

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



ROBBINSTON

WASHINGTON COUNTY

ROUTE 1

ROBBINSTON BRIDGE

BRIDGE NO. 6774

FEDERAL PROJECT NO.2663010

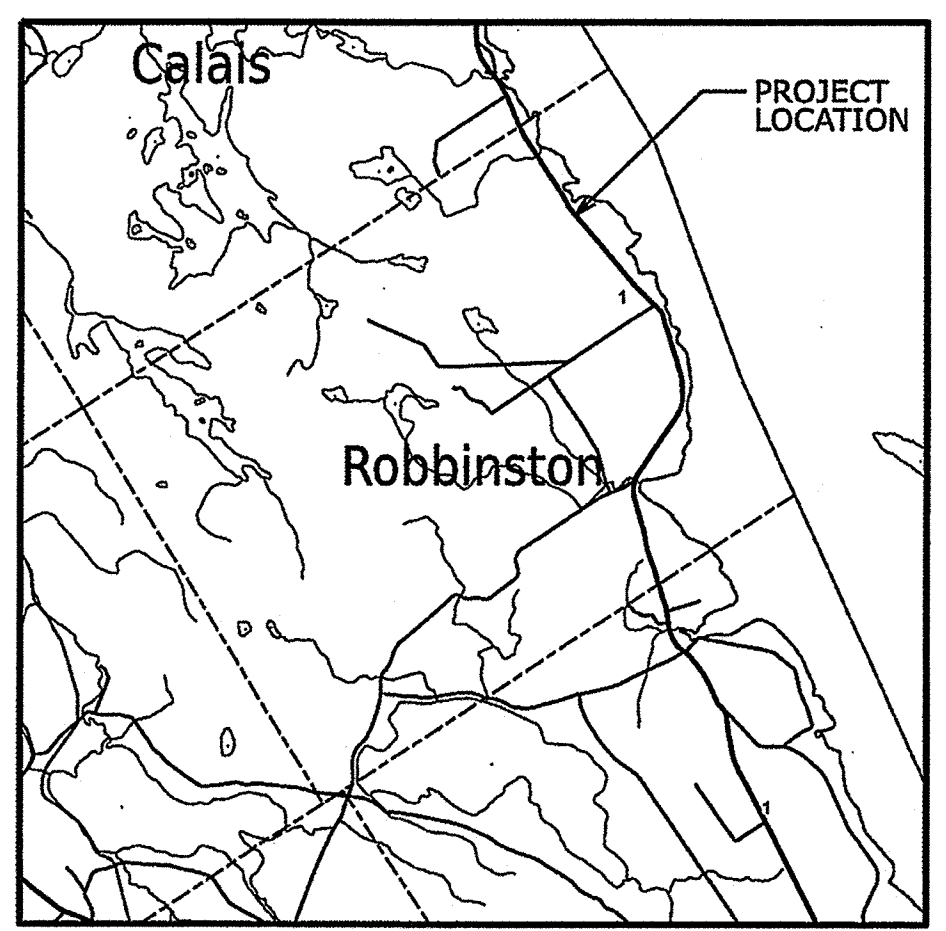
PROJECT LENGTH: 0.07 MILES

PLAN LEGEND

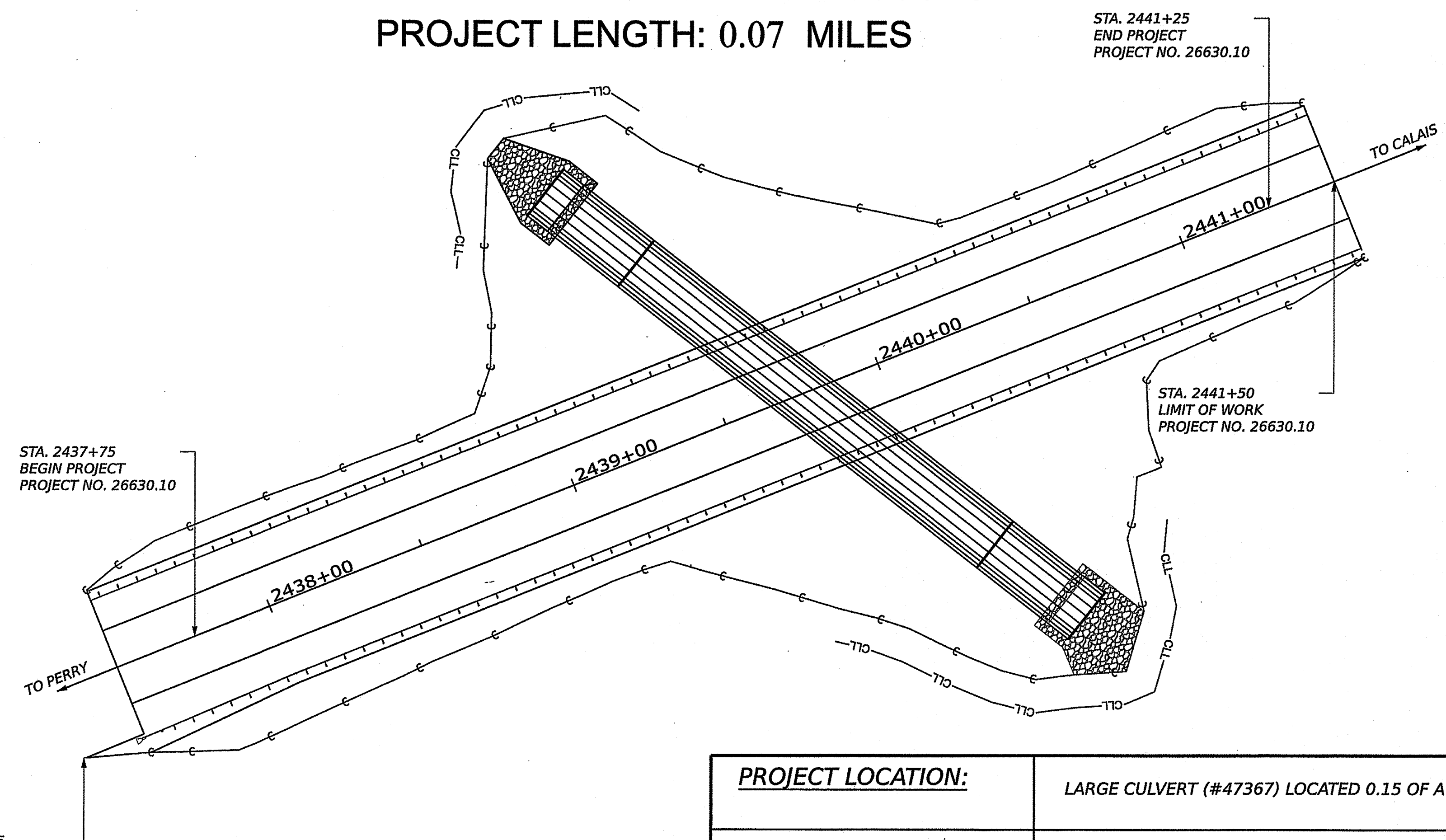
Town, County, State	_____	Catch Basins	▣ Existing	⊙ Proposed
Property Lines	-----	Manholes	⊙ Existing	⊙ Proposed
R/W Lines-Existing	-----	Proposed Underdrain	-----	
R/W Lines-Proposed	-----	Proposed Ditch	-----	
Culvert-Existing	-----	Existing Ditch	-----	
Culvert Proposed	-----	Utility Poles	⊙ Existing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

TRAFFIC DATA

Current (2025) AADT	2210
Future (2045) AADT	2430
DHV - % of AADT	11%
Design Hour Volume	267
% Heavy Trucks (AADT)	3%
% Heavy Trucks (DHV)	2%
Directional Distribution (DHV)	59%
18-kip Equivalent P 2.0	58
18-kip Equivalent P 2.5	55
Design Speed (mph)	55
Corridor Priority	1



Scale in Miles
LOCATION MAP

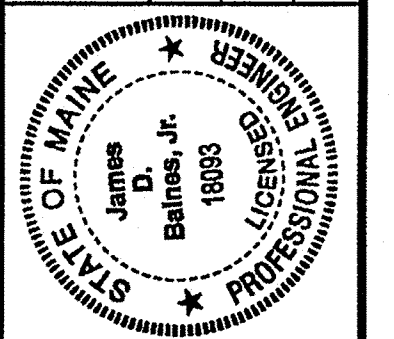


LAYOUT SCALE
25 0 25 50
Scale in Feet

INDEX OF SHEETS

Description	Sheet No.
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STATE OF MAINE DEPARTMENT OF TRANSPORTATION	DATE 8-15-25
APPROVED ACTING COMMISSIONER	8-15-25
CHIEF ENGINEER	8-20-25



SIGNATURE James D. Barnes, Jr.	P.E. NUMBER 18093	DATE 8/14/2025
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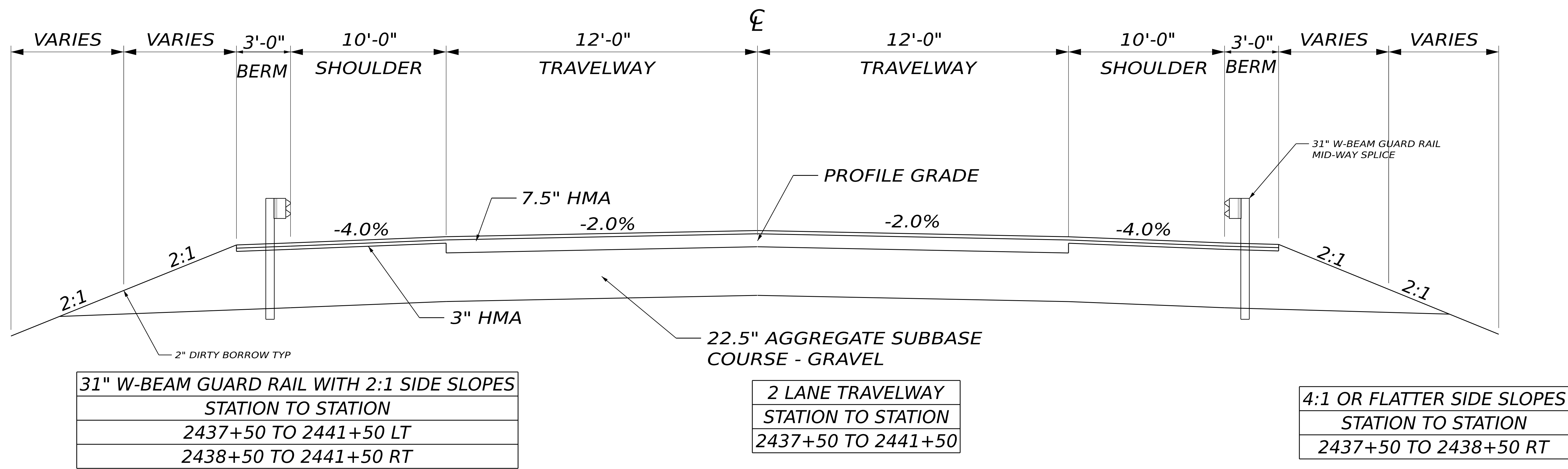
PROJECT INFORMATION	REGIONAL
PROGRAM	R. BARROWS
PROJECT MANAGER	J. BARNES
DESIGNER	
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

ROBBINSTON ROUTE 1 TITLE SHEET

SHEET NUMBER 1 OF 21

Username: James.Barnes Date: 8/14/2025

TYPICAL SECTION



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 SHALL HAVE THE SAME SLOPE AS THE TRAVELWAY.
- 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 CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%.
- 5. THE STATIONING SHOWN UNDER EACH TYPICAL SECTION IS APPROXIMATE.

SUPERELEVATION TABLE				

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

26630.10

WIN
26630.10

HIGHWAY PLANS

PROJ. MANAGER	CHECKED-REVIEWED	CHECKED-REVIEWED	CHECKED-REVIEWED	CHECKED-REVIEWED	SIGNATURE
DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	P.E. NUMBER
REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	REVISIONS 5	DATE
FIELD CHANGES					

ROBBINSON
ROUTE 1

TYPICAL SECTIONS

SHEET NUMBER
2
OF 21

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.20	Common Excavation	2,930	CY
203.25	Granular Borrow	810	CY
203.33	Special Fill	380	CY
206.061	Structural Earth Excavation - Drainage/Minor Structures	100	CY
304.10	Aggregate Subbase Coarse Gravel - Type D	1,640	CY
403.2081	Hot Mix Asphalt - 12.5 mm Nominal Maximum Size (Polymer Modified)	190	T
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size	450	T
409.15	Tack	40	G
508.13	Sheet Waterproofing Membrane (130 SY)	1	LS
511.07	Cofferdam - Upstream	1	LS
511.07	Cofferdam - Downstream	1	LS
534.71	Precast Concrete Box Culvert	1	LS
606.1305	31" W-Beam Guardrail, Mid-Way Splice-Flared Terminal	1	EA
606.353	Relectorized Flexible Guardrail Marker	1	EA
606.365	Guardrail, Remove, Modify, and Reset	750	LF
610.08	Plain Riprap	20	CY
610.212	Streambed Rock Features	30	CY
610.213	Void-Filled Riprap	60	CY
615.10	Dirty Borrow	110	CY
618.14	Seeding Method Number 2	11	UN
619.12	Mulch	11	UN
620.58	Erosion Control Geotextile	110	SY
627.733	4" White or Yellow Painted Pavement Mark Line	1200	LF
629.05	Hand Labor, Straight Time	40	HR
631.12	All Purpose Excavator (including operator)	40	HR
631.172	Truck - Large (including operator)	40	HR
631.18	Chainsaw Rental (including operator)	10	HR
639.19	Field Office Type B	1	EA
643.72	Temporary Traffic Signal	1	LS
652.312	Barricade Type III	6	EA
652.33	Drum	30	EA
652.34	Cone	100	EA
652.35	Construction Signs	260	SF
652.36	Maintainance of Traffic Control Devices	30	CD
652.38	Flagger	250	HR
652.41	Portable Changeable Message Sign	2	EA
652.61	Staged Construction and Traffic Control	1	LS
656.75	Temporary Soil Erosion and Water Pollution Control Plan	1	LS
659.10	Mobilization	1	LS

GENERAL NOTES

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. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AS INDICATED ON THE PLANS AND APPROVED BY THE RESIDENT.
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. ALL INSLOPE AND DITCHES IN CUT AREAS SHALL BE GRADED AS SHOWN ON THE TYPICALS OR FLATTER, OR AS DIRECTED BY THE RESIDENT.
5. 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.
6. 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.
7. 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.
8. 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.
9. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING (OR MILLING) SHALL BE INCIDENTAL TO THE RELATED PAVING (OR MILLING) ITEMS. THIS INCLUDES KILLING AND REMOVAL OF ALL VEGETATIVE MATTER.
10. WHEN SUPERELEVATION EXCEEDS THE SLOPE OF THE LOW-SIDE SHOULDER, THE LOW-SIDE SHOULDER WILL HAVE SAME SLOPE AS THE TRAVELWAY.
11. CROSS SLOPES FOR NORMAL AND SUPERELEVATED SECTIONS WILL BE STRAIGHT UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
12. THE ALGEBRAIC DIFFERENCE BETWEEN TRAVELWAY AND SHOULDER CROSS SLOPE SHALL NOT EXCEED 8 PERCENT.
13. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.
14. GUARDRAIL END TREATMENTS SHALL BE INSTALLED CONCURRENTLY WITH THE PLACEMENT OF EACH SECTION OF BEAM GUARDRAIL.
15. ALL EXISTING GUARDRAIL REMOVED AND NOT REUSED ON THE PROJECT WILL BECOME THE PROPERTY OF THE CONTRACTOR. REMOVAL AND DISPOSAL SHALL BE CONSIDERED INCIDENTAL TO THE GUARDRAIL ITEMS.

