

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



## WATERFORD

OXFORD

ROUTE 118

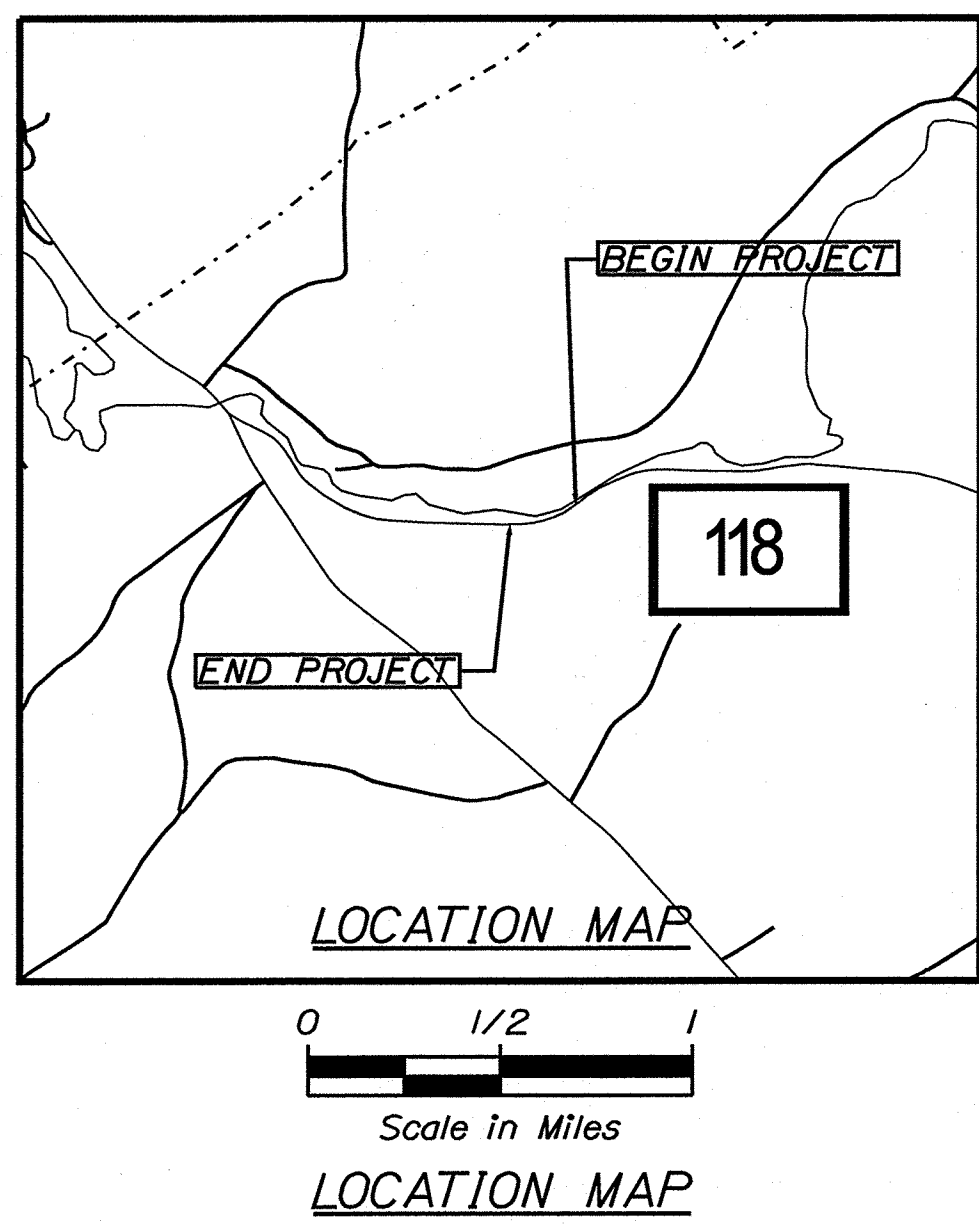
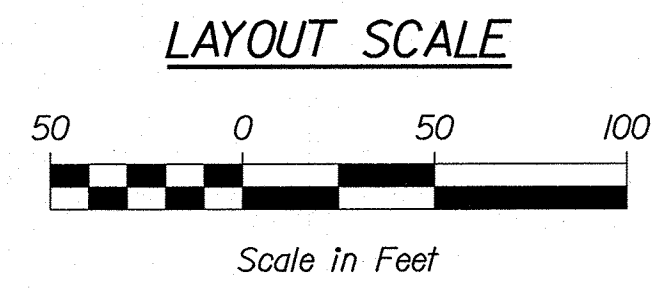
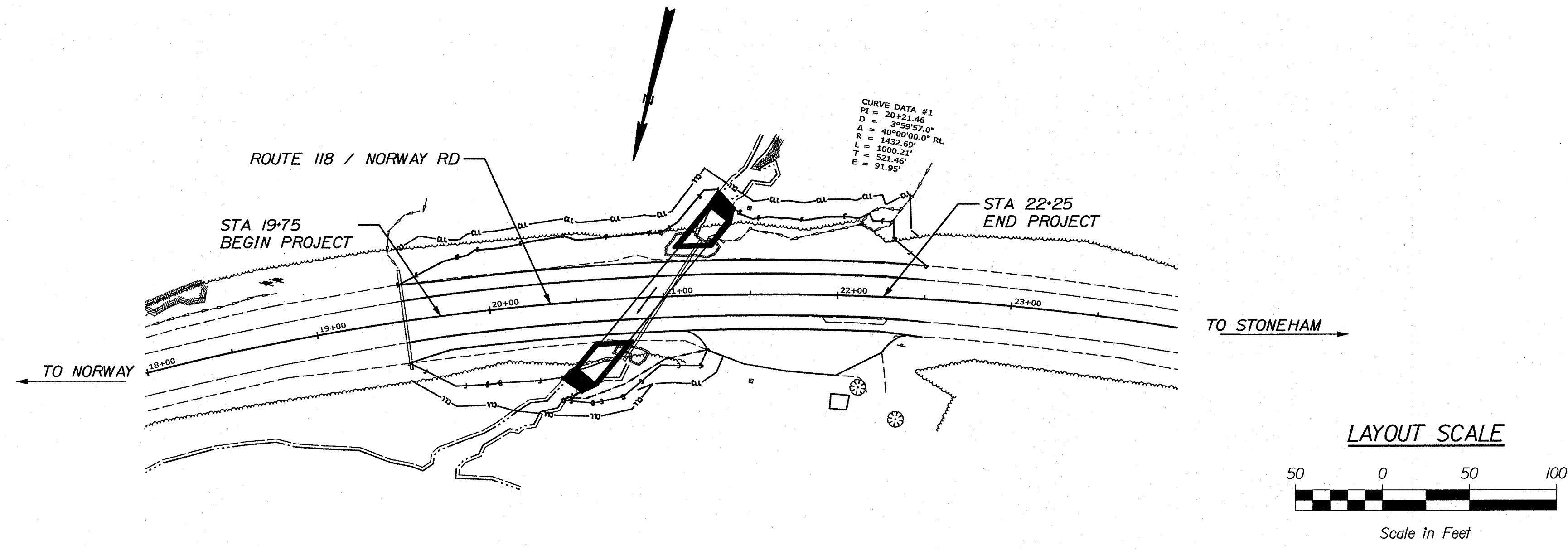
**FEDERAL PROJECT NO. 2461700**

PROJECT LENGTH: 0.08 MILES

BRIDGE NO. 6682 - NORWAY RD. BRIDGE

PLAN LEGEND	
Town, County, State	_____
Property Lines	-----
R/W Lines-Existing	-----
R/W Lines-Proposed	-----
Culvert-Existing	-----
Culvert Proposed	-----
Curbing	Existing Proposed
Type 1	-----
Type 3	-----
Type 5	-----
Outline of Bodies of Water	-----
Exposed Bedrock	-----
Buildings	-----
Trees	Conifer Deciduous
Tree Line	-----
Clearing Limit Line	-----
Railroad	-----
Catch Basins	Existing Proposed
Manholes	Existing Proposed
Proposed Underdrain	-----
Proposed Ditch	-----
Existing Ditch	-----
Utility Poles	Existing Proposed
Fire Hydrants	Existing Proposed
Existing Water Line	-----
Existing San. Sewer	-----
Existing San. Sewer Manhole	⊙
Guardrail-Existing	-----
Guardrail-Proposed	-----
Guardrail-Cable, Other	-----
Centerline-Existing	-----
Centerline-Proposed	-----
Travelway-Existing	-----
Travelway-Proposed	-----
Boring	HB-XXX-###
Pavement Core	PC-#
Test Pit	TP-XXX-###
Probe	P-#.#X
	#.# = Depth
	X = W (Weathered Rock)
	R (Refusal)
	NR (No Refusal)

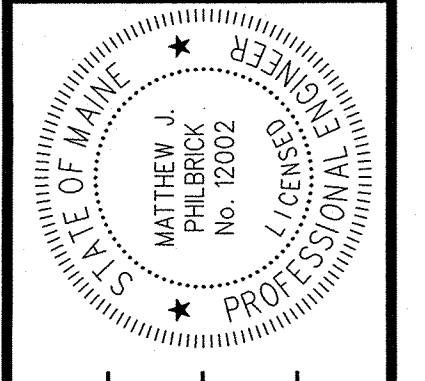
INDEX OF SHEETS	
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TRAFFIC DATA	
Current (2020) AADT	1090
Future (2040) AADT	1200
DHV - % of AADT	10%
Design Hour Volume	120
% Heavy Trucks (AADT)	13%
% Heavy Trucks (DHV)	14%
Directional Distribution (DHV)	51%
18-kip Equivalent P 2.0	105
18-kip Equivalent P 2.5	100
Design Speed (mph)	50 MPH
Functional Class	Major Collector
Corridor Priority	4

<b>PROJECT LOCATION:</b>	LARGE CULVERT #46194 LOCATED 1.21 MILES WEST OF HERSEY ROAD
<b>PROGRAM AREA:</b>	HIGHWAY PROGRAM
<b>SCOPE OF WORK:</b>	LARGE CULVERT REPLACEMENT

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER: <i>James H. ...</i>	<i>[Signature]</i>	8-15-22
CHIEF ENGINEER: <i>James H. ...</i>	<i>[Signature]</i>	8-12-2022



<i>[Signature]</i>	SIGNATURE	DATE
12002	P.E. NUMBER	6/9/2022

PROJECT INFORMATION	
PROGRAM	HIGHWAY
PROJECT MANAGER	ERNEST MARTIN
DESIGNER	MATTHEW PHILBRICK
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

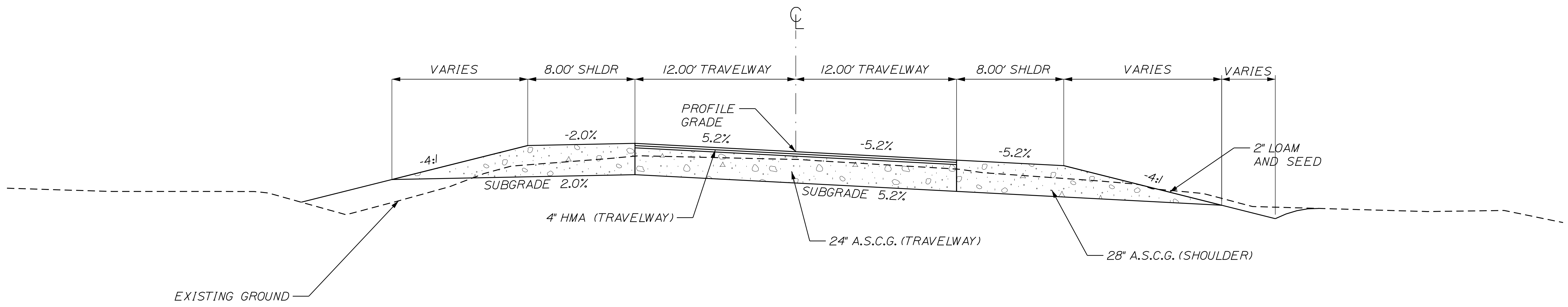
WIN 24617.00 FEDERAL AID PROJECT NO. 2461700

WATERFORD ROUTE 118
TITLE SHEET

SHEET NUMBER	1
	OF 17

Filename: ...:\00\HIGHWAY\MSTA\001\_Title.dgn Division: HIGHWAY Username: Matthew Philbrick Date: 8/4/2022

Filename: ... \HIGHWAY\MSTA\002\_Typical.dgn Division: HIGHWAY Username: Matthew Philbrick Date: 8/4/2022



TYPICAL SECTION

**NOTES:**

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. CROSS SLOPES FOR NORMAL AND SUPERELEVATED SECTIONS WILL BE STRAIGHT UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
3. THE ALGEBRAIC DIFFERENCE BETWEEN TRAVELWAY AND SHOULDER CROSS SLOPE SHALL NOT EXCEED 8 PERCENT.
4. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

