STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eighth Edition 2017 with 2018 errata.

DESIGN LOADING

Live Load	HL-93 Modified For Strength I

TRAFFIC DATA

Current (2019) AADT	4230
Future (2029) AADT	4650
Future (2039) AADT	5080
DHV - % of AADT	10%
Design Hour Volume	508
Heavy Trucks (% of AADT)	12%
Heavy Trucks (% of DHV)	12%
Directional Distribution (% of DHV)	52%
18 kip Equivalent P 2.0	557
18 kip Equivalent P 2.5	530
Design Speed (mph)	40

HYDROLOGIC DATA

Drainage Area	1.7 sq mi
Design Discharge (Q50)	252.0 cfs
Check Discharge (Q100)	294.9 cfs
Headwater Elevation (Q50)	248.4 ft
Headwater Elevation (Q100)	248.6 ft
Discharge Velocity (Q50)	4.3 fps
Discharge Velocity (Q100)	4.9 fps
Headwater Elevation (Q1.1)	247.6 ft
Discharge Velocity (Q1.1)	0.8 fps
Headwater Elevation (Q25)	248.2 ft

MATERIALS

Concrete:	
Curbs	Class "LP"
Precast	Class "P"
Beam Slab Closures	Grout
All Other	Class "A"
Concrete Reinforcing:	
Plain steel	ASTM A 615, Grade 60
Stainless steel	ASTM A955, Grade 75
Prestressing Strands	AASHTO M203 (ASTM A 416), Grade 270, Low Relaxation
Steel H-Piles	ASTM A572, Grade 50

BASIC DESIGN STRESSES

Concrete:	
Class LP	f 'c = 5,000 psi
Class P	f 'c = 8,000 psi
	f 'ci = 6,500 psi
Grout	f'c = 8,000 psi
Class A	f 'c = 4,000 psi
Concrete Reinforcing:	
Plain Steel	f y = 60,000 psi
Stainless Steel	f y = 75,000 psi
Prestressing Strand	F u = 270,000 psi
Steel H-Piles	fy=50,000 psi

ANSON
SOMERSET COUNTY
ICE HOUSE BRIDGE
OVER
GILMAN BROOK

RIVER ROAD / ROUTE 8 / ROUTE 201A

FEDERAL AID PROJECT NO. STP - 2165(700)
PROJECT LENGTH 0.10 mi.
BRIDGE NO. 3726

LIST OF DRAWINGS

UTILITIES

Madison Electric Works
Fairpoint
Charter Communications
TDS of Maine
Anson/Madison Water District
Anson Sewer

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating traffic using on site special detour with temporary traffic signals.

PROJECT LOCATION:	On River Road/Route 8/Route 201A, 0.05 miles south of the intersection with Campground Road. Lat. - 44° 48' 48" N Long. - 69° 53' 32" W
PROGRAM AREA:	Bridge
OUTLINE OF WORK:	Bridge Replacement

WIN 021657.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED

	DATE
COMMISSIONER:	12/9/19
CHIEF ENGINEER:	12-9-19

STATE OF MAINE PETER M. PERKINS No. 8251 LICENSED PROFESSIONAL ENGINEER

SIGNATURE	
P.E. NUMBER	8251
DATE	11/25/19

PROJECT INFORMATION

PROGRAM	BRIDGE
PROJECT MANAGER	Mark Parlin
DESIGNER	Peter Perkins
CONSULTANT	CHA Consulting Inc.
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

ANSON
ICE HOUSE BRIDGE
TITLE SHEET

Filename: ...\MSTA\002_Quantities_Notes.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION		QUANTITY	UNIT
202.19	REMOVING EXISTING BRIDGE		1	LS
202.202	REMOVING PAVEMENT SURFACE		1400	SY
203.20	COMMON EXCAVATION		1170	CY
203.2318	DISPOSAL OF SPECIAL WASTE		100	T
203.24	COMMON BORROW		120	CY
203.25	GRANULAR BORROW		290	CY
206.082	STRUCTURE EARTH EXCAVATION-MAJOR STRUCTURES		617	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL		1150	CY
403.2081	12.5 MM POLYMER MODIFIED HMA		190	TON
403.209	HOT MIX ASPHALT 9.5 MM (INCIDENTALS)		10	TON
403.213	HOT MIX ASPHALT 12.5 MM BASE		50	TON
403.2131	12.5 MM POLYMER MODIFIED HMA BASE		170	TON
409.15	BITUMINOUS TACK COAT - APPLIED		150	G
461.131	TEMPORARY PAVEMENT		90	T
501.231	DYNAMIC LOADING TEST		2	EA
501.50	STEEL H-BEAM PILES 89 LBS/FT, DELIVERED		310	LF
501.501	STEEL H-BEAM PILES 89 LBS/FT, IN PLACE		300	LF
501.90	PILE TIPS		8	EA
501.91	PILE SPLICES		12	EA
501.92	PILE DRIVING EQUIPMENT MOBILIZATION		1	LS
502.219	STRUCTURAL CONCRETE, ABUTMENTS & RETAINING WALLS	(110 CY)	1	LS
502.31	STRUCTURAL CONCRETE APPROACH SLABS	(26 CY)	1	LS
502.49	STRUCTURAL CONCRETE CURBS AND SIDEWALKS	(6 CY)	1	LS
502.492	STRUCTURAL CONCRETE CURBS AND SIDEWALKS		4	CY
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED		18700	LB
503.13	REINFORCING STEEL, PLACING		18700	LB
503.26	STAINLESS STEEL REINFORCEMENT - FABRICATED & DELIVERED		2000	LB
503.27	STAINLESS STEEL REINFORCEMENT - PLACING		2000	LB
507.0821	STEEL BRIDGE RAILING, 3 BAR	(124 LF)	1	LS
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE	(199 SY)	1	LS
510.10	SPECIAL DETOUR 14' ROADWAY WIDTH TRAFFIC NOT SEPARATED		1	LS
511.07	COFFERDAM: UPSTREAM		1	LS
511.07	COFFERDAM: DOWNSTREAM		1	LS
514.06	CURING BOX FOR CONCRETE CYLINDER		1	EA
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES	(56 SY)	1	LS
520.232	EXPANSION DEVICE - ASPHALTIC PLUG JOINT		70	LF
526.301	TEMPORARY CONCRETE BARRIER TYPE 1	(80 LF)	1	LS
527.34	WORK ZONE CRASH CUSHIONS		4	UN
535.622	PRESTRESSED STRUCTURE CONCRETE NEXT BEAM	(61 CY)	1	LS
604.18	ADJUST MANHOLE OR CB TO GRADE		3	EA
606.1301	31" W-BEAM GUARDRAIL - MID-WAY SPLICE		162.5	LF
606.1305	31" W-BEAM GUARDRAIL - MID-WAY SPLICE FLARED TERMINAL		4	EA
606.1721	BRIDGE TRANSITION - TYPE 1		4	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER		8	EA
607.421	SCREENING FENCE		200	LF
610.08	PLAIN RIPRAP		413	CY
613.319	EROSION CONTROL BLANKET		65	SY
615.07	LOAM		30	CY
618.14	SEEDING METHOD NUMBER 2		1	UN
619.12	MULCH		1	UN
619.14	EROSION CONTROL MIX		30	CY
620.58	EROSION CONTROL GEOTEXTILE		639	SY
620.66	DRAINAGE GEOCOMPOSITE		84	SY
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE		2040	LF
627.77	REMOVING PAVEMENT MARKINGS		340	SF
627.78	TEMP 4" PAINT PAVEMENT MARKING LINE WHITE OR YELLOW		1000	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
643.72	TEMPORARY TRAFFIC SIGNAL		1	LS
652.312	TYPE III BARRICADE		4	EA
652.33	DRUM		27	EA
652.34	CONE		27	EA
652.35	CONSTRUCTION SIGNS		300	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	(180 CD)	1	LS
652.38	FLAGGER		320	HR
656.75	TEMPORARY SOIL EROSION & WATER POLLUTION CONTROL		1	LS
659.10	MOBILIZATION		1	LS

GENERAL CONSTRUCTION NOTES

1. For easements, construction limits and right of way lines, refer to Right of Way Map.

2. 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.

3. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.

4. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.

5. 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.

6. All embankment material, except as otherwise shown, placed below EL. 248.00 shall be Granular Borrow meeting the requirements of Subsection 703.19, Material for Underwater Backfill.

7. Construct the riprap shelf at each abutment at EL. 251.20.

8. Unless otherwise shown, place loam 2 inches deep on all new or reconstructed side slopes or as directed by the Resident.

9. 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 No. 619.14, Erosion Control Mix.

10. Place a 24-inch, wide strip of Temporary Erosion Control Blanket on the side slopes along the top of the riprap and behind the wingwalls.

11. An NCHRP350 or MASH compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail.

12. Extended-use 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, where it is apparent that runoff will cause continual erosion. Payment will be made under the appropriate Contract items.

13. Protective Coating for Concrete Surfaces shall be applied to the following areas:

All exposed surfaces of concrete curbs.
Fascias down to the drip notch.
Top face and to one foot below the ground on vertical walls against earth.

14. Project information referred to below may be accessed at the following MaineDOT web address: http://www.maine.gov/mdot/contractors/.

15. 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.

16. The hydrologic report of the bridge site may be accessed at the MaineDOT web address. The hydrologic report is 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.

17. The project geotechnical report titled: Geotechnical Report for the Replacement of Ice House Bridge, State Route 201A over Gilman Brook, Anson, Maine, MaineDOT Soils Report 2019-43, Dated September 18, 2019 may be accessed on the MaineDOT web address.

18. 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.

19. 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:

a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

c. 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.

20. Install two layers of 6 mil polyethylene sheeting under approach slabs. Payment will be considered incidental to Item No. 502.31, Structural Concrete Approach Slab.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE PLANS

BRIDGE NO. 3726

SIGNATURE

P.E. NUMBER

DATE

		BY	DATE
PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

ESTIMATED QUANTITIES & CONSTRUCTION NOTES

SHEET NUMBER

2

OF 30

CURVE DATA #3
PI = 20+54.19
D = 6°21'58.3"
Δ = 2°32'37.4" Lt.
R = 900.00'
L = 39.96'
T = 19.98'
E = 0.22'

STA. 107+25
LIMIT OF WORK
MATCH EXISTING
END MILL
AND OVERLAY

DRIVEWAY 10+00.00 =
CAMPGROUND RD. 20+71.78

PC = STA. 20+34.21

16' wide driveway - See detail on sheet 9 for additional information

PT = STA. 20+74.17

POE = STA. 20+83.98

R=10.0' (typ.)

S63°33'47.17"W

N20°40'49.71"W

Campground

11+00

10+00

20+00

N18°08'12.32"W

To No. Anson

CURVE DATA #3

108+00

CURVE DATA #2

River Road/Route 8/Route 201A

Riprap limit

Abandoned 14" water main

W-Beam Guardrail - Mid-way Splice (Typ.)

W-Beam Guardrail - Mid-Way Splice Flared Terminal (Typ.)

Remove Pipe

Remove Pavement, Paid under Item 203.20, Common Excavation. Loam and Seed

Existing 16" Dia. water main

Flow

40'-0"

CLL

104+00

105+00

106+00

107+00

CURVE DATA #1

N27°49'35.24"E

103+00

102+00

To Anson

River Road/Route 8/Route 201A

101+00

Existing 6" Dia. sewer main

Gilman Brook

Riprap limit

Riprap slope protection sta. 103+25 to sta. 104+89

To Kennebec River

Flow

Proposed Pole 103+20 Rt Offset 35 ft

Proposed Pole 105+60 Rt Offset 35 ft

Existing concrete collar over sewer main. 3' wide x 2' deep

PT = STA. 106+02.56

PC = STA. 107+03.61

CAMPGROUND ROAD 20+00.00 =
RIVER ROAD STA. 107+41.55

Gravel Drive (Typ.)

PC = STA. 101+46.61

STA. 102+15
LIMIT OF WORK
MATCH EXISTING
START MILL AND OVERLAY

CURVE DATA #1
PI = 103+76.47
D = 3°56'16.3"
Δ = 17°57'17.7" Rt.
R = 1455.00'
L = 455.96'
T = 229.86'
E = 18.05'

PLAN

25 0 25 50
Scale of Feet

CURVE DATA #2
PI = 108+61.36
D = 3°08'47.0"
Δ = 9°54'07.7" Rt.
R = 1821.00'
L = 314.71'
T = 157.75'
E = 6.82'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

BY	DATE
PAL	DEC 2017
PMP	DEC 2017

SIGNATURE

P.E. NUMBER

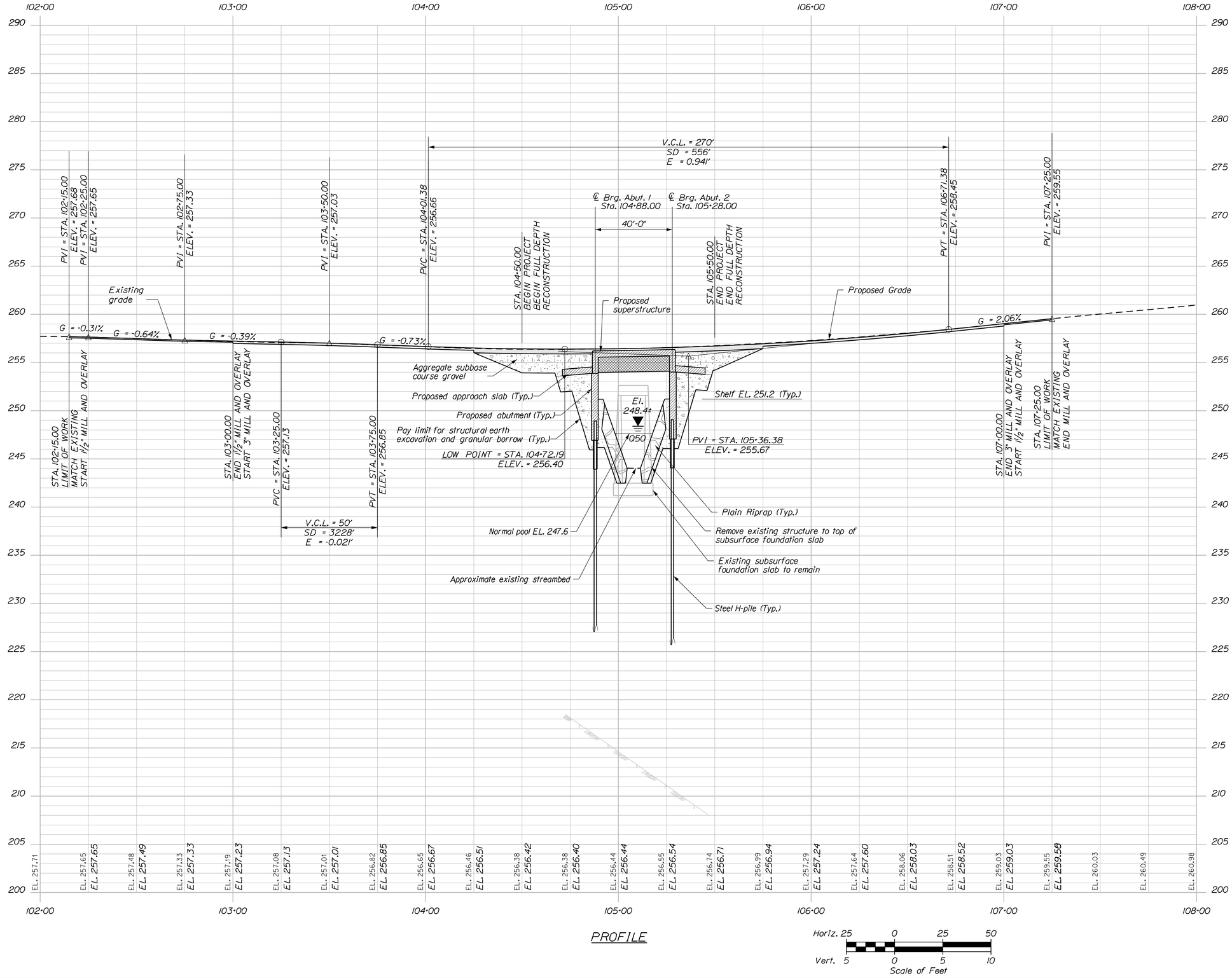
DATE

PROJ. MANAGER	Mark Parlin
DESIGN-DETAILED	PAL
CHECKED-REVIEWED	PMP
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

PLAN

SHEET NUMBER
3
OF 30



PROFILE

Horiz. 25 0 25 50
Vert. 5 0 5 10
Scale of Feet

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN
021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Perkins	BY	DATE
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

PROFILE

SHEET NUMBER

4

OF 30

CURVE DATA #3
PI = 20+54.19
D = 6°21'58.3"
Δ = 2°32'37.4" Lt.
R = 900.00'
L = 39.96'
T = 19.98'
E = 0.22'

DRIVEWAY 10+00.00 = CAMPGROUND RD. 20+71.78

PC = STA. 20+34.21

PT = STA. 20+74.17

POE = STA. 20+83.98

11+00

S63°33'47.17"W

Campground Road

N20°40'49.71"W

10+00

CURVE DATA #3

20+00

N18°08'12.32"W

To No. Anson

108+00

CURVE DATA #2

River Road/Route 8/Route 201A

CAMPGROUND ROAD 20+00.00 = RIVER ROAD STA. 107+41.55

CLL

BB-AGB-101

BB-AGB-102

105+00

106+00

N27°49'35.24"E

107+00

104+00

CURVE DATA #1

103+00

To Anson

102+00

River Road/Route 8/Route 201A

To Kennebec River

Gilman Brook

PT = STA. 106+02.56

PC = STA. 107+03.61

PC = STA. 101+46.61

LEGEND
CASED WASH BORING

PLAN

25 0 25 50
Scale of Feet

CURVE DATA #1
PI = 103+76.47
D = 3°56'16.3"
Δ = 17°57'17.7" Rt.
R = 1455.00'
L = 455.96'
T = 229.86'
E = 18.05'

CURVE DATA #2
PI = 108+61.36
D = 3°08'47.0"
Δ = 9°54'07.7" Rt.
R = 1821.00'
L = 314.71'
T = 157.75'
E = 6.82'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 21657.00

BRIDGE NO. 3726

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2	B.SLAVEN	FEB 2019
DESIGN3-DETAILED3	T.WHITE	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

