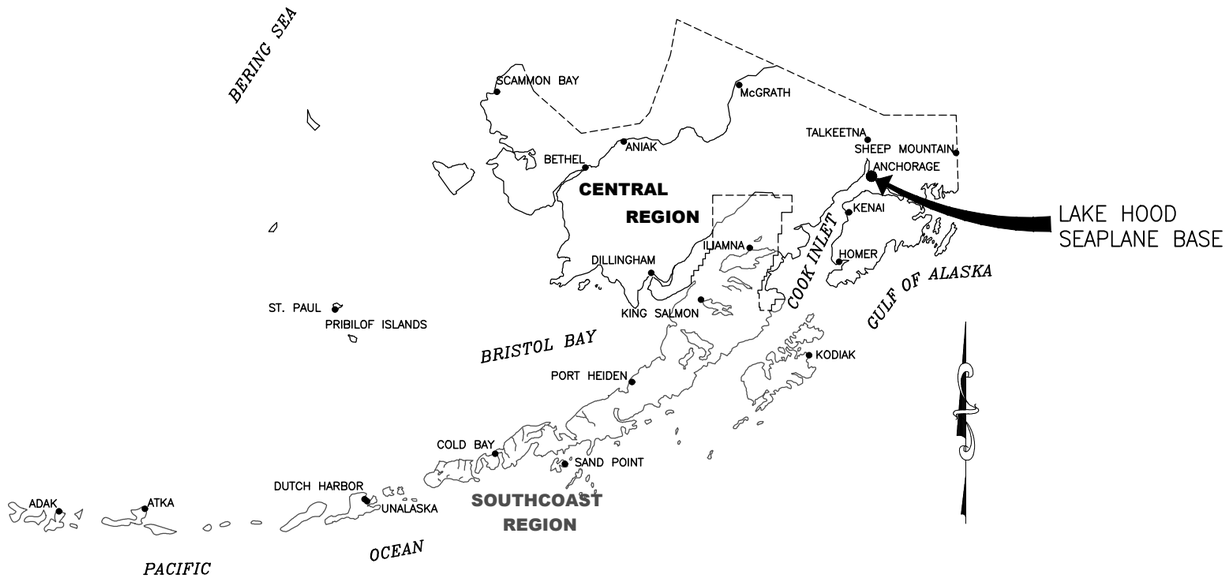
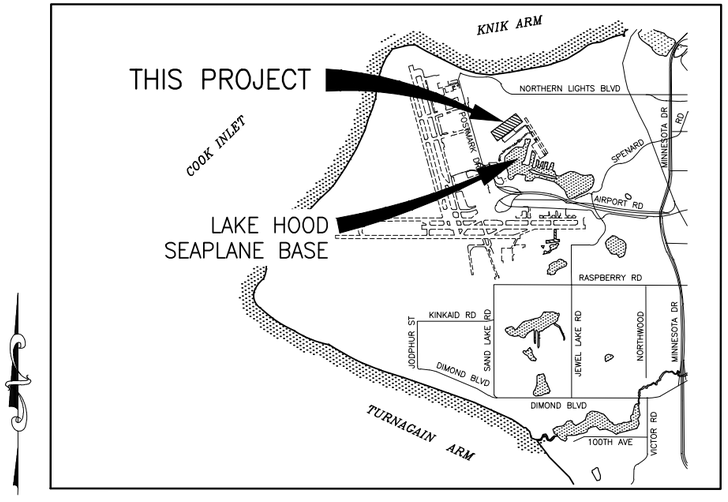


ALASKA CENTRAL REGION LOCATION MAP

NOT TO SCALE



VICINITY MAP

SCALE 1"= 1/2 MILE
T 13 N, R 14 W
SEWARD MERIDIAN
U.S.G.S. ANCHORAGE A-8

CONSTRUCTION PLANS

LAKE HOOD SEAPLANE BASE

ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
FAA MEMORANDUM OF AGREEMENT
No. 697DCK-22-T-00001

PS&E
APRIL 2025

CONCUR	**DATE**
JOEL G. ST. AUBIN, P.E.	**REGIONAL CONSTRUCTION ENGINEER**
APPROVED	**DATE**
LUKE BOWLAND, P.E.	**REGIONAL PRECONSTRUCTION ENGINEER**
APPROVED	**DATE**
STEVEN RZEPKA, P.E.	**AVIATION DESIGN GROUP CHIEF**
APPROVED	**DATE**
TADD ISAACSON, P.E.	**PROJECT MANAGER**

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
COVER

DATE: 04/09/2025

Designed By: AAT
Drawn By: RJB
Checked By: TRI

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
INDEX

DATE: 04/09/2025

SHEET: 2 OF 38

LEGEND

DESCRIPTION	EXISTING	PROPOSED
AIRPORT PROPERTY BOUNDARY		
BOLLARD / FLEXIBLE DELINEATOR		
BUILDING		
CENTERLINE (RUNWAY/TAXIWAY)		
CONTOURS	100	100
CULVERT WITH END SECTIONS		
DETAIL CALLOUT		1 / XXX
ELECTRICAL LINE (UNDERGROUND)	UGE	UGE
ELECTRICAL OUTLET		
FENCE (CHAIN-LINK)	x x	x x
FENCE (WOVEN WIRE)	xx xx	xx xx
GEOTEXTILE, SEPARATION		
GRADE BREAK		GB
IDENTIFICATION BUBBLE		ID
LABEL (PIPE CULVERT)		P-#
LIGHT POLE		
MANHOLE (STORM, TOP INTAKE)	FI	
OFA LINE	OFA	OFA
PAVEMENT/SHOULDER (EDGE)		
SIGN POST/MARKER		
STORM DRAIN LINE (UNDERGROUND)	SD	SD
TIE-DOWN		
TOE OF SLOPE		
CUT		
FILL		

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	LB	POUND
		LF	LINEAR FOOT
ABN-UE	ABANDONED UNDERGROUND ELECTRIC LINE	LS	LUMP SUM
APR	APRON	LT	LEFT
ATCT	AIR TRAFFIC CONTROL TOWER	MAINT	MAINTENANCE
ASP	ALASKA STANDARD PLANS	MAX	MAXIMUM
AWOS	AUTOMATED WEATHER OBSERVING SYSTEM	MIN	MINIMUM
BOP	BEGINNING OF PROJECT	MMA	METHYL METHACRYLATE
BVCS	BEGIN VERTICAL CURVE STATION	MPH	MILES PER HOUR
BVCE	BEGIN VERTICAL CURVE ELEVATION	N	NORTHING, NORTH
CAA	CORRUGATED ALUMINUM ALLOY	NOM	NOMINAL
CABC	CRUSHED AGGREGATE BASE COURSE	NTS	NOT TO SCALE
CF	CUBIC FEET	NIC	NOT IN CONTRACT
CL, ℄	CENTERLINE	NO	NUMBER
CPEP	CORRUGATED POLYETHYLENE PIPE	NW	NORTHWEST
CS	CONTINGENT SUM	OC	ON CENTER
CSP	CORRUGATED STEEL PIPE	OFA	OBJECT FREE AREA
CSPP	CONSTRUCTION SAFETY AND PHASING PLAN	OC	ON CENTER
CY	CUBIC YARD	OG	ORIGINAL GROUND
DIA, D	DIAMETER	PC	POINT OF CURVATURE
DEMO	DEMOLITION	PG	PERFORMANCE GRADE
DOT	DEPARTMENT OF TRANSPORTATION	PI	POINT OF INTERSECTION
E	EASTING, EAST	PST	PERFORATED STEEL TUBE
EA	EACH	PT	POINT OF TANGENCY
ELEV	ELEVATION	PVI	POINT OF VERTICAL INTERSECTION
EMBK	EMBANKMENT	RAP	RECYCLED ASPHALT PAVEMENT
EOP	END OF PROJECT	RD	ROAD
ESCP	EROSION AND SEDIMENT CONTROL PLAN	REQ'D	REQUIRED
EVCS	END VERTICAL CURVE STATION	RT	RIGHT
EVCE	END VERTICAL CURVE ELEVATION	SF	SQUARE FEET
FES	FLARED END SECTION	SS	SANITARY SEWER LINE
FG	FINISHED GRADE	SW	SOUTHWEST
FT	FOOT	STA	STATION
GA	GAUGE	SY	SQUARE YARD
GALV	GALVANIZED	TW	TAXIWAY
GB	GRADE BREAK	TYP	TYPICAL
HMA	HOT MIX ASPHALT	UGE	UNDERGROUND ELECTRICAL LINE
HR	HOUR	UGT	UNDERGROUND COMMUNICATION LINE
ID	INSIDE DIAMETER	W	WEST
IN	INCHES	W/	WITH
K	CURVATURE		

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
LEGEND

DATE: 04/09/2025
SHEET: 3 OF 38

Designed By: AAT
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ESTIMATED QUANTITIES

No.	ITEM	UNIT	QUANTITY
D701.010.0018	CS PIPE, 18–INCH	LF	77
D701.020.0018	CPE PIPE, 18–INCH, TYPE S	LF	922
D701.040.0024	CAA PIPE, 24–INCH	LF	271
D751.010.0048	MANHOLE, TYPE I, 48–INCH	EA	4
D760.010.0030	THAW PIPE, 1.5–INCH	LF	348
F161.050.0000	WOVEN WIRE FENCE, 8 FOOT	LF	880
F162.010.0008	8–FEET CHAIN–LINK FENCE	LF	1,600
F162.095.0000	TEMPORARY SECURITY FENCE	LS	ALL REQ'D
F170.010.0000	STEEL BOLLARD	EA	9
G100.010.0000	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQ'D
G135.010.0000	CONSTRUCTION SURVEYING BY THE CONTRACTOR	LS	ALL REQ'D
G135.020.0000	EXTRA THREE PERSON SURVEY PARTY	HR	40
G135.050.0000	CONTRACTOR FURNISHED ENGINEERING TOOLS	CS	ALL REQ'D
G150.010.0075	EQUIPMENT RENTAL, DOZER 75–HP MINIMUM	HR	35
G200.010.0000	CONTRACTOR QUALITY CONTROL PROGRAM	LS	ALL REQ'D
G300.010.0000	CPM SCHEDULING	LS	ALL REQ'D
G301.010.0000	PULL PLANNING	LS	ALL REQ'D
G710.020.0000	HIGHWAY FLAGGER	CS	ALL REQ'D
G710.040.0000	HIGHWAY TRAFFIC CONTROL	CS	ALL REQ'D
L150.010.0000	WEATHERPROOF OUTLETS	LS	ALL REQ'D
L155.020.0000	APRON LIGHTING	LS	ALL REQ'D
L160.030.0000	LOAD CENTER, TYPE 2	EA	1
P151.040.0000	CLEARING & GRUBBING	LS	ALL REQ'D
P152.010.0000	UNCLASSIFIED EXCAVATION	CY	76,000
P154.020.0000	SUBBASE COURSE	TON	221,000
P161.020.0000	RECYCLED ASPHALT PAVEMENT	CY	650
P165.010.0000	REMOVAL OF STRUCTURES	LS	ALL REQ'D
P165.080.0000	REMOVAL AND RELOCATION OF STRUCTURES	LS	ALL REQ'D
P170.020.0000	SOIL TESTING PROGRAM	CS	ALL REQ'D
P170.040.0000	SUPPLEMENTAL LABORATORY TEST	CS	ALL REQ'D
P170.080.0000	"HOT" MATERIAL OFFSITE TRANSPORTATION AND DISPOSAL	CS	ALL REQ'D
P171.010.0000	TEMPORARY CONTAMINATED SOIL STOCKPILE	CS	ALL REQ'D
P180.020.0000	RIPRAP, CLASS I	TON	16
P209.020.0000	CRUSHED AGGREGATE BASE COURSE	TON	7,250
P401.010.0030	HOT MIX ASPHALT TYPE II, CLASS A	TON	5,450
P401.020.5240	ASPHALT BINDER, PG 52–40	TON	289
P401.080.0000	HOT MIX ASPHALT PRICE ADJUSTMENT	CS	ALL REQ'D
P401.110.0000	LONGITUDINAL JOINT DENSITY PRICE ADJUSTMENT	CS	ALL REQ'D
P401.120.0000	ASPHALT BINDER QUALITY PRICE ADJUSTMENT	CS	ALL REQ'D
P620.020.0000	RUNWAY AND TAXIWAY PAINTING	LS	ALL REQ'D
P620.020.0000*	RUNWAY AND TAXIWAY PAINTING	LS	ALL REQ'D
P620.110.0000	INLAID MMA PAVEMENT MARKINGS (LONGITUDINAL, TRANSVERSE, AND GORE)	SF	2,550
P641.010.0000	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQ'D
P641.050.0000	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL BY DIRECTIVE	CS	ALL REQ'D
P641.060.0000	WITHHOLDING	CS	ALL REQ'D
P641.070.0000	SWPPP MANAGER	LS	ALL REQ'D
P650.010.0000	AIRCRAFT TIE–DOWN	EA	135
P660.030.0000	REFLECTIVE MARKER, TYPE II	EA	19
P661.010.0000	STANDARD SIGN	SF	46
P670.010.0000	HAZARD MARKER BARRIER, PLASTIC	EA	23
P671.020.0000	RUNWAY CLOSURE MARKER, ILLUMINATED	EA	2
P671.040.0000	TAXIWAY CLOSURE MARKER, VINYL MESH	EA	4
P681.020.0000	GEOTEXTILE, STABILIZATION	SY	32,900
P682.020.0000	GEOTEXTILE, EROSION CONTROL	SY	600
P685.010.0000	GEOGRID	SY	43,900
T901.010.0000	SEEDING	ACRE	2

ESTIMATING FACTORS

No.	ITEM	FACTOR
P154.020.0000	SUBBASE COURSE	2.0 TON/CY
P180.020.0000	RIPRAP, CLASS I	1.5 TON/CY
P209.020.0000	CRUSHED AGGREGATE BASE COURSE	2.0 TON/CY
P401.010.0030	HOT MIX ASPHALT TYPE II, CLASS A	2.05 TON/CY
P401.020.5240	ASPHALT BINDER, PG 52–40	5.3%
P603.010.0010	TACK COAT, STE–1	0.8416 LB/SY
T901.020.0000	SEEDING	5 LB/1,000 SF

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PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
ESTIMATED QUANTITIES

DATE: 04/09/2025

SHEET: 4 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:54 PM
Layout Name: Est Quantities
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D701.0X0.00XX PIPE SUMMARY

PIPE		INLET			OUTLET			SLOPE	LENGTH (FT)			END SECTIONS	ALIGNMENT	CSPP PHASE	SHEET NO.	REMARKS
NUMBER	SIZE (IN)	STATION	OFFSET (FT)	INVERT	STATION	OFFSET (FT)	INVERT		D701.010.0018	D701.020.0018	D701.040.0024					
P-1	18	S-1		67.16	S-2		65.91	0.50%		250.0		0	STORM DRAIN	3	18	INSTALL INSULATION BOARD (TYP). SEE DETAILS 1/26
P-2	18	S-2		65.81	S-3		64.56	0.50%		250.0		0	STORM DRAIN	3	18	INSTALL INSULATION BOARD (TYP). SEE DETAILS 1/26
P-3	18	S-3		64.46	S-4		63.21	0.50%		250.0		0	STORM DRAIN	3	19	INSTALL INSULATION BOARD (TYP). SEE DETAILS 1/26
P-4	18	S-4		63.11	309+21.47	0	62.60	0.30%		172.0		1	STORM DRAIN	3	19	INSTALL INSULATION BOARD (TYP). SEE DETAILS 1/26
P-5	24	14+26.15	33.98LT	67.29	14+26.15	37.96RT	66.75	0.75%			71.9	2	RD	4	16	
P-6	24	16+31.73	30.74LT	66.48	16+31.73	35.71RT	66.19	0.44%			66.4	2	RD	4	16	
P-7	24	18+39.98	29.81LT	65.42	18+73.25	49.53RT	65.34	0.09%			86.2	2	RD	4	16	
P-10	24	46+32.12	183.94RT	62.10	46+78.32	179.59RT	61.84	0.56%			46.4	2	APRON	6	36	REFER TO SHEET 36
TP-1	18	109+57.02	38.73RT	75.65	109+56.79	37.91LT	75.21	0.57%	77.0			0	TEMP TW & APRON	1	AC4	
								TOTALS:	77	922	271					

D760.010.0030 THAW PIPE, 1.5-INCH

NUMBER	LENGTH	SHEET NO.	REMARKS
P-5	71.9	16	
P-6	66.4	16	
P-7	86.2	16	
P-10	46.4	36	
TP-1	76.6	AC4	
TOTALS:	348		

D751.XXX.XXXX STRUCTURE SUMMARY

STRUCTURE	STATION	OFFSET (FT)	RIM ELEVATION	DIAMETER (IN)	D751.010.0048	CASTING TYPE	ALIGNMENT	CSPP PHASE	SHEET NO.	REMARKS
S-1	300+00.00	0	74.04	48	1	24" ROUND, SLOTTED	STORM DRAIN	3	18	
S-2	302+50.00	0	71.79	48	1	24" ROUND, SLOTTED	STORM DRAIN	3	18	
S-3	305+00.00	0	69.54	48	1	24" ROUND, SLOTTED	STORM DRAIN	3	19	
S-4	307+50.00	0	67.79	48	1	24" ROUND, SLOTTED	STORM DRAIN	3	19	
				TOTALS:	4					

P165.010.0000 REMOVAL OF STRUCTURES

STATION	OFFSET (FT)	ALIGNMENT	PHASE	SHEET NO.	REMARKS
18+65.57	15.48RT	RD	1	9	REMOVE 24-INCH PIPE WITH THAW PIPE (54.5 LF)
18+80.01	11.77RT	RD	1	9	REMOVE STANDARD SIGN
20+55.05	21.79LT	RD	1	9	REMOVE STANDARD SIGN
33+44.04	6.70RT	APRON	1	9	REMOVE STANDARD SIGN
34+91.27	6.92RT	APRON	1	9	REMOVE STANDARD SIGN
31+72.05	70.67RT	APRON	3	9	REMOVE TIE DOWN
32+16.99	70.83RT	APRON	3	9	REMOVE TIE DOWN
32+61.83	70.70RT	APRON	3	9	REMOVE TIE DOWN
37+56.87	70.49RT	APRON	3	9	REMOVE TIE DOWN
38+01.78	70.78RT	APRON	3	9	REMOVE TIE DOWN
42+06.56	70.52RT	APRON	3	9	REMOVE TIE DOWN
42+38.25	54.51RT	APRON	3	9	REMOVE BOLLARD
42+45.73	54.76RT	APRON	3	9	REMOVE BOLLARD
42+51.19	50.14RT	APRON	3	9	REMOVE BOLLARD
46+21.58	174.12RT	APRON	6	36	REMOVE 18" CMP (24.0 LF)
46+32.12	183.94RT	APRON	6	36	REMOVE 18" CMP AND THAW PIPE (46.4 LF)

F161.050.0008 8-FEET WOVEN-WIRE FENCE

BEGIN STATION	OFFSET (FT)	END STATION	OFFSET (FT)	LENGTH (FT)	ALIGNMENT	SHEET NO	REMARKS
8+97.28	100.69L	10+97.24	102.53L	238.27	RD	15	WILDLIFE FENCE
10+97.24	102.53L	17+26.91	41.37L	640.65	RD	16	WILDLIFE FENCE
			TOTAL:	878.925			

F162.010.0008 8-FEET CHAIN-LINK FENCE

BEGIN STATION	OFFSET (FT)	END STATION	OFFSET (FT)	LENGTH (FT)	ALIGNMENT	SHEET NO	REMARKS
31+63.79	44.74RT	42+38.45	112.00LT	1388.71	APRON	20-21	SECURITY FENCE
42+86.70	64.00LT	43+69.98	82.09LT	85.22	APRON	21	SECURITY FENCE
42+38.45	112.00LT	42+86.70	64.00LT	96.25	APRON	21	PRIVACY FENCE
			TOTAL:	1600			

F162.095.0000 TEMPORARY FENCE

BEGIN STATION	OFFSET (FT)	END STATION	OFFSET (FT)	LENGTH (FT)	ALIGNMENT	SHEET NO	REMARKS
31+59.95	44.74RT	43+06.90	44.42RT	1183.74	APRON	AC9	CSPP
100+99.14	193.16LT	108+13.93	57.21RT	897.53	TEMP APRON	AC5	CSPP
			TOTAL:	2081.26			

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LAKE HOOD SEAPLANE BASE
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ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
SUMMARY TABLES

DATE: 04/09/2025

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File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-Cover-Index-Est Quantities.dwg

P620.110.0000 INLAID MMA PAVEMENT MARKINGS (LONGITUDINAL, TRANSVERSE, AND GORE)

BEGIN STATION	OFFSET (FT)	END STATION	OFFSET (FT)	AREA (SF)	ALIGNMENT	PHASE	SHEET NO	DESCRIPTION
3+25.00	12.0L	22+15.00	12.0L	625.2	RD CL	4	32	RD EDGE STRIPE/FOG/WHITE
3+25.00	12.0R	22+15.00	12.0R	631.4	RD CL	4	32	RD EDGE STRIPE/FOG/WHITE
3+25.00	0	22+15.00	0	1256.7	RD CL	4	32	RD CL STRIP/DOUBLE YELLOW
			TOTAL:	2513.3				

P650.010.0000 AIRCRAFT TIE-DOWN

POINT #	BEGIN STATION	OFFSET (FT)	ALIGNMENT	SHEET NO	REMARKS
1	34+48.20	213.00LT	APRON	20	MEDIUM TIE-DOWN
2	34+98.20	213.00LT	APRON	20	MEDIUM TIE-DOWN
3	35+48.20	213.00LT	APRON	20	MEDIUM TIE-DOWN
4	35+98.20	213.00LT	APRON	20	MEDIUM TIE-DOWN
5	36+48.20	213.00LT	APRON	20	MEDIUM TIE-DOWN
6	36+98.20	213.00LT	APRON	20	MEDIUM TIE-DOWN
7	37+48.20	213.00LT	APRON	20	MEDIUM TIE-DOWN
8	37+98.20	213.00LT	APRON	20	MEDIUM TIE-DOWN
9	34+28.95	114.00LT	APRON	20	MEDIUM TIE-DOWN
10	34+78.95	114.00LT	APRON	20	MEDIUM TIE-DOWN
11	35+28.95	114.00LT	APRON	20	MEDIUM TIE-DOWN
12	35+78.95	114.00LT	APRON	20	MEDIUM TIE-DOWN
13	36+28.95	114.00LT	APRON	20	MEDIUM TIE-DOWN
14	36+78.95	114.00LT	APRON	20	MEDIUM TIE-DOWN
15	34+03.95	74.00LT	APRON	20	MEDIUM TIE-DOWN
16	34+53.95	74.00LT	APRON	20	MEDIUM TIE-DOWN
17	35+03.95	74.00LT	APRON	20	MEDIUM TIE-DOWN
18	35+53.95	74.00LT	APRON	20	MEDIUM TIE-DOWN
19	36+03.95	74.00LT	APRON	20	MEDIUM TIE-DOWN
20	36+53.95	74.00LT	APRON	20	MEDIUM TIE-DOWN
21	37+03.95	74.00LT	APRON	20	MEDIUM TIE-DOWN
22	38+63.45	74.00LT	APRON	21	MEDIUM TIE-DOWN
23	39+13.45	74.00LT	APRON	21	MEDIUM TIE-DOWN

P650.010.0000 AIRCRAFT TIE-DOWN

POINT #	BEGIN STATION	OFFSET (FT)	ALIGNMENT	SHEET NO	REMARKS
24	39+63.45	74.00LT	APRON	21	MEDIUM TIE-DOWN
25	40+13.45	74.00LT	APRON	21	MEDIUM TIE-DOWN
26	40+63.45	74.00LT	APRON	21	MEDIUM TIE-DOWN
27	41+13.45	74.00LT	APRON	21	MEDIUM TIE-DOWN
28	41+63.45	74.00LT	APRON	21	MEDIUM TIE-DOWN
29	42+13.45	74.00LT	APRON	21	MEDIUM TIE-DOWN
30	33+29.34	25.00RT	APRON	20	SMALL TIE-DOWN
31	33+74.34	25.00RT	APRON	20	SMALL TIE-DOWN
32	34+19.34	25.00RT	APRON	20	SMALL TIE-DOWN
33	34+64.34	25.00RT	APRON	20	SMALL TIE-DOWN
34	35+09.34	25.00RT	APRON	20	SMALL TIE-DOWN
35	35+54.34	25.00RT	APRON	20	SMALL TIE-DOWN
36	35+99.34	25.00RT	APRON	20	SMALL TIE-DOWN
37	36+44.34	25.00RT	APRON	20	SMALL TIE-DOWN
38	36+89.34	25.00RT	APRON	20	SMALL TIE-DOWN
39	38+69.15	25.00RT	APRON	21	SMALL TIE-DOWN
40	39+14.15	25.00RT	APRON	21	SMALL TIE-DOWN
41	39+59.15	25.00RT	APRON	21	SMALL TIE-DOWN
42	40+04.15	25.00RT	APRON	21	SMALL TIE-DOWN
43	40+49.15	25.00RT	APRON	21	SMALL TIE-DOWN
44	40+94.15	25.00RT	APRON	21	SMALL TIE-DOWN
45	41+39.15	25.00RT	APRON	21	SMALL TIE-DOWN

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:54 PM
Layout Name: Summary Tables 3
File Path and Name: W:\Projects\ANA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-Cover-Index-Est Quantities.dwg

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
SUMMARY TABLES

DATE: 04/09/2025

P660.030.0000 REFLECTIVE MARKER, TYPE II

STATION	OFFSET (FT)	ALIGNMENT	WIDTH (IN)	HEIGHT (IN)	PHASE	SHEET NO.	REMARKS
31+66.60	47.70RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
33+66.59	70.65RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
32+63.99	70.72RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
32+64.00	48.29RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
32+88.67	20.57RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
33+46.76	66.95LT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
33+86.00	118.43LT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
37+39.80	19.40RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
37+39.80	68.40LT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
37+39.80	119.60LT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
37+44.05	70.82RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
37+44.11	48.20RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
38+23.24	71.00RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
38+23.30	48.20RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
38+27.61	19.40RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
38+27.61	68.40LT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
41+99.30	19.40RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
42+03.49	70.56RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	
42+03.61	48.20RT	APRON	REFERENCE MARKING DETAIL 2/34		3	33	

P661.010.0000 STANDARD SIGN SUMMARY

SIGN #	STATION	OFFSET	ASDS CODE	WIDTH (IN)	HEIGHT (IN)	AREA (SF)	SIGN FACE DIRECTION	POST SIZE TYPE	ALIGNMENT	SHEET NO.	REMARKS
1	1+35.39	24.00RT	R2-1	24	30	5.00	SW	2.5" PST	RD	32	SPEED LIMIT - 35 MPH
2	2+33.30	24.00RT	W1-4L_Y	36	36	9.00	SW	2.5" PST	RD	32	REVERSE CURVE LEFT
3	13+99.78	23.93LT	W1-4L_Y	36	36	9.00	E	2.5" PST	RD	32	REVERSE CURVE LEFT
4	14+30.61	24.00RT	W1-2L_Y	36	36	9.00	W	2.5" PST	RD	32	LEFT CURVE
5	21+21.01	23.80LT	W1-2R_Y	30	30	9.00	N	2.5" PST	RD	32	RIGHT CURVE
6	22+21.01	23.86LT	R2-1	24	30	5.00	N	2.5" PST	RD	32	SPEED LIMIT - 35 MPH
					TOTAL:	46.00					

APPROACH SUMMARY

SHEET	STATION	OFFSET	SKEW ANGLE	TYPE				WIDTH (FT)	LENGTH (FT)	REMARKS
				PUB.	RES.	COM. FARM	ACCESS TRAIL			
17	17+85.43	LT	67		X			20	37.24	
17	17+85.45	RT	113		X			20	93.28	

BY	DATE	REVISION

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
SUMMARY TABLES

DATE: 04/09/2025
SHEET: 7 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised:
Layout Name: 4/09/2025, 12:54 PM
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil\Planset\00831-ANC-Cover-Index-Est Quantities.dwg
Summary Tables 4

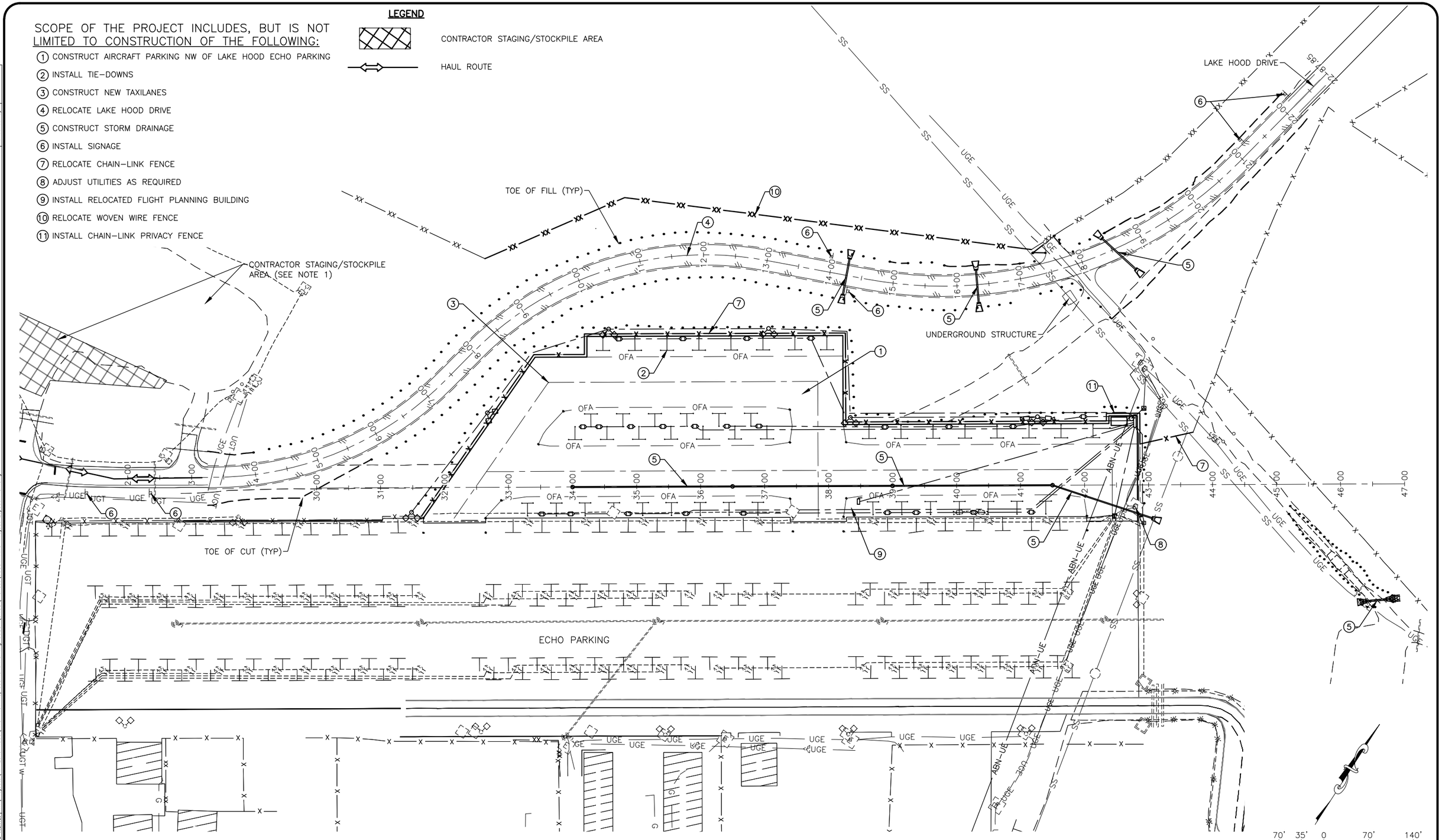
SCOPE OF THE PROJECT INCLUDES, BUT IS NOT LIMITED TO CONSTRUCTION OF THE FOLLOWING:

1. CONSTRUCT AIRCRAFT PARKING NW OF LAKE HOOD ECHO PARKING
2. INSTALL TIE-DOWNS
3. CONSTRUCT NEW TAXILANES
4. RELOCATE LAKE HOOD DRIVE
5. CONSTRUCT STORM DRAINAGE
6. INSTALL SIGNAGE
7. RELOCATE CHAIN-LINK FENCE
8. ADJUST UTILITIES AS REQUIRED
9. INSTALL RELOCATED FLIGHT PLANNING BUILDING
10. RELOCATE WOVEN WIRE FENCE
11. INSTALL CHAIN-LINK PRIVACY FENCE

LEGEND

CONTRACTOR STAGING/STOCKPILE AREA

HAUL ROUTE



PROJECT LAYOUT PLAN GENERAL NOTES:

1. LOCATE CONSTRUCTION STAGING WITHIN THE ACTIVE WORK AREA OR AS SHOWN.

BY	DATE	REVISION

STATE OF ALASKA
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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
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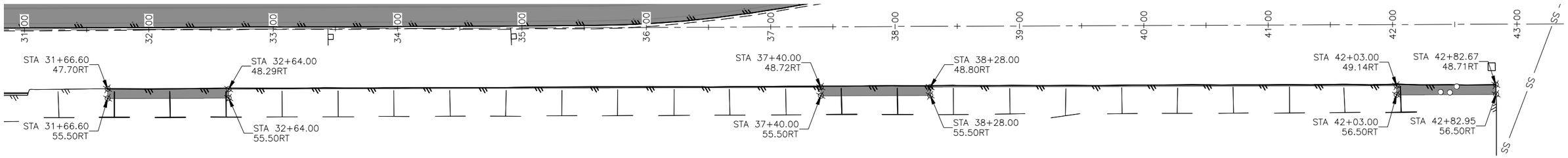
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
PROJECT LAYOUT PLAN DETAIL

DATE: 04/09/2025

SHEET: 8 OF 38

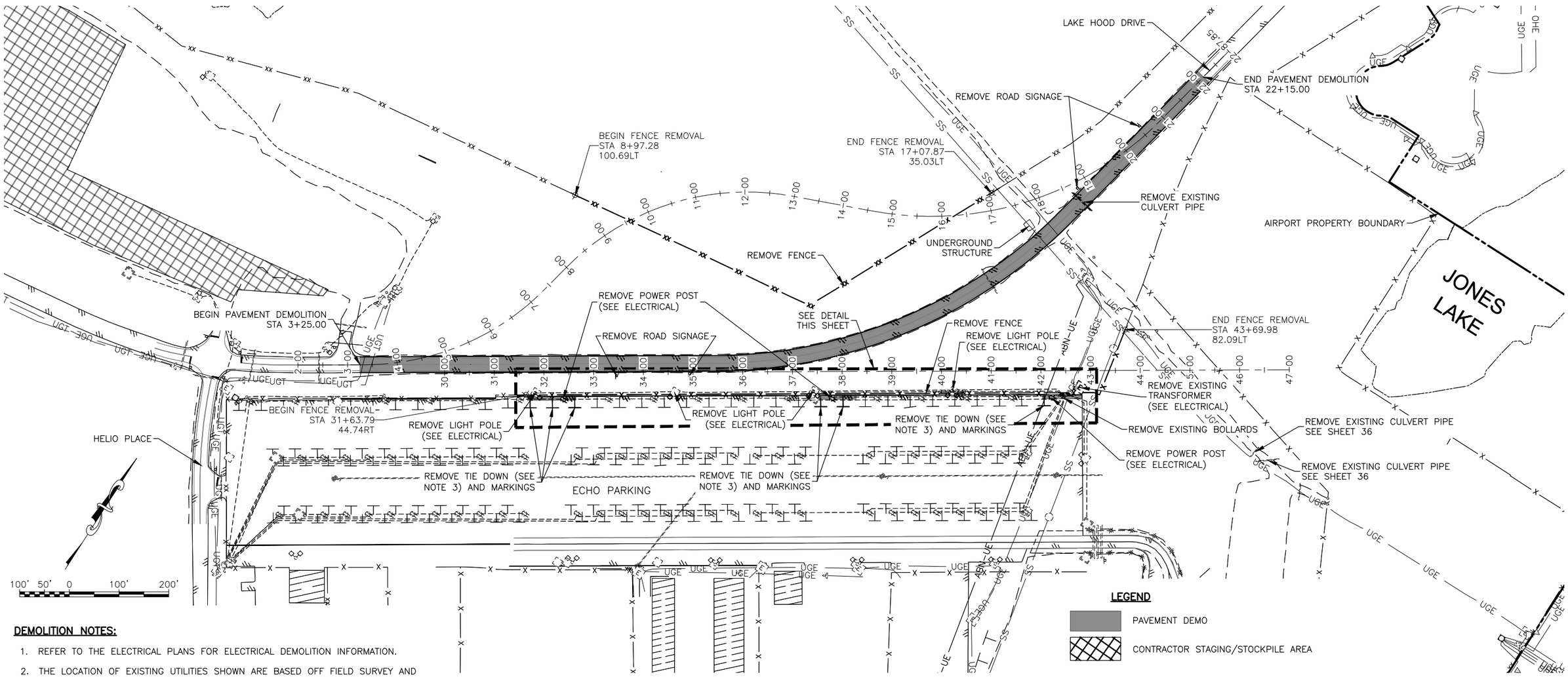
Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:55 PM
Layout Name: PLP_2
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil\3D\Planset\00831-ANC-Project Layout Plan.dwg



PAVEMENT DEMO DETAIL

40' 20' 0 40' 80'



LEGEND

- PAVEMENT DEMO
- CONTRACTOR STAGING/STOCKPILE AREA

DEMOLITION NOTES:

1. REFER TO THE ELECTRICAL PLANS FOR ELECTRICAL DEMOLITION INFORMATION.
2. THE LOCATION OF EXISTING UTILITIES SHOWN ARE BASED OFF FIELD SURVEY AND AS-BUILT RECORDS. THEY ARE APPROXIMATE LOCATIONS ONLY AND NOT ALL UTILITIES MAY BE SHOWN. CONTRACTOR TO FIELD LOCATE UTILITIES PRIOR TO EXCAVATION.
3. CUT TIE DOWN AS FAR BELOW GRADE AS PRACTICABLE, FILL REMAINING DEPRESSION WITH EPOXY.

BY	DATE	REVISION

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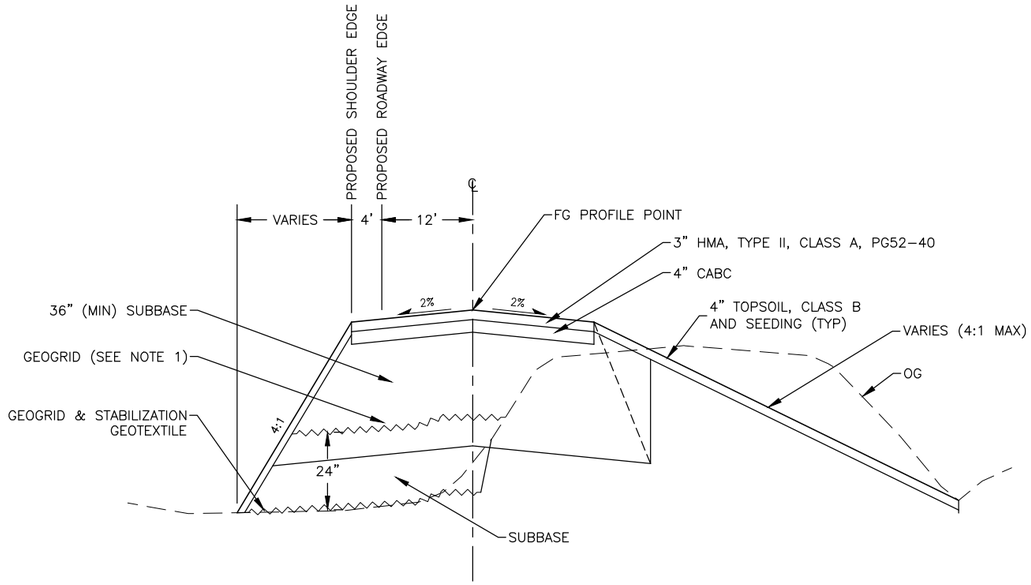
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
DEMOLITION PLAN

DATE: 04/09/2025
SHEET: 9 OF 38

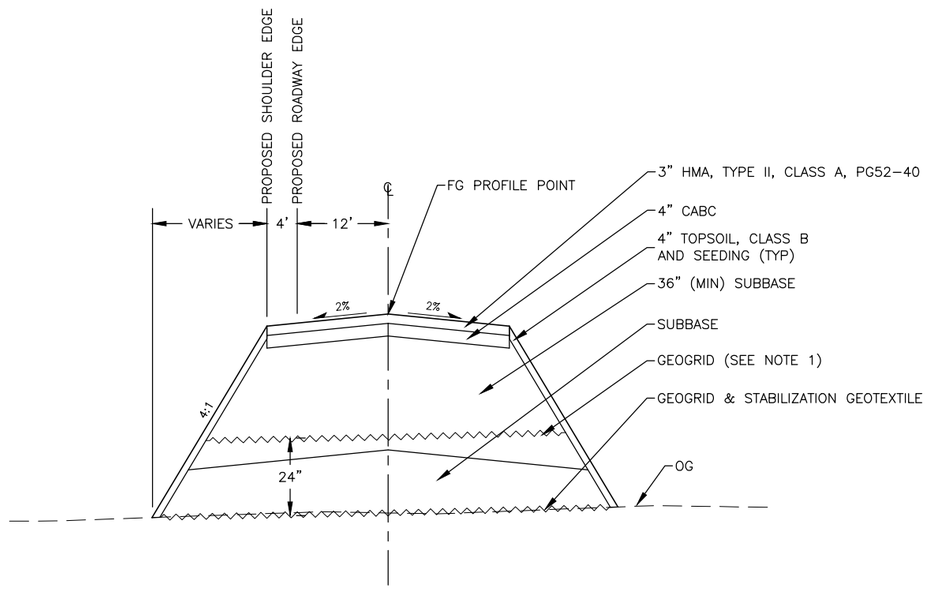
Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised:
Layout Name: DEMO 1
File Path and Name: W:\Projects\ANA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D Planset\00831-ANC-DEMO PLAN.dwg
4/09/2025, 12:56 PM



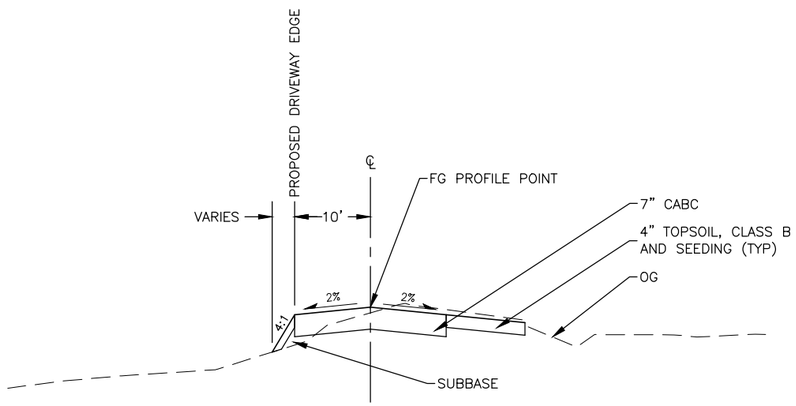
1/10 ROAD TYPICAL SECTION

RD ℄ STA 03+25.00 TO 5+75.00
RD ℄ STA 17+50.00 TO 22+15.00
NOT TO SCALE



2/10 ROAD TYPICAL SECTION

RD ℄ STA 05+75.00 TO 17+50.00
NOT TO SCALE



3/10 DRIVEWAY TYPICAL SECTION

DW ℄ STA 200+47.34 TO 200+82.47
DW ℄ STA 201+17.71 TO 202+04.03
NOT TO SCALE

NOTES:

1. INSTALL ADDITIONAL GEOGRID WHERE SURCHARGE DEPTH EQUALS 6FT. REFERENCE SHEET 11.

BY	DATE	REVISION

STATE OF ALASKA
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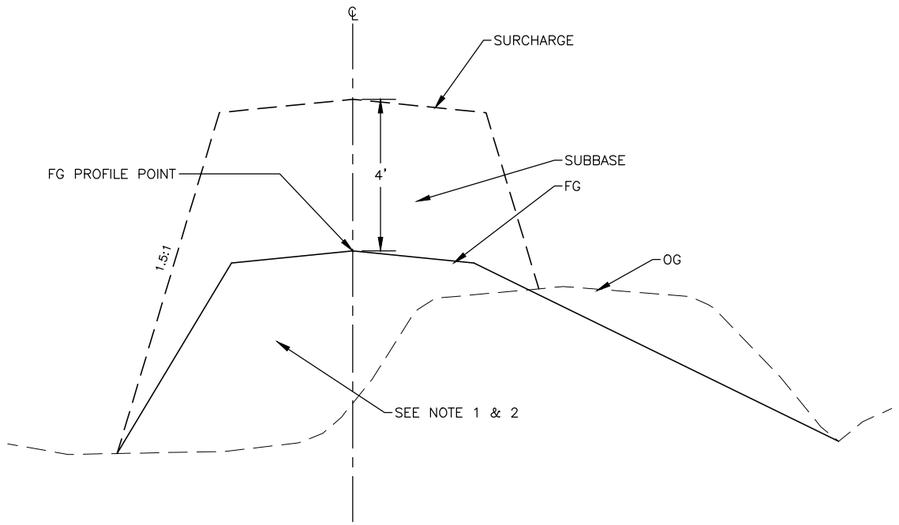
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
ROAD TYPICALS

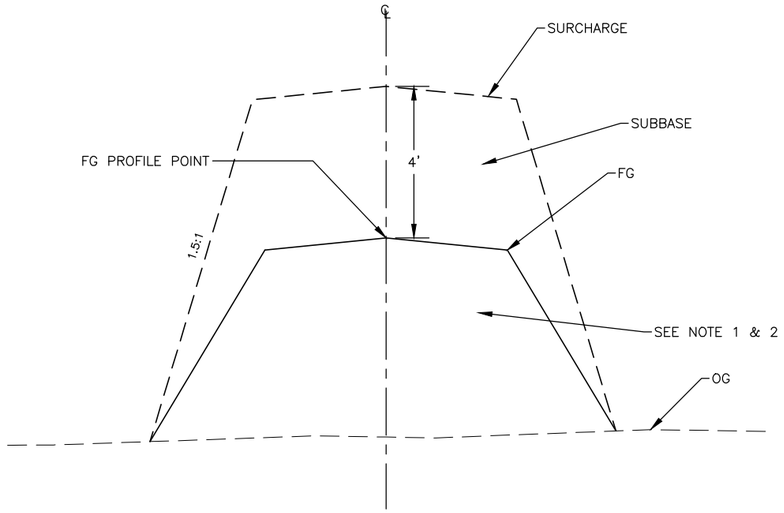
DATE: 04/09/2025
SHEET: 10 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

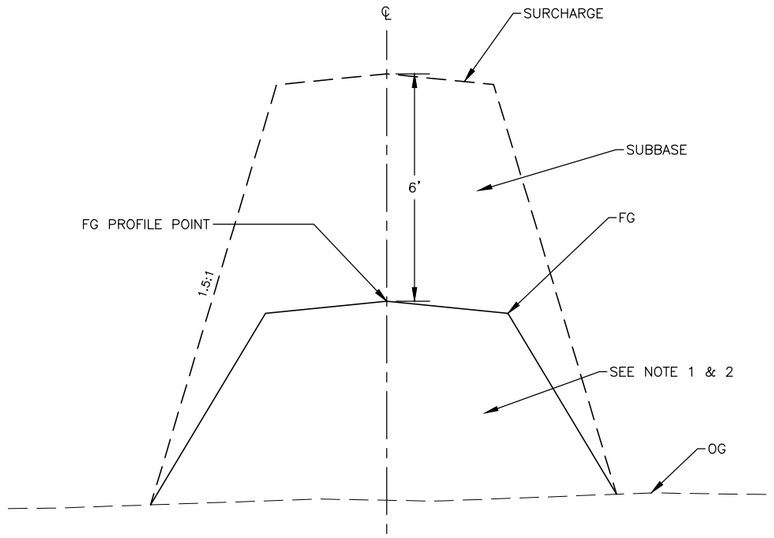
Date Revised: 4/09/2025, 12:56 PM
Layout Name: ROAD TYPICALS 1
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil\Planset\00831-ANC-TYPICALS.dwg



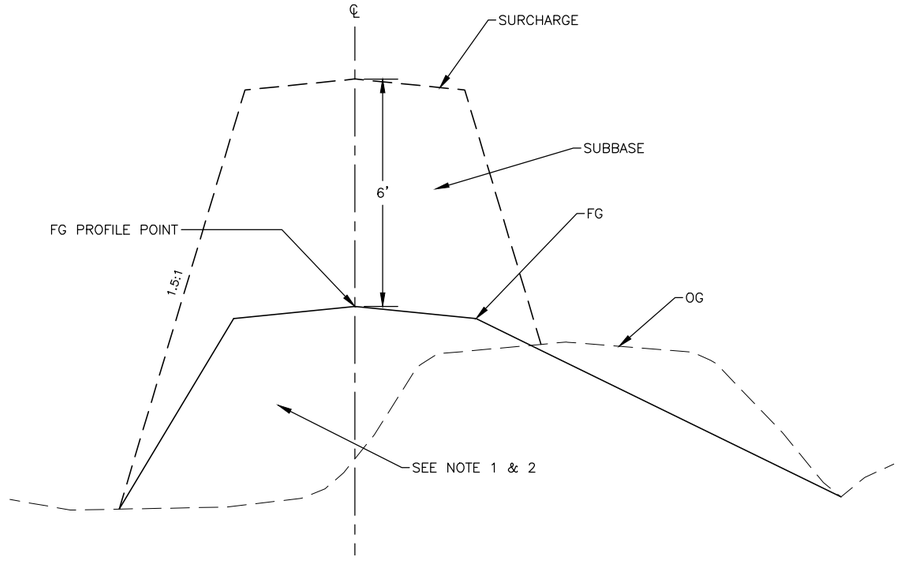
1/11 4FT SURCHARGE TYPICAL SECTION – ROAD
RD ℄ STA 04+00.00 TO 5+75.00
NOT TO SCALE



2/11 4FT SURCHARGE TYPICAL SECTION – ROAD
RD ℄ STA 05+75.00 TO 14+00.00
NOT TO SCALE



3/11 6FT SURCHARGE TYPICAL SECTION – ROAD
RD ℄ STA 14+00.00 TO 18+50.00
NOT TO SCALE



4/11 6FT SURCHARGE TYPICAL SECTION – ROAD
RD ℄ STA 18+50.00 TO 20+00.00
NOT TO SCALE

NOTES:

1. INSTALL GEOGRID AND GEOTEXTILE FABRIC PER (TYP) 1/10 AND (TYP) 2/10.
2. SEE TYPICAL SECTIONS FOR CONSTRUCTION DETAIL. GEOGRID MUST BE INSTALLED PRIOR TO SURCHARGE.
3. FULL THICKNESS OF THE SURCHARGE EMBANKMENT SHALL REMAIN IN PLACE FOR A MINIMUM OF SIX MONTHS PRIOR TO REMOVAL AND CONSTRUCTION OF FINAL STRUCTURAL SECTION.
4. EXCAVATION OF SURCHARGE LAYER WILL BE PAID UNDER P152.010.0000. REUSE EXCAVATED SURCHARGE MATERIAL AS SUBBASE. CONSTRUCTION SHALL BE PHASED TO MAXIMIZE THE REUSE OF SURCHARGED MATERIAL AS SUBBASE WITHIN THE PROJECT LIMITS .A SEPARATE PAYMENT WILL NOT BE MADE FOR PLACEMENT OF SALVAGED MATERIAL.
5. MAINTAIN EXISTING DRAINAGE PATTERNS DURING SURCHARGE PERIOD. WORK REQUIRED TO MAINTAIN EXISTING DRAINAGE PRIOR TO INSTALLATION OF PERMANENT STORM DRAIN INFRASTRUCTURE IS SUBSIDIARY TO THE CONTRACT.
6. INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON THE TRAFFIC CONTROL SHEETS OR AS DIRECTED BY THE ENGINEER.

BY	DATE	REVISION

STATE OF ALASKA
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PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
ROAD SURCHARGE TYPICALS

DATE: 04/09/2025
SHEET: 11 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised:
Layout Name: ROAD SURCHARGE TYPICALS 1
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-TYPICALS.dwg
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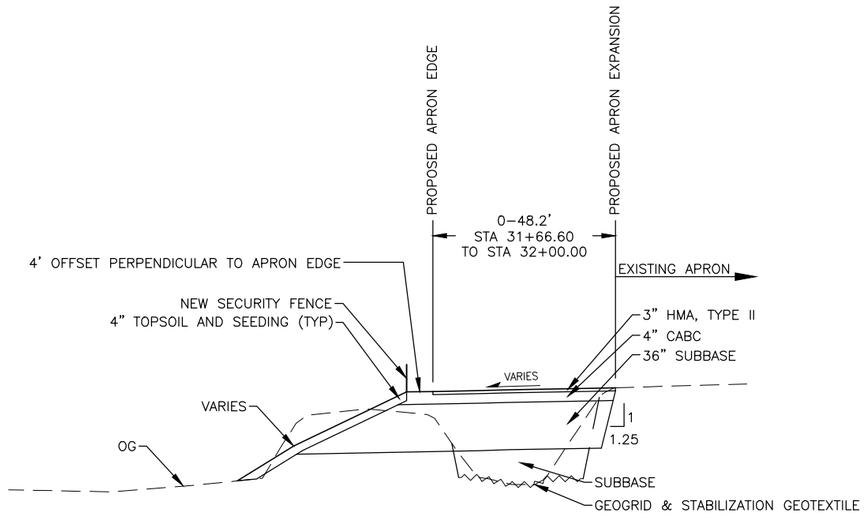
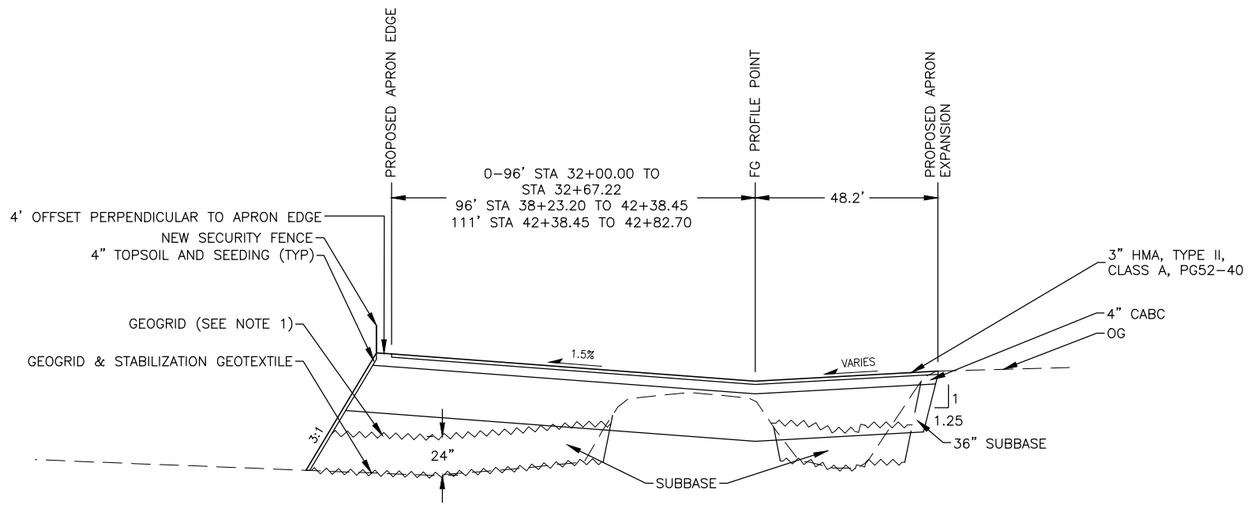
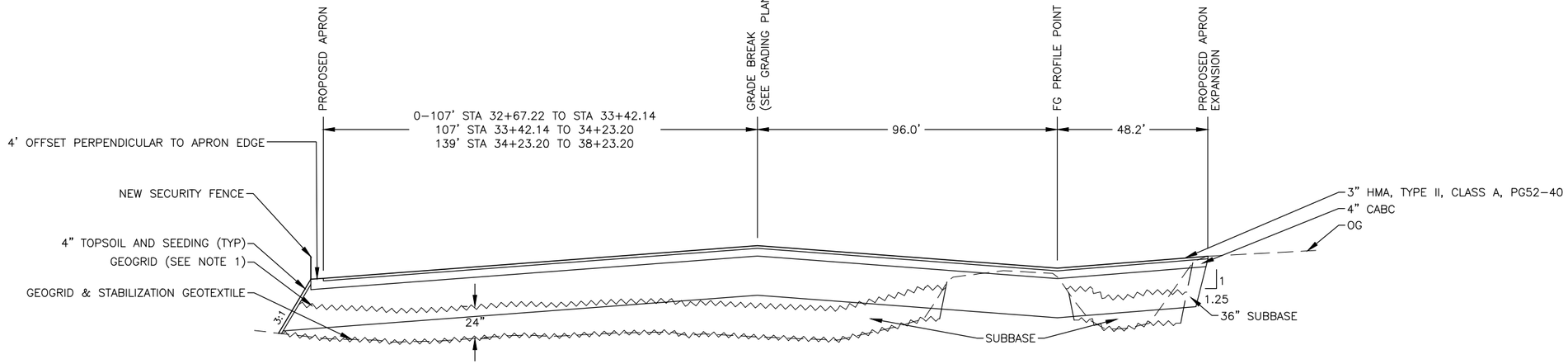


1/12 APRON TYPICAL SECTION
STA 31+66.60 TO 32+00.00
NOT TO SCALE



2/12 APRON TYPICAL SECTION
STA 32+00.00 TO 32+67.22
STA 38+23.20 TO 42+82.70
NOT TO SCALE



3/12 APRON TYPICAL SECTION
STA 32+67.22 TO 38+23.20
NOT TO SCALE

NOTES:

1. ADDITIONAL GEOGRID LAYER INSTALLED WHERE SURCHARGE DEPTH EQUALS 6FT.

BY	DATE	REVISION

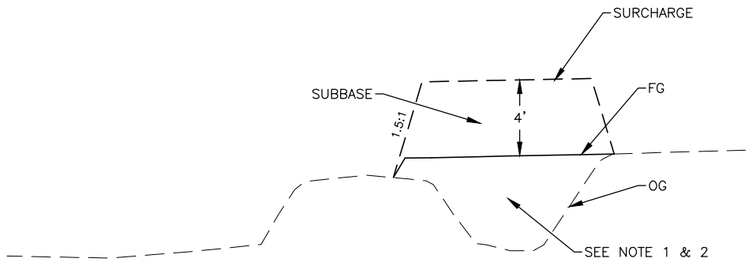
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
APRON TYPICALS

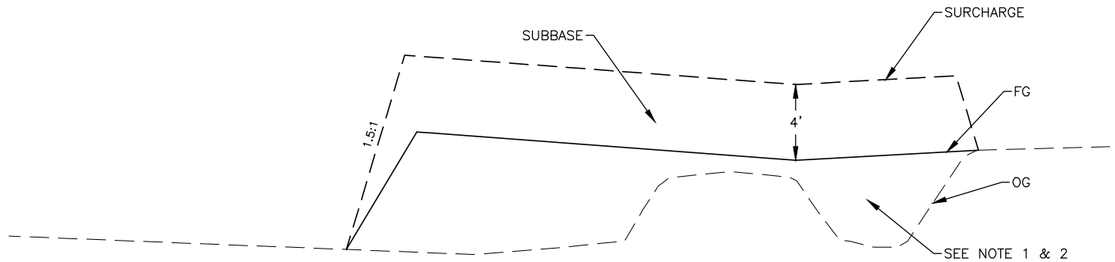
DATE: 04/09/2025
SHEET: 12 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

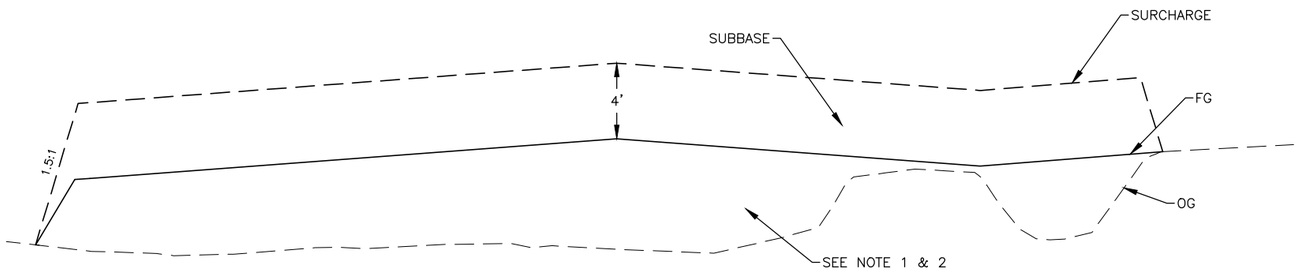
Date Revised: 4/09/2025, 12:56 PM
Layout Name: APRON TYPICALS 1
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-TYPICALS.dwg



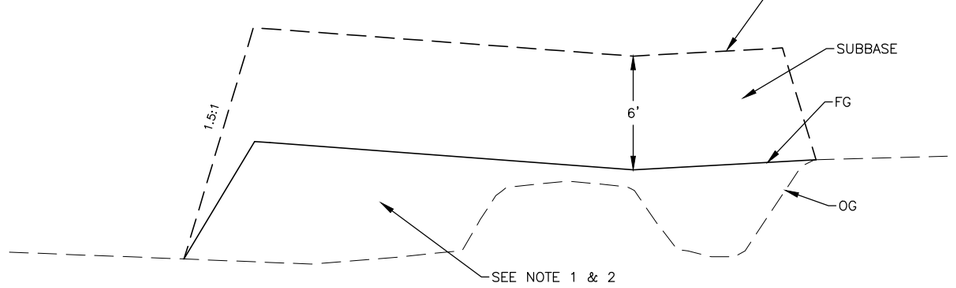
1/13 4FT SURCHARGE TYPICAL SECTION – APRON
STA 31+66.60 TO 32+00.00
NOT TO SCALE



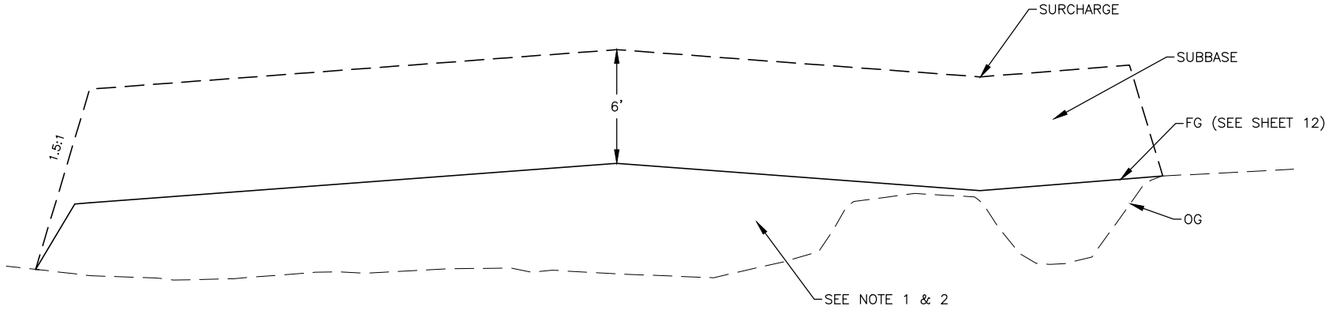
2/13 4FT SURCHARGE TYPICAL SECTION – APRON
STA 32+00.00 TO 32+67.22
NOT TO SCALE



3/13 4FT SURCHARGE TYPICAL SECTION – APRON
STA 32+67.22 TO 38+00.00
NOT TO SCALE



4/13 6FT SURCHARGE TYPICAL SECTION – APRON
STA 38+23.20 TO 42+82.70
NOT TO SCALE



5/13 6FT SURCHARGE TYPICAL SECTION – APRON
STA 38+00.00 TO 38+23.20
NOT TO SCALE

NOTES:

1. INSTALL GEOGRID AND GEOTEXTILE FABRIC PER (TYP) 1/12, (TYP) 2/12, AND (TYP) 3/12.
2. SEE TYPICAL SECTIONS FOR CONSTRUCTION DETAILS.
3. FULL THICKNESS OF THE SURCHARGE EMBANKMENT SHALL REMAIN IN PLACE FOR A MINIMUM OF SIX MONTHS PRIOR TO REMOVAL AND CONSTRUCTION OF FINAL STRUCTURAL SECTION.
4. EXCAVATION OF SURCHARGE LAYER WILL BE PAID UNDER P152.010.0000. REUSE EXCAVATED SURCHARGE MATERIAL AS SUBBASE. CONSTRUCTION SHALL BE PHASED TO MAXIMIZE THE REUSE OF SURCHARGED MATERIAL AS SUBBASE WITHIN THE PROJECT LIMITS .A SEPARATE PAYMENT WILL NOT BE MADE FOR PLACEMENT OF SALVAGED MATERIAL.
5. MAINTAIN EXISTING DRAINAGE PATTERNS DURING SURCHARGE PERIOD. WORK REQUIRED TO MAINTAIN EXISTING DRAINAGE PRIOR TO INSTALLATION OF PERMANENT STORM DRAIN INFRASTRUCTURE IS SUBSIDIARY TO THE CONTRACT.
6. INSTALL TRAFFIC CONTROL DEVICES AS SHOWN ON THE TRAFFIC CONTROL SHEETS OR AS DIRECTED BY THE ENGINEER.

