

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



LEWISTON ANDROSCOGGIN COUNTY RIVER ROAD BRIDGE OVER HARTS BROOK RIVER ROAD FEDERAL AID PROJECT NO. 2723000 PROJECT LENGTH 0.05 mi. BRIDGE NO. 0093

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Tenth Edition 2024.

DESIGN LOADING

Live Load HL - 93 Modified for Strength I

TRAFFIC DATA

Latest (2023) AADT	1730
Future (2035) AADT	1830
Future (2043) AADT	1900
DHV - % of AADT	9%
Design Hour Volume	171
Heavy Trucks (% of AADT)	15%
Heavy Trucks (% of DHV)	21%
Directional Distribution (% of DHV)	62%
18 kip Equivalent P 2.0	176
18 kip Equivalent P 2.5	168
Design Speed (mph)	30

HYDROLOGIC DATA

Drainage Area	3.12 sq mi
Design Discharge (Q50)	525 cfs
Check Discharge (Q100)	615 cfs
Headwater Elevation (Q1.1)	148.57 ft
Headwater Elevation (Q25)	151.54 ft
Headwater Elevation (Q50)	151.98 ft
Headwater Elevation (Q100)	152.42 ft
Discharge Velocity (Q1.1)	4.40 fps
Discharge Velocity (Q50)	7.88 fps
Discharge Velocity (Q100)	8.57 fps

MATERIALS

Concrete:	
Precast	Class "P"
All Other	Class "A"
Reinforcing:	
Plain Reinforcing Steel	ASTM A615, Grade 60
Welded Wire Reinforcement	AASHTO M 336M/M336

BASIC DESIGN STRESSES

Concrete:	
Class "A"	f'c = 4,000 psi
Class "P"	f'c = 5,000 psi
Reinforcing:	
Plain Reinforcing Steel	f y = 60,000 psi
Welded Wire Reinforcement	f y = 65,000 psi

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities & General Construction Notes	2
General Plan	3
Profile	4
Boring Location Plan & Interpretive Subsurface Profile	5-6
Boring Logs	7-8
Typical Sections	9
Cross Sections	10-15
Culvert Staging Plan	16
Culvert Details	17-18
Streambed Details	19
Wingwall Details	20
Detour Plan	21
Right of Way Plan	22

UTILITIES

Central Maine Power	City of Lewiston Fiber
Charter Communications	Firstlight
Consolidated Communications	Unitil
City of Lewiston Water and Sewer	

MAINTENANCE OF TRAFFIC

Bridge will be closed during construction with traffic detoured.

<u>PROJECT LOCATION</u>	River Road Bridge (#0093) over Harts Brook. Located 0.15 of a mile north of Interstate 95. Lat./Long. 44°04'19.3" N 70°12'0.9" W
<u>PROGRAM AREA</u>	Bridge
<u>OUTLINE OF WORK</u>	Bridge Replacement and Associated Approach Work

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
APPROVED
ACTING COMMISSIONER
DATE
2-2-26
CHIEF ENGINEER



Sarah J. Williams
SIGNATURE
13582
P.E. NUMBER
1/27/26
DATE

PROJECT INFORMATION
BRIDGE PROGRAM
TREVOR GLEASON
DESIGNER
SARAH WILLIAMS
CONSULTANT
STANTEC
PROJECT RESIDENT
CONTRACTOR
PROJECT COMPLETION DATE

WIN 27230.00

**LEWISTON
RIVER ROAD
TITLE SHEET**

SHEET NUMBER
1
OF 22



DATE: 1/27/2026
USERNAME: KWIGHT

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QTY	UNIT
202.202	REMOVING PAVEMENT SURFACE	230	SY
203.20	COMMON EXCAVATION	890	CY
203.24	COMMON BORROW	360	CY
203.25	GRANULAR BORROW	280	CY
203.33	SPECIAL FILL - STREAMBED MATERIAL	261	CY
203.55	CULVERT BEDDING STONE	89	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	810	CY
403.2081	HOT MIX ASPHALT - 12.5 mm (POLYMER MODIFIED)	110	T
403.2131	HOT MIX ASPHALT - 12.5 mm (BASE AND INTERMEDIATE COURSE POLYMER MODIFIED)	150	T
409.15	BITUMINOUS TACK COAT, APPLIED	44	G
508.13	SHEET WATERPROOFING MEMBRANE	(240 SY)	1 LS
511.07	COFFERDAM: UPSTREAM	1	LS
511.07	COFFERDAM: DOWNSTREAM	1	LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES	(90 SY)	1 LS
524.301	TEMPORARY STRUCTURAL SUPPORT - ROADWAY	1	LS
526.301	PORTABLE CONCRETE BARRIER, TYPE I	(120 LF)	1 LS
531.59	WINGWALL DETAIL-BUILD	1	LS
534.71	PRECAST CONCRETE BOX CULVERT	(262 CY)	1 LS
603.43	36 INCH REINFORCED CONC. PIPE CLASS IV	108	LF
603.55	CONCRETE PIPE TIES	2	GROUP
604.18	ADJUSTING MANHOLE OR CATCH BASIN TO GRADE	2	EA
606.1301	31" W-BEAM GUARDRAIL - MID-WAY SPLICE - SINGLE FACED	325	LF
606.1305	31" W-BEAM GUARDRAIL - MID-WAY SPLICE FLARED TERMINAL	1	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	2	EA
606.366	GUARDRAIL, REMOVE AND RESET	37.5	LF
610.08	PLAIN RIPRAP	300	CY
610.18	STONE DITCH PROTECTION	5	CY
610.212	STREAMBED ROCK FEATURES	12	CY
610.213	VOID-FILLED RIPRAP	109	CY
613.319	EROSION CONTROL BLANKET	470	SY
615.07	LOAM	59	CY
618.14	SEEDING METHOD NUMBER 2	10	UN
619.12	MULCH	10	UN
619.14	EROSION CONTROL MIX	120	CY
620.54	STABILIZATION/REINFORCEMENT GEOTEXTILE	270	SY
620.58	EROSION CONTROL GEOTEXTILE	520	SY
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	750	LF
629.05	HAND LABOR, STRAIGHT TIME	40	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	20	HR
631.172	TRUCK-LARGE (INCLUDING OPERATOR)	20	HR
639.19	FIELD OFFICE, TYPE B	1	EA
652.312	TYPE III BARRICADES	6	EA
652.33	DRUM	20	EA
652.34	CONE	20	EA
652.35	CONSTRUCTION SIGNS	250	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.38	FLAGGERS	360	HR
652.41	PORTABLE-CHANGEABLE MESSAGE SIGN	2	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

- For easements, construction limits, and right of way lines, refer to the Right of Way Map.
- The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.
- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- Existing signs within the Project limits shall be removed and reset as directed by the Resident. Payment for removal and reinstallation of existing signs will be considered incidental to the Contract. No separate payment will be made.
- Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.
- In areas where the Resident directs the Contractor not to excavate to the subgrade line shown on the plans, payment for removing existing pavement, grubbing, shaping, ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rental items.
- All embankment material, except as otherwise shown, placed below EL. 152.00 shall be Granular Borrow meeting the requirements of Standard Specifications Subsection 703.19, Granular Borrow, for Material for Underwater Backfill, with the additional requirement that the maximum particle size be limited to 4 inches.
- Place riprap on sideslopes up to EL. 157.00 on the upstream side and EL. 152.00 on the downstream side.
- Place loam 2 inches deep on all new or reconstructed sideslopes or as directed by the Resident.
- Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Pay Item 619.14, Erosion Control Mix.
- Place a 24 inch wide strip of Erosion Control Blanket on the sideslopes along the top of the riprap and behind the wingwalls.
- A MASH compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail.
- Where it is apparent that runoff will cause continual erosion, Erosion Control Blanket, seeded gutters, riprap downspouts, and other gutters lined with Stone Ditch Protection shall be constructed after paving and shoulder work is completed. Payment will be made under the appropriate Contract items.
- Protective Coating for Concrete Surfaces shall be applied to the following areas:
Concrete headwalls, including to one foot inside the box culvert;
Exposed tops of vertical walls and to one foot below the ground on the back side; and
Exposed faces of vertical walls and to one foot inside the box.
- Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/dot/doing-business/bid-opportunities>.
- The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
- Reports on hydrology and/or hydraulics applicable to the bridge site may be accessed at the MaineDOT web address. The reports are based on MaineDOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.
- The project geotechnical report titled: Geotechnical Design Report, Replacement of Hart's River Road Bridge #0093, River Road over Harts Brook, Lewiston, Maine August 2025 may be accessed at the MaineDOT web address.
- Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.

- Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:
 - If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
 - If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
 - If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation and Time.
- Removal of existing gabion walls shall be incidental to Item 534.71 Precast Concrete Box Culvert. No additional payment shall be made.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2723000
WIN 27230.00

PROJ. MANAGER	T. GLEASON	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	KLW/CHL	KLW/CHL	JAN 2026			
CHECKED-REVIEWED	KLW/CHL	KLW/CHL	JAN 2026			
DESIGN-DETAILED02	SLW/PLP	SLW/PLP				
DESIGN-DETAILED03						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
ESTIMATED QUANTITIES &
CONSTRUCTION NOTES