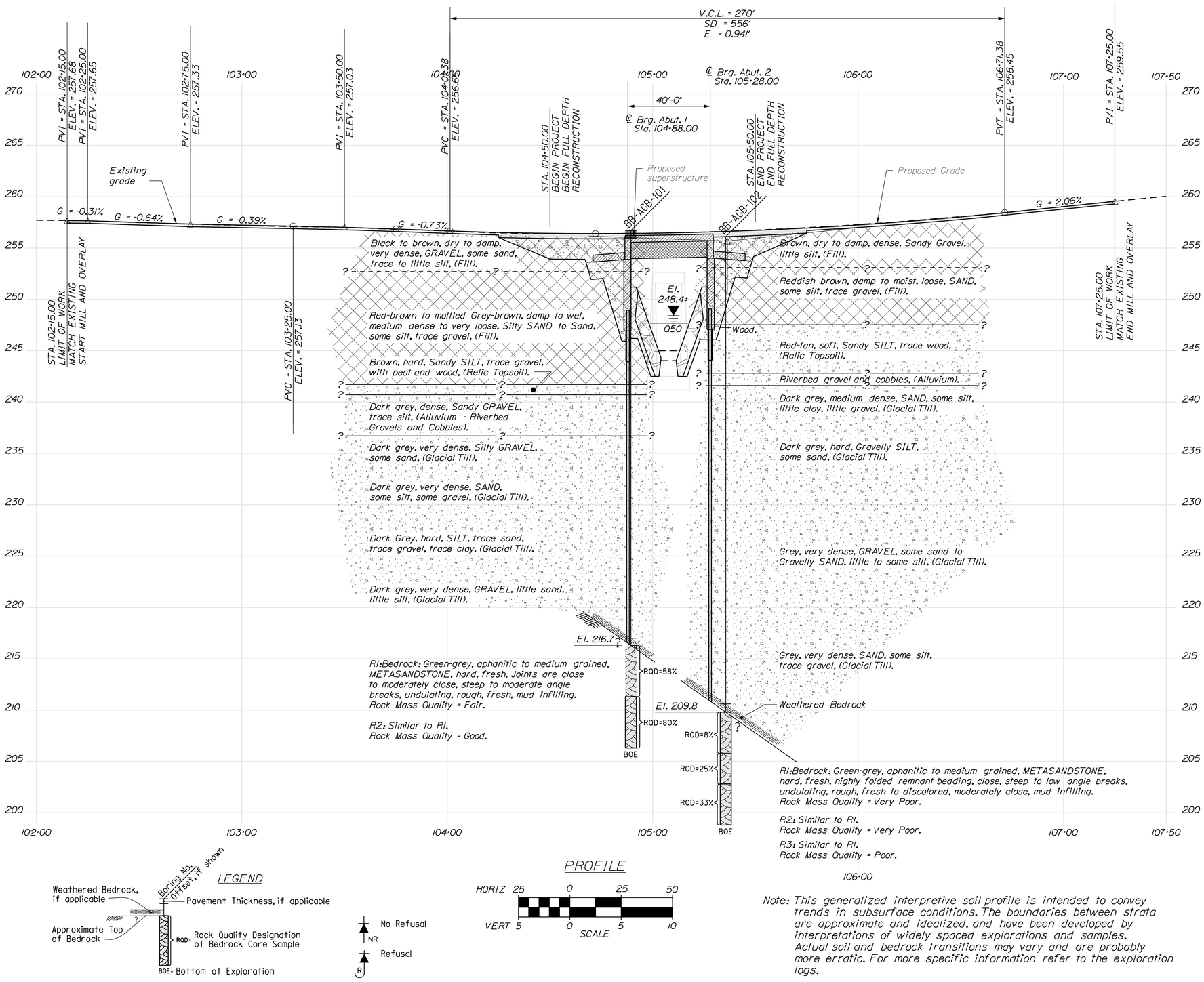
P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
SOMERSET COUNTY
ANSON

BORING LOCATION PLAN

SHEET NUMBER
5
OF 30



LEGEND

PROFILE

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.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 21657.00

BRIDGE NO. 3726

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	---	---
DESIGN-DETAILED	---	---
CHECKED-REVIEWED	---	---
DESIGN2-DETAILED2	T. WHITE	FEB 2019
DESIGN3-DETAILED3	---	---
REVISIONS 1	---	---
REVISIONS 2	---	---
REVISIONS 3	---	---
REVISIONS 4	---	---
FIELD CHANGES	---	---

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET COUNTY

INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

6

OF 30

Filename: ...\00\GEOTECH\MSTA\006_ISP1.dgn Division: GEOTECH Username: Laura.Krusinski Date:11/22/2019

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Ice House Bridge #3726 carries Routes 8/201A (River Road) over
Locations Anson, Maine

Boring No.: BB-AGB-101
WIN: 21657.00

Driller:	New England Boring Co.	Elevation (ft.):	256.7	Auger ID/OD:	5" Solid Stem
Operator:	Enos/Shore	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Be Schonewald	Rig Type:	Mobile B53 Rubber Track	Hammer Wt./Fall:	140/30"
Date Start/Finish:	7/5/2017-7/6/2017	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	104+89.4, 7.8 ft Lt.	Casing ID/OD:	HW & NW	Water Level*:	6.8 ft bgs, open
Hammer Efficiency Factor: 0.677		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Abbreviations:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer WOH/C = Weight of Rods or Casing
WH = Unsuccessful Field Vane Shear Test Attempt WOR = Weight of the Person

R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N60 = SPT N-uncorrected Corrected for Hammer Efficiency

S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value.
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency

T_v = Pocket Torvane Shear Strength (psf)
WC = Water Contents, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6in. or Shear Strength (psf or TSF) tsf	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results* AASHTO and Unified Class
0							5⅝			9" HMA.	
								256.0		0.8	
	1D	24/12	1.00 - 3.00	23/29/24/31	53	60				Black to brown, dry to damp, very dense, GRAVEL, some fine to coarse sand, trace to little silt. (Fill),	
								252.7		4.0	
5	2D	24/20	5.00 - 7.00	6/7/5/3	12	14				Red-brown, damp to moist, medium dense, Silty fine to medium SAND, trace fine gravel, trace coarse sand. (Fill),	GM270357 A-4, SM WC=18.0%
10	3D	24/18	10.00 - 12.00	WOH/2/1/1	3	3	23			Grey-brown, mottled, moist to wet, very loose, fine SAND, some silt, (Fill),	GM270358 A-2-4, SM WC=28.1%
							22				
							31				
15							32				
							32				
	4D/A	24/11	15.00 - 17.00	3/12/20/13	32	36	22			4D (15.0-16.0 ft bgs) Brown, hard, fine to medium Sandy SILT, trace gravel, with peat and wood. (Relic Topsoil).	
								241.7		15.0	
								240.7		4D/A (16.0-17.0 ft bgs) Dark grey, dense, fine to coarse Sandy GRAVEL, trace silt, (Alluvium - Riverbed Gravel). 16.0	GM270359 A-1-a, GM-GW WC=10.2%
							85			Very boney; difficult to penetrate with roller cone. Riverbed Gravels and Cobbles based on drilling behavior.	
							78				
20							300				
	5D	24/12	20.00 - 22.00	14/20/40/39	60	68	RC	236.7		20.0 Dark grey, very dense, Silty GRAVEL, some fine to coarse sand, (Glacial Till),	
25	6D	24/17	25.00 - 27.00	35/30/39/61	69	78				Dark grey, very dense, SAND, some silt, some gravel, (Glacial Till),	GM270360 A-2-4, SM WC=8.7%
30	7D	21.6/19	30.00 - 31.80	70/63/71/50(4")	134	151				Dark grey, hard, SILT, trace sand, trace gravel, trace clay, (Glacial Till), .	GM270361 A-4, CL WC=20.2%
35	8D	3.6/3.6	35.00 - 35.30	150(4")	---					Dark grey, very dense, GRAVEL, little fine to coarse sand, little silt, (Glacial Till),	
40	R1	60/60	40.00 - 45.00	RQD = 58%			NQ-2	217.0		39.7	
								216.7		Weathered Bedrock, Drove HW Casing to 40.0 ft bgs. 40.0 Top of Bedrock at Elev. 216.7 ft. R1: Bedrock: Green-grey, aphanitic to medium grained, META ARGILLACEOUS SANDSTONE, occasional quartz veins hard, fresh, remnant bedding not observed, joints are close to moderately close, steep to moderate angle breaks, undulating, rough, typically fresh, typically moderately close, with mud infilling, [SANGERVILLE FORMATION] Rock Mass Quality = Fair. R1: Core Times (min:sec) 40.0-41.0 ft (3:00) 41.0-42.0 ft (2:35) 42.0-43.0 ft (2:25) 43.0-44.0 ft (2:25) 44.0-45.0 ft (2:30) 100% recovery Loss pressure from 45.0-45.4 ft bgs, re-ream R1 to 45.4 ft bgs.	
45	R2	60/60	45.40 - 50.40	RQD = 80%						R2: Bedrock: Similar to R1, Solid piece below 46.8 ft bgs. Rock Mass Quality = Good. R2: Core Times (min:sec) 45.4-46.4 ft (2:10) 46.4-47.4 ft (2:15) 47.4-48.4 ft (2:45) 48.4-49.4 ft (3:15) 49.4-50.4 ft (3:40) 100% Recovery	
								206.3		50.4	
50										Bottom of Exploration at 50.4 feet below ground surface.	
55											
60											
65											
70											
75											

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.

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Ice House Bridge #3726 carries Routes 8/201A (River Road) over
Locations Anson, Maine

Boring No.: BB-AGB-102
WIN: 21657.00

Driller:	New England Boring Co.	Elevation (ft.):	256.1	Auger ID/OD:	5" Solid Stem
Operator:	Enos/Shore	Datum:	NAVD88	Sampler:	Standard Split Spoon
Logged By:	Be Schonewald	Rig Type:	Mobile B53 Rubber Track	Hammer Wt./Fall:	140/30"
Date Start/Finish:	7/6/2017-7/7/2017	Drilling Method:	Cased Wash Boring	Core Barrel:	NQ-2"
Boring Location:	105+35.6, 10.8 ft Rt.	Casing ID/OD:	HW & NW	Water Level*:	None Observed
Hammer Efficiency Factor: 0.677		Hammer Type:	Automatic ☒ Hydraulic ☐ Rope & Cathead ☐		

Abbreviations:
D = Split Spoon Sample
WO = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
WU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test. PP = Pocket Penetrometer WOH/C = Weight of Rods or Casing
WH = Unsuccessful Field Vane Shear Test Attempt WOR = Weight of the Person

R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight of 140lb. Hammer
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N60 = SPT N-uncorrected Corrected for Hammer Efficiency

S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(LAB)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (tsf)
N-uncorrected = Raw Field SPT N-value.
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency

T_v = Pocket Torvane Shear Strength (psf)
WC = Water Contents, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows / 6in. or Shear Strength (psf or TSF) tsf	N-uncorrected	N60	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results* AASHTO and Unified Class
0							5⅝			Brown, dry to damp, dense, fine to coarse Sandy GRAVEL, little silt, Asphalt in tip of spoon; Strong Petroleum Odor, (Fill),	
	1D	24/17	1.00 - 3.00	23/21/22/20	43	49		253.1		3.0	
5	2D	24/10	5.00 - 7.00	3/2/4/2	6	7	6			Reddish brown, damp to moist, loose, fine to medium SAND, some silt, trace gravel, trace coarse sand, (Fill),	GM270362 A-2-4, SM WC=15.6%
							7				
							12				
							52	247.5		Wood at 8.6 ft bgs based on drilling behavior. 8.6	
							46				
10	3D	24/1	10.00 - 12.00	1/1/2/3	3	3	31			Red-tan, soft, fine Sandy SILT, trace wood, trace coarse sand, (Relic Topsoil).	
							34				
							51				
							138	242.8		Riverbed gravel and cobbles, (Alluvium). 13.3	
15							RC	241.6		14.5	
	4D	24/7	15.00 - 17.00	22/18/8/10	26	29	107			Dark grey, medium dense, SAND, some silt, little clay, little gravel, (Glacial Till),	GM270363 A-4, SC-SM WC=9.1%
							64				
							119				
							74				
20							94				
	5D	24/9	20.00 - 22.00	6/16/13/47	29	33	65			Dark grey, hard, Gravelly SILT, some fine to coarse sand, layered, (Glacial Till),	
							122				
							205				
							RC				
25	MD	2.4/0	25.00 - 25.20	50(2")	---					Dark grey, Gravel, Silty fine SAND in tip of spoon.	
30	MD	2.4/0	30.00 - 30.20	120(2")	---						
	6D	6/4	31.00 - 31.50	365(6")	---					Grey, very dense, GRAVEL, some sand, little silt, (Glacial Till),	GM270364 A-1-b, GM WC=6.3%
35	TD	12/12	35.00 - 36.00	79/127	---					Grey, very dense, Gravelly fine to medium SAND, little to some silt, layered, (Glacial Till),	
40	BD	20.4/ 20.4	40.00 - 41.70	50/50/93/50(2")	143	161	RC			Grey, very dense, fine to medium SAND, some silt, trace fine gravel, (Glacial Till),	GM270365 A-2-4, SM WC=14.4%
								210.4		45.5	
	R1	48/47	46.30 - 50.30	RQD = 8%			NQ-2	209.8		Weathered Bedrock. 46.3 Top of Bedrock at Elev. 209.8 ft. R1: Bedrock: Green-grey, aphanitic to medium grained, META ARGILLACEOUS SANDSTONE, quartz veins, hard, typically fresh, some remnant bedding visible and highly folded, Close, typically high angle with minor low angle breaks undulating, rough, fresh to discolored, moderately close, with mud infilling, highly broken at 46.3-47.1 ft bgs. Rock Mass Quality = Very Poor. [SANGERVILLE FORMATION] R1: Core Times (min:sec) 46.3-47.0 ft (---) 47.0-48.0 ft (3:05) 48.0-49.0 ft (2:55) 49.0-50.0 ft (3:05) 50.0-50.3 ft (---) 98% Recovery	
50	R2	36/35	50.30 - 53.30	RQD = 25%						R2: Bedrock: Similar to R1, Highly broken 53.0-53.3 ft bgs. Rock Mass Quality = Very Poor. R2: Core Times (min:sec) 50.3-51.3 ft (2:10) 51.3-52.3 ft (2:20) 52.3-53.3 ft (2:50) 97% Recovery	
	R3	48/47	53.30 - 57.30	RQD = 33%						R3: Bedrock: Similar to R1, Highly broken 55.6-56.0 ft bgs, Near vertical fracture terminates at 56.7 ft bgs. Rock Mass Quality = Poor. No core times taken. 98% Recovery	
55								198.8		57.3	
60										Bottom of Exploration at 57.3 feet below ground surface.	
65											
70											
75											

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.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 21657.00

BRIDGE NO. 3726

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	------	------
DESIGN-DETAILED	------	------
CHECKED-REVIEWED	------	------
DESIGN2-DETAILED2	B.SLAVEN	APR 2019
DESIGN3-DETAILED3	------	------
REVISIONS 1	------	------
REVISIONS 2	------	------
REVISIONS 3	------	------
REVISIONS 4	------	------
FIELD CHANGES	------	------

SIGNATURE

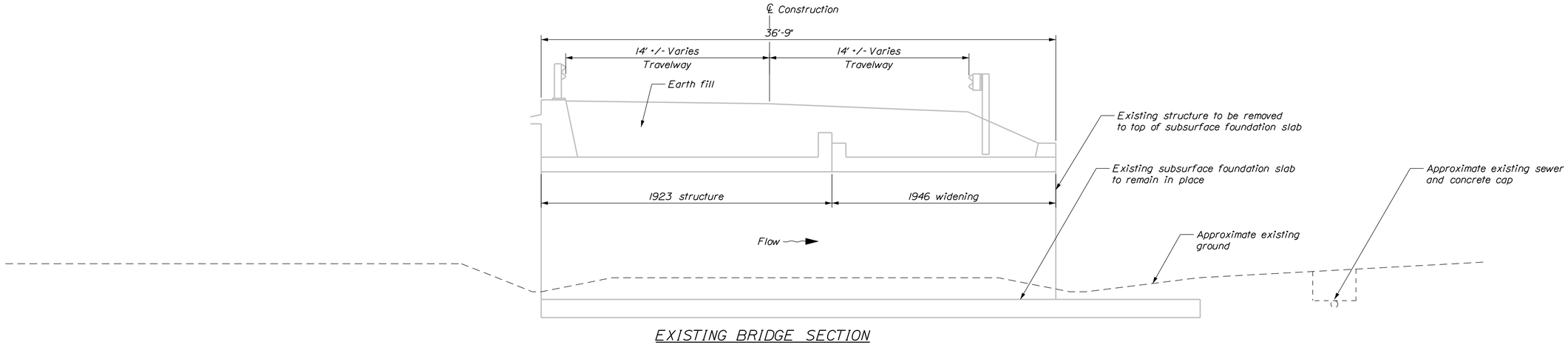
P.E. NUMBER

DATE

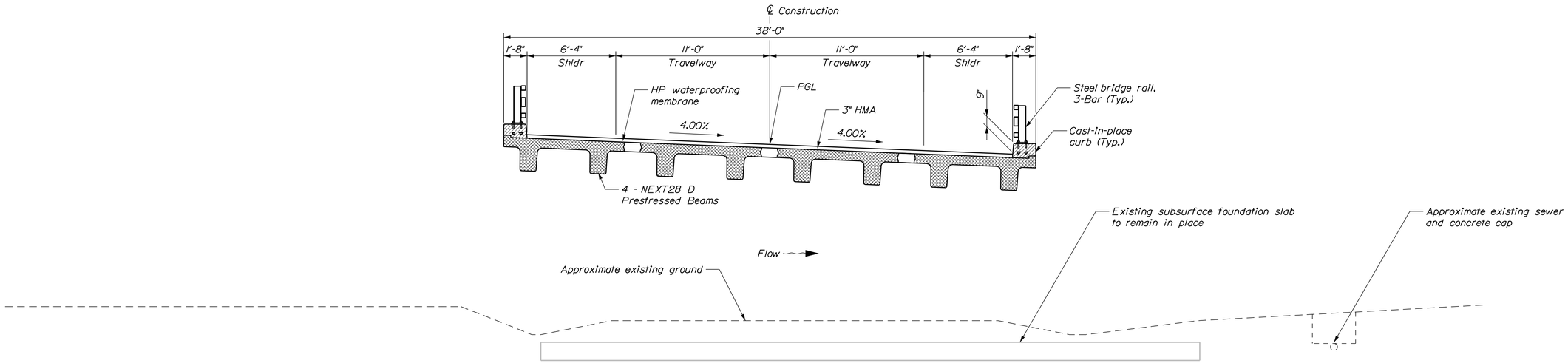
ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET COUNTY

BORING LOGS

SHEET NUMBER
7
OF 30



EXISTING BRIDGE SECTION



PROPOSED BRIDGE SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	Mark Perkins		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

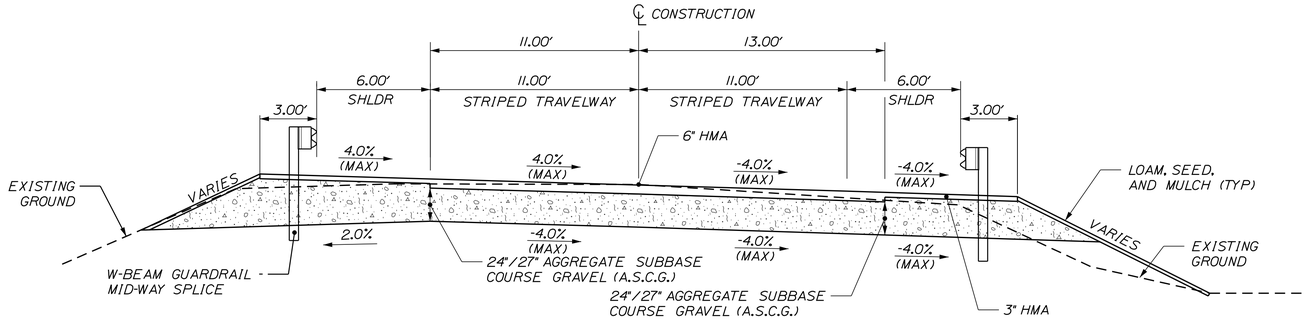
ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