Proposed Left SH	Proposed Left TW	Centerline Station	Proposed Right TW	Proposed Right SH
-	-	18+50	-	-
-	-	18+75	-	-
-	-	19+00	-	-
-	-	19+25	-	-
-10.0%	2.1%	19+50	-6.8%	-11.7%
-8.0%	3.1%	19+75	-6.0%	-9.5%
-6.0%	4.2%	20+00	-5.2%	-7.3%
-4.0%	5.2%	20+25	-5.2%	-5.2%
-2.0%	5.2%	20+50	-5.2%	-5.2%
-2.0%	5.2%	20+75	-5.2%	-5.2%
-2.0%	5.2%	21+00	-5.2%	-5.2%
-2.0%	5.2%	21+25	-5.2%	-7.3%
-2.0%	5.2%	21+50	-5.2%	-9.5%
-3.0%	5.2%	21+75	-5.2%	-11.6%
-3.9%	4.3%	22+00	-5.2%	-13.7%
-4.9%	3.4%	22+25	-6.2%	-15.9%
-5.8%	2.5%	22+50	-7.1%	-18.0%
-	-	22+75	-	-
-	-	23+00	-	-
-	-	23+25	-	-
-	-	23+50	-	-

NOT TO SCALE

STATE OF MAINE																									
DEPARTMENT OF TRANSPORTATION																									
2461700	WIN																								
24617.00	HIGHWAY PLANS																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">PROJ. MANAGER ERNE MARTIN</td> <td style="width: 50%;">BY T. WHITE</td> <td style="width: 50%;">DATE JUNE 2022</td> </tr> <tr> <td>CHECKED-REVIEWED M. PHILBRICK</td> <td></td> <td>SIGNATURE</td> </tr> <tr> <td>DESIGNS DETAILED C. RUSSEL</td> <td></td> <td>P.E. NUMBER</td> </tr> <tr> <td>REVISIONS 1</td> <td></td> <td>DATE</td> </tr> <tr> <td>REVISIONS 2</td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 3</td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 4</td> <td></td> <td></td> </tr> <tr> <td>FIELD CHANGES</td> <td></td> <td></td> </tr> </table>	PROJ. MANAGER ERNE MARTIN	BY T. WHITE	DATE JUNE 2022	CHECKED-REVIEWED M. PHILBRICK		SIGNATURE	DESIGNS DETAILED C. RUSSEL		P.E. NUMBER	REVISIONS 1		DATE	REVISIONS 2			REVISIONS 3			REVISIONS 4			FIELD CHANGES			<p style="font-size: 24pt; margin: 0;">WATERFORD</p> <p style="font-size: 24pt; margin: 0;">ROUTE 118</p> <p style="font-size: 36pt; margin: 0;">TYPICAL SECTIONS</p>
PROJ. MANAGER ERNE MARTIN	BY T. WHITE	DATE JUNE 2022																							
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REVISIONS 4																									
FIELD CHANGES																									
SHEET NUMBER																									
2																									
OF 17																									

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.20	COMMON EXCAVATION	1257	CY
203.25	GRANULAR BORROW	614	CY
203.33	SPECIAL FILL	137	CY
206.07	STR. ROCK EXCAVATION - DRAINAGE AND MINOR STRUCTURES	38	CY
304.10	AGGREGATE SUBBASE - GRAVEL	1086	CY
403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	112	TONS
403.213	HOT MIX ASPHALT 12.5 MM HMA BASE	186	TONS
409.15	BITUMINOUS TACK COAT	40	GAL
508.13	SHEET WATERPROOF MEMBRANE (260 SY)	1	LS
511.07	COFFERDAM: UPSTREAM	1	LS
511.07	COFFERDAM: DOWNSTREAM PRECAST	1	LS
534.71	CONCRETE BOX CULVERT PLAIN RIPRAP	1	LS
610.08	STREAMBED ROCK FEATURES	50	CY
610.212		69	CY
613.319	EROSION CONTROL BLANKET	25	SY
615.10	DIRTY BORROW	57	CY
618.14	SEEDING METHOD NUMBER 2	10	UN
619.12	MULCH	10	UN
619.14	EROSION CONTROL MIX	10	CY
620.58	EROSION CONTROL GEOTEXTILE	100	SY
627.733	4" WHITE OR YELLOW PAVEMENT MARKING LINE	400	LF
629.05	HAND LABOR, STRAIGHT TIME	20	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
631.172	LARGE TRUCK (INCLUDING OPERATOR)	10	HR
639.19	FIELD OFFICE TYPE B	1	EA
652.312	BARRICADE TYPE III	10	EA
652.33	DRUM	50	EA
652.34	CONE	50	EA
652.35	CONSTRUCTION SIGN	328	SF
652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	20	CD
652.38	FLAGGER	450	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	3	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
**2461700**  
WIN  
**24617.00**  
HIGHWAY PLANS

PROJ. MANAGER	ERNE MARTIN	BY	DATE
DESIGN-DETAILED	M. PHILBRICK	T. WHITE	JUNE 2022
CHECKED-REVIEWED			
DESIGN-DETAILED	C. RUSSEL		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

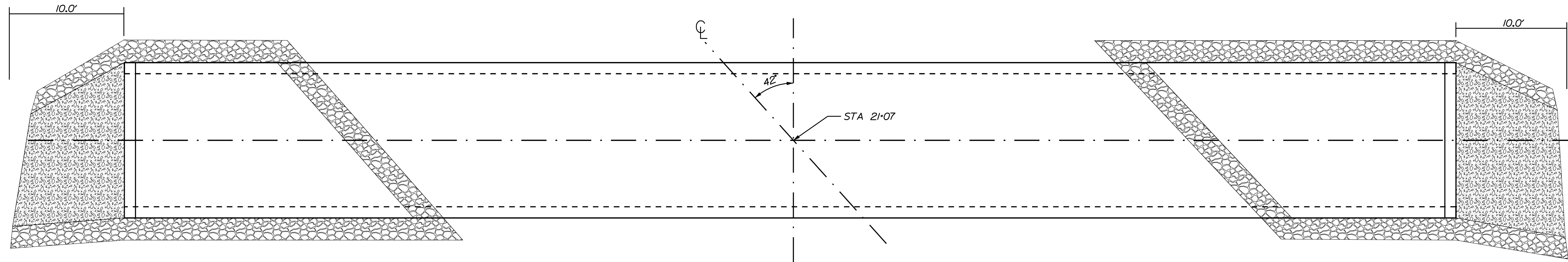
WATERFORD  
ROUTE 118  
**ESTIMATED QUANTITIES**

SHEET NUMBER  
**3**  
OF 17

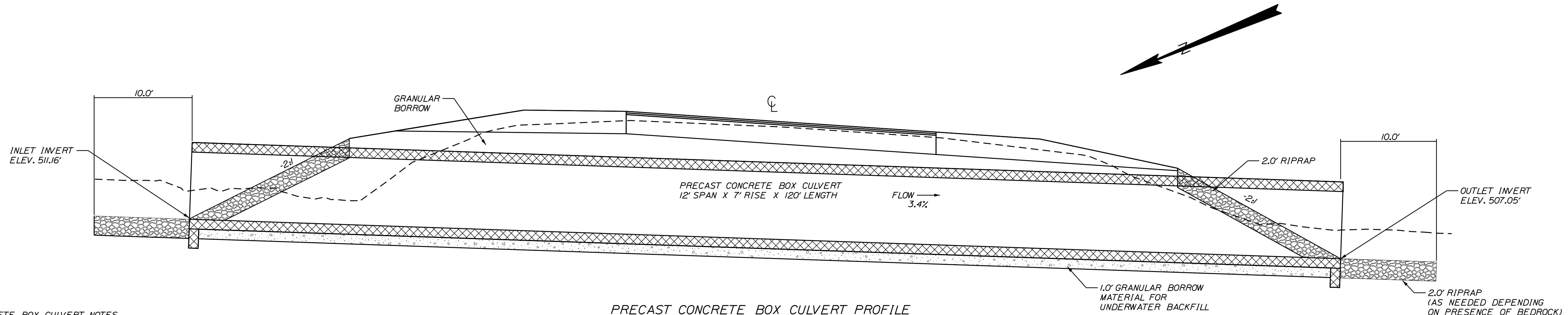
1. Clearing limits shall be 10 feet beyond and parallel to the construction slope lines or as shown on the Plans unless otherwise authorized by the Resident.
2. All clearing shall be considered incidental to the Contract and no separate payment will be made.
3. The clearing and selective clearing and thinning lines shown on the Plans are for estimating purposes only. The actual lines for clearing and thinning shall be established in the field by the Contractor and approved by the Resident.
4. Grubbing in fill areas has been shown on the cross sections. These limits are approximate and have been used for estimating purposes only. Actual grubbing limits may vary based on field conditions as directed by the Resident.
5. All inslope and ditches in cut areas shall be graded as shown on the typical or flatter, or as directed by the Resident.
6. The Contractor shall plan and conduct work so that upon completion of the project there is no drop-off from the edge of the shoulder pavement.
7. Driveway fill side slopes shall be the same as the fill side slopes without guardrail unless otherwise noted on the Plans.
8. All waste material not used on the project shall be disposed of off the project in acceptable waste areas reviewed by the Resident. Grading, seeding and mulching of waste areas shall be considered incidental.
9. Required ditch protection shown on the Plans or in the Construction Notes is for estimating purposes only. The actual type and location of ditch protection may be altered by the Resident.
10. Granular borrow used to backfill muck excavation or in low wet areas to 1 foot above water level or old ground shall meet requirements for granular borrow material for underwater backfill as specified in Standard Specifications Item 703.19, Granular Borrow.
11. Existing inslopes in proposed fill areas shall be benched by excavating steps of sufficient width to permit placing and compacting the fill material along with the material removed.
12. Gravel entrances shall be constructed with 14 inches of aggregate subbase course gravel or 11 inches of aggregate subbase course gravel and 3 inches of untreated aggregate surface course unless otherwise noted in the Plans or directed by the Resident.
13. A 3-foot paved lip shall be placed at all unpaved entrances unless otherwise noted in the Plans or directed by the Resident.
14. When superelevation exceeds the slope of the low-side shoulder, the low-side shoulder will have same slope as the travelway.
15. Inlets and outlets of all culverts shall be ripped unless otherwise noted on the Plans or directed by the Resident.
16. Dirty borrow has been estimated for all disturbed slope areas other than lawn areas. Actual placement of the dirty borrow shall be as noted on the Plans or designated by the Resident.
17. Unless otherwise noted Seeding Method No. 1 shall be utilized on all lawns and developed areas; Seeding Method No. 2 shall be utilized on all other areas.
18. Dirty borrow shall be placed to a nominal depth of 2 inches unless otherwise noted or directed.
19. Any damage to the slopes caused by the Contractor's equipment, personnel, or operation shall be repaired to the satisfaction of the Resident. All work, equipment, and materials required to make repairs shall be at the Contractor's expense.
20. Geotechnical information furnished or referred to in the bid documents is for the use of the bidders. No assurance is given that the information or interpretations will be representative of the actual subsurface conditions throughout the construction site. MaineDOT will not be responsible for any interpretations or conclusions drawn from the geotechnical information. The boring logs provided in the bid documents (if any) present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between boring locations.
21. Areas on the project requiring fill will come from suitable sites such as excavation, ditch and inslope or equipment rental areas.
22. Estimated quantities for required structural earth excavation, drainage and minor structures are informational only and represent the approximate minimum quantity required to install drainage structures. Additional excavation for the Contractor's convenience or to comply with backsloping requirements will not be paid for directly but will be considered incidental to the related drainage items.
23. No separate payment for superintendent or foreman will be made for the supervision of equipment and layout of work being paid for under the equipment rental items.
24. "Undetermined locations" shall be determined by the Resident.