SHEET NUMBER
2
OF 22

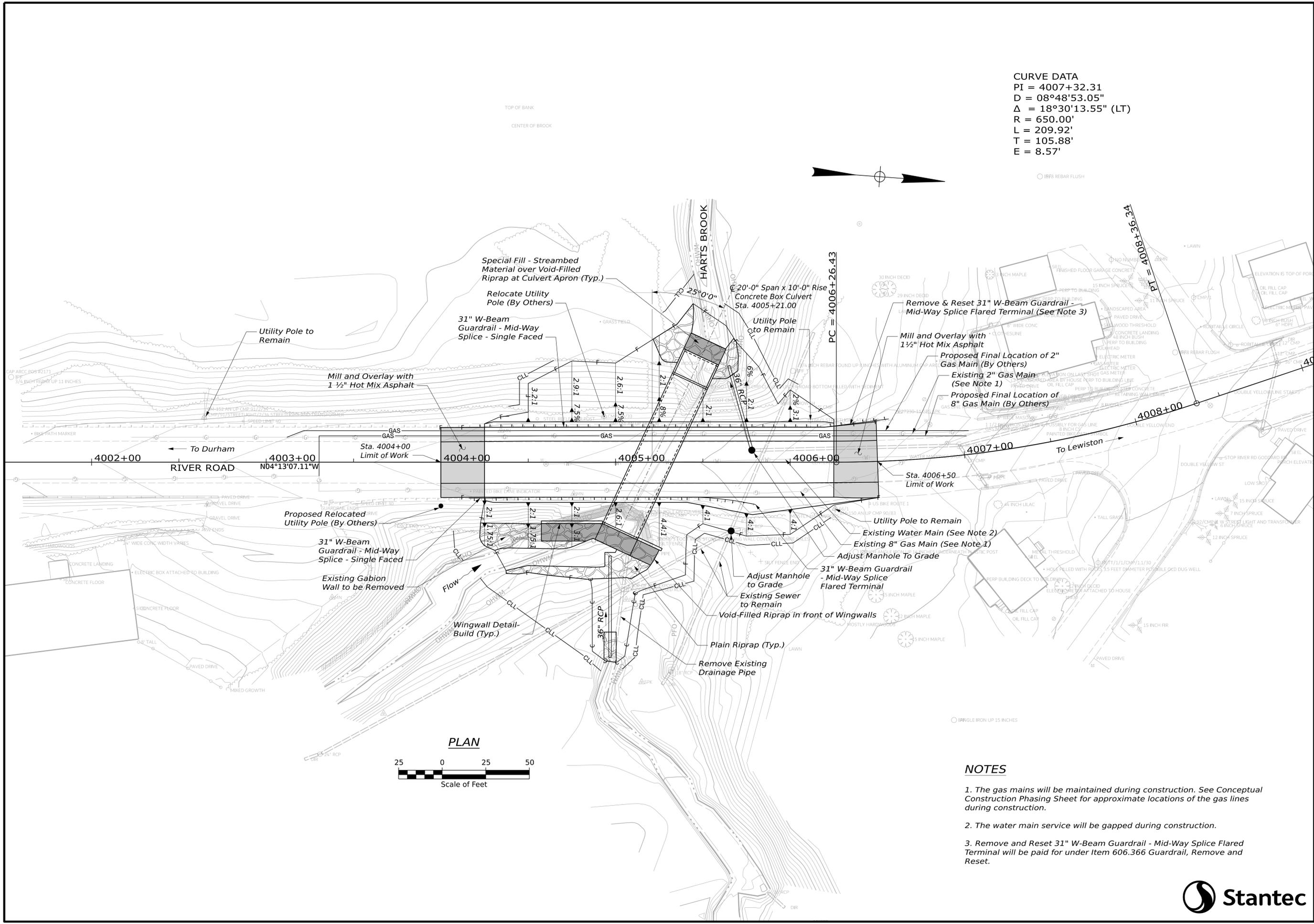


DATE	SIGNATURE	P.E. NUMBER	DATE
JAN 2026			
JAN 2026			

PROJ. MGR.	DESIGN	CHECKED	DESIGNED	REVISIONS	FIELD CHANGES
T. GLEASON	KLW/CJL	SLW/RJP			

DATE	BY	REVISION
JAN 2026	KLW/CJL	DESIGN
JAN 2026	SLW/RJP	CHECKED

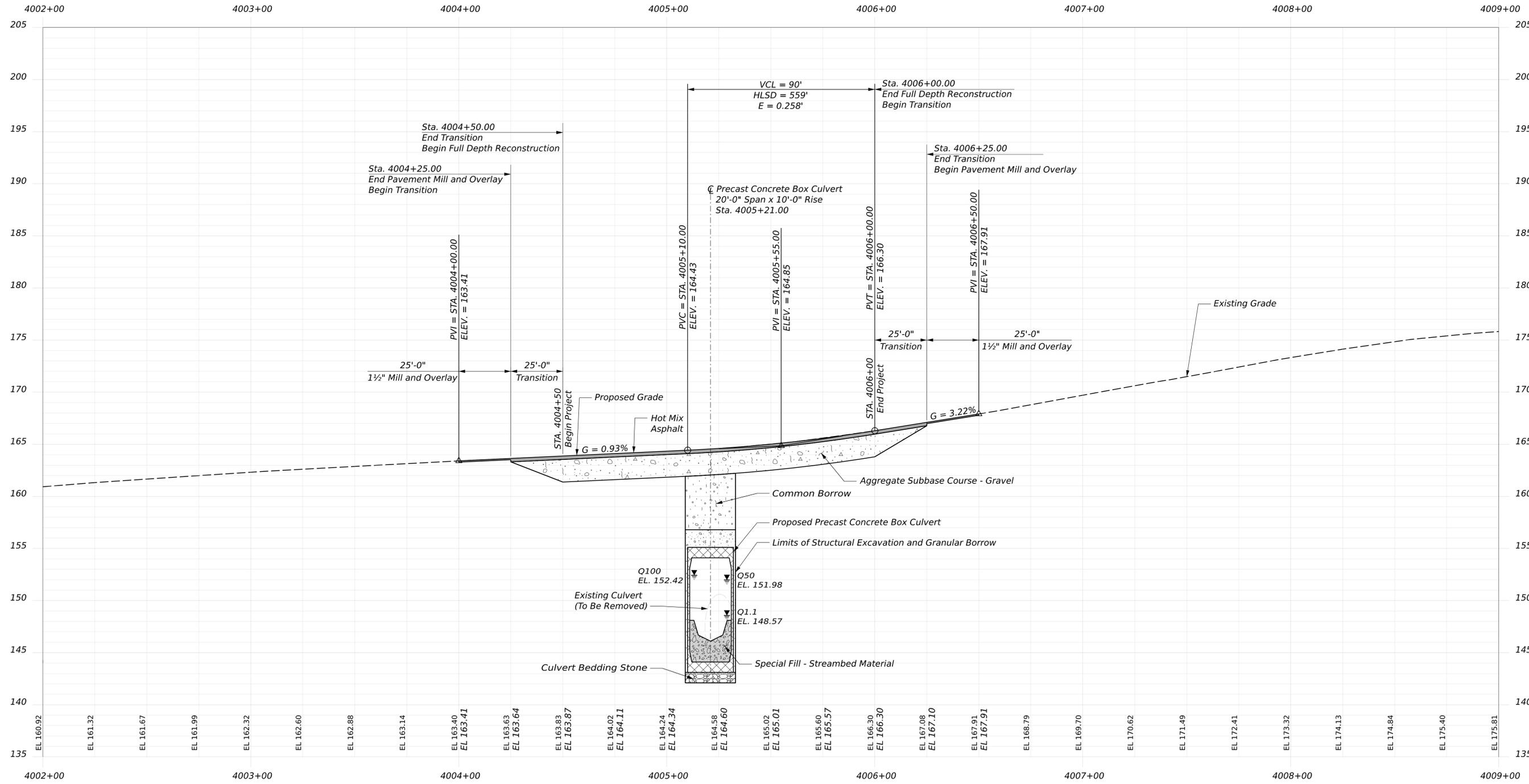
CURVE DATA
PI = 4007+32.31
D = 08°48'53.05"
Δ = 18°30'13.55" (LT)
R = 650.00'
L = 209.92'
T = 105.88'
E = 8.57'



NOTES

- The gas mains will be maintained during construction. See Conceptual Construction Phasing Sheet for approximate locations of the gas lines during construction.
- The water main service will be gapped during construction.
- Remove and Reset 31" W-Beam Guardrail - Mid-Way Splice Flared Terminal will be paid for under Item 606.366 Guardrail, Remove and Reset.





PROJ. MANAGER	T. GLEASON	DATE	JAN 2026
DESIGN-DETAILED	KLW/CHL	BY	KLW/CHL
CHECKED-REVIEWED	SAW/PLP	DATE	JAN 2026
DESIGN-DETAILED02		SIGNATURE	
DESIGN-DETAILED03		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER	T. GLEASON	DATE	JAN 2026
DESIGN-DETAILED	KLW/CHL	BY	KLW/CHL
CHECKED-REVIEWED	SAW/PLP	DATE	JAN 2026
DESIGN-DETAILED02		SIGNATURE	
DESIGN-DETAILED03		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
PROFILE

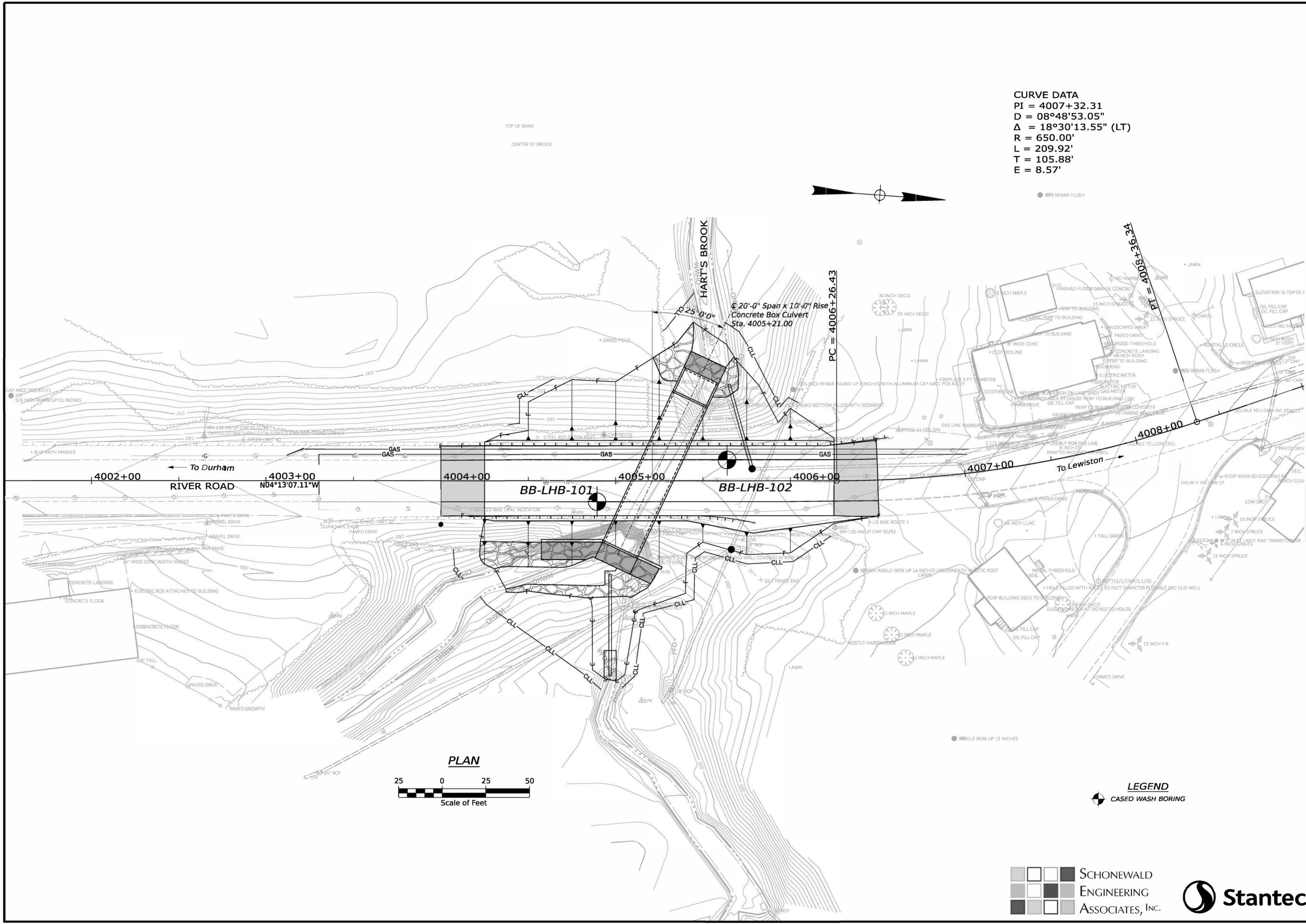
SHEET NUMBER

4

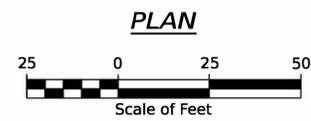
OF 22



Username: kwight Date: 1/12/2026



CURVE DATA
 PI = 4007+32.31
 D = 08°48'53.05"
 Δ = 18°30'13.55" (LT)
 R = 650.00'
 L = 209.92'
 T = 105.88'
 E = 8.57'



LEGEND
 CASED WASH BORING

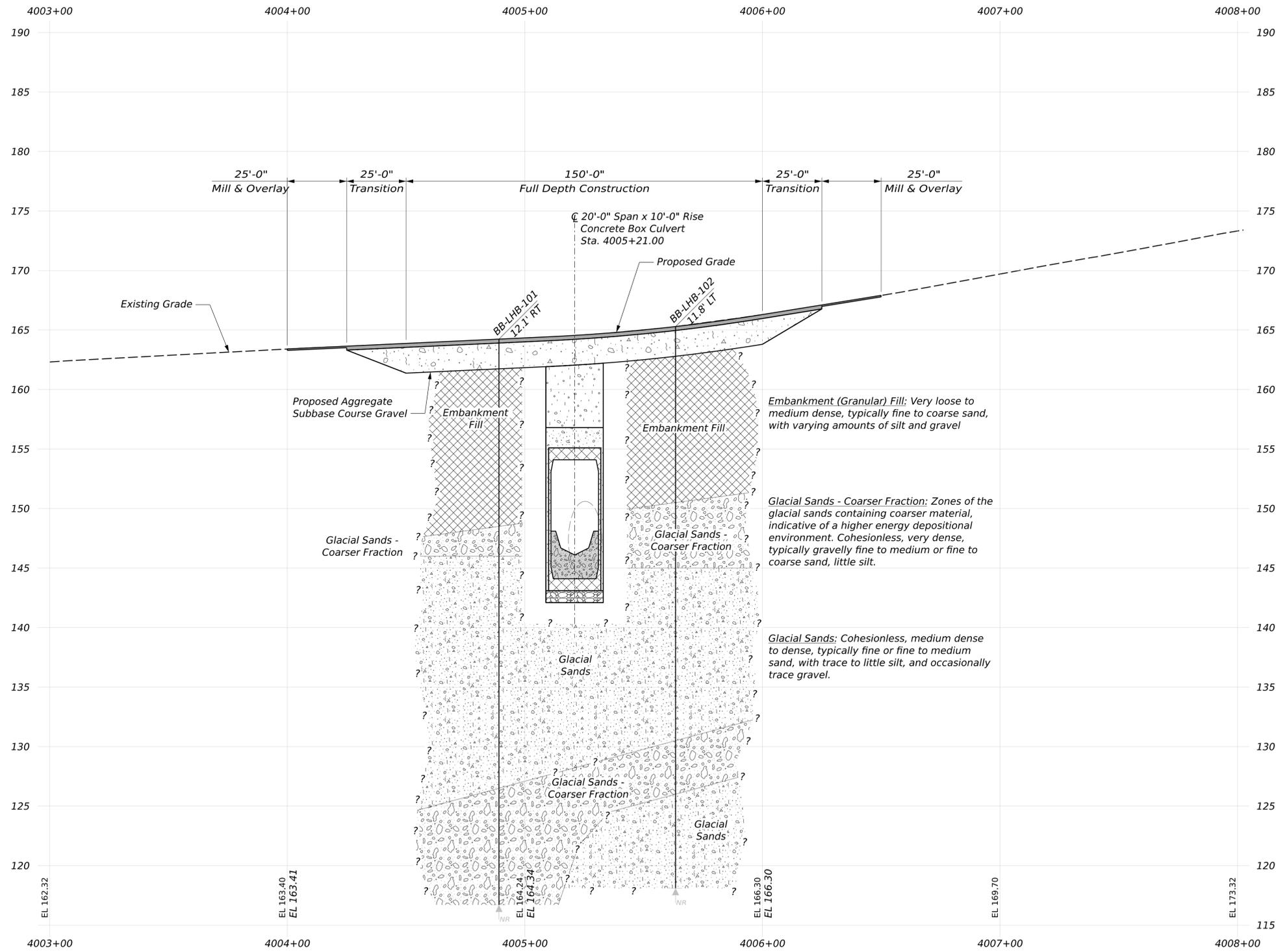
SCHONEWALD ENGINEERING ASSOCIATES, INC.

