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

HYDROLOGIC DATA

Drainage Area	3.0 sq mi
Design Discharge (Q50)	242.6 cfs
Check Discharge (Q100)	283.4 cfs
Headwater Elevation (Q1.1)	206.0 ft
Headwater Elevation (Q25)	206.5 ft
Headwater Elevation (Q50)	206.6 ft
Headwater Elevation (Q100)	206.8 ft
Discharge Velocity (Q1.1)	0.8 fps
Discharge Velocity (Q50)	4.3 fps
Discharge Velocity (Q100)	5.1 fps

MATERIALS

Concrete:	
Precast	Class "P"
All Other	Class "A"
Reinforcing Steel	ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Concrete	f 'c = 4000 psi
Precast Concrete	f 'c = 5000 psi
Reinforcing Steel	f y = 60,000 psi

JEFFERSON
LINCOLN COUNTY
DAVIS BRIDGE NO. 1
OVER
BRANN BROOK
STATE ROUTE 17
FEDERAL AID PROJECT NO. 02309200
PROJECT LENGTH 0.079 mi.
BRIDGE NO. 2218

LIST OF DRAWINGS

UTILITIES

Spectrum
Central Maine Power
Consolidated Communications

TRAFFIC DATA

Current (2020) AADT	4770
Future (2040) AADT	5250
DHV - % of AADT	11
Design Hour Volume	578
Heavy Trucks (% of AADT)	11
Heavy Trucks (% of DHV)	6
Directional Distribution (% of DHV)	50
18 kip Equivalent P 2.0	157
18 kip Equivalent P 2.5	150
Design Speed (mph)	55

MAINTENANCE OF TRAFFIC

Maintain one 12'-0" wide lane of alternating two - way traffic using traffic signals.

PROJECT LOCATION	Davis No. 1 Bridge (#2218) on State Route 17, Over Brann Brook, 0.5 Miles east of Route 32, Lat./Long. 44°14'59" N 69°31'44" W
PROGRAM AREA	Highway - Bridge Traditional
OUTLINE OF WORK	Bridge Culvert Replacement

2309200 WIN 023092.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
COMMISSIONER: DATE 12-7-22
CHIEF ENGINEER: DATE 12-5-2022

STATE OF MAINE · GARRETT A GUSTAFSON · 13553 · LICENSED PROFESSIONAL ENGINEER
SIGNATURE
P.E. NUMBER 13553
DATE 11-23-22

PROJECT INFORMATION			
PROGRAM	BRIDGE PROGRAM		
PROJECT MANAGER	B. NICHOLS		
DESIGNER	G. GUSTAFSON		
CONSULTANT			
PROJECT RESIDENT			
CONTRACTOR			
PROJECT COMPLETION DATE			

JEFFERSON
DAVIS BRIDGE NO. 1

TITLE SHEET

SHEET NUMBER 1 OF 16

Username: Brian.Nichols Date:11/22/2022 Division: BRIDGE Filename:\00\BRIDGE\MSTA\001_Title.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.19	REMOVING EXISTING BRIDGE	1	LS
202.202	REMOVING PAVEMENT SURFACE	710	SY
203.20	COMMON EXCAVATION	1140	CY
203.2318	DISPOSAL OF SPECIAL WASTE	300	T
203.24	COMMON BORROW	70	CY
203.25	GRANULAR BORROW	100	CY
203.33	SPECIAL FILL (STREAM BED MATERIAL)	130	CY
203.55	CULVERT BEDDING STONE	140	CY
206.061	STRUCTURAL EARTH EXCAVATION MINOR STRUCTURES BELOW GRADE	60	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	1125	CY
403.2081	12.5 MM POLYMER MODIFIED HOT MIX ASPHALT	180	T
403.213	HOT MIX ASPHALT 12.5 MM BASE	90	T
403.2131	12.5 MM POLYMER MODIFIED HMA BASE	300	T
409.15	BITUMINOUS TACK COAT - APPLIED	100	G
508.13	SHEET WATERPROOFING MEMBRANE (150 SY)	1	LS
511.07	COFFERDAM: UPSTREAM	1	LS
511.07	COFFERDAM: DOWNSTREAM	1	LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (35 SY)	1	LS
524.301	TEMPORARY STRUCTURAL SUPPORT	1	LS
526.301	TEMPORARY CONCRETE BARRIER - TYPE 1 (600 LF)	1	LS
527.34	WORK ZONE CRASH CUSHIONS	2	UN
534.71	PRECAST CONCRETE BOX CULVERT (166 CY)	1	LS
606.1301	31" W-BEAM GUARDRAIL-MID-WAY SPLICE	442	LF
606.1303	31" W-BEAM GUARDRAIL-MID-WAY SPLICE LESS THAN 15' RADIUS	25	LF
606.1305	31" W-BEAM GUARDRAIL-MID-WAY SPLICE FLARED TERMINAL	3	EA
606.265	TERMINAL END-SINGLE RAIL-GALVANIZED STEEL	1	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	8	EA
610.08	PLAIN RIPRAP	350	CY
613.319	EROSION CONTROL BLANKET	125	SY
615.07	LOAM	60	CY
618.14	SEEDING METHOD NUMBER 2	10	UN
619.12	MULCH	10	UN
619.14	EROSION CONTROL MIX	120	CY
620.54	STABILIZATION REINFORCEMENT GEOTEXTILE	460	SY
620.58	EROSION CONTROL GEOTEXTILE	315	SY
627.7.33	4" WHITE OR YELLOW PAINTED PAVEMENT LINE	1250	LF
627.77	REMOVING EXISTING PAVEMENT MARKINGS	180	SF
627.78	TEMP. 4" PAINTED PAVEMENT MARKING LINE, YELLOW OR WHITE	825	LF
629.05	HAND LABOR, STRAIGHT TIME	40	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	20	HR
631.14	GRADER (INCLUDING OPERATOR)	10	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	20	HR
639.19	FIELD OFFICE, TYPE B	1	EA
643.72	TEMPORARY TRAFFIC SIGNAL	1	LS
652.312	TYPE III BARRICADE	4	EA
652.33	DRUM	20	EA
652.34	CONE	40	EA
652.35	CONSTRUCTION SIGNS	300	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES (120 CD)	1	LS
652.38	FLAGGER	180	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	2	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

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

2. The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.

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

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

5. In areas where the Resident directs the Contractor not to excavate to the subgrade line shown on the Plans, payment for removing existing pavement, grubbing, shaping, ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rental items.

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

7. Place riprap on sideslopes up to EL. 209

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

9. Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Item No. 619.14, Erosion Control Mix.

10. Place a 24-in. wide strip of Extended-use Erosion Control Blanket on the sideslopes along the backside of the guardrail.

11. An NCHRP350 compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail.

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

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

On all concrete headwalls and box surfaces that are exposed and to limit lines, one foot beyond intersection of all surfaces with ground.

14. Guardrail post length and embedment as shown in the Standard Details shall be modified from the indicated 6 foot length to 8 feet, with 5'-5" of embedment.

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

16. The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.

17. The hydrologic report of the bridge site may be accessed at the MaineDOT web address. The hydrologic report is based on MaineDOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.

18. The project geotechnical report titled: 'Geotechnical Design Report for the Replacement of Davis Bridge No. 1, Maine Route 17 Over Brann Brook, Jefferson, Maine Soils Report No. 2022-20, Dated June 22, 2022, may be accessed at the MaineDOT website.

19. Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.

20. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

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

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

c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

21. The minimum depth of Aggregate Subbase Course Gravel above the new structure shall be 2'-0" before traffic can be shifted onto new structure.

22. Excavate all silty clay encountered in the Precast Concrete Box footprint down to the top of till (approximately EL. 193.5). Excavated material shall be replaced with compacted granular borrow.

23. Voids between stones in Plain Riprap Apron below EL. 206 shall be filled with "Filler Material" conforming to Special Provision 203, Special Fill. For the portion of Filler Material to be placed within the limits of Plain Riprap shown on the plans, payment for furnishing Filler Material, equipment, labor and washing-in with water will not be made directly but shall be considered incidental to Item No. 610.08, Plain Riprap.

24. Item No. 202.19, Removing Existing Bridge, includes removal and disposal of the existing steel plate pipe arch as well as removal and disposal of any remnants of previous structures necessary for installing the new structure.

25. The Contractor shall maintain the excavation so that the box culvert and crushed stone mat are constructed 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. Temporary earth support systems may be required. Where excavation sides are cut back, excavation slope geometries be in accordance with OSHA regulations, or flatter.

26. Stabilization/Reinforcement Geotextile shall be hand deployed onto the soil subgrade prior to installing the crushed stone mat. Adjoining sections of the geotextile shall be overlapped by a minimum of 2 feet and steel rollers and plates used to facilitate sliding of box segments. The crushed stone shall be placed in maximum 8-inch thick lifts and each lift compacted with at least 4 passes of a walk-behind plate compactor. To facilitate setting and sliding adjacent precast box segments, the contractor has the option of constructing an 18-inch thick crushed stone mat, wrapped in geotextile and topped with 6-inches of granular borrow bedding.

27. Removal and relocation of the mailboxes at Travel Pond Lane shall be at the direction of the Resident and shall be considered incidental to related Contract Items.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE PLANS

BRIDGE NO. 2218

PROJ. MANAGER	B. NICHOLS		
DESIGN-DETAILED	C. GUSTAFSON	J. LEAVITT	8.5.2022
CHECKED-REVIEWED	C. VANDEBOOGART	M. POULIN	8.5.2022
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
JEFFERSON LINCOLN COUNTY

ESTIMATED QUANTITIES AND
GENERAL CONSTRUCTION NOTES

SHEET NUMBER

2

OF 16

CURVE DATA #1
PI = 5+36.77
D = 1°28'08.8"
Δ = 9°13'31.0" Lt.
R = 3900.00'
L = 627.94'
T = 314.65'
E = 12.67'

PC = STA. 2+22.12

To Travel Pond

℄ Precast Box Culvert STA. 4+20

30° Skew

Stream Excavation Limits (Typ.)

Match Banks from Culvert into Stream (Typ.)

31" Mid Way Splice Guardrail 15'-0" Radius

Mail Boxes to be Relocated to other side of Travel Pond Lane

CLL CLL CLL

To Whitefield

1+00
S88°15'57.21"E

2+00

3+00

4+00

5+00

6+00

7+00

State Route 17

To Rockland

31" Mid-Way Splice Flared Terminal (Typ.)

Remove Existing Bridge Footing

Remove Existing 11'-5" x 7'-3" x 80' Pipe Arch

New Pole

Existing pole to be removed by others

Plain Riprap (Typ.)

Void-filled Plain Riprap (Typ.)

