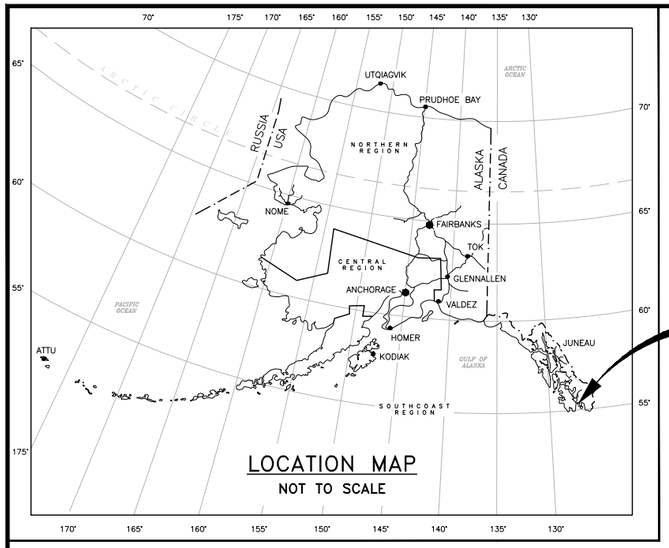
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	A1	112
CDS ROUTE: 4041222 & 4041223		MILEPOINT: 0.069 & 0.077		



PROJECT LOCATION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

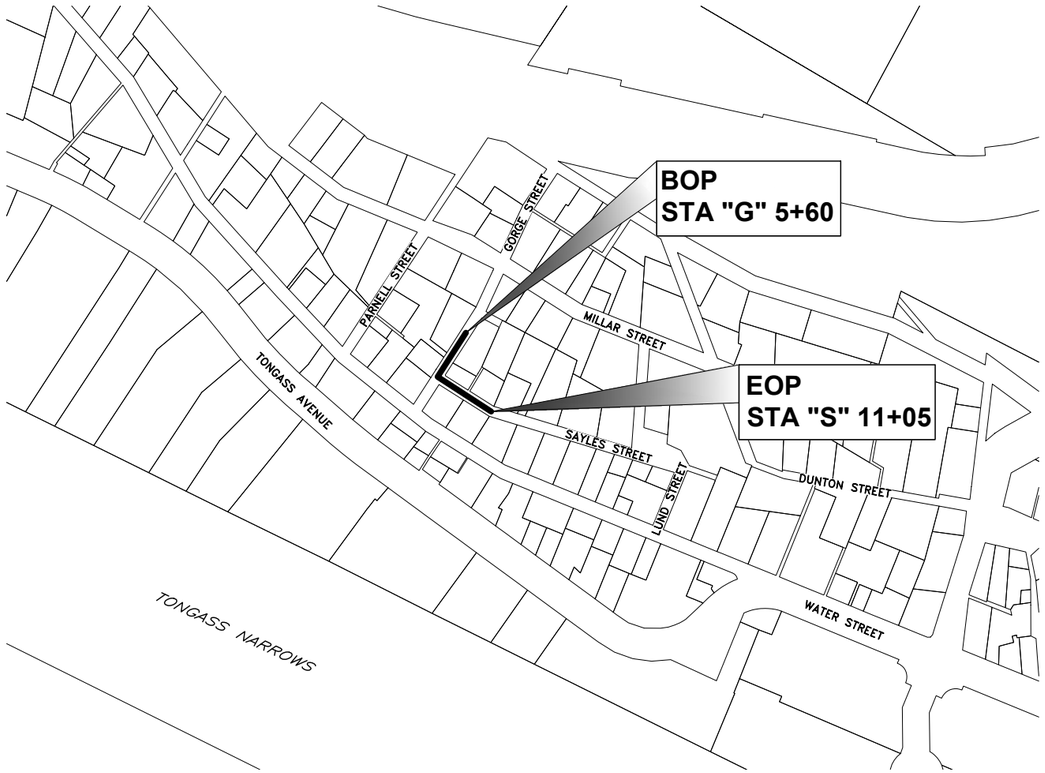
PROJECT NO. 0003225/SFHWY00070

GRADING, BRIDGE, DRAINAGE, PAVING, SIGNING, AND UTILITIES

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LAYOUT SCHEMATIC, GENERAL NOTES
A3	LEGEND / SYMBOLS
A4	SURVEY CONTROL SHEET
B1–B3	TYPICAL SECTIONS
C1–C2	ESTIMATE OF QUANTITIES
D1–D4	SUMMARY TABLES
E1–E13	DETAILS
F1	DEMOLITION PLAN
F2–F3	PLAN & PROFILE
N1–N53	BRIDGE PLANS
P1–P2	ESCP SHEETS
S1–S4	CONSTRUCTION PHASING
T1–T2	TRAFFIC CONTROL PLANS
U1–U14	UTILITY SHEETS
V1–V8	TELECOMM

THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT:
D–24.00, D–25.00, D–26.04
M–20.15, M–23.13
S–01.02, S–05.02, S–20.11, S–30.05
U–03.01



VICINITY MAP

ALIGNMENT DESIGNATIONS

NAME	DESIGNATION	BEGIN	END
GORGE STREET	"G"	"G" STA 5+60.00	"G" STA 6+49.61
SAYLES STREET	"S"	"S" STA 10+10.42	"S" STA 11+05.00

The undersigned hereby certifies that this duplicated document is an exact and true copy of the original.

DESIGN DESIGNATIONS

ADT (2021)	430
ADT (2044)	455
DHV (2021)	46
PERCENT TRUCKS (T)	1.47%
DIRECTIONAL SPLIT (D)	54%
DESIGN SPEED (V)	20 MPH
DESIGN ESALS	200,000

PROJECT SUMMARY

SAYLES STREET WIDTH OF PAVEMENT	17 FT 6 IN
GORGE STREET WIDTH OF PAVEMENT	17 FT 6 IN
LENGTH OF PAVING	36 FT
LENGTH OF PROJECT	184 FT

December 9, 2024

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

DocuSigned by:
APPROVED BY: _____ DATE 9/30/2024
CFE1E1F341494BA...
Kirk Miller, P.E.
Preconstruction Engineer, Southcoast Region

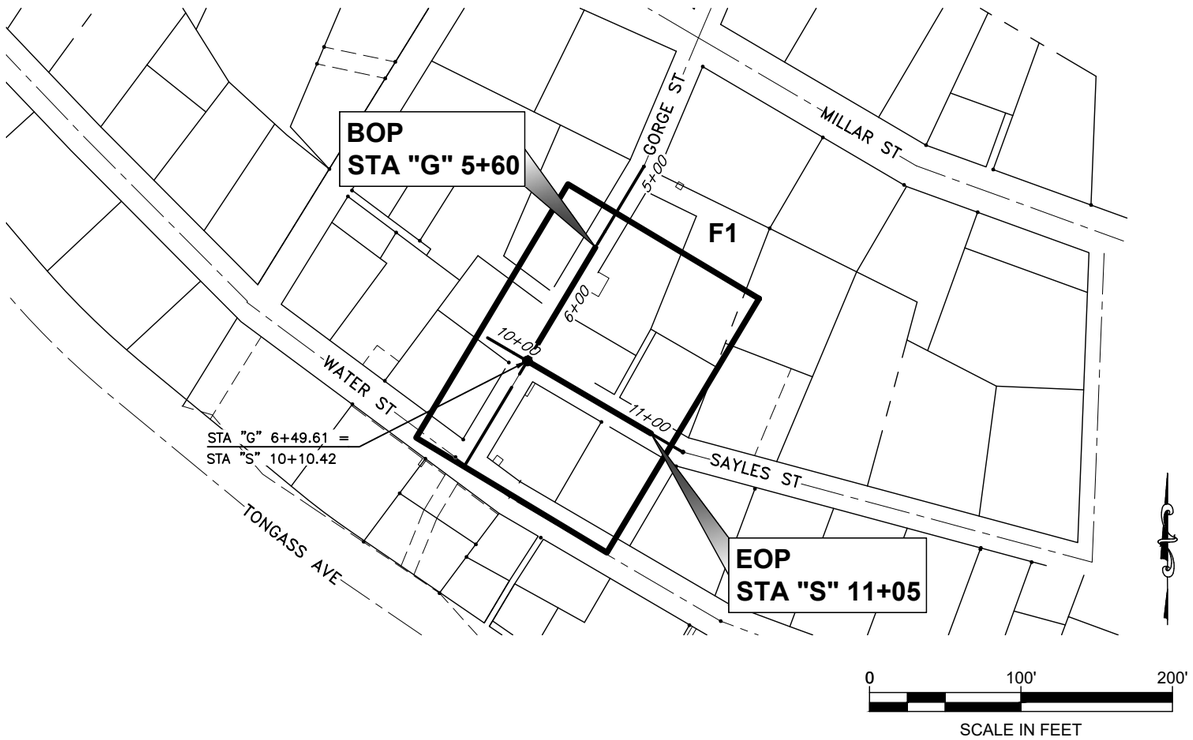
DocuSigned by:
ACCEPTED FOR CONSTRUCTION: _____ DATE 9/30/2024
2E12E08EB67041B...
Christopher Goins, P.E., C.M.
Regional Director, Southcoast Region

Z:\project\2630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-A1-Title-A1 Fri, Aug/02/24 03:41pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	A2	A4

GENERAL NOTES:

1. THE CONTRACTOR SHALL PROTECT IN PLACE FEATURES ON PRIVATE PROPERTIES IDENTIFIED IN THE PLANS, AND TO THE GREATEST EXTENT POSSIBLE, MINIMIZE IMPACTS TO PRIVATE PROPERTY IMPROVEMENTS.
2. CONTAIN ALL CONSTRUCTION WITHIN THE RIGHT–OF–WAY OR TEMPORARY CONSTRUCTION EASEMENTS. DO NOT DISPOSE OF EXCESS MATERIAL WITHIN THE RIGHT–OF–WAY, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS.
3. THE DESIGN SURVEY WAS PERFORMED APRIL 2019 TO ESTABLISH GROUND AND TOPOGRAPHIC FEATURES. FIELD CONDITIONS MAY HAVE CHANGED THAT ARE NOT REPRESENTED IN THIS PLANSET.
4. UTILITY LOCATIONS SHOWN IN THE PLANS ARE APPROXIMATE. SOME UTILITIES HAVE BEEN LOCATED FROM AS–BUILT DRAWINGS. FIELD CONDITIONS MAY NOT BE ACCURATELY REPRESENTED AND/OR MAY HAVE CHANGED. CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY COMPANY FIELD LOCATES PRIOR TO EXCAVATION.
5. ALL STORM DRAIN STRUCTURES INCLUDE 18" SUMP EXCEPT FOR STORM STRUCTURE INLET, TYPE D.
6. WHEN PAVING ADJACENT TO CURB & GUTTER, THE CONTRACTOR SHALL ENSURE THAT THE ASPHALT SURFACE BE 1/8"–1/4" HIGHER THAN THE LIP OF THE GUTTER PAN FOR CATCH CURB AND 1/8"–1/4" LOWER THAN THE LIP OF THE GUTTER PAN FOR SPILL CURB.
7. INVASIVE PLANT SPECIES LOCATIONS ARE SHOWN IN P SHEETS.



ABBREVIATIONS

AADT	ANNUAL AVERAGE DAILY TRAFFIC	NTS	NOT TO SCALE
ADEC	ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION	OAE	OR APPROVED EQUAL
ADT	AVERAGE DAILY TRAFFIC	OC	ON CENTER
AWWA	AMERICAN WATER WORKS ASSOCIATION	OD	OUTER DIAMETER
BMP	BEST MANAGEMENT PRACTICE	OH	OVERHEAD UTILITY
BOP	BEGINNING OF PROJECT, BOTTOM OF PIPE	OHE	OVERHEAD ELECTIC
CC	CLEAR COVER	PG	PROFILE GRADE
C&G	CURB & GUTTER	PGL	PROFILE GRADE LINE
CI	CAST IRON	PSI	POUNDS PER SQUARE INCH
℄, CL	CENTERLINE	PVC	POLYVINYL CHLORIDE
CONC	CONCRETE	R	RADIUS
CONT	CONTINUOUS	REF	REFERENCE
CPEP	CORRUGATED POLYETHYLENE PIPE	REINF	REINFORCING
CF	CUBIC FOOT	ROW	RIGHT–OF–WAY
CY	CUBIC YARD	RT	RIGHT
DI	DUCTILE IRON	SCH	SCHEDULE
DIP	DUCTILE IRON PIPE	SDMH	STORM DRAIN MANHOLE
EA	EACH	SHLD	SHOULDER
EG	EXISTING GROUND	SPA	SPACING
EL, ELEV	ELEVATION	SS	SANITARY SEWER
EOP	END OF PROJECT, EDGE OF PAVEMENT	ST	STREET
ESCP	EROSION AND SEDIMENT CONTROL PLAN	STA	STATION
FG	FINISHED GRADE	STD	STANDARD
FT	FEET, FOOT	SY	SQUARE YARD
GV	GATE VALVE	TBC	TOP BACK OF CURB
HDPE	HIGH DENSITY POLYETHYLENE	TYP	TYPICAL
HMA	HOT MIX ASPHALT	VB	VALVE BOX
IN	INCH	VPC	VERTICAL POINT OF CURVATURE
INV	INVERT	VPI	VERTICAL POINT OF INTERSECTION
KPU	KETCHIKAN PUBLIC UTILITIES	VPT	VERTICAL POINT OF TANGENCY
LF	LINEAR FOOT	W	WATER
LONGIT	LONGITUDINAL	WWF	WELDED WIRE FABRIC
LT	LEFT		
LVC	LENGTH OF VERTICAL CURVE		
MAX	MAXIMUM		
ME	MATCH EXISTING		
MIN	MINIMUM		
MIPT	MALE IRON PIPE THREAD		
MJ	MECHANICAL JOINT		

PLANS DEVELOPED BY:
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Cert. of Auth. No.
AECC111

STATE OF ALASKA 49TH
Joseph M Horazdovsky
CE 135639
8/1/2024
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

LAYOUT SCHEMATIC AND GENERAL NOTES

FILE | DATE | LAYOUT | A2 | DESIGNED | JMH | CHECKED | JLO | DRAFTED | AJB, JTH
8/2/24
Z:\projects\3600.00.001_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\LDCAD\Sayles-Gorge\A0070-A2.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	A3	A4

	RECOVERED	SET
BLM MONUMENT	✠	
GLO MONUMENT	✠	
USC&GS MONUMENT	▲	
PRIMARY MONUMENT	✠	✠
CENTERLINE MONUMENT IN CASING	⊕	◒
PRIMARY R.O.W. MONUMENT	⊕	◒
BEARING OBJECT	✳	
MISCELLANEOUS MONUMENT	⊗	
LINE OF SIGHT MONUMENT		⊕
CONCRETE R.O.W. MONUMENT	■	
BENCHMARK		BM
REBAR AND CAP	⊙	⊙
REBAR	⊕	●
IRON PIPE	◉	
PK NAIL		▽
SPIKE		✕
HUB AND TACK		⊡
CONSTRUCTION CENTERLINE	5+00	
MICELLANEOUS CENTERLINE	10+00	
STATION EQUATION	"L"48+97.23 POT BK= "O"48+97.23 PC AHD	
PROJECT RIGHT-OF-WAY LINE	ROW	
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE	C/A	
EXISTING EASEMENT LINE		
PROPOSED EASEMENT LINE		
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE	T. 2 N. / T. 1 N. — T. 1 E. / T. 2 E.	
MEANDER LINE	M1 M2 M3	

	EXISTING	PROPOSED
SANITARY SEWER (FLOW DIRECTION →)	SS	SS
FUEL LINE	O	O
GAS LINE	G	G
WATER LINE	W	W
METER, VALVE, FIRE HYDRANT	W	W
STORM DRAIN (FLOW DIRECTION →)	SD	SD
FIBER OPTIC LINE		
DIRECT BURIAL TELEPHONE CABLE	T	T
DIRECT BURIAL ELECTRIC CABLE	E	E
ELECTRIC LINE (OVERHEAD)		
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
TELEPHONE DUCT	T	T
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE	MH	MH
SANITARY SEWER CLEAN OUT		
SPECIAL DITCH CENTERLINE		
HIGH TIDE LINE	HTL	HTL
GRAVEL EDGE		
DRIVEWAY REGRADING		
RIPRAP		
BRIDGE/CONCRETE		

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE		
CURB AND GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
CULVERT PIPE		
SIGN		
MAILBOX	MB	MB
RAILROAD TRACKS		
RAILROAD DEVICES	CROSS-BUCK, FLASHING LIGHT	CANTILEVER, SWITCH
TREE LINE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS	H = HOUSE, G = GARAGE, M = MERCHANT/STORE, B = BARN, S = SHED, P = PRIVY, SS = SERVICE STATION, W = WAREHOUSE	
POST OR BOLLARD		
WELL OR MONITORING WELL	W, MW	
SEPTIC PIPE	S	
FUEL TANK FILL PIPE/VENT	P	
SATELLITE DISH	SAT. DISH	
TEST HOLE	TH	
CONIFER TREE		
DECIDUOUS TREE		
GRAVE		
THERMOSIPHON		
PARKING METER		
VEHICLE PLUG-IN		
DELINEATOR/GUIDE MARKER		

	EXISTING	PROPOSED
JUNCTION BOX, TYPE IA		5
JUNCTION BOX, TYPE II		6
JUNCTION BOX, TYPE III		3
SIGNAL FACE, VEHICULAR	42	42
SIGNAL FACE, BACKPLATE	42	42
SIGNAL FACE, LEFT TURN, BACKPLATE	43	43
SIGNAL FACE, PEDESTRIAN		
LOOP DETECTOR	33	73
VIDEO DETECTOR	2	2
RADAR DETECTOR	4	4A
OPTICOM DETECTOR	1	1
PEDESTRIAN PUSH BUTTON	1	1
SIGNAL POST W/O MAST ARM		1
SIGNAL POLE W/MAST ARM		4
SIGNAL CONTROLLER		
LOAD CENTER		
LUMINAIRE		12
RIGID METAL CONDUIT		

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

LEGEND / SYMBOLS

FILE Z:\projects\3630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-A3.dwg | 8/2/24 | LAYOUT A3 | DESIGNED JMH | CHECKED JLO | DRAFTED AJB, JTH | DATE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	A4	A4

DATE | FILE | 1 | LAYOUT | 7/25/24 | DESIGNED | JMH | CHECKED | JLO | DRAFTED | AJB, JTH

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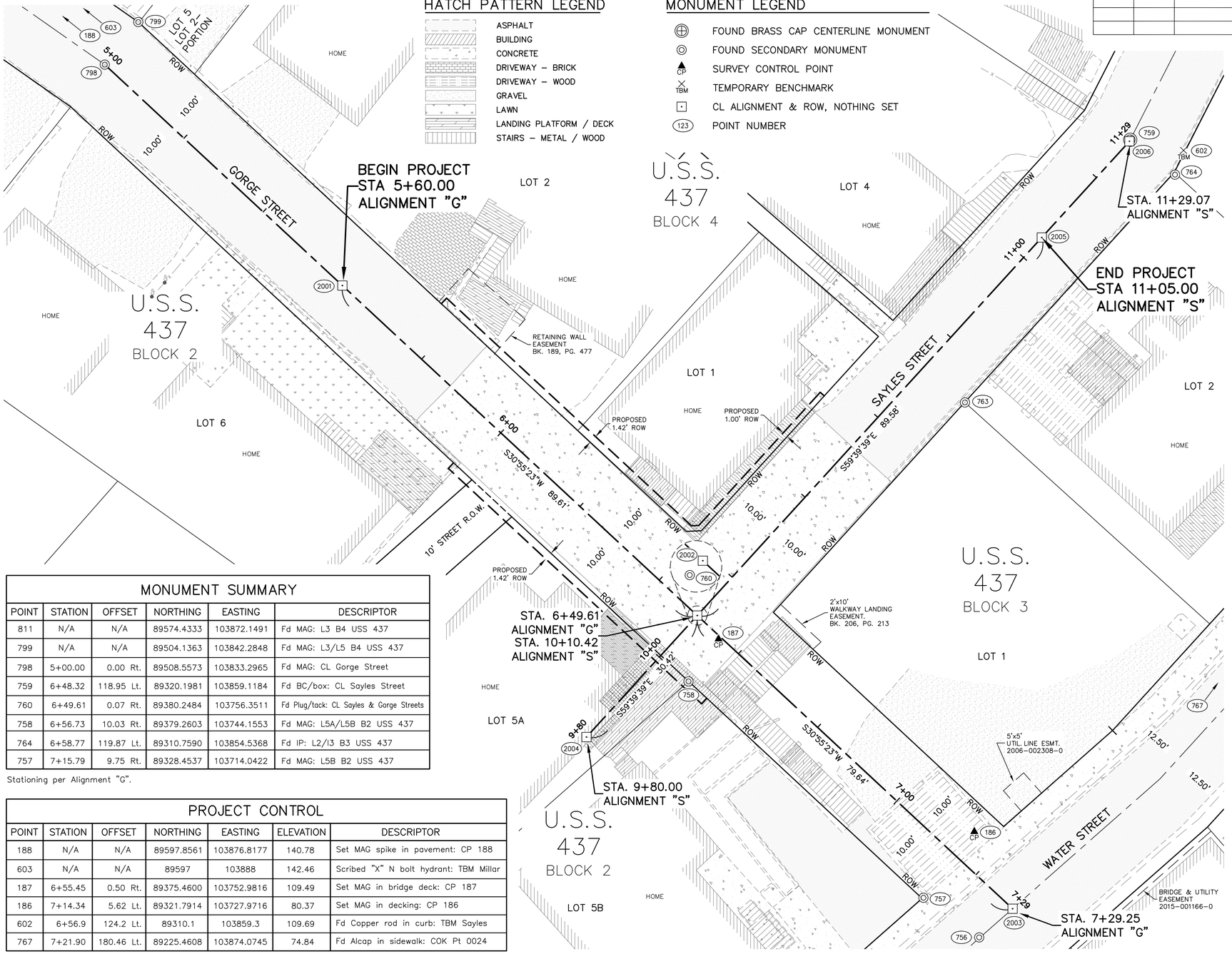

NOTES

1. Information provided here is based on the field survey performed by R&M Consultants, Inc., in April 2019. The purpose of this survey was to provide existing site information for engineers to design a replacement for Sayles Street – Gorge Street Viaduct. This survey was performed concurrent with the Water Street Trestle No. 1 replacement survey. Both these surveys build on the 2011–2013 bridge replacement survey performed by R&M for Water Street Trestle No. 2..
2. Title reports were outside the scope of this Control Sheet. Mapping here is based on cursory research performed in 2019. Other easements and deeded lot reconfigurations may exist.
3. Reference:
   a. DOT&PF Survey Control Sheets, KTN–Water Street, Rehabilitation/Replacement of Off System City Bridges, Project #69534 (2015).
   b. Record of Survey plat 2013–15.
   c. Plat V1–30
   d. Plat V1–100
   e. Plat V1–108
   f. U.S. Survey 437
   g. U.S. Survey 1378

HORIZONTAL CONTROL STATEMENT

Control Methodology:
Primary horizontal control was established using Static GPS techniques with Trimble dual frequency receivers. GPS vectors were adjusted by simultaneous least squares methods using Trimble Business Center software. All vectors were constrained to DOT&PF Control Stations #1902 and #16. Reference: *DOT&PF Survey Control Sheets, KTN–Water Street, Rehabilitation/Replacement of Off System City Bridges, Project #69534* (2015).

Coordinate System:
This project is located entirely within the KTN–3RD_AVE/TONGASS_AVE coordinate system, a U.S. Survey foot, local grid coordinate system developed by the Alaska DOT&PF for the Ketchikan area. All measurements, dimensions, coordinates and elevations are expressed in U.S. Survey feet unless otherwise noted.

Basis of Coordinates:
Basis of Coordinates is Station "TBM–66", a 3" DOT&PF brass disk set flush in a rock outcrop along the south side of 3rd Avenue Extension. Said station has KTN–3RD_AVE/TONGASS_AVE coordinates of 89745.1673 N, 104488.6036 E. Ref: Pt. #1902: DOT&PF spreadsheet: Tongass_All–Fields.xlsx.
TBM–66 (#1902) a.k.a.: DOT&PF #92 & DOT&PF #66.

Basis of Bearings:
Basis of Bearings is the "Ketchikan Gateway Borough Control Network of 1984" (KGBCN84) NAD27 bearing between monuments "J" and "I" (KGBCN84 pt. nos. 1014 & 1015). Monuments "J" and "I" are Tongass Avenue monuments originally depicted on "Coordinate Map of Ketchikan, Alaska", Plat V1–112. Said KGBCN84 NAD27 bearing between monuments "J" and "I" is S88°29'20"W.

Translation Parameters:
To convert Alaska State Plane Zone 1, NAD83(CORS96)(EPOCH: 2003.0000), U.S Survey Feet coordinates to the local project U.S. Survey Feet coordinates:
Step 1: Scale by 1.000099310 (1/.9999007) (base point 0,0).
Step 2: Rotate –00°00'18" (base point 0,0).
Step 3: Translate using –1199866.83352 N, –3000134.77840 E.
To convert local project coordinates to Alaska State Plane Zone 1, NAD83(CORS96)–(EPOCH: 2003.0000), U.S. Survey Feet coordinates:
Step 1: Scale by .9999007 (base point 0,0).
Step 2: Rotate +00°00'18" (base point 0,0).
Step 3: Translate using +1199485.89702 N, +2999941.55133 E.

VERTICAL CONTROL STATEMENT

Basis of Vertical Control:
Basis of Vertical Control is KGBCN84. Elevations are based on vertical control established by R&M in 2011. Reference: *DOT&PF Survey Control Sheets, KTN–Water Street, Rehabilitation/Replacement of Off System City Bridges, Project #69534* (2015).

Elevations were transferred to primary horizontal control and temporary benchmarks using differential levels. Topography and planimetrics were measured using optical instrumentation and trigonometric methods.

SURVEYOR'S CERTIFICATE

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska, and that this plat was made by me or under my direct supervision. I declare that this plat is based on information compiled from record data and controlled by recovered monuments, and that all dimensions and other details are correct.

Randal H. Brinker — 7/25/24

RANDAL H. BRINKER, L.S. 8852 — Date

MONUMENT SUMMARY

POINT	STATION	OFFSET	NORTHING	EASTING	DESCRIPTOR
811	N/A	N/A	89574.4333	103872.1491	Fd MAG: L3 B4 USS 437
799	N/A	N/A	89504.1363	103842.2848	Fd MAG: L3/L5 B4 USS 437
798	5+00.00	0.00 Rt.	89508.5573	103833.2965	Fd MAG: CL Gorge Street
759	6+48.32	118.95 Lt.	89320.1981	103859.1184	Fd BC/box: CL Sayles Street
760	6+49.61	0.07 Rt.	89380.2484	103756.3511	Fd Plug/tack: CL Sayles & Gorge Streets
758	6+56.73	10.03 Rt.	89379.2603	103744.1553	Fd MAG: L5A/L5B B2 USS 437
764	6+58.77	119.87 Lt.	89310.7590	103854.5368	Fd IP: L2/I3 B3 USS 437
757	7+15.79	9.75 Rt.	89328.4537	103714.0422	Fd MAG: L5B B2 USS 437

Stationing per Alignment "G".

PROJECT CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTOR
188	N/A	N/A	89597.8561	103876.8177	140.78	Set MAG spike in pavement: CP 188
603	N/A	N/A	89597	103888	142.46	Scribed "X" N bolt hydrant: TBM Millar
187	6+55.45	0.50 Rt.	89375.4600	103752.9816	109.49	Set MAG in bridge deck: CP 187
186	7+14.34	5.62 Lt.	89321.7914	103727.9716	80.37	Set MAG in decking: CP 186
602	6+56.9	124.2 Lt.	89310.1	103859.3	109.69	Fd Copper rod in curb: TBM Sayles
767	7+21.90	180.46 Lt.	89225.4608	103874.0745	74.84	Fd Alcap in sidewalk: COK Pt 0024

Stationing per Alignment "G".

ALIGNMENT "G"

POINT	STATION	OFFSET	NORTHING	EASTING	DESCRIPTOR
798	5+00.00	0.00 Rt.	89508.5573	103833.2965	Fd MAG: CL Gorge Street
2001	5+60.00	0.00 Rt.	89457.0859	103802.4633	Nothing set: BOP Gorge centerline
2002	6+49.61	0.00 Rt.	89380.2121	103756.4132	Nothing set: CL SI Gorge & Sayles
2003	7+29.25	0.00 Rt.	89311.8964	103715.4898	Nothing set: CL SI Gorge & Water

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10 ft.

ALIGNMENT "S"

POINT	STATION	OFFSET	NORTHING	EASTING	DESCRIPTOR
2004	9+80.00	0.00 Rt.	89395.5763	103730.1616	Nothing set: CL Sayles extended
2002	10+10.42	0.00 Rt.	89380.2121	103756.4132	Nothing set: CL SI Gorge & Sayles
2005	11+05.00	0.00 Rt.	89332.4367	103838.0430	Nothing set: EOP CL Sayles
2006	11+29.07	0.00 Rt.	89320.2800	103858.8142	Nothing set: CL Sayles

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STATE OF ALASKA 49TH — Randal H. Brinker LS 8852 7/25/24 — Registered Professional Land Surveyor

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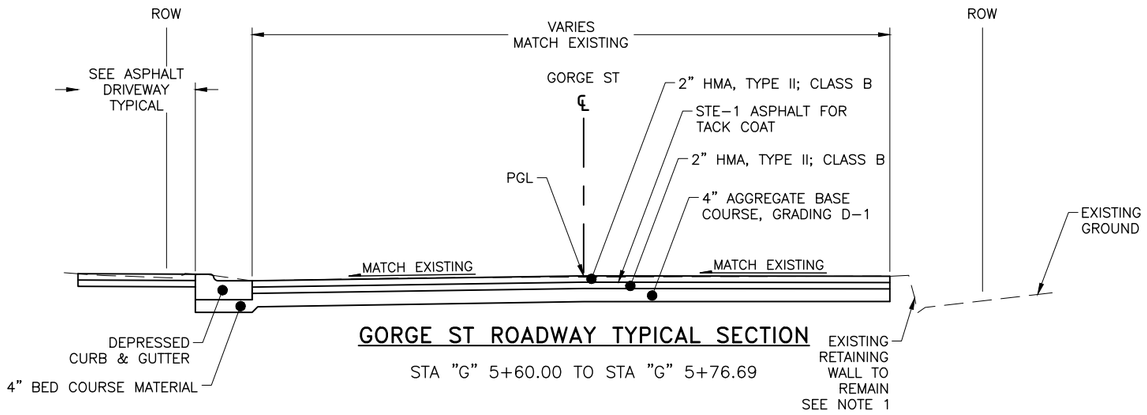
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

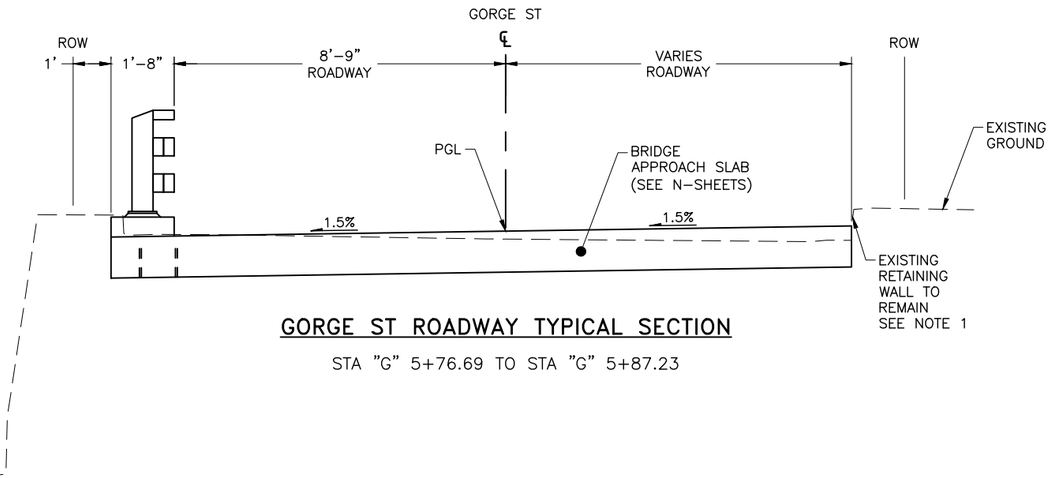
SURVEY CONTROL SHEET

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	B1	B3



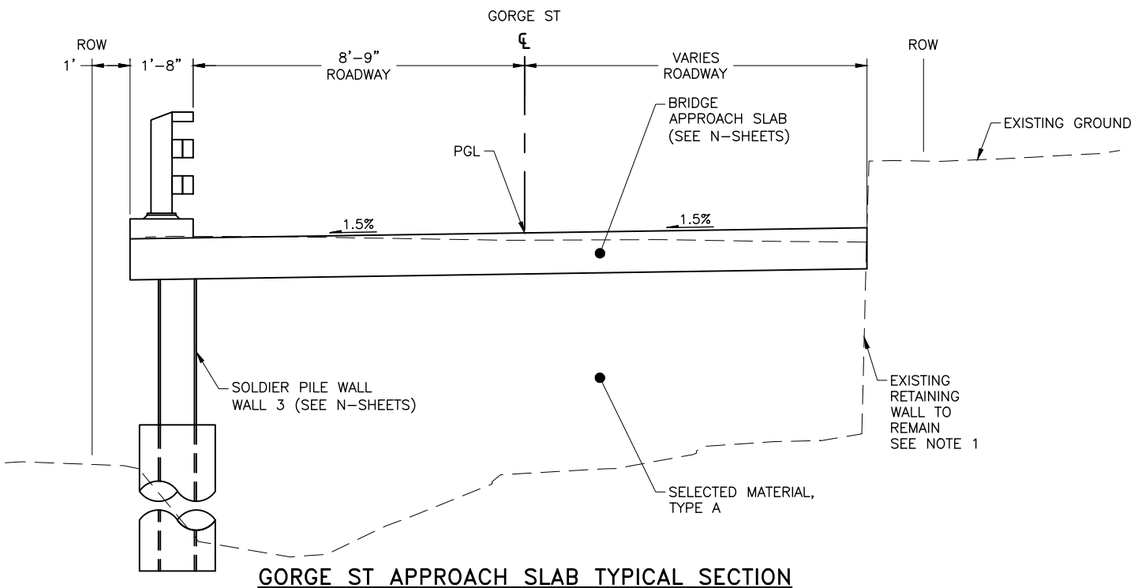
GORGE ST ROADWAY TYPICAL SECTION

STA "G" 5+60.00 TO STA "G" 5+76.69



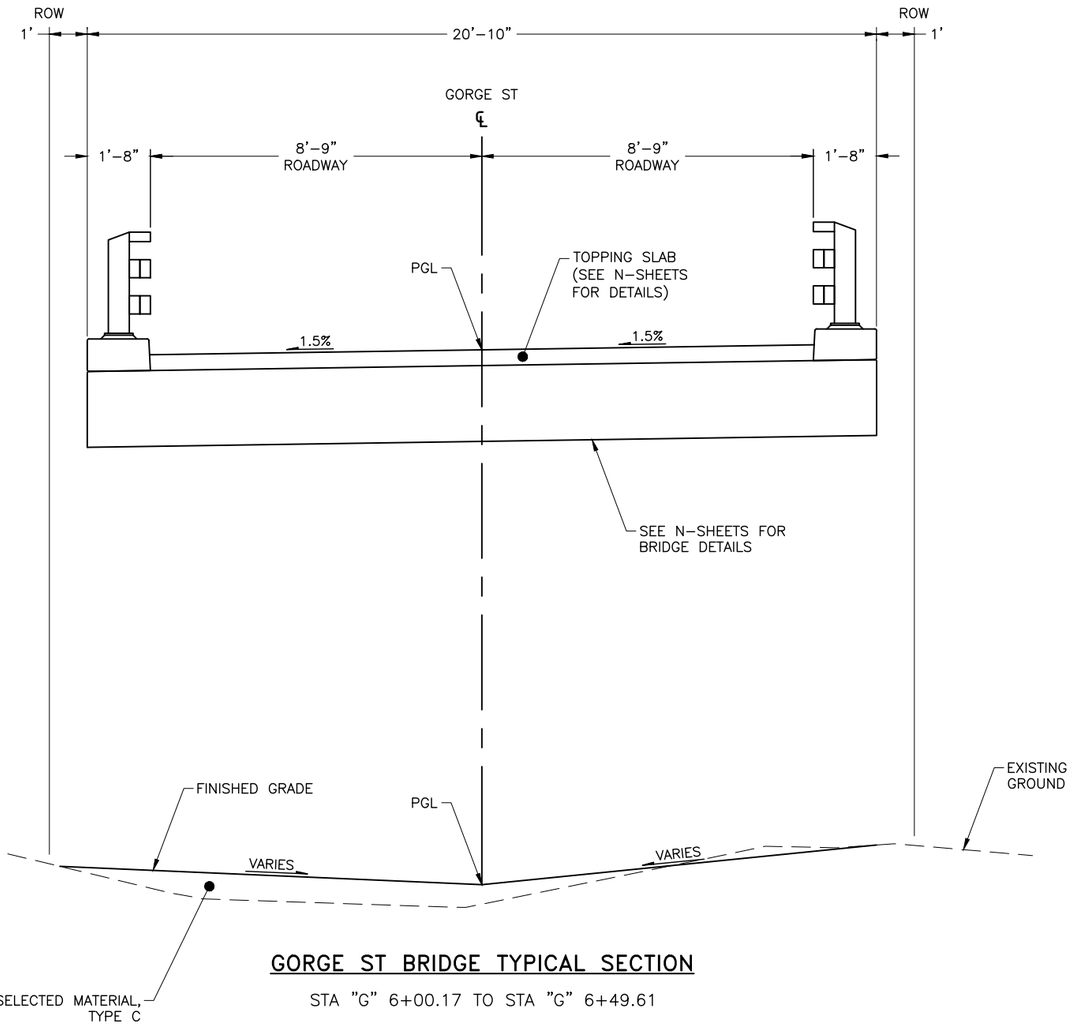
GORGE ST ROADWAY TYPICAL SECTION

STA "G" 5+76.69 TO STA "G" 5+87.23



GORGE ST APPROACH SLAB TYPICAL SECTION

STA "G" 5+87.23 TO STA "G" 6+00.17



GORGE ST BRIDGE TYPICAL SECTION

STA "G" 6+00.17 TO STA "G" 6+49.61

NOTES:

1. USE CAUTION WHEN FILLING AND COMPACTING ADJACENT TO EXISTING RETAINING WALLS TO AVOID DAMAGING THEM.

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8/2/2024
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

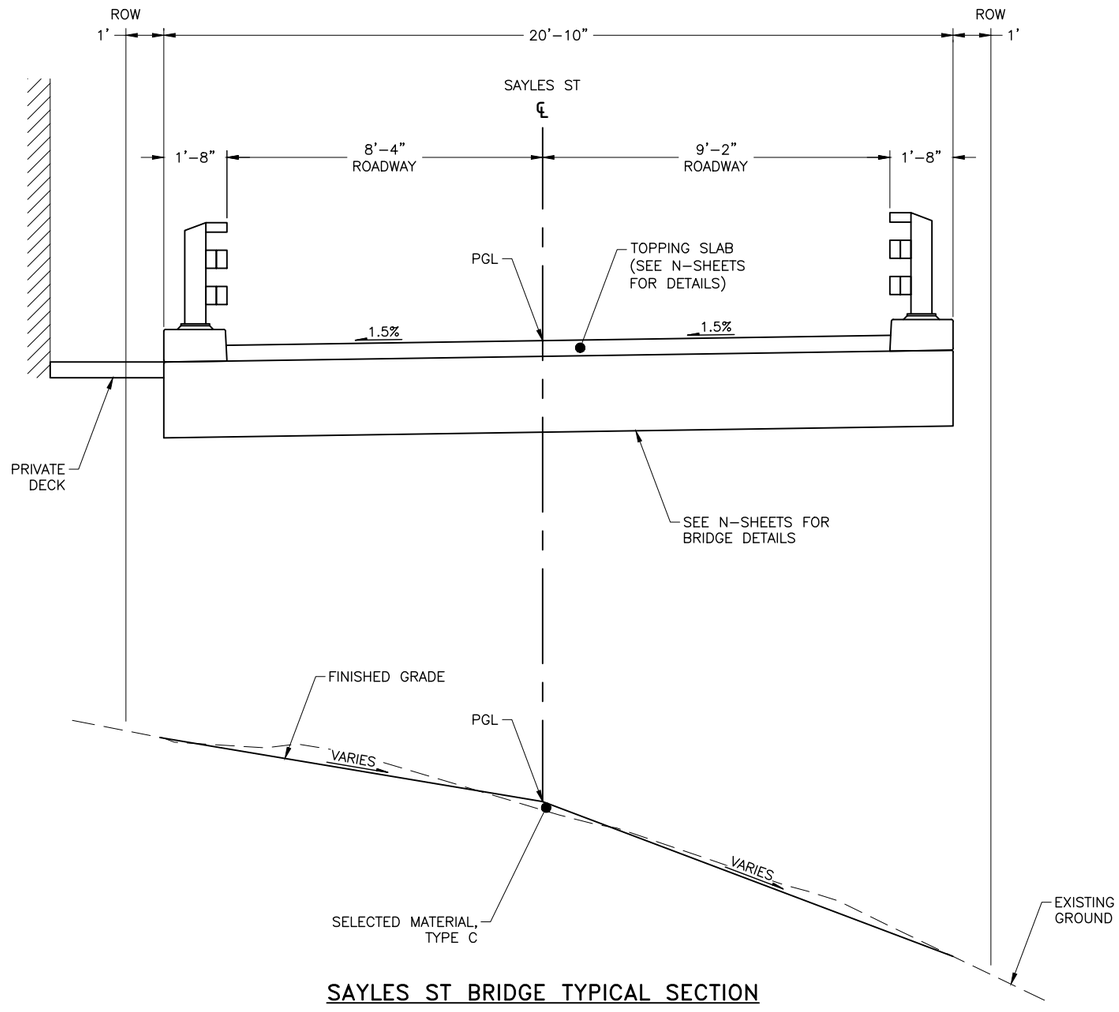
KTN: SAYLES/GORGE ST. VIADUCT
(1841) IMPROVEMENTS

TYPICAL SECTIONS

DATE | 8/2/24 | LAYOUT | B1 | DESIGNED | JMH | CHECKED | JLO | DRAFTED | AJB, JTH

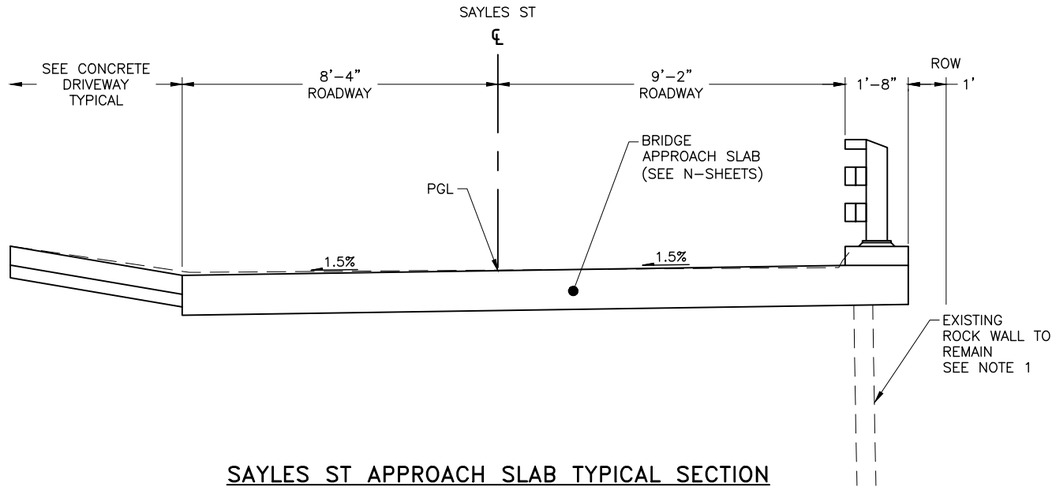
FILE Z:\projects\0300.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\VCAD\Sayles-Gorge\0070-B1.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	B2	B3



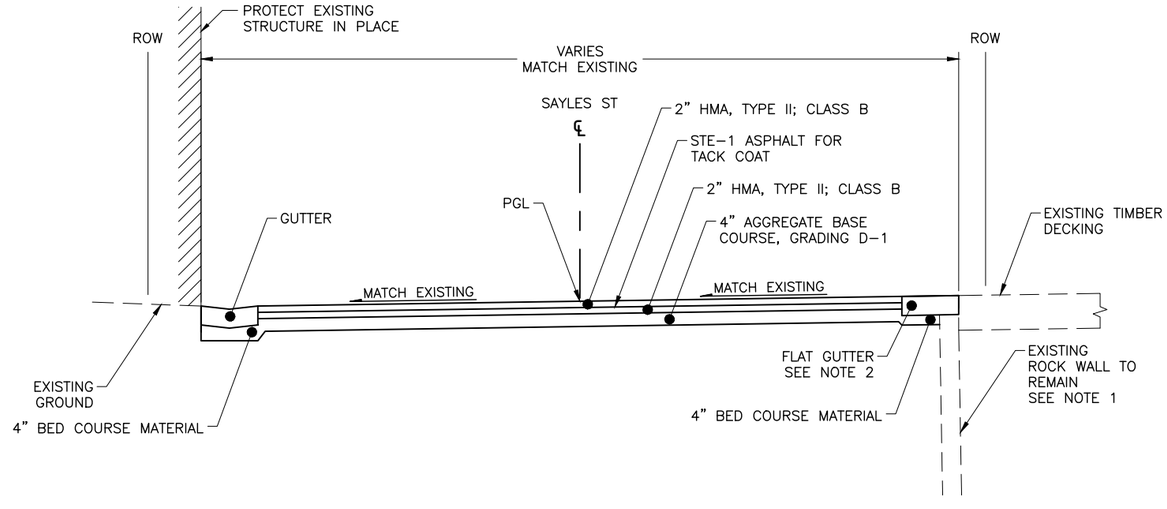
SAYLES ST BRIDGE TYPICAL SECTION

STA "S" 10+10.42 TO STA "S" 10+48.91



SAYLES ST APPROACH SLAB TYPICAL SECTION

STA "S" 10+48.91 TO STA "S" 10+76.41



SAYLES ST ROADWAY TYPICAL SECTION

STA "S" 10+76.41 TO STA "S" 11+05.00

NOTES:

1. USE CAUTION WHEN FILLING AND COMPACTING ADJACENT TO EXISTING ROCK WALLS TO AVOID DAMAGING THEM.
2. EXISTING ROCK WALL TO BE SAWCUT AND REMOVED AS NEEDED TO INSTALL FLAT GUTTER.

PLANS DEVELOPED BY:
R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, Alaska 99507
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Cert. of Auth. No.
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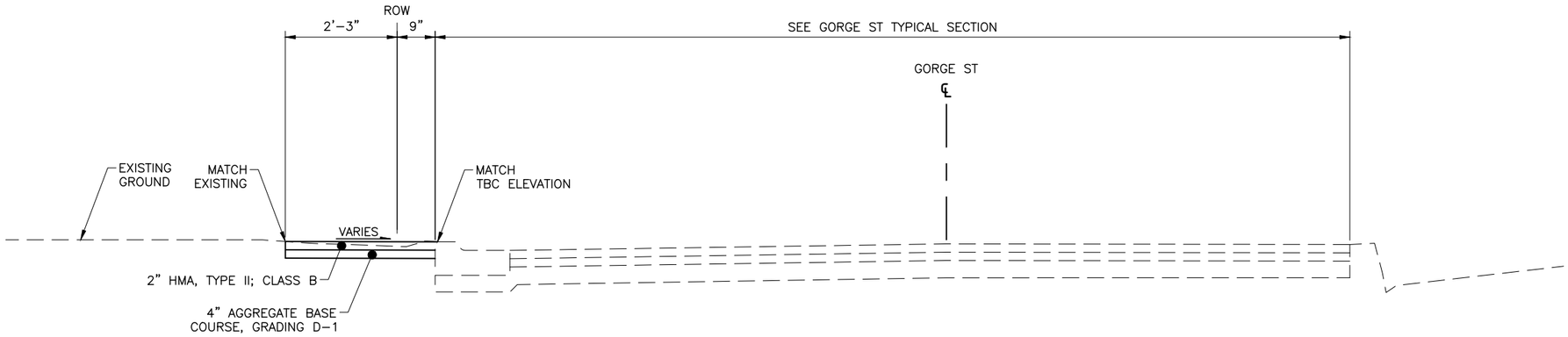
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

TYPICAL SECTIONS

FILE | Z:\project\3830.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-01.dwg
DATE | 8/2/24
LAYOUT | B2
DESIGNED | JMH
CHECKED | JLO
DRAFTED | AJB, JTH

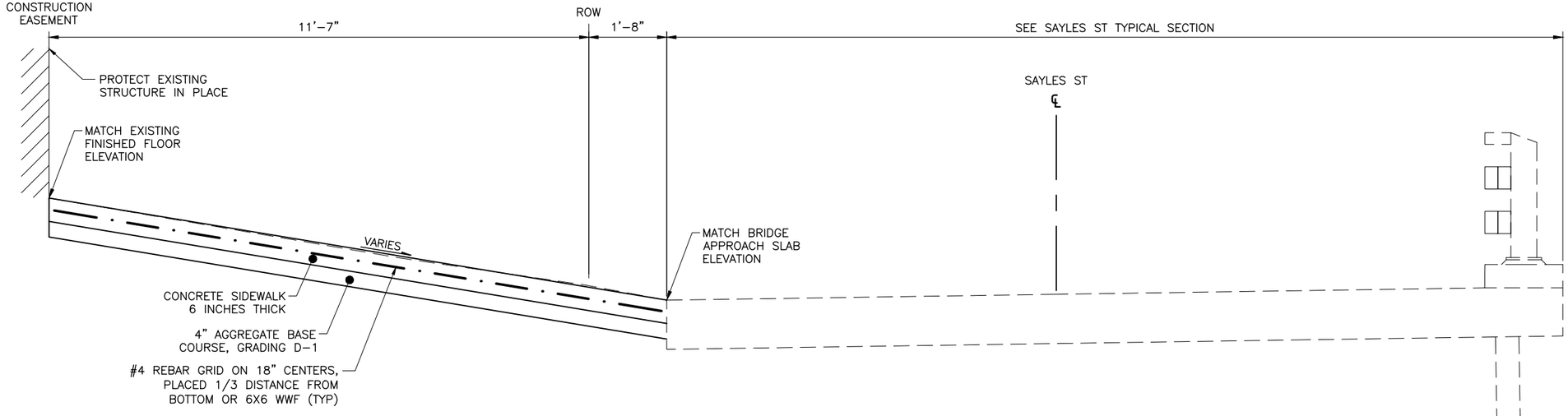
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	B3	B3



ASPHALT DRIVEWAY TYPICAL

STREET ADDRESS: 308 GORGE STREET



CONCRETE DRIVEWAY TYPICAL

STREET ADDRESS: 1270 SAYLES STREET

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FILE | Z:\projects\0630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\VCAD\Sayles-Gorge\0003225-B1.dwg
DATE | 8/2/24
LAYOUT | B3
DESIGNED | JMH
CHECKED | JLO
DRAFTED | AJB, JTH

Addendum #1 :Attachment #2

NO.	DATE	REVISION
1	10/23/24	UPDATE BRIDGE PAY ITEMS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	C1	C2

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	QUANTITY
201.0009.0000	CLEARING AND GRUBBING	LUMP SUM	ALL REQUIRED
201.2001.0000	INVASIVE PLANT SPECIES CONTROL, REMOVAL, AND DISPOSAL	SQUARE YARD	250
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED
202.0002.0000	REMOVAL OF PAVEMENT	SQUARE YARD	160
202.0009.0000	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	18
202.0010.0000	SINGLE MAIL BOX INSTALLATION	EACH	3
202.0020.0000	REMOVAL OF SINGLE MAIL BOX	EACH	3
202.0023.0000	REMOVAL OF BRIDGE NO. 1841	LUMP SUM	ALL REQUIRED
202.2040.0000	RESTORATION OF PRIVATE AND PUBLIC PROPERTY	CONTINGENT SUM	ALL REQUIRED
203.0005.000A	BORROW, TYPE A	CUBIC YARD	80
203.0019.0000	UNCLASSIFIED EXCAVATION	LUMP SUM	ALL REQUIRED
205.0001.0000	EXCAVATION FOR STRUCTURES	CUBIC YARD	44
205.0004.0000	POROUS BACKFILL MATERIAL	CUBIC YARD	86
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	40
401.0001.002B	HMA, TYPE II; CLASS B	TON	20
401.0004.5828	ASPHALT BINDER, GRADE PG 58-28	TON	1
501.0001.0000	CLASS A CONCRETE	LUMP SUM	ALL REQUIRED
501.0002.0000	CLASS A-A CONCRETE	LUMP SUM	ALL REQUIRED
501.0007.0000	PRECAST CONCRETE MEMBER, 19'-7" SOLID SLAB	EACH	4
501.0007.0000	PRECAST CONCRETE MEMBER, 26'-1" VOIDED SLAB	EACH	5
501.0007.0000	PRECAST CONCRETE MEMBER, 37'-9" VOIDED SLAB	EACH	5
501.0009.0000	CLASS DS CONCRETE, 24 INCH SHAFT	LINEAR FOOT	136
503.0001.0000	REINFORCING STEEL	LUMP SUM	ALL REQUIRED
503.0002.0000	EPOXY-COATED REINFORCING STEEL	LUMP SUM	ALL REQUIRED
504.0002.0000	STRUCTURAL STEEL	POUND	8,395
505.0005.0001	FURNISH STRUCTURAL STEEL H-PILES, W12X106	LINEAR FOOT	345
506.0001.0000	TREATED TIMBER STAIRS	LUMP SUM	ALL REQUIRED
507.0001.0003	STEEL BRIDGE RAILING, 3-TUBE	LINEAR FOOT	227
515.0001.0000	DRILLED SHAFT 24 INCH DIAMETER	LUMP SUM	ALL REQUIRED
515.0002.0000	UNCLASSIFIED SHAFT EXCAVATION, 24 INCH DIAMETER	LINEAR FOOT	165
515.0003.0000	SPECIAL SHAFT EXCAVATION, 24 INCH DIAMETER	LINEAR FOOT	168
515.0004.0000	SHAFT CASING, 24 INCH DIAMETER	LINEAR FOOT	116
603.0017.0024	PIPE 24 INCH CASING	LINEAR FOOT	30
603.0021.0018	CORRUGATED POLYETHYLENE PIPE 18 INCH	LINEAR FOOT	120
603.2023.0006	PVC PIPE, 6" SCH40	LINEAR FOOT	88
604.0002.0000	SANITARY SEWER MANHOLE	EACH	1
604.0005.000A	INLET, TYPE A	EACH	4
604.0005.000D	INLET, TYPE D	EACH	1
604.0010.0000	RECONSTRUCT INLET	EACH	1
608.0001.0006	CONCRETE SIDEWALK, 6 INCHES THICK	SQUARE YARD	20
609.0002.0001	CURB AND GUTTER, TYPE 1	LINEAR FOOT	100

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(1841) IMPROVEMENTS

ESTIMATE OF QUANTITIES

FILE | Z:\proj\act\3630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\MCAD\Sayles-Gorge\00070-C1.dwg
DATE | 10/23/24
LAYOUT | C1
DESIGNED | JMH
CHECKED | JLO
DRAFTED | AJB, JTH

NO.	DATE	REVISION
1	10/23/24	UPDATE CASING PAY ITEMS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	C2	C2

DRAFTED	DESIGNED	CHECKED	LAYOUT	DATE
AJB, JTH	JMH	JLO	C2	10/23/24

FILE Z:\project\30830.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\30070-C1.dwg

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	QUANTITY
615.0001.0000	STANDARD SIGN	SQUARE FOOT	9
620.0001.0000	TOPSOIL	SQUARE YARD	390
626.0001.0008	SANITARY SEWER CONDUIT, 8 INCH PVC C900	LINEAR FOOT	32
626.0001.0008	SANITARY SEWER CONDUIT, 8 INCH PVC C900, INSULATED	LINEAR FOOT	88
626.0002.0000	SANITARY SEWER SERVICE CONNECTION	EACH	2
626.2003.0000	SANITARY SEWER CLEANOUT	EACH	1
626.2009.0000	SANITARY SEWER PIPE CASING, 16 INCH, HDPE, SDR 17	LINEAR FOOT	24
1 626.2009.0000	SANITARY SEWER PIPE CASING, 20 INCH, HDPE, SDR 17	LINEAR FOOT	6
627.0003.0000	INSTALL VALVE BOX	EACH	2
627.0008.0000	WATER SERVICE CONNECTION	EACH	5
627.0009.0008	GATE VALVE, 8 INCH	EACH	2
627.2012.0008	HDPE WATER CONDUIT, 8-INCH, SDR 11	LINEAR FOOT	82
627.2012.0008	HDPE WATER CONDUIT, 8-INCH, SDR 11, INSULATED	LINEAR FOOT	95
627.2021.0000	WATER PIPE CASING, 12 INCH, HDPE, SDR 17	LINEAR FOOT	49
1 627.2021.0000	WATER PIPE CASING, 20 INCH, HDPE, SDR 17	LINEAR FOOT	11
631.0001.0002	GEOTEXTILE, DRAINAGE, CLASS 2	SQUARE YARD	50
635.0002.0000	INSULATION BOARD	SQUARE FOOT	330
639.0001.0000	DRIVEWAY	EACH	2
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
640.0004.0000	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQUIRED
642.0001.0000	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
643.0002.0000	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643.0003.0000	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
643.0025.0000	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
643.2005.0000	PUBLIC INFORMATION PROGRAM	LUMP SUM	ALL REQUIRED
644.0001.0000	FIELD OFFICE	LUMP SUM	ALL REQUIRED
644.0006.0000	VEHICLE	LUMP SUM	ALL REQUIRED
644.2004.0000	ENGINEERING COMMUNICATIONS	CONTINGENT SUM	ALL REQUIRED
644.2008.0000	WEB-BASED SUBMITTALS	LUMP SUM	ALL REQUIRED
645.0001.0000	TRAINING PROGRAM, 1 TRAINEES / APPRENTICES	LABOR HOURS	500
658.0001.0000	EROSION, SEDIMENT, AND POLLUTION CONTROL WITHOUT CGP COVERAGE	LUMP SUM	ALL REQUIRED
658.0002.0000	ESCP CHANGES BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
680.2000.0000	TELECOMMUNICATIONS UTILITY RELOCATION - PERMANENT INSTALLATION	LUMP SUM	ALL REQUIRED
680.2000.0000	TELECOMMUNICATIONS UTILITY RELOCATION - TEMPORARY INSTALLATION	LUMP SUM	ALL REQUIRED
684.2000.0000	TELEVISION UTILITY RELOCATION - PERMANENT INSTALLATION	LUMP SUM	ALL REQUIRED
684.2000.0000	TELEVISION UTILITY RELOCATION - TEMPORARY INSTALLATION	LUMP SUM	ALL REQUIRED
687.2000.0000	POWER UTILITY RELOCATION - PERMANENT INSTALLATION	LUMP SUM	ALL REQUIRED
687.2000.0000	POWER UTILITY RELOCATION - TEMPORARY INSTALLATION	LUMP SUM	ALL REQUIRED

TABLE OF ESTIMATING FACTORS

ITEM NO.	ITEM	ESTIMATING FACTOR
203.0005.000A	BORROW, TYPE A	145 LB/CF
205.0004.0000	POROUS BACKFILL MATERIAL	100 LB/CF
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	145 LB/CF
401.0001.002B	HMA, TYPE II; CLASS B	150 LB/CF
401.0004.5258	ASPHALT BINDER, GRADE PG 52-58	5% OF 401.0001.002B
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	0.000334 TON/SY

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(1841) IMPROVEMENTS

ESTIMATE OF QUANTITIES

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			ALASKA	0003225/SFHWY00070	2024	D1	D4

201.0009.0000 CLEARING AND GRUBBING

SHEET	START STATION	END STATION	OFFSET	AREA (SY)	REMARKS
F2–F3	BOP	EOP	RT/CL	386.9	

202.0001.0000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

SHEET	START STATION	OFFSET	END STATION	OFFSET	LENGTH (LF)	AREA (SF)	REMARKS
F1	"G" 5+61.9	12.1 LT	"G" 5+76.1	11.9 LT	14.1	42.4	DRIVEWAY
F1	"G" 5+65.8	2.6 RT	"G" 5+87.2	0.5 RT	21.6	–	WATER
F1	"G" 5+66.0	3.4 LT	"G" 6+79.9	4.5 LT	52.3	–	SANITARY SEWER
F1	"G" 5+69.2	8.1 RT	"G" 5+69.5	2.3 RT	5.8	–	WATER
F1	"G" 5+85.3	0.8 RT	"G" 5+94.8	6.6 LT	11.9	–	STORM DRAIN
F1	"G" 5+85.3	0.8 LT	–	–	–	–	STORM DRAIN INLET
F1	"G" 5+87.2	6.7 LT	"G" 6+42.7	6.1 LT	55.6	–	STORM DRAIN
F1	"G" 6+08.6	10.0 RT	"G" 6+12.4	4.4 LT	14.9	–	SANITARY SEWER
F1	"G" 6+22.2	14.1 RT	–	–	–	–	FUEL TANK
F1	"G" 6+24.7	6.9 RT	"G" 6+61.4	2.3 LT	39.3	–	STORM DRAIN
F1	"G" 6+38.7	1.2 LT	"G" 6+40.3	1.0 RT	2.7	–	STORM DRAIN
F1	"G" 6+38.9	7.1 LT	"G" 6+40.3	3.4 LT	5.3	–	STORM DRAIN
F1	"G" 6+38.9	7.1 LT	"G" 6+61.4	2.8 LT	23.0	–	STORM DRAIN
F1	"G" 6+38.8	7.7 LT	"G" 6+40.5	7.9 LT	1.7	–	STORM DRAIN
F1	"G" 6+38.8	7.7 LT	"G" 6+61.4	3.4 LT	23.1	–	STORM DRAIN
F1	"G" 6+42.0	10.9 LT	"G" 6+61.4	3.9 LT	22.4	–	STORM DRAIN
F1	"G" 6+60.6	–	"G" 6+96.6	–	–	272.4	STAIRS
F1	"S" 10+36.8	9.2 LT	"S" 10+37.5	12.8 LT	3.6	–	WATER
F1	"S" 10+51.3	–	–	–	–	–	ROCK WALL FOR WATER UTILITY WORK
F1	"S" 10+52.8	0.9 LT	"S" 10+85.5	CL	32.8	–	WATER
F1	"S" 10+56.5	0.7 LT	–	–	–	–	WATER VALVE
F1	"G" 5+65.8	0.5 LT	"G" 5+87.2	0.5 RT	21.6	–	WATER

202.0002.0000 REMOVAL OF PAVEMENT

SHEET	START STATION	END STATION	AREA (SY)	REMARKS
F1	"G" 5+60.0	"G" 5+87.2	54.3	
F1	"S" 10+52.8	"S" 11+05.0	99.3	
TOTAL:			153.6	
ROUNDED TOTAL:			160 SY	

202.0009.0000 REMOVAL OF CURB AND GUTTER

SHEET	START STATION	END STATION	OFFSET	LENGTH (LF)	REMARKS
F1	"G" 5+60.0	"G" 5+77.3	LT	17.8	
TOTAL:				17.8	
ROUNDED TOTAL:				18 LF	

202.0010.0000, 202.0020.0000 SINGLE MAIL BOX SUMMARY

SHEET	STATION	OFFSET	202.0010.0000 SINGLE MAIL BOX INSTALLATION	202.0020.0000 REMOVAL OF SINGLE MAILBOX	REMARKS
F2	"G" 5+76.0	11.8 LT	1	1	
F2	"G" 6+37.4	11.1 RT	1	1	
F2	"G" 6+37.4	11.9 RT	1	1	
TOTAL:			3 EA	3 EA	

202.2040.0000 RESTORATION OF PRIVATE AND PUBLIC PROPERTY

SHEET	STATION	OFFSET	AREA (SF)	REMARKS
F2	"G" 6+52.9	RT	308.3	UPPER AND LOWER DECK/STAIRS, FUEL TANK FILL PIPE
F2	"S" 10+23.4	LT	145.9	UPPER AND LOWER DECK/STAIRS
F3	"S" 10+76.41	RT		MATCH TIMBER DECK RAILING TO BRIDGE RAILING

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SUMMARY TABLES

DESIGNED JMH | DRAFTED AJB, JTH | CHECKED JLO | LAYOUT D1 | DATE 8/2/24

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ALASKA	0003225/SFHWY00070	2024	D2	D4

603.0017.0024, 603.0021.0018, 603.2023.0006 STORM DRAIN PIPE SUMMARY

SHEET	NAME	INLET			OUTLET			SLOPE	603.0017.0024	603.0021.0018	603.2023.0006	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		PIPE 24 INCH, CASING	CORRUGATED POLYETHYLENE PIPE 18 INCH	PVC PIPE, 6" SCH40	
U4	P1-1	"G" 5+75.7	7.3 LT	115.98	"G" 6+18.5	6.6 LT	97.00	44.3%		46.8		
U4	UC-04	"G" 5+78.1	7.2 LT	114.65	"G" 6+02.3	6.9 LT	103.95	44.3%	26.4			
U4	P1-2	"G" 6+16.4	16.9 RT	100.68	"G" 6+18.5	6.6 LT	98.31	10.0%			23.8	
U4	P1-3	"G" 6+18.5	6.6 LT	96.50	"G" 6+36.9	6.3 LT	93.70	15.2%		18.6		
U4	P1-4	"G" 6+41.5	9.2 LT	103.75	"G" 6+36.9	6.3 LT	95.50	VARIES			23.5	MULTI-PIPE SYSTEM. BRIDGE DRAIN DOWNSPOUT. SEE N-SHEETS
U4	P1-5	"G" 6+36.9	6.3 LT	93.60	"G" 6+53.8	0.8 LT	89.70	21.9%		18.2		
U4	P1-6	"G" 6+59.7	32.8 RT	90.56	"G" 6+53.9	32.3 RT	90.50	1.0%			5.8	
U4	P1-7	"G" 6+53.9	32.3 RT	90.40	"G" 6+53.8	0.8 LT	89.10	3.9%			33.1	
U4	P1-8	"G" 6+53.8	0.8 LT	88.40	"G" 6+79.5	2.1 LT	78.70	37.7%		27.5		
TOTAL:									26.4	111.1	86.2	
ROUNDED TOTAL:									30 LF	120 LF	88 LF	

604.0005.000A, 604.0005.000D STORM DRAIN STRUCTURES

SHEET	NAME	604.0005.000A	604.0005.000D	STATION	OFFSET	TOP OF CASTING ELEVATION	TYPE OF CASTING	REMARKS
		INLET, TYPE A	INLET, TYPE D					
U4	S1-1	X		"G" 5+75.7	7.3 LT	120.12	HIGH CAPACITY FIELD INLET FRAME AND GRATE	18" SUMP
U4	S1-2	X		"G" 6+18.5	6.6 LT	100.52	FLAT LID	18" SUMP
U4	S1-3	X		"G" 6+36.9	6.3 LT	96.83	FLAT LID	18" SUMP
U4	S1-4	X		"G" 6+53.8	0.8 LT	92.96	FLAT LID	18" SUMP
U4	S1-5		X	"G" 6+53.9	32.3 RT	92.65	FLAT GRATE INLET	5" SUMP
TOTAL:		4 EA	1 EA					

604.0010.0000 RECONSTRUCT INLET

SHEET	STATION	OFFSET	REMARKS
U4	"G" 6+79.9	4.5 LT	
TOTAL:		1 EA	

604.0002.0000, 626.0002.0000, 626.2003.0000 SANITARY SEWER MANHOLE, SANITARY SEWER SERVICE CONNECTION, SANITARY SEWER CLEANOUT

STATION	OFFSET	604.0002.0000	626.0002.0000	626.2003.0000	REMARKS
		SANITARY SEWER MANHOLE	SANITARY SEWER SERVICE CONNECTION	SANITARY SEWER CLEANOUT	
"G" 5+66.0	3.4 LT	X			
"G" 6+08.5	2.4 LT		X		
"G" 6+24.5	2.9 LT		X		
"G" 6+79.8	4.5 LT			X	
TOTAL:		1 EA	2 EA	1 EA	

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49TH
for duty
Joseph M Horazdovsky
CE 13563
9/3/2024
REGISTERED PROFESSIONAL ENGINEER

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KTN: SAYLES/GORGE ST. VIADUCT
(1841) IMPROVEMENTS

SUMMARY TABLES

AJB, JTH | DRAFTED | JLO | CHECKED | JMH | DESIGNED | D2 | LAYOUT | 8/2/24 | DATE

FILE Z:\project\3000.00.001_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\ci\LIVCAD\Sayles-Gorge\000PD-01.dwg

NO.	DATE	REVISION
1	10/23/24	UPDATE CASING PAY ITEMS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	D3	D4

DRAFTED	AJB, JTH
CHECKED	JLO
DESIGNED	JMH
LAYOUT	D3
DATE	10/23/24
FILE	Z:\projects\0630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\1VACAD\Sayles-Gorge\00070-01.dwg

608.0001.0006 CONCRETE SIDEWALK, 6 INCHES THICK

SHEET	START STATION	END STATION	OFFSET	AREA (SY)	REMARKS
F3	"S" 10+53.1	10+71.2	LT	19.0	
TOTAL:				19.0	
ROUNDED TOTAL:				20 SY	

609.0002.0001 CURB AND GUTTER, TYPE 1

SHEET	START STATION	END STATION	OFFSET	LENGTH (LF)	REMARKS
F2	"G" 5+60.0	"G" 5+76.7	LT	16.7	DEPRESSED CURB AND GUTTER
F3	"S" 10+61.2	"S" 10+61.5	LT	12.2	GUTTER
F3	"S" 10+71.4	"S" 11+05.0	LT	33.7	GUTTER
F3	"S" 10+76.4	"S" 11+05.0	RT	28.6	FLAT GUTTER
TOTAL:				91.2	
ROUNDED TOTAL:				100 LF	

615.0001.0000 STANDARD SIGN SUMMARY

SIGN POST NO	LEGEND	STATION	OFFSET	ASDS CODE	WIDTH (IN)	HEIGHT (IN)	BRACED	FRAMED	AREA (SF)	POST	SIGN FACING	REMARKS
1	24 HR PARKING	"G" 5+83.2	9.6 LT	R7-108	12	18			1.5	2.5 PT	NW	SIGNS TO BE MOUNTED ON BRIDGE RAIL CURB
2	NO PARKING	"G" 6+20.8	9.6 LT	R7P-102 (CUSTOM)	12	18			1.5	2.5 PT	NW	
3	SAYLES STREET	"S" 10+00.8	8.5 RT	D3-101	30	8	X		1.67	2.5 PT	NE	
	GORGE STREET			D3-101	24	8			1.33		SE	
	NO PARKING			R7P-103 (CUSTOM)	12	18			1.5		SE	
4	NO PARKING	"S" 10+39.2	9.2 LT	R7P-102 (CUSTOM)	12	18			1.5	2.5 PT	SE	
TOTAL:									9 SF			

626.0001.0008, 626.2009.0000 SANITARY SEWER PIPE SUMMARY

SHEET	NAME	INLET STATION	INLET OFFSET	INLET INVERT	OUTLET STATION	OUTLET OFFSET	OUTLET INVERT	SLOPE	626.0001.0008 SANITARY SEWER CONDUIT, 8 INCH PVC C900 (LF)	626.0001.0008 SANITARY SEWER CONDUIT, 8 INCH PVC C900, INSULATED (LF)	626.2009.0000 SANITARY SEWER PIPE CASING, 16 INCH, HDPE, SDR 17 (LF)	626.2009.0000 SANITARY SEWER PIPE CASING, 20 INCH, HDPE, SDR 17 (LF)	⚠1 REMARKS
U3	SSP-01	"G" 5+66.0	3.4 LT	112.7	"G" 5+97.3	2.4 LT	106.5	19.7%	31.9				
U3	UC-05	"G" 5+74.7	3.1 LT	110.8	"G" 5+97.3	2.4 LT	106.3	19.7%			23.0		
U3	UC-06	"G" 5+97.3	2.4 LT	106.1	"G" 6+02.3	2.3 LT	105.1	19.7%				5.1	
U3	SSP-02	"G" 5+97.3	2.4 LT	106.5	"G" 6+02.3	2.3 LT	105.5	19.7%		5.1			
U3	SSP-03	"G" 6+02.3	2.3 LT	105.5	"G" 6+79.9	4.5 LT	77.4	36.3%		82.6			
TOTAL:									31.9	87.7	23.0	5.1	
ROUNDED TOTAL:									32 LF	88 LF	24 LF	6 LF	

627.0003.0000, 627.0009.0008 VALVE SUMMARY

SHEET	STATION	OFFSET	627.0003.0000 INSTALL VALVE BOX	627.0009.0008 GATE VALVE, 8 INCH	REMARKS
U1	"G" 5+64.9	2.7 RT	1	1	
U1	"S" 10+98.7	0.6 LT	1	1	
TOTAL:			2 EACH	2 EACH	

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KTN: SAYLES/GORGE ST. VIADUCT
(1841) IMPROVEMENTS

SUMMARY TABLES

NO.	DATE	REVISION
1	10/23/24	UPDATE CASING PAY ITEMS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	D4	D4

DRAFTED	DESIGNED	CHECKED	LAYOUT	DATE
AJB, JTH	JMH	JLO	D4	10/23/24

FILE: Z:\prj\project\0830.00 007_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\civil\AKAD\Sayles-Gorge\00070-01.dwg

627.0008.0000 WATER SERVICE CONENCTION

SHEET	STATION	OFFSET	REMARKS
U1	"G" 5+69.4	2.3 RT	
U1	"G" 6+05.0	2.3 RT	
U1	"G" 6+37.8	2.3 RT	
U1	"S" 10+37.1	1.9 LT	
U1	"S" 10+78.6	1.9 LT	
TOTAL:		5 EA	

627.2012.0008, 627.2021.0000 WATER PIPE SUMMARY

SHEET	NAME	INLET			OUTLET			SLOPE	627.2012.0008	627.2012.0008	627.2021.0000	627.2021.0000	⚠ REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		HDPE WATER CONDUIT, 8-INCH, SDR 11 (LF)	HDPE WATER CONDUIT, 8-INCH, SDR 11, INSULATED (LF)	WATER PIPE CASING, 12 INCH, HDPE, SDR 17 (LF)	WATER PIPE CASING, 20 INCH, HDPE, SDR 17 (LF)	
U1	WP-01	"G" 5+64.9	2.7 RT	117.53	"G" 5+69.0	2.3 RT	116.49	25.3	4.3				
U1	WP-02	"G" 5+69.0	2.3 RT	116.49	"G" 5+97.3	2.3 RT	109.33	25.3	29.2				
U1	UC-01	"G" 5+74.7	2.3 RT	114.86	"G" 5+97.3	2.3 RT	109.16	25.3			23.3		
U1	UC-02	"G" 5+97.3	2.3 RT	108.91	"G" 6+02.3	2.3 RT	107.65	25.3				5.2	
U1	WP-03	"G" 5+97.3	2.3 RT	109.33	"G" 6+16.6	2.3 RT	104.44	25.3		19.9			
U1	WP-04	"G" 6+16.6	2.3 RT	104.44	"G" 6+47.7	2.3 RT	102.83	5.2		31.2			
U2	WP-05	"S" 10+51.8	1.9 LT	103.93	"S" 10+08.1	1.9 LT	102.83	2.5		43.7			
U2	UC-03	"S" 10+51.8	1.9 LT	103.51	"S" 10+46.8	1.9 LT	103.39	2.5				5.0	
U2	UC-04	"S" 10+77.4	1.9 LT	104.41	"S" 10+51.8	1.9 LT	103.76	2.5			25.6		
U2	WP-06	"S" 10+79.6	1.9 LT	104.63	"S" 10+51.8	1.9 LT	103.93	2.5	27.8				
U2	WP-07	"S" 10+81.8	0.2 RT	105.34	"S" 10+79.6	1.9 LT	104.63	23.1	3.1				
U2	WP-08	"S" 10+90.7	0.3 LT	107.38	"S" 10+81.8	0.2 RT	105.34	23.1	9.1				
U2	WP-09	"S" 10+90.7	0.3 LT	107.38	"S" 10+98.7	0.6 LT	107.29	1.1	8.0				
TOTAL:									81.4	94.8	48.9	10.2	
ROUNDED TOTAL:									82 LF	95 LF	49 LF	11 LF	

635.0002.0000 INSULATION BOARD

SHEET	START STATION	END STATION	AREA (SF)	REMARKS
U1	"G" 5+64.9	"G" 5+98.4	134.3	ABOVE WATER CONDUIT
U2	"S" 10+50.8	"S" 10+98.7	191.3	ABOVE WATER CONDUIT
TOTAL:			325.6	
ROUNDED TOTAL:			330 SF	

639.0001.0000 DRIVEWAY

SHEET	START STATION	OFFSET	LENGTH (LF)	WIDTH	REMARKS
F2	"G" 5+69.2	LT	3	14.1	
F3	"S" 10+66.7	LT	12.2	9.7	
TOTAL:				2 EA	

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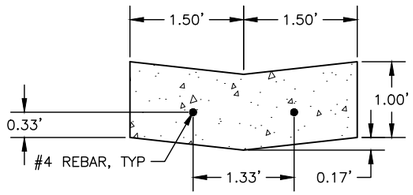
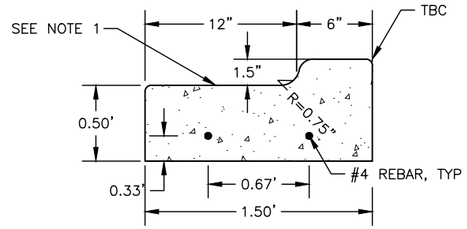
(1841) IMPROVEMENTS

SUMMARY TABLES

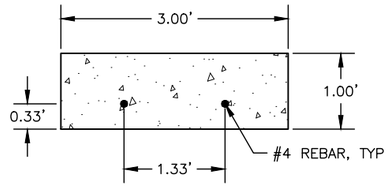
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	E1	E13



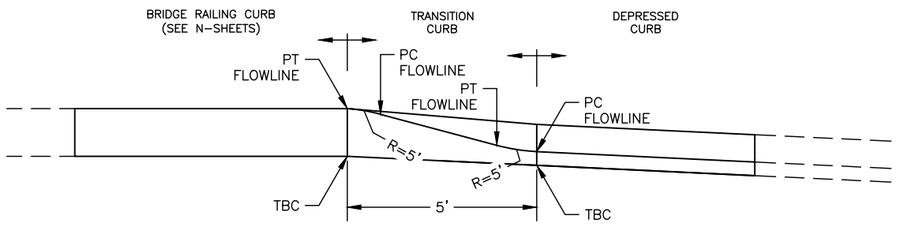
1 / E1 GUTTER NTS



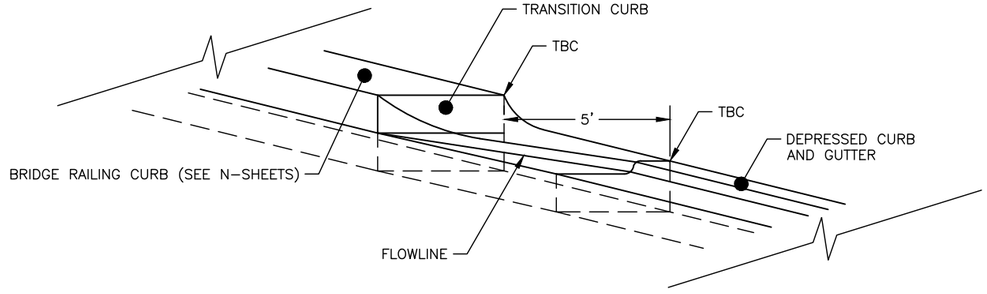
2 / E1 DEPRESSED CURB & GUTTER NTS



3 / E1 FLAT GUTTER NTS



4 / E1 TRANSITION CURB – PLAN VIEW NTS



5 / E1 TRANSITION CURB – ISOMETRIC VIEW NTS

NOTES:

1. GUTTER SHALL HAVE A MINIMUM CROSS-SLOPE OF 2% INTO CURB. EXCEPT WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS-SLOPE OF THE GUTTER SHALL MATCH THE CROSS-SLOPE OF THE ADJACENT PAVEMENT.
2. ALL CURBS THAT ARE DRIVABLE SHALL HAVE REBAR REINFORCEMENT.

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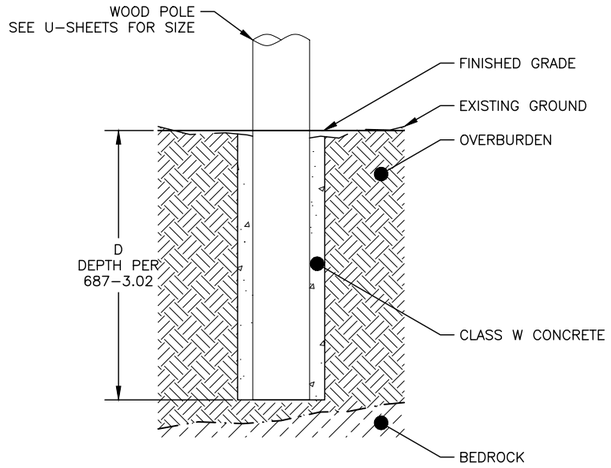
(1841) IMPROVEMENTS

CURB AND GUTTER DETAILS

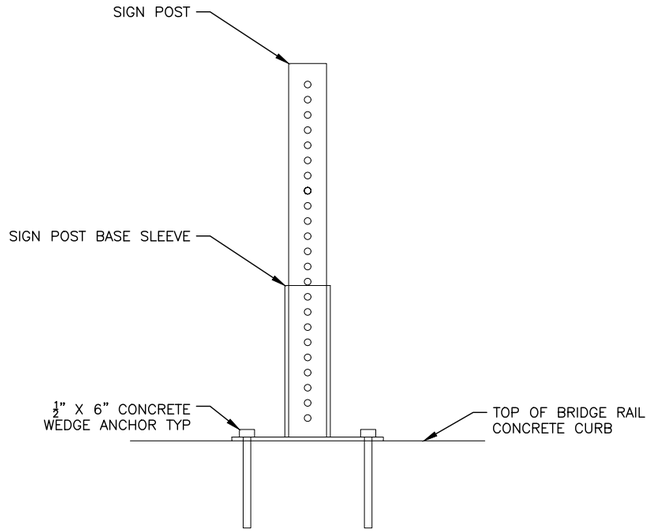
FILE | Z:\project\30630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-E1.dwg
DATE | 8/2/24
LAYOUT | E1
DESIGNED | JMH
CHECKED | JLO
DRAFTED | AJB, JTH

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	E2	E13

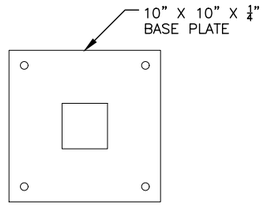


1/E2 FOUNDATION CASE 1 – UTILITY POLE IN SOIL

NTS



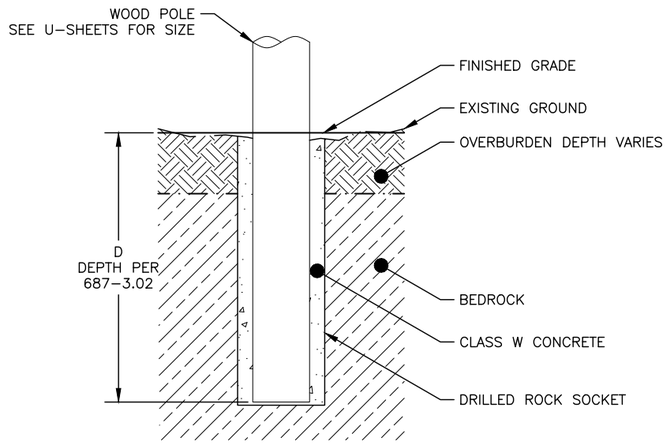
ELEVATION VIEW



PLAN VIEW

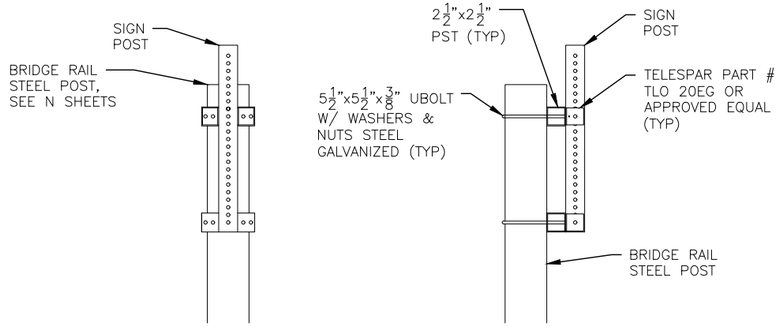
2/E2 BASE MOUNTED SIGN ATTACHMENT

NTS



3/E2 FOUNDATION CASE 2 – DRILLED ROCK SOCKET

NTS



4/E2 SIGN POST TO BRIDGE RAIL ANCHOR DETAIL

NTS

POLE FOUNDATION AND INSTALLATION NOTES:

1. THE CONTRACTOR SHALL HAVE ALL THE EQUIPMENT, MATERIALS AND LABOR TO CONSTRUCT THE NEW POLE FOUNDATION TO THE EMBEDMENT DEPTH DESCRIBED IN SUBSECTION 687–3.02. CONTRACTOR SHALL FIELD DETERMINE FOUNDATION CASE TO BE CONSTRUCTED BASED ON DEPTH FROM FINISHED GRADE TO BEDROCK.