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 Federal Project No. 2723000
 WIN 27230.00

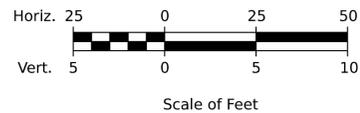
PROJ. MANAGER	T. GLEASON	DATE	DATE
DESIGN-DETAILED	IVS @ SEA	OCT 2025	OCT 2025
CHECKED-REVIEWED	IVS @ SEA		
DESIGN-DETAILS	IVS @ SEA		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

RIVER ROAD BRIDGE NO. 0093
 CROSSING HART'S BROOK
 LEWISTON
BORING LOCATION PLAN

SHEET NUMBER
5
 OF 22



PROFILE



LEGEND
 CASED WASH BORING

KEY
 NR = No Refusal surface encountered
 bgs = below ground surface
 BB = Bridge Boring

LEGEND
 Weathered Bedrock, if applicable
 Approximate Top of Bedrock
 Boring No. (e.g., 100)
 Pavement Thickness, if applicable
 RQD = Rock Quality Designation of Bedrock Core Sample
 Bottom of Exploration
 No Refusal
 Refusal

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 transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

SIGNATURE: *Isaac V. Schonewald*
 P.E. NUMBER: 7528
 DATE: January 13, 2026

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

RIVER ROAD BRIDGE NO. 0093
 CROSSING HARTS BROOK
 LEWISTON
**INTERPRETIVE SUBSURFACE
 PROFILE**



Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS				Project: Harts River Road Bridge #0093 River Road over Harts Brook Location: Lewiston, ME				Boring No.: <u>BB-LHB-101</u> WIN: <u>27230.00</u>			
Driller: New England Boring Contractors		Elevation (ft.): 163.9		Auger ID/DD: vac excavate to 5.6 ft							
Operator: McDougal/ Share		Datum: NAVD88		Sampler: standard split-spoon							
Logged By: Schonewald		Rig Type: Mobile Drill B-53 track (NEBC-28)		Hammer Wt./Fall: 140 lbs/30 inches							
Date Start/Finish: 11/1/23; 0940-1615		Drilling Method: cased wash boring		Core Barrel: n/a							
Boring Location: Sta 4004+89, 12.1 RT		Casing ID/DD: HW(4.0/4.5)-17'/NW(3.0/3.5)-19'		Water Level*: 23.6 Ft (open, 0 hrs stab)							
Hammer Efficiency Factor: 0.765		Hammer Type: Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>									
Definitions: D = Split Spoon Sample MD = Unsuccessful Split Spoon Sample Attempt U = Thin Wall Tube Sample MU = Unsuccessful Thin Wall Tube Sample Attempt V = Field Vane Shear Test MV = Unsuccessful Field Vane Shear Test Attempt R = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Roller Cone WDH = Weight of 140lb. Hammer PP = Pocket Penetrometer WDR/C = Weight of Rods or Casing WDR/C = Weight of One Person S _u = Peak/Retained Field Vane Undrained Shear Strength (psf) S _{u(lab)} = Lab Vane Undrained Shear Strength (psf) q _u = Unconfined Compressive Strength N = uncorrected = Raw Field SPT N-value N ₆₀ = SPT N-corrected Corrected for Hammer Efficiency N ₆₀ = (Hammer Efficiency Factor/60) * N-uncorrected T _v = Pocket Torvane Shear Strength (psf) VC = Water Content, percent LL = Liquid Limit PL = Plastic Limit I _p = Plasticity Index G = Grain Size Analysis C = Consolidation Test											
Depth (ft.)	Sample Information							Graphic Log	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class	
	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or ROD (%)	N-uncorrected	N ₆₀	Casing Blows				
0								163.5	5 inches HMA 0.4 to 3.0 ft: Many small cobbles noted. 3 ft: Apparent bottom of road gravels. GRAB SAMPLE: Brown, moist, fine to coarse SAND, some gravel, trace to little silt, (Fill). 5.6 ft: Bottom of vacuum excavation.		
5	1D		5.0 - 5.6	GRAB SAMPLE	--						
10	2D	24/7	10.0 - 12.0	2-2-2-2	4	5	PUSH		Brown, loose, fine to coarse SAND, little to some silt, trace to little gravel, (Fill).	GTX#747690 G=A-2-4(0)	
15	3D	14/11	15.0 - 16.2	6-26-50/2'	--		RC	147.7	Red brown, Gravelly, fine to coarse SAND, little silt, (Fill).	GTX#747691 G=A-1-b(0)	
							NW	146.1	16.2 to 17.8 ft: Very boney; difficulty advancing borehole.		
20	4D	24/11	21.0 - 23.0	12-13-13-13	26	33			Red brown, dense, fine to medium SAND, little silt, trace coarse sand, trace fine gravel, (Glacial Sand).	GTX#747692 G=A-2-4(0)	
							OPEN				
25	5D	24/11	23.0 - 25.0	9-10-10-11	20	26			Red brown, medium dense, fine SAND, trace to little silt, (Glacial Sand).	GTX#747693 G=A-2-4(0)	
Remarks: Vacuum excavation completed on 10/23/23. Borehole grouted to 5.1 ft BGS with cement-bentonite grout; peastone to approx. 0.5 ft BGS; cold patch.											
Stratification lines represent approximate boundaries between soil types; transitions may be gradual.								Page 1 of 2		Boring No.: BB-LHB-101	
* 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.											

Maine Department of Transportation Soil/Rock Exploration Log US CUSTOMARY UNITS				Project: Harts River Road Bridge #0093 River Road over Harts Brook Location: Lewiston, ME				Boring No.: <u>BB-LHB-101</u> WIN: <u>27230.00</u>			
Driller: New England Boring Contractors		Elevation (ft.): 163.9		Auger ID/DD: vac excavate to 5.6 ft							
Operator: McDougal/ Share		Datum: NAVD88		Sampler: standard split-spoon							
Logged By: Schonewald		Rig Type: Mobile Drill B-53 track (NEBC-28)		Hammer Wt./Fall: 140 lbs/30 inches							
Date Start/Finish: 11/1/23; 0940-1615		Drilling Method: cased wash boring		Core Barrel: n/a							
Boring Location: Sta 4004+89, 12.1 RT		Casing ID/DD: HW(4.0/4.5)-17'/NW(3.0/3.5)-19'		Water Level*: 23.6 Ft (open, 0 hrs stab)							
Hammer Efficiency Factor: 0.765		Hammer Type: Automatic <input checked="" type="checkbox"/> Hydraulic <input type="checkbox"/> Rope & Cathead <input type="checkbox"/>									
Definitions: D = Split Spoon Sample MD = Unsuccessful Split Spoon Sample Attempt U = Thin Wall Tube Sample MU = Unsuccessful Thin Wall Tube Sample Attempt V = Field Vane Shear Test MV = Unsuccessful Field Vane Shear Test Attempt R = Rock Core Sample SSA = Solid Stem Auger HSA = Hollow Stem Auger RC = Roller Cone WDH = Weight of 140lb. Hammer PP = Pocket Penetrometer WDR/C = Weight of Rods or Casing WDR/C = Weight of One Person S _u = Peak/Retained Field Vane Undrained Shear Strength (psf) S _{u(lab)} = Lab Vane Undrained Shear Strength (psf) q _u = Unconfined Compressive Strength (ksf) N = uncorrected = Raw Field SPT N-value N ₆₀ = SPT N-corrected Corrected for Hammer Efficiency N ₆₀ = (Hammer Efficiency Factor/60) * N-uncorrected T _v = Pocket Torvane Shear Strength (psf) VC = Water Content, percent LL = Liquid Limit PL = Plastic Limit I _p = Plasticity Index G = Grain Size Analysis C = Consolidation Test											
Depth (ft.)	Sample Information							Graphic Log	Visual Description and Remarks	Laboratory Testing Results/AASHTO and Unified Class	
	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or ROD (%)	N-uncorrected	N ₆₀	Casing Blows				
5	6D	24/12	25.0 - 27.0	8-10-11-14	21	27			Red brown-tan, medium dense, fine SAND, little silt, trace medium sand, (Glacial Sand).	GTX#747694 G=A-2-4(0)	
	7D	24/12	27.0 - 29.0	13-14-15-17	29	37			Red brown-tan, dense, fine to medium SAND, trace to little silt, (Glacial Sand).		
	8D	24/12	29.0 - 31.0	16-17-19-30	36	46			Red brown-tan, dense, fine to medium SAND, trace to little silt, with one 1-inch seam fine to coarse SAND, trace silt, (Glacial Sand).		
30											
	9D	24/14	34.0 - 36.0	19-10-11-18	21	27			Brown, medium dense, fine to medium SAND, little silt, little gravel, trace coarse sand; somewhat layered, (Glacial Sand).	GTX#747695 G=A-2-4(0)	
35											
	10D	24/21	39.0 - 41.0	30-33-33-61	66	84			Brown, very dense, layered (composite sample): fine to medium SAND, trace silt; fine to coarse SAND; and Gravelly fine to medium SAND, little to some silt, trace coarse sand, (Glacial Sand-Coarse Fraction).		
40									42.3 to 42.7 ft: Boney layer.		
									43.8 to 44.1 ft: Boney layer.		
45	11D	5/4	45.0 - 45.4	50/5'	--				Grey brown, fine to medium SAND, little to some silt, little gravel, trace coarse sand, (Glacial Sand-Coarse Fraction). 45.4 to 47.1 ft: Boney layer.		
50									Bottom of Exploration at 47.2 feet below ground surface. No refusal.		
Remarks: Vacuum excavation completed on 10/23/23. Borehole grouted to 5.1 ft BGS with cement-bentonite grout; peastone to approx. 0.5 ft BGS; cold patch.											
Stratification lines represent approximate boundaries between soil types; transitions may be gradual.								Page 2 of 2		Boring No.: BB-LHB-101	
* 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.											

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2723000
WIN 27230.00

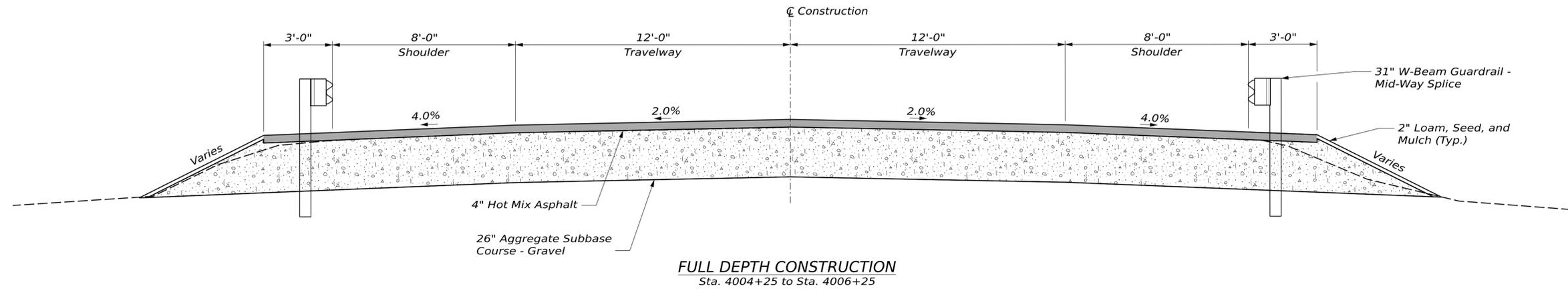
PROJ. MANAGER	DATE	SIGNATURE	P.E. NUMBER	DATE
CHECKED-DETAILED	OCT 2025			
CHECKED-REVIEWED	OCT 2025			
DESIGNED-DETAILED				
DESIGNED-REVIEWED				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
BORING LOGS (1 OF 2)

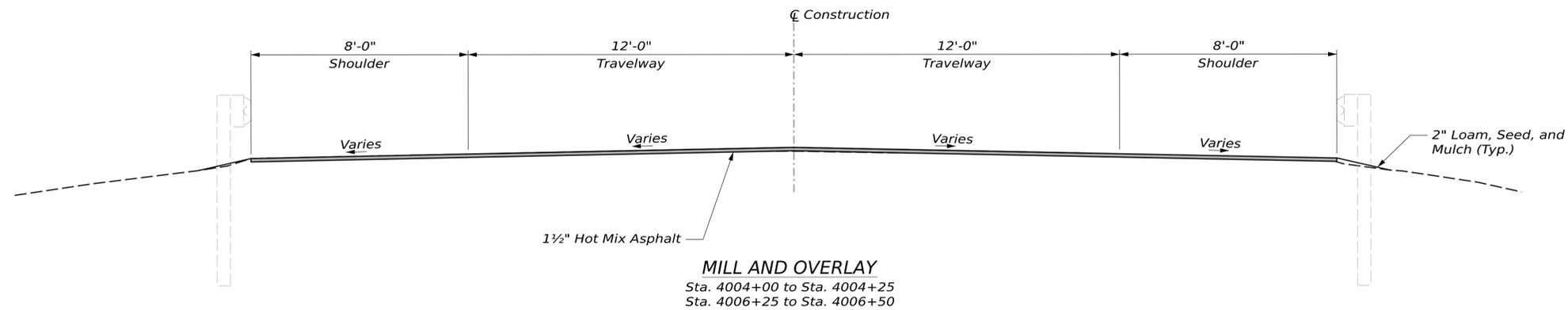
SHEET NUMBER
7
OF 22



Date: 1/12/2026
Username: kwight



FULL DEPTH CONSTRUCTION
Sta. 4004+25 to Sta. 4006+25



MILL AND OVERLAY
Sta. 4004+00 to Sta. 4004+25
Sta. 4006+25 to Sta. 4006+50

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2723000
WIN 27230.00

PROJ. MANAGER	T. GLEASON	DATE	OCT 2025
DESIGN-DETAILED	KLW/CHL	BY	KLW/CHL
CHECKED-REVIEWED	SLW/PLP	DATE	OCT 2025
DESIGN-DETAILED02		SIGNATURE	
DESIGN-DETAILED03		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER	T. GLEASON	DATE	OCT 2025
DESIGN-DETAILED	KLW/CHL	BY	KLW/CHL
CHECKED-REVIEWED	SLW/PLP	DATE	OCT 2025
DESIGN-DETAILED02		SIGNATURE	
DESIGN-DETAILED03		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON

TYPICAL SECTIONS

SHEET NUMBER

9

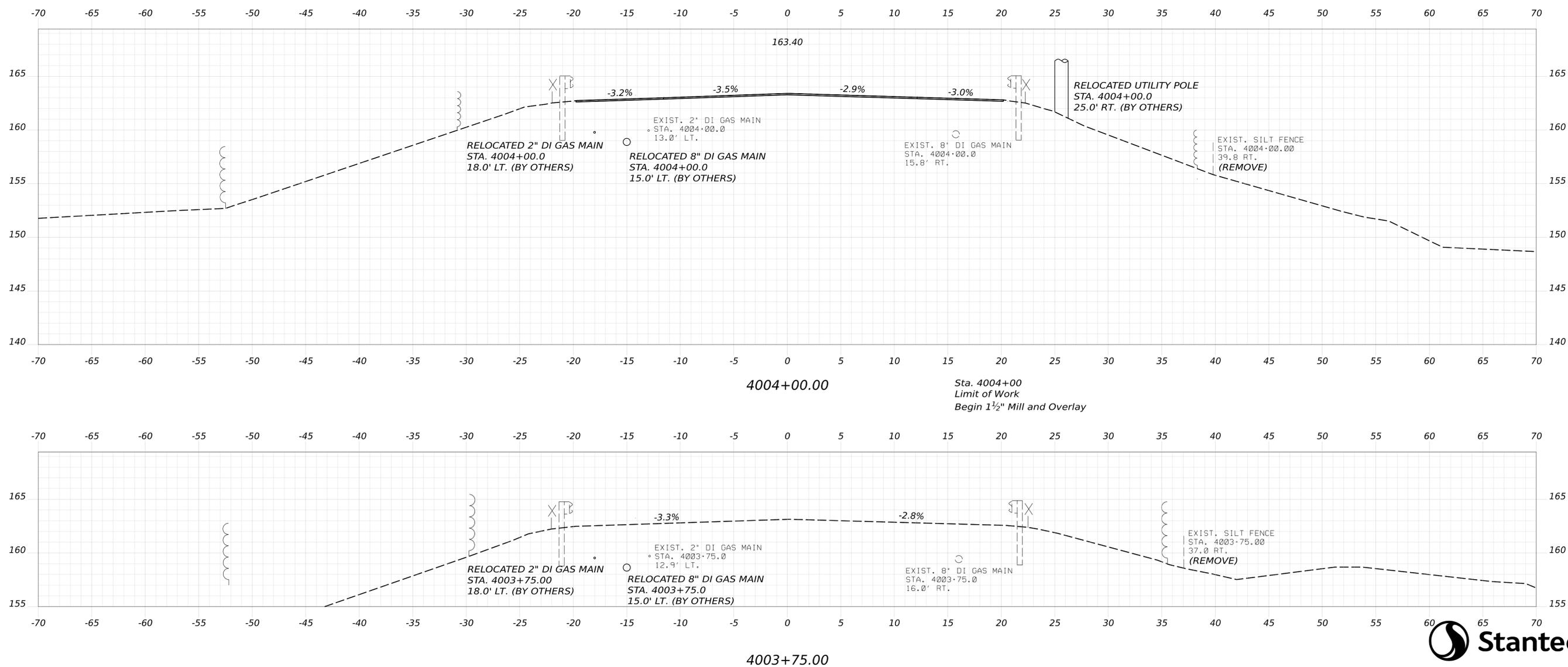
OF 22



Username: kwright Date: 1/14/2026

Date: 1/14/2026

Username: kwight



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2723000

DATE	SIGNATURE
OCT 2025	
OCT 2025	
BY	P.E. NUMBER
ALW/CHL	
SAW/R/P	
T. GLEASON	DATE

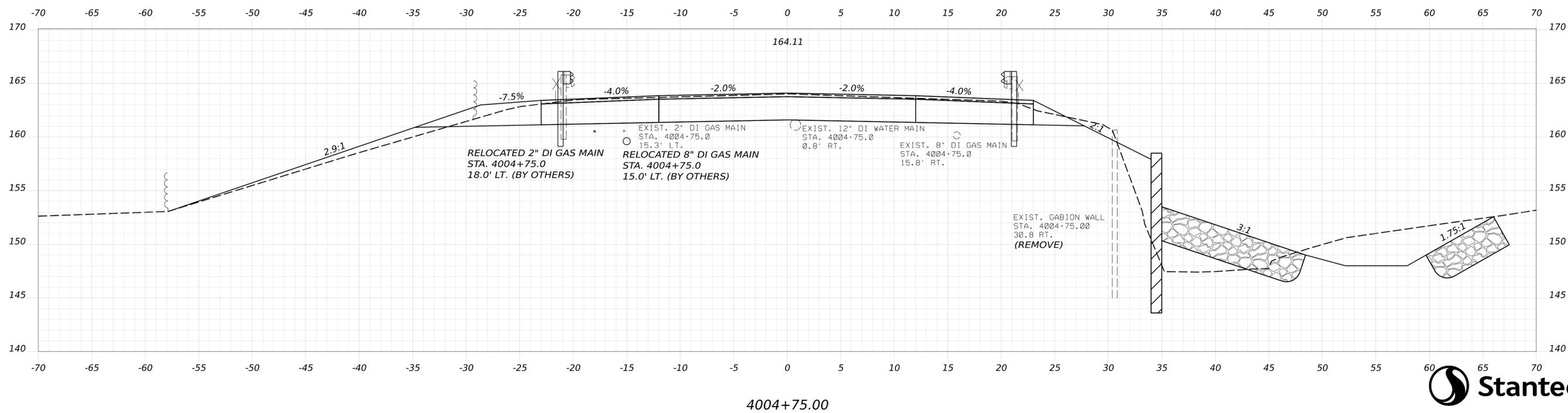
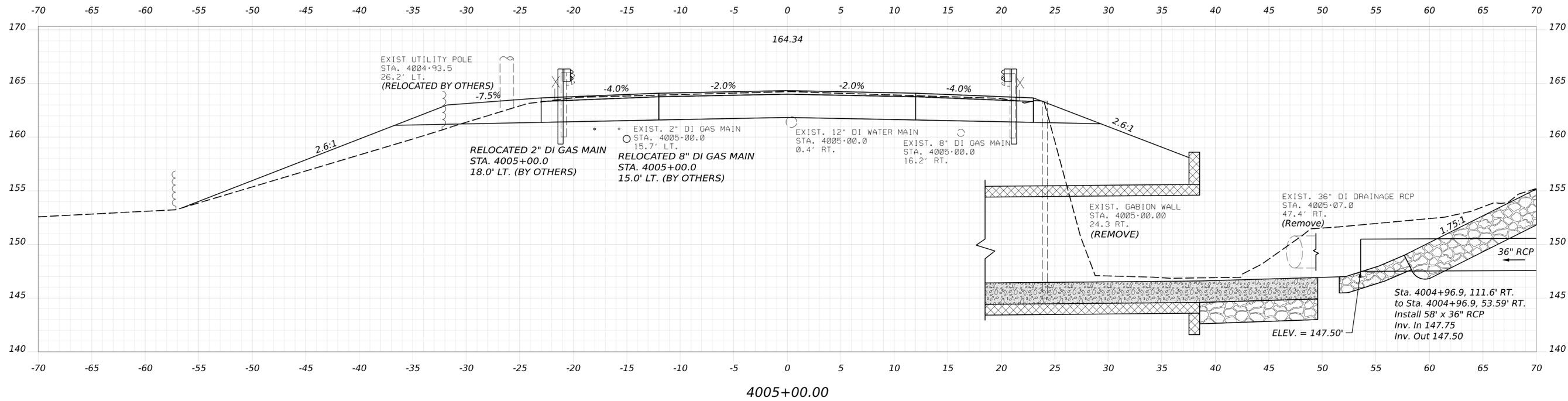
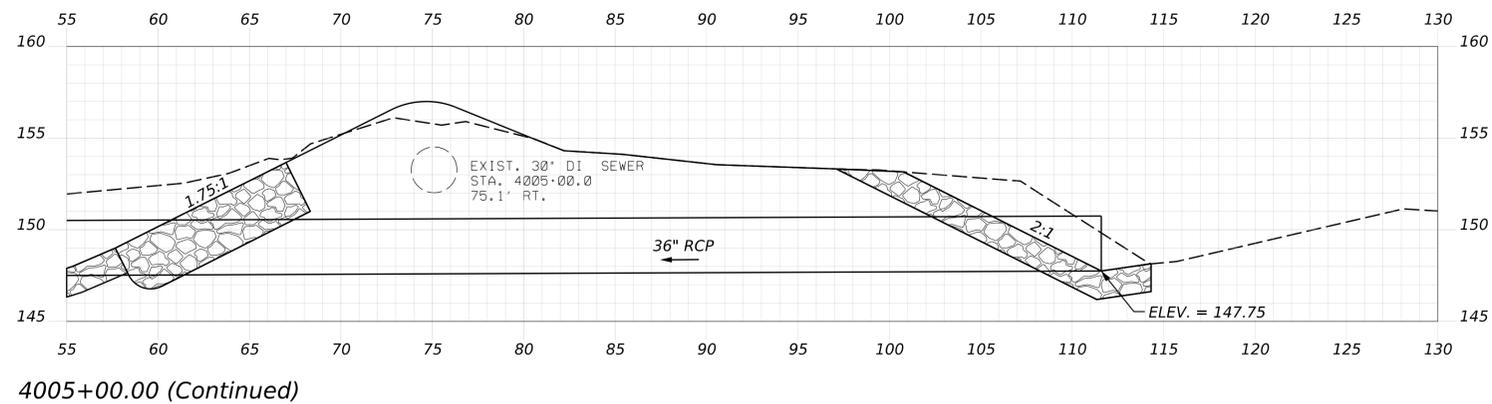
PROJ. MANAGER	REVISIONS 1
DESIGN-DETAILED	REVISIONS 2
CHECKED-REVIEWED	REVISIONS 3
DESIGN-DETAILED02	REVISIONS 4
DESIGN-DETAILED03	FIELD CHANGES

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
CROSS SECTIONS

SHEET NUMBER
10
OF 22



Username: kwight Date: 1/14/2026



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2723000

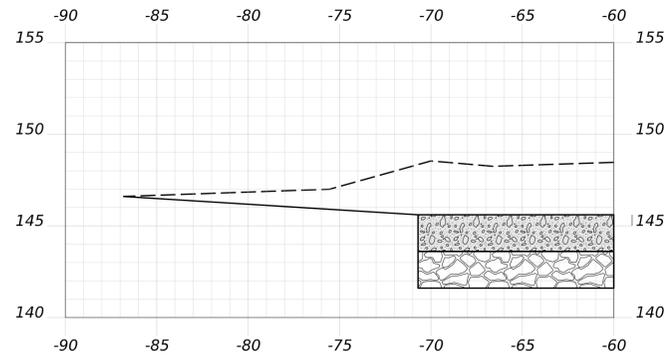
PROJ. MANAGER	T. GLEASON	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	KLW/CHL	ALW/PLP	OCT 2025			
CHECKED-REVIEWED	SAW/PLP	SAW/PLP	OCT 2025			
DESIGN-DETAILED02						
DESIGN-DETAILED03						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON

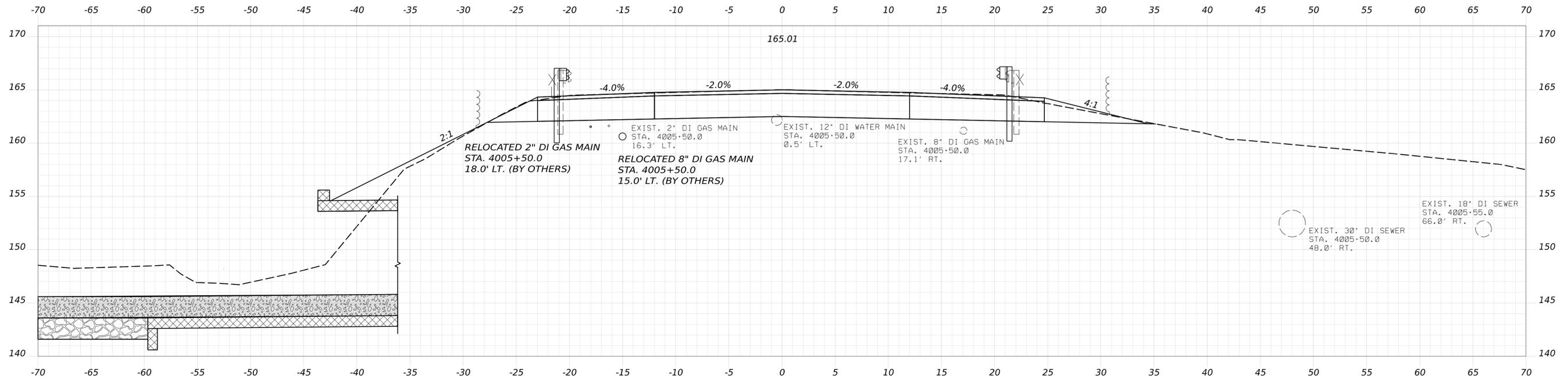
SHEET NUMBER
12
OF 22

CROSS SECTIONS

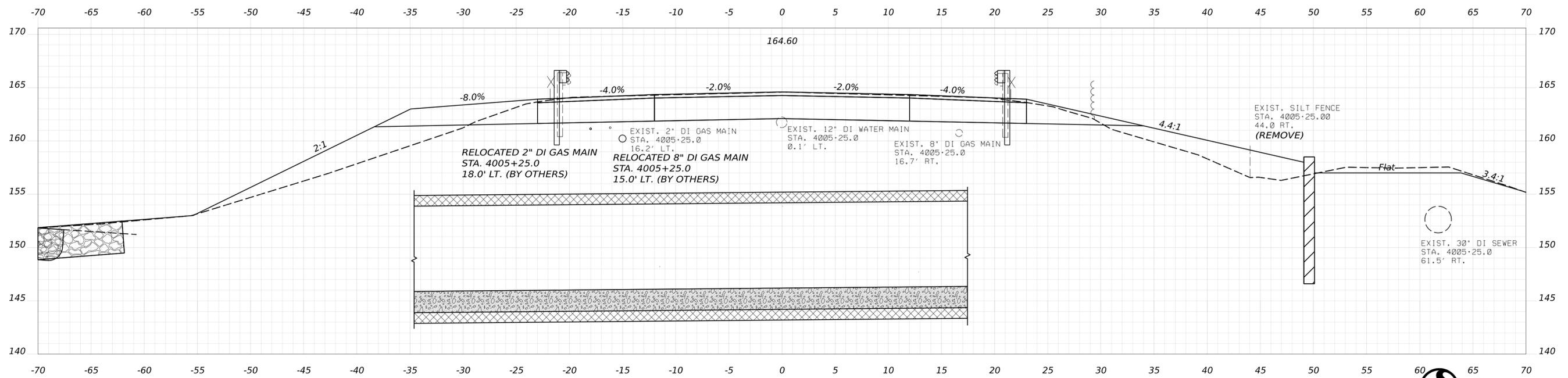




4005+50.00 (Continued)



