

# Blue Hill Falls Bridge

## Bridge Advisory Committee Meeting



Aug. 12, 2021

# Agenda Outline

- Introductions
- Geotech & Substructure Update
- Contractor Process Updates
  - Rock Roads
  - Temporary Bridge & Signals
  - Periodic Road Closures
  - Recreational Access
- Aesthetics
  - Fascia Panel Selection
  - Bridge Shoulder Treatments
  - Portion(s) of Arch to be salvaged
- Right-of-Way / Plantings
- Plan Review
- Schedule



# Geotechnical & foundation strengthening

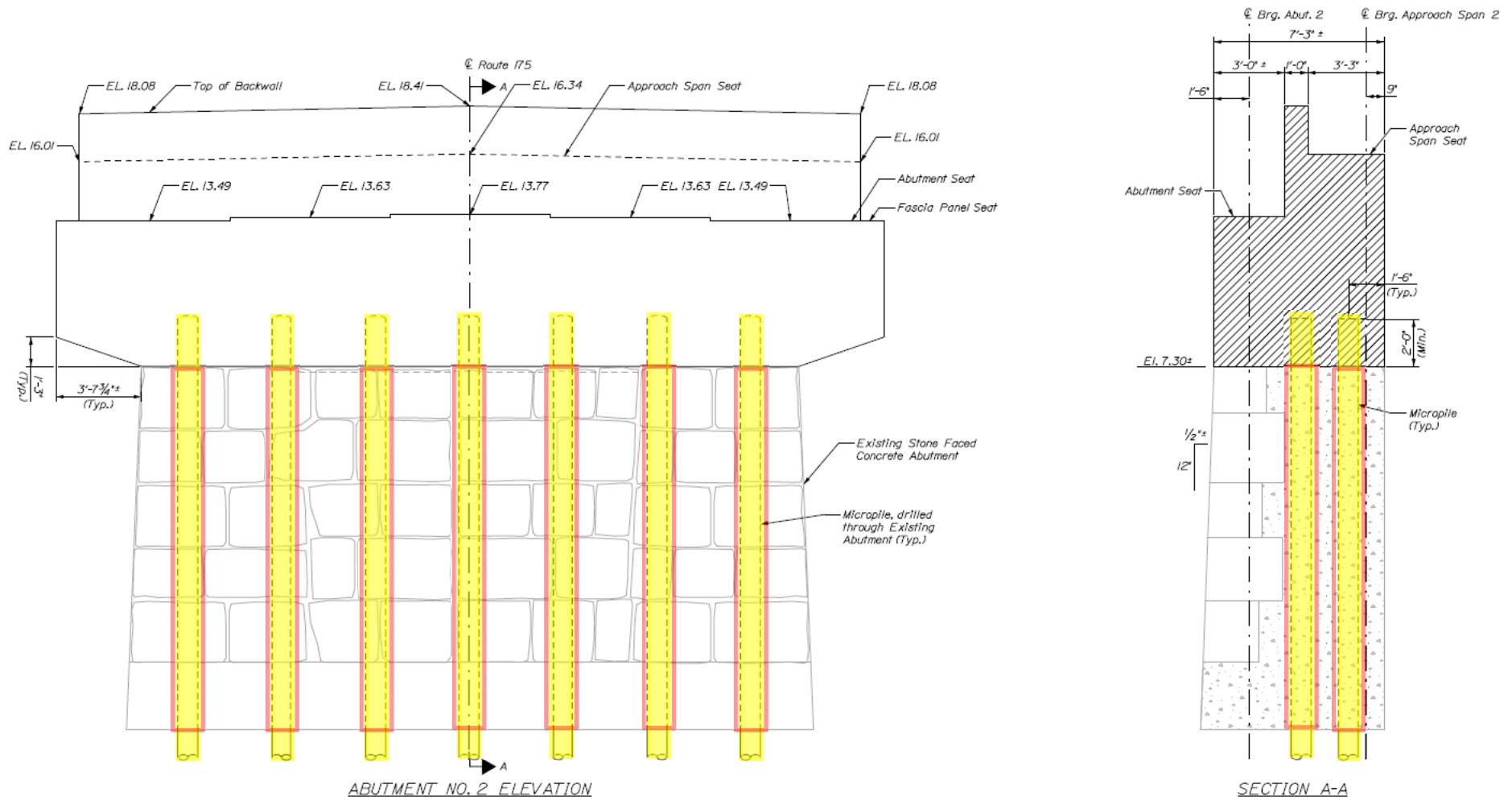
- Soil beneath south abutment and retaining walls
- Foundation strengthening needed to meet standards