BRIDGE TYPICAL SECTION

SHEET NUMBER

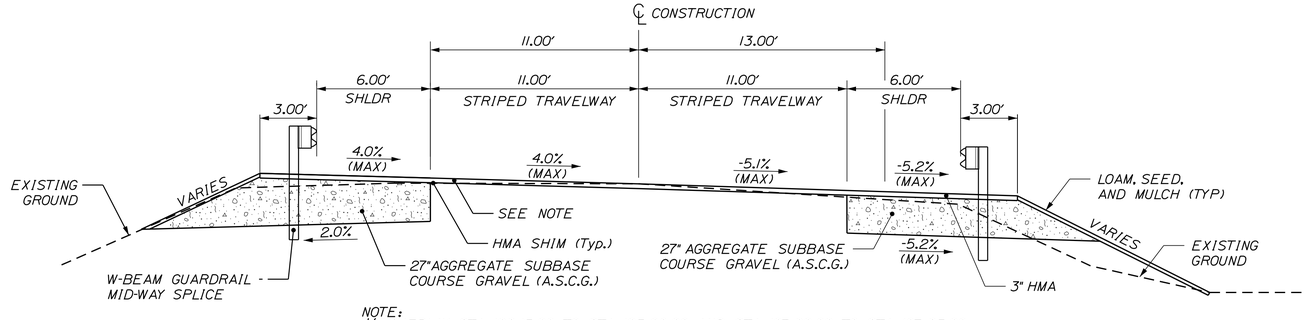
8

OF 30



FULL CONSTRUCTION APPROACH SECTION

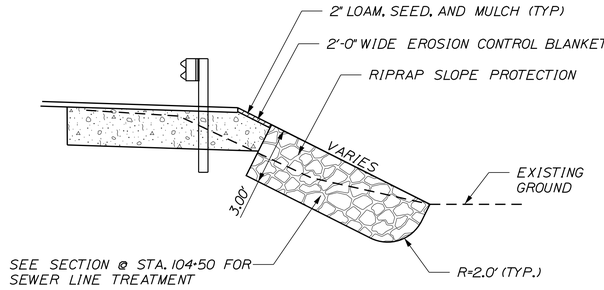
STA. 104+25.00 TO STA. 105+75.00



NOTE:
1½" OVERLAY STA. 102+15.00 TO STA. 103+00.00 AND STA. 107+00.00 TO STA. 107+25.00.
3" OVERLAY STA. 103+00.00 TO STA. 104+25.00 AND STA. 105+75.00 TO STA. 107+00.00

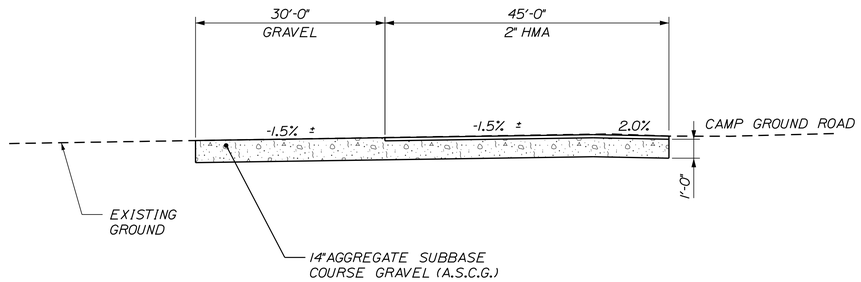
BOX OUT SHOULDER WIDENING SECTION

STA. 102+15.00 TO STA. 104+25.00
STA. 105+75.00 TO STA. 107+25.00



RIPRAP SLOPE TREATMENT

STA. 103+24 ± TO STA. 104+88± RT.
SCALE: 1" = 4'



DRIVEWAY PROFILE

SCALE: N.T.S.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin	BY	DATE
DESIGN-DETAILED	C. Ohnsman	P. Lusitoni	10/2019
CHECKED-REVIEWED	P. Lusitoni	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

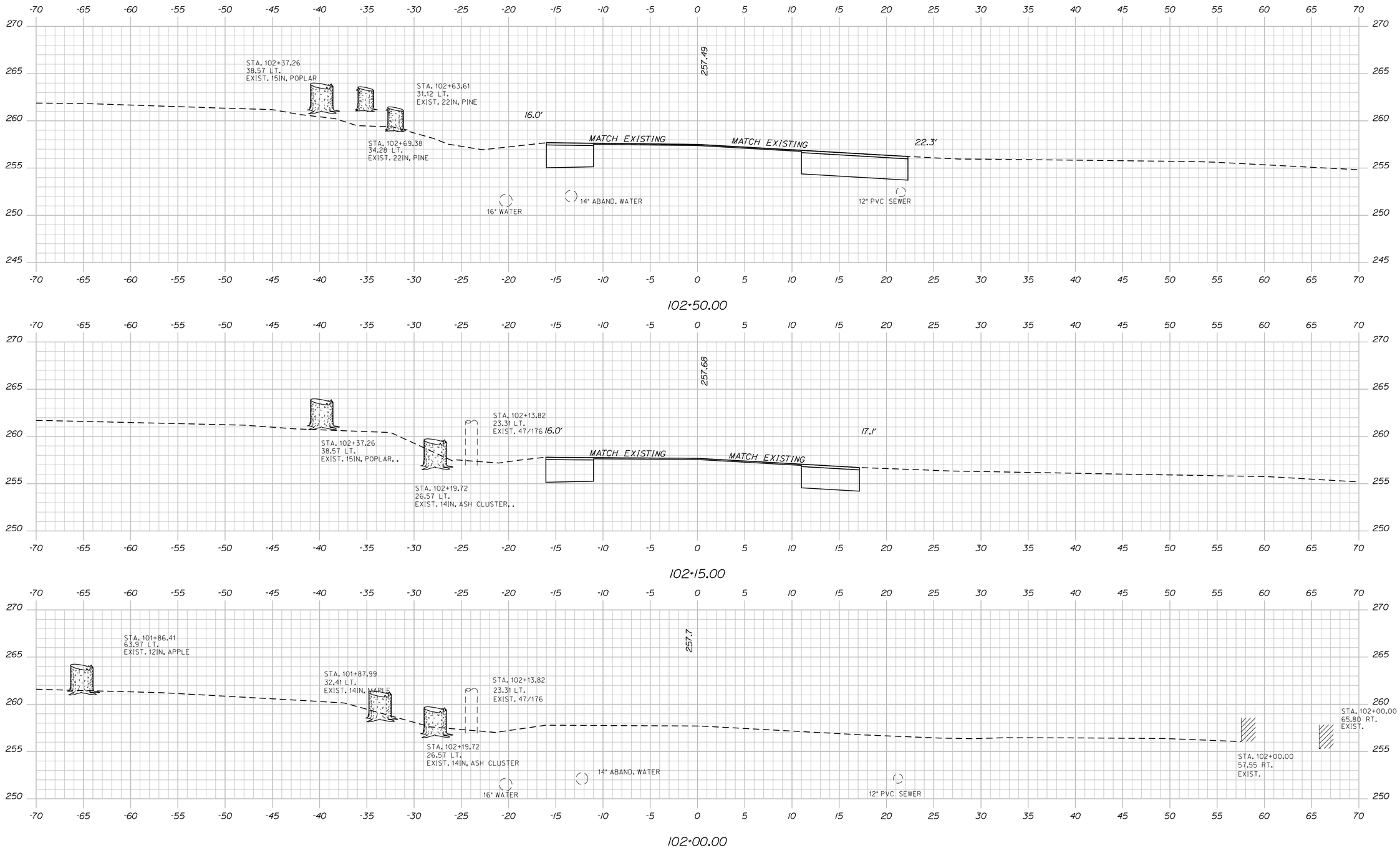
HIGHWAY TYPICAL SECTION

SHEET NUMBER

9

OF 30

Filename: ...\MSTA\009_Highway Typical.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN
021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Perkin	BY	DATE
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

CROSS SECTIONS

SHEET NUMBER

10

OF 30

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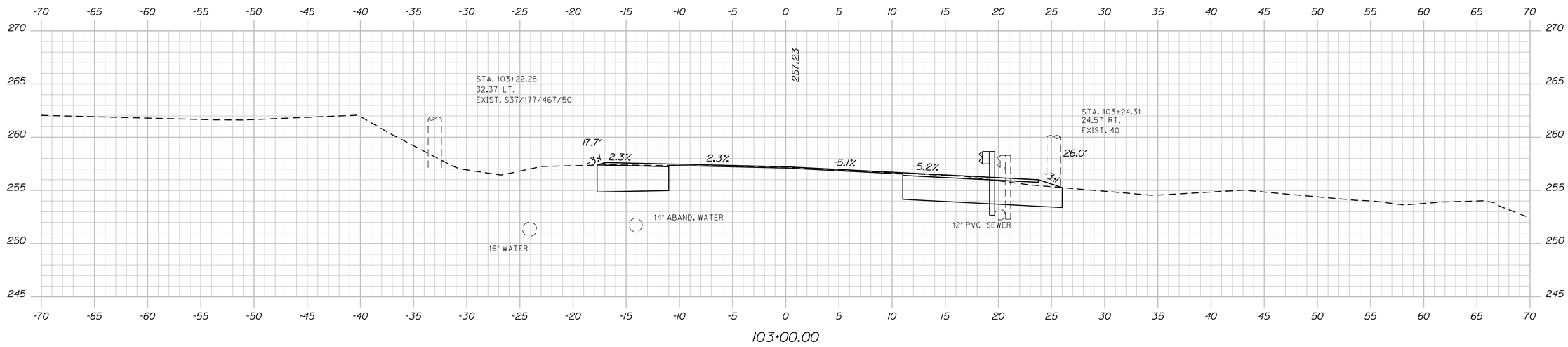
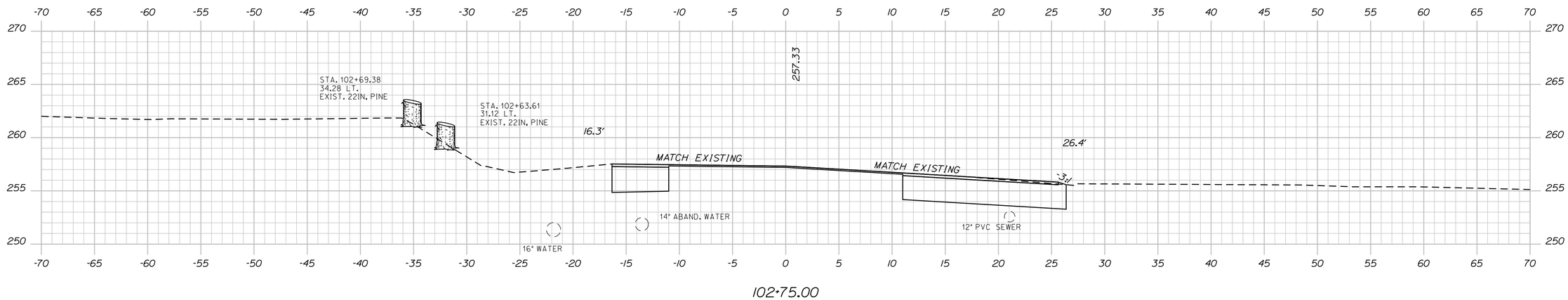
Sta. 102+00.00 to Sta. 102+50.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Perkins		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

CROSS SECTIONS

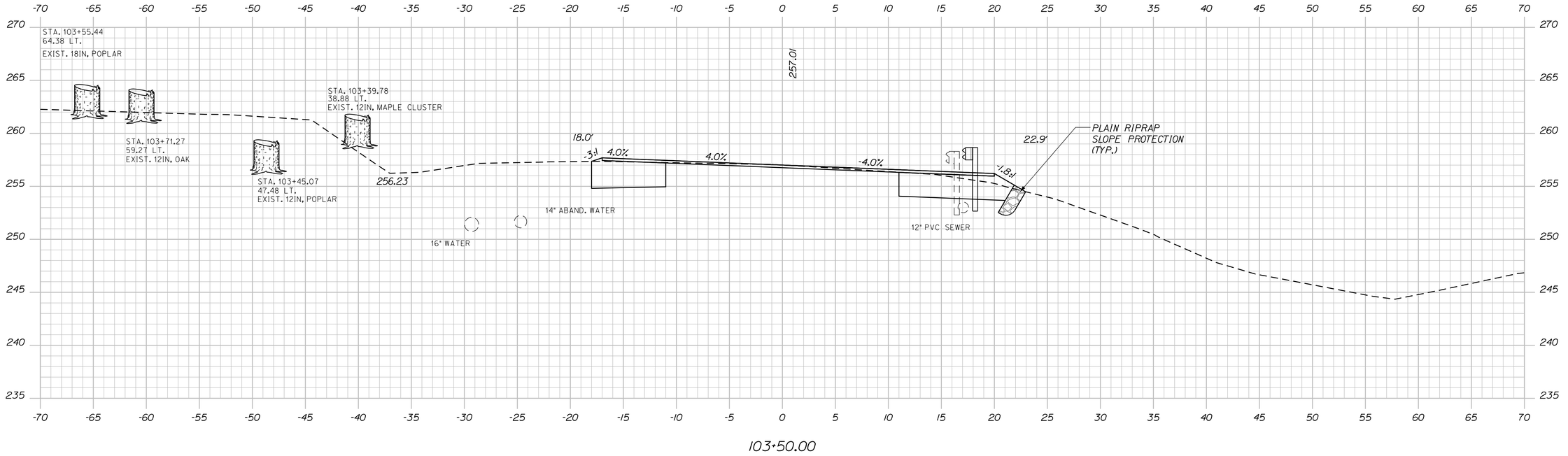
SHEET NUMBER

11

OF 30

Sta. 102+75.00 to Sta. 103+00.00

Filename: ...\MSTA\011_XSECT_102+75_002.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

		DATE
PROJ. MANAGER	Mark Parlin	BY
DESIGN-DETAILED	C. Ohnsman	P. Lusitani 10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins 5/2019
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

CROSS SECTIONS

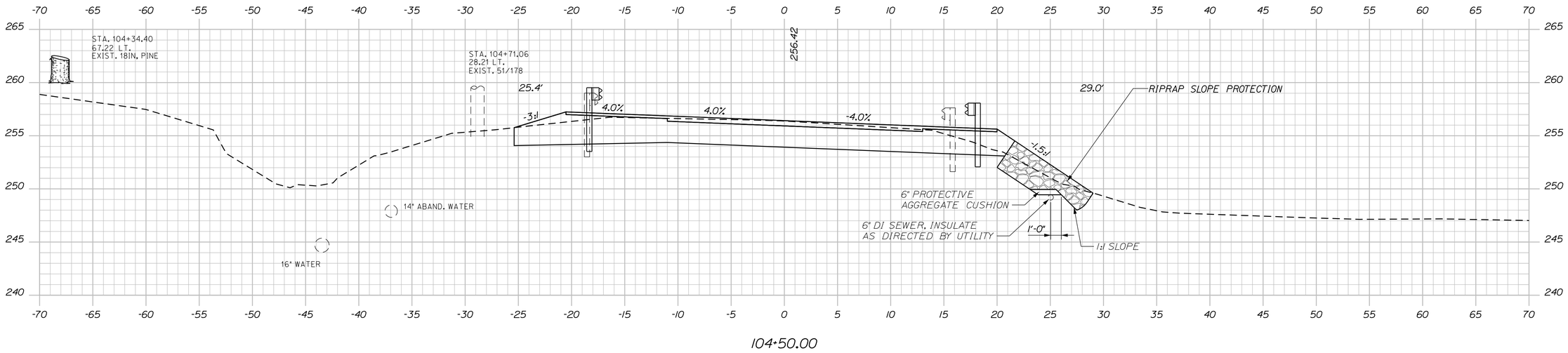
SHEET NUMBER

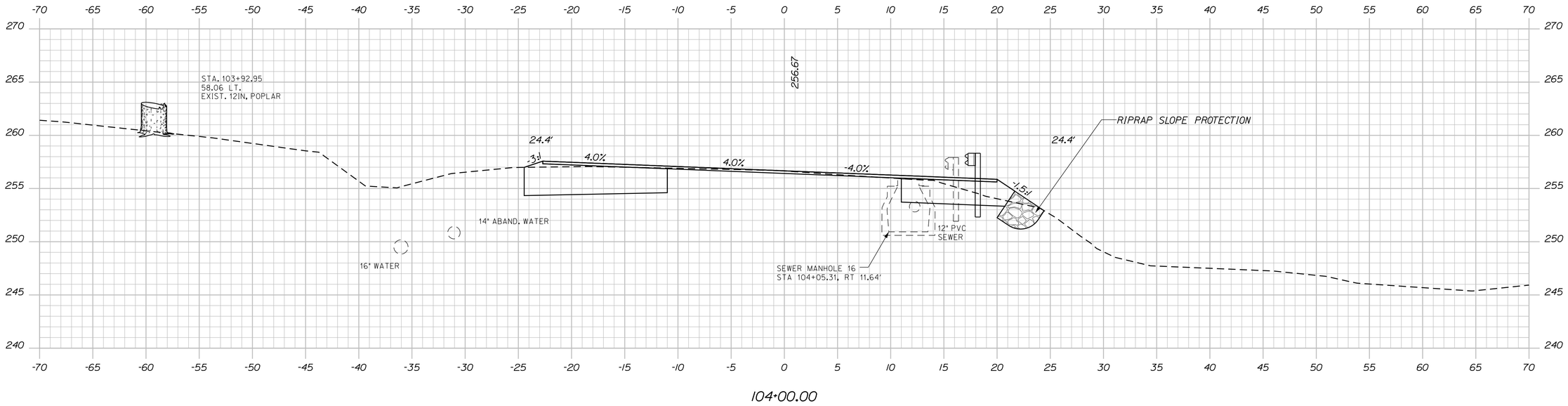
12

OF 30

Filename: ...\MSTA\012_XSECT_103+25_003.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019

Sta. 103+25.00 to Sta. 103+50.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN
021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Perkins		
DESIGN-DETAILED	C. Ohnsman	P. Lusitoni	10/2019
CHECKED-REVIEWED	P. Lusitoni	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

CROSS SECTIONS

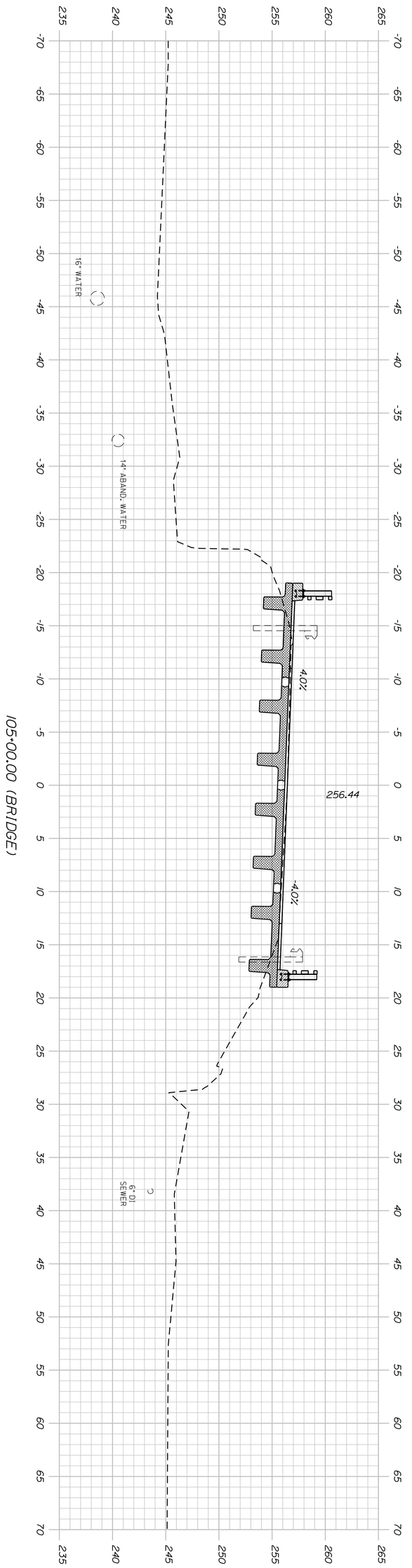
SHEET NUMBER

13

OF 30

Sta. 104+00.00 to Sta. 104+50.00

Filename: ...\MSTA\013_XSECT_104+00_004.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