New Pole

Existing pole to be removed by others

BRANN BROOK

Brann Brook Flow

PLAN

25 0 25 50
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

PROJ. MANAGER	B. NICHOLS		
DESIGN-DETAILED	G. GUSTAFSON	J. LEAVITT	10.6.2022
CHECKED-REVIEWED	C. WOODCOCK	M. POULIN	8.5.2022
DESIGN2-DETAILED2	ED2		
DESIGN3-DETAILED3	ED3		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

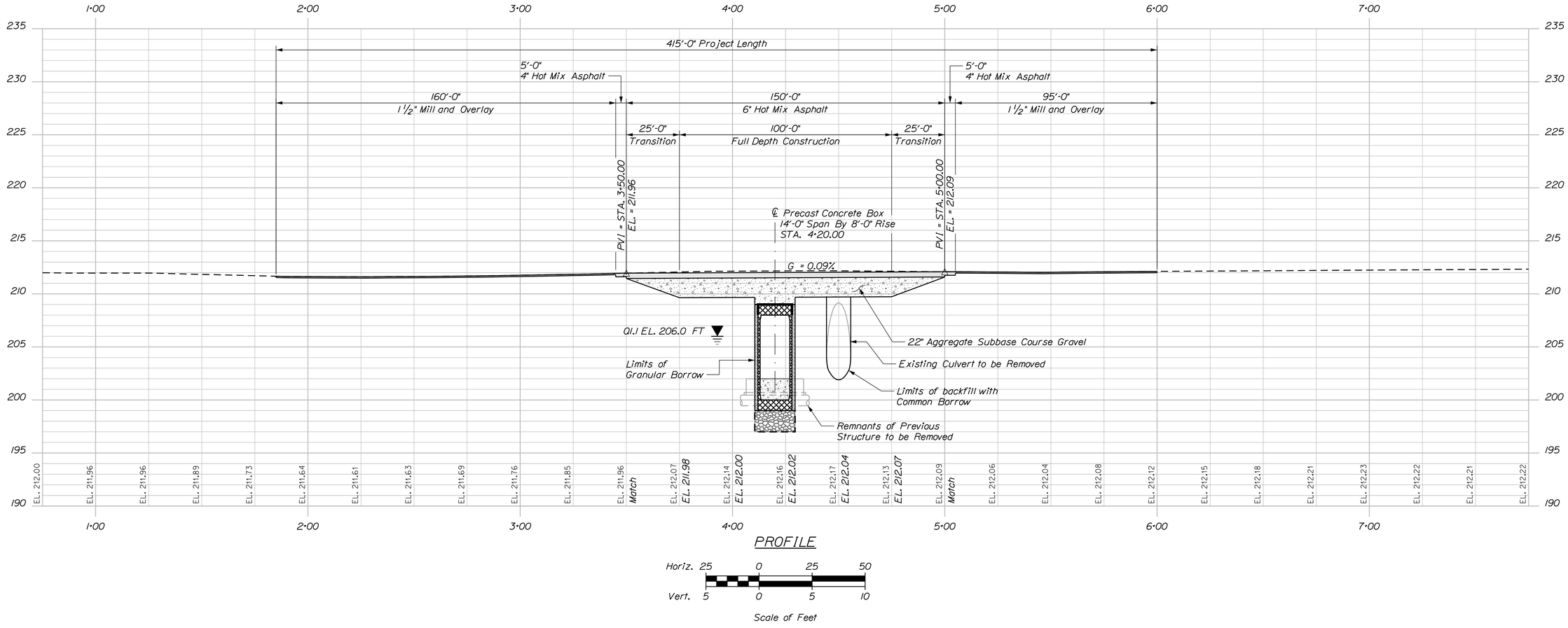
P.E. NUMBER

DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
LINCOLN COUNTY
JEFFERSON

GENERAL PLAN

SHEET NUMBER
3
OF 16



PROFILE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

Filename: ...\00\BRIDGE\MSTA\004_Profile.dgn Division: BRIDGE Username: Brian.Nichols Date:11/22/2022

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218 BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	B. NICHOLS	
DESIGN-DETAILED	G. GUSTAFSON	8.5.2022
CHECKED-REVIEWED	J. LEAVITT	8.5.2022
DESIGN2-DETAILED2	C. VANDENBOSSCHE	
DESIGN3-DETAILED3	M. POULIN	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
LINCOLN COUNTY
JEFFERSON

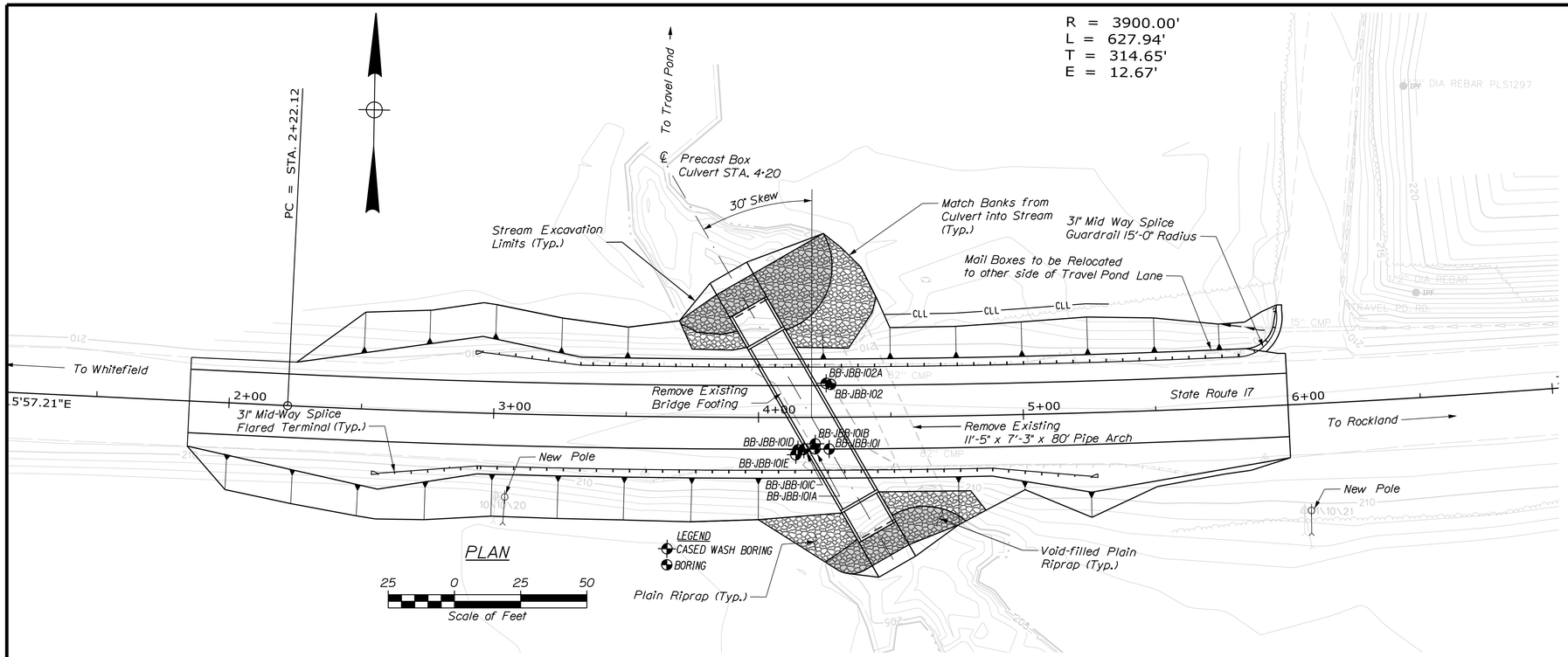
PROFILE

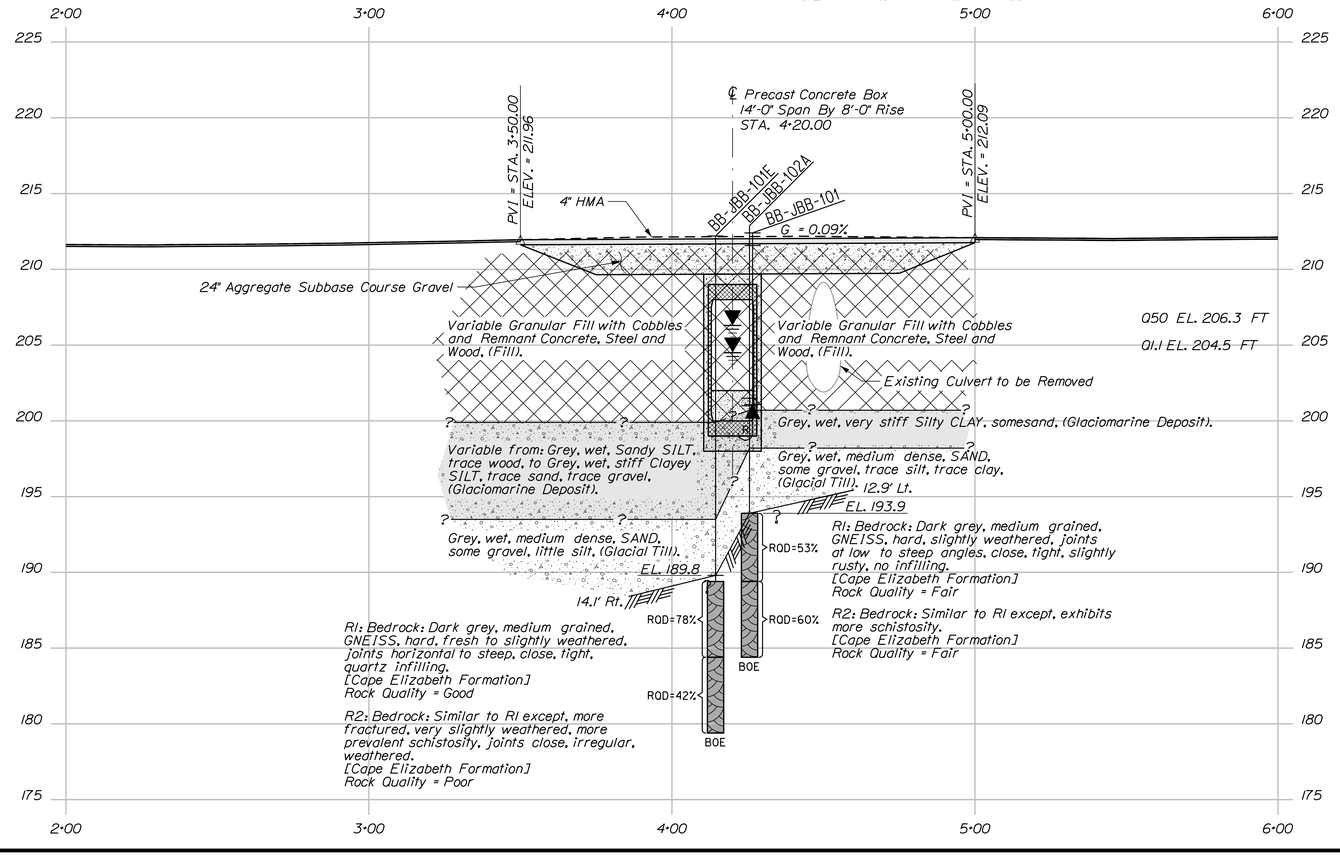
SHEET NUMBER

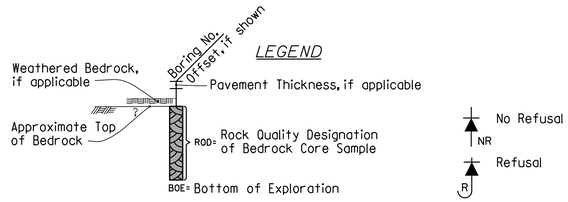
4

OF 16

R = 3900.00'
L = 627.94'
T = 314.65'
E = 12.67'