25. Final striping for the project shall be done by the Contractor per the striping layout in the Contract documents or as provided by the Department. Payment shall be made under appropriate Contract items.
26. The Contractor will place appropriately-marked stakes at the following locations on the project: striping pattern changes, cross-slope changes, and every 500 feet for stationing. The Contractor will paint every full station (100 feet) on the existing roadway and will transfer the painted stationing through all intermediate lifts (not surface). Appropriately-sized striping pattern changes will be painted on surface. Stationing control must be placed before work can commence. Cross-slope and striping change controls must be placed before paving can commence.
27. The project geotechnical report titled "Geotechnical Design Report for the Construction of Norway Road Bridge", Soils Report 2022-19, 7/15/2022, can be accessed at the MaineDOT website [HTTP://MAINE.GOV/MDOT/CONTRACTORS](http://MAINE.GOV/MDOT/CONTRACTORS)

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2461700	WIN 24617.00	HIGHWAY PLANS
DESIGN-DETAILED: M. PHILBRICK CHECKED-REVIEWED: T. WHITE DESIGN-DETAILED: C. RUSSEL REVISIONS 1: REVISIONS 2: REVISIONS 3: REVISIONS 4: FIELD CHANGES:		SIGNATURE P.E. NUMBER DATE		
WATERFORD ROUTE 118		GENERAL NOTES		
SHEET NUMBER				
4				
OF 17				



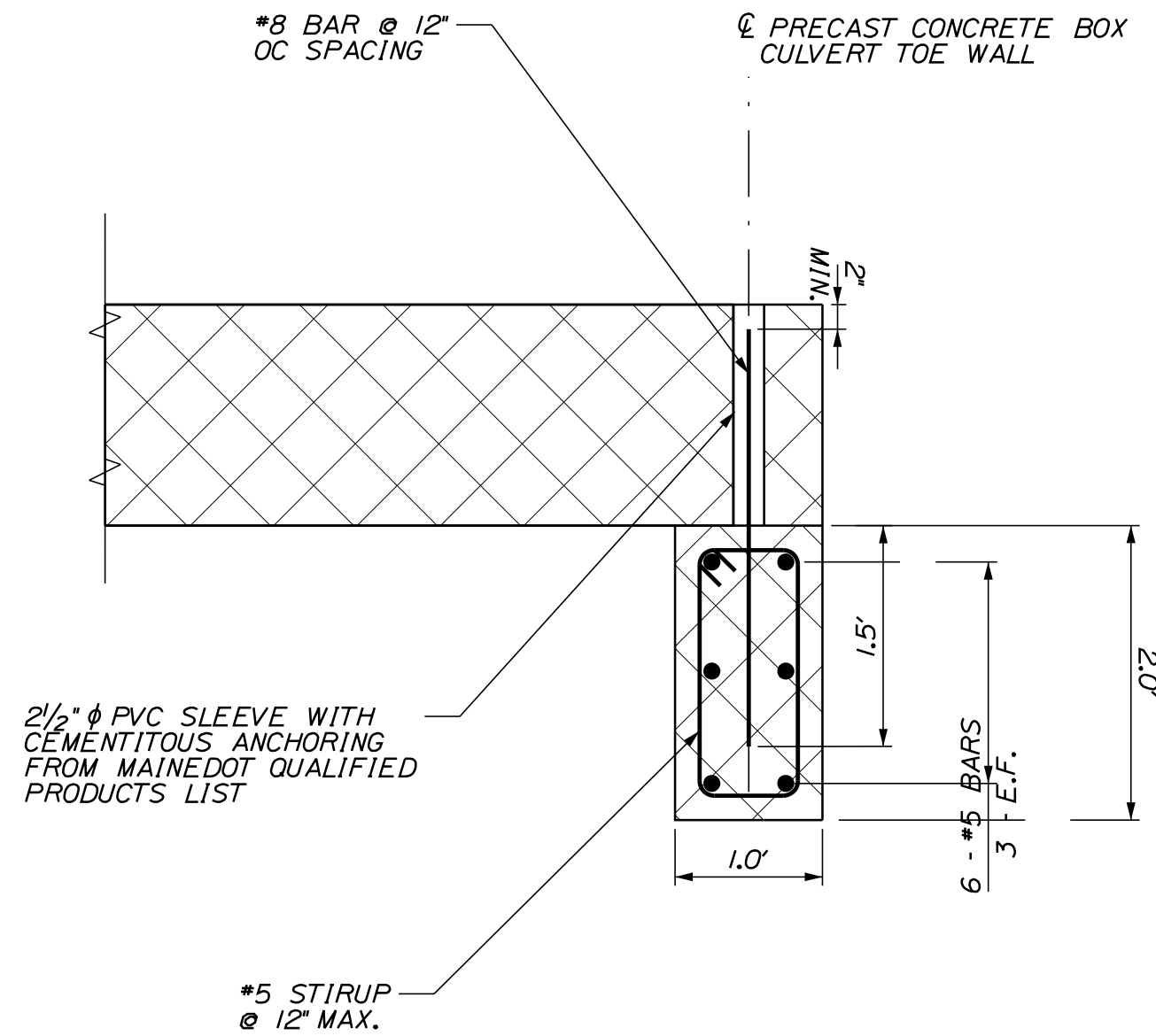
PRECAST CONCRETE BOX CULVERT PLAN VIEW



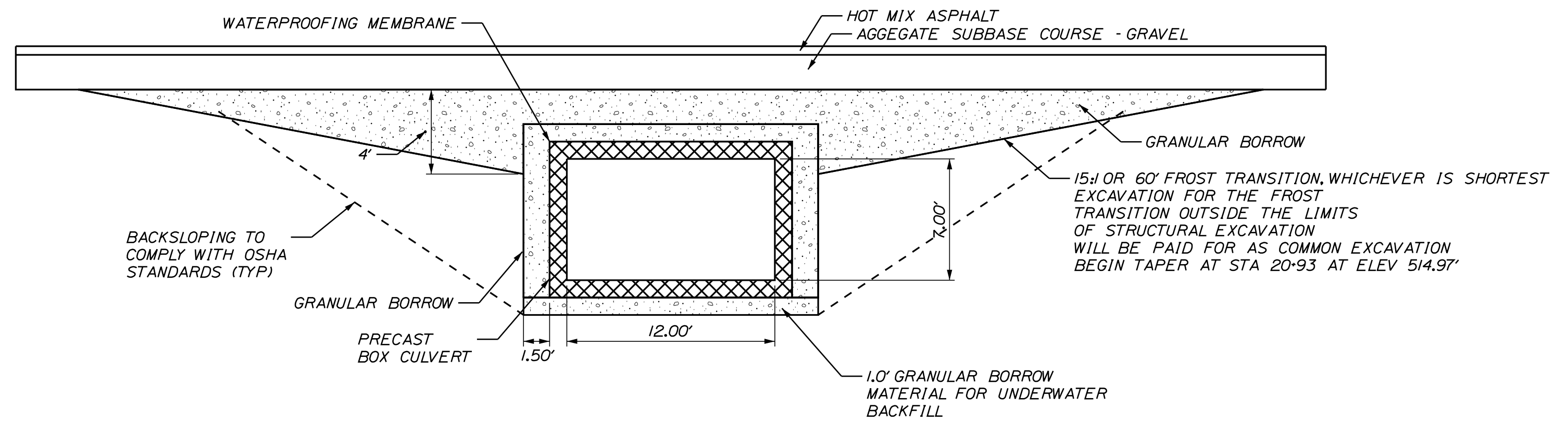
PRECAST CONCRETE BOX CULVERT PROFILE

**PRECAST CONCRETE BOX CULVERT NOTES**

1. THE PRECAST UNITS SHALL BE DESIGNED TO CARRY CONSTRUCTION LOADING WITH A MINIMUM FILL COVER OF 18" OVER THE TOP OF THE UNIT.
2. THE CONSTRUCTION, HANDLING, AND ASSEMBLY OF THE PRECAST UNITS SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION SECTION 534, PRECAST STRUCTURAL CONCRETE, AND WITH THE MANUFACTURER'S SPECIFICATIONS AS APPLICABLE.
3. INSTALL STANDARD MEMBRANE WATERPROOFING OVER THE TOP AND TO 12" DOWN THE EXTERIOR SIDES OF THE PRECAST UNITS.
4. THE PRECAST CONCRETE BOX CULVERT SHALL BE BEDDED ON A 1-FOOT LAYER OF COMPACTED GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL.
5. COFFERDAMS ARE TO BE PLACED AT BOTH THE DOWNSTREAM AND UPSTREAM ENDS OF THE PRECAST STRUCTURE TO ALLOW WATER TO BE PUMPED AND REMOVED DURING CONSTRUCTION OF THE BOX CULVERT.
6. RIPRAP WILL BE USED TO INSLOPE AROUND THE CULVERT ENDS AT BOTH THE INLET AND OUTLET. SEE PLAN FOR LOCATIONS.
7. THE CULVERT SHALL BE LINED WITH A MINIMUM OF 2.5 FEET OF SPECIAL FILL IN ACCORDANCE WITH SPECIAL PROVISION 203.
8. VOIDS IN RIPRAP APRONS SHALL BE INFILLED WITH GRANULAR BORROW OR OTHER MATERIAL APPROVED BY RESIDENT, WATERED-IN AND TAMPED.
9. THE FURNISHING AND PLACING OF BACKFILL MATERIAL BETWEEN THE GRANULAR BORROW PAY LIMIT AND THE NORMAL SUBGRADE LINE WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCIDENTAL TO THE WORK. BACKFILL MATERIAL SHALL BE FROM SUITABLE EXCAVATION WITHIN PROJECT LIMITS, IF AVAILABLE, AND SHALL BE GRANULAR MATERIAL AS DIRECTED BY THE RESIDENT.
10. A CLAMSHELL PRECAST BOX CULVERT MAY BE USED FOR CULVERTS OVER 6 FEET IN DEPTH. SEAM HEIGHT MUST ALLOW FOR CONSTRUCTION OF FULL HEIGHT BANKLINES AS SHOWN.



PRECAST CONCRETE TOE WALL DETAIL

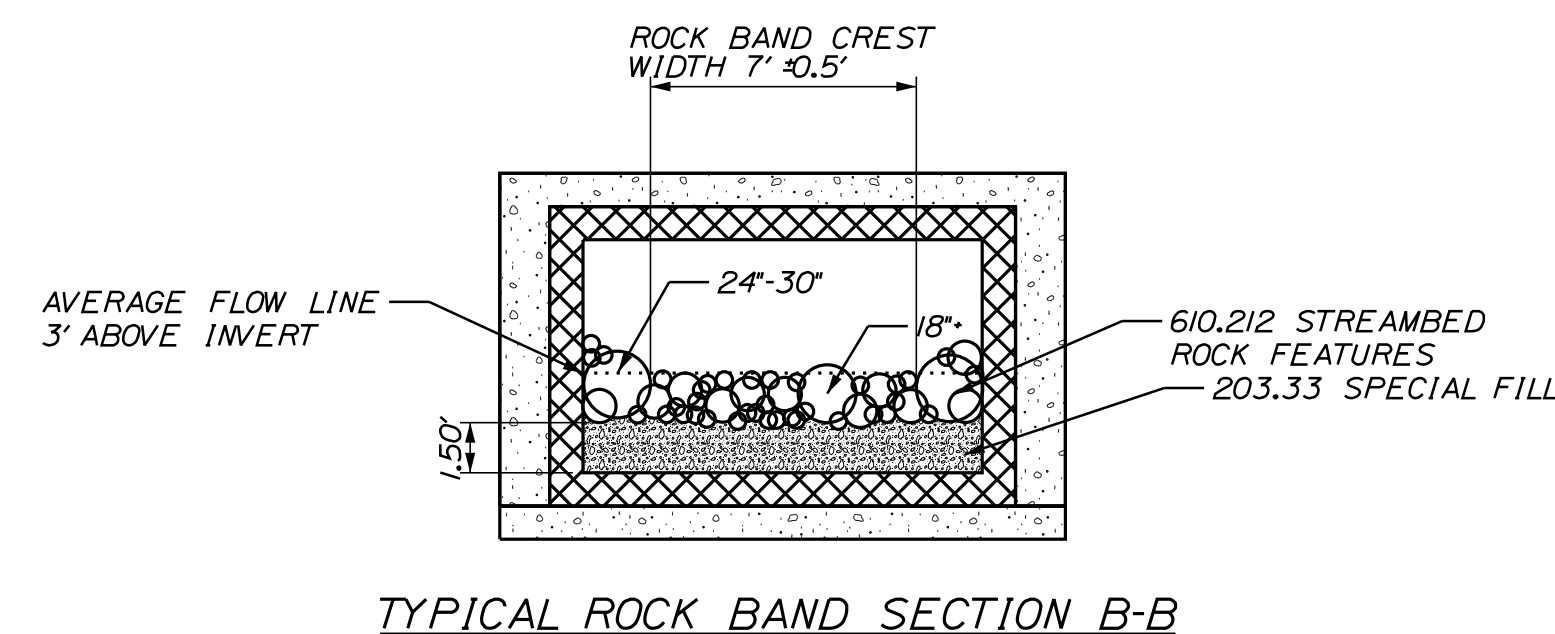
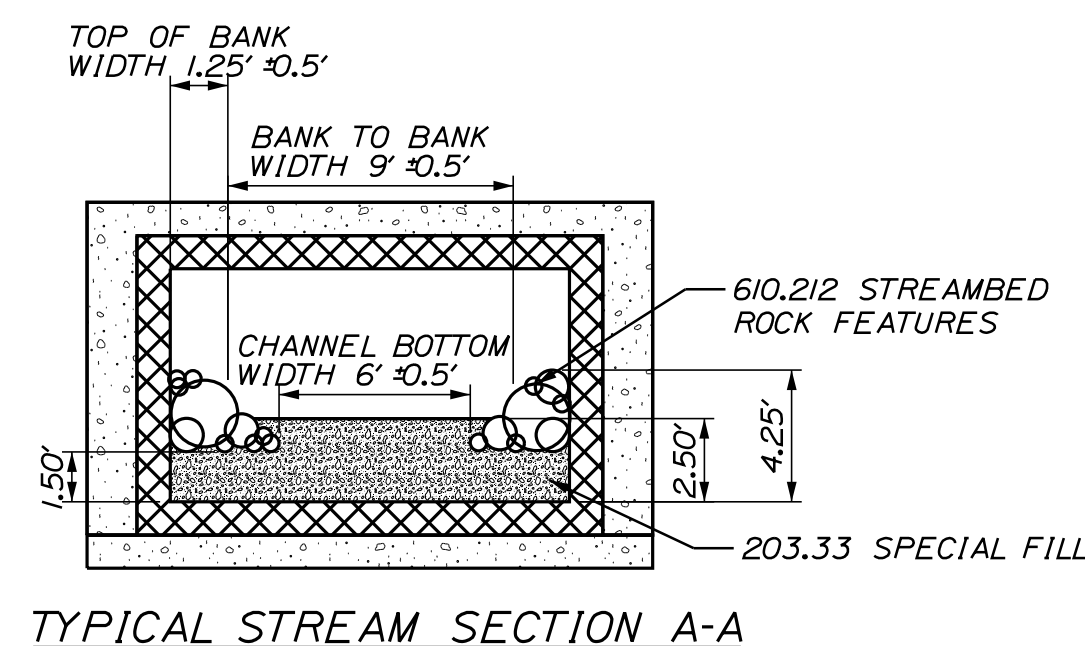
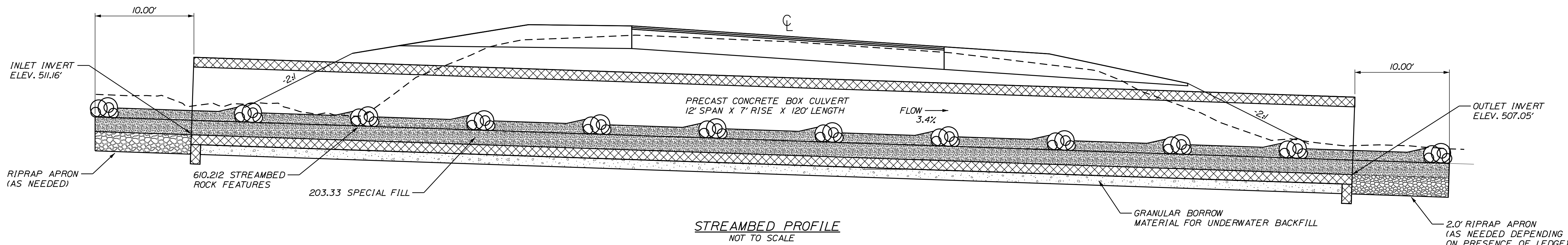
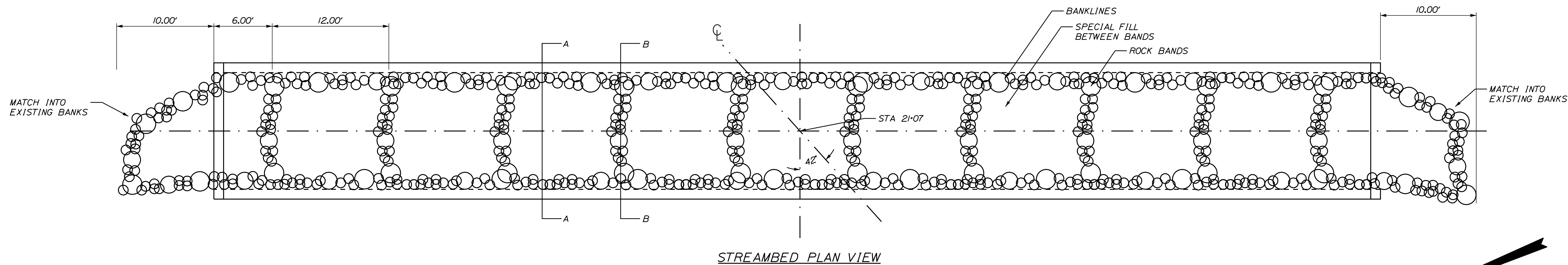