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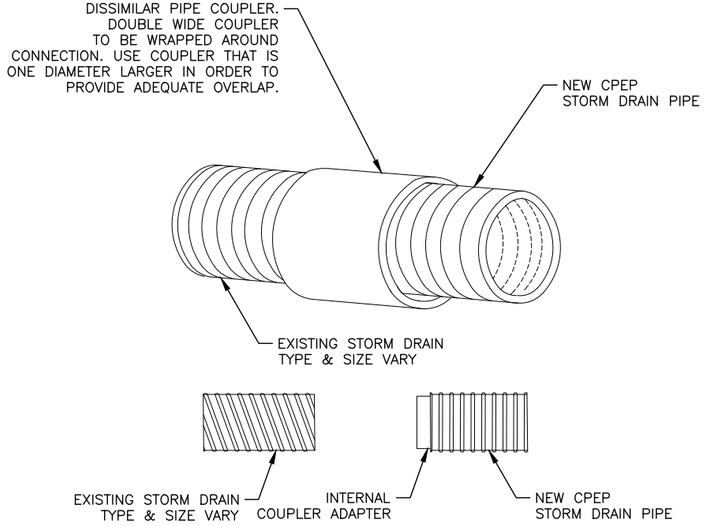
KTN: SAYLES/GORGE ST. VIADUCT
(1841) IMPROVEMENTS

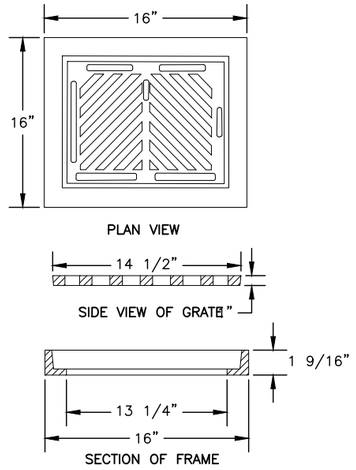
POLE FOUNDATION DETAILS
AND SIGN ATTACHMENT

FILE	DATE	DESIGNED	DRAFTED	CHECKED	LAYOUT
Z:\projects\3600.00.001_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\CAD\Sayles-Gorge\0003225-E1.dwg	8/2/24	JMH	AJB, JTH	JLO	E2

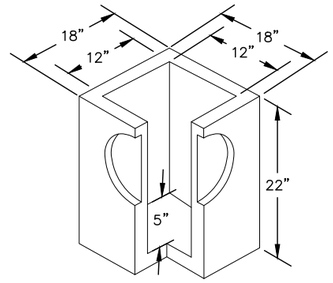
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	E3	E13



1 E3 NEW TO EXISTING STORM DRAIN CONNECTION NTS



2 E3 FLAT GRATE INLET AND FRAME ASSEMBLY NTS



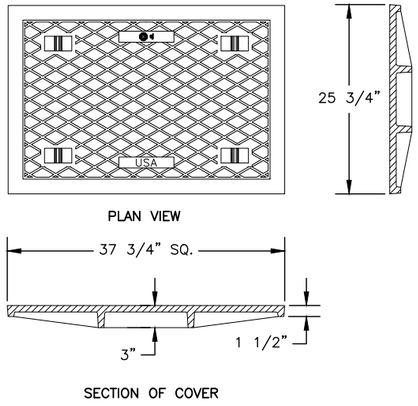
3 E3 INLET, TYPE D NTS

INLET, TYPE D NOTES:

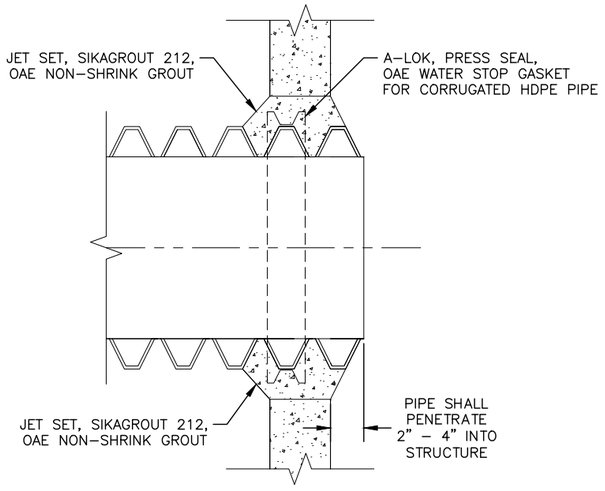
1. INLET HAS 10" KNOCKOUTS ON FOUR SIDES TO ACCOMMODATE 6" PIPE SIZE.
2. EXTENSION RISERS AVAILABLE IN 6" AND 12" HEIGHTS.
3. GROUT INLET, OUTLET, AND PICK HOLE PENETRATIONS WITH JET-SET, SIKAGROUT 212, OR OTHER APPROVED NON-SHRINK GROUT.
4. INLET SHALL BE SET ON A MINIMUM OF 6" THICK BEDDING THAT IS LEVEL, AND COMPACTED TO 95%, AND ORIENTED TO THE AXIS OF THE ROAD. OFF-AXIS OR OFF-LEVEL INLETS SHALL BE REMOVED AND ADJUSTED BEFORE BACKFILLING.
5. INLETS SHALL BE BACKFILLED WITH A MINIMUM OF 6 INCHES OF BEDDING PLACED IN MAXIMUM LIFTS OF 6" AND COMPACTED TO 95% OF DRY DENSITY.
6. CONTRACTOR SHALL REMOVE KNOCKOUTS AS PER MANUFACTURES RECOMMENDATIONS. DAMAGE INCURRED TO THE STRUCTURE DURING KNOCKOUT REMOVAL SHALL BE EVALUATED BY THE ENGINEER TO DETERMINE WHETHER INTEGRITY OF STRUCTURE HAS BEEN COMPROMISED. STRUCTURES DAMAGED BY THE CONTRACTOR AND DEEMED UN-USABLE BY THE ENGINEER SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
7. CONNECT ALL PIPES IN CONFORMANCE WITH WATERTIGHT STRUCTURE CONNECTION DETAIL

NOTES:

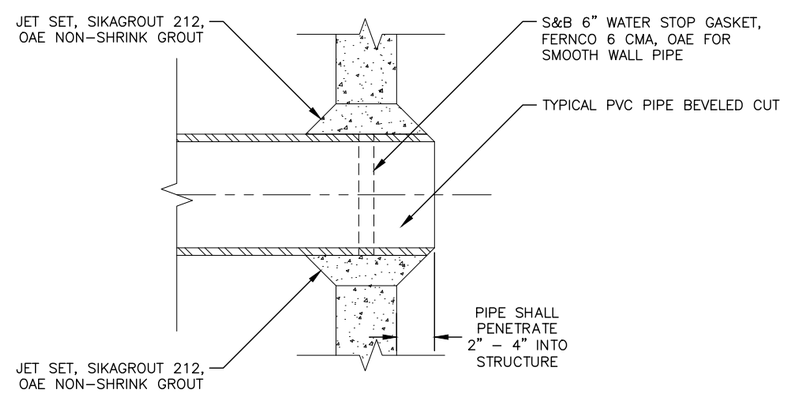
1. INSTALL COUPLER IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



4 E3 FLAT LID NTS



5 E3 CORRUGATED WATERTIGHT STRUCTURE CONNECTION NTS



6 E3 SMOOTH WALL WATERTIGHT STRUCTURE CONNECTION NTS

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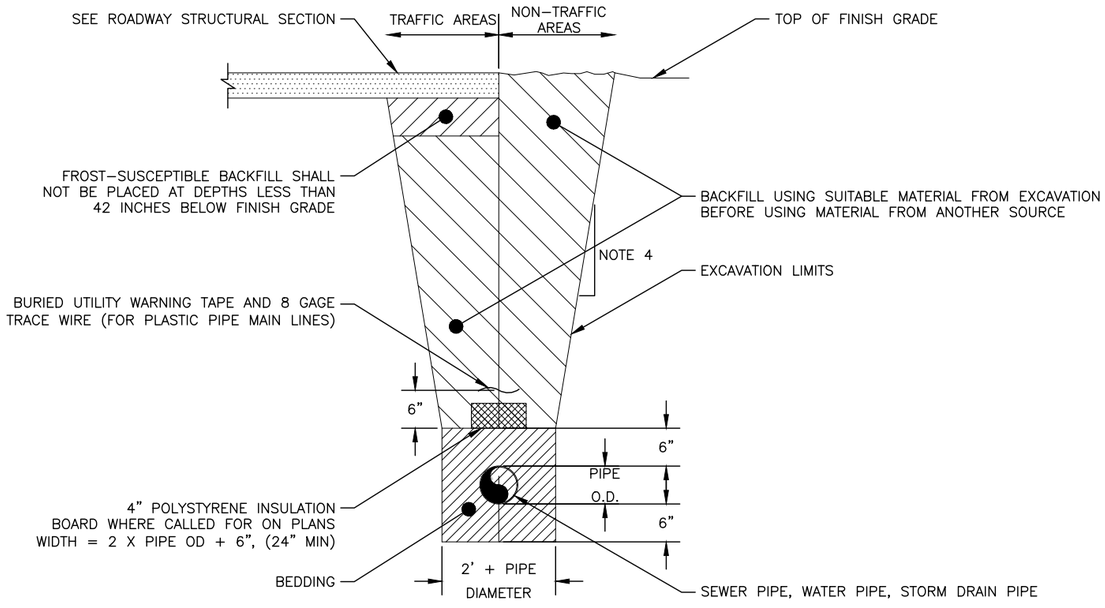
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

STORM DRAIN DETAILS

FILE Z:\project\30835.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-E1.dwg
DATE 8/2/24 LAYOUT E3 DESIGNED JMH CHECKED JLO DRAFTED AJB, JTH

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	E4	E13



1/E4 TYPICAL BURIED WET UTILITY TRENCH SECTION

NTS

UTILITY TRENCH SECTION NOTES:

1. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS.
2. IF UNSUITABLE PIPE FOUNDATION MATERIAL IS ENCOUNTERED DURING EXCAVATION, ENGINEER MAY DIRECT THE CONTRACTOR TO OVER–EXCAVATE AND BACKFILL WITH SUITABLE MATERIAL.
3. TRENCH SECTION APPLICABLE FOR SEWER, WATER, AND STORM PIPE.
4. SLOPE OF TRENCH WALL TO BE DETERMINED BY CONTRACTOR, MEETING ALL APPLICABLE SAFETY REQUIREMENTS.
5. INSULATION BOARD JOINTS SHALL BE INSTALLED WITH STAGGERED JOINTS. JOINTS SHALL BE OVERLAPPED 1 FOOT.

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8/2/2024
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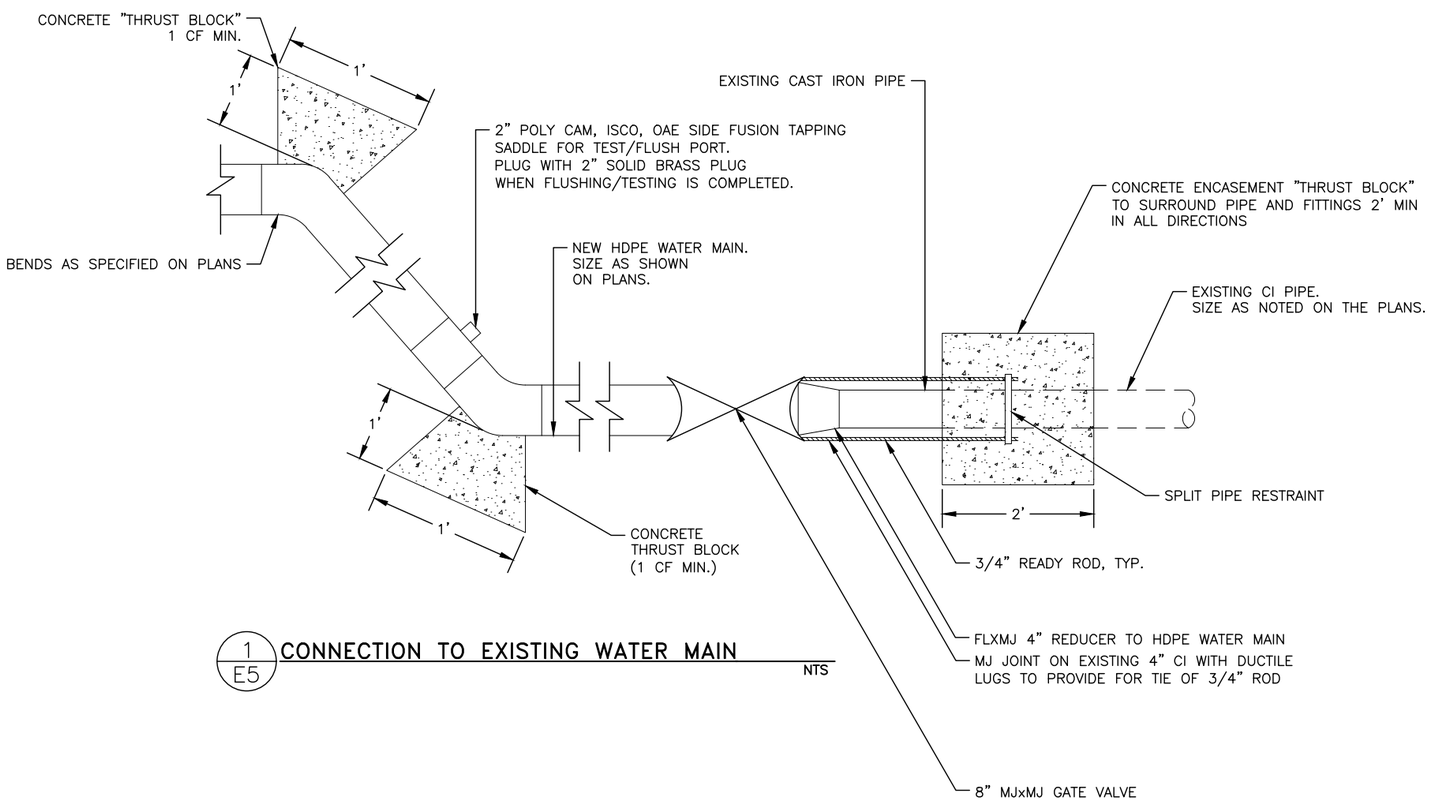
KTN: SAYLES/GORGE ST. VIADUCT
(1841) IMPROVEMENTS

TRENCHING DETAILS

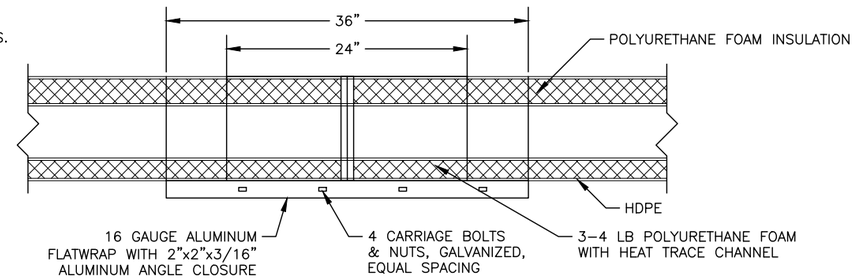
FILE | Z:\project\30630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-E1.dwg
DATE | 8/2/24
LAYOUT | E4
DESIGNED | JMH
CHECKED | JLO
DRAFTED | AJB, JTH

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	E5	E13



1/E5 CONNECTION TO EXISTING WATER MAIN

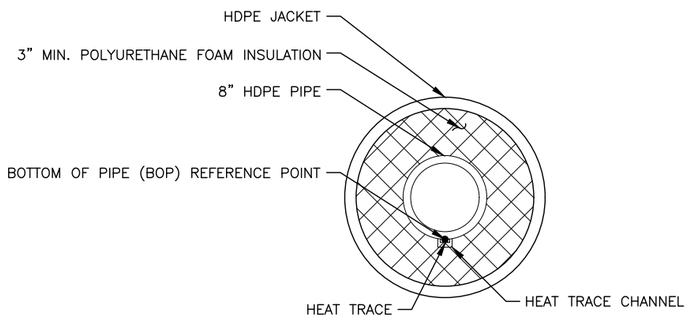
NTS



NOTE:
JOINT KIT FOR HDPE WATER LINE WITH 12" CUTBACK ON THE PIPE.

2/E5 INSULATED WATER MAIN JOINT

NTS



3/E5 INSULATED WATER MAIN SECTION

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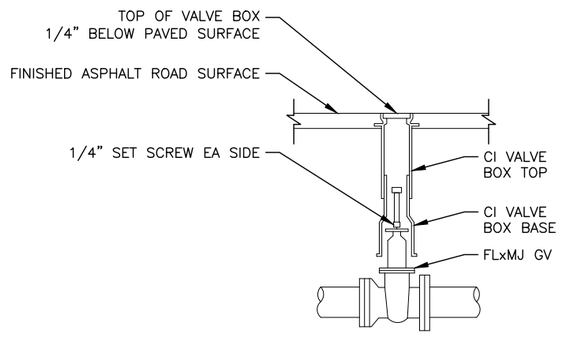

RESTRAIN ALL JOINTS

4/E5 TYPICAL BURIED MAIN LINE VALVE WITH OPERATING ROD

NTS

BURIED VALVE NOTES:

1. NEW VALVE BOX TO ALLOW FOR 12" MINIMUM VERTICAL ADJUSTMENT
2. THREADED VALVE BOX SECTIONS ARE NOT ALLOWED. CONTRACTOR SHALL REMOVE THREADED PORTIONS OF THE VALVE BOX WITH CUT-OFF SAW.
3. CONTRACTOR SHALL APPLY GREASE TO ALL INTERFACES BETWEEN VALVE BOX SECTIONS.
4. COMPACTION AROUND VALVE BOX INSTALLATION IS CRITICAL. CONTRACTOR SHALL EMPLOY MECHANICAL TAMPING METHODS TO ENSURE THAT MATERIAL AROUND VALVE BOX REACHES 95% OF MAXIMUM DENSITY.
5. CONTRACTOR SHALL INSTALL A 6" MINIMUM THICKNESS OF BEDDING AROUND VALVE BOX DURING BACKFILL.
6. EXTENSION IS REQUIRED ON ALL VALVES WHERE OPERATING NUT IS 6' OR MORE BELOW FINISHED SURFACE.

INSULATED WATER PIPE NOTES:

HEAT TRACING CABLE TO BE 5W/FT SELF REGULATING CHROMALUX SRL 5-1CT WITH FLOUROPOLYMER COATING. MOUNT BOX FOR END SEAL KIT ON 4"x4" AS SHOWN. SEE ELECTRICAL DRAWINGS FOR MORE DETAILS.

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

WATER CONNECTION DETAILS

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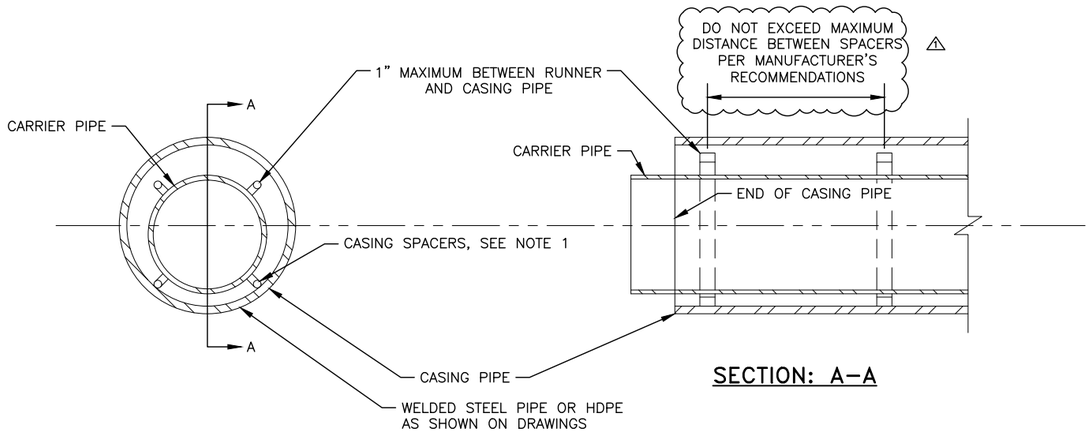
Addendum #1 :Attachment #4

NO.	DATE	REVISION
1	10/23/24	UPDATE CASING DETAILS AND NOTES

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	E6	E13

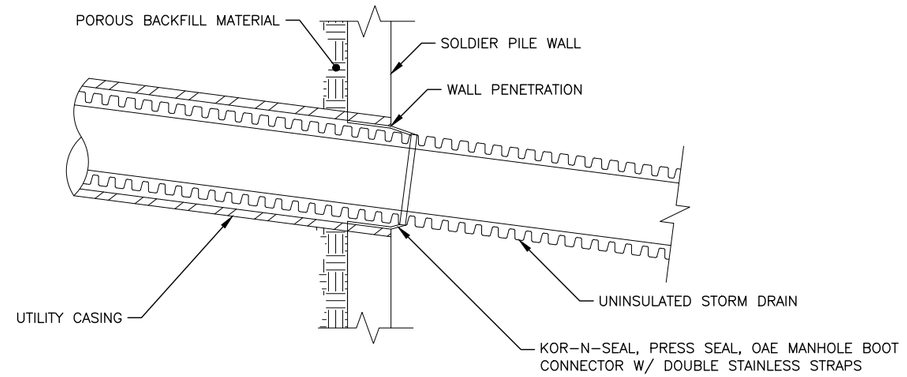
FILE	DATE	LAYOUT	DESIGNED	CHECKED	DRAFTED
Z:\projects\30835.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-E1.dwg	10/23/24	E6	JMH	JLO	AJB, JTH



SECTION: A–A

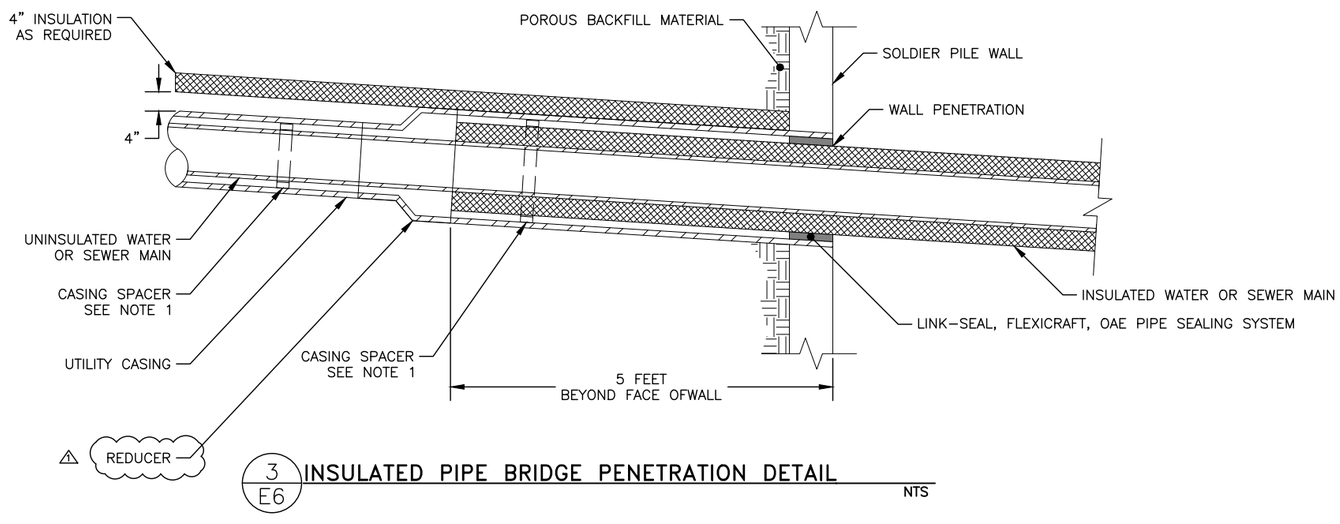
1/E6 PIPE CASING

NTS



2/E6 NON–INSULATED PIPE BRIDGE PENETRATION DETAIL

NTS



3/E6 INSULATED PIPE BRIDGE PENETRATION DETAIL

NTS

NOTES:

1. INSTALL CASING SPACERS A MAXIMUM OF ONE FOOT (1') FROM EACH SIDE OF EACH PIPE JOINT. CASING SPACERS SHALL BE BOLT–ON WITH POLYETHYLENE RUNNERS TO BE INSTALLED WITH NO BACKFILL OF ANNULAR SPACE BETWEEN CARRIER PIPE AND CASING PIPE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. 1
2. ENDS OF CASING PIPE SHALL BE SEALED WITH SYNTHETIC RUBBER SEAL WITH STAINLESS STEEL BANDS. CASING SHALL BE WATERTIGHT.
3. CARRIER PIPE SHALL BE CONSTRUCTED WITH RESTRAINED JOINTS INSTALLED ENTIRE LENGTH OF CASING PIPE AND AT CONNECTIONS BETWEEN EXISTING AND NEW PIPE.
4. PERFORM LAMP TESTINGS TO VERIFY PROPER CASING ALIGNMENT AFTER CASING PIPE IS BACKFILLED A MINIMUM OF 2 FEET AND PRIOR TO CARRIER PIPE INSTALLATION.
5. PLACE INSULATION BOARD W/ BURIED UTILITY WARNING TAPE ABOVE AS REQUIRED.

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

WALL PENETRATION AND UTILITY CASING DETAILS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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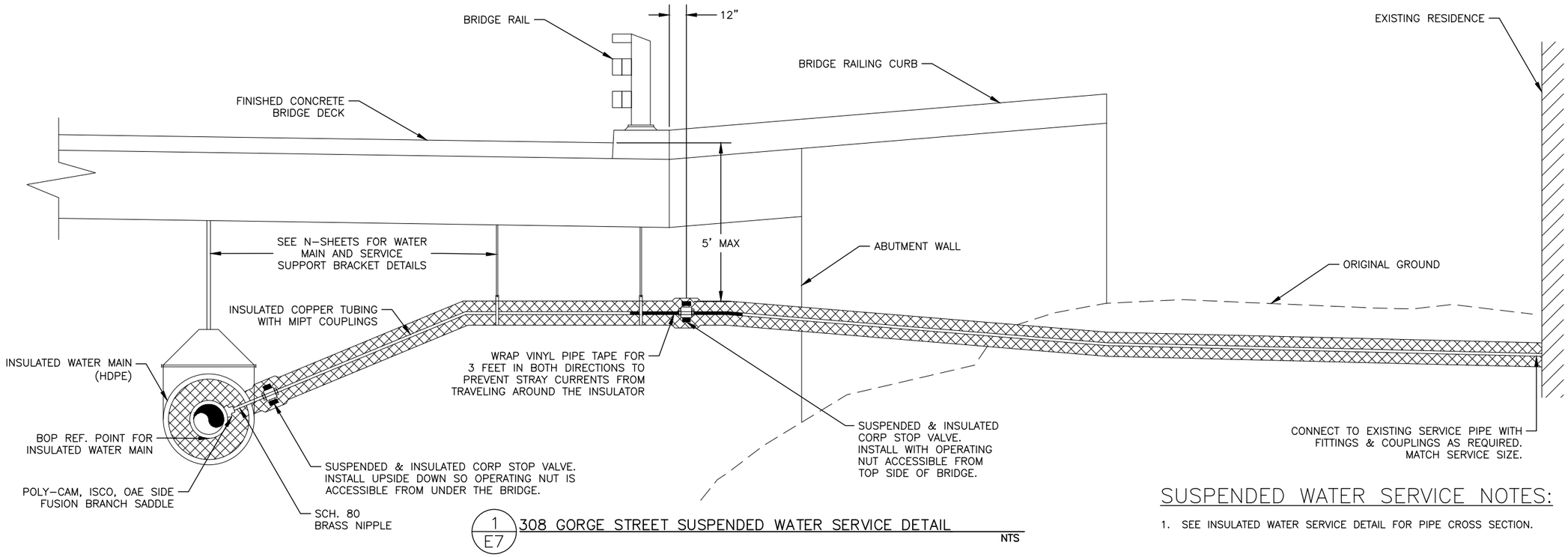
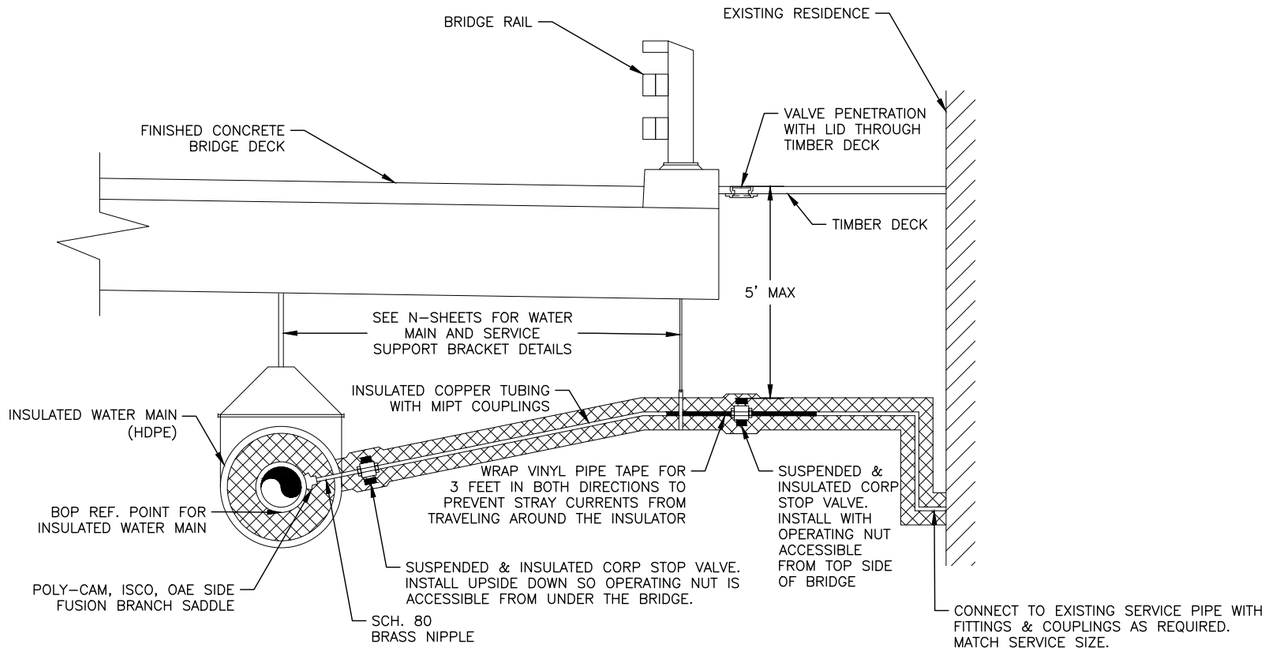


1/E7 308 GORGE STREET SUSPENDED WATER SERVICE DETAIL

NTS

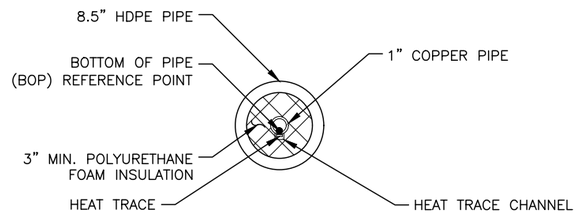
SUSPENDED WATER SERVICE NOTES:

1. SEE INSULATED WATER SERVICE DETAIL FOR PIPE CROSS SECTION.



2/E7 301 GORGE STREET AND 1270 SAYLES STREET SUSPENDED WATER SERVICE DETAIL

NTS



3/E7 INSULATED WATER SERVICE

NTS

INSULATED WATER PIPE NOTES:

HEAT TRACING CABLE TO BE 5W/FT SELF REGULATING CHROMALUX SRL 5-1CT WITH FLOUROPOLYMER COATING. MOUNT BOX FOR END SEAL KIT ON 4"x4" AS SHOWN. SEE ELECTRICAL DRAWINGS FOR MORE DETAILS.

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

WATER SERVICE DETAILS

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DATE | 8/2/24
LAYOUT | E7
DESIGNED | JMH
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DRAFTED | AJB, JTH

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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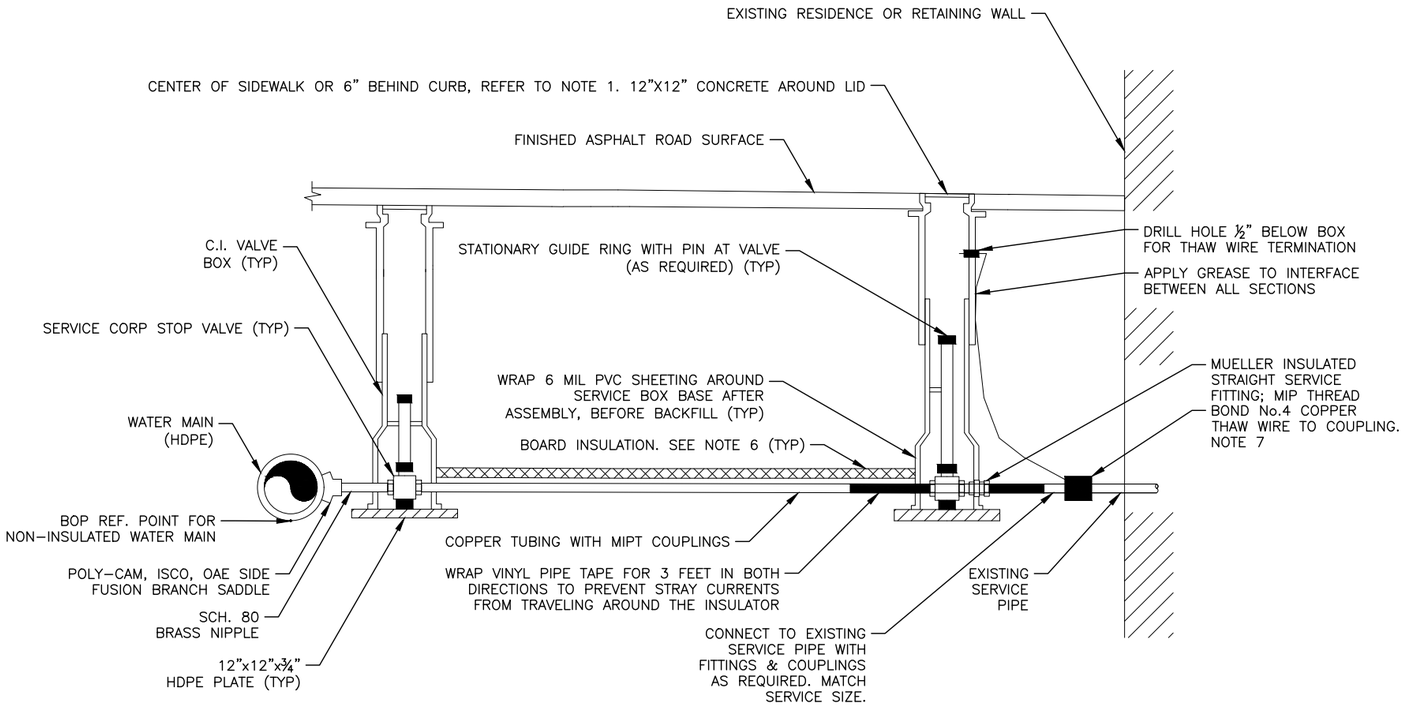

1/E8 309 GORGE STREET AND 1260 SAYLES STREET BURIED WATER SERVICE DETAIL

NTS

BURIED WATER SERVICE NOTES:

1. INSTALL TOP OF VALVE BOX AS SHOWN 1/4" BELOW PAVED SURFACE.
2. ALLOW 12" FOR RAISING VALVE BOX. GREASE THE OVERLAPPING PORTION.
3. ENLARGED BASE IS REQUIRED FOR 1" SERVICES AND LARGER.
4. A SERVICE VALVE ROD EXTENSION IS REQUIRED ON ALL SERVICE VALVES 6' OR MORE BELOW FINISHED GRADE.
5. EXTEND SERVICE PAST SERVICE VALVE AS REQUIRED TO ESTABLISH SERVICE OR AS INDICATED ON THE PLANS.
6. PLACE INSULATION BOARD W/ BURIED UTILITY WARNING TAPE ABOVE AS REQUIRED.
7. SECURE THE COPPER THAW WIRE TO THE COUPLING USING A BRASS ELECTRICAL GROUND CLAMP, ROUTE THE COPPER THAW WIRE ALONG THE OUTSIDE OF THE VALVE BOX, THROUGH THE HOLE AT THE TOP. SECURE WIRE TO OUTSIDE OF BOX WITH BRASS ELECTRICAL GROUND CLAMP OR FIBER TAPE.

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SANITARY SEWER MANHOLE DETAILS

FILE | Z:\projects\20535.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-E1.dwg
DATE | 8/2/24
LAYOUT | E8
DESIGNED | JMH
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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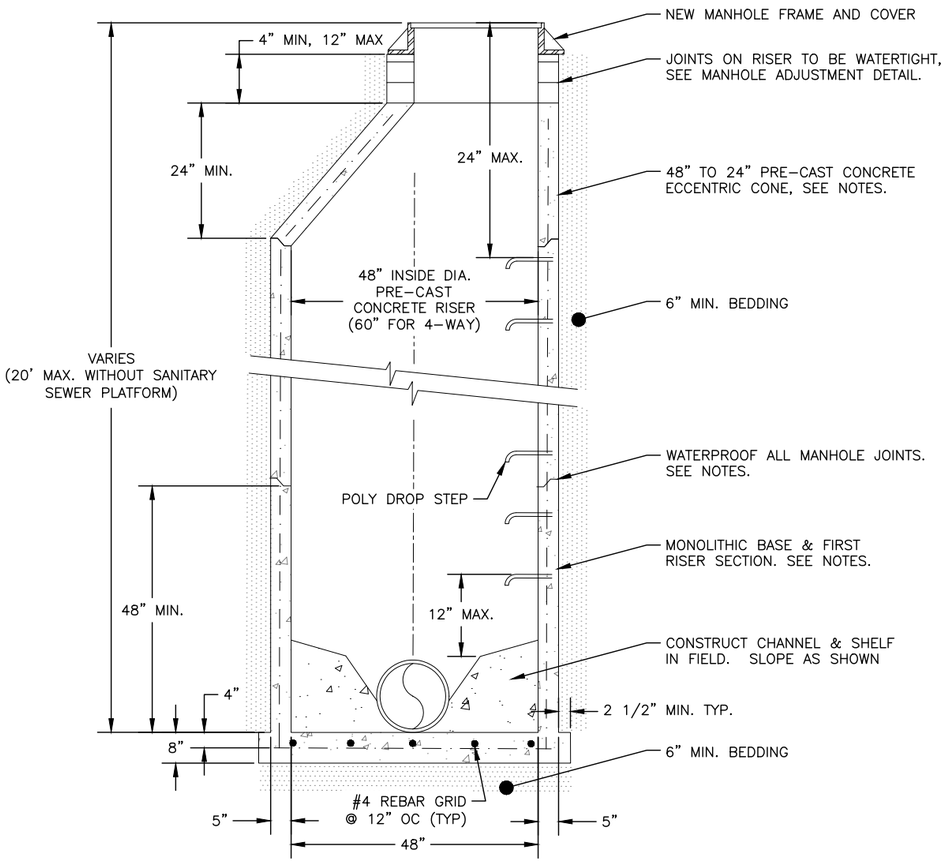

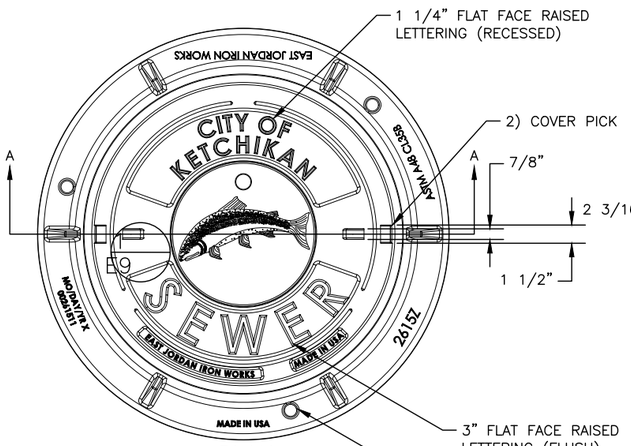

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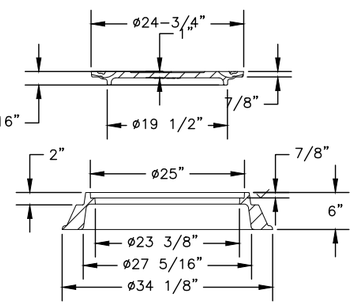

SECTION A-A

1 / E9 SANITARY SEWER MANHOLE, FRAME & COVER

NTS

SANITARY SEWER MANHOLE NOTES:

1. ALL MANHOLE SECTIONS SHALL CONFORM TO ASTM C-478, LATEST EDITION, INCLUDING MINIMUM STEEL REQUIREMENTS. THE BASE SECTION SHALL BE A 4' TALL UNIT AND STEEL SHALL BE EMBEDDED IN BASE SO THAT FIRST RISER SECTION IS CONNECTED TO BASE.
2. CHANNEL DEPTH SHALL BE EQUAL TO THE PIPE DIAMETER OR GREATER. CHANNEL AND SHELF SHALL HAVE A SMOOTH FINISH.
3. SEAL MANHOLE AT PIPE CONNECTIONS WITH WATERTIGHT Z-LOCK, KOR-N-SEAL, OAE MANHOLE CONNECTOR WITH STAINLESS STEEL CLAMP. SEE DETAIL.
4. WHEN MANHOLE HEIGHT IS LESS THAN 7', REPLACE CONCRETE CONE SECTION WITH PRE-CAST REDUCING SLAB.
5. FRAME AND LID SHALL BE ADJUSTED AS NECESSARY TO BE 1/4" BELOW THE RESTORED SURFACE AND MATCH EXISTING ROAD AND SLOPE.
6. INSTALLATION OF FRAME, LID, ADJUSTMENT RINGS, ONTO THE PRE-CAST STRUCTURE SHALL BE WATER-TIGHT USING A POLYURETHANE SEALANT ON BOTTOM AND TOP OF EVERY RISER.
7. NEW MANHOLE FRAME AND COVER SHALL NOT BE DIAMOND-CUT. THE MANHOLE SHALL BE PAVED THROUGH.
8. ALL MANHOLE JOINTS SHALL BE WATERPROOFED USING A DOUBLE LAYER OF RAM-NEK, PRESS SEAL PRO-STIK, OAE. THE EXTERIOR OF ALL JOINTS SHALL BE SEALED WITH CCW-715, SIKALATEX, OAE ADHESIVE AND CCW-861 MIRA-DRI SYSTEM, SIKASHIELD, OAE 18" EACH SIDE OF JOINT.
9. STRUCTURE SHALL BE BACKFILLED WITH 6" SELECTED MATERIAL, TYPE A.
10. STEPS SHALL NOT BE ABOVE FLOW CHANNEL AND PLACED A MAXIMUM OF 12" ABOVE SHELF. STEPS SHALL BE IN ALIGNMENT AND NOT OFFSET FROM EACH OTHER.

FRAME & COVER NOTES:

1. MANHOLE FRAME AND COVER SHALL BE EJ 0026152W01, NEENAH 365, OAE.
2. COVER AND FRAME SHALL BE HEAVY DUTY AND RATED FOR H-20 LOADING. MINIMUM TOTAL WEIGHT SHALL BE 360 POUNDS.
3. COVER AND SEALING GASKET FOR SEWER SHALL BE RUBBER GASKET RESULTING IN A SELF SEALING LID.
4. SEWER FRAMES SHALL BE MACHINED TO FIT WATERTIGHT COVER. SEWER COVERS SHALL HAVE THE WORDS "CITY OF KETCHIKAN SEWER" CAST IN, AND SHALL BE PROVIDED WITH AN INTEGRAL LIFT HANDLE.
5. FRAME AND COVER DIMENSIONS SHALL BE IN ACCORDANCE WITH THE GUIDELINES INDICATED. VARIATIONS SHALL BE APPROVED BY THE ENGINEER.
6. ALL FRAMES AND COVERS SHALL BE IDENTICAL FOR ALL MANHOLE INSTALLATIONS.

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SEWER DETAILS

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LAYOUT | E9
DESIGNED | JMH
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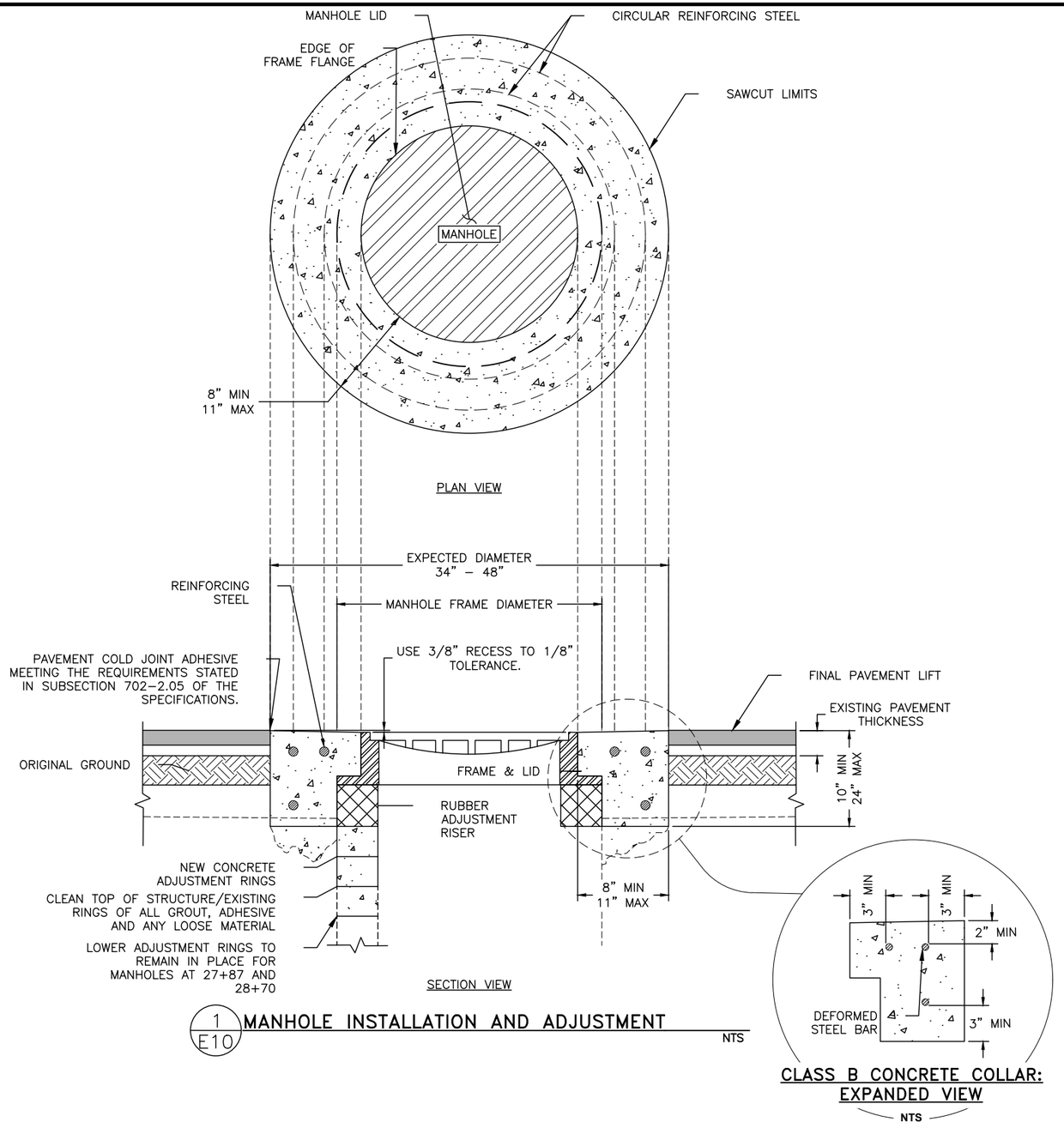
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	E10	E13

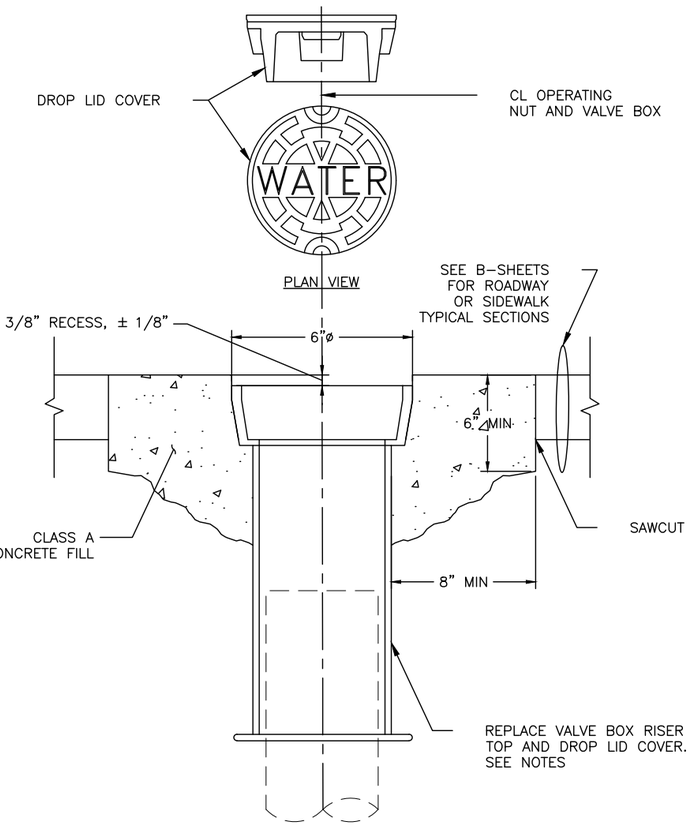


1 E10 **MANHOLE INSTALLATION AND ADJUSTMENT**

NTS

CLASS B CONCRETE COLLAR: EXPANDED VIEW

NTS



2 E10 **VALVE BOX ADJUSTMENT**

NTS

MANHOLE ADJUSTMENT NOTES:

1. MANHOLE SHALL BE AT THE CENTER OF THE CIRCULAR SAWCUT.
2. RECESS OUTSIDE EDGE OF CONCRETE COLLAR 1/8" AND SLOPE TOWARDS MANHOLE.
3. MAKE EDGE BETWEEN CONCRETE COLLAR AND FRAME FLUSH.
4. USE GRADE 60 STEEL.
5. USE #4 DEFORMED BARS FOR EXCAVATIONS LESS THAN 17 INCHES.
6. USE #5 DEFORMED BARS FOR EXCAVATIONS BETWEEN 17 AND 24 INCHES.
7. CONCRETE EXTENDS FULL DEPTH OF EXCAVATION.
8. MAKE EXCAVATION VERTICAL PRIOR TO POURING CONCRETE.
9. INSTALLING STEEL PLATE OVER MANHOLE OPENING AS A TEMPORARY MEASURE IS ALLOWED.
10. SEE SECTION 604 IN THE SPECIFICATIONS FOR GRADE RINGS,

VALVE BOX ADJUSTMENT NOTES:

1. VALVE BOX SHALL BE AT THE CENTER OF THE CIRCULAR SAWCUT.

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SEWER DETAILS

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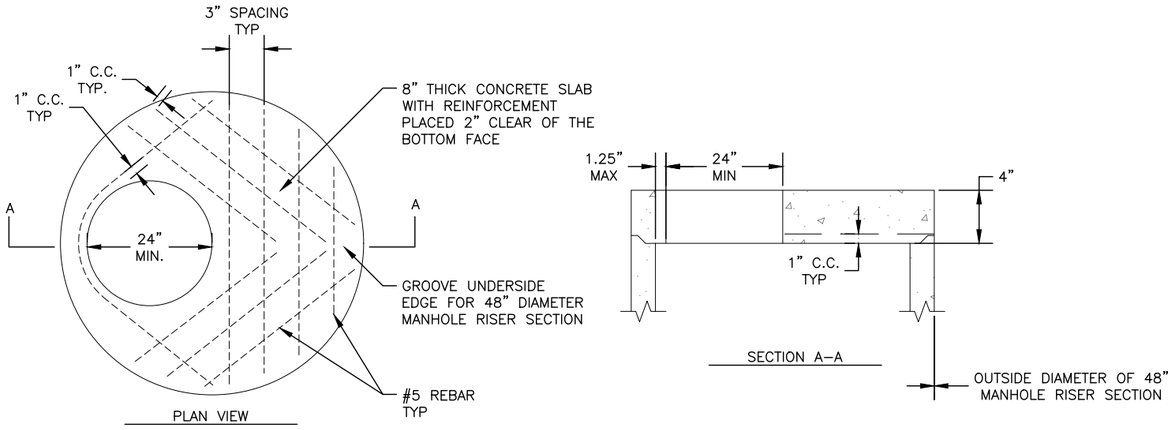
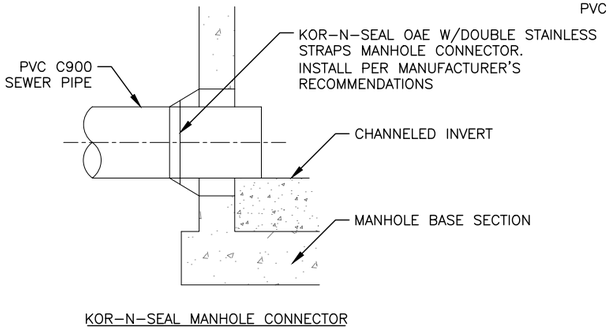


1/E11 SEWER MANHOLE REDUCER SLAB DETAIL

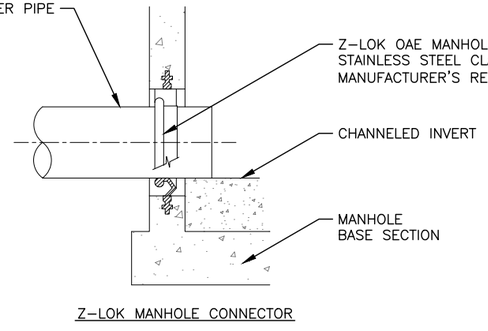
NTS



KOR–N–SEAL MANHOLE CONNECTOR

NOTE:

KOR–N–SEAL IS A PRESS–SEAL BOOT TO BE USED ONLY WHEN A BOOT CANNOT BE INTEGRALLY CAST INTO THE MANHOLE



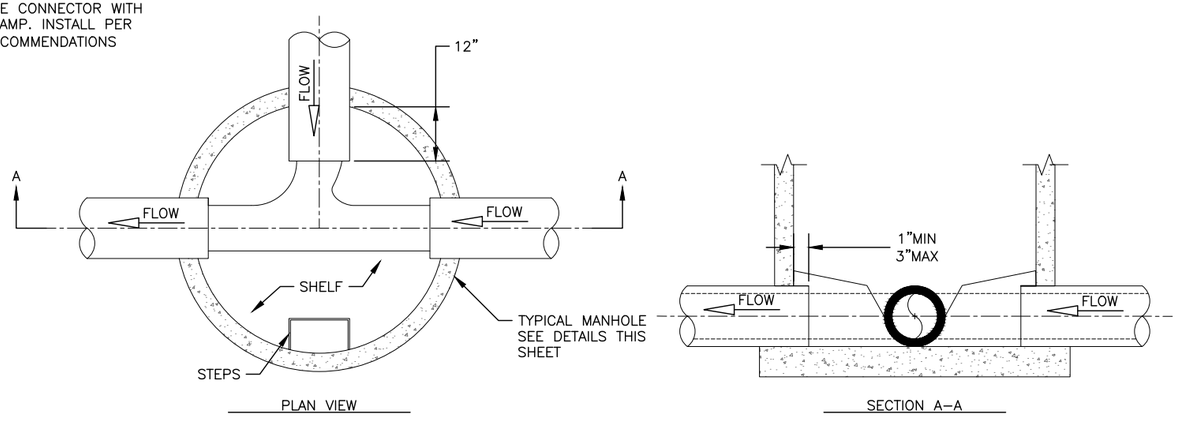
Z–LOK MANHOLE CONNECTOR

NOTE:

THE Z–LOK CONNECTOR SHALL BE CAST INTO THE MANHOLE AT THE TIME OF MANUFACTURE

2/E11 SEWER PIPE CONNECTION DETAIL

NTS



3/E11 SEWER MANHOLE CHANNELING DETAIL

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STATE OF ALASKA
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Joseph M Horazdovsky
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8/2/2024
REGISTERED PROFESSIONAL ENGINEER

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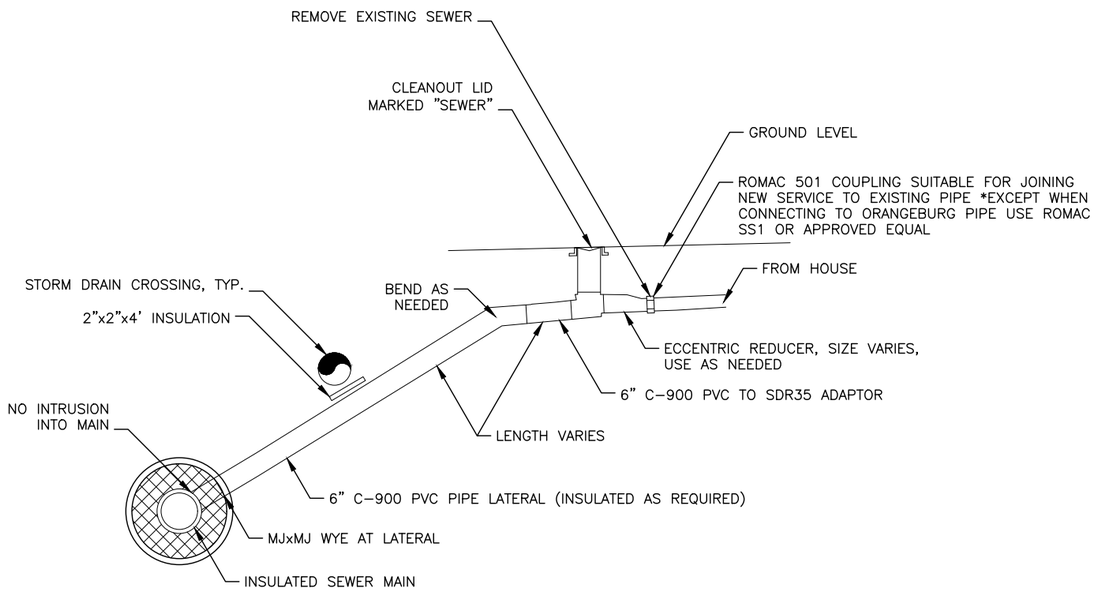
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

SEWER DETAILS

DRAFTED AJB, JTH | DESIGNED JMH | CHECKED JLO | LAYOUT E11 | 8/2/24 | DATE | FILE Z:\projects\30630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-E1.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	E12	E13



1/E12 SEWER LATERAL SERVICE CONNECTION DETAIL

NTS

NOTES:

1. SEWER SERVICE CONDUIT TO BE INSTALLED WITH A MINIMUM SLOPE OF 0.02 FT/FT
2. CONNECTIONS FROM ROOF DOWNSPOUTS, AREA DRAINS, ETC. ARE PROHIBITED.
3. BURIED PIPE MUST BE LAID ON AND BEDDED WITH COMPACTED AND COMPETENT MATERIAL.
4. MAX 3 FITTINGS ALLOWED PER SERVICE UNLESS APPROVED BY OWNER.

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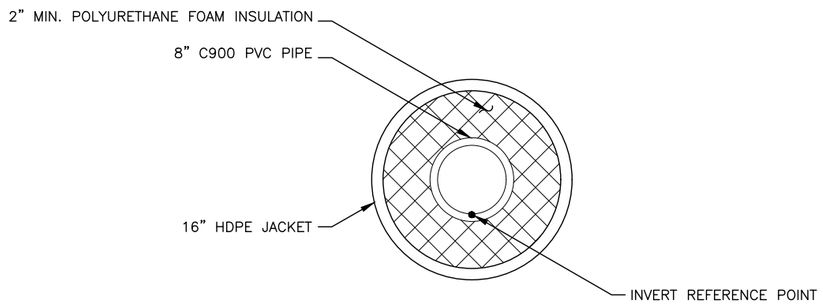
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

SEWER DETAILS

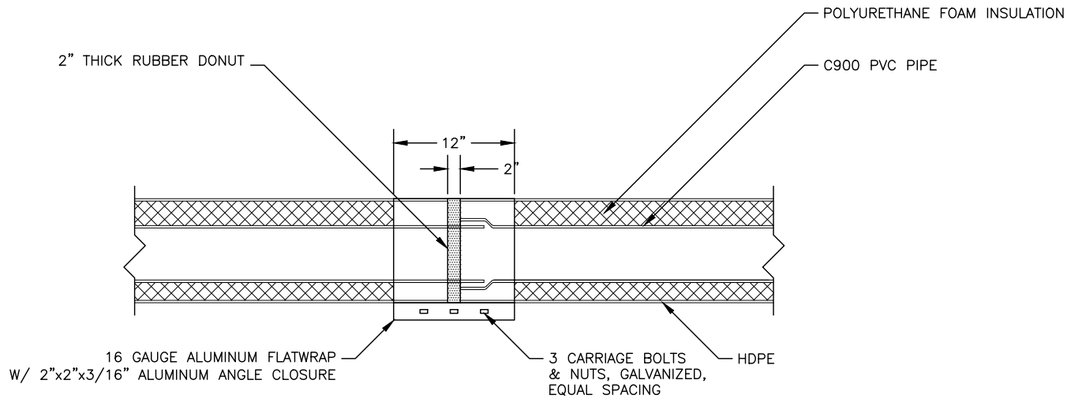
FILE	DATE	DESIGNED	DRAFTED	CHECKED	LAYOUT
Z:\project\3630.00.001_SE KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-E1.dwg	8/2/24	JMH	AJB, JTH	JLO	E12

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	E13	E13



1/E13 INSULATED C900 PVC SEWER MAIN SECTION

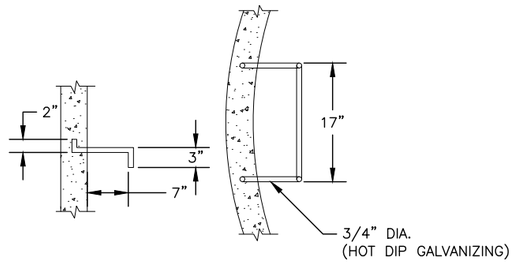
NTS



NOTE: JOINT KIT FOR C900 SEWER LINE WITH SLAB PLUS 1 3/4" CUTBACK ON THE PIPE.

2/E13 INSULATED SEWER PIPE JOINT

NTS



3/E13 MANHOLE STEP

NTS

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KTN: SAYLES/GORGE ST. VIADUCT
(1841) IMPROVEMENTS

SEWER DETAILS

FILE	DATE
Z:\project\30835.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-E1.dwg	

8/2/24	LAYOUT	E13	DESIGNED	JMH	CHECKED	JLO	DRAFTED	AJB, JTH

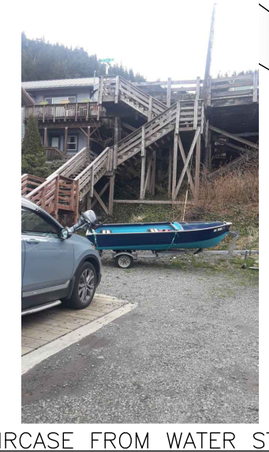
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	F1	F3

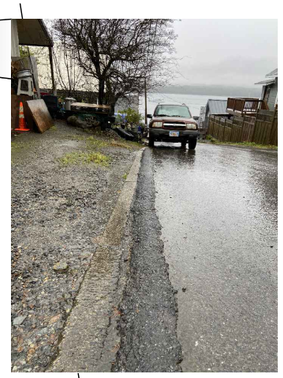
BOP
STA "G" 5+60
BEGIN DEMO

LOOKING NE, DOWNSTATION, GORGE ST.

LOOKING SE, UPSTATION, SAYLES ST.



LOOKING N, STAIRCASE FROM WATER ST. TO SAYLES ST.



LOOKING SW, UPSTATION, GORGE ST.

LOOKING NW, STAIRCASE FROM SAYLES ST. TO WATER ST.

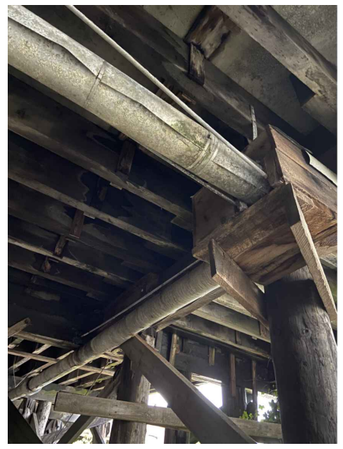
PROTECT EXISTING CONCRETE RETAINING WALL AND FENCE IN PLACE
GORGE STREET
309 GORGE ST.
PROTECT EXISTING DECK IN PLACE
REMOVE EXISTING FUEL TANK
REMOVE CURB AND GUTTER
REMOVE EXISTING TIMBER LAGGING AT BRIDGE ABUTMENT
PROTECT EXISTING DECK IN PLACE
DO NOT DISTURB EXISTING TREE
308 GORGE ST.
REMOVE FUEL TANK FILL PIPE FROM EXISTING BRIDGE. PROTECT EXISTING FUEL TANK IN PLACE
ROW
PROTECT CONCRETE STAIRS IN PLACE
EOP
STA "S" 11+05
END DEMO
REMOVE BOARDWALK, STAIRS, AND DECK
1270 SAYLES ST.
1260 SAYLES ST.
301 GORGE ST.
SAYLES STREET
REMOVE DECK
1306 WATER ST.
PROTECT EXISTING FUEL TANK IN PLACE
STA "G" 6+49.61 =
STA "S" 10+10.42
PROTECT EXISTING DECK IN PLACE
REMOVE EXISTING VALVE
REMOVE EXISTING ROCK RETAINING WALL AS NECESSARY. SEE NOTE 1
WATER STREET

DEMOLITION LEGEND

⊗ ○	REMOVAL OF OLD PILE – 202.0023.0000
	REMOVAL OF STRUCTURES AND OBSTRUCTIONS – 202.0001.0000
	REMOVAL OF PAVEMENT – 202.0002.0000
	REMOVAL OF BRIDGE NO. 1841 – 202.0023.0000
	REMOVAL OF CONCRETE FOUNDATIONS – 202.0023.0000
	RESTORATION OF PRIVATE AND PUBLIC PROPERTY – 202.2040.0000
—W— —W—	REMOVAL OF EXISTING WATERLINE – 202.0001.0000 SEE NOTE 1
—SS— —SS—	REMOVAL OF EXISTING SANITARY SEWER – 202.0001.0000
—SD— —SD—	REMOVAL OF EXISTING STORM DRAIN – 202.0001.0000

DEMOLITION NOTES:

1. REMOVE EXISTING ROCK RETAINING WALL AS NECESSARY TO FACILITATE REMOVAL AND INSTALLATION OF WATER MAIN AND VALVES. REMOVAL WILL BE PAID FOR UNDER PAY ITEM 202.0001.0000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS.
2. SEE U–SHEETS FOR MORE INFORMATION ON DEMOLITION OF WATER, SANITARY SEWER, AND STORM DRAIN.



UNDER BRIDGE

UNDER BRIDGE

0 20' 40'
SCALE IN FEET

PLANS DEVELOPED BY:
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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

DEMOLITION PLAN

DESIGNED JMH | DRAFTED AJB, JTH | CHECKED JLO | LAYOUT F1 | 9/23/24 DATE

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	F2	F3

BOP
STA "G" 5+60
MATCH EXISTING ROAD

PROTECT EXISTING DECK IN PLACE

24 HR PARKING

NO PARKING HERE TO CORNER

308 GORGE ST.

1270 SAYLES ST.

PAINT BRIDGE RAILING CURB FACE AND TOP YELLOW WITHIN 20' OF CORNER.

RELOCATE EXISTING FUEL TANK FILL PIPE FROM EXISTING BRIDGE TO PRIVATE TIMBER STAIRS.

PROTECT EXISTING FUEL TANK IN PLACE

DO NOT DISTURB EXISTING TREE

NEW UPPER AND LOWER DECK AND STAIRS

ROW

0 10' 20'
SCALE IN FEET

5+50 6+00 6+50 7+00

GORGE STREET

PROTECT EXISTING CONCRETE RETAINING WALL AND FENCE IN PLACE

PROTECT EXISTING DECK IN PLACE

309 GORGE ST.

NEW UPPER AND LOWER DECK

PROTECT EXISTING ROOF EVE IN PLACE

301 GORGE ST.

TREATED TIMBER STAIRS. SEE N-SHEETS.

1306 WATER ST.

PROTECT EXISTING FUEL TANK IN PLACE

9+80

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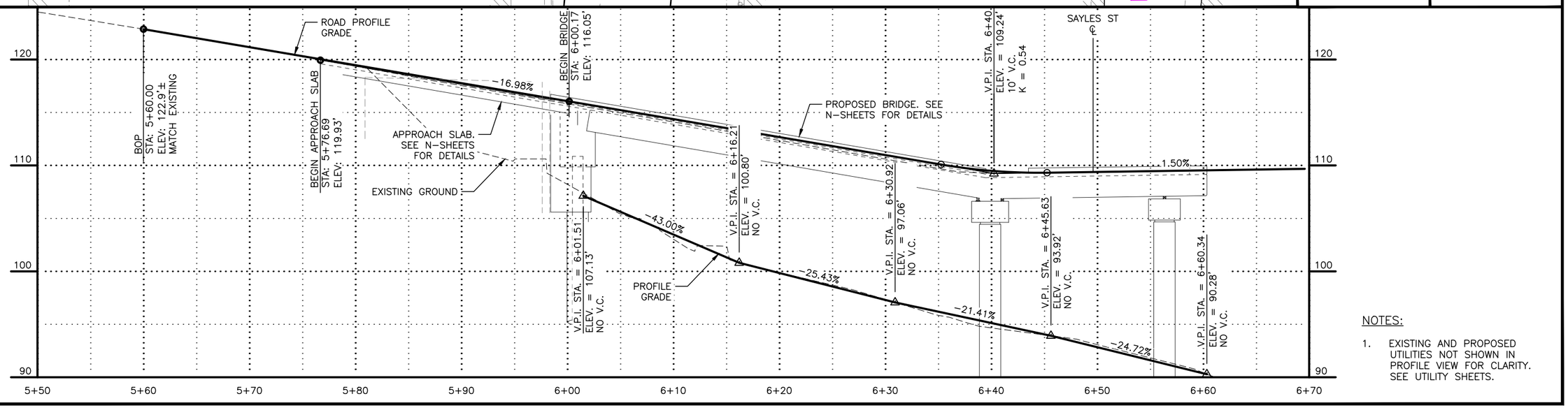

NOTES:

1. EXISTING AND PROPOSED UTILITIES NOT SHOWN IN PROFILE VIEW FOR CLARITY. SEE UTILITY SHEETS.

FIRM	R&M CONSULTANTS, INC.
ADDRESS	6860 GLACIER HWY, JUNEAU, AK 99811
PHONE	(907) 465-1763
DESIGNED	JMH
CHECKED	JLO
DRAFTED	AJB, JTH
DATE	9/23/24
LAYOUT	F2
CERTIFICATE OF AUTH #	
FILE	Z:\proj\3650.00 DOT_SE KTN Meier Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-F Sheets - Plan & Profile.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	F3	F3

PROTECT EXISTING FUEL TANK IN PLACE

RELOCATE EXISTING FUEL TANK FILL PIPE FROM EXISTING BRIDGE TO PRIVATE TIMBER STAIRS.

1270 SAYLES ST.

PAINT BRIDGE RAILING CURB FACE AND TOP YELLOW WITHIN 20' OF CORNER.

NEW BOARDWALK

PROTECT EXISTING CONCRETE STAIRS IN PLACE

PROTECT EXISTING RETAINING WALL IN PLACE

1260 SAYLES ST.

0 10' 20'

SCALE IN FEET

NO PARKING HERE TO CORNER

4

ROW

301 GORGE ST.

9+80

10+00

10+50

SAYLES STREET

11+00

1306 WATER ST.

3

GORGE ST 300

NO PARKING NON MOTORIZED VEHICLES THIS BLOCK

SAYLES 1021 ST

PROTECT EXISTING FUEL TANK IN PLACE

TREATED TIMBER STAIRS. SEE N-SHEETS.

PROTECT EXISTING TIMBER DECK IN PLACE

EOP
STA "S" 11+05
MATCH EXISTING ROAD

PLANS DEVELOPED BY:
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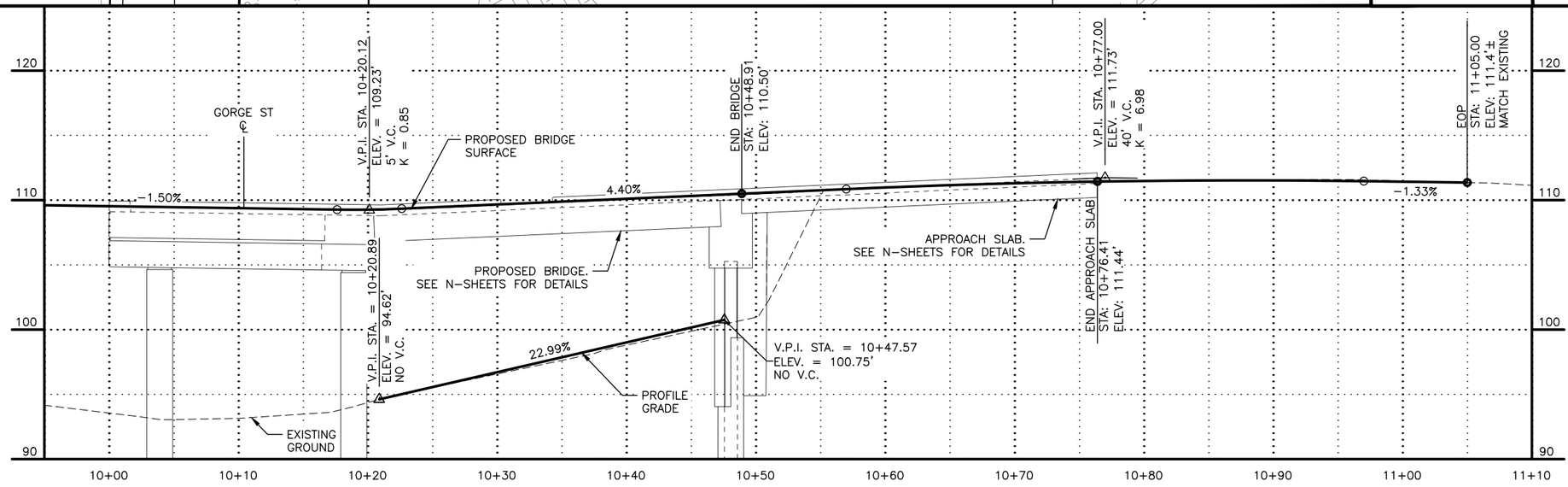

NOTES:

1. EXISTING AND PROPOSED UTILITIES NOT SHOWN IN PROFILE VIEW FOR CLARITY. SEE UTILITY SHEETS.

FIRM R&M CONSULTANTS, INC. | PHONE (907) 465-1763 | CERTIFICATE OF AUTH #:
ADDRESS 6860 GLACIER HWY, JUNEAU, AK 99811 | DESIGNED JMH | CHECKED JLO | DRAFTED AJB, JTH
DATE 9/23/24 | LAYOUT F3
FILE Z:\projects\3650.00 001_GC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-F Sheets - Plan & Profile.DWG

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N1	N53

GENERAL STRUCTURES NOTES:

1. All material and workmanship shall be in accordance with the requirements of the Alaska Department of Transportation and Public Facilities "Standard Specifications for Highway Construction", Dated 2020, Standard Modifications, Statewide Special Provisions and Project Special Provisions.

2. The structure has been designed in accordance with the requirements of the AASHTO LRFD Bridge Design Specifications Ninth Edition – dated 2020.

3. Seismic design of the structure has been completed using:
   PGA = 0.10
   A_S = 0.10
   S_{DS} = 0.30
   S_{D1} = 0.22
   SITE CLASS = B

4. DESIGN LOADS:
   DEAD LOAD:
   CIP CONCRETE – 155 PCF
   PRESTRESSED CONCRETE – 165 PCF
   WEARING SURFACE – 50 PSF

   LIVE LOAD:
   VEHICLE – AASHTO HL93 W/IMPACT
   SURCHARGE – 270 PSF

   EARTH PRESSURE:
   LATERAL K_a = 0.28 @ Abutment 1
   K_{AE} = 0.36 @ Abutment 1
   K_a = 0.25 @ Abutment 5
   K_{AE} = 0.32 @ Abutment 5

5. Unless otherwise shown in the plans the concrete cover measured from the face of the concrete to the face of any reinforcing steel shall be two and a half inches at the top of the bridge deck and two inches at all other locations.

1 6. Cast–in–place concrete for Approach Slabs, Bridge Deck, Abutment End Diaphragms, and Bent 2 and 4 closure pours shall be Class A–A. All other cast–in–place concrete shall be Class A, UNO.

1 7. MATERIALS:
   Reinforcing steel shall be ASTM A706, Grade 60.
   Soldier Piles shall be ASTM A709, Grade 50
   Plate shall be ASTM A572, Grade 50 uno.
   Angles shall be ASTM A709, Grade 36
   Pipe piles shall be in accordance with Section 715 or one of the following:
   – API 5CT J55
   – ASTM A709 Grade 50
   – ASTM A252, Modified Grade 3 (50 ksi min. yield)

   For the purposes of welding and prequalification of base metal, steel pipe pile designated as ASTM A252 may be treated as prequalified provided the chemical composition conforms to a prequalified base metal classification listed in Table 3.1 of the AWS D1.1/D1.1M, latest edition, Structural Welding Code, the grade of the pipe piling meets or exceeds the grade specified in the plans and the carbon equivalent (CE) is a maximum of 0.45

8. All Structural Steel shall be galvanized per Standard specification section 716–2.07. Any field welding or damage of galvanized steel shall be repaired per specification.

9. All exterior corners and edges shall have a 3/4" chamfer and all interior corners shall have a 3/4" fillet UNO.

10. Contractor shall verify existing dimensions and elevations in the field prior to work. Contractor shall contact Project Engineer with any discrepancies.

11. The Structural Foundation Engineering Report provided by R&M Consultants, dated June 6, 2024 was used for design.

12. Due to soil conditions at the site, it is expected that a temporary casing will be required for soldier pile and shaft installation.