16. TWO REFLECTORIZED FLEXIBLE GUARDRAIL MARKERS (STANDARD SPECIFICATIONS ITEM 606.353, REFLECTORIZED FLEXIBLE GUARDRAIL MARKER) WILL BE INSTALLED AT EACH GUARDRAIL END.
17. CONNECTIONS FOR PROPOSED GUARDRAIL TO EXISTING GUARDRAIL WILL BE CONSIDERED INCIDENTAL TO STANDARD SPECIFICATIONS SECTION 606, GUARDRAIL.
18. 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.
19. DIRTY BORROW SHALL BE PLACED TO A NOMINAL DEPTH OF 2 INCHES UNLESS OTHERWISE NOTED OR DIRECTED.
20. ANY BASE PAVEMENT NOT SURFACED BEFORE WINTER WILL REQUIRE TEMPORARY PAVEMENT MARKINGS OF PAINT, BOTH YELLOW CENTERLINE AND WHITE EDGE LINES AND WILL BE CONSIDERED PART OF STANDARD SPECIFICATIONS ITEM 627.78, TEMPORARY PAVEMENT MARKING LINE, WHITE OR YELLOW.
21. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT THE MAIL WILL BE DELIVERABLE. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT
22. 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.
23. 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.
24. THE PROJECT GEOTECHNICAL REPORT TITLED "GEOTECHNICAL DESIGN REPORT FOR THE CONSTRUCTION OF ROBBINSON BRIDGE", SOILS REPORT 2025-31, AUGUST 1, 2025 CAN BE ACCESSED AT THE MAINEDOT WEBSITE [HTTPS://WWW.MAINE.GOV/DOT/DOING-BUSINESS/BID-OPPORTUNITIES](https://www.maine.gov/dot/doing-business/bid-opportunities).
25. 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.
26. AREAS ON THE PROJECT REQUIRING FILL WILL COME FROM SUITABLE SITES SUCH AS EXCAVATION, DITCH AND INSLOPE OR EQUIPMENT RENTAL AREAS.
27. 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.
28. 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.

ROBBINSON

ROUTE 1

ESTIMATES QUANTITIES
& GENERAL NOTES

SHEET NUMBER

3

OF 21

STATE OF MAINE

DEPARTMENT OF TRANSPORTATION

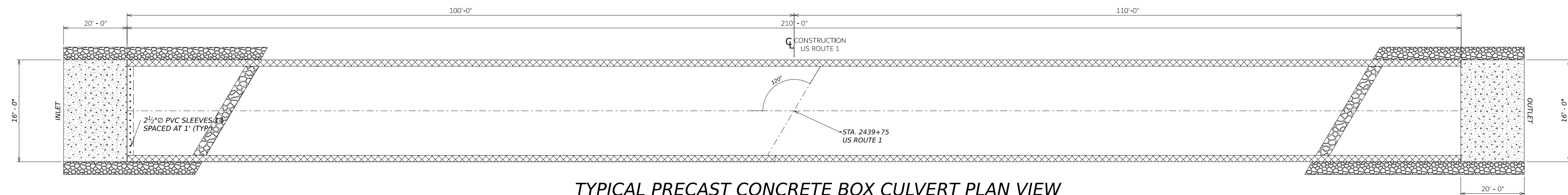
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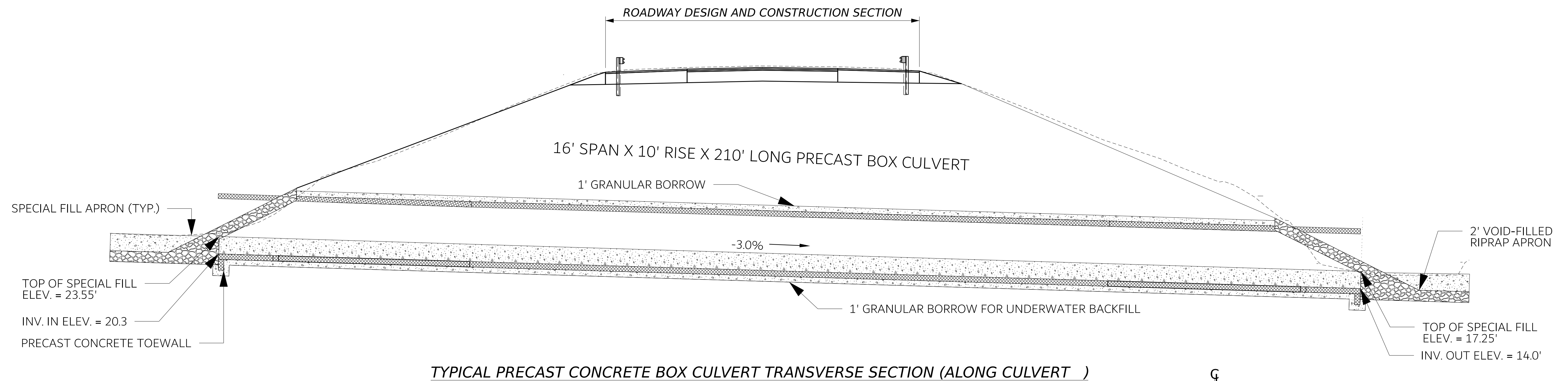
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HIGHWAY PLANS

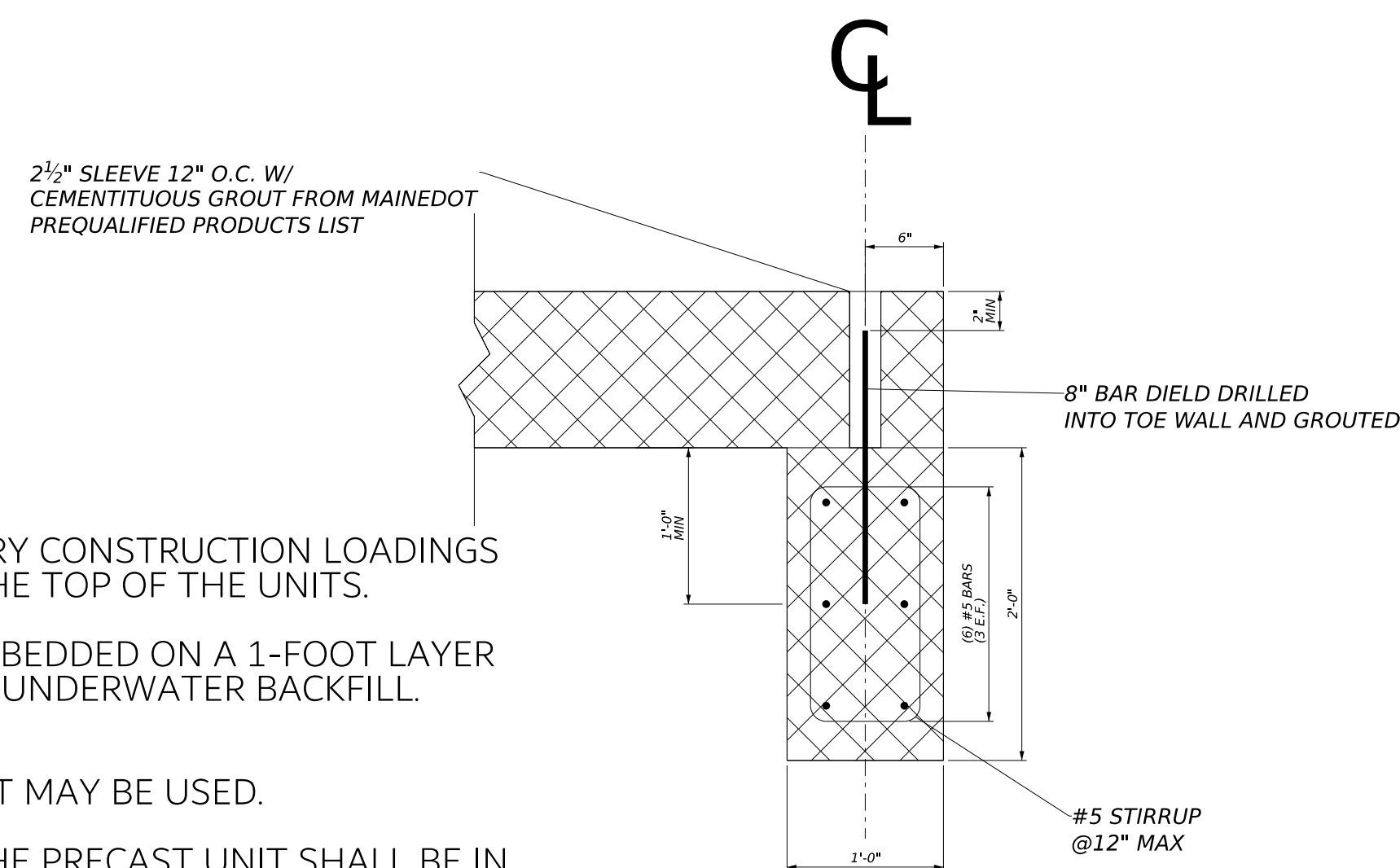
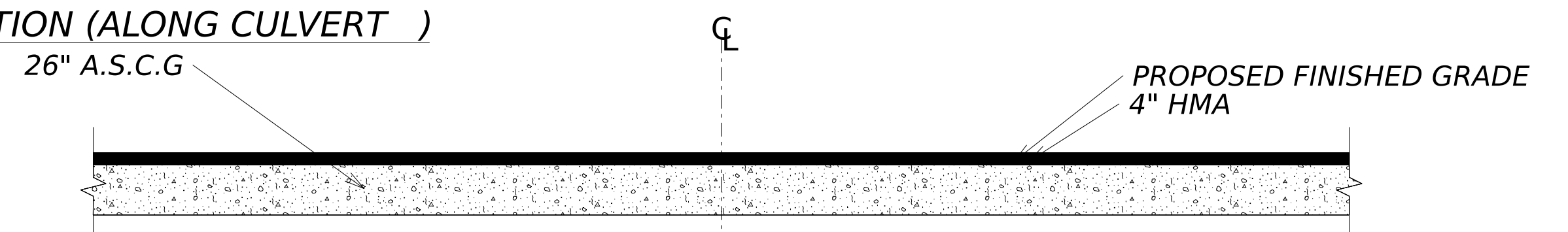
SPECIAL DETAILS



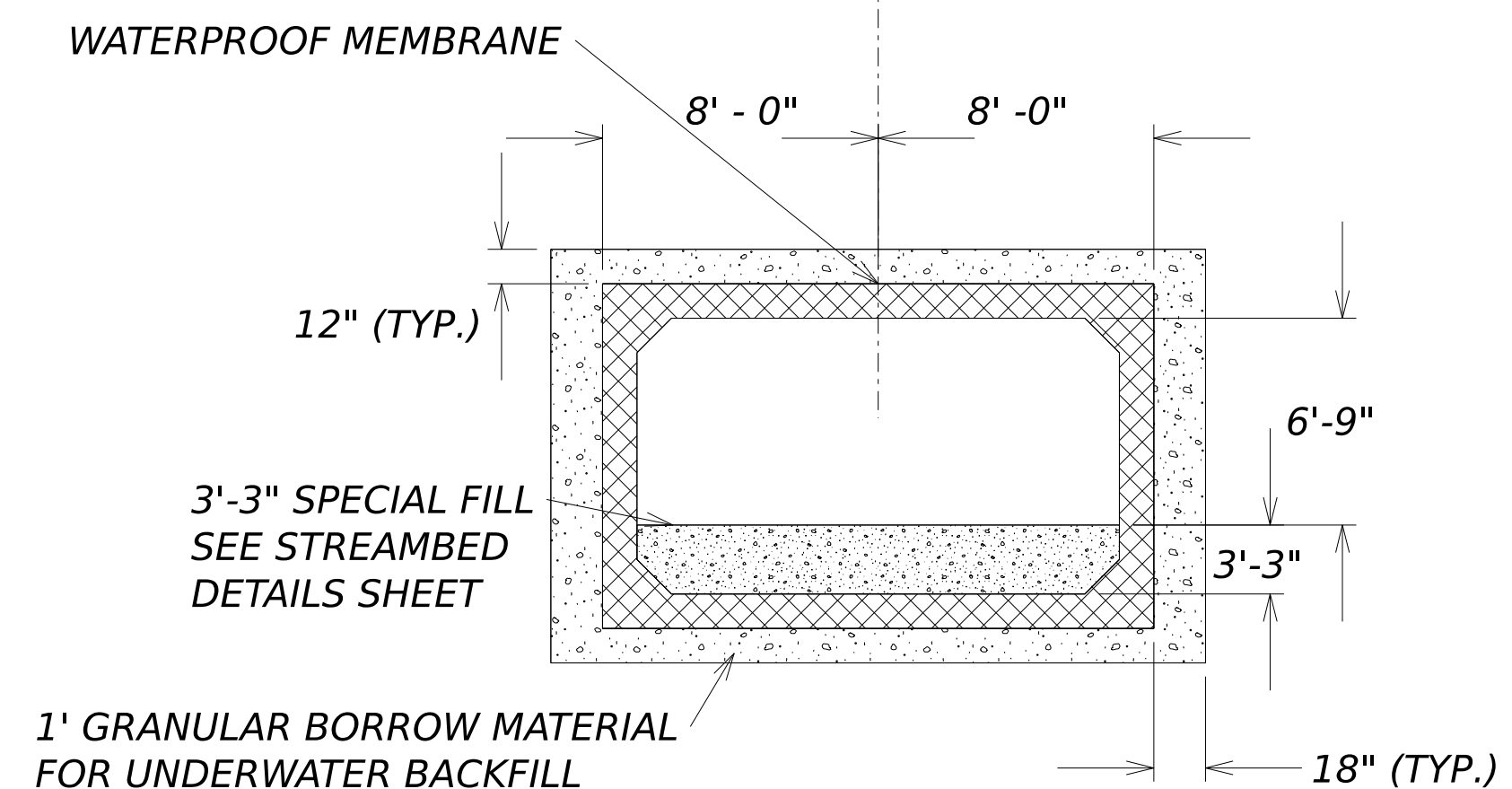
TYPICAL PRECAST CONCRETE BOX CULVERT PLAN VIEW



TYPICAL PRECAST CONCRETE BOX CULVERT TRANSVERSE SECTION (ALONG CULVERT)



TYPICAL PRECAST CONCRETE TOEWALL DETAIL



TYPICAL PRECAST CONCRETE BOX CULVERT CROSS SECTION

NOT TO SCALE

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. SPECIFICATIONS AS APPLICABLE.
3. A "CLAMSHELL" PRECAST CONCRETE BOX CULVERT MAY BE USED.
4. CONSTRUCTION, HANDLING AND ASSEMBLY OF THE PRECAST UNIT SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATION 534 AND THE MANUFACTURER'S