4005+50.00



4005+25.00

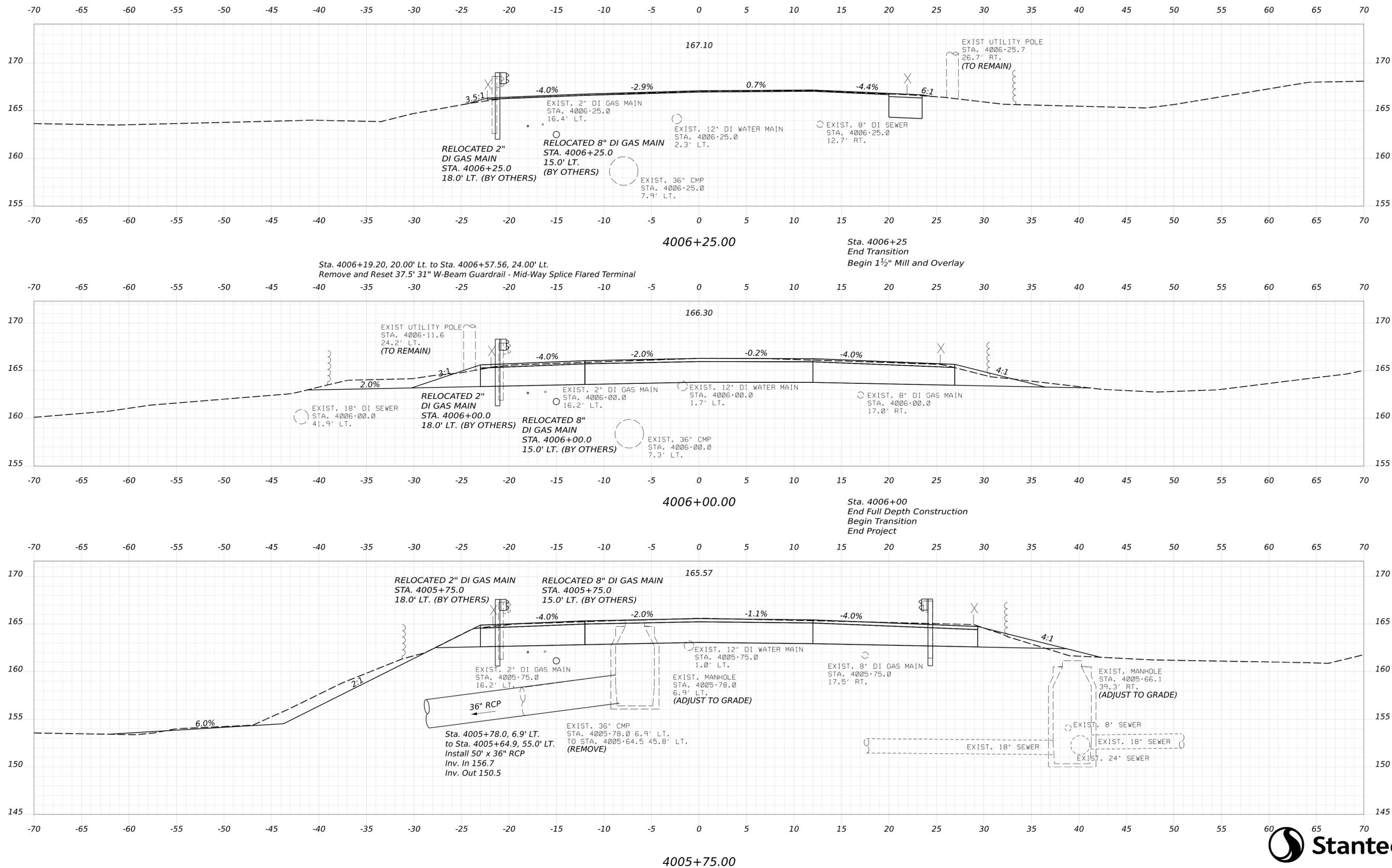
PROJ. MANAGER	T. GLEASON	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	KLW/CHL	OCT 2025			
CHECKED-REVIEWED	SAW/R/P	OCT 2025			
DESIGN-DETAILED02					
DESIGN-DETAILED03					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
CROSS SECTIONS



Username: kwight Date: 1/14/2026

Username: kwight Date: 1/14/2026



STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 Federal Project No. 2723000

PROJ. MANAGER	DESIGN/DETAIL	CHECK/REVISED	DESIGN/DETAIL	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES

DATE	BY	T. GLEASON	KLW/CHL	ALW/PLP	SAW/PLP	SIGNATURE	P.E. NUMBER	DATE
OCT 2025								
OCT 2025								

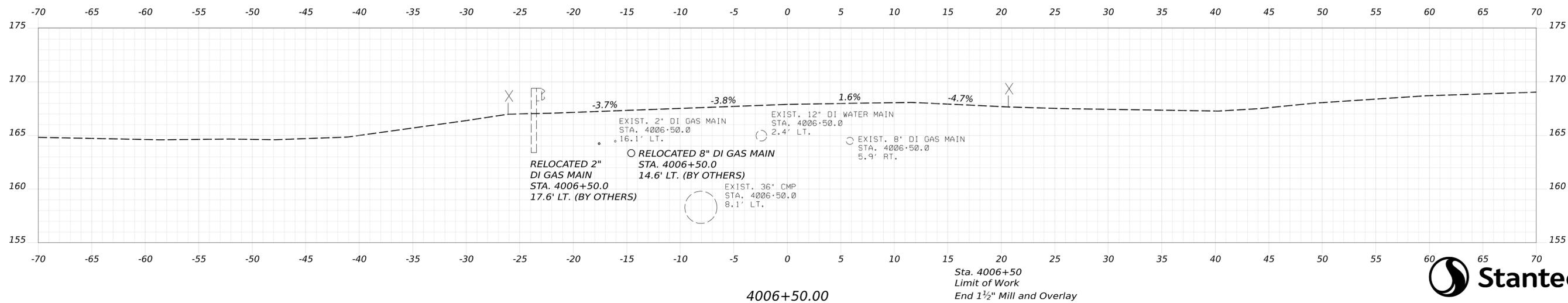
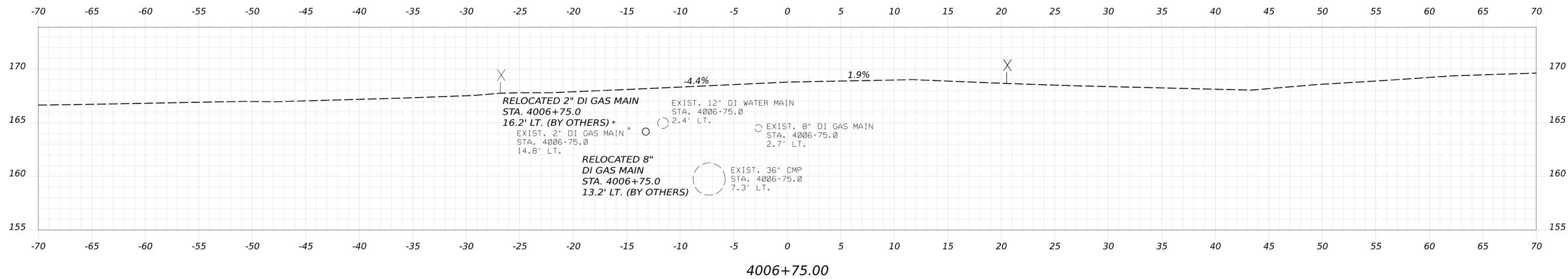
RIVER ROAD BRIDGE NO. 0093
 CROSSING HARTS BROOK
 LEWISTON

CROSS SECTIONS

SHEET NUMBER
14
 OF 22



Username: kwight Date: 1/14/2026



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2723000

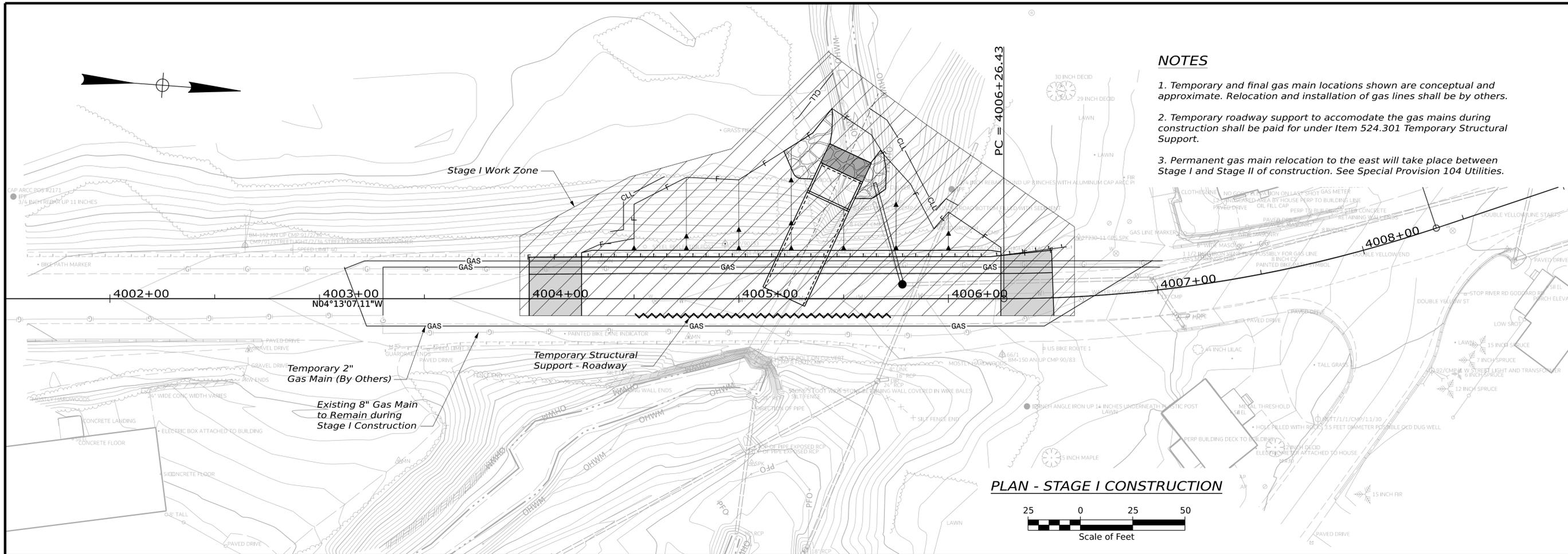
SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	T. GLEASON	BY	DATE
DESIGN-DETAILED	KLW/CHL	KLW/CHL	OCT 2025
CHECKED-REVIEWED	SLW/PLP	SLW/PLP	OCT 2025
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

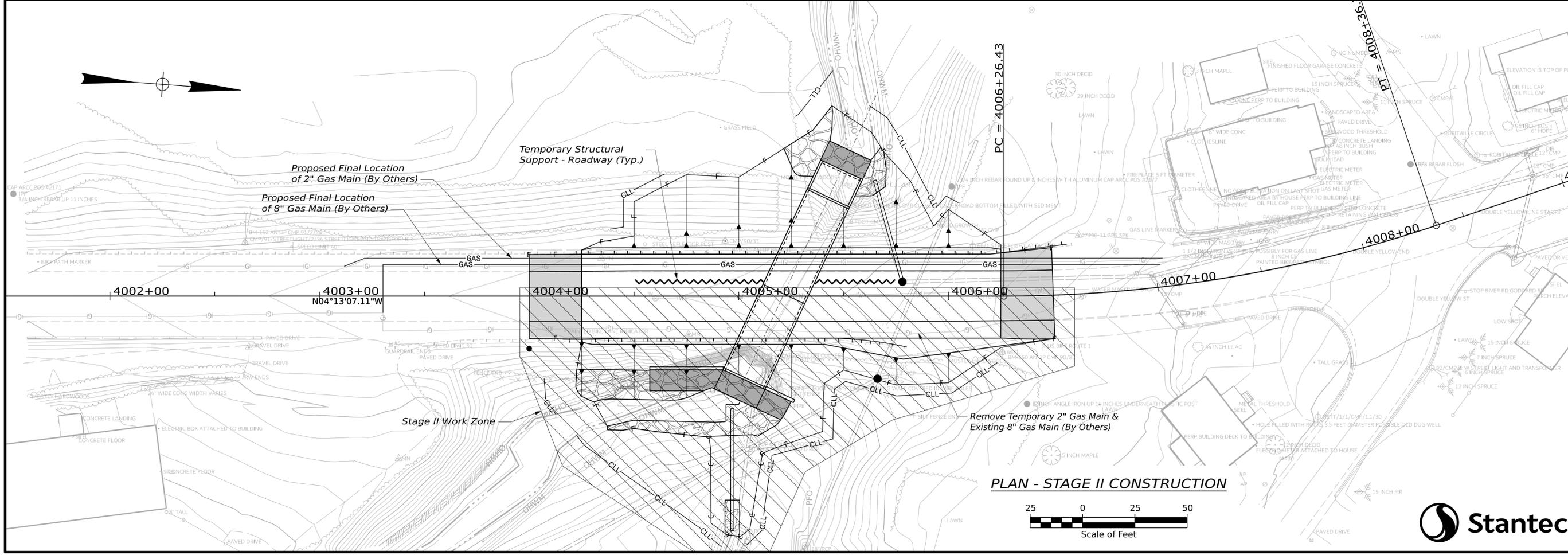
RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
CROSS SECTIONS

SHEET NUMBER
15
OF 22

Date: 1/14/2026
 Username: kwight

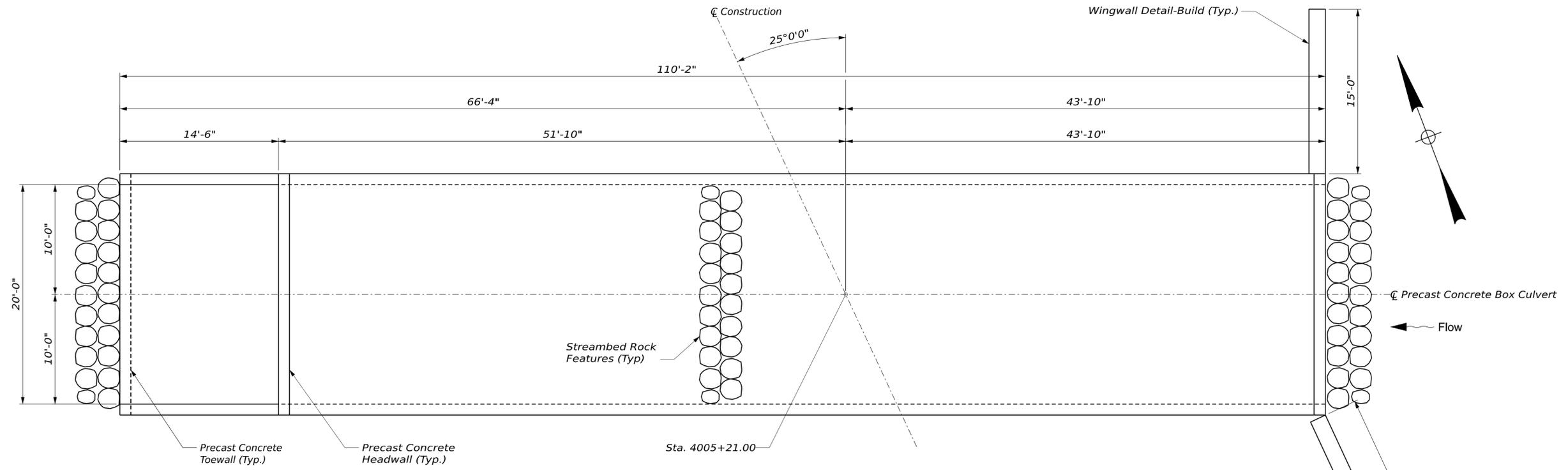


- NOTES**
1. Temporary and final gas main locations shown are conceptual and approximate. Relocation and installation of gas lines shall be by others.
 2. Temporary roadway support to accommodate the gas mains during construction shall be paid for under Item 524.301 Temporary Structural Support.
 3. Permanent gas main relocation to the east will take place between Stage I and Stage II of construction. See Special Provision 104 Utilities.

