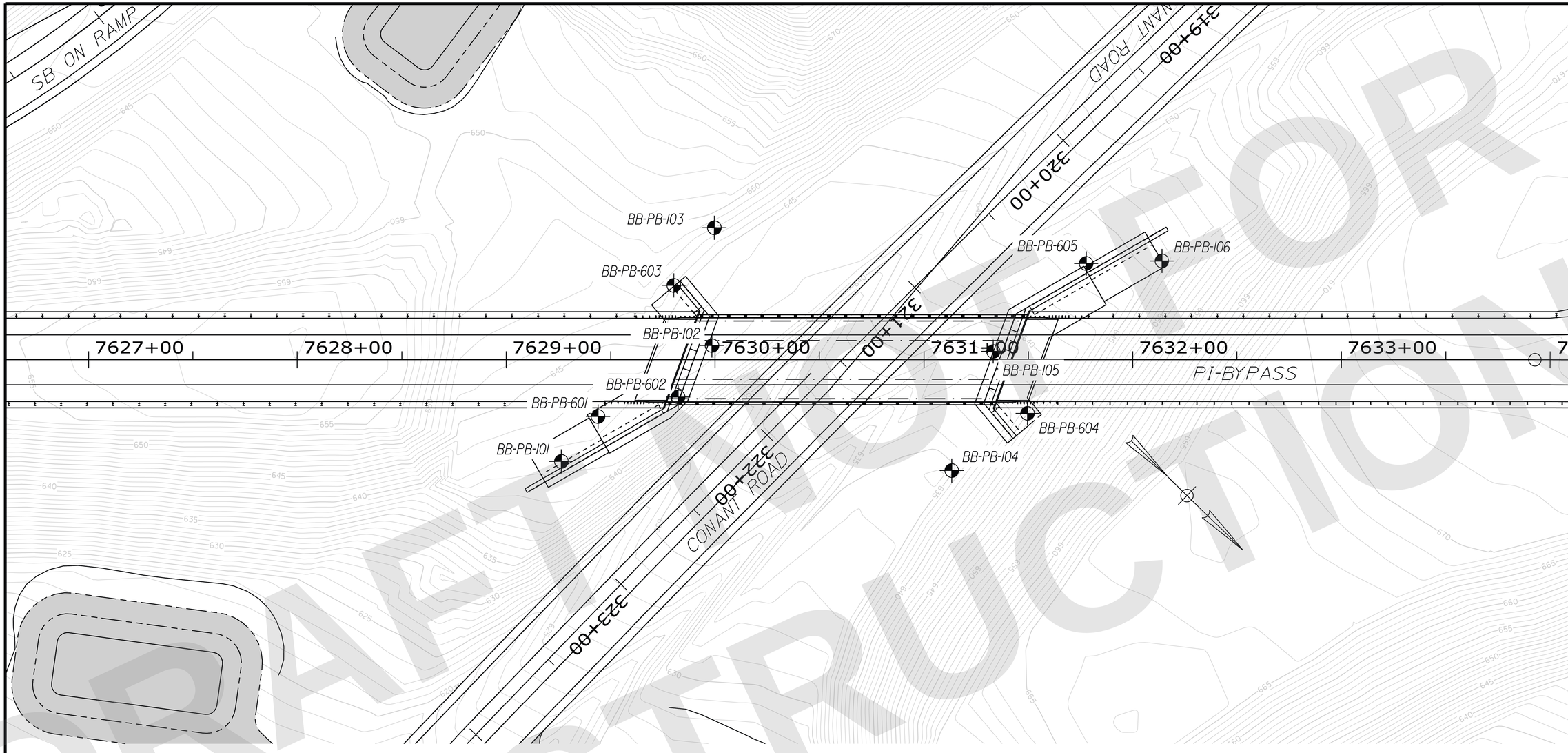
	BY	DATE
R.M.	JAH	08/2025
	SMH	08/2025

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

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

BRIDGE PROFILE

SHEET NUMBER
B-99
633
OF 747



NOTES

1) Base map developed from electronic files (Contours.dgn, Alignments.dgn, and Highway.dgn) provided by VHB on July 14, 2025.

2) The as-drilled locations of the BB-PB-100 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings050714.dgn) on May 28, 2014.

3) The as-drilled locations of the BB-PB-600 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings_112023) on November 20, 2023.

BORING LOCATION PLAN LEGEND

BB-PB-106 — Location and designation of BB-PB-100 series borings performed by Maine Test Boring between April 7 and April 9, 2014 and observed by GZA personnel.

BB-PB-606 — Location and designation of BB-PB-600 series borings performed by New England Boring Contractors of Hermon, Maine between October 12 and October 17, 2023 and observed by GZA personnel.

PLAN

25 0 25 50

Scale in Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
AROOSTOOK COUNTY
PRESQUE ISLE

BORING LOCATION PLAN

PREPARED BY:

GZA

SHEET NUMBER

B-100

634

OF 747

Date: 7/29/2025

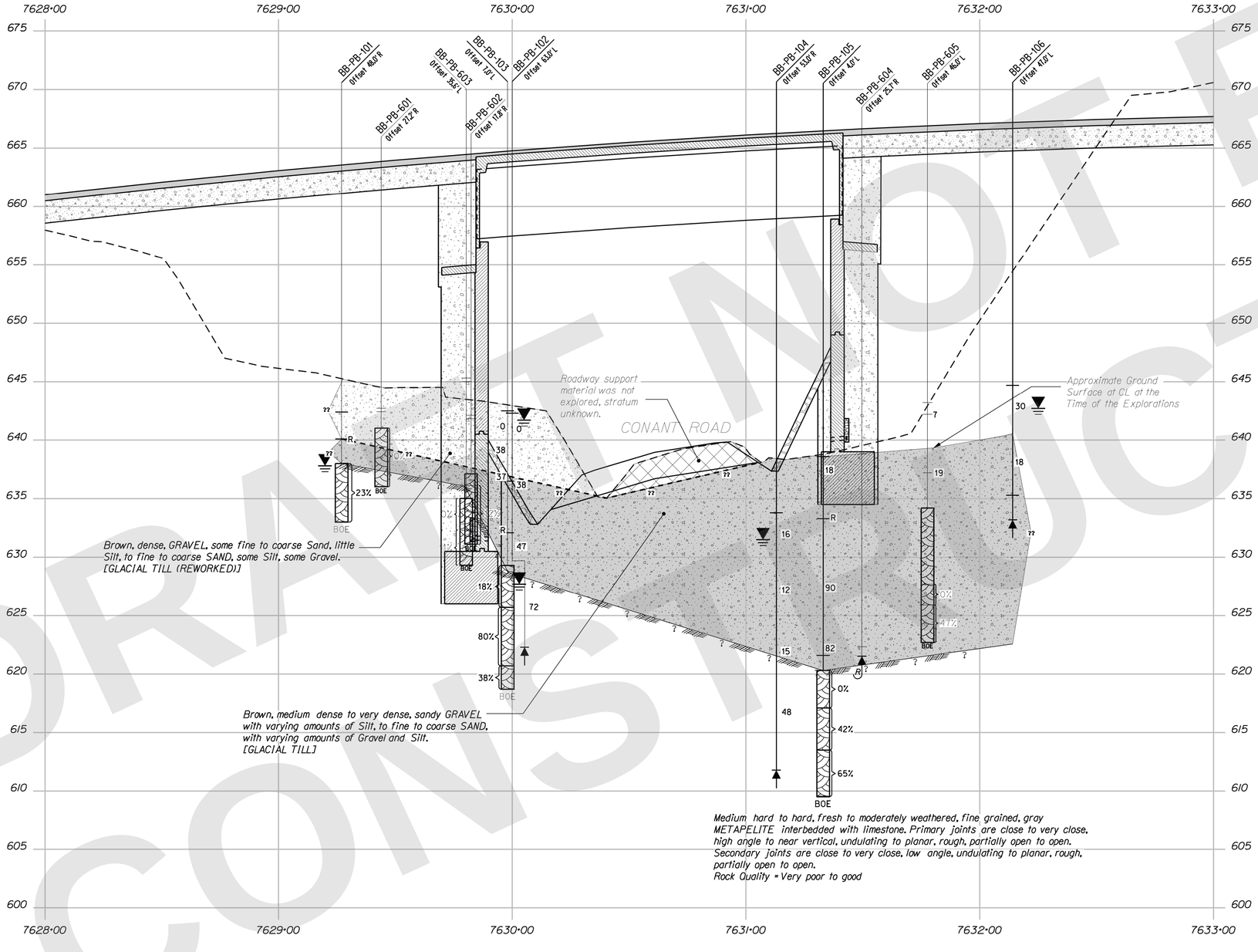
Username: common

Division: HIGHWAY

Filename: ...\Conant_BLP\Conant_BLP.dgn

DRAFT NOT FOR CONSTRUCTION

Filename: ...\ISPs\z_Conant-ISP_7.22.25.dgn Division: HIGHWAY Username: common Date:7/29/2025



INTERPRETIVE SUBSURFACE PROFILE

NOTES

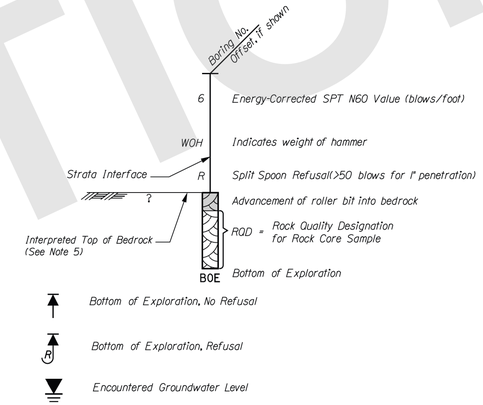
1) Profile map developed from electronic file provided by VHB on July 14, 2025 (z_Conant_Prof.dng)

2) The as-drilled locations of the BB-PB-100 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings050714.dgn) on May 28, 2014.

3) The as-drilled locations of the BB-PB-600 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings_112023.dgn) on November 20, 2023.

4) Top of rock is defined using either split spoon refusal prior to identification of bedrock by roller bit or coring, top of rock surface was interpolated to represent anticipated conditions at the baseline.

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



SCALE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

BRIDGE PLANS

WIN 006462.92

BRIDGE NO. 6491

R.M.	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED B.C.	E.T.	7/2025
CHECKED-REVIEWED A.B.	C.S.	7/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CONANT ROAD BRIDGE
OVER CONANT ROAD
AROOSTOOK COUNTY
PRESQUE ISLE

INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

B-101

635

OF 747

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Boring Logs sheets.dgn
Division: HIGHWAY
Username: common
Date:7/29/2025

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass
Segment: 2
Location: Presque Isle, Maine

Boring No.: BB-PB-101
WIN: 6462.91

Driller:	Maine Test Boring	Elevation (ft.):	642.4
Operator:	Mike Porter	Datum:	NAVD 88
Logged By:	Eric Boron	Rig Type:	Mobile B53 Track
Date Start/Finish:	4/7/14 - 4/7/14	Drilling Method:	Cased
Boring Location:	N1036011.8, E2272588.9	Casing ID/OD:	4"
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐
Auger ID/OD:		Sampler:	Split Spoon
Hammer Wt./Fall:	140/30	Core Barrel:	N22 Wireline
Water Level: *	4.6'	Rope & Cathead	☒

Definitions:
SS = Split Spoon Sample
MC = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WOH/C = Weight of Rods or Casing
WOR/C = Weight of Rods or Casing
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
Note: * Hammer Efficiency Factor=100/N-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results: AASHTO and Unified Class.
0											
	10	16/10	1.0 - 2.3	10-35-100/4"	R			640.4		Top 8": Olive-brown, moist, silty fine to coarse SAND, little Gravel, poorly graded.	
							HC	640.1		=GLACIAL TILL= (SM)	
										Bottom 4": Gray, dry fine to coarse GRAVEL, trace fine to coarse Sand, poorly graded, apparent rock fragments.	
										=POSSIBLE WEATHERED/FRACTURED BEDROCK= (GP)	
	R1	60/57	4.4 - 9.4	RQD = 23%			N62	638.0		Split spoon refusal at 2.3' (ID: 640.1'). Possible bedrock.	
5										Rock Quality = Very Poor	
										Medium hard, fresh, fine grained, gray METAFELITE interbedded with Limestone. Primary joints are close, moderately dipping, undulating, rough, discolored, partially open. Secondary joints are close, near vertical, undulating, rough, discolored, partially open. Frequent 1/32"-1/8" calcite/lime stringers.	
										Rock Quality = Very Poor	
										Rock Core Times: 2.25, 2.0, 2.25, 1.75 2.5	
10								633.0			
										Bottom of Exploration at 9.4 feet below ground surface.	
15											
20											
25											

Remarks:
1. Water level measured in hole 20 minutes after drilling completed. Casing was removed.

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-PB-101

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass, Phase 2
Location: Presque Isle, Maine

Boring No.: BB-PB-603
WIN: 006462.92

Driller:	New England Boring Contractors	Elevation (ft.):	645.3
Operator:	T. Schaefer	Datum:	NAVD88
Logged By:	E. Toma	Rig Type:	ATV-Mounted Mobile Drill Rig B53
Date Start/Finish:	10-12-23/10-12-23	Drilling Method:	SSA / Spin & Wash
Boring Location:	7629+80.3	Casing ID/OD:	3/3.5"
Hammer Efficiency Factor:	0.742	Hammer Type:	Automatic ☒ Hydraulic ☐
Auger ID/OD:	4.5"	Sampler:	Standard Splitspoon
Hammer Wt./Fall:	140#/30	Core Barrel:	NQ
Water Level: *	Not Encountered	Rope & Cathead	☐

Definitions:
SS = Split Spoon Sample
MC = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WOH/C = Weight of Rods or Casing
WOR/C = Weight of Rods or Casing
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
Note: * Hammer Efficiency Factor=100/N-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results: AASHTO and Unified Class.
0											
	10	24/4	0.0 - 2.0	1-4-3-3	7	9	5SA	645.0		(Top 3"): Olive, SILT, trace sand, with roots and grass. (Topsoil)	
										(Bottom 7"): Olive, moist, stiff, SILT, little gravel, trace sand, roots and grass in top 3", =Glacial Till=	
	20	24/24	5.0 - 7.0	8-4-3-5	7	9				Olive, moist, stiff, SILT, some gravel, little sand, =Glacial Till=	
5											
	30 BIT	3/3 50/150	10.0 - 10.3 12.8	50/3" RQD = 0%	R		N/A	635.0		Olive, moist, SILT, some Gravel, some fine to coarse Sand, =Glacial Till=	
10											
										R1: Hard, fresh, aphanitic, grey, PHYLLITE. Joints are very close to close, moderately dipping, to high angle, undulating, smooth, fresh, tight to partially open. Recovery = 100% Rock Quality = Very Poor Rock Core Times (min/sec): 10.5-11.5' (2:46), 11.5-12.5' (2:14), 12.5-13.0' (2:02)	
	R2	36/36	13.0 - 16.0	RQD = 11%						R2: Hard, fresh, aphanitic, grey, PHYLLITE. Joints are very close to close, high angle, undulating, rough, fresh, tight to partially open. Recovery = 100% Rock Quality = Very Poor Rock Core Times (min/sec): 13.0-14.0' (2:44), 14.0-15.0' (2:03), 15.0-16.0' (2:35)	
15								629.3			
										Bottom of Exploration at 16.0 feet below ground surface.	
20											
25											

Remarks:
1. Automatic hammer NEBC #220 with an energy transfer ratio = 0.742
2. As-drilled boring locations were surveyed by MaineDOT in the field (N635991.5, E2272490.9).

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-PB-603

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass
Segment: 2
Location: Presque Isle, Maine

Boring No.: BB-PB-102
WIN: 6462.91

Driller:	Maine Test Boring	Elevation (ft.):	642.5
Operator:	Mike Porter	Datum:	NAVD 88
Logged By:	Eric Boron	Rig Type:	Mobile B53 Track
Date Start/Finish:	4/8/14 - 4/8/14	Drilling Method:	Cased
Boring Location:	N1036024.7, E2272498.7	Casing ID/OD:	4" and 3"
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐
Auger ID/OD:		Sampler:	Split Spoon
Hammer Wt./Fall:	140/30	Core Barrel:	N22 Wireline
Water Level: *	+0.6'	Rope & Cathead	☒

Definitions:
SS = Split Spoon Sample
MC = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WOH/C = Weight of Rods or Casing
WOR/C = Weight of Rods or Casing
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
Note: * Hammer Efficiency Factor=100/N-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results: AASHTO and Unified Class.
0											
	10	24/18	1.0 - 3.0	17-20-17-15	F	0		640.5		Brown-olive, fine to coarse SAND, some Silt, some Gravel, poorly graded, frozen. =REWORKED TILL= (SM)	C=65 A-2-4, SM WC=23.5
	20	24/16	5.0 - 7.0	5-15-23-36	38	38	27			Brown, moist, dense, silty fine to coarse SAND, some Gravel, poorly graded. =GLACIAL TILL= (SM)	
5							31				
							39				
							38				
							39				
	30	24/17	10.0 - 12.0	15-22-25-23	47	47	38			Brown, wet, hard, lean CLAY, some fine to coarse SAND, little Gravel. =GLACIAL TILL= (CL)	C=66 A-6, CL LL=22 PL=14 PI=8 WC=10.8
10							38				
							44				
							52				
							63				
	40	24/11	15.0 - 17.0	27-34-38-36	72	72	WC	624.2			
15										Drill cuttings indicate possible rock at 18.3'. Drilled with roller cone from 18.3-20.0', practical refusal. =POSSIBLE BEDROCK=	
								622.5			
20										Bottom of Exploration at 20.0 feet below ground surface.	
25											

Remarks:
1. "F" indicates frozen soil sampled; blow counts not representative of penetration resistance.
2. Water level measured prior to drilling. Surface water running into hole.
3. Rope and cathead used for 10 through 30. Rope sticking to cathead due to rain, swap to spooling winch for 40 for safety purposes.

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-PB-102

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass
Segment: 2
Location: Presque Isle, Maine

Boring No.: BB-PB-104
WIN: 6462.91

Driller:	Maine Test Boring	Elevation (ft.):	633.8
Operator:	Mike Porter	Datum:	NAVD 88
Logged By:	Eric Boron	Rig Type:	Mobile B53
Date Start/Finish:	4/9/14 - 4/9/14	Drilling Method:	Cased
Boring Location:	E1036348.7, N2272461.5	Casing ID/OD:	4"
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐
Auger ID/OD:		Sampler:	Split Spoon
Hammer Wt./Fall:	140/30	Core Barrel:	--
Water Level: *	2.3'	Rope & Cathead	☒

Definitions:
SS = Split Spoon Sample
MC = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WOH/C = Weight of Rods or Casing
WOR/C = Weight of Rods or Casing
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
Note: * Hammer Efficiency Factor=100/N-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results: AASHTO and Unified Class.
0											
	10	24/9	1.0 - 3.0	2-8-8-5	16	16		632.8		Brown, moist, medium dense, fine to coarse SAND, some Silt, some Gravel, poorly graded, occasional roots. =GLACIAL TILL= (SM)	C=61 A-2-4, SM WC=25.8
	20	24/19	5.0 - 7.0	4-5-7-8	12	12				Brown-olive, medium dense, fine to coarse SAND, some Silt, wet, poorly graded. =GLACIAL TILL= (SM)	
5											
	30	24/20	10.0 - 12.0	7-8-7-8	15	15					
10											
										Brown-olive, wet, medium dense, fine to coarse SAND, some Gravel, some Silt, poorly graded. =GLACIAL TILL= (SM)	C=62 A-2-4, SM WC=20.4
	40	24/0	15.0 - 17.0	16-19-29-34	48	48					
15										No Recovery. Drill cuttings indicate similar soil to Sample 10.	
							RC	618.1			
20										Drilled with roller cone from 19.7'-22.0'. Drill action and cuttings indicate possible bedrock. =POSSIBLE BEDROCK=	
								617.8			
25										Bottom of Exploration at 22.0 feet below ground surface.	

Remarks:
1. Water level measured after augering to 5.0' bgs, prior to introducing drilling water.

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-PB-104

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass, Phase 2
Location: Presque Isle, Maine

Boring No.: BB-PB-601
WIN: 006462.92

Driller:	New England Boring Contractors	Elevation (ft.):	642.7 642.2
Operator:	T. Schaefer	Datum:	NAVD88
Logged By:	E. Toma	Rig Type:	ATV-Mounted Mobile Drill Rig B53
Date Start/Finish:	10-12-23/10-12-23	Drilling Method:	SSA / Spin & Wash
Boring Location:	7629+43.9	Casing ID/OD:	3/3.5"
Hammer Efficiency Factor:	0.742	Hammer Type:	Automatic ☒ Hydraulic ☐
Auger ID/OD:	4.5"	Sampler:	Standard Splitspoon
Hammer Wt./Fall:	140#/30	Core Barrel:	NQ
Water Level: *	Not Encountered	Rope & Cathead	☐

Definitions:
SS = Split Spoon Sample
MC = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WOH/C = Weight of Rods or Casing
WOR/C = Weight of Rods or Casing
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
Note: * Hammer Efficiency Factor=100/N-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results: AASHTO and Unified Class.
0											
	10	24/20	0.0 - 2.0	3-3-4-14	7	9	5SA	642.4		(Top 3"): Olive, moist, SILT, with grass and roots. (Topsoil)	
								640.9		(Bottom 17"): Olive, dry, stiff, SILT, some fine to coarse sand, trace gravel, =Glacial Till=	
										Fractured rock in spoon tip, advanced auger to 4.0' and set up to core.	
	R1	54/54	5.0 - 9.5	RQD = 0%			N/A			R1: Hard, fresh, aphanitic, grey, PHYLLITE. Joints are extremely close to close, moderately dipping to high angle, undulating, smooth, fresh, partially open. Recovery = 100% Rock Quality = Very Poor Rock Core Times (min/sec): 5.0-6.0' (2:26), 6.0-7.0' (2:12), 7.0-8.0' (2:14), 8.0-9.0' (1:49), 9.0-9.5' (1:47)	
5											
10											
										Bottom of Exploration at 9.5 feet below ground surface.	
15											
20											
25											

Remarks:
1. Automatic hammer NEBC #220 with an energy transfer ratio = 0.742
2. As-drilled boring locations were surveyed by MaineDOT in the field (N636009.4, E2272561.3).

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-PB-601

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass, Phase 2
Location: Presque Isle, Maine

Boring No.: BB-PB-602
WIN: 006462.92

Driller:	New England Boring Contractors	Elevation (ft.):	642.1
Operator:	T. Schaefer	Datum:	NAVD88
Logged By:	E. Toma	Rig Type:	ATV-Mounted Mobile Drill Rig B53
Date Start/Finish:	10-12-23/10-12-23	Drilling Method:	SSA / Spin & Wash
Boring Location:	7629+82.4	Casing ID/OD:	3/3.5"
Hammer Efficiency Factor:	0.742	Hammer Type:	Automatic ☒ Hydraulic ☐
Auger ID/OD:	4.5"	Sampler:	Standard Splitspoon
Hammer Wt./Fall:	140#/30	Core Barrel:	NQ
Water Level: *	Not Encountered	Rope & Cathead	☐

Definitions:
SS = Split Spoon Sample
MC = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WOH/C = Weight of Rods or Casing
WOR/C = Weight of Rods or Casing
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
Note: * Hammer Efficiency Factor=100/N-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results: AASHTO and Unified Class.
0											
	10	24/20	0.0 - 2.0	1-2-7-6	9	11	5SA	641.8		(Top 3"): Olive, moist, SILT, with roots. (Topsoil)	
										(Bottom 17"): Olive, moist, medium dense, Silty GRAVEL, some fine sand, =Glacial Till=	
	20	0/0	5.0 - 5.0	50/0"	R		N/A	637.1		Spoon refusal at 5.0'. Increased auger resistance during advancement. 5-6" of rock dust observed on auger flights. Advanced 3" casing and set up to core at 6.0'.	
	R1	60/50	6.0 - 11.0	RQD = 12%						R1: Very hard, fresh, aphanitic, grey PHYLLITE joints are very close to close, moderately dipping to high angle, undulating, smooth, fresh, partially open. Recovery = 100% Rock Quality = Very Poor Rock Core Times (min/sec): 6.0-7.0' (3:54), 7.0-8.0' (3:12), 8.0-9.0' (1:52), 9.0-10.0' (2:31), 10.0-11.0' (2:23)	
5											
10								631.1			
										Bottom of Exploration at 11.0 feet below ground surface.	
15											
20											
25											

Remarks:
1. Automatic hammer NEBC #220 with an energy transfer ratio = 0.742
2. As-drilled boring locations were surveyed by MaineDOT in the field (N636030.3, E2272527.7).

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-PB-602

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass
Segment: 2
Location: Presque Isle, Maine

Boring No.: BB-PB-103
WIN: 6462.91

Driller:	Maine Test Boring	Elevation (ft.):	642.3
Operator:	Mike Porter	Datum:	NAVD 88
Logged By:	Eric Boron	Rig Type:	Mobile B53
Date Start/Finish:	4/7/14 - 4/7/14	Drilling Method:	Cased
Boring Location:	N1036886.2, E2272457.6	Casing ID/OD:	4" and 3"
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐
Auger ID/OD:		Sampler:	Split Spoon
Hammer Wt./Fall:	140/30	Core Barrel:	N22 Wireline
Water Level: *	14.8'	Rope & Cathead	☒

Definitions:
SS = Split Spoon Sample
MC = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WOH/C = Weight of Rods or Casing
WOR/C = Weight of Rods or Casing
R = Rock Core Sample
HSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
Note: * Hammer Efficiency Factor=100/N-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results: AASHTO and Unified Class.
0											
	10	24/20	0.0 - 2.0	15-19-21-31	F	0	5SA			Brown, fine to coarse SAND, some Silt, some Gravel, poorly graded, frozen. =GLACIAL TILL (REWORKED)= (SM)	C=67 A-1-b, SM WC=25.5
	20	24/6	2.0 - 4.0	34-22-16-14	38	38				Brown-gray, moist, dense, GRAVEL, some fine to coarse Sand, little Silt poorly graded. =GLACIAL TILL (REWORKED)= (GM)	
	30	24/7	4.0 - 6.0	22-22-15-14	37	37				Brown-gray, moist, dense, GRAVEL, some fine to coarse Sand, little Silt poorly graded. =GLACIAL TILL (REWORKED)= (GM)	C=68 A-1-b, GM WC=9.2
5							28	636.3			
							32				
							31				
							36				
	40	17/14	8.0 - 10.4	6-12-100/5"	R		100			Brown, moist, fine to medium SAND, some Silt, trace Gravel, poorly graded. Gravel piece in tip. =GLACIAL TILL= (SM)	
10							RC	631.9			
										Split spoon refusal at 10.4' (ID: 632.1'), rolled to 23.2'. Cuttings consistent with rock from 10.4'-13.2'. Set up to core. =POSSIBLE BEDROCK=	
	R1	43/34	13.2 - 16.8	RQD = 18%			N62	629.1		Medium hard, moderately weathered, fine grained, gray METAFELITE interbedded with Limestone. Joints are close to very close, moderately dipping to high angle, undulating, rough, discolored to decomposed, partially open to open. High angle bedding with occasional mud seams. White calcite/lime stringers throughout. Rock Quality = Very Poor Core Times (min/ft): 3.75, 1.75, 1.75, 2.0	
15										Hard, fresh, fine grained, gray METAFELITE interbedded with Limestone. Primary joints are close to moderately spaced, low angle, planar, rough, discolored, partially open. Secondary joints are moderately spaced, moderately dipping to high angle, planar, rough, discolored, partially open. White calcite/lime stringers throughout. Rock Quality = Good Rock Core Times (min/ft): 2.5, 2.25, 2.5, 2.75, 2.5		
	R2	60/60	16.8 - 21.8	RQD = 80%							
20											
	R3	24/24	21.8 - 23.8	RQD = 38%				618.5			
25										Hard, fresh, fine grained, gray METAFELITE interbedded with Limestone. Primary joints are close, low angle, planar, rough, discolored, partially open to open. Secondary joints are close, moderately dipping to high angle, undulating, rough, discolored, partially open. 1/16"-1/4" calcite/lime stringers throughout. Rock Quality = Poor Rock Core Times (min/ft): 1.75, 2.5	
										Bottom of Exploration at 23.8 feet below ground surface.	

Remarks:
1. "F" indicates frozen soil sampled; blow counts not necessarily representative of penetration resistance.
2. Water level measured approximately 20 minutes after drilling was completed. Casing was removed.

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-PB-103

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92
BRIDGE NO. 6491

BRIDGE PLANS

PROJ. MANAGER	R.M.		
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE, ME

AROOSTOOK COUNTY

BORING LOGS 1

PREPARED BY:

SHEET NUMBER
B-102
636
OF 747

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass
Segment 2
Location: Presque Isle, Maine

Boring No.: BB-PB-105
WIN: 6462.91

Driller:	Maine Test Boring	Elevation (ft.): 638.6	Auger ID/OD:
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Eric Baron	Rig Type: Mobile B53	Hammer Wt./Fall: 140/30
Date Start/Finish:	4/8/14 - 4/8/14	Drilling Method: Cased	Core Barrel: NQ2 Wireline
Boring Location:	E1036102.1, N2272406.7	Casing ID/OD: 4" and 3"	Water Level *: Not observed
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

Definitions:
SS = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
US = Undisturbed Sample
UT = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
HSA = Hollow Stem Auger
MD = Mudbug Auger
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
WOR = Weight of Drill Rig Person
R = Rock Core Sample
SSA = Solid Stem Auger
WO = Wash Out Auger
WOM = Weight of Man
WOH/C = Weight of Hammer or Casing
N_{60} = SPT Hammer Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60=Uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
w_n = Water Content, percent
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT Hammer Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6in. (or Sample Strength or RQD (2))	Uncorrected	N_{60}	Casing	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0											
	S1	24/14	1.0 - 3.0	8-10-8-10	18	18				Brown, moist, medium dense, silty SAND, some Gravel, poorly graded. GLACIAL TILL- (SM)	G=6.3 A=6, SM w/c=9.6
5	S2	5/5	5.0 - 5.4	50/5"	R					Olive-brown, wet, dense to very dense, silty SAND, some Gravel, poorly graded. GLACIAL TILL- (SM)	
	S3	24/10	10.0 - 12.0	20-45-45-26	90	90		628.6			
10										Gray-brown, wet, very dense, GRAVEL, little fine to coarse Sand, little Silt, poorly graded, angular Gravel. -POSSIBLE WEATHERED/FRACTURED BEDROCK- (GP)	—10.0
	S4	24/16	15.0 - 17.0	24-38-44-51	82	82		621.6		Olive-gray, wet, very dense, GRAVEL, some fine to coarse Sand, little Silt, poorly graded, some angular Gravel. * POSSIBLE WEATHERED/FRACTURED BEDROCK- (GM)	—17.0
15										Advanced roller cone to 18.3' and began coring. Possible bedrock.	—18.3
	R1	38/32	18.3 - 21.5	RQD = 0%			N/C	620.3		Medium hard, moderately weathered, gray METAFELITE interbedded with Limestone. Primary joints are close to very close, high angle to near vertical, undulating, rough, discolored, open. Secondary joints similar, low angle, 1/32"-1/4" calcite stringers throughout. Rock Quality = Very Poor Rock Core Times: 2.25, 3.25, 3.0	
20	R2	43/41	21.5 - 25.1	RQD = 42%						Medium hard, moderately weathered, fine grained, gray METAFELITE interbedded with Limestone. Primary joints are close to very close, moderately dipping to high angle, planar, rough, discolored, open. Secondary joints are moderately spaced, low angle, undulating, rough, discolored, partially open, 1/32"-1/4" calcite stringers throughout. Rock Quality= Poor Rock Core Times (min/ft): 1.75, 1.75 2.25	
	R3	48/48	25.1 - 29.1	RQD = 65%				609.5		Medium hard, slightly weathered, fine grained, gray METAFELITE interbedded with Limestone. Primary joints are close to moderately spaced, low angle, undulating, rough, discolored, partially open to open. Secondary joints are similar, high angle, 1/64"- 1/4" calcite stringers throughout. Rock Quality = Fair Rock Core Times (min/ft): 2.25, 1.75 2.0, 2.25	
25										Bottom of Exploration at 29.1 feet below ground surface.	—29.1
30											

Remarks:
1. Spooling winch and safety hammer used for sampling due to wet conditions and safety concerns.
2. Well installed in boring to 17.3' bgs. 10' 2" ID screen, 17' 2" ID riser, sand back-fill up to 3' bgs, bentonite chips up to ground surface.

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-PB-105

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass, Phase 2
Location: Presque Isle, Maine

Boring No.: BB-PB-604
WIN: 006462.92

Driller:	New England Boring Contractors	Elevation (ft.): 638.8	Auger ID/OD: 4.5"
Operator:	T. Schaefer	Datum: NAVD88	Sampler: Standard Splitspoon
Logged By:	E. Toone	Rig Type: ATV-Mounted Mobile Drill Rig B53	Hammer Wt./Fall: 140#/30
Date Start/Finish:	10-17-23/10-17-23	Drilling Method: SSA / Spin & Wash	Core Barrel: NQ
Boring Location:	7631+49.7	Casing ID/OD: 3/3.5"	Water Level *: Not Encountered
Hammer Efficiency Factor:	0.742	Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions:
SS = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
US = Undisturbed Sample
UT = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
HSA = Hollow Stem Auger
MD = Mudbug Auger
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
WOR = Weight of Drill Rig Person
R = Rock Core Sample
SSA = Solid Stem Auger
WO = Wash Out Auger
WOM = Weight of Man
WOH/C = Weight of Hammer or Casing
N_{60} = SPT Hammer Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60=Uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
w_n = Water Content, percent
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT Hammer Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6in. (or Sample Strength or RQD (2))	Uncorrected	N_{60}	Casing	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	S0	24/10	0.0 - 2.0	1-1-2-1	3	4	SSA			Olive, moist, soft, SILT, some gravel,some fine to coarse sand, (Glacial Till).	
5	S1	24/23	5.0 - 7.0	4-4-6-7	10	12				Olive, moist, medium dense, SILT, fine to coarse sand, little gravel, (Glacial Till).	
10	S2	24/23	10.0 - 12.0	7-12-14-15	26	32				Olive, dry, dense, Silty GRAVEL, some fine to coarse sand, (Glacial Till).	
	R1	36/5	13.5 - 16.5				N/C			R1: Grey, GRAVEL, trace silt, (Glacial Till).	
15	S3	9/9	16.5 - 17.3	48-50/3"	R			622.3		Olive/grey, wet, GRAVEL, some fine to coarse sand, little silt, (Probable Fractured Bedrock).	—16.5
								621.5		Bottom of Exploration at 17.3 feet below ground surface.	—17.3
20											

Remarks:
1. Automatic hammer NEBC #200 with an energy transfer ratio = 0.742
2. As-drilled boring locations were surveyed by MaineDOT in the NAD (NAD83(CORS96) Maine East (Zone 1801) (US Feet) coordinate system.

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-PB-604

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass, Phase 2
Location: Presque Isle, Maine

Boring No.: BB-PB-605
WIN: 006462.92

Driller:	New England Boring Contractors	Elevation (ft.): 643.2	Auger ID/OD: 4.5"
Operator:	T. Schaefer	Datum: NAVD88	Sampler: Standard Splitspoon
Logged By:	E. Toone	Rig Type: ATV-Mounted Mobile Drill Rig B53	Hammer Wt./Fall: 140#/30
Date Start/Finish:	10-17-23/10-17-23	Drilling Method: SSA / Spin & Wash	Core Barrel: NQ
Boring Location:	7631+77.7	Casing ID/OD: 3/3.5"	Water Level *: Not Encountered
Hammer Efficiency Factor:	0.742	Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions:
SS = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
US = Undisturbed Sample
UT = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
HSA = Hollow Stem Auger
MD = Mudbug Auger
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
WOR = Weight of Drill Rig Person
R = Rock Core Sample
SSA = Solid Stem Auger
WO = Wash Out Auger
WOM = Weight of Man
WOH/C = Weight of Hammer or Casing
N_{60} = SPT Hammer Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60=Uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
w_n = Water Content, percent
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT Hammer Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6in. (or Sample Strength or RQD (2))	Uncorrected	N_{60}	Casing	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	S0	24/9	0.0 - 2.0	#Cbl=1-5-11	6	7	SSA			Olive, moist, medium stiff, SILT, some fine to coarse sand, little gravel, (Glacial Till).	
5	S1	24/21	5.0 - 7.0	14-6-9-9	15	18				Olive, moist, stiff, SILT, some gravel, little sand, (Glacial Till).	
10	S2 RT	5/5 - 27/22	10.0 - 10.4 12.3	50/5" RQD = 0%	R		N/C	634.2		Gray, fine to coarse SAND and GRAVEL observed on auger flights at 9.0', (Probable Fractured Bedrock). Gray, fine to coarse SAND, (Fractured Bedrock). R1: Hard, fresh, aphanitic, grey, PHYLLITE. Joints are close, low angle, undulating, smooth, discolored, partially open. Rock is fractured into gravel pieces from 10.3'-11.3'. Recovery = 100% Rock Quality = Very Poor Rock Core Times (min/sec): 15.5-16.5' (1:50), 16.5-17.3' (1:54)	—9.0
15	R2	38/38	17.3 - 20.5	RQD = 47%				622.7		R2: Hard, fresh, aphanitic, grey, PHYLLITE. Joints are very close to moderately spaced, low angle, undulating, rough, fresh, very tight to partially open. Recovery = 100% Rock Quality = Poor Recovery = 100% Rock Core Times (min/sec): 17.3-18.3' (1:45), 18.3-19.3' (1:36), 19.3-20.3' (1:43), 20.3-20.5' (0:20)	—20.5
20										Bottom of Exploration at 20.5 feet below ground surface.	

Remarks:
1. Automatic hammer NEBC #200 with an energy transfer ratio = 0.742
2. As-drilled boring locations were surveyed by MaineDOT in the NAD (NAD83(CORS96) Maine East (Zone 1801) (US Feet) coordinate system.

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-PB-605

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass
Segment 2
Location: Presque Isle, Maine

Boring No.: BB-PB-106
WIN: 6462.91

Driller:	Maine Test Boring	Elevation (ft.): 644.7	Auger ID/OD:
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Eric Baron	Rig Type: Mobile B53	Hammer Wt./Fall: 140/30
Date Start/Finish:	4/9/14 - 4/9/14	Drilling Method: Reboot	Core Barrel: --
Boring Location:	E1036150.6, N2272319.4	Casing ID/OD: 4"	Water Level *: 2.0'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

Definitions:
SS = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
US = Undisturbed Sample
UT = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
HSA = Hollow Stem Auger
MD = Mudbug Auger
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
WOR = Weight of Drill Rig Person
R = Rock Core Sample
SSA = Solid Stem Auger
WO = Wash Out Auger
WOM = Weight of Man
WOH/C = Weight of Hammer or Casing
N_{60} = SPT Hammer Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor/60=Uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
w_n = Water Content, percent
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT Hammer Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plasticity Index
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows/6in. (or Sample Strength or RQD (2))	Uncorrected	N_{60}	Casing	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
	S1	24/8	1.0 - 3.0	23-18-12-14	30	30				Brown, moist, dense, fine to coarse, sandy GRAVEL, little Silt, poorly graded. GLACIAL TILL- (GM)	
5	S2	24/14	5.0 - 7.0	13-11-7-11	18	18	N/C			Brown, moist, medium dense, fine to coarse SAND, some Gravel, some Silt, poorly graded. GLACIAL TILL- (SM)	
10								635.3		Drilled with roller cone from 8.4'-11.5' action and cuttings indicate possible bedrock with smooth drilling. -POSSIBLE BEDROCK-	—9.4
								633.2		Bottom of Exploration at 11.5 feet below ground surface.	—11.5
15											
20											
25											
30											

Remarks:
1. Water level taken approximately 20 minutes after drilling was complete and casing removed.

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-PB-106

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE, ME AROOSTOOK COUNTY

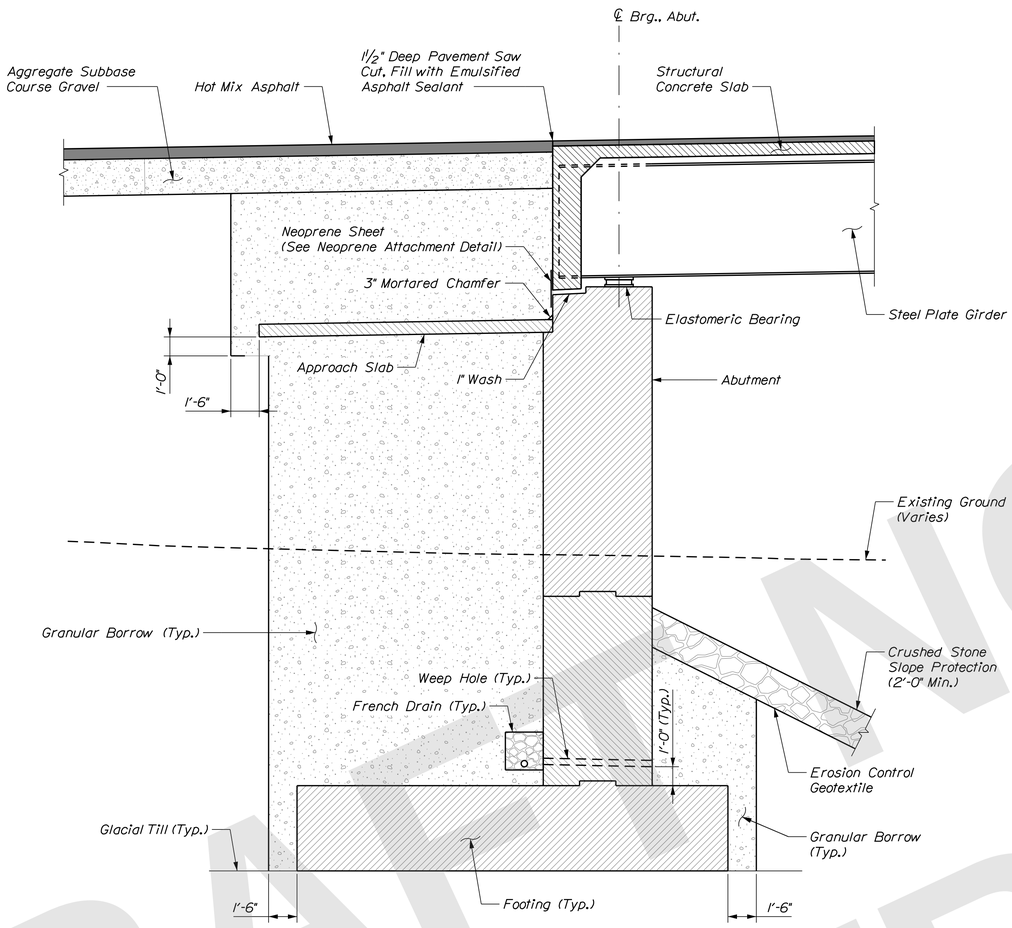
BORING LOGS 2

PREPARED BY:
GZA

SHEET NUMBER
B-103
637
OF 747

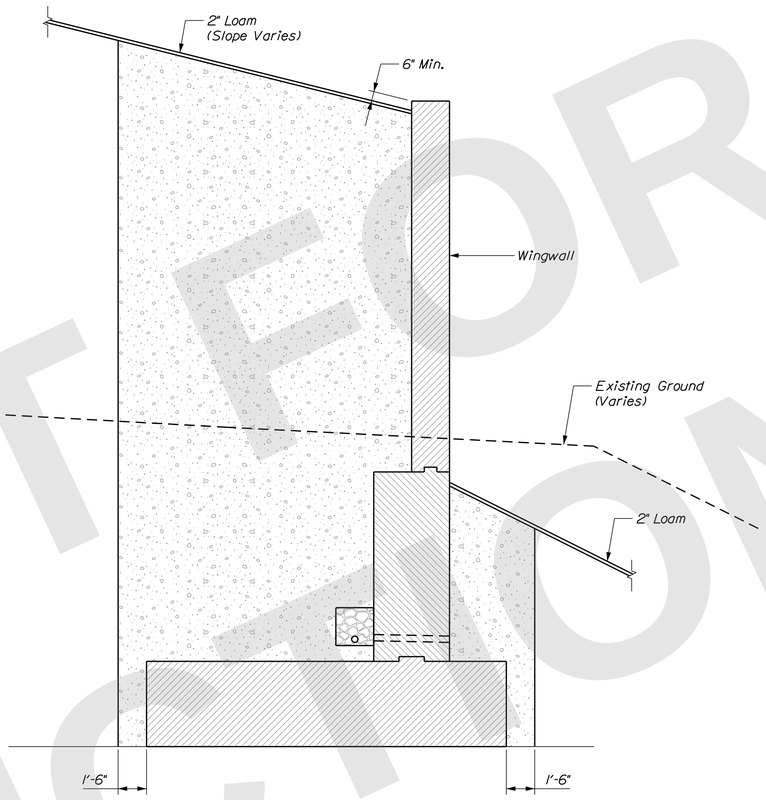
DRAFT
CONSTRUCTION

Filename: ...\Boring Logs sheets.dgn Division: HIGHWAY Username: common Date:7/29/2025



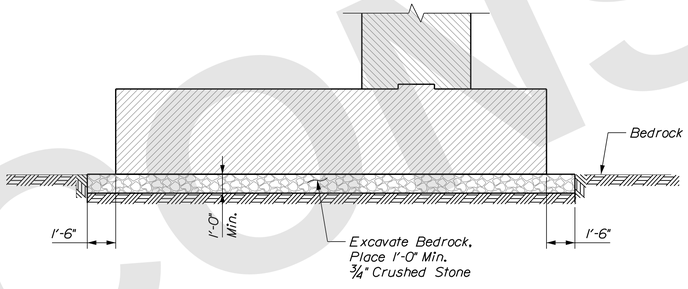
ABUTMENT SECTION

(Abutment No. 1 Shown, Abutment No. 2 Similar)
(Footing on Glacial Till Shown)



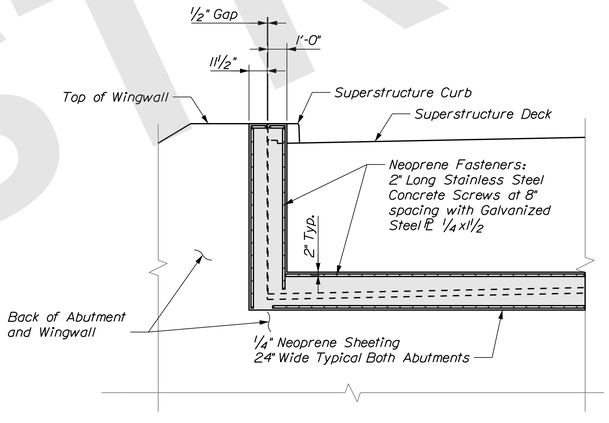
WINGWALL SECTION

(Footing on Glacial Till Shown)



FOUNDATION ON BEDROCK

Not to Scale
(See Abutment and Wingwall Sections for Backfill Details)



SCHEMATIC NEOPRENE ATTACHMENT DETAIL

Typical on backsides of abutments where the end of Superstructure is flush with the Abutment.

ABUTMENT NOTES

1. The maximum factored applied footing pressure at both Abutments is 12 ksf at Strength I Limit State and 8 ksf at Service Limit State.

2. Structural Earth Excavation, required more than 12 inches below the bottom of the structure, will be paid for in accordance with Standard Specifications Section 206, Structural Excavation.

3. Abutments, wingwalls and their footings shall be backfilled with Granular Borrow. Pay limits are as shown in the typical sections.

4. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted.

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

6. Cover joints where waterstops are not required in accordance with Standard Details Section 502.

7. Spread footings bearing on soil shall be supported on natural deposited soil and proof compacted or on ¾ inch crushed stone (Item No. 203.35 Crushed Stone ¾ inch). Natural soil subgrade surfaces shall be confirmed by the Resident.

8. Bedrock which protrudes above the bottom of footing elevation shown on the plans shall be removed to at least 1 foot below footing subgrade and replaced with ¾ inch crushed stone. Payment for bedrock removal shall be made under Item No. 206.092, Structural Rock Excavation - Major Structures.

9. Transverse saw cuts in the pavement shall be sealed with emulsified asphalt sealing compound conforming to Specification 702.12. The saw cut and emulsified sealing shall not be paid for directly, but considered incidental to related Contract Items.

10. Payment for mortared chamfer at approach slabs shall not be paid for directly, but shall be considered incidental to related Contract Items.

11. Neoprene sheeting, fasteners, and all labor required to install the neoprene sheeting shall be considered incidental to related Contract Items.