STATE OF NEW YORK	
DEPARTMENT OF TRANSPORTATION	
26630.10	
WIN	
26630.10	HIGHWAY PLANS

DESIGN-DETAILED	JAY BARNES				
CHECKED-REVIEWED					
DESIGN-D-DETAILED					
DESIGN-D-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					
		SIGNATURE			
		P.E. NUMBER			
		DATE			

ROBBINSON
ROUTE 1

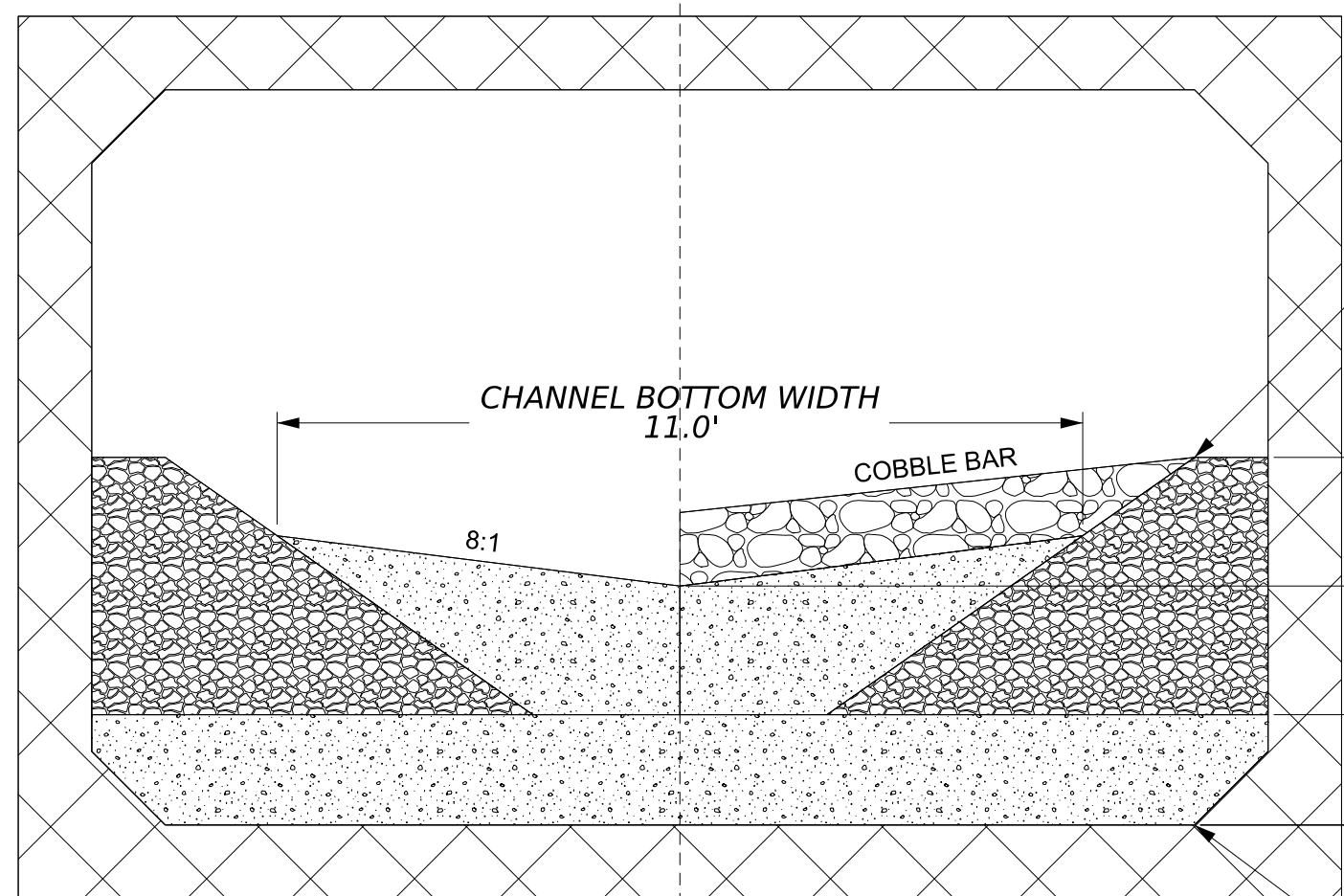
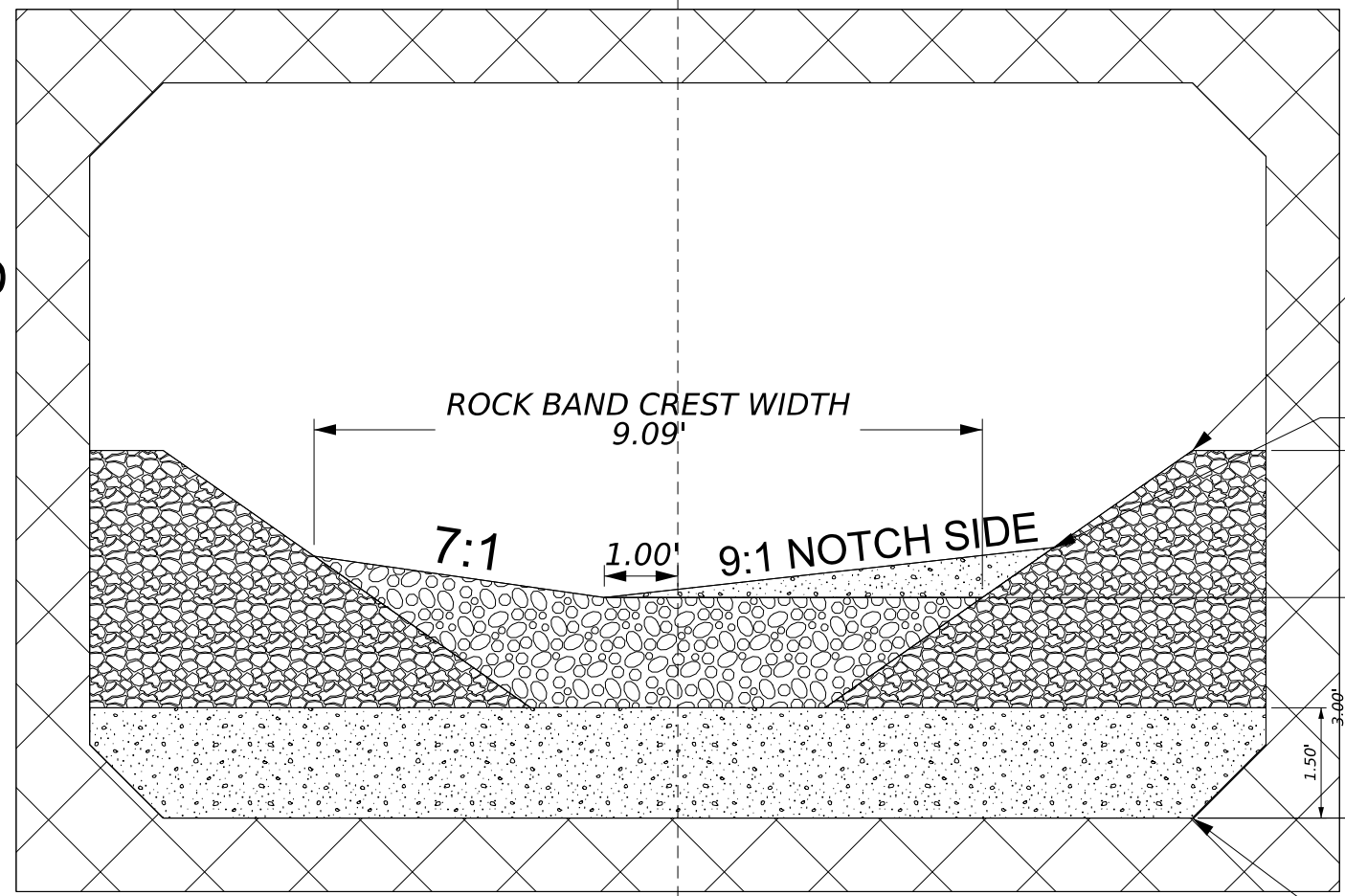
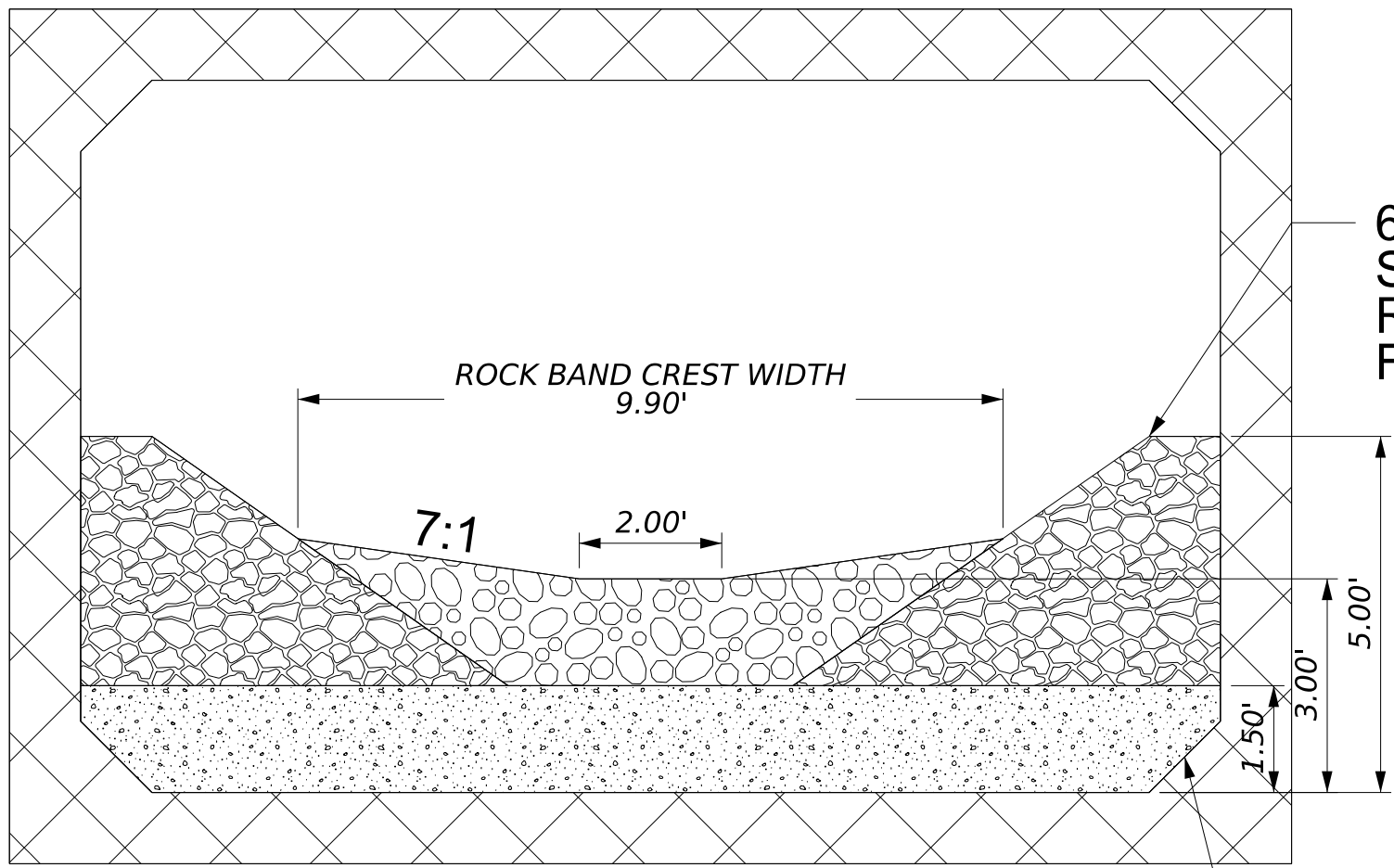
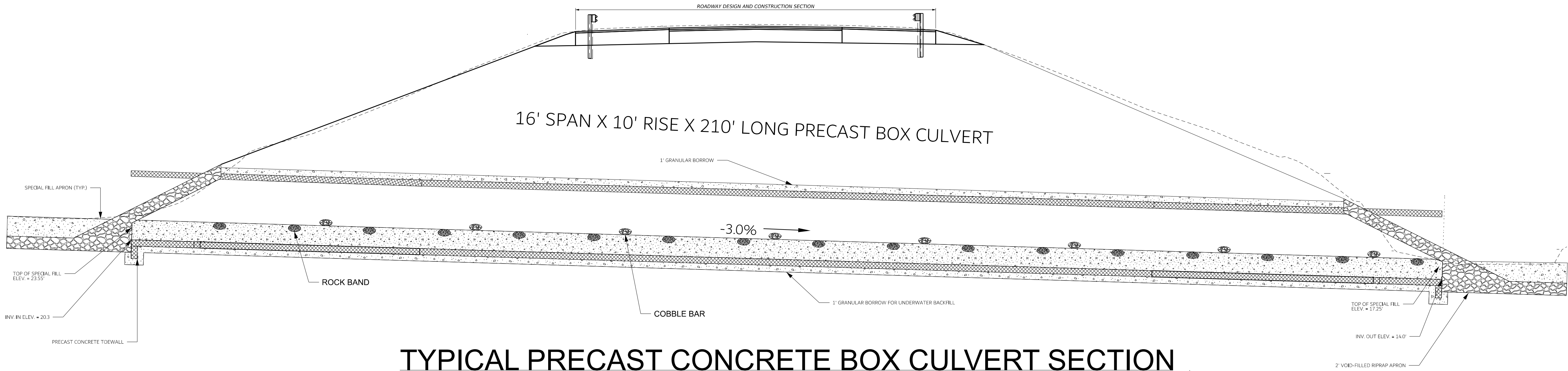
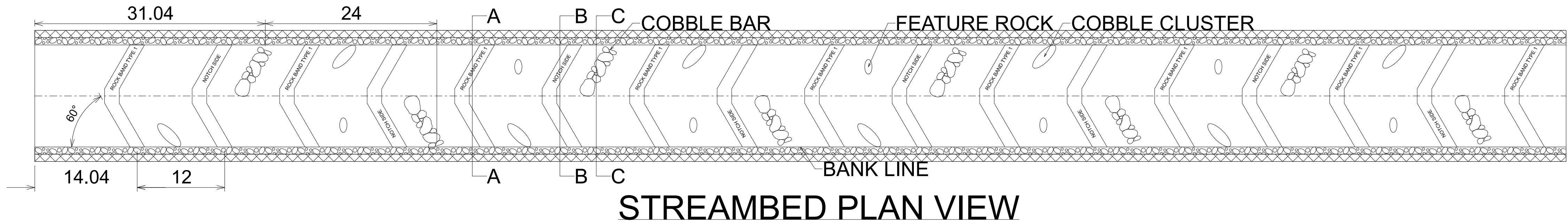
SPECIAL DETAILS