# Design Update - Substructure

## Abutment – Micropile underpinning / strengthening

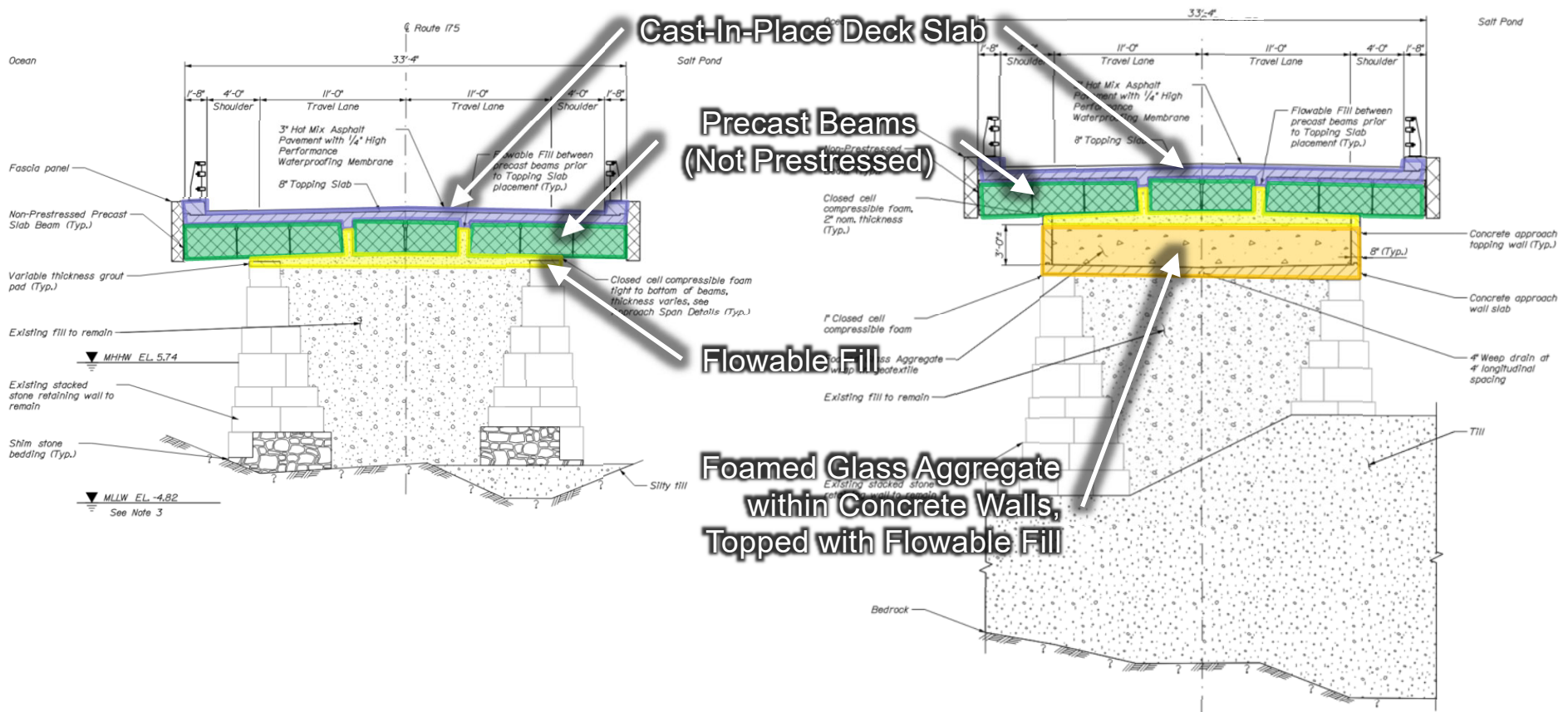
- Pre-core holes through abutments prior to Micropile Installation