Sta. 105+00.00 to Sta. 105+10.00

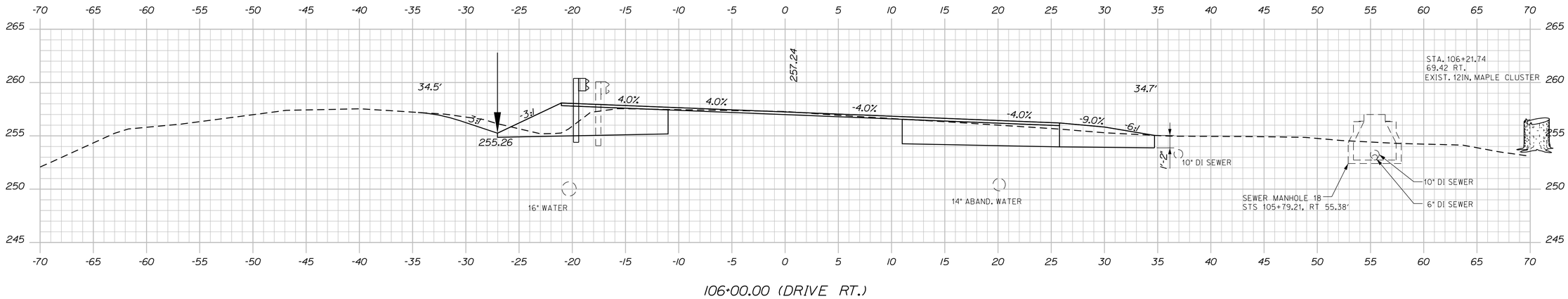
ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET
CROSS SECTIONS

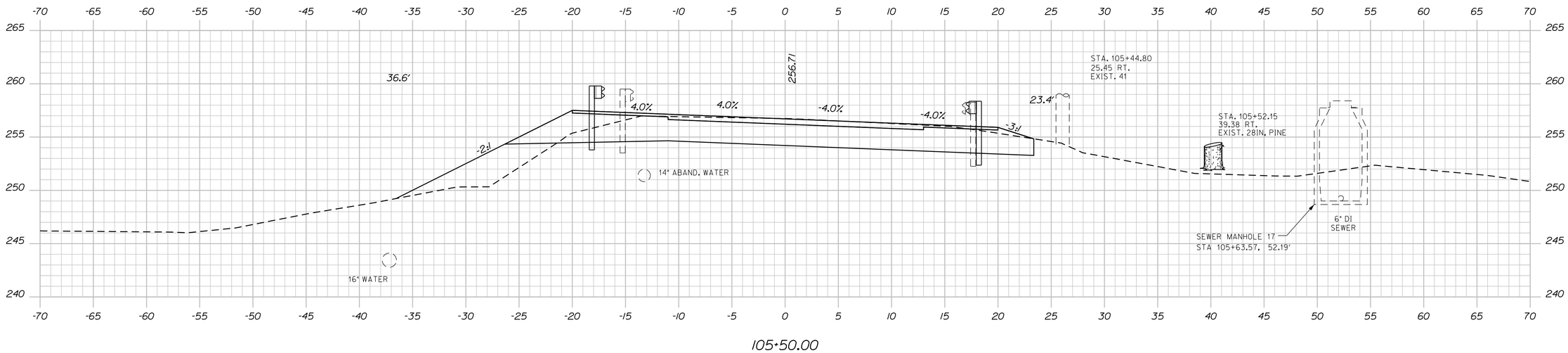
SHEET NUMBER 14 OF 30

PROJ. MANAGER	Mark Porlin	BY	DATE
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
021657.00
BRIDGE NO. 3726 WIN 021657.00 BRIDGE PLANS





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN
021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

CROSS SECTIONS

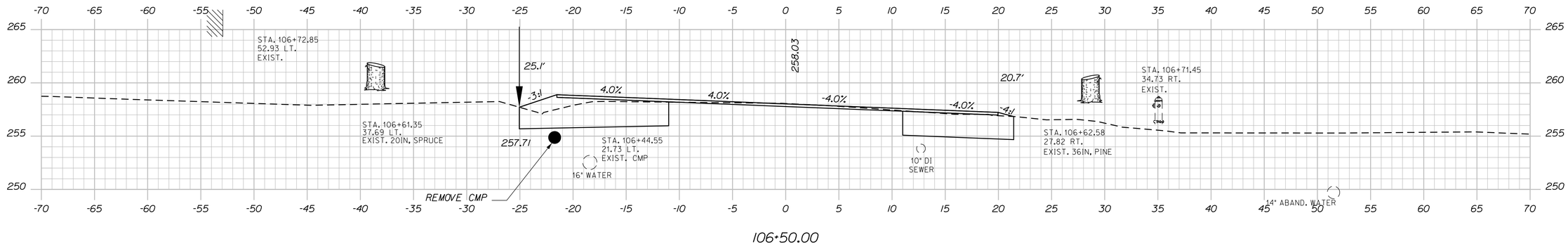
SHEET NUMBER

15

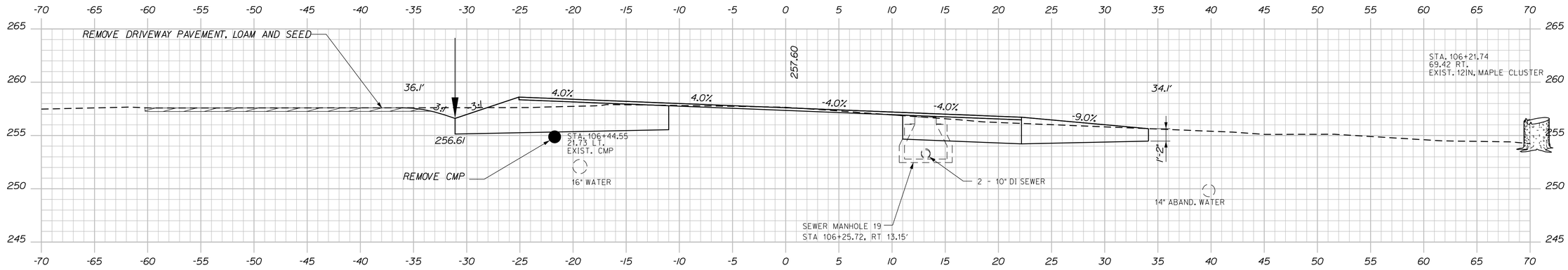
OF 30

Sta. 105+50.00 to Sta. 106+00.00

Filename: ...\MSTA\015_XSECT_105+50_006.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



106+50.00



106+25.00 (DRIVE RT & LT.)

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN
021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Perkins		
DESIGN-DETAILED	C. Ohnsman	P. Lusitoni	10/2019
CHECKED-REVIEWED	P. Lusitoni	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

CROSS SECTIONS

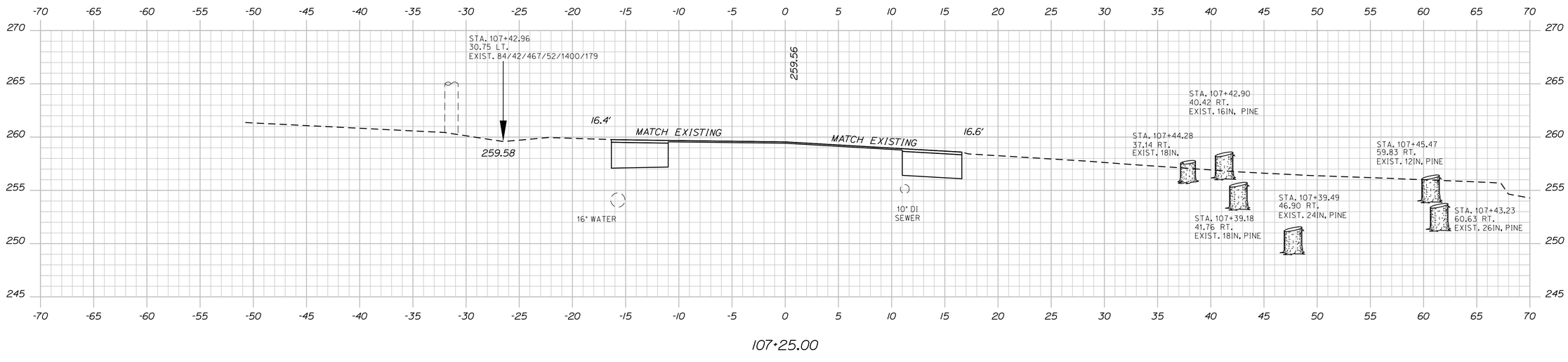
SHEET NUMBER

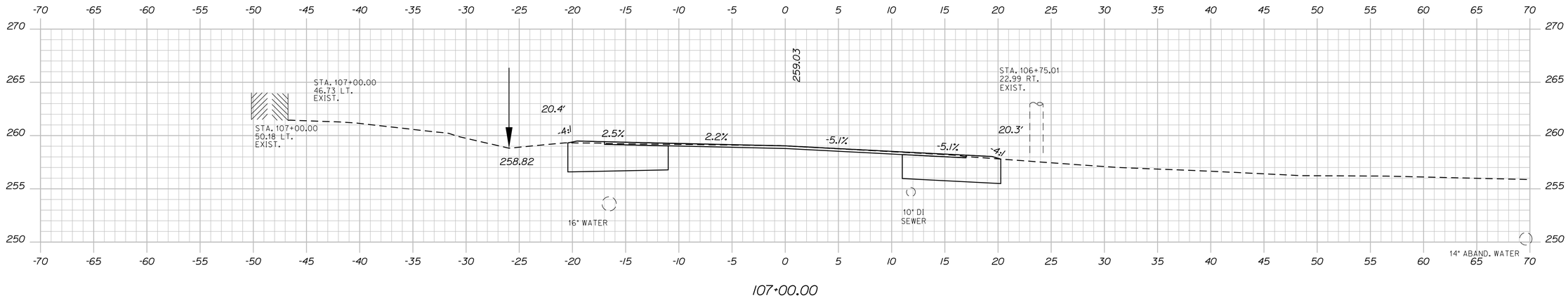
16

OF 30

Filename: ...\MSTA\016_XSECT_106+25_007.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019

Sta. 106+25.00 to Sta. 106+50.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Perkin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitoni	10/2019
CHECKED-REVIEWED	P. Lusitoni	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

CROSS SECTIONS

SHEET NUMBER

17

OF 30

Filename: ...\MSTA\017_XSECT_107+00_008.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019

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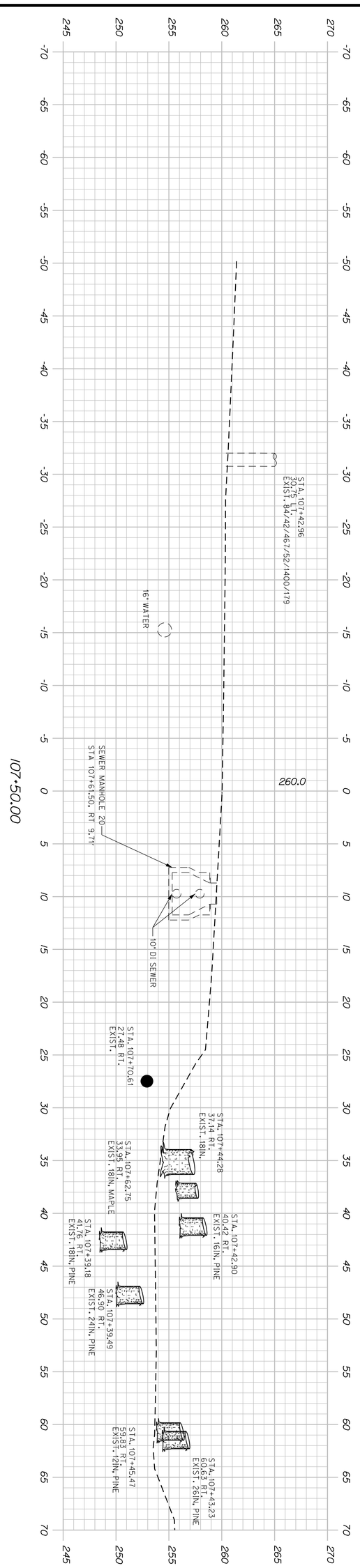
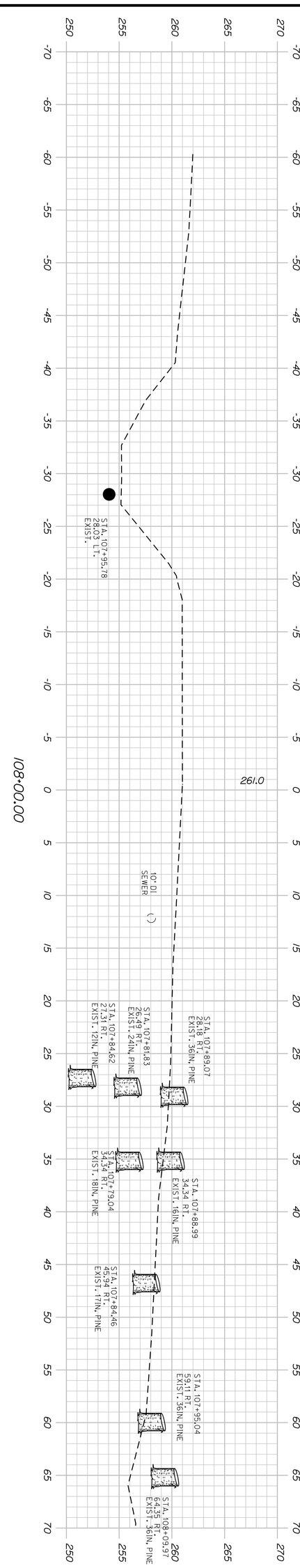




ICE HOUSE BRIDGE
GILMAN BROOK

ANSON SOMERSET

CROSS SECTIONS

PROJ. MANAGER	Mark Parlin	BY	DATE
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

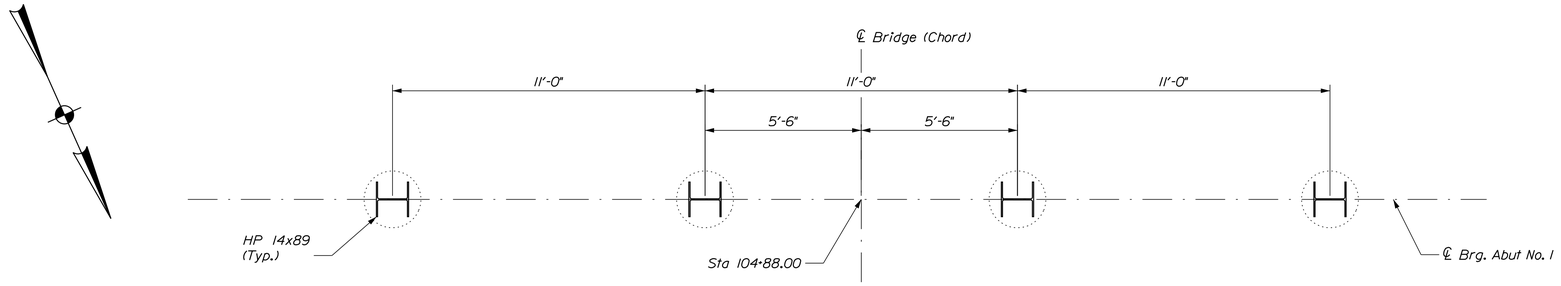
SHEET NUMBER 18 OF 30

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

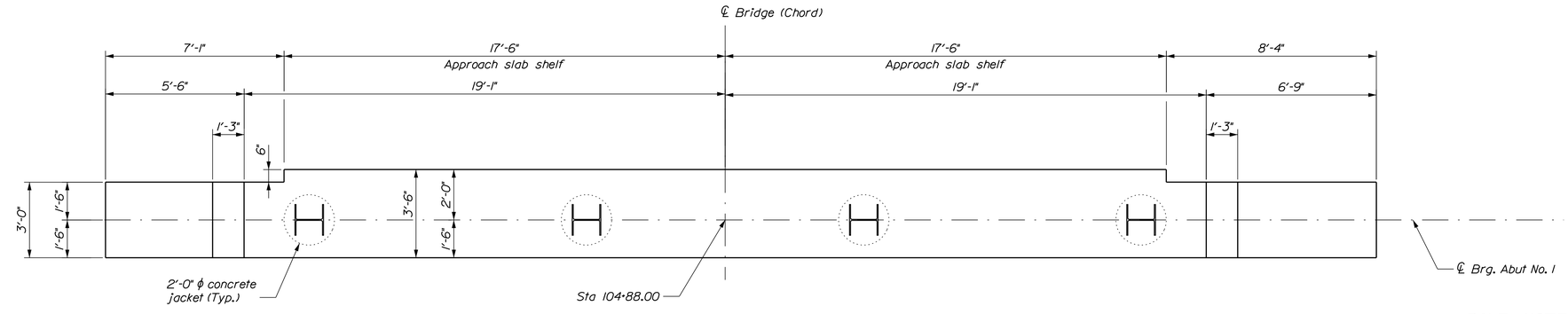
BRIDGE NO. 3726 WIN 021657.00 BRIDGE PLANS

Sta. 107+50.00 to Sta. 108+00.00



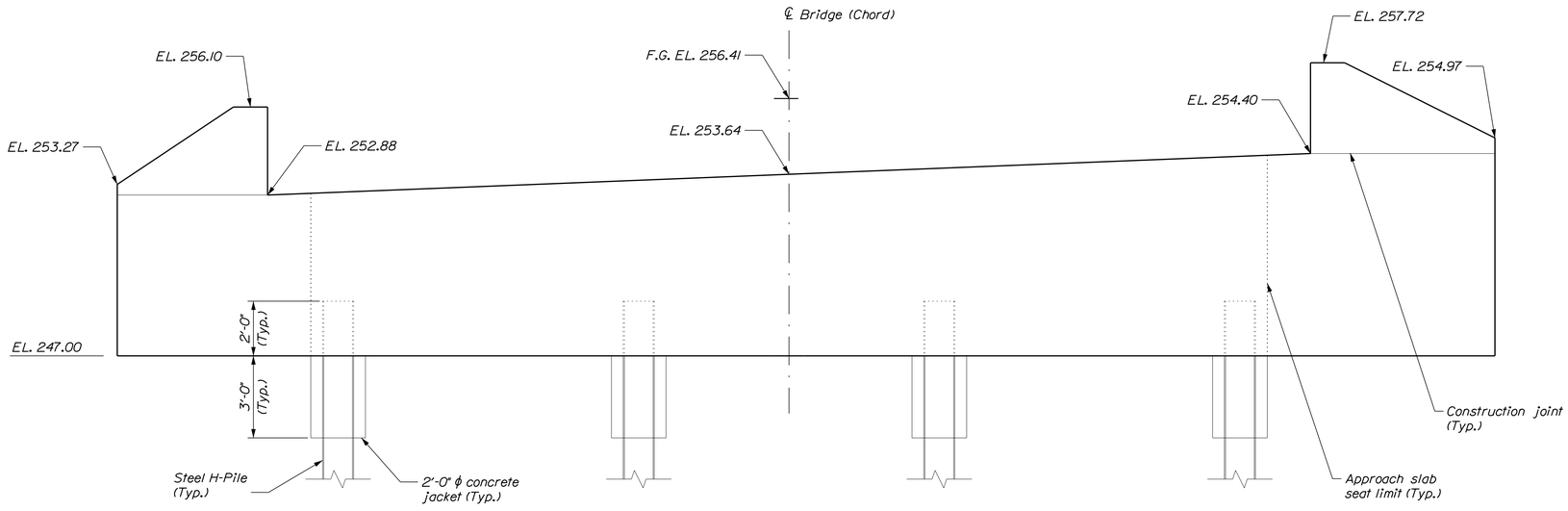
ABUTMENT NO. 1 PILE PLAN

Flow



ABUTMENT NO. 1 PLAN

Flow



ABUTMENT NO. 1 ELEVATION

Flow

ABUTMENT NOTES

1. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.

2. Place 4-in. diameter drains in the breastwall and wingwalls at 10-ft maximum spacing. The exact location will be determined by the Resident.

3. The parapet portions of the wingwalls shall be placed after erection of the precast units to ensure an accurate match with the superstructure.

