DRAWING LOCATION: C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\DESIGN\PLANSET\00381_A1_A2_TITLE.DWG

DESIGNED BY	DLP
CHECKED BY	ALH
DRAWN BY	DLP

SCALE	N/A

DATE	7/22/2020
TIME	2:08 PM

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	A1	A4

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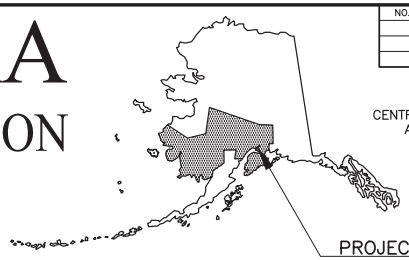


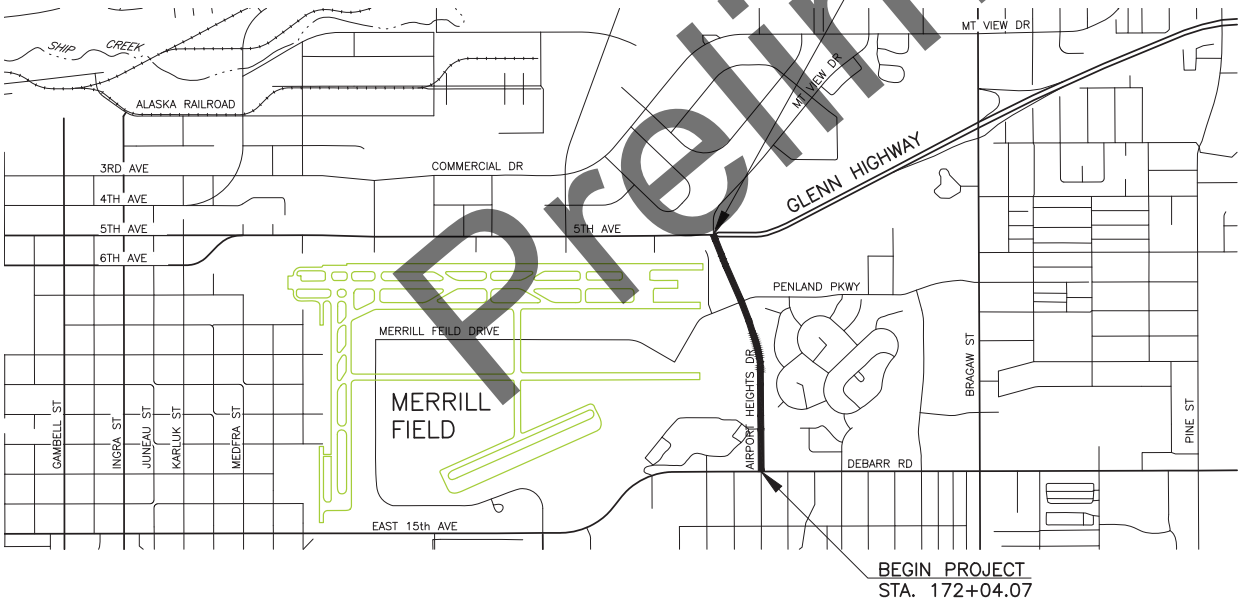
PROPOSED HIGHWAY PROJECT

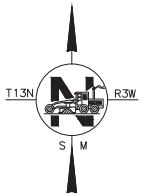
AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION PROJECT NO. 0001620/CFHWY00381

GRADING, DRAINAGE, PAVING, ADA FACILITIES, SIGNING, AND STRIPING

PROJECT SUMMARY		
ROADWAY	WIDTH	LENGTH
AIRPORT HEIGHTS DRIVE	48-72 FT	0.56 MILES

DESIGN DESIGNATIONS			
ROADWAY	FUNCTIONAL CLASS	AADT (2018)	DESIGN SPEED (V)
AIRPORT HEIGHTS DRIVE	MINOR ARTERIAL		
MP 0.00 TO MP 0.17		14,586	40 MPH
MP 0.17 TO MP 0.56		10,533	40 MPH





STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
4111 AVIATION AVENUE, ANCHORAGE, AK 99502
(907)269-0590

APPROVED:

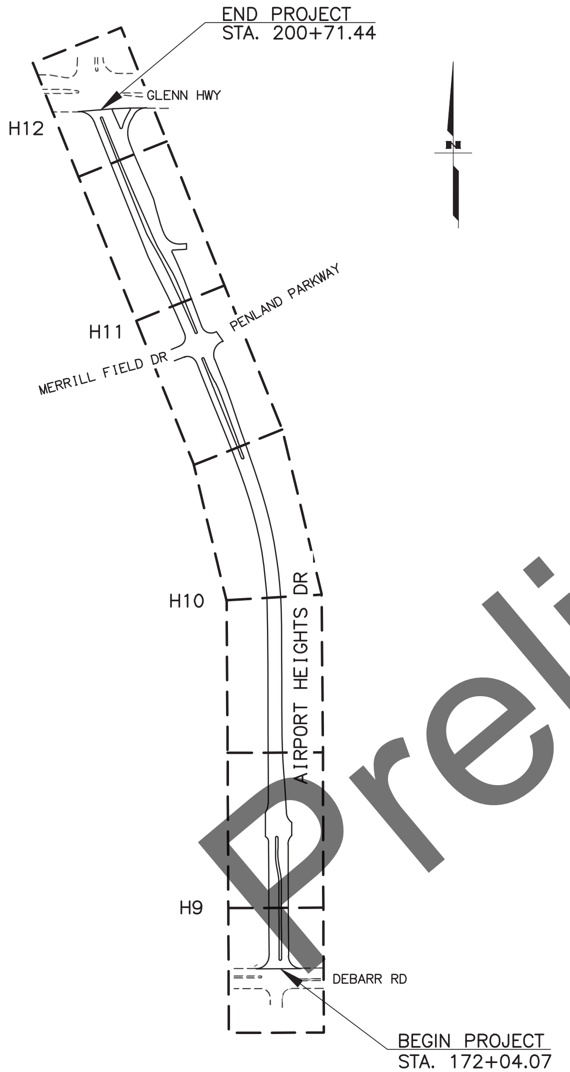
REGIONAL PRECONSTRUCTION ENGINEER DATE

CONCUR:

REGIONAL CONSTRUCTION ENGINEER DATE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	A2	A4



GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE RIGHT-OF-WAY, TEMPORARY CONSTRUCTION EASEMENTS, AND TEMPORARY CONSTRUCTION PERMITS. NO EXCESS MATERIAL SHALL BE DISPOSED OF WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.
2. THE ROW LINES SHOWN WERE DRAWN BY DOT&PF AND ARE BASED ON DOT&PF PROJECTS: "AIRPORT HEIGHTS ROAD" [US-0544(1)], "DEBARR ROAD" [S-0544(4)], AND "GLENN HIGHWAY GAMBELL ST TO AIRPORT HEIGHTS RECONSTRUCTION" [IM-0A1-6(35)/58800]; AND SUBDIVISION PLATS AND RECORDED DOCUMENTS; AND FOUND MONUMENTS SURVEYED BY DOT&PF IN 2018. THE ROW LINES WERE INSERTED USING A COMMON COORDINATE SYSTEM.
3. ANY AREA WITHIN THE RIGHT-OF-WAY DISTURBED BY THE CONTRACTOR REQUIRE SOD.
4. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATE METHOD APPROVED BY THE ENGINEER.
5. ADJUST ALL PAVEMENT PENETRATIONS TO FINAL GRADE PRIOR TO TOP LIFT OF PAVING.

   IF ANY PAVEMENT PENETRATION REQUIRES GRADE ADJUSTMENT AFTER FINAL LIFT PAVING, AS DETERMINED BY THE ENGINEER, SAW CUT A NEAT LINE ALONG THE PAVEMENT TO BE REMOVED. USE AN INFRARED HEATER TO HEAT THE EXISTING PAVEMENT; EQUIPMENT AND MAXIMUM TEMPERATURE SHALL BE APPROVED BY THE ENGINEER. REPLACE THE REMOVED ASPHALT WITH NEW HOT MIX ASPHALT AND THOROUGHLY COMPACT. SEAL JOINTS, AT LEAST 12 INCHES WIDE CENTERED ON JOINT, USING ASPHALT SYSTEMS GSB-88, OR APPROVED EQUAL, WHILE THE HOT MIX ASPHALT IS CLEAN, FREE OF MOISTURE AND PRIOR TO STRIPING.

   THERE SHALL BE NO PAYMENT FOR ADDITIONAL WORK CAUSED BY FAILURE TO ADJUST PAVEMENT PENETRATIONS TO FINAL GRADE.
6. CONCRETE SIDEWALK REMOVED FOR CURB RAMP WORK SHALL BE REPLACED WITH 4 INCHES CONCRETE. ASPHALT REMOVED FOR CURB RAMP WORK SHALL BE REPLACED WITH 2 INCHES (MIN.) HMA. CURB RAMPS SHALL CONSIST OF 4 INCHES CONCRETE OVER 2 INCHES AGGREGATE BASE COURSE, GRADING D-1.
7. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, INCLUDING ARROW BOARD DEVICE(S), FOR OVERHEAD INSPECTION AND LOCATE WORK PERFORMED BY MOA SIGNAL ELECTRONICS. CONTRACTOR SHALL BE ON-SITE AT COMPLETION OF LOCATES TO REVIEW LAYOUT AND MAKE STATIONING MEASUREMENTS FOR CONDUIT LOCATIONS.
8. WHEN INSTALLING NEW CURB RAMPS AND BACKING CURB, ENSURE ACCESS IS RETAINED TO FOUNDATION BASE PLATE, NUTS, AND BOLTS. IF EXISTING SIGNAL POLE FOUNDATION IS COVERED WITH SOILS, REMOVE AND EXPOSE FOUNDATION AND ANCHOR BOLTS. THIS WORK IS SUBSIDIARY TO PAY ITEM 608.0006.0000.
9. CONSTRUCT RAMP RUNS, LANDINGS, FLARES, AND SIDEWALK EXTENSIONS SHOWN IN THE PLANS USING 4 INCHES CONCRETE REGARDLESS OF WHETHER THE EXISTING SIDEWALK/PATHWAY IS ASPHALT OR CONCRETE.
10. CONSTRUCT CURB RAMPS TO AVOID IMPACTING SIGNAL POLE FOUNDATIONS. DO NOT COVER SIGNAL POLE FOUNDATION BOLTS AND BASE PLATES WITH TOPSOIL.
11. DETECTABLE WARNING TILES SHALL BE YELLOW.

INDEX

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	SHEET LAYOUT, INDEX, AND GENERAL NOTES
A3	LEGEND
A4	SURVEY CONTROL SHEET(S)
B1-B2	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1-D3	SUMMARY TABLES
E1-E7	DETAIL SHEETS
H1-H17	SIGNING AND STRIPING
K1-K5	AUTOMATED TRAFFIC RECORDER PLANS

THE FOLLOWING ALASKA STANDARD PLANS APPLY TO THIS PROJECT:

I-21.11, I-22.11
S-00.11, S-05.01, S-23.00, S-30.04, S-31.01, S-32.00
T-05.10, T-20.04*, T-21.03, T-22.04, T-23.00

* AS MODIFIED WITHIN

ABBREVIATIONS:

BOP = BEGINNING OF PROJECT
EOP = END OF PROJECT
ME = MATCH EXISTING
CL = CENTERLINE
NW = NORTHWEST
NE = NORTHEAST
SW = SOUTHWEST
SE = SOUTHEAST

SPECIFICATION:

CONSTRUCT THE IMPROVEMENTS COVERED BY THESE PLANS IN ACCORDANCE WITH THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 2020 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS.

STATE OF ALASKA 49TH AARON L. HUNTING CE 106601 REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SHEET LAYOUT, INDEX,
AND GENERAL NOTESD

DESIGNED BY	DLP
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DRAFTED BY	DLP
SCALE	N/A
DATE	8/4/2020
TIME	3:32 PM

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DESIGNED BY	DLP
CHECKED BY	ALH
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DATE	7/22/2020
TIME	2:24 PM

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\PLANSET\00381_A03_LEGEND.DWG

ROADWAY

	EXISTING	PROPOSED
EDGE OF PAVEMENT		
LIMIT OF CUT SLOPE & FILL SLOPE		CUT / FILL
GRAVEL EDGE		
SIDEWALK AND PATH/TRAIL		
CONCRETE CURB & GUTTER		
CONCRETE CURB CUT		
PARALLEL CURB RAMP PERPENDICULAR CURB RAMP		
UNIDIRECTIONAL CURB RAMP & MID-BLOCK CURB RAMP		
DETECTABLE WARNING TILE		
BRIDGE		
TUNNEL		
GUARDRAIL		
END & PARALLEL END SECTIONS		
ROADWAY OBLITERATION		
FENCE	X X	X X
STONE FENCE		
NOISE BARRIER	X	X
RETAINING WALL		
HEADWALL & WINGWALL		
BOTTOM OF DITCH		
SPECIAL DITCH		
FLAT BOTTOM DITCH		
BERM		
RIPRAP		
BOULDER OR BOULDERS		
PRIVATE SIGN, MAILBOX	MB	MB
POST, BOLLARD		

UTILITIES

	EXISTING	PROPOSED
STORM DRAIN	SD	
STORM DRAIN MANHOLE, CLEANOUT	SD, CO	SD, CO
CURB INLET CATCH BASIN FIELD INLET CATCH BASIN	FI	FI
PIPE CULVERT WITH END SECTION		
SANITARY SEWER	SS	SS
SANITARY SEWER MANHOLE, CLEANOUT	SS, CO	SS, CO
SEPTIC VENT, SEWER SERVICE CONNECTION	S	
WATER	W	W
FIRE HYDRANT, VALVE OR RISER		
WELL, WATER SERVICE CONNECTION	W	
NATURAL GAS	G	G
OIL OR GASOLINE PIPELINE	O	O
TANKS (ABOVE GROUND, UNDERGROUND)		U
ELECTRIC	OE (OVERHEAD) UE (UNDERGROUND) OE&OT (OVERHEAD)	
UTILITY POLE, POLE WITH LUMINAIRE		
GUY POLE, GUY WIRE ANCHOR	GP	
TRANSMISSION TOWER (WOOD, STEEL)		
ELECTRIC PEDESTAL, TRANSFORMER	E	E
ELECTRIC MANHOLE, METER	E	
ELECTRIC OUTLET, LANDSCAPE LIGHT		
TELEPHONE	OT (OVERHEAD) UT (UNDERGROUND) UT&TV (UNDERGROUND)	
TELEPHONE MANHOLE, PEDESTAL	T	T
FIBER OPTIC	FO	
FIBER OPTIC MANHOLE	FO	
CABLE TV	OTV (OVERHEAD) UTV (UNDERGROUND)	
CABLE TV PEDESTAL, SATELLITE DISH		
UNDERGROUND DUCT, UTILIDOR (ELECTRIC, TELEPHONE, FIBER OPTIC)		
VENT		
ATR LOOP & CONDUIT		

TOPOGRAPHY

	EXISTING	EXISTING	PROPOSED
LAKE OR POND, WETLANDS	LAKE/POND	CONTOUR, MAJOR OR MINOR	520
TREE (CONIFER/DECIDUOUS) TREELINE (EDGE OF VEGETATION)		DRAINAGE FLOW	
PLANTER	P	CREEK (CENTERLINE)	
BUILDING OR FOUNDATION		RIVER (EDGE OF WATER)	

TRAFFIC

	EXISTING	PROPOSED
LOAD CENTER		
STATE TRAFFIC, MOA TRAFFIC, & BEACON CONTROLLER ARROW INDICATES DOOR LOCATION		
TYPE 1A, II, III, IV JUNCTION BOX		##
FIBER OPTIC VAULT	F/O	F/O ##
ELECTROLIER		
HIGHTOWER		HT#
SIGNAL POLE WITH MASTARM		14
PEDESTRIAN PUSH BUTTON & SIGNAL		
VEHICULAR SIGNAL		
VEHICULAR SIGNAL LEFT & RIGHT		
OPTICAL, CAMERA, RADAR, AND GPS DETECTOR		OPT CAM RAD GPS
LOOP DETECTOR		###
COMMUNICATION ANTENNA		
MASTARM BEACON		
RURAL & SCHOOL ZONE BEACON		
LOOP DETECTOR CONDUIT		
SIGNAL CONDUIT	TR	TR
LIGHTING CONDUIT	LTG	LTG
SIGNAL & LIGHTING CONDUIT	T/L	T/L
CONDUIT BORING		
CONDUIT SIZE IN INCHES	2"-3C4	2" 1-3C4 CKT BA12 CKT BA13
INTERCONNECT	I/C	I/C
SIGN POST		##

PAVEMENT MARKINGS

	PROPOSED
TRAFFIC PROJECT CENTERLINE	
8" & 4" WHITE SOLID STRIPE	8"W 4"W
4" WHITE SKIP STRIPE 10' STRIPES AND 30' SPACES	4"W SKIP
8" WHITE LANE GUIDE SKIP LANE CONTINUATION OR TURN SKIP 1' STRIPES AND 3' SPACES	8"W GUIDE SKIP
8" & 4" YELLOW SOLID STRIPE	8"Y 4"Y
4" YELLOW SKIP STRIPE 10' STRIPES AND 30' SPACES	4"Y SKIP
STRIPING CHANGE STATION INTERVAL	+20
2' CROSSWALK OR STOPBAR	24"W (TYP)
LADDER CROSSWALK LAYOUT 2' WIDE RUNGS WITH 2' SPACES ALIGNED TO AVOID TIRE PATHS	10' 12' (2)-4"Y 3" APART
TYPICAL PAINTED MEDIAN	VARIES 18"Y @ 45°

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	A3	A4

RIGHT-OF-WAY

	RECOVERED	SET THIS PROJECT
FEDERAL GOV'T SURVEY MONUMENT		
GOV'T CONTROL STATION		
PRIMARY MONUMENT (BRASS/AL CAP)		
MISC SECONDARY CORNER		
PRIMARY CENTERLINE MONUMENT		
SECONDARY CENTERLINE MONUMENT		
RANDOM CONTROL MONUMENT	RCM	
PRIMARY GPS CONTROL POINT	GPS	
HORIZONTAL CONTROL POINT	CP	
SECONDARY CONTROL POINT	SCP	
VERTICAL BENCHMARK	BM	
TEMPORARY BENCHMARK	TBM	

TOWNSHIP AND RANGE LINES	T13N / T12N, R2W, R3W
SECTION LINE	
1/4 SECTION LINE	
1/16 SECTION LINE	
CORPORATE or CITY LIMITS	
EXISTING RIGHT-OF-WAY	
RIGHT-OF-WAY OR EASEMENT REQUIRED	
PROJECT RIGHT-OF-WAY LINE	
EXISTING RIGHT-OF-WAY EASEMENT	
EXISTING PROPERTY LINE	
CONTROLLED ACCESS LINE	
EXISTING UTILITY EASEMENT	
PROPOSED UTILITY EASEMENT	
EXISTING CENTERLINE	
RAILROAD CENTERLINE	
TEMPORARY CONSTRUCTION EASEMENT	
TEMPORARY CONSTRUCTION PERMIT	

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

LEGEND

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	A4	A4

DRAWING LOCATION
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DESIGN\01-PLANSET\00381_A4_SURVEY.DWG

DATE	TIME	SCALE	DESIGNED BY	DLP
7/22/2020	2:24 PM	1" = 20'	CHECKED BY	ALH
			DRAWN BY	DLP

RESERVED FOR SURVEY CONTROL

Preliminary

STATE OF ALASKA
AARON L. HUNTING
CE 10601
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SURVEY CONTROL SHEET

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	B1	B2

DRAWING LOCATION
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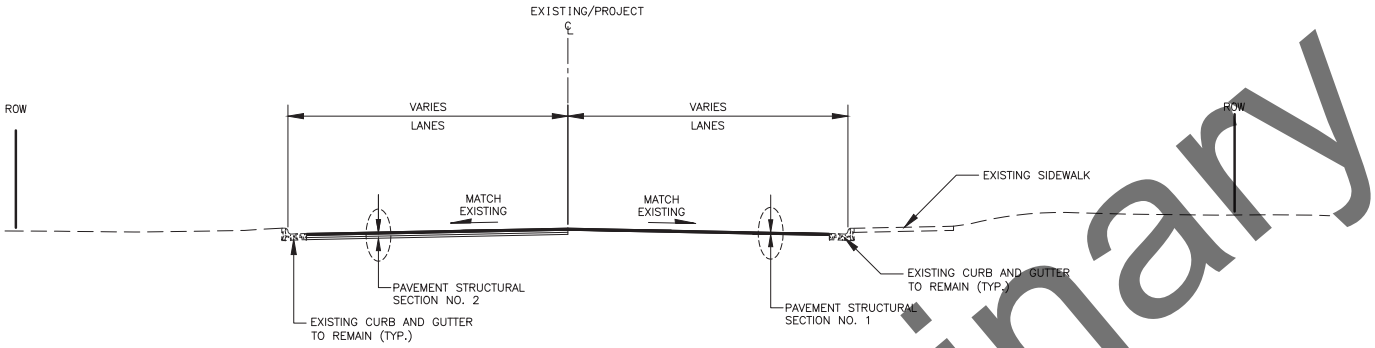
DESIGNED BY	DLP
CHECKED BY	ALH
DRAWN BY	DLP

SCALE: N/A

DATE: 7/22/2020
TIME: 2:24 PM

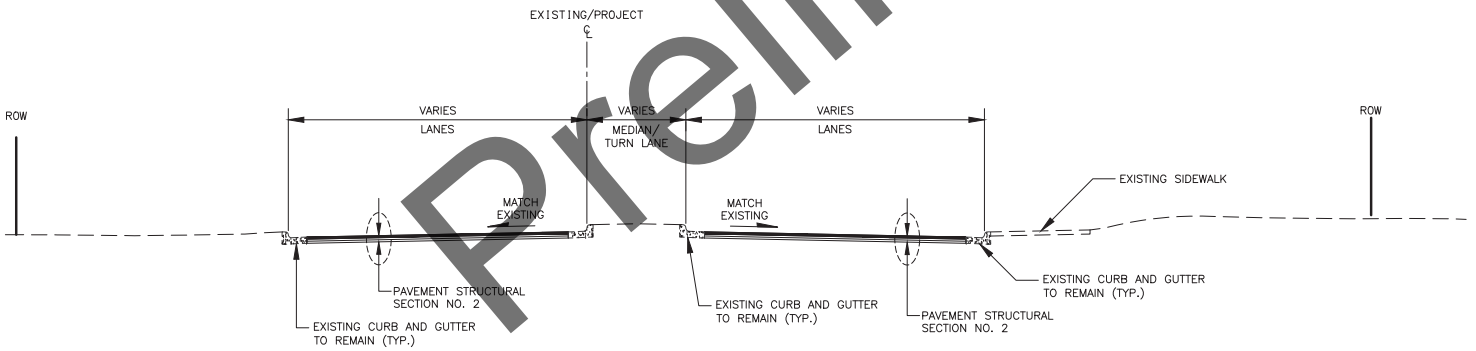
NOTES:

1. PLACE 4" AGGREGATE BASE COURSE, GRADING D-1 IN AREAS WHERE DETECTOR LOOPS ARE INSTALLED.



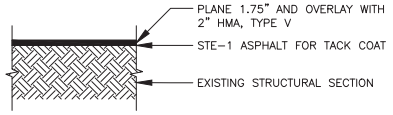
AIRPORT HEIGHTS DRIVE

STA. 176+50.00 TO STA. 181+75.00



AIRPORT HEIGHTS DRIVE

STA. 172+04.07 TO STA. 176+50.00



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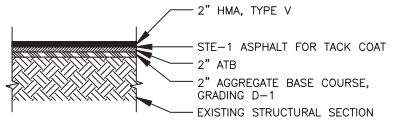

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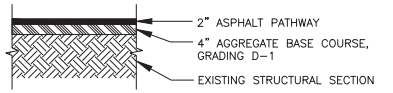
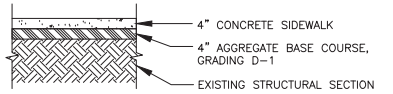


PATHWAY STRUCTURAL SECTION NO. 1



SIDEWALK STRUCTURAL SECTION NO. 1

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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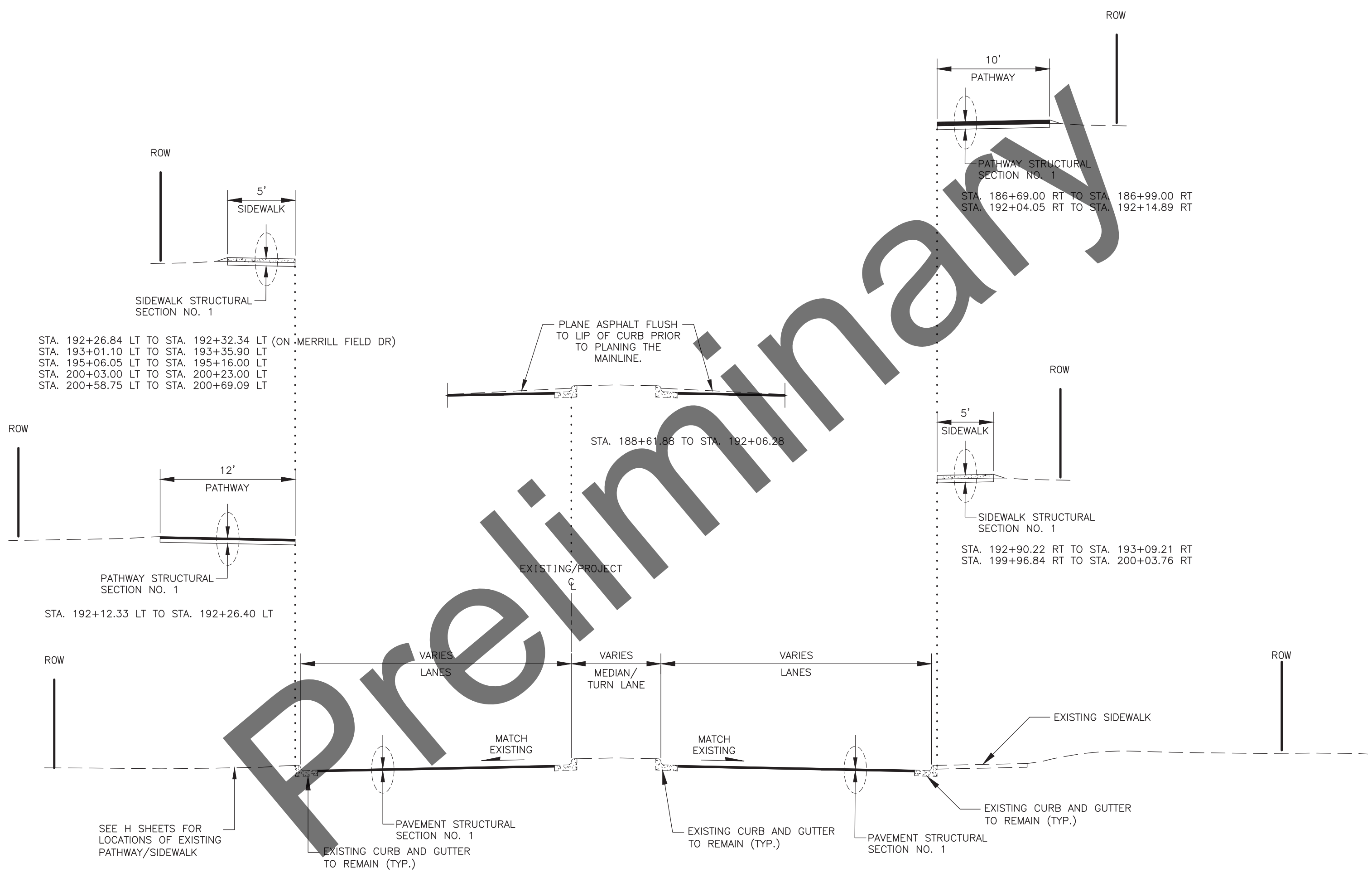
AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