BRIDGE BASIS OF ESTIMATE

ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL QUANTITY	
202.0001.0000	Removal Of Structures And Obstructions	LS	LS	All Req'd	All Req'd	All Req'd	
202.0023.0000	Removal Of Bridge No. 1841	LS	LS	All Req'd	All Req'd	All Req'd	
203.0019.0000	Unclassifed Excavation	LS	CY	46	----	46	
205.0001.0000	Excavation For Structures	CY	CY	44	----	44	
205.0004.0000	Porous Backfill Material	CY	CY	86	----	86	
501.0001.0000	Class A Concrete	LS	CY	85	----	85	
501.0002.0000	Class A–A Concrete	LS	CY	----	99	99	
501.0007.0000	Precast Concrete Member, 37'–9" Voided Slab	EA	EA	----	5	5	
501.0007.0000	Precast Concrete Member, 19'–7" Solid Slab	EA	EA	----	4	4	1
501.0007.0000	Precast Concrete Member, 26'–1" Voided Slab	EA	EA	----	5	5	
501.0009.0000	Class DS Concrete, 24" Shaft	LF	LF	136	----	136	
503.0001.0000	Reinforcing Steel	LS	LB	36700	----	36700	
503.0002.0000	Epoxy–Coated Reinforcing Steel	LS	LB	----	22200	22200	
504.0002.0000	Structural Steel	LB	LB	8395	----	8395	
505.0005.0001	Furnish Structural Steel Piles, W12x106	LF	LF	345	----	345	1
506.0001.0000	Treated Timber Stairs	LS	LS	All Req'd	All Req'd	All Req'd	
507.0001.0003	Steel Bridge Railing, 3–Tube	LF	LF	----	227	227	
515.0001.0000	Drilled Shaft 24 Inch Diameter	LS	LS	All Req'd	All Req'd	All Req'd	
515.0002.0000	Unclassified Shaft Excavation, 24 Inch Diameter	LF	LF	165	----	165	
515.0003.0000	Special Shaft Excavation, 24 Inch Diameter	LF	LF	168	----	168	
515.0004.0000	Shaft Casing, 24" Diameter	LF	LF	116	----	116	
631.0001.0002	Geotextile, Drainage, Class 2	SY	SY	50	----	50	

BRIDGE DRAWING LIST

TITLE	DWG NO
DRAWING INDEX AND STRUCTURAL NOTES	1
BRIDGE GENERAL LAYOUT	2
BRIDGE ELEVATIONS	3
BRIDGE TYPICAL SECTIONS	4
SUGGESTED CONSTRUCTION SEQUENCE 1	5
SUGGESTED CONSTRUCTION SEQUENCE 2	6
FOUNDATION PLAN	7
FOUNDATION DETAILS	8
ABUTMENT 1 LAYOUT	9
ABUTMENT 1 FASCIA	10
ABUTMENT 1 DETAILS 1	11
ABUTMENT 1 DETAILS 2	12
ABUTMENT 1 CAP DETAILS 1	13
ABUTMENT 1 CAP DETAILS 2	14
BENT 2 LAYOUT	15
BENT 3 LAYOUT	16
BENT 4 LAYOUT	17
WEST FRAME BRACING	18
STEEL DETAILS	19
BENT 2 DETAILS 1	20
BENT 2 DETAILS 2	21
BENT 3 DETAILS 1	22
BENT 3 DETAILS 2	23
BENT 4 DETAILS 1	24
BENT 4 DETAILS 2	25
ABUTMENT 5 LAYOUT	26
ABUTMENT 5 FASCIA	27
ABUTMENT 5 DETAILS 1	28
ABUTMENT 5 DETAILS 2	29
ABUTMENT 5 CAP DETAILS 1	30
ABUTMENT 5 CAP DETAILS 2	31
FRAMING PLAN	32
GIRDER DETAILS 1	33
GIRDER DETAILS 2	34
GIRDER DETAILS 3	35
PIER 2 CLOSURE POUR	36
PIER 4 CLOSURE POUR	37
BRIDGE DECK PLAN	38
BRIDGE DECK DETAILS 1	39
BRIDGE DECK DETAILS 2	40
BRIDGE DECK DETAILS 3	41
BRIDGE APPROACH SLAB LAYOUT	42
BRIDGE APPROACH SLAB DETAILS	43
STEEL BRIDGE RAILING DETAILS 1 OF 3	44
STEEL BRIDGE RAILING DETAILS 2 OF 3	45
STEEL BRIDGE RAILING DETAILS 3 OF 3	46
UTILITY HANGER DETAILS	47
THRUST BLOCK DETAILS	48
BRIDGE DRAIN DOWNSPOUT DETAILS	49
TIMBER STAIR DETAILS 1	50
TIMBER STAIR DETAILS 2	51
TIMBER STAIR DETAILS 3	52
TIMBER STAIR DETAILS 4	53

LEGEND:

A — Identifies Section, View or Detail
A — Note: If Section, View or Detail is shown on another sheet reference "SHEET TITLE"

TP–1 — Test Pit by R & M Consultants, 2022

B–1 — Boring by R & M Consultants, 2022

ABBREVIATIONS:

℄	Centerline
CIP	Cast In Place
CJP	Complete Joint Penetration
conc.	Concrete
EL	Elevation
long.	Longitudinal
No.	Number
o.c.	on center
typ.	Typical
ROW	Right of Way
Rt	Right
spec.	Specification
std.	Standard
UNO	Unless Noted Otherwise
WP	Work Point
PCF	Pounds per Cubic Foot
PSF	Pounds per Square Foot
SC	Shaft–Column

1 10/24/24 – UPDATES TO PAY ITEMS AND NOTES

10/24/24 | 5:20 AM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N01 Drawing Index & Notes R1.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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(206) 622-5822

STATE OF ALASKA 49TH — "Anne Fabrello-Streufert," 10-24-2024 SE135564 REGISTERED STRUCTURAL ENGINEER

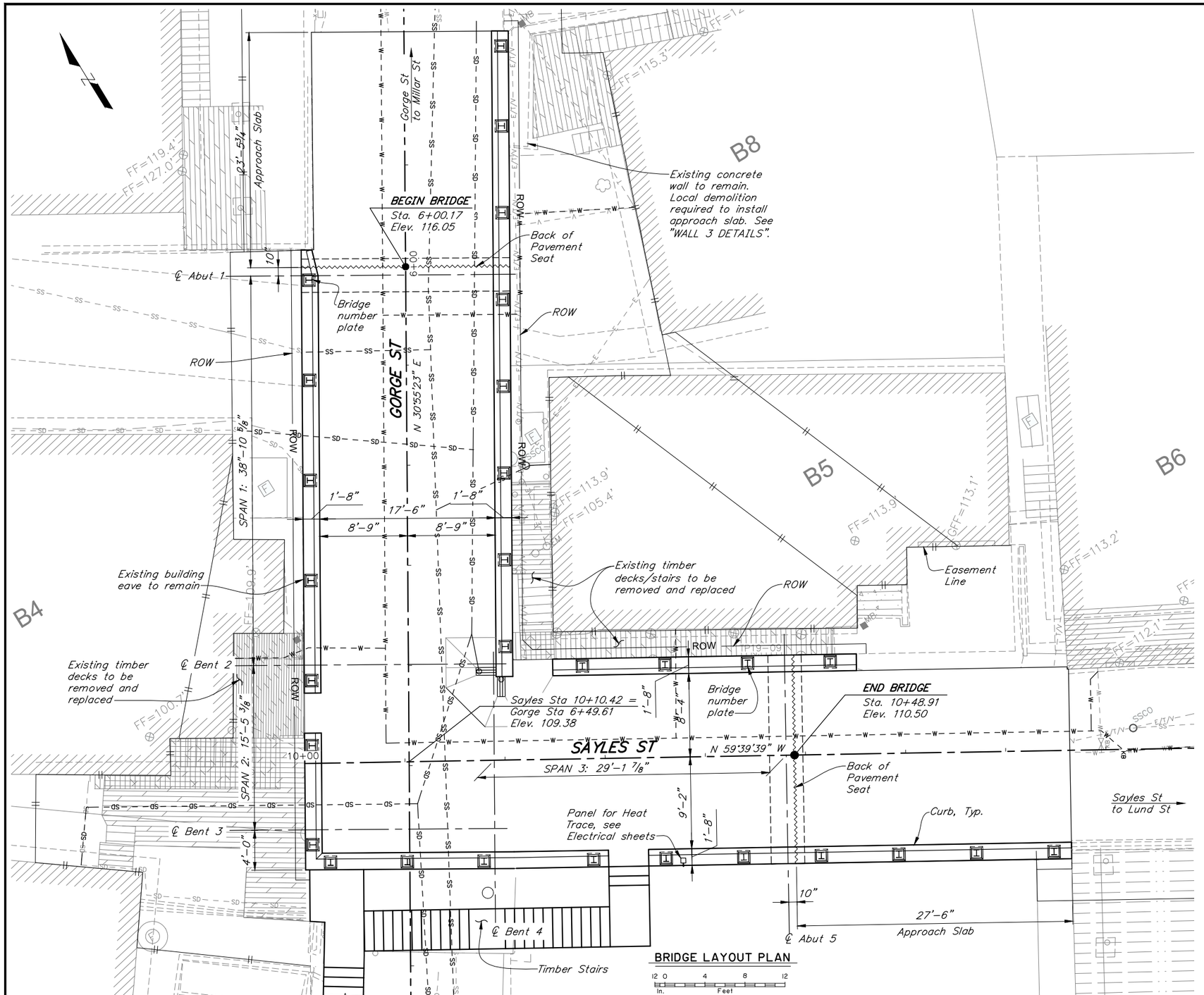
SAYLES – GORGE STREET VIADUCT

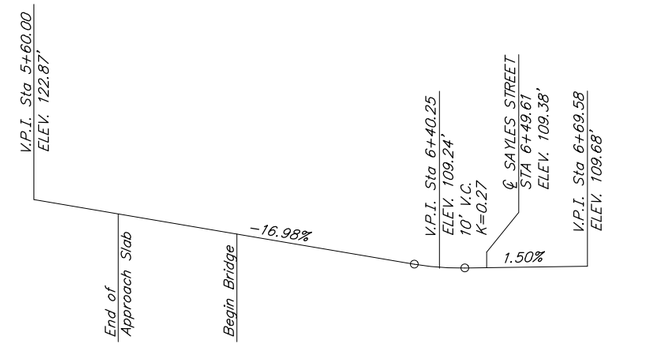
SAYLES ST & GORGE ST

DRAWING INDEX AND STRUCTURAL NOTES

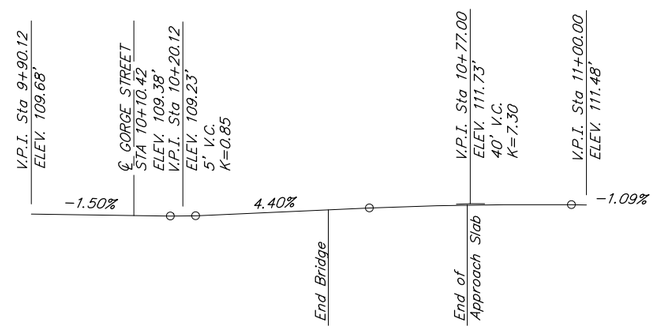
BRIDGE NO. 1841
DWG. NO. 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N2	N53





GORGE STREET PROFILE GRADE



SAYLES STREET PROFILE GRADE

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	LAYOUT BY: Andrew Gastineau	CHECKED BY: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	SPECIFICATIONS BY: Joshua Pruitt	P S & E COMPARED:	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	APPROVAL RECOMMENDED BY:		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
8-01-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

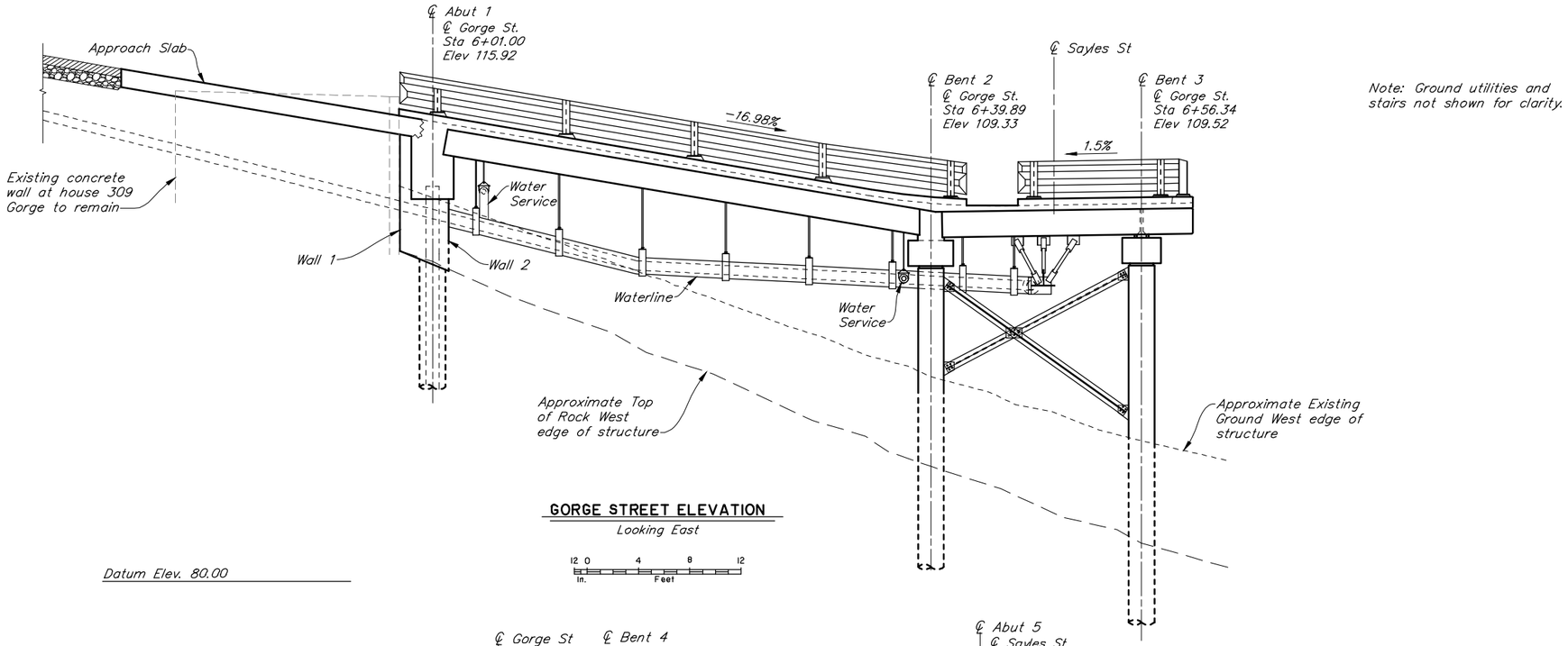
SAYLES ST & GORGE ST

BRIDGE GENERAL LAYOUT

BRIDGE NO. 1841
DWG. NO. 2

08/01/24 | 1:22 PM | Joshp
V:\1810\0239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N02 Bridge General Layout.dwg

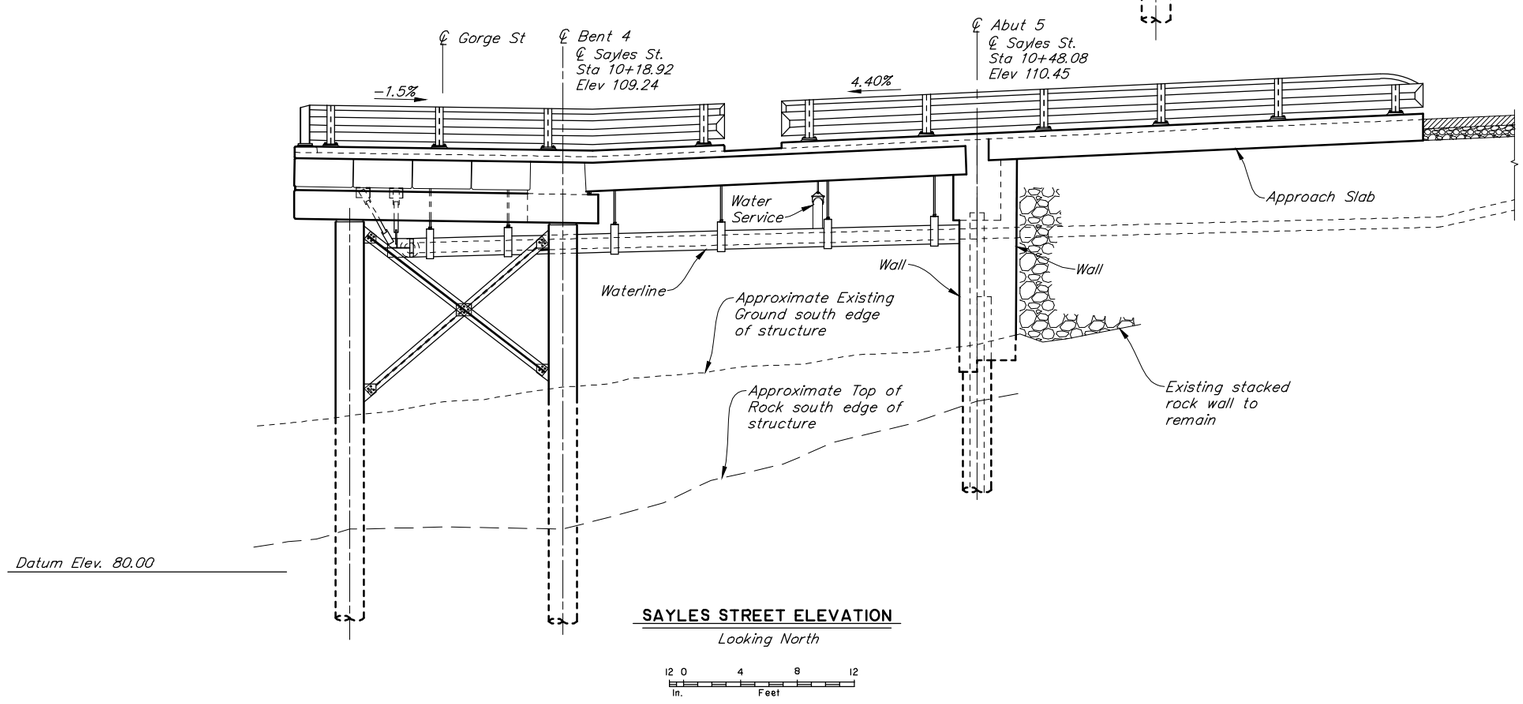
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N3	N53



GORGE STREET ELEVATION

Looking East

Note: Ground utilities and stairs not shown for clarity.



SAYLES STREET ELEVATION

Looking North

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
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STATE OF ALASKA 49 TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

BRIDGE ELEVATIONS

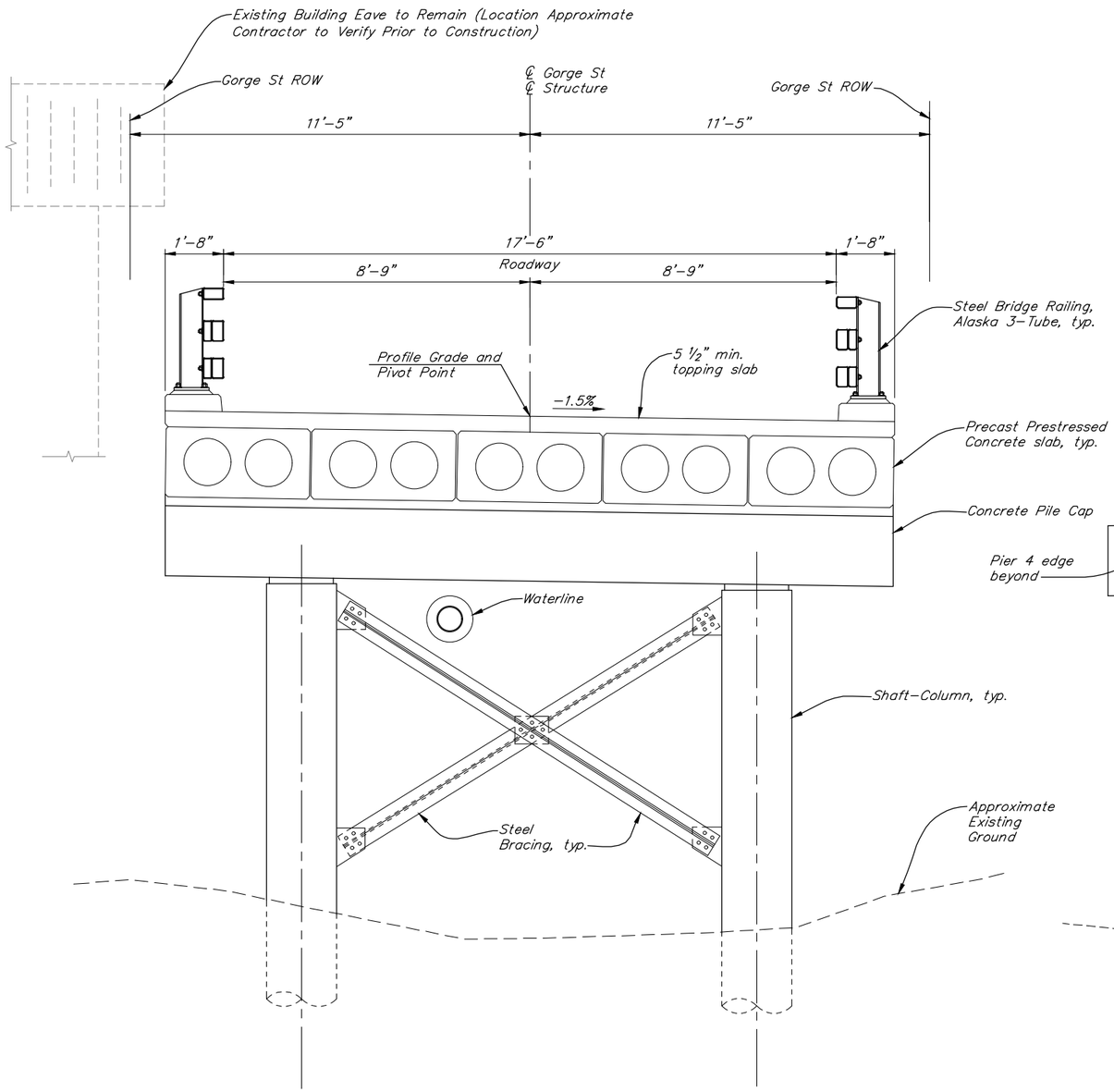
BRIDGE NO. 1841

DWG. NO. 3

07/31/24 | 8:04 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N03 Bridge Elevations.dwg

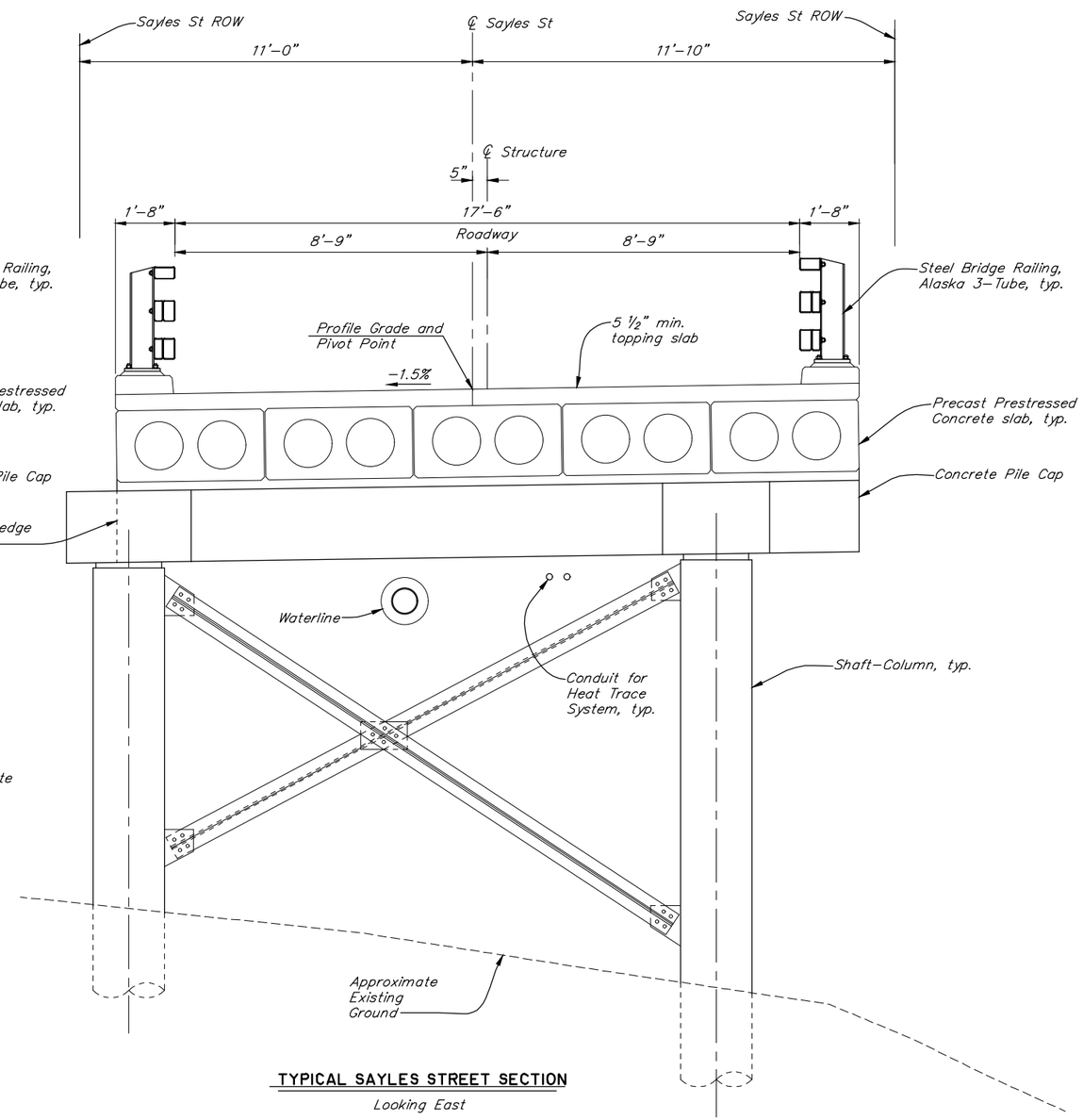
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N4	N53

Note: Ground utilities and stairs not shown for clarity.



TYPICAL GORGE STREET SECTION

Looking North



TYPICAL SAYLES STREET SECTION

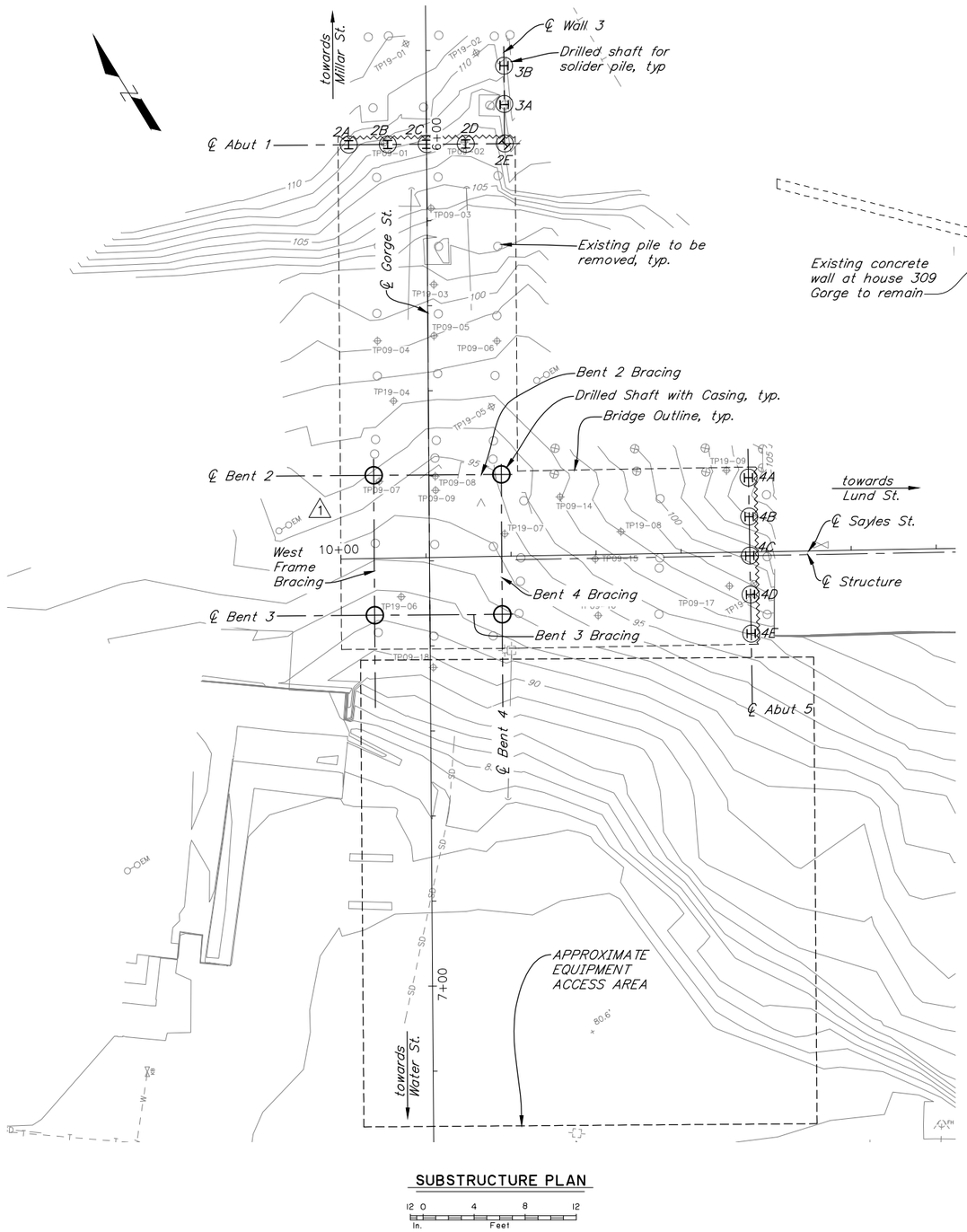
Looking East

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	STATE OF ALASKA **DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES** PLANS DEVELOPED BY: KPFF ENGINEERING CONSULTING 1601 5th Ave, Suite 1600, Seattle, WA 98101 (206) 622-5822	**SAYLES/GORGE ST. VIADUCT** SAYLES ST & GORGE ST **BRIDGE TYPICAL SECTIONS**
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		BRIDGE NO. 1841 DWG. NO. 4

STATE OF ALASKA 49TH — Anne Fabrello-Streufert, 7-31-2024, SE135564, REGISTERED STRUCTURAL ENGINEER

07/31/24 | 8:07 AM | Rickt
V:\1890239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N04 Bridge Typical Sections.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N5	N53



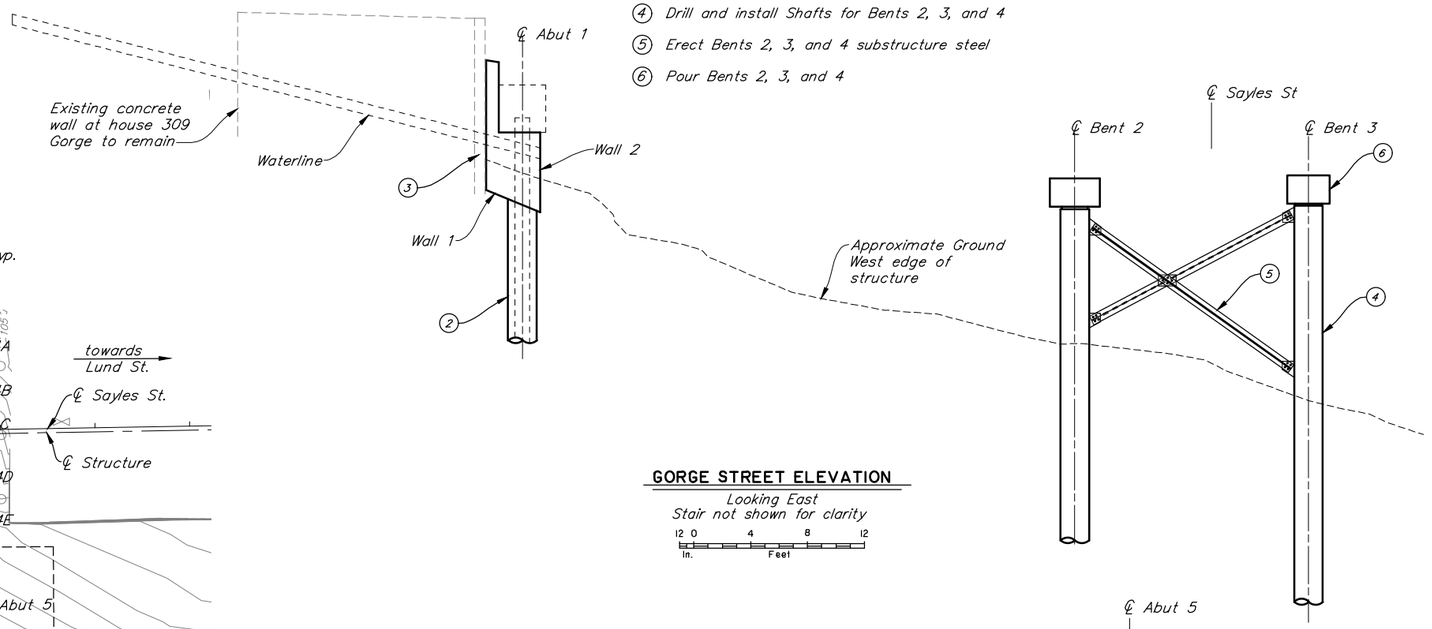
SUBSTRUCTURE PLAN

12 0 4 8 12
In. Feet

SUGGESTED SUBSTRUCTURE CONSTRUCTION SEQUENCE

Sequence shown is suggested. Final sequence to be determined by the Contractor based on their means and methods.

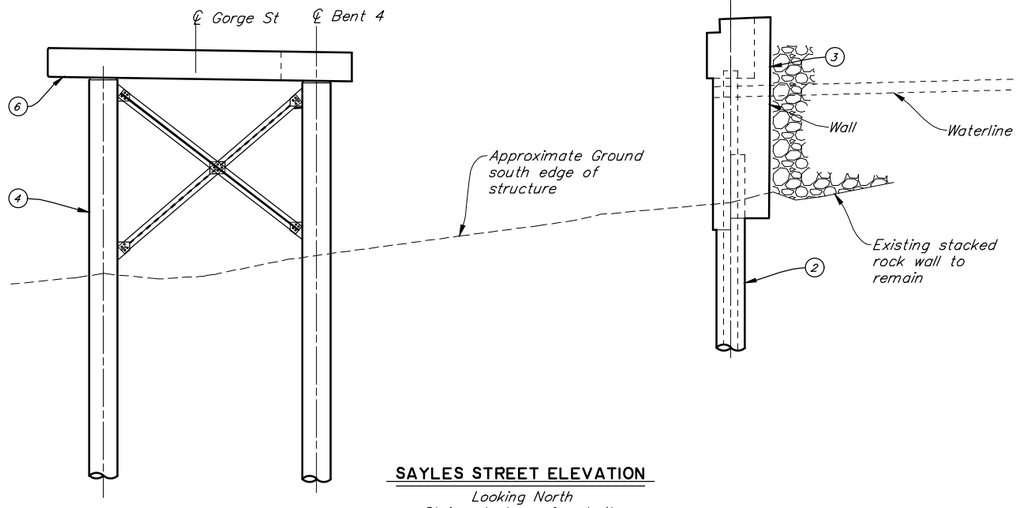
1. *Remove existing bridge and existing features per "DEMOLITION PLAN"*
2. *Drill abutment rock sockets*
3. *Install abutment soldier pile walls and pile caps; backfill prior to setting voided slab girders*
4. *Drill and install Shafts for Bents 2, 3, and 4*
5. *Erect Bents 2, 3, and 4 substructure steel*
6. *Pour Bents 2, 3, and 4*



GORGE STREET ELEVATION

Looking East
Stair not shown for clarity

12 0 4 8 12
In. Feet



SAYLES STREET ELEVATION

Looking North
Stair not shown for clarity

12 0 4 8 12
In. Feet

△1 10/23/24 – MINOR DRAFTING CLEANUP

09/26/24 | 9:25 PM | Rickt
V:\1180239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N05 Suggested Const Seq 1.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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STATE OF ALASKA 49TH
"Anne Fabrello-Streufert"
9-26-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

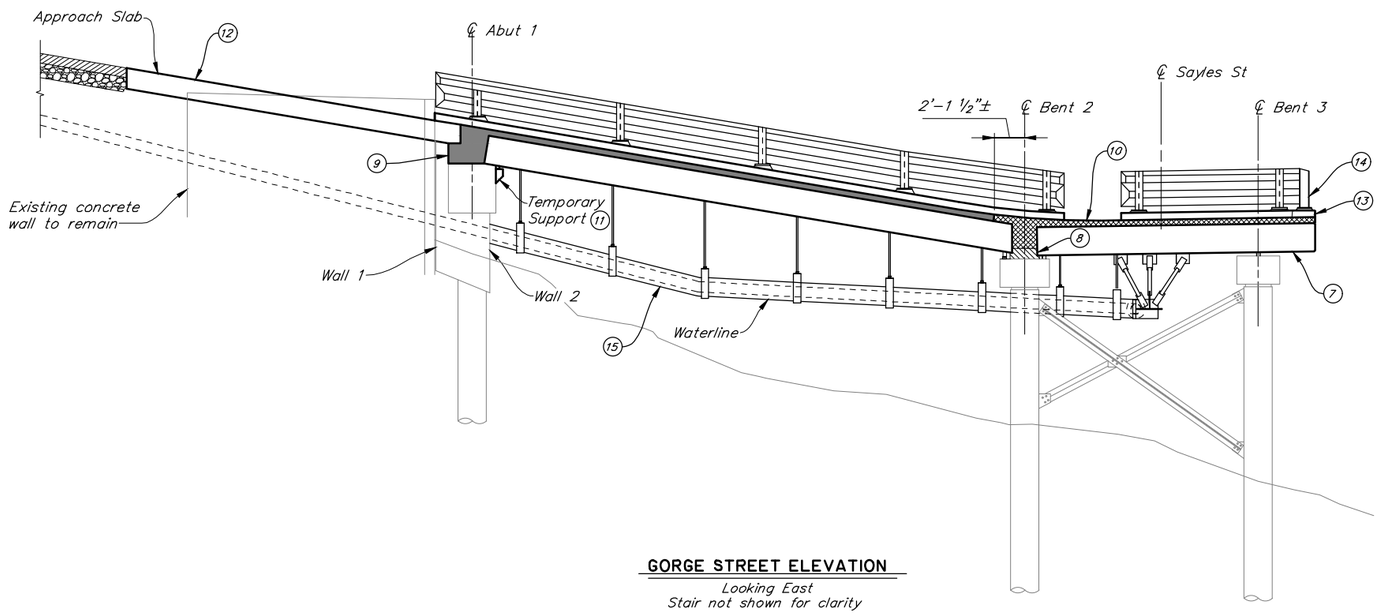
SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

SUGGESTED CONSTRUCTION SEQUENCE 1

BRIDGE NO. 1841
DWG. NO. 5

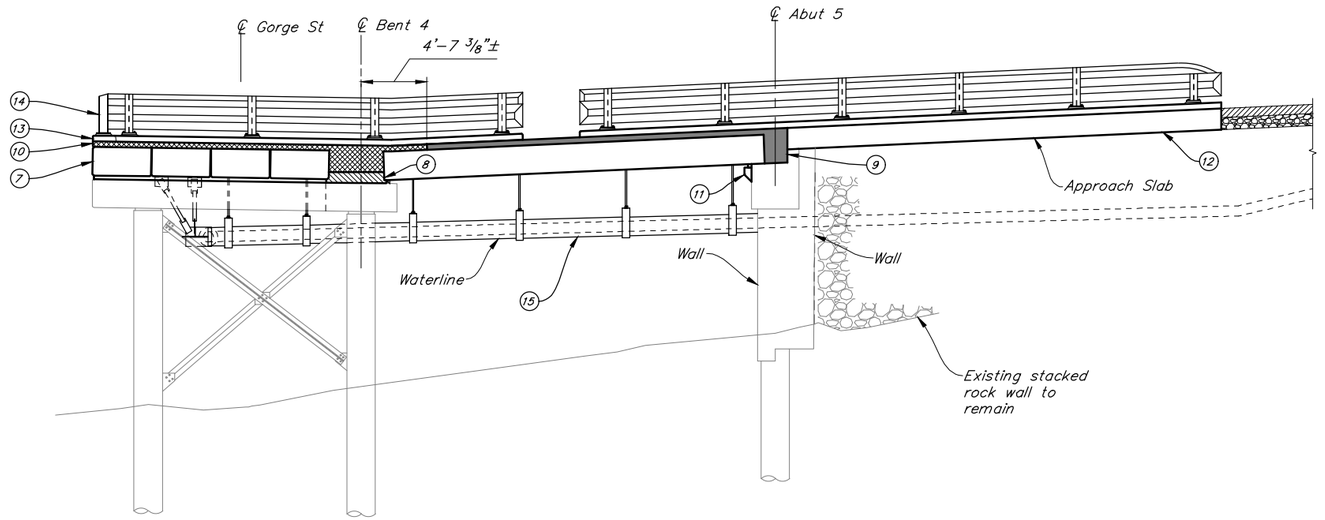
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N6	N53



GORGE STREET ELEVATION

Looking East
Stair not shown for clarity

12 0 4 8 12
In. Feet



SAYLES STREET ELEVATION

Looking North
Stair not shown for clarity

12 0 4 8 12
In. Feet

SUGGESTED SUPERSTRUCTURE CONSTRUCTION SEQUENCE

(7) *Install voided slab girders using temporary supports as required*
(8) *Cast bottom portion of closure pours (Class A)* △1
(9) *Cast End Diaphragms with Bridge Deck Spans 1 and 3 (Class A–A)*
(10) *Cast Span 2 with Bent 2 and Bent 4 closure pours (Class A–A)*
(11) *Remove temporary supports and Temporary Oak Blocks*
(12) *Cast Bridge Approach Slabs*
(13) *Cast Curbs*
(14) *Install Steel Bridge Barrier*
(15) *Install Bridge utilities*
(16) *Install Timber Stairs, Decks, and other misc. items.*

△1 10/24/24 – CONCRETE CLASS CLARIFICATION

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
10-24-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

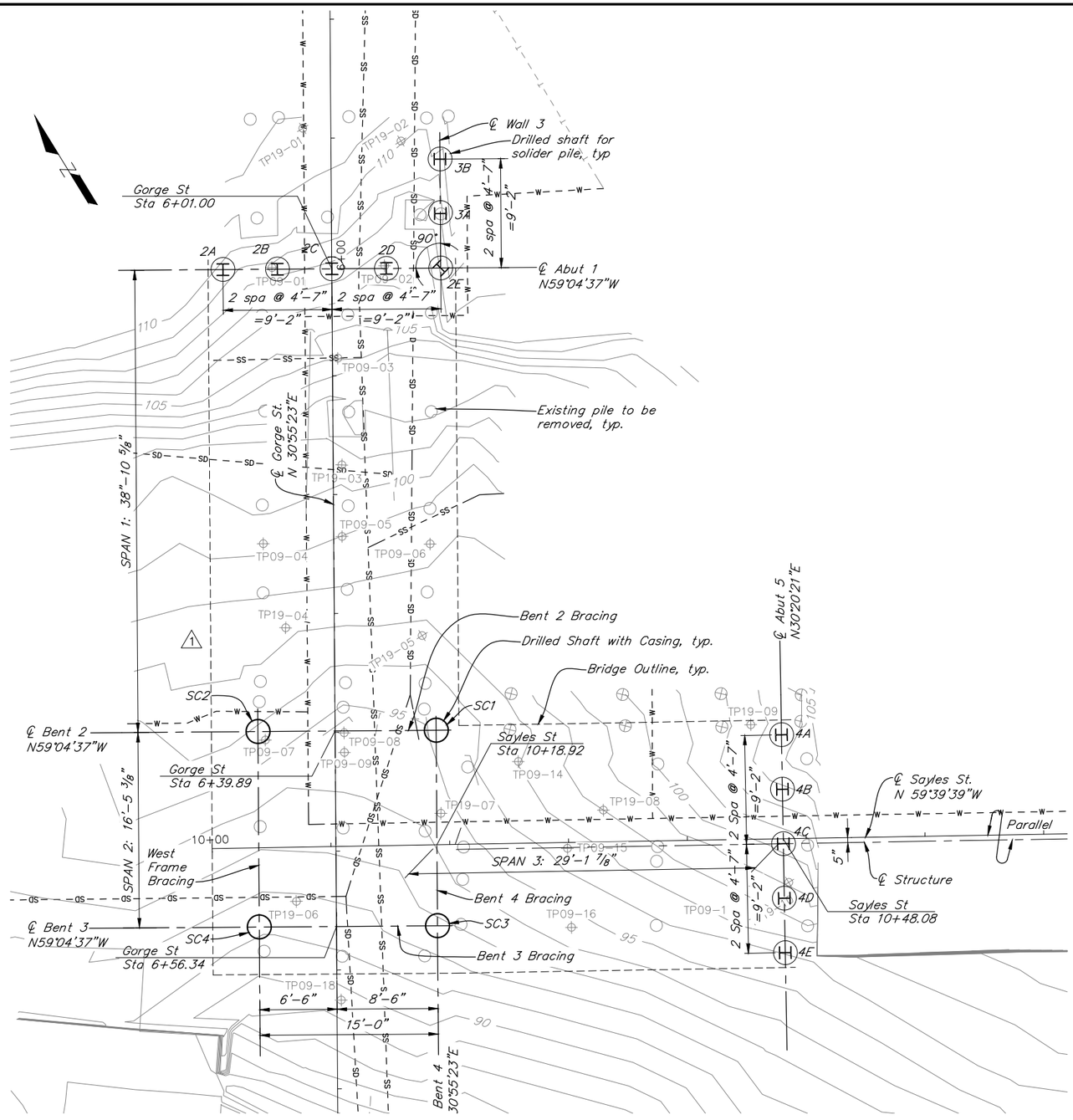
SAYLES – GORGE STREET VIADUCT
SAYLES ST & GORGE ST
SUGGESTED CONSTRUCTION SEQUENCE 2

BRIDGE NO. 1841
DWG. NO. 6

10/24/24 | 5:20 AM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N06 Suggested Const Seq 2.dwg

Addendum #1 :Attachment #5

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N7	N53



FOUNDATION PLAN

12 0 4 8 12
In. Feet

NOTES:

1. *Existing utilities not shown for clarity. See civil plans for existing utilities.*
2. *Utility locations shown conceptually. See civil plans for exact locations.*
3. *Protect all adjacent private buildings, walls and facilities*
4. *Do not remove overburden near private property which would undermine existing structures and foundations.*

1 10/23'24 – MINOR DRAFTING CLEANUP

09/26/24 | 9:25 PM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N07 Foundation Plan.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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STATE OF ALASKA 49TH
"Anne Fabrello-Streufert"
9-26-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

FOUNDATION PLAN

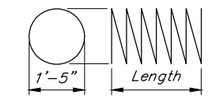
BRIDGE NO. 1841

DWG. NO. 7

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N8	N53

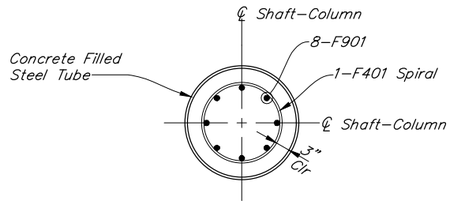
REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
F401	S, F	4	4	38'–0"	Spiral
F402		4	4	1'–5"	Spiral
F901	F	9	32	40'–0"	–

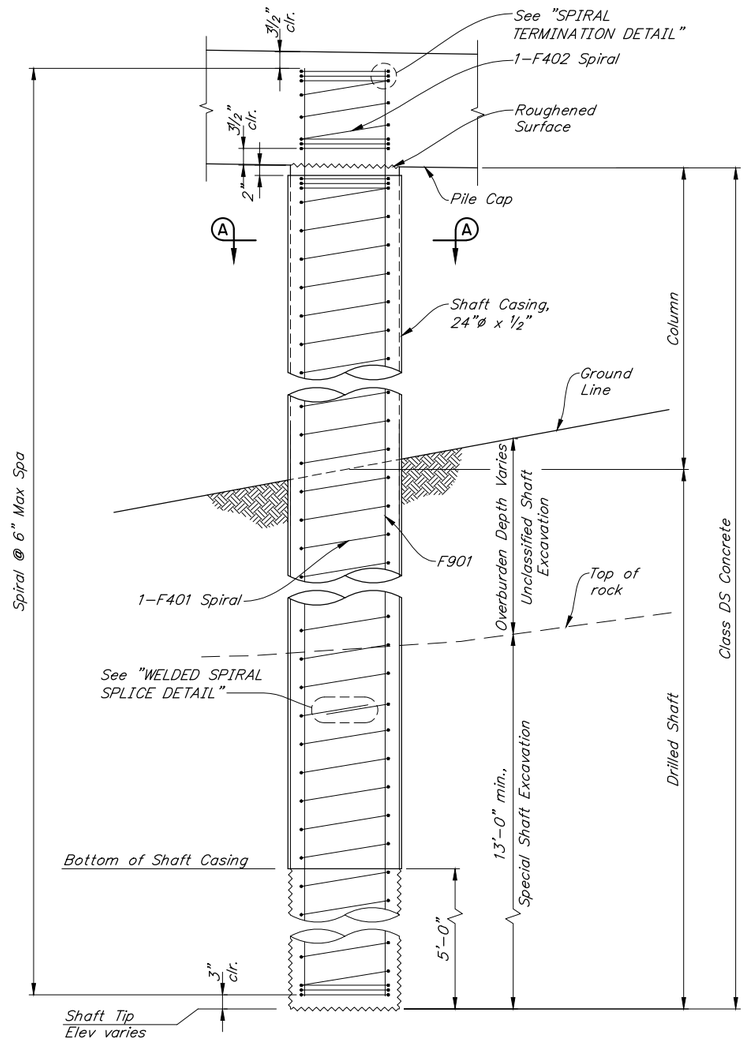


F401
F402

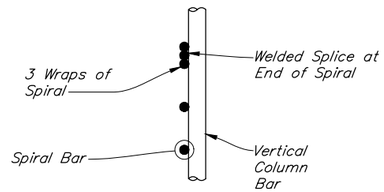
S = Spliced permitted. Length does not include splices.
F = Furnish additional length and field adjust.
V = Varies



SECTION A-A

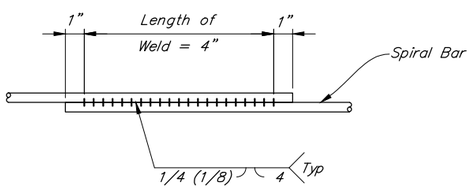


SHAFT-COLUMN ELEVATION



Required At All Locations Where Spiral Terminates

SPIRAL TERMINATION DETAIL



WELDED SPIRAL SPLICE DETAIL

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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1601 5th Ave, Suite 1600, Seattle, WA 98101
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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
4-29-2024
SE135664
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

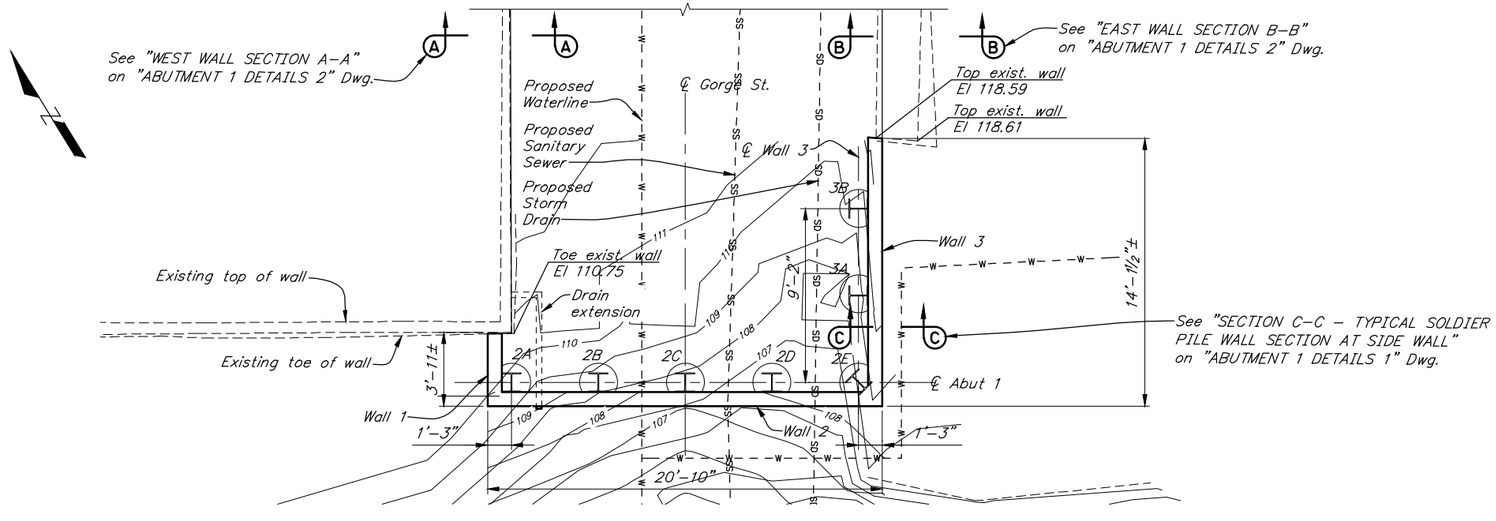
SAYLES ST & GORGE ST

FOUNDATION DETAILS

BRIDGE NO. 1841
DWG. NO. 8

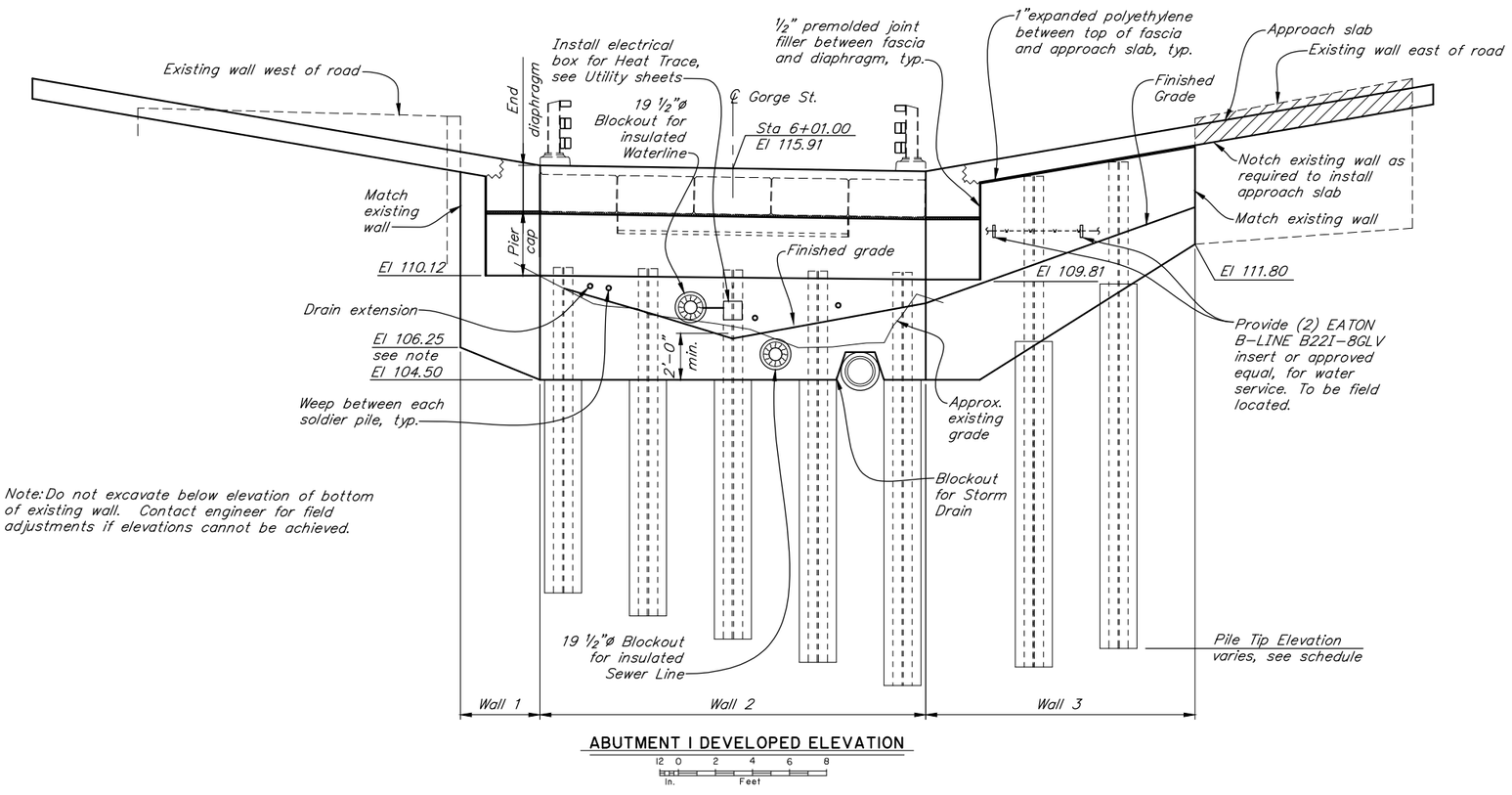
04/29/24 | 3:58 PM | Haoyis
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (\2019)\1841-N08 Foundation Details.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N9	N53



ABUTMENT 1 PLAN

12 0 2 4 6 8 In. Feet



Note: Do not excavate below elevation of bottom of existing wall. Contact engineer for field adjustments if elevations cannot be achieved.

ABUTMENT 1 DEVELOPED ELEVATION

12 0 2 4 6 8 In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

ABUTMENT 1 LAYOUT

BRIDGE NO. 1841

DWG. NO. 9

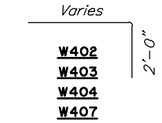
07/31/24 | 10:15 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N09 Abutment 1 Layout.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N10	N53

REINFORCING STEEL

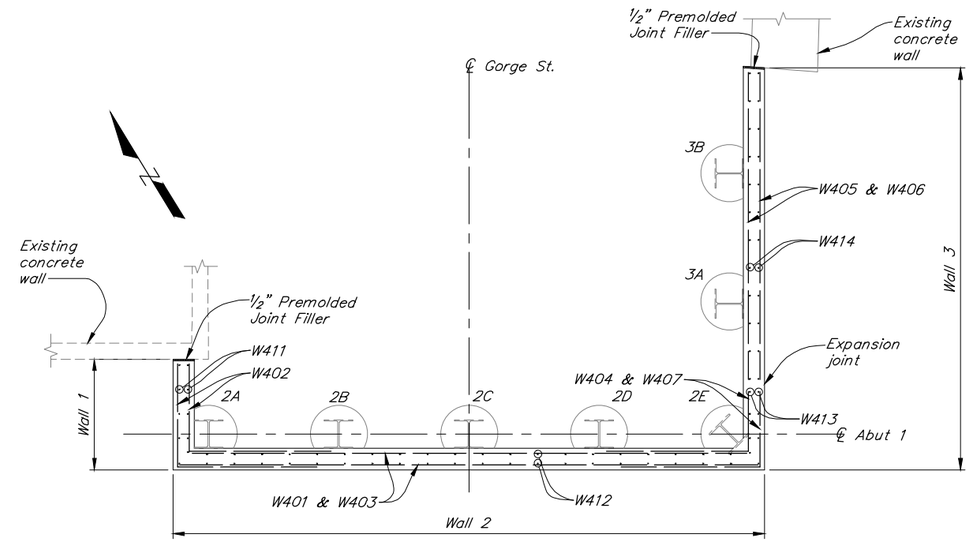
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W401		4	19	20' – 6"	
W402	V	4	8	5' – 5"	BENT
W403	V	4	4	5' – 10"	BENT
W404	V	4	10	4' – 11"	BENT
W405		4	8	10' – 9"	
W406	V	4	14	9' – 1"	
W407		4	8	3' – 0"	
W411		4	30	3' – 2"	
W412		4	28	5' – 0"	
W413		4	2	4' – 5"	
W414	V	4	24	10' – 1"	
W415		4	4	7' – 6"	

BENDING DIAGRAM



Note: All dimensions are out to out.

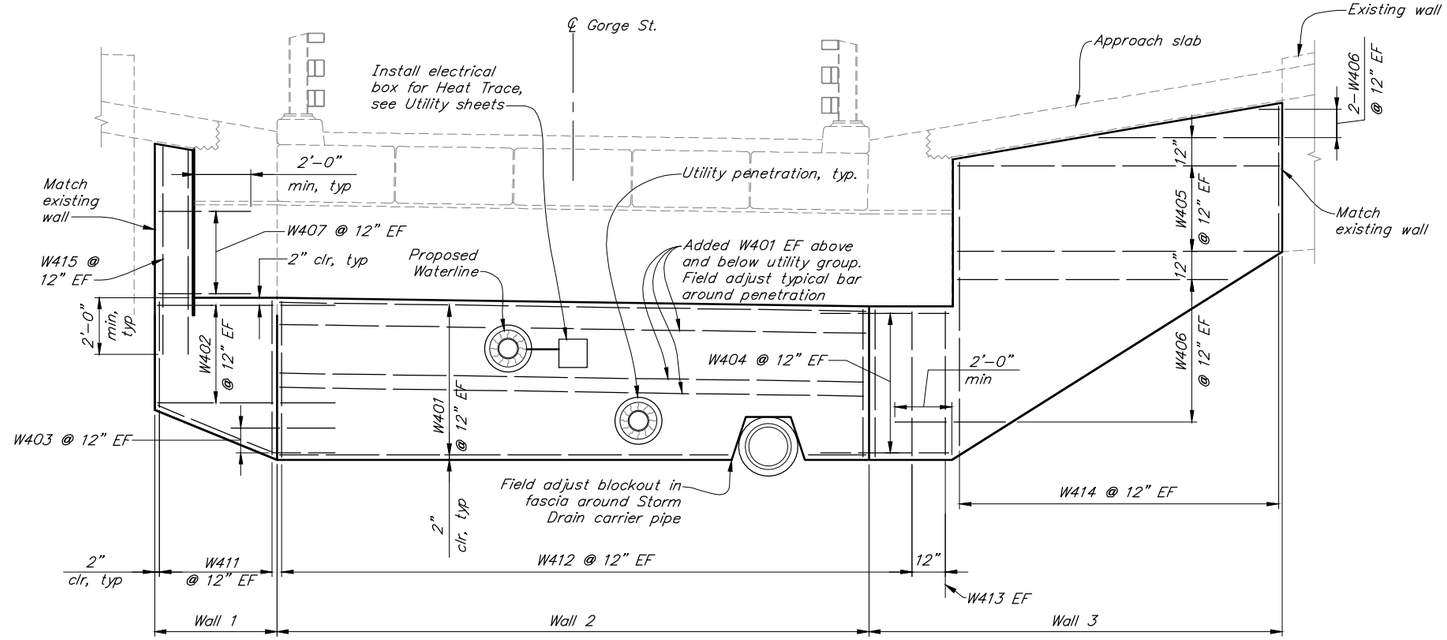
V = Varies



Note: For information not shown, see dwg. "ABUTMENT 1 LAYOUT"

ABUTMENT I FASCIA PLAN

12 0 2 4 6
In. Feet



Note: For information not shown, see dwg. "ABUTMENT 1 LAYOUT"

ABUTMENT I FASCIA DEVELOPED ELEVATION

12 0 2 4 6
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

ABUTMENT 1 FASCIA

BRIDGE NO. 1841

DWG. NO. 10

07/31/24 | 10:25 AM | Rickt
V:\1880239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N10 Abutment 1 Fascia.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N11	N53

SOLDIER PILE SCHEDULE

Wall	Pile mark	Pile size	Shaft diameter	PILE ELEVATION		
				Top	Estimated Tip*	Estimated Top rock **
2	2A	W12x106	2'–0"	111.60	93.00	105.00
2	2B	W12x106	2'–0"	111.53	91.75	103.75
2	2C	W12x106	2'–0"	111.46	90.50	102.50
2	2D	W12x106	2'–0"	111.39	89.25	101.25
2	2E	W12x106	2'–0"	111.33	88.00	100.00
3	3A	W12x106	2'–0"	116.00	89.00	100.00
3	3B	W12x106	2'–0"	116.75	90.00	102.00

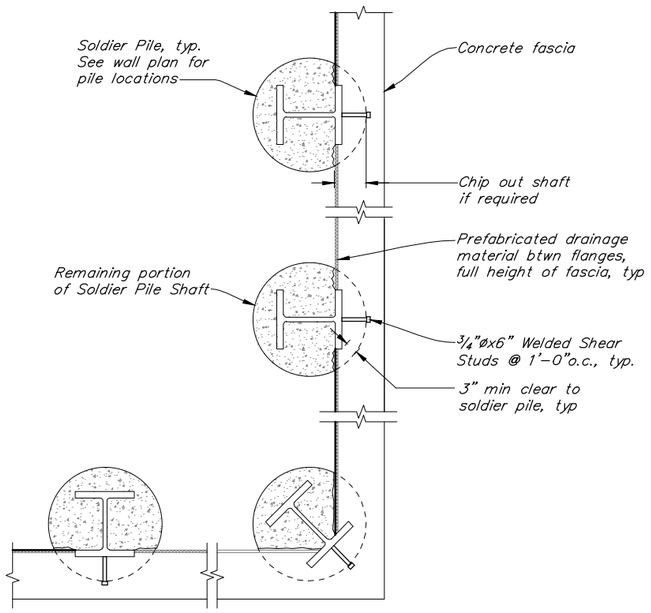
SOLDIER PILE NOTES:

* Minimum embedment of 10'–0 into intact rock. Piles shall be ordered minimum 5' long to accommodate unknown rock depths.

** Top of rock may vary. Elevation estimated based on geotechnical recommendations. See construction sequence below.

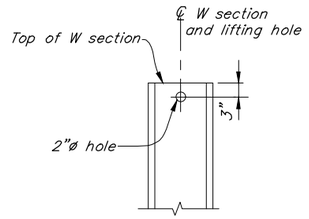
SOLDIER PILE CONSTRUCTION SEQUENCE:

1. Drill to rock.
2. If intact rock elevation differs from table value by more than 2 feet, contact Engineer.
3. Drill 12' into rock. Verify rock suitability with Geotechnical Engineer.
4. Cut bottom of pile to achieve top elevation per table.
5. Place pile.
6. Place shaft concrete.
7. Install fascia.



TYPICAL SOLDIER PILE WALL PLAN

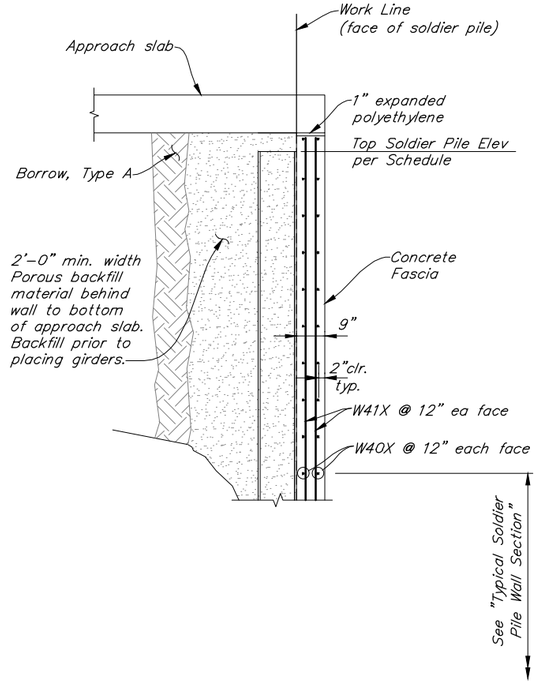
12 6 0 1 2 3
In. Feet



Note: Lifting hole shall be drilled in the shop prior to painting the pile.

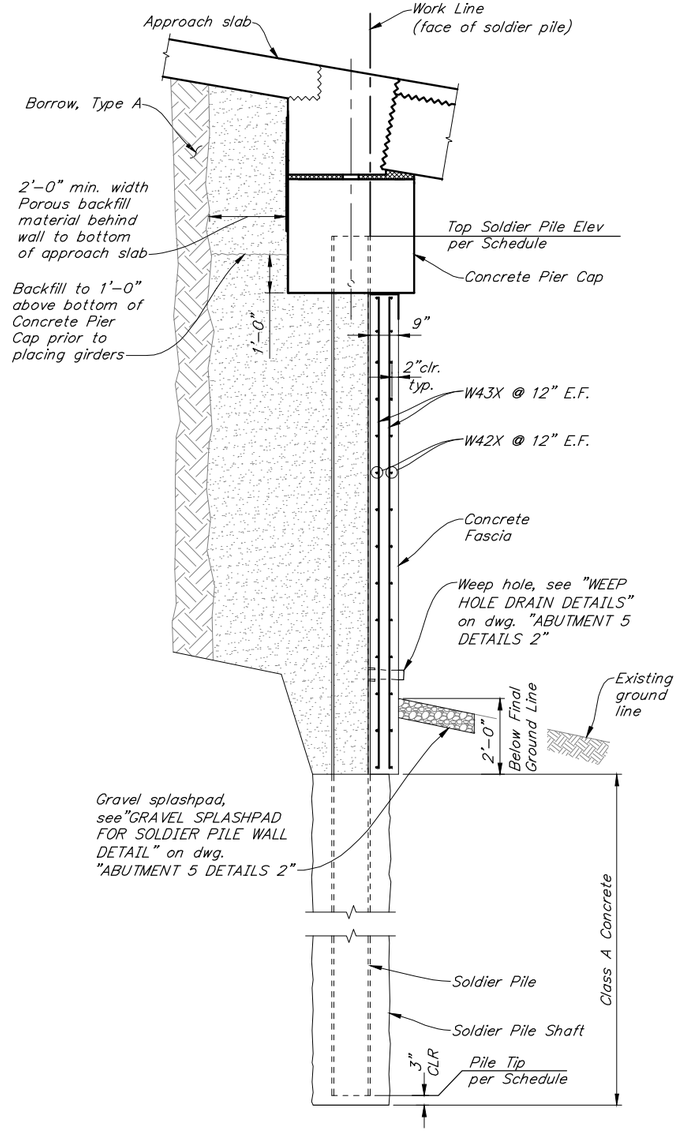
SOLDIER PILE LIFTING HOLE

12 6 0 1 2 3
In. Feet



SECTION C-C - TYPICAL SOLDIER PILE WALL SECTION AT SIDE WALL

12 6 0 1 2 3 4
In. Feet



TYPICAL SOLDIER PILE WALL SECTION

12 6 0 1 2 3 4
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
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STATE OF ALASKA 49TH
"Anne Fabrello-Streufert"
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

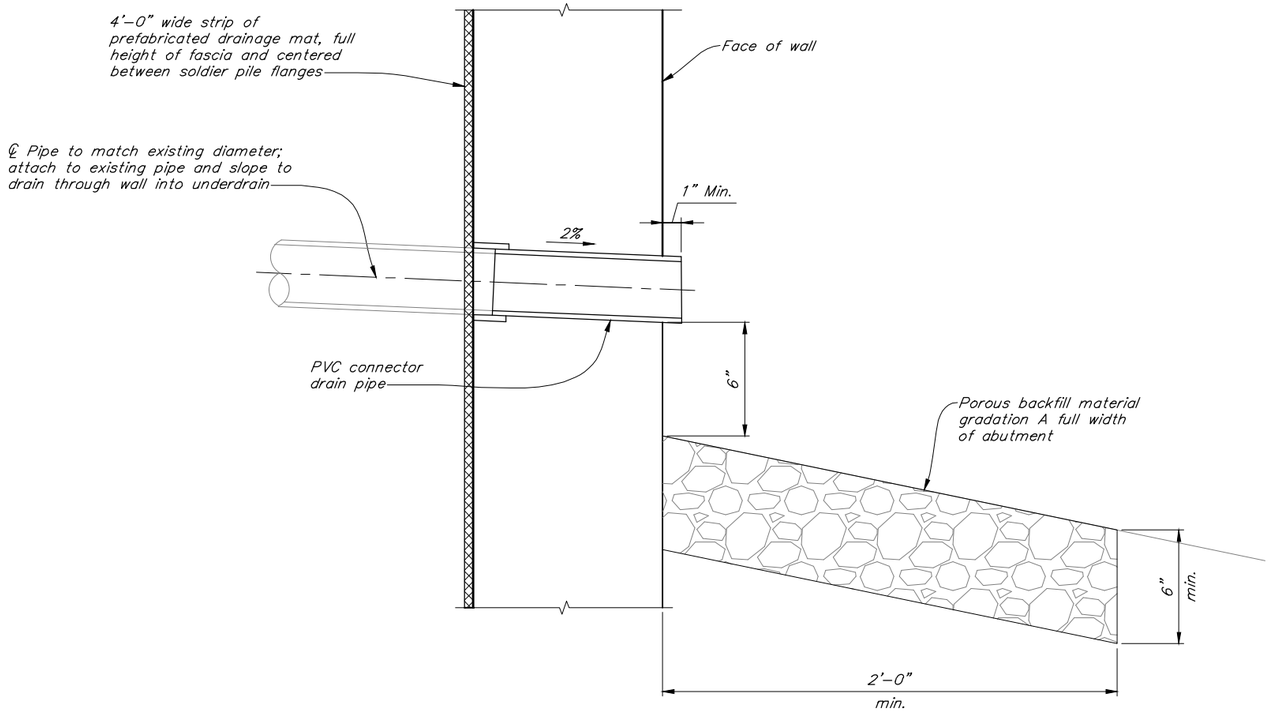
ABUTMENT 1 DETAILS 1

BRIDGE NO. 1841

DWG. NO. 11

07/31/24 | 10:53 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N11 Abutment 1 Details 1.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N12	N53

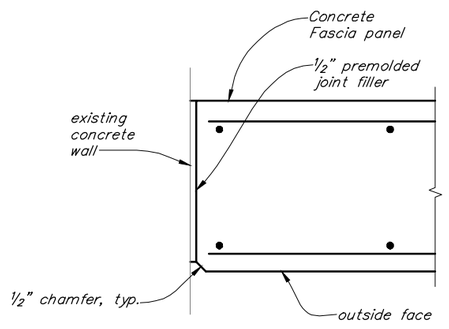


DRAIN EXTENSION AT SOLDIER PILE WALL

0 3 6 9 1'-0"
Inches

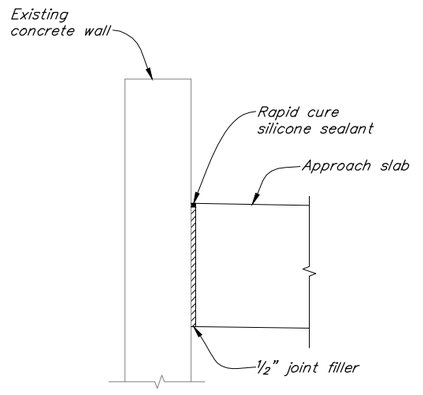
NOTES:

1. See "ABUTMENT 5 DETAILS" for additional details.



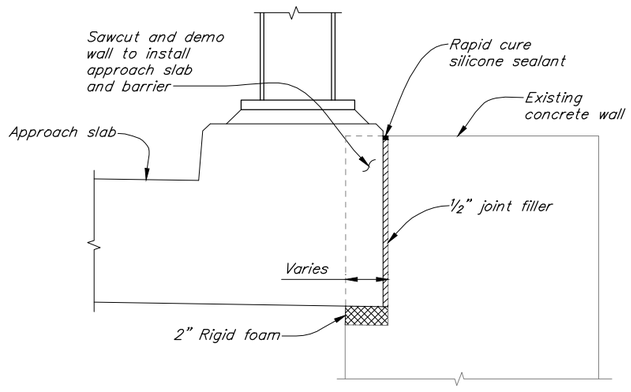
TYPICAL FASCIA TERMINATION DETAIL

0 3 6 9 1'-0"
Inches



WEST WALL SECTION A-A

6 0 1
In. Feet



EAST WALL SECTION B-B

6 0 1
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
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"Anne Fabrello-Streufert"
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

ABUTMENT 1 DETAILS 2

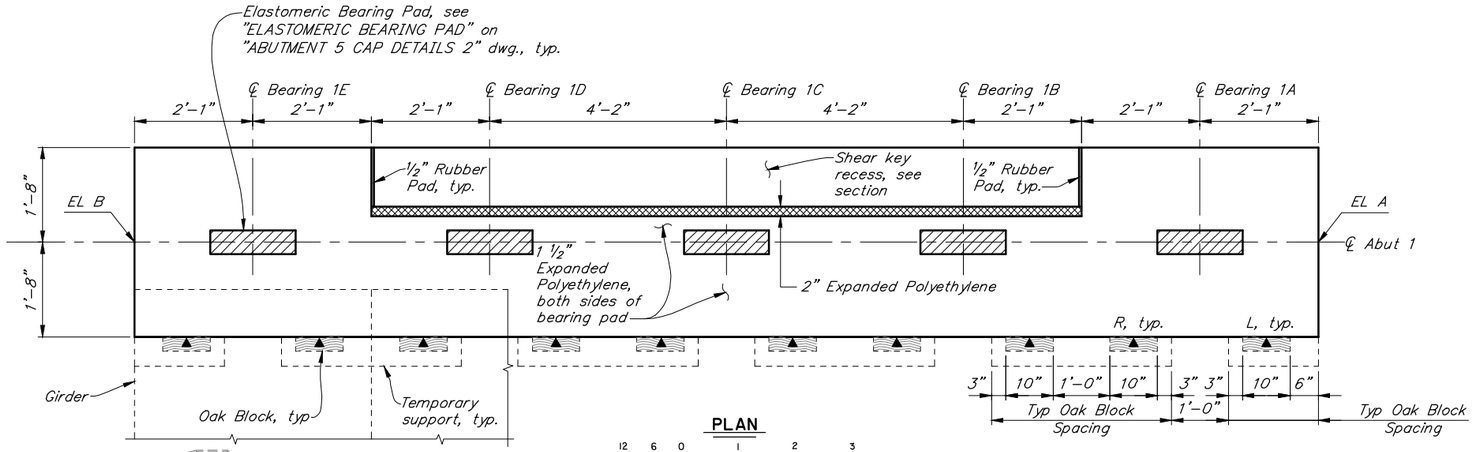
BRIDGE NO. 1841

DWG. NO. 12

07/31/24 | 10:55 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N12 Abutment 1 Details 2.dwg

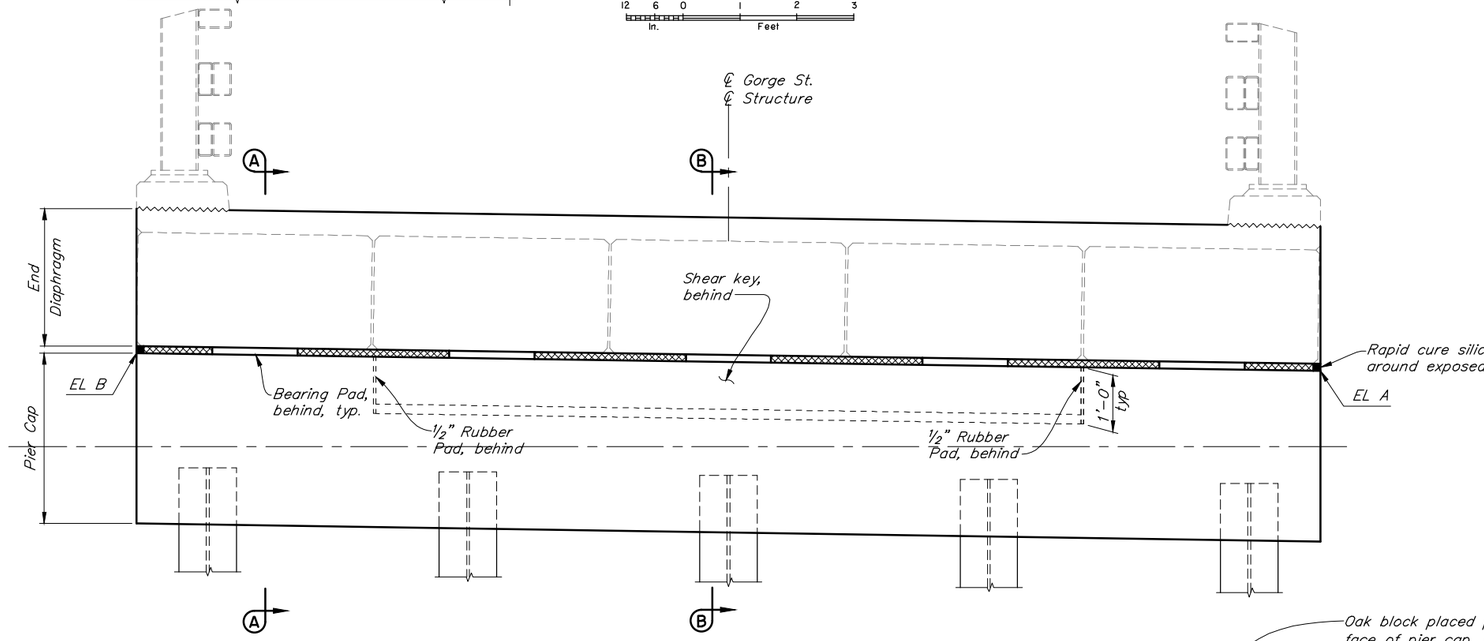
Addendum #1 :Attachment #5

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N13	N53



PLAN

12 6 0 1 2 3
In. Feet

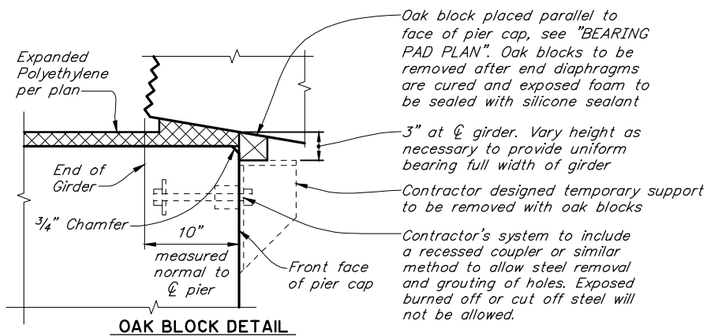


ELEVATION

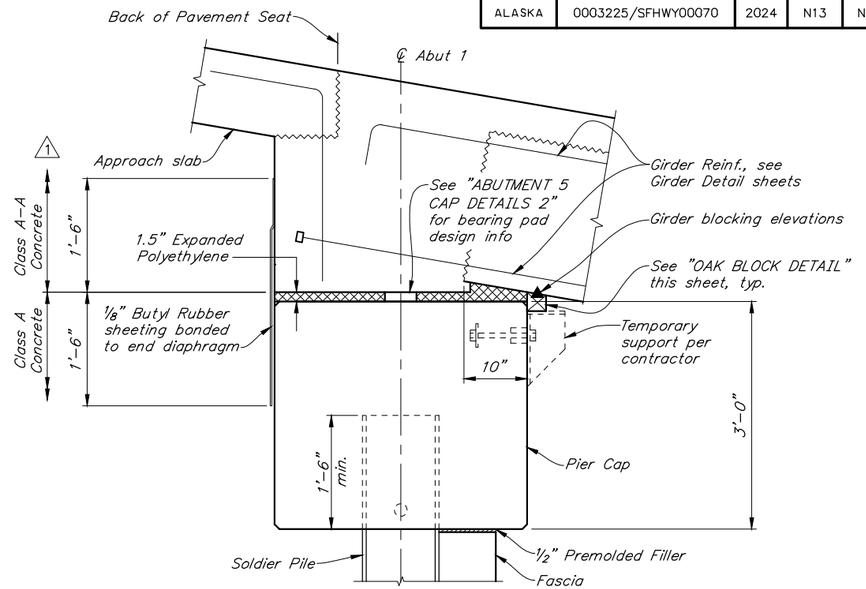
12 6 0 1 2 3
In. Feet

CENTERLINE TOP OF PIER ELEVATIONS	
B	A
113.12	112.81

GIRDER BLOCKING ELEVATIONS									
GIRDER 1E		GIRDER 1D		GIRDER 1C		GIRDER 1B		GIRDER 1A	
R	L	R	L	R	L	R	L	R	L
113.21	113.17	113.15	113.11	113.08	113.05	113.02	112.99	112.96	112.92

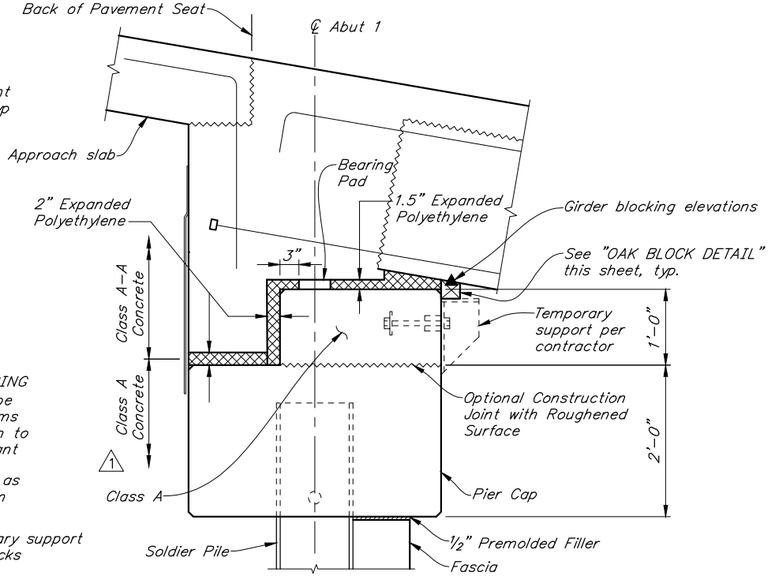


OAK BLOCK DETAIL



END DIAPHRAGM SECTION A-A

12 6 0 1 2
In. Feet



Note: For information not shown, see Section A-A.