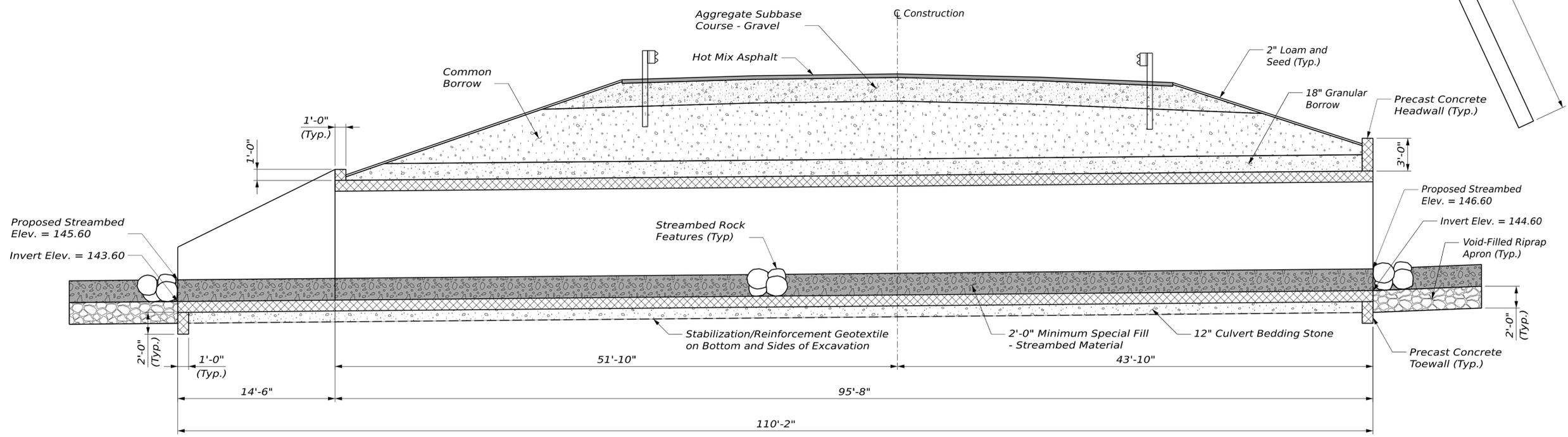


STATE OF MAINE DEPARTMENT OF TRANSPORTATION		Federal Project No. 2723000		WIN 27230.00	
PROJ. MANAGER	T. GLEASON	BY	ALW/CHL	DATE	OCT 2025
DESIGN-DETAILED	KLW/CHL	BY	SAW/RFP	DATE	OCT 2025
CHECKED-REVIEWED	SAW/RFP	BY	SAW/RFP	SIGNATURE	
DESIGN-DETAILED#2				P.E. NUMBER	
DESIGN-DETAILED#3				DATE	
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					
RIVER ROAD BRIDGE NO. 0093 CROSSING HARTS BROOK LEWISTON					
CULVERT STAGING PLAN					
SHEET NUMBER					
16					
OF 22					





PRECAST CONCRETE BOX PLAN
(20'-0" Span x 10'-0" Rise)



LONGITUDINAL SECTION
(Along Centerline Box Culvert)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2723000
WIN 27230.00

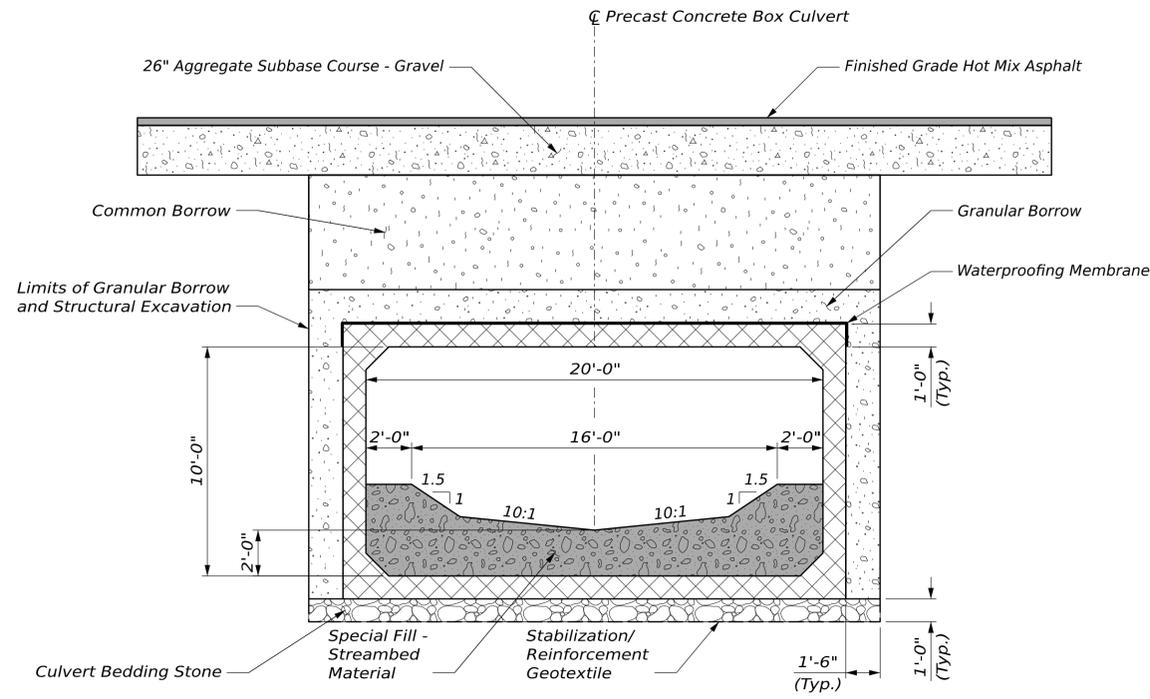
PROJ. MANAGER	T. GLEASON	BY	DATE
DESIGN-DETAILED	KLW/CHL	KLW/CHL	JAN 2026
CHECKED-REVIEWED	SAW/PLP	SAW/PLP	JAN 2026
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
CULVERT DETAILS (1 OF 2)

SHEET NUMBER
17
OF 22



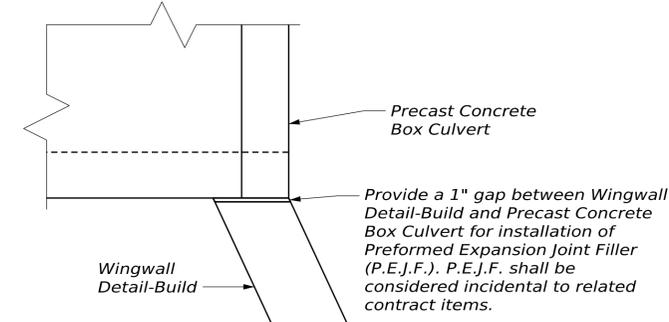
Username: kwight Date: 1/14/2026



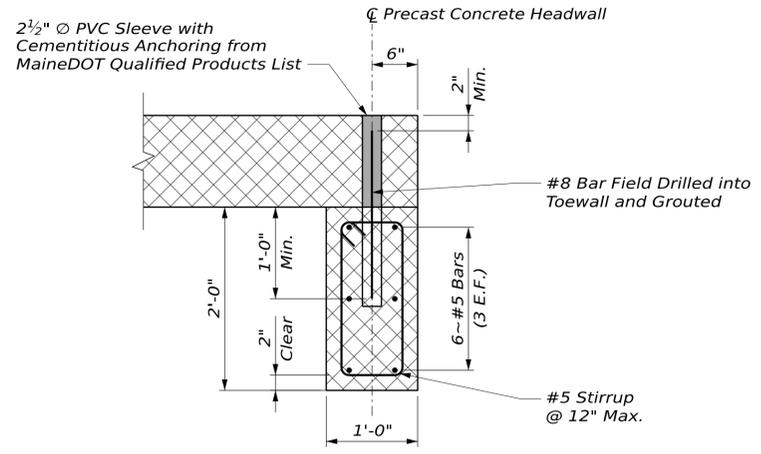
TYPICAL PRECAST CONCRETE BOX TRANSVERSE SECTION

PRECAST CONCRETE BOX CULVERT NOTES

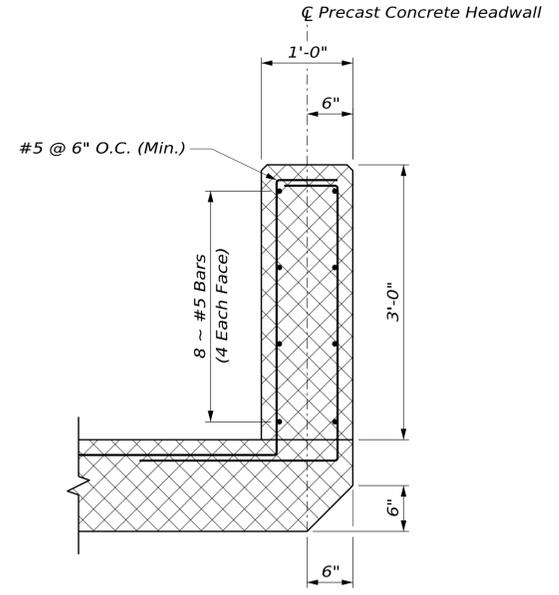
1. The precast units shall be designed to carry construction loadings with a minimum fill cover of 18 inches over the top of the units.
2. In accordance with Standard Specification Subsection 534.04, Precast Structural Concrete, the Contractor shall submit design calculations for the precast structure to the Department for review. The calculations shall demonstrate that the factored bearing pressures at the Strength Limit and Service Limit States do not exceed the factored geotechnical bearing resistances provided in the project geotechnical design report.
3. The Contractor shall maintain the excavation so that the box culvert and culvert bedding layer are installed in the dry. Groundwater shall be controlled by pumping from sumps or other dewatering systems selected by the Contractor.
4. The native soil subgrade shall be excavated in two phases. The bulk of the excavation may be performed using a conventional excavator bucket. For the final phase, a smooth-edged bucket shall be used to expose the culvert bearing layer subgrade and minimize disturbance. The Contractor shall not operate heavy equipment over the excavated subgrade to minimize subgrade disturbance. Limit vibration induced disturbance to the saturated subgrade. If the subgrade is disturbed, weakened, or over-excavated, the Contractor shall excavate the disturbed material and replace with compacted Granular Borrow - Material for Underwater Backfill to the subgrade level at the Contractor's expense.
5. The Stabilization/Reinforcement Geotextile shall be deployed onto the prepared native soil subgrade prior to installing the culvert bedding material. Adjoining sections of the geotextile shall be overlapped by a minimum of 2 feet. The culvert bedding material shall be placed in maximum 6-inch-thick lifts and each lift compacted with several passes of a walk-behind roller or large plate compactor.



