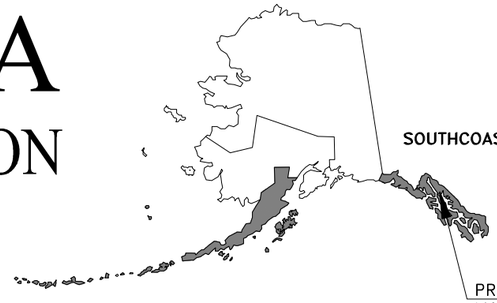
STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



PROJECT LOCATION
M&O STATION:
6860 GLACIER HIGHWAY
JUNEAU, AK 99801

REVISIONS		
NO.	DATE	DESCRIPTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/958032	2020	A1	A7
			PLAN SET TOTAL	65

CDS ROUTE: 296110/296158 | MILEPOINT: 0.00 TO 0.81
LATITUDE: 58°16'32.26" N | LONGITUDE: 134°23'34.84" W

PROPOSED HIGHWAY PROJECT

JNU DOUGLAS HIGHWAY PM CONSTRUCTION STAGE I
PROJECT NO. SFHWY00293/958032

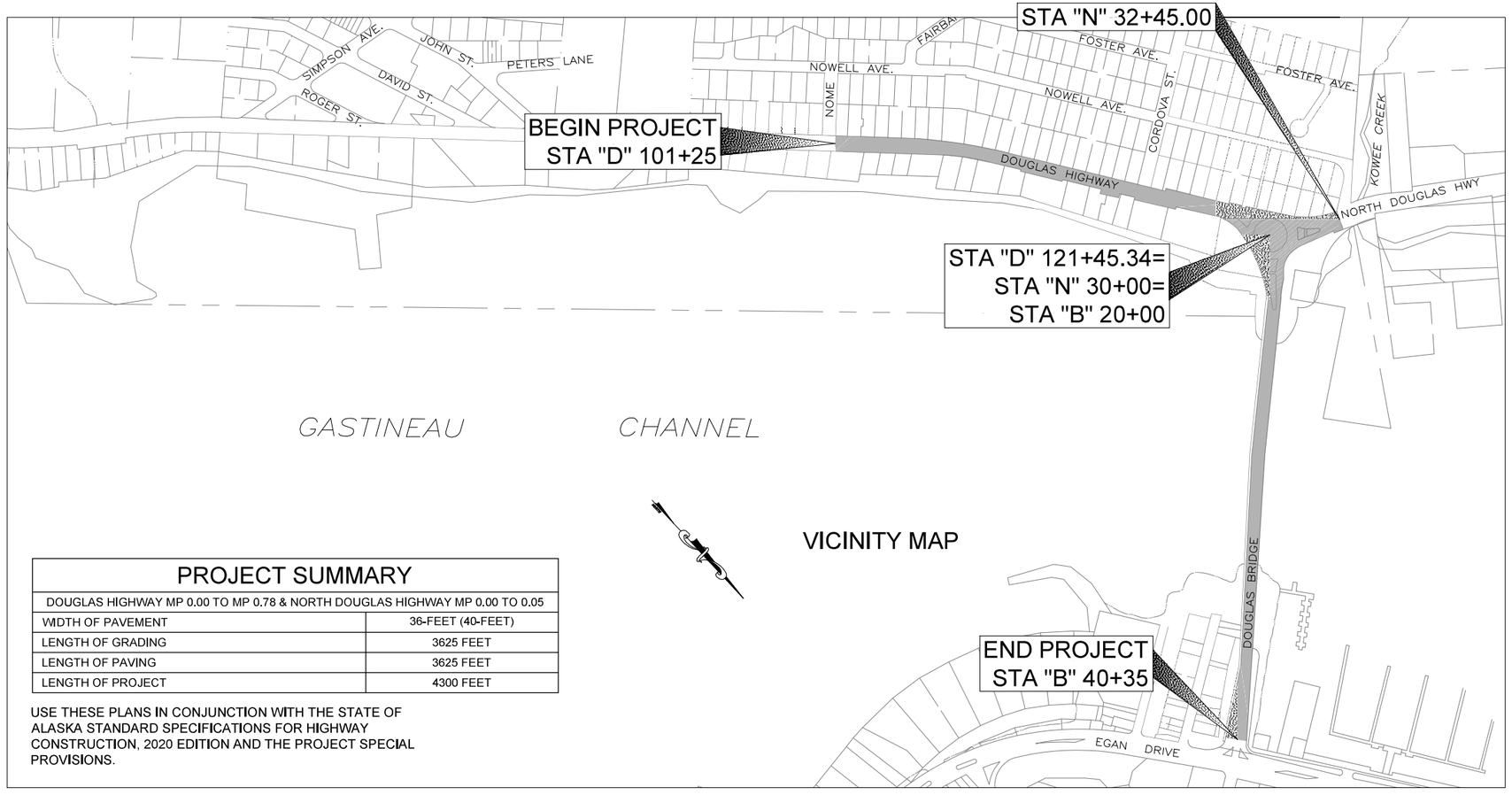
GRADING, DRAINAGE, PAVING, SIDEWALKS & CURB RAMPS

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

February 23, 2021

PROJECT ENGINEER STEVEN REED, PE
CONTRACTOR SECON, INC
BEGIN DATE OF WORK 04/15/2021
END DATE OF WORK 11/02/2021

S D E Reed
2/3/22



VICINITY MAP

PROJECT SUMMARY	
DOUGLAS HIGHWAY MP 0.00 TO MP 0.78 & NORTH DOUGLAS HIGHWAY MP 0.00 TO 0.05	
WIDTH OF PAVEMENT	36-FEET (40-FEET)
LENGTH OF GRADING	3625 FEET
LENGTH OF PAVING	3625 FEET
LENGTH OF PROJECT	4300 FEET

USE THESE PLANS IN CONJUNCTION WITH THE STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2020 EDITION AND THE PROJECT SPECIAL PROVISIONS.

DESIGN DESIGNATIONS

CORDOVA STREET TO I STREET
MP 0.55 TO 2.12

FUNCTIONAL CLASS	MINOR ARTERIAL
ADT (2017)	8440
ADT (2020)	8520
ADT (2027)	8650
ADT (2035)	8830
DHV LAST YEAR W/ TRAFFIC DATA (2017)	930
DHV DESIGN YEAR (2021)	940
DHV MID-LIFE YEAR (2027)	950
DHV DESIGN YEAR (2035)	970
PERCENT TRUCKS (T)	2.8%
DIRECTIONAL SPLIT (D)	60/40
DESIGN SPEED (V)	40
DESIGN ESALS (15 YEARS)	550,000

DESIGN DESIGNATIONS

EGAN DRIVE TO CORDOVA STREET
MP 0.00 TO 0.55

FUNCTIONAL CLASS	URBAN ARTERIAL
ADT (2012)	9510
ADT (2020)	9720
ADT (2027)	9870
ADT (2035)	10070
DHV LAST YEAR W/ TRAFFIC DATA (2012)	1050
DHV DESIGN YEAR (2021)	1070
DHV MID-LIFE YEAR (2027)	1090
PERCENT TRUCKS (T)	2.8%
DIRECTIONAL SPLIT (D)	60/40
DESIGN SPEED (V)	30
DESIGN ESALS (15 YEARS)	650,000
DHV FUTURE YEAR (2035)	1110

PLANS DEVELOPED BY: DOWL
9085 GLACIER HWY – JUNEAU, AK 99801
907–780–3533 – #AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER

08/07/2020

APPROVED:

Digitally signed by Kirk Miller
Date: 2020.08.13 16:30:44 -08'00'

KIRK MILLER, P.E.
REGIONAL PRECONSTRUCTION ENGINEER — DATE

CONCUR:

14Aug2020

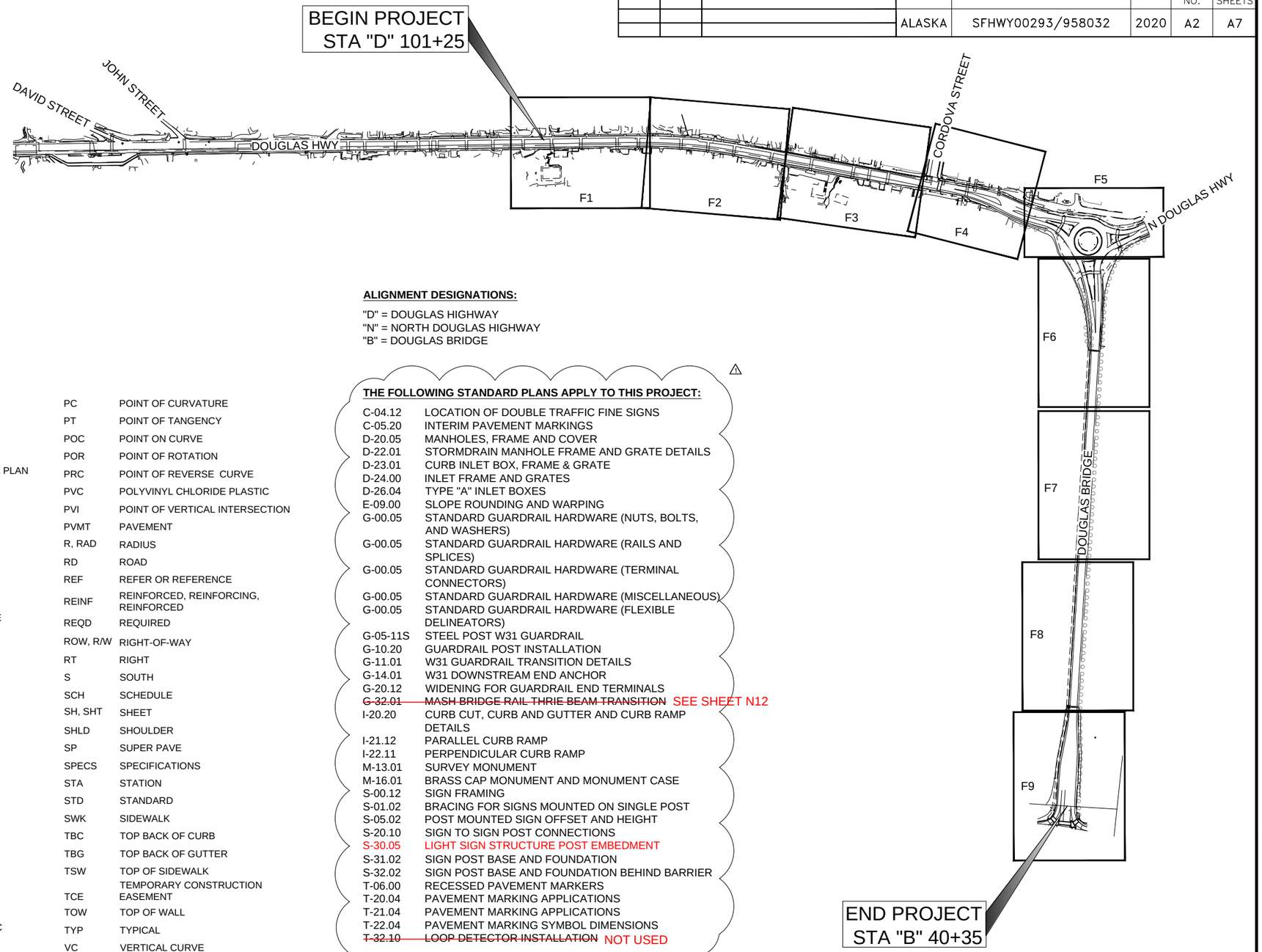
D. LANCE MEARIG, P.E.
DIRECTOR, SOUTHCOAST REGION — DATE

FIRM DOWL | ADDRESS 5368 COMMERCIAL BLVD, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-CV-A-70897.dwg | DATE 8/4/2020 17:06 | LAYOUT A1 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	A2	A7

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	INDEX, SHEET LAYOUT, AND ABBREVIATIONS
A3	LEGEND AND SYMBOLS
A4-A7	SURVEY CONTROL
B1-B2	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1-D4	SUMMARY TABLES
E1-E3	MISCELLANEOUS DETAILS
F1-F9	PLAN AND PROFILE
G1-G5	APPROACH PLAN AND PROFILES
H1-H9	SIGNING AND STRIPING
N1-N12	BRIDGE DRAWINGS
P1-P5	EROSION SEDIMENT AND CONTROL PLAN
Q1-Q2	DRAINAGE PLAN AND PROFILE
T1-T6	TRAFFIC CONTROL PLAN



ALIGNMENT DESIGNATIONS:

"D" = DOUGLAS HIGHWAY
"N" = NORTH DOUGLAS HIGHWAY
"B" = DOUGLAS BRIDGE

ABBREVIATIONS

@	AT
&	AND
ACI	AMERICAN CONCRETE INSTITUTE
ADT	AVERAGE DAILY TRAFFIC
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
ATB	ASPHALT TREATED BASE
BB	BEGIN BASELINE
BCP	BLUE CURB PAINT
BFE	BOTTOM FOOTING ELEVATION
BM	BENCH MARK
B.O.P.	BEGINNING OF PROJECT
BOT	BOTTOM
BRG	BEARING
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
CC	CENTER TO CENTER
C&G	CURB AND GUTTER
CJ	CONSTRUCTION JOINT
CL	CENTER LINE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS, CONTINUATION
CPP	CORRUGATED POLYETHYLENE PIPE, TYPE S
CTE	CONNECT TO EXISTING
CTR	CENTER
CY	CUBIC YARD
DET	DETAIL
DIA OR Ø	DIAMETER
DI	DUCTILE IRON
DOT&PF	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
DWG	DRAWING
E	EAST
EA	EACH
EB	END BASELINE
EG	EXISTING GRADE
EL	ELEVATION
ENGR	ENGINEER
E.O.P.	END OF PROJECT
EP	EDGE OF PAVEMENT
ESCP	EROSION SEDIMENT CONTROL PLAN
EXST, EX	EXISTING
FDN	FOUNDATION
FG	FINISH GRADE
FL	FLOW LINE (ELEV)
FT	FOOT OR FEET
FTG	FOOTING
GAL	GALLONS
GB	GRADE BREAK
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
HORIZ	HORIZONTAL
IN	INCH
INVT, INV	INVERT
J, JB	JUNCTION BOX
JT	JOINT
KIP	1000 POUNDS-FORCE
L	LEFT, LENGTH
LAT	LATITUDE
LB	POUNDS
LF	LINEAR FOOT
LONG	LONGITUDE
LT	LEFT
LVC	LENGTH OF VERTICAL CURVE
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
MTE	MATCH TO EXISTING
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N	NORTH
NO, #	NUMBER, NUMBERING
NTS	NOT TO SCALE
O.C./ OC	ON CENTER
OD	OUTSIDE DIAMETER
PED	PEDESTRIAN
PGP	PROFILE GRADE POINT
PI	POINT OF INTERSECTION
PL	PLACE, PLATE, PROPERTY LINE
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
POC	POINT ON CURVE
POR	POINT OF ROTATION
PRC	POINT OF REVERSE CURVE
PVC	POLYVINYL CHLORIDE PLASTIC
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
R, RAD	RADIUS
RD	ROAD
REF	REFER OR REFERENCE
REINF	REINFORCED, REINFORCING, REINFORCED
REQD	REQUIRED
ROW, R/W	RIGHT-OF-WAY
RT	RIGHT
S	SOUTH
SCH	SCHEDULE
SH, SHT	SHEET
SHLD	SHOULDER
SP	SUPER PAVE
SPECS	SPECIFICATIONS
STA	STATION
STD	STANDARD
SWK	SIDEWALK
TBC	TOP BACK OF CURB
TBG	TOP BACK OF GUTTER
TSW	TOP OF SIDEWALK
TCE	TEMPORARY CONSTRUCTION EASEMENT
TOW	TOP OF WALL
TYP	TYPICAL
VC	VERTICAL CURVE
VERT, VT	VERTICAL
VPI	VERTICAL POINT OF INTERSECTION
W	WEST
YCP	YELLOW CURB PAINT

THE FOLLOWING STANDARD PLANS APPLY TO THIS PROJECT: ⚠

C-04.12	LOCATION OF DOUBLE TRAFFIC FINE SIGNS
C-05.20	INTERIM PAVEMENT MARKINGS
D-20.05	MANHOLES, FRAME AND COVER
D-22.01	STORMDRAIN MANHOLE FRAME AND GRATE DETAILS
D-23.01	CURB INLET BOX, FRAME & GRATE
D-24.00	INLET FRAME AND GRATES
D-26.04	TYPE "A" INLET BOXES
E-09.00	SLOPE ROUNDING AND WARPING
G-00.05	STANDARD GUARDRAIL HARDWARE (NUTS, BOLTS, AND WASHERS)
G-00.05	STANDARD GUARDRAIL HARDWARE (RAILS AND SPLICES)
G-00.05	STANDARD GUARDRAIL HARDWARE (TERMINAL CONNECTORS)
G-00.05	STANDARD GUARDRAIL HARDWARE (MISCELLANEOUS)
G-00.05	STANDARD GUARDRAIL HARDWARE (FLEXIBLE DELINEATORS)
G-05-11S	STEEL POST W31 GUARDRAIL
G-10.20	GUARDRAIL POST INSTALLATION
G-11.01	W31 GUARDRAIL TRANSITION DETAILS
G-14.01	W31 DOWNSTREAM END ANCHOR
G-20.12	WIDENING FOR GUARDRAIL END TERMINALS
~~G-32.01~~	~~MASH BRIDGE RAIL THRIE BEAM TRANSITION~~ SEE SHEET N12
I-20.20	CURB CUT, CURB AND GUTTER AND CURB RAMP DETAILS
I-21.12	PARALLEL CURB RAMP
I-22.11	PERPENDICULAR CURB RAMP
M-13.01	SURVEY MONUMENT
M-16.01	BRASS CAP MONUMENT AND MONUMENT CASE
S-00.12	SIGN FRAMING
S-01.02	BRACING FOR SIGNS MOUNTED ON SINGLE POST
S-05.02	POST MOUNTED SIGN OFFSET AND HEIGHT
S-20.10	SIGN TO SIGN POST CONNECTIONS
S-30.05	LIGHT SIGN STRUCTURE POST EMBEDMENT
S-31.02	SIGN POST BASE AND FOUNDATION
S-32.02	SIGN POST BASE AND FOUNDATION BEHIND BARRIER
T-06.00	RECESSED PAVEMENT MARKERS
T-20.04	PAVEMENT MARKING APPLICATIONS
T-21.04	PAVEMENT MARKING APPLICATIONS
T-22.04	PAVEMENT MARKING SYMBOL DIMENSIONS
~~T-32.10~~	~~LOOP DETECTOR INSTALLATION~~ NOT USED

CO #1
Attachment #4
JNU: Douglas Hwy Surface & Sidewalk Repairs Stage 1
Proj. # 0958033 / SFHWY00293

REVISIONS			
REV	DATE	DESCRIPTION	BY
⚠	11/12/20	Addendum No. 1	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

SR 2/3/21

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/12/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

INDEX, SHEET LAYOUT, AND ABBREVIATIONS

FIRM DOWL
FILE \\JNU-FS\jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-CV-A-70897.dwg
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
DATE 11/12/2020 10:38 LAYOUT A2
PHONE (907) 780-3533 DESIGNED STEPHENS CHECKED NOBLE DRAFTED KEMP
CERTIFICATE OF AUTH #: AECL848

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	A3	A7

	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

MISCELLANEOUS CENTERLINE 10+00

STATION EQUATION "L"48+97.23 POT BK= / "O"48+97.23 PC AHD

EXISTING RIGHT-OF-WAY LINE R/W

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	
FUEL LINE	F	
GAS LINE	G	
WATER LINE	W	
METER, VALVE, FIRE HYDRANT		
EXISTING STORM DRAIN	SD	
PROPOSED STORM DRAIN (F SHEET # & PIPE # ON SHEET)		S-10, SD, S-11, MH, P1-11, P1-10
FIBER OPTIC LINE	F/O	
DIRECT BURIAL TELEPHONE CABLE	T	
DIRECT BURIAL ELECTRIC CABLE	UGE	
ELECTRIC LINE (OVERHEAD)	OHE	
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
TELEPHONE DUCT	T	
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE	MH	MH
SANITARY SEWER CLEAN OUT		
DITCH CENTERLINE		
TREE LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
PAVEMENT PLANING & OVERLAY		
BASE COURSE REPAIR & NEW PAVEMENT		
REPLACE CONCRETE SIDEWALK		
INVASIVE SPECIES		
OUTLET RIPRAP APRON		

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
SIDEWALK/DRIVEWAY PAVEMENT HATCH		
FENCE		
STANDARD CURB AND GUTTER		
VALLEY GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
GUARDRAIL END SECTION		
CULVERT PIPE		
SIGN		
MAILBOX	MB	MB
WETLANDS		
EXISTING BUILDINGS	H	
POST OR BOLLARD		
WELL OR MONITORING WELL	W, MW	
SEPTIC PIPE	S	
FUEL TANK FILL PIPE/VENT	F	
SATELLITE DISH	SAT. DISH	
TEST HOLE	TH	
CONIFER TREE		
DECIDUOUS TREE		
GRAVE		
THERMOSIPHON		
PARKING METER		
VEHICLE PLUG-IN		
DELINEATOR/GUIDE MARKER		
BOULDER		

	EXISTING	PROPOSED
JUNCTION BOX, TYPE IA		5
JUNCTION BOX, TYPE II		6
JUNCTION BOX, TYPE III		3
SIGNAL FACE, VEHICULAR	4 2	
SIGNAL FACE, BACKPLATE	4 2	
SIGNAL FACE, LEFT TURN, BACKPLATE	4 3	
SIGNAL FACE, PEDESTRIAN		
LOOP DETECTOR	33	
VIDEO DETECTOR	2	
RADAR DETECTOR	4	
OPTICOM DETECTOR	1	
PEDESTRIAN PUSH BUTTON	1	
SIGNAL POST W/O MAST ARM		
SIGNAL POLE W/MAST ARM		
SIGNAL CONTROLLER		

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA 49th — Steven K. Noble No.CE10051 — REGISTERED PROFESSIONAL ENGINEER
08/07/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

LEGEND AND SYMBOLS

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
DATE 8/4/2020 17:06 | LAYOUT A3 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-CV-A-70897.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	A4	A7

DOUGLAS HIGHWAY ALIGNMENT D

SEGMENT	STATION	NORTHING	EASTING	DISTANCE	BEARING	STATION	RADIUS	LENGTH	DELTA
L1	10+00.00	204505.23	193106.72	112.97	N16° 04' 53"W	11+12.97			
L2	11+12.97	204613.77	193075.42	1279.05	N45° 43' 42"W	23+92.02			
L3	23+92.02	205506.63	192159.57	445.52	N45° 00' 04"W	28+37.54			
L4	28+37.54	205821.65	191844.54	301.87	N46° 39' 13"W	31+39.41			
C1	31+39.41	206028.86	191625.01			31+86.57	1000.00	47.16	2°42'08"
C2	31+86.57	206060.41	191589.96			33+81.45	3000.00	194.88	3°43'19"
L5	33+81.45	206192.06	191446.32	1700.54	N45° 38' 02"W	50+81.99			
L6	50+81.99	207381.14	190230.63	249.79	N45° 38' 54"W	53+31.78			
L7	53+31.78	207555.77	190052.01	359.92	N46° 35' 34"W	56+91.70			
L8	56+91.70	207803.09	189790.54	689.79	N45° 21' 01"W	63+81.49			
C3	63+81.49	208287.86	189299.81			69+44.91	3250.00	563.42	9°55'58"
C4	69+44.91	208647.18	188866.75			74+50.05	3250.00	505.14	8°54'19"
L9	74+50.05	208965.91	188475.52	1457.10	N46° 22' 41"W	89+07.15			
L10	89+07.15	209971.16	187420.72	724.88	N46° 24' 31"W	96+32.03			
L11	96+32.03	210470.97	186895.70	812.51	N46° 23' 02"W	104+44.54			
C5	104+44.54	211031.46	186307.46			108+45.18	2000.00	400.64	11°28'38"
L12	108+45.18	211334.94	186046.93	535.03	N34° 54' 23"W	113+80.21			
L13	113+80.21	211773.72	185740.77	151.78	N34° 20' 00"W	115+31.99			
L14	115+31.99	211899.05	185655.16	144.30	N34° 10' 55"W	116+76.29			
C6	116+76.29	212018.42	185574.09			117+95.20	480.00	118.91	14°11'38"
L15	117+95.20	212124.02	185520.09	39.96	N19° 59' 17"W	118+35.16			
C7	118+35.16	212161.58	185506.43			119+56.77	550.00	121.61	12°40'07"
L16	119+56.77	212270.35	185452.62	26.94	N32° 39' 24"W	119+83.71			
C8	119+83.71	212293.04	185438.08			121+23.34	290.00	139.63	27°35'13"
L17	121+23.34	212423.89	185393.37	22.00	N5° 04' 11"W	121+45.34			

COORDINATES LISTED IN ALIGNMENT TABLES HOLD OVER DISTANCE AND BEARING

DOUGLAS HIGHWAY ALIGNMENT N

SEGMENT	STATION	NORTHING	EASTING	DISTANCE	BEARING	STATION	RADIUS	LENGTH	DELTA
L18	30+00.00	212445.81	185391.43	61.32	N51° 11' 09"W	30+61.32			
C9	30+61.32	212484.24	185343.65			31+60.51	305.00	99.19	18°37'58"
L19	31+60.51	212532.87	185257.70	84.35	N69° 49' 07"W	32+44.86			

LOW DISTORTION PROJECTION DEFINITION

Name: JNU GRID 2016
Projection type: Transverse Mercator
Latitude of grid origin: 58°24'00.0"N (58.4°)
Central meridian (grid origin): 134°37'00.0"W (-134.616666666667°)
False northing: 250000.00 ft
False easting: 150000.00 ft
Grid scale factor: 1.000003
Linear unit: Survey Feet
Datum: NAD83(2011)
Ellipsoid: GRS_1980
Semi-major axis (m): 6378137.0

DATUM IS NAD83(2011) JNU GRID 2016. VERTCIAL DATUM IS NAVD88. TO DERIVE ELEVATIONS WHERE MLLW = 0.00' ADD 3.54 FT. TO NAVD88 ELEVATIONS FOR CURRENT TIDAL EPOCH.

FOR MLLW=0.00' FOR OLD JNU GRID 2000 ADD 3.08 FT

Survey Control Table Alignment D

Point #	Northing	Easting	Elevation	Description	Station	Offset
2	212444.95	185391.14	54.14	3.25"Digmon_GPS_JG16-2	121+44.51	0.37L
117	210534.01	186876.66	67.25	GPS_ALCAP2.5"_SET	96+89.30	32.50R
118	210961.75	186351.27	57.83	GPS_ALCAP2.5"_SET	103+64.73	20.25L
119	211827.91	185676.94	56.04	GPS_ALCAP2.5"SET	114+60.96	22.14L

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.

CONTROL POINT #2 IS A DIG MONUMENT IN THE CENTER OF THE ROUNDABOUT. IF DISTURBED RESET IN THE SAME LOCATION

SR 2/3/21

7.6.20

STATE OF ALASKA
49 TH
Daniel O. Miller
No. 11296
REGISTERED PROFESSIONAL LAND SURVEYOR

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 Glacier Highway Juneau Ak. 99801
(907) 465-1763

JUNEAU- DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE 1
SURVEY CONTROL

DESIGNED DRAWN CHECKED DATE
XREFS
SCALE
LAYOUT A4
DATE TIME 7/6/2020 13:54
DRAWING LOCATION
O:\...\SFHWY00293\SVC\3D\BASEMAPS\SFHWY00058_SCS_060320.dwg

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	A5	A7

DESIGNED | DRAWN | CHECKED | DRAWN | QUANTITIES | CHECKED | SHEETS | SCALE | LAYOUT A5 | DATE TIME 7/10/2020 11:11 | DRAWING LOCATION C:\Projects\SFHWY00058\SVY\CDD\BASEMAPS\SFHWY00058_SCS_060320.dwg

Existing Property					
Point #	Northing	Easting	Description	Station	Offset
1059	210629.54	186691.19	ALCAP2"_FND_3650S	98+89.48	26.28L
1060	210837.16	186476.97	ALCAP2"_FND_JW.BEAN	101+87.78	23.74L
1061	210835.90	186476.50	IP3/4"_FND	101+87.26	24.98L
1062	210748.50	186654.69	PLASCAP_FND_3650S	99+97.96	34.67R
1063	210760.08	186645.27	PLASCAP_FND_3650S	100+12.77	36.55R
1064	211123.15	186265.13	REBAR_FND	105+40.14	34.93R
1065	211174.48	186217.96	PLASCAP_LS3650	106+11.10	34.99R
1066	211246.35	186155.52	PLASCAP_LS3650	107+07.96	33.73R
1067	211037.98	186300.62	BC_DOH\CL MON	104+53.99	0.02L
1070	211612.48	185818.88	BC	112+03.29	28.21L
1074	211901.18	185604.64	PLASCAP_FND_5713S	115+62.14	40.60L
1075	212052.42	185507.15	SPINHOLE_FND_REBAR_PLASTIC CAP	117+37.08	40.45L
1120	212150.07	185437.92	REBAR_NO CAP	118+49.55	68.16L
1121	212146.90	185433.33	PLASCAP_FND_FINLEY	118+48.09	73.59L
1122	212101.58	185472.45	REBAR__FND_NO CAP	117+90.87	52.47L
1139	211860.00	185894.69	PLASCAP_FND_3650S	113+62.89	175.60R
1140	211806.71	185926.39	PLASCAP_FND_3650S	113+01.05	171.10R
1141	211713.43	185982.53	PLASCAP_FND_TNA_6262S	111+92.43	163.77R
1142	211548.91	186079.83	PLASCAP_FND_TNA_6262S	110+01.83	149.42R
1143	211537.96	186086.19	ALCAP3.25"_FND_USMS\MCC3	109+89.21	148.37R
1144	211631.08	186030.72	PLASCAP_FND_TNA_6262S	110+97.32	156.16R
1145	211474.77	186146.69	SPINHOLE_FND_PLASTIC CAP_7570S	109+02.77	161.83R

202.0001.0000 SEE SHEET D1

Centerline Monuments To Be Removed					
Point #	Northing	Easting	Description	Station	Offset
1068	211327.29	186052.24	BC_CL MON	108+35.87	0.05L
1071	211899.05	185655.16	BC_DOH\CL MON	115+31.99	0.00R

Existing Centerline Monuments to be Removed.

642.0004.0000

Approximate Location Of New Shoulder Monuments					
Point #	Northing	Easting	Description	Station	Offset
1600	211831.32	185674.78	APPROX_SH_MON	114+65.00	22.00L
1601	210963.46	186348.39	APPROX_SH_MON	103+68.00	21.00L

⊕ SHOULDER MONUMENT TO BE SET AFTER CONSTRUCTION

PROPOSED LOCATION OF SHOULDER MONUMENTS TO BE SET AFTER CONSTRUCTION. SHOULDER MONUMENTS MUST BE LINE OF SIGHT BETWEEN EACH MONUMENT. CONTRACTOR CAN MOVE THE SHOULDER MONUMENTS AND CASES AS NEEDED TO MAINTAIN SIGHT LINE BETWEEN SHOULDER MONUMENTS AS DIRECTED BY ENGINEER.

MONUMENT NOTES:

1. IF ANY PAIR OF CONTROL POINTS DISAGREES FROM PUBLISHED VALUE 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 PROPERTY MONUMENTS, OR PROPERTY MARKERS, CORNERS OR ACCESSORIES WHICH WILL BE DISTURBED OR BURIED SHALL BE REFERENCED PRIOR TO BEING DISTURBED, AND RE-ESTABLISHED IN THEIR ORIGINAL HORIZONTAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH (A.S.34.65.040) AND (A.S.19.10.260) SHALL BE SUBMITTED TO THE CONSTRUCTION ENGINEER FOR REVIEW PRIOR TO RECORDING. COORDINATE VALUES LISTED ARE FOR INFORMATIONAL PURPOSES AND SHOULD BE USED TO RESET MONUMENTS ONLY AS A LAST RESORT.

3.WHEN POSSIBLE ALL ORIGINAL PRIMARY MONUMENTS SHALL BE SAVED AND RESET IN THEIR ORIGINAL HORIZONTAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH (A.S.34.65.040) AND (A.S.19.10.260) SHALL BE SUBMITTED TO THE CONSTRUCTION ENGINEER FOR REVIEW PRIOR TO RECORDING

4. RIGHT OF WAY LOCATION IS SHOWN FOR GRAPHICAL ORIENTATION PURPOSES ONLY. REFER TO ALASKA DOT&PF RIGHT OF WAY MAPS FOR RIGHT OF WAY INFORMATION.

5. HORIZONTAL AND VERTICAL CONTROL MUST BE FIELD VERSIFIED BY THE CONTRACTOR. DISCREPANCIES WILL BE REPORTED TO DOT&PF CONSTRUCTION PROJECT ENGINEER.

SEE AS-BUILT SHEET D5 FOR SUMMARY TABLES ADDED BY RFI 10

642.0006.0000 AND 642.0007.0000

Existing Property to Be Referenced & Replaced					
Point #	Northing	Easting	Description	Station	Offset
1069	211485.01	185988.56	PLASCAP_6262S	110+01.65	38.01R
1072	212016.88	185610.22	ALCAP3.25"_4382S	116+54.72	29.02R
1073	211785.45	185771.13	REBAR_FND	113+72.46	31.61R
1137	211839.91	185732.99	PLASCAP_FND	114+39.26	30.91R
1138	211719.62	185817.02	PLASCAP_FND_3650S	112+92.22	31.58R
1152	211635.03	185877.02	PLASCAP_FND_TNA_6252S	111+88.51	32.38R

ALL PROPERTY MONUMENTS IN THIS TABLE SHALL BE REFERENCED PRIOR TO DISTURBANCE FROM CONSTRUCTION AND RE-ESTABLISHED IN THEIR ORIGINAL HORIZONTAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH A.S.34.65.040 SHALL BE SUBMITTED TO DOT FOR REVIEW PRIOR TO RECORDING.

SR 2/3/21

7.10.20

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 Glacier Highway Juneau Ak 99801
(907) 465-1763

JUNEAU- DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE 1
SURVEY CONTROL

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/958032	2020	A6	A7

DESIGNED: LPAPO
CHECKED: DJENOTOV
DRAFTED: JPAPO

XREFS

SCALE

LAYOUT: A6

DATE TIME: 7/10/2020 11:11

DRAWING LOCATION:
G:\proj\SFHWY00058\SV\C3D\BASEMAPS\SFHWY00058_SCS_060320.dwg

0 50 100 Feet

JUNEAU DOUGLAS ROUNDABOUT

DOUGLAS HIGHWAY

CORDOVA STREET

BOP: STA: 30+00.00
PC: STA: 30+61.32
EOP: STA: 121+45.34
PT: STA: 121+23.34
EOP: STA: 32+44.86
PT: STA: 31+60.51
PC: STA: 119+83.71
PT: STA: 119+56.77
PC: STA: 118+35.16
PT: STA: 117+95.20
PI: STA: 115+31.99
PC: STA: 116+76.29
PI: STA: 113+80.21
PT: STA: 108+45.18
PC: STA: 104+44.54

1138 1152 1069 1070 1068 1067 1066 1065 1064 1063 1062 117
1140 1141 1144 1142 1143 1145 1139 1072 1137 1073 1071 1074 1075 1122 1120 1121 1600 119 1601 118 1060 1061 1059

SR 2/3/21
7.10.20

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 Glacier Highway Juneau Ak. 99801
(907) 465-1763

STATE OF ALASKA 49TH
Daniel M. Jenotov
No. 14290
REGISTERED PROFESSIONAL LAND SURVEYOR

JUNEAU- DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE 1
SURVEY CONTROL

Survey Control Table Alignment B						
Point #	Northing	Easting	Elevation	Description	Station	Offset
44	212726.15	185663.81	66.72	BC_95-J-6_GPS-1995_RTK	23+93.03	18.66R
75	213587.85	186617.13	42.79	BC_RTK	36+78.07	18.02R
536	213970.90	186980.75	24.58	ALCAP_DOT/PF-71_PT#100 10th TO MAIN	N\A	N\A

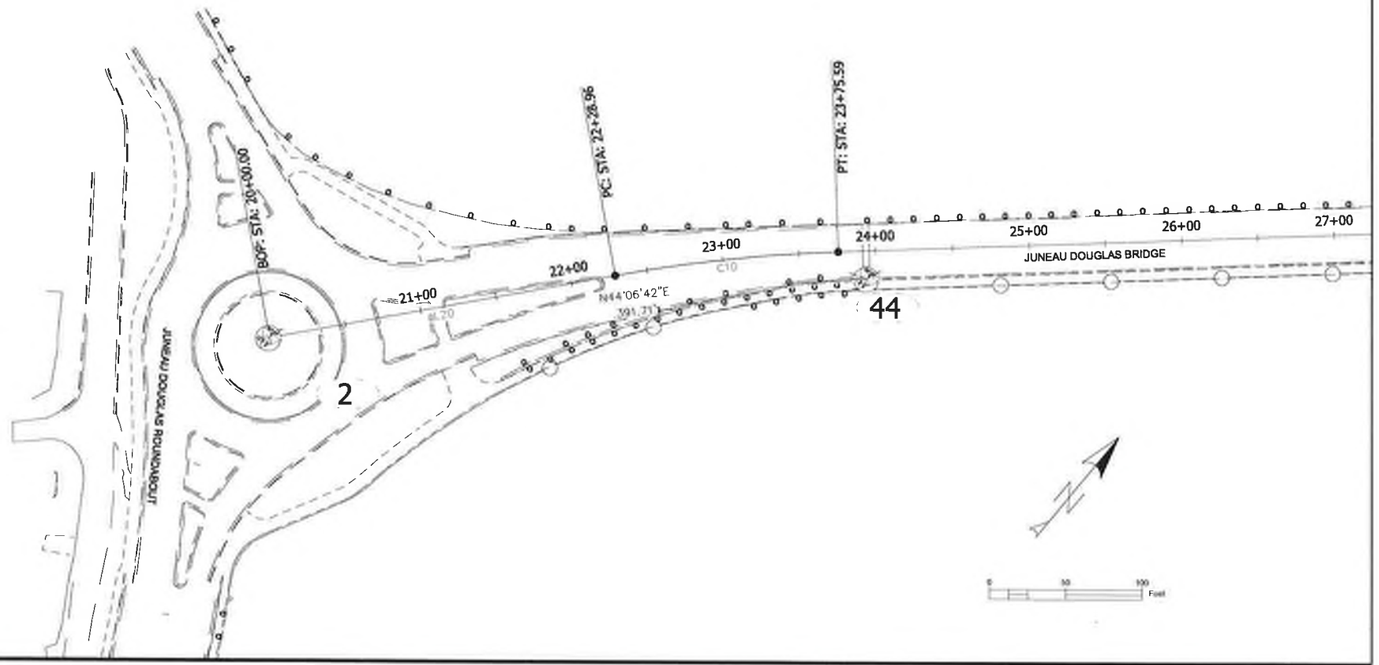
COORDINATES LISTED IN ALIGNMENT TABLES HOLD OVER DISTANCE AND BEARING

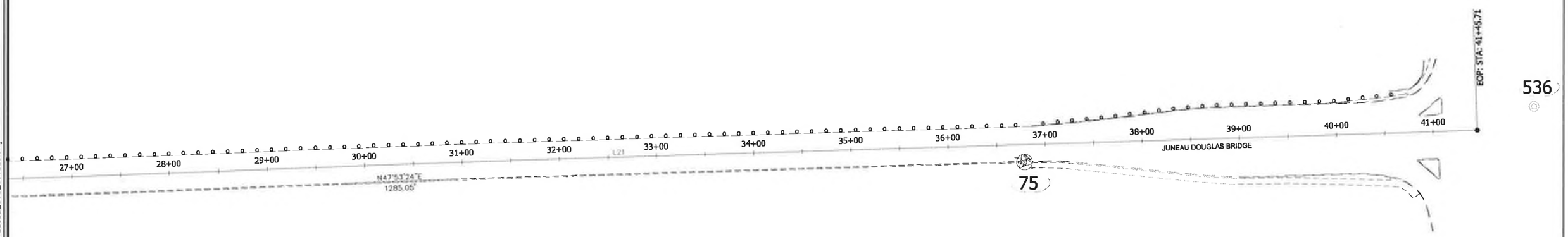
JUNEAU DOUGLAS BRIDGE ALIGNMENT B									
SEGMENT	STATION	NORTHING	EASTING	DISTANCE	BEARING	STATION	RADIUS	LENGTH	DELTA
L20	20+00.00	212445.81	185391.43	228.96	N39° 31' 03"E	22+28.96			
C10	22+28.96	212622.43	185537.12			23+75.59	1000.00	146.63	8°24'04"
L21	23+75.59	212728.31	185638.36	1770.12	N47° 55' 07"E	41+45.71			

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.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/958032	2020	A7	A7





SR 2/3/21

7.6.20

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
6860 Glacier Highway Juneau Ak 99801
(907) 465-1763

Daniel M. Ignatov
No. 11295

JUNEAU- DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE 1
SURVEY CONTROL

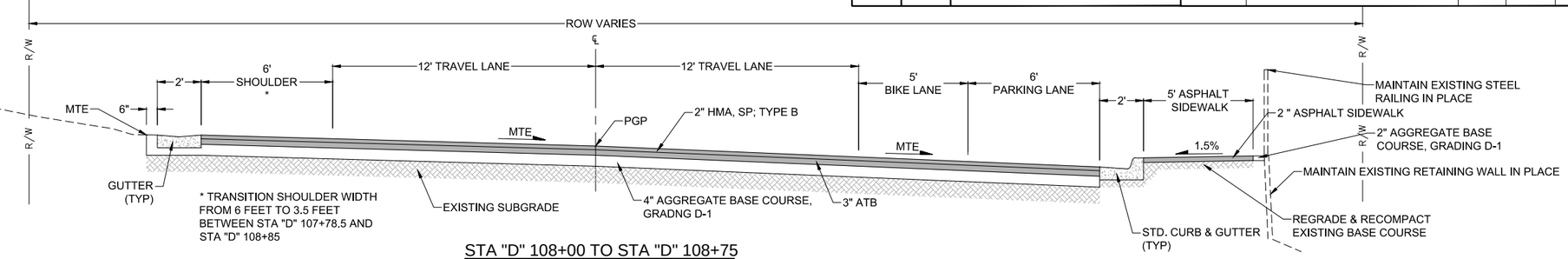
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DATE/TIME 7/6/2020 13:54
LAYOUT A7
SCALE
SHEETS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	B1	B2

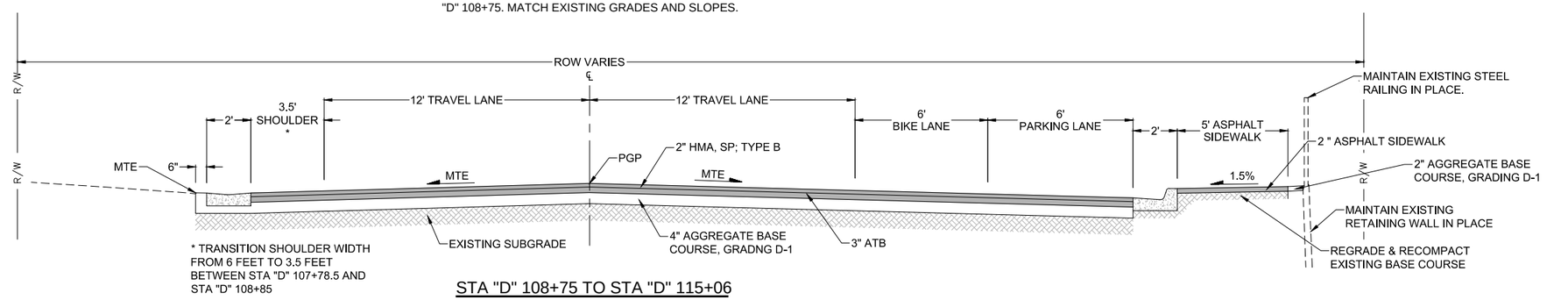
GENERAL NOTES:

1. EXISTING UTILITIES SHOWN ON F SHEETS. LOCATION AND SIZE OF EXISTING UTILITIES ARE BASED ON RECORD DRAWINGS.
2. ROADWAY CROSS-SLOPES ARE GENERALLY 2% TO 3% AWAY FROM THE CROWN LINE. VARIATIONS OCCUR IN AREAS WHERE THE ROADWAY IS SUPERELEVATED. MAINTAIN EXISTING CROSS SLOPES ON THE ROADWAY, UNLESS OTHERWISE NOTED.
3. REPLACE EXISTING GUTTER, CURB & GUTTER AND SIDEWALK AT LOCATIONS SHOWN ON THE D SHEETS & F SHEETS. NEW GUTTER AND STD CURB & GUTTER TO MATCH LINE AND GRADE OF EXISTING GUTTER AND STD CURB & GUTTER UNLESS OTHERWISE SHOWN ON THE G SHEETS. RE-GRADE AND COMPACT EXISTING BASE COURSE AS NECESSARY TO INSTALL NEW CURB & GUTTER AND SIDEWALK.
4. TOPSOIL AND SEED, 3" THICK, ALL DISTURBED AREAS UNLESS OTHERWISE SHOWN. TOPSOIL AND SEEDING WILL BE CONSIDERED INCIDENTAL TO ALL OTHER WORK.

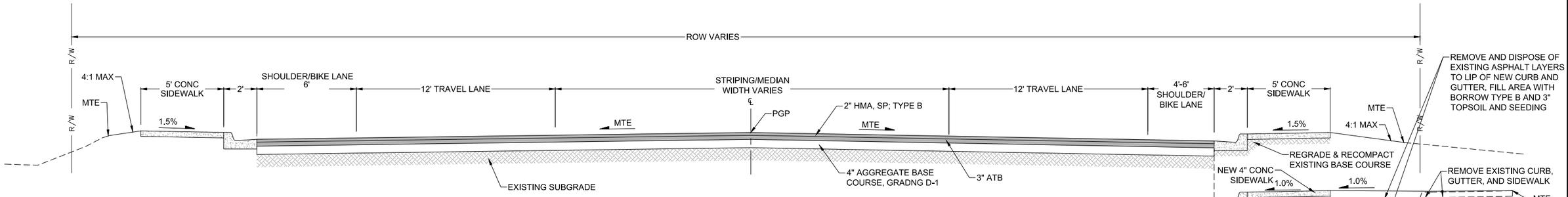


STA "D" 108+00 TO STA "D" 108+75

*TRANSITION TO CROWN FROM STA "D" 108+00 TO STA "D" 108+75. MATCH EXISTING GRADES AND SLOPES.

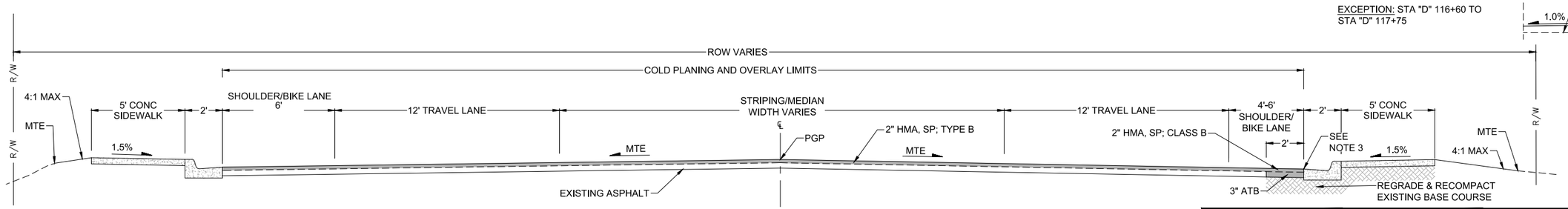


STA "D" 108+75 TO STA "D" 115+06



STA "D" 115+06 TO STA "D" 117+75

*SEE G SHEETS FOR INTERSECTION GRADING AND SECTIONS BETWEEN STA "D" 115+00 AND STA "D" 115+70



STA "D" 117+75 TO STA "D" 120+68.8 AND STA "N" 30+76.7 TO STA "N" 32+13.2

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

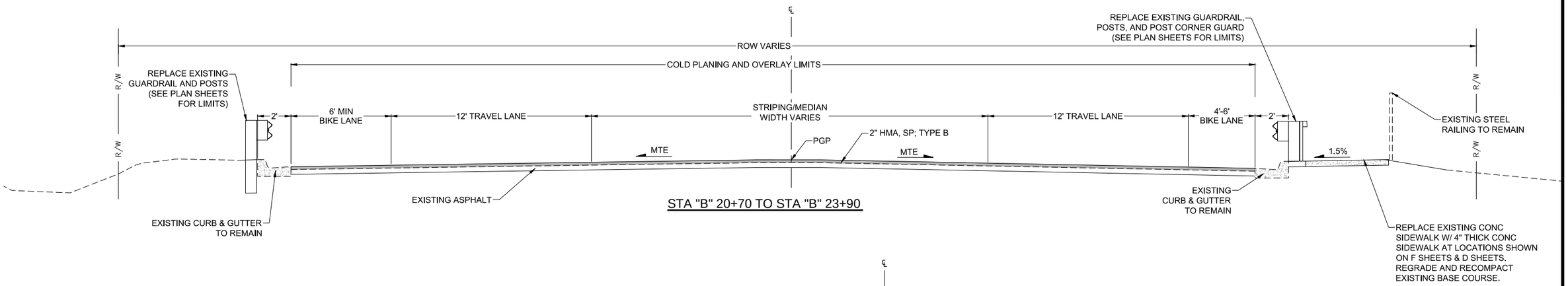
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY PM CONSTRUCTION STAGE I

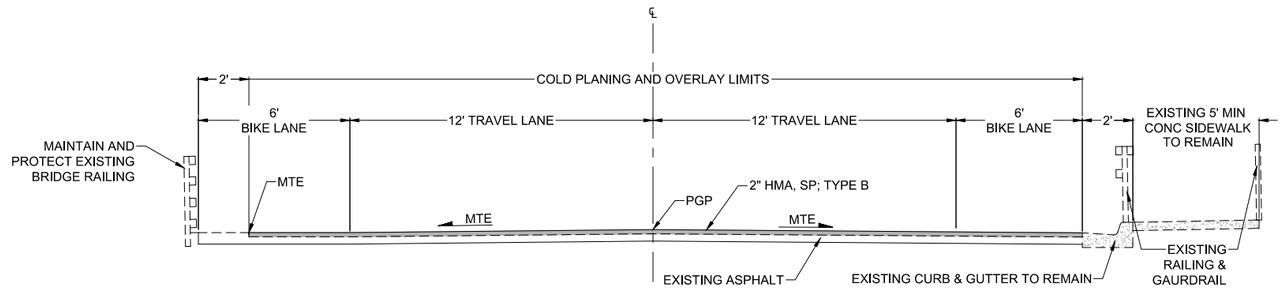
TYPICAL SECTIONS

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-TS-B-70897.dwg | DATE 8/4/2020 17:19 | LAYOUT B1 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP

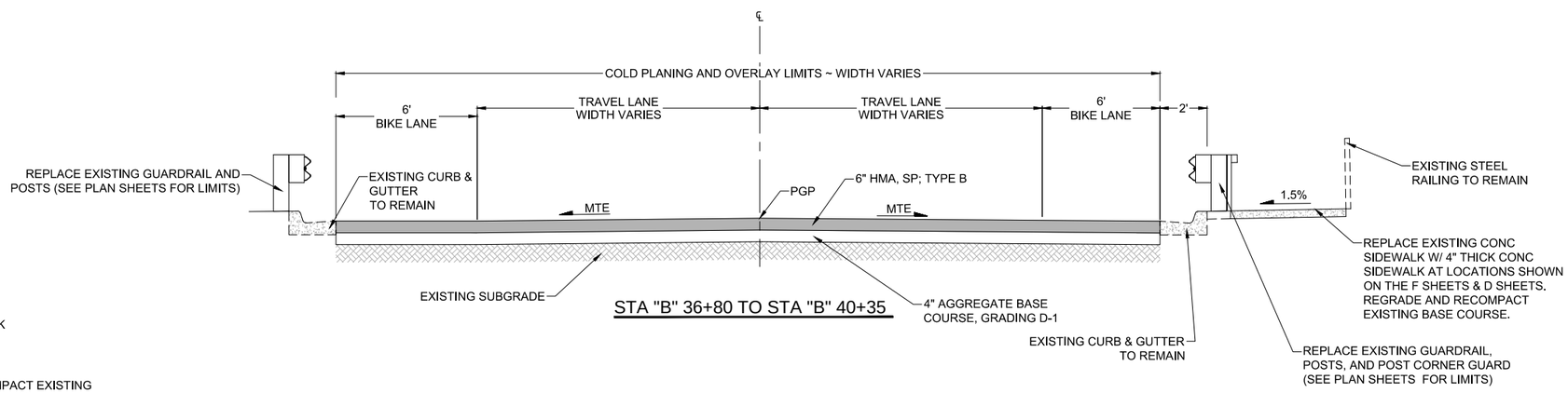
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	B2	B2



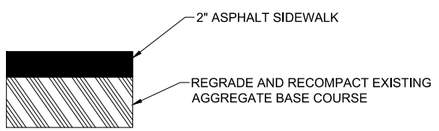
STA "B" 20+70 TO STA "B" 23+90



STA "B" 23+90 TO STA "B" 36+80 (DOUGLAS BRIDGE)



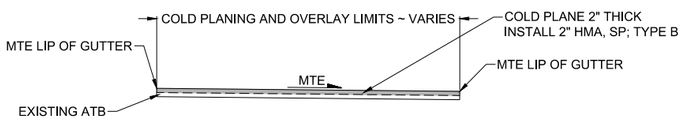
STA "B" 36+80 TO STA "B" 40+35



RESIDENTIAL AND COMMERCIAL DRIVEWAY STRUCTURAL SECTION

NTS - SEE SHEET D4 AND F SHEETS FOR DRIVEWAY LOCATIONS AND DIMENSIONS

USED ON SITKA ST WITH 2.5 INCH HMA



ROUNDABOUT

* CIRCULAR LANES AND APPROACHES TO LEADING END OF SPLITTER ISLANDS. SEE F SHEETS FOR HORIZONTAL LIMITS.

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA 49th Steven K. Noble No.CE10051 REGISTERED PROFESSIONAL ENGINEER

08/07/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY PM CONSTRUCTION STAGE I

TYPICAL SECTIONS

FIRM DOWL
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
DATE 8/4/2020 17:19
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-TS-B-70897.dwg
PHONE (907) 780-3533
DESIGNED STEPHENS
LAYOUT B2
CHECKED NOBLE
CERTIFICATE OF AUTH #: AECL848
DRAFTED KEMP

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	C1	C1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY	
201.0009.0000	CLEARING AND GRUBBING	LS	ALL REQ'D	
201.2001.0000	INVASIVE PLANT SPECIES CONTROL, REMOVAL, AND DISPOSAL	SY	~~1,135~~	984.1
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	ALL REQ'D	
202.0002.0000	REMOVAL OF PAVEMENT	SY	~~7,374~~	7663
202.0003.0000	REMOVAL OF SIDEWALK	SY	~~1,247~~	1282
202.0004.0000	REMOVAL OF CULVERT PIPE	LF	~~249~~	140.5
202.0006.0000	REMOVAL OF MANHOLE	EA	~~6~~	5
202.0008.0000	REMOVAL OF INLET	EA	1	
202.0009.0000	REMOVAL OF CURB AND GUTTER	LF	~~1,904~~	2292
203.0003.0000	UNCLASSIFIED EXCAVATION	CY	~~721~~	822.5
203.0005.000B	BORROW, TYPE B	CY	~~90~~	281.7
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	~~1,433~~	2204.3
306.0001.0000	ATB	TON	~~1,269~~	819.23
306.0002.6428	ASPHALT BINDER, GRADE PG 64-28	TON	~~63~~	45.06
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	TON	~~8~~	9.91
408.2001.000B	HMA, SP; TYPE B	TON	~~2,400~~	2551.98
408.2004.6428	ASPHALT BINDER, GRADE PG 64-28	TON	~~144~~	163.379
408.2008.000B	HMA PRICE ADJUSTMENT, SP; TYPE B	CS	ALL REQ'D	
408.2009.0000	LONGITUDINAL JOINT DENSITY PRICE ADJUSTMENT	CS	ALL REQ'D	
408.2010.0001	PAVEMENT SMOOTHNESS PRICE ADJUSTMENT, METHOD 1	CS	ALL REQ'D	
410.2001.0000	PAVEMENT COLD PLANING	SY	~~10,436~~	10,004
516.0001.0000	EXPANSION JOINT, SILICONE	LF	~~37~~	21.5
516.0001.0001	EXPANSION JOINT, STRIP SEAL Deleted by CO 8	LF	~~110~~	
603.0001.0024	CSP 24 INCH	LF	~~19~~	24
603.0021.0012	CORRUGATED POLYETHYLENE PIPE 12 INCH	LF	~~85~~	86.3
603.0021.0018	CORRUGATED POLYETHYLENE PIPE 18 INCH Deleted by CO 14	LF	~~64~~	
603.0021.0024	CORRUGATED POLYETHYLENE PIPE 24 INCH	LF	83	
603.0021.0036	CORRUGATED POLYETHYLENE PIPE 36 INCH Deleted by CO 14	LF	~~45~~	
603.2017.0000	CULVERT CLEANING	LF	~~479~~	1,231.4
603.2019.0036	LINER FOR STORM DRAIN 36 INCH, HDPE	LF	~~17~~	20.5
603.2027.0012	CURE IN PLACE PIPE, 12"	LF	~~49~~	57
603.2027.0018	CURE IN PLACE PIPE, 18"	LF	~~50~~	49
603.2027.0024	CURE IN PLACE PIPE, 24"	LF	~~520~~	593.43
603.2027.0036	CURE IN PLACE PIPE, 36"	LF	~~286~~	324.25
603.2027.0048	CURE IN PLACE PIPE, 48"	LF	~~163~~	169.5

BASIS OF ESTIMATE

ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
203.0006.000B	BORROW, TYPE B	1.95 TON/CY
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	2.00 TON/CY
306.0002.6428	ASPHALT BINDER, GRADE PG 64-28	5.3% OF TOTAL WEIGHT OF 306.0001.0000
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	0.10 GAL/SY, 240 GAL/TON
408.2001.000B	HMA, SP; TYPE B	119 LB/SY-IN
408.2004.6428	ASPHALT BINDER, GRADE PG 64-28	6.0% OF TOTAL WEIGHT OF 408.2001.000B
611.0001.0002	RIPRAP, CLASS II	1.46 TON/CY
670.2001.0000	MMA PAVEMENT MARKINGS, SURFACE APPLIED	SEE SHEET H1
670.2002.0000	MMA PAVEMENT MARKINGS, INLAID	SEE SHEET H1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY	
604.0001.0000	STORM SEWER MANHOLE	EA	~~7~~	6
604.0003.0000	RECONSTRUCT EXISTING MANHOLE	EA	~~1~~	2
604.0005.000A	INLET, TYPE A	EA	1	
604.0010.0000	RECONSTRUCT INLET	EA	1	
604.0016.0000	ADJUST INLET FRAME AND GRATE	EA	~~3~~	4
605.0006.0012	PERFORATED CORRUGATED POLYETHYLENE PIPE FOR UNDERDRAIN 12 INCH	LF	~~42~~	18
606.0001.0000	W-BEAM GUARDRAIL	LF	~~1,300~~	1,008.5
606.0006.0000	REMOVING AND DISPOSING OF GUARDRAIL	LF	~~813~~	1,300
606.0013.0000	PARALLEL GUARDRAIL TERMINAL	EA	3	
606.0016.0000	TRANSITION RAIL MODIFICATION	EA	4	
608.0001.0004	CONCRETE SIDEWALK, 4 INCHES THICK	SY	~~1,107~~	1,103.4
608.0001.0006	CONCRETE SIDEWALK, 6 INCHES THICK	SY	~~257~~	219.25
608.0003.0000	ASPHALT SIDEWALK	SY	~~824~~	1,022.4
608.0006.0000	CURB RAMP	EA	~~16~~	14
609.0002.0001	CURB AND GUTTER, TYPE I	LF	~~1,904~~	2,395.8
610.0001.0000	DITCH LINING	CY	~~11~~	37.6
611.0002.0002	RIPRAP, CLASS II	TON	~~261~~	235.8
615.0001.0000	STANDARD SIGN	SF	~~302~~	324
615.0002.0000	REMOVE AND RELOCATE SIGN	EA	1	
615.0005.0000	DELINEATOR, FLEXIBLE	EA	13	
615.0007.0000	SALVAGE AND DISPOSE SIGN	EA	~~56~~	58
627.0010.0000	ADJUSTMENT OF VALVE BOX	EA	~~8~~	14
631.0002.0001	GEOTEXTILE, EROSION CONTROL, CLASS 1	SY	~~155~~	375
635.0001.0000	INSULATION BOARD	MBM	~~1~~	.576
639.0001.0000	DRIVEWAY	EA	20	
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D	
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D	
641.0003.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LS	ALL REQ'D	
641.0005.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CS	ALL REQ'D	
641.0007.0000	SWPPP MANAGER	LS	ALL REQ'D	
642.0001.0000	CONSTRUCTION SURVEYING	LS	ALL REQ'D	
642.0003.0000	THREE PERSON SURVEY PARTY	HR	75	2.63
642.0004.0000	SET PRIMARY MONUMENT	EA	2	
642.0006.0000	REPLACE EXISTING WITH PRIMARY MONUMENT	EA	~~1~~	0
642.0007.0000	REPLACE EXISTING WITH SECONDARY MONUMENT	EA	~~5~~	1
642.0008.0000	ADJUST EXISTING MONUMENT	EA	~~2~~	0
642.0009.0000	REFERENCE EXISTING MONUMENT	EA	~~6~~	1
642.0010.0000	MONUMENT CASE	EA	2	
643.0002.0000	TRAFFIC MAINTENANCE	LS	ALL REQ'D	
643.0003.0000	PERMANENT CONSTRUCTION SIGNS	LS	ALL REQ'D	
643.0025.0000	TRAFFIC CONTROL	CS	ALL REQ'D	
643.0032.0000	FLAGGING	CS	ALL REQ'D	
643.2005.0000	PUBLIC INFORMATION PROGRAM	LS	ALL REQ'D	
644.0001.0000	FIELD OFFICE	LS	ALL REQ'D	
644.0002.0000	FIELD LABORATORY	LS	ALL REQ'D	
644.2004.0000	ENGINEERING COMMUNICATIONS	CS	ALL REQ'D	
644.2008.0000	WEB-BASED SUBMITTALS	LS	ALL REQ'D	
~~645.0001.0000~~	~~TRAINING PROGRAM, 1 TRAINEE/APPRENTICE~~	LH	~~300~~	
660.2008.0000	TRAFFIC LOOP REPLACEMENT	CS	ALL REQ'D	
670.0001.0000	PAINTED TRAFFIC MARKINGS	LS	ALL REQ'D	
670.0008.0000	RECESSED PAVEMENT MARKER	EACH	~~53~~	56
670.2001.0000	MMA PAVEMENT MARKINGS, SURFACE APPLIED	LS	ALL REQ'D	
670.2002.0000	MMA PAVEMENT MARKINGS, INLAID	LS	ALL REQ'D	

SR 2/3/21

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	11/13/20	Addendum No. 1	RS
2	11/23/20	Addendum No. 4	RS
3	11/30/20	Addendum No. 5	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA · 49th · Steven K. Noble · No.CE10051 · REGISTERED PROFESSIONAL ENGINEER
11/30/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

ESTIMATE OF QUANTITIES

FIRM DOWL
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-QT-C-70897.dwg
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
DATE 11/30/2020 17:30
PHONE (907) 780-3533
CERTIFICATE OF AUTH #: AECL848
DESIGNED STEPHENS
CHECKED NOBLE
DRAFTED KEMP
LAYOUT C1

SFHWY00293 / 958033
JUN: DOUGLAS HWY SURFACE AND SIDEWALK REPAIRS STAGE 1

SHEET C2 - SUMMARY OF QUANTITIES FOR CHANGE ORDER ITEMS

NEW ITEMS CREATED BY CHANGE ORDER			
ITEM NO.	**ITEM DESCRIPTION**	**PAY UNIT**	**TOTAL QUANTITY**
604.0004.0000	Adjust Existing Manhole(CO #2)	Each	4
603.0099.0000	Connect to Existing Pipe (CO #3)	Each	9
604.0099.0000	Raise Existing Manhole (CO #3)	LS	1.0
643.2023.0000	Shuttle (CO #4)	Day	7.0
643.2023.0099	Shuttle Mobilization (CO #4)	LS	1.0
516.0098.0000	Field Welding (CO #5)	Hr	3
516.0099.0000	Header Replacement (CO #5)	Each	3
202.0099.0000	Removal of Valve Boxes (CO #6)	LS	1
603.0098.0000	Equitable Adjustment, P5-1 (CO #6)	LS	1
603.0021.0048	CPP 48 Inch (CO #7)	LF	17.00
627.0099.0000	Repair Sewer Service (CO #7)	LS	1
516.0001.0099	Equitable Adjustment, Expansion Joint (CO #8)	LS	1
603.0097.0000	Modify S-96 (CO #9)	LS	1
603.2027.0099	CIPP Modification or Pipe Repair (CO #10)	Hr	22.25
606.0099.0000	Downstream End Anchor (CO #10)	Each	2
611.0099.0000	Add'l Riprap at P2-12 (CO #13)	LS	1

SR 2/3/21

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	D1	D4

201.2001.0000 INVASIVE PLANT SPECIES CONTROL, REMOVAL, AND DISPOSAL

SHEET	START STATION	END STATION	OFFSET	AREA (SY)	REMARKS
P1	'D' 102+22	'D' 102+32	LT	5	REED CANARY GRASS
P1	'D' 102+47	'D' 102+53	LT	4	REED CANARY GRASS
P1	'D' 102+75	'D' 103+01	LT	12	REED CANARY GRASS
P1	'D' 101+82	'D' 101+96	LT	3	ORANGE HAWKWEED
P1	'D' 103+38	'D' 103+38	LT	1	ORANGE HAWKWEED
P1	'D' 103+74	'D' 103+89	LT	5	ORANGE HAWKWEED
P1	'D' 103+95	'D' 104+00	RT	1	ORANGE HAWKWEED
P2	'D' 113+73	'D' 113+80	LT	2	REED CANARY GRASS
P2	'D' 115+07	'D' 115+11	LT	4	REED CANARY GRASS
P2	'D' 117+05	'D' 117+46	LT	12	ORANGE HAWKWEED
P3	'D' 118+28	'D' 118+59	LT	40	REED CANARY GRASS
P3	'D' 119+53	'D' 120+00	LT	52	REED CANARY GRASS
P3	'D' 119+93	'D' 120+02	LT	9	REED CANARY GRASS
P3	'D' 118+45	'B' 23+98	RT	343	REED CANARY GRASS
P3	'B' 22+32	'B' 22+39	LT	3	REED CANARY GRASS
P3	'D' 120+13	'D' 120+18	LT	3	OXEYE DAISY
P3	'D' 120+34	'D' 120+40	LT	2	OXEYE DAISY
P3	'D' 120+06	'D' 120+30	LT	13	ORANGE HAWKWEED
P3/P4	'B' 22+48	'B' 22+58	LT	4	REED CANARY GRASS
P4	'B' 22+62	'B' 22+62	LT	1	REED CANARY GRASS
P4	'B' 22+68	'B' 22+78	LT	4	REED CANARY GRASS
P4	'B' 22+90	'B' 23+06	LT	7	REED CANARY GRASS
P4	'B' 23+28	'B' 23+36	LT	4	REED CANARY GRASS
P4	'B' 23+58	'B' 23+99	LT	28	REED CANARY GRASS
P4	'B' 23+72	'B' 23+89	RT	15	ORANGE HAWKWEED
P5	'B' 36+76	'B' 40+54	LT	207	REED CANARY GRASS
P5	'B' 40+67	'B' 40+80	LT	7	REED CANARY GRASS
P5	'B' 36+76	'B' 40+88	RT	312	REED CANARY GRASS
P5	'B' 39+92	'B' 40+02	LT	6	RAMPION BELLFLOWER
P5	'B' 40+71	'B' 40+76	LT	2	OXEYE DAISY
P5	'B' 36+50	'B' 36+79	RT	22	ORNAMENTAL JEWELWEED
			TOTAL:	1,135	SY

202.0001.0000 REMOVAL OF STRUCTURES AND OBSTRUCTIONS

STATION	OFFSET	REMARKS
'D' 108+36	0.1' LT	REMOVE CENTERLINE MONUMENT, SHEET A6
'D' 115+32	0.0' RT	REMOVE CENTERLINE MONUMENT, SHEET A6

202.0002.0000 REMOVAL OF PAVEMENT

SHEET	START		END		AREA (SY)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F1	'D' 101+29	LT	'D' 101+54	LT	46	DRIVEWAY
F2-F3	'D' 108+00	CL	'D' 110+00	CL	884	ROADWAY RECON
F2	'D' 108+50	RT	'D' 108+50	RT	7	DRIVEWAY
F2	'D' 108+50	LT	'D' 108+50	LT	17	DRIVEWAY
F2	'D' 109+25	RT	'D' 109+25	RT	3	DRIVEWAY
F3	'D' 110+93	LT	'D' 110+93	LT	23	DRIVEWAY
F3-F4	'D' 110+00	RT	'D' 115+00	RT	278	PATHWAY
F3-F4	'D' 110+00	RT	'D' 117+25	RT	161	2' C/G STRIP
F3-F4	'D' 110+00	CL	'D' 115+65	CL	2544	ROADWAY RECON
F3	'D' 111+00	RT	'D' 111+00	RT	14	DRIVEWAY
F3	'D' 111+75	LT	'D' 112+00	LT	35	DRIVEWAY
F3	'D' 112+25	LT	'D' 112+25	LT	28	DRIVEWAY
F3	'D' 113+05	LT	'D' 113+50	LT	24	DRIVEWAY
F3	'D' 113+60	RT	'D' 113+75	RT	4	DRIVEWAY
F3	'D' 114+00	RT	'D' 114+25	RT	23	DRIVEWAY
F3-F4	'D' 114+75	RT	'D' 115+00	RT	12	DRIVEWAY
F4	'D' 115+65	CL	'D' 117+25	CL	718	ROADWAY RECON
F4	'D' 115+65	LT	'D' 117+25	LT	36	2' C/G STRIP
F4	'D' 116+50	RT	'D' 116+50	RT	11	DRIVEWAY
F4	'D' 116+90	LT	'D' 116+90	LT	13	DRIVEWAY
F4	'D' 117+50	LT	'D' 117+50	LT	11	DRIVEWAY
F4	'D' 118+00	RT	'D' 118+00	RT	36	DRIVEWAY
F5	'D' 119+80	RT	'D' 119+80	RT	2	MEDIAN ISLAND
F5	'D' 120+25	RT	'D' 120+25	RT	16	MEDIAN ISLAND
F5	'D' 120+30	RT	'D' 120+30	RT	2	MEDIAN ISLAND
F5	'D' 120+45	LT	'D' 120+45	LT	2	MEDIAN ISLAND
F5	'N' 30+77	RT	'N' 30+80	RT	2	MEDIAN ISLAND
F5	'N' 31+00	CL	'N' 31+00	CL	21	CROSSWALK
F5	'N' 31+10	CL	'N' 31+15	CL	19	MEDIAN ISLAND
F5	'N' 31+45	CL	'N'31+40	CL	3	MEDIAN ISLAND
F6	'B' 20+75	RT	'B' 20+75	RT	1	MEDIAN ISLAND
F6	'B' 20+90	CL	'B' 21+00	CL	36	MEDIAN ISLAND
F6	'B' 21+10	CL	'B' 21+10	CL	26	CROSSWALK
F6	'B' 21+20	CL	'B' 21+20	CL	4	MEDIAN ISLAND
F6	'B' 21+20	RT	'B' 21+20	RT	1	MEDIAN ISLAND
F6	'B' 22+15	RT	'B' 22+15	RT	3	MEDIAN ISLAND
F8	'B' 36+80	CL	'B' 37+00	CL	79	FULL WIDTH ROAD
F9	'B' 37+00	CL	'B' 40+35	CL	2229	FULL WIDTH ROAD
				TOTAL:	7,374	SY

⚠

202.0003.0000 REMOVAL OF SIDEWALK

SHEET	START		END		AREA (SY)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F4	'D' 115+05	RT	'D' 118+50	RT	191	DOUGLAS
F4-F5	'D' 115+50	LT	'D' 119+00	LT	212	DOUGLAS
F5	'D' 119+45	RT	'D' 121+10	RT	158	DOUGLAS
F5	'D' 119+80	RT	'D' 119+80	RT	5	MEDIAN ISLAND
F5	'D' 120+20	LT	'D' 120+60	LT	44	DOUGLAS
F5	'N' 30+80	LT	'N' 31+70	LT	68	N.DOUGLAS
F5	'N' 30+80	RT	'N' 32+20	RT	117	N.DOUGLAS
F6	'B' 20+50	RT	'B' 21+30	RT	147	ROUNDABOUT
F6	'B' 20+50	LT	'B' 21+30	LT	108	DOUGLAS
F6	'B' 22+48	RT	'B' 23+90	RT	93	TO BRIDGE
F8	'B' 36+78	RT	'B' 36+88	RT	7	BRIDGE
F9	'B'37+20	RT	'B' 38+59	RT	38	BRIDGE
F9	'B' 39+42	RT	'B' 40+32	RT	59	BRIDGE
				TOTAL:	1,247	SY

202.0004.0000 REMOVAL OF CULVERT PIPE

SHEET	INLET		OUTLET		SIZE (IN)	LENGTH (LF)	REMARKS
	STATION	OFFSET	STATION	OFFSET			
F1	'D' 101+25	27.3' LT	'D' 101+44	21.7' LT	12	20	
F1	'D' 101+44	28.8' LT	'D' 101+46	23.0' LT	24	6	
F2	'D' 106+60	25.5' RT	'D' 106+59	35.0 RT	18	10	
F2	'D' 109+67	31.9' LT	'D' 109+79	17.3' LT	24	19	
F2	'D' 109+81	17.5' LT	'D' 109+85	23.4' LT	12	20	
F2	'D' 109+79	15.8' LT	'D' 109+96	25.2' RT	36	45	
F3	'D' 111+53	17.6' LT	'D' 111+63	22.3' LT	12	20	
F3	'D' 114+82	17.8' LT	'D' 115+55	24.9' LT	12	73	
F4	'D' 118+70	50.5' LT	'D' 119+31	22.5' LT	18	36	NOT REMOVED
					TOTAL:	~~249~~	LF

202.0006.0000 REMOVAL OF MANHOLE

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F1	'D' 101+46	18.6' LT	1	S-96
F2	'D' 105+03	28.3' LT	1	S-99
~~F2~~	~~'D' 109+80~~	~~16.5' LT~~	~~1~~	~~S-105~~ RECONST, SEE DIR #7
F4	'D' 115+55	24.9' LT	1	S-109
F4	'D' 117+96	45' LT	1	S-113
F5	'D' 119+37	77.3' LT	1	S-118
		TOTAL:	~~6~~ 5	EA

202.0008.0000 REMOVAL OF INLET

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F3	'D' 114+80	17.4' LT	1	
		TOTAL:	1	EA

202.0009.0000 REMOVAL OF CURB AND GUTTER

SHEET	START		END		LENGTH (LF)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F2-F4	'D' 108+00	LT	'D' 115+35	LT	724	
F2-F3	'D' 108+00	RT	'D' 110+00	RT	199	
F3	'D' 110+75	RT	'D' 111+25	RT	50	
F3-F4	'D' 112+50	RT	'D' 118+50	RT	594	
F5	'D' 115+50	LT	'D' 115+90	LT	58	
F5	'D' 119+70	RT	'D' 119+80	RT	27	
F5	'D' 120+30	RT	'D' 120+40	RT	10	
F5	'D' 120+65	LT	'D' 120+70	LT	10	
F5	'N' 31+40	CL	'N' 31+45	CL	14	NORTH DOUGLAS
F5	'N' 31+10	CL	'N' 31+20	CL	41	NORTH DOUGLAS
F5	'N' 30+76	RT	'N' 30+81	RT	10	NORTH DOUGLAS
F5	'N' 30+85	RT	'N' 31+15	RT	32	NORTH DOUGLAS
F5	'N' 30+85	LT	'N' 31+20	LT	30	NORTH DOUGLAS
F6	'B' 20+70	RT	'B' 20+75	RT	10	BRIDGE
F6	'B' 20+90	LT	'B' 21+10	LT	53	BRIDGE
F6	'B' 21+16	RT	'B' 21+21	RT	10	BRIDGE
F6	'B' 21+16	LT	'B' 21+21	LT	17	BRIDGE
F6	'B' 22+16	RT	'B' 22+20	LT	15	BRIDGE
				TOTAL:	1,904	LF

REVISIONS			
REV	DATE	DESCRIPTION	BY
⚠	11/12/20	Addendum No. 1	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

SR 2/3/21

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/12/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

SUMMARY TABLES

FIRM DOWL
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
DATE 11/12/2020 10:35
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-SU-D-70897.dwg
LAYOUT D1
PHONE (907) 780-3533
DESIGNED STEPHENS
CHECKED NOBLE
DRAFTED KEMP
CERTIFICATE OF AUTH #: AECL848

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	D2	D4

203.0003.0000 UNCLASSIFIED EXCAVATION

SHEET	START STATION	END STATION	VOLUME (CY)	REMARKS
F2-F3	'D' 108+00	'D' 110+00	98	ROADWAY
F3	'D' 112+06	'D' 112+02	4	P3-4A
F3-F4	'D' 110+00	'D' 115+65	283	ROADWAY
F4	'D' 115+65	'D' 117+25	80	ROADWAY
F8-F9	'B' 36+75	'B' 40+30	256	ROADWAY
		TOTAL:	721	CY

203.0005.000B BORROW, TYPE B

SHEET	STATION	OFFSET	QUANTITY (CY)	REMARKS
F2	'D' 104+96	55' RT	20	CULVERT OUTLET FILL P2-2
F2	'D' 105+25	40' RT	20	CULVERT BACK FILL P2-12
F3	'D' 112+02	40' RT	50	CULVERT BACK FILL P3-4A
		TOTAL:	90	CY

301.0001.00D1 AGGREGATE BASE COURSE, GRADING D-1

SHEET	START STATION	END STATION	WEIGHT (TON)	REMARKS
F2-F3	'D' 108+00	'D' 110+00	196	ROADWAY
F3-F4	'D' 110+00	'D' 115+65	565	ROADWAY
F4	'D' 115+65	'D' 117+25	159	ROADWAY
F8-F9	'B' 36+75	'B' 40+30	513	ROADWAY
		TOTAL:	1,433	TONS

306.0001.0000 ATB

SHEET	START STATION	END STATION	WEIGHT (TON)	REMARKS
F2-F3	'D' 108+00	'D' 110+00	174	
F3-F4	'D' 110+00	'D' 115+65	500	
F4	'D' 115+65	'D' 117+25	141	
~~F4-F5~~	~~'B' 36+75~~	~~'B' 40+33~~	~~454~~	USED HMA, SP
		TOTAL:	~~1,269~~	TONS

306.0002.6428 ASPHALT BINDER, GRADE PG 64-28

SHEET	START STATION	END STATION	WEIGHT (TON)	REMARKS
F1-F9	'D' 108+00	'B' 40+35	63	
		TOTAL:	63	TONS

402.0001.STE1 STE-1 ASPHALT FOR TACK COAT

SHEET	START STATION	END STATION	WEIGHT (TON)	REMARKS
F1-F9	'D' 108+00	'B' 40+35	8	
		TOTAL:	8	TONS

408.2001.000B HMA, SP; TYPE B

SHEET	START STATION	END STATION	WEIGHT (TON)	REMARKS
F2-F3	'D' 108+00	'D' 110+00	116	
F3-F4	'D' 110+00	'D' 115+65	334	
F4	'D' 115+65	'D' 117+25	94	
F4-F5	'D' 117+25	'D' 119+00	144	
F5-F6	'D' 119+00	'B' 20+50	340	
F6-F7	'B' 20+50	'B' 26+00	334	
F6	'B' 23+90	'B' 23+95	6	BRIDGE JOINT
F7-F8	'B' 26+00	'B' 31+50	282	
F7	'B' 29+80	'B' 29+83	6	BRIDGE JOINT
F7	'B' 30+85	'B' 30+90	6	BRIDGE JOINT
F8	'B' 31+50	'B' 36+75	270	
F8	'B' 36+75	'B' 36+78	6	BRIDGE JOINT
F8-F9	'B' 36+75	'B' 40+35	454	
		TOTAL:	2392	TONS
		ROUNDED TOTAL:	2400	TONS

408.2004.6428 ASPHALT BINDER, GRADE PG 64-28

SHEET	START STATION	END STATION	WEIGHT (TON)	REMARKS
F1-F9	'D' 108+00	'B' 40+33	144	
	TOTAL:		144	TONS

410.2001.0000 PAVEMENT COLD PLANING

SHEET	START STATION	END STATION	OFFSET	AREA (SY)	REMARKS
F4-F5	'D' 117+25	'D' 119+00	CL	1,091	
F5-F6	'D' 119+00	'B' 20+50	CL	2,595	
F6-F7	'B' 20+50	'B' 26+00	CL	2,544	
F7-F8	'B' 26+00	'B' 31+50	CL	2,149	
F8	'B' 31+50	'B' 36+75	CL	2,057	
			TOTAL:	10,436	SY

516.0001.0000 EXPANSION JOINT, SILICONE

SHEET	STATION	NOTES
F7	'B' 29+83	REFER TO N SHEETS

ELIMINATED, SEE CO #8

~~516.0001.0001 EXPANSION JOINT, STRIP SEAL~~

~~SHEET~~	~~STATION~~	~~NOTES~~
~~F6~~	~~'B' 23+90~~	~~REFER TO N SHEETS~~
~~F7~~	~~'B' 30+88~~	~~REFER TO N SHEETS~~
~~F8~~	~~'B' 36+77~~	~~REFER TO N SHEETS~~

603.0001.0024 CSP 24 INCH

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F3	P3-4A	'D' 112+06	41.2' RT	39.72	'D' 112+02	60.0' RT	37.29	19	

603.0021.0012 CORRUGATED POLYETHYLENE PIPE 12 INCH

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F3	P3-1	'D' 111+41	22.5' LT	49.2	'D' 111+53	17.4' LT	48.2	11	
F3-F4	P4-1	'D' 114+82	17.8' LT	53.7	'D' 115+55	24.9' LT	51.4	74	
							TOTAL:	85	LF

603.0021.0018 CORRUGATED POLYETHYLENE PIPE 18 INCH

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F4-F5	P5-1	'D' 118+70	50.5' LT	47.8	'D' 119+31	22.5' LT	40.0	~~64~~	
EXISTING PIPE REMAINS IN PLACE							TOTAL:	~~64~~ 0	LF