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

	R.M.	DATE
PROJ. MANAGER		
DESIGN-DETAILED	JAH	08/2025
CHECKED-REVIEWED	YP	08/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

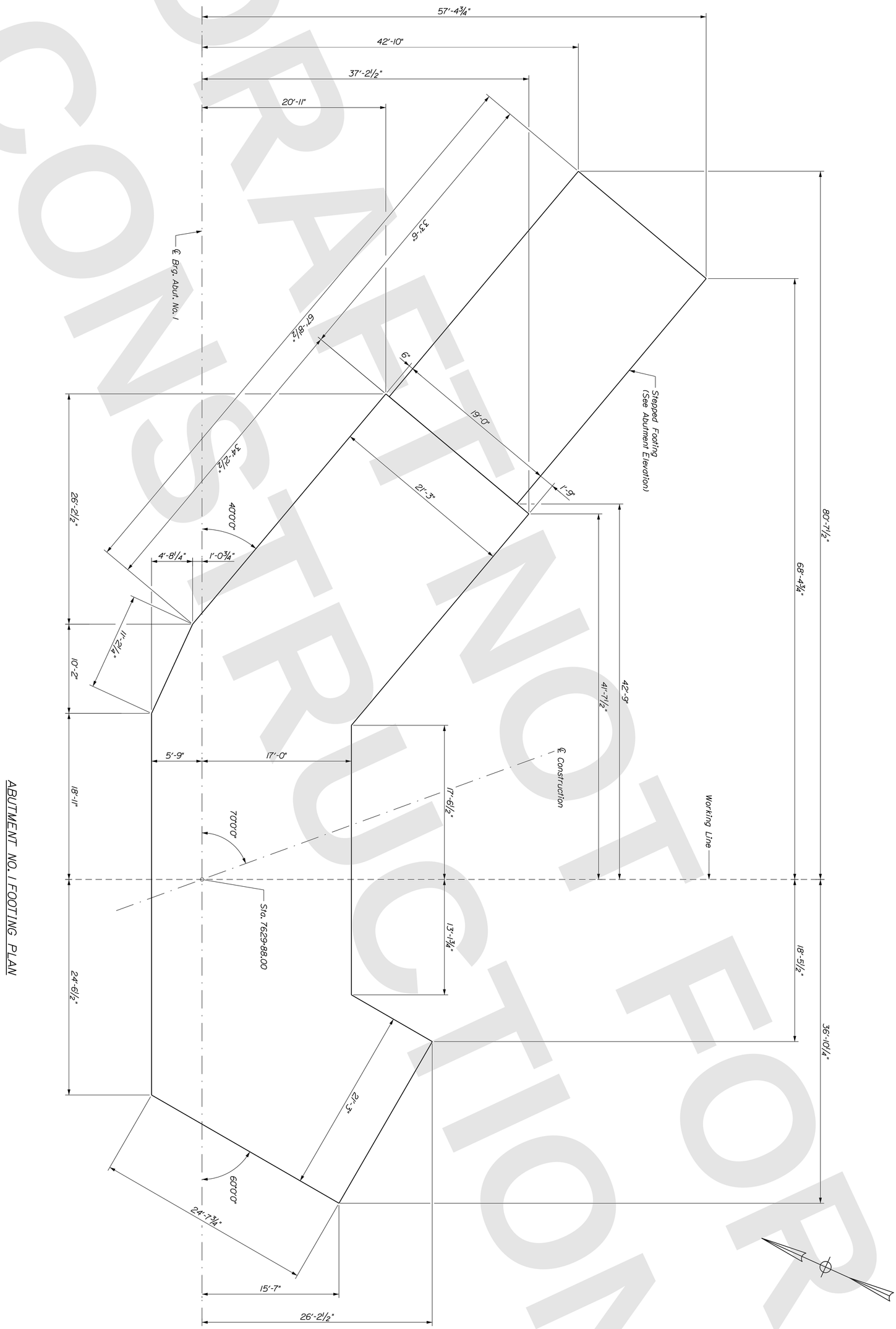
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT & WINGWALL DETAILS

SHEET NUMBER
B-104
638
OF 747

Filename: ...\Conant Rd\B42_Abut Details.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

DRAFT NOT FOR CONSTRUCTION



ABUTMENT NO. 1 FOOTING PLAN

SHEET NUMBER B-105 639 OF 747

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 1 FOOTING PLAN

PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

vhb

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS

BRIDGE NO. 6491 WIN 006462.92 BRIDGE PLANS

Username: jamesdavis Date:9/2/2025
Division: HIGHWAY
Filename: ...\Conant Rd\B44_Abut1_01.dgn

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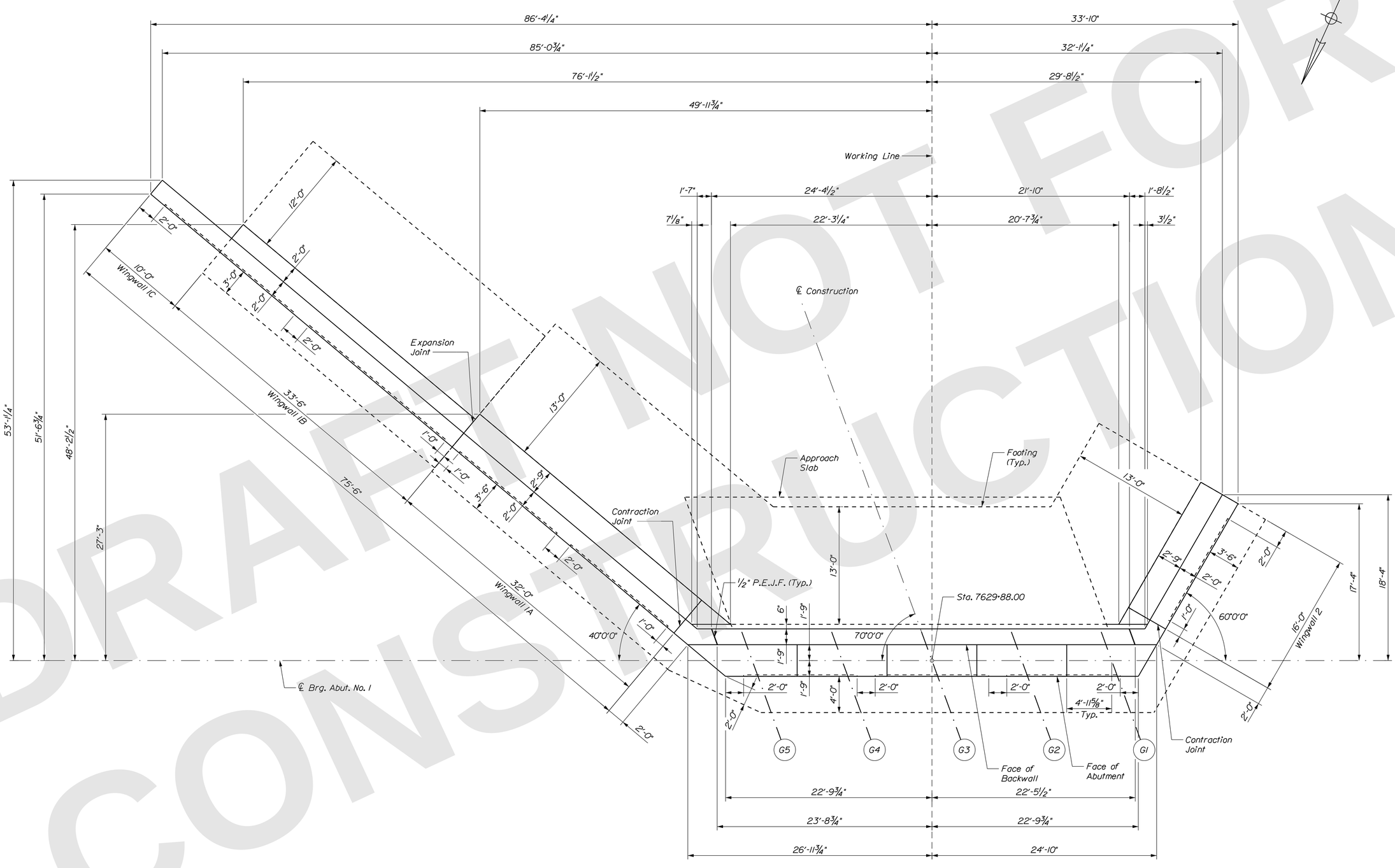


ABUTMENT NO. 1 PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

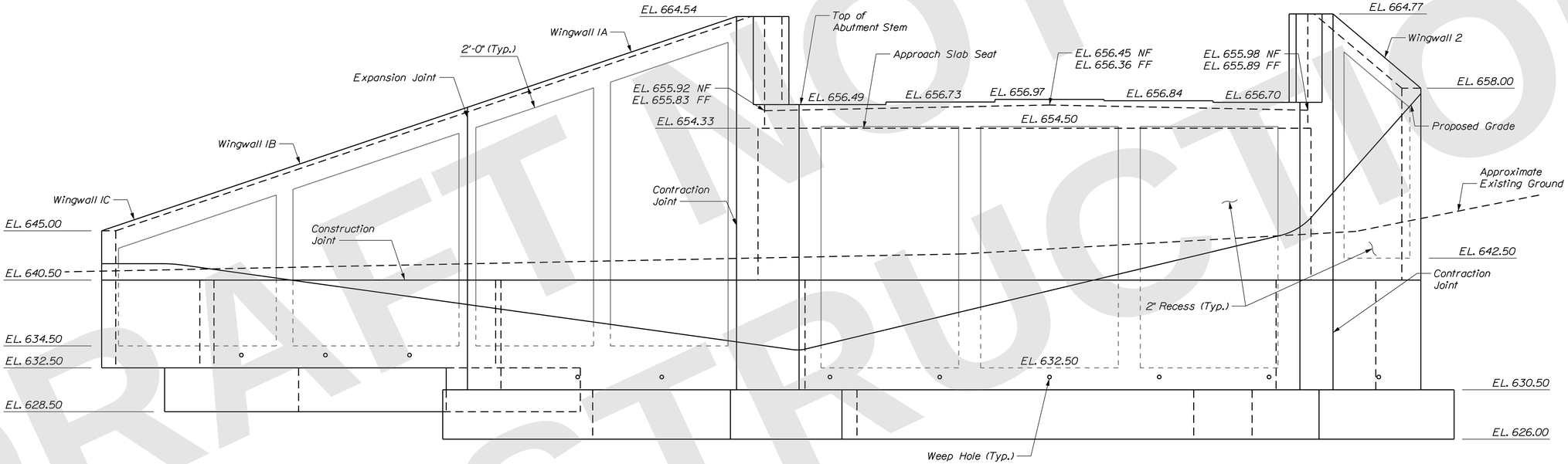
vhb

PROJ. MANAGER	R.M.		
DESIGN-DETAILED	JAH	BY	DATE
CHECKED-REVIEWED	YP	JAH	08/2025
DESIGN2-DETAILED2		YP	08/2025
DESIGN3-DETAILED3		SMH	
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 1 PLAN

SHEET NUMBER
B-106
640
OF 747



ABUTMENT NO. 1 ELEVATION

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Conant Rd\B45_Abut1_02.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491 BRIDGE PLANS

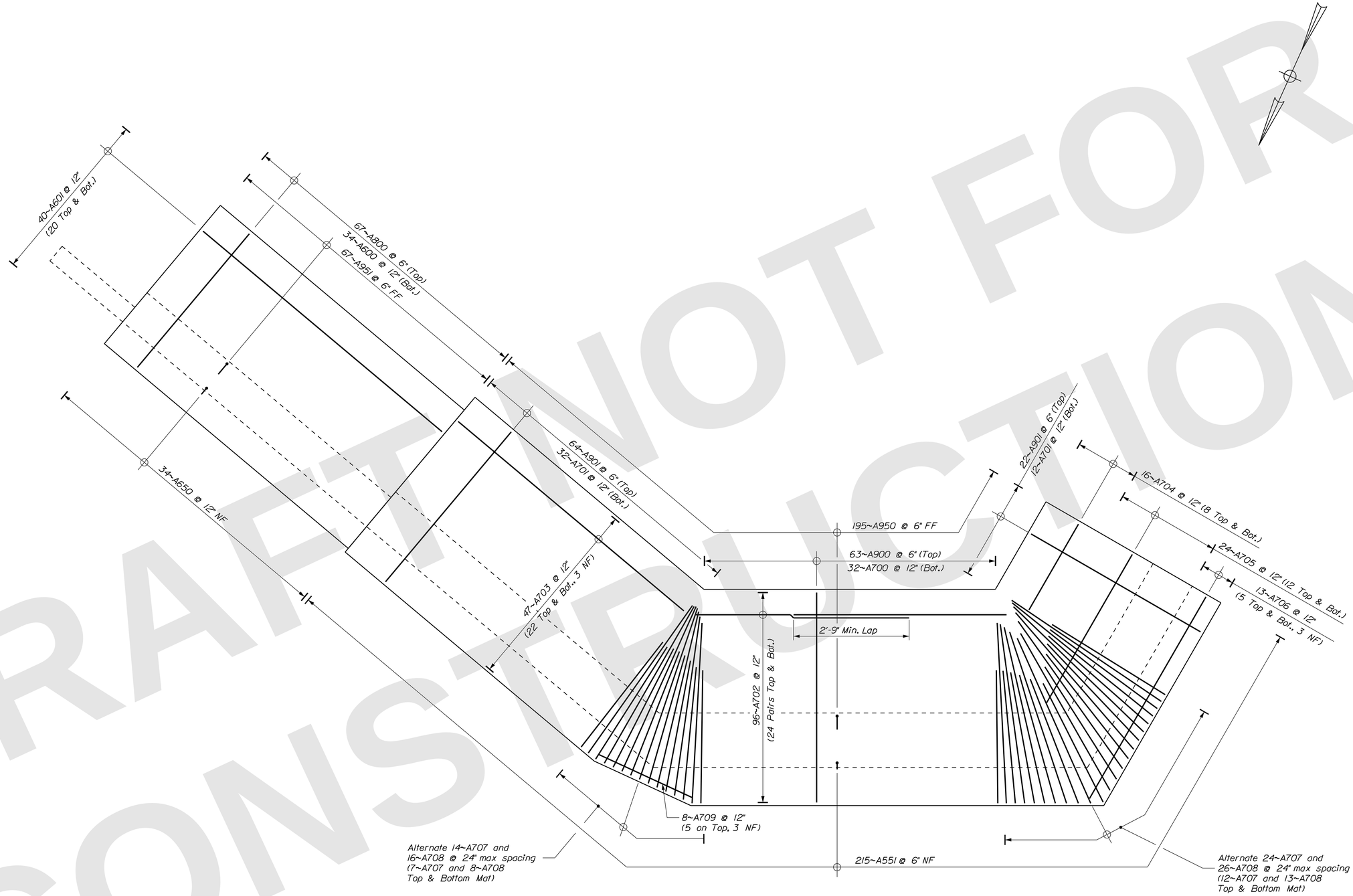
vhb

	BY	DATE
R.M.	JAH	08/2025
PROJ. MANAGER	SMH	08/2025
DESIGN-DETAILED	JAH	
CHECKED-REVIEWED	YP	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 1 ELEVATION

SHEET NUMBER
B-107
641
OF 747



ABUTMENT NO. 1 FOOTING REINFORCING PLAN

REINFORCING KEY

EF = Each Face
NF = Near Face
FF = Far Face

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491 BRIDGE PLANS

vhb

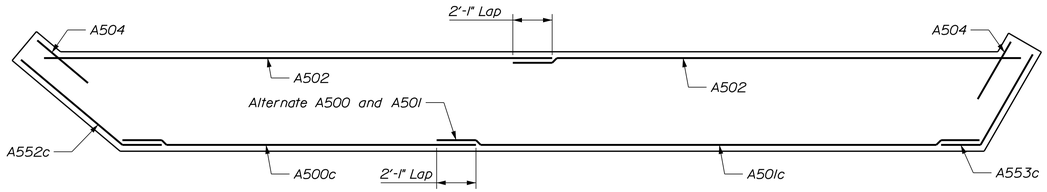
	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 1
FOOTING REINFORCING

SHEET NUMBER
B-108
642
OF 747

Filename: ...\B93_AbutFoot_Rein.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



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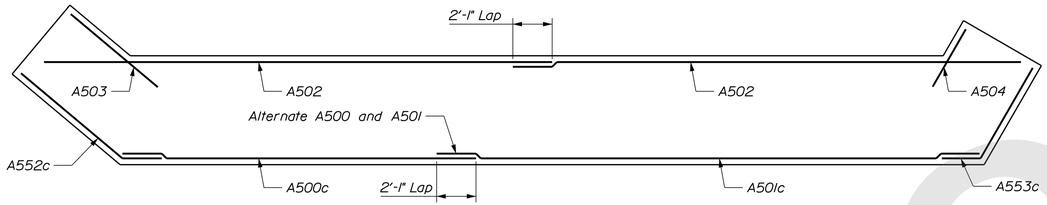
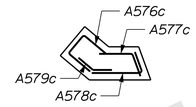
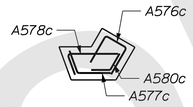


SET A





SET C
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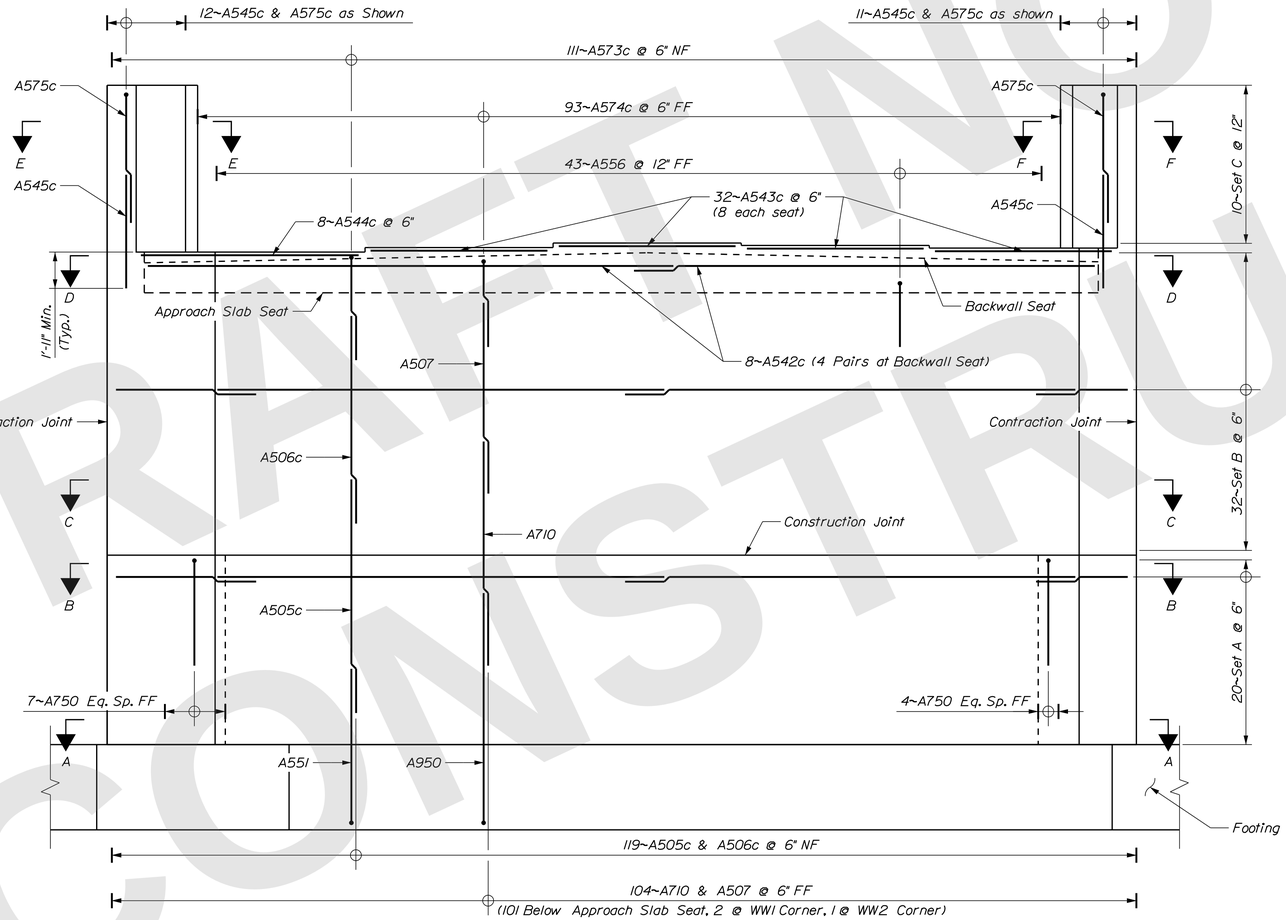


ABUTMENT NO. 1 REINFORCING ELEVATION
(Recess Panels and Wingwalls Beyond Contraction Joints are not Shown for Clarity)

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

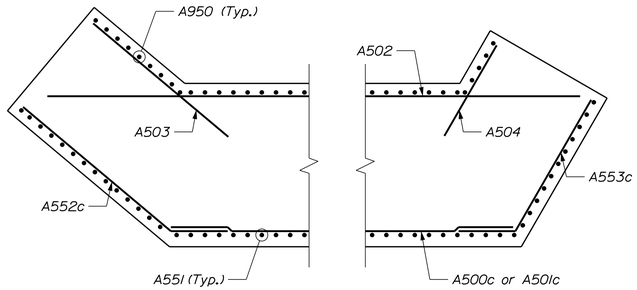
	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

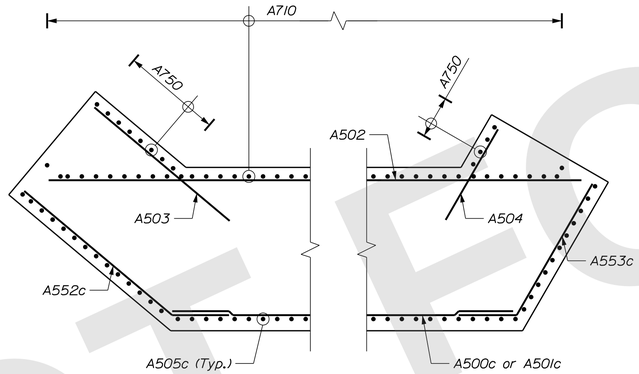
ABUTMENT NO. 1 STEM
REINFORCING (1 OF 2)

SHEET NUMBER
B-109
643
OF 747

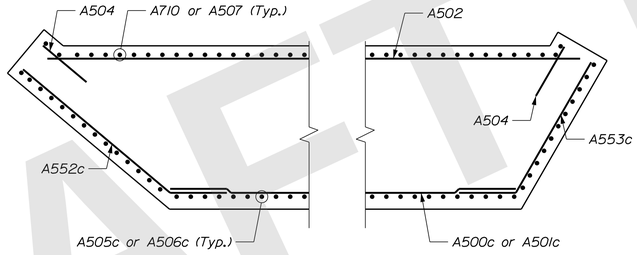
Filename: ...\XX2_ABUT1STEMREIN.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



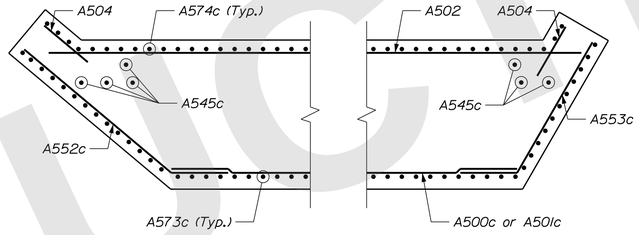
SECTION A-A



SECTION B-B



SECTION C-C



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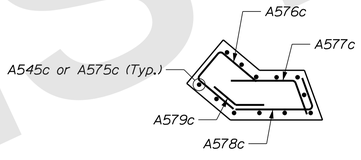
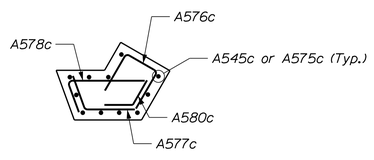


SECTION E-E



SECTION F-F

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN **006462.92**

BRIDGE NO. 6491

BRIDGE PLANS

vhb

	BY	DATE
R.M.	JAH	08/2025
JAH	SMH	08/2025
YP		

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

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

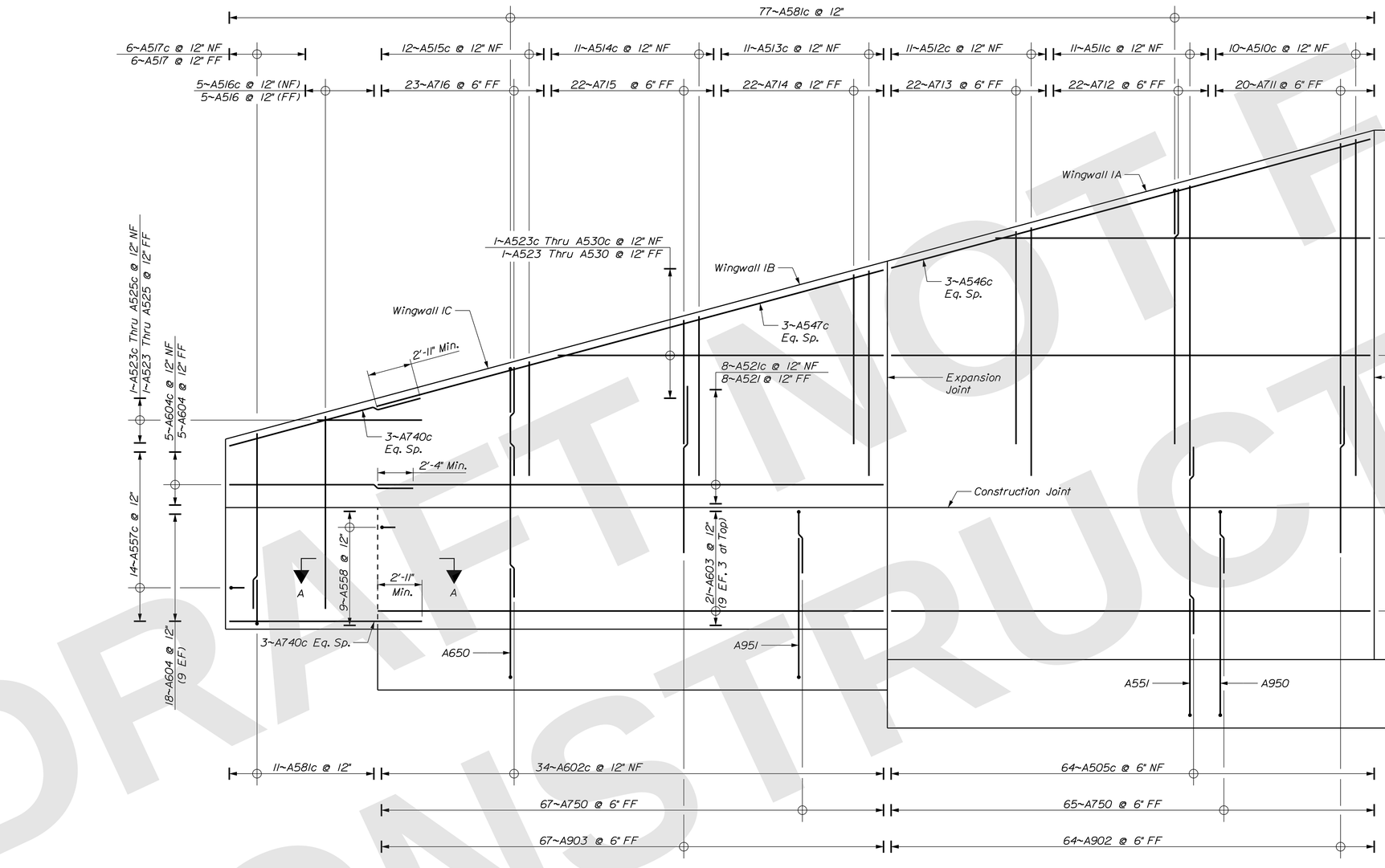
ABUTMENT NO.1 STEM REINFORCING (2 OF 2)

SHEET NUMBER
B-110
644
OF 747

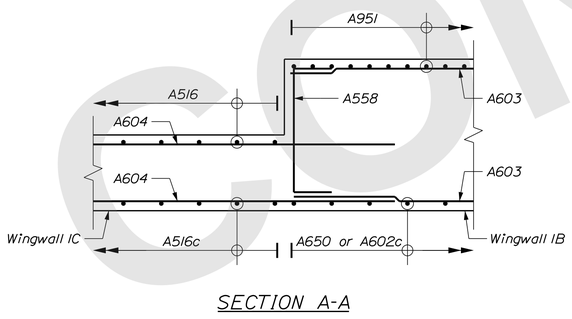
Filename: ...\XX2_ABUT1STEMREIN.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

Filename: ...\Conant Rd\XX3_ABUT1WW1REIN.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

DRAFT NOT FOR CONSTRUCTION



WINGWALL NO. 1 REINFORCING



SECTION A-A

REINFORCING KEY

EF = Each Face
NF = Near Face
FF = Far Face

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN **006462.92**
BRIDGE NO. 6491
BRIDGE PLANS

vhb

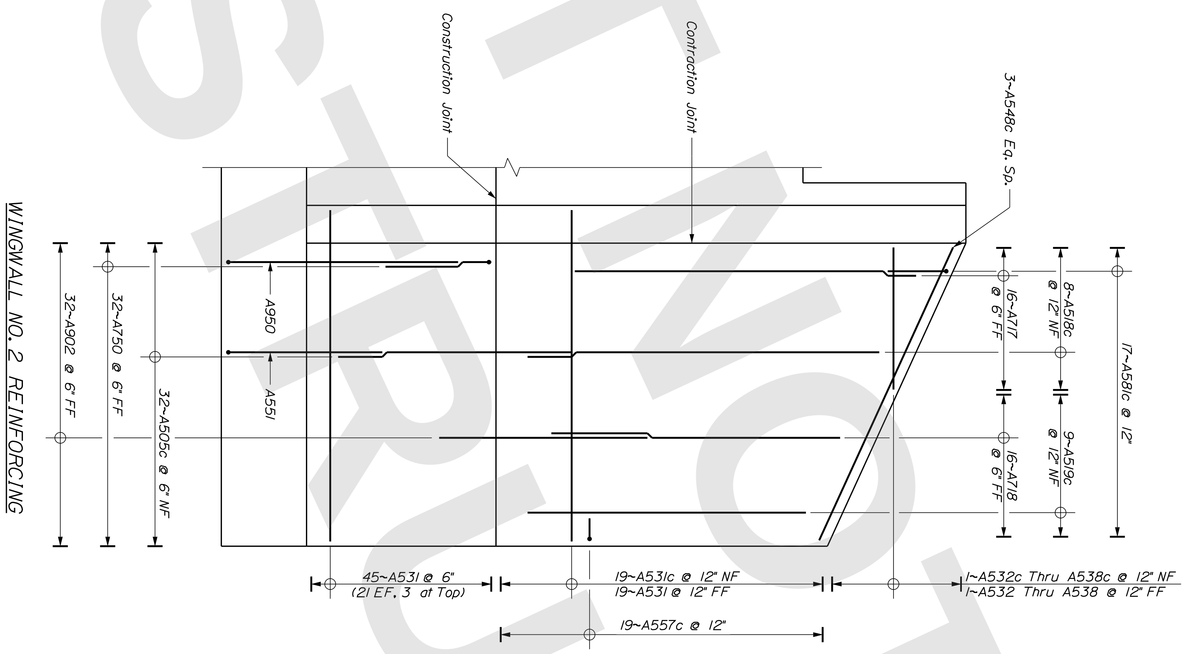
PROJ. MANAGER	R.M.		
DESIGN-DETAILED	JAH	BY	DATE
CHECKED-REVIEWED	YP	JAH	08/2025
DESIGN2-DETAILED2		SMH	08/2025
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 1
WINGWALL REINFORCING (1 of 2)

SHEET NUMBER
B-111
645
OF 747

DRAFT NOT FOR CONSTRUCTION



REINFORCING KEY

EF = Each Face
NF = Near Face
FF = Far Face

PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 1
WINGWALL REINFORCING (2 of 2)

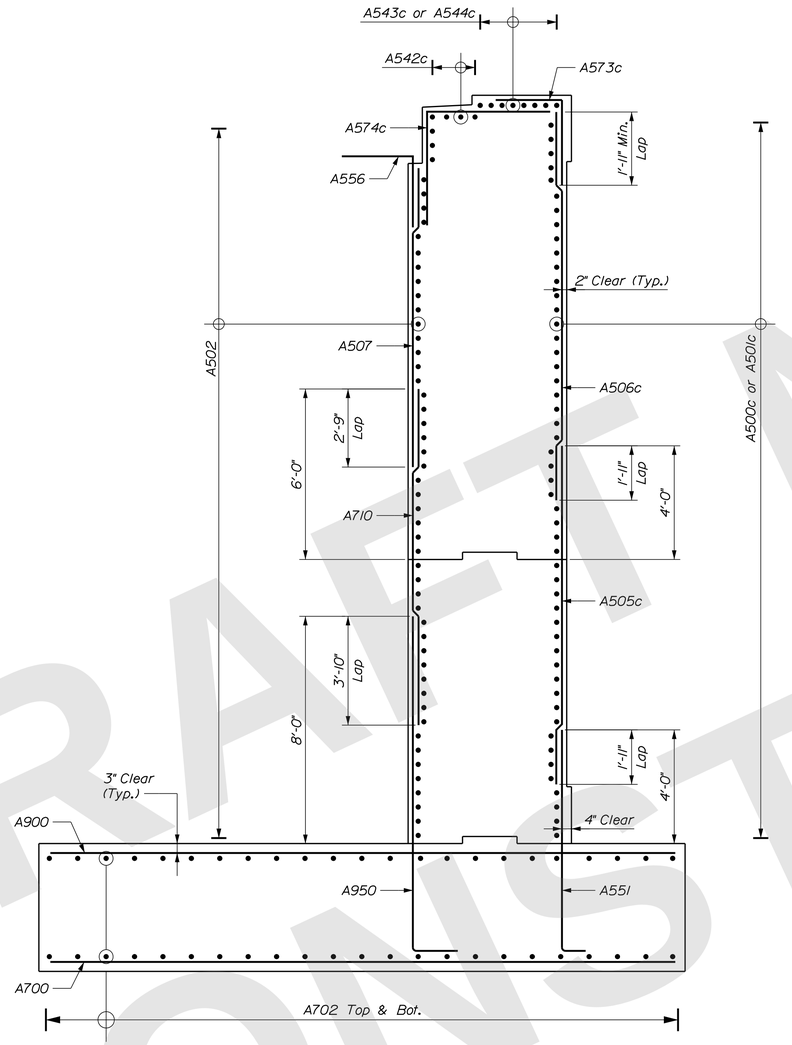
SHEET NUMBER
B-112
646
OF 747

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS

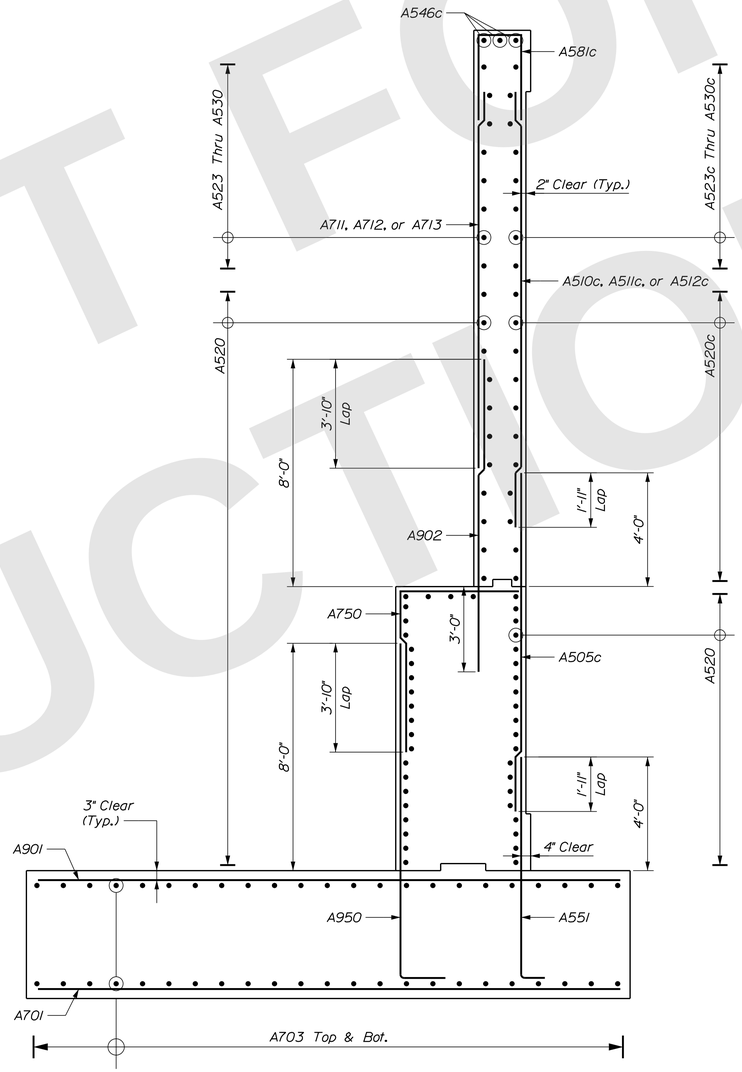
BRIDGE NO. 6491 WIN 006462.92 BRIDGE PLANS

Filename: ...\B98_Abut1_Section_Reinf.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

DRAFT NOT FOR CONSTRUCTION



ABUTMENT NO. I SECTION



WINGWALL IA SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491 BRIDGE PLANS

vhb

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

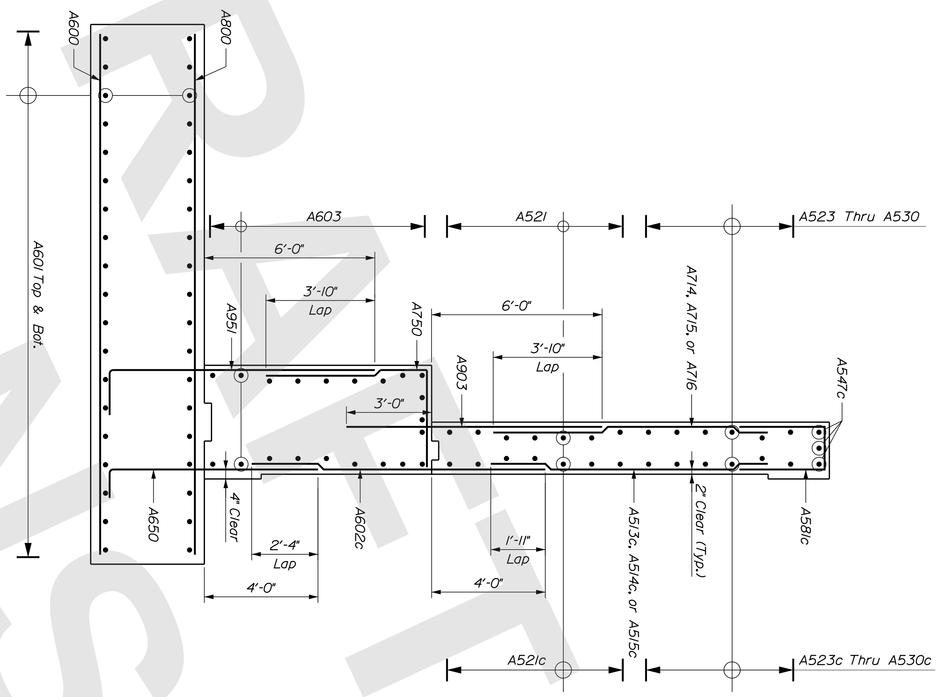
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 1
REINFORCING SECTIONS (1 OF 2)

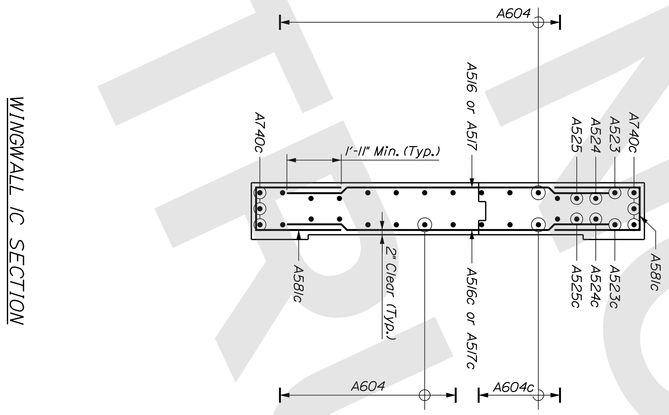
SHEET NUMBER
B-113
647
OF 747

DRAFT NOT FOR CONSTRUCTION

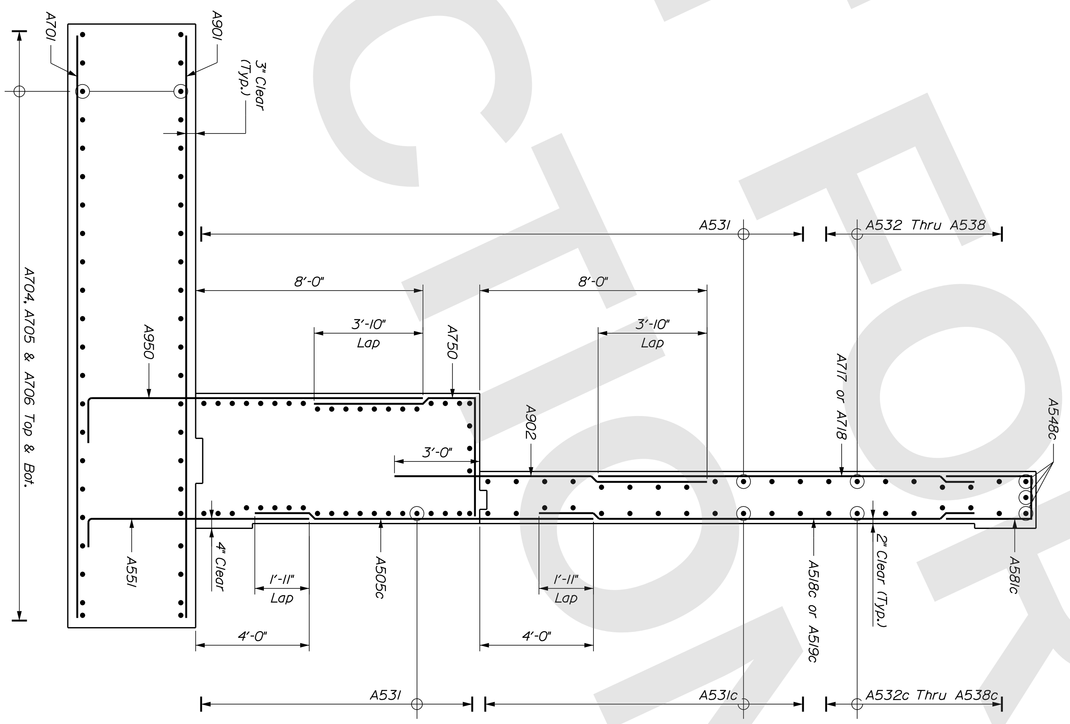
WINGWALL 1B SECTION



WINGWALL 1C SECTION



WINGWALL 2 SECTION



SHEET NUMBER B-114
648
OF 747

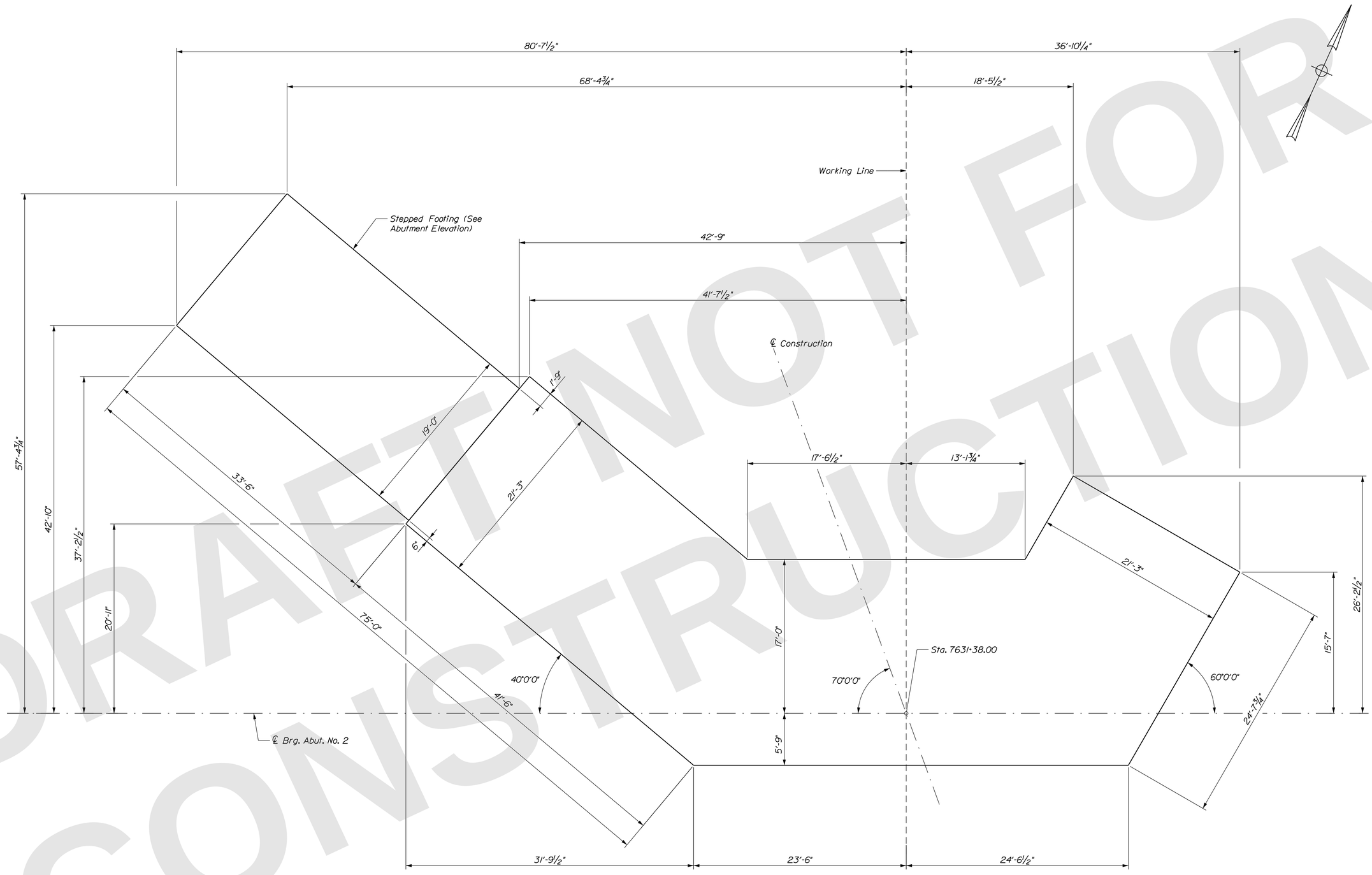
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 1
REINFORCING SECTIONS (2 OF 2)

PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

vhb

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS
WIN
BRIDGE NO. 6491 006462.92 BRIDGE PLANS