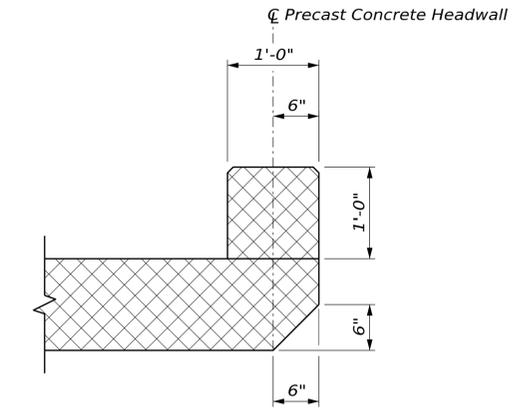
P.E.J.F. DETAIL



PRECAST CONCRETE TOEWALL DETAIL



EAST PRECAST CONCRETE HEADWALL DETAIL



WEST PRECAST CONCRETE HEADWALL DETAIL

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		Federal Project No. 2723000		WIN 27230.00	
PROJ. MANAGER	T. GLEASON	BY	ALW/CHL SAW/PLP	DATE	JAN 2026	SIGNATURE	
DESIGN-DETAILED	KLW/CHL	CHECKED-REVIEWED	SAW/PLP	DATE	JAN 2026	P.E. NUMBER	
DESIGN-DETAILED02		DESIGN-DETAILED03		REVISIONS 1		DATE	
				REVISIONS 2			
				REVISIONS 3			
				REVISIONS 4			
				FIELD CHANGES			

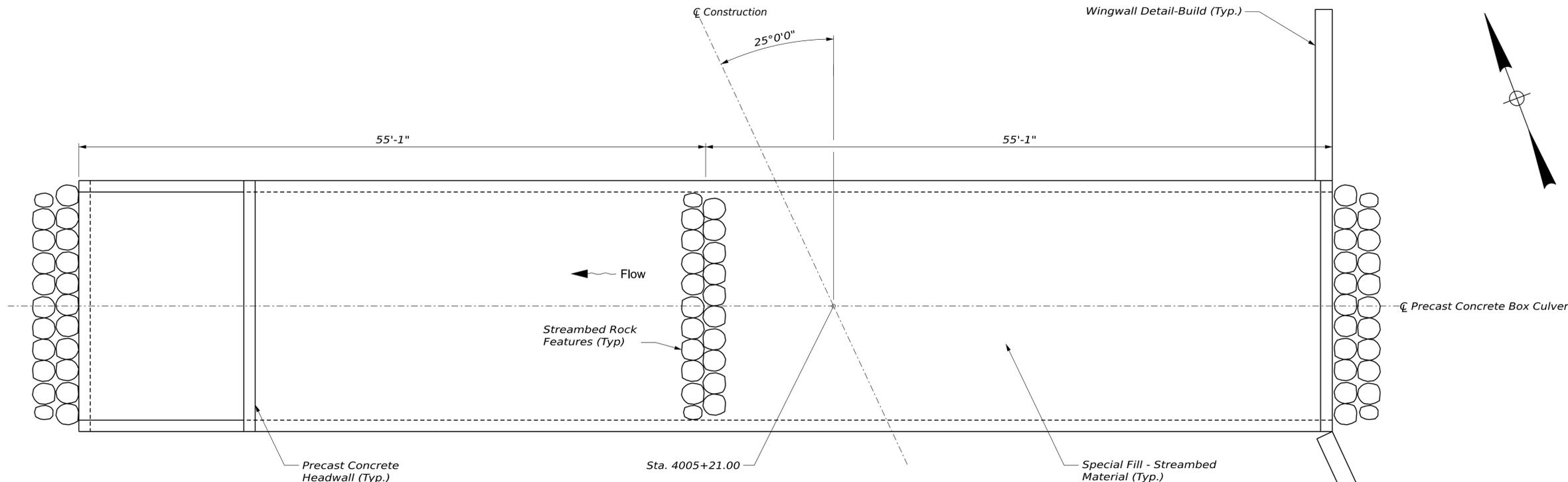
RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
CULVERT DETAILS (2 OF 2)

SHEET NUMBER

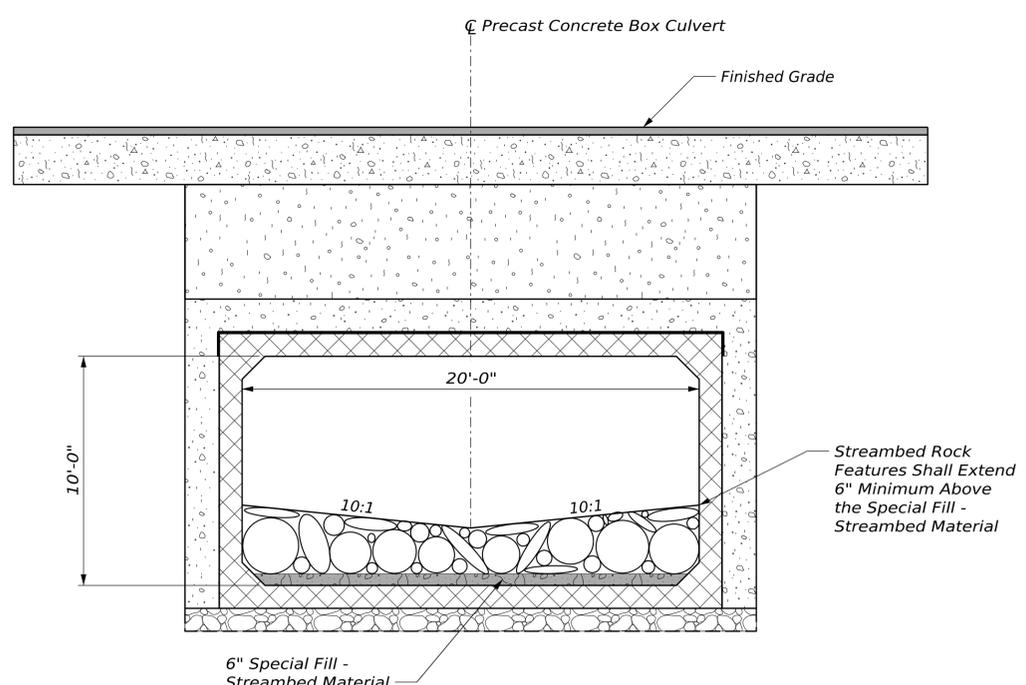
18

OF 22

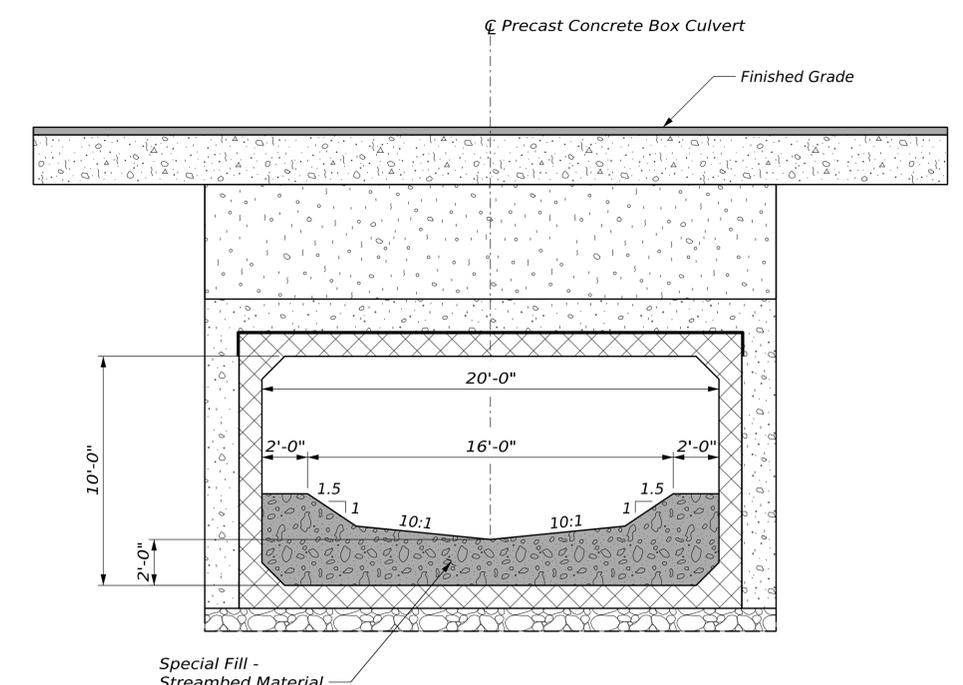




STREAMBED ROCK FEATURES LAYOUT
(20'-0" Span x 10'-0" Rise)



TYPICAL STREAMBED ROCK FEATURES SECTION



TYPICAL SPECIAL FILL - STREAMBED MATERIAL SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2723000
WIN 27230.00

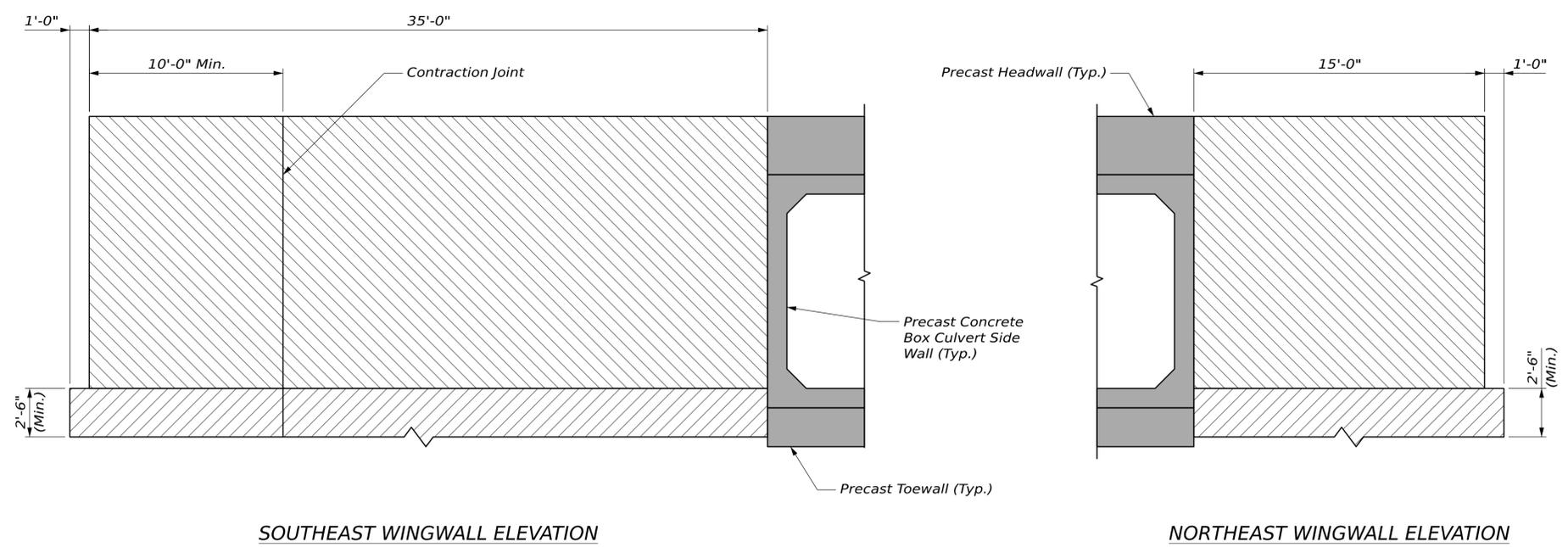
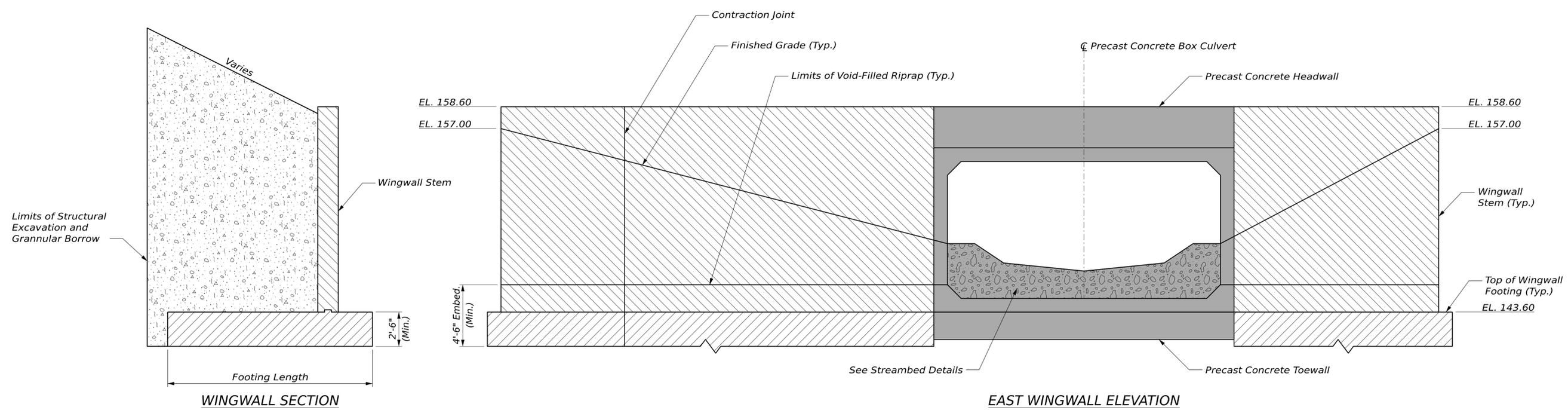
PROJ. MANAGER	T. GLEASON	BY	DATE
DESIGN-DETAILED	KLW/CHL	ALW/CHL	JAN 2026
CHECKED-REVIEWED	SLW/PLP	SLW/PLP	JAN 2026
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

