

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



## CARROLL PLANTATION

**PENOBSCOT COUNTY**

LINDSEY BROOK BRIDGE

ROUTE 6

BRIDGE NO. 6601

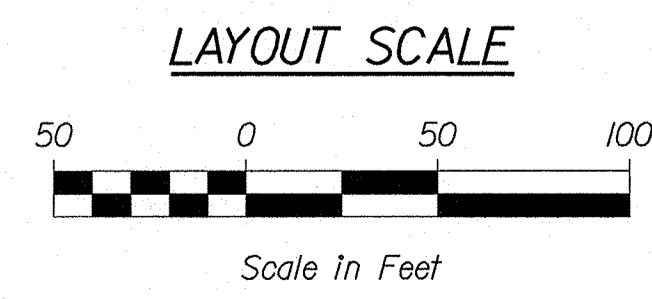
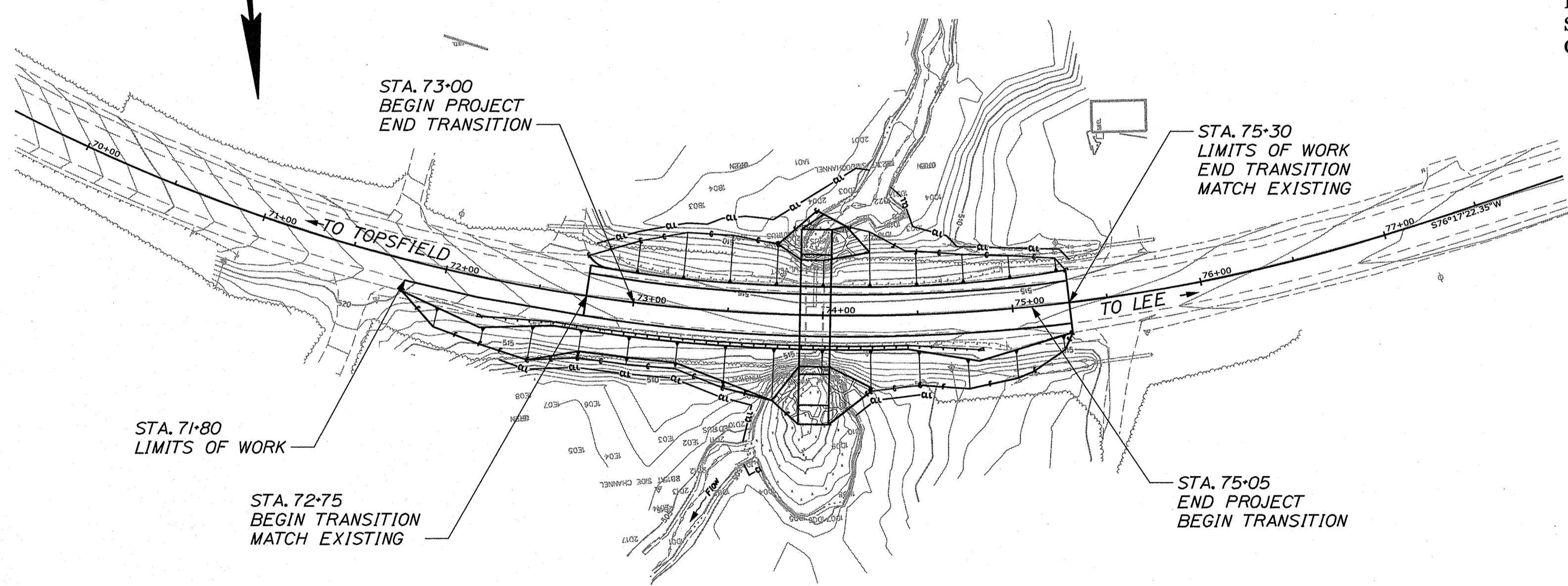
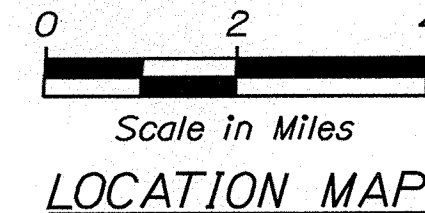
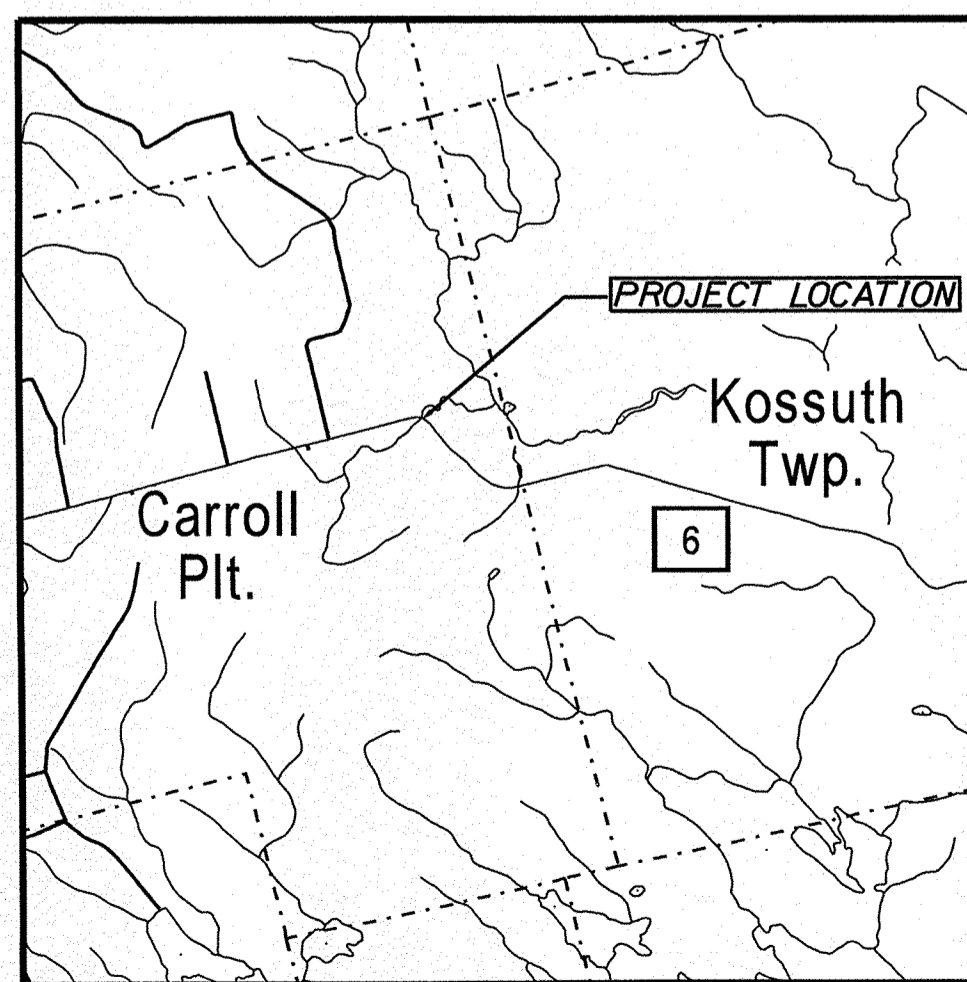
**STATE PROJECT NO. 23581.00**

PROJECT LENGTH : 0.04 MILES

PLAN LEGEND	
Town, County, State	-----
Property Lines	-----
R/W Lines-Existing	-----
R/W Lines-Proposed	-----
Culvert-Existing	-----
Culvert Proposed	-----
Curbing Existing	-----
Curbing Proposed	-----
Type 1	-----
Type 3	-----
Type 5	-----
Outline of Bodies of Water	-----
Exposed Bedrock	-----
Buildings	-----
Trees	-----
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	-----
Probe	P-#. #X
Boring	HB-XXX-###
Pavement Core	PC-#
Test Pit	TP-XXX-###
	#, # = Depth
	X = W (Weathered Rock)
	R (Refusal)
	NR (No Refusal)

INDEX OF SHEETS	
Description	Sheet No.
Title Sheet	1
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Estimated Quantities and General Notes	3
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Boring Location Plan & Interpretive Subsurface	
Profile With Boring Logs	6
General Plan	7
Profile	8
Cross Sections	9-16
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TRAFFIC DATA	
Current (2021) AADT	870
Future (2041) AADT	880
DHV - % of AADT	11%
Design Hour Volume	97
% Heavy Trucks (AADT)	21%
% Heavy Trucks (DHV)	20%
Directional Distribution (DHV)	51%
18-KIP Equivalent P 2.0	262
18-KIP Equivalent P 2.5	250
Design Speed (mph)	50
Functional Class:	Major Collector
Corridor Priority	3

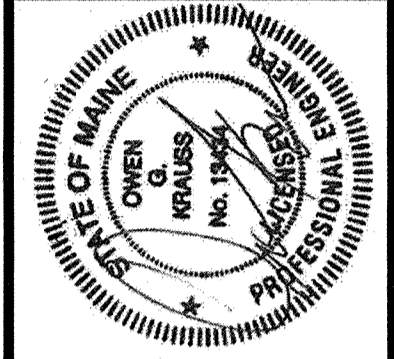


**MAINTENANCE OF TRAFFIC**  
Maintain one 11'-0" wide lane of alternating two - way traffic using traffic signals.

**UTILITIES**  
Eastern Maine Electric Cooperative  
Spectrum Charter Communications  
Consolidated Communications of Maine

<b>PROJECT LOCATION:</b>	LARGE CULVERT (#979262) LOCATED 1.38 MILES NORTH OF THE KOSSUTH TWP TOWN LINE
<b>PROGRAM AREA:</b>	HIGHWAY PROGRAM
<b>SCOPE OF WORK:</b>	LARGE CULVERT REPLACEMENT

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER:		3-25-21
CHIEF ENGINEER:		3-25-21



SIGNATURE	DATE
	MARCH 22, 2021
13434	
P.E. NUMBER	

PROGRAM	DESIGNER	CONSULTANT	CONTRACTOR	PROJECT RESIDENT	PROJECT COMPLETION DATE
HIGHWAY PROGRAM	OWEN KRAUSS	HOYLE, TANNER & ASSOC., INC.			
PROJECT MANAGER					
ROGER SOUCY					

WIN 23581.00 STATE PROJECT NO. 23581.00

CARROLL PLANTATION  
LINDSEY BROOK BRIDGE

TITLE SHEET

SHEET NUMBER	1
OF 17	

Date: 3/22/2021  
Username:   
Division: HIGHWAY  
Filename: ...:\00\HIGHWAY\MSTA\001\_Title.dgn

Date: 3/12/2021

Username:

Division: HIGHWAY

Filename: ... \HIGHWAY\MSTA\002\_Typical.dgn

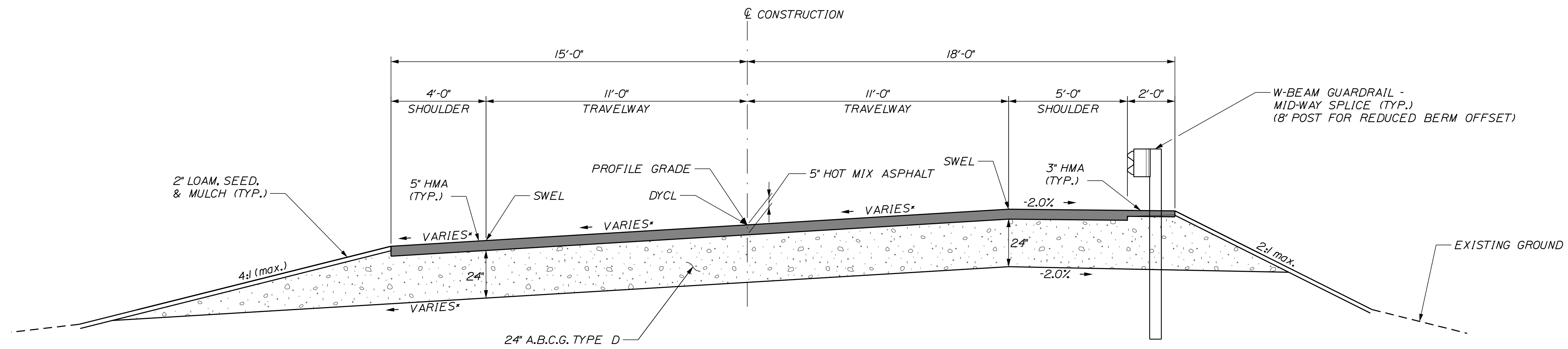


TABLE OF SUPERELEVATION

LEFT		STATION	RIGHT	
SH.	T/W		T/W	SH.
		71+80.00		-3.08%
		72+00.00		-3.52%
		72+25.00		-3.00%
		72+50.00		-3.00%
-4.64%	-7.85%	72+75.00	5.13%	-2.80%
-5.60%	-7.00%	73+00.00	5.00%	-2.00%
-6.60%	-7.00%	73+25.00	5.00%	-2.00%
-7.00%	-7.00%	73+50.00	5.00%	-2.00%
		TO		
-7.00%	-7.00%	74+75.00	5.00%	-2.90%
-7.00%	-7.00%	75+00.00	5.00%	-3.80%
-6.50%	-7.09%	75+25.00	4.60%	-4.70%
-6.40%	-7.09%	75+30.00	4.84%	-4.84%