BY	DATE	REVISION

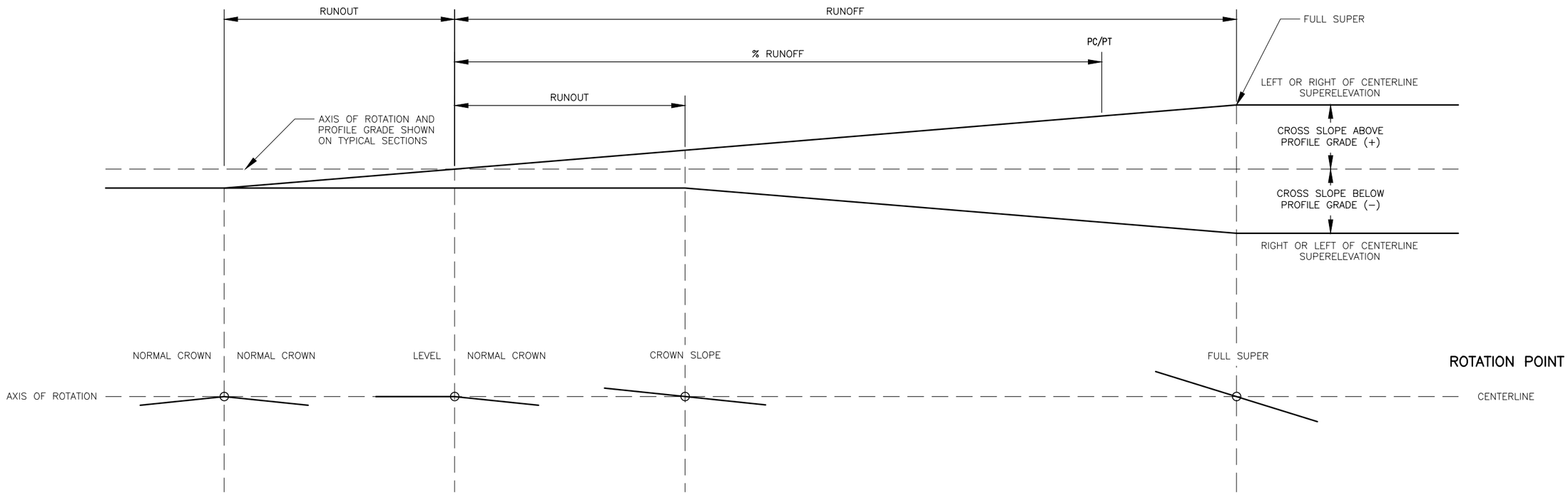
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
APRON SURCHARGE TYPICALS

DATE: 04/09/2025
SHEET: 13 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:56 PM
Layout Name: APRON SURCHARGE TYPICALS 2
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-TYPICALS.dwg



SUPERELEVATION TRANSITION

NOTES:

1. BUILD SUPERELEVATION INTO SUBGRADE AND CARRY THROUGH SHOULDERS.
2. % RUNOFF = PORTION OF RUNOFF ON TANGENT.
3. WIDENING FOR GUARDRAIL OR CURVATURE DOES NOT CHANGE THE LOCATION OF THE AXIS OF ROTATION

BY	DATE	REVISION

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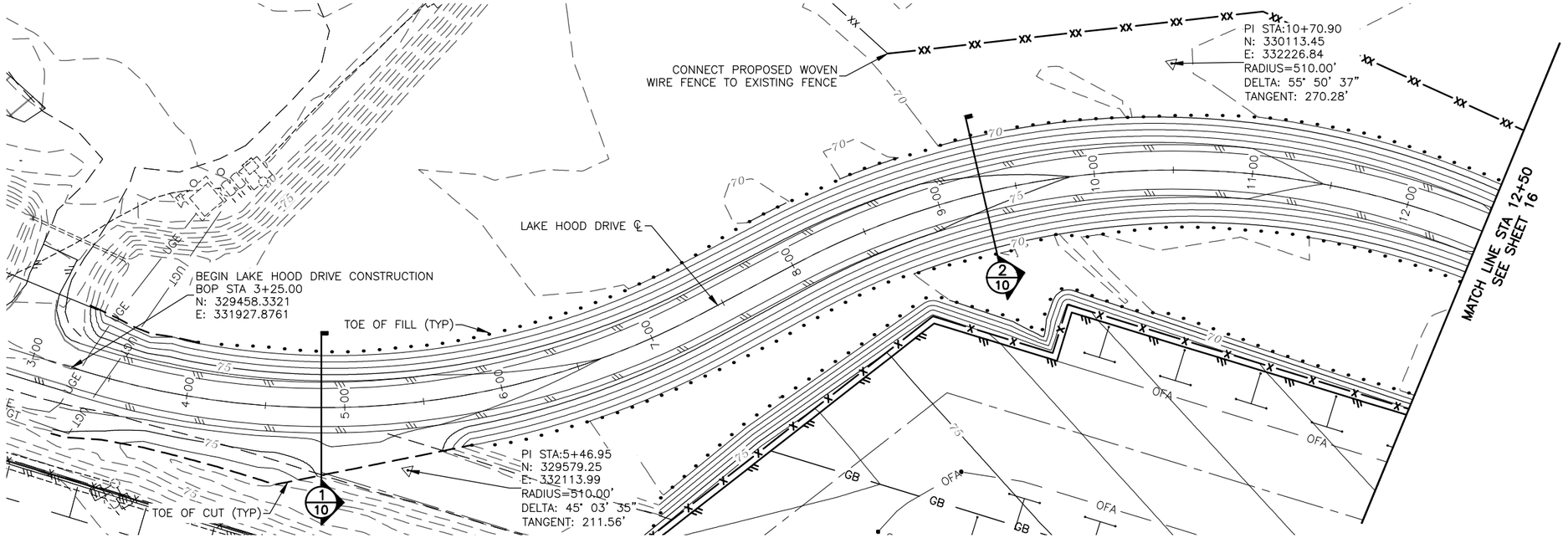
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
SUPERELEVATION TRANSITION DETAIL

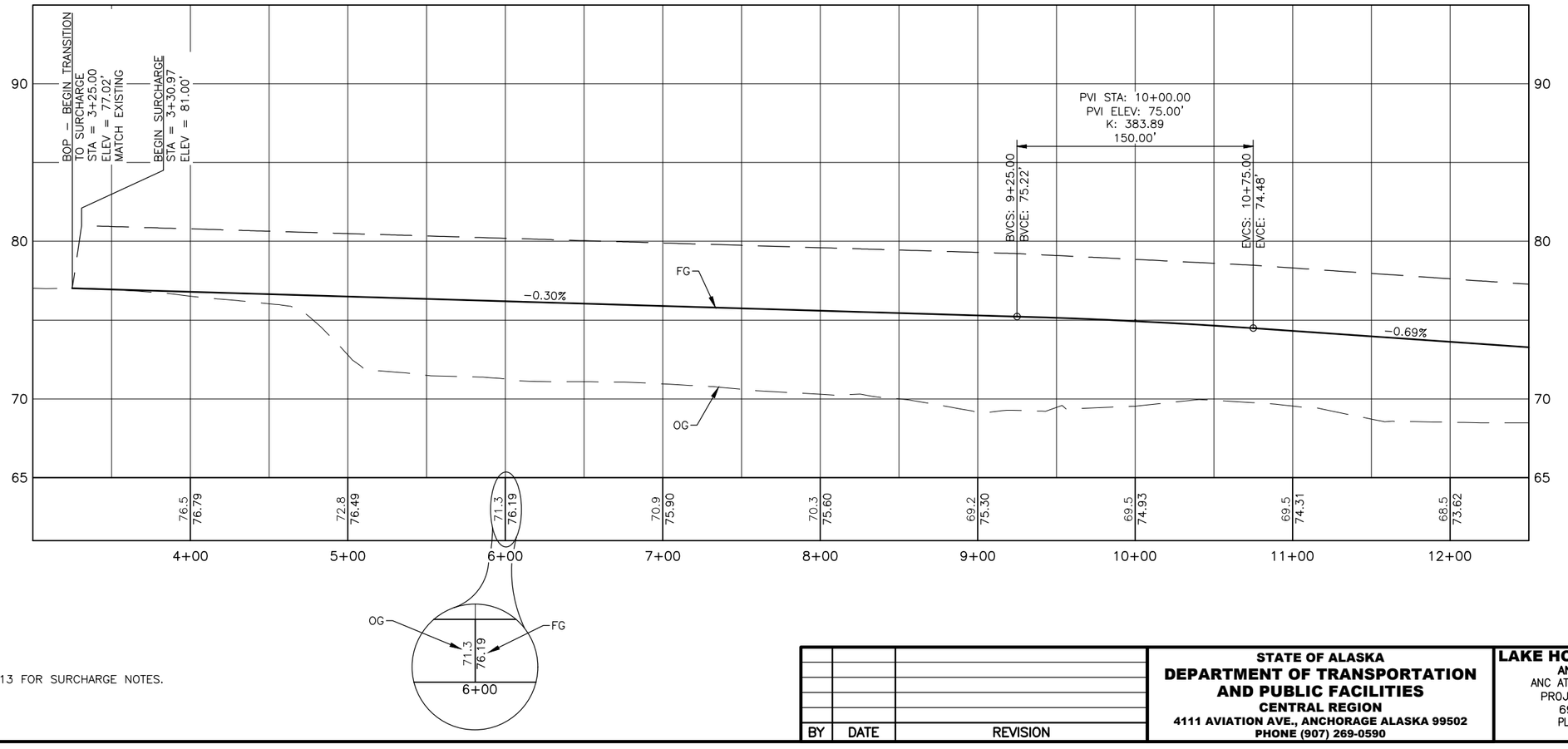
DATE: 04/09/2025

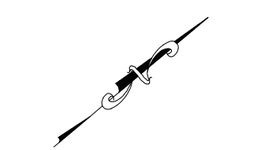
SHEET: 14 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:56 PM
Layout Name: SUPERELEVATION
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-TYPICALS.dwg







NOTES:

1. SEE SHEETS 11 AND 13 FOR SURCHARGE NOTES.

BY	DATE	REVISION

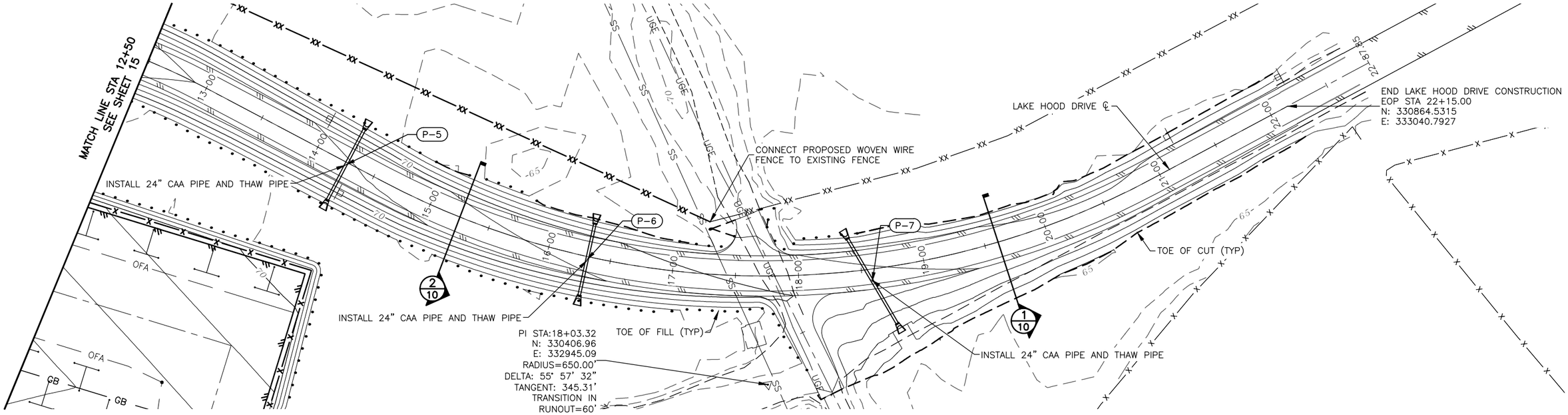
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

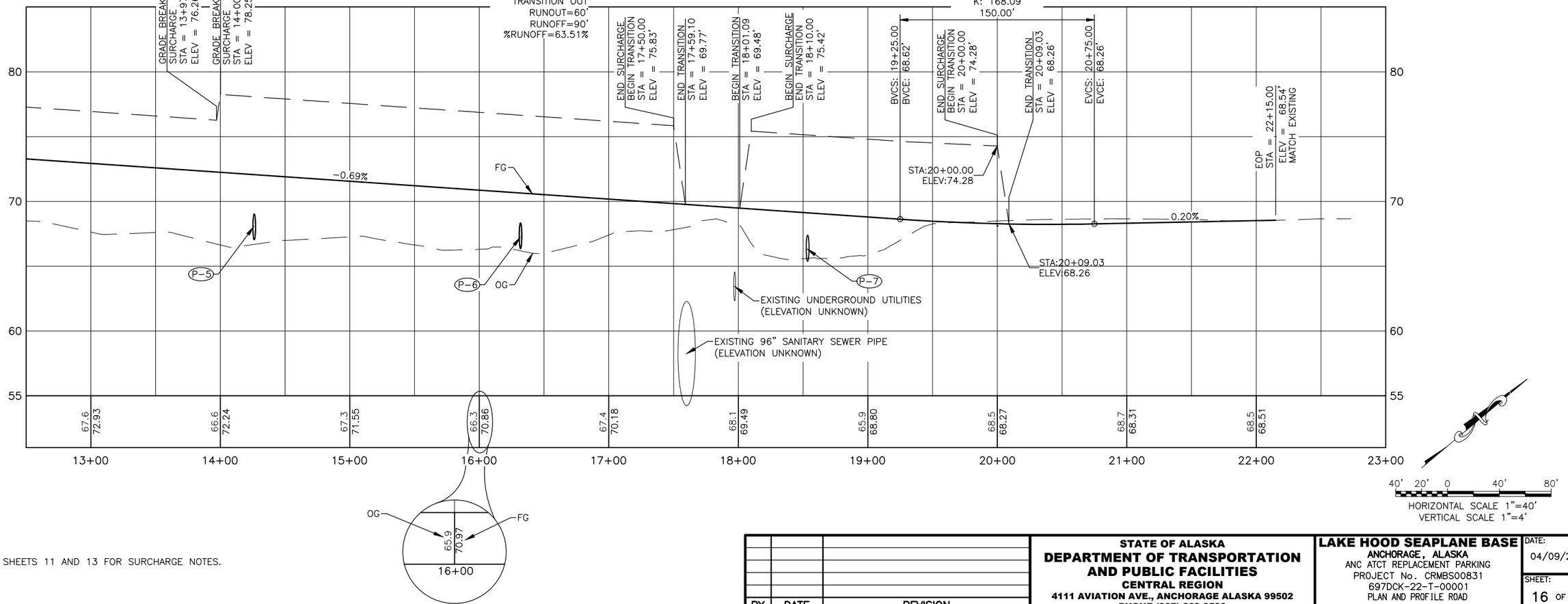
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
PLAN AND PROFILE ROAD

DATE: 04/09/2025
SHEET: 15 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:56 PM
Layout Name: PLAN AND PROFILE ROAD 1
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-P&P.dwg





NOTES:

1. SEE SHEETS 11 AND 13 FOR SURCHARGE NOTES.

BY	DATE	REVISION

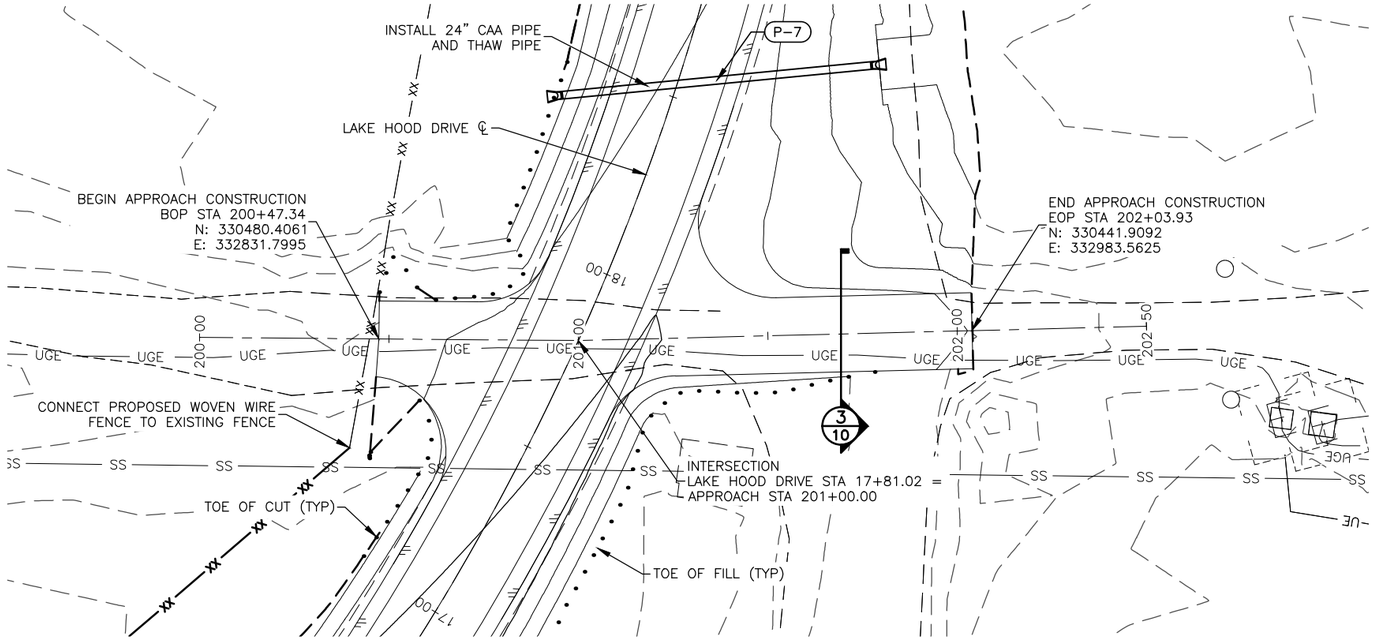
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

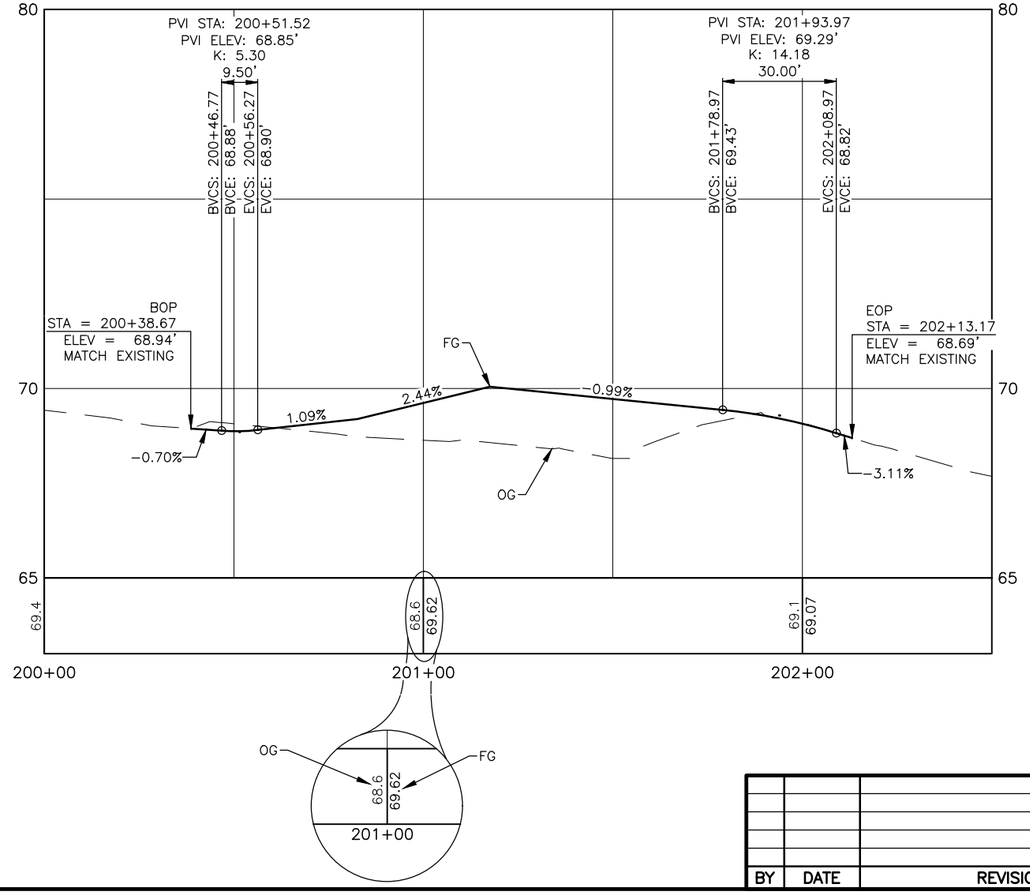
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
PLAN AND PROFILE ROAD

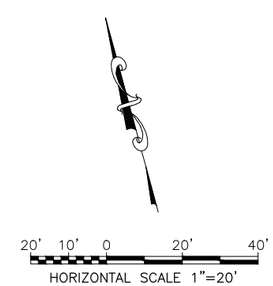
DATE: 04/09/2025
SHEET: 16 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised:
Layout Name: 4/09/2025, 12:57 PM
File Path and Name: PLAN AND PROFILE ROAD 2
W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D Planset\00831-ANC-P&P.dwg







NOTES:

1. SEE SHEETS 11 AND 13 FOR SURCHARGE NOTES.

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
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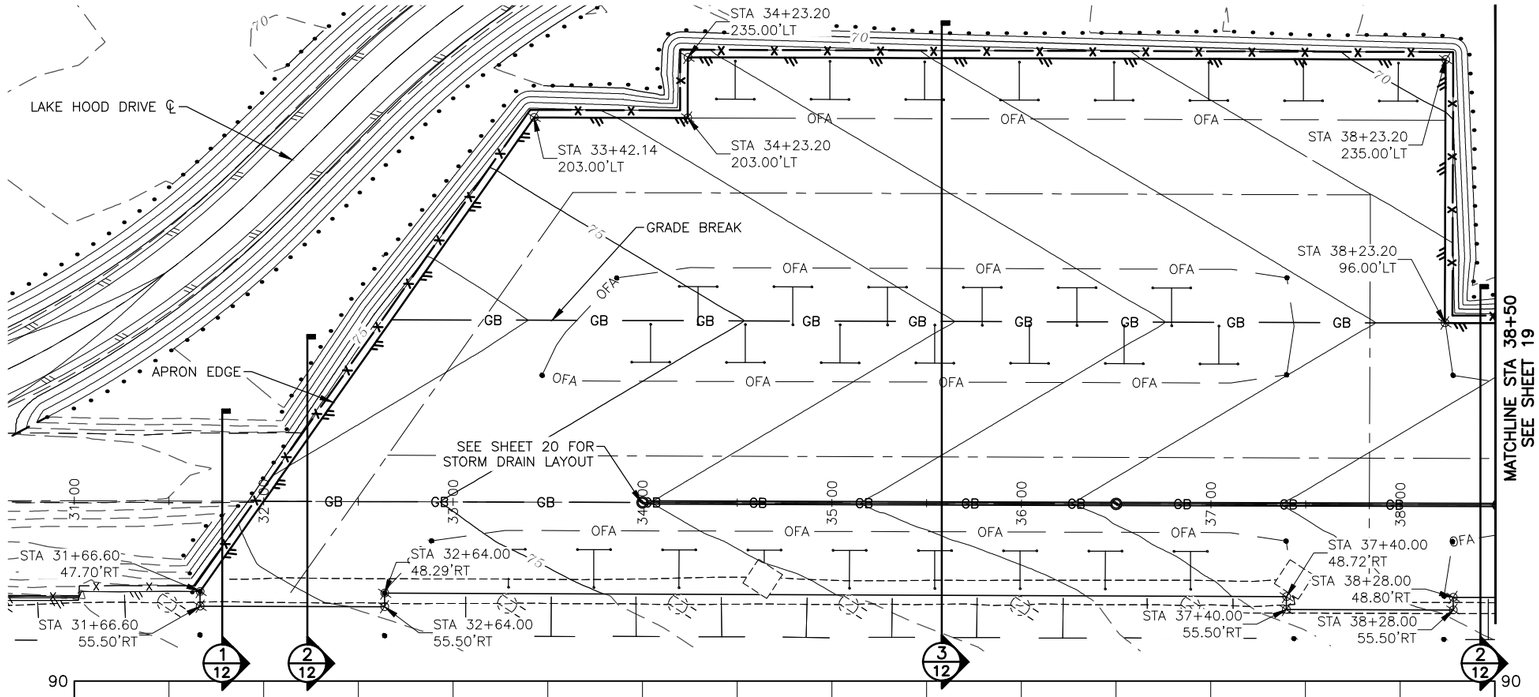
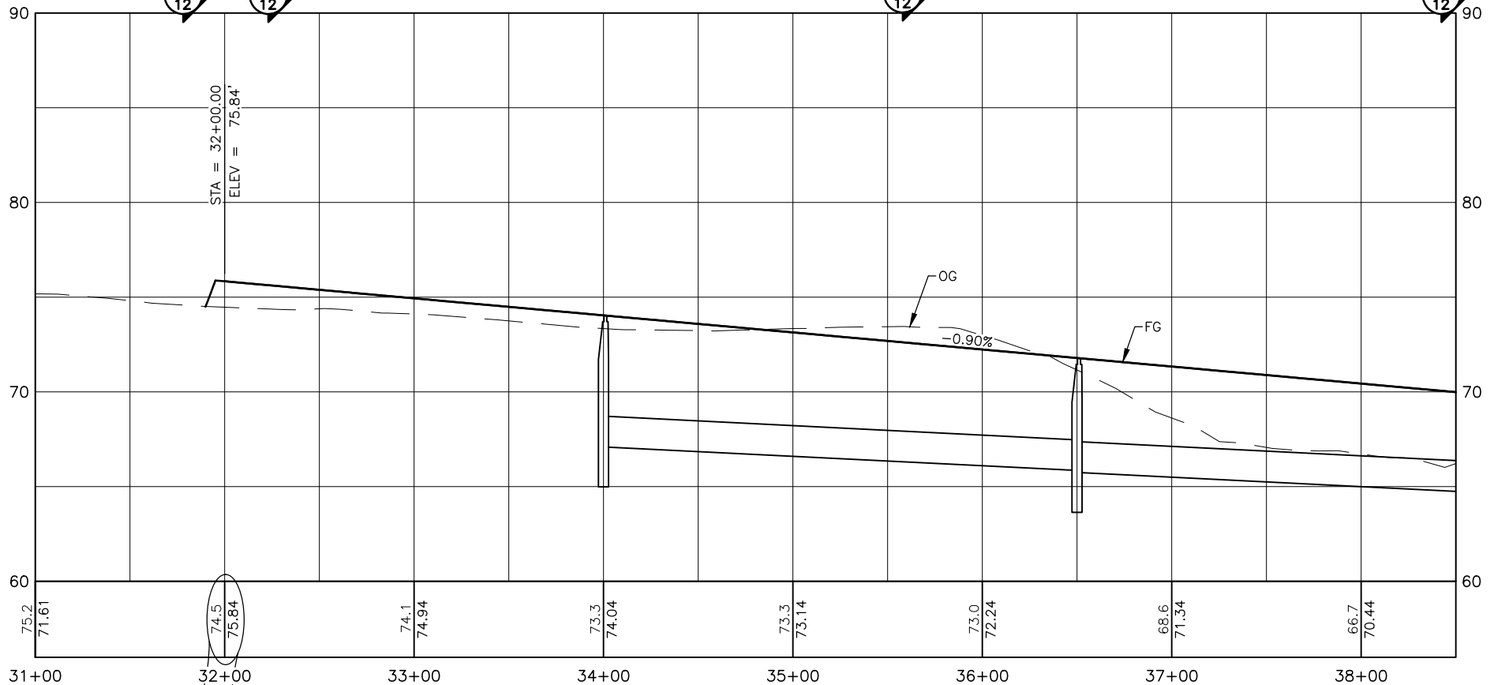
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
APPROACH PLAN AND PROFILE

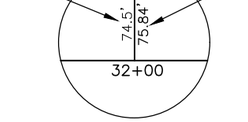
DATE: 04/09/2025
SHEET: 17 OF 38

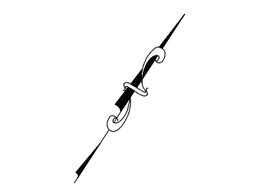
Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:57 PM
Layout Name: APPROACH PLAN AND PROFILE
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-P&P.dwg









Designed By:	AAT
Drawn By:	RJB
Checked By:	TRI
Date Revised:	4/09/2025, 12:58 PM
Layout Name:	PLAN AND PROFILE APRON 1
File Path and Name:	W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-P&P.dwg

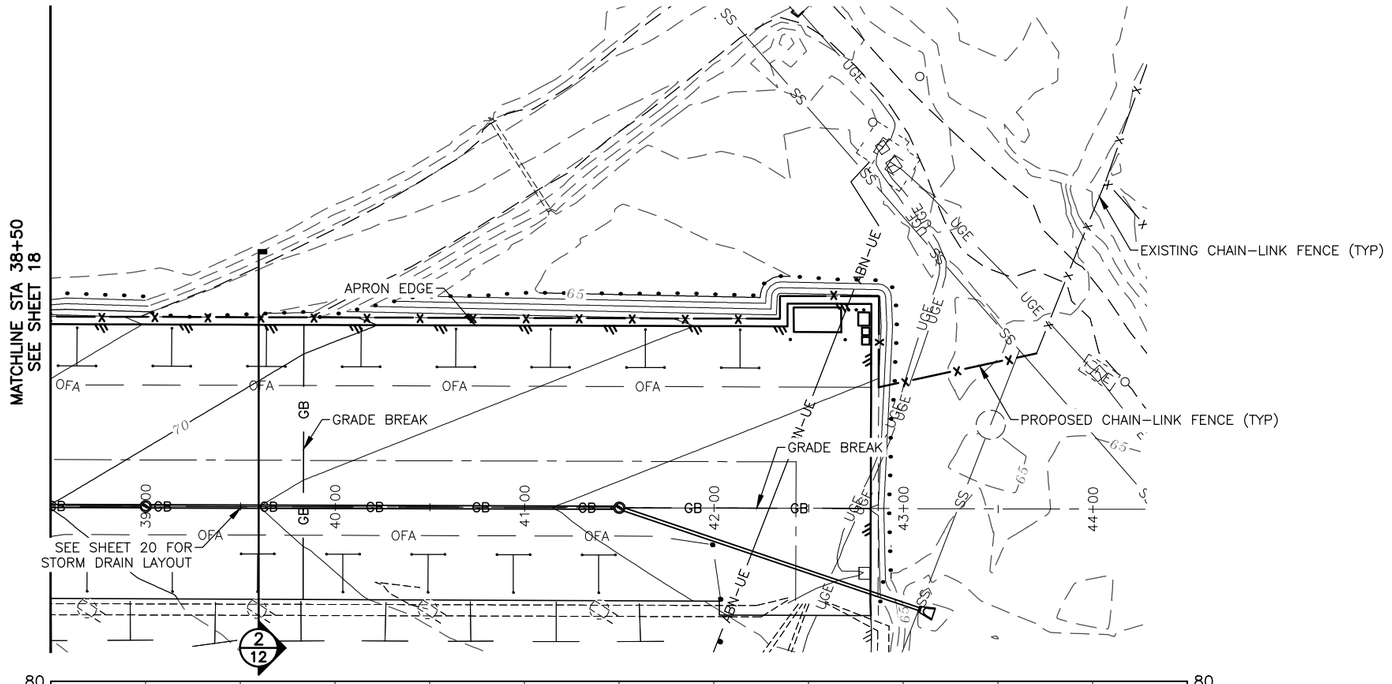
BY	DATE	REVISION

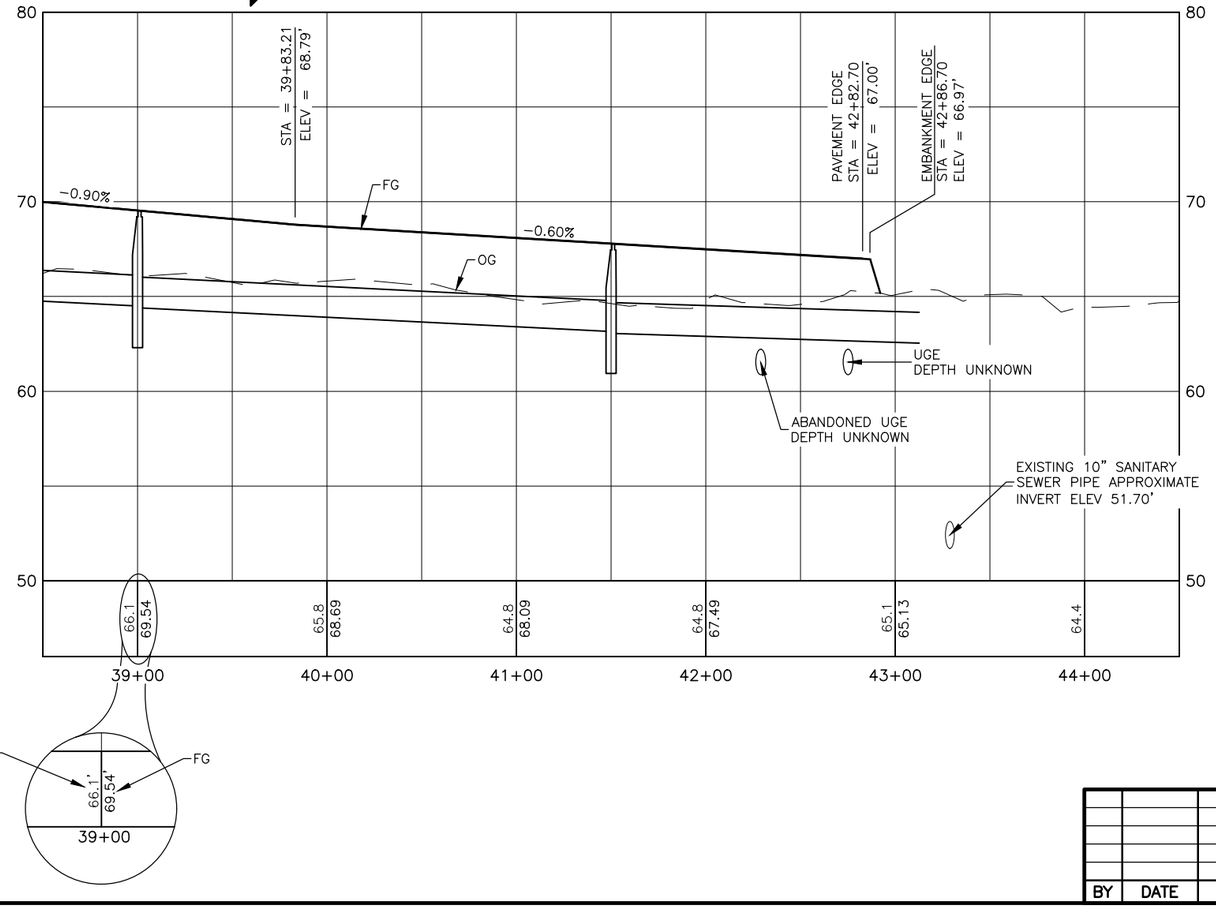
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
PLAN AND PROFILE APRON