TYPICAL PRECAST CONCRETE BOX CULVERT SECTION

NOT TO SCALE

PROJ. MANAGER	BY	DATE
ERNE MARTIN	T. WHITE	JUNE 2022
DESIGN DETAILED	M. PHILBRICK	
CHECKED/REVIEWED	C. RUSSEL	
DESIGN DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

Filename: ... \MSTA\006\_StreambedDetails.dgn  
 Division: HIGHWAY  
 Username: Matthew Philbrick  
 Date: 8/4/2022



**CONSTRUCTION NOTES**

1. Special Fill - Streambed Material shall be thoroughly mixed prior to placement.
2. Place 1.5 ft lift of Special Fill on the invert, machine tamp and water-in. The Resident shall approve the lift before placement of the banklines, rockbands and the final lift.
3. Place a minimum of 3 large rocks (18" to 30") in each rock band approximately as shown on the plan and sections or as directed.
4. The rock bands shall be slightly curved or vee-shaped in plan view with the bend or vee pointed upstream.
5. The average flow line (finished grade) of the rock bands shall be 3 feet above the invert. The flow line (finished grade) is measured at the contact point between adjacent rocks. The top of individual rocks shall not extend more than 0.5 feet above this line.
6. Voids in the streambed material, bankline stone and rockbands shall be filled and sealed so that water remains on the surface of the channel and stays between the banklines and does not pipe through the stone. Refer to Special Provisions 203 and 610.

NOT TO SCALE

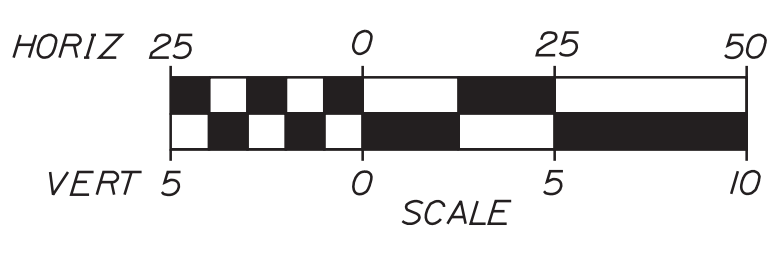
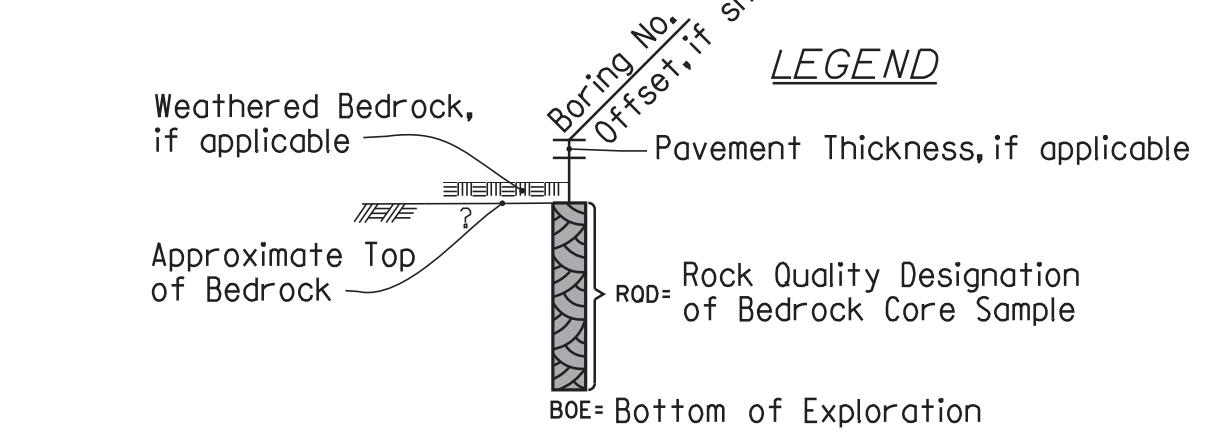
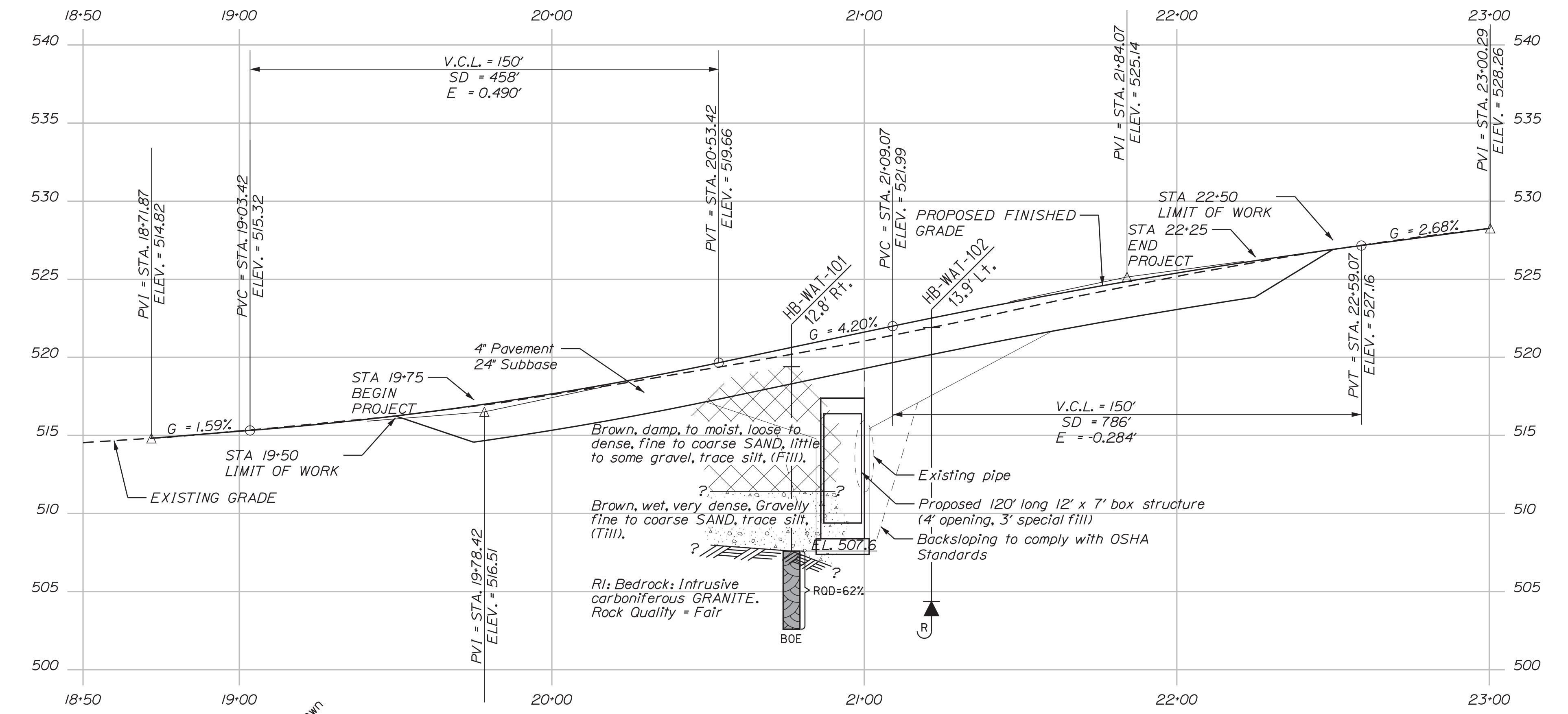
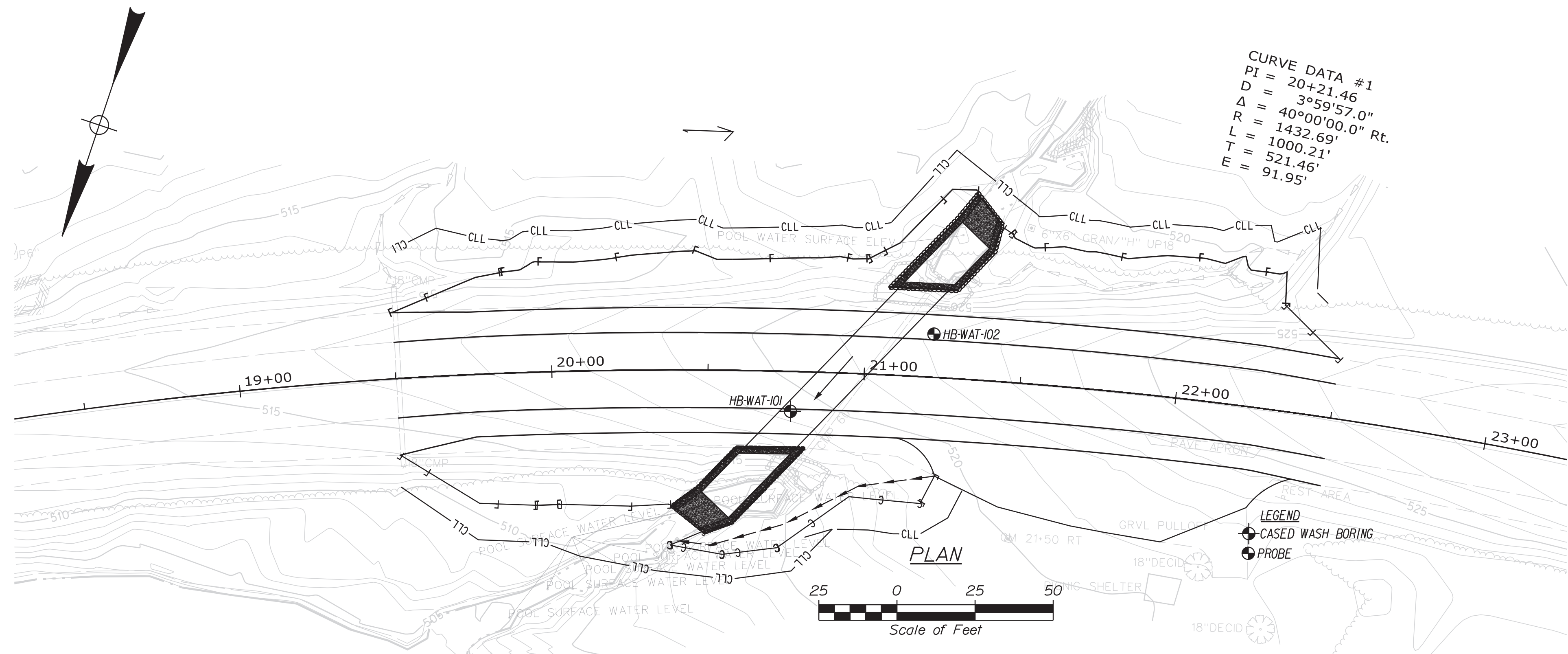
STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2461700		WIN 24617.00		HIGHWAY PLANS	
WATERFORD ROUTE 118		STREAMBED DETAILS		SHEET NUMBER		6	
OF 17		DATE		SIGNATURE		P.E. NUMBER	
FIELD CHANGES		REVISIONS 1		REVISIONS 2		REVISIONS 3	
REVISIONS 4		BY		DATE		DATE	
PROJ. MANAGER		ERNE MARTIN		T. WHITE		JUNE 2022	
DESIGN-REVIEWED		M. PHILBRICK		C. RUSSEL			
DESIGN DETAILED							
REVISIONS 1							
REVISIONS 2							
REVISIONS 3							
REVISIONS 4							