TYPICAL SECTION WITH GUARDRAIL  
\* SEE TABLE OF SUPERELEVATION

AGGREGATE SUBBASE COURSE GRAVEL TYPE D		
LEFT SHOULDER VARIES CY/100 LF	11 FT. TRAVEL LANES 81.48 CY/100 LF	RIGHT SHOULDER VARIES CY/100 LF

Notes:

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

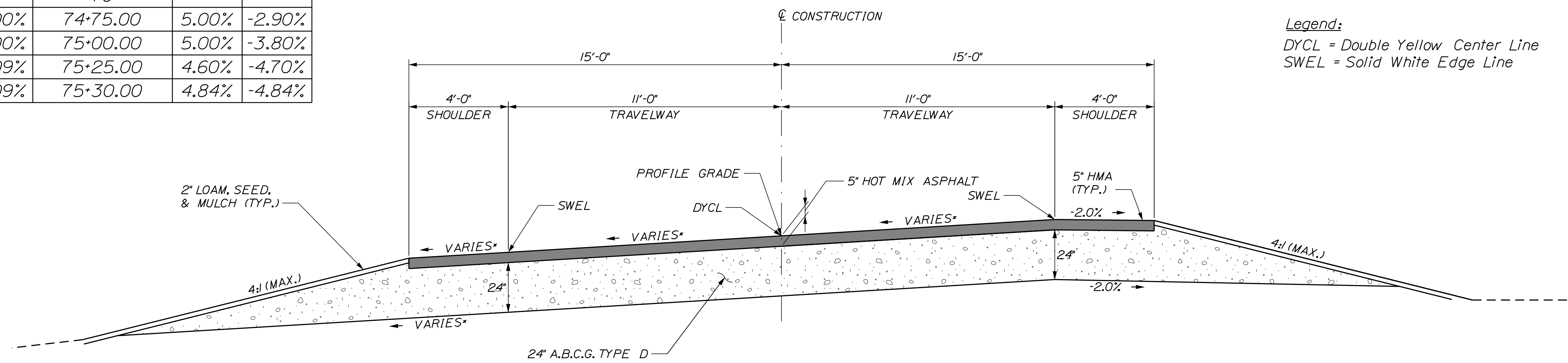
2. When superelevation exceeds the slope of the low side shoulder, the low side shoulder pavement shall have the same cross slope as the travel way.

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

4. The algebraic difference between the shoulder and travelway crossslopes ("Rollover") shall not exceed 8%.

Legend:

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



TYPICAL SECTION WITHOUT GUARDRAIL  
\* SEE TABLE OF SUPERELEVATION

AGGREGATE SUBBASE COURSE GRAVEL TYPE D		
LEFT SHOULDER VARIES CY/100 LF	11 FT. TRAVEL LANES 81.48 CY/100 LF	RIGHT SHOULDER VARIES CY/100 LF

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STATE PROJECT NO. 23581.00  
BRIDGE NO. 6601  
WIN 23581.00  
HIGHWAY PLANS

PROJ. MGR.	DESIGN DET.	CHECKED	DESIGN DET.	DESIGN DET.	REVISIONS	REVISIONS	REVISIONS	REVISIONS	FIELD CHANGES
					1	2	3	4	

CARROLL PLANTATION  
LINDSEY BROOK BRIDGE  
TYPICAL SECTIONS

SHEET NUMBER

2

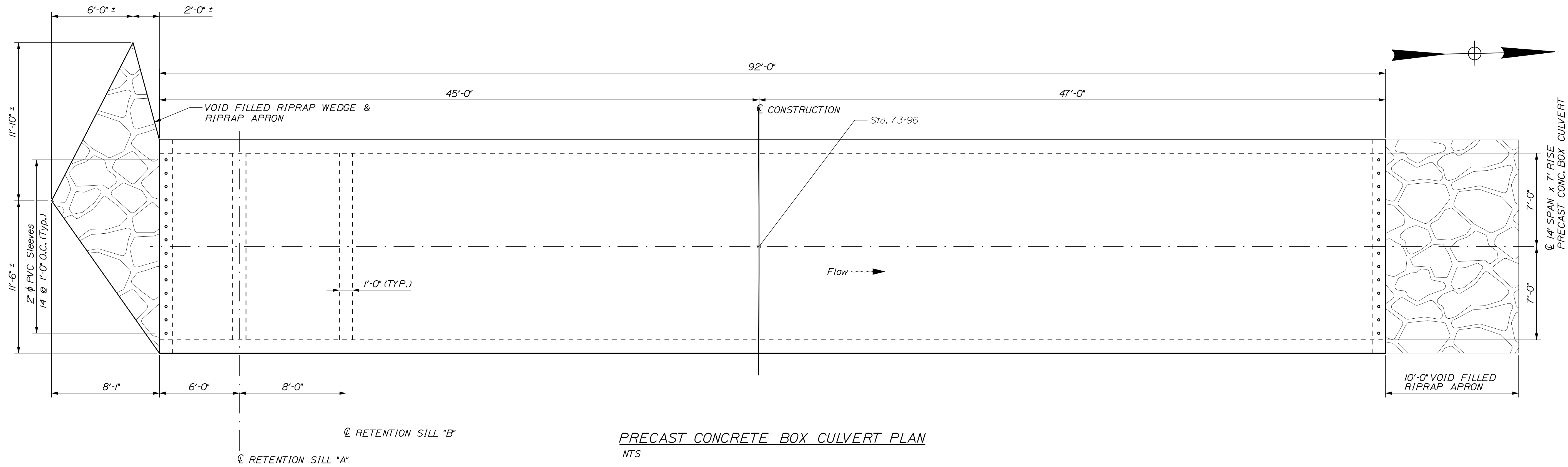
OF 17

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.20	COMMON EXCAVATION	1200	CY
203.24	COMMON BORROW	40	CY
203.25	GRANULAR BORROW	700	CY
203.33	SPECIAL FILL	20	CY
304.10	AGGR SUBB COURSE - GRAVEL	920	CY
403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	95	T
403.213	HOT MIX ASPHALT 12.5 MM BASE	205	T
409.15	BITUMINOUS TACK COAT - APPLIED	62	G
508.13	SHEET WATERPROOFING MEMBRANE (126 SY)	1	LS
511.07	COFFERDAM: UPSTREAM	1	LS
511.07	COFFERDAM: DOWNSTREAM	1	LS
534.7101	PRECAST CONCRETE BOX CULVERT - STATE SUP (170 CY)	1	LS
606.1301	31" W-BEAM GUARDRAIL, MIDWAY-SPLICE - SINGLE FACED	187.5	LF
606.1305	31" W-BEAM GR, MD-WY SPLC FLARED TERM	2	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	4	EA
606.363	GUARDRAIL REMOVE AND DISPOSE	460	LF
610.08	PLAIN RIPRAP	170	CY
613.319	EROSION CONTROL BLANKET	170	SY
615.07	LOAM	70	CY
618.14	SEEDING METHOD NUMBER 2	11	UN
619.12	MULCH	11	UN
620.58	EROSION CONTROL GEOTEXTILE	290	SY
627.733	4" WHITE OR YELLOW PAINTED PAVE MARK LINE	860	LF
629.05	HAND LABOR, STRAIGHT TIME	10	HR
631.12	ALL PURPOSE EXCAVATOR (INC OPERATOR)	20	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	20	HR
639.19	FIELD OFFICE TYPE B	1	EA
643.72	TEMPORARY TRAFFIC SIGNAL	1	LS
652.33	DRUM	25	EA
652.34	CONE	25	EA
652.35	CONSTRUCTION SIGNS	200	SF
652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	60	CD
652.38	FLAGGER	40	HR
652.61	STAGE CONSTRUCTION AND TRAFFIC CONTROL	1	LS
656.75	TEMP SOIL EROSION & WATER POLLUTION CTRL	1	LS
659.10	MOBILIZATION	1	LS

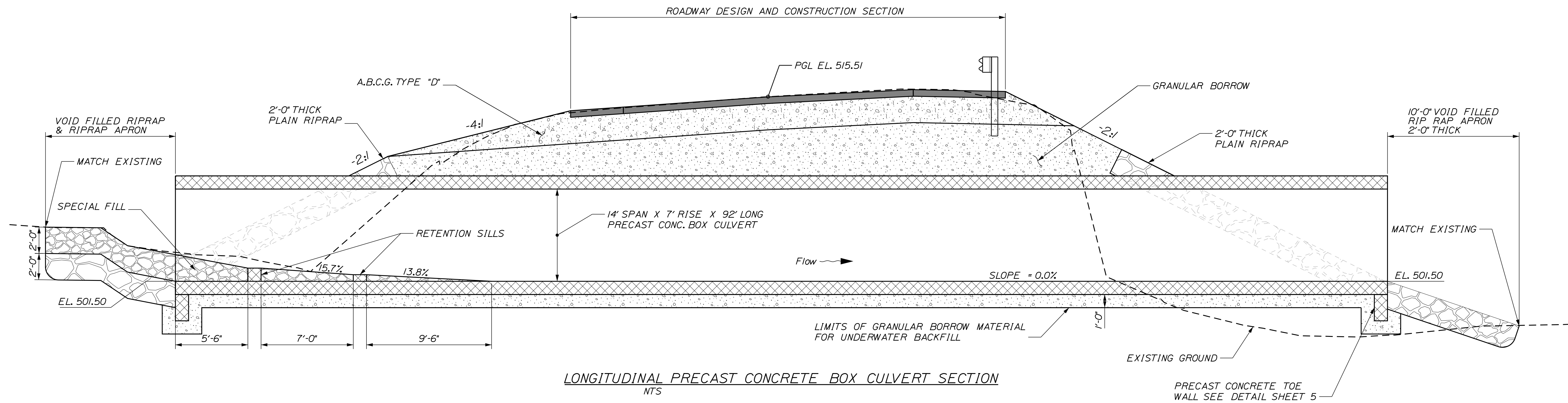
**GENERAL NOTES**

- PAVEMENT THICKNESSES SHOWN ON THE TYPICAL SECTIONS ARE INTENDED TO BE NOMINAL.
- 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.
- ALL CLEARING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AS INDICATED ON THE PLANS AND APPROVED BY THE RESIDENT.
- 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.
- 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.
- 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.
- 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.
- 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 THE STANDARD SPECIFICATIONS ITEM 703.19, GRANULAR BORROW.
- CROSS SLOPES FOR NORMAL AND SUPERELEVATED SECTIONS WILL BE STRAIGHT UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
- NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.
- GUARDRAIL END TREATMENTS SHALL BE INSTALLED CONCURRENTLY WITH THE PLACEMENT OF EACH SECTION OF BEAM GUARDRAIL.
- ALL EXISTING GUARDRAIL SHALL BE REMOVED AND WILL BECOME THE PROPERTY OF THE CONTRACTOR. REMOVAL AND DISPOSAL SHALL BE CONSIDERED INCIDENTAL TO THE GUARDRAIL ITEMS.
- TWO REFLECTORIZED FLEXIBLE GUARDRAIL MARKERS (STANDARD SPECIFICATIONS ITEM 606.353, REFLECTORIZED FLEXIBLE GUARDRAIL MARKER) WILL BE INSTALLED AT EACH GUARDRAIL END.
- 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.
- LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES IN LAWN AREAS AND 2 INCHES IN ALL OTHER AREAS UNLESS OTHERWISE NOTED OR DIRECTED.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING OPERATIONAL BUSINESS DIRECTIONAL SIGNS (OBDS) TO ENSURE THAT THEY ARE VISIBLE TO THE TRAVELING PUBLIC. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 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.
- 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.
- 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.
- THE PROJECT GEOTECHNICAL REPORT TITLED "GEOTECHNICAL DESIGN REPORT FOR THE CONSTRUCTION OF LINDSEY BROOK BRIDGE", SOILS REPORT 2021-09, FEBRUARY 26, 2021 CAN BE ACCESSED AT THE MAINEDOT WEBSITE <http://www.maine.gov/mdot/contractors>
- 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 PRESENT FACTUAL AND INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUBSURFACE CONDITIONS BETWEEN BORING LOCATIONS.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
STATE PROJECT NO. 23581.00		BRIDGE NO. 8601	
WIN		23581.00	
HIGHWAY PLANS			
PROJ. MANAGER	R. SOUCY	BY	DATE
DESIGN-DETAILED	O. KRALISS	B. NICHOLS	OCT 2020
CHECKED-REVIEWED	O. KRALISS	B. NICHOLS	OCT 2020
DESIGNS DET AILED 1	K. BROWN		
DESIGNS DET AILED 2			
DESIGNS DET AILED 3			
DESIGNS DET AILED 4			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
CARROLL PLANTATION ROUTE 6 ESTIMATED QUANTITIES AND GENERAL NOTES			
SHEET NUMBER			
3			
OF 17			



PRECAST CONCRETE BOX CULVERT PLAN  
NTS



LONGITUDINAL PRECAST CONCRETE BOX CULVERT SECTION  
NTS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	R. SOURCE	BY	DATE
DESIGN DETAILED	O. KRALUSS	B. NICHOLS	OCT 2020
CHECKED/REVIEWED			OCT 2020
DESIGN DETAILED	K. BROWN		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CARROLL PLANTATION  
LINDSEY BROOK BRIDGE