TYPICAL SECTIONS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	B2	B2



AIRPORT HEIGHTS DRIVE

STA. 181+75.00 TO STA. 200+71.44

STATE OF ALASKA 49TH AARON L. HUNTING CE 106601 REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

TYPICAL SECTIONS

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CHECKED BY ALH
DRAFTED BY DLP
SCALE N/A
DATE 7/22/2020 TIME 2:24 PM

DRAWING LOCATION
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	C1	C1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
202.0001.0000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	ALL REQ'D
202.0003.0000	REMOVAL OF SIDEWALK	S.Y.	294
202.0007.0000	REMOVAL OF JUNCTION BOX	EACH	8
202.0009.0000	REMOVAL OF CURB AND GUTTER	L.F.	655.5
202.2023.0000	PAVEMENT PLANING	S.Y.	18,200
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	TON	63
306.0001.0000	ATB	TON	665
306.0002.6440	ASPHALT BINDER, GRADE PG 64-40 E	TON	35
402.0001.STE1	STE-1 ASPHALT FOR TACK COAT	TON	7
408.2001.000V	HMA, TYPE V	TON	2,060
408.2004.6440	ASPHALT BINDER, GRADE PG 64-40 E	TON	110
408.2022.0000	COMBINED PRICE ADJUSTMENT	C.S.	ALL REQ'D
604.0004.0000	ADJUST EXISTING MANHOLE	EACH	3
604.0016.0000	ADJUST INLET FRAME AND GRATE	EACH	5
608.0001.0004	CONCRETE SIDEWALK, 4 INCHES THICK	S.Y.	104
608.0006.0000	CURB RAMP	EACH	14
608.2002.0000	ASPHALT PATHWAY	TON	7
609.0002.0001	CURB AND GUTTER, TYPE I	L.F.	655.5
615.0001.0000	STANDARD SIGN	S.F.	343
615.0005.0000	DELINEATOR, FLEXIBLE	EACH	12
619.2009.0000	MANUFACTURED INLET PROTECTION SYSTEM	EACH	9
627.0010.0000	ADJUSTMENT OF VALVE BOX	EACH	10
639.2000.0000	APPROACH	EACH	5
640.0001.0000	MOBILIZATION AND DEMOBILIZATION	L.S.	ALL REQ'D
641.0001.0000	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	L.S.	ALL REQ'D
641.0005.0000	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	C.S.	ALL REQ'D
641.0006.0000	WITHHOLDING	C.S.	ALL REQ'D
641.0007.0000	SWPPP MANAGER	L.S.	ALL REQ'D
642.0001.0000	CONSTRUCTION SURVEYING	L.S.	ALL REQ'D
642.0003.0000	THREE PERSON SURVEY PARTY	HOUR	10
643.0002.0000	TRAFFIC MAINTENANCE	L.S.	ALL REQ'D
643.0003.0000	PERMANENT CONSTRUCTION SIGNS	L.S.	ALL REQ'D
643.0023.0000	TRAFFIC PRICE ADJUSTMENT	C.S.	ALL REQ'D
643.0025.0000	TRAFFIC CONTROL	C.S.	ALL REQ'D
643.0032.0000	FLAGGING	C.S.	ALL REQ'D
644.0001.0000	FIELD OFFICE	L.S.	ALL REQ'D
644.2004.0000	ENGINEERING COMMUNICATIONS	C.S.	ALL REQ'D
644.2007.0000	VEHICLE (LT/SUV)	EACH	1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
645.0001.0000	TRAINING PROGRAM, 1 TRAINEES / APPRENTICES	LABOR HOUR	100
646.0001.0000	CPM SCHEDULING	L.S.	ALL REQ'D
647.2002.0000	BACKHOE, 4WD, 1 CY BUCKET, 75 HP MIN, 15 FT DEPTH	C.S.	ALL REQ'D
660.2004.0000	ADJUST JUNCTION BOX	EACH	2
660.2005.0002	JUNCTION BOX, TYPE 2	EACH	2
660.2005.001A	JUNCTION BOX, TYPE IA	EACH	5
660.0011.0000	TRAFFIC LOOP	EACH	36
660.2008.0000	TRAFFIC LOOP REPLACEMENT	C.S.	ALL REQ'D
660.2025.0000	PAN TILT ZOOM (PTZ) CAMERA	EACH	1
669.2000.0000	TRAFFIC DATA - SITE H1	L.S.	ALL REQ'D
669.2000.000A	TRAFFIC DATA - SITE H2	L.S.	ALL REQ'D
670.2005.0000	MMA PAVEMENT MARKINGS, TRANSVERSE AND GORE SURFACE APPLIED	L.F.	200
670.2006.0000	MMA PAVEMENT MARKINGS, LONGITUDINAL INLAID	L.F.	7,850
670.2007.0000	MMA PAVEMENT MARKINGS, SYMBOLS AND ARROW(S) INLAID	EACH	22
682.2000.0000	VAC-TRUCK POTHOLE	C.S.	ALL REQ'D

TABLE OF ESTIMATING FACTORS

ITEM NO.	ITEM DESCRIPTION	UNIT
301.0001.00D1	AGGREGATE BASE COURSE, GRADING D-1	144 LB./FT.^{3}
306.0001.0000	ATB	150 LB./FT.^{3}
306.0002.6440	ASPHALT BINDER, GRADE PG 64-40 E	5.3% OF TOTAL WEIGHT OF 306.0001.0000
402.0001.0000	STE-1 ASPHALT FOR TACK COAT	0.000334 TON/S.Y.
408.2001.000V	HMA, TYPE V	151 LB./FT.^{3}
408.2004.6440	ASPHALT BINDER, GRADE PG 64-40 E	5.3% OF TOTAL WEIGHT OF 408.2001.000V
608.2002.0000	ASPHALT PATHWAY	151 LB./FT.^{3}

STATE OF ALASKA ★ 49TH ★ AARON L. HUNTING CE 106601 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

ESTIMATE OF QUANTITIES

DESIGNED BY DLP
CHECKED BY ALH
DRAFTED BY DLP
SCALE N/A
DATE 8/4/2020 TIME 3:39 PM
DRAWING LOCATION
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY PP\CIV3D\19\PLANSET\00381_C01_EST.DWG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	D1	D3

REMOVAL OF STRUCTURES AND OBSTRUCTIONS - 202.0001.0000

SHEET	STATION	OFFSET	REMARKS
H11	181+52	37 RT	SIGN POST

SIDEWALK, CURB RAMP, & CURB AND GUTTER SUMMARY - 202.0003.0000, 202.0009.0000, 608.0001.0004, 608.0006.0000, 608.2002.0000, 609.0002.0001

SHEET	STATION		OFFSET	202.0003.0000	202.0009.0000	608.0001.0004	608.0006.0000 CURB RAMP				608.2002.0000	609.0002.0001	REMARKS
	FROM	TO		REMOVAL OF SIDEWALK (SY)	REMOVAL OF CURB & GUTTER (LF)	CONCRETE SIDEWALK (SY)	CURB RAMP TYPE	RADIUS (FT)	QUADRANT	QUANTITY	ASPHALT PATHWAY (TON)	CURB & GUTTER, TYPE I (LF)	
H10	172+06	172+25	LT	26	42	4	PARALLEL	39.5	NW	2	-	42	DEBARR RD
H10	172+15	172+32	RT	-	20	-	-	39	-	-	-	20	AIRPORT HEIGHTS DR
H10	175+96	176+30	RT	28	37	-	DIRECTIONAL	39	SE	1	-	37	BLOOD BANK OF ALASKA
H10	176+80	177+12	RT	24	34	-	DIRECTIONAL	40	NE	1	-	34	BLOOD BANK OF ALASKA
H10	178+13	178+43	LT	-	30	-	-	-	-	-	-	30	
H11	179+38	179+82	LT	-	44	-	-	-	-	-	-	44	DEPRESSED CURB AND GUTTER
H11	185+76	186+34	LT	-	57	-	-	-	-	-	-	57	
H11	186+69	186+99	RT	33	-	-	-	-	-	-	4	-	
H12	191+49	192+33	LT	-	131	-	-	-	-	-	-	131	
H12	192+12	192+26	LT	-	-	-	-	-	-	-	2	-	DETECTOR LOOP REPLACEMENT
H12	192+04	192+15	RT	12	20	-	-	44	SE	-	1	20	PENLAND PKWY
H12	192+19	192+32	LT	25	-	21	PARALLEL	28	SW	1	-	-	MERRILL FIELD DR - RAMP & RT FLARE DETECTOR LOOP REPLACEMENT
H12	192+74	193+36	LT	58	85	26	PARALLEL	28	NW	2	-	85	MERRILL FIELD DR
H12	192+78	193+09	RT	26	37	22	PERPENDICULAR	30	NE	1	-	37	PENLAND PKWY - FLARES ONLY
H12	195+06	195+16	LT	6	-	6	-	-	-	-	-	-	
H12	195+80	195+92	RT	10	20	-	PARALLEL	50	NE	1	-	20	CARRS EXIT
H13	199+84	200+05	RT	16	28	6	PARALLEL	85	SE	1	-	28	EXIT TO GLENN HWY
H13	199+97	200+09	RT	3	15.5	-	PERPENDICULAR	-	SE	1	-	15.5	EXIT TO GLENN HWY - RAMP ONLY
H13	200+03	200+23	LT	11	-	11	-	-	-	-	-	-	
H13	200+40	200+54	RT	7	41	3	PERPENDICUALR	-	SE	1	-	41	ISLAND - RAMP & LT FLARE ONLY
							PERPENDICULAR			1			ISLAND - DW ONLY
H13	200+60	200+73	LT	9	14	5	PERPENDICULAR	50	NE	1	-	14	RAMP & RT FLARE ONLY
											-		
			TOTAL:	294	655.5	104				14	7	655.5	
			PAY ITEM QUANTITY:	294	655.5	104				14	7	655.5	

STATE OF ALASKA
49TH
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SUMMARY TABLES

DESIGNED BY	CHECKED BY	DRAFTED BY	SCALE	DATE	TIME
DLP	ALH	DLP	N/A	8/4/2020	3:45 PM

DRAWING LOCATION
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY PP\CIV3D19\PLANSET\00381_D1-D4_SUM.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	D2	D3

DESIGNED BY: DLP
CHECKED BY: ALH
DRAWN BY: DLP

SCALE: N/A

DATE: 8/4/2020 TIME: 3:48 PM

DRAWING LOCATION:
C:\Users\DPeterson\OneDrive - State of Alaska\CFHWY00381 - AMATS_Airport Heights_DeBarr to Glenn Hwy\
Develop\Plansets\00381_01_04_SUM.dwg

JUNCTION BOX SUMMARY - 202.0007.0000, 660.2004.0000, 660.2005.0002, 660.2005.001A

SHEET	STATION	OFFSET	202.0007.0000 REMOVAL OF JUNCTION BOX (EACH)	660.2004.0000 ADJUST JUNCTION BOX (EACH)	660.2005.0002 JUNCTION BOX, TYPE 2 (EACH)	660.2005.001A JUNCTION BOX, TYPE IA (EACH)	REMARKS
H9	192+27	159 LT	X				
H12	192+03	50 RT		X			ADJUST J-BOX TO MATCH PATHWAY
H12	192+08	42 RT		X			ADJUSTMENT INCLUDES LOWER J-BOX EXTENSION
H12	192+16	35 LT	X		X		ROTATE FOR CORRECT ENTRY OF ALL EXISTING CONDUITS J-BOX VERTICAL EXTENSION MAY BE REQUIRED
H12	192+24	46 LT				X	
H12	192+32	46 LT	X				LOCATE NEW J-BOX (STA. 192+24) BEHIND SIDEWALK
H12	192+98	41 RT	X		X		J-BOX VERTICAL EXTENSION MAY BE REQUIRED
H12	193+05	31 LT	X			X	
H12	193+34	31 LT	X			X	
H13	200+41	33 RT	X			X	
H13	200+44	36 RT	X			X	
		TOTAL:	8	2	2	5	
		PAY ITEM QUANTITY:	8	2	2	5	

MANHOLE AND INLETS - 604.0004.0000, 604.0016.0000

SHEET	STATION	OFFSET	604.0004.0000 ADJUST EXISTING MANHOLE (EACH)	604.0016.0000 ADJUST INLET FRAME AND GRATE (EACH)	REMARKS
H10	181+43	26 RT	X	X	
H10	181+43	26 LT	X	X	
H11	190+89	37 RT		X	
H11	192+30	53 RT	X		SS
H11	196+31	36 RT		X	
H11	197+53	46 RT		X	
		TOTAL:	3	5	
		PAY ITEM QUANTITY:	3	5	

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STATE OF ALASKA
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AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

SUMMARY TABLES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	D3	D3

DRAWING LOCATION
C:\Users\DPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 - AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\
DESIGN\19-PLANS\00381_01_04_SUM.DWG

DATE 8/4/2020 TIME 3:49 PM | SCALE N/A | DESIGNED BY DLP | CHECKED BY ALH | DRAWN BY DLP

ADJUSTMENT OF VALVE BOX - 627.0010.0000

SHEET	STATION	OFFSET	QUANTITY (EACH)	REMARKS
H10	172+70	10 LT	1	
H10	174+80	13 LT	1	
H10	176+93	11 LT	1	
H11	180+43	11 LT	1	
H11	181+30	18 LT	1	
H11	183+65	9 LT	1	
H11	184+58	11 LT	1	
H11	186+64	8 LT	1	
H12	192+59	21 LT	1	
H12	192+87	11 LT	1	
		TOTAL:	10	
		PAY ITEM QUANTITY:	10	

APPROACH SUMMARY - 639.2000.0000

SHEET	STATION	OFFSET	TYPE			RADIUS (FT)	WIDTH (FT)	LENGTH (FT)	REMARKS
			PUB.	RES.	COM.				
H10	176+56	RT			X	39 / 40	43	53	BLOOD BANK OF ALASKA
H10	176+68	LT			X	17 / 58	76	32	ALASKA REGIONAL HOPITAL
H12	192+53	RT	X			44 / 30	38	78	PENLAND PKWY
H12	192+53	LT	X			29 / 28	38.5	110	MERRILL FIELD DR
H12	195+62	RT			X	4 / 50	17.5	91	CARRS
					TOTAL:	5			
					PAY ITEM QUANTITY:	5			

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

SUMMARY TABLES

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4111 AVIATION AVENUE
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STATE OF ALASKA
AARON L. HUNTING
CE 106601
REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	E1	E9

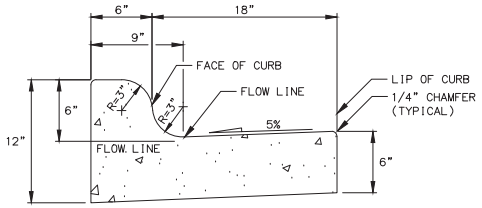
DRAWING LOCATION
C:\Users\dpeterson\Desktop\STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\PLANSET\00381_E1_CURB & GUTTER DETAILS.DWG

DESIGNED BY DLP
CHECKED BY ALH
DRAWN BY DLP

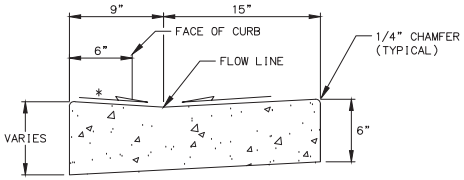
SCALE N/A

TIME 2:24 PM

DATE 7/22/2020



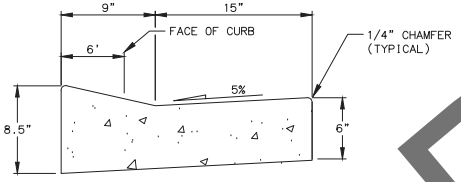
6" MOUNTABLE CURB & GUTTER



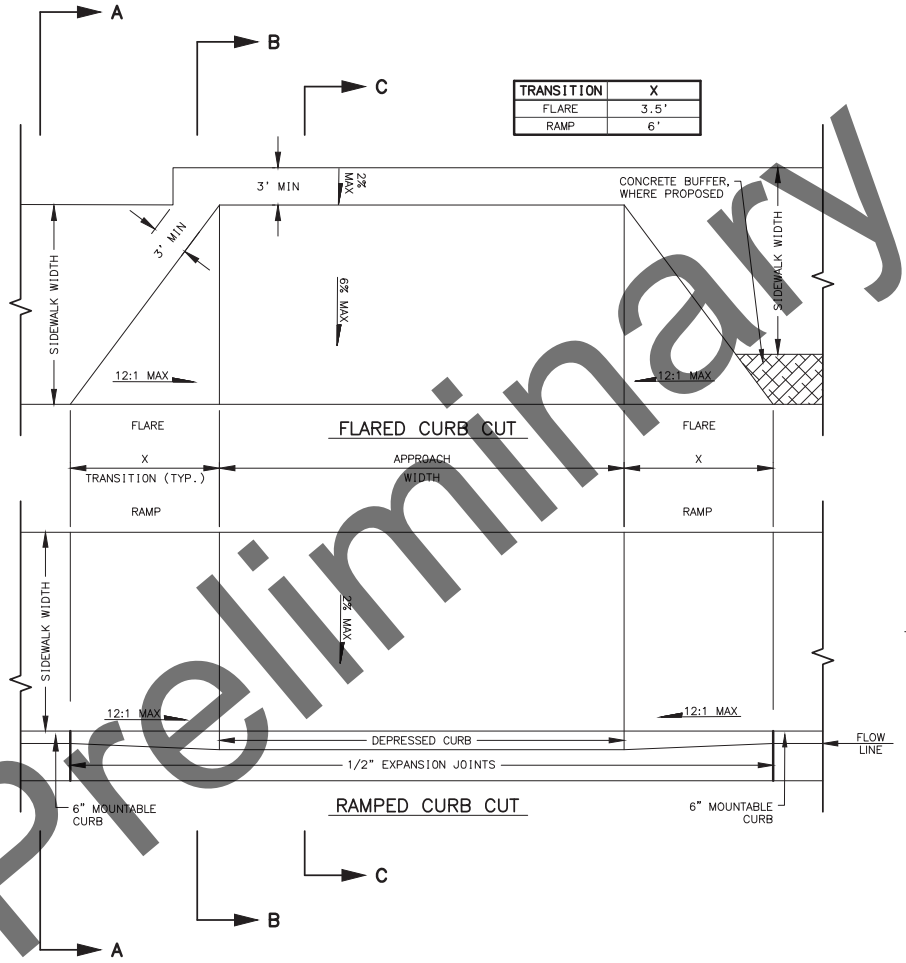
CURB RAMP CURB & GUTTER

* SLOPE THE FOLLOWING:

1. PARALLEL TYPE RAMPS SLOPE = 2.00%
2. PERPENDICULAR TYPE RAMPS SLOPE = 8.33%

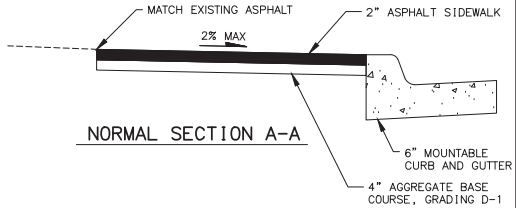


DEPRESSED CURB & GUTTER (CURB CUT)

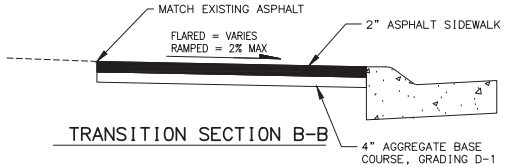


TRANSITION	X
FLARE	3.5'
RAMP	6'

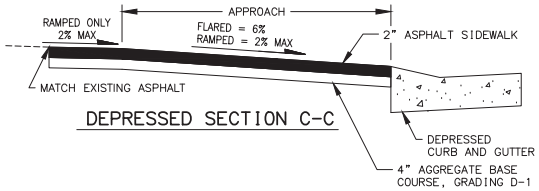
VEHICULAR CURB CUT PLANS



NORMAL SECTION A-A



TRANSITION SECTION B-B



DEPRESSED SECTION C-C

APPROACH CURB CUT PROFILES

CURB NOTE:

1. MOUNTABLE AND DEPRESSED GUTTER PANS SHALL MATCH THE ROADWAY CROSS SLOPE IN THE HIGH SIDE OF SUPERELEVATED AREAS. USE A 25 FOOT TRANSITION LENGTH, FROM POINT OF ZERO CROSS SLOPE TO INSIDE OF THE HORIZONTAL CURVE.

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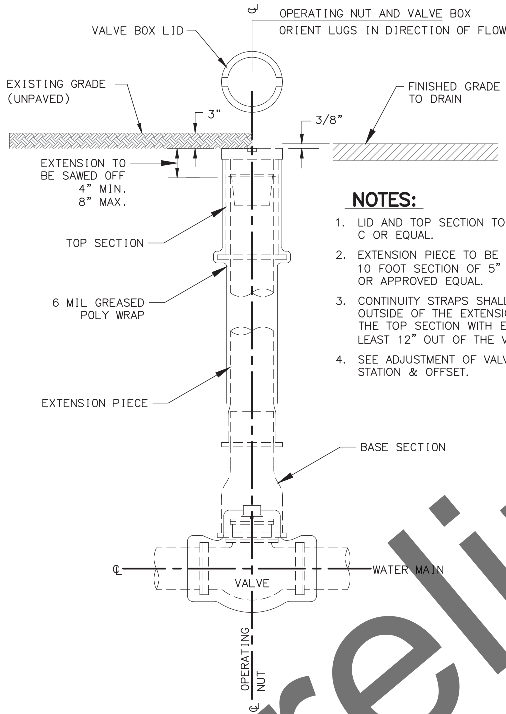
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

CURB AND GUTTER & CURB CUT DETAILS

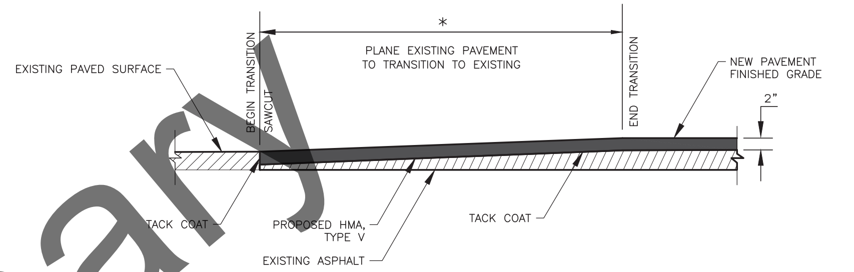
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	E2	E9



NOTES:

1. LID AND TOP SECTION TO BE OLYMPIC FOUNDRY TYPE C OR EQUAL.
2. EXTENSION PIECE TO BE OLYMPIC FOUNDRY TYPE A, 10 FOOT SECTION OF 5" DIA. SINGLE HUB SOIL PIPE OR APPROVED EQUAL.
3. CONTINUITY STRAPS SHALL BE SECURED TO THE OUTSIDE OF THE EXTENSION PIECE AND PLACED INSIDE THE TOP SECTION WITH ENOUGH SLACK TO PULL AT LEAST 12" OUT OF THE VALVE BOX.
4. SEE ADJUSTMENT OF VALVE BOX SUMMARY TABLE FOR STATION & OFFSET.

TYPICAL VALVE BOX ADJUSTMENT



NEW PAVEMENT TRANSITION TO EXISTING MAINLINE PAVEMENT AND PUBLIC APPROACHES

PROFILE VIEW – N.T.S.

* 50' FOR BOP & EOP

* RADIUS RETURN FOR APPROACHES.