Date: 7/19/2022

Username: Cody A. Russell

Division: GEOTECH

Filename: ... \MSTAN002\_BLP8\SP\_WBL1.dgn



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.

Maine Department of Transportation Soil/Bore Exploration Log US CUSTOMARY UNITS		Project: Route 118 Large Culvert Location: Waterford, Maine		Boring No.: HB-WAT-101																			
Driller: MainDOT	Elevation (ft.): 519.4	Auger ID/OD: 5" Solid Stem	WIN: 24617.00																				
Operator: Bagger	Disturb: NAVD88	Sampler: Standard Split Spoon																					
Logged By: B. Willard	Rig Type: CME 45C	Sampler Wt./Fall: 140/3/30"																					
Date Start/Finish: 9/23/2021 07:00-11:00	Drilling Method: Cased Wash Boring	Core Barrel: ND-2"																					
Boring Location: 20+16.7, 12.8 ft ft.	Casing ID/OD: MB-3"	Water Level: 8.5 ft bgs.																					
<table border="1"> <thead> <tr> <th>Sample Information</th> <th>Visual Description and Remarks</th> <th>Laboratory Testing Results</th> </tr> </thead> <tbody> <tr> <td>10 24/16 2.00 9/12/12/10 24 36 SSA</td> <td>Brown, comp. dense, fine to coarse SAND, some gravel, trace silt, (FIII).</td> <td>GM33998 A-1-50, 5M WC=3.5%</td> </tr> <tr> <td>5 20 24/19 5.00 7.00 3/3/4/6 7 10</td> <td>Brown, moist, loose, fine to coarse SAND, little gravel, trace silt, (FIII).</td> <td>GM33999 A-1-50, 5M WC=3.5%</td> </tr> <tr> <td>10 10 21.6/14 10.00 11.80 18/34/42/50/3/6.1 76 113 36</td> <td>Brown, wet, very dense, Gravelly fine to coarse SAND, trace silt, (FIII); GTS blow for 0.8 ft.</td> <td>GM33700 A-1-50, 5M WC=13.9%</td> </tr> <tr> <td>15 10 60-60 11.80 16.80 ROD = 62%</td> <td>100' of Bedrock at Elev. 507.6 ft. R11 Bedrock: Intrusive carboniferous GRANITE. R11 Core Times (min/sec) 11.8-12.8 ft (11:48) 12.8-13.8 ft (13:22) 13.8-14.8 ft (13:14) 14.8-15.8 ft (13:14) 15.8-16.8 ft (12:28) 100% Recovery</td> <td></td> </tr> <tr> <td>20 10 60-60 11.80 16.80 ROD = 62%</td> <td>Bottom of Exploration at 16.8 feet below ground surface.</td> <td></td> </tr> </tbody> </table>						Sample Information	Visual Description and Remarks	Laboratory Testing Results	10 24/16 2.00 9/12/12/10 24 36 SSA	Brown, comp. dense, fine to coarse SAND, some gravel, trace silt, (FIII).	GM33998 A-1-50, 5M WC=3.5%	5 20 24/19 5.00 7.00 3/3/4/6 7 10	Brown, moist, loose, fine to coarse SAND, little gravel, trace silt, (FIII).	GM33999 A-1-50, 5M WC=3.5%	10 10 21.6/14 10.00 11.80 18/34/42/50/3/6.1 76 113 36	Brown, wet, very dense, Gravelly fine to coarse SAND, trace silt, (FIII); GTS blow for 0.8 ft.	GM33700 A-1-50, 5M WC=13.9%	15 10 60-60 11.80 16.80 ROD = 62%	100' of Bedrock at Elev. 507.6 ft. R11 Bedrock: Intrusive carboniferous GRANITE. R11 Core Times (min/sec) 11.8-12.8 ft (11:48) 12.8-13.8 ft (13:22) 13.8-14.8 ft (13:14) 14.8-15.8 ft (13:14) 15.8-16.8 ft (12:28) 100% Recovery		20 10 60-60 11.80 16.80 ROD = 62%	Bottom of Exploration at 16.8 feet below ground surface.	
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Maine Department of Transportation Soil/Bore Exploration Log US CUSTOMARY UNITS		Project: Route 118 Large Culvert Location: Waterford, Maine		Boring No.: HB-WAT-102										
Drilling Contractor: MainDOT	Elevation (ft.): 521.9	Auger ID/OD: 5" Dia.	WIN: 24617.00											
Operator: Bagger	Disturb: NAVD88	Sampler: N/A												
Logged By: B. Willard	Rig Type: CME 45C	Sampler Wt./Fall: N/A												
Date Start/Finish: 9/23/2021 11:00-11:30	Drilling Method: Solid Stem Auger	Core Barrel: N/A												
Boring Location: 21+27.5, 13.9 ft ft.	Casing ID/OD: N/A	Water Level: None Observed												
<table border="1"> <thead> <tr> <th>Sample Information</th> <th>Visual Description and Remarks</th> <th>Laboratory Testing Results</th> </tr> </thead> <tbody> <tr> <td>5 20 24/19 5.00 7.00 3/3/4/6 7 10</td> <td>Soils similar to HB-WAT-101.</td> <td></td> </tr> <tr> <td>15 10 60-60 11.80 16.80 ROD = 62%</td> <td>Bottom of Exploration at 13.8 feet below ground surface. NO LOG</td> <td></td> </tr> </tbody> </table>						Sample Information	Visual Description and Remarks	Laboratory Testing Results	5 20 24/19 5.00 7.00 3/3/4/6 7 10	Soils similar to HB-WAT-101.		15 10 60-60 11.80 16.80 ROD = 62%	Bottom of Exploration at 13.8 feet below ground surface. NO LOG	
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STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2461700  
WIN  
24617.00  
HIGHWAY PLANS

STATE OF MAINE  
Cody A. Russell  
15866  
7/15/2022  
DATE

Cody A. Russell  
SIGNATURE  
15866  
P.E. NUMBER  
7/15/2022  
DATE

ERNE MARTIN  
BY  
M.PHILBRICK  
DESIGN-REVIEWED  
C. RUSSELL  
DESIGN-DETAILED  
T. WHITE  
DESIGN-DETAILED  
REVISIONS 1  
REVISIONS 2  
REVISIONS 3  
REVISIONS 4  
FIELD CHANGES

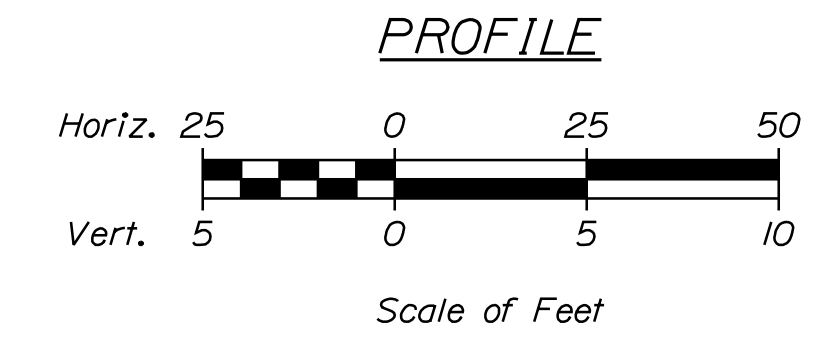
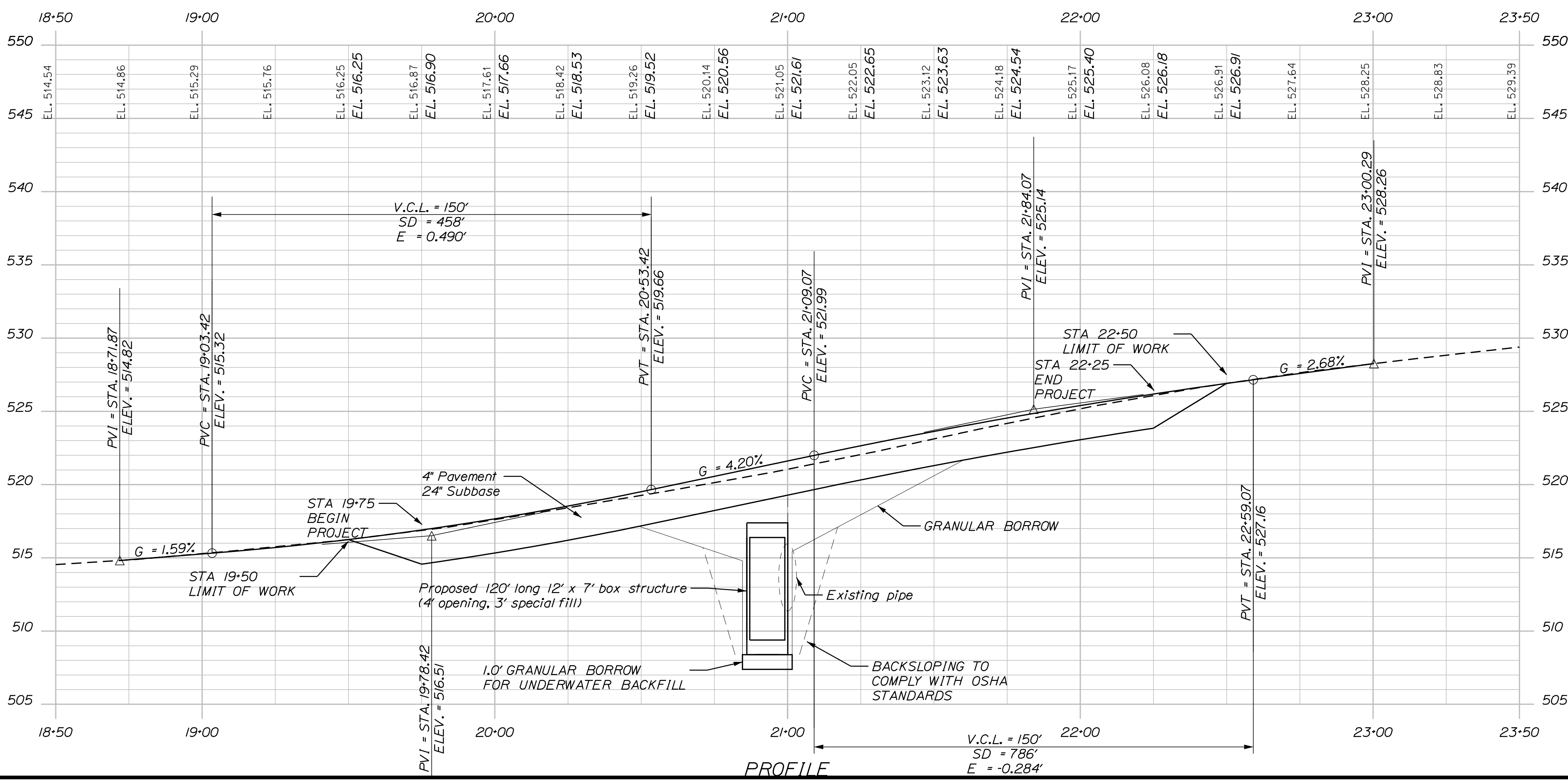
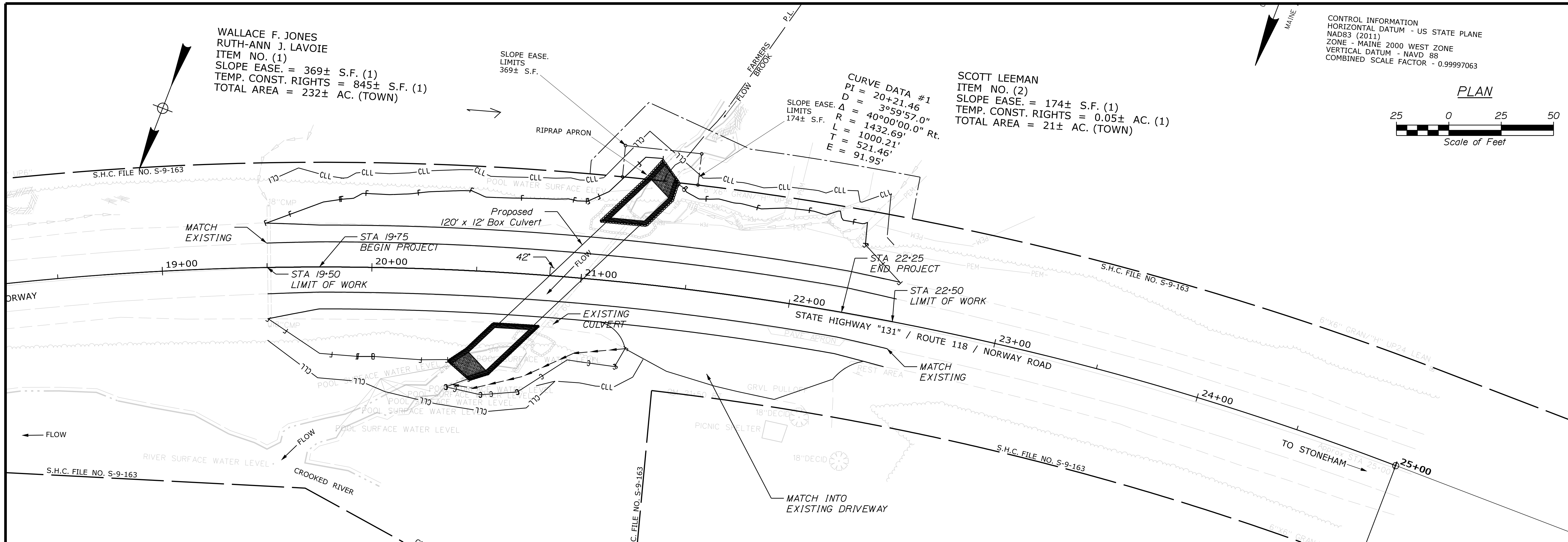
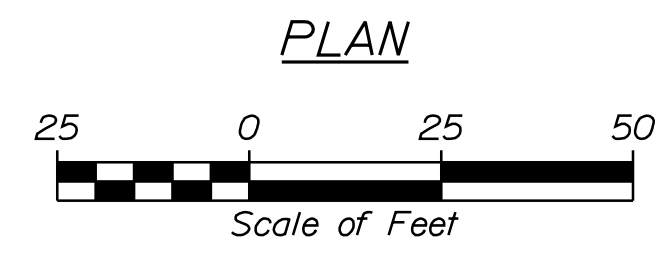
WATERFORD  
ROUTE 118  
BORING LOCATION PLAN &  
INTERPRETIVE SUBSURFACE PROFILE  
WITH BORING LOGS