# Design Update - Substructure

## Substructure – Approach Span

- Lightweight fill or air gap beneath precast beams



Date: 8/11/2021

Username:

Division:

Filename: 032\_TempSignalPlan.dgn

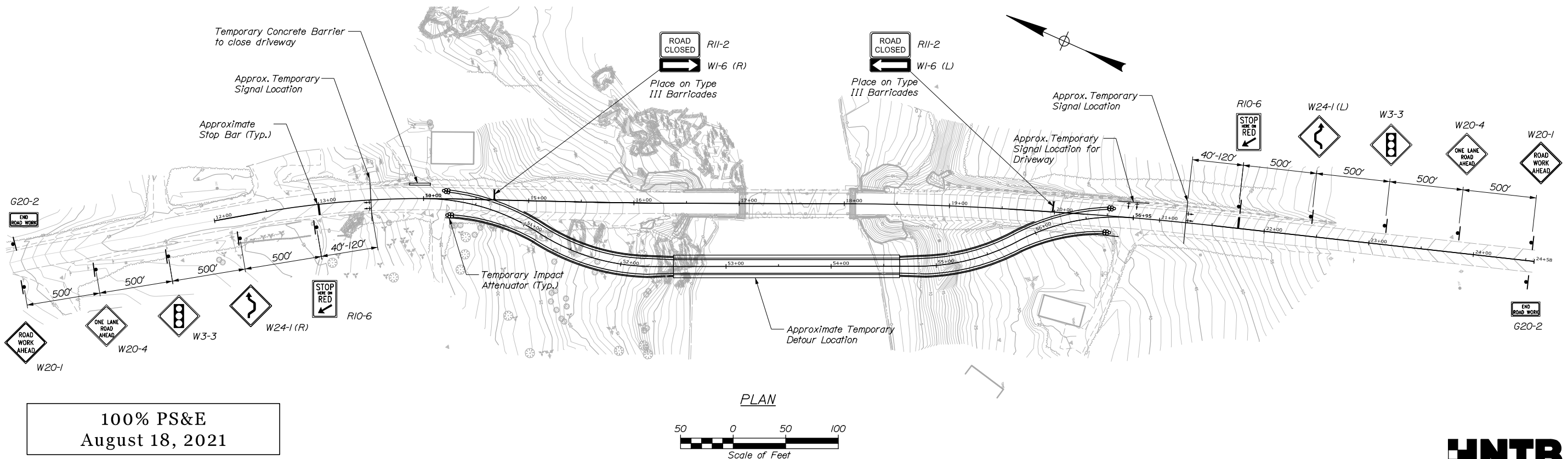
TEMPORARY SIGNAL SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER		
G20-2	36"	18"	END ROAD WORK	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			2	COLORS SHALL CONFORM TO STANDARD HIGHWAY SIGN DETAILS			4.50 (9)
R10-6	24"	36"	STOP ONE ON RED				2				6.00 (12)
R11-2	48"	30"	ROAD CLOSED				2				10.00 (20)
W1-6 (L)	48"	24"	[Arrow pointing right]				1				8.00 (8)
W1-6 (R)	48"	24"					1				8.00 (8)
W3-3	48"	48"	[Traffic light symbol]				2				16.00 (32)
W20-1	48"	48"	ROAD WORK AHEAD				2				16.00 (32)
W20-4	48"	48"	ONE LANE ROAD AHEAD				2				16.00 (32)
W24-1 (L)	48"	48"	[Curve left symbol]				1				16.00 (16)
W24-1 (R)	48"	48"	[Curve right symbol]				1				16.00 (16)