SHEET NUMBER

4

OF 21

STREAMBED DETAILS



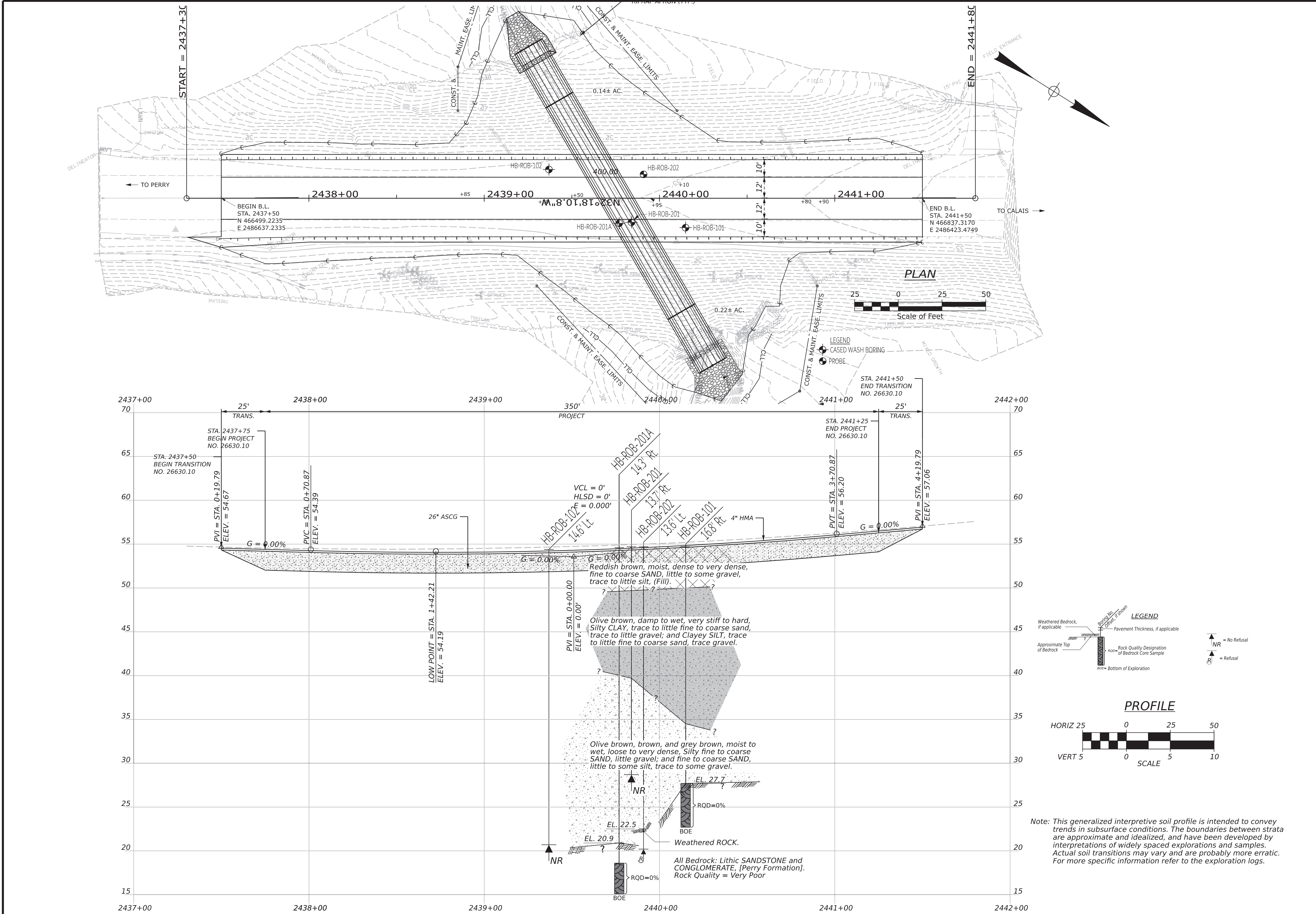
- CONSTRUCTION NOTES
1. SPECIAL FILL - STREAMBED MATERIAL SHALL BE THOROUGHLY MIXED PRIOR TO PLACEMENT.
 2. PLACE 1.0 FT LIFT OF SPECIAL FILL ON THE INVERT, MACHINE TAMP AND WATER-IN. THE RESIDENT SHALL APPROVE THE LIFT BEFORE PLACEMENT OF THE BANKLINES, ROCKBANDS AND THE FINAL LIFT.
 3. PLACE A MINIMUM OF 3 LARGER STONES (24" TO 30") IN EACH ROCK BAND, AND BETWEEN BANDS ALONG THE BANKLINES, 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 OF THE ROCK BANDS SHALL BE 3' ABOVE THE INVERT. THE FLOW LINE IS MEASURED AT THE CONTACT POINT BETWEEN ADJACENT ROCKS. THE TOP OF INDIVIDUAL LARGE ROCKS SHALL NOT EXTEND MORE THAN 1/3 THE HEIGHT OF THE STONE.
 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, STAYS BETWEEN THE BANKLINES AND DOES NOT PIPE THROUGH THE STONE. REFER TO SPECIAL PROVISIONS 203 AND 610.
 7. VOIDS IN RIPRAP APRONS SHALL BE INFILLED WITH GRANULAR BORROW OR OTHER MATERIAL APPROVED BY THE RESIDENT, WATERED-IN AND TAMPED.

STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
WIN	
26630.10	
HIGHWAY PLANS	

PROJ. MANAGER	DATE	BY	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED					
CHECKED-REVIEWED					
DESIGN-DETAILED					
DESIGN-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

ROBBINSON	
ROUTE 1	
STREAMBED DETAILS	

SHEET NUMBER	
5	
OF 21	



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2663010

26630.10

HIGHWAY PLANS

STATE OF MAINE
Cody Russell
15866
LICENSED PROFESSIONAL ENGINEER

Cody A. Russell

SIGNATURE
15866

P.E. NUMBER
8/14/2025

DATE

PROJ. MANAGER	DATE	BY	REVISIONS
CHECKED-REVIEWED			
DESIGNED-DETAILED	JUL 2025	T WHITE	
DESIGNED-DETAILED	Y T LEE		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ROBBINSON
U.S. ROUTE 1

BORING LOCATION PLAN &
INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER
6
OF 21

[illegible]

Maine Department of Transportation						Project Route 1 Large Culvert Replacement		Boring No.: HB-R08-201		
Soil/Rock Exploration Log US CUSTOMARY UNITS						Location Robinson, Maine		W/N: 26630.10		
Driller: Seaboard Drilling LLC		Elevation (ft.): 547				Auger ID/OD: 3" Solid Stem				
Operator: Eric/Lane's		Datum: NAVD83				Sampler: Standard Split Spoon				
Clogged By: C. Russell		Rig Type: Truck Mounted Acker AD2				Hammer Vt./Fall: 140#/30"				
Date Start/Finish: 5/28/2025; 08:23-1300		Drilling Method: Cased Wash Boring				Core Barrel: N/A				
Boring Location: 2493+84, 13.7 Ft Rt.		Casing ID/OD: HW-4"/NW-3"				Water Level*: None Observed				
Hammer Efficiency Factor - 100%		Hammer Type:		☒ Automatic ☐ Hydraulic ☐		Rope & Cathode ☐				
Penetration:		R = Rock Core Sample S = Soil Stem Auger SSA = Solid Stem Auger HS = Hollow Stem Auger BC = Rubber Core M = Unsuccessful Full Penetration Attempt V = Field Value Shear Test PP = Pocket Penetrometer WBK = Weight of Blow or Casing MW = Unsuccessful First Two Shear Tests Attempt		S _p = Penetration Force via Undrained Shear Strength (qsf) S _u (avg) = Lab Value Undrained Shear Strength (qsf) N ₆₀ = Uncorrected Cone Resistance N _{uncorr} = Raw field SPT value HMER Efficiency Factor = % of Hammer Efficiency N _a = SPT Uncorrected Corrected for Hammer Efficiency N _c = Hammer Efficiency Factor/HMERUncorrected		T = Pocket Torque Shear Strength (qsf) UC = % Water Content, percent LI = Liquid Limit P = Plastic Limit PI = Plasticity Index G = Grain Size Analysis C = Consolidation Test				
Sample Information										
	Depth (ft.)	Sample No.	Pen./Ref. (in)	Sample Depth (ft.)	Blast (lb / cu ft)	Blow Count (blows / ft)	N ₆₀	Casing Depth (ft.)	Visual Description and Remarks	Laboratory Testing Results / ASDI and Unified Class.
5	1D	24/13	1.00 ± 3.00	16/16/14/15	30	50		SSA	6" HMA. Reddish-brown, moist, very dense, fine to coarse SAND, some gravel, trace silt, (fsl).	-0.5
5	2D	24/13	5.00 ± 7.00	4/5/11/10	16	27	HP		Dive-brown, damp, very stiff, Clay SILTY, little fine to coarse sand, trace gravel. HP = Hydraulic Push	-5.0
10	3D	24/6	10.00 ± 12.00	5/6/5/8	11	18	UPN HELE		Dive-brown, wet, velvety stiff, SILTY CLAY, little fine to coarse sand, little gravel.	
15	4D/1	24/14	15.00 ± 17.00	8/9/15/20	24	40			4D (15D-16.0 ft bgs) Dive-brown, wet, dense, Silty Fine to coarse SAND, little gravel. 4D/4 (16d-17.0 ft bgs) Dive-brown, wet, Silty Fine to medium SAND.	-15.0
20	5D	24/10	20.00 ± 22.00	9/15/16/20	31	52			Brown, wet, very dense, Fine to coarse SAND, some gravel, little silt, (fsl).	-20.0
25	6D	24/8	25.00 ± 27.00	17/22/13/9	35	59	14		Brown, wet, very dense, Fine to coarse SAND, little gravel, little silt. Bottom of Exploration at 26.3 feet below ground surface MD casing telescoped through MD drive through culvert at approximately 26.0 ft bgs. Sealed hole in culvert MD REF USDM, moved to HB-R08-201A.	-26.0
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.

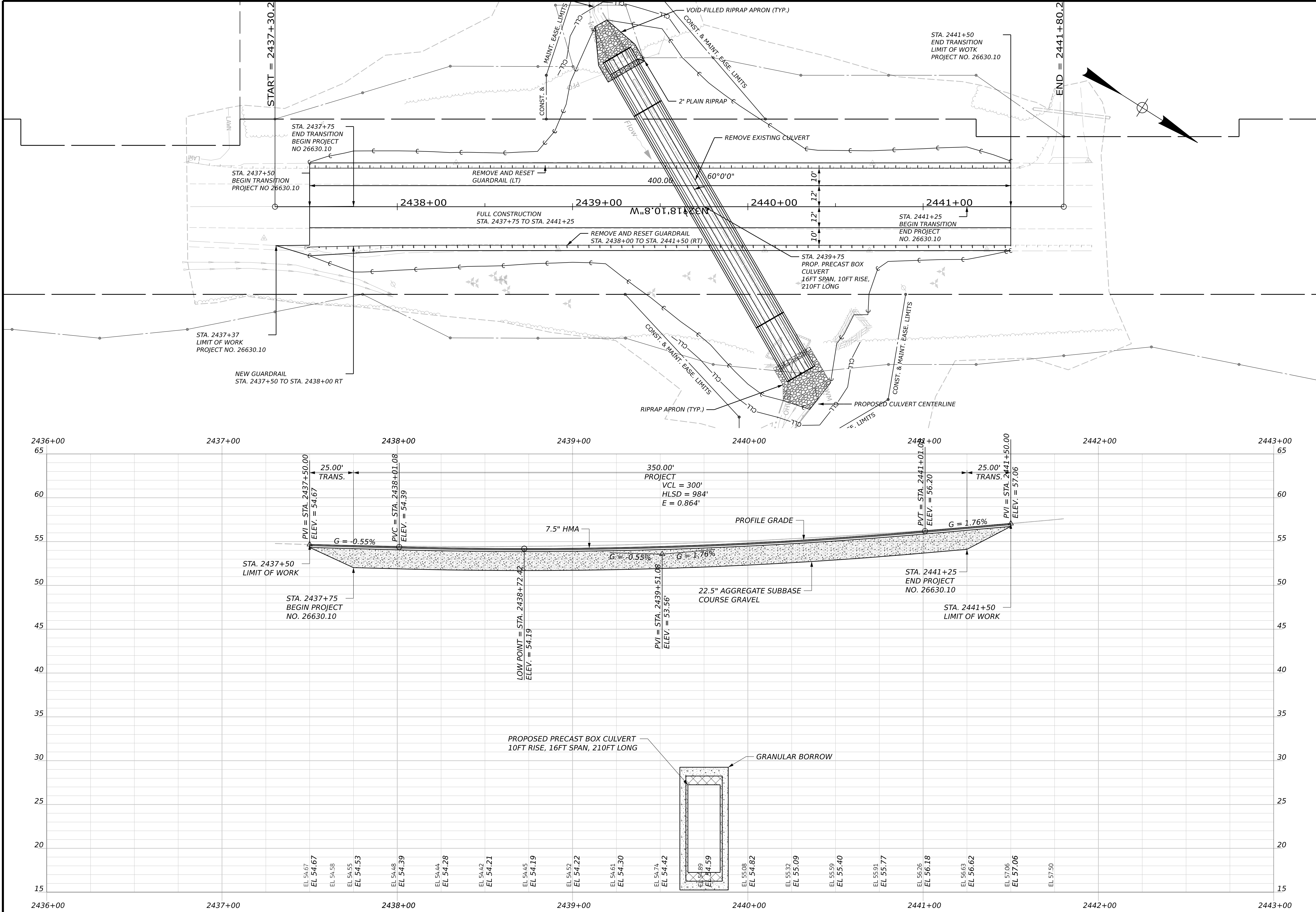
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Boring No.: HB-R08-201

