NO.	DATE	REVISIONS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z686600000/0932053	2018	A1	29
CDS ROUTE: 296000		MILEPOINT: 8.9 TO 9.2		
LATITUDE: 58°22'13.44"N		LONGITUDE: 134°35'13.70"E		

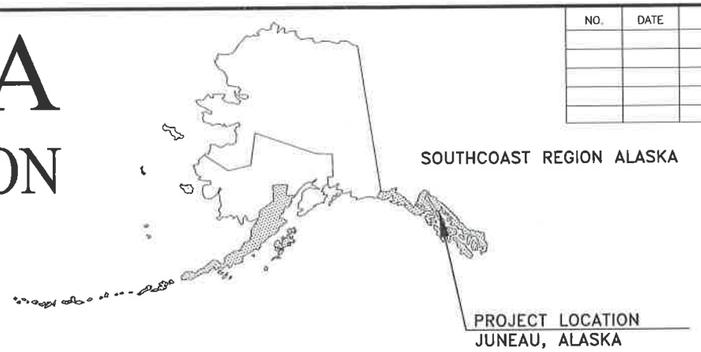
STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

JNU EGAN DRIVE AND RIVERSIDE INTERSECTION IMPROVEMENT PROJECT NO. NH-0932053/Z686600000

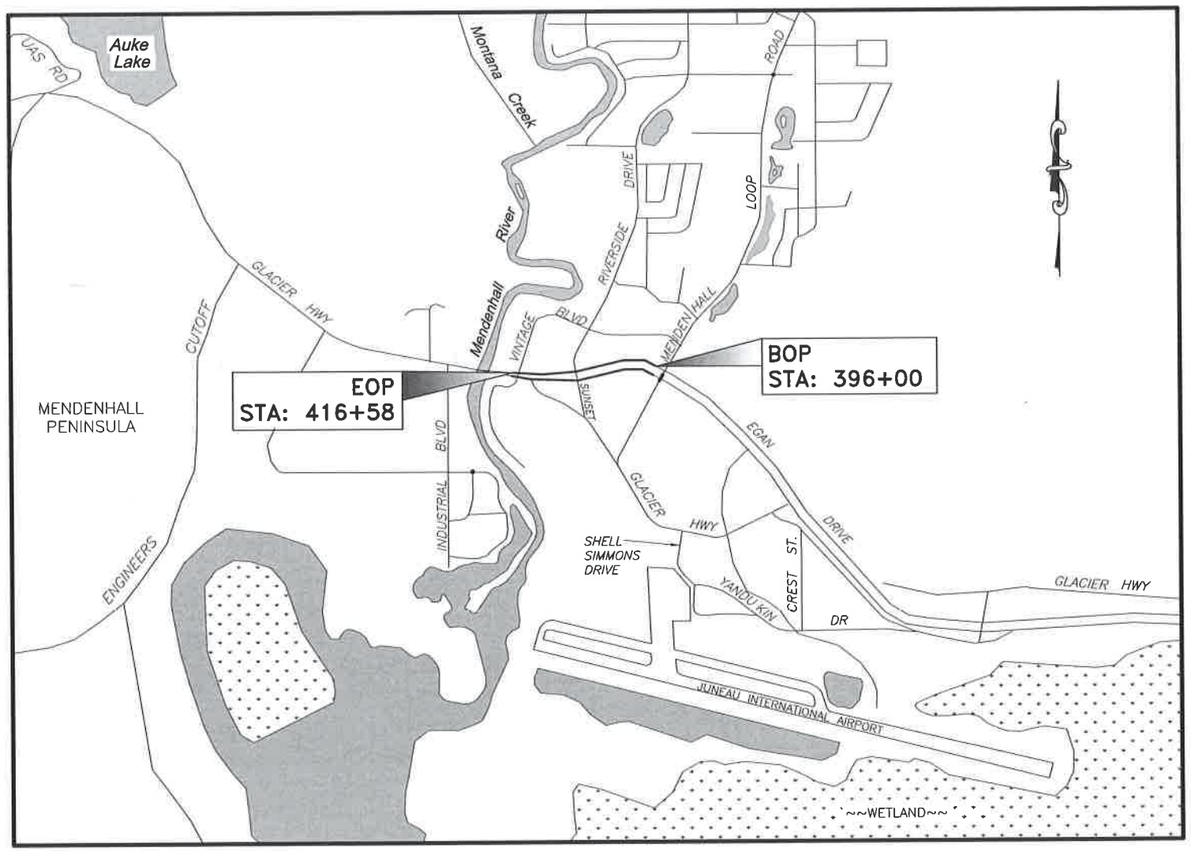
PAVING, SIGNING, STRIPING, ILLUMINATION + SIGNALIZATION



AS BUILT PLANS
Contractor: SECON
Project Engineer: Randall E Johnston
Start Construction Date: 05.09.2019
End Construction Date: 11.05.2019

PROJECT SUMMARY	
ROAD NAME	EGAN DR AND GLACIER HWY
WIDTH OF PAVEMENT	41'
LENGTH OF PAVING	1270' 0.24 MILE
LENGTH OF PROJECT	2047' 0.39 MILE

DESIGN DESIGNATIONS	
PROJECT TYPE	RECONSTRUCTION
FUNCTIONAL CLASS	PRINCIPAL ARTERIAL–OTHER
ADT (2016)	15,284
ADT (2040)	16,400
DHV 2018	1620
DHV 2038	1710
PERCENT TRUCKS (T)	8%
DESIGN SPEED (V)	50 MPH
DESIGN EAL'S (20 YEARS)	3,255,000



VICINITY MAP

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

November 13, 2018

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.23.2020

PRINTED: 6/26/2018

USE THESE PLANS IN CONJUNCTION WITH THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2017 EDITION AND THE PROJECT SPECIAL PROVISIONS.

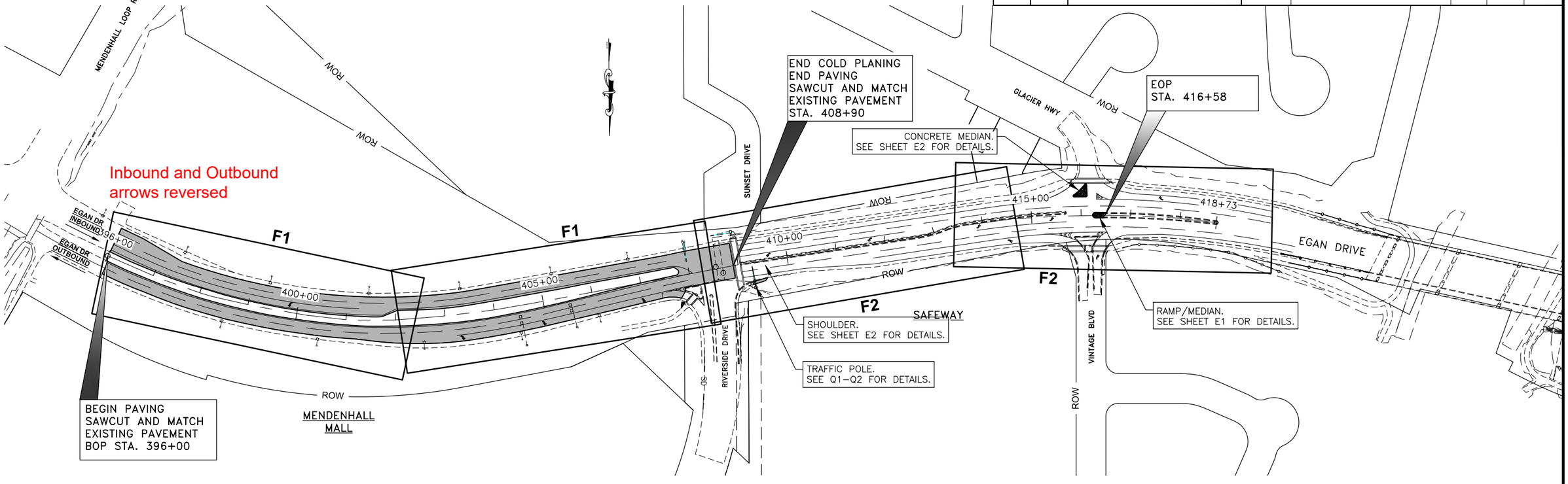
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99801
(907) 465–1763

APPROVED: 6-28-18
REGIONAL PRECONSTRUCTION ENGINEER — DATE
L. PAT CARROLL, P.E.

CONCUR: For 6-28-18
REGIONAL DIRECTOR — DATE
D. LANCE MEARIG, P.E.

FILE: Q:\Jnu\68660\Planset\68660_A1 Tsheet.dwg | DATE: 6/25/2018 14:25 | LAYOUT: A1 | DESIGNED: PW | CHECKED: DP | DRAFTED: PW, JT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	A2	4



GENERAL NOTES:

1. CONTAIN ALL CONSTRUCTION WITHIN THE RIGHT-OF-WAY. DO NOT DISPOSE OF EXCESS MATERIAL WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS.
2. MAKE ALL PAVEMENT CUTS CLEAN, VERTICAL, AND TRUE TO THE REMOVAL LIMITS SHOWN ON THE PLANS.
3. DO NOT COVER SIGNAL POLE FOUNDATION BOLTS AND BASE PLATES.
4. ON STANDARD DRAWING C-03.10, REPLACE THE SAFETY FENCE AND TYPE II BARRICADE OR TUBULAR MARKINGS SHOWN IN THE TYPICAL SECTION WITH ADA COMPLIANT BARRICADES.

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

D-24.00 I-20.20 S-00.11 T-30.11 T-34.01

INDEX OF SHEETS

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA
DAVID A. PRATT
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

LAYOUT, NOTES, & INDEX

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	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		
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
EXISTING STORM DRAIN (FLOW DIRECTION →)	SD	
PROPOSED STORM DRAIN	S-10, S-11, P-11, P-10, SD, MH	
FIBER OPTIC LINE	FO	
DIRECT BURIAL TELEPHONE CABLE	T	T
DIRECT BURIAL ELECTRIC CABLE	E	E
ELECTRIC LINE (OVERHEAD)		OHE
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		
RIPRAP		
SPECIAL DITCH CENTERLINE		
HIGH TIDE LINE	HTL	HTL

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE	--X---X---X---X--	
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		123
RIGID METAL CONDUIT		

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	A3	4

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND TH
David A. Pleasant
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

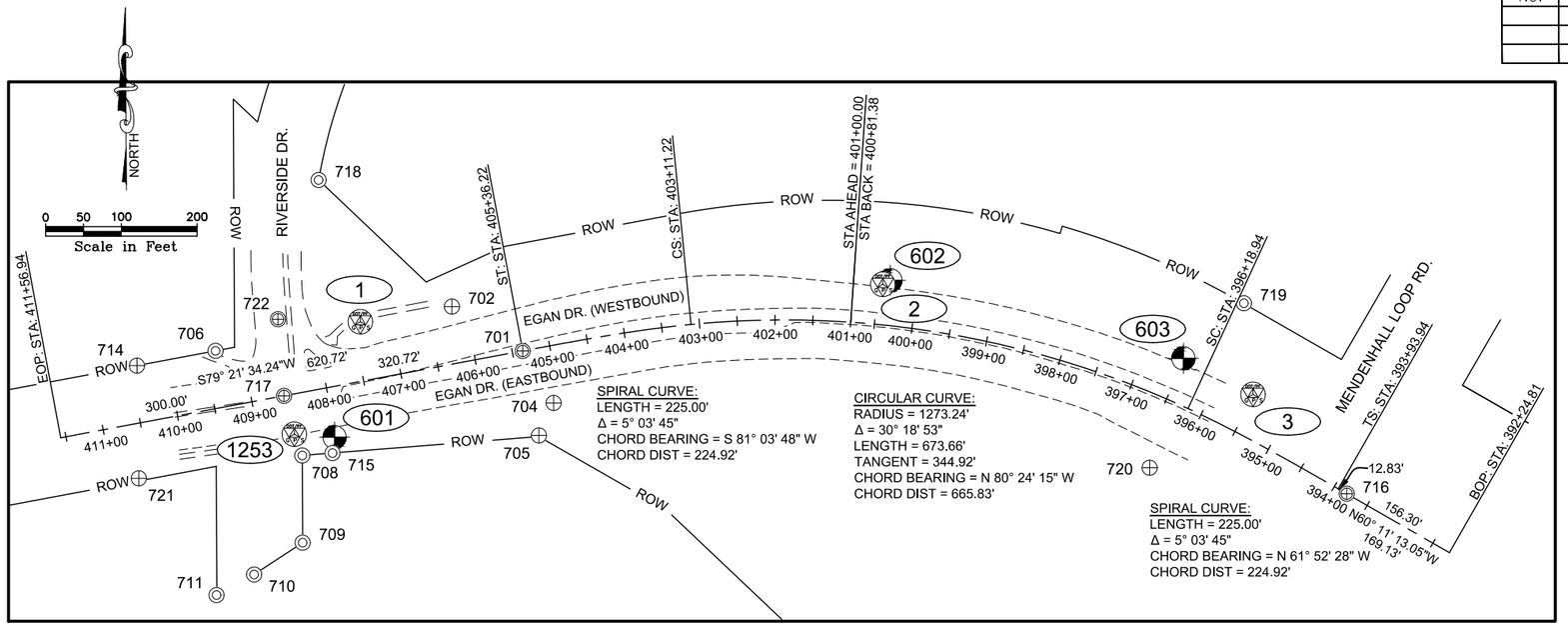
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

LEGEND & SYMBOLS

FILE | Q:\jnu\68660\Planset\68660_A3_Legend.dwg | LAYOUT | A3 | DESIGNED | PW | CHECKED | DP | DRAFTED | PW, RG, JT | DATE | 8/9/2018 10:00 AM

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	A4	4



SPIRAL CURVE:
LENGTH = 225.00'
Δ = 5° 03' 45"
CHORD BEARING = S 81° 03' 48" W
CHORD DIST = 224.92'

CIRCULAR CURVE:
RADIUS = 1273.24'
Δ = 30° 18' 53"
LENGTH = 673.66'
TANGENT = 344.92'
CHORD BEARING = N 80° 24' 15" W
CHORD DIST = 665.83'

SPIRAL CURVE:
LENGTH = 225.00'
Δ = 5° 03' 45"
CHORD BEARING = N 61° 52' 28" W
CHORD DIST = 224.92'

HORIZONTAL CONTROL:

Horizontal Control for this project is based on the "JNU GRID 2016" Low Distortion Projection System (LDP), established by DOT/PF.

The "JNU GRID 2016" LDP has the following parameters:

Linear Unit: U.S. Survey Feet (sft)
Datum: NAD83 (2011) Epoch 2010.0000
Ellipsoid: GRS 80
Projection: Transverse Mercator
Latitude of Grid Origin: 58°24'00.0" N (58.4°)
Central Meridian (Grid Origin): 134°37'00.0" W (-134.6166666666667)
False Northing: 250000.0 sft
False Easting: 150000.0 sft
Grid Scale Factor: 1.000003 (exact)

Project Specific Horizontal Control:
Horizontal Control was provided by DOT/PF and consist of the following monuments and horizontal coordinates:

1: 2-1/2" Alum. Cap on 5/8" x 30" Rebar in southerly shoulder of multi-use pathway. Point bears N 10° E, 32.3' from Luminaire with Yield Sign attached.

N 239277.354 sft
E 154541.998 sft

2: 2-1/2" Alum. Cap on 5/8" x 30" Rebar in northerly shoulder of Egan Dr. Point bears S 63° W, 11.3' from Luminaire.

N 239326.774 sft
E 155232.040 sft

3: 2-1/2" Alum. Cap on 5/8" x 30" Rebar in northerly shoulder of Egan Dr. Point bears S 63° E, 103.7' from Luminaire with Speed Limit Sign attached.

N 239181.526 sft
E 155720.958 sft

1253: 2-1/2" Brass Cap in Monument Case near the southerly edge of Egan Dr and Riverside Dr. intersection.

N 239128.967 sft
E 154454.833 sft

VERTICAL CONTROL:

The Vertical Datum is "MLLW Gastineau Channel" Tidal Datum.
See Survey Control Sheet A2, dated September 10, 2013, from the "JNU: Glacier Hwy Brotherhood Bridge Replacement" Project, Project No. MAP21-NH-BR-0933(19) / 67984.

The Basis of Elevations is Point 1253, a 2-1/2" Brass Cap in Monument Case near the southerly edge of Egan Dr. and Riverside Dr. intersection, having an elevation of 30.34' per said Survey Control Sheet.

SURVEY NOTES:

1. The information shown hereon is based on a field survey performed by R&M Consultants, Inc. (R&M) from April 19th thru April 25th, 2017.
2. The horizontal locations of found property corners and other found control points as shown hereon were surveyed using static GNSS techniques utilizing multi-frequency Trimble R10 receivers. Horizontal coordinates were derived by a least-squares adjusted network utilizing Trimble Business Center ver. 3.81.
3. Elevations established this survey were determined by a series of balanced and closed differential level loops utilizing a Leica DNA10 Digital Level and barcode rod. The Digital Level was checked and adjusted by a digital peg test prior to the performance of any level loops. All level loops meet 3rd order accuracy specifications.

MONUMENT NOTES:

1. If any pair of control points disagree from published values by more than 1:10,000 horizontally or vertically, then a third network point must be tied to ascertain which point is in error or has been disturbed.
2. Whether listed or not, all monuments, property markers, or accessories that will be disturbed or buried shall be referenced prior to being disturbed, and re-established in their original position and a Record of Monument form shall be filed in accordance with A.S.34.65.040. Coordinate values listed are for informational purposes and should be used to reset monuments only as a last resort.

TBM SUMMARY:

TBM 601: Elev. = 30.58 sft, N 239125 sft, E 154508 sft

Northeasterly Bolt at base of Traffic Signal Pole located near the Southeasterly intersection of Egan Dr. & Riverside Dr.

TBM 602: Elev. = 33.94 sft, N 239332 sft, E 155242 sft

Southwesterly Bolt at base of Traffic Luminaire located on the Northerly side of Egan Dr., 3rd Luminaire Westerly from Mendenhall Lp. Rd.

TBM 603: Elev. = 32.90 sft, N 239229 sft, E 155629 sft

Southeasterly Bolt at base of Traffic Luminaire located on the Northerly side of Egan Dr., 1st Luminaire Westerly from Mendenhall Lp. Rd.

EXISTING PROPERTY MONUMENTS

Point #	Northing	Easting	Description	Station	Offset
702	239297.367	154663.010	IP_381/381/ROW	406+17.27	74.75 RT
704	239170.231	154797.322	BC3"_IP_381/381/ROW	405+08.62	74.98 LT
705	239127.350	154777.880	BC3.25"_UNMARKED	405+35.73	113.56 LT
706	239238.956	154350.830	REBAR5/8"	409+34.86	74.98 RT
708	239100.873	154465.378	ALCAP2"_ROW/LOT 1_FAITH LUTHERAN	408+47.78	81.88 LT
709	238985.829	154465.834	ALCAP2"_ROW/LOT 1_FAITH LUTHERAN	408+68.58	195.03 LT
710	238943.796	154401.744	REBAR	409+39.33	224.50 LT
711	238916.665	154352.146	PLASCAP_5713S	409+93.08	242.01 LT
714	239219.432	154247.023	ALPRIM3.25"_USS1193/USS381/ROW	410+40.49	74.96 RT
715	239104.049	154505.307	ALCAP2"_ROW/LOT 1_FAITH LUTHERAN	408+07.95	86.13 LT
718	239464.444	154486.903	PLASCAP_4382S	407+59.49	271.47 RT
719	239301.748	155708.892	PLASCAP_4382S	396+11.11	157.06 RT
720	239084.690	155584.412	BC3.25"_ROW PC/381	396+33.37	92.13 LT
721	239070.756	154249.509	ALPRIM3.25"_C-1 TR2_USS1193	410+65.50	71.62 LT

All **PROPERTY MONUMENTS** in the **EXISTING PROPERTY MONUMENTS** table **SHALL BE PRESERVED AND REFERENCED** prior to disturbance and replaced at their original horizontal position.

A RECORD OF MONUMENT FORM IN ACCORDANCE WITH A.S. 34.65.040 SHALL BE SUBMITTED TO THE DOT PROJECT ENGINEER FOR REVIEW PRIOR TO RECORDING FOR EACH MONUMENT.

EXISTING SURVEY CONTROL

Point #	Northing	Easting	Description	Station	Offset
3	239181.526	155720.958	ALCAP2"_DOT_SET	395+51.30	54.58 RT
2	239326.774	155232.040	ALCAP2.5"_DOT_SET	400+44.05	53.35 RT
1	239277.354	154541.998	ALCAP2.5"_DOT_SET	407+39.89	77.42 RT
1253	239128.967	154454.833	CL_MON_BC2.5"	408+52.96	52.32 LT

All **SURVEY CONTROL** monuments in this table are provided strictly for survey control. Should any of them be destroyed during construction they **SHALL NOT** be replaced.

No monuments disturbed or damaged.

EXISTING CENTERLINE MONUMENTS

Point #	Northing	Easting	Description	Station	Offset
716	239050.409	155844.664	CL_MON_BC2.5"	393+81.11	0.00 RT
701	239238.823	154756.470	CL_MON_BC2.5"	405+36.22	0.05 LT
722	239280.716	154433.314	CL_MON_BC2.5"	408+46.09	100.79 RT
717	239179.559	154441.273	CL_MON_BC2.5"	408+56.94	0.09 LT

EXISTING CENTERLINE MONUMENTS **SHALL BE PRESERVED IN PLACE.**

All **CENTERLINE MONUMENTS** in the **EXISTING CENTERLINE MONUMENTS** table **SHALL BE PRESERVED AND REFERENCED** prior to disturbance and replaced at their original horizontal position.

A RECORD OF MONUMENT FORM IN ACCORDANCE WITH A.S. 34.65.040 SHALL BE SUBMITTED TO THE DOT PROJECT ENGINEER FOR REVIEW PRIOR TO RECORDING FOR EACH MONUMENT.