SPECIAL DETAILS

SHEET NUMBER

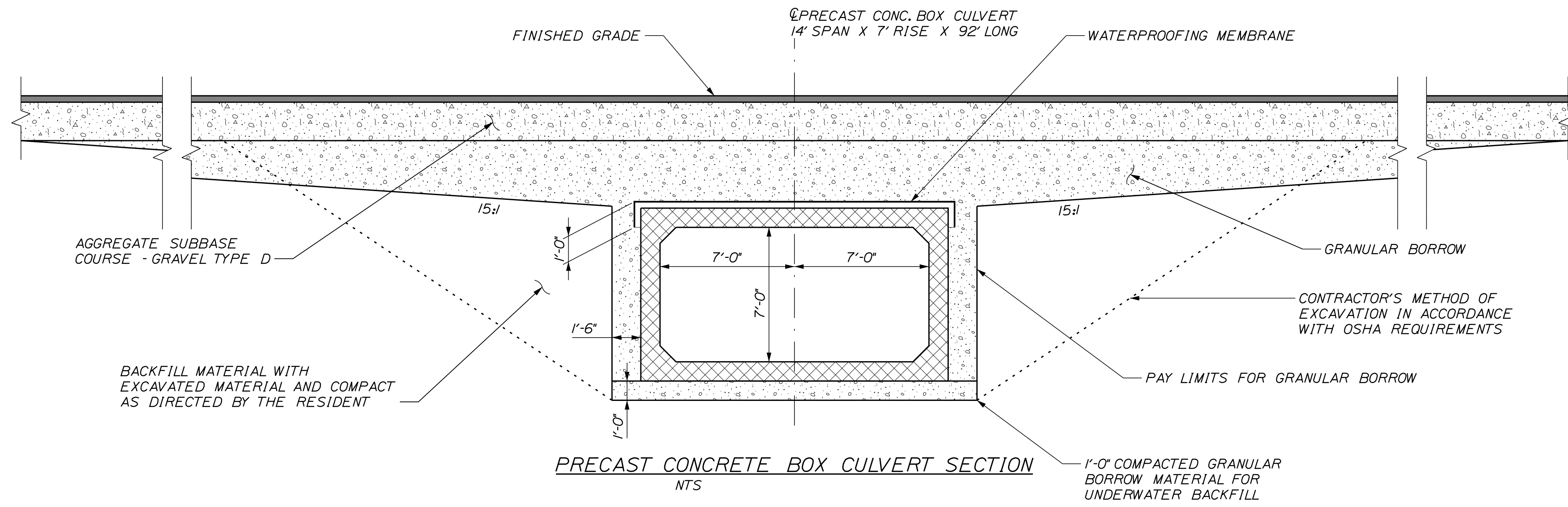
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OF 17

Date: 3/12/2021

Username:

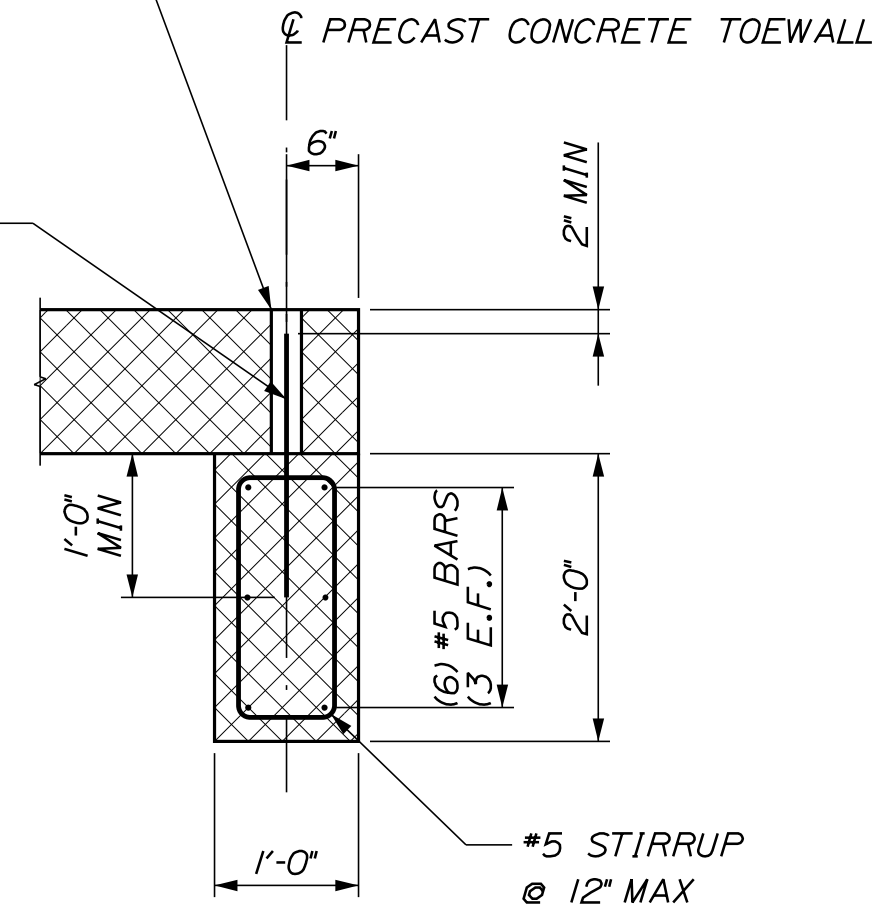
Filename: ... \00\HIGHWAY\MSTA\005\_Box\_2.dgn Division: HIGHWAY



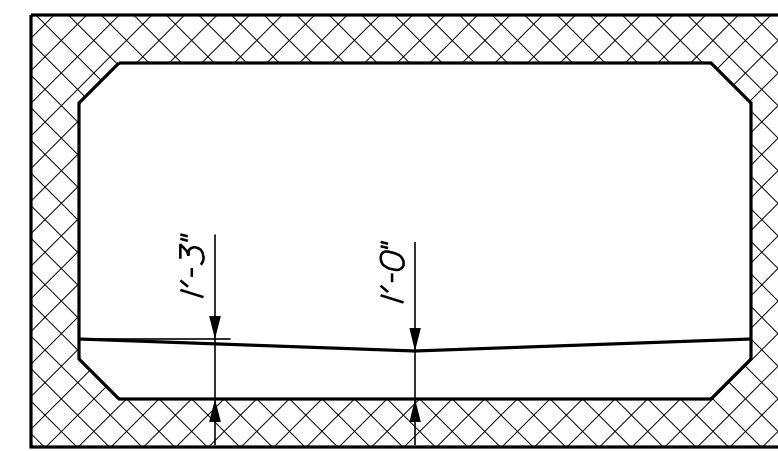
**PRECAST CONCRETE BOX CULVERT SECTION**  
NTS

2 1/2" SLEEVE 12" O.C. W/  
CEMENTITIOUS GROUT FROM MAINE DOT  
PREQUALIFIED PRODUCTS LIST

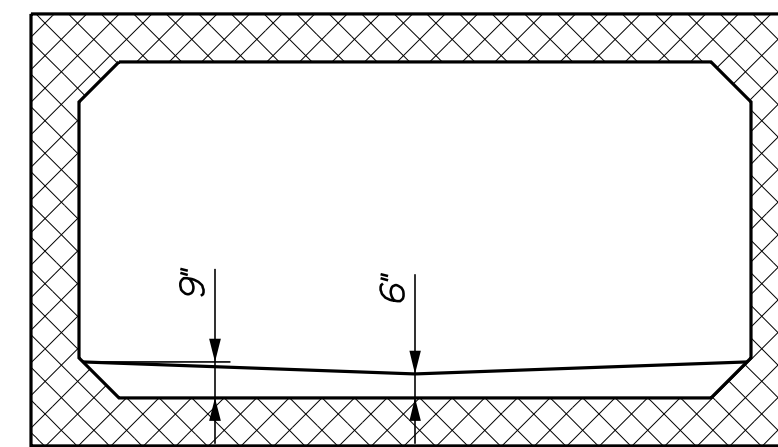
#8 BAR  
FIELD DRILLED INTO  
TOE WALL AND GROUTED



**PRECAST CONCRETE TOEWALL DETAIL**



**RETENTION SILL 'A'**  
NTS



**RETENTION SILL 'B'**  
NTS

**PRECAST CONCRETE BOX CULVERT NOTES:**

1. THE PRECAST UNITS SHALL BE DESIGNED TO CARRY CONSTRUCTION LOADINGS WITH A MINIMUM FILL COVER OF 18 INCHES OVER THE TOP OF THE UNITS.
2. THE PRECAST CONCRETE BOX CULVERT SHALL BE BEDDED ON A 1-FOOT LAYER OF COMPACTED GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL.
3. CONSTRUCTION, HANDLING AND ASSEMBLY OF THE PRECAST UNIT SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 534 AND THE MANUFACTURER'S SPECIFICATIONS AS APPLICABLE.
4. INSTALL STANDARD MEMBRANE WATERPROOFING OVER THE TOP AND TO 12 INCHES DOWN THE EXTERIOR SIDES OF THE PRECAST UNITS.
5. COFFERDAMS ARE TO BE PLACED AT BOTH THE DOWNSTREAM AND UPSTREAM END OF THE PRECAST CONCRETE BOX CULVERT IN THE DRY.
6. RIPRAP WILL BE USED TO INSLOPE AROUND THE CULVERT ENDS AT BOTH THE INLET AND OUTLET. SEE PLAN AND PROFILE FOR LOCATIONS

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

2358110

BRIDGE NO. 8601

WIN

23581.10

HIGHWAY PLANS

PROJ. MANAGER	R. SOURCE	BY	DATE
DESIGN DETAILED	O. KRALUS	B. NICHOLS	OCT 2020
CHECKED/REVIEWED			OCT 2020
DESIGN DETAILED	K. BROWN		
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CARROLL PLANTATION  
LINDSEY BROOK BRIDGE