4. Cover joints where waterstops are not required in accordance with Standard Details Section 502(01).

5. Payment for the concrete jackets around the tops of the H-piles will not be paid for directly, but will be considered incidental to Pay Item 502.219, Structural Concrete Abutments and Retaining Walls. Fill Concrete may be used for the concrete jackets.

6. Adjust the abutment seat elevations in accordance with Special Provision 535 - Precast, Prestressed Concrete Superstructure (Camber).

7. Anchor dowels (bar 901SS) shall be installed plumb and may either be cast-in or drilled and anchored in accordance with Standard specifications Section 503.06.

PILE NOTES

1. The maximum factored pile load is 258 kips at the Strength Limit State.

2. H-pile material shall be ASTM A 572, Grade 50.

3. Estimate of piles required:

   Abutment No. 1: 4 ~ HP 14x89 @ 35 feet
   Abutment No. 2: 4 ~ HP 14x89 @ 40 feet

The order lengths of the piles shall include an additional 5 feet of length for each test pile to accommodate dynamic test piling equipment.

4. All piles shall be equipped with a pile tip in accordance with Standard Specifications Section 501.048, Prefabricated Pile Tips and 711.10 H-Beam Piles, Splices and Tips.

5. Piles shall be driven to the required resistance on or within bedrock in accordance with Standard Specification Section 501.

6. The Contractor shall perform and submit a wave equation analysis for review and acceptance by the Resident. The maximum allowable driving stress is 0.90 times Fy. The submittal analyses shall include the proposed stopping criteria based on the wave equation analysis and the proposed driving system.

7. The Contractor shall perform 2 dynamic load tests with 24 hour (min.) restrike tests to confirm the nominal resistance of the piles. The required nominal resistance for pile is the factored axial pile load divided by a resistance factor of 0.65 per LRFD Specifications. The dynamic test shall be performed on the first production pile driven at each abutment.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

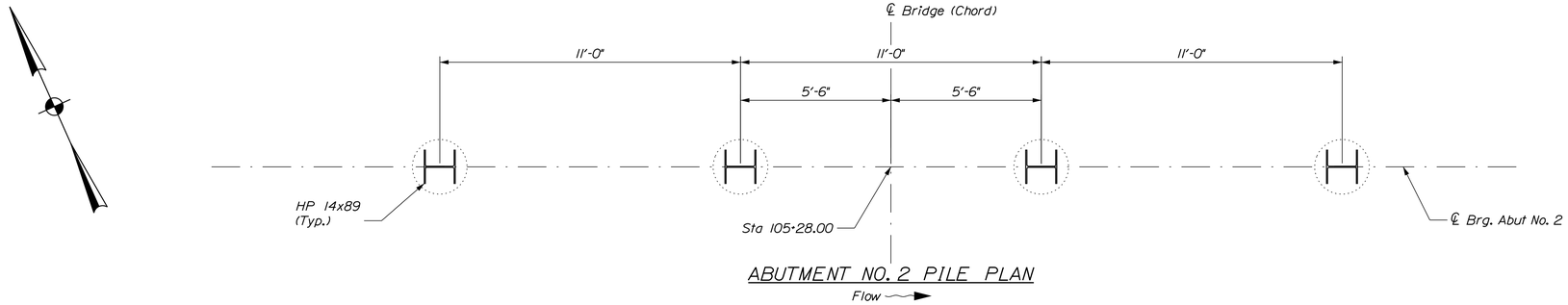
ABUTMENT NO. 1
PLAN AND ELEVATION

SHEET NUMBER

19

OF 30

Filename: ...\BRIDGE\MSTA\019_Abutment_1.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



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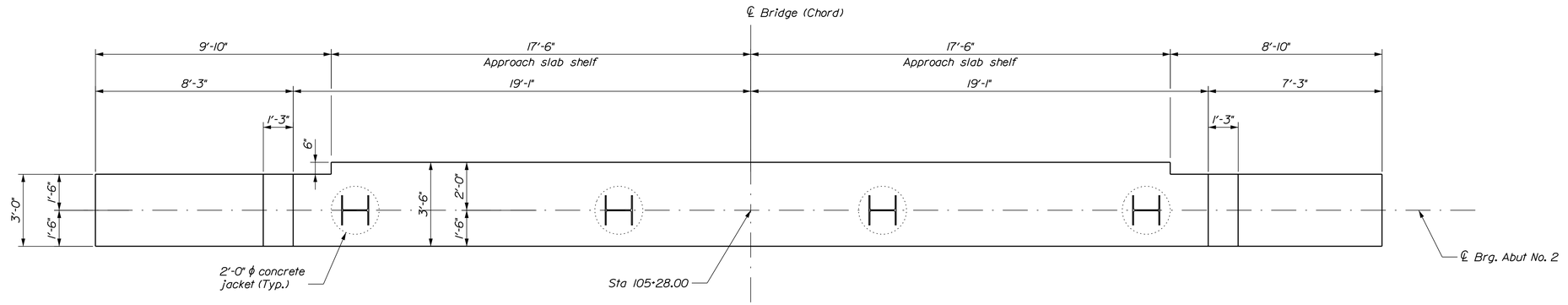
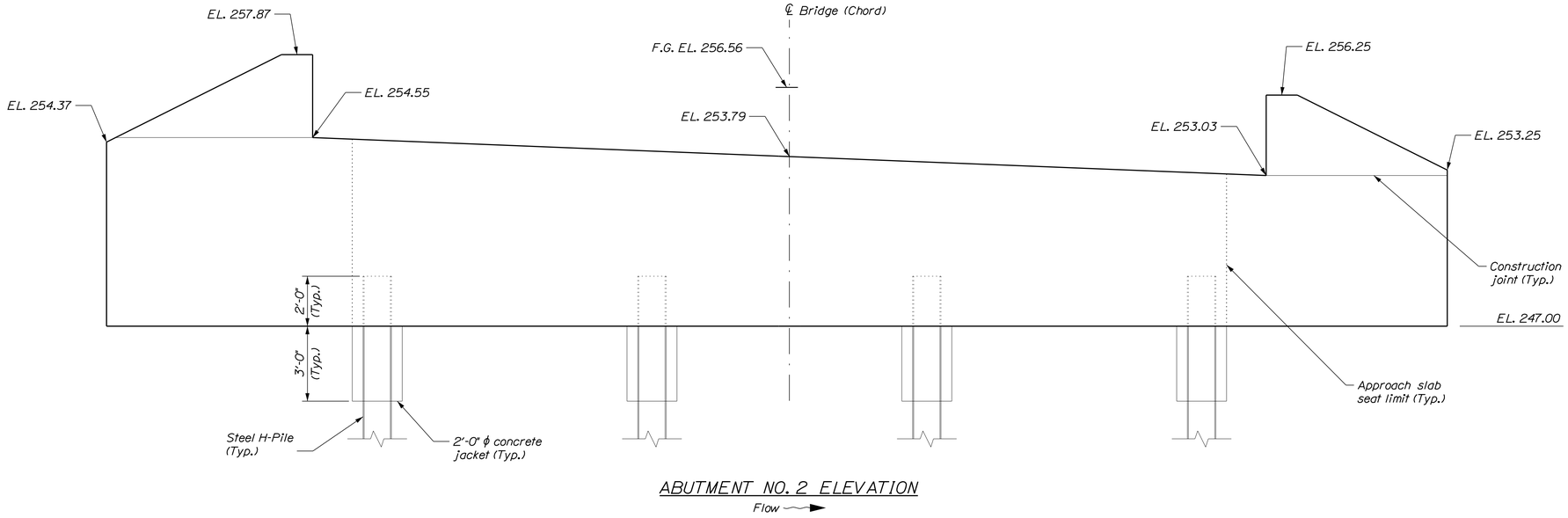


ABUTMENT NO. 2 PLAN



ABUTMENT NO. 2 ELEVATION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN
021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

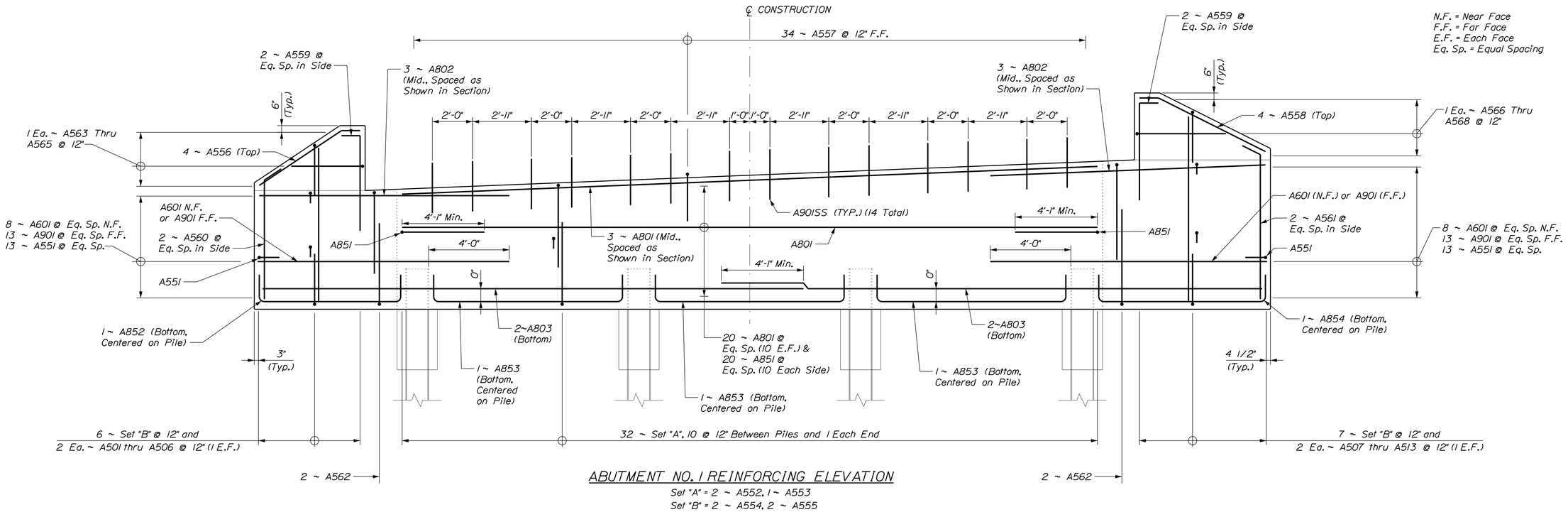
ABUTMENT NO. 2
PLAN AND ELEVATION

SHEET NUMBER

20

OF 30

Filename: ...\BRIDGE\MSTA\020_Abutment_2.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



ABUTMENT NO. 1 REINFORCING ELEVATION

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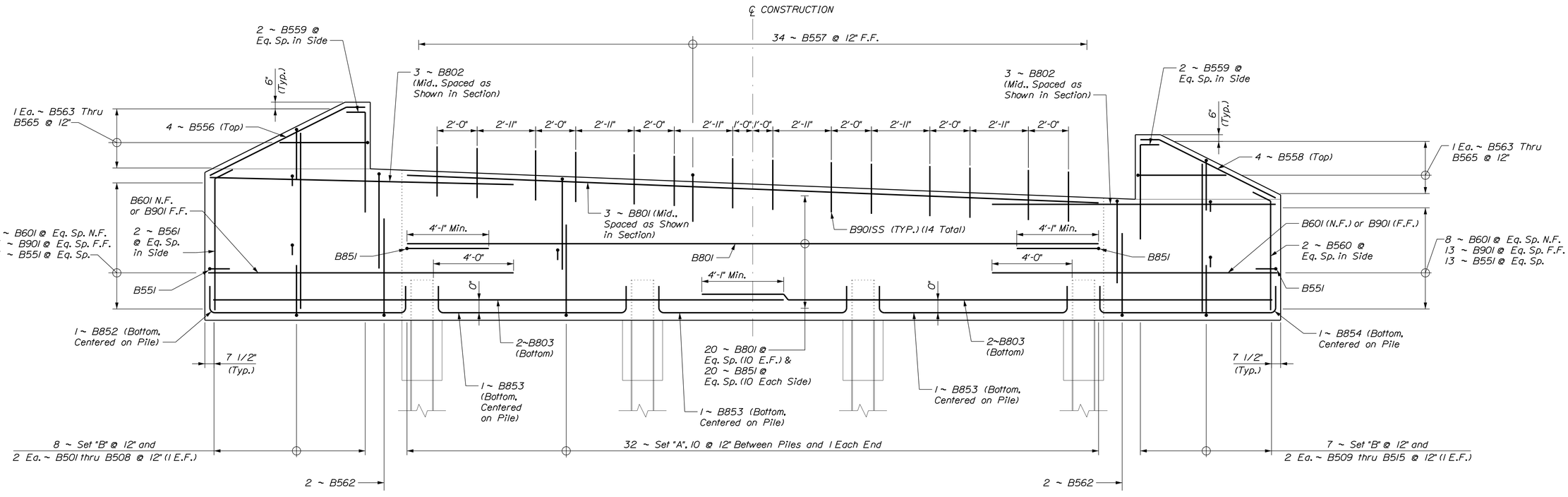

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

	BY	DATE
PROJ. MANAGER	Mark Parkin	
DESIGN-DETAILED	P. Lusitani	10/2019
CHECKED-REVIEWED	C. Ohnsman	
DESIGN2-DETAILED2	P. Lusitani	5/2019
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

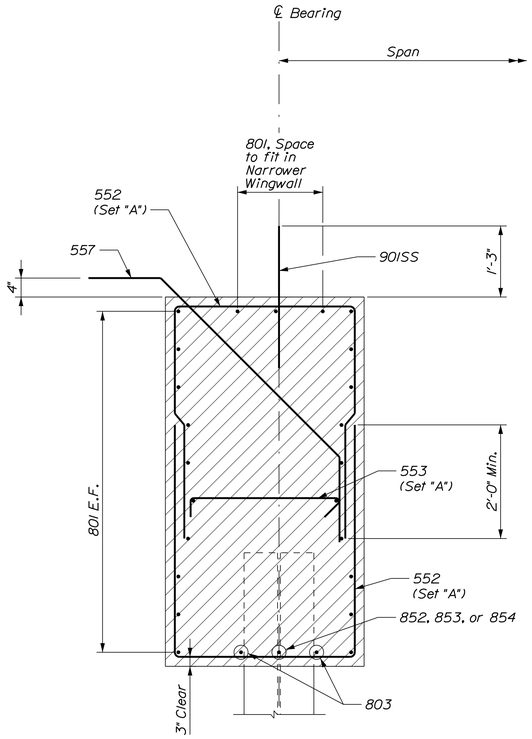
ABUTMENT REINFORCING

SHEET NUMBER

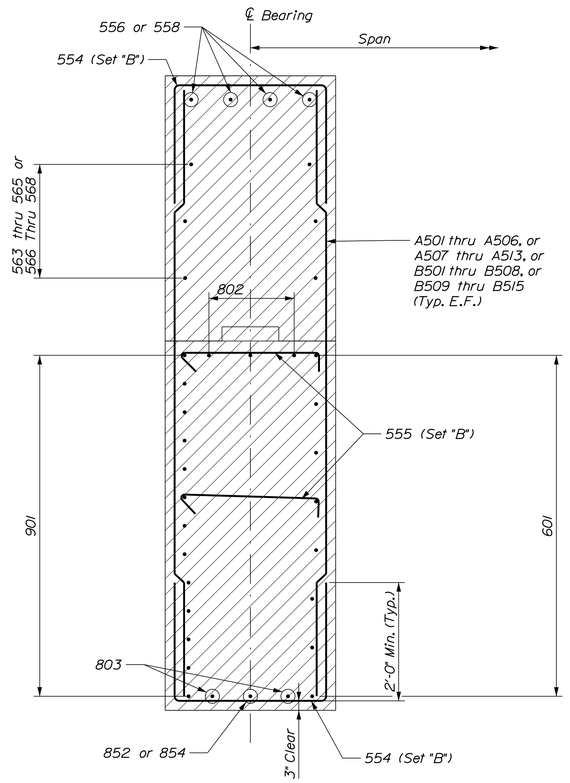
21

OF 30

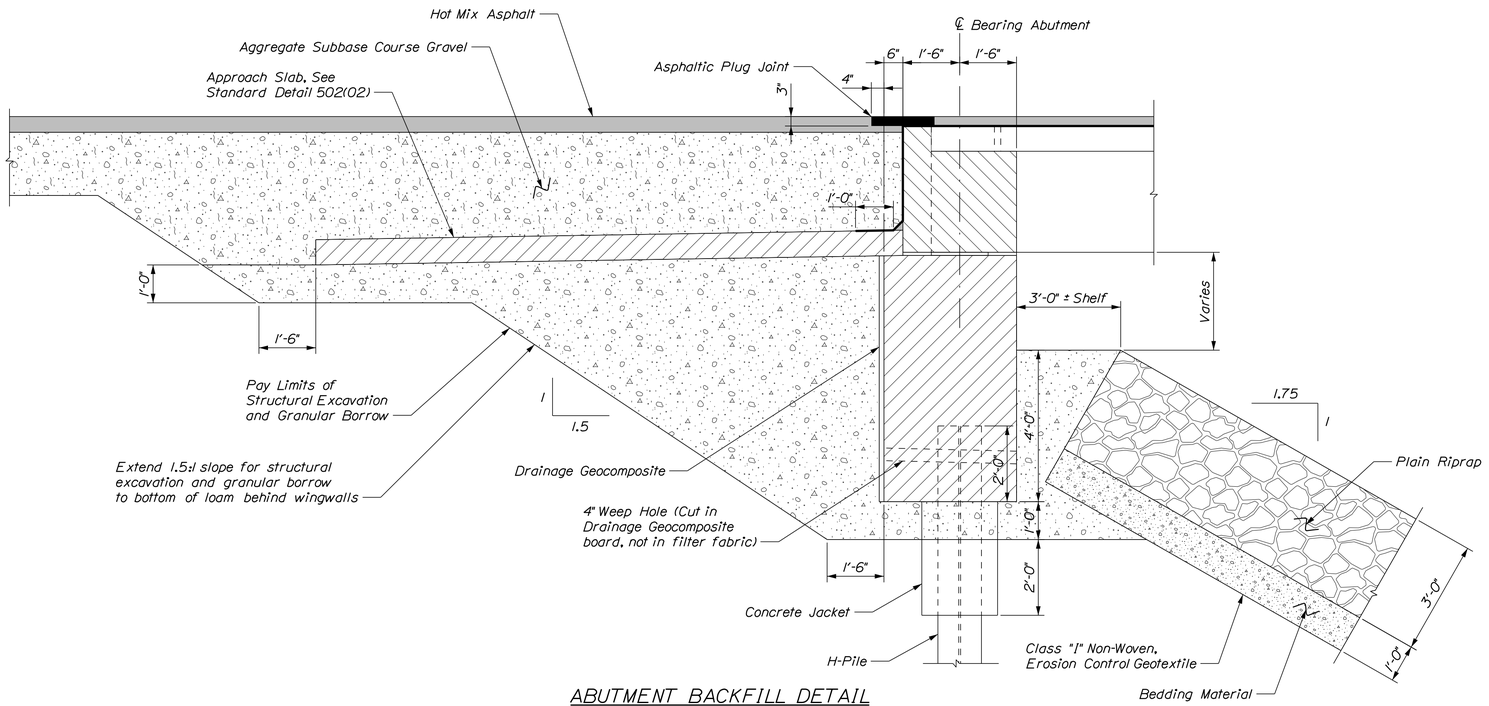
Filename: ...\MSTA\021_Abutment_Rebar.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



TYPICAL ABUTMENT SECTION



TYPICAL WINGWALL SECTION



ABUTMENT BACKFILL DETAIL

Filename: ...\MSTA\022_Abutment_Details.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