ABUTMENT NO. 2 FOOTING PLAN

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Conant Rd\B46_Abut2Foot_01.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491 BRIDGE PLANS

vhb

PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

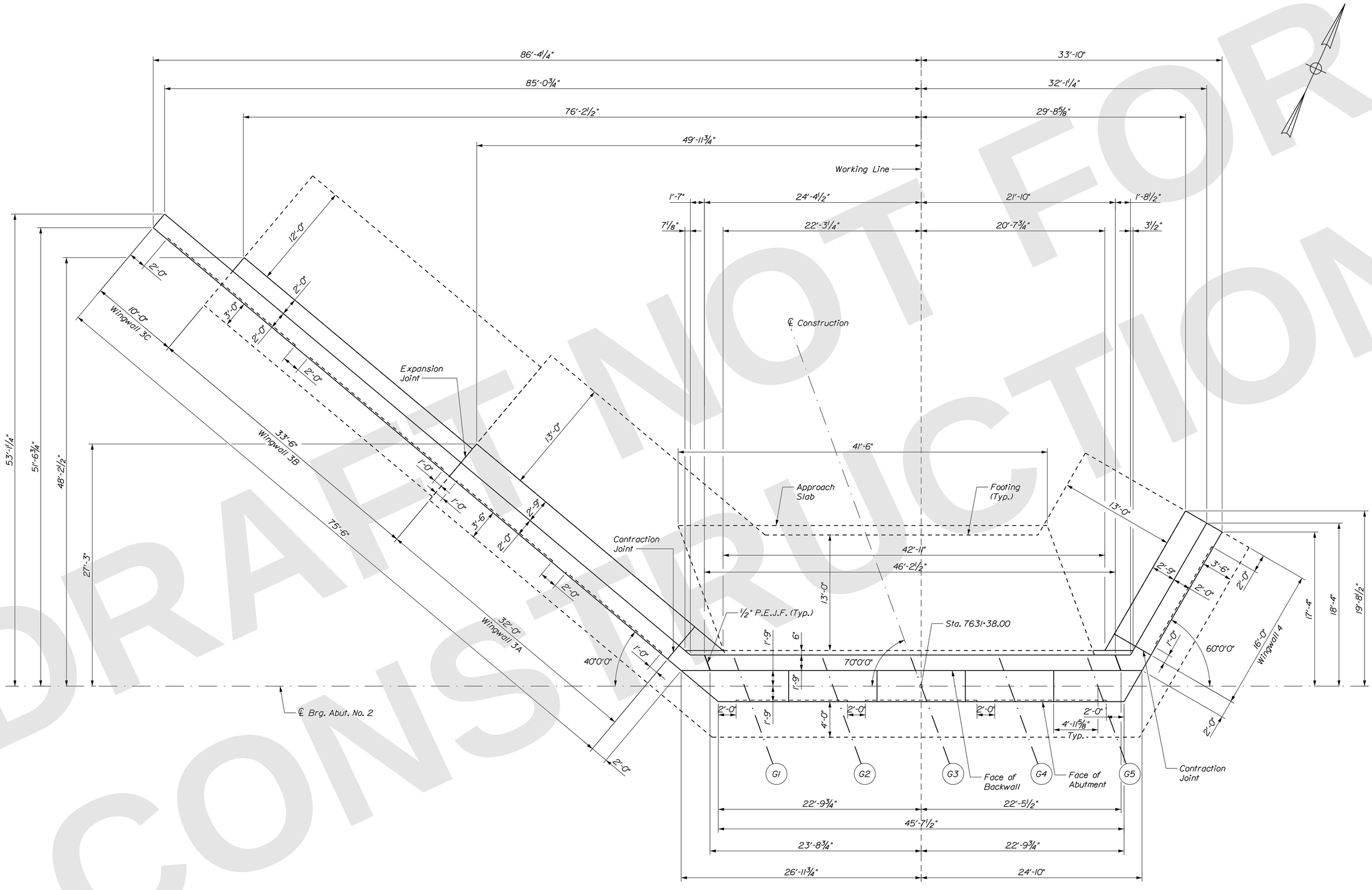
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 2
FOOTING PLAN

SHEET NUMBER
B-115
649
OF 747

Username: jamesdavis Date:9/2/2025
Division: HIGHWAY
Filename: ...\Conant Rd\B47_Abut2_01.dgn

DRAFT NOT FOR CONSTRUCTION



ABUTMENT NO. 2 PLAN

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN **006462.92**

BRIDGE NO. 6491 BRIDGE PLANS

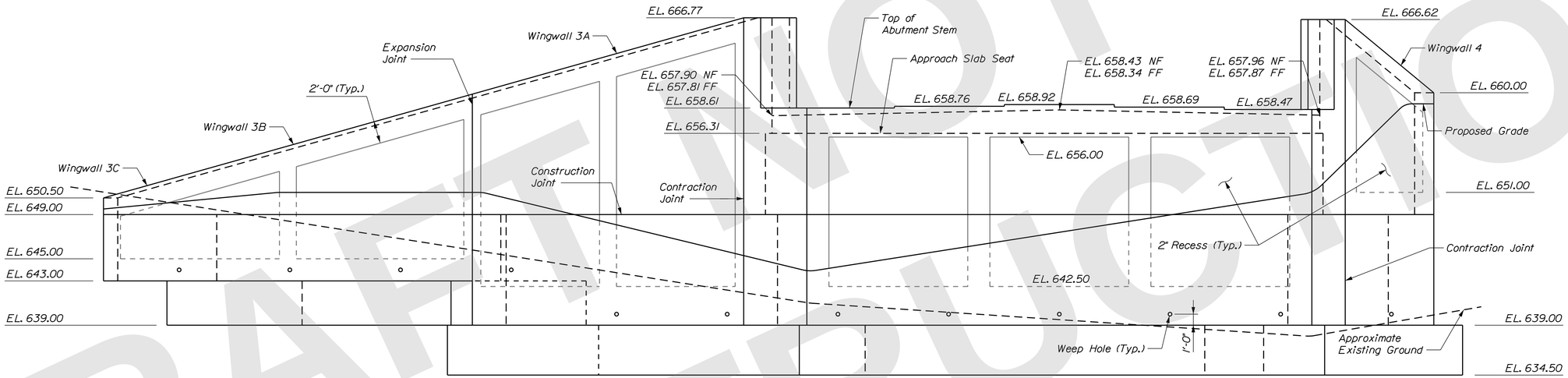
vhb

PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 2 PLAN

SHEET NUMBER
B-116
650
OF 747



ABUTMENT NO. 2 ELEVATION

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Conant Rd\B48_Abut2_02.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491 BRIDGE PLANS

vhb

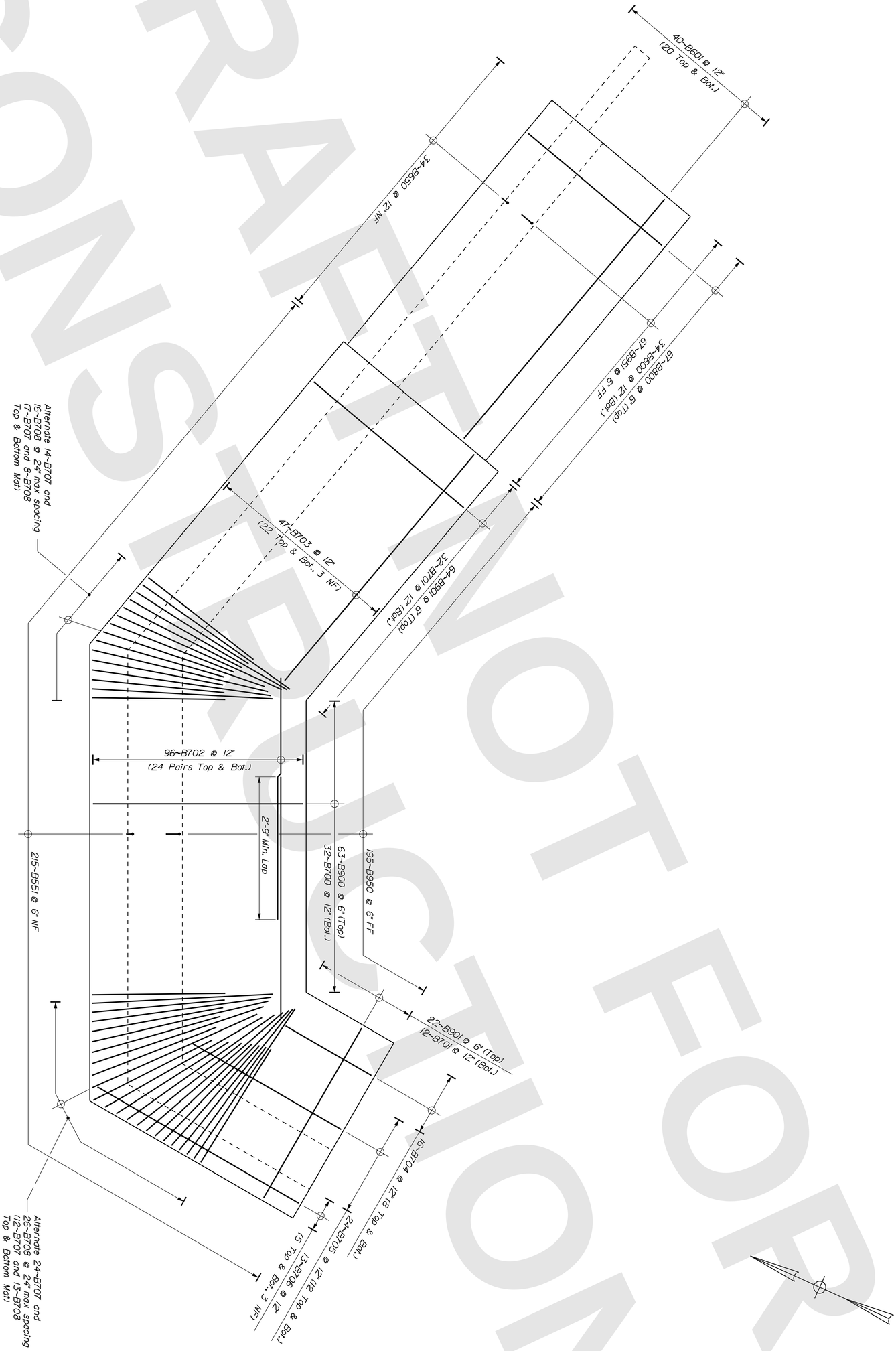
	BY	DATE
PROJ. MANAGER	R.M.	
DESIGN-DETAILED	JAH	08/2025
CHECKED-REVIEWED	YP	08/2025
DESIGN2-DETAILED2	SMH	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 2 ELEVATION

SHEET NUMBER
B-117
651
OF 747

DRAFT NOT FOR CONSTRUCTION



ABUTMENT NO. 2 FOOTING REINFORCING PLAN

SHEET NUMBER
B-118
652
OF 747

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

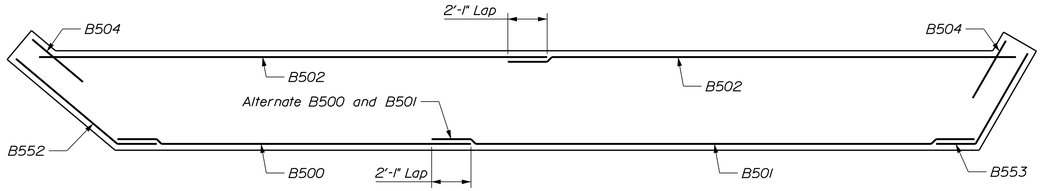
ABUTMENT NO. 2
FOOTING REINFORCING

PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

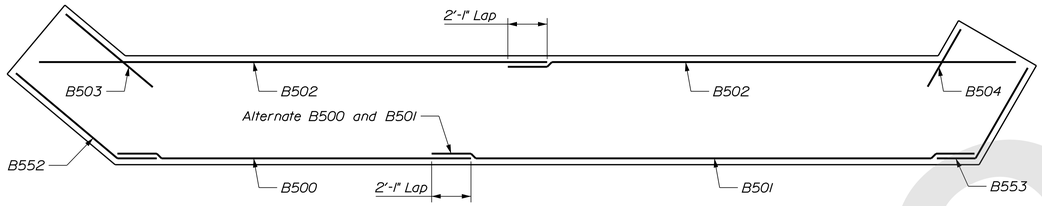
vhb

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS

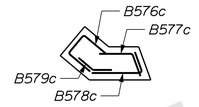
BRIDGE NO. 6491 WIN 006462.92 BRIDGE PLANS

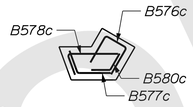


SET B

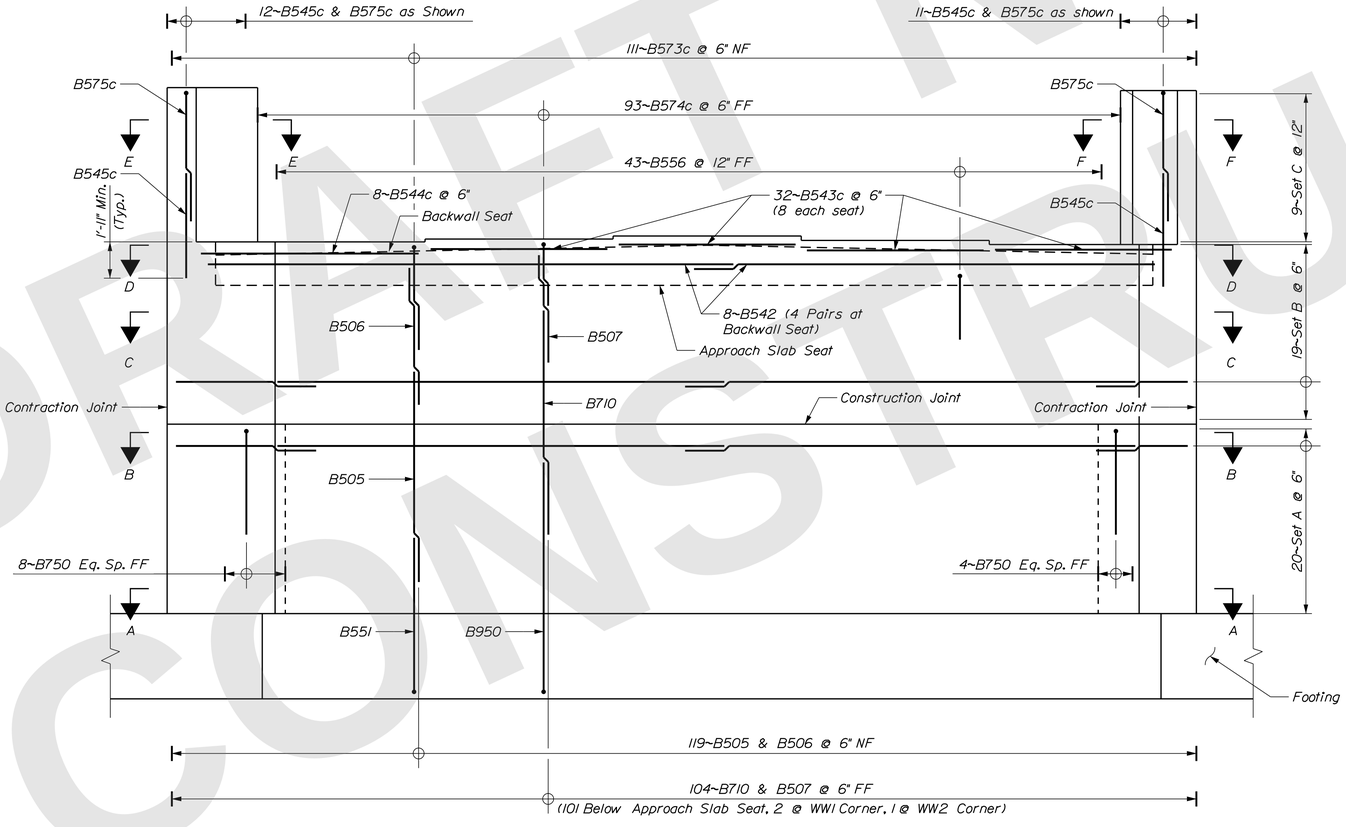


SET A





SET C
(All Chromx)



ABUTMENT NO. 2 REINFORCING ELEVATION
(Recess Panels and Wingwalls Beyond Contraction Joints not Shown for Clarity)

REINFORCING KEY

EF = Each Face
NF = Near Face
FF = Far Face

DRAFT NOT FOR CONSTRUCTION

Filename: ...\XX2_ABUT2STEMREIN.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

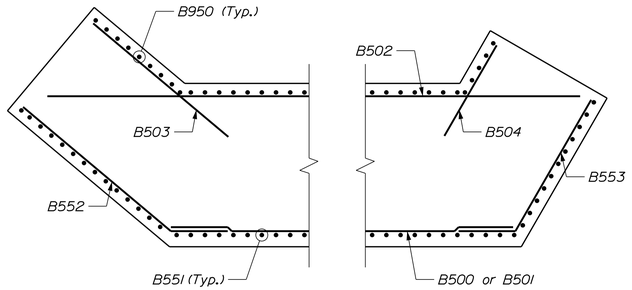
	BY	DATE
R.M.	JAH	08/2025
	SMH	08/2025

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

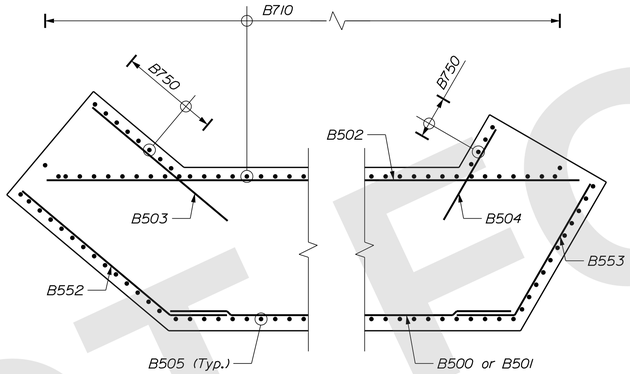
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 2 STEM REINFORCING (1 OF 2)

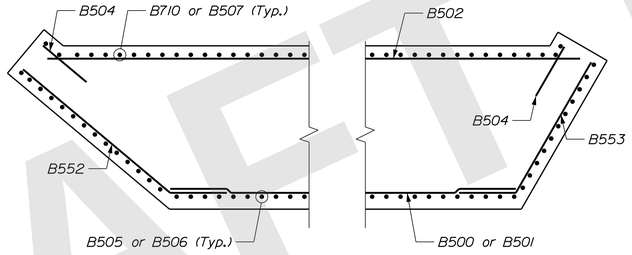
SHEET NUMBER
B-119
653
OF 747



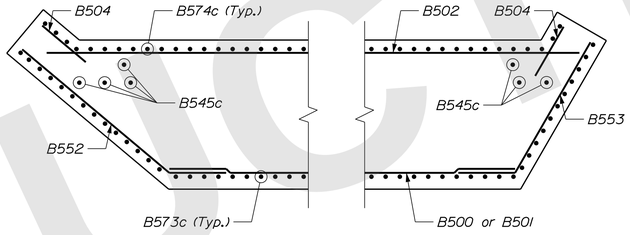
SECTION A-A



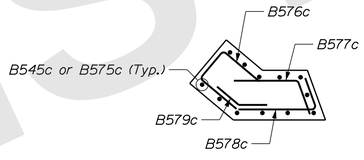
SECTION B-B



SECTION C-C



SECTION D-D



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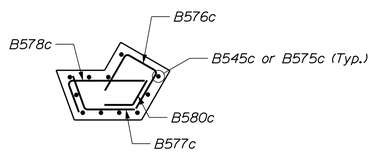


SECTION F-F

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

PROJ. MANAGER	R.M.
DESIGN-DETAILED	JAH
CHECKED-REVIEWED	YP
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

	BY	DATE
REVISIONS 1	JAH	08/2025
REVISIONS 2	SMH	08/2025
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

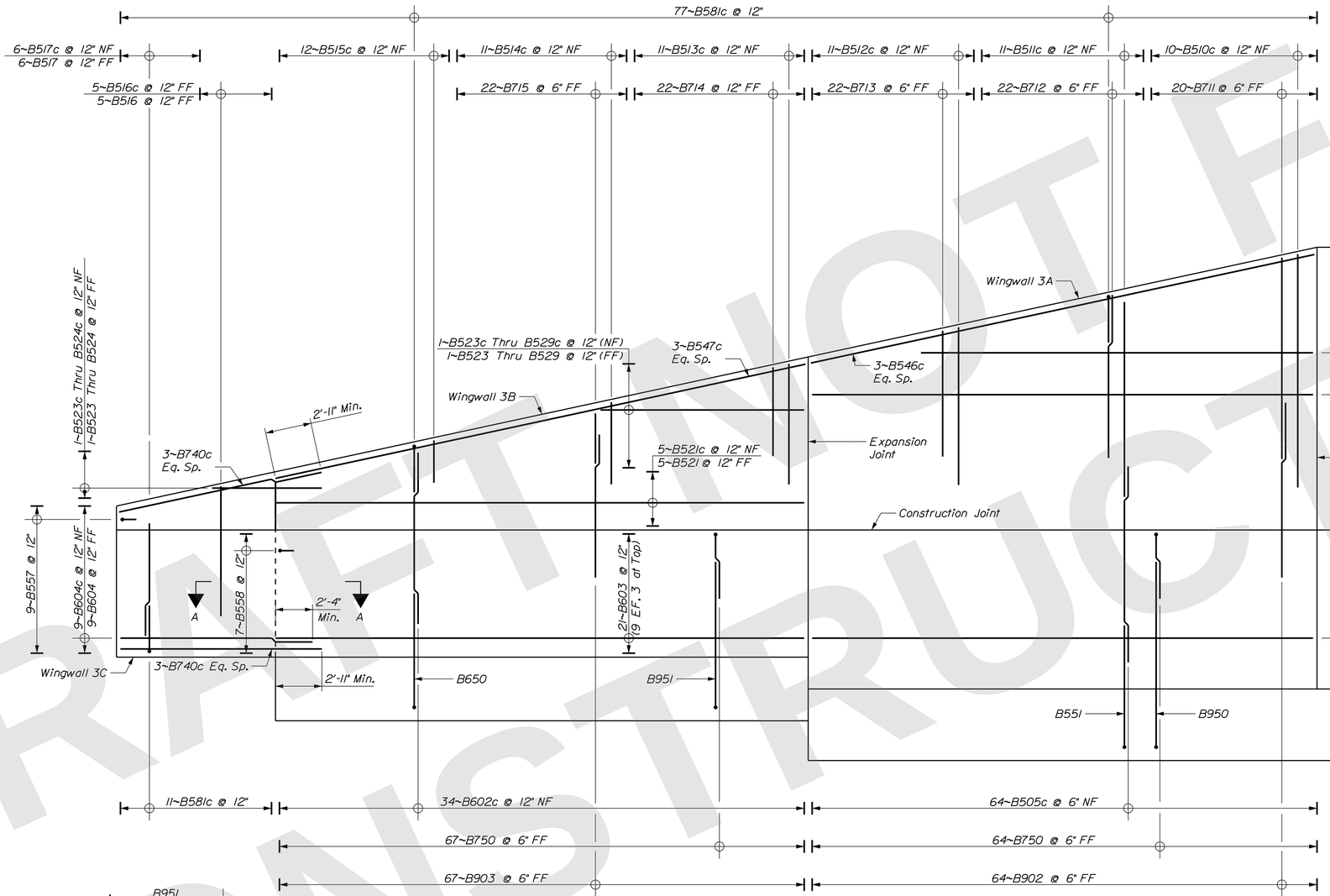
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO.2 STEM
REINFORCING (2 OF 2)

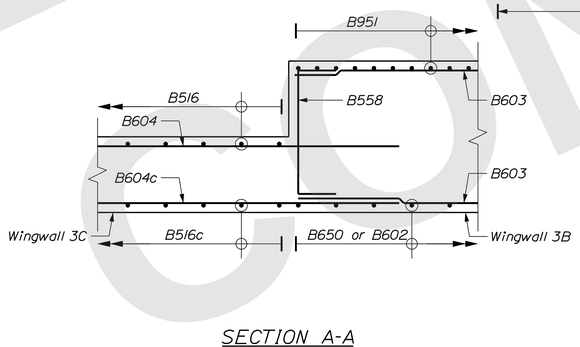
SHEET NUMBER
B-120
654
OF 747

Filename: ...\XX2_ABUT2STEMREIN.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

Filename: ...\Conant Rd\XX3_ABUT2WW1REIN.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



WINGWALL NO. 3 REINFORCING



SECTION A-A

REINFORCING KEY

EF = Each Face
NF = Near Face
FF = Far Face

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

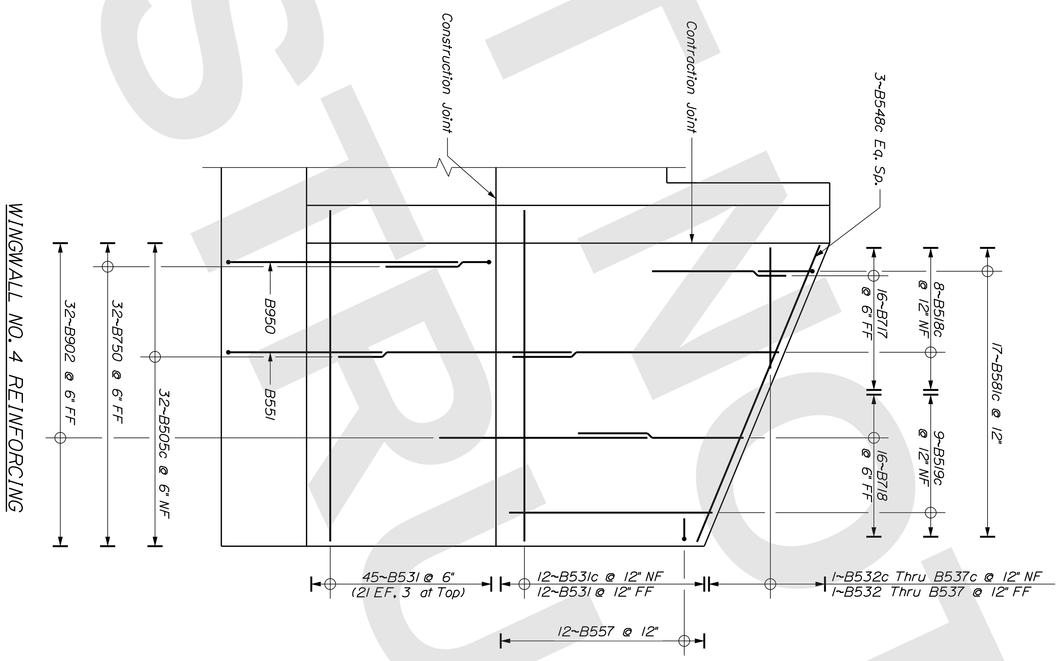
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 2
WINGWALL REINFORCING (1 of 2)

SHEET NUMBER
B-121
655
OF 747

DRAFT NOT FOR CONSTRUCTION

WINGWALL NO. 4 REINFORCING



REINFORCING KEY

EF = Each Face
NF = Near Face
FF = Far Face

SHEET NUMBER B-122 656 OF 747	CONANT ROAD BRIDGE OVER CONANT ROAD PRESQUE ISLE AROOSTOOK COUNTY		
	ABUTMENT NO. 2 WINGWALL REINFORCING (2 of 2)		

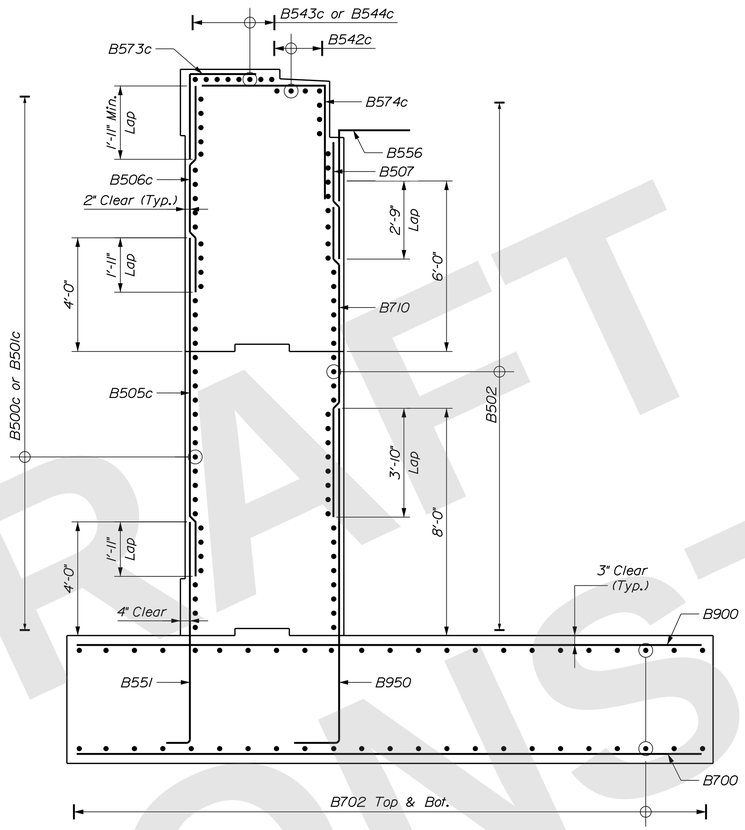
PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

vhb

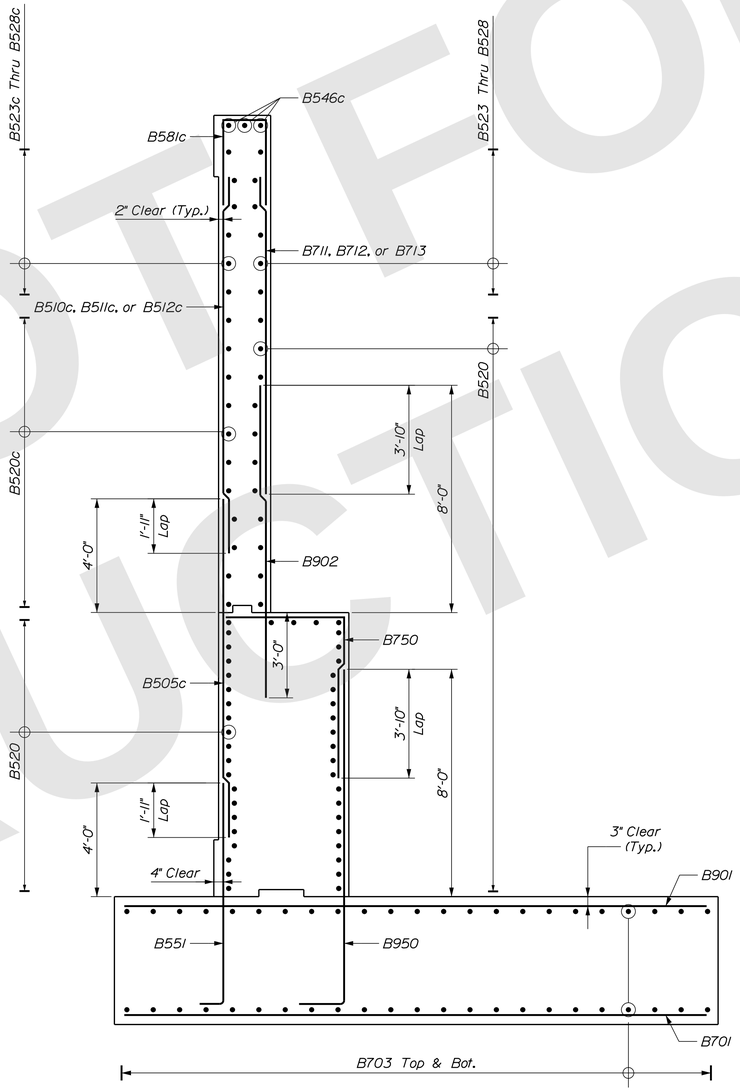
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS

BRIDGE NO. 6491 WIN 006462.92 BRIDGE PLANS

Filename: ...\B106_Abut2_Section_Reinf.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



ABUTMENT NO. 2 SECTION



WINGWALL 3A SECTION

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491 BRIDGE PLANS

vhb

	BY	DATE
R.M.	JAH	08/2025
	SMH	08/2025

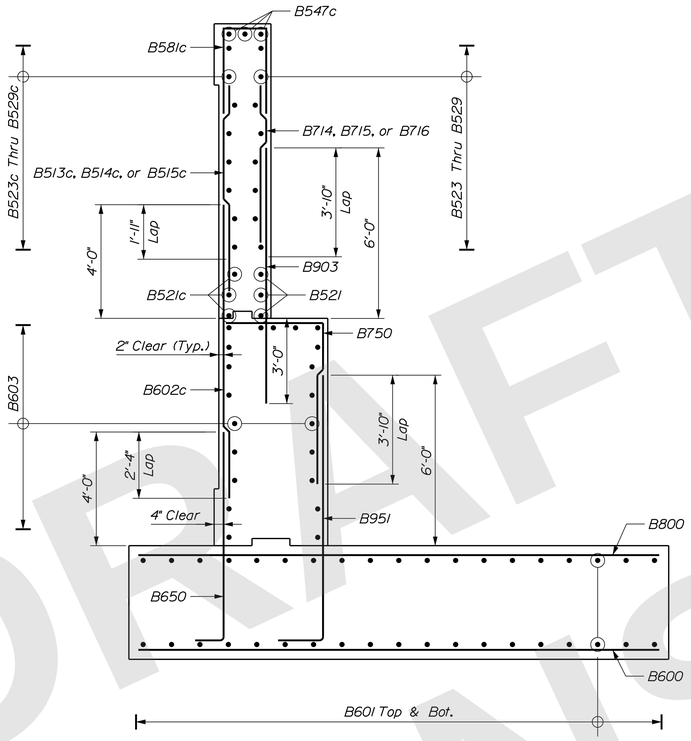
PROJ. MANAGER	R.M.
DESIGN-DETAILED	JAH
CHECKED-REVIEWED	YP
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

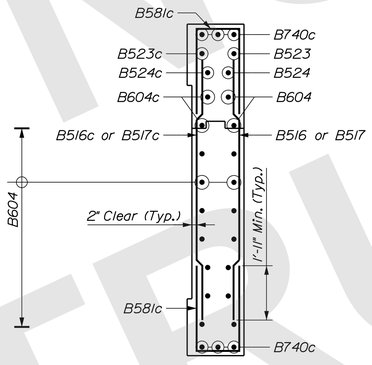
ABUTMENT NO. 2
REINFORCING SECTIONS (1 OF 2)

SHEET NUMBER
B-123
657
OF 747

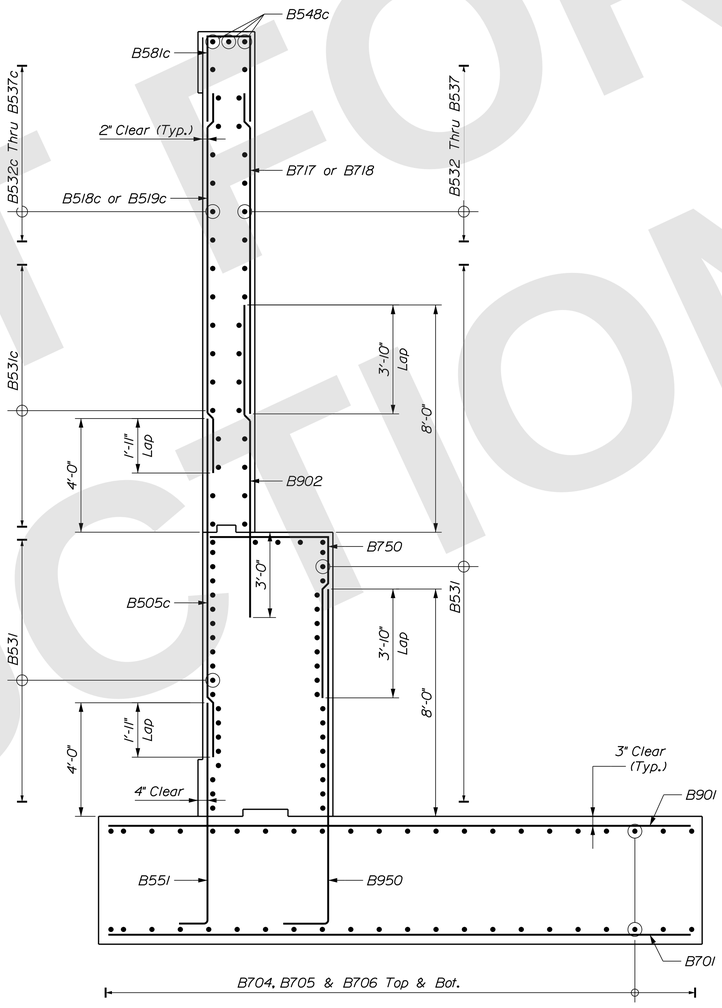
Filename: ...\B107_Abut2_Section_Reinf2.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



WINGWALL 3B SECTION



WINGWALL 3C SECTION



WINGWALL 4 SECTION

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491 BRIDGE PLANS

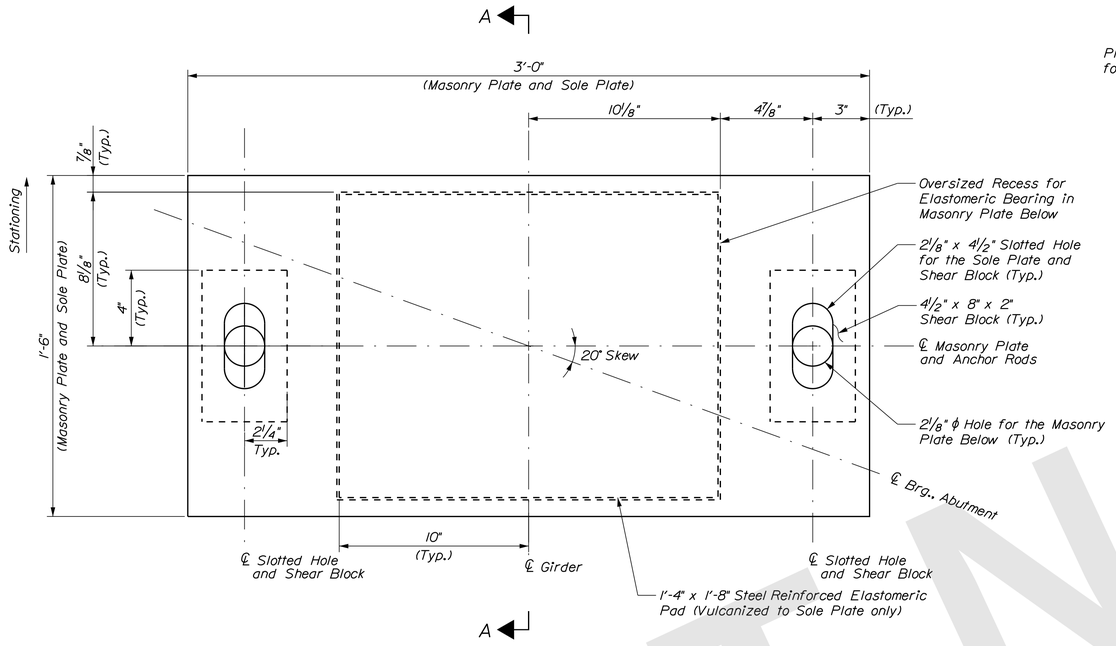
vhb

	BY	DATE
PROJ. MANAGER	R.M.	
DESIGN-DETAILED	JAH	08/2025
CHECKED-REVIEWED	YP	08/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

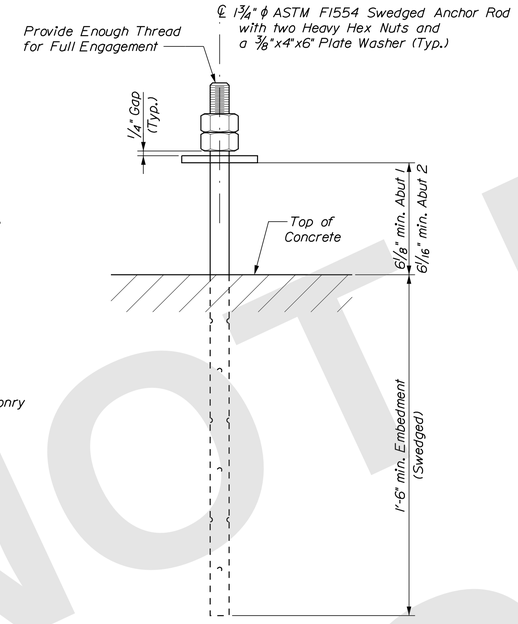
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

ABUTMENT NO. 2
REINFORCING SECTIONS (2 OF 2)

SHEET NUMBER
B-124
658
OF 747



BEARING PLAN
(Anchor Rods not Shown)



ANCHOR ROD DETAIL

ELASTOMERIC BEARING NOTES

1. The shear modulus of the elastomer shall be 95 psi.

2. Vulcanization of the elastomer to the steel plates shall be done during the primary mold process. Sole plate shall be vulcanized to the elastomer.

3. Masonry plates, shear blocks and sole plates shall meet the requirements of ASTM A709, Grade 50. Anchor rods shall meet the requirements of ASTM F1554, Grade 105 and shall be swedged on the embedded portion of the rod.

4. Masonry plates shall be galvanized in accordance with Section 506. Sole plates and shear blocks for steel superstructures shall be treated in the same manner as the structural steel. Anchor rods, plate washers, and nuts shall be galvanized to ASTM A153 or ASTM B695, Class 50, Type 1.

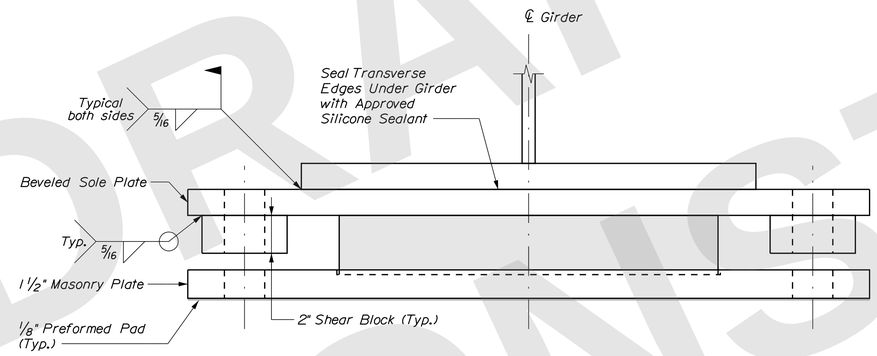
5. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge and a direction arrow that points upstation. All marks shall be permanent and shall be visible after the bearing is installed.

6. Bearings shall be covered during shipping and at any time prior to installation that the bearings may be exposed to sunlight.

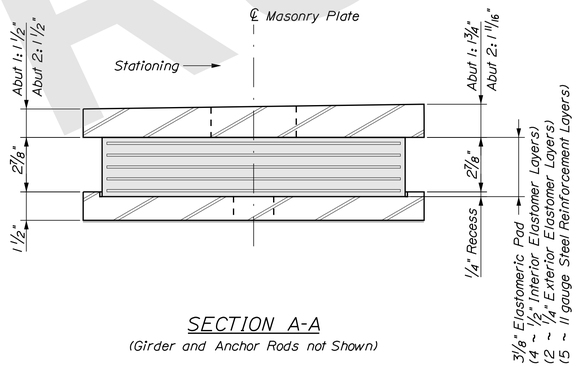
7. The superstructure may be erected when the ambient air temperature is within the range of 65°F and 90°F. If the ambient air temperature is outside this range, the bearings shall be reset as directed by the Resident.

8. All necessary precautions shall be taken to protect bearing components from field weld flash and spatter. Heat from welding operations shall be controlled such that steel adjacent to the elastomer does not exceed 200 °F. The temperature shall be verified by the use of temperature indicating crayons or other suitable means.

9. The "Bearing Design Load" for each bearing as noted in Standard Specifications, subsection 523.23.4, is 312 kips. This is the total load for the Service I load combination, without impact.



BEARING ELEVATION
(Anchor Rods not Shown)



SECTION A-A
(Girder and Anchor Rods not Shown)

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

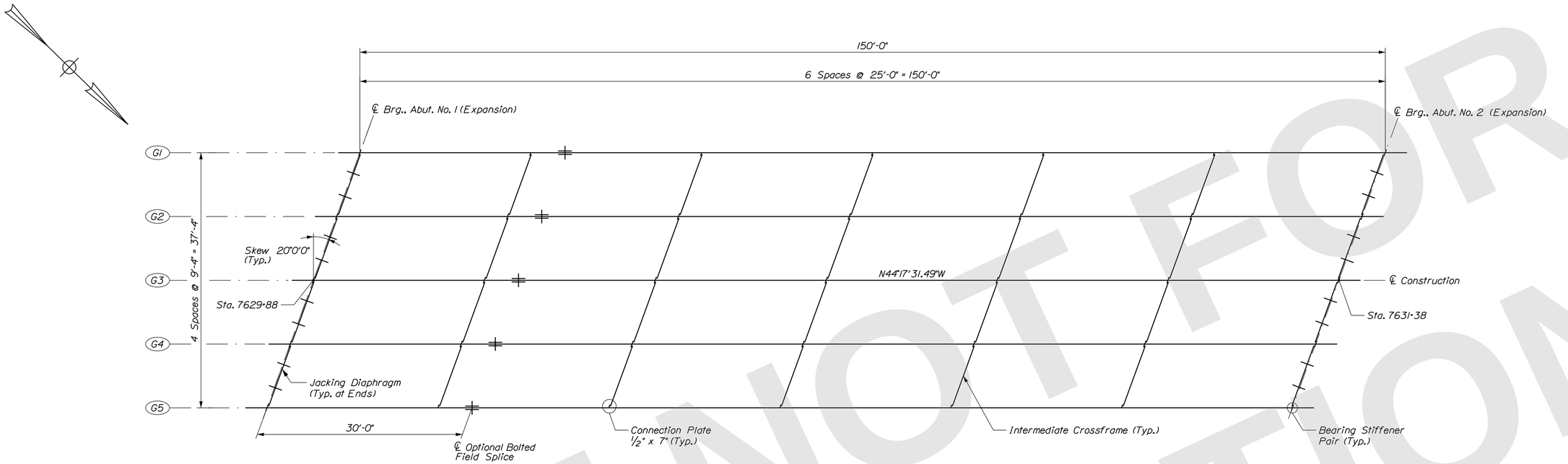
PROJ. MANAGER	R.M.		
DESIGN-DETAILED	JEP	JAH	08/2025
CHECKED-REVIEWED	ELW	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

BEARING DETAILS

SHEET NUMBER
B-125
659
OF 747

Username: jamesdavis Date:9/2/2025
Division: HIGHWAY
Filename: ...\B49_Bearing_Details.dgn



FRAMING PLAN

NOTE: All intermediate crossframes are Type L

STRUCTURAL STEEL NOTES

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

2. No transverse butt weld splices will be allowed in the flange plates or web plates within 10 feet or 10 percent of the span length (whichever is greater) from the point of maximum positive moment. Butt weld splices in flanges shall be not less than one foot from transverse butt welds in the web plates and no transverse web or flange butt welds shall be located within one 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 at least 20 feet in length unless otherwise shown on the plans.

4. Bearing stiffeners shall be plumb after erection and dead loading of the structure.

5. Crossframe connection plates may be either plumb or normal to the top flange.

6. All connection plate and stiffener welds shall be 5/16" fillet welds except 1/4" fillet welds may be used along the web of connection plates.

7. Structural steel was designed with a vertical construction live load of 50 psf and a lateral wind velocity during construction of 115 mph.

8. All bolts, nuts, and washers shall be Hot-Dipped Galvanized in accordance with ASTM A153.

9. Bolted field splice connections shall be made using 7/8" ASTM F3125, Grade A325 Type I high strength bolts. Bolt hole size shall be 15/16" diameter. Field splice bolt threads shall be excluded from the shear plane.

10. The splice shall be designed with a Class B slip coefficient.

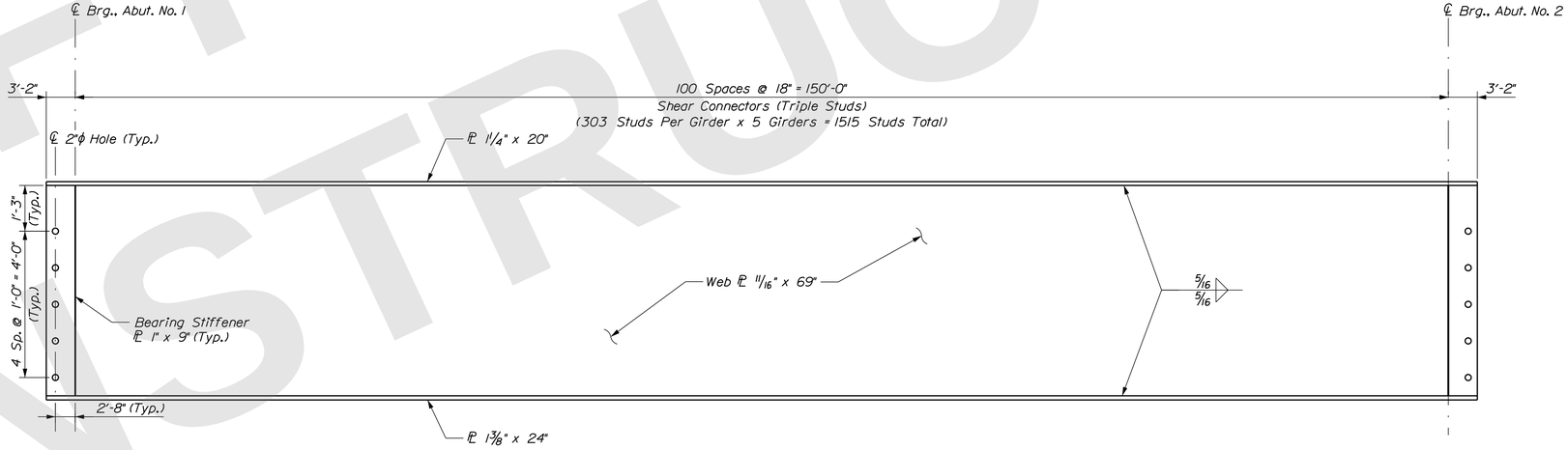
11. Repairs to the Thermal Spray Coating that modify the surface roughness in the area of the faying surface shall not be performed without the approval of the Fabrication Engineer.