603.0021.0024 CORRUGATED POLYETHYLENE PIPE 24 INCH

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F1	P1-1A	'D' 101+45	23.6' LT	56.0	'D' 101+46	18.6' LT	58.0	5	
~~F2~~	~~P2-4~~	~~'D' 109+67~~	~~31.8' LT~~	~~45.3000~~	~~'D' 109+80~~	~~16.5' LT~~	~~44.8~~	~~20~~	
F3	P3-3	'D' 111+53	16.6' LT	45.1	'D' 111+45	38.1' RT	40.0	56	CIPP, RFI#05
F5	P5-2	'D' 119+37	77.3' LT	34.1	'D' 119+39	75.9' LT	34.0	2	
							TOTAL:	~~83~~	LF

603.0021.0036 CORRUGATED POLYETHYLENE PIPE 36 INCH

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F2	P2-6	'D' 109+79	16.5' LT	41.5	'D' 109+96	25.2' RT	37.0	45	CIPP, Dir 3
							TOTAL:	~~45~~ 0	LF

603.2027.0024 CIPP, 24"

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	NOTES
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F2	P2-2	'D' 105+14	25.8' RT	44.7	'D' 105+21	57.6' RT	39.4	33	Added 3/22/21 by RFI 3

CULVERT CLEANING PERFORMED AT ALL CIPP LOCATIONS, SEE DIR #11

~~603.2017.0000 CULVERT CLEANING~~

~~SHEET~~	~~PIPE ID~~	~~STATION~~	~~OFFSET~~	~~DIAMETER~~	~~LENGTH (LF)~~	~~REMARKS~~
~~F2~~		~~'D' 106+74~~	~~21.8' RT~~	~~36~~	~~41~~	
~~F3~~		~~'D' 111+44~~	~~37.6' RT~~	~~24~~	~~52~~	
~~F3~~		~~'D' 111+44~~	~~20.1' RT~~	~~12~~	~~12~~	
~~F4~~		~~'D' 116+24~~	~~Cross~~	~~12~~	~~39~~	
~~F4~~		~~'D' 115+91~~	~~Cross~~	~~24~~	~~69~~	
~~F4~~		~~'D' 116+26~~	~~Cross~~	~~12~~	~~39~~	
~~F4~~		~~'D' 116+70~~	~~26.4' RT~~	~~24~~	~~91~~	
~~F4~~		~~'D' 118+47~~	~~Cross~~	~~24~~	~~60~~	
~~F4~~		~~'D' 118+49~~	~~30.2' RT~~	~~24~~	~~76~~	
				TOTAL:	~~479~~	LF

603.2019.0036 LINER FOR STORMDRAIN 36 INCH, HDPE

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F2	P2-12	'D' 109+96	25.4' RT	35.1	'D' 109+97	41.9' RT	32.1	17	
							TOTAL:	17	LF

△5 **603.2027.0012 CURE IN PLACE PIPE, 12"**

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F2	P2-9	'D' 108+24	22.8' LT	48.0	'D' 108+72	24.7' LT	46.7	49	P165
							TOTAL:	49	LF

△5 **603.2027.0018 CURE IN PLACE PIPE, 18"**

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F2	P2-7	'D' 106+41	21.5' LT	43.5	'D' 106+60	24.7' RT	42.5	50	
							TOTAL:	50	LF

△5 **603.2027.0024 CURE IN PLACE PIPE, 24"**

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F2	P2-1	'D' 105+03	28.3' LT	52.0	'D' 105+14	24.9' RT	48.5	60	
F2	P2-3	'D' 109+09	24.9' RT	43.7	'D' 109+96	25.4' RT	39.1	97	
F2	P2-10	'D' 108+75	25.9' LT	46	'D' 109+09	24.9' RT	43.9	69	
F3	P3-4	'D' 112+06	27.9' LT	48.6	'D' 112+03	40.7' RT	39.7	77	
F4	P4-2	'D' 117+17	30.1' LT	50.5	'D' 117+94	44.6' LT	49.1	84	
F4	P4-3	'D' 117+96	45.0' LT	48.9	'D' 119+37	77.3' LT	35.9	133	
ALSO P3-3							TOTAL:	520	LF

△5 **603.2027.0036 CURE IN PLACE PIPE, 36"**

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F2	P2-8	'D' 106+93	19.1' LT	45.3	'D' 109+16	16.0' LT	42.3	225	
F2	P2-11	'D' 109+19	15.9' LT	42.2	'D' 109+80	16.5' LT	41.8	61	
ALSO P2-6							TOTAL:	286	LF

△5 **603.2027.0048 CURE IN PLACE PIPE, 48"**

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F5	P5-3	'D' 119+47	87.5' LT	35.6	'D' 119+14	71.8' RT	23.2	~~163~~	
							TOTAL:	~~163~~	LF 123.5

~40 LF OF 48 INCH HDPE LINER FOR STORM DRAIN USED AT P5-3 INLET, SEE CO #11
INLET INCLUDES HYDRO-BELL CULVET INLET DEVICE SR 2/3/21

REVISIONS			
REV	DATE	DESCRIPTION	BY
△1	11/12/20	Addendum No. 1	RS
△5	11/30/20	Addendum No. 5	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/30/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

SUMMARY TABLES

CERTIFICATE OF AUTH #: AECL848 | DRAFTED: KEMP | CHECKED: NOBLE | DESIGNED: STEPHENS | LAYOUT: D2
PHONE (907) 780-3533 | DATE 11/30/2020 17:35
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
FIRM DOWL
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-SU-D-70897.dwg

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/958032	2020	D3	D4

604.0001.0000 STORM SEWER MANHOLE ⚠

SHEET	STRUCTURE ID	STATION	OFFSET	QUANTITY (EA)	RIM EL.	REMARKS	TYPE OF CASTING
F1	S-96	'D' 101+46	18.6' LT	1	59.76	48-INCH DIAMETER, PRECAST	GUTTER INLET FRAME AND GRATE
F2	S-99	'D' 105+03	28.3' LT	1	56.46	48-INCH DIAMETER, PRECAST	MANHOLE LID FRAME AND GRATE
~~F2~~	~~S-105~~	~~'D' 109+80~~	~~16.5' LT~~	~~1~~	~~48.59~~	~~48-INCH DIAMETER, PRECAST~~	~~GUTTER INLET FRAME AND GRATE~~
F3	S-108A	'D' 111+45	38.1' RT	1	45.40	48-INCH DIAMETER, PRECAST	MANHOLE LID FRAME AND SOLID LID
F4	S-109	'D' 115+55	24.9' LT	1	55.05	48-INCH DIAMETER, PRECAST	CURB INLET FRAME AND GRATE
F4	S-113	'D' 117+96	45.0' LT	1	52.26	48-INCH DIAMETER, PRECAST	MANHOLE LID FRAME AND GRATE
F5	S-118	'D' 119+37	77.3' LT	1	44.28	48-INCH DIAMETER, PRECAST	MANHOLE LID FRAME AND GRATE
			TOTAL:	~~7~~ 6	EA		

606.0013.0000 PARALLEL GUARDRAIL TERMINAL

SHEET	START		END		QUANTITY (EA)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F4	'D' 118+51	38.6' RT	'D' 118+98	36.7' RT	1	
F5	'N' 31+59	33.4' RT	'N' 32+09	36.5' RT	1	
F9	'B' 40+01	33.1' LT	'B' 40+51	36.2' LT	1	
				TOTAL:	3	EA

608.0001.0006 CONCRETE SIDEWALK, 6 INCHES THICK ⚠

SHEET	START		END		AREA (SY)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F4	'D' 115+65	20.0' RT	'D' 115+65	20.0' RT	9	CURB RAMP
F4	'D' 115+55	25.0' LT	'D' 115+75	21.6' LT	13	CURB RAMP
F4	'D' 116+30	18.8' RT	'D' 116+63	19.4' RT	18	DRIVEWAY
F4	'D' 116+58	25.0' LT	'D' 117+06	26.0' LT	28	DRIVEWAY
F4	'D' 116+17	18.0' RT	'D' 116+22	18.0' RT	5	BUS STOP
F4	'D' 117+38	28.0' LT	'D' 117+78	28.6' LT	24	DRIVEWAY
F4	'D' 117+83	30.1' LT	'D' 117+88	30.6' LT	5	BUS STOP
F4	'D' 118+00	30.5' RT	'D' 118+47	30.5' RT	27	DRIVEWAY
F5	'D' 120+20	27.0 LT	'D' 120+30	40.0' LT	16	CURB RAMP
F5	'D' 120+25	CL	'D' 120+25	CL	16	ISLAND CROSSWALK
F5	'D' 120+12	34.2' RT	'D' 120+30	40.0' RT	6	CURB RAMP
F5	'N' 30+80	38.0' LT	'N' 31+20	26.0' LT	19	CURB RAMP
F5	'N' 31+00	CL	'N' 31+00	CL	21	ISLAND CROSSWALK
F5	'N' 30+95	34.1' RT	'N' 31+11	30.2' RT	9	CURB RAMP
F6	'B' 21+15	RT	'B' 21+15	RT	7	CURB RAMP
F6	'B' 21+15	CL	'B' 21+15	CL	26	ISLAND CROSSWALK
F6	'B' 21+08	30.9' LT	'B' 21+24	30.6' LT	8	CURB RAMP
				TOTAL:	257	SY

604.0003.0000 RECONSTRUCT EXISTING MANHOLE

SHEET	STRUCTURE ID	STATION	OFFSET	QUANTITY (EA)	RIM EL.	TYPE OF CASTING
F3	S-107	'D' 111+53	16.6' LT	1	51.33	GUTTER INLET FRAME AND GRATE
RECONST S-105, SEE DIR #7			TOTAL:	~~1~~ 2	EA	

606.0016.0000 TRANSITION RAIL MODIFICATION

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS	
F6	'B' 23+90	17.9' LT	1	BRIDGE	23+70
F6	'B' 23+93	18.2' RT	1	BRIDGE	23+73
F8	'B' 36+80	18.6' LT	1	BRIDGE	37+00
F8	'B' 36+80	18.5' RT	1	BRIDGE	37+00
FROM		TOTAL:	4	EA	TO

608.0001.0004 CONCRETE SIDEWALK, 4 INCHES THICK

SHEET	START		END		AREA (SY)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F4	'D' 115+05	21.0' RT	'D' 118+50	31.0' RT	138	
F4	'D' 115+50	40.0' LT	'D' 115+56	24.9' LT	15	
F4	'D' 115+77	21.6' LT	'D' 116+58	24.3' LT	46	
F4	'D' 117+06	26.5' LT	'D' 117+38	28.1' LT	19	
F4	'D' 117+78	30.1' RT	'D' 117+83	30.1' RT	4	
F4-F5	'D' 117+78	32.0' LT	'D' 119+05	32.0' LT	62	
F5	'D' 119+70	32.0' RT	'D' 121+20	101.8' RT	158	
F5	'D' 119+75	4.0' RT	'D' 119+75	4.0' RT	7	ISLAND NOSE #1
F5	'D' 120+10	27.0' LT	'D' 120+55	40.0' LT	29	
F5	'D' 120+30	13.4' RT	'D' 120+30	18.5' RT	2	ISLAND CORNER REPAIR
F5	'D' 120+65	10.0' RT	'D' 120+70	5.0' RT	2	ISLAND CORNER REPAIR
F5	'N' 30+77	11.6' RT	'N' 30+80	15.5' RT	2	ISLAND CORNER REPAIR
F5	'N' 30+80	52.8' RT	'N' 32+15	29.3' RT	117	
F5	'N' 30+90	37.0' RT	'N' 31+73	15.0' LT	49	
F5	'N' 31+40	CL	'N' 31+45	CL	3	ISLAND NOSE #2
F6	'B' 21+35	29.0' RT	'B' 20+50	95.5' RT	108	
F6	'B' 21+20	CL	'B' 21+20	CL	4	ISLAND CORNER REPAIR
F6	'B' 21+20	17.7' RT	'B' 21+24	19.4' RT	1	ISLAND CORNER REPAIR
F6	'B' 21+26	56.0' RT	'B' 20+50	93.0' RT	140	
F6	'B' 20+75	28.0' RT	'B' 20+70	28.0' RT	1	ISLAND CORNER REPAIR
F6	'B' 22+20	1.0' RT	'B' 22+20	1.0' RT	3	ISLAND NOSE #3
F6	'B' 22+40	33.0' RT	'B' 23+90	19.0' RT	93	
F8	'B' 36+78	18.3' RT	'B' 36+89	18.0' RT	7	
F9	'B' 37+20	20.3' RT	'B' 37+70	38.2' RT	38	
F9	'B' 39+42	42.5' RT	'B' 40+33	47.3' RT	59	
				TOTAL:	1,107	SY

608.0003.0000 APSHALT SIDEWALK

SHEET	START		END		AREA (SY)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F1	'D' 101+29	13.5' LT	'D' 101+54	13.5' LT	46	DRIVEWAY
F2-F3	'D' 108+00	26.0 RT	'D' 110+00	26.5' RT	120	PATHWAY AND DRIVEWAYS
F2	'D' 108+25	20.0' LT	'D' 108+50	20.0' LT	17	DRIVEWAY
F2-F3	'D' 109+25	17.5' LT	'D' 112+03	17.5' LT	185	PATHWAY AND DRIVEWAYS
F3-F4	'D' 110+00	26.5' RT	'D' 115+10	20.5' RT	333	PATHWAY AND DRIVEWAYS
F3	'D' 112+20	20.0' LT	'D' 112+47	20.0' LT	28	DRIVEWAY
F3	'D' 113+05	20.0' LT	'D' 113+40	20.0' LT	24	DRIVEWAY
F4	'D' 116+35	24.0' RT	'D' 116+60	24.0' RT	11	DRIVEWAY
F4	'D' 116+70	29.6' LT	'D' 116+90	31.2' LT	13	DRIVEWAY
F4	'D' 117+38	33.3' LT	'D' 117+71	34.0' LT	11	DRIVEWAY
F4	'D' 118+00	35.3' RT	'D' 118+50	35.7' RT	36	DRIVEWAY
				TOTAL:	824	SY

604.0005.000A INLET, TYPE A

SHEET	STRUCTURE ID	STATION	OFFSET	QUANTITY (EA)	RIM EL.	TYPE OF CASTING	REMARKS
F3	S-108	'D' 114+80	17.4' LT	1	55.54	GUTTER INLET FRAME AND GRATE	
			TOTAL:	1	EA		

604.0010.0000 RECONSTRUCT INLET

SHEET	STRUCTURE ID	STATION	OFFSET	QUANTITY (EA)	RIM EL.	TYPE OF CASTING	REMARKS
F5	S-126	'D' 121+24	76.2' LT	1	50.86	CURB INLET FRAME AND GRATE	TYPE A
			TOTAL:	1	EA		

604.0016.0000 ADJUST INLET FRAME AND GRATE

SHEET	STRUCTURE ID	STATION	OFFSET	QUANTITY (EA)	RIM EL.	TYPE OF CASTING	REMARKS
F2	S-103	'D' 109+18	16.0' LT	1	48.54	GUTTER FRAME AND GRATE	SDMH
F2	S-104	'D' 109+09	24.9' RT	1	47.96	CURB INLET FRAME AND GRATE	SDMH
F2	S-106	'D' 109+96	25.4' RT	1	48.64	CURB INLET FRAME AND GRATE	SDMH
F4 NA D116+27 RT			TOTAL:	~~3~~ 4	EA		

605.0006.0012 PERFORATED CORRUGATED POLYETHYLENE PIPE FOR UNDERDRAIN 12 INCH

SHEET	PIPE ID	INLET			OUTLET			LENGTH (LF)	REMARKS
		STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
F1	P1-1	'D' 101+25	27.3' LT	53.8	'D' 101+44	21.7' LT	53.8	20	
F2	P2-5	'D' 109+85	23.4' LT	42.8	'D' 109+80	16.5' LT	42.8	9	
F3	P3-2	'D' 111+63	22.3' LT	46.1	'D' 111+53	16.6' LT	46.1	13	
							TOTAL:	42	LF

606.0001.0000 W-BEAM GUARDRAIL

SHEET	START		END		LENGTH (LF)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
~~F4~~	~~'D' 118+51~~	~~38.7' RT~~	~~'D' 118+98~~	~~36.7' RT~~	~~50.0~~	PGT
~~F5~~	~~'N' 31+59~~	~~33.4' RT~~	~~'N' 32+09~~	~~36.5' RT~~	~~50.0~~	PGT
F6	'B' 21+44	52.4' RT	'B' 23+93	18.2' RT	~~262.5~~	
F6	'B' 21+58	50.0' LT	'B' 23+90	17.9' LT	~~250.0~~	
F8	'B' 36+80	18.5' RT	'B' 39+85	40.5' RT	~~312.5~~	
F8	'B' 36+80	18.6' LT	'B' 40+51	36.2' LT	~~375.0~~	
				TOTAL:	~~1300~~	LF 1060

606.0006.0000 REMOVING AND DISPOSING OF GUARDRAIL

SHEET	START		END		LENGTH (LF)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F4	'D' 118+46	RT	'D' 118+98	RT	52	
F5	'N' 31+59	RT	'N' 32+09	RT	50	
F6	'B' 21+45	LT	'B' 23+90	LT	246	
F6	'B' 21+44	RT	'B' 21+56	RT	~~12~~	END AT B23+70, 226 LF
F6	'B' 23+70	RT	'B' 23+93	RT	23	
F8-F9	'B' 36+80	RT	'B' 37+00	RT	~~21~~	END AT B39+72, 292 LF
F8-F9	'B' 36+80	LT	'B' 40+75	LT	396	
F9	'B' 39+72	RT	'B' 39+85	RT	13	
				TOTAL:	813	LF 1290

608.0006.0000 CURB RAMP

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS	
F4	'D' 115+62	20.1' RT	1	PARALLEL CURB RAMP	
F4	'D' 115+65	21.6' LT	1	PARALLEL CURB RAMP	
F5	'D' 120+20	29.0' LT	1	PARALLEL CURB RAMP	
F5	'D' 120+25	15.7' RT	1	BLENDED TRANSITION	
F5	'D' 120+28	1.6' LT	1	BLENDED TRANSITION	
F5	'D' 120+30	37.8' RT	1	PERPENDICULAR CURB RAMP	
F5	'N' 30+99	10.4 ' RT	1	BLENDED TRANSITION	
F5	'N' 31+03	10.2' LT	1	BLENDED TRANSITION	
F5	'N' 31+00	24.8' RT	1	PERPENDICULAR CURB RAMP	
F5	'N' 31+00	16.8' LT	1	PARALLEL CURB RAMP	
F6	'B' 21+12	4.4' LT	1	BLENDED TRANSITION	
F6	'B' 21+12	22.1' RT	1	BLENDED TRANSITION	
F6	'B' 21+12	38.3' RT	1	PERPENDICULAR CURB RAMP	
F6	'B' 21+00	33.1' LT	1	PERPENDICULAR CURB RAMP	
~~F6~~	~~'B' 23+93~~	~~19.1' RT~~	~~1~~	~~PARALLEL CURB RAMP~~	PAID USING 608.0001.0004
~~F8~~	~~'B' 36+79~~	~~18.5' RT~~	~~1~~	~~PARALLEL CURB RAMP~~	
		TOTAL:	~~16~~ 14	EA	

SR 2/3/21

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	11/12/20	Addendum No. 1	RS
2	11/20/20	Addendum No. 4	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/20/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

SUMMARY TABLES

FIRM DOWL
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase 1\SC-CT-SU-D-70897.dwg
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
PHONE (907) 780-3533
DATE 11/16/2020 16:55
CERTIFICATE OF AUTH #: AECL848
DESIGNED STEPHENS
DRAFTED KEMP
CHECKED NOBLE
LAYOUT D3

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	D4	D4

609.0002.0001 CURB AND GUTTER, TYPE 1

SHEET	START		END		LENGTH (LF)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
F2-F4	'D' 108+00	19.0' LT	'D' 115+35	40.8' RT	724	
F2-F3	'D' 108+00	25.8' RT	'D' 110+00	25.5' RT	199	
F3	'D' 110+75	25.6' RT	'D' 111+25	25.5' RT	50	
F3-F4	'D' 112+50	25.6' RT	'D' 118+50	30.0' RT	594	
F4	'D' 115+50	39.4' RT	'D' 115+90	21.6' RT	58	ISLAND
F5	'D' 119+70	7.0' RT	'D' 119+80	3.0' RT	27	ISLAND NOSE #1
F5	'D' 120+30	13.0' RT	'D' 120+40	18.5' RT	10	ISLAND
F5	'D' 120+65	5.0' LT	'D' 120+70	11.0' LT	10	ISLAND
F5	'N' 31+40	CL	'N' 31+45	CL	14	ISLAND NOSE #2
F5	'N' 31+10	CL	'N' 31+20	CL	41	ISLAND
F5	'N' 30+76	10.0' RT	'N' 30+81	14.0' RT	10	ISLAND
F5	'N' 30+85	36.5' RT	'N' 31+15	29.0' RT	32	
F5	'N' 30+85	37.0' LT	'N' 31+20	25.5' RT	30	
F6	'B' 20+70	25.5' RT	'B' 20+75	29.0' RT	10	ISLAND
F6	'B' 20+90	CL	'B' 21+10	CL	53	ISLAND
F6	'B' 21+16	18.0' RT	'B' 21+21	20.0' RT	10	ISLAND
F6	'B' 21+16	5.0' RT	'B' 21+21	4.5' LT	17	ISLAND
F6	'B' 22+16	CL	'B' 22+20	CL	15	ISLAND NOSE #3
				TOTAL:	1,904	LF

610.0001.0000 DITCH LINING

SHEET	PIPE ID	STATION	OFFSET	VOLUME (CY)	REMARKS
F3	P3-4A	'D' 112+06	41.2' RT	11	
			TOTAL:	11	CY

611.0002.0002 RIPRAP, CLASS II

SHEET	PIPE ID	STATION	OFFSET	VOLUME (CY)	REMARKS
F2	P2-2	'D' 105+21	57.6' RT	55	
F2	P2-12	'D' 110+09	111.4' RT	99	
F3	P3-4A	'D' 112+02	60.0' RT	107	
			TOTAL:	261	TON

615.0002.0000 REMOVE AND RELOCATE SIGN

SHEET	EXISTING		NEW		QUANTITY (EA)	REMARKS
	STATION	OFFSET	STATION	OFFSET		
H3	'D' 117+10	32.4' LT	'D' 117+81	36.8' LT	1	RELOCATE EXISTING BUS STOP SIGN ON NEW FOUNDATION WITH NEW 2"x2" P.S.T. POST, FOUNDATION AND HARDWARE PER STD PLAN S-30.05

615.0005.0000 DELINEATOR, FLEXIBLE

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
H4	'D' 119+76	RT	1	S. DOUGLAS ISLAND NOSE
H4	'D' 120+30	RT	1	S. DOUGLAS ISLAND CORNER
H4	'D' 120+70	LT	1	S. DOUGLAS ISLAND CORNER
H4	'N' 30+70	RT	1	S. DOUGLAS ISLAND CORNER
H4	'N' 31+05	RT	1	S. DOUGLAS ISLAND CORNER
H4	'N' 31+10	LT	1	S. DOUGLAS ISLAND CORNER
H4	'N' 31+40	RT	1	N. DOUGLAS ISLAND NOSE
H4	'B' 20+75	RT	1	DOUGLAS BRIDGE ISLAND CORNER
H4	'B' 21+05	RT	1	DOUGLAS BRIDGE ISLAND CORNER
H4	'B' 21+10	LT	1	DOUGLAS BRIDGE ISLAND CORNER
H4	'B' 21+15	RT	1	DOUGLAS BRIDGE ISLAND CORNER
H4	'B' 21+17	LT	1	DOUGLAS BRIDGE ISLAND CORNER
H5	'B' 22+15	RT	1	DOUGLAS BRIDGE ISLAND NOSE
		TOTAL:	13	EA

615.0007.0000 SALVAGE AND DISPOSE SIGN

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
H2	'D' 104+98	LT	1	NO PARKING BIKE LANE
H3	'D' 107+14	RT	1	SPEED LIMIT 30
H3	'D' 107+61	LT	1	SPEED LIMIT 40
H3	'D' 112+64	LT	1	SPEED LIMIT 30
H3	'D' 112+92	RT	1	BICYCLE SYMBOL
H3	'D' 114+01	LT	1	BIKE LANE
H3	'D' 114+63	RT	1	NO PARKING ANYTIME
H3	'D' 115+21	RT	1	RIGHT LEFT TURN ONLY
H3	'D' 115+63	LT	1	PEDESTRIAN SYMBOL
H3	'D' 115+63	RT	1	PEDESTRIAN SYMBOL
H3	'D' 116+56	LT	1	PEDESTRIAN SYMBOL
H3	'D' 116+59	RT	1	ROUNDABOUT CIRCULATION PLAQUE
H4	'D' 119+36	RT	1	YIELD
H4	'D' 119+49	LT	1	NO PARKING ANYTIME
H4	'D' 119+50	RT	1	BIKES OK
H4	'D' 119+73	RT	1	OBJECT MARKER
H4	'D' 119+73	RT	1	OBJECT MARKER
H4	'D' 119+98	LT	1	BICYCLE SYMBOL
H4	'D' 120+32	RT	1	PEDESTRIAN SYMBOL
H4	'D' 120+46	LT	1	PEDESTRIAN SYMBOL
H4	'D' 120+64	RT	1	YIELD
H4	'D' 120+64	RT	1	OBJECT MARKER
H4	'D' 120+65	LT	1	DOUGLAS
H4	'D' 121+36	LT	1	ONE WAY
H4	'N' 28+30	LT	1	ROUNDABOUT CIRCULATION PLAQUE
H4	'N' 28+30	LT	1	ADVISORY SPEED SIGN
H4	'N' 30+81	LT	1	YIELD
H4	'N' 30+81	RT	1	NORTH DOUGLAS
H4	'N' 30+95	RT	1	PEDESTRIAN SYMBOL
H4	'N' 31+21	LT	1	PEDESTRIAN SYMBOL
H4	'N' 31+31	RT	1	BICYCLE SYMBOL
H4	'N' 31+37	RT	1	KEEP RIGHT
H4	'N' 31+37	RT	1	OBJECT MARKER
H4	'N' 32+07	LT	1	YIELD
H4	'N' 32+07	LT	1	NO PARKING ANYTIME
H4	'B' 20+06	RT	1	ONE WAY
H4	'B' 20+13	LT	1	ONE WAY
H4	'B' 20+74	LT	1	YIELD
H4	'B' 20+75	RT	1	JUNEAU
H4	'B' 20+80	LT	1	YIELD
H4	'B' 20+90	RT	1	BIKES OK
H4	'B' 21+03	RT	1	PEDESTRIAN SYMBOL
H4	'B' 21+29	LT	1	PEDESTRIAN SYMBOL
H4	'B' 21+79	RT	1	SPEED LIMIT 30
H4	'B' 22+12	LT	1	RIGHT TURN MUST TURN RIGHT
H5	'B' 22+17	RT	1	KEEP RIGHT
H5	'B' 22+74	LT	1	LEFT LANE/RIGHT LANE TURN
H5	'B' 23+69	RT	1	GASTINEAU CHANNEL
H5	'B' 23+77	LT	1	ROUNDABOUT DESIGNATION SIGN
H6	'B' 36+90	RT	1	NO PARKING BIKE LANE
H6	'B' 36+90	LT	1	GASTINEAU CHANNEL
H6	'B' 37+56	LT	1	NO PARKING BIKE LANE
H6	'B' 39+39	RT	1	LEFT MANDATORY MOVEMENT LANE CONTROL ONLY
H6	'B' 39+39	RT	1	LEFT AND THROUGH OPTIONAL MOVEMENT LANE CONTROL
H6	'B' 39+39	RT	1	RIGHT MANDATORY MOVEMENT LANE CONTROL ONLY
H6	'B' 39+50	LT	1	SPEED LIMIT 30
		TOTAL:	~~56~~ 58	EA

H5 B23+77 LT 1 ADVISORY SPEED
H4 D120+57 RT 1 YIELD

627.0010.0000 ADJUSTMENT OF VALVE BOX

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F3	'D' 111+62	10.2' LT	1	
F3	'D' 111+69	10.3' LT	1	
F4	'D' 115+20	17.8' RT	1	ABANDONED, REMOVED
F4	'D' 115+22	13.8' RT	1	ABANDONED, REMOVED
F4	'D' 115+25	9.7' LT	1	
F4	'D' 115+24	17.8' RT	1	ABANDONED, REMOVED
F4	'D' 115+26	15.3' LT	1	
F4	'D' 116+23	17.5' RT	1	
		TOTAL:	8	EA

631.0002.0001 GEOTEXTILE, EROSION CONTROL, CLASS I

SHEET	PIPE ID	STATION	OFFSET	AREA (SY)	REMARKS
F2	P2-2	'D' 105+21	36.8' RT	37	RIPRAP CLASS II
F2	P2-12	'D' 110+09	111.4' RT	68	RIPRAP CLASS II
F3	P3-4A	'D' 112+02	60.0' RT	50	RIPRAP CLASS II
			TOTAL:	155	SY

639.0001.0000 DRIVEWAY

SHEET	STATION*	OFFSET	TYPE (EA)			WIDTH (FT)**	LENGTH (FT)***	MATCH TO	MTE	REMARKS
			PUBLIC	RES.	COMM.					
F1	'D' 101+41	13.5' RT		1		24.8	20	ROADWAY EDGE	DRIVEWAY	DRIVEWAY
F2	'D' 108+38	18.1' LT		1		22.5	8.0	BACK OF GUTTER	DRIVEWAY	DRIVEWAY
F2	'D' 108+51	31.0' RT		1		37.3	2.6	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F2	'D' 109+21	31.0' RT		1		29.6	1.3	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F2	'D' 109+40	22.8' LT		1		26.7	5.0	BACK OF APRON	DRIVEWAY	DRIVEWAY
F3	'D' 110+14	17.5' LT		1		181.3	5.4	BACK OF GUTTER	DRIVEWAYS	ASPHALT APRON
F3	'D' 110+91	23.0' LT		1		19.6	5.0	BACK OF APRON	DRIVEWAY	DRIVEWAY
F3	'D' 110+97	31.2' RT		1		21.5	5.1	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F3	'D' 111+86	17.6' LT		1		34.6	10.6	BACK OF GUTTER	DRIVEWAY	DRIVEWAY
F3	'D' 112+33	17.6' LT		1		29.3	10.7	BACK OF GUTTER	DRIVEWAY	DRIVEWAY
F3	'D' 112+81	31.0' RT		1		21.7	0.7	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F3	'D' 113+24	17.6' LT		1		38.6	5.8	BACK OF GUTTER	DRIVEWAY	DRIVEWAY
F3	'D' 113+60	31.0' RT		1		16.6	2.1	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F3	'D' 114+12	29.6' RT		1		38.5	6.5	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F3	'D' 114+88	26.1' RT		1		27.8	3.1	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F4	'D' 115+29	41.1' LT	1			36.6				CORDOVA STREET
F4	'D' 116+46	24.1' RT		1		21.4	4.9	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F4	'D' 116+83	30.2' LT		1		35.2	3.6	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F4	'D' 117+49	33.5' LT		1		31.4	3.4	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY
F4	'D' 118+23	35.6' RT			1	48.1	7.3	BACK OF SIDEWALK	DRIVEWAY	DRIVEWAY. BREEZE-IN ACCESS
		TOTAL:	1	18	1	EA				
		TOTAL:		20		EA				

* STATION AND OFFSET SHOWN ARE TO THE APPROXIMATE CENTER OF THE DRIVEWAY AT THE BACK OF GUTTER OR BACK OF SIDEWALK.
** DRIVEWAY WIDTH IS MEASURED AT THE MTE DRIVEWAY LOCATION DESCRIBED ABOVE AND SHOWN ON THE F SHEETS.
*** LENGTH IS THE DISTANCE BETWEEN "MATCH TO" AND "MTE" FEATURES AND IS MEASURED AT THE MID-POINT OF EACH DRIVEWAY.

~~642.0008.0000 ADJUST EXISTING MONUMENT~~

~~SHEET~~	~~STATION~~	~~OFFSET~~	~~QUANTITY (EA)~~	~~REMARKS~~
~~F2~~	~~'D' 108+36~~	~~0.0~~	~~1~~	
~~F4~~	~~'D' 115+32~~	~~0.0~~	~~1~~	
		~~TOTAL:~~	~~2~~	~~EA~~

MONUMENTS REMOVED, SEE RFI #10

SR 2/3/21

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	11/13/20	Addendum No. 1	RS
4	11/20/20	Addendum No. 4	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/20/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

SUMMARY TABLES

FIRM DOWL
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase 1\SC-CT-SU-D-70897.dwg
LAYOUT D4
DESIGNED STEPHENS
DRAFTED KEMP
CHECKED NOBLE
PHONE (907) 780-3533
CERTIFICATE OF AUTH #: AECL848
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
DATE 11/16/2020 16:55

SFHWY00293 / 958033
JUN: DOUGLAS HWY SURFACE AND SIDEWALK REPAIRS STAGE 1

SHEET D5 - ADDITIONAL SUMMARY TABLES FROM RFI #10

ITEM NO. 642.0009.0000				
REFERENCE EXISTING MONUMENT				
POINT #	**STATION**	**OFFSET**	**QUANTITY (EA)**	**NOTES**
1069	'D' 110+02	38' RT	1	
1072	'D' 116+55	29.02' RT	1	
1073	'D' 113+73	31.6' RT	1	
1137	'D' 114+39	30.9' RT	1	
1138	'D' 112+92	31.5' RT	1	
1152	'D' 111+89	32.38' RT	1	
		TOTAL:	**6**	

ITEM NO. 642.0004.0000				
SET PRIMARY MONUMENT				
POINT #	**STATION**	**OFFSET**	**QUANTITY (EA)**	**NOTES**
1600	'D' 114+65	22' LT	1	
1601	'D' 103+68	21' LT	1	
		Total:	**2**	

ITEM NO. 642.0010.0000				
MONUMENT CASE				
POINT #	**STATION**	**OFFSET**	**QUANTITY (EA)**	**NOTES**
1600	'D' 114+65	22' LT	1	
1601	'D' 103+68	21' LT	1	
		TOTAL:	**2**	

ITEM NO. 642.0006.0000 & ITEM NO. 642.0007.0000				
REPLACE EXISTING WITH PRIMARY/SECONDARY MONUMENT				
POINT #	**STATION**	**OFFSET**	**QUANTITY (EA)**	**NOTES**
1069	'D' 110+02	38' RT	1	
1072	'D' 116+55	29.02' RT	1	
1073	'D' 113+73	31.6' RT	1	
1137	'D' 114+39	30.9' RT	1	
1138	'D' 112+92	31.5' RT	1	
1152	'D' 111+89	32.38' RT	1	
		TOTAL:	**6**	

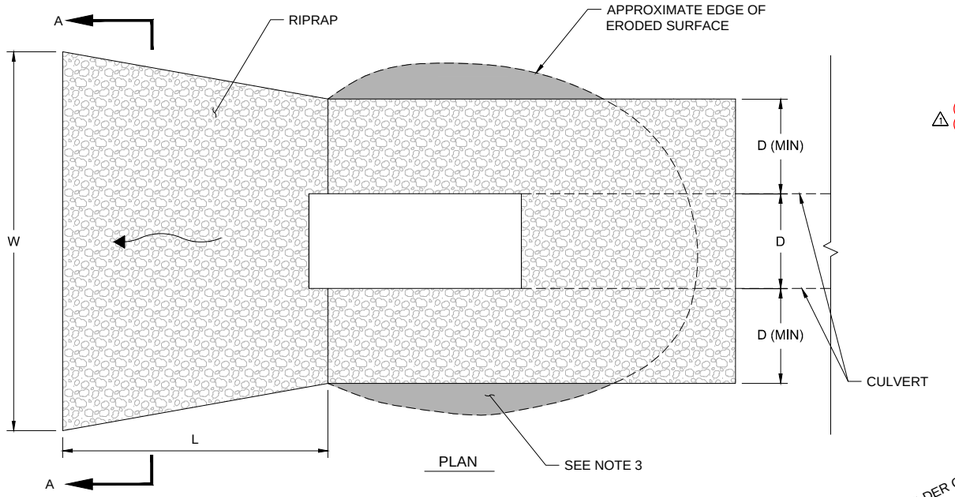
SR 2/3/21

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	E1	E3

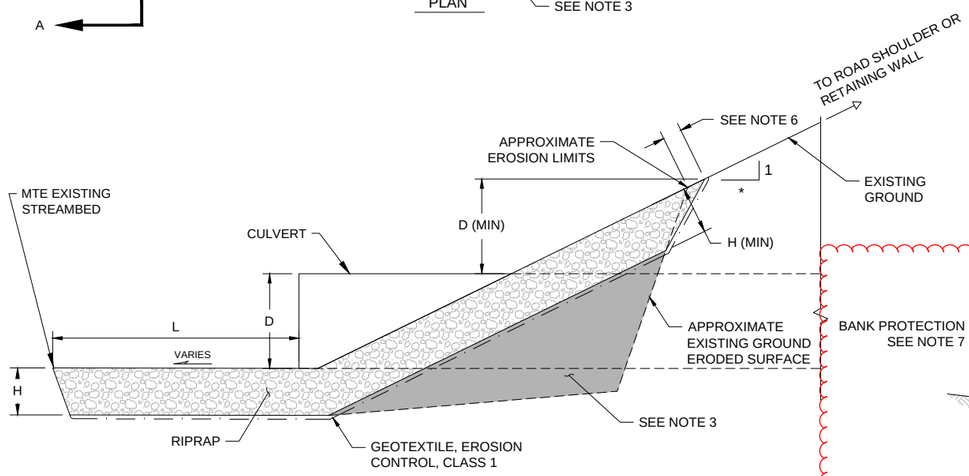
GENERAL NOTES FOR RIPRAP SLOPE PROTECTION SUMMARY TABLE

1. VERIFY CLASS OF RIPRAP WITH ENGINEER AFTER EXISTING CULVERT IS REMOVED AND PRIOR TO INSTALLATION OF NEW RIPRAP.

RIPRAP SLOPE PROTECTION SUMMARY					
PIPE ID	RIPAP CLASS	D (IN)	L (FT)	W (FT)	H (FT)
P2-2	II	24	18	16	3
P2-12	II	36	25	16	3
P3-4A	II	24	18	16	3

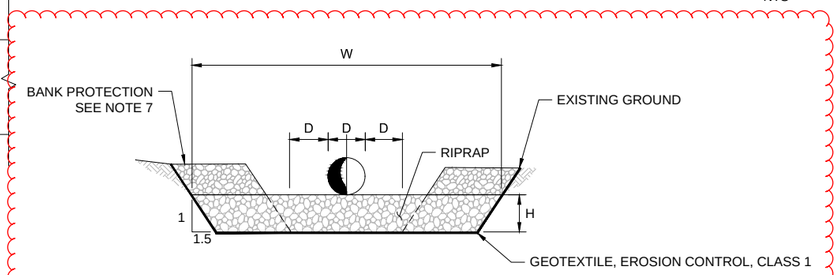


PLAN



PROFILE

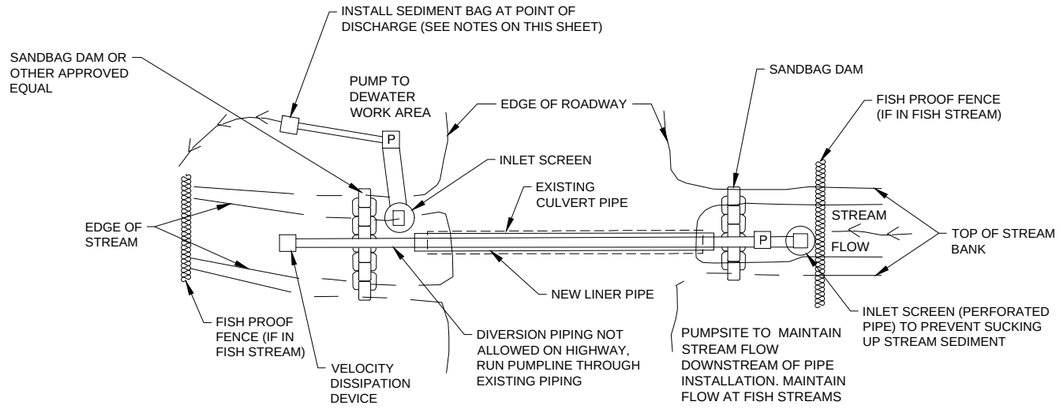
* MATCH EXISTING SLOPE



SECTION A-A

RIPRAP SLOPE PROTECTION

NTS



RECOMMENDED STREAM DEWATERING DETAILS - PLAN

NTS

NOTES:

1. WHEN IN-STREAM WORK AREAS REQUIRE DEWATERING, THE PUMP DISCHARGE SHALL BE PLACED SO THAT THERE IS A MINIMUM OF 50 FEET OF VEGETATED AREAS BETWEEN THE DISCHARGE POINT AND THE STREAM BANK SUCH THAT DEWATERING DISCHARGE COMPLIES WITH STATE WATER QUALITY STANDARDS AS DESCRIBED IN 18 AAC 70, TURBIDITY FOR FRESHWATER USES. PUMP DISCHARGE PLACEMENT MAY REQUIRE FREQUENT REPOSITIONING OF THE DISCHARGE LOCATION AND/OR ADDITIONAL DISCHARGE TREATMENT METHODS MAY BE NECESSARY. INSTALLATION OF SLIPLINE, CIPP, OR NEW PIPE TO BE COMPLETED ON LOW FLOW DAYS TO AVOID/MINIMIZE DIVERSIONS.
2. MULTIPLE PUMPS MAY BE NECESSARY TO DEWATER WORK AREAS AND/OR MAINTAIN STREAM BY PASS FLOW. THE CONTRACTOR SHALL PROVIDE ADEQUATE QUANTITIES AND SIZES OF PUMPS.
3. FILL VOIDS UNDER RIPRAP WITH USABLE EXCAVATION OR BORROW, TYPE B.
4. THIS DETAIL APPLIES TO CULVERTS BEING REPLACED AND AT OTHER LOCATIONS AS LISTED IN THE SPECIAL OUTLET APRON SUMMARY (THIS SHEET). THE ENGINEER MAY, AS NECESSARY, APPROVE USE OF THIS DETAIL AT OTHER LOCATIONS NOT LISTED.
5. CONTRACTOR TO SUBMIT DEWATERING PLAN (IF NECESSARY) TO ENGINEER FOR APPROVAL PRIOR TO BEGINNING ANY DEWATERING FOR PIPE INSTALLATION OR REHABILITATION.
6. EXTEND RIPRAP AT LEAST 1 FOOT UPHILL FROM THE TOP OF THE EXISTING ERODED SLOPE LIMITS.
7. BANK PROTECTION THICKNESS TO BE AT LEAST 1.5 D50 OF SELECTED RIPRAP FOR OUTLET CONTROL. EXTENT OF BANK PROTECTION TO COVER ERODED OR BARE SOIL AS DETERMINED BY ENGINEER.

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	11/12/20	Addendum No. 1	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/12/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

DETAILS

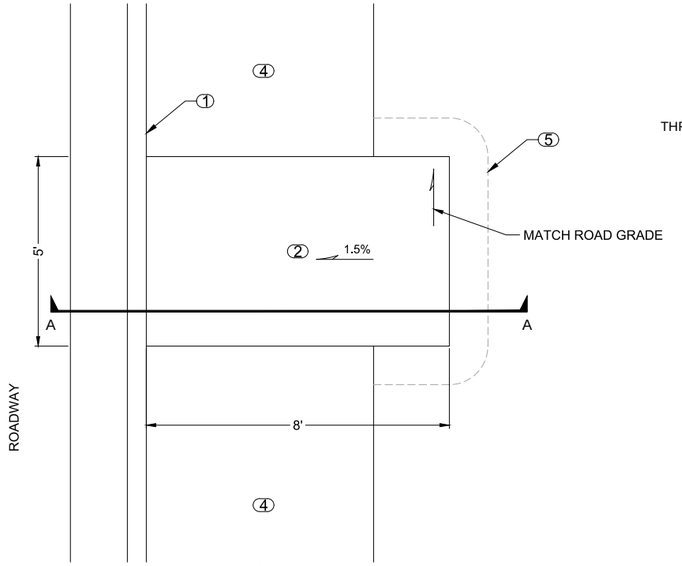
1 of 1

CO #1
Attachment #5
JNU: Douglas Hwy Surface & Sidewalk Repairs Stage 1
Proj. # 0958033 / SFHWY00293

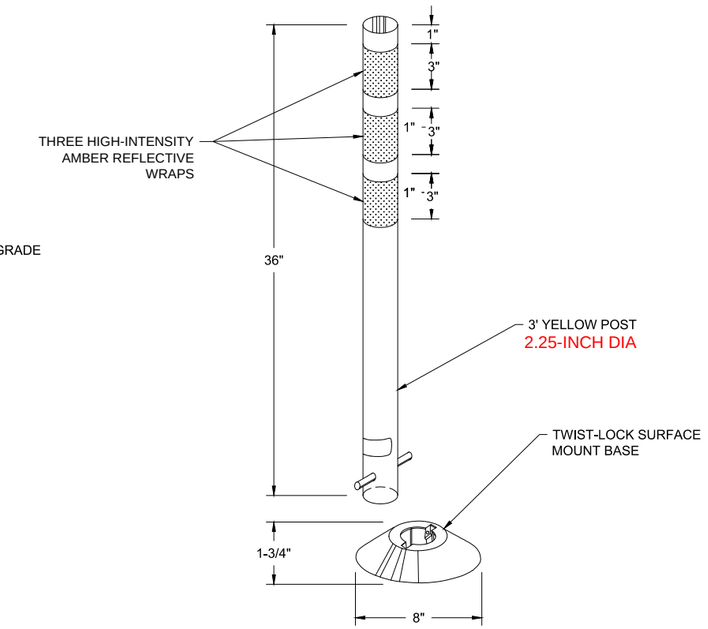
SR 2/3/21

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase 1\SC-CT-DT-E-70897.dwg | LAYOUT E1 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP
DATE 11/12/2020 10:31

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	E2	E3



PLAN

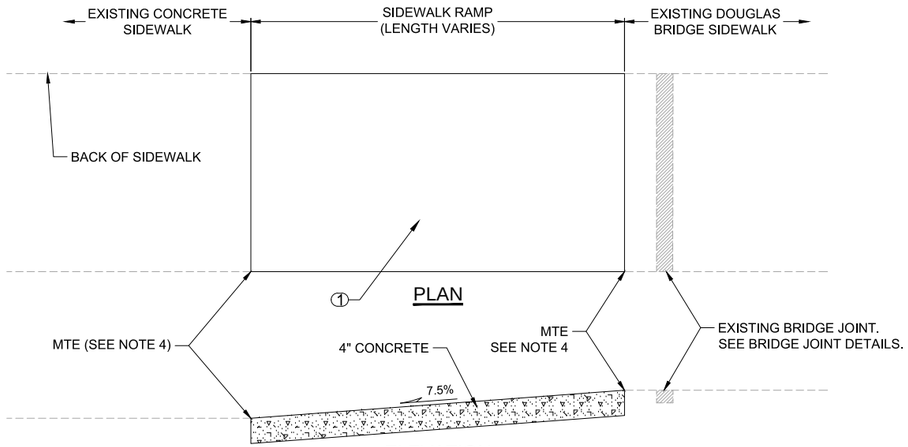


USED SAFE-HIT TYPE 5 #SH536SMA-WS BY TRINITY HWY

FLEXIBLE DELINEATOR DETAIL

NTS

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



ELEVATION

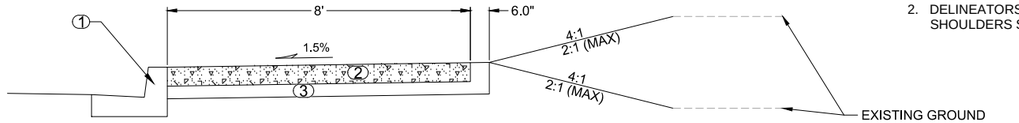
SIDEWALK RAMP AT DOUGLAS BRIDGE

NTS

* TO BE MEASURED & PAID FOR UNDER ITEM No. 608.0006.0000 - CURB RAMP.

NOTES (X):

1. REMOVE & DISPOSE OF EXISTING ASPHALT SIDEWALK RAMP.
2. INSTALL 4" CONCRETE SIDEWALK RAMP TO LIMITS SHOWN ON THE PLAN SHEETS. THE ENGINEER SHALL APPROVE LIMITS OF NEW SIDEWALK RAMP PRIOR TO INSTALLATION. GRADE OF RAMP TO BE 7.5% OR LOWER.
3. REGRADE/RECOMPACT EXISTING BASE COURSE AS NEEDED PRIOR TO PAVING NEW RAMP.
4. SAWCUT & REMOVE EXISTING CONCRETE SIDEWALK TO LIMITS AS APPROVED BY THE ENGINEER.



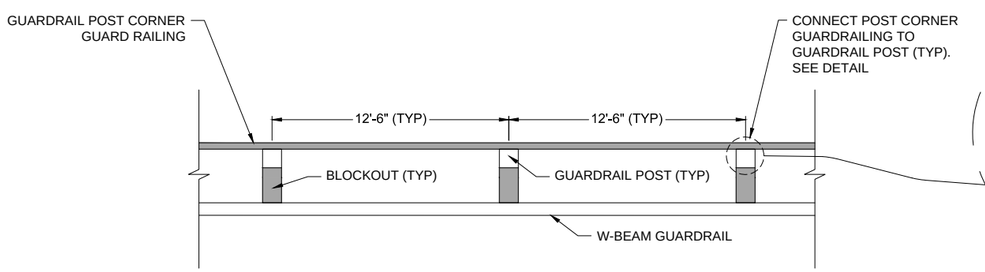
SECTION A-A

BUS STOP LANDING DETAIL

NTS

NOTES (X):

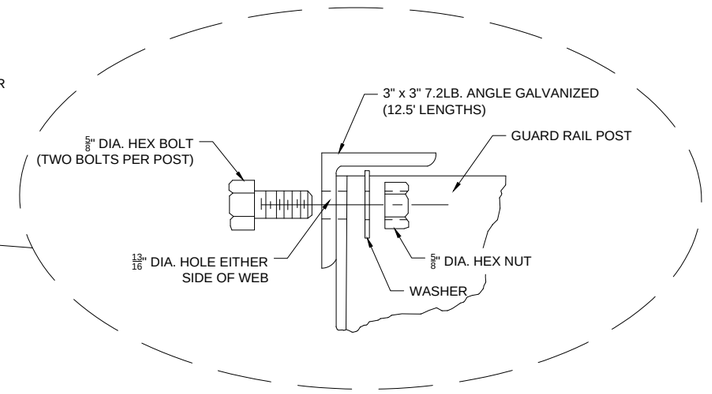
1. STANDARD CURB & GUTTER PER STANDARD PLAN I-20.20.
2. CONCRETE SIDEWALK, 6 INCHES THICK.
3. AGGREGATE BASE COURSE, GRADING D-1, 4 INCHES THICK.
4. ASPHALT OR CONCRETE SIDEWALK (SEE F SHEETS).
5. APPROXIMATE SLOPE LIMITS.
6. SEE F SHEETS FOR LOCATIONS OF NEW BUS STOP LANDINGS.



GUARDRAIL POST CORNER GUARD - PLAN

NTS

GENERAL SCHEMATIC



GUARDRAIL POST CORNER GUARD - DETAIL

NTS

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

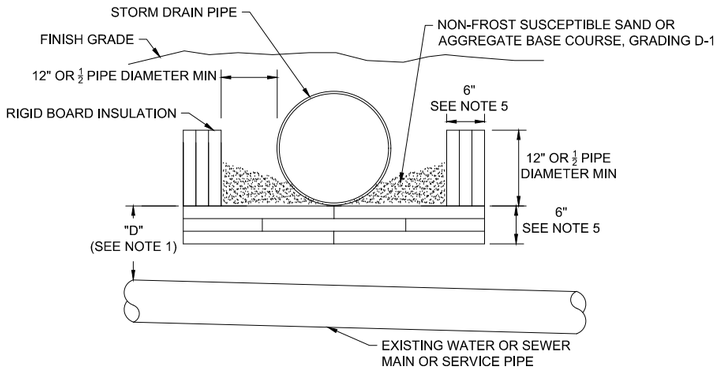
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

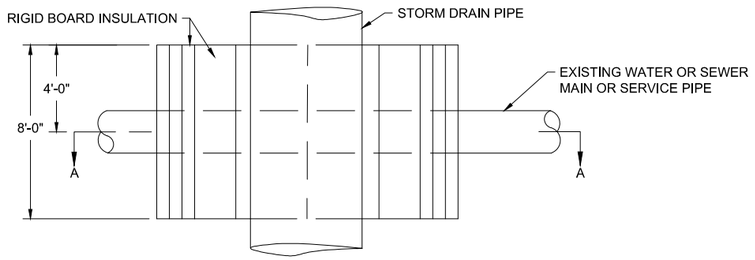
DETAILS

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	E3	E3



SECTION A-A

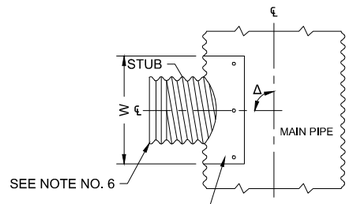


PLAN

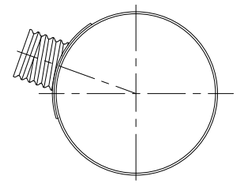
RIGID INSULATION DETAIL
NTS

NOTES:

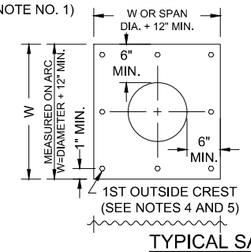
1. INSTALL INSULATION AS SHOWN WHEN "D" IS LESS THAN 5'-0" FOR WATER PIPE OR 3'8" FOR SEWER PIPE.
2. INSULATION SHALL CONFORM TO SECTION 02607 OF THE STANDARD SPECIFICATIONS.
3. PIPE INSULATION SHALL BE 8'-0" IN LENGTH, CENTERED OVER EXISTING WATER OR SEWER PIPE.
4. PIPE INSULATION WITH R-FACTOR EQUAL TO RIGID BOARD MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.
5. CROSSING SHALL BE PROTECTED WITH A MINIMUM 6" OF INSULATION BOARDS WITH A 12" OVERLAP AS SHOWN.

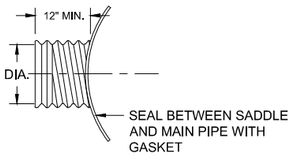


PLAN



SECTION





TYPICAL SADDLE BRANCH

NOTES:

1. SADDLE PLATES ARE THE SAME GAUGE OR ONE GAUGE HEAVIER THAN THE MAINLINE. CONTRACTOR TO VERIFY GAUGE OF MAIN PIPE IN FIELD.
2. SUPPLY ANGLE Δ FOR OTHER THAN 90°.
3. W = (DIA. + 12")/SIN Δ.
4. STRUCTURAL FASTENERS ARE 3/8" A307 BOLTS WITH 1/2" HOLES AND A563(A) NUTS.
5. NON-STRUCTURAL FASTENERS ARE 1/4" SELF TAPPING SCREWS WITH #5 POINT.
6. PROVIDE ALL ADAPTORS AND OTHER FITTINGS NECESSARY TO CONNECT DISSIMILAR PIPE SIZES AND MATERIAL. CONNECT TO NEW PIPE.

TABLE 1: ATTACHMENT REQUIREMENTS		
CORRUGATION TYPE	MINIMUM NUMBER & SPACING OF BOLTS OR SCREWS REQUIRED	
	LONGITUDINAL	CIRCUMFERENTIAL
2-2/3" X 1/2"	EVERY 2ND CREST	6"
3" X 1"	EVERY 2ND CREST	6"
5" X 1"	EVERY 2ND CREST	6"

USED AT P5-2

SR 2/3/21

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	11/12/20	Addendum No. 1	RS
2	11/24/20	Addendum No. 4	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/24/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

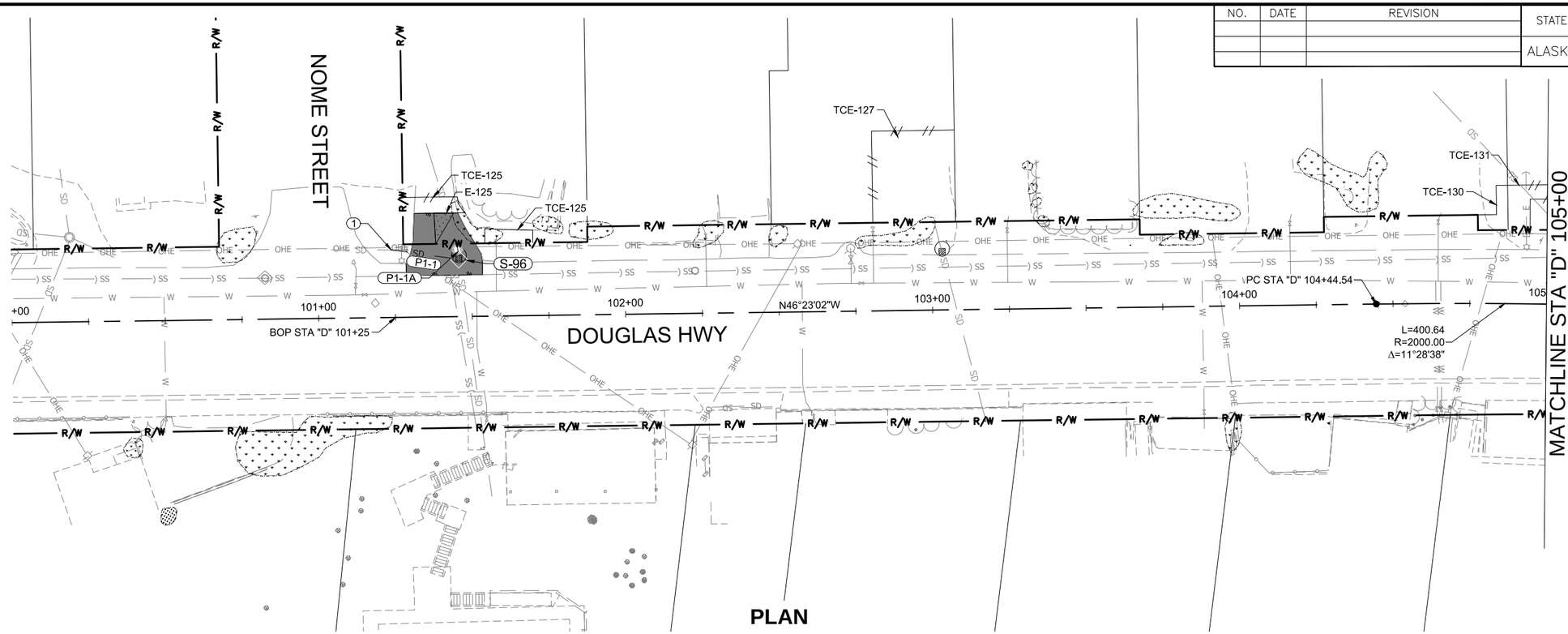
JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

DETAILS

FIRM DOWL
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
PHONE (907) 780-3533
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-DT-E-70897.dwg
DESIGNED STEPHENS
DRAFTED KEMP
CHECKED NOBLE
LAYOUT E3
CERTIFICATE OF AUTH #: AECL848
DATE 11/24/2020 9:50

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	F1	F9

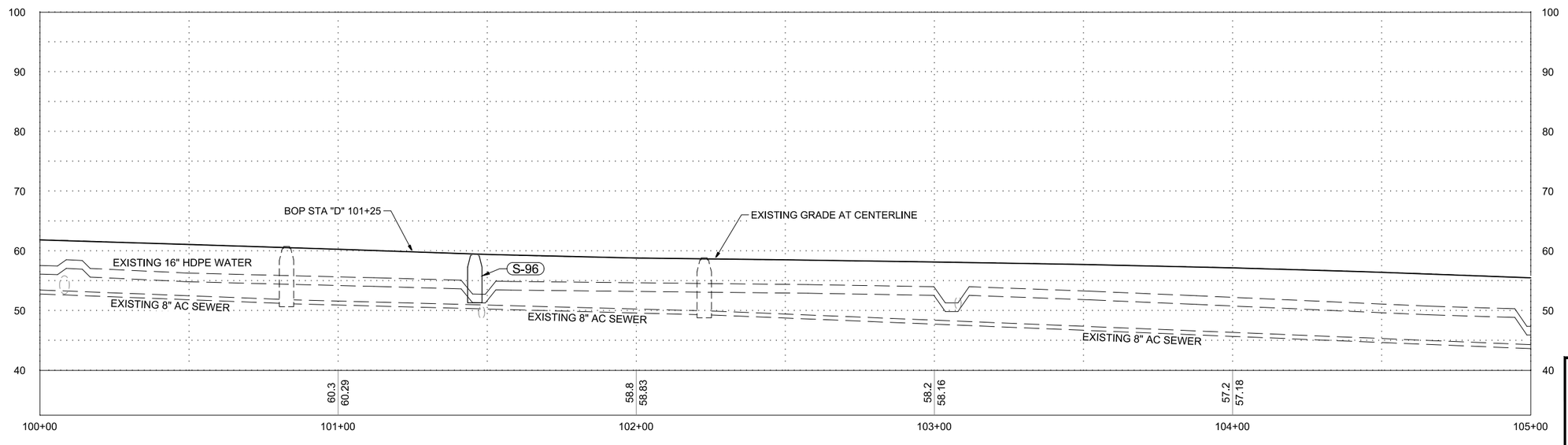


PLAN

PLAN NOTES (X):

1. CONNECT TO EXISTING 12" CMP
2. ABANDONED WATER LINES NOT SHOWN.
3. TCE-127 HAS AN END DATE OF DECEMBER 31, 2022.

20 0 20 40
SCALE IN FEET



PROFILE

PROFILE NOTES:

1. ABANDONED WATER LINES NOT SHOWN.

SR 2/3/21

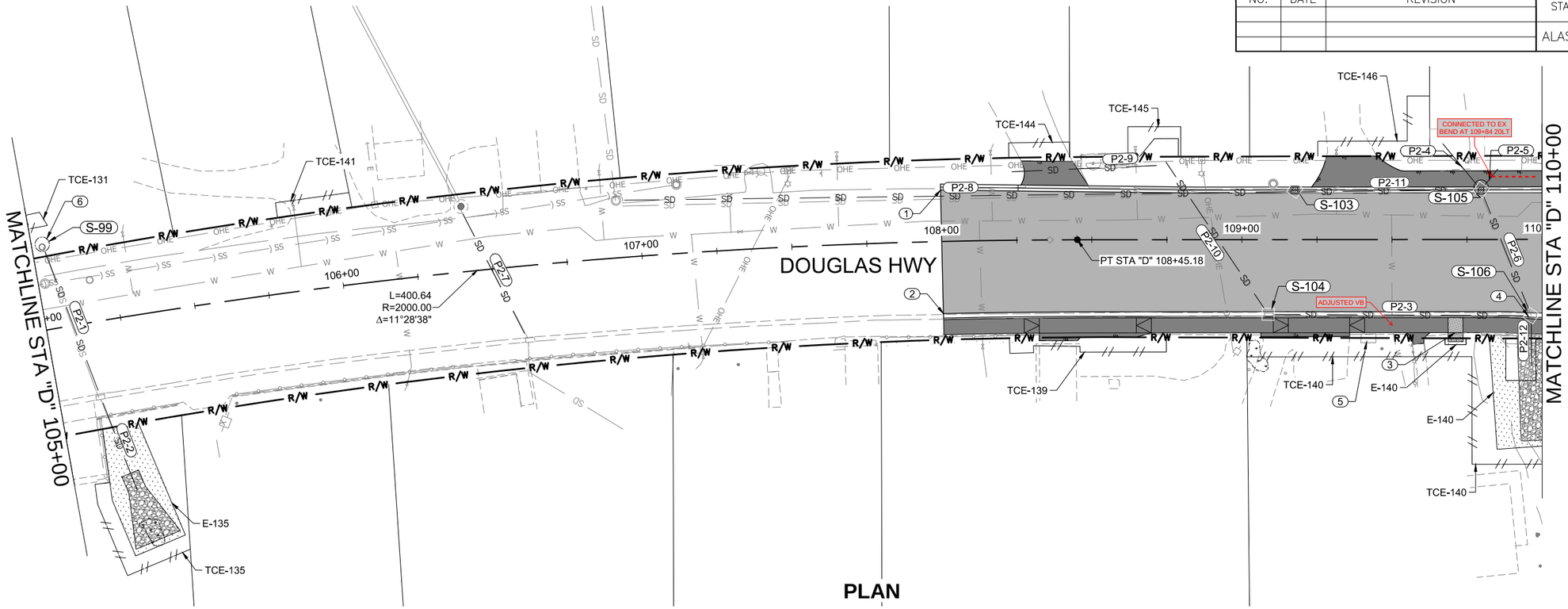
PLANS DEVELOPED BY:
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STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	F2	F9

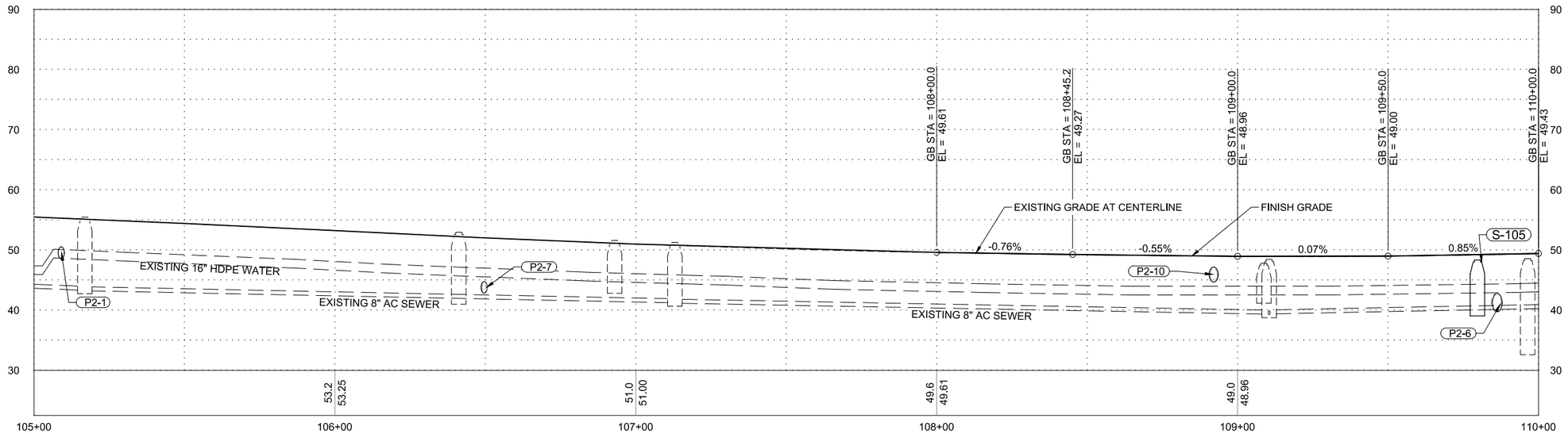


PLAN

PLAN NOTES (X):

1. STA "D" 108+00 LT BEGIN NEW GUTTER (SEE STD PLAN I-20.20).
2. STA "D" 108+00 RT BEGIN REPLACE STANDARD CURB & GUTTER (SEE STD PLAN I-20.20).
3. SEE SHEET E2 FOR BUS STOP LANDING DETAIL.
4. STA "D" 109+95 RT. END REPLACE STANDARD CURB & GUTTER (SEE STD PLAN I-20.20).
5. PRESERVE AND PROTECT EXISTING GARBAGE ENCLOSURE.
6. EXISTING DRAINAGE STRUCTURE IS BURIED. CONTRACTOR IS TO LOCATE STRUCTURE AND REPORT TO ENGINEER. THIS WILL BE CONSIDERED INCIDENTAL TO PAY ITEM 202.006.0000 REMOVAL OF MANHOLE.

20 0 20 40
SCALE IN FEET



PROFILE

PROFILE NOTES:

1. FINISH GRADE TO MATCH EXISTING GRADE AT CENTERLINE.
2. GRADE BREAKS AND SLOPES SHOWN ARE TO GUIDE CONTRACTOR IN MATCHING EXISTING GRADE AT CENTERLINE.
3. ESTABLISH VERTICAL CURVES AS NECESSARY THROUGH CENTERLINE GRADE BREAKS.
4. ABANDONED WATER LINES NOT SHOWN.

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

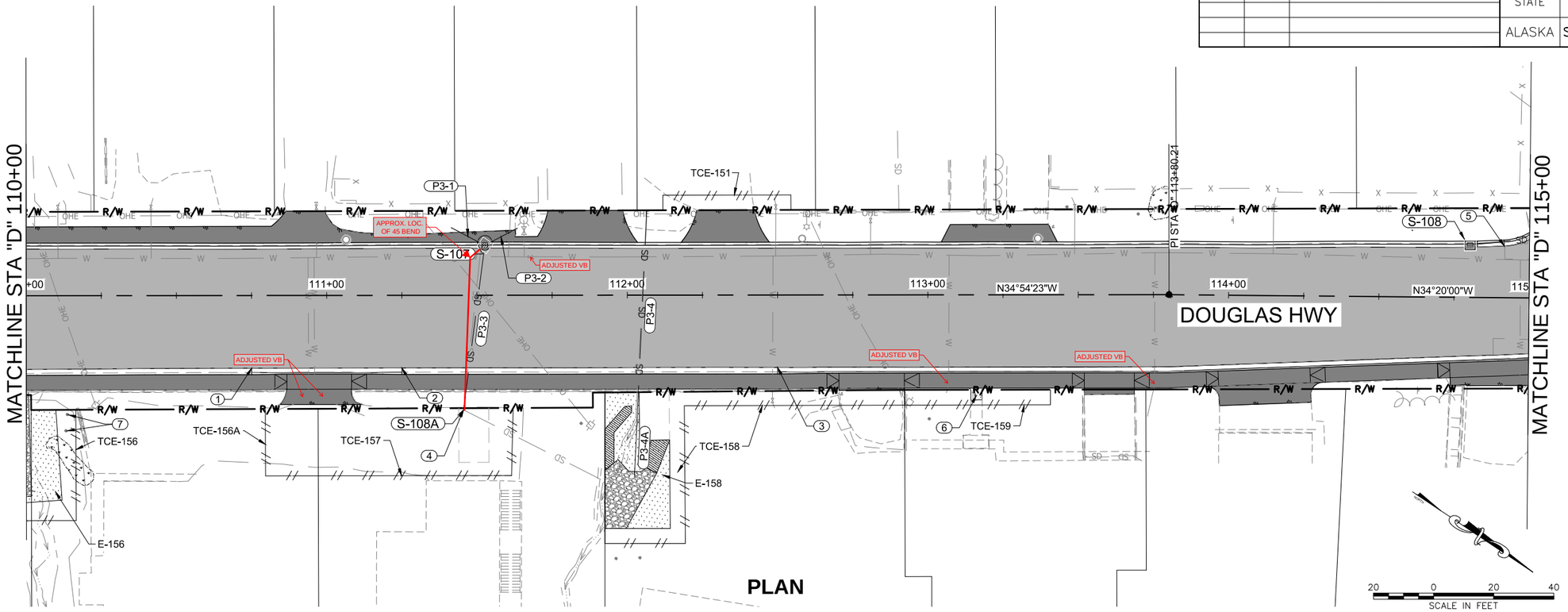
STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER

08/07/2020

FIRM	DOWL	ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-PP-F-70897.dwg	DATE	8/6/2020 12:44	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP
				LAYOUT	F2		

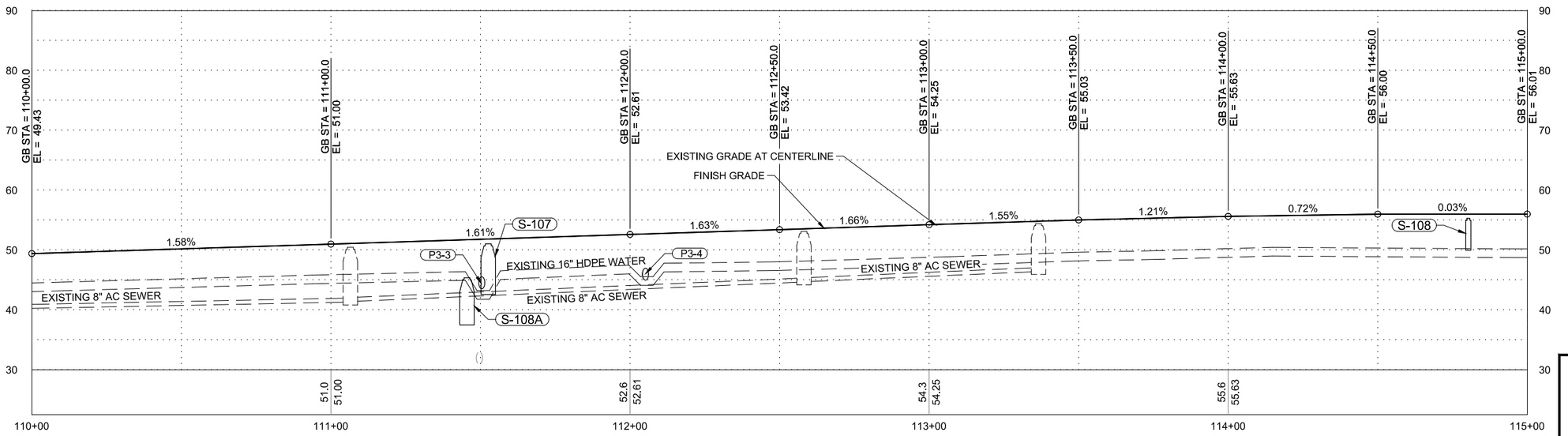
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	F3	F9



PLAN NOTES (X):

1. STA "D" 110+75 RT. BEGIN STD CURB & GUTTER (SEE STD PLAN I-20.20).
2. STA "D" 111+25 RT. END STD CURB & GUTTER (SEE STD PLAN I-20.20).
3. STA "D" 112+50 RT. BEGIN STD CURB & GUTTER (SEE STD PLAN I-20.20).
4. STA "D" 111+45 RT. CAMERA STORM PIPE TO LOCATE EXISTING BEND. POT HOLE AT BEND TO DETERMINE PIPE INVERT ELEVATIONS. INSTALL STORMDRAIN MANHOLE PER STD PLAN D-20.05 WITH SOLID COVER. SUBMIT SHOP DRAWINGS FOR APPROVAL BY ENGINEER. INCLUDE INVERT ELEVATIONS IN SHOP DRAWINGS. INSTALLATION SHALL BE PER MANUFACTURER'S RECOMMENDATIONS. CUT & CONNECT EXISTING PIPES TO NEW STRUCTURE.
5. STA "D" 114+92 LT. END GUTTER REPLACE. TRANSITION (5') TO NEW STD CURB & GUTTER (SEE STD PLAN I-20.20).
6. 4-INCH THICK CONCRETE SIDEWALK. MATCH TO EXISTING WALKWAY.
7. PRESERVE AND PROTECT EXISTING SPRUCE TREES (2). LOCATION OF TREES SHOWN IS APPROXIMATE. CONTRACTOR TO VERIFY LOCATION OF EXISTING TREES WITH ENGINEER.



PROFILE NOTES:

1. FINISH GRADE TO MATCH EXISTING GRADE AT CENTERLINE.
2. GRADE BREAKS AND SLOPES SHOWN ARE TO GUIDE CONTRACTOR IN MATCHING EXISTING GRADE AT CENTERLINE.
3. ESTABLISH VERTICAL CURVES AS NECESSARY THROUGH CENTERLINE GRADE BREAKS.
4. ABANDONED WATER LINES NOT SHOWN.

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

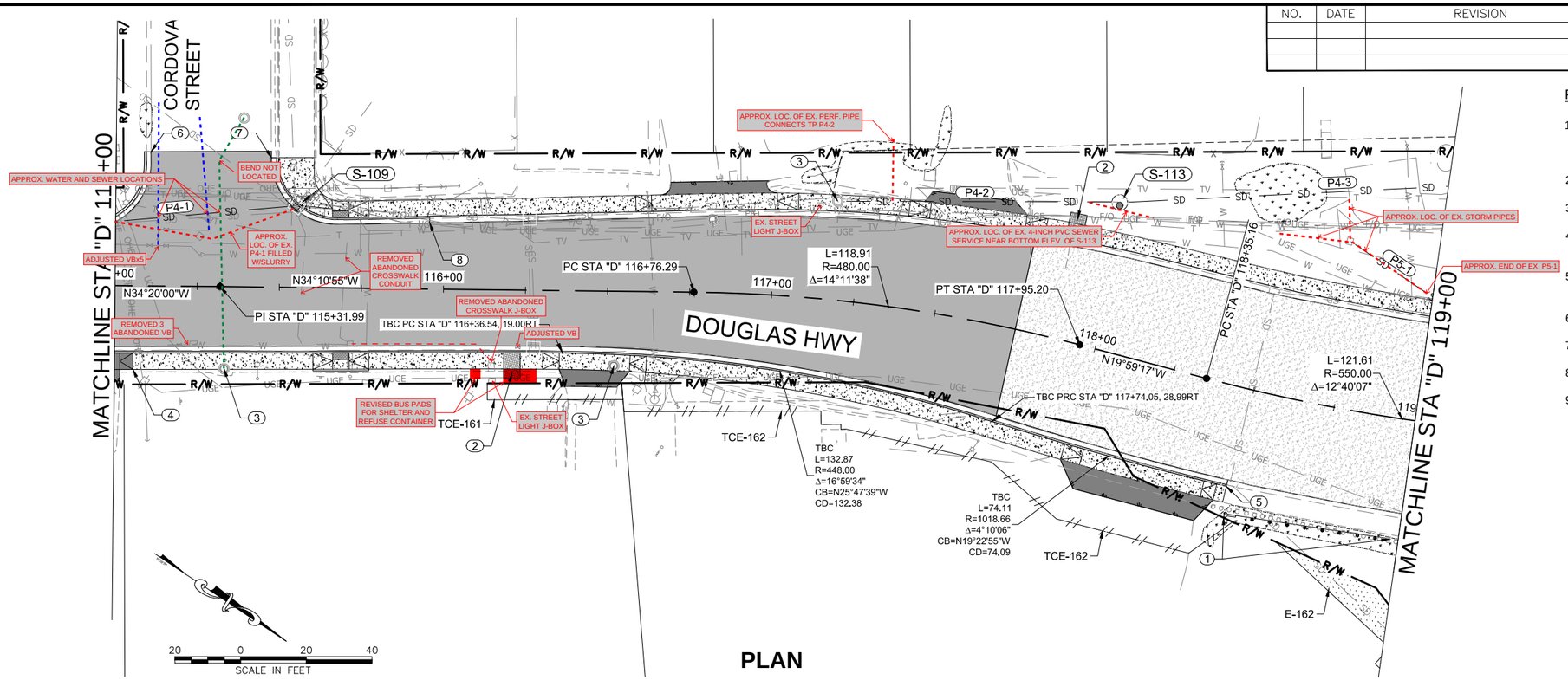
STATE OF ALASKA 49th Steven K. Noble No.CE10051 REGISTERED PROFESSIONAL ENGINEER

08/07/2020

FIRM	DOWL	ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-PP-F-70897.dwg	DATE	8/6/2020 12:44	LAYOUT	F3	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP

NO.	DATE	REVISION

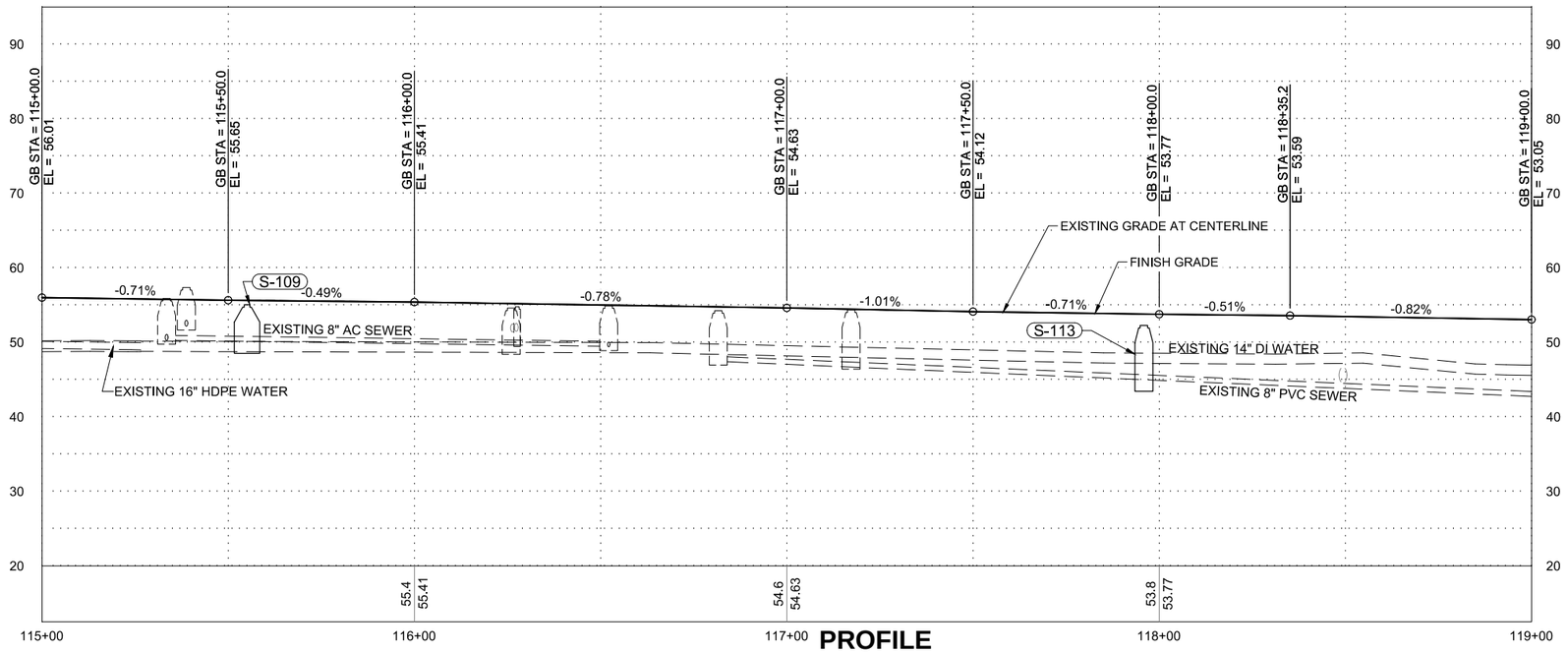
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	F4	F9



PLAN

PLAN NOTES (X):

1. REPLACE EXISTING GUARDRAIL SECTION WITH NEW TO ACHIEVE 8 FOOT OFFSET AT END TERMINAL FROM BACK OF CURB. STA "D" 118+50, 38' RT TO STA "D" 118+98, 37' RT.
2. SEE SHEET E2 FOR BUS STOP LANDING DETAIL.
3. ADJUST FRAME & COVER TO GRADE.
4. STA "D" 115+06 RT. END ASPHALT SIDEWALK / BEGIN CONCRETE SIDEWALK.
5. STA "D" 118+49, 30' RT. END NEW STD CURB & GUTTER. END NEW CONCRETE SIDEWALK.
6. STA "D" 115+11, 41' LT. END STD CURB & GUTTER.
7. STA "D" 115+47, 39' LT. BEGIN NEW STD CURB & GUTTER.
8. STA "D" 115+96, 20' LT. END STD CURB & GUTTER.
9. SEE SHEET G1 FOR INTERSECTION AND CURB RAMP GRADING PLANS AT CORDOVA STREET.