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

Borings BB-JBB-101A, BB-JBB-101B, BB-JBB-101C, BB-JBB-101D and BB-JBB-102 are not shown on the Profile for clarity.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

PROJ. MANAGER	M. KERSBERGEN	BY	DATE
DESIGN-DETAILED	K. NASH	J. LEAVITT	OCT 2020
CHECKED-REVIEWED		M. POULIN	OCT. 2020
DESIGN2-DETAILED2	J.MANAHAN	T. WHITE	FEB 2022
DESIGN3-DETAILED3	-------	-------	------
REVISIONS 1	-------	-------	------
REVISIONS 2	-------	-------	------
REVISIONS 3	-------	-------	------
REVISIONS 4	-------	-------	------
FIELD CHANGES	-------	-------	------

SIGNATURE

P.E. NUMBER

DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
JEFFERSON LINCOLN COUNTY

BORING LOCATION PLAN & INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

5

OF 16

Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Davis Bridge No. 1 #2218 carries State Route 17 over Brann Brook
Location: Jefferson, Maine

Boring No.: BB-JBB-101 — WIN: 23092.00

Driller:	S.W. Cole	Elevation (ft.)	212.4	Auger ID/OD:	5" Solid Stem
Operator:	Kevin/Ryan	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	J. Manahan	Rig Type:	Diedrich D50	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/3/2020; 08:00-09:00	Drilling Method:	Cased Wash Boring	Core Barrel:	N/A
Boring Location:	4+26.6, 12.0 ft Rt.	Casing ID/OD:	HW-4"	Water Level*:	7.0 ft bgs.
Hammer Efficiency Factor: 0.977		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test, PP = Pocket Penetrometer; MV = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR/C = Weight of Rods or Casing; WO1P = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); N-uncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected; T_v = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0							SSA		10" HMA.	
0.8								211.6		
5	1D	24/11	5.00 - 7.00	5/5/9/13	14	23			Brown, damp to dry, medium dense, SAND, little gravel, trace silt, trace pavement, occasional cobble, (Fill). Cobbles from 8.4-10.0 ft bgs.	
10.0	2D	15.6/14	10.00 - 11.30	14/10/--	---			202.4	Grey, wet, Gravelly SAND, little silt. Drove HW Casing to 10.0 ft bgs.	
11.3								201.1	Bottom of Exploration at 11.3 feet below ground surface. Auger REFUSAL, pitching up, steel grindings.	

Remarks: Hammer #367

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-JBB-101

Boring No.: BB-JBB-101A — WIN: 23092.00

Drilling Contractor:	S.W. Cole	Elevation (ft.)	212.4	Auger ID/OD:	5" Dia.
Operator:	Kevin/Ryan	Datum:	NAVD88	Sampler:	N/A
Logged By:	J. Manahan	Rig Type:	Diedrich D50	Hammer Wt./Fall:	N/A
Date Start/Finish:	6/3/2020; 09:30-10:00	Drilling Method:	Solid Stem Auger	Core Barrel:	N/A
Boring Location:	4+21.3, 11.9 ft Rt.	Casing ID/OD:	N/A	Water Level*:	None Observed

Definitions: D = Split Spoon Sample; S = Sample off Auger Flights; B = Bucket Sample off Auger Flights; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MV = Unsuccessful Field Vane Shear Test Attempt; V = Field Vane Shear Test, PP= Pocket Penetrometer; MU = Unsuccessful Thin Wall Tube Sample Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR/C = Weight of Rods or Casing; WO1P = Weight of 1 Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); N-value = Raw Field SPT N-value; T_v = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; ≠ = Similar or Equal too; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-value	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0						SSA		No material description given. Broke piece of auger off, left in borehole at about 10.0 ft bgs.	
10.0							202.4	Bottom of Exploration at 10.0 feet below ground surface. Broke Auger	

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: BB-JBB-101A

Boring No.: BB-JBB-101B — WIN: 23092.00

Driller:	S.W. Cole	Elevation (ft.)	212.4	Auger ID/OD:	5" Solid Stem
Operator:	Kevin/Ryan	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	J. Manahan	Rig Type:	Diedrich D50	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/3/2020; 09:15-09:30	Drilling Method:	Cased Wash Boring	Core Barrel:	N/A
Boring Location:	4+21.4, 10.0 ft Rt.	Casing ID/OD:	HW-4"	Water Level*:	None Observed
Hammer Efficiency Factor: 0.977		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample Attempt; V = Field Vane Shear Test, PP = Pocket Penetrometer; MV = Unsuccessful Field Vane Shear Test Attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WOR/C = Weight of Rods or Casing; WO1P = Weight of One Person; S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); N-uncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency; N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected; T_v = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0							SSA		No material description given.	
10	MD	8/0	10.00 - 10.67	2/--	---				Failed sample attempt, hard layer at 10.0 ft bgs.	
10.7								201.7	Bottom of Exploration at 10.7 feet below ground surface. Spoon REFUSAL	

Remarks: Hammer #367

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-JBB-101B

Boring No.: BB-JBB-101C — WIN: 23092.00

Driller:	S.W. Cole	Elevation (ft.)	212.4	Auger ID/OD:	5" Solid Stem
Operator:	Kevin/Ryan	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	J. Manahan	Rig Type:	Diedrich D50	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/3/2020; 10:00-11:30	Drilling Method:	Cased Wash Boring	Core Barrel:	N/A
Boring Location:	4+17.1, 12.0 ft Rt.	Casing ID/OD:	HW-4"	Water Level*:	None Observed
Hammer Efficiency Factor: 0.977		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0							SSA		No material description given.	
10							48		Drove HW Casing to 10.0 ft bgs.	
11							156		Auger grinding on hard material from 11. 5-12.5 ft bgs., concrete cuttings on auger. Augered to 12.5 ft bgs.	
12.5	1D	24/4	12.50 - 14.50	10/24/30/34	54	88		199.9	Grey, wet, Sandy SILT, with piece of wood.*	
14.5								197.9	Bottom of Exploration at 14.5 feet below ground surface. Broke HW Casing off in boring, left one piece in ground at about 12.0 ft bgs.	

Remarks: Hammer #367; *SPT test influenced by wood.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
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Page 1 of 1 — Boring No.: BB-JBB-101C

Boring No.: BB-JBB-101D — WIN: 23092.00

Driller:	S.W. Cole	Elevation (ft.)	212.4	Auger ID/OD:	5" Solid Stem
Operator:	Kevin/Ryan	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	J. Manahan	Rig Type:	Diedrich D50	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/3/2020; 11:30-12:30	Drilling Method:	Cased Wash Boring	Core Barrel:	N/A
Boring Location:	4+14.9, 12.2 ft Rt.	Casing ID/OD:	HW-4"	Water Level*:	7.4 ft bgs.
Hammer Efficiency Factor: 0.977		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0							SSA		No material description given. Augered to 15.0 ft bgs., no obstructions.	
13.0								199.4		
15	1D	24/12	15.00 - 17.00	4/4/5/4	9	15			Grey, wet, stiff, Clayey SILT, trace sand, trace gravel, (Glaciomarine Deposit).	G#340750 A-4, CL WC=18.8% LL=34 PL=24 PI=10
17.0								195.4	Bottom of Exploration at 17.0 feet below ground surface. HW Casing REFUSAL	

Remarks: Hammer #367

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Page 1 of 1 — Boring No.: BB-JBB-101D

Boring No.: BB-JBB-101E — WIN: 23092.00

Driller:	S.W. Cole	Elevation (ft.)	212.2	Auger ID/OD:	5" Solid Stem
Operator:	Kevin/Ryan	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	J. Manahan	Rig Type:	Diedrich D50	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/3/2020; 12:30-15:00	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	4+14, 14.1 ft Rt.	Casing ID/OD:	HW-4"	Water Level*:	None Observed
Hammer Efficiency Factor: 0.977		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0							SSA		No material description given.	
10							43			
11							41			
12							137/5		Casing bouncing at 12.5 ft bgs., likely wood, continued after augering in casing.	
13							19			
14							22		Washwater changed to grey at 14.5 ft bgs.	
15	MV		15.00 - 15.00	Would not push			HP		Failed 55x110 mm vane attempt, would not push. HP=Hydraulic Push	
18.7							a43	193.5	a43 blows for 0.3 ft.	
19							155			
20	1D	24/14	20.00 - 22.00	20/11/10/11	21	34	39		Grey, wet, medium dense, SAND, some gravel, little silt, (Glacial Till).	G#336976 A-1-b, SM WC=12.0%
21							46			
22.4	R1	60/59	22.80 - 27.80	RQD = 78%			b72 NQ-2	189.8	b72 blows for 0.4 ft. Auger Refusal at 22.1 ft bgs., Roller Coned ahead to 22.8 ft bgs. Top of Bedrock at Elev. 189.8 ft. R1: Bedrock: Dark grey, medium grained, GNEISS, hard, fresh to slightly weathered, joints horizontal to steep, close, tight, quartz infilling [Cape Elizabeth Formation] Rock Quality = Good R1: Core Times (min:sec) 22.8-23.8 ft (3:10) 23.8-24.8 ft (3:44) 24.8-25.8 ft (3:27) 25.8-26.8 ft (3:52) 26.8-27.8 ft (4:43) 98% Recovery	
27.8	R2	60/60	27.80 - 32.80	RQD = 42%					R2: Bedrock: Similar to R1 except more fractured, very slightly weathered, more prevalent schistosity, joints close, irregular, weathered. Rock Quality = Poor R2: Core Times (min:sec) 27.8-28.8 ft (3:40) 28.8-29.8 ft (3:59) 29.8-30.8 ft (5:57) 30.8-31.8 ft (5:07) 31.8-32.8 ft (6:28) 100% Recovery	
32.8								179.4	Bottom of Exploration at 32.8 feet below ground surface.	