LEGEND:

- 123 — Point Number
- Found 2-1/2" Alum. Cap on 5/8" Rebar
- Found Alum. or Brass Cap Monument
- Found Brass Cap Centerline Monument
- Found 5/8" Rebar, See Existing Property Monuments Table
- Set Temporary Bench Mark, See TBM Summary

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

06/22/2018

STATE OF ALASKA 49TH
Brian R. Meyers
LS - 13008
REGISTERED PROFESSIONAL LAND SURVEYOR

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

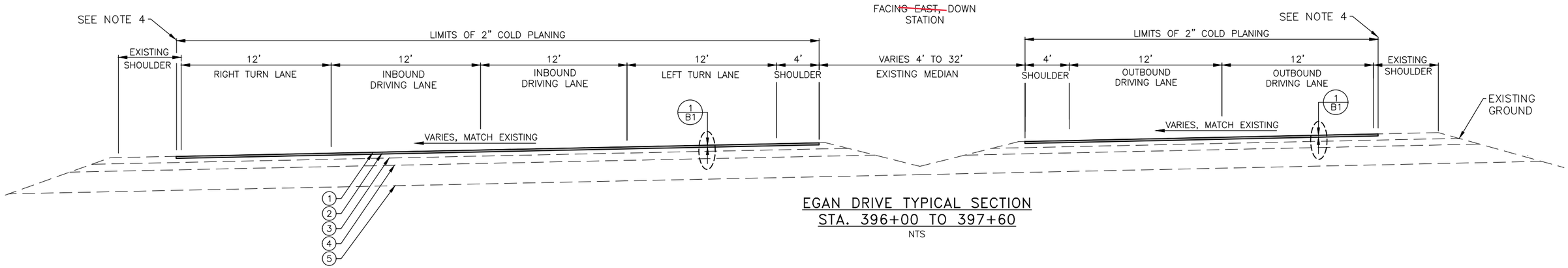
JNU – EGAN DR RIVERSIDE INTERSECTION IMPROVEMENTS

SURVEY CONTROL

FILE Z:\project\1825.11 DOT_SE Eng Term Egan Dr Traffic Pole\Survey\ACAD\68660 Control.dwg | DATE 6/22/2018 15:46 | LAYOUT | SURVEY CONTROL | DESIGNED | CHECKED CAW | DRAFTED BRM

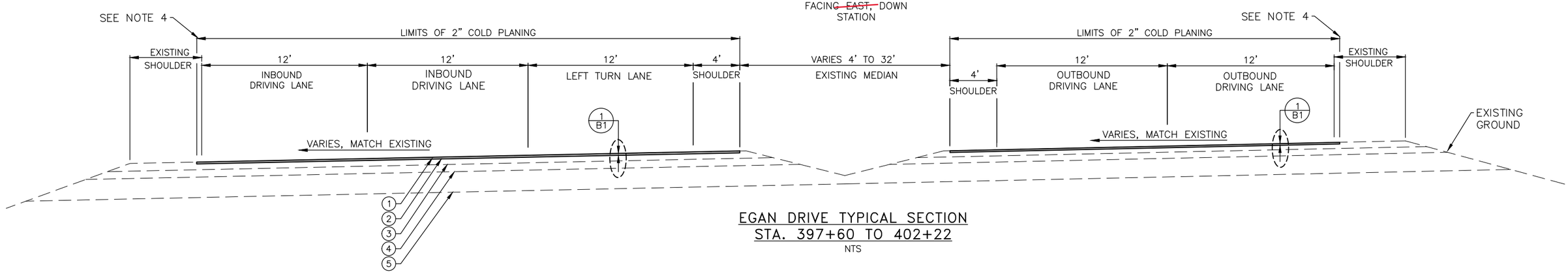
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	B1	3

Facing West



EGAN DRIVE TYPICAL SECTION
STA. 396+00 TO 397+60
NTS

Facing West

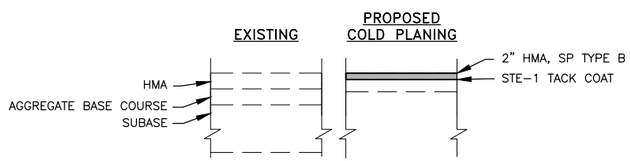


EGAN DRIVE TYPICAL SECTION
STA. 397+60 TO 402+22
NTS

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

TYPICAL SECTION NOTES:

1. COMPLETE PAVING FROM HIGH SIDE TO LOW SIDE TO AVOID PONDING.
2. MINIMIZE PAVEMENT JOINTS. WHEN A JOINT IS REQUIRED, LOCATE IT AT CENTERLINE OR 6–INCHES BEYOND LANE EDGE.
3. STOCKPILE ASPHALT MATERIAL REMOVED DURING COLD PLANING AT THE DEPARTMENT ASPHALT STOCKPILE AT THE INTERSECTION OF EGAN DRIVE & MENDENHALL LOOP ROAD.
4. COLD PLANE 6" BEYOND PROPOSED FOG LINE TO AVOID FOG LINE FROM OVERLYING THE LONGITUDINAL JOINT.



1 B1 EGAN DR. COLD PLANING SECTION
SCALE: NOT TO SCALE

LEGEND

1. 2" HMA, SP TYPE B
2. STE–1 ASPHALT FOR TACK COAT
3. EXISTING 6" ASPHALT
4. EXISTING 6" AGGREGATE BASE COURSE
5. EXISTING 18" SUBBASE

STATE OF ALASKA
40TH
David A. Yeatt
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

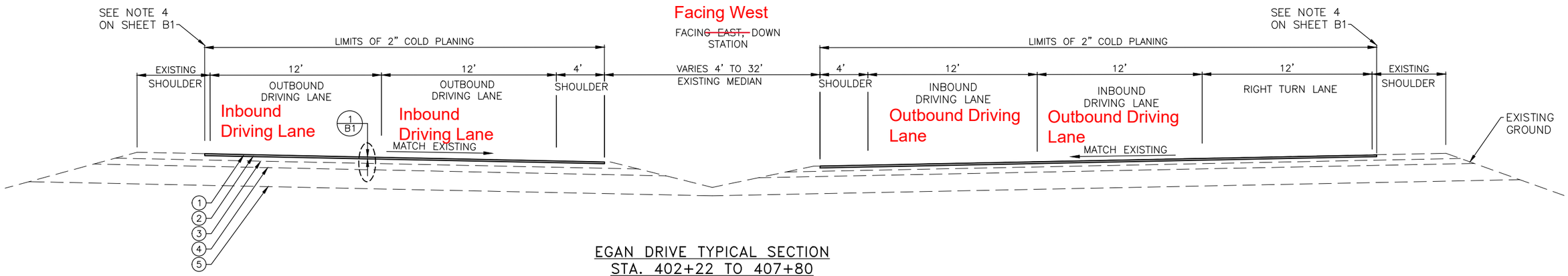
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465–1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

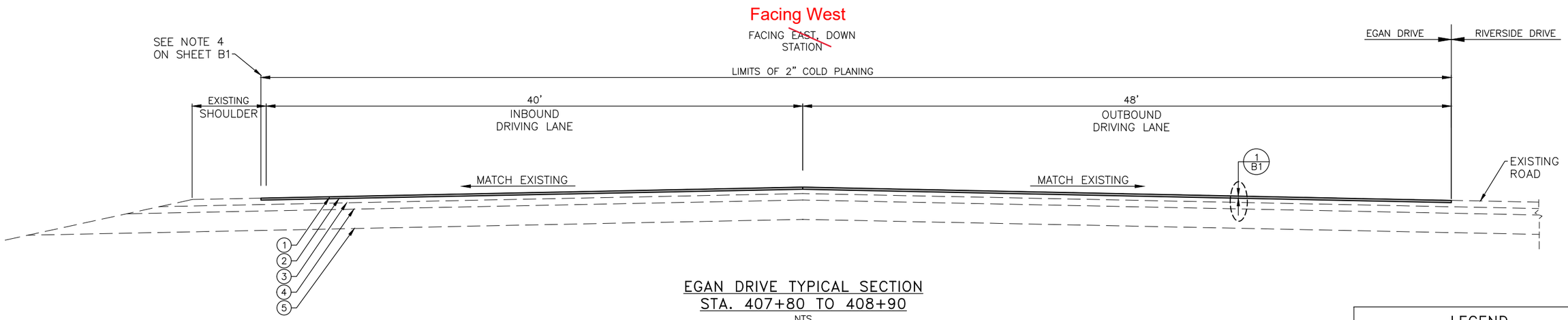
TYPICAL SECTIONS

FILE | Q:\jnu\68660\Planset\68660_B1-B3 Typ.dwg | DATE | 8/9/2018 9:58 | LAYOUT | B1 | DESIGNED | PW | CHECKED | DP | DRAFTED | PW, RG, JT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	B2	3



EGAN DRIVE TYPICAL SECTION
STA. 402+22 TO 407+80
NTS



EGAN DRIVE TYPICAL SECTION
STA. 407+80 TO 408+90
NTS

LEGEND

1. 2" HMA, SP TYPE B
2. STE-1 ASPHALT FOR TACK COAT
3. EXISTING 6" ASPHALT
4. EXISTING 6" AGGREGATE BASE COURSE
5. EXISTING 18" SUBBASE

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA
David A. Pyeatt
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TYPICAL SECTIONS

FILE | Q:\Jnu\68660\Planset\68660_B1-B3 Typ.dwg | DATE | 8/9/2018 9:58 | LAYOUT | B2 | DESIGNED | PW | CHECKED | DP | DRAFTED | PW, RG, JT

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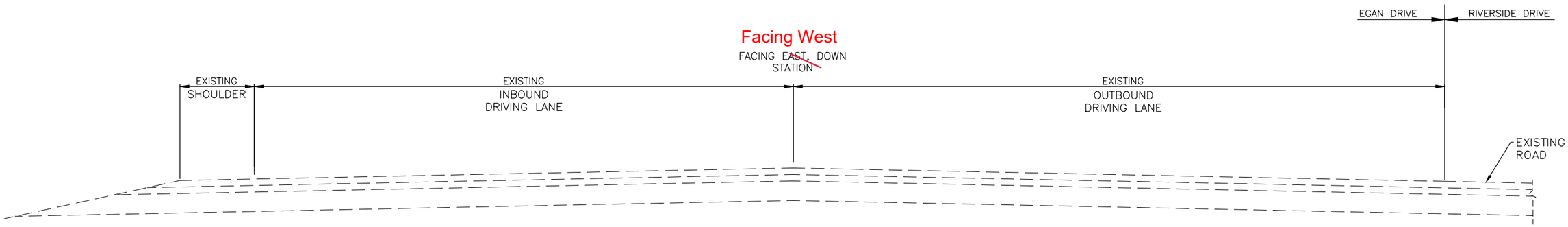
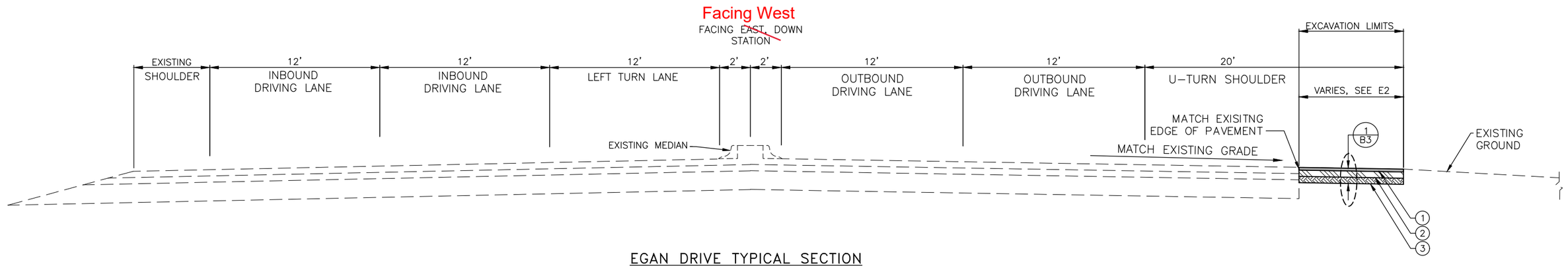
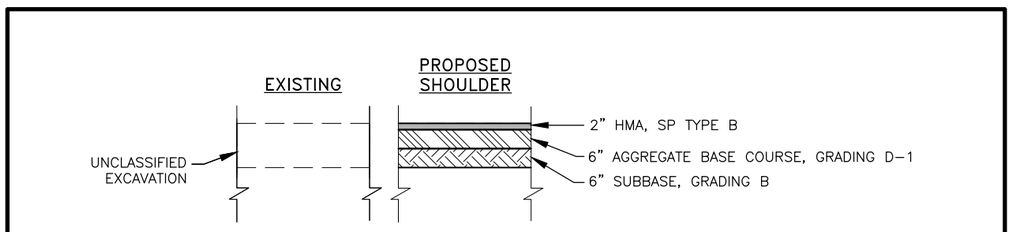
			ALASKA	Z686600000/0932053	2018	B3	3



EXISTING EGAN DRIVE TYPICAL SECTION
STA. 408+90 TO 409+24 – NO WORK
NTS



EGAN DRIVE TYPICAL SECTION
STA. 409+24 TO 409+57
NTS



1/B3 SHOULDER SECTION AT STA. 409+24–409+57
SCALE: NOT TO SCALE

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

LEGEND

1. 2" HMA, SP TYPE B
2. 6" AGGREGATE BASE COURSE, GRADING D–1
3. 6" SUBBASE, GRADING B

STATE OF ALASKA
David A. Pyeatt
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465–1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TYPICAL SECTIONS

FILE | Q:\Jnu\68660\Planset\68660_B1-B3 Typ.dwg
DATE | 8/9/2018 9:58
LAYOUT | B3
DESIGNED | PW
CHECKED | DP
DRAFTED | PW, RG, JT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
3	9/5/18	NEW ESTIMATE OF QUANTITIES TABLE	ALASKA	Z686600000/0932053	2018	C1	1

3

ESTIMATE OF QUANTITIES

ITEM NO.	SSHC 2017 ITEM NO.	DESCRIPTION	UNIT	QUANTITY
201.2001.0000	-	Invasive Plants Species Control, Removal and Disposal	SQ YD	250 212
202.0002.0000	202(2)	Removal of Pavement	SQ YD	90 94.24
203.0019.0000	-	Unclassified Excavation	Lump Sum	All Required
301.2002.00D1	-	Aggregate Base Course, Grading D-1	Lump Sum	All Required
304.2000.0000	304(4)	Subbase, Grading B	Lump Sum	All Required
402.0001.STE1	402(1)	STE-1 Asphalt For Tack Coat	Ton	3 6.36
408.2001.000B	401(1_)	HMA, SP; Type B	Ton	1,200 1216.63
408.2004.6428	401(4_)	Asphalt Binder, Grade PG 64-28	Ton	70 67.73
408.2008.000B	401(8_)	HMA, Price Adjustment, Type SP: Class B	Contingent Sum	All Required
408.2009.0000	401(9)	Longitudinal Joint Density Price Adjustment	Contingent Sum	All Required
410.2001.0000	-	Pavement Cold Planing	Square Yard	9,786 10187.86
550.0001.0000	550(1)	Class B Concrete	Lump Sum	All Required
609.0002.0ALL	609(2)	Curb and Gutter, All Types	Linear Feet	145 149.50
615.0001.0000	615(1)	Standard Sign	SQ FT	7.5
615.0005.0000	615(5)	Delineator, Flexible	EA	4
615.0006.0000	615(6)	Salvage Sign	EA	3
627.0010.0000	627(10)	Adjustment of Valve Box	EA	1
640.0001.0000	640(1)	Mobilization And Demobilization	Lump Sum	All Required
641.0001.0000	641(1)	Erosion And Pollution Control Administration	Lump Sum	All Required
641.0003.0000	641(3)	Temporary Erosion, Sediment and Pollution Control	Lump Sum	All Required
641.0005.0000	641(5)	Temporary Erosion, Sediment and Pollution Control by Directive	Contingent Sum	All Required
642.0001.0000	642(1)	Consturction Surveying	Lump Sum	All Required
643.0002.0000	643(2)	Traffic Maintenance	Lump Sum	All Required
643.0003.0000	643(3)	Permanent Construction Signs	Lump Sum	All Required
643.0032.0000	643(15)	Flagging	Contingent Sum	All Required
643.0025.0000	643(25)	Traffic Control	Contingent Sum	All Required
652.0001.0000	652(1)	Interim Work Price Adjustment	Contingent Sum	All Required
660.0001.0000	660(1)	Traffic Signal System Complete, ST: 409+26.83	Lump Sum	All Required
660.2001.0000	660(14)	Signal and Lighting Salvage ST: 409+21.42	Lump Sum	All Required
660.2005.0002	660(15)	Junction Box, Type 2	EA	3
660.2011.0000	660(16)	Electrical Conduit	Lump Sum	All Required
660.2012.0000	660(17)	Conductors	Lump Sum	All Required
670.2002.0000	670(13)	MMA Pavement Markings, Inlaid	Lump Sum	All Required

660.0001.0000 Ped-Pole Frangible Couplings was added by CO-1
660.2011.0001 Additional Conduit was added by CO-4
660.0001.0000 LED Intersection Luminaire was added by CO-1

BASIS OF ESTIMATE

ITEM NO.	ITEM	ESTIMATING FACTOR
203 (19)	UNCLASSIFIED EXCAVATION	88 CY
301 (5)	AGGREGATE BASE COURSE, GRADING D-1	49 CY
304 (4)	SUBBASE GRADING B	10 CY
550 (1)	CLASS B CONCRETE	10 CY

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA 49TH
David A. Fyeatt
AELC13268
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

ESTIMATE OF QUANTITIES

DATE 9/5/2018 10:40 | LAYOUT C1 | DESIGNED PW | CHECKED DP | DRAFTED PW, RG, JT
FILE Q:\jnu\68660\Plnset\68660_C1_Quantities.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	D1	1

201(7) INVASIVE PLANTS SPECIES CONTROL, REMOVAL AND DISPOSAL

STATION FROM	STATION TO	OFFSET	AREA (SY)	REMARKS
				620.0003.000 Topsoil was added by
409+21	410+02	RT	250	CO-1 for backfill

202(2) REMOVAL OF PAVEMENT

STATION FROM	STATION TO	OFFSET	AREA (SY)	REMARKS
407+72	407+83	RT	7	INFRONT OF CONRETE MEDIAN ON EGAN DRIVE
416+05	416+25	LT	32	CONCRETE MEDIAN REMOVAL AND PREPARATION
416+35	416+58	CL	51	CONCRETE MEDIAN REMOVAL AND PREPARATION
				SEE SHEET C1 for updated qty total

609(2) CURB AND GUTTER, EXPRESS WAY

STATION FROM	STATION TO	OFFSET	LENGTH (FT)	REMARKS
416+05	416+25	LT	50	AROUND CONCRETE MEDIAN
416+35	416+58	CL	95	AROUND CONCRETE MEDIAN
				SEE SHEET C1 for updated qty total

615 (1) STANDARD SIGN SUMMARY

SIGN #	LEGEND	STATION	OFFSET	TYPE	WIDTH (IN)	HEIGHT (IN)	AREA (SF)	SIGN FACING	COMMENT
1	LEFT TURN/ U-TURN	408+00	LT	R3-106	30	36	7.5	W	MOUNTED ON MAST ARM

615 (5) FLEXIBLE DELINEATOR

STATION	OFFSET	REMARKS
415+94	LT	LOCATED ON MEDIAN
416+08	LT	LOCATED ON MEDIAN
416+10	LT	LOCATED ON MEDIAN

615 (6) SALVAGE SIGN

SIGN #	LEGEND	STATION	OFFSET	TYPE	WIDTH (IN)	HEIGHT (IN)	AREA (SF)	SIGN FACING	REMARKS
1	RIVERSIDE DRIVE	409+27	RT	D3-1	80	24	13	E	MOUNTED ON MAST ARM
2	PEDESTRIAN	409+04	RT	R10-3e	9	15	1	S	POST MOUNTED 2.5 X 2.5 PT
3	PEDESTRIAN	409+04	RT	R10-3e	9	15	1	N	POST MOUNTED 2.5 X 2.5 PT

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA
10TH
David A. Pyeatt
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

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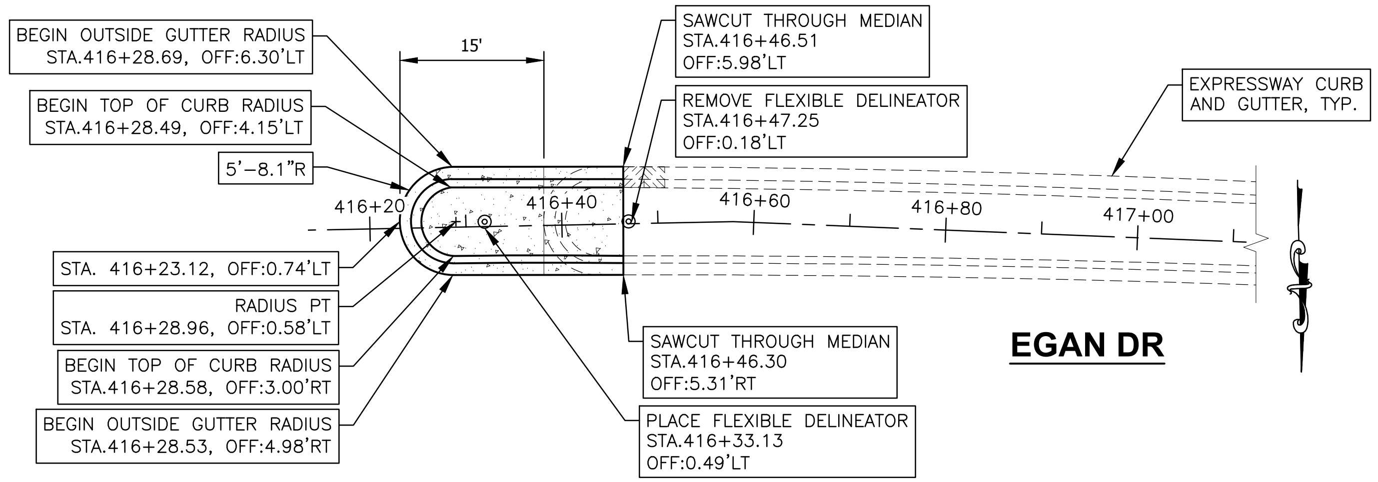
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

SUMMARIES

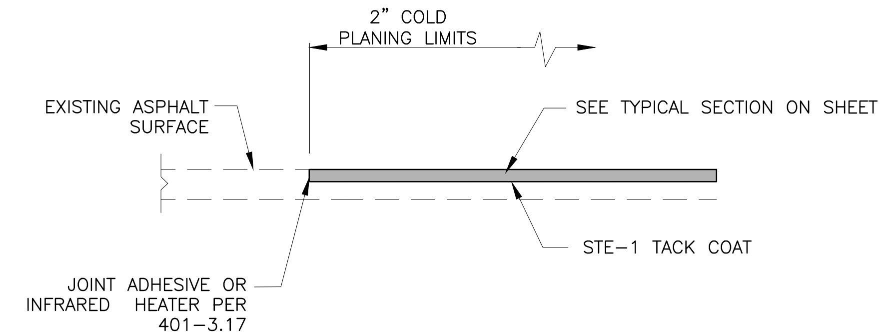
FILE Q:\Jnu\68660\Planset\68660_D1_Sums.dwg | DATE 6/26/2018 10:42 | LAYOUT | SUMMARIES | DESIGNED PW | CHECKED DP | DRAFTED PW, RG, JT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	E1	3