12. Ends of girder webs shall be vertical under full dead load.

13. All structural steel including the girders, stiffeners, connection plates, crossframes, and splice plates shall be coated with Thermal Spray Coating in accordance with Standard Specifications Section 506. Shop Applied Protective Coating.

14. At the Contractor's option, the crossframes may be Hot-Dipped Galvanized in accordance with Standard Specifications Section 506. Shop Applied Protective Coating, as approved by the Resident. Payment will be considered incidental to Item 506.9104, Thermal Spray Coating (Shop Applied), no separate payment will be made.

15. All web plates and bottom flange plates are subject to tension or stress reversal.



GIRDER ELEVATION

(Intermediate Crossframe Connection Plates Not Shown)
(Optional Field Splice Not Shown)

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

	BY	DATE
R.M.	JAH	08/2025
	SMH	08/2025

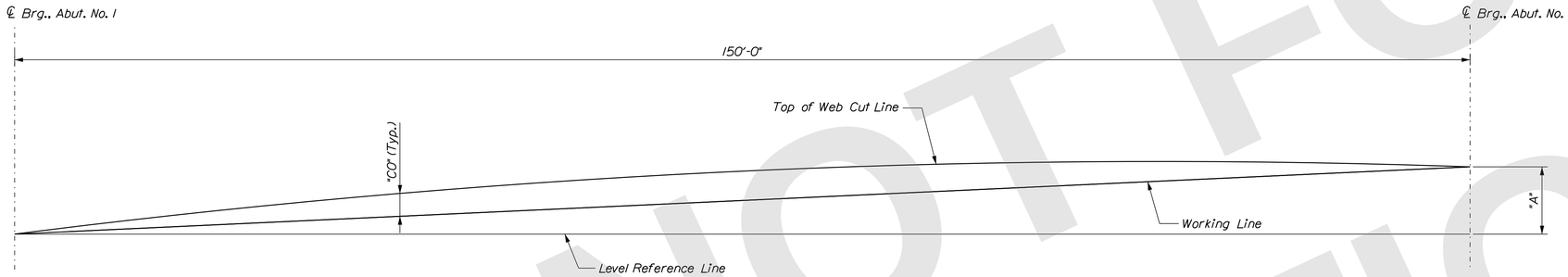
PROJ. MANAGER	R.M.
DESIGN-DETAILED	JEP
CHECKED-REVIEWED	E.W.
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

CONANT ROAD BRIDGE
OVER CONANT ROAD
AROOSTOOK COUNTY
PRESQUE ISLE

FRAMING PLAN & GIRDER ELEVATION

SHEET NUMBER
B-126
660
OF 747

Filename: ...\B50_Framing Plan & Beam Elev.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



CAMBER DIAGRAM
All Girders

TABLE OF DEFLECTIONS AND GEOMETRIC CAMBER (Inches)

Girder	Description	℄ Brg., Abut. No. 1	10'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	℄ Brg., Abut. No. 2
All Girders	Steel Dead Load	0.00	0.35	0.69	0.99	1.24	1.44	1.58	1.65	1.65	1.58	1.44	1.24	0.99	0.69	0.35	0.00
	Fluid Dead Load	0.00	0.92	1.79	2.57	3.24	3.77	4.13	4.31	4.31	4.13	3.77	3.24	2.57	1.79	0.92	0.00
	Superimposed Dead Load	0.00	0.26	0.51	0.74	0.93	1.08	1.18	1.23	1.23	1.18	1.08	0.93	0.74	0.51	0.26	0.00
	Total Load	0.00	1.53	2.98	4.30	5.41	6.29	6.89	7.20	7.20	6.89	6.29	5.41	4.30	2.98	1.53	0.00
	Geometric Camber	0.00	0.31	0.57	0.79	0.97	1.10	1.19	1.23	1.23	1.19	1.10	0.97	0.79	0.57	0.31	0.00

BOTTOM OF SLAB ELEVATIONS (Feet)

Girder	℄ Brg., Abut. No. 1	10'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	℄ Brg., Abut. No. 2
G1	663.41	663.66	663.90	664.13	664.35	664.54	664.71	664.87	664.99	665.10	665.18	665.24	665.28	665.30	665.31	665.32
G2	663.55	663.80	664.04	664.27	664.49	664.68	664.86	665.01	665.14	665.24	665.32	665.38	665.43	665.45	665.47	665.47
G3	663.68	663.93	664.18	664.41	664.63	664.82	665.00	665.15	665.28	665.39	665.47	665.53	665.57	665.60	665.62	665.62
G4	663.44	663.69	663.94	664.17	664.39	664.59	664.76	664.92	665.05	665.16	665.24	665.31	665.35	665.38	665.39	665.40
G5	663.20	663.45	663.70	663.94	664.15	664.35	664.53	664.69	664.82	664.93	665.01	665.08	665.12	665.15	665.17	665.18

TABLE OF CAMBER DIMENSIONS (Feet)

Girder	"A"
G1	1.91
G2	1.92
G3	1.94
G4	1.96
G5	1.98

TABLE OF CAMBER ORDINATES "CO" (Inches)

Girder	℄ Brg., Abut. No. 1	10'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	130'	140'	℄ Brg., Abut. No. 2
All Girders	0.00	1.84	3.56	5.09	6.38	7.39	8.08	8.43	8.43	8.08	7.39	6.38	5.09	3.56	1.84	0.00

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN **006462.92**

BRIDGE NO. 6491 — BRIDGE PLANS

vhb

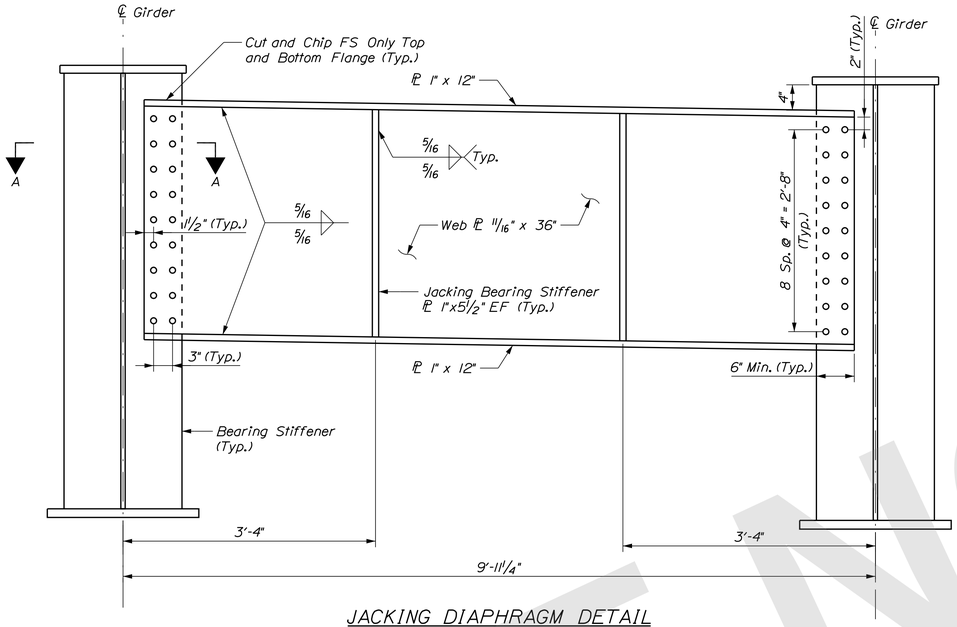
	BY	DATE
R.M.	JAH	08/2025
PROJ. MANAGER	SMH	08/2025
DESIGN-DETAILED	JEP	
CHECKED-REVIEWED	ELW	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE — AROOSTOOK COUNTY

GIRDER DETAILS (1 OF 2)

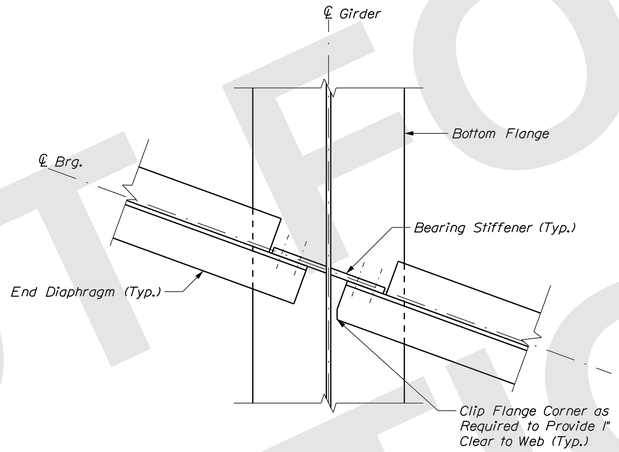
SHEET NUMBER
B-127
661
OF 747

Filename: ...\B86_Girder Details.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



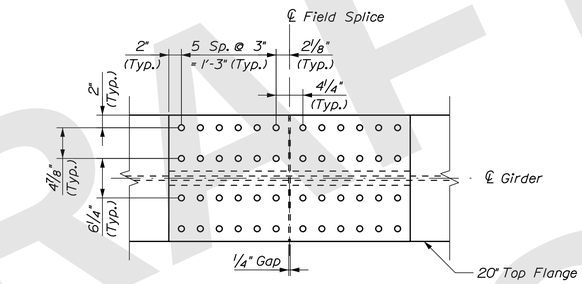
JACKING DIAPHRAGM DETAIL

Dimensions Shown are Along Skew
(One Interior Bay Shown Only)



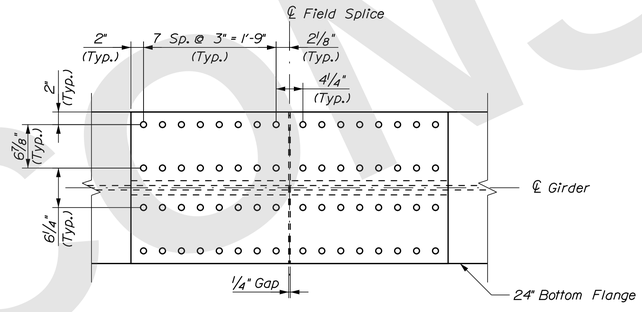
SECTION A-A

(Interior Girder Shown)

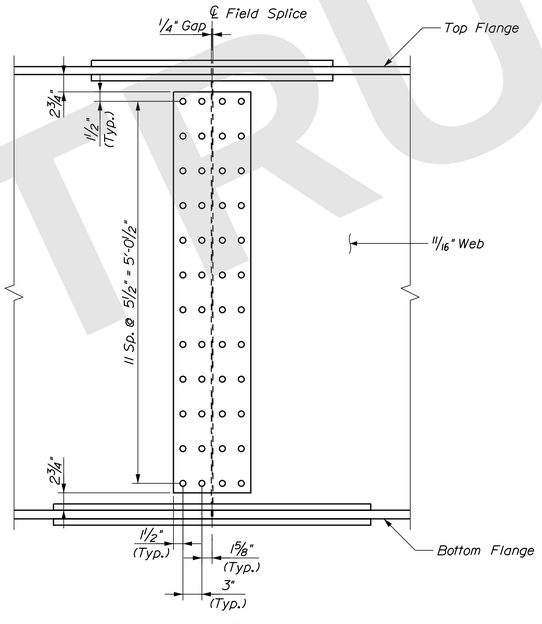


TOP VIEW

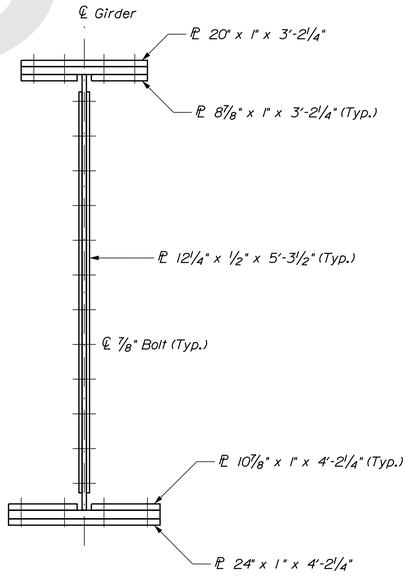
(Shear Connectors Not Shown)



BOTTOM VIEW



ELEVATION



SECTION

OPTIONAL BOLTED FIELD SPLICE DETAILS

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491 BRIDGE PLANS

vhb

PROJ. MANAGER	R.M.		
DESIGN-DETAILED	JEP	JAH	08/2025
CHECKED-REVIEWED	ELW	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

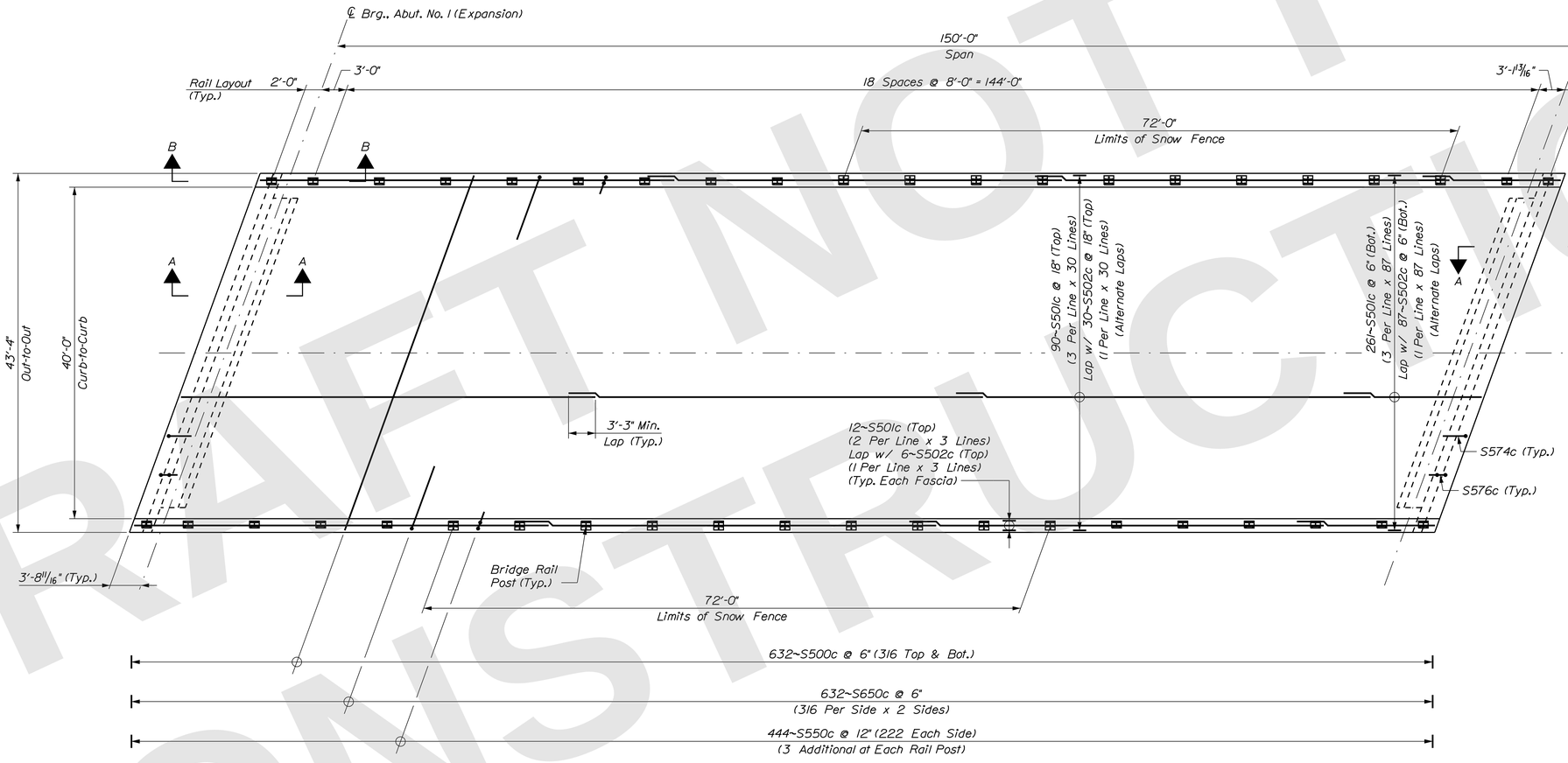
CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

GIRDER DETAILS (2 OF 2)

SHEET NUMBER
B-128
662
OF 747

Username: jamesdavis Date:9/2/2025
Division: HIGHWAY
Filename: ...\B86_Girder Details 2.dgn

Filename: ...\Conant Rd\B51_SuperPlan.dgn Username: jamesdavis Date:9/2/2025
Division: HIGHWAY



SUPERSTRUCTURE REINFORCING PLAN

(Bridge Rail and Snow Fence Not Shown For Clarity)

NOTE

1. See Superstructure Section and Deck End Details Sheet for Sections A-A and B-B.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN **006462.92**

BRIDGE NO. 6491 BRIDGE PLANS

vhb

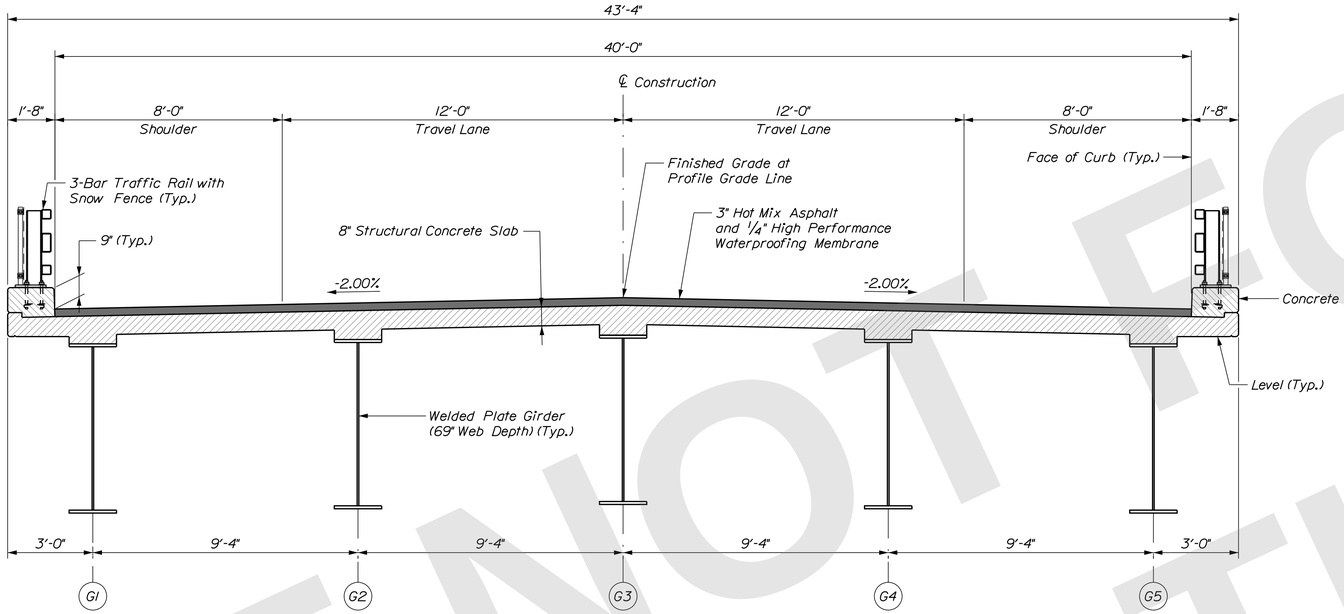
		BY	DATE
PROJ. MANAGER	R.M.		
DESIGN-DETAILED	JEP	JAH	08/2025
CHECKED-REVIEWED	ELW	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

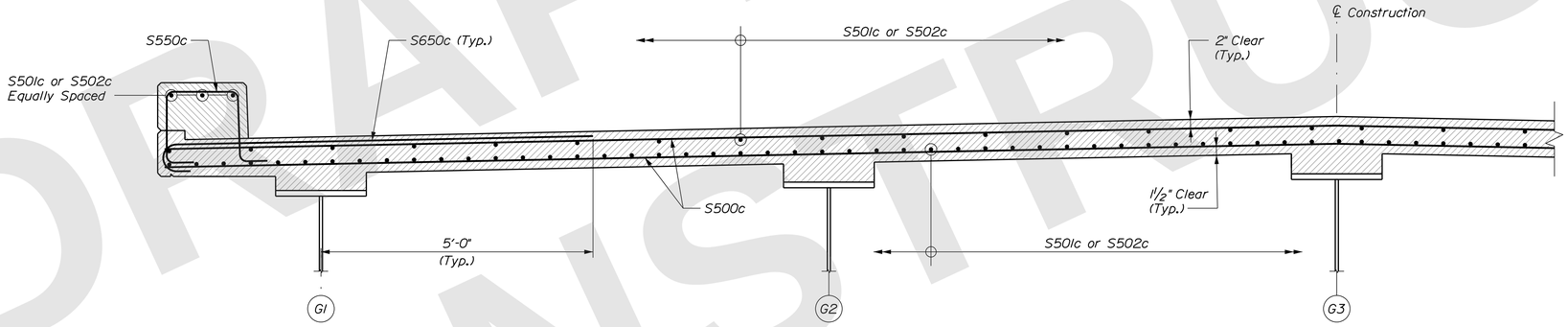
SUPERSTRUCTURE
REINFORCING PLAN

SHEET NUMBER
B-129
663
OF 747

Filename: ...\Conant Rd\B52_SuperSec_01.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



SUPERSTRUCTURE SECTION



PARTIAL DECK REINFORCING SECTION

SUPERSTRUCTURE NOTES

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

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

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

4. The superstructure slab and end diaphragm concrete shall be placed continuously and shall be kept plastic until the entire placement has been made.

5. Precast Concrete Deck Panels are not allowed on this project.

6. The Contractor shall stagger splice locations of longitudinal deck reinforcing.

7. End diaphragm concrete will be paid for under Item No. 502.26, Structural Concrete Roadway and Sidewalk Slabs on Steel Bridges and shall be placed with the deck.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

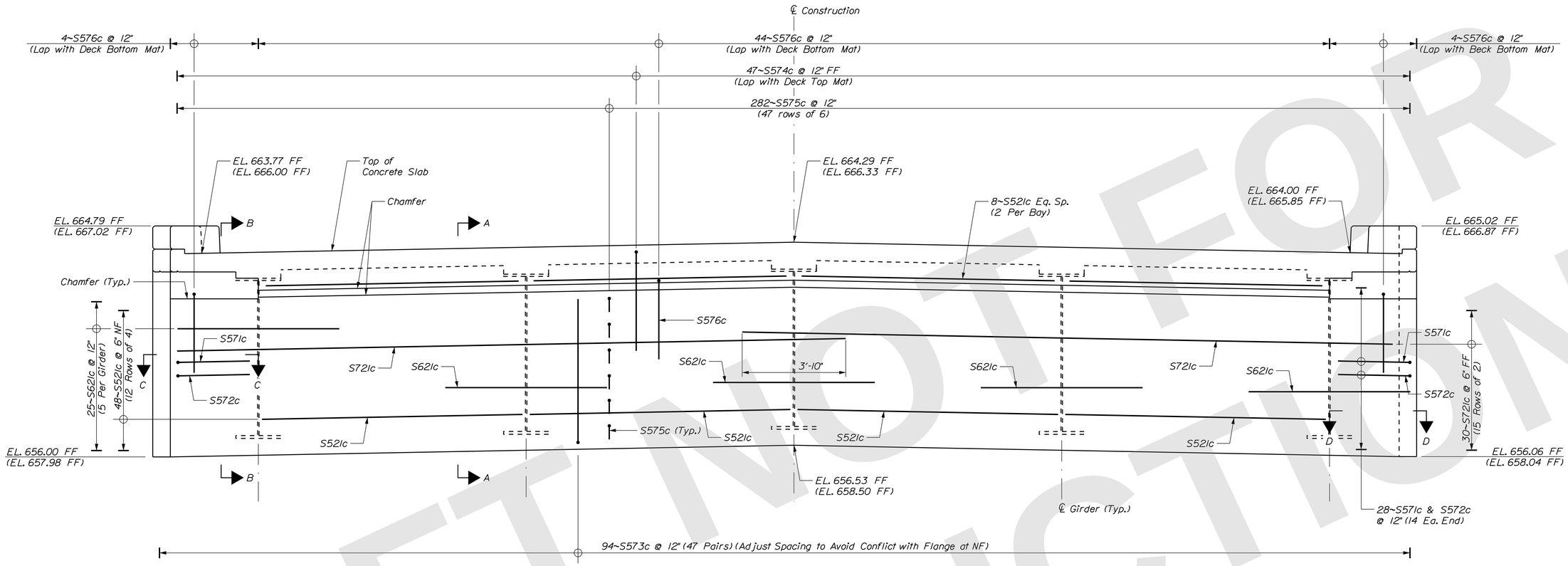
vhb

	BY	DATE
PROJ. MANAGER	R.M.	
DESIGN-DETAILED	JEP	08/2025
CHECKED-REVIEWED	ELW	08/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

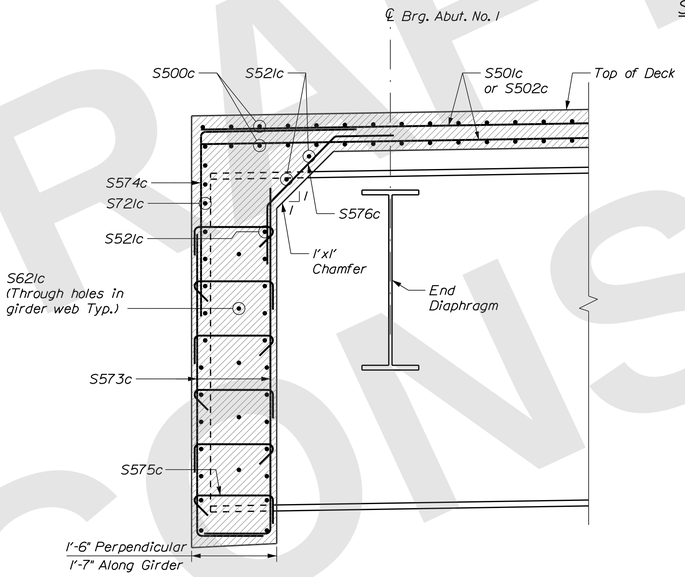
SUPERSTRUCTURE SECTION

SHEET NUMBER
B-130
664
OF 747

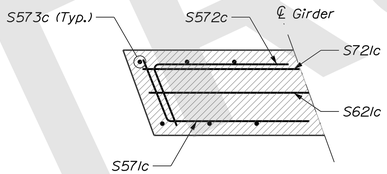


SUPERSTRUCTURE BACKWALL ELEVATION AND REINFORCING

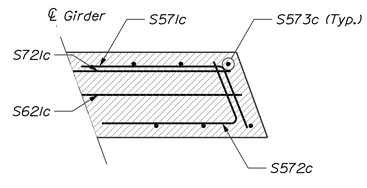
Note: All Ties and Stirrups are Placed Parallel to Girder
(Reinforcing Details at Abutment No. 1 Shown, Abutment No. 2 Similar)
(Abutment No. 2 Elevations Shown in Parentheses)



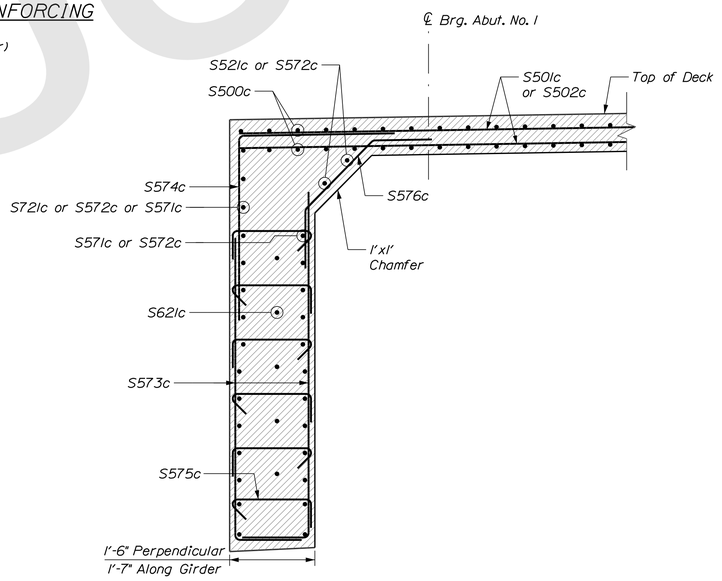
SECTION A-A
(Section Cut Perpendicular to Abutment No. 1)



SECTION C-C



SECTION D-D



SECTION B-B
(Section Cut Perpendicular to Abutment No. 1)
(Exterior Bay at G5 Shown, Other Similar)
(Curb Not Shown for Clarity)

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS
WIN 006462.92
BRIDGE NO. 6491
BRIDGE PLANS

vhb

PROJ. MANAGER	R.M.	
DESIGN-DETAILED	JAH	08/2025
CHECKED-REVIEWED	YP	08/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

SUPERSTRUCTURE BACKWALL & DECK END DETAILS

SHEET NUMBER
B-131
665
OF 747

Filename: ...\Conant Rd\B45_Abut1Super1.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

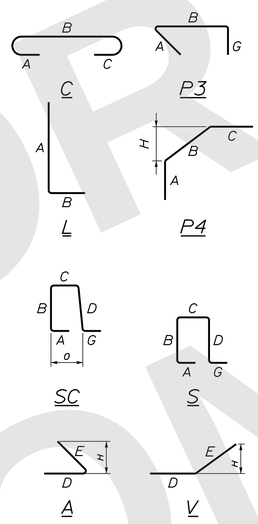
STRAIGHT BARS

MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION
			ABUTMENT 1				
A500c	52	18'-8"	Stem Horizontal	A714	22	10'-3"	Wingwall Vertical
A501c	52	28'-8"	Stem Horizontal	A715	22	7'-4"	Wingwall Vertical
A502	104	26'-10"	Stem Horizontal	A716	23	4'-3"	Wingwall Vertical
A503	20	4'-11"	Stem Horizontal	A717	16	18'-11"	Wingwall Vertical
A504	84	3'-1"	Stem Horizontal	A718	16	15'-3"	Wingwall Vertical
A505c	215	11'-11"	Stem Vertical	A740c	6	13'-2"	Wingwall Horizontal
A506c	119	13'-11"	Stem Vertical	A800	67	18'-6"	Wingwall Footing Transverse Top
A507	104	10'-5"	Stem Vertical	A900	63	22'-3"	Footing Transverse Top
A510c	10	21'-2"	Wingwall Vertical	A901	86	20'-9"	Wingwall Footing Transverse Top
A511c	11	18'-2"	Wingwall Vertical	A902	96	11'-0"	Wingwall Stem Vertical
A512c	11	15'-3"	Wingwall Vertical	A903	67	9'-0"	Wingwall Stem Vertical
A513c	11	12'-3"	Wingwall Vertical				
A514c	11	9'-4"	Wingwall Vertical				
A515c	12	6'-3"	Wingwall Vertical				
A516	5	13'-6"	Wingwall Vertical				
A516c	5	13'-6"	Wingwall Vertical				
A517	6	12'-1"	Wingwall Vertical				
A517c	6	12'-1"	Wingwall Vertical				
A518c	8	20'-11"	Wingwall Vertical				
A519c	9	17'-3"	Wingwall Vertical				
A520	62	31'-8"	Wingwall Horizontal				
A520c	17	31'-8"	Wingwall Horizontal				
A521	8	33'-2"	Wingwall Horizontal				
A521c	8	33'-2"	Wingwall Horizontal				
A523	3	3'-6"	Wingwall Horizontal				
A523c	3	3'-6"	Wingwall Horizontal				
A524	3	7'-3"	Wingwall Horizontal				
A524c	3	7'-3"	Wingwall Horizontal				
A525	3	10'-11"	Wingwall Horizontal				
A525c	3	10'-11"	Wingwall Horizontal				
A526	2	14'-8"	Wingwall Horizontal				
A526c	2	14'-8"	Wingwall Horizontal				
A527	2	18'-5"	Wingwall Horizontal				
A527c	2	18'-5"	Wingwall Horizontal				
A528	2	22'-1"	Wingwall Horizontal				
A528c	2	22'-1"	Wingwall Horizontal				
A529	2	25'-10"	Wingwall Horizontal				
A529c	2	25'-10"	Wingwall Horizontal				
A530	2	29'-6"	Wingwall Horizontal				
A530c	2	29'-6"	Wingwall Horizontal				
A531	64	15'-8"	Wingwall Horizontal				
A531c	19	15'-8"	Wingwall Horizontal				
A532	1	2'-0"	Wingwall Horizontal				
A532c	1	2'-0"	Wingwall Horizontal				
A533	1	4'-2"	Wingwall Horizontal				
A533c	1	4'-2"	Wingwall Horizontal				
A534	1	6'-4"	Wingwall Horizontal				
A534c	1	6'-4"	Wingwall Horizontal				
A535	1	8'-7"	Wingwall Horizontal				
A535c	1	8'-7"	Wingwall Horizontal				
A536	1	10'-9"	Wingwall Horizontal				
A536c	1	10'-9"	Wingwall Horizontal				
A537	1	12'-11"	Wingwall Horizontal				
A537c	1	12'-11"	Wingwall Horizontal				
A538	1	15'-1"	Wingwall Horizontal				
A538c	1	15'-1"	Wingwall Horizontal				
A542c	8	24'-2"	Bridge Seat Horizontal				
A543c	32	9'-7"	Bridge Seat Horizontal				
A544c	8	11'-9"	Bridge Seat Horizontal				
A545c	23	6'-1"	Stem Vertical				
A546c	3	32'-10"	Wingwall Horizontal				
A547c	3	34'-5"	Wingwall Horizontal				
A548c	3	17'-3"	Wingwall Horizontal				
A600	34	18'-6"	Wingwall Footing Transverse Bot.				
A601	40	33'-0"	Wingwall Footing Long. Top & Bot.				
A602c	34	10'-4"	Wingwall Vertical				
A603	21	33'-2"	Wingwall Horizontal				
A604	23	12'-2"	Wingwall Horizontal				
A604c	5	12'-2"	Wingwall Horizontal				
A700	32	22'-3"	Footing Transverse Bot.				
A701	44	20'-9"	Wingwall Footing Transverse Bot.				
A702	96	22'-5"	Footing Long. Top & Bot.				
A703	47	34'-0"	Wingwall Footing Long. Top & Bot.				
A704	16	10'-5"	Wingwall Footing Long. Top & Bot.				
A705	24	18'-0"	Wingwall Footing Long. Top & Bot.				
A706	13	24'-5"	Wingwall Footing Long. Top & Bot.				
A707	38	19'-0"	Footing Transverse Top & Bot.				
A708	42	14'-0"	Footing Transverse Top & Bot.				
A709	8	10'-9"	Footing Longitudinal				
A710	104	11'-10"	Stem Vertical				
A711	20	19'-2"	Wingwall Vertical				
A712	22	16'-2"	Wingwall Vertical				
A713	22	13'-3"	Wingwall Vertical				

BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
							ABUTMENT 1							
A551	215	8'-11"	L	8'-1"	0'-10"									Footing Vertical L-Bar
A552c	52	8'-2"	V				7'-2"	1'-0"			0'-8"			Stem Horizontal
A553c	52	6'-8"	V				5'-8"	1'-0"			0'-11"			Stem Horizontal
A556	43	5'-0"	L	2'-6"	2'-6"									Approach Slab L-Bar
A557c	33	3'-6"	S	0'-0"	1'-0"	1'-6"	1'-0"			0'-0"				Wingwall Side U-Bar
A558	9	5'-6"	S	0'-0"	1'-0"	3'-6"	1'-0"			0'-0"				Wingwall Transition Side U-Bar
A573c	111	5'-4"	L	2'-4"	3'-0"									Stem Vertical
A574c	93	8'-9"	L	4'-0"	4'-9"									Stem Vertical
A575c	23	8'-4"	L	6'-10"	1'-6"									Stem Vertical
A576c	20	4'-10"	S	0'-0"	1'-8"	1'-6"	1'-8"			0'-0"				Stem Horizontal
A577c	20	3'-7"	V				2'-3"	1'-4"			1'-4"			Stem Horizontal
A578c	20	4'-1"	A				2'-9"	1'-4"			1'-4"			Stem Horizontal
A579c	10	2'-0"	V				1'-0"	1'-0"			0'-8"			Stem Horizontal
A580c	10	2'-0"	V				1'-0"	1'-0"			0'-11"			Stem Horizontal
A581c	105	7'-6"	S	0'-0"	3'-0"	1'-6"	3'-0"			0'-0"				Wingwall Top U-Bar
A650	34	8'-7"	L	7'-7"	1'-0"									Footing Vertical L-Bar
A750	175	9'-2"	L	5'-8"	3'-6"									Wingwall Stem Vertical L-Bar
A950	195	13'-8"	L	12'-1"	1'-7"									Footing Vertical L-Bar
A951	67	10'-8"	L	9'-1"	1'-7"									Footing Vertical L-Bar

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, Grade 60
ASTM A1035, Type CS, Grade 100

GENERAL NOTES

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

   Mark "A502" = bar size #5
   Mark "B805" = bar size #8
   Mark "S650" = bar size #6

2. Bar Marks ending in a letter indicate the following:

   c = Low Carbon Chromium

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. 6491

BRIDGE PLANS

vhb

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	JAH	JAH	08/2025
CHECKED-REVIEWED	YP	SMH	08/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

REINFORCING SCHEDULE
(1 OF 2)

SHEET NUMBER
B-132
666
OF 747

PRELIMINARY NOT FOR CONSTRUCTION

Filename: ...\Conant Rd\050_Reinf_Sched.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

Filename: ...\Conant Rd\050_Reinf_Sched2.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

STRAIGHT BARS

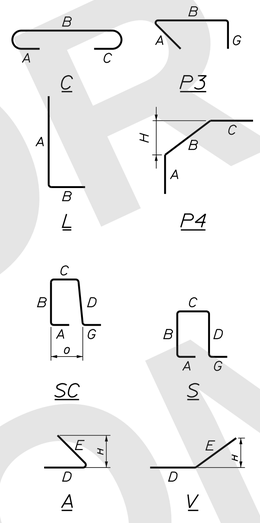
MARK	QTY.	LENGTH	LOCATION
ABUTMENT 2			
B500c	39	18'-8"	Stem Horizontal
B501c	39	28'-8"	Stem Horizontal
B502	78	26'-10"	Stem Horizontal
B503	20	4'-11"	Stem Horizontal
B504	58	3'-1"	Stem Horizontal
B505c	215	11'-11"	Stem Vertical
B506c	119	7'-5"	Stem Vertical
B507	104	6'-0"	Stem Vertical
B510c	10	14'-8"	Wingwall Vertical
B511c	11	12'-3"	Wingwall Vertical
B512c	11	9'-11"	Wingwall Vertical
B513c	11	7'-7"	Wingwall Vertical
B514c	11	5'-2"	Wingwall Vertical
B515c	12	2'-8"	Wingwall Vertical
B516	5	8'-2"	Wingwall Vertical
B516c	5	8'-2"	Wingwall Vertical
B517	6	7'-1"	Wingwall Vertical
B517c	6	7'-1"	Wingwall Vertical
B518c	8	14'-1"	Wingwall Vertical
B519c	9	10'-9"	Wingwall Vertical
B520	57	31'-8"	Wingwall Horizontal
B520c	12	31'-8"	Wingwall Horizontal
B521	5	33'-2"	Wingwall Horizontal
B521c	5	33'-2"	Wingwall Horizontal
B523	3	4'-5"	Wingwall Horizontal
B523c	3	4'-5"	Wingwall Horizontal
B524	3	9'-1"	Wingwall Horizontal
B524c	3	9'-1"	Wingwall Horizontal
B525	2	13'-9"	Wingwall Horizontal
B525c	2	13'-9"	Wingwall Horizontal
B526	2	18'-4"	Wingwall Horizontal
B526c	2	18'-4"	Wingwall Horizontal
B527	2	23'-0"	Wingwall Horizontal
B527c	2	23'-0"	Wingwall Horizontal
B528	2	27'-8"	Wingwall Horizontal
B528c	2	27'-8"	Wingwall Horizontal
B529	1	32'-3"	Wingwall Horizontal
B529c	1	32'-3"	Wingwall Horizontal
B531	57	15'-8"	Wingwall Horizontal
B531c	12	15'-8"	Wingwall Horizontal
B532	1	2'-3"	Wingwall Horizontal
B532c	1	2'-3"	Wingwall Horizontal
B533	1	4'-8"	Wingwall Horizontal
B533c	1	4'-8"	Wingwall Horizontal
B534	1	7'-1"	Wingwall Horizontal
B534c	1	7'-1"	Wingwall Horizontal
B535	1	9'-6"	Wingwall Horizontal
B535c	1	9'-6"	Wingwall Horizontal
B536	1	11'-11"	Wingwall Horizontal
B536c	1	11'-11"	Wingwall Horizontal
B537	1	14'-4"	Wingwall Horizontal
B537c	1	14'-4"	Wingwall Horizontal
B542c	8	24'-2"	Bridge Seat Horizontal
B543c	32	9'-7"	Bridge Seat Horizontal
B544c	8	11'-9"	Bridge Seat Horizontal
B545c	23	6'-1"	Stem Vertical
B546c	3	32'-5"	Wingwall Horizontal
B547c	3	34'-0"	Wingwall Horizontal
B548c	3	16'-11"	Wingwall Horizontal
B600	34	18'-6"	Wingwall Footing Transverse Bot.
B601	40	33'-0"	Wingwall Footing Long. Top & Bot.
B602c	34	10'-4"	Wingwall Vertical
B603	21	33'-2"	Wingwall Horizontal
B604	9	11'-11"	Wingwall Horizontal
B604c	9	11'-11"	Wingwall Horizontal
B700	32	22'-3"	Footing Transverse Bot.
B701	44	20'-9"	Wingwall Footing Transverse Bot.
B702	96	25'-5"	Footing Long. Top & Bot.
B703	47	34'-2"	Wingwall Footing Long. Top & Bot.
B704	16	10'-5"	Wingwall Footing Long. Top & Bot.
B705	24	18'-0"	Wingwall Footing Long. Top & Bot.
B706	13	24'-5"	Wingwall Footing Long. Top & Bot.
B707	38	19'-0"	Footing Transverse Top & Bot.
B708	42	14'-0"	Footing Transverse Top & Bot.
B710	104	11'-10"	Stem Vertical
B711	20	12'-8"	Wingwall Vertical
B712	22	10'-3"	Wingwall Vertical
B713	22	7'-11"	Wingwall Vertical
B714	22	5'-7"	Wingwall Vertical
B715	22	3'-2"	Wingwall Vertical
B717	16	12'-1"	Wingwall Vertical
B718	16	8'-9"	Wingwall Vertical
B740c	6	13'-0"	Wingwall Horizontal

MARK	QTY.	LENGTH	LOCATION
ABUTMENT 2			
B800	67	18'-6"	Wingwall Footing Transverse Top
B900	63	22'-3"	Footing Transverse Top
B901	86	20'-9"	Wingwall Footing Transverse Top
B902	96	11'-0"	Wingwall Stem Vertical
B903	67	9'-0"	Wingwall Stem Vertical
SUPERSTRUCTURE			
S500c	632	45'-9"	Transverse Bar
S501c	369	50'-0"	Longitudinal Bar
S502c	123	16'-10"	Longitudinal Bar
S521c	112	9'-8"	Backwall Transverse
S621c	50	6'-0"	Backwall Transverse
S721c	60	24'-11"	Backwall Transverse Dowel
APPROACH SLAB			
AS501	32	30'-0"	Approach Slab
AS502	32	12'-11"	Approach Slab
AS601	156	15'-2"	Approach Slab

BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
ABUTMENT 2														
B551	215	8'-11"	L	8'-1"	0'-10"									Footing Vertical L-Bar
B552c	39	8'-2"	V				7'-2"	1'-0"			0'-8"			Stem Horizontal
B553c	39	6'-8"	V				5'-8"	1'-0"			0'-11"			Stem Horizontal
B556	43	5'-0"	L	2'-6"	2'-6"									Approach Slab L-Bar
B557c	21	3'-6"	S	0'-0"	1'-0"	1'-6"	1'-0"			0'-0"				Wingwall Side U-Bar
B558	7	5'-6"	S	0'-0"	1'-0"	3'-6"	1'-0"			0'-0"				Wingwall Transition Side U-Bar
B573c	111	5'-4"	L	2'-4"	3'-0"									Stem Vertical
B574c	93	8'-9"	L	4'-0"	4'-9"									Stem Vertical
B575c	23	7'-8"	L	6'-2"	1'-6"									Stem Vertical
B576c	18	4'-10"	S	0'-0"	1'-8"	1'-6"	1'-8"			0'-0"				Stem Horizontal
B577c	18	3'-7"	V				2'-3"	1'-4"			1'-4"			Stem Horizontal
B578c	18	4'-1"	A				2'-9"	1'-4"			1'-4"			Stem Horizontal
B579c	9	2'-0"	V				1'-0"	1'-0"			0'-8"			Stem Horizontal
B580c	9	2'-0"	V				1'-0"	1'-0"			0'-11"			Stem Horizontal
B581c	105	7'-6"	S	0'-0"	3'-0"	1'-6"	3'-0"			0'-0"				Wingwall Top U-Bar
B650	34	8'-7"	L	7'-7"	1'-0"									Footing Vertical L-Bar
B750	175	9'-2"	L	5'-8"	3'-6"									Wingwall Stem Vertical L-Bar
B950	195	13'-8"	L	12'-1"	1'-7"									Footing Vertical L-Bar
B951	67	10'-8"	L	9'-1"	1'-7"									Footing Vertical L-Bar
SUPERSTRUCTURE														
S550c	444	5'-3"	SC	0'-10"	1'-2"	1'-3"	1'-2"			0'-10"		1'-4"		Curb Stirrup
S650c	632	8'-9"	C	0'-8"	8'-1"	0'-0"								Overhang Hook
S571c	56	3'-10"	V				2'-8"	1'-2"			1'-1"			Backwall Horizontal
S572c	56	3'-10"	A				2'-8"	1'-2"			1'-1"			Backwall Horizontal
S573c	188	7'-3"	L	6'-1"	1'-2"									Backwall Vertical
S574c	94	5'-11"	L	3'-2"	2'-9"									Backwall Vertical
S575c	564	2'-2"	P3	0'-6"	1'-3"					0'-6"				Backwall Tie
S576c	104	3'-9"	P4	1'-0"	1'-9"	1'-0"					1'-3"			Deck End Long. Bar

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, Grade 60
ASTM A1035, Type CS, Grade 100

GENERAL NOTES

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

   Mark "A502" = bar size #5
   Mark "B805" = bar size #8
   Mark "S650" = bar size #6

2. Bar Marks ending in a letter indicate the following:

   c = Low Carbon Chromium

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE PLANS

BRIDGE NO. 6491

vhb

PROJ. MANAGER	R.M.
DESIGN-DETAILED	JAH
CHECKED-REVIEWED	YP
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

	DATE	BY
REVISIONS 1	08/2025	JAH
REVISIONS 2	08/2025	SMH
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CONANT ROAD BRIDGE
OVER CONANT ROAD
PRESQUE ISLE AROOSTOOK COUNTY

REINFORCING SCHEDULE (2 OF 2)

SHEET NUMBER
B-133
667
OF 747

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

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

DESIGN LOADING

Live Load ..... HL - 93 Modified

MATERIALS

Concrete:
- Fill ..... "Fill"
- All Other ..... Class "A"
- Precast ..... Class "P"

Reinforcing:
- Plain Reinforcing Steel ..... ASTM A 615, Grade 60

BASIC DESIGN STRESSES

Concrete:
- Class "A" ..... f 'c = 4,000 psi
- Class "P" ..... f 'c = 5,000 psi

Reinforcing Steel
- Plain Reinforcing Steel ..... f y = 60,000 psi

PRESQUE ISLE
AROOSTOOK COUNTY
LARGE CULVERTS
PRESQUE ISLE BYPASS

BRIDGE NO. 6584
BRIDGE NO. 6585
BRIDGE NO. 6586
BRIDGE NO. 6734
BRIDGE NO. 6583
BRIDGE NO. 6748

LIST OF DRAWINGS

Title Sheet B-134
Bridge No. 6584 (Clark Brook Bypass)
- Plan and Longitudinal Section B-135
- Boring Location Plan & Interpretive Subsurface Profile B-136
- Boring Logs B-137
- Typical Sections B-138

Bridge No. 6585 (Tributary to Clark Brook)
- Plan and Longitudinal Section B-139
- Boring Location Plan & Interpretive Subsurface Profile B-140
- Boring Logs B-141
- Typical Sections B-142

Bridge No. 6586 (Tributary to Williams Brook)
- Plan and Longitudinal Section B-143
- Boring Location Plan & Interpretive Subsurface Profile B-144
- Boring Logs B-145
- Typical Sections B-146

Bridge No. 6734 (Williams Brook Bridge)
- Plan and Longitudinal Section B-147
- Boring Location Plan & Interpretive Subsurface Profile B-148
- Boring Logs B-149
- Typical Sections B-150

Bridge No. 6583 (Tributary to Merritt Brook)
- Plan and Longitudinal Section B-151
- Boring Logs B-152
- Boring Location Plan & Interpretive Subsurface Profile B-153
- Typical Sections B-154

Bridge No. 6748 (Stone Flower Bridge)
- Plan and Longitudinal Section B-155
- Boring Location Plan & Interpretive Subsurface Profile B-156
- Boring Logs B-157
- Typical Sections B-158

Large Culvert Details (1 of 4) B-159
Large Culvert Details (2 of 4) B-160
Large Culvert Details (3 of 4) B-161
Large Culvert Details (4 of 4) B-162

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS
WIN 6462.92
BRIDGE NO: BRIDGE PLANS

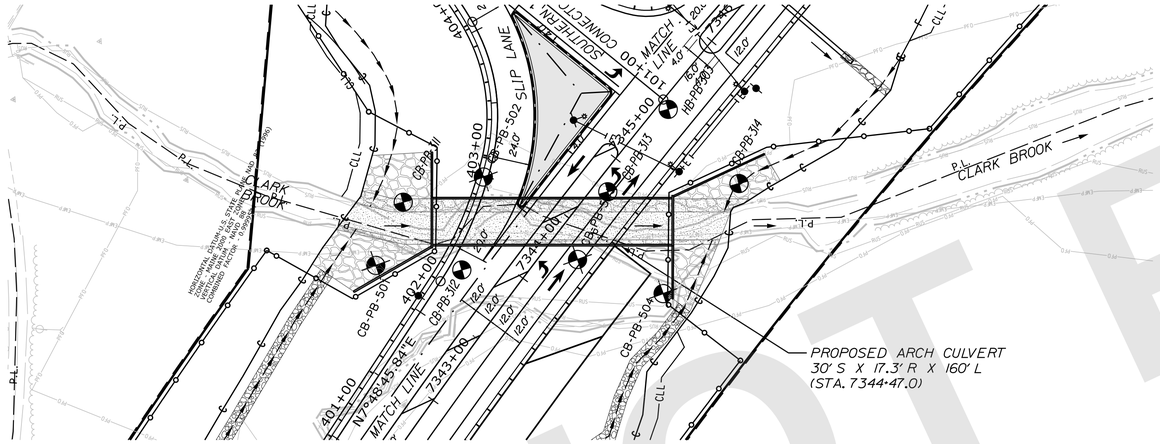
PROJECT INFORMATION	
PROGRAM	HIGHWAY
PROJECT MANAGER	L. ROWE
DESIGNER	S. HODGDON
CONSULTANT	VHB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

PRESQUE ISLE
LARGE CULVERTS

TITLE SHEET

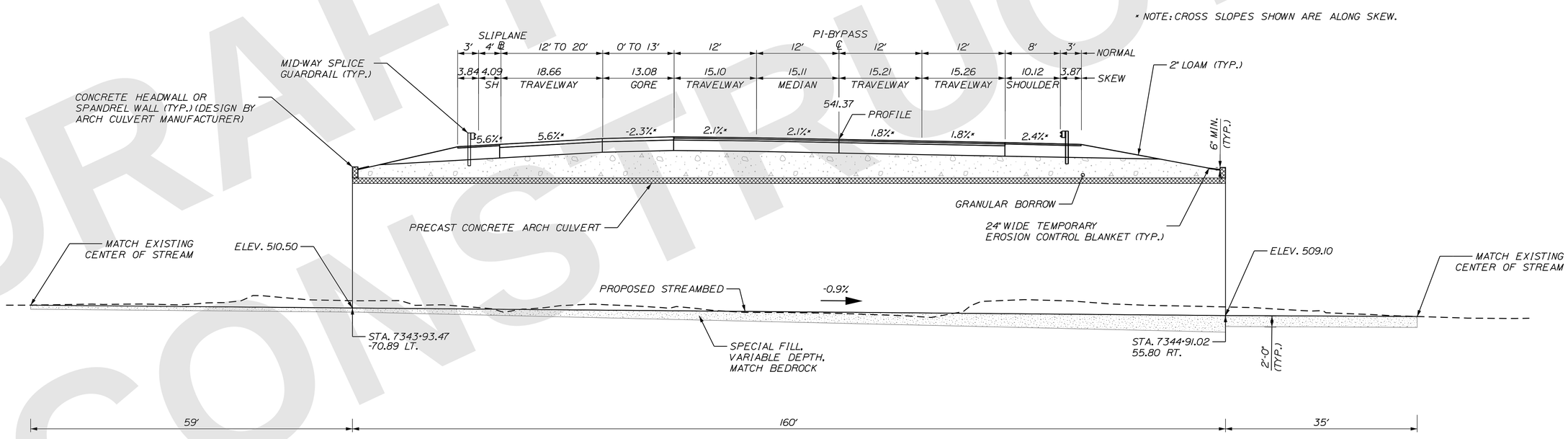
SHEET NUMBER
B-134
668
OF 747

Filename: \MSTA\Planset\B1_Title.dgn Division: HIGHWAY Username: jamesdavis Date: 9/2/2025



PLAN
(FOOTINGS AND PEDESTAL WALLS NOT SHOWN)
50 0 50 100
Scale of Feet

* NOTE: CROSS SLOPES SHOWN ARE ALONG SKEW.