Remarks: Hammer #367

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Page 1 of 1 — Boring No.: BB-JBB-101E

Boring No.: BB-JBB-102 — WIN: 23092.00

Drilling Contractor:	S.W. Cole	Elevation (ft.)	211.7	Auger ID/OD:	2.5"/6.25"
Operator:	Kevin/Ryan	Datum:	NAVD88	Sampler:	N/A
Logged By:	J. Manahan	Rig Type:	Diedrich D50	Hammer Wt./Fall:	N/A
Date Start/Finish:	6/4/2020; 08:00-09:00	Drilling Method:	Hollow Stem Auger	Core Barrel:	N/A
Boring Location:	4+27.3, 12.4 ft Lt.	Casing ID/OD:	N/A	Water Level*:	None Observed

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-value	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0						HSA		10" HMA.	
0.8							210.9	No material description given.	
3.0							208.7	Bottom of Exploration at 3.0 feet below ground surface. REFUSAL on steel.	

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.
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Page 1 of 1 — Boring No.: BB-JBB-102

Boring No.: BB-JBB-102A — WIN: 23092.00

Driller:	S.W. Cole	Elevation (ft.)	211.7	Auger ID/OD:	5" Solid Stem
Operator:	Kevin/Ryan	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	J. Manahan	Rig Type:	Diedrich D50	Hammer Wt./Fall:	140#/30"
Date Start/Finish:	6/4/2020; 09:00-14:00	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	4+25.6, 12.9 ft Lt.	Casing ID/OD:	NW-3" & HW-4"	Water Level*:	None Observed
Hammer Efficiency Factor: 0.977		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class
0							HSA			
5	1D	24/11	5.00 - 7.00	2/2/3/2	5	8			Brown, moist, loose, SAND, little gravel, little silt, (Fill).	G#336977 A-1-b, SW-SM WC=14.6%
10	2D	2.4/2.4	10.00 - 10.20	50(2.4")	---			201.5	Brown, moist, SAND, little silt, little gravel. 6" layer of CONCRETE at 10.2 ft bgs.	
11.0								200.7	Steel obstruction at 10.7 ft bgs.	
13	3D/A	24/16	13.00 - 15.00	6/12/16/10	28	46	OPEN HOLE	198.2	3D (13.0-13.5 ft) Grey, wet, very stiff, Silty CLAY, some sand (Glaciomarine Deposit). 3D/A (13.5-15.0 ft) Grey, wet, medium dense, SAND, some gravel, trace silt, (Glacial Till).	
15	4D	20.4/11	15.00 - 16.70	13/10/7/50(2")	17	28			Grey, wet, medium dense, medium to coarse SAND, some gravel, little silt, trace clay. Ground down to 17.8 ft bgs with auger, NW Casing to 17.5 ft bgs.	G#336978 A-1-b, SC-SM WC=10.7%
17.8	R1	54/53	17.80 - 22.30	RQD = 53%			NQ-2	193.9	Top of Bedrock at Elev. 193.9 ft. R1: Bedrock: Dark grey, medium grained, GNEISS, hard, slightly weathered, joints at low to steep angles, close, tight, slightly rusty, no infilling. [Cape Elizabeth Formation] Rock Quality = Fair R1: Core Times (min:sec) 17.8-18.8 ft (5:25) 18.8-19.8 ft (5:44) 19.8-20.8 ft (5:33) 20.8-21.8 ft (4:36) 21.8-22.3 ft (2:57) 98% Recovery	
22.3	R2	60/59	22.30 - 27.30	RQD = 60%					R2: Bedrock: Similar to R1 except exhibits more schistosity R2: Core Times (min:sec) 22.3-23.3 ft (2:42) 23.3-24.3 ft (3:04) 24.3-25.3 ft (3:45) 25.3-26.3 ft (3:52) 26.3-27.3 ft (4:52) 98% Recovery	
27.3								184.4	Bottom of Exploration at 27.3 feet below ground surface.	

Remarks: Hammer #367; Water on spoon at 13.0-15.0 ft bgs.; Switched to NW Casing at 15.0 ft bgs., could not push HW Casing past 10.6 ft bgs.

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Page 1 of 1 — Boring No.: BB-JBB-102A

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2309200
WIN 023092.00
BRIDGE NO. 2218 — BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	M. KERSBERGEN	
DESIGN-DETAILED	K. NASH / J. LEAVITT	OCT 2020
CHECKED-REVIEWED	M. POULIN	OCT. 2020
DESIGN2-DETAILED2	J.MANAHAN / T. WHITE	JUN 2022
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
JEFFERSON LINCOLN COUNTY

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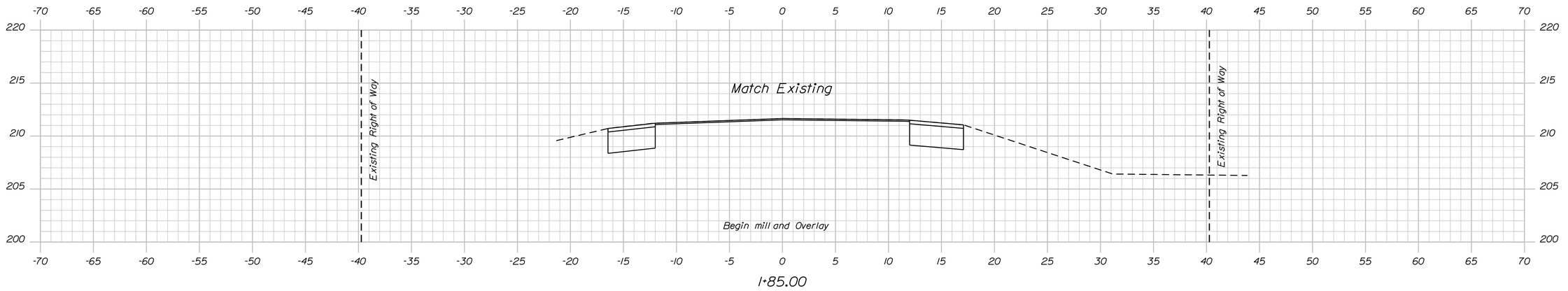

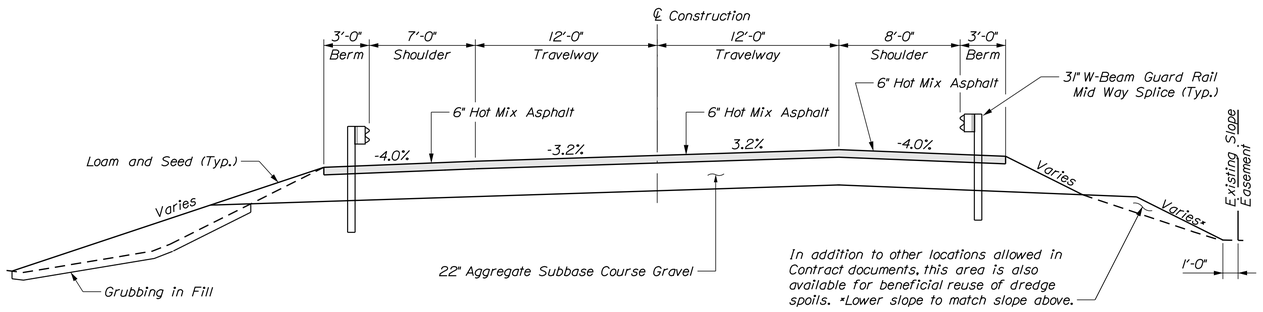

TYPICAL APPROACH SECTION

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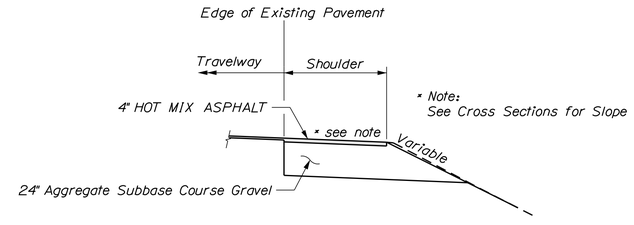

TYPICAL WIDENING SHOULDER SECTION

(Mill and Overlay Areas)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

PROJ. MANAGER	B. NICHOLS		
DESIGN-DETAILED	G. GUSTAFSON	J. LEAVITT	10.6.2022
CHECKED-REVIEWED	C. VANDENBOSSCHE	W. POULIN	8.5.2022
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DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
JEFFERSON LINCOLN COUNTY

CROSS SECTIONS

SHEET NUMBER

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OF 16

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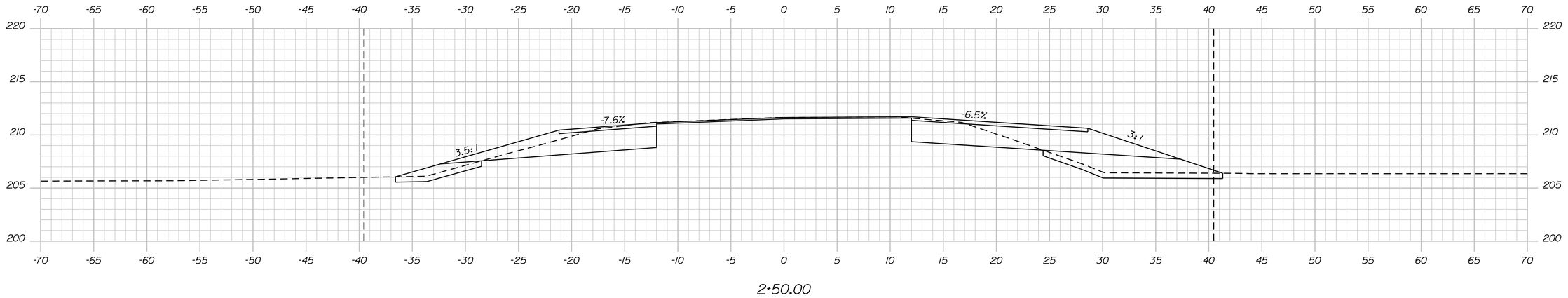

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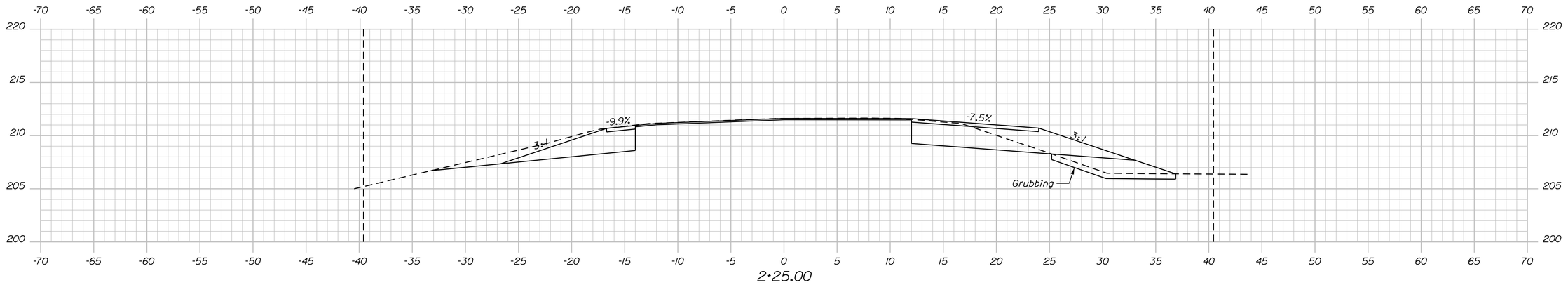