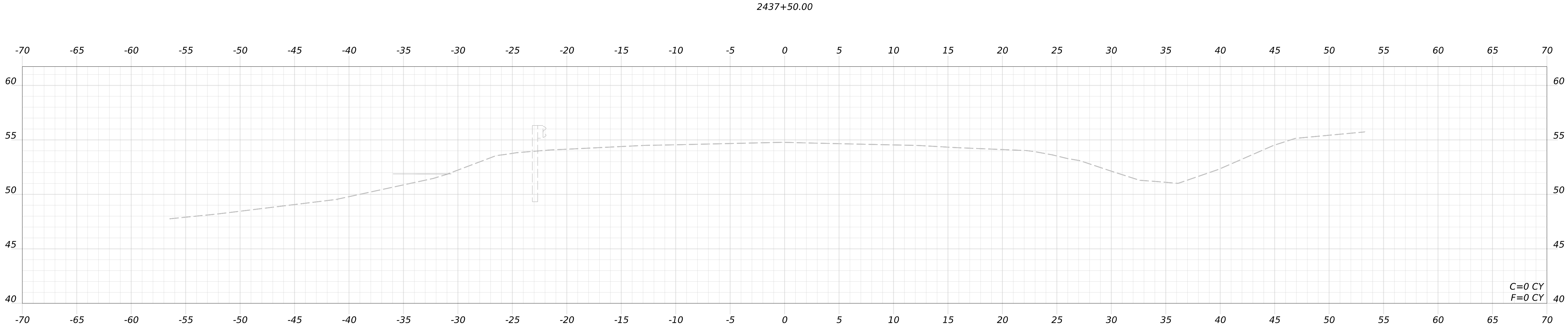
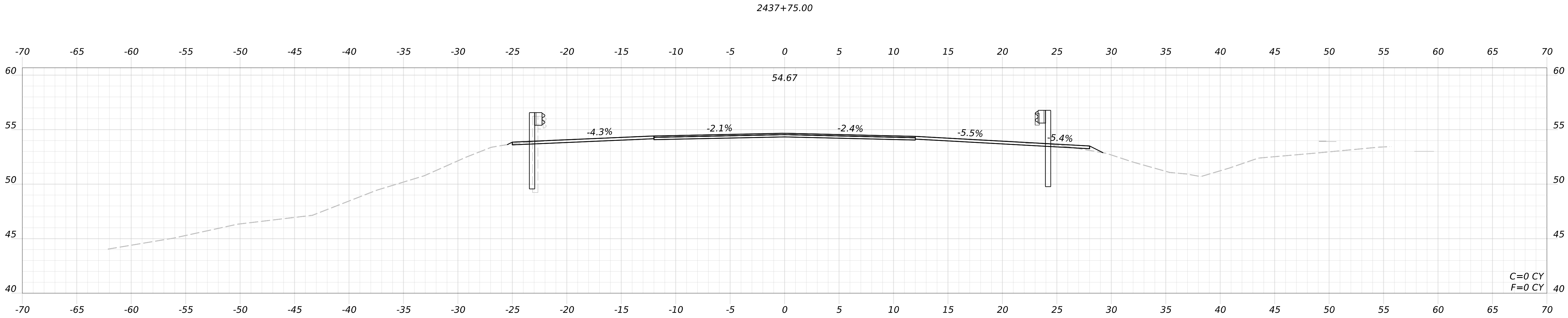
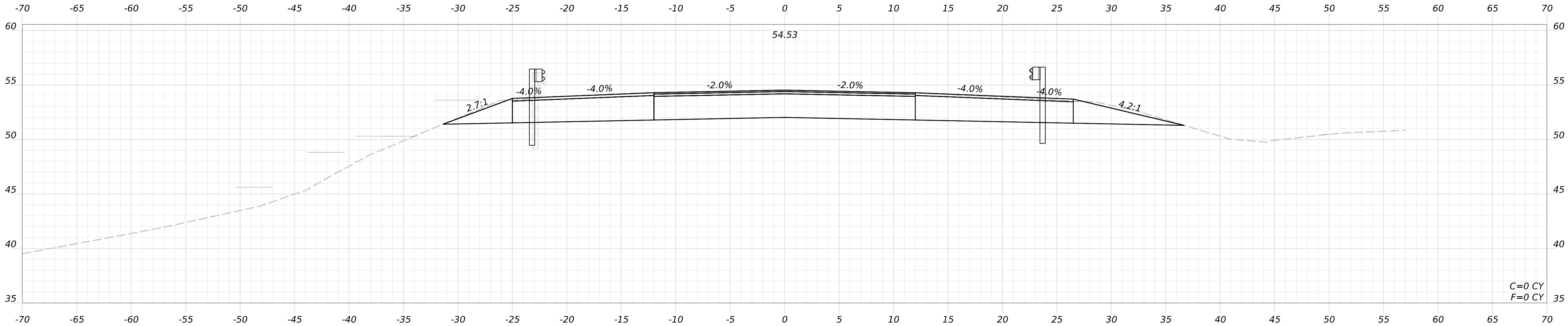
Maine Department of Transportation				Project: Route 1 Large Culvert Replacement		Boring No: HB-R08-201A	
Soil/Rock Exploration Log				Location: Lorton, Maine		W/N: 26630.10	
US CUSTOMARY UNITS							
Driller: Seaboard Drilling LLC		Elevation (ft): 54.6		Auger ID/DD: 5" Solid Stem			
Operator: Eric James		Datum: NAVD83		Sampler: Standard Split Spoon			
Logged By: C. Russell		Rig Type: Truck Mounted Acker A52		Hammer Wt/Fall: 140#/30"			
Date Start/Finish: 5/28/2025, 13:00-17:00		Drilling Method: Cased Wash Boring		Core Barrel: N/A			
Boring Location: 2439+77, 14.3 Ft Rt.		Casing ID/DD: HW-4"/NW-3"		Water Level#: 100 Ft bgs.			
Hammer Efficiency Factor: 1.008		Hammer Type: Automatic SS Hydraulic ☐ Rope & Cathode ☐					
Notes: D = Split Spoon Sample MS = Unsuccessful Split Spoon Sample Attempt U = Thin Wall Sample M = Unsuccessful Thin Wall Sample Attempt N = Field Vane Shear Test RP = Pocket Penetration MSR = Unsuccessful Field Vane Shear Test Attempt R = Rock Core Sample SSA = Solid Stem Auger MSA = Motor Stem Auger RC = Rubber Core WSP = Weight of HBM Hammer WSP = Weight of Rig or Casing WSP = Weight of Shear Pin LS = Penetration Test Vane Unrated Shear Strength (psi) LS(100) = Lab Vane Unrated Shear Strength (psi) LS = Unrated Compressive Strength (ksi) MSRcorrected = Raw First SPI * Wuse Hammer Efficiency Factor = Rig Specific Annual Calibration Value MS = SPI Uncorrected Corrected for Hammer Efficiency MS = Hammer Efficiency Factor * MSR Uncorrected LC = Pocket Torque Shear Strength (psi) VC = Vane Content, percent LI = Liquid Limit PI = Plastic Limit PL = Plasticity Index G = Grain Size Analysis C = Consolidation Test							
Sample Information							
Depth (ft.)	Sample No.	Pen./Roc. (in)	Sample Depth (ft.)	Block (in. x in. x in.)	Shear Strength (psi)	or RQD (%)	Uncorrected
							WSP
							Casing
							Penetration
							Correction
							Graphic Log
							Visual Description and Remarks
							Laboratory Testing Results/ASHTO and Unified Class.
4							SSA
5							55
							78
							117
							129
10							131
							143
15							
20							
25							
30	1D	24/8	30.00 = 32.00	6/3/1/1	4	7	24.6
							20.9
35							186
40	R1	42/42	36.00 = 39.50	R00 = 0%			151
45							
50							
1D 24/8 30.00 = 32.00 6/3/1/1 4 7 24.6 RP 20.9 186 151 Grey-brown, wet, loose, fine to coarse SAND, some gravel, some silt Top of Bedrock at Elev. 20.9 Ft. Roller cone ahead in to bedrock to 36.0 Ft bgs. R1: Bedrock: Lithic SANDSTONE and CONGLOMERATE, (Pherry Formation). Rock Quality = Very Poor R1 Core Takes (contact) 36.0-37.0 Ft (357) 37.0-38.0 Ft (430) 38.0-39.0 Ft (514) 39.0-39.5 (544) 100% Recovery Bottom of Exploration at 39.5 feet below ground surface							

[illegible]

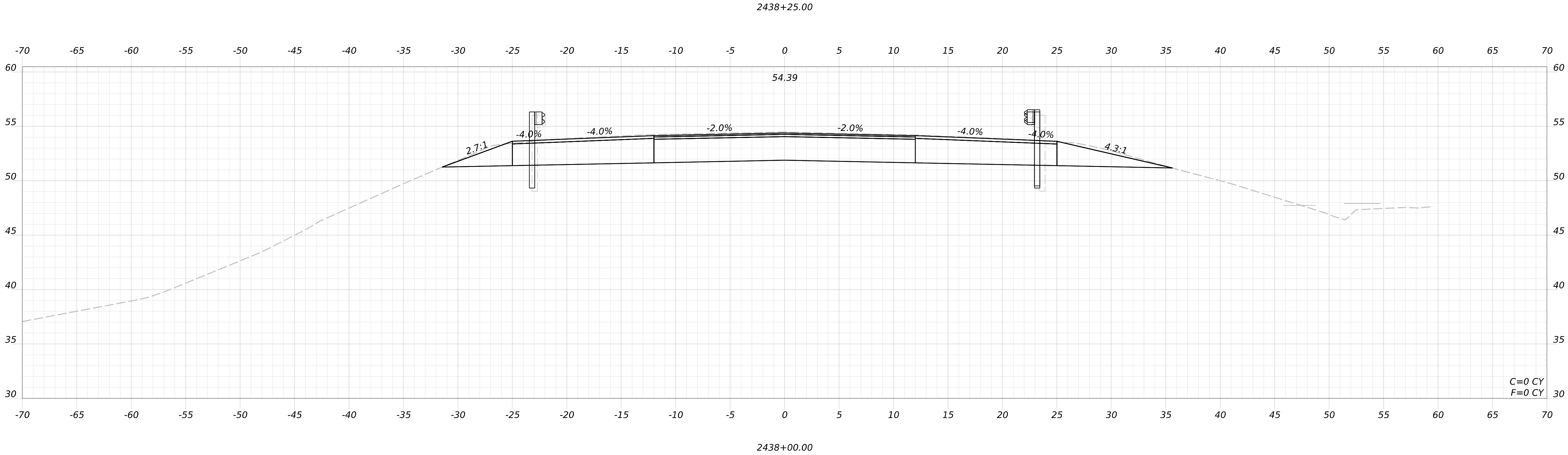
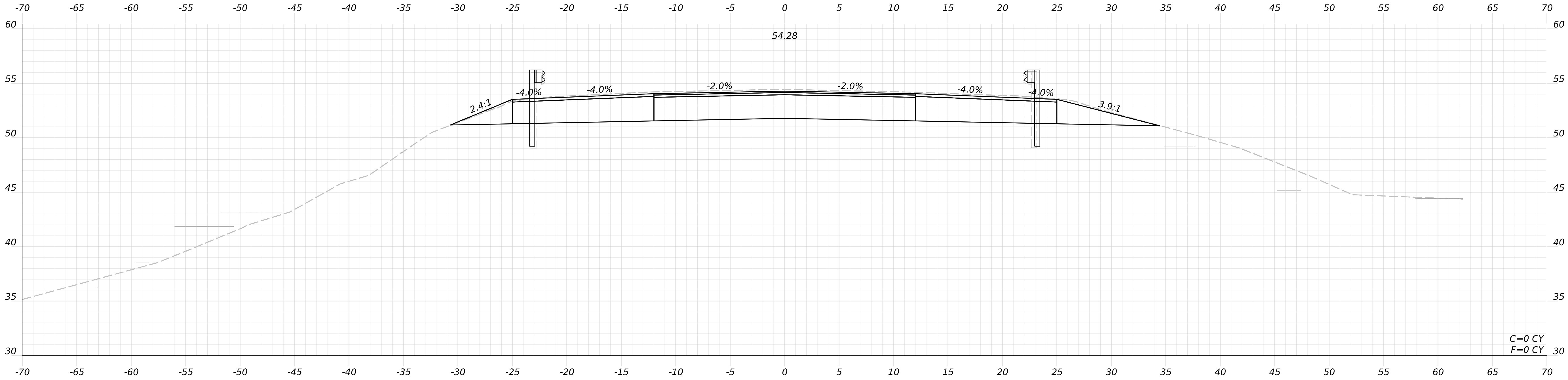
Maine Department of Transportation							Boring No.: HB-RDB-102			
<u>Solid Rock Exploration Log —</u>						<u>Location:</u> Robinston, Maine	<u>Boring No.</u> : HB-RDB-102			
<u>US CUSTOMER UNITS</u>						<u>W/N:</u> B6983010				
<u>Drilling Contractor:</u> NoneBOT		<u>Elevation (ft.):</u> 54.4		<u>Auger ID/DD:</u> 5' Dia.						
<u>Operator:</u> Daggett/Amarie		<u>Date:</u> NAVD88		<u>Sampler:</u> N/A						
<u>Ligation By:</u> B. Wilder		<u>Rig Type:</u> CME 43C		<u>Hammer Vt/Fall:</u> N/A						
<u>Date Start/Finish:</u> 11/8/2023–11/8/2023		<u>Drilling Method:</u> Solid Stem Auger		<u>Core Barrel:</u> N/A						
<u>Boring Location:</u> 2439+36.9, 16.4 Ft L.T.		<u>Casing ID/DD:</u> N/A		<u>Water Level*</u> :		None Observed				
<u>Diphenetic</u> = Soil Sooon Sample S = Single off Auger Flights B = Bucket Sample off Auger Flights NI = Unsuccessful Split Sooon Sample Attempt N/S = Not Soil Take Sooon KV = Unsuccessful Field Vane Shear Test Attempt V = Liquid Vane Shear Test N/U = Unsuccessful Penetration Test Using Torque Arm E = Rock Core Sampler SA = Solid Stem Auger NSA = Hollow Stem Auger HSC = Motor Core NV = Weight of 14lb Hammer P = Plastic Limit LL = Liquid Limit PL = Plastic Limit PI = Plasticity Index G = Grain Size Analysis CT = Comminution Tests										
Sample Information										
(ft.) Depth	Sample No.	Rev./ABC (n)	Single Depth (in.)	Blows / G.S. (n)	Shear Strength (psi) or RBC CD	V-value Blows	Casing Elevation (ft.)	Gauging Log	Visual Description and Remarks	Laboratory Testing Results/ ASTM and Unified Class.
0									Probe, no material samples taken.	
5										
10										
15/30										
20.7									Bottom of Exploration at 33.7 feet below ground surface—NO REVEAL	33.7
Modified boring log layout. Depth (ft.) line ends at 15 ft bgs and also begins at 30 ft bgs. Boring log spliced between those depths to fit on sheet.										
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 in the time measurements were made.										