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

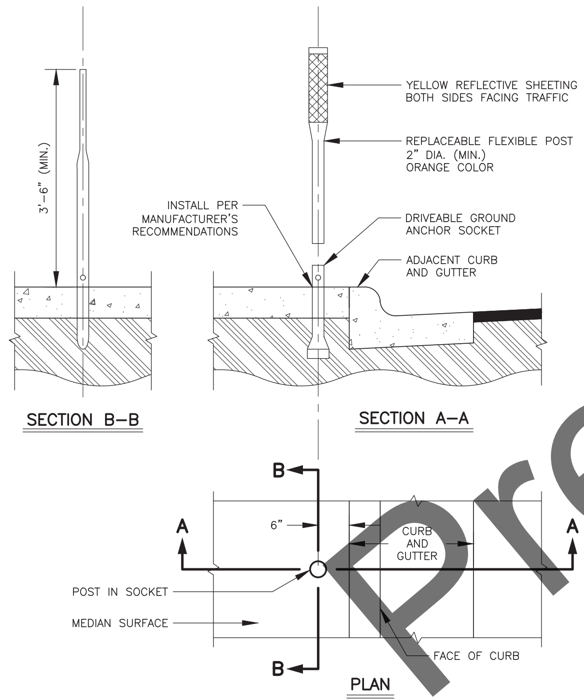
AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

PAVEMENT TRANSITION & VALVE BOX DETAILS

DESIGNED BY DLP
CHECKED BY ALH
DRAFTED BY DLP
SCALE N/A
DATE 7/22/2020 TIME 2:24 PM

DRAWING LOCATION
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY PP\CIV3D19\PLANSET\00381_E2_TRANS_DETAILS.DWG

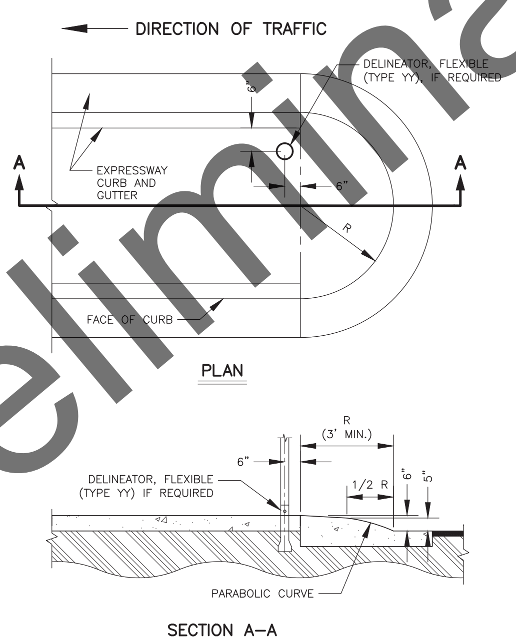
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	E3	E9



FLEXIBLE DELINEATOR

DELINEATOR NOTES:

1. INSTALL DELINEATORS WHERE SHOWN IN THE SUMMARY TABLE, OR AS DIRECTED BY THE ENGINEER.
2. CENTER POINT OF THE DELINEATOR SHALL BE 6 INCHES FROM THE BACK OF CURB.
3. WHERE DELINEATORS ARE SET IN CONCRETE PAVEMENT, PLACE THEM IN EXPANSION JOINTS.



SLOPED MEDIAN NOSE

SLOPED MEDIAN NOTES:

1. PAINT ALL SLOPED MEDIAN NOSES WITH YELLOW REFLECTORIZED PAINT. PAINT FOR NOSES IS SUBSIDIARY TO 670 ITEMS.
2. THE RADIUS DIMENSIONS PROVIDED IN THE PLANS ARE MEASURED TO LIP OF CURB. CONTRACTOR WILL NEED TO CALCULATE THE VALUE OF "R" FROM RADIUS DIMENSION AND CURB GEOMETRY.

Preliminary

STATE OF ALASKA 49TH AARON L. HUNTING CE 106601 REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

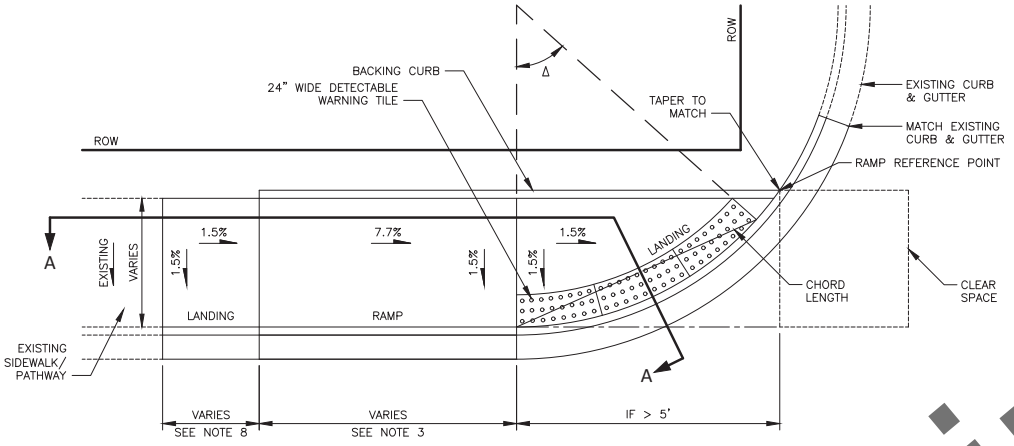
AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

FLEXIBLE DELINEATOR DETAIL

DESIGNED BY DLP | CHECKED BY ALH | DRAFTED BY DLP | SCALE N/A | DATE 7/22/2020 | TIME 2:25 PM

DRAWING LOCATION
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY PP\CIV3D19\PLANSET\00381_E3_FLEX DELINEATOR DETAIL.DWG

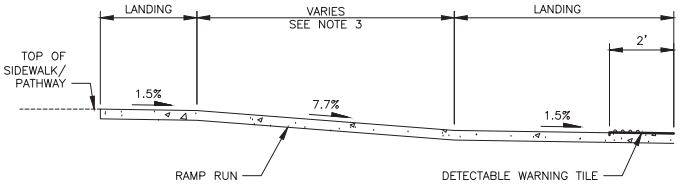
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	E4	E9



DIRECTIONAL RAMP

NOTES:

1. SEE CURB RAMP DETAIL SHEETS FOR SPECIFIC DIRECTIONAL CURB RAMP DIMENSIONS AND GRADES. IF NO DETAIL IS PROVIDED CONSTRUCT PER DIRECTION RAMP DETAIL. SEE STRIPING PLANS FOR CROSSWALK LAYOUT.
2. CONSTRUCT RAMP RUNS AND LANDINGS OF 4" THICK (MIN.) CONCRETE, REGARDLESS OF WHETHER THE SIDEWALK IS ASPHALT OR CONCRETE.
3. CONSTRUCT RAMP SLOPES AT 7.7% (5.0% MIN. AND 8.3% MAX.). IF SITE CONDITIONS WARRANT IT, RAMP LENGTHS SHOULD BE INCREASED TO KEEP GRADES UNDER THE 8.3% MAXIMUM, BUT ARE NOT REQUIRED TO EXCEED 15'. THE RESULTING RAMP GRADE AT A 15' RAMP LENGTH IS ACCEPTABLE EVEN IF IT EXCEEDS 8.3%.
4. CONSTRUCT SIDEWALK CROSS-SLOPES AT 1.5% (1.0% MIN. AND 2.0% MAX.).
5. CONSTRUCT GRADE BREAKS PERPENDICULAR TO RAMP RUNS.
6. PROVIDE A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE CURB ON RAMP RUNS AND UPPER LANDINGS AND PARALLEL TO THE CURB ON LOWER LANDINGS.
7. INSTALL 24" DETECTABLE WARNING TILES THAT COMPLY WITH ALL APPLICABLE REQUIREMENTS CONTAINED IN THE PLANS FOR THE FULL WIDTH OF THE RAMP. ALIGN TRUNCATED DOME PATTERN IN THE PREDOMINANT DIRECTION OF WHEELCHAIR TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
8. LENGTH OF LANDING:
   a. IF A CONSTRAINT EXISTS AT BACK OF SIDEWALK THAT INHIBITS TURNING, LENGTH OF LANDING IS 60".
   b. IF NO CONSTRAINT EXISTS, LENGTH OF LANDING IS 48".



SECTION A–A

STATE OF ALASKA DOT&PF
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(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

DIRECTIONAL CURB RAMP DETIALS

DRAWING LOCATION
C:\Users\DJPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 - AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\PLANSET\00381_E4_CURB RAMP DETAILING

DESIGNED BY	DLP
CHECKED BY	ALH
DRAWN BY	DLP
SCALE	N/A
DATE	7/22/2020
TIME	2:25 PM

NO.	DATE	REVISION

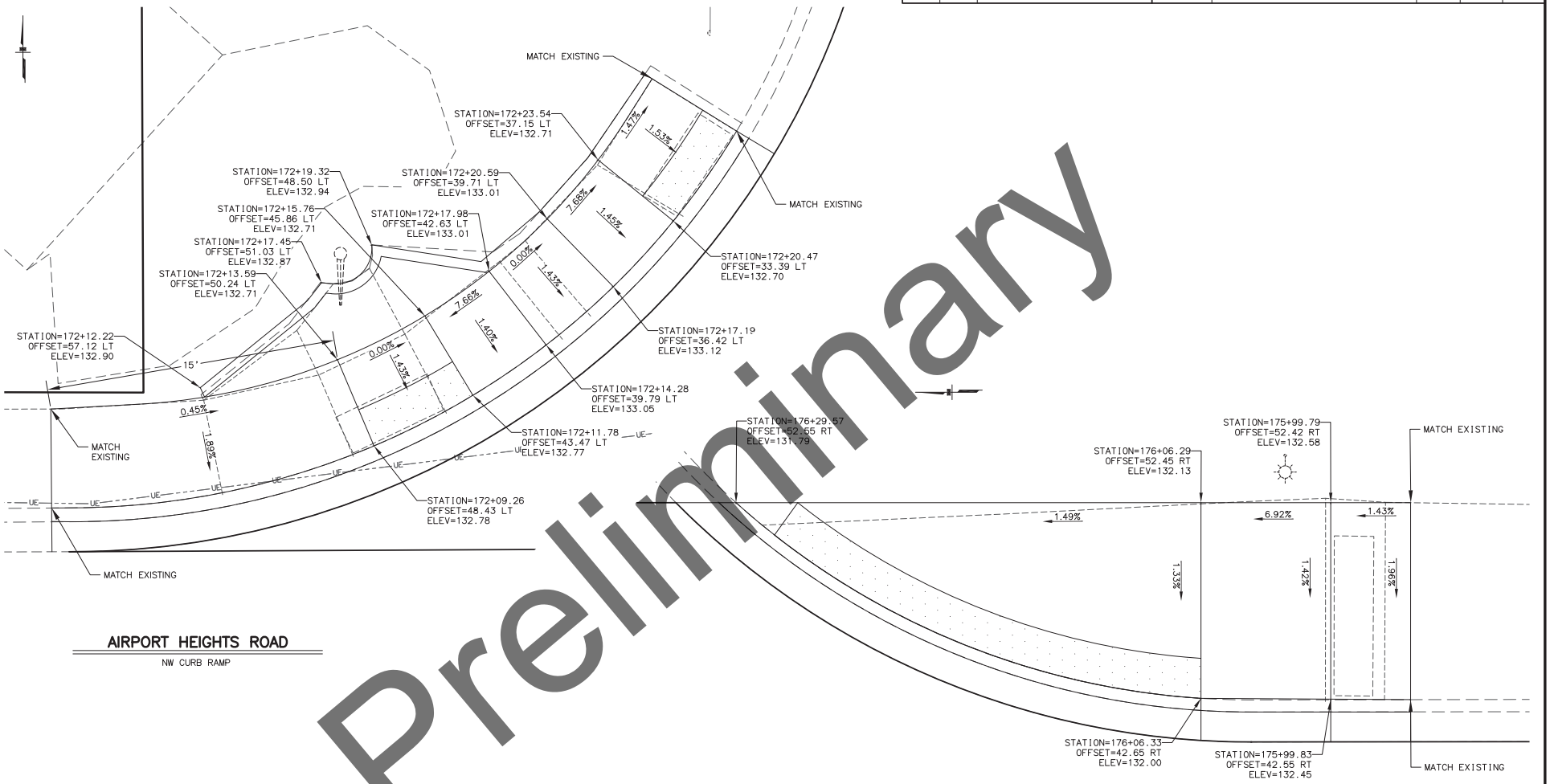
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	E5	E9

DRAWING LOCATION
W:\PROJECTS\CFHWY00381_AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY_PPV\CIV\3019\PLANSET\V00381_E5=E7_CURB RAMP

DESIGNED BY	DLP
CHECKED BY	ALH
DRAWN BY	DLP

SCALE: 1"=5'

DATE TIME: 7/24/2020 10:16 AM



AIRPORT HEIGHTS ROAD

NW CURB RAMP

BLOOD BANK

SE CURB RAMP

NOTE:

RADIUS PROVIDED AT FACE OF BACKING CURB ONLY WHEN MAINLINE AND SIDE STREETS HAVE DIFFERENT SIDEWALK WIDTHS.

STATE OF ALASKA
49TH
AARON L. HUNTING
CE 106601
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

CURB RAMP LAYOUT DETAILS

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	E6	E9

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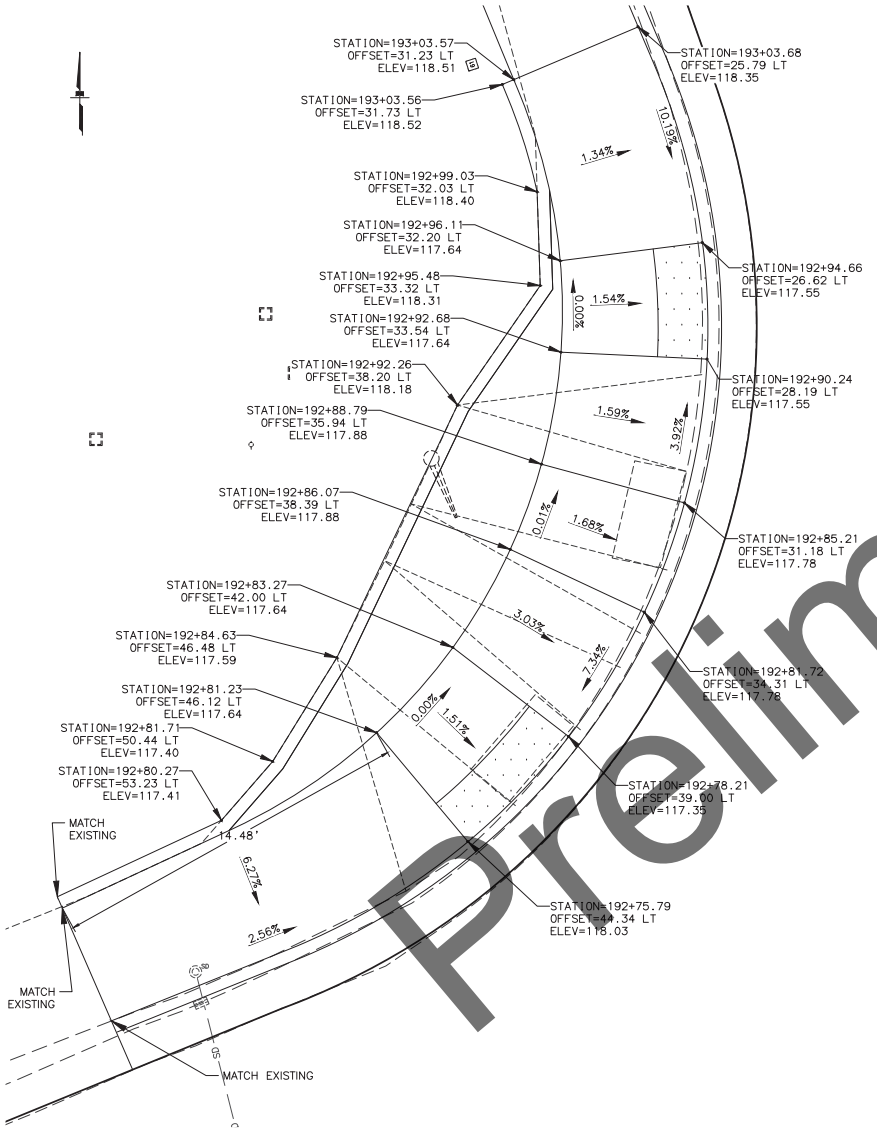
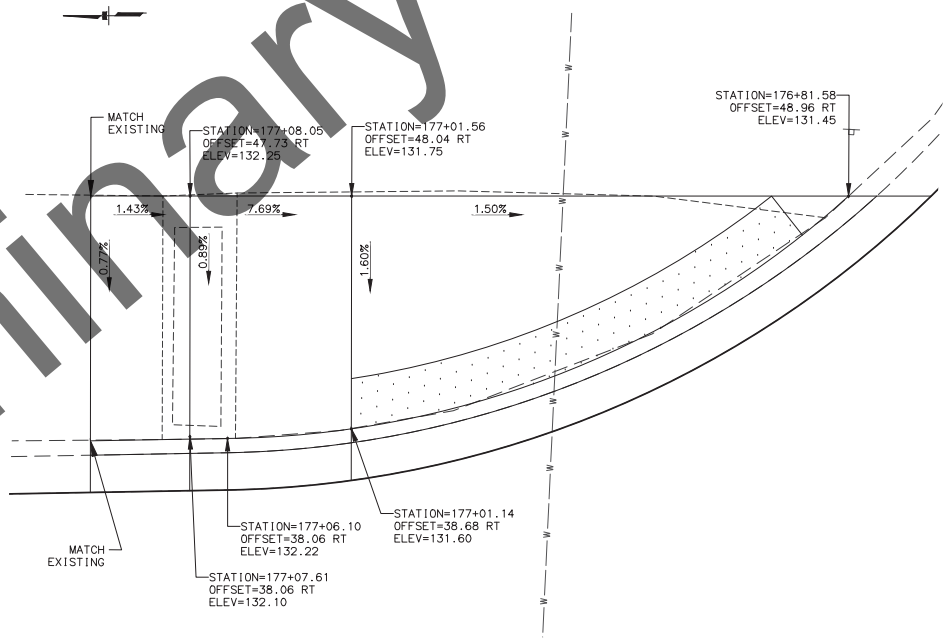
			DRAWN BY	DLP



MERRILL FIELD DRIVE

NW CURB RAMP



BLOOD BANK

NE CURB RAMP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

CURB RAMP LAYOUT DETAILS

AARON L. HUNTING
CE 106601
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STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	E7	E9

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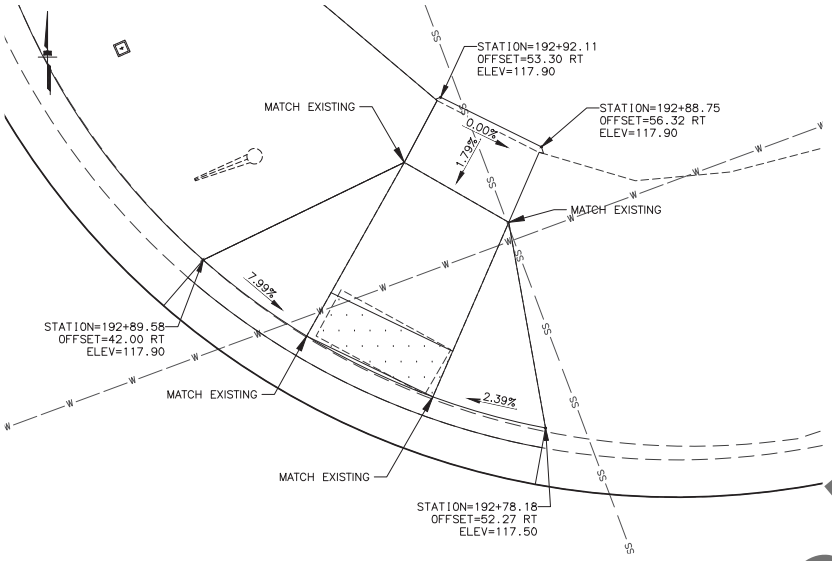
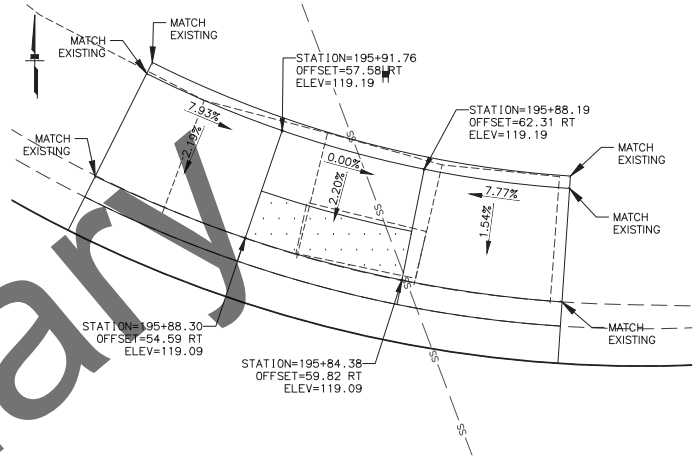


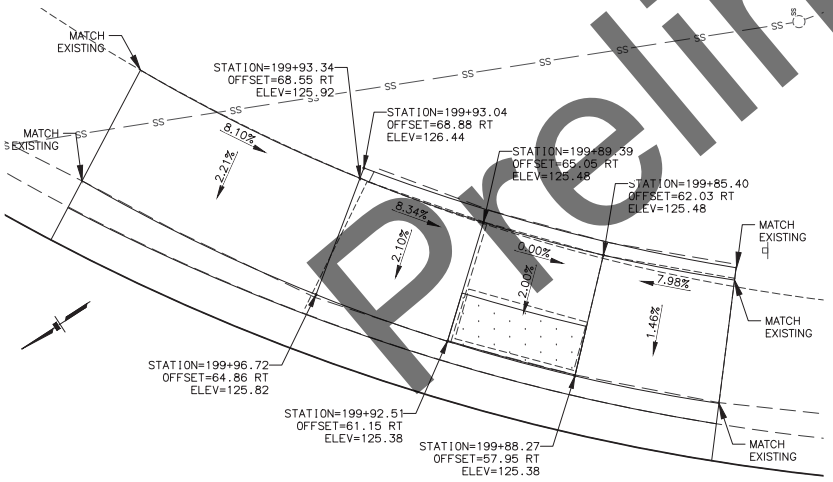
PENLAND PARKWAY

NE CURB RAMP



CARRS EXIT

NE CURB RAMP



GLENN EXIT

SE CURB RAMP

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

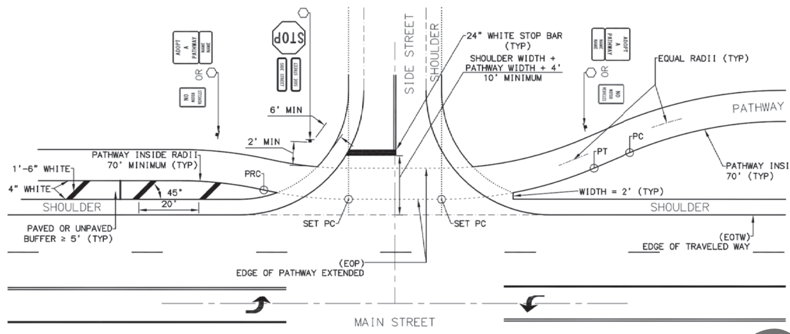
AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

CURB RAMP LAYOUT DETAILS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	E8	E9

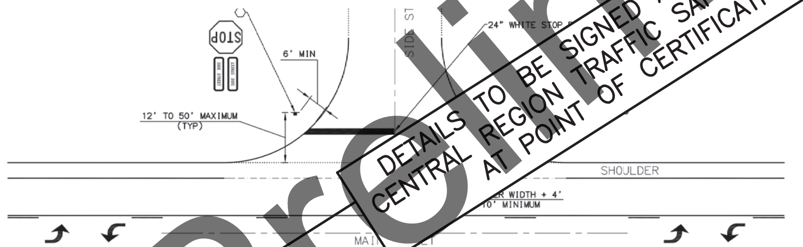
CR-T-01.10



TYPICAL UNCURBED RETURN WITH PATHWAY

RESCINDED

FOR REVIEW PURPOSES



TYPICAL UNCURBED RETURN WITHOUT SIDEWALK

UNCURBED INTERSECTION NOTES: (IN PRIORITY ORDER)

SIGNING:

1. LOCATE STOP SIGN SO IT IS VISIBLE TO APPROACHING TRAFFIC AND NEAR THE STOP BAR.
2. PROVIDE 2' OF CLEARANCE BETWEEN EDGE OF STOP SIGN PANEL AND EDGE OF PATHWAY OR SIDEWALK.
3. PROVIDE 6' OF CLEARANCE BETWEEN EDGE OF STOP SIGN PANEL AND EDGE OF SIDE STREET.
4. PLACE PATHWAY REGULATORY SIGNS AT COLLECTOR OR ARTERIAL ROADWAY JUNCTIONS, TYPICALLY GREATER THAN 1000 VEHICLES A DAY, OR SIDE STREETS CONNECTING THROUGH TRAFFIC TO OTHER COLLECTORS OR ARTERIALS.
5. "NO MOTOR VEHICLES" SIGNS ARE NOT REQUIRED WITHIN THE MUNICIPALITY OF ANCHORAGE.
6. SEE PLANS FOR PATHWAY SIGNING REQUIRED AT SIDE STREETS.

STRIPING:

1. STOP BARS ARE NOT REQUIRED WHEN NO PATHWAY OR SIDEWALK IS PRESENT. SEE PLANS.
2. LOCATE STOP BAR 4' MINIMUM BEHIND THE WIDTH OF PATHWAY.
3. BREAK CENTERLINE STRIPING WITHIN INTERSECTIONS WHICH HAVE DEDICATED TURN LANES.
4. CONTINUE CENTERLINE STRIPING THROUGH INTERSECTIONS WITH CENTER TWO-WAY-LEFT-TURN-ONLY LANES OR WHEN THERE ARE NO LEFT TURN LANES.
5. CONTINUE LANE "SKIP" STRIPING THROUGH INTERSECTIONS.
6. DELETE OUTERMOST EDGE OF TRAVELED WAY STRIPING AT INTERSECTIONS OR WRAP EOTW STRIPING TO SIDE STREET EOTW.
7. MATCH SIDE STREET STRIPING IF STRIPING IS PRESENT.