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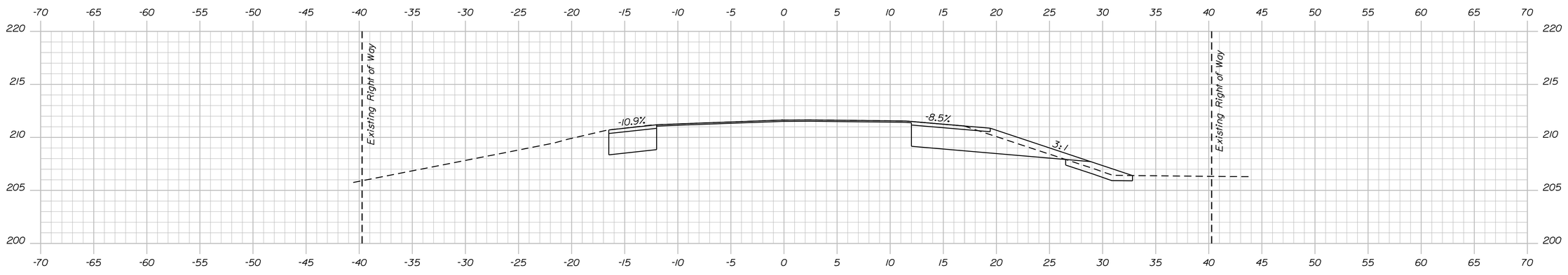

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

PROJ. MANAGER	B. NICHOLS		
DESIGN-DETAILED	G. GUSTAFSON	J. LEAVITT	10.6.2022
CHECKED-REVIEWED	C. VANDERHOOF	M. POULIN	8.5.2022
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DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

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DAVIS BRIDGE NO. 1
BRANN BROOK
JEFFERSON LINCOLN COUNTY

CROSS SECTIONS

SHEET NUMBER

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OF 16

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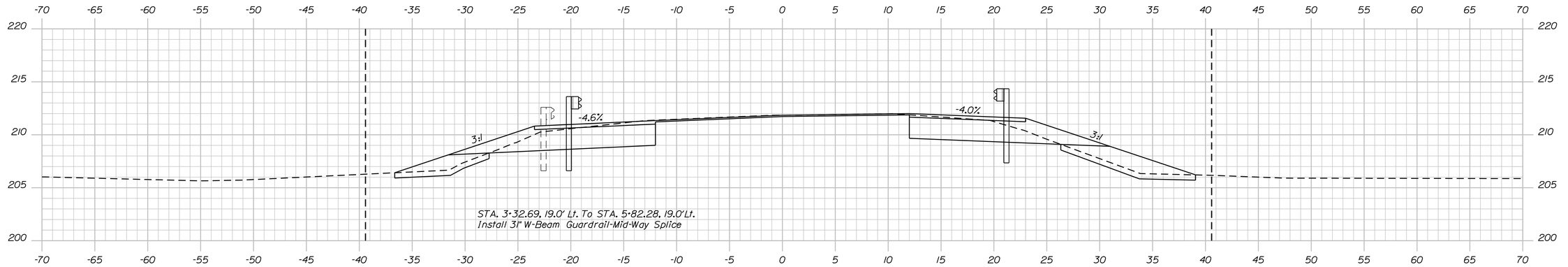

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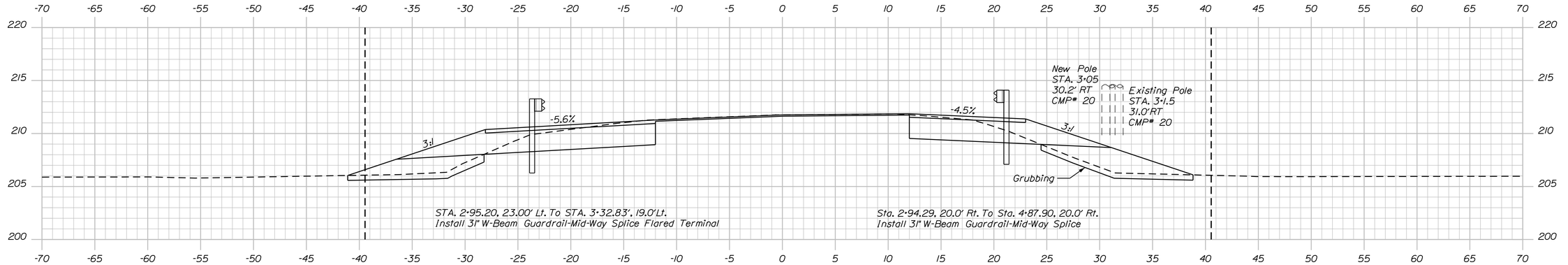

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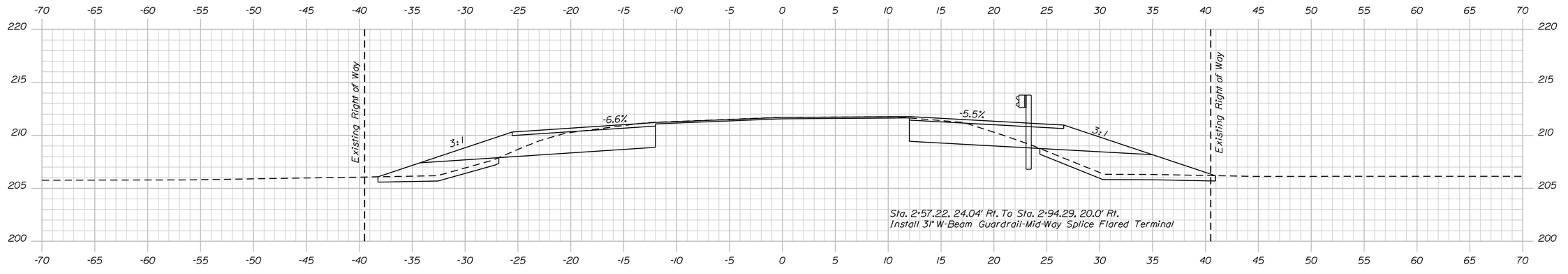

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

PROJ. MANAGER	B. NICHOLS		
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CHECKED-REVIEWED	C. WADSWORTH	M. POULIN	8.5.2022
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DESIGN3-DETAILED3			
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REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

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BRANN BROOK
LINCOLN COUNTY
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CROSS SECTIONS

SHEET NUMBER

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OF 16

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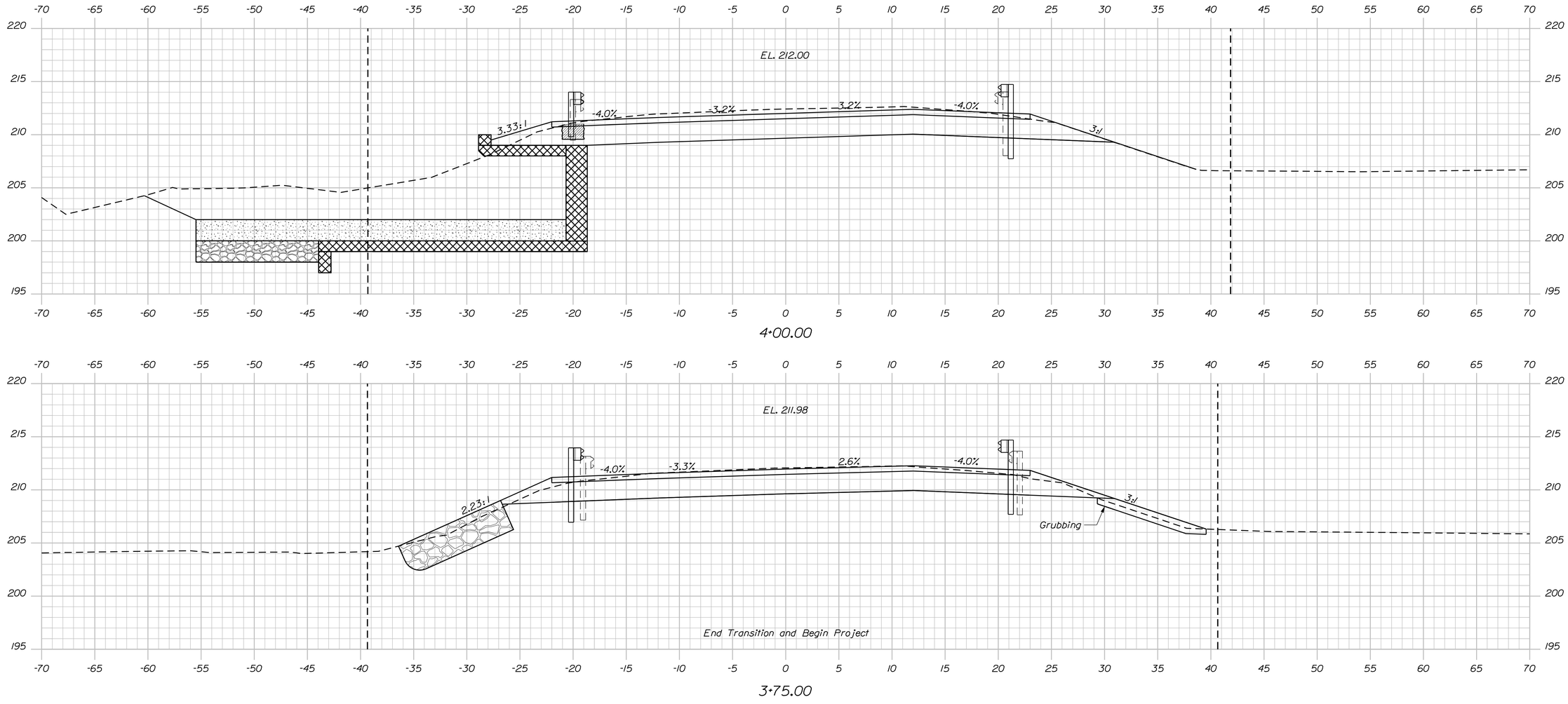

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

PROJ. MANAGER	B. NICHOLS		
DESIGN-DETAILED	C. GUSTAFSON	J. LEAVITT	10.6.2022
CHECKED-REVIEWED	C. VANDERHOOF	M. POULIN	8.5.2022
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DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