END DIAPHRAGM SECTION B-B

12 6 0 1 2
In. Feet

1 10/24/24 - CONCRETE CLASS CLARIFICATION

10/24/24 | 5:20 AM | Joshp
V:\18000239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N13 Abutment 1 Cap Details 1.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
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Anne Fabrello-Streufert
10-24-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES - GORGE STREET VIADUCT

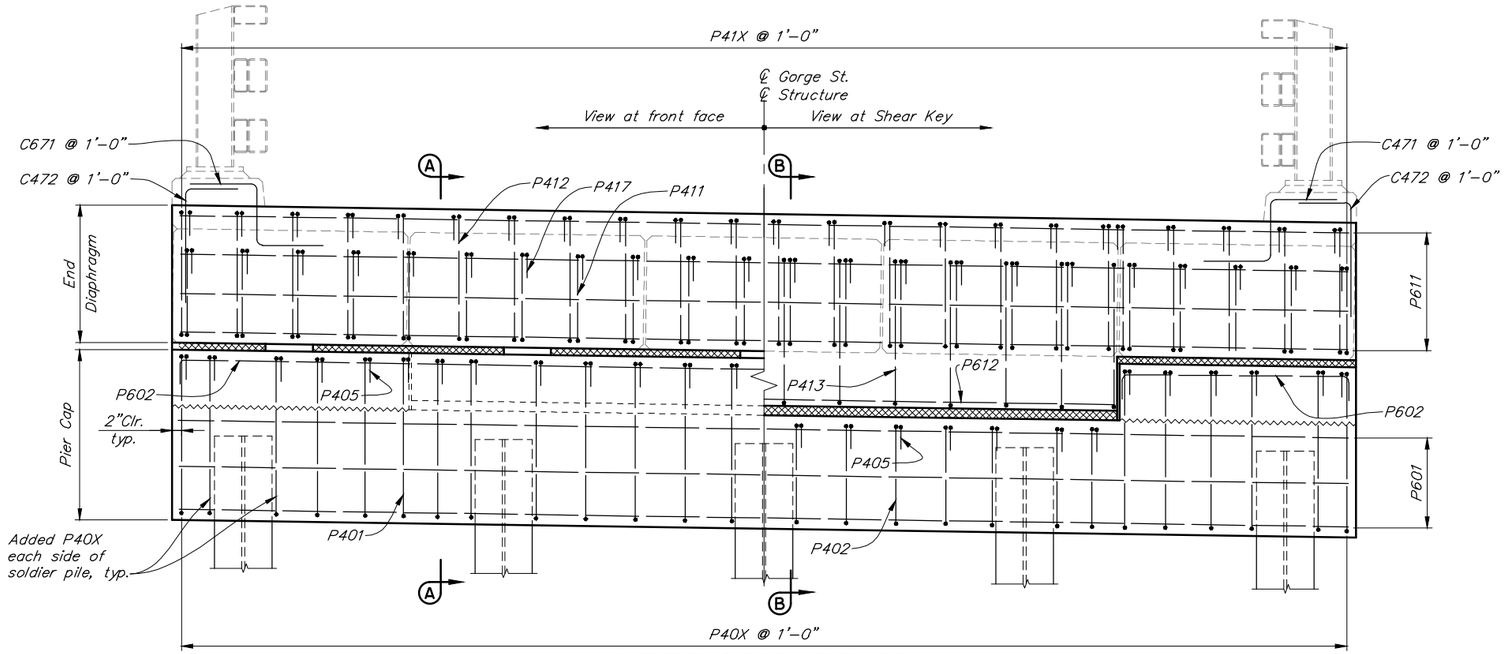
SAYLES ST & GORGE ST

ABUTMENT 1 CAP DETAILS 1

BRIDGE NO. 1841

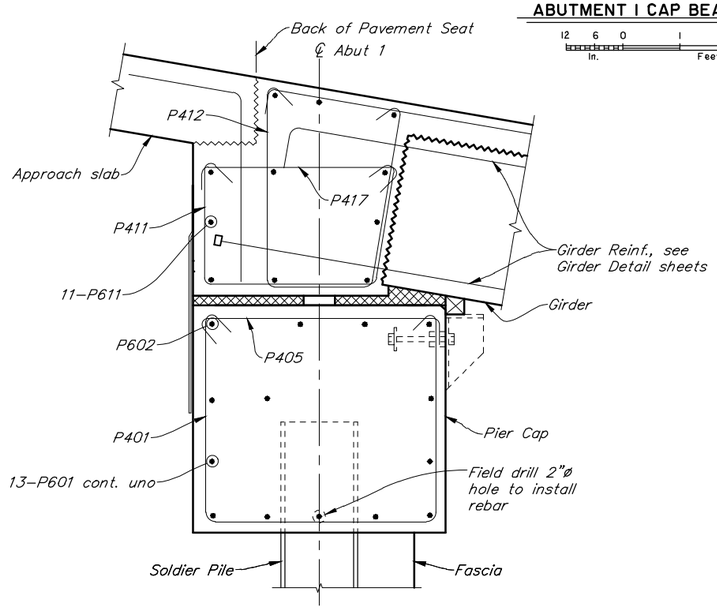
DWG. NO. 13

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N14	N53



ABUTMENT I CAP BEAM ELEVATION

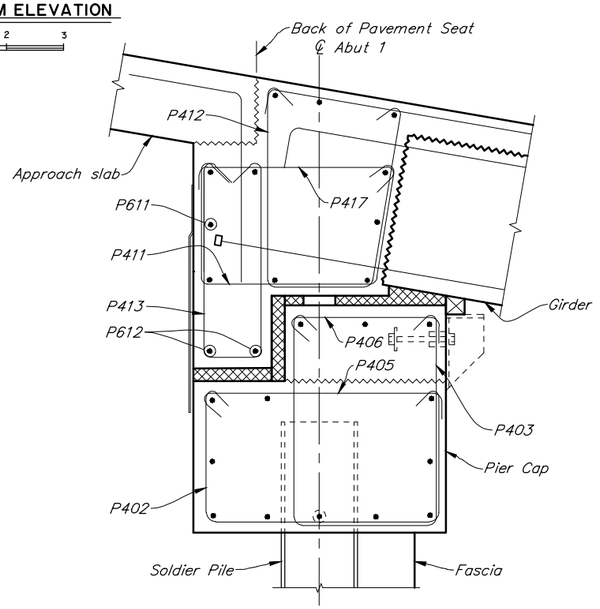
12 6 0 1 2 3
In. Feet



Note: For information not shown, see sheet "ABUTMENT 1 CAP DETAILS 1"

END DIAPHRAGM SECTION A-A

12 6 0 1 2
In. Feet



Note: For information not shown, see Section A-A

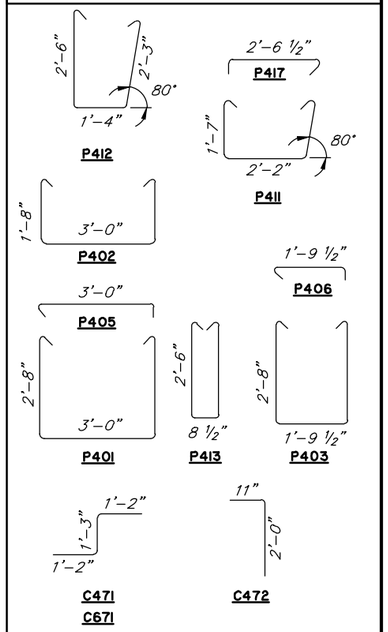
END DIAPHRAGM SECTION B-B

12 6 0 1 2
In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
P401		4	12	8' – 11"	BENT
P402		4	16	6' – 11"	BENT
P403		4	16	7' – 8"	BENT
P405		4	28	3' – 8"	BENT
P406		4	16	2' – 5"	BENT
P417	E	4	22	3' – 3"	BENT
P411	E	4	22	5' – 11"	BENT
P412	E	4	22	6' – 11"	BENT
P413	E	4	14	6' – 3"	BENT
P601		6	13	20' – 6"	
P602		6	2	3' – 10"	
P611	E	6	11	20' – 6"	
P612		6	2	12' – 1"	
C471	E	4	2	3' – 5"	BENT
C472	E	4	7	2' – 10"	BENT
C671	E	6	5	3' – 3"	BENT

BENDING DIAGRAM



E = Epoxy coated reinforcing steel

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

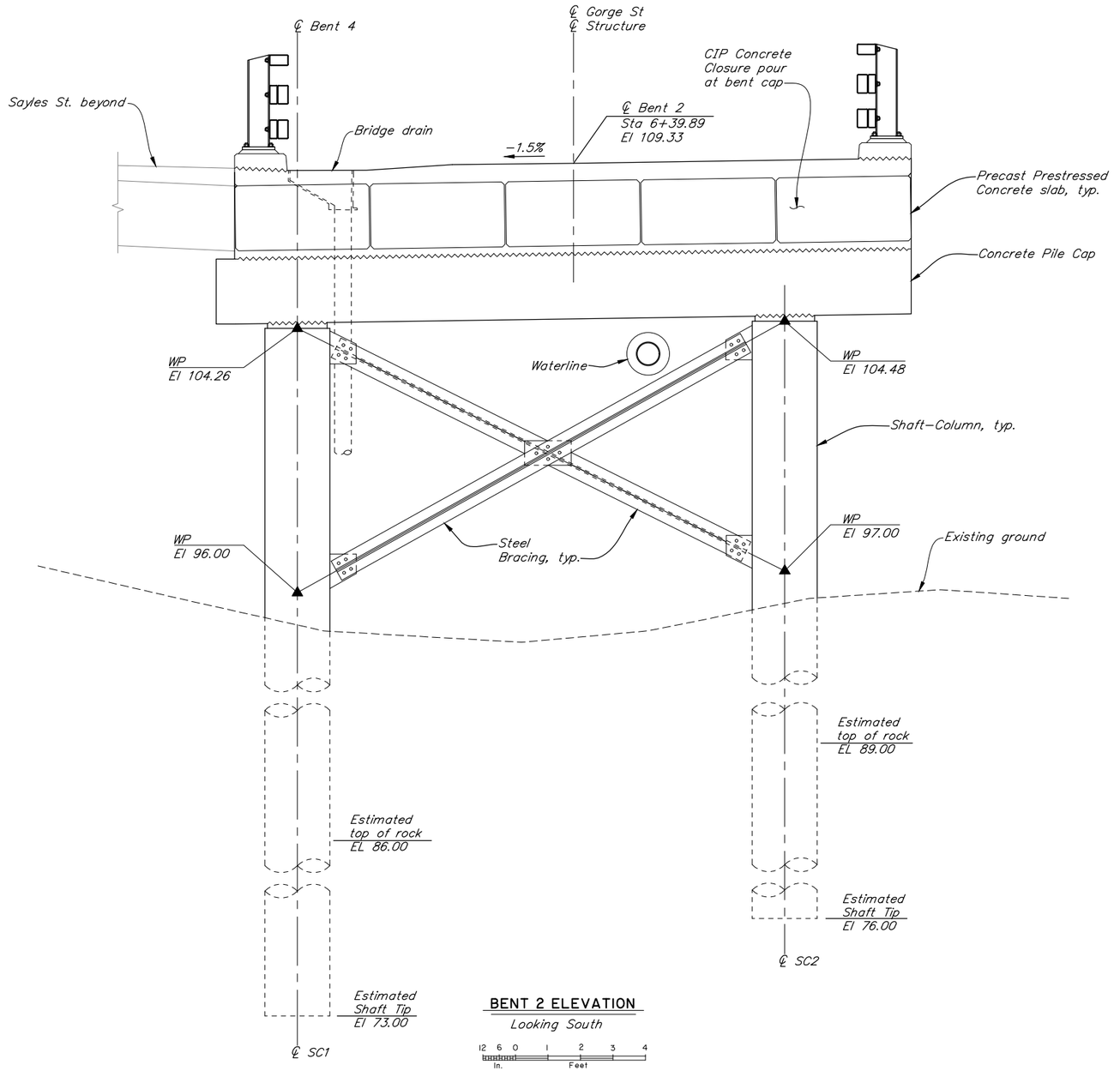
SAYLES ST & GORGE ST

ABUTMENT 1 CAP DETAILS 2

BRIDGE NO. 1841
DWG. NO. 14

07/31/24 | 3:01 PM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N14 Abutment 1 Cap Details 2.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N15	N53



BENT 2 ELEVATION

Looking South

NOTES:

1. *Estimated top of rock based on geotechincal report. Contractor to verify and notify engineer if elevation varies by more than 1'-0". Estimated shaft tip is based on top of rock elevation.*
2. *Storm drain and storm sewer not shown. See Civil.*

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
5-06-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

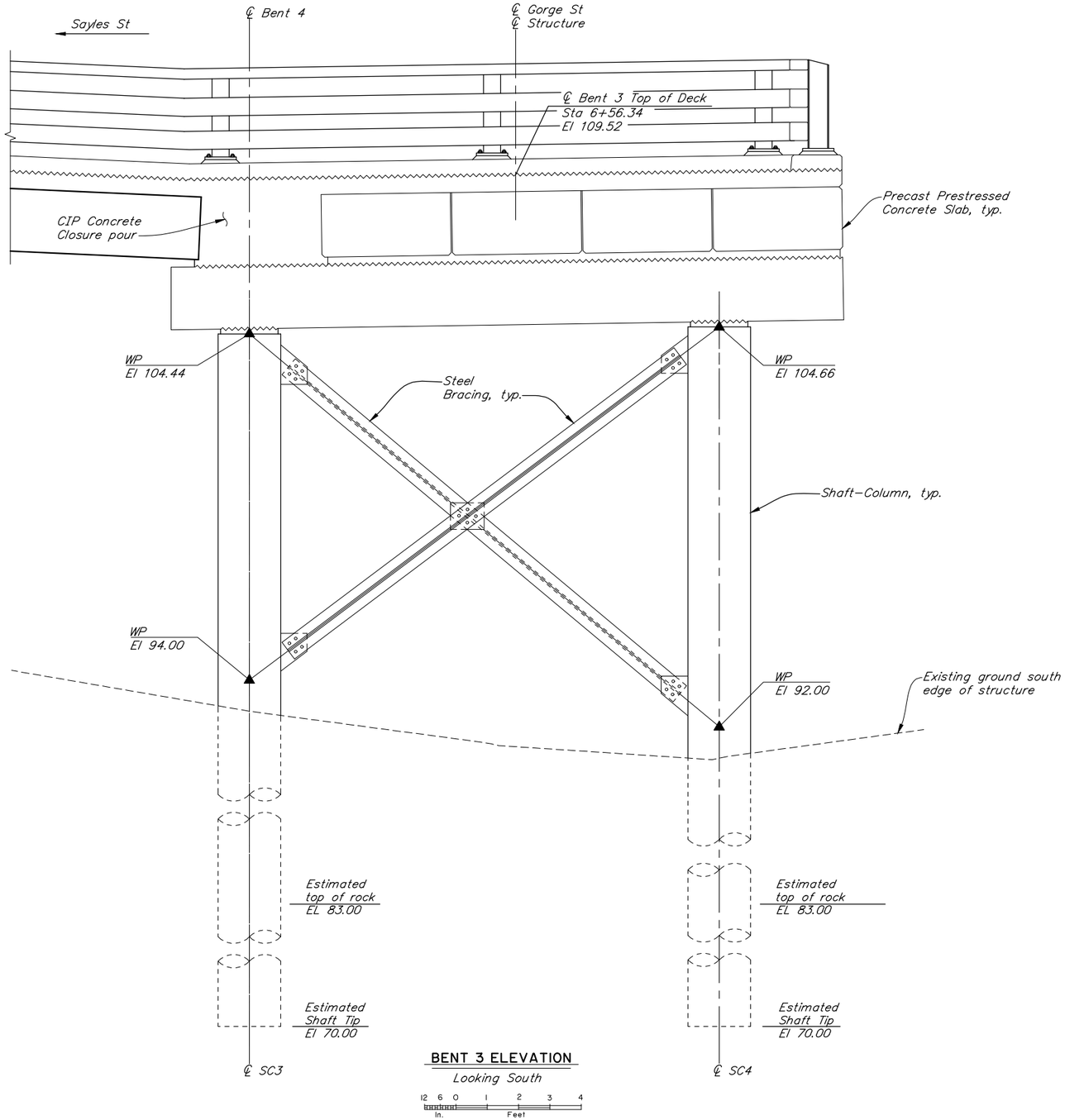
BENT 2 LAYOUT

BRIDGE NO. 1841

DWG. NO. 15

05/06/24 | 5:16 PM | RICKT
V:\1180\0239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N15 Bent 2 Layout.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N16	N53



BENT 3 ELEVATION

Looking South

12 6 0 1 2 3 4
In. Feet

NOTES:

1. *Estimated top of rock based on geotechincal report. Contractor to verify and notify engineer if elevation varies by more than 1'–0". Estimated shaft tip is based on top of rock elevation.*
2. *Storm drain and storm sewer not shown. See Civil.*

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

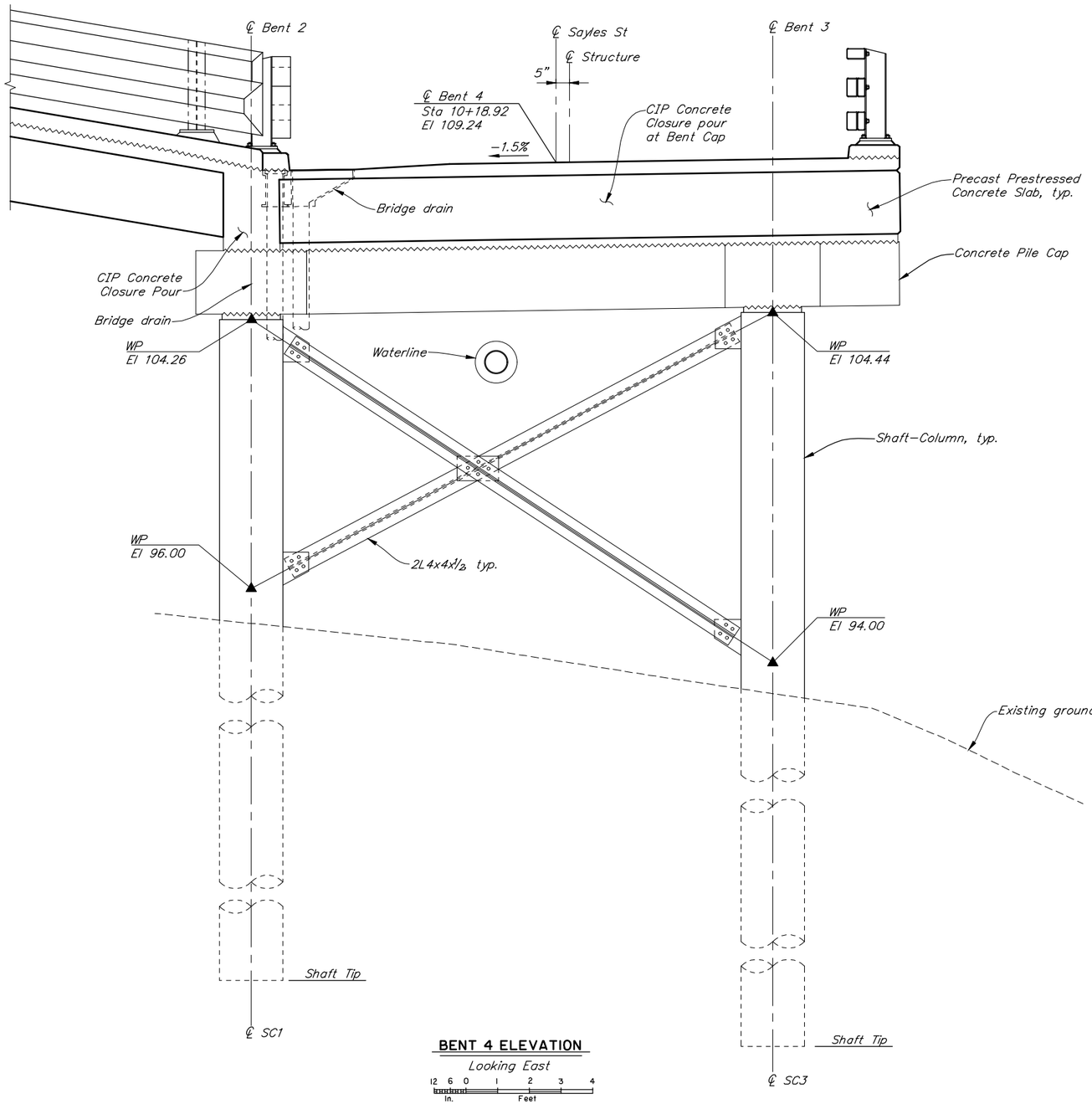
BENT 3 LAYOUT

BRIDGE NO. 1841

DWG. NO. 16

07/31/24 | 5:12 AM | Rickt
V:\1800239\(Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N16 Bent 3 Layout.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N17	N53



BENT 4 ELEVATION

Looking East

12 6 0 1 2 3 4
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
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7-31-2024
SE135564
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SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

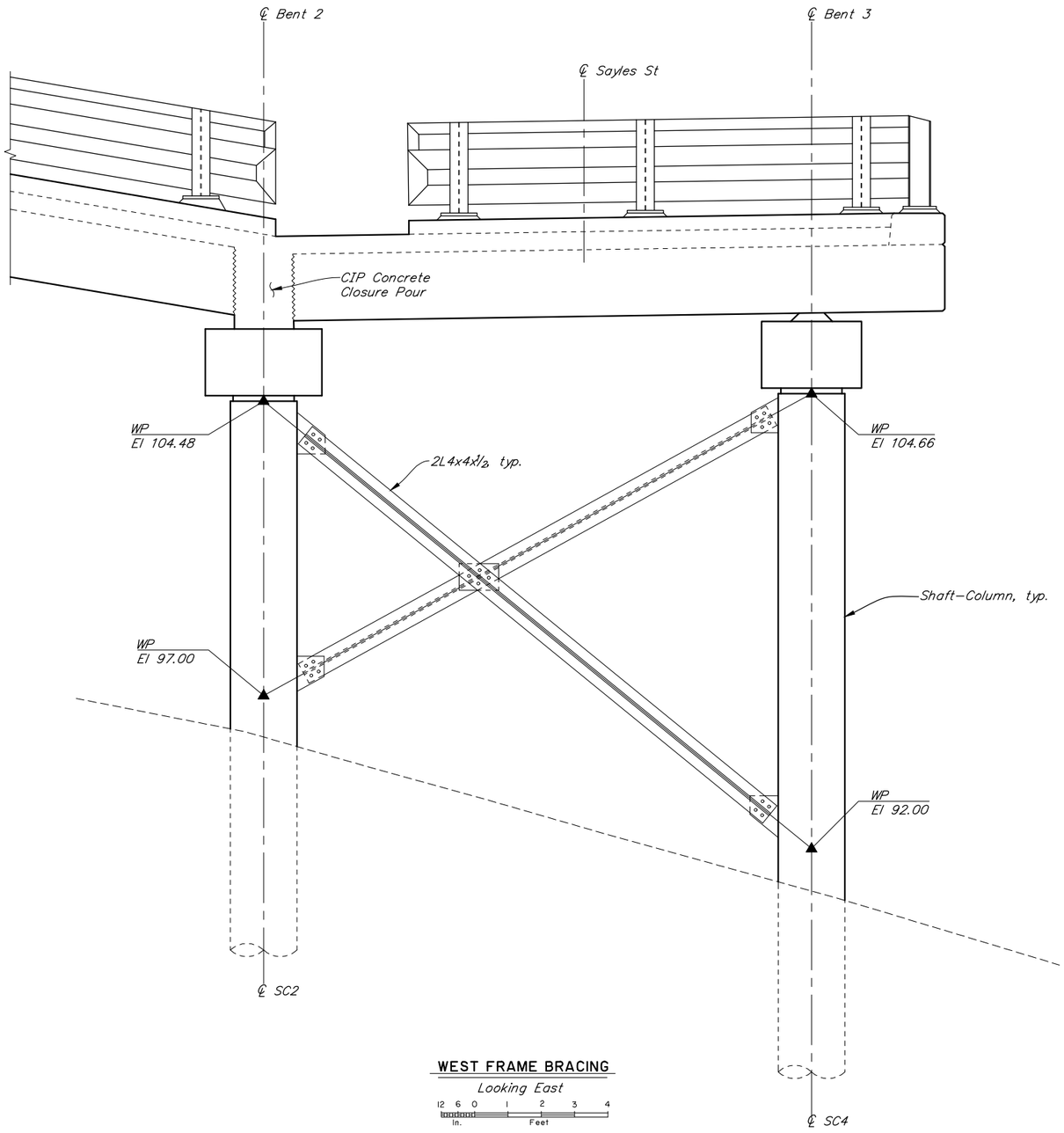
BENT 4 LAYOUT

BRIDGE NO. 1841

DWG. NO. 17

07/31/24 | 10:58 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N17 Bent 4 Layout.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N18	N53



WEST FRAME BRACING

Looking East

12 6 0 1 2 3 4
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

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SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

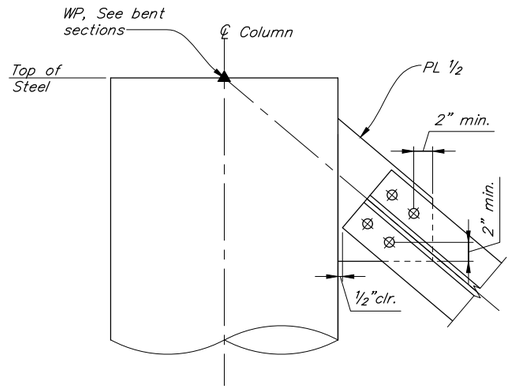
WEST FRAME BRACING

BRIDGE NO. 1841

DWG. NO. 18

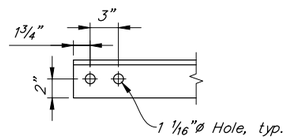
07/31/24 | 5:18 AM | Rickt
V:\1800239\ (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N18 Tower View West.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N19	N53



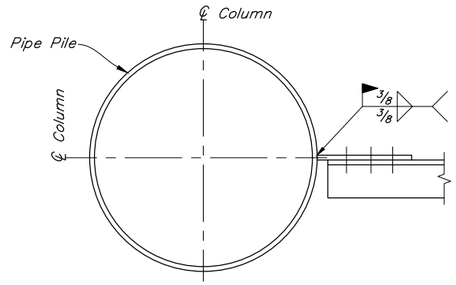
TOP COLUMN BRACE DETAIL

6 0 I
In. Feet



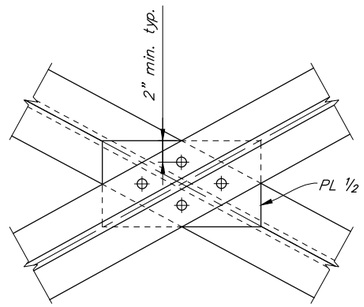
TYPICAL ANGLE BRACE END

6 0 I
In. Feet



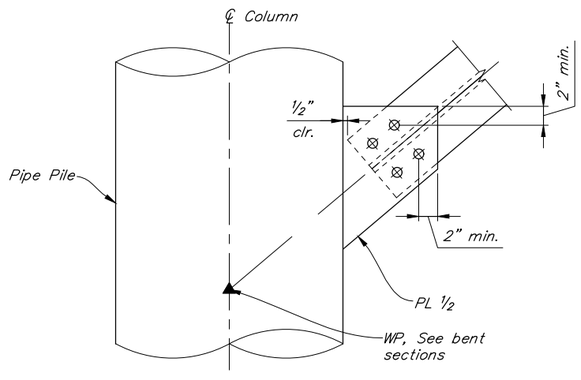
COLUMN BRACE SECTION

6 0 I
In. Feet



CENTER GUSSET DETAIL

6 0 I
In. Feet



BOTTOM COLUMN BRACE DETAIL

6 0 I
In. Feet

NOTES:

1. *All holes to be filled with 1" dia. high strength bolts meeting ASTM F3125, Grade A325.*
2. *All bolt threads accessible from the ground shall be fouled after installation.*

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

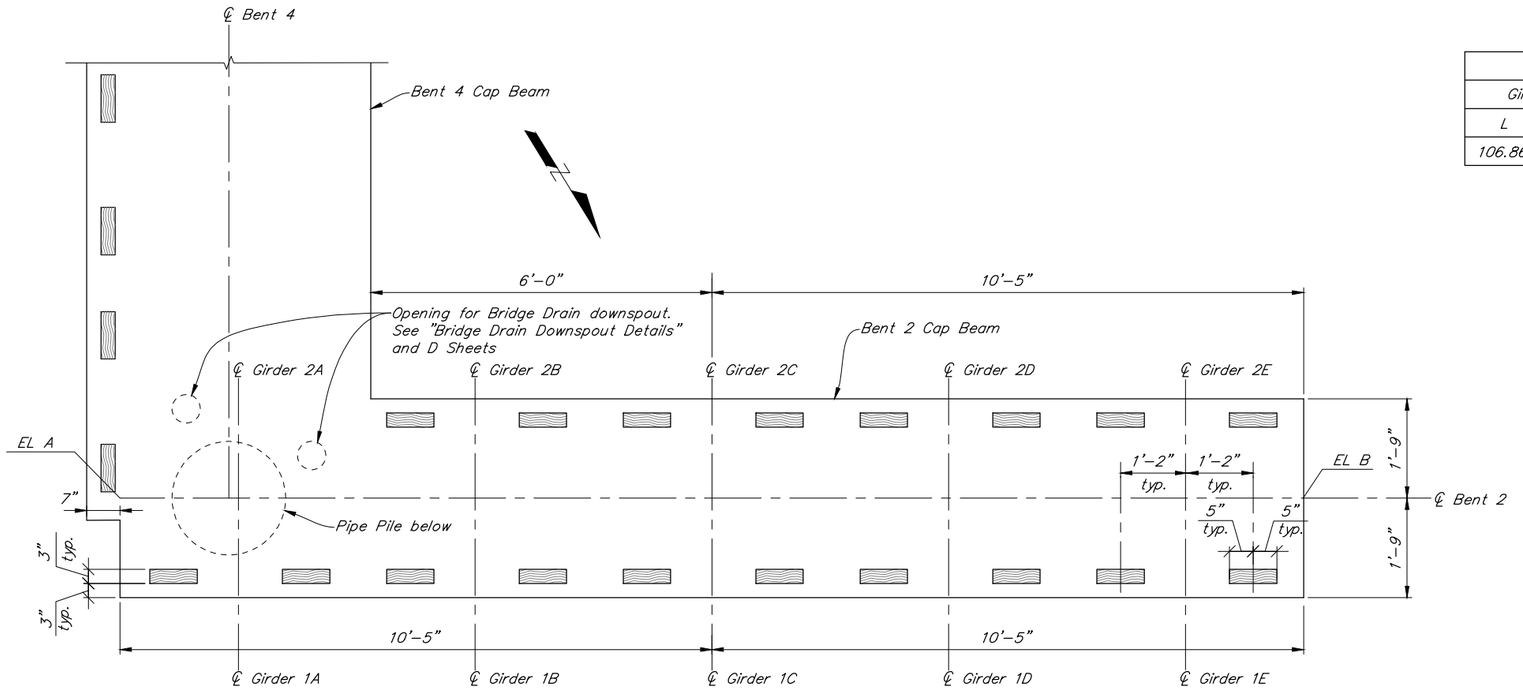
STEEL DETAILS

BRIDGE NO. 1841

DWG. NO. 19

07/31/24 | 5:20 AM | Rickt
V:\1180\239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N19 Steel Details.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N20	N53



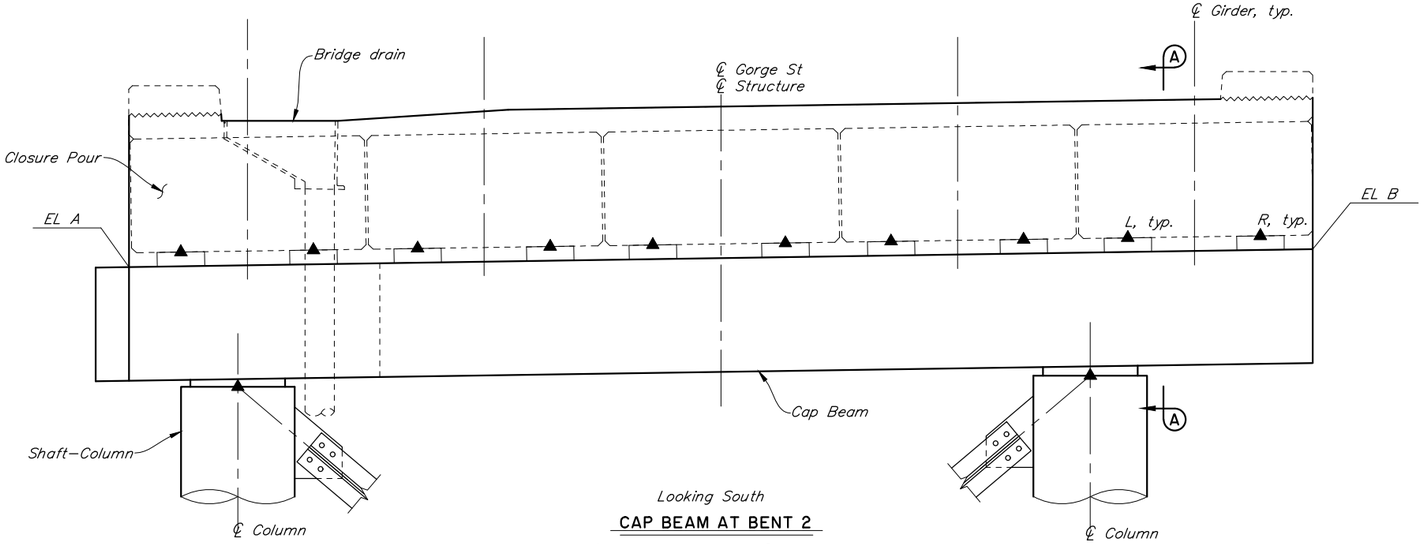
PLAN VIEW B-B

12 6 0 1 2 3
In. Feet

GIRDER BLOCKING ELEVATIONS									
Girder 1A		Girder 1B		Girder 1C		Girder 1D		Girder 1E	
L	R	L	R	L	R	L	R	L	R
106.86	106.89	106.92	106.95	106.98	107.02	107.04	107.08	107.11	107.14

GIRDER BLOCKING ELEVATIONS							
Girder 2B		Girder 2C		Girder 2D		Girder 2E	
L	R	L	R	L	R	L	R
106.68	106.71	106.74	106.77	106.80	106.84	106.86	106.90

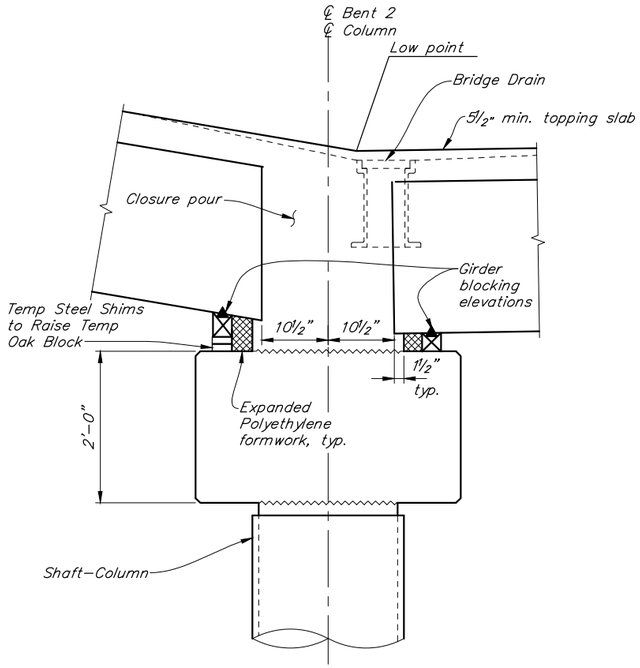
CENTERLINE TOP OF BENT ELEVATIONS	
A	B
106.39	106.71



Looking South

CAP BEAM AT BENT 2

12 6 0 1 2 3
In. Feet



SECTION A-A

12 6 0 1 2
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
"Anne Fabrello-Streufert,"
6-12-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

BENT 2 DETAILS 1

BRIDGE NO. 1841

DWG. NO. 20

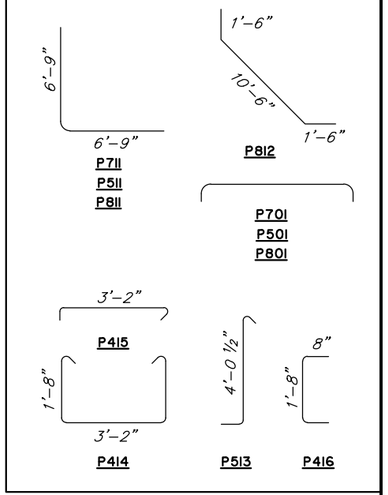
06/12/24 | 12:38 PM | Joshp
V:\1180023\9 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N20 Bent 2 Details 1.dwg

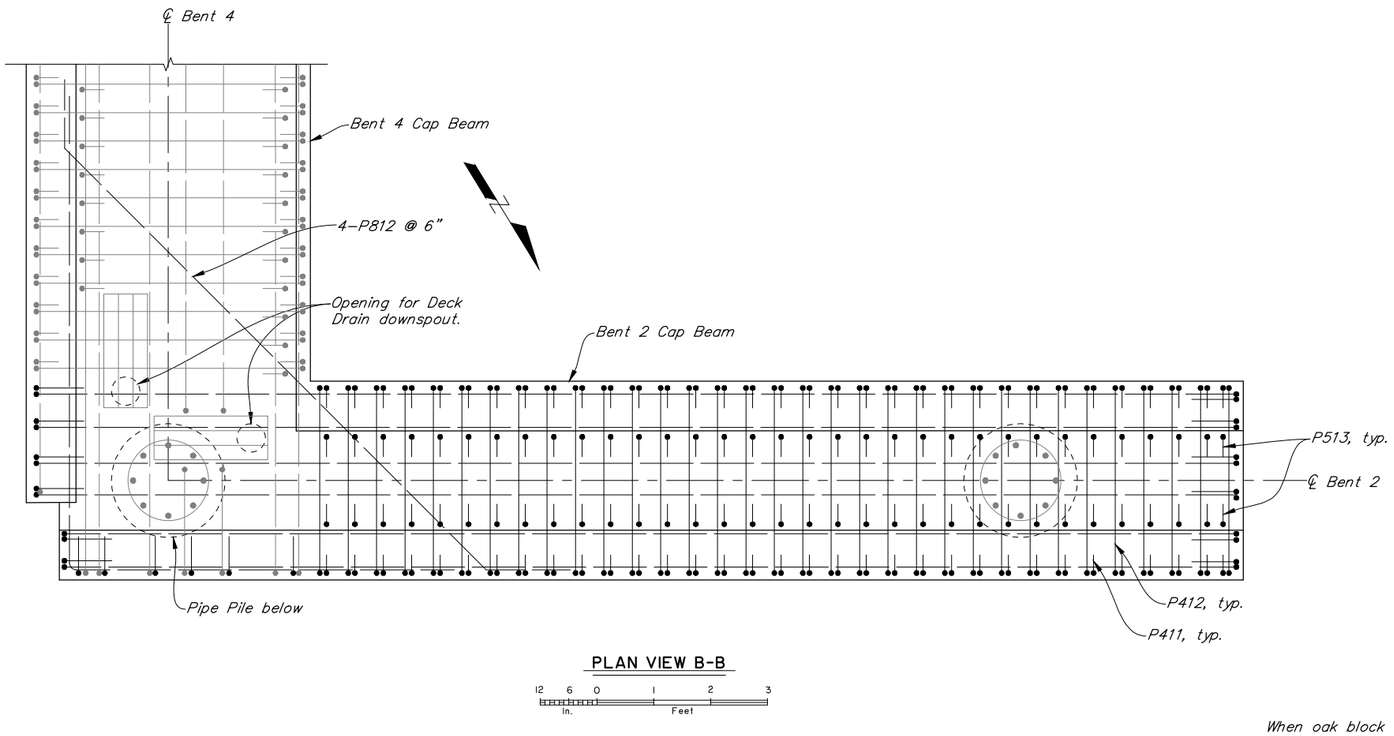
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N21	N53

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
P414		4	33	7' – 1"	BENT
P415		4	66	3' – 10"	BENT
P416		4	7	2' – 10"	BENT
P501		5	2	22' – 3"	BENT
P511		5	1	19' – 10"	BENT
P513		5	66	4' – 10"	BENT
P701		7	6	22' – 10"	BENT
P711		7	1	19' – 10"	BENT
P801		8	6	23' – 1"	BENT
P811		8	1	19' – 9"	BENT
P812		8	4	13' – 5"	BENT

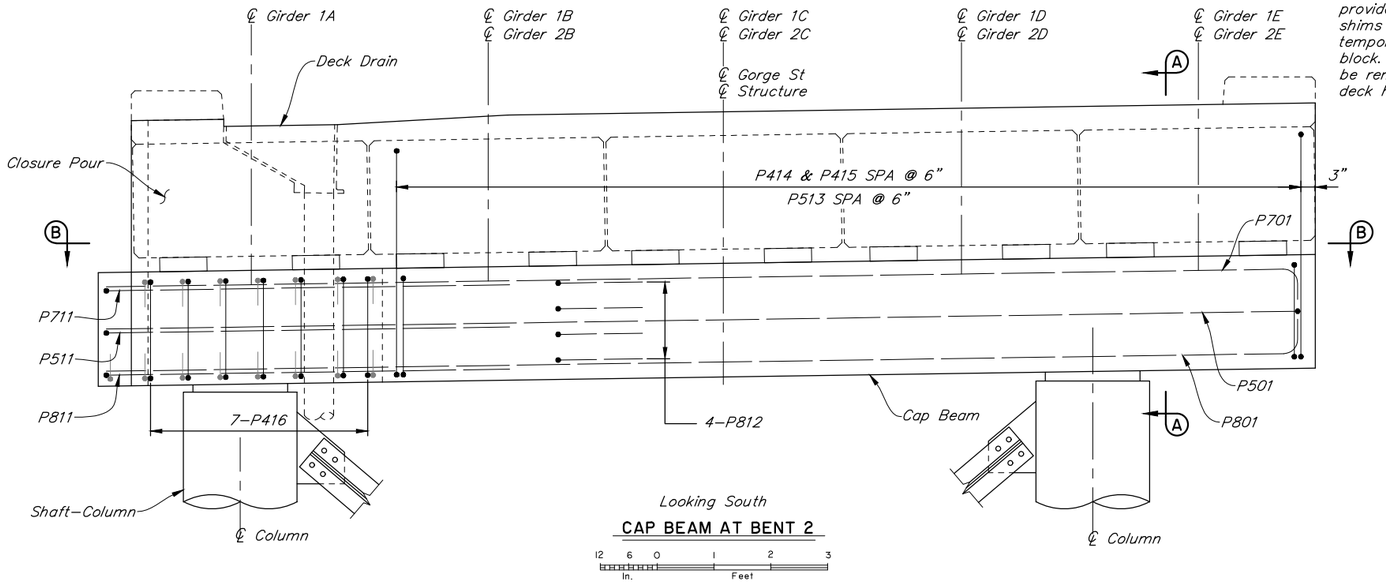
BENDING DIAGRAM





PLAN VIEW B-B

12 6 0 1 2 3
In. Feet

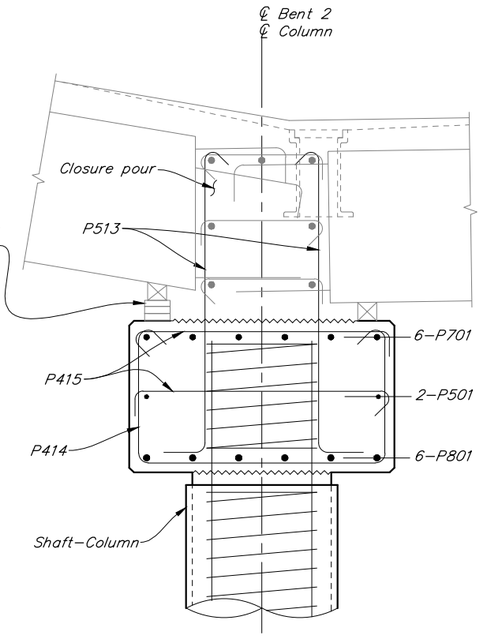


Looking South

CAP BEAM AT BENT 2

12 6 0 1 2 3
In. Feet

When oak block height would exceed its width, provide steel shims to raise temporary oak block. Shims to be removed after deck has cured



SECTION A-A

12 6 0 1 2
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

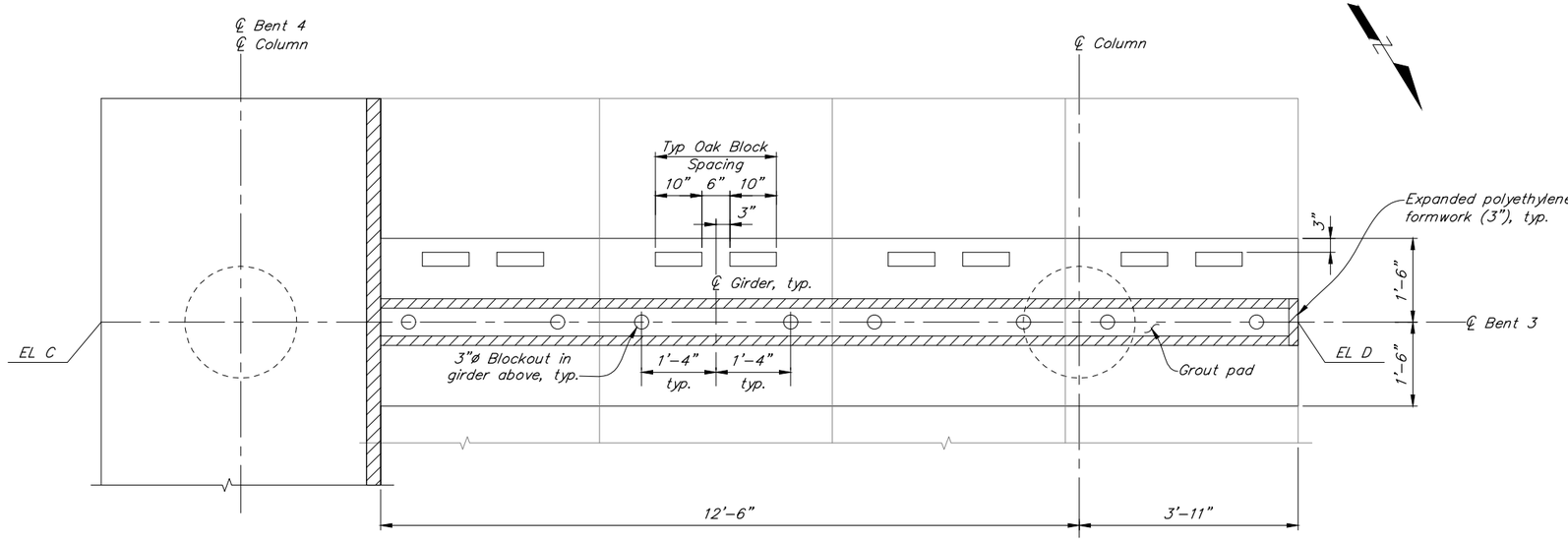
BENT 2 DETAILS 2

BRIDGE NO. 1841

DWG. NO. 21

07/31/24 | 5:31 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N21 Bent 2 Details 2.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N22	N53



BENT 3 CAP BEAM PLAN

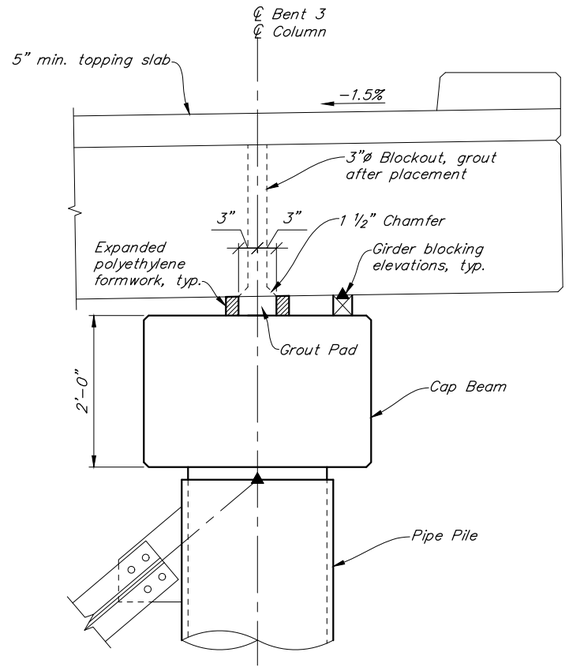
12 6 0 1 2 3
In. Feet

GIRDER BLOCKING ELEVATIONS							
Girder 2B		Girder 2C		Girder 2D		Girder 2E	
L	R	L	R	L	R	L	R
106.93	106.95	106.99	107.01	107.05	107.07	107.11	107.13

CENTERLINE TOP OF BENT ELEVATIONS	
C	D
106.58	106.89

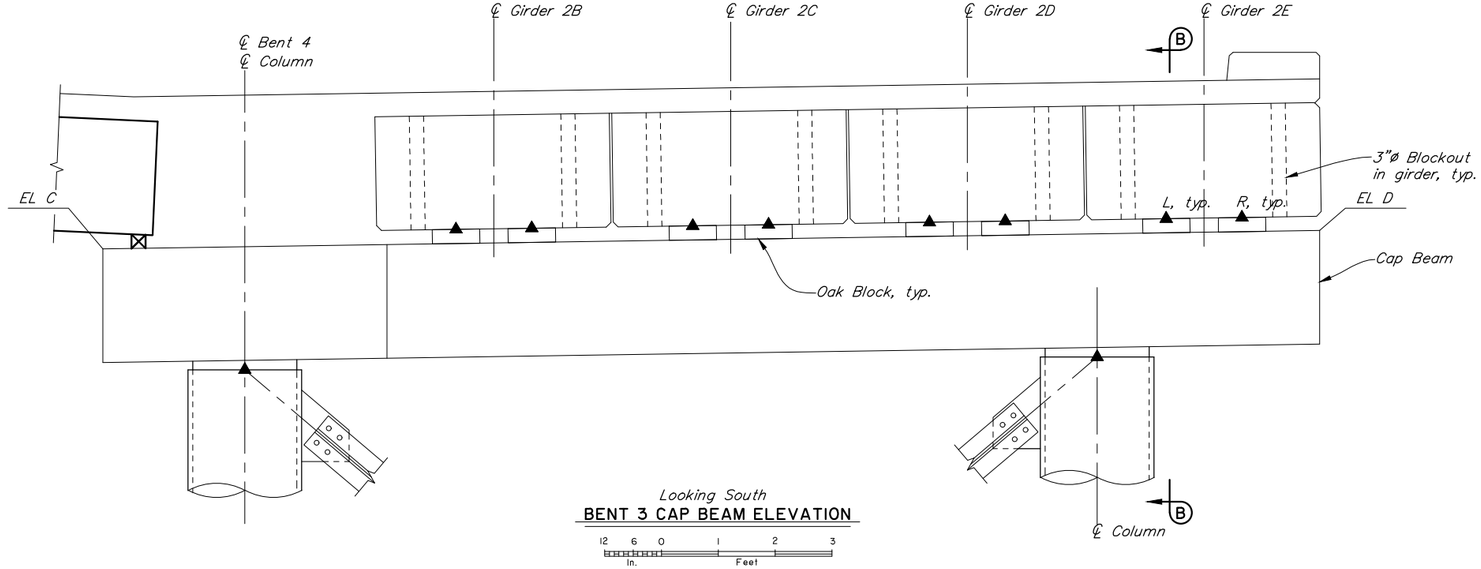
NOTES:

1. Grout shall be per specification section 701-2.03 and extended using pea gravel per manufacturer's instructions.



SECTION B-B

12 6 0 1 2
In. Feet



Looking South

BENT 3 CAP BEAM ELEVATION

12 6 0 1 2 3
In. Feet

07/31/24 | 6:01 AM | Rickt
V:\1180l0239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N22 Bent 3 Details 1.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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(206) 622-5822

STATE OF ALASKA 49TH
"Anne Fabrello-Streufert," 7-31-2024 SE135564 REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

BENT 3 DETAILS 1

BRIDGE NO. 1841

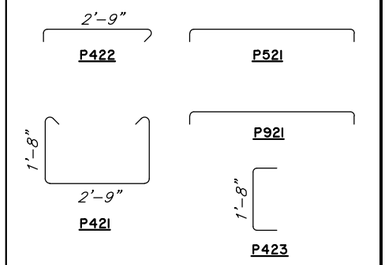
DWG. NO. 22

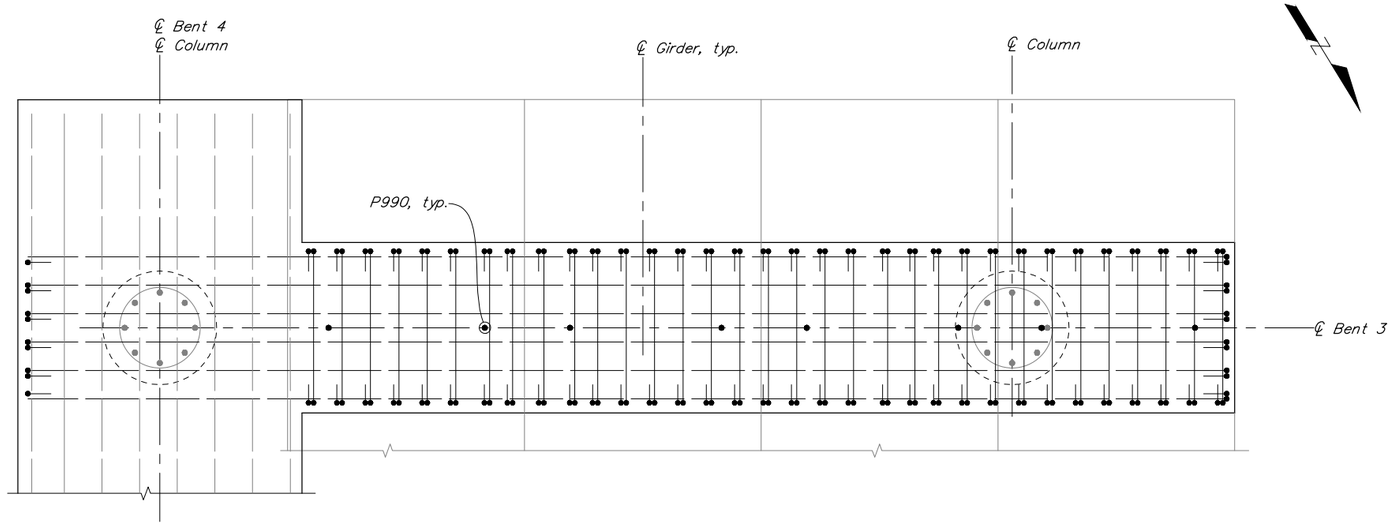
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N23	N53

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
P421		4	33	6' – 9"	BENT
P422		4	66	3' – 4"	BENT
P423		4	12	2' – 3"	BENT
P521		5	2	22' – 6"	BENT
P921		9	12	23' – 9"	BENT
P990		9	8	3' – 3"	

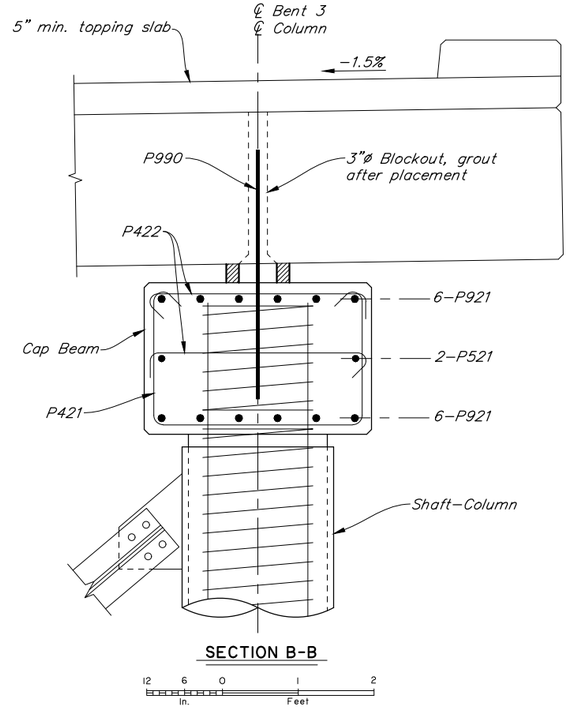
BENDING DIAGRAM





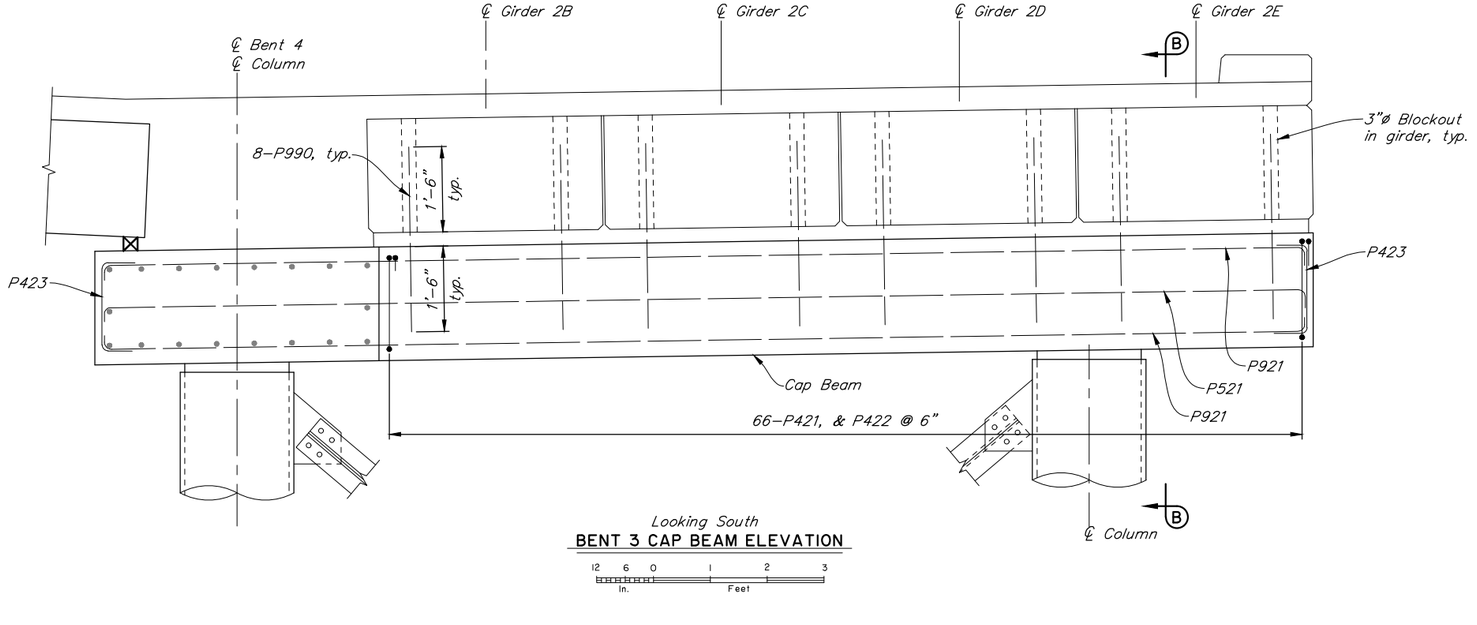
BENT 3 CAP BEAM PLAN

12 6 0 1 2 3
In. Feet



SECTION B-B

12 6 0 1 2
In. Feet



Looking South

BENT 3 CAP BEAM ELEVATION

12 6 0 1 2 3
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

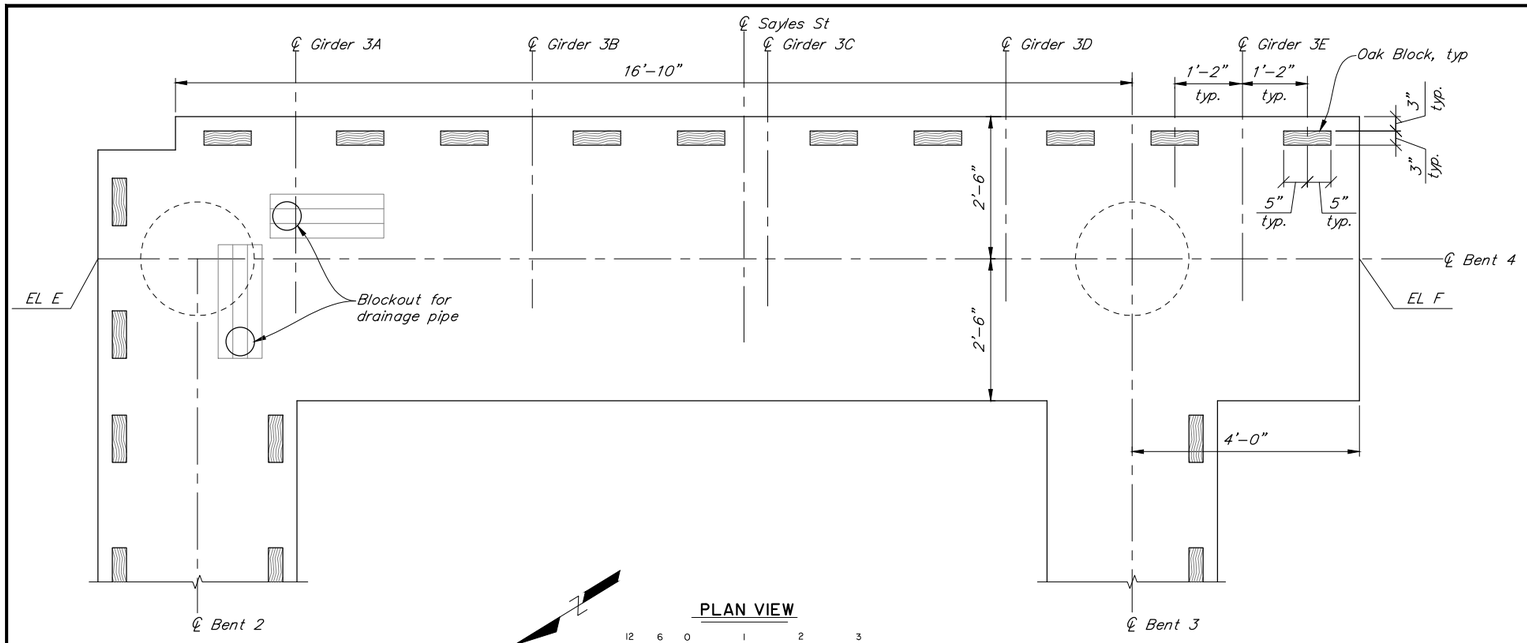
BENT 3 DETAILS 2

BRIDGE NO. 1841

DWG. NO. 23

07/31/24 | 5:39 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N23 Bent 3 Details 2.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N24	N53

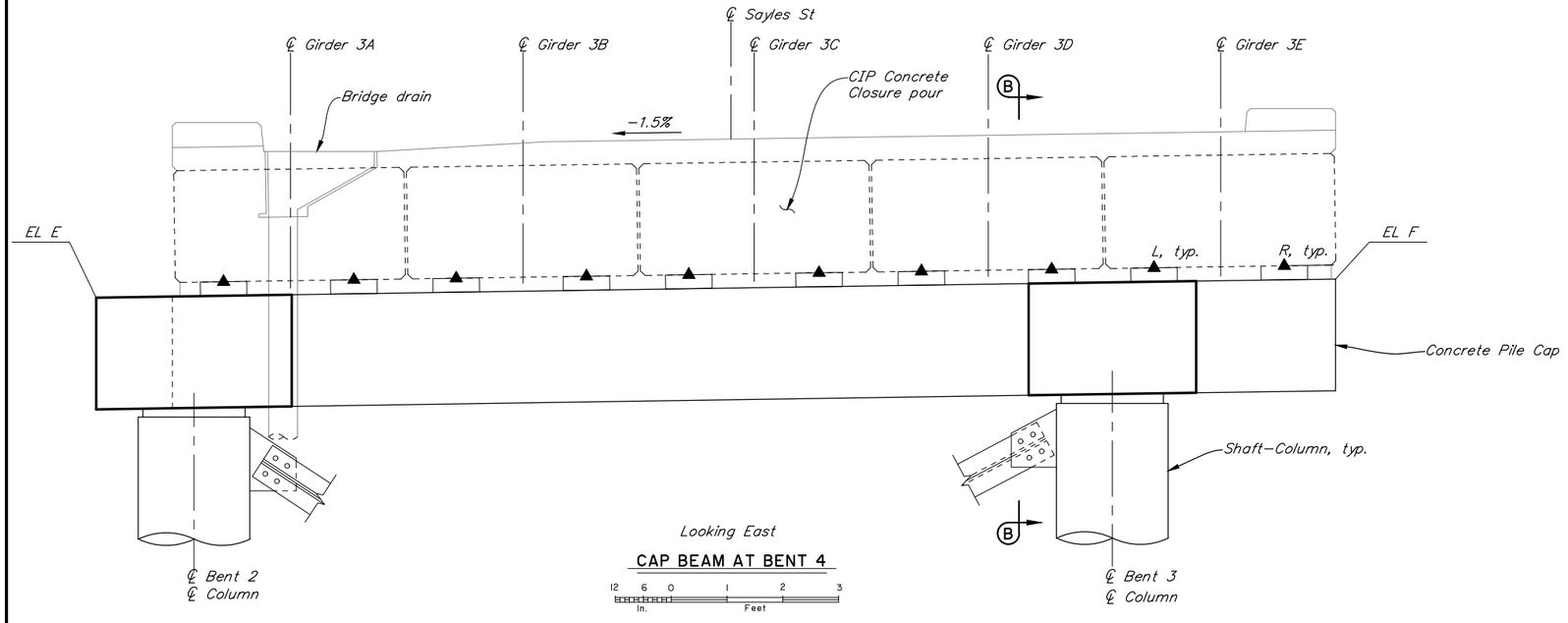


PLAN VIEW

12 6 0 1 2 3
In. Feet

GIRDER BLOCKING ELEVATIONS									
Girder 3A		Girder 3B		Girder 3C		Girder 3D		Girder 3E	
L	R	L	R	L	R	L	R	L	R
106.74	106.78	106.81	106.84	106.87	106.90	106.93	106.97	106.99	107.03

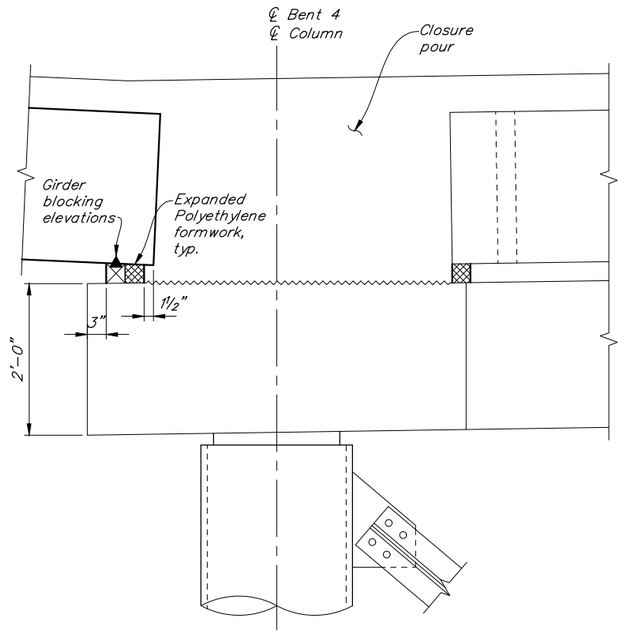
CENTERLINE TOP OF BENT ELEVATIONS	
E	F
106.33	106.49



Looking East

CAP BEAM AT BENT 4

12 6 0 1 2 3
In. Feet



SECTION B-B

12 6 0 1 2
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
"Anne Fabrello-Streufert"
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

BENT 4 DETAILS 1

BRIDGE NO. 1841

DWG. NO. 24

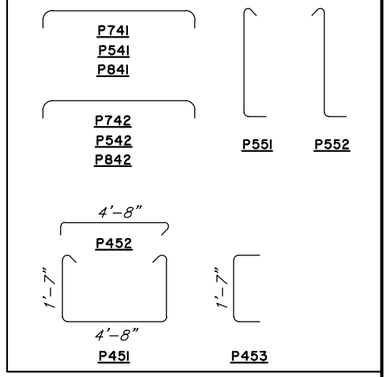
07/31/24 | 5:41 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N24 Bent 4 Details 1.dwg

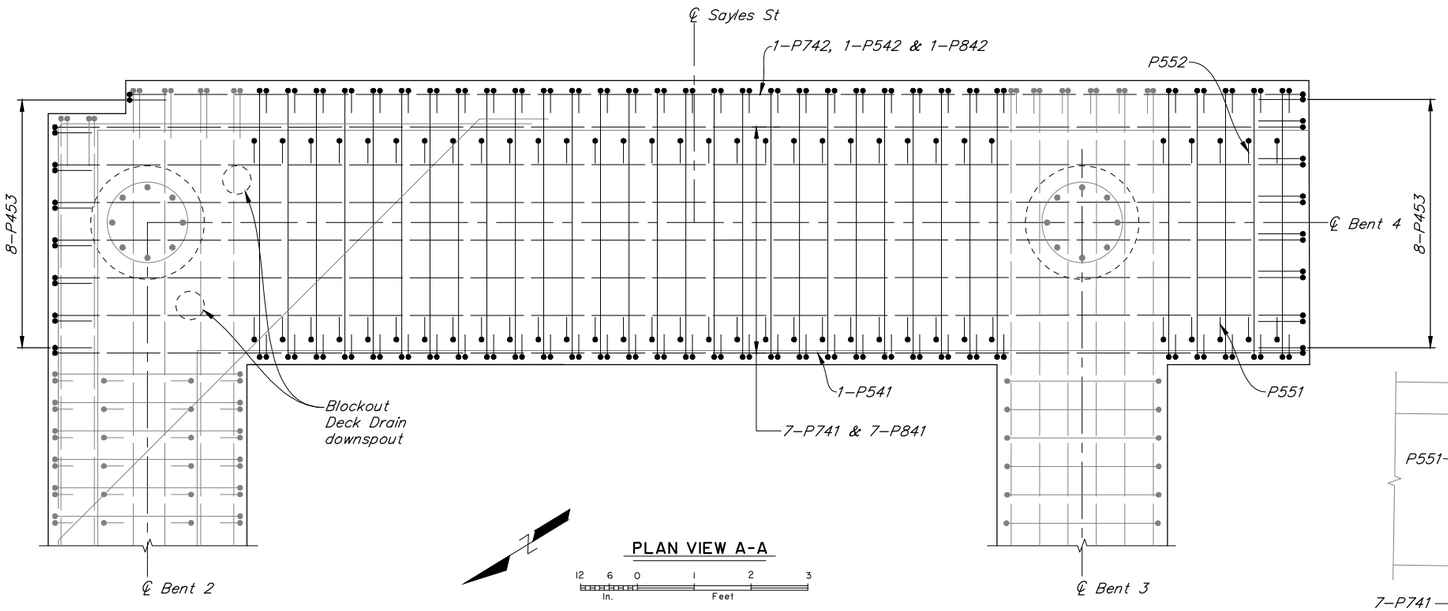
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N25	N53

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
P451		4	32	8' – 5"	BENT
P452		4	64	5' – 4"	BENT
P453		4	16	2' – 8"	BENT
P541		5	1	23' – 2"	BENT
P542		5	1	21' – 9"	BENT
P551		5	32	4' – 8"	BENT
P552		5	32	4' – 8"	BENT
P741		7	7	23' – 9"	BENT
P742		7	1	22' – 4"	BENT
P841		8	7	23' – 12"	BENT
P842		8	1	22' – 7"	BENT

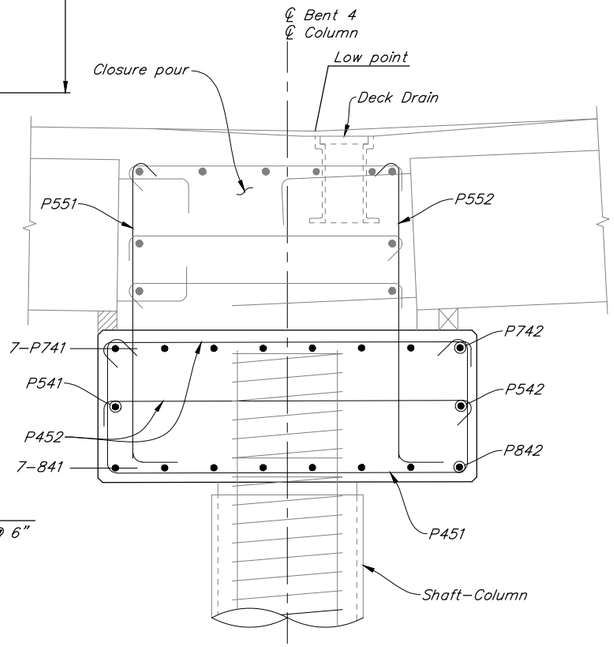
BENDING DIAGRAM





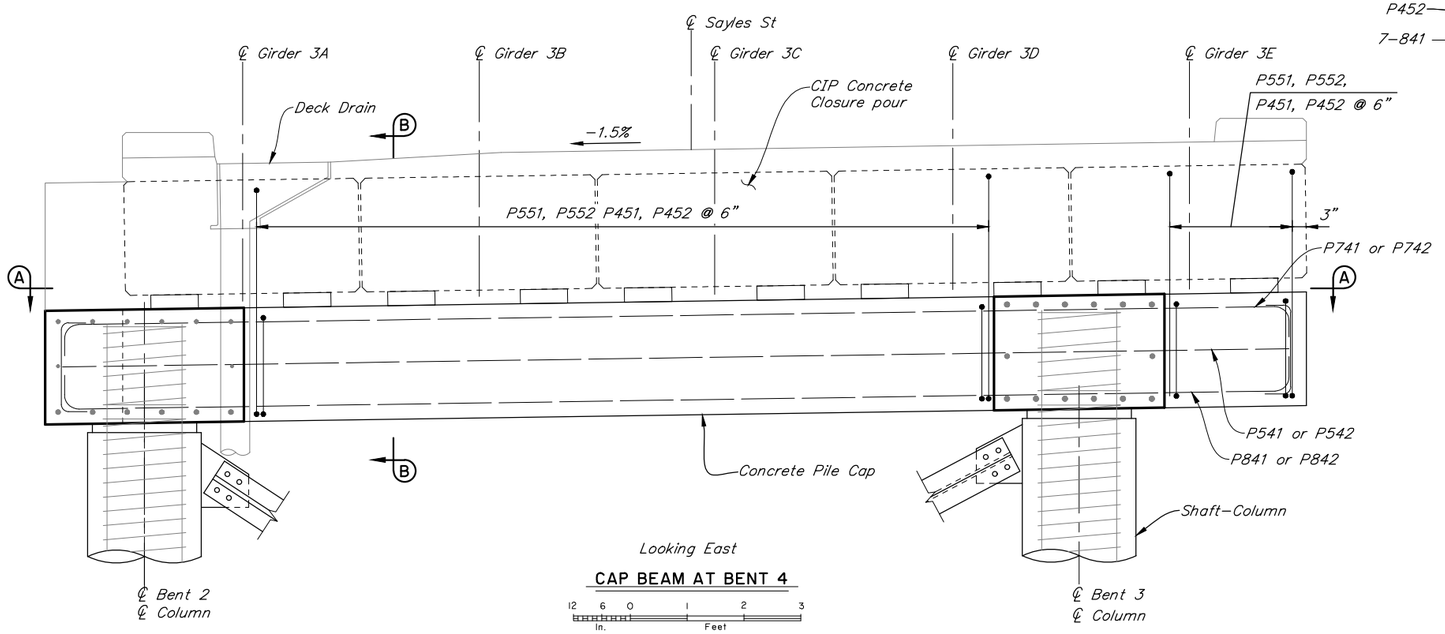
PLAN VIEW A-A

12 6 0 1 2 3
In. Feet



SECTION B-B

12 6 0 1 2
In. Feet



Looking East

CAP BEAM AT BENT 4

12 6 0 1 2 3
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

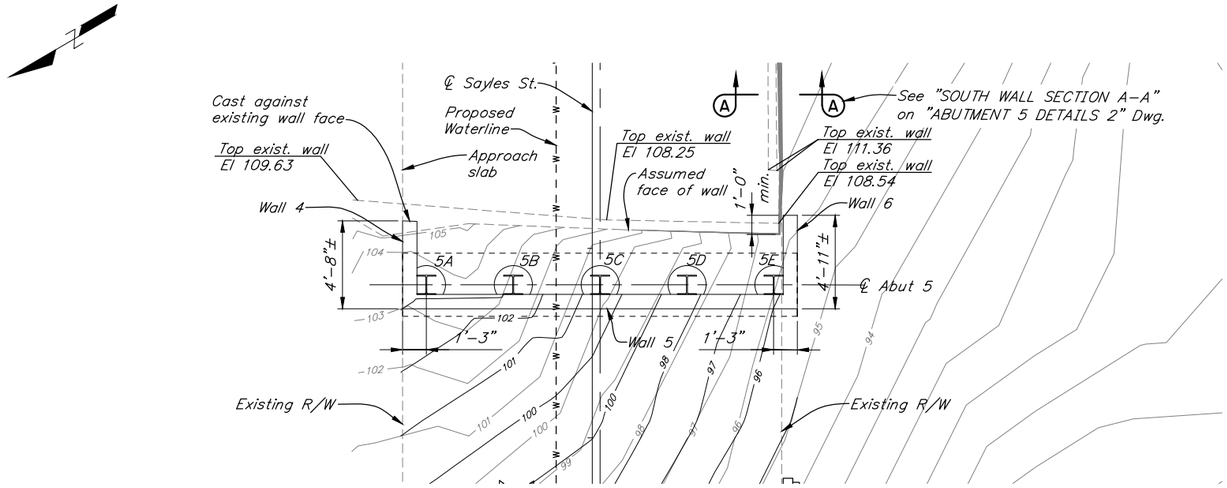
SAYLES ST & GORGE ST

BENT 4 DETAILS 2

BRIDGE NO. 1841
DWG. NO. 25

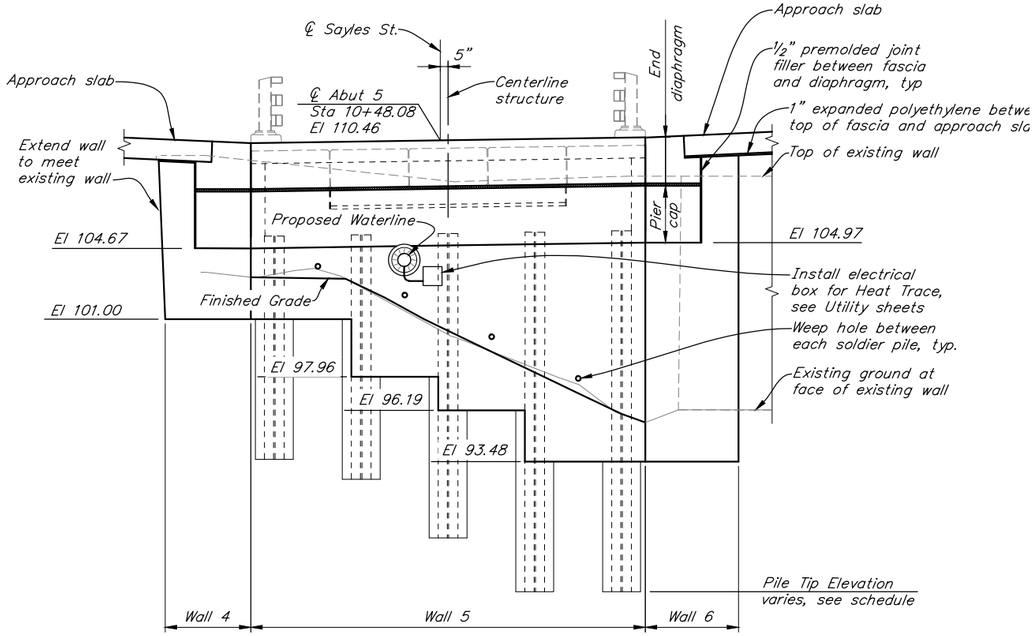
07/31/24 | 5:43 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N25 Bent 4 Details 2.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N26	N53



ABUTMENT 5 PLAN

12 0 2 4 6 8
In. Feet



ABUTMENT 5 DEVELOPED ELEVATION

12 0 2 4 6 8
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
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1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES - GORGE STREET VIADUCT

SAYLES ST & GORGE ST

ABUTMENT 5 LAYOUT

BRIDGE NO. 1841
DWG. NO. 26

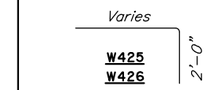
07/31/24 | 6:08 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N26 Abutment 5 Layout.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N27	N53

REINFORCING STEEL

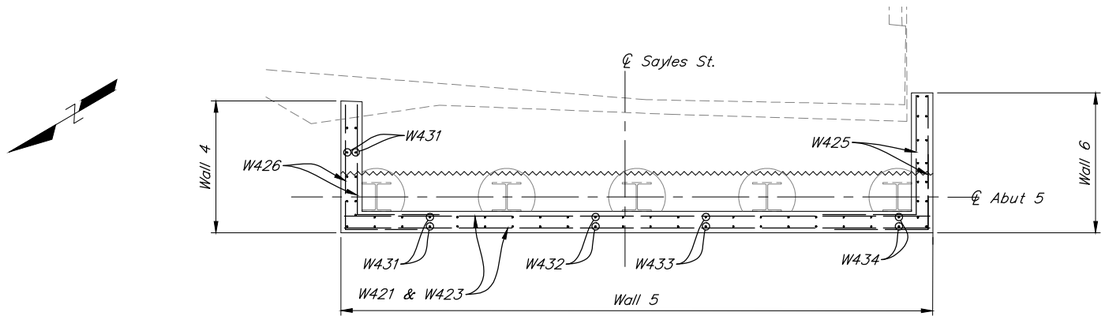
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W421		4	10	20' – 6"	
W422		4	6	15' – 2"	
W423		4	4	10' – 7"	
W424		4	6	6' – 0"	
W425	V	4	24	6' – 8"	BENT
W426	V	4	8	6' – 8"	BENT
W427		4	12	7' – 6"	
W431		4	20	3' – 6"	
W432		4	10	6' – 6"	
W433		4	10	8' – 4"	
W434		4	24	11' – 2"	
W435		4	16	3' – 9"	

BENDING DIAGRAM



Note: All dimensions are out to out.

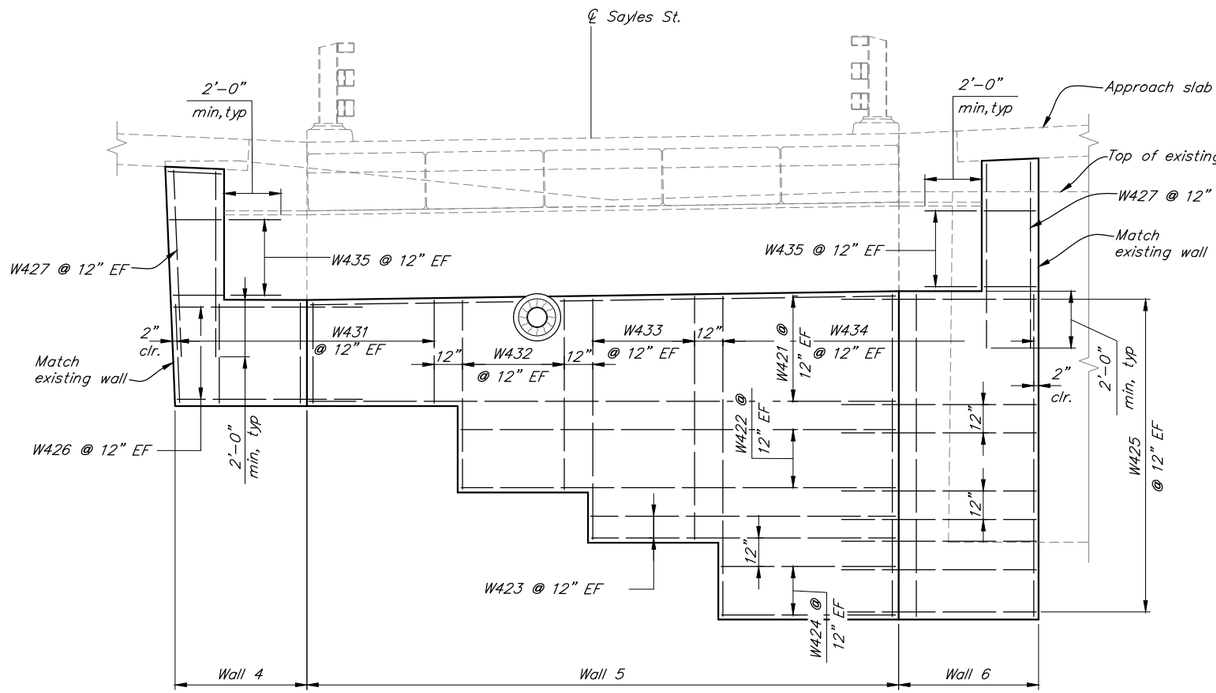
V = Varies



Note: For information not shown, see dwg. "ABUTMENT 5 LAYOUT"

ABUTMENT 5 FASCIA PLAN

12 0 2 4 6
In. Feet



Note: For information not shown, see dwg. "ABUTMENT 5 LAYOUT"

ABUTMENT 5 FASCIA DEVELOPED ELEVATION

12 0 2 4 6
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
5-29-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

ABUTMENT 5 FASCIA

BRIDGE NO. 1841

DWG. NO. 27

05/29/24 | 10:18 PM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N27 Abutment 5 Fascia.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N28	N53

SOLDIER PILE SCHEDULE

Wall	Pile mark	Pile size	Shaft diameter	PILE ELEVATION		
				Top	Estimated Tip*	Estimated Top rock
4	5A	W12x106	2'-0"	106.18	83.00	96.00
4	5B	W12x106	2'-0"	106.25	82.00	95.00
4	5C	W12x106	2'-0"	106.32	81.00	94.00
4	5D	W12x106	2'-0"	106.39	80.00	93.00
4	5E	W12x106	2'-0"	106.46	79.00	92.00

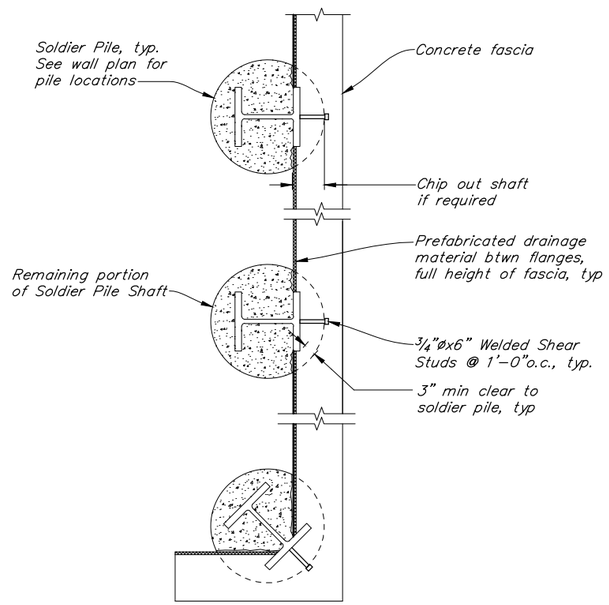
SOLDIER PILE NOTES:

* Minimum embedment of 10'-0 into intact rock. Piles shall be ordered minimum 5' long to accommodate unknown rock depths.

** Top of rock may vary. Elevation estimated based on geotechnical recommendations. See construction sequence below.

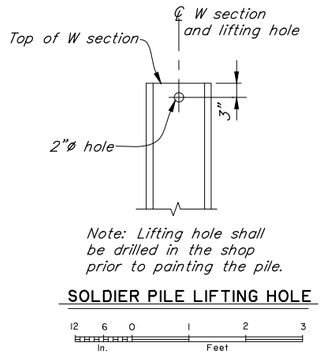
SOLDIER PILE CONSTRUCTION SEQUENCE:

1. Drill to rock.
2. If intact rock elevation differs from table value by more than 2 feet, contact Engineer.
3. Drill 13' into rock. Verify rock suitability with Geotechnical Engineer.
4. Cut bottom of pile to achieve top elevation per table.
5. Place pile.
6. Place shaft concrete.
7. Install fascia.



TYPICAL SOLDIER PILE WALL PLAN

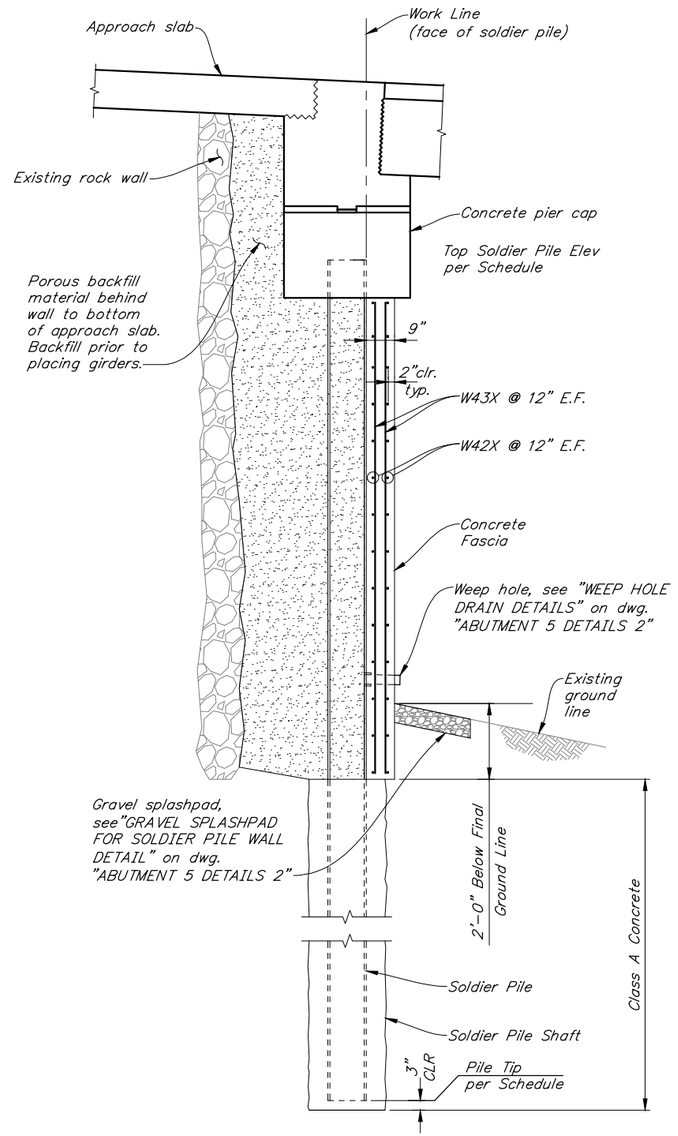
12 6 0 1 2 3
In. Feet



Note: Lifting hole shall be drilled in the shop prior to painting the pile.

SOLDIER PILE LIFTING HOLE

12 6 0 1 2 3
In. Feet



TYPICAL SOLDIER PILE WALL SECTION

12 6 0 1 2 3 4
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
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STATE OF ALASKA 49 TH
"Anne Fabrello-Streufert"
4-24-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

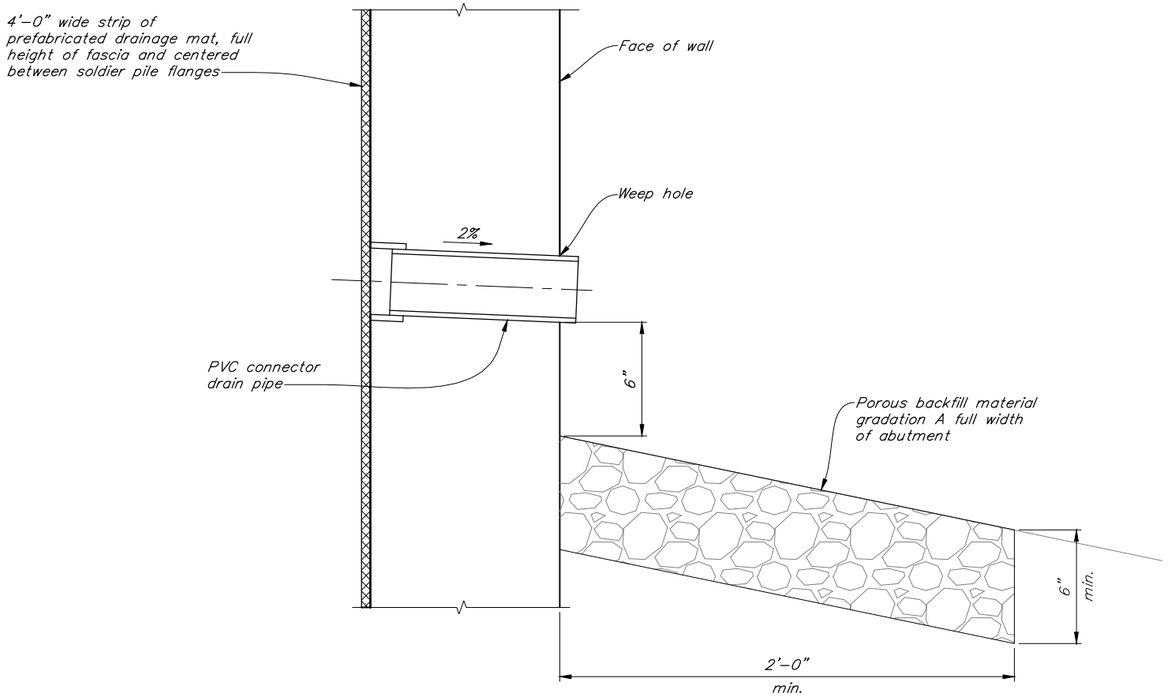
ABUTMENT 5 DETAILS 1

BRIDGE NO. 1841

DWG. NO. 28

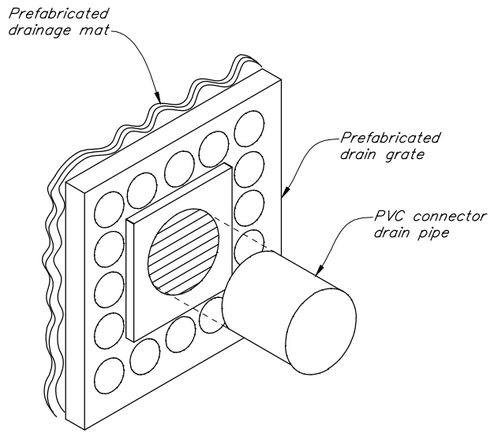
04/24/24 | 6:53 AM | RICKT
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N28 Abutment 5 Details 1.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N29	N53

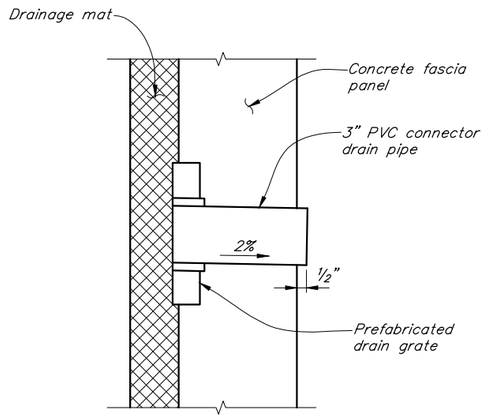


GRAVEL SPLASHPAD AT SOLDIER PILE WALL

0 3 6 9 1'-0"
Inches

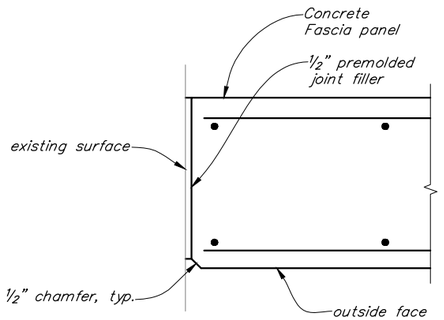


ISOMETRIC VIEW



SECTION VIEW

NOTES:
1. Drain grate installation shall not disrupt prefabricated drainage mat.