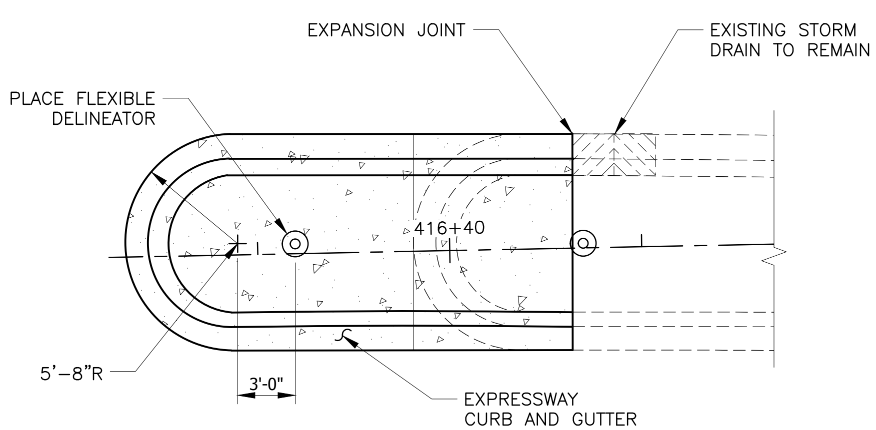
CONCRETE MEDIAN EXTENSION ON EGAN

STA. 416+59 TO 416+82

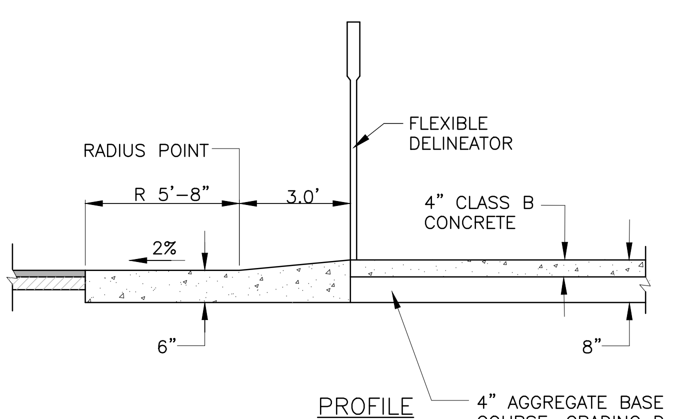


BEGINNING AND END OF PAVEMENT TRANSITION DETAIL

STA. 396+00 & 408+70

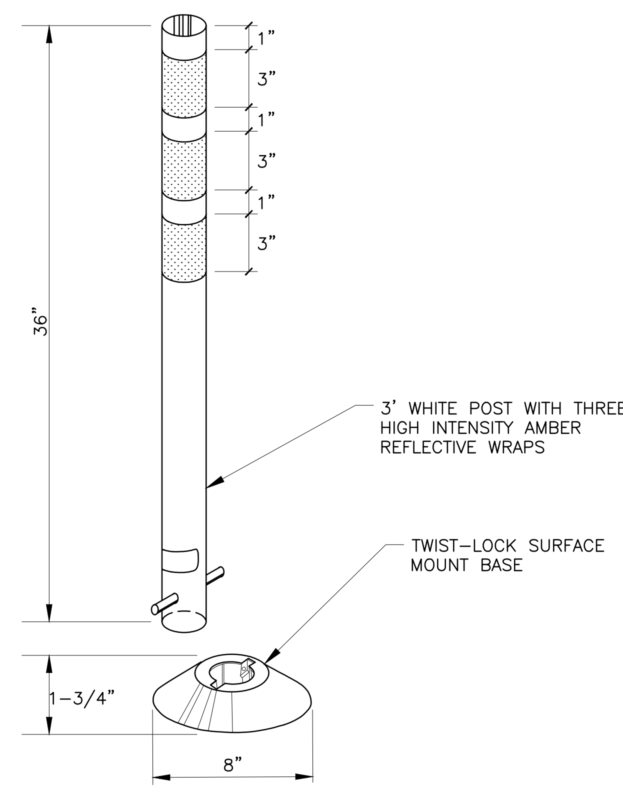


PLAN



PROFILE

RAMP MEDIAN/ISLAND END DETAIL



TYPE-A FLEXIBLE DELINEATOR

FLEXIBLE DELINEATOR NOTES:

1. DELINEATORS SHALL BE INSTALLED AT LOCATIONS SHOWN IN THE PLANS .
2. DELINEATORS SHALL BE WHITE IN COLOR. DELINEATORS INSTALLED ON MEDIAN SHOULDERS SHALL HAVE YELLOW REFLECTIVE SHEETING.

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

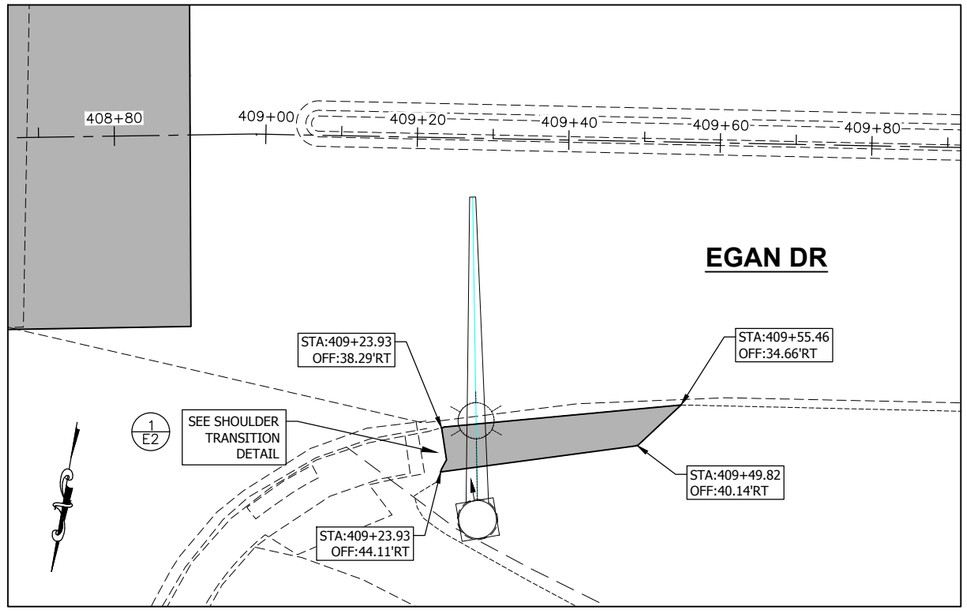
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

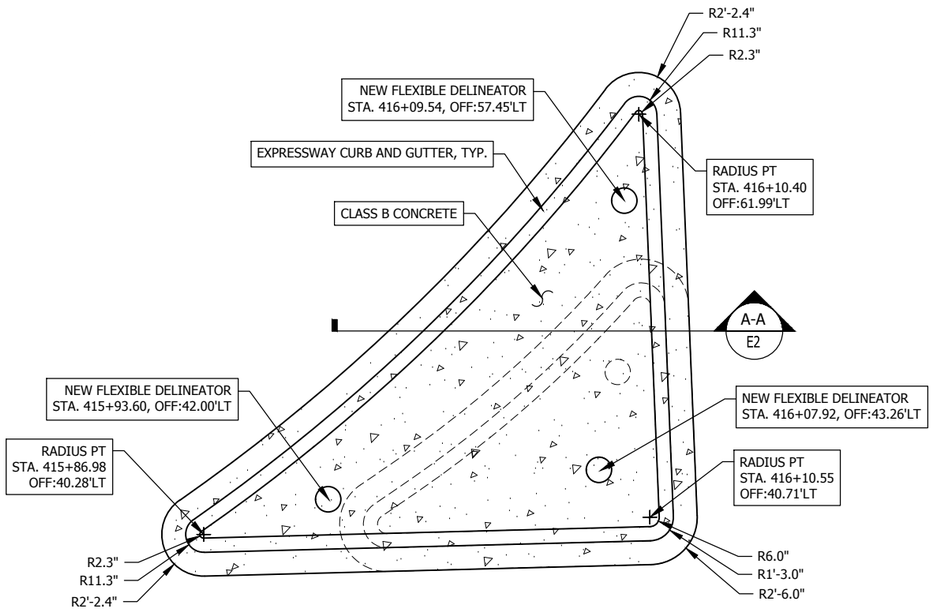
MISCELLANEOUS DETAILS

FILE Q:\Jnu\68660\Planset\68660_E1-E2_Misc Det.dwg
DATE 6/28/2018 12:44
LAYOUT E1
DESIGNED PW
CHECKED DP
DRAFTED PW, RG, JT

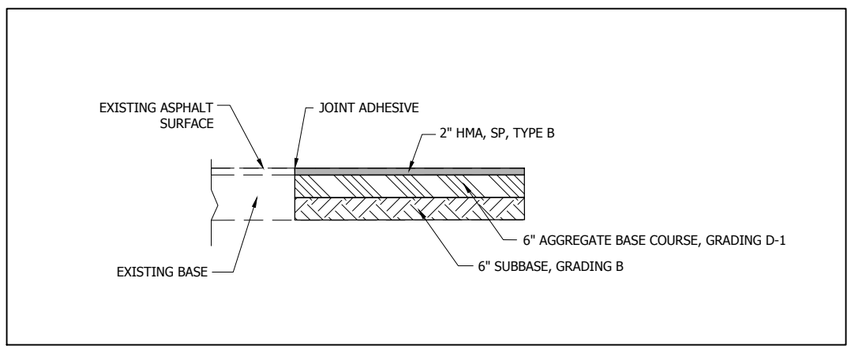
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	E2	3



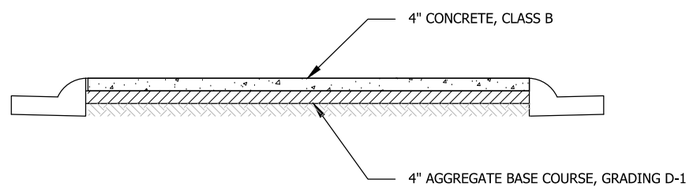
SHOULDER PLAN
STA.409+24 – 409+56



CONCRETE MEDIAN DETAIL



1 / E2 SHOULDER TRANSITION DETAIL
STA. 409+55



A-A / E2 CONCRETE MEDIAN SECTION
SCALE: NOT TO SCALE

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA
DAVID A. PRATT
8/9/2018
AELC13264
REGISTERED PROFESSIONAL ENGINEER

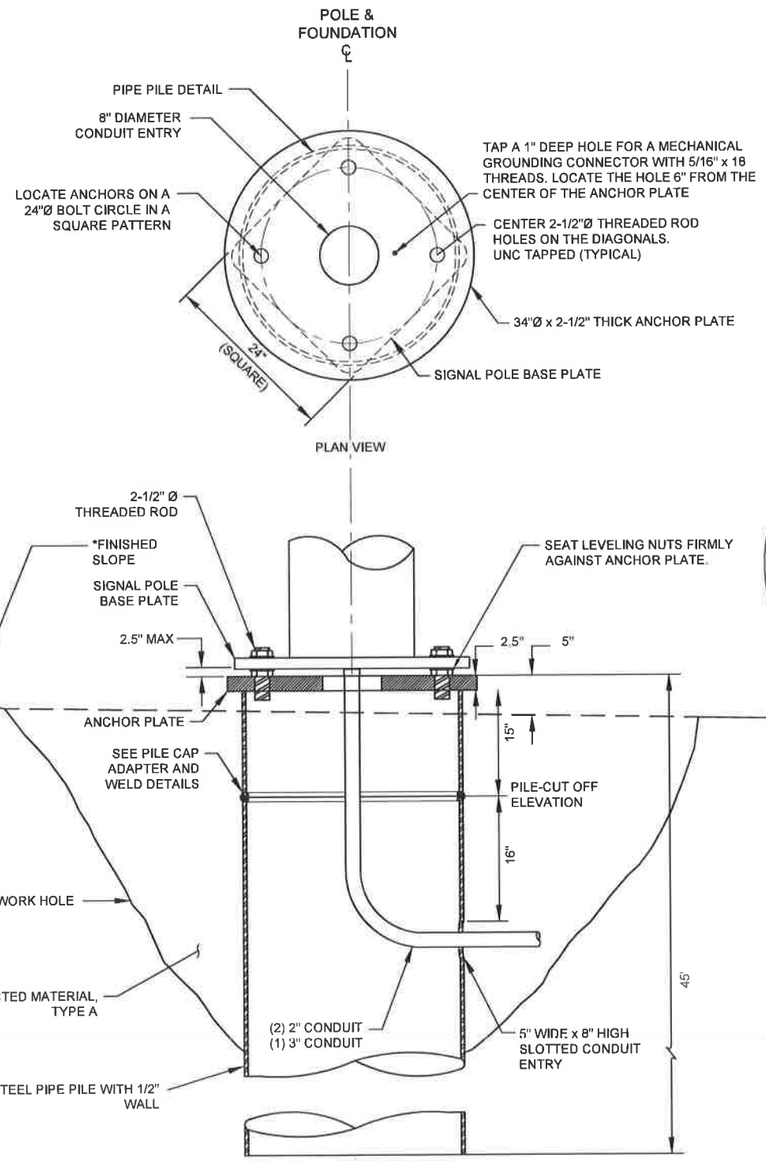
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

MISCELLANEOUS DETAILS

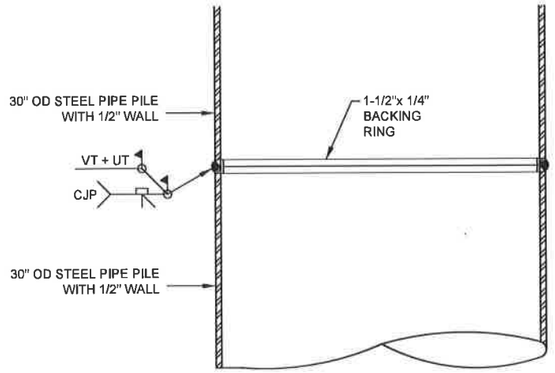
FILE: Q:\Jnu\68660\Planset\68660_E1-E2_Misc Det.dwg
DATE: 6/28/2018 12:44
LAYOUT: E2
DESIGNED: PW
CHECKED: DP
DRAFTED: PW, RG, JT

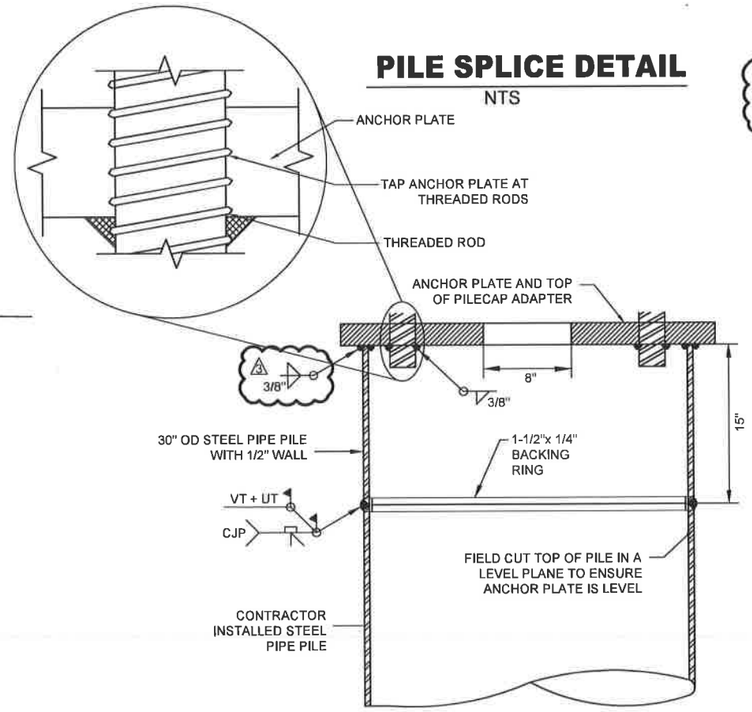
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
3	9/6/18	REVISED NOTE 4 AND WELD SYMBOL	ALASKA	Z686600000/0932053	2018	E3	3



PIPE PILE FOUNDATION

NTS





PILE SPLICE DETAIL

NTS

PILECAP ADAPTER AND WELD DETAIL

NTS

DESIGN NOTES:

1. DESIGN STANDARD: CURRENT STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS WITH 2006 INTERIM.
2. GALVANIZE PILE AND PILE CAP ADAPTER ACCORDING TO SECTION 505.
3. CONSTRUCTION STANDARD: STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2017 ENGLISH EDITION WITH SPECIAL PROVISIONS.
4. FABRICATION OF THE PILE CAP ADAPTER, ANCHOR PLATE AND THREADED ROD ASSEMBLY SHALL BE PERFORMED BY AN AISC CERTIFIED FABRICATOR.

MATERIAL REQUIREMENTS		
STRUCTURAL STEEL PLATE	ASTM A572 GRADE 50	Fy = 50 KSI
STEEL PIPE PILE	ASTM A709 GRADE 50 T3	Fy = 50 KSI
	API 5L GRADE X 42	Fy = 42 KSI
THREADED ROD	ASTM A572 GRADE 60	Fy = 60 KSI

NOTES:

1. DO NOT DISTURB THE EXISTING SIGNAL POLE DURING EXCAVATING AND PILE DRIVING.
2. FURNISH STEEL PIPE PILES THAT CONFORM TO THE MATERIAL REQUIREMENTS AND SECTION 660, 715 AND 740 OF THE SPECIFICATIONS.
3. DRIVE PILES OPEN ENDED. COMPLETE PILE WORK ACCORDING TO SECTIONS 505, 660 AND 715 OF THE SPECIFICATIONS. REMOVE AND REINSTALL PILES OUT OF PLUMB MORE THAN 1:40.
4. FRESH HEAD THE TOP OF PILES IN A LEVEL PLANE AND CUT THE CONDUIT ENTRANCE HOLE AFTER DRIVING THE PILE. MECHANICAL, PLASMA CUTTER, OR OXY-FUEL MEANS ARE PERMITTED. (3)
5. BACKFILL AND COMPACT THE WORK HOLE BEFORE ERECTING THE SIGNAL POLE.
6. TERMINATE CONDUIT(S) 3" ABOVE THE TOP OF THE ANCHOR PLATE. INSTALL A GROUNDING BUSHING ON THE END OF THE RIGID METAL CONDUIT AND ESTABLISH A BOND WITH THE ANCHOR PLATE.
7. TOPSOIL & SEED DISTURBED AREAS OUTSIDE OF PAVING LIMITS. THIS WORK IS SUBSIDIARY TO THE 660(1) SIGNAL SYSTEM COMPLETE PAY ITEM.

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU – EGAN DR RIVERSIDE INTERSECTION IMPROVEMENTS

SIGNAL POLE FOUNDATION

FILE	DATE	DESIGNED	CHECKED	DRAFTED
Z:\project\182511 DOT_SE Eng Term Egan Dr Traffic Pole\Civil\ACAD\68660-E1.dwg	9/6/2018 10:21 LAYOUT E1	MF	RR	JH/DC

BOP STA. 396+00
N 496561.635, E 505135.877
BEGIN PAVING
SAWCUT AND MATCH EXISTING PAVEMENT

0 40' 80'
SCALE IN FEET

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z686600000/0932053	2018	F1	2

BEGIN 2" COLD PLANING
BEGIN PAVING

396+00 397+00 398+00 399+00 400+00 401+00 402+00

EGAN DR INBOUND

BEGIN 2" COLD PLANING
BEGIN PAVING

EGAN DR OUTBOUND

30 30 30 35

STATE OF ALASKA
49TH
David A. Yeatt
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

30 30 30 35

EGAN DR INBOUND

403+00 404+00 405+00 406+00 407+00 408+00

EGAN DR OUTBOUND

STA:407+86.71
OFF:32.02'RT

STA:407+76.08
OFF:44.57'RT

STA:407+74.44
OFF:52.86'RT

PAVEMENT REMOVAL

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

FIRM	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES					ADDRESS	6860 GLACIER HWY, JUNEAU, AK 99811
FILE	Q:\Jnu\68660\Planset\68660_F1-F2.dwg	LAYOUT	F1	DESIGNED	PW	PHONE	(907) 465-1763
		DATE	6/28/2018 12:46	CHECKED	DP	CERTIFICATE OF AUTH #	
				DRAFTED	PW, RG, JT		

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z686600000/0932053	2018	F2	2

STA. 408+90
N 495300.797, E 505155.705
END COLD PLANING, END PAVING
SAWCUT AND MATCH EXISTING PAVEMENT

30

30

30

409+00

410+00

411+00

412+00

413+00

414+00

EGAN DR. EASTBOUND

EGAN DR. WESTBOUND

TRAFFIC POLE.
SEE Q2 FOR DETAILS.

PEDESTRIAN POLE.
SEE Q1 FOR DETAILS.

SHOULDER.
SEE SHEET E2 FOR DETAILS.

0 40' 80'

SCALE IN FEET

STATE OF ALASKA
49TH
David A. Yeatt
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

VINTAGE BLVD

Glacier Hwy

END PROJECT
STA. 416+46.69
N 494553.044
E 505054.076

CONCRETE MEDIAN
SEE SHEET E2 FOR DETAILS

RAMP/MEDIAN
SEE SHEET E1 FOR DETAILS

STA:416+28.96
OFF:6.27'LT

STA:416+23.23
OFF:0.55'LT

STA:416+28.91
OFF:5.08'RT

STA:416+46.48
OFF:5.47'RT

414+00

415+00

416+00

417+00

418+00

418+73

EGAN DR. EASTBOUND

EGAN DR. WESTBOUND

Vintage Blvd

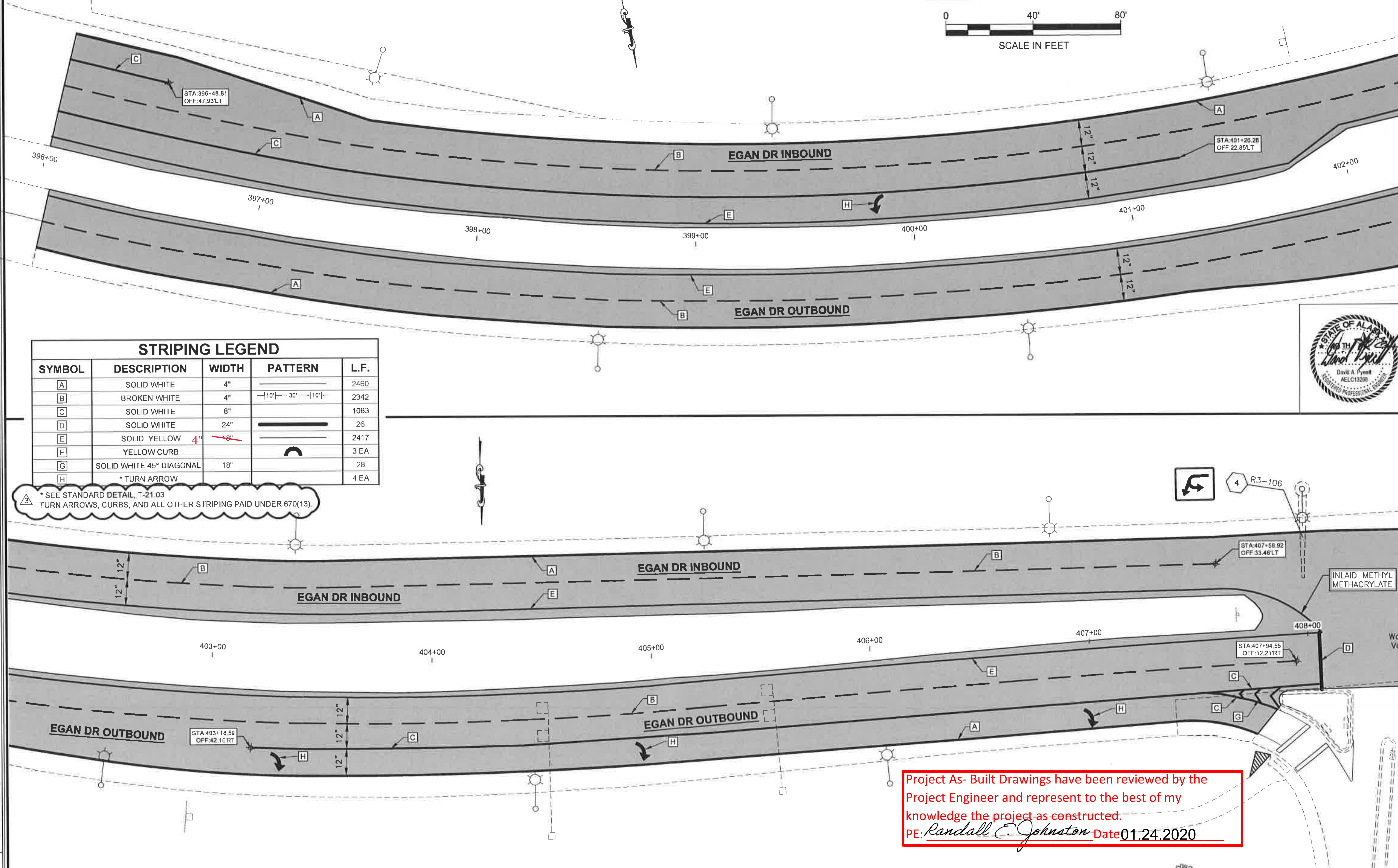
GLACIER HWY

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

FIRM	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES			ADDRESS	6860
FILE	Q:\Jnu\68660\Planset\68660_F1-F2.dwg			DATE	6/28/2018 12:46
LAYOUT	F2	DESIGNED	PW	CHECKED	DP
PHONE	(907) 465-1763			CERTIFICATE OF AUTH #:	
				DRAFTED	PW, RG, JT

NO.	DATE	REVISION
3	9/5/18	REVISED NOTE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z686600000/0932053	2018	H1	3



STRIPING LEGEND

SYMBOL	DESCRIPTION	WIDTH	PATTERN	L.F.
A	SOLID WHITE	4"		2460
B	BROKEN WHITE	4"	10' — 30' — 10'	2342
C	SOLID WHITE	8"		1083
D	SOLID WHITE	24"		26
E	SOLID YELLOW	4" ~~18"~~		2417
F	YELLOW CURB			3 EA
G	SOLID WHITE 45° DIAGONAL	18"		28
H	* TURN ARROW			4 EA

3 * SEE STANDARD DETAIL, T-21.03
TURN ARROWS, CURBS, AND ALL OTHER STRIPING PAID UNDER 670(13).