DETAILS TO BE SIGNED AND ISSUED BY CENTRAL REGION TRAFFIC SAFETY ENGINEER AT POINT OF CERTIFICATION

Preliminary

REVISIONS		
Date	Description	By
09/16/13	NOTES ADDED	SET
12/10/14	RADII/REVISED NOTES	SET
06/23/15	CED: ADA TILES NOT REQ	SET
06/10/17	XWALK BUFFER	SET

SHEET 1 OF 2

State of Alaska
Department of Transportation & Public Facilities

UNSIGNALIZED INTERSECTION STOP AND CROSSING

Date 06/10/17

CR-T-01.10 Sheet 1 of 2

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

UNSIGNALIZED INTERSECTION STOP AND CROSSING

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			DRAFTED BY	DLP

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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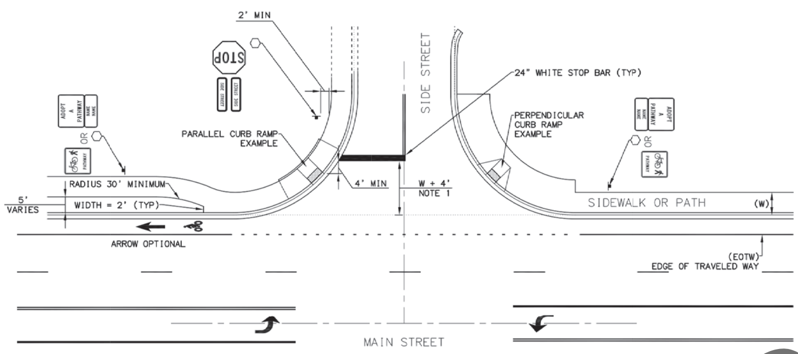
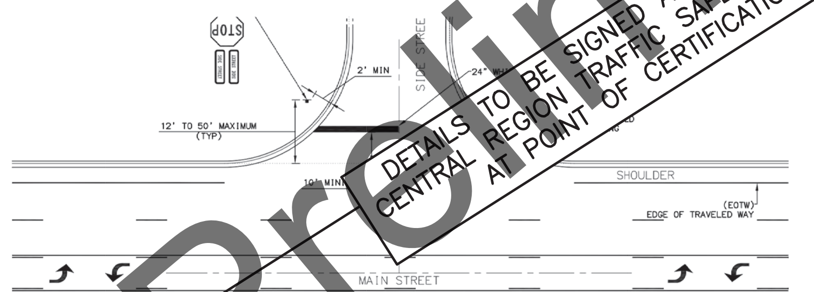


TYPICAL CURBED RETURN WITH SIDEWALK

RESCINDED

FOR REVIEW PURPOSES



TYPICAL CURBED RETURN WITHOUT SIDEWALK

CURBED INTERSECTION NOTES:

SIGNING:

1. LOCATE STOP SIGN SO IT IS VISIBLE TO APPROACHING TRAFFIC AND NEAR THE STOP BAR.
2. PROVIDE 2' OF CLEARANCE BETWEEN EDGE OF STOP SIGN PANEL AND EDGE OF PATHWAY OR SIDEWALK.
3. PROVIDE 6' OF CLEARANCE BETWEEN EDGE OF STOP SIGN PANEL AND SIDE STREET FACE OF CURB.
4. PLACE PATHWAY REGULATORY SIGNS AT COLLECTOR OR ARTERIAL ROADWAY JUNCTIONS, TYPICALLY GREATER THAN 1000 VEHICLES A DAY, OR SIDE STREETS CONNECTING THROUGH TRAFFIC TO OTHER COLLECTORS OR ARTERIALS.
5. "NO MOTOR VEHICLES" SIGNS ARE NOT REQUIRED WITHIN THE MUNICIPALITY OF ANCHORAGE.
6. SEE PLANS FOR PATHWAY SIGNING REQUIRED AT SIDE STREETS.

STRIPING:

1. STOP BARS ARE NOT REQUIRED WHEN NO PATHWAY OR SIDEWALK IS PRESENT. SEE PLANS.
2. LOCATE STOP BAR 4' MINIMUM BETWEEN THE TOE OF CURB RAMP AND EDGE OF STOP BAR OR A DISTANCE OF THE WIDTH OF THE SIDEWALK OR PATHWAY PLUS 4'.
3. BREAK CENTERLINE STRIPING WITHIN INTERSECTIONS WHICH HAVE DEDICATED TURN LANES.
4. CONTINUE CENTERLINE STRIPING THROUGH INTERSECTIONS WITH CENTER TWO-WAY-LEFT-TURN-ONLY LANES OR WHEN THERE ARE NO LEFT TURN LANES.
5. CONTINUE LANE "SKIP" STRIPING THROUGH INTERSECTIONS.
6. DELETE OUTERMOST EDGE OF TRAVELED WAY STRIPING AT INTERSECTIONS OR WRAP EOTW STRIPING TO SIDE STREET EOTW.
7. MATCH SIDE STREET STRIPING IF STRIPING IS PRESENT.

DETAILS TO BE SIGNED AND ISSUED BY CENTRAL REGION TRAFFIC SAFETY ENGINEER AT POINT OF CERTIFICATION

Preliminary

REVISIONS		
Date	Description	By
01/17/13	SHEET NUMBER AND DRAWING	SET
09/16/13	NOTES ADDED	SET
12/10/14	REVISED NOTES	SET
6/10/17	REVISED NOTES	SET

~~SHEET 2 OF 2~~

State of Alaska
Department of Transportation
& Public Facilities

UNSIGNALIZED INTERSECTION
STOP AND CROSSING

APPROVED

STATE OF ALASKA 49TH REGISTERED PROFESSIONAL ENGINEER

Date 06/10/17

~~CR-T-01.10~~ ~~Sheet 2 of 2~~

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

UNSIGNALIZED INTERSECTION
STOP AND CROSSING

DATE	TIME	SCALE	DESIGNED BY	CHECKED BY	DRAFTED BY
7/22/2020	2:25 PM	N/A	DLP	ALH	DLP

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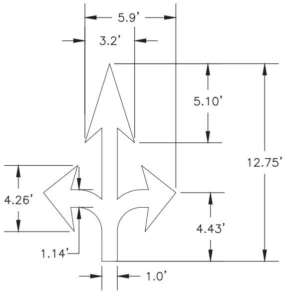
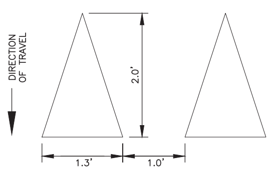
NO.	DATE	REVISION

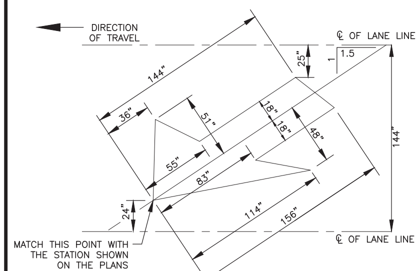
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H1	H17



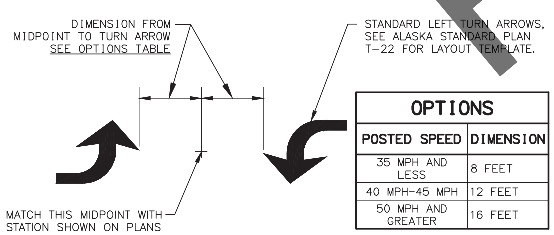
LEFT/THRU/RIGHT ARROW DETAIL



YIELD PAVEMENT MARKINGS DETAIL

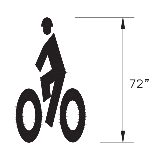


LANE DROP ARROW DETAIL



TWO WAY LEFT TURN ARROW DETAIL

OPTIONS	
POSTED SPEED	DIMENSION
35 MPH AND LESS	8 FEET
40 MPH-45 MPH	12 FEET
50 MPH AND GREATER	16 FEET



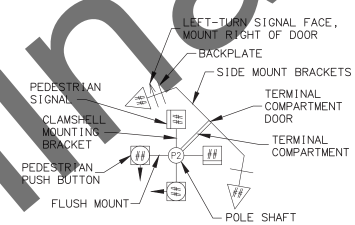
HELMETED MUTCD BIKE SYMBOL
(EXCLUDE ARROW UNLESS SHOWN IN PLANS)

SIGNING & STRIPING NOTES:

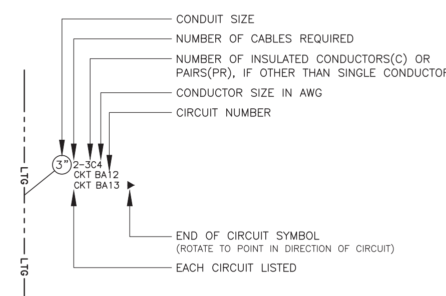
1. ALL STATION LOCATIONS FOR SIGN INSTALLATION ARE APPROXIMATE. INSTALL SIGNS AT LOCATIONS AS DIRECTED BY THE ENGINEER.
2. USE THE FOLLOWING DEFINITIONS TO DECIPHER THE ABBREVIATED SIGN POST TYPES IN THE SIGN SUMMARY SHEETS.
   A. PT MEANS A PERFORATED STEEL TUBE.
   B. T MEANS A SQUARE STEEL TUBE.
   C. P MEANS A ROUND STEEL PIPE.
   D. W MEANS A WIDE FLANGE BEAM.
   E. POPL MEANS A POLE PLATE INSTALLED PER ITS ALASKA STANDARD PLAN S-23.
3. FABRICATE ALL SIGNS FROM 0.125" THICK ALUMINUM SHEETING, UNLESS STATED ELSEWHERE.
4. FOR SIGNS SUPPORTED BY MULTIPLE POSTS, FABRICATE THE POSTS WITH THEIR TOPS LEVEL WITH ONE ANOTHER.
5. FOR PERFORATED STEEL TUBE SIGNPOSTS, INSTALL THE CONCRETE FOUNDATION OPTION SHOWN ON STANDARD PLAN S-30. TRIM EACH PT POST TO LIMIT THE LENGTH INSERTED INTO THE FOUNDATION TO 12 INCHES.
6. FABRICATE GUIDE SIGNS ACCORDING TO THE SHOP DRAWINGS INCLUDED IN THE APPENDICES OF PART 4, CONTRACT PROVISIONS AND SPECIAL PROVISIONS. TRIM THE CORNERS OF ALL SIGNS TO THE RADIUS SHOWN ON EACH SHOP DRAWING.
7. ERECT NEW SIGNS BEFORE REMOVAL OF EXISTING SIGNS WITH SIMILAR MESSAGE. NOTIFY THE ENGINEER A MINIMUM OF 14 DAYS PRIOR TO BEGINNING SIGN REMOVAL AND SALVAGE OR DISPOSAL ACTIVITIES.
8. FOR SIGNS SUPPORTED BY MULTIPLE TUBES OR PIPES, LOCATE THE OUTER POSTS ON MAXIMUM SIX FEET CENTERS. INSTALL ADJACENT WIDE FLANGE POSTS ON MINIMUM EIGHT FEET CENTERS.
9. SELECTIVE AND HAND CLEARING SHALL BE PERFORMED AT THE DISCRETION OF THE ENGINEER, IN ACCORDANCE WITH SECTION 201, UPSTREAM OF ALL SIGN INSTALLATION LOCATIONS TO ACHIEVE MINIMUM SIGN VISIBILITY REQUIREMENTS. IF NOT INCLUDED AS A SEPARATE ITEM, THIS WORK SHALL BE SUBSIDIARY TO THE SIGN INSTALLATION ITEMS AND WORK.
10. FOR ALL FINAL PAVEMENT MARKINGS USE MMA MATERIALS. LONGITUDINAL, TRANSVERSE AND SYMBOL MARKINGS SHALL BE INLAID AND GORE STRIPES SHALL BE SURFACE APPLIED AS SPECIFIED IN SECTION 670 OF THE SPECIFICATIONS.
11. DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT OR FACE OF CURB WHEN PRESENT.
12. IF THE NEW AND EXISTING PAVEMENT MARKINGS ARE NOT ALIGNED AT MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER ON THE NEW PAVEMENT.
13. WHERE NEW STRIPING IS TO EXTEND BEYOND PAVING LIMITS, REMOVE EXISTING STRIPING IN ACCORDANCE WITH SUBSECTION 670-3.04 TO THE EXTENT OF STRIPING LIMITS.

ABBREVIATIONS

AWG	AMERICAN WIRE GAUGE	NB	NORTH BOUND
CAM	CAMERA	OMNI	OMNI DIRECTIONAL ANTENNA
EB	EAST BOUND	P#	TRAFFIC SIGNAL POLE #
GND	GROUND	PE	PHOTOELECTRIC CELL
HDPE	HIGH DENSITY POLYETHYLENE CONDUIT	PED B ##	PEDESTRIAN PUSH BUTTON #
HEAD	VEHICULAR SIGNAL HEAD	PEDI	PEDESTRIAN SIGNAL HEAD
SIG	SIGNAL	PRE #	PREEMPTION #
I/C	INTERCONNECT	PRE CON #	PREEMPTION CONFIRMATION LIGHT #
INTX	INTERSECTION	RAD	RADAR
INTX L	INTERSECTION LIGHTING	RMC	RIGID METAL CONDUIT
LC	LOAD CENTER	SB	SOUTH BOUND
LFNC	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT	TC	TRAFFIC CONTROLLER
LTG	LIGHTING	WB	WEST BOUND
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	YAGI	DIRECTIONAL ANTENNA



POLE SHAFT LEGEND



CIRCUIT LABELING LEGEND

CALL BEFORE YOU DIG!

CONTRACTOR SHALL CALL A MINIMUM OF 3 DAYS IN ADVANCE OF CONSTRUCTION

ALASKA DIGLINE....907-278-3121 OR 800-478-3121

CALL OR GO TO WWW.AKONECALL.COM/STATEWIDE.HTM FOR MEMBER LIST OF WHO WILL BE NOTIFIED

FOUNDATIONS NOTES:

1. STATION & C.L. REFERENCE ARE TO THE CENTER OF THE STRUCTURE, EXCEPT ON LOOPS WHICH ARE TO THE CENTER OF THE TRAILING EDGE OF THE LOOP (EDGE NEAREST INTERSECTION).
2. JUNCTION BOX LOCATIONS APPROXIMATE. LOCATE J-BOXES SO THAT THEY ARE LOCATED OUT OF THE PATHWAY, SIDEWALK, CURB RAMPS, AND DRAINAGE COLLECTION AREAS.
3. INSTALL LOAD CENTER AND TRAFFIC CONTROLLER FOUNDATIONS WITHIN 1-DEGREE OF PLUMB.
4. INSTALL ANCHOR BOLTS IN CAST FOUNDATIONS TO BE WITHIN 1:48 OF PLUMB.
5. TOPSOIL AND SEED ANY DISTURBED AREAS.

SIGNAL SYSTEM NOTES:

1. FURNISH THE SIGNAL AND LUMINAIRE MASTARM LENGTHS AND DIMENSIONS SPECIFIED ON THE POLE ELEVATIONS.
2. INSTALL DEVICES SUCH THAT THE DIMENSIONS SHOWN TO THE BOTTOM OF THE DEVICES ON THE POLE ELEVATIONS ARE MINIMUMS. VERTICAL DIMENSIONS TO SIGNAL HEADS ARE TO BOTTOM OF THE BACK PLATE.
3. INSTALL MAST ARMS PERPENDICULAR TO THE ROADWAY CENTERLINE. ACCEPTABLE VARIANCE IS +/- 1-DEGREE.
4. SALVAGE SIGNAL POLE ASSEMBLIES, SIGNS, SIGNAL FACES, AND LUMINAIRES AND DELIVER TO MAINTENANCE AND OPERATIONS WITHIN 48-HOURS OF DECOMMISSIONING. COMPONENTS DAMAGED WHILE IN THE CONTRACTOR'S CUSTODY MUST BE REPLACED AT THE CONTRACTOR'S EXPENSE. REMOVE AND DISPOSE OF FOUNDATIONS.
5. SALVAGE EXISTING CONTROLLER CABINET AFTER NEW CONTROLLER CABINET IS IN SERVICE AND DELIVER TO MAINTENANCE AND OPERATIONS WITHIN 48-HOURS OF DECOMMISSIONING.
6. REMOVE ABANDONED OR UNUSED TRAFFIC JUNCTION BOXES UNLESS OTHERWISE NOTED.
7. NEW SIGNAL HEADS THAT ARE MOUNTED BUT NOT IN OPERATION SHALL BE COVERED WITH A COMMERCIALLY AVAILABLE SIGNAL-SHIRT. EACH SIGNAL SHIRT SHALL FEATURE ELASTICIZED OPENINGS THAT FIT OVER THE VISORS AND AT LEAST TWO STRAPS TO SECURE IT TO THE SIGNAL. PROVIDE SHIRTS WITH A LEGEND THAT READS "OUT OF SERVICE" AND A CENTER SECTION THAT ALLOWS AN OPERATOR TO SEE THE INDICATIONS DURING SYSTEM TESTS.
8. SIGNAL HEADS ARE TO BE LOCATED PER FIGURE 4D-100, TYPICAL SIGNAL HEAD LOCATIONS, PER THE ALASKA TRAFFIC MANUAL. ACCEPTABLE VARIANCE IS +/- 1-FOOT.
9. AIM SIGNALS PER TABLE 660-2, THROUGH-SIGNAL AIMING POINT, OF THE SPECIAL PROVISIONS. SIGNALS SHALL ALSO BE AIMED SO AS NOT TO BE VISIBLE FROM SIDE STREET TRAFFIC. ACCEPTABLE VARIANCE IS +/- 5 DEGREES.
10. EXISTING CIRCUITS LISTED ON THE LOAD CENTER SUMMARY AND PLAN SHEETS WERE OBTAINED FROM AS-BUILT INFORMATION AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO WORK INVOLVING THOSE CIRCUITS.

STATE OF ALASKA 49TH AARON L. HUNTING CE 106601 REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

TRAFFIC LEGEND AND NOTES

Preliminary

DESIGNED BY	CHECKED BY	DRAFTED BY
DLP	ALH	DLP

SCALE
N/A

DATE	TIME
8/4/2020	3:57 PM

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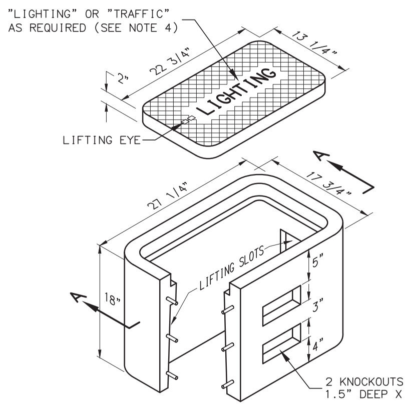
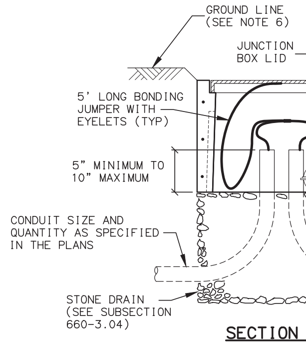
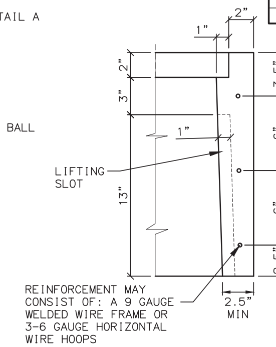
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H2	H17



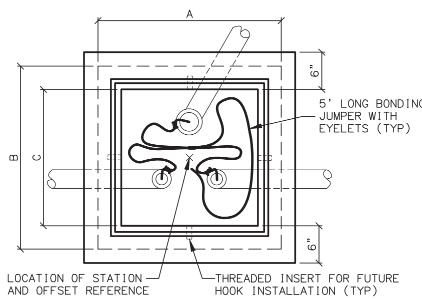


SECTION A-A



DETAIL A

TYPE IA JUNCTION BOX



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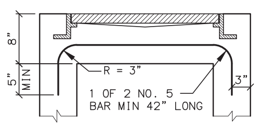

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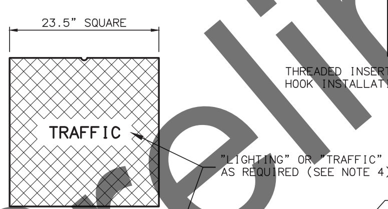
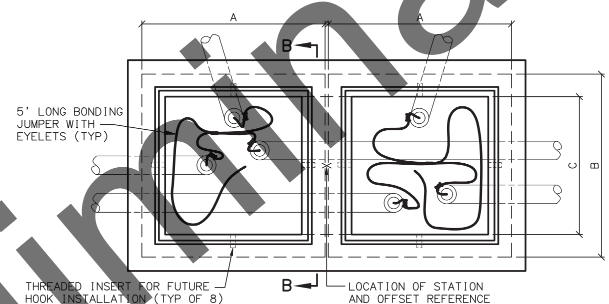
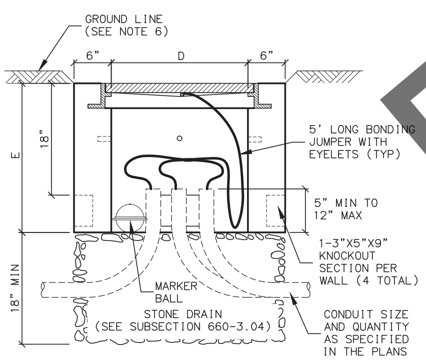


LID FOR TYPE II & III J-BOXES

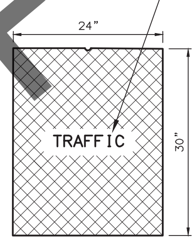


PLAN



TYPE II JUNCTION BOX

ELEVATION



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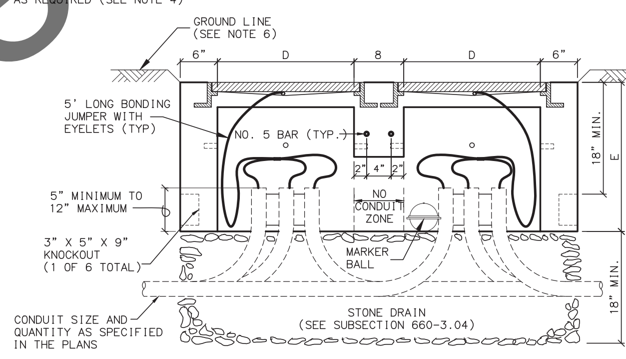

TYPE III/IV JUNCTION BOX

ELEVATION (TYPE III LAYOUT DEPICTED)

NOTES:

1. AVOID INSTALLING TYPE IA JUNCTION BOXES IN DRIVEWAYS OR IN LOCATIONS SUBJECT TO USE BY HEAVY TRUCKS. INSTALL JUNCTION BOXES ONLY AT THE LATERAL LOCATIONS ALLOWED IN SUBSECTION 660-3.04.
2. FURNISH TYPE II, III AND IV JUNCTION BOXES WITH CAST IRON FRAMES AND LIDS THAT WEIGH A MINIMUM OF 210 POUNDS AND ARE RATED FOR HEAVY TRAFFIC LOADS IN COMPLIANCE WITH AASHTO M306. FURNISH TYPE IA JUNCTION BOXES WITH CAST IRON LIDS THAT WEIGH A MINIMUM OF 50 POUNDS.
3. CONSTRUCT JUNCTION BOXES ACCORDING TO SECTION 501 USING CLASS A CONCRETE. REINFORCE TYPE IA JUNCTION BOXES AS SHOWN. SYNTHETIC STRUCTURAL FIBER-REINFORCED CONCRETE THAT MEETS ASTM C 1116 AND CONTAINS FIBER IN PROPORTIONS AS RECOMMENDED BY THE FIBER MANUFACTURER MAY BE ADDED FOR STRENGTH.
4. FOR JUNCTION BOXES THAT CONTAIN ILLUMINATION CONDUCTORS EXCLUSIVELY, FURNISH LIDS WITH THE WORD "LIGHTING" INSCRIBED INTO THEM. FOR OTHER JUNCTION BOXES, FURNISH LIDS WITH THE WORD "TRAFFIC" INSCRIBED INTO THEM.
5. UNDER JUNCTION BOXES, INSTALL STONE DRAINS THAT CONSIST OF POROUS BACKFILL MATERIAL CONFORMING TO SUBSECTION 703-2.10.
6. SET THE TOPS OF JUNCTION BOXES WITH THE FOLLOWING DIMENSIONS BELOW THE FINISHED SURROUNDING SURFACE:
   - 1" IN PAVED MEDIANS AND ADJACENT TO PEDESTRIAN FACILITIES
   - 1/4" IN PEDESTRIAN FACILITIES
   - 2" IN ALL OTHER AREAS
7. BOND JUNCTION BOX LIDS TO THE SYSTEM OF EQUIPMENT GROUNDING CONDUCTORS ACCORDING TO SUBSECTION 660-3.06. ATTACH BONDING JUMPERS TO THE JUNCTION BOX LIDS WITH BRASS OR STAINLESS STEEL HARDWARE.
8. INSTALL LOOP DETECTOR TAILS THROUGH ONE OF THE KNOCKOUTS OF TYPE 1A JUNCTION BOXES. AFTER SETTING THE BOXES TO GRADE, INSTALL GROUT IN THE GAPS THAT REMAIN IN THE KNOCKOUT.
9. INSTALL A 1/2" THICK PREFORMED BITUMINOUS JOINT MATERIAL AROUND JUNCTION BOXES INSTALLED IN PORTLAND CEMENT CONCRETE WALKWAYS.
10. INSTALL AN ELECTRONIC MARKER BALL IN ALL JUNCTION BOXES PER SUBSECTION 660-3.04.
11. PRIOR TO INSTALLATION MARK ALL JUNCTION BOX LOCATIONS WITH A WIRE STAFF VINYL FLAG. THE FLAG SHALL BE RED IN COLOR AND MINIMUM 4-INCHES TALL BY 5-INCHES WIDE. THE WIRE STAFF SHALL BE 21-INCHES IN LENGTH AND CONSTRUCTED OF MINIMUM 15.5 GAUGE STEEL.
12. WHERE MODIFIED TYPE II JUNCTION BOXES ARE REQUIRED FOR DETECTOR LOOP TAIL INSTALLATIONS, ADD ONE(1) ADDITIONAL 5" DEEP X 3" HIGH X 18" WIDE KNOCKOUT 12" BELOW TOP OF JUNCTION BOX.