PROFILE

PROFILE NOTES:

1. FINISH GRADE TO MATCH EXISTING GRADE AT CENTERLINE.
2. GRADE BREAKS AND SLOPES SHOWN ARE TO GUIDE CONTRACTOR IN MATCHING EXISTING GRADE AT CENTERLINE.
3. ESTABLISH VERTICAL CURVES AS NECESSARY THROUGH CENTERLINE GRADE BREAKS.
4. ABANDONED WATER LINES NOT SHOWN.

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

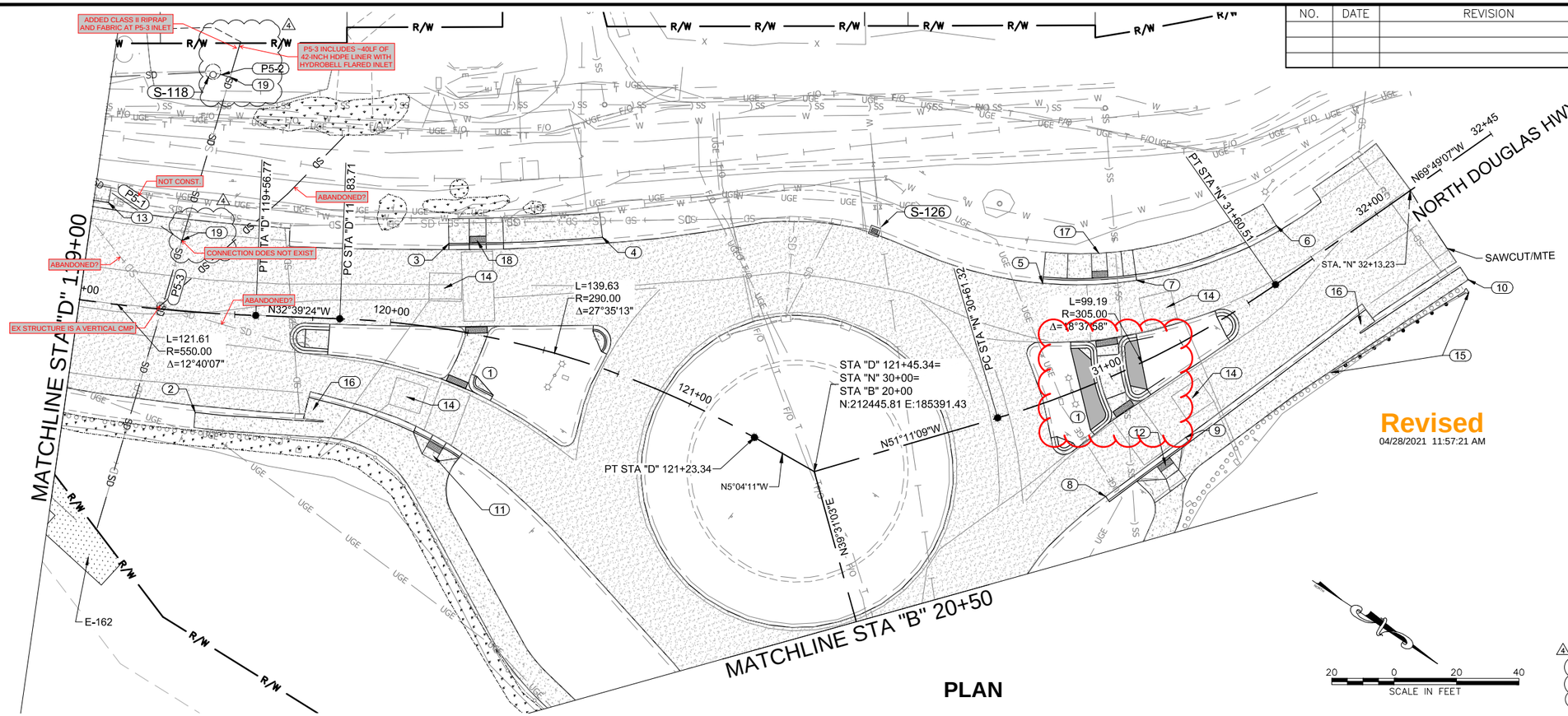
STATE OF ALASKA 49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM	DOWL
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DATE	8/6/2020 12:44
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DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP	CERTIFICATE OF AUTH #:	AECL848
PHONE	(907) 780-3533	LAYOUT	F4				

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	F5	F9



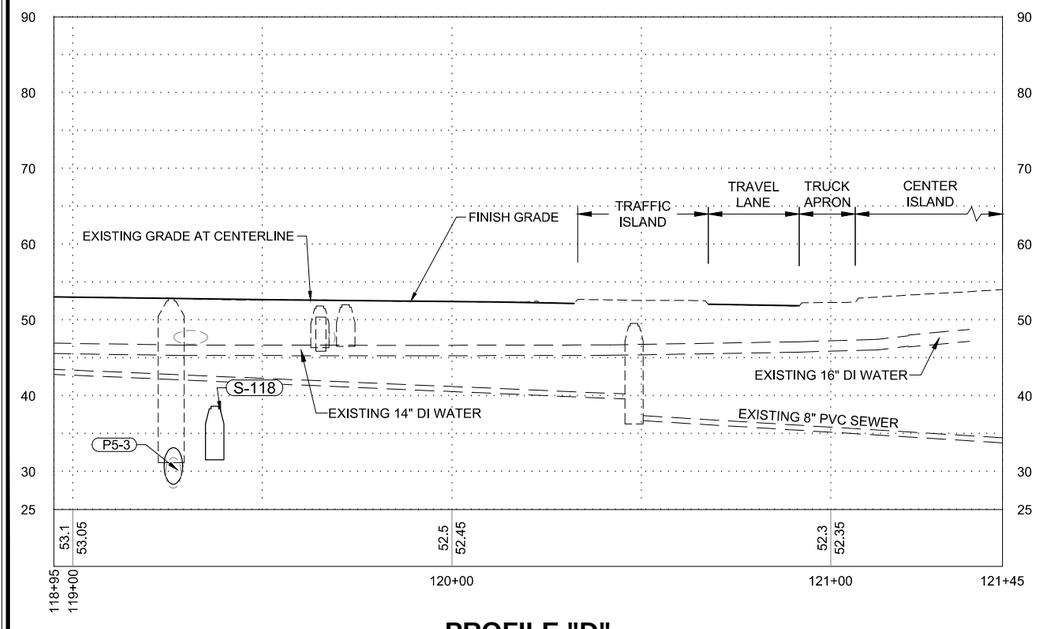
PLAN

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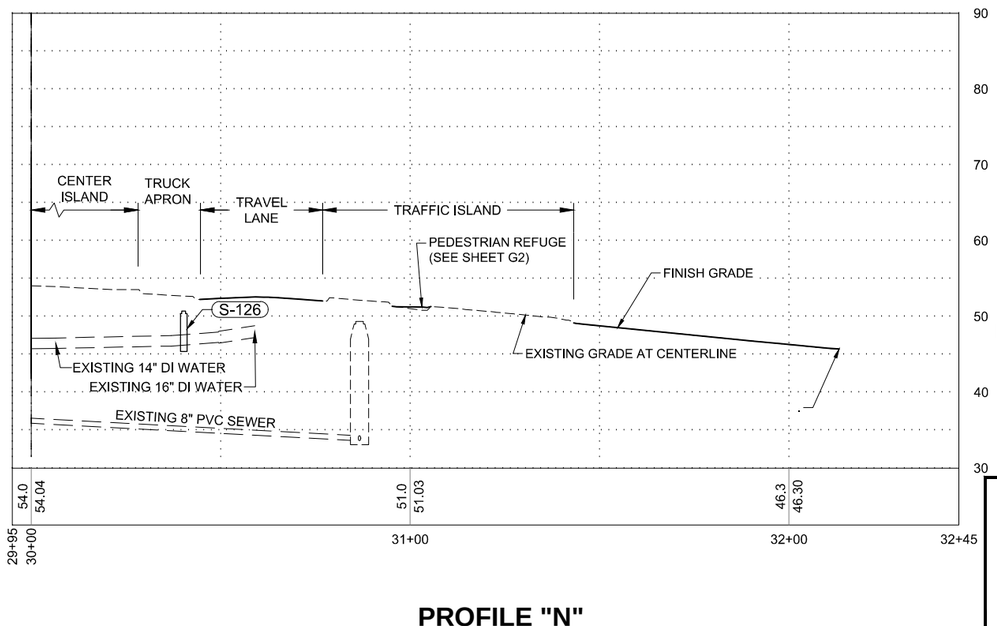
PLAN NOTES (X)

1. SEE SHEET G2 FOR TRAFFIC ISLAND & PEDESTRIAN REFUGE DETAILS.
2. STA "D" 119+40 RT. BEGIN NEW CONCRETE SIDEWALK.
3. STA "D" 120+15 LT. BEGIN NEW CONCRETE SIDEWALK.
4. STA "D" 120+58 LT. END NEW CONCRETE SIDEWALK.
5. STA "N" 30+91 LT BEGIN NEW CONCRETE SIDEWALK AND STD CURB & GUTTER.
6. STA "N" 31+72 LT. END NEW CONCRETE SIDEWALK.
7. STA "N" 31+22 LT. END NEW STD CURB & GUTTER.
8. STA "N" 30+85 RT. BEGIN NEW STD CURB & GUTTER.
9. STA "N" 31+13 RT. END NEW STD CURB & GUTTER.
10. STA "N" 32+12 RT. END NEW CONCRETE SIDEWALK.
11. STA "D" 120+20 RT. RECONSTRUCT CURB RAMP. SEE SHEET G4.
12. STA "N" 31+05 RT. RECONSTRUCT CURB RAMP. SEE SHEET G4.
13. STA "D" 119+05 LT. END NEW CONCRETE SIDEWALK.
14. EXISTING TRAFFIC LOOPS. APPROXIMATE LOCATION SHOWN. CONTRACTOR SHALL LOCATE WITH DOT&PF PRIOR TO PAVEMENT PLANING. THE CONTRACTOR SHALL NOT DAMAGE EXISTING LOOPS OR CONDUIT. DEPTH OF LOOPS & CONDUIT IS APPROXIMATELY 1-INCH BELOW THE BOTTOM OF THE EXISTING ASPHALT LAYERS (BASED ON AS-BUILT DRAWINGS). NOT ENCOUNTERED
15. REPLACE EXISTING GUARDRAIL (SEE STD PLAN G-05.11S). STA "N" 31+59 RT TO STA "N" 32+10 RT.
16. RECONSTRUCT EXISTING CONCRETE RAMP.
17. STA "N" 31+10 LT. RECONSTRUCT CURB RAMP SEE SHEET G4.
18. STA "B" 120+23. RECONSTRUCT CURB RAMP. SEE SHEET G4.

△4
19. INSTALL SADDLE BRANCH (SEE SHEET E3). CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING CONNECTION.
NO EXISTING CONNECTION.
NEW CONNECTION NOT CONSTRUCTED



PROFILE "D"



PROFILE "N"

PROFILE NOTES:

1. FINISH GRADE TO MATCH EXISTING GRADE AT CENTERLINE. ELEVATIONS AND SLOPES NOT SHOWN.
2. ABANDONED WATER LINES NOT SHOWN.
3. EXISTING TRUCK APRON, CENTER ISLAND, AND SPLITTER ISLANDS TO REMAIN UNLESS OTHERWISE NOTED IN THE PLANS.

SR 2/3/21

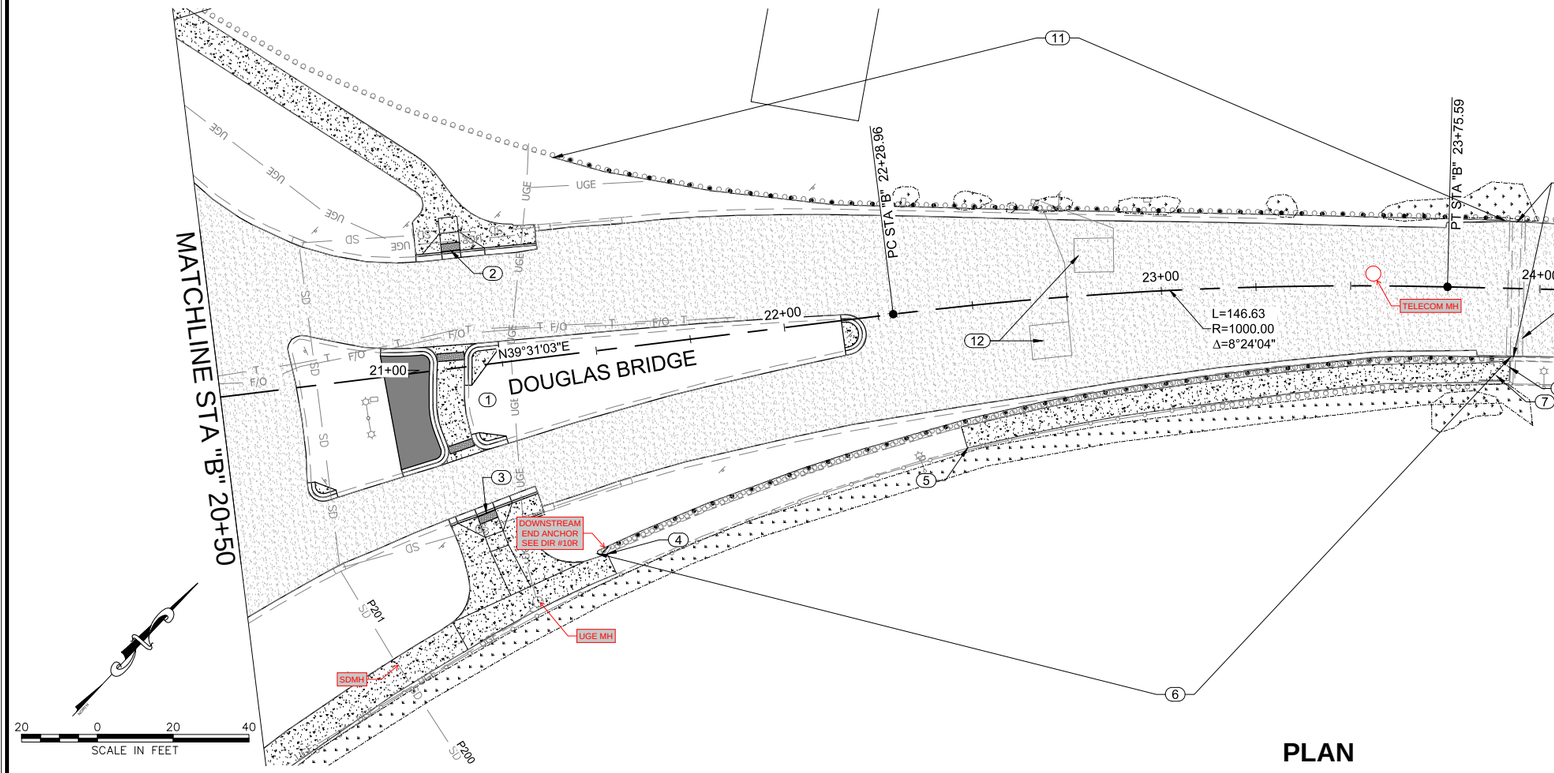
REVISIONS			
REV	DATE	DESCRIPTION	BY
△4	11/20/20	Addendum No. 4	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
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STATE OF ALASKA
49th
Steven K. Noble
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ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848
DATE	4/8/2021 10:41	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP
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FIRM	DOWL						

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/0958032	2020	F6	F9



PLAN

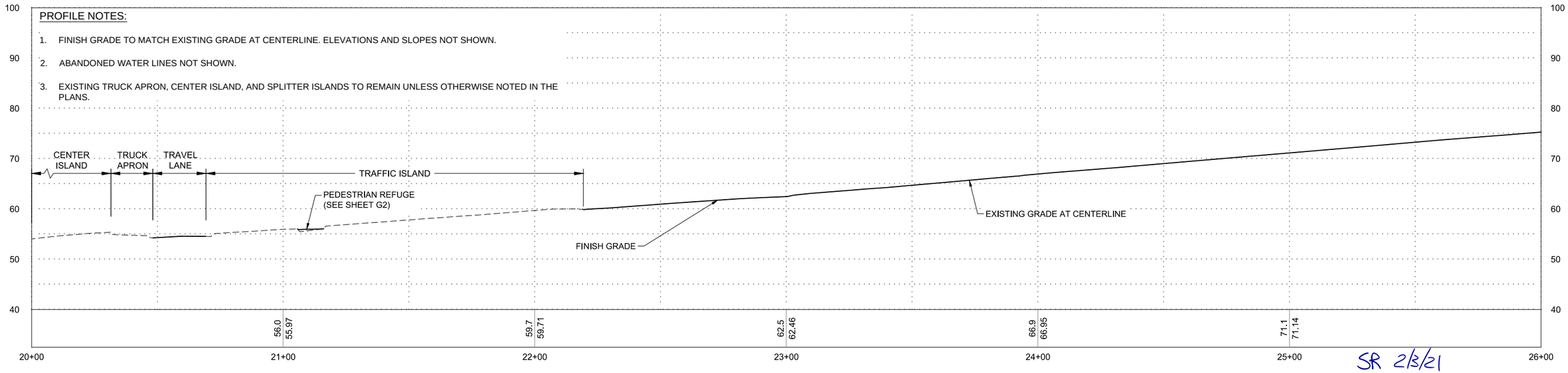
PLAN NOTES (X):

1. SEE SHEET G2 FOR TRAFFIC ISLAND & PEDESTRIAN REFUGE DETAILS.
2. STA "B" 21+15 LT. RECONSTRUCT ADA RAMP. SEE SHEET G4.
3. STA "B" 21+17 RT. RECONSTRUCT ADA RAMP. SEE SHEET G4.
4. STA "B" 21+46 RT. END NEW CONCRETE SIDEWALK.
5. STA "B" 22+45 RT. BEGIN NEW CONCRETE SIDEWALK.
6. REPLACE EXISTING GUARDRAIL (SEE STD PLAN G-05.11S). STA "B" 21+44 TO 23+93 RT. INSTALL GUARDRAIL POST CORNER GUARD ON BACK OF GUARDRAIL POSTS PER DETAIL ON SHEET E2.
7. RECONSTRUCT RAMP. SEE SHEET E2 FOR DETAILS.
8. STA "B" 23+92.5 RT. END NEW CONCRETE SIDEWALK.
9. EXISTING BRIDGE JOINT. SEE N SHEETS FOR JOINT REPAIRS.
10. SEE N SHEETS FOR TRANSITION RAIL MODIFICATIONS.
11. REPLACE EXISTING GUARDRAIL (SEE STD PLANS FOR W-BEAM GUARDRAIL). STA "B" 21+45 TO 23+90 LT.
12. EXISTING TRAFFIC LOOPS. APPROXIMATE LOCATION SHOWN. CONTRACTOR SHALL LOCATE WITH DOT&PF PRIOR TO PAVEMENT PLANING. THE CONTRACTOR SHALL NOT DAMAGE EXISTING LOOPS OR CONDUIT. DEPTH OF LOOPS & CONDUIT IS APPROXIMATELY 1-INCH BELOW THE BOTTOM OF THE EXISTING ASPHALT LAYERS (BASED ON RECORD DRAWINGS).

EX. STEEL PLATES REPAIRED
JOINT NOT REPLACED
SEE CO#8

PROFILE NOTES:

1. FINISH GRADE TO MATCH EXISTING GRADE AT CENTERLINE. ELEVATIONS AND SLOPES NOT SHOWN.
2. ABANDONED WATER LINES NOT SHOWN.
3. EXISTING TRUCK APRON, CENTER ISLAND, AND SPLITTER ISLANDS TO REMAIN UNLESS OTHERWISE NOTED IN THE PLANS.



PROFILE

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
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STATE OF ALASKA 49th
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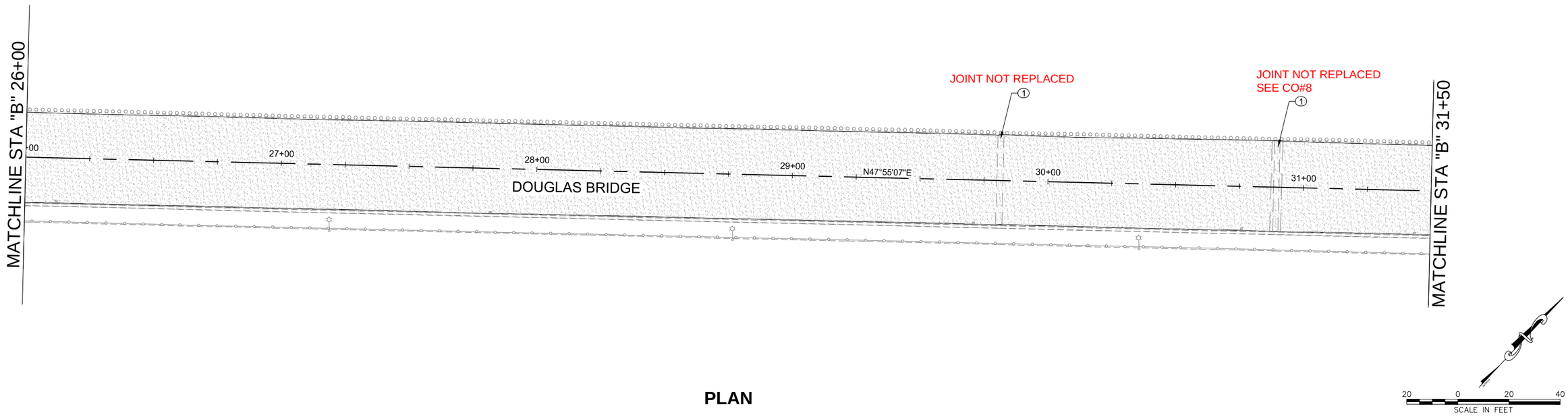
FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
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NO.	DATE	REVISION

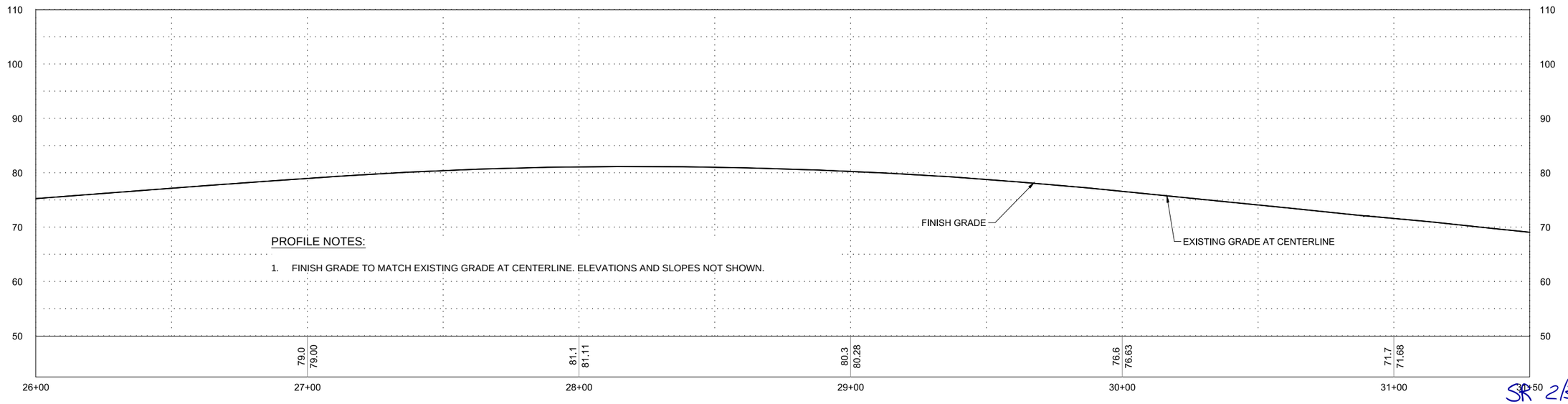
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	F7	F9

PLAN NOTES (X):

1. EXISTING BRIDGE JOINT. SEE N SHEETS FOR JOINT REPAIRS.



PLAN



PROFILE NOTES:

1. FINISH GRADE TO MATCH EXISTING GRADE AT CENTERLINE. ELEVATIONS AND SLOPES NOT SHOWN.

PROFILE

SR 2/3/21

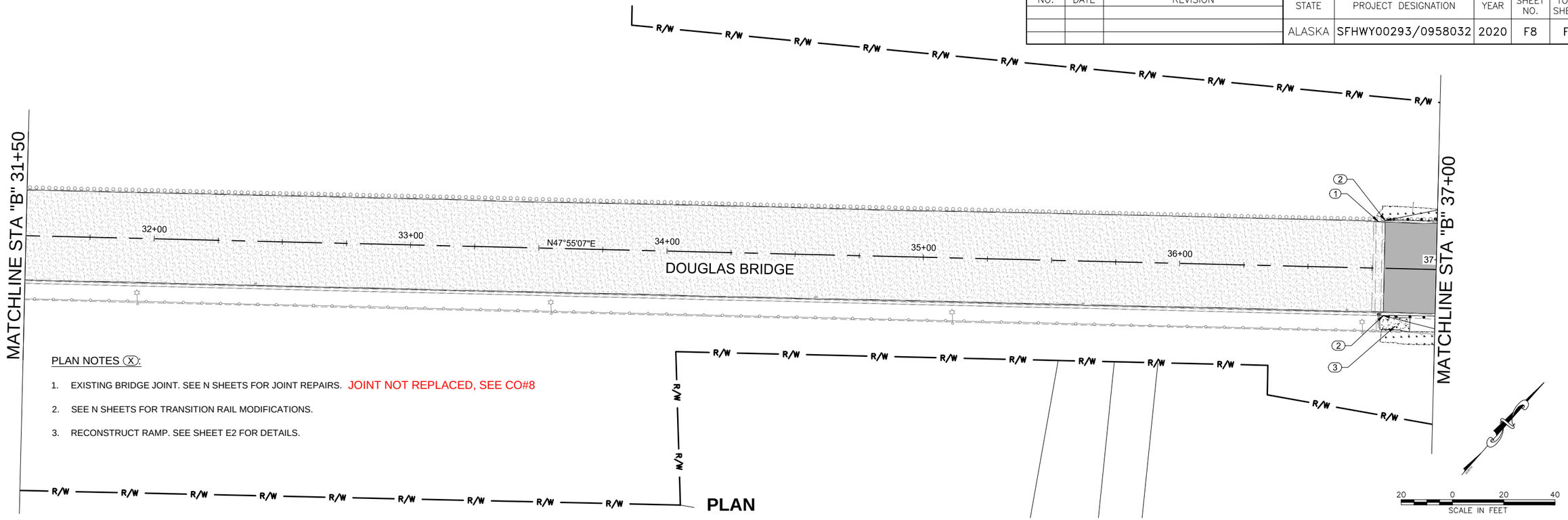
PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
DATE 8/6/2020 12:44 | LAYOUT F7 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP
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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	F8	F9



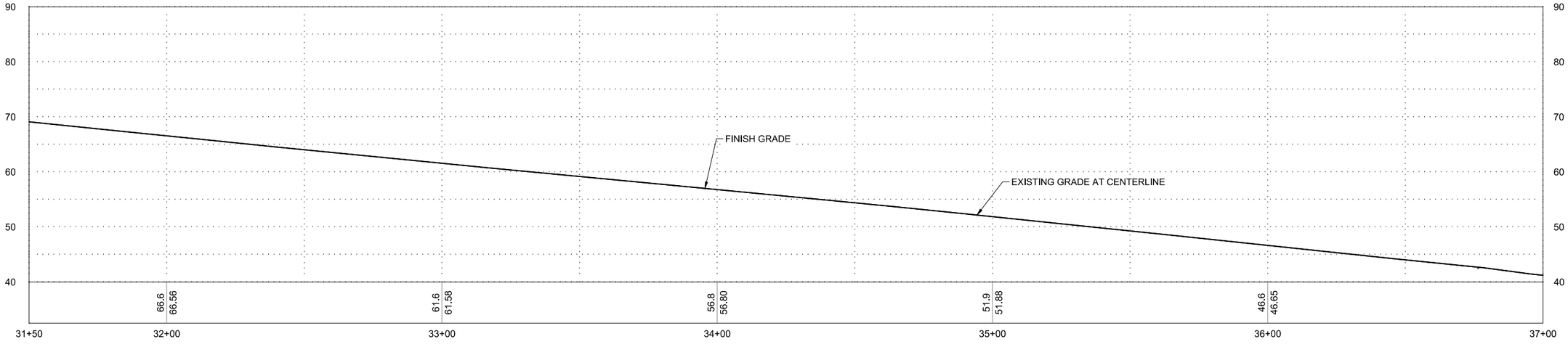
PLAN NOTES (X):

1. EXISTING BRIDGE JOINT. SEE N SHEETS FOR JOINT REPAIRS. JOINT NOT REPLACED, SEE CO#8
2. SEE N SHEETS FOR TRANSITION RAIL MODIFICATIONS.
3. RECONSTRUCT RAMP. SEE SHEET E2 FOR DETAILS.

PLAN

PROFILE NOTES:

1. FINISH GRADE TO MATCH EXISTING GRADE AT CENTERLINE. ELEVATIONS AND SLOPES NOT SHOWN.



PROFILE

SR 2/3/21

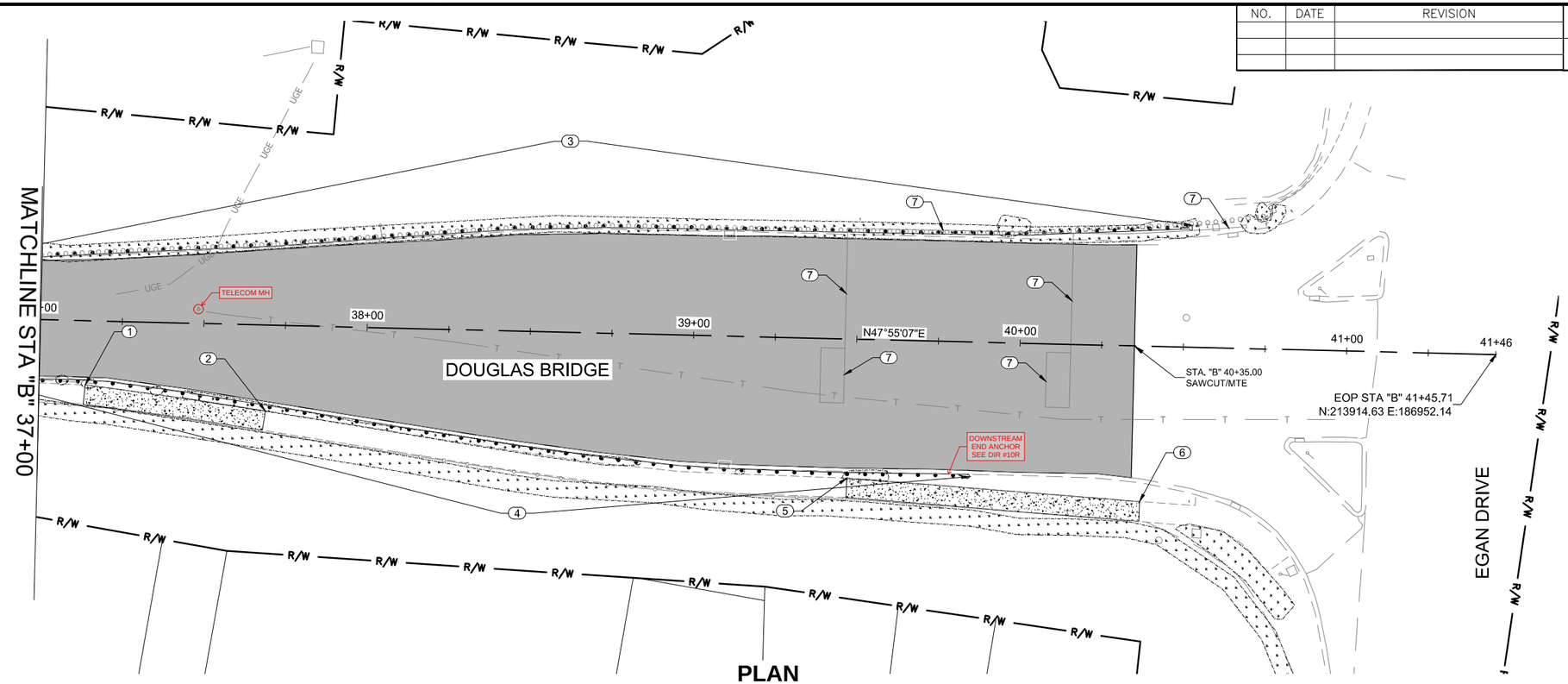
PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	F9	F9

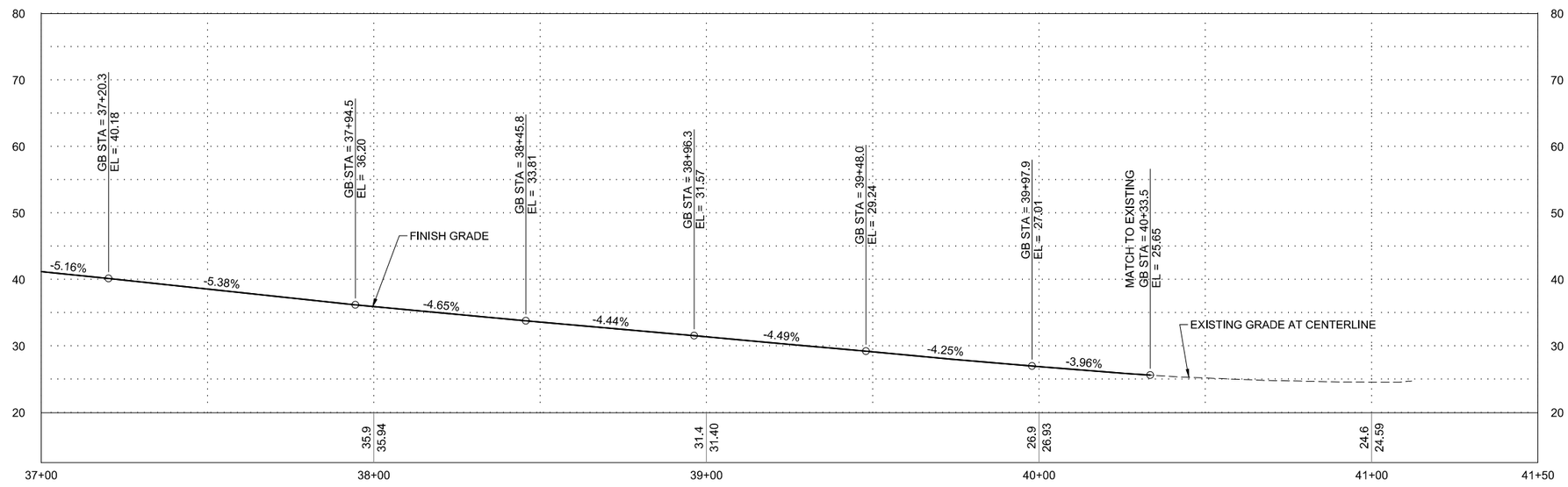


PLAN

PLAN NOTES (X):

1. STA "B" 37+14 RT. BEGIN NEW CONCRETE SIDEWALK.
2. STA "B" 37+69 RT. END NEW CONCRETE SIDEWALK.
3. REPLACE EXISTING GUARDRAIL (SEE STD PLAN G-05.11S). STA "B" 36+80 TO 40+52 LT.
4. REPLACE EXISTING GUARDRAIL (SEE STD PLAN G-05.11S). STA "B" 36+80 TO 39+85 RT. INSTALL GUARDRAIL POST CORNER GUARD ON BACK OF GUARDRAIL POSTS PER DETAIL ON SHEET E2. (4)
5. STA "B" 39+48 RT. BEGIN NEW CONCRETE SIDEWALK.
6. STA "B" 40+38 RT. END NEW CONCRETE SIDEWALK.
7. APPROXIMATE LOCATION OF ABANDONED TRAFFIC LOOP DETECTOR SYSTEM. REMOVE AND DISPOSE OF EXISTING CONDUIT, WIRES, JUNCTION BOX, AND APPURTANCES. REMOVED

20 0 20 40
SCALE IN FEET



PROFILE

PROFILE NOTES:

1. FINISH GRADE TO MATCH EXISTING GRADE AT CENTERLINE.
2. GRADE BREAKS AND SLOPES SHOWN ARE APPROXIMATE ONLY AND ARE INTENDED TO GUIDE CONTRACTOR IN MATCHING EXISTING GRADE AT CENTERLINE.
3. ESTABLISH VERTICAL CURVES AS NECESSARY THROUGH CENTERLINE GRADE BREAKS.

SR 2/3/21

REVISIONS			
REV	DATE	DESCRIPTION	BY
4	11/20/20	Addendum No. 4	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/20/2020

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
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NO.	DATE	REVISION
1	4/3/21	Directive 01

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	G1	G5

CURVE TABLE					
C #	L	RAD	DELTA	CHORD	BEARING
C1	27.53	18.00	87.62	24.92	N80° 49' 35"W
C2	6.07	11.66	29.84	6.00	N49° 04' 10"E

PT STA "D" 115+08.69
40.84' LT
EL=MTE 57.28 TBC

PC STA "D" 114+91.47
19.17' LT
EL=MTE 56.09 TBC

STA "CS" 0+22.34
EL=MTE
N: 211876.55
E: 185620.70

"CS" 0+25
N55°40'00"E

CORDOVA STREET

PC STA "D" 115+49.43
39.48' LT
EL=MTE

STA "D" 115+60.21
39.67' LT
EL=MTE

STA "D" 115+61.81
29.75' LT
EL=55.83

STA "D" 115+65.82
26.80' LT
EL=55.29

END NEW CURB & GUTTER
STA "D" 115+95.53
22.17' LT
EL=MTE

STA "D" 115+70.83
26.48' LT
EL=55.24

STA "D" 115+76.83
26.65' LT
EL=55.67

S-109

STA "D" 115+56.41
24.94' LT
EL=55.71 TBC

1.6% 3.3% 1.1% 7.2% 4.6% 0.8% 1.3% 1.1% 6.7% 1.7%

STA "D" 115+65.98
21.42' LT
EL=55.25 TBC

PT STA "D" 115+67.44
21.38' LT
EL=55.20 TBC

STA "D" 115+70.98
21.47' LT
EL=55.18 TBC

STA "D" 115+76.98
21.62' LT
EL=55.58 TBC

EXISTING CURB & GUTTER TO REMAIN.

R/W R/W R/W R/W R/W R/W R/W R/W

C1 C2

115+00 116+00

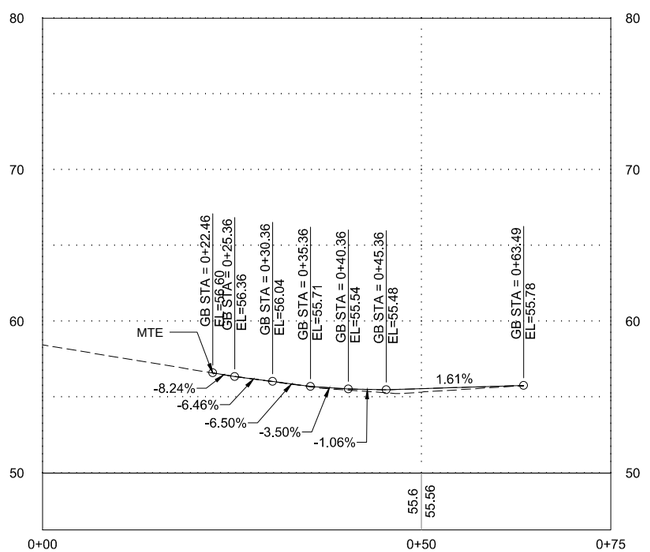
STA "D" 115+33
EB STA "CS" 0+63.49
N:211899.76 E:185654.68

DOUGLAS HIGHWAY

STA "D" 115+66.49, 19.79 RT

STA "D" 115+71.49, 19.72 RT

PLAN



"CS" PROFILE

CORDOVA STREET - STA "D" 115+32.85 - LT

NOTES (X):

1. RECONSTRUCT MID-BLOCK PARALLEL CURB RAMP PER STD PLAN I-21.11

5 0 5 10
SCALE IN FEET

REVISED 3/29/2021

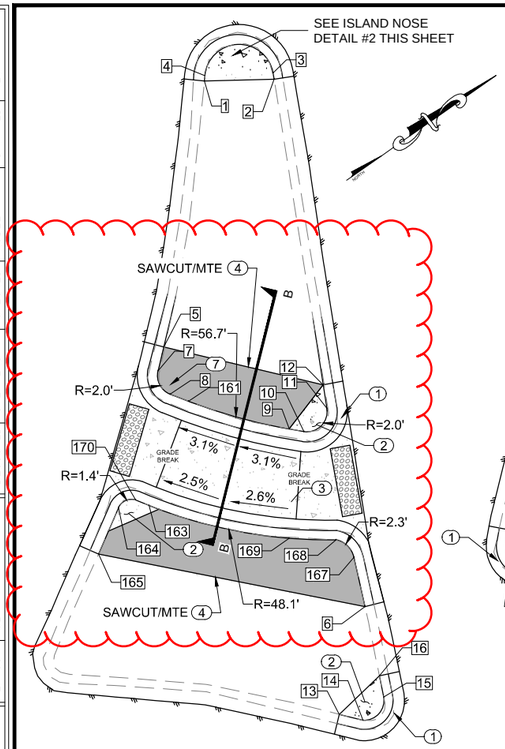
SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

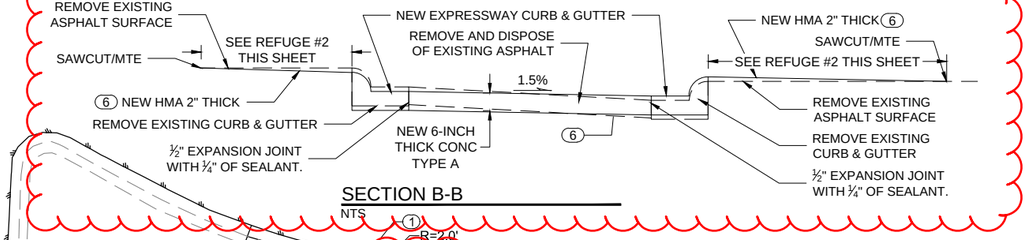
STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
3/29/2021

FIRM	DOWL	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848	
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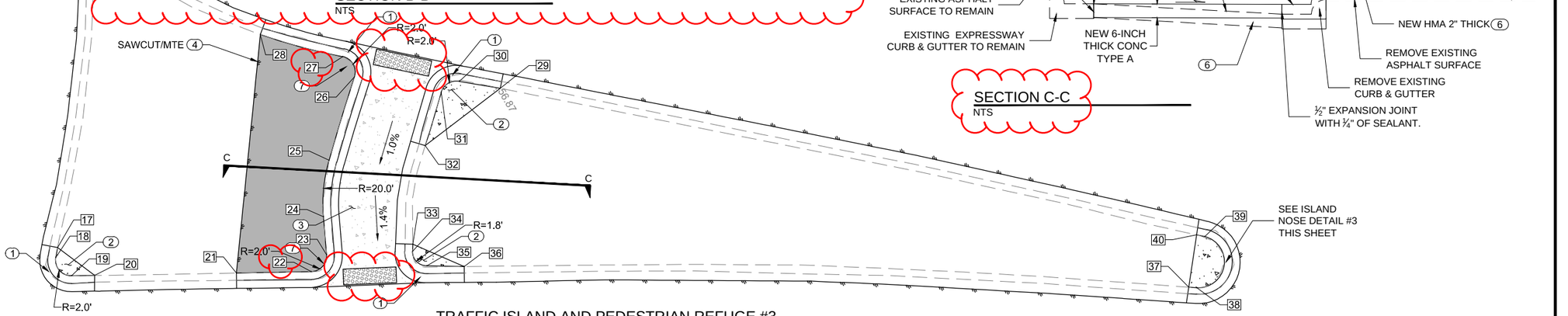
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/0958032	2020	G2	G5



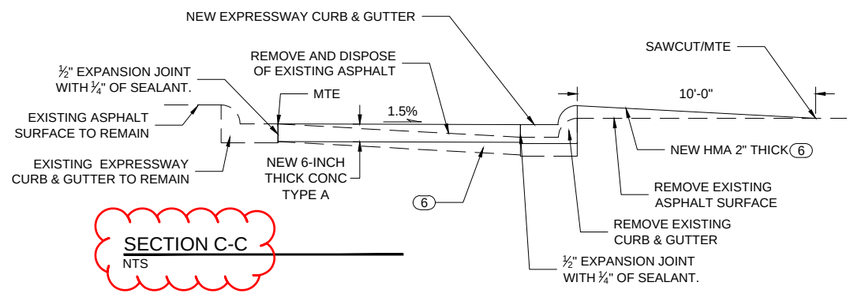
TRAFFIC ISLAND AND PEDESTRIAN REFUGE #2
NTS — NORTH DOUGLAS AT ROUNDABOUT



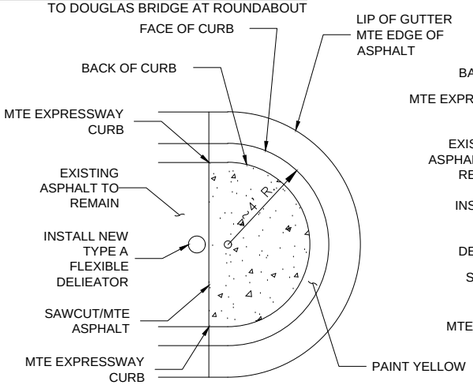
SECTION B-B
NTS

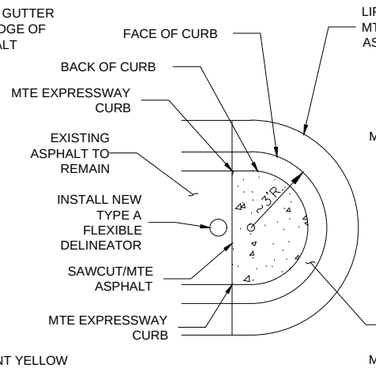


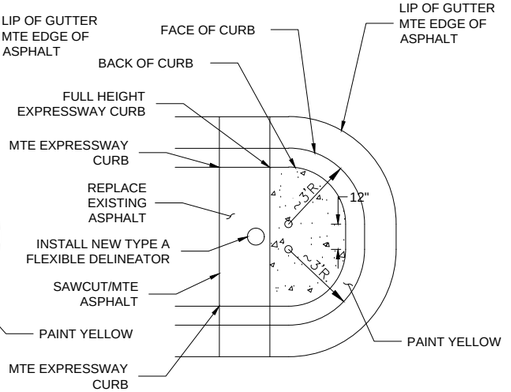
TRAFFIC ISLAND AND PEDESTRIAN REFUGE #3
NTS — TO DOUGLAS BRIDGE AT ROUNDABOUT

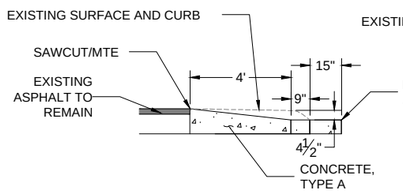


SECTION C-C
NTS

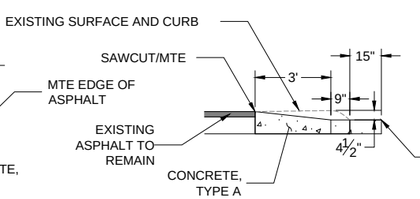




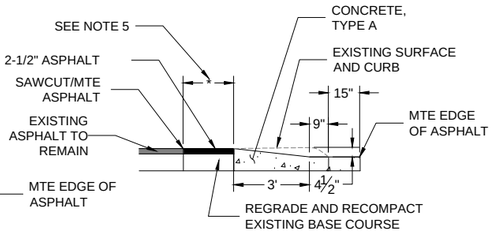




ISLAND NOSE - DETAIL #3
NTS

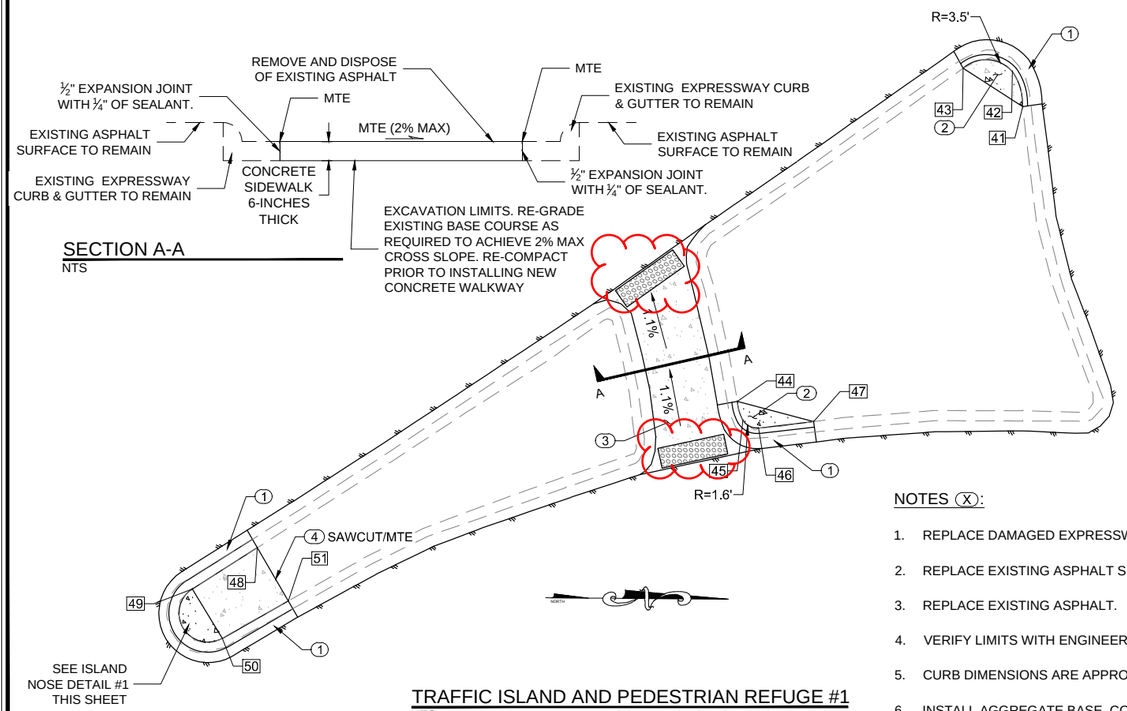


ISLAND NOSE - DETAIL #2
NTS



ISLAND NOSE - DETAIL #1
NTS

Revised
04/28/2021 11:25:30 AM



SECTION A-A
NTS

TRAFFIC ISLAND AND PEDESTRIAN REFUGE #1
NTS — SOUTH DOUGLAS AT ROUNDABOUT

NOTES (X):

1. REPLACE DAMAGED EXPRESSWAY CURB WITH NEW EXPRESSWAY CURB. MATCH TO EXISTING GRADES.
2. REPLACE EXISTING ASPHALT SURFACING WITH 4" THICK CONCRETE TO LIMITS SHOWN. REPLACE TYPE-A FLEXIBLE DELINEATOR WITH NEW.
3. REPLACE EXISTING ASPHALT.
4. VERIFY LIMITS WITH ENGINEER.
5. CURB DIMENSIONS ARE APPROXIMATE. MATCH EXISTING HORIZONTAL AND VERTICAL LAYOUT AT LIP OF GUTTER IN THE FIELD AND AS APPROVED BY THE ENGINEER.
6. INSTALL AGGREGATE BASE COURSE, GRADING D-1 IN VOID AREAS UNDER NEW SURFACING.
7. REPLACE EXISTING TYPE-A FLEXIBLE DELINEATOR WITH NEW (SEE SHEET H-1 FOR FLEXIBLE DELINEATOR DETAIL.

ASPHALT SIDEWALK USED FOR HMA IN ISLANDS, SEE RFI #14

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA — 49th — Steven K. Noble — No.CE10051 — REGISTERED PROFESSIONAL ENGINEER

FIRM	DOWL	DESIGNED	STEPHENS	DRAFTED	KEMP
ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533	CHECKED	NOBLE
FILE	\\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-GR-G-70897_25Apr2021_REVISED.dwg	LAYOUT	G2	CERTIFICATE OF AUTH #:	AECL848
		DATE			

POINT TABLE				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
1	"N" 31+39.08	1.52 LT	49.69	MTE
2	"N" 31+38.54	5.37 RT	49.79	MTE
3	"N" 31+39.16	5.34 RT	49.78	PT/MTE
4	"N" 31+39.61	1.40 LT	49.69	PC/MTE
5	"N" 31+12.68	7.20 LT	50.79	MTE
6	"N" 30+87.66	13.27 RT	52.43	MTE
7	"N" 31+10.29	7.79 LT	50.87	PT
8	"N" 31+07.91	6.64 LT	51.13	PC
9	"N" 31+04.48	5.16 RT	51.50	TBC
10	"N" 31+04.23	6.61 RT	51.60	PC
11	"N" 31+06.48	8.87 RT	51.42	PT
12	"N" 31+08.75	8.52 RT	51.30	MTE
13	"N" 30+77.26	11.58 RT	52.37	MTE
14	"N" 30+76.91	13.97 RT	52.90	PC/MTE
15	"N" 30+79.27	15.79 RT	52.36	PT/MTE
16	"N" 30+81.23	15.18 RT	52.38	MTE
17	"B" 20+72.05	25.32 RT	55.08	MTE
18	"B" 20+72.03	26.58 RT	55.04	PC/MTE
19	"B" 20+74.38	28.59 RT	55.02	PT/MTE
20	"B" 20+77.29	28.08 RT	55.10	MTE
21	"B" 20+95.08	24.88 RT	55.58	MTE
22	"B" 21+04.47	23.19 RT	55.75	PC/MTE
23	"B" 21+06.06	20.74 RT	55.93	PT
24	"B" 21+04.89	16.03 RT	56.05	PC
25	"B" 21+04.45	8.80 RT	56.12	PC
26	"B" 21+05.04	2.20 LT	56.19	PT
27	"B" 21+04.03	4.49 LT	55.97	PC/MTE
28	"B" 20+99.23	5.60 LT	55.79	MTE
29	"B" 21+24.52	3.75 LT	56.87	MTE
30	"B" 21+19.22	3.77 LT	56.48	PT/MTE
31	"B" 21+17.17	2.01 LT	56.37	PC/MTE
32	"B" 21+16.24	4.99 RT	56.50	MTE
33	"B" 21+16.69	17.66 RT	56.25	MTE
34	"B" 21+16.82	18.55 RT	56.08	PC/MTE
35	"B" 21+18.92	20.07 RT	56.11	PT/MTE
36	"B" 21+23.61	19.41 RT	56.35	MTE
37	"B" 22+15.23	7.22 RT	60.08	MTE
38	"B" 22+16.25	7.13 RT	59.67	PT/MTE
39	"B" 22+16.23	0.53 RT	59.76	PC/MTE
40	"B" 22+15.15	0.47 RT	60.21	MTE
41	"D" 120+67.58	5.03 LT	52.50	MTE
42	"D" 120+67.54	8.65 LT	52.38	PC/MTE
43	"D" 120+63.10	10.31 LT	52.33	MTE
44	"D" 120+30.76	13.21 RT	52.84	MTE
45	"D" 120+30.52	15.15 RT	52.83	PC/MTE
46	"D" 120+31.72	16.47 RT	52.56	PT/MTE
47	"D" 120+37.35	17.94 RT	52.83	MTE
48	"D" 119+80.50	3.77 RT	53.04	MTE
49	"D" 119+72.89	3.80 RT	52.57	PC/MTE
50	"D" 119+72.78	9.54 RT	52.51	PT/MTE
51	"D" 119+80.29	9.87 RT	52.91	MTE

POINT TABLE				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
161	"N" 31+07.17	4.81 LT	51.23	TBC
163	"N" 30+96.57	8.57 LT	51.35	TBC
164	"N" 30+96.24	11.57 LT	51.54	PC/MTE
165	"N" 30+91.37	13.36 LT	51.70	MTE
167	"N" 30+92.28	11.91 RT	52.17	PT
168	"N" 30+93.88	10.05 RT	51.88	PC
169	"N" 30+93.84	5.41 RT	51.69	TBC
170	"N" 30+97.10	9.90 LT	51.32	PT

Revised
04/28/2021 5:12:43 PM

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	G3	G5

SR 2/3/21

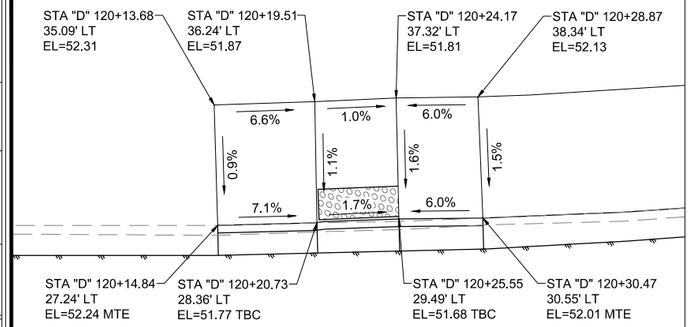
PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER

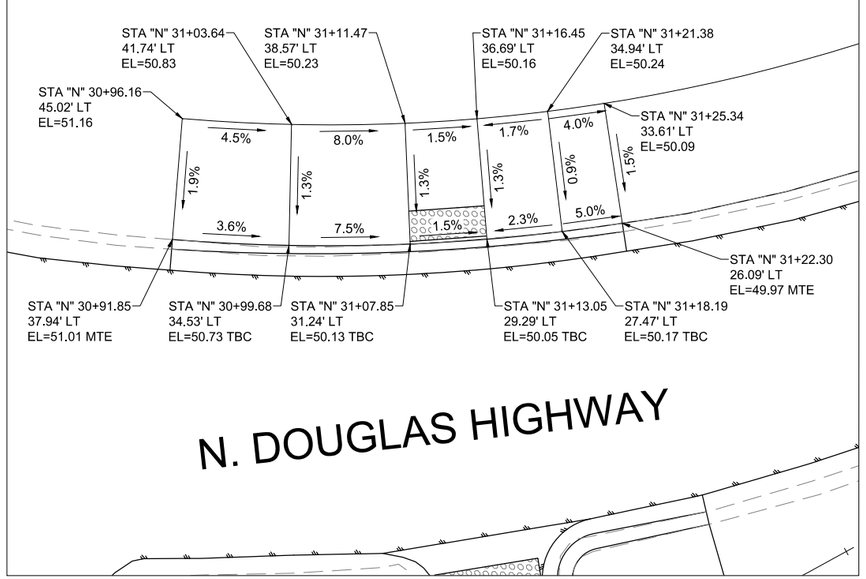
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ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801			PHONE	(907) 780-3533		CERTIFICATE OF AUTH #:		AECL848
DATE	4/28/2021 14:53								

NO.	DATE	REVISION

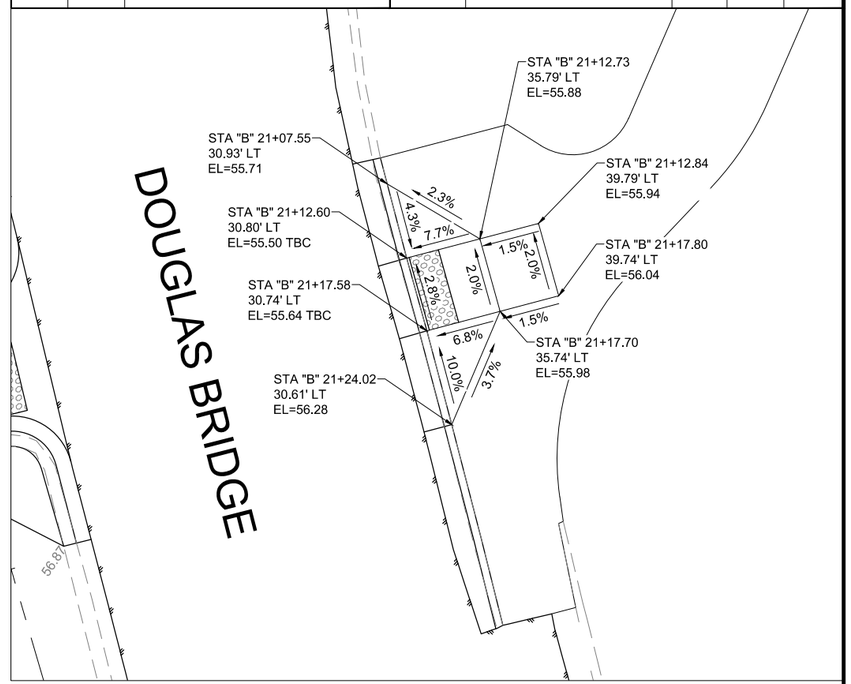
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ALASKA	SFHWY00293/0958032	2020	G4	G5



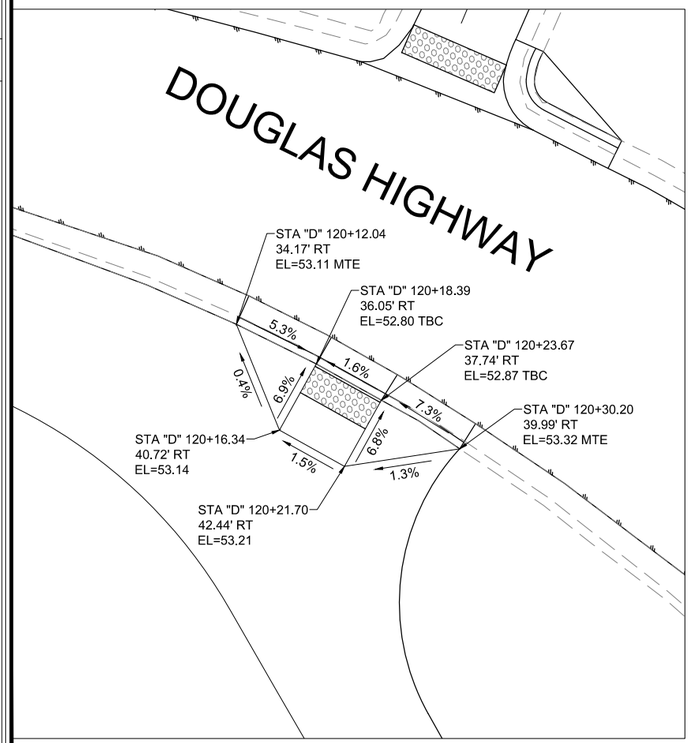
PLAN



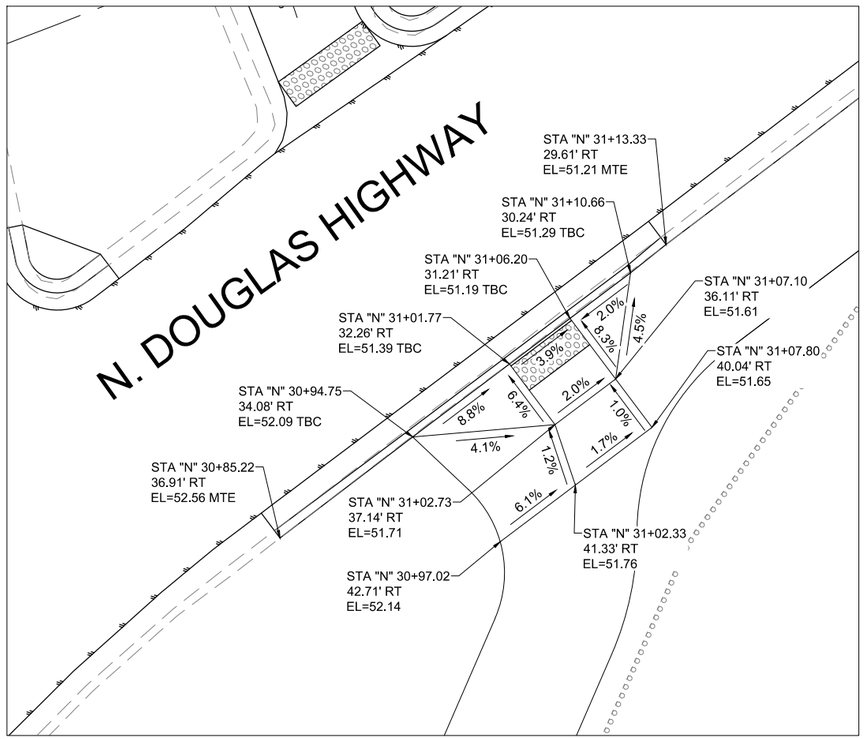
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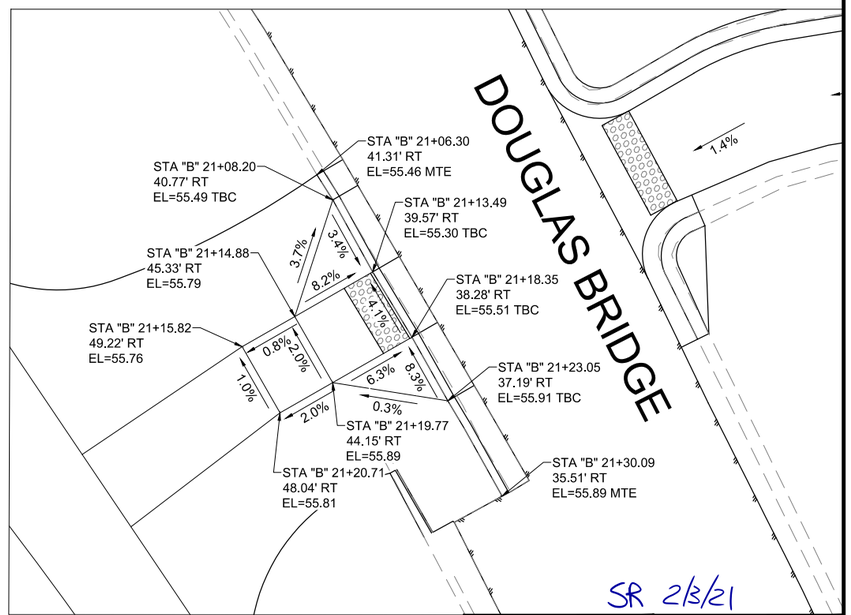
PLAN



PLAN



PLAN



PLAN

5 0 5 10
SCALE IN FEET

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM	DOWL				CERTIFICATE OF AUTH #:	AECL848	
ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801		PHONE	(907) 780-3533			
DATE	8/4/2020 17:29	LAYOUT	G4	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-GR-G-70897.dwg						

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	G5	G5

FIRM	DOWL		
ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533
DATE	8/4/2020 17:29	LAYOUT	G5
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-GR-G-70897.dwg		

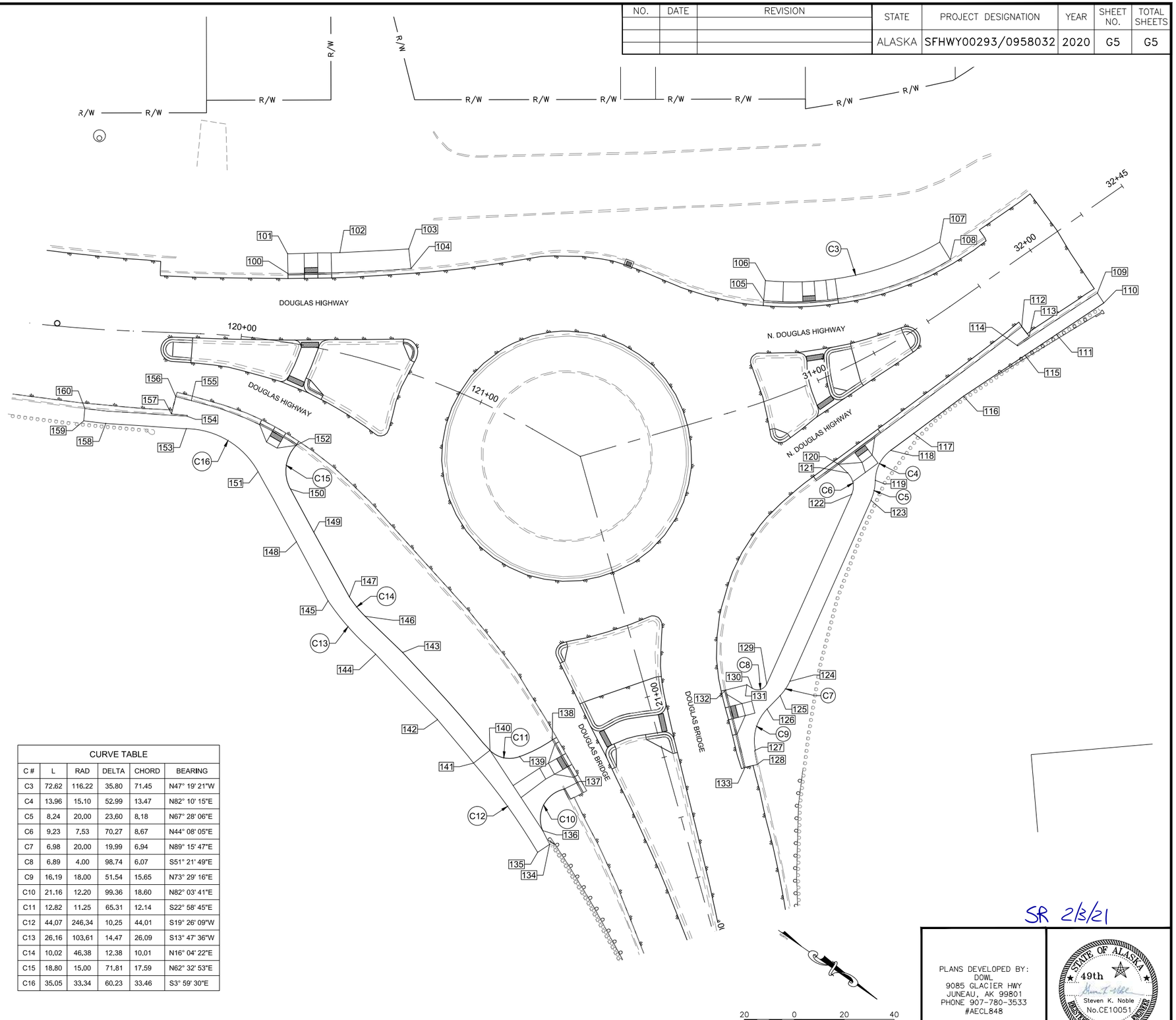
CERTIFICATE OF AUTH #:	AECL848		
DESIGNED	STEPHENS	CHECKED	NOBLE
DRAFTED	KEMP		

POINT TABLE

POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
100	"D" 120+14.84	27.24 LT	52.24	MTE
101	"D" 120+13.68	35.09 LT	52.31	BKSW/MTE
102	"D" 120+31.88	39.12 LT	52.11	BKSW
103	"D" 120+54.86	47.25 LT	0.00	BKSW/MTE
104	"D" 120+57.55	39.98 LT	51.75	MTE
105	"N" 30+91.85	37.94 LT	51.01	MTE
106	"N" 30+96.16	45.02 LT	51.16	BKSW/MTE
107	"N" 31+72.07	23.45 LT	47.97	BKSW/MTE
108	"N" 31+71.55	15.33 LT	47.84	MTE
109	"N" 32+12.19	29.38 RT	0.00	MTE
110	"N" 32+12.04	34.13 RT	45.92	BKSW/MTE
111	"N" 31+89.26	33.59 RT	47.00	BKSW
112	"N" 31+79.65	23.09 RT	0.00	MTE
113	"N" 31+79.85	27.97 RT	47.27	MTE
114	"N" 31+73.90	28.47 RT	47.76	SWK
115	"N" 31+74.13	33.24 RT	47.80	BKSW
116	"N" 31+46.11	32.92 RT	49.43	BKSW
117	"N" 31+23.89	35.79 RT	50.81	BKSW
118	"N" 31+13.79	37.65 RT	51.38	PT
119	"N" 31+04.41	45.89 RT	51.98	PRC
120	"N" 30+94.75	34.08 RT	52.09	TBC/MTE
121	"N" 30+96.54	38.73 RT	52.12	PC
122	"N" 30+94.99	47.22 RT	52.26	PT
123	"N" 31+00.24	52.47 RT	52.33	PT
124	"B" 21+09.29	56.64 LT	56.13	PC
125	"B" 21+13.78	51.34 LT	56.18	PT
126	"B" 21+17.57	44.84 LT	56.05	PC
127	"B" 21+32.16	35.87 LT	56.54	BKSW/MTE
128	"B" 21+37.85	35.06 LT	56.26	BKSW/MTE
129	"B" 21+07.85	47.44 LT	56.05	PC
130	"B" 21+07.94	41.37 LT	55.85	PT
131	"B" 21+06.00	39.66 LT	55.75	BKSW
132	"B" 21+05.77	30.98 LT	55.64	MTE
133	"B" 21+37.63	30.12 LT	56.20	MTE
134	"B" 21+46.29	53.57 RT	56.00	BKSW/MTE
135	"B" 21+48.09	59.07 RT	56.06	BKSW/MTE
136	"B" 21+40.27	54.76 RT	55.84	PT
137	"B" 21+26.56	42.18 RT	55.98	PC/MTE
138	"B" 21+06.30	41.31 RT	55.46	MTE
139	"B" 21+09.22	55.71 RT	55.24	PT
140	"B" 21+03.62	66.48 RT	54.74	PC
141	"B" 21+06.76	74.18 RT	54.62	PC
142	"B" 20+86.11	83.40 RT	53.56	BKSW
143	"B" 20+56.50	89.63 RT	52.46	SWK
144	"B" 20+54.27	100.23 RT	52.06	PT
145	"D" 120+67.66	96.85 RT	51.50	PC
146	"B" 20+38.48	100.21 RT	51.67	PT
147	"D" 120+78.72	92.43 RT	51.54	PC
148	"D" 120+40.81	77.61 RT	52.20	BKSW
149	"D" 120+48.65	72.20 RT	52.31	BKSW
150	"D" 120+31.73	57.54 RT	53.07	PT
151	"D" 120+14.46	52.96 RT	53.27	PT
152	"D" 120+30.20	39.99 RT	53.32	BKSW
153	"D" 119+79.45	38.24 RT	52.65	PC
154	"D" 119+79.60	33.25 RT	52.58	SWK
155	"D" 119+80.98	26.92 RT	52.61	SWK
156	"D" 119+74.74	25.54 RT	52.13	MTE
157	"D" 119+73.23	32.51 RT	52.44	SWK/MTE
158	"D" 119+47.75	37.49 RT	52.73	BKSW
159	"D" 119+39.45	36.96 RT	52.80	BKSW/MTE
160	"D" 119+39.52	32.02 RT	52.71	MTE

CURVE TABLE

C #	L	RAD	DELTA	CHORD	BEARING
C3	72.62	116.22	35.80	71.45	N47° 19' 21"W
C4	13.96	15.10	52.99	13.47	N82° 10' 15"E
C5	8.24	20.00	23.60	8.18	N67° 28' 06"E
C6	9.23	7.53	70.27	8.67	N44° 08' 05"E
C7	6.98	20.00	19.99	6.94	N89° 15' 47"E
C8	6.89	4.00	98.74	6.07	S51° 21' 49"E
C9	16.19	18.00	51.54	15.65	N73° 29' 16"E
C10	21.16	12.20	99.36	18.60	N82° 03' 41"E
C11	12.82	11.25	65.31	12.14	S22° 58' 45"E
C12	44.07	246.34	10.25	44.01	S19° 26' 09"W
C13	26.16	103.61	14.47	26.09	S13° 47' 36"W
C14	10.02	46.38	12.38	10.01	N16° 04' 22"E
C15	18.80	15.00	71.81	17.59	N62° 32' 53"E
C16	35.05	33.34	60.23	33.46	S3° 59' 30"E



PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER

08/07/2020

SR 2/3/21

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	STPHWY00293/958032	2020	H1	H9

LEGEND

LEGEND APPLIES TO "H" SHEETS ONLY.