DATE: 04/09/2025

SHEET: 18 OF 38





BY	DATE	REVISION

STATE OF ALASKA
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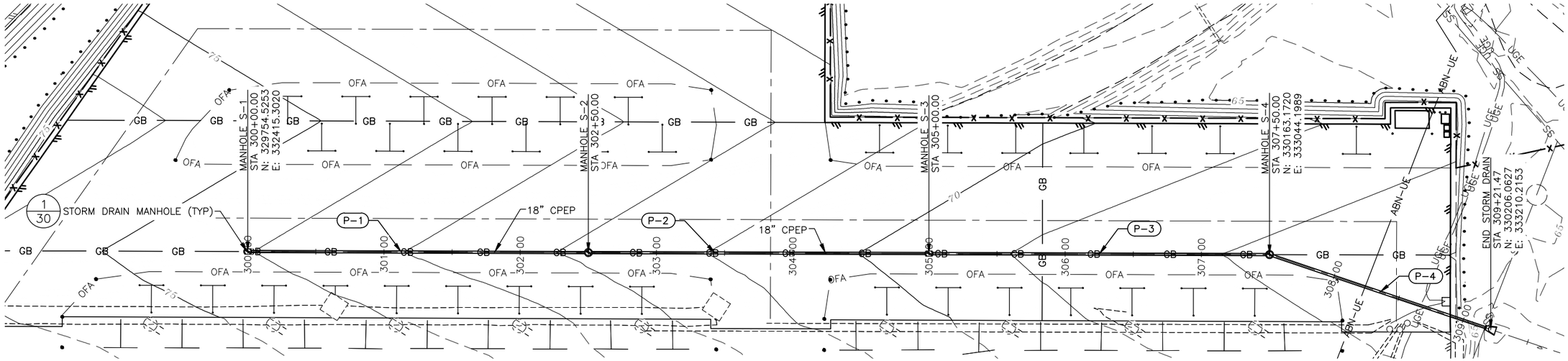
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

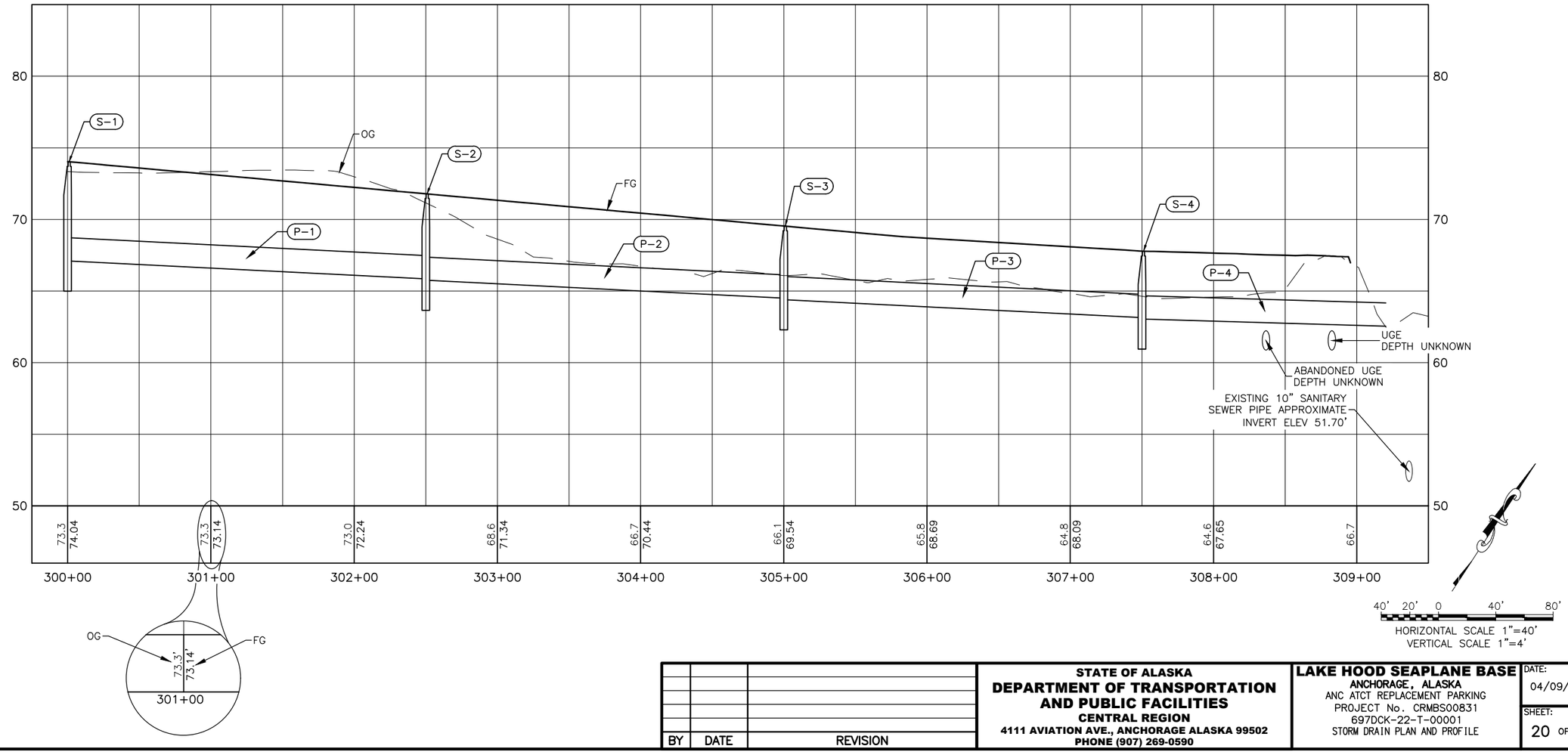
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
PLAN AND PROFILE APRON

DATE: 04/09/2025
SHEET: 19 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:58 PM
Layout Name: PLAN AND PROFILE APRON 2
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-P&P.dwg





40' 20' 0 40' 80'

HORIZONTAL SCALE 1"=40'
VERTICAL SCALE 1"=4'

BY	DATE	REVISION

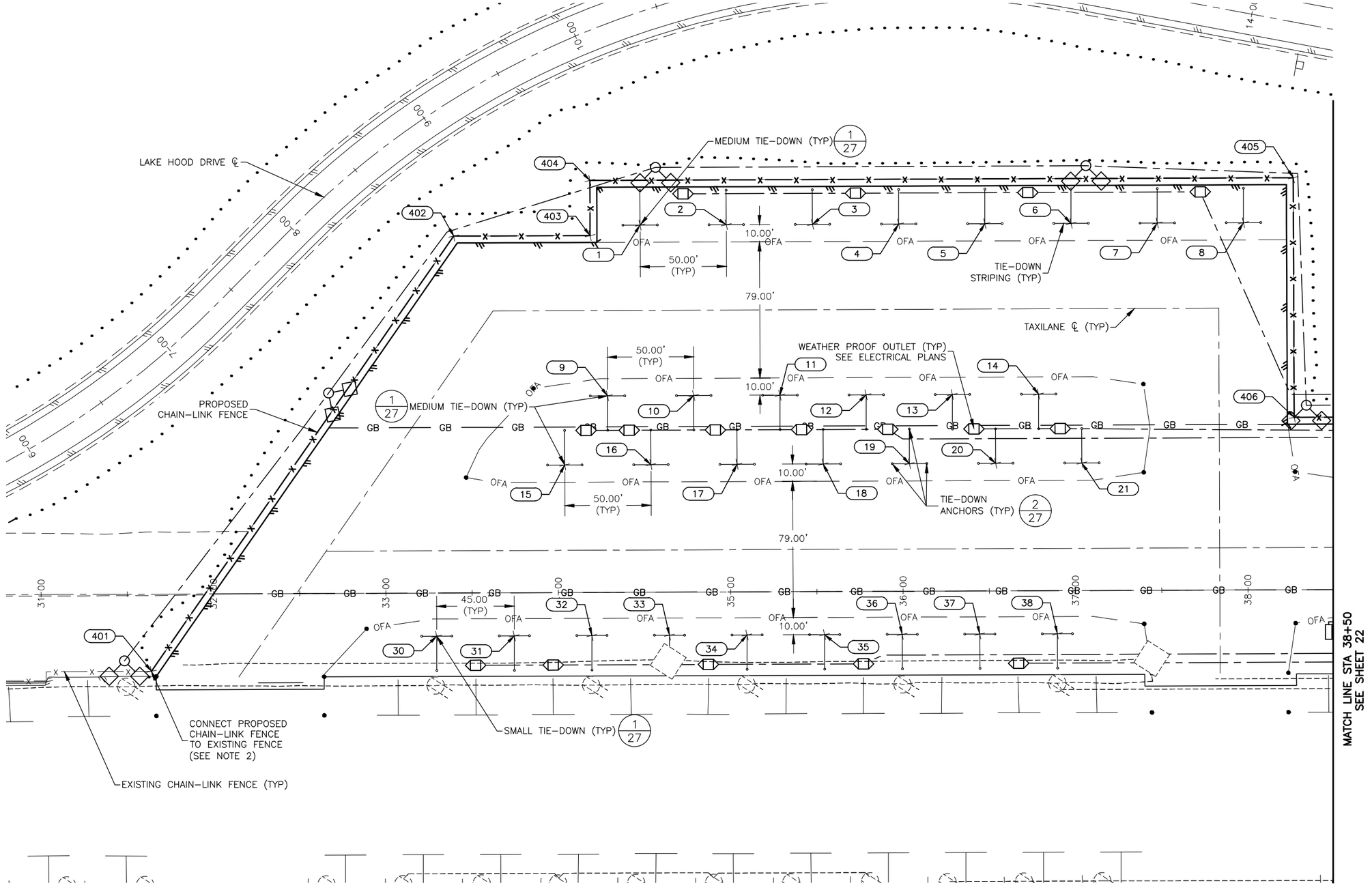
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
STORM DRAIN PLAN AND PROFILE

DATE: 04/09/2025
SHEET: 20 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:59 PM
Layout Name: STORM DRAIN PLAN AND PROFILE
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-SD-P&P.dwg



NOTES:

1. SEE SUMMARY TABLE ON SHEET 6 FOR TIE DOWN POINT LOCATIONS.
2. SEE SUMMARY TABLE ON SHEET 6 FOR FENCE CORNER LOCATIONS.

BY	DATE	REVISION

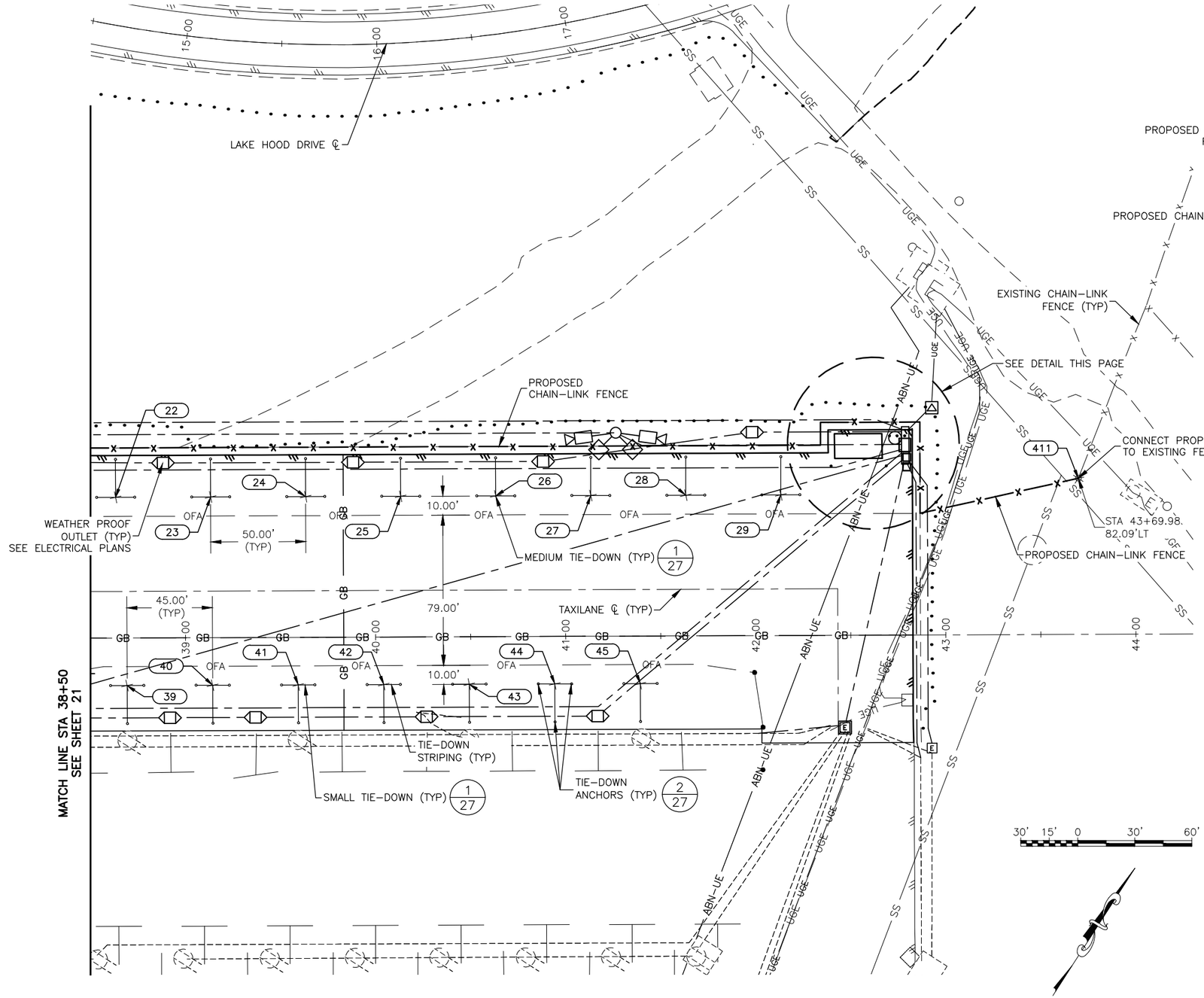
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

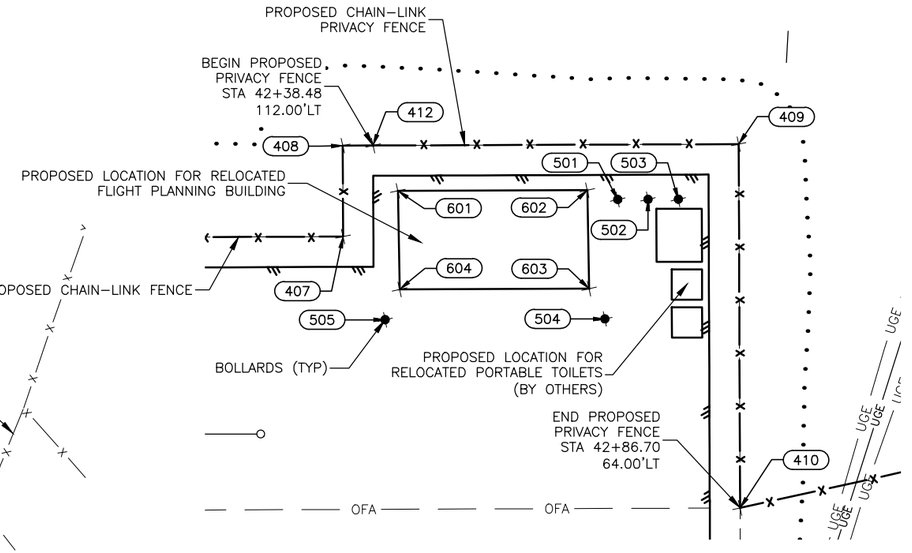
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
FENCE AND TIE-DOWN LAYOUT

DATE: 04/09/2025
SHEET: 21 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:59 PM
Layout Name: TIE DOWN 1
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-TIE DOWN LAYOUT.dwg





PRIVACY FENCE LOCATION

10' 5' 0 10' 20'

30' 15' 0 30' 60'

FENCE CORNER TABLE			
POINT #	STATION	OFFSET	DESCRIPTION
401	31+63.79	44.74RT	CONNECT TO EXISTING
402	33+40.06	207.00LT	FENCE CORNER
403	34+19.20	207.00LT	FENCE CORNER
404	34+19.20	239.00LT	FENCE CORNER
405	38+27.20	239.00LT	FENCE CORNER
406	38+27.20	100.00LT	FENCE CORNER
407	42+34.45	100.00LT	FENCE CORNER
408	42+34.45	112.00LT	FENCE CORNER
409	42+86.70	112.00LT	PRIVACY FENCE CORNER
410	42+86.70	64.00LT	END PRIVACY FENCE CORNER
411	43+69.98	82.09LT	CONNECT TO EXISTING
412	42+38.45	112.00LT	BEGIN CHAIN-LINK PRIVACY FENCE

BOLLARD TABLE			
POINT #	STATION	OFFSET	DESCRIPTION
501	42+70.70	104.75LT	BOLLARD
502	42+74.70	104.75LT	BOLLARD
503	42+78.70	104.75LT	BOLLARD
504	42+68.95	89.00LT	BOLLARD
505	42+39.95	89.00LT	BOLLARD

BUILDING CORNER TABLE			
POINT #	STATION	OFFSET	DESCRIPTION
601	42+41.70	106.00LT	BLDG CORNER
602	42+66.70	106.00LT	BLDG CORNER
603	42+66.89	93.00LT	BLDG CORNER
604	42+41.89	93.00LT	BLDG CORNER

NOTES:

1. SEE SUMMARY TABLE ON SHEET 6 FOR TIE DOWN POINT LOCATIONS.

BY	DATE	REVISION

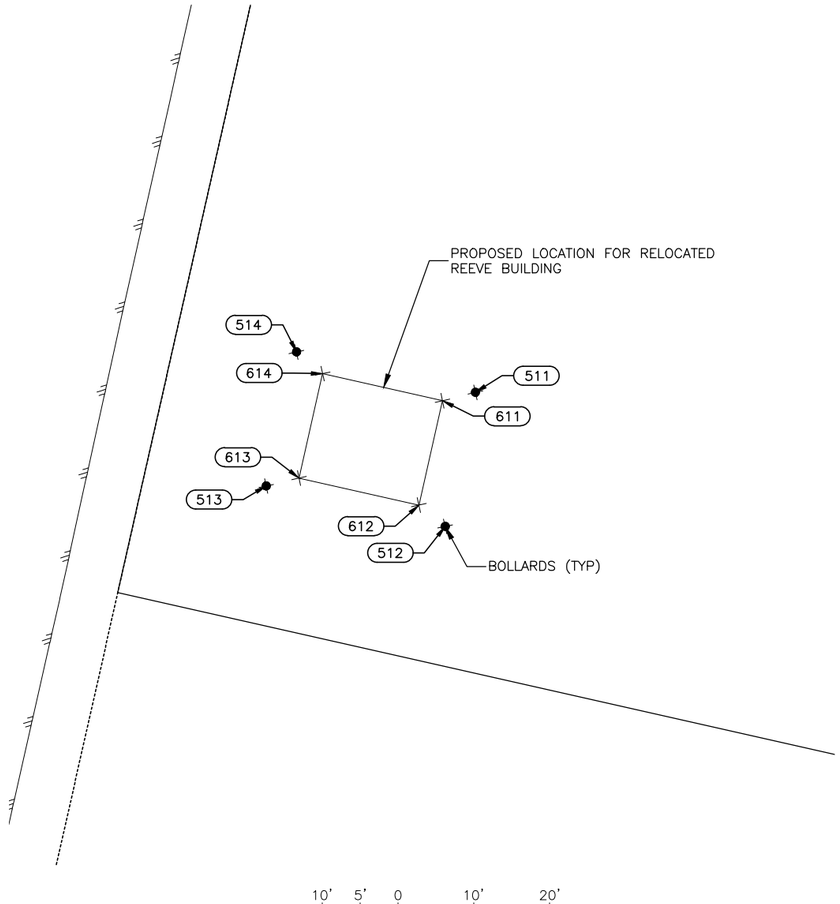
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
FENCE AND TIE-DOWN LAYOUT

DATE: 04/09/2025
SHEET: 22 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 12:59 PM
Layout Name: TIE DOWN 2
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-TIE DOWN LAYOUT.dwg



REEVE BUILDING RELOCATION LAYOUT

BOLLARD TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
513	326657.8099	331412.1958	BOLLARD
514	326674.8347	331405.9770	BOLLARD
511	326683.1413	331428.7173	BOLLARD
512	326666.1166	331434.9362	BOLLARD

BUILDING CORNER TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
611	326679.8639	331425.6560	BLDG CORNER
612	326666.5963	331430.5024	BLDG CORNER
613	326661.0345	331415.2764	BLDG CORNER
614	326674.3021	331410.4300	BLDG CORNER

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
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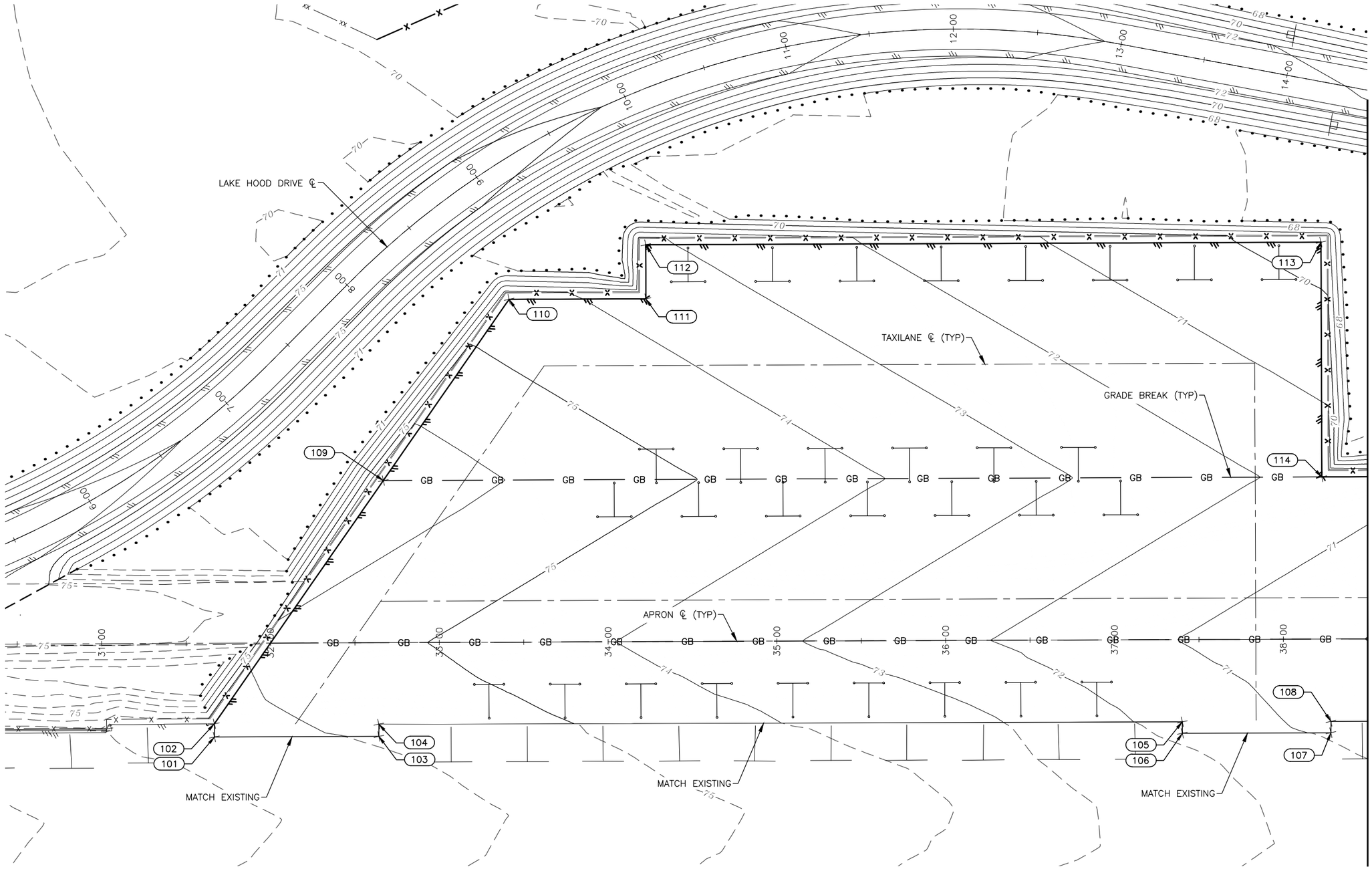
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
REEVE BUILDING RELOCATION LAYOUT

DATE: 04/09/2025
SHEET: 23 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised:
Layout Name: 4/09/2025, 1:00 PM REEVE_BLDG_LAYOUT
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-TIE DOWN LAYOUT.dwg



Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 1:00 PM
Layout Name: GRADING PLAN 1
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-GRADING PLAN.dwg

GRADING PLAN NOTES:

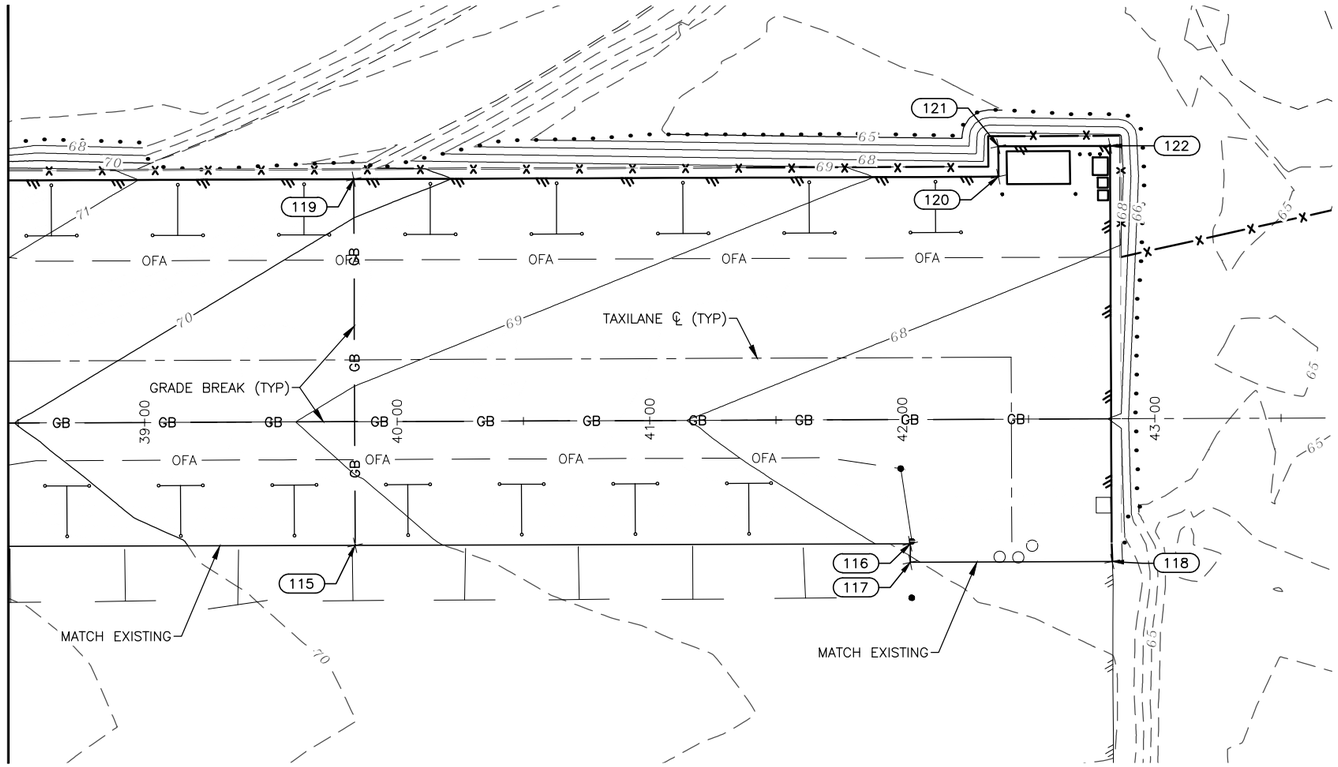
1. SEE SHEET 25 FOR GRADING POINT TABLE.
2. SEE SHEETS 21 AND 22 FOR FENCE CORNER LOCATIONS.