SPECIAL DETAILS

SHEET NUMBER

5

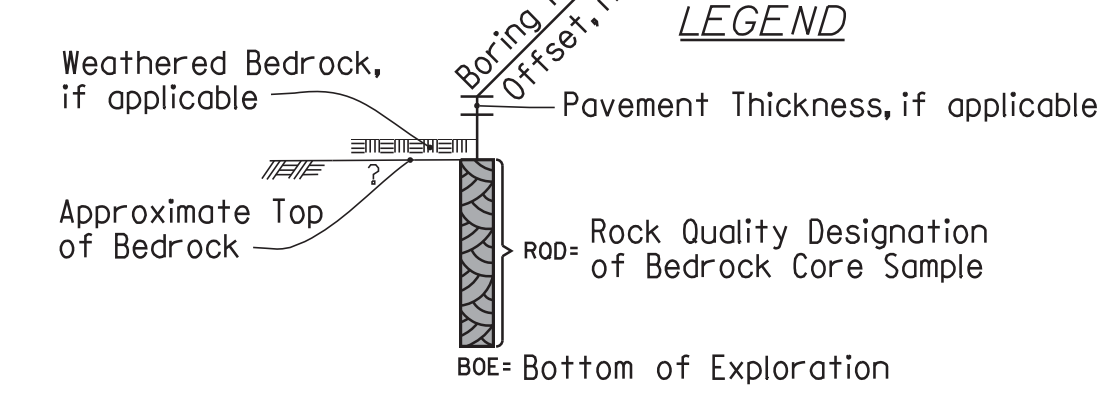
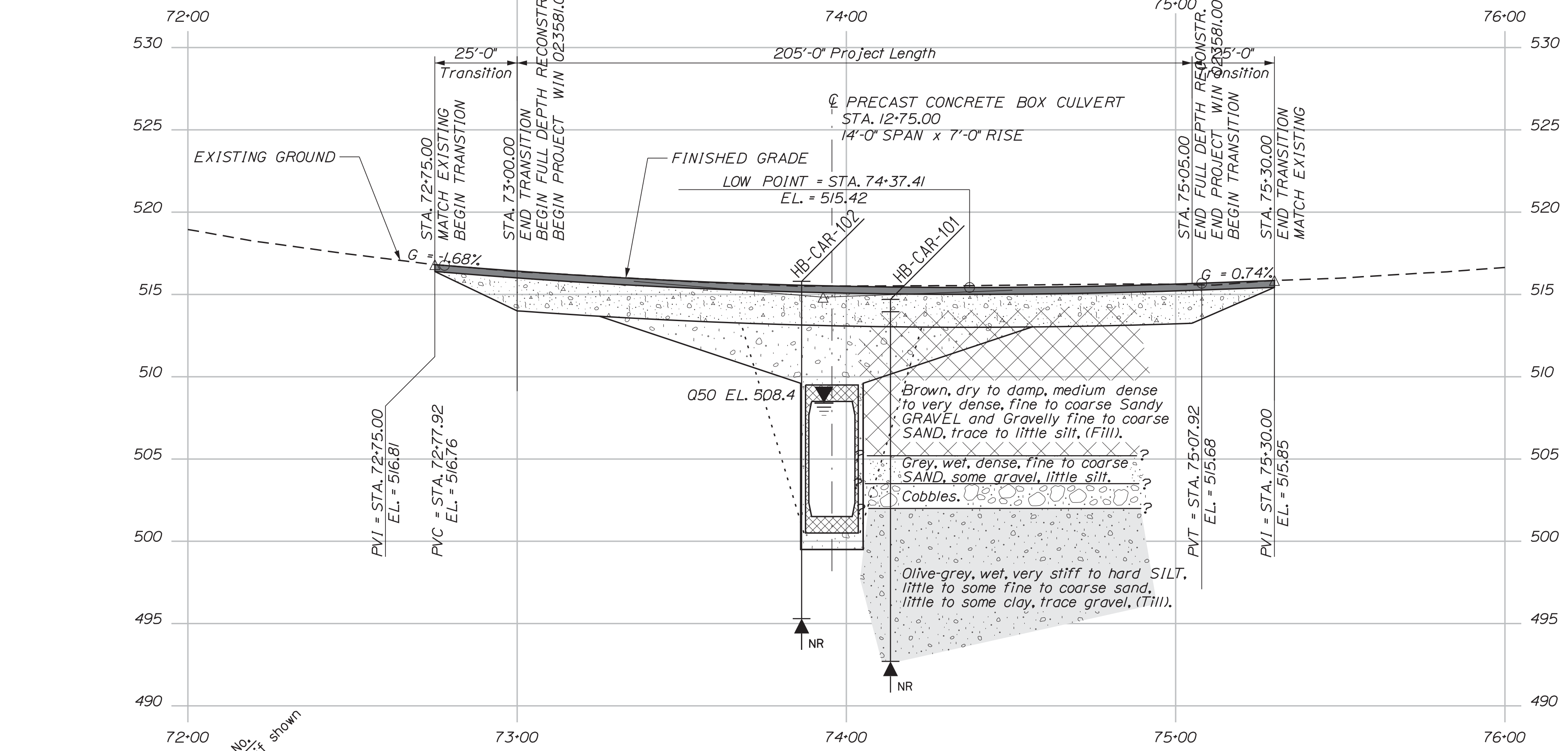
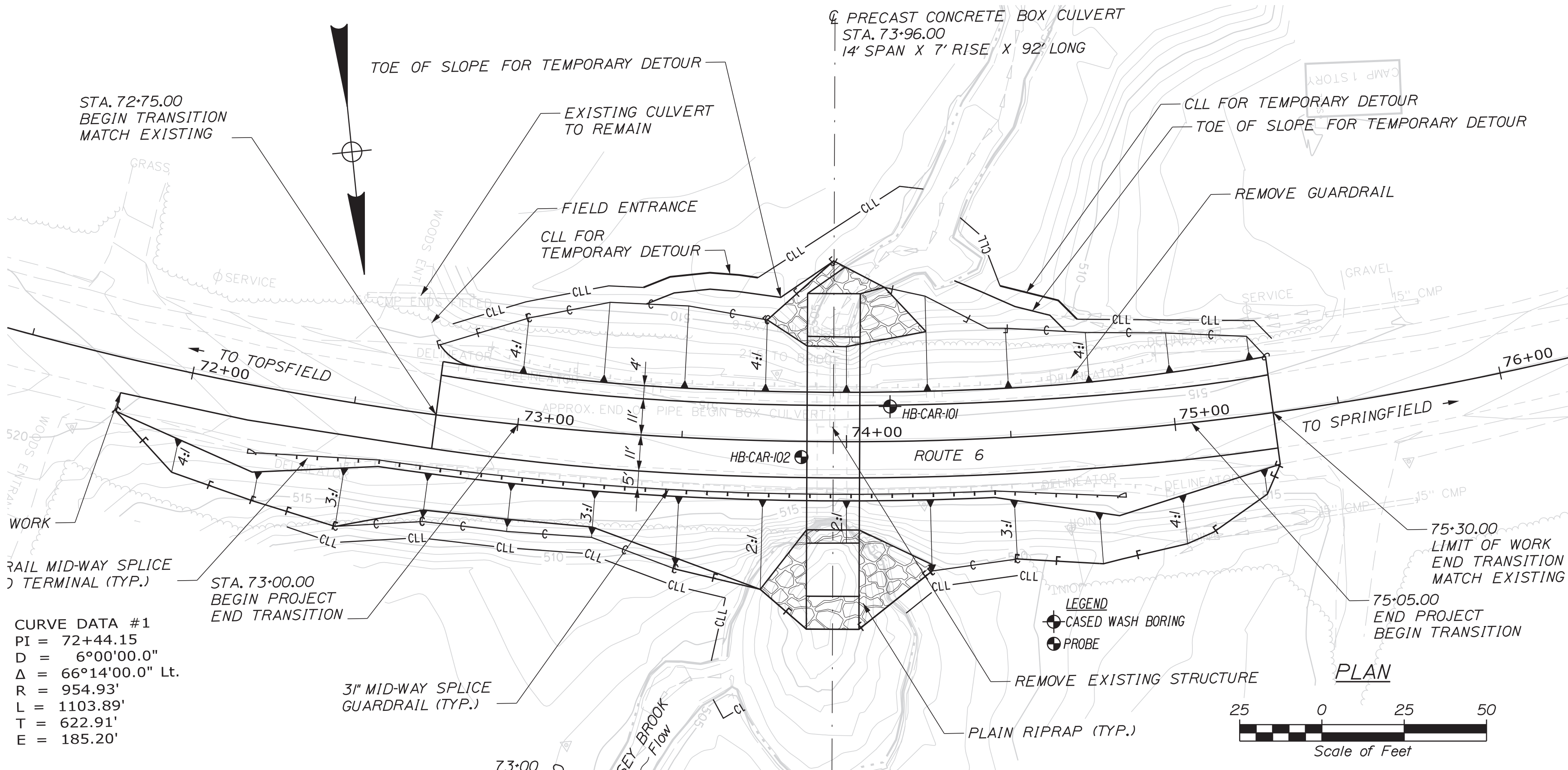
OF 17

Date: 2/26/2021

Username: Cody A. Russell

Division: GEOTECH

Filename: ... \MSTA002\_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/Rock Exploration Log US CUSTOMER UNITS		Project: Large Culvert Replacement on Route 6 Location: Carroll Plantation, Maine		Boring No.: HB-CAR-101 WIN: 23581.00																																																																
Drilling Contractor: MainDOT	Elevation (ft.): 514.7	Auger ID/OD: 5" Solid Stem	Operator: Doggett/Nilies	Start Date: N/A	Sampler: Standard Split Spoon																																																															
Logged By: B. W. Fisher	Rig Type: CME 45C	Home: WT, Fall 11	Date Start/Finish: 9/10/2018 09:00-12:30	Drilling Method: Cased Wash Boring	Cone Barrels: N/A																																																															
Boring Location: 74+13.4, 10.6 ft Lt.	Coring ID/OD: NW-3"	Water Level: N/A	Home Efficiency Factors: 0.928	Home Type: Automatic	Rope & Cable: 3"																																																															
<table border="1"> <thead> <tr> <th>Sample No.</th> <th>Rev./Spec. (ft.)</th> <th>Sample Depth (ft.)</th> <th>Blow (1/8" in. Strain) (blows/ft)</th> <th>Penetration (lb/ft)</th> <th>Moisture (%)</th> <th>Grain Size (mm)</th> <th>Visual Description and Remarks</th> <th>Laboratory Testing Results (ASTM) and Unified Class</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>24/16</td> <td>1.50 - 3.50</td> <td>10/11/12/12</td> <td>29</td> <td>45</td> <td>534</td> <td>Brown, dry, very dense, fine to coarse SANDY GRAVEL, trace silt, (FILL).</td> <td>GH29624 A=4, CL MC=15.35</td> </tr> <tr> <td>20</td> <td>24/13</td> <td>5.00 - 7.00</td> <td>9/6/6/9</td> <td>12</td> <td>19</td> <td>533</td> <td>Brown, damp, medium dense, gravelly fine to coarse SAND, little silt, (FILL).</td> <td>GH29625 A=4, CL MC=15.35</td> </tr> <tr> <td>30</td> <td>14, 6/11</td> <td>10.00 - 11.20</td> <td>8/9/40(2,4')</td> <td>---</td> <td>---</td> <td>426</td> <td>Grey, wet, dense, fine to coarse SAND, some gravel, little silt. Layer of Cobbles from 11.2-12.7 ft bgs.</td> <td>GH29626 A=4, CL MC=15.35</td> </tr> <tr> <td>40</td> <td>24/14</td> <td>15.00 - 17.00</td> <td>7/10/10/12</td> <td>20</td> <td>31</td> <td>534</td> <td>Olive-grey, wet, hard, SILT, some clay, little fine to coarse sand, trace gravel, (FILL).</td> <td>GH29627 A=4, CL MC=15.35</td> </tr> <tr> <td>50</td> <td>24/15</td> <td>20.00 - 22.00</td> <td>8/10/9/11</td> <td>19</td> <td>29</td> <td>534</td> <td>Olive-grey, wet, very stiff, SILT, some fine to coarse sand, trace gravel, (FILL).</td> <td>GH29628 A=4, CL MC=15.35</td> </tr> <tr> <td>20</td> <td>50</td> <td>24/15</td> <td>20.00 - 22.00</td> <td>8/10/9/11</td> <td>19</td> <td>29</td> <td>Bottom of Exploration at 22.0 feet below ground surface, NO REFUSAL.</td> <td>GH29628 A=4, CL MC=15.35</td> </tr> </tbody> </table>						Sample No.	Rev./Spec. (ft.)	Sample Depth (ft.)	Blow (1/8" in. Strain) (blows/ft)	Penetration (lb/ft)	Moisture (%)	Grain Size (mm)	Visual Description and Remarks	Laboratory Testing Results (ASTM) and Unified Class	10	24/16	1.50 - 3.50	10/11/12/12	29	45	534	Brown, dry, very dense, fine to coarse SANDY GRAVEL, trace silt, (FILL).	GH29624 A=4, CL MC=15.35	20	24/13	5.00 - 7.00	9/6/6/9	12	19	533	Brown, damp, medium dense, gravelly fine to coarse SAND, little silt, (FILL).	GH29625 A=4, CL MC=15.35	30	14, 6/11	10.00 - 11.20	8/9/40(2,4')	---	---	426	Grey, wet, dense, fine to coarse SAND, some gravel, little silt. Layer of Cobbles from 11.2-12.7 ft bgs.	GH29626 A=4, CL MC=15.35	40	24/14	15.00 - 17.00	7/10/10/12	20	31	534	Olive-grey, wet, hard, SILT, some clay, little fine to coarse sand, trace gravel, (FILL).	GH29627 A=4, CL MC=15.35	50	24/15	20.00 - 22.00	8/10/9/11	19	29	534	Olive-grey, wet, very stiff, SILT, some fine to coarse sand, trace gravel, (FILL).	GH29628 A=4, CL MC=15.35	20	50	24/15	20.00 - 22.00	8/10/9/11	19	29	Bottom of Exploration at 22.0 feet below ground surface, NO REFUSAL.	GH29628 A=4, CL MC=15.35
Sample No.	Rev./Spec. (ft.)	Sample Depth (ft.)	Blow (1/8" in. Strain) (blows/ft)	Penetration (lb/ft)	Moisture (%)	Grain Size (mm)	Visual Description and Remarks	Laboratory Testing Results (ASTM) and Unified Class																																																												
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Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMER UNITS		Project: Large Culvert Replacement on Route 6 Location: Carroll Plantation, Maine		Boring No.: HB-CAR-102 WIN: 23581.00																												
Drilling Contractor: MainDOT	Elevation (ft.): 515.8	Auger ID/OD: 5" Dia.	Operator: Doggett/Nilies	Start Date: N/A	Sampler: N/A																											
Logged By: B. W. Fisher	Rig Type: CME 45C	Home: WT, Fall 11	Date Start/Finish: 9/10/2018 08:30-10:00	Drilling Method: Solid Stem Auger	Cone Barrels: N/A																											
Boring Location: 73+62.4, 4.8 ft Lt.	Coring ID/OD: N/A	Water Level: N/A	Home Efficiency Factors: 0.928	Home Type: Automatic	Rope & Cable: 3"																											
<table border="1"> <thead> <tr> <th>Sample No.</th> <th>Rev./Spec. (ft.)</th> <th>Sample Depth (ft.)</th> <th>Blow (1/8" in. Strain) (blows/ft)</th> <th>Penetration (lb/ft)</th> <th>Moisture (%)</th> <th>Grain Size (mm)</th> <th>Visual Description and Remarks</th> <th>Laboratory Testing Results (ASTM) and Unified Class</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>Probes, no samples taken, soils similar to HB-CAR-101.</td> <td>---</td> </tr> <tr> <td>20</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>Bottom of Exploration at 25.5 feet below ground surface, NO REFUSAL.</td> <td>---</td> </tr> </tbody> </table>						Sample No.	Rev./Spec. (ft.)	Sample Depth (ft.)	Blow (1/8" in. Strain) (blows/ft)	Penetration (lb/ft)	Moisture (%)	Grain Size (mm)	Visual Description and Remarks	Laboratory Testing Results (ASTM) and Unified Class	5	---	---	---	---	---	---	Probes, no samples taken, soils similar to HB-CAR-101.	---	20	---	---	---	---	---	---	Bottom of Exploration at 25.5 feet below ground surface, NO REFUSAL.	---
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STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

23581.00  
WIN  
23581.00

STATE OF MAINE  
Cody A. Russell  
15866  
LICENSED PROFESSIONAL ENGINEER

Cody A. Russell  
SIGNATURE  
FEB 2021  
15866  
P.E. NUMBER  
2/26/2021  
DATE

PROJ. MANAGER  
DESIGN-REVIEWED  
DESIGN-DETAILED  
DESIGN-FILED  
REVISIONS 1  
REVISIONS 2  
REVISIONS 3  
REVISIONS 4  
FIELD CHANGES