J-BOX DIMENSIONS

J-BOX TYPE	DIMENSIONS				
	A (MAX.)	B (MAX.)	C (MIN.)	D (MIN.)	E (MIN.)
II	29 1/2"	29 1/2"	22"	22"	24"
III	29 1/2"	29 1/2"	22"	22"	24"
IV	30"	36"	30"	24"	30"

STATE OF ALASKA · 49TH · AARON L. HUNTING · CE 106601 · REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

JUNCTION BOX DETAILS

DESIGNED BY	DLP
CHECKED BY	ALH
DRAFTED BY	DLP
SCALE	N/A
DATE	8/4/2020
TIME	3:57 PM

DRAWING LOCATION
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H3	H17

DRAWING LOCATION
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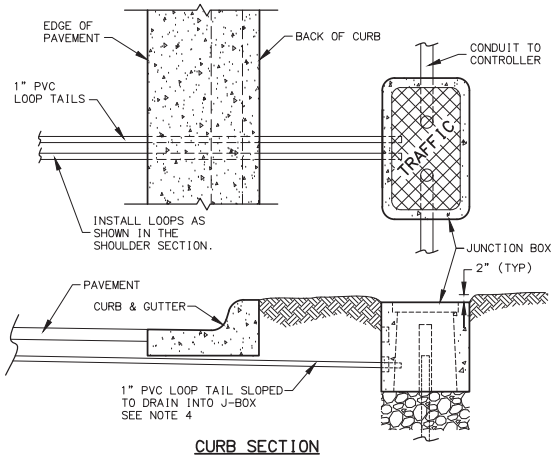
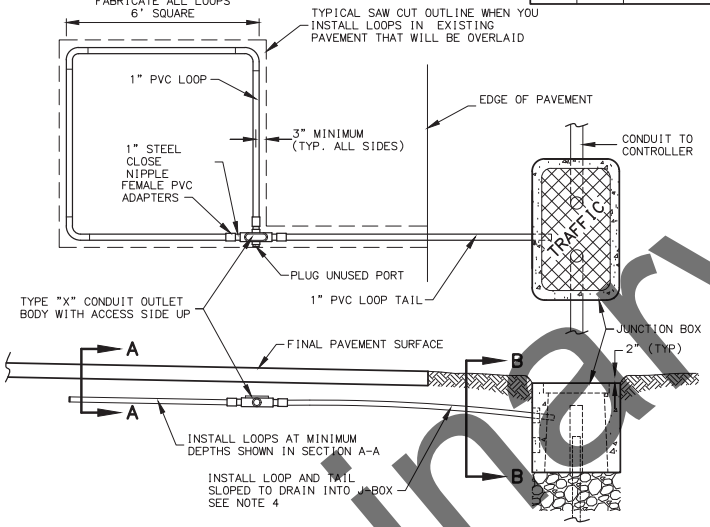
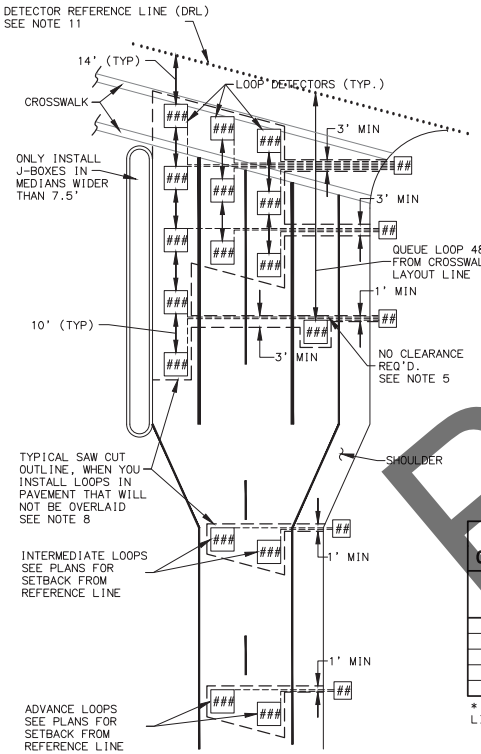


CURB SECTION

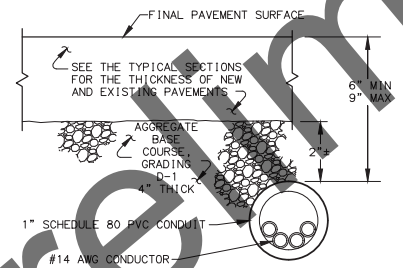


SHOULDER SECTION

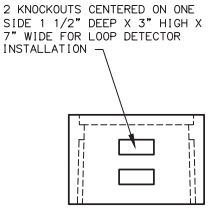


TYPICAL LOOP SETBACKS

MEASURE THE SETBACKS FROM THE DRL LAYOUT LINE ALONG THE CENTER OF EACH LANE



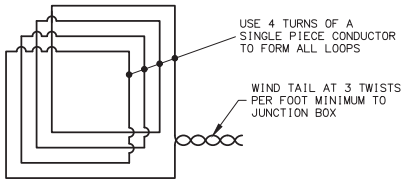
SECTION A-A



SECTION B-B

DETECTOR LOOP SPACING ON HIGH SPEED APPROACHES		
POSTED SPEED (MPH)	ADVANCED LOOP *	INTERMEDIATE LOOP *
35	255	170
40	285	190
45	330	210
50	355	235
55	385	255

* SETBACK FROM DETECTOR REFERENCE LINE (FEET)



LOOP WIRING DETAIL

TYPICAL PVC CONDUIT ENCASED LOOP DETECTOR INSTALLATION

NOTES:

1. EACH LOOP DETECTOR SHALL CONSIST OF A SINGLE PIECE OF #14 AWG CONDUCTOR INSTALLED IN ONE INCH SCHEDULE 80 PVC CONDUIT. BUILD ALL LOOPS 6.0 FEET SQUARE, SOLVENT WELDING ALL PVC TO PVC JOINTS. USE TYPE X OUTLET BODIES MADE OF HOT DIP GALVANIZED STEEL TO JOIN THE LOOPS AND TAILS.
2. INSTALL 4 TURNS OF CONDUCTOR IN ALL LOOPS AND PROVIDE TAILS THAT EXTEND TO THE JUNCTION BOX SPECIFIED ON THE PLANS. USE #14 AWG CONDUCTOR IN A POLYETHYLENE TUBE CONFORMING TO IMSA SPECIFICATION 51-5. WIND THE TAIL CONDUCTORS TOGETHER AT A RATE OF 3 TWISTS PER FOOT.
3. INSTALL ALL LOOP DETECTORS BEFORE OVERLAYING THE EXISTING PAVEMENT OR PAVING THE NEW ROADWAY.
4. INSTALL ALL LOOP DETECTORS SLOPED TO DRAIN INTO THE JUNCTION BOX THE LOOP TAIL ENTERS. IF YOU CAN NOT INSTALL THE LOOP TO DRAIN INTO THE J-BOX, DRILL FIVE 1/4" WEEP HOLES ON 1 FOOT CENTERS IN THE UNDERSIDE OF THE CONDUIT AT THE LOW SPOT.
5. YOU MAY INSTALL A LOOP TAIL IMMEDIATELY ADJACENT TO A LOOP AND OTHER LOOP TAILS. LOOP TAILS SHALL NOT CROSS LOOP CONDUITS.
6. TEST ALL LOOP DETECTORS FOR CONTINUITY AND INSULATION INTEGRITY BEFORE SEALING THE LOOPS UNDER THE FINAL LIFT OF ASPHALT. PROVIDE THE ENGINEER A WRITTEN RECORD OF FIELD TESTING INCLUDING; CONTINUITY, INSULATION RESISTANCE AND INDUCTANCE TESTS AS REQUIRED IN SECTION 660-3.01(7) OF THE STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION.
7. WHEN INSTALLING LOOP DETECTORS IN EXISTING PAVEMENT, CUT THE ASPHALT WITH A SAW AND REMOVE ALL ASPHALT WITHIN THE SAW CUT. MATCH EXISTING PAVEMENT THICKNESS WHEN REPAIRING THE CUTOUT.
8. 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 A TRAPEZOIDAL SAW CUT.
   C. CUT TO WITHIN 1 FOOT OF THE LANE AND EDGE LINES, PRESERVING THESE PAVEMENT MARKINGS;
   D. REMOVE THE ASPHALT TO THE LIP OF THE GUTTER WHERE THERE ARE NO EDGE LINES;
   E. CUT ACROSS LANE LINES WHEN LOOPS IN ADJACENT LANES ARE SIDE BY SIDE;
   F. CUT TRENCHES CROSSING A LANE A MINIMUM OF 3 FEET WIDE; AND
   G. CUT TRENCHES CROSSING A SHOULDER A MINIMUM 1 FOOT WIDE.
9. HEAT AND TACK COAT THE EDGES OF EXISTING PAVEMENT BEFORE PAVING THE 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.
10. MAINTAIN THE REPLACEMENT ASPHALT MIX ABOVE A TEMPERATURE OF 225°F UNTIL THE TIME OF APPLICATION; IF NECESSARY, STORE THE MIX IN AN INSULATED BOX TO MAINTAIN THIS MINIMUM TEMPERATURE.
11. TO ESTABLISH DETECTOR REFERENCE LINE, LAYOUT A LINE PARALLEL TO THE CROSS STREET CENTER LINE, STARTING AT THE CURB RETURN TO THE RIGHT OF THE APPROACH.
12. ENSURE DEPTH OF AGGREGATE BASE COURSE, GRADING D-1 AT LOOP LOCATIONS IS A MINIMUM OF 4 INCHES. EXCAVATION AND INSTALLATION OF ADDITIONAL AGGREGATE BASE COURSE, GRADING D-1 NECESSARY TO MEET THIS REQUIREMENT IN EXISTING ROAD SECTIONS SHALL BE SUBSIDIARY TO TRAFFIC LOOP PAY ITEM.

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STATE OF ALASKA
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AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

LOOP DETECTOR INSTALLATION DETAILS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H4	H17

DRAWING LOCATION
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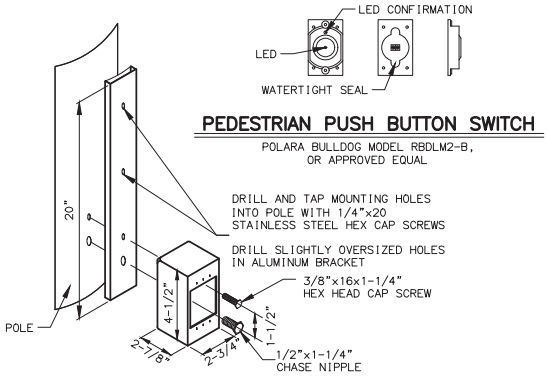
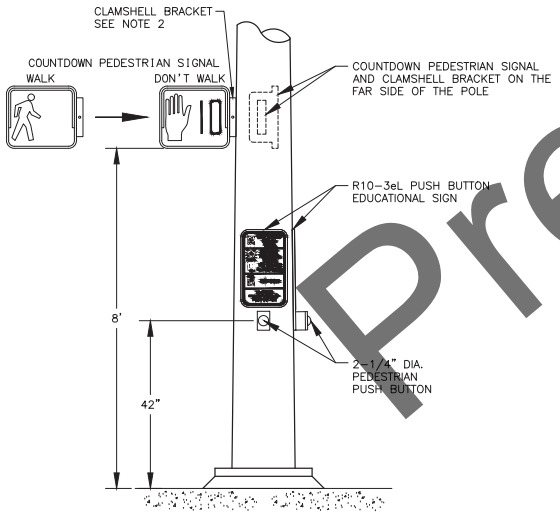


PEDESTRIAN PUSH BUTTON SWITCH

POLARA BULLDOG MODEL RBDLM2-B, OR APPROVED EQUAL

PEDESTRIAN PUSH BUTTON HOUSING

(STYLE A)



PEDESTRIAN HARDWARE AND SIGNAGE FOR PUSH-BUTTON LOCATIONS

SEE SIGN SUMMARY FOR LOCATIONS

NOTES:

1. INSTALL THE PEDESTRIAN SIGNS SHOWN IN THE PLANS AS DETAILED ON THIS SHEET AND PER ALASKA TRAFFIC MANUAL.
   A. USE SLIP FITTERS TO INSTALL PEDESTRIAN SIGNALS ON THE TOP OF POSTS.
   B. USE CLAMSHELL BRACKETS TO INSTALL ALL PEDESTRIAN SIGNALS, EXCEPT THOSE THAT ARE POST TOP MOUNTED.
2. INSTALL PEDESTRIAN INDICATION TO FACE THE CENTER OF THE FAR SIDE CROSSWALK. ACCEPTABLE VARIANCE IS +/- 1 DEGREE.
3. LOWER SIGNAL PUSH BUTTON IF THE EXITING BUTTON IS OVER 46". LEAVE IN PLACE IF THE BUTTON IS 42"-46".

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SIGNAL HARDWARE DETAILS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H5	H17

DRAWING LOCATION
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DESIGNED BY	DLP
CHECKED BY	ALH
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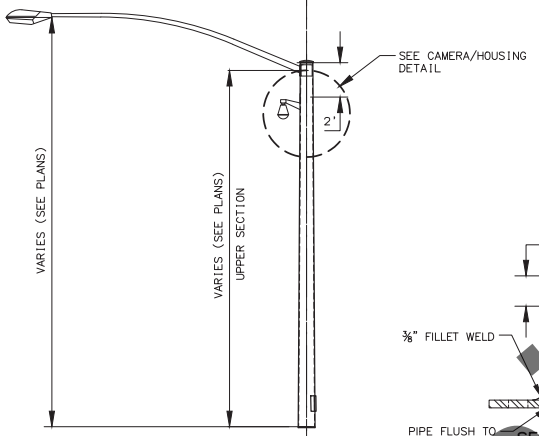
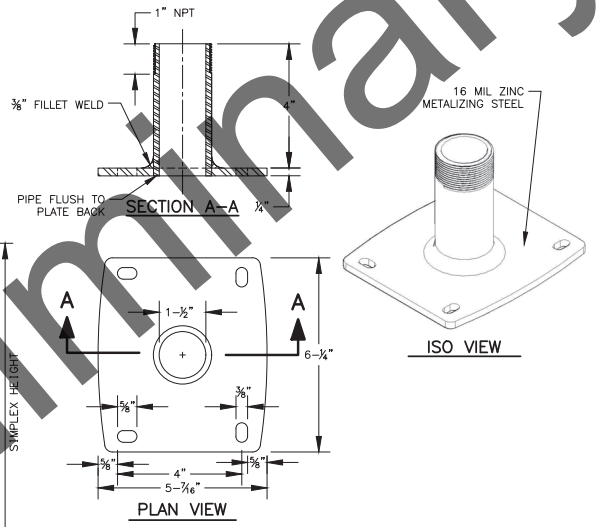


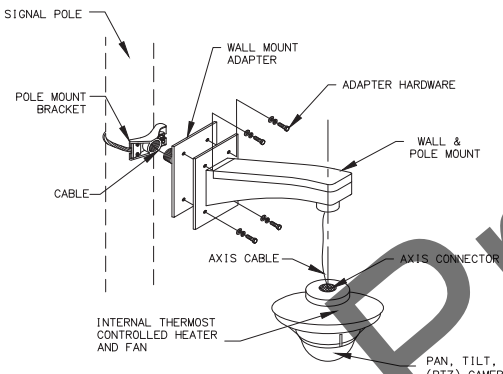
MATERIAL REQUIREMENTS	
ALL ASSEMBLIES	
MOUNTING BRACKET	ASTRO-BRAC AB-0160-45-SS-PNC
WALL ADAPTOR	STEEL FABRICATORS OR APPROVED EQUAL
WALL MOUNT	AXIS T91L61 OR APPROVED EQUAL
CABLE 1 (SIGNAL)	CAT-5E, SHIELDED, DIRECT BURIAL
CONNECTOR	ENVIRONMENTALLY HARDENED RJ-45
STRAIN RELIEF	REMKE 2201-013 OR APPROVED EQUAL
ADAPTER HARDWARE, EACH	(1) 5/16" 18X1" HEX BOLT, STAINLESS (2) 5/16" FLAT WASHER, STAINLESS (1) 5/16" NY-LOCK NUT, STAINLESS
CAMERA	
CAMERA	SEE SPECIFICATIONS



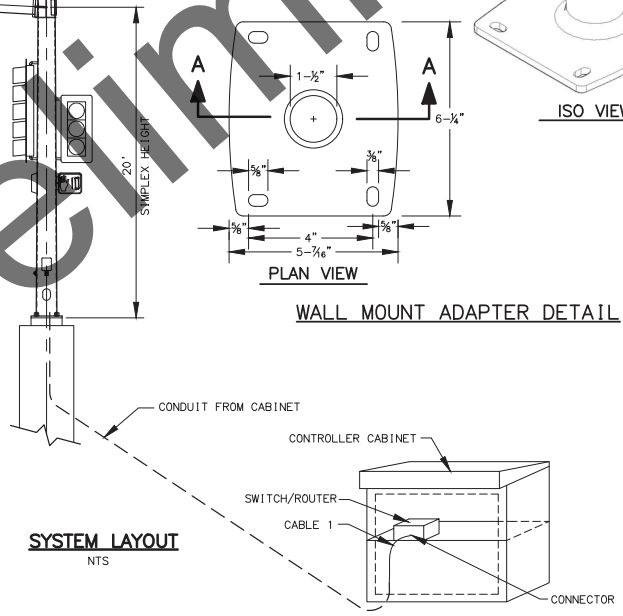
WALL MOUNT ADAPTER DETAIL

NOTES:

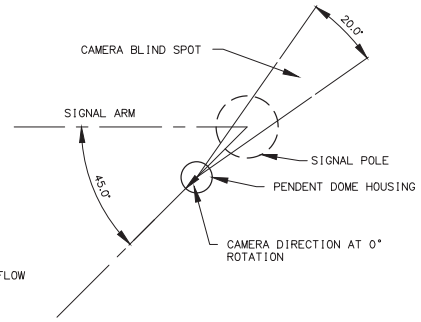
1. PROTECT CABLE ENDS FROM MOISTURE AT ALL TIMES.
2. PULL CABLE IN ACCORDANCE WITH SECTION 660 OF THE SPECIAL PROVISIONS. PULL CABLE SO THAT THERE IS SUFFICIENT LENGTH TO REACH THE TOP OF THE CONTROLLER CABINET. CABLES ARE TO BE PULLED WITHOUT CONNECTORS ATTACHED. WHEN CABLE HAS BEEN PULLED TO FINAL LOCATIONS INSTALL AND MAKE FINAL CONNECTIONS.
3. CABLE RUNS ARE TO BE MADE CONTINUOUS WITHOUT SPLICES EXCEPT FOR IN LOCATION SHOWN IN SPICE DETAIL WITH SPECIFIED CONNECTOR.
4. CABLE WITH DAMAGED INSULATION, OR THAT HAS BEEN CRIMPED OR BENT BEYOND THE MINIMUM BEND RADIUS MUST BE REPLACED AT NO ADDITIONAL COST.
5. THE MINIMUM BEND RADIUS SHALL NOT EXCEED THE MANUFACTURERS RECOMMENDATIONS.
6. ENSURE ADEQUATE LENGTH OF EACH CABLE TO ALLOW WORK ON THE ENDS OF THE CABLE IN THE CONTROLLER CABINET AND THE CAMERA MOUNTING LOCATION.
7. MOUNT THE PENDENT DOME HOUSING AT A 45° ANGLE AT THE REQUIRED HEIGHT. ANGLE AND HEIGHT MAY BE ADJUSTED BY THE ENGINEER TO AVOID WELDS, APPENDICES AND TO APPROVE SIGHT DISTANCE.
8. ADJUST CAMERA INSIDE THE PENDENT DOME HOUSING AS SHOWN. ENSURE THAT THE CAMERA IS MOUNTED AT A 0° TILT ANGLE.
9. INSTALL WATERTIGHT THREADED RIGID COMPRESSION CONNECTOR WHERE CABLE PASSES THROUGH THE POLE.
10. AT SPLICE LOCATION PROVIDE A SECURE CONNECTION USING CONNECTOR PARTS SPECIFIED. AFTER CONNECTION IS MADE COVER SPLICE WITH HEAT SHRINK. PROVIDE A STRAIN RELIEF CABLE AS NECESSARY.
11. CAMERA/HOUSING MOUNTING HEIGHT TO BE DETERMINED IN THE FIELD BY THE ENGINEER.



CAMERA/HOUSING DETAIL
NTS



SYSTEM LAYOUT
NTS



CAMERA/PENDENT DOME ORIENTATION
NTS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

PAN, TILT, ZOOM CAMERA MOUNTING DETAIL

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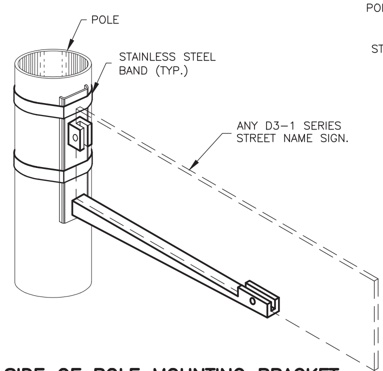
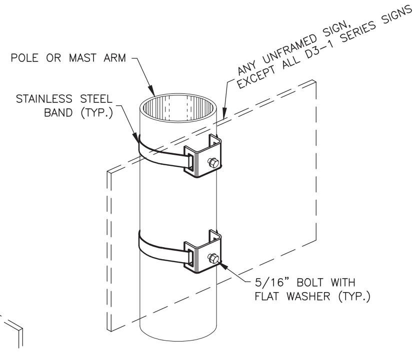
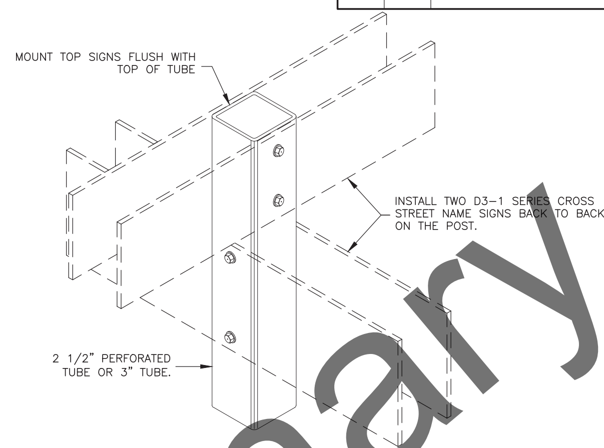


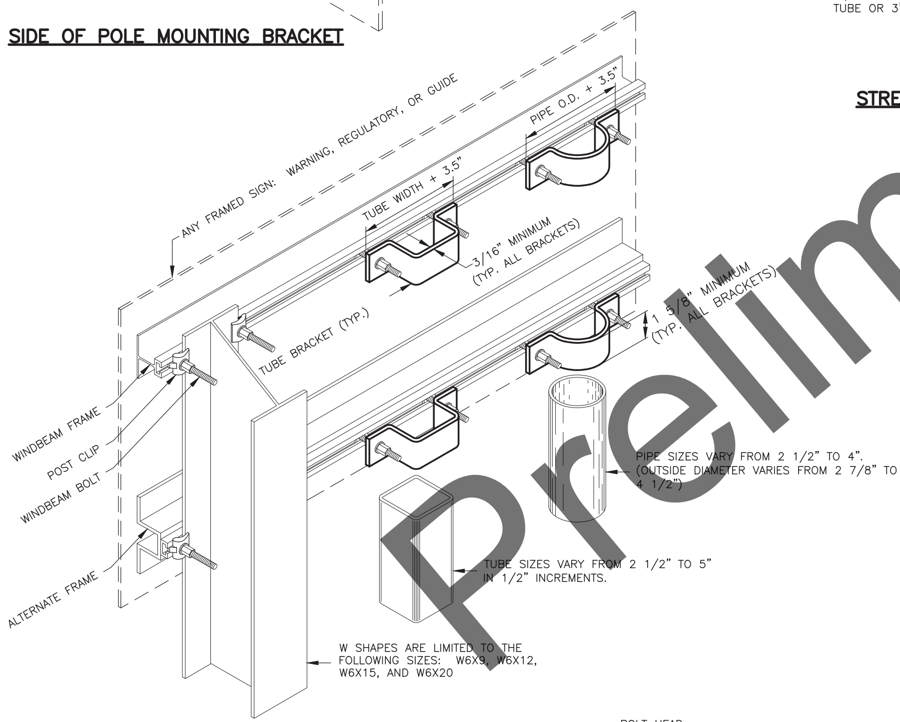
SIDE OF POLE MOUNTING BRACKET



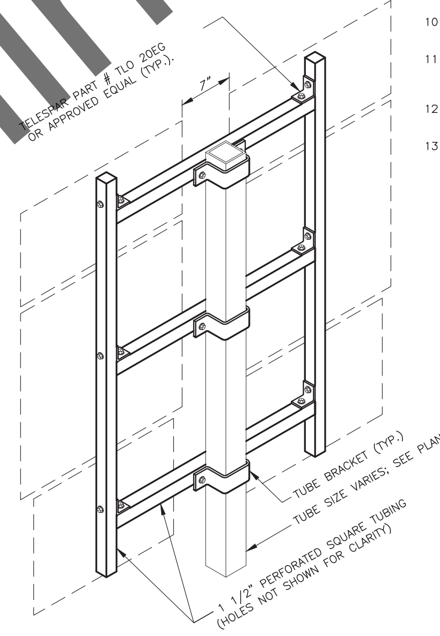
SADDLE BRACKETS



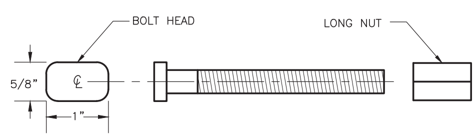
STREET NAME SIGN INSTALLATION



FRAMED SIGN ATTACHMENT BRACKETS



ROUTE MARKER TREE



3/8" WINDBEAM BOLT AND LONG NUT

NOTES:

1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE TUBES TO SUPPORT SIGNS MOUNTED ON ONE POST.
2. ATTACH SIGNS, FRAMED AND UNFRAMED TO THEIR SUPPORTS WITH ZINC PLATED 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PERFORATED TUBES WITH ACCESSORY DRIVE RIVETS AND TO SADDLES WITH 5/16" BOLTS.
3. BOLT UNFRAMED SIGNS DIRECTLY TO TUBES IN TWO LOCATIONS, NEAR TOP AND NEAR BOTTOM OF MATING SURFACE. ATTACH THEM TO POLES AND MAST ARMS WITH TWO SADDLES.
4. ATTACH BRACKETS TO POLES AND MAST ARMS WITH DOUBLE WRAPS OF 3/4" WIDE BY 0.020" THICK STAINLESS STEEL BANDING MATERIAL. TIGHTEN EACH BAND UNTIL IT STOPS MOVING THROUGH THE BUCKLE.
5. ATTACH FRAMED SIGNS TO POSTS WHEREVER THE FRAMES CROSS THE POSTS. AT EACH CROSSING, ATTACH THE SIGN USING TWO POST CLIPS ON W-SHAPE POSTS, A U-SHAPED BRACKET ON PIPES, AND A BRACKET WITH SQUARE CORNERS ON TUBES.
6. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
7. ONLY USE THE SPECIAL WINDBEAM BOLTS TO ATTACH SIGNS FRAMED WITH THE WINDBEAM FRAMING MATERIAL.
8. ATTACH FRAMED SIGNS TO POLES AND MAST ARMS USING POLE PLATES INSTALLED ACCORDING TO ALASKA STANDARD PLAN S-23.
9. FOR ROUTE MARKER TREES, CUT PERFORATED TUBES TO ENSURE TIGHT FITTING JOINTS. ASSEMBLE THE PIECES WITH ACCESSORY ELL-SHAPED ANGLE BRACKETS.
10. INSTALL THE TOP EDGE OF SIGNS 1" ABOVE THE TOPS OF POSTS, EXCEPT FOR THE D3-1 STREET NAME SIGNS.
11. INSTALL THE TOP EDGE OF SIGNS 3" BELOW THE TOP OF POST, WHENEVER THEY ARE MOUNTED BELOW SIGNS SECURED BY POST TOP MOUNTING BRACKETS.
12. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.
13. INSTALL WEATHER TIGHT CAPS ON ALL PIPE AND TUBE POSTS, EXCEPT PERFORATED TUBING.