LONGITUDINAL SECTION
NOT TO SCALE
(ALONG CENTERLINE OF CONCRETE CULVERT)
(PEDESTAL WALL AND FOOTING NOT SHOWN)

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92
BRIDGE NO. 6584
BRIDGE PLANS

vhb

PROJ. MANAGER	R.M.		
DESIGN-DETAILED	BRT	JBD	9/2/2025
CHECKED-REVIEWED	ECF	SMH	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

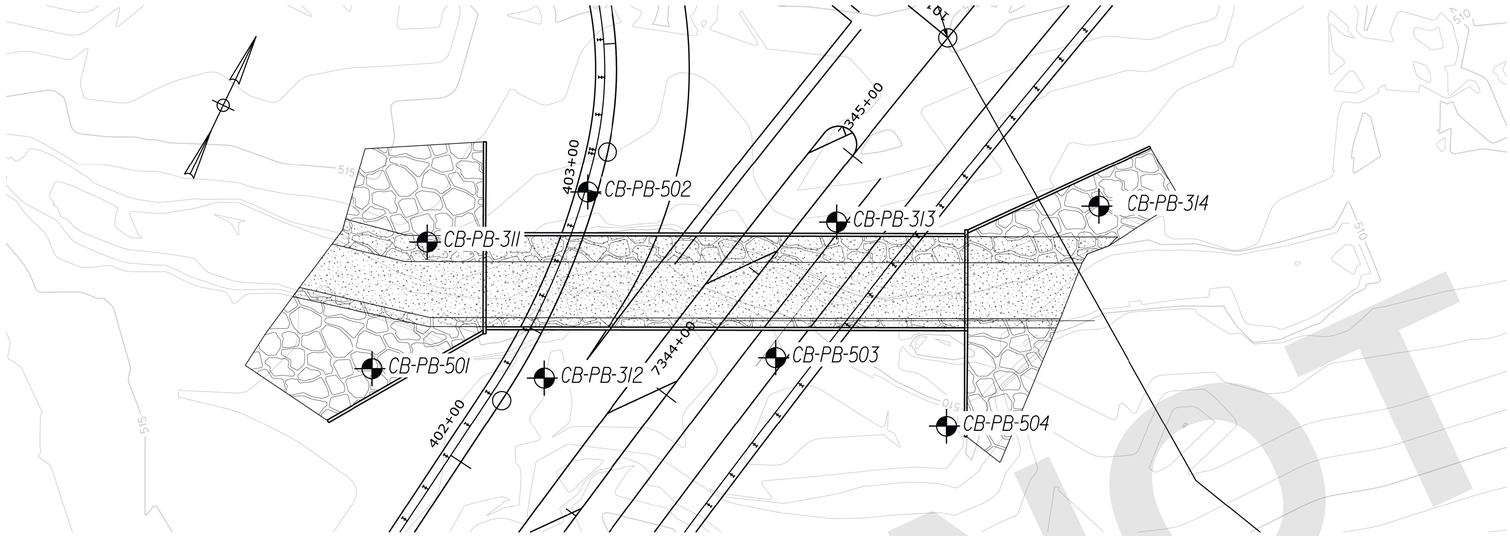
CLARK BROOK BYPASS BIRDGE
OVER CLARK BROOK
PRESQUE ISLE AROOSTOOK COUNTY

PLAN AND LONGITUDINAL SECTION

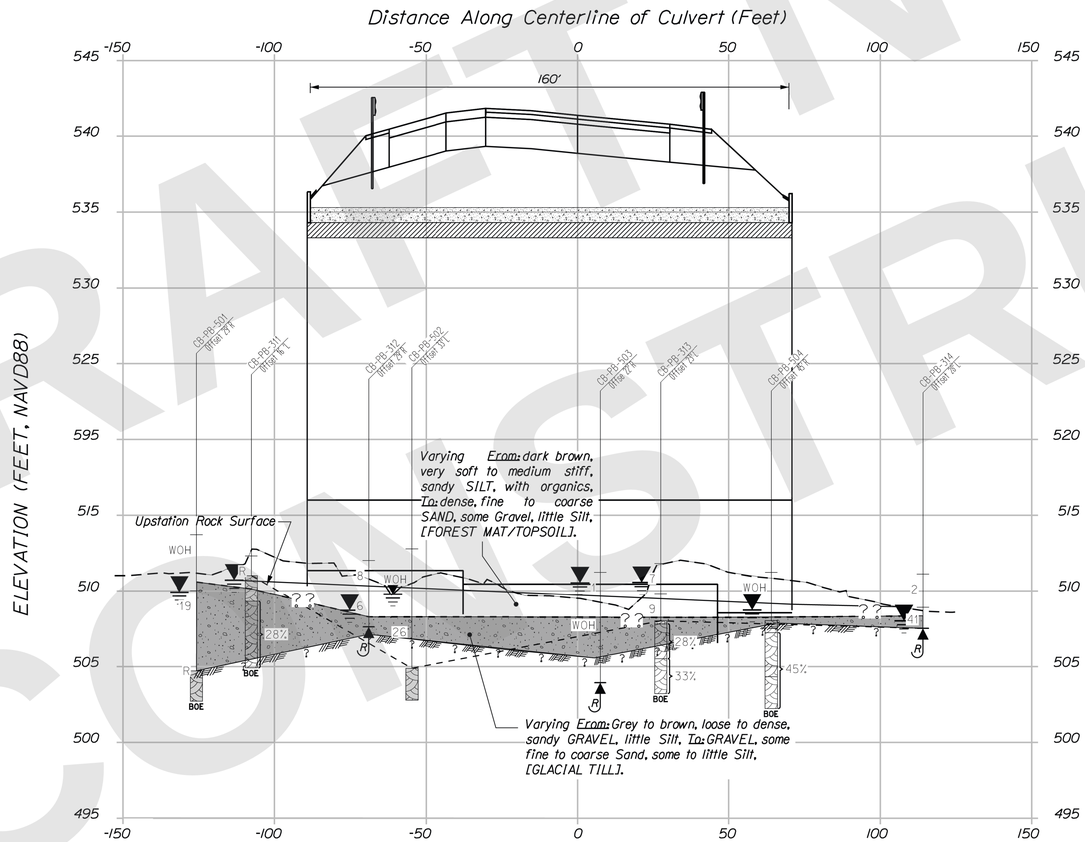
SHEET NUMBER
B-135
669
OF 747

Username: jamesdavis Date:9/2/2025
Division: HIGHWAY
Filename: ...\B2_Box_Culverts_Plans.dgn

CLARK BROOK ARCH CULVERT - STA 7344+47.04 (SKEWED 37°-43'-24")



BORING LOCATION PLAN



INTERPRETIVE SUBSURFACE PROFILE

NOTES

1) Base map developed from electronic files (Contours.dgn, Alignments.dgn and Highway.dgn) provided by VHB on July 14, 2025.

2) ISPs developed from file X_sect_box_culvert.dgn provided by VHB on July 14, 2025.

3) The as-drilled locations of the CB-PB-300 and CB-PB-500 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings.dgn) on September 5, 2019.

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

BORING LOCATION PLAN LEGEND

CB-PB-314 — *Location and designation of CB-PB-300 series borings that were performed by New England Boring Company of Hermon, Maine between August 26 and September 2, 2015.*

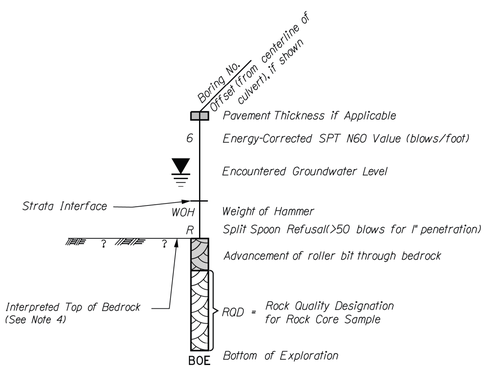
CB-PB-504 — *Location and designation of CB-PB-500 series borings that were performed by New England Boring company of Hermon, Maine between February 20 and 26, 2017.*

PLAN

25 0 25 50

Scale in Feet

INTERPRETIVE SUBSURFACE PROFILE LEGEND



PROFILE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

PREPARED BY: GZA

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CLARK BROOK ARCH CULVERT
PRESQUE ISLE BYPASS

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER
B-136
670
OF 747

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Culvert_BLPs\Culvert_BLPs.dgn Division: HIGHWAY Username: common Date:7/29/2025

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Presque Isle Bypass Segment 1 09.0025832.03
Location: Presque Isle, Maine

Boring No.: BB-PB-501
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.): 598.0 +/-	Auger ID/OD: 4.25" OD
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Blaine Cordell	Rig Type: ATV	Hammer Wt./Fall: 140/30
Date Start/Finish:	01/03/17 - 01/03/17	Drilling Method: Cased/SSA	Core Barrel: NX
Boring Location:	N706959.3, E2276030.7	Casing ID/OD: 3"	Water Level: * 5.8'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

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

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (if applicable)	Nuncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/11	1.0 - 3.0	1-2-3-5	5	7	SSA			Brown, moist, medium stiff, SILT, some fine to medium Sand, little Gravel. -NEWGNYED GLACIAL TILL- (ML)	
								593.0			3.0
5	20	24/12	5.0 - 7.0	4-6-6-11	12	12				Brown/grey, wet, medium dense, sandy GRAVEL, little Silt. -GLACIAL TILL- (GM)	
	R1	35/14	9.5 - 12.4	RQD = 0%			NX	586.7		Casing refusal at 9.3' bgs. Roller cone to 9.5' bgs and set up to core. R1: Hard, fresh to slightly weathered, aphanitic, grey, METAPELITE. Extremely fractured, resulting in angular gravel. Rock Quality = Very Poor Rock Core Times (min/set): 9.5-10.5 (2:30), 10.5-11.5 (3:30), 11.5-12.4 (4:15)	9.3
10	R2	60/60	12.4 - 17.4	RQD = 72%				583.6		R2: Hard, fresh to slightly weathered, aphanitic, grey, METAPELITE. Joints are very close to extremely close, low angle, rough, planar, partially open, fresh to discolored. One high angle joint. Rock Quality = Very Poor Rock Core Times (min/sec): 12.4-13.4 (2:30), 13.4-14.4 (3:00), 14.4-15.4 (2:00), 15.4-16.4 (1:30), 16.4-17.4 (1:30)	12.4
15								578.6		Bottom of Exploration at 17.4 feet below ground surface.	17.4
20											
25											

Remarks:
1. 3" casing to 9.3' bgs
2. Water level measured 30 minutes after completion of drilling.

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-PB-501

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1 09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-312
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.): 512.0	Auger ID/OD: 2.25" ID
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Blaine Cordell	Rig Type: Mobile Track	Hammer Wt./Fall: 140/30
Date Start/Finish:	9/1/15-9/1/15	Drilling Method: HSA	Core Barrel: --
Boring Location:	N706863.5, E2273884.6	Casing ID/OD: --	Water Level: * 3.3'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

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

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (if applicable)	Nuncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/11	0.0 - 2.0	2-4-4-5	8	8	HSA			Brown, moist, medium stiff, SILT, some fine to coarse Sand, some organics. -TOPSOIL- (ML)	
	20	24/2	2.0 - 4.0	1-4-2-5	6	9				Brown, wet, loose, fine to coarse SAND, some Silt. -TOPSOIL- (SM)	
5	30	1/0	4.3 - 4.4	50/1"	R			507.6		Split spoon refusal at 4.4' bgs/ possible till.	4.3
								507.2		Augered to 4.8' bgs/ auger refusal/ possible bedrock.	4.8
10										Bottom of Exploration at 4.8 feet below ground surface.	
15											
20											
25											

Remarks:
1. Water level measured immediately after completion of drilling.

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.: CB-PB-312

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Presque Isle Bypass Segment 1 09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-503
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.): 511.2	Auger ID/OD: 4.25" OD
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Blaine Cordell	Rig Type: ATV	Hammer Wt./Fall: 140/30
Date Start/Finish:	02/20/17 - 02/20/17	Drilling Method: Cased/SSA	Core Barrel: --
Boring Location:	N706870.5, E2273950.6	Casing ID/OD: 3"	Water Level: * 0.7'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

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

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (if applicable)	Nuncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/2	1.0 - 3.0	WOH-WOH-1-WOH	1	1	SSA			Dark brown, moist, very soft, organic SILT, some fine to medium Sand, with organics. -FOREST MAT- (OL)	
	20	24/24	3.5 - 5.5	WOH-WOH-WOH-WOH	0	0				Dark brown, moist, very soft, organic SILT. -FOREST MAT- (OL)	
5								503.9			3.5
								502.7		Casing met refusal at 7.3' bgs. Roller cone from 7.3'- 8.5' bgs, approximately 7 min/ft with 800 psi pressure. Increased resistance during roller cone advancement indicates increased bedrock quality.	7.3
10										Bottom of Exploration at 8.5 feet below ground surface.	8.5
15											
20											
25											

Remarks:
1. Water level taken approximately 15 minutes after completion of drilling.
2. 3" casing to 7.3' bgs.

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.: CB-PB-503

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Presque Isle Bypass Segment 1 09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-504
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.): 511.3	Auger ID/OD: 4.25" OD
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Blaine Cordell	Rig Type: ATV	Hammer Wt./Fall: 140/30
Date Start/Finish:	02/20/17 - 02/20/17	Drilling Method: Cased	Core Barrel: NX
Boring Location:	N706874.5, E2274011.3	Casing ID/OD: 3"	Water Level: * 2.5'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

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

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (if applicable)	Nuncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/10	1.0 - 3.0	WOH-WOH-WOH-11			SSA			Dark brown to grey, moist, very soft, organic SILT, some fine to medium Sand, little Gravel, with organics. -FOREST MAT- (OL)	
							R/C	508.1			3.2
	R1	60/60	4.0 - 9.0	RQD = 45%			NX			Casing met refusal at 3.2' bgs. Roller cone to 4.0' bgs/ advancement of approximately 5 min/ft at 750 psi pressure. Set up to core. R1: Hard, fresh, aphanitic, grey, METAPELITE. Joints are very close to moderately spaced, moderately dipping to high angle, rough, planar, fresh, partially open to tight. Rock Mass Quality = Poor Rock Core Times (min/sec): 4.0-5.0 (3:30), 5.0-6.0 (2:15), 6.0-7.0 (1:30), 7.0-8.0 (1:30), 8.0-9.0 (1:45)	4.0
5								502.3		Bottom of Exploration at 9.0 feet below ground surface.	9.0
10											
15											
20											
25											

Remarks:
1. Water level measured approximately 20 minutes after completion of drilling.
2. 4" casing to 3.2' bgs; then 3" casing to 4.0' bgs.

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.: CB-PB-504

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1 09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-311
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.): 510.3	Auger ID/OD: --
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Blaine Cordell	Rig Type: Mobile Track	Hammer Wt./Fall: 140/30
Date Start/Finish:	8/31/15-9/1/15	Drilling Method: Cased	Core Barrel: NX
Boring Location:	N708655.2, E2272830.5	Casing ID/OD: 3"	Water Level: * 1.0'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

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

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (if applicable)	Nuncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	18/5	0.0 - 1.3	1-1-50/3"	R		SPT			Dark brown, moist, dense, fine to coarse SAND, some fine to coarse Gravel, little Silt. -TOPSOIL- (SM) Split spoon refusal at 1.3' bgs/ possible bedrock.	C=210 A=1b, SM w=33.0
								511.0			1.3
5	R1	53/53	3.0 - 7.4	RQD = 28%			NQ			Spun casing to 3.0' bgs. Roller cone to 3.0' bgs and set up to core. R1: Hard, fresh, aphanitic, gray, METAPELITE with calcite seams and veins. Joints are very close to close, moderately dipping to high angle, rough, undulating, fresh, tight to partially open. Rock Mass Quality = Poor Rock Core Times (min/ft): 2.0, 1.5, 2.0, 2.5, 2.0/4"	3.0
								504.9		Bottom of Exploration at 7.4 feet below ground surface.	7.4
10											
15											
20											
25											

Remarks:
1. Water level measured 15 minutes after completion of drilling.

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.: CB-PB-311

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1 09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-502
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.): 510.8	Auger ID/OD: 4.25" OD
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Blaine Cordell	Rig Type: ATV	Hammer Wt./Fall: 140/30
Date Start/Finish:	01/26/17 - 01/26/17	Drilling Method: Cased/SSA	Core Barrel: --
Boring Location:	N708693.1, E2273871.0	Casing ID/OD: 4"	Water Level: * 3.0'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

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

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (if applicable)	Nuncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/0	1.0 - 3.0	1-WOH-WOH-WOH	WOH		SSA			No recovery. Took grab sample to describe material. Dark brown, moist, sandy SILT, with organics. -FOREST MAT- (ML)	
	20	24/12	4.5 - 6.5	5-9-17-51	26	29		508.3		Gray, wet, medium dense, sandy GRAVEL, little Silt. -GLACIAL TILL- (GM)	4.5
5								504.9		Casing met refusal at 7.9' bgs. Increased resistance during roller cone advancement indicates possible increased bedrock quality. Roller cone advancement from 8.0'-10.0' bgs approximately 5 min/ft with 750 psi of downward pressure.	7.9
10								502.8		Bottom of Exploration at 10.0 feet below ground surface.	10.0
15											
20											
25											

Remarks:
1. Water level taken 15 minutes after completion of drilling.

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.: CB-PB-502

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1 09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-313
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.): 511.8	Auger ID/OD: --
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Blaine Cordell	Rig Type: Mobile Track	Hammer Wt./Fall: 140/30
Date Start/Finish:	9/1/15-9/1/15	Drilling Method: Cased	Core Barrel: NQ
Boring Location:	N708719.5, E2273949.4	Casing ID/OD: 3"	Water Level: * 1.2'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

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

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (if applicable)	Nuncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/1	0.0 - 2.0	4-4-3-8	7	7	SPT			Brown, moist, medium stiff, SILT, some organics, little fine to medium Sand. -TOPSOIL- (ML)	
	20	22/6	2.0 - 3.8	11-6-3-59/3"	9	9		509.8			2.0
5	R1	29/29	4.0 - 6.4	RQD = 28%			NQ	508.0		Brown, moist, loose to dense, GRAVEL some fine to coarse Sand, little Silt. -GLACIAL TILL- (GP-GM) Split spoon refusal at 3.8' bgs/ possible bedrock.	3.8
	R2	26/26	6.4 - 8.6	RQD = 33%				503.2		Spun casing to 4.0' bgs. Roller cone to 4.0' bgs and set up to core. R1: Hard, fresh, aphanitic, gray, METAPELITE with calcite seams and veins. Joints are very close to close, low angle to moderately dipping, rough, undulating, fresh to partially open. Rock Mass Quality = Poor to Fair Rock Core Times (min/ft): 3.0, 2.5, 1.5/4" R2: Hard, fresh, aphanitic, gray, METAPELITE with calcite. Joints are very close to close, low angle to moderately dipping, rough, undulating, fresh to discolored, tight to partially open. Rock Mass Quality = Poor Rock Core Times (min/ft): 2.0, 1.5, 1.0/4"	C=221 A=1b, GP-GM w=12.7
10										Bottom of Exploration at 8.6 feet below ground surface.	8.6
15											
20											
25											

Remarks:
1. Water level measured 20 minutes after completion of drilling.

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.: CR-PB-313

Maine Department of Transportation

Soil/Rock Exploration Log

US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1 09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-314
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.): 511.1	Auger ID/OD: 2.25" ID
Operator:	Mike Porter	Datum: NAVD 88	Sampler: Split Spoon
Logged By:	Blaine Cordell	Rig Type: Mobile Track	Hammer Wt./Fall: 140/30
Date Start/Finish:	02/20/17 - 02/20/17	Drilling Method: HSA	Core Barrel: NX
Boring Location:	N708761.6, E2274025.3	Casing ID/OD: --	Water Level: * 3.7'
Hammer Efficiency Factor:	0.6	Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒	

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

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows/6 in. Strength or RQD (if applicable)	Nuncorrected	N60	Casing Blows/ft.	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/2	0.0 - 2.0	WOH-WOH-2-2	2	2	HSA			Brown, moist, soft, SILT, some organics, little fine to medium Sand. -TOPSOIL- (ML)	
	20	19/10	2.0 - 3.6	2-6-35-56/1"	41	41		508.9			2.2
5								506.6		Brown, wet, dense, GRAVEL, some fine to coarse Sand, little Silt. -GLACIAL TILL- (GM) Split spoon refusal at 3.6' bgs/ auger to 4.5' bgs. Auger refusal/ possible bedrock	C=222 A=1b, GM w=16.4
										Bottom of Exploration at 4.5 feet below ground surface.	4.5
10											
15											

Remarks:
1. Water level measured immediately after completion of drilling.

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.: CB-PB-314

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED22			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CLARK BROOK ARCH CULVERT
PRESQUE ISLE BYPASS

BORING LOGS 1

PREPARED BY:

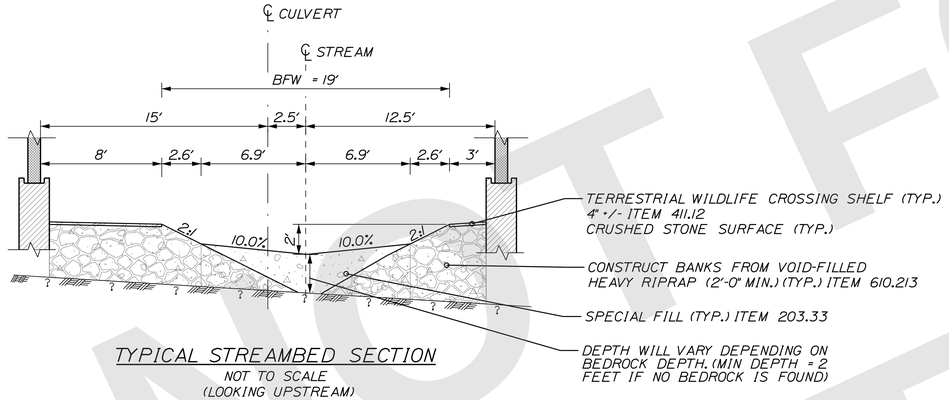
GZA

SHEET NUMBER
B-137
671
OF 747

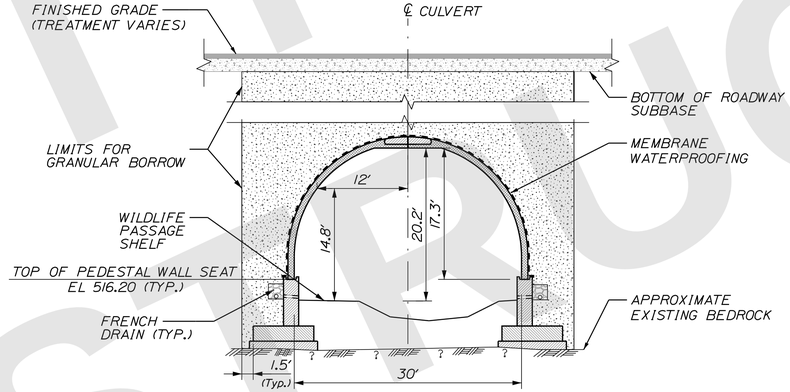
Date:7/29/2025
Username: common
Division: HIGHWAY
Filename: ...\Boring Logs sheets.dgn

DRAFT NOT FOR CONSTRUCTION

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



TYPICAL STREAMBED SECTION
NOT TO SCALE
(LOOKING UPSTREAM)



ARCH CULVERT
NOT TO SCALE
(LOOKING UPSTREAM)

PEDESTAL WALL NOTES:

1. THE MAXIMUM FACTORED APPLIED FOOTING PRESSURE AT EACH PEDESTAL WALL IS 12 KSF AT THE STRENGTH I LIMIT STATE AND 8 KSF AT THE SERVICE I LIMIT STATE.

2. PEDESTAL WALL AND FOUNDATION DESIGN IS BASED ON A FACTORED STRENGTH I LIMIT STATE LOAD OF 1.4 KLF (HORIZONTAL) AND 47 KLF (VERTICAL) AT THE PEDESTAL WALL SEAT. IF THE FINAL DESIGN LOADS EXCEED THESE VALUES. THE FOUNDATION DESIGN SHALL BE MODIFIED AS REQUIRED.

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6584 BRIDGE PLANS

vhb

	R.M.	DATE
PROJ. MANAGER		
DESIGN-DETAILED	BRT	JBD 9/2/2025
CHECKED-REVIEWED	ECF	SMH 9/2/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

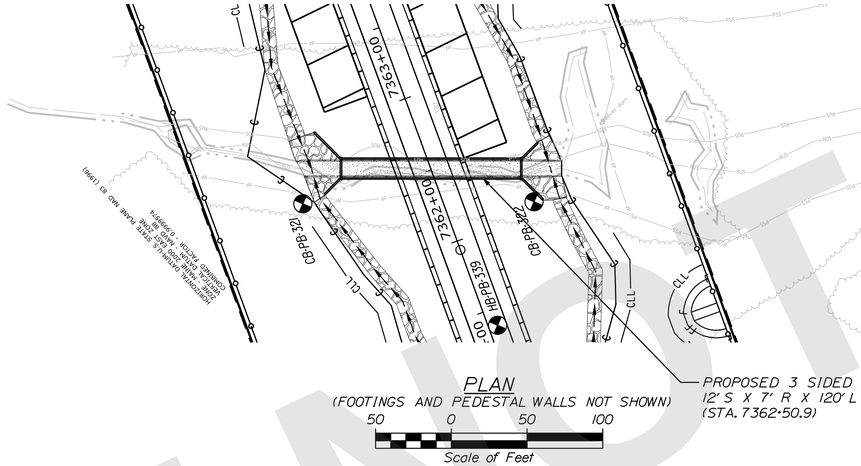
CLARK BROOK BYPASS BIRDGE
OVER CLARK BROOK
PRESQUE ISLE AROOSTOOK COUNTY

TYPICAL SECTIONS

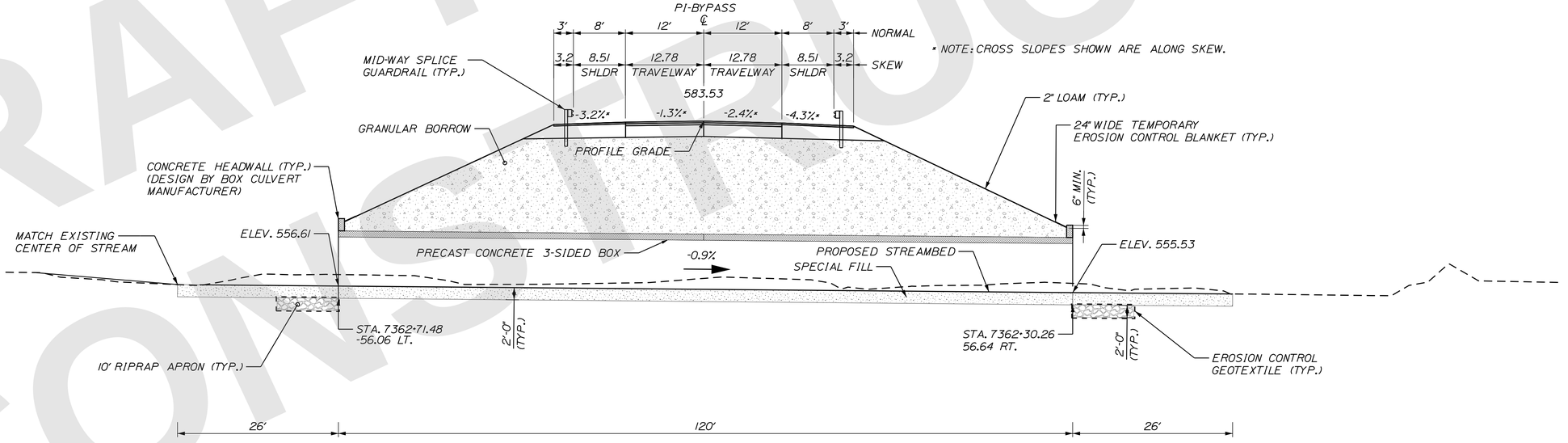
SHEET NUMBER
B-138
672
OF 747

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

DRAFT NOT FOR CONSTRUCTION



PLAN
(FOOTINGS AND PEDESTAL WALLS NOT SHOWN)
50 0 50 100
Scale of Feet



LONGITUDINAL SECTION
NOT TO SCALE
(ALONG CENTERLINE OF 3-SIDE CONCRETE BOX)
(PEDESTAL WALL AND FOOTING NOT SHOWN)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6585 BRIDGE PLANS

vhb

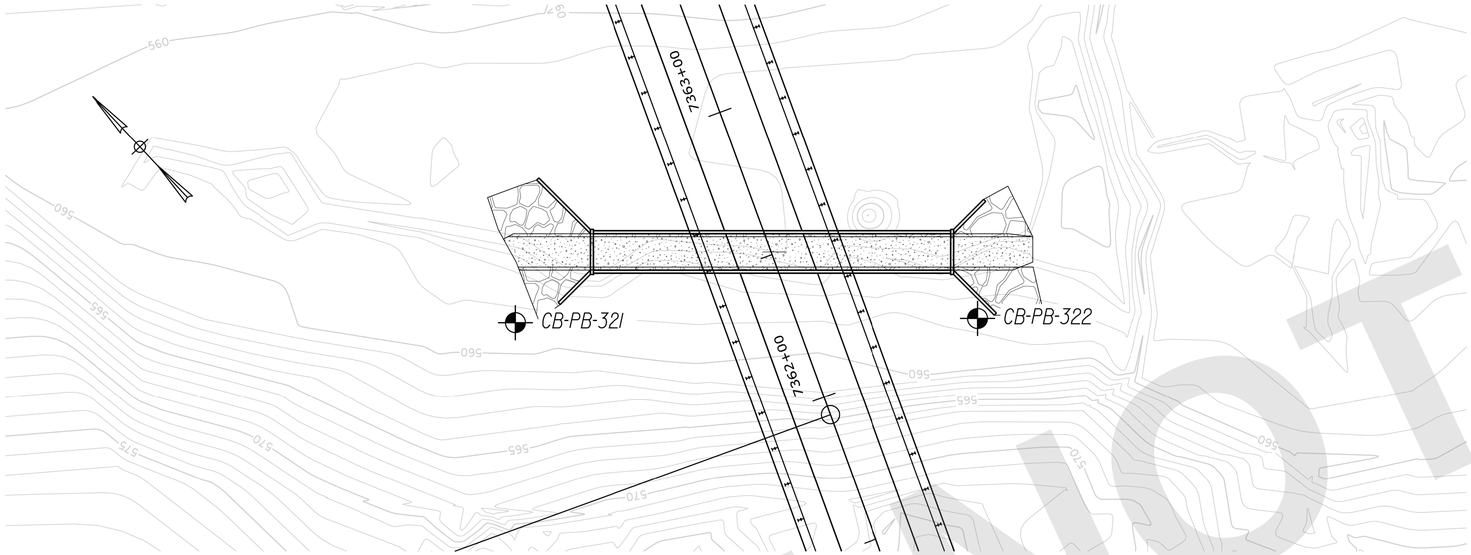
PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	BRT	JBD	9/2/2025
CHECKED-REVIEWED	ECF	SMH	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TRIBUTARY TO CLARK BROOK BIRDGE
OVER TRIBUTARY TO CLARK BROOK
PRESQUE ISLE AROOSTOOK COUNTY

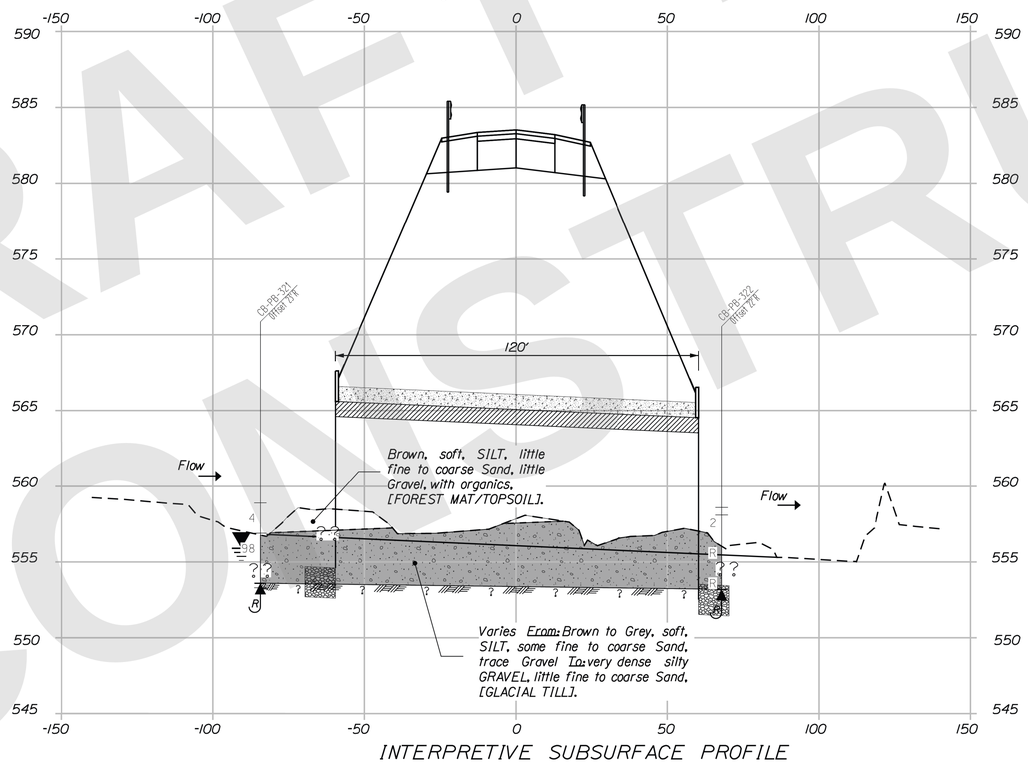
PLAN AND LONGITUDINAL SECTION

SHEET NUMBER
B-139
673
OF 747

TRIBUTARY TO CLARK BROOK 3-SIDED CULVERT - STA 7362+50.9 (SKEWED)



BORING LOCATION PLAN



INTERPRETIVE SUBSURFACE PROFILE

NOTES

1) Base map developed from electronic files (Contours.dgn and Highway.dgn) provided by VHB on July 14, 2025.

2) ISPs developed from file X_sect_box_culvert.dgn provided by VHB on July 14, 2025.

3) The as-drilled locations of the CB-PB-300 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings.dgn) on September 5, 2019.

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

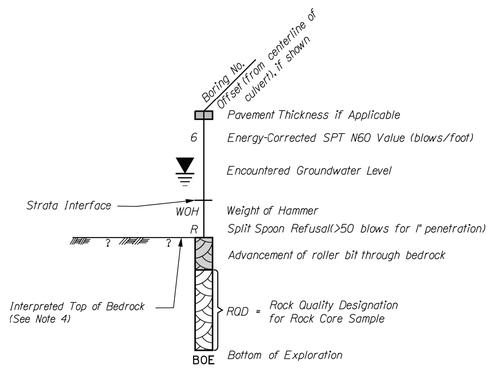
BORING LOCATION PLAN LEGEND

CB-PB-322 — Location and designation of CB-PB-300 series borings that were performed by New England Boring Contractors of Hermon, Maine between August 26 and September 2, 2015.

PLAN

25 0 25 50
Scale in Feet

INTERPRETIVE SUBSURFACE PROFILE LEGEND



PROFILE

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

PREPARED BY:

GZA

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

PROJ. MANAGER	R.M.	DATE
DESIGN-DETAILED	B.C.	BY
CHECKED-REVIEWED	A.B.	E.T. 7/2025
DESIGN2-DETAILED2	ED2	C.S. 7/2025
DESIGN3-DETAILED3	ED3	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

TRIB. TO CLARK BROOK 3-SIDED CULVERT
PRESQUE ISLE BYPASS

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER
B-140
674
OF 747

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Culvert_BLPs\Culvert_BLPs.dgn Division: HIGHWAY Username: common Date:7/29/2025

Filename: ...\Boring Logs sheets.dgn Division: HIGHWAY Username: common Date:7/29/2025

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-321
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	558.9	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Standard Splitspoon
Logged By:	Blaine Cordell	Rig Type:	Mobile Track	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	9/2/15-9/2/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N1010413.4, E2274496.7	Casing ID/OD:	--	Water Level *:	3.0'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐	Rope & Cathead ☒	

Definitions:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
U = Undisturbed Shelby Tube Sample
W = Undisturbed Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WH,C = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
WOR = Wash Out Rock
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
N_{60} = Hammer Efficiency Factor-ASTM-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(r)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
N_{60} = SPT N-value Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor-ASTM-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.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Spoon Sample Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0											
	S1	24/7	0.0 - 2.0	1-1-1-3	4	4	HSA			Brown, moist, soft, SILT, some organics, little fine to coarse sand, little gravel, (Topsoil).	
								556.9			
	S2	19/12	2.0 - 3.6	33-38-55-50/1"	98	98				2.0' Grey/brown, wet, very dense, gravelly fine to coarse SAND, little silt, (Glacial Till).	G*223 A-1-a, SP-SM w=10.1
5											
	S3	3/0	5.0 - 5.3	70/3"	R			553.3		No recovery. Splitspoon refusal at 5.3' bgs; advanced auger to refusal at 5.6' bgs; possible bedrock.	
										5.6' Bottom of Exploration at 5.6 feet below ground surface.	
10											
15											
20											
25											

Remarks:
1. Water level measured immediately after completion of drilling.
2. Fine-Grained Soil Descriptions on this log are based on plasticity estimated using visual-manual classification techniques or laboratory Atterberg Limit tests if available, rather than the MaineDOT Standard based on percentages passing specific grain sizes.

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.: CB-PB-321

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-322
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	558.6	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Standard Splitspoon
Logged By:	Blaine Cordell	Rig Type:	Mobile Track	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	9/1/15-9/1/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N1010310.2, E2274609.1	Casing ID/OD:	--	Water Level *:	Dry
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐	Rope & Cathead ☒	

Definitions:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
U = Undisturbed Shelby Tube Sample
W = Undisturbed Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
WH,C = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
WOR = Wash Out Rock
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
N_{60} = SPT N-value Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor-ASTM-uncorrected
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(r)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
N_{60} = SPT N-value Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor-ASTM-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.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Spoon Sample Strength (psf) or RQD (%)	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0											
	S1	24/12	0.0 - 2.0	1-1-1-1	2	2	HSA	558.1		1D (Top 6"): Topsoil. 0.5' 1D (Bottom 6"): Brown/grey, moist, soft, SILT, some fine to coarse sand, trace gravel, (Glacial Till).	w=43.9
	S2	13/12	2.0 - 3.1	2-29-50/1"	R					Grey, moist, very dense, silty GRAVEL, little fine to coarse sand, (Glacial Till). 3.7'-4.0' bgs: Apparent boulder.	
5											
	S3	1/0	5.0 - 5.1	50/1"	R			553.2		No recovery. Splitspoon refusal at 5.1' bgs; advanced auger to refusal at 5.4' bgs; possible bedrock.	
										5.4' Bottom of Exploration at 5.4 feet below ground surface.	
10											
15											
20											
25											

Remarks:
1. Boulder from 3.7'-4.0' bgs.
2. Water level measured immediately after completion of drilling.
3. Fine-Grained Soil Descriptions on this log are based on plasticity estimated using visual-manual classification techniques or laboratory Atterberg Limit tests if available, rather than the MaineDOT Standard based on percentages passing specific grain sizes.

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.: CB-PB-322

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92 HIGHWAY PLANS

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

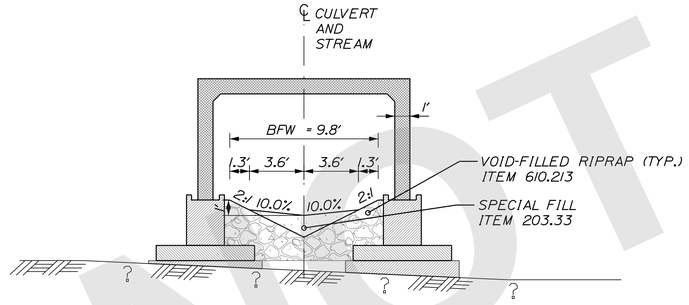
TRIB. TO CLARK BROOK 3-SIDED CULVERT
PRESQUE ISLE BYPASS

BORING LOGS 1

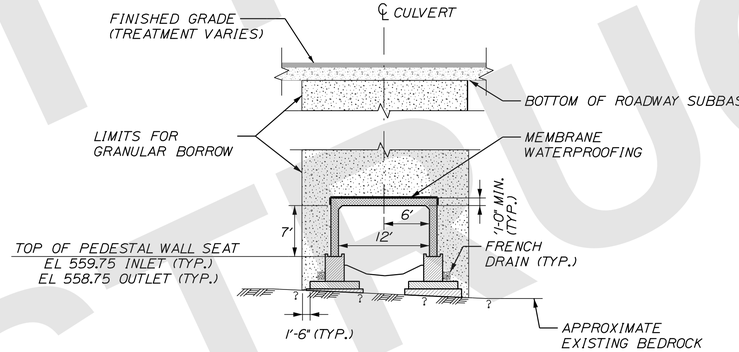
PREPARED BY: GZA

SHEET NUMBER
B-141
675
OF 747

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



TYPICAL STREAMBED SECTION
NOT TO SCALE



TYPICAL 3-SIDE BOX SECTION
NOT TO SCALE

PEDESTAL WALL NOTES:

1. THE MAXIMUM FACTORED APPLIED FOOTING PRESSURE AT EACH PEDESTAL WALL IS 11 KSF AT THE STRENGTH I LIMIT STATE AND 7 KSF AT THE SERVICE I LIMIT STATE.

2. PEDESTAL WALL AND FOUNDATION DESIGN IS BASED ON A FACTORED STRENGTH I LIMIT STATE LOAD OF 4.4 KLF (HORIZONTAL) AND 26 KLF (VERTICAL) AT THE PEDESTAL WALL SEAT. IF THE FINAL DESIGN LOADS EXCEED THESE VALUES. THE FOUNDATION DESIGN SHALL BE MODIFIED AS REQUIRED.