CARROLL P.L.T.  
ROUTE 6  
BORING LOCATION PLAN &  
INTERPRETIVE SUBSURFACE PROFILE  
WITH BORING LOGS

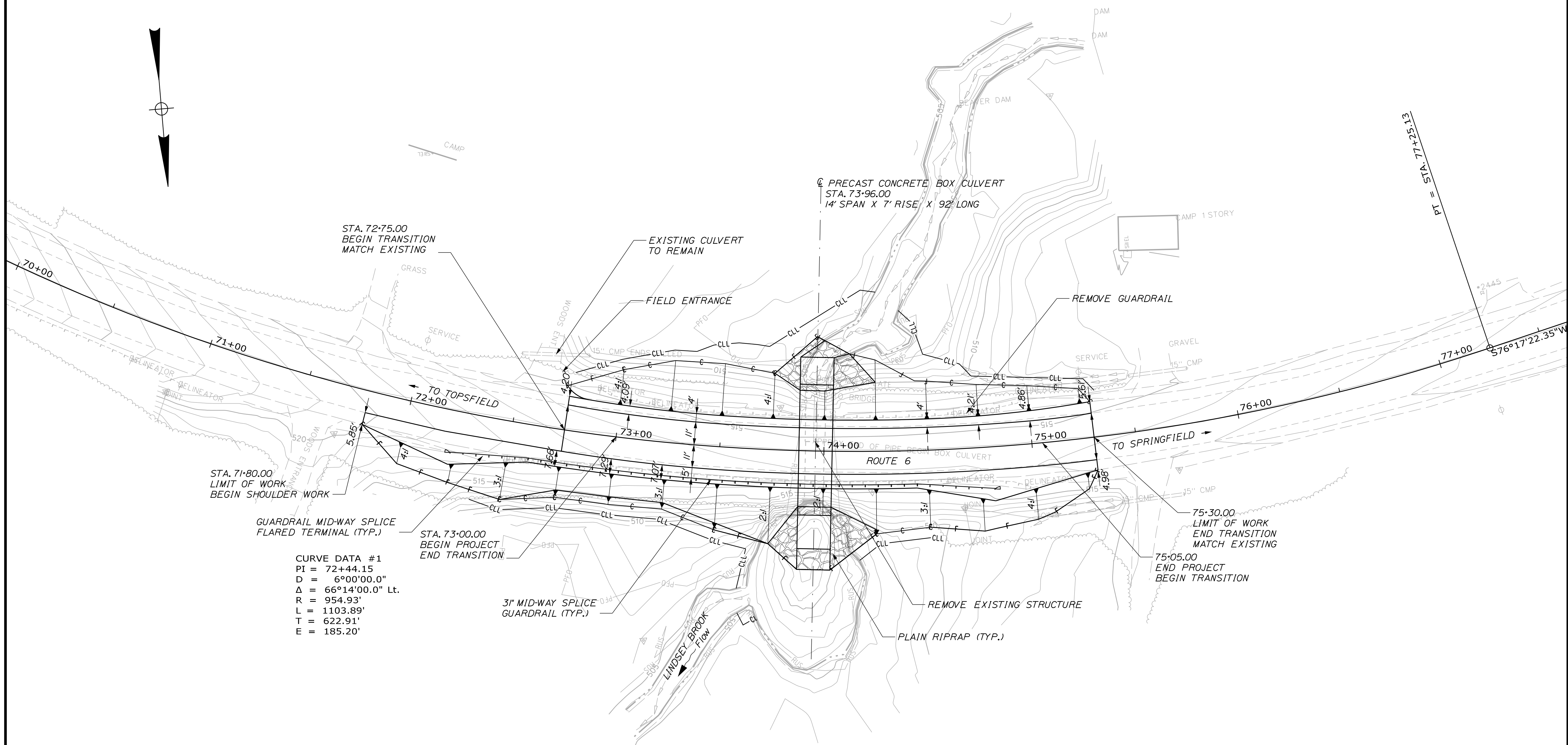
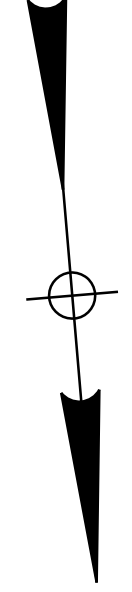
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OF 17

Date: 3/12/2021

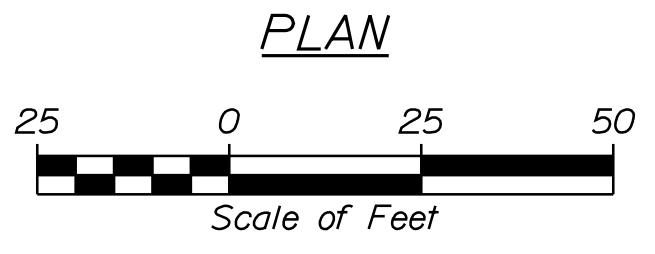
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Division: HIGHWAY

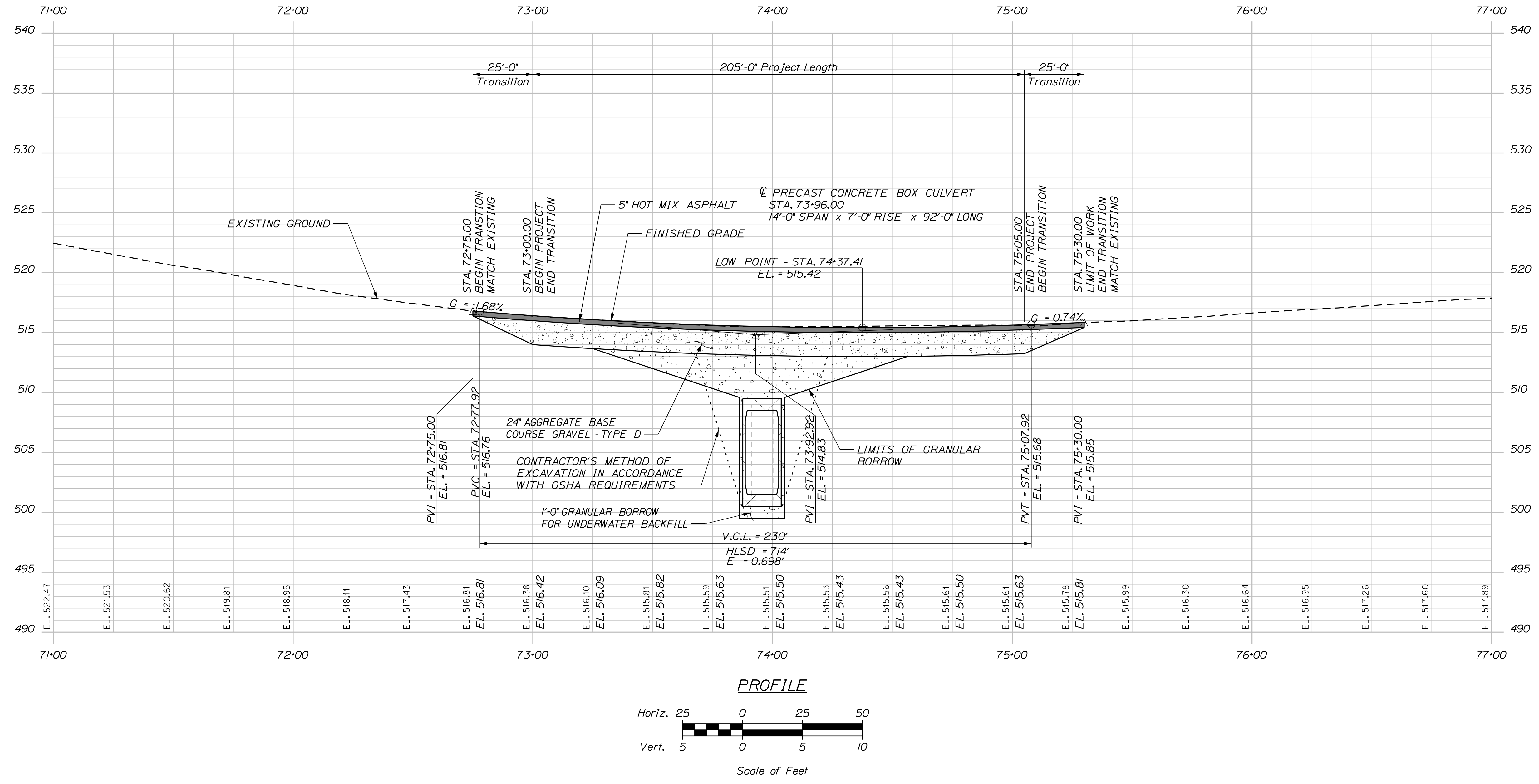
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CURVE DATA #1  
 PI = 72+44.15  
 D = 6°00'00.0"  
 Δ = 66°14'00.0" Lt.  
 R = 954.93'  
 L = 1103.89'  
 T = 622.91'  
 E = 185.20'



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STATE PROJECT NO. 23581.00	
BRIDGE NO. 6601		WIN 23581.00	
HIGHWAY PLANS			
PROJ. MANAGER	R. SOUCY	BY	DATE
DESIGN DETAILED	O. KRASS	B. NICHOLS	OCT 2020
CHECKED/REVIEWED	K. BROWN		OCT 2020
DESIGN DETAILED		SIGNATURE	
REVISIONS 1		P.E. NUMBER	
REVISIONS 2		DATE	
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
CARROLL PLANTATION LINDSEY BROOK BRIDGE		GENERAL PLAN	
SHEET NUMBER		7	
		OF 17	



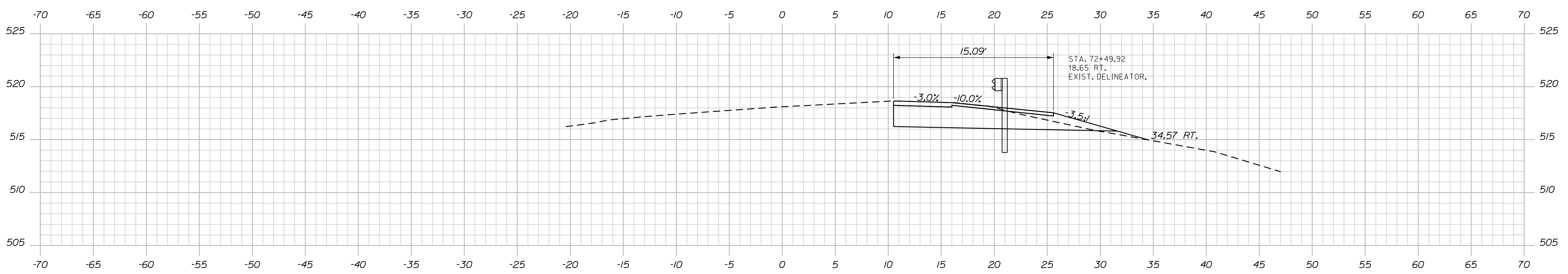
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BRIDGE NO. 6601		WIN 23581.00	
HIGHWAY PLANS			
PROJ. MANAGER	R. SOUCY	BY	DATE
DESIGN-DETAILED	O. KRALSS	B. NICHOLS	OCT 2020
CHECKED-REVIEWED			OCT 2020
DESIGN-DETAILED	K. BROWN		
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
CARROLL PLANTATION LINDSEY BROOK BRIDGE		SIGNATURE	
PROFILE		P.E. NUMBER	
SHEET NUMBER		DATE	
8			
OF 17			

Date: 3/12/2021

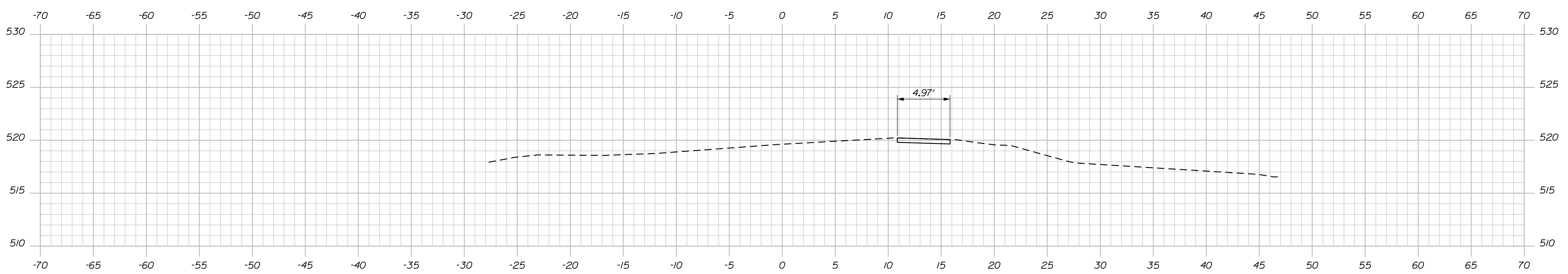
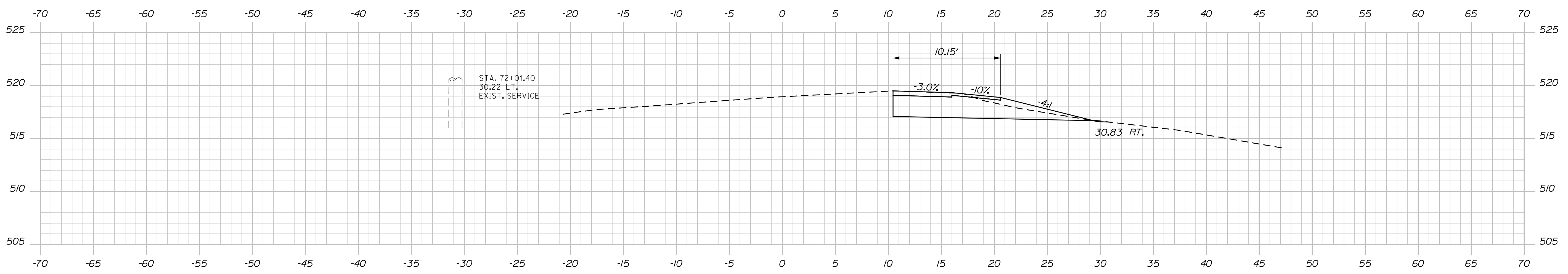
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Division: BRIDGE