FASTENER SPECIFICATION TABLE

FASTENERS		STEEL	STAINLESS STEEL
BOLTS		ASTM A 307	ASTM F 593
NUTS	REGULAR / LOCK	ASTM A 563	ASTM F 594
WASHERS		ASTM A 36	ASTM A 480
POST CLIPS			

STATE OF ALASKA · 49TH · AARON L. HUNTING · CE 106601 · REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
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(907) 269-0590

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

SIGN ATTACHMENT DETAILS

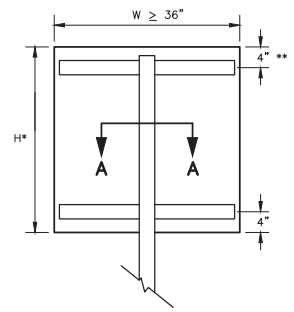
DATE	TIME	SCALE	DESIGNED BY	CHECKED BY	DRAFTED BY
8/4/2020	3:57 PM	N/A	DLP	ALH	DLP

DRAWING LOCATION:
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY
PP\CIV3D19\PLANSET\00381_H6-SIGN_ATMT.DWG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	H7	H17

DRAWING LOCATION
C:\Users\DJPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 - AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\PLANSET\00381_H7_LIGHT_SIGN.DWG

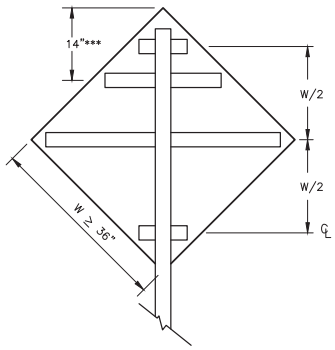
DATE 8/4/2020 TIME 3:57 PM | SCALE N/A | DESIGNED BY DLP | CHECKED BY ALH | DRAWN BY DLP



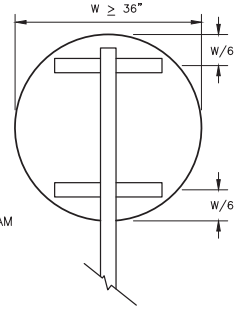
RECTANGLES AND TRAPEZOIDS

* WHEN H > 42 INCHES, INSTALL A 3RD WINDBEAM CENTERED ON THE SIGN.

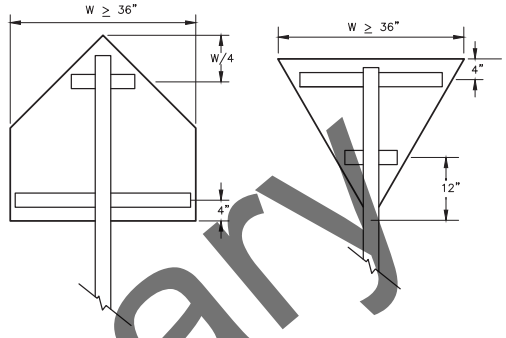
** FOR S5-1 SIGNS MOUNTED ON FLASHING BEACON POSTS, USE A 10" OFFSET. OTHERWISE, USE 4".



*** FOR WARNING SIGNS MOUNTED ON FLASHING BEACON POSTS, USE THE 14" OFFSET. OTHERWISE, USE W/2.

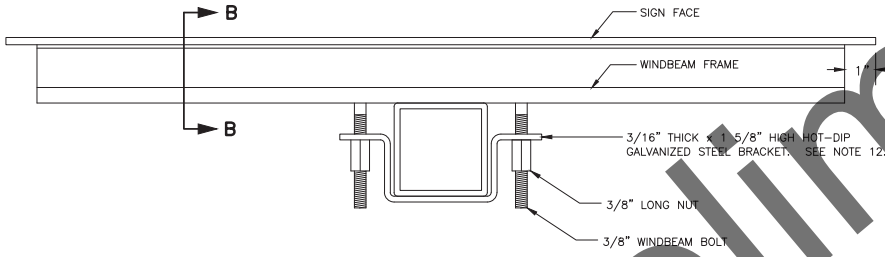


ROUNDS AND OCTAGONS

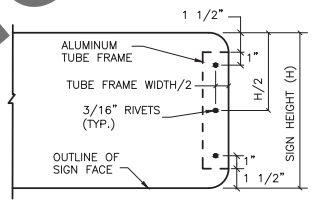


WINDBEAM LOCATIONS FOR EACH SIGN SHAPE

ELEVATION VIEW



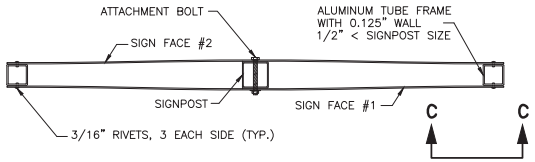
SECTION A - A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM



VIEW C - C

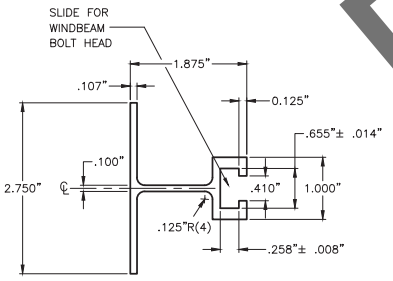
NOTES:

1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
2. INSTALL WINDBEAM OR ZEE SHAPED FRAMING MEMBERS ON DIAMOND SHAPED SIGNS 36 INCHES AND LONGER ON A SIDE AND ON OTHER SIGNS 36 INCHES WIDE AND WIDER.
3. IN HIGH WIND AREAS, THE PLANS MAY REQUIRE SIGNS SMALLER THAN THOSE LISTED IN NOTE 2 BE FRAMED AS SHOWN HERE IN.
4. THIS DRAWING DEPICTS THE WINDBEAM FRAMING AND ATTACHMENT SYSTEM. ATTACH SIGNS FRAMED WITH ZEE SHAPED FRAMING ACCORDING TO REGIONAL DRAWING "SIGN ATTACHMENT DETAILS", USING "U" SHAPED BRACKETS AND TWO BOLTS WITH NUTS.
5. THE ENGINEER MAY APPROVE OTHER FRAMING MEMBERS. SUBMIT DOCUMENTS THAT DETAIL THE FRAME'S CROSS SECTION AND STRENGTH, AND METHOD OF ATTACHING THE FRAME TO A POST.
6. USE FRAMING MEMBERS MADE FROM ALUMINUM ALLOY 6061-T6.
7. EACH FRAMING MEMBER SHALL BE ONE CONTINUOUS PIECE.
8. ATTACH FRAMING MEMBERS TO THE SIGN PANELS WITH RIVETS OR AN ENGINEER APPROVED, DOUBLE SIDED, HIGH STRENGTH, ADHESIVE TAPE.
9. WITH THE ADHESIVE TAPE, INSTALL TWO RIVETS IN BOTH ENDS OF EACH FRAMING MEMBER, AND ATTACH THE FRAMING MEMBERS TO THE SIGN PANELS ACCORDING TO THE TAPE MANUFACTURER'S WRITTEN INSTRUCTIONS, INCLUDING:
   A. THE CLEANING AND HANDLING OF THE SIGN PANELS AND FRAMING MEMBERS.
   B. THE APPLICATION OF THE ADHESIVE TAPE.
10. WHEN RIVETS ARE USED TO ATTACH FRAMING MEMBERS, INSTALL 2 RIVETS IN EACH END AND THE BALANCE ON 8" MAXIMUM CENTERS.
11. USE 3/16" DIAMETER RIVETS CONFORMING TO ALUMINUM ALLOY 6061-T6 FOR COLD DRIVEN RIVETS, OR ALUMINUM ALLOY 6061-T43 FOR HOT DRIVEN RIVETS.
12. THE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.

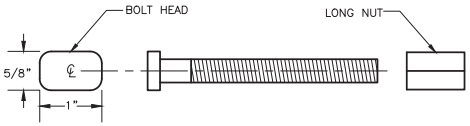


D3-1 STREET NAME SIGN FRAMING DETAIL

PLAN VIEW



SECTION B - B WINDBEAM CROSS SECTION



3/8" WINDBEAM BOLT AND LONG NUT

STATE OF ALASKA DOT&PF
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

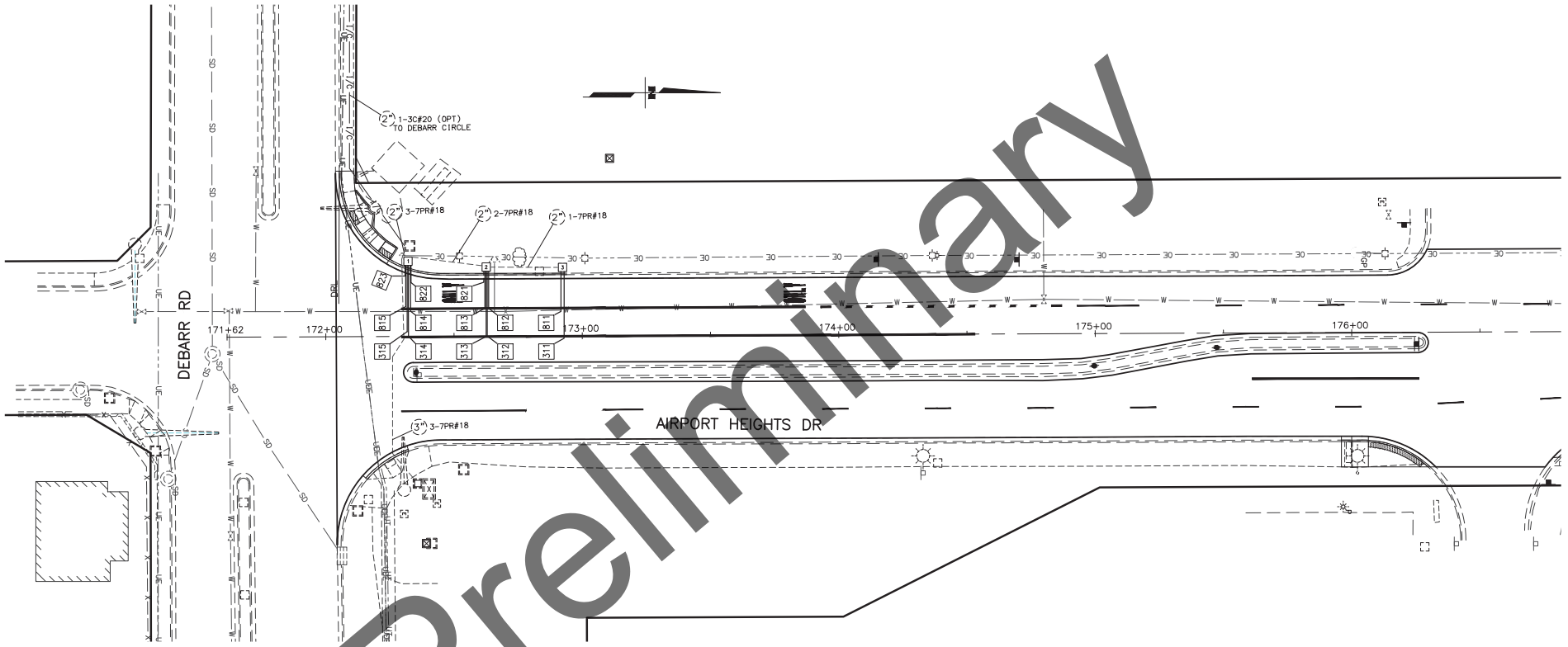
LIGHT SIGN ATTACHMENT DETAILS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H8	H17

NOTES:

1. REMOVE AND REPLACE EXISTING JUNCTION BOXES AND CABLING FOR SOUTHBOUND APPROACH DETECTION.



LOOP SCHEDULE

LOOP	STATION ALIGNMENT	OFFSET	LOOP	STATION ALIGNMENT	OFFSET	LOOP	STATION ALIGNMENT	OFFSET
311	172+83.0	6.1 RT	811	172+83.0	5.1 LT	821	172+51.0	16.3 LT
312	172+67.0	6.1 RT	812	172+67.0	5.1 LT	822	172+35.0	16.6 LT
313	172+51.0	6.0 RT	813	172+51.0	5.2 LT	823	172+19.1	23.1 LT
314	172+35.0	6.0 RT	814	172+35.0	5.3 LT			
315	172+19.0	5.8 RT	815	172+19.0	5.3 LT			

DETECTOR REFERENCE IS THE CENTER OF THE LAGGING LOOP EDGE

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

DEBARR ROAD LOOP REPLACEMENT

DRAWING LOCATION
C:\Users\DJPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 - AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\PLANSET\00381_H8_HR_SIG_PLAN_PEN_DEBARR.DWG

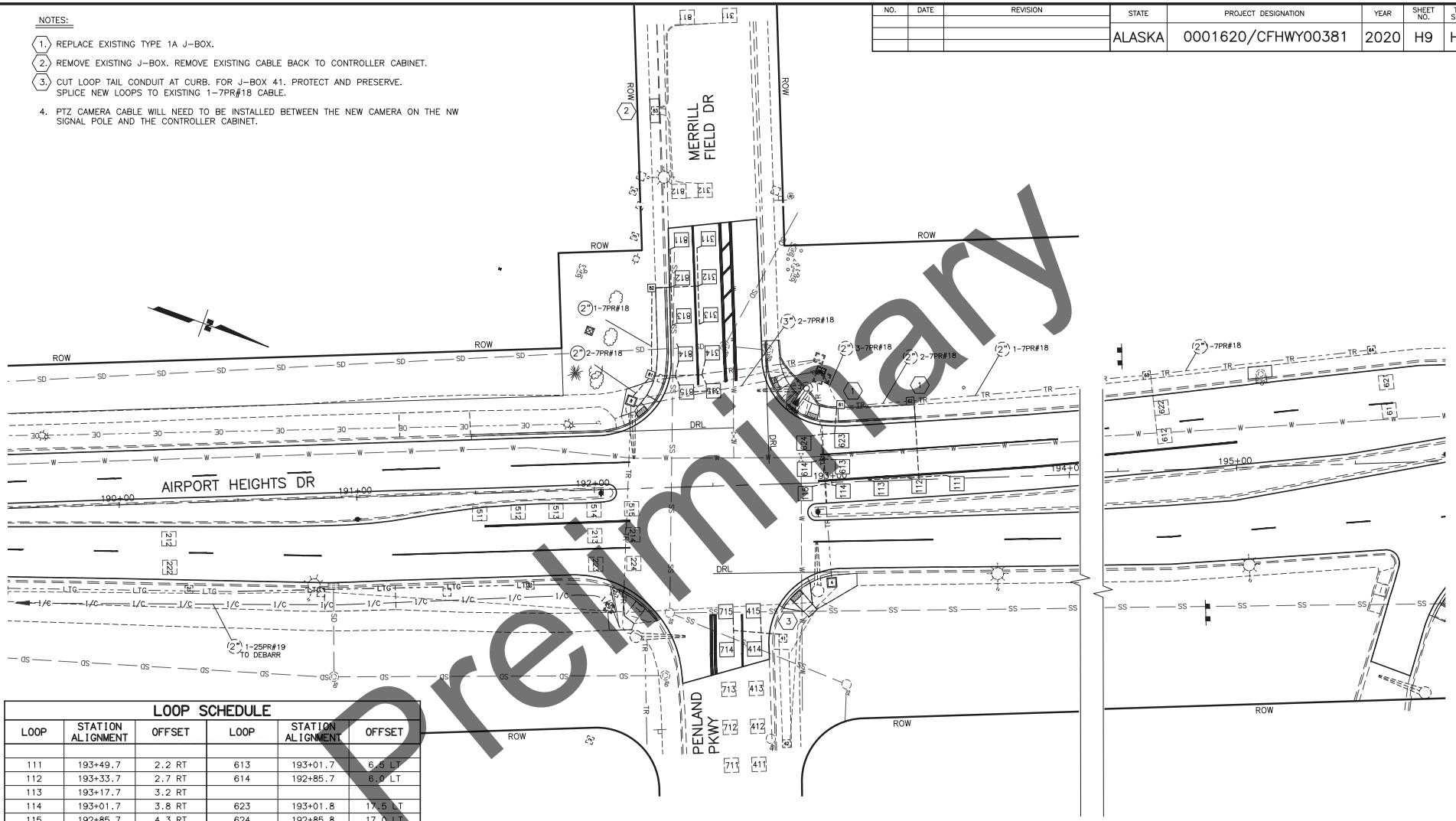
DATE	TIME	SCALE	DESIGNED BY	DLP
8/4/2020	3:57 PM	1" = 20'	CHECKED BY	ALH
			DRAWN BY	DLP

NOTES:

1. REPLACE EXISTING TYPE 1A J-BOX.
2. REMOVE EXISTING J-BOX. REMOVE EXISTING CABLE BACK TO CONTROLLER CABINET.
3. CUT LOOP TAIL CONDUIT AT CURB. FOR J-BOX 41. PROTECT AND PRESERVE. Ssplice NEW LOOPS TO EXISTING 1-7PR#18 CABLE.
4. PTZ CAMERA CABLE WILL NEED TO BE INSTALLED BETWEEN THE NEW CAMERA ON THE NW SIGNAL POLE AND THE CONTROLLER CABINET.

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H9	H17



LOOP SCHEDULE

LOOP	STATION ALIGNMENT	OFFSET	LOOP	STATION ALIGNMENT	OFFSET
111	193+49.7	2.2 RT	613	193+01.7	6.5 LT
112	193+33.7	2.7 RT	614	192+85.7	6.0 LT
113	193+17.7	3.2 RT			
114	193+01.7	3.8 RT	623	193+01.8	17.5 LT
115	192+85.7	4.3 RT	624	192+85.8	17.0 LT
311	192+51.3	101.1 LT	714	192+53.7	66.0 RT
312	192+51.2	85.1 LT	715	192+53.8	50.0 RT
313	192+51.3	69.1 LT			
314	192+51.4	53.1 LT	811	192+40.0	101.0 LT
315	192+51.4	37.1 LT	812	192+39.9	85.0 LT
			813	192+40.0	69.0 LT
414	192+65.3	66.5 RT	814	192+40.1	53.0 LT
415	192+65.3	50.5 RT	815	192+40.1	37.0 LT

STATE OF ALASKA
AARON L. HUNTING
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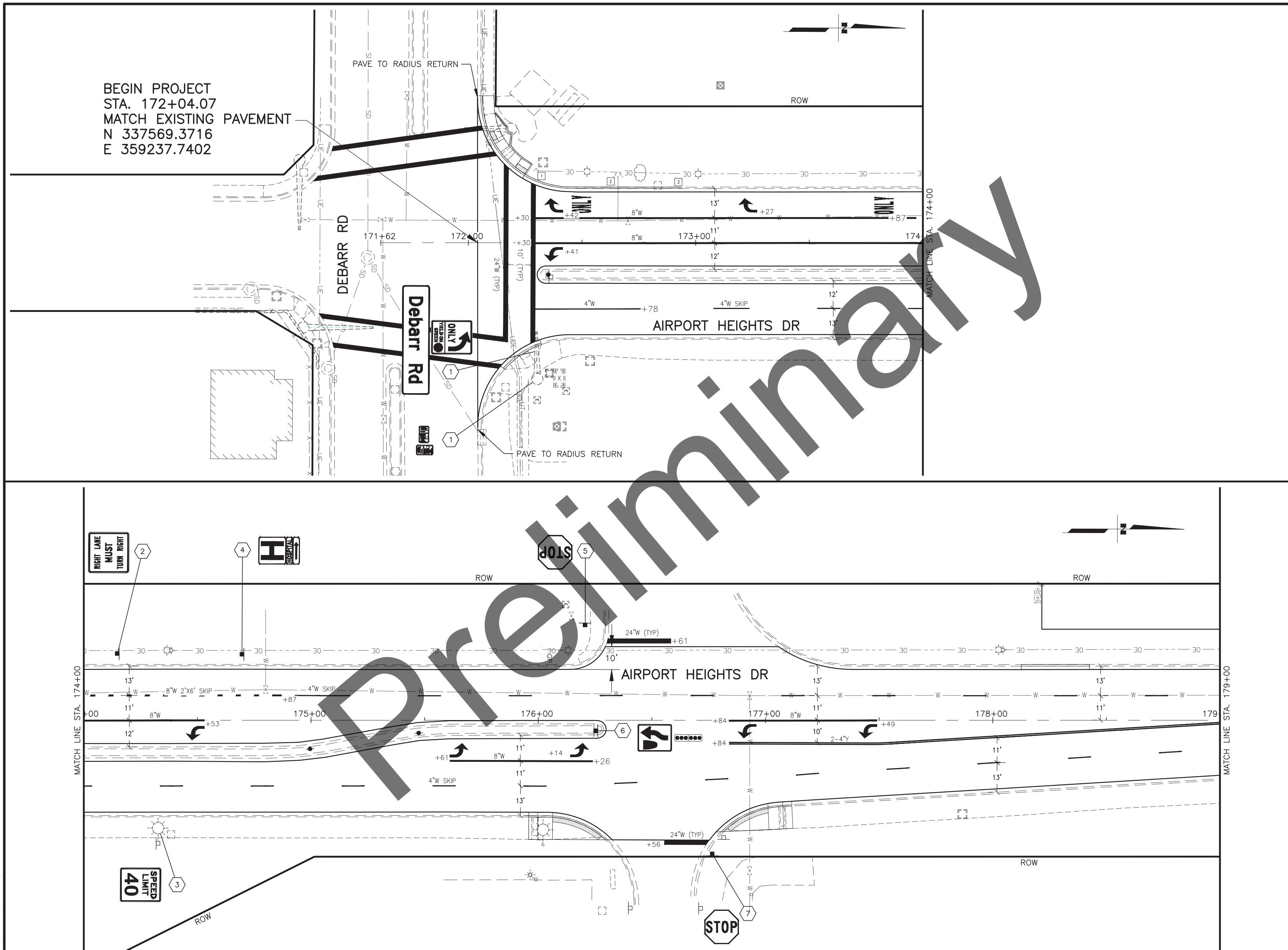
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

PENLAND PARKWAY LOOP REPLACEMENT

DRAWING LOCATION
C:\Users\DPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 - AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\
GFX\CAD\PLANSET\00381_H8_H9_SIG PLAN_PEN-DEBARR.DWG

DATE 8/4/2020 TIME 4:05 PM | SCALE 1" = 20' | DESIGNED BY DLP | CHECKED BY ALH | DRAWN BY DLP



SHEET NO.	TOTAL SHEETS
H10	H17
STATE	YEAR
ALASKA	2020

PROJECT DESIGNATION

0001620/
CFHWY00381

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

STATE OF ALASKA
49TH
AARON L. HUNTING
CE 106601
REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 172+04.07 TO
STA. 179+00.00