	EXISTING	PROPOSED
JUNCTION BOX, TYPE IA		
JUNCTION BOX, TYPE II		
JUNCTION BOX, TYPE III		
SIGNAL POLE W/MAST ARM		
LOAD CENTER		
LUMINAIRE		22
RIGID METAL CONDUIT		
SIGN		H
ROUNDABOUT PAVEMENT MARKING AREA		

ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC
AH	AHEAD
AVE	AVENUE
BPC	BLUE PAINTED CURB
C/A	CONTROL ACCESS
DOT&PF	DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DY	DOUBLE YELLOW
EB	EASTBOUND
EOP	EDGE OF PAVEMENT
IN OR "	INCH
LF	LINEAR FOOT
L.O.C.	LIP OF CURB
MILL	MILLILITERS
MTE	MATCH TO EXISTING
NB	NORTHBOUND
NE	NORTHEAST
NO.	NUMBER
NTS	NOT TO SCALE
NW	NORTHWEST
RP	REFERENCE POINT
SB	SOUTHBOUND
SE	SOUTHEAST
SW	SOUTHWEST
SF	SQUARE FOOT
SY	SQUARE YARD
STD	SEE STANDARD PLAN
TYP	TYPICAL
V	DESIGN SPEED
W	WHITE
WB	WESTBOUND
WD	WHITE DASHED
WRE	WHITE ROUNDABOUT ENTRY
Y	YELLOW
YPC	YELLOW PAINTED CURB

INDEX OF SHEETS

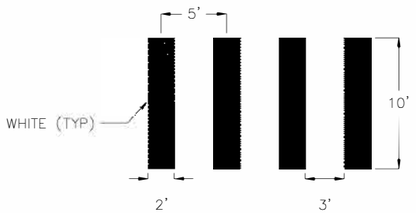
SHEET NO.	DESCRIPTION
H-1	TRAFFIC LEGEND, DETAILS, AND SHEET INDEX
H-2 TO H-6	SIGNING AND STRIPING PLAN SHEETS
H-7 TO H-9	SIGN SUMMARY

TRAFFIC MARKING SUMMARY

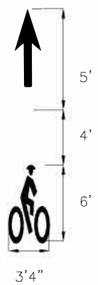
DESCRIPTION	UNIT	QUANTITY	STRIPING THICKNESS (MIL)	REMARKS
670.2002.0000 – MMA PAVEMENT MARKINGS, INLAID				
RIGHT TURN ARROWS	EACH	2	125	
"ONLY" LETTERING	EACH	1	125	
4" W	LF	5665	125	
4" WD	LF	20	125	
4" DY	LF	2823	125	
8" W	LF	169	125	
18" Y (STD)	SF	135	125	
CROSSWALK BARS (ZEBRA)	SF	140	125	
LEFT TURN ARROWS	EACH	2	125	
COMBINATION ARROWS	EACH	1	125	
BIKE LANE SYMBOLS	EACH	5	125	
670.2001.0000 – MMA PAVEMENT MARKINGS, SURFACE APPLIED				
STOP BARS	SF	50	60	
670.2002.0000 – MMA PAVEMENT MARKINGS, INLAID				
RIGHT TURN ARROWS	EACH	3	500	ROUNDABOUT*
4" W	LF	455	500	ROUNDABOUT*
4" WD	LF	82	500	ROUNDABOUT*
4" Y	LF	627	500	ROUNDABOUT*
4" DY	LF	582	500	ROUNDABOUT*
8" W	LF	386	500	ROUNDABOUT*
8" WRE	LF	22	500	ROUNDABOUT*
18" Y (STD)	SF	575	500	ROUNDABOUT*
LEFT TURN ARROWS	EACH	3	500	ROUNDABOUT*
CROSSWALK BARS (ZEBRA)	SF	500	500	ROUNDABOUT*
BIKE LANE SYMBOLS	EACH	4	500	ROUNDABOUT*
*	INCLUDES ALL MARKINGS FROM STA "D" 118+00 TO STA "D" 121+45, STA "N" 30+00 TO "N" 32+13.23, AND STA "B" 20+00 TO STA "B" 23+11			
670.0001.0000 – PAINTED TRAFFIC MARKINGS				
YPC	LF	75	16-20	

PAVEMENT DETAILS

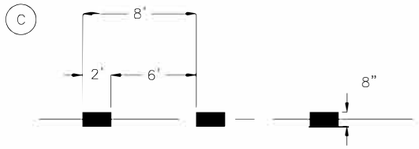
A



B



C

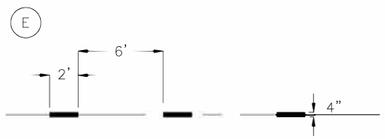


8" WHITE ROUNDABOUT ENTRY LINE (8" WRE)

D



E



F

YELLOW PAINTED CURB NOSE

SIGNING KEY

(#) STATION
SIGN CODE(S)
SIGN LOCATION #

PAVEMENT MARKING KEY

(X) STATION
SIGN CODE(S)
DETAIL LETTER

SR 2/3/21

H ANS DEVELOPED BY:
EGNL
9655 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-4200

STATE OF ALASKA
2015
Engineer & Notary
No. CC10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

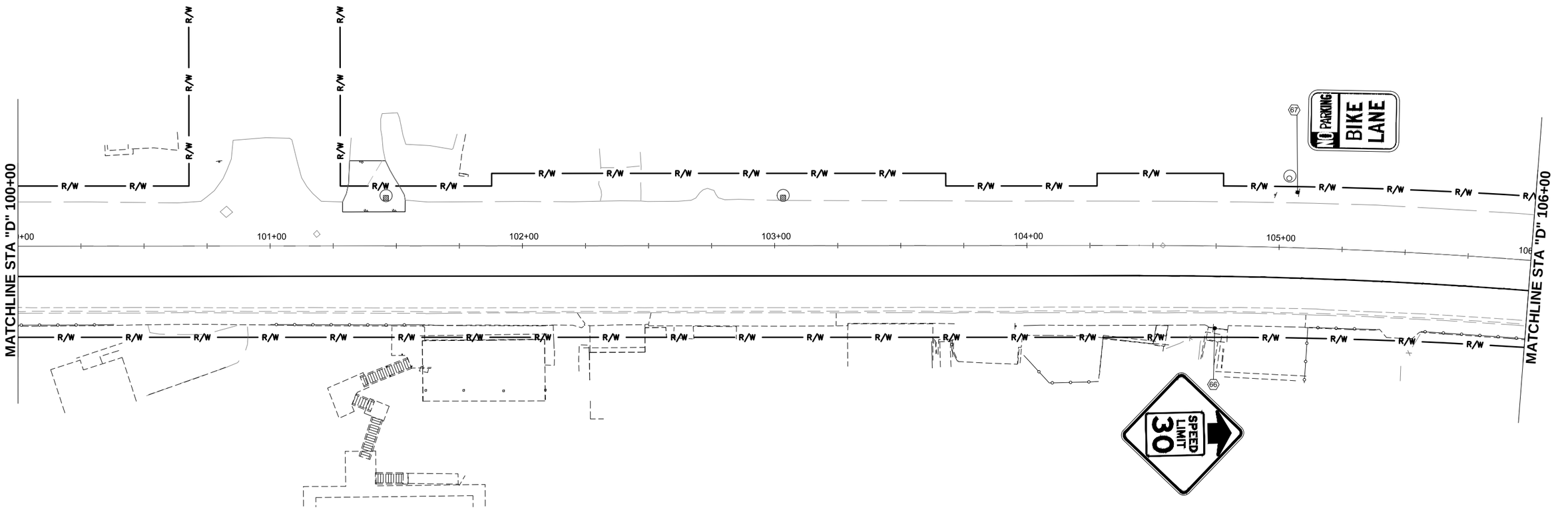
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

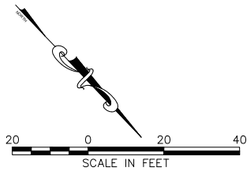
JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE 1

TRAFFIC LEGEND AND NOTES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	H2	H9





SR 2/3/21

NOTES:

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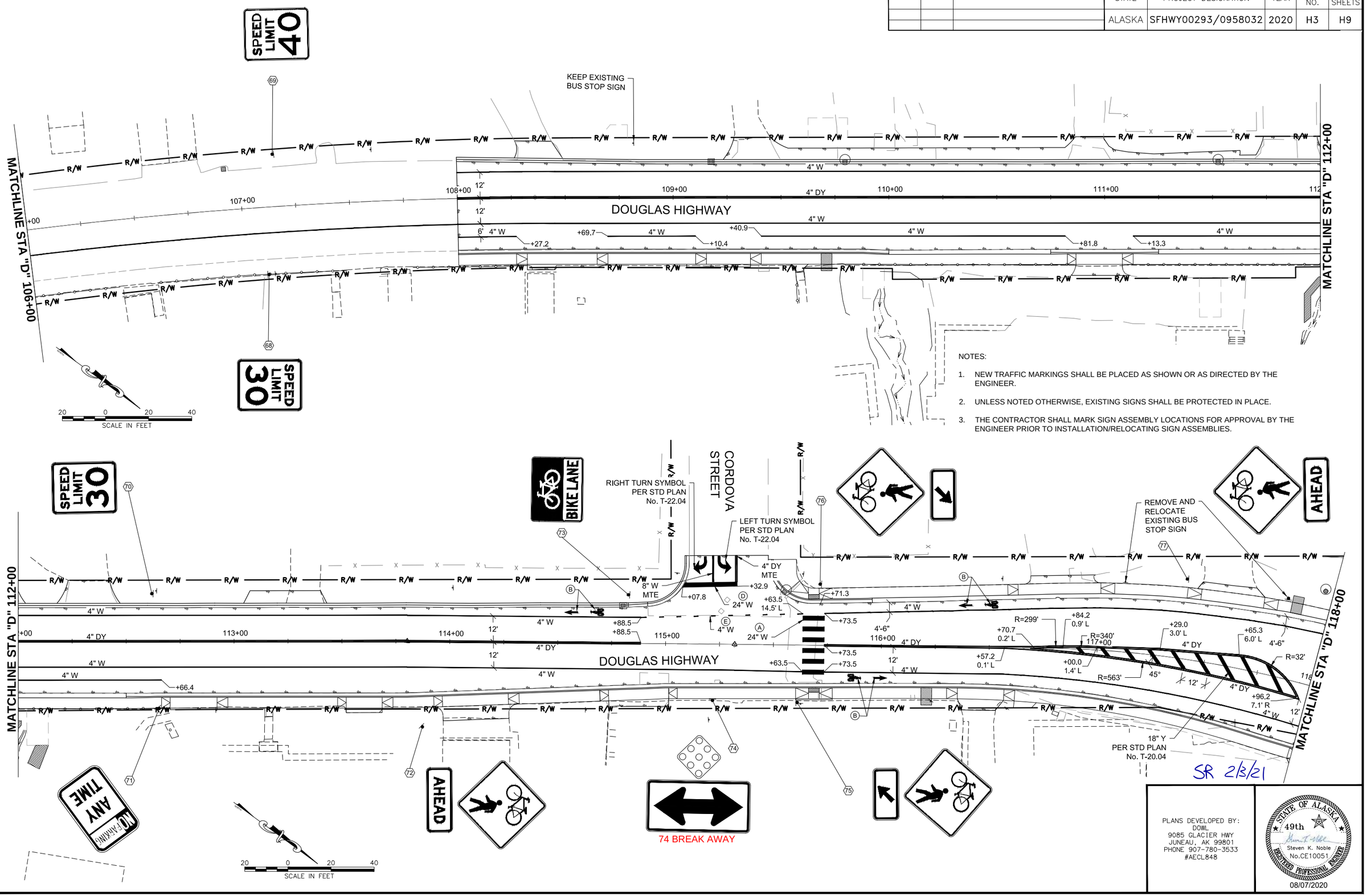
PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
PROFESSIONAL ENGINEER
08/07/2020

FIRM DOWL
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801
PHONE (907) 780-3533
CERTIFICATE OF AUTH #: AECL848
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-GT-SS-H-70897.dwg
LAYOUT H2
DESIGNED STEPHENS
CHECKED NOBLE
DRAFTED KEMP
DATE 8/4/2020 17:09

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	H3	H9



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SR 2/3/21

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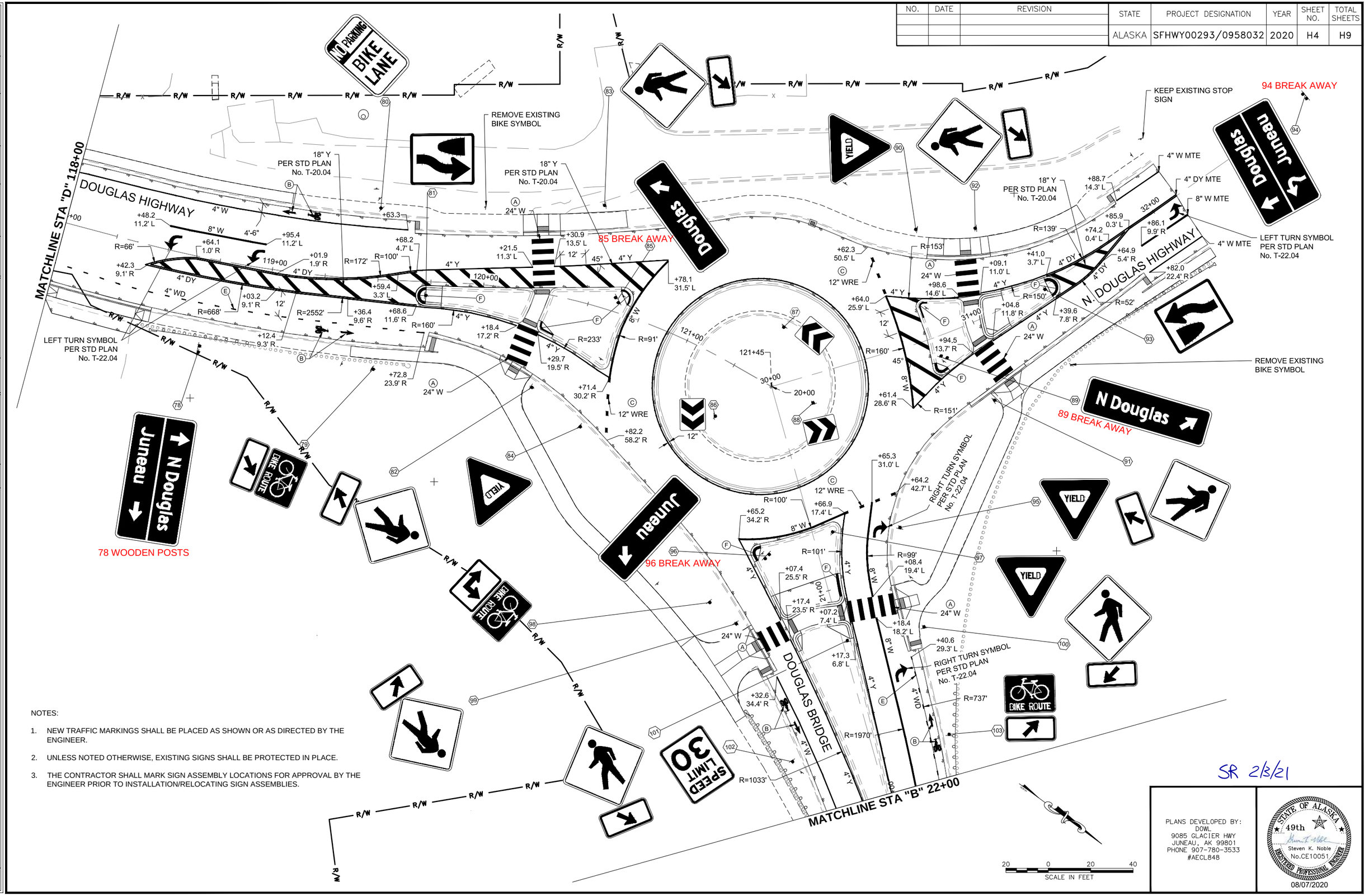
STATE OF ALASKA
49th
Steven K. Noble
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REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM	DOWL	ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848		
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-SS-H-70897.dwg	DATE	8/4/2020	LAYOUT	H3	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	H4	H9

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FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-SS-H-70897.dwg	DATE	8/4/2020	LAYOUT	H4	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP



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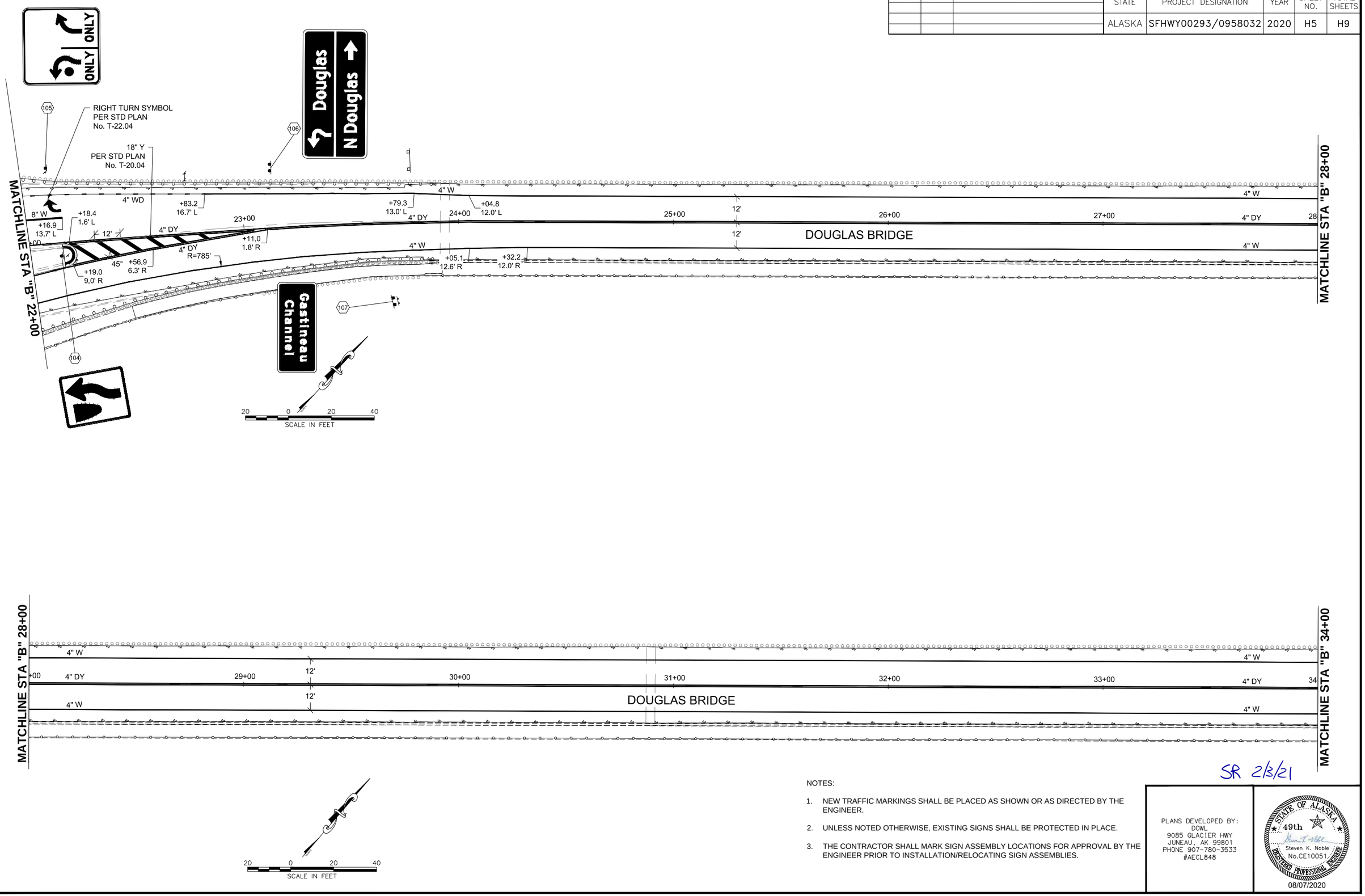
SR 2/3/21

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9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
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STATE OF ALASKA
49th
Steven K. Noble
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08/07/2020

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	H5	H9



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SR 2/3/21

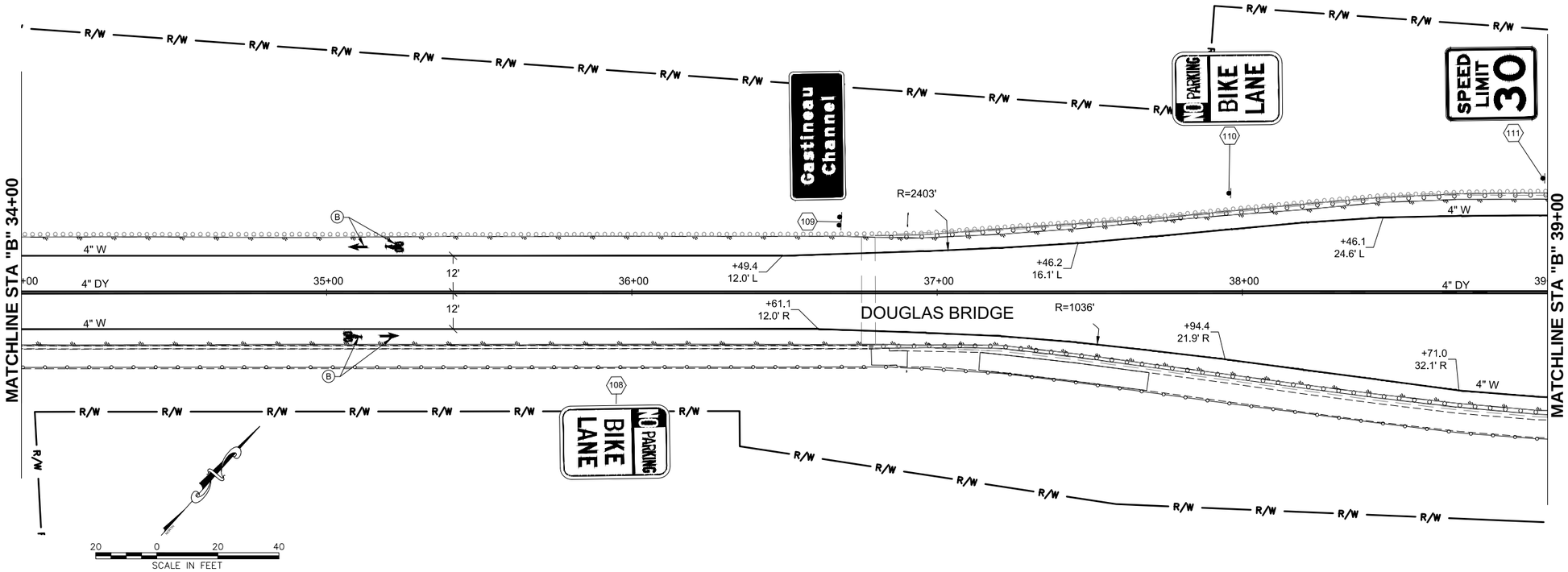
PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
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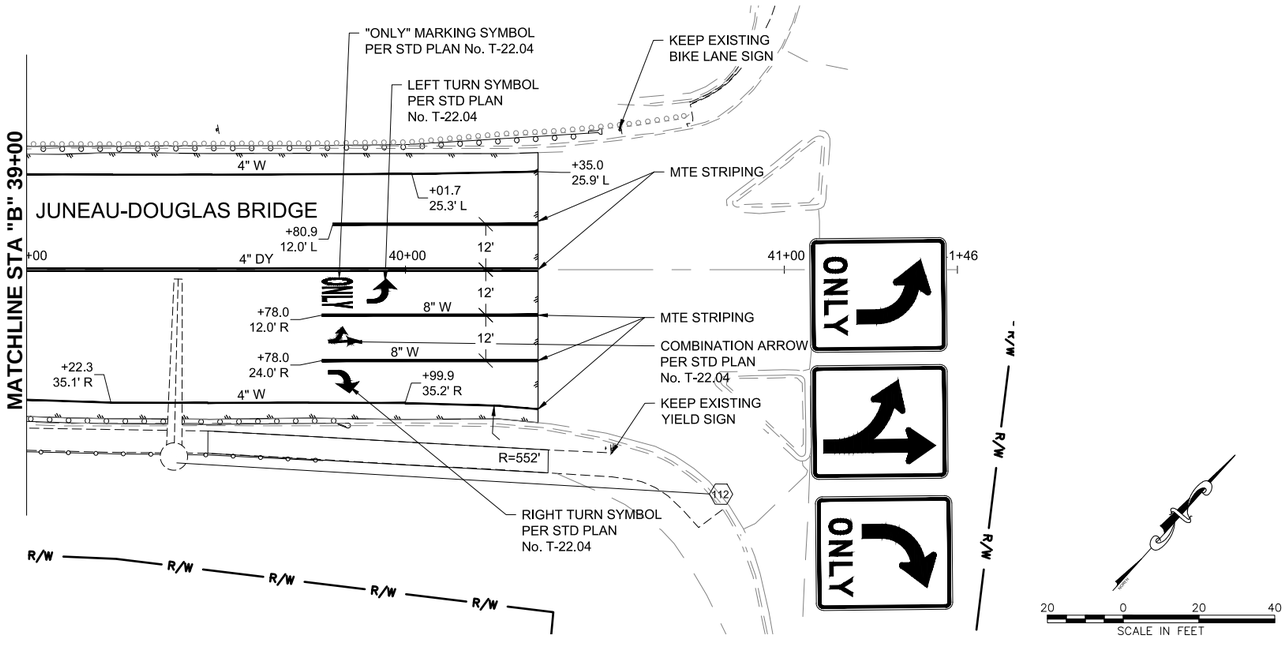
STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-SS-H-70897.dwg | DATE 8/4/2020 17:09 | LAYOUT H5 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	H6	H9





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SR 2/3/21

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JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA 49th
Steven K. Noble
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REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-SS-H-70897.dwg | DATE 8/4/2020 17:09 | LAYOUT H6 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	H7	H9

SHEET	POST NO.	STATION ALIGNMENT	CL REF	TYPE	LEGEND/SIGN	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (SQ.FT)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMES YES	FRAMES NO	REMARKS
H2	66	"D" 104+75	RT	W3-5	REDUCED SPEED LIMIT AHEAD	36	36	9	SE	1-2.5" PST		X	
	67	"D" 105+07	LT	R7-9	NO PARKING BIKE LANE	12	18	1.5	NW	1-2.5" PST		X	
H3	68	"D" 107+11	RT	R2-1	SPEED LIMIT 30	24	30	5	SE	1-2.5" PST		X	
	69	"D" 107+59	LT	R2-1	SPEED LIMIT 40	24	30	5	NW	1-2.5" PST		X	
	70	"D" 112+62	LT	R2-1	SPEED LIMIT 30	24	30	5	NW	1-2.5" PST		X	
	71	"D" 112+65	RT	R7P-101	NO PARKING ANYTIME	12	18	1.5	S	1-2.5" PST		X	
	72	"D" 113+88	RT	W11-15	COMBINATION BIKE AND PEDESTRIAN CROSSING	30	30	6.25	SE	1-2.5" PST		X	MOUNT W16-9P UNDER W11-15 ON SAME POST.
				W16-9P	AHEAD	24	12	2				X	
	73	"D" 114+83	LT	R3-17	BIKE LANE	30	24	5	NW	1-2.5" PST		X	
	74	"D" 115+33	RT	W1-7	LARGE ARROW (TWO DIRECTION)	48	24	8	W	1-3" ST	X	X	
				OM4-1	OBJECT MARKER (TYPE 4)	18	18	2.25				X	
	75	"D" 115+67	RT	W11-15	COMBINATION BIKE AND PEDESTRIAN CROSSING	30	30	6.25	SE	1-2.5" PST		X	MOUNT W16-7PL UNDER W11-15 ON SAME POST.
				W16-7PL	LEFT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	76	115+67	LT	W11-15	COMBINATION BIKE AND PEDESTRIAN CROSSING	30	30	6.25	NW	1-2.5" PST		X	MOUNT W16-7PL UNDER W11-15 ON SAME POST.
				W16-7PL	LEFT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	77	"D" 117+37	LT	W11-15	COMBINATION BIKE AND PEDESTRIAN CROSSING	30	30	6.25	NW	1-2.5" PST		X	MOUNT W16-9P UNDER W11-15 ON SAME POST.
				W16-9P	AHEAD	24	12	2				X	
H4	78	"D" 118 +73	RT	D1-2D	N DOUGLAS/JUNEAU	60	30	12.5	SE	△ 2-2.5" ST	X		BEHIND GUARDRAIL, REFER TO STD PLAN NO. S-05.02, AND S-32.02. △
	79	"D" 119+47	RT	D11-1	BIKE ROUTE	24	18	3	S	1-2.5" PST		X	MOUNT M6-2 UNDER D11-1 ON SAME POST.
				M6-2	DIRECTIONAL ARROW AUXILIARY	12	9	0.75				X	
	80	"D" 119+50	LT	R7-9	NO PARKING BIKE LANE	12	18	1.5	N	1-2.5" PST		X	
	81	"D" 119+73	LT	R4-7C	KEEP RIGHT	24	30	5	SE	1-2.5" PST		X	INSTALL 5 FEET FROM CURB NOSE, REFER TO STD PLAN NO. S-05.02. △

NOTES:

1. SIGNS SCHEDULED TO BE REMOVED AND REINSTALLED SHALL BE PLACED ON NEW FOUNDATIONS WITH NEW POST AND HARDWARE.

SR 2/3/21

REVISIONS			
REV	DATE	DESCRIPTION	BY
△1	11/12/20	Addendum No. 1	RS

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA 49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/12/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY PM CONSTRUCTION STAGE I

SIGN SUMMARY

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-SS-H-70897.dwg | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP
DATE 11/12/2020 10:38 | LAYOUT H7

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	H8	H9

SHEET	POST NO.	STATION ALIGNMENT	CL REF	TYPE	LEGEND/SIGN	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (SQ.FT)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMES YES	FRAMES NO	REMARKS
H4	82	"D" 120+32	RT	W11-2	PEDESTRIAN TRAFFIC	30	30	6.25	S	1-2.5" PST		X	MOUNT W16-7 UNDER W11-2 ON SAME POST.
				W16-7PL	LEFT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	83	"D" 120+46	LT	W11-2	PEDESTRIAN TRAFFIC	30	30	6.25	NW	1-2.5" PST		X	MOUNT W16-7 UNDER W11-2 ON SAME POST.
				W16-7PL	LEFT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	84	"D" 120+65	RT	R1-2	YIELD	36	36	9	S	1-2.5" PST		X	
	85	"D" 120+63	LT	D1-1D	DOUGLAS	54	18	6.75	NW	2-2.5" ST	X		
	86	"D" 121+30	RT	R6-4	ROUNDABOUT DIRECTIONAL (2 CHEVRONS)	30	24	5	SE	1-2.5" PST		X	
	87	"D" 121+36	LT	R6-4	ROUNDABOUT DIRECTIONAL (2 CHEVRONS)	30	24	5	W	1-2.5" PST		X	
	88	"N" 30+17	RT	R6-4	ROUNDABOUT DIRECTIONAL (2 CHEVRONS)	30	24	5	NW	1-2.5" PST		X	
	89	"N" 30+81	RT	D1-1D	N DOUGLAS	60	18	7.5	E	2-2.5" ST	X		INSTALL 5 FEET FROM CURB NOSE, REFER TO STD PLAN NO. S-05.02.
	90	"N" 30+91	LT	R1-2	YIELD	36	36	9	NW	1-2.5" PST		X	
	91	"N" 30+95	RT	W11-2	PEDESTRIAN TRAFFIC	30	30	6.25	E	1-2.5" PST		X	MOUNT W16-7 UNDER W11-2 ON SAME POST.
				W16-7PL	LEFT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	92	"N" 31+21	LT	W11-2	PEDESTRIAN TRAFFIC	30	30	6.25	NW	1-2.5" PST		X	MOUNT W16-7 UNDER W11-2 ON SAME POST.
				W16-7PL	LEFT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	93	"N" 31+37	RT	R4-7C	KEEP RIGHT	24	30	5	W	1-2.5" PST		X	INSTALL 5 FEET FROM CURB NOSE, REFER TO STD PLAN NO. S-05.02.
	94	"N" 32+95	LT	D1-2D	DOUGLAS/JUNEAU	54	30	11.25	W	2-3.0" ST	X		PLACE APPROX. 175 FEET IN ADVANCE OF POST 92.
	95	"B" 20+74	LT	R1-2	YIELD	36	36	9	NE	1-2.5" PST		X	
	96	"B" 20+75	RT	D1-1D	JUNEAU	54	18	6.75	S	2-2.5" ST	X		INSTALL 5 FEET FROM CURB NOSE, REFER TO STD PLAN NO. S-05.02.
	97	"B" 20+80	LT	R1-2	YIELD	36	36	9	N	1-2.5" PST		X	
	98	"B" 20+90	RT	D11-1	BIKE ROUTE	24	18	3	S	1-2.5" PST		X	MOUNT M6-6 UNDER D11-1 ON SAME POST.
				M6-6	THROUGH AND LEFT DIRECTIONAL ARROW AUXILIARY	12	9	0.75				X	

REVISIONS			
REV	DATE	DESCRIPTION	BY
1	11/12/20	Addendum No. 1	RS
4	11/20/20	Addendum No. 4	RS

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/20/2020

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

SIGN SUMMARY

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-SS-H-70897.dwg | DATE 11/12/2020 10:38 | LAYOUT H8 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/958032	2020	H9	H9

SHEET	POST NO.	STATION ALIGNMENT	CL REF	TYPE	LEGEND/SIGN	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (SQ.FT)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMES YES	FRAMES NO	REMARKS
H4	99	"B" 21+03	RT	W11-2	PEDESTRIAN TRAFFIC	30	30	6.25	S	1-2.5" PST		X	MOUNT W16-7 UNDER W11-2 ON SAME POST.
				W16-7PL	LEFT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	100	"B" 21+25	LT	W11-2	PEDESTRIAN TRAFFIC	30	30	6.25	NE	1-2.5" PST		X	MOUNT W16-7 UNDER W11-2 ON SAME POST.
				W16-7PR	RIGHT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	101	"B" 21+29	LT	W11-2	PEDESTRIAN TRAFFIC	30	30	6.25	NE	1-2.5" PST		X	MOUNT W16-7 UNDER W11-2 ON SAME POST.
				W16-7PL	LEFT DIAGONAL DIRECTIONAL ARROW	24	12	2				X	
	102	"B" 21+73	RT	R2-1	"SPEED LIMIT 30"	24	30	5	S	1-2.5" PST		X	
	103	"B" 21+81	LT	D11-1	"BIKE ROUTE"	24	18	3	NE	1-2.5" PST		X	MOUNT M6-2 UNDER D11-1 ON SAME POST.
				M6-2	RIGHT DIRECTIONAL ARROW AUXILIARY	12	9	0.75				X	
H5	104	"B" 22+14	RT	R4-7C	KEEP RIGHT	24	30	5	NE	1-2.5" PST		X	
	105	"B" 22+12	LT	R3-8	ADVANCE CIRCULAR INTERSECTION LANE CONTROL- LEFT TURN ONLY	36	36	9	NE	1-3.0" ST		X	BEHIND GUARDRAIL, REFER TO STD PLAN NO. S-05.02, AND S-32.02. ⚠
	106	"B" 23+10	LT	D1-2D	DOUGLAS/ N-DOUGLAS	60	30	12.5	NE	2-3.0" ST	X		BEHIND GUARDRAIL, REFER TO STD PLAN NO. S-05.02, AND S-32.02. ⚠
	107	"B" 23+69	RT	I-3	GASTINEAU CHANNEL	42	18	5.25	SW	⚠ 2-2.5" ST		X	BEHIND GUARDRAIL, REFER TO STD PLAN NO. S-05.02, AND S-32.02. ⚠
H6	108	"B" 35+95	RT	R7-9	NO PARKING BIKE LANE	12	18	1.5	W	N/A		X	MOUNT ON ELECTROLIER, LOCATED APPROX. 267 FEET IN ADVANCE OF THE MASTARM USED FOR POST 112 ON THE RIGHT SIDE.
	109	"B" 36+68	LT	I-3	GASTINEAU CHANNEL	42	18	5.25	E	⚠ 2-2.5" ST		X	
	110	"B" 37+96	LT	R7-9	NO PARKING BIKE LANE	12	18	1.5	E	1-2.5" PST		X	BEHIND GUARDRAIL, REFER TO STD PLAN NO. S-05.02, AND S-32.02. ⚠
	111	"B" 38+99	LT	R2-1	SPEED LIMIT 30	24	30	5	E	1-2.5" PST		X	BEHIND GUARDRAIL, REFER TO STD PLAN NO. S-05.02, AND S-32.02. ⚠
	112	"B" 39+39	RT	R3-5L	LEFT MANDATORY MOVEMENT LANE CONTROL ONLY	30	36	7.5	SW	EXISTING		X	MOUNT SIGNS ON EXISTING MASTARM.
				R3-6TL	LEFT AND THROUGH OPTIONAL MOVEMENT LANE CONTROL	30	36	7.5				X	
				R3-5R	RIGHT MANDATORY MOVEMENT LANE CONTROL ONLY	30	36	7.5				X	

REVISIONS			
REV	DATE	DESCRIPTION	BY
⚠	11/12/20	Addendum No. 1	RS

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA 49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
11/12/2020

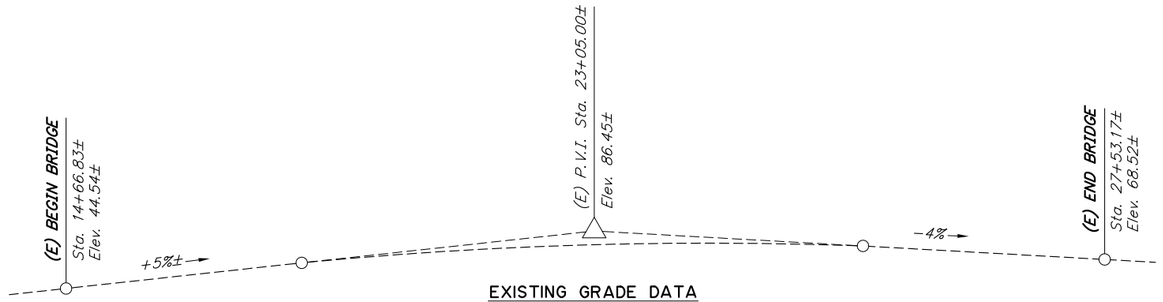
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

JNU DOUGLAS HIGHWAY
PM CONSTRUCTION
STAGE I

SIGN SUMMARY

FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE \\JNU-FS\Jnu-projects\22\70897-02\65CAD\Phase I\SC-CT-SS-H-70897.dwg | LAYOUT H9 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP
DATE 11/12/2020 10:38

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N1	N12

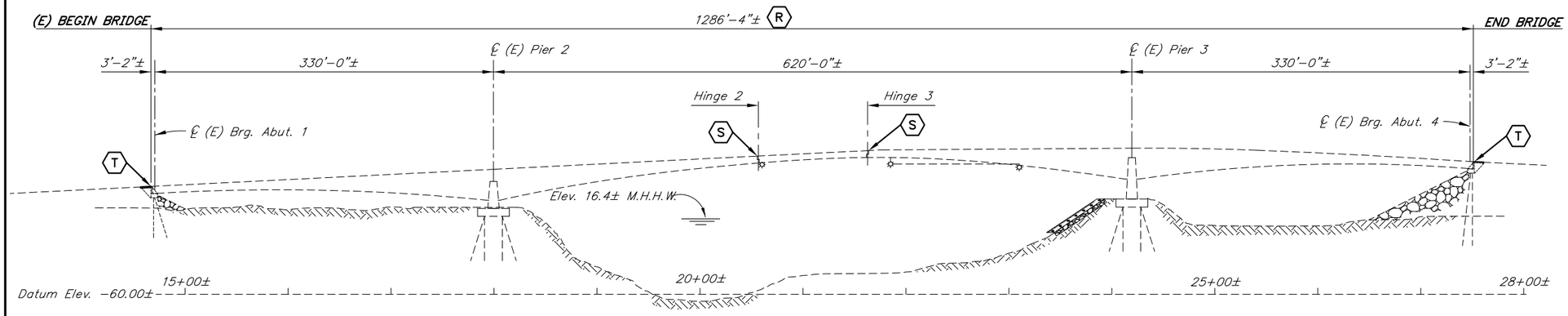


EXISTING GRADE DATA

No Scale

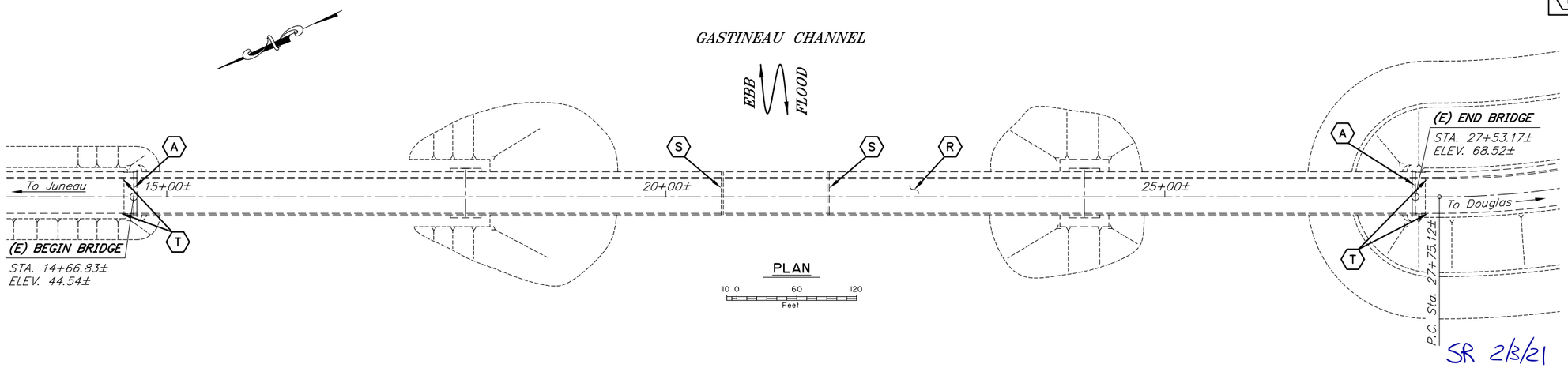
BRIDGE DRAWING INDEX

TITLE	DWG. NO.
GENERAL LAYOUT	1
TYPICAL SECTION	2
ABUTMENT 1 EXISTING EXPANSION JOINT	3
ABUTMENT 1 PROPOSED EXPANSION JOINT	4
ABUTMENT 4 EXISTING EXPANSION JOINT	5
ABUTMENT 4 PROPOSED EXPANSION JOINT	6
SUSPENDED SPAN EXISTING EXPANSION JOINT	7
SUSPENDED SPAN PROPOSED EXPANSION JOINT	8
SUSPENDED SPAN EXISTING FIXED JOINT	9
2-TUBE RAIL DETAILS	10
COMBINATION RAIL DETAILS	11
THRIE BEAM DETAILS	12



ELEVATION

10 0 60 120
Feet



PLAN

10 0 60 120
Feet

SR 2/3/21

LEGEND

- (A) – Replace Abutment Joints
- (S) – Replace Suspension Span Joints
- (R) – Remove and replace asphalt pavement
- (T) – Transition Rail Modification

NOTES:

(E) = Existing

- - - - - = Existing

——— = Proposed

Bridge stations and elevations are based on as-built drawings.

For project stations and elevations, see roadway sheets.

Verify controlling field dimensions before ordering or fabricating any material.

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells	LAYOUT BY: Jesse Escamilla III	CHECKED BY: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III	SPECIFICATIONS BY: Jesse Escamilla III	P S & E COMPARED: Andrew Wells
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells	APPROVAL RECOMMENDED BY: Rich Pratt	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA 49TH
Jesse Escamilla III
08-07-2020
AE# 125547
REGISTERED STRUCTURAL ENGINEER

JNU DOUGLAS HIGHWAY PM CONSTRUCTION STAGE 1

DOUGLAS CROSSING

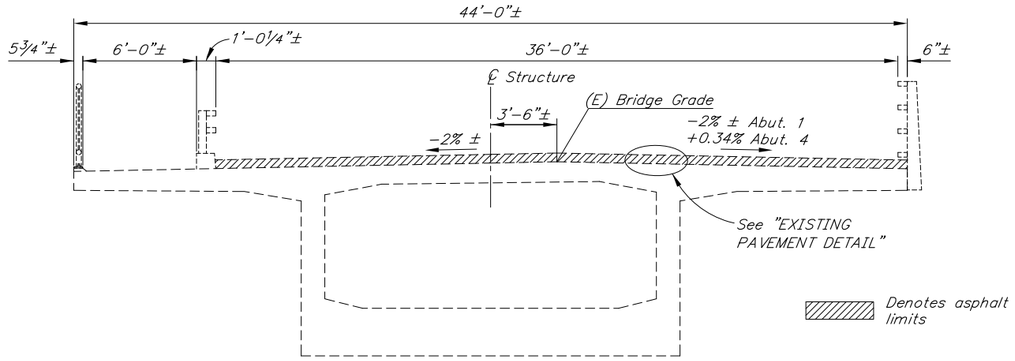
GENERAL LAYOUT

BRIDGE NO. 740

DWG. NO. 1

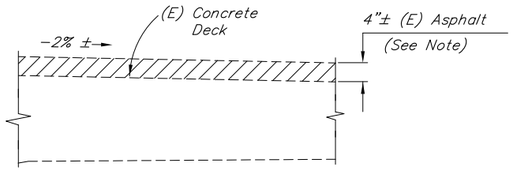
R:\cad\740\740-General Layout Fri, Aug/07/20 3:17pm

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N2	N12



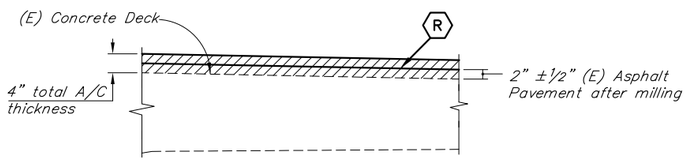
EXISTING TYPICAL SECTION





EXISTING PAVEMENT DETAIL





PAVEMENT DETAIL - THIS CONTRACT



NOTE:

Existing pavement is deeply rutted in some areas. Mill to leave a uniform thickness of 2" ±½" of existing pavement.

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2017 Edition, with latest interim specifications.

LIVE LOAD:..... HL-25

REINFORCEMENT:..... ASTM A706, Grade 60, Fy = 60,000 psi

CONCRETE:.....Class A Concrete unless otherwise noted, f'c = 4000 psi

STRUCTURAL STEEL:.....ASTM A709, Grade 50, Fy = 50,000 psi
Galvanize transition rail elements in accordance with AASHTO M111 unless shown otherwise.

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	PAY UNIT	ESTIMATING UNIT	SUBST.	SUPERST.	TOTAL QUANTITY
202.0002.0014	Removal of Pavement	LS	SY		5,282	5,282
516.0001.0000	Expansion Joint, Silicone	LS	LF		37	37
516.0001.0001	Expansion Joint, Strip Seal	LS	LF		110	110
606.0016.0001	Transition Rail, Modification	EA	EA		4	4

Item numbers are for reference only. Quantities shown are not necessarily the pay quantities nor the total quantity of the particular item.

Existing stations, elevations and dimensions are based on as-built plans, and those plans may not show existing dimensions and conditions. Where dimensions of the propsed work depend on the existing bridge dimensions, field-verify the controlling dimensions and adjust proposed dimensions of the work to fit existing conditions.

SR 2/3/21

NOTES:

(E) = Existing
- - - - - = Existing
——— = Proposed

Bridge stations and elevations are based on as-built drawings.

For project stations and elevations, see roadway sheets.

Verify controlling field dimensions before ordering or fabricating any material.

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA 49TH
Jesse Escamilla III
08-07-2020
SE# 125547
REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

DOUGLAS CROSSING

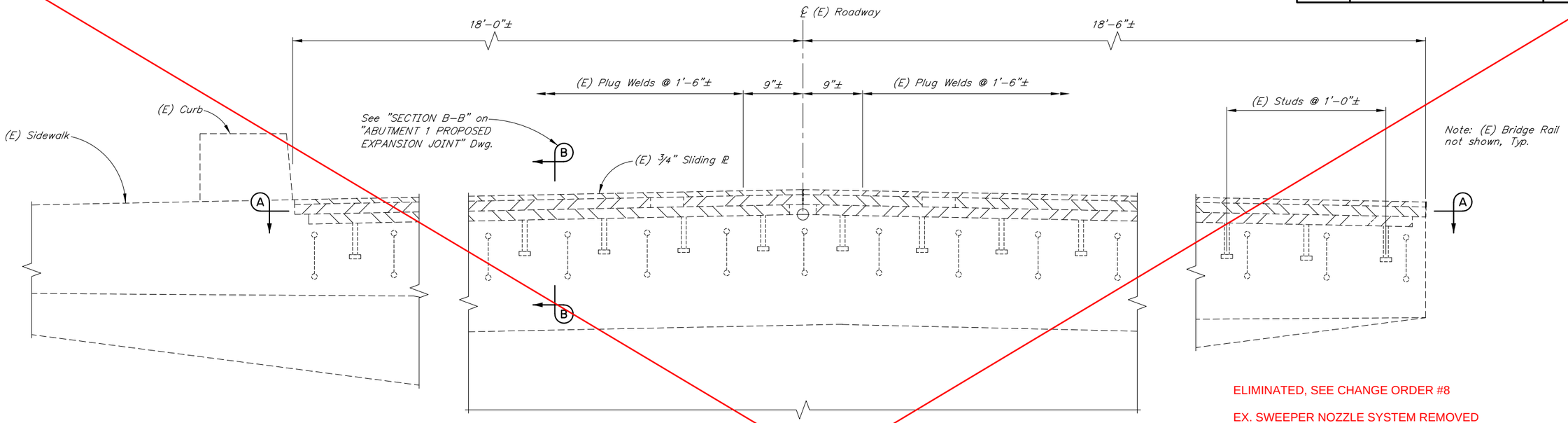
TYPICAL SECTION

BRIDGE NO. 740

DWG. NO. 2

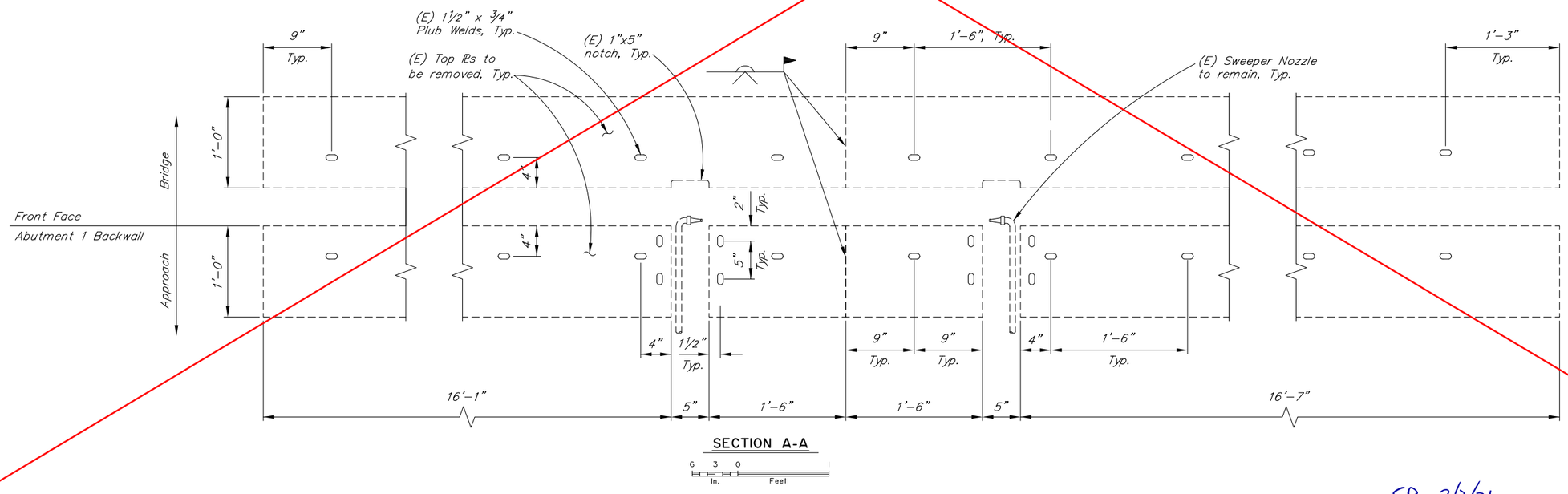
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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N3	N12



EXISTING JOINT ELEVATION

6 3 0
In. Feet



SECTION A-A

6 3 0
In. Feet

ELIMINATED, SEE CHANGE ORDER #8

EX. SWEEPER NOZZLE SYSTEM REMOVED
EX. STEEL PLATES AND STRIP SEAL REMAIN
POLYMER NOSING REPLACED WITH HMA, SP

SR 2/3/21

NOTES:

(E) = Existing
– – – – – = Existing
——— = Proposed

Bridge stations and elevations are based on as–built drawings.

For project stations and elevations, see roadway sheets.

Verify controlling field dimensions before ordering or fabricating any material.

R:\cad\740\740-Abut 1 Ex Joint Fri, Aug/07/20 3:17pm

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907–465–2975

STATE OF ALASKA 49TH
Jesse Escamilla III
08-07-2020
REGISTERED STRUCTURAL ENGINEER
OEA 125547

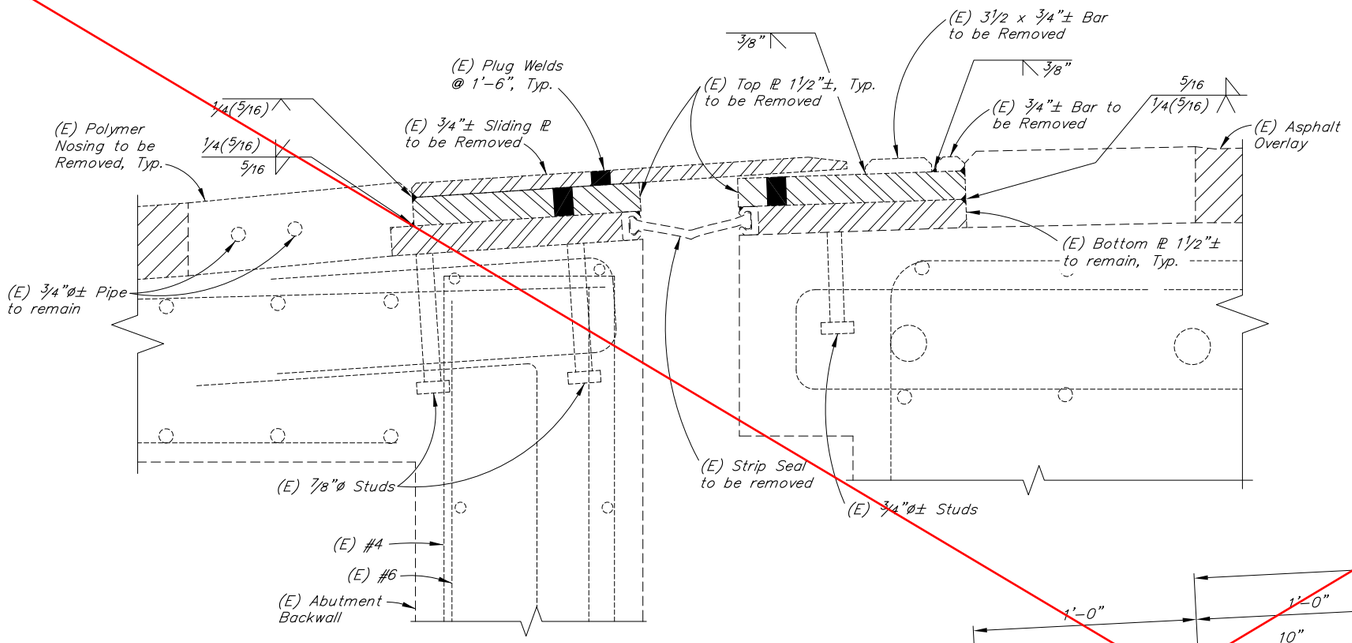
GASTINEAU CHANNEL BRIDGE
DOUGLAS CROSSING
ABUTMENT 1 EXISTING EXPANSION JOINT

BRIDGE NO. 740
DWG. NO. 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N4	N12

ELIMINATED, SEE CHANGE ORDER #8

EX. SWEEPER NOZZLE SYSTEM REMOVED
EX. STEEL PLATES AND STRIP SEAL REMAIN
POLYMER NOSING REPLACED WITH HMA, SP

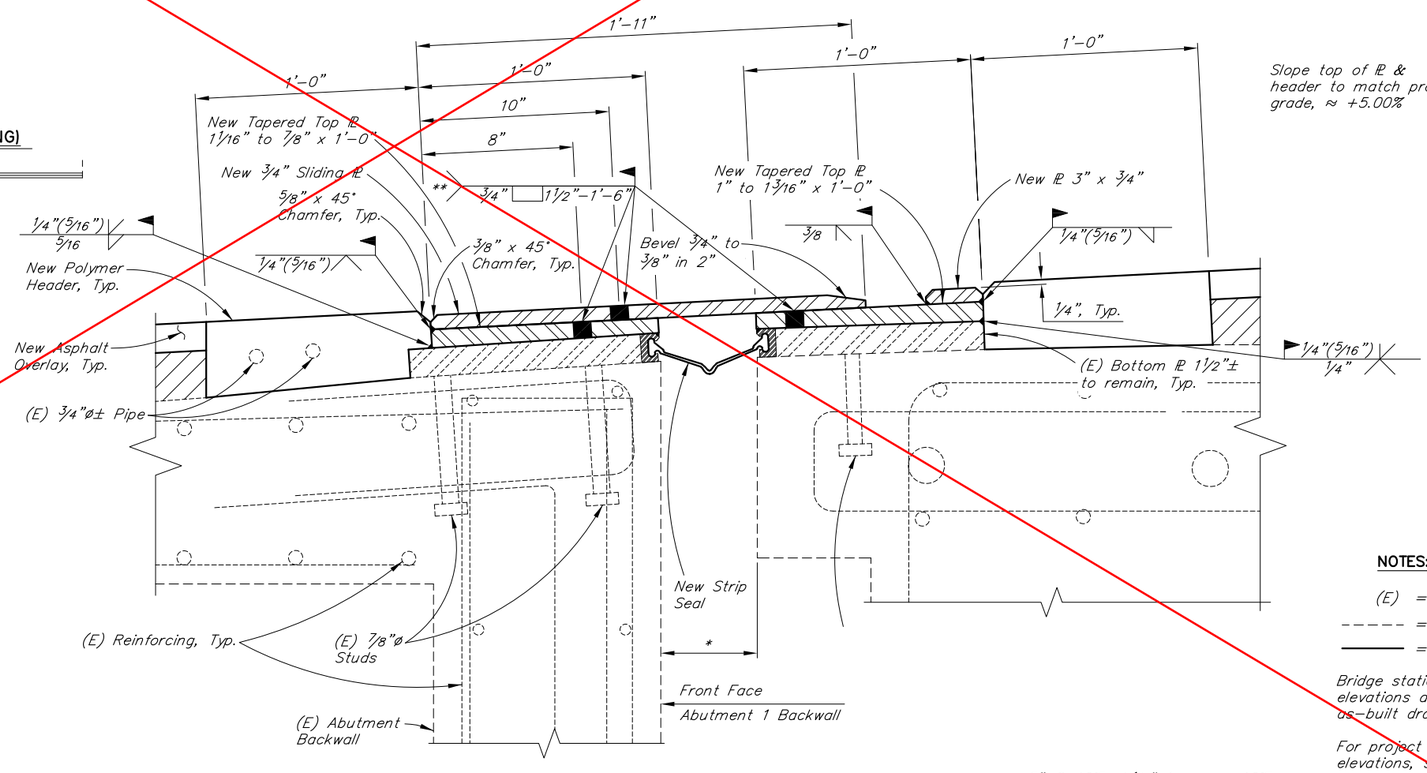


SECTION B-B (EXISTING)

6 3 0 1
In. Feet

NEW STRIP SEAL

No Scale



PROPOSED SECTION

6 3 0 1
In. Feet

Slope top of ℄ & header to match profile grade, ≈ +5.00%

* 5" @ 40'. ±1/4" for every 10'
** For top plate plug Weld spacing details see "SECTION A-A" as shown on previous drawing.

SR 2/3/21

NOTES:

(E) = Existing
- - - - - = Existing
——— = Proposed

Bridge stations and elevations are based on as-built drawings.

For project stations and elevations, see roadway sheets.

Verify controlling field dimensions before ordering or fabricating any material.

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

R:\cad\740\740-Abut 1 Prop Joint Fri, Aug/07/20 3:17pm

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA 49TH — Jesse Escamilla III — 08-07-2020 — SE# 125547 — REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

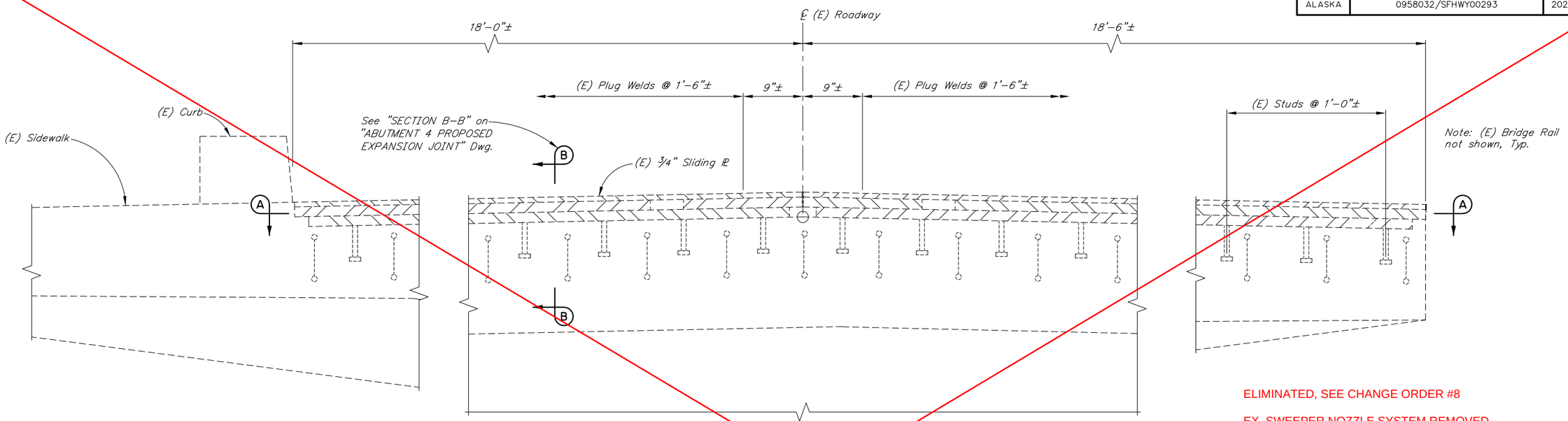
DOUGLAS CROSSING

ABUTMENT 1 PROPOSED EXPANSION JOINT

BRIDGE NO. 740

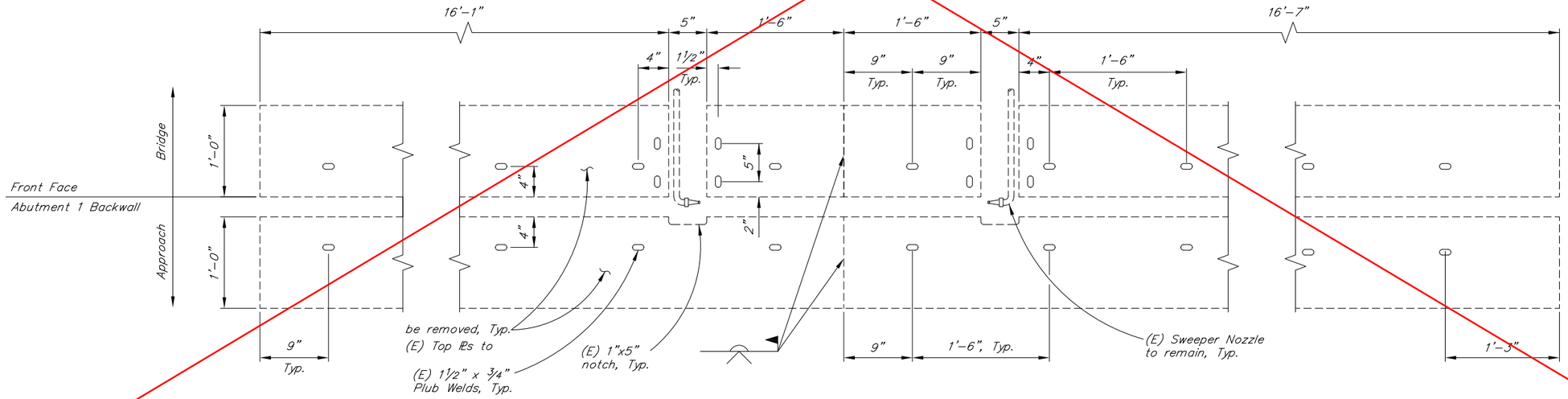
DWG. NO. 4

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N5	N12



EXISTING JOINT ELEVATION

6 3 0 1
In. Feet



SECTION A-A

6 3 0 1
In. Feet

ELIMINATED, SEE CHANGE ORDER #8

EX. SWEEPER NOZZLE SYSTEM REMOVED
EX. STEEL PLATES AND STRIP SEAL REMAIN
POLYMER NOSING REPLACED WITH HMA, SP

NOTES:

(E) = Existing
- - - - - = Existing
——— = Proposed

Bridge stations and elevations are based on as-built drawings.

For project stations and elevations, see roadway sheets.

Verify controlling field dimensions before ordering or fabricating any material.

SR 2/3/21

R:\cad\740\740-Abut 4 Ex Joint Fri, Aug/07/20 3:17pm

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA 49TH
Jesse Escamilla III
08-07-2020
GE# 125547
REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

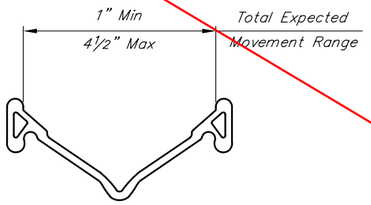
DOUGLAS CROSSING

ABUTMENT 4 EXISTING EXPANSION JOINT

BRIDGE NO. 740

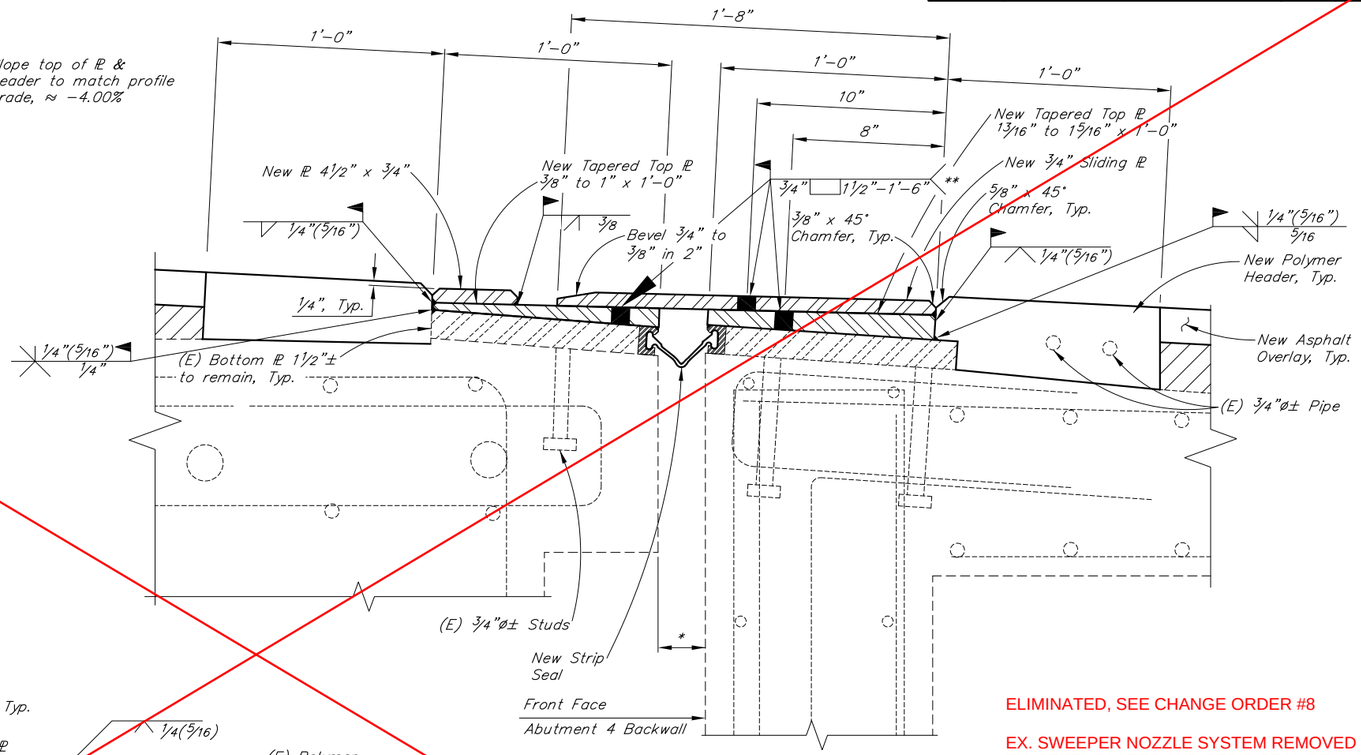
DWG. NO. 5

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N6	N12



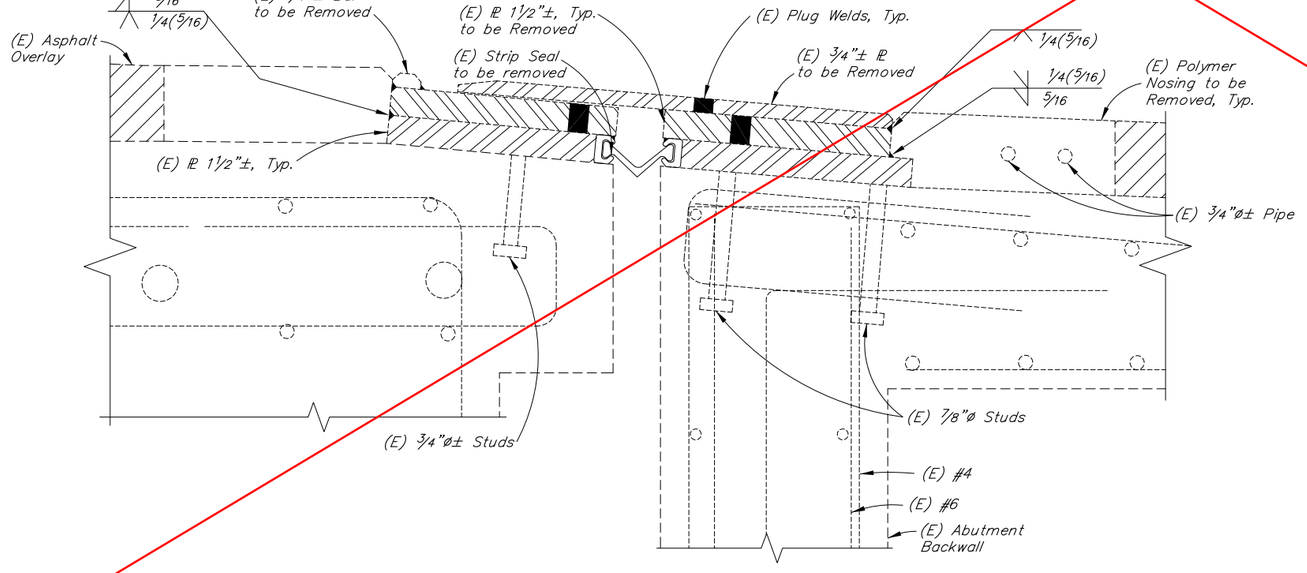
NEW STRIP SEAL

No Scale



PROPOSED SECTION

6 3 0 In. Feet



SECTION B-B

6 3 0 In. Feet

ELIMINATED, SEE CHANGE ORDER #8

EX. SWEEPER NOZZLE SYSTEM REMOVED
EX. STEEL PLATES AND STRIP SEAL REMAIN
POLYMER NOSING REPLACED WITH HMA, SP

* 2⅝" @ 40°F. ±¼" for every 10°F
** For top plate plug Weld spacing details see "SECTION A−A" as shown on previous drawing.

NOTES:

(E) = Existing
– – – – – = Existing
——— = Proposed

Bridge stations and elevations are based on as-built drawings.

For project stations and elevations, see roadway sheets.

Verify controlling field dimensions before ordering or fabricating any material.

SR 2/3/21

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907−465−2975

STATE OF ALASKA 49TH
Jesse Escamilla III
08-07-2020
OE# 125547
REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

DOUGLAS CROSSING

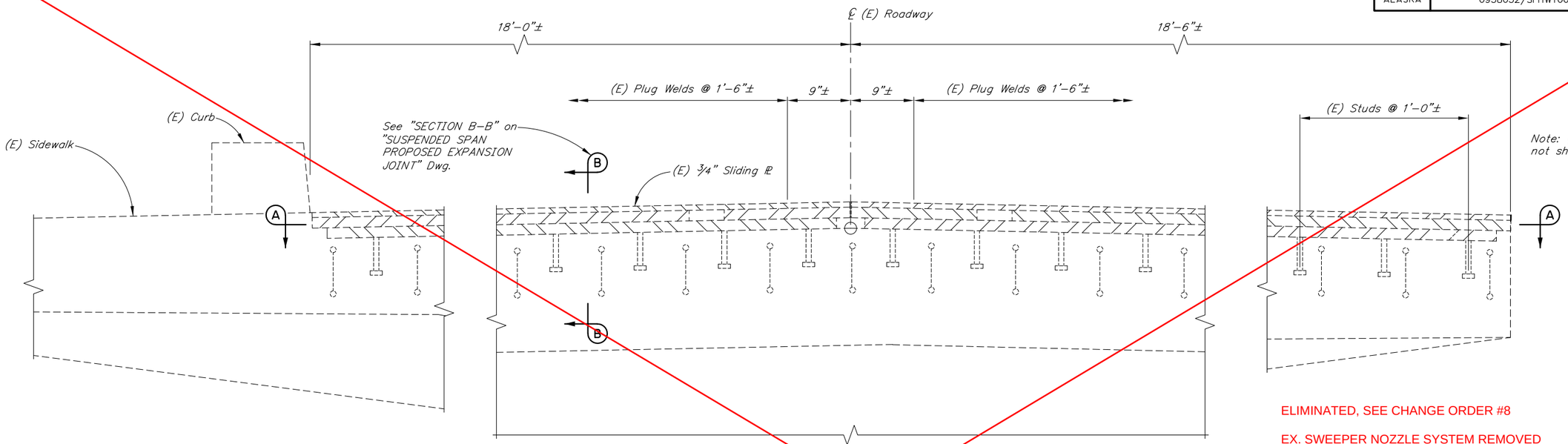
ABUTMENT 4 PROPOSED EXPANSION JOINT

BRIDGE NO. 740

DWG. NO. 6

R:\cad\740\740-Abut 4 Prop Joint Fri, Aug/07/20 3:18pm

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N7	N12

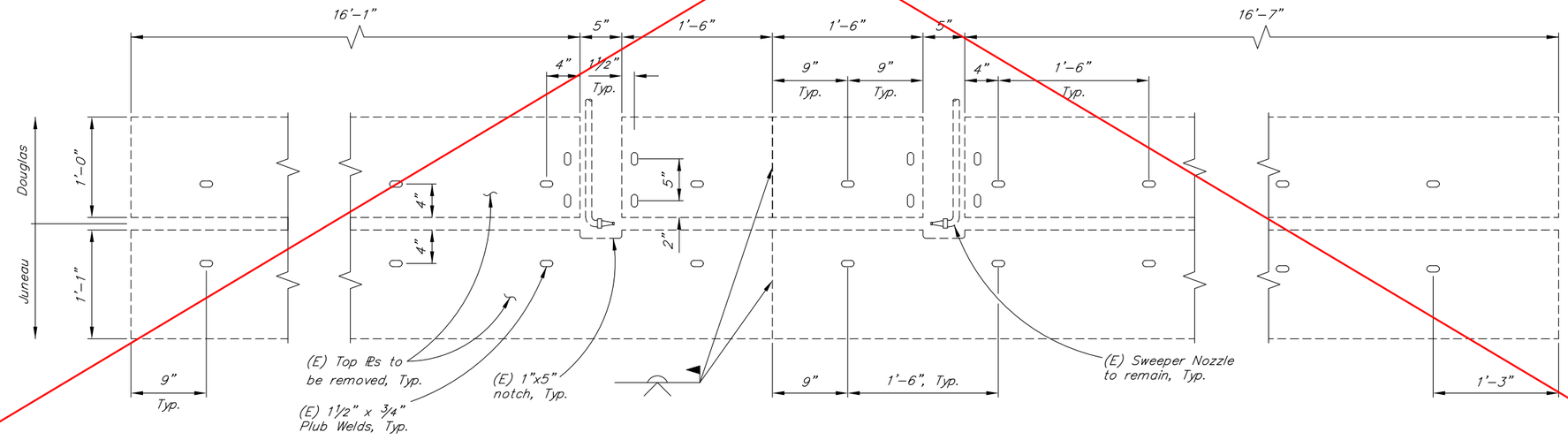


EXISTING JOINT ELEVATION

6 3 0 — In. Feet

ELIMINATED, SEE CHANGE ORDER #8

EX. SWEEPER NOZZLE SYSTEM REMOVED
EX. STEEL PLATES AND STRIP SEAL REMAIN
POLYMER NOSING REPLACED WITH HMA, SP



SECTION A-A

6 3 0 — In. Feet

NOTES:

(E) = Existing
– – – – – = Existing
——— = Proposed

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For project stations and elevations, see roadway sheets.

Verify controlling field dimensions before ordering or fabricating any material.

SR 2/3/21

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA 49TH — Jesse Escamilla III 08-07-2020 SE# 125547 REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

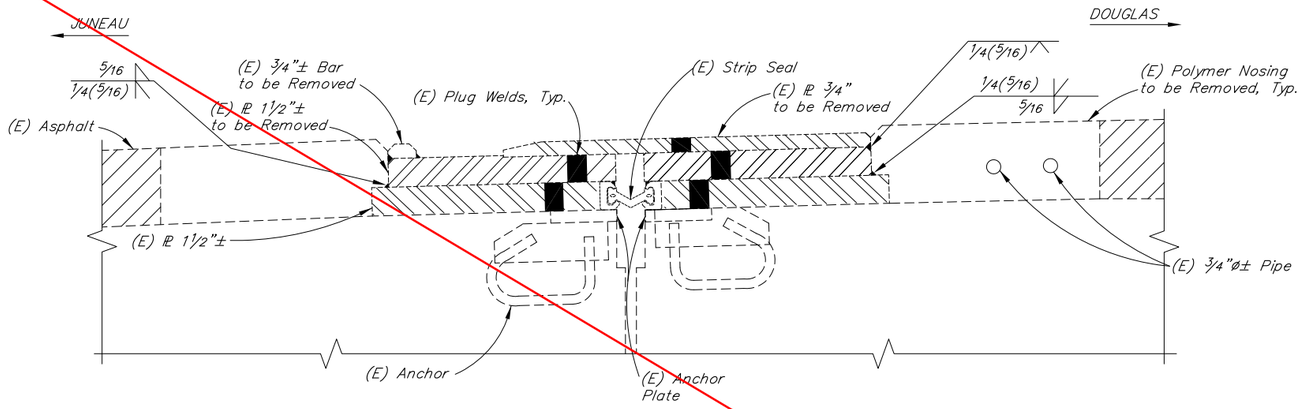
DOUGLAS CROSSING

HINGE 2 SUSPENDED SPAN EXISTING EXPANSION JOINT

BRIDGE NO. 740
DWG. NO. 7

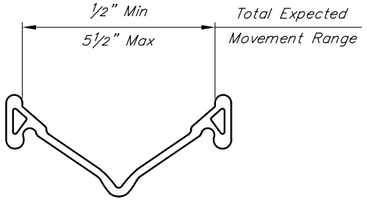
R:\cad\740\740-SSpan Ex Exp Joint Fri, Aug/07/20 3:18pm

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N8	N12



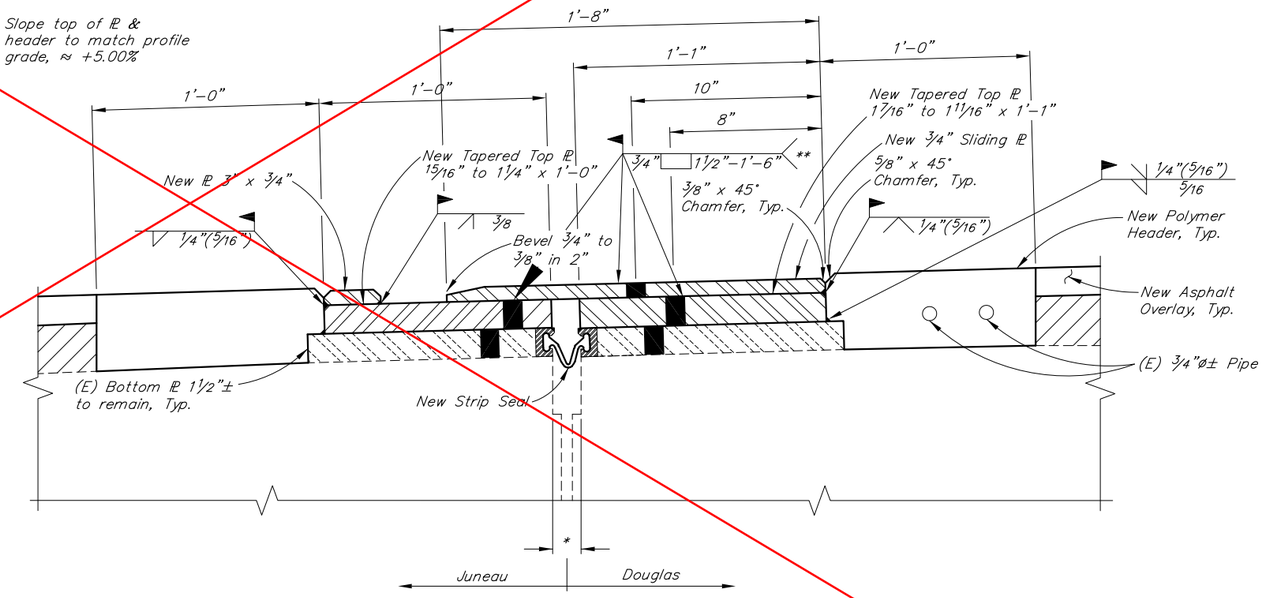
EXISTING JOINT DETAILS

6 3 0 1
In. Feet



NEW STRIP SEAL

No Scale



PROPOSED JOINT DETAILS

6 3 0 1
In. Feet

ELIMINATED, SEE CHANGE ORDER #8

EX. SWEEPER NOZZLE SYSTEM REMOVED
EX. STEEL PLATES AND STRIP SEAL REMAIN
POLYMER NOSING REPLACED WITH HMA, SP

* 1 1/2" @ 40°F. ±7/16" for every 10°F
** For top plate plug Weld spacing details see "SECTION A-A" as shown on previous drawing.

SR 2/3/21

NOTES:

(E) = Existing
- - - - - = Existing
——— = Proposed

Bridge stations and elevations are based on as-built drawings.

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Verify controlling field dimensions before ordering or fabricating any material.

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA 49TH — Jesse Escamilla III 08-07-2020 — SE# 125547 — REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

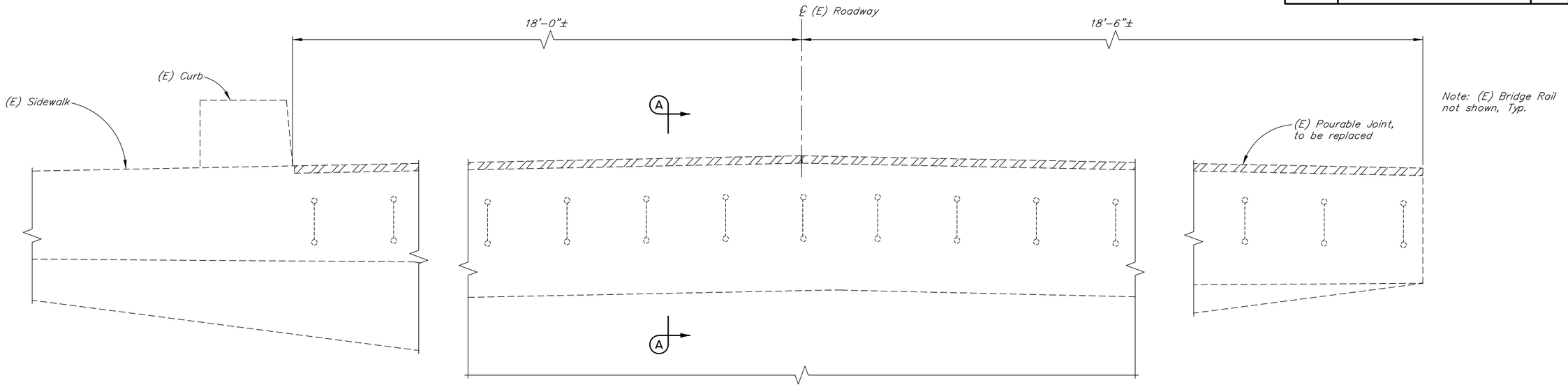
DOUGLAS CROSSING

SUSPENDED SPAN PROPOSED EXPANSION JOINT

BRIDGE NO. 740
DWG. NO. 8

R:\cad\740\740-SSpan Prop Exp Joint Fri, Aug/07/20 3:18pm

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N9	N12

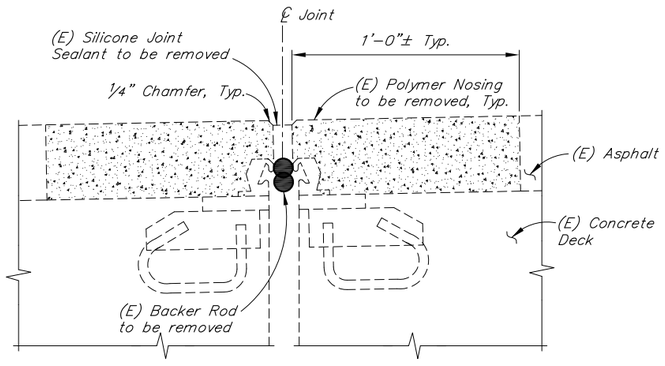


PARTIAL JOINT ELEVATION

6 3 0 1
In. Feet

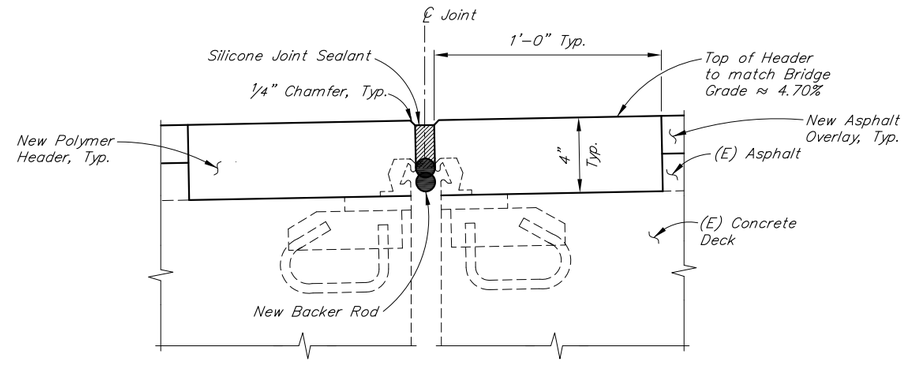
NOT CONSTRUCTED, FOUND DAMAGED CONCRETE BELOW POLYMER NOSING

POLYMER NOSING REPLACED WITH HMA ON LT



SECTION A-A

6 3 0 1
In. Feet



PROPOSED FIXED JOINT

6 3 0 1
In. Feet

SR 2/3/21

NOTES:

(E) = Existing

– – – – – = Existing

——— = Proposed

Bridge stations and elevations are based on as-built drawings.

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Verify controlling field dimensions before ordering or fabricating any material.