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6585 BRIDGE PLANS

vhb

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	BRT	JBD	9/2/2025
CHECKED-REVIEWED	ECF	SMH	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

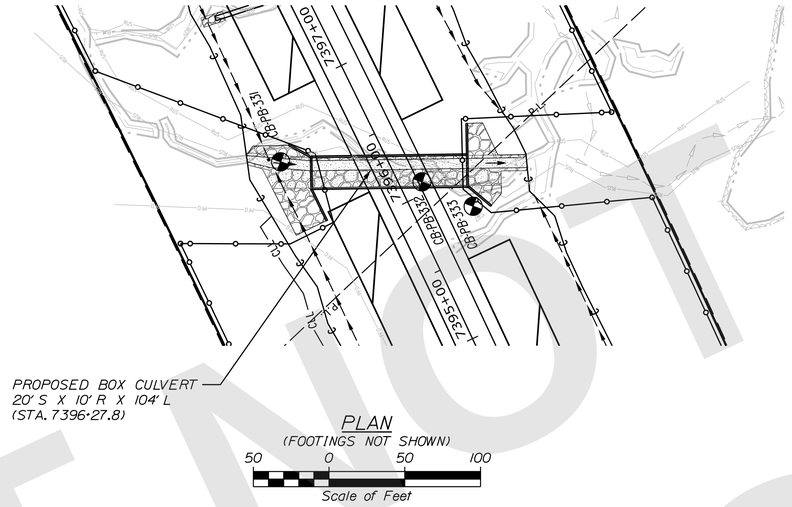
TRIBUTARY TO CLARK BROOK BIRDGE
OVER TRIBUTARY TO CLARK BROOK
PRESQUE ISLE AROOSTOOK COUNTY

TYPICAL SECTIONS

SHEET NUMBER
B-142
676
OF 747

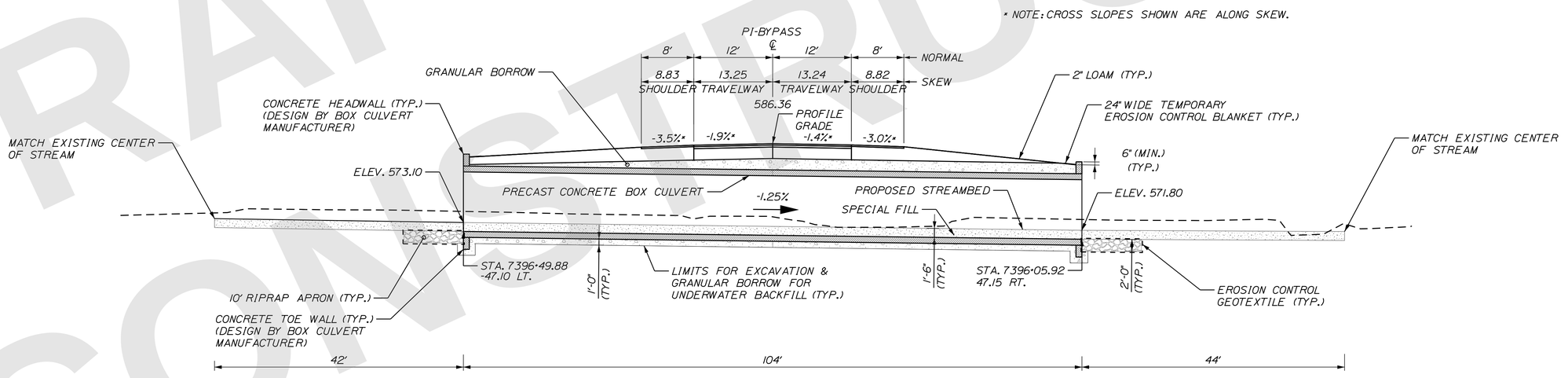
Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

DRAFT NOT FOR CONSTRUCTION



PLAN
(FOOTINGS NOT SHOWN)

50 0 50 100
Scale of Feet



LONGITUDINAL SECTION
NOT TO SCALE
(ALONG CENTERLINE OF CONCRETE BOX)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN **6462.92**

BRIDGE NO. 6586 BRIDGE PLANS

vhb

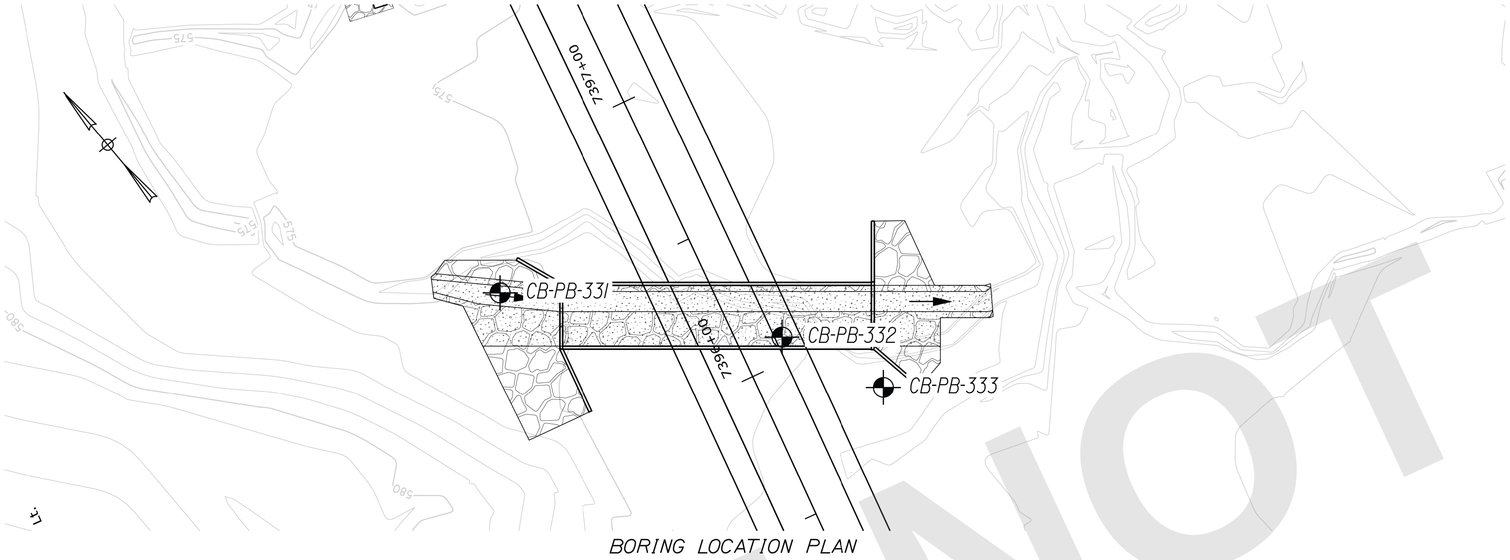
PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	BRT	JBD	9/2/2025
CHECKED-REVIEWED	ECF	SMH	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TRIBUTARY TO WILLIAMS BROOK BIRDGE
OVER TRIBUTARY TO WILLIAMS BROOK
PRESQUE ISLE AROOSTOOK COUNTY

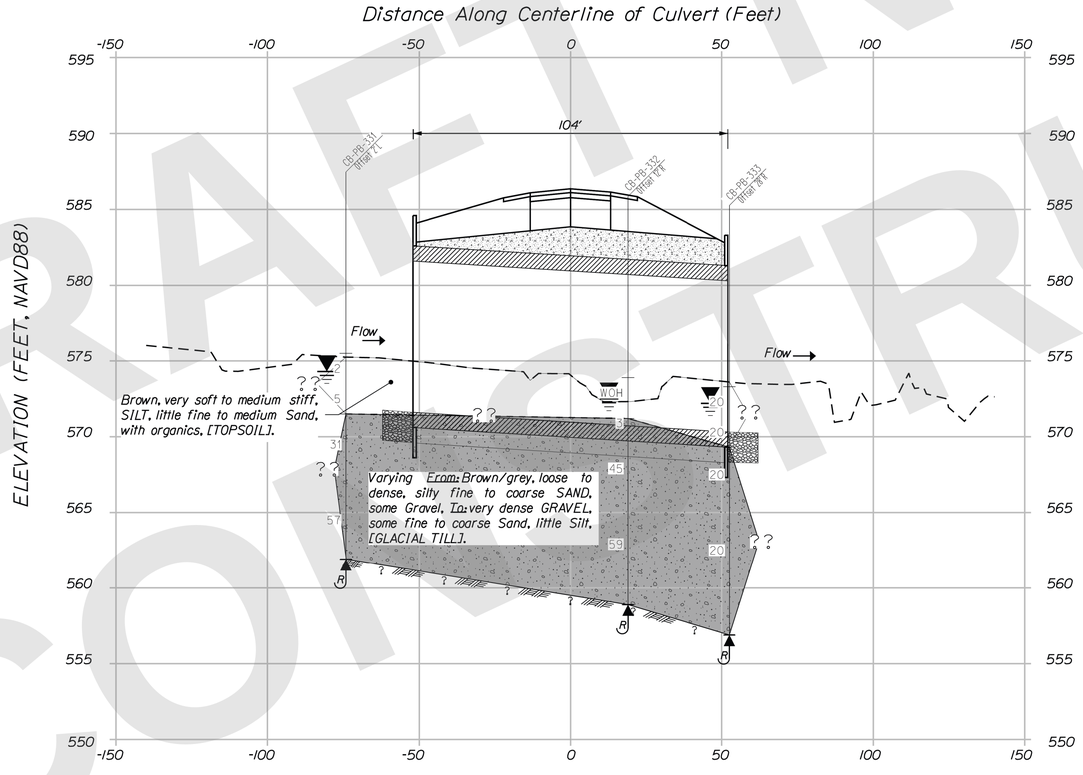
PLAN AND LONGITUDINAL SECTION

SHEET NUMBER
B-143
677
OF 747

TRIBUTARY TO WILLIAMS BROOK BOX CULVERT - STA 7396+27.83 (SKEWED)



BORING LOCATION PLAN



INTERPRETIVE SUBSURFACE PROFILE

NOTES

1) Base map developed from electronic files (Contours.dgn, Alignments.dgn and Highway.dgn) provided by VHB on July 14, 2025.

2) ISPs developed from file X_sect_box_culvert.dgn provided by VHB on July 14, 2025.

3) The as-drilled locations of the CB-PB-300 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings.dgn) on September 5, 2019.

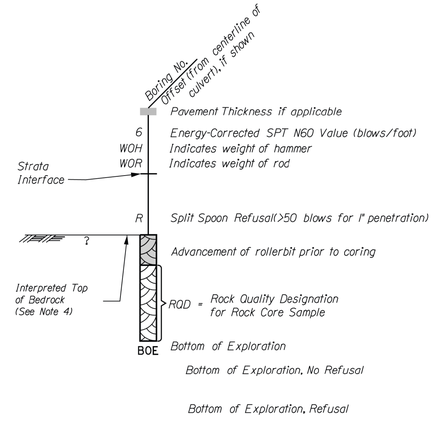
4) This generalized interpretive soil and rock profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and rock transitions may vary and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

BORING LOCATION PLAN LEGEND

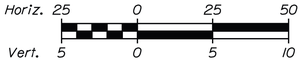
CB-PB-333 — Location and designation of CB-PB-300 series borings that were performed by New England Boring of Hermon, Maine between August 26 and September 2, 2015.

PLAN

INTERPRETIVE SUBSURFACE PROFILE LEGEND



PROFILE



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

PROJ. MANAGER	R.M.
DESIGN-DETAILED	B.C.
CHECKED-REVIEWED	A.B.
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

BY	DATE
E.T.	7/2025
C.S.	7/2025

REVISIONS
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

TRIB. TO WILLIAMS BROOK BOX CULVERT
PRESQUE ISLE BYPASS

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

PREPARED BY: GZA

SHEET NUMBER
B-144
678
OF 747

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Culvert_BLPs\Culvert_BLPs.dgn Division: HIGHWAY Username: common Date:7/29/2025

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-331
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	575.5	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Blaine Cordell	Rig Type:	Mobile Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	9/2/15-9/2/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N:703584.5, E:2275695.8	Casing ID/OD:	--	Water Level *:	1.2'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐	Rope & Cathead ☒	

Definitions:
SS = Split Spoon Sample
US = Undisturbed Split Spoon Sample Attempt
WS = Wash Sample
U = Undisturbed Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
RC = Rock Core Sample
HSA = Hollow Stem Auger
WB = Wash Boring
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
WOR = Weight of Rod Person
q_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{ut(fv)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N_{60} = SPT Blow Count Corrected for Hammer Efficiency
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Strength or RQD (*)	N-uncorrected	N60	Casing	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/6	0.0 - 2.0	1-1-1-1	2	2	HSA			Brown, moist, soft, SILT, some organics, little fine to medium Sand. -TOPSOIL- (ML)	
	20	24/9	2.0 - 4.0	1-3-2-5	5	5		571.5		Brown, wet, medium stiff, SILT, little fine to medium Sand, little organics. -TOPSOIL- (ML) — 4.0	
5	30	24/15	5.0 - 7.0	7-15-16-14	31	31				Brown, wet, dense, fine to coarse SAND, some Gravel, some Silt. -GLACIAL TILL- (SM)	C*225 A-1-b, SM w=9.1
10	40	24/12	10.0 - 12.0	18-33-24-31	57	57				Brown/gray, wet, very dense, gravelly fine to coarse SAND, little Silt. -GLACIAL TILL- (SM)	
	50	1/0	13.5 - 13.6	50/1"	R			561.9		Augered to 13.5' bgs; auger refusal. Split spoon refusal at 13.6' bgs; possible bedrock. — 13.6	
15										Bottom of Exploration at 13.6 feet below ground surface.	
20											

Remarks:
1. Water level measured immediately after completion of drilling.

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.: CB-PB-331

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-332
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	573.9	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Blaine Cordell	Rig Type:	Mobile Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	9/2/15-9/2/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N:703513.5, E:2275757.7	Casing ID/OD:	--	Water Level *:	1.4'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐	Rope & Cathead ☒	

Definitions:
SS = Split Spoon Sample
US = Undisturbed Split Spoon Sample Attempt
WS = Wash Sample
U = Undisturbed Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
RC = Rock Core Sample
HSA = Hollow Stem Auger
WB = Wash Boring
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
WOR = Weight of Rod Person
q_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{ut(fv)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N_{60} = SPT Blow Count Corrected for Hammer Efficiency
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Strength or RQD (*)	N-uncorrected	N60	Casing	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/1	0.0 - 2.0	WOH-WOH-WOH-WOH	WOH		HSA			Brown, moist, very soft, SILT, little fine to medium Sand, little organics. -TOPSOIL- (ML)	
	20	24/14	2.0 - 4.0	1-1-2-1	3	3		571.2		Top 8": Brown, wet, soft, SILT, little fine to medium Sand, little organics. -TOPSOIL- (ML)	
5	30	24/12	5.0 - 7.0	4-18-27-22	45	45				Bottom 6": Brown/gray, wet, loose, silty fine to coarse SAND, some Gravel. -GLACIAL TILL- (SM) — 2.7	
10	40	24/14	10.0 - 12.0	12-16-43-39	59	59				Brown, wet, dense, fine to coarse SAND, some Silt, some Gravel. -GLACIAL TILL- (SM)	C*226 A-2-4, SM w=6.8
	50	1/0	14.9 - 15.0	50/1"	R			558.9		Brown, wet, very dense, GRAVEL, some fine to coarse Sand, little Silt. -GLACIAL TILL- (GM)	
15										Augered to 14.9' bgs; auger refusal. Split spoon refusal at 15.0' bgs; possible bedrock. — 15.0	
20										Bottom of Exploration at 15.0 feet below ground surface.	

Remarks:
1. Water level measured immediately after completion of drilling.

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.: CB-PB-332

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-333
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	573.3	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Blaine Cordell	Rig Type:	Mobile Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	9/2/15-9/2/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N:703479.2, E:2275772.7	Casing ID/OD:	--	Water Level *:	1.1'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐	Rope & Cathead ☒	

Definitions:
SS = Split Spoon Sample
US = Undisturbed Split Spoon Sample Attempt
WS = Wash Sample
U = Undisturbed Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
RC = Rock Core Sample
HSA = Hollow Stem Auger
WB = Wash Boring
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
WOR = Weight of Rod Person
q_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{ut(fv)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (tsf)
N_{60} = SPT Blow Count Corrected for Hammer Efficiency
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
T_v = Pocket Torvane Shear Strength (psf)
MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Strength or RQD (*)	N-uncorrected	N60	Casing	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/0	0.0 - 2.0	WOH-WOH-1-1	1	1	HSA			No recovery.	
	20	24/10	2.0 - 4.0	1-1-1-1	2	2		569.3		Brown, wet, soft, SILT, little fine to medium Sand, little organics. -TOPSOIL- (ML) — 4.0	
5	30	24/13	5.0 - 7.0	2-3-1-1	9	9				Brown, wet, loose, silty GRAVEL, some fine to coarse Sand. -GLACIAL TILL- (GM)	
10	40	24/8	10.0 - 12.0	10-11-19-18	30	30				Brown, wet, medium dense, GRAVEL, some fine to coarse Sand, little Silt. -GLACIAL TILL- (GM)	
	50	13/10	15.0 - 16.1	21-73-50/1"	R			556.9		Brown, wet, very dense, fine to coarse SAND, some Gravel, little Silt. -GLACIAL TILL- (SM) Split spoon refusal at 16.1' bgs; augered to 16.4' bgs. Auger refusal; possible bedrock — 16.4	C*227 A-1-b, SM w=8.9
15										Bottom of Exploration at 16.4 feet below ground surface.	
20											

Remarks:
1. Water level measured immediately after completion of drilling.

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.: CB-PB-333

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92 HIGHWAY PLANS

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TRIB. TO WILLIAMS BROOK BOX CULVERT
PRESQUE ISLE BYPASS

BORING LOGS 1

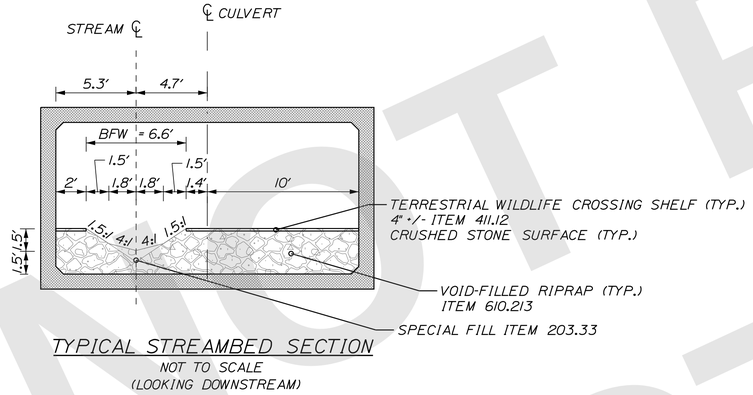
PREPARED BY:
GZA

SHEET NUMBER
B-145
679
OF 747

Filename: ...\Boring Logs sheets.dgn Division: HIGHWAY Username: common Date:7/29/2025

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

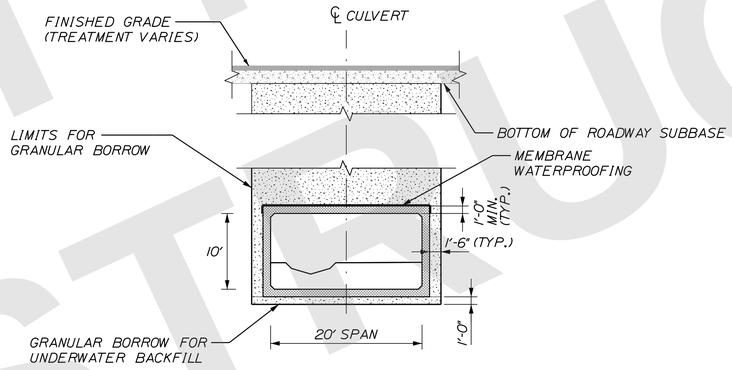
DRAFT NOT FOR CONSTRUCTION



TYPICAL STREAMBED SECTION

NOT TO SCALE

(LOOKING DOWNSTREAM)



TYPICAL BOX SECTION

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6586

BRIDGE PLANS

vhb

	BY	DATE
R.M.	JBD	9/2/2025
PROJ. MANAGER	BRT	
DESIGN-DETAILED	BRT	
CHECKED-REVIEWED	ECF	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	SMH	9/2/2025
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

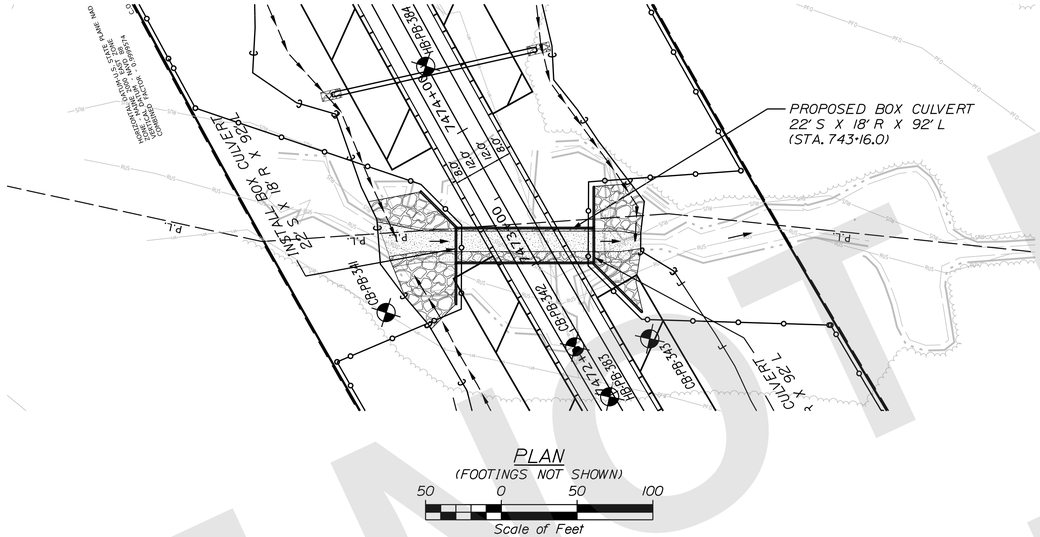
TRIBUTARY TO WILLIAMS BROOK BIRDGE
OVER TRIBUTARY TO WILLIAMS BROOK
PRESQUE ISLE AROOSTOOK COUNTY

TYPICAL SECTIONS

SHEET NUMBER
B-146
680
OF 747

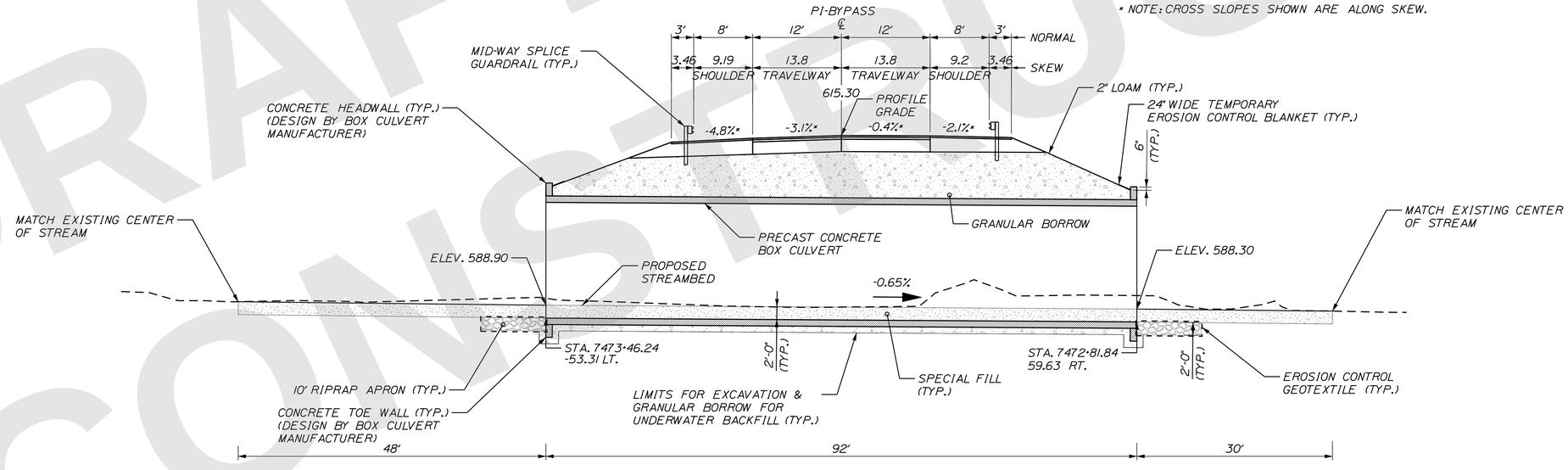
Username: jamesdavis Date:9/2/2025
Division: HIGHWAY
Filename: ...\B2_Box_Culverts_Plans.dgn

DRAFT NOT FOR CONSTRUCTION



PLAN
(FOOTINGS NOT SHOWN)

50 0 50 100
Scale of Feet



LONGITUDINAL SECTION

NOT TO SCALE
(ALONG CENTERLINE OF CONCRETE BOX)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6734 BRIDGE PLANS

vhb

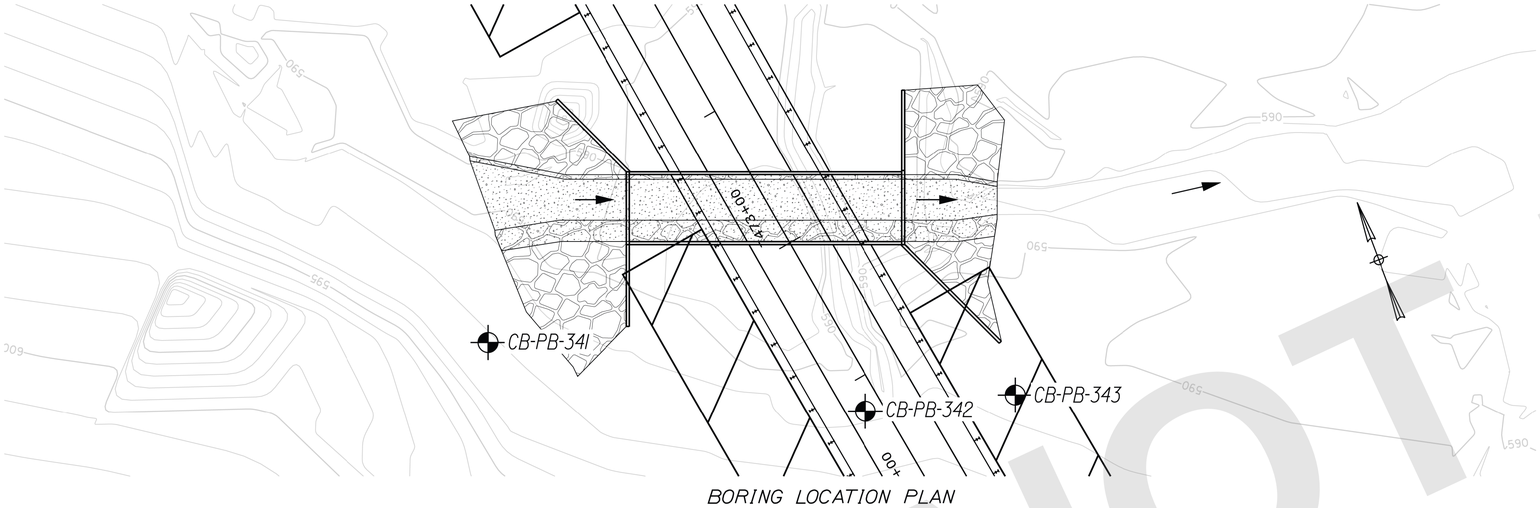
PROJ. MANAGER	R.M.		
DESIGN-DETAILED	BRT	JBD	9/2/2025
CHECKED-REVIEWED	ECF	SMH	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

WILLIAMS BROOK BIRDGE
OVER WILLIAMS BROOK
PRESQUE ISLE AROOSTOOK COUNTY

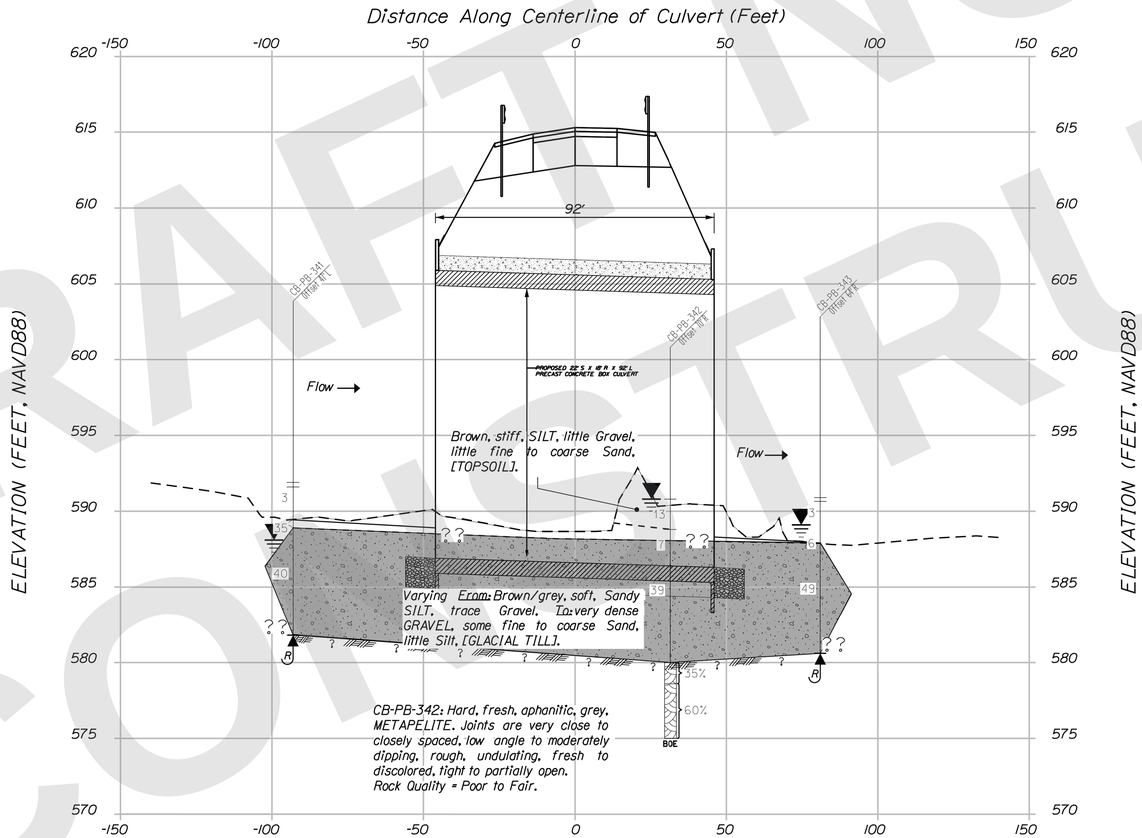
PLAN AND LONGITUDINAL SECTION

SHEET NUMBER
B-147
681
OF 747

WILLIAMS BROOK BOX CULVERT - STA 7473+16.0 (SKEWED)



BORING LOCATION PLAN



INTERPRETIVE SUBSURFACE PROFILE

NOTES

1) Base map developed from electronic files (Contours.dgn, Alignments.dgn, and Highway.dgn) provided by VHB on July 14, 2025.

2) ISPs developed from file X_sect_box_culvert.dgn provided by VHB on July 14, 2025.

3) The as-drilled locations of the CB-PB-300 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings.dgn) on September 5, 2019.

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

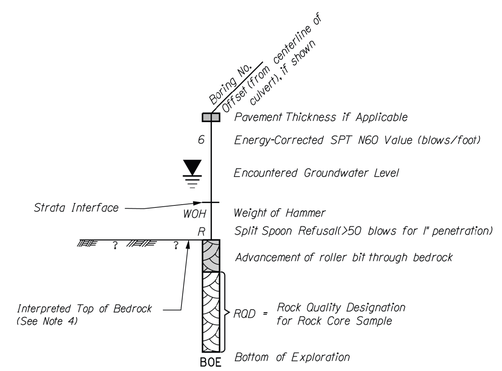
BORING LOCATION PLAN LEGEND

CB-PB-343 — Location and designation of CB-PB-300 series borings that were performed by New England Boring Contractors of Hermon, Maine between August 26 and September 2, 2015.

PLAN

25 0 25 50
Scale in Feet

INTERPRETIVE SUBSURFACE PROFILE LEGEND



PROFILE

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

PREPARED BY: GZA

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

PROJ. MANAGER	R.M.
DESIGN-DETAILED	B.C.
CHECKED-REVIEWED	A.B.
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

BY	DATE
E.T.	7/2027
C.S.	7/2025

WILLIAMS BROOK BOX CULVERT
PRESQUE ISLE BYPASS

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER
B-148
682
OF 747

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Culvert_BLPs\Culvert_BLPs.dgn Division: HIGHWAY Username: common Date:7/29/2025

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-341
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	591.9	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Blaine Cardall	Rig Type:	Mobile Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	8/26/15-8/26/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N702063.7, E2274976.5	Casing ID/OD:	--	Water Level *:	3.8'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
SS = Split Spoon Sample
UD = Unsaccarated Soil Sample
MC = Unsaccarated Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer

RC = Rock Core Sample
HSA = Solid Stem Auger
HW = Hollow Stem Auger
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
N.E.F. = Hammer Efficiency Factor=60/Hammerenergy

S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
N_{60} = SPT Blows Corrected for Hammer Efficiency
N_{field} = SPT Nuncorrected Corrected for Hammer Efficiency

MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Pen. (in.)	Sample Depth (ft.)	Blows (/6 in.) Strength (tsf) or RQD (/)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/12	0.0 - 2.0	WOH-1-2-4	3	3	HSA	591.6		Top 3": ~TOPSOIL~	
										Bottom 9": Brown, moist, soft, sandy SILT, trace Gravel. ~GLACIAL TILL~ (ML)	0.3
	20	24/13	2.0 - 4.0	11-14-21-26	35	35				Brown, wet, dense, GRAVEL, some fine to coarse Sand, some Silt. ~GLACIAL TILL~ (GM)	
5											
	30	24/9	5.0 - 7.0	20-22-18-13	40	40				Brown, wet, dense, sandy GRAVEL, little Silt. ~GLACIAL TILL~ (GM)	D*228 A-1-b, GM w=9.0
10											
	40	1/1	10.0 ~ 10.1	50/1"	R			581.6		Brown/gray, wet, very dense, GRAVEL, some fine to coarse Sand, little Silt. ~GLACIAL TILL~ (GM) Split spoon refusal at 10.1' bgs; augered to 10.3' bgs. Auger refusal; possible bedrock.	10.3
15										Bottom of Exploration at 10.3 feet below ground surface.	
20											
25											

Remarks:
1. Water level measured immediately after completion of drilling.

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.: CB-PB-341

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-342
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	590.8	Auger ID/OD:	--
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Blaine Cardall	Rig Type:	Mobile Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	8/27/15-8/27/15	Drilling Method:	Cased	Core Barrel:	NQ
Boring Location:	N702998.3, E2275084.9	Casing ID/OD:	3"	Water Level *:	+0.5'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
SS = Split Spoon Sample
UD = Unsaccarated Soil Sample
MC = Unsaccarated Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer

RC = Rock Core Sample
HSA = Solid Stem Auger
HW = Hollow Stem Auger
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
N.E.F. = Hammer Efficiency Factor=60/Hammerenergy

S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
N_{60} = SPT Blows Corrected for Hammer Efficiency
N_{field} = SPT Nuncorrected Corrected for Hammer Efficiency

MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Pen. (in.)	Sample Depth (ft.)	Blows (/6 in.) Strength (tsf) or RQD (/)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/12	0.0 - 2.0	3-7-6-4	13	13	2			Brown, wet, stiff, SILT, little Gravel, little fine to coarse Sand. ~TOPSOIL~ (ML)	2.0
							7	588.8		Brown, wet, loose, fine to coarse SAND, little Silt, little Gravel. ~GLACIAL TILL~ (SM)	
5	20	24/13	2.0 - 4.0	4-4-3-7	7	7	6				
							8				
	30	24/14	5.0 - 7.0	18-14-25-25	39	39	20			Brown, wet, dense, fine to coarse SAND, some Gravel, little Silt. ~GLACIAL TILL~ (SM)	
10							4				
							35				
							44				
							47				
							50				
	40 BIT	9/5 +7/12	10.0 ~ 10.8	65-71/5" RQD = 55/-	R		77	580.0		Brown, wet, very dense, GRAVEL, little fine to coarse Sand, little Silt. ~GLACIAL TILL~ (GM) Split spoon refusal at 10.8' bgs; possible bedrock.	10.8
			10.8 ~ 12.2							Casing met refusal at 10.8' bgs. Roller cone to 10.8' bgs and set up to core.	
15	R2	43/40	12.2 ~ 15.8	RQD = 60/-				575.0		R1: Hard, fresh, aphanitic, gray, METAPELITE. Joints are very close to close, low angle, rough, undulating, fresh to discolored, open. Rock Mass Quality = Poor Rock Core Times (min/ft): 2.0, 1.0/4" R2: Hard, fresh, aphanitic, gray, METAPELITE. Joints are close, low angle to moderately dipping, rough, undulating, fresh to discolored, tight to partially open. Rock Mass Quality = Fair Rock Core Times (min/ft): 2.25, 1.5, 1.5, 1.0/6"	15.8
20										Bottom of Exploration at 15.8 feet below ground surface.	
25											

Remarks:
1. Water level measured before start of drilling (pond level).

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.: CB-PB-342

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-343
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	590.9	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Blaine Cardall	Rig Type:	Mobile Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	8/26/15-8/26/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N702985.7, E2275133.1	Casing ID/OD:	--	Water Level *:	1.8'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
SS = Split Spoon Sample
UD = Unsaccarated Soil Sample
MC = Unsaccarated Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer

RC = Rock Core Sample
HSA = Solid Stem Auger
HW = Hollow Stem Auger
WOH = Weight of 140lb. Hammer
WOR/C = Weight of Rods or Casing
N.E.F. = Hammer Efficiency Factor=60/Hammerenergy

S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
N_{60} = SPT Blows Corrected for Hammer Efficiency
N_{field} = SPT Nuncorrected Corrected for Hammer Efficiency

MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Pen. (in.)	Sample Depth (ft.)	Blows (/6 in.) Strength (tsf) or RQD (/)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/11	0.0 - 2.0	WOH-1-2-2	3	3	HSA	590.5		Top 4": ~TOPSOIL~	
										Bottom 7": Brown, moist, soft, sandy SILT, trace Gravel. ~GLACIAL TILL~ (ML)	0.4
	20	24/12	2.0 - 4.0	3-2-4-7	6	6				Gray, wet, loose, fine to coarse SAND, some Gravel, little Silt. ~GLACIAL TILL~ (SM)	D*229 A-1-b, SM w=19.8
5											
	30	24/11	5.0 - 7.0	9-15-34-20	49	49				Brown/gray, wet, dense, sandy GRAVEL, little Silt. ~GLACIAL TILL~ (GM)	
10											
	40	3/3	10.0 ~ 10.3	60/3"	R			580.4		Brown/gray, wet, very dense, sandy GRAVEL, little Silt. ~GLACIAL TILL~ (GM) Split spoon refusal at 10.3' bgs. Auger to 10.5' bgs; Auger refusal; possible bedrock.	10.5
15										Bottom of Exploration at 10.5 feet below ground surface.	
20											
25											

Remarks:
1. Water level measured immediately after completion of drilling.

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.: CB-PB-343

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92 HIGHWAY PLANS

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

WILLIAMS BROOK BOX CULVERT
PRESQUE ISLE BYPASS

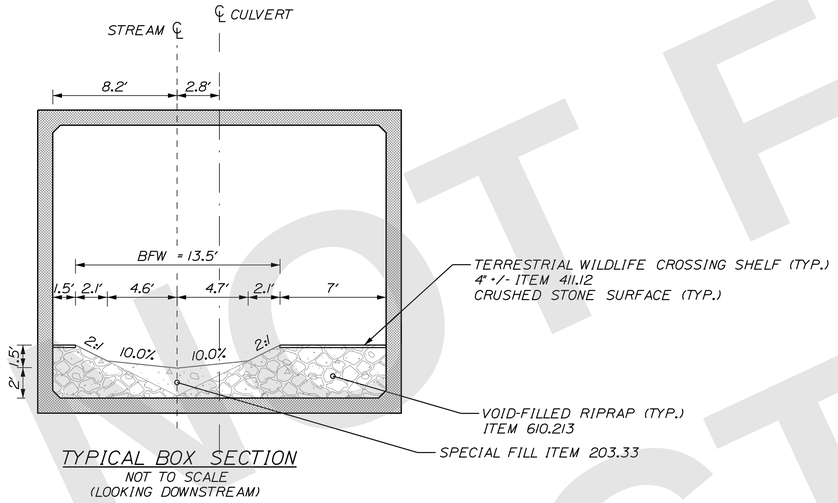
BORING LOGS 1

PREPARED BY:
GZA

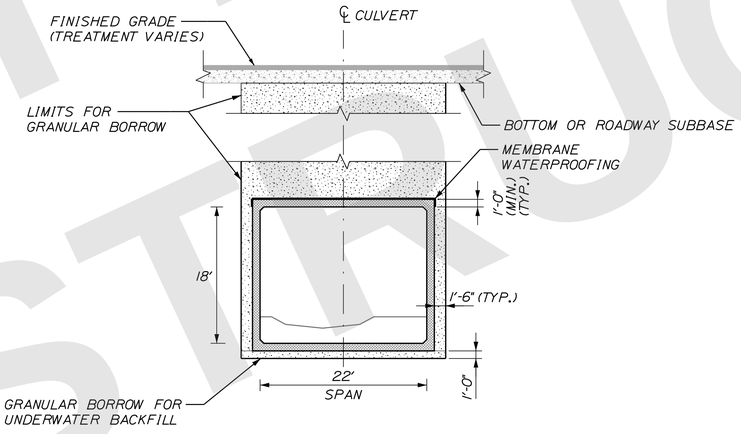
SHEET NUMBER
B-149
683
OF 747

Filename: ...\Boring Logs sheets.dgn Division: HIGHWAY Username: common Date:7/29/2025

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



TYPICAL BOX SECTION
NOT TO SCALE
(LOOKING DOWNSTREAM)



TYPICAL BOX SECTION
NOT TO SCALE

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6734 BRIDGE PLANS

vhb

	BY	DATE
R.M.		
PROJ. MANAGER	JBD	9/2/2025
DESIGN-DETAILED	SMH	9/2/2025
CHECKED-REVIEWED		
DESIGN2-DETAILED2	BRT	
DESIGN3-DETAILED3	CCF	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

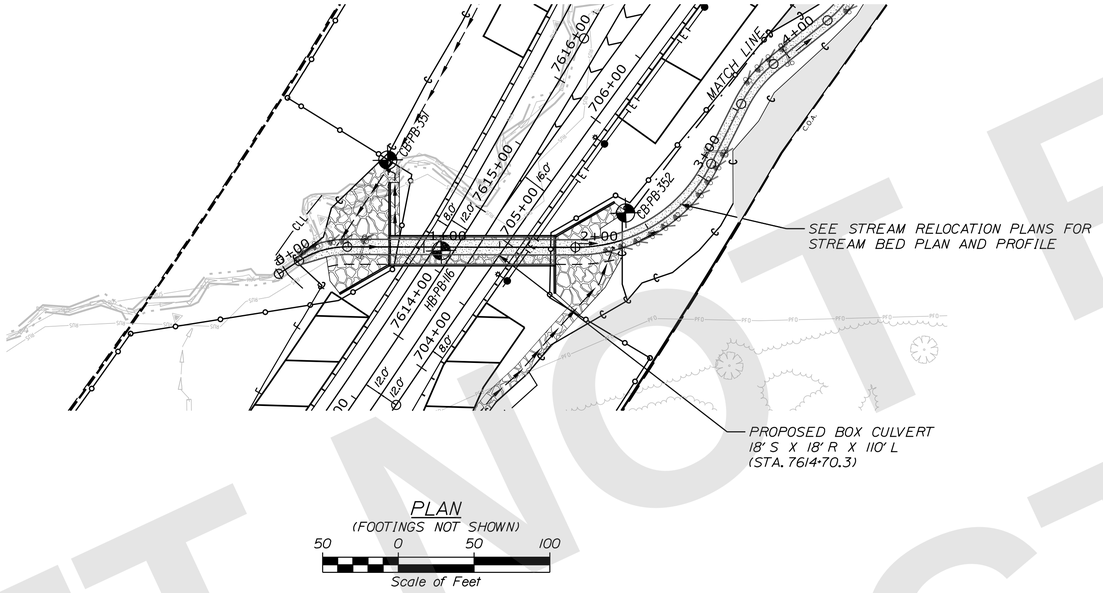
WILLIAMS BROOK BIRDGE
OVER WILLIAMS BROOK
PRESQUE ISLE AROOSTOOK COUNTY

TYPICAL SECTIONS

SHEET NUMBER
B-150
684
OF 747

Username: jamesdavis Date:9/2/2025
Division: HIGHWAY
Filename: ...\B2_Box_Culverts_Plans.dgn

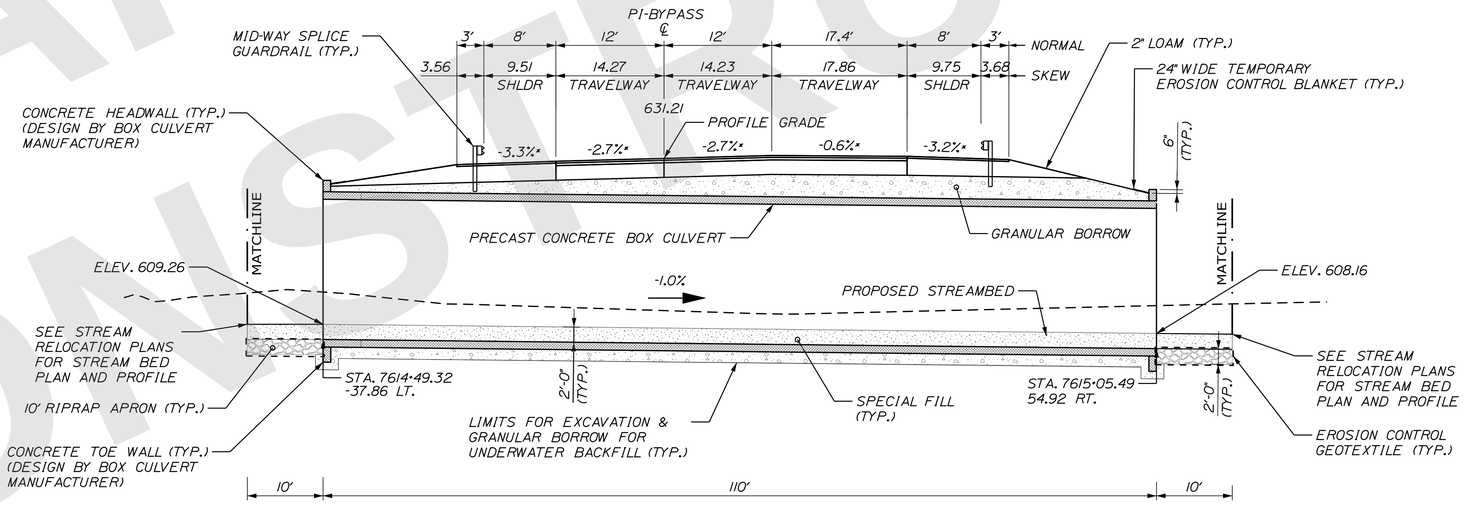
DRAFT NOT FOR CONSTRUCTION



PLAN
(FOOTINGS NOT SHOWN)

50 0 50 100
Scale of Feet

* NOTE: CROSS SLOPES SHOWN ARE ALONG SKEW.