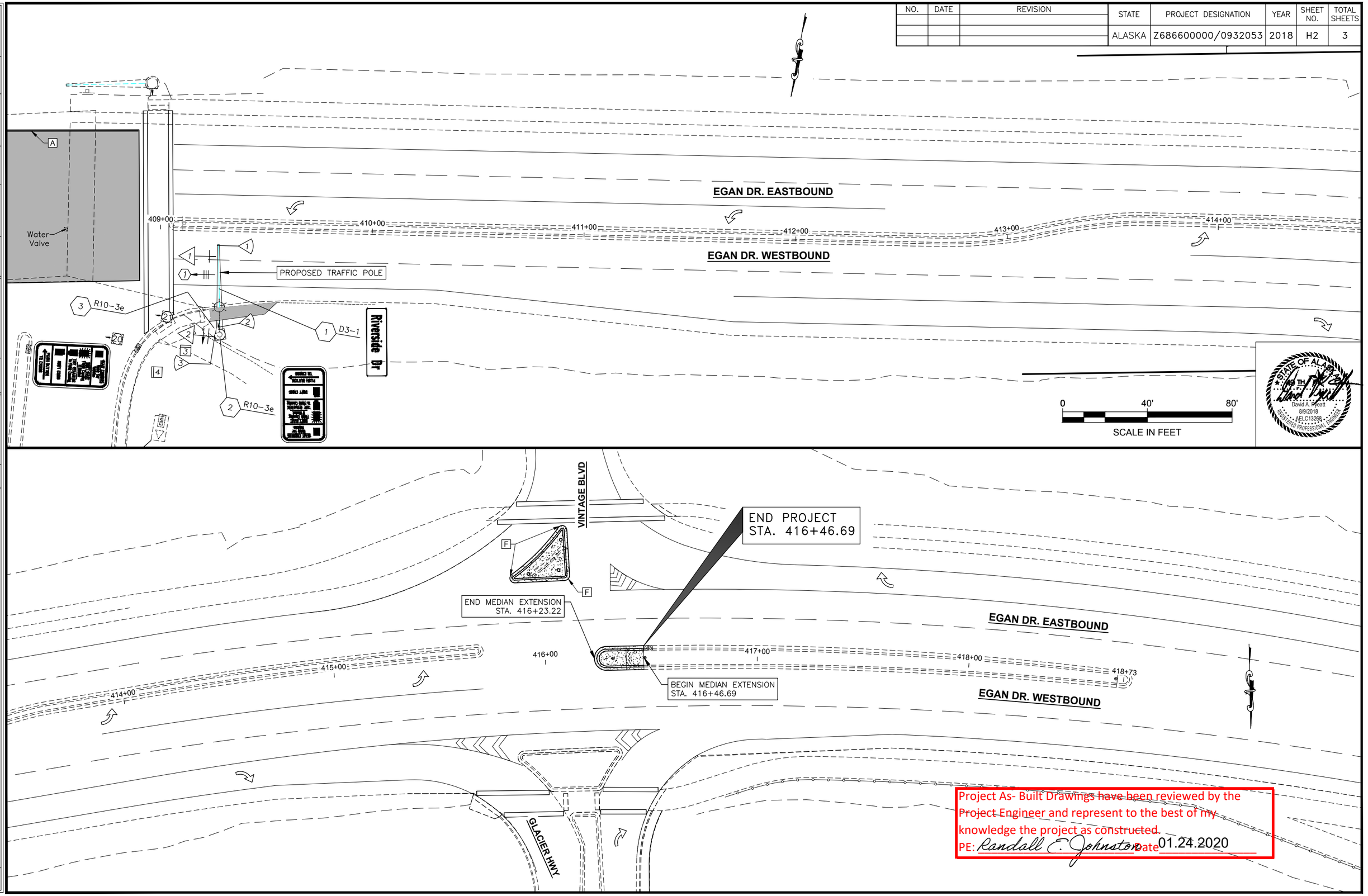
STATE OF ALASKA 49TH David A. Pyeatt AELC13268 REGISTERED PROFESSIONAL ENGINEER

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

FIRM: STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES | ADDRESS: 6860 GLACIER HWY, JUNEAU, AK 99811 | PHONE: (907) 465-1763 | CERTIFICATE OF AUTH #:
FILE: O:\Jnu\68660\Planset\68660_H1-H3_Sheets.dwg | DATE: 9/5/2018 10:39 | LAYOUT: H1 | DESIGNED: PW | CHECKED: DP | DRAFTED: PW, RG, JT

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z686600000/0932053	2018	H2	3

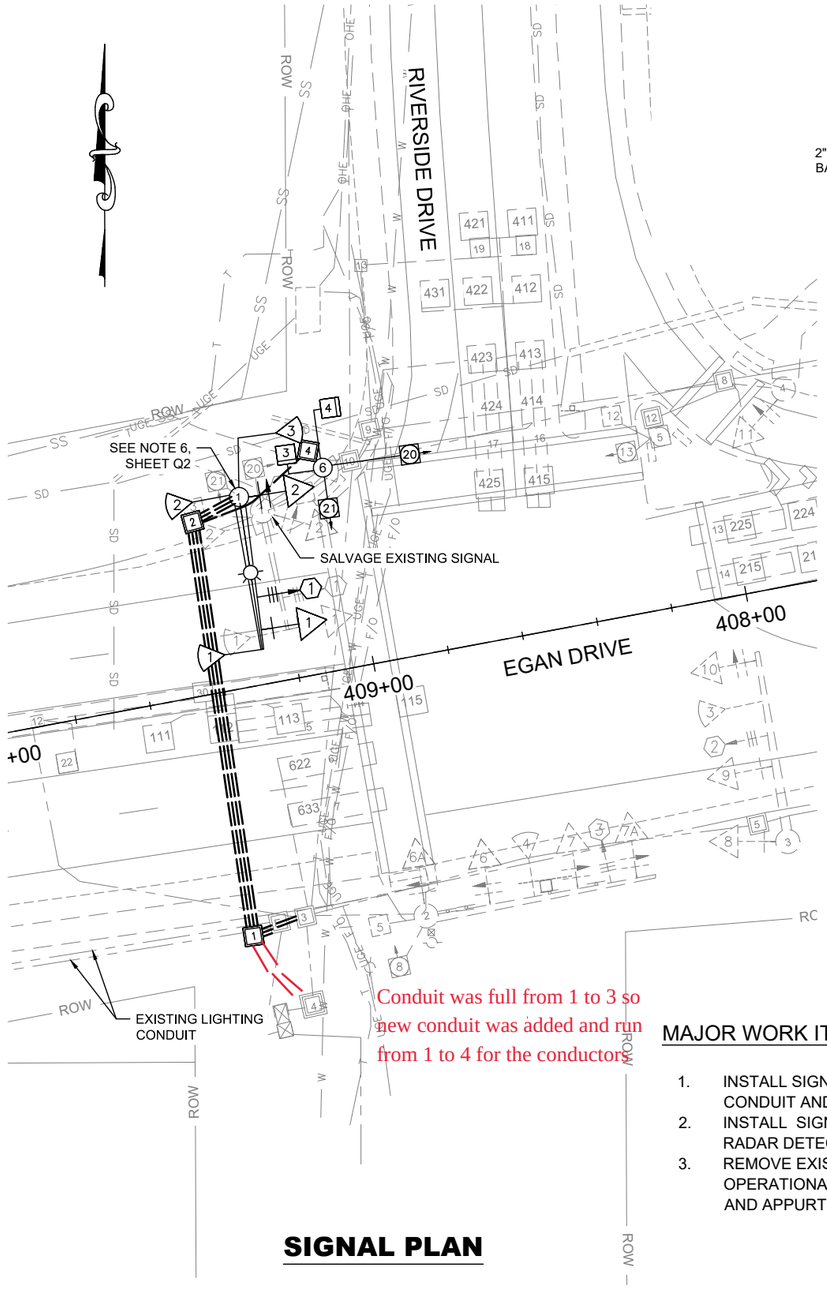


STATE OF ALASKA
10TH
David A. Yeatt
8/9/2018
AELC13268
REGISTERED PROFESSIONAL ENGINEER

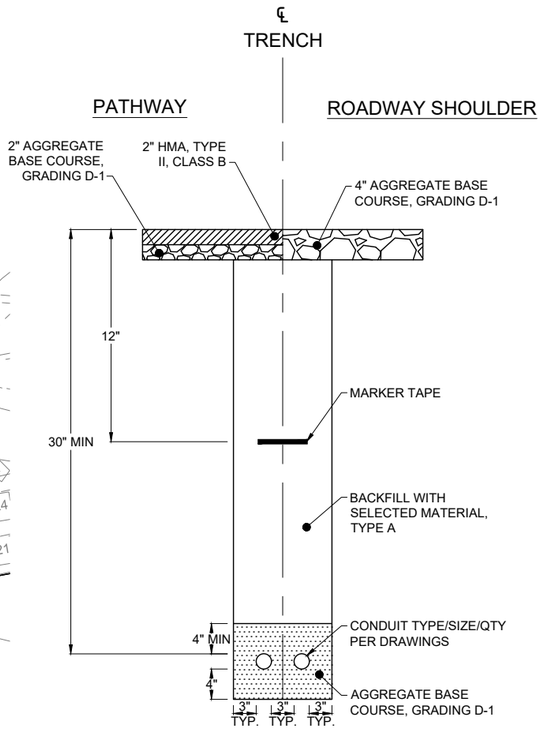
Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

FIRM	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES					CERTIFICATE OF AUTH #:			
FILE	Q:\Juu\68660\Plotset\68660_H1-H3_Sheets.dwg	LAYOUT	H2	DESIGNED	PW	CHECKED	DP	DRAFTED	PW, RG, JT
DATE	6/28/2018 12:49			PHONE	(907) 465-1763				
ADDRESS	6860 GLACIER HWY, JUNEAU, AK 99811								

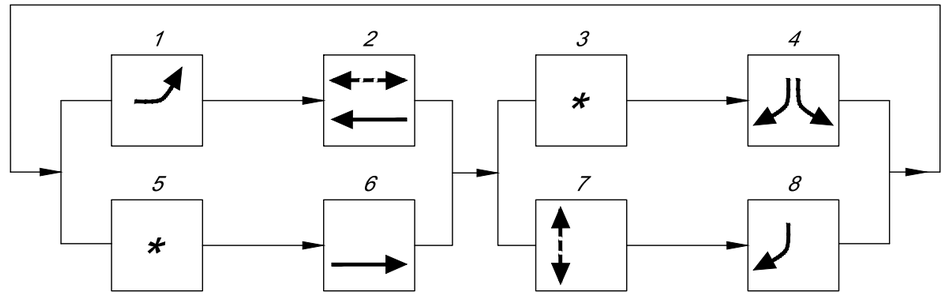
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	H3	3



SIGNAL PLAN



TRENCH DETAIL



PHASE DIAGRAM

PROTECTED VEHICLE MOVEMENT
PEDESTRIAN MOVEMENT
* FUTURE USE / NOT USED

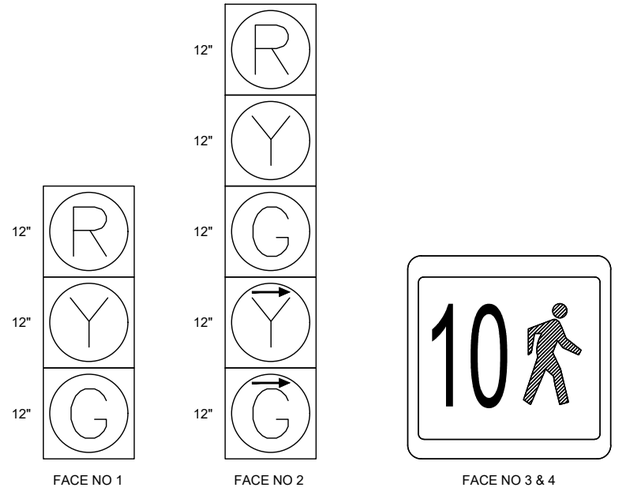
OVERLAP

660(1) FOUNDATION SCHEDULE

POLE NO.	STATION	OFFSET	FOUNDATION TYPE
1	409+26.83	49.81 RT	PILE, SEE SHEET E1
6	409+03.67	53.37 RT	CIP, STD DWG L-30.10

660(15) JUNCTION BOX SCHEDULE

BOX NO.	STATION	OFFSET	TYPE
1	409+44.46	64.77 LT	2
2	409+40.09	45.58 RT	2
4	409+06.61	58.47 RT	2



FACE NO 1 FACE NO 2 FACE NO 3 & 4

SIGNAL DISPLAYS

MAJOR WORK ITEMS AT THIS INTERSECTION

1. INSTALL SIGNAL POLE AND MAST ARM NO. 1, PEDESTRIAN ASSEMBLY NO. 6, CONDUIT AND CONDUCTOR AS SHOWN.
2. INSTALL SIGNAL ASSEMBLY NO. 1 TO INCLUDE RELOCATION OF THE EXISTING RADAR DETECTION SYSTEM.
3. REMOVE EXISTING SIGNAL ASSEMBLY (POLE 1) AFTER NEW SIGNAL IS OPERATIONAL. SALVAGE AND DELIVER POLE, MAST ARM, SIGNAL HARDWARE AND APPURTENANCES TO DOT&PF AT

   6860 GLACIER HIGHWAY
   JUNEAU AK 99811

4. AFTER REMOVAL OF THE EXISTING POLE P1, REMOVE THE TOP OF THE FOUNDATION TO AT LEAST 2' BELOW THE PROPOSED GRADE.
5. INSTALL THREE TYPE II JUNCTION BOXES AND CONDUIT AS SHOWN. CONDUIT UNDER EGAN DRIVE SHALL BE INSTALLED USING TRENCHLESS METHODS.

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA 49 TH
Marc Frutiger
No. CE 11889
6/22/18
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU – EGAN DR RIVERSIDE INTERSECTION IMPROVEMENTS

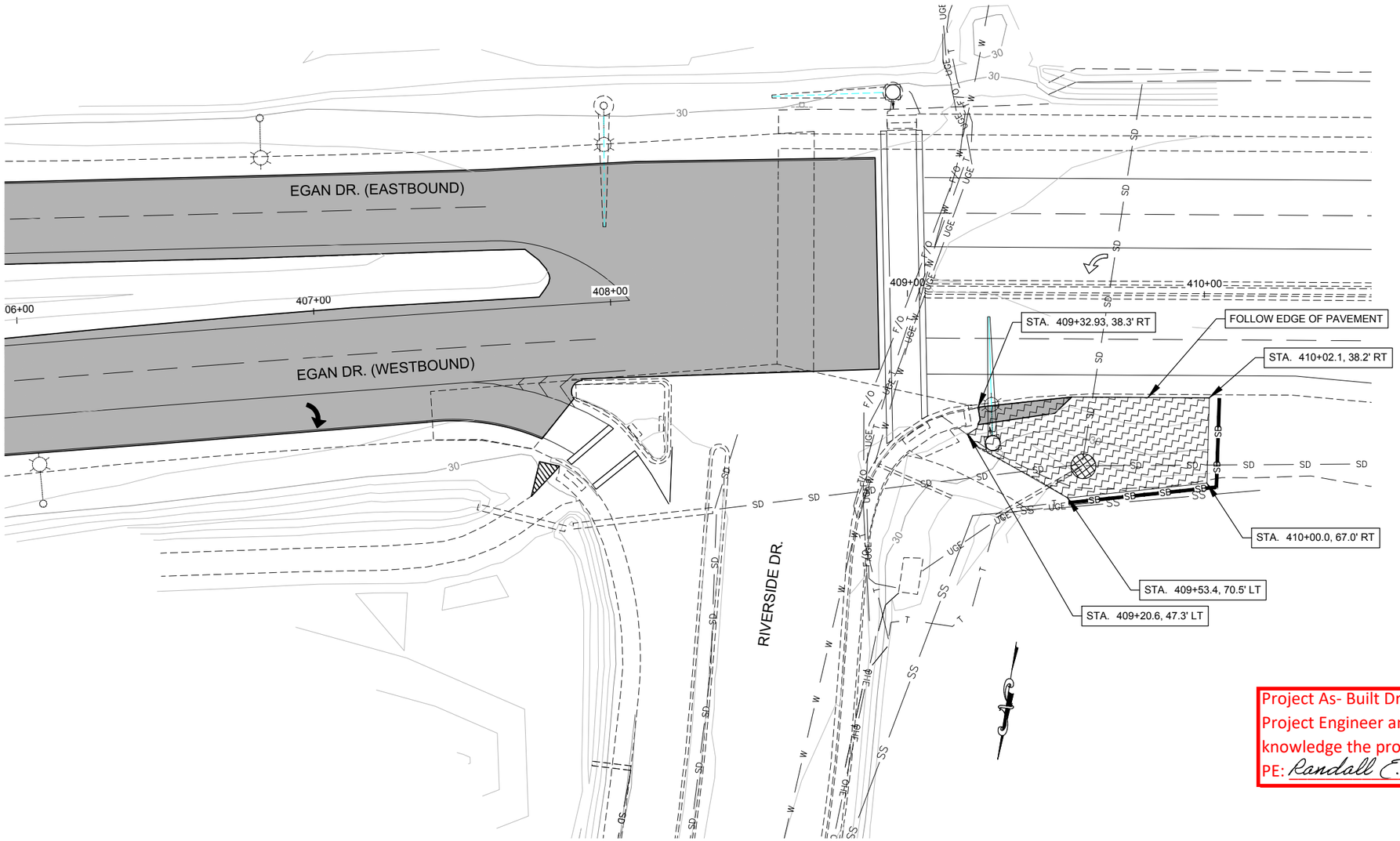
SIGNAL PLAN

FILE | Z:\project\1825.11 DOT_SE Eng Term Egan Dr Traffic Pole\Civil\ACAD\68660-H1 & H2.dwg | DATE | 6/22/2018 15:17 | LAYOUT | H1 | DESIGNED | MF | CHECKED | RR | DRAFTED | JH/DC

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	P1	1

LEGEND

- INVASIVE PLANT SPECIES
- INLET PROTECTION
- SEDIMENT BARRIER



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PE: Randall E. Johnston Date 01.24.2020

0 40' 80'

SCALE IN FEET

ESCP NOT SEALED
IN ACCORDANCE WITH
ALASKA HIGHWAY
PRECONSTRUCTION
MANUAL
SECTION 1120.7.3
DATED NOVEMBER 15, 2013

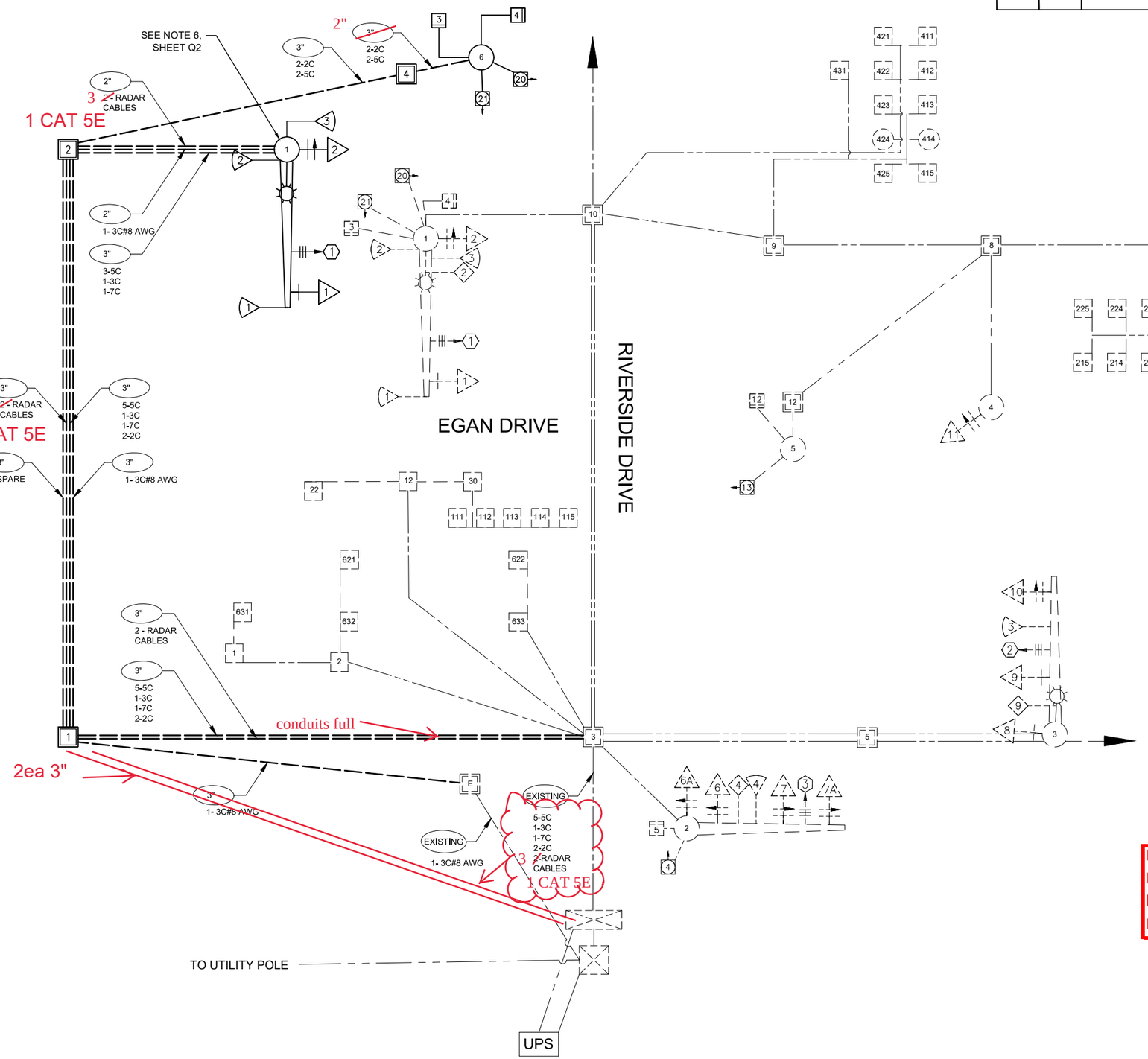
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