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA 49TH
Jesse Escamilla III
09-07-2020
SE# 125547
REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

DOUGLAS CROSSING

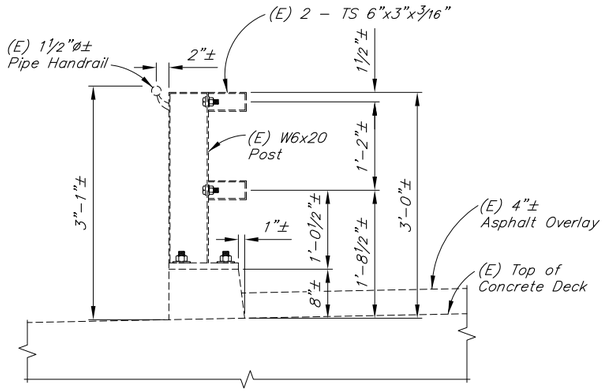
HINGE 1 SUSPENDED SPAN EXISTING FIXED JOINT

BRIDGE NO. 740

DWG. NO. 9

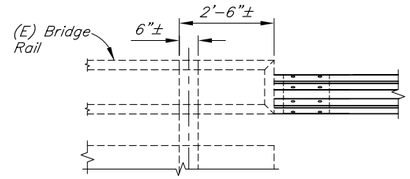
R:\cad\740\740-SSpan Prop Fix Joint (3) Fri, Aug/07/20 3:18pm

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N10	N12



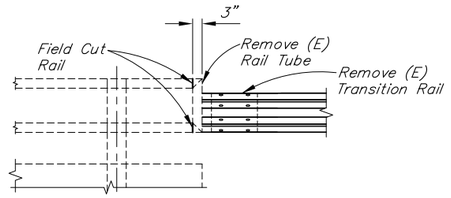
EXISTING TYPICAL SECTION

12 6 0 1 2
In. Feet



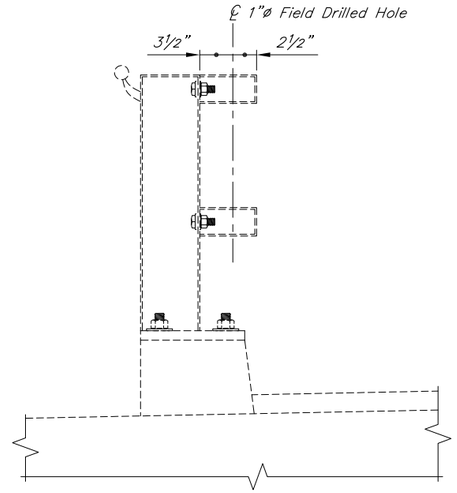
EXISTING RAIL END TERMINUS

12 6 0 1 2 3
In. Feet



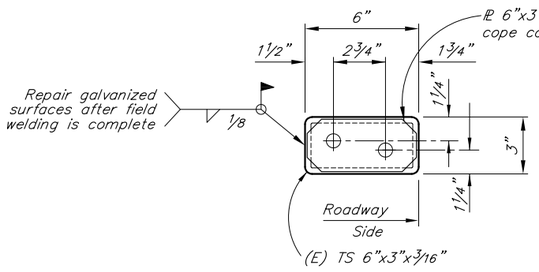
MODIFICATIONS TO RAIL END TERMINUS

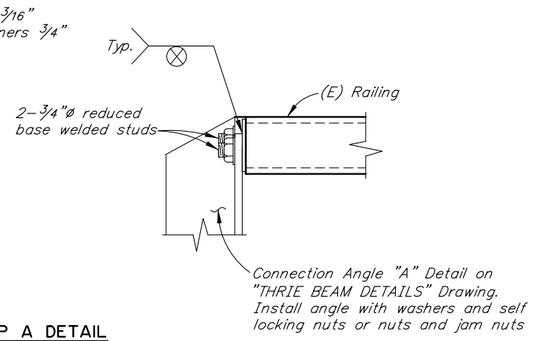
12 6 0 1 2 3
In. Feet



SECTION B-B

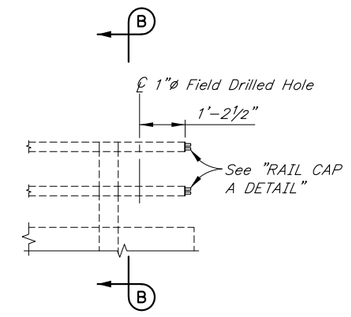
6 3 0 1
In. Feet





RAIL CAP A DETAIL

6 3 0 1
In. Feet



PROPOSED RAIL END TERMINUS

12 6 0 1 2 3
In. Feet

SR 2/3/21

R:\cad\740\740-(E) Rail Details Fri, Aug/07/20 3:18pm

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA 49TH
Jesse Escamilla III
08-07-2020
SE# 125547
REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

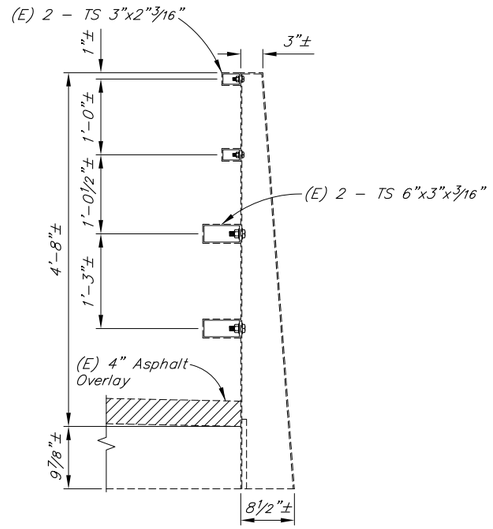
DOUGLAS CROSSING

2–TUBE RAIL DETAILS

BRIDGE NO. 740

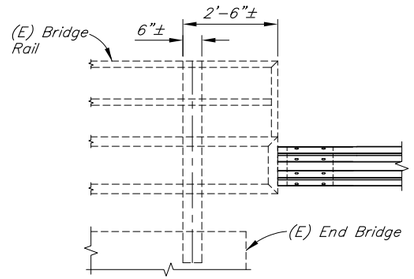
DWG. NO. 10

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N11	N12



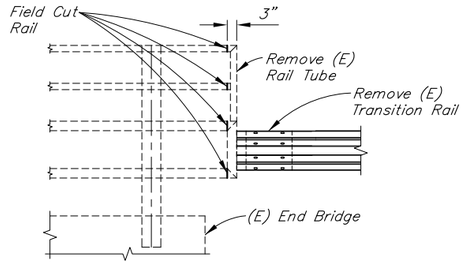
EXISTING TYPICAL SECTION

12 6 0 1 2
In. Feet



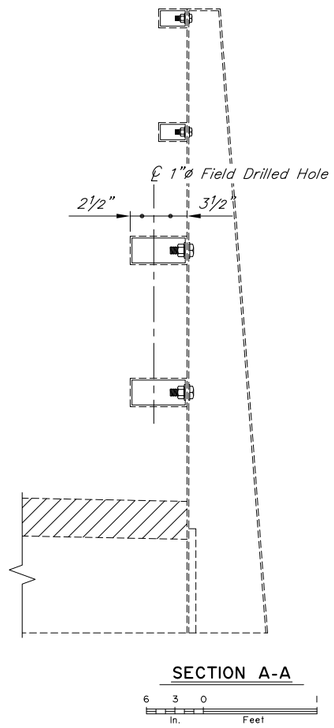
EXISTING RAIL END TERMINUS

12 6 0 1 2 3
In. Feet



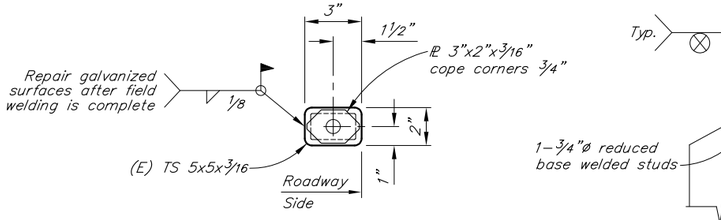
MODIFICATIONS TO RAIL END TERMINUS

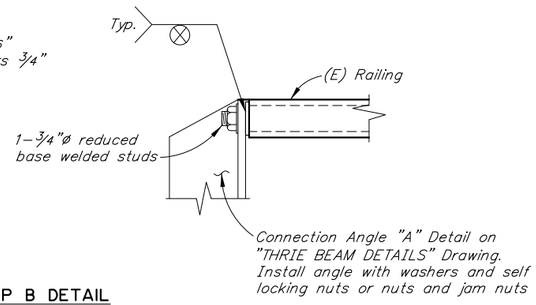
12 6 0 1 2 3
In. Feet



SECTION A-A

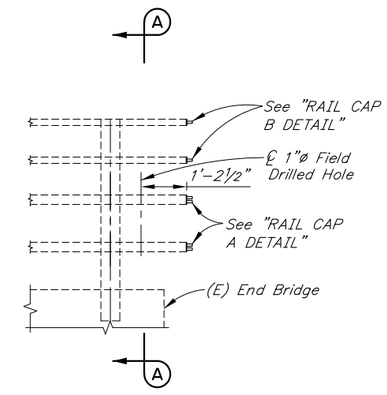
6 3 0 1
In. Feet





RAIL CAP B DETAIL

6 3 0 1
In. Feet



PROPOSED RAIL END TERMINUS

12 6 0 1 2 3
In. Feet

SR 2/3/21

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
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907–465–2975

STATE OF ALASKA 49TH
Jesse Escamilla III
08-07-2020
SE# 125547
REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

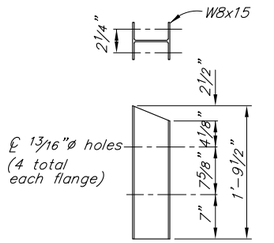
DOUGLAS CROSSING

COMBINATION RAIL DETAILS

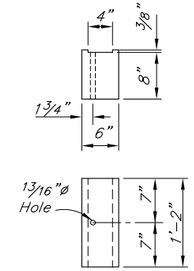
BRIDGE NO. 740
DWG. NO. 11

R:\cad\740\740-(E) Rail Details (2) Fri, Aug/07/20 3:18pm

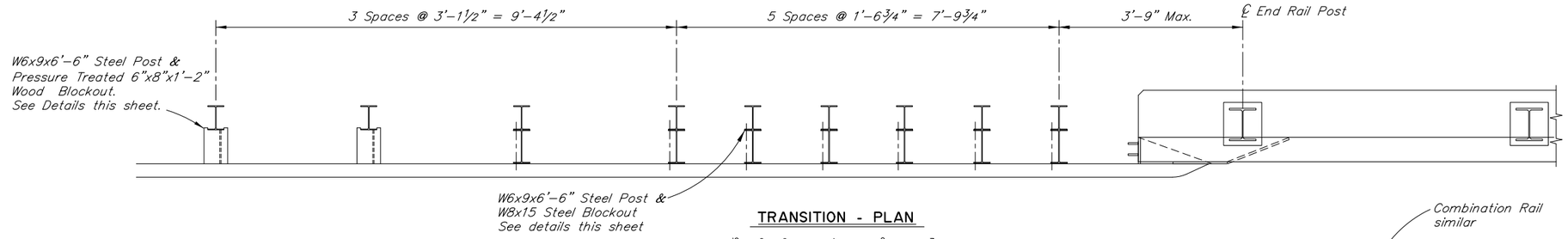
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0958032/SFHWY00293	2020	N12	N12



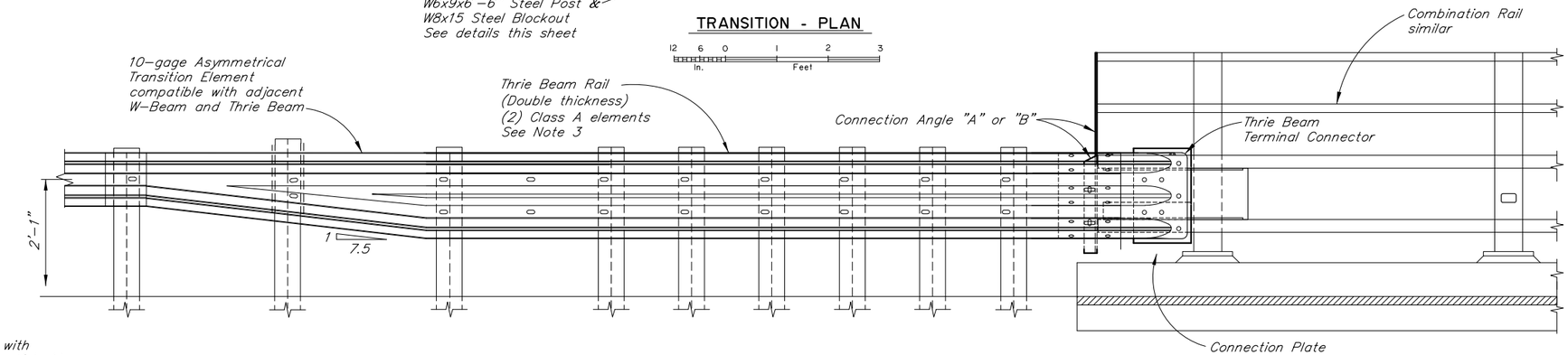
THRIE BEAM BLOCKOUT

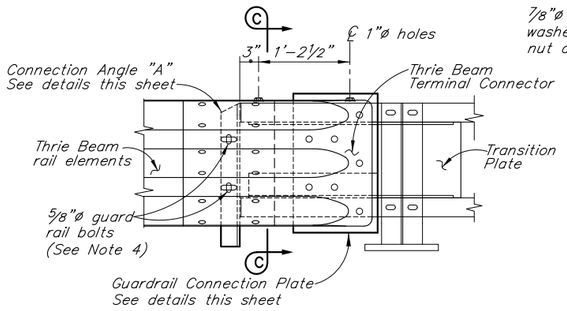


WOOD BLOCKOUT

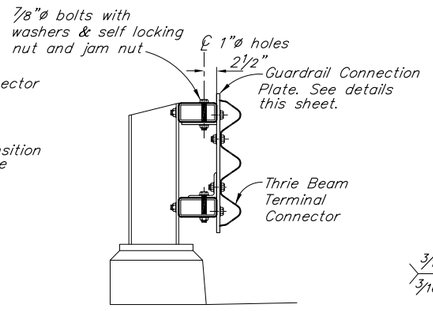


TRANSITION - PLAN



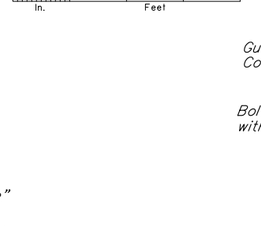


TRANSITION CONNECTION - ELEVATION

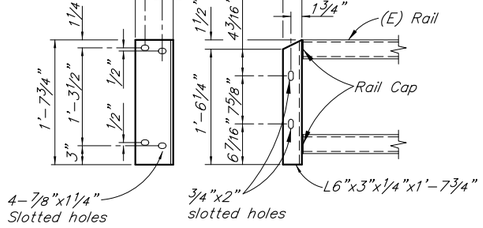


SECTION C-C

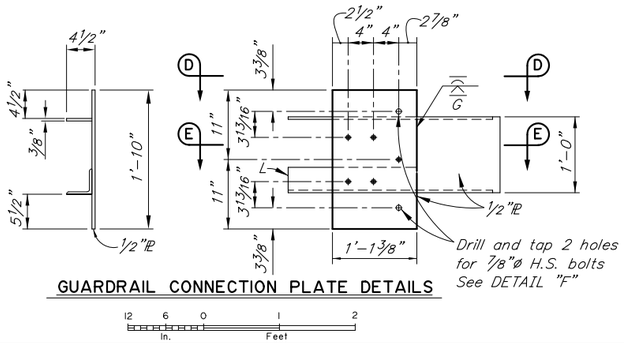
TRANSITION - ELEVATION



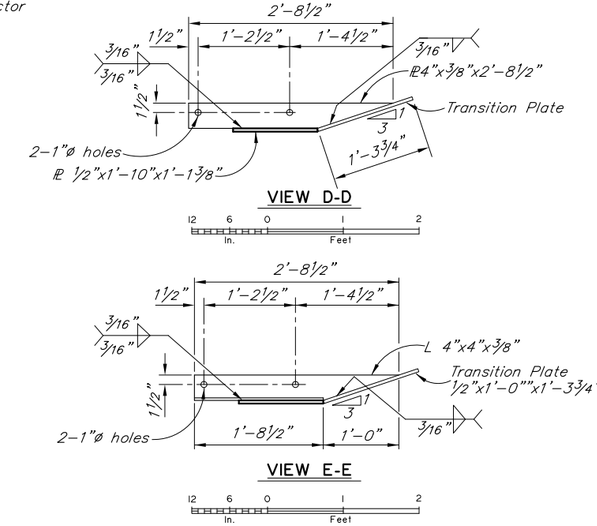
DETAIL "F"
No Scale

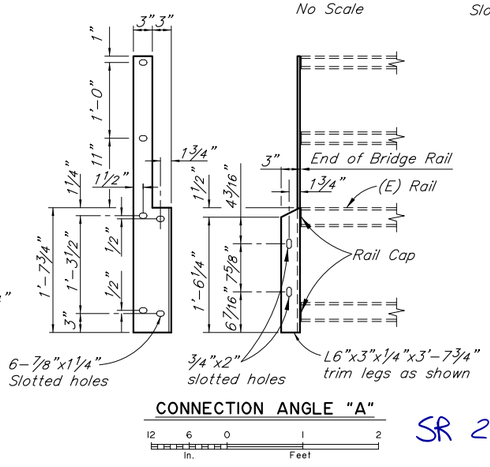


CONNECTION ANGLE "B"



GUARDRAIL CONNECTION PLATE DETAILS





CONNECTION ANGLE "A"

SR 2/3/21

TRANSITION NOTES

1. All guardrail and guardrail connection hardware to conform to AASHTO M-180.
   All H.S. Bolts conform to ASTM A325.
   All other steel to conform to ASTM A709 Grade 36.
2. Conform to G-00, G-04S, G-25S for all guardrail details not shown.
3. Lap approach guardrail to prevent snags from oncoming traffic.
4. Provide 4½" horizontal slot in approach guardrail. Adjust guardrail bolts for sliding fit.
5. This design is not crash tested or approved for NCHRP 350, TL 4. Plans have been modified to allow for fit of "As-Built" bridge rail.
6. Thrie Beam transition to follow roadway alignment.

DESIGNED BY: Jesse Escamilla III	CHECKED: Andrew Wells
DRAWN BY: Michael Foster	CHECKED: Jesse Escamilla III
QUANTITIES BY: Jesse Escamilla III	CHECKED: Andrew Wells

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION
3132 Channel Drive
Juneau, Alaska 99801
907-465-2975

STATE OF ALASKA
49 TH.
Jesse Escamilla III
08-07-2020
REGISTERED STRUCTURAL ENGINEER

GASTINEAU CHANNEL BRIDGE

DOUGLAS CROSSING

THRIE BEAM DETAILS

BRIDGE NO. 740

DWG. NO. 12

R:\cad\740\740-Thrie Beam Details Fri, Aug/07/20 3:18pm

NO.	DATE	REVISION

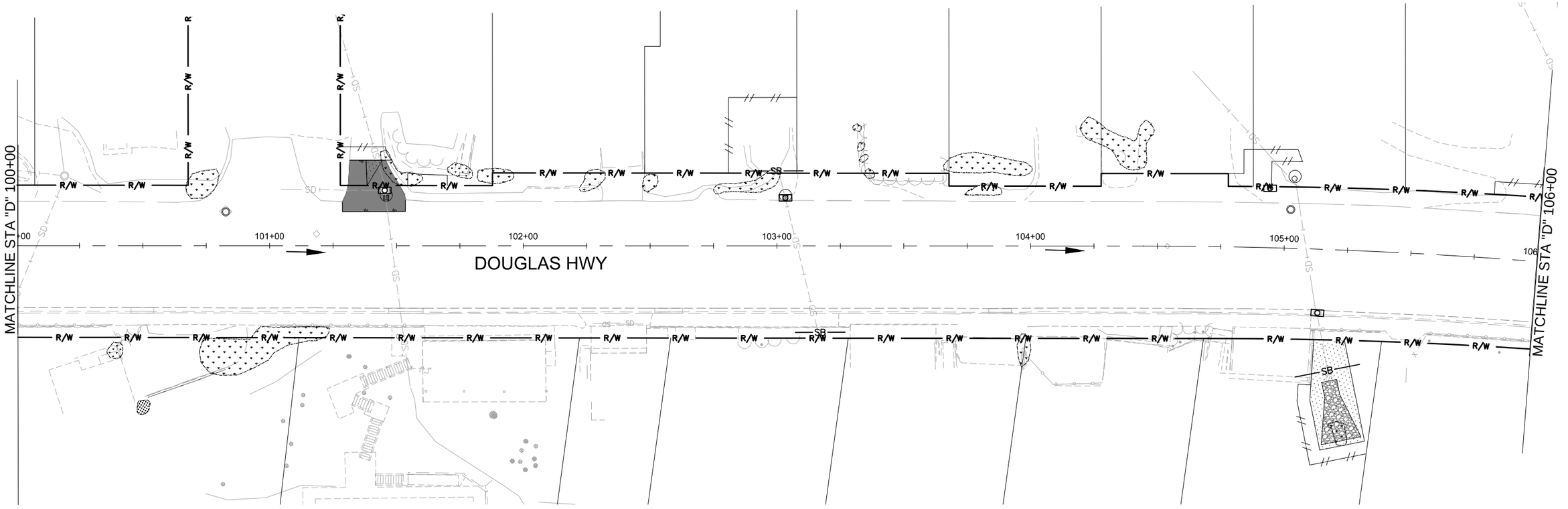
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	P1	P5

NOTES:

1. REFER TO ESCP IN APPENDIX C OF THE SPECIAL PROVISIONS.
2. INSTALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO EARTH DISTURBING ACTIVITIES.
3. THE LOCATION OF TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES ARE RECOMMENDATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE AND IMPLEMENT A SWPPP ACCORDING TO CONTRACT SPECIFICATION SECTION 641 AND THE ESCP.
4. REFER TO D SHEETS FOR INVASIVE SPECIES LOCATIONS AND TYPES.

ESCP LEGEND

SEDIMENT BARRIER	—SB—
INLET PROTECTION	▭
SURFACE STORMWATER FLOW	→
INVASIVE SPECIES	▭



SR 2/3/21

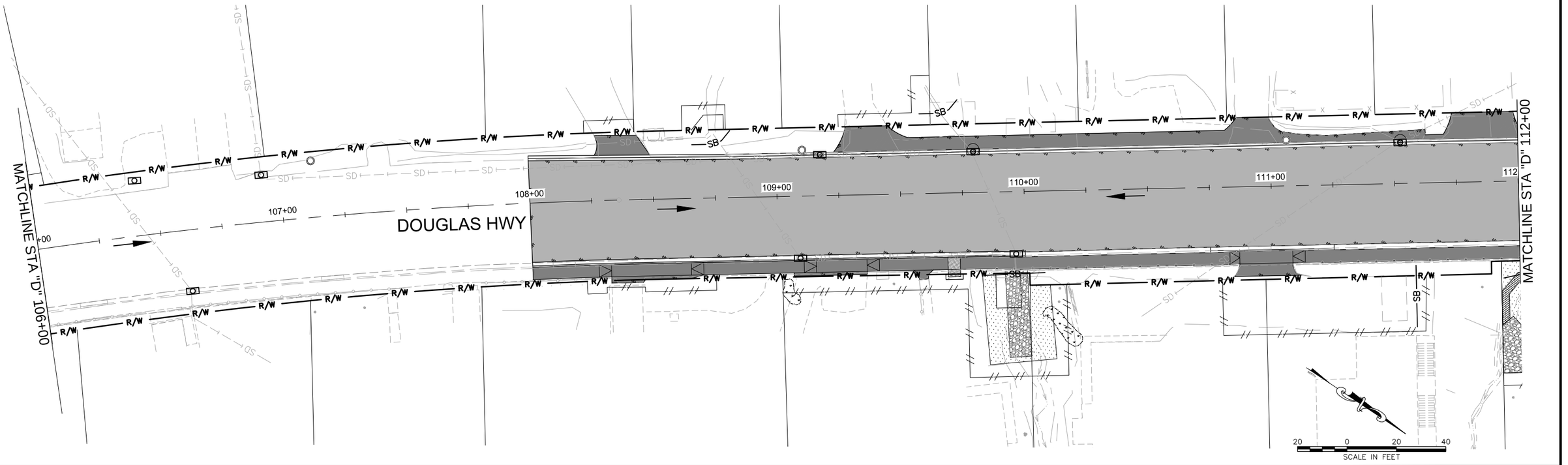
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SCALE IN FEET

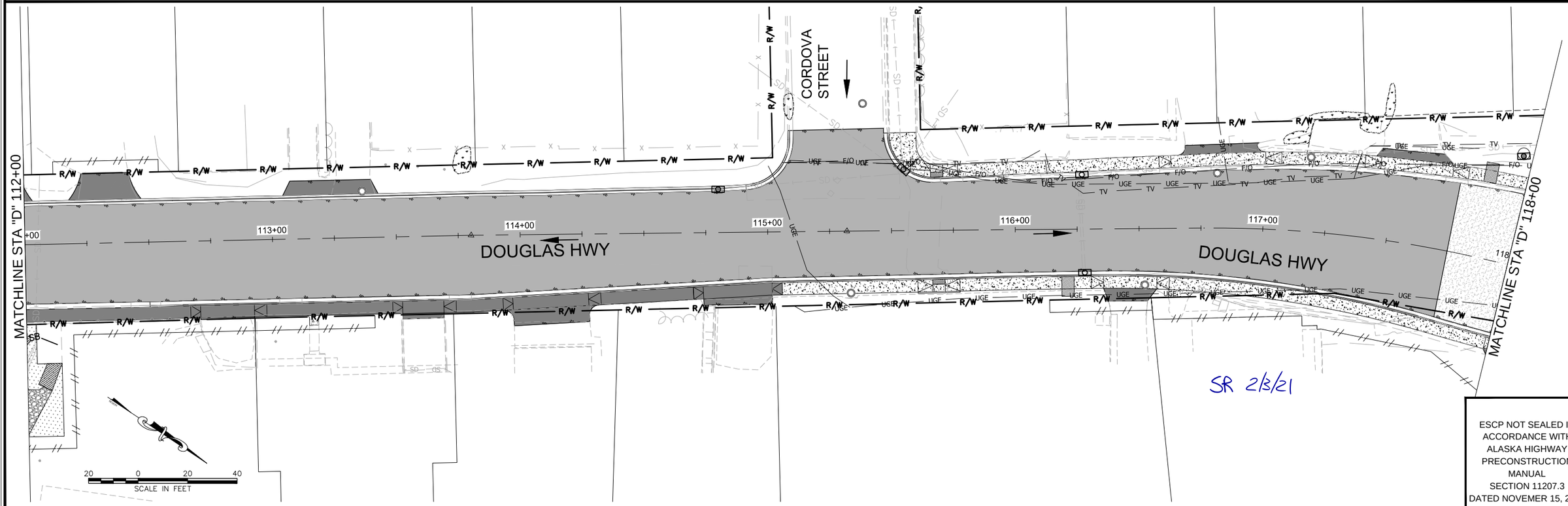
ESCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 11207.3 DATED NOVEMER 15, 2013

FIRM	DOWL	ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-ESCP-P-70897.dwg	DATE	8/4/2020 17:07	LAYOUT	P1	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	P2	P5





SR 2/3/21

ESCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 11207.3 DATED NOVEMER 15, 2013

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FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-ESCP-P-70897.dwg	DATE	8/4/2020 17:07	DESIGNED	STEPHENS	CHECKED	NOBLE
		LAYOUT	P2			DRAFTED	KEMP

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/0958032	2020	P3	P5

MATCHLINE STA "D" 118+00

119+00

120+00

121+00

30+00

31+00

32+00

32+45

N. DOUGLAS HWY

DOUGLAS BRIDGE

21+00

22+00

MATCHLINE STA "B" 22+50

20 0 20 40
SCALE IN FEET

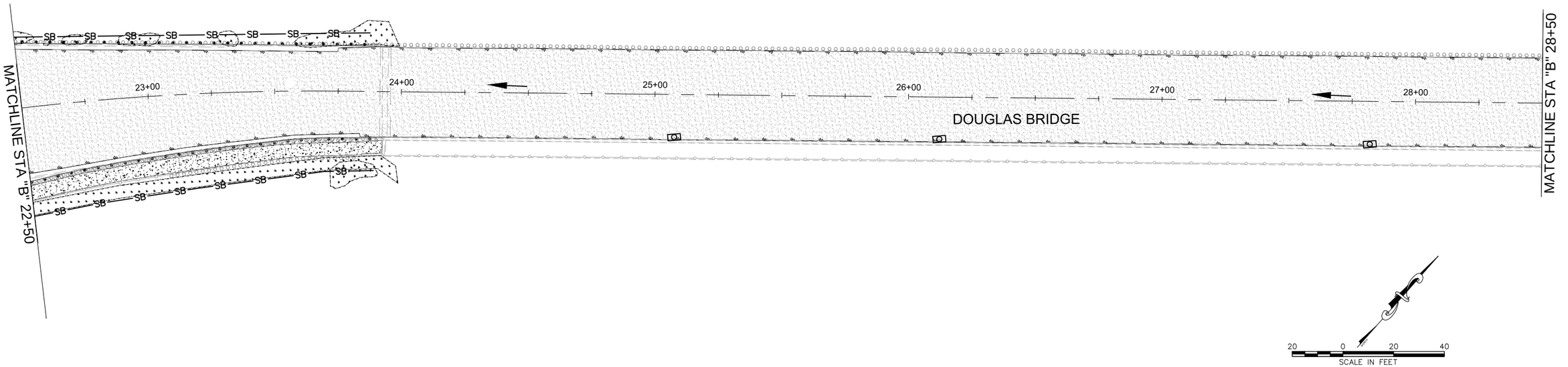
SR 2/3/21

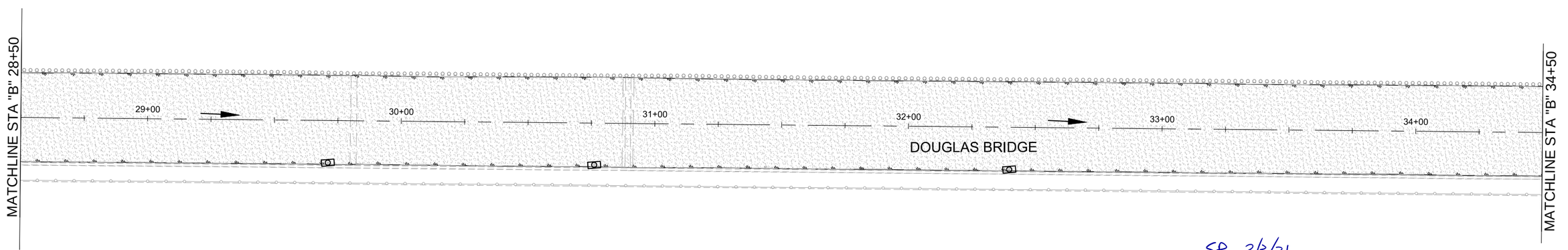
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DATE	8/4/2020 17:07
LAYOUT	P3
DESIGNED	STEPHENS
CHECKED	NOBLE
DRAFTED	KEMP
PHONE	(907) 780-3533
CERTIFICATE OF AUTH #:	AECL848

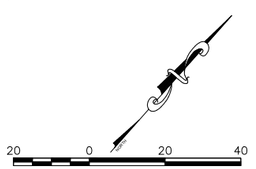
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	P4	P5





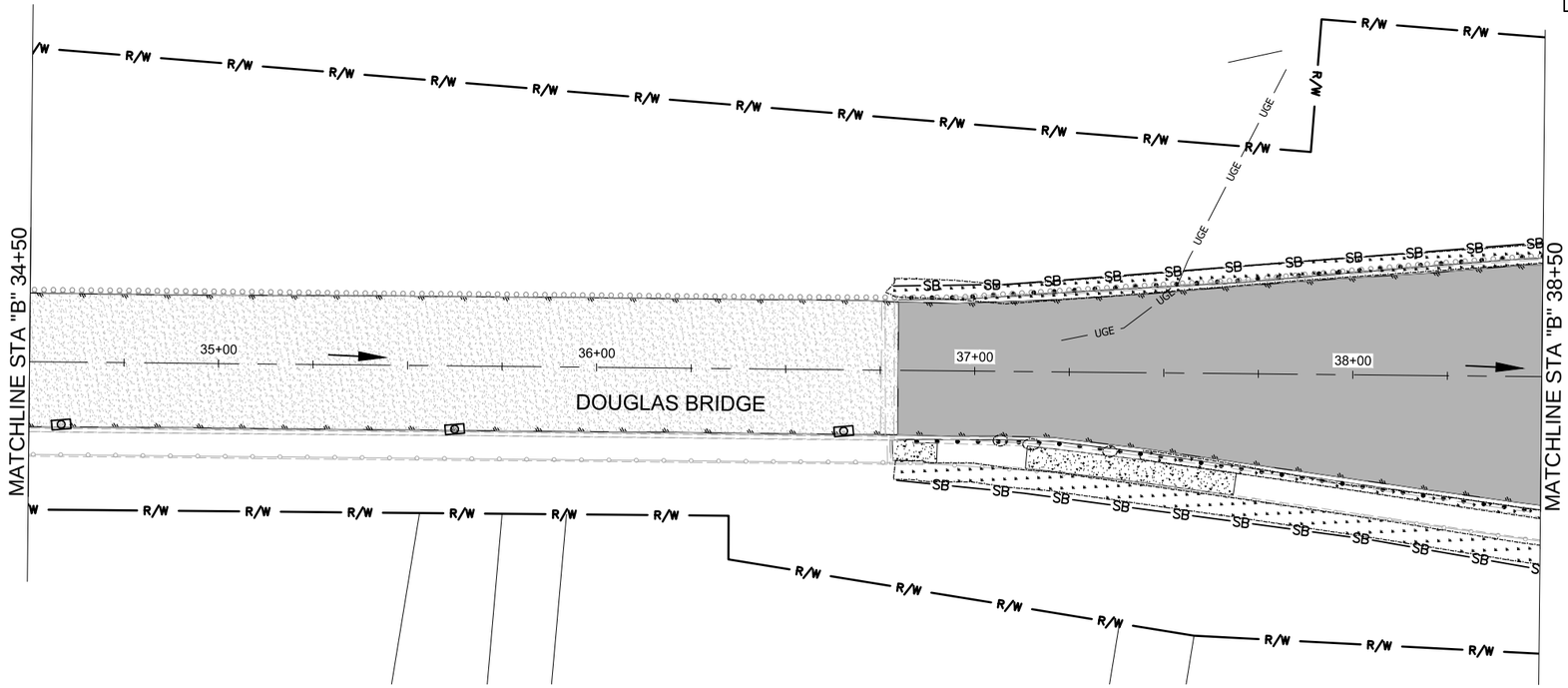
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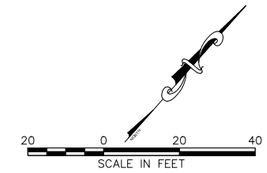


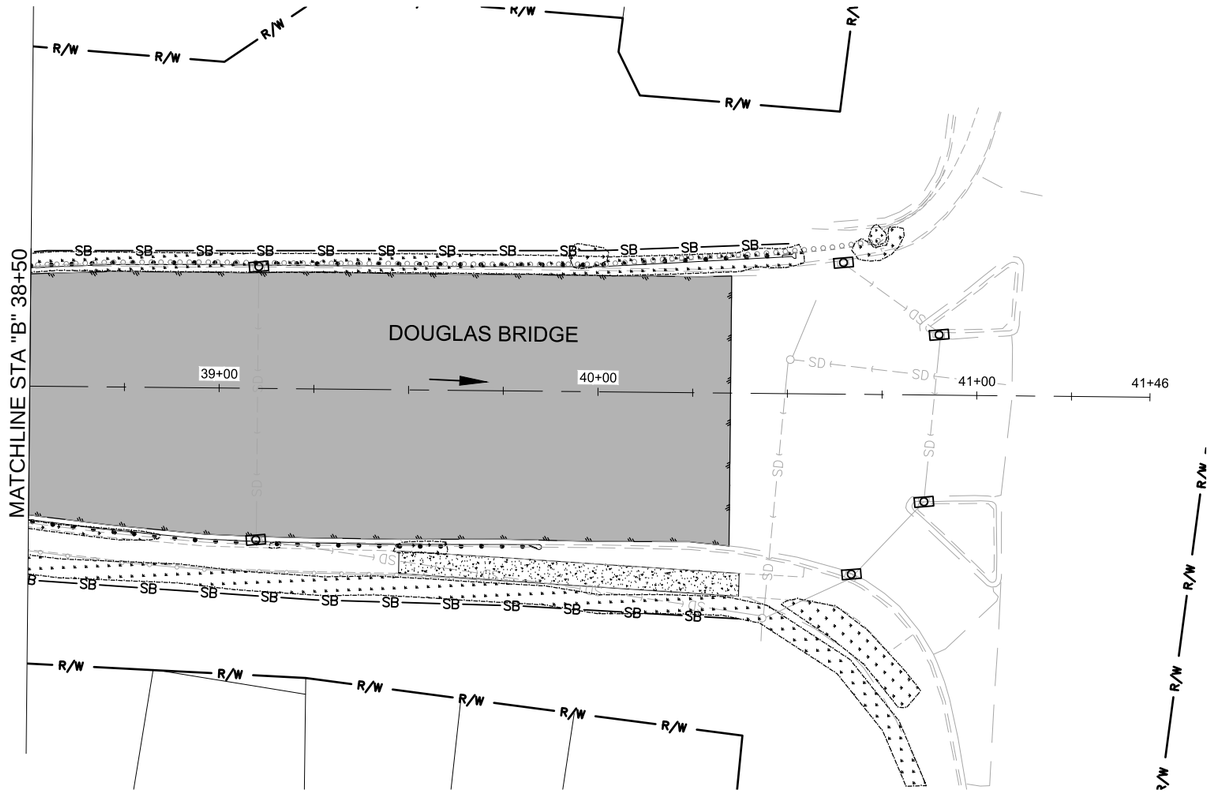
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FIRM DOWL | ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-ESCP-P-70897.dwg | DATE 8/4/2020 17:07 | LAYOUT P4 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP

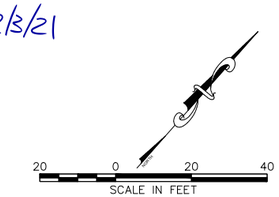
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			ALASKA	SFHWY00293/0958032	2020	P5	P5







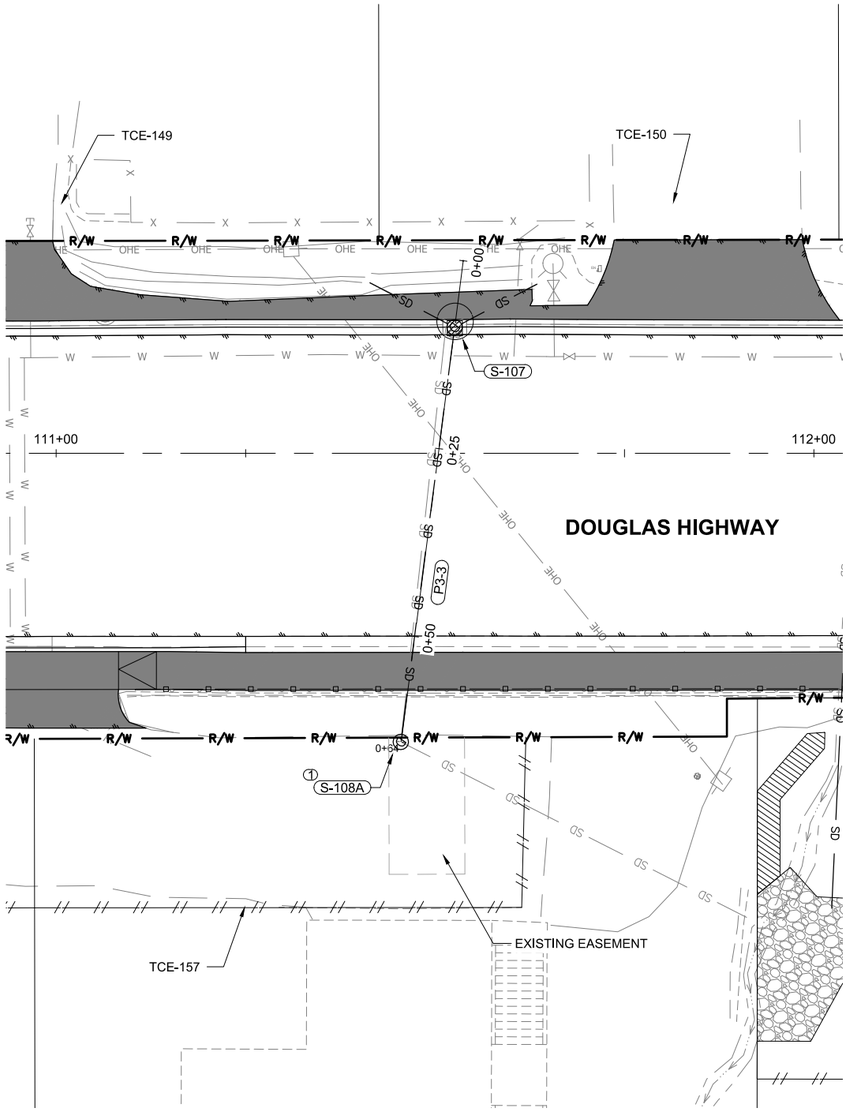
SR 2/3/21



ESCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 11207.3 DATED NOVEMER 15, 2013

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ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801
DATE	8/4/2020 17:07
LAYOUT	P5
DESIGNED	STEPHENS
CHECKED	NOBLE
DRAFTED	KEMP
PHONE	(907) 780-3533
CERTIFICATE OF AUTH #:	AECL848

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/0958032	2020	Q1	Q2



P3-3 PLAN

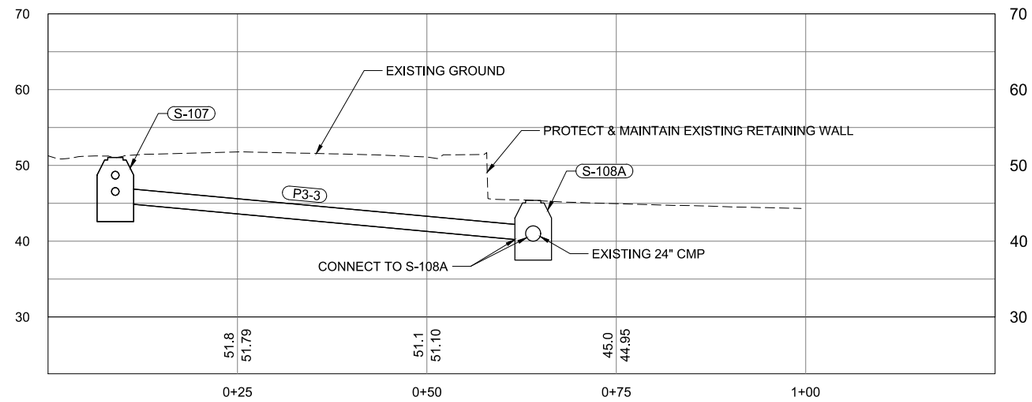
10 0 10 20
SCALE IN FEET

EXISTING P3-3:
D = 24" CMP
L = UNKNOWN
S = UNKNOWN
IN IE = 45.09'
STA "D" 111+53, 16.6' LT
OUT IE = 38.74'
STA "D" 11+91, 61.2' RT

NOTES (X):

1. INSTALL STORM DRAIN MANHOLE WITH SOLID COVER. VIDEO INSPECT EXISTING STORMPIPE TO VERIFY LOCATION OF ASSUMED BEND. POT HOLE ON VERIFIED BEND LOCATION & RECORD PIPE ELEVATIONS. SUBMIT INFORMATION TO ENGINEER. SUBMIT SHOP DRAWING FOR NEW STRUCTURE TO ENGINEER FOR APPROVAL OF CULVERT REHABILITATION.

P3-3 CONSTRUCTED WITH CIPP
SEE SHEET F3 FOR ALIGNMENT INFO



P3-3 PROFILE

SR 2/3/21

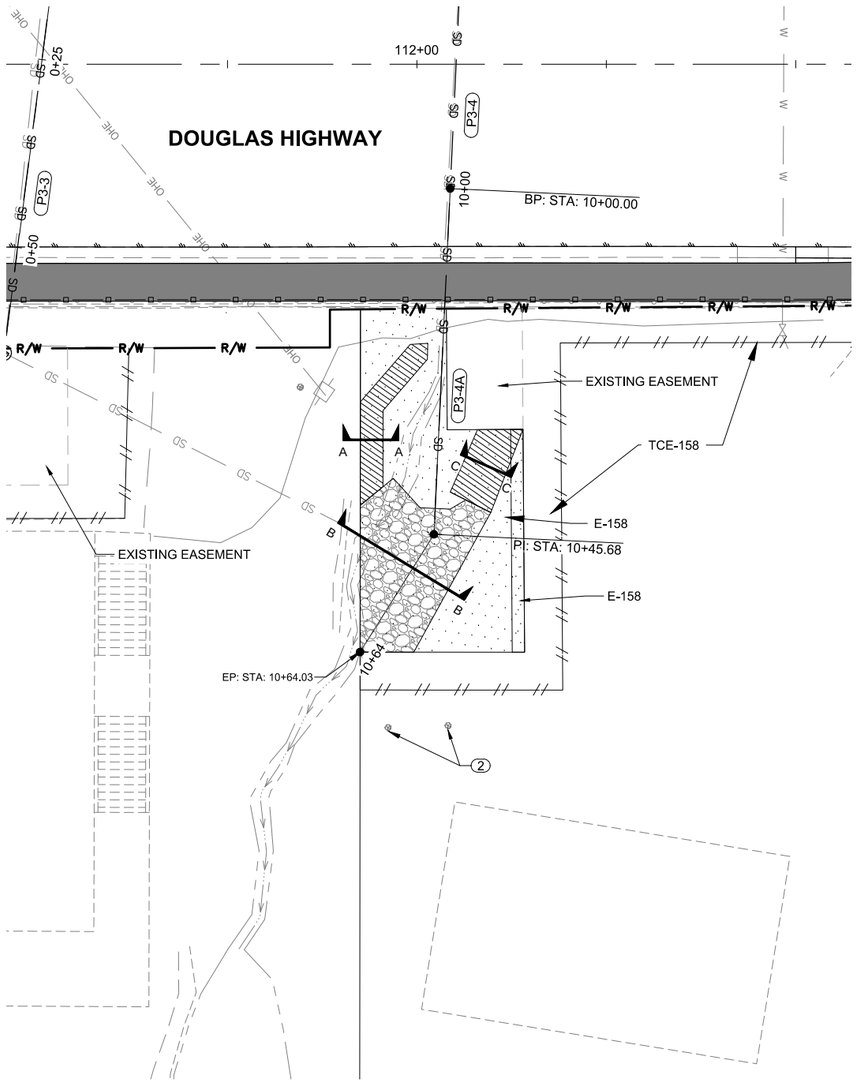
PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

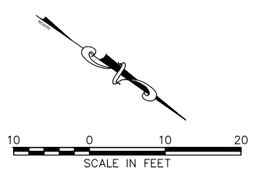
FIRM DOWL | PHONE (907) 780-3533 | CERTIFICATE OF AUTH #: AECL848
ADDRESS 9085 GLACIER HIGHWAY, JUNEAU, AK 99801 | DESIGNED STEPHENS | CHECKED NOBLE | DRAFTED KEMP
DATE 8/4/2020 17:27 | LAYOUT Q1
FILE C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-SD-PI-0-70897.dwg

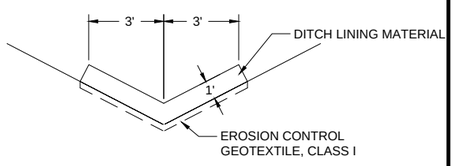
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	Q2	Q2

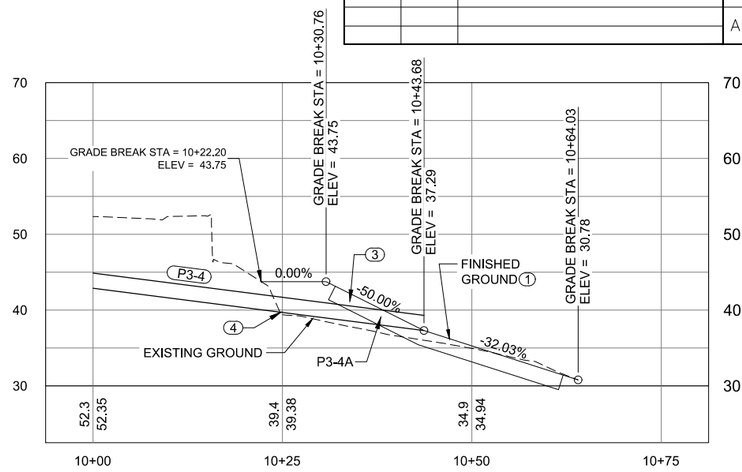


P3-4A PLAN





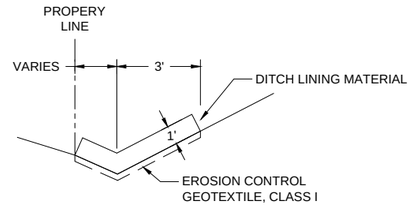
SECTION C-C DITCH LINING



P3-4A PROFILE

EXISTING P3-4:
D = 24" CIPP
L = 69.69'
S = .1277
IN IE = 48.55
STA "D" 112+06, 27.9' LT
OUT IE = 39.72
STA "D" 112+03, 41.2' RT

P3-4A:
D = 24" CSP
L = 19.1'
S = .1285
IN IE = 39.72
STA "D" 112+03, 41.2 RT
OUT IE = 37.29
STA "D" 112+02, 60.0' RT

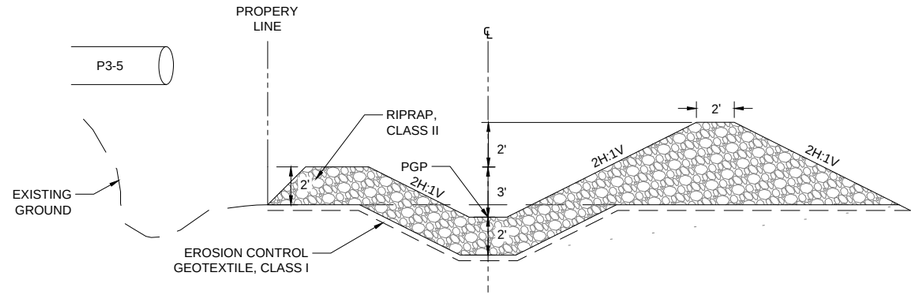


SECTION A-A DITCH LINING

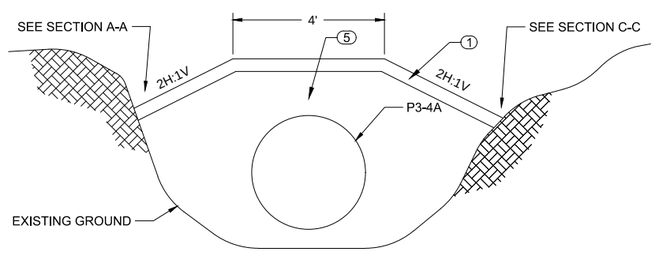
NOTES (X) :

1. FOR FINISHED SURFACE, PLACE 4 INCHES OF TOP SOIL ON BACKFILL AND SEED.
2. PRESERVE AND PROTECT EXISTING TREES.
3. RIPRAP APRON. VERTICAL LIMIT OF RIPRAP TO BE MINIMUM 2-FT ABOVE CROWN OF PIPE.
4. CONNECT TO EXISTING 24-INCH CORRUGATED METAL PIPE WITH CIPP LINER.
5. MIN 2-FOOT THICKNESS OF FILL MATERIAL TO COVER CROWN ON PIPE.

CIPP LINING ON P3-4 EXTENDS TO THE OUTLET OF P3-4A



SECTION B-B CHANNEL LINING



P3-4A SECTION

SR 2/3/21

PLANS DEVELOPED BY:
DOWL
9085 GLACIER HWY
JUNEAU, AK 99801
PHONE 907-780-3533
#AECL848

STATE OF ALASKA
49th
Steven K. Noble
No.CE10051
REGISTERED PROFESSIONAL ENGINEER
08/07/2020

FIRM	DOWL
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-SD-P1-Q-70897.dwg
ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801
DATE	8/4/2020 17:27
PHONE	(907) 780-3533
DESIGNED	STEPHENS
LAYOUT	Q2
CERTIFICATE OF AUTH #:	AECL848
CHECKED	NOBLE
DRAFTED	KEMP

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	T1	T6

TRAFFIC CONTROL NOTES

1. 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.
2. ALL TRAFFIC CONTROL PLANS SUBMITTED BY THE CONTRACTOR SHALL BE NUMBERED. ALL TRAFFIC CONTROL PLANS THAT USE A TYPICAL APPLICATION AS DESCRIBED IN THE LATEST EDITION OF THE ALASKA TRAFFIC MANUAL (ATM) SHALL REFERENCE THE TYPICAL APPLICATION.
3. TWO LANES SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE ENGINEER. FLAGGERS MUST BE PRESENT FOR ANY LANE CLOSURES. IF LANE CLOSURES MUST OCCUR AND ARE APPROVED BY THE ENGINEER,THE CONTRACTOR SHALL STRICTLY ADHERE TO THE REQUIREMENTS OF THE LANE CLOSURE INCLUDING, BUT NOT LIMITED TO BEGINNING AND END TIMES, AND DURATION. AT NO TIME SHALL ALL LANES OF TRAFFIC BE CLOSED.
4. THE LENGTH OF WORK AREA SHALL BE MINIMIZED TO AVOID EXCESSIVE TRAFFIC DELAYS AS DIRECTED BY THE ENGINEER. IN NO CASE WILL THE ENGINEER ALLOW A WORK AREA GREATER THAN 2000 FEET.
5. KEEP THE PUBLIC INFORMED OF CONSTRUCTION ACTIVITIES THROUGH A PUBLIC INFORMATION PLAN (PIP). SEE SECTION 643-3.03 OF THE SPECIAL PROVISIONS FOR PIP REQUIREMENTS.
6. SEE SECTION 202-3.05 OF THE SPECIAL PROVISIONS FOR LIMITATIONS ON PAVEMENT REMOVAL AND REPAVING. REPAVED SECTIONS REQUIRE INTERIM PAVEMENT MARKINGS PER SECTION 643-2.01 OF THE SPECIFICATIONS.
7. LOCATION OF DOUBLE TRAFFIC SIGNS SHALL BE ESTABLISHED IN ACCORDANCE WITH THE AK DOT&PF STANDARD PLAN C-04.12.
8. CHANGEABLE MESSAGE SIGNS SHALL BE USED FOR ADVANCED NOTIFICATION. LOCATION OF CHANGEABLE MESSAGE SIGNS SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER.
9. NIGHT WORK MAY BE REQUIRED BY THE ENGINEER, IF WORK REQUIRES ONE LANE OF TRAFFIC. THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS FOR NIGHT WORK. THE CONTRACTOR SHALL PERFORM NIGHT WORK WITHIN THE TIMES IDENTIFIED IN THE SPECIFICATIONS.
10. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT OR PROPERTY OWNER OF EACH DRIVEWAY CLOSURE 3 DAYS BEFORE CLOSING THE DRIVEWAY TO VEHICULAR ACCESS AND AGAIN 24 HOURS BEFORE CLOSURE. THE RESIDENT OR PROPERTY OWNER SHALL BE INFORMED OF THE PERIOD OF TIME THE CLOSURE WILL BE IN EFFECT. NO DRIVEWAY CLOSURES WILL BE PERMITTED UNTIL THIS REQUIREMENT HAS BEEN MET TO THE SATISFACTION OF THE ENGINEER.
11. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT OR PROPERTY OWNER OF ON-STREET PARKING CLOSURES 3 DAYS BEFORE CLOSING THE DRIVEWAY TO VEHICULAR ACCESS AND AGAIN 24 HOURS BEFORE CLOSURE. THE RESIDENTS OR PROPERTY OWNERS SHALL BE INFORMED OF THE PERIOD OF TIME THE CLOSURE WILL BE EFFECT AND WHERE TEMPORARY ON-STREET PARKING IS AVAILABLE DURING THE CLSOURE. NO ON-STREET PARKING CLOSURES WILL BE PERMITTED UNTIL THIS REQUIREMENT HAS BEEN MET TO THE SATISFACTION OF THE ENGINEER.

TCP LEGEND

- SIGN
- CONE
- DRUM
- FLAGGING STATION
- HI-LEVEL WARNING DEVICE
- ONE LANE TWO WAY TRAFFIC
- VEHICLE TRAVEL PATH DURING A FLAGGING PHASE
- TYPE III BARRICADE

TCP SETUP TABLE

SPEED (MPH)	MIN MERGING TAPER LENGTH (L) IN FEET WIDTH OF OFFSET (W) IN FEET			MIN NUMBER OF DEVICES WIDTH OF OFFSET (W) IN FEET			MAX DEVICE SPACING IN FEET		BUFFER SPACE IN FEET
	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGENT	
25 OR BELOW	105	115	125	6	6	6	25	50	155
30	150	165	180	6	7	7	30	60	200
35	205	225	245	7	8	8	35	70	250
40	270	295	320	8	9	9	40	80	305
45	450	495	540	11	12	13	45	90	360
50	500	550	600	11	12	13	50	100	425
55	550	605	660	11	12	13	55	110	495
60	600	660	720	11	12	13	60	120	570

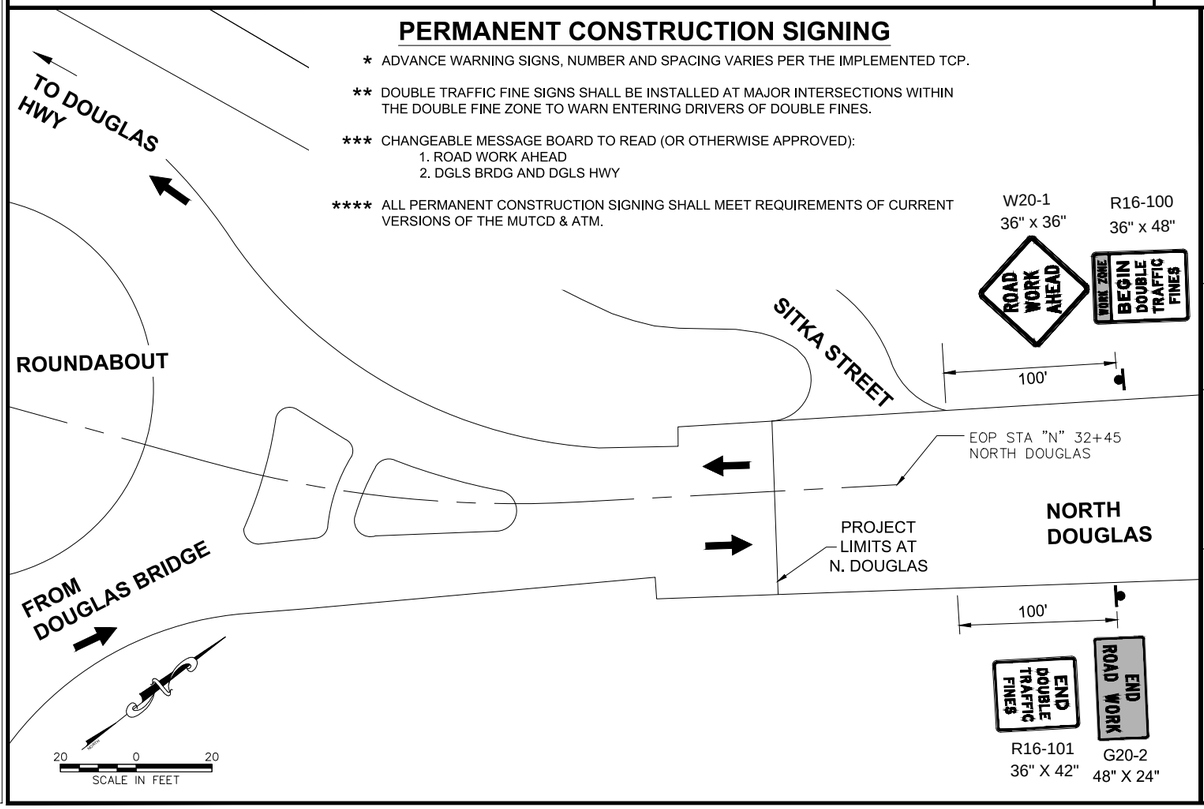
PERMANENT CONSTRUCTION SIGNING

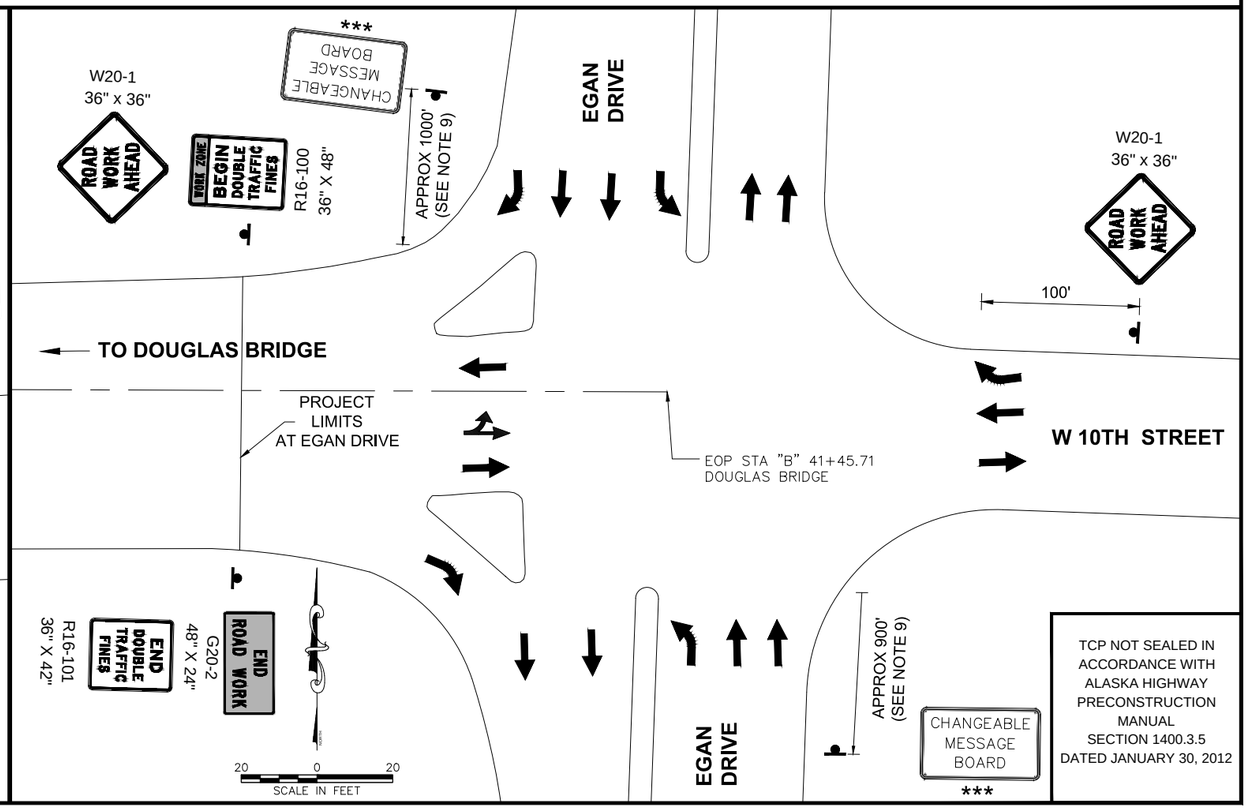
* ADVANCE WARNING SIGNS, NUMBER AND SPACING VARIES PER THE IMPLEMENTED TCP.

** DOUBLE TRAFFIC FINE SIGNS SHALL BE INSTALLED AT MAJOR INTERSECTIONS WITHIN THE DOUBLE FINE ZONE TO WARN ENTERING DRIVERS OF DOUBLE FINES.

*** CHANGEABLE MESSAGE BOARD TO READ (OR OTHERWISE APPROVED):
1. ROAD WORK AHEAD
2. DGLS BRDG AND DGLS HWY

**** ALL PERMANENT CONSTRUCTION SIGNING SHALL MEET REQUIREMENTS OF CURRENT VERSIONS OF THE MUTCD & ATM.



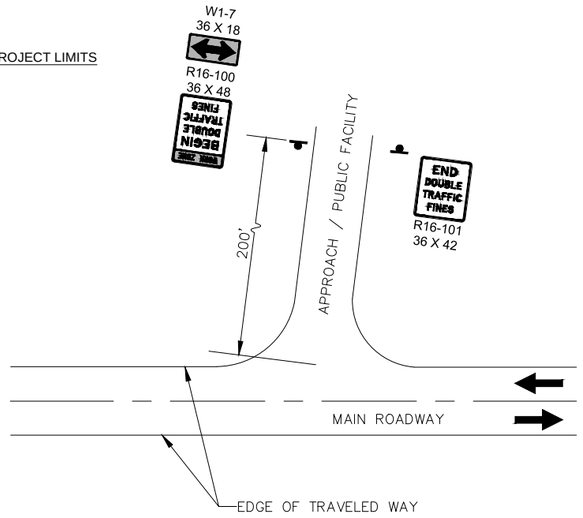


FIRM	DOWL	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848
ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP
DATE	8/4/2020 17:25	LAYOUT	T1				
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-TC-T-70897.dwg						

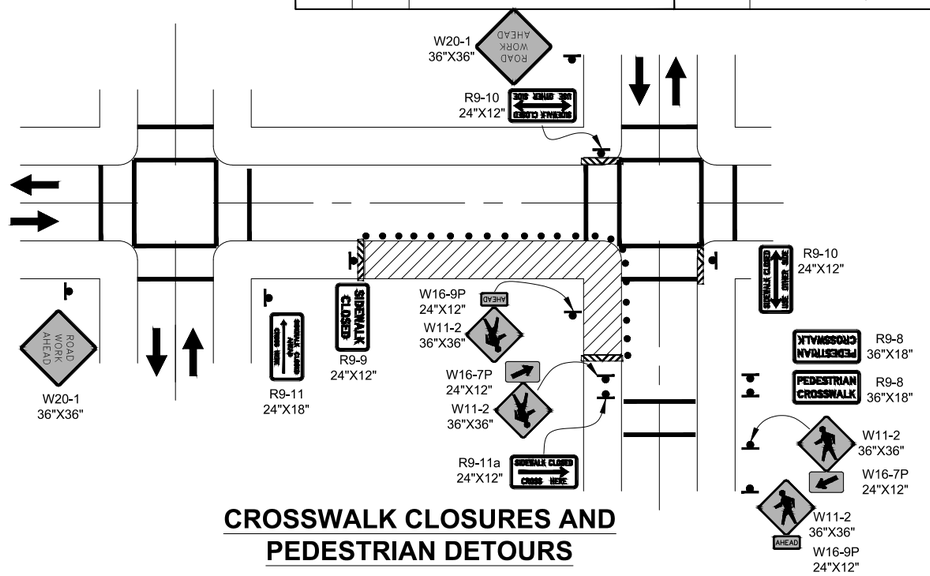
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/0958032	2020	T2	T6

SIDE STREETS WITHIN PROJECT LIMITS

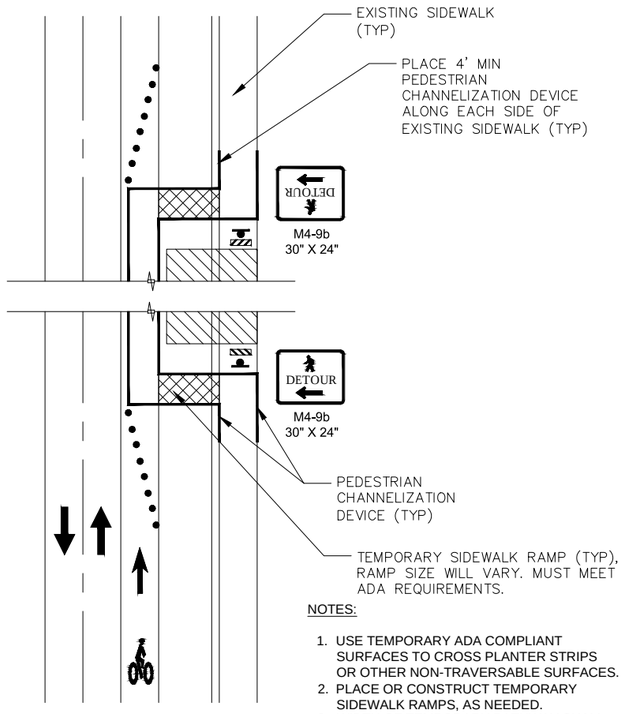
CORDOVA STREET
SITKA STREET



PERMANENT CONSTRUCTION SIGNING SIDE STREETS



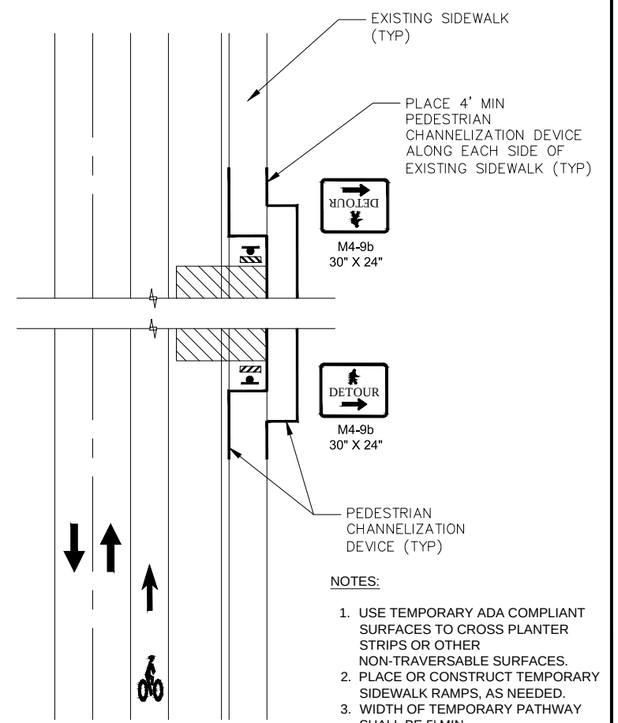
CROSSWALK CLOSURES AND PEDESTRIAN DETOURS



NOTES:

1. USE TEMPORARY ADA COMPLIANT SURFACES TO CROSS PLANTER STRIPS OR OTHER NON-TRAVERSABLE SURFACES.
2. PLACE OR CONSTRUCT TEMPORARY SIDEWALK RAMPS, AS NEEDED.
3. WIDTH OF TEMPORARY PATHWAY SHALL BE 5' MIN.
4. INSTALL A "BICYCLES ON ROADWAY" (CW11-1) SIGN IN ADVANCE OF THE DIVERSION WHEN A BIKE LANE IS CLOSED, OR WHEN THE SHOULDER IS CLOSED AND BIKES ARE EXPECTED.

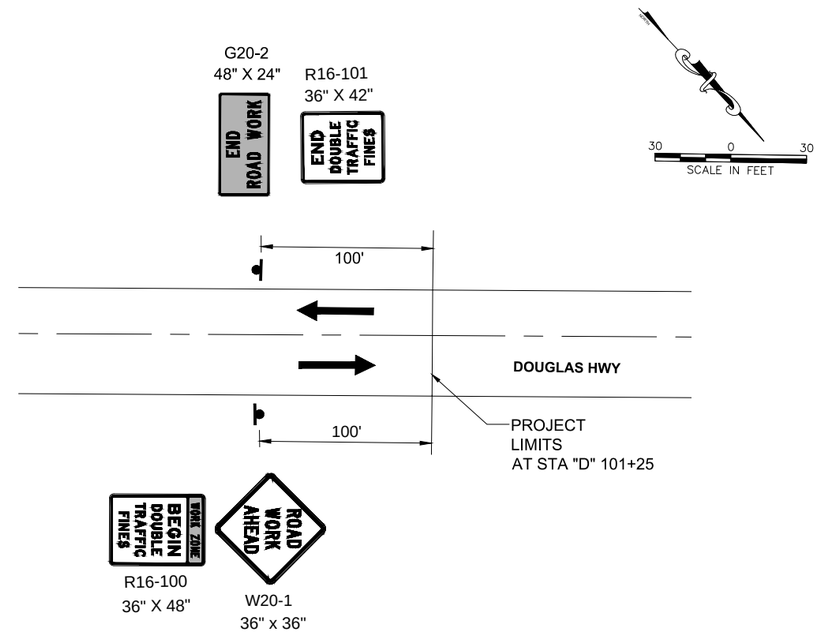
SIDEWALK DIVERSION - 1



NOTES:

1. USE TEMPORARY ADA COMPLIANT SURFACES TO CROSS PLANTER STRIPS OR OTHER NON-TRAVERSABLE SURFACES.
2. PLACE OR CONSTRUCT TEMPORARY SIDEWALK RAMPS, AS NEEDED.
3. WIDTH OF TEMPORARY PATHWAY SHALL BE 5' MIN.
4. THIS DETAIL IS TO BE USED WHEN ADEQUATE ROW AND SPACE ARE AVAILABLE BEHIND THE SIDEWALK.
5. INSTALL A "BICYCLES ON ROADWAY" (CW11-1) SIGN IN ADVANCE OF THE DIVERSION WHEN A BIKE LANE IS CLOSED, OR WHEN THE SHOULDER IS CLOSED AND BIKES ARE EXPECTED.

SIDEWALK DIVERSION - 2



PERMANENT CONSTRUCTION BEGINNING OF PROJECT

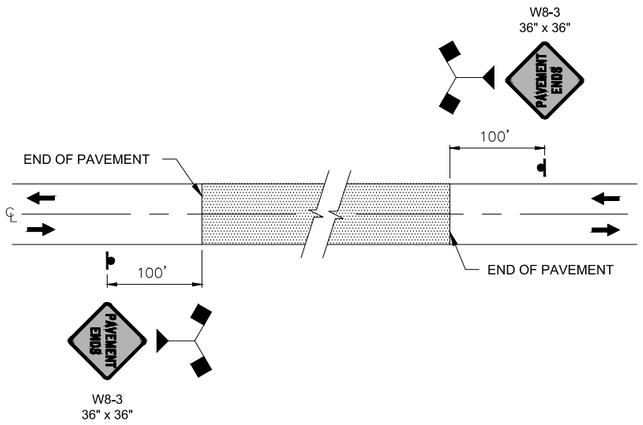
* SEE PERMANENT CONSTRUCTION SIGNING NOTES ON SHEET T1

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

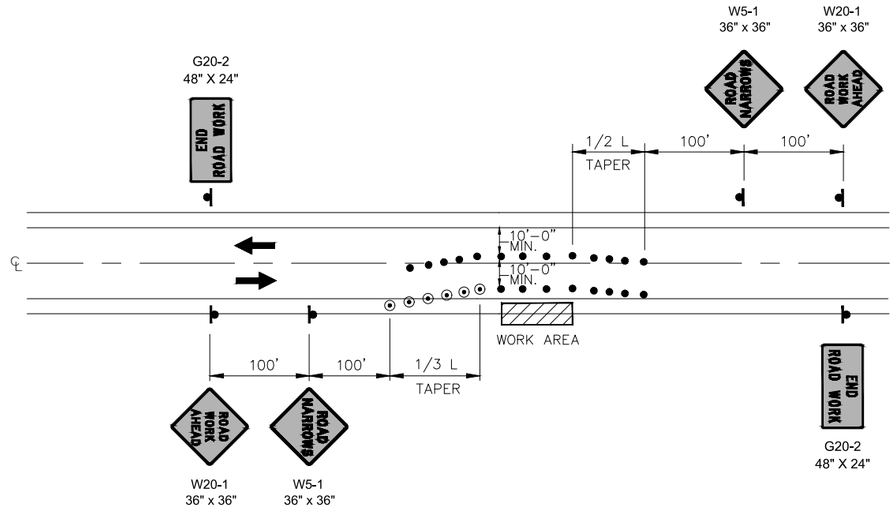
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ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533				
DATE	8/4/2020	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-TC-T-70897.dwg	LAYOUT	T2				

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	T3	T6

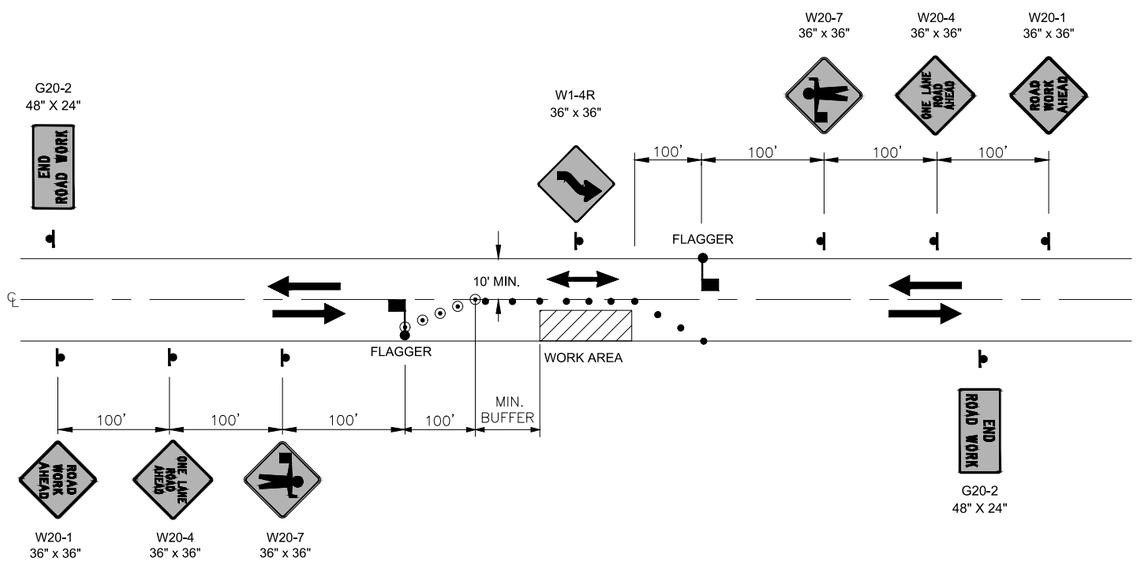


SIGNING FOR UNPAVED AREA



ROADWAY ENCROACHMENT

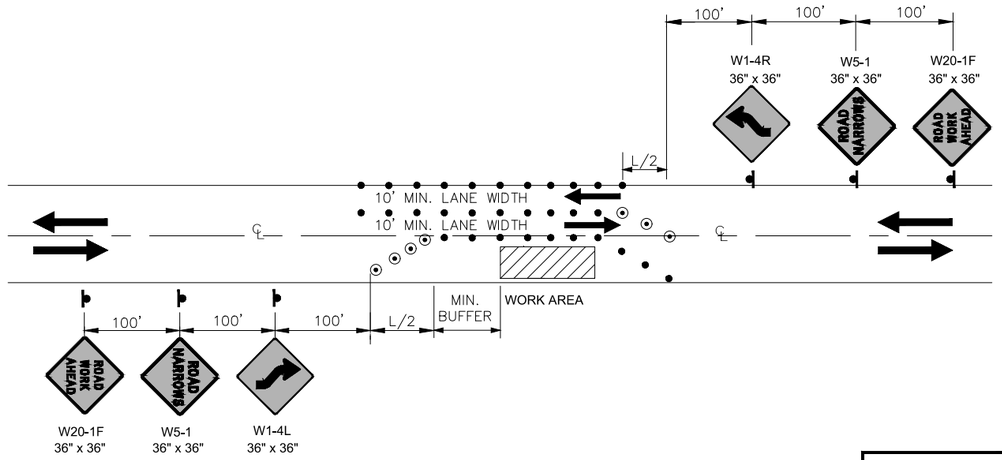
NOTE:
1. IF ONLY ONE LANE IS AFFECTED BY ROAD WORK (THAT IS, THE CONES ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE WILL NOT BE NEEDED.
2. SEE TCP SETUP TABLE ON SHEET T1 FOR TAPER LENGTH (L).



TWO LANE ROAD - SINGLE LANE CLOSURE

DOUBLE FLAGGER

NOTE:
1. SEE TCP SETUP TABLE ON SHEET T1 FOR TAPER LENGTH (L) AND MINIMUM BUFFER LENGTH.



TWO-WAY TRAFFIC

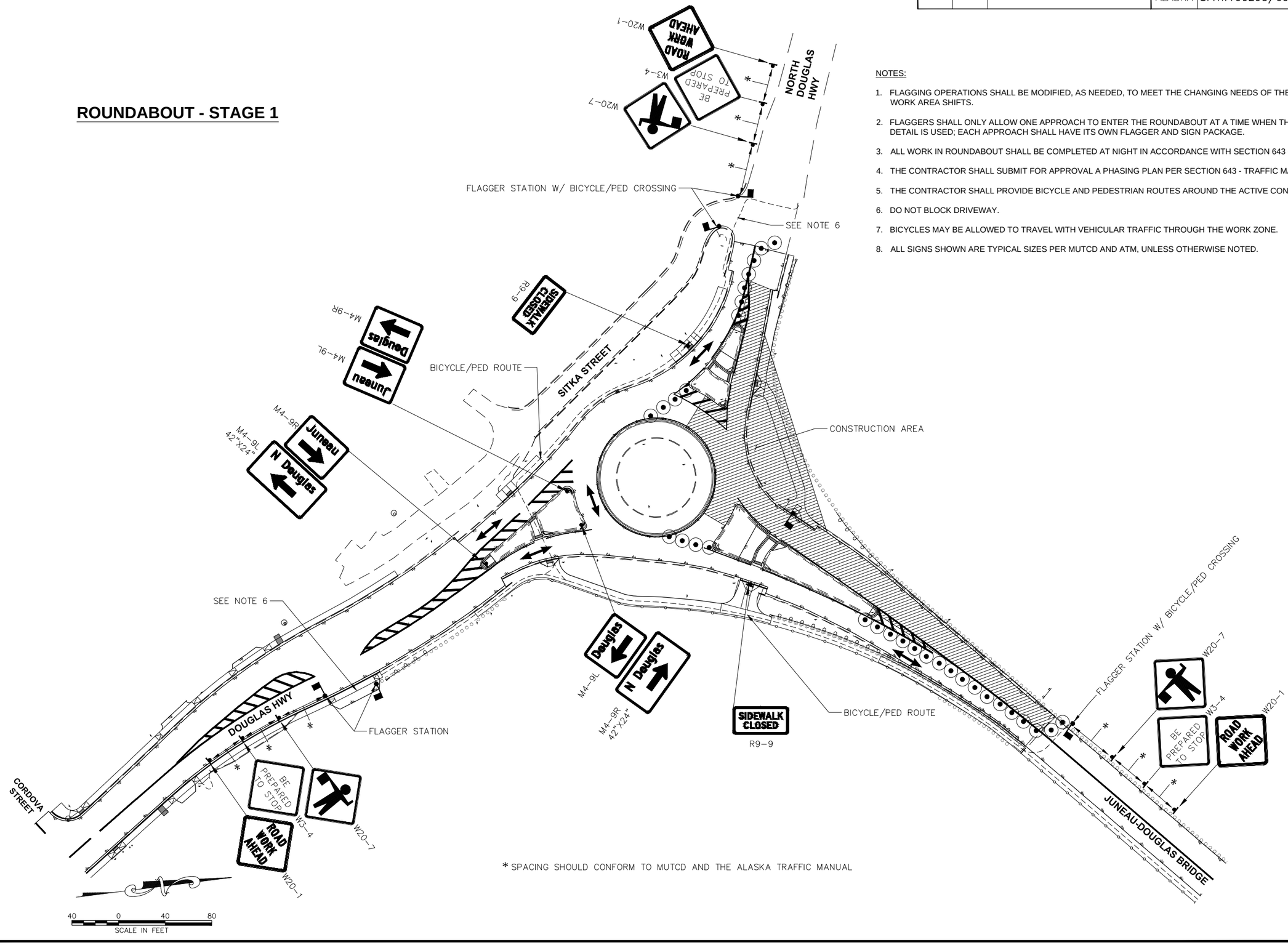
NOTE:
1. SEE TCP SETUP TABLE ON SHEET T1 FOR TAPER LENGTH (L) AND MINIMUM BUFFER LENGTH.