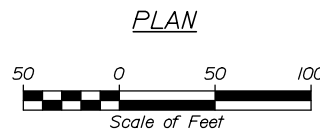
OFF-SITE DETOUR PLAN SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK-GROUND	LEGEND BORDER		
CS-1	42"	30"	FALLS BRIDGE CLOSED USE DETOUR	4" C	3"		7	ORANGE	BLACK		8.75 (61.25)
CS-2	30"	12"	ROUTE 175	4" C			22	ORANGE	BLACK		2.50 (55)
M4-8a	24"	18"	END DETOUR	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			2	COLORS SHALL CONFORM TO STANDARD HIGHWAY SIGN DETAILS			3.00 (6)
M4-9	30"	24"	DETOUR [Up arrow]				11				5.00 (55)
M4-9L	30"	24"	DETOUR [Left arrow]				5				5.00 (25)
M4-9R							4			5.00 (20)	
M4-10L	48"	18"	DETOUR [Left arrow]				3				6.00 (18)
M4-10R							4			6.00 (24)	
W20-3 (500)	48"	48"	ROAD CLOSED XXX FT				2				16.00 (32)
W20-3 (1000)							2			16.00 (32)	
R11-2	48"	30"	ROAD CLOSED				*				*
R11-3a (0.5)	60"	30"	ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY				2				12.50 (25)
R11-3a (1.0)							1			12.50 (25)	
R11-3a (3.0)							1			12.50 (25)	

\*R11-2 is used in both the temporary signal and off-site detour setups.



100% PS&E  
August 18, 2021



**HNTB**

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
1771200  
WIN  
17712.00  
Bridge No. 5038  
BRIDGE PLANS

PROJ. MANAGER	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
A. Lofth	06/21	E. Raymond	06/21			
DESIGN-DETAILED		E. Raymond				
CHECKED-REVIEWED		T. Cole				
DESIGNS-DETAILED						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						