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STA. 72+23.27 TO STA. 72+59.87  
 INSTALL REFLECTORIZED FLEXIBLE GUARDRAIL MARKERS (2)  
 INSTALL GUARDRAIL MID-WAY SPLICE FLARED TERMINAL



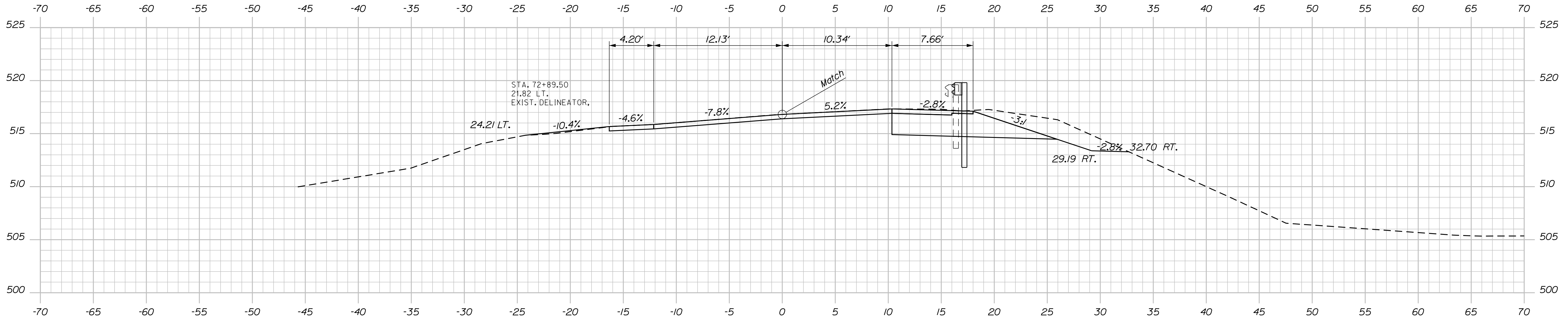
STATE OF MAINE DEPARTMENT OF TRANSPORTATION		STATE PROJECT NO. 23581.00
BRIDGE NO. 6601		WIN 23581.00
HIGHWAY PLANS		
PROJ. MANAGER	R. SOUCY	BY
DESIGN-DETAILED	O. KRALISS	B. NICHOLS
CHECKED-REVIEWED		OCT 2020
DESIGN-DETAILED	K. BROWN	OCT 2020
DESIGN-DETAILED		SIGNATURE
REVISIONS 1		P.E. NUMBER
REVISIONS 2		DATE
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		
CARROLL PLANTATION ROUTE 6 CROSS SECTIONS		
SHEET NUMBER		
9		
OF 17		

Date: 3/12/2021

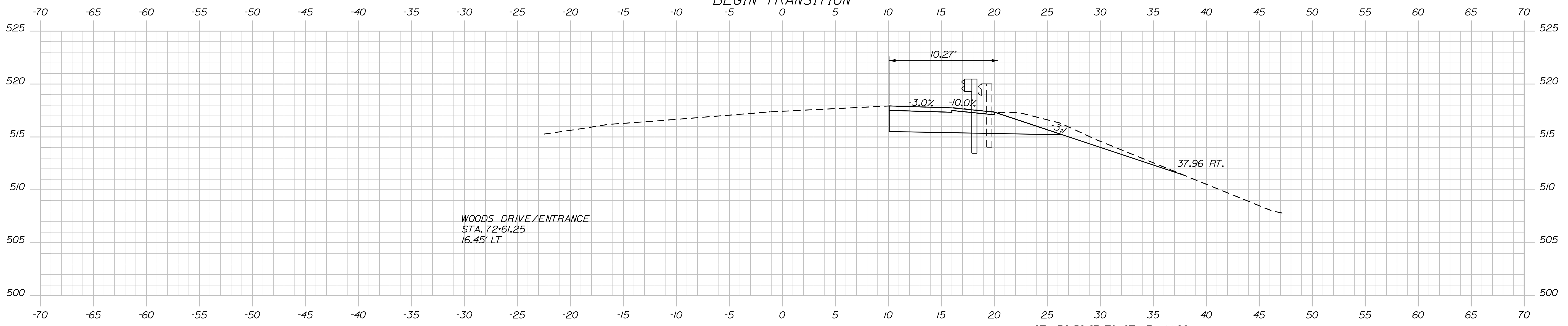
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Division: BRIDGE

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72+75.00  
MATCH EXISTING  
BEGIN TRANSITION



72+50.00

STA. 72+59.87 TO STA. 74+44.28  
INSTALL 187.5 LF 3\"/>

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STATE PROJECT NO. 23581.00  
BRIDGE NO. 6601 WIN 23581.00 HIGHWAY PLANS

DESIGNER: B. NICHOLS  
CHECKED: O. KRALISS  
DESIGNED: K. BROWN  
REVISIONS: 1, 2, 3, 4  
FIELD CHANGES

PROJ. MANAGER	R. SOURCE	BY	DATE
	O. KRALISS	B. NICHOLS	OCT 2020
CHECKED-REVIEWED			OCT 2020
DESIGNED-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE  
P.E. NUMBER  
DATE

CARROLL PLANTATION  
ROUTE 6  
CROSS SECTIONS

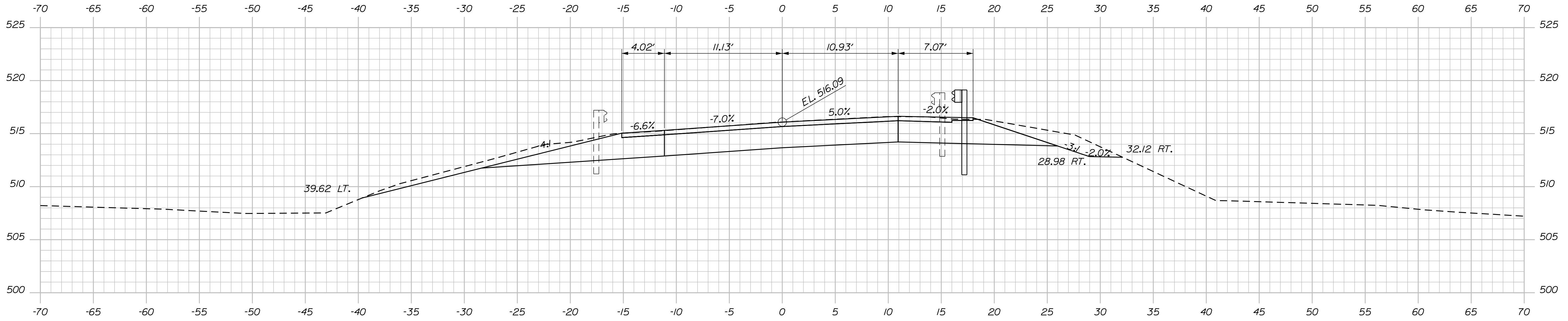
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OF 17

Date: 3/12/2021

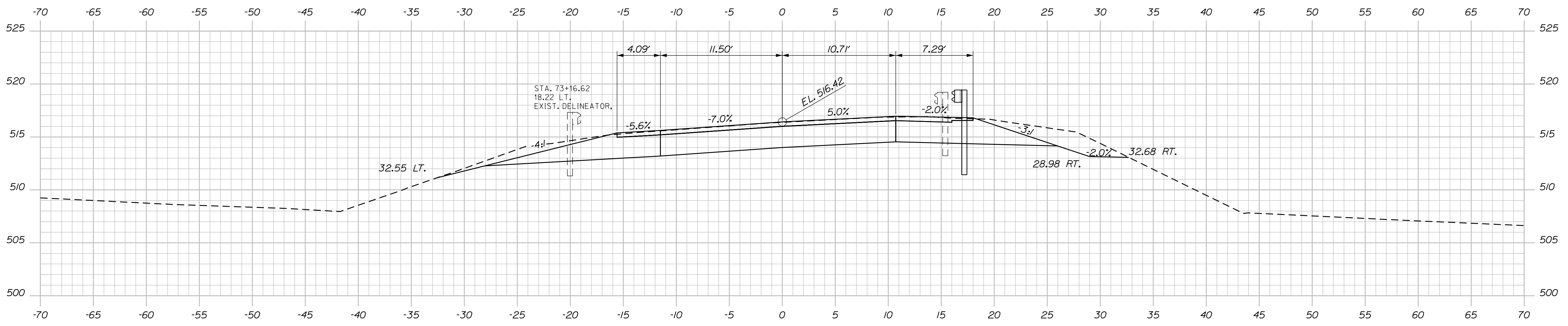
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Division: BRIDGE

Filename: ... \MSTAD011\_XSECT\_73+00\_003.dgn



73+25.00



73+00.00  
END TRANSITION  
BEGIN PROJECT

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STATE PROJECT NO. 23581.00  
BRIDGE NO. 6601 WIN 23581.00 HIGHWAY PLANS

SIGNATURE  
P.E. NUMBER  
DATE

PROJ. MANAGER	R. SOURCE	BY	DATE
DESIGN-DETAILED	O. KRALISS	B. NICHOLS	OCT 2020
CHECKED-REVIEWED			
DESIGN-DETAILED	K. BROWN		OCT 2020
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

CARROLL PLANTATION  
ROUTE 6  
CROSS SECTIONS

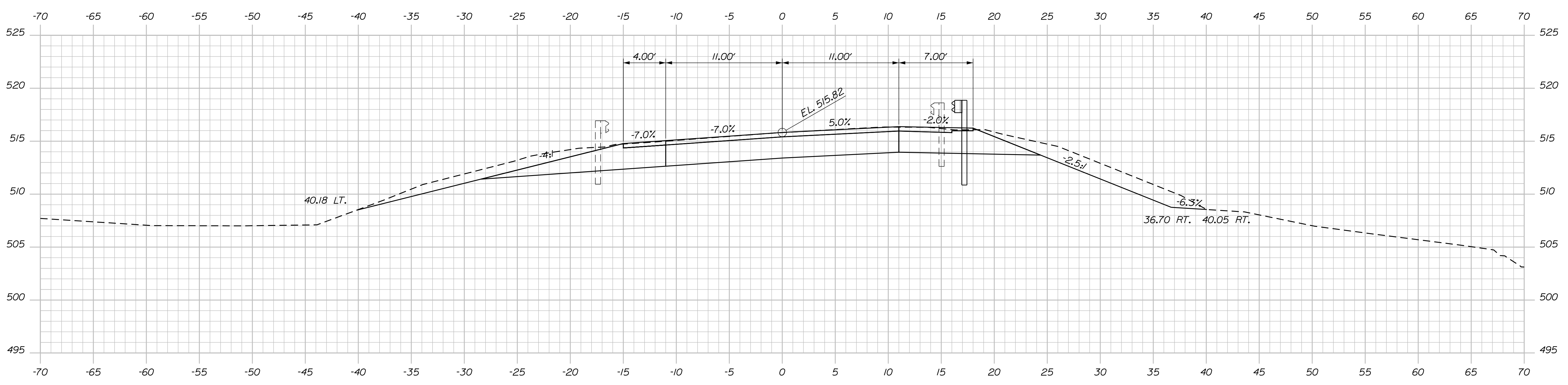
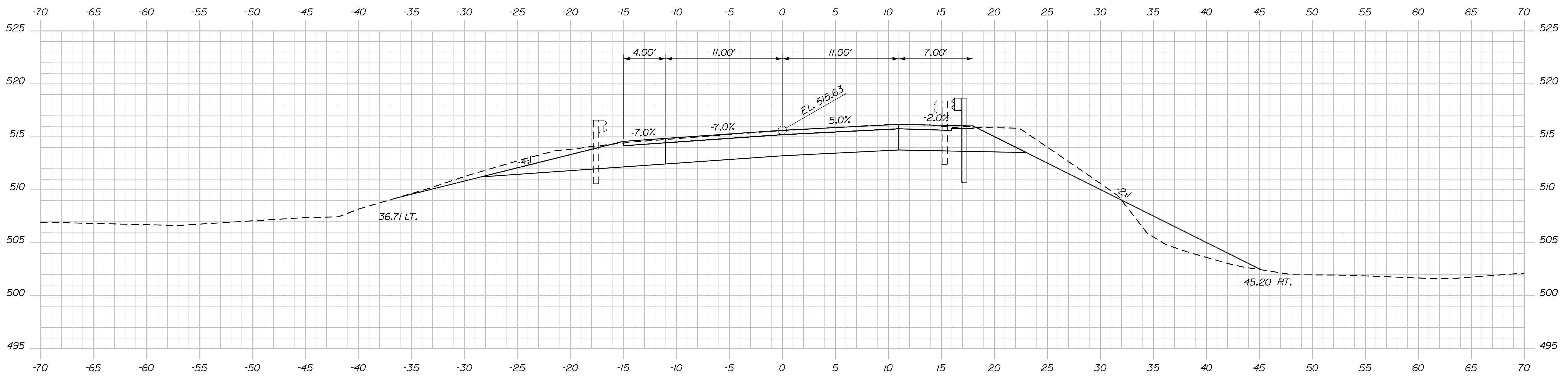
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OF 17