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

FIRM	DOWL
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-TC-T-70897.dwg
DATE	8/4/2020 17:25
ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801
PHONE	(907) 780-3533
DESIGNED	STEPHENS
CHECKED	NOBLE
DRAFTED	KEMP
LAYOUT	T3
CERTIFICATE OF AUTH #:	AECL848

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/0958032	2020	T4	T6

ROUNDABOUT - STAGE 1



NOTES:

1. FLAGGING OPERATIONS SHALL BE MODIFIED, AS NEEDED, TO MEET THE CHANGING NEEDS OF THE WORK ZONE AS THE WORK AREA SHIFTS.
2. FLAGGERS SHALL ONLY ALLOW ONE APPROACH TO ENTER THE ROUNDABOUT AT A TIME WHEN THIS TRAFFIC CONTROL DETAIL IS USED; EACH APPROACH SHALL HAVE ITS OWN FLAGGER AND SIGN PACKAGE.
3. ALL WORK IN ROUNDABOUT SHALL BE COMPLETED AT NIGHT IN ACCORDANCE WITH SECTION 643 - TRAFFIC MAINTENANCE.
4. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A PHASING PLAN PER SECTION 643 - TRAFFIC MAINTENANCE.
5. THE CONTRACTOR SHALL PROVIDE BICYCLE AND PEDESTRIAN ROUTES AROUND THE ACTIVE CONSTRUCTION ZONE.
6. DO NOT BLOCK DRIVEWAY.
7. BICYCLES MAY BE ALLOWED TO TRAVEL WITH VEHICULAR TRAFFIC THROUGH THE WORK ZONE.
8. ALL SIGNS SHOWN ARE TYPICAL SIZES PER MUTCD AND ATM, UNLESS OTHERWISE NOTED.

* SPACING SHOULD CONFORM TO MUTCD AND THE ALASKA TRAFFIC MANUAL

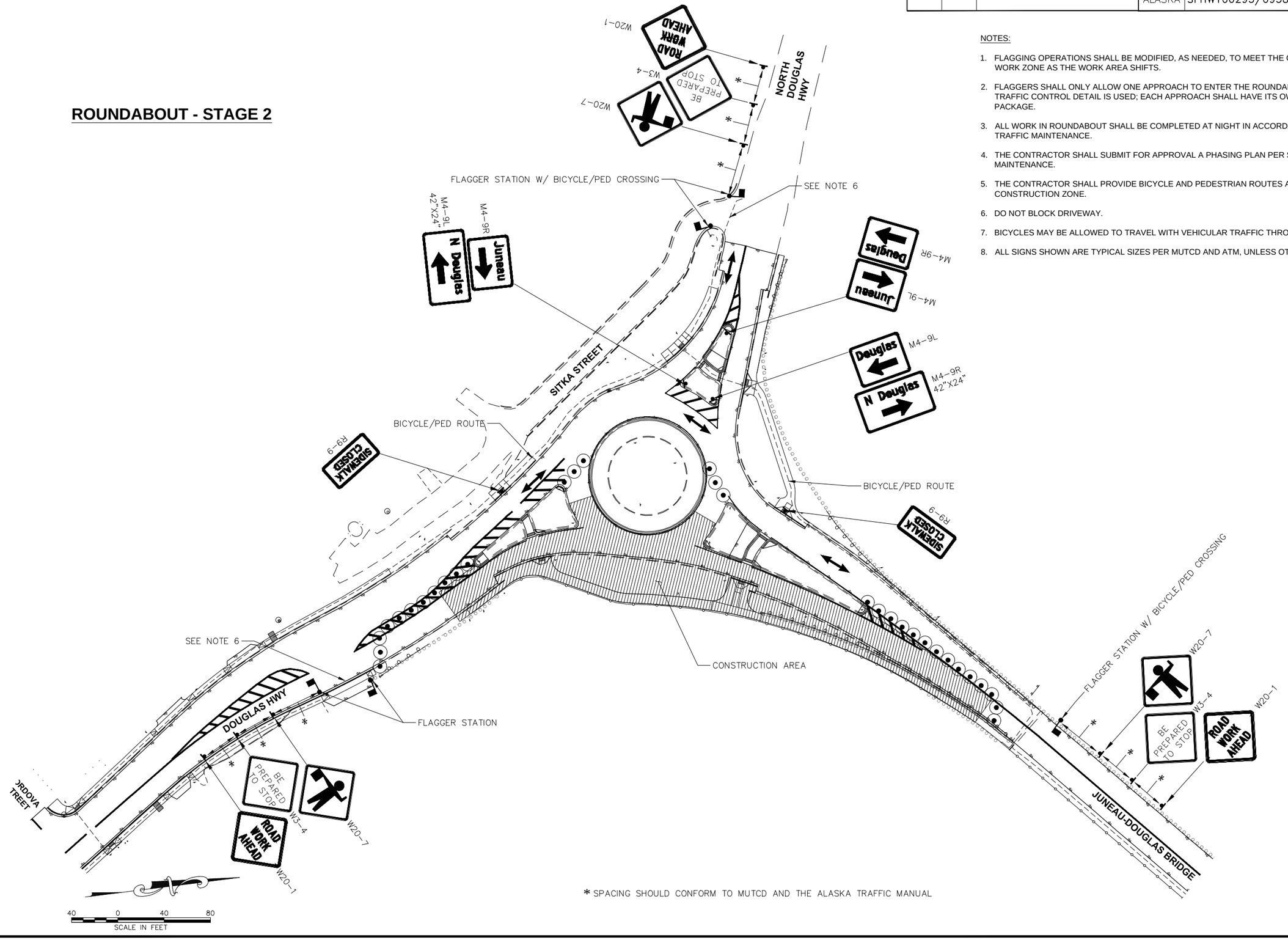
TCP NOT SEALED IN ACCORDANCE WITH ALASKA HIGHWAY PRECONSTRUCTION MANUAL SECTION 1400.3.5 DATED JANUARY 30, 2012

FIRM	DOWL	ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-TC-T-70897.dwg	LAYOUT	T4	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP
		DATE	8/4/2020 17:25				

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	SFHWY00293/0958032	2020	T5	T6

ROUNDABOUT - STAGE 2



NOTES:

1. FLAGGING OPERATIONS SHALL BE MODIFIED, AS NEEDED, TO MEET THE CHANGING NEEDS OF THE WORK ZONE AS THE WORK AREA SHIFTS.
2. FLAGGERS SHALL ONLY ALLOW ONE APPROACH TO ENTER THE ROUNDABOUT AT A TIME WHEN THIS TRAFFIC CONTROL DETAIL IS USED; EACH APPROACH SHALL HAVE ITS OWN FLAGGER AND SIGN PACKAGE.
3. ALL WORK IN ROUNDABOUT SHALL BE COMPLETED AT NIGHT IN ACCORDANCE WITH SECTION 643 - TRAFFIC MAINTENANCE.
4. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A PHASING PLAN PER SECTION 643 - TRAFFIC MAINTENANCE.
5. THE CONTRACTOR SHALL PROVIDE BICYCLE AND PEDESTRIAN ROUTES AROUND THE ACTIVE CONSTRUCTION ZONE.
6. DO NOT BLOCK DRIVEWAY.
7. BICYCLES MAY BE ALLOWED TO TRAVEL WITH VEHICULAR TRAFFIC THROUGH THE WORK ZONE.
8. ALL SIGNS SHOWN ARE TYPICAL SIZES PER MUTCD AND ATM, UNLESS OTHERWISE NOTED.

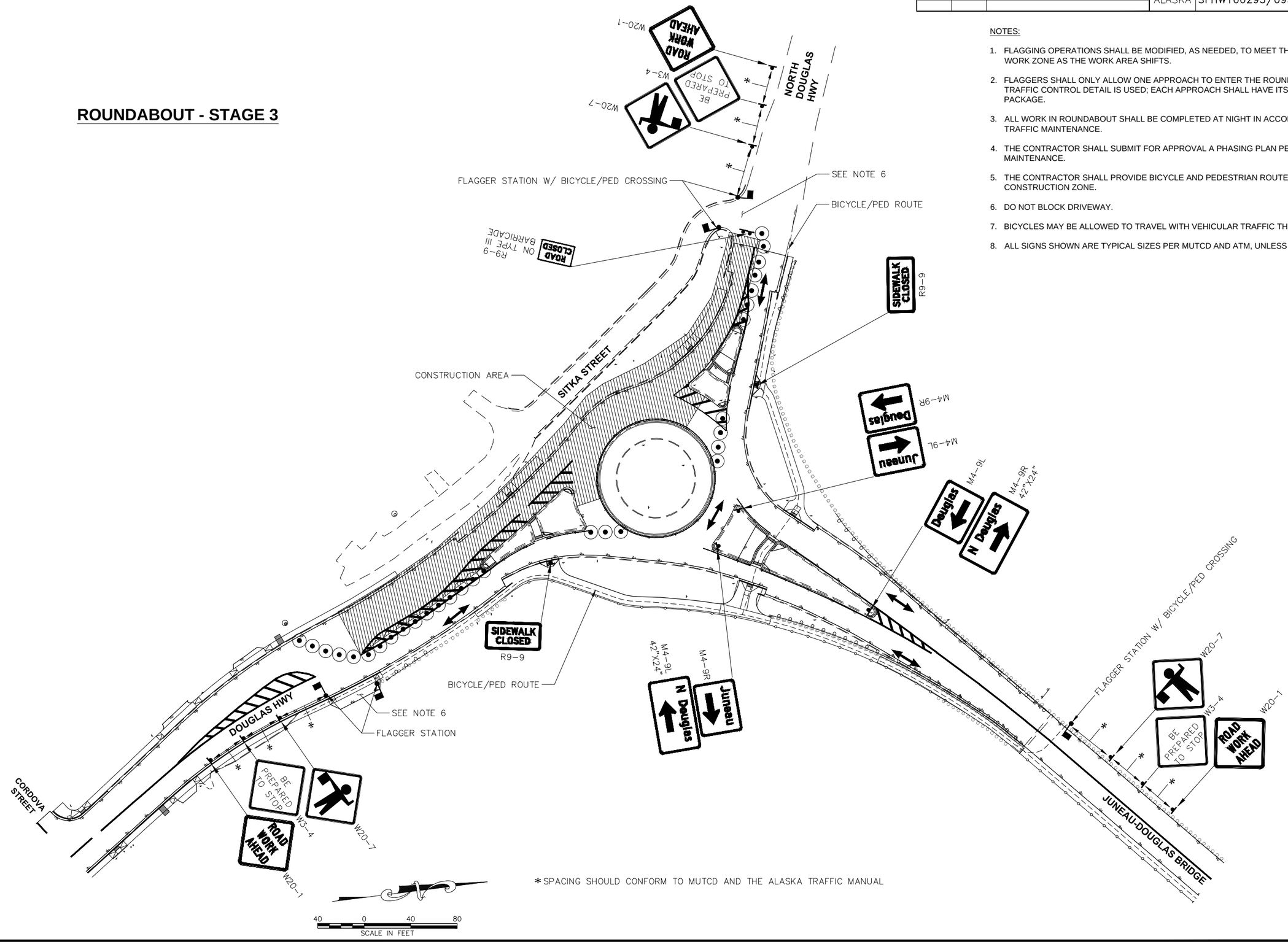
* SPACING SHOULD CONFORM TO MUTCD AND THE ALASKA TRAFFIC MANUAL

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

FIRM	DOWL		PHONE	(907) 780-3533		CERTIFICATE OF AUTH #:	AECL848		
ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801		DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP	
DATE	8/4/2020 17:25		LAYOUT	T5					
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-TC-T-70897.dwg								

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SFHWY00293/0958032	2020	T6	T6

ROUNDABOUT - STAGE 3



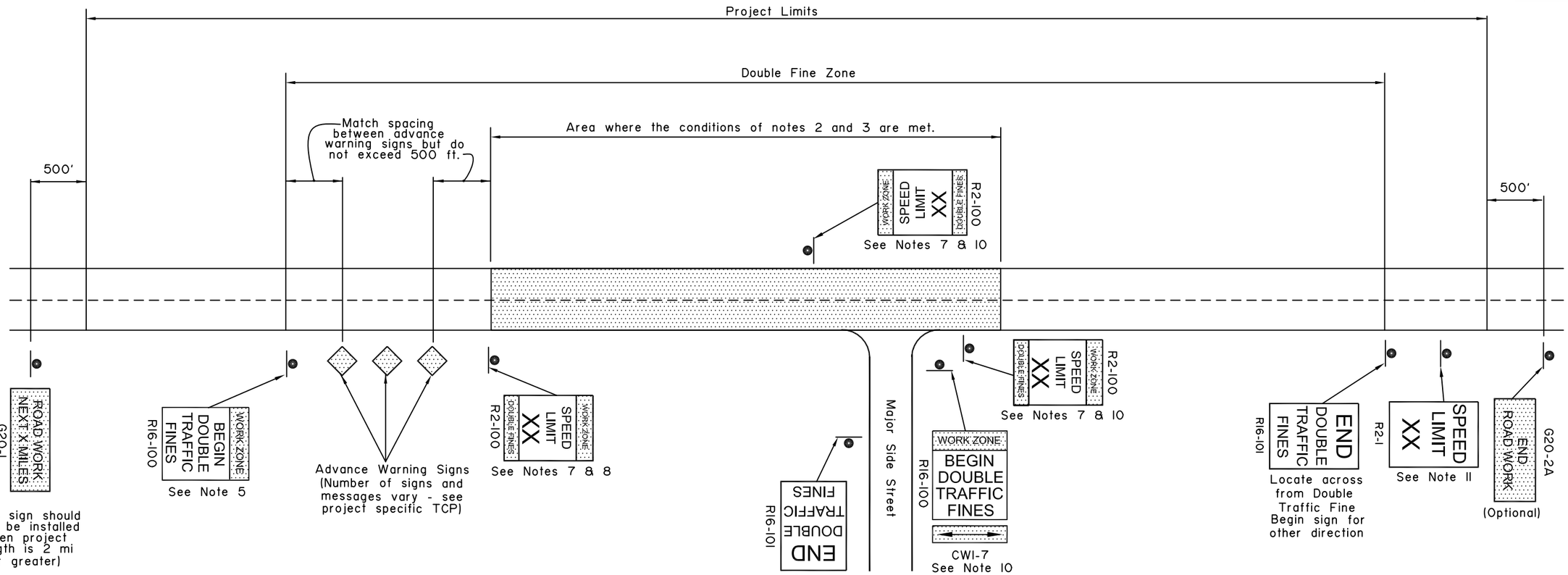
* SPACING SHOULD CONFORM TO MUTCD AND THE ALASKA TRAFFIC MANUAL

NOTES:

1. FLAGGING OPERATIONS SHALL BE MODIFIED, AS NEEDED, TO MEET THE CHANGING NEEDS OF THE WORK ZONE AS THE WORK AREA SHIFTS.
2. FLAGGERS SHALL ONLY ALLOW ONE APPROACH TO ENTER THE ROUNDABOUT AT A TIME WHEN THIS TRAFFIC CONTROL DETAIL IS USED; EACH APPROACH SHALL HAVE ITS OWN FLAGGER AND SIGN PACKAGE.
3. ALL WORK IN ROUNDABOUT SHALL BE COMPLETED AT NIGHT IN ACCORDANCE WITH SECTION 643 - TRAFFIC MAINTENANCE.
4. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A PHASING PLAN PER SECTION 643 - TRAFFIC MAINTENANCE.
5. THE CONTRACTOR SHALL PROVIDE BICYCLE AND PEDESTRIAN ROUTES AROUND THE ACTIVE CONSTRUCTION ZONE.
6. DO NOT BLOCK DRIVEWAY.
7. BICYCLES MAY BE ALLOWED TO TRAVEL WITH VEHICULAR TRAFFIC THROUGH THE WORK ZONE.
8. ALL SIGNS SHOWN ARE TYPICAL SIZES PER MUTCD AND ATM, UNLESS OTHERWISE NOTED.

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

FIRM	DOWL	ADDRESS	9085 GLACIER HIGHWAY, JUNEAU, AK 99801	PHONE	(907) 780-3533	CERTIFICATE OF AUTH #:	AECL848	
FILE	C:\Civil 3D Projects\2016\22\70897-01\Civil\SC-CT-TC-T-70897.dwg	DATE	8/4/2020 17:25	LAYOUT	T6	DESIGNED	STEPHENS	CHECKED	NOBLE	DRAFTED	KEMP



GENERAL NOTES

1. Signs are shown for one direction only (with one exception). Signs for the other direction mirror those shown.

2. Double fine signs shall be used only where one or more of the following conditions exist:
   a. Active work areas (where road workers and/or machines are presently working on or adjacent to a road)
   b. Detours on new temporary roads built for that purpose (this does not include detours on existing streets)
   c. Sections of paved roads where pavement has been removed.
   d. Roads being paved where unmatched asphalt lifts result in a vertical lip between lanes.

3. Double fine signs shall be confined to the areas where the above conditions exist, with the following exceptions:
   a. If the project is 2 miles or shorter in length, the entire project may be posted for double fines when the above conditions exist on any part of the project.
   b. When the above conditions exist at multiple locations separated by less than 2 miles, the locations and the intervening segments may be posted as a single double fine zone.

4. Double fine signs shall be removed or covered when work activity ceases for more than two days and conditions b, c, or d of note 2 are not met.

5. The R16-100 "BEGIN" sign may be used in place of the first advance warning sign. However, when this is done, the appropriate advance warning sign must be reinstalled when the double fine sign is taken down or covered.

6. When a double fine zone is longer than 2 miles, work zone speed limit signs shall be posted at spacings not greater than 2 miles within the double fine zone.

7. "Work zone speed limit signs", as used here, refer either to 1) R2-100 signs or 2) standard R2-1 regulatory speed limit signs with CW20-102 "DOUBLE FINES" plates mounted below.

8. The limit shown on work zone speed limit signs shall be either the existing limit before construction or, if a work zone speed limit order has been approved in accordance with ADOT&PF Procedure 05.05.020 PDR, a reduced limit.

9. All existing regulatory speed limit signs within double fine zones shall either be replaced with R2-100 signs or supplemented with CW20-102 plates.

10. Signs shall be installed at major intersections within the double fine zone to warn entering drivers of double fines. This may be done with a R16-100 sign with a CWI-7 arrow panel on the side street or with two work zone speed limit signs on the main street on either side of the intersection. Use of R16-100 signs on side streets eliminates the need for "Road Work Ahead" signs on those streets. If the speed limit has been reduced, the two work zone speed limit signs are mandatory.

11. At the end of each double fine zone, install an R2-1 sign showing the speed limit for the road beyond the double fine zone.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

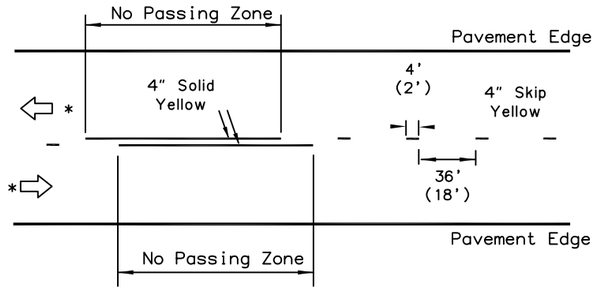
LOCATION OF DOUBLE TRAFFIC FINE SIGNS

Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

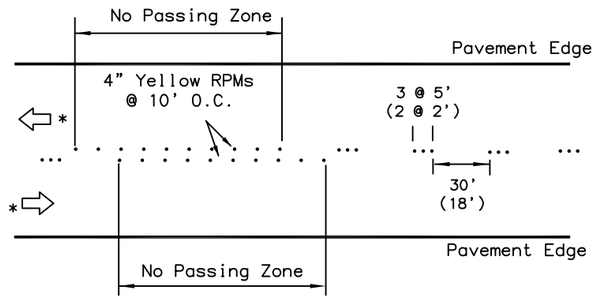
Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029



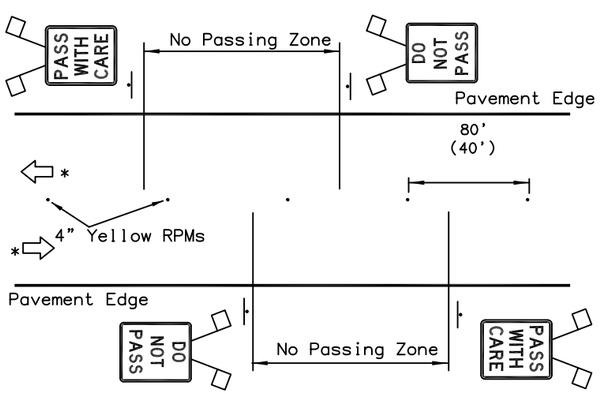
Striping



Temporary Raised Pavement Markers

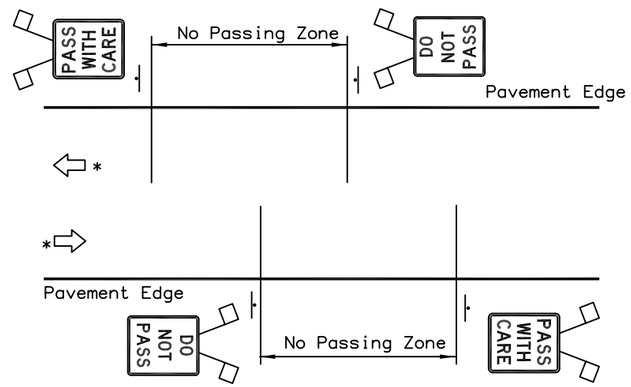
DETAIL A

Two-lane road: No Passing Zones indicated with pavement markings.



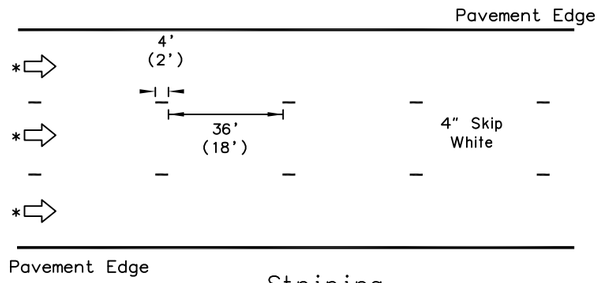
DETAIL B

Two-lane road: No Passing Zones indicated by signs only. Raised pavement markers for centerline delineation.

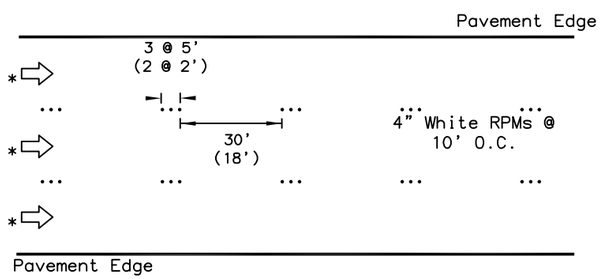


DETAIL C

Two-lane road: No Passing Zones indicated by signs only (see Note 2c). No centerline delineation.



Striping



Temporary Raised Pavement Markers

DETAIL D

Multilane one-way road: Lane dividing lines

* Direction of Travel

GENERAL NOTES:

1. Final pavement markings conforming to Part 3 of the Alaska Traffic Manual should be installed before paved roads are open to public travel. If that is not practical, install interim pavement markings as shown on this drawing. Maintain interim pavement markings until final pavement markings are installed.

2. No interim pavement markings are required:
   a. on projects that will not have permanent markings when finished.
   b. in work zones that are open to public travel for no more than one work shift during daytime or for no more than one hour at night.
   c. where DO NOT PASS and PASS WITH CARE signs are installed on two lane roads as shown in Detail C, no pavement markings are required:
      1) for 3 days if seasonal ADT is above 2000, or
      2) for 1 month if seasonal ADT is below 2000.

3. Interim pavement markings should not be in place longer than 14 calendar days before being replaced with permanent markings conforming to Part 3 of the Alaska Traffic Manual unless the Engineer provides written approval.

4. Where R4-1 DO NOT PASS signs are used, install at the beginning of no passing zones and at no more than 1500' spacings within no passing zones.

5. Install high level warning devices on all DO NOT PASS and PASS WITH CARE signs.

6. Offset temporary markings 8"-12" from the future location of permanent markings if applied on the same lift of pavement.

7. Dimensions in parenthesis apply to curves with a radius of 1000 feet or less or where posted speed limit is 30 mph or less.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

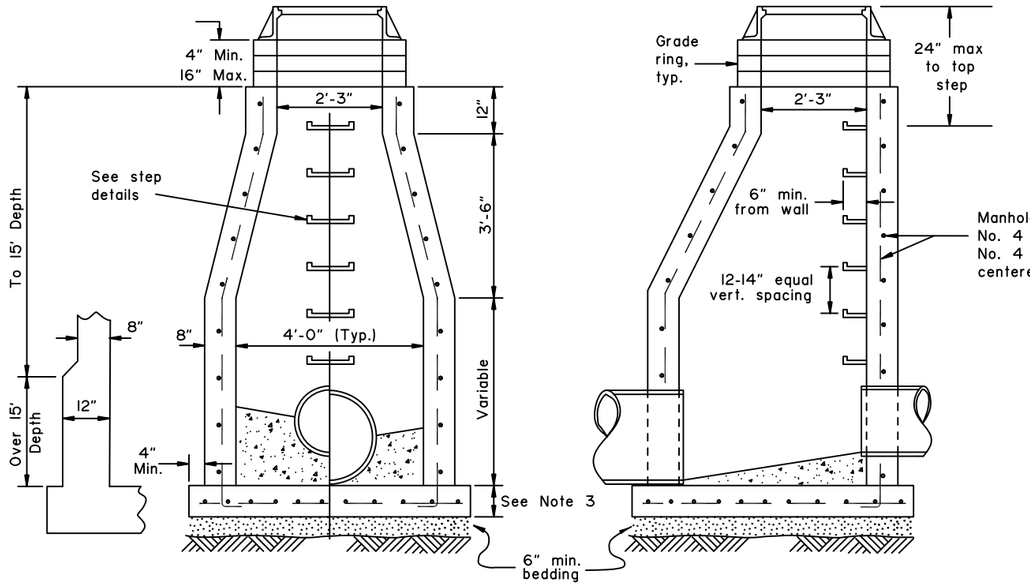
INTERIM PAVEMENT MARKINGS

Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

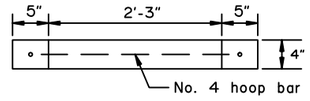
Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

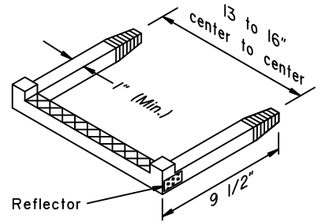


CAST-IN-PLACE MANHOLE

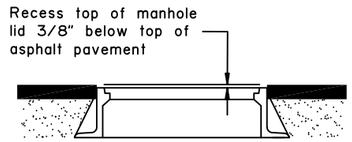
NOT USED



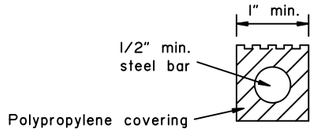
GRADE RING



STEP DETAIL



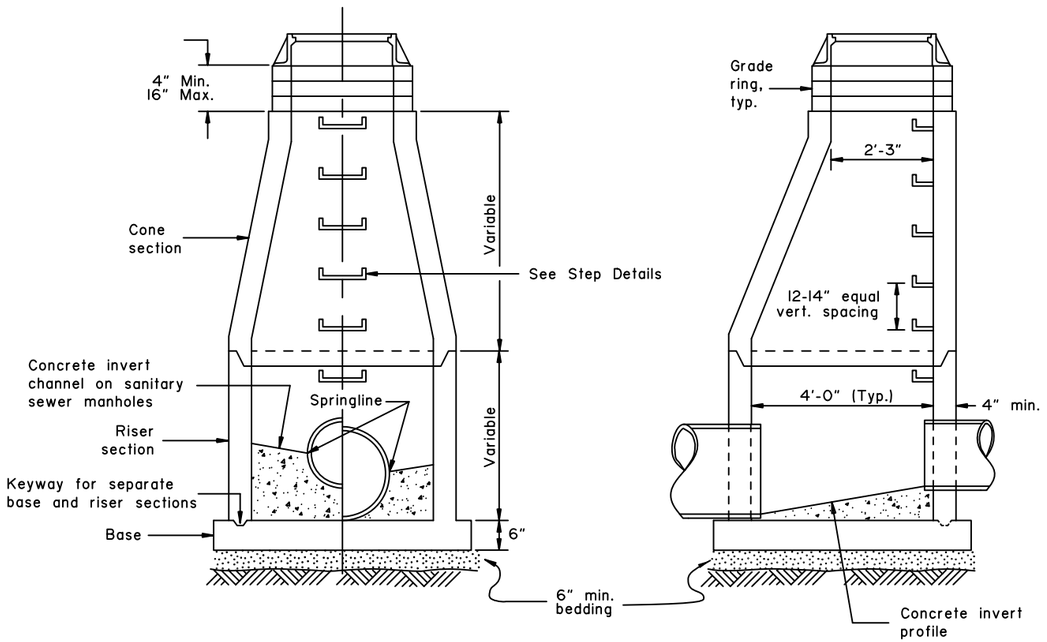
MANHOLE IN PAVEMENT



STEP CROSS SECTION

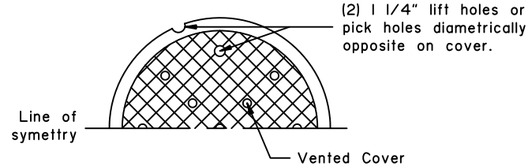
GENERAL NOTES:

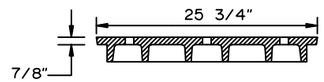
1. Either precast or cast-in-place manholes may be used.
2. Details for manhole frame, cover and step are generic in nature and may vary from shown depending on manufacturer
3. Use 8" thick cast-in-place concrete bases for depths less than 15' and 12" thick bases for depths 15' or greater.
4. Manhole frames shall have a depth of 6" unless otherwise indicated on the plans.
5. Step requirements:
   a. 18" max. vertical clearance to bottom of manhole or concrete invert.
   b. 3" minimum embedment.
   c. 1,500 lb. min. pullout force.
   d. ASTM A-615 grade 60 steel bar.
   e. Injection molded polypropylene covering meeting ASTM D-41010
   f. Slip resistant foot tread with "wings" to prevent feet from sliding off the edge.
   g. Reflectors at step corners
6. Reinforcement for precast manhole sections shall meet AASHTO M 199.



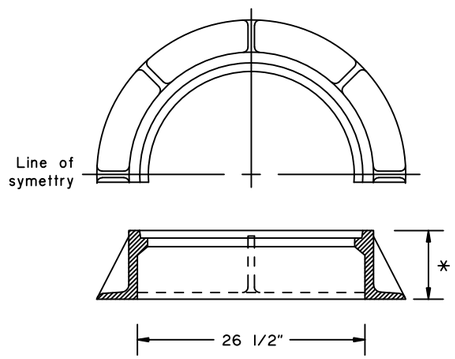
PRECAST CONCRETE MANHOLE

Reinforcement not shown for clarity
See Note 6





MANHOLE COVER



MANHOLE FRAME

MANHOLE FRAME & COVER MINIMUM WEIGHT		
* Depth	6"	380 lbs
	7"	400 lbs
	8"	440 lbs
	9"	470 lbs
	10"	500 lbs

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ALASKA STANDARD PLAN

MANHOLES, FRAME AND COVER

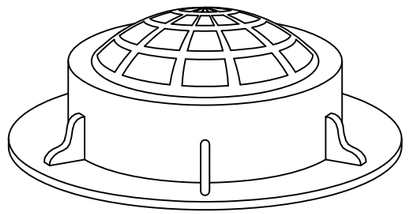
Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

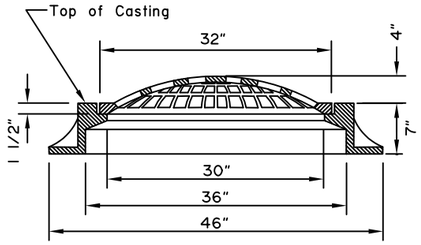
Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

D-20.05

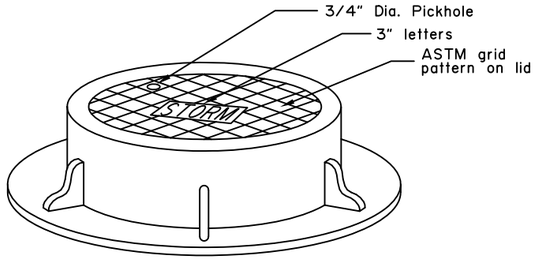


Surround field inlets with a 24" wide rock rubble collar 10" deep, 3" maximum size rock.



FIELD INLET FRAME & GRATE

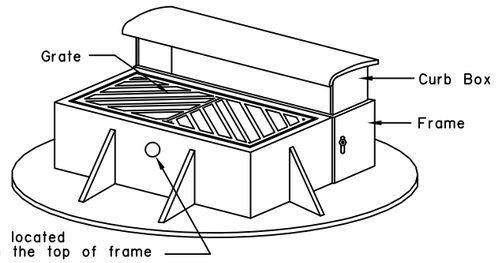
To be supplied for storm drain manholes where field inlets are specified. Field inlet frame and grate shall have a Minimum total weight of 525 lb.



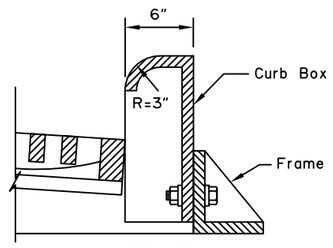
MANHOLE LID FRAME AND GRATE

NOTES:

1. Details shown are to indicate general design only. Dimensions and design may vary among the manufacturers, except that inlet grate shall be within ¼"± of dimensions shown on this drawing.
2. Manhole lids shall be 32" in diameter and may be used with field inlet frames.
3. Type A field inlet frame inside dimensions shall be 24" x 36". Lugs will not protrude outside the concrete surface of the inlet box.
4. Grates shall be bicycle safe. Where high capacity grates are called for on the plans, they shall conform to Std. Dwg. D-25.
5. Frame and grate casting types are identified by the following abbreviations:
   C.I. = Curb Inlet
   F.I. = Field Inlet
   M.H. = Manhole
6. Flowline depression shall conform to Std. Dwg. D-23 for an on grade or sag point conditions.
7. These are the default frames and grates to be used unless shown otherwise on the drainage plans or drainage structure summary.

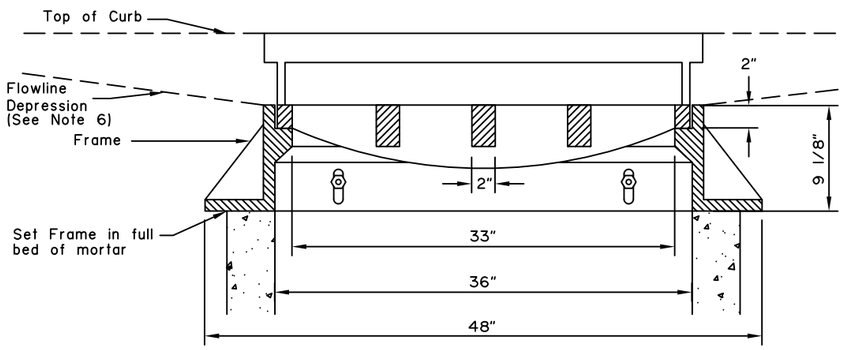


NOTE:
Curb Box, Grate and frame shall have a minimum total weight of 725 lb.

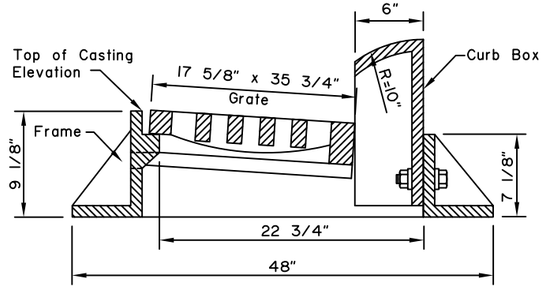


SIDE VIEW
MOUNTABLE CURB AND GUTTER

REQUIRED FRAME AND GRATES (See Note 7)			
STRUCTURE	INLET TYPE	CURB TYPE	TYPE FRAME AND GRATE
INLET BOX, TYPE A	Curb	Mountable	Standard Curb Inlet
	Curb	Expressway	Mountable Curb Inlet
	Curb	Rolled Curb	Depressed Inlet
	Field	------	Field Inlet
STORM DRAIN MANHOLES, TYPE I, II AND III	Curb	Mountable	Mountable Curb Inlet
	Curb	Expressway	Expressway Curb Inlet
	Curb	Rolled Curb	Depressed Inlet
	Field	------	Field Inlet
	Manhole Lids	------	Field Inlet Frame, Solid MH. Lid



FRONT VIEW



SIDE VIEW
EXPRESSWAY CURB AND GUTTER

CURB INLET FRAME AND GRATE

To be supplied for storm drain manholes Type I, Type II and Type III where curb inlets are specified.

NOT TO SCALE

State of Alaska DOT&PF
ALASKA STANDARD PLAN

STORMDRAIN MANHOLE FRAME AND GRATE DETAILS

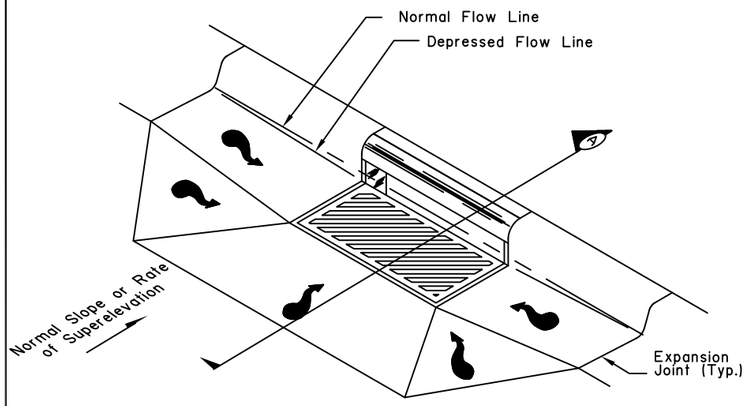
Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

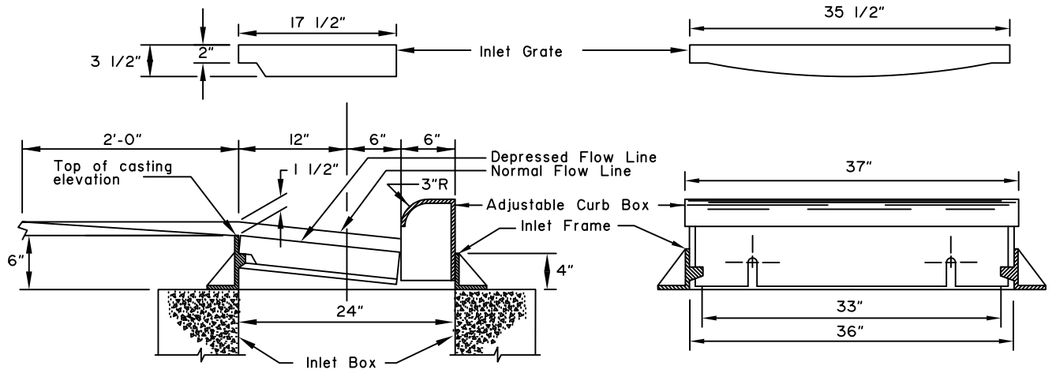
Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

D-22.01



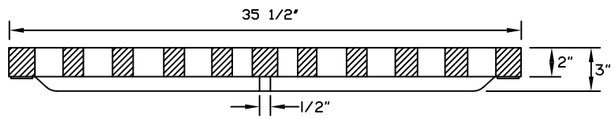
STANDARD CURB INLET INSTALLATION



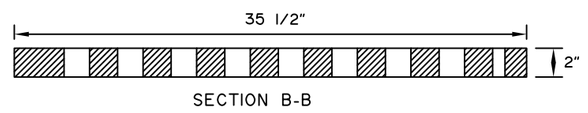
SECTION A

GENERAL NOTES:

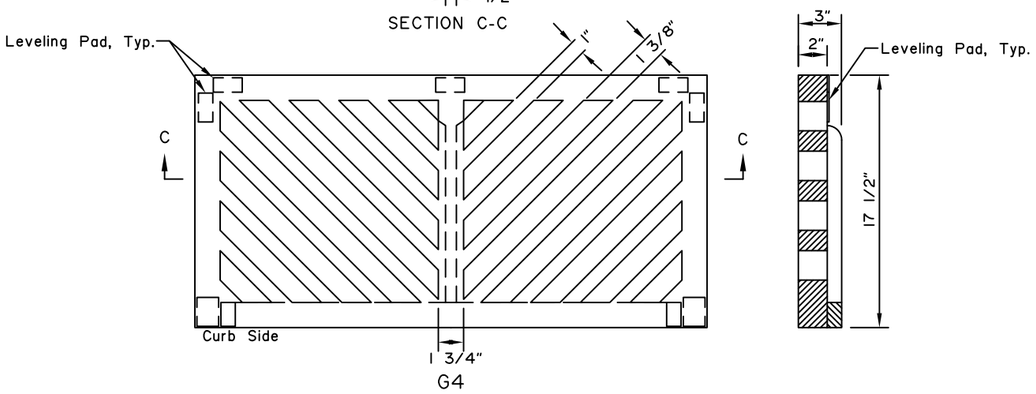
1. Details shown are to indicate general design only. Dimensions and design may vary among the manufacturers.
2. Minimum casting weight shall be 330 lbs for Curb Inlet Frame with Curb Box and 200 lbs. for Inlet Grate.
3. The outside dimensions of Inlet Grate shall be 35 1/2" x 17 1/2" and all grates shall be inter-changeable.
4. Minimum drainage area of Inlet Grate shall be 255 square inches.
5. Inlet Grate type G-3R or G-3L shall be used in all cases except where drainage is from both directions, in which case type G-4 shall be used.



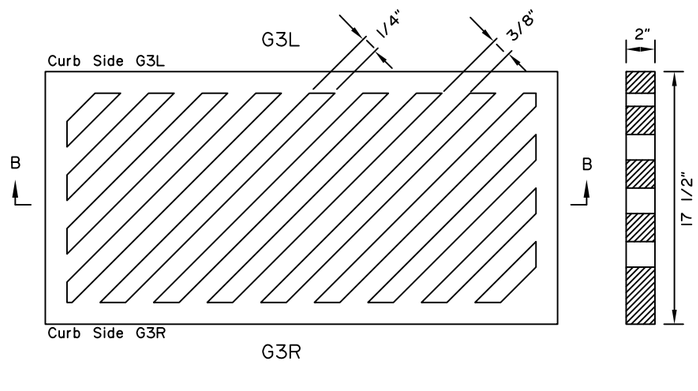
SECTION C-C



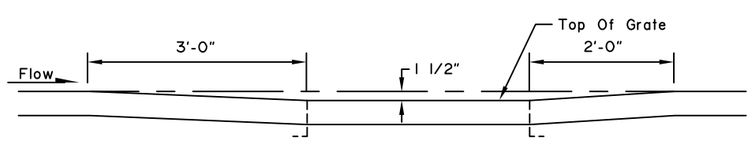
SECTION B-B



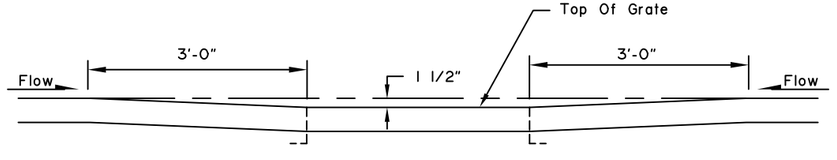
G4



G3R



ON GRADE



AT LOW POINT

DEPRESSION IN FLOW LINE AT INLET CONSTRUCTION DETAILS

NOT TO SCALE

SR 2/3/21

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CURB INLET BOX, FRAME & GRATE

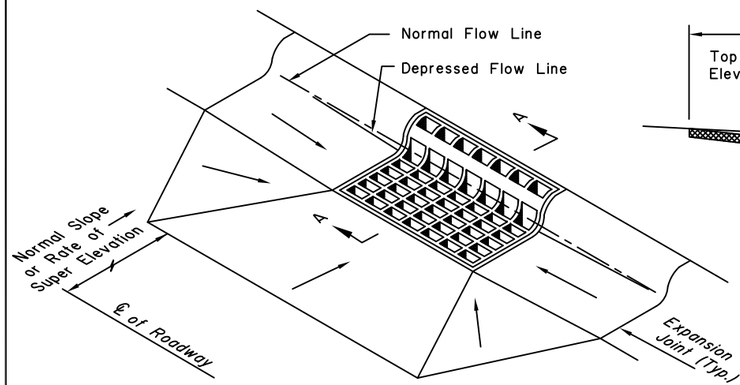
Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

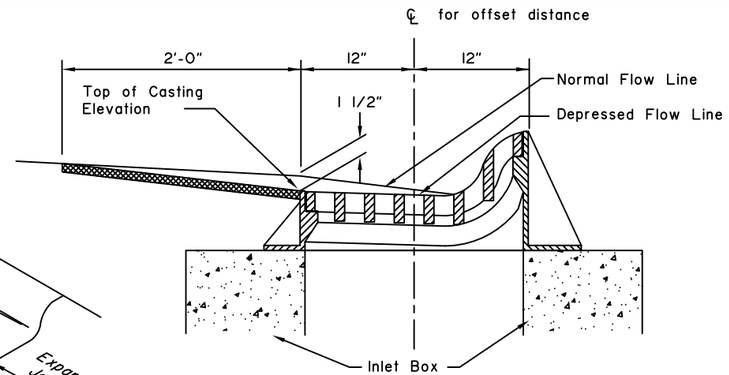
Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

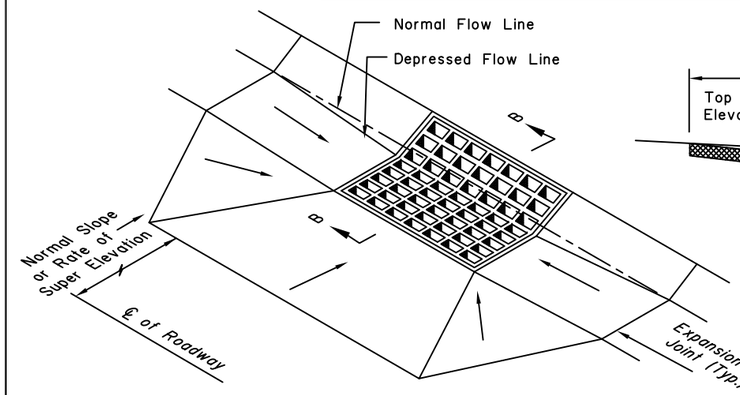
D-23.01



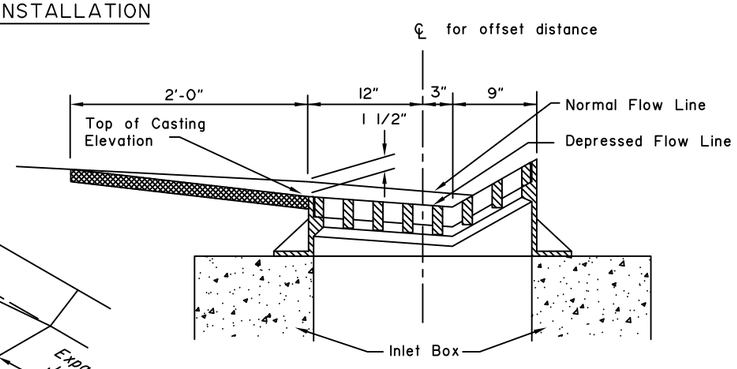
MOUNTABLE CURB INLET INSTALLATION



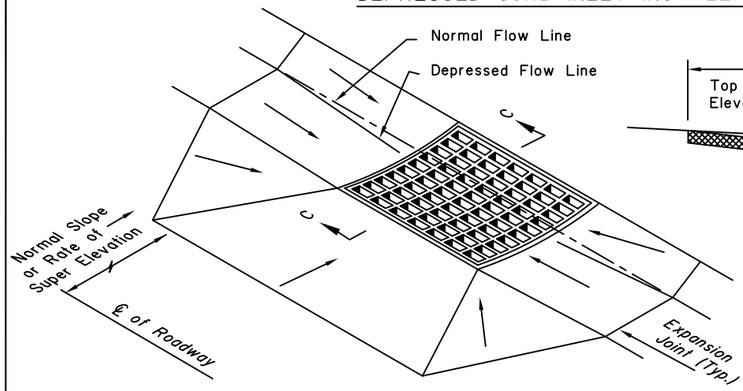
SECTION A-A



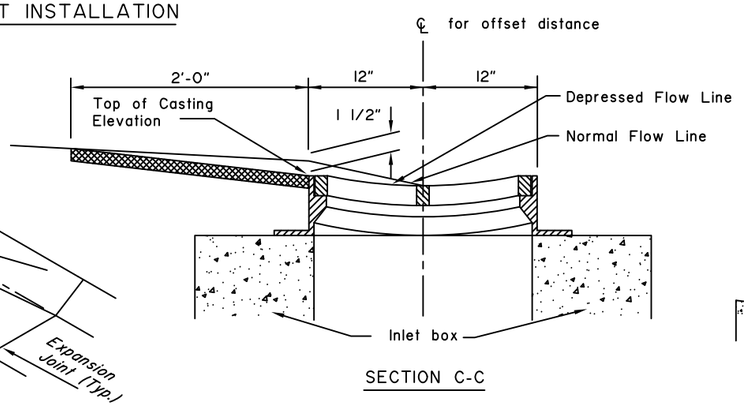
DEPRESSED CURB INLET INSTALLATION



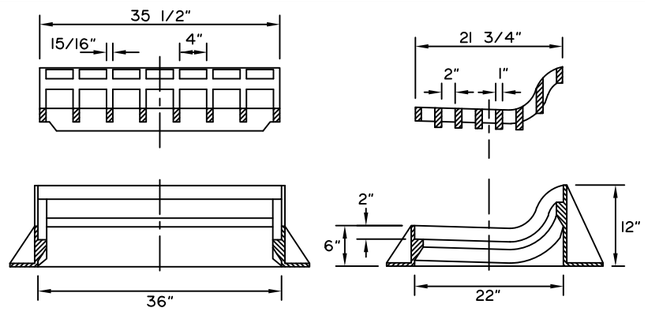
SECTION B-B



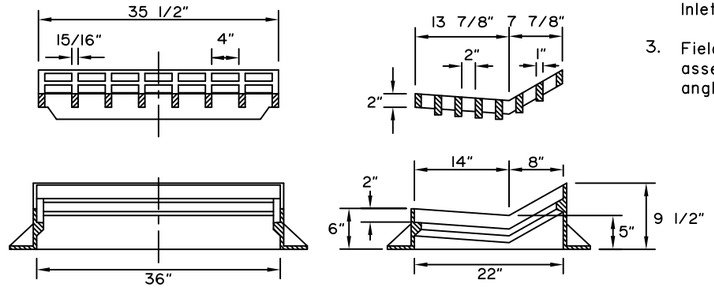
GUTTER INLET INSTALLATION



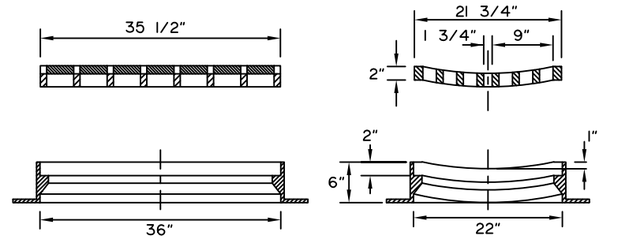
SECTION C-C



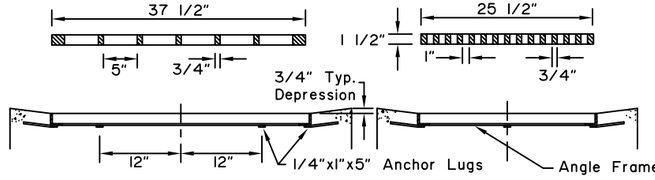
MOUNTABLE CURB INLET FRAME AND GRATE



DEPRESSED CURB INLET FRAME AND GRATE

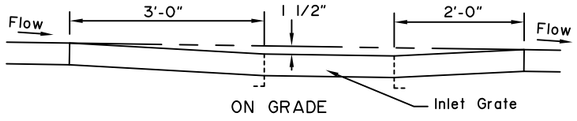


GUTTER INLET FRAME AND GRATE

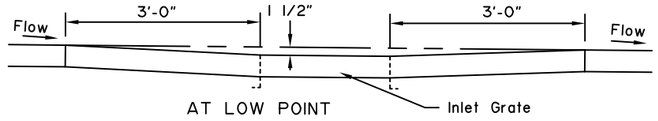


NOTE: All Angle Frame shall have Anchor Lugs

FIELD INLET FRAME AND GRATE



ON GRADE



AT LOW POINT

DEPRESSION IN FLOW LINE AT INLET CONSTRUCTION DETAILS

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"x1 3/4"x1/4" angle equivalent to ASTM A-36 steel.

SR 2/3/21

State of Alaska DOT&PF
ALASKA STANDARD PLAN

INLET FRAMES AND GRATES

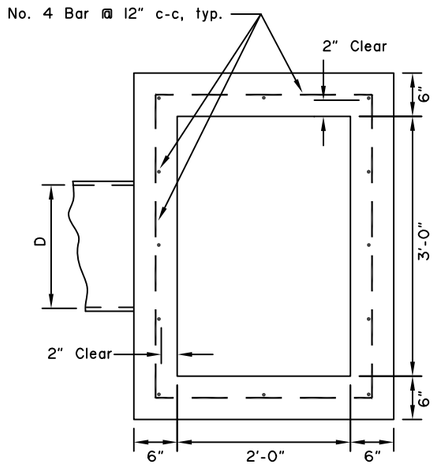
Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

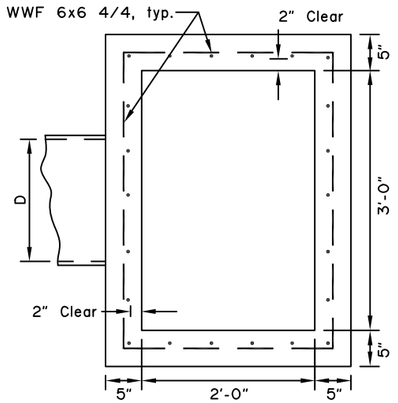
Adoption Date: 02/08/2019

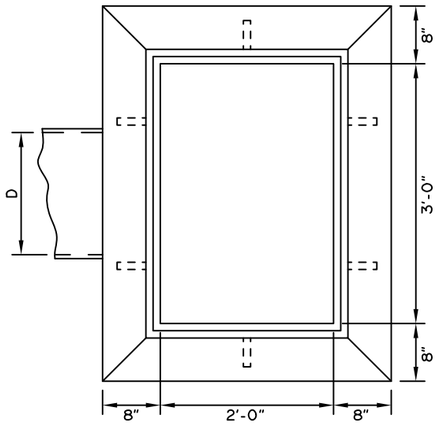
Last Code and Stds. Review By: Date:

Next Code and Standards Review date: 02/08/2029

D-24.00

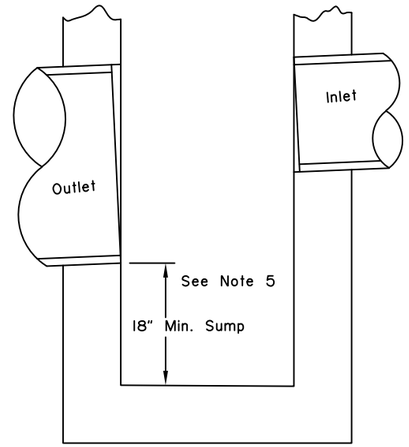




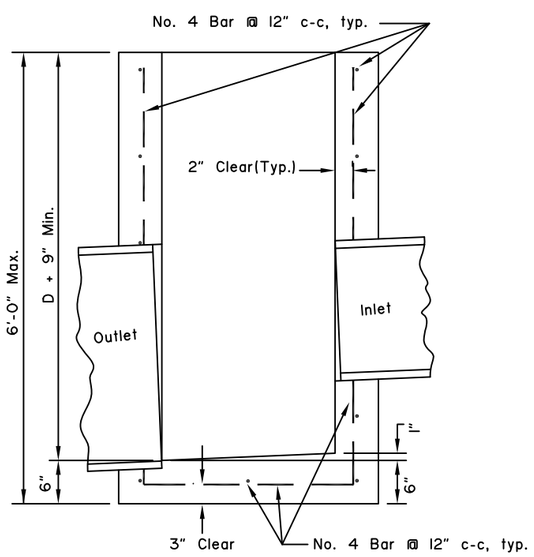


GENERAL NOTES:

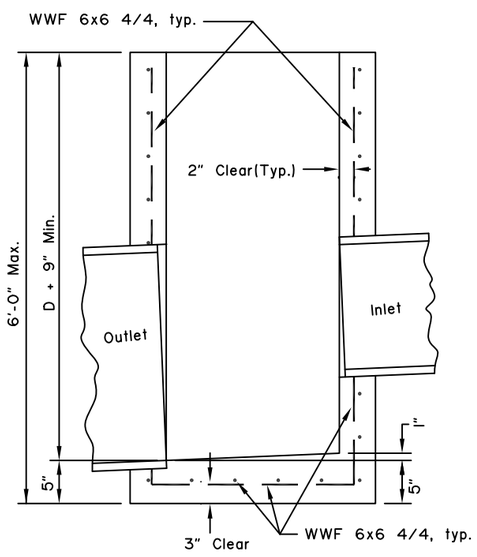
1. Install inlet boxes parallel to the curb line.
2. The plans will indicate which inlet boxes require a sump.
3. Shape floors to drain.
4. Use Grade 40 minimum reinforcing steel.
5. The plans will indicate which inlet boxes require sumps.



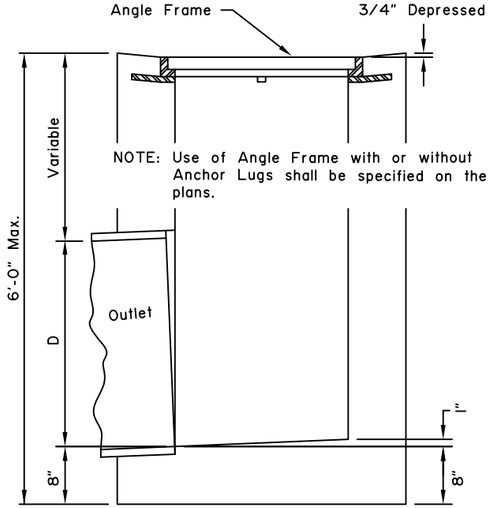
SUMP DETAIL



REINFORCED
CAST IN PLACE
NOT USED



PRECAST



FIELD INLET BOX
CAST* IN PLACE
NOT USED

* May be Precast or Reinforced Cast-In-Place Box.

TYPE "A" CONCRETE INLET BOXES

NOT TO SCALE

State of Alaska DOT&PF
ALASKA STANDARD PLAN

**TYPE "A"
INLET BOX**

Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

D-26.04

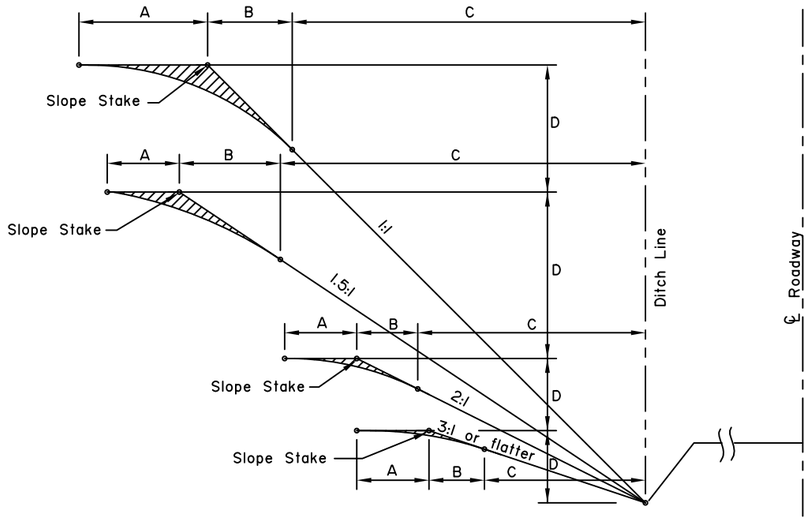


FIG. 1
TYPICAL SECTION OF ROUNDED SLOPES

TABLE OF ROUNDING DIMENSIONS

Rate of Slope	A		B	
	When B's 5.0' or less	When B is more than 5.0'	When D's 15.0' or less	When D is more than 15.0'
3:1 or flatter	B	5.0'	5.0'	5.0'
2:1	B	5.0'	5.0'	D/3
1.5:1	B	5.0'	5.0'	D/3
1:1	B	$\frac{D}{3}$, Max. 10.0'		D/3

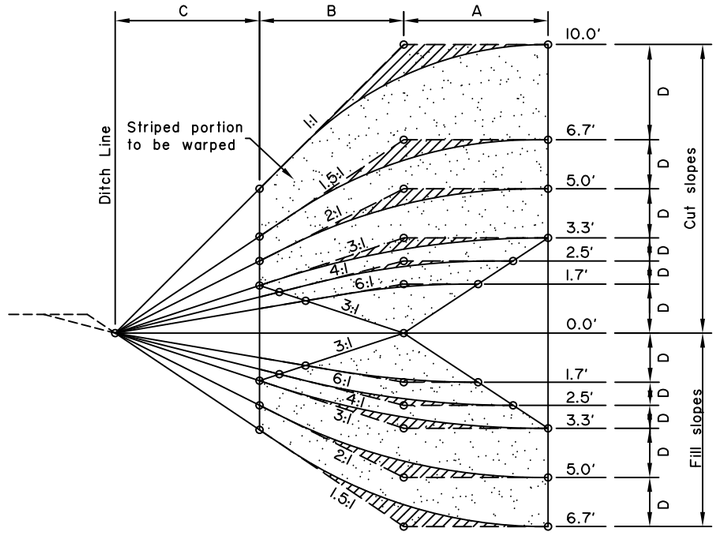


FIG. 4
TYPICAL GRADING FOR WARPING SLOPES

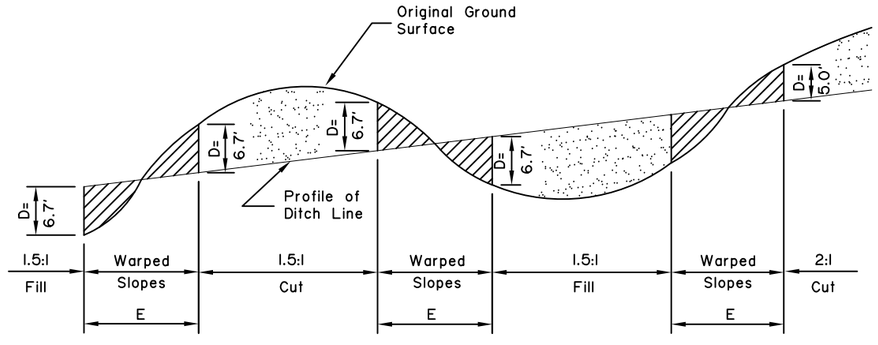


FIG. 5
TYPICAL PROFILE OF WARPED SLOPES

TYPICAL SLOPE WARPING

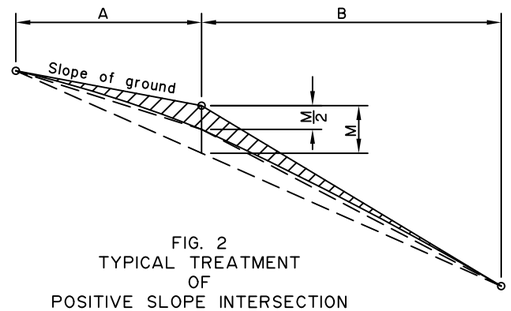


FIG. 2
TYPICAL TREATMENT
OF
POSITIVE SLOPE INTERSECTION

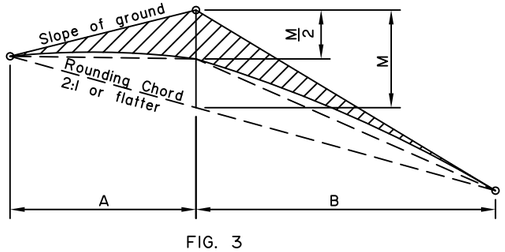


FIG. 3
TYPICAL TREATMENT
OF
NEGATIVE SLOPE INTERSECTION

TYPICAL SLOPE ROUNDING

GENERAL NOTES

1. Cut and fill slopes shall be rounded as shown in fig. 1, 2, and 3 when required by the plans or special provisions. Rounding of fill slopes shall be done in the same manner as shown for cut slopes.

2. Intersections of cut and fill slopes shall be warped as shown in fig. 4 and 5 when required by the plans or special provisions.

3. Warping of cut and fill slopes is for the purpose of attaining a more pleasing appearance and to promote the growth of natural vegetation by causing the fill slope to flow smoothly into the cut slope. The length of slope warping is relatively proportional to the character of the topography, the distance between end limits of warped surfaces being lessended as the terrain steepens and lengthened as the topography flattens out. The procedure as outlined herein is typical and shall be varied to meet special conditions and shall be as staked by the Engineer.

4. SUGGESTED PROCEDURE FOR WARPING SLOPING

   A--Select end points for warping to fit specified slope ratios as follows:-
   (a) The dimensions A, B, and C shall all be constant throughout the full length of warping, E.
   (b) When the average depth of cut or fill is such that the dimension B+C exceeds 10 feet, the ends of warping shall be at points where B+C is 10 feet, provided the warping distance E does not exceed 100 feet. That is, as shown in fig. 4 and 5, warping shall begin at a cut or fill depth of 6.7 feet for 1.5:1 slopes, at 50 feet for 2:1 slopes, etc. if the dimension E exceeds 100 feet, the dimension B+C shall be reduced until the intersections of the prescribed slopes with the natural ground are 100 feet apart.
   (c) When the average depth of cut or fill is such that the distance B+C is between 5 feet and 10 feet, the ends of warping shall be at points where C is 0 feet, but such points shall not be more than 150 feet apart.
   (d) When the average depth of cut or fill is such that the dimension B is less than 5 feet, the ends of warping shall be 200 feet apart.

   B--Set slope stakes at end of warping.

   C--Set additional slope stakes at various intervals between end stakes and at the sames distance from centerline.

   D--Flatten and round warped slopes as shown in figure 4 for each section.

5. A layer of earth overlying a rock cut shall be rounded as far as possible as though the total height of slope were in earth cut.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SLOPE
ROUNDING AND WARPING

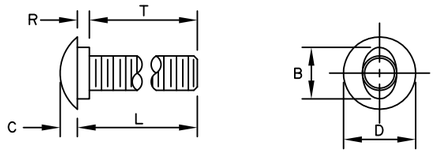
Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

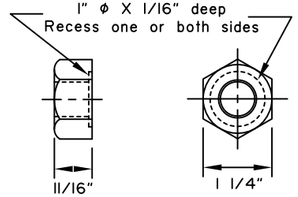
E-09.00



B	C	D	L (Length)	R	T (Thread Length)
15/16"	5/16"	1 5/16" or 1 7/16"	As Required	7/32"	As Required

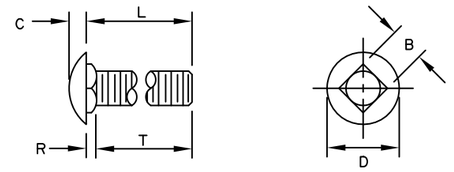
5/8" BUTTONHEAD BOLT

(FBB01-05)



5/8" Dia. RECESSED HEX NUT

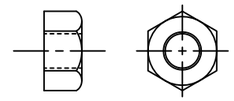
(FBB01-05)



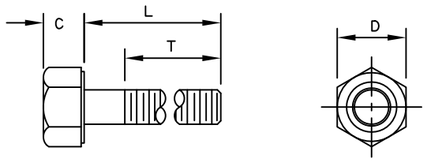
B	C	D	L (Length)	R	T (Thread Length)
5/8"	5/16"	1 5/16"	As Required	3/16"	As Required

5/8" Dia. CARRIAGE BOLT

(FBC10-20)

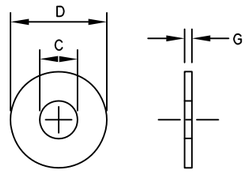


STANDARD HEX NUT



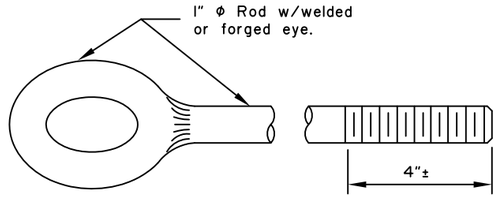
Bolt Size	C	D	L (Length)	T (Thread Length)
5/16"	——	——	1 1/2"	7/8"
5/16"	——	——	1"	1"
3/8"	——	——	7 1/2"	1 1/2"
1/2"	——	——	1 1/2"	1 1/2"
1/2"	——	——	1 1/4"	1 1/4"
5/8" H.S.	5/16"	7/8"	8"	1 1/2"
5/8"-11	——	——	1 1/2"	1 1/2"
3/4"	——	——	1 1/2"	1 1/2"
3/4"	——	——	As Required	2"
3/4" H.S.	15/32"	1 1/4"	2"	1 1/2"

STANDARD HEX BOLTS



For Bolt ϕ	C	D	G
3/8"	7/16"	1"	5/64"
1/2"	17/32"	1 1/16"	3/32"
1/2" H.S.	17/32"	1 1/16"	3/32"
5/8"	11/16"	1 3/4"	9/64"
3/4"	13/16"	1 15/32"	9/64"
3/4" H.S.	13/16"	2"	5/32"
1"	1 1/16"	2"	9/64"

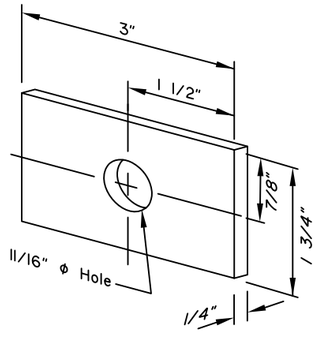
STANDARD STEEL WASHERS



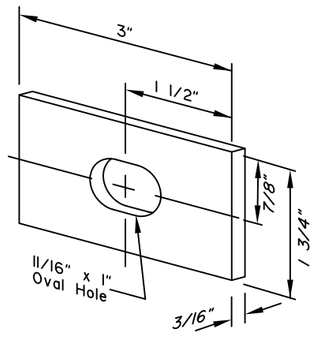
EYE BOLT

GENERAL NOTES:

1. All covered hardware shall comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition. Designators given when possible in parentheses.

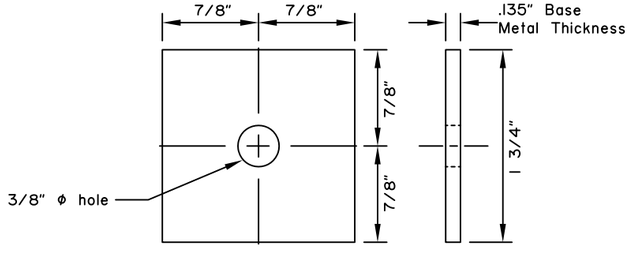


FLAT PLATE WASHER



RECTANGULAR POST BOLT WASHER

(FWR03)



SQUARE STEEL WASHER

(FWR01)

Note: drawing not to scale

REVISIONS		
Date	Description	By
3/15/99	Delete BCT Hardware	KJS
1/16/17	Added Designators	LRG
12/22/17	No changes this sht.	LRG

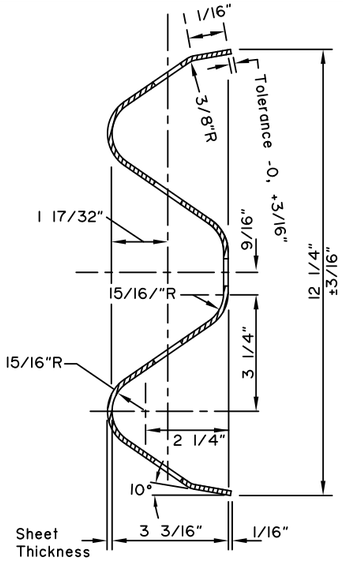
State of Alaska DOT&PF
3132 Channel Dr., Juneau, AK
Phone: (907) 465-2960

STANDARD GUARDRAIL HARDWARE (NUTS, BOLTS & WASHERS)

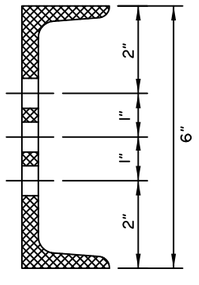


Eff. Date: 12/22/17

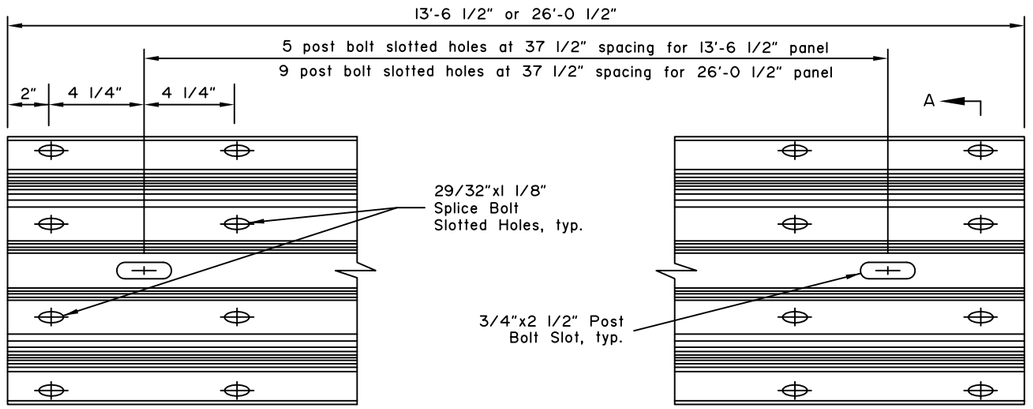
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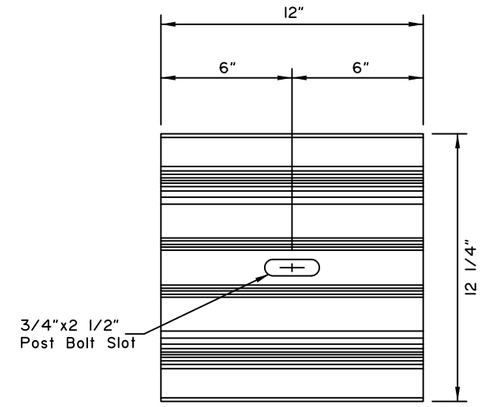
SECTION A-A
(RWM02a-b)



SECTION B-B



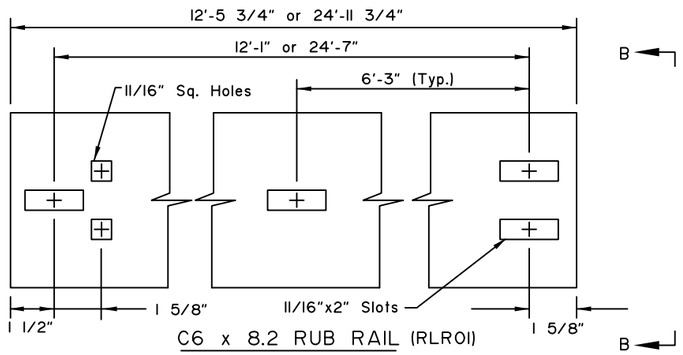
STANDARD W-BEAM PANEL (RWM04a-b)



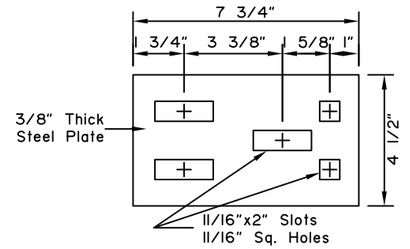
W-BEAM BACKUP PLATE
(RWB01a-b)

GENERAL NOTES:

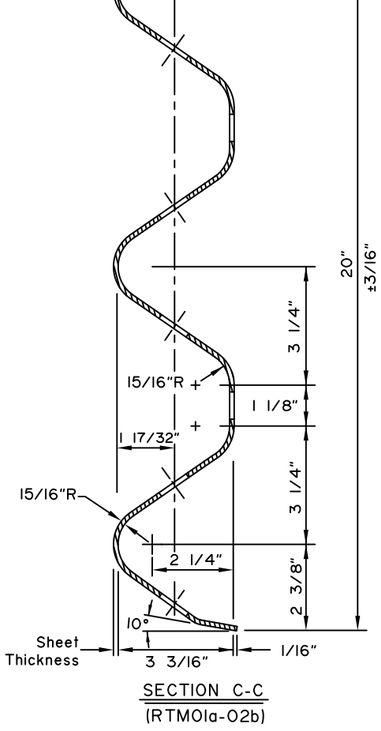
1. All covered hardware shall comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition. Designators given when possible in parentheses.
2. Install back-up plates between blockouts and w-beam or thrie-beam rail at intermediate (non-splice) posts when steel blockouts are used but not with wood, rubber, plastic, or other approved blockouts.



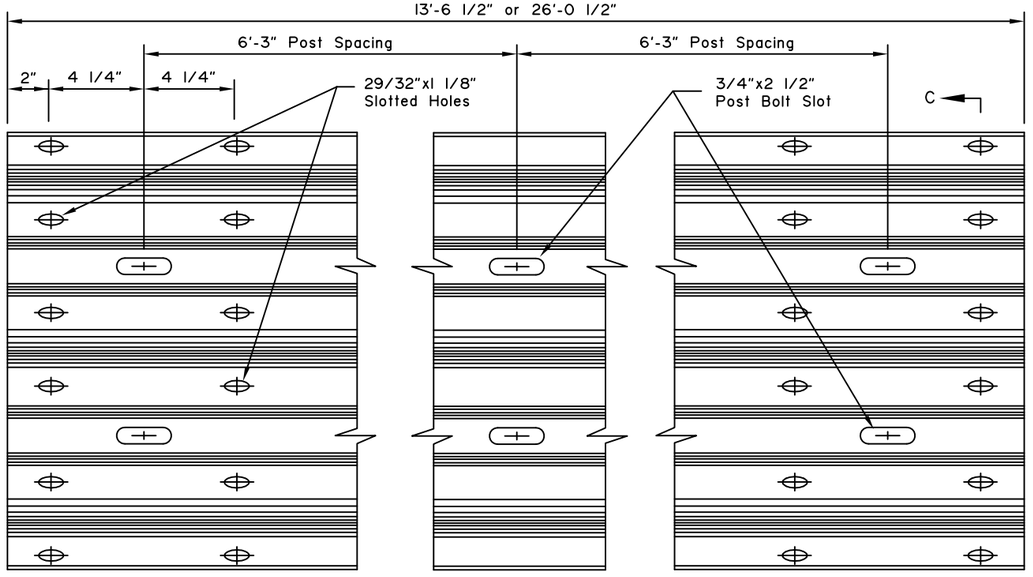
C6 x 8.2 RUB RAIL (RLR01)
ASTM A36 STEEL



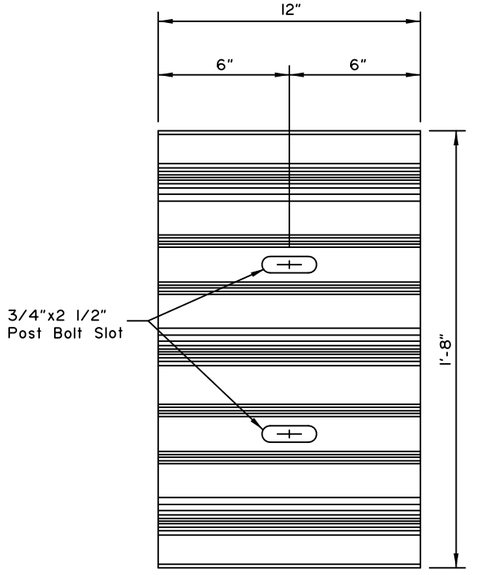
SPLICE PLATE (RLR01)
ASTM A36 STEEL



SECTION C-C
(RTM01a-02b)



STANDARD THRIE BEAM PANEL (RTM01a-02b)



THRIE BEAM BACKUP PLATE
(RTB01a-02b)

REVISIONS		
Date	Description	By
4/28/10	Revise general notes	KJS
1/16/17	Fix dimensions in Sections A-A and C-C	LRG
12/22/17	Std w-beam to RWM04	LRG

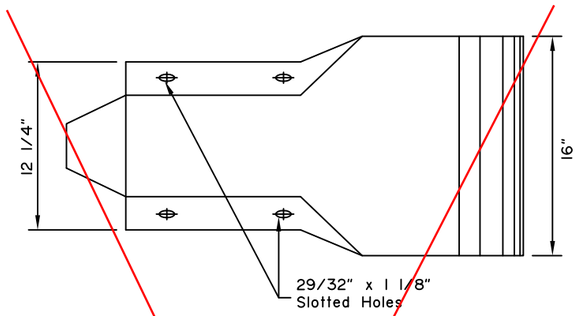
State of Alaska DOT&PF
3132 Channel Dr., Juneau, AK
Phone: (907) 465-2960

STANDARD GUARDRAIL HARDWARE (RAILS AND SPLICES)

STATE of ALASKA 49th R A
Lars R. Gregovich CE-8065
REGISTERED PROFESSIONAL ENGINEER
Dec. 8, 2017

Eff. Date: 12/22/17

G-00.04



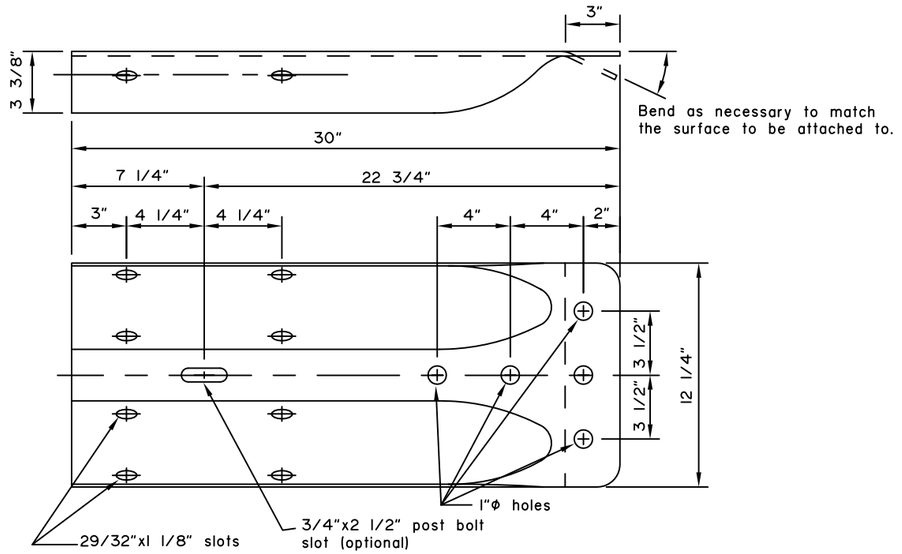
PROFILE

W-BEAM PLAN VIEW

*Radius to be specified on the plans

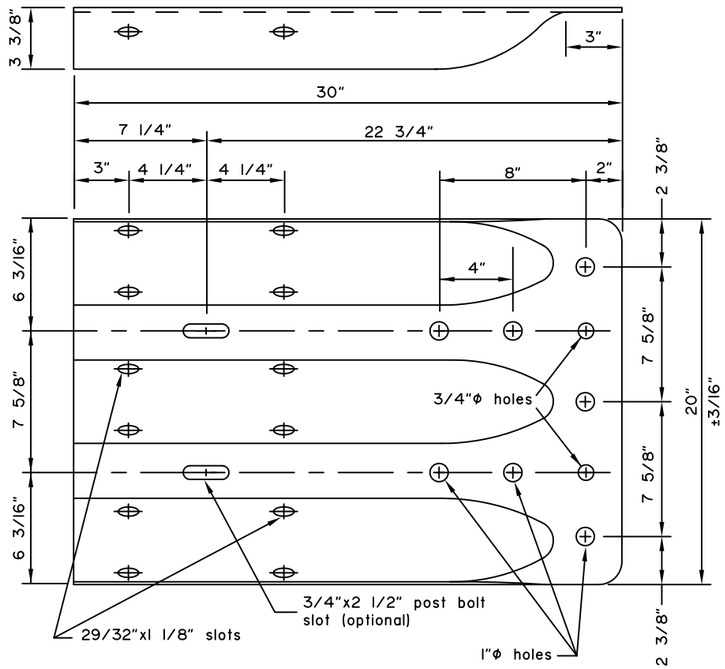
STANDARD W-BEAM END SECTION

(RWE06)



STANDARD W-BEAM TERMINAL CONNECTOR

(RWE02)



STANDARD THRIE BEAM TERMINAL CONNECTOR

(RTE01b)

GENERAL NOTES:

1. W-Beam and Thrie Beam Terminal Connectors shall conform to AASHTO M 180, Class B, Type II.
2. W-Beam end sections shall conform to AASHTO M 180, Class A, Type II.
3. All covered hardware shall comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition. Designators given when possible in parentheses.