DATE	TIME	SCALE	DESIGNED BY	CHECKED BY	DRAFTED BY
8/4/2020	3:57 PM	1" = 20'	DLP	ALH	DLP

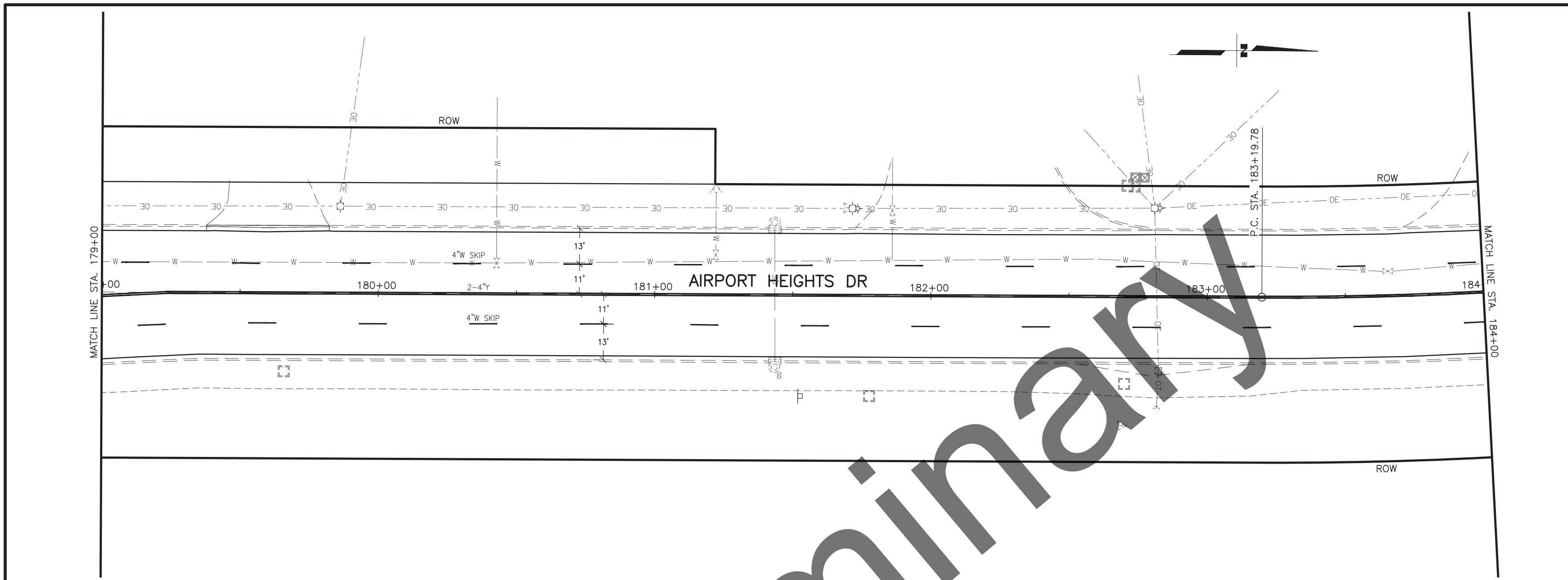
DRAWING LOCATION
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY
PP\CIV3D19\PLANSET\00381_H10-H13_SPLAN20.DWG

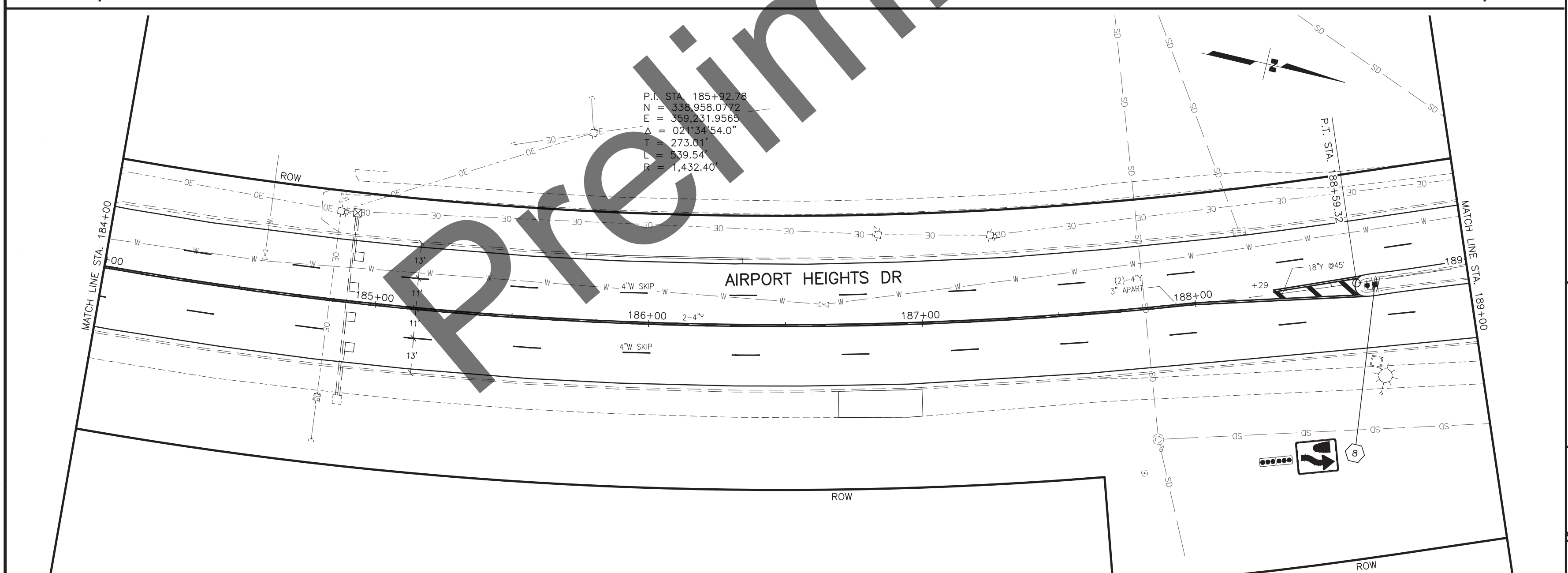
SHEET NO.	TOTAL SHEETS
H11	H17
STATE	YEAR
ALASKA	2020

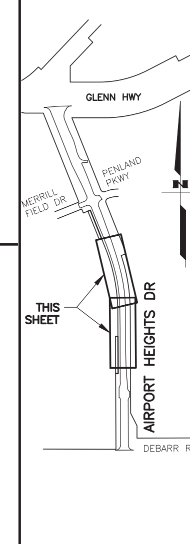
PROJECT DESIGNATION

0001620/
CFHWY00381

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	







STATE OF ALASKA
49TH
AARON L. HUNTING
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STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 179+00.00 TO
STA. 189+00.00

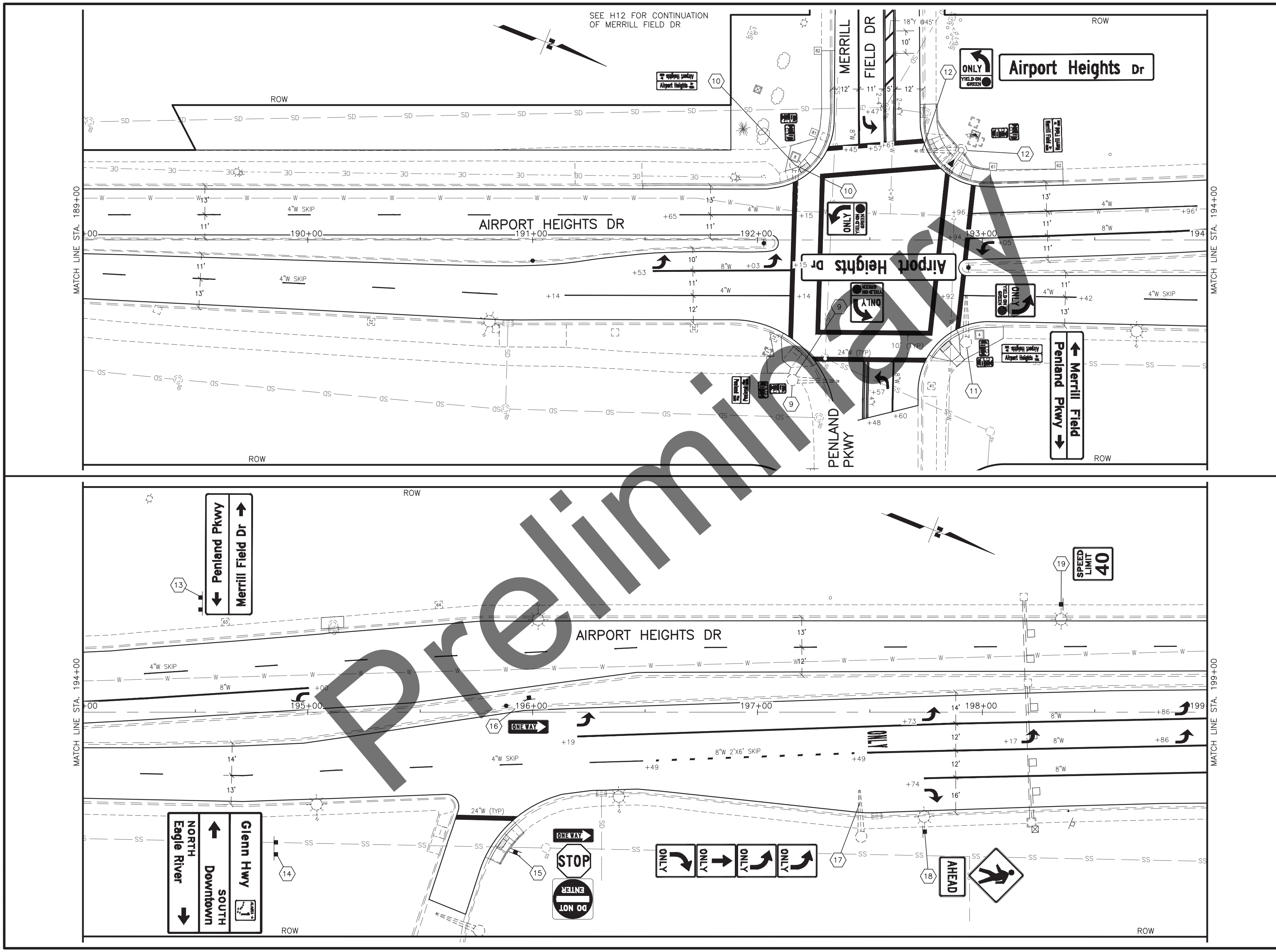
DESIGNED BY	DLP
CHECKED BY	ALH
DRAFTED BY	DLP

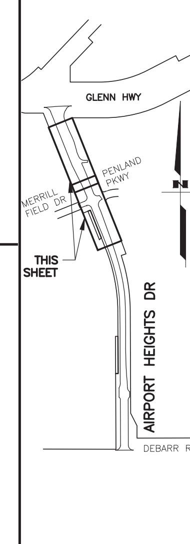
SCALE 1" = 20'

DATE 8/4/2020 TIME 3:57 PM

DRAWING LOCATION: C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY
PP\CIV3D19\PLANSET\00381_H10-H13_SPLAN20.DWG

Preliminary





SHEET NO.	TOTAL SHEETS
H12	H17
STATE	YEAR
ALASKA	2020

PROJECT DESIGNATION
0001620/
CFHWY00381

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

DATE	TIME	SCALE	DESIGNED BY	CHECKED BY	DRAFTED BY
8/4/2020	3:58 PM	1" = 20'	DLP	ALH	DLP

DRAWING LOCATION
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STATE OF ALASKA 49TH
AARON L. HUNTING
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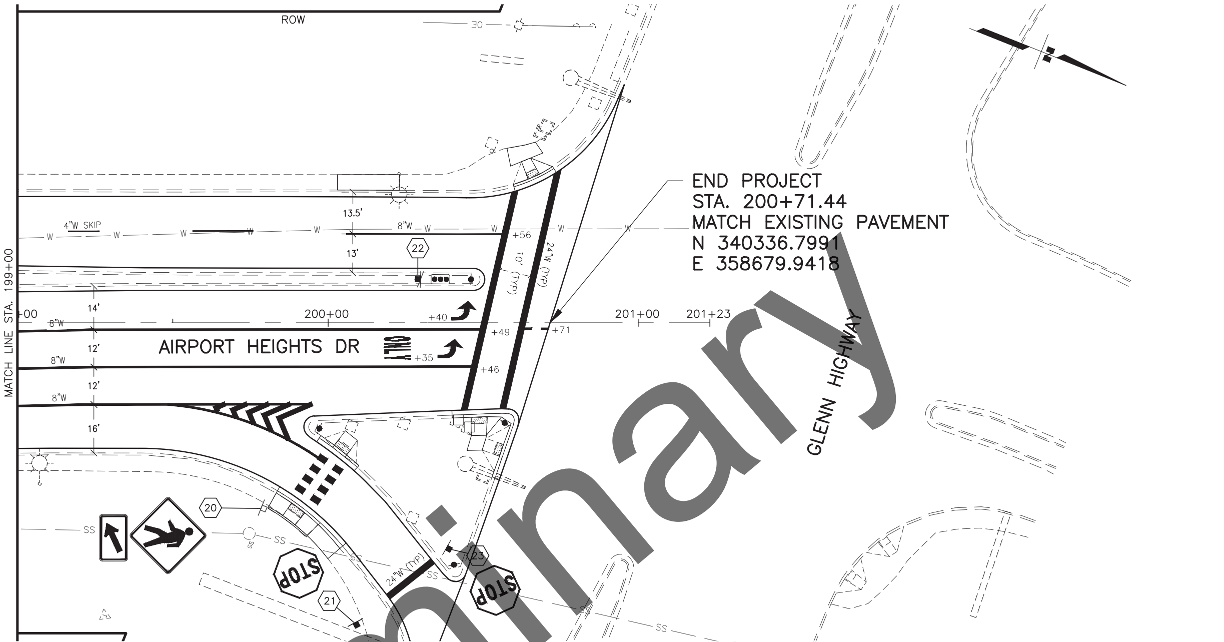
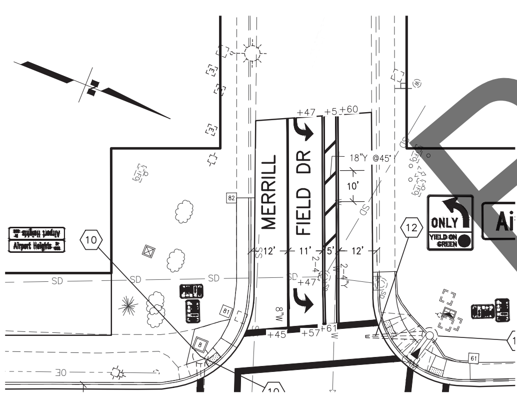
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 189+00.00 TO
STA. 199+00.00



MERRILL FIELD DRIVE
CONTINUATION

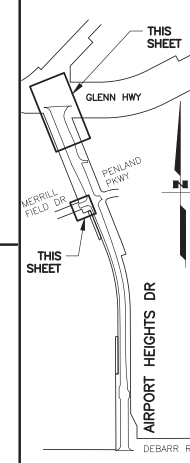


Preliminary

SHEET NO.	TOTAL SHEETS
H13	H17
STATE	YEAR
ALASKA	2020

PROJECT DESIGNATION
0001620/
CFHWY00381

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	



STATE OF ALASKA
49TH
AARON L. HUNTING
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SIGNING AND STRIPING
STA. 199+00.00 TO
STA. 200+71.44

DATE	TIME	SCALE	DESIGNED BY	DLP
8/4/2020	3:58 PM	1" = 20'	CHECKED BY	ALH
			DRAFTED BY	DLP

DRAWING LOCATION:
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY
PP\CIV3D19\PLANSET\00381_H10-H13_SPLAN20.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H14	H17

615.0001.0000 - SIGN SUMMARY

SHEET	POST NO.	ALIGNMENT STATION	CL REF.	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (SQ.FT)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMED YES	FRAMED NO	REMARKS
H10	1	172+30	OH-RT	R10-100		30	36	7.50	S	-		X	MOUNT TO EXISTING MASTARM
				D3-1	Debarr Rd	72	18	9.00			X		
			RT	R10-3E-L		9	15	0.94	S	-		X	MOUNT TO EXISTING SIGNAL POLE
				R10-3E-R		9	15	0.94	W			X	
H10	2	174+16	LT	R3-7R	RIGHT LANE MUST TURN RIGHT	36	36	9.00	N	USE EXISTING	X		
H10	3	174+32	RT	R2-1	SPEED LIMIT 40	30	36	7.50	S			X	MOUNT TO EXISTING LIGHT POLE
H10	4	174+70	LT	D9-2	H	24	36	6.00	N	USE EXISTING		X	MAKE AS ONE PANEL
				D9-13AP	HOSPITAL								
				D9-301									
H10	5	176+21	LT	R1-1	STOP	30	30	6.25	W	USE EXISTING		X	
H10	6	176+26	RT	R4-7C		18	30	3.75	N	USE EXISTING		X	MOUNT IN MEDIAN
				OM2-1V		6	12	0.50	N			X	INSTALL BACK TO BACK, MOUNT IN MEDIAN
				OM2-1V		6	12	0.50	S			X	
H10	7	176+77	RT	R1-1	STOP	30	30	6.25	E	USE EXISTING		X	
H11	8	188+65	RT	R4-7C		18	30	3.75	S	USE EXISTING		X	MOUNT IN MEDIAN
				OM2-1V		6	12	0.50	S			X	INSTALL BACK TO BACK, MOUNT IN MEDIAN
				OM2-1V		6	12	0.50	N			X	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SIGN SUMMARY

STATE OF ALASKA 49TH AARON L. HUNTING CE 106601 REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

DESIGNED BY DLP | CHECKED BY ALH | DRAFTED BY DLP | SCALE N/A | DATE 8/4/2020 | TIME 3:58 PM

DRAWING LOCATION C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY PP\CIV3D19\PLANSET\00381_H14-H17_SIGN SUM.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H15	H17

DRAWING LOCATION
C:\Users\DJPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 - AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\
DP\CHWY\PLANSET\00381_H14-H17_SIGN SUM.DRG

DATE 8/4/2020 TIME 3:58 PM | SCALE N/A | DESIGNED BY DLP | CHECKED BY ALH | DRAWN BY DLP

615.0001.0000 - SIGN SUMMARY

SHEET	POST NO.	ALIGNMENT STATION	CL REF.	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (SQ.FT)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMED YES	FRAMED NO	REMARKS
H12	9	192+16	OH-RT	R10-100	ONLY	30	36	7.50	W	-		X	MOUNT TO EXISTING MASTARM
				D3-1	Airport Heights Dr	108	18	13.50	W		X		
			RT	D3-101	Penland Pkwy 3000	24	8	1.33	N/S	-		X	DOUBLE SIDE PANEL, MOUNT TO EXISTING SIGNAL POLE BLOCK NO. 3000
				R10-3E-R		9	15	0.94	N			X	MOUNT TO EXISTING SIGNAL POLE
				R10-3E-L		9	15	0.94	W			X	
H12	10	192+17	OH-LT	R10-100	ONLY	30	36	7.50	N	-		X	MOUNT TO EXISTING MASTARM
			LT	D3-101	Airport Heights Dr 800	36	8	2.00	E/W	-	X		DOUBLE SIDED PANEL MOUNT TO EXISTING SIGNAL POLE BLOCK NO. 800
				R10-3E-R		9	15	0.94	E			X	MOUNT TO EXISTING SIGNAL POLE
				R10-3E-L		9	15	0.94	N			X	
H12	11	192+93	OH-RT	R10-100	ONLY	30	36	7.50	S	-		X	MOUNT TO EXISTING MASTARM
				D3-102	← Merrill Field Penland Pkwy →	96	30	20.00	S		X		
			RT	D3-101	Airport Heights Dr 700	36	8	2.00	E/W	-	X		DOUBLE SIDE PANEL MOUNT TO EXISTING SIGNAL POLE BLOCK NO. 700
				R10-3E-L		9	15	0.94	S			X	MOUNT TO EXISTING SIGNAL POLE
				R10-3E-R		9	15	0.94	W			X	
H12	12	192+91	OH-LT	R10-100	ONLY	30	36	7.50	E	-		X	MOUNT ON EXISTING MASTARM
				D3-1	Airport Heights Dr	144	18	18.00	E		X		
			LT	D3-101	Merrill Field Dr 2900	30	8	1.67	N/S	-		X	DOUBLE SIDE PANEL, MOUNT TO EXISTING SIGNAL POLE BLOCK NO. 2900
				R10-3E-R		9	15	0.94	S			X	MOUNT TO EXISTING SIGNAL POLE
				R10-3E-L		9	15	0.94	E			X	

STATE OF ALASKA DOT&PF
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AARON L. HUNTING
CE 106601
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

SIGN SUMMARY

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	H16	H17

615.0001.0000 - SIGN SUMMARY

SHEET	POST NO.	ALIGNMENT STATION	CL REF.	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (SQ.FT)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMED YES	FRAMED NO	REMARKS
H12	13	194+53	LT	D3-201	← Penland Pkwy / Merrill Field Dr →	108	42	31.50	N	2-2.5" PT	X		
H12	14	194+85	RT	D3-202	Glenn Hwy / ← SOUTH Downtown / NORTH Eagle River →	108	84	63.00	S	2-2.5" PT	X		
H12	15	195+92	RT	R6-1R	ONE WAY →	36	12	3.00	E	USE EXISTING	X		
				R1-1	STOP	36	36	9.00	E		X		
				R5-1	DO NOT ENTER	30	30	6.25	W			X	
H12	16	195+98	RT	R6-1R	ONE WAY →	36	12	3.00	E	USE EXISTING	X		MOUNT IN MEDIAN
H12	17	197+46	OH-RT	R3-5L	↰ ONLY	30	30	6.25	S	-		X	MOUNT TO EXISTING MASTARM
				R3-5L	↰ ONLY	30	30	6.25	S			X	
				R3-5A	↑ ONLY	30	30	6.25	S			X	
				R3-5R	↱ ONLY	30	30	6.25	S			X	
H12	18	197+74	RT	W11-2	(pedestrian)	30	30	6.25	S	-		X	RELOCATED FROM STA. 198+38 MOUNT TO EXISTING ELECTROLIER
				W16-9P	AHEAD	24	12	2.00	S			X	MOUNT TO EXISTING ELECTROLIER
H12	19	198+35	LT	R2-1	SPEED LIMIT 40	30	36	7.50	N	-		X	MOUNT TO EXISTING ELECTROLIER
H13	20	199+79	RT	W11-2	(pedestrian)	30	30	6.25	S	USE EXISTING		X	
				W16-7PL	↙	24	12	2.00	S			X	
H13	21	200+09	RT	R1-1	STOP	36	36	9.00	W	USE EXISTING	X		
H13	22	200+29	CL	OM2-1V	(signal)	6	12	0.50	N	USE EXISTING		X	MOUNT IN MEDIAN
H13	23	200+39	RT	R1-1	STOP	36	36	9.00	W	1-2.5" PT	X		

STATE OF ALASKA 49TH AARON L. HUNTING CE 106601 REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

SIGN SUMMARY

DESIGNED BY DLP | CHECKED BY ALH | DRAFTED BY DLP
SCALE N/A
DATE 8/4/2020 TIME 3:58 PM
DRAWING LOCATION
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY
PP\CIV3D19\PLANSET\00381_H14-H17_SIGN SUM.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	H17	H17

DRAWING LOCATION
C:\Users\DJPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 - AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\
DESIGN\01-PLANS\10381_H14-H17_SIGN_SUM.DWG

DATE 8/4/2020 TIME 3:58 PM | SCALE N/A | DESIGNED BY DLP | CHECKED BY ALH | DRAWN BY DLP

SALVAGE SIGN SUMMARY

SHEET	STATION	OFFSET	TYPE	LEGEND	QUANTITY (EACH)	REMARKS
H10	172+30	RT	R10-100	LEFT TURN ONLY ON GREEN BALL	1	
			D3-1	DEBARR RD	1	
			R10-3E	PUSH BUTTON COUNTDOWN EDUCATIONAL	2	
H10	174+16	LT	R3-7R	RIGHT LANE MUST TURN RIGHT	1	
H10	174+32	RT	R2-1	SPEED LIMIT 40	1	
H10	174+70	LT	SPECIAL	HOSPITAL (SYMBOL) HOSPITAL RT ARROW	1	
H10	176+21	LT	R1-1	STOP	1	
			SPECIAL	BUCKLE UP FOR SAFETY	1	
H10	176+26	RT	R4-7	KEEP RIGHT (SYMBOL)	1	
			OM-1	OBJECT MARKER TYPE 1	2	
H10	176+82	RT	R1-1	STOP	1	
H11	188+65	RT	R4-7	KEEP RIGHT (SYMBOL)	1	
			OM-1	OBJECT MARKER (TYPE 1)	2	
H12	192+16	RT	R10-100	LEFT TURN ONLY ON GREEN BALL	1	
			D3-1	AIRPORT HEIGHTS DR	1	
			D3-1	PENLAND PARKWAY	1	
			D3-1	AIRPORT HEIGHTS DR 700	1	
			R10-3E	PUSH BUTTON COUNTDOWN EDUCATIONAL	2	
H12	192+17	LT	R10-100	LEFT TURN ONLY ON GREEN BALL	1	
			D3-1	AIRPORT HEIGHTS DR 800	1	
			R10-3E	PUSH BUTTON COUNTDOWN EDUCATIONAL	2	
H12	192+93	RT	R10-100	LEFT TURN ONLY ON GREEN BALL	1	
			D3-102	MERRILL FIELD DR/PENLAND PKWY	1	
			R10-3E	PUSH BUTTON COUNTDOWN EDUCATIONAL	2	
H12	192+91	LT	R10-100	LEFT TURN ONLY ON GREEN BALL	1	
			D3-1	AIRPORT HEIGHTS DR	1	
			D3-1	AIRPORT HEIGHTS DR 800	1	
			D3-1	MERRILL FIELD DR 300	1	
			R10-3E	PUSH BUTTON COUNTDOWN EDUCATIONAL	2	
H12	195+92	RT	R6-1R	ONE WAY (RIGHT ARROW)	1	
			R1-1	STOP	1	
			R5-1	DO NOT ENTER	1	
H12	195+98	RT	R6-1R	ONE WAY (RIGHT ARROW)	1	
H12	196+02	LT	MOA	DON'T TRASH ALASKA	1	
H12	197+46	RT	R3-5L	LEFT ONLY	1	
			R3-5L	LEFT ONLY	1	
			R3-5A	AHEAD ONLY	1	
			R3-5R	RIGHT ONLY	1	
H12	198+39	RT	W11-2	PEDESTRIAN (SYMBOL)	1	
H12	198+35	LT	R2-1	SPEED LIMIT 40	1	
H13	199+79	RT	W11-2	PEDESTRIAN (SYMBOL)	1	
H13	200+09	RT	R1-1	STOP	1	
H13	200+30	CL	OM-1	OBJECT MARKER TYPE 1	1	

615.0005.0000 - DELINEATOR, FLEXIBLE

SHEET	STATION	OFFSET	QUANTITY (EACH)	REMARKS
H10	172+35	RT	1	
H10	175+00	RT	1	
H10	175+47	RT	1	
H11	188+63	RT	1	
H12	191+00	RT	1	
H12	192+03	RT	1	
H12	192+94	RT	1	
H12	195+88	LT	1	
H13	199+97	RT	1	
H13	200+41	RT	1	
H13	200+46	LT	1	
H13	200+57	RT	1	
		TOTAL:	12	
		PAY ITEM QUANTITIY:	12	

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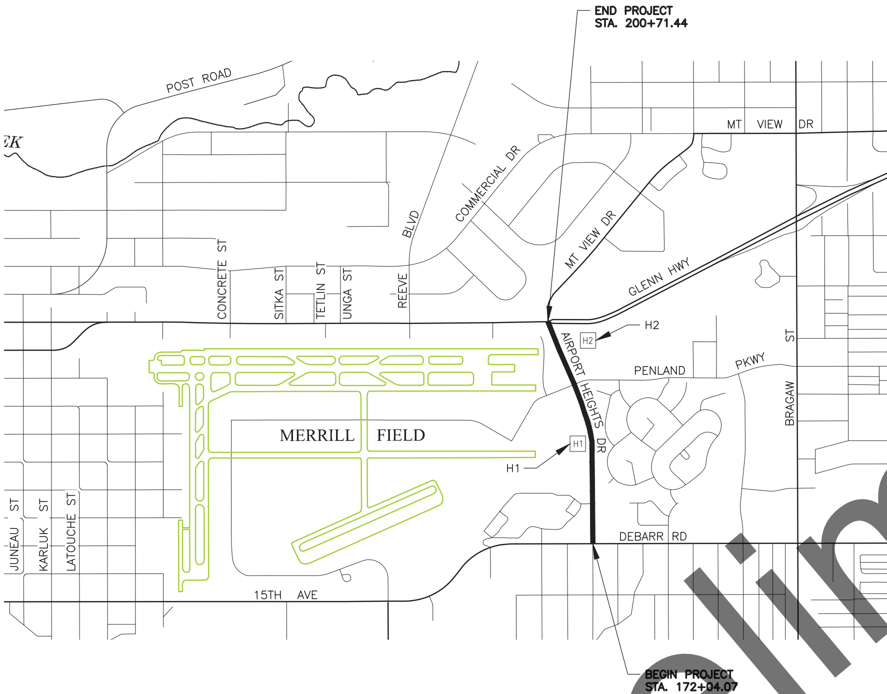
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

SIGN SUMMARY

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	K1	K5



DRAWING SHEET INDEX

SHEET NO.	DESCRIPTION
K1	ATR SITE PLAN
K2	H1 LOOP LAYOUT
K3	H2 LOOP LAYOUT
K4	ATR CABI CABINET DETAILS
K5	ATR LEAD-IN SPLICE AND OVERLAID PRESENCE LOOP DETAILS

GENERAL NOTES

1. INSTALLATION OF EQUIPMENT AND MATERIALS SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE CURRENT NATIONAL ELECTRICAL CODE, ALASKA DOT&PF STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND LOCAL AMENDMENTS.
2. EVERY EFFORT HAS BEEN MADE TO MAKE THIS INFORMATION CONTAINED IN THESE DOCUMENTS COMPLETE AND ACCURATE. HOWEVER, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS AND DIMENSIONS.
3. PVC FROM JUNCTION BOXED TO TRAFFIC LOOPS IS NOT ALLOWED. USE ONLY RMC OR IMC.
4. ALL PVC CONDUIT AND FITTINGS SHALL BE 1 INCH SCHEDULE 80.