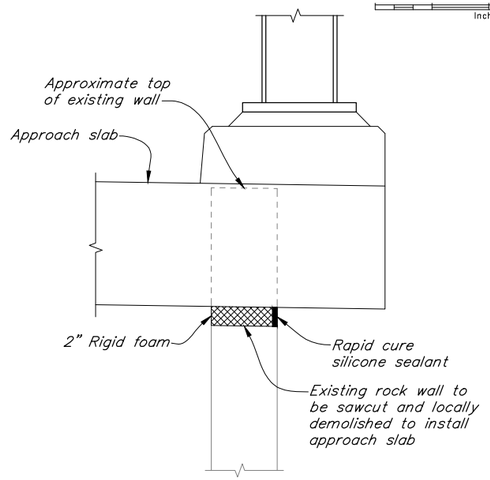


TYPICAL FASCIA TERMINATION DETAIL

0 3 6 9 1'-0"
Inches

WEEP HOLE DETAILS

0 3 6 9 1'-0"
Inches



SOUTH WALL SECTION A-A

6 0 1
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
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4-24-2024
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SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

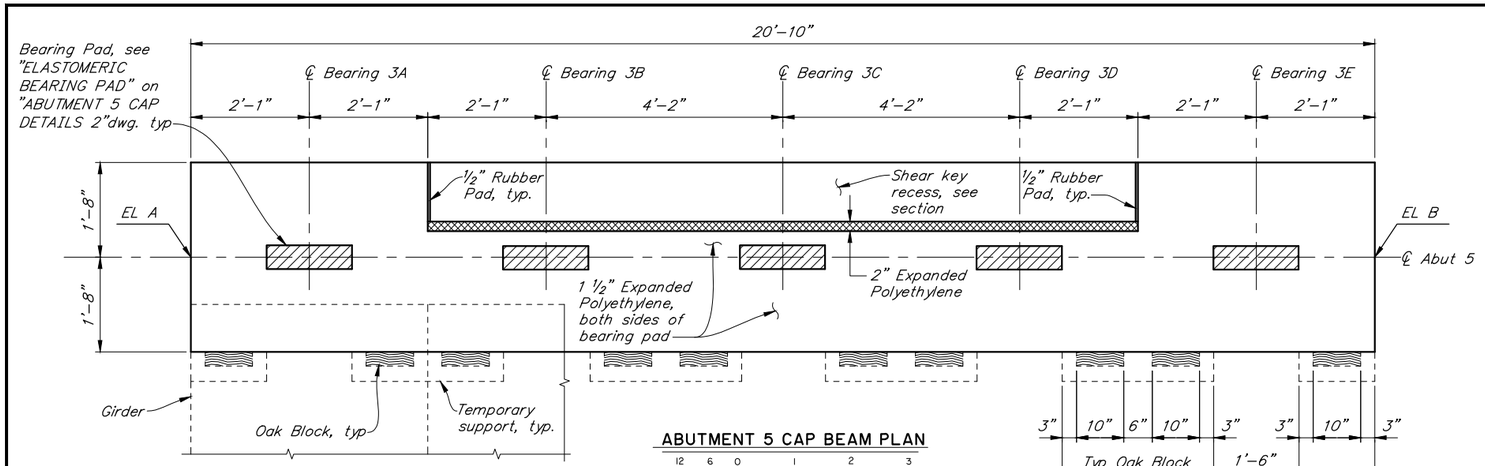
ABUTMENT 5 DETAILS 2

BRIDGE NO. 1841

DWG. NO. 29

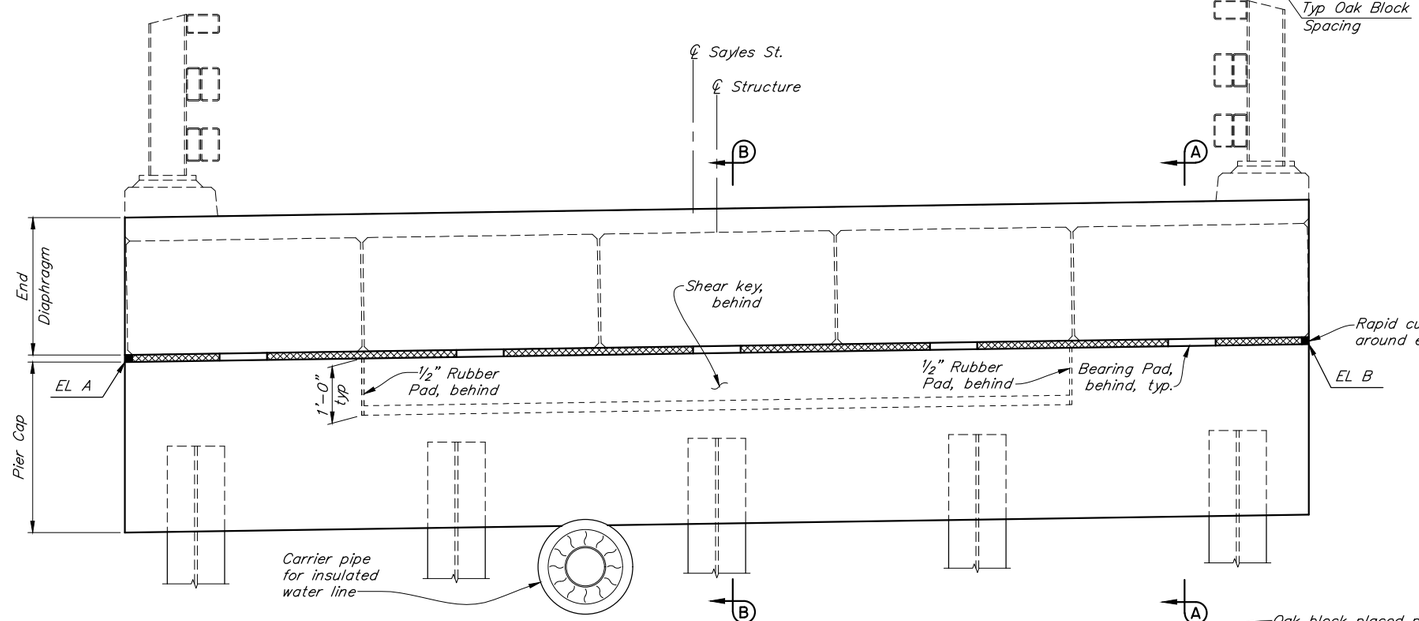
04/24/24 | 6:54 AM | RICKT
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N29 Abutment 5 Details 2.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N30	N53



ABUTMENT 5 CAP BEAM PLAN

12 6 0 1 2 3
In. Feet

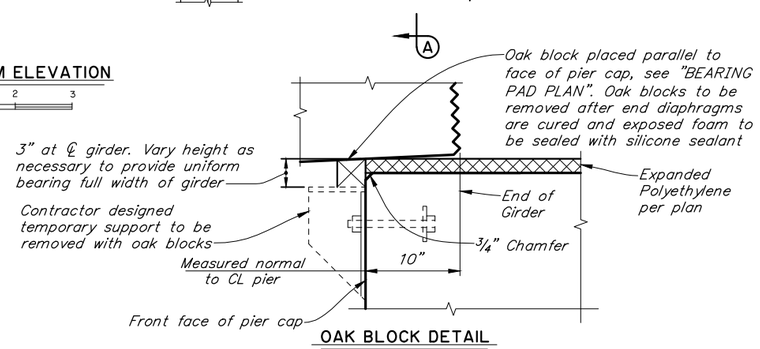


ABUTMENT 5 CAP BEAM ELEVATION

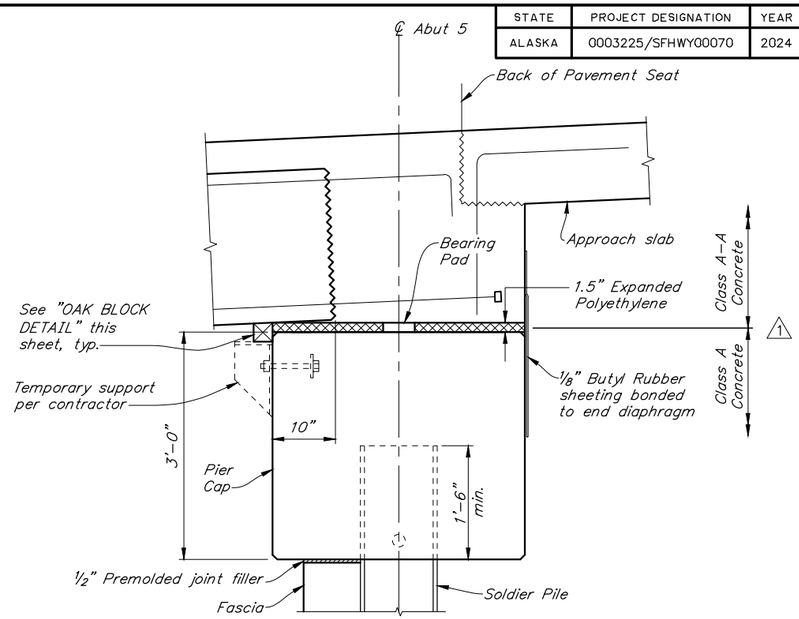
12 6 0 1 2 3
In. Feet

CENTERLINE TOP OF PIER ELEVATIONS	
A	B
107.67	107.97

GIRDER BLOCKING ELEVATIONS									
Girder 3A		Girder 3B		Girder 3C		Girder 3D		Girder 3E	
L	R	L	R	L	R	L	R	L	R
107.74	107.78	107.81	107.84	107.87	107.90	107.93	107.97	107.99	108.03

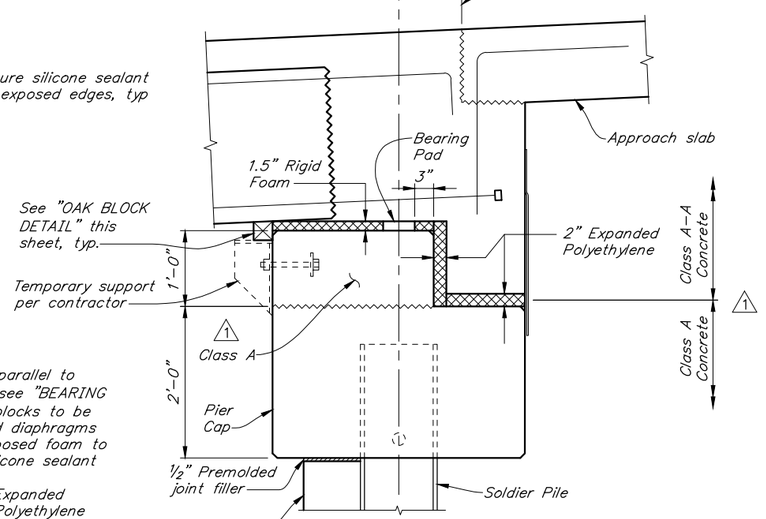


OAK BLOCK DETAIL



END DIAPHRAGM SECTION A-A

12 6 0 1 2
In. Feet



Note: For information not shown, see Section A-A.

END DIAPHRAGM SECTION B-B

12 6 0 1 2
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
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STATE OF ALASKA 49 TH
Anne Fabrello-Streufert
10-24-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

ABUTMENT 5 CAP DETAILS 1

BRIDGE NO. 1841
DWG. NO. 30

1 10/24/24 – CONCRETE CLASS CLARIFICATION

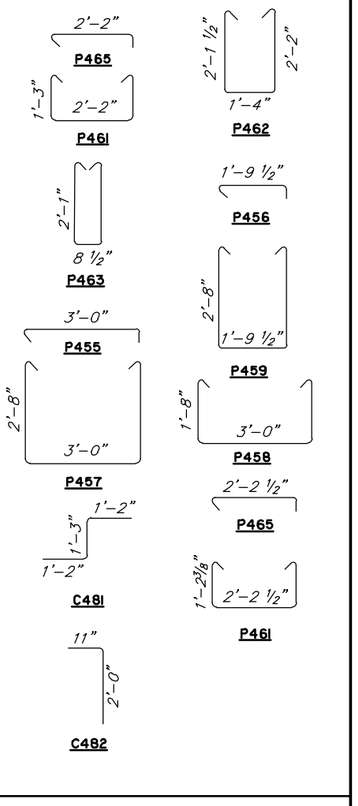
10/24/24 | 5:20 AM | Joshp
V:\18001239 (Sayles-Gorge Viaduct)\02_Design (\2019)\1841-N30 Abutment 5 Cap Details 1.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N31	N53

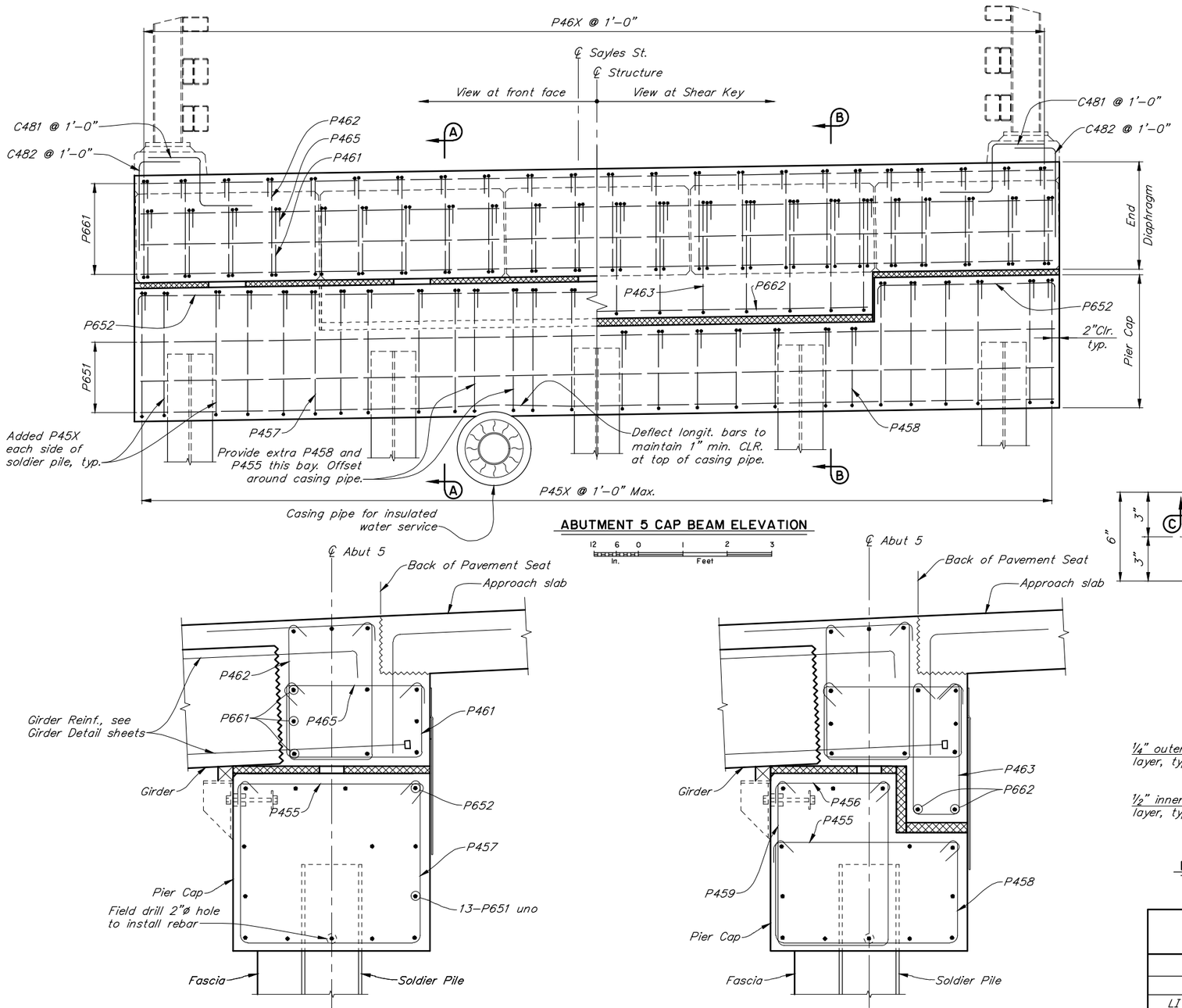
REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
P455		4	29	3' – 8"	BENT
P456		4	16	2' – 5"	BENT
P457		4	12	8' – 11"	BENT
P458		4	17	6' – 11"	BENT
P459		4	16	7' – 8"	BENT
P461	E	4	22	5' – 3"	BENT
P462	E	4	22	6' – 2"	BENT
P463	E	4	14	5' – 5"	BENT
P465	E	4	22	2' – 10"	BENT
P651		6	13	20' – 6"	
P652		6	2	3' – 10"	
P661		6	11	20' – 6"	
P662		6	2	12' – 1"	
C481	E	4	4	3' – 5"	BENT
C482	E	4	4	2' – 10"	BENT

BENDING DIAGRAM



E = Epoxy coated reinforcing steel



ABUTMENT 5 CAP BEAM ELEVATION

12 6 0 1 2 3
In. Feet

Note: For information not shown, see sheet "ABUTMENT 5 CAP DETAILS 1"

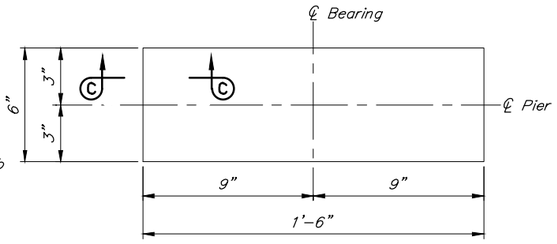
END DIAPHRAGM SECTION A-A

12 6 0 1 2
In. Feet

Note: For information not shown, see Section A–A

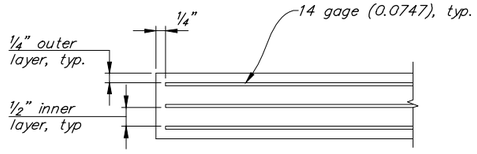
END DIAPHRAGM SECTION B-B

12 6 0 1 2
In. Feet



ELASTOMERIC BEARING PAD

Laminated Elastomeric Bearing Pad (3 shims)



ELASTOMERIC BEARING PAD - SECTION C-C

BEARING DESIGN TABLE AASHTO METHOD B DESIGN	
SERVICE - I LIMIT STATE	
DEAD LOAD (DL) REACTION	30 KIPS
LIVE LOAD REACTION (W/O IMPACT)	40 KIPS
UNLOADED HEIGHT	1.72"
SHEAR MODULUS	165 PSI

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

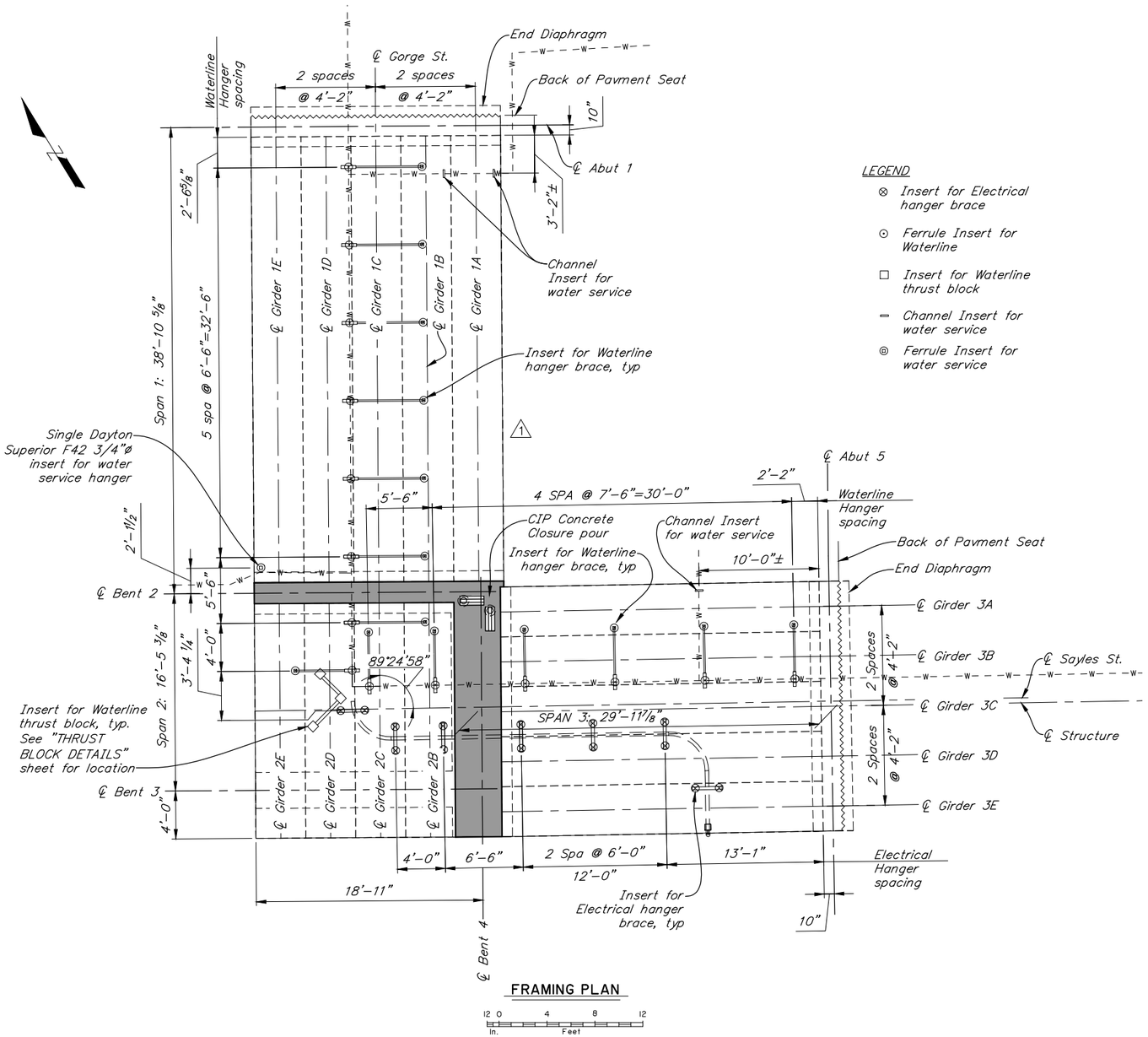
SAYLES ST & GORGE ST

ABUTMENT 5 CAP DETAILS 2

BRIDGE NO. 1841
DWG. NO. 31

07/31/24 | 3:19 PM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N31 Abutment 5 Cap Details 2.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N32	N53



LEGEND

- ⊗ Insert for Electrical hanger brace
- ⊙ Ferrule Insert for Waterline
- □ Insert for Waterline thrust block
- ▬ Channel Insert for water service
- ◎ Ferrule Insert for water service

FRAMING PLAN

12 0 4 8 12
In. Feet

1 10/23/24 – MINOR DRAFTING CLEANUP

09/26/24 | 9:25 PM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N32 Framing Plan.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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STATE OF ALASKA 49TH
Anne Fabrello-Streifert
9-26-2024
SE13556
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

FRAMING PLAN

BRIDGE NO. 1841
DWG. NO. 32

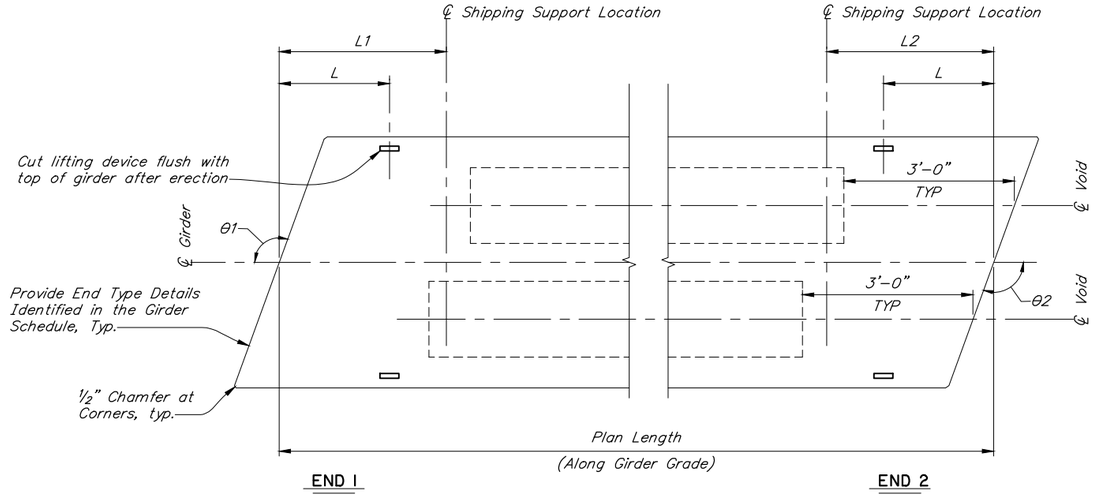
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N33	N53

GIRDER SCHEDULE

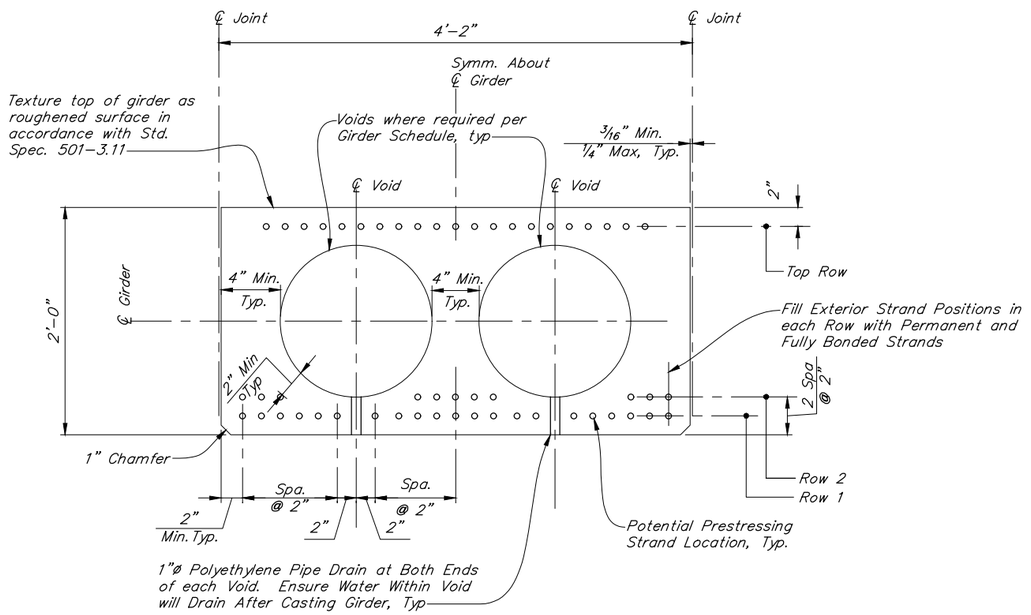
Span	Girder	Girder Height H	Girder Width W	Plan length (along girder grade) (see Girder Note 1)	Voids		Girder End Details				Min Concrete Comp Strength		Prestressing Strands (See Girder Notes 2 – 4)										"A" Dimension at ℄ Bearings	Deck Screed Camber C	Midspan Vertical Deflection D		Shipping and Handling Details		
													Row 1			Row 2			Row 3			Top Row								
					Number	Diameter	End 1 Type	End 2 Type	θ_1	θ_2	@ 28-Days F'C (KSI)	@ Release F'C (KSI)	Permanent Strands	Extended Number	Debonded Number and Length	Permanent Strands	Extended Number	Debonded Number and Length	Permanent Strands	Extended Number	Debonded Number and Length	Permanent Strands	Temporary Strands			Lower Bound @ 40 Days	Upper Bound @ 120 Days	L	L_1	L_2
1	A–E	2'–0"	4'–2"	37'–8 3/4"	2	15.7	A	B	90	90	7.0	5.0	13	4	–	–	–	–	–	–	–	4	–	6.0	0	1/8"	3/8"	3'–0"	2'–0"	2'–0"
2	B–E	2'–0"	4'–2"	19'–6 3/8"	0	–	A	C	90	90	7.0	5.0	11	4	–	–	–	–	–	–	–	2	–	6.0	0	0	1/8"	3'–0"	2'–0"	2'–0"
3	A–E	2'–0"	4'–2"	26'–8 3/4"	2	15.7	B	A	90	90	7.0	5.0	11	4	–	–	–	–	–	–	–	4	–	6.0	0	1/8"	1/4"	3'–0"	2'–0"	2'–0"

GIRDER NOTES:

1. Plan length shall be increased as necessary to compensate for shortening due to prestress and shrinkage.
2. All strands shall be 0.6"ø AASHTO M203 grade 270 low relaxation strands, strands shall be symmetrical about the girder centerline. Exterior strands in each row shall be fully bonded. Design is based on the following steel stresses:
   Pretensioning – Jacking Stresses 189 ksi
   after initial losses 178 ksi
   after all losses 156 ksi
3. Space extended strands symmetrically and evenly across girder width. Stagger extended strand locations with respect to girders in adjacent spans.
4. Concrete shall be Class P concrete with the strengths noted in the Girder Schedule.



TYPICAL GIRDER PLAN



TYPICAL GIRDER SECTION

For Strand Patterns, See "GIRDER DETAILS 3"

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
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STATE OF ALASKA 49TH — Anne Fabrello-Streufert, 6-12-2024, SE135564, REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

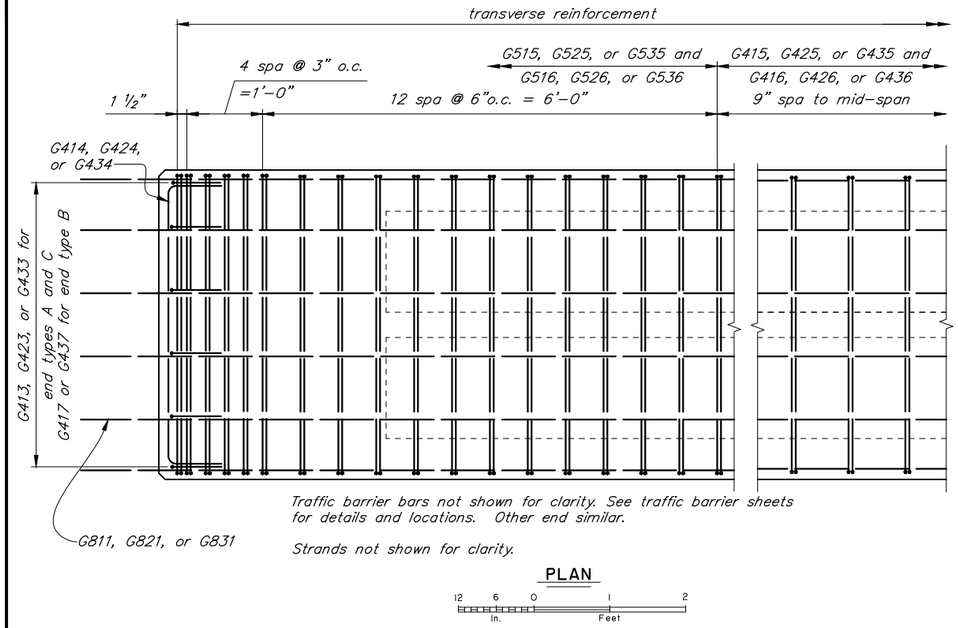
SAYLES ST & GORGE ST

GIRDER DETAILS 1

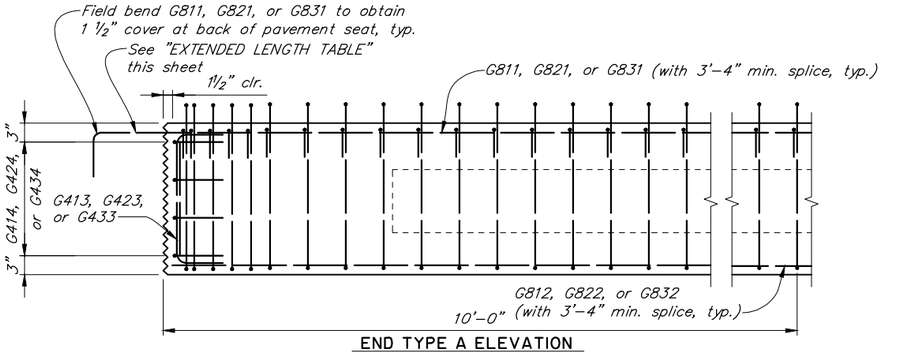
BRIDGE NO. 1841

DWG. NO. 33

06/12/24 | 12:56 PM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N33 Girder Details 1.dwg

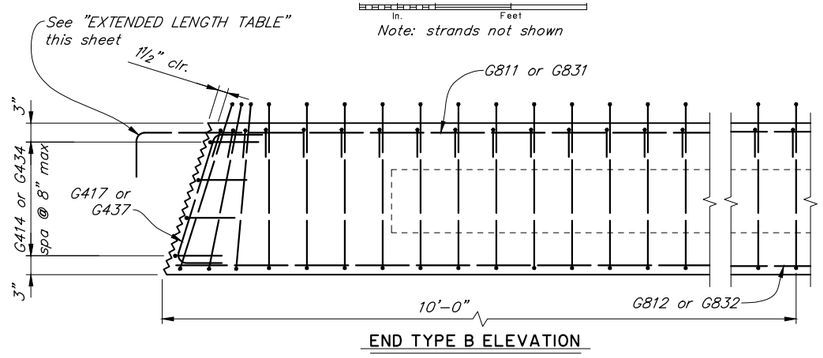


PLAN



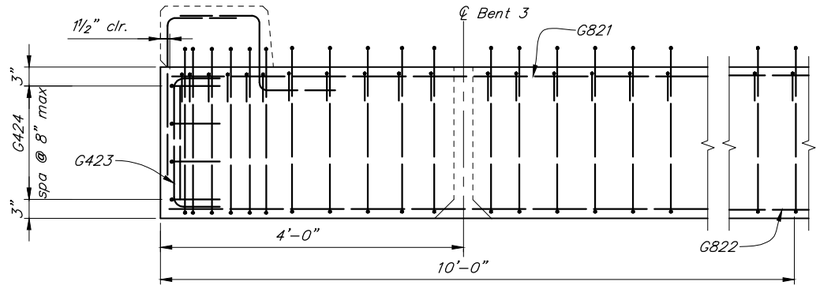
END TYPE A ELEVATION

Note: strands not shown



END TYPE B ELEVATION

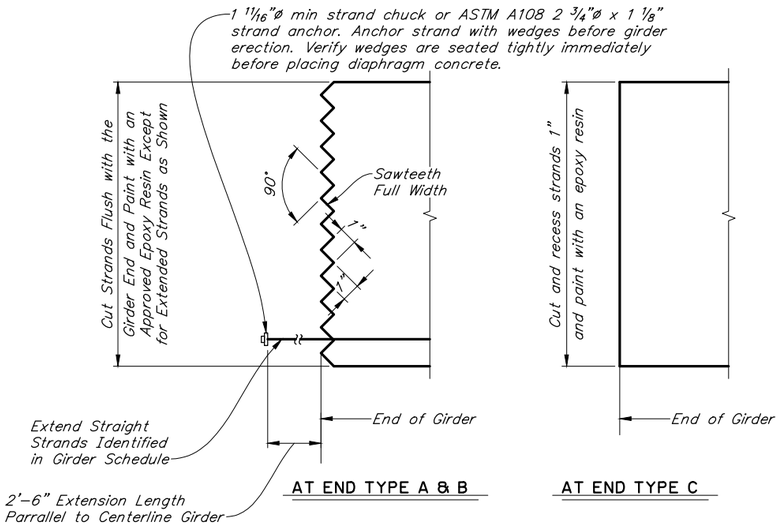
Note: strands not shown



END TYPE C ELEVATION

Note: strands not shown

EXTENDED LENGTH TABLE			
SPAN	LOCATION	TOP REINFORCING STEEL	PRESTRESSING STRAND
1	Abutment 1	1'-7"	2'-0"
1	Bent 2	1'-4"	1'-4"
2	Bent 2	1'-4"	1'-4"
2	Bent 3	–	–
3	Bent 4	2'-6"	2'-6"
3	Abutment 5	1'-7"	2'-0"



GIRDER END DETAIL

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N34	N53

GIRDER SPAN 1 REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C411	E	4	47	3' – 5"	BENT
C412	E	4	97	2' – 11"	BENT
C611	E	6	50	3' – 3"	BENT
G413		4	30	2' – 3"	BENT
G414		4	40	4' – 3"	BENT
G415		4	158	8' – 6"	BENT
G416		4	158	5' – 4"	BENT
G417		4	30	2' – 3"	BENT
G515		5	170	8' – 7"	BENT
G516		5	170	5' – 4"	BENT
G811		8	30	41' – 10"	BENT
G812		8	30	37' – 6"	

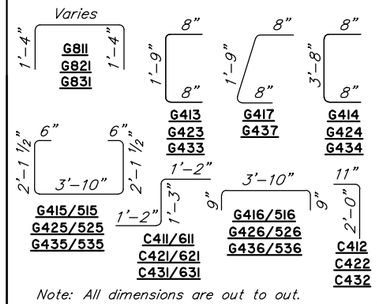
GIRDER SPAN 2 REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C421	E	4	20	3' – 5"	BENT
C422	E	4	50	2' – 11"	BENT
C621	E	6	30	3' – 3"	BENT
G423		4	48	2' – 3"	BENT
G424		4	32	4' – 3"	BENT
G425		4	30	8' – 6"	BENT
G426		4	30	5' – 4"	BENT
G525		5	136	8' – 7"	BENT
G526		5	136	5' – 4"	BENT
G527		5	27	3' – 6"	BENT
G528		5	27	3' – 6"	BENT
G821		8	24	22' – 3"	BENT
G822		8	24	19' – 4"	

GIRDER SPAN 3 REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C431	E	4	25	3' – 5"	BENT
C432	E	4	55	2' – 11"	BENT
C631	E	6	30	3' – 3"	BENT
G433		4	30	2' – 3"	BENT
G434		4	40	4' – 3"	BENT
G435		4	85	8' – 6"	BENT
G436		4	85	5' – 4"	BENT
G535		5	170	8' – 7"	BENT
G536		5	170	5' – 4"	BENT
G831		8	30	33' – 5"	BENT
G832		8	30	25' – 6"	
G437		4	30	2' – 3"	BENT

BENDING DIAGRAM



Note: All dimensions are out to out.

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
4-29-2024
SE13564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

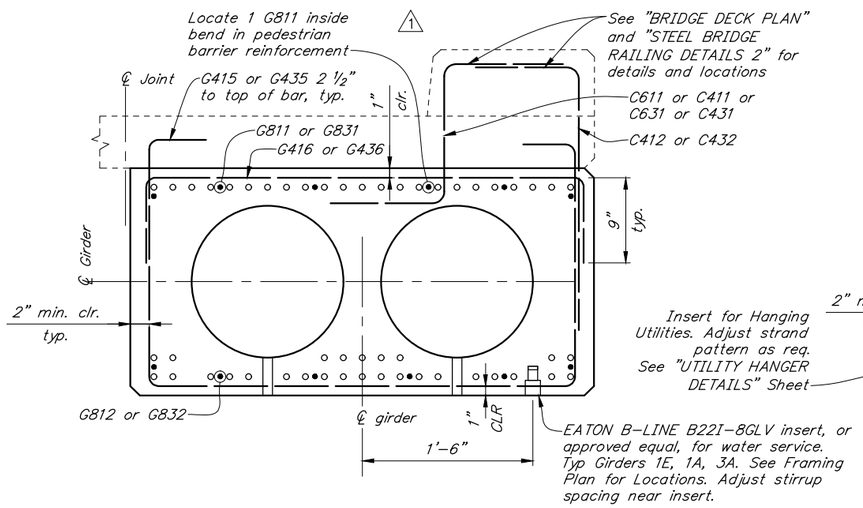
GIRDER DETAILS 2

BRIDGE NO. 1841

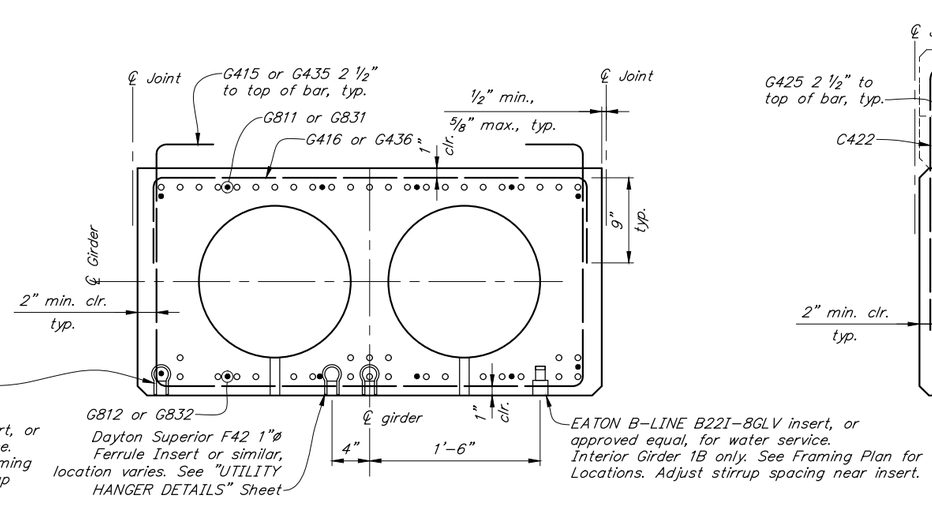
DWG. NO. 34

04/29/24 | 10:51 AM | Haoyis
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N34 Girder Details 2.dwg

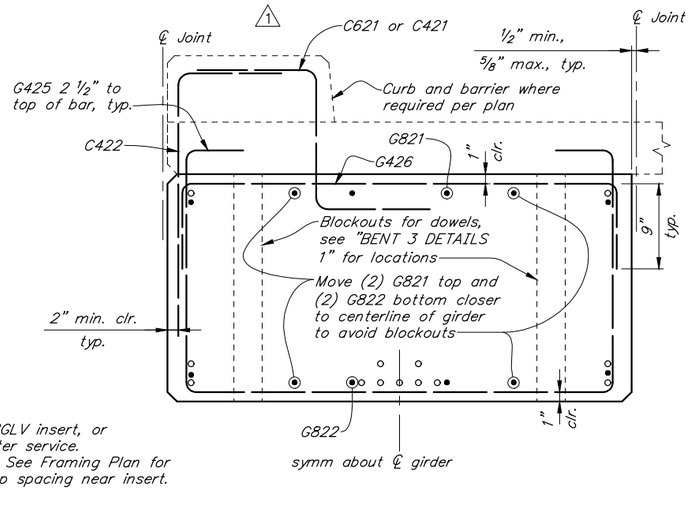
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N35	N53



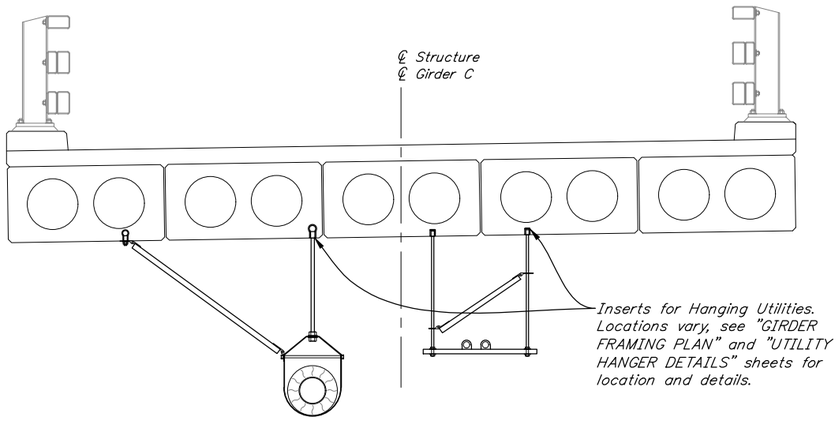
TYPICAL SPAN 1 AND 3 EXTERIOR GIRDER SECTION



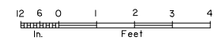
TYPICAL SPAN 1 AND 3 INTERIOR GIRDER SECTION

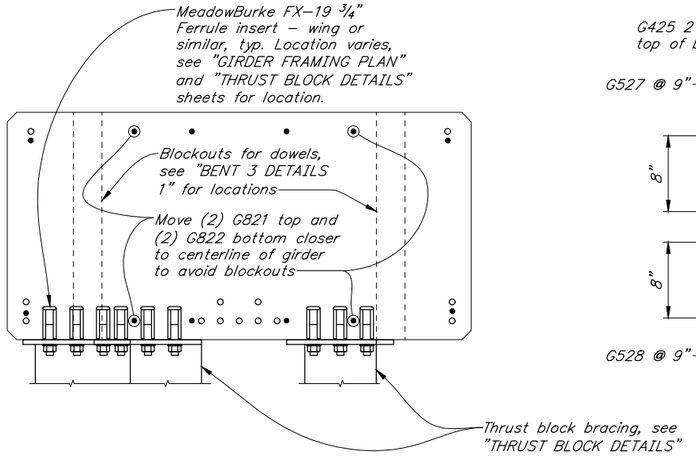


TYPICAL SPAN 2 GIRDER SECTION



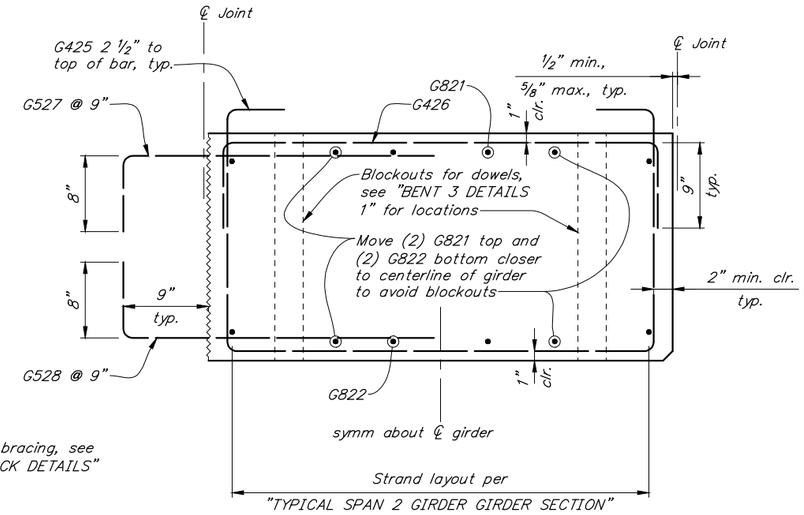
UTILITY HANGER DETAILS



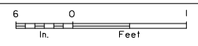


Looking North

SPAN 2 GIRDER D THRUST BLOCK BRACING CONNECTION



TYPICAL SPAN 2 GIRDER B SECTION



1 10/23/24 – CLARITY AT BRIDGE DECK

09/26/24 | 9:25 PM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N35 Girder Details 3.dwg

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
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STATE OF ALASKA 49TH
Anne Fabrello Streufert
Anne Fabrello-Streufert
9-26-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

GIRDER DETAILS 3

BRIDGE NO. 1841

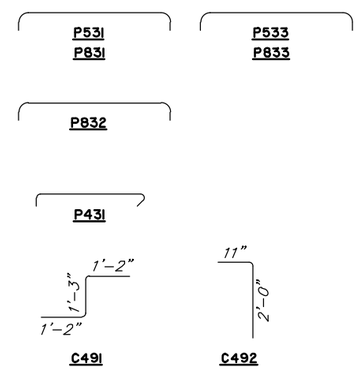
DWG. NO. 35

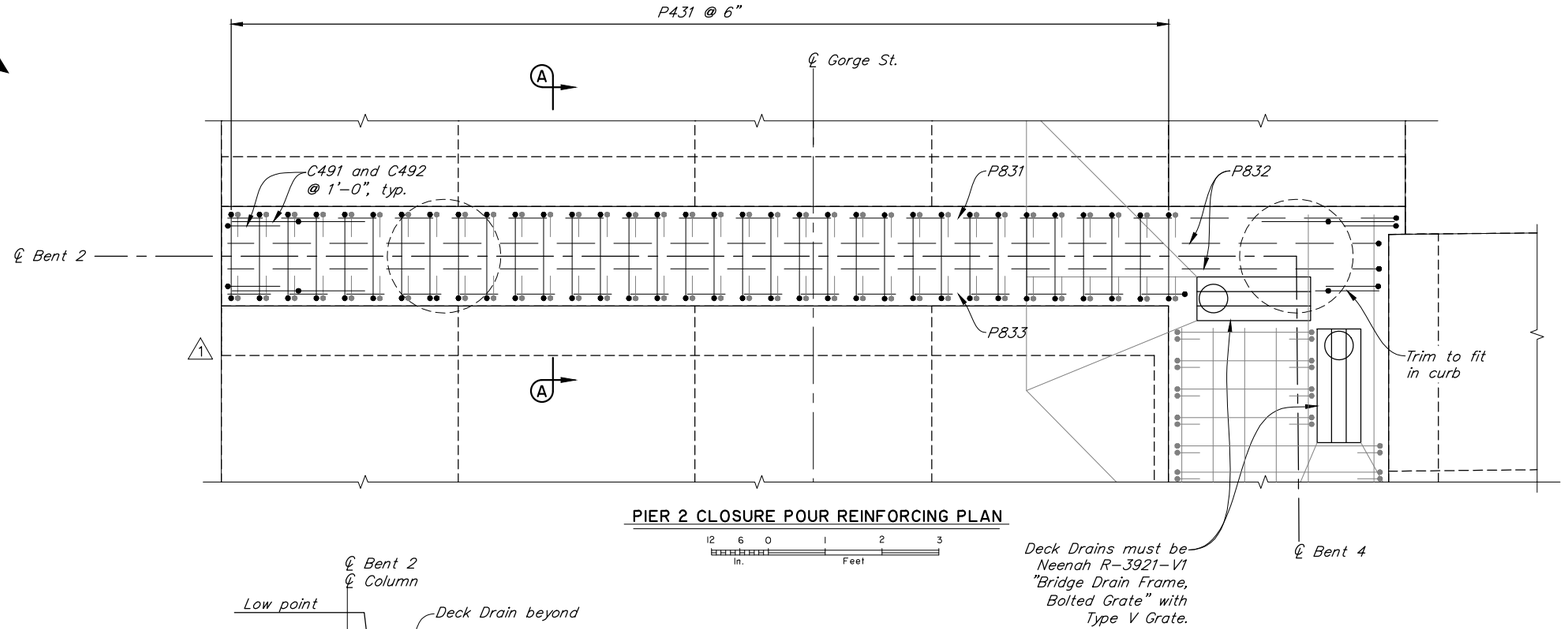
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N36	N53

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
P431		4	102	2' – 2"	BENT
P531		5	2	21' – 11"	BENT
P533		5	2	18' – 3"	BENT
P831		8	1	22' – 9"	BENT
P832		8	2	22' – 6"	BENT
P833		8	1	19' – 1"	BENT
C491	E	4	4	3' – 5"	BENT
C492	E	4	4	2' – 10"	BENT

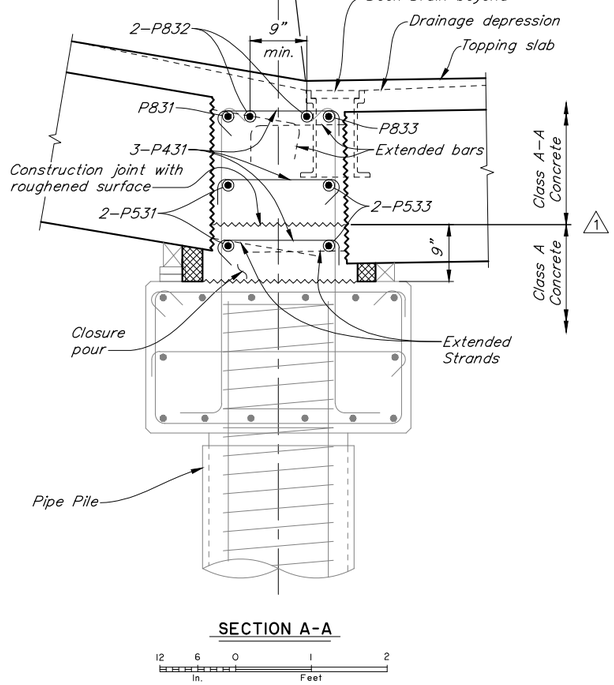
BENDING DIAGRAM





PIER 2 CLOSURE POUR REINFORCING PLAN

12 6 0 1 2 3
In. Feet



SECTION A-A

12 6 0 1 2
In. Feet

1 10/24/24 – CONCRETE CLASS CLARIFICATION

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
10-24-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

PIER 2 CLOSURE POUR

BRIDGE NO. 1841

DWG. NO. 36

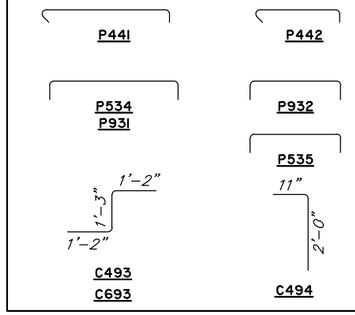
10/24/24 | 5:20 AM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (\2019)\1841-N36 Pier 2 Closure Pour.dwg

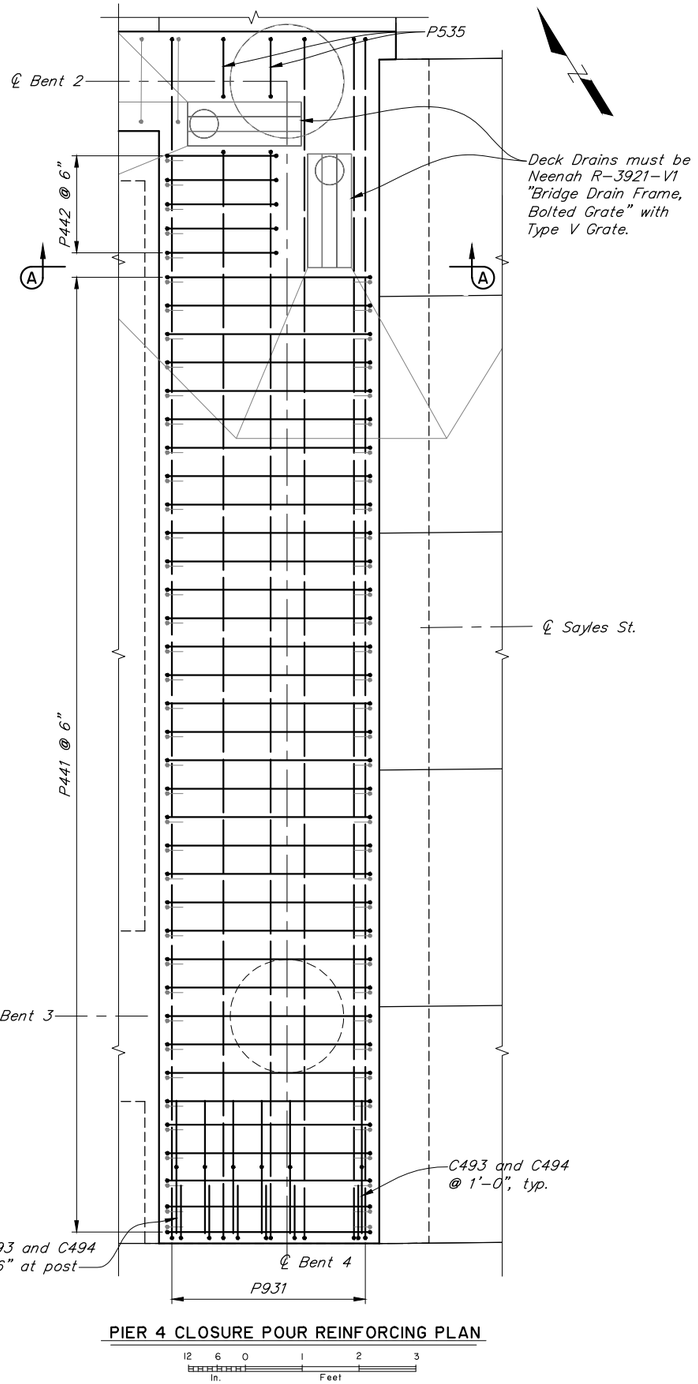
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N37	N53

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
P441		4	105	4' – 2"	BENT
P442		4	15	2' – 6"	BENT
P534		5	4	22' – 6"	BENT
P931		9	4	23' – 9"	BENT
P932		9	2	21' – 9"	BENT
P535		5	2	2' – 5"	BENT
C493	E	4	1	3' – 5"	BENT
C494	E	4	6	2' – 10"	BENT
C693	E	6	5	3' – 3"	BENT

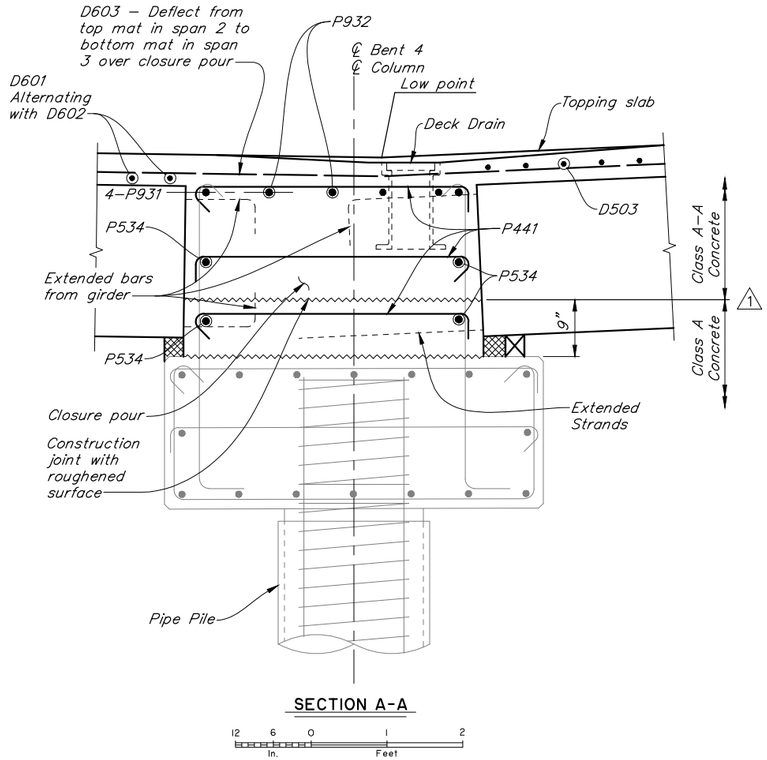
BENDING DIAGRAM





PIER 4 CLOSURE POUR REINFORCING PLAN

12 6 0 1 2 3
In. Feet



SECTION A-A

12 6 0 1 2
In. Feet

△1 10/24/24 – CONCRETE CLASS CLARIFICATION

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
"Anne Fabrello-Streufert"
10-24-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

PIER 4 CLOSURE POUR

BRIDGE NO. 1841
DWG. NO. 37

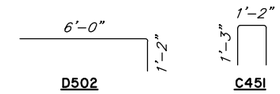
10/24/24 | 5:20 AM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N37 Pier 4 Closure Pour.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N38	N53

DECK REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D501	E	5	22	26' – 0"	
D502	E	5	44	7' – 2"	BENT
D503	E	5	133	20' – 6"	
D601	E	6	22	44' – 0"	
D602	E	6	20	38' – 0"	
D603	E	6	39	48' – 7"	
D604	E	6	3	27' – 8"	
C451	E	4	60	3' – 6"	BENT
C461	E, S	4	3	64' – 1"	
C462	E	4	3	30' – 0"	
C463	E, S	4	3	41' – 10"	
C464	E	4	3	29' – 11"	
C465	E	4	3	13' – 4"	
C466	E, S	4	3	43' – 10"	

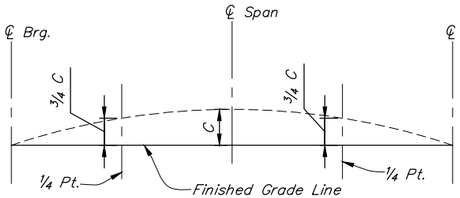
BENDING DIAGRAM



Note: All dimensions are out to out.

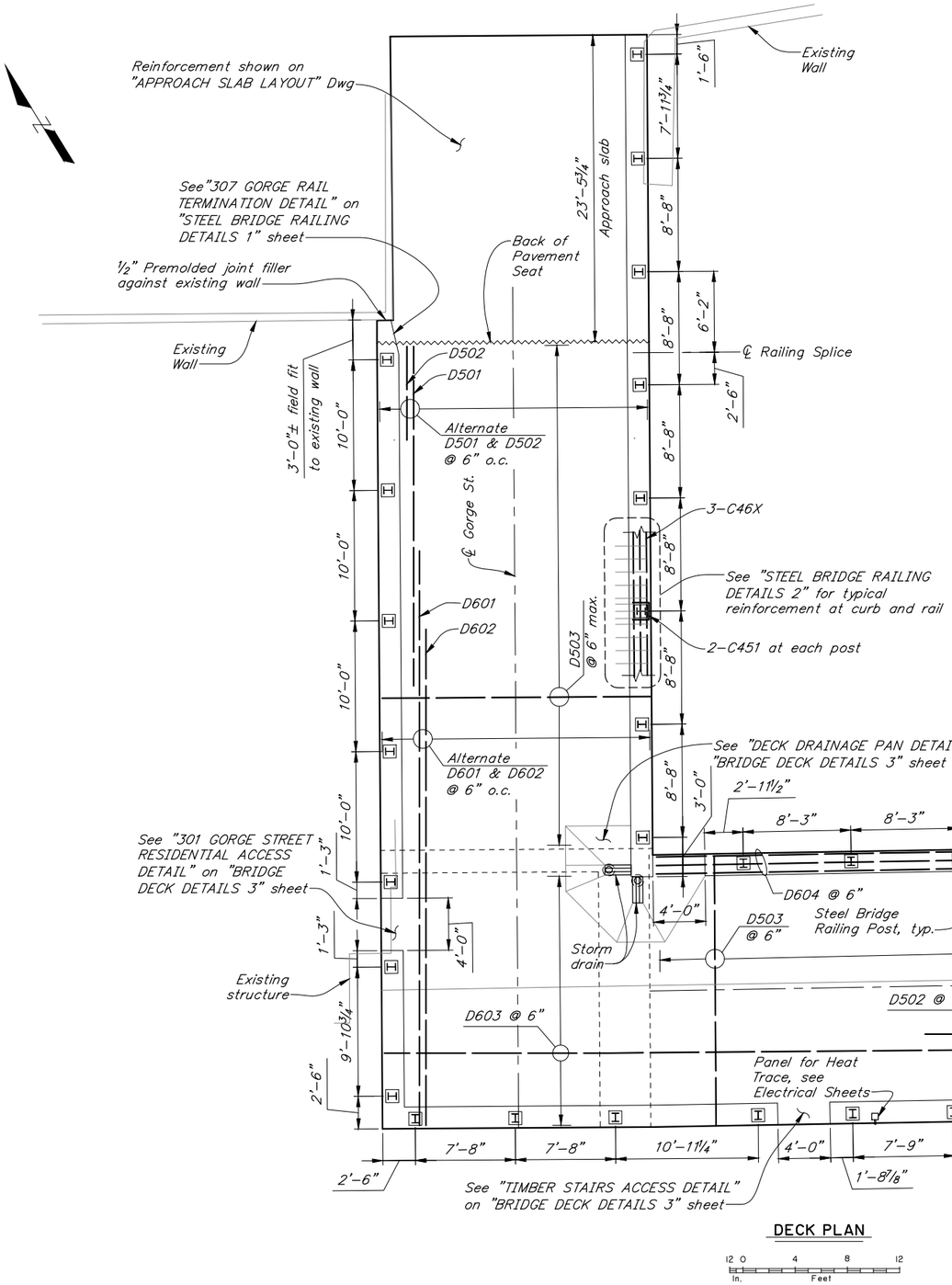
E = Epoxy coated reinforcing steel

S = Splices permitted. Length does not include splices.



SCREED SETTING DIMENSIONS

For Dimension "C" See "GIRDER SCHEDULE"



DECK PLAN

12 0 4 8 12
In. Feet

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
4-29-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

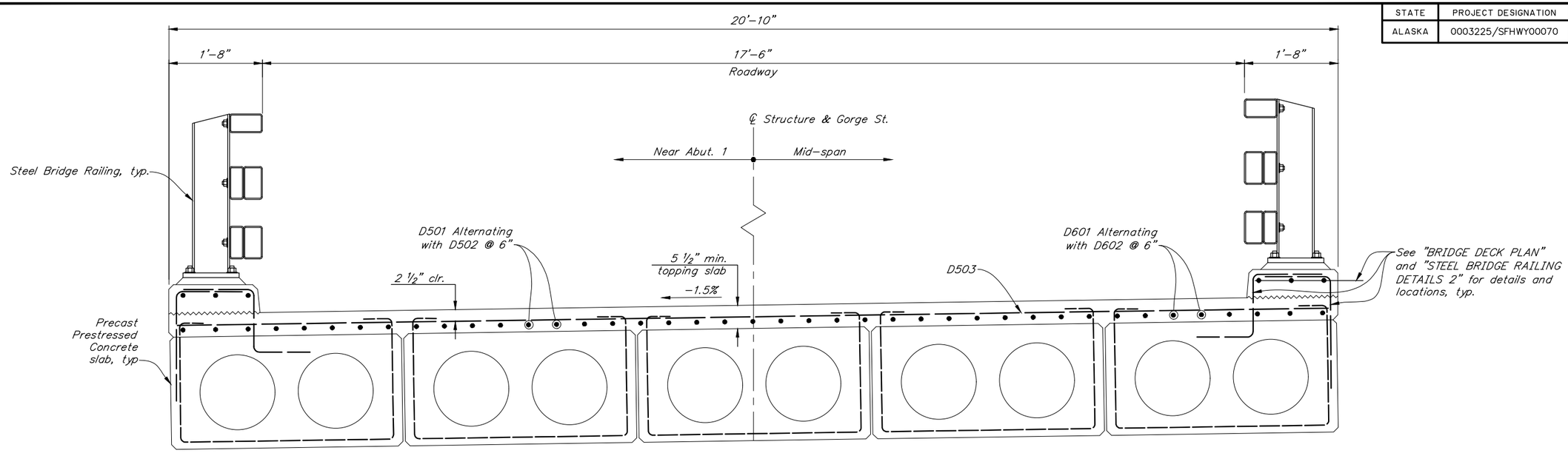
BRIDGE DECK PLAN

BRIDGE NO. 1841

DWG. NO. 38

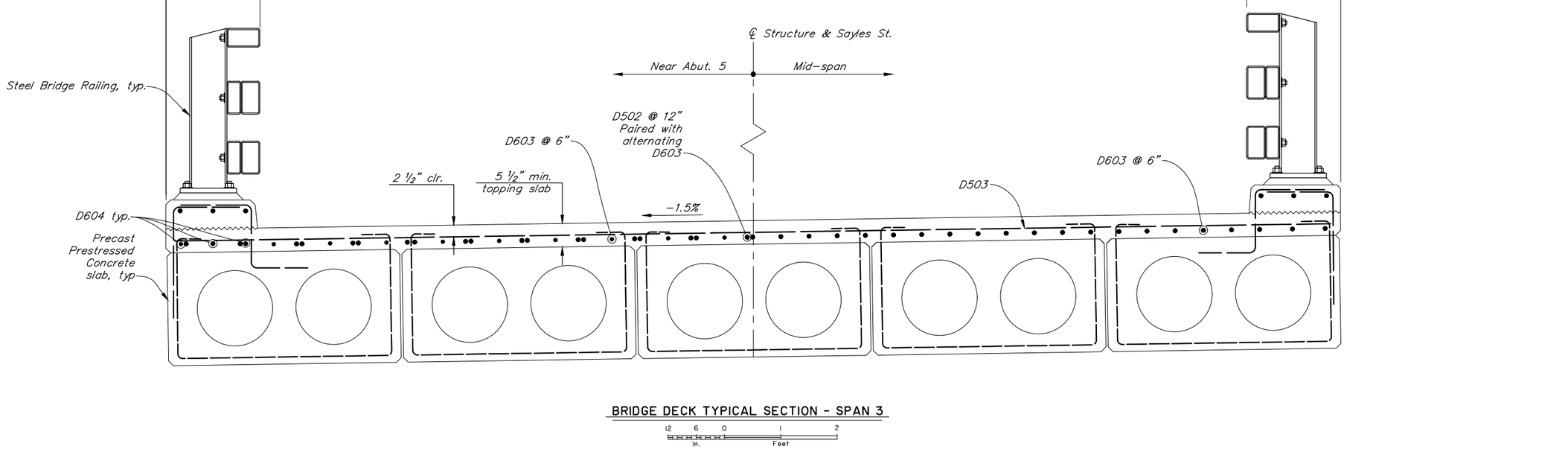
04/29/24 | 3:53 PM | Haoyis
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N38 Bridge Deck Plan.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N39	N53



BRIDGE DECK TYPICAL SECTION - SPAN 1

12 6 0 1 2
In. Feet



BRIDGE DECK TYPICAL SECTION - SPAN 3

12 6 0 1 2
In. Feet

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
4-25-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

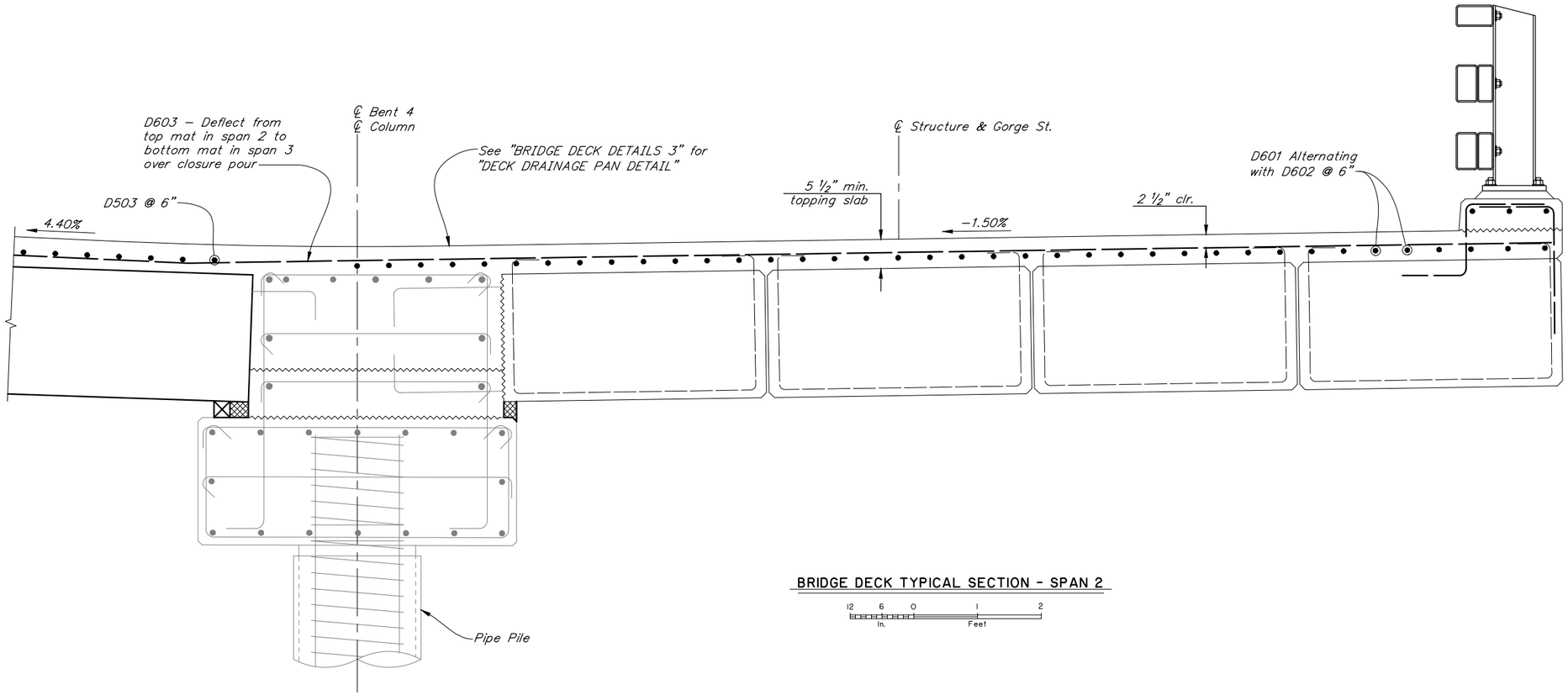
SAYLES ST & GORGE ST

BRIDGE DECK DETAILS 1

BRIDGE NO. 1841
DWG. NO. 39

04/25/24 | 9:51 AM | RICKT
V:\11800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N39 Bridge Deck Details 1.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N40	N53



BRIDGE DECK TYPICAL SECTION - SPAN 2

12 6 0 1 2
In. Feet

04/24/24 | 7:11 AM | RICKT
V:\1800230 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N40 Bridge Deck Details 2.dwg

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
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STATE OF ALASKA 49 TH
Anne Fabrello-Streufert
4-24-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

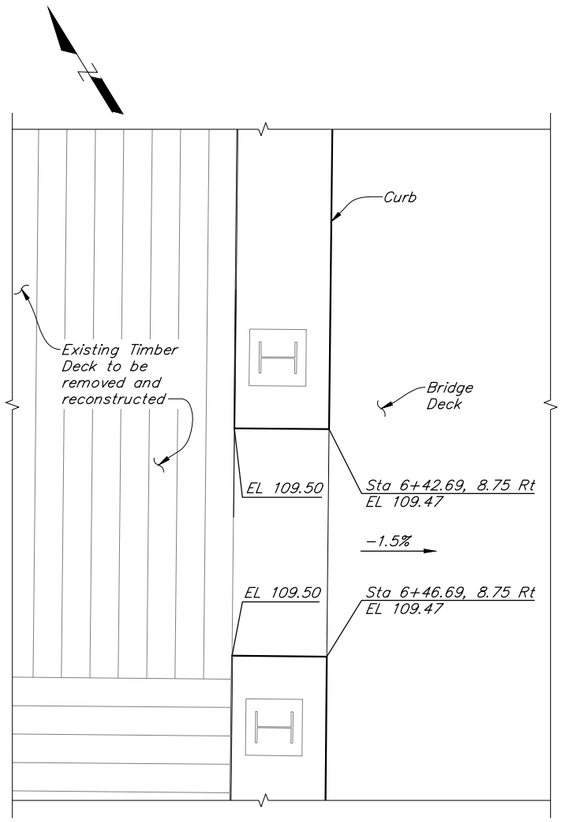
SAYLES ST & GORGE ST

BRIDGE DECK DETAILS 2

BRIDGE NO. 1841
DWG. NO. 40

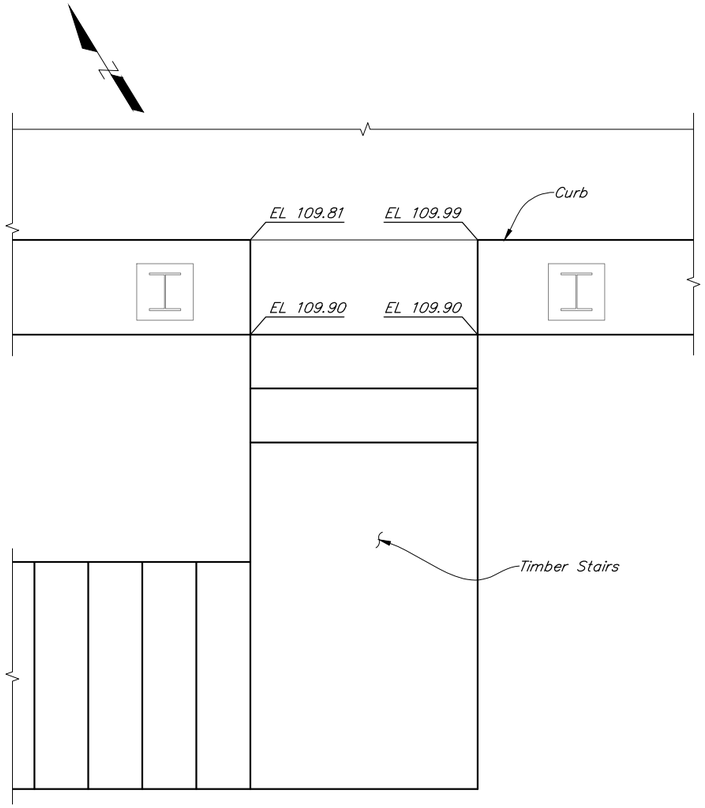
Addendum #1 :Attachment #5

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N41	N53



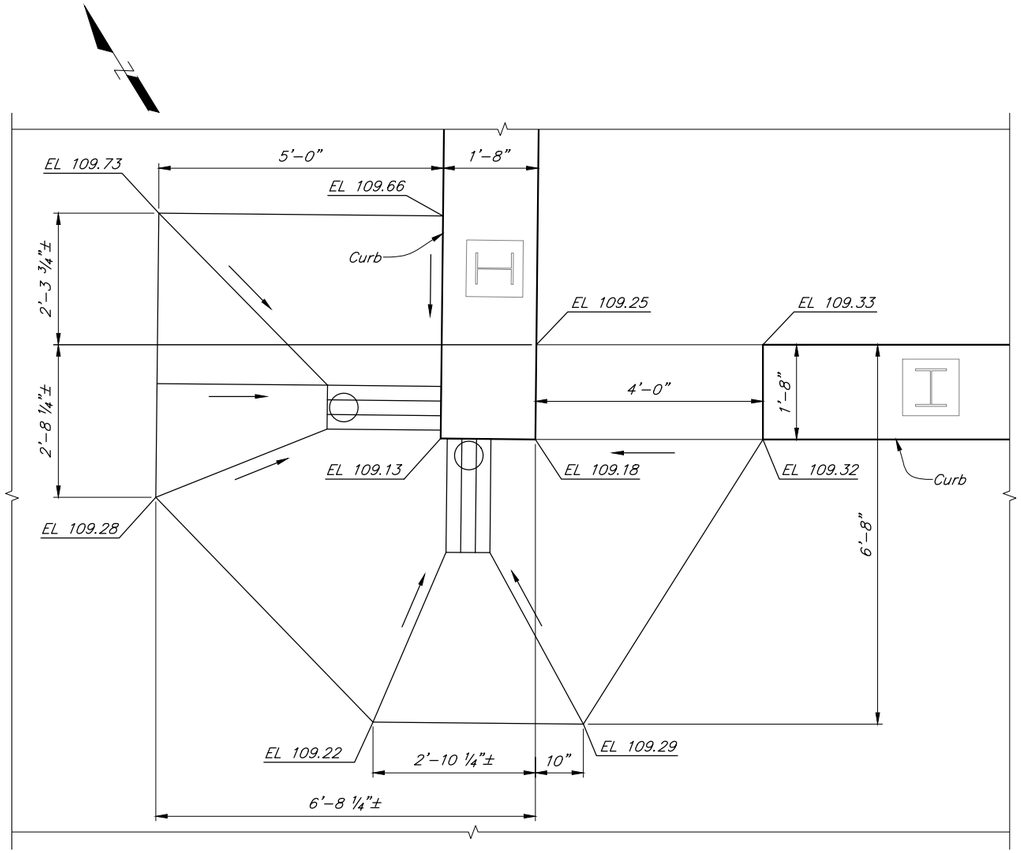
301 GORGE STREET RESIDENTIAL ACCESS DETAIL

12 6 0 1 2 3
In. Feet



TIMBER STAIRS ACCESS DETAIL

12 6 0 1 2 3
In. Feet



1 DECK DRAINAGE PAN DETAIL

12 6 0 1 2 3
In. Feet

1 10/23/24 - MINOR DETAILING CHANGES

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
9-26-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

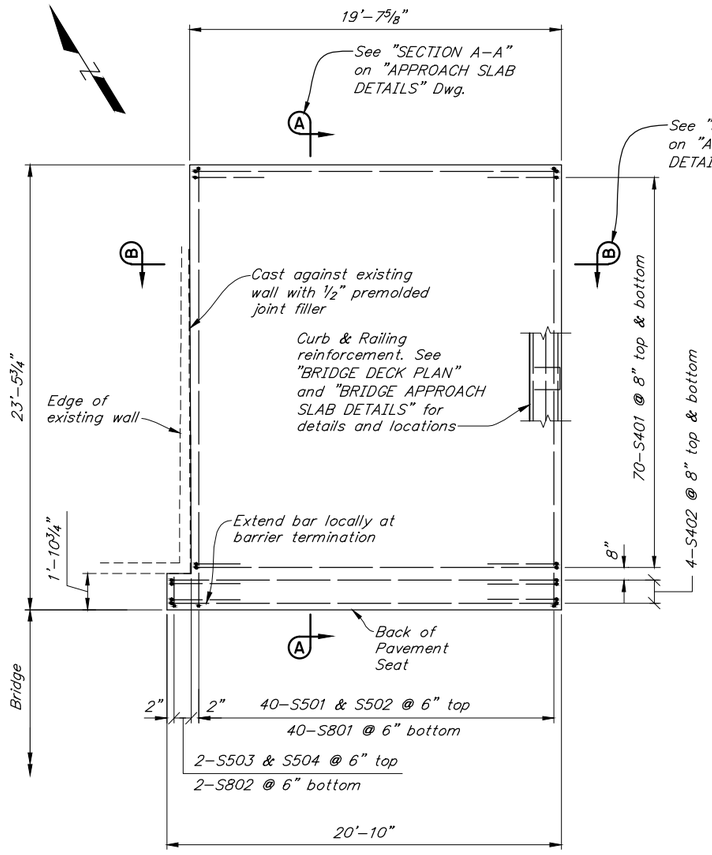
SAYLES - GORGE STREET VIADUCT

SAYLES ST & GORGE ST

BRIDGE DECK DETAILS 3

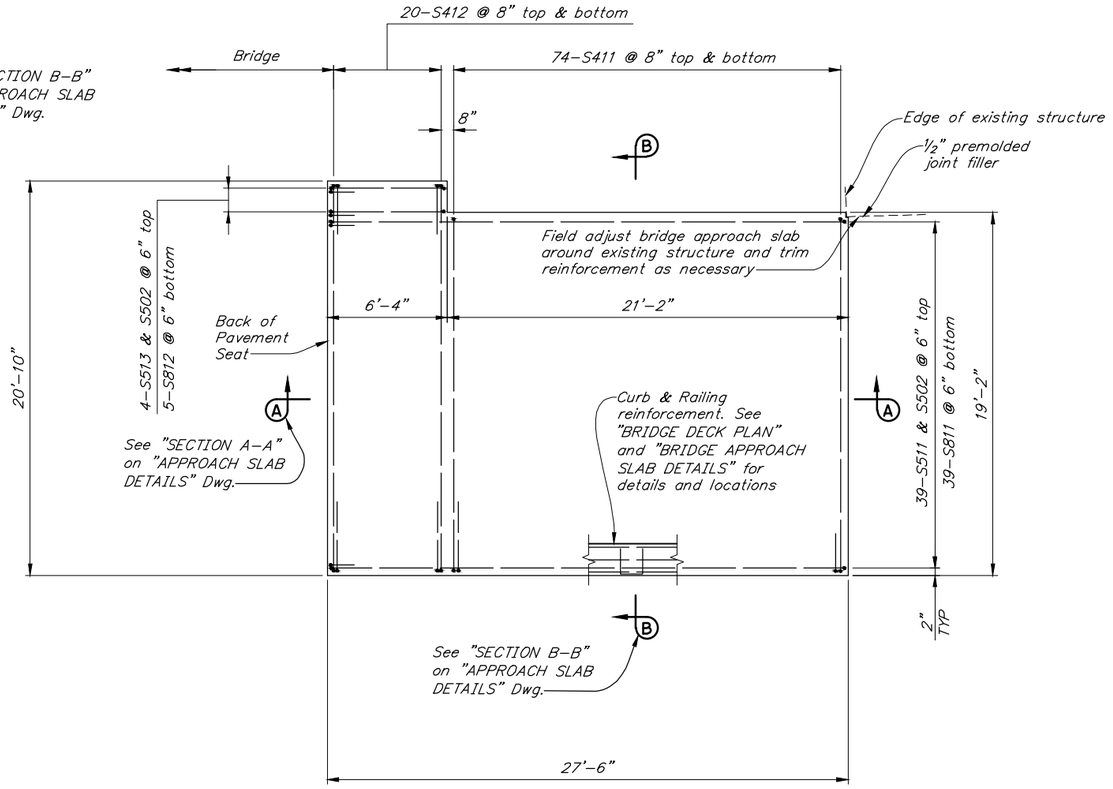
BRIDGE NO. 1841
DWG. NO. 41

09/26/24 | 9:25 PM | RICKT
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N41 Bridge Deck Details 3.dwg



GORGE STREET APPROACH SLAB PLAN

12 0 2 4 6 8
In. Feet



SAYLES STREET APPROACH SLAB PLAN

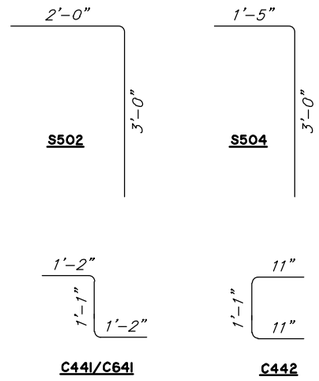
12 0 2 4 6 8
In. Feet

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N42	N53

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C441	E	4	38	2' – 11"	BENT
C442	E	4	78	2' – 11"	BENT
C641	E	6	40	2' – 11"	BENT
S401	E	4	70	19' – 0"	
S402	E	4	4	20' – 4"	
S411	E	4	74	18' – 7"	
S412	E	4	20	20' – 4"	
S501	E	5	40	23' – 1"	
S502	E	5	83	5' – 0"	BENT
S503	E	5	2	0' – 11"	
S504	E	5	2	4' – 5"	BENT
S511	E	5	39	30' – 0"	
S513	E	5	4	5' – 11"	
S801	E	8	40	23' – 1"	
S802	E	8	2	0' – 11"	
S811	E	8	39	27' – 2"	
S812	E	8	5	5' – 11"	

BENDING DIAGRAM



Note: All dimensions are out to out.