RIVER ROAD BRIDGE NO. 0093
CROSSING HARTS BROOK
LEWISTON
STREAMBED DETAILS

SHEET NUMBER
19
OF 22



Username: kwight Date: 1/14/2026

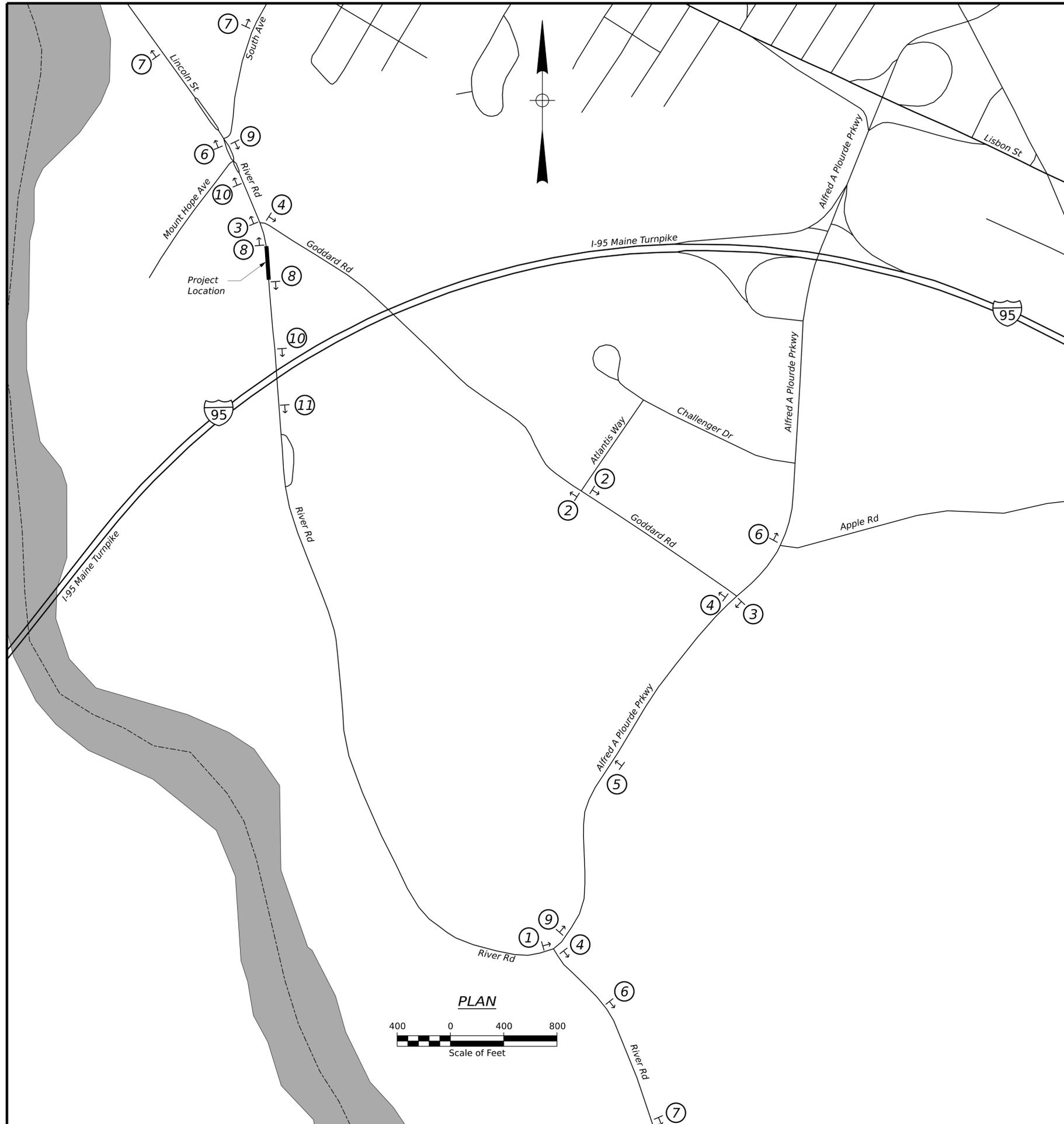


WINGWALL DETAIL-BUILD NOTES

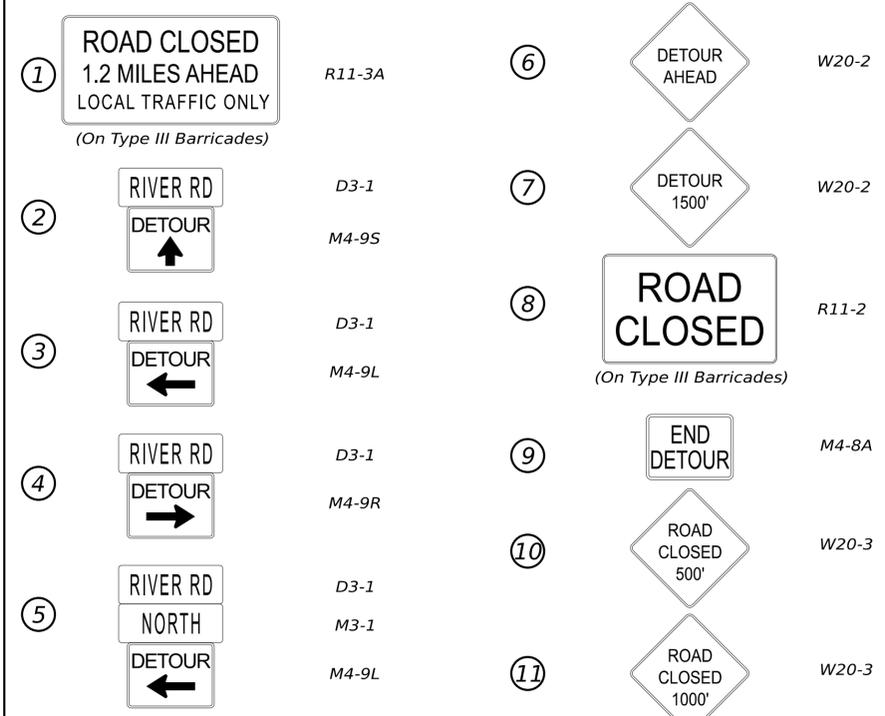
1. The Wingwall Detail-Build structure shown is for illustrative purposes only. See Special Provision 531 and project Geotechnical Report.
2. Wingwalls and their footings shall be backfilled with Granular Borrow. The footings shall be bedded on a 1-foot layer of compacted Granular Borrow for Underwater Backfill and geotextile fabric. Granular Borrow, Geotextile Fabric, and Structural Earth Excavation shall be incidental to Item 531.59 Wingwall Detail-Build.
3. Refer to the project Geotechnical Design Report for Wingwall Detail-Build geotechnical design requirements.
4. Concrete spread footings shown for illustrative purposes. Footings shall be a minimum of 3'-0" wide and 2'-6" thick, but actual dimensions shall be specified by the wingwall designer.
5. Construct French Drains behind each base of the Structure Detail Build wingwalls in accordance with Standard Specification Section 512, French Drains. Daylight french drains through weepholes in the wingwalls. Coordinate daylight locations with the Resident. French drains will not be measured for payment, but shall be included in Item 531.59 Wingwall Detail-Build.
6. At the option of the Contractor, a construction joint in the southeast wingwall may be utilized to facilitate water control during construction.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		Federal Project No. 2723000	
RIVER ROAD BRIDGE NO. 0093 CROSSING HARTS BROOK LEWISTON		WINGWALL DETAILS	
PROJ. MANAGER	T. GLEASON	DATE	DATE
DESIGN-DETAILED	KLW/CHL	JAN 2026	
CHECKED-REVIEWED	KLW/CHL	JAN 2026	
DESIGN-DETAILED02	SLW/PLP		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
SIGNATURE		P.E. NUMBER	
DATE		DATE	
SHEET NUMBER		WIN 27230.00	
20			
OF 22			





Road Closure & Detour Sign Summary			
Text	ID Number	Size	Quantity & Color
NORTH	M3-1	24" X 12"	1 - Black on Orange
RIVER RD	D3-1	24" X 12"	8 - Black on Orange
END DETOUR	M4-8A	24" X 18"	2 - Black on Orange
DETOUR ←	M4-9L	30" X 24"	3 - Black on Orange
DETOUR →	M4-9R	30" X 24"	4 - Black on Orange
DETOUR ↑	M4-9S	30" X 24"	2 - Black on Orange
ROAD CLOSED	R11-2	60" X 30"	2 - Black on White
ROAD CLOSED XX FEET AHEAD LOCAL TRAFFIC ONLY	R11-3A	60" X 30"	1 - Black on White
DETOUR XXX	W20-2	36" X 36"	6 - Black on Orange
ROAD CLOSED XXX	W20-3	36" X 36"	3 - Black on Orange



STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		Federal Project No. 2723000		WIN 27230.00	
RIVER ROAD BRIDGE NO. 0093		CROSSING HARTS BROOK		LEWISTON		DETOUR PLAN	
SHEET NUMBER		21		OF		22	

PROJ. MANAGER	T. GLEASON	BY	DATE
DESIGN-DETAILED	KLW/CHL	ALW/CHL	JAN 2026
CHECKED-REVIEWED	SWW/PLP	SWW/PLP	JAN 2026
DESIGN-DETAILED02			
DESIGN-DETAILED03			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			



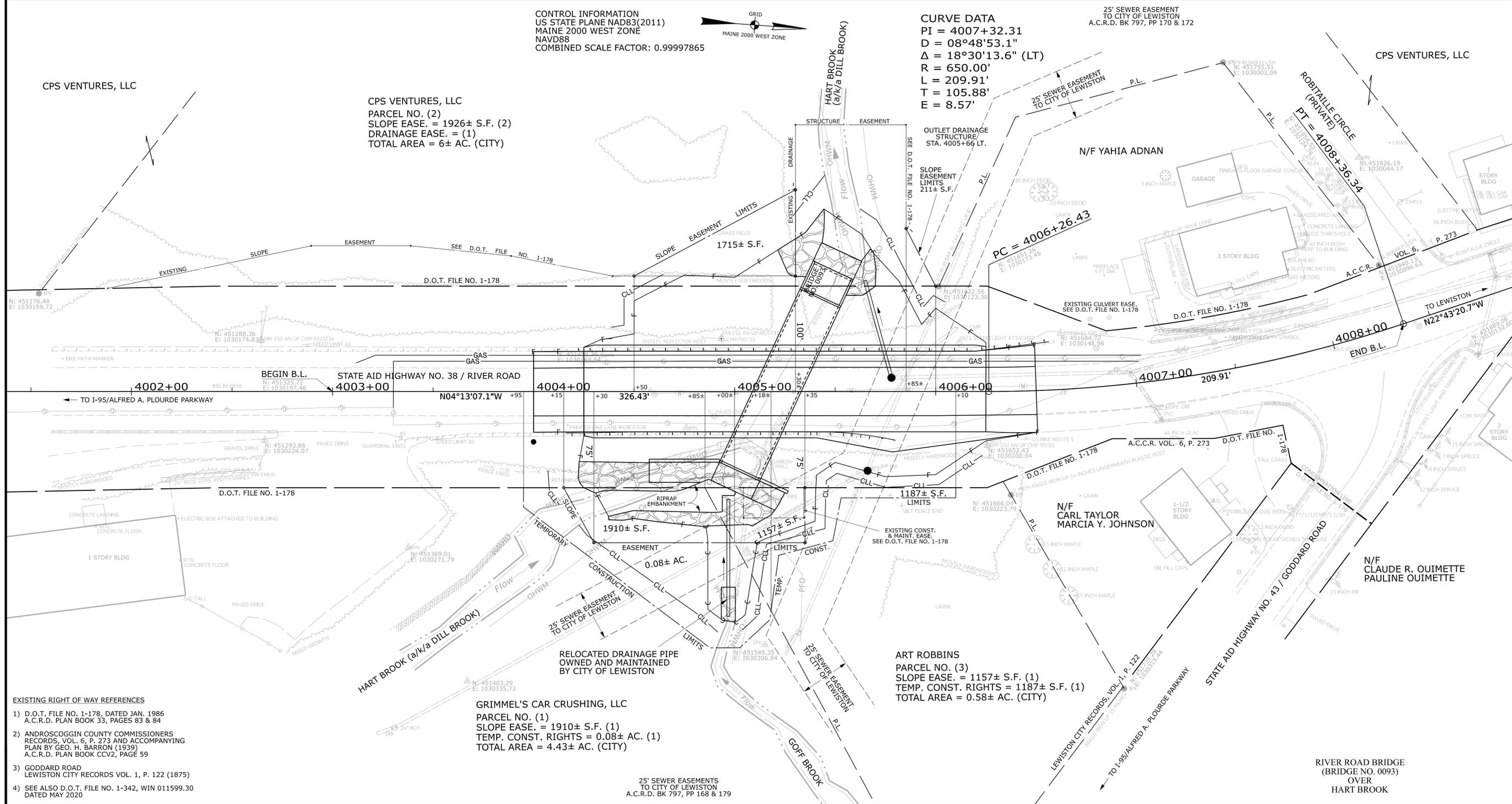
PLAN LEGEND	
Town, County, State	New R/W Along Existing R/W
Approx. Property Lines	Building
Existing Right of Way	Clearing Limit Line - CLL
Limits of Wrought Portion	Trees Conifer, Deciduous
Control Of Access	Tree Line, Bush Line
New Right of Way	Water Edge
New Easement	Ledge, Rock/Boulder, Flag Pole
New Temporary Rights	Fence, CHAIN LINK, BARB WIRE, STOCKADE, Mailbox
New R/W Within Existing R/W	Sign
Existing	Proposed
Sanitary Sewer	Traveled Way
Com. Line UG	Ditch
Electric Line	Catch Basin
Water Line	Manhole
Underdrain Line	Sewer Manhole
Gas Line	Utility Pole
Guardrail	Fire Hydrant
Culvert	Curbing
Existing	Proposed
Cut Line	Fill Line
Stonewall	Retaining Wall
Baseline	Monument
	Iron Rod Set
	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 ADJUTING PROPERTY OWNERS.

Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY OF _____
RECEIVED _____, 20____
AT _____ HRS. _____ MINS. _____ M.
AND RECORDED IN _____
PLAN BOOK (OR FILE NO.) _____, PAGE _____
ATTEST: _____ REGISTER



- EXISTING RIGHT OF WAY REFERENCES**
- D.O.T. FILE NO. 1-178, DATED JAN. 1986
A.C.R.D. PLAN BOOK 33, PAGES 83 & 84
 - ANDROSCOGGIN COUNTY COMMISSIONERS RECORDS, VOL. 6, P. 273 AND ACCOMPANYING PLAN BY GEO. H. BARRON (1939)
A.C.R.D. PLAN BOOK CCV2, PAGE 59
 - GODDARD ROAD LEWISTON CITY RECORDS VOL. 1, P. 122 (1875)
 - SEE ALSO D.O.T. FILE NO. 1-342, WIN 011599.30 DATED MAY 2020

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	JH	CWK
FINAL RIGHT OF WAY AREAS	JH	PNS
	JH	JDF

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

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

DALE F. DOUGHTY
ACTING COMMISSIONER
WILLIAM A. PULVER
CHIEF ENGINEER

DATE

STATE AID HIGHWAY NO. 38
RIVER ROAD

LEWISTON ANDROSCOGGIN COUNTY
WORK IDENTIFICATION NO. (W.I.N.) 027230.00

OCTOBER 2025 RIGHT-OF-WAY MAP
SCALE 1" = 25' SHEET 1 OF 1

D.O.T. FILE NO. 1-371

SHEET NUMBER
22
OF 22