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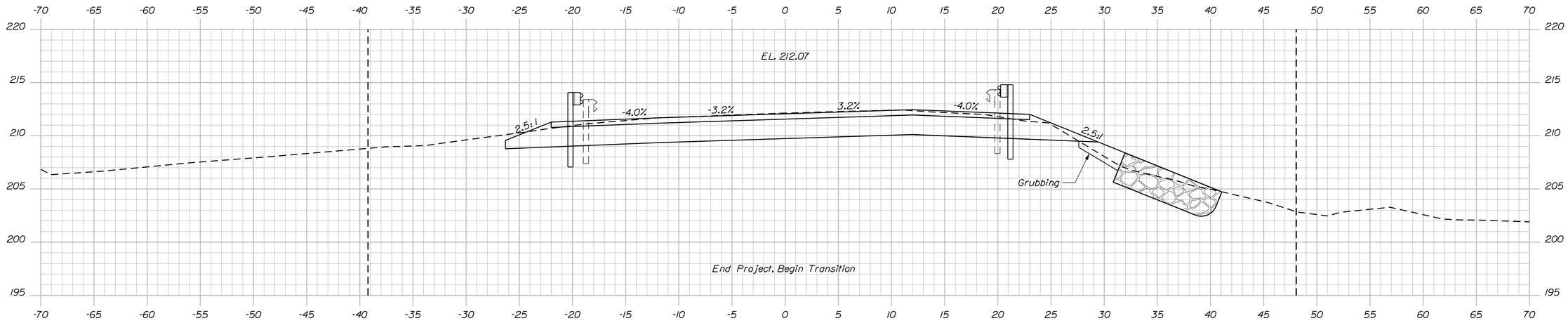

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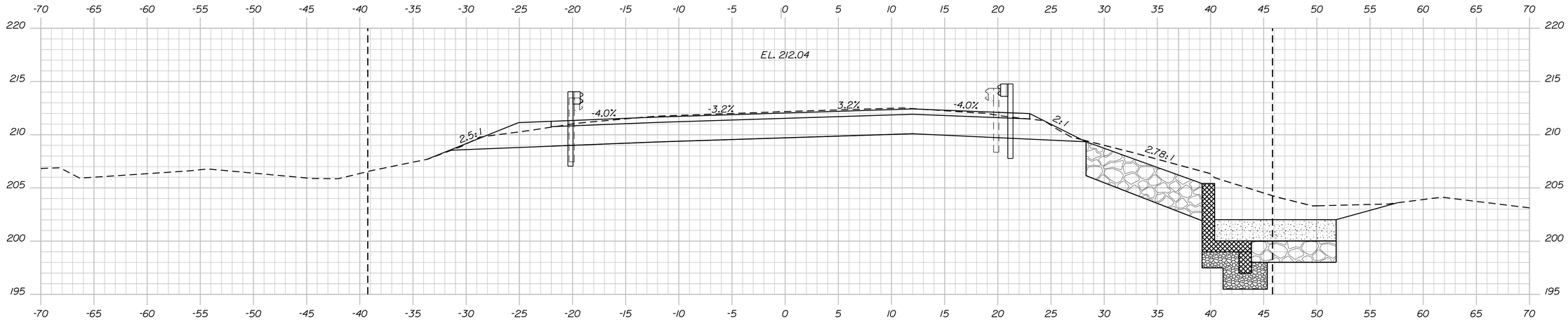

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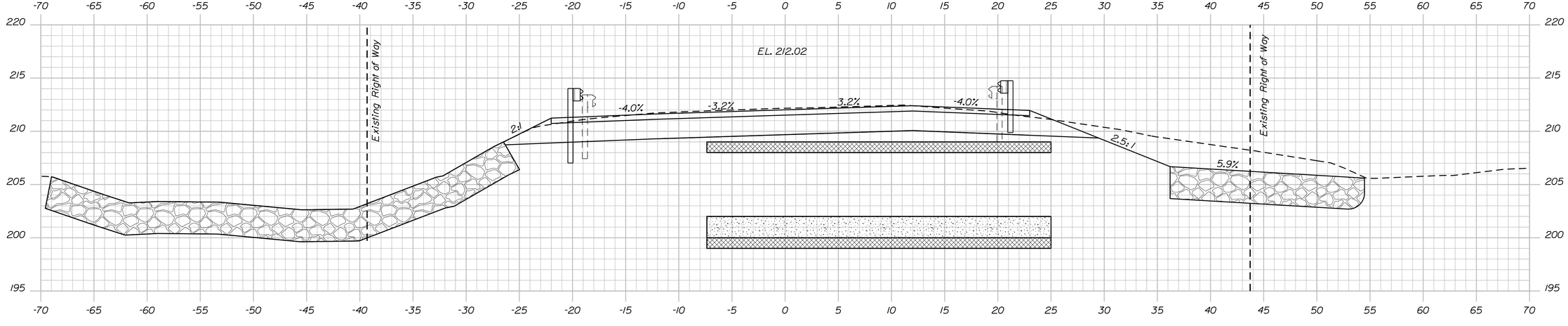

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE PLANS

BRIDGE NO. 2218

PROJ. MANAGER	B. NICHOLS		
DESIGN-DETAILED	G. GUSTAFSON	J. LEAVITT	10.6.2022
CHECKED-REVIEWED	C. VANDERSOOR	W. POULIN	8.5.2022
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
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REVISIONS 4			
FIELD CHANGES			

SIGNATURE

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BRANN BROOK
JEFFERSON LINCOLN COUNTY

CROSS SECTIONS

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OF 16

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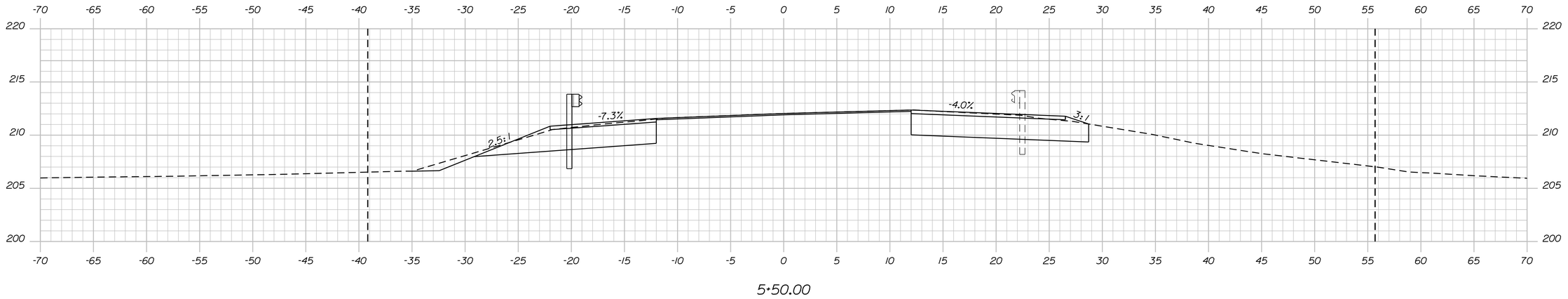

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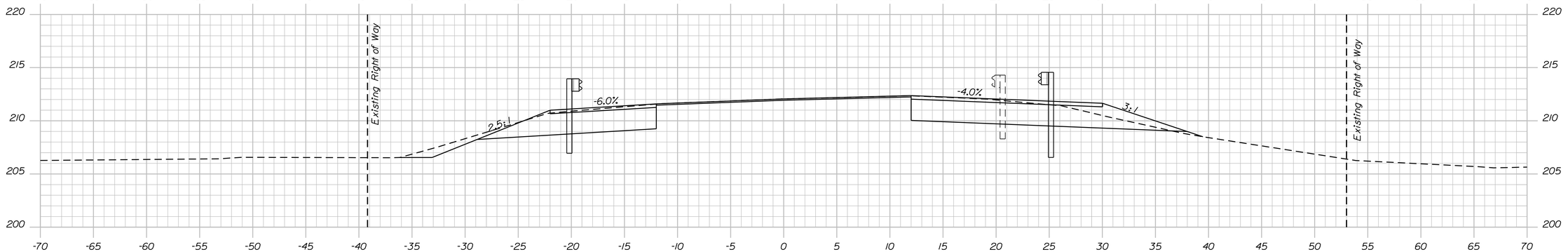

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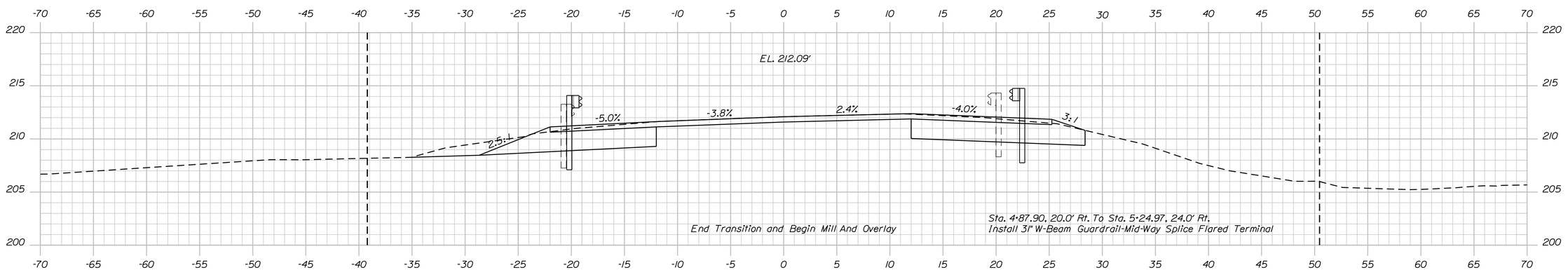

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	B. NICHOLS	
DESIGN-DETAILED	J. GUSTAFSON	10.6.2022
CHECKED-REVIEWED	C. VANDENBOSSCHE	8.5.2022
DESIGN2-DETAILED2	W. POULIN	
DESIGN3-DETAILED3	J. LEAVITT	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