SHEET NUMBER  
7  
OF 17

WALLACE F. JONES  
RUTH-ANN J. LAVOIE  
ITEM NO. (1)  
SLOPE EASE. = 369± S.F. (1)  
TEMP. CONST. RIGHTS = 845± S.F. (1)  
TOTAL AREA = 232± AC. (TOWN)

SCOTT LEEMAN  
ITEM NO. (2)  
SLOPE EASE. = 174± S.F. (1)  
TEMP. CONST. RIGHTS = 0.05± AC. (1)  
TOTAL AREA = 21± AC. (TOWN)

CONTROL INFORMATION  
HORIZONTAL DATUM - US STATE PLANE  
NAD83 (2011)  
ZONE - MAINE 2000 WEST ZONE  
VERTICAL DATUM - NAVD 88  
COMBINED SCALE FACTOR - 0.99997063

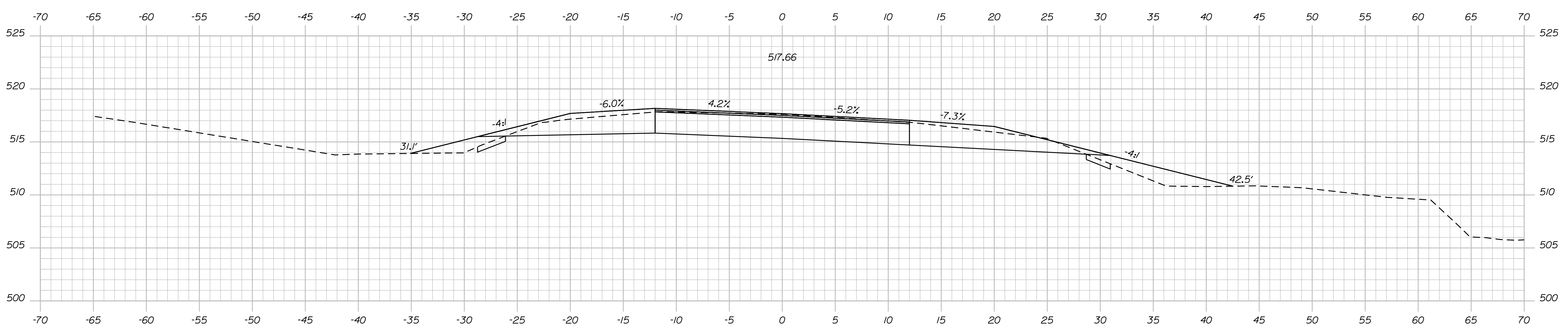
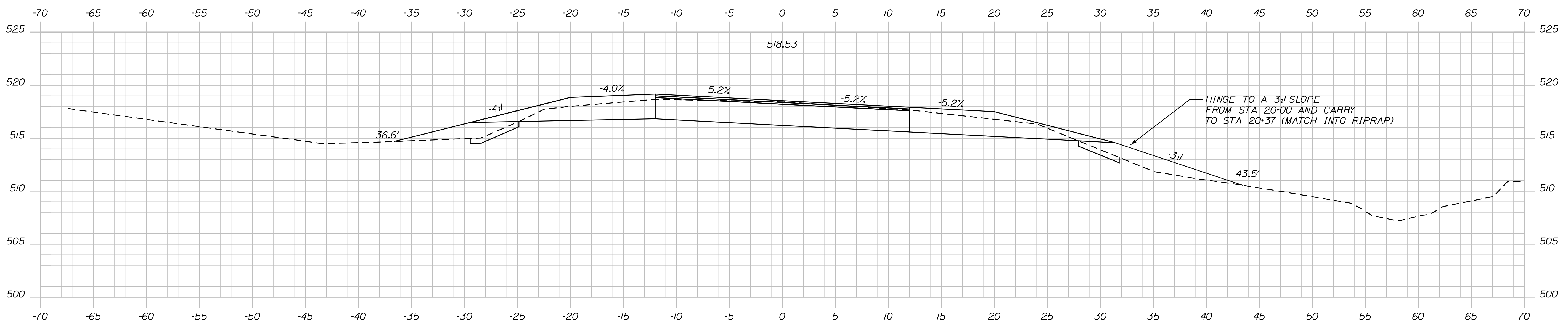


STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2461700	
WATERFORD		OXFORD		WIN	
WATERFORD ROUTE 118		PLAN/PROFILE		BRIDGE NO. 6682	
SHEET NUMBER		8		24617.00	
OF 17				HIGHWAY PLANS	

PROJ. MANAGER	BY	DATE
ERNE MARTIN	M. PHILBRICK	JUNE 2022
DESIGN-DETAILED	T. WHITE	
CHECKED-REVIEWED	C. RUSSEL	
DESIGN-DETAILED		
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE	P.E. NUMBER	DATE





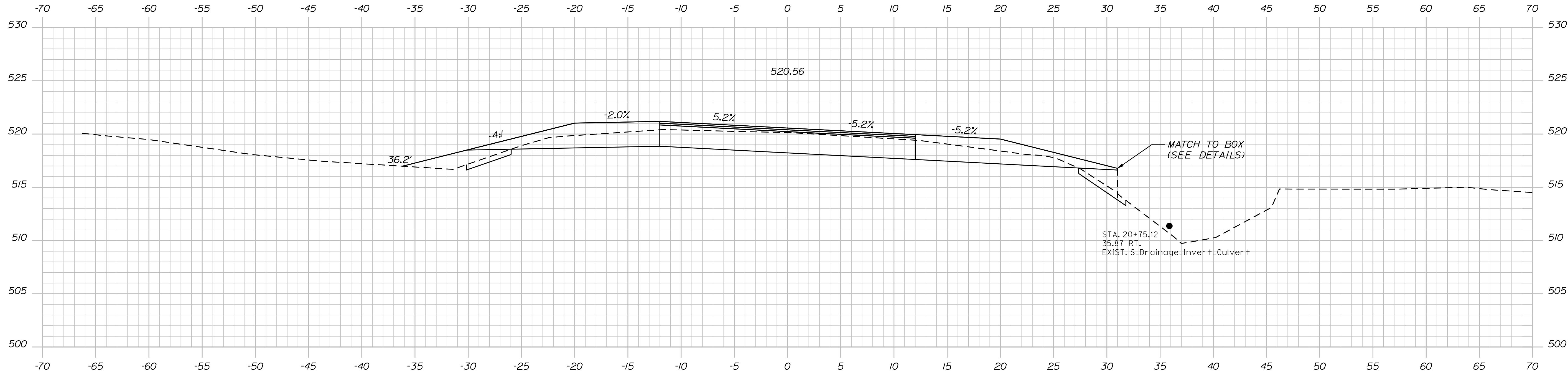
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2461700  
WIN  
24617.00  
HIGHWAY PLANS

DESIGN-DETAILED	BY	DATE
CHECKED-REVIEWED	M. PHILBRICK	JUNE 2022
DESIGN-DETAILED	T. WHITE	
DESIGN-DETAILED	C. RUSSEL	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

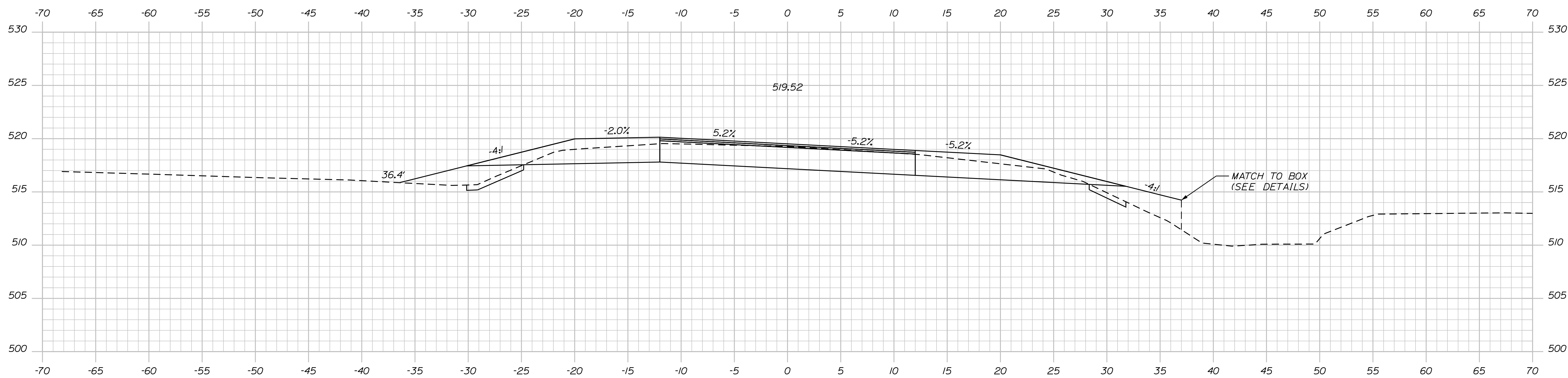
PROJ. MANAGER	ERNE MARTIN
CHECKED-REVIEWED	M. PHILBRICK
DESIGN-DETAILED	C. RUSSEL
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