E = Epoxy coated reinforcing steel.

NOTES:

1. Provide ½" radius at all edges of bridge approach slab except at longitudinal joints and adjacent to L–Type abutments.
2. The minimum lap splice of #5 is 2'–6", #6 is 3'–0", and #8 is 3'–3", all lap splices shall be staggered so that no more than 50% of rebar is spliced at the same location, lap splices shall be located within the middle half of the bridge approach slab. Optional splices are allowed for #6.
3. For traffic barrier details, including any bridge approach slab blockout information, see traffic barrier sheets.

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
7-31-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES – GORGE STREET VIADUCT

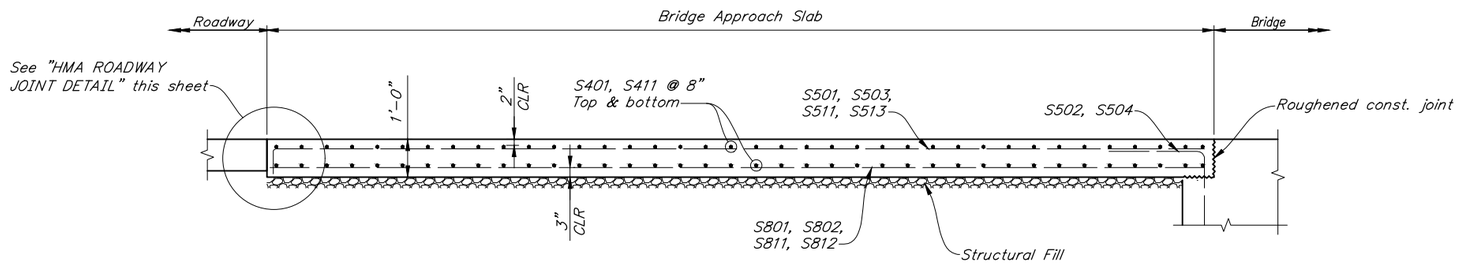
SAYLES ST & GORGE ST

BRIDGE APPROACH SLAB LAYOUT

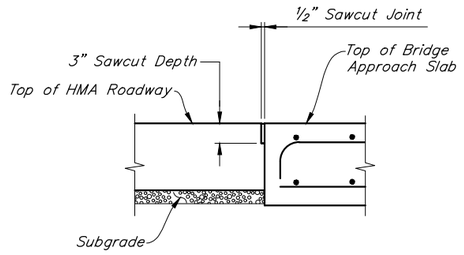
BRIDGE NO. 1841
DWG. NO. 42

07/31/24 | 6:48 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N42 Bridge Approach Slab Layout.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N43	N53

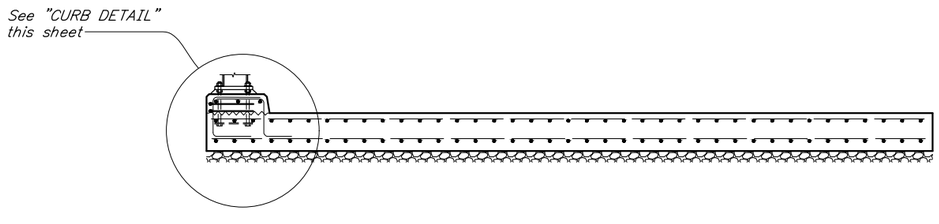


SECTION A-A

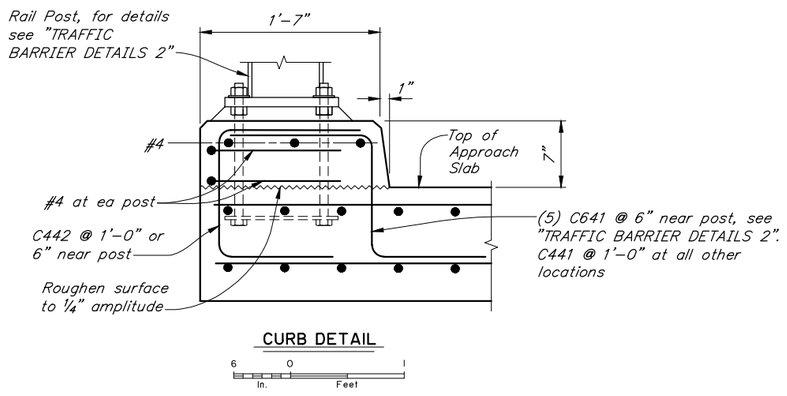


HMA ROADWAY JOINT DETAIL

Sawcut shall be filled with joint sealant per specification.



SECTION B-B



CURB DETAIL

6 In. 0 1 Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
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SAYLES – GORGE STREET VIADUCT

SAYLES ST & GORGE ST

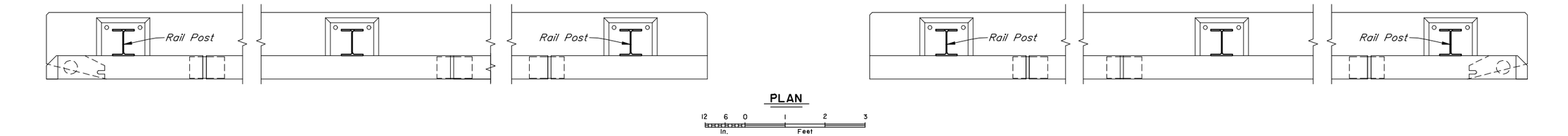
BRIDGE APPROACH SLAB DETAILS

BRIDGE NO. 1841

DWG. NO. 43

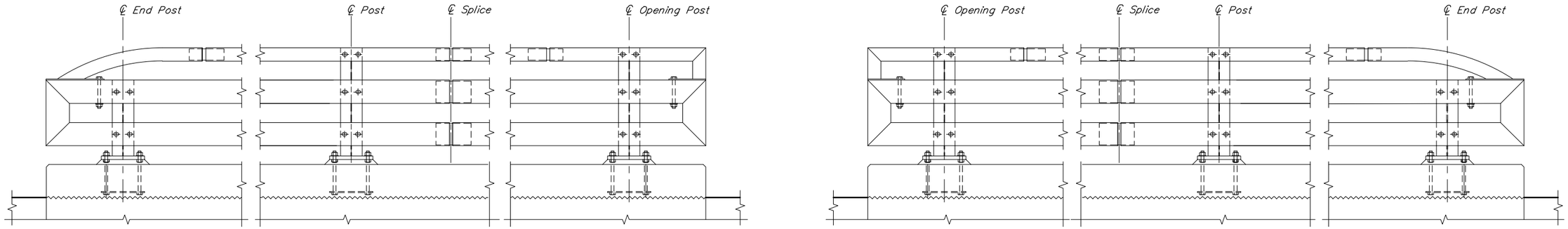
04/29/24 | 2:02 PM | Haoyis
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N43 Bridge Approach Slab Details.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N44	N53



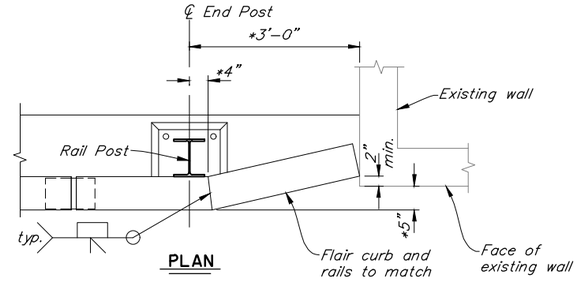
PLAN

12 6 0 2 3
In. Feet

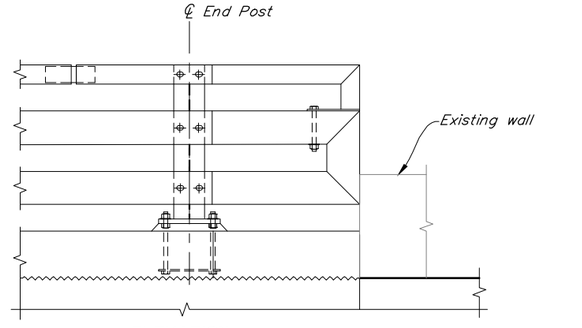


ELEVATION

12 6 0 2 3
In. Feet



PLAN



ELEVATION

* Contractor to verify dimension to fit field conditions

309 GORGE RAIL TERMINATION DETAIL

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
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7-31-2024
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REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

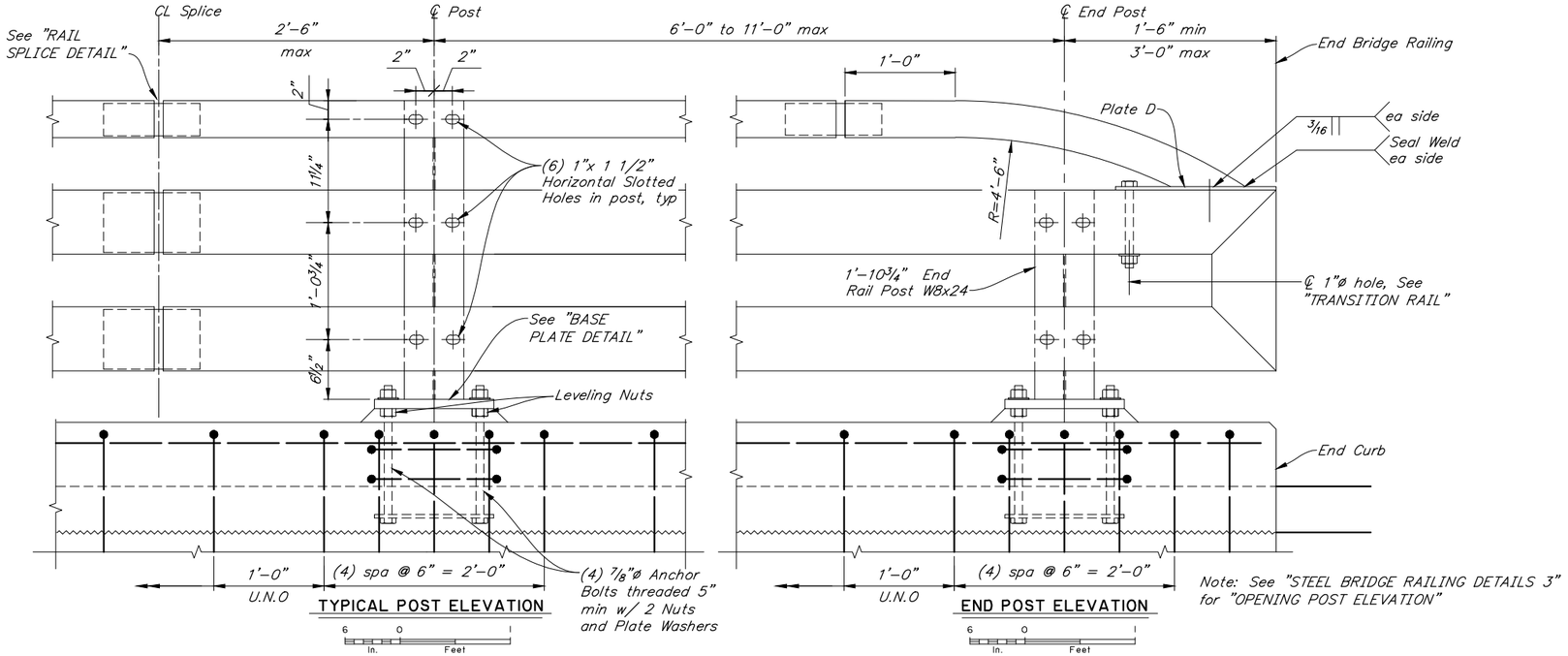
STEEL BRIDGE RAILING DETAILS 1 OF 3

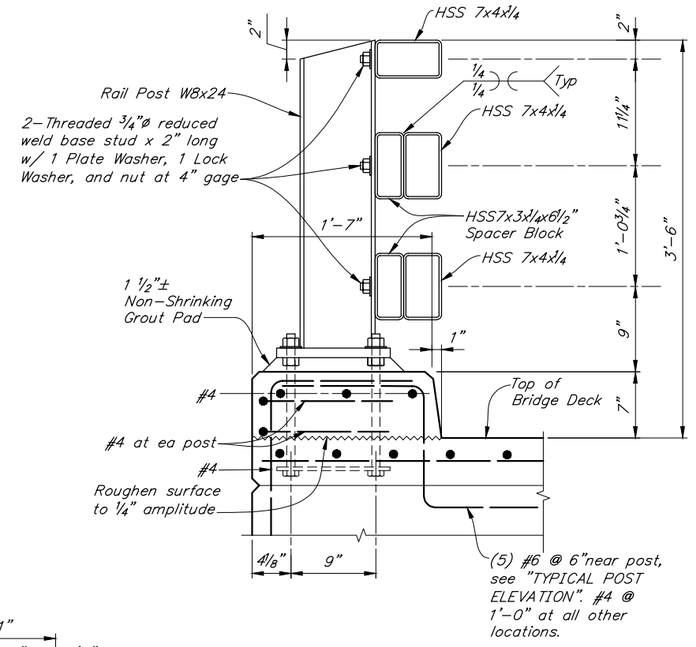
BRIDGE NO. 1841

DWG. NO. 44

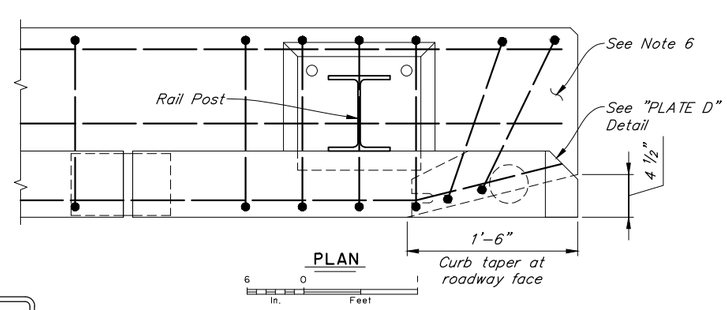
07/31/24 | 6:53 AM | Rickt
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (\2019)\1841-N44 Steel Bridge Railing Details 1 of 3.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N45	N53

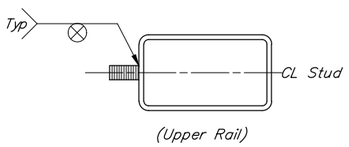




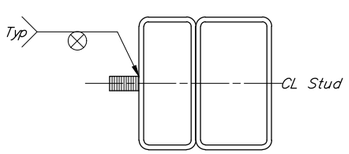
TYPICAL SECTION - BRIDGE



PLAN

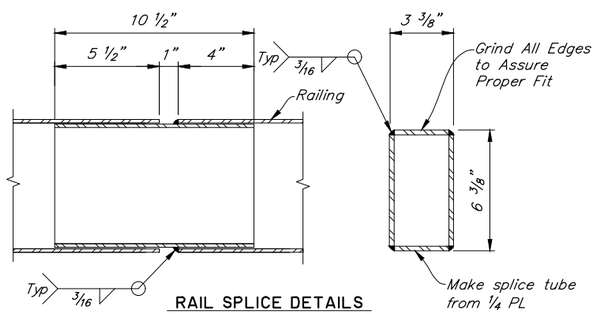


(Upper Rail)



(Lower and Middle Rail)

RAILING STUD DETAIL



RAIL SPLICE DETAILS

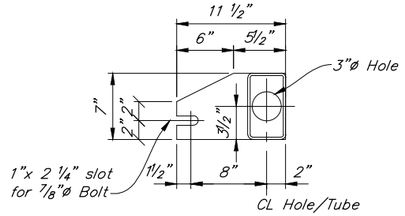


PLATE "D"

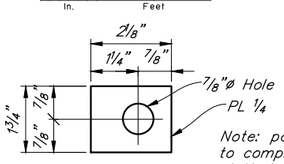
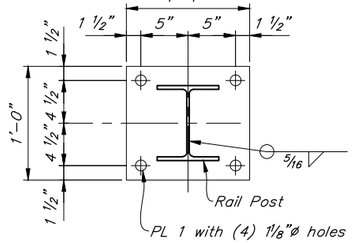
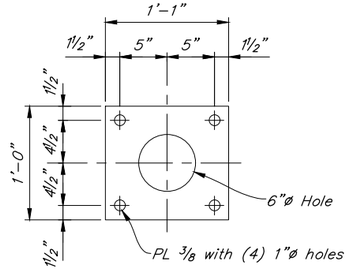


PLATE WASHER
No Scale

Note: position washer to completely cover slotted hole.



BASE PLATE DETAIL



ANCHOR PLATE DETAIL

TYPICAL SECTION - BRIDGE

NOTES:

1. All bridge railing materials shall conform to Section 722 of the Standard Specifications.
2. Provide railing expansion joints at 50'-0" maximum intervals. Railing shall be continuous over 2 posts minimum. Railing expansion joints are required in rail panels that span bridge expansion joints.
3. Install grout in a single placement.
4. Install bridge rail post plumb.
5. Install bridge railing rails parallel to road profile. Where vertical curves are present, curb shall follow curve, but rails shall not.
6. Adjust reinforcing to accommodate curb taper.

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
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STATE OF ALASKA 49TH REGISTERED STRUCTURAL ENGINEER
Anne Fabrello-Streufert
4-29-2024
SE135564

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

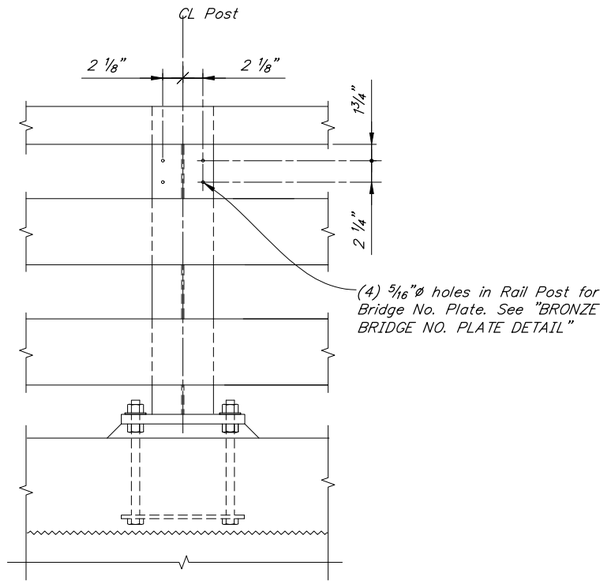
STEEL BRIDGE RAILING DETAILS 2 OF 3

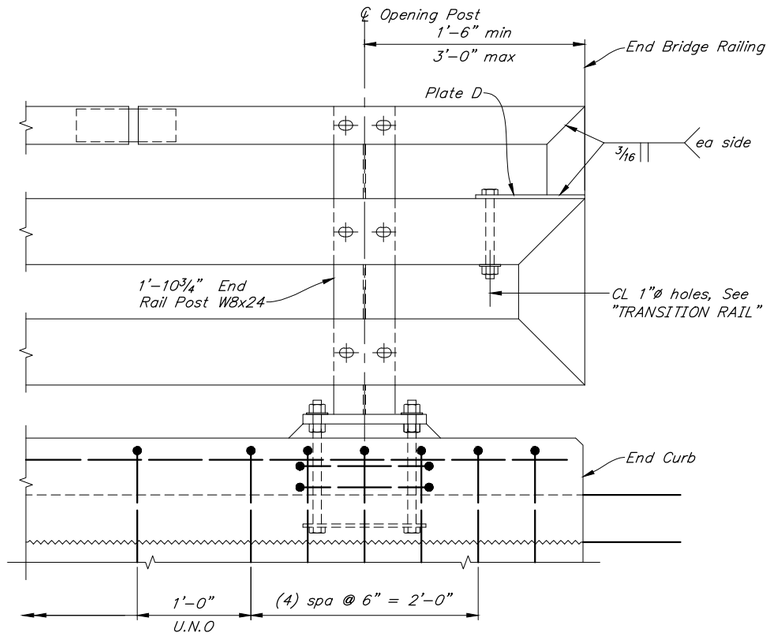
BRIDGE NO. 1841

DWG. NO. 45

04/29/24 | 2:31 PM | Haoyis
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N45 Steel Bridge Railing Details 2 of 3.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N46	N53





NOTES:

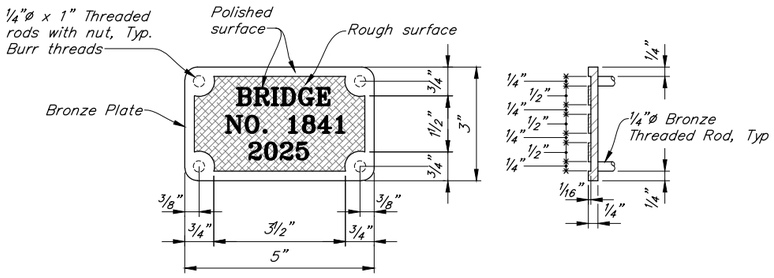
1. *Locate bridge number plates on right hand side of approaching traffic near each end as shown on "GENERAL LAYOUT" Dwg. (2 total).*
2. *Furnish bridge number plates. Use "Century" type style lettering. Use studs and nuts that conform to UNS C65100 or C65500. Braze 1/4" dia. threaded rod to back of plate with nut – 4 required. Use tamper proof nuts.*

BRIDGE NO. PLATE LOCATION DETAIL

6 0 1
In. Feet

OPENING POST ELEVATION

6 0 1
In. Feet



BRONZE BRIDGE NO. PLATE DETAIL

1 0 2 4
Inches

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
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STATE OF ALASKA 49TH
Anne Fabrello-Streufert
6-12-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

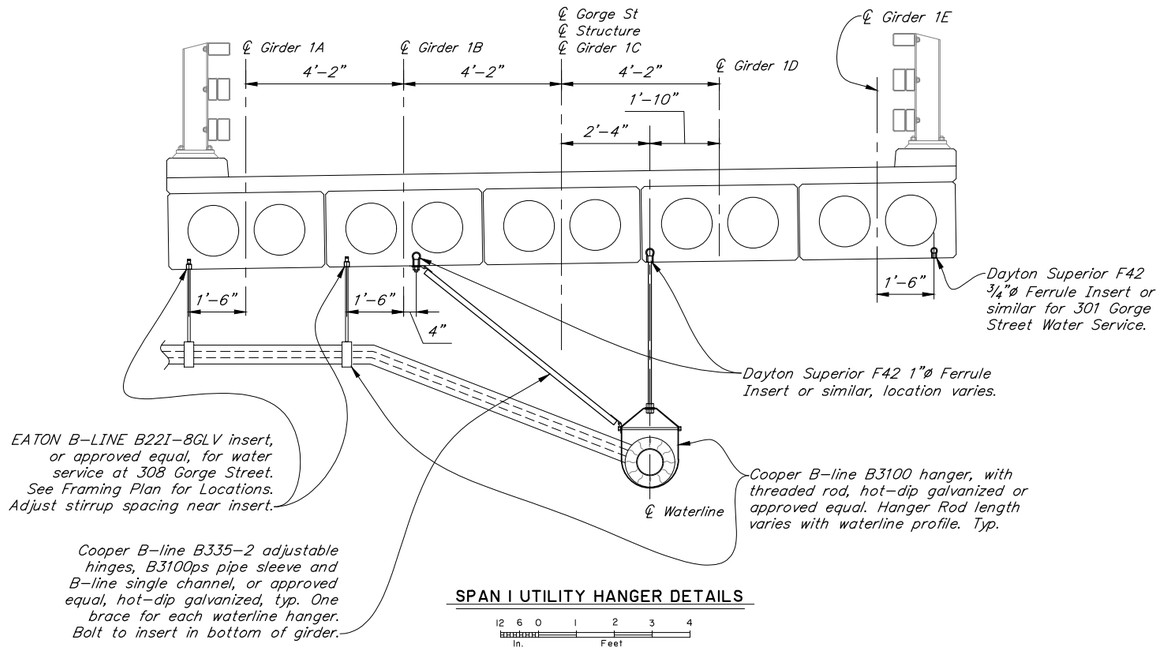
SAYLES ST & GORGE ST

STEEL BRIDGE RAILING DETAILS 3 OF 3

BRIDGE NO. 1841
DWG. NO. 46

06/12/24 | 1:14 PM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N46 Steel Bridge Railing Details 3 of 3.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N47	N53



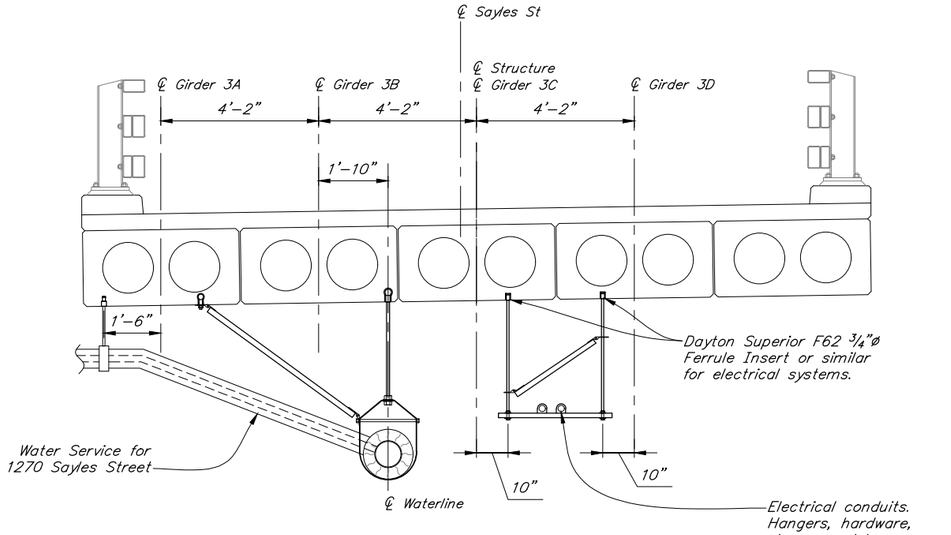
SPAN 1 UTILITY HANGER DETAILS

12 6 0 1 2 3 4
In. Feet

Looking up station, South.

See "GIRDER FRAMING PLAN" and "GIRDER DETAILS" sheets for insert locations and additional details. Install inserts in Girder to account for grade, such that rod hangs plumb.

308 Gorge St water service shown, 301 Gorge St water service similar.



SPAN 3 UTILITY HANGER DETAILS

12 6 0 1 2 3 4
In. Feet

Looking up station, East.

For hardware details not shown, see Span 1 Utility Hanger Details

See "GIRDER FRAMING PLAN" and "GIRDER DETAILS" sheets for insert locations and additional details. Install inserts in Girder to account for grade, such that rod hangs plumb.

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

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Anne Fabrello-Streufert
6-02-2024
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SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

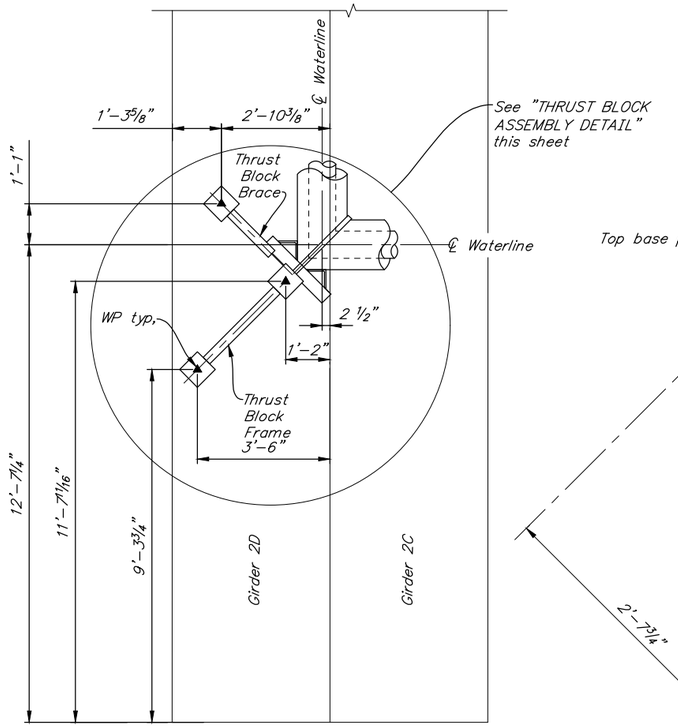
UTILITY HANGER DETAILS

BRIDGE NO. 1841

DWG. NO. 47

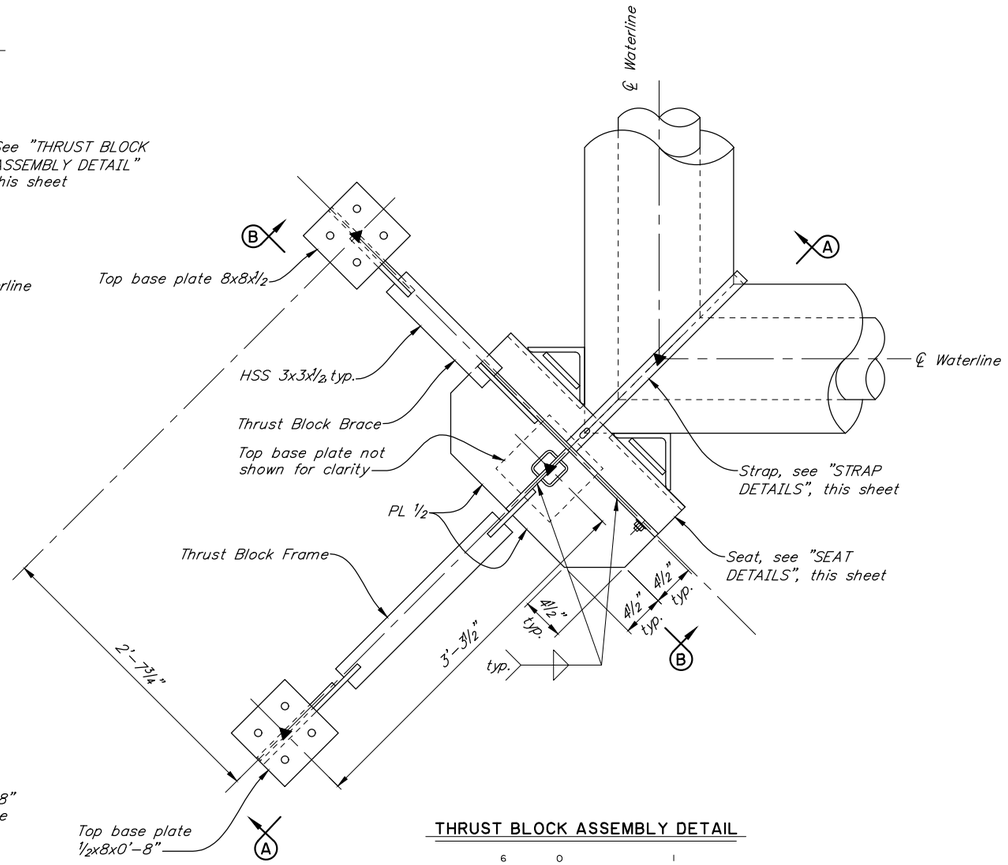
06/02/24 | 9:23 PM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N47 Utility Hanger Details.dwg

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N48	N53



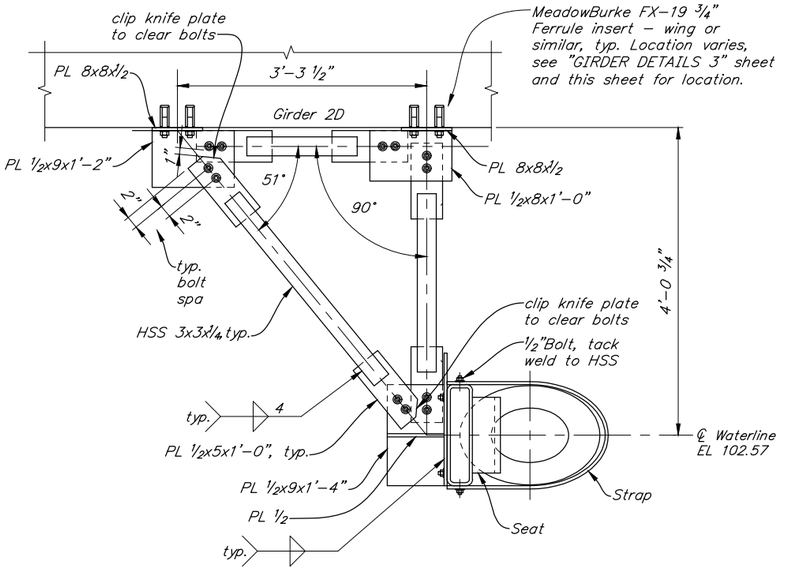
Note: Dimensions based on 90 degree elbow for 8" diameter fused HDPE pipe. Contractor to coordinate and confirm dimensions with their supplier.

THRUST BLOCK FRAME AND BRACE INSERT LOCATION PLAN



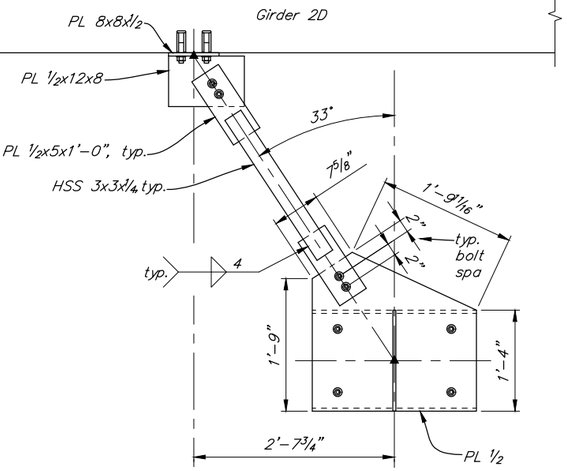
THRUST BLOCK ASSEMBLY DETAIL

6 0 1
In. Feet



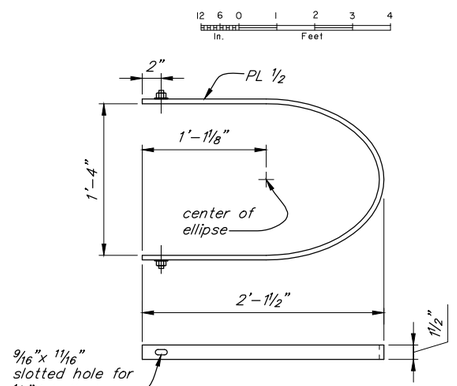
THRUST BLOCK FRAME SECTION A-A

12 6 0 1 2
In. Feet



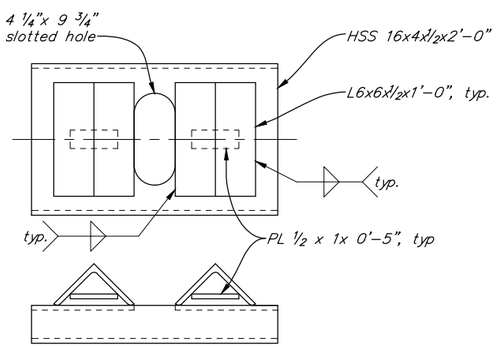
THRUST BLOCK BRACE SECTION B-B

12 6 0 1 2
In. Feet



STRAP DETAILS

6 0 1
In. Feet



SEAT DETAILS

6 0 1
In. Feet

NOTES:

1. *Hot dip galvanized structural steel including fasteners in accordance with AASHTO M111/M232 after fabrication except as noted.*
2. *All field and shop connections shall be slip critical Class B and made with high strength bolts. Nuts, bolts and washers shall conform to ASTM F3125 A325 black weather and shall be ¾" diameter unless otherwise noted. Threads shall not be permitted in shear planes. All connections shown are for field bolting. Shop bolting may be used where approved in the shop plans.*
3. *Welding shall be equal in strength to the parent metal and shall conform to the current specifications of the American Welding Society. All welding shall be done to minimize distortion. The welding sequences and procedures to be used shall be submitted to the Engineer for approval prior to the start of welding. Welding electrodes used on weathering steel shall be appropriate for weathering steel. Welding electrodes shall be a minimum of E70XX. All welds are 3/16" unless noted otherwise.*

DESIGNED BY: Tom Lin	CHECKED: Joshua Pruitt		
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt		

STATE OF ALASKA
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STATE OF ALASKA 49TH
"Anne Fabrello-Streufert"
8-01-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

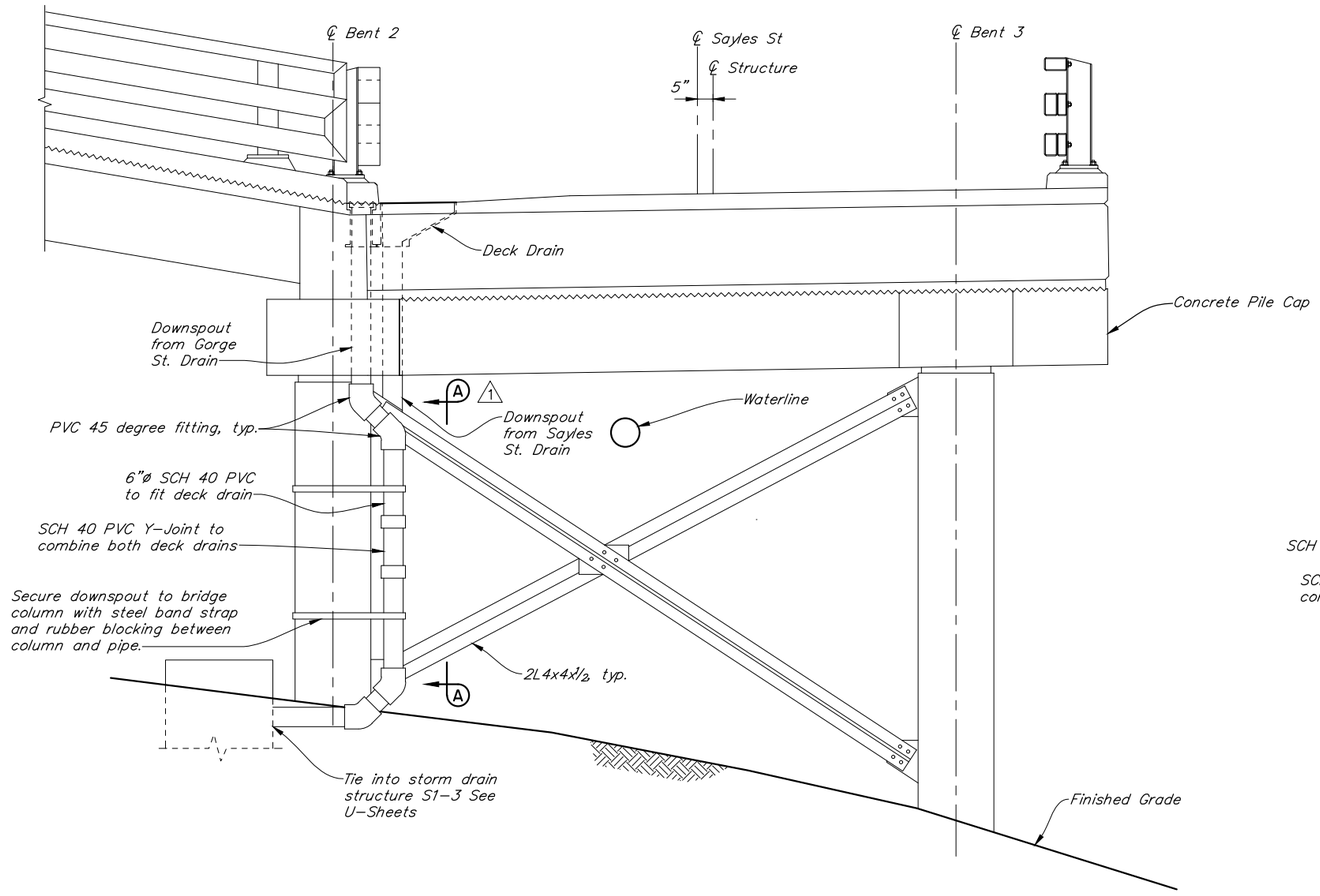
SAYLES ST & GORGE ST

THRUST BLOCK DETAILS

BRIDGE NO. 1841
DWG. NO. 48

08/01/24 | 10:03 AM | Joshp
V:\1180023\9 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N48 Thrust Block Details.dwg

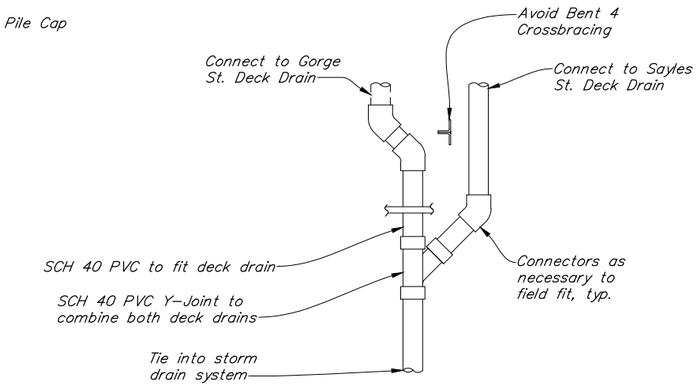
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N49	N53



BENT 4 ELEVATION

Looking East

12 6 0 1 2 3 4
In. Feet



SECTION A-A

Looking North

12 6 0 1 2 3 4
In. Feet

1 10/23/24 – MINOR DRAFTING CORRECTION

09/26/24 | 9:25 PM | Rickt
V:\18002\39 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N49 Bridge Drain Downspout Details.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
9-26-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

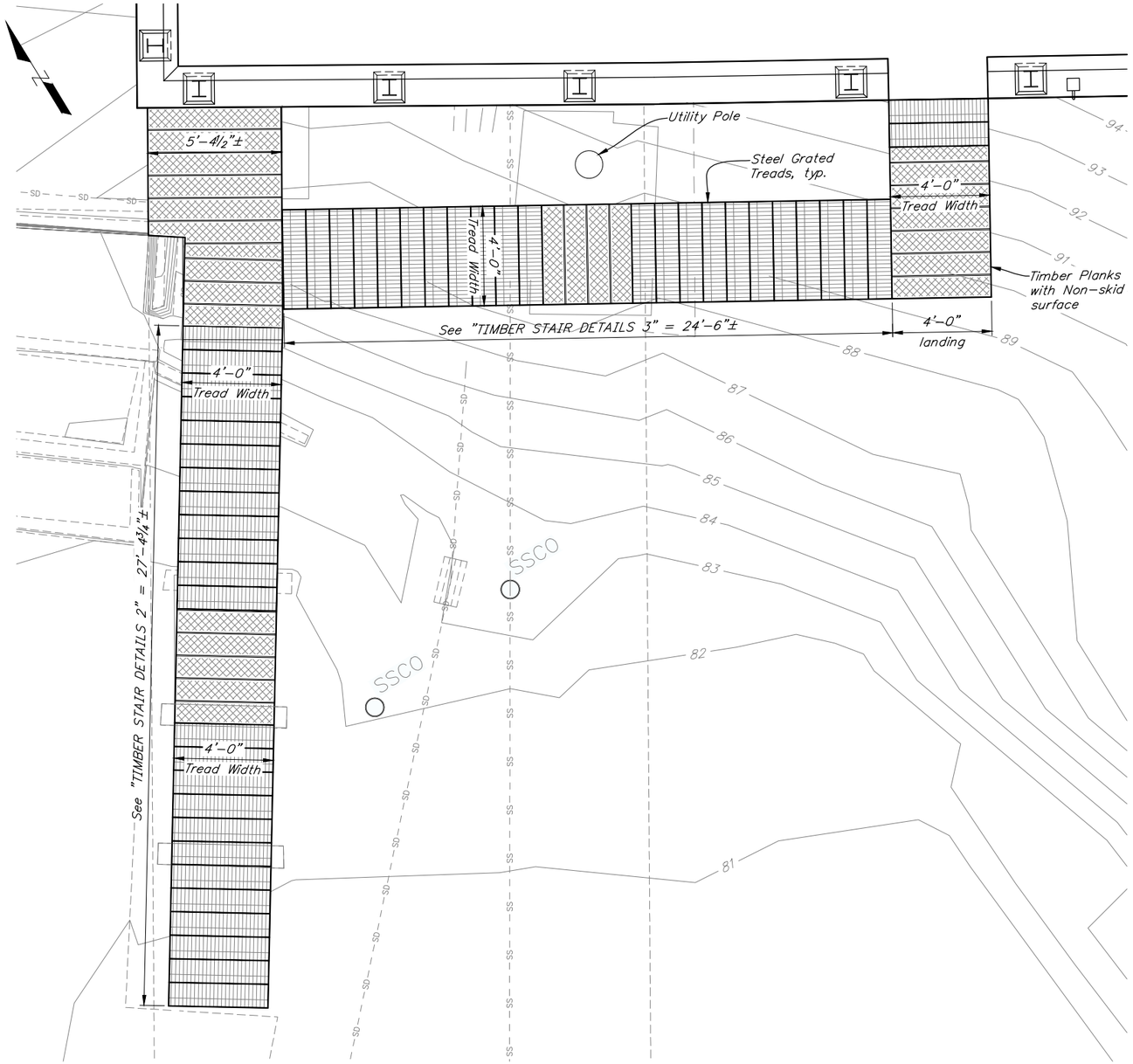
SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

BRIDGE DRAIN DOWNSPOUT DETAILS

BRIDGE NO. 1841
DWG. NO. 49

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N50	N53



TIMBER STAIR PLAN

12 0 2 4 6 Inches / Feet

TIMBER STAIR NOTES:

GENERAL

Stairs shall be constructed in accordance with Section 506 of the Specifications.

Dimensions provided in these plans are informational, except for rail height. The intent is that stairs will be constructed to fit the new as-constructed bridge elevations and existing landings that remain. Rail height shall be as shown.

The Contractor shall verify dimensions and elevations prior to construction of stairs.

1 *Pipe Handrail to be designed to fit field conditions by the Contractor and meet the requirements of IBC 2021.*

MATERIALS

Timber: per Section 713

Stair Treads: Pre-Manufactured Hot-Dip-Galvanized Steel treads 48" wide, with bar grating, with slip resistant serrated surface, and angle nosing, with a minimum of 60% open area. Products similar to McNICHOLS #640231T175.

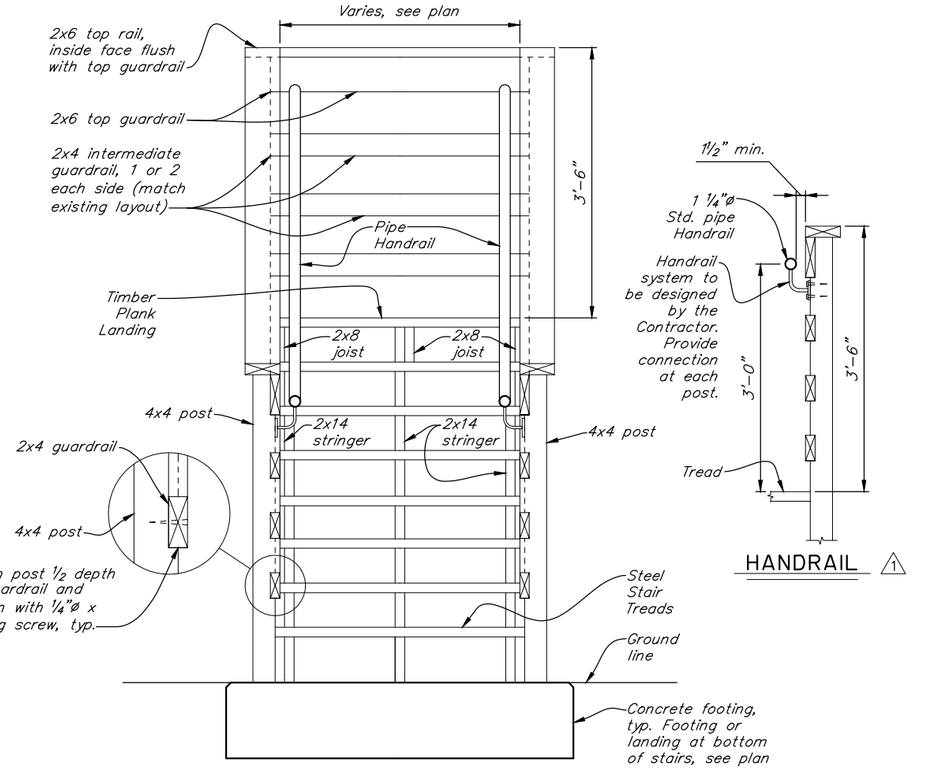
Preservatives for Timber: per Section 714

Steel Parts and Hardware: Hot-dip galvanize unless noted otherwise. Provide materials per Section 506 and these plans. Pipe Handrails per ASTM A53 and Hot Dip Galvanized.

INSTALLATION

Stair widths shall match existing landings. Approximate stair widths between inside of rails are shown in these plans. Treads shall be connected to timbers through manufacturer's recommendations. Tread depth and riser height shall not vary by more than ⅜" in any flight of stairs and shall fall within the following limits:

Tread depth: Min. = 11"
Max. = 12"
Riser height: Min. = 4"
Max. = larger of 7" or the existing riser height



TYPICAL SECTION 1

12 6 0 1 2 In. / Feet

HANDRAIL 1

1 10/23/24 - DETAILING UPDATES AND STEEL GRAB RAIL

09/26/24 | 9:25 PM | Joshp
V:\18001239 (Sayles-Gorge Viaduct)\02_Design (\2019)\1841-N50 Timber Stair Details 1.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
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(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
9-26-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES - GORGE STREET VIADUCT

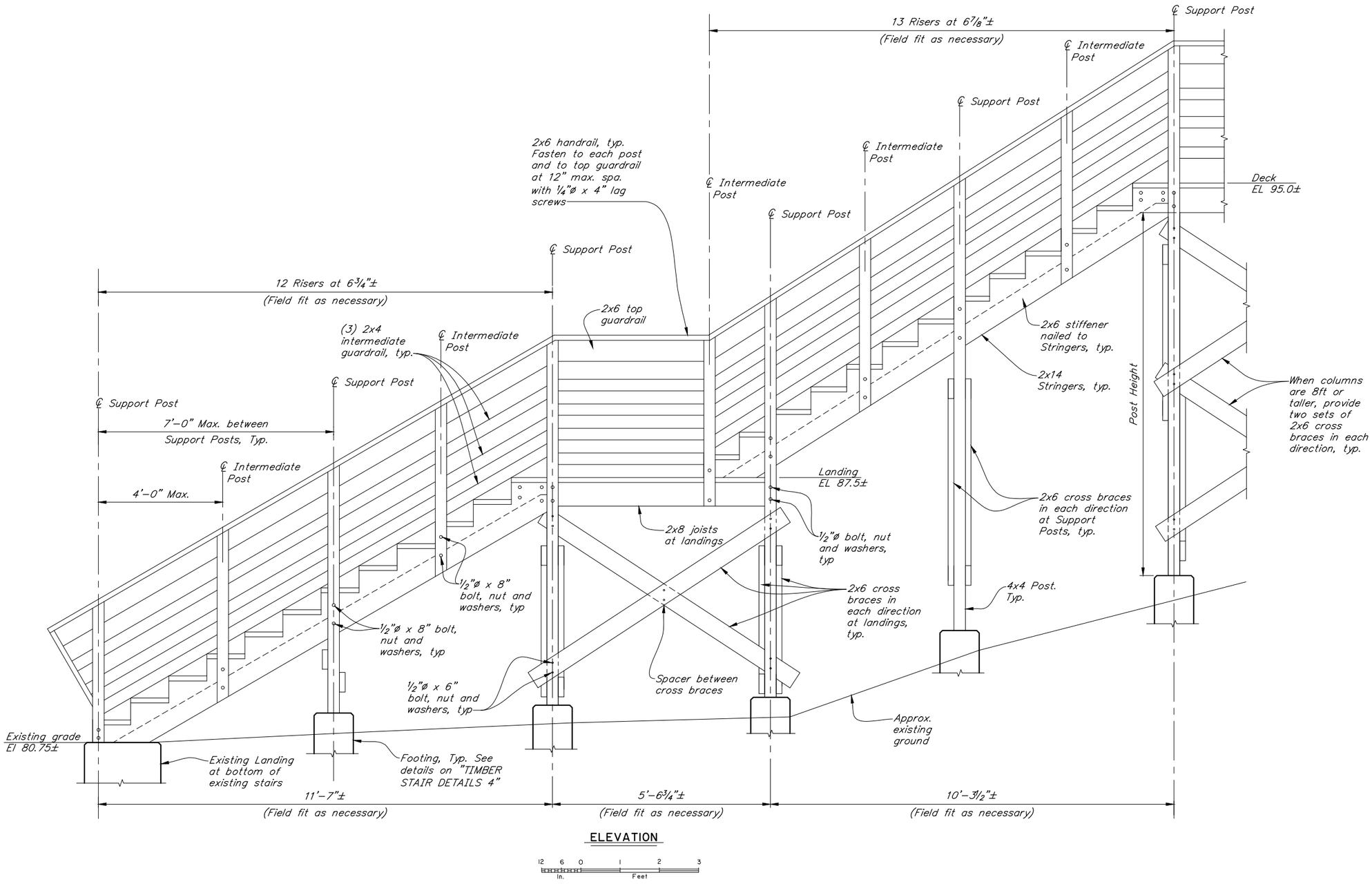
SAYLES ST & GORGE ST

TIMBER STAIR DETAILS 1

BRIDGE NO. 1841

DWG. NO. 50

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N51	N53



ELEVATION

12 6 0 1 2 3
In. Feet

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt	
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
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(206) 622-5822

STATE OF ALASKA 49 TH
"Anne Fabrello Streufert"
8-01-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

TIMBER STAIR DETAILS 2

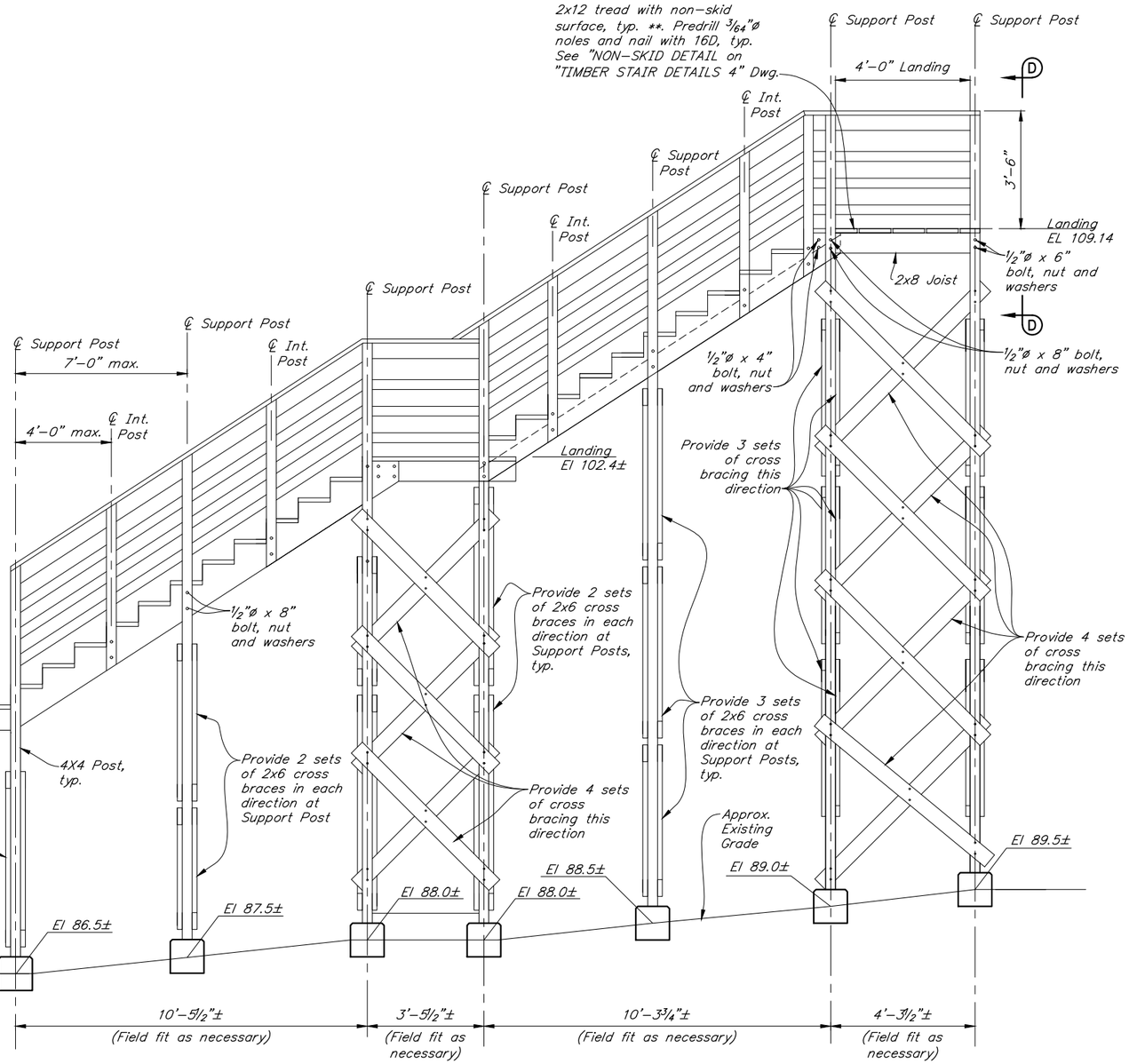
BRIDGE NO. 1841

DWG. NO. 51

08/01/24 | 1:13 PM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N51 Timber Stair Details 2.dwg

Addendum #1 :Attachment #5

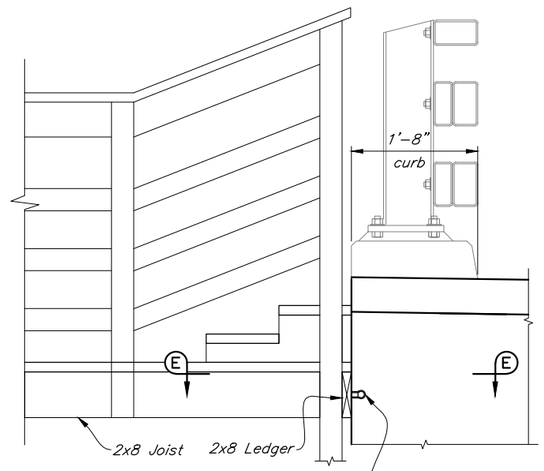
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N52	N53



ELEVATION

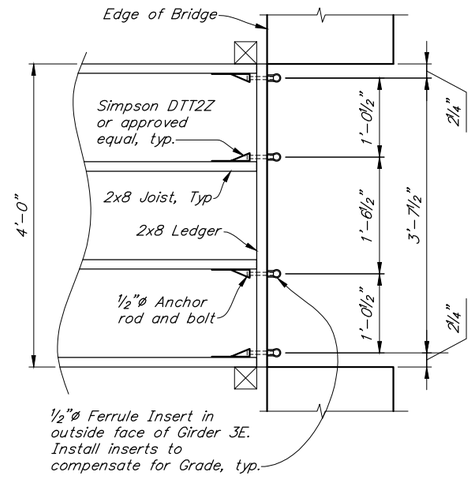
12 6 0 1 2 3 4
In. Feet

For common timber details not shown, see "TIMBER STAIR DETAILS 2" and "TIMBER STAIR DETAILS 4"



1 VIEW D-D

12 6 0 1 2
In. Feet



1 VIEW E-E

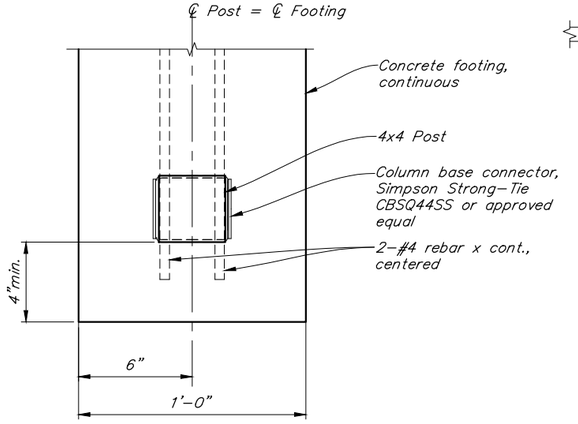
12 6 0 1 2
In. Feet

1 10/23/24 - DETAILING UPDATES AND BRIDGE CONNECTION

09/26/24 | 9:25 PM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N52 Timber Stair Details 3.dwg

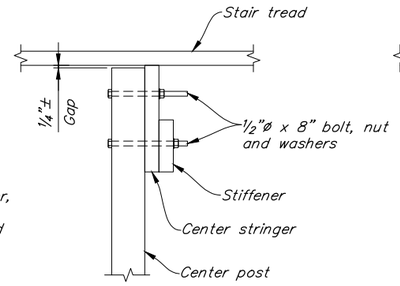
DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES PLANS DEVELOPED BY: KPFF ENGINEERING CONSULTING 1601 5th Ave, Suite 1600, Seattle, WA 98101 (206) 622-5822	SAYLES/GORGE ST. VIADUCT SAYLES ST & GORGE ST TIMBER STAIR DETAILS 3
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt		
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt	STATE OF ALASKA 49TH Anne Fabrello-Streufert, 9-26-2024 SE135564 REGISTERED STRUCTURAL ENGINEER	BRIDGE NO. 1841 DWG. NO. 52

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	N53	N53



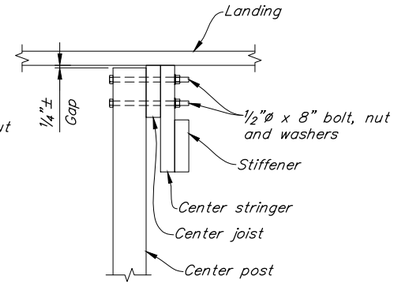
FOOTING PLAN

0 3 6 9 1'-0"
Inches



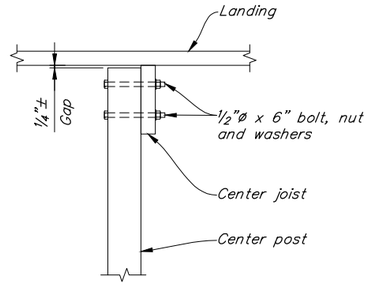
SECTION A-A

6 0
In. Feet



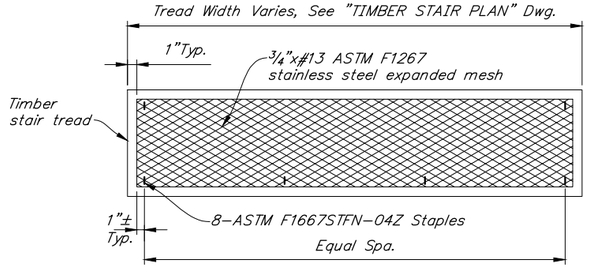
SECTION B-B

6 0
In. Feet



SECTION C-C

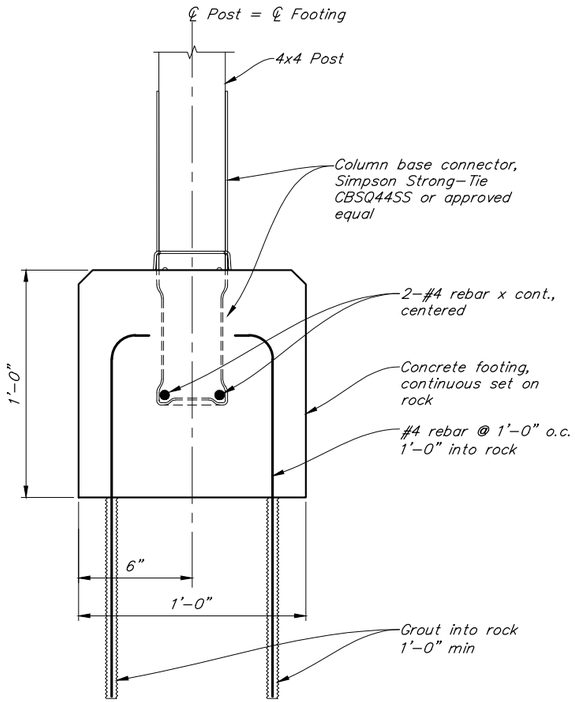
6 0
In. Feet



Notes:
1. Apply non-skid detail to landing planks.
2. Orient expanded steel mesh with long direction of diamonds in line with long dimension of timber planks.

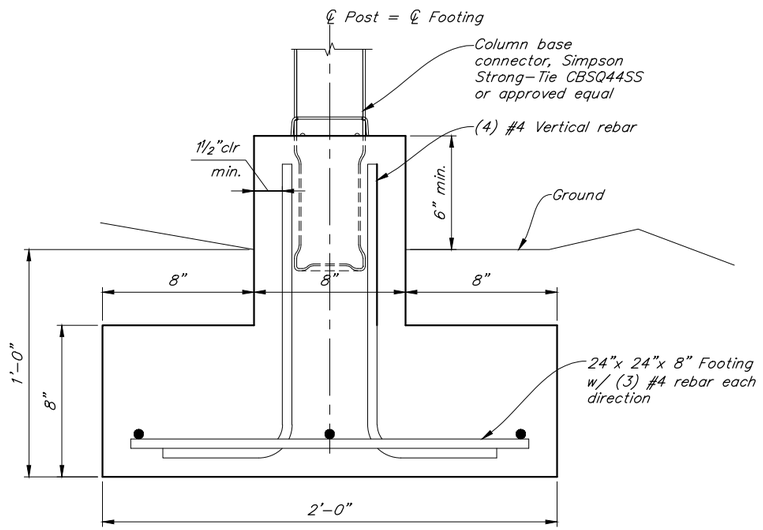
NON-SKID TIMBER PLANK DETAIL

6 0
In. Feet



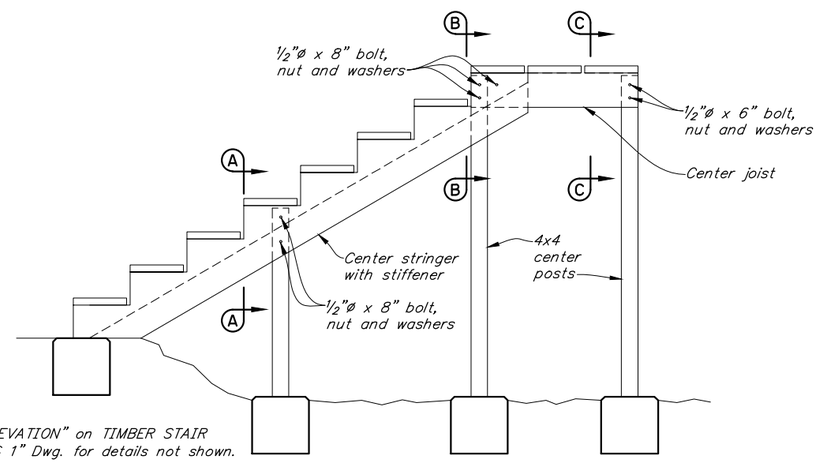
FOOTING ON ROCK SECTION

0 3 6 9 1'-0"
Inches



FOOTING ON SOIL SECTION

0 3 6 9 1'-0"
Inches



Notes:
1. See "ELEVATION" on TIMBER STAIR DETAILS 1" Dwg. for details not shown.

ELEVATION - CENTER STRINGER

12 6 0 1 2 3
In. Feet

△1 10/23/24 - MOVED VIEW D-D TO SHEET 52

09/26/24 | 9:25 PM | Joshp
V:\1800239 (Sayles-Gorge Viaduct)\02_Design (v2019)\1841-N53 Timber Stair Details 4.dwg

DESIGNED BY: Andrew Gastineau	CHECKED: Joshua Pruitt
DRAWN BY: Rick Torgeson	CHECKED: Joshua Pruitt
QUANTITIES BY: Andrew Gastineau	CHECKED: Joshua Pruitt

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PLANS DEVELOPED BY:
KPFF ENGINEERING CONSULTING
1601 5th Ave, Suite 1600, Seattle, WA 98101
(206) 622-5822

STATE OF ALASKA 49TH
Anne Fabrello-Streufert
9-26-2024
SE135564
REGISTERED STRUCTURAL ENGINEER

SAYLES/GORGE ST. VIADUCT

SAYLES ST & GORGE ST

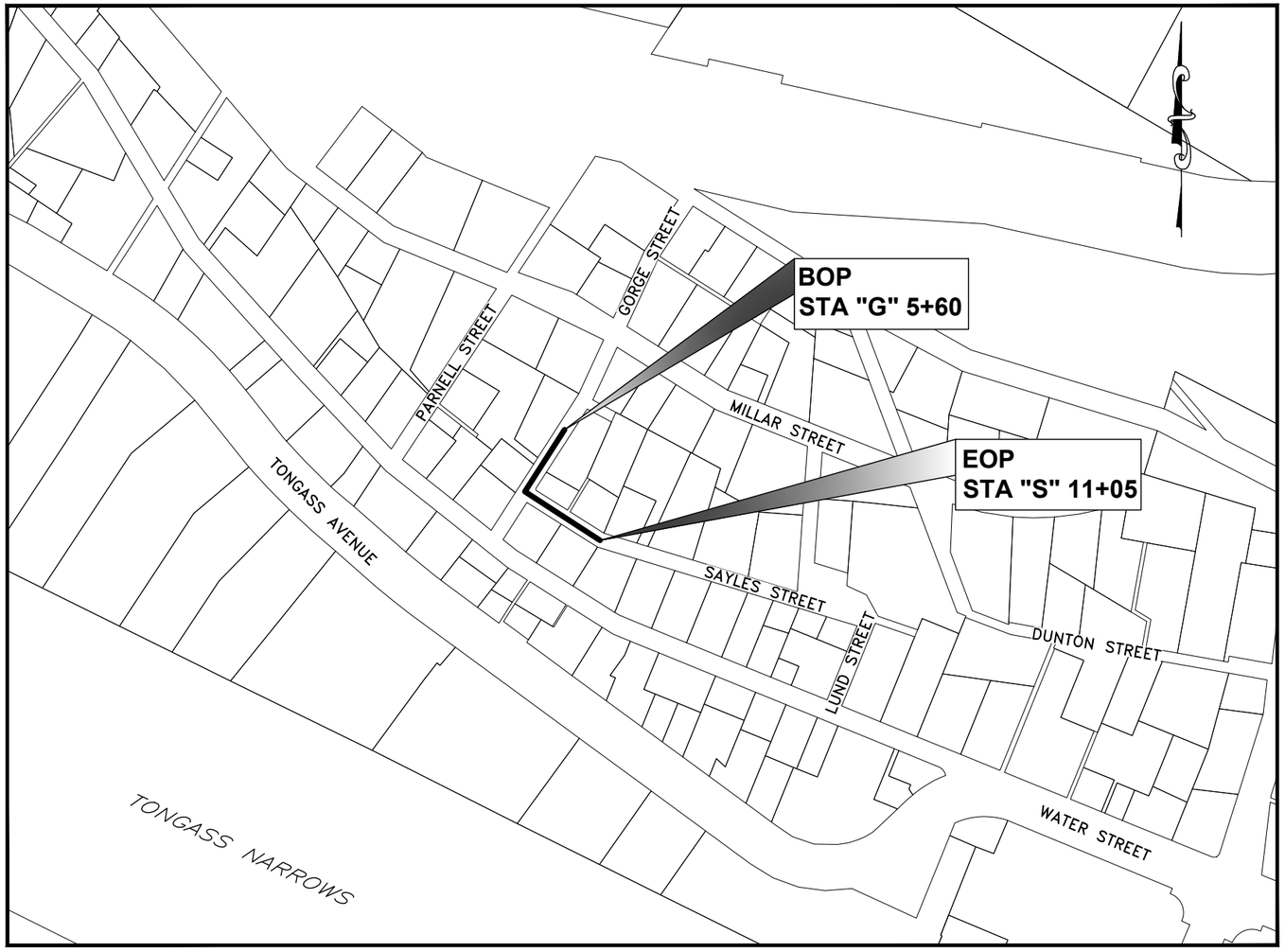
TIMBER STAIR DETAILS 4

BRIDGE NO. 1841

DWG. NO. 53

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	P1	P2



VICINITY MAP

LEGEND	
SYMBOL	DESCRIPTION
	PERIMETER CONTROL
	INLET PROTECTION
	PAVEMENT
	INVASIVE SPECIES
	AREA OF DISTURBANCE

NOTES:

1. PRIOR TO ANY CONSTRUCTION, THE PROJECT LIMITS WILL BE STAKED AND FLAGGED TO ASSURE NATURAL VEGETATION IS MAINTAINED TO THE MAXIMUM EXTENT POSSIBLE.
2. NO EARTHWORK WILL BE ALLOWED ON A SPECIFIC STAGE/PHASE OF THE PROJECT UNTIL BMPs HAVE BEEN APPROVED AND IMPLEMENTED.
3. BMPs ARE INTENDED TO MANAGE STORM WATER ORIGINATING ON THE SITE TO PREVENT OFFSITE SEDIMENTATION. STORM WATER ORIGINATING FROM BEYOND THE PROJECT LIMITS AND BASE FLOWS ARE TO BE ROUTED AROUND THE PROJECT THROUGH EXISTING DRAINAGE CHANNELS. USE TEMPORARY DITCHING AND PIPING AS NECESSARY TO MEET THIS REQUIREMENT.
4. PERIMETER CONTROL LOCATIONS ARE IDENTIFIED IN THESE ESCP SHEETS. PERIMETER CONTROL OPTIONS INCLUDE, BUT ARE NOT LIMITED TO, SILT FENCE, STRAW WATTLES/FIBER ROLLS, COMPOST LOGS AND OTHERS AS DETERMINED BY THE CONTRACTOR. PERIMETER CONTROLS ARE USED TO PREVENT OFFSITE SEDIMENTATION AND WILL NOT BE PLACED IN STREAM CHANNELS.
5. IN ORDER TO MAINTAIN ACCESS DURING CONSTRUCTION, PERIMETER CONTROL BMPs ARE NOT FEASIBLE ALONG PROJECT SIDE STREETS AND APPROACHES. THE CONTRACTOR SHALL IMPLEMENT BMPs AS NECESSARY TO MINIMIZE RUNOFF AND INSTALL INLET PROTECTION BMPs BEYOND THE PROJECT LIMITS AS NECESSARY.
6. FIXED ENTRANCE/EXIT BMPs ARE NOT FEASIBLE; CONTRACTOR SHALL IMPLEMENT STREET SWEEPING AS NECESSARY TO MITIGATE OFFSITE TRACKING OF SEDIMENT. STREET SWEEPING SHALL BE PAID FOR UNDER 643.0025.0000 PAY ITEM.
7. THE RECEIVING WATER BODY FOR STORM WATER DISCHARGES IS TONGASS NARROWS.
8. THE CONTRACTOR SHALL INSTALL BMPs AS APPROPRIATE BASED ON CONSTRUCTION METHODS TO MINIMIZE STORM WATER RUNOFF INTO TONGASS NARROWS.
9. NO KNOWN THREATENED OR ENDANGERED SPECIES OR HISTORIC/CULTURAL SITES WILL BE ADVERSELY AFFECTED BY THE PROPOSED PROJECT OR THE ASSOCIATED STORM WATER DISCHARGES.
10. ALL SLOPES AND DISTURBED AREAS WILL BE STABILIZED WITH RIPRAP, HMA, OR TOPSOIL AND SEEDED.
11. STAGING AND STOCKPILE AREAS, DISPOSAL SITES, AND HAUL ROADS WILL BE IDENTIFIED BY THE CONTRACTOR AND ADDED TO THIS SHEET ACCORDINGLY.
12. THE CONTRACTOR WILL PREPARE THE HAZARDOUS MATERIAL CONTROL PLAN AND THE SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN IF APPLICABLE. THE CONTRACTOR WILL FOLLOW ALL REQUIREMENTS AS STATED IN THE SPECIAL PROVISIONS WHEN PREPARING THESE PLANS (REFER TO SECTION 658).
13. REFER TO THE SPECIAL PROVISIONS SECTION 658 FOR ADDITIONAL REQUIREMENTS AND DETAILS.

PLANS DEVELOPED BY:
R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, Alaska 99507
907 522-1707 voice
907 522-3404 fax
www.rmconsult.com
Cert. of Auth. No.
AECC111

ESCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1120.7.3 DATED OCTOBER 31,2023

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

EROSION AND SEDIMENT CONTROL PLAN

FILE	LAYOUT	DESIGNED	CHECKED	DRAFTED	DATE
Z:\projects\0630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\MCAD\Sayles-Gorge\00070-P1-ESCP.dwg	P1	JMH	JLO	AJB, JTH	8/2/24

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	P2	P2

DATE	8/2/24
LAYOUT	P2
DESIGNED	JMH
CHECKED	JLO
DRAFTED	AJB, JTH

FILE Z:\projects\0635.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-P1-ESCP.dwg

1306 B1

301 B4

309 B9

ROW

10+00

GORGE STREET

BOP
STA "G" 5+60

9

7+00

6+00

5+00

#1

#3

ROW

1270 B5

308 B8

306 B10

LOT 1 (VACANT)

SAYLES STREET

#2

1260 B6

1256 B2

11+00

11+29

EOP
STA "S" 11+05

1256 B3

1248 B7

0 20' 40'

SCALE IN FEET

INVASIVE PLANT SPECIES

LOCATION #	SPECIES	AREA (SY)	NOTES
1	ANNUAL BLUEGRASS, COMMON PLANTAIN	106.8	ALONG STAIRCASE DECK
2	REED CANARYGRASS	128.5	ALONG ROCK CUT CLIFF
3	ANNUAL BLUEGRASS	9.2	ALONG STRIP OF GRAVEL

PLANS DEVELOPED BY:
R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, Alaska 99507
907 522-1707 voice
907 522-3404 fax
www.rmconsult.com
Cert. of Auth. No.
AECC111

ESCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1120.7.3 DATED OCTOBER 31,2023

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

EROSION AND SEDIMENT CONTROL PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	S1	S4

DRAFTED AJB, JTH | CHECKED JLO | DESIGNED JMH | LAYOUT S1 | 8/2/24 | DATE

FILE Z:\projects\0030.00 007_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\MCAD\Sayles-Gorge\00070-01-Construction Phasing.dwg

1306 WATER ST.

301 GORGE ST.

INSTALL TEMPORARY UTILITY POLE AND CONNECT TEMPORARY UTILITIES TO 301 GORGE ST.

REMOVE WOOD DECK, RAILING, AND MAILBOXES

REMOVE LOWER WOOD DECK AND RAILING

STA "G" 6+49.61 = STA "S" 10+10.42

REMOVE UTILITY POLE

WATER STREET

9+00

10+00

ROW

309 GORGE ST.

INSTALL TEMPORARY UTILITY POLE

309 GORGE ST. GARAGE

ROAD CLOSURE. SEE T SHEETS FOR SIGNING, MARKERS AND DEVICES

GORGE STREET

7+00

6+00

5+00

1270 SAYLES ST.

REMOVE BOARDWALK, WOOD STAIRS, LANDING, RAILING, FOUNDATION, AND UPPER DECK

308 GORGE ST.

INSTALL TEMPORARY UTILITY POLE AND CONNECT TO 308 GORGE ST AND 1270 SAYLES ST.

BOP
STA "G" 5+60
MATCH EXISTING ROAD

INSTALL TEMPORARY UTILITY POLE

308 GORGE ST. GARAGE

LOT 1 UTILIZED FOR CONTRACTOR STAGING AREA, ACCESS AND EQUIPMENT

LOT 1 (VACANT)

INSTALL TEMPORARY UTILITY POLE AND CONNECT EXISTING UTILITY POLE.

SAYLES STREET

INSTALL TEMPORARY UTILITY POLE AND CONNECT 1260 SAYLES ST.

1260 SAYLES ST.

1256 SAYLES ST.

1260 WATER ST.

11+00

11+29

EOP
STA "S" 11+05
MATCH EXISTING ROAD

ROAD CLOSURE. SEE T SHEETS FOR SIGNING, MARKERS AND DEVICES

1256 WATER ST.

A,B

1248 SAYLES ST.

0 20' 40'

SCALE IN FEET

PHASE 1 NOTES:

1. SEE TRAFFIC CONTROL SHEETS FOR ALL ROAD CLOSURE SIGNING, MARKERS AND DEVICES.
2. MOBILIZE AND PREP LOT 1 FOR STAGING AREA, ACCESS AND EQUIPMENT STORAGE.
3. REMOVE PRIVATE PROPERTY INCLUDING BOARDWALK, WOOD DECK, RAILING, AND MAILBOXES.
4. INSTALL TEMPORARY UTILITY POLES AND RELOCATE OVERHEAD UTILITIES. SEE U–SHEETS FOR POLE LOCATIONS.
5. INSTALL TEMPORARY UTILITY SERVICES TO ALL BUILDINGS IMPACTED WITHIN PROJECT LIMITS.
6. REMOVE EXISTING UTILITY POLE.

CONSTRUCTION PHASING LEGEND

	CONTRACTOR STAGING AND WORK AREA
	TEMPORARY OVERHEAD UTILITY RELOCATION
	TEMPORARY OVERHEAD UTILITY POLE/GUY WIRE
	TEMPORARY OVERHEAD UTILITY WORK AREA
	REMOVE PRIVATE PROPERTY

PLANS DEVELOPED BY:
R&M Consultants, Inc.
9101 Vanguard Drive
Anchorage, Alaska 99507
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907 522-3404 fax
www.rmconsult.com
Cert. of Auth. No.
AECC111

STATE OF ALASKA 49TH
Joseph M Horazdovsky
CE 13539
8/2/2024
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

CONSTRUCTION PHASE 1

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	S2	S4

DATE	DRAFTED	CHECKED	DESIGNED	LAYOUT	FILE
8/2/24	AJB, JTH	JLO	JMH	S2	Z:\projects\0030.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\MCAD\Sayles-Gorge\00070-01-Construction Phasing.dwg

1306 WATER ST.

301 GORGE ST.

309 GORGE ST.

309 GORGE ST. GARAGE

WATER STREET

STA "G" 6+49.61 = STA "S" 10+10.42

9+80

10+00

ROW

ROAD CLOSURE. SEE T SHEETS FOR SIGNING, MARKERS AND DEVICES

GORGE STREET

7+00

6+00

5+00

1270 SAYLES ST.

BOP
STA "G" 5+60
MATCH EXISTING ROAD

308 GORGE ST.

308 GORGE ST. GARAGE

LOT 1 (VACANT)

REMOVE EXISTING VALVE

SAYLES STREET

1260 SAYLES ST.

1256 SAYLES ST.

1260 WATER ST.

11+00

11+29

EOP
STA "S" 11+05
MATCH EXISTING ROAD

ROAD CLOSURE. SEE T SHEETS FOR SIGNING, MARKERS AND DEVICES

1256 WATER ST.

A,B

1248 SAYLES ST.

0 20' 40'

SCALE IN FEET

PHASE 2A NOTES:

1. REMOVE PAVEMENT, EXCAVATE AND EXPOSE EXISTING WATERLINE AND SEWERLINE.
2. INSTALL SHUTOFF VALVES, MANHOLES, AND APPURTENANCES BEHIND EXISTING ABUTMENT WALLS.
3. PROVIDE TEMPORARY WATER AND SANITARY SEWER SERVICES TO AFFECTED PROPERTIES.

PHASE 2B NOTES:

1. REMOVE WOOD STAIRS TO WATER STREET. REMOVE EXISTING CURB AND GUTTER, AND ALL ELEMENTS OF THE EXISTING BRIDGE.
2. REMOVE WATERLINE, SEWERLINE, AND EXISTING ROOF DRAIN LEADERS AND PIPING BELOW THE EXISTING BRIDGE.
3. REMOVE EXISTING BRIDGE NO. 1841.

CONSTRUCTION PHASING LEGEND

	CONTRACTOR STAGING AND WORK AREA
—W—	REMOVAL OF EXISTING WATERLINE – 202.0001.0000
—SS—	REMOVAL OF EXISTING SANITARY SEWER – 202.0001.0000
—SD—	REMOVAL OF EXISTING STORM DRAIN – 202.0001.0000
	REMOVAL OF BRIDGE NO. 1841 – 202.0023.0000
	REMOVAL OF CONCRETE FOUNDATIONS – 202.0023.0000
	REMOVE TIMBER STAIRS

DEMOLITION NOTES:

1. SEE U-SHEETS FOR MORE INFORMATION ON DEMOLITION OF WATER, SANITARY SEWER, AND STORM DRAIN.

PLANS DEVELOPED BY:
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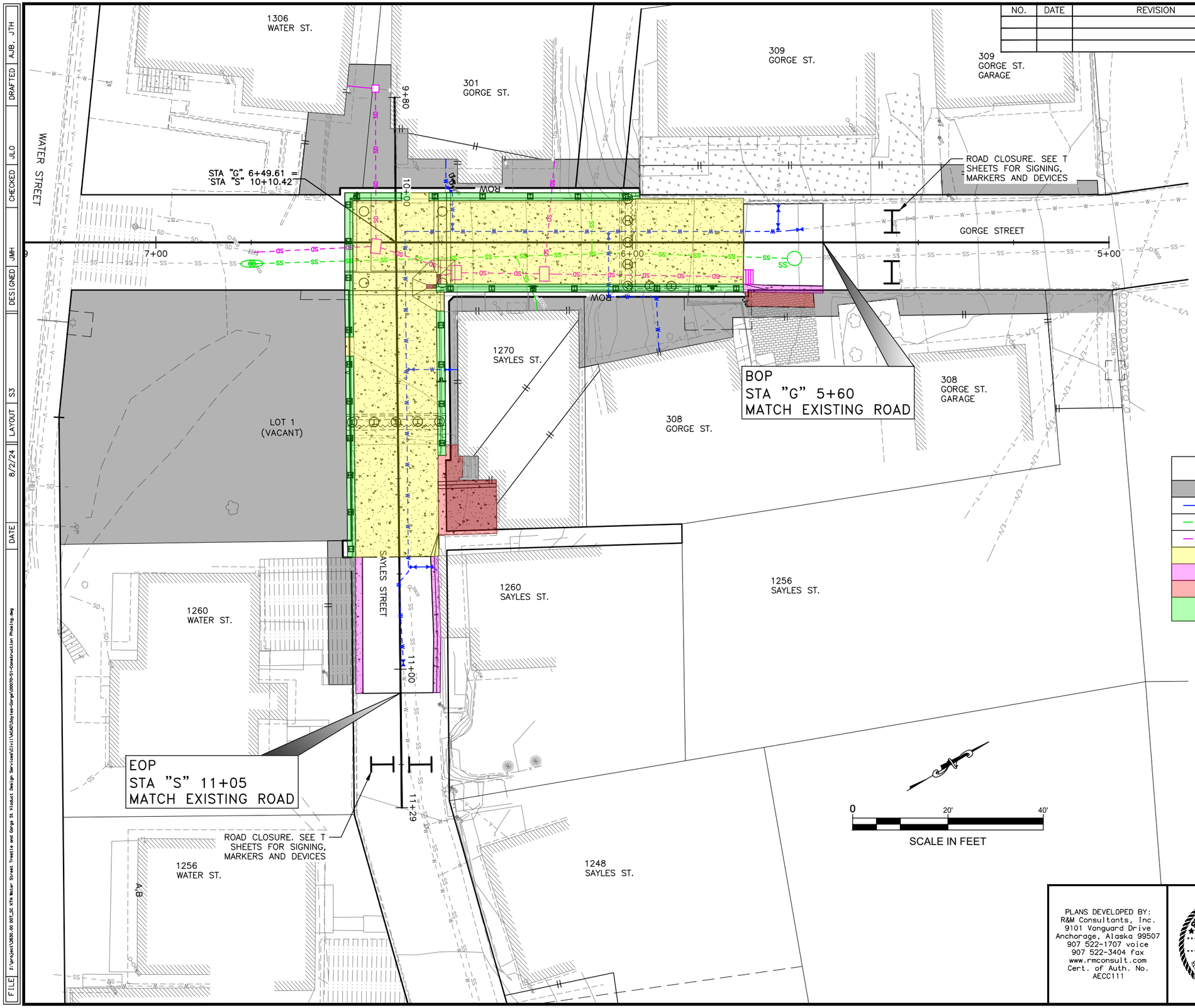
STATE OF ALASKA 49TH
Joseph M Horazdovsky
CE 13563
9/2/2024
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

CONSTRUCTION PHASE 2

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	S3	S4



PHASE 3 NOTES:

1. INSTALL DRILLED SHAFTS AND ROCK SOCKETS FOR BRIDGE FOUNDATIONS AND ABUTMENTS.
2. INSTALL H–PILES AND TIMBER LAGGING FOR NEW ABUTMENT SOLIDER PILE WALLS.
3. BACKFILL BETWEEN NEW AND EXISTING ABUTMENT WALLS.
4. DRILL AND INSTALL SHAFTS FOR BENTS 2, 3, AND 4.
5. INSTALL VOIDED SLAB GIRDERS USING TEMPORARY SUPPORTS
6. INSTALL NEW WATERLINE, SANITARY SEWERLINE, AND DRAINAGE PIPES, STRUCTURES, AND APPURTENANCES.
7. CONNECT NEW UTILITIES THROUGH ABUTMENT WALL PENETRATIONS.
8. BACKFILL BEHIND ABUTMENT WALLS TO BOTTOM OF STRUCTURAL SECTION.
9. CAST END DIAPHRAGMS WITH BRIDGE DECK SPANS 1 AND 3.
10. CAST SPAN 2 WITH BENT 4 CLOSURE POURS.
11. REMOVE TEMPORARY SUPPORTS.
12. CONSTRUCT APPROACH SLABS.