ESCP

DATE	6/28/2018 12:50
LAYOUT	P1
DESIGNED	PW
CHECKED	DR
DRAFTED	PW/JT
FILE	Q:\Jnu\68660\Planset\68660_P1 ESCP.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	Q1	2



NOTES:

1. INSTALL BARE 1 #8 GROUND IN ALL NEW CONDUITS

CONDUCTOR LEGEND

2-XX	QTY OF CABLES OF INDICATED TYPE
-2C	#14 PED CALL CABLE
-5C OR -7C	#14 SIGNAL HEAD CABLE
-3C	OPTICOM CABLE
X"	RIGID METAL CONDUIT

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6/22/18
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6860 GLACIER HIGHWAY, JUNEAU, AK 99811
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JNU – EGAN DR RIVERSIDE INTERSECTION IMPROVEMENTS

WIRING DIAGRAM

FILE | Z:\project\1825.11 DOT_SE Eng Term Egan Dr Traffic Pole\Civil\ACAD\68660-Q1.dwg | DATE | 6/22/2018 15:20 | LAYOUT | Q1 | DESIGNED | MF | CHECKED | RR | DRAFTED | JH/DC

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	Q2	2

660(1) SIGNAL HEAD SCHEDULE

POLE NO.	SIGNAL HEAD NO.	INDICATION	FACING
1	1	R-Y-G	EAST
1	2	R-Y-G-YRA-GRA	EAST
6	3	W-DW	SOUTH
6	4	W-DW	EAST

660(1) OPTICOM DETECTOR SCHEDULE

POLE NO.	ID	PHASE CALL	FACING	REMARKS
1	1	2	EAST	

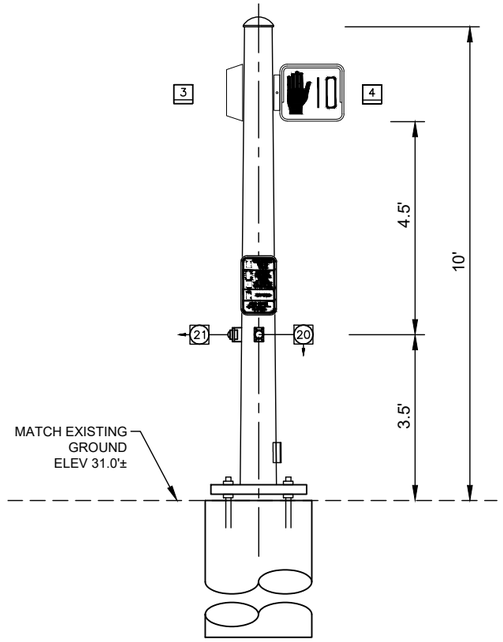
660(1) INTERSECTION LUMINAIRE SCHEDULE

POLE NO.	TYPE	WATTS	REMARKS
1	~~HPS~~	250	SIGNAL MOUNTED

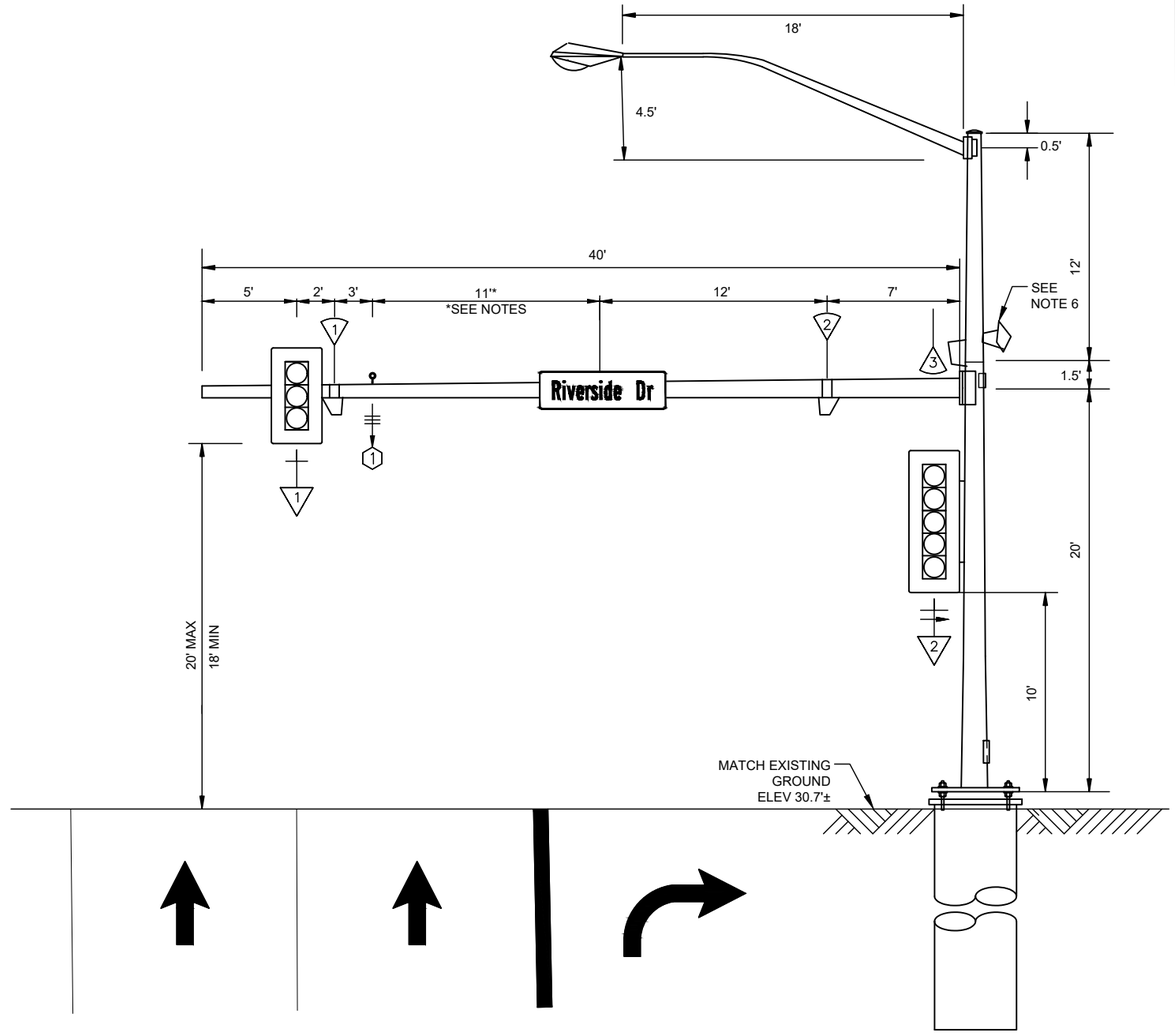
LED by Change Order

660(1) RADAR DETECTOR SCHEDULE

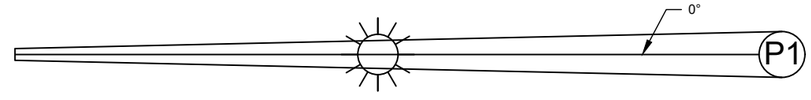
POLE NO.	ID	TYPE	FACING	REMARKS
1	1	ADVANCE SENSOR	WEST	RELOCATE EXISTING TO THE PROPOSED SIGNAL
1	2	MATRIX SENSOR	WEST	RELOCATE EXISTING TO THE PROPOSED SIGNAL
1	3	MATRIX SENSOR	EAST	RELOCATE EXISTING TO THE PROPOSED SIGNAL



PEDESTRIAN POLE (P6)
ELEVATION VIEW
LOOKING WEST
NTS



TRAFFIC SIGNAL POLE (P1)
LOOKING WEST
NTS



RADIAL INDEX

NOTES:

1. THIS DRAWING IS INTENDED FOR POLE DESIGN PURPOSES ONLY. ASSEMBLY CONFIGURATIONS ARE FOR LOADING PURPOSES AND MAY DIFFER FROM THOSE SHOWN IN PLANS. POLES HAVE NOT BEEN EVALUATED FOR LOADING CONDITIONS MORE SEVERE THAN THOSE SHOWN AND WILL REQUIRE INDIVIDUAL ANALYSIS WHEN ENCOUNTERED.
2. PROVIDE A SINGLE HANDHOLE LOCATED 135 DEGREES FROM MASTARM ON POLE 1 (P1).
3. FOUNDATION ELEVATIONS SHALL BE STAKED AND APPROVED BY ENGINEER PRIOR TO INSTALLATION.
4. SYMBOL MARKINGS ARE FOR LANE ARRANGEMENT REFERENCE ONLY. SEE SIGNING AND STRIPING SHEETS FOR STRIPING DETAILS.
5. CONTRACTOR SHALL VERIFY SIGNAL HEAD PLACEMENT IS CENTERED BETWEEN TWO THRU LANES.
6. RELOCATE EXISTING RADIO TO THE PROPOSED POLE.

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PE: Randall E. Johnston Date 01.24.2020

STATE OF ALASKA 49 TH
Marc Frutiger
No. CE 11989
6/22/18
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU – EGAN DR RIVERSIDE INTERSECTION IMPROVEMENTS

POLE ELEVATIONS

FILE | Z:\project\1825.11 DOT_SE Eng Term Egan Dr Traffic Pole\Civil\ACAD\68660-Q2.dwg
DATE | 6/22/2018 15:30
LAYOUT | Q2
DESIGNED | MF
CHECKED | RR
DRAFTED | JH/DC

FILE	DATE	LAYOUT	DESIGNED	DRAFTED	CHECKED
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T1	9

TRAFFIC CONTROL NOTES

1. SEE SECTION 643-3.08 FOR LIMITATIONS ON TRAFFIC RESTRICTIONS.
2. USE TYPE B WARNING LIGHTS ON ADVANCE WARNING SIGNS.
3. DOUBLE TRAFFIC FINE SIGNS SHALL BE INSTALLED AS SHOWN ON STD DWG C-04.12 AND AS SHOWN IN THESE PLANS. DOUBLE FINE SIGNS (R16-100, R16-101, CW20-102, AND ASSOCIATED CW1-6 OR CW1-7) ARE PERMANENT CONSTRUCTION SIGNS. REMOVE OR COVER THEM IF THE CONDITIONS IN C-04.12 NOTE 2 AND 3 DO NOT EXIST.
4. PROTECT WITH PORTABLE CONCRETE BARRIERS ALL AREAS OF REMOVED GUARDRAIL.
5. COVER DIRECTIONAL LANE SIGNS (R3-5 & R3-6 SERIES, TYPICALLY MOUNTED ON SIGNAL POLE MASTARMS) THAT CONTRADICT THE MOVEMENT RESTRICTIONS IN THE TCP.
6. DETOUR PLANS ARE NOT PROVIDED. THE CONTRACTOR SHALL SUBMIT DETOUR PLANS WITH THE TCP'S FOR OPERATIONS THAT WILL LIMIT ACCESS.
7. USE TYPE II BARRICADES AND R9 SERIES SIGNS TO CLOSE SIDEWALKS AND CROSSWALKS.
8. MAX CONE OR DRUM SPACING SHALL NOT EXCEED 45' ON TAPERS OR 90' ON TANGENTS
9. THE LENGTH OF WORK AREA SHALL BE MINIMIZED TO AVOID EXCESSIVE TRAFFIC DELAYS AS DIRECTED BY THE ENGINEER.
10. WHEN WORKING ON EGAN DRIVE SHOULDERS THE CONTRACTOR SHALL CLOSE THE RIGHT LANE.

LEGEND

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE II BARRICADE
- ..... TYPE III BARRICADE
- ..... WORK AREA
- PCMS ..... PORTABLE CHANGEABLE MESSAGE BOARD SIGN
- PCB ..... PORTABLE CONCRETE BARRIER

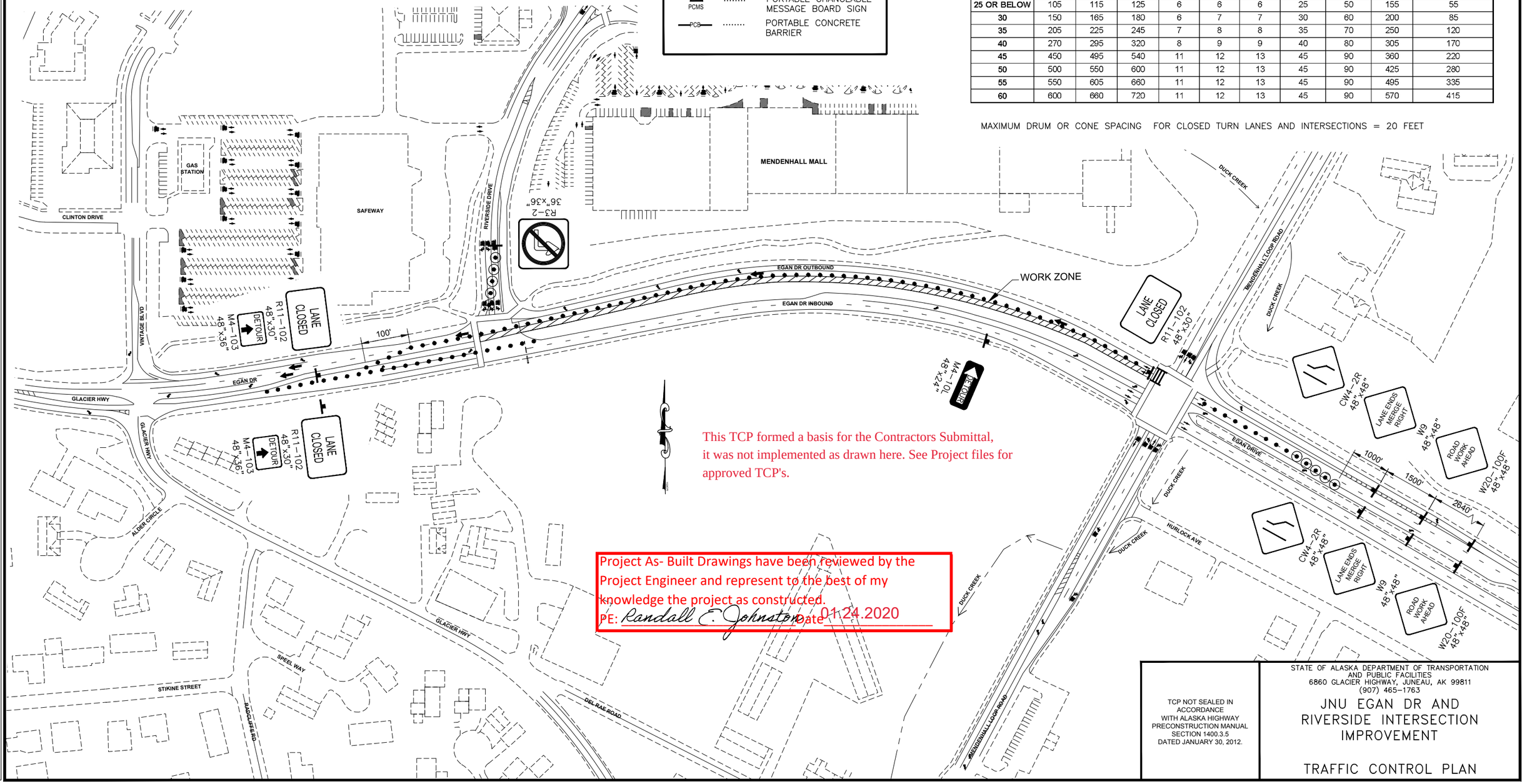
0 200' 400'

SCALE IN FEET

TCP SETUP TABLE

	MIN MERGING TAPER LENGTH (L) IN FEET WIDTH OF OFFSET (W) IN			MIN NUMBER OF DEVICES WIDTH OF OFFSET (W) IN FEET			MAX DEVICE SPACING IN FEET		BUFFER SPACE	BUFFER SPACE PER THE ATTSA GUIDE
SPEED (MPH)	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGENT	(FT)	(FT)
										35 FT FOR 20 MPH
25 OR BELOW	105	115	125	6	6	6	25	50	155	55
30	150	165	180	6	7	7	30	60	200	85
35	205	225	245	7	8	8	35	70	250	120
40	270	295	320	8	9	9	40	80	305	170
45	450	495	540	11	12	13	45	90	360	220
50	500	550	600	11	12	13	45	90	425	280
55	550	605	660	11	12	13	45	90	495	335
60	600	660	720	11	12	13	45	90	570	415

MAXIMUM DRUM OR CONE SPACING FOR CLOSED TURN LANES AND INTERSECTIONS = 20 FEET



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Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.

PE: Randall E. Johnston Date 01.24.2020

TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TRAFFIC CONTROL PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T2	9

0 200' 400'

SCALE IN FEET

LEGEND

- SIGN
- CONE
- DRUM
- TYPE II BARRICADE
- TYPE III BARRICADE
- WORK AREA
- PCMS — PORTABLE CHANGEABLE MESSAGE BOARD SIGN
- PCB — PORTABLE CONCRETE BARRIER

THE ALASKA CLUB
POST OFFICE
USE MALL ROAD AND VINTAGE ROAD
DETOUR
M4-10R 48"x24"
R11-2
RIVERSIDE DRIVE
POSTAL WAY
CLINTON DRIVE
VINTAGE BLVD
Alaska Gardens
R3-2 36"x36"
R11-102 48"x30"
LANE CLOSED
MENDENHALL MALL
SUPER BEAR SUPERMART
GAS STATION
SAFEWAY
CLINTON DRIVE
EGAN DR OUTBOUND
EGAN DR INBOUND
R3-1 36"x36"
WORK ZONE
VINTAGE BLVD
EGAN DR
GLACIER HWY
M4-103 48"x36"
ALDER CIRCLE
STIKINE STREET
SPEEL WAY
RADCLIFFE RD
DEL RAE ROAD
MENDENHALL LOOP ROAD
DUCK CREEK
MALL ROAD
ATLIN DRIVE
HURLOCK AVE
EGAN DRIVE
CW4-2R 48"x48"
LANE ENDS MERGE LEFT
W9 48"x48"
ROAD WORK AHEAD
W20-100F 48"x48"
1000'
1500'
2640'

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(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TRAFFIC CONTROL PLAN

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T3	9

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LAYOUT	T3
DESIGNED	PW DR
CHECKED	DP
DRAFTED	PW, RG, JT
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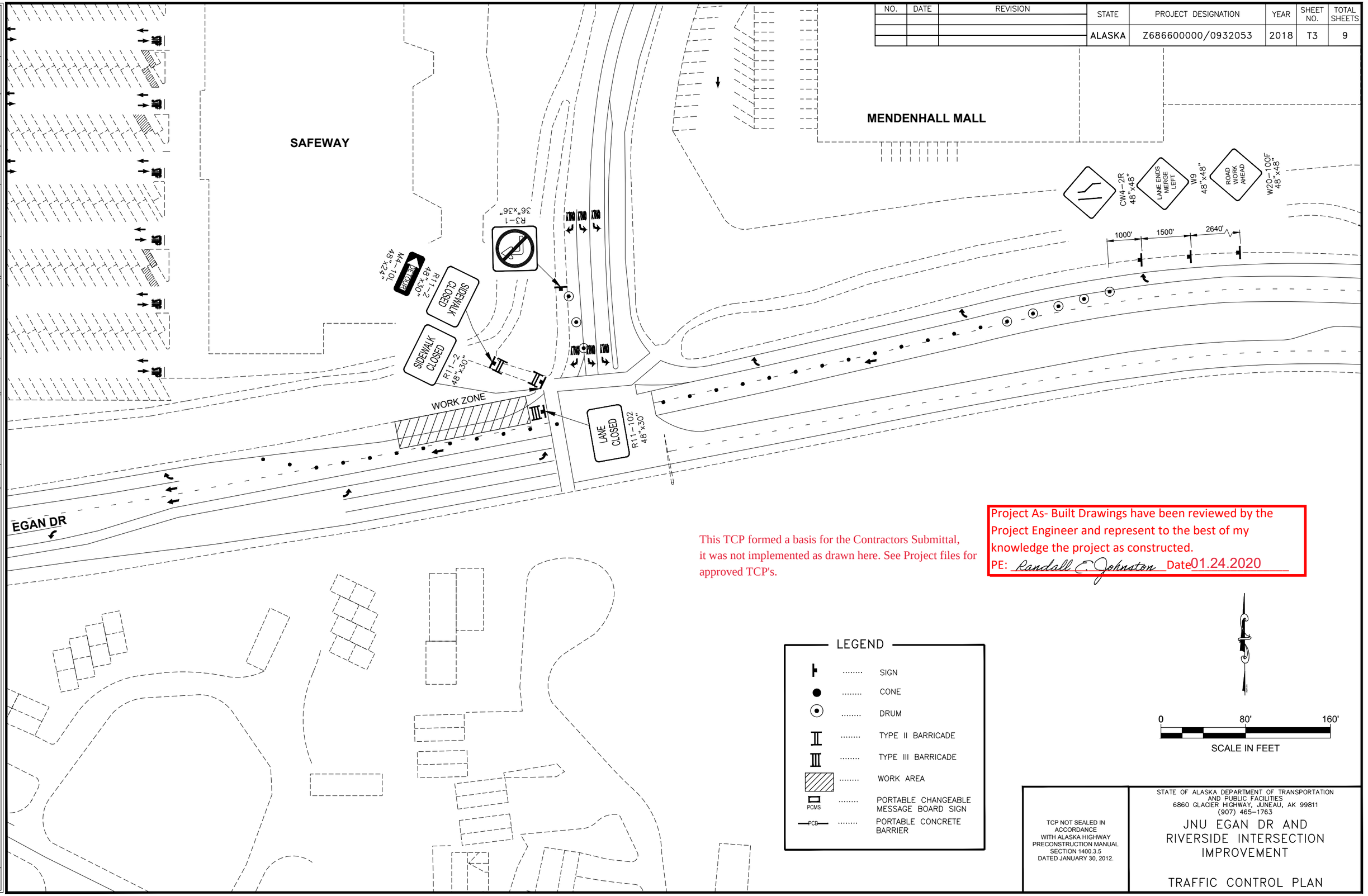

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LEGEND

	SIGN
	CONE
	DRUM
	TYPE II BARRICADE
	TYPE III BARRICADE
	WORK AREA
PCMS	PORTABLE CHANGEABLE MESSAGE BOARD SIGN
PCB	PORTABLE CONCRETE BARRIER

0 80' 160'

SCALE IN FEET

TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012.