REFERENCE SPECIFICATIONS

ALL WIRING SHALL BE CONSTRUCTED PER SPECIFICATION SECTION 660 SIGNALS AND LIGHTING, EXCEPT WHERE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS. ALL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATION SECTION 660-3.03 CONDUIT, 660-3.04 JUNCTION BOXES, 660-3.05 WIRING, 660-3.06 BONDING AND GROUNDING, AND 660-3.01.7 FIELD TESTS, EXCEPT AS MODIFIED BY SECTION 669 AUTOMATED TRAFFIC RECORDERS.

LABELS

ALL CABLES SHALL BE LABELED AT BOTH ENDS AND AT EVERY JUNCTION BOX THROUGH WHICH THE CABLES PASS, PER SPECIFICATION SECTION 660-3.05.13.

ALL WIRE PAIRS SHALL BE LABELED AT THE TERMINAL BLOCK AND AT ANY LOOSE ENDS.

THE FOLLOWING CONVENTIONS SHALL APPLY TO DESIGNATING AND LABELING CABLES AND WIRE PAIRS:

LANES: TRAFFIC LANES AND THEIR RESPECTIVE LOOPS AND SENSORS SHALL BE LABELED FROM THE OUTSIDE EDGE OF THE ROAD TOWARD THE CENTER AS FOLLOWS:

| A | B | C | D | | D | C | B | A |

TERMINAL BLOCKS: WIRES FROM SENSORS PLACED IN LANES WHICH ARE CLOSEST TO THE CONTROL BOX SHALL BE PLACED AT THE LEFT OR AT THE TOP OF THE TERMINAL BLOCK, DEPENDING ON ORIENTATION.

WIRES FOR INDUCTIVE LOOPS, SENSORS AND RESERVES ARE LABELED AS FOLLOWS:

PnDLc

WHERE:

- P — IS THE PREFIX:
  - V TRAFFIC VOLUME LOOP
  - H VEHICLE CLASSIFICATION / SPEED LOOP
  - GL AUTOMATIC VEHICLE CLASSIFICATION (AVC) SENSOR
  - Ga AUTOMATIC VEHICLE CLASSIFICATION PIEZO
- n — NUMBER SUFFIX FOR MULTIPLE LOOPS IN THE SAME LANE
- D — DIRECTION (N, S, E, W, NE, SE, SW, NW)
- L — IS THE PREFIX FOR ROAD DESIGNATION
  - L LANE*
  - R RAMP**
  - SR SPUR RAMP**
  - LP LOOP**
  - LR LOOP RAMP**
  - * ROADS AND HIGHWAYS
  - ** INTERCHANGES
- c — IS THE SUFFIX FOR LANE DESIGNATION (A, B, C, D)
- RMC — RIGID METAL CONDUIT, GALVANIZED
- IMC — INTERMEDIATE METAL CONDUIT
- ⟨#⟩ — CONDUIT REFERENCE NUMBER
- [#] — NOTE REFERENCE NUMBER

ATR ASSEMBLIES SCHEDULE

RECORDER NUMBER	CABINET STATION	CABINET OFFSET	NUMBER OF LANES	SITE NUMBER	CABINET ASSEMBLY STYLE	TYPE IA JUNCTION BOXES	INDUCTIVE LOOPS (QTY.)	PIEZO SENSORS (QTY.)
H1	184+89.9	31.1 LT		55231000	CBAI		4	
H2	198+23.4	50.6 RT		55225000	CBAI		6	

INDUCTIVE LOOPS

ALL INDUCTIVE LOOPS SHALL BE WOUND IN THE SAME DIRECTION WITH THE STARTING LEAD MARKED "S" PER SECTION 666-3.05.13.

LEAD-IN WIRES FOR EACH LOOP SHALL BE IN SEPARATE CONDUITS TO THE FIRST JUNCTION BOX. THESE CONDUITS SHALL BE SEPARATED FROM OTHER LOOPS BY A MINIMUM OF 12 INCHES.

INDUCTIVE LOOPS SHALL BE INSTALLED IMMEDIATELY PRIOR TO PAVING THIS SECTION OF ROADWAY. FINAL LIFT ASPHALT PAVEMENT SHALL BE SMOOTH OVER ALL INDUCTIVE LOOPS AND WITHOUT TRANSVERSE SEAMS, JOINTS, OR ROUGHNESS WITHIN 50 FEET OF THE LOOPS.

ATR ASSEMBLIES SCHEDULE

ALL WIRING SHALL BE CONSTRUCTED PER SPECIFICATION SECTION 660 SIGNALS AND LIGHTING, EXCEPT WHERE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS. ALL CONSTRUCTION SHALL CONFORM TO SPECIFICATION SECTIONS 660-3.03 CONDUIT, 660-3.04 JUNCTION BOXES, 660-3.05 WIRING, 660-3.06 BONDING AND GROUNDING, AND 660-3.01.7 FIELD TESTS, EXCEPT AS MODIFIED BY 669 AUTOMATED TRAFFIC RECORDERS.

STATE OF ALASKA 49TH AARON L. HUNTING CE 106601 REGISTERED PROFESSIONAL ENGINEER

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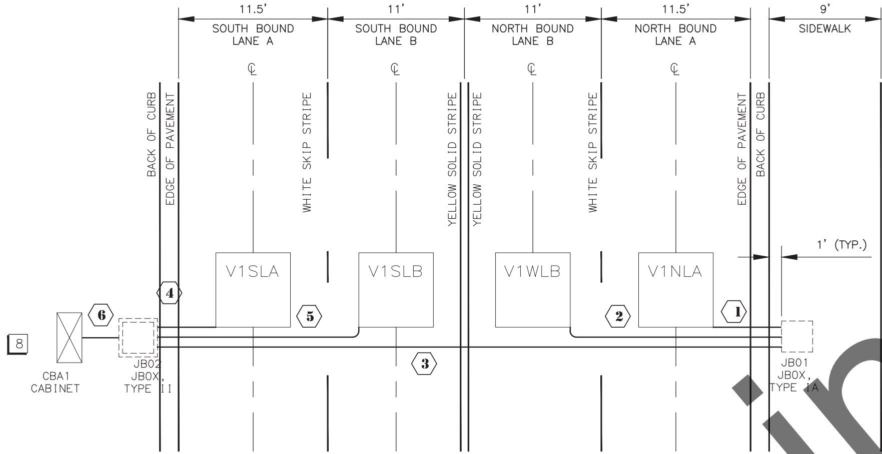
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS:
DEBARR TO GLENN HWY
PAVEMENT PRESERVATION

ATR SITE PLAN

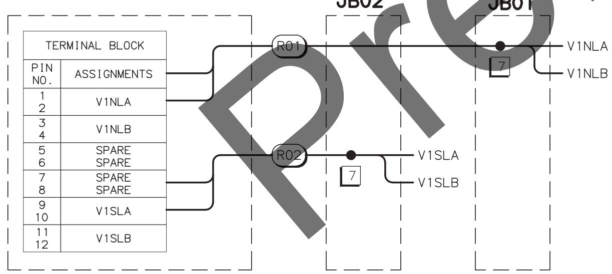
DESIGNED BY DLP
CHECKED BY ALH
DRAFTED BY DLP
SCALE N/A
DATE 7/22/2020 TIME 2:27 PM
DRAWING LOCATION
C:\USERS\DLPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY PP\CIV3D19\PLANSET\00381_K1-K5_ATR_SITE.DWG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	K2	K5



SENSOR, J-BOX, AND CABINET LAYOUT - H1

NOT TO SCALE



ONE LINE WIRING DIAGRAM

NOTES:

1. ALL PVC CONDUIT AND FITTINGS SHALL BE 1 INCH SCHEDULE 80.
2. INSTALL 1/2 INCH PREFORMED BITUMINOUS JOINT MATERIAL BETWEEN JBOX AND PAVEMENT WHEN JBOXES ARE LOCATED IMMEDIATELY ADJACENT TO A SIDEWALK OR ROAD SURFACE.
3. PROVIDE GROUNDING BUSHINGS ON ALL CONDUITS. GROUND WITH A MINIMUM #6 BARE CU.
4. INSTALL ALL LOOP DETECTORS PRIOR TO OVERLAYING PAVEMENT.
5. LOOPS TO BE CENTERED IN LANE.
6. MINIMUM SPACING BETWEEN TAIL AND LOOP OR PIEZO IS 1 FOOT. SENSOR TAILS SHALL NOT CROSS EACH OTHER.
7. SPLICE LOOP WIRING TO MULTI-PAIR CABLE USING NONREENTERABLE, WET LOCATION SPLICE. SEE TYPICAL SPLICE DETAIL.
8. CABINET DOOR TO OPEN AWAY FROM ROADWAY. SEE CABINET TYPE CBAI TYPE DETAIL.
9. ALL WORK TO BE COMPLETED WITHIN THE RIGHT-OF-WAY.
10. CABINET ASSIGNMENTS ARE FROM AS-BUILTS. FIELD VERIFY.

CONDUIT AND CONDUCTOR SCHEDULE

CONDUIT		FROM	TO	CABLE		
NO. ⬡	SIZE			QTY.	TYPE	NUMBER
1	1"	JB01	V1NLA	1	1 PR. #14	
2	1"	JB01	V1NLB	1	1 PR. #14	
3	2"	JB02	JB01	1	6 PR. #18	R01
4	1"	JB02	V1SLA	1	1 PR. #14	
5	1"	JB02	V1SLAB	1	1 PR. #14	
6	2"	JB02	CBA1	2	6 PR. #18	R01, R02

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STATE OF ALASKA
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AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

ATR H1 LAYOUT, CONDUIT & CONDUCTOR SCHEDULE & WIRING DIAGRAM

DESIGNED BY	DLP
CHECKED BY	ALH
DRAFTED BY	DLP
SCALE	N/A
DATE	7/22/2020
TIME	2:27 PM

DRAWING LOCATION
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PP\CIV3D19\PLANSET\00381_K1-K5_ATR SITE.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001620/CFHWY00381	2020	K3	K5

DRAWING LOCATION
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DESIGN\19-PLANS\10381_K1-K5_AIR_SITE.DWG

DESIGNED BY	DLP
CHECKED BY	ALH
DRAWN BY	DLP

SCALE
N/A

DATE	TIME
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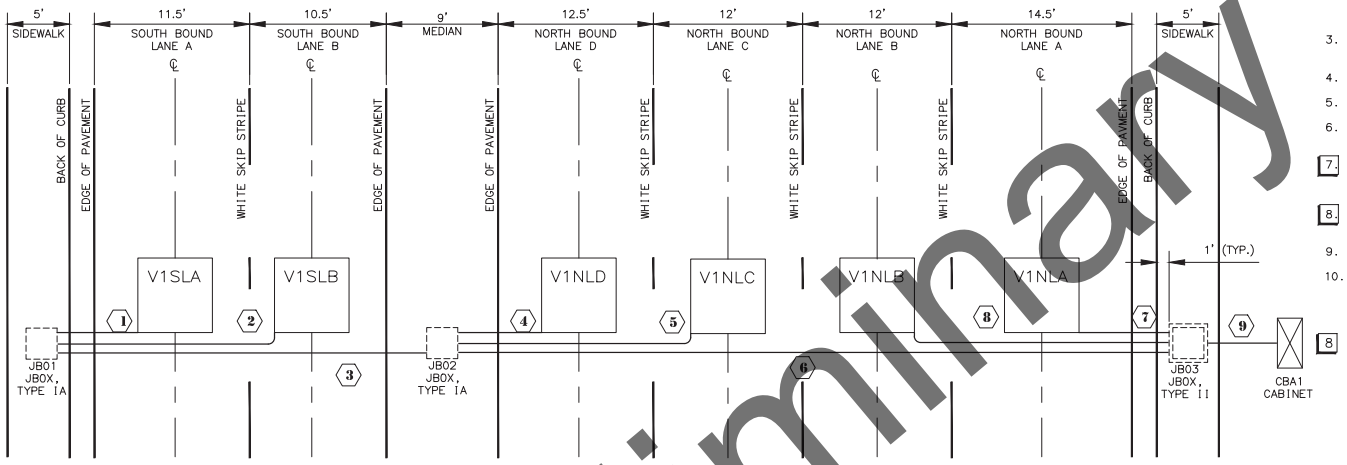
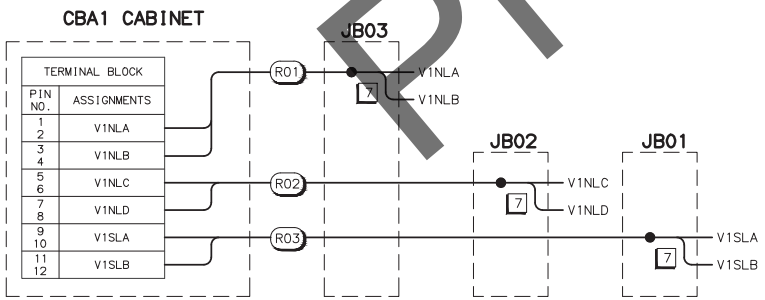


SENSOR, J-BOX, AND CABINET LAYOUT - H2

NOT TO SCALE



ONE LINE WIRING DIAGRAM

NOTES:

1. ALL PVC CONDUIT AND FITTINGS SHALL BE 1 INCH SCHEDULE 80.
2. INSTALL 1/2 INCH PREFORMED BITUMINOUS JOINT MATERIAL BETWEEN JBOX AND PAVEMENT WHEN JBOXES ARE LOCATED IMMEDIATELY ADJACENT TO A SIDEWALK OR ROAD SURFACE.
3. PROVIDE GROUNDING BUSHINGS ON ALL CONDUITS. GROUND WITH A MINIMUM #6 BARE CU.
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7. SPLICE LOOP WIRING TO MULTI-PAIR CABLE USING NONREENTERABLE, WET LOCATION SPLICE. SEE TYPICAL SPLICE DETAIL.
8. CABINET DOOR TO OPEN AWAY FROM ROADWAY. SEE CABINET TYPE CBAI DETAIL.
9. ALL WORK TO BE COMPLETED WITHIN THE RIGHT-OF-WAY.
10. CABINET ASSIGNMENTS ARE FROM AS-BUILTS. FIELD VERIFY.

CONDUIT AND CONDUCTOR SCHEDULE

CONDUIT		FROM	TO	CABLE		
NO. ⬡	SIZE			QTY.	TYPE	NUMBER
1	1"	JB01	V1SLA	1	1 PR. #14	
2	1"	JB01	V1SLB	1	1 PR. #14	
3	2"	JB02	JB01	1	6 PR. #14	R01
4	1"	JB02	V1NLD	1	1 PR. #14	
5	1"	JB02	V1NLC	1	1 PR. #14	
6	2"	JB03	JB02	2	6 PR. #18	R01, R02
7	1"	JB03	V1NLA	1	1 PR. #14	
8	1"	JB03	V1NLB	1	1 PR. #14	
9	2"	JB03	CBA1	1	6 PR. #18	R01, R02, R03

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

ATR H2 LAYOUT, CONDUIT & CONDUCTOR SCHEDULE & WIRING DIAGRAM

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	K4	K5

DRAWING LOCATION
C:\Users\DJPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381 - AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\PLANSET\00381_K1-K5_ATR_SITE.DWG

DESIGNED BY	DLP
CHECKED BY	ALH
DRAWN BY	DLP

SCALE	DATE	TIME
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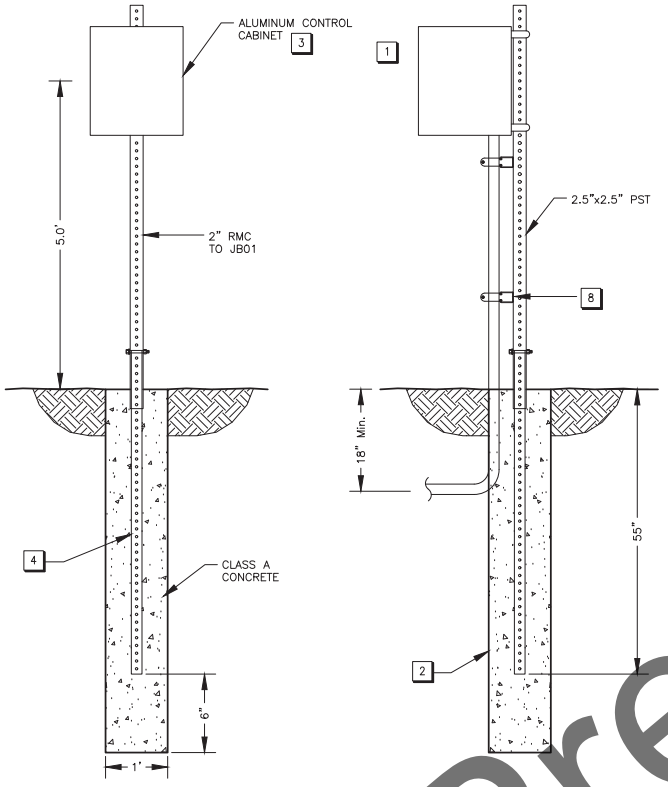
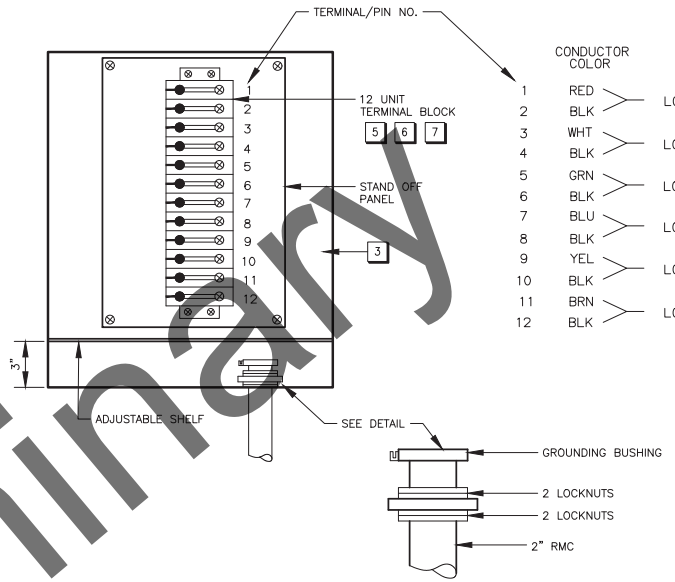


FRONT ELEVATION

SIDE ELEVATION

CABINET TYPE CBAI DETAIL

NOT TO SCALE



CABINET TYPE CBA1

FRONT VIEW, DOOR OPEN

NOTES:

1. CONTROLLER CABINET DOOR TO OPEN AWAY FROM THE ROADWAY.
2. INSTALL FOUNDATION IN SELECT MATERIAL, TYPE A. THE CONTRACTOR SHALL EXCAVATE AND BACKFILL WITH GRAVEL 2 FEET BELOW AND SURROUNDING THE FOUNDATION.
3. CONTRACTOR SHALL INSTALL SINGLE-DOOR, LOCKABLE, CONTINUOUS HINGE ENCLOSURE (WITH CLAMPS), WITH TYPE 3R OR 4X ENVIRONMENTAL RATING, nVENT-HOFFMAN CATALOG NUMBER A30H2408ALLP (30" X 24" X 8"), OR EQUAL, COMPLETE WITH MOUNTING PANEL, DIN RAIL, AND TERMINAL BLOCKS AS REQUIRED.
4. SLEEVE TYPE CONCRETE FOUNDATION. SEE ALASKA STANDARD PLAN S-30.04, PERFORATED STEEL TUBE (PST) POST.
5. TERMINATE ALL CONDUCTORS TO TERMINAL BLOCK. TERMINATE ALL CONDUCTORS WITH CRIMPED AND SOLDERED SPADE TYPE TERMINALS.
6. TY-RAPS TO PROVIDE STRAIN RELIEF FOR INCOMING CONDUCTORS.
7. LABEL SENSOR LEADS:
   USE THE INDUCTIVE LOOP DESIGNATION FOR IDENTIFICATION. SUCH AS "VISLA"
8. CONTRACTOR SHALL SECURE AND SUPPORT THE RMC PER NEC 344.30.

STATE OF ALASKA DOT&PF
4111 AVIATION AVENUE
ANCHORAGE, AK 99502
(907) 269-0590

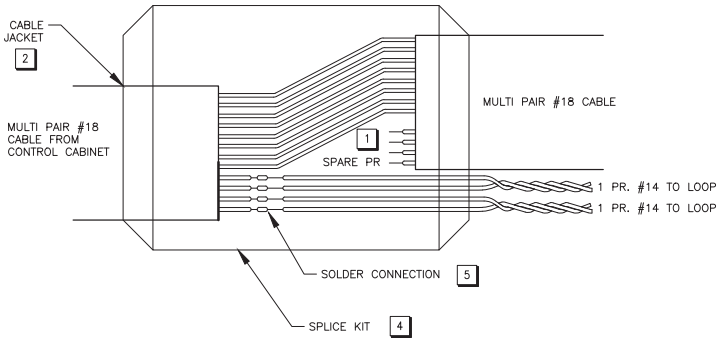
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

ATR CBAI CABINET DETAIL

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0001620/CFHWY00381	2020	K5	K5

DRAWING LOCATION
C:\Users\DPETERSON\ONEDRIVE - STATE OF ALASKA\CFHWY00381_AMATS_AIRPORT HEIGHTS_DEBARR TO GLENN HWY\
DESIGNED BY: DLP | CHECKED BY: ALH | DRAWN BY: DLP
SCALE: N/A
DATE: 7/22/2020 TIME: 2:27 PM

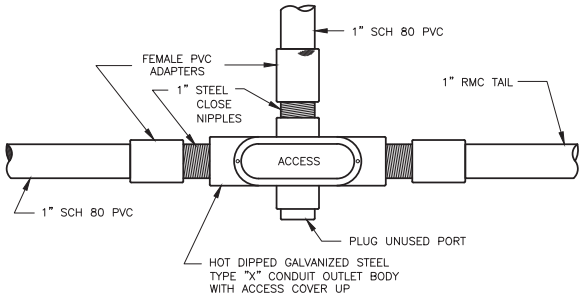


TYPICAL SPLICE DETAIL

NOT TO SCALE

NOTES:

1. TERMINATE ALL SPARS WITHIN THE SPICE BODY.
2. SPLICE BODY TO ENCLOSE ALL CABLE JACKETS.
3. STAGGER SPLICE POINTS. SOLDER CONNECTIONS, ENCLOSE EXPOSED CONDUCTORS IN ADHESIVE WALL HEAT SHRINK TUBING.
4. USE A NON-REENTERABLE, WITH LOCATION, COMMERCIAL SPLICE KIT 3M TYPE 82-F1 OR EQUIVALENT AS APPROVED BY THE ENGINEER.
5. SOLDER CONNECTIONS. DO NOT USE COMPRESSION CONNECTIONS. WARP CONDUCTORS OVER EACH OTHER BEFORE SOLDERING.



"X" BODY DETAIL

STATE OF ALASKA
AARON L. HUNTING
CE 106601
REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

AMATS: AIRPORT HEIGHTS: DEBARR TO GLENN HWY PAVEMENT PRESERVATION

ATR LEAD-IN SPLICE AND OVERBID PRESENCE LOOP DETAILS