BLUE HILL FALLS BRIDGE  
SALT POND OUTLET  
HANCOCK COUNTY  
BLUE HILL  
TEMPORARY SIGNAL PLAN

SHEET NUMBER  
32  
OF 63



**Blue Hill Falls Bridge  
Conceptual Project  
Renderings**

**Option 3A-3**

**Fascia with Chamfer Strip  
Fascia on Bridge & Appr.  
No Columns**



**Dec. 7, 2020**

**Selected Bridge Fascia Panel Concept**



**Selected Bridge Rail Type (rail will be galvanized/unpainted)**





**Shoulder Treatment Limits and Details**



**Shoulder Pavement Stamping & Pigmented Coating**

**Option 1A, 2A & 3A**

**Driver's View**

**No Columns  
Colored Shoulder**



**August 19, 2020**

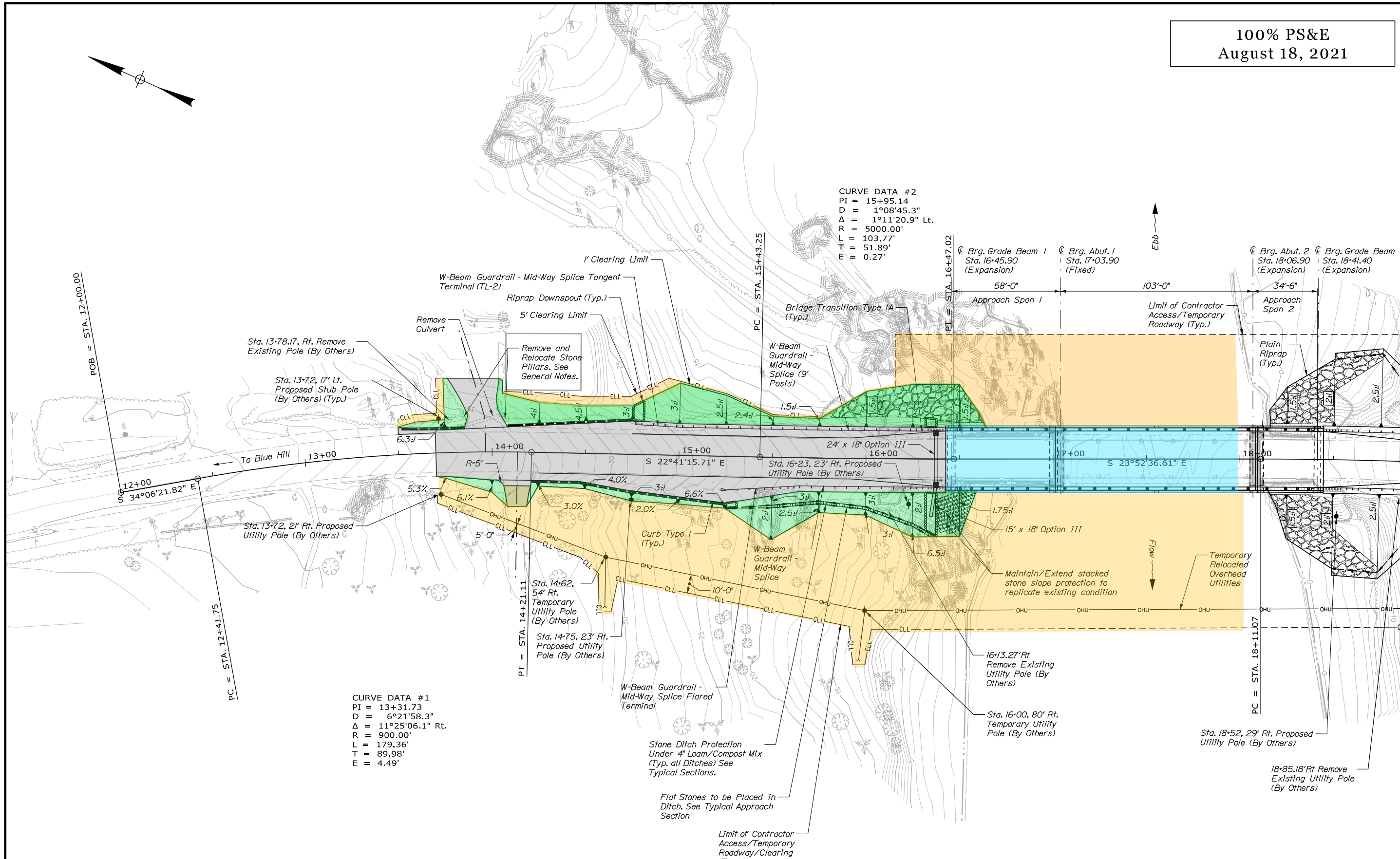


**Discussion: Items to retain for commemorative purposes**

Filename: 004\_Plan 1.dgn  
 Division:  
 Username:  
 Date: 8/11/2021

100% PS&E  
 August 18, 2021

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 1771200  
 WIN  
 17712.00  
 Bridge No. 5038  
 BRIDGE PLANS



DATE	BY	SIGNATURE	P.E. NUMBER	DATE
06/21	E. Raymond			
06/21	T. Cole			

PROJ. MANAGER	DESIGN-DETAILED	CHECKED-REVIEWED	DESIGNS-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES
A. Lofth	E. Raymond	A. Sweet						