WATERFORD  
ROUTE 118  
CROSS SECTIONS

SHEET NUMBER  
**10**  
OF 17



20+75.00



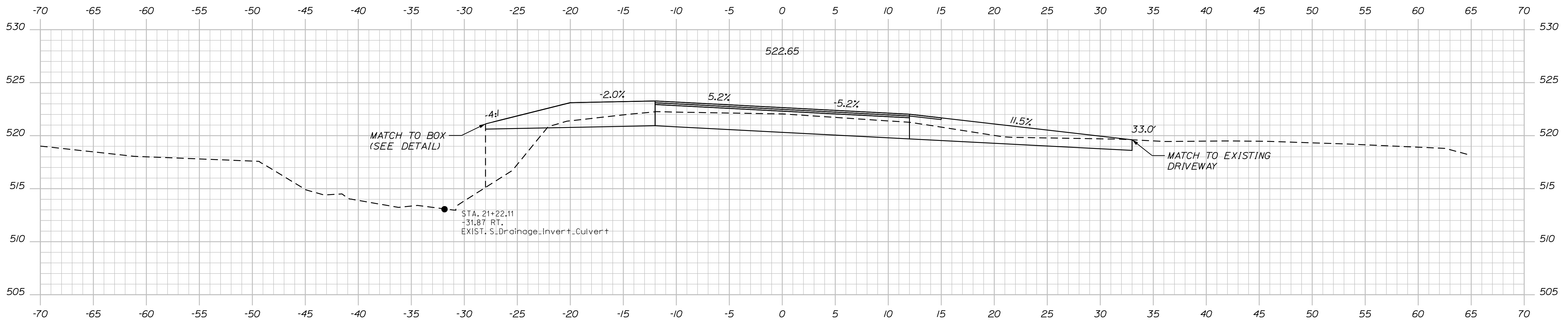
20+50.00

DESIGNED BY	ERNE MARTIN
CHECKED BY	M. PHILBRICK
DESIGNED	C. RUSSEL
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

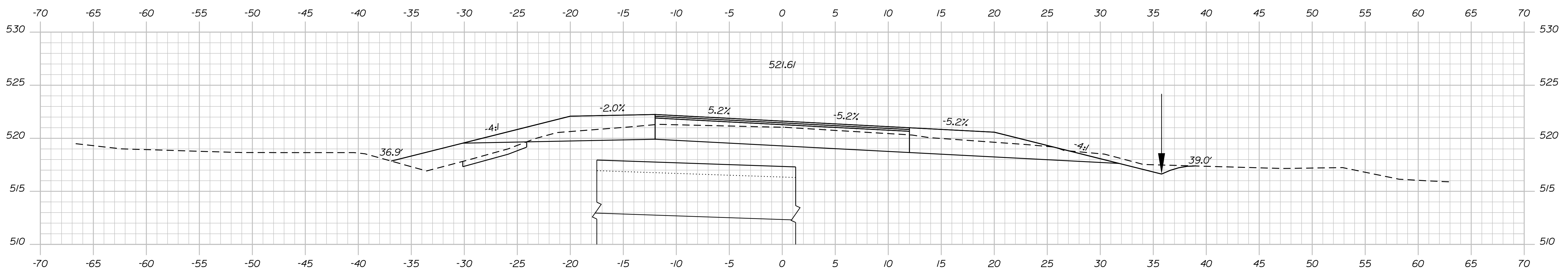
DATE	JUNE 2022
BY	T. WHITE
SIGNATURE	
P.E. NUMBER	
DATE	

WATERFORD  
ROUTE 118  
CROSS SECTIONS

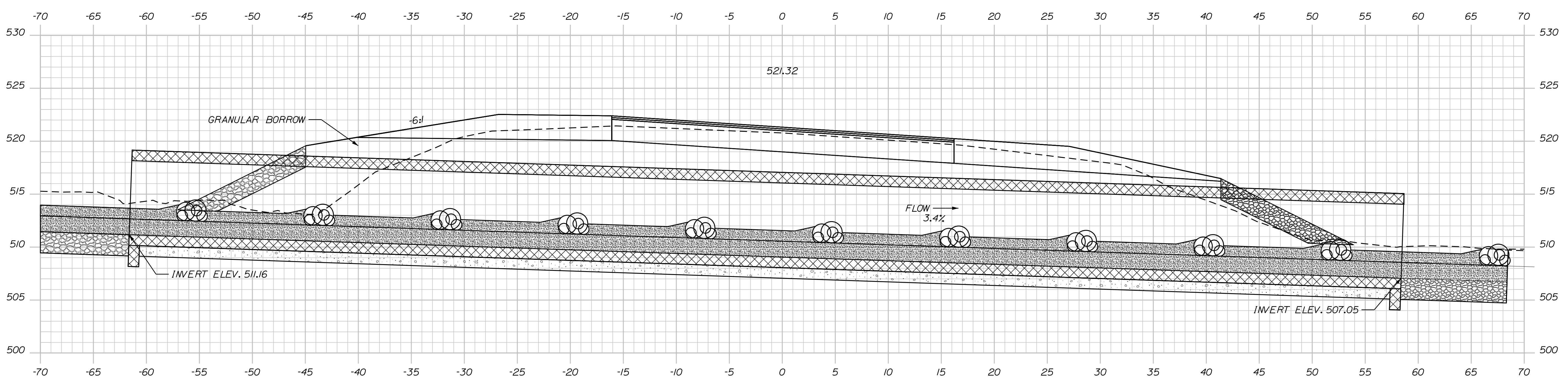
Filename: ... \MSTAO12\_XSECT\_20+93\_004.dgn Division: HIGHWAY Username: Matthew Philbrick Date: 8/4/2022



21+25.00



21+00.00



SKewed 42°  
20+93.07

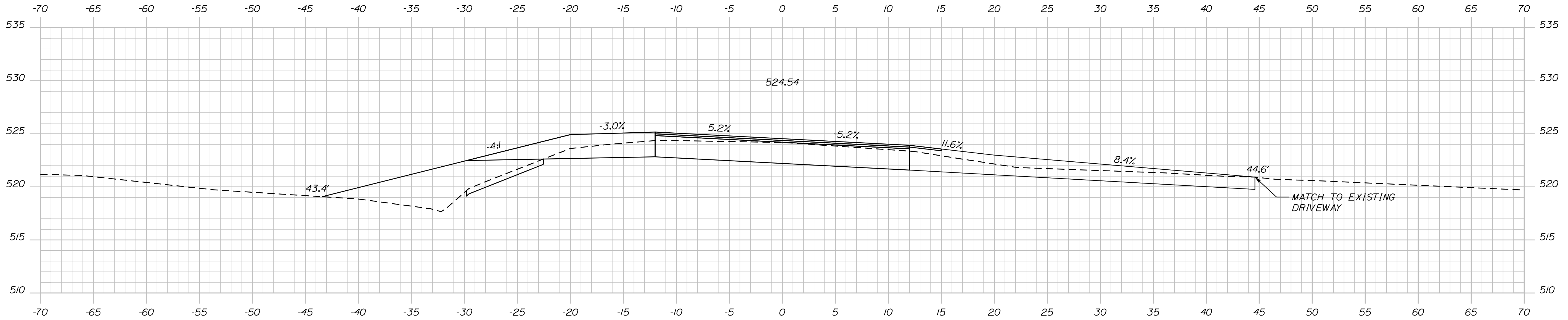
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2461700  
WIN  
24617.00  
HIGHWAY PLANS

DESIGN DETAILED	CHECKED/REVIEWED	DESIGN DETAILED	DESIGN DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
M. PHILBRICK	T. WHITE	C. RUSSEL						

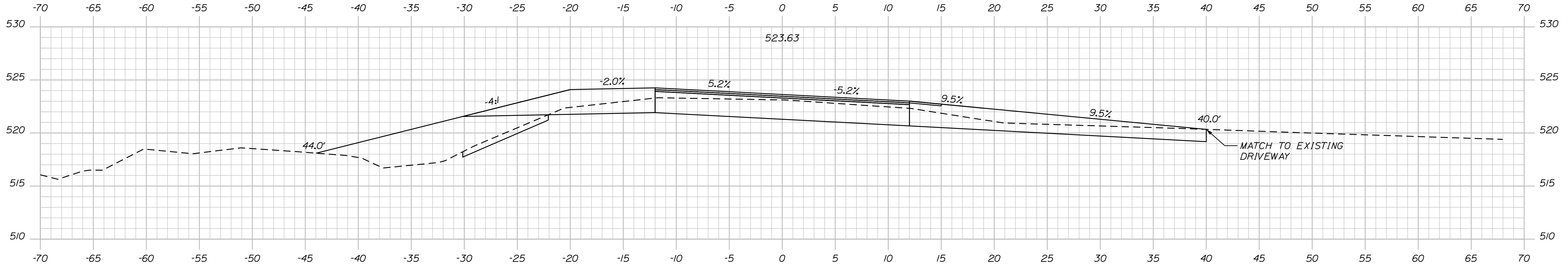
DATE	BY	PROJ. MANAGER	ERNE MARTIN	DATE	SIGNATURE	P.E. NUMBER	DATE
JUNE 2022	M. PHILBRICK	T. WHITE					

WATERFORD  
ROUTE 118  
CROSS SECTIONS

SHEET NUMBER  
**12**  
OF 17



21+75.00



21+50.00

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
2461700  
WIN  
24617.00  
HIGHWAY PLANS

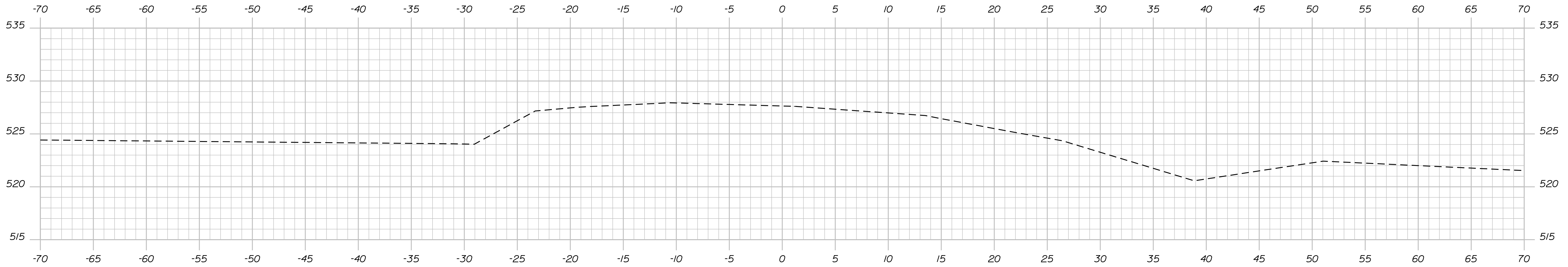
DESIGN-DETAILED	DATE
CHECKED-REVIEWED	JUNE 2022
DESIGN-DETAILED	SIGNATURE
DESIGN-DETAILED	P.E. NUMBER
REVISIONS 1	DATE
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

PROJ. MANAGER	BY
ERNE MARTIN	T. WHITE
DESIGN-DETAILED	
M. PHILBRICK	
DESIGN-DETAILED	
C. RUSSEL	
DESIGN-DETAILED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

WATERFORD  
ROUTE 118  
CROSS SECTIONS

SHEET NUMBER  
**13**  
OF 17





22+75.00

Sta. 22+75.00 to Sta. 22+75.00

WATERFORD  
ROUTE 118

CROSS SECTIONS

SHEET NUMBER

15

OF 17

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

2461700

WIN  
24617.00

HIGHWAY PLANS

PROJ. MANAGER	ERNE MARTIN	BY	DATE
CHECKED-REVIEWED	M. PHILBRICK	T. WHITE	JUNE 2022
DESIGNS DETAILED	C. RUSSEL		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