BRIDGE NO. 3726 | WIN 021657.00 | BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin	BY	DATE
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

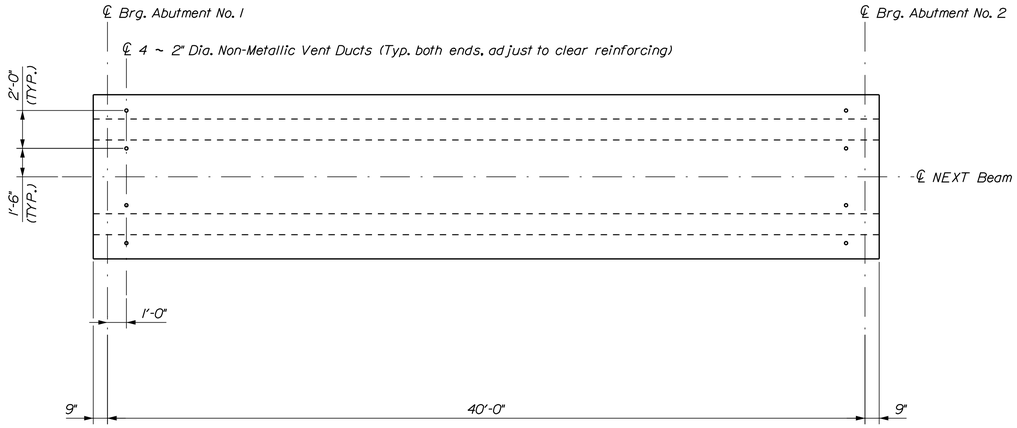
ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

ABUTMNET DETAILS

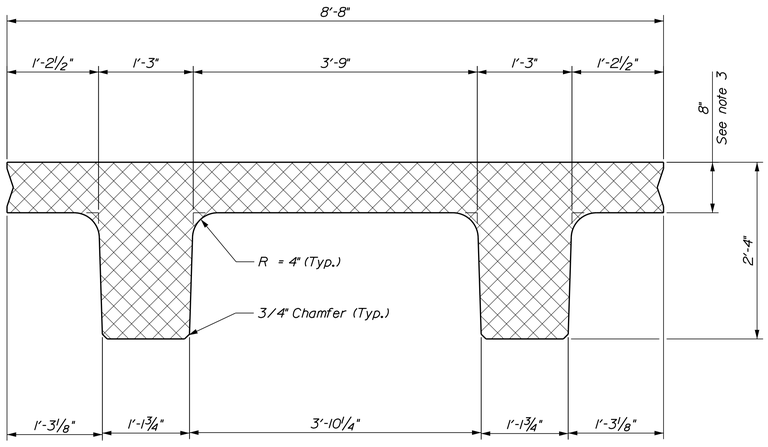
SHEET NUMBER

22

OF 30



NEXT 28 D BEAM PLAN



NEXT 28 D BEAM SECTION

PRECAST CONCRETE SUPERSTRUCTURE NOTES

1. NEXT D Beams are a non-proprietary shape developed by PCI NORTHEAST (PCINE). Standardized section properties and details may be found at http://www.pcine.org.

2. The estimated camber at release is 0.469 inches and the estimated camber at erection is 0.834 inches. The estimated deflection from superimposed loads is 0.073 inches at mid span.

3. The slab thickness shall be varied parabolically from 8" at midspan to 9" at ℄ bearings to compensate for camber and roadway profile

4. Prestressing strands shall be 0.6-in. diameter. The tensioning force is 44 kips per prestressing strand, including the top strands.

5. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.

6. Install 2-in. diameter nonmetallic vent ducts in the beam flange at both ends, see beam plan.

7. Do not drill holes or use powder actuated tools on the prestressed beams without the approval of the Fabrication Engineer.

8. Neoprene pads shall be either polychloroprene or natural polyisoprene of 50± 5 Shore A durometer hardness, and shall conform to the requirements of Division 2, Section 18.2 of AASHTO Standard Specifications for Highway Bridges. Neoprene pads will not be paid for directly but will be considered incidental to related Contract items.

9. A maximum of 50% of the strands in the bottom 3 rows may be debonded 6 inches from the end of the beam. All 4 top row strands shall be fully bonded.

10. The reinforcing may be adjusted to facilitate the installation around the stirrups.

11. Lifting loops and temporary storage/shipping dunnage shall be a maximum of 2 feet from each beam end.

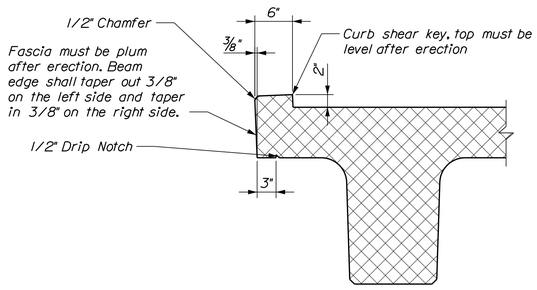
12. All reinforcing steel for precast NEXT Beams shall be Stainless Steel ASTM A955 Grade 75.

13. Keyways for closure pours shall be cast using a concrete surface retarder and power washed with water in order to produce an exposed aggregate surface finish. The set retarder shall be used in accordance with the manufacturer's recommendations.

14. The top of the precast NEXT beams shall have a float finish per Standard Specification Section 535.

15. All metallic inserts in the top flange, including lifting devices, shall be stainless steel.

16. Neoprene Pad seams perpendicular to the centerline of bearing will be allowed, provided that the seams are located approximately half way between NEXT Beam stems.



FASCIA OVERHANG DETAIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

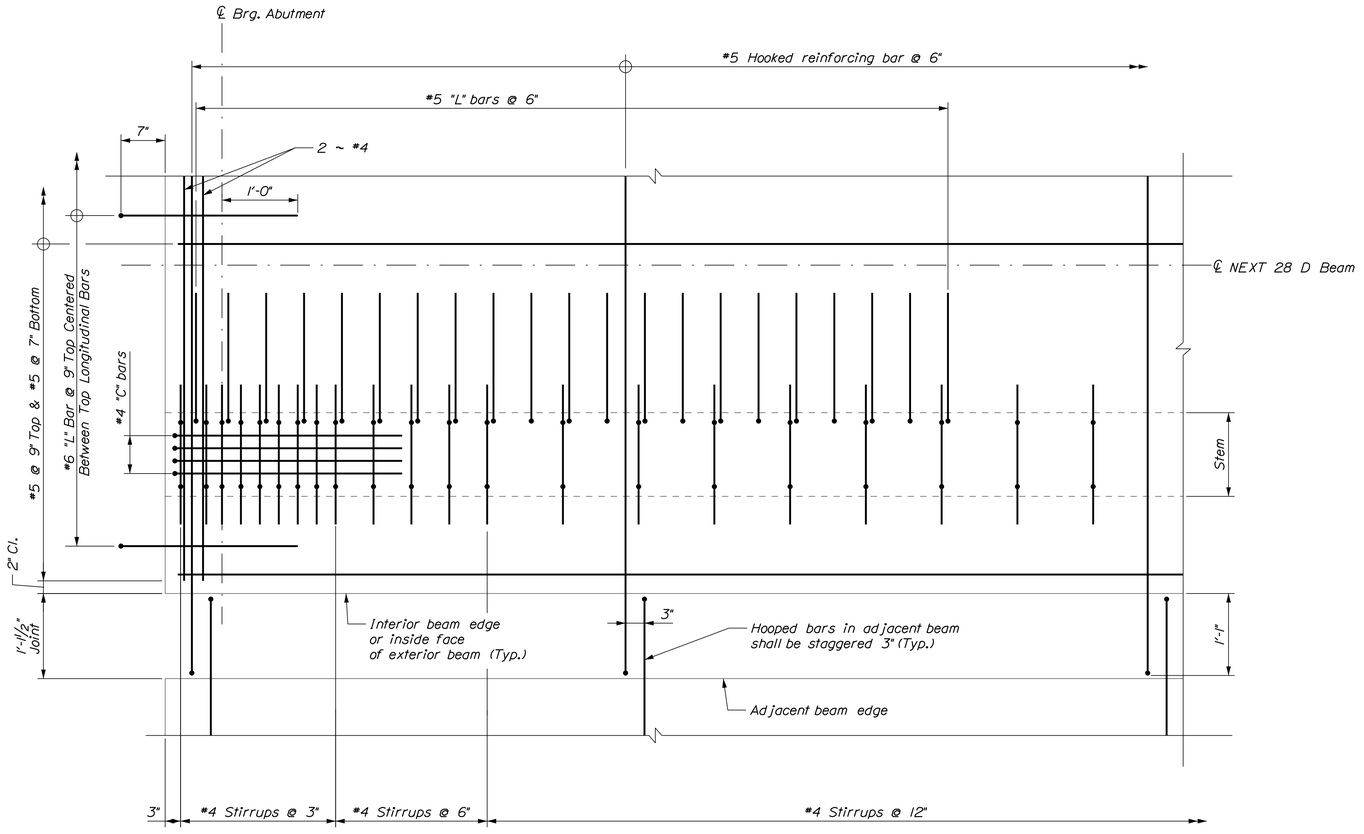
PRECAST NEXT BEAM
PLAN AND ELEVATION

SHEET NUMBER

23

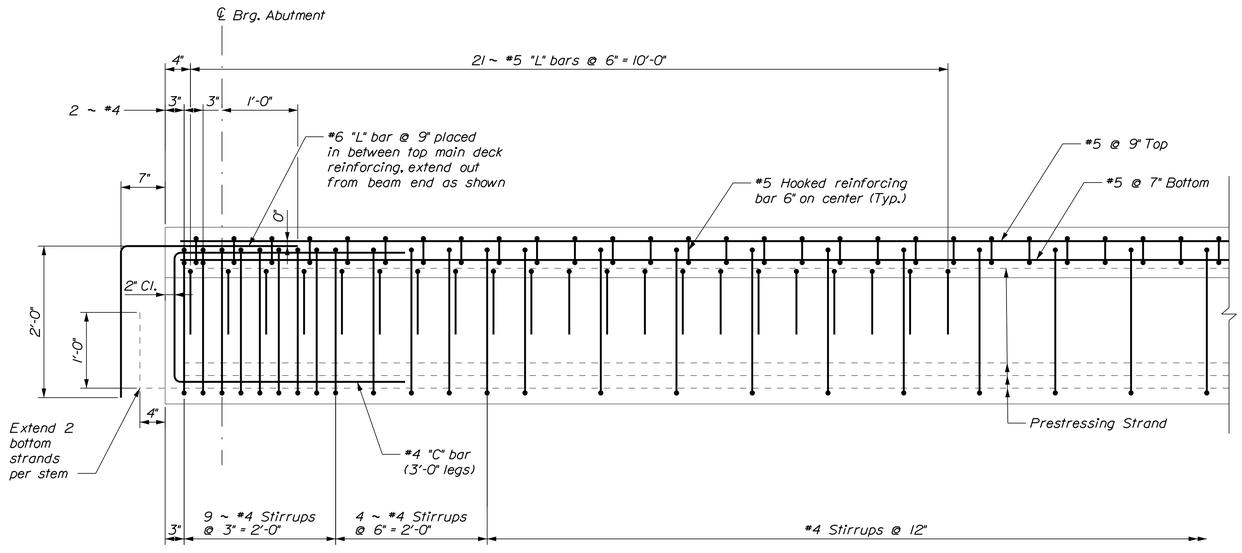
OF 30

Filename: ...\023_Beam_Plan_Elevation.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



NEXT 28 D BEAM PART REINFORCING PLAN

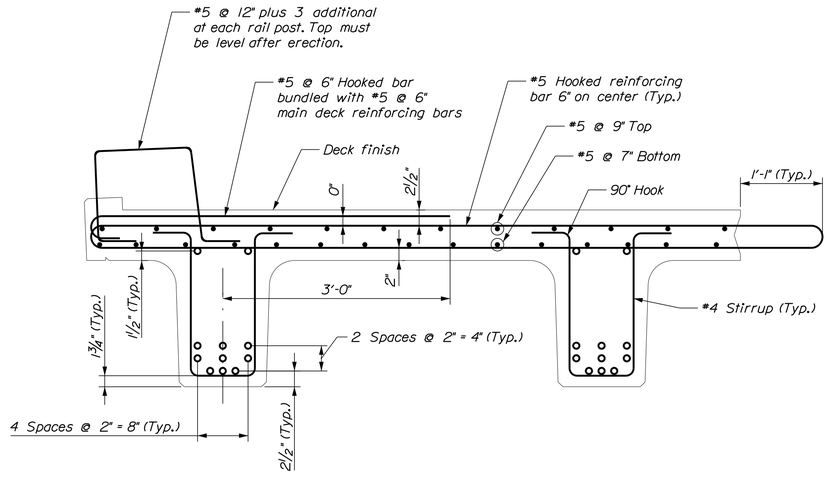
Prestressing Strands, fascia curb bars, and overhang hooked bars not Shown for Clarity



NEXT 28 D BEAM PART REINFORCING ELEVATION

Fascia curb bars and overhang hooked bars not shown for clarity

Note:
1. All reinforcing bars in the beams shall be stainless steel, grade 75.

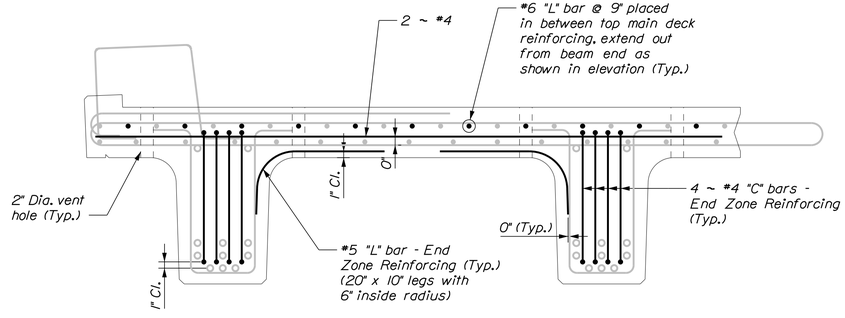


Fascia Side of Exterior Beam

Interior Side of Exterior Beam and Typical Interior Beam Edges

○ Strands fully bonded

NEXT 28 D BEAM TYPICAL REINFORCING SECTION



Fascia Side of Exterior Beam

Interior Side of Exterior Beam and Typical Interior Beam Edges

NEXT 28 D BEAM TYPICAL ADDITIONAL END REINFORCING SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

			DATE
PROJ. MANAGER	Mark Perkins	BY	
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

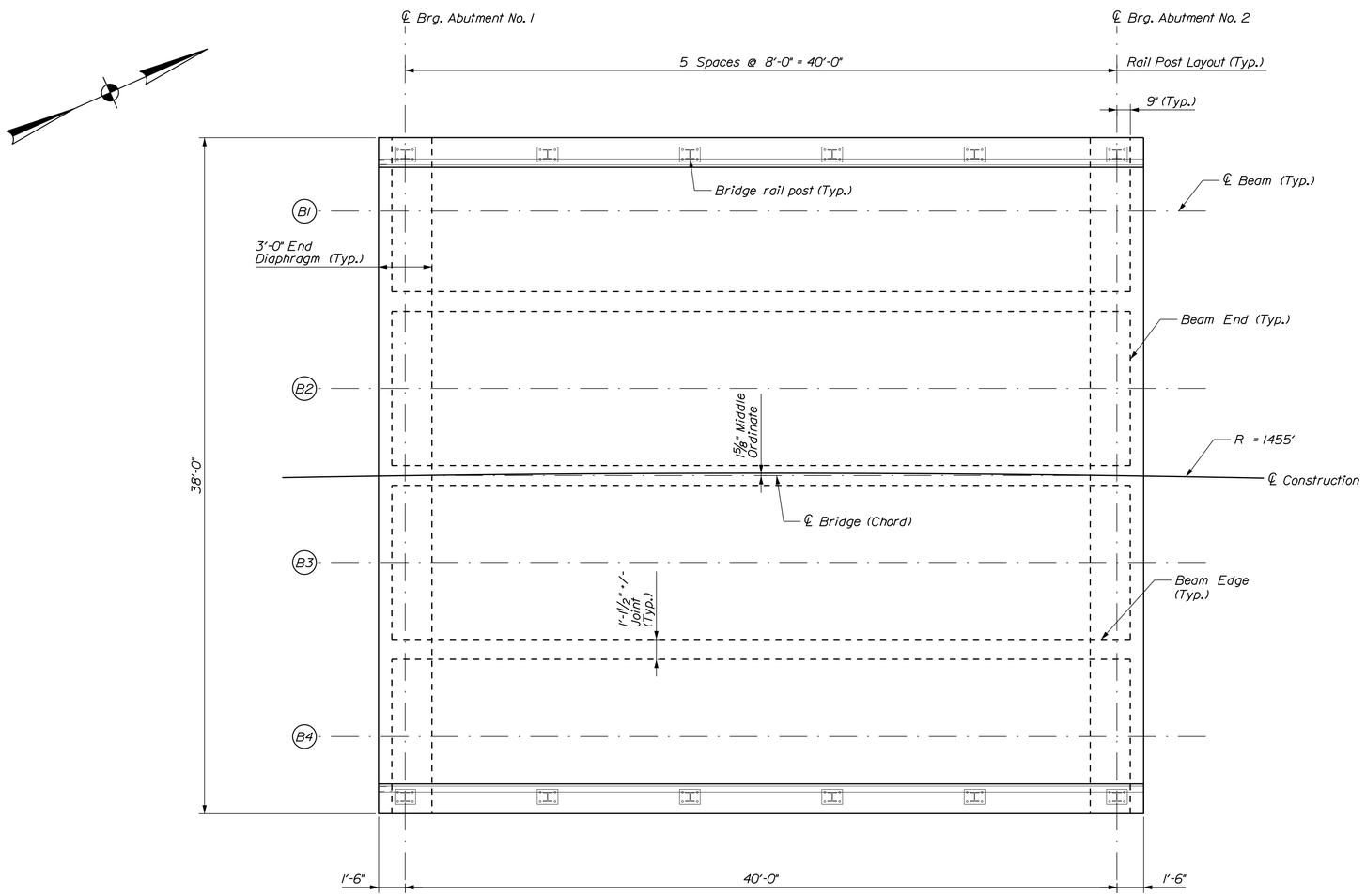
PRECAST NEXT BEAM DETAILS

SHEET NUMBER

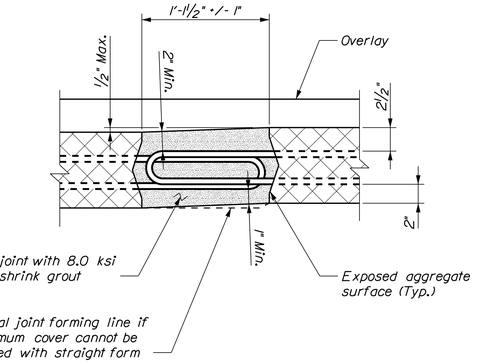
24

OF 30

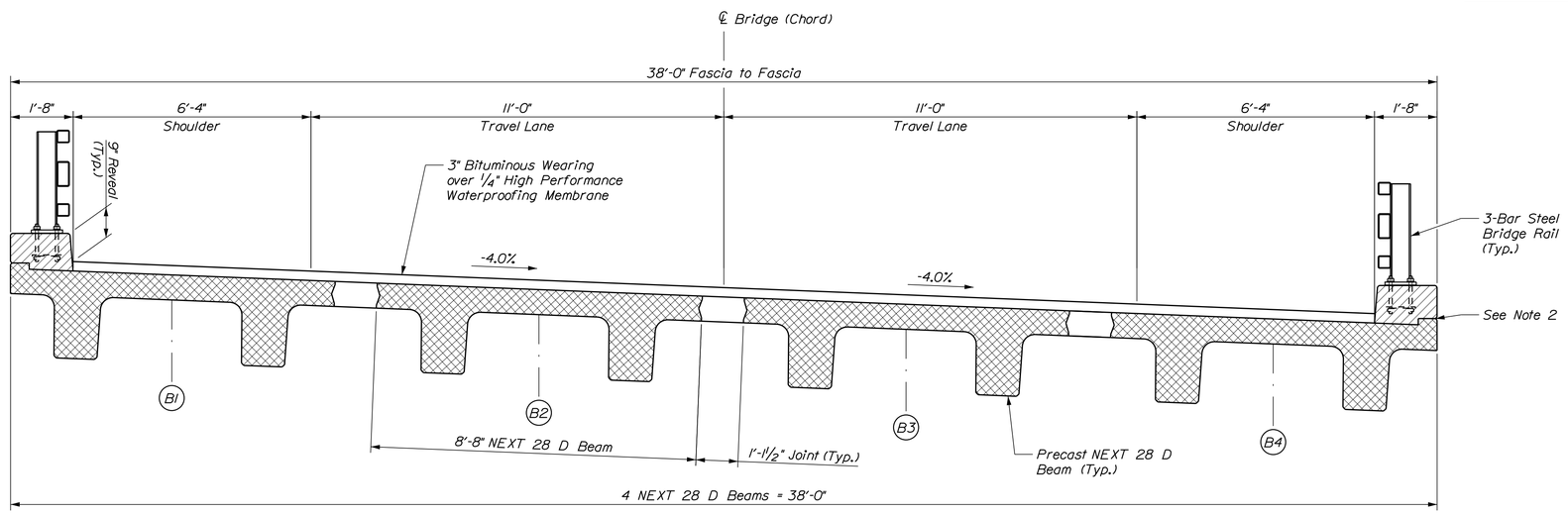
Filename: ...\MSTA\024_Beam_Details.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



SUPERSTRUCTURE PLAN



NEXT D BEAM CAMBER JOINT DIFFERENTIAL DETAIL



TRANSVERSE SECTION

SUPERSTRUCTURE NOTES

1. The method of forming the closure pour flange connections shall be determined by the Contractor. The forms shall be removable and able to accommodate differential camber. Form supports shall not penetrate through the top of pour or NEXT beam unless approved by the Fabrication Engineer.