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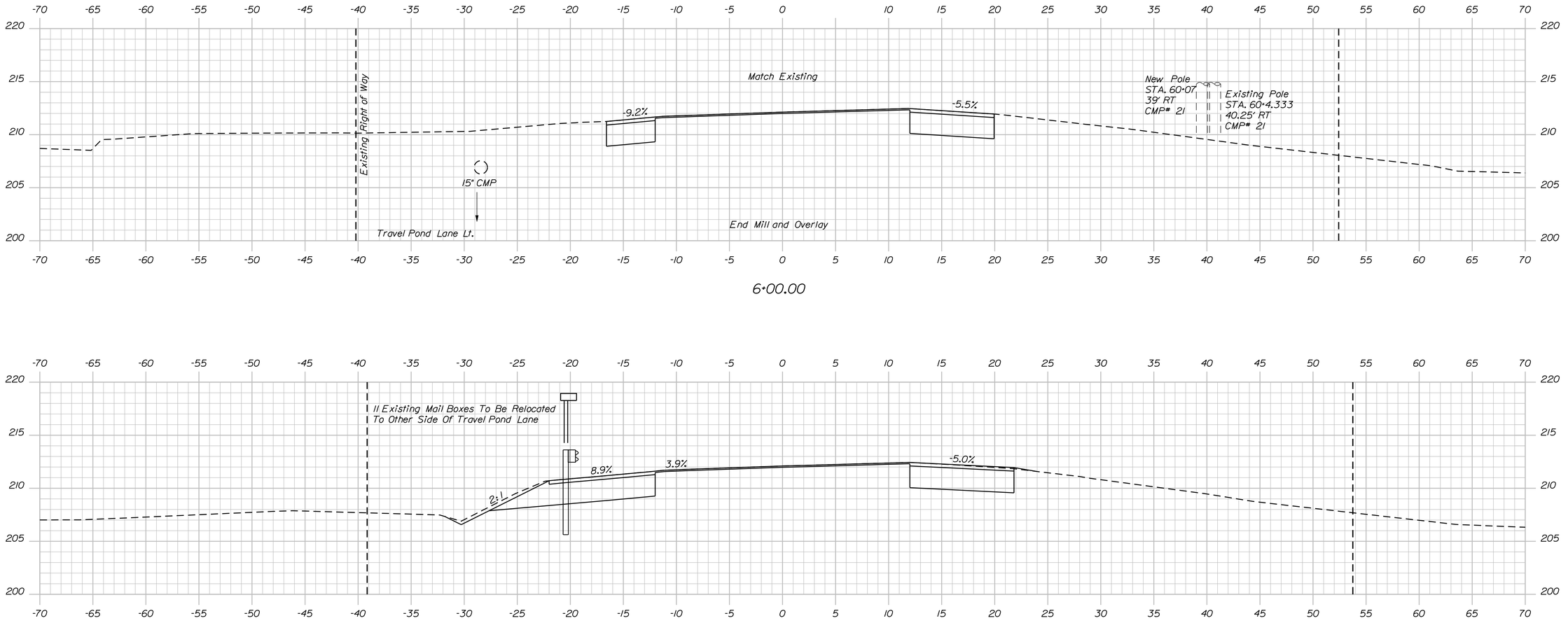
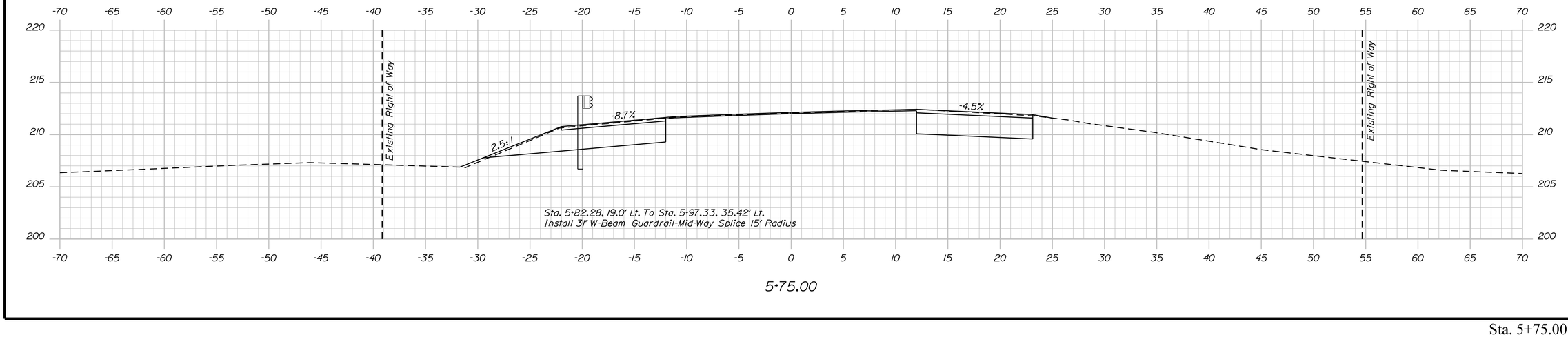
12

OF 16

Filename: ...\MSTA\012_XSECT_5+00_007.dgn Division: BRIDGE Username: Brian.Nichols Date:11/22/2022

Sta. 5+00.00 to Sta. 5+50.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE PLANS

BRIDGE NO. 2218

PROJ. MANAGER	B. NICHOLS			
DESIGN-DETAILED	G. GUSTAFSON	J. LEAVITT	10.6.2022	
CHECKED-REVIEWED	C. VANDENBOSSCHE	M. POULIN	8.5.2022	
DESIGN2-DETAILED2	LED2			
DESIGN3-DETAILED3	LED3			
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

SIGNATURE

P.E. NUMBER

DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
JEFFERSON — LINCOLN COUNTY

CROSS SECTIONS

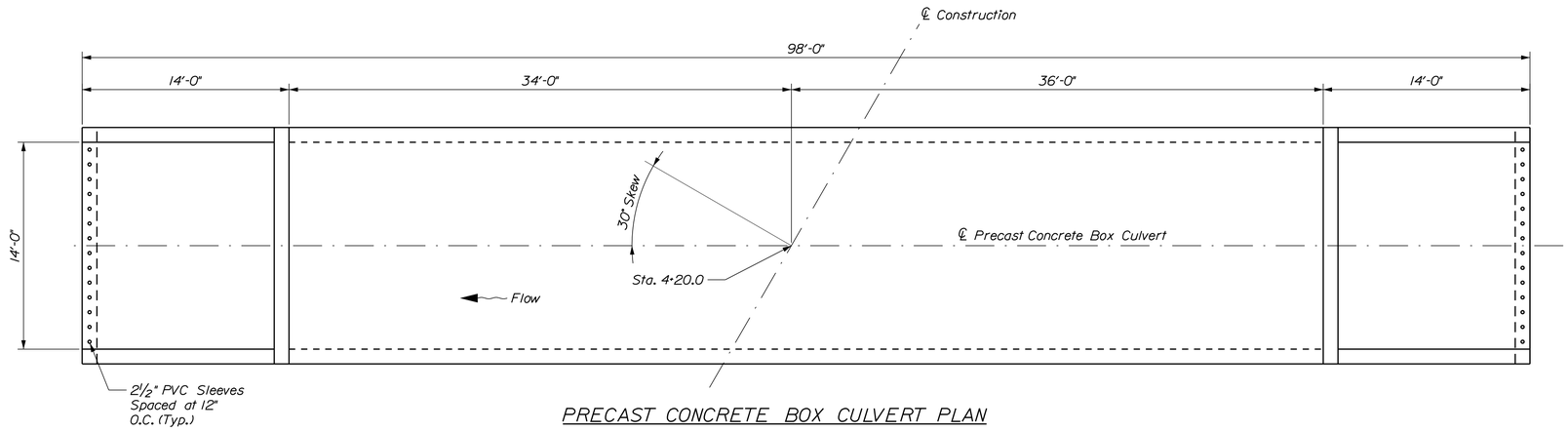
SHEET NUMBER

13

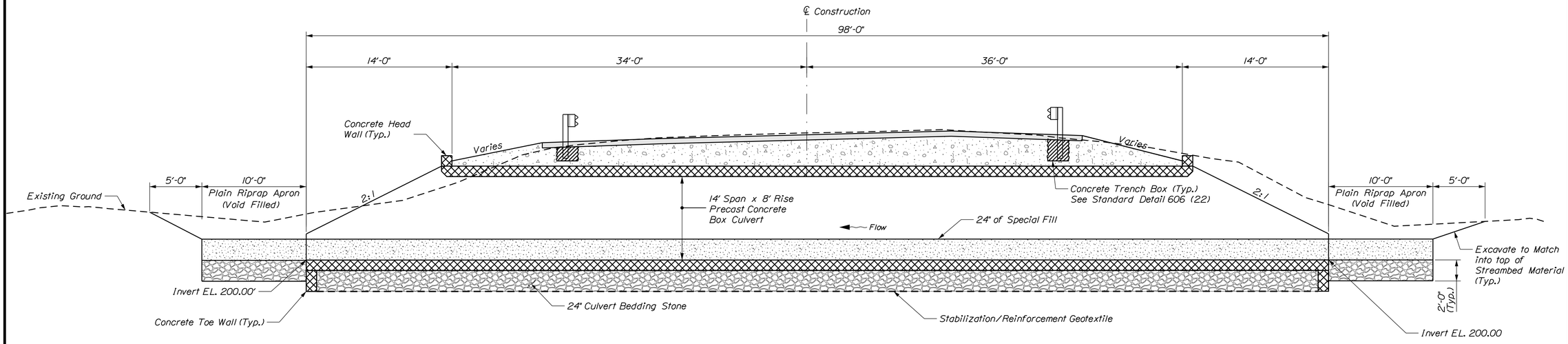
OF 16

Sta. 5+75.00 to Sta. 6+00.00

Filename: ...\MSTA\013_XSECT_5+75_008.dgn Division: BRIDGE Username: Brian.Nichols Date:11/22/2022



PRECAST CONCRETE BOX CULVERT PLAN



TYPICAL LONGITUDINAL SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

PROJ. MANAGER	B. NICHOLS	
DESIGN-DETAILED	G. GUSTAFSON	J. LEAVITT 10.6.2022
CHECKED-REVIEWED	C. VANDENBOSSCHE	M. POULIN 8.5.2022
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
JEFFERSON LINCOLN COUNTY

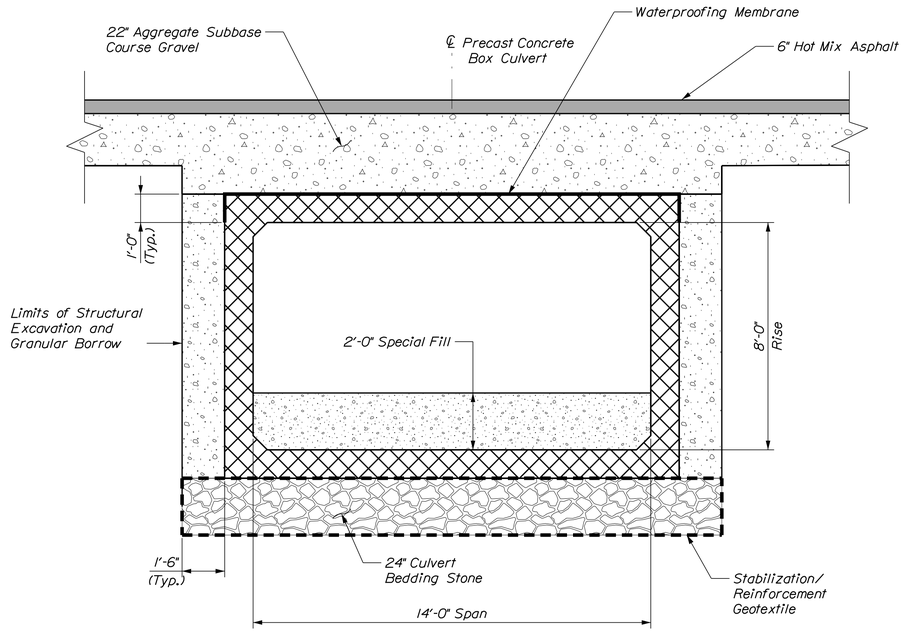
CULVERT DETAILS

SHEET NUMBER

14

OF 16

Filename: ...\014_Box Culvert Details.dgn Division: BRIDGE Username: Brian.Nichols Date:11/22/2022