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JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TRAFFIC CONTROL PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T4	9

0 80' 160'

SCALE IN FEET

LEGEND

- SIGN
- CONE
- DRUM
- TYPE II BARRICADE
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- WORK AREA
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MENDENHALL LOOP ROAD

DUCK CREEK

WORK ZONE

R3-1 36"x36"

LANE CLOSED R11-102 48"x30"

EGAN DRIVE

1000'

1500'

2640'

CW4-2R 48"x48"

LANE ENDS MERGE LEFT W9 48"x48"

ROAD WORK AHEAD W20-100F 48"x48"

HURLOCK AVE

DUCK CREEK

DUCK CREEK

DUCK CREEK

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TRAFFIC CONTROL PLAN

FILE	DATE	LAYOUT	DESIGNED	DRAWN	CHECKED	APPROVED
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T5	9

DATE 6/28/2018 12:52 | LAYOUT T5 | DESIGNED DR | CHECKED DP | DRAFTED RG

FILE Q:\jnu\68660\Planset\68660_T5-T6_Traf.dwg

0 40' 80'

SCALE IN FEET

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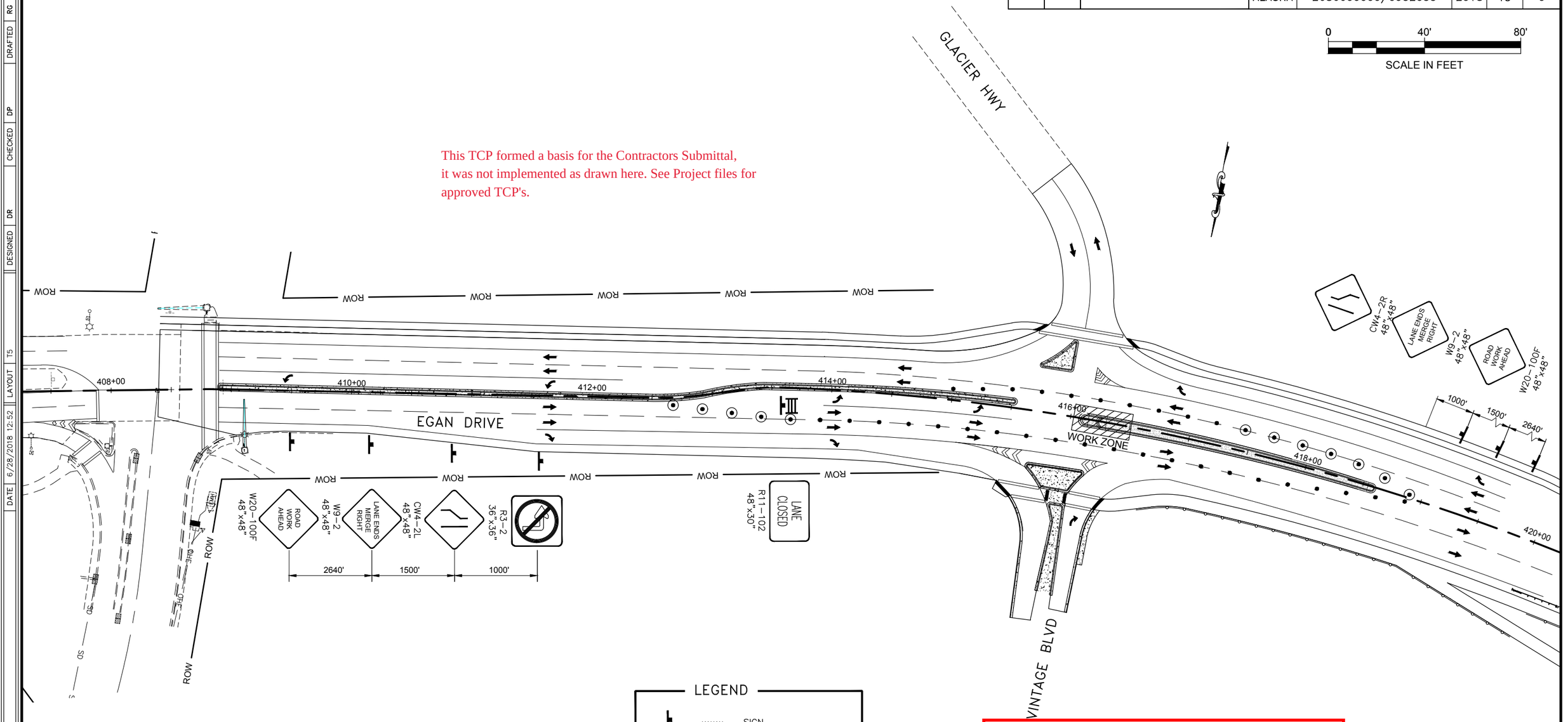

LEGEND

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE II BARRICADE
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TRAFFIC CONTROL PLAN

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T6	9

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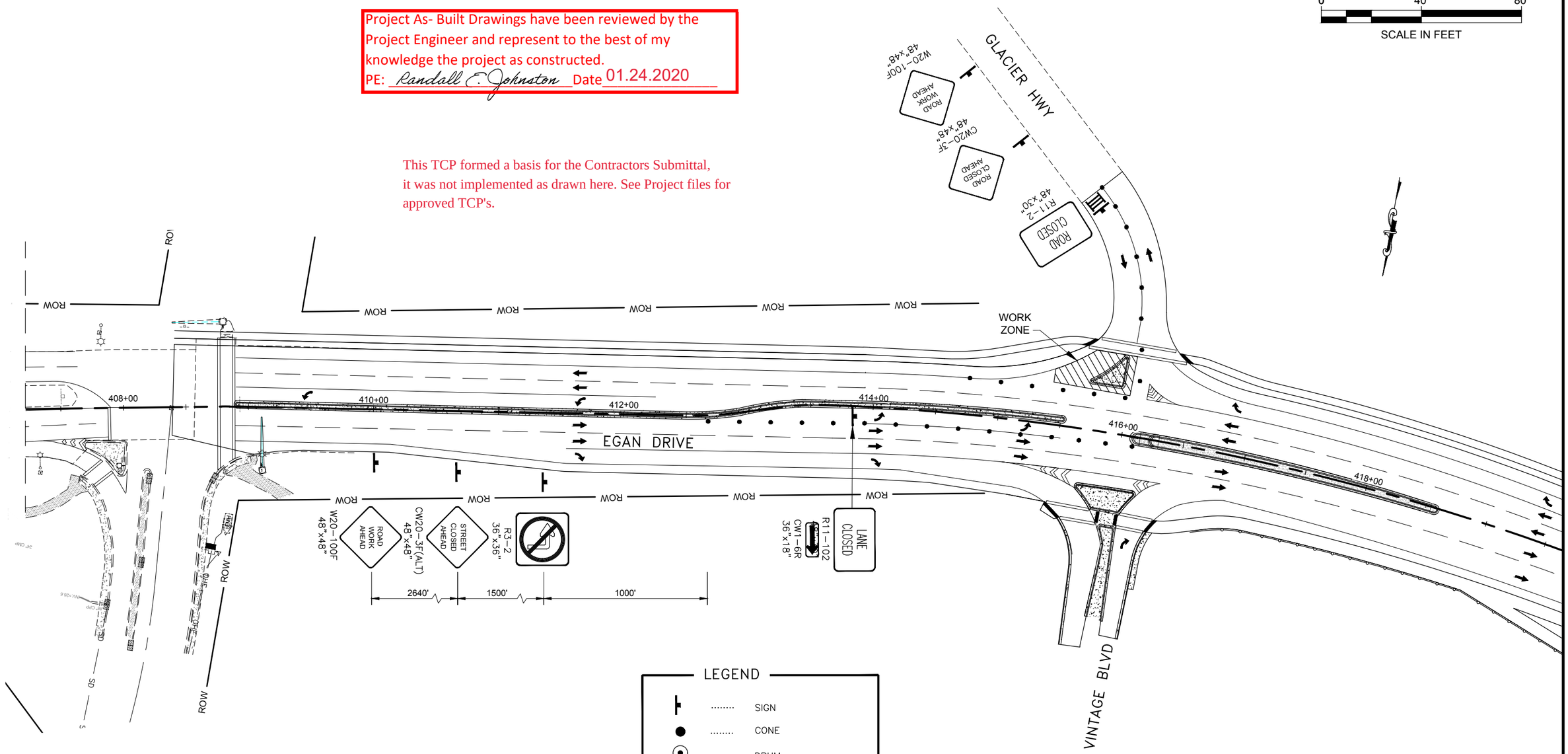
0 40' 80'
SCALE IN FEET



LEGEND

- SIGN
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- TYPE II BARRICADE
- TYPE III BARRICADE
- WORK AREA
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TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012.

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JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TRAFFIC CONTROL PLAN

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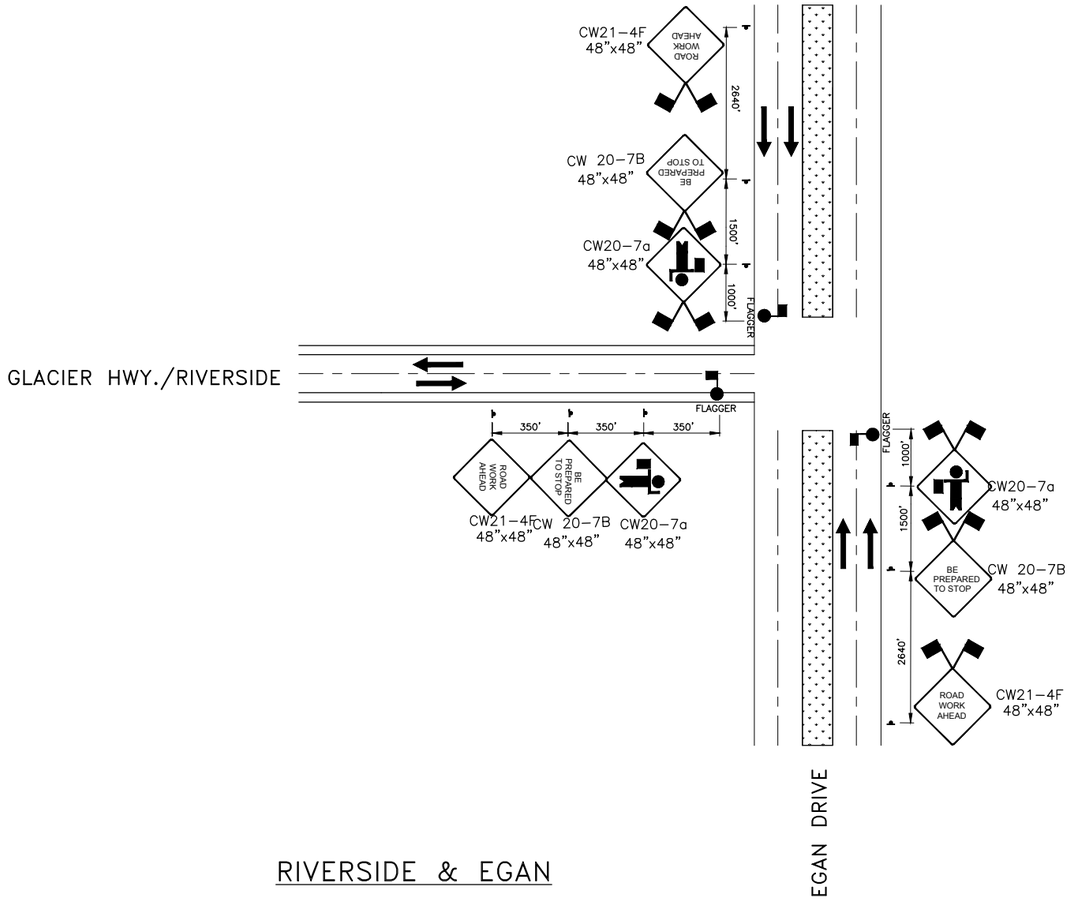
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T7	9

NOTE:

1. FLAGGERS ARE NEEDED ONLY WHEN THE INTERSECTION SIGNAL IS SHUT DOWN, SEE SECTION 643 FOR RESTRICTIONS.



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LEGEND

- ..... SIGN
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- ..... TYPE III BARRICADE
- ..... WORK AREA
- PCMS ..... PORTABLE CHANGEABLE MESSAGE BOARD SIGN
- PCB ..... PORTABLE CONCRETE BARRIER
- ..... FLAGGER STATION
- ..... HIGH LEVEL WARNING DEVICE

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465–1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TRAFFIC CONTROL PLAN

FILE	DATE	LAYOUT	DESIGNED	PW DR	CHECKED	DRAFTED
Q:\jnu\68660\Planset\68660_T7-T9_Traf.dwg	6/13/2018 7:53	T7			DP	PW, RG, JT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T8	9

LEGEND

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE II BARRICADE
- ..... TYPE III BARRICADE
- ..... WORK AREA
- PCMS ..... PORTABLE CHANGEABLE MESSAGE BOARD SIGN
- PCB ..... PORTABLE CONCRETE BARRIER

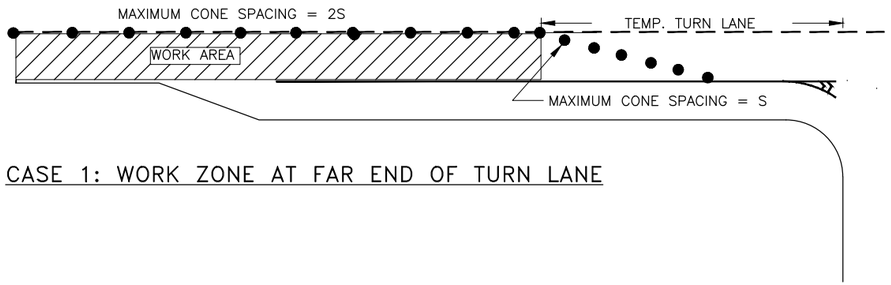
This TCP formed a basis for the Contractors Submittal, it was not implemented as drawn here. See Project files for approved TCP's.

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

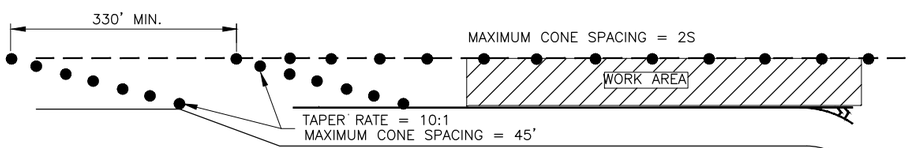
TCP SETUP TABLE

SPEED (MPH)	MIN MERGING TAPER LENGTH (L) IN FEET WIDTH OF OFFSET (W) IN 10'	11'	12'	MIN NUMBER OF DEVICES WIDTH OF OFFSET (W) IN FEET 10'	11'	12'	MAX DEVICE SPACING IN FEET ALONG TAPER	ALONG TANGENT	BUFFER SPACE (FT)	BUFFER SPACE PER THE ATTSA GUIDE (FT)
										35 FT FOR 20 MPH
25 OR BELOW	105	115	125	6	6	6	25	50	155	55
30	150	165	180	6	7	7	30	60	200	85
35	205	225	245	7	8	8	35	70	250	120
40	270	295	320	8	9	9	40	80	305	170
45	450	495	540	11	12	13	45	90	360	220
50	500	550	600	11	12	13	45	90	425	280
55	550	605	660	11	12	13	45	90	495	335
60	600	660	720	11	12	13	45	90	570	415

MAXIMUM DRUM OR CONE SPACING FOR CLOSED TURN LANES AND INTERSECTIONS = 20 FEET



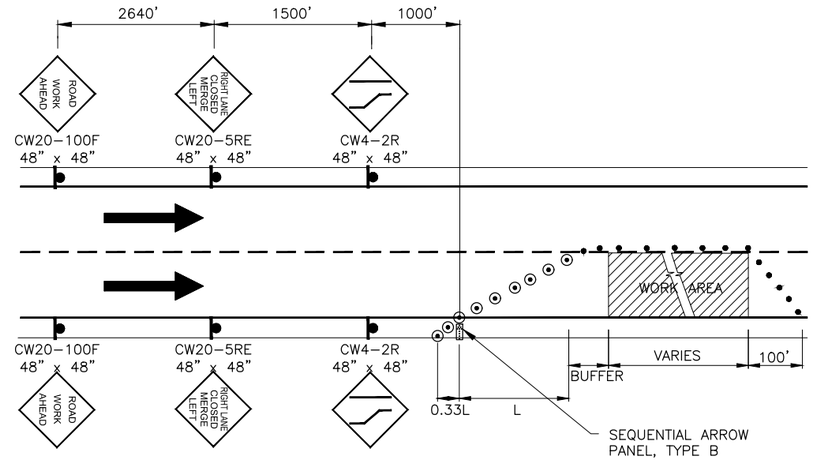
CASE 1: WORK ZONE AT FAR END OF TURN LANE



CASE 2: WORK ZONE NEARING INTERSECTION

TYPICAL DETAIL: LANE TO REMAIN OPEN

TRAFFIC CONTROL



TYPICAL SINGLE LANE CLOSURE

TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012.

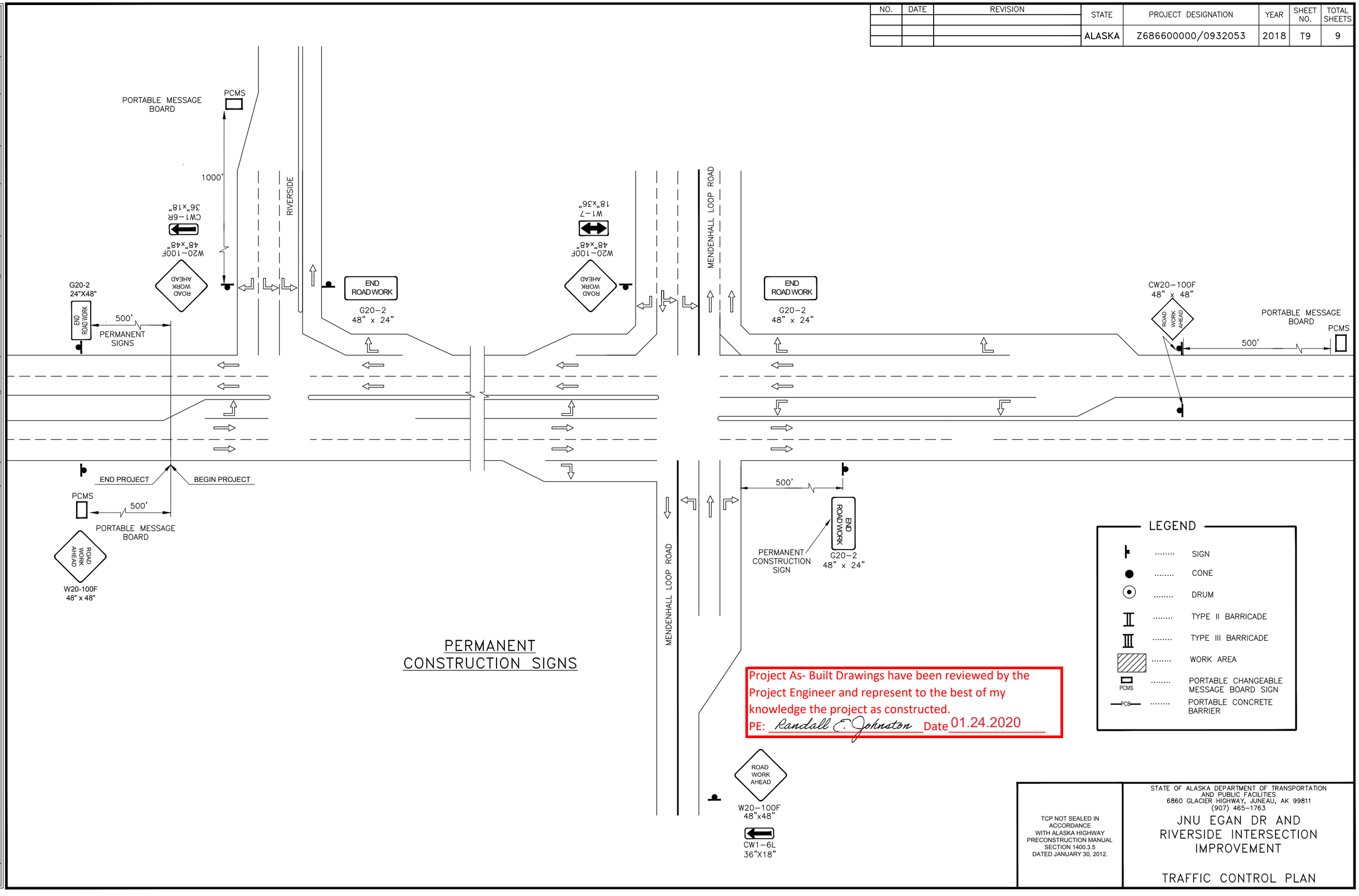
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
(907) 465-1763

JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TRAFFIC CONTROL PLAN

FILE | Q:\Jnu\68660\Planset\68660_T7-T9_Trof.dwg | DATE | 6/13/2018 7:53 | LAYOUT | T8 | DESIGNED | PW DR | CHECKED | DP | DRAFTED | PW, RG, JT

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	Z686600000/0932053	2018	T9	9



PERMANENT CONSTRUCTION SIGNS

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: *Randall E. Johnston* Date 01.24.2020

LEGEND

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE II BARRICADE
- ..... TYPE III BARRICADE
- ..... WORK AREA
- PCMS ..... PORTABLE CHANGEABLE MESSAGE BOARD SIGN
- PCB ..... PORTABLE CONCRETE BARRIER

TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HIGHWAY, JUNEAU, AK 99811
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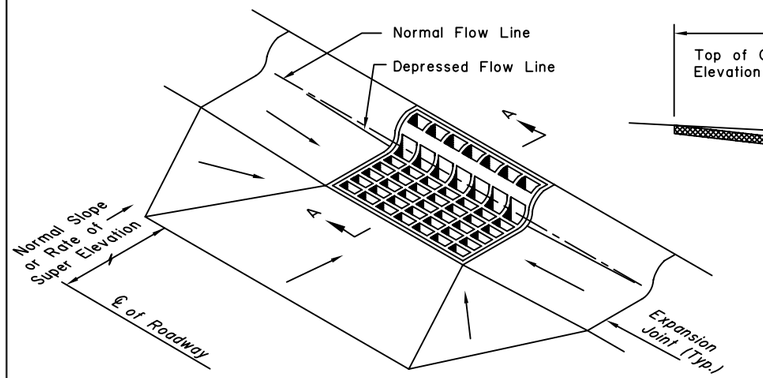
JNU EGAN DR AND RIVERSIDE INTERSECTION IMPROVEMENT