CONSTRUCTION PHASING LEGEND

	CONTRACTOR STAGING AND WORK AREA
—W—	PROPOSED WATERLINE – SEE U–SHEETS
—SS—	PROPSED SANITARY SEWER – SEE U–SHEETS
—SD—	PROPOSED STORM DRAIN – SEE U–SHEETS
	PROPOSED BRIDGE AND APPROACH SLABS
	CURB AND GUTTER, TYPE I – 609.0002.0001
	DRIVEWAY – 639.0001.0000
	STEEL BRIDGE RAILING, 3–TUBE – 507.0001.0003

PHASE 4 NOTES:

1. INSTALL BRIDGE CURB AND RAILING.
2. PLACE ROADWAY STRUCTURAL SECTION.
3. CONSTRUCT ROADWAY CURB AND GUTTER.
4. GRADE AND CONSTRUCT DRIVEWAYS.
5. REMOVE TEMPORARY WATER AND SANITARY SEWER SERVICES ONCE NEW WATERLINE AND SEWERLINE IS TESTED AND OPERATIONAL.

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

CONSTRUCTION PHASE 3&4

DESIGNED JMH | DRAFTED AJB, JTH | CHECKED JLO | LAYOUT S3 | DATE 8/2/24

FILE Z:\projects\2020.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\VCAD\Sayles-Gorge\\00070-01-Construction Phasing.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	S4	S4

DATE	LAYOUT	DESIGNED	CHECKED	DRAFTED
8/2/24	S4	JMH	JLO	AJB, JTH

FILE: Z:\project\0030.00 DOT_JC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\MCAD\Sayles-Gorge\00070-01-Construction Phasing.dwg

1306 WATER ST.

301 GORGE ST.

309 GORGE ST.

309 GORGE ST. GARAGE

WATER STREET

STA "G" 6+49.61 = STA "S" 10+10.42

CONSTRUCT BOARDWALK AND DECKS. SEE PHASE 7 NOTES.

ROAD CLOSURE. SEE T SHEETS FOR SIGNING, MARKERS AND DEVICES

GORGE STREET

PERMANENT UTILITY POLE

CONSTRUCT NEW STAIRS TO CONNECT WITH WATER STREET ACCESS.

1270 SAYLES ST.

BOP
STA "G" 5+60
MATCH EXISTING ROAD

308 GORGE ST. GARAGE

308 GORGE ST.

LOT 1 (VACANT)

SAYLES STREET

1260 SAYLES ST.

1256 SAYLES ST.

1260 WATER ST.

EOP
STA "S" 11+05
MATCH EXISTING ROAD

ROAD CLOSURE. SEE T SHEETS FOR SIGNING, MARKERS AND DEVICES

1256 WATER ST.

1248 SAYLES ST.

0 20' 40'

SCALE IN FEET

PHASE 5 NOTES:

1. CONSTRUCT TREATED TIMBER STAIRS.
2. RESTORE PRIVATE AND PUBLIC PROPERTY INCLUDING DECKS, STAIRS, BOARDWALKS, MAILBOXES, RAILINGS, ETC.
3. PLACE ASPHALT PAVEMENT

PHASE 6 NOTES:

1. CONSTRUCT NEW UTILITY POLE FOUNDATION.
2. INSTALL PERMANENT OVERHEAD UTILITIES AND CONNECTIONS TO RESIDENCES.
3. REMOVE TEMPORARY POLES AND OVERHEAD UTILITIES.

CONSTRUCTION PHASING LEGEND

	CONTRACTOR STAGING AND WORK AREA
	OVERHEAD UTILITY POLE/GUY WIRE
	OVERHEAD UTILITY RELOCATION
	RESTORATION OF PRIVATE AND PUBLIC PROPERTY
	HMA, TYPE II: CLASS B – 401.0001.002B
	TREATED TIMBER STAIRS – 506.0001.0000
	TOPSOIL – 620.0001.0000

PHASE 7 NOTES:

1. PLACE TOPSOIL AND SEED ALL DISTURBED SLOPES.
2. CLEAN UP PROJECT SITE AND DEMOBILIZE.
3. REMOVE ALL TRAFFIC CONTROL DEVICES.

PLANS DEVELOPED BY:
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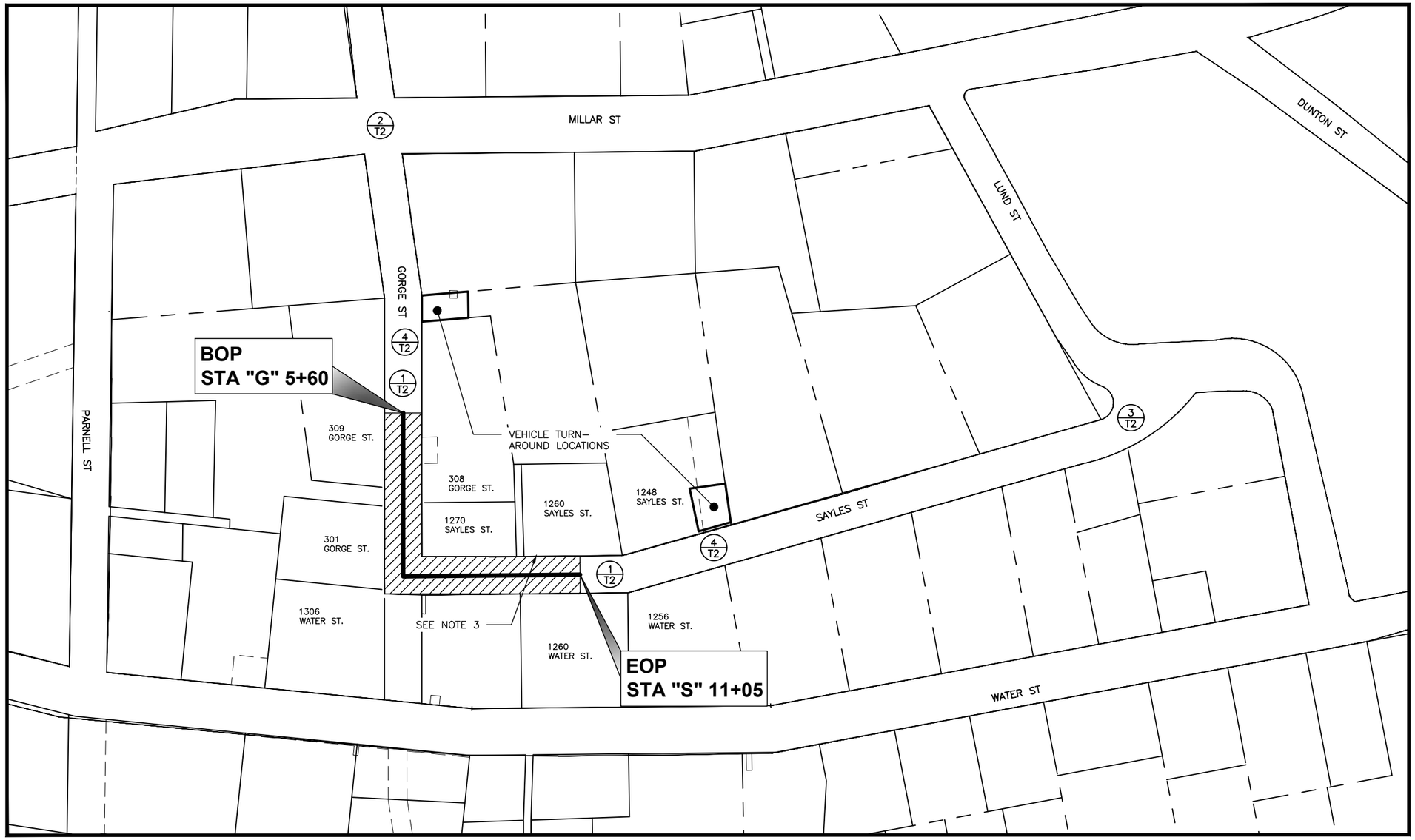
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

CONSTRUCTION PHASE 5–7

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	T1	T2



VICINITY MAP

0 60' 120'

SCALE IN FEET

LEGEND	
DESCRIPTION	SYMBOL
SIGN	
TYPE III BARRICADE	
ROAD CLOSURE	

GENERAL TRAFFIC CONTROL NOTES:

1. SEE SECTION 643-3.08 FOR LIMITATIONS ON TRAFFIC RESTRICTIONS.
2. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. THE FINAL TCP ADDRESSING IN DEPTH THE VARIETY OF SITUATIONS THAT MAY OCCUR ONCE CONSTRUCTION HAS STARTED SHALL BE COMPLETED BY THE CONTRACTOR AND SUBMITTED FOR REVIEW BY THE ENGINEER.
3. CONTRACTOR TO PROVIDE PARKING ACCESS TO ELECTRIC VEHICLE CHARGER AT 1260 SAYLES STREET PER SUBSECTION 643-3.08.

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STATE OF ALASKA 49TH FOR ALASKA Joseph M Horazdovsky CE 135639 9/19/2024 REGISTERED PROFESSIONAL ENGINEER

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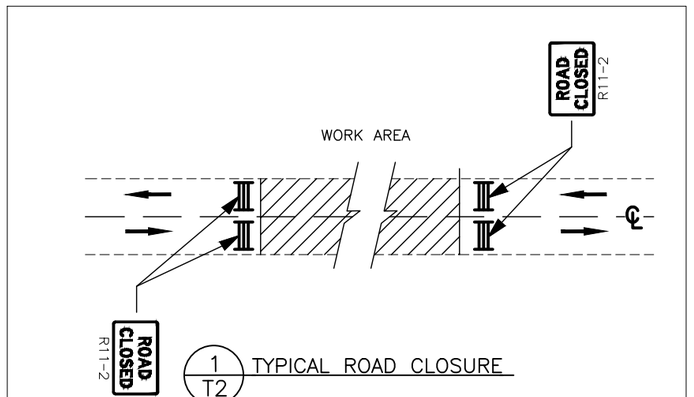
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

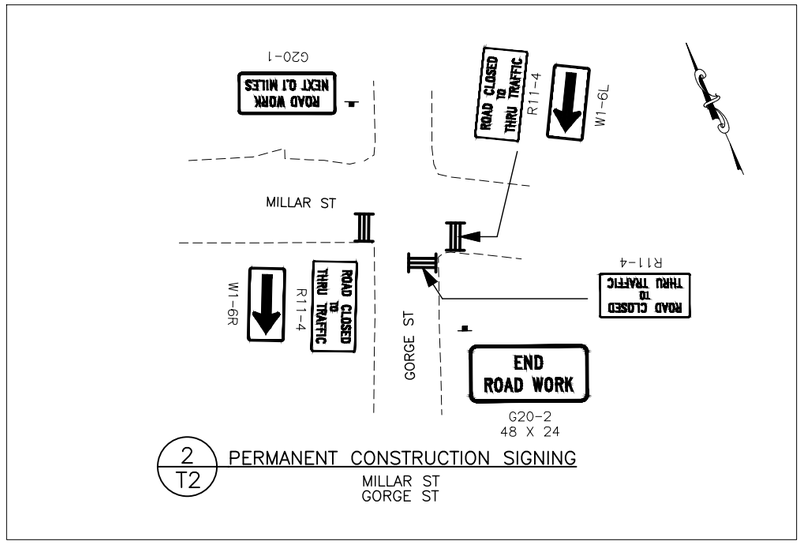
LEGEND AND VICINITY MAP

FILE Z:\projects\0630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-T1-Traffic.dwg
DATE 9/23/24
LAYOUT T1
DESIGNED JMH
CHECKED JLO
DRAFTED AJB, JTH

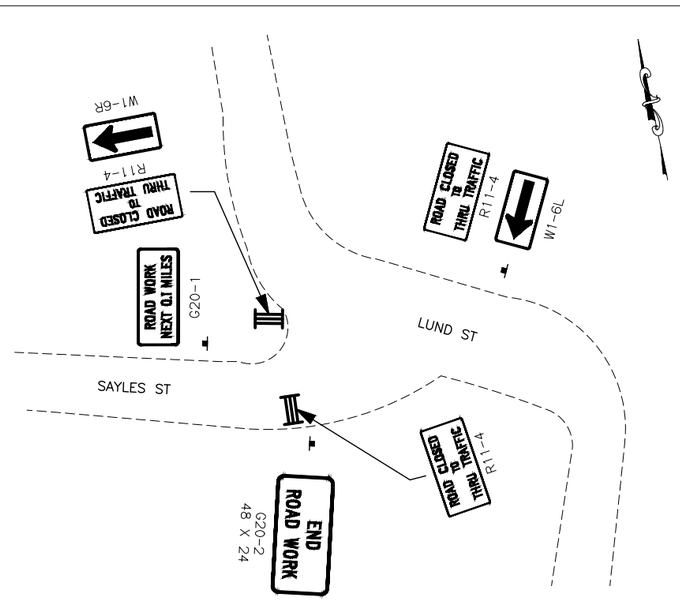
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	T2	T2



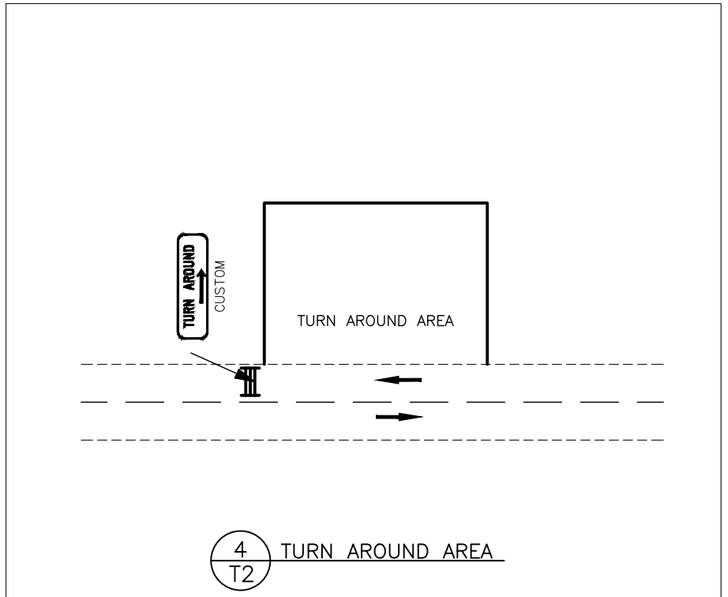
1/T2 TYPICAL ROAD CLOSURE



2/T2 PERMANENT CONSTRUCTION SIGNING
MILLAR ST
GORGE ST



3/T2 PERMANENT CONSTRUCTION SIGNING
LUND ST
SAYLES ST



4/T2 TURN AROUND AREA

PLANS DEVELOPED BY:
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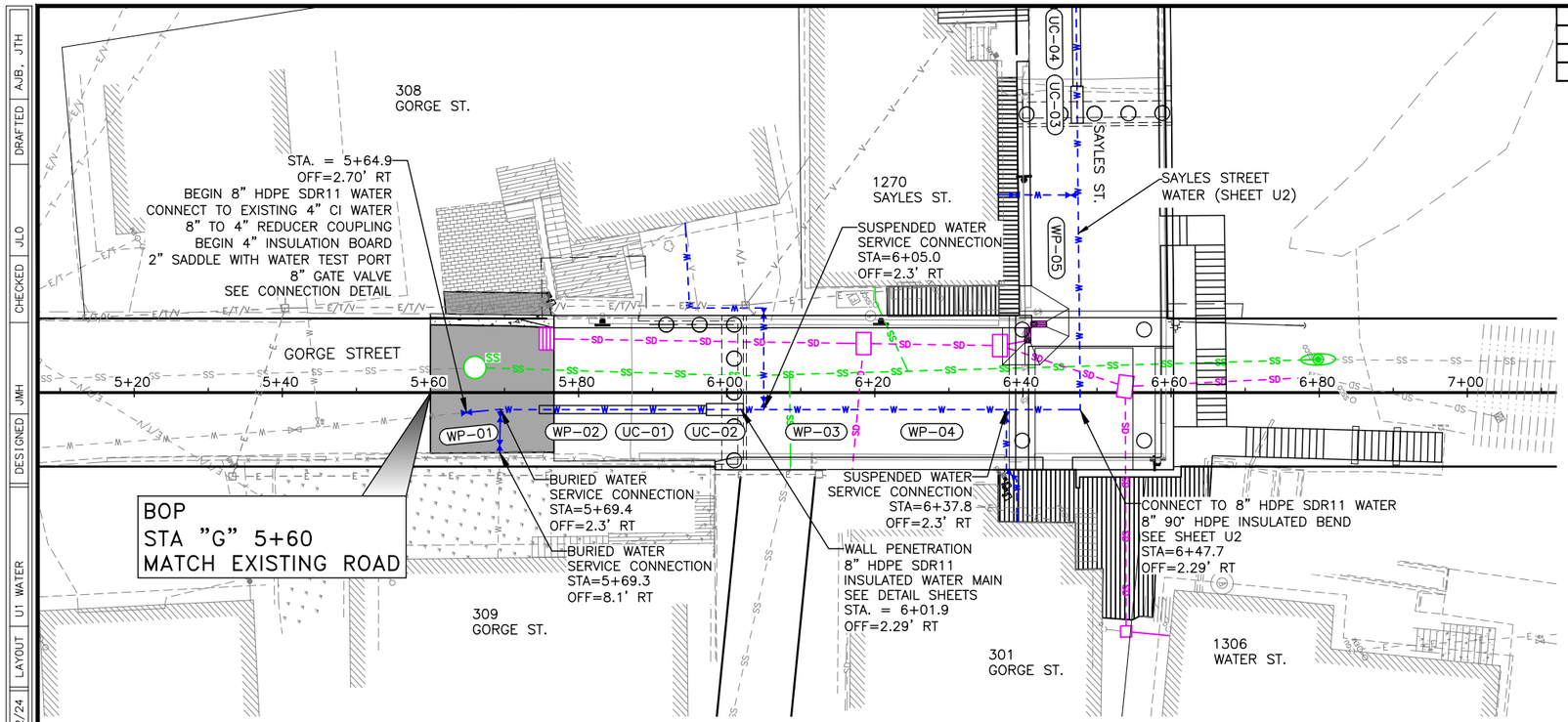
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

TRAFFIC CONTROL PERMANENT CONSTRUCTION SIGNING

FILE | Z:\projects\0630.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\0007b-T1-Traffic.dwg
DATE | 8/2/24
LAYOUT | T2
DESIGNED | JMH
CHECKED | JLO
DRAFTED | AJB, JTH

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	U1	U14

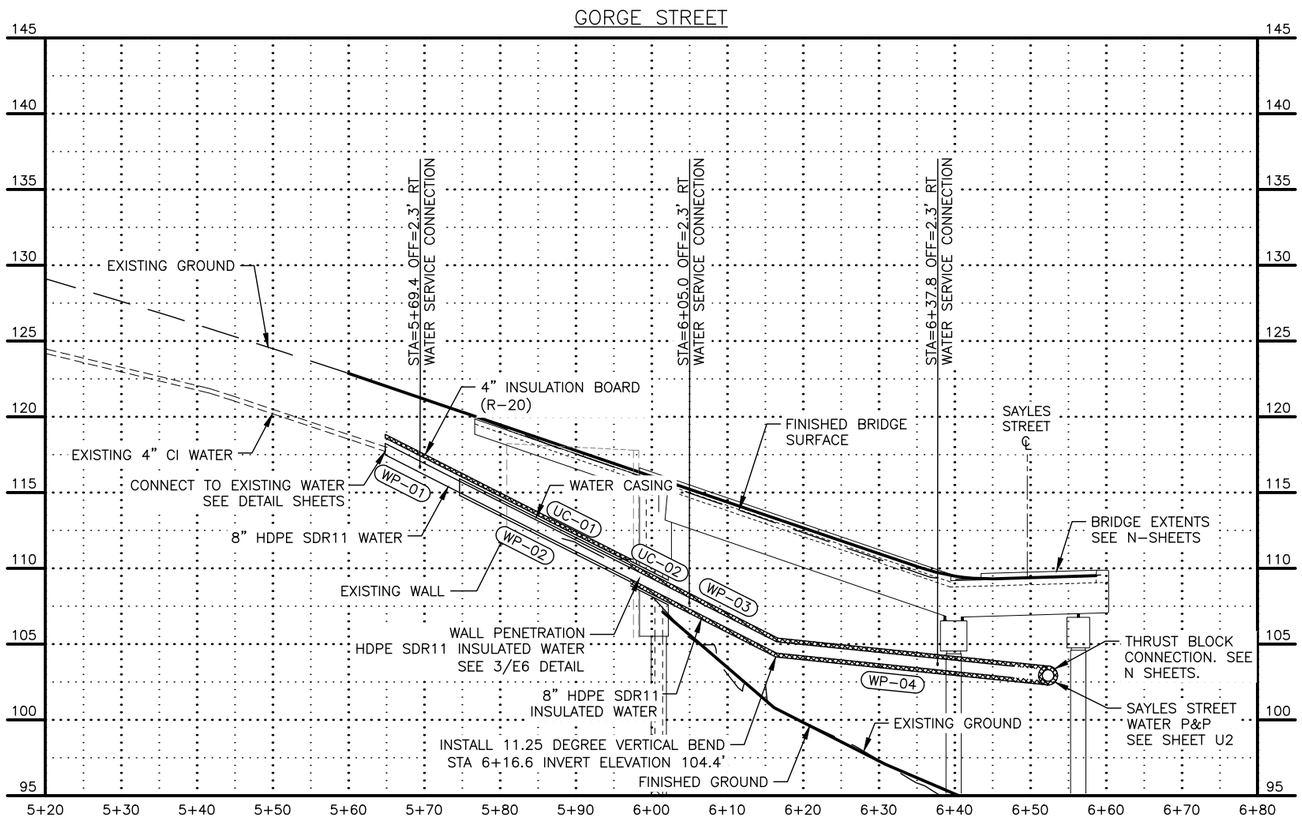


DEMOLITION & TEMPORARY SERVICE NOTES:

1. EXISTING WATER MAIN AND APPURTENANCES TO BE REMOVED AND DISPOSED OF BY CONTRACTOR. SEE F DEMO SHEET.
2. EXISTING UTILITY LOCATIONS TO BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK.
3. WATER REMOVAL NOT LOCATED ON THE EXISTING BRIDGE IS PAID UNDER BID ITEM 202.0001.0000 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS. WATER REMOVAL ATTACHED TO THE EXISTING BRIDGE IS PAID UNDER BID ITEM 202.0023.0000 – REMOVAL OF BRIDGE.
4. SEE SUMMARY TABLE IN D SHEETS FOR BID ITEM 202.0001.0000 FOR ADDITIONAL INFORMATION.
5. PROVIDE TEMPORARY SERVICES PRIOR TO DEMOLITION OF UTILITIES.

CONSTRUCTION NOTES:

1. CONSTRUCT WATER SYSTEM IN ACCORDANCE WITH SPECIFICATION SECTION 627.
2. KPU WATER DIVISION, KETCHIKAN FIRE DEPARTMENT, AND EXISTING CUSTOMERS SHALL BE NOTIFIED FORTY–EIGHT (48) HOURS IN ADVANCE OF WATER SERVICE INTERRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE TO EXISTING CUSTOMERS IF THE OUTAGE EXCEEDS 6–HOURS OR IF DEEMED NECESSARY BY THE ENGINEER. THE CONTRACTOR SHALL HAVE A TEMPORARY WATER SERVICE PLAN REVIEWED AND APPROVED BY ADEC.
3. REPLACE WATER SERVICES TO THE EXTENTS SHOWN ON PLANS.
4. REPLACE WATER SERVICE VALVE BOXES.
5. BURIED WATER MAINS SHALL HAVE 4' MINIMUM COVER. WHERE MINIMUM COVER IS NOT POSSIBLE, INSTALL 4" BOARD INSULATION AS SHOWN.
6. TRACE WIRE SHALL BE INSTALLED 12" ABOVE BURIED WATER MAINS. USE 8 GAGE WIRE ABOVE MAINS.
7. NO PIPE LENGTH LESS THAN EIGHT (8') FEET SHALL BE INCORPORATED IN THE WATER SYSTEM EXCEPT FOR THOSE NECESSARY FOR FIRE HYDRANTS OR VALVE LOCATIONS.
8. THRUST RESTRAINT SHALL BE PROVIDED BY USE OF FIELD–LOK GASKETS (OR EQUAL) OR MEG–A–LUG FITTINGS (OR EQUAL) ON ALL MECHANICAL JOINTS.
9. THE CONTRACTOR SHALL OPEN BORE FLUSH THE NEWLY INSTALLED WATER MAIN PRIOR TO INSTALLATION OF WATER SERVICES. PROVIDE A MINIMUM OF 48 HOURS ADVANCE NOTICE.
10. PIPE DEFLECTION MAY BE ACCOMPLISHED BY FUSED INSTALLATION OF PRE–FORMED ELBOWS.
11. MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL SEPARATION BETWEEN THE WATER MAIN(S) AND SEWER/STORM DRAIN PIPING UNLESS OTHERWISE SHOWN ON THE DRAWINGS. WHEN THE 10 FEET SEPARATION REQUIREMENT CANNOT BE ACHIEVED, INSTALL WATER MAINS A MINIMUM OF 18 INCHES ABOVE THE TOP OF SEWER/STORM PIPING.
12. WHERE BURIED, THE WATER LINE, SEWER LINE, AND STORM DRAIN LINE WILL BE IN SEPARATE TRENCHES.
13. WATER SERVICES SHALL BE 3/4" COPPER, TYPE K, UNLESS OTHERWISE NOTED ON PLANS.



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9/3/2024
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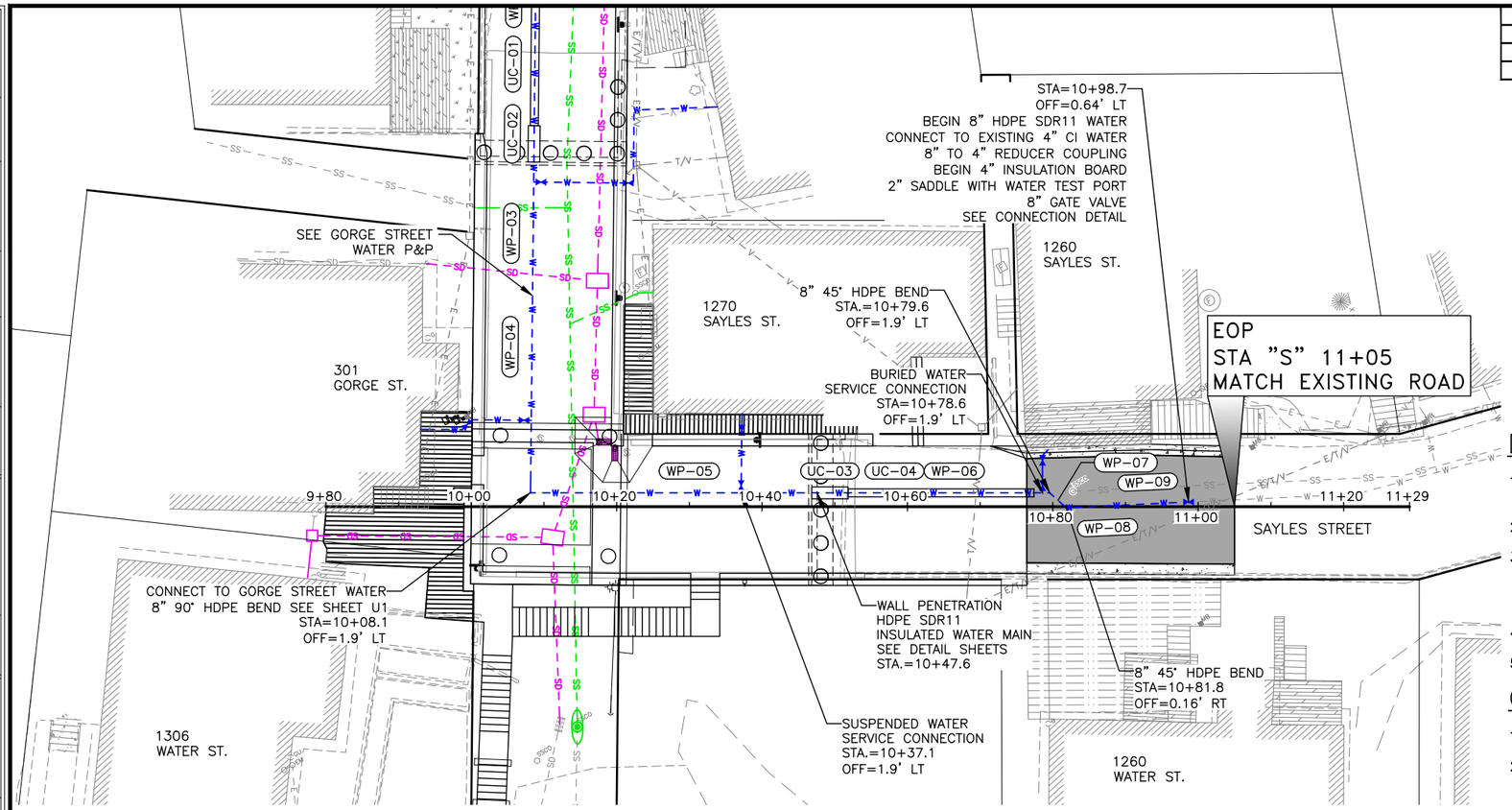
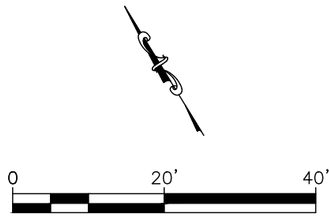
KTN: SAYLES/GORGE ST. VIADUCT
(1841) IMPROVEMENTS

GORGE STREET WATER
PLAN & PROFILE

FILE | DATE | LAYOUT | U1 WATER | DESIGNED | CHECKED | DRAFTED
Z:\projects\0630.00 DOT_SE KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\MCAD\Sayles-Gorge\U0070-U1 Water-Plan and Profile.dwg
8/2/24 | JMH | JLO | AJB, JTH

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	U2	U14



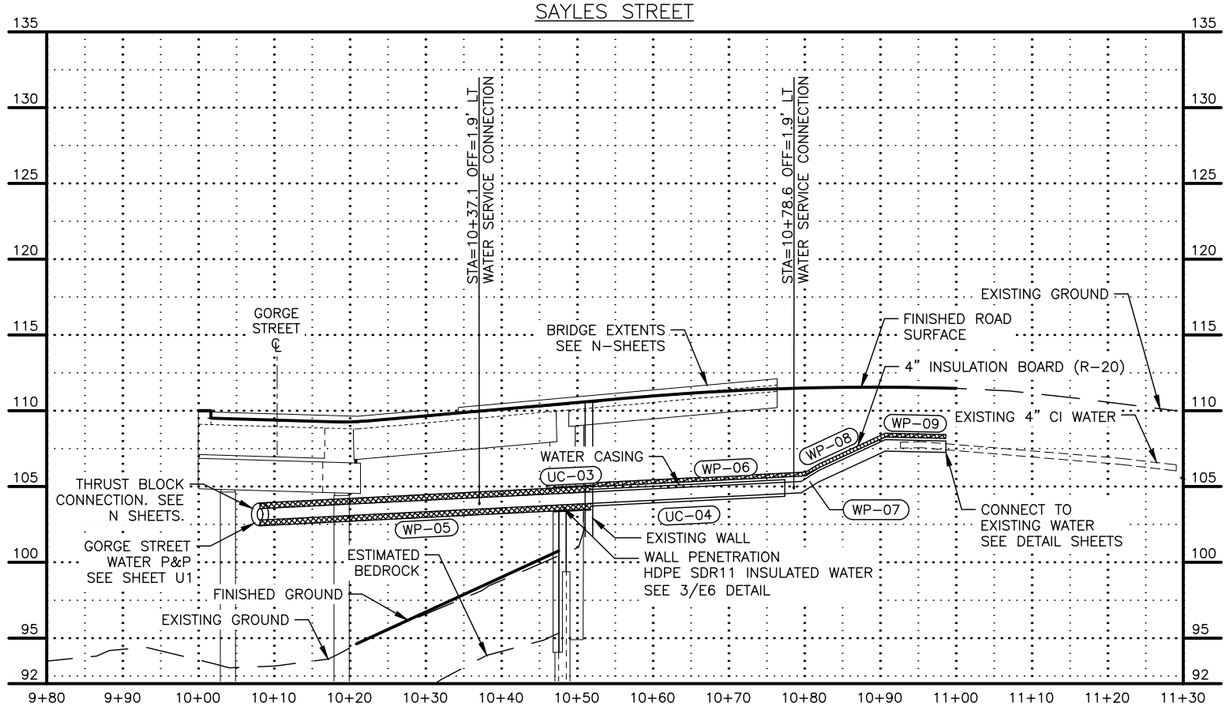


DEMOLITION & TEMPORARY SERVICE NOTES:

1. EXISTING WATER MAIN AND APPURTENANCES TO BE REMOVED AND DISPOSED OF BY CONTRACTOR. SEE DEMOLITION PLAN.
2. EXISTING UTILITY LOCATIONS TO BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK.
3. WATER, SANITARY SEWER, AND STORM DRAIN REMOVAL NOT LOCATED ON THE EXISTING BRIDGE IS PAID UNDER BID ITEM 202.0001.0000 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS. WATER, SANITARY SEWER, AND STORM DRAIN REMOVAL ATTACHED TO THE EXISTING BRIDGE IS PAID UNDER BID ITEM 202.0023.0000 – REMOVAL OF BRIDGE.
4. SEE SUMMARY TABLE IN D SHEETS FOR BID ITEM 202.0001.0000 FOR ADDITIONAL INFORMATION.
5. PROVIDE TEMPORARY WATER & SEWER SERVICES PRIOR TO DEMOLITION OF UTILITIES.

CONSTRUCTION NOTES:

1. CONSTRUCT WATER SYSTEM IN ACCORDANCE WITH SPECIFICATION SECTION 627.
2. KPU WATER DIVISION, KETCHIKAN FIRE DEPARTMENT, AND EXISTING CUSTOMERS SHALL BE NOTIFIED SEVENTY–TWO (72) HOURS IN ADVANCE OF WATER SERVICE INTERRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE TO EXISTING CUSTOMERS IF THE OUTAGE EXCEEDS 6–HOURS OR IF DEEMED NECESSARY BY THE ENGINEER. THE CONTRACTOR SHALL HAVE A TEMPORARY WATER SERVICE PLAN REVIEWED AND APPROVED BY ADEC.
3. REPLACE WATER SERVICES TO THE EXTENTS SHOWN ON PLANS.
4. REPLACE WATER SERVICE VALVE BOXES.
5. BURIED WATER MAINS SHALL HAVE 4' MINIMUM COVER. WHERE MINIMUM COVER IS NOT POSSIBLE, INSTALL 4" BOARD INSULATION AS SHOWN.
6. TRACER WIRE SHALL BE INSTALLED 12" ABOVE BURIED WATER MAINS. USE 8 GAGE WIRE ABOVE MAINS.
7. THRUST RESTRAINT SHALL BE PROVIDED BY USE OF FIELD–LOK GASKETS (OR EQUAL) OR MEG–A–LUG FITTINGS (OR EQUAL) ON ALL MECHANICAL JOINTS.
8. THE CONTRACTOR SHALL OPEN BORE FLUSH THE NEWLY INSTALLED WATER MAIN PRIOR TO INSTALLATION OF WATER SERVICES. PROVIDE A MINIMUM OF 48 HOURS ADVANCE NOTICE.
9. PIPE DEFLECTION MAY BE ACCOMPLISHED BY FUSED INSTALLATION OF PRE–FORMED ELBOWS.
10. MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL SEPARATION BETWEEN THE WATER MAIN(S) AND SEWER/STORM DRAIN PIPING UNLESS OTHERWISE SHOWN ON THE DRAWINGS. WHEN THE 10 FEET SEPARATION REQUIREMENT CANNOT BE ACHIEVED, INSTALL WATER MAINS A MINIMUM OF 18 INCHES ABOVE THE TOP OF SEWER/STORM PIPING.
11. WHERE BURIED, THE WATER LINE, SEWER LINE, AND STORM DRAIN LINE WILL BE IN SEPARATE TRENCHES.
12. WATER SERVICES SHALL BE 3/4" COPPER, TYPE K, UNLESS OTHERWISE NOTED ON PLANS.



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STATE OF ALASKA 49TH
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(907) 465–1763

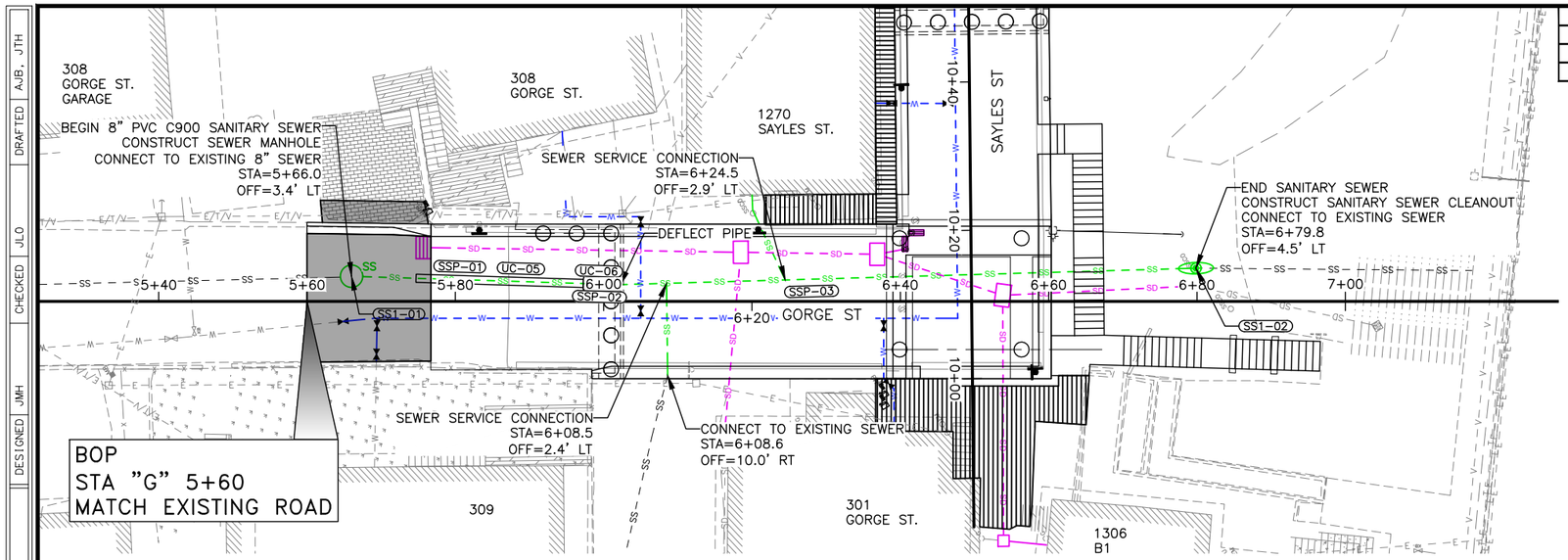
KTN: SAYLES/GORGE ST. VIADUCT
(1841) IMPROVEMENTS

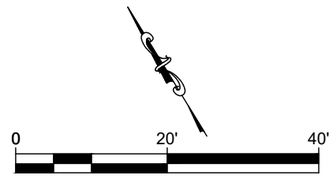
SAYLES STREET WATER
PLAN & PROFILE

FILE | Z:\project\2020.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\00070-U1 Water-Plan and Profile.dwg
DATE | 8/2/24
LAYOUT | U2 WATER
DESIGNED | JMH
CHECKED | JLO
DRAFTED | AJB, JTH

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	U3	U14



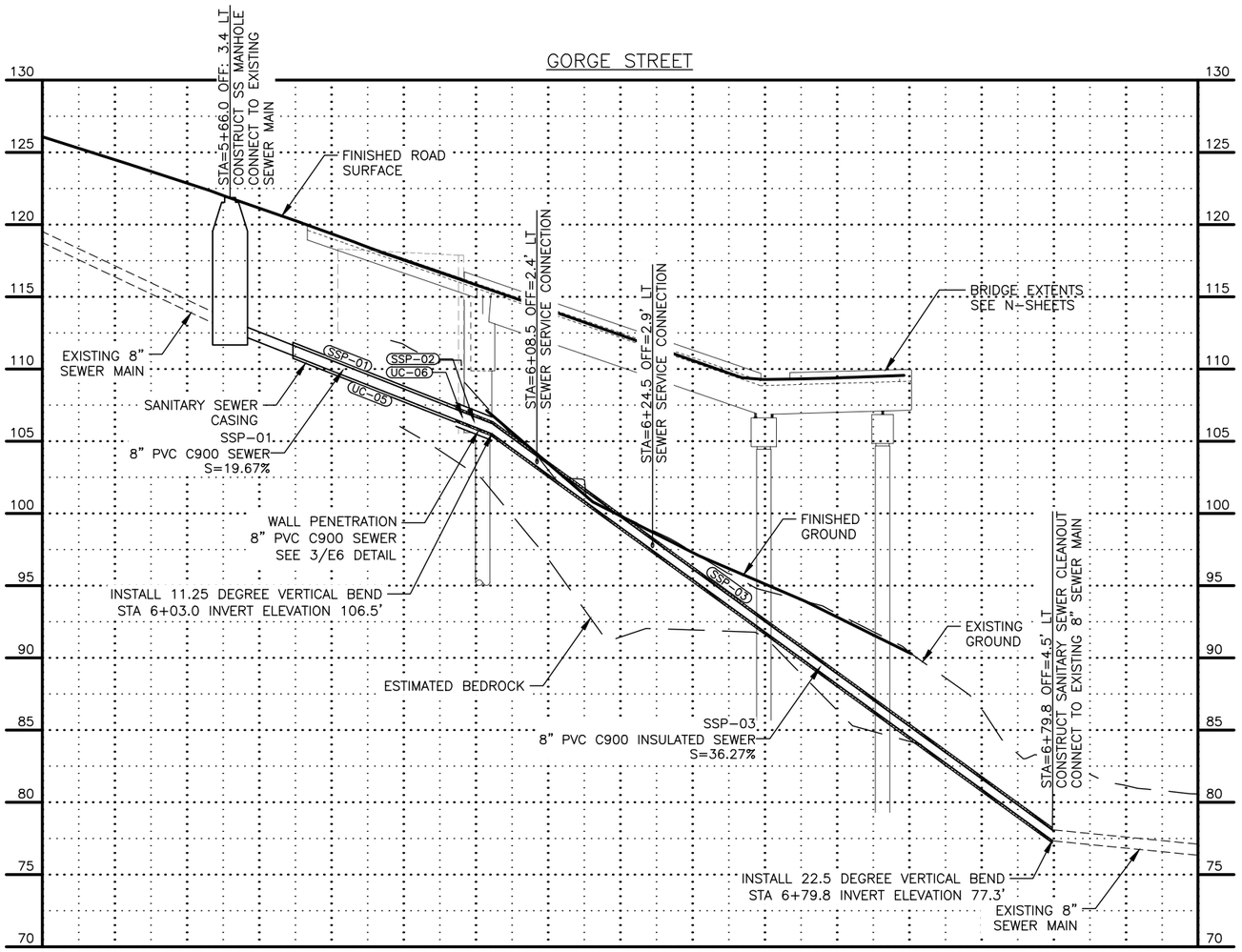


DEMOLITION & TEMPORARY SERVICE NOTES:

1. EXISTING SEWER MAIN AND APPURTENANCES TO BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. SEE DEMOLITION PLAN.
2. EXISTING UTILITY LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK.
3. SANITARY SEWER REMOVAL NOT LOCATED ON THE EXISTING BRIDGE IS PAID UNDER BID ITEM 202.0001.0000 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS. SANITARY SEWER REMOVAL ATTACHED TO THE EXISTING BRIDGE IS PAID UNDER BID ITEM 202.0023.0000 – REMOVAL OF BRIDGE.
4. SEE SUMMARY TABLE IN D SHEETS FOR BID ITEM 202.0001.0000 FOR ADDITIONAL INFORMATION.
5. PROVIDE TEMPORARY SERVICES PRIOR TO DEMOLITION OF UTILITIES .

CONSTRUCTION NOTES:

1. CITY OF KETCHIKAN AND EXISTING CUSTOMERS SHALL BE NOTIFIED SEVENTY–TWO (72) HOURS IN ADVANCE OF SEWER SERVICE INTERRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SEWER SERVICE TO EXISTING CUSTOMERS IF THE OUTAGE EXCEEDS 6–HOURS OR IF DEEMED NECESSARY BY THE ENGINEER. THE CONTRACTOR SHALL HAVE A TEMPORARY SEWER SERVICE PLAN REVIEWS AND APPROVED BY ADEC.
2. REPLACE ALL SEWER SERVICES TO THE EDGE OF RIGHT–OF–WAY OR TO RESIDENCE AS SHOWN.
3. REPLACE ALL SEWER SERVICE CLEAN OUTS.
4. BURIED SEWER MAINS SHALL HAVE 4' MINIMUM COVER. WHERE MINIMUM COVER IS NOT POSSIBLE, INSTALL INSULATED SANITARY SEWER CONDUIT.
5. TRACE WIRE SHALL BE INSTALLED 12" ABOVE BURIED SEWER MAINS. USE 8 GAGE WIRE ABOVE MAINS.
6. SEE D SHEETS FOR SANITARY SEWER PIPE AND STRUCTURE INFORMATION.



PLANS DEVELOPED BY:
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STATE OF ALASKA
49TH
Joseph M Horazdovsky
CE 13563
9/3/2024
REGISTERED PROFESSIONAL ENGINEER

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

GORGE STREET SANITARY SEWER PLAN AND PROFILE

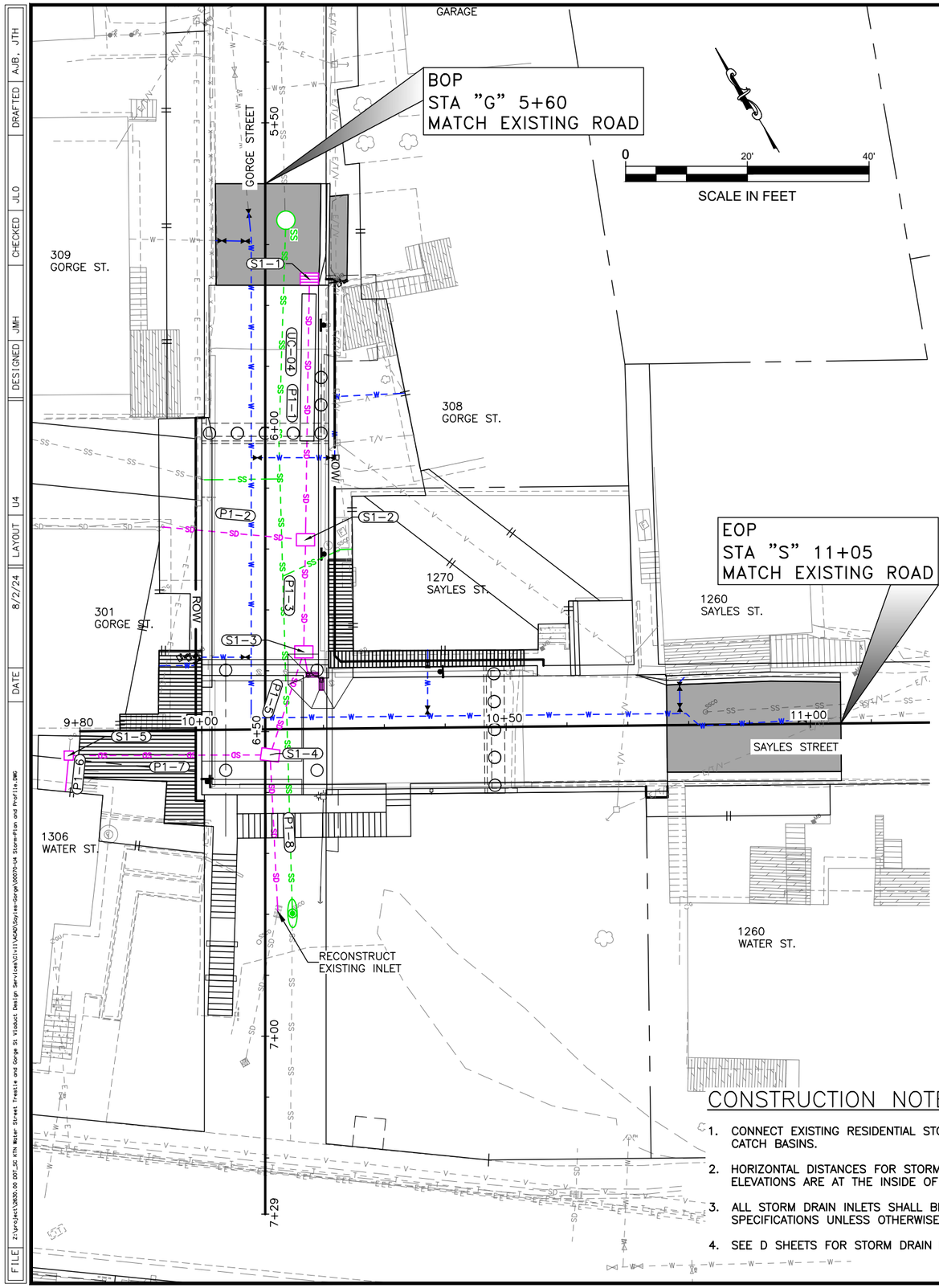
FILE	DATE	DESIGNED	DRAFTED	CHECKED	LAYOUT
Z:\ProjectX\3650.00 001_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\ACAD\Sayles-Gorge\U00070-U3 Sewer-Plan and Profile.dwg	8/2/24	JMH	JLO	JLO	U3

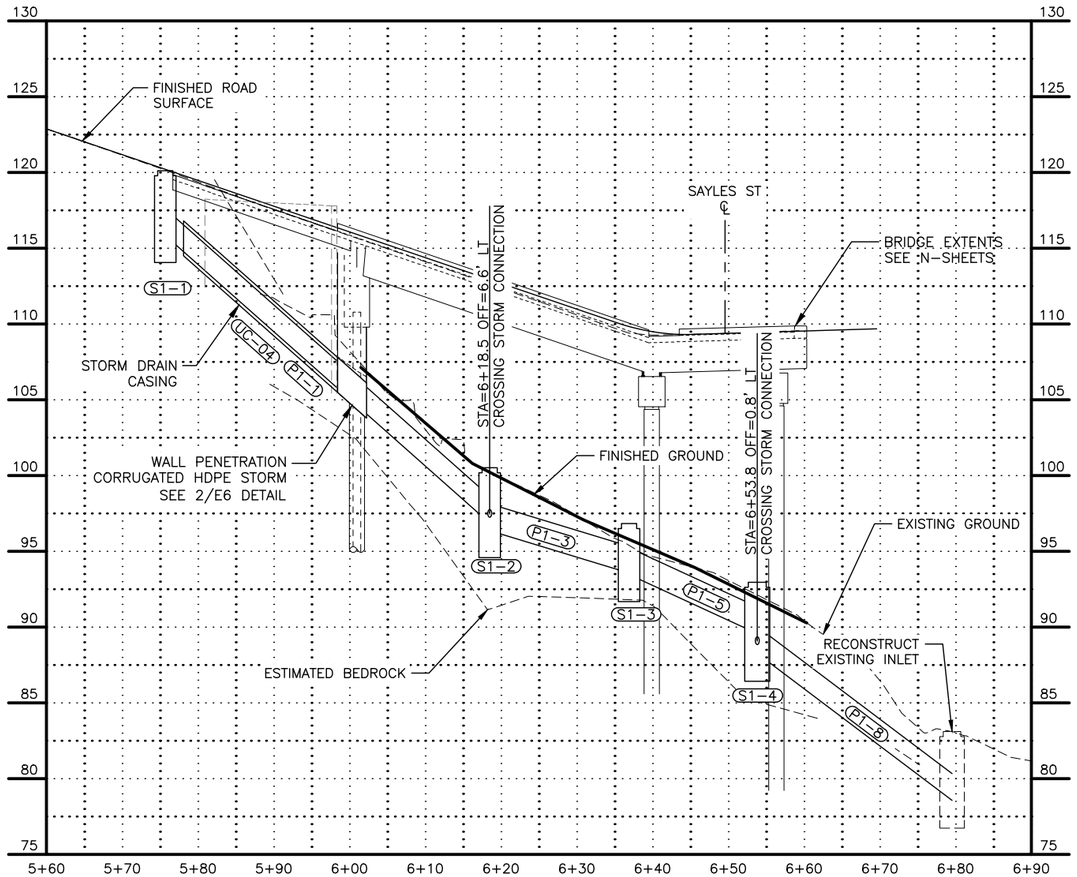
AJB, JTH

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	U4	U14

DRAFTED AJB, JTH | DESIGNED JMH | CHECKED JLO | LAYOUT U4 | 8/2/24 DATE | FILE Z:\projects\0300.00 DOT_SC KTN Water Street Trestle and Gorge St Viaduct Design Services\Civil\CAD\Sayles-Gorge\U0070-U4 Storm-Plan and Profile.DWG





DEMOLITION NOTES:

1. EXISTING STORM DRAIN MAIN AND APPURTENANCES TO BE REMOVED AND DISPOSED OF BY CONTRACTOR. SEE F SHEETS.
2. REMOVAL OF STORM DRAIN NOT ATTACHED TO THE EXISTING BRIDGE IS PAID UNDER BID ITEM 202.0001.0000 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS. REMOVAL OF STORM DRAIN ATTACHED TO THE EXISTING BRIDGE IS PAID UNDER BID ITEM 202.0023.0000 – REMOVAL OF BRIDGE.
3. SEE SUMMARY TABLE IN D SHEETS FOR BID ITEM 202.0001.0000 FOR ADDITIONAL INFORMATION.

CONSTRUCTION NOTES:

1. CONNECT EXISTING RESIDENTIAL STORM DRAIN SERVICES AND RAIN LEADERS TO NEW STORM DRAIN CATCH BASINS.
2. HORIZONTAL DISTANCES FOR STORM DRAIN ARE MEASURED FROM CENTER OF INLET. PIPE INVERT ELEVATIONS ARE AT THE INSIDE OF MANHOLE WALL.
3. ALL STORM DRAIN INLETS SHALL BE CONSTRUCTED ACCORDING TO THE PROJECT DETAILS AND SPECIFICATIONS UNLESS OTHERWISE NOTED IN THE PLANS.
4. SEE D SHEETS FOR STORM DRAIN PIPE AND STRUCTURE INFORMATION TABLES.

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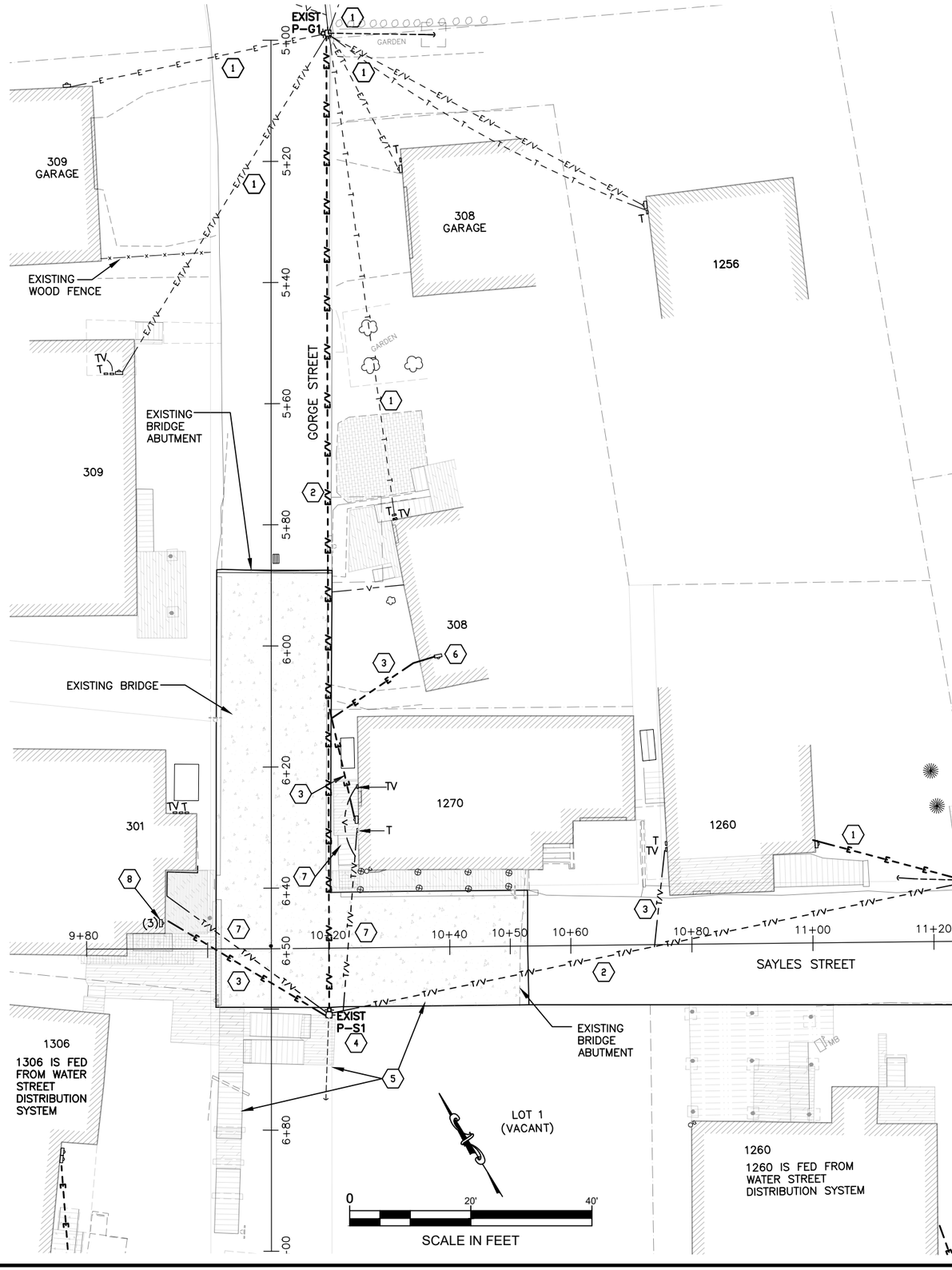
KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

STORM DRAIN PIPE PLAN & PROFILE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0003225/SFHWY00070	2024	U5	U14



GENERAL NOTES

A EXISTING AERIAL DISTRIBUTION SYSTEM AND SERVICE DROPS TO THE HOMES ARE TO REMAIN UNLESS OTHERWISE NOTED.

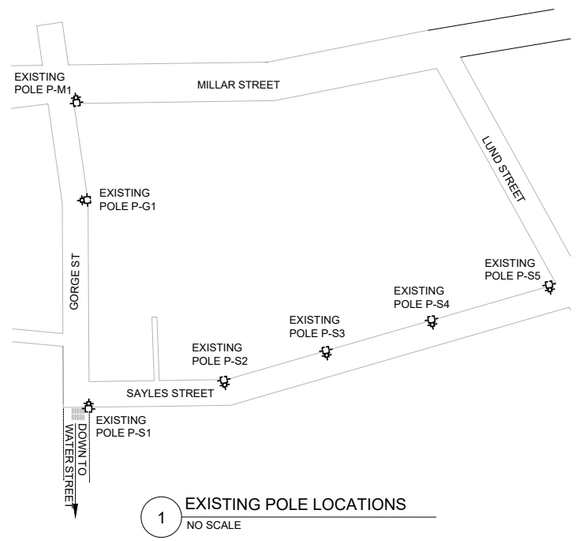
B INSTALL A TEMPORARY AERIAL POWER DISTRIBUTION SYSTEM WITH SERVICE DROPS TO THE HOMES PRIOR TO BRIDGE DEMOLITION. THE TEMPORARY SYSTEM IS TO ALLOW COMPLETE ACCESS TO THE BRIDGE WORK AREA WITH NO OVERHEAD LINES CROSSING THE EXISTING BRIDGE DECK, SEE U6, V SHEETS.

C AFTER THE NEW BRIDGE IS INSTALLED, INSTALL THE PERMANENT AERIAL POWER DISTRIBUTION SYSTEM WITH AERIAL DROPS TO THE HOMES, SEE U7, V SHEETS.

D E = KPU-E 120/240 VOLT; V = CABLE TV -COAXIAL CABLE, T = KPU-T FIBER OPTIC. TV AND TELE ARE SHOWN FOR REFERENCE ONLY, SEE V SHEETS FOR THEIR INSTALLATION.

ELECTRICAL NOTES

1. EXISTING AERIAL CABLING TO REMAIN
2. DISCONNECT AND SWING EXISTING AERIAL DISTRIBUTION FROM EXIST POLE P-G1 TO TEMPORARY POLES P-G2-T AND P-G5-T. COIL EXCESS CONDUCTOR. SEE U6, U8, V SHEETS FOR TEMPORARY SYSTEM, SEE U7, U8, V SHEETS FOR NEW SYSTEM.
3. DISCONNECT AND REMOVE EXISTING SERVICE DROP. SEE U6, U8, V2, V7 FOR TEMPORARY SYSTEM, SEE U7, U8, V3, V8FOR NEW SYSTEM.
4. REMOVE EXISTING POLE P-S1. INSTALL NEW TEMPORARY POLE P-S1-T AND LAND EXISTING CABLING ON THE TEMPORARY POLE, SEE U6, U8, V2, V7
5. EXISTING BRIDGE AND STAIRS TO BE DEMOLISHED, SEE F AND N SHEETS.
6. REMOVE EXISTNG METER, INSTALL NEW SERVICE, SEE U6. METER IS LOCATED INDOORS ON THE 2ND FLOOR. COORDINATE WITH THE OWNER TO GAIN ACCESS.
7. DISCONNECT EXISTING SERVICE DROP. HOME DOES NOT REQUIRE TELEPHONE OR CABLE TV FOR THE TEMPORARY SYSTEM. SEE U6, U8, V2 FOR TEMPORARY SYSTEM, SEE U7, U8, V3, V8 FOR NEW SYSTEM.
8. METERS ARE LOCATED AT GROUND LEVEL (BELOW THE BRIDGE DECK)



1 EXISTING POLE LOCATIONS
NO SCALE

SYMBOLS AND LEGEND

- BREAKOUT BOX (HEAT TAPE SYSTEM) OPTICAL NETWORK TERMINAL, ONT NETWORK INTERFACE DEVICE, NID T = TELEPHONE, TV = CABLE TV
- COMBINATION METER MAIN / METER PACK/METER
- DISCONNECT, CIRCUIT BREAKER TYPE
- PANELBOARD
- EXISTING POWER POLE / POWER POLE W/LIGHT
- P-S1 NEW WOOD POWER POLE, 50'
- SIDEWALK GUY
- DOWN GUY
- LED STREET LIGHT
- PILOT LIGHT SWITCH
- GEC GROUNDING ELECTRODE CONDUCTOR
- H/T HEAT TAPE
- CABLE TELEVISION LINE -GCI
- E 120/240V - KPU ELECTRIC
- T TELEPHONE - KPU TELECOMM
- W WATER LINE
- EASEMENT
- A HEAT TAPE CONNECTIONS A=BEGINNING OF H/T RUN WATER MAIN B=END OF H/T RUN C=BEGINNING OF H/T RUN WATER SERVICE
- J JUNCTION BOX P = H/T POWER CONNECTION E = H/T END FITTING
- RECEPTACLE (SEE 687 FOR NEMA TYPE)

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

EXISTING ELECTRICAL SITE PLAN

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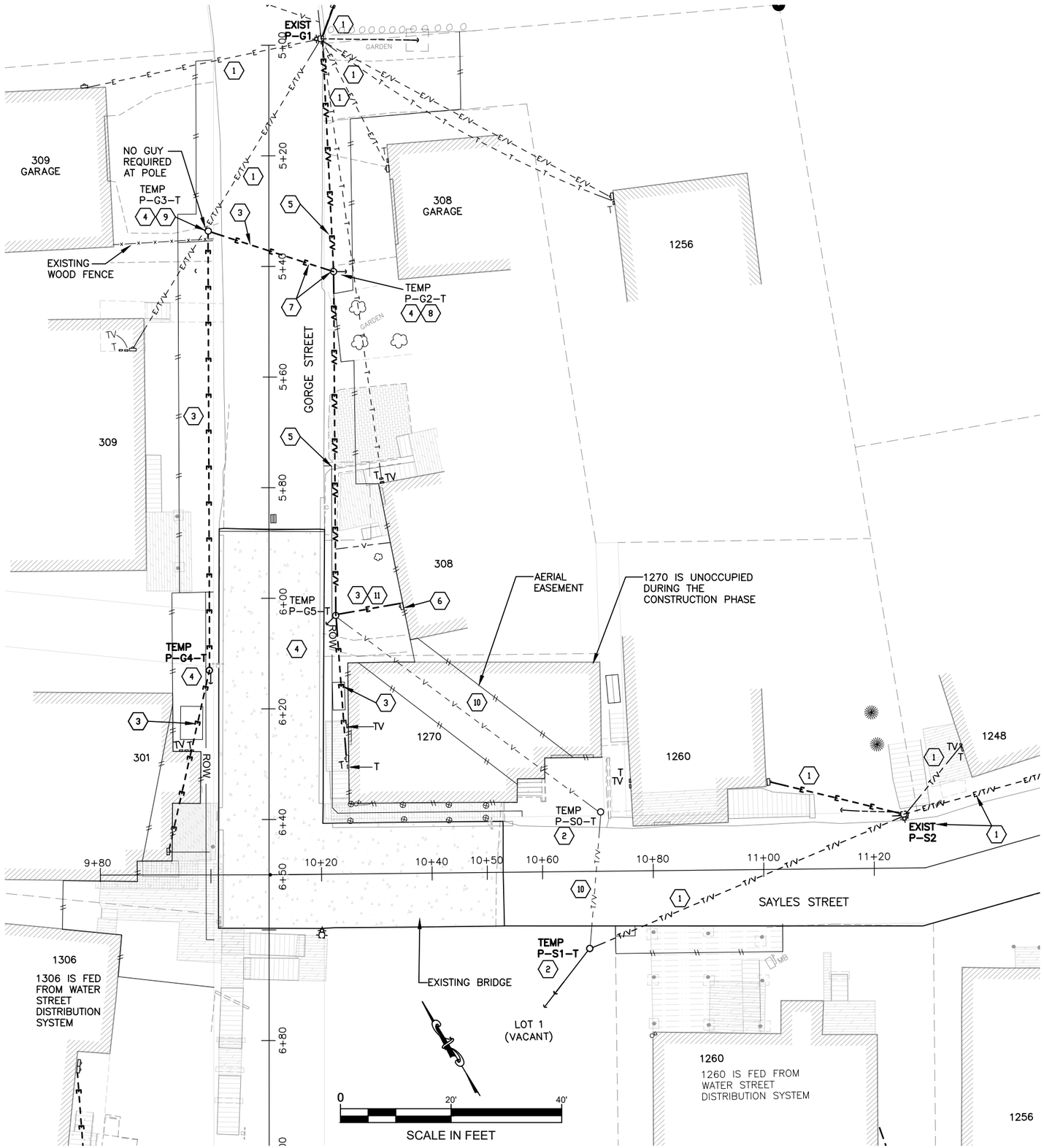
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	U6	U14



GENERAL NOTES

A EXISTING AERIAL DISTRIBUTION SYSTEM AND SERVICE DROPS TO THE HOMES ARE TO REMAIN UNLESS OTHERWISE NOTED.

B INSTALL A TEMPORARY AERIAL POWER DISTRIBUTION SYSTEM WITH SERVICE DROPS TO THE HOMES PRIOR TO BRIDGE DEMOLITION. THE TEMPORARY SYSTEM IS TO ALLOW COMPLETE ACCESS TO THE BRIDGE WORK AREA WITH NO OVERHEAD LINES CROSSING THE EXISTING BRIDGE DECK, SEE U11, V SHEETS.

C E = KPU-E 120/240 VOLT; V = CABLE TV -COAXIAL CABLE, T = KPU-T FIBER OPTIC. TV AND TELE ARE SHOWN FOR REFERENCE ONLY, SEE V SHEETS FOR THEIR INSTALLATION.

ELECTRICAL NOTES

1. EXISTING AERIAL CABLING TO REMAIN
2. INSTALL NEW TEMPORARY POLES P-S0-T AND P-S1-T. LAND EXISTING AERIAL CABLING ON THE TEMPORARY POLES. COIL EXCESS CONDUCTOR.
3. INSTALL NEW SERVICE DROP.
4. INSTALL NEW TEMPORARY POLE.
5. DISCONNECT AND SWING EXISTING AERIAL DISTRIBUTION FROM EXIST POLE P-G1 TO TEMPORARY POLES P-G2-T AND P-G5-T. REMOVE EXCESS CONDUCTOR. SEE U6, U8, V SHEETS FOR TEMPORARY SYSTEM, SEE U7, U8, V SHEETS FOR NEW SYSTEM.
6. INSTALL NEW ELECTRIC SERVICE, SEE U11.
7. #1/0 TRIPLEX SERVICE TO 301 GORGE - SPLICE INTO #4/0 TRIPLEX DISTRIBUTION
8. COORDINATE POLE LOCATION WITH EXISTING WATER SERVICE LINE , SEE U1.
9. INSTALL NEW TEMPORARY POLE P-G3-T IN TCE. IF EXISTING OVERHEAD DROPS TO THE 309 RESIDENCE TO ARE WITHIN 2' OF THE POLE, FASTEN THE EXISTING DROPS TO THE POLE.
10. DISCONNECT AND SWING EXISTING TEL AND TV DISTRIBUTION FROM EXIST POLE P-S1 TO TEMPORARY POLES P-S1-T AND P-S0-T. MAINTAIN NESC CLEARANCE OVER 1270 ROOF. SEE V SHEETS FOR TEMPORARY SYSTEM.
11. COORDINATE THE LENGTH OF SERVICE DROP TO ALLOW CONNECTION TO THE PERMANENT SYSTEM, SEE U7.
12. THE HOME IS UNOCCUPIED DURING THE CONSTRUCTION PHASE - INSTALL A TEMPORARY SERVICE DROP TO THE HOME. THE EXISTING METER PACK LOCATED AT GROUND LEVEL, UNDER A STREET LEVEL DECK. EXISTING SERVICE MAST RISES THRU THE ROOF. SEE 1 & 4/U13

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

ELECTRICAL SITE PLAN TEMPORARY WORK

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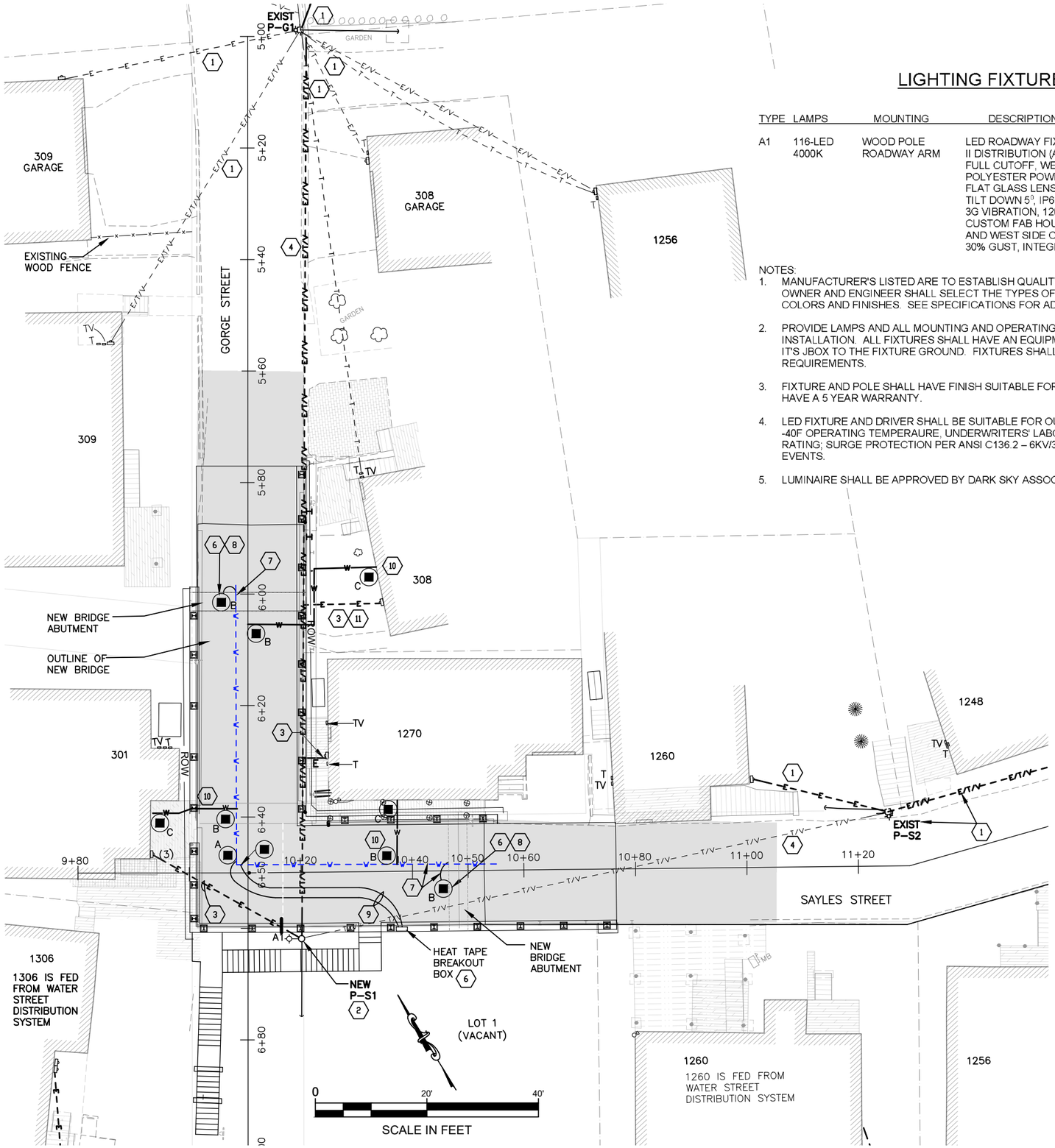
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	U7	U14



LIGHTING FIXTURE SCHEDULE:

TYPE	LAMPS	MOUNTING	DESCRIPTION	MANUFACTURER
A1	116-LED 4000K	WOOD POLE ROADWAY ARM	LED ROADWAY FIXTURE WITH 3, TYPE II DISTRIBUTION (ASYMMETRIC SHORT), FULL CUTOFF, WET LABEL, GASKETED, POLYESTER POWDER PAINT, GRAY FINISH, FLAT GLASS LENS, TILT DOWN 5°, IP65 ENCLOSURE RATING, 3G VIBRATION, 120 VOLT DRIVER, CUSTOM FAB HOUSE SIDE SHIELDS -NORTH, AND WEST SIDE OF FIXTURE; 130MPH W/ 30% GUST, INTEGRAL PHOTOCELL	GE EVOLVE EXR1-G1 SERIES

NOTES:
1. MANUFACTURER'S LISTED ARE TO ESTABLISH QUALITY. PRIOR TO ORDERING THE FIXTURES THE OWNER AND ENGINEER SHALL SELECT THE TYPES OF FIXTURES, MOUNTING TYPES/ACCESSORIES, COLORS AND FINISHES. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE LAMPS AND ALL MOUNTING AND OPERATING ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. ALL FIXTURES SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR INSTALLED FROM IT'S JBOX TO THE FIXTURE GROUND. FIXTURES SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
3. FIXTURE AND POLE SHALL HAVE FINISH SUITABLE FOR A MARINE ENVIRONMENT AND THE FINISH SHALL HAVE A 5 YEAR WARRANTY.
4. LED FIXTURE AND DRIVER SHALL BE SUITABLE FOR OUTDOOR, MARINE INSTALLATION AND RATED FOR -40F OPERATING TEMPERAURE, UNDERWRITERS' LABORATORIES LISTING, UL 1029, CLASS A SOUND RATING; SURGE PROTECTION PER ANSI C136.2 – 6KV/3KA & COMBINATION WAVE CAPACITY OF 120 EVENTS.
5. LUMINAIRE SHALL BE APPROVED BY DARK SKY ASSOCIATION OR SIMILAR ORGANIZATION.

GENERAL NOTES

A EXISTING AERIAL DISTRIBUTION SYSTEM AND SERVICE DROPS TO THE HOMES ARE TO REMAIN UNLESS OTHERWISE NOTED.

B AFTER THE NEW BRIDGE IS INSTALLED, INSTALL THE PERMANENT AERIAL POWER DISTRIBUTION SYSTEM WITH AERIAL DROPS TO THE HOMES, SEE U8, V SHEETS.

C AFTER THE NEW PERMANENT AERIAL SYSTEM IS INSTALLED, DISCONNECT AND REMOVE THE TEMPORARY AERIAL POWER DISTRIBUTION SYSTEM SHOWN ON U6.

D E = KPU-E 120/240 VOLT; V = CABLE TV -COAXIAL CABLE, T = KPU-T FIBER OPTIC. TV AND TELE ARE SHOWN FOR REFERENCE ONLY, SEE V SHEETS FOR THEIR INSTALLATION.

ELECTRICAL NOTES

1. EXISTING AERIAL CABLING TO REMAIN
2. INSTALL NEW PERMANENT POLE WITH TYPE A1 LIGHT FIXTURE.
3. INSTALL NEW SERVICE DROP.
4. INSTALL NEW AERIAL CABLING.
5. AFTER NEW PERMANENT SYSTEM IS INSTALLED REMOVE TEMPORARY POLES AND ASSOCIATED CABLING., SEE U6, U11 AND V2.
6. INSTALL HEAT TAPE DEVICES IN BREAKOUT BOX WITH CIRCUIT DIAGRAM AND LABELS PER SECTION 687. INSTALL FLANGED INLET FOR HEAT TAPE CONNECTION TO CITY GENERATOR, SWITCHES, SEE 1/U10.
7. INSTALL HEAT TAPE, POWER CONNECTION & END FITTING - EQUIPMENT IS PROVIDED IN SECTION 627. PULL HEAT TAPE IN CHANNEL LOCATED ON THE BOTTOM SIDE OF THE MAIN WATER LINE ARCTIC PIPE. FASTEN THE POWER CONNECTION AND END FITTING TO THE WATER LINE WITH STAINLESS STEEL PIPE CLAMP. INSTALL WARNING TAPE ON THE WATER LINE PER NEC 427. SEE U10. THE HEAT TAPE IS INSTALLED ON THE WATER LINE THAT IS UNDER THE BRIDGE, EXPOSED TO THE AIR.
8. INSTALL HEAT TAPE END FITTING WITH PILOT LIGHT ON THE WATER LINE AT THE ABUTMENT STRUCTURE.
9. INSTALL CONDUITS IN A UNISTRUT PIPE RACK W/ ALL-THREAD SUSPENDED FROM BRIDGE DECK. SEE N SHEETS FOR INSERT LAYOUT. DURING SUBMITTAL PHASE IN THE BRIDGE DECK SUBMITTAL, THE CONTRACTOR SHALL LOCATE THE INSERTS AS NEEDED FOR THE ACTUAL EQUIPMENT LAYOUT
10. WATER SERVICE TO THE HOME: INSTALL HEAT TAPE FROM THE POWER CONNECTION FITTING LOCATED IN THE TYPE C BOX ON THE HOUSE DOWN TO THE INSULATED WATER SERVICE PIPE, AND THEN RUN THE TAPE IN THE CHANNEL ON THE BOTTOM OF THE WATER PIPE. INSTALL THE END FITTING AT THE END OF THE RUN - WHERE THE WATER SERVICE PIPE TAPS INTO THE WATER MAIN. INSTALL WARNING TAPE ON THE WATER LINE PER NEC 427. SEE U10. COORDINATE THE TYPE C BOX LOCATION WITH THE HOME OWNER AND THE DEPARTMENT.
11. SERVICE DROP INSTALLED IN TEMPORARY WORK, SEE U6. ADJUST TENSION AND RECONNECT DROP TO PERMANENT SYSTEM

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

ELECTRICAL SITE PLAN PERMANENT WORK

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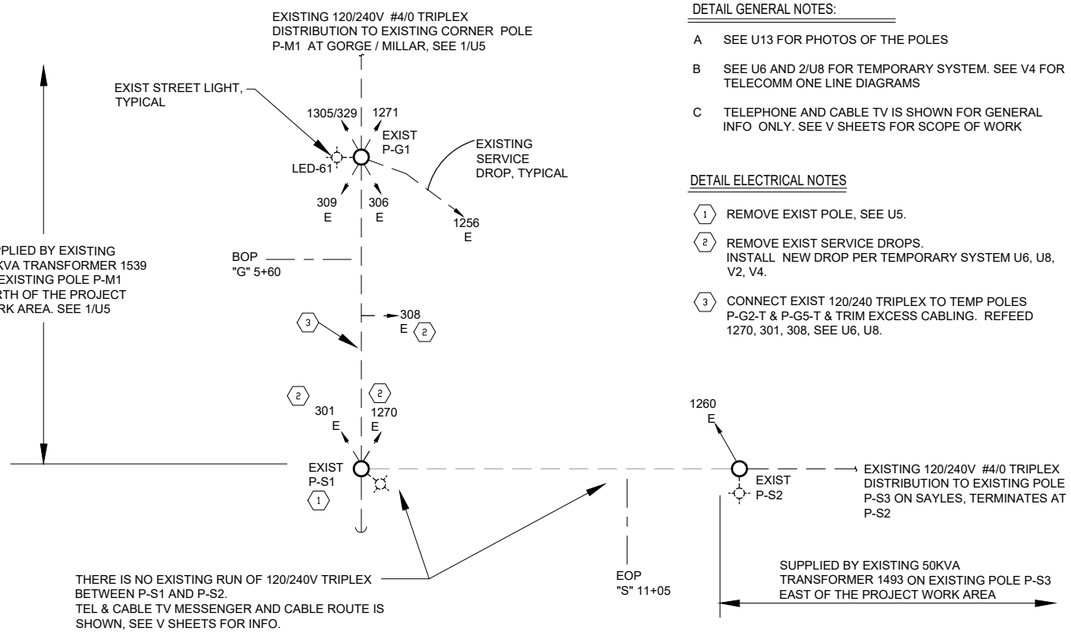
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	U8	U14



1 ELECTRICAL ONE LINE DIAGRAM - EXISTING INSTALLATION
NO SCALE

DETAIL GENERAL NOTES:

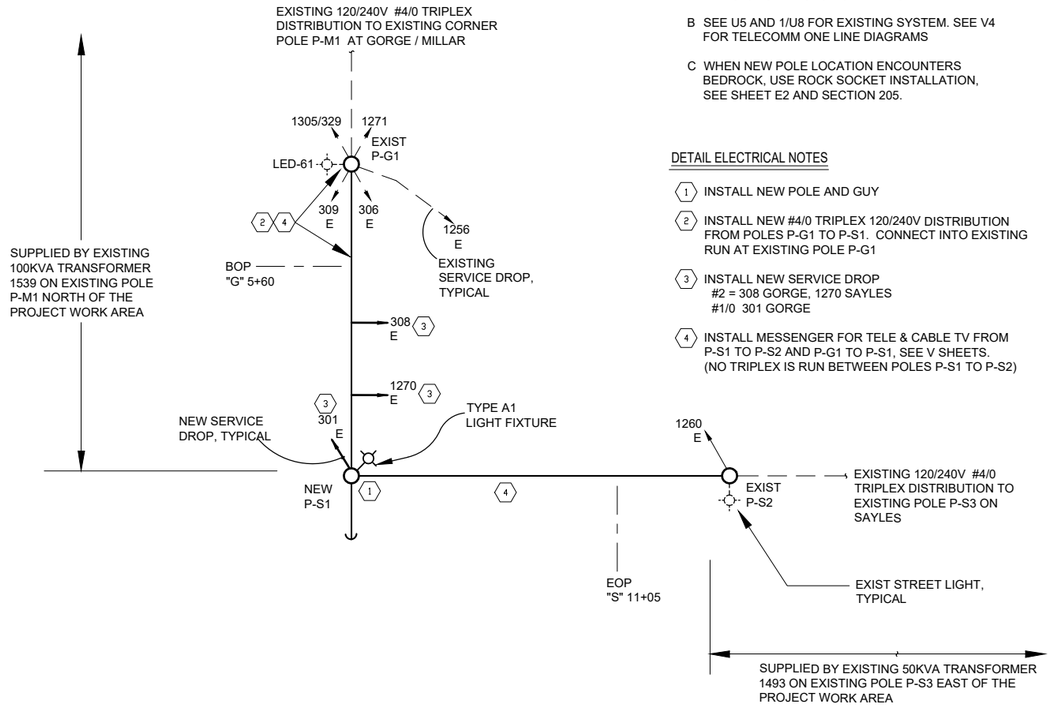
A SEE U13 FOR PHOTOS OF THE POLES

B SEE U6 AND 2/U8 FOR TEMPORARY SYSTEM. SEE V4 FOR TELECOMM ONE LINE DIAGRAMS

C TELEPHONE AND CABLE TV IS SHOWN FOR GENERAL INFO ONLY. SEE V SHEETS FOR SCOPE OF WORK

DETAIL ELECTRICAL NOTES

1. REMOVE EXIST POLE, SEE U5.
2. REMOVE EXIST SERVICE DROPS. INSTALL NEW DROP PER TEMPORARY SYSTEM U6, U8, V2, V4.
3. CONNECT EXIST 120/240 TRIPLEX TO TEMP POLES P-G2-T & P-G5-T & TRIM EXCESS CABLING. REFEED 1270, 301, 308, SEE U6, U8.