LONGITUDINAL SECTION
NOT TO SCALE
(ALONG CENTERLINE OF CONCRETE BOX)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92
BRIDGE NO. 6583
BRIDGE PLANS

vhb

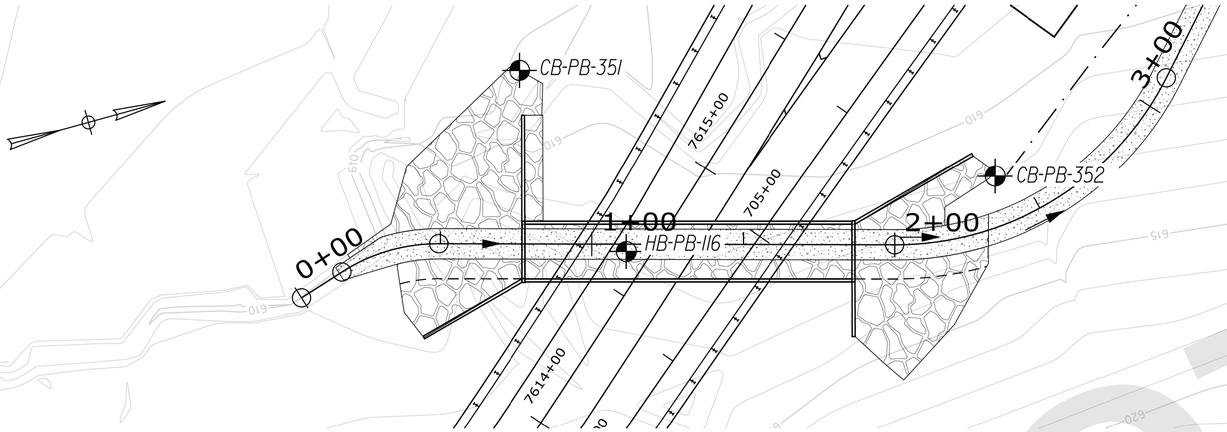
PROJ. MANAGER	R.M.		
DESIGN-DETAILED	BRT	JBD	9/2/2025
CHECKED-REVIEWED	ECF	SMH	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TRIBUTARY TO MERRITT BROOK BIRDGE
OVER TRIBUTARY TO MERRITT BROOK
PRESQUE ISLE AROOSTOOK COUNTY

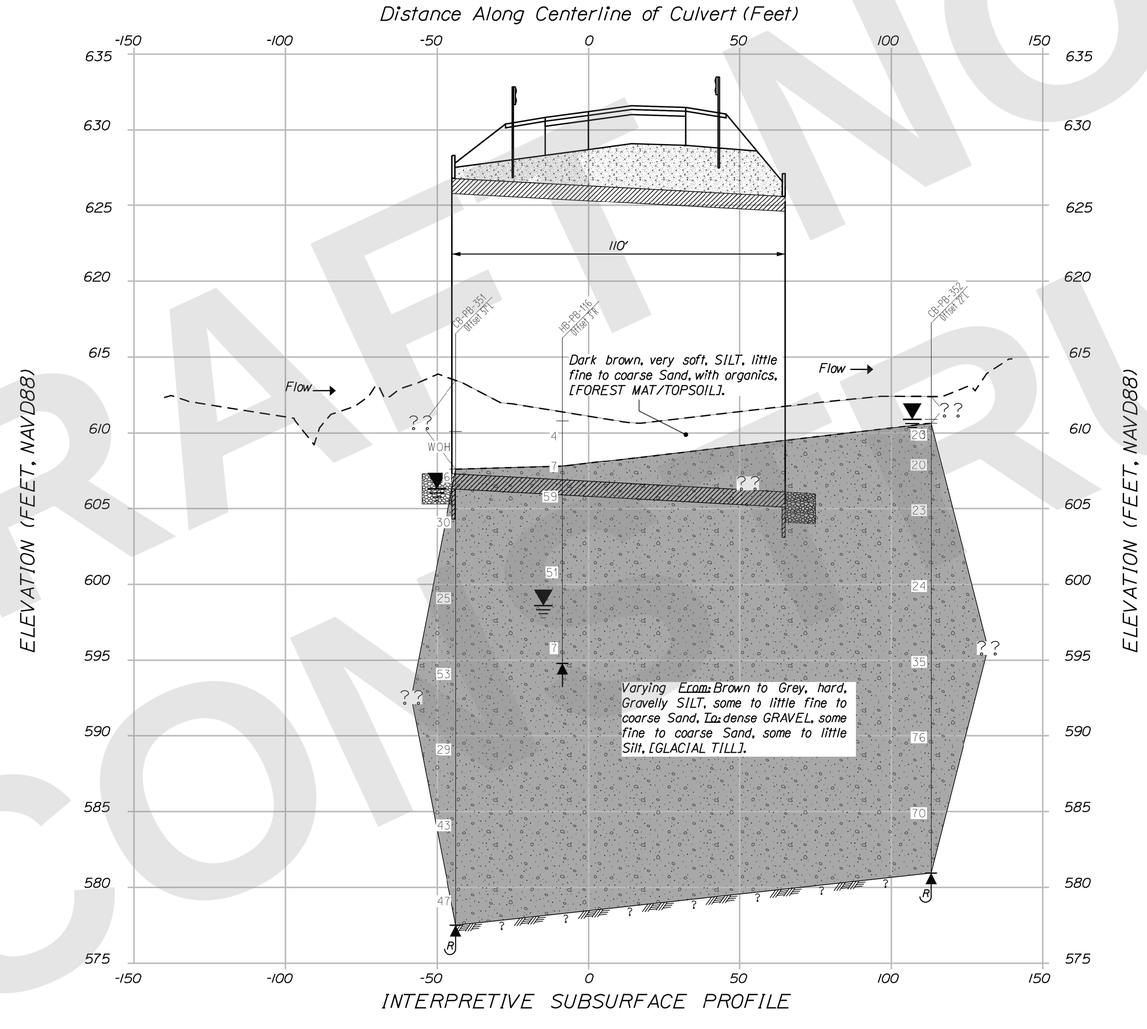
PLAN AND LONGITUDINAL SECTION

SHEET NUMBER
B-151
685
OF 747

TRIBUTARY TO MERRITT BROOK BOX CULVERT - STA 7614+70.3 (SKEWED)



BORING LOCATION PLAN



INTERPRETIVE SUBSURFACE PROFILE

NOTES

1) Base map developed from electronic files (Contours.dgn, Alignments.dgn, and Highway.dgn) provided by VHB on July 14, 2025.

2) ISPs developed from file X_sect_box_culvert.dgn provided by VHB on July 14, 2025.

3) The as-drilled locations of the CB-PB-300 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings.dgn) on September 5, 2019.

4) The as-drilled locations of the HB-PB-100 series test borings were surveyed and provided by MaineDOT in an electronic file (Borings050714.dgn) on May 28, 2014.

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

BORING LOCATION PLAN LEGEND

CB-PB-352 — Location and designation of CB-PB-300 series borings that were performed by New England Boring of Hermon, Maine between August 26 and September 2, 2015.

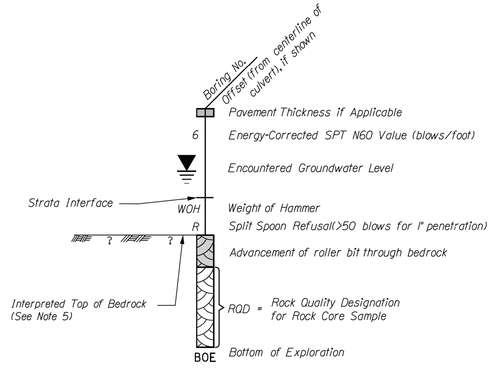
HB-PB-116 — Location and designation of HB-PB-100 series borings that were performed by Maine Test Boring of Hermon, Maine on April 10, 2014.

PLAN

25 0 25 50

Scale in Feet

INTERPRETIVE SUBSURFACE PROFILE LEGEND



PROFILE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

PREPARED BY:

GZA

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

	R.M.	DATE
PROJ. MANAGER		
DESIGN-DETAILED	B.C.	
CHECKED-REVIEWED	A.B.	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	E.T.	7/7/2025
REVISIONS 2	C.S.	7/7/2025
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

TRIB. TO MERRITT BROOK BOX CULVERT
PRESQUE ISLE BYPASS

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER
B-152
686
OF 747

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Culvert_BLPs\Culvert_BLPs.dgn Division: HIGHWAY Username: common Date:7/29/2025

Date:7/29/2025

Username: common

Division: HIGHWAY

Filename: ...\Boring Logs sheets.dgn

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-351
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	610.1	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Blaine Cordell	Rig Type:	Mobile Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	8/28/15-8/28/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N1034904.9, E2273501.1	Casing ID/OD:	--	Water Level *:	3.8'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐	Rope & Cathead ☒	

Definitions:
SA = Split Spoon Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
RQD = Result of Core Percent
R = Rock Core Sample
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
Qtz = Quartz Content, percent
N_{60} = SPT Nuncorrected Corrected for Hammer Efficiency
Nm = Hammer Efficiency Factor=60/Hmeasured
T_v = Pocket Torvane Shear Strength (psf)
MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Pen. (in.)	Sample Depth (ft.)	Blows / 6 in. Seating Drive Strength (N) RQD (T)	N-uncorrected	N(c)	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	S1	24/15	0.0 - 2.0	WOH-WOH-WOH-WOH	WOH		HSA			Dark brown, moist, very soft, SILT, some organics, little fine to coarse Sand. -TOPSOIL- (ML)	
	S2	24/15	2.0 - 4.0	1-3-3-14	6	6		607.6		Top 6": Dark brown, moist, very soft, SILT, some organics, little fine to coarse Sand. -TOPSOIL- (ML)	
5	S3	24/16	5.0 - 7.0	15-16-14-17	30	30				Bottom 9": Brown/gray, moist, fine to coarse SAND, some Clayey Silt, little Gravel. -GLACIAL TILL- (GM)	2.5
	S4	24/23	10.0 - 12.0	6-13-12-18	25	25				Brown/gray, wet, medium dense, silty GRAVEL, little fine to coarse Sand. -GLACIAL TILL- (GM)	
10											wc=10.7
	S5	24/16	15.0 - 17.0	17-25-28-26	53	53				Brown/gray, wet, very dense, sandy GRAVEL, little Silt. -GLACIAL TILL- (GM)	
15											
	S6	24/16	20.0 - 22.0	11-11-18-22	29	29				Brown/gray, wet, very stiff, Clayey SILT, little fine to coarse Sand, trace Gravel. -GLACIAL TILL- (ML)	
20											
	S7	24/5	25.0 - 27.0	20-20-23-26	43	43				Brown/gray, wet, dense, GRAVEL, some Silt, some fine to coarse Sand. -GLACIAL TILL- (GM)	
25											
	S8	24/6	30.0 - 32.0	10-20-27-45	47	47				Brown/gray, wet, dense, GRAVEL, little fine to medium Sand, little Silt. -GLACIAL TILL- (GM)	
30	S9	1/0	32.6 - 32.7	50/1"	R			577.4		Augered to 32.6' bgs, auger refusal. Split spoon refusal at 32.7' bgs: possible bedrock.	
										Bottom of Exploration at 32.7 feet below ground surface.	32.7
35											
40											
45											
50											

Remarks:
1. Water level measured immediately after completion of drilling.

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.: CB-PB-351

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass
Segment 2
Location: Presque Isle, Maine

Boring No.: MB-PB-116
WIN: 6462.91

Driller:	Maine Test Boring	Elevation (ft.):	610.8	Auger ID/OD:	2.25"/6.0"
Operator:	Brad Enos	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Brad Tirone	Rig Type:	Mobile B53 Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	4/10/14 - 4/10/14	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	E1034922.9, N2273568.1	Casing ID/OD:	--	Water Level *:	12.2'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐	Rope & Cathead ☒	

Definitions:
SA = Split Spoon Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
RQD = Result of Core Percent
R = Rock Core Sample
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
Qtz = Quartz Content, percent
N_{60} = SPT Nuncorrected Corrected for Hammer Efficiency
Nm = Hammer Efficiency Factor=60/Hmeasured
T_v = Pocket Torvane Shear Strength (psf)
MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Pen. (in.)	Sample Depth (ft.)	Blows / 6 in. Seating Drive Strength (N) RQD (T)	N-uncorrected	N(c)	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	S1	24/7	0.0 - 2.0	1-2-2-1	4	4	HSA			Brown, moist, soft, SILT, little Gravel and organics. -TOPSOIL- (ML)	
	S2	24/13	2.0 - 4.0	WOH-2-5-6	7	7		607.8		Top 12": Same as sample 1D.	
5	S3	24/14	4.0 - 6.0	4-45-14-11	59	59				Bottom 7": Tan, wet, SILT grading to gray, moist, loose, silty fine to medium SAND, little Gravel. -GLACIAL TILL- (GM)	3.0
	S4	24/9	9.0 - 11.0	14-21-30-23	51	51				Gray, damp, hard, gravelly SILT. -GLACIAL TILL- (ML)	
10										Brown, damp, hard, gravelly SILT, little fine to medium Sand. -GLACIAL TILL- (ML)	
15	S5	24/14	14.0 - 16.0	13-16-27-21	43	43		594.8		Brown, damp, dense, GRAVEL, some fine to coarse Sand, some Silt. -GLACIAL TILL- (GM)	C=6 A=14, GM WC=6.7
20										Bottom of Exploration at 16.0 feet below ground surface.	16.0
25											
30											
35											
40											
45											
50											

Remarks:
1. Water level measured at completion of drilling inside of augers.

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.: MB-PB-116

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass - Segment 1
09.0025832.03
Location: Presque Isle, Maine

Boring No.: CB-PB-352
WIN: 6462.92

Driller:	New England Boring	Elevation (ft.):	610.9	Auger ID/OD:	2.25" ID
Operator:	Mike Porter	Datum:	NAVD 88	Sampler:	Split Spoon
Logged By:	Blaine Cordell	Rig Type:	Mobile Track	Hammer Wt./Fall:	140/30
Date Start/Finish:	8/27/15-8/28/15	Drilling Method:	HSA	Core Barrel:	--
Boring Location:	N1035046.8, E2273576.5	Casing ID/OD:	--	Water Level *:	8.7'+4.5'/+4.7'
Hammer Efficiency Factor:	0.6	Hammer Type:	Automatic ☐ Hydraulic ☐	Rope & Cathead ☒	

Definitions:
SA = Split Spoon Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
WOH = Weight of Hammer
WOR/C = Weight of Rods or Casing
RQD = Result of Core Percent
R = Rock Core Sample
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
Qtz = Quartz Content, percent
N_{60} = SPT Nuncorrected Corrected for Hammer Efficiency
Nm = Hammer Efficiency Factor=60/Hmeasured
T_v = Pocket Torvane Shear Strength (psf)
MC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Rec./Pen. (in.)	Sample Depth (ft.)	Blows / 6 in. Seating Drive Strength (N) RQD (T)	N-uncorrected	N(c)	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	S1	24/9	0.0 - 2.0	1-1-2-4	3	3	HSA	610.5		Top 4": -TOPSOIL-	0.4
	S2	24/11	2.0 - 4.0	6-6-14-18	20	20				Bottom 5": Brown, moist, soft, SILT, some fine to coarse Sand, trace Gravel. -GLACIAL TILL- (ML) Brown, moist, very stiff, gravelly SILT, little fine to coarse Sand. -GLACIAL TILL- (ML)	
5	S3	24/18	5.0 - 7.0	4-8-15-11	23	23				Brown, moist, very stiff, gravelly SILT, little fine to coarse Sand. -GLACIAL TILL- (ML)	wc=9.6
	S4	24/18	10.0 - 12.0	9-10-14-18	24	24				Brown, wet, very stiff, gravelly SILT, little fine to coarse Sand. -GLACIAL TILL- (ML)	
10											
15	S5	24/17	15.0 - 17.0	14-14-19-33	33	33				Brown, wet, hard, gravelly SILT, little fine to coarse Sand. -GLACIAL TILL- (ML)	
20	S6	24/17	20.0 - 22.0	20-35-41-43	76	76				Brown, wet, very dense, GRAVEL, some Silt, some fine to coarse Sand. -GLACIAL TILL- (GM)	
	S7	24/17	25.0 - 27.0	17-29-43-47	72	72				Brown, wet, very dense, GRAVEL, some fine to coarse Sand, trace Silt. -GLACIAL TILL- (GP)	
25											
	S8	1/0	30.0 - 30.1	50/1"	R			580.7		No recovery. Split spoon refusal at 30.1' bgs: augered to 30.2' bgs. Auger refusal: possible bedrock.	
30										Bottom of Exploration at 30.2 feet below ground surface.	30.2
35											
40											
45											
50											

Remarks:
1. Initial water level measured immediately after sample 4D was taken.
2. Encountered spring while augering to 25.0' bgs. Took water measurements at 5 min at 4.5' above ground and 10 min at 4.7' above ground in casing extending above ground surface.

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.: CB-PB-352

DRAFT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN
6462.92

HIGHWAY PLANS

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	B.C.	E.T.	7/2025
CHECKED-REVIEWED	A.B.	C.S.	7/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

TRIB. TO MERRITT BROOK BOX CULVERT
PRESQUE ISLE BYPASS

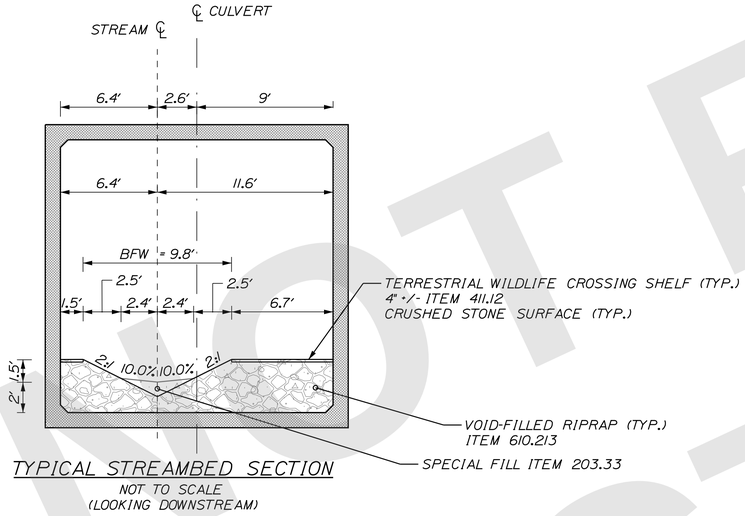
BORING LOGS 1

PREPARED BY:

GZA

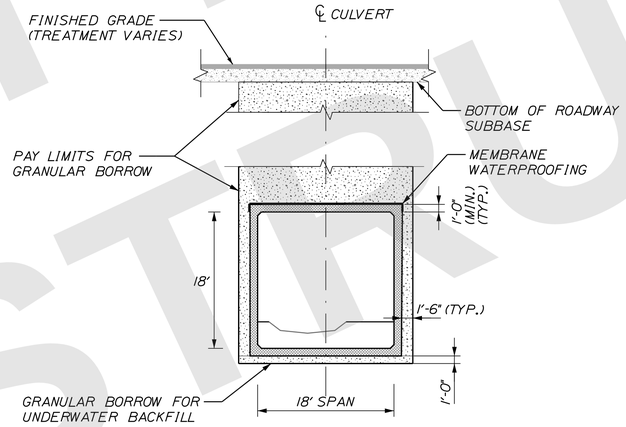
SHEET NUMBER
B-153
687
OF 747

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



TYPICAL STREAMBED SECTION

NOT TO SCALE
(LOOKING DOWNSTREAM)



TYPICAL BOX SECTION

NOT TO SCALE

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6583 BRIDGE PLANS

vhb

	BY	DATE
R.M.		
PROJ. MANAGER	JBD	9/2/2025
DESIGN-DETAILED	SMH	9/2/2025
CHECKED-REVIEWED	BRT	
DESIGN2-DETAILED2	CCF	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

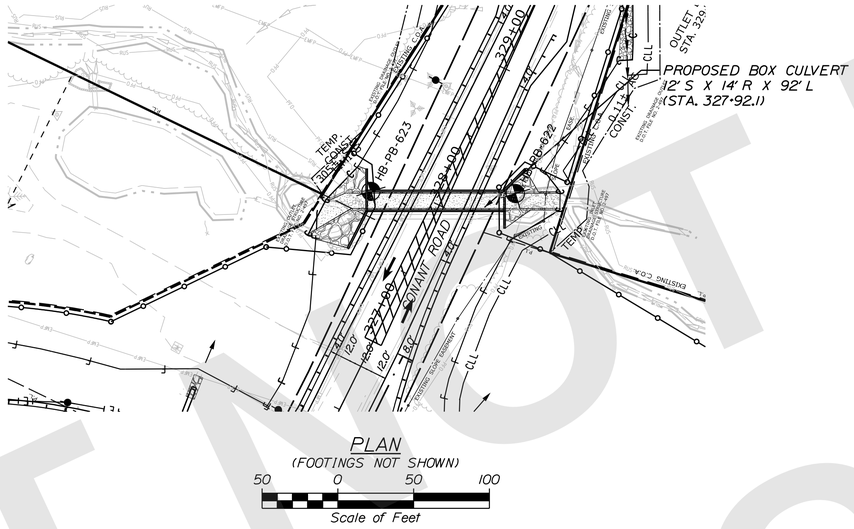
TRIBUTARY TO MERRITT BROOK BIRDGE
OVER TRIBUTARY TO MERRITT BROOK
PRESQUE ISLE AROOSTOOK COUNTY

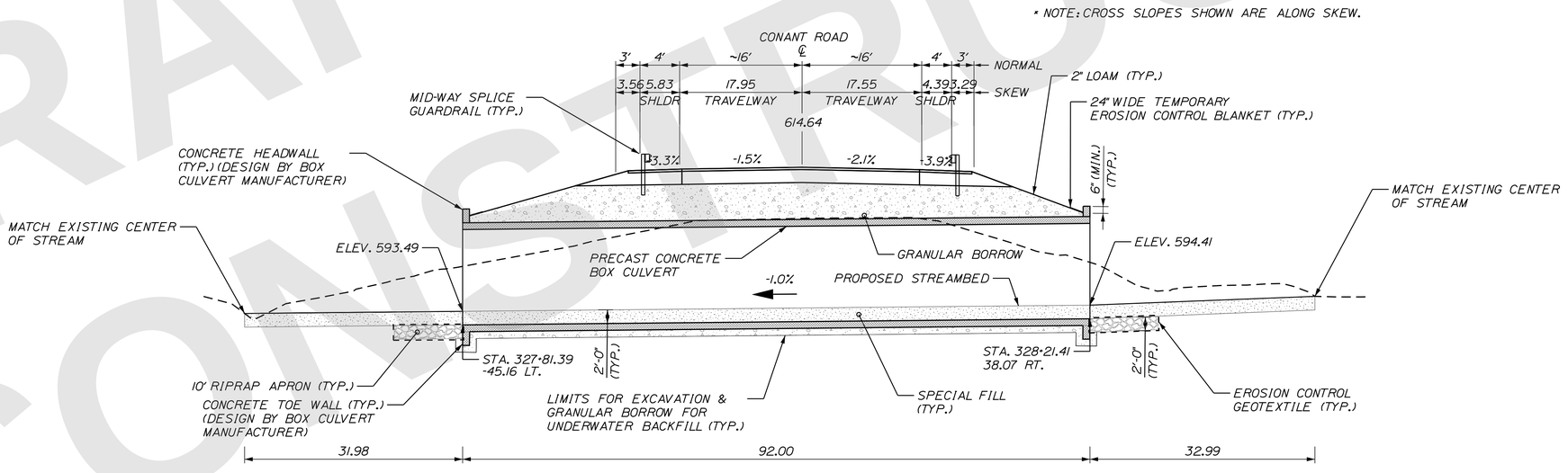
TYPICAL SECTIONS

SHEET NUMBER
B-154
688
OF 747

Username: jamesdavis Date:9/2/2025
Division: HIGHWAY
Filename: ...\B2_Box_Culverts_Plans.dgn

DRAFT NOT FOR CONSTRUCTION





LONGITUDINAL SECTION

NOT TO SCALE
(ALONG CENTERLINE OF CONCRETE BOX)
(PHASED CONSTRUCTION JOINTS NOT SHOWN. SEE STAGED CONSTRUCTION SECTIONS)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6748

BRIDGE PLANS

vhb

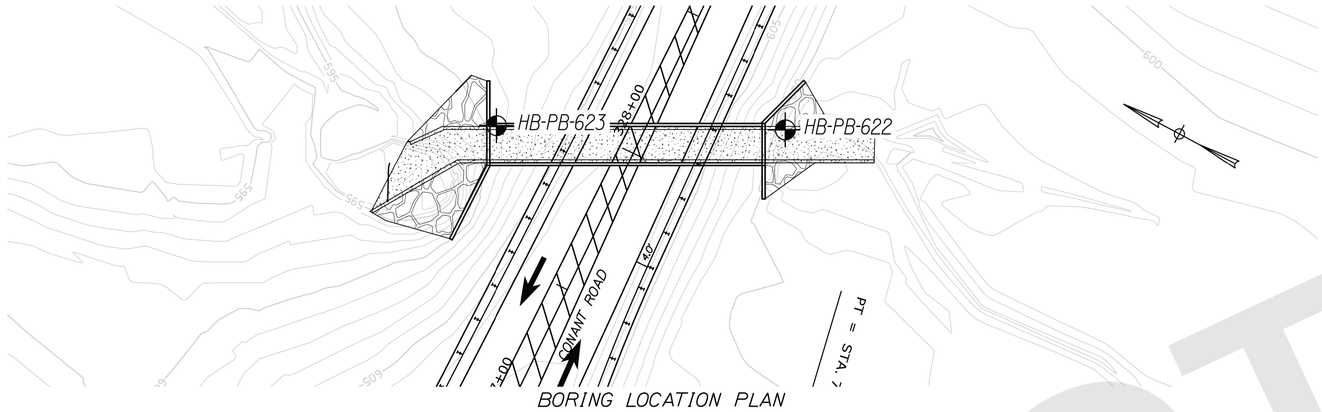
PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	BRT	JBD	9/2/2025
CHECKED-REVIEWED	ECF	SMH	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

STONE FLOWER BIRDGE
OVER TRIBUTARY TO MERRITT BROOK
PRESQUE ISLE AROOSTOOK COUNTY

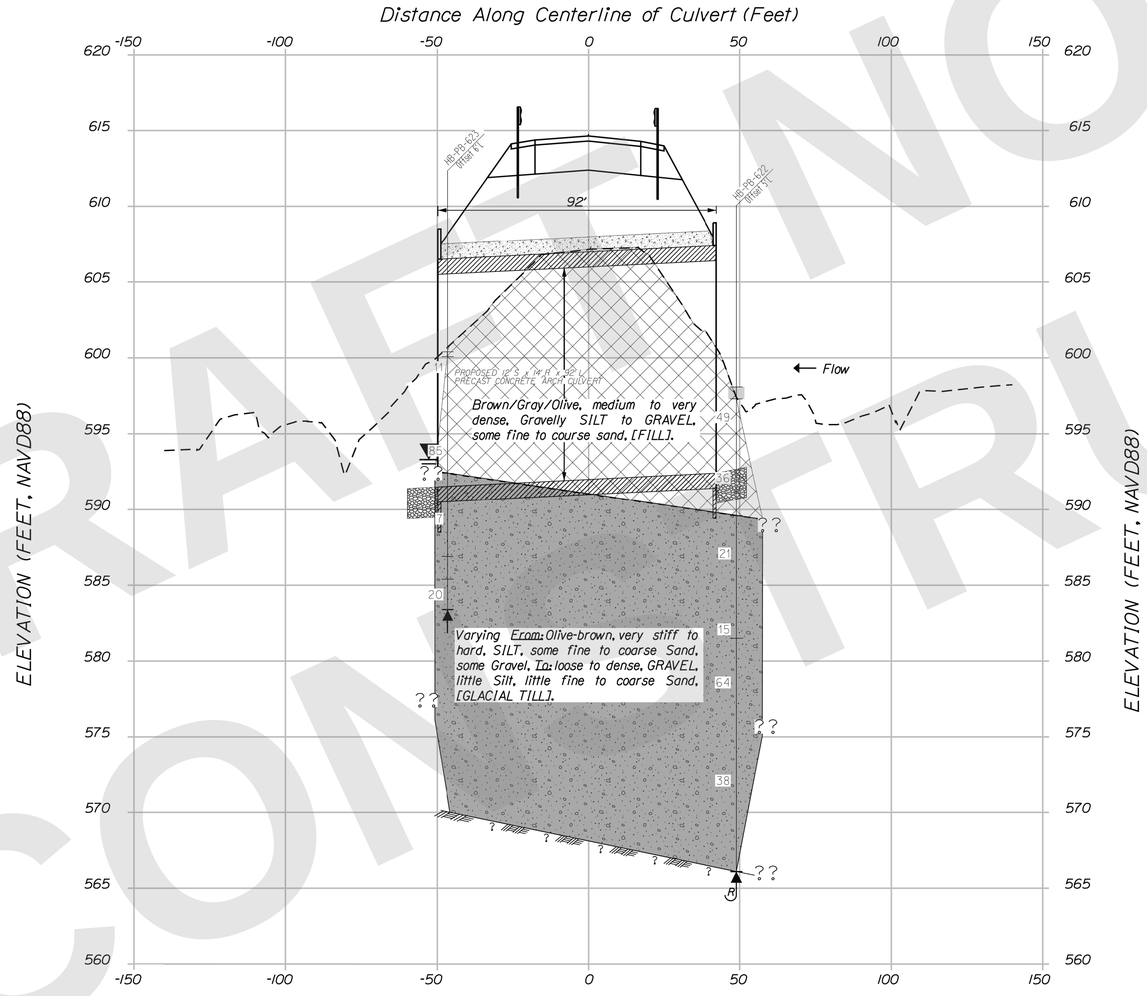
PLAN AND LONGITUDINAL SECTION

SHEET NUMBER
B-155
689
OF 747

CONANT ROAD OVER TRIBUTARY TO MERRITT BOX CULVERT - STA 327+92.12 (SKEWED)



BORING LOCATION PLAN



INTERPRETIVE SUBSURFACE PROFILE

NOTES

1) Base map developed from electronic files (Contours.dgn, Alignments, and Highway.dgn) provided by VHB on July 14, 2025.

2) ISPs developed from file X_sect_box_culvert.dgn provided by VHB on July 14, 2025.

3) The as-drilled locations of the HB-PB-622 and HB-PB-623 test borings were surveyed and provided by MaineDOT in an electronic file (Borings_112023.dgn) on November 11, 2023.

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

BORING LOCATION PLAN LEGEND

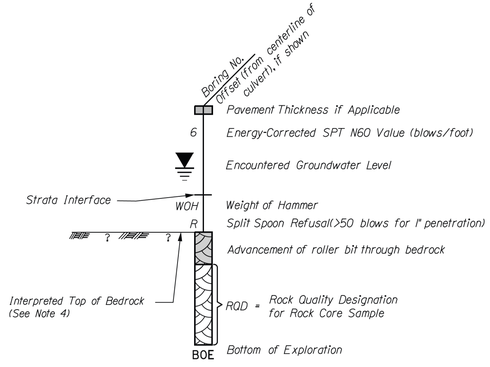
HB-PB-623 — Location and designation of HB-PB-600 series borings that were performed by New England Boring Contractors of Hermon, Maine between October 11 and 16, 2023.

PLAN

25 0 25 50

Scale in Feet

INTERPRETIVE SUBSURFACE PROFILE LEGEND



PROFILE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

	BY	DATE
R.M.		
PROJ. MANAGER	E.T.	7/2025
DESIGN-DETAILED	B.C.	7/2025
CHECKED-REVIEWED	C.S.	
DESIGN2-DETAILED2	A.B.	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CONANT ROAD BOX CULVERT
PRESQUE ISLE BYPASS

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

PREPARED BY: GZA

SHEET NUMBER
B-156
690
OF 747

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Culvert_BLPs\Culvert_BLPs.dgn Division: HIGHWAY Username: common Date:7/29/2025

Username: common
Division: HIGHWAY
Filename: ...\Boring Logs sheets.dgn
Date:7/30/2025

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass, Phase 2
Location: Presque Isle, Maine

Boring No.: MB-PB-623
WIN: 006462.92

Driller: New England Boring Contractors	Elevation (ft.): 600.4	Auger ID/OD:	4.5"
Operator: T. Schaefer	Datum: NAVD88	Sampler:	Standard Splitspoon
Logged By: E. Tome	Rig Type: ATV-Mounted Mobile Drill Rig B53	Hammer Wt./Fall:	140#/30"
Date Start/Finish: 10-11-23/10-11-23	Drilling Method: SSA / Spin & Wash	Core Barrel:	N/A
Boring Location: 327+88.6, 44.6' Lt.	Casing ID/OD: 3"/3.5"	Water Level *:	6.8'
Hammer Efficiency Factor: 0.742	Hammer Type: Automatic ☒ Hydraulic ☐	Rope & Cathead ☐	

Definitions:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
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
WOP = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
N_{60} = SPT Nuncorrected Corrected for Hammer Efficiency
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT Nuncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor*60/Hmeasured
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.) Strength Test (N) & RQD (?)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	10	24/10	0.0 - 2.0	1-3-6-5	9	11	SSA	600.1		10 (Top 3"): Brown, moist, SILT, trace fine to coarse sand, with roots, (Topsoil).	
										10 (Bottom 7"): Brown/grey, moist, medium dense, GRAVEL, some silt, some fine to coarse sand, (Fill).	
										Intermittent increases in auger resistance indicate probable cobbles throughout.	
5	20	24/6	5.5 - 7.5	5-50-19-12	69	85				Grey, wet, very dense, sandy GRAVEL, trace Silt,(Fill).	D*23-S-5172 A-1-a, GW-GM WC=7.4%
							R/C	592.4			
10	30	24/6	10.0 - 12.0	2-3-3-4	6	7				Grey, wet, loose, GRAVEL, little silt, little fine to coarse sand, (Glacial Till).	D*23-S-5182 A-6(1), GM WC=21.9%
15	40	24/9	15.0 - 17.0	7-8-8-12	16	20		583.4		Olive, wet, very stiff, gravelly SILT, little fine to coarse sand, (Glacial Till).	
										Bottom of Exploration at 17.0 feet below ground surface.	
20											

Remarks:
1. Automatic hammer NEBC #320 with an energy transfer ratio = 0.742.
2. Hand-held boring locations were surveyed by MaineDOT in the field (N1036128.5, E2273097.6).

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.: MB-PB-623

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Presque Isle Bypass, Phase 2
Location: Presque Isle, Maine

Boring No.: MB-PB-622
WIN: 006462.92

Driller: New England Boring Contractors	Elevation (ft.): 598.1	Auger ID/OD:	4.5"
Operator: T. Schaefer	Datum: NAVD88	Sampler:	Standard Splitspoon
Logged By: E. Tome	Rig Type: ATV-Mounted Mobile Drill Rig B53	Hammer Wt./Fall:	140#/30"
Date Start/Finish: 10-16-23/10-16-23	Drilling Method: SSA / Spin & Wash	Core Barrel:	--
Boring Location: 328+28.6, 42.0' Rt.	Casing ID/OD: 3"/3.5"	Water Level *:	Not Encountered
Hammer Efficiency Factor: 0.742	Hammer Type: Automatic ☒ Hydraulic ☐	Rope & Cathead ☐	

Definitions:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
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
WOP = Weight of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_u = Unconfined Compressive Strength (ksf)
N_{60} = SPT Nuncorrected Corrected for Hammer Efficiency
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT Nuncorrected Corrected for Hammer Efficiency
N_{60} = Hammer Efficiency Factor*60/Hmeasured
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.) Strength Test (N) & RQD (?)	Nuncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	597.3		0"-0.8": Asphalt	
	10	24/12	1.0 - 3.0	22-26-14-33	40	49				Grey, dry, dense, GRAVEL, some fine to coarse sand, trace silt, (Fill).	
5	20	24/18	5.0 - 7.0	23-17-12-6	29	36				Olive, wet, hard, SILT, some fine to coarse sand, some gravel, (Fill).	D*23-S-5170 WC=11.2%
								589.6			
10	30	24/12	10.0 - 12.0	22-11-6-4	17	21				Olive-brown, wet, medium dense, Silty CLAY, some gravel, some fine to coarse sand, (Glacial Till).	D*23-S-5183 A-6(11), CC WC=21.9%
15	40	24/13	15.0 - 17.0	3-7-5-17	12	15				40 (Top 8"): Olive-brown, wet, very stiff, SILT, some fine to coarse sand, little gravel, (Glacial Till).	
										40 (Bottom 5"): Blue-grey, wet, gravelly SILT, some fine to coarse sand, (Glacial Till).	
	50	24/5	18.5 - 20.5	11-20-32-30	52	64	R/C			Olive, wet, hard, SILT, some fine to coarse sand, some gravel, (Glacial Till).	D*23-S-5171 WC=8.8%
20											
25	60	24/14	25.0 - 27.0	9-15-16-20	31	38				Olive, wet, dense, silty GRAVEL, some fine to coarse sand, (Glacial Till).	D*23-S-5171 WC=5.8%
30								566.1		Increase in roller cone resistance at 32.0', probable fractured bedrock. Roller cone refusal at 34.5'.	
								564.1		Bottom of Exploration at 34.0 feet below ground surface.	
35											
40											
45											

Remarks:
1. Automatic hammer NEBC #320 with an energy transfer ratio = 0.742.
2. Hand-held boring locations were surveyed by MaineDOT in the field (N1036043.8, E2273414).

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.: MB-PB-622

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92 HIGHWAY PLANS

	R.M.	DATE
PROJ. MANAGER		
DESIGN-DETAILED	B.C.	7/2025
CHECKED-REVIEWED	A.B.	7/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

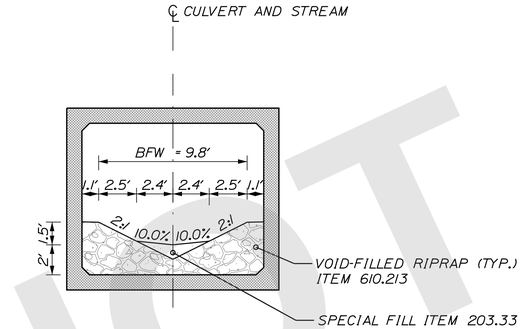
CONANT ROAD BOX CULVERT
PRESQUE ISLE BYPASS

BORING LOGS 1

PREPARED BY:
GZA

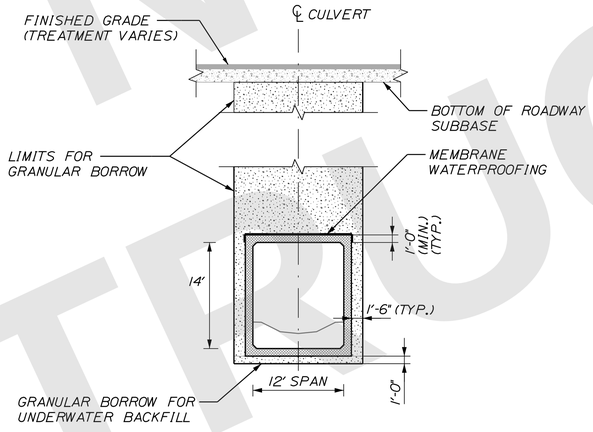
SHEET NUMBER
B-157
691
OF 747

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



TTYPICAL STREAMBED SECTION

NOT TO SCALE



TYPICAL BOX SECTION

NOT TO SCALE

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. 6748 BRIDGE PLANS

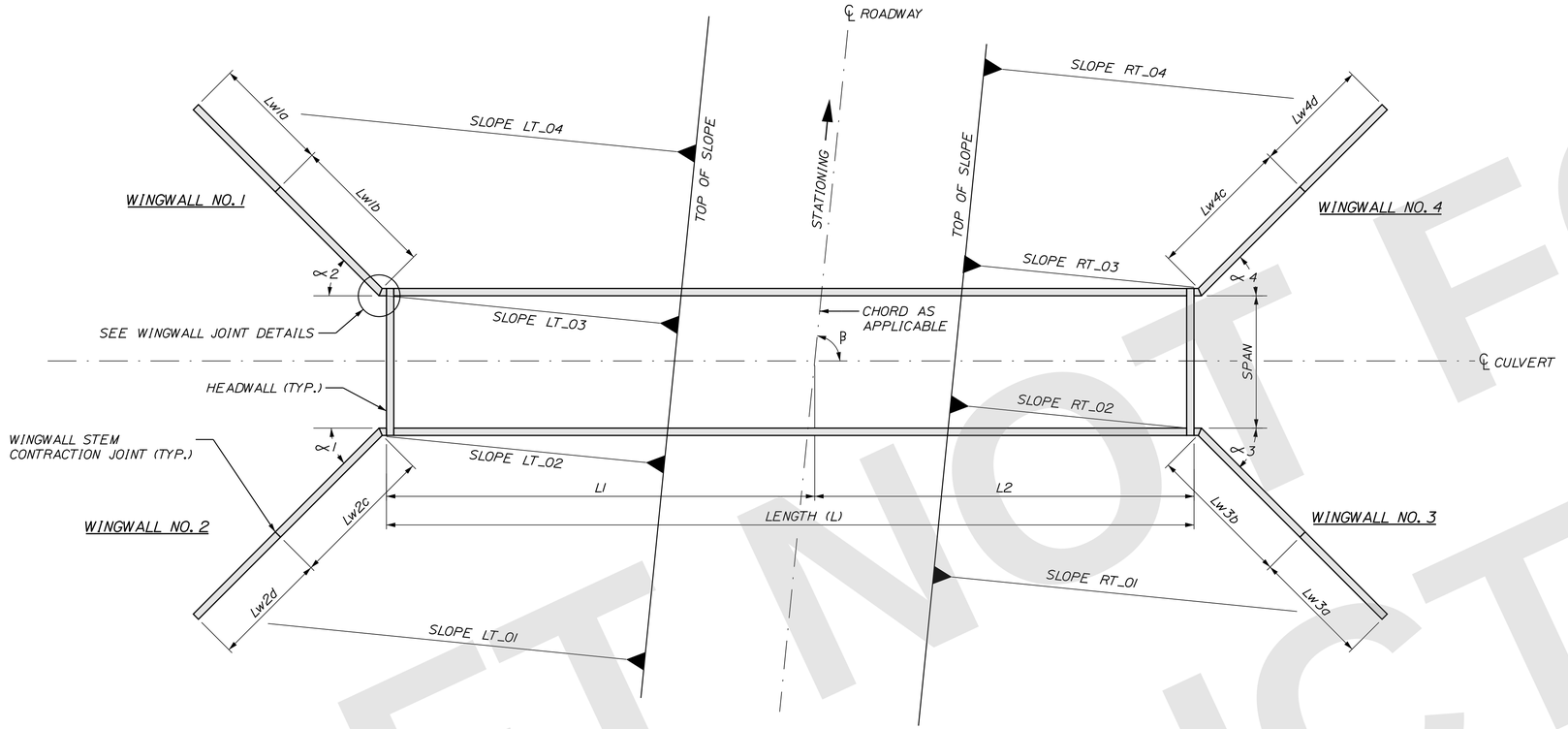
vhb

PROJ. MANAGER	R.M.		
DESIGN-DETAILED	BRT	JBD	9/2/2025
CHECKED-REVIEWED	ECF	SMH	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

STONE FLOWER BIRDGE
OVER TRIBUTARY TO MERRITT BROOK
PRESQUE ISLE AROOSTOOK COUNTY

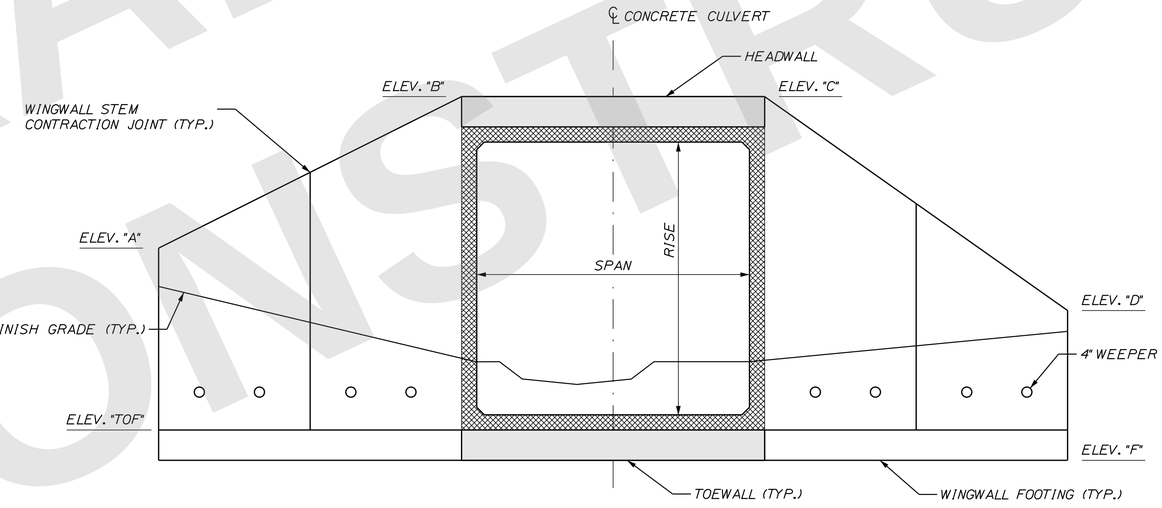
TYPICAL SECTIONS

SHEET NUMBER
B-158
692
OF 747



SCHEMATIC CULVERT PLAN VIEW

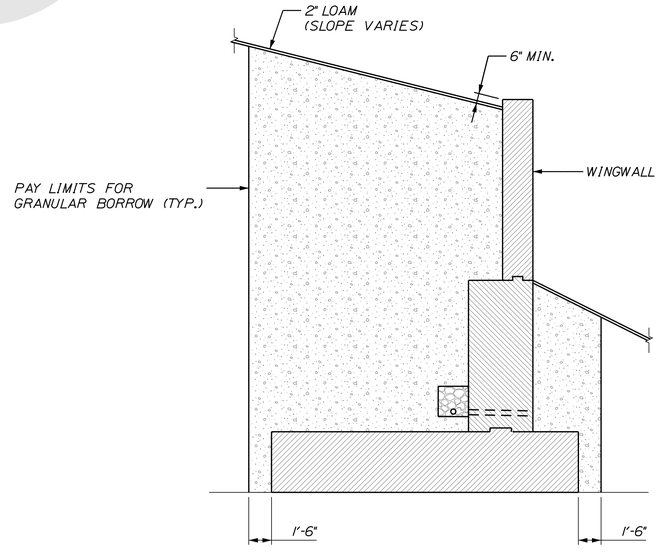
NOT TO SCALE



SCHEMATIC CULVERT END VIEW

(BOX CULVERT SHOWN)

NOT TO SCALE



WINGWALL TYPE I SECTION

(FOOTING ON GLACIAL TILL SHOWN)

(WINGWALL TYPE 2 SECTION SIMILAR)

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

BRIDGE NO. BRIDGE PLANS

vhb

PROJ. MANAGER	R.M.		
DESIGN-DETAILED	YP	BY	DATE
CHECKED-REVIEWED	APS	JBD	9/2/2025
DESIGN2-DETAILED2		SMH	9/2/2025
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

LARGE CULVERTS

PRESQUE ISLE AROOSTOOK COUNTY

LARGE CULVERT DETAILS (1 OF 4)

SHEET NUMBER

B-159

693

OF 747

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

TABLE OF VARIABLES - GENERAL LAYOUT																		
Bridge No.	Station	Span (ft)	Height (ft)	Beta (deg)	L (ft)	L1 (ft)	L2 (ft)	Lw1a (ft)	Lw1b (ft)	Lw2c (ft)	Lw2d (ft)	Lw3a (ft)	Lw3b (ft)	Lw4c (ft)	Lw4d (ft)	alpha_1 (deg)	alpha_2 (deg)	alpha_3 (deg)	alpha_4 (deg)
6584	7344+47	30	17.3*	52.2	160.0	89.5	70.5	---	30.0	29.5	29.5	17.5	17.5	33.3	33.3	90	30	90	25
6585	7362+51	12	7.0*	110.0	120.0	59.7	60.3	---	24.0	14.0	---	---	19.5	14.5	---	45	45	45	45
6586	7396+28	20	10.0	115.0	104.0	54.3	49.7	---	16.0	23.0	---	---	20.0	20.0	---	30	115	40	90
6734	7473+16	22	18.0	120.0	92.0	47.5	44.5	16.5	16.5	27.0	---	22.5	22.5	27.0	---	45	90	45	90
6583	7614+70	18	18.0	56.7	110.0	43.0	67.0	17.5	17.5	18.5	18.5	---	18.0	22.0	22.0	90	30	90	30
6748	327+92	12	14.0	64.4	92.0	49.9	42.1	---	14.0	27.0	---	---	11.0	19.0	---	90	63	90	45

* Height from top of pedestal seat

TABLE OF VARIABLES - ELEVATIONS												
Bridge No.	EL F. LT	EL F. RT	EL TOF. RT	EL TOF. LT	EL 1A	EL 1B	EL 2C	EL 2D	EL 3A	EL 3B	EL 4C	EL 4D
6584	---	---	510.5	509.1	525.0	536.0	536.0	523.0	515.5	537.0	537.0	523.7
6585	---	---	556.6	555.5	563.8	569.2	566.6	559.5	563.4	567.9	565.5	559.0
6586	568.3	567.0	---	---	577.8	583.9	583.9	578.3	579.5	582.6	582.6	577.1
6734	583.6	583.0	---	---	602.4	608.7	607.2	597.3	607.0	611.8	607.3	597.9
6583	603.9	602.8	---	---	615.8	627.6	627.6	619.0	620.3	627.1	627.1	616.5
6748	588.5	589.4	---	---	603.0	608.0	608.0	606.0	603.0	608.5	608.5	605.0

TABLE OF VARIABLES - SIDE SLOPE GRADES								
Bridge No.	LT_01	LT_02	LT_03	LT_04	RT_01	RT_02	RT_03	RT_04
6584	2H:1V	3H:1V	3.5H:1V	2H:1V	2H:1V	3.5H:1V	3.5H:1V	2H:1V
6585	2H:1V	2H:1V	2H:1V	2H:1V	2H:1V	2H:1V	2H:1V	2H:1V
6586	4H:1V	14H:1V	9.5H:1V	4H:1V	4H:1V	5H:1V	7.5H:1V	4H:1V
6734	2H:1V	3H:1V	2H:1V	2H:1V	2H:1V	2H:1V	2.5H:1V	2H:1V
6583	2H:1V	2H:1V	5.5H:1V	2H:1V	3H:1V	5H:1V	2.5H:1V	2H:1V
6748	2H:1V	2.5H:1V	3.5H:1V	2.5H:1V	2H:1V	3H:1V	2H:1V	2H:1V

DRAFT NOT FOR CONSTRUCTION

Filename: ...\MSTA\Planset\B3_WW_tables.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. BRIDGE PLANS

vhb

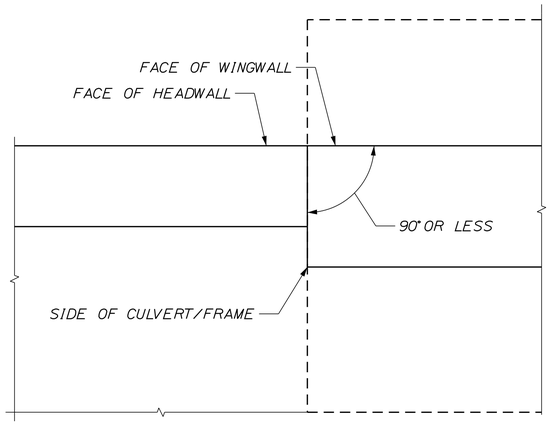
PROJ. MANAGER	R.M.	
DESIGN-DETAILED	YP	JBD 9/2/2025
CHECKED-REVIEWED	APS	SMH 9/2/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

LARGE CULVERTS

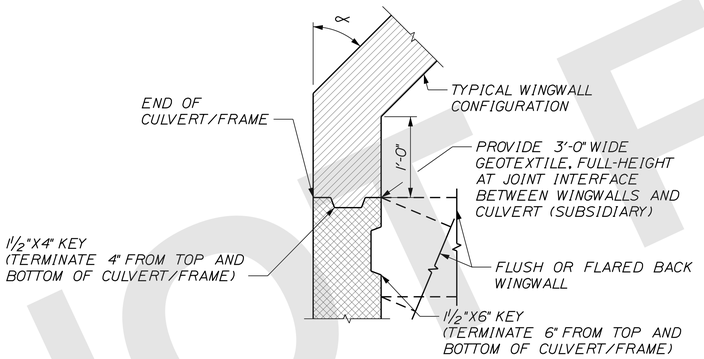
PRESQUE ISLE AROOSTOOK COUNTY

LARGE CULVERT
DETAILS (2 OF 4)

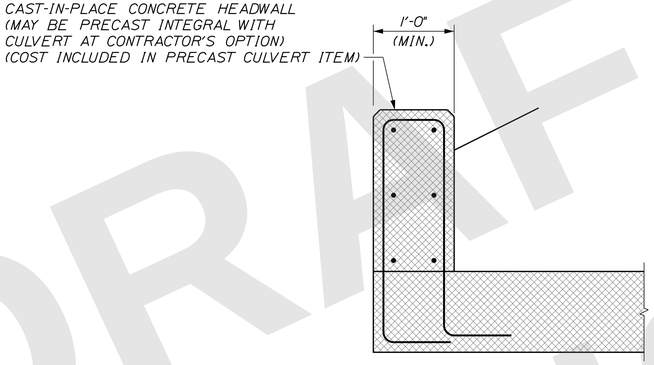
SHEET NUMBER
B-160
694
OF 747



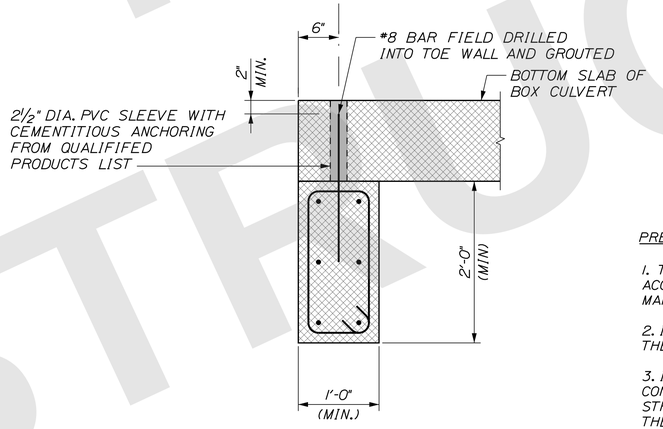
FLUSH OR FLARED BACK WINGWALL
PLAN DETAIL
Not to Scale



WINGWALL VERTICAL JOINT DETAIL
Not to Scale



PRECAST HEADWALL DETAIL
Not to Scale



PRECAST CONCRETE
TOE WALL DETAIL
Not to Scale

PRECAST CONCRETE CULVERT NOTES:

1. THE CONSTRUCTION, HANDLING, AND ASSEMBLY OF THE PRECAST UNITS SHALL BE IN ACCORDANCE WITH SECTION 534, PRECAST STRUCTURAL CONCRETE, AND WITH THE MANUFACTURER'S SPECIFICATIONS AS APPLICABLE.