TRAFFIC CONTROL PLAN

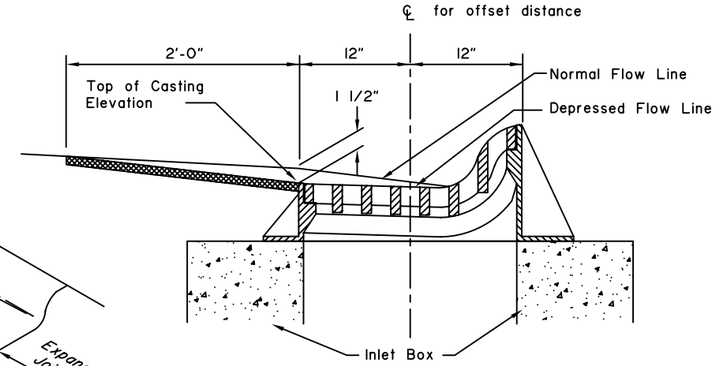
FILE	DATE	LAYOUT	DESIGNED	PW DR	CHECKED	DP	DRAFTED	PW, RG, JT
Q:\Jnu\68660\Plonset\68660_T7-T9_Trof.dwg	6/13/2018 7:53	T9						

D-24.00

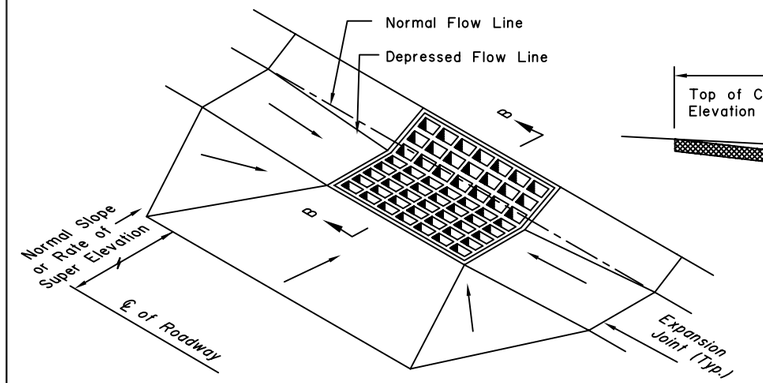
SHEET 1 of 1



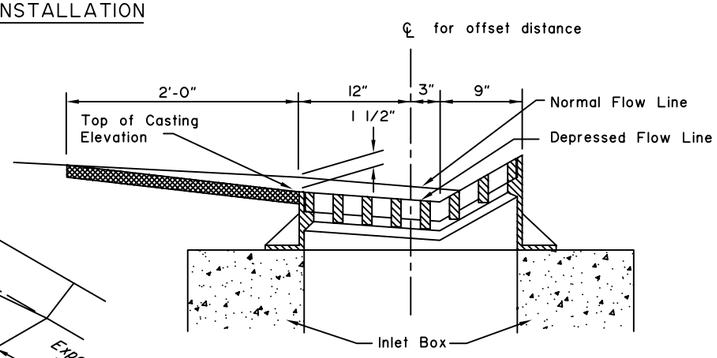
MOUNTABLE CURB INLET INSTALLATION



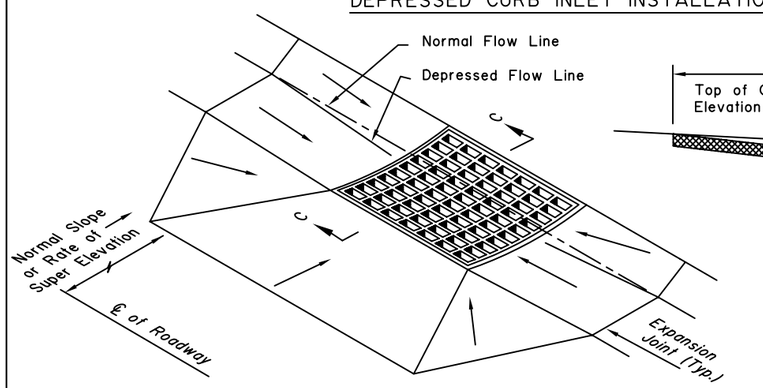
SECTION A-A



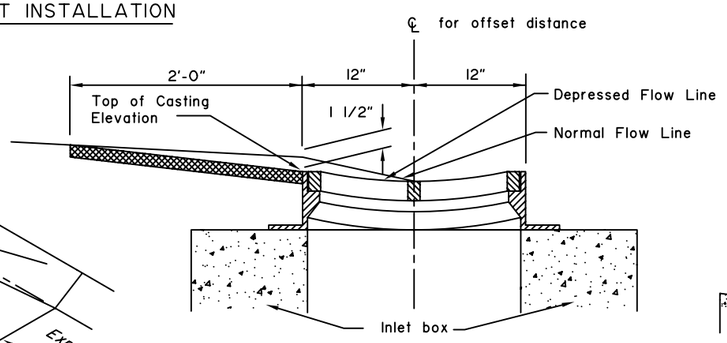
DEPRESSED CURB INLET INSTALLATION



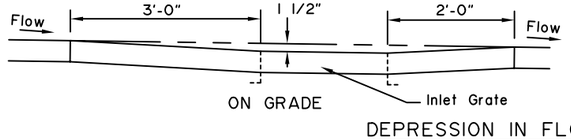
SECTION B-B

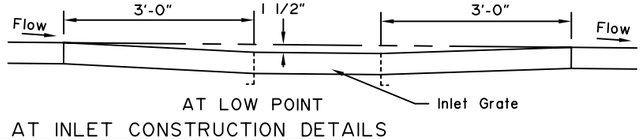


GUTTER INLET INSTALLATION

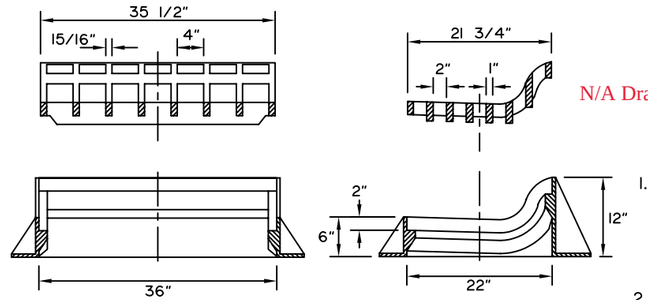


SECTION C-C

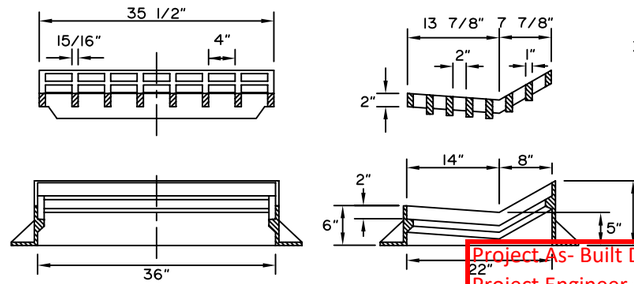




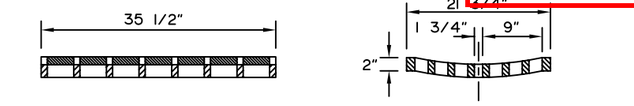
DEPRESSION IN FLOW LINE AT INLET CONSTRUCTION DETAILS



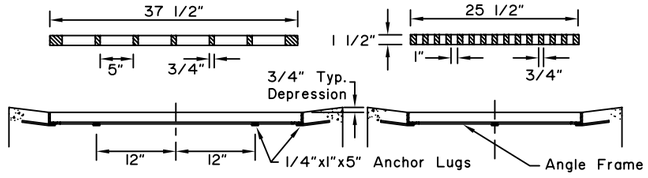
MOUNTABLE CURB INLET FRAME AND GRATE



DEPRESSED CURB INLET FRAME AND GRATE



GUTTER INLET FRAME AND GRATE



NOTE: All Angle Frame shall have Anchor Lugs

FIELD INLET FRAME AND GRATE

N/A Drawing

GENERAL NOTES:

1. Details shown are to indicate general design only. Dimensions and design may vary among the manufacturers. Except inlet grate outside dimension shall be as shown on this drawing.
2. Minimum casting weight shall be 550lbs. for Curb Inlet Frame and Grate, 450lbs. for Gutter Inlet Frame and Grate, and 300lbs. for Field Inlet Frame and Grate.
3. Field Inlet Frame may be welded assembly of L 1 3/4"xl 3/4"xl/4" angle equivalent to ASTM A-36 steel.

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020

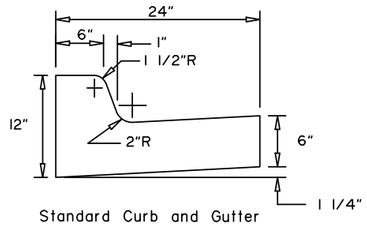
REVISIONS		
Date	Description	By

State of Alaska
Department of Transportation & Public Facilities

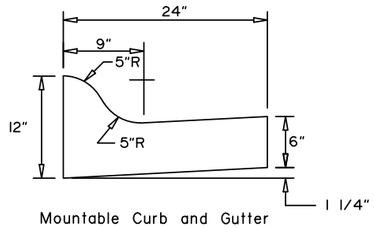
INLET FRAMES AND GRATES

APPROVED
Date 7/15/82

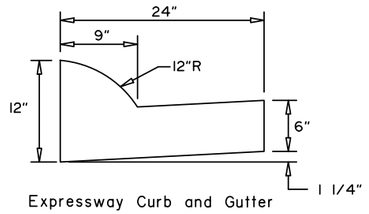
D-24.00



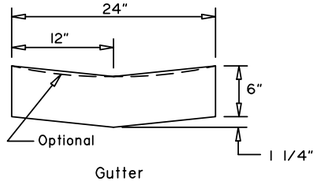
Standard Curb and Gutter



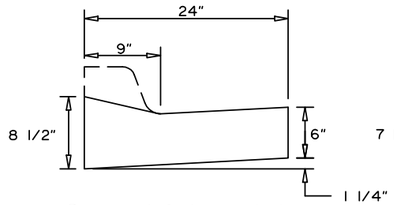
Mountable Curb and Gutter



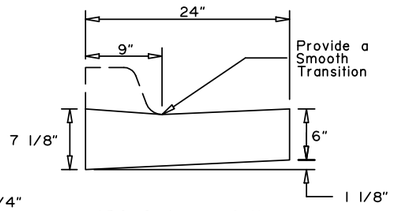
Expressway Curb and Gutter



Gutter

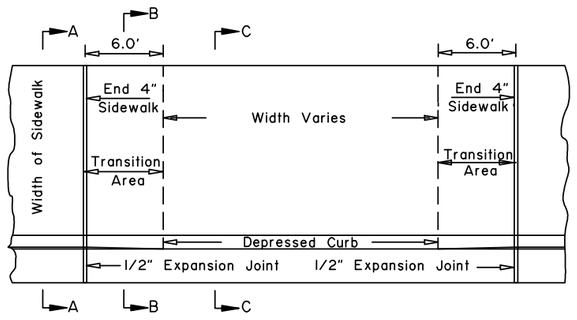


Depressed Curb and Gutter

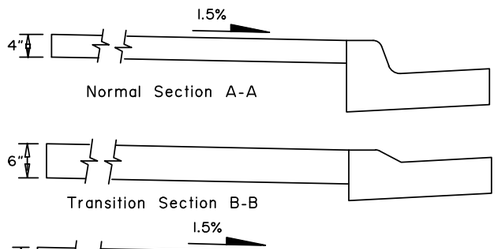


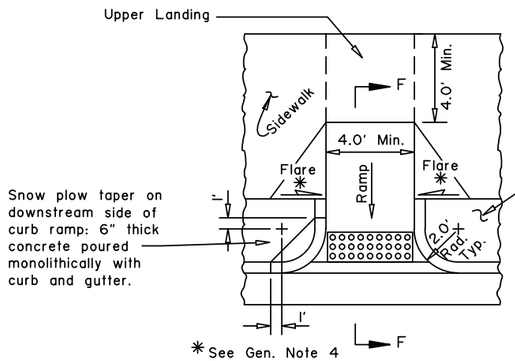
ADA Curb and Gutter

CURB and GUTTER DETAILS

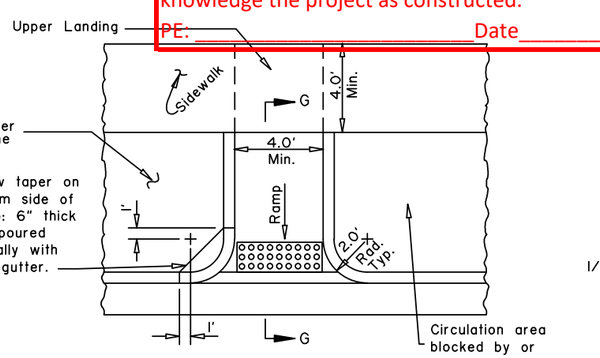


DRIVEWAY CURB CUT DETAILS



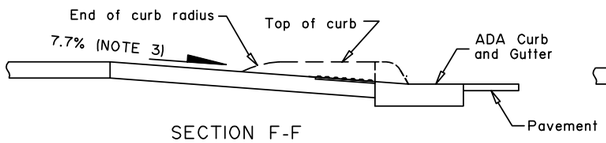


PLAN

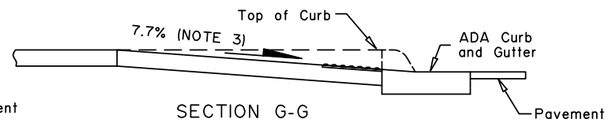


PLAN

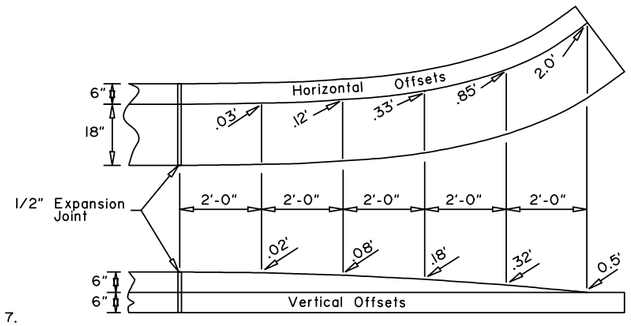
= Detectable Warning Tile (see Note 8)



SECTION F-F
Returned Curb Ramp with Sidewalk for Pedestrians



SECTION G-G
Returned Curb Ramp for Pedestrians



CURB and GUTTER TERMINATION TRANSITIONS

Note: Drawing not to scale

CONSTRUCTION NOTES:

1. Use the type of curb and gutter shown on the plans.
2. Construct ramp runs and landings of concrete, regardless of whether the sidewalk is asphalt or concrete.
3. Construct ramp slopes at a 7.7% nominal grade, or flatter. Ramp slopes may be increased to a maximum of 8.3% when site conditions warrant it. Ramp lengths should be increased to keep grades under the 8.3% maximum, but are not required to exceed 15.0 feet. The resulting ramp grade at a 15.0 foot ramp length is acceptable even if it exceeds 8.3%.
4. Construct flare slopes at 8.3% (measured paralllel to the curb line) or flatter, sidewalk cross slopes at 1.5% nominal (1.0% min. and 2.0% max), and ADA Curb and Gutter gutter pan slopes at 4.7% nominal. Construct grade breaks perpendicular to ramp runs.
5. Do not construct flare slopes steeper than 10.0%, sidewalk cross slopes steeper than 2.0% and ADA Curb and Gutter gutter pan slopes steeper than 5.0%. These are the steepest slopes allowed under the 2006 ADA Standards for Transportation Facilities.
6. Provide a coarse broomed finish on ramp runs perpendicular to the ramp slope.
7. When approved by the Engineer, curb returns may be replaced with flares at locations where access to the side of a ramp run is free of poles, utility boxes, other obstructions, or non–accessible surfaces such as a dirt planter strips. See Standard Drawing I–22 for flare details.
8. Install 24" wide detectable warning tiles for the full width of the ramp. Provide tiles with truncated domes meeting Section 705.1 of the 2006 ADA Standards for Transportation Facilities. Align truncated dome pattern in the predominant direction of wheelchair travel to permit wheels to roll between domes.
9. Maximum cross slope on upper landings, measured in any direction, is 2.0%. Maximum cross slope on ramps is 2.0% measured perpendicular to the ramp run.

DESIGN NOTES:

1. Use Mountable or Expressway curbs on medians and traffic islands.
2. These details are compliant with the 2006 ADA Standards for Transportation Facilities.

REVISIONS		
Date	Description	By
5/31/12	ADA Updates	JCJ
3/31/15	Slopes and cross slope	JCJ
7/1/16	2006 ADA Stds Update	LRG

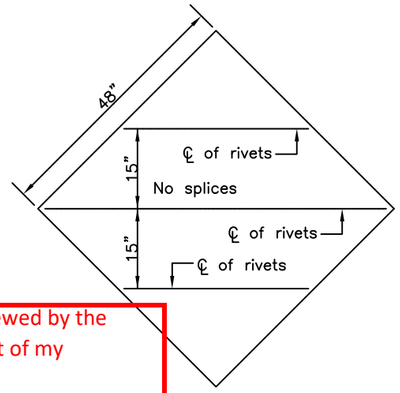
State of Alaska DOT&PF
3132 Channel Dr., Juneau, AK
Phone: (907) 465–2960

CURB CUT, CURB & GUTTER AND CURB RAMP DETAILS

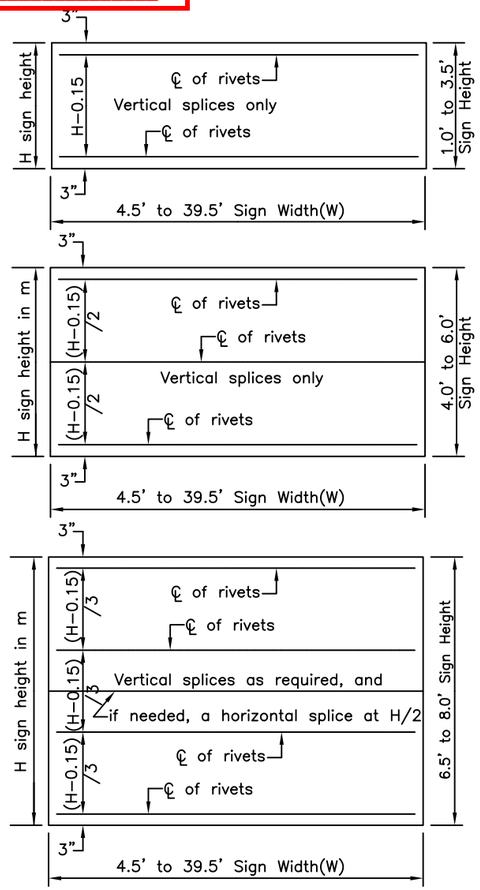
STATE of ALASKA 49th
Lars R. Gregovich CE-8065 REGISTERED PROFESSIONAL ENGINEER
6-15-16

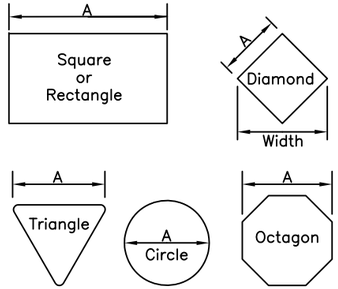
Eff. Date: 7/1/16

I–20.20



Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020





Maximum size unframed signs using 0.125" thick aluminum sheeting.	
Sign Shape	A
Squares, Shields, and Route Markers	48"
Rectangles	48"
Diamonds	48"
Triangles	48"
Rounds and Octagons	48"

Install wind framing on all signs that exceed the dimensions listed.

LIGHT SIGNS

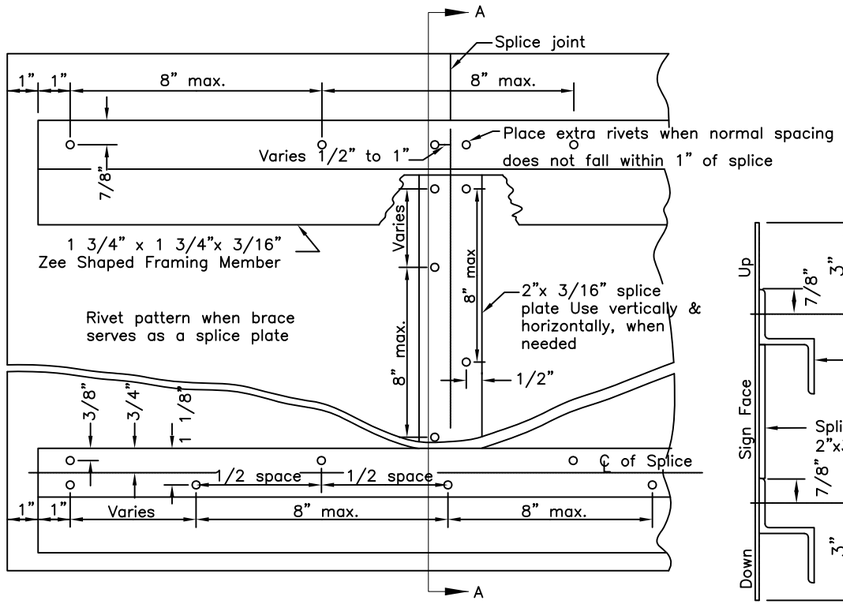
WIND FRAMING LOCATIONS

TUBE SIGN POST SPACING

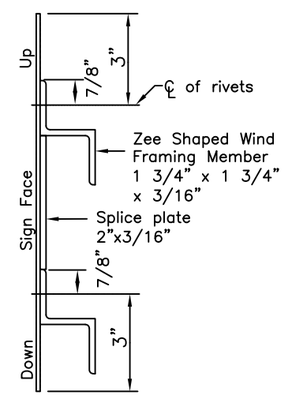
Sign Width (feet)	No. of Posts	Distance Between Posts	Sign Overhang	Post Type				Notes
				P.S.T.	Wood	Steel Tube	W–Shape	
0.5 to 4.0	1	–	0.5W	X	X	X		See Note 2.
4.5 to 10.0	2	0.6W	0.2W	X	X	X		See Note 3.
10.5 to 11.0	2	6	Varies	X	X	X		See Note 3.
11.5 to 13.0	2	8	Varies				X	
13.5 to 20.0	2	0.6W	0.2W				X	
20.5 to 22.5	3	8	Varies				X	
23.0 to 29.5	3	0.35W	0.15W				X	
30.0 to 31.5	4	8	Varies				X	
32.0 to 40.0	4	0.25W	0.125W				X	

SIGN POST SPACING NOTES:

1. Install sign support in accordance with the table above, unless otherwise required by plans or specifications.
2. Exceptions:
   a. Use one post for all E5–1 gore signs, regardless of width.
   b. Use one 2.5" P.S.T. for all STOP signs, with or without street name signs.
3. Supports placed within 7' of each other must be acceptable for that use. See Standard Drawing S–30 for the sizes of wood posts and P.S.T.s that may be used within 7'. See Manufacturer's documentation for breakaway couplings and tubes that may be used within 7'.
4. See Standard Drawing S–31 for frangible couplings, hinges, and foundations for tube and W–shape sign supports.