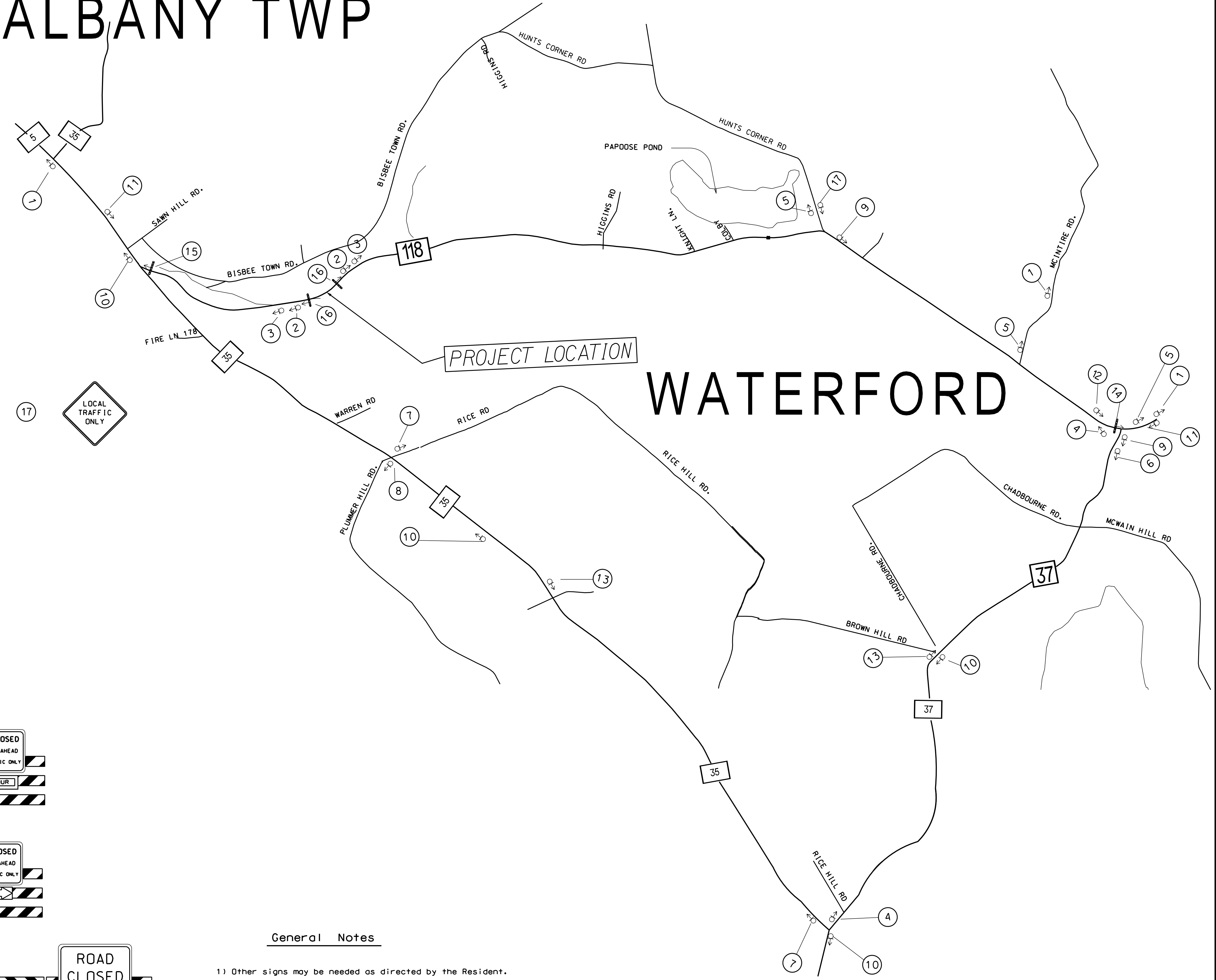
SIGNATURE

P.E. NUMBER

DATE

# ALBANY TWP

# WATERFORD



PROJECT LOCATION

### General Notes

- 1) Other signs may be needed as directed by the Resident.
- 2) Contractor shall cover all conflicting route and directional signs.
- 3) The Contractor is responsible for getting the correct mileage on signs 14 and 15.

NOT TO SCALE

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

- 10
- 11
- 12
- 13
- 14
- 15
- 16

LOCAL TRAFFIC ONLY

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2461700	WIN 024617.00																														
WATERFORD ROUTE 118 DETOUR PLAN	SHEET NUMBER <b>16</b> OF 17																																
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>PROJ. MANAGER</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>ERNE MARTIN</td> <td>M. PHILBRICK</td> <td>JUNE 2022</td> </tr> <tr> <td>CHECKED-REVIEWED</td> <td>T. WHITE</td> <td></td> </tr> <tr> <td>DESIGN-REVIEWED</td> <td>C. RUSSEL</td> <td></td> </tr> <tr> <td>DESIGN-DETAILED</td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 1</td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 2</td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 3</td> <td></td> <td></td> </tr> <tr> <td>REVISIONS 4</td> <td></td> <td></td> </tr> <tr> <td>FIELD CHANGES</td> <td></td> <td></td> </tr> </tbody> </table>	PROJ. MANAGER	BY	DATE	ERNE MARTIN	M. PHILBRICK	JUNE 2022	CHECKED-REVIEWED	T. WHITE		DESIGN-REVIEWED	C. RUSSEL		DESIGN-DETAILED			REVISIONS 1			REVISIONS 2			REVISIONS 3			REVISIONS 4			FIELD CHANGES					
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REVISIONS 1																																	
REVISIONS 2																																	
REVISIONS 3																																	
REVISIONS 4																																	
FIELD CHANGES																																	

Date: March 2020

Username:

Filename:

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

New R/W Along Existing R/W  
 Building \_\_\_\_\_  
 Trees Conifer \_\_\_\_\_  
 Tree Line \_\_\_\_\_  
 Water Edge \_\_\_\_\_  
 Ledge \_\_\_\_\_  
 Fence CHAIN LINK \_\_\_\_\_  
 Sign \_\_\_\_\_

Clearing Limit Line \_\_\_\_\_  
 Bush Line \_\_\_\_\_  
 Rock/Boulder \_\_\_\_\_  
 BARB WIRE \_\_\_\_\_  
 WELL \_\_\_\_\_  
 Deciduous \_\_\_\_\_  
 Flag Pole \_\_\_\_\_  
 STOCKADE \_\_\_\_\_  
 Mailbox \_\_\_\_\_

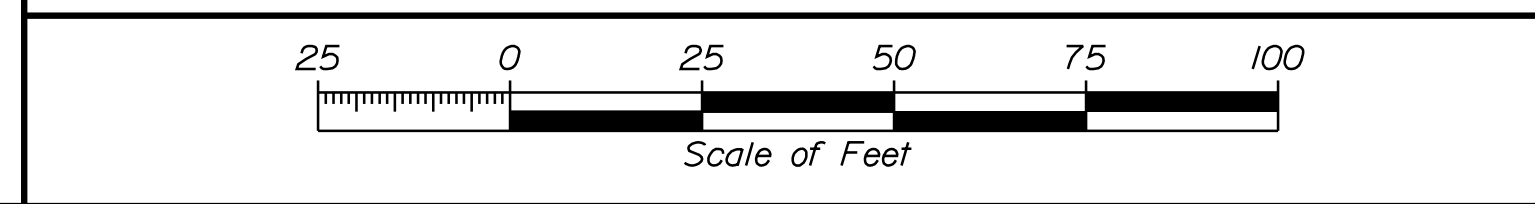
Sanitary Sewer \_\_\_\_\_  
 Telephone Line \_\_\_\_\_  
 Electric Line \_\_\_\_\_  
 Water Line \_\_\_\_\_  
 Underdrain Line \_\_\_\_\_  
 Gas Line \_\_\_\_\_  
 Guardrail \_\_\_\_\_  
 Culvert \_\_\_\_\_

Proposed \_\_\_\_\_  
 Existing \_\_\_\_\_  
 Traveled Way \_\_\_\_\_  
 Ditch \_\_\_\_\_  
 Catch Basin \_\_\_\_\_  
 Manhole \_\_\_\_\_  
 Sewer Manhole \_\_\_\_\_  
 Utility Pole \_\_\_\_\_  
 Fire Hydrant \_\_\_\_\_  
 Curbing \_\_\_\_\_

Cut Line \_\_\_\_\_  
 Stonewall \_\_\_\_\_  
 Baseline \_\_\_\_\_  
 Monument \_\_\_\_\_  
 Iron Rod Found \_\_\_\_\_  
 Replacement Pin Set \_\_\_\_\_

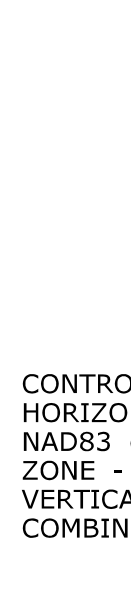
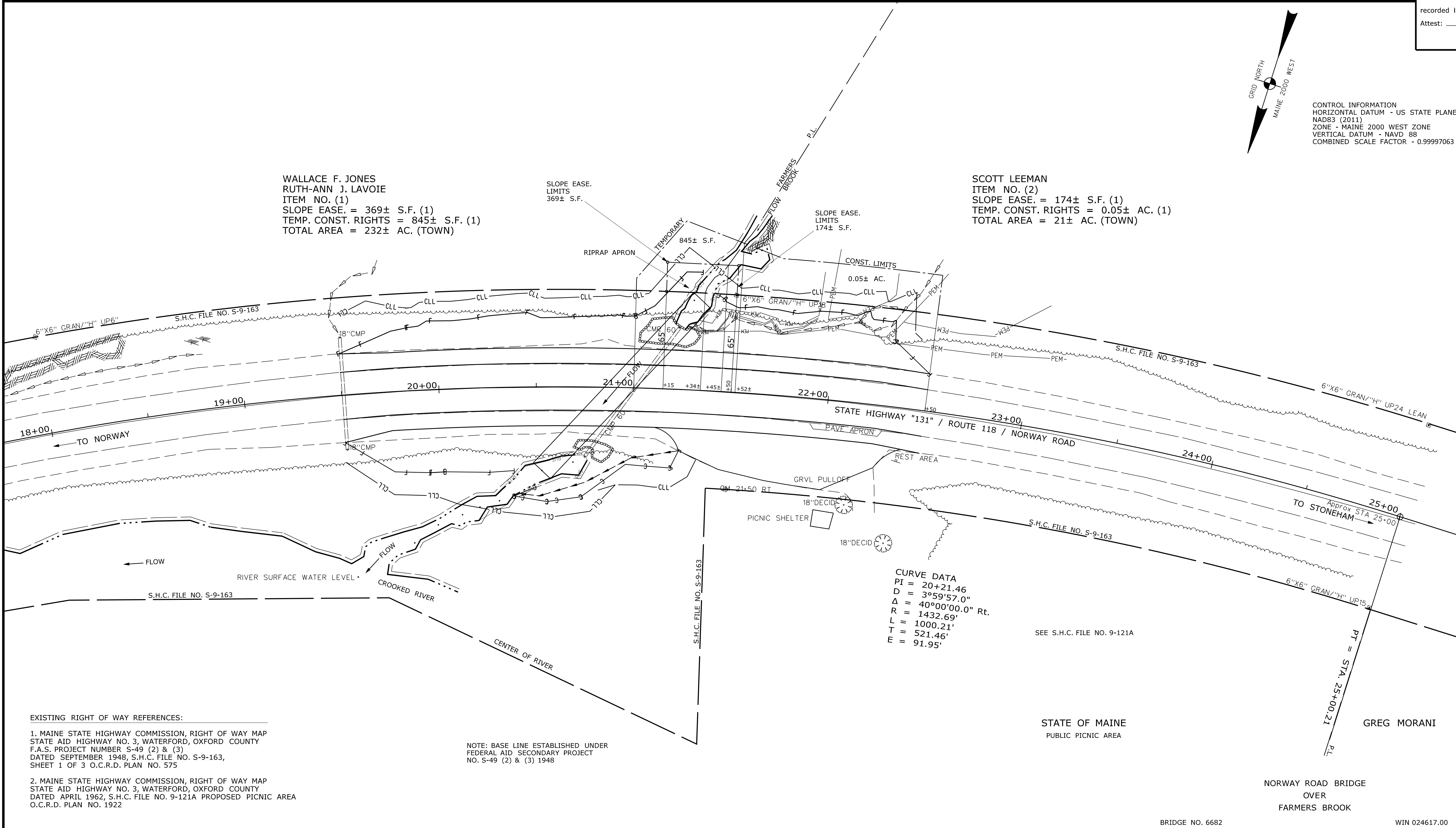
Fill Line \_\_\_\_\_  
 Retaining Wall \_\_\_\_\_  
 Traverse Point \_\_\_\_\_  
 Pipe Found \_\_\_\_\_

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.



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 WEST ZONE  
 VERTICAL DATUM - NAVD 88  
 COMBINED SCALE FACTOR - 0.99997063

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

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	E.M.S.	C.W.K.
FINAL RIGHT OF WAY	C.J.C.	J.H.
AREAS		

CURVE DATA  
 PI = 20+21.46  
 D = 3°59'57.0"  
 Δ = 40°00'00.0" Rt.  
 R = 1432.69'  
 L = 1000.21'  
 T = 521.46'  
 E = 91.95'

EXISTING RIGHT OF WAY REFERENCES:  
 1. MAINE STATE HIGHWAY COMMISSION, RIGHT OF WAY MAP STATE AID HIGHWAY NO. 3, WATERFORD, OXFORD COUNTY F.A.S. PROJECT NUMBER S-49 (2) & (3) DATED SEPTEMBER 1948, S.H.C. FILE NO. S-9-163, SHEET 1 OF 3 O.C.R.D. PLAN NO. 575  
 2. MAINE STATE HIGHWAY COMMISSION, RIGHT OF WAY MAP STATE AID HIGHWAY NO. 3, WATERFORD, OXFORD COUNTY DATED APRIL 1962, S.H.C. FILE NO. 9-121A PROPOSED PICNIC AREA O.C.R.D. PLAN NO. 1922

NOTE: BASE LINE ESTABLISHED UNDER FEDERAL AID SECONDARY PROJECT NO. S-49 (2) & (3) 1948

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

BRUCE A. VAN NOTE  
 COMMISSIONER  
 JOYCE NOEL TAYLOR  
 CHIEF ENGINEER

DATE \_\_\_\_\_

STATE HIGHWAY "131"  
 NORWAY ROAD / ROUTE 118  
 WATERFORD OXFORD COUNTY  
 FEDERAL AID PROJECT NO. 2461700

APRIL 2022  
 SCALE 1" = 25'

RIGHT-OF-WAY MAP  
 SHEET 1 OF 1

D.O.T. FILE NO. 9-423

SHEET NUMBER  
**17**  
 OF 17

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 WATERFORD  
 RIGHT OF WAY MAP

16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460

STATE OF MAINE  
 PUBLIC PICNIC AREA

GREG MORANI

NORWAY ROAD BRIDGE  
 OVER  
 FARMERS BROOK

BRIDGE NO. 6682 WIN 024617.00