BOX CULVERT SECTION

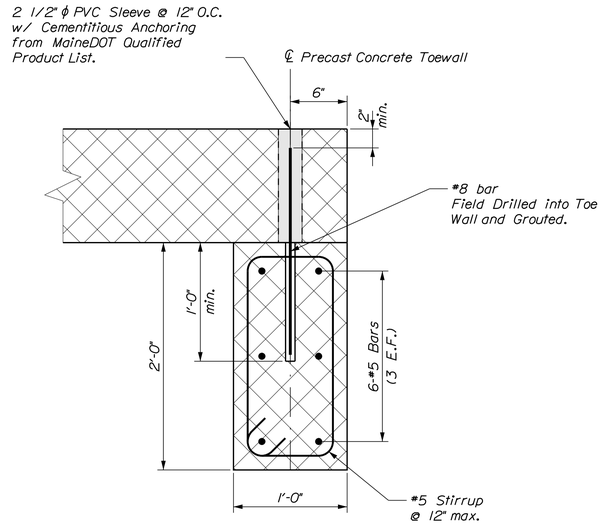
PRECAST CONCRETE ARCHES OR BOXES NOTES

1. The construction, handling, and assembly of the precast units shall be in accordance with Special Provisions Section 534, Precast Structural Concrete, and with the manufacturer's specifications as applicable.

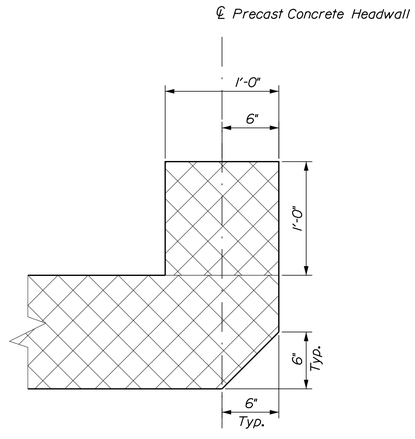
2. Install standard membrane waterproofing over the top and to 12 inches down the exterior sides of the precast units.

3. The excavation shall be made with a smooth-edged bucket and to avoid disturbance of the side slopes and excavation subgrade. The Contractor shall not operate heavy equipment over the excavated subgrade to minimize subgrade disturbance. Vibration-induced disturbances shall be avoided. If the subgrade is disturbed or weakened, the Contractor shall over-excavate the disturbed material and replace with compacted Granular Borrow to the subgrade level at the Contractor's expense. All steel, rebar, concrete, organics, wood, and timber encountered at the bearing elevation shall be removed and replaced with compacted Granular Borrow Material for Underwater Backfill.

4. Special Fill inside the culvert shall be placed strictly to the limits shown.



PRECAST CONCRETE TOEWALL DETAIL



PRECAST CONCRETE HEADWALL DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2309200

WIN 023092.00

BRIDGE NO. 2218

BRIDGE PLANS

PROJ. MANAGER	B. NICHOLS		
DESIGN-DETAILED	G. GUSTAFSON	J. LEAVITT	10.6.2022
CHECKED-REVIEWED	G. GUSTAFSON	S. MCMULLEN	8.5.2022
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

DAVIS BRIDGE NO. 1
BRANN BROOK
JEFFERSON LINCOLN COUNTY

CULVERT DETAILS

SHEET NUMBER

15

OF 16

Username: Brian.Nichols Date:11/22/2022

Division: BRIDGE

Filename: ...\015_Box Culvert Details.dgn

PLAN LEGEND

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

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

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

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE REGISTRY OF DEEDS

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

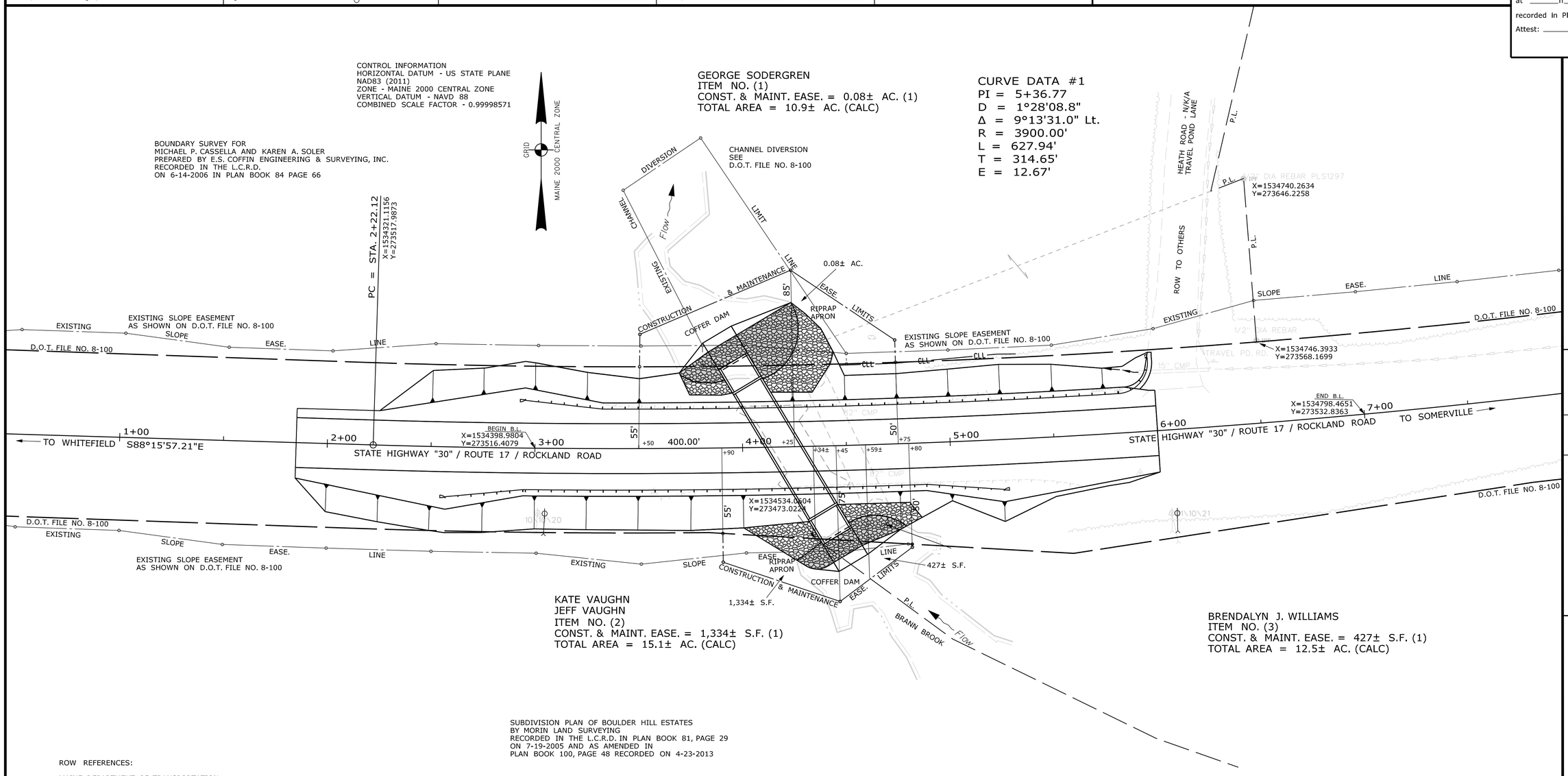
CONTROL INFORMATION
HORIZONTAL DATUM - US STATE PLANE
NAD83 (2011)
ZONE - MAINE 2000 CENTRAL ZONE
VERTICAL DATUM - NAVD 88
COMBINED SCALE FACTOR - 0.99998571

GRID MAINE 2000 CENTRAL ZONE

BOUNDARY SURVEY FOR
MICHAEL P. CASSELLA AND KAREN A. SOLER
PREPARED BY E.S. COFFIN ENGINEERING & SURVEYING, INC.
RECORDED IN THE L.C.R.D.
ON 6-14-2006 IN PLAN BOOK 84 PAGE 66

GEORGE SODERGREN
ITEM NO. (1)
CONST. & MAINT. EASE. = 0.08± AC. (1)
TOTAL AREA = 10.9± AC. (CALC)

CURVE DATA #1
PI = 5+36.77
D = 1°28'08.8"
Δ = 9°13'31.0" Lt.
R = 3900.00'
L = 627.94'
T = 314.65'
E = 12.67'



KATE VAUGHN
JEFF VAUGHN
ITEM NO. (2)
CONST. & MAINT. EASE. = 1,334± S.F. (1)
TOTAL AREA = 15.1± AC. (CALC)

BRENDALYN J. WILLIAMS
ITEM NO. (3)
CONST. & MAINT. EASE. = 427± S.F. (1)
TOTAL AREA = 12.5± AC. (CALC)

SUBDIVISION PLAN OF BOULDER HILL ESTATES
BY MORIN LAND SURVEYING
RECORDED IN THE L.C.R.D. IN PLAN BOOK 81, PAGE 29
ON 7-19-2005 AND AS AMENDED IN
PLAN BOOK 100, PAGE 48 RECORDED ON 4-23-2013

ROW REFERENCES:

MAINE DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
STATE HIGHWAY "30"
JEFFERSON LINCOLN COUNTY
FEDERAL AID PROJECT NO. RF-F-030-1(16)
DATED OCTOBER 1978
D.O.T. FILE NO. 8-100 SHEET 2 OF 19

LINCOLN COUNTY COMMISSIONERS RECORDS
VOL. 7 PAGE 229
YEAR 1846
WIDTH 4 RODS (66 FEET)

DAVIS BRIDGE NO. 1
OVER
BRANN BROOK

BRIDGE NO. 2218 WIN 023092.00

TECH	CHECKED
G.L.L.	
J.D.F.	J.D.F.
J.D.F.	J.D.F.

ITEM	
EXISTING CONDITION PLAN	
FINAL RIGHT OF WAY	
AREAS	

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

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	10-24-22	5946	282

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

STATE HIGHWAY "30"
ROUTE 17 / ROCKLAND ROAD
JEFFERSON LINCOLN COUNTY
FEDERAL AID PROJECT NO. 2309200

MAY 2022 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 8-205
SCALE 1" = 25' | SHEET 1 OF 1

SHEET NUMBER
16
OF 16

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Division: BRIDGE Username: Brian.Nichols Date:11/22/2022