RIVET DETAIL FOR ZEE SHAPED WIND FRAMING & SPLICE PLATE



SECTION A–A

GENERAL NOTES

1. See the standard specifications for the aluminum alloys that you may use for sign sheeting and wind framing members.
2. Fabricate all signs from 0.125" thick aluminum sheeting.
3. Sign fabricators may use alternates to the zee shaped framing member with approval of the engineer, if the frame manufacturer certifies their design equals or exceeds the strength of the zee shaped design.
4. Install one piece wind framing members on all signs up to 23.5' wide. Use one splice in each wind frame on all signs wider than 23.5'. Locate splices at least 18" from all posts and panel edges. Stagger splices in adjacent framing members at least 8.0' apart.
5. Attach wind framing members with rivets or with an engineer approved, double sided, high strength, adhesive tape. Clean and handle sheeting and framing members and apply tape in accordance with the tape manufacturer's written instructions. Install two rivets in both ends of each framing member.
6. Use 3/16" diameter rivets conforming to aluminum alloy 6061–T6 for cold driven rivets, or aluminum alloy 6061–T43 for hot driven rivets.
7. Sign fabricators may use sign panels extruded with integral framing with approval of the engineer, if the manufacturer certifies their design equals or exceeds the strength of the 0.125" thick panel with framing attached to it.
8. Frame all signs taller than 8.0' with five wind framing members located (H–0.15)/4 spaces. If needed, make a horizontal splice at the middle wind frame.
9. Do not use round pipes for sign supports.

REVISIONS		
Date	Description	By
4/28/10	Delete pipe, rev notes	KJS

Sheet 1 of 1

State of Alaska
Department of Transportation & Public Facilities

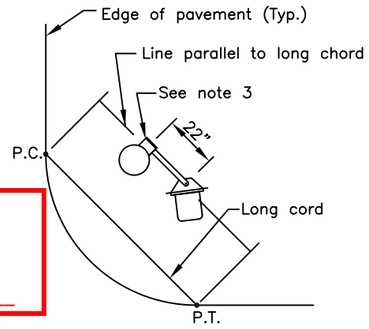
SIGN FRAMING AND POST SPACING

APPROVED
Date 5/31/12

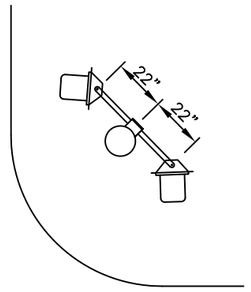
S-00.11

T-30.11

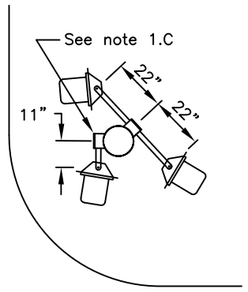
Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020



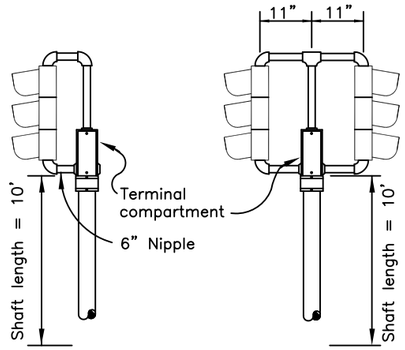
PLAN VIEW



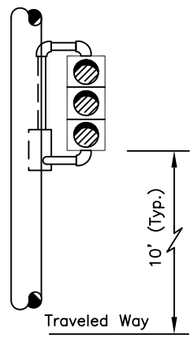
PLAN VIEW



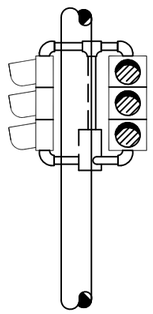
PLAN VIEW

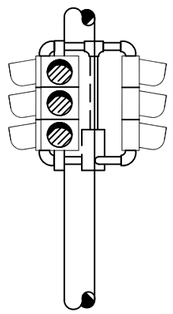


T-1 T-2



S-1
Use a one way, L.O.D. frame for installing one face

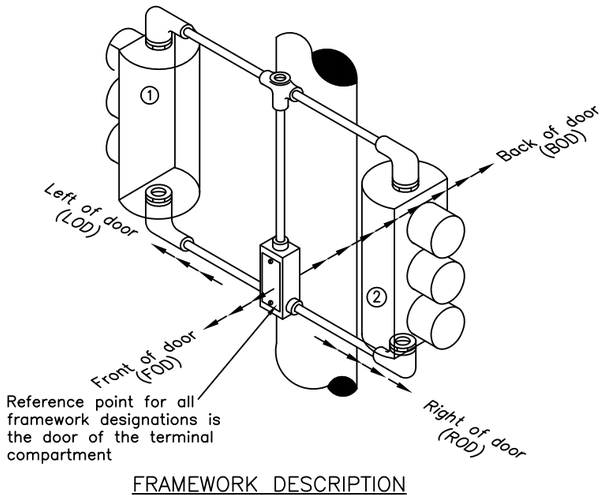

S-2
Use a two way frame for installing two faces


S-3
Use two frames for installing three faces: a two way and a one way R.O.D.

GENERAL NOTES

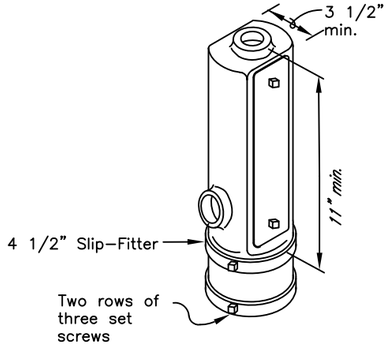
1. Install the signal faces in the plans as detailed on this sheet.
   - A. Use elevator plumbizers to install faces on mast arms and whenever 2" pipe tenons are specified. Install the plumbizer between the red and yellow signal indications.
   - B. Use signal frames to install signal faces on the sides of poles and on the tops of posts.
   - C. Use a second signal frame to install the third face when three side mounted signal faces are shown.
2. Furnish all signal frames with terminal compartments.
3. Install one terminal compartment on the side of the pole opposite the midpoint of the radius. Position the terminal compartment at the location where a line parallel to the long cord (P.C. to P.T.) of the radius is tangent to the pole.
4. Field drill the holes needed for attaching all signal hardware. Remove burrs after drilling. Treat the bare steel surfaces in accordance with AASHTO M36.
5. Provide back plates sized for the number of signal sections and mounting type, so that no light is visible between the back plate and the signal face.
6. Attach all back plates using stainless steel rivets with large flange button heads. Install 3/16" diameter by 9/16" long stainless steel rivets that provide at least 535 lb. and 675 lb. shear and tensile strengths, respectively. Bore out the mounting hole in the back plates and signal heads to the diameter recommended by the rivet manufacturer.
7. Before installing the machine screws that secure the visors, coat the threads with an anti-seizing compound.
8. Furnish clamp assemblies for field-installed plumbizer mounts with stainless steel hardware, AB-3007-L as manufactured by Pelco Products, Inc., or approved equivalent. The tenon shall be a 6" length of 2" rigid metal conduit with 1" tapered threads on one end. Drill the tenon to accept the plumbizer through bolt and debur all openings. Coat the tenon threads with Z.R.C. Galvilite, Crown-Gold Calvanizing Compound, or approved equivalent.

POST MOUNTED SIGNALS
(Shown without backplate)

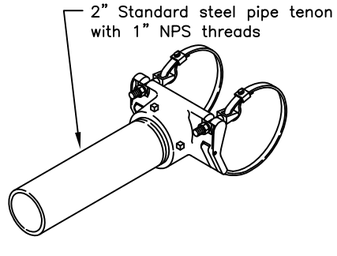


FRAMEWORK DESCRIPTION
Head no. ① offset L.O.D.
Head no. ② offset R.O.D.

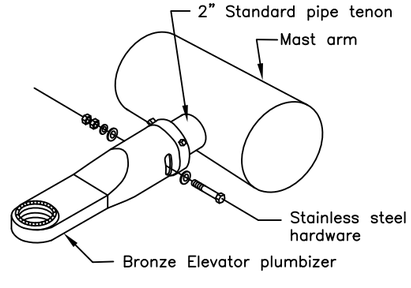
SIDE MOUNTED SIGNAL FRAMES WITH VEHICULAR SIGNALS
(Shown without backplates)



TERMINAL COMPARTMENT WITH SLIP FITTER
(See notes 1.C. and 2)



CLAMP ASSEMBLY FOR FIELD INSTALLED PLUMBIZER MOUNT
(See notes 4 and 8)



ELEVATOR PLUMBIZER
(See note 1.A.)

REVISIONS		
Date	Description	By

Sheet 1 of 2

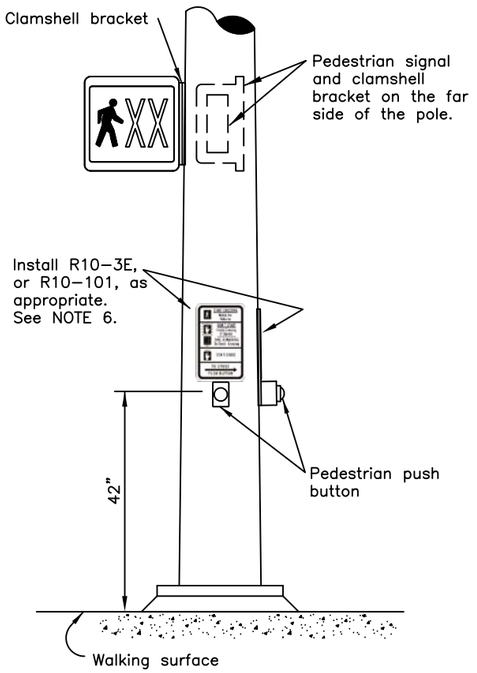
State of Alaska
Department of Transportation & Public Facilities

TRAFFIC SIGNAL HARDWARE

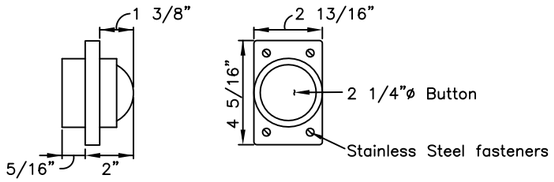
APPROVED
Date 5/31/12

T-30.11 Sheet 1

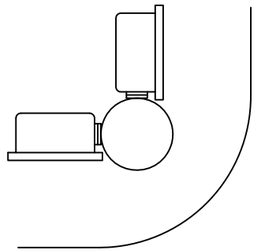
T-30.11



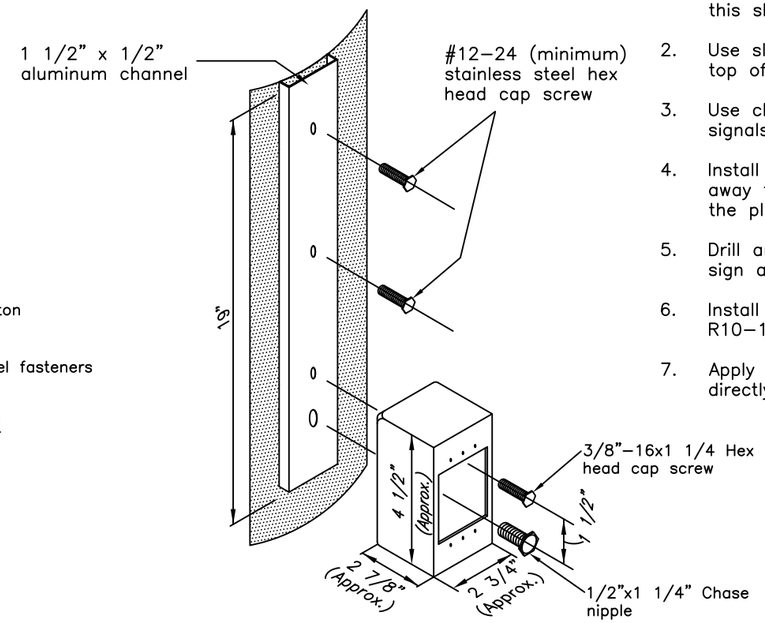
SIGNAL POLE MOUNTED PEDESTRIAN HARDWARE & SIGNAGE



PEDESTRIAN PUSH BUTTON SWITCH



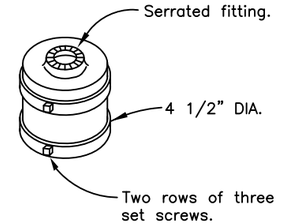
PLAN VIEW



PEDESTRIAN PUSH BUTTON HOUSING

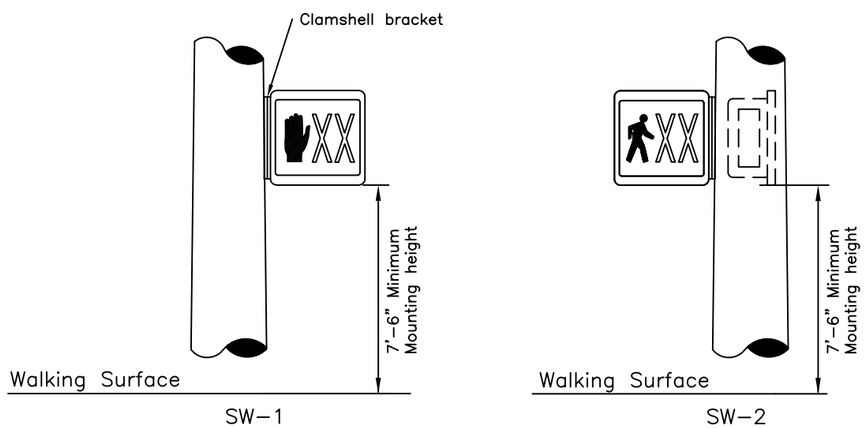
GENERAL NOTES

1. Install the signal faces in the plans as detailed on this sheet.
2. Use slip fitters to install pedestrian signals on the top of posts.
3. Use clamshell brackets to install all pedestrian signals except those that are post–top mounted.
4. Install pedestrian signals on the side of poles away from traffic, unless indicated otherwise in the plans.
5. Drill and tap the pole for all mounting holes for sign and pedestrian push button housing.
6. Install R10–3E if a push button is installed. Install R10–101 if no push button is installed.
7. Apply caint–seize compound to cap screws tapped directly into pole.



SLIP FITTER
(See note 2)

Project As- Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE: Randall E. Johnston Date 01.24.2020



SIDE MOUNTED SIGNALS

POST MOUNTED SIGNALS

REVISIONS		
Date	Description	By
4/28/10	Notes, signal, signage	KJS

Sheet 2 of 2

State of Alaska
Department of Transportation
& Public Facilities

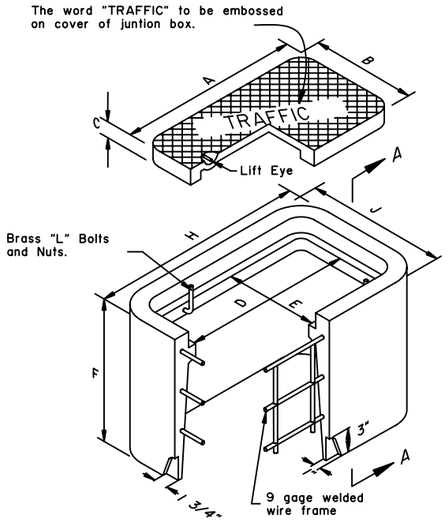
TRAFFIC SIGNAL HARDWARE

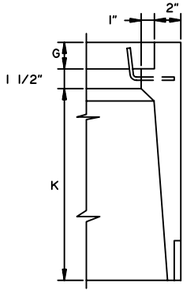
APPROVED
Date 5/31/12

T–30.11 Sheet 2

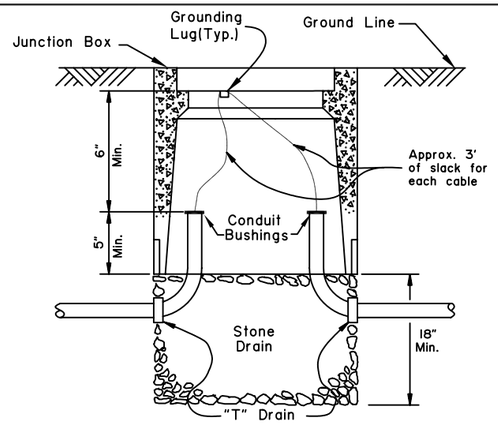
T-34.01

SHEET | of |



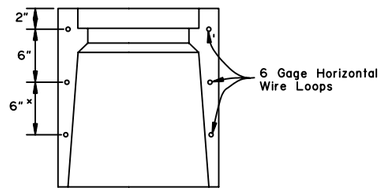


SECTION A-A



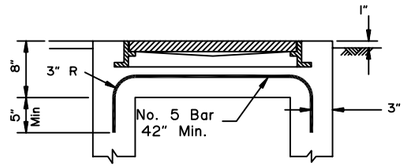
TYPE I & I-A JUNCTION BOX

	DIMENSIONS (IN.)	
	TYPE I	TYPE I-A
A	15	22 3/4
B	10	13 1/4
C	1 3/4	2
D	13 1/2	21 1/4
E	8 1/2	11 3/4
F	12	18
G	1 3/4	2
H	19 1/2	27 1/4
J	14 1/2	17 3/4
K	8 3/4	14 1/2



ALTERNATE REINFORCING

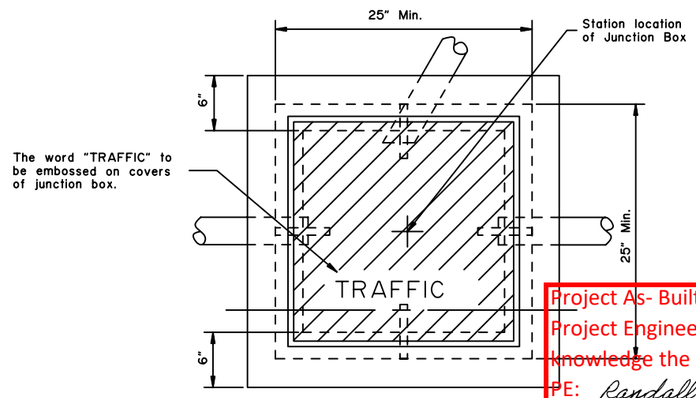
*Type I-A Only



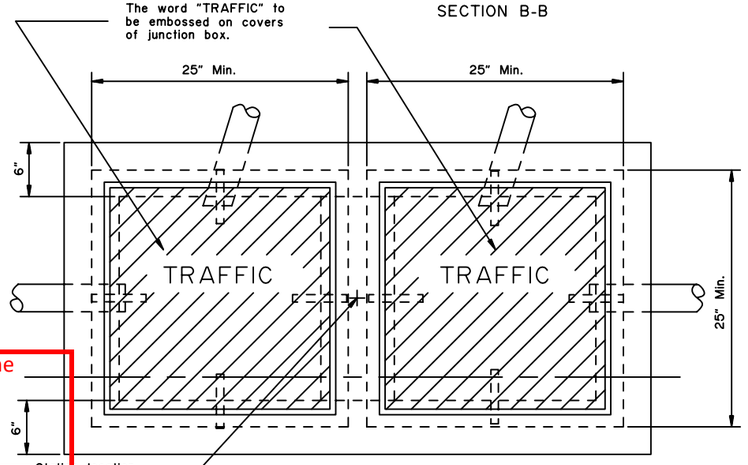
SECTION B-B

GENERAL NOTES:

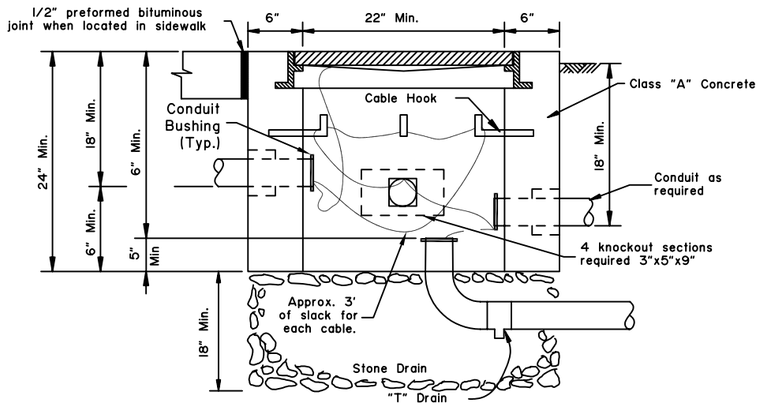
1. Each frame and cover for Type II and Type III junction boxes shall be of cast iron for light duty use with a minimum weight of 210 pounds. Covers for type I & IA junction boxes shall be either aluminum or cast iron.
2. Junction boxes located in a side-walk shall be installed with a 1/2" preformed bituminous joint material around its perimeter.
3. All conduits shall be bonded to form a continuous electrically secure system with the ground at the load center junction box.
4. All junction box covers shall be bonded to ground with copper braid of £8 AWG cross section. For types I & IA, the length shall be 3 feet, and 5 feet for types II & III.
5. All conduits shall be grouted in knockout sections in accordance with the Alaska Specifications for Highway Construction, latest edition.
6. Junction boxes shall be set flush with the surrounding surface except in an unpaved shoulder, when they shall be located 2" below grade.



PLAN

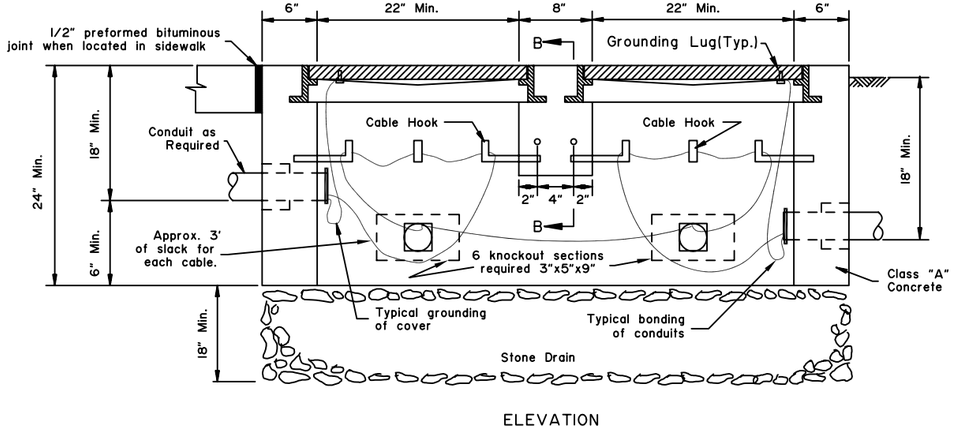


PLAN



ELEVATION

TYPE II JUNCTION BOX



ELEVATION

TYPE III JUNCTION BOX

REVISIONS		
Date	Description	By
4/1/93	Modify Type II & III	Gdo

State of Alaska
Department of Transportation & Public Facilities

JUNCTION BOXES FOR TRAFFIC SIGNALS

APPROVED

B. C. HARRY EE-4600

Loren L. Rasmussen CE-3395

Date 7/15/82

T-34.01