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2663010		WIN 26630.10		HIGHWAY PLANS	
ROBBINSON ROUTE 1		SHEET NUMBER		8		OF 21	
PLAN / PROFILE		SIGNATURE		P.E. NUMBER		DATE	
PROJ. MANAGER DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES		BY R. BARROWS J. BARNES V. GEMMA		DATE AUG 2025			

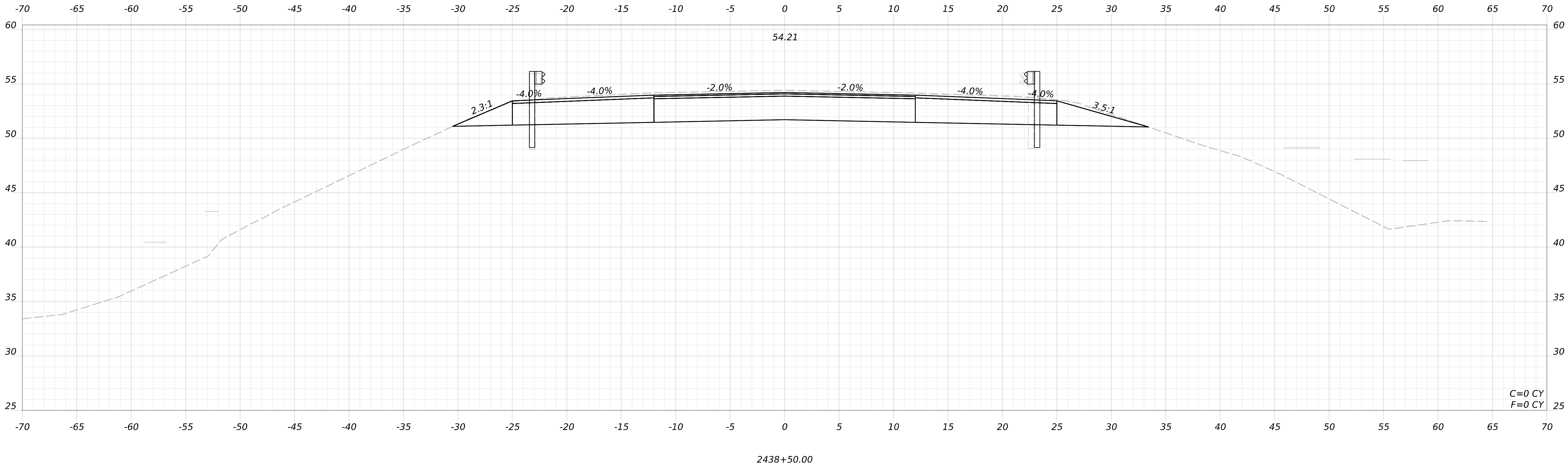
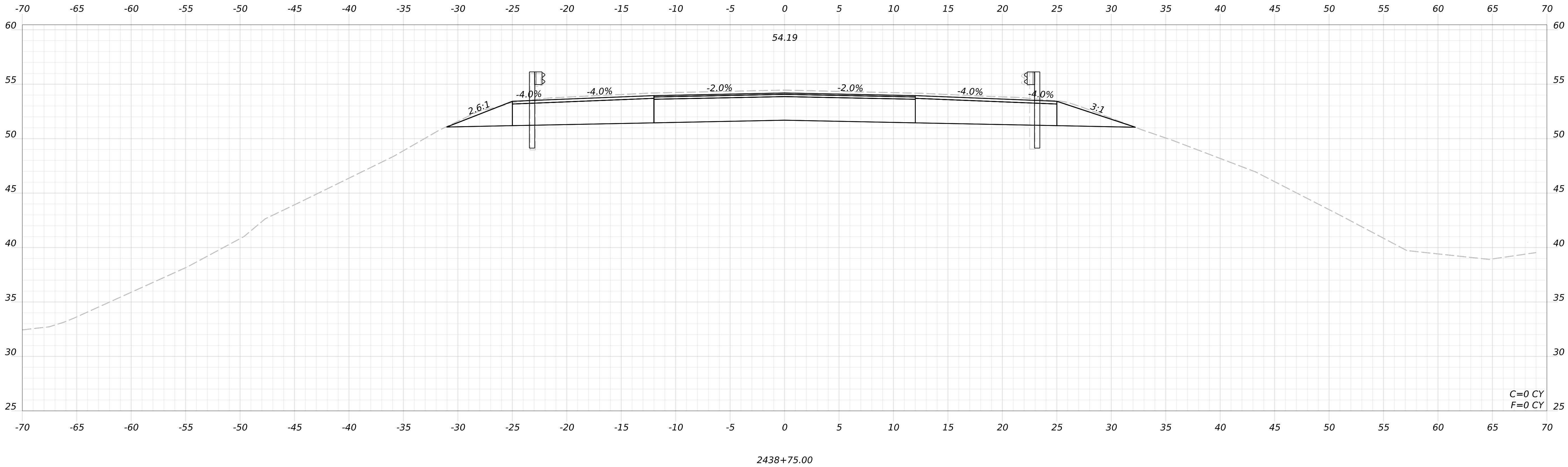


STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2663010		WIN	26630.10	HIGHWAY PLANS			
ROBBINSON ROUTE 1		CROSS SECTIONS				SHEET NUMBER		
						9		
						OF 21		
PROJ. MANAGER	R. BARROWS	BY	V. GEMMA	DATE	JUL 2025	SIGNATURE	P.E. NUMBER	DATE
CHECKED-REVIEWED	J. BAINES							
DESIGN-DETAILED								
DESIGN-DETAILED								
DESIGN-DETAILED								
REVISIONS 1								
REVISIONS 2								
REVISIONS 3								
REVISIONS 4								
FIELD CHANGES								

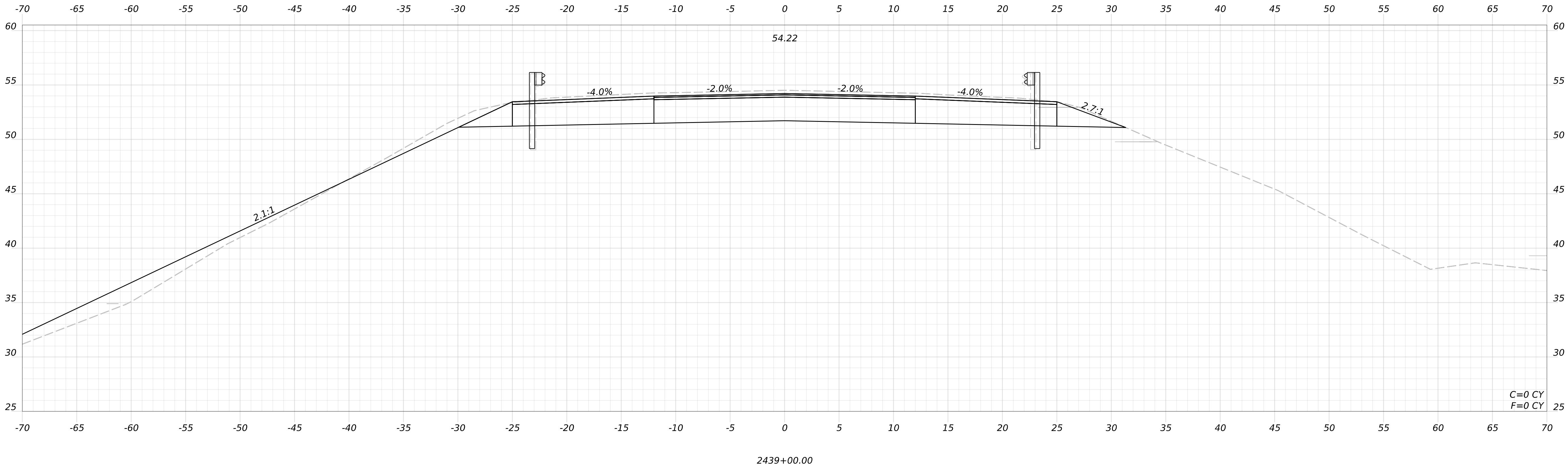
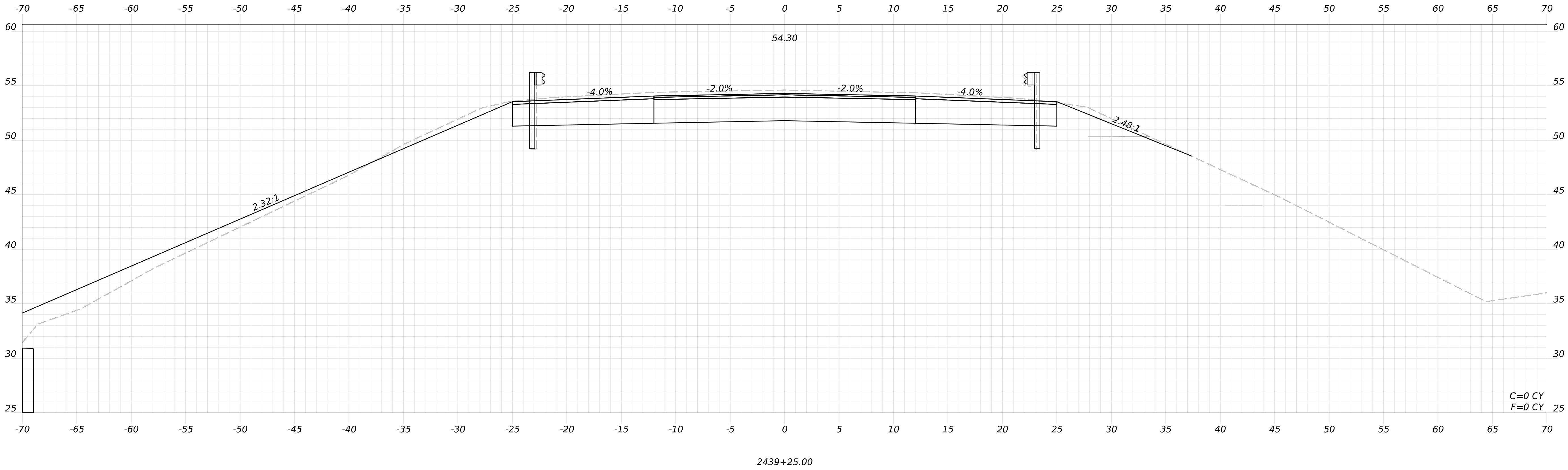


PROJ. MANAGER	R. BARROWS	BY	J. BARNES	DATE	JUL 2025
CHECKED-DETAILED	J. BARNES	BY	V. GEMMA	SIGNATURE	
DESIGNED-DETAILED				P.E. NUMBER	
DESIGNED-DETAILED3				DATE	
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

ROBBINSON
ROUTE 1
CROSS SECTIONS



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2663010		WIN 26630.10		HIGHWAY PLANS	
ROBBINSON ROUTE 1		SIGNATURE		P.E. NUMBER		DATE	
		J. BARNES		X. GEMMA		JUL 2025	
		DESIGN-REVIEWED		DESIGN-REVIEWED		DESIGN-REVIEWED	
		DESIGN-REVIEWED		DESIGN-REVIEWED		DESIGN-REVIEWED	
CROSS SECTIONS		REVISIONS 1		REVISIONS 2		REVISIONS 3	
		REVISIONS 4		REVISIONS 5		REVISIONS 6	
		FIELD CHANGES		FIELD CHANGES		FIELD CHANGES	
		FIELD CHANGES		FIELD CHANGES		FIELD CHANGES	
SHEET NUMBER		11		OF		21	



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2663010

WIN
26630.10

HIGHWAY PLANS

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

R. BARROWS
J. BAINES
V. GEMMA

BY
J. BAINES
V. GEMMA

DATE
JUL 2025

SIGNATURE

P.E. NUMBER

DATE

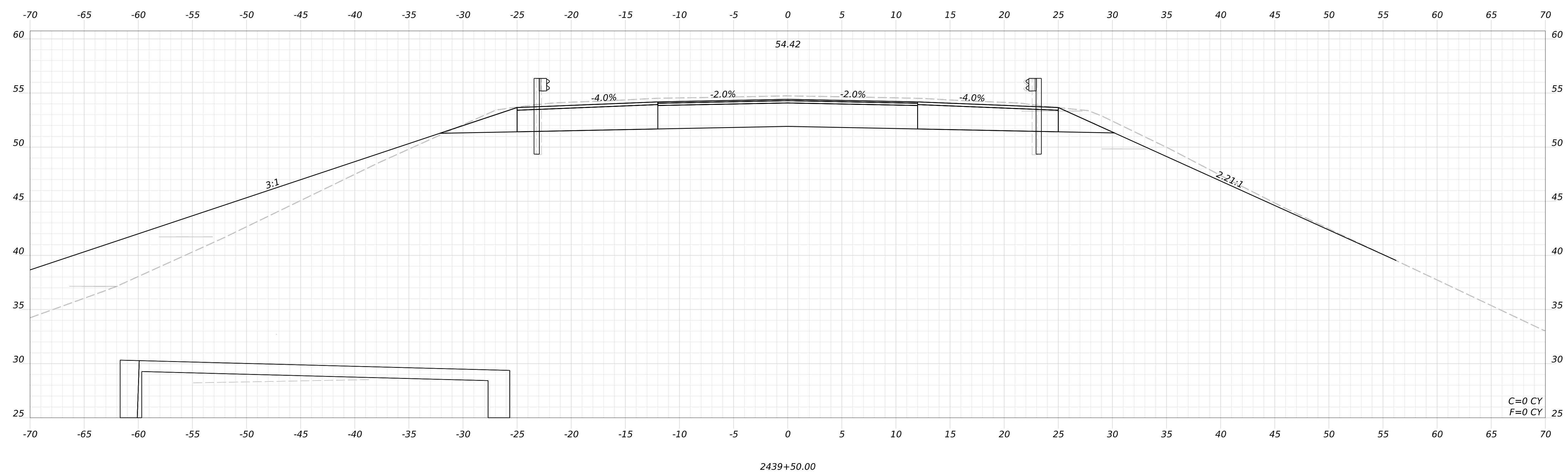
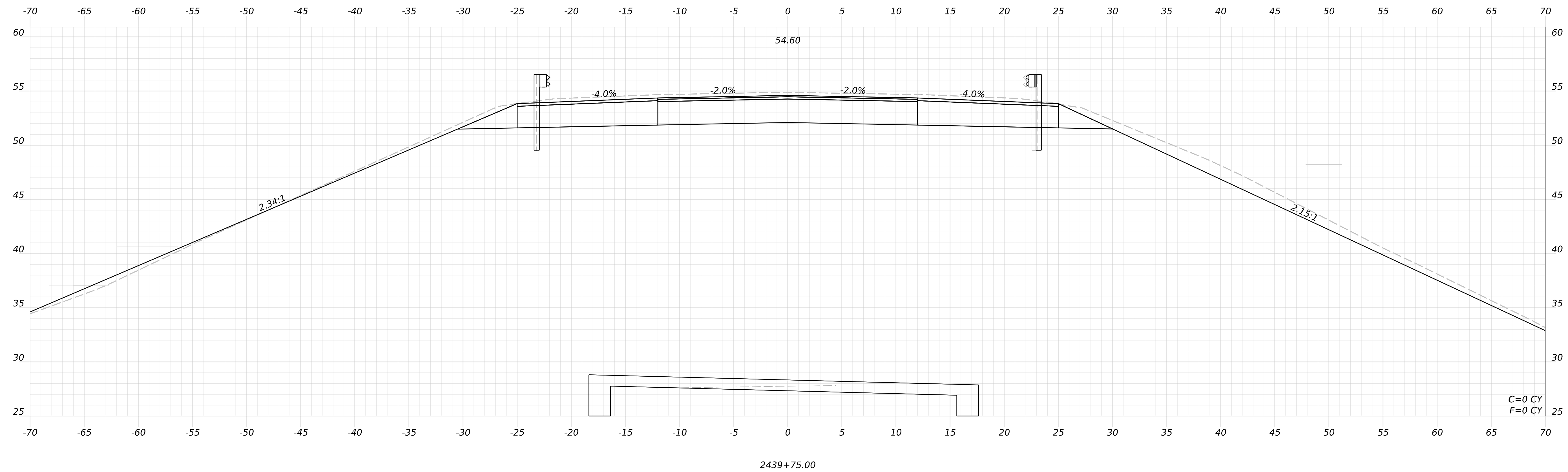
ROBBINSON
ROUTE 1