BY	DATE	REVISION

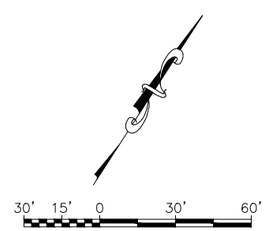
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
GRADING PLAN

DATE: 04/09/2025
SHEET: 24 OF 38



GRADING TABLE				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
101	31+66.60	55.50RT	76.44	MATCH EXISTING
102	31+66.60	47.70RT	76.31	MATCH EXISTING
103	32+64.00	55.50RT	75.89	MATCH EXISTING
104	32+64.00	48.29RT	75.65	MATCH EXISTING
105	37+40.00	48.72RT	71.67	MATCH EXISTING
106	37+40.00	55.50RT	71.85	MATCH EXISTING
107	38+28.00	55.50RT	70.92	MATCH EXISTING
108	38+28.00	48.80RT	70.79	MATCH EXISTING
109	32+67.22	96.00LT	76.67	GRADE BREAK / PAVEMENT EDGE
110	33+42.14	203.00LT	74.39	PAVEMENT EDGE
111	34+23.20	203.00LT	73.66	PAVEMENT EDGE
112	34+23.20	235.00LT	73.18	PAVEMENT EDGE
113	38+23.20	235.00LT	69.58	PAVEMENT EDGE
114	38+23.20	96.00LT	71.67	GRADE BREAK / PAVEMENT EDGE
115	39+83.21	48.94RT	69.30	GRADE BREAK / MATCH EXISTING
116	42+03.00	49.14RT	67.92	MATCH EXISTING
117	42+03.00	56.50RT	68.04	MATCH EXISTING
118	42+82.95	56.50RT	67.56	MATCH EXISTING
119	39+83.20	96.00LT	70.23	GRADE BREAK / PAVEMENT EDGE
120	42+38.45	96.00LT	68.70	PAVEMENT EDGE
121	42+38.45	108.00LT	68.52	PAVEMENT EDGE
122	42+82.70	108.00LT	68.25	PAVEMENT EDGE



GRADING PLAN NOTES:

1. ALL STATIONS AND OFFSETS BASED ON APRON ALIGNMENT.
2. SEE SHEETS 21 AND 22 FOR FENCE CORNER LOCATIONS.

BY	DATE	REVISION

STATE OF ALASKA
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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
GRADING PLAN

DATE: 04/09/2025
SHEET: 25 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised:
Layout Name: 4/09/2025, 1:26 PM GRADING PLAN 2
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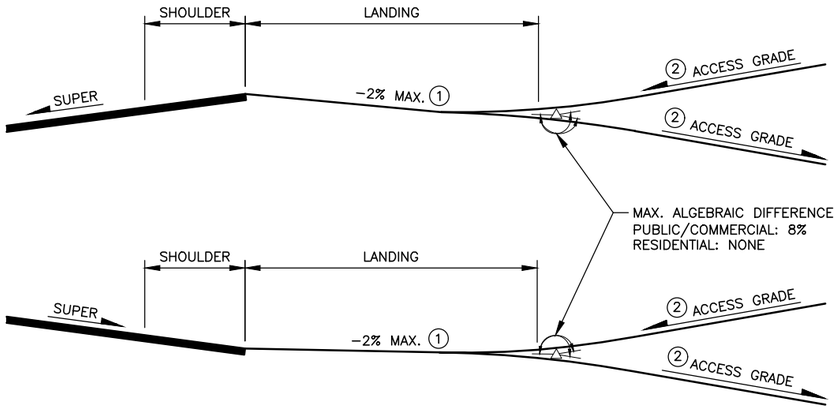
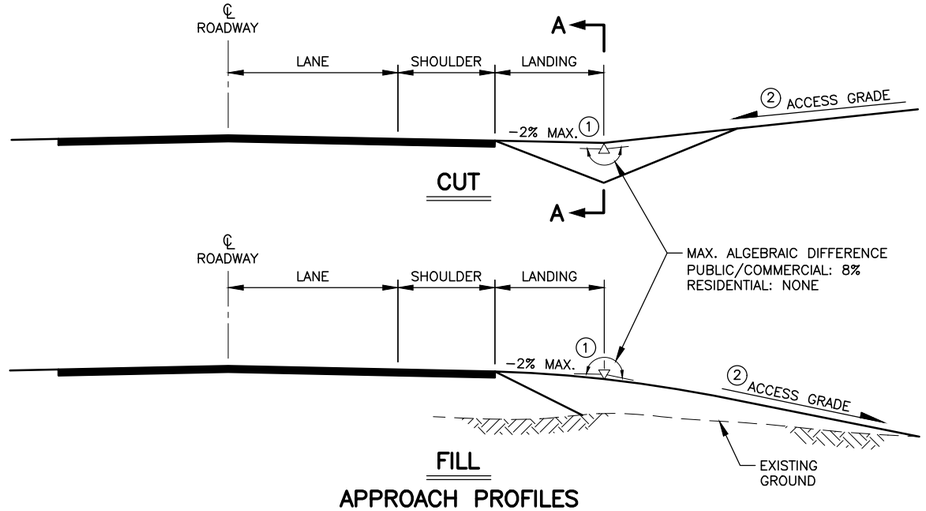


APPROACH PROFILES ON SUPER ELEVATED ROADWAY

(1) WHEN PATHWAY IS PRESENT, MAXIMUM LANDING GRADE IS TO BE -1.5%.

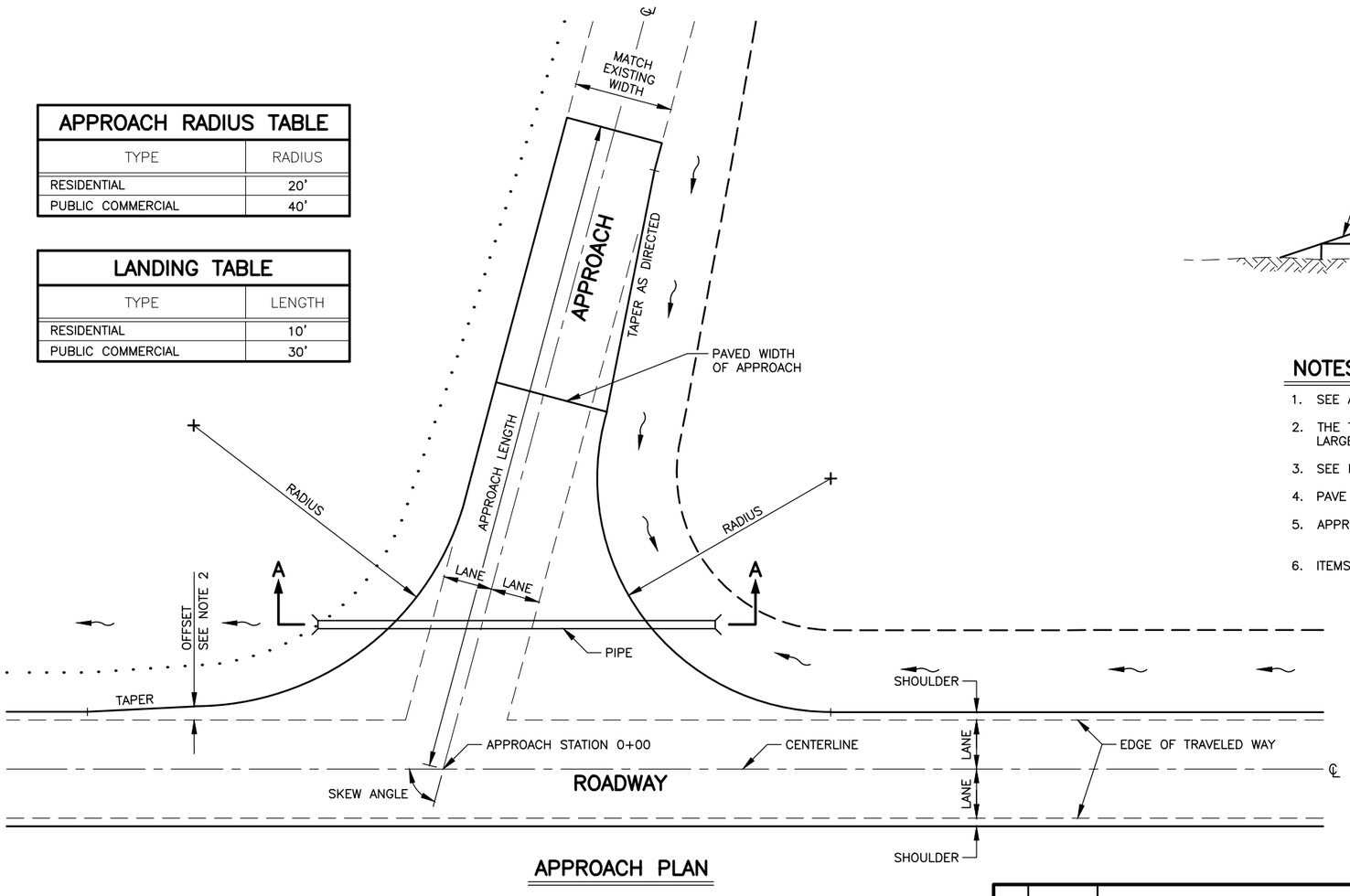
(2) ACCESS GRADE MAX. 15%



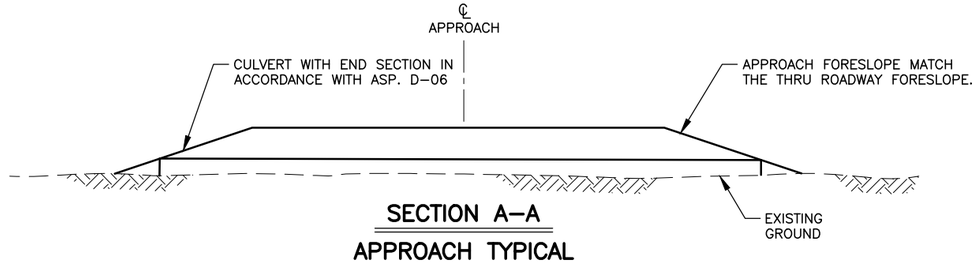
APPROACH PROFILES

APPROACH RADIUS TABLE	
TYPE	RADIUS
RESIDENTIAL	20'
PUBLIC COMMERCIAL	40'

LANDING TABLE	
TYPE	LENGTH
RESIDENTIAL	10'
PUBLIC COMMERCIAL	30'



APPROACH PLAN



SECTION A-A
APPROACH TYPICAL

NOTES:

1. SEE APPROACH SUMMARY FOR APPROACH STATION, LENGTH, WIDTH, SKEW ANGLE, AND TYPE.
2. THE TAPER OFFSET FROM TRAVELED WAY = ASSIGNED VALUE OR SHOULDER WIDTH WHICHEVER IS LARGER. TAPER WILL BE 10 FEET IN LENGTH FOR EACH FOOT OF OFFSET.
3. SEE PUBLIC APPROACH AND DRIVEWAY TYPICAL SECTIONS.
4. PAVE TO THE END OF THE RADIUS RETURN UNLESS OTHERWISE INDICATED.
5. APPROACH VERTICAL CURVE REQUIREMENTS: CREST – 2 ½ INCH MAXIMUM IN A 10–FOOT CHORD
   SAG – 2 INCH MAXIMUM IN A 10–FOOT CHORD
6. ITEMS AND MATERIAL OF APPROACH ARE SUBSIDIARY TO THE RESPECTIVE ITEMS OF WORK.

BY	DATE	REVISION

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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
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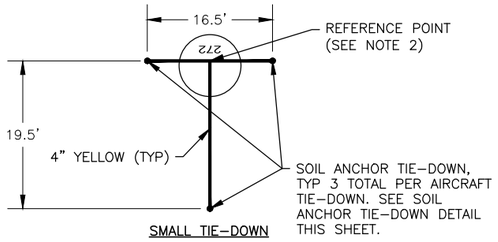
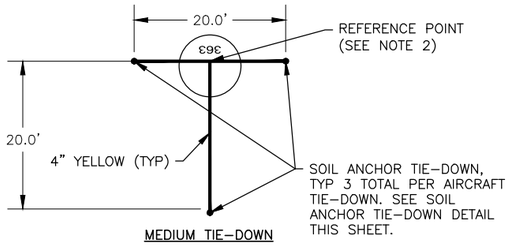
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
APPROACH DETAILS

DATE: 04/09/2025
SHEET: 26 OF 38

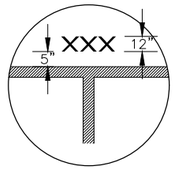
Designed By: AAT
Drawn By: RJB
Checked By: TRI
Date Revised: 4/09/2025, 1:00 PM
Layout Name: APPROACH DETAILS
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-DETAILS.dwg



SMALL TIE-DOWN



MEDIUM TIE-DOWN



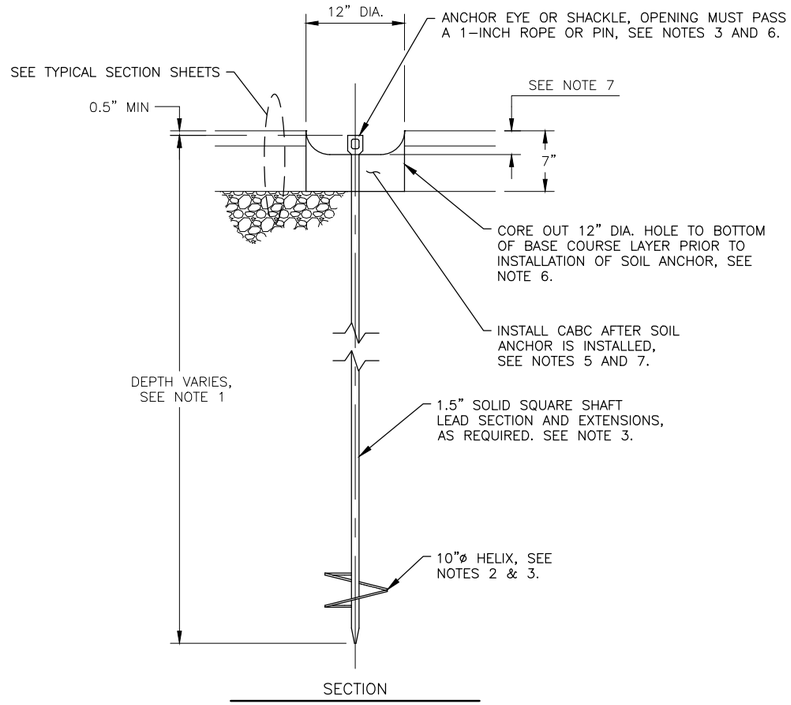
TIE-DOWN LAYOUT

TIE-DOWN NOTES:

1. LOCATE UNDERGROUND UTILITIES PRIOR TO INSTALLING ANCHORS AND COORDINATE WITH THE ENGINEER ANY NECESSARY ADJUSTMENTS TO AVOID CONFLICTS.
2. SEE SHEETS 21 AND 22 FOR REFERENCE POINT LOCATIONS AND ORIENTATIONS.
3. SEE SHEET 35 FOR MARKING PLAN AND NUMBERING.CONFIRM LOCATION OF TIE-DOWN ANCHORS PRIOR TO STRIPING OF AIRCRAFT TIE-DOWNS.

1/27 TIE-DOWN DETAIL

SCALE: NTS



SECTION

SOIL ANCHOR TIE-DOWN NOTES:

1. MINIMUM EMBEDMENT 10 FEET BELOW FINISH GRADE.
2. HELIX PLATES SHALL BE AT LEAST 3/8-INCH THICK.
3. ALL HELICAL ANCHOR MATERIALS SHALL BE HOT DIP GALVANIZED.
4. SEE TIE-DOWN LAYOUT SHEETS 21-22 FOR SOIL ANCHOR TIE-DOWN ORIENTATION.
5. HAND TAMP CABC TO COMPACT TO SATISFACTION OF ENGINEER.
6. INSTALL SOIL ANCHOR SO THAT ANCHOR EYE IS CENTERED WITHIN THE CORED AREA.
7. INSTALL CABC UP TO BOTTOM OF ANCHOR EYE OPENING.

2/27 TYPICAL SOIL ANCHOR TIE-DOWN DETAIL

SCALE: NTS

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697DCK-22-T-00001
TIE-DOWN DETAILS

DATE: 04/09/2025

SHEET: 27 OF 38

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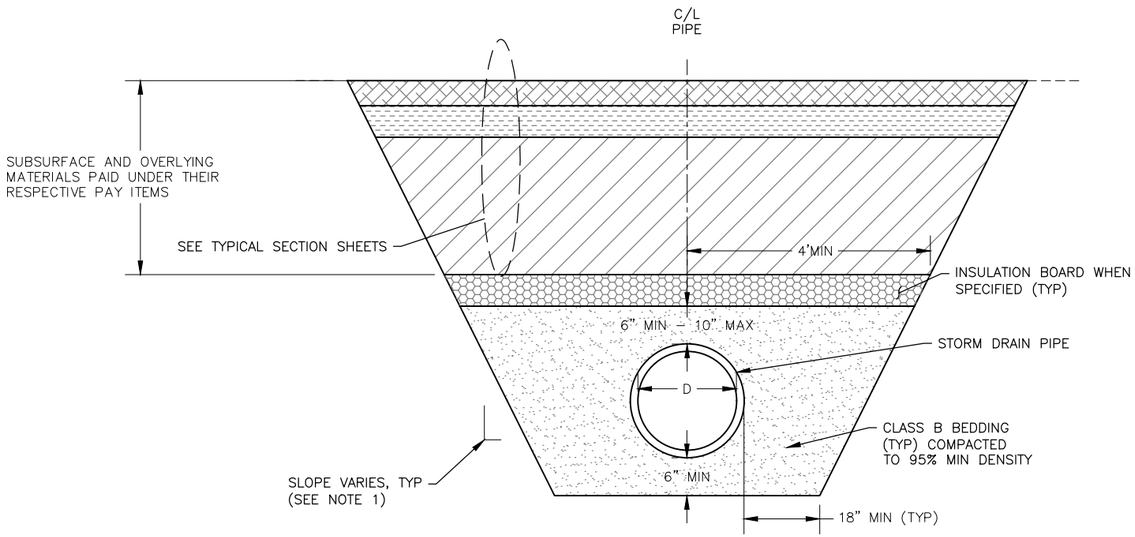
Layout Name: DETAILS TIEDOWN
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-DETAILS.dwg

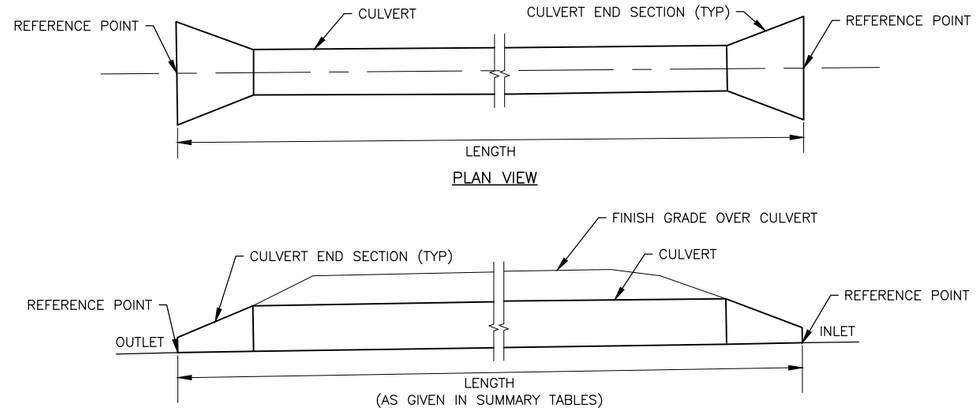


1/28 STORM DRAIN TRENCH TYPICAL

SCALE: NTS

NOTES:

1. TRENCH WALL SLOPES WILL VARY WITH SOIL STRENGTH AND CHARACTER. SLOPES SHALL CONFORM WITH OSHA REGULATIONS AND REQUIREMENTS.
2. EXCAVATION, BEDDING, BACKFILL, AND FILTER MATERIALS WILL BE SUBSIDIARY TO PIPE ITEMS.
3. PERMANENT STORM DRAIN INSTALLATION MAY NOT OCCUR UNTIL EMBANKMENT SURCHARGE LOAD HAS BEEN REMOVED. SEE SHEETS 11 AND 13.
4. INSTALL SAND BLANKET PER SPECIFICATION P-190.
5. INSULATION BOARD TO BE INSTALLED FROM STRUCTURE. REVIEW PIPE SUMMARY TABLE ON SHEET 5 FOR WHICH PIPES REQUIRE INSULATION BOARD.
6. INSULATION BOARD IS SUBSIDIARY TO THE RESPECTIVE ITEMS OF WORK. SEE SPECIFICATION P-190.
7. JOINTS IN INSULATION BOARD SHALL BE STAGGERED WHEN MULTIPLE LAYERS ARE REQUIRED.



PLAN VIEW

SECTION VIEW

2/28 CULVERT REFERENCE DETAIL

SCALE: NTS

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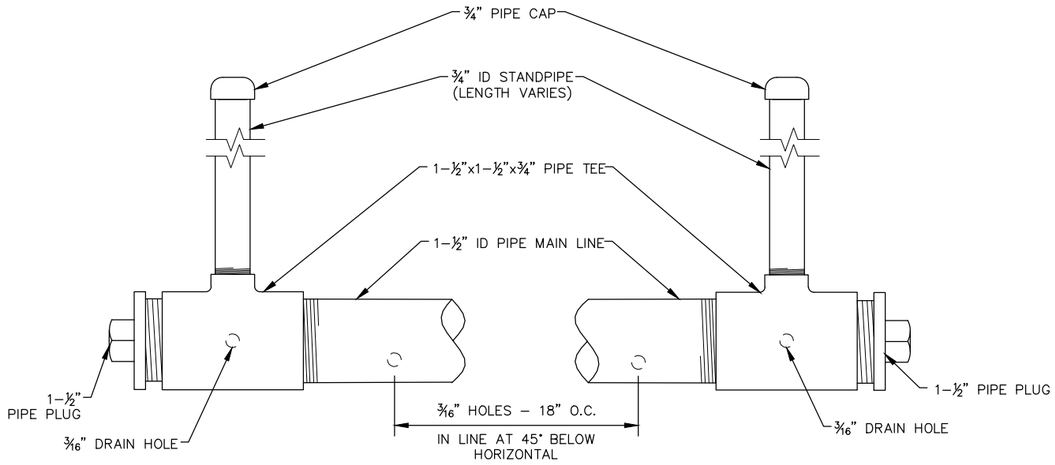
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
CULVERT DETAILS

DATE: 04/09/2025

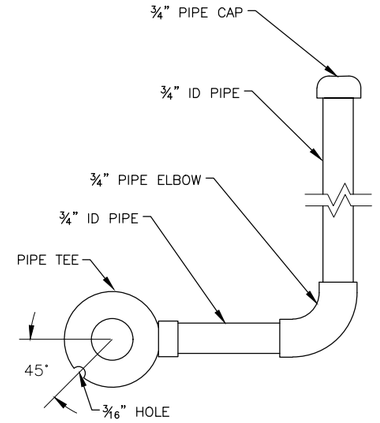
SHEET: 28 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 1:00 PM
Layout Name: CULVERT DETAILS
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-DETAILS.dwg



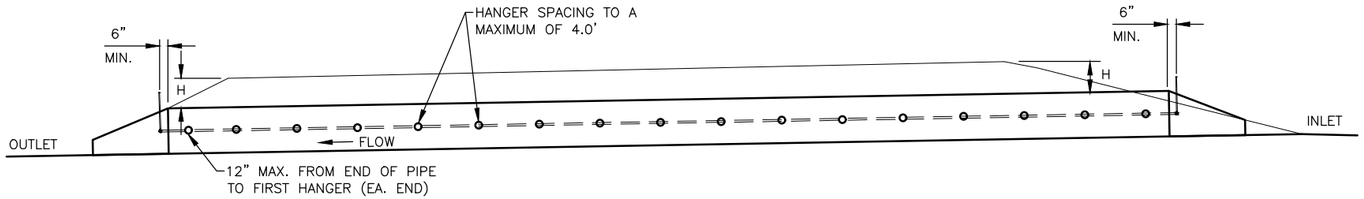
PLAN VIEW



END SECTION

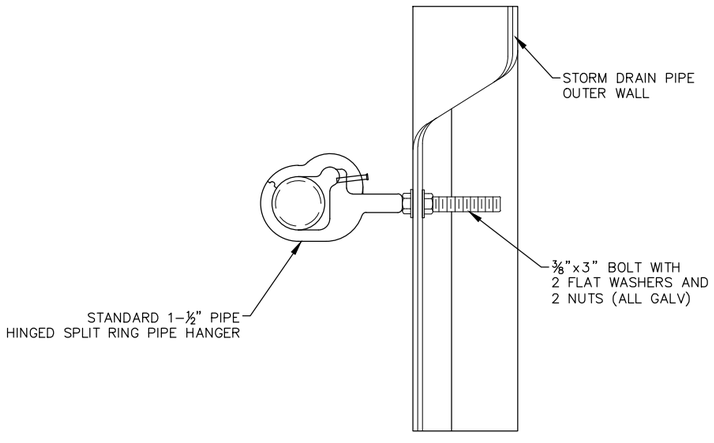
1/29 STANDARD SINGLE THAW PIPE DETAIL

SCALE: NTS



2/29 CULVERT THAW PIPE DETAIL

SCALE: NTS

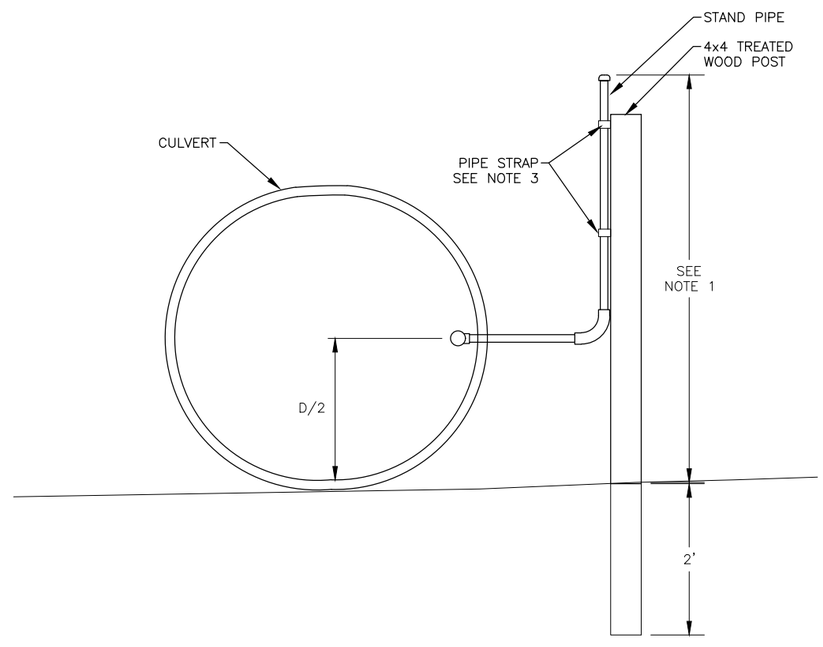


3/29 THAW PIPE HANGER DETAIL

SCALE: NTS

NOTES:

1. HEIGHT OF ALL STANDPIPES TO BE ½ THE HEIGHT OF CULVERT COVER OR 5' WHICHEVER IS LESS.
2. USE PRESSURE TREATED SUPPORT POSTS OF HEM-FIR, NO. 2 OR BETTER. USE AMMONIACAL COPPER ZINC ARSENATE (ACZA) OR CHROMATED COPPER ARSENATE (CCA) PRESERVATIVES ON SUPPORT POSTS. PRESSURE TREAT IN ACCORDANCE WITH AASHTO M133.
3. FASTEN STAND PIPE TO SUPPORT POSTS WITH GALVANIZED RIGID CONDUIT STRAPS AND 3" LONG GALVANIZED LAG SCREWS AT MAX. 12" CENTERS.



4/29 STANDARD BRACE

SCALE: NTS

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
THAW PIPE DETAILS

DATE: 04/09/2025

SHEET: 29 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

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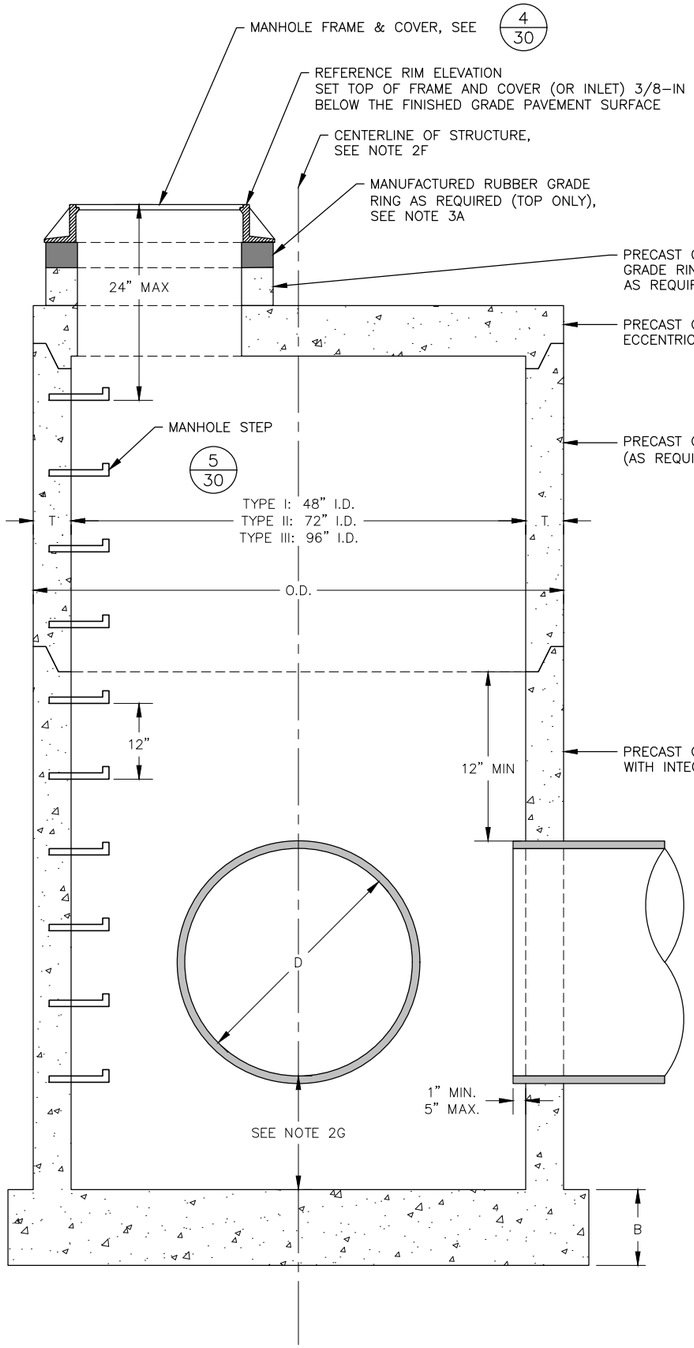
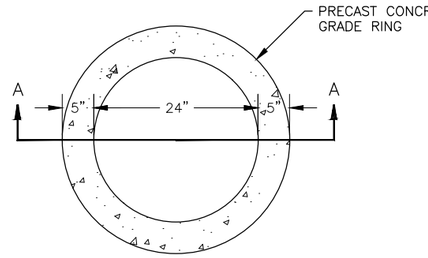
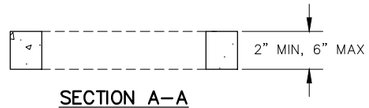
Layout Name: 4/09/2025, 1:00 PM
File Path and Name: W:\Projects\MIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-DETAILS.dwg



1/30 PRECAST CONCRETE STORM DRAIN MANHOLE

SCALE: NTS

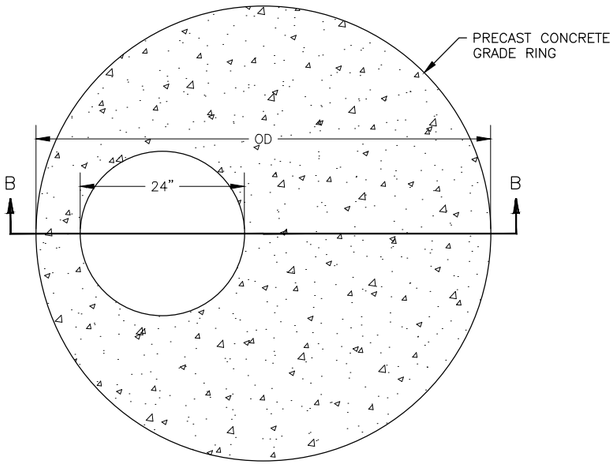


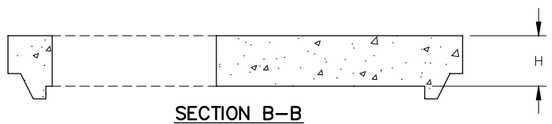


SECTION A–A

2/30 PRECAST CONCRETE GRADE RINGS

SCALE: NTS

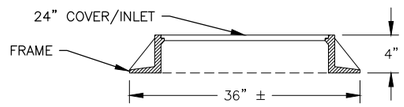




SECTION B–B

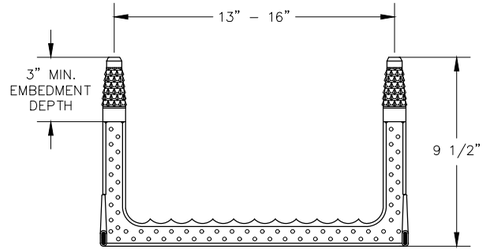
3/30 PRECAST CONCRETE ECCENTRIC REDUCING SLAB

SCALE: NTS



4/30 MANHOLE FRAME AND STORM DRAIN INLET COVER

SCALE: NTS



5/30 DETAIL: MANHOLE STEP

SCALE: NTS

DETAIL NOTES:

1. DESIGN ALL CONCRETE STRUCTURES AND STEEL REINFORCEMENT TO MEET THE LOADING CRITERIA PROVIDED IN THE CURRENT FAA AC 150/5320–6, THE REQUIREMENTS OF ASTM C478, AND THE DESIGN LOADS PROVIDED IN THE SPECIFICATIONS (D751). WALL, FLOOR, AND SLAB THICKNESS DIMENSIONS WILL VARY BASED ON LOAD REQUIREMENTS, SIZE AND DEPTH OF STRUCTURE. PROVIDE SHOP DRAWINGS FOR EACH STRUCTURE WITH A LETTER FROM THE PRECAST SUPPLIER CERTIFYING COMPLIANCE WITH THE REQUIREMENTS ABOVE, AND SEALED BY A CIVIL ENGINEER CURRENTLY REGISTERED IN THE STATE OF ALASKA.

2. PRECAST CONCRETE MANHOLE

   A EMBED STEEL FROM FIRST BARREL INTO MANHOLE BASE TO PROVIDE AN INTEGRAL–BASE MANHOLE.