2. Form a one inch V-groove on the fascias at the horizontal joint between the curb and beam.

3. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.

4. The NEXT beam flange closure pours shall be completed prior to placing the end diaphragm concrete.

5. Payment for NEXT Beam flange closure pours will be made under Item 502.492. Limits of grout will be the full length of beams.

6. Payment for end diaphragm concrete will be made under Item No. 502.219 Structural Concrete, Abutments and Retaining Walls.

7. The bridging plate specified in Section 520 for the Asphaltic Plug Joint is not required for this project.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitoni	10/2019
CHECKED-REVIEWED	P. Lusitoni	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

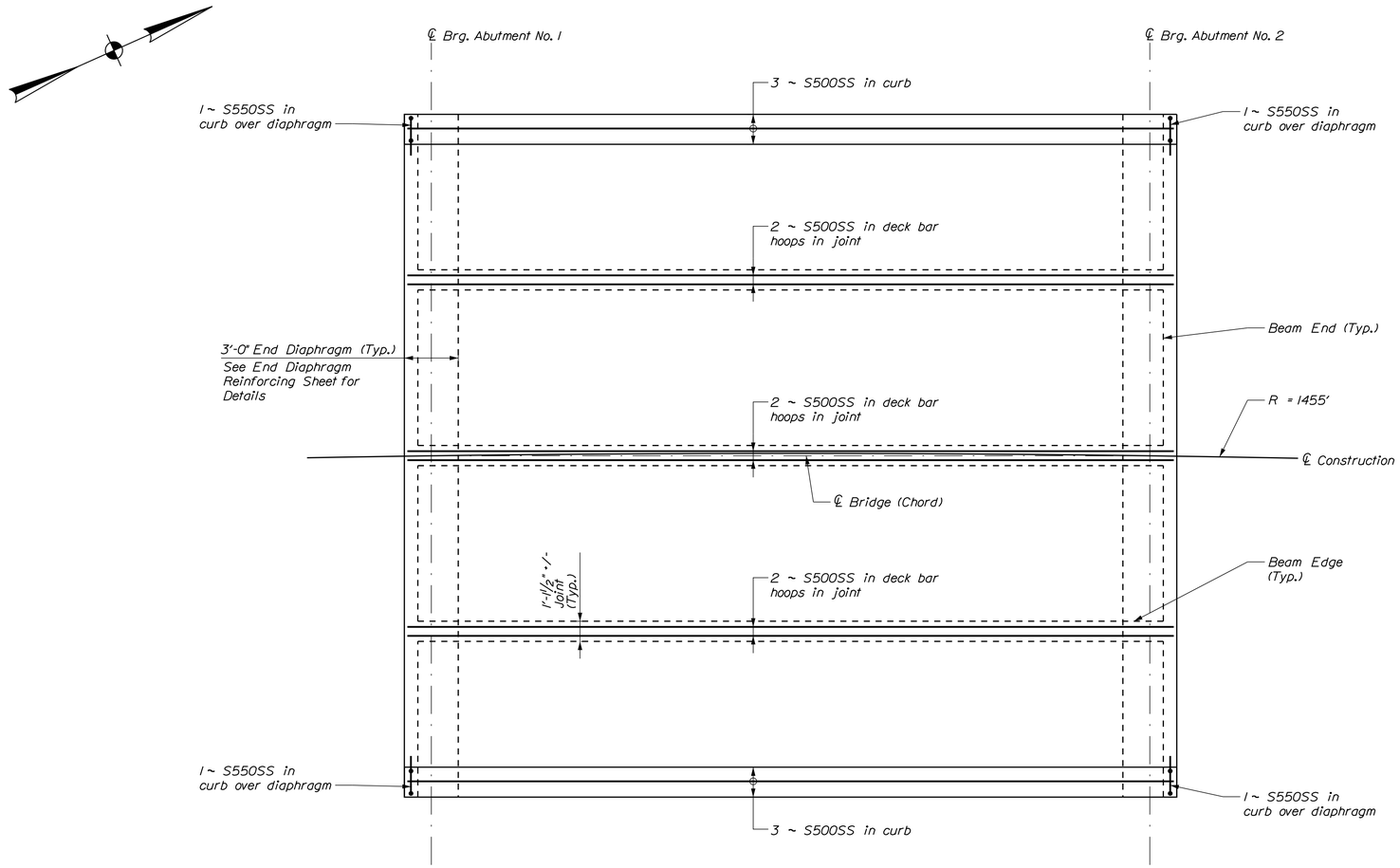
ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

SUPERSTRUCTURE PLAN

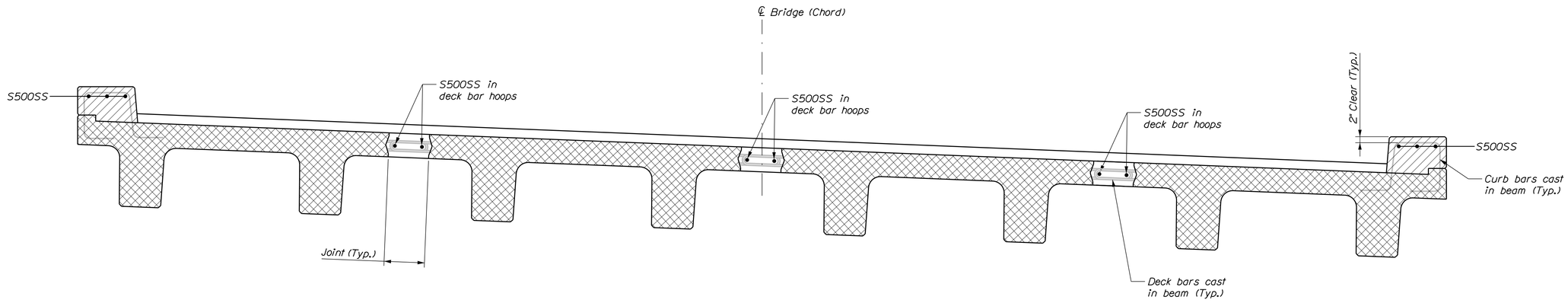
SHEET NUMBER

25

OF 30



SUPERSTRUCTURE REINFORCING PLAN



TRANSVERSE REINFORCING SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

PROJ. MANAGER	Mark Perkins	
DESIGN-DETAILED	C. Ohnsman	10/2019
CHECKED-REVIEWED	P. Lusitoni	5/2019
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY / DATE

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

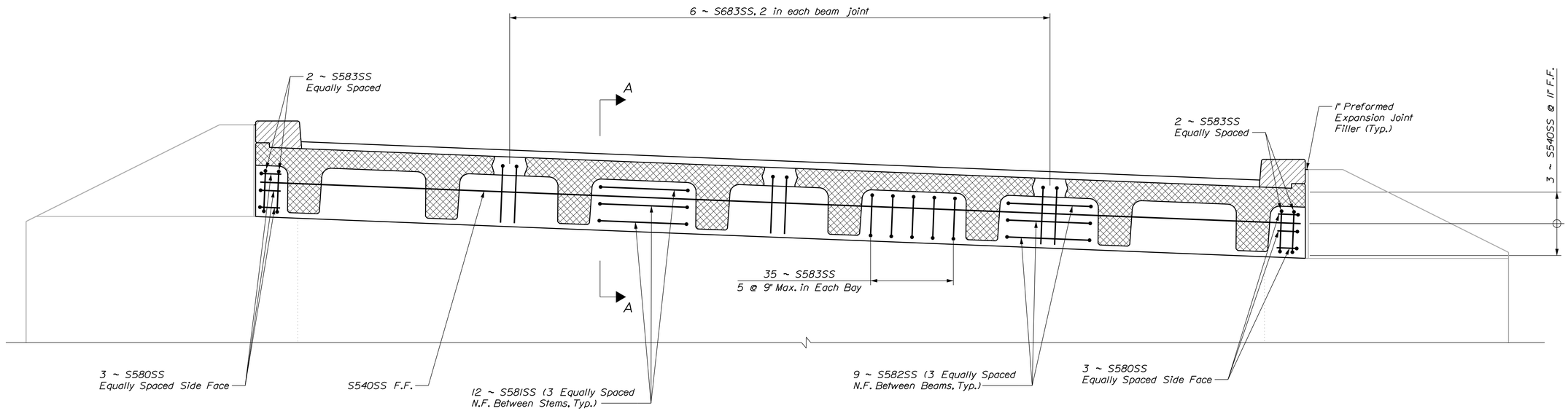
SUPERSTRUCTURE REINFORCING

SHEET NUMBER

26

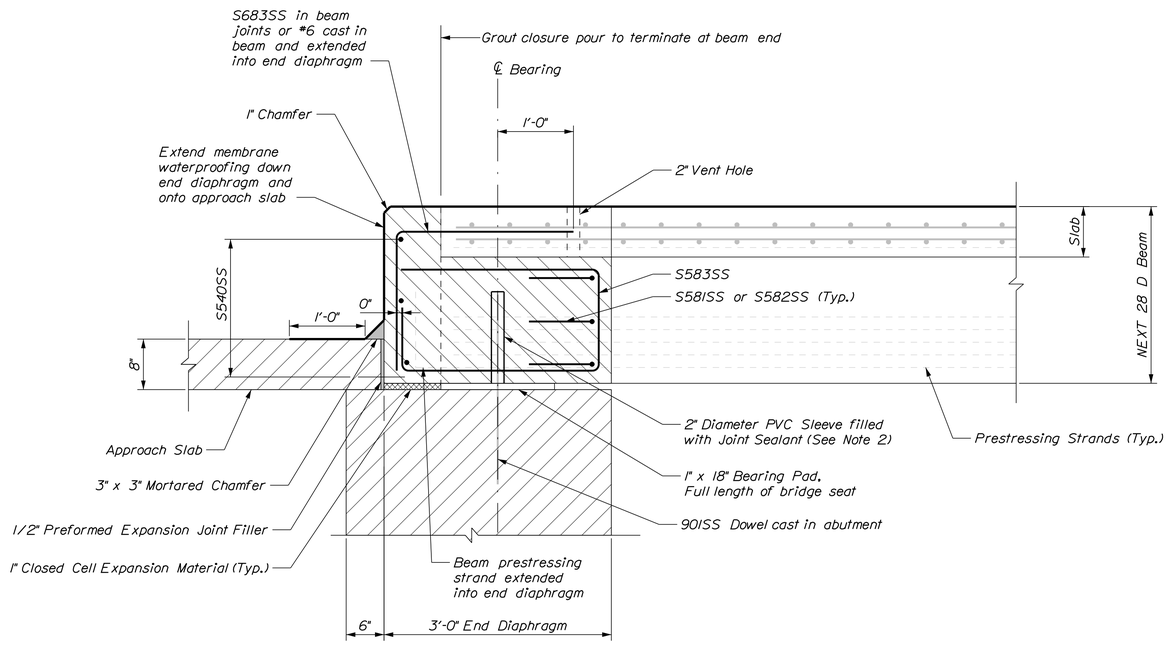
OF 30

Filename: ...\026_Superstructure_Rebar.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019



END DIAPHRAGM REINFORCEMENT ELEVATION

Abutment No. 2 End Shown, Abutment No 1 End Opposite Hand



SECTION A-A

NOTES:

1. Payment for Preformed Expansion Joint Filler, closed cell foam, and mortared chamfer will not be made directly and shall be considered incidental to related Contract Items.

2. PVC sleeves shall be centered on the anchor dowels and the annular space filled with a joint sealant. The sealant shall be one of the polyurethane based products listed on the MaineDOT Qualified Products List of Pour-In-Place Joint Sealant. Payment for all labor and materials will not be made directly and will be considered incidental to related Contract Items.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	Mark Pearlin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

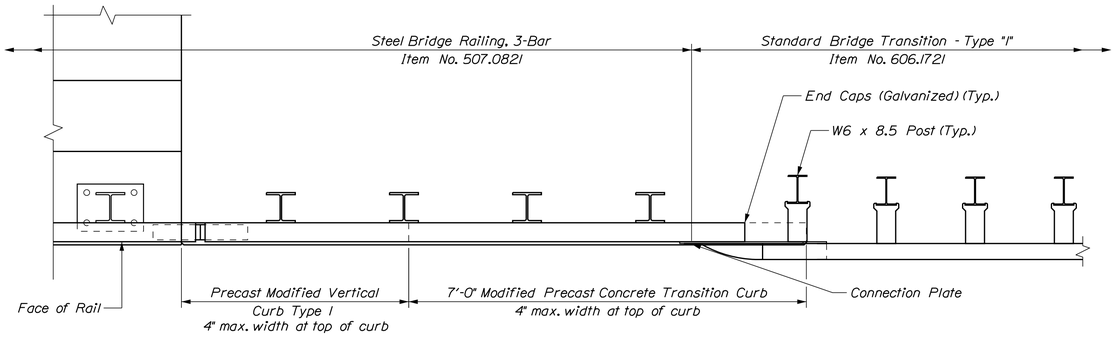
END DIAPHRAGM REINFORCING

SHEET NUMBER

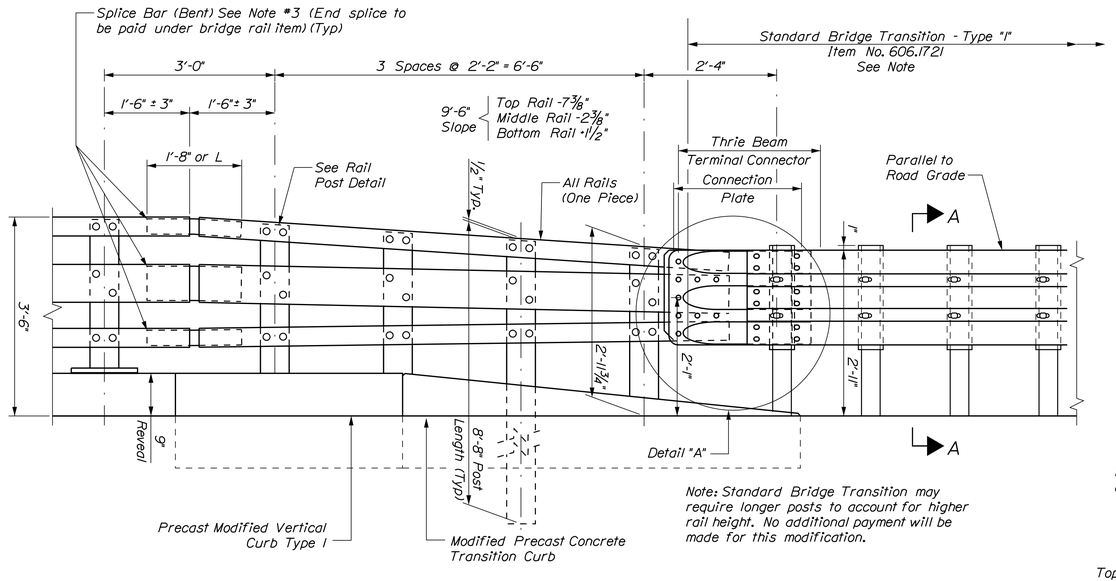
27

OF 30

Filename: ...\MSTA\027_Diaphragm_Rebar.dgn Division: HIGHWAY Username: 1151 Date:11/25/2019

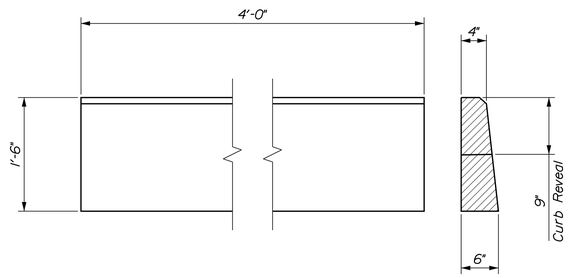


PLAN VIEW; STEEL BRIDGE RAILING, 3-BAR

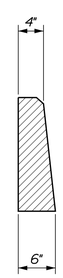


Note: Standard Bridge Transition may require longer posts to account for higher rail height. No additional payment will be made for this modification.

ELEVATION VIEW- STEEL BRIDGE RAILING, 3-BAR



PRECAST MODIFIED VERTICAL CURB TYPE I



MODIFIED PRECAST CONCRETE TRANSITION CURB

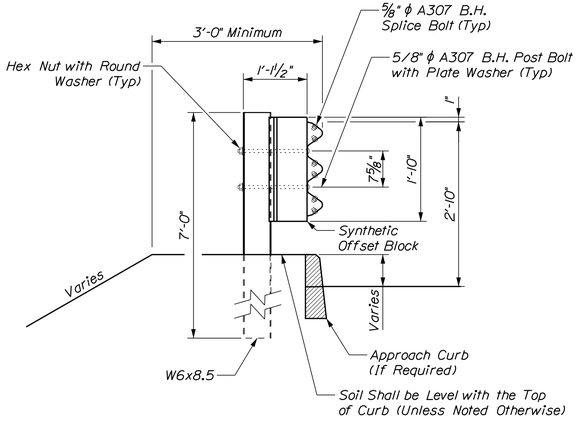
NOTES

1. All bridge approach rail materials, dimensions, sizes, and notes shall be the same as those of the bridge rail, unless otherwise noted.

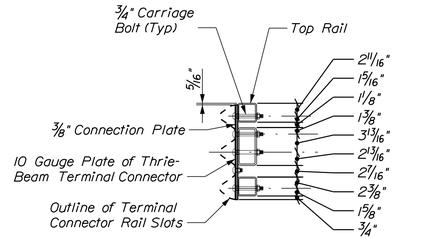
2. Carriage bolts shall be ASTM A307, and nuts shall be ASTM A563 Grade A or better (galvanized).