Note: Drawing not to scale

SR 2/3/21

REVISIONS		
Date	Description	By
3/15/99	Delete Thrie end sect.	KJS
1/16/17	Holes added to Thrie	LRG
12/22/17	No changes this sht.	LRG

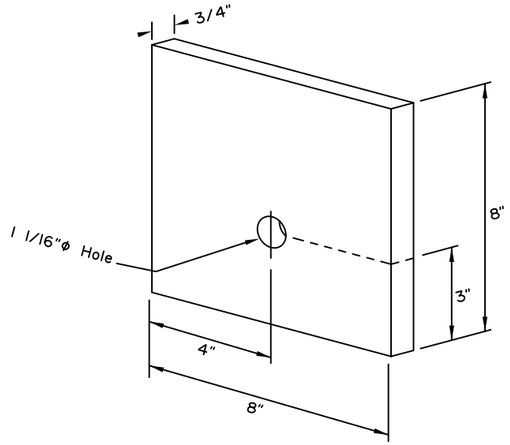
State of Alaska DOT&PF
3132 Channel Dr., Juneau, AK
Phone: (907) 465-2960

STANDARD GUARDRAIL HARDWARE (TERMINAL CONNECTORS)

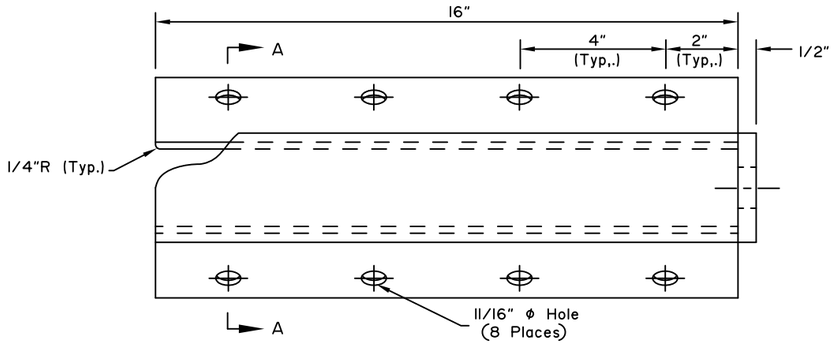
STATE of ALASKA 49th Lars R. Gregovich CE-8065 REGISTERED PROFESSIONAL ENGINEER Dec. 8, 2017

Eff. Date: 12/22/17

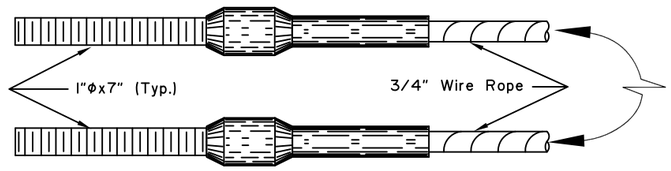
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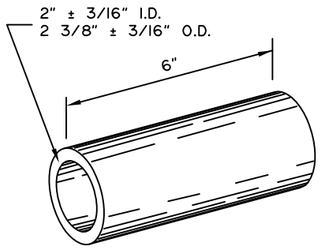
BEARING PLATE for CRT TERMINAL ANCHOR
(FPB01)



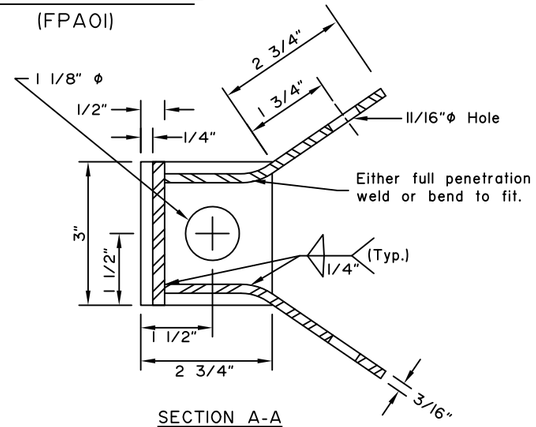
CABLE ANCHOR PLATE
(FPA01)



SWAGED FITTING DETAIL
(FCA01-02)



SLEEVE DETAIL
(FMM02)



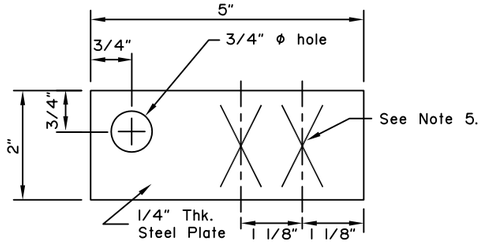
SECTION A-A

CONTROLLED RELEASE TERMINAL HARDWARE DETAILS

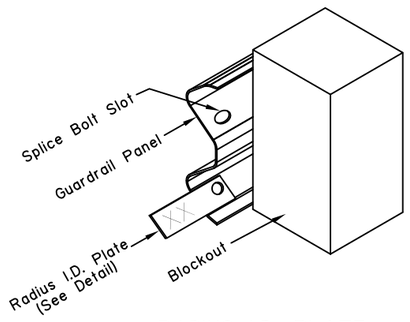
GENERAL NOTES:

1. Cable Anchor Plate may be formed in single unit or welded fabrication.
2. Anchor Cable Assembly must conform to AASHTO M 30 with Type II Wire Rope.
3. Provide Sleeve for Wood Posts meeting the requirements of ASTM A53 and made of 2-inch galvanized standard pipe. Sleeve shall be a tight, pressed fit in post.
4. Attach radius ID plates to all shop-bent guardrail sections. Bolt the ID plates to the back side of the guardrail panel with the lower splice bolt nearest the P.C. of the radius.
5. Show the Rail bend radius, in feet, as "XX" on the radius ID plate. Digits shall be etched or stamped and have a min. height of 1 1/2" and a max. width of 3/4". Galvanize the plate after the digits are marked.
6. All covered hardware shall comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition. Designators given when possible in parentheses.

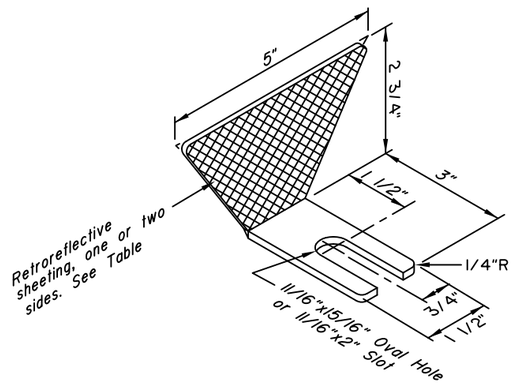
Note: Drawing not to scale



RADIUS I.D. PLATE



RADIUS I.D. PLATE MOUNTING DETAIL



GUARDRAIL REFLECTOR

Guardrail Reflector Table

Type	Color	Reflectorized
A	White	Front & Rear
B	White	Front
C	Yellow	Front
D	Yellow	Front & Rear

REVISIONS		
Date	Description	By
3/15/99	Delete BCT Hardware	KJS
1/16/17	Change ASTM in Note 3	LRG
12/22/17	No changes this sht.	LRG

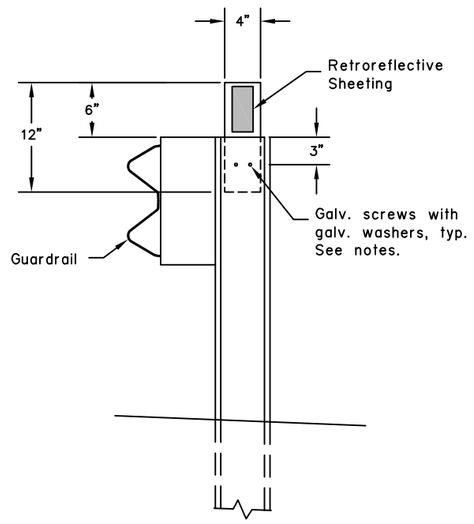
State of Alaska DOT&PF
3132 Channel Dr., Juneau, AK
Phone: (907) 465-2960

STANDARD GUARDRAIL HARDWARE (MISCELLANEOUS)



Eff. Date: 12/22/17

G-00.04



GUARDRAIL FLEXIBLE DELINEATOR DETAIL

(Steel post shown - similar for wood post)

CONSTRUCTION NOTES

1. Install guardrail flexible delineators where shown on the plans.
2. Install guardrail flexible delineators at 50 foot spacing, unless otherwise noted on the plans. Install not less than 2 delineators per guardrail run.
3. Use 3" x 5" white/yellow/red retroreflective sheeting as required per Standard Drawing T-05. Install retroreflective sheeting on both sides of delineator on two-way roads.
4. Attach 4" x 12" flexible delineators to the top of new guardrail posts, on the trailing side of the posts relative to the adjacent lane's direction of travel.
5. Predrill or preform 5/16" diameter mounting holes in steel posts by the manufacturer prior to galvanizing. Predrilling or preforming holes not required for wood posts.
6. Use 2 each 1/4" dia. x 1-1/2" long galvanized lag screws for attaching to wood posts and 2 each 1/4" dia. x 3/4" long galvanized self-drilling fasteners for steel posts. Install a galvanized washer between the fastener head and the flexible delineator.

Note: Drawing not to scale

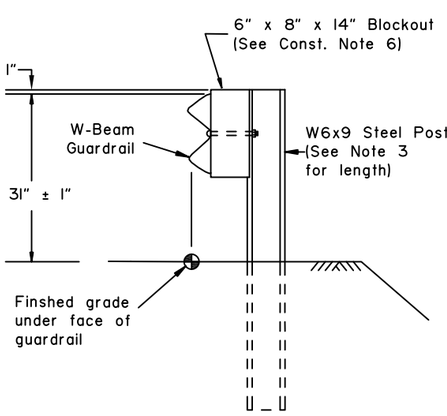
REVISIONS		
Date	Description	By
12/22/17	New Sht. 5 added	LRG

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

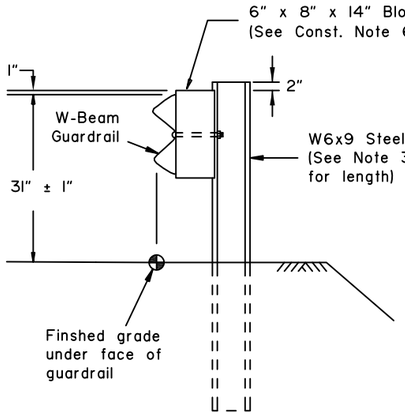
STANDARD GUARDRAIL HARDWARE (FLEXIBLE DELINEATORS)

STATE of ALASKA 49th
Lars R. Gregovich
CE-8065
REGISTERED PROFESSIONAL ENGINEER
Dec. 8, 2017

Eff. Date: 12/22/17

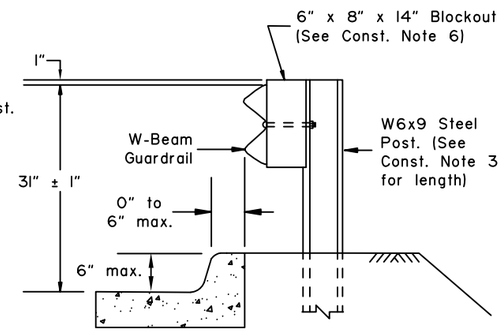


TYPE I POST INSTALLATION

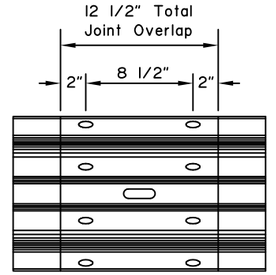


TYPE II POST INSTALLATION

(Facilitates raising rail for future overlays.)

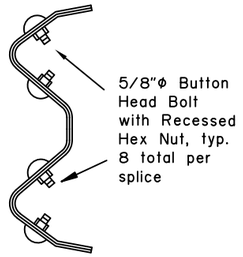


TYPE III POST INSTALLATION

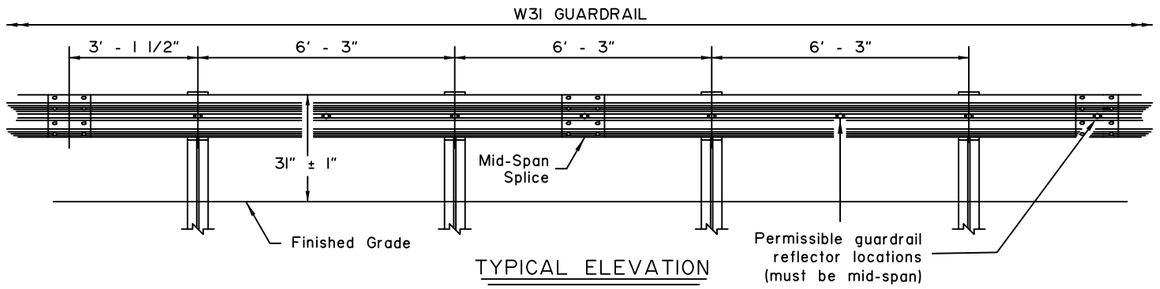


SPLICE DETAIL

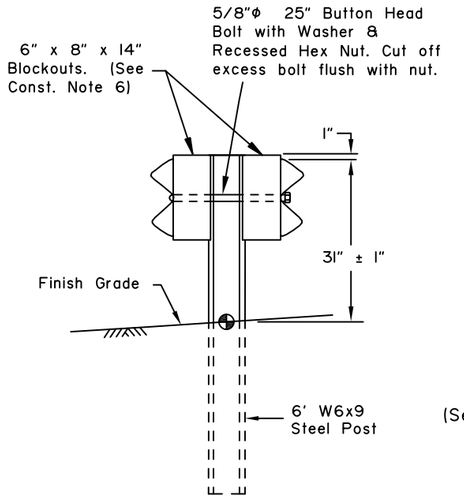
(At mid span between posts only. Bolts not shown for clarity)



SPLICE CROSS-SECTION



TYPICAL ELEVATION

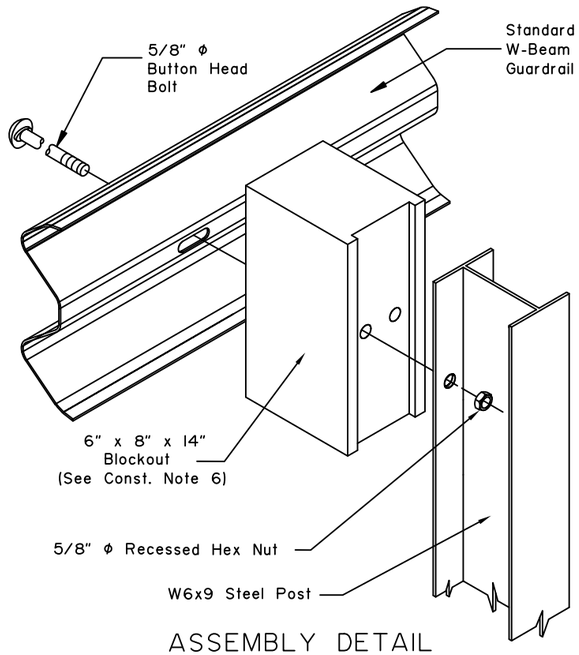


TYPE IV DOUBLE SIDED INSTALLATION



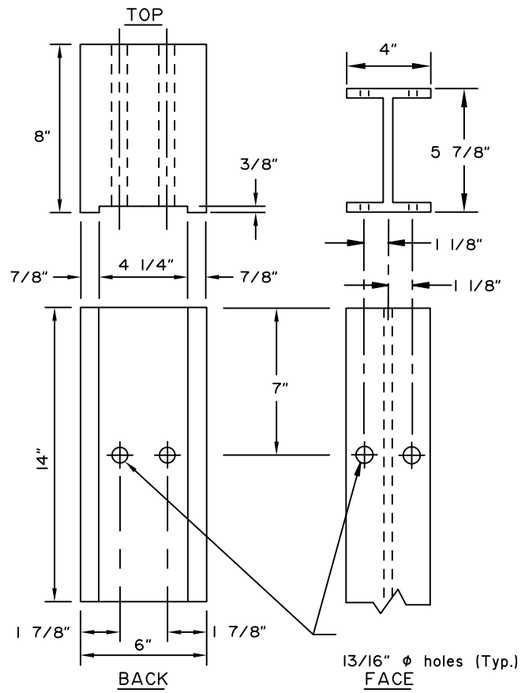
GUARDRAIL REFLECTOR

(See Const. Note 5)



ASSEMBLY DETAIL

(Type I post shown)



6" x 8" BLOCKOUT

W6x9 STEEL POST

CONSTRUCTION NOTES:

1. Provide hardware compliant with the Task Force 13 (TF13) Guide to Standardized Roadside Safety Hardware.
2. See Standard Plan G-00 for hardware details not shown on this drawing.
3. See Standard Plan G-10 for post lengths corresponding to different combinations of slope and behind-post embankment width.
4. Typical post spacing is 6'-3" center to center.
5. Attach guardrail reflector to guardrail using a 5/8" button head bolt with 5/8" recessed head hex nut and steel washer at location shown in the Typical Elevation. Install reflectors every 25' on tangents and every 12.5' on curves starting 100' before the P.C. and ending 100' after the P.T.
6. Use wood or synthetic blockouts designed, tested, and passed per MASH for use with steel posts. Either bolt hole on the blockout may be used for attachment.
7. Use a 25 linear foot transition to match differing height of existing or new rail elements and end treatments - see Standard Plan G-11.
8. W6x8.5 steel post may be substituted for W6x9 steel post.
9. Install flexible delineators on guardrail posts when called for in the contract. See Standard Plan G-00 for guardrail flexible delineator details.

DESIGN NOTES:

1. No fixed objects allowed within 36" of the back side of guardrail post.
2. This barrier is acceptable under MASH Tests 3-10 and 3-11.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

STEEL POST W31 GUARDRAIL

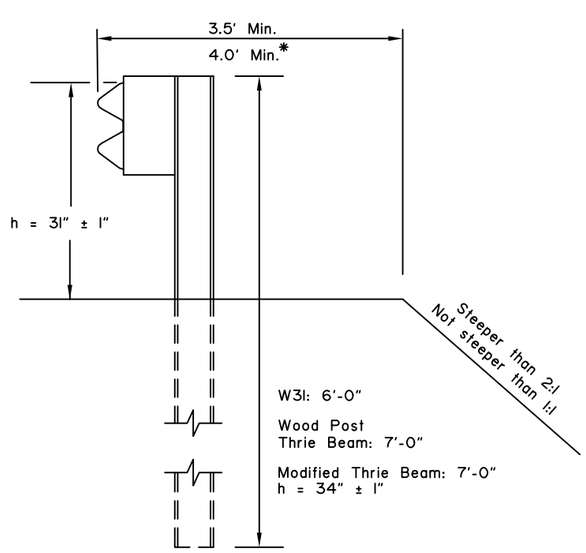
Adopted as an Alaska Standard Plan by: _____

Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 05/15/2019

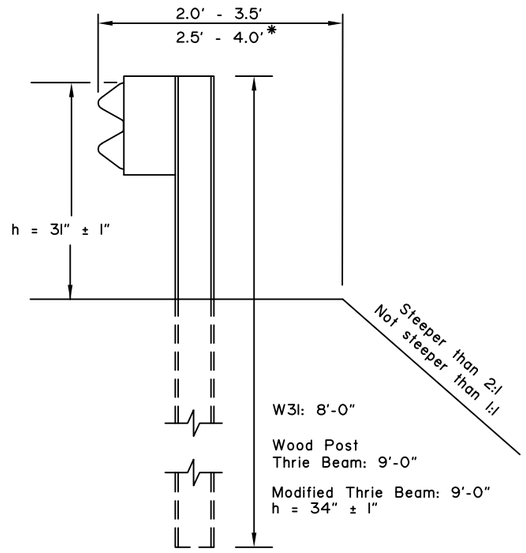
Last Code and Stds. Review
By: LRG Date: 5/15/2019

Next Code and Standards Review date: 5/15/2029



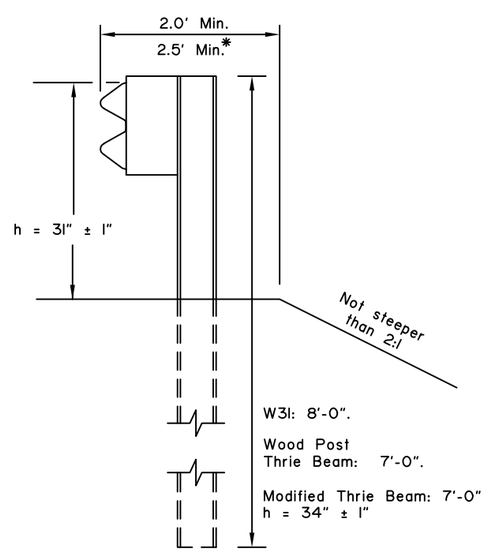
* with Modified Thrie Beam

CASE 1



* with Modified Thrie Beam

CASE 2



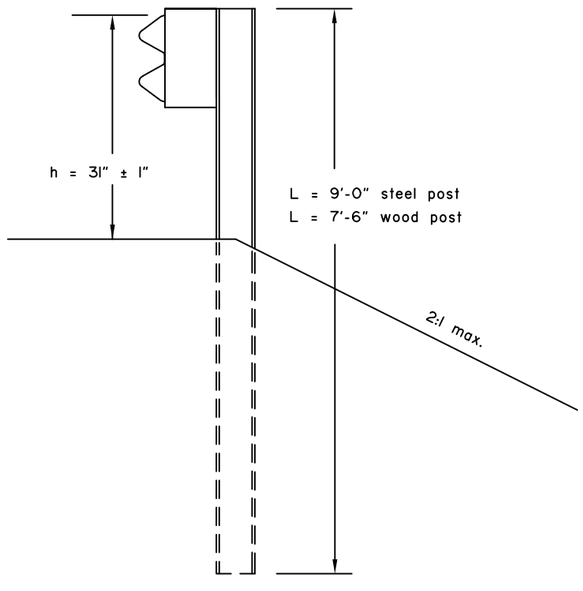
CASE 3

CONSTRUCTION NOTES:

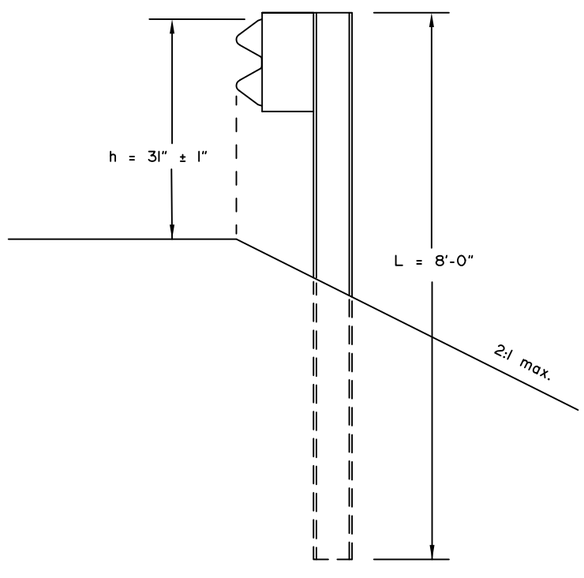
1. This drawings is to be used for post length determination only. See Plans for slopes and behind-post embankment widths.
2. To determine post length, identify the case that matches site conditions and read the length corresponding to the pertinent guardrail type.
3. These dimensions apply to both curbed and uncurbed section.
4. Case 1, 2 and 3 are shown with steel posts. Wood posts may be substituted when allowed by specifications. Wood Post Thrie Beam installations must use wood posts only.
5. Case 4 and 5 apply to W31 guardrail only.

DESIGN NOTES:

1. No fixed objects allowed within 36" of the back of post for Cases 1, 2 & 3.
2. No fixed objects allowed within 48" of the back of post for Cases 4 & 5.



CASE 4
(See Note 5)



CASE 5
(See Note 5)

State of Alaska DOT&PF
ALASKA STANDARD PLAN

GUARDRAIL POST INSTALLATION

Adopted as an Alaska Standard Plan by: Kenneth J. Fisher
Kenneth J. Fisher, P.E.
Chief Engineer

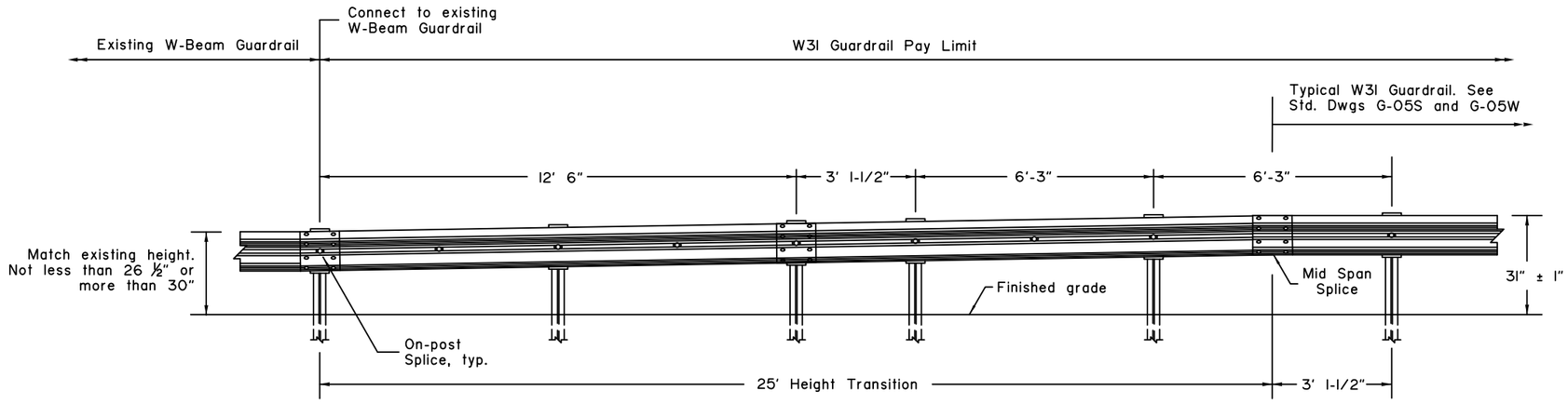
Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

GENERAL NOTES:

1. This drawing illustrates steel post W31 guardrail. Wood posts may be substituted when allowed by specification.



W31 TO W-BEAM TRANSITION

REVISIONS		
Date	Description	By

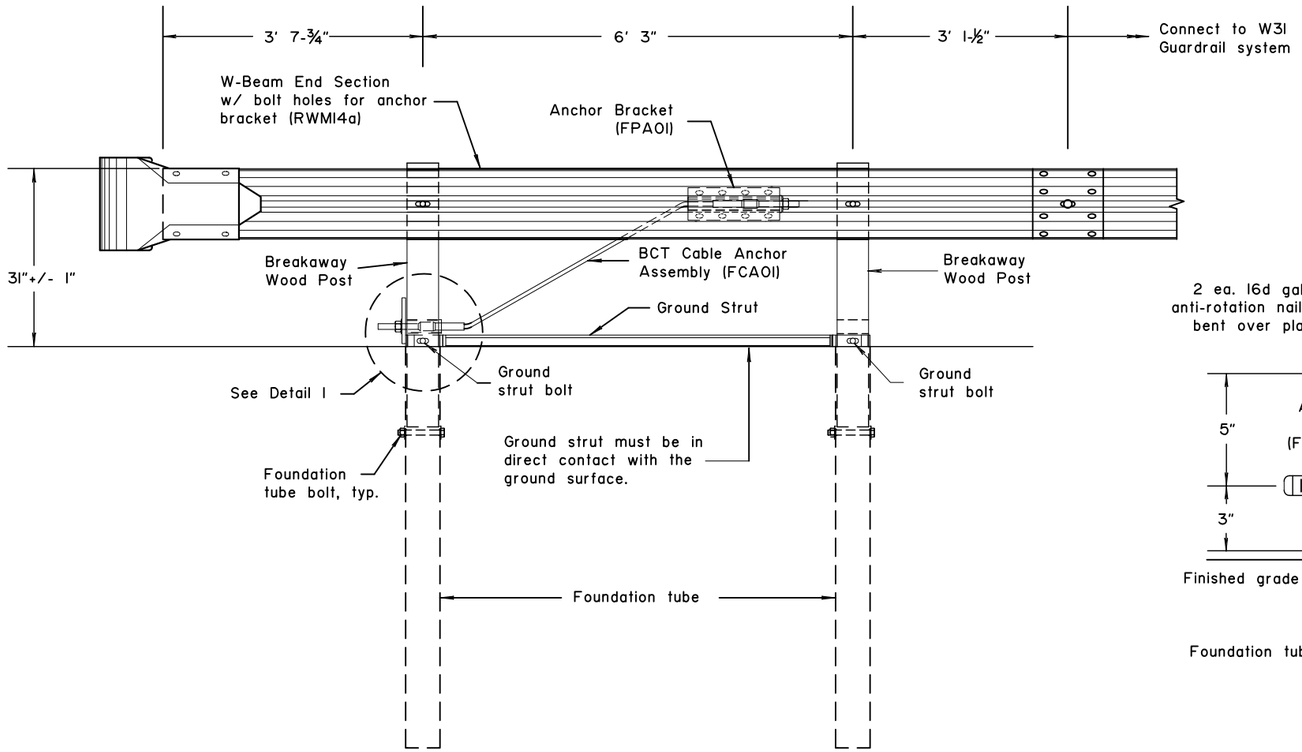
State of Alaska
Department of Transportation
& Public Facilities

W31 Guardrail
Transition Details

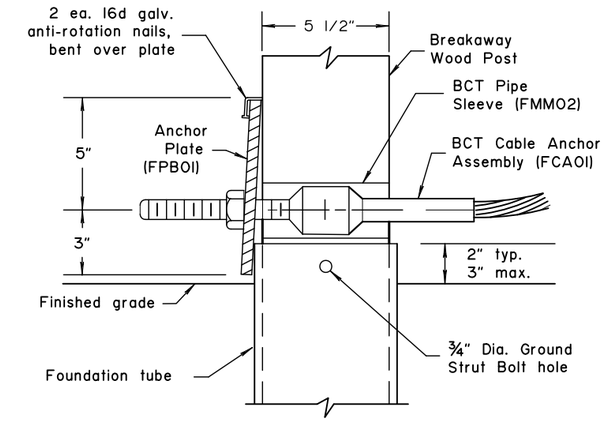
STATE of ALASKA
49th
Lars R. Gregovich
CE-8065
REGISTERED PROFESSIONAL ENGINEER
Dec. 11, 2017

Eff. Date:
12/22/17

G-11.00

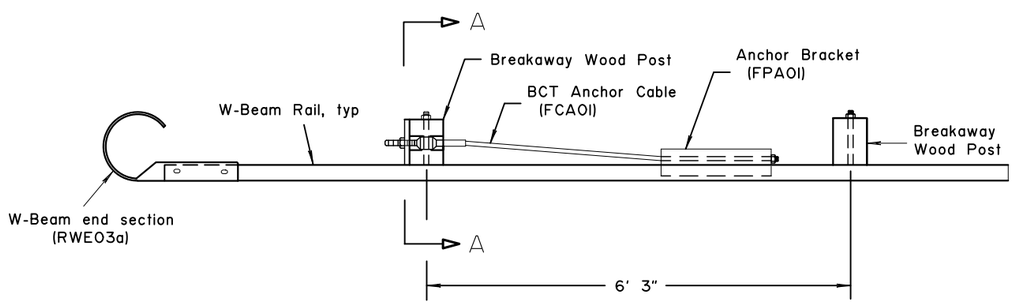


ELEVATION

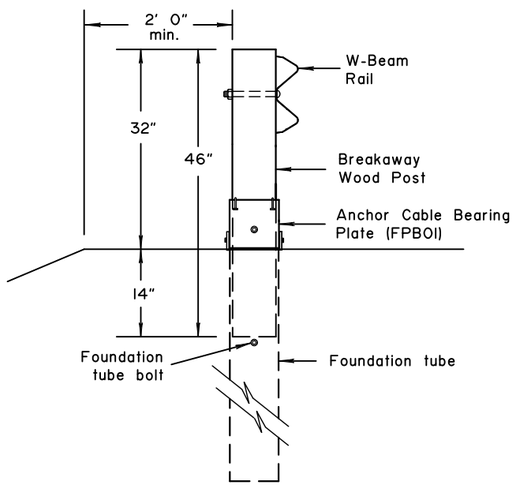


DETAIL 1

(Ground strut not shown for clarity)



PLAN VIEW



SECTION A–A

CONSTRUCTION NOTES

1. All covered hardware must comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition. Designators are given in parenthesis, when possible.
2. End section bolts and nuts have the same material requirements as splice bolts.
3. Foundation tube bolts are are 7/8" diameter ASTM A307 hex head. Foundation tube bolts require an ASTM A563 A nut and two ASTM F844 7/8" diameter flat washers. Install one washer under bolt head and one under nut.
4. Anchor bracket and strut bolts are are 5/8" diameter ASTM A307 hex head. Foundation tube bolts require ASTM A563 A nut and two ASTM F844 7/8" diameter flat washers. Install one washer under bolt head and one under nut.

DESIGN NOTES

1. This design in not crashworthy under MASH and is not intended for locations within the clear zone or where it is likely to be struck head-on by an errant vehicle.
2. This end anchorage is typically used on the downstream end of guardrail runs on one-way roads.

REVISIONS		
Date	Description	By

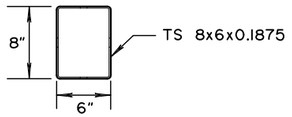
State of Alaska DOT&PF
3132 Channel Dr., Juneau, AK
Phone: (907) 465-2960

W31 DOWNSTREAM END ANCHOR

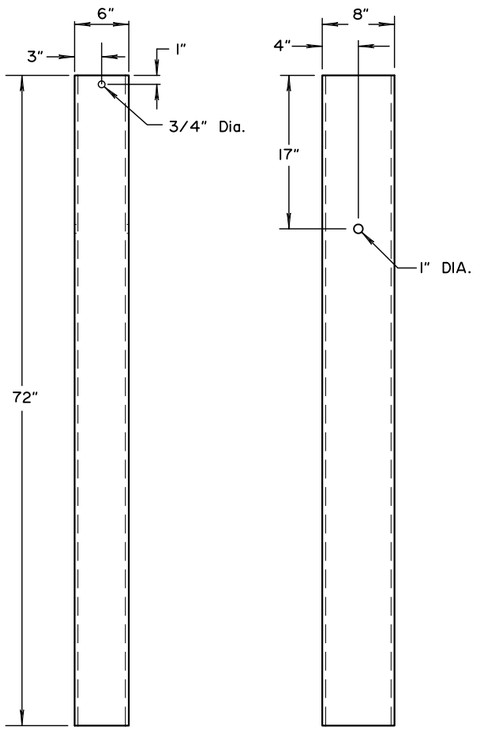


Eff. Date: 12/22/17

G-14.00



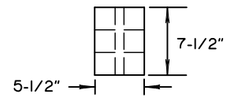
PLAN VIEW



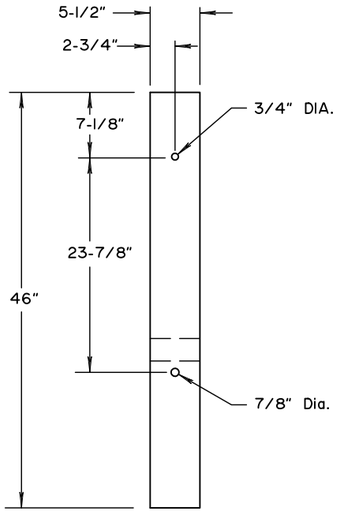
FRONT VIEW

SIDE VIEW

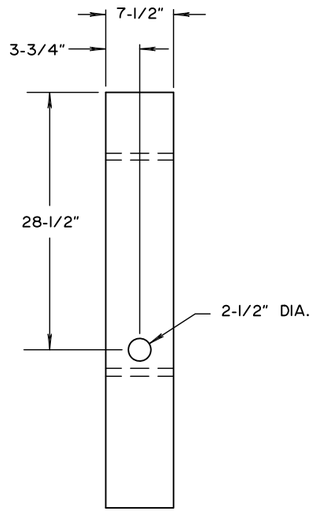
FOUNDATION TUBE



PLAN VIEW

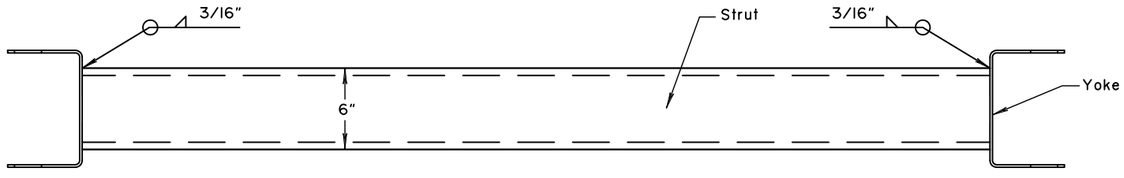


FRONT VIEW

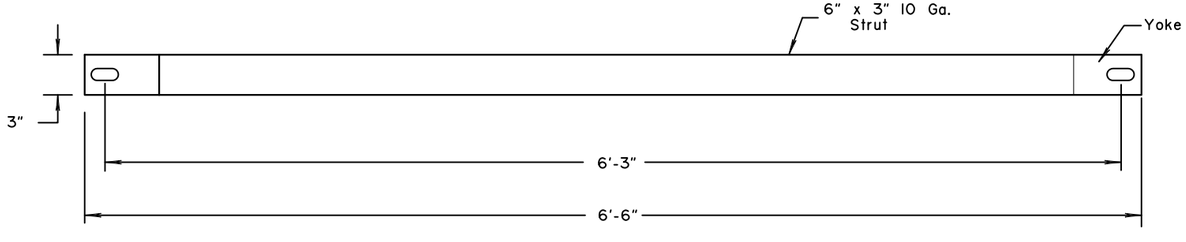


SIDE VIEW

BREAKAWAY WOOD POST

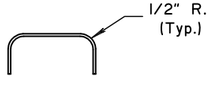


PLAN VIEW

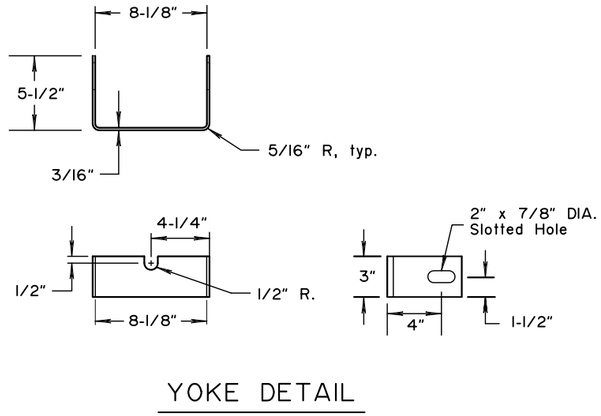


FRONT VIEW

GROUND STRUT DETAIL



GROUND STRUT SECTION



YOKE DETAIL

CONSTRUCTION NOTES

1. All covered hardware must comply with the AASHTO/AGC/ARTBA "A Guide to Standardized Highway Barrier Hardware", latest edition. Designators are given in parenthesis, when possible.

REVISIONS		
Date	Description	By

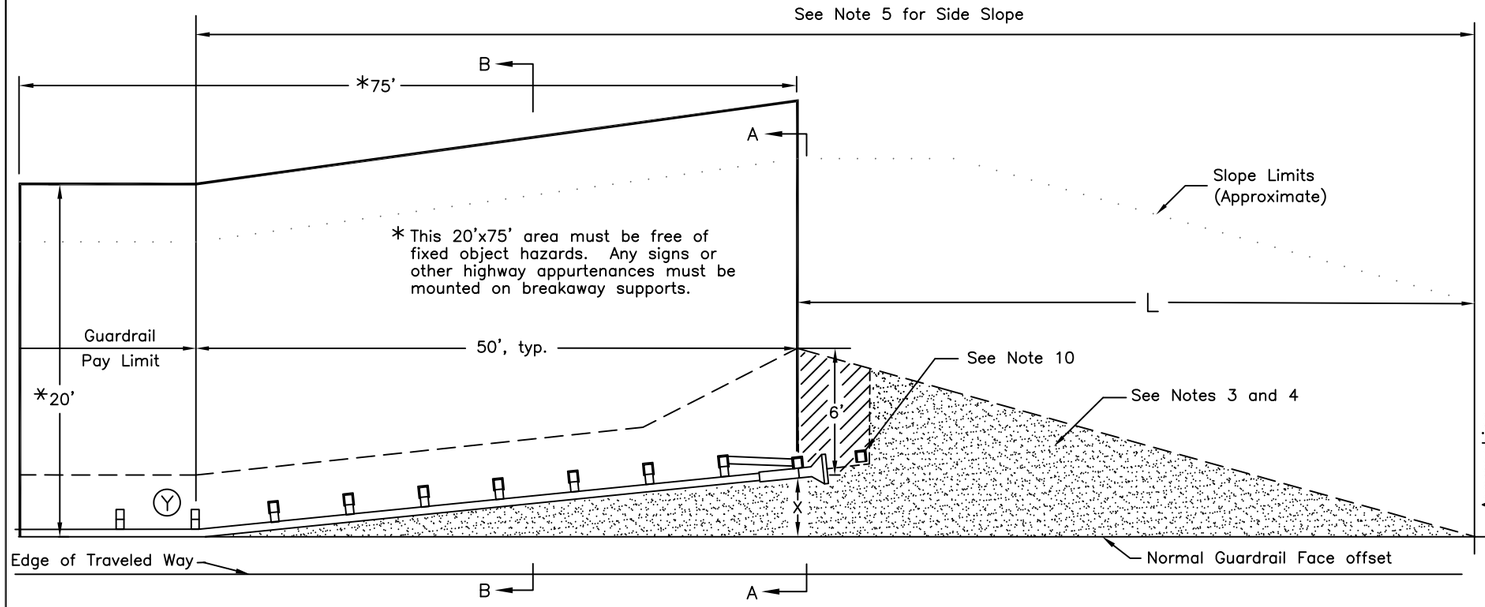
State of Alaska DOT&PF
3132 Channel Dr., Juneau, AK
Phone: (907) 465-2960

W31 DOWNSTREAM END ANCHOR

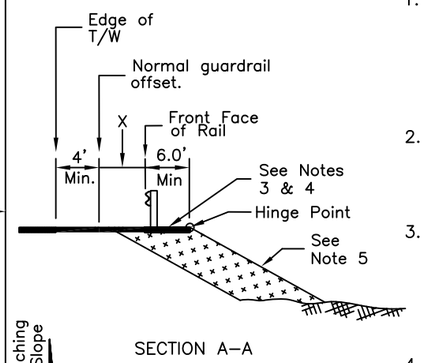


Eff. Date: 12/22/17

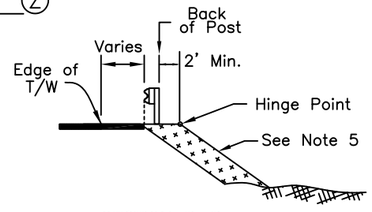
G-14.00



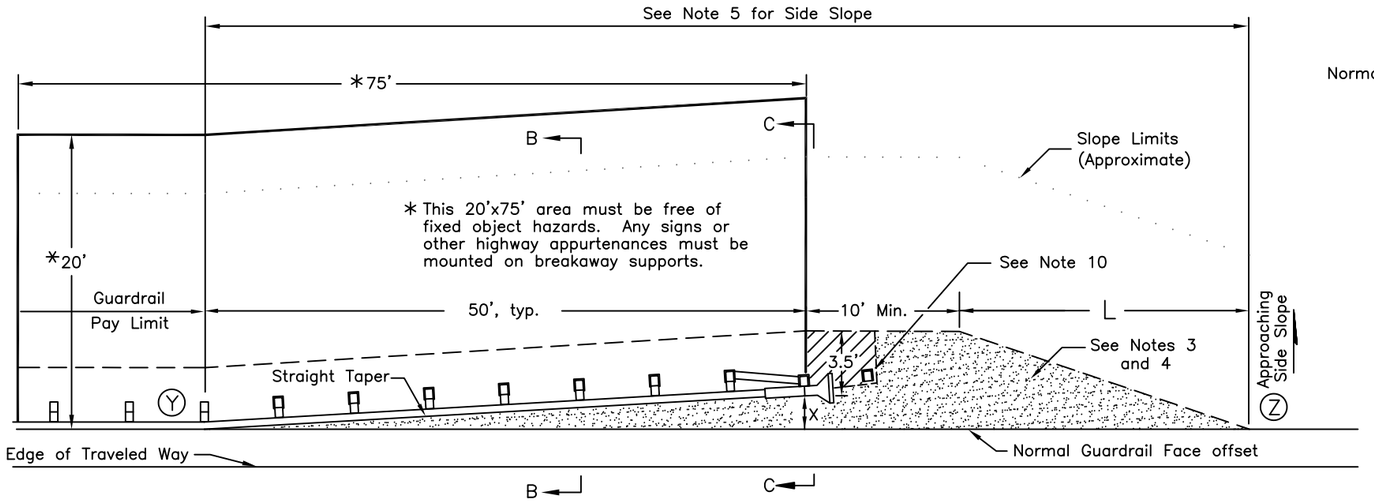
STANDARD GUARDRAIL TERMINAL WIDENING DETAIL



SECTION A–A

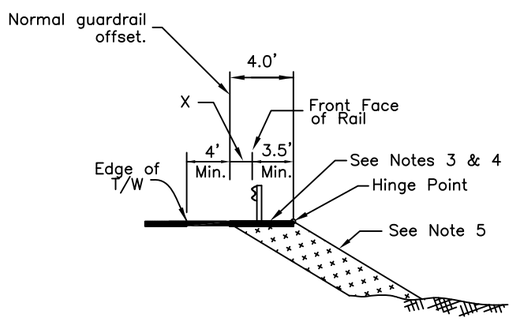


SECTION B–B
(Applies to both details)



ALTERNATE GUARDRAIL TERMINAL WIDENING DETAIL

(USE ONLY WHEN LIMITED RIGHT–OF–WAY OR LIMITING SITE CONDITIONS MAKE THE STANDARD DETAIL INFEASIBLE)



SECTION C–C

X= End offset. See manufacturer's information for the range of acceptable end offsets for each MASH compliant terminal.

Taper Lengths (L) for Common End Offsets (X)		
End Offset	Standard Detail	Alternate Detail
0'	24.0'	13.0'
1'	26.0'	17.0'
1.5'	28.0'	19.0'
2'	30.0'	21.0'
2.5'	32.0'	22.0'
4'	37.0'	28.0'
Interpolate if the end offset falls between table values		

GENERAL NOTES

1. This Std. Dwg. applies to all MASH approved guardrail end terminals (GETs). The alternate detail may only be used with parallel or tangent GETs. The terminal details shown are for illustration only – see manufacturer's drawings for actual post, rail, strut, etc. configuration and layout.
2. Use this Std. Widening Detail for all GETs except when limited right–of–way or limiting site conditions make the use of the Std. Widening Detail infeasible. In that case, the alternate detail is permissable.
3. Construct the shaded areas to match the slope of the adjacent shoulder. The slope may be increased to 10:1 if identified in the plans or when approved by the engineer. Match the slope when the shoulder slopes toward the road as well as away from the road.
4. On paved roads, the shaded areas shall be paved. On gravel roads, surface the shaded areas with the same materials used to surface the travel lanes.
5. From point Ⓨ to point Ⓩ make the side slope match the approaching side slope except where it is flatter than 4:1. In that case, the slope may be steepened to 4:1.
6. Attach a flexible marker at the beginning of each GET.
7. The max. allowable height for foundation tubes or other steel components of terminal post breakaway systems is 4" above the surrounding grade.
8. The details on this sheet do not apply to W31 Downstream End Anchors (Std Dwg G–14).
9. The details on this sheet apply to GETs on both the approach and downstream ends on two–way undivided roads and to any downstream MASH compliant GETs.
10. Some MASH GET systems have an additional post/anchor at the approximate location shown. If this post/anchor is present do not pave the diagonally hatched area. If not present, pave the diagonally hatched area also.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

WIDENING FOR GUARDRAIL END TERMINALS

Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E. Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review By: Date:

Next Code and Standards Review date:02/08/2029

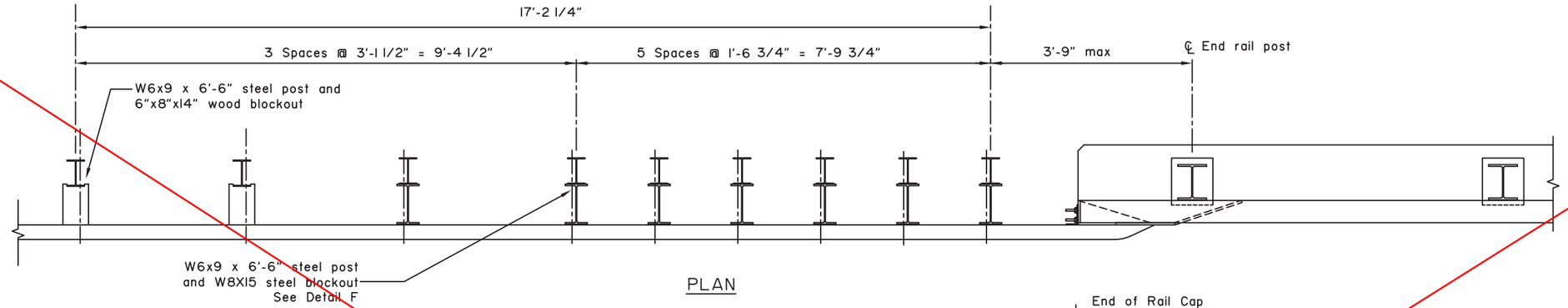
G–20.12

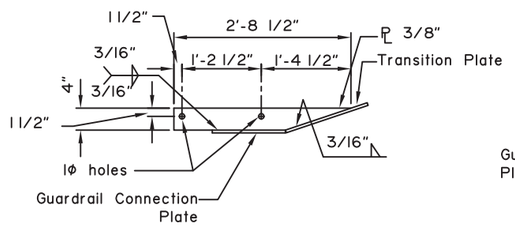
G-31.01

GENERAL NOTES

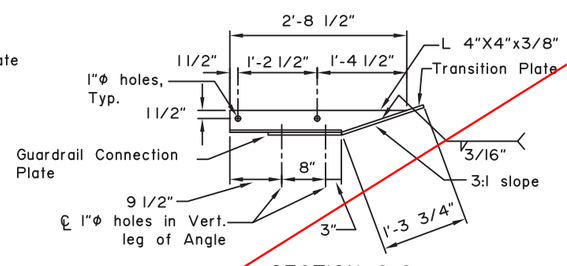
1. All guardrail and guardrail connection hardware to conform to AASHTO M-180.
   All H.S. Bolts conform to ASTM A325.
   All other steel to conform to ASTM A709 Grade 36.
2. Conform to G-00, G-04S, G-10 for all guardrail details not shown. No Back-up Plates required.
3. Lap approach guardrail to prevent snags from oncoming traffic.
4. Provide 4 1/2" horizontal slot in approach guardrail. Adjust guardrail bolts for sliding fit.
5. This design is approved for NCHRP 350, TL 4.

NOT USED, SEE SHEET N12

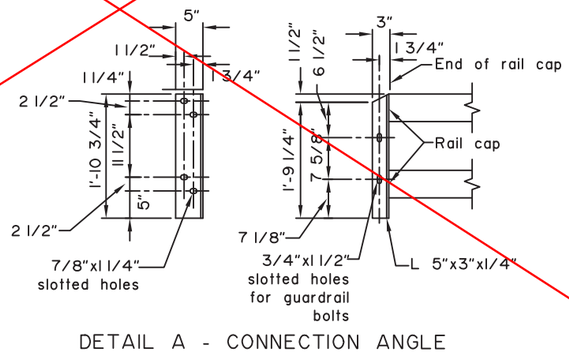




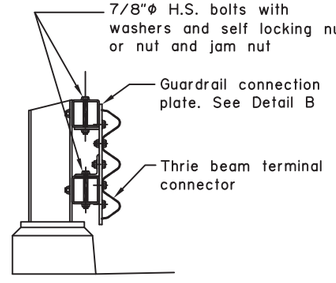
VIEW D-D



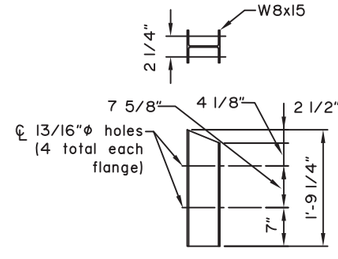
SECTION C-C



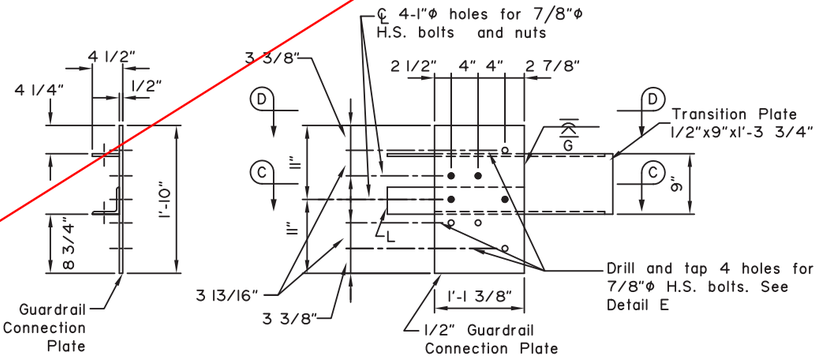
DETAIL A - CONNECTION ANGLE



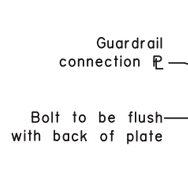
SECTION A-A



DETAIL F - STEEL BLOCKOUT



DETAIL B - GUARDRAIL CONNECTION PLATE



DETAIL E

GR 2/3/21

No Scale

REVISIONS		
Date	Description	By
8/10/11	Post Length	EEM

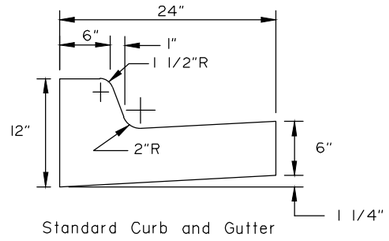
Sheet 1 of 1

State of Alaska
Department of Transportation
& Public Facilities

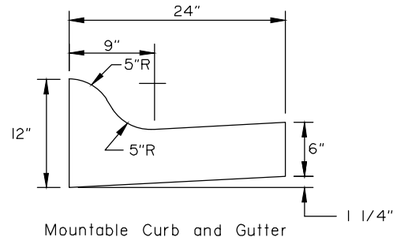
BRIDGE RAIL THRIE BEAM TRANSITION

APPROVED
Elmer E. Marx III
No. CE 9490
Date 3/31/15

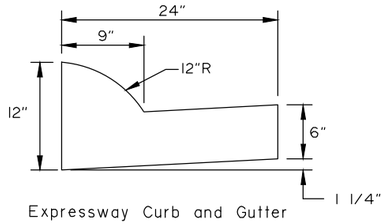
G-31.01



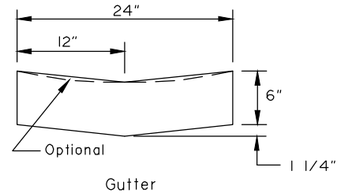
Standard Curb and Gutter



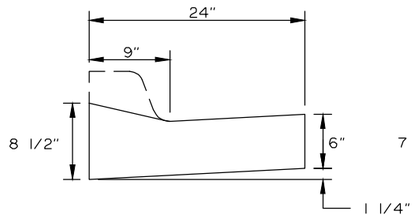
Mountable Curb and Gutter



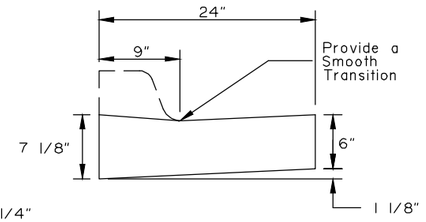
Expressway Curb and Gutter



Gutter

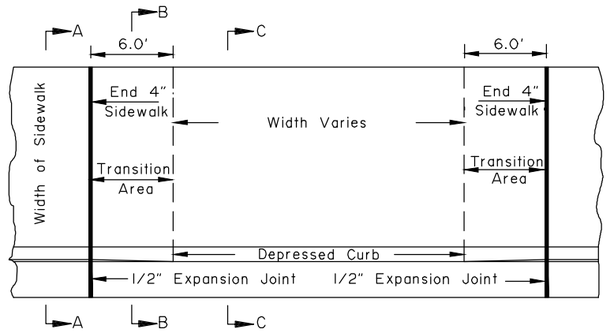


Depressed Curb and Gutter

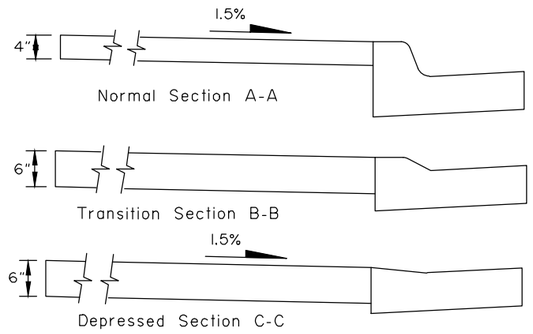


ADA Curb and Gutter

CURB and GUTTER DETAILS

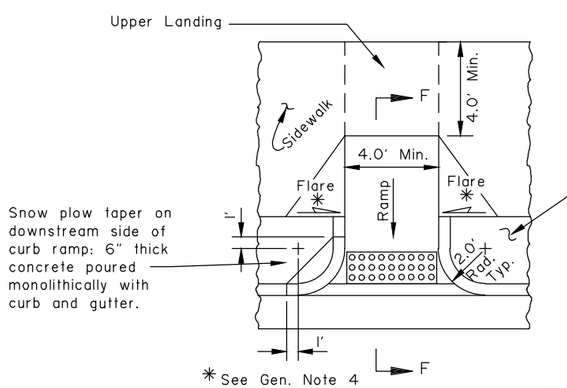


DRIVEWAY CURB CUT DETAILS

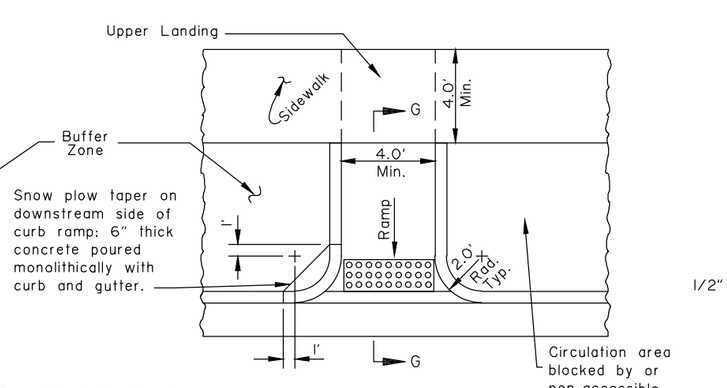


CONSTRUCTION NOTES:

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 Plan 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.

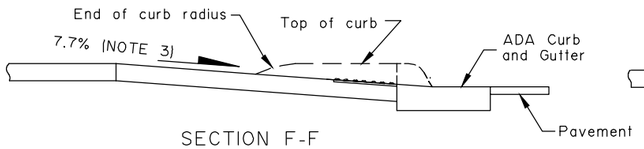


PLAN

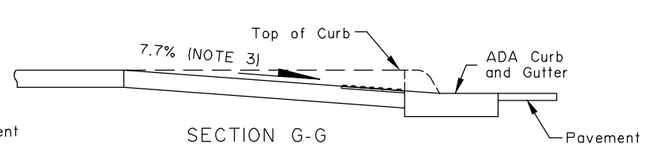


PLAN

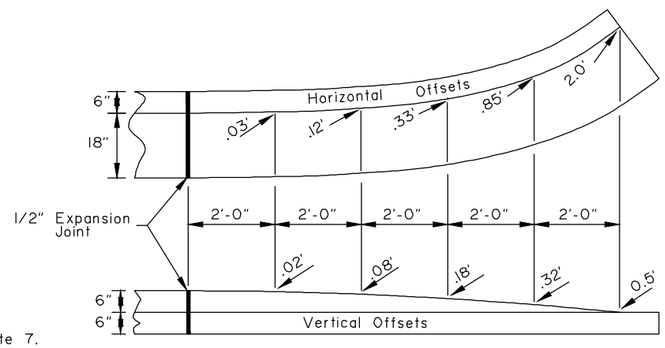
= Detectable Warning Tile (see Note 8)



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

State of Alaska DOT&PF
ALASKA STANDARD PLAN

**CURB CUT
CURB & GUTTER
AND CURB RAMP DETAILS**

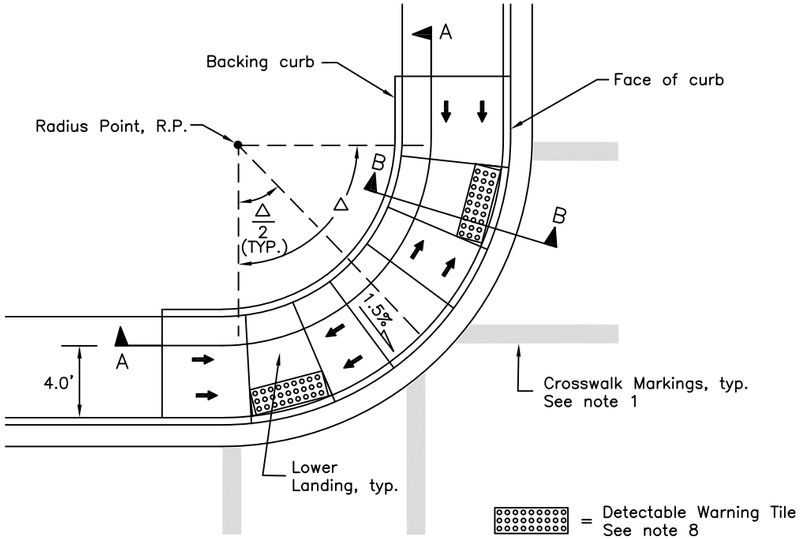
Adopted as an Alaska Standard Plan by: *Carolyn Morehouse*
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

Last Code and Stds. Review
By: KLH Date: 7/8/2020

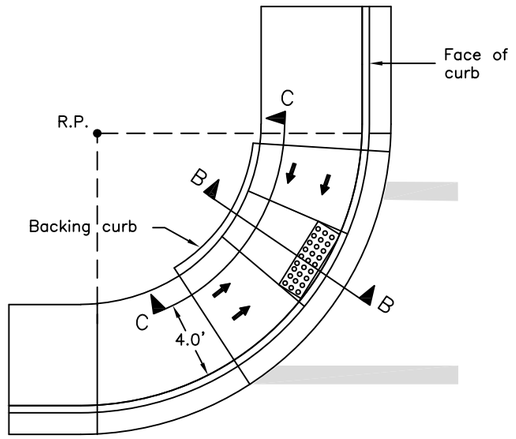
Next Code and Standards Review date: 7/8/2030

I-20.20

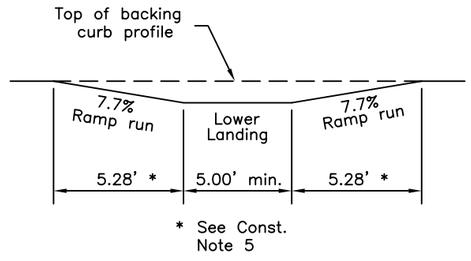


= Detectable Warning Tile
See note 8

TWO CROSSING DIRECTIONS
At corner



ONE CROSSING DIRECTION
At corner – generic location shown



* See Const. Note 5

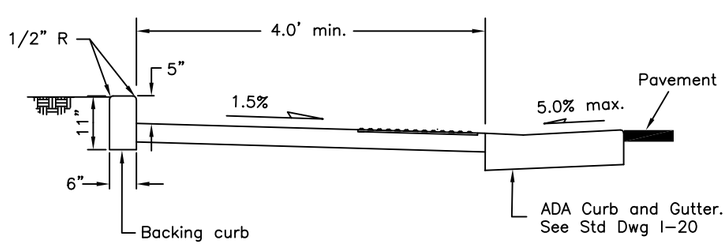
PROFILE C–C

CONSTRUCTION NOTES:

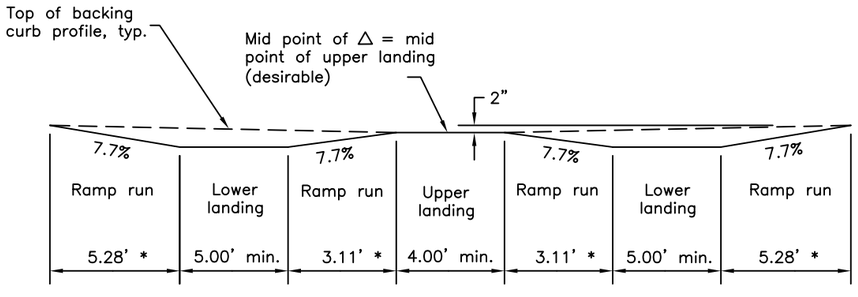
1. See plans for ramp type at specific locations. See striping plans for crosswalk layouts.
2. Construct ramp runs and landings of concrete, regardless of whether the sidewalk is asphalt or concrete.
3. When one parallel curb ramp will serve two directions, use the One Crossing Direction detail and refer to the striping plans for crosswalk layouts.
4. Ramp run lengths are shown for a flat sidewalk grade. For other sidewalk grades, increase or decrease ramp and flare lengths to maintain the slopes shown.
5. Construct ramp slopes at a nominal 7.7% 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%.
6. Construct sidewalk cross slopes at 1.5% nominal (1.0% min. and 2.0% max).
7. Provide a coarse broomed finish running perpendicular to the curb on ramp runs and upper landings and parallel to the curb on lower landings.
8. Install 24" detectable warning tiles meeting Section 705.1 of the 2006 ADA Standards for Transportation Facilities for the full width of the ramp.
9. Maximum cross slope on lower landings is 2.0% as measured in any direction. Maximum cross slope on ramps is 2.0% measured perpendicular to the ramp run.
10. Provide 4" minimum thick concrete on ramps and landings.

DESIGN NOTES

1. Parallel curb ramps are typically used when the sidewalk is at least 4' wide but can not be constructed wide enough for perpendicular ramps.
2. When one curb ramp is installed in a curb radius to serve both directions of pedestrian traffic, construct it in accordance with the One Crossing Direction detail.
3. Locate lower landings within the inner edges of marked crosswalks or, if crosswalks are not marked, within the area a standard marked crosswalk would enclose. See Standard Drawing T–23 for standard crosswalk layout.
4. Avoid drainage grates within marked crosswalks or, if crosswalks aren't marked, within the area a standard marked crosswalk would enclose. If a drainage grate is located directly in the pedestrian accessible route (e.g. a wheel chair must pass over it), install a grate meeting the requirements of Section 302.3 of the 2006 ADA Standards.
5. These details are compliant with the 2006 ADA Standards for Transportation Facilities, except for the 15' maximum ramp length noted in Construction Note 5, which is from the Draft 2011 PROWAG.

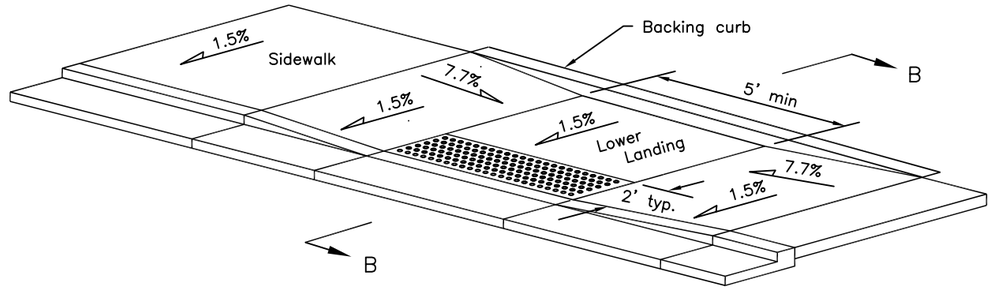


SECTION B–B



* See Const. Note 5

PROFILE A–A



MID–BLOCK

Note: Drawing not to scale

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PARALLEL CURB RAMP

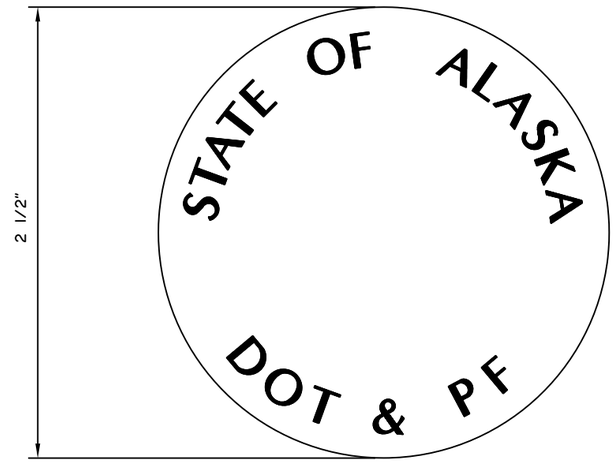
Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review By: Date:

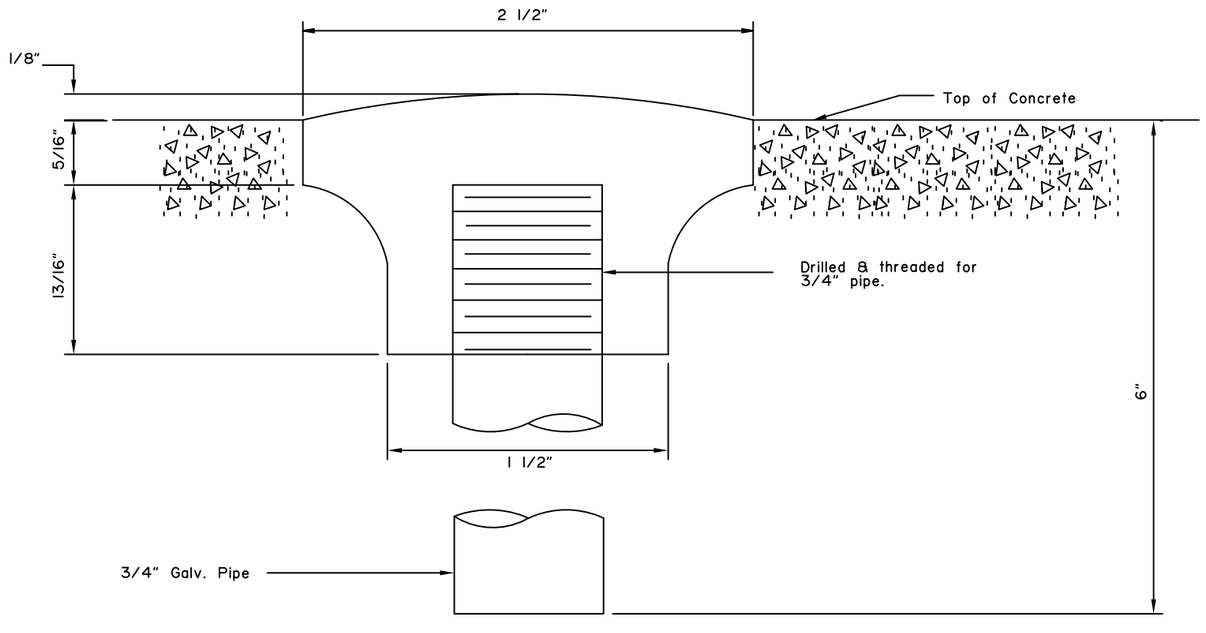
Next Code and Standards Review date:02/08/2029

I-21.11



GENERAL NOTES:

1. For Structures under 200' total length: provide 1 monument.
2. For Structures 200' or over: provide 2 Monuments.
3. Monuments shall be located as directed by the Engineer.