   B CONSTRUCT MANHOLE WITH 48–INCH I.D. FOR MANHOLES WITH PIPE DIAMETERS (D) LESS THAN OR EQUAL TO 24–INCHES. CONSTRUCT MANHOLE WITH 72–INCH I.D. FOR MANHOLES WITH PIPE DIAMETERS (D) BETWEEN 24 – 36 INCHES. CONSTRUCT MANHOLE WITH 96–INCH I.D. FOR MANHOLES WITH PIPE DIAMETERS (D) GREATER THAN 36 INCHES UP TO 48–INCHES.

   C PROVIDE MINIMUM 135° BETWEEN PIPE PENETRATIONS GREATER THAN 24–INCHES OR MAINTAIN 8–INCH VERTICAL CLEARANCE FOR PIPE PENETRATIONS WITH ANGLES LESS THAN 135°.

   D PLACE CONCRETE MANHOLE / MANHOLE BASE ON 6–INCH MINIMUM CRUSHED AGGREGATE BASE COURSE. COMPACTED TO 95% MINIMUM DENSITY.

   E SEAL PIPE PENETRATIONS WITH NON–SHRINKABLE GROUT IN ACCORDANCE WITH THE SPECIFICATIONS AND MANUFACTURERS RECOMMENDATIONS.

   F OFFSETS ARE MEASURED BETWEEN THE CENTERLINE OF THE ALIGNMENT AND THE CENTERLINE OF THE STRUCTURE.

   G ALL STORM DRAIN MANHOLES SHALL HAVE 18" MIN SUMPS.

3. GRADE RINGS

   A PROVIDE MINIMUM OF ONE 2–INCH GRADE RING ABOVE EACH REDUCING SLAB UNLESS OTHERWISE NOTED ON THE PLANS. PROVIDE MANUFACTURERED RUBBER GRADE RINGS (NOT TO EXCEED 3" THICK) IMMEDIATELY BELOW THE FRAME AND SEAL USING SELF LEVELING POLYURETHANE SEALANT, OR AS RECOMMENDED BY THE MANUFACTURER. PROVIDE A COMBINATION OF TAPERED RUBBER GRADE RINGS AS NEEDED TO MATCH FINISHED GRADE SLOPES. PROVIDE PRECAST CONCRETE GRADE RINGS BELOW RUBBER GRADE RINGS AS REQUIRED.

4. PRECAST CONCRETE ECCENTRIC REDUCING SLAB

   A CONSTRUCT ECCENTRIC REDUCING SLAB WITH MALE OR FEMALE END AS NEEDED TO MATCH MANHOLE RISER.

   B ALIGN REDUCING SLAB SO THAT THE MANHOLE STEPS ARE IN LINE WITH THE MANHOLE FRAME AND COVER.

5. MANHOLE FRAME AND COVER/INLET

   A PROVIDE MANHOLE FRAME AND COVER (OR INLET) IN ACCORDANCE WITH THE SUMMARY TABLES.

   B FRAMES, GRATES, AND COVERS SHALL MEET LOADING REQUIREMENTS SPECIFIED PER D751.

6. MANHOLE STEPS

   A PROVIDE SLIP RESISTANT FOOT TREAD WITH "WINGS" TO PREVENT FEET FROM SLIDING OFF THE EDGE AND INCLUDE REFLECTORS AT THE STEP CORNERS.

   B INSTALL MANHOLE STEPS TO RESIST A PULLOUT FORCE OF 1500LB.

BY	DATE	REVISION

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CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
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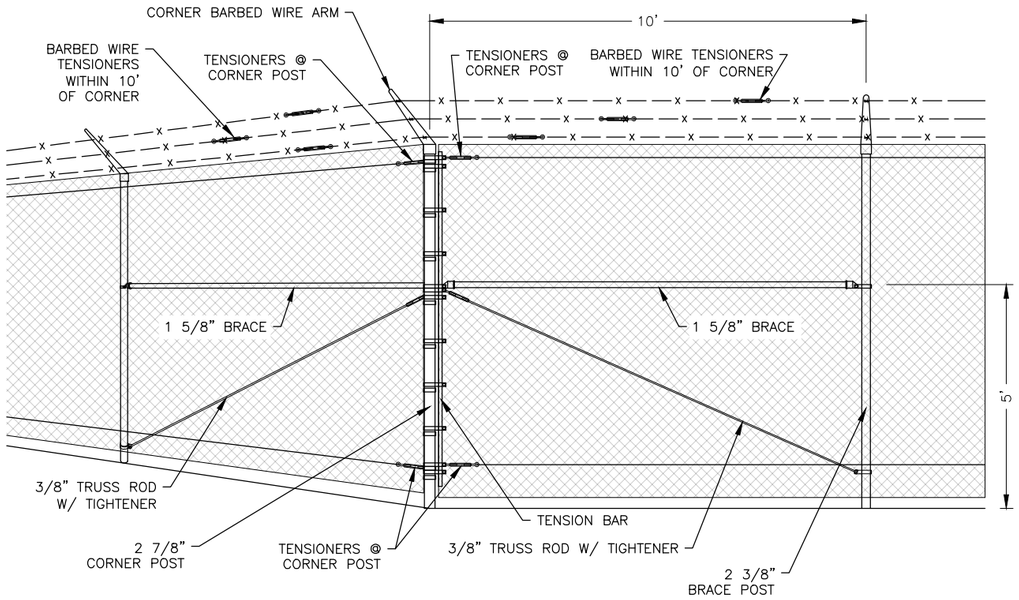
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
MANHOLE DETAILS

DATE: 04/09/2025

SHEET: 30 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 1:00 PM
Layout Name: AWG
File Path and Name: W:\Projects\ANA Lake Hood\ANC ATCT Replacement Parking 00831\Civil\30\Planset\00831-ANC-DETAILS.dwg



1/31 CORNER POST
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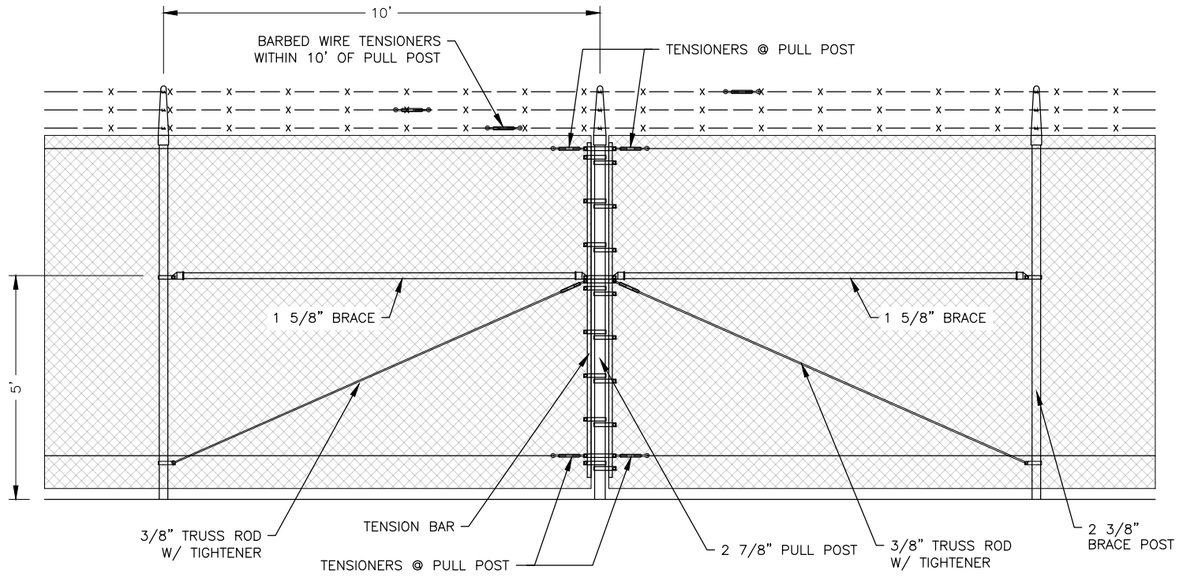

2/31 PULL POST
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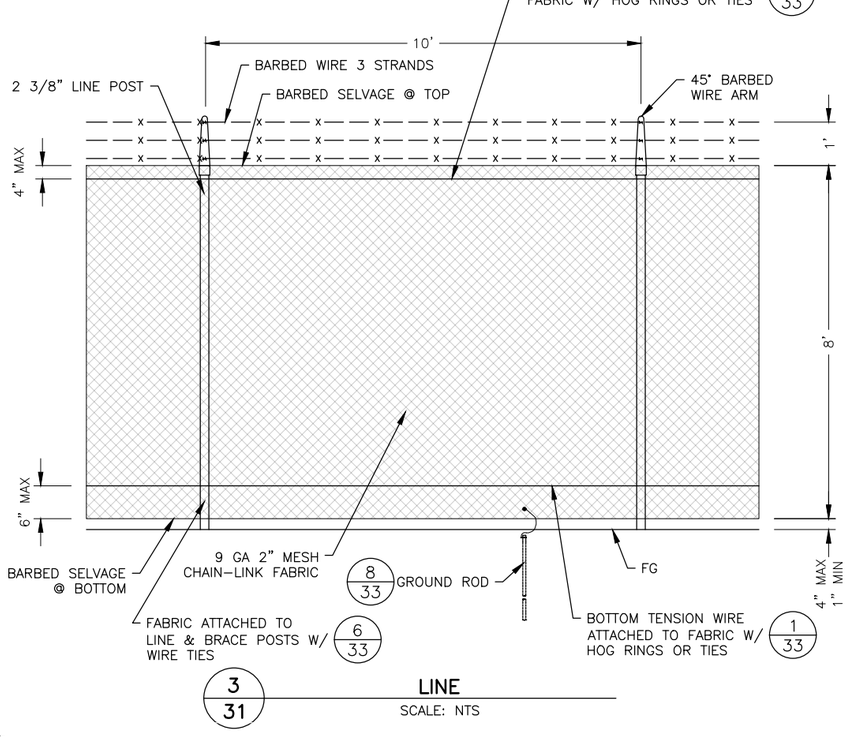

3/31 LINE
SCALE: NTS

NOTES:

1. SEE SHEET 33 FOR FENCING DETAILS.

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
CHAIN-LINK FENCING DETAILS

DATE: 04/09/2025
SHEET: 31 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI
Date Revised: 4/09/2025, 1:00 PM
Layout Name: DETAILS FENCING 1
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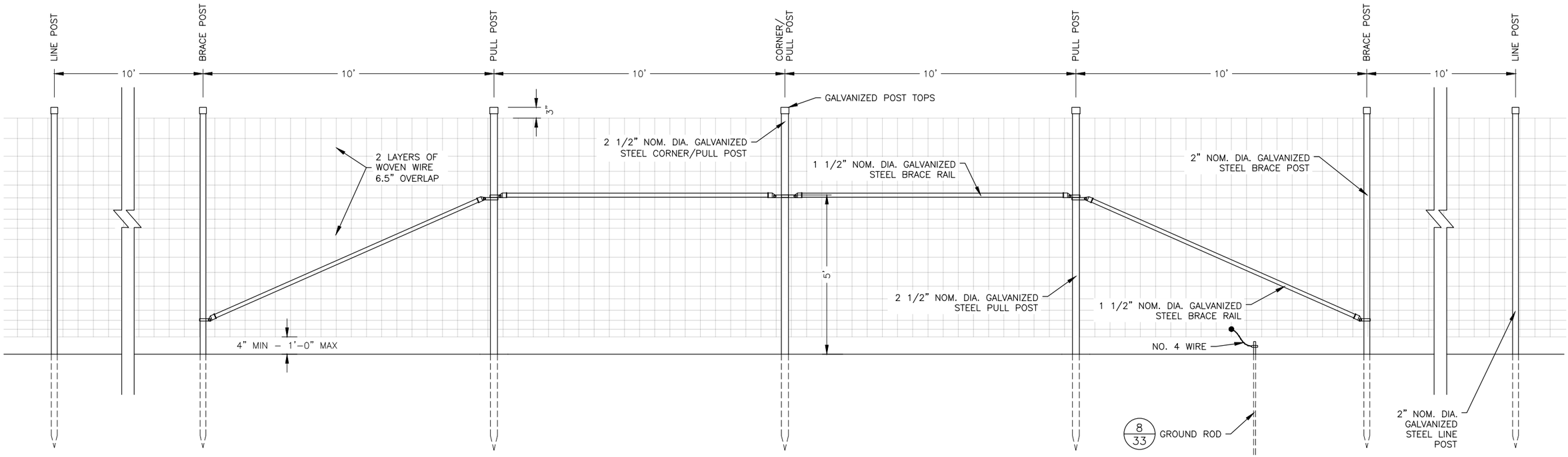
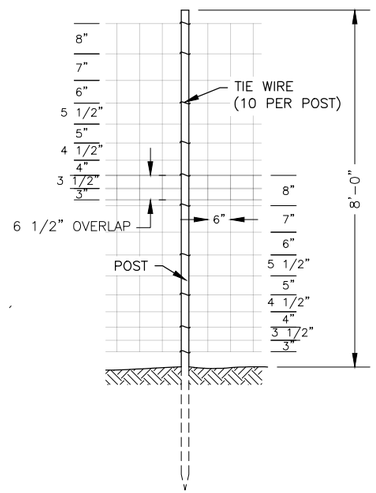


1/32 WOVEN WIRE FENCING
SCALE: NTS



2/32 WOVEN WIRE FENCE DETAIL
SCALE: NTS

NOTES:

1. USE EQUAL POLE SPACING (S). MAXIMUM POLE SPACING IS 10 FEET.
2. PULL POSTS SHALL HAVE A MAXIMUM SPACING OF 250 FEET.
3. ADDITIONAL BRACE POST OR PULL POST LOCATIONS MAY BE NECESSARY WHERE FENCING INTERSECTS OR RUNS PARALLEL WITH STREAMS, BODIES OF WATER, OR LOW GRADES IN THE FENCE LINE.
4. SECURELY FASTEN POST TOPS TO POST.
5. SECURELY FASTEN BRACE RAILS TO POSTS WITH BRACE BANDS.
6. WOVEN WIRE FABRICS SHALL BE JOINED LONGITUDINALLY WITH A CONTINUOUS 9 GAUGE GALVANIZED WIRE WOVEN NEATLY THROUGH THE MESH AND WRAPPED EVERY 24 INCHES OR ATTACHED WITH 9 GAUGE HOG RINGS SPACED AT 24 INCH INTERVALS.

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
WOVEN WIRE FENCING DETAILS

DATE: 04/09/2025
SHEET: 32 OF 38

Designed By: AAT
Drawn By: RJB
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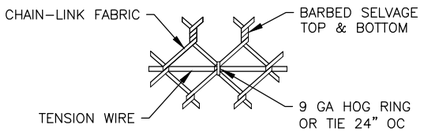
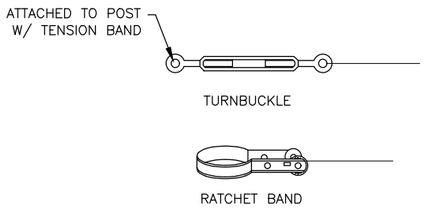
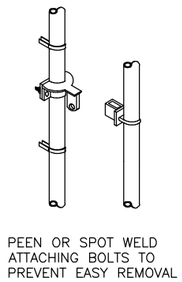
Layout Name: DETAILS FENCING 3
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-DETAILS.dwg



1/33 FABRIC TO TENSION WIRE FASTENERS
SCALE: NTS



2/33 TENSIONERS FOR STRANDED WIRE
SCALE: NTS



3/33 ICE FREE LOCKING ASSEMBLY
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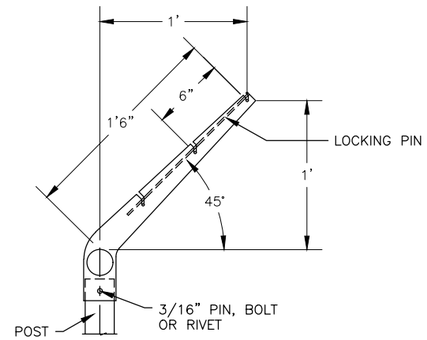
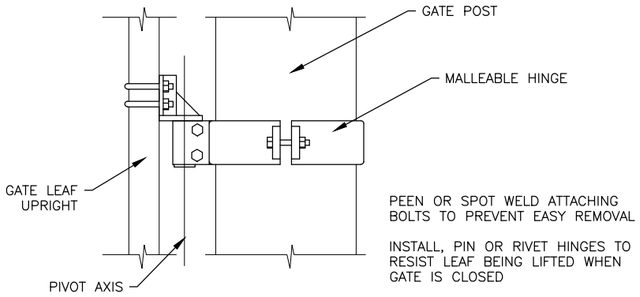
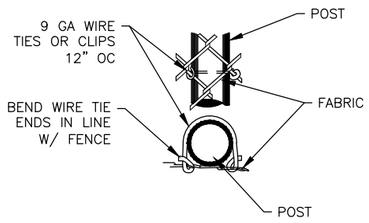


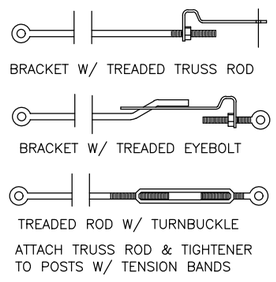
4/33 LINE POST BARBED WIRE ARM
SCALE: NTS



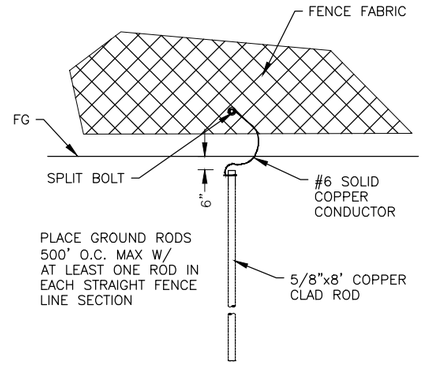
5/33 GATE HINGE
SCALE: NTS



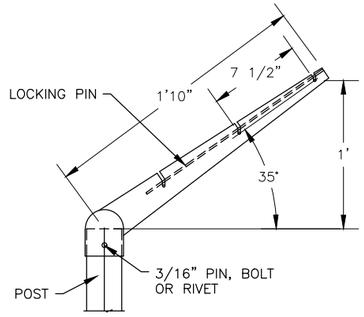
6/33 FABRIC TO TUBULAR POST FASTENERS
SCALE: NTS



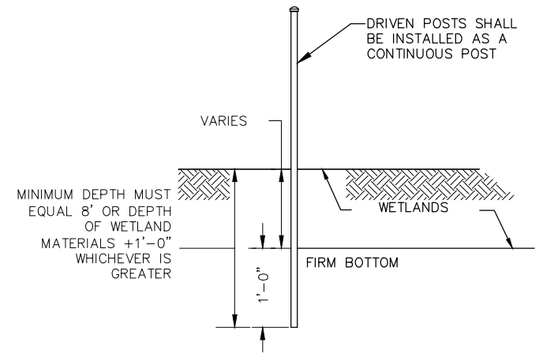
7/33 TRUSS ROD W/ TIGHTENER
SCALE: NTS



8/33 GROUND ROD
SCALE: NTS



9/33 CORNER POST BARBED WIRE ARM
SCALE: NTS



10/33 DRIVEN POST DETAIL
SCALE: NTS

NOTES:

1. USE 3/16" DIAMETER RIVETS CONFORMING TO ALUMINUM ALLOY 6061–T43 FOR HOT DRIVEN RIVETS.

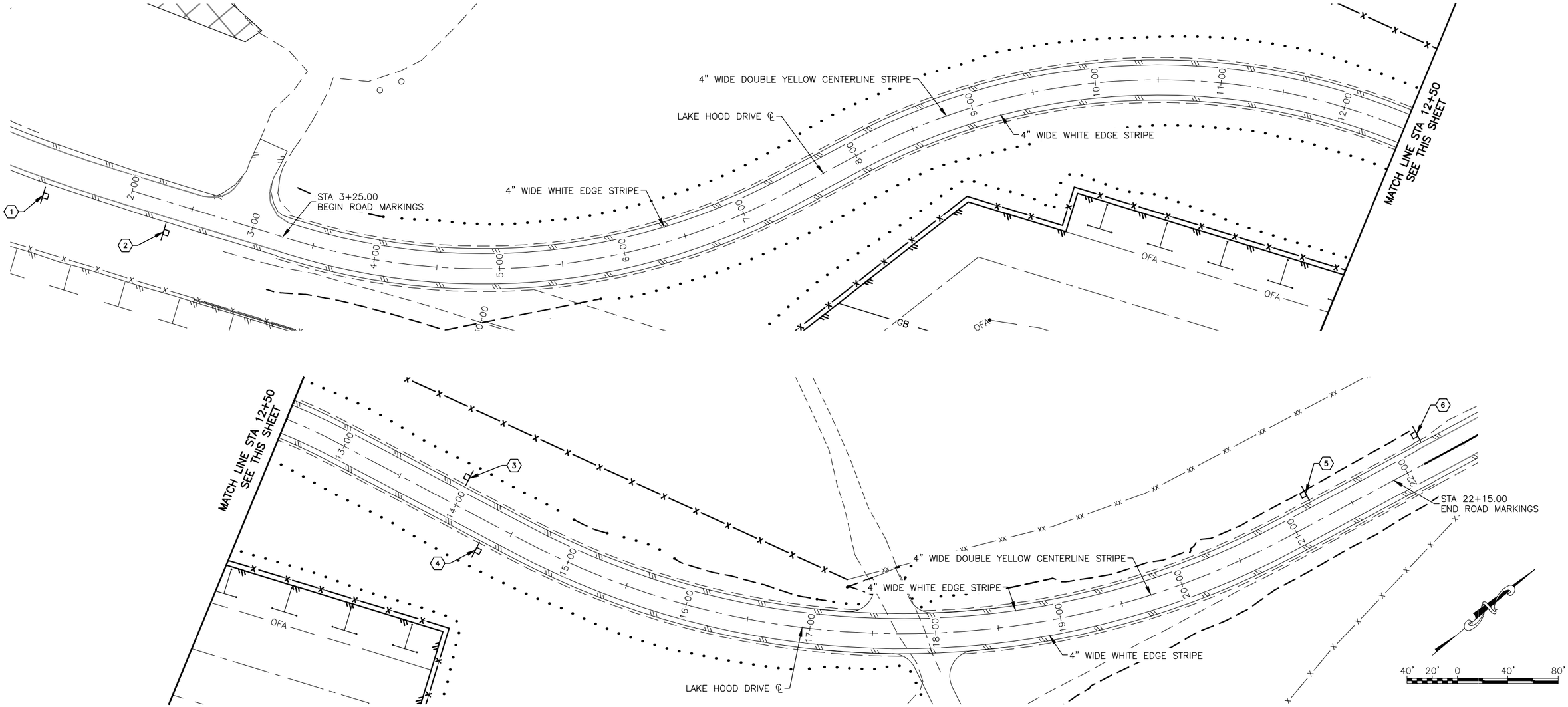
BY	DATE	REVISION

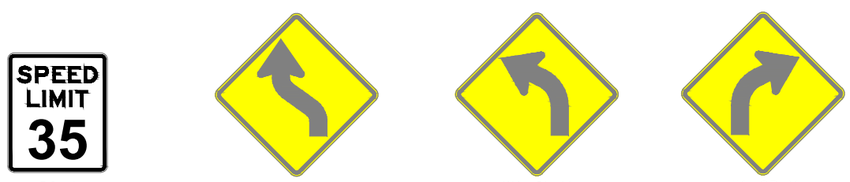
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
CHAIN-LINK FENCING DETAILS

DATE: 04/09/2025
SHEET: 33 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI
Date Revised:
Layout Name: 4/09/2025, 1:00 PM
DETAILS FENCING 2
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-DETAILS.dwg





R2-1

W1-4L_Y

W1-2L_Y

W1-2R_Y

SIGN SUMMARY								
SIGN NO	TYPE	LOCATION	LEGEND	SIZE INCH	COLOR LEGEND/BACKGROUND	THICKNESS UNFRAMED INCH	AREA FT^2	POST TYPE*
1	R2-1	RD CL 01+35.39 24.00' R	SPEED LIMIT – 35	24"X30"	BLK/WHT RETROREFLECTIVE	.125"	5.00	2 ½" PT
2	W1-4L_Y	RD CL 02+35.39 24.00' R	--	36"X36"	BLACK/YELLOW	.125"	9.00	2 ½" PT
3	W1-4L_Y	RD CL 13+97.69 24.00' L	--	36"X36"	BLACK/YELLOW	.125"	9.00	2 ½" PT
4	W1-2L_Y	RD CL 14+32.70 24.00' R	--	36"X36"	BLACK/YELLOW	.125"	9.00	2 ½" PT
5	W1-2R_Y	RD CL 21+31.09 24.00' L	--	36"X36"	BLACK/YELLOW	.125"	9.00	2 ½" PT
6	R2-1	RD CL 22+31.09 24.00' L	SPEED LIMIT – 35	24"X30"	BLK/WHT RETROREFLECTIVE	.125"	5.00	2 ½" PT

***PT – PERFORATED STEEL TUBE**

MARKING PLAN NOTES:

1. SEE SHEET 36 FOR ROAD MARKING DETAIL.
2. ALL STATION AND OFFSET LOCATIONS FOR SIGN INSTALLATION ARE APPROXIMATE. INSTALL SIGNS AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. INSTALL ROADWAY SIGNS ON SIGN POST BASE AND FOUNDATION SHOWN ON STANDARD PLAN S-31.02. USE CONCRETE CONFORMING TO ITEM P-610 OF THE SPECIFICATIONS.

BY	DATE	REVISION

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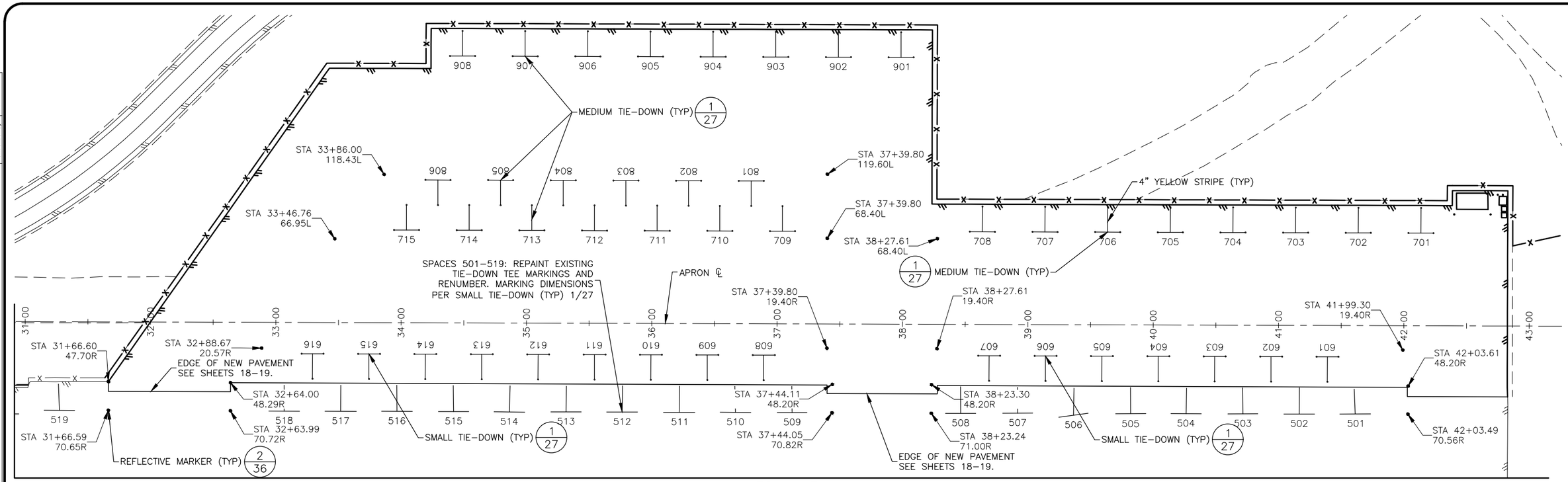
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
MARKING AND SIGNING PLAN - ROAD

DATE: 04/09/2025
SHEET: 34 OF 38

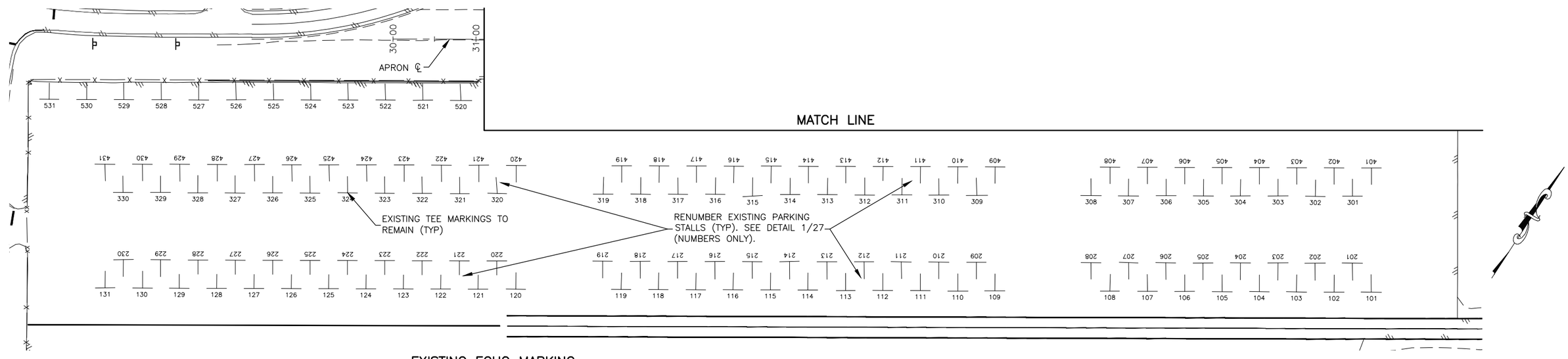
Designed By: AAT
Drawn By: RJB
Checked By: TRI
Date Revised: 4/09/2025, 1:02 PM
Layout Name: MARKING_PLAN_1
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-MARKING PLAN.dwg



MATCH LINE

NEW ECHO MARKING

40' 20' 0 40' 80'



EXISTING ECHO MARKING

60' 30' 0 60' 120'

BY	DATE	REVISION

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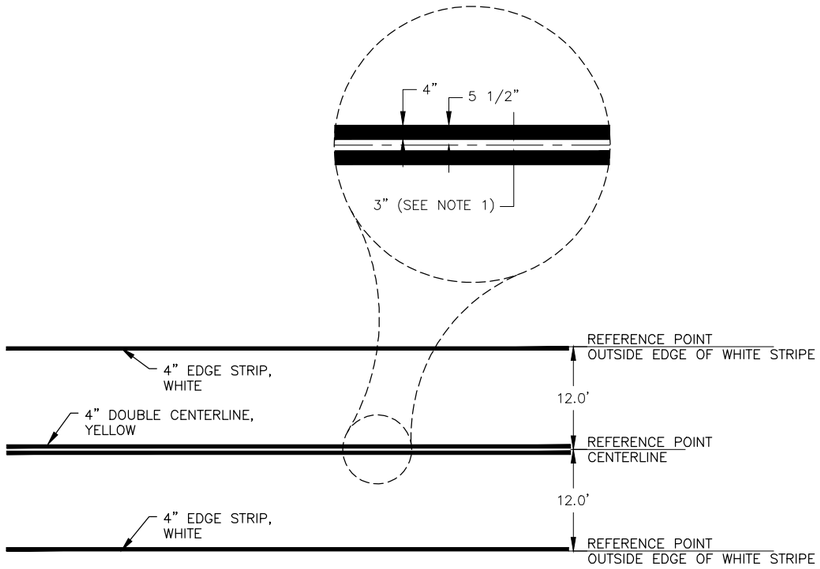
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
MARKING AND SIGNING PLAN - APRON

DATE: 04/09/2025

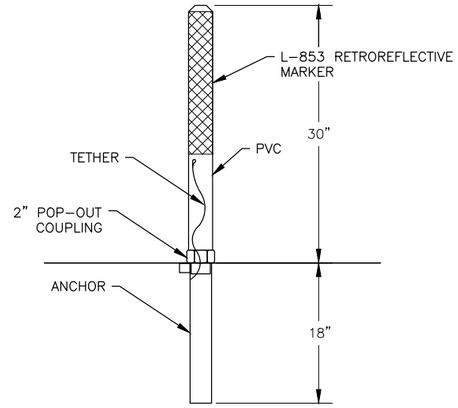
SHEET: 35 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 1:02 PM
Layout Name: MARKING PLAN 2
File Path and Name: W:\Projects\ANA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-MARKING PLAN.dwg



1/36 ROAD MARKING DETAIL
SCALE: NTS



2/36 REFLECTIVE MARKER
SCALE: NTS

NOTES:

1. ADJUST CENTERLINE SPACING FROM 3" UP TO 5" WHERE RECESSED PAVEMENT MARKERS ARE REQUIRED.
2. FOR ALL FINAL ROADWAY MARKINGS USE INLAID METHYL METHACRYLATE PAVEMENT MARKINGS.
3. IF THE NEW AND EXISTING PAVEMENT MARKINGS ARE NOT ALIGNED AT THE MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER ON THE NEW PAVEMENT.