Date: 3/12/2021

Username:

Division: BRIDGE

Filename: ... \MST\A012\_XSECT\_73+50\_004.dgn



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STATE PROJECT NO. 23581.00  
BRIDGE NO. 6601 WIN 23581.00 HIGHWAY PLANS

DESIGNED	BY	DATE	SIGNATURE
CHECKED	R. SOUCY	OCT 2020	
DESIGNED	O. KRALISS	OCT 2020	
DESIGNED	B. NICHOLS		
DESIGNED	K. BROWN		
REVISIONS 1			P.E. NUMBER
REVISIONS 2			DATE
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER	BY	DATE
CHECKED	R. SOUCY	OCT 2020
DESIGNED	O. KRALISS	OCT 2020
DESIGNED	B. NICHOLS	
DESIGNED	K. BROWN	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

CARROLL PLANTATION  
ROUTE 6  
CROSS SECTIONS

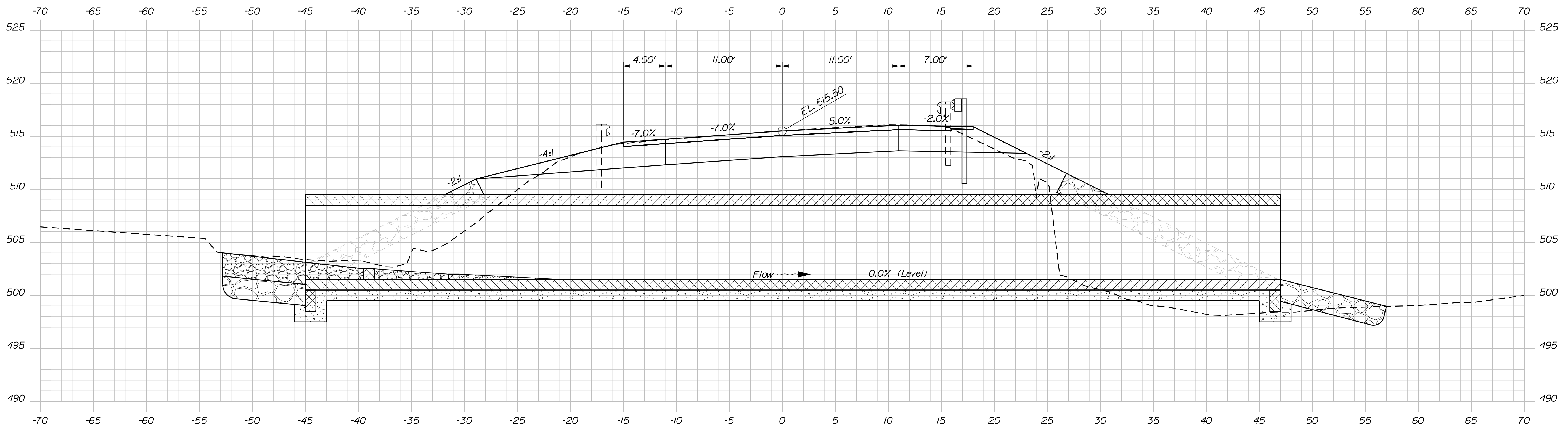
SHEET NUMBER  
**12**  
OF 17

Date: 3/12/2021

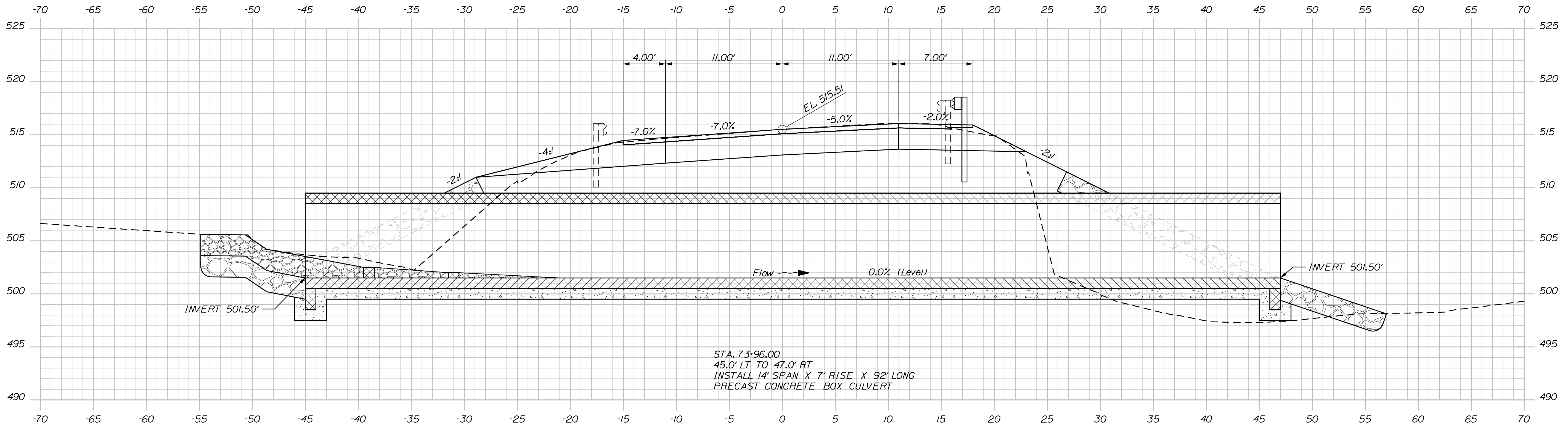
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Division: BRIDGE

Filename: ... \MSTA\013\_XSECT\_73+96\_005.dgn



74+00.00



STA. 73+96.00  
 45.0' LT TO 47.0' RT  
 INSTALL 14' SPAN X 7' RISE X 92' LONG  
 PRECAST CONCRETE BOX CULVERT

73+96.00

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 STATE PROJECT NO. 23581.00  
 BRIDGE NO. 8601  
 WIN 23581.00  
 HIGHWAY PLANS

PROJ. MANAGER	R. SOUCY	DATE
CHECKED/REVIEWED	O. KRALISS	OCT 2020
DESIGNED/TAILED	B. NICHOLS	OCT 2020
DESIGNS/TAILED	K. BROWN	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE	P.E. NUMBER	DATE

CARROLL PLANTATION  
 ROUTE 6  
 CROSS SECTIONS

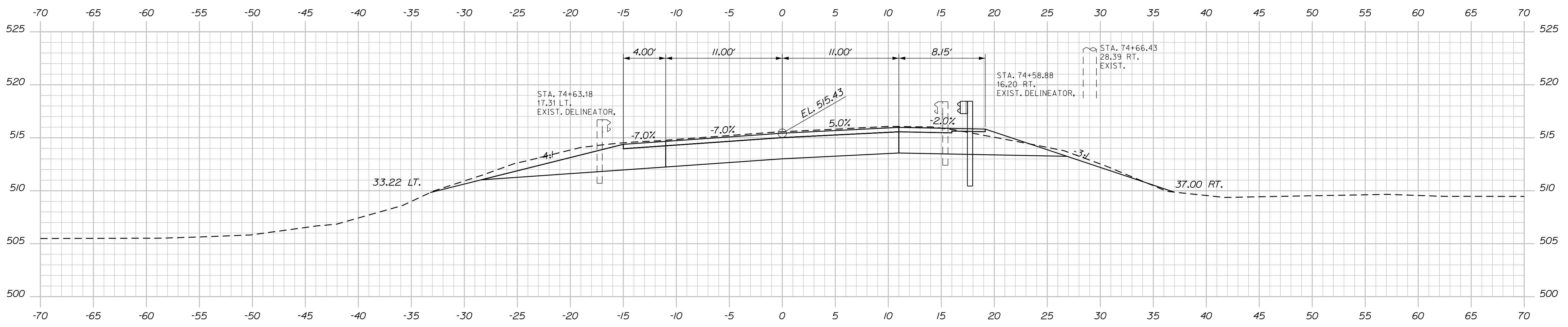
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**13**  
 OF 17

Date: 3/12/2021

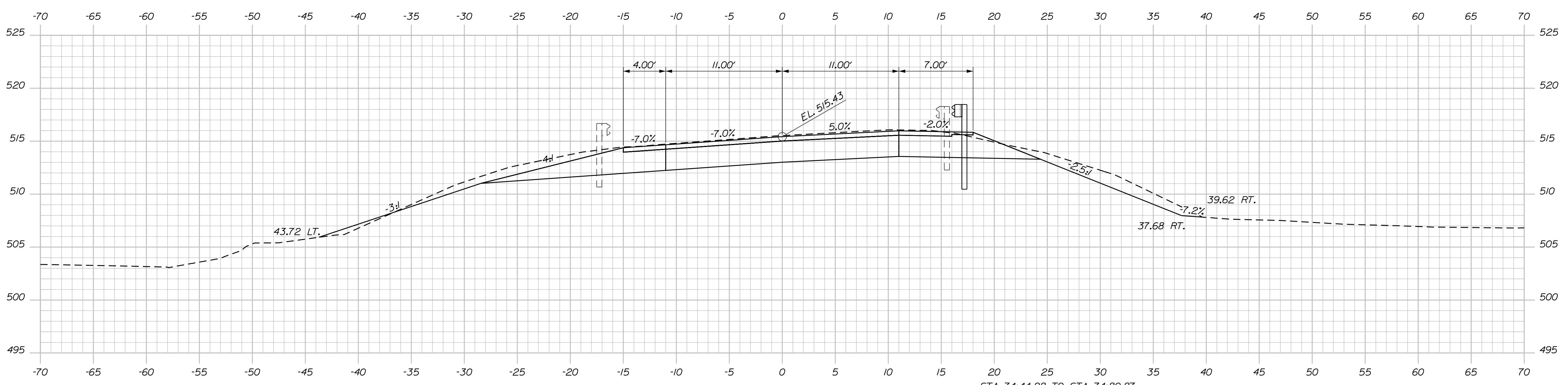
Username:

Division: BRIDGE

Filename: ... \MSTAN014\_XSECT\_74+25\_006.dgn



74+50.00



74+25.00

STA. 74+44.28 TO STA. 74+80.87  
INSTALL REFLECTORIZED FLEXIBLE GUARDRAIL MARKERS (2)  
INSTALL GUARDRAIL MID-WAY SPLICE FLARED TERMINAL

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STATE PROJECT NO. 23581.00  
BRIDGE NO. 6601 WIN 23581.00 HIGHWAY PLANS

PROJ. MANAGER  
DESIGN DETAILED  
CHECKED/REVIEWED  
DESIGN DETAILED  
REVISIONS 1  
REVISIONS 2  
REVISIONS 3  
REVISIONS 4  
FIELD CHANGES

R. SOUCY  
O. KRALISS  
B. NICHOLS  
K. BROWN

DATE  
OCT 2020  
OCT 2020

SIGNATURE  
P.E. NUMBER  
DATE

CARROLL PLANTATION  
ROUTE 6  
CROSS SECTIONS

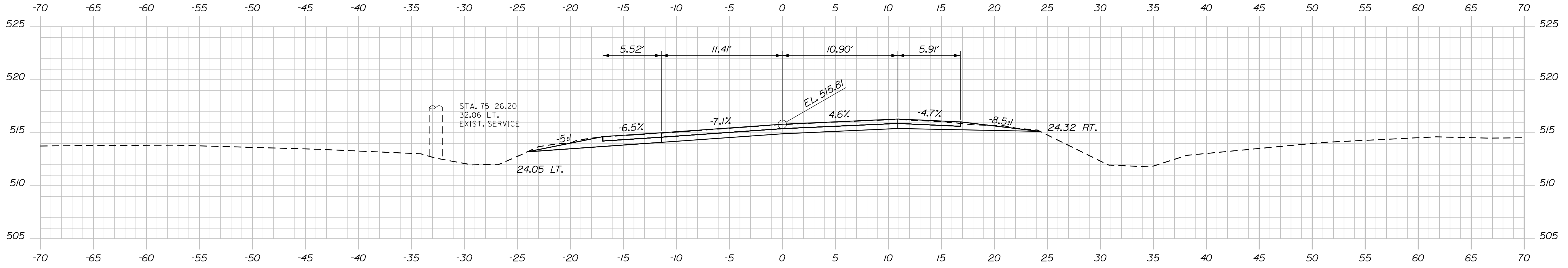
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OF 17

Date: 3/12/2021

Username:

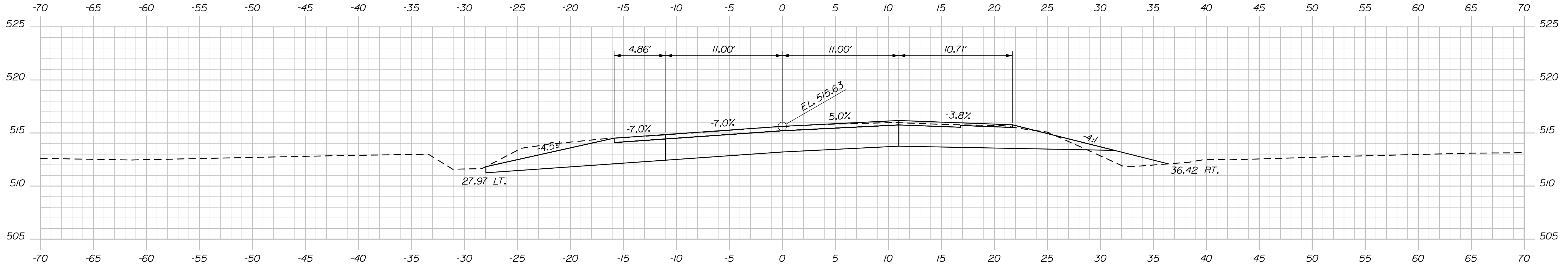
Division: BRIDGE

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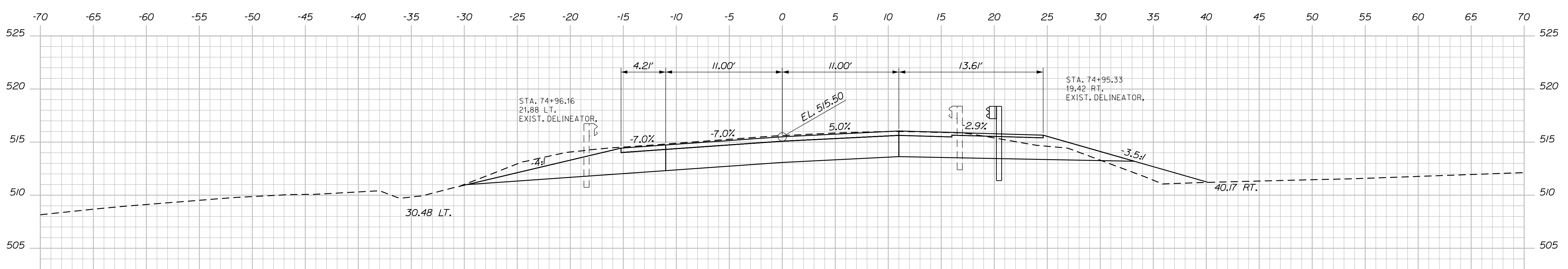


75+25.00

75+05.00  
END PROJECT  
BEGIN TRANSITION



75+00.00



74+75.00

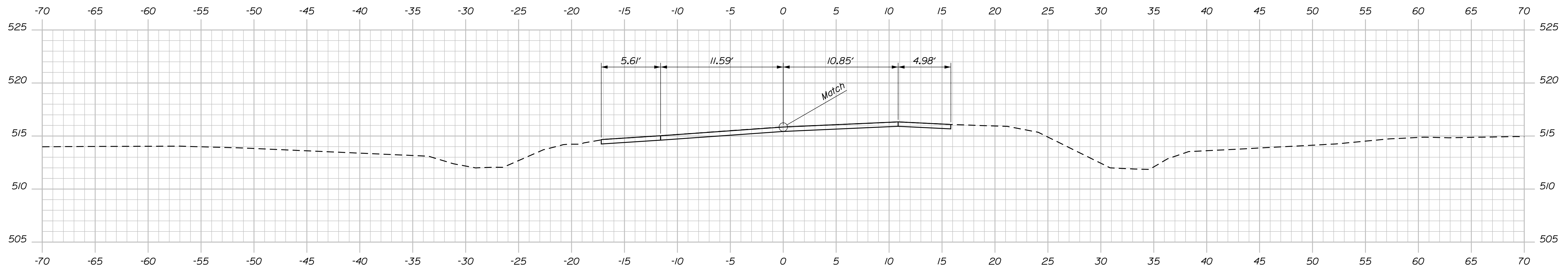
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STATE PROJECT NO. 23581.00  
BRIDGE NO. 8601  
WIN  
23581.00  
HIGHWAY PLANS

DESIGN/TAILED	DATE	SIGNATURE
CHECKED/REVIEWED	OCT 2020	
DESIGNED/TAILED	OCT 2020	
REVISIONS 1		P.E. NUMBER
REVISIONS 2		DATE
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PROJ. MANAGER	R. SOUCY	BY	B. NICHOLS	DATE	OCT 2020
CHECKED/REVIEWED	O. KRALISS	BY	B. NICHOLS	DATE	OCT 2020
DESIGNED/TAILED	K. BROWN	BY		DATE	
REVISIONS 1		BY		DATE	
REVISIONS 2		BY		DATE	
REVISIONS 3		BY		DATE	
REVISIONS 4		BY		DATE	
FIELD CHANGES		BY		DATE	

CARROLL PLANTATION  
ROUTE 6  
CROSS SECTIONS

SHEET NUMBER  
**15**  
OF 17



75+30.00  
END TRANSITION  
MATCH EXISTING

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
STATE PROJECT NO. 23581.00

BRIDGE NO. 6601  
WIN  
23581.00  
HIGHWAY PLANS

PROJ. MANAGER	R. SOURCE	BY	DATE
DESIGN-DETAILED	O. KRALUSS	B. NICHOLS	OCT 2020
CHECKED-REVIEWED			OCT 2020
DESIGN-DETAILED	K. BROWN		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE  
P.E. NUMBER  
DATE

CARROLL PLANTATION  
ROUTE 6  
CROSS SECTIONS

SHEET NUMBER

16

OF 17

Town, County, State \_\_\_\_\_  
 Approx. Property Lines \_\_\_\_\_ P.L.  
 Existing Right of Way \_\_\_\_\_  
 Limits of Wrought Portion \_\_\_\_\_ L.O.W.P.  
 Control Of Access \_\_\_\_\_ C.O.A.  
 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 \_\_\_\_\_  
 Flag Pole \_\_\_\_\_  
 Stockade \_\_\_\_\_  
 Mailbox \_\_\_\_\_

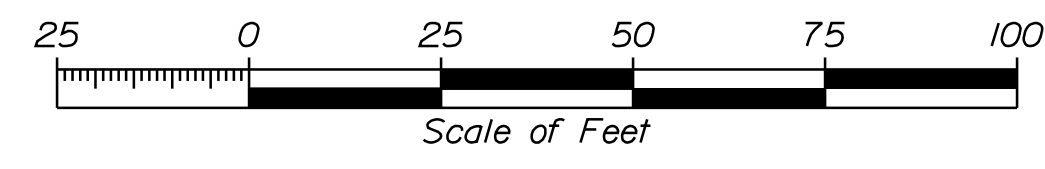
Sanitary Sewer \_\_\_\_\_  
 Telephone Line \_\_\_\_\_  
 Electric Line \_\_\_\_\_  
 Water Line \_\_\_\_\_  
 Underdrain Line \_\_\_\_\_  
 Gas Line \_\_\_\_\_  
 Guardrail \_\_\_\_\_  
 Culvert \_\_\_\_\_

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

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

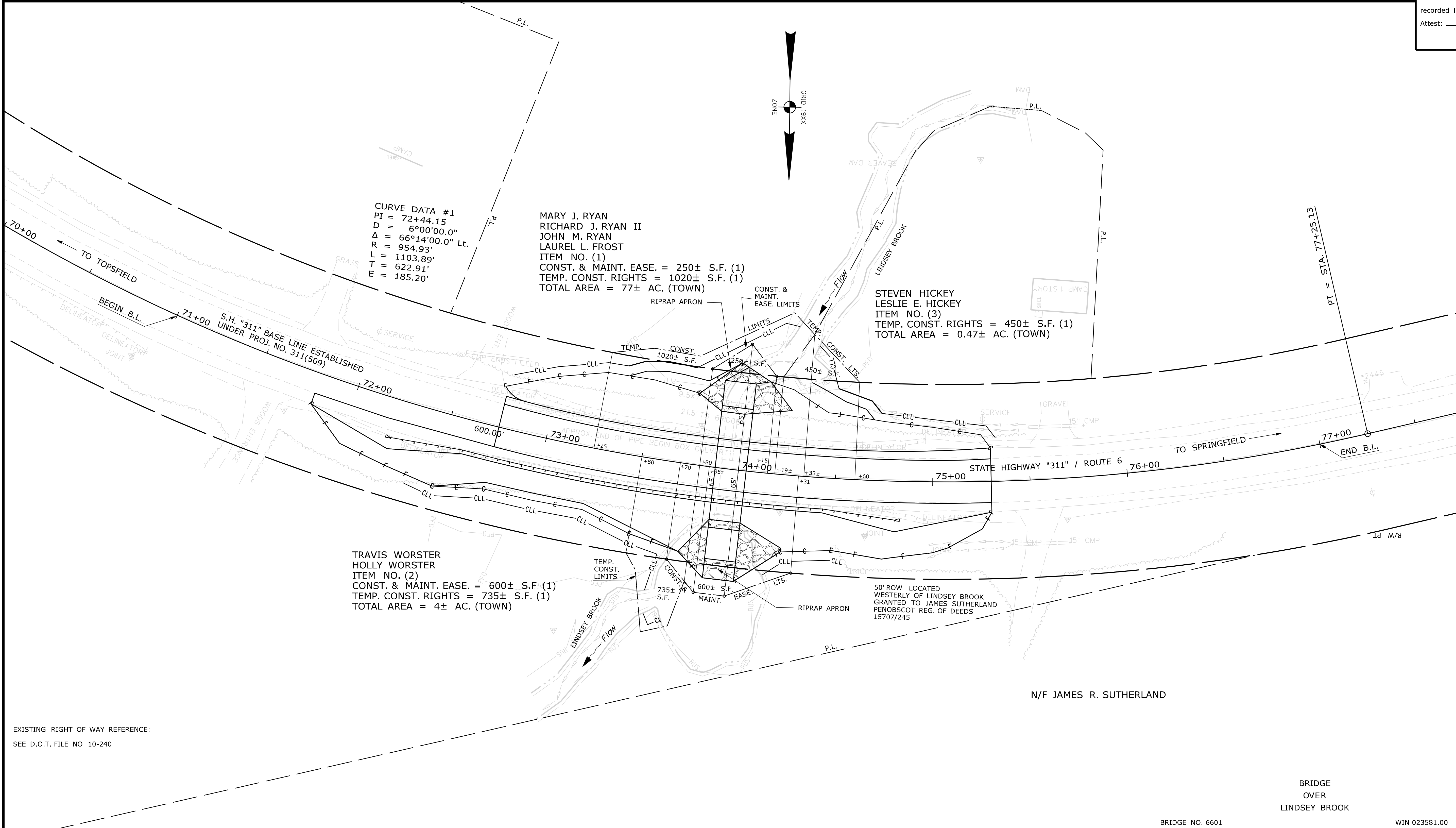
Fill Line \_\_\_\_\_  
 Retaining Wall \_\_\_\_\_  
 Traverse Point \_\_\_\_\_  
 Pipe Found \_\_\_\_\_

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 ADJACENT PROPERTY OWNERS.



STATE OF MAINE  
 REGISTRY OF DEEDS

COUNTY \_\_\_\_\_  
 RECEIVED \_\_\_\_\_,  
 at \_\_\_\_\_ h \_\_\_\_\_ m \_\_\_\_\_ M and  
 recorded in Plan Bk \_\_\_\_\_, Pg. \_\_\_\_\_  
 Attest: \_\_\_\_\_  
 REGISTER



CURVE DATA #1  
 PI = 72+44.15  
 D = 6°00'00.0"  
 Δ = 66°14'00.0" Lt.  
 R = 954.93'  
 L = 1103.89'  
 T = 622.91'  
 E = 185.20'

MARY J. RYAN  
 RICHARD J. RYAN II  
 JOHN M. RYAN  
 LAUREL L. FROST  
 ITEM NO. (1)  
 CONST. & MAINT. EASE. = 250± S.F. (1)  
 TEMP. CONST. RIGHTS = 1020± S.F. (1)  
 TOTAL AREA = 77± AC. (TOWN)

STEVEN HICKEY  
 LESLIE E. HICKEY  
 ITEM NO. (3)  
 TEMP. CONST. RIGHTS = 450± S.F. (1)  
 TOTAL AREA = 0.47± AC. (TOWN)

TRAVIS WORSTER  
 HOLLY WORSTER  
 ITEM NO. (2)  
 CONST. & MAINT. EASE. = 600± S.F. (1)  
 TEMP. CONST. RIGHTS = 735± S.F. (1)  
 TOTAL AREA = 4± AC. (TOWN)

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	G.L.L.	
FINAL RIGHT OF WAY	T.L.B.	D.S.G.
AREAS	T.L.B.	D.S.G.

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

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

BRUCE A. VAN NOTE  
 COMMISSIONER  
 JOYCE NOEL TAYLOR  
 CHIEF ENGINEER

DATE \_\_\_\_\_

STATE HIGHWAY "311"  
 ROUTE 6 / MAIN ROAD / LEE ROAD  
 CARROLL PLANTATION PENOBSCOT COUNTY  
 STATE PROJECT NO. 23581.00

JANUARY 2021  
 SCALE 1" = 25'

RIGHT-OF-WAY MAP  
 SHEET 1 OF 1

D.O.T. FILE NO. 10-523

SHEET NUMBER  
 17  
 OF 17

Date: 2/10/2021  
 Username: Terri.L.Blair  
 Division: ROW  
 Filename: ... \00\ROW\MSTA\001\_RWP\PLAN1.dgn