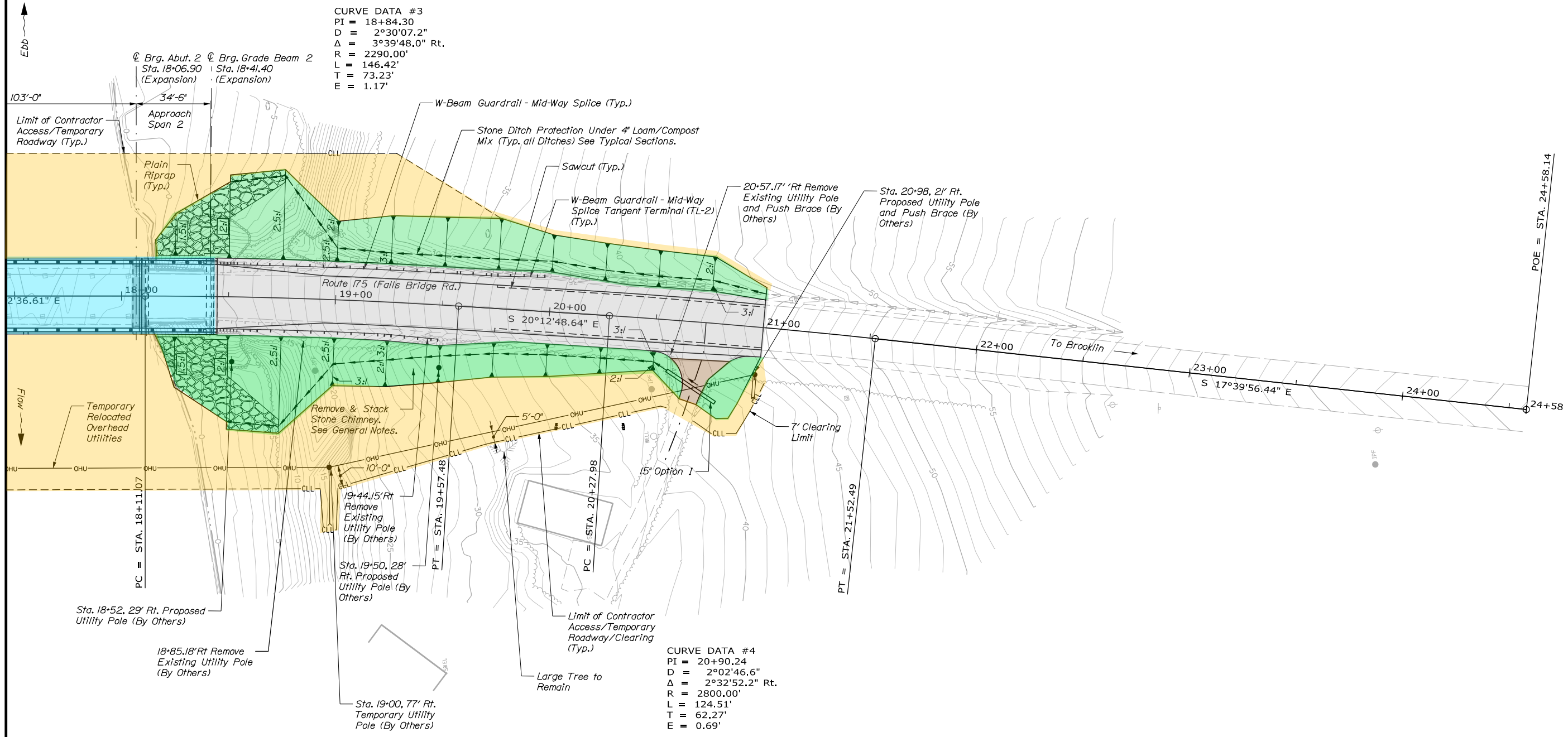
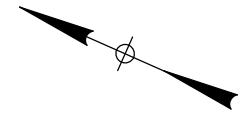
BLUE HILL FALLS BRIDGE  
 SALT POND OUTLET  
 HANCOCK COUNTY  
 BLUE HILL  
 GENERAL PLAN 1

SHEET NUMBER  
 4  
 OF 63



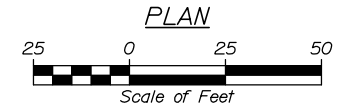
Filename: 005\_Plan 2.dgn  
 Division:  
 Username:  
 Date: 8/11/2021

100% PS&E  
 August 18, 2021



CURVE DATA #3  
 PI = 18+84.30  
 D = 2°30'07.2"  
 Δ = 3°39'48.0" Rt.  
 R = 2290.00'  
 L = 146.42'  
 T = 73.23'  
 E = 1.17'

CURVE DATA #4  
 PI = 20+90.24  
 D = 2°02'46.6"  
 Δ = 2°32'52.2" Rt.  
 R = 2800.00'  
 L = 124.51'  
 T = 62.27'  
 E = 0.69'



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		1771200	
BLUE HILL FALLS BRIDGE SALT POND OUTLET HANCOCK COUNTY		BRIDGE NO. 5038	
GENERAL PLAN 2		BRIDGE PLANS	
SHEET NUMBER		WIN 17712.00	
5		OF 63	

PROJ. MANAGER	A. Lotter	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
DESIGN-DETAILED	E. Raymond	E. Raymond	06/21			
CHECKED-REVIEWED	A. Sweet	T. Cole	06/21			
DESIGNS-DETAILED						
REVISIONS 1						
REVISIONS 2						
REVISIONS 3						
REVISIONS 4						
FIELD CHANGES						