SURVEY MONUMENT

State of Alaska DOT&PF
ALASKA STANDARD PLAN

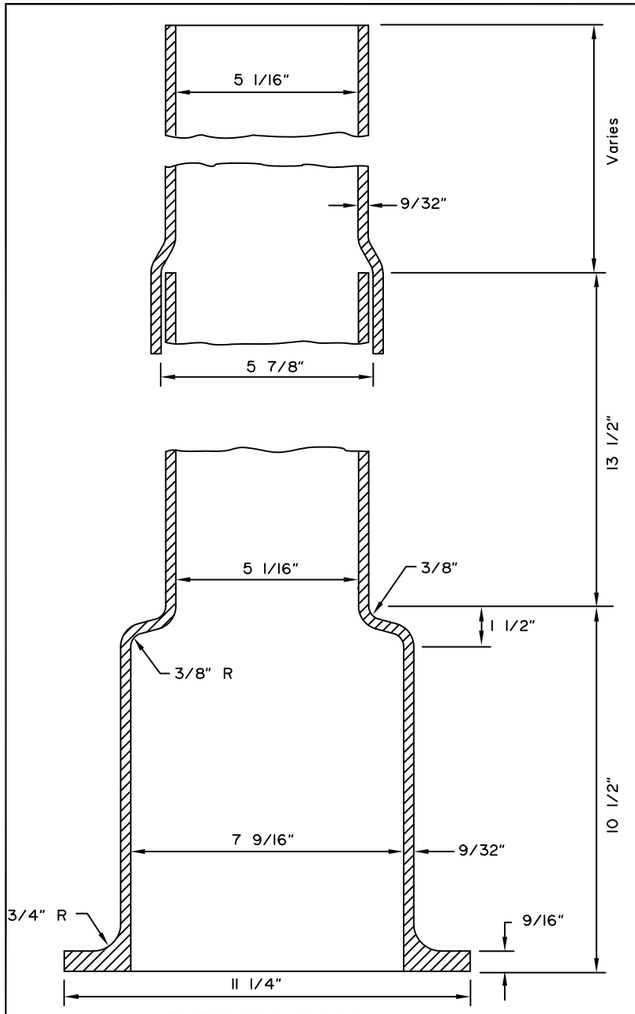
SURVEY MONUMENT

Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

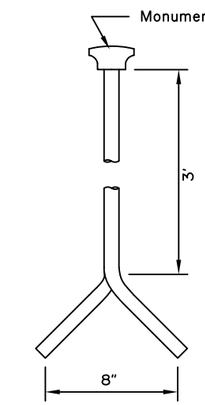
Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

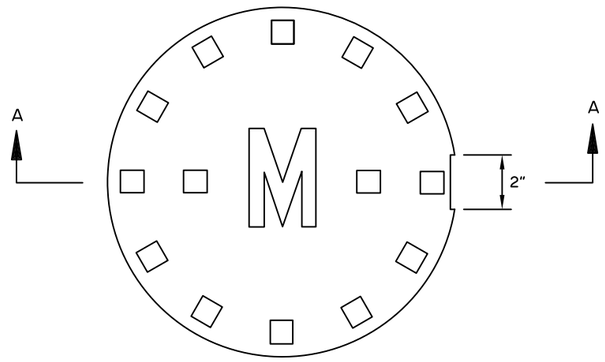
Next Code and Standards Review date: 02/08/2029



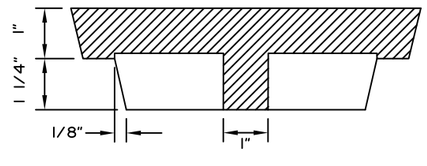
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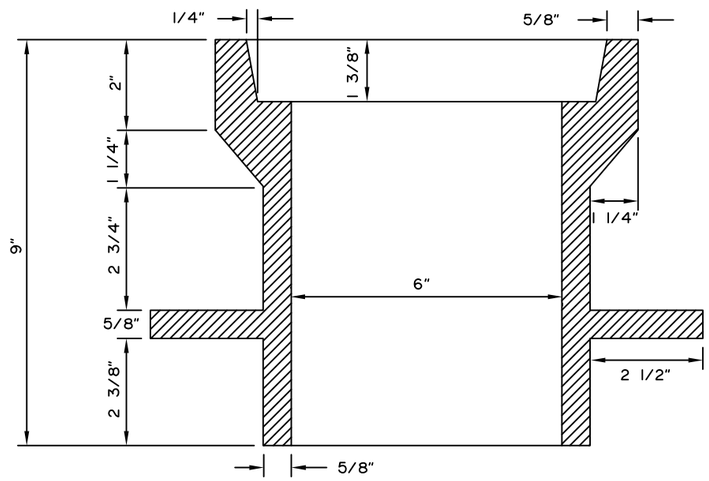
MONUMENT DETAIL



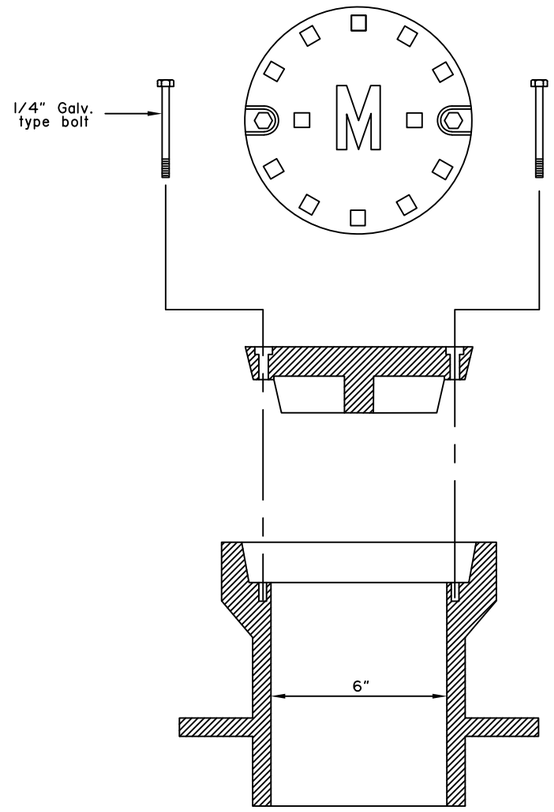
PLAN VIEW ACCESS COVER



SECTION A-A



MONUMENT CASE



BOLTING MONUMENT CASE ASSEMBLY
(See Note 2)

GENERAL NOTES:

1. Details shown are to indicate general design only. Dimensions and design may vary among the manufacturers.
2. Where monument cases are to be placed in paved area of a roadway or sidewalk, the top of the case and/or cover shall be the same elevation as the top of the finish surface with bolting type access cover.
3. Where monument cases are to be placed in a gravel surfaced roadway, the top of the case shall be placed 1'-0" below the top of the surface of the roadway.
4. In solid rock, drill a 2" Dia. hole a minimum of 1'-0" deep, fill with mortar and set cap. 3/4"x9" galvanized pipe, designated length when set in mortar.
5. The top of the monument cap shall be placed 1' ± above the bottom of the monument case.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

BRASS CAP MONUMENT AND MONUMENT CASE

Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

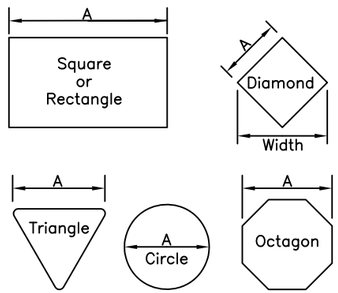
Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

M-16.01

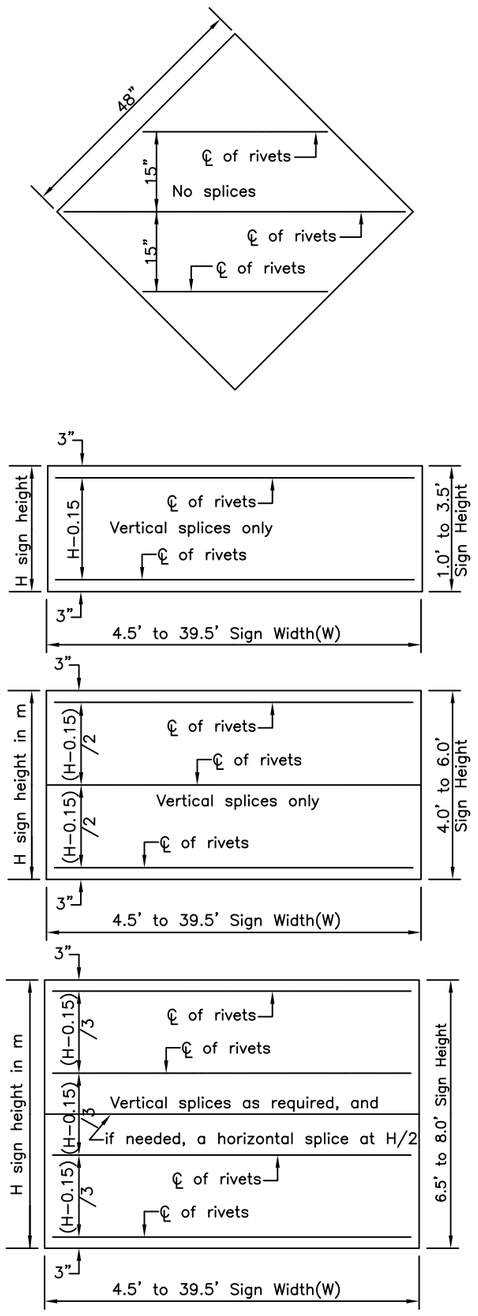
S-00.11



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

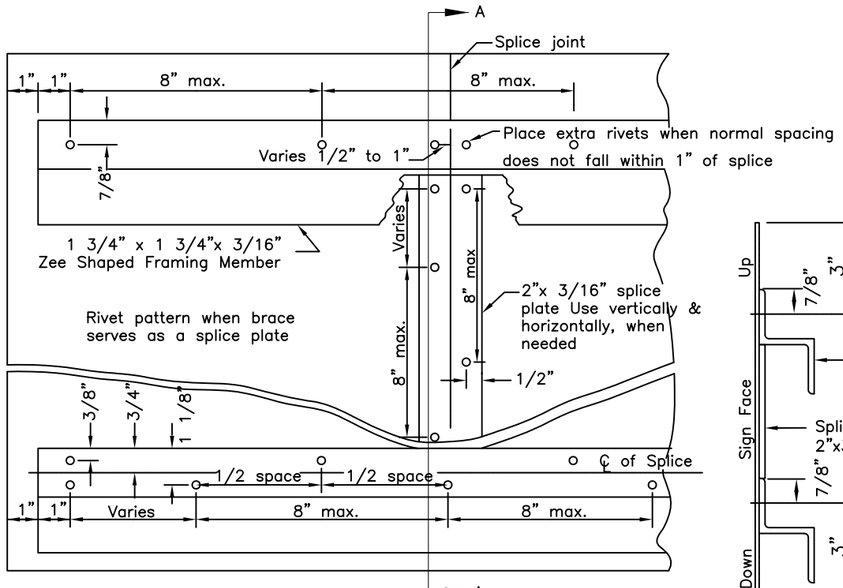


WIND FRAMING LOCATIONS

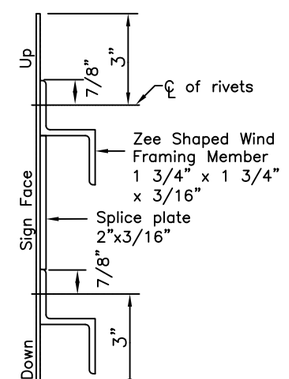
TUBE SIGN POST SPACING								
Sign Width (feet)	No. of Posts	Distance Between Posts	Sign Overhang	Post Type				Notes
				P.S.T.	Wood	Steel Tube	W–Shape	
0.5 to 4.0	1	–	0.5W	X	X	X		See Note 2.
4.5 to 10.0	2	0.6W	0.2W	X	X	X		See Note 3.
10.5 to 11.0	2	6	Varies	X	X	X		See Note 3.
11.5 to 13.0	2	8	Varies				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

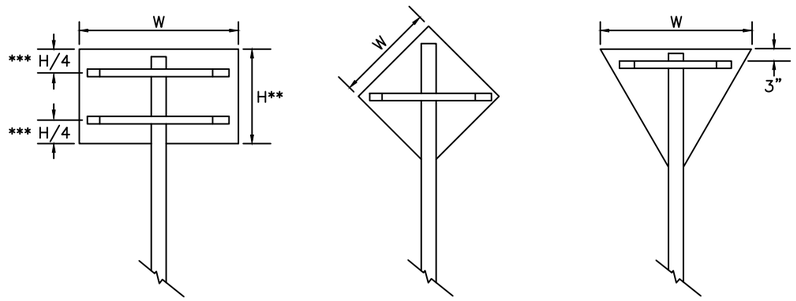
Sheet 1 of 1

State of Alaska
Department of Transportation
& Public Facilities

SIGN FRAMING AND POST SPACING

APPROVED
Date 5/31/12

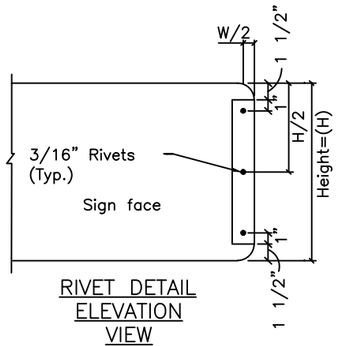
S-00.11



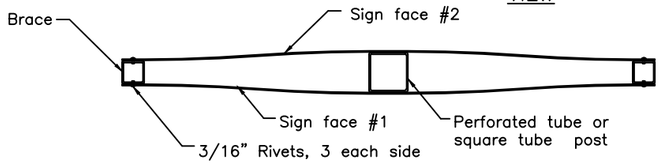
*** Use one brace when H ≤ 18"
Use two braces when 18"< H < 48"
Use three braces when H ≥ 48"

** Position of brace may be varied to match Predrilled mounting holes in panel

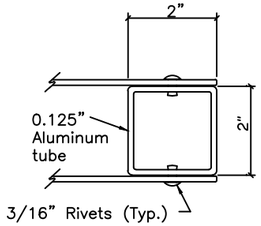
SIGN BRACING PLACEMENT



RIVET DETAIL
ELEVATION
VIEW

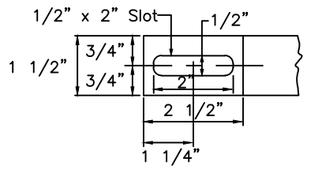


PLAN VIEW

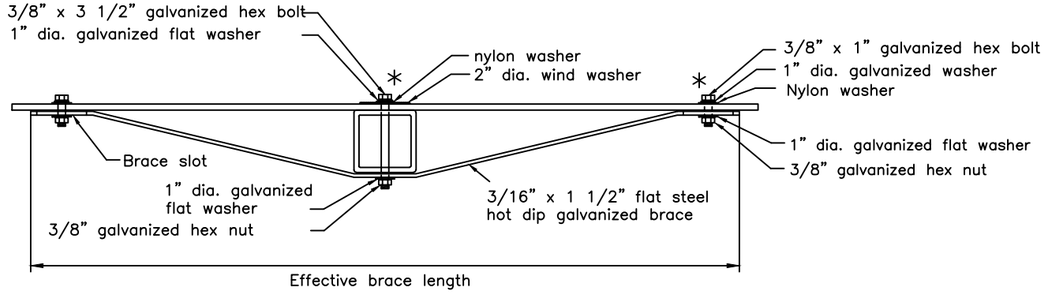


END BRACE DETAIL

SMALL STREET NAME SIGN (D3-1, D3-1A, D3-1D) BRACING DETAILS



DETAIL OF BRACE SLOT
Elevation view



TUBE POST SIGN BRACING
Plan view

* Adjust location of bracing so that bolts and washers will miss the sign legend

Sign Width(W)	Effective Brace Length		
	Warning	Yield	Other
30"	36"	24"	24"
36"	42"	30"	30"
42"	48"	–	36"
48"	Two posts	36"	42"

< 30" No bracing required and use square tube

DRAWING NOT TO SCALE

REVISIONS		
Date	Description	By
1/16/17	Bolt size & type	LRG

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

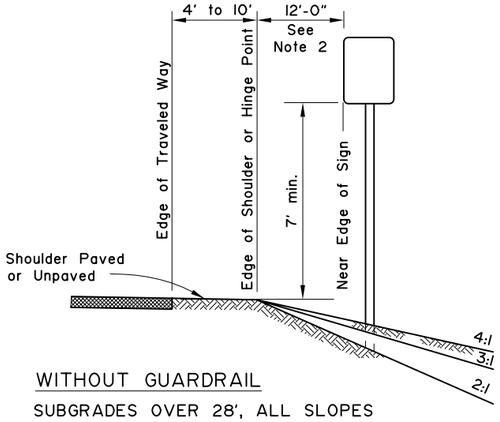
BRACING FOR SIGNS MOUNTED ON SINGLE POST

STATE of ALASKA 49th
Lars R. Gregovich
CE-8065
REGISTERED PROFESSIONAL ENGINEER
Jan. 6, 2017

Eff. Date:
1/16/17

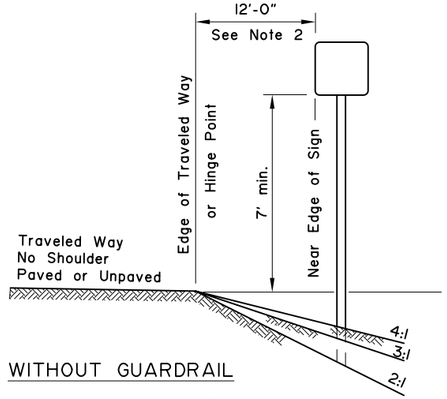
S-01.01

S-05.01



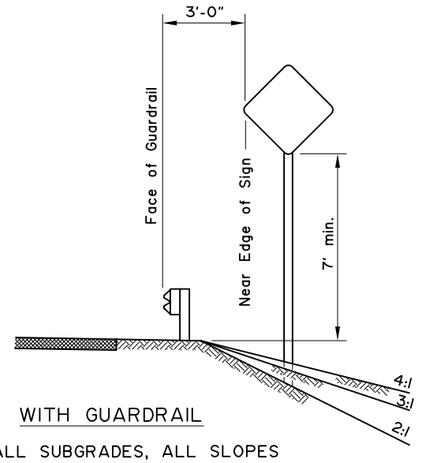
WITHOUT GUARDRAIL

SUBGRADES OVER 28', ALL SLOPES



WITHOUT GUARDRAIL

SUBGRADES 24' TO 28', ALL SLOPES

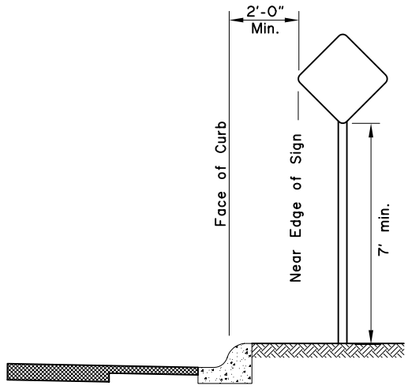


WITH GUARDRAIL

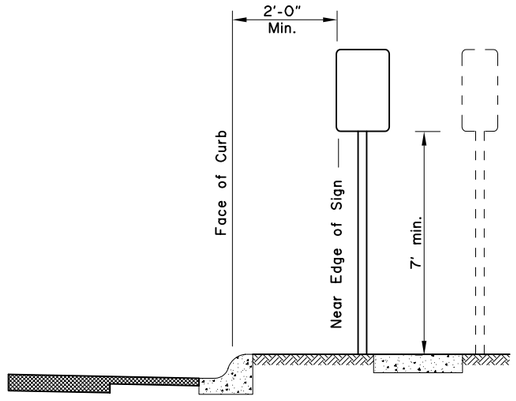
ALL SUBGRADES, ALL SLOPES

GENERAL NOTES

1. Unless shown otherwise on the plans, the standard sign offset is 12'. The minimum is 6'.
2. If signs extend over sidewalks, the minimum vertical clearance is 7'-0".
3. Add 6" to mounting height on unpaved roads.
4. If signs extend over bike paths, the minimum vertical clearance is 8' 0".
5. When signs are placed 30' or more from the edge of traveled way, mount them with the bottom of the sign at least 5' above the road surface at the near edge of the road.
6. When multiple hinged sign supports are used, mount hinges at least 7' above the ground.

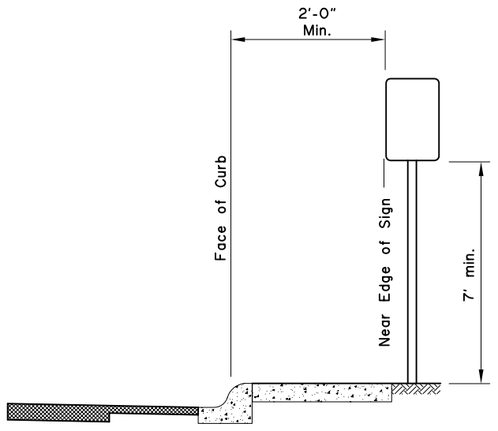


CURB WITHOUT SIDEWALK

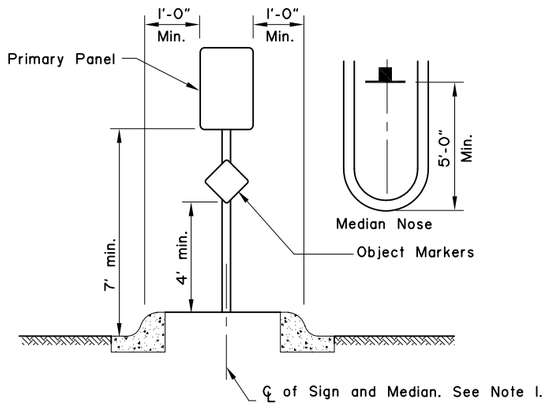


CURB WITH PARKWAY AND SIDEWALK

(If R/W width permits, signs should be placed behind sidewalk.)

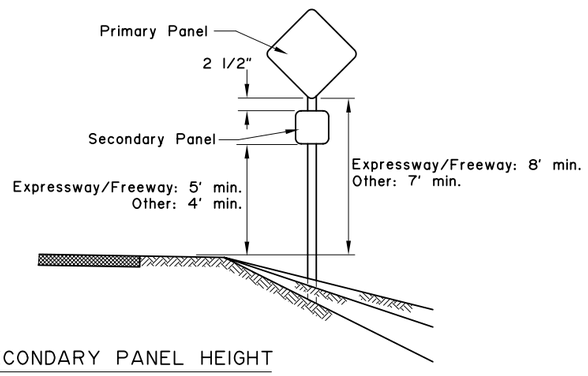


CURB WITH SIDEWALK WITHOUT PARKWAY



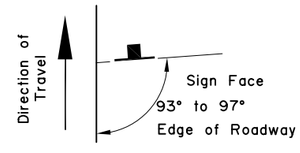
RAISED MEDIANS

Minimum 4' Width for Signing



SECONDARY PANEL HEIGHT

ALL TWO PANEL MOUNTING



SIGN POSITIONING

REVISIONS		
Date	Description	By
4/3/01	Revised Sign Heights	KJS

Sheet 1 of 1

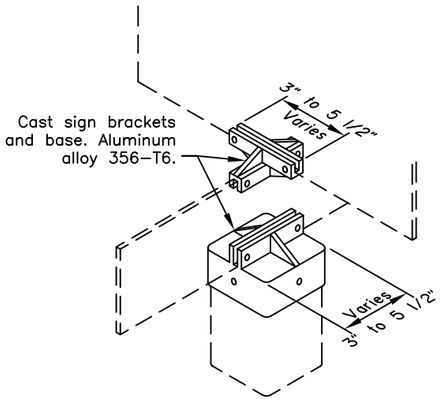
State of Alaska
Department of Transportation
& Public Facilities

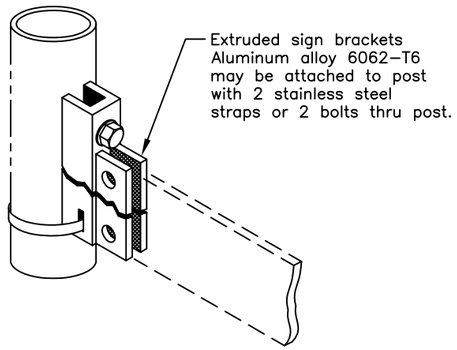
POST MOUNTED SIGN OFFSET AND HEIGHT

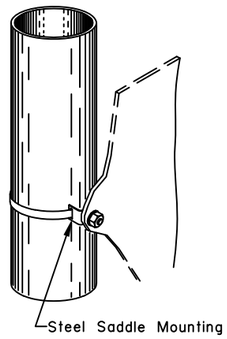
APPROVED

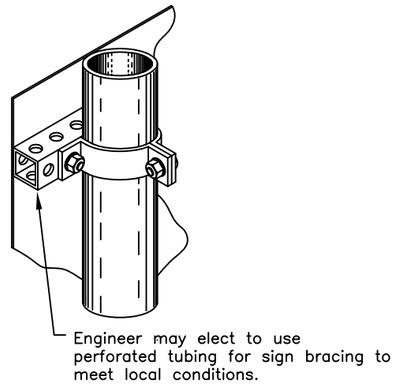
Date 7/15/82

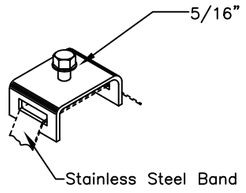
S-05.01

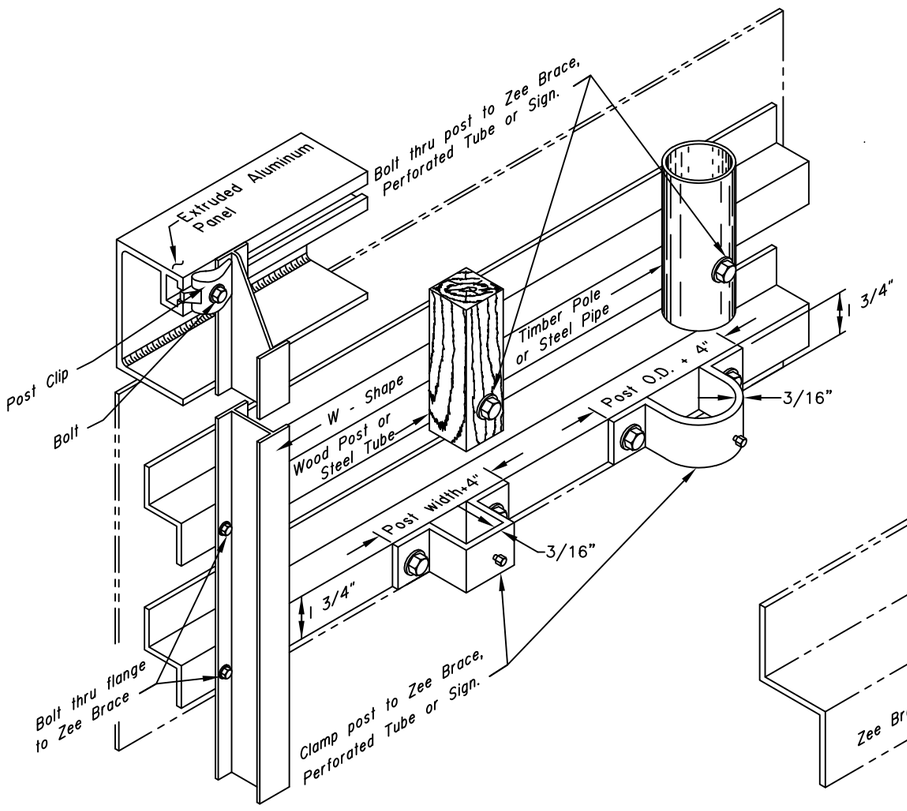


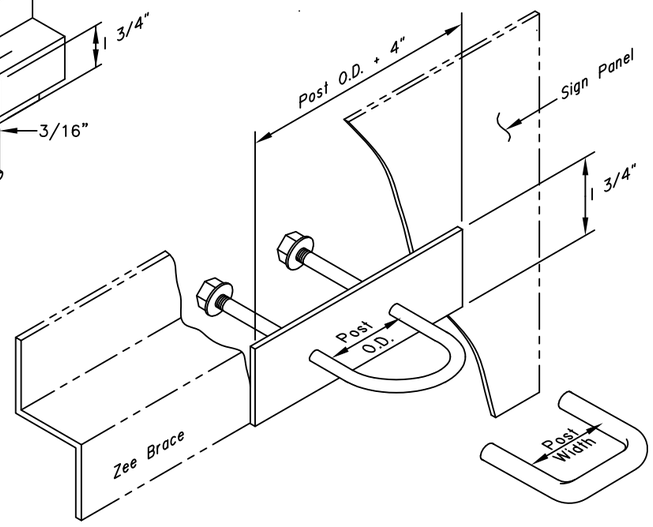


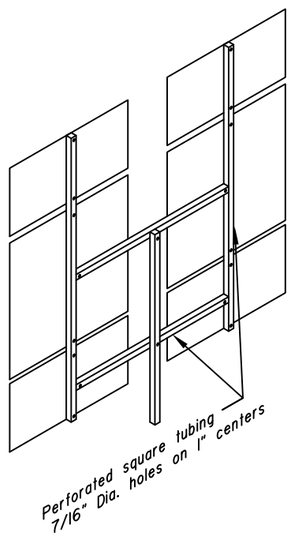












GENERAL NOTES

1. Details shown indicate general design only. Dimensions and design may vary among the manufacturers.
2. Install weather tight caps on all pipe and tube post (except perforated tubing).
3. Protect sign posts installed using driving methods with drive caps during installation.
4. Bolt braces to posts at each point where they cross posts.
5. Install signs with top of post, mounting brackets, etc. with a minimum of 3" below top of sign.
6. Paint all sign mounting fasteners on sign face a color closely matching the sign face.
7. Attach all signs, zees and braces mounted to the posts with 5/16" bolts.
8. Furnish all aluminum nuts, bolts and washers with anodized finish.

FASTENER SPECIFICATION TABLE				
FASTENERS		ALUMINUM	STEEL	STAINLESS STEEL
BOLTS	MACHINE CARRIAGE "U"	2024–T4	A–307	A–276
NUTS	REGULAR	6061–T6	A–307	A–276
	LOCK	2017–T4		
WASHERS		2024–T4	A–36	A–276
POST CLIP		356–T6		

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SIGN TO SIGN POST CONNECTION

Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

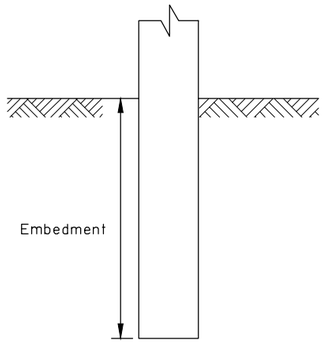
Next Code and Standards Review date: 02/08/2029

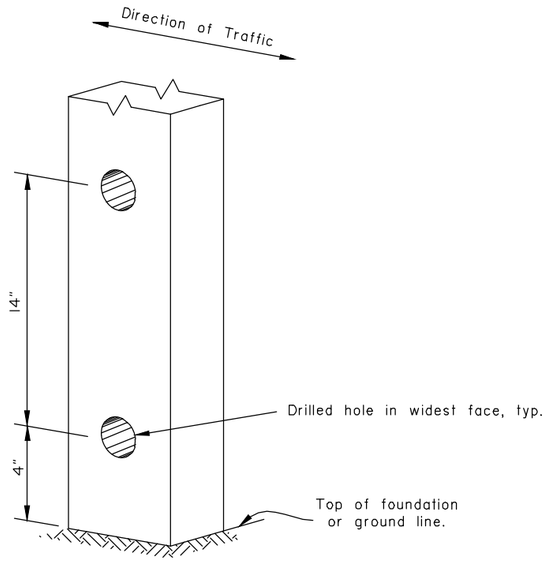
CO #1
Attachment #3
JNU: Douglas Hwy Surface & Sidewalk Repairs Stage 1
Proj. # 0958033 / SFHWY00293

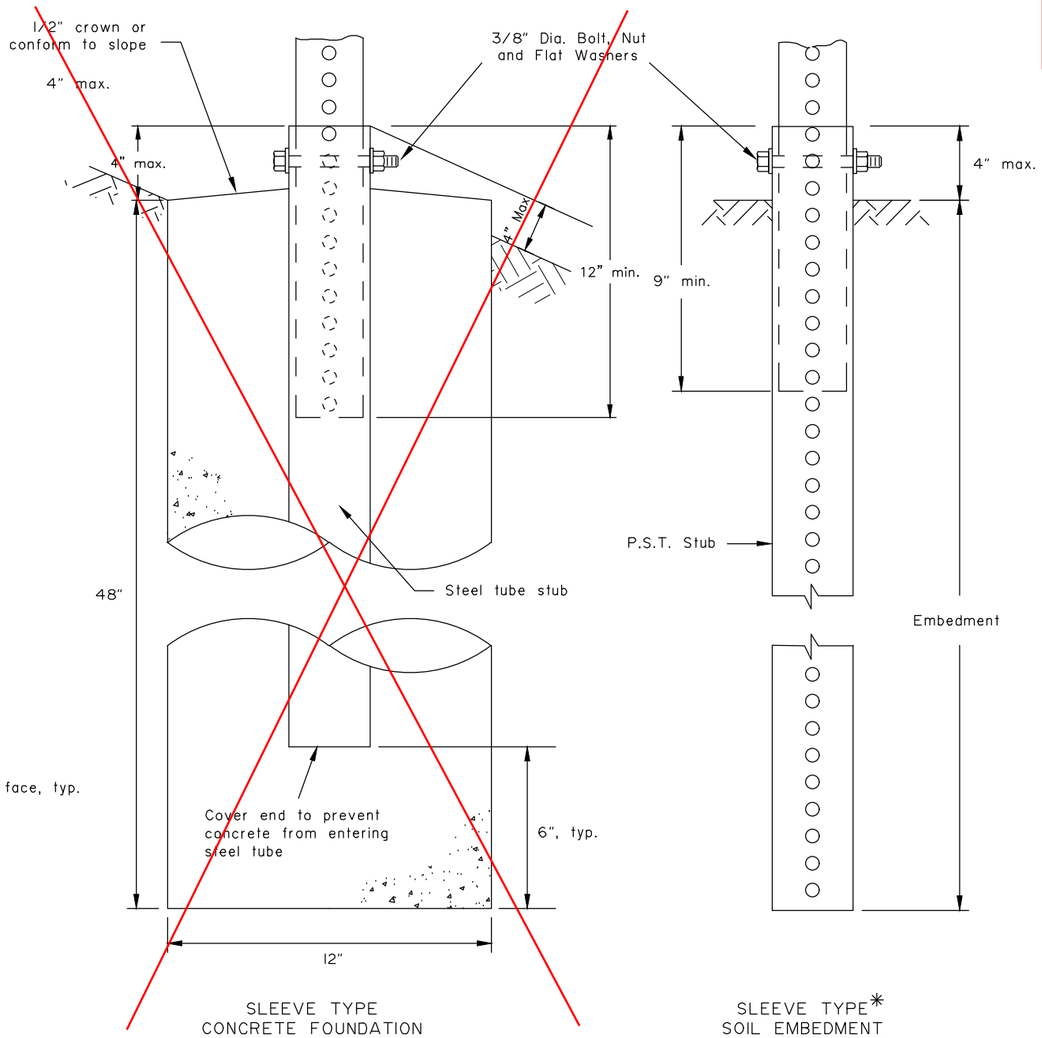
1 of 1

S-30.05

SHEET | of |







SLEEVE TYPE
CONCRETE FOUNDATION

NOT USED

SLEEVE TYPE*
SOIL EMBEDMENT

GENERAL NOTES:

1. Sign shall be placed symmetrically around posts and refer to Standard Plan S-00 for sign framing details.
2. See plans for type of post, size and embedment type.
3. To maintain crashworthiness, install no more than the number of P.S.T.s or wood posts specified in the tables within 7' of each other.
4. Concrete shall be class B.
5. Do not use the supports on this drawing for multiple support signs if supports are separated by more than 7 feet.
6. Treat all field cuts and field drilled holes in wood posts in accordance with Section 730-2.04 of the Standard Specifications.

SIGN POST SPACING NOTES:

1. Install sign support in accordance with the table below, 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 tables below 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 Plan S-31 for frangible couplings, hinges, and foundations for tube and W-shape sign supports.

SR 2/3/21

WOOD SIGN POSTS			
SIZE	HOLE DIA.	EMBEDMENT*	NO. OF POSTS WITHIN 7 Ft. PATH
4"x4"	NONE	4'-1"	2
4"x6"	1 1/2"	5'-3"	2
6"x6"	1 1/2"	4'-9"	1
6"x8"	3"	4'-9"	1

* Embedment depth applies in both strong and weak soil.

WOOD POSTS

PERFORATED STEEL TUBES (P.S.T.)		
POST SIZE	Embedment Depth	No. of P.S.T.s permitted within 7 ft path
1 1/2" x 1 1/2"	4'-8"	2
1 3/4" x 1 3/4"	4'-6"	2
2" x 2"	4'-3"	2
2 1/4" x 2 1/4"	5'-0"	1
2 1/2" x 2 1/2"	4'-6"	1

* Use 3"x3"x3/16" Stub for 2 1/2"x2 1/2" PST Applications.

PERFORATED STEEL TUBE (PST) POSTS

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	

TUBE SIGN POST SPACING

Note: Drawing not to scale

State of Alaska DOT&PF
ALASKA STANDARD PLAN

LIGHT SIGN STRUCTURE
POST EMBEDMENT

Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

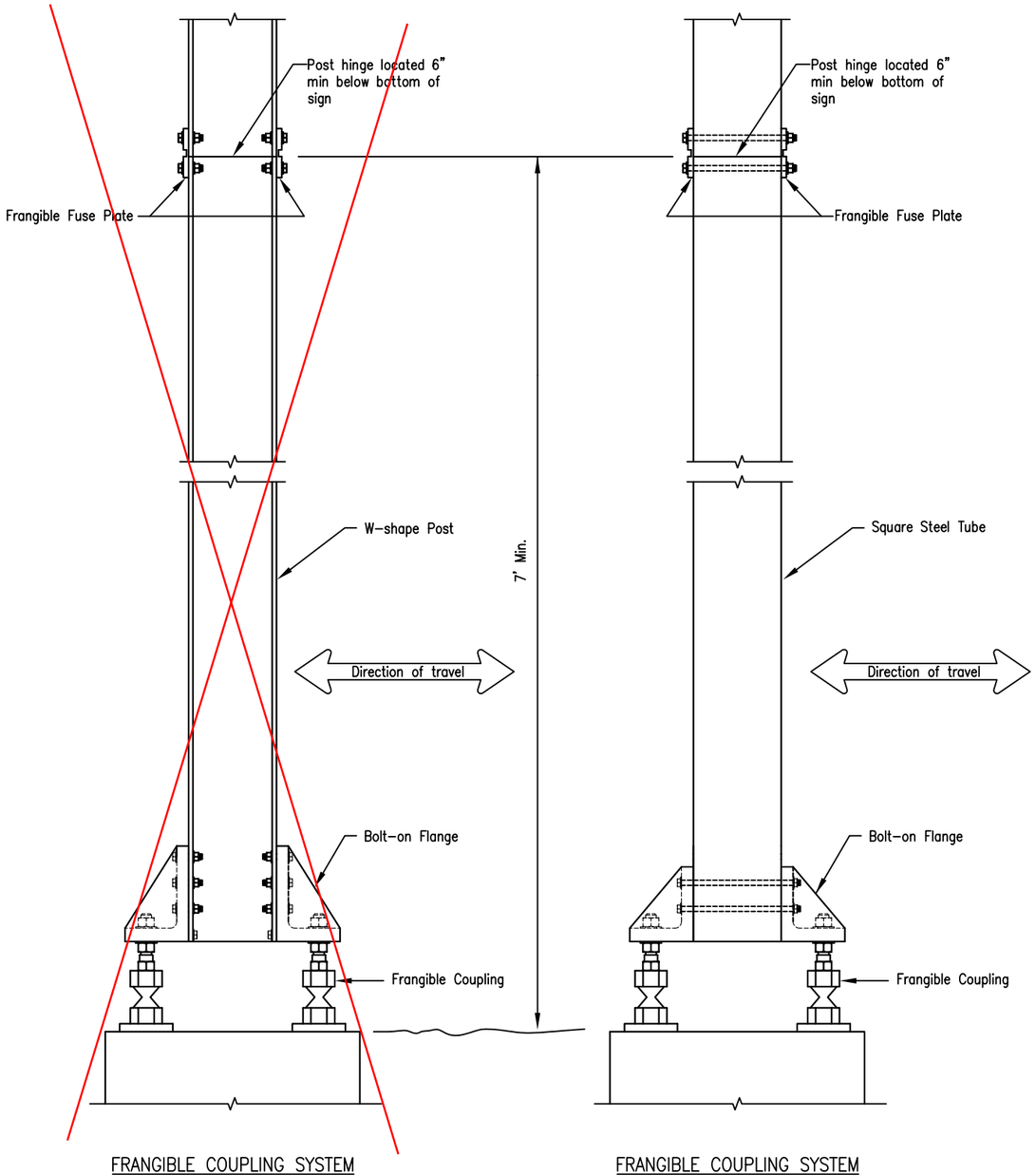
Last Code and Stds. Review
By: WTH Date: 7/8/2020

Next Code and Standards Review date: 7/8/2030

S-30.05

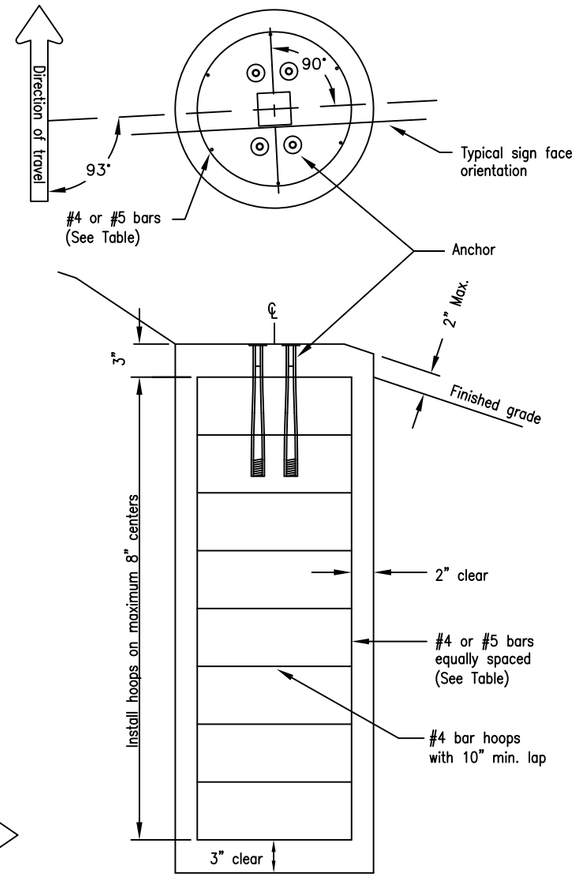
S-31.01

NOTE:
Install hinges when more than one post is used to support a sign. Do not install hinges on single post installations.



FRANGIBLE COUPLING SYSTEM FOR W-SHAPE POST
NOT USED

FRANGIBLE COUPLING SYSTEM FOR SQUARE STEEL TUBES



SIGN POST FOUNDATION

See Table for depth and diameter

POST SIZE & TYPE	FOUNDATION *			REINFORCEMENT					
	DIA.	MIN. DEPTH	CY^3 CONC.	VERTICAL BARS QTY.	SIZE	LGTH.	HOOPS QTY.	SIZE	DIA.
2 1/2" TUBE	1'-6"	4'-0"	0.26	6	#4	3'-6"	7	#4	1'-2"
3" TUBE	1'-6"	4'-0"	0.26	6	#4	3'-6"	7	#4	1'-2"
3 1/2" TUBE	1'-6"	4'-6"	0.30	6	#4	4'-0"	8	#4	1'-2"
4" TUBE	2'-6"	4'-0"	0.72	7	#5	3'-6"	7	#4	2'-2"
4 1/2" TUBE	2'-6"	4'-6"	0.81	7	#5	4'-0"	8	#4	2'-2"
5" TUBE	2'-6"	5'-6"	1.00	7	#5	5'-0"	9	#4	2'-2"
W6 x 9	2'-6"	4'-0"	0.95	8	#5	3'-6"	7	#4	2'-2"
W6 x 12	2'-6"	4'-6"	1.07	8	#5	4'-0"	8	#4	2'-2"
W6 x 15	3'-0"	6'-6"	1.69	8	#5	6'-0"	11	#4	2'-8"
W6 x 30	3'-0"	7'-6"	1.95	8	#5	7'-0"	12	#4	2'-8"

FOUNDATION TABLE

* Foundations sized for use where there are no loose, high moisture, or fine grained soils.

GENERAL NOTES

1. Furnish sign posts with NCHRP 350 or MASH compliant FHWA-approved frangible couplings designed to break away safely when struck from any direction. The frangible couplings shall not have specific installation torque requirements.
2. Furnish frangible coupling systems with bolt-on flanges.
3. Details on this sheet illustrate only the general components of a frangible coupling system, and are not intended to specify a particular product.
4. Install frangible fuse plates as specified by the manufacturer and hinged joints when multiple posts are used to support a sign. Do not use round pipes.
5. Install the components of the breakaway system, including hinges, in accordance with the written instructions of the system manufacturer.
6. Use Class A concrete conforming to section 501 of the Standard Specifications. Furnish ASTM A615 grade 60 steel bars for concrete reinforcement conforming to AASHTO M31.
7. Spiral reinforcing steel may be substituted for hoops in concrete foundation. Spiral option shall consist of #3 plain spiral with 6" pitch with three flat turns at the top and one flat turn at the bottom.
8. Install the concrete anchors using a rigid template. Locate the anchors on centers and within tolerances specified by the manufacturer.
9. Install the anchors in fresh concrete as recommended by the manufacturer. Adjust the template's final position until it is level. Remove and replace all foundations that need more than 2 shims under any 1 coupling or more than a total of 3 shims under any pair of couplings to plumb the post.
10. Drill the holes for attaching brackets before the sign posts are hot dip galvanized. Test fit templates in the holes to ensure the brackets can be installed square to the posts.

REVISIONS		
Date	Description	By
4/28/10	Delete pipe, Add hinge	KJS

Sheet 1 of 1

State of Alaska
Department of Transportation
& Public Facilities

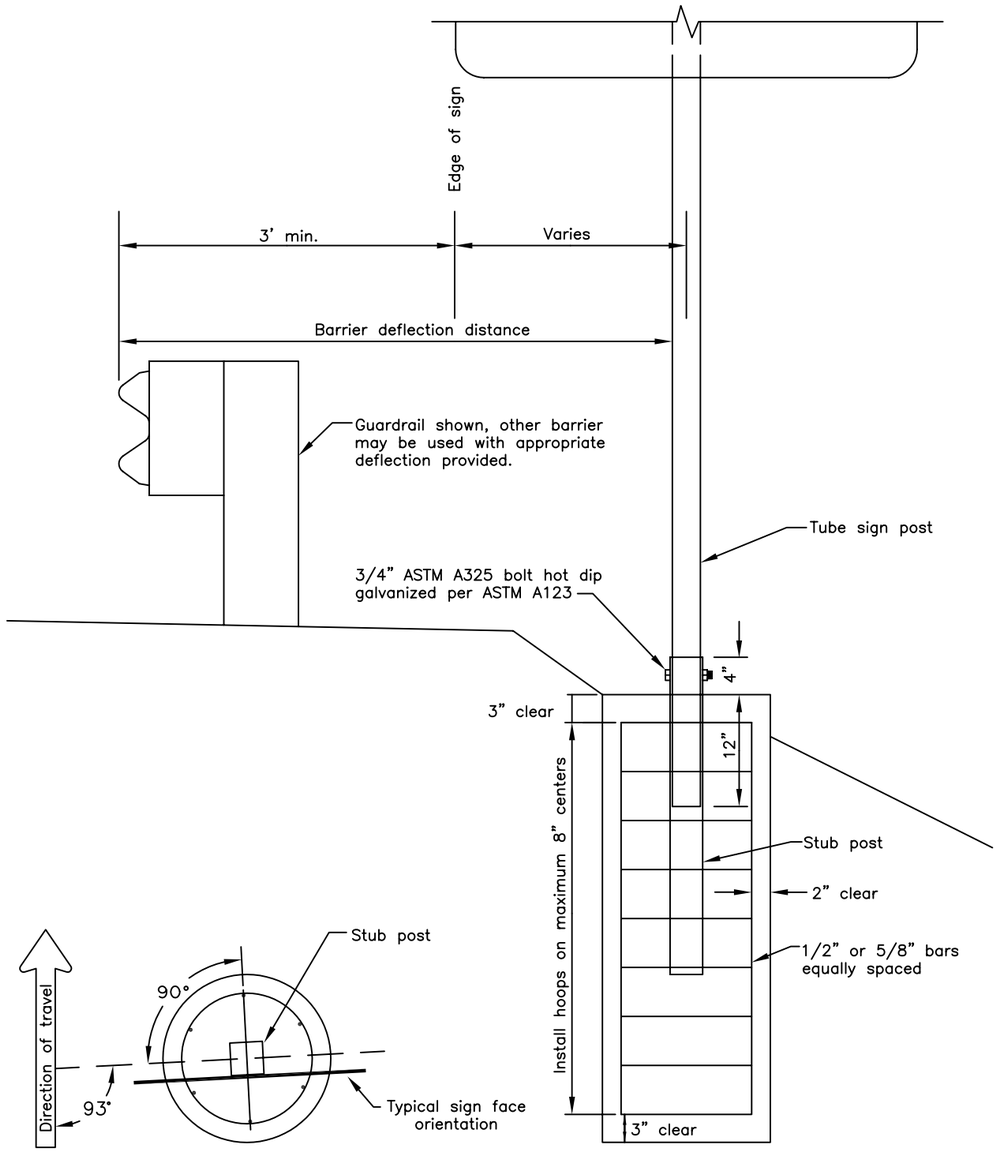
SIGN POST BASE AND FOUNDATION

SR 2/3/21

APPROVED
Date 5/31/12

S-31.01

S-32.00



SIGN POST FOUNDATION
(Plan view)

SIGN POST FOUNDATION
See table for depth and diameter

GENERAL NOTES

1. This is a non-crashworthy sign support. It may only be used at locations shielded by a guardrail, barrier, or wall. It may not be used if the sign post is within 20' of the rail and is closer than 75' from the guardrail end post (measured along the rail). For this case use a breakaway sign support. See Standard Drawing G-20.
2. Furnish steel tube sign post and stub post that conform to ASTM A500, grade B, and meet ASTM A123 for hot dip galvanizing.
3. Install tubes and stub post with a 0.1875" wall thickness.
4. For Perforated Tubes use Standard Drawing S-30.
5. Spiral reinforcing steel may be substited for hoops in concrete foundation. Spiral option shall consist of No. 3 plain spiral with 6" pitch with three flat turns at the top and one flat turn at the bottom.

POST SIZE & TYPE	FOUNDATION *			REINFORCEMENT					STUB POST	
	DIA.	MIN. DEPTH	C.Y. CONC.	VERTICAL BARS QTY.	SIZE	LGTH.	HOOPS SIZE	DIA.	SLEEVE SIZE	LGTH.
2 1/2" TUBE	1'-0"	4'-6"	0.13	6	1/2"	4'-0"	1/2"	8"	3"	3'
3" TUBE	1'-6"	4'-0"	0.25	6	1/2"	3'-6"	1/2"	1'-2"	3 1/2"	3'
3 1/2" TUBE	1'-6"	4'-6"	0.27	6	1/2"	4'-0"	1/2"	1'-2"	4"	3'
4" TUBE	2'-6"	4'-0"	0.69	7	5/8"	3'-6"	1/2"	2'-2"	4 1/2"	3'
4 1/2" TUBE	2'-6"	4'-6"	0.78	7	5/8"	4'-0"	1/2"	2'-2"	5"	3'

* Foundation sized for use where there are no loose, high moisture, or fine grained soil.

REVISIONS		
Date	Description	By

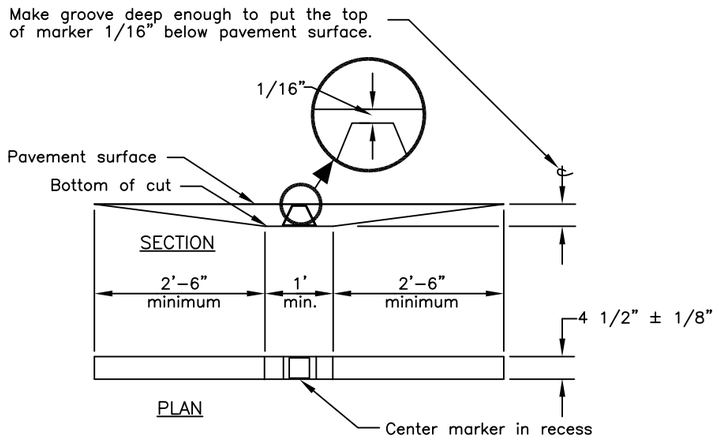
Sheet 1 of 1

State of Alaska
Department of Transportation
& Public Facilities

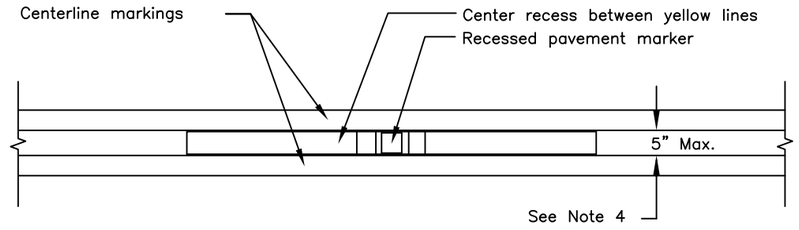
SIGN POST BASE AND FOUNDATION BEHIND BARRIER

APPROVED
Date 2/28/03

S-32.00



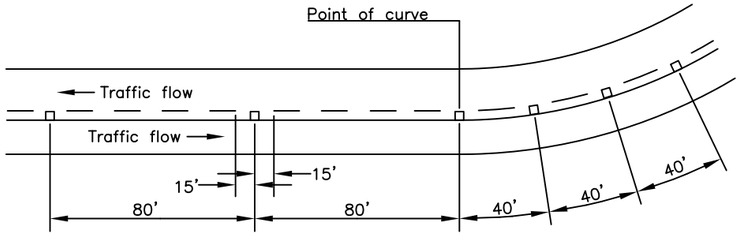
RECESSED PAVEMENT MARKER SLOT



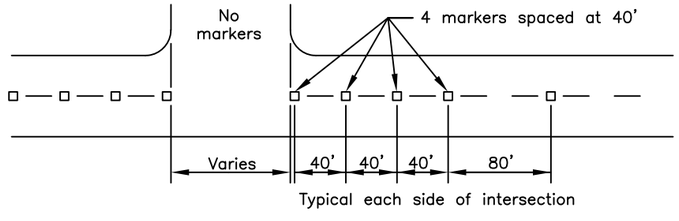
RECESSED PAVEMENT MARKERS WITH DOUBLE CENTERLINE INSTALLATION

GENERAL NOTES

1. Install recessed pavement markers spaced at 80' on tangent sections of roadway and on curves with a radius greater than 1,600'.
2. Install recessed pavement markers spaced at 40' on curves with a radius 1,600' or less.
3. Install recessed pavement markers between the lines on sections with double lines (either broken or solid.)
4. Increase the distance between yellow painted lines from the standard 3" up to a maximum of 5" to minimize paint overspray onto the marker.
5. Install recessed pavement markers on the centerline of the line, midpoint between stripe segments on sections with single broken lines.
6. Install reflectors of the same color as the pavement markings they supplement, except when red reflectors are specified on the departure side of markers on one–way roads to warn motorists they are going the wrong way.
7. Unless otherwise specified on one–way roads, reflectors are required only on the approaching traffic side of markers. In these cases, the 2'–6" taper may be omitted on the departure side.



RECESSED PAVEMENT MARKERS ON CURVES WITH A RADIUS LESS THAN 1,600'



RECESSED PAVEMENT MARKERS AT INTERSECTION APPROACHES

State of Alaska DOT&PF
ALASKA STANDARD PLAN

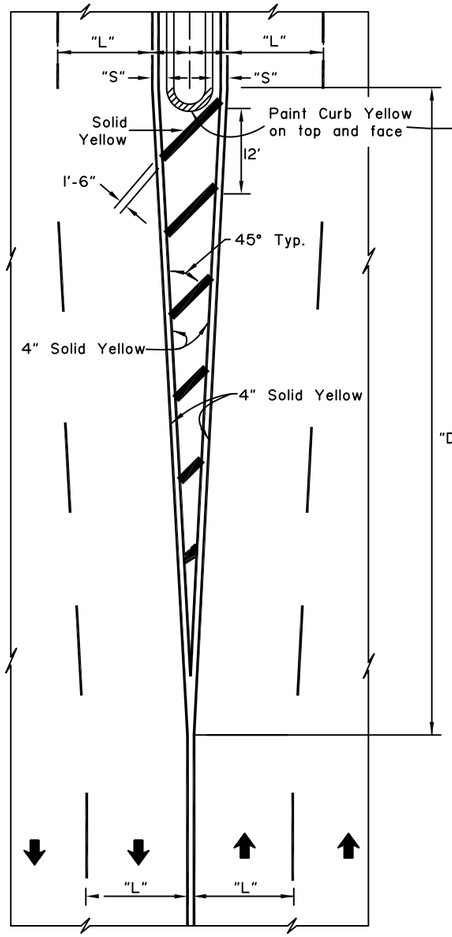
RECESSED PAVEMENT MARKERS

Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

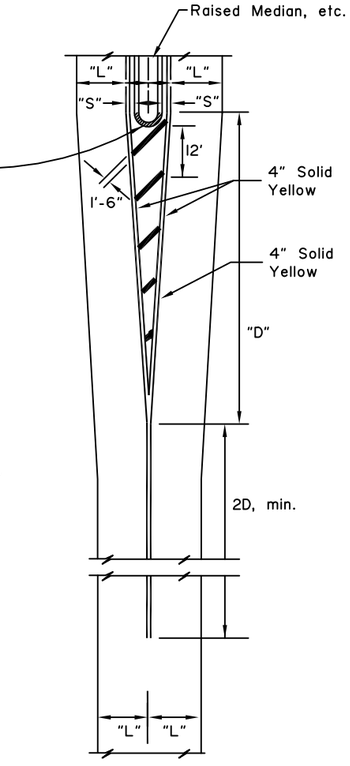
Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

Next Code and Standards Review date:02/08/2029

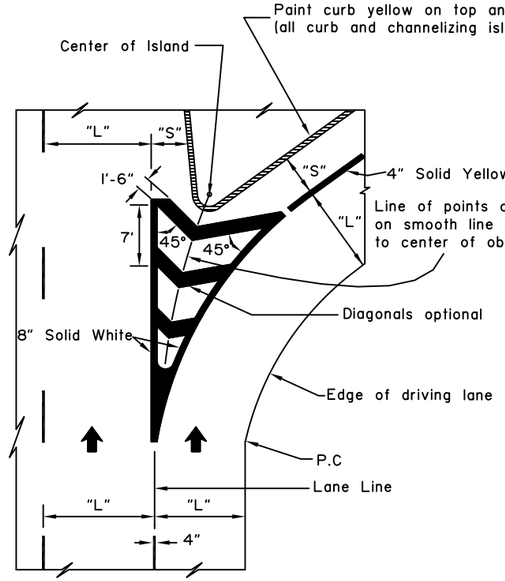


FOUR OR MORE LANES
DRIVE TO RIGHT

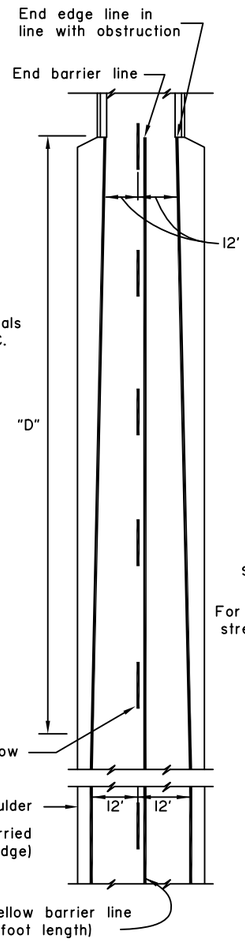


TWO LANES
DRIVE TO RIGHT

White longitudinal and diagonal markers identical to Four Lane Arrangement.

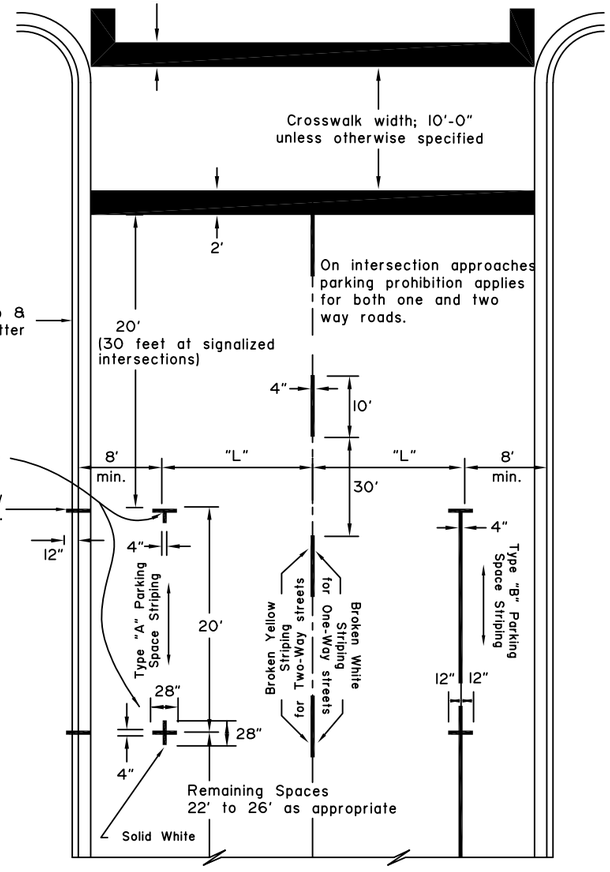


CHANNELIZING ISLAND



Note: On bridges over 24' wide use standard pavement markings. Barrier lines not used unless otherwise required.

EDGE LINE TRANSITION TO NARROW BRIDGE AND APPROACH BARRIER LINE



CENTERLINES FOR TWO LANE TWO WAY URBAN ROADS-PARKING LIMIT LINES

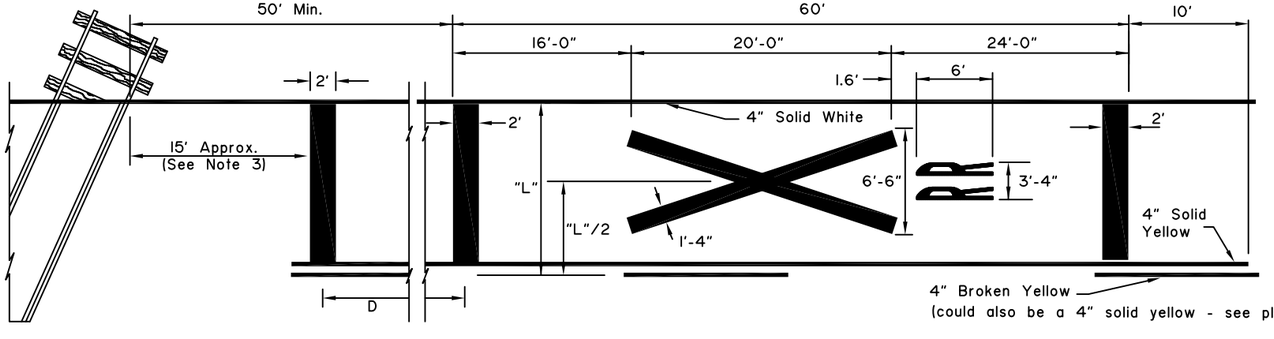
NOTES: "D" = Speed limit (mph) X "S" (offset width in feet) or as indicated on the plans. Minimum "D" = 100 feet urban, 200 feet rural.

APPROACH TO OBSTRUCTIONS

RAILROAD CROSSING NOTES:

1. All markings solid while unless indicated otherwise.
2. On 4-lane roadways place railroad crossing approach markings in each lane of the approach.
3. Locate Stop Bar 15' from railroad track or 8' from gate, if present.
4. Place edge lines and lane lines on a uni-directional approach in a normal manner except that the lane line(s) shall be solid 4" white in lieu of broken for a distance of (D+60') in advance of the stop bands.

POSTED LIMIT	D
30 M.P.H.	225'
40	350'
50	475'
60	625'



APPROACH TO RAILROAD CROSSING ON 2 LANE 2 WAY HIGHWAY

GENERAL NOTES:

1. "S"= offset distance as shown on the plans, otherwise 1 to 2 feet.
2. "L"= driving lane width.
3. See the Alaska Traffic Manual for additional guidance and/or restrictions on the use of traffic control devices.

NOT TO SCALE

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ALASKA STANDARD PLAN

PAVEMENT MAKING APPLICATIONS

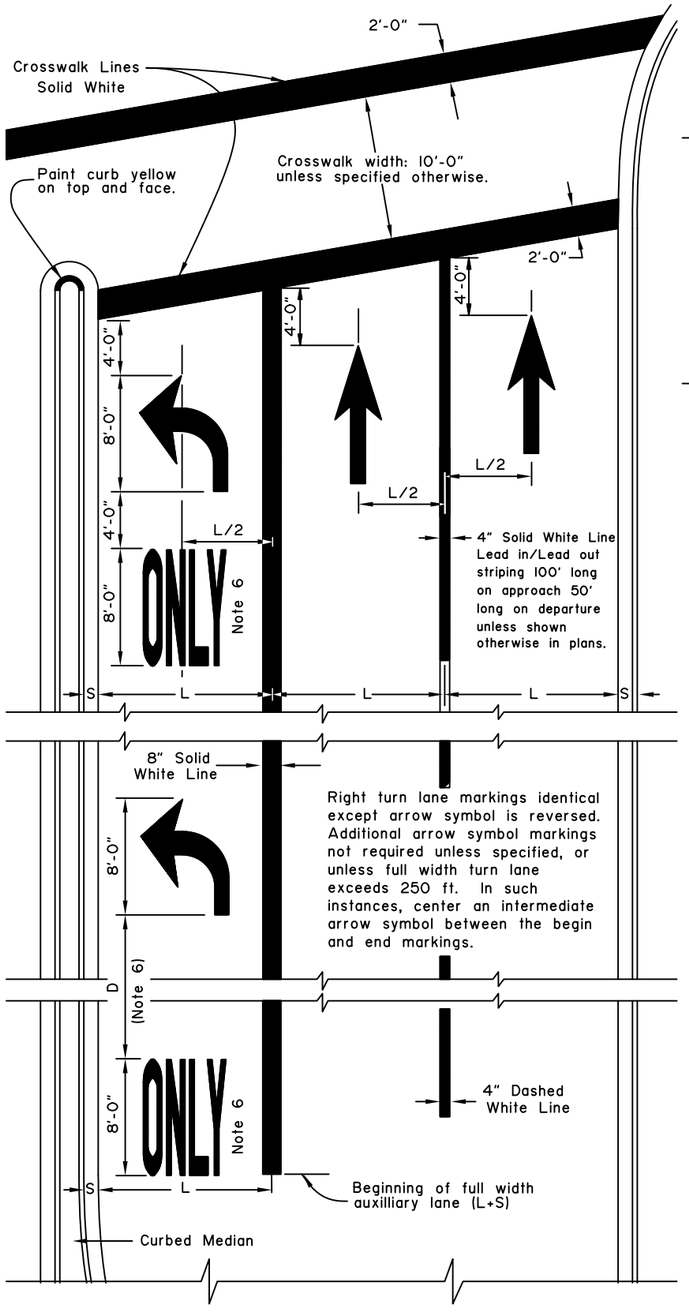
Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

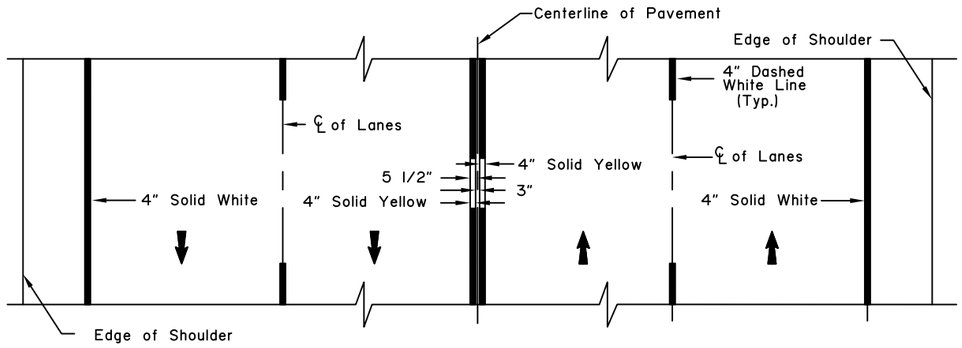
Last Code and Stds. Review
By: Date:

Next Code and Standards Review date: 02/08/2029

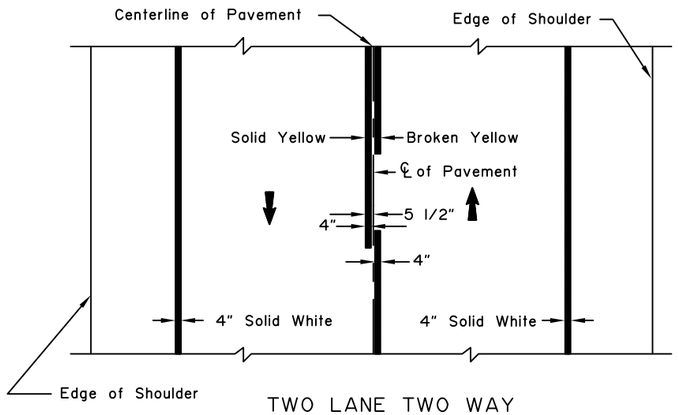
T-20.04



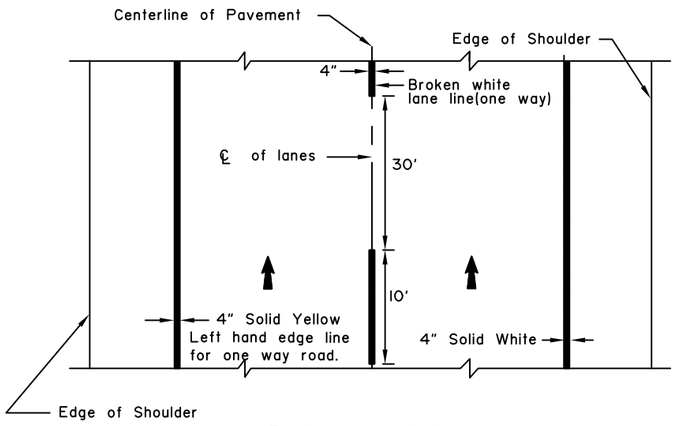
APPROACH TO INTERSECTION



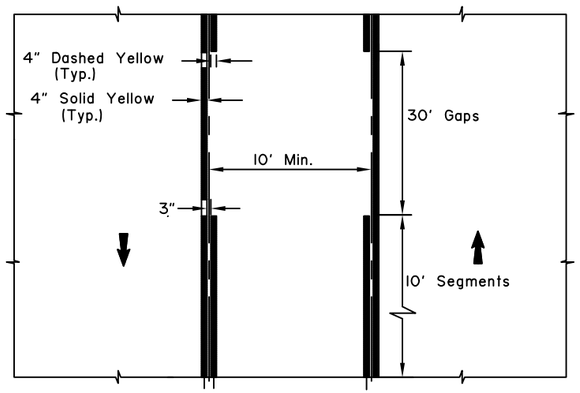
FOUR LANE TWO WAY



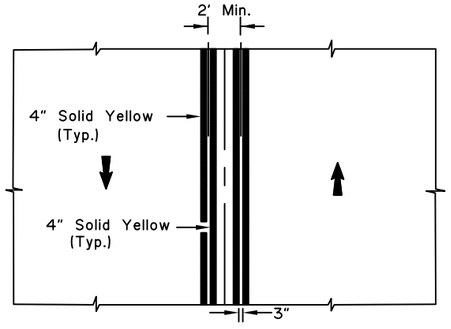
TWO LANE TWO WAY



TWO LANE ONE WAY



TWO-WAY LEFT TURN LANE



STRIPED MEDIAN

GENERAL NOTES:

1. All markings white unless indicated otherwise.
2. Lengths of stripe and gap for lane and center lines identical.
3. Lane lines for auxiliary lanes are unbroken solid lines.
4. "L" = driving lane width.
5. "S" = shy distance as shown on plans, otherwise 1 to 2 feet.
6. ONLY markings are required where through lanes change to turn lanes. In other cases, apply ONLY markings as indicated on plans.
7. See ALASKA TRAFFIC MANUAL for additional instruction on the use of TRAFFIC CONTROL DEVICES.
8. 6. Adjust distance D between ONLY and Turn Arrow based on SPEED vs. D table.

SPEED	D
25 or less	35'
30	45'
35	50'
40	60'
45	65'
50	75'
55 or more	80'

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PAVEMENT MAKING APPLICATIONS

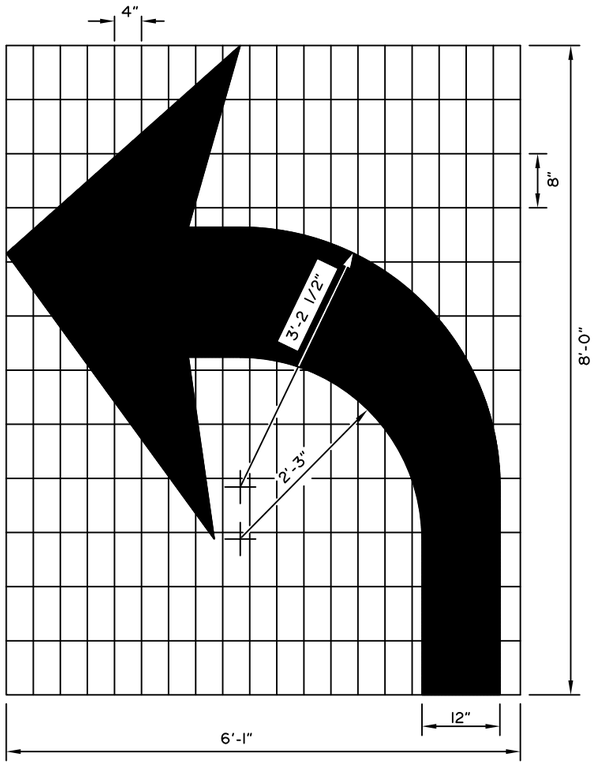
Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E. Chief Engineer

Adoption Date: 02/08/2019

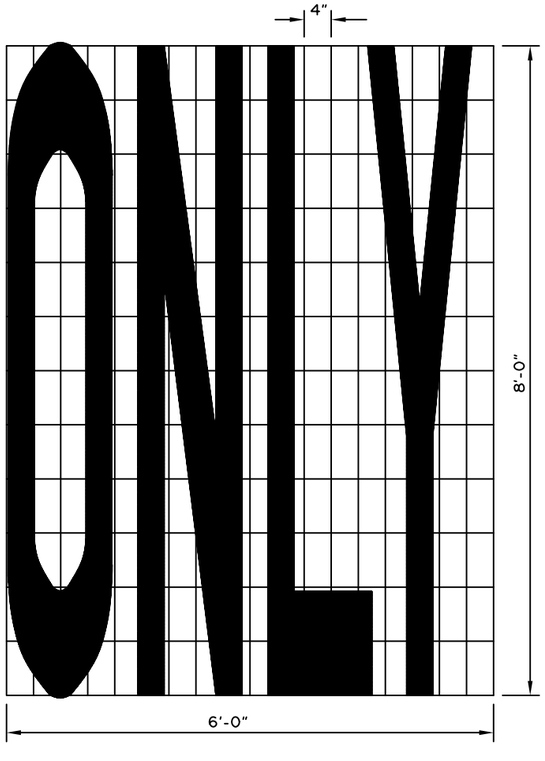
Last Code and Stds. Review By: Date:

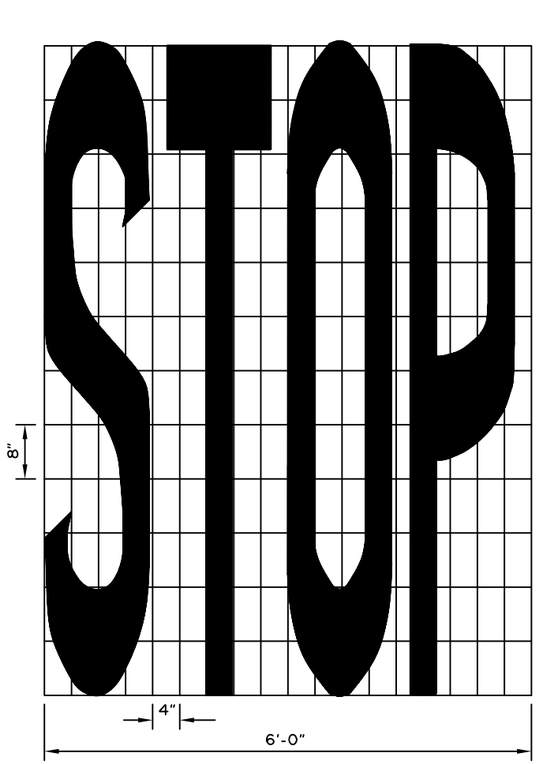
Next Code and Standards Review date: 02/08/2029

T-21.03



Right turn auxilliary lane usage markings identical except arrow symbol is reversed.

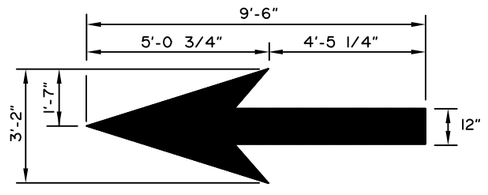




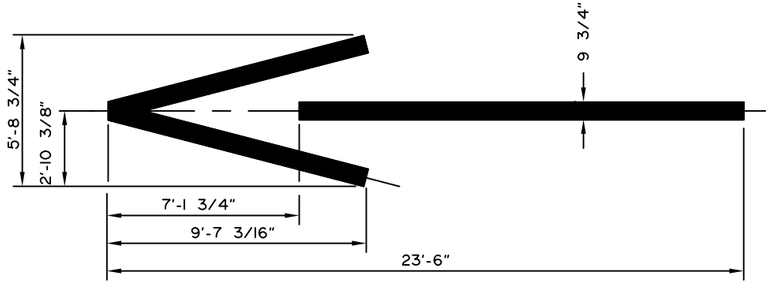
LAYOUT TEMPLATES FOR STENCILS

GENERAL NOTES:

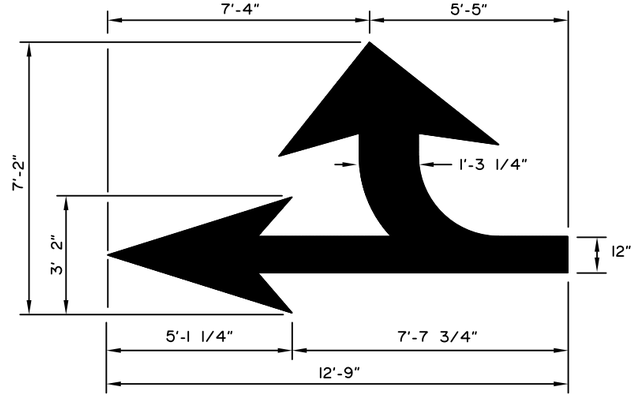
1. All symbols shown shall be white and reflectorized in accordance with the Special Provisions.
2. See the Alaska Sign Design Specifications (ASDS) for lettering and symbols for pavement marking details not provided on this drawing.



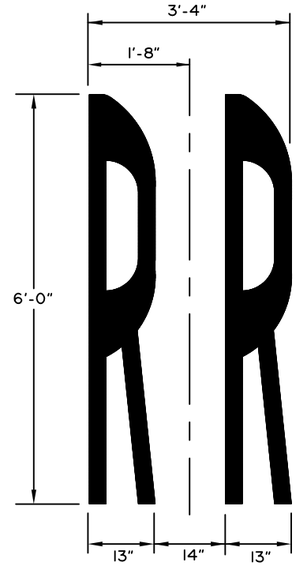
STRAIGHT AHEAD ARROW



WRONG WAY ARROW



COMBINATION ARROW



RAILROAD SYMBOL

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PAVEMENT MARKING SYMBOL DIMENSIONS

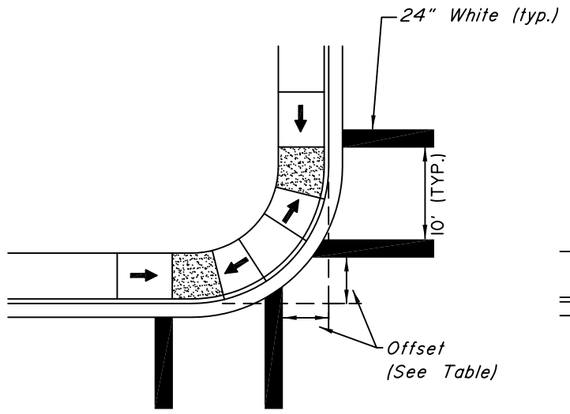
Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E.
Chief Engineer

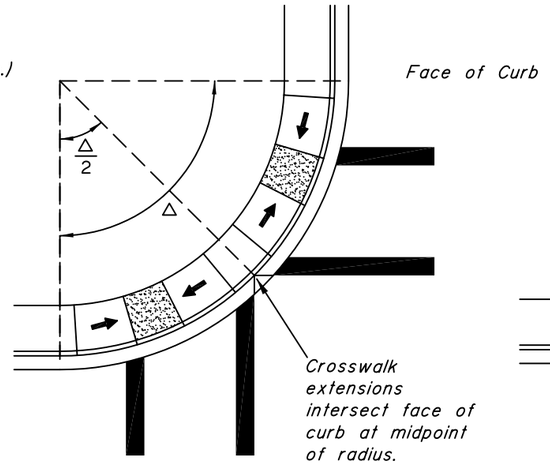
Adoption Date: 02/08/2019

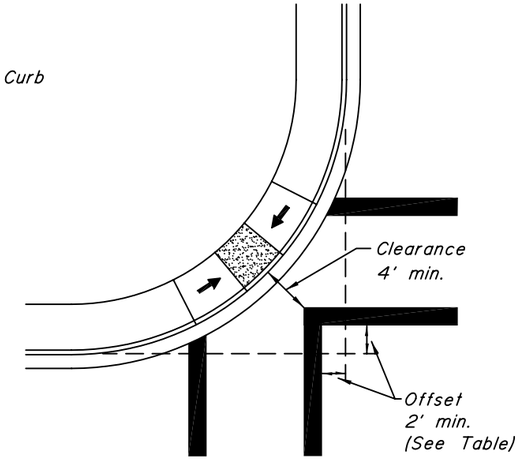
Last Code and Stds. Review By: Date:

Next Code and Standards Review date: 02/08/2029

T-22.04







NOTES.

1. The crosswalk locations shown assume a 90-degree intersection - adjust as necessary on skewed intersections to ensure that crosswalk landings (for parallel curb ramps) or ramp runs (for perpendicular curb ramps) fall within the inner edges of crosswalk stripes. If Case 3 (not recommended) is used, the layout should also be adjusted to provide at least the minimum clearance while maximizing the offset.
2. Although border crosswalks are shown, these details apply to ladder crosswalks also. When used, the outside of 10' wide ladder crosswalks should coincide with the inside of border crosswalks as shown here.
3. Border crosswalks should be used at traffic signals or on approaches controlled by stop signs. At other locations, ladder crosswalks should be used.
4. If only one crosswalk connects with a curb radius, it should be located as if there were two connecting crosswalks.
5. These details apply to parallel (shown) as well as perpendicular curb ramps.
6. Case 3, the layout for a single central curb ramp, should be used only when installing two ramps is not feasible. It should not be used for radii under 25 feet. See plans for ramp layout at particular locations.
7. Radius is measured to the face of curb.

CASE 1

Dual Curb Ramps
Radius ≤ 25'

CASE 1	
Crosswalk Offset From Face of Curb	
Radius (ft.)	Offset (ft.)
5	5
10	6
15	7
20	8
25	9

CASE 2

Dual Curb Ramps
25' < Radius ≤ 50'

CASE 3

Single Central Curb Ramp
25' ≤ Radius ≤ 50'
(Not Recommended)

CASE 3	
Crosswalk Offset From Face of Curb	
Radius (ft)	Offset (ft)
25	2
30	3
35	5
40	6
45	8
50	9

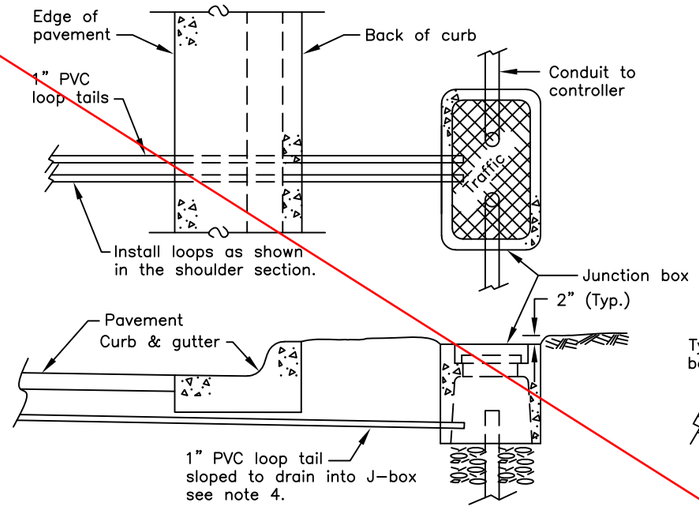
REVISIONS		
Date	Description	By

State of Alaska
Department of Transportation
& Public Facilities

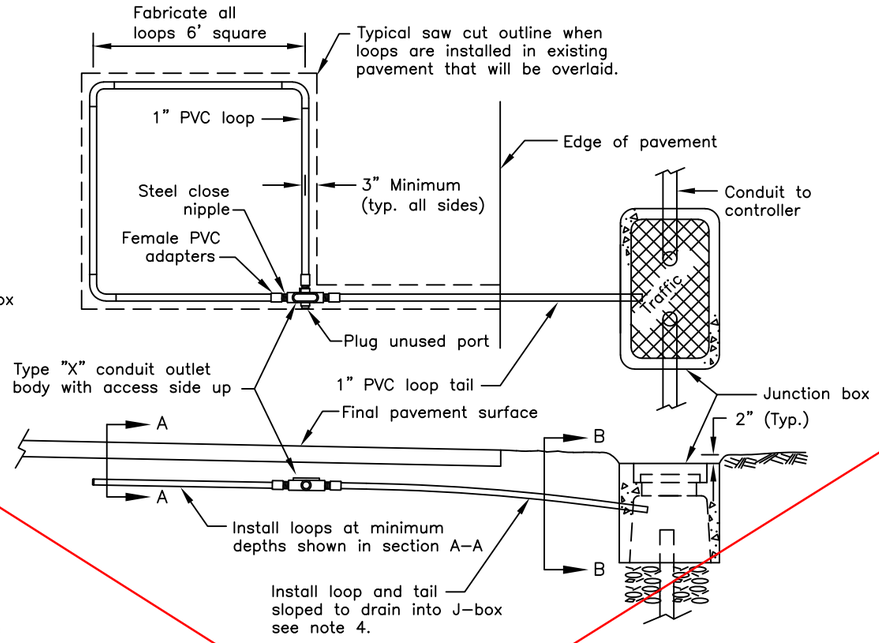
CROSSWALK LOCATION AT INTERSECTIONS

APPROVED
Date 2/15/00

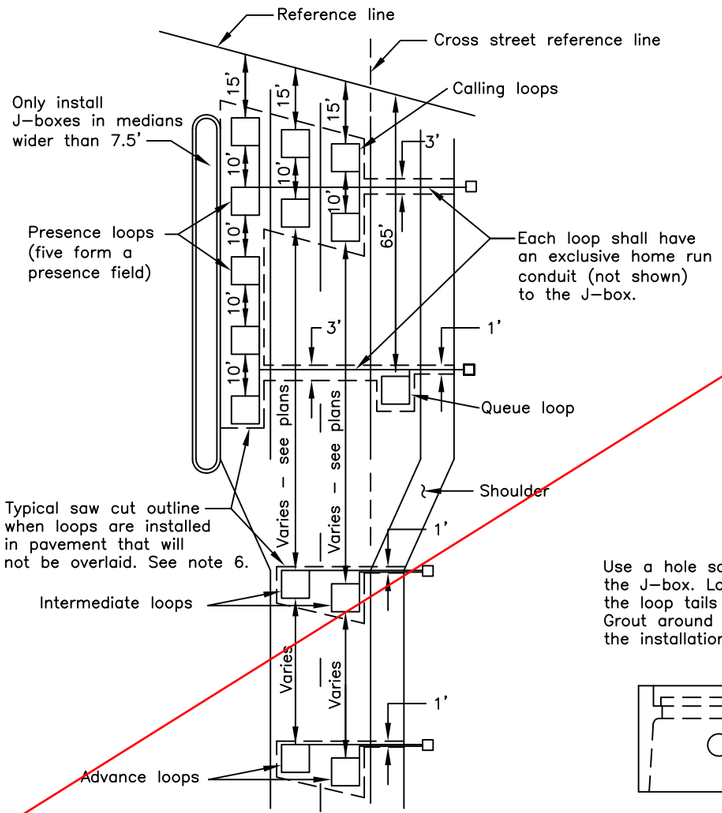
T-23.00



CURB SECTION

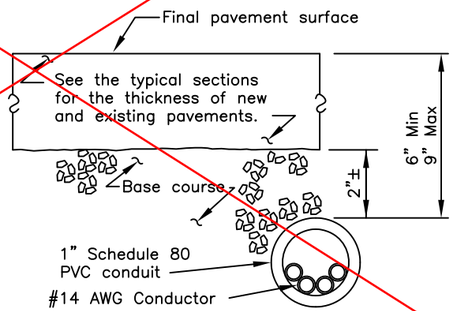


SHOULDER SECTION

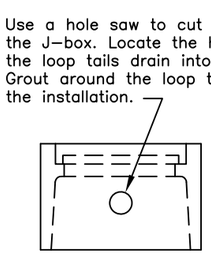


TYPICAL LOOP SETBACKS

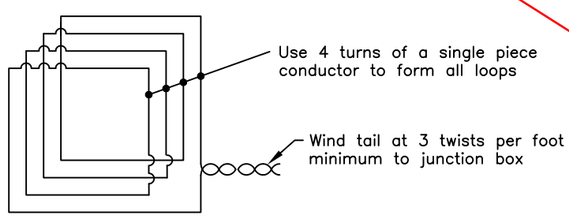
Measure the setbacks from the reference line along the center of each lane.



SECTION A–A



VIEW B–B



LOOP WIRING DETAIL

TYPICAL PVC CONDUIT ENCASED LOOP DETECTOR INSTALLATION

GENERAL NOTES

1. Solvent weld all PVC to PVC joints. Use hot dip galvanized steel type X outlet bodies to join the loops and tails.
2. Use tube loop wire per IMSA specification 51–5 with the optional polyethylene tubing.
3. Install and test all loop detectors before overlaying the existing pavement or paving the new roadway.
4. Drill five 1/4" weep holes on 12" centers in the underside of the conduit at the low spot when the loop and tail cannot be installed to drain into the J–box. If the Engineer allows 90 degree elbows to be used, drill a 1/4" hole in the low point.
5. When installing loop detectors in existing pavement, cut the asphalt with a saw and remove all asphalt within the saw cut.
6. Where existing pavement will not be overlaid, cut the pavement with a saw as follows:
   A. Remove all pavement from the length of the five loop presence fields.
   B. Enclose all loops that enter a common junction box within one saw cut area.
   C. Cut to within 12" of lane and edge lines to preserve them.
   D. Remove asphalt to gutter where there are no edge lines.
   E. Cut across lane lines when loops are side by side.
   F. Cut trenches crossing a lane a minimum of 3' wide.
   G. Cut trenches crossing a shoulder a minimum 12" wide.
7. Heat and tack coat the edges of existing pavement before paving cutouts. Compact the asphalt mixture with a self–propelled steel wheeled roller. Furnish asphalt mix that conforms to section 401 of the Specifications, and is approved by the Engineer. Maintain the replacement asphalt temperature at the mixing temperature specified in the approved mix design until compaction has begun.
8. To establish the reference lines, extend the right edges of the outermost through lanes across the intersection.

NOT USED

SR 2/8/21

State of Alaska DOT&PF
ALASKA STANDARD PLAN

LOOP DECTECTOR INSTALLATION

Adopted as an Alaska Standard Plan by: Kenneth J. Fisher, P.E. Chief Engineer

Adoption Date: 02/08/2019

Last Code and Stds. Review By: Date:

Next Code and Standards Review date:02/08/2029

T-32.10