DETAIL GENERAL NOTES:

A **SEE U13 FOR PHOTOS OF THE POLES**

B SEE U5 AND 1/U8 FOR EXISTING SYSTEM. SEE V4 FOR TELECOMM ONE LINE DIAGRAMS

C WHEN NEW POLE LOCATION ENCOUNTERS BEDROCK, USE ROCK SOCKET INSTALLATION, SEE SHEET E2 AND SECTION 205.

DETAIL ELECTRICAL NOTES

1. INSTALL NEW POLE AND GUY
2. INSTALL NEW #4/0 TRIPLEX 120/240V DISTRIBUTION FROM POLES P-G1 TO P-S1. CONNECT INTO EXISTING RUN AT EXISTING POLE P-G1
3. INSTALL NEW SERVICE DROP #2 = 308 GORGE, 1270 SAYLES #1/0 301 GORGE
4. INSTALL MESSENGER FOR TELE & CABLE TV FROM P-S1 TO P-S2 AND P-G1 TO P-S1, SEE V SHEETS. (NO TRIPLEX IS RUN BETWEEN POLES P-S1 TO P-S2)

3 ELECTRICAL ONE LINE DIAGRAM - PERMANENT INSTALLATION
NO SCALE

DETAIL GENERAL NOTES:

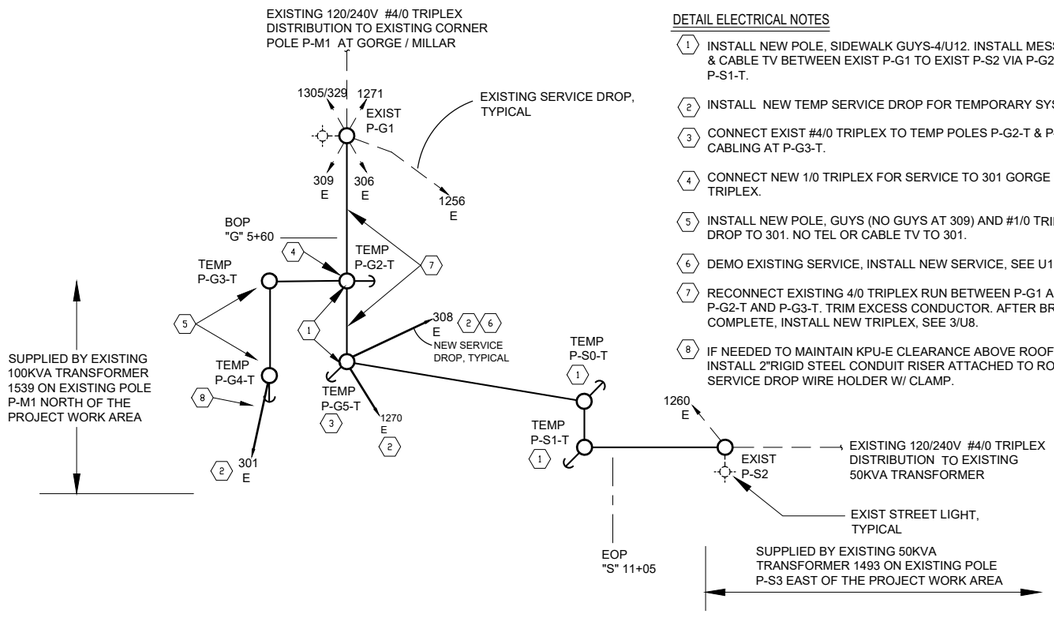
A SEE U13 FOR PHOTOS OF THE POLES

B SEE U5 AND 1/U8 FOR EXISTING SYSTEM. SEE V4 FOR TELECOMM ONE LINE DIAGRAMS

C WHEN NEW POLE LOCATION ENCOUNTERS BEDROCK, USE ROCK SOCKET INSTALLATION, SEE SHEET E2 AND SECTION 205.

DETAIL ELECTRICAL NOTES

1. INSTALL NEW POLE, SIDEWALK GUYS-4/U12. INSTALL MESSENGERS FOR TELE & CABLE TV BETWEEN EXIST P-G1 TO EXIST P-S2 VIA P-G2-T, P-G5-T, P-S0-T, P-S1-T.
2. INSTALL NEW TEMP SERVICE DROP FOR TEMPORARY SYSTEM U6, U8, V2, V4.
3. CONNECT EXIST #4/0 TRIPLEX TO TEMP POLES P-G2-T & P-G5-T. TRIM EXCESS CABLING AT P-G3-T.
4. CONNECT NEW 1/0 TRIPLEX FOR SERVICE TO 301 GORGE INTO RUN #4/0 TRIPLEX.
5. INSTALL NEW POLE, GUYS (NO GUYS AT 309) AND #1/0 TRIPLEX SERVICE DROP TO 301. NO TEL OR CABLE TV TO 301.
6. DEMO EXISTING SERVICE, INSTALL NEW SERVICE, SEE U11.
7. RECONNECT EXISTING 4/0 TRIPLEX RUN BETWEEN P-G1 AND P-S1 TO POLE P-G2-T AND P-G3-T. TRIM EXCESS CONDUCTOR. AFTER BRIDGE WORK IS COMPLETE, INSTALL NEW TRIPLEX, SEE 3/U8.
8. IF NEEDED TO MAINTAIN KPU-E CLEARANCE ABOVE ROOF: INSTALL 2"RIGID STEEL CONDUIT RISER ATTACHED TO ROOF EAVE W/ SERVICE DROP WIRE HOLDER W/ CLAMP.



2 ELECTRICAL ONE LINE DIAGRAM - TEMPORARY INSTALLATION
NO SCALE

PLANS DEVELOPED BY:

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

ELECTRICAL ONE LINE DIAGRAMS

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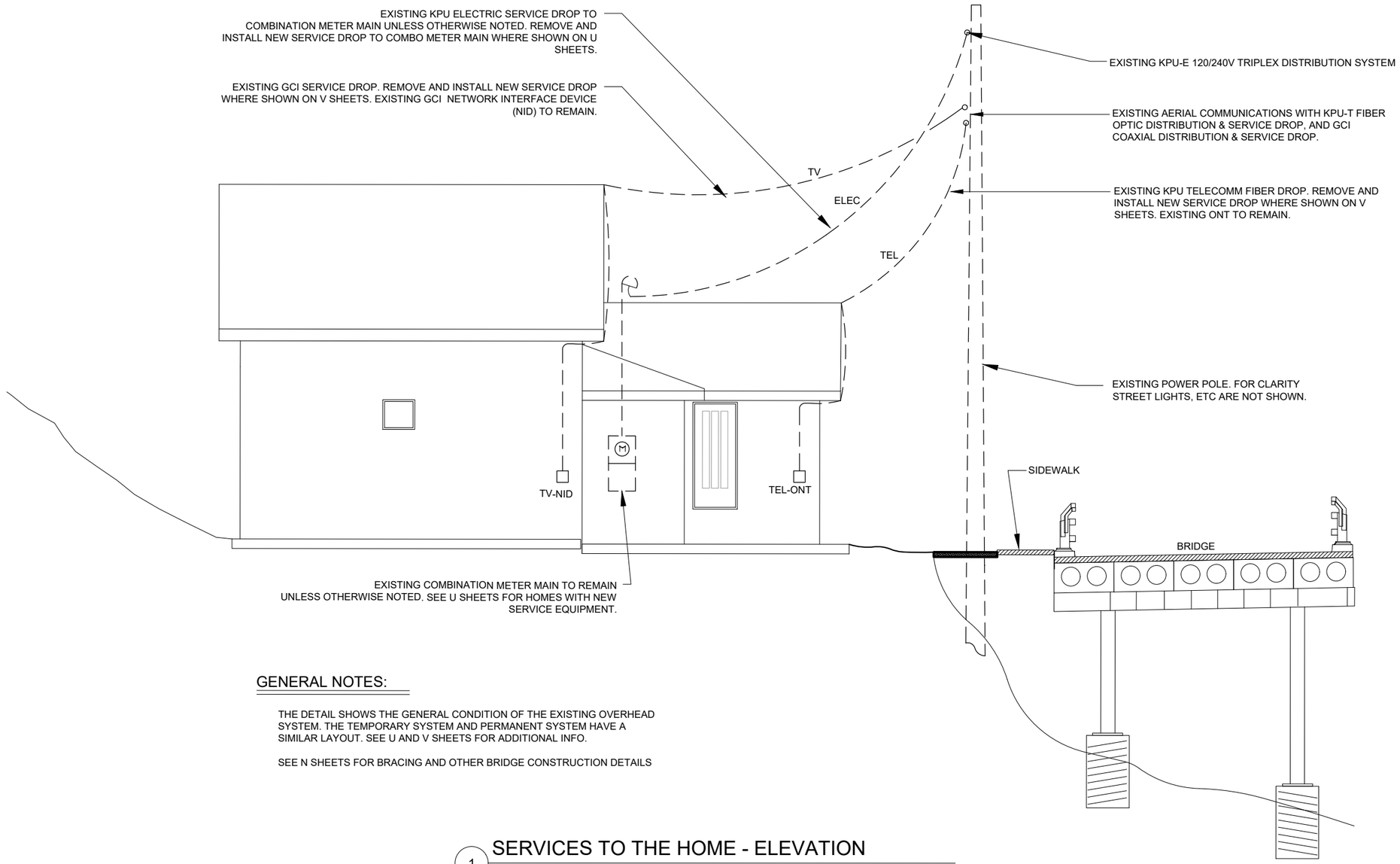
			ALASKA	0003225/SFHWY00070	2024	U9	U14



GENERAL NOTES:

THE DETAIL SHOWS THE GENERAL CONDITION OF THE EXISTING OVERHEAD SYSTEM. THE TEMPORARY SYSTEM AND PERMANENT SYSTEM HAVE A SIMILAR LAYOUT. SEE U AND V SHEETS FOR ADDITIONAL INFO.

SEE N SHEETS FOR BRACING AND OTHER BRIDGE CONSTRUCTION DETAILS

1 SERVICES TO THE HOME - ELEVATION

NO SCALE

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STATE OF ALASKA
49th
KEITH NELSON
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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

ELECTRICAL DETAILS

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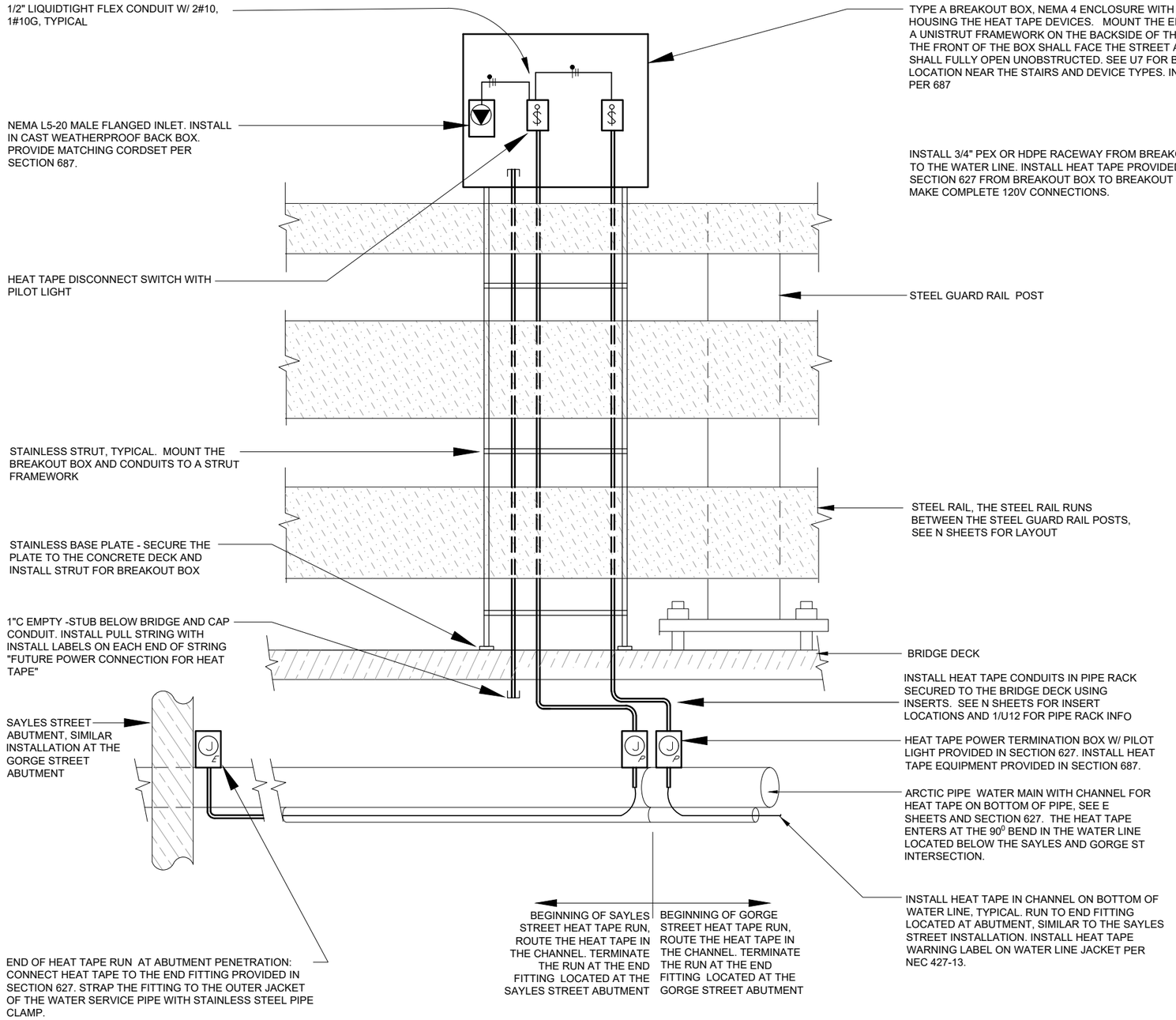


1 HEAT TAPE BREAKOUT BOX DETAIL

NO SCALE LOCATION NEAR STAIRS

DETAIL NOTES:

A HEAT TAPE, POWER CONNECTION AND END FITTINGS ARE PROVIDED IN SECTION 627. SEE 3/E5 FOR WATER LINE SECTION AND E7 FOR WATER SERVICE DETAILS

B DISCONNECTS AND RECEPTACLES SHALL BE LOCATED IN A BREAKOUT BOX MOUNTED ON THE GUARD RAIL. THE HEAT TAPE CABLE SHALL BE INSTALLED COMPLETE FROM THE POWER CONNECTION FITTING TO THE END FITTING. INSTALL HEAT TAPE IN CHANNEL LOCATED ON THE BOTTOM OF INSULATED ARCTIC WATER PIPE, SEE SECTION 627.

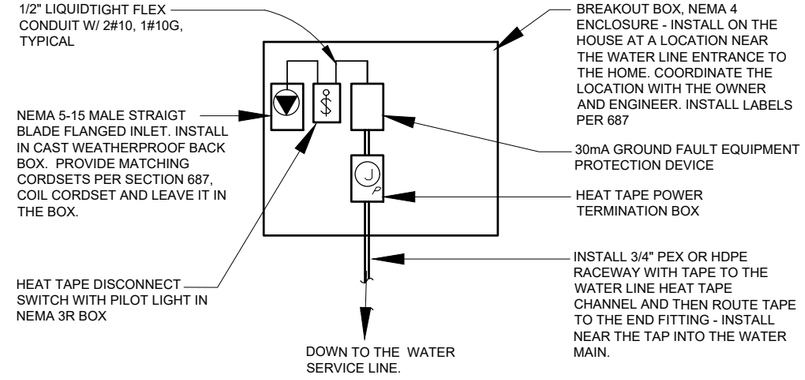
C ROUTE THE BRANCH CIRCUIT RACEWAY IN THE CONDUIT RACK, SEE 1/U12.

D LABEL THE RUN OF HEAT TAPE CABLE AND PROVIDE CIRCUIT DIAGRAM PER SECTION 687. LABEL COVER OF BOX: WATER LINE HEAT TAPE, PROVIDE OTHER LABELS PER SECTION 687

E SEE N SHEETS FOR GUARD RAIL DETAILS

F COORDINATE LOCATION OF THE BREAKOUT BOX AND INSTALLATION METHODS WITH THE ENGINEER PRIOR TO COMMENCING WITH THE ROUGH-IN WORK

G IN THE SUBMITTAL PHASE, COORDINATE THE LOCATION OF THE INSERTS IN THE DECK WITH THE BRIDGE DECK MANUFACTURER.



2 HEAT TAPE INSTALLATION AT HOUSE

NO SCALE

A. THE INSTALLATION IS SIMILAR TO 1/U10.

B. INSTALL HEAT TAPE WARNING LABEL ON THE JACKET OF THE WATER SERVICE LINE PER NEC 427-13.

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

ELECTRICAL DETAILS

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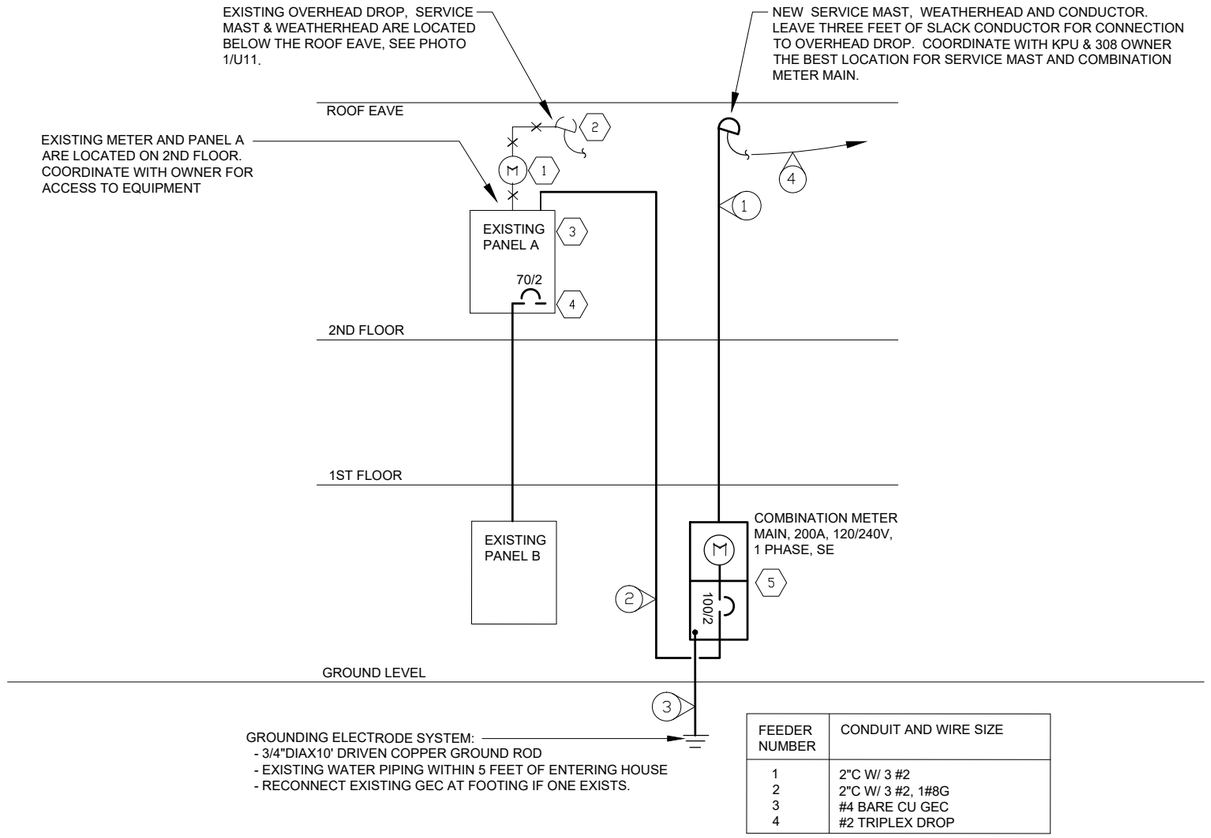


FEEDER NUMBER	CONDUIT AND WIRE SIZE
1	2"C W/ 3 #2
2	2"C W/ 3 #2, 1#8G
3	#4 BARE CU GEC
4	#2 TRIPLEX DROP

NEC LOAD CALC:
RECONNECT EXISTING ELECTRICAL SERVICE WHICH IS 100A, 120/240V, SINGLE PHASE. THE SERVICE LOAD HAS NOT CHANGED. THE UTILITY OVERHEAD SERVICE DROP IS SIZED PER KPU ELECTRIC STANDARD SERVICE CONDUCTOR SIZE.

1 SERVICE ONE LINE DIAGRAM -308 GORGE STREET
NO SCALE

ELECTRICAL NOTES:

1. REMOVE THE EXISTING SURFACE MOUNTED METER AND ASSOCIATED CONDUIT AND WIRE. PATCH AND PAINT EXISTING SURFACES TO MATCH EXISTING FINISHES.
2. EXIST SERVICE MAST LOCATED BELOW THE 2ND FLOOR ROOF EAVE, REMOVE EXISTING SERVICE MAST, SERVICE CONDUCTOR AND CONDUIT. INSTALL NEW RISER MAST, WEATHERHEAD, AND CONDUCTORS -CONNECT TO NEW COMBINATION METER MAIN. PATCH AND PAINT RISER CONDUIT & HOUSE SIDING TO MATCH EXISTING. COORDINATE WITH KPU TO DISCONNECT AND RECONNECT THEIR TRIPLEX OVERHEAD DROP.
3. EXISTING SQUARE D Q0 125A, 12 CIRCUIT PANEL WITH MAIN LUGS, 6 AVAILABLE SPACES.
4. INSTALL NEW BREAKER IN AVAILABLE SPACE (CIRCUIT 5,7) AND CONNECT THE EXISTING PANEL B FEEDER (#4 WIRE) TO THE NEW BREAKER.
5. COORDINATE THE BEST LOCATION FOR THE COMBINATION METER MAIN WITH THE OWNER AND KPU-E

GENERAL NOTES:

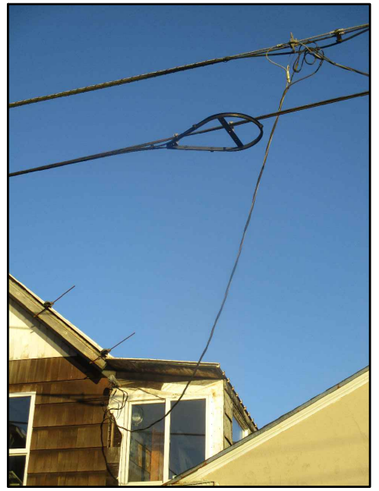
A SERVICE WORK SHALL COMPLY WITH THE LATEST KPU INSTALLATION STANDARDS. PRIOR TO INSTALLATION, CONFIRM THE INSTALLATION MEETS THEIR REQUIREMENTS.

B OBTAIN PERMITS & PLAN REVIEW FROM CITY OF KETCHIKAN BUILDING DEPT.

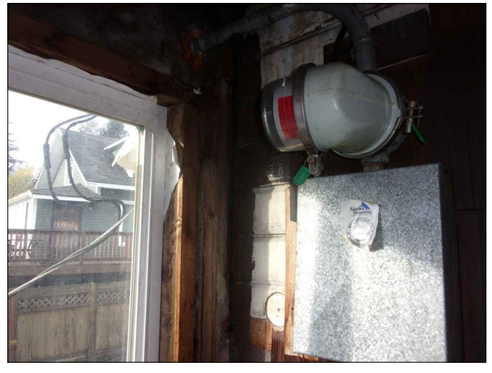
C PRIOR TO BEGINNING THE INSTALLATION WORK, MEET WITH THE OWNER TO COORDINATE THE WORK EFFORT INCLUDING SCHEDULING THE OUTAGES, THE NEW EQUIPMENT LOCATIONS AND CONDUIT ROUTES ON THE HOME, ROOF, SIDING AND INTERIOR WALL REPAIR, FINISH MATERIAL, AND PAINT COLORS.

D THIS DETAIL ILLUSTRATES THE BASIC CONCEPT FOR INSTALLING NEW SERVICE EQUIPMENT AT 308 GORGE STREET. PATCH AND PAINT ALL DEMOLISHED FINISHES, EXISTING OPENINGS IN ROOFS AND WALLS TO MATCH EXISTING SURFACES. PROVIDE ALL COMPONENTS FOR A COMPLETE INSTALLATION.

E FIELD CONFIRM EXISTING EQUIPMENT LAYOUT, FEEDER CONNECTIONS PRIOR TO ORDERING NEW SERVICE EQUIPMENT



1 308 GORGE SERVICE DROP
NO SCALE
KPU-E METER IS LOCATED ON THE 2ND FLOOR (BEHIND THE WINDOW ON THE LEFT).



2 308 METER AND PANEL
NO SCALE

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

ELECTRICAL DETAILS

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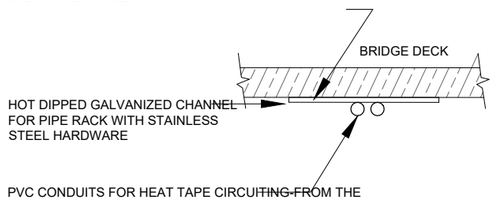
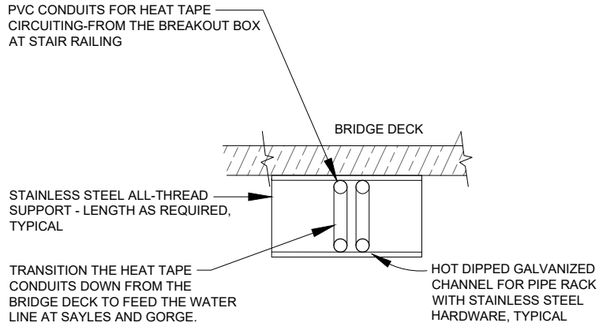
			ALASKA	0003225/SFHWY00070	2024	U12	U14

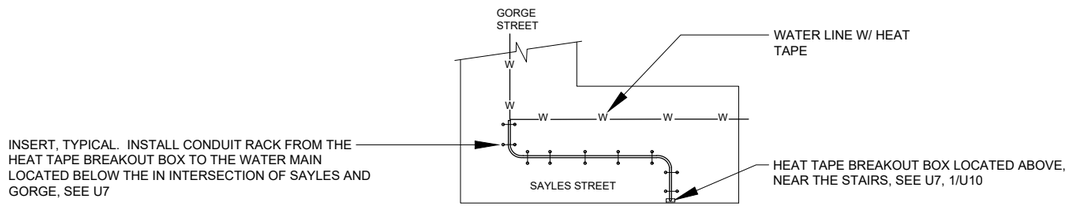
SECURE PIPE RACK TO CONCRETE BRIDGE DECK USING PREINSTALLED INSERTS IN THE BRIDGE DECK, SEE N SHEETS. COORDINATE THE INSERT LOCATIONS & RACK MOUNTING REQUIREMENTS WITH THE BRIDGE DECK MFR DURING THE SUBMITTAL PHASE.



CONDUIT RUNS UNDER BRIDGE DECK



CONDUIT TRANSITION TO WATER LINE



INSERTS & TRAPEIZE - UNDER THE BRIDGE DECK

1 CONDUIT RACK - UNDER THE BRIDGE DECK

NO SCALE

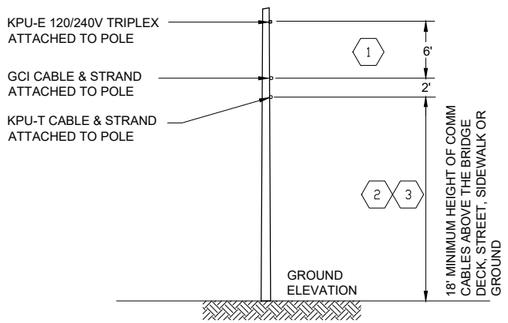
DETAIL NOTES:

A DETAIL SHOWS A GENERIC SECTION OF THE PIPE RACK. NOT ALL CONDUITS OR COMPONENTS ARE SHOWN, SEE U SHEETS FOR ADDITIONAL INFO.

B CHANNEL IS HOT DIP GALVANIZED WITH STAINLESS STEEL HARDWARE AND ALL-THREAD ROD

C SEE N35 & N47 FOR BRACING INFO.

D INSERTS ARE PREINSTALLED AND CANNOT BE INSTALLED IN THE BRIDGE DECK IN THE FIELD. COORDINATE THE FINAL INSERT LOCATIONS WITH THE DECK MANUFACTURER DURING THE SUBMITTAL PHASE. SEE N32 FOR INSERT LAYOUT AND N25 & N47 FOR CONDUIT RACK INFO.



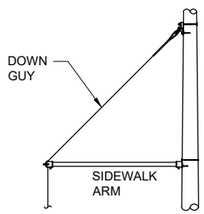
THE DETAIL SHOWS THE GENERAL FRAMING REQUIREMENTS FOR KPU POWER POLES.

2 KPU GENERAL FRAMING GUIDE

NO SCALE

ELECTRICAL NOTES

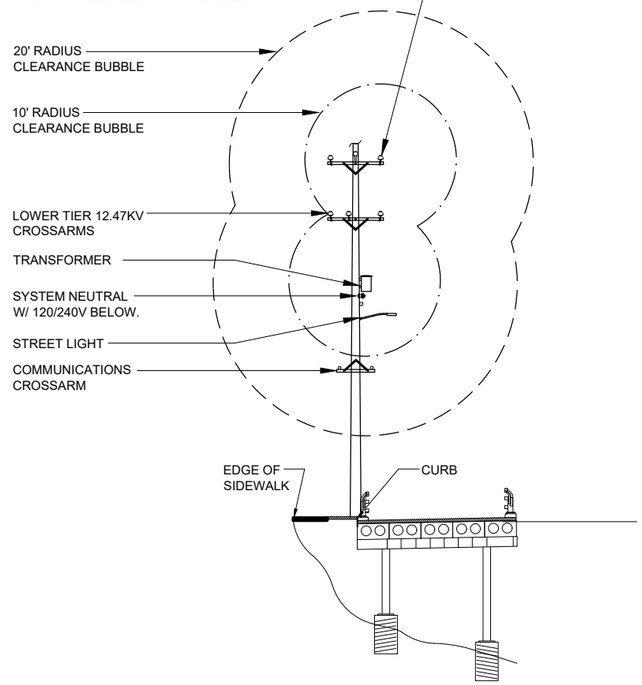
1. THE MINIMUM DISTANCE BETWEEN ANY OF THE COMM LINES AND THE 120/240V DISTRIBUTION SYSTEM IS 48"
2. MAINTAIN A MINIMUM OF 5' HORIZONTAL DISTANCE BETWEEN OVERHEAD CONDUCTORS AND BUILDINGS & STRUCTURES.
3. MINIMUM VERTICAL CLEARANCE OVER BUILDINGS/STRUCTURES SHALL BE 10'.



4 SIDEWALK GUY

NO SCALE

TOP TIER CROSSARMS ARE NOT INSTALLED IN THE PROJECT WORK AREA. THEY MAY BE INSTALLED IN AREAS NEAR THE WORK AREA - WHEN TOP TIER CROSSARMS ARE INSTALLED, CONFIRM THE OPERATING VOLTAGE.



3 OSHA CLEARANCE BUBBLE

NO SCALE

GENERAL NOTES:

A THE DETAIL SHOWS EXISTING ARRANGEMENT ON EXISTING POLE P-M1 (GORGE AND MILLAR)

B THE DETAIL SHOWS THE 10 AND 20 FOOT CLEARANCE BUBBLES DRAWN CENTERED ON THE INSULATOR LOCATED ON THE RIGHT SIDE OF THE TOP CROSSARM.

C WORKING INSIDE OF THE 10 FOOT BUBBLE REQUIRES A CERTIFIED OPERATOR ON THE GROUND TO MONITOR CONSTRUCTION EQUIPMENT AND DISTANCE FROM ENERGIZED ELECTRICAL,EQUIPMENT, CONDUCTORS, ETC.

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

ELECTRICAL DETAILS

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	U13	U14

1 301 GORGE KPU-E SERVICE

NO SCALE

METERS ARE LOCATED ON GROUND LEVEL (BELOW THE BRIDGE DECK)

2 308 GORGE & 1270 SAYLES

NO SCALE

THE RIGHTMOST WINDOWS ARE THE LOCATION OF THE SERVICE MAST AT 309. SEE U11 FOR ADDITIONAL 309 GORGE PHOTOS.

.

3 1270 SAYLES SERVICES

NO SCALE

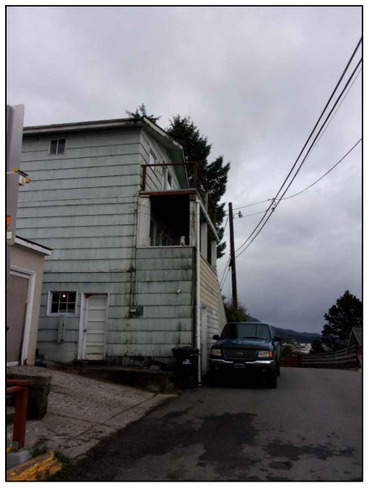
4 301 GORGE SERVICE DROPS

NO SCALE

5 POLE P-S1 - AT STAIRS

NO SCALE

EXISTING TERMINALS FSAY-1270 AND TSAY-1270
EXISTING STREET LIGHT



6 POLE P-S2 & 1248 COMM DROPS

NO SCALE

7 POLE P-S3

NO SCALE

8 POLE P-G1

NO SCALE

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ELECTRICAL PHOTOS

FILE	DATE	LAYOUT	U13 FOTO	DESIGNED	CHECKED	DRAFTED
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	U14	U14

Overhead Distrribution Sytstem												
Information for the Existing Installation												
Pole	KPU #	Status	Height	Class	Xfm	Xfm #	Xfm Phase	RUS Xfm Detail	Street Light	Guy	120/240V Distribution	Comments
P-G1	1342-A3-3	E	45?	2	N		A		Y	Y	Exist #4/0 Triplex	Existing triplex originates at a 100kVA transformer #1539 on Pole P-M1 on the corner of Millar and Gorge.
P-S1	1342-A4-5	E	50	2	N		A		Y	Y	Exist #4/0 Triplex	Existing triplex running along Gorge deadends at P-S1. There is no triplex running along Sayles from P-S1 to P-S2.
P-S2	1341-D4-7	E	45	2	N		C		Y	Y	Exist #4/0 Triplex	Existing triplex deadends at P-S2; originates at a 50kVA transformer on Pole P-S3 which is the next pole to the east on Sayles Street.
Information for the Temporary Installation												
P-S1-T		N	55	2	N		A		N	Y	None	Install new tele and cable tv messengers. See V sheets for cabling.
P-S0-T		N	45	2	N		A		N	Y	None	Install new tele and cable tv messengers. See V sheets for cabling.
P-G2-T		N	45	2	N		A		N	Y	Exist #4/0 Triplex	Reinstall existing triplex and tele and cable tv messengers. See V sheets for cabling.
P-G3-T		N	45	2	N		A		N	Y	#1/0 Triplex	Install new triplex service to 301 Gorge.
P-G4-T		N	45	2	N		A		N	Y	#1/0 Triplex	Install new triplex service to 301 Gorge.
P-G5-T		N	45	2	N		A		N	Y	Exist #4/0 Triplex	Reinstall existing triplex and tele and cable tv messengers. See V sheets for cabling.
Information for the New Installation												
P-S1-N		N	55	2	N		A		Y	Y	#4/0 Triplex	Install new triplex running along Gorge deadends at P-S1. Install new tele and cable tv messengers. See V sheets for cabling.
Information for the Existing Transformers												
P-M1	1342-A3-3	E			100kVA	1539	A	G39				Existing transformer to remain
P-S3	1341-D4-6	E			50kVA	1493	C	G39				Existing transformer to remain

E = EXISTING
N = NEW
R/R = REMOVE & REPLACE

SERVICE INFORMATION
120/240V, Single Phase, Three Wire Distribution

	Address	Street	# Existing Meters	Existing Triplex (Alum)	Existing Drop	New Service	GES	Comments	Existing Electric Service Equipment	KPU Meter / Mfr.
1	1305 / 329	Gorge	1	#2	Pole P-M1		NA	KPU-E and KPU-T services are from Millar aerial distribution. The GCI service originates on Pole P-G1; NID located under deck, (2) splitters.	House is not involved in the project work area	House is not involved in the project work area
2	1271	Gorge	1	#2	Pole P-G1		No GEC visible		Existing service equipment remains; Meter only, no disconnect or CB	Westinghouse 9465
3	309 Garage	Gorge	1	#2	Pole P-G1		No GEC visible	Inactive Service; No Meter	Existing service equipment remains; Circle AW Combination meter main w/ 100A CB	No Meter
4	309	Gorge	1	#2	Pole P-G1		No GEC visible		Existing service equipment remains; B-Line meter main w/ 100A CB	
5	308 Garage	Gorge	1	#2	Pole P-G1		No GEC visible		Existing service equipment remains; Combination meter main w/CB: No Meter, CB locked closed	27099; Itron
6	308	Gorge	1	#2	Midspan Tap, P-G1 - P-S1	Y	#6G Stranded, #10G	Demo existing service. Install new service. See U11 New Service Detail	Existing service mast with conductors routed into the house; no meter or disconnect is visible	No meter is visible
7	301	Gorge	3	#1/0	Pole P-S1		#8G	Meter Pack w/ 3 Breakers: Top 125/2, Middle 100/2, Bottom 100/2	Existing service equipment remains; Square D 300A meter main w/ (3) meters, (2) 100A & (1) 125A-(Top) CBs	21219 top; 21218 middle; 21217 bottom; Itron
8	1270	Sayles	1	#2	Midspan Tap, P-G1 - P-S1		No GEC visible		Existing service equipment remains; B-Line meter main w/ 100A CB	11828; Westinghouse
9	1260	Sayles	1	#2	Pole P-S2		No GEC visible		Existing service equipment remains; Meter only, no disconnect or CB	18038; Itron
10	1248	Sayles	1	#2	Midspan Tap, P-S2 - P-S3		No GEC visible	Service is fed from midspan tap P-S2 - P-S3 and remains; no work required on overhead drop	Existing service equipment remains; meter main w/???A CB, >7 AFG NEC=cannot access equipment.	14447; ABB

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ELECTRICAL SERVICE & POLE INFORMATION

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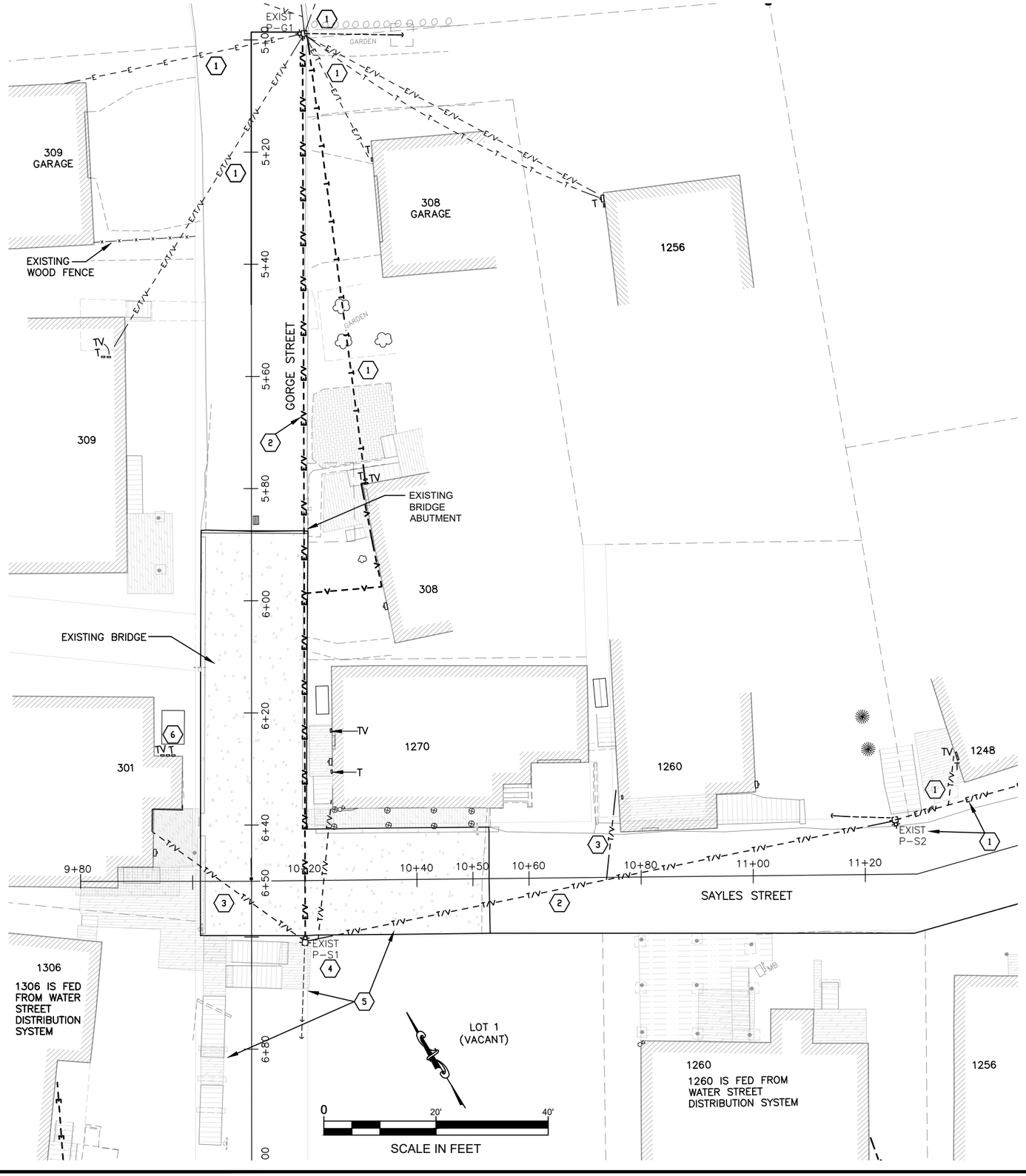

GENERAL NOTES

A EXISTING AERIAL DISTRIBUTION SYSTEM AND SERVICE DROPS TO THE HOMES ARE TO REMAIN UNLESS OTHERWISE NOTED.

B INSTALL A TEMPORARY AERIAL POWER DISTRIBUTION SYSTEM WITH SERVICE DROPS TO THE HOMES PRIOR TO BRIDGE DEMOLITION. THE TEMPORARY SYSTEM IS TO ALLOW COMPLETE ACCESS TO THE BRIDGE WORK AREA WITH NO OVERHEAD LINES CROSSING THE EXISTING BRIDGE DECK, SEE U11, V SHEETS.

C AFTER THE NEW BRIDGE IS INSTALLED, INSTALL THE PERMANENT AERIAL POWER DISTRIBUTION SYSTEM WITH AERIAL DROPS TO THE HOMES, SEE U12, V SHEETS.

D E = KPU-E 120/240 VOLT; V = CABLE TV -COAXIAL CABLE, T = KPU-T FIBER OPTIC. ELECTRICAL AND CABLE TV ARE SHOWN FOR REFERENCE ONLY, SEE U5-7 AND V5-8 FOR THEIR INSTALLATION.

ELECTRICAL NOTES

1. EXISTING AERIAL CABLING TO REMAIN
2. DISCONNECT AND SWING EXISTING AERIAL DISTRIBUTION TO TEMPORARY POLE. COIL EXCESS CONDUCTOR. SEE U11, V2 FOR TEMPORARY SYSTEM, SEE U12, V3 FOR NEW SYSTEM.
3. DISCONNECT AND REMOVE EXISTING SERVICE DROP. SEE U11, V2 FOR TEMPORARY SYSTEM, SEE U12, V3 FOR NEW SYSTEM.
4. SEE U10 - REMOVAL OF EXISTING POLE P-S1 AND INSTALLATION OF NEW TEMPORARY POLE P-ST-1 AND LAND EXISTING CABLING ON THE TEMPORARY POLE, SEE U11
5. EXISTING BRIDGE AND STAIRS TO BE DEMOLISHED, SEE F AND N SHEETS.
6. ONT AND NID ARE LOCATED AT GROUND LEVEL (BELOW THE BRIDGE DECK).

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KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

TELECOMM SITE PLAN EXISTING SYSTEM

DATE	9/23/24
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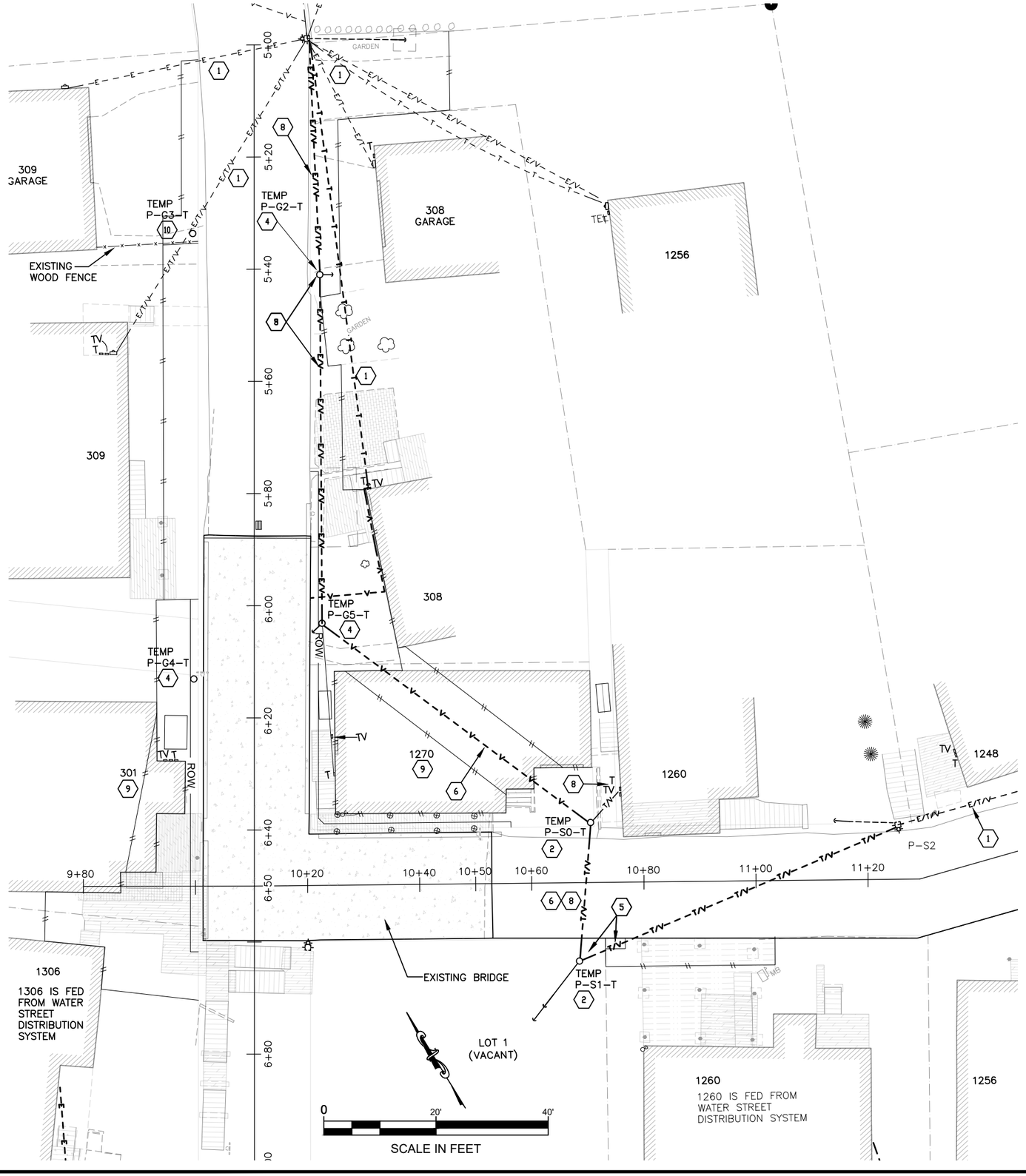
LAYOUT	V1
FILE	S&G-U1+V PSE-cd 240923.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	V2	V8



GENERAL NOTES

A EXISTING AERIAL DISTRIBUTION SYSTEM AND SERVICE DROPS TO THE HOMES ARE TO REMAIN UNLESS OTHERWISE NOTED.

B INSTALL A TEMPORARY AERIAL POWER DISTRIBUTION SYSTEM WITH SERVICE DROPS TO THE HOMES PRIOR TO BRIDGE DEMOLITION. THE TEMPORARY SYSTEM IS TO ALLOW COMPLETE ACCESS TO THE BRIDGE WORK AREA WITH NO OVERHEAD LINES CROSSING THE EXISTING BRIDGE DECK, SEE U11, V SHEETS.

C E = KPU-E 120/240 VOLT; V = CABLE TV -COAXIAL CABLE, T = KPU-T FIBER OPTIC. ELECTRICAL AND CABLE TV ARE SHOWN FOR REFERENCE ONLY, SEE U5-7 AND V5-8 FOR THEIR INSTALLATION.

ELECTRICAL NOTES

1. EXISTING AERIAL CABLING TO REMAIN
2. INSTALL NEW TEMPORARY POLE P-S1-T AND LAND EXISTING AERIAL CABLING ON THE TEMPORARY POLE. REMOVE EXCESS CONDUCTOR.
3. INSTALL NEW SERVICE DROP.
4. NEW TEMPORARY POLE W/ MESSENGERS, SEE U6.
5. EXISTING KPU-T CABLING, REINSTALL AERIAL TERMINALS AT TEMPORARY POLE AND COIL SPARE CABLE ON THE POLE
6. GCI - CABLE TV CABLING, SEE V5-8
7. EXISTING RECONFIGURE KPU-T DROP TO 1260
8. DISCONNECT AND SWING EXISTING TELEPHONE AERIAL DISTRIBUTION FROM EXIST POLE P-G1 TO TEMPORARY POLES P-G2-T AND P-G5-T. COIL EXCESS CONDUCTOR. SEE U6 AND V4 SHEETS FOR FOR ADDITIONAL INFO, SEE U8, V3 SHEETS FOR NEW SYSTEM.
9. HOME HAS NO TELEPHONE OR CABLE TV DROPS FOR THE TEMPORARY SYSTEM. DISCONNECT EXISTING DROP FOR TEMPORARY SYSTEM. SEE V3 FOR NEW DROP FOR THE PERMANENT SYSTEM. SEE U6 FOR ELECTRICAL SERVICE DROP.
10. NEW TEMPORARY POLE P-G3-T IN TCE, SEE U6. IF EXISTING OVERHEAD DROPS TO THE 309 RESIDENCE TO ARE WITHIN 2' OF THE POLE, FASTEN THE EXISTING DROPS TO THE POLE.

PLANS DEVELOPED BY:

NELSON ELECTRICAL ENGINEERING.
209 Bunchberry Road
Ketchikan, Alaska 99901
907-617-7761

STATE OF ALASKA 49th KEITH NELSON EE-7655 9-23-24 REGISTERED PROFESSIONAL ENGINEER

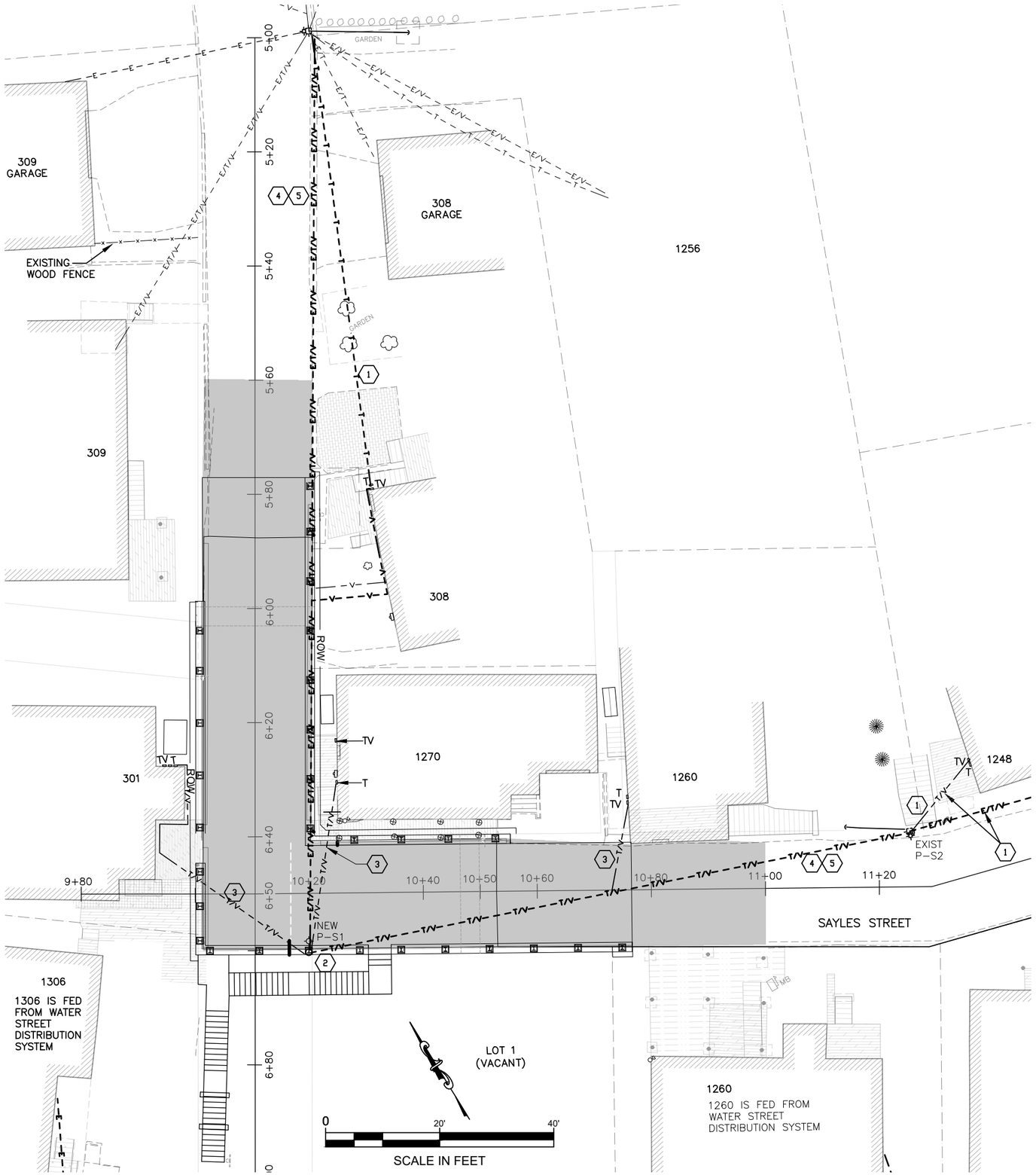
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

TELECOMM SITE PLAN TEMPORARY SYSTEM

DRAFTED AB | DESIGNED | CHECKED | LAYOUT V2 | 9/23/24 DATE | FILE S&G-U1+V PSE-cd 240923.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	V3	V8



ELECTRICAL NOTES

A EXISTING AERIAL DISTRIBUTION SYSTEM AND SERVICE DROPS TO THE HOMES ARE TO REMAIN UNLESS OTHERWISE NOTED.

B AFTER THE NEW BRIDGE IS INSTALLED, INSTALL THE PERMANENT AERIAL DISTRIBUTION SYSTEM WITH AERIAL DROPS TO THE HOMES, SEE U7, V SHEETS.

C AFTER THE NEW PERMANENT AERIAL SYSTEM IS INSTALLED, DISCONNECT AND REMOVE THE TEMPORARY AERIAL DISTRIBUTION SYSTEM SHOWN ON U6-7 AND V SHEETS.

D E = KPU-E 120/240 VOLT; V = CABLE TV -COAXIAL CABLE, T = KPU-T FIBER OPTIC. ELECTRICAL AND CABLE TV ARE SHOWN FOR REFERENCE ONLY, SEE U5-7 AND V5-8 FOR THEIR INSTALLATION.

ELECTRICAL NOTES

1. EXISTING AERIAL CABLING TO REMAIN
2. INSTALL NEW PERMANENT POLE.
3. INSTALL NEW SERVICE DROP.
4. INSTALL NEW MESSENGER, REATTACH EXISTING AERIAL CABLING AND TERMINALS FOR RUNS FROM PG1 TO P-S1 AND P-S1 TO P-S2..
5. AFTER NEW PERMANENT SYSTEM IS INSTALLED REMOVE TEMPORARY POLES AND ASSOCIATED CABLING.

PLANS DEVELOPED BY:

NELSON ELECTRICAL ENGINEERING.
209 Bunchberry Road
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907-617-7761

STATE OF ALASKA
49th
Keith Nelson
KEITH NELSON
EE-7855
9-23-24
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
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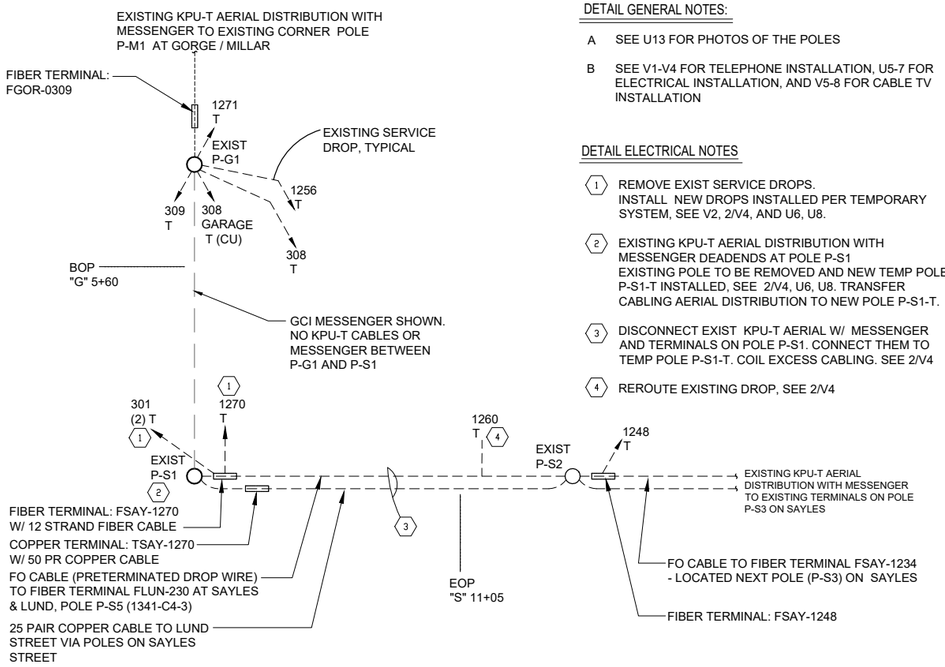
(907) 465-1763

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

TELECOMM SITE PLAN PERMANENT SYSTEM

DATE	9/23/24
DRAFTED	AB
DESIGNED	
CHECKED	
LAYOUT	V3
FILE	S&G-U1+V PSE-cd 240923.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0003225/SFHWY00070	2024	V4	V8



1 TELEPHONE ONE LINE DIAGRAM - EXISTING INSTALLATION
NO SCALE

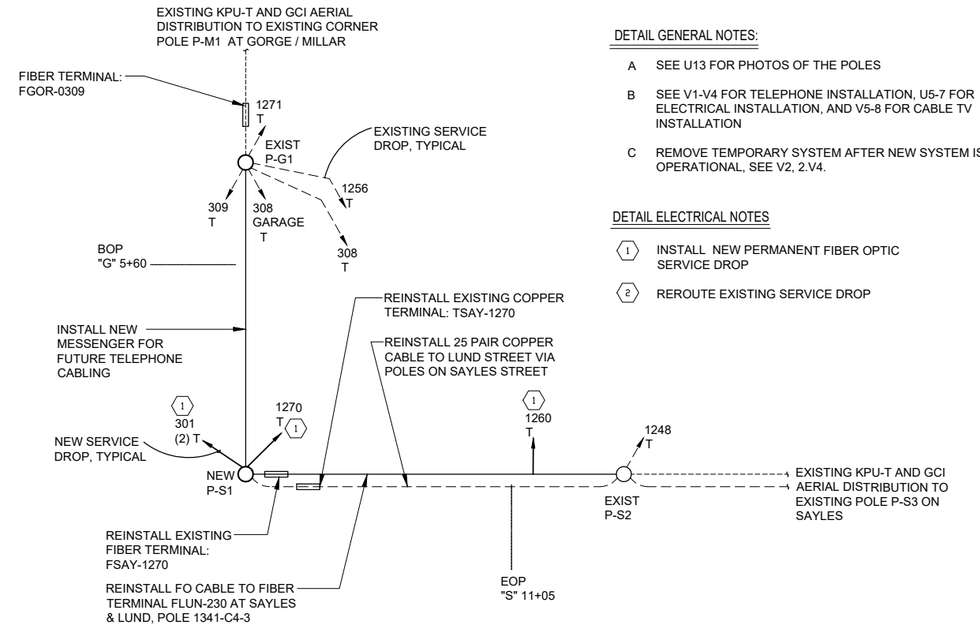
DETAIL GENERAL NOTES:

A SEE U13 FOR PHOTOS OF THE POLES

B SEE V1-V4 FOR TELEPHONE INSTALLATION, U5-7 FOR ELECTRICAL INSTALLATION, AND V5-8 FOR CABLE TV INSTALLATION

DETAIL ELECTRICAL NOTES

1. REMOVE EXIST SERVICE DROPS. INSTALL NEW DROPS INSTALLED PER TEMPORARY SYSTEM, SEE V2, 2/V4, AND U6, U8.
2. EXISTING KPU-T AERIAL DISTRIBUTION WITH MESSENGER DEADENDS AT POLE P-S1 EXISTING POLE TO BE REMOVED AND NEW TEMP POLE P-S1-T INSTALLED, SEE 2/V4, U6, U8. TRANSFER CABLING AERIAL DISTRIBUTION TO NEW POLE P-S1-T.
3. DISCONNECT EXIST KPU-T AERIAL W/ MESSENGER AND TERMINALS ON POLE P-S1. CONNECT THEM TO TEMP POLE P-S1-T. COIL EXCESS CABLING. SEE 2/V4
4. REROUTE EXISTING DROP, SEE 2/V4



3 TELEPHONE ONE LINE DIAGRAM - PERMANENT INSTALLATION
NO SCALE

DETAIL GENERAL NOTES:

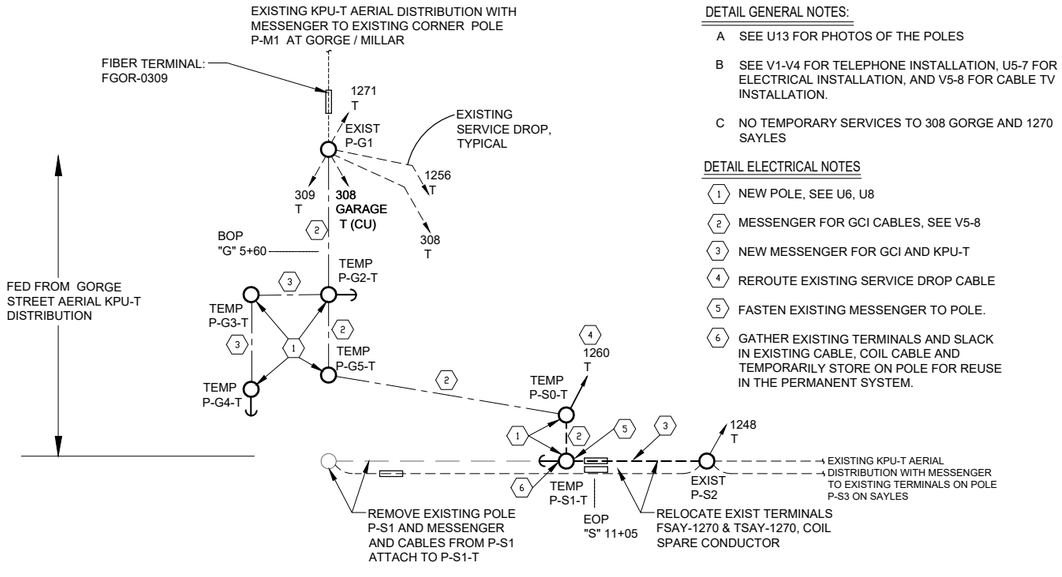
A SEE U13 FOR PHOTOS OF THE POLES

B SEE V1-V4 FOR TELEPHONE INSTALLATION, U5-7 FOR ELECTRICAL INSTALLATION, AND V5-8 FOR CABLE TV INSTALLATION

C REMOVE TEMPORARY SYSTEM AFTER NEW SYSTEM IS OPERATIONAL, SEE V2, 2.V4.

DETAIL ELECTRICAL NOTES

1. INSTALL NEW PERMANENT FIBER OPTIC SERVICE DROP
2. REROUTE EXISTING SERVICE DROP



2 TELEPHONE ONE LINE DIAGRAM - TEMPORARY INSTALLATION
NO SCALE

DETAIL GENERAL NOTES:

A SEE U13 FOR PHOTOS OF THE POLES

B SEE V1-V4 FOR TELEPHONE INSTALLATION, U5-7 FOR ELECTRICAL INSTALLATION, AND V5-8 FOR CABLE TV INSTALLATION.

C NO TEMPORARY SERVICES TO 308 GORGE AND 1270 SAYLES

DETAIL ELECTRICAL NOTES

1. NEW POLE, SEE U6, U8
2. MESSENGER FOR GCI CABLES, SEE V5-8
3. NEW MESSENGER FOR GCI AND KPU-T
4. REROUTE EXISTING SERVICE DROP CABLE
5. FASTEN EXISTING MESSENGER TO POLE.
6. GATHER EXISTING TERMINALS AND SLACK IN EXISTING CABLE, COIL CABLE AND TEMPORARILY STORE ON POLE FOR REUSE IN THE PERMANENT SYSTEM.

PLANS DEVELOPED BY:
NELSON ELECTRICAL ENGINEERING.
209 Bunchberry Road
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907-617-7761

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER
KEITH NELSON
EE-7655
9-23-24

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465-1763

KTN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

TELEPHONE ONE LINE DIAGRAMS

DRAFTED AB | DESIGNED | CHECKED | LAYOUT V4 | 9/23/24 DATE | FILE S&G-U1+V PSE-cd 240923.dwg

LEGEND

*SYMBOLS ARE PROVIDED FOR POSITIONAL REFERENCE ONLY, GCI SYSTEM DESIGN SHEETS SHOULD BE REFERRED TO FOR ACTUAL SYSTEM LAYOUT AND SPLICING.

FACILITY LINE TYPES & COLOR CODES

AERIAL FACILITY
UNDERGROUND FACILITY
YELLOW - EXISTING GCI FACILITY TO REMAIN

AERIAL FACILITY
UNDERGROUND FACILITY
BLUE - EXISTING GCI FACILITY TO BE ADJUSTED

AERIAL FACILITY
UNDERGROUND FACILITY
RED - EXISTING GCI FACILITY TO BE RETIRED

AERIAL FACILITY
UNDERGROUND FACILITY
GREEN - NEW GCI FACILITY TO BE INSTALLED
*FACILITY FULLY FUNDED BY AGENCY

AERIAL FACILITY
UNDERGROUND FACILITY
ORANGE - NEW GCI FACILITY TO BE INSTALLED
*BETTERED FACILITY PARTIALLY FUNDED BY AGENCY

AERIAL FACILITY
UNDERGROUND FACILITY
BROWN - NEW GCI FACILITY TO BE INSTALLED
*FACILITY NON-PARTICIPATING IN AGENCY FUNDING

AERIAL FACILITY
UNDERGROUND FACILITY
PURPLE - TEMPORARY GCI FACILITY TO BE INSTALLED

AERIAL FACILITY SYMBOLS

POLE 1 — UTILITY POLE W/ POLE NUMBER
(1) 2" RISER — GCI RISER POLE W/ RISER INFO
GUY POLE
DROP POLE
15' — ANCHOR W/ LEAD LENGTH
FIBER SLACK LOOP
FIBER SPLICE CLOSURE
OPTICAL NODE
AMPLIFIER
MB — MINI BRIDGER AMPLIFIER
LINE EXTENDER
DIRECTIONAL COUPLER
SPLITTER
TAP
SB — SPLICE BLOCK

UNDERGROUND FACILITY SYMBOLS

FO — FIBER VAULT
MH — STEEL LID MANHOLE
HH — SMALL HANDHOLE
NODE PEDESTAL
AMPLIFIER PEDESTAL
LINE EXTENDER PEDESTAL
PEDESTAL W/ DIRECTIONAL COUPLER
SPLITTER PEDESTAL
TAP PEDESTAL
SB — PEDESTAL W/ SPLICE BLOCK
DROP PEDESTAL
T — TAP IN EXTERIOR MOUNTED BOX
PS — POWER SUPPLY CABINET
MB — METER BASE / LOAD CENTER
XC — OPTICAL CROSS CONNECT CABINET

FACILITY ID CONVENTION

UG/100'/(3) 1.25" HDPE-288F, 12F/CIC-.875C

- UG — FACILITY INSTALL LOCATION / METHOD
- 100' — FACILITY LENGTH
- (3) 1.25" HDPE-288F, 12F/CIC-.875C — CONDUIT OR STRAND TYPE (QUANTITY, SIZE, & MATERIAL)
- 12F/CIC-.875C — CABLE FACILITY WITHIN OR SUPPORTED BY PREVIOUSLY SPECIFIED CONDUIT OR STRAND
- / — ADDITIONAL FACILITIES WITHIN SAME ALIGNMENT SEPARATED BY SLASH OR RETURN

FACILITY ID SUFFIXES

C - COAXIAL CABLE
F - FIBER OPTIC CABLE

COMMON ABBREVIATIONS

AC - ASPHALT CUT
CIC - CABLE IN CONDUIT
DBC - DIRECT BURIED CABLE
DB - DIRECTIONAL BORE
EHS - EXTRA HIGH STRENGTH (STRAND)
HD - HAND DIG
HB - HOG BORE
JB - JOINT BORE
JT - JOINT TRENCH
OH - OVERHEAD
PSF - POWER SUPPLY FEED
STM - STATUS MONITORING
SVC - SERVICE DROP
UG - UNDERGROUND

SPECIAL CONSTRUCTION METHODS

(4" DB/50')

- (4" DB — CONSTRUCTION METHOD
- 50') — FOOTAGE

* FOOTAGES ARE BROKEN OUT FROM TOTAL FOOTAGE FOR REFERENCE

PROJECT NOTES

1.) KPU CONTRACTOR TO COMPLETE THE INSTALLATION OF GCI'S TEMPORARY AND PERMANENT MESSENGER STRAND.

2.) KPU CONTRACTOR TO SOURCE AND PROVIDE THE REQUIRED MATERIALS FOR THE INSTALLATION OF GCI'S TEMPORARY AND PERMANENT MESSENGER STRAND.
(GCI CONSTRUCTION MANAGER TO PROVIDE SPECIFICATIONS FOR THE STRAND AND MOUNTING HARDWARE TO BE INSTALLED).

3.) KPU CONTRACTOR TO WRECK-OUT AND DISPOSE OF GCI'S EXISTING AND TEMPORARY MESSENGER STRAND AND COAX CABLE SCHEDULED FOR RETIREMENT.

4.) KPU CONTRACTOR TO COORDINATE ANCHORING WITH GCI AT TEMP POLE P-G5-T TO ALLOW FOR THE TEMPORARY AND PERMANENT RECONFIGURATION OF THE EXISTING ACTIVE 96 COUNT FIBER OPTIC CABLE.

DRAWN BY: WHIT WILLSON DATE: 9/23/24
PROJECT ENGINEER: ALEX SLAVENS ACCT: 112853.01

NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE
1		
2		
3		
4		
5		
6		
7		

GCI COMMUNICATION CORP
2550 Denali St
Suite 1000
Anchorage, Alaska
99503

YELLOW	EXISTING FACILITIES TO REMAIN	BROWN	NON-PARTICIPATING
RED	EXISTING FACILITIES TO BE RETIRED	PURPLE	TEMPORARY
GREEN	NEW FACILITIES	BLUE	EXISTING FACILITY TO BE ADJUSTED
ORANGE	BETTERMENTS	WHITE/BLACK	NOTES

PROJECT NAME:
ER# 25659 / WO# 23-1387 / ADOT# SFHWY0070
KETCHIKAN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

GRIDS: GCI 5049, 5149
SCALE:
DRAWING NAME:
SHEET V5 OF V8

DRAWN BY: WHIT WILLSON DATE: 9/23/2024
PROJECT ENGINEER: ALEX SLAVENS ACCT: 112853.01

NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE
1		
2		
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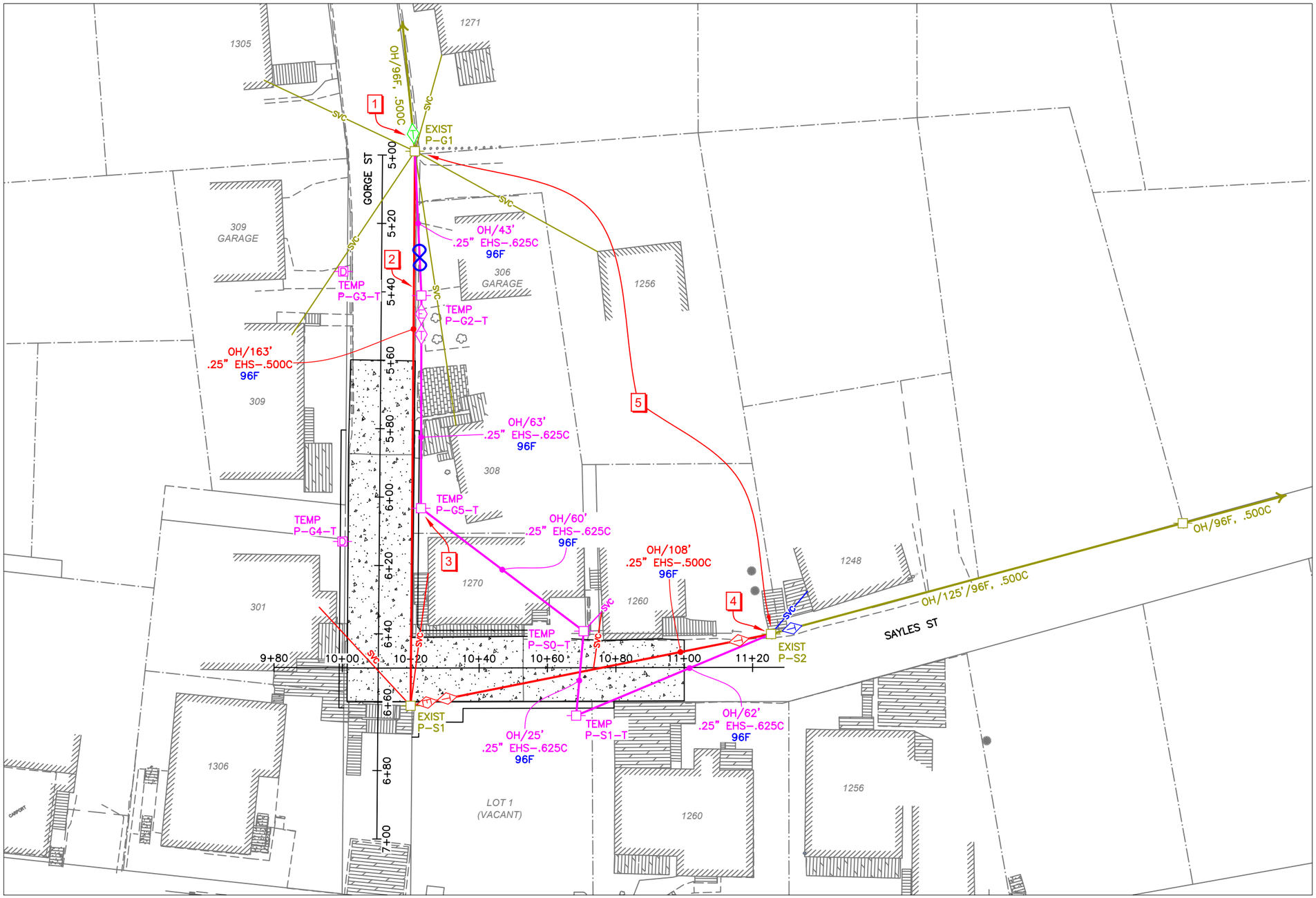
GCI COMMUNICATION CORP
2550 Denali St
Suite 1000
Anchorage, Alaska
99503

EXISTING FACILITY

PROJECT NAME:
ER# 25659 / WO# 23-1387 / ADOT# SFHWY0070
KETCHIKAN: SAYLES/GORGE ST.
VIADUCT (1841) IMPROVEMENTS

GRIDS: GCI 5049, 5149 SCALE: 1:30
DRAWING NAME:
SHEET V6 OF V8



1.) At existing pole P-G1: Dead-end existing .25" strand to remain in place and temporary .25" strand, change out existing tap, splice temporary .625 coax, and gather the slack from the existing active 96 count fiber optic cable for storage on temporary aerial alignment.

From the tap at pole P-G1: Maintain existing services to 1305, 1271, 309, 308, and 1256.

2.) At temporary pole P-G2-T: Relocate line extender from Exist Pole P-S1 and splice it as the temporary line extender, temporary tap, and temporary .625 coax.

The homes at 301 and 1270 will be unoccupied during construction. the temporary tap will be used in case cable TV service to 301 or 1270 is needed during construciton.

3.) At temporary pole P-G5-T: Coordinate KPU-T anchoring to allow for the temporary reconfiguration of the existing active 96 count fiber optic cable.

4.) At existing pole P-S2: Dead-end existing .25" strand to remain in place and temporary .25" strand, relocate existing tap to the span to the east that is to remain in place, and splice temporary .625 coax.

From the tap at pole P-S2: Reconfigure service to 1248 as required for permanent installation, and temporarily serve 1260. The service to 1260 shall be routed from pole P-S2, then to P-S1-T, then to P-S0-T, and then to customer.

5.) Relocate existing active 96 count fiber optic cable from existing alignment to temporary alignment. Fiber to remain active during relocation. Maintain NESC clearance over 1270 roof.

At temporary pole P-G5-T: Coordinate KPU-T anchoring to allow for the temporary reconfiguration of the existing active 96 count fiber optic cable.

At existing pole P-G1: Gather the slack from the existing active 96 count fiber optic cable for looped storage at pole.

DRAWN BY: WHIT WILLSON DATE: 9/23/24
PROJECT ENGINEER: ALEX SLAVENS ACCT: 112853.01

NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE
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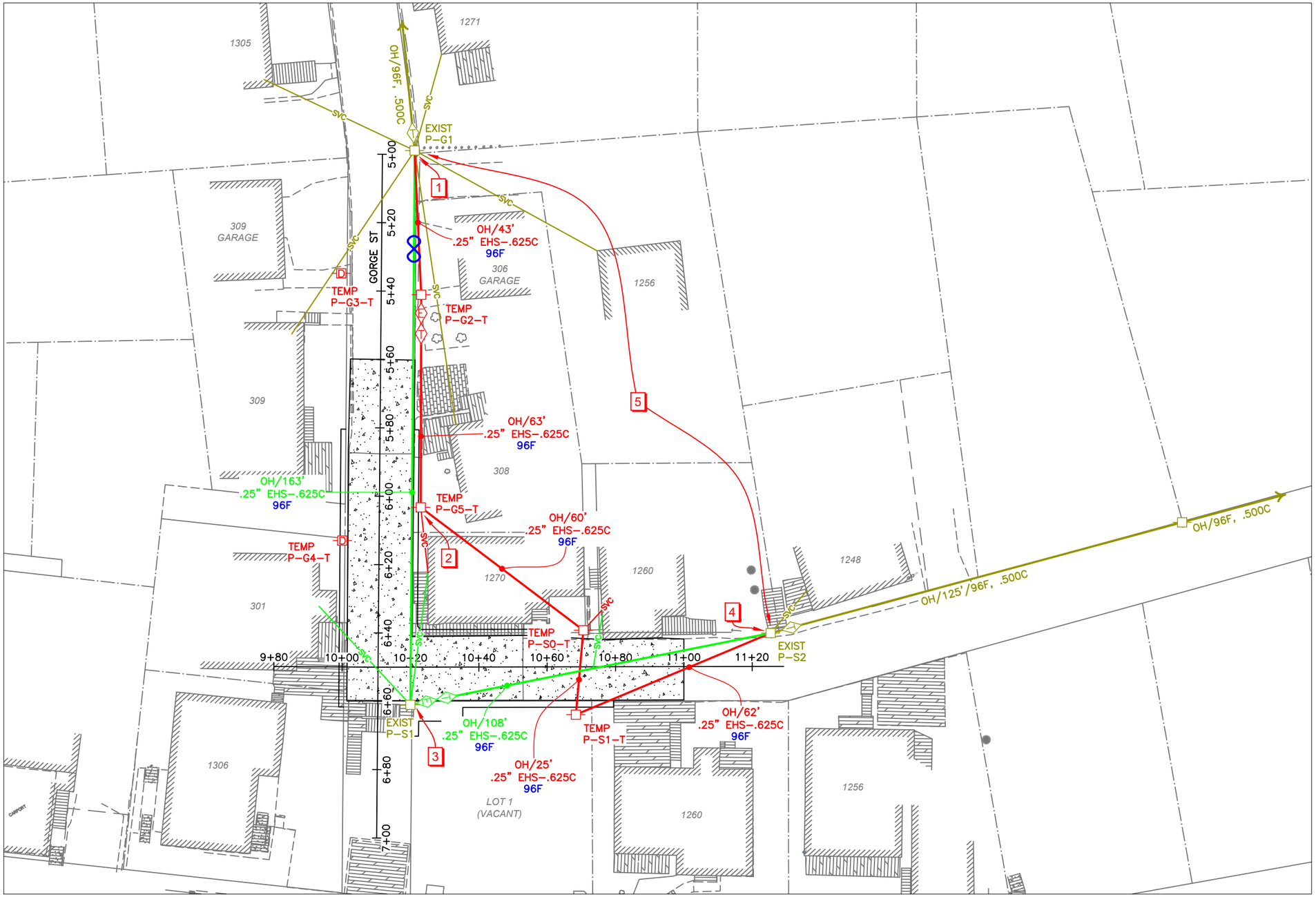
GCI COMMUNICATION CORP
2550 Denali St
Suite 1000
Anchorage, Alaska
99503

TEMPORARY RELOCATION

YELLOW	EXISTING FACILITIES TO REMAIN	BROWN	NON-PARTICIPATING
RED	EXISTING FACILITIES TO BE RETIRED	PURPLE	TEMPORARY
GREEN	NEW FACILITIES	BLUE	EXISTING FACILITY TO BE ADJUSTED
ORANGE	BETTERMENTS	WHITE/BLACK	NOTES

PROJECT NAME:
ER# 25659 / WO# 23-1387 / ADOT# SFHWY0070
KETCHIKAN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

GRIDS: GCI 5049, 5149 SCALE: 1:30
DRAWING NAME:
SHEET V7 OF V8



1.) At existing pole P-G1: Dead-end permanent .25" strand and splice permanent .625 coax

2.) After new permanent system is operational remove temporary pole P-G5-T.

3) At New pole P-S1: Splice permanent line extender (relocate the extender from P-G2-T), permanent tap, and permanent .625 coax.

From the tap at pole P-S1: Restore permanent service to 301, 1270, and 1260.

4.) At existing pole P-S2: Dead-end permanent .25" strand and splice permanent .625 coax

5.) Relocate existing active 96 count fiber optic cable from temporary alignment to permanent alignment (PG1 to P-S1 to P-S2). Fiber to remain active during relocation. Remove all temporary poles. Remove unused hardware from permanent poles

DRAWN BY: WHIT WILLSON DATE: 9/23/24
PROJECT ENGINEER: ALEX SLAVENS ACCT: 112853.01

NO.	DESIGN/CONSTRUCTION/ASBUILT REVISION	DWN BY/DATE
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GCI COMMUNICATION CORP
2550 Denali St
Suite 1000
Anchorage, Alaska
99503

PERMANENT RELOCATION

YELLOW	EXISTING FACILITIES TO REMAIN	BROWN	NON-PARTICIPATING
RED	EXISTING FACILITIES TO BE RETIRED	PURPLE	TEMPORARY
GREEN	NEW FACILITIES	BLUE	EXISTING FACILITY TO BE ADJUSTED
ORANGE	BETTERMENTS	WHITE/BLACK	NOTES

PROJECT NAME:
ER# 25659 / WO# 23-1387 / ADOT# SFHWY0070
KETCHIKAN: SAYLES/GORGE ST. VIADUCT (1841) IMPROVEMENTS

GRIDS: GCI 5049, 5149 SCALE: 1:30
DRAWING NAME:
SHEET V8 OF V8