BY	DATE	REVISION

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
MARKING DETAILS

DATE: 04/09/2025

SHEET: 36 OF 38

Designed By: AAT
Drawn By: RJB
Checked By: TRI

Date Revised: 4/09/2025, 1:02 PM
Layout Name: DETAILS MARKING
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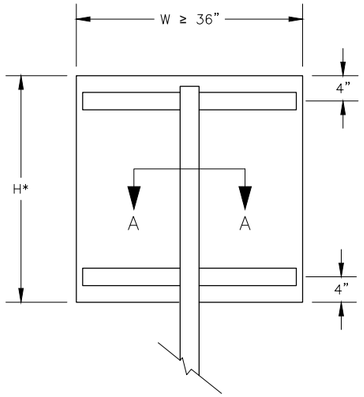
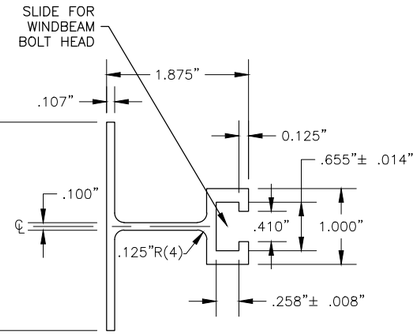


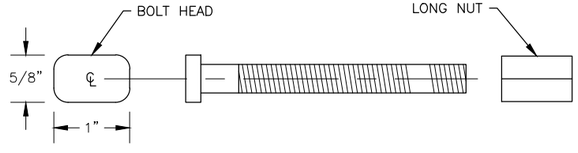
RECTANGLES AND TRAPEZOIDS

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

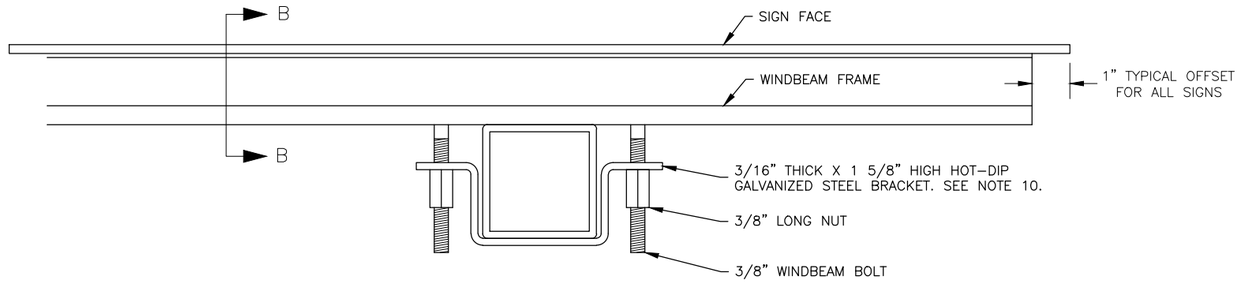
WINDBEAM LOCATIONS FOR RECTANGLES AND TRAPEZOIDS ELEVATION VIEW



SECTION B – B WINDBEAM CROSS SECTION



3/8" WINDBEAM BOLT AND LONG NUT



SECTION A – A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM

NOTES:

1. ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
2. INSTALL WINDBEAM ON SIGNS 36 INCHES WIDE AND WIDER.
3. 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.
4. USE FRAMING MEMBERS MADE FROM ALUMINUM ALLOY 6061–T6.
5. EACH FRAMING MEMBER SHALL BE ONE CONTINUOUS PIECE.
6. ATTACH FRAMING MEMBERS TO THE SIGN PANELS WITH RIVETS OR AN ENGINEER APPROVED, DOUBLE SIDED, HIGH STRENGTH, ADHESIVE TAPE.
7. 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.
8. WHEN RIVETS ARE USED TO ATTACH FRAMING MEMBERS, INSTALL 2 RIVETS IN EACH END AND THE BALANCE ON 8" MAXIMUM CENTERS.
9. USE 3/16" DIAMETER RIVETS CONFORMING TO ALUMINUM ALLOY 6061–T6 FOR COLD DRIVEN RIVETS, OR ALUMINUM ALLOY 6061–T43 FOR HOT DRIVEN RIVETS.
10. THE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
11. POST LENGTHS SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR USING THE CRITERIA FOR RURAL ROADS, UNLESS DETERMINED OTHERWISE BY THE ENGINEER.

1/37 SIGN/POST DETAILS

SCALE: NTS

BY	DATE	REVISION

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CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

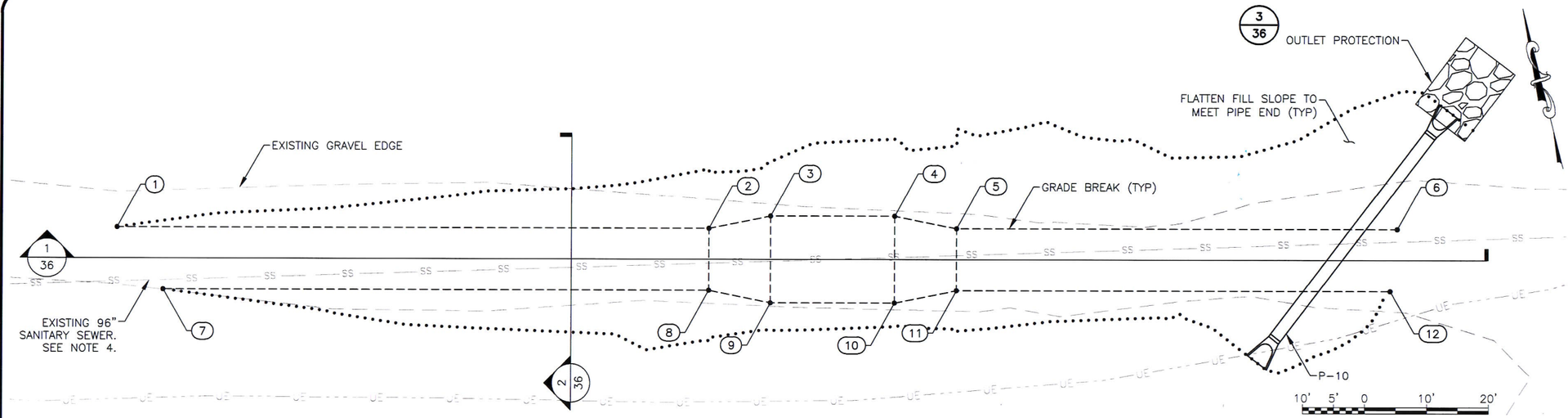
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
SIGN DETAILS

DATE: 04/09/2025

SHEET: 37 OF 38

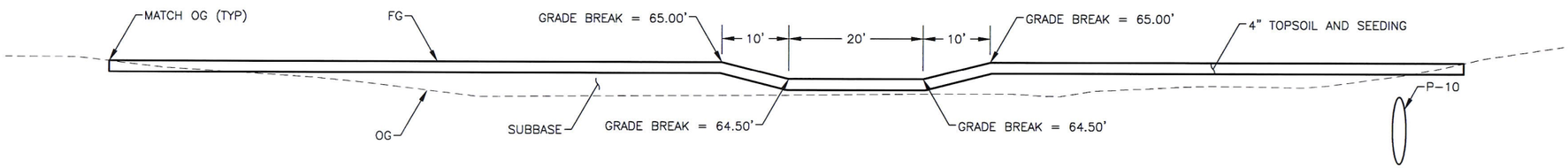
Designed By: AAT
Drawn By: RJB
Checked By: TRI

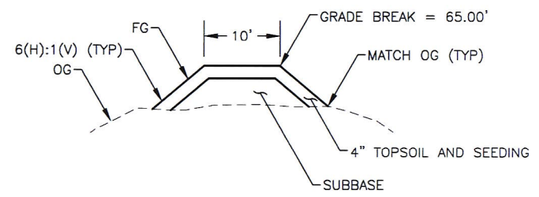
Date Revised:
Layout Name: DETAILS SIGN
File Path and Name: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-DETAILS.dwg
4/09/2025, 1:02 PM



GRADING POINTS				
POINT #	STATION	OFFSET	ELEVATION	DESCRIPTION
1	19+02.81	482.13RT	65.00	MATCH OG
2	19+15.25	575.05RT	65.00	GRADE BREAK
3	19+17.47	584.34RT	64.50	GRADE BREAK
4	19+19.78	603.85RT	64.50	GRADE BREAK
5	19+19.91	614.04RT	65.00	GRADE BREAK
6	19+27.53	683.53RT	65.00	MATCH OG
7	18+98.33	491.87RT	65.00	MATCH OG
8	19+10.09	577.36RT	65.00	GRADE BREAK
9	19+10.30	587.55RT	64.50	GRADE BREAK
10	19+12.72	607.00RT	64.50	GRADE BREAK
11	19+14.90	616.28RT	65.00	GRADE BREAK
12	19+22.65	684.55RT	65.00	MATCH OG

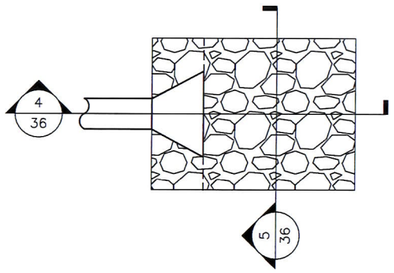
EMBANKMENT MODIFICATION PLAN



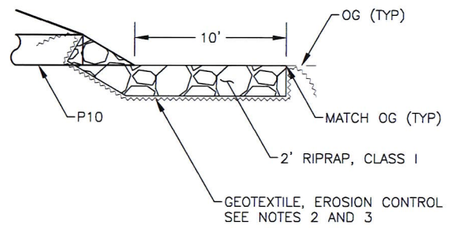


1/36 EMBANKMENT MODIFICATION SECTION 1
SCALE: NTS

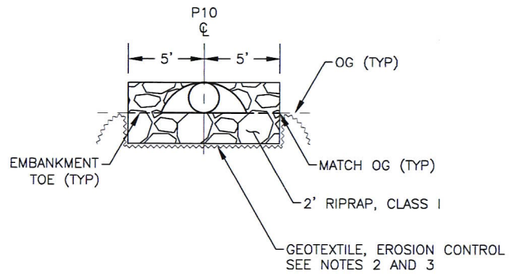
2/36 EMBANKMENT MODIFICATION SECTION 2
SCALE: NTS



3/36 OUTLET PROTECTION
SCALE: NTS



4/36 OUTLET PROTECTION SECTION 4
SCALE: NTS



5/36 OUTLET PROTECTION SECTION 5
SCALE: NTS

NOTES:

1. STATIONS AND OFFSETS REFERENCE THE LAKE HOOD DRIVE ALIGNMENT.
2. KEY FABRIC INTO EXISTING GROUND A MINIMUM OF 3 FEET.
3. FABRIC SHALL HAVE A MAXIMUM APPARENT OPENING SIZE OF 0.22 MM.
4. SANITARY SEWER LOCATION IS APPROXIMATE. ACTUAL DEPTH AND LOCATION MAY VARY.

STATE OF ALASKA 49TH REGISTERED PROFESSIONAL ENGINEER
Aaron J. Havel
OR - 107650
6/14/24

AWR ENGINEERING, LLC
4011 ARCTIC BOULEVARD, SUITE 106
ANCHOIRAGE, ALASKA 99503-5701
(907) 441-2973
AECL1470

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T00001
EMBANKMENT MODIFICATION DETAILS

DATE: 06/14/2024
SHEET: 36 OF 36

Designed By: AH
Drawn By: AH
Checked By: JD

Date Revised:
Layout Name: 6/14/2024, 8:45 AM
File Path and Name: LMBK
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DEMOLITION NOTES:

1. REMOVE ELECTRICAL EQUIPMENT AS INDICATED ON DEMOLITION PLANS. REMOVAL INCLUDES ALL ASSOCIATED CONDUIT, CONDUCTORS, CONTROLS, DRAIN CONDUITS, FOUNDATIONS, AND CONCRETE, UNLESS OTHERWISE INDICATED. OFFER ALL REMOVED LIGHTS, PANELS, CONTROLS, AND OTHER ELECTRICAL EQUIPMENT IN SERVICEABLE CONDITION THAT ARE NOT BEING REINSTALLED TO AIRPORT MAINTENANCE. DELIVER ALL REMOVED CONDUCTORS TO A DUMPSTER PROVIDED BY AIRPORT MAINTENANCE FOR DISPOSAL. DISPOSAL OF EQUIPMENT DEEMED NON-SALVAGABLE BY AIRPORT MAINTENANCE AND REMOVED CONDUIT, SUPPORTS, CONCRETE, AND OTHER MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR. DISPOSE OF MATERIAL AT AN APPROVED SITE OFF OF AIRPORT PROPERTY IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS. DISPOSAL COSTS ARE SUBSIDIARY TO THE CONTRACT.
2. WHEN REMOVING CONDUCTORS FROM EXISTING CONDUIT TO REMAIN, INSTALL A PULL ROPE FOR FUTURE USE PER SPECIFICATION L-108.
3. CONDUITS SHOWN TO BE REMOVED THAT WILL NOT BE DISTURBED BY EXCAVATION ASSOCIATED WITH THIS PROJECT MAY BE ABANDONED IN PLACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. REMOVE ALL CONDUCTORS FROM ABANDONED CONDUITS.
4. REMOVAL OF EXISTING POWER POSTS, LIGHTING, AND ELECTRICAL PANELS IS SUBSIDIARY TO INSTALLATION OF NEW POWER POSTS, LIGHTING, AND ELECTRICAL PANELS.
5. COORDINATE DISCONNECTION AND REMOVAL OF FLIGHT PLANNING BUILDING AND REEVE AIR BUILDING ELECTRICAL SERVICES WITH CHUGACH ELECTRIC ASSOCIATION THROUGH THE ENGINEER. TRANSFORMER WILL BE REMOVED BY THE UTILITY.

ELECTRICAL NOTES:

1. COORDINATE ALL SERVICE OUTAGES WITH THE PROJECT ENGINEER PER GCP 50 AND GCP 80. SCHEDULE WORK TO MINIMIZE QUANTITY AND DURATION OF OUTAGES UNLESS OTHERWISE COORDINATED IN ADVANCE.
2. PROVIDE A MINIMUM OF 48 HOURS NOTICE FOR REQUIRED LOCKOUTS OR OTHER INVOLVEMENT OF AIRPORT MAINTENANCE PERSONNEL.
3. COORDINATE ALL UTILITY WORK WITH CHUGACH ELECTRIC ASSOCIATION THROUGH THE ENGINEER. TRANSFORMER REMOVAL AND REPLACEMENT WILL BE PERFORMED BY THE UTILITY.
4. ALL WORK ASSOCIATED WITH RELOCATION OF THE FLIGHT PLANNING BUILDING IS SUBSIDIARY TO ITEM P165.080.0000, INCLUDING DISCONNECTION AND DEMOLITION OF EXISTING ELECTRICAL SERVICE, NEW UNDERGROUND FEEDER AND DISCONNECT, AND RECONNECTION OF RELOCATED BUILDING TO NEW FEEDER.
5. ALL WORK ASSOCIATED WITH RELOCATION OF THE REEVE AIR BUILDING IS SUBSIDIARY TO ITEM P165.080.0000, INCLUDING DEMOLITION OF EXISTING ELECTRICAL SERVICE AND INSTALLATION OF NEW LOAD CENTER.
6. UNLESS OTHERWISE INDICATED, LIGHTING CIRCUITS SHALL BE 2#6 (APRON LT), 2#6 (OBSTR LT), AND 1#6 GRD IN 1-1/2" CONDUIT.

SHEET NOTES: (X)

1. REMOVE LIGHT POLE, LIGHT FIXTURES, CAMERAS AND ASSOCIATED CONDUIT AND ENCLOSURES (WHERE PRESENT), AND UNDERGROUND CIRCUITS. STORE POLE AND CAMERA-RELATED EQUIPMENT FOR REINSTALLATION. CUT OFF PILE FOUNDATION 24" BELOW GRADE AND ABANDON IN PLACE.
2. REMOVE METERBASE, PANELBOARD, APRON LIGHTING CONTACTOR, OBSTRUCTION LIGHT CONTACTOR, AND ASSOCIATED SUPPORT STRUCTURE AND FOUNDATION. STORE CONTACTORS FOR REINSTALLATION.
3. INSTALL EXISTING LIGHT POLE, NEW LIGHT FIXTURES, AND EXISTING CAMERAS AND ASSOCIATED CONDUIT AND ENCLOSURES (WHERE PRESENT) ON NEW PILE FOUNDATION.
4. INSTALL NEW MANHOLE TO CAPTURE EXISTING CIRCUITS. SPLICE CIRCUITS USING WATERTIGHT EPOXY SPLICE KITS AND EXTEND TO NEW PANEL USING 3#1/0 & 1#4 GRD IN 1-1/2"C FOR EACH CIRCUIT, TYP OF 7.
5. INSTALL NEW JUNCTION BOX TO CAPTURE EXISTING SPARE CONDUIT. EXTEND TO NEW PANEL.
6. SPLICE CONDUIT STRAIGHT THROUGH WHERE POST WAS REMOVED. INSTALL 3#1/0 & 1#4 GRD BETWEEN ADJACENT EXISTING POWER POSTS.
7. FINAL LOCATION OF NEW LOAD CENTER TO BE DETERMINED BY THE ENGINEER BASED ON FIELD CONDITIONS, BUILDING LOCATION, AND UTILITY CONNECTION.

ELECTRICAL PLAN LEGEND

EXISTING TO REMAIN (DEMO/NEW PLANS)	DEMOLITION (DEMO PLANS)	NEW WORK (NEW PLANS)	
----	———	———	ELECTRICAL CONDUIT, HDPE UNLESS OTHERWISE NOTED
			GROUND ROD, 3/4"x10' TYPICAL
E	E	E	ELECTRICAL MANHOLE
C	C	C	COMMUNICATIONS MANHOLE
E	E	E	ELECTRICAL TYPE II JUNCTION BOX
C	C	C	COMMUNICATIONS TYPE II JUNCTION BOX
--UGE--	—UGE—	—UGE—	PRIMARY UNDERGROUND ELECTRICAL LINE
--UGC--	—UGC—	—UGC—	UNDERGROUND COMMUNICATIONS LINE
			LIGHT POLE WITH MULTIPLE FLOOD LIGHT FIXTURES
			PAD-MOUNT TRANSFORMER
			POWER POST
			CCTV CAMERA
			DISCONNECT SWITCH
			LOAD CENTER

ATCT	AIR TRAFFIC CONTROL TOWER
BC	BARE COPPER
BOP	BEGINNING OF PROJECT
C	CONDUIT
CEA	CHUGACH ELECTRIC ASSOCIATION
ø DIA	DIAMETER
EOP	END OF PROJECT
EMH	ELECTRICAL MANHOLE
EMT	ELECTRICAL METALLIC TUBING
FAA	FEDERAL AVIATION ADMINISTRATION
GRD	GROUND
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
LFMC	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
PPE	PERSONAL PROTECTIVE EQUIPMENT
PVC	POLYVINYL CHLORIDE
RMC	RIGID METALLIC CONDUIT (GALVANIZED STEEL)
SS	STAINLESS STEEL
TP	TEST POINT
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
(X)	REFERENCE TO SHEET NOTE

LIGHT FIXTURE SCHEDULE

ID	DESCRIPTION	FIXTURE			COLOR	MOUNTING	MTG	MANUFACTURER/CATALOG NO.	NOTES
		VOLTAGE	WATTS	LUMENS	TEMP		HEIGHT	(OR APPROVED EQUAL)	
A	FLOOD LIGHT	208	208	30000	4000K	POLE	30'-0"	CREE OSQ-L-B-55-SV, OSQ-ML-B-AA	1
B	OBSTRUCTION LIGHT	120	6	–	RED	POLE	30'-0"	DIALIGHT RTOCR07001	

LIGHT FIXTURE SCHEDULE NOTES:

1. WHERE NEW POLES ARE REQUIRED, PROVIDE ROUND TAPERED STEEL POLE, GALVANIZED FINISH, WITH POLE-TOP TENON AND INTERNAL VIBRATION DAMPER. PROVIDE 2-POSITION BULLHORN ARM, GALVANIZED FINISH, WITH THREADED CENTER HUB AT TENON MOUNT FOR OBSTRUCTION LIGHT. SEE DETAIL 3/E4.

STATE OF ALASKA 49TH LUCAS SCHNELLER EE-11399 REGISTERED PROFESSIONAL ENGINEER

STANTEC CONSULTING SERVICES INC.
725 EAST FIREWEED LANE, SUITE 200
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(907) 276-4245
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CENTRAL REGION
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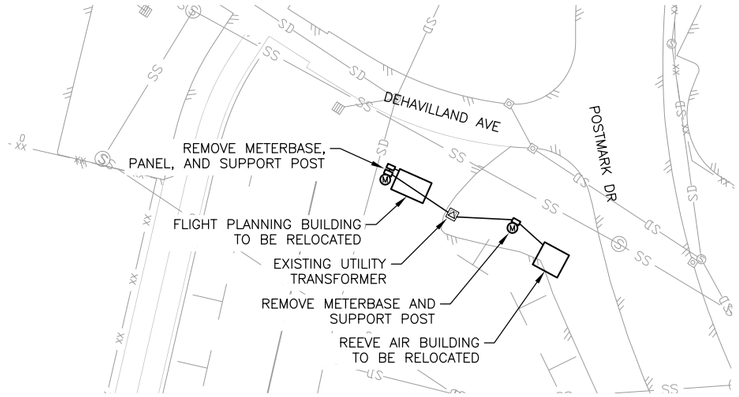
PHONE (907) 269-0590

TED STEVENS ANCHORAGE INT'L. AIRPORT
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
ELECTRICAL LEGEND AND NOTES

DATE: 6/12/2024
SHEET: E1 OF E8

Designed By: LPS
Drawn By: JCA/LPS
Checked By: CLR

Date Revised: 6/11/2024, 11:30 PM
Layout Name: Layout1
File Path and Name: U:\2073016900\drawing\e\sheets\00831-ANC-E01-LEGEND.dwg



BUILDING REMOVAL PLAN

Designed By:	LPS
Drawn By:	JCA/LPS
Checked By:	CLR
Date Revised:	6/11/2024, 11:30 PM
Layout Name:	01
File Path and Name:	U:\207301690O\drawing\e\sheets\00831-ANC-E2-PLAN-DEMO.dwg

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PROJECT No. CRMBS00831
697DCK-22-T-00001
ELECTRICAL DEMOLITION PLAN

DATE: 6/12/2024

SHEET: E2 OF E8

BUILDING RELOCATION PLAN

100' 50' 0 100' 200'

ENLARGED PLAN

10' 5' 0 10' 20'

Designed By: LPS
Drawn By: JCA/LPS
Checked By: CLR

Date Revised: 6/11/2024, 11:31 PM
Layout Name: 01
File Path and Name: U:\207301690O\drawing\e\sheets\00831-ANC-E3-PLAN-NEW.dwg

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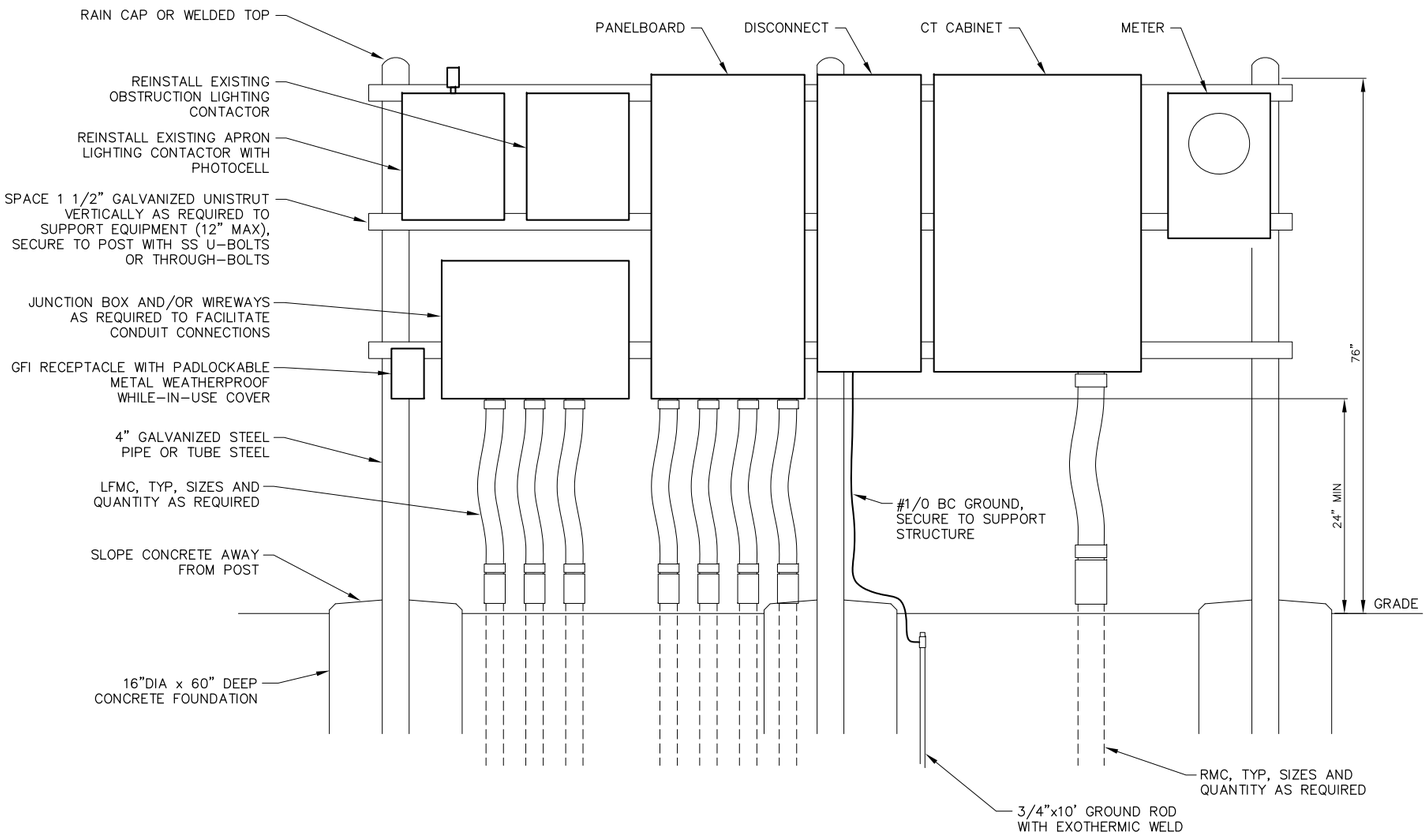
PROJECT No. CRMBS00831
697DCK-22-T-00001
ELECTRICAL NEW WORK PLAN

DATE: 6/12/2024
SHEET: E3 OF E8

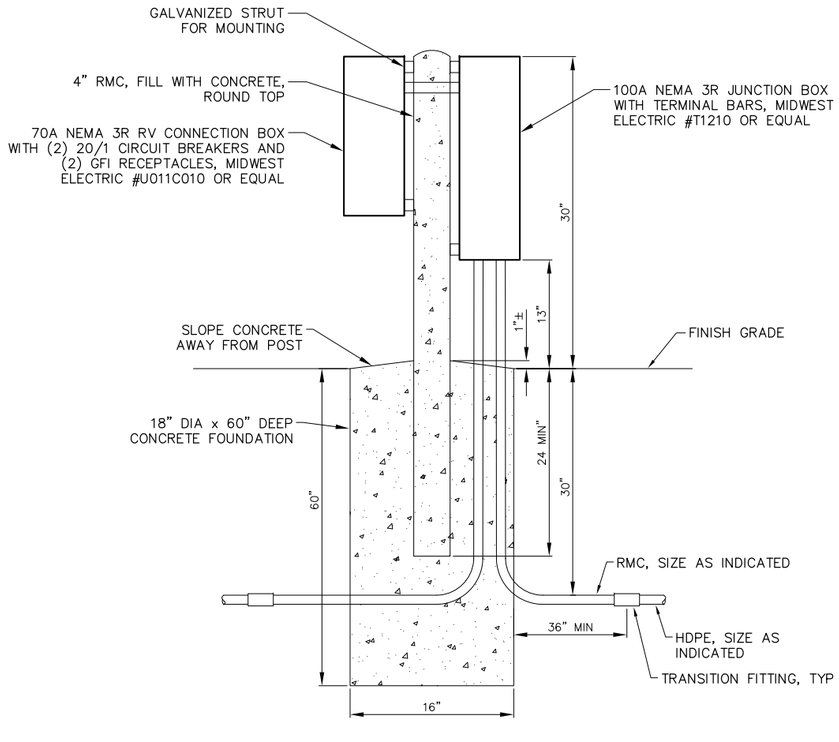


DETAIL NOTES:

1. ADJUST WIDTH AS REQUIRED FOR EQUIPMENT INSTALLED, 24" MINIMUM, 72" MAXIMUM SPAN WITHOUT ADDITIONAL SUPPORT.
2. EQUIPMENT ARRANGEMENT AND CONNECTIONS ARE SUGGESTED. CONTRACTOR SHALL DETERMINE FINAL MOUNTING AND ARRANGEMENT.
3. VERIFY AND ASBUILT APRON LIGHTING AND OBSTRUCTION LIGHTING CONTACTOR WIRING PRIOR TO REMOVAL. RECONNECT REINSTALLED CONTACTORS TO OPERATE IN SAME MANNER AS EXISTING.

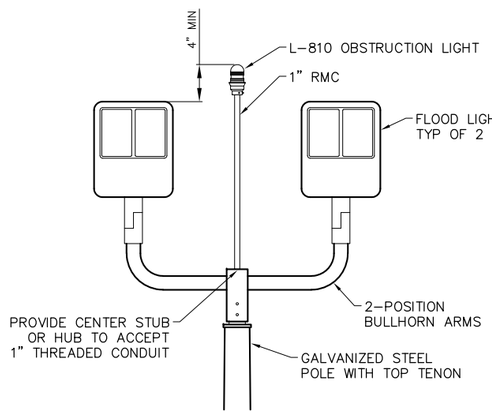
1 E4 PANEL STRUCTURE DETAIL (LOAD CENTER TYPE 2)

SCALE: N.T.S.



2 E4 POWER POST DETAIL

SCALE: N.T.S.



DETAIL NOTES:

1. SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
2. AT RELOCATED POLES, REMOVE AND REPLACE EXISTING LIGHT FIXTURES, OBSTRUCTION LIGHTS, AND INTERNAL CONDUCTORS. REPLACEMENT LIGHT FIXTURES AND OBSTRUCTION LIGHTS SHALL BE PER THE LIGHT FIXTURE SCHEDULE.
3. AT RELOCATED POLE WITH CCTV CAMERAS, MAINTAIN AND PROTECT OR REMOVE AND REINSTALL CAMERAS AND ASSOCIATED RACEWAYS, CABLES, BOXES, AND CONTROL PANEL TO MATCH EXISTING CONFIGURATION.

3 E4 APRON FLOOD LIGHT DETAIL

SCALE: N.T.S.