3. Weld splice bar to fit bend. Use complete joint penetration butt weld (B-U2).

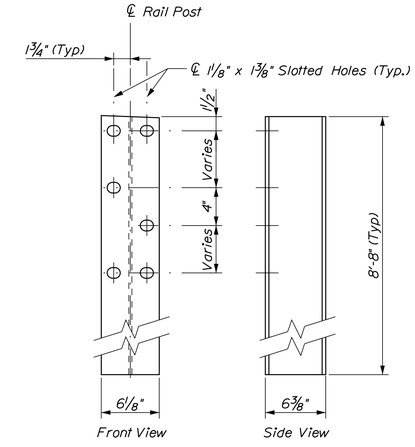
4. Precast concrete curbs will not be paid for seperately, but shall be considered incidental to other items.



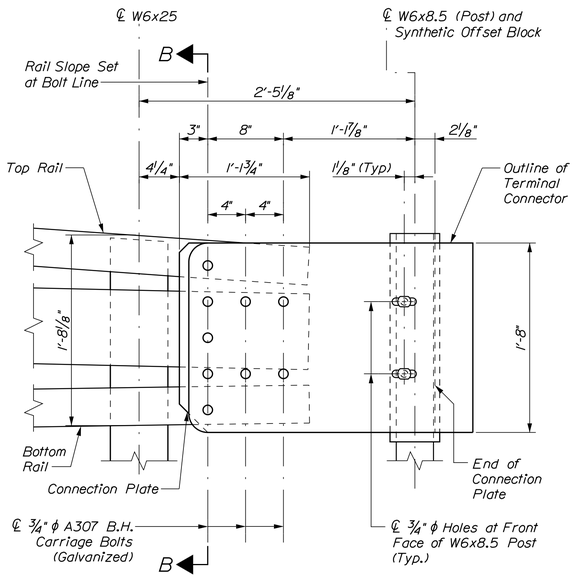
SECTION A-A (POST RAIL ASSEMBLY)



SECTION B-B (CONNECTION PLATE)

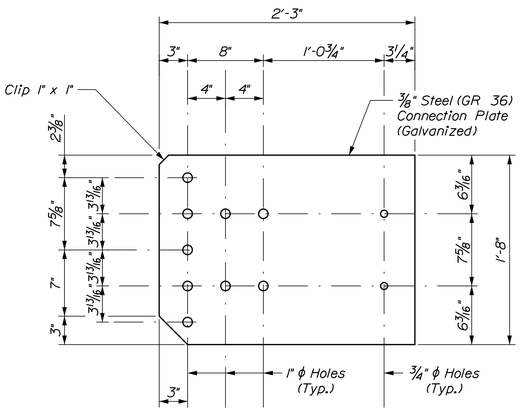


RAIL POST (W6x25)



DETAIL A

(Overlapping of Double Nested Thrie-Beam not Shown for Clarity)



CONNECTION PLATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE NO. 3726

BRIDGE PLANS

		BY	DATE
PROJ. MANAGER	Mark Perlin		
DESIGN-DETAILED	C. Ohnsman	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Lusitani	P. Perkins	5/2019
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

STEEL APPROACH RAILING
3-BAR

SHEET NUMBER

28

OF 30

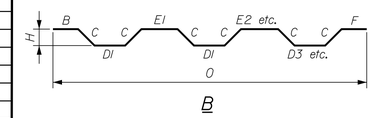
STRAIGHT BARS

MARK	QTY.	LENGTH	LOCATION
ABUTMENT NO. 1 (PLAIN REBAR)			
A501	2	5'-11"	Wingwall Verticals
A502	2	6'-7"	Wingwall Verticals
A503	2	7'-3"	Wingwall Verticals
A504	2	7'-11"	Wingwall Verticals
A505	2	8'-7"	Wingwall Verticals
A506	2	8'-8"	Wingwall Verticals
A507	2	7'-8"	Wingwall Verticals
A508	2	8'-2"	Wingwall Verticals
A509	2	8'-8"	Wingwall Verticals
A510	2	9'-2"	Wingwall Verticals
A511	2	9'-8"	Wingwall Verticals
A512	2	10'-2"	Wingwall Verticals
A513	2	10'-3"	Wingwall Verticals
A601	16	14'-0"	Wingwall Bottom Half Front Horizontal
A801	23	34'-8"	Abutment Horizontal
A802	6	14'-0"	Wingwall Horizontal at Construct. Joint
A803	4	27'-2"	Abutment Bottom
A901	26	14'-0"	Wingwall Bottom Half Rear Horizontal
ABUTMENT NO. 1 (STAINLESS STEEL)			
A90ISS	14	2'-6"	Abutment to Superstructure Connection
ABUTMENT NO. 2 (PLAIN REBAR)			
B501	2	7'-2"	Wingwall Verticals
B502	2	7'-8"	Wingwall Verticals
B503	2	8'-2"	Wingwall Verticals
B504	2	8'-8"	Wingwall Verticals
B505	2	9'-2"	Wingwall Verticals
B506	2	9'-8"	Wingwall Verticals
B507	2	10'-2"	Wingwall Verticals
B508	2	10'-5"	Wingwall Verticals
B509	2	6'-1"	Wingwall Verticals
B510	2	6'-7"	Wingwall Verticals
B511	2	7'-1"	Wingwall Verticals
B512	2	7'-7"	Wingwall Verticals
B513	2	8'-1"	Wingwall Verticals
B514	2	8'-7"	Wingwall Verticals
B515	2	8'-9"	Wingwall Verticals
B601	16	15'-6"	Wingwall Bottom Half Front Horizontal
B801	23	34'-8"	Abutment Horizontal
B802	6	15'-6"	Wingwall Horizontal at Construct. Joint
B803	4	28'-10"	Abutment Bottom
B901	26	15'-6"	Wingwall Bottom Half Rear Horizontal
ABUTMENT NO. 2 (STAINLESS STEEL)			
B90ISS	14	2'-6"	Abutment to Superstructure Connection
SUPERSTRUCTURE (STAINLESS STEEL)			
S500SS	12	42'-8"	Curb and Beam Joint Long. Bars
S540SS	6	37'-8"	Diaphragm Rear Horizontals
APPROACH SLABS (PLAIN REBAR)			
AS501	32	33'-4"	Transverse Bars
AS601	134	15'-2"	Longitudinal Bars

BENT BARS

MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
ABUTMENT NO. 1 (PLAIN REBAR)														
A551	26	4'-6 1/2"	S	0"	1'-0"	2'-6 1/2"	1'-0"			0"				Wingwall End Horizontal U-Bar
A552	64	12'-6"	S	0"	4'-8"	3'-2"	4'-8"			0"				Abutment Vertical U-Bar
A553	32	4'-11 1/2"	P3	5 1/2"	3'-2"					6"				Abutment Stirrup
A554	26	7'-2"	S	0"	2'-3"	2'-8"	2'-3"			0"				Wingwall Vertical U-Bar
A555	26	3'-7 1/2"	P3	5 1/2"	2'-8"					6"				Wingwall Stirrup
A556	4	5'-10"	V				4'-11"	11"			6"			Wingwall Top
A557	34	7'-7 1/2"	P4	1'-6"	4'-7 1/2"	1'-6"					3'-3 1/2"			Approach Slab Connector
A558	4	6'-10"	V				5'-11"	11"			4 7/8"			Wingwall Top
A559	4	6'-5"	L	5'-6"	11"									Wingwall Side Vertical
A560	2	6'-10"	V				5'-10"	1'-0"			10"			Wingwall End Verticals
A561	2	8'-6"	V				7'-6"	1'-0"			10 3/4"			Wingwall End Verticals
A562	4	12'-2"	S	0"	4'-9"	2'-8"	4'-9"			0"				Abutment Vertical U-Bar
A563	1	5'-6 1/2"	S	0"	1'-6"	2'-6 1/2"	1'-6"			0"				Wingwall Top Half Horizontals
A564	1	8'-6 1/2"	S	0"	3'-0"	2'-6 1/2"	3'-0"			0"				Wingwall Top Half Horizontals
A565	1	11'-6 1/2"	S	0"	4'-6"	2'-6 1/2"	4'-6"			0"				Wingwall Top Half Horizontals
A566	1	5'-10 1/2"	S	0"	1'-8"	2'-6 1/2"	1'-8"			0"				Wingwall Top Half Horizontals
A567	1	9'-10 1/2"	S	0"	3'-8"	2'-6 1/2"	3'-8"			0"				Wingwall Top Half Horizontals
A568	1	13'-10 1/2"	S	0"	5'-8"	2'-6 1/2"	5'-8"			0"				Wingwall Top Half Horizontals
A851	20	11'-2 1/2"	S	0"	4'-1"	3'-0 1/2"	4'-1"			0"				Abutment Horizontal End U-Bar
A852	1	9'-9"	S	0"	1'-4"	7'-1"	1'-4"			0"				Abutment Bottom End Horizontal
A853	3	12'-2"	S	0"	1'-4"	9'-6"	1'-4"			0"				Abut. Bot. Between Piles Horizontals
A854	1	11'-0"	S	0"	1'-4"	8'-4"	1'-4"			0"				Abut. Bottom End Horizontal
ABUTMENT NO. 2 (PLAIN REBAR)														
B551	26	4'-6 1/2"	S	0"	1'-0"	2'-6 1/2"	1'-0"			0"				Wingwall End Horizontal U-Bar
B552	64	12'-6"	S	0"	4'-8"	3'-2"	4'-8"			0"				Abutment Vertical U-Bar
B553	32	4'-11 1/2"	P3	5 1/2"	3'-2"					6"				Abutment Stirrup
B554	30	7'-2"	S	0"	2'-3"	2'-8"	2'-3"			0"				Wingwall Vertical U-Bar
B555	30	3'-7 1/2"	P3	5 1/2"	2'-8"					6"				Wingwall Stirrup
B556	4	8'-5"	V				7'-6"	11"			4 7/8"			Wingwall Top
B557	34	7'-7 1/2"	P4	1'-6"	4'-7 1/2"	1'-6"					3'-3 1/2"			Approach Slab Connector
B558	4	7'-5"	V				6'-6"	11"			4 7/8"			Wingwall Top
B559	4	6'-5"	L	5'-6"	11"									Wingwall Side Vertical
B560	2	7'-1"	V				6'-1"	1'-0"			10 3/4"			Wingwall End Verticals
B561	2	7'-11"	V				6'-11"	1'-0"			10 3/4"			Wingwall End Verticals
B562	4	12'-2"	S	0"	4'-9"	2'-8"	4'-9"			0"				Abutment Vertical U-Bar
B563	2	5'-10 1/2"	S	0"	1'-8"	2'-6 1/2"	1'-8"			0"				Wingwall Top Half Horizontals
B564	2	9'-10 1/2"	S	0"	3'-8"	2'-6 1/2"	3'-8"			0"				Wingwall Top Half Horizontals
B565	2	13'-10 1/2"	S	0"	5'-8"	2'-6 1/2"	5'-8"			0"				Wingwall Top Half Horizontals
B851	20	11'-2 1/2"	S	0"	4'-1"	3'-0 1/2"	4'-1"			0"				Abutment Horizontal End U-Bar
B852	1	12'-6"	S	0"	1'-4"	9'-10"	1'-4"			0"				Abutment Bottom End Horizontal
B853	3	12'-2"	S	0"	1'-4"	9'-6"	1'-4"			0"				Abut. Bot. Between Piles Horizontals
B854	1	11'-6"	S	0"	1'-4"	8'-10"	1'-4"			0"				Abut. Bottom End Horizontal
SUPERSTRUCTURE (STAINLESS STEEL)														
S550SS	4	6'-11"	S	10"	2'-0"	1'-3"	2'-0"			10"				Curb & Diaphragm Bar
S580SS	12	4'-1"	S	9"	2'-6"	10"	0"			0"				Diaphragm End Horizontal
S581SS	24	5'-1"	S	0"	10"	3'-5"	10"			0"				Diaphragm Horizontal Between Stems
S582SS	18	4'-10"	S	0"	10"	3'-2"	10"			0"				Diaphragm Horizontal Between Beams
S583SS	78	7'-5"	S	10"	2'-8"	1'-3"	2'-8"			0"				Diaphragm Verticals
S683SS	12	4'-3"	L	2'-4"	1'-11"									Diaphragm Rear / Deck End "L" Bar

TYPE - BENDING DIAGRAMS



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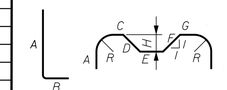
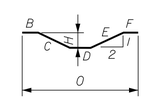
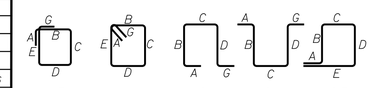
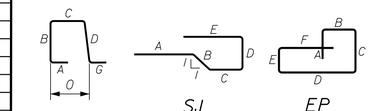


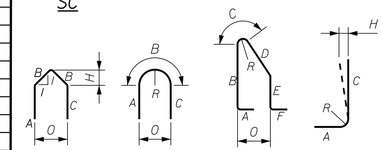
L W

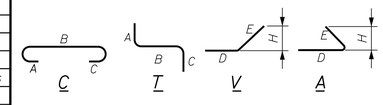


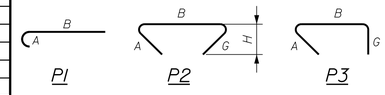
M

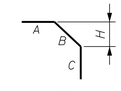












All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A615/A615M, Grade 60
ASTM A955, Grade 75
CSA S807-10, ACI 440.1R-15

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:

   Mark "A502" = bar size #5
   Mark "P805" = bar size #8
   Mark "S650" = bar size #6
   Mark "S650SS" = bar size #6 Stainless Steel
   Mark "S600G" = bar size #6 GFRP

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case shall be based on crank bars as schedule on the plans.

3. Bar marks ending with "G" indicate GFRP. Bar marks ending with "SS" indicate stainless steel. All other bars are plain (uncoated).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

021657.00

WIN 021657.00

BRIDGE PLANS

BRIDGE NO. 3726

	BY	DATE
PROJ. MANAGER	Mark Parlin	
DESIGN-DETAILED	P. Lusitani	10/2019
CHECKED-REVIEWED	P. Perkins	5/2019
DESIGN2-DETAILED2	C. Ohmsman	
DESIGN3-DETAILED3	P. Lusitani	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

ICE HOUSE BRIDGE
GILMAN BROOK
ANSON SOMERSET

REINFORCING SCHEDULE

SHEET NUMBER
29
OF 30

Filename: ...\MSTA\029_Rebar_Schedule.dgn Username: 1151 Division: HIGHWAY Date:11/25/2019

PLAN LEGEND

Town, County, State	New R/W Along Existing R/W		Existing	Proposed		Existing	Proposed
Approx. Property Lines P.L.	Building	Clearing Limit Line CLL	Sanitary Sewer		Traveled Way		
Existing Right of Way	Trees Conifer	Deciduous	Telephone Line	T	Ditch		
Limits of Wrought Portion L.O.W.P.	Tree Line	Bush Line	Electric Line	E	Catch Basin		
Control Of Access C.O.A.	Water Edge		Water Line	W	Manhole		
New Right of Way	Ledge	Rock/Boulder Flag Pole	Underdrain Line		Sewer Manhole		
New Easement	Fence CHAIN LINK	BARB WIRE STOCKADE	Gas Line	G	Utility Pole		
New Temporary Rights	Sign	Well WELL Mailbox	Guardrail		Fire Hydrant		
New R/W Within Existing R/W			Culvert		Curbing		

Cut Line C C C	Fill Line F F F		
Stonewall	Retaining Wall		
Baseline 10+00 11+00 12+00			
Monument	Traverse Point		
Iron Rod Found IRF	Pipe Found IPF		
Replacement Pin Set			

STATE OF MAINE
REGISTRY OF DEEDS
COUNTY _____
RECEIVED _____, _____
at _____h _____m _____M and recorded in
Plan Book _____, Page _____
Attest: _____
REGISTER

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

GRID NORTH
U.S. STATE PLANE, NAD83 (2011)
MAINE 2000 WEST ZONE
NAVD88
COMBINED FACTOR 0.9999897

JOSEPH F. CARRIGAN
ITEM NO. (1)
SLOPE EASE. = 732± S.F. (1)
TEMP. ROAD RIGHTS = 0.14± AC. (1)
TOTAL AREA = 4.00± AC. (PER TOWN)

BRIAN J. THORPE
ITEM NO. (2)
SLOPE EASE. = 774± S.F. (1)
TEMP. CONST. RIGHTS = 0.05± AC. (2)
TEMP. ROAD RIGHTS = 0.11± AC. (1)
TOTAL AREA = 0.50± AC. (PER TOWN)

MICHAEL A. LEHAY
DRIVEWAY 10+00.00 = CAMPGROUND RD. 20+71.78

N/F VICTOR H. CARRIGAN
TOTAL AREA = 0.37± AC. (PER TOWN)

MADISON PAPER
TOTAL AREA = 5.25± AC. (PER TOWN)

JOANNE M. BURNS
RUSSELL A. BURNS II
CAMPGROUND ROAD 20+09.95
RIVER ROAD STA. 107+41.55

Remove by Others
Station 104+75Lt
Off Set 27 ft

GILBERT BROOK
A/K/A GILMAN BROOK

EXISTING WATER UTILITY EASEMENT
INCLUDES AREA 15' WEST FROM THE
CENTERLINE OF THE WATER MAIN

Remove by Others
Station 103+23Lt
Off Set 29 ft

FORMER LOCATION OF STATE HIGHWAY "H"
PRESUMED DISCONTINUED BY ABANDONMENT

Remove by Others
Station 102+16Lt
off set 21 ft

TEMP. ROAD LIMITS
CLL
EXISTING WATER MAIN EASEMENT
0.14± AC.
0.11± AC.
SLOPE EASE. LIMITS
732± S.F.
774± S.F.
45°
50'
TEMP. CONST. LIMITS
617± S.F.
1469± S.F.
PC = STA. 20+34.21
PT = STA. 20+74.17
POE = STA. 20+83.98
S63°13'47.17"W
CAMPGROUND ROAD
N20°40'49.71"W
11+00
10+00
CURVE DATA #3
STATE HIGHWAY "45"
455.95'
TO ANSON VILLAGE
BEGIN B.L.
102+00
103+00
104+00
105+00
106+00
107+00
108+00
U.S. ROUTE 201A
RIVER ROAD
N27°49'35.24"E
N27°49'35.2"E
101.05'
96.39'
20+00
N18°08'12.32"W
END B.L.
TO NORTH ANSON

Remove Pole
Station 103+27Rt
Off Set 28 ft

Proposed Pole
103+20 Rt
Offset 35 ft

Remove Pole
Station 105+41Rt
Off Set 27 ft

Proposed Pole 105+60 Rt
Offset 35 ft

EXISTING 30' WIDE SANITARY SEWER EASEMENT

PC = STA. 101+46.61

PT = STA. 106+02.56

PC = STA. 107+03.61

CURVE DATA #1
PI = 103+76.47
D = 3°56'16.3"
Δ = 17°57'17.7" Rt.
R = 1455.00'
L = 455.95'
T = 229.86'
E = 18.05'

CURVE DATA #2
PI = 108+61.36
D = 3°08'47.0"
Δ = 9°54'07.7" Rt.
R = 1821.00'
L = 314.71'
T = 157.75'
E = 6.82'

EXISTING RIGHT OF WAY REFERENCE
S.H.C. FILE NO. 13-52, SHEET 2, AUGUST 1946

ICE HOUSE BRIDGE
OVER
GILBERT BROOK

BRIDGE NO. 3726 WIN 021657.00

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

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

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "45"
U.S. ROUTE 201A RIVER ROAD
ANSON SOMERSET COUNTY
FEDERAL AID PROJECT NO. STP-2165(700)

JUNE 2019 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 13-400
SCALE 1" = 25' | SHEET 1 OF 1

SHEET NUMBER
30
OF 30

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Division: BRIDGE Username: Richard.E.Myers Date:12/2/2019