CROSS SECTIONS

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2663010

WIN
26630.10

HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE _____

DATE _____

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BY _____

V. GEMMA

3. BARROWS

TRAINING

PROJ. MANAGER

DESIGN DETAILED

DESIGN-DETAILED	
CHECKED-REVIEWED	

DESIGN2-DETAILED2

DESIGN3-DETAILED3

REVISIONS 1	
REVISIONS 2	

REVISIONS 3

REVISIONS 4

FIELD CHANGES

ROBBINSON ROUTE 1

CROSS SECTIONS

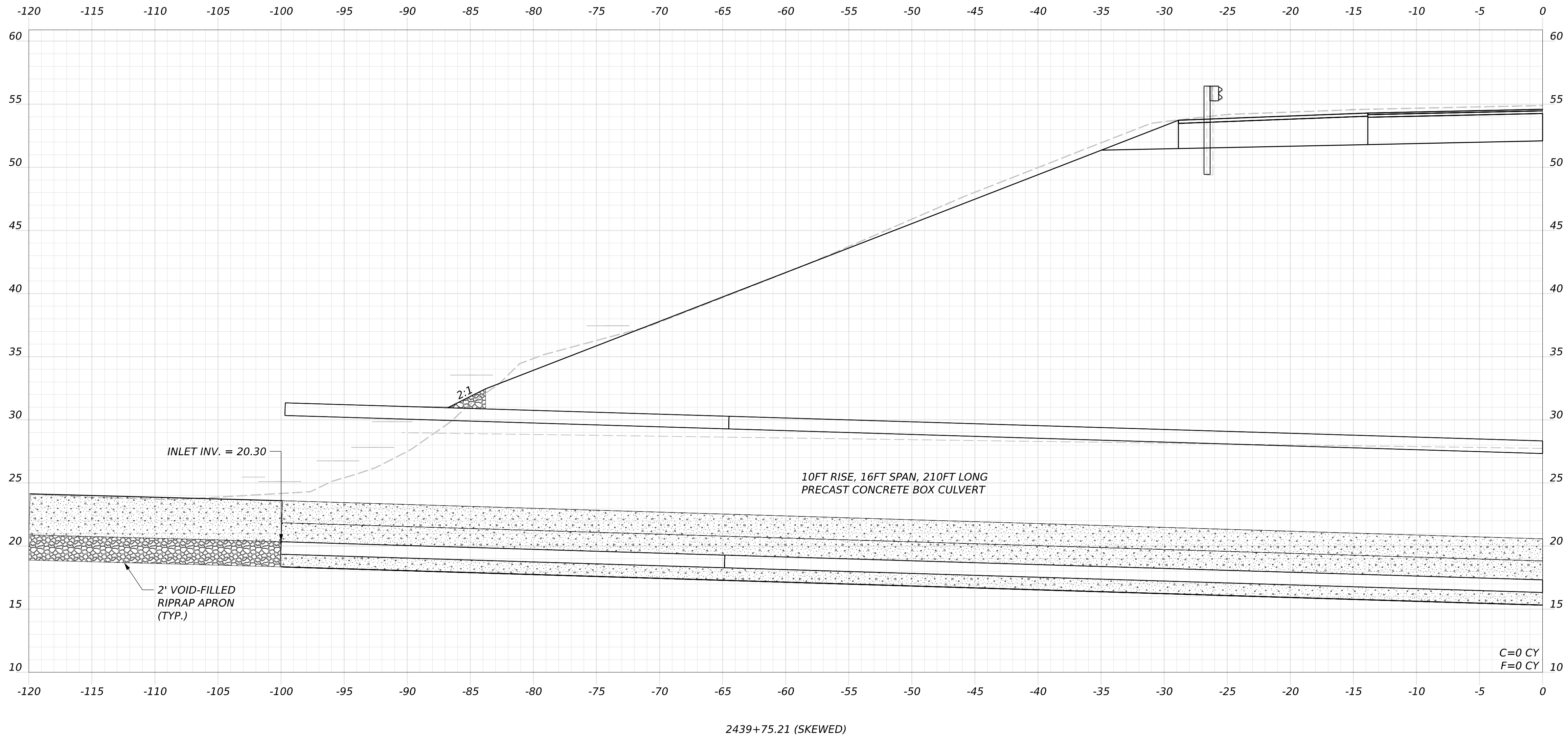
SHEET NUMBER

13

OF 21

Username: James.Baines

Date: 8/21/2025



STATE OF MAINE DEPARTMENT OF TRANSPORTATION	2663010	WIN 26630.10	HIGHWAY PLANS
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PROJ. MANAGER	R. BARROWS	BY	DATE
DESIGN-DETAILED 1	J. BIANE	Y. GEMMA	JUL. 2025
CHECKED-IN-REVIEWED			
DESIGN-DETAILED 2			
DESIGN-DETAILED 3			
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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
SIGNATURE			
P.E. NUMBER			
DATE			

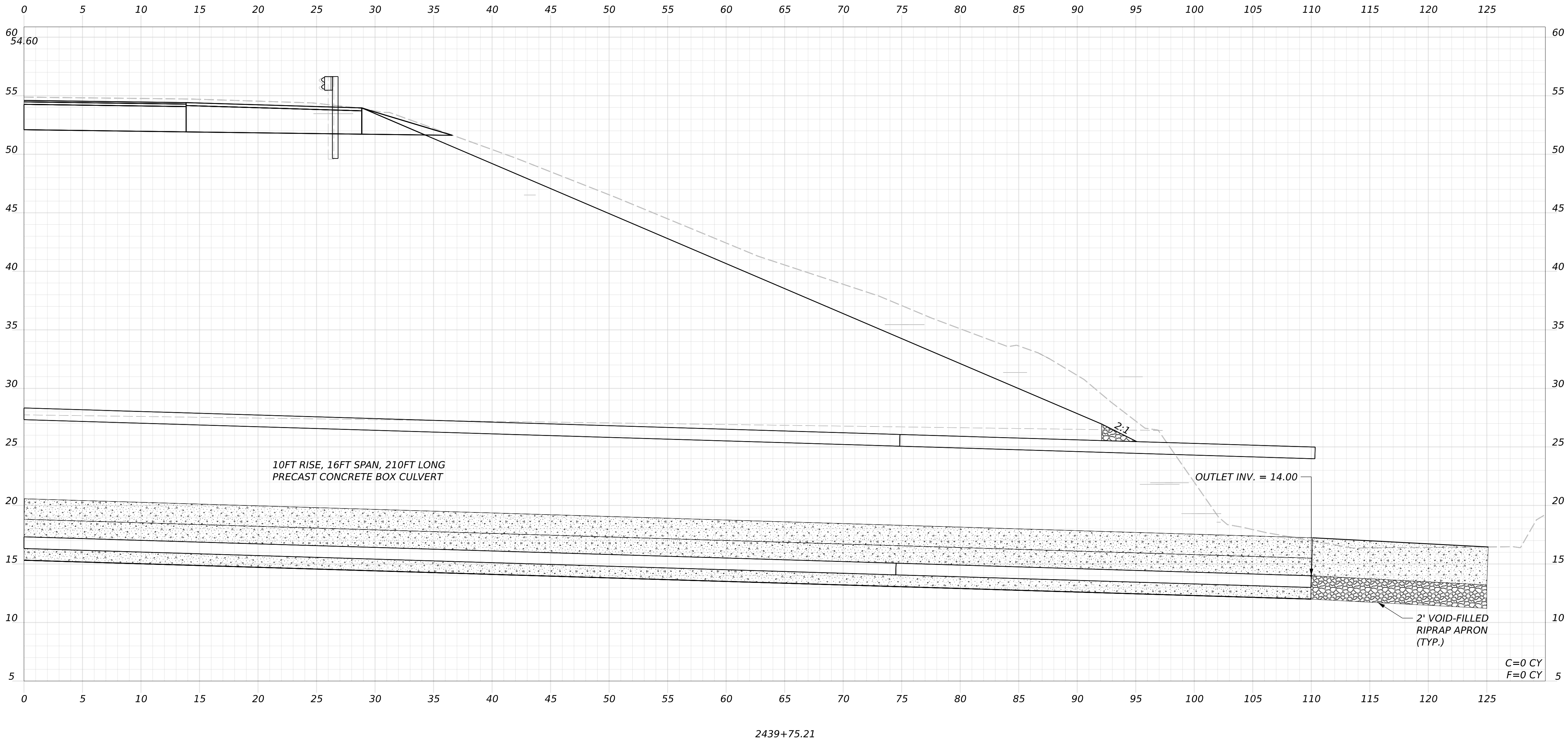
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CROSS SECTIONS

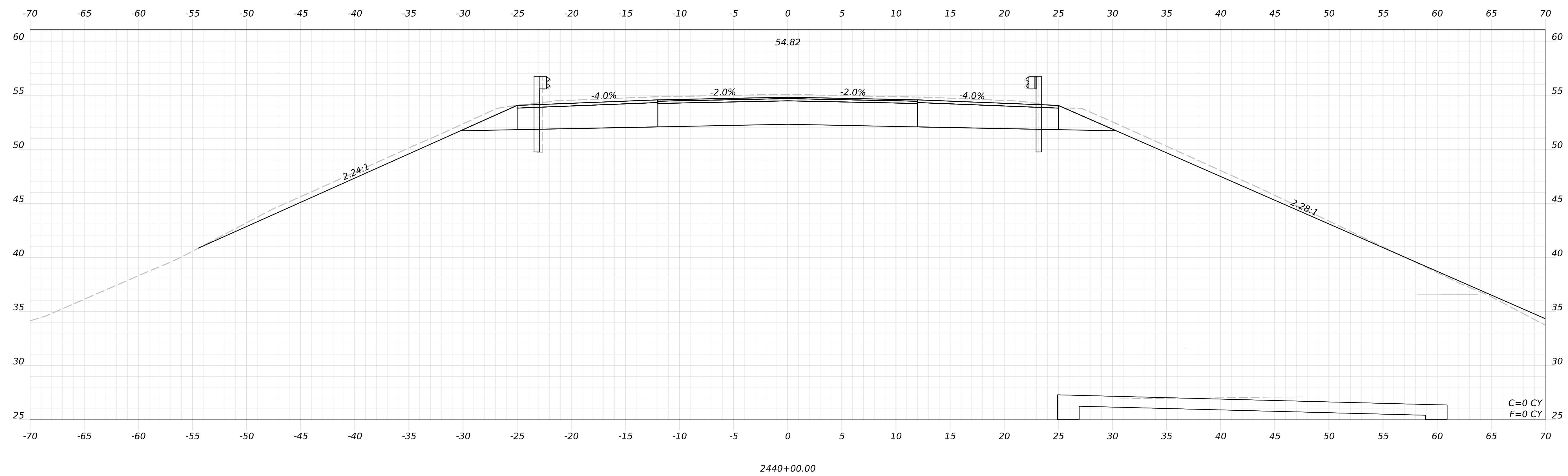
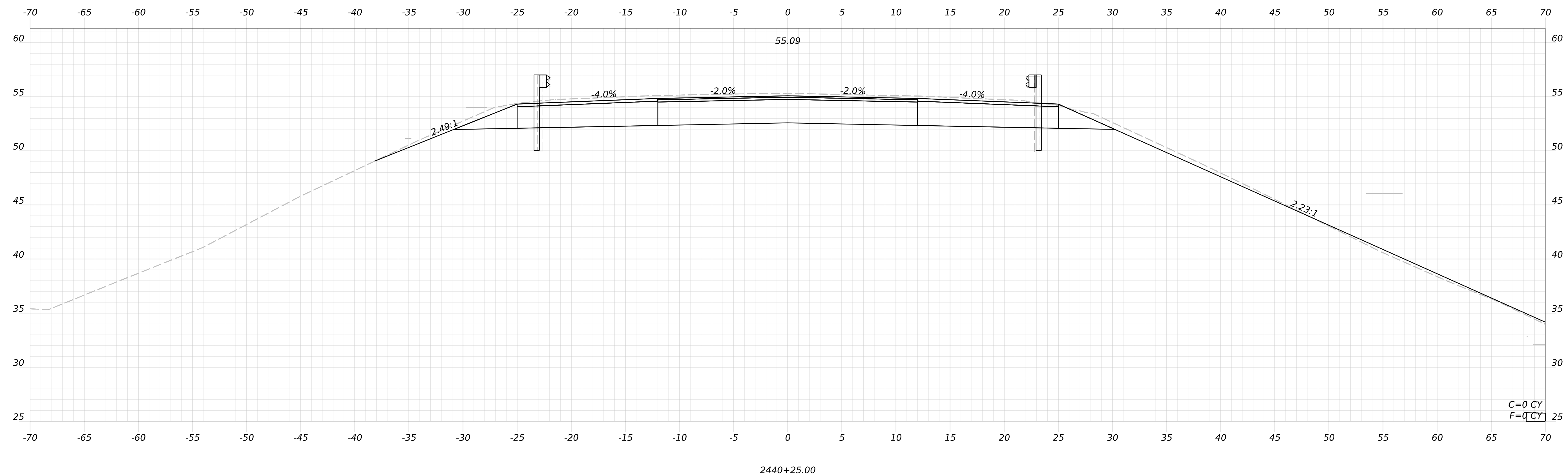
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OF 21



ROBBINSTON ROUTE 1					PROJ. MANAGER		R. BARROWS	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
CROSS SECTIONS					DESIGN-DETAILED		J. BAINES	V. GEMMA			
					CHECKED-REVIEWED				JUL 2025	SIGNATURE	
					DESIGN-DETAILED02						
					DESIGN-DETAILED03						
					REVISIONS 1					P.E. NUMBER	
					REVISIONS 2						
					REVISIONS 3						
					REVISIONS 4					WIN 26630.10	
FIELD CHANGES										HIGHWAY PLANS	