Designed By: LPS
Drawn By: JCA/LPS
Checked By: CLR

Date Revised: 6/11/2024, 11:32 PM
Layout Name: DETAILS1
File Path and Name: U:\207301690\drawing\e\sheets\00831-ANC-E4-E8-DETAILS.dwg

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PHONE (907) 269-0590

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PROJECT No. CRMBS00831
697DCK-22-T-00001
ELECTRICAL DETAILS

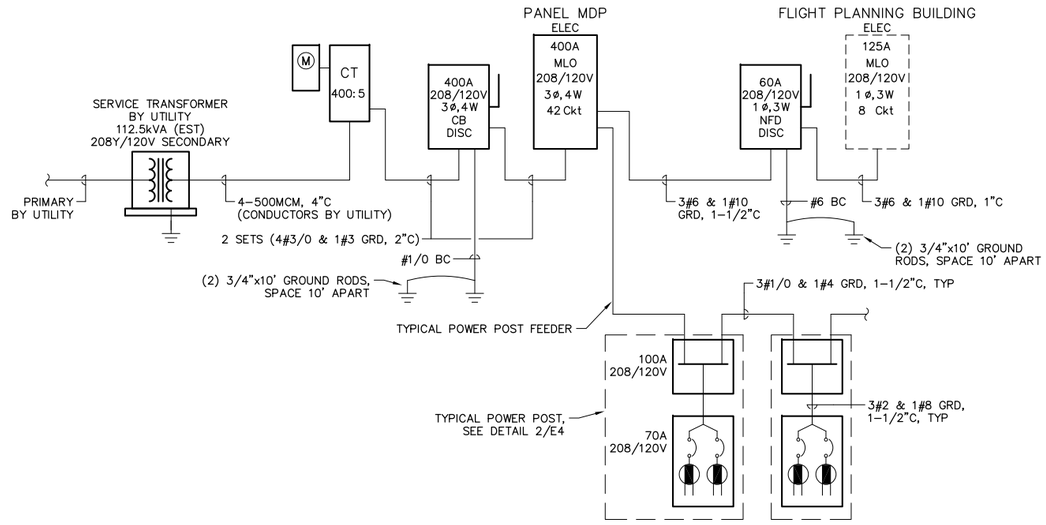
DATE: 6/12/2024

SHEET: E4 OF E8

PANEL MDP

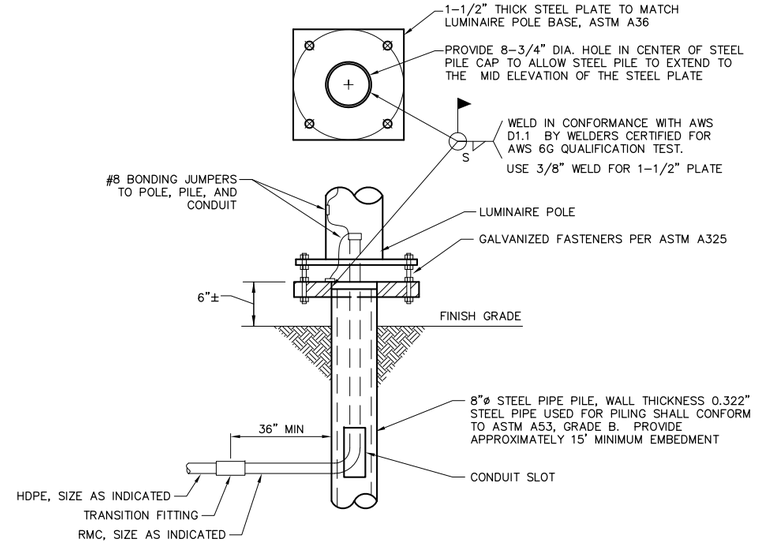
CKT	LOAD	BRANCH BKR	BRANCH VA	CONNECTED KVA A	CONNECTED KVA B	CONNECTED KVA C	BRANCH VA	BRANCH BKR	LOAD	CKT
1	EXISTING OUTLETS (2)	100/2	2400	7.2			4800	100/2	EXISTING OUTLETS (4)	2
3			2400		7.2		4800			4
5	EXISTING OUTLETS (4)	100/2	4800			9.6	4800	70/2	EXISTING OUTLETS (4)	6
7			4800	9.6			4800			8
9	EXISTING OUTLETS (7)	100/2	8400		13.2		4800	70/2	EXISTING OUTLETS (4)	10
11			8400			13.2	4800			12
13	EXISTING OUTLETS (7)	100/2	8400	9.4			1000	20/2	APRON LIGHTS	14
15			8400		9.4		1000			16
17	APRON LIGHTS	20/2	1500			2.0	500	20/1	OBSTRUCTION LIGHTS	18
19			1500	1.6			100	20/1	CONTROL	20
21	NEW OUTLETS (4)	100/2	4800		10.8		6000	100/2	NEW OUTLETS (4)	22
23			4800			10.8	6000			24
25	NEW OUTLETS (5)	100/2	6000	10.8			4800	100/2	NEW OUTLETS (5)	26
27			6000		10.8		4800			28
29	NEW OUTLETS (6)	100/2	7200			7.4	180	20/1	RECEPTACLE	30
31			7200	7.2						32
33	FLIGHT PLANNING BUILDING	50/2	3600		3.6					34
35			3600			3.6				36
37				0.0						38
39					0.0					40
41						0.0				42
	CONNECTED LOAD	**147.4** KVA		45.8	55.0	46.6			PANEL SPECIFICATIONS	
		409 AMPS		382	458	388			MAINS RATING AMPS – 400	
	NEC DEMAND	**121.9** KVA							MAIN CIRCUIT BREAKER AMPERES – MLO	
		339 AMPS							CAPACITY ONE–POLE CIRCUITS – 42	
									SYSTEM VOLTAGE – 208Y/120	
									PHASE, NO. OF WIRES – 3 PH, 4 W	
									AIC RATING – 22,000	
									MOUNTING – POST	
									LOCATION – APRON	

PANEL NOTES
1. NEMA 3R ENCLOSURE.



1/E5 **ELECTRICAL RISER DIAGRAM**

SCALE: N.T.S.



2/E5 **LIGHT POLE BASE DETAIL**

SCALE: N.T.S.

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ANCHORAGE, AK 99503-2245
(907) 276-4245
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PHONE (907) 269-0590

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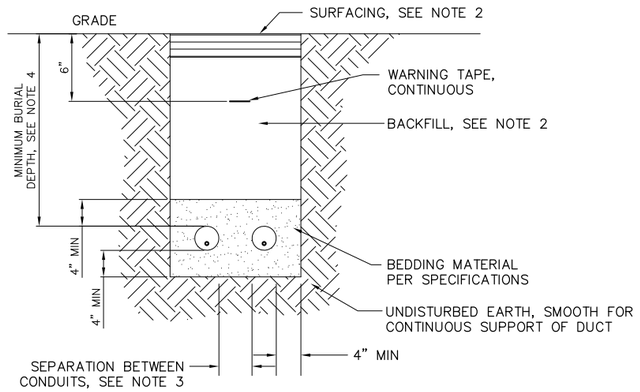
PROJECT No. CRMBS00831
697DCK-22-T-00001
ELECTRICAL DETAILS

DATE: 6/12/2024
SHEET: E5 OF E8

Designed By: LPS
Drawn By: JCA/LPS
Checked By: CLR
Date Revised: 6/11/2024, 11:32 PM
Layout Name: DETAILS2
File Path and Name: U:\2073016900\drawing\e\sheets\00831-ANC-E4-E8-DETAILS.dwg

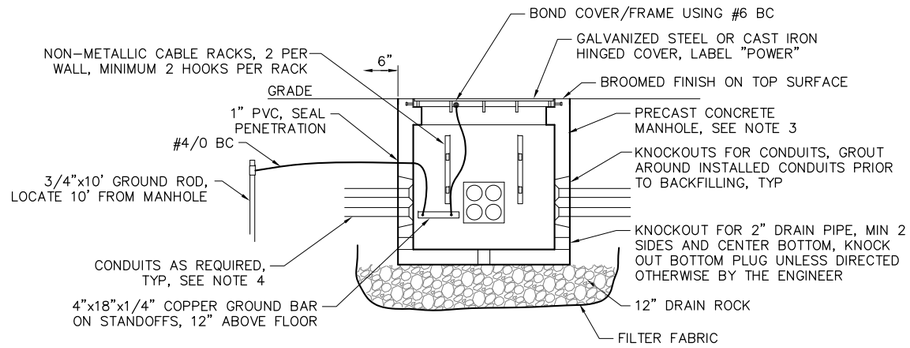


NOTES:

1. WIDTH OF TRENCH AND NUMBER OF CONDUITS PER TRENCH WILL VARY (2 SHOWN).
2. IN AREAS OF NEW CONSTRUCTION, SEE CIVIL FOR SURFACING AND BACKFILL. IN EXISTING AREAS, MATCH EXISTING SURFACING AND BACKFILL.
3. USE COMMERCIALLY MANUFACTURED DUCT SPACERS IN COMMON DUCTBANKS WITH PARALLEL CONDUITS SPACED EVERY 5' O.C. TO MAINTAIN SEPARATION. SEPARATION BETWEEN CONDUITS MUST BE AS FOLLOWS:
   –CONDUITS OF SAME TYPE (POWER OR SIGNAL) UNDER SAME OWNERSHIP – 2"
   –PRIMARY POWER AND ANY OTHER CONDUIT – 18" MIN
   –TELECOM UTILITY AND ANY OTHER CONDUIT – 18" MIN
4. MINIMUM BURIAL DEPTH MUST BE AS FOLLOWS, UNLESS OTHERWISE INDICATED:
   –LIGHTING AND POWER CIRCUITS – 24"

1 / E6 TYPICAL CONDUIT TRENCH DETAIL

SCALE: N.T.S.



NOTES:

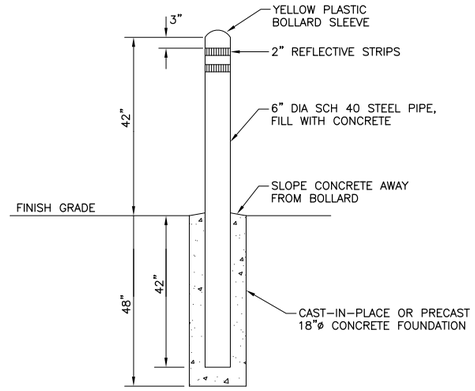
1. PRECAST MANHOLE, LID, FRAME, AND COVER MUST BE RATED FOR WHEEL LOADING BASED ON LOCATION. CONCRETE TOP SECTION WITH COVER MAY BE OVERSIZED IF REQUIRED TO MEET LOADING REQUIREMENTS.

   AIRCRAFT AREA – 100,000 LB. LOAD

2. PROVIDE CAST IRON HINGED COVERS WITH SPRING ASSIST MECHANISM.
3. MANHOLES MUST BE 4'x4'x4' INSIDE DIMENSIONS. VERTICAL DIMENSION MUST BE MEASURED FROM SURFACE GRADE TO INTERIOR FLOOR. MANHOLE COVERS MUST BE 36"x36" MINIMUM.
4. EXTEND METALLIC CONDUIT 2" INTO MANHOLE AND TERMINATE WITH AN INSULATED GROUNDING BUSHING BONDED TO THE GROUND BAR WITH #6 BC. TERMINATE NON–METALLIC CONDUIT AT TERMINATION FITTINGS CAST INTO THE MANHOLE WALL OR EXTEND 2" INTO MANHOLE AND REAM ENDS TO PREVENT CONDUCTOR INSULATION DAMAGE.
5. ALL GROUNDING CONNECTIONS INSIDE THE MANHOLE SHALL BE MADE USING 2–HOLE TIN–PLATED COPPER COMPRESSION LUGS CONCENTRICALLY CRIMPED. HARDWARE SHALL BE STAINLESS STEEL WITH BELLEVILLE SPRING WASHERS ON ALL BOLTED CONNECTIONS. BURIED GROUND CONNECTIONS SHALL BE EXOTHERMIC WELDS. XHHW–2 GROUNDING CONDUCTORS SHALL HAVE GREEN INSULATION.

2 / E6 ELECTRICAL MANHOLE DETAIL

SCALE: N.T.S.



3 / E6 BOLLARD DETAIL

SCALE: N.T.S.

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Drawn By: JCA/LPS
Checked By: CLR

Date Revised: 6/11/2024, 11:32 PM
Layout Name: DETAILS3
File Path and Name: U:\2073016900\drawing\e\sheets\00831-ANC-E4-E8-DETAILS.dwg

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STANTEC CONSULTING SERVICES INC.
725 EAST FIREWEED LANE, SUITE 200
ANCHORAGE, AK 99503-2245
(907) 276-4245
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CENTRAL REGION
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PHONE (907) 269-0590

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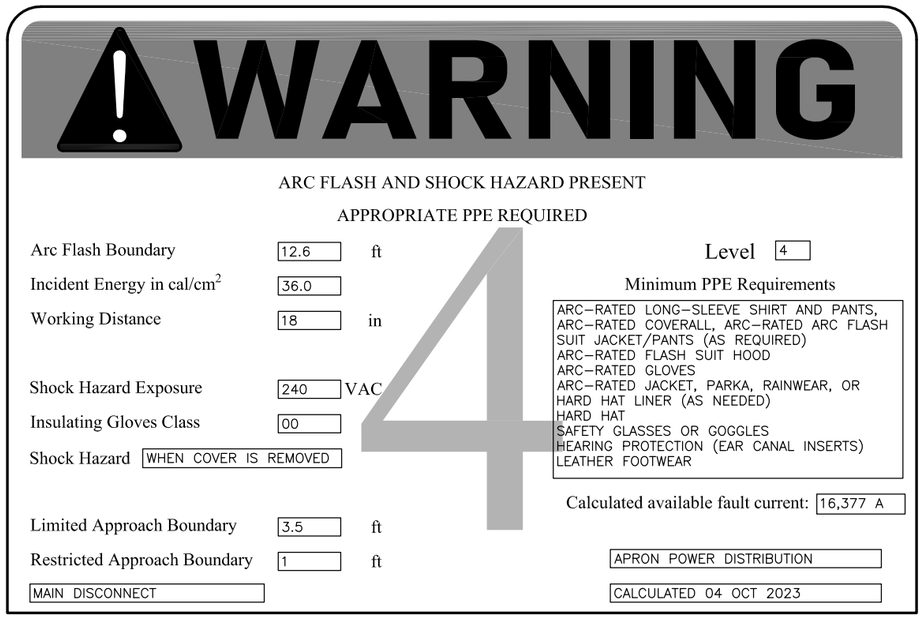
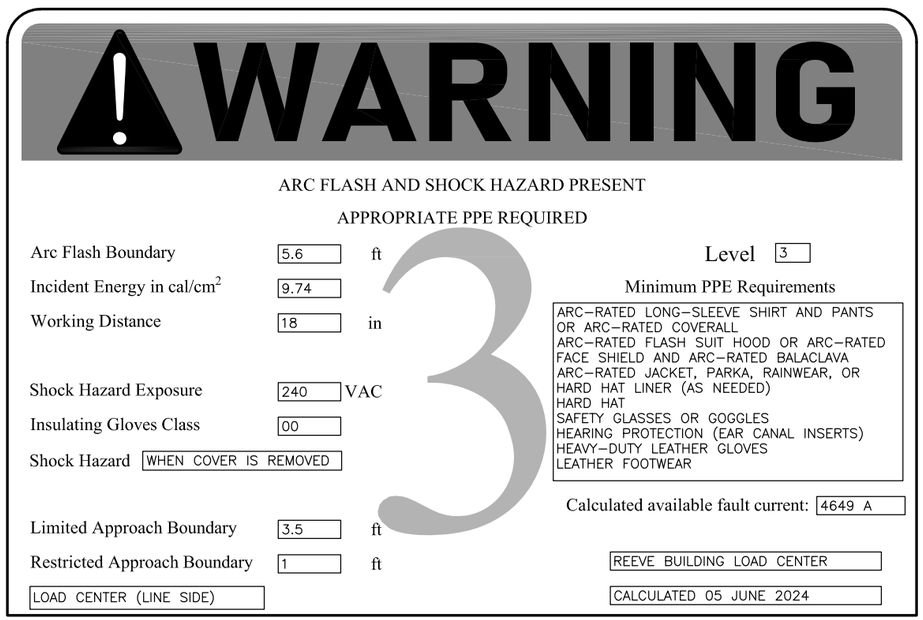
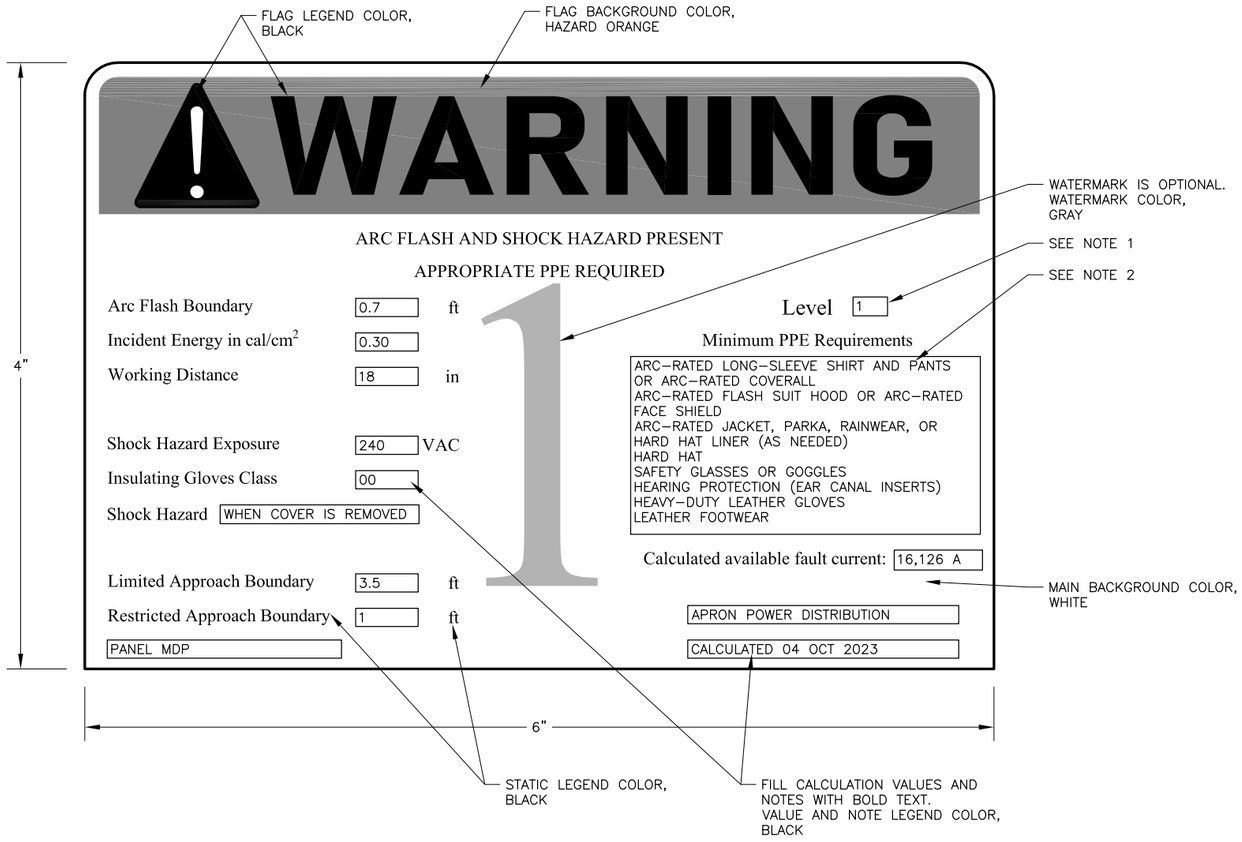
697DCK-22-T-00001
ELECTRICAL DETAILS

DATE: 6/12/2024
SHEET: E6 OF E8

Designed By: LPS
Drawn By: JCA/LPS
Checked By: CLR
Date Revised: 6/11/2024, 11:32 PM
Layout Name: DETAILS4
File Path and Name: U:\2073016900\drawing\e\sheets\00831-ANC-E4-E8-DETAILS.dwg







NOTES:

1. APPLICABLE STATE OF ALASKA DOT&PF ELECTRICAL EQUIPMENT MUST BE LABELED WITH DOT&PF-DEFINED SITE-SPECIFIC PPE LEVELS, AS DEFINED IN NFPA 70E 130.5(H)(3)(c). THE LEVELS ARE: LEVEL 1 (0 TO 4 CAL/CM^2), 2 (4.1 TO 8.0 CAL/CM^2), 3 (8.1 TO 25.0 CAL/CM^2), 4 (25.1 TO 39.9 CAL/CM^2), OR WP (WORK PROHIBITED, FOR EQUIPMENT IN WHICH THE CALCULATED ARC FLASH INCIDENT ENERGY IS ≥ 40 CAL/CM^2).
2. MINIMUM PPE REQUIREMENTS FOR EACH PPE LEVEL DESCRIBED IN NOTE 1 ARE THE SAME REQUIREMENTS AS DESCRIBED IN NFPA 70E TABLE 130.7(C)(15)(c). THESE PPE REQUIREMENTS ARE TO BE USED AS THE SITE-SPECIFIC PPE LEVELS.
3. APPLY WEATHERPROOF SELF-ADHESIVE LABELS TO INTERIOR DEAD FRONT OF EQUIPMENT INDICATED.
4. MAIN DISCONNECT ELECTRICAL SERVICE IS SERVED FROM CEA TRANSFORMER. CALCULATIONS ARE BASED ON A 112.5KVA TRANSFORMER WITH AN IMPEDANCE OF 1.6%.
5. LOAD CENTER ELECTRICAL SERVICE IS SERVED FROM CEA TRANSFORMER. CALCULATIONS ARE BASED ON A 15KVA TRANSFORMER WITH AN IMPEDANCE OF 1.2%.

1 / E7 ARC FLASH LABELS
NTS

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DATE: 6/12/2024
SHEET: E7 OF E8

Designed By:	LPS
Drawn By:	JCA/LPS
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Date Revised:	6/11/2024, 11:32 PM
Layout Name:	DETAILS5
File Path and Name:	U:\207301690O\drawing\e\sheets\00831-ANC-E4-E8-DETAILS.dwg

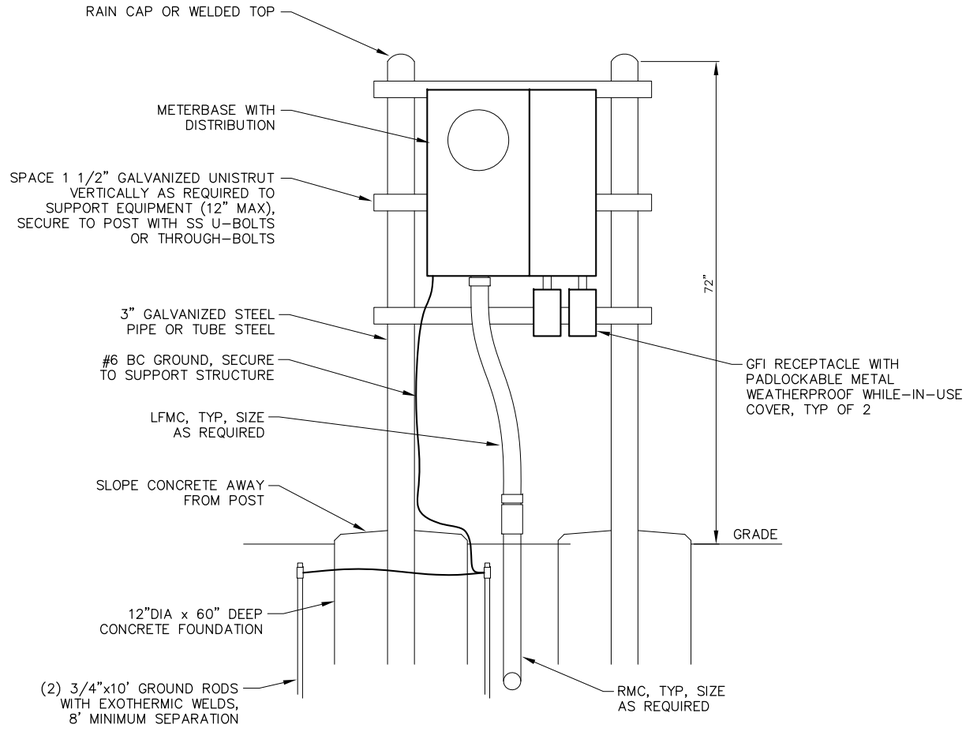
NEW LOAD CENTER

CKT	LOAD	BRANCH BKR	BRANCH VA	CONN KVA A	CONN KVA B	BRANCH VA	BRANCH BKR	LOAD	CKT
1	GFI RECEPTACLE	20/1	1200	1.2			20/1	SPARE	2
3	GFI RECEPTACLE	20/1	1200		1.2		20/1	SPARE	4
5				0.0					6
7					0.0				8
9				0.0					10
11					0.0				12
	CONNECTED LOAD	**2.4** KVA		1.2	1.2				
		10 AMPS		10	10				
	NEC DEMAND	**2.4** KVA							
		10 AMPS							

PANEL NOTES

PANEL SPECIFICATIONS

MAINS RATING AMPS – 100
MAIN CIRCUIT BREAKER AMPERES – 100
CAPACITY ONE–POLE CIRCUITS – 12
SYSTEM VOLTAGE – 240/120
PHASE, NO. OF WIRES – 1 PH, 3 W
AIC RATING – 10,000
LOAD CENTER – TYPE 2



DETAIL NOTES:

1. ADJUST WIDTH AS REQUIRED FOR EQUIPMENT INSTALLED, 24" MINIMUM, 72" MAXIMUM SPAN WITHOUT ADDITIONAL SUPPORT.
2. EQUIPMENT ARRANGEMENT AND CONNECTIONS ARE SUGGESTED. CONTRACTOR SHALL DETERMINE FINAL MOUNTING AND ARRANGEMENT.
3. METERBASE INSTALLATION SHALL MEET REQUIREMENTS OF SERVING UTILITY. COORDINATE WITH UTILITY THROUGH THE ENGINEER FOR CONNECTION OF ELECTRIC SERVICE.

1/E8 LOAD CENTER DETAIL

SCALE: N.T.S.

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DATE: 6/12/2024

SHEET: E8 OF E8

FLIGHT PLANNING BUILDING STRUCTURAL NOTES

(APPLIES UNLESS NOTED OTHERWISE)

CODE:

2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) WITH MUNICIPALITY OF ANCHORAGE AMENDMENTS.

DESIGN LOADS:

RISK CATEGORY	II
ROOF SNOW LOAD	42 PSF
P_g	50 PSF
C_E	1.0
C_t	1.2
I_s	1.0
TYPICAL ROOF DEAD LOAD	12 PSF
WIND LOADS:	
V_{ULT}	130 MPH
V_{ASD}	102 MPH
EXPOSURE	C
C_{pi}	±0.18

SEISMIC LOADS:	
SEISMIC DESIGN CATEGORY	D
IMPORTANCE I_E	1.0
SITE CLASSIFICATION	D–DEFAULT
S_s	1.5
S_1	0.67
STRUCTURAL SYSTEM:	
STEEL ORDINARY MOMENT FRAMES	
R:	6.5
Ω_0:	3.0
C_d	4
S_{DS}	1.2
S_{D1}	0.773
ρ:	1.0
EQUIVALENT LATERAL FORCE PROCEDURE	
BASE SHEAR	4.0 KIPS
C_s	0.18

FOUNDATIONS:

FOOTINGS	DESIGN SOIL BEARING VALUE
PRECAST FOOTINGS ON FIRM UNDISTURBED SOIL	1,500 PSF

CONCRETE:

TYPICAL CONCRETE COMPRESSIVE STRENGTHS		
CONCRETE	MINIMUM 28 DAY COMPRESSIVE STRENGTH	SLUMP AT PLACEMENT
FOOTINGS AND STEM WALLS	4,500 PSI	4" MAXIMUM

STRUCTURAL PORTLAND CEMENT CONCRETE MUST MEET THE REQUIREMENTS OF SECTION P–610. APPLY A SURFACE SEALER TO ALL STRUCTURAL PORTLAND CEMENT CONCRETE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION P–610.

CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

CONCRETE CONTAINING SUPERPLASTICIZING ADMIXTURE SHALL HAVE A SLUMP NOT EXCEEDING 3", TO BE FIELD VERIFIED, PRIOR TO ADDING ADMIXTURE, AND NOT EXCEEDING 8" AT PLACEMENT.

ADDITION OF WATER TO THE BATCH FOR MATERIAL WITH INSUFFICIENT SLUMP WILL NOT BE PERMITTED.

MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED.

STRUCTURAL STEEL:

TYPICAL STEEL STRENGTHS	
STRUCTURAL STEEL	ASTM A992 (Fy = 50 KSI)
TUBULAR STEEL	ASTM A500 GRADE "B" (Fy = 46 KSI)
BOLTS	ASTM A325

LATEST AISC AND AWS CODES APPLY. ALL BOLTS AND POST–INSTALLED CONCRETE ANCHORS SHALL BE INSTALLED WITH STEEL WASHERS. ALL WELDING TO BE BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. CERTIFICATES SHALL BE THOSE ISSUED BY AN ACCEPTED TESTING AGENCY. ALL WELDING TO BE DONE BY E70 SERIES LOW HYDROGEN RODS. ALL WELDING PER AMERICAN WELDING SOCIETY (AWS) STANDARDS, MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V–NOTCH TOUGHNESS OF 20 FOOT–POUNDS AT MINUS 20 DEGREES F. ALL BEAMS SHALL BE ERECTED WITH THE NATURAL CAMBER UPWARDS.

PERFORM STEEL FABRICATION WITH ADDITIONAL SPECIAL INSPECTION OF WELDING OR BOLTING AS NOTED BELOW. THE STEEL FABRICATOR'S QUALIFICAITONS SHALL BE SUBMITTED TO THE MUNICIPALITY'S BUILDING SAFETY PLAN REVIEW AS A DEFERRED SUBMITTAL. AS AN ALTERNATIVE, THE STEEL FABRICATOR NEED NOT BE CERTIFIED IF SPECIAL INSPECTION PER IBC 2018, CHAPTER 17 IS PERFORMED. SUBMIT DETAILS OF THE SPECIAL INSPECTION PROGRAM TO THE MUNICIPALITY AS A DEFERRED SUBMITTAL FOR APPROVAL.

FINISH:

PRIMER: DEVOE COATINGS CATHACOAT 304V.
INTERMEDIATE COATING: DEVOE COATINGS, BAR–RUST 236.
FINISH COAT: DEVOE COATINGS, DEVTHANE–359.

WOOD:

VERSA–LAM LVL BEAMS: 2.1E 2800 AS MANUFACTURED BY BOISE CASCADE, OR EQUAL.

SHOP DRAWINGS:

THE CONTRACTOR SHALL REVIEW, STAMP WITH HIS APPROVAL, DATE AND SIGN ALL SHOP DRAWINGS REQUIRED BY THE CONTRACT DOCUMENTS PRIOR TO SUBMITTING TO THE ENGINEER. AT THE TIME OF SUBMISSION, THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DEVIATION IN THE SHOP DRAWINGS FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

GENERAL:

THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM.

GENERAL, CONTINUED:

ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING WITH APPROPRIATE TRADES, DRAWINGS, AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. DO NOT PENETRATE ANY STRUCTURAL ELEMENTS (BEAMS, COLUMNS, WALLS, SLABS, ETC.) WITHOUT PRIOR WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

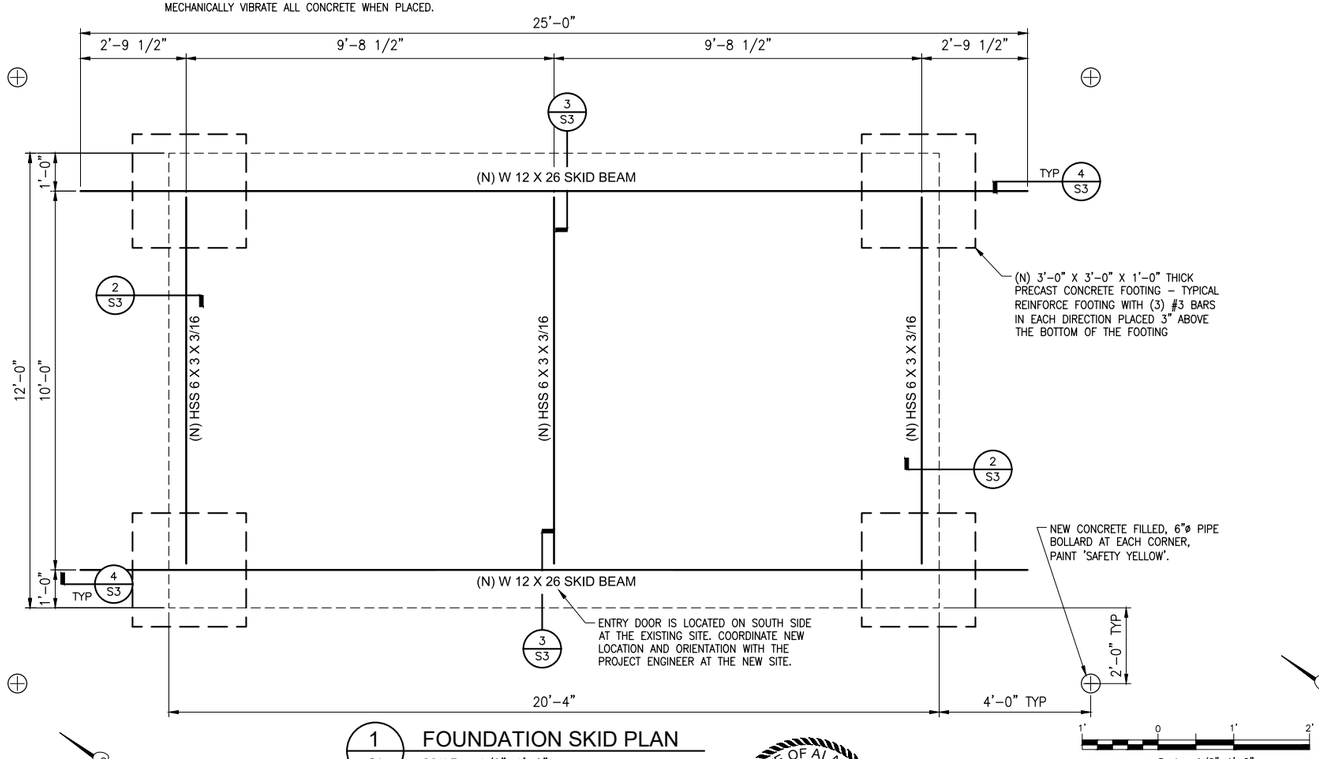
"TYPICAL DETAILS" ARE NOT CUT ON THE DRAWINGS, BUT APPLY UNLESS NOTED OTHERWISE.

WHERE ANY DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES, AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN.