2. INSTALL STANDARD MEMBRANE WATERPROOFING OVER THE TOP AND TO 12 INCHES DOWN THE EXTERIOR SIDES OF THE PRECAST UNITS UNLESS SHOWN OTHERWISE.

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 LIMIT STATES DO NOT EXCEED THE FACTORED GEOTECHNICAL BEARING RESISTANCES PROVIDED IN THE PROJECT GEOTECHNICAL DESIGN REPORT.

4. THE CONTRACTOR SHALL MAINTAIN THE EXCAVATION SO THAT THE BOX CULVERT AND BEDDING LAYER ARE INSTALLED IN-THE-DRY. GROUNDWATER SHOULD 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 SIDES ARE CUT BACK, EXCAVATION SLOPE GEOMETRIES SHALL BE IN ACCORDANCE WITH OSHA REGULATIONS, OR FLATTER.

5. THE NATIVE SOIL SUBGRADE SHALL BE EXCAVATED USING A SMOOTH-EDGED BUCKET AND TO AVOID DISTURBANCE OF THE SUBGRADE. THE CONTRACTOR SHALL NOT OPERATE HEAVY EQUIPMENT OVER THE EXCAVATED SUBGRADE TO MINIMIZE SUBGRADE DISTURBANCE. IF THE SUBGRADE IS DISTURBED OR WEAKENED, THE CONTRACTOR SHALL EXCAVATE THE DISTURBED MATERIAL AND REPLACE WITH COMPACTED GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL TO THE SUBGRADE LEVEL AT THE CONTRACTOR'S EXPENSE.

DRAFT NOT FOR CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS
WIN 6462.92
BRIDGE NO. BRIDGE PLANS

vhb

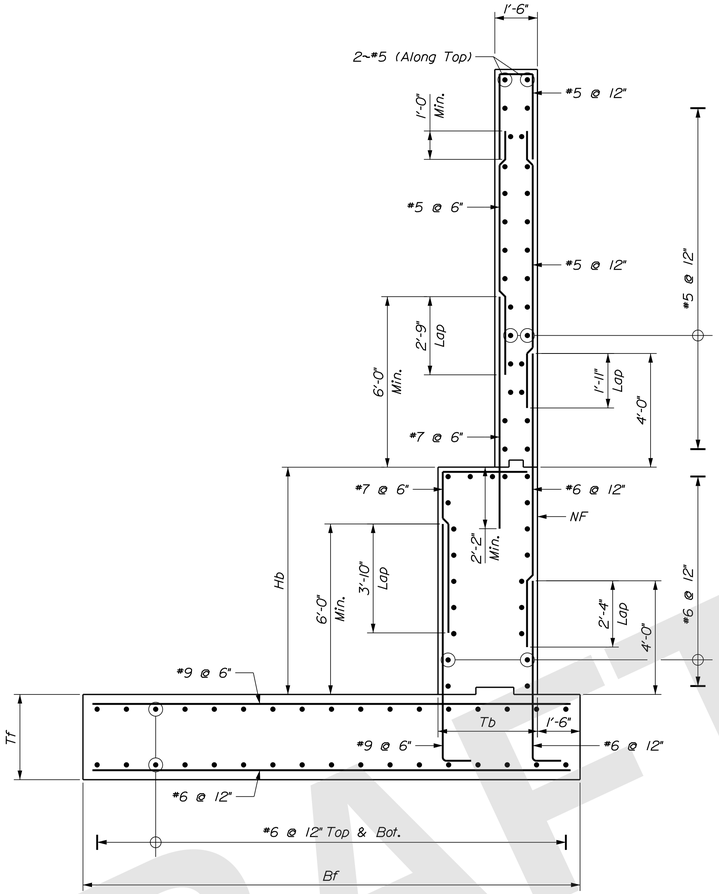
	BY	DATE
R.M.		
PROJ. MANAGER	JBD	9/2/2025
DESIGN-DETAILED	YP	
CHECKED-REVIEWED	APS	9/2/2025
DESIGN2-DETAILED2	SMH	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

LARGE CULVERTS
PRESQUE ISLE AROOSTOOK COUNTY
LARGE CULVERT
DETAILS (3 OF 4)

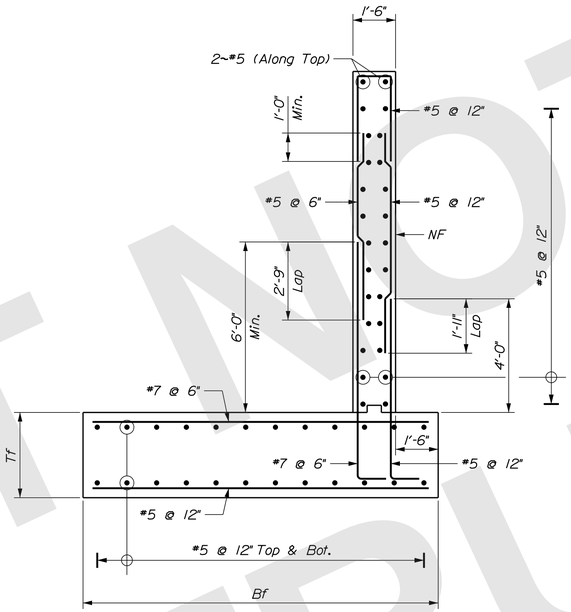
SHEET NUMBER
B-161
695
OF 747

Filename: ...\B2_Box_Culverts_Plans.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

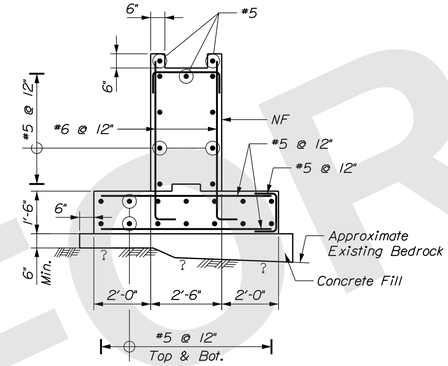
Filename: ...\B4_WW_Section_Reinf.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025



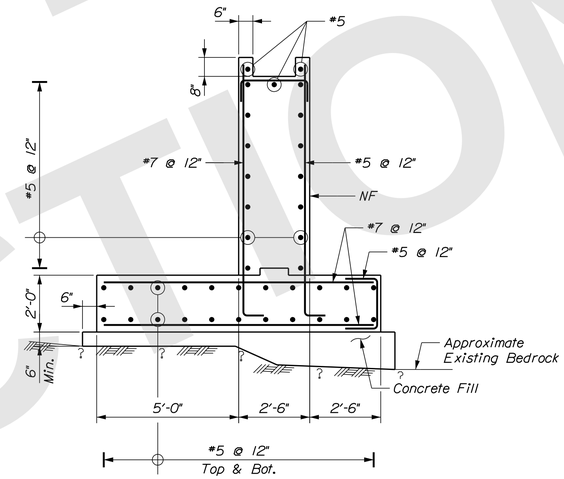
WINGWALL TYPE 1 SECTION



WINGWALL TYPE 2 SECTION



PEDESTAL WALL SECTION (TRIBUTARY TO CLARK BROOK)



PEDESTAL WALL SECTION (CLARK BROOK BYPASS)

CLARK BROOK BYPASS					
Bridge No. 6584		Geometry (ft)			
Wingwall	Type	Bf	Tf	Hb	Tb
1a	-	-	-	-	-
1b	1	16.5	3.0	8.0	2.5
2c	1	16.5	3.0	8.0	2.5
2d	1	16.5	3.0	8.0	2.5
3a	2	12.5	3.0	-	-
3b	1	16.5	3.0	8.0	2.5
4c	1	17.5	3.5	10.0	3.0
4d	1	16.5	3.0	8.0	2.5

TRIBUTARY TO WILLIAMS BROOK					
Bridge No. 6586		Geometry (ft)			
Wingwall	Type	Bf	Tf	Hb	Tb
1a	-	-	-	-	-
1b	2	11.0	2.0	-	-
2c	2	11.0	2.0	-	-
2d	-	-	-	-	-
3a	-	-	-	-	-
3b	2	11.0	2.0	-	-
4c	2	11.0	2.0	-	-
4d	-	-	-	-	-

TRIBUTARY TO MERRITT BROOK					
Bridge No. 6583		Geometry (ft)			
Wingwall	Type	Bf	Tf	Hb	Tb
1a	2	12.5	3.0	-	-
1b	1	15.0	3.0	7.0	2.5
2c	1	15.0	3.0	7.0	2.5
2d	2	12.5	3.0	-	-
3a	-	-	-	-	-
3b	1	15.0	3.0	7.0	2.5
4c	1	15.0	3.0	7.0	2.5
4d	2	12.5	3.0	-	-

TRIBUTARY TO CLARK BROOK					
Bridge No. 6585		Geometry (ft)			
Wingwall	Type	Bf	Tf	Hb	Tb
1a	-	-	-	-	-
1b	2	10.5	2.0	-	-
2c	2	10.5	2.0	-	-
2d	-	-	-	-	-
3a	-	-	-	-	-
3b	2	10.5	2.0	-	-
4c	2	10.5	2.0	-	-
4d	-	-	-	-	-

WILLIAMS BROOK BRIDGE					
Bridge No. 6734		Geometry (ft)			
Wingwall	Type	Bf	Tf	Hb	Tb
1a	1	15.0	3.0	7.0	2.5
1b	1	15.0	3.0	7.0	2.5
2c	1	15.0	3.0	7.0	2.5
2d	-	-	-	-	-
3a	1	17.5	3.5	8.0	3.0
3b	1	17.5	3.5	8.0	3.0
4c	1	15.0	3.0	7.0	2.5
4d	-	-	-	-	-

STONE FLOWER BRIDGE					
Bridge No. 6748		Geometry (ft)			
Wingwall	Type	Bf	Tf	Hb	Tb
1a	-	-	-	-	-
1b	2	12.5	3.0	-	-
2c	2	12.5	3.0	-	-
2d	-	-	-	-	-
3a	-	-	-	-	-
3b	2	12.5	3.0	-	-
4c	2	12.5	3.0	-	-
4d	-	-	-	-	-

CAST-IN-PLACE CONCRETE NOTES

1. Reinforcing steel shall have a minimum concrete cover of 2 inches in the walls and 3 inches in the footings unless otherwise noted.

2. Place drains with a 4 inch diameter in pedestal walls and wingwalls at 10 feet maximum spacing. The exact location will be determined by the Resident.

3. Place contraction joints every 30 feet maximum along pedestal walls. Offset contraction joints in pedestal walls from precast arch and frame elements. The exact location will be determined by the Resident.

4. Maintain constant top of pedestal wall elevation, vary or step top of footing elevation as needed. The final footing elevation variation will be approved by the Resident.

5. When the bedrock protrudes above the bottom of the footing shown, the footing may be raised with the approval of the Resident. The minimum allowable footing thickness is shown on the plans.

6. At the option of the Resident, bedrock which protrudes above the horizontal plane 12 inches below the proposed footing elevation may be removed. Payment for bedrock removal shall be made under Item No. 206.092, Structural Rock Excavation - Major Structures.

7. A concrete leveling pad may be constructed between the bottom of the footing and the top of the prepared bedrock surface. Concrete for leveling pads shall be class "fill" concrete conforming to the requirements of Section 502 Structural Concrete. Leveling pad shall have a minimum thickness of 6 inches.

8. Footing concrete or a concrete leveling pad shall be placed on bedrock cleaned of all weathered rock, loose fractured rock and soil. The bedrock subgrade shall be confirmed to be relatively level. Where the bedrock slope exceeds 4h:1v, the bedrock surface shall be benched to create level steps, made completely level, or dowels may be installed in accordance with an approved design submittal. The Resident shall approve the bedrock subgrade prior to the placement of concrete.

9. All cast-in-place concrete wingwalls and pedestal walls shall be paid under item 502.219, Structural Concrete, Abutment and Retaining Walls.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 006462.92

BRIDGE NO. BRIDGE PLANS

vhb

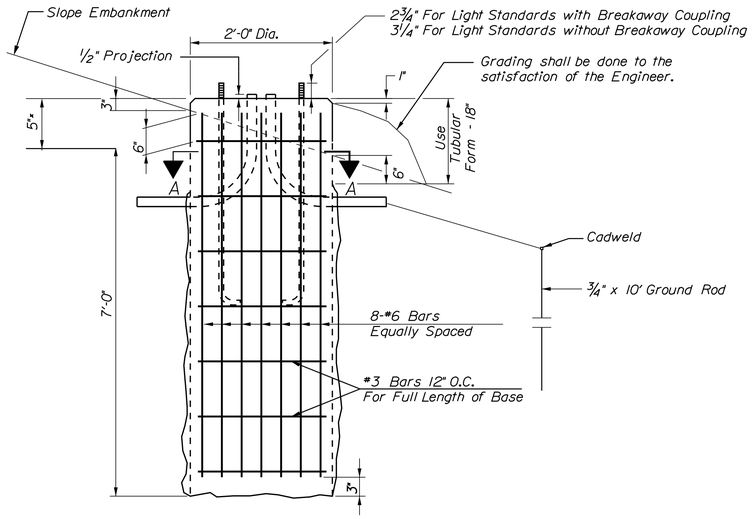
	BY	DATE
PROJ. MANAGER	R.M.	
DESIGN-DETAILED	JBD	9/2/2025
CHECKED-REVIEWED	YP	
DESIGN2-DETAILED2	APS	
DESIGN3-DETAILED3	SMH	9/2/2025
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

LARGE CULVERTS
PRESQUE ISLE AROOSTOOK COUNTY

LARGE CULVERT
DETAILS (4 OF 4)

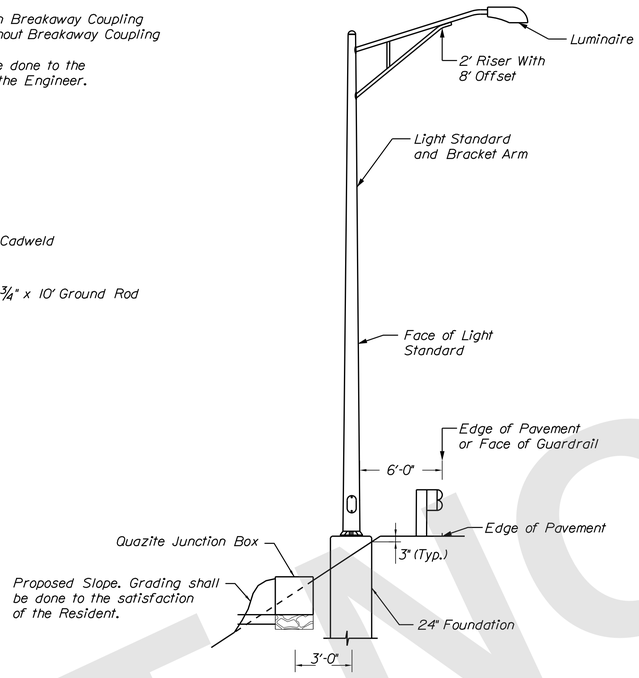
SHEET NUMBER
B-162
696
OF 747

DRAFT NOT FOR CONSTRUCTION

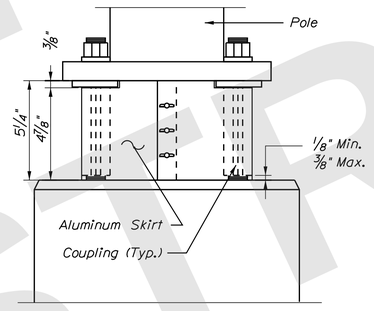


24 Inch Foundation

Note:
Where solid rock is encountered at less than the required distance below ground level, reinforcing steel shall be doweled into ledge as shown on MaineDOT Standard Detail 626(06). Payment shall be incidental to the foundation pay item.



Placement of Light Standard



Breakaway Couplings and Skirt Detail

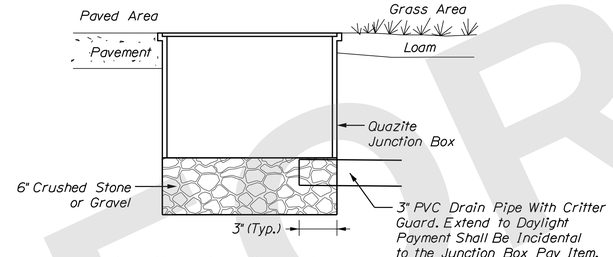
NOTES:

1. Junctions Boxes For Highway Shall Be Quazite® Or Approved Equal And In Accordance With Special Provision 626.

2. Splices In Box Shall Be Made With ILSCO USPA-350SS-DB Dual Rated Insulated, In-line, Waterproof Splice, UL Listed For Direct Burial (Wire Range From 350KCMIL - 10AWG Stranded) Only. Provide Enough Slack In Wire To Allow Removal Of Splices And Neatly Arrange Wire In Box.

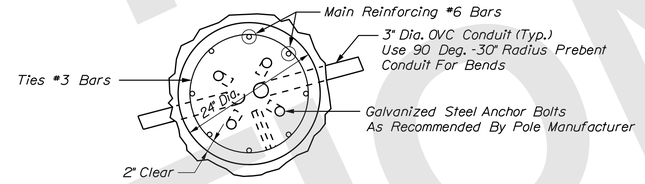
3. The Cover Shall Be Labeled With Function Designation In 1" Min Text As Follows:
"Lighting For Lighting Conduit"
"Communication For Communication Conduits"
"Signal" For Singal Conduits

4. Cover Shall Be Heavy Duty Type Tier 22 With (2) 1/2" Stainless Steal Penta-Head Bolts.

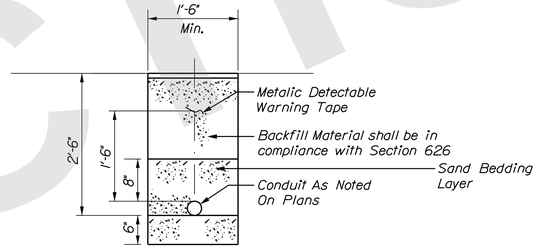


Junction Box Cover & Frame

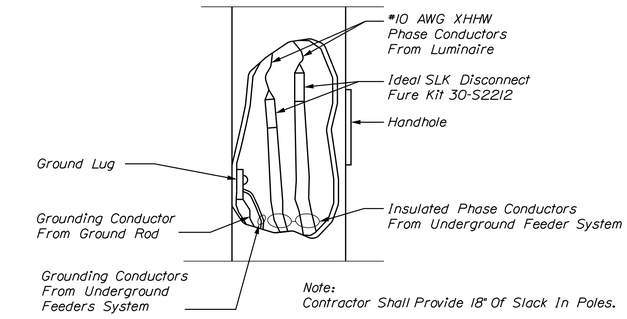
Note: Install junction boxes on grade



Section A-A



Trench Cross Section



Typical Pole Wiring Detail

DRAFT NOT FOR CONSTRUCTION

Filename: ...\Lighting\L-01_PLANLT06.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

vhb

	BY	DATE
R.M.	JBD	9/2/2025
PROJ. MANAGER		
DESIGN-DETAILED	ZBW	
CHECKED-REVIEWED	ECF	
DESIGN2-DETAILED2	AG	9/2/2025
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PRESQUE ISLE
PRESQUE ISLE BYPASS

CONSTRUCTION DETAILS

SHEET NUMBER
L-1
697
OF 747

Filename: ...\Lighting\L-02_PLANLT07.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

GENERAL NOTES: LIGHTING

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO APPLICABLE PROVISIONS OF THE CURRENT EDITIONS OF THE MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT) STANDARD SPECIFICATIONS AND STANDARD DETAILS, NATIONAL ELECTRIC CODE (NEC) AND ANY REQUIREMENTS OF THE POWER COMPANY.
2. FIELD-VERIFY POLE LOCATIONS TO AVOID NATURAL AND BUILT SITE FEATURES THAT WOULD CONFLICT WITH PROPER INSTALLATION OF POLE FOUNDATIONS.
3. HIGHWAY LIGHTING FIXTURE VOLTAGE SHALL BE 240 VOLTS.
4. LIGHTING FIXTURES SHALL BE IES FULL CUTOFF, LIGHT EMITTING DIODE (LED) FIXTURES
5. ALL FIXTURES SHALL BE GASKETED AND HAVE SURGE PROTECTION AND A DOUBLE FUSE KIT. ALL FIXTURES SHALL BE GRAY. IF DIFFERENT FIXTURES ARE PROPOSED, THEY SHALL BE IES FULL CUTOFF, TYPE 3 IES DISTRIBUTION TYPE AS NOTED IN THE LUMINAIRE SCHEDULE, LED LUMINAIRES, B.U.G. RATINGS SHALL BE EQUAL TO OR BETTER THAN THE DESIGNED FIXTURES. THE CONTRACTOR MUST DEMONSTRATE THAT THE PROPOSED FIXTURES WILL REASONABLY EQUAL THE LIGHT LEVELS AND DISTRIBUTIONS SHOWN ON THE PLANS, IN THE OPINION OF MAINEDOT.
6. CONDUIT SHALL BE 2" MINIMUM, PVC SCHEDULE 80. MINIMUM BURIAL DEPTH FOR CONDUIT SHALL BE 36" TO THE TOP OF PIPE. ALL CONDUIT ENDS SHALL BE FITTED WITH PULLING BELL ENDS.
7. A JUNCTION BOX/HANDHOLE SHALL BE INSTALLED AT EACH POLE. THE WIRING IN CONDUITS SHALL BE CONTINUOUS BETWEEN JUNCTION BOXES/HANDHOLES WITHOUT RUNNING SPLICES IN CONDUITS.
8. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL FURNISH TO MAINEDOT A SET OF AS-BUILT PLANS FOR FUTURE REFERENCE AND SYSTEM MAINTENANCE.
9. ALL LIGHT BASES SHALL HAVE A GROUND ROD LOCATED ADJACENT TO THE POLE THAT IS BONDED TO THE GROUNDING CONDUCTOR.
10. LOAD CENTER SHALL BE MARKED WITH ARC FLASH HAZARD TYPE 1, 2, 3 OR 4 AND THE APPROPRIATE PPE REQUIRED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING AN ARC FLASH STUDY.
11. EACH LOAD CENTER SHALL HAVE A PHOTOCELL TO CONTROL ALL LIGHTS ON THAT SERVICE. INDIVIDUAL PHOTOCELLS ON LIGHTS WILL NOT BE ACCEPTED.
12. BREAKAWAY DEVICES FOR LIGHT POLES SHALL CONFORM TO THE LATEST VERSION OF "AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" AND NCHRP REPORT 350. THE BREAKAWAY DEVICE SHALL BE DESIGNED SO THAT THE ANCHOR BOLTS WILL NOT BEND WHEN A VEHICLE HITS THE POLE. A FRANGIBLE COUPLING SUCH AS TRANSPO POLE-SAFE 5000 SERIES (WITH A FEMALE ANCHOR), THE MANITOBA SAFETY BASE WITH REACTION PLATE, OR APPROVED EQUAL SHALL BE USED. BREAKAWAY DEVICES SHALL BE INSTALLED ON ALL POLES.
13. WIRE SHALL BE STRANDED COPPER XHHW-2, SIZE AS NOTED ON THE PLANS.
14. FOUNDATIONS SHALL BE 24 INCH DIAMETER BY 7' HEIGHT FOUNDATIONS. PRECAST FOUNDATIONS MAY BE USED, AND IF USED SHALL INCLUDE CAST CONDUIT INSERTS AT EACH POLE. CONTRACTOR SHALL PROVIDE 18" OF EXTRA WIRE SLACK.
15. FOR ALL CONDUIT RUNS FROM HANDHOLE TO POLE, THE CONTRACTOR SHALL INSTALL 3"C WITH 2#10 AND 1#10 GND.

LOAD CENTER A													
MAIN CIRCUIT BREAKER: 60						PROJECT NAME: P1-BYPASS LIGHTING							
MAIN BUS: 60						FED FROM: OVERHEAD SERVICE							
VOLTAGE: 120/240V-1P-3W						LOCATION: P1-BYPASS / CONANT ROAD							
DESCRIPTION	PHASE WATTAGE		BREAKER			BUS	BREAKER			PHASE WATTAGE		DESCRIPTION
	ΦA	ΦB	POLE	AMP	CKT		CKT	AMP	POLE	ΦA	ΦB	
A-1	525	525	1	15	1		2	15	1	560	560	A-2
A-3	490	490	1	15	3		4	15	1	490	490	A-4
	1015	1015								1050	1050	

	ΦA	ΦB		CALCULATED LOAD VALUES	
PANEL PHASE TOTALS	2065	2065	SINGLE POLE DOUBLE THROW CIRCUITS, SIZED TO LOAD	TOTAL CONNECTED KW	4.13
				TOTAL CONNECTED AMP	17.21

LOAD CENTER B													
MAIN CIRCUIT BREAKER: 60						PROJECT NAME: P1-BYPASS LIGHTING							
MAIN BUS: 60						FED FROM: OVERHEAD SERVICE							
VOLTAGE: 120/240V-1P-3W						LOCATION: P1-BYPASS / SOUTHERN CONNECTOR							
DESCRIPTION	PHASE WATTAGE		BREAKER			BUS	BREAKER			PHASE WATTAGE		DESCRIPTION
	ΦA	ΦB	POLE	AMP	CKT		CKT	AMP	POLE	ΦA	ΦB	
B-1	140	140	1	15	1							
	140	140										

	ΦA	ΦB		CALCULATED LOAD VALUES	
PANEL PHASE TOTALS	140	140	SINGLE POLE DOUBLE THROW CIRCUITS, SIZED TO LOAD	TOTAL CONNECTED KW	0.28
				TOTAL CONNECTED AMP	1.17

ROADWAY LUMINAIRE SCHEDULE					
QUANTITY	CATALOG NUMBER	DESCRIPTION	LUMENS	VOLTAGE	MAXIMUM WATTS
63	ATBO P203 MVOLT R3 4K NL	AUTOBAHN LED ROADWAY P203 TYPE III 4000K	10056	240	70

CONDUIT SUMMARY - CIRCUITS A-1 & A-2			
LINK		DISTANCE	REMARKS
FROM	TO		
LOAD CENTER A	HHAI5	605'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI5	HHAI4	85'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI4	HHAI3	95'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI3	HHAI2	75'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI2	HHAII	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAII	HHAI0	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI0	HHA9	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA9	HHA8	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA8	HHA7	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA7	HHA6	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA6	HHA5	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA5	HHA4	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA4	HHA3	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA3	HHA2	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA2	HHAI	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI5	HHAI6	75'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI6	HHAI7	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI7	HHAI8	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI8	HHAI9	125'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHAI9	HHA20	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA20	HHA2I	120'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA2I	HHA22	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA22	HHA23	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA23	HHA24	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA24	HHA25	105'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA25	HHA26	105'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA26	HHA27	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA27	HHA28	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA28	HHA29	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA29	HHA30	110'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND
HHA30	HHA3I	115'	2-#4 CKT A-1, 2-#4 CKT A-2, 1-#4 GND

CONDUIT SUMMARY - CIRCUITS A-3 & A-4			
LINK		DISTANCE	REMARKS
FROM	TO		
LOAD CENTER A	HHA48	365'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA48	HHA47	85'	2-#4 CKT A-3 & 1-#4 GND
HHA48	HHA49	80'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA49	HHA50	110'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA50	HHA5I	110'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA5I	HHA52	115'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA52	HHA53	110'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA53	HHA54	115'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA54	HHA55	105'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA55	HHA56	120'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA56	HHA57	105'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA57	HHA58	115'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA58	HHA59	110'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA59	HHA46	95'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA46	HHA45	130'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA45	HHA44	120'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA44	HHA43	115'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA43	HHA42	120'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA42	HHA4I	115'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA4I	HHA40	120'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA40	HHA39	110'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA39	HHA38	110'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA38	HHA37	100'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA37	HHA36	115'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA36	HHA35	100'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA35	HHA34	115'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA34	HHA33	110'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND
HHA33	HHA32	115'	2-#4 CKT A-3, 2-#4 CKT A-4, 1-#4 GND

CONDUIT SUMMARY - CIRCUIT B-1			
LINK		DISTANCE	REMARKS
FROM	TO		
LOAD CENTER B	HHB4	175'	2-#6 CKT B-1 & 1-#6 GND
HHB4	HHB3	100'	2-#6 CKT B-1 & 1-#6 GND
HHB3	HHB2	75'	2-#6 CKT B-1 & 1-#6 GND
HHB2	HHBI	90'	2-#6 CKT B-1 & 1-#6 GND

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

vhb

	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ZBW	JBD	9/2/2025
CHECKED-REVIEWED	ECF	AG	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PRESQUE ISLE
PRESQUE ISLE BYPASS

SCHEDULE & NOTES

SHEET NUMBER
L-2
698
OF 747

PRELIMINARY NOT FOR CONSTRUCTION

PRESQUE ISLE
PRESQUE ISLE BYPASS

LIGHTING PLAN (01)

SHEET NUMBER L-3
699
OF 747

PROJ. MANAGER		R.M.	BY	DATE
DESIGN-DETAILED		ZBW	JBD	9/2/2025
CHECKED-REVIEWED		ECF	AC	9/2/2025
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

vhb

STATE OF MAINE
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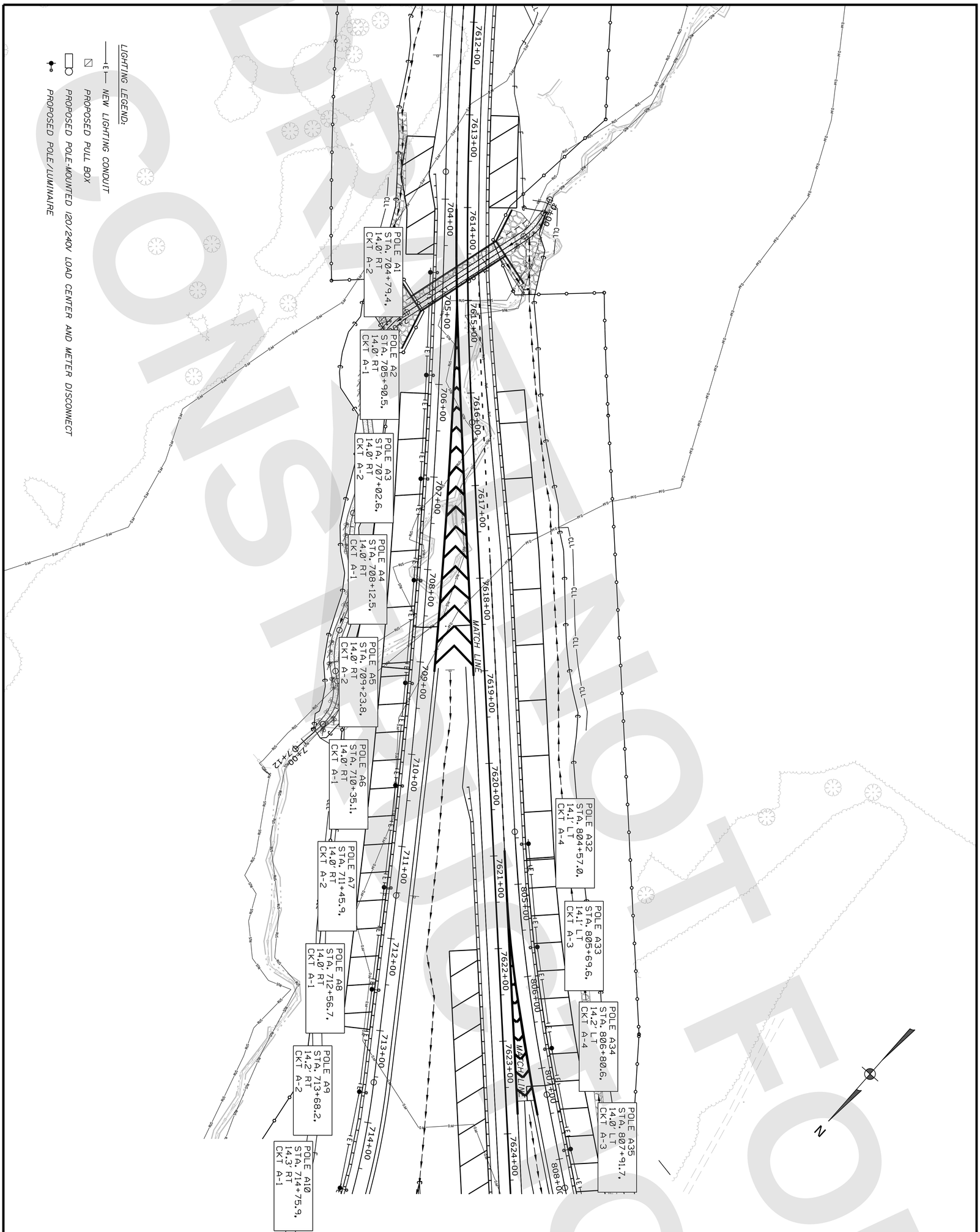
CAPITAL PROJECTS
WIN
6462.92
HIGHWAY PLANS

PRELIMINARY NOT FOR CONSTRUCTION



PROJ. MANAGER	R.M.	BY	DATE
DESIGN-DETAILED	ZBW	JBD	9/2/2025
CHECKED-REVIEWED	ECF	AG	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PRESQUE ISLE
PRESQUE ISLE BYPASS

LIGHTING PLAN (02)

SHEET NUMBER L-4
700
OF 747

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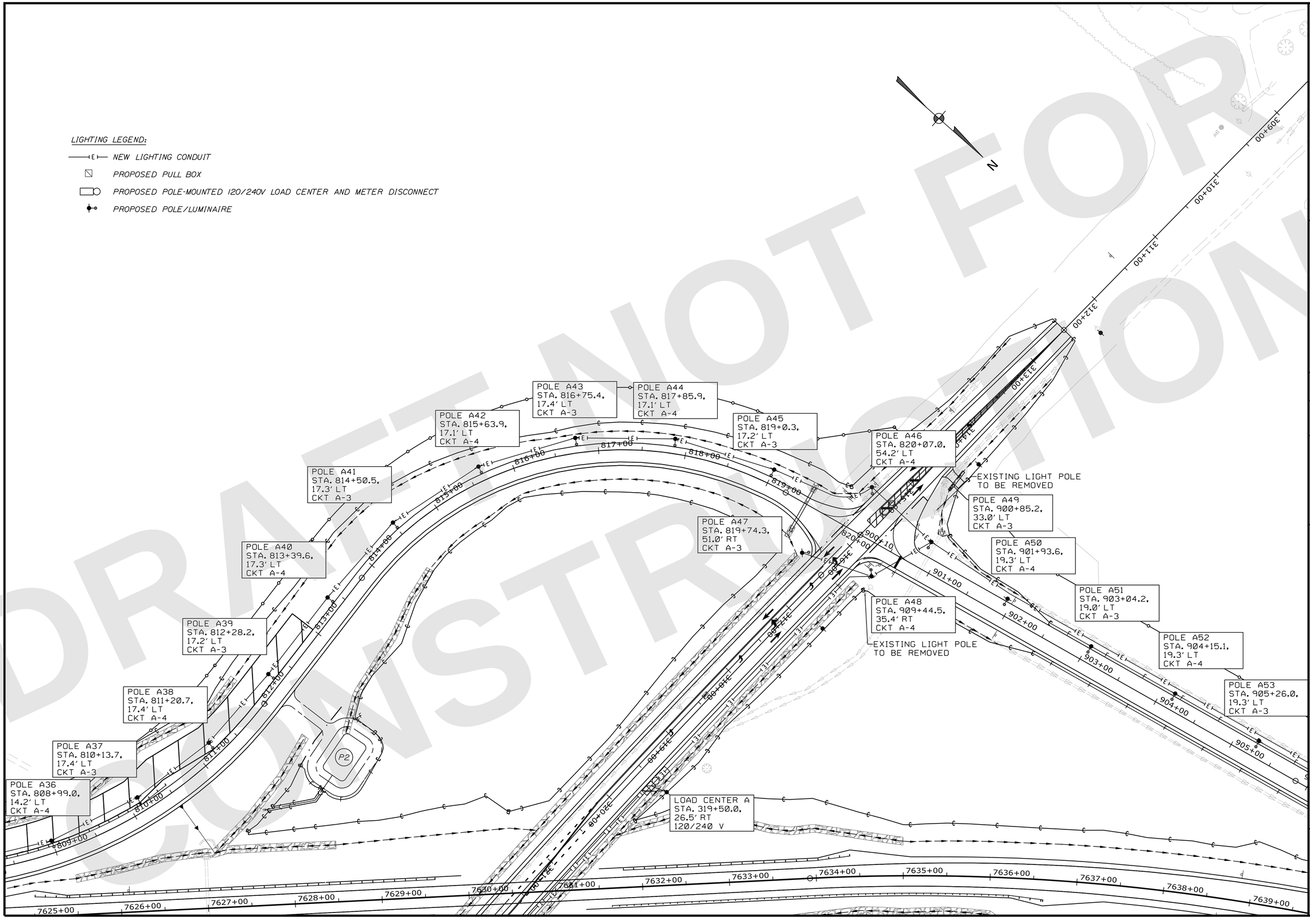
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS
WIN 6462.92
HIGHWAY PLANS

Filename: ...\Lighting\L-05_PLANLT03.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

LIGHTING LEGEND:

- *NEW LIGHTING CONDUIT*
- *PROPOSED PULL BOX*
- *PROPOSED POLE-MOUNTED 120/240V LOAD CENTER AND METER DISCONNECT*
- *PROPOSED POLE/LUMINAIRE*



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CAPITAL PROJECTS

WIN 6462.92

HIGHWAY PLANS

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PROJ. MANAGER	R.M.	DATE
DESIGN-DETAILED	ZBW	9/2/2025
CHECKED-REVIEWED	ECF	9/2/2025
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PRESQUE ISLE
PRESQUE ISLE BYPASS

LIGHTING PLAN (03)

SHEET NUMBER
L-5
701
OF 747

POLE A11
STA. 715+90.1,
14.2' RT
CKT A-2

POLE A12
STA. 716+99.0,
14.0' RT
CKT A-1

POLE A13
STA. 717+81.8,
34.8' RT
CKT A-2

POLE A14
STA. 717+98.8,
57.1' LT
CKT A-1

POLE A15
STA. 600+76.6,
44.2' LT
CKT A-2

POLE A16
STA. 600+64.5,
19.2' RT
CKT A-1

POLE A17
STA. 601+78.6,
14.0' RT
CKT A-2

POLE A18
STA. 602+87.1,
13.7' RT
CKT A-1

POLE A19
STA. 604+03.2,
13.9' RT
CKT A-2

POLE A20
STA. 605+13.6,
13.8' RT
CKT A-1

POLE A21
STA. 606+24.9,
14.0' RT
CKT A-2

POLE A22
STA. 607+38.5,
14.0' RT
CKT A-1

POLE A23
STA. 608+45.3,
17.3' RT
CKT A-2

POLE A24
STA. 609+65.5,
17.3' RT
CKT A-1

POLE A25
STA. 610+71.1,
17.6' RT
CKT A-2

N

LIGHTING LEGEND:

- *NEW LIGHTING CONDUIT*
- *PROPOSED PULL BOX*
- *PROPOSED POLE-MOUNTED 120/240V LOAD CENTER AND METER DISCONNECT*
- *PROPOSED POLE/LUMINAIRE*

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Filename: ...\Lighting\L-06_PLANLT04.dgn Division: HIGHWAY Username: jamesdavis Date:9/2/2025

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CAPITAL PROJECTS

WIN
6462.92

HIGHWAY PLANS

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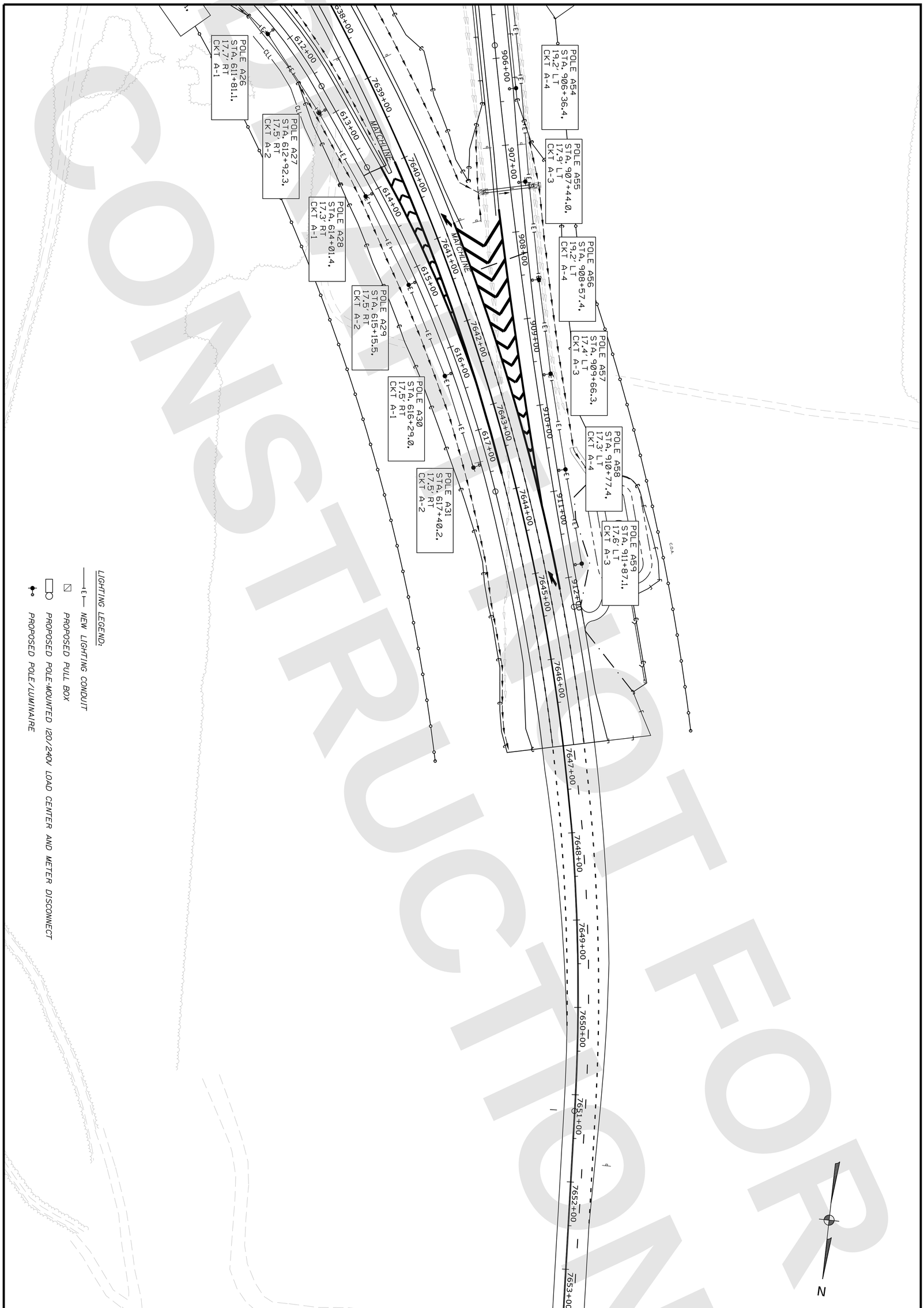
	R.M.	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	ZBW	JBD	9/2/2025
CHECKED-REVIEWED	ECF	AG	9/2/2025
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PRESQUE ISLE
PRESQUE ISLE BYPASS

LIGHTING PLAN (04)

SHEET NUMBER
L-6
702
OF 747



LIGHTING LEGEND:

- *NEW LIGHTING CONDUIT*
- *PROPOSED PULL BOX*
- *PROPOSED POLE-MOUNTED 120/240V LOAD CENTER AND METER DISCONNECT*
- *PROPOSED POLE/LUMINAIRE*

PRELIMINARY NOT FOR CONSTRUCTION

SHEET NUMBER L-7 703 OF 747

PRESQUE ISLE
PRESQUE ISLE BYPASS

LIGHTING PLAN (05)

PROJ. MANAGER		R.M.	BY	DATE
DESIGN-DETAILED		ZBW	JBD	9/2/2025
CHECKED-REVIEWED		ECF	AC	9/2/2025
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

vhb

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
CAPITAL PROJECTS
WIN 6462.92 HIGHWAY PLANS