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2663010

WIN
26630.10 HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE _____

PROJ. MANAGER	BY	DATE
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DESIGN-DETAILED	J. BAINES	V. GEMMA

CHECKED-REVIEWED		JUL 2025
DESIGN2-DETAILED2		

DESIGN3-DETAILED3			
REVISIONS 1			

REVISIONS 2		

REVISIONS 3		
REVISIONS 4		

FIELD CHANGES		

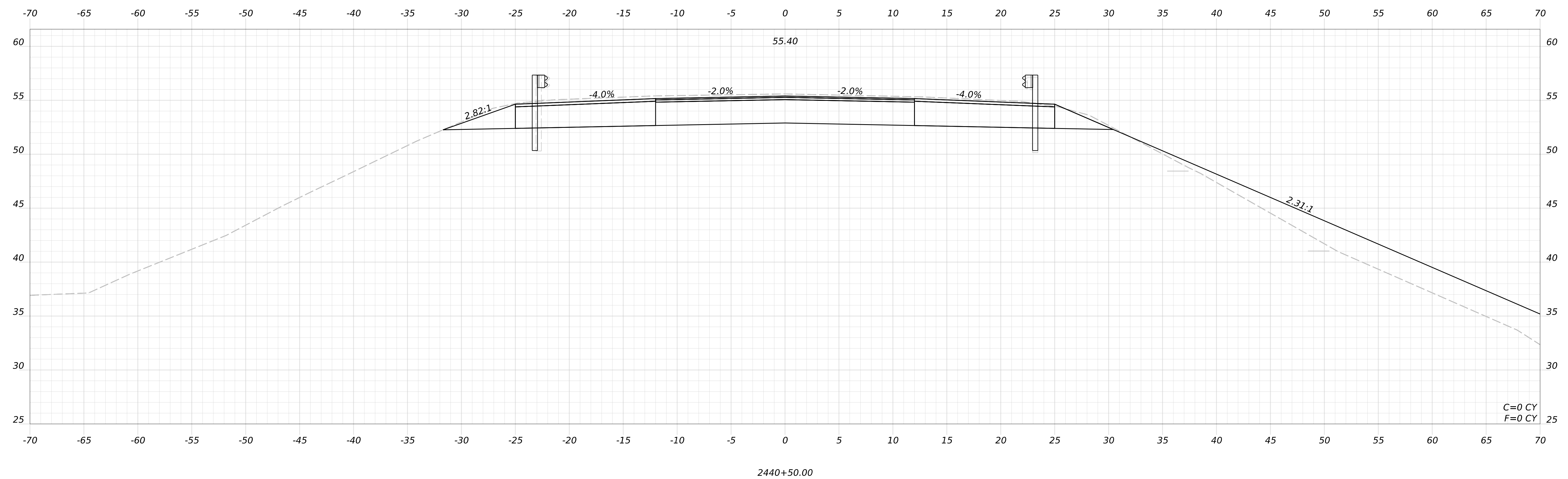
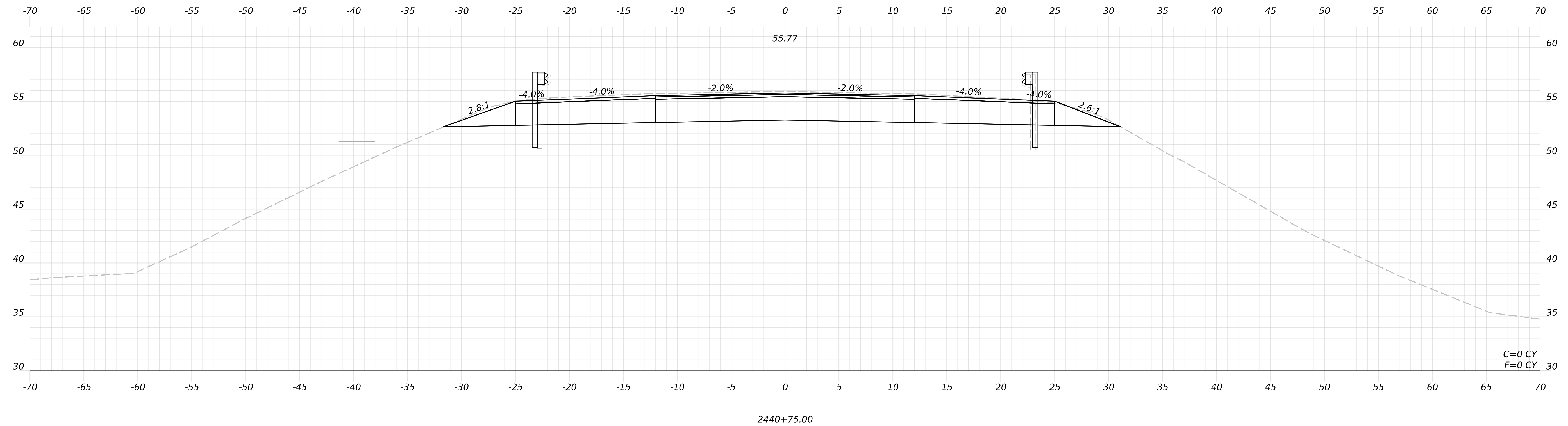
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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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WIN
26630.10
HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE _____

DESIGN-DETAILED	J. BAINES	V. GEMMA
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CHECKED-REVIEWED			JUL 2025
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DESIGN3-DETAILED3		
REVISIONS 1		

REVISIONS 2		
REVISIONS 3		

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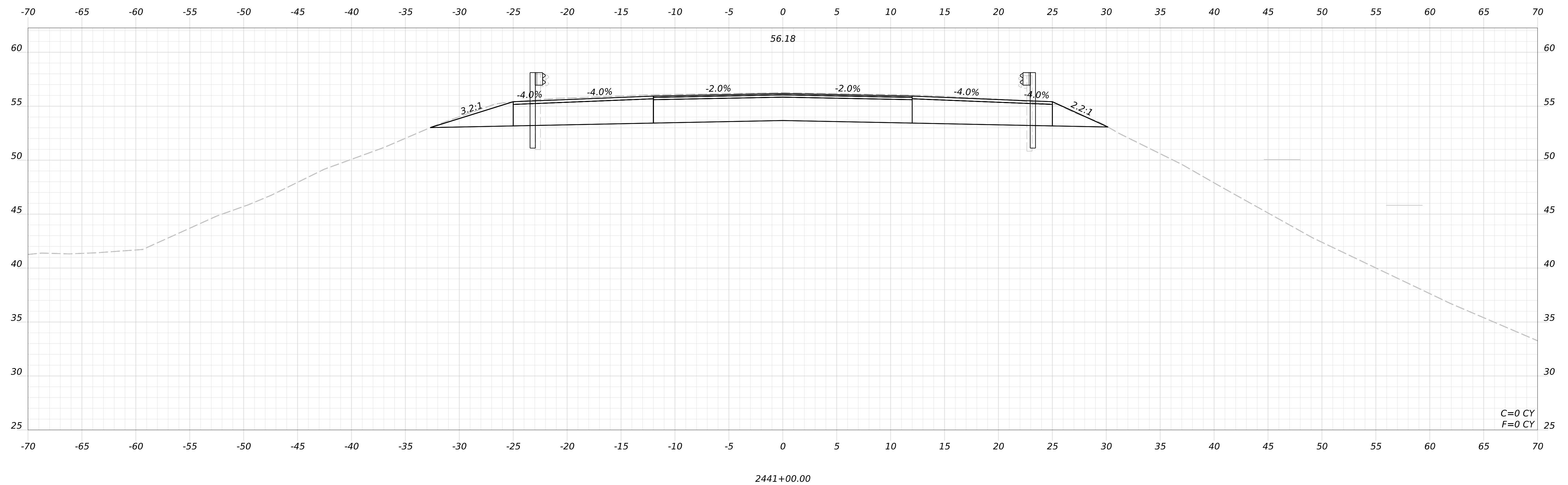
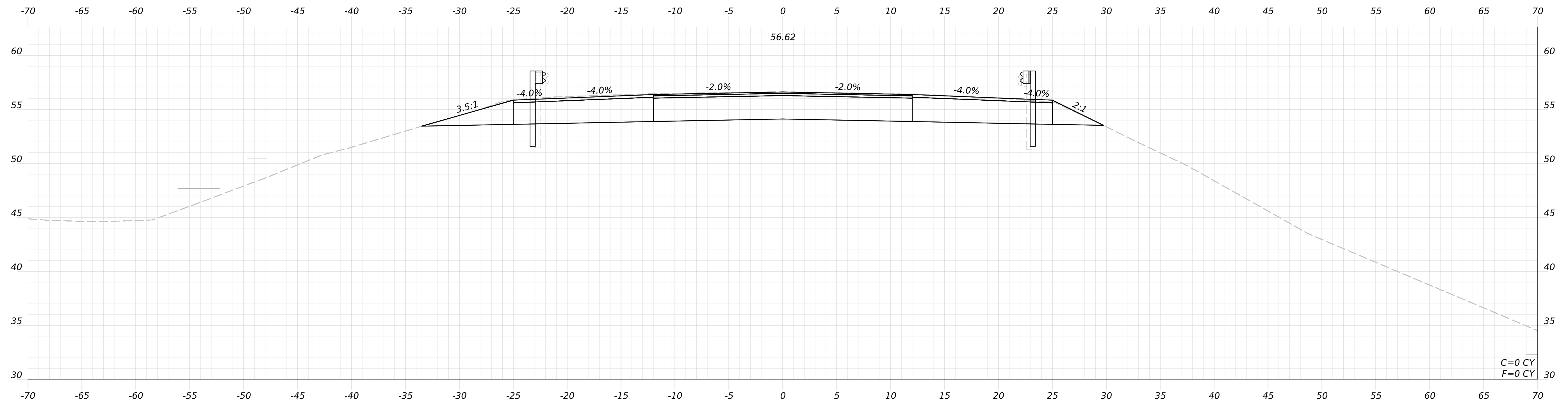
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CROSS SECTIONS

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2663010

WIN
26630.10
HIGHWAY PLANS

SIGNATURE

P.E. NUMBER

DATE _____

DESIGN-DETAILED	J. BAINES	V. GEMMA
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	CHECKED-REVIEWED		JUL 2025
DESIGN2-DETAILED2			

DESIGN3-DETAILED3		
DESIGN3-DETAILED3		

REVISIONS 1	
REVISIONS 2	

REVISIONS 3		
REVISIONS 4		

		FIELD CHANGES	

ROBBINSON

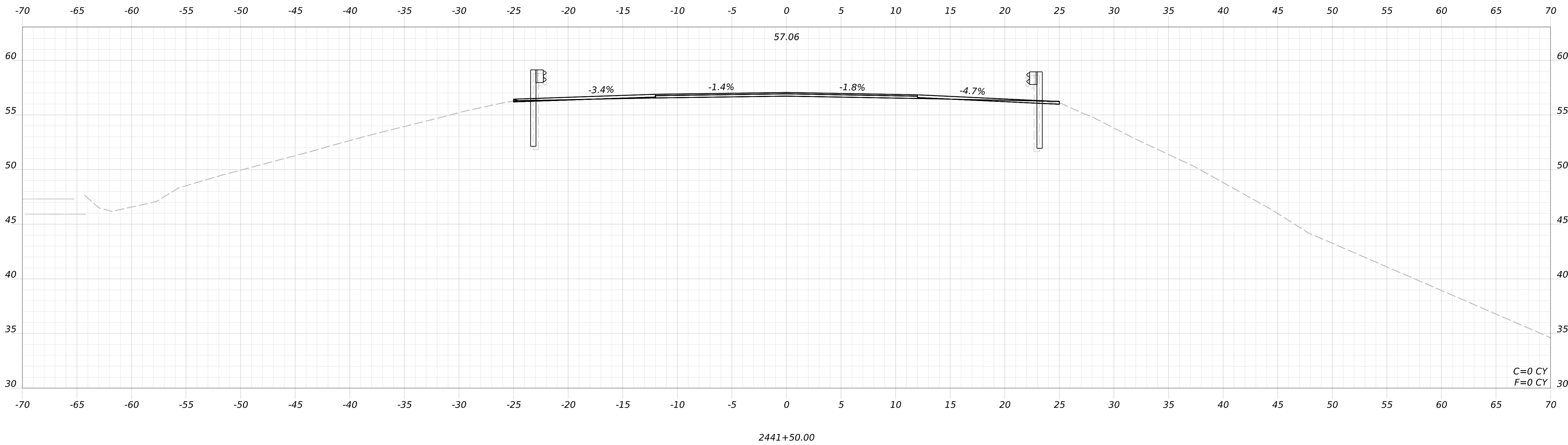
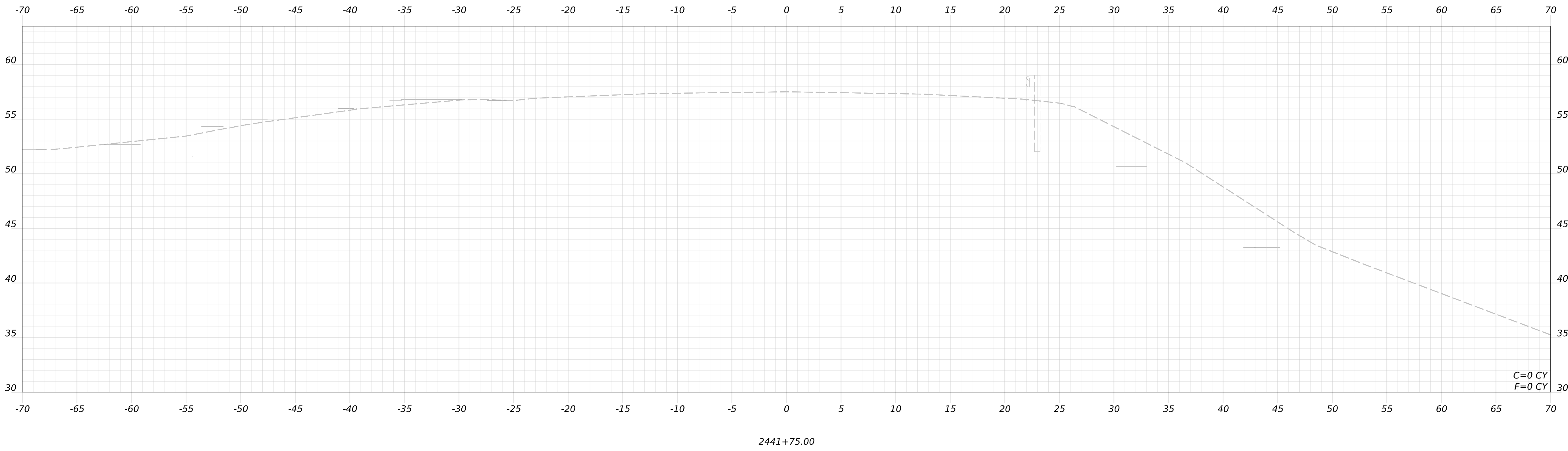
ROUTE 1

CROSS SECTIONS

SHEET NUMBER

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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HIGHWAY PLANS

PROJ. MANAGER	R. BARROWS	BY	DATE
CHECKED-DETAILED	J. BARNES	V. GEMMA	JUL 2025
DESIGNED-DETAILED			
DESIGNED-DETAILED			
REVISIONS 1			
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FIELD CHANGES			

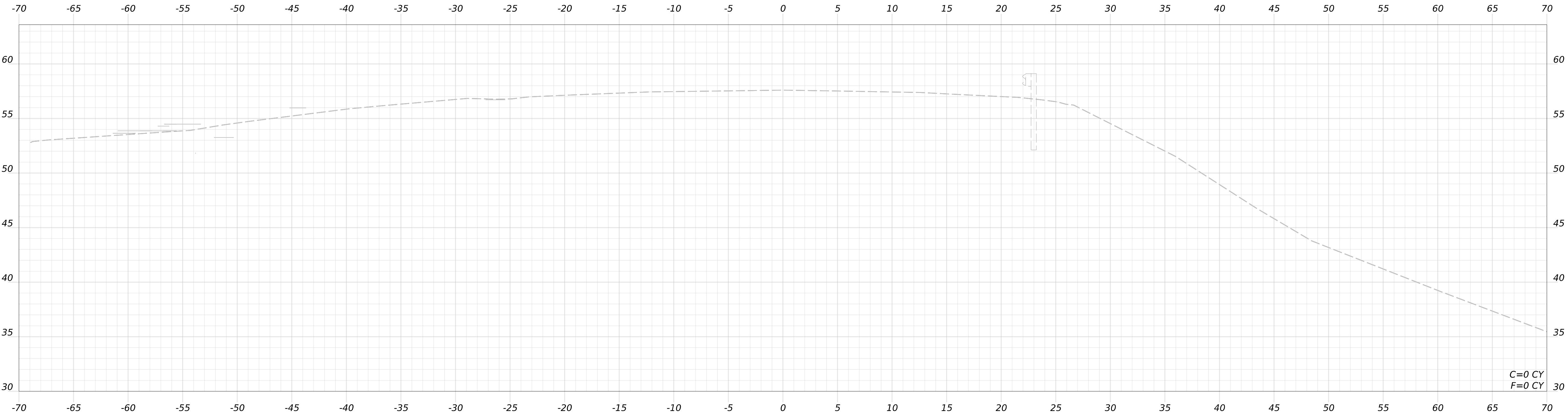
ROBBINSON
ROUTE 1

CROSS SECTIONS

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STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
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WIN	26630.10
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PROJ. MANAGER	R. BARROWS	BY	DATE
DESIGN-DETAILED	J. BAINES	V. GENOVA	JUL 2025
CHECKED-REVIEWED			SIGNATURE
DESIGN-DETAILED2			
DESIGN-DETAILED3			P.E. NUMBER
REVISIONS 1			
REVISIONS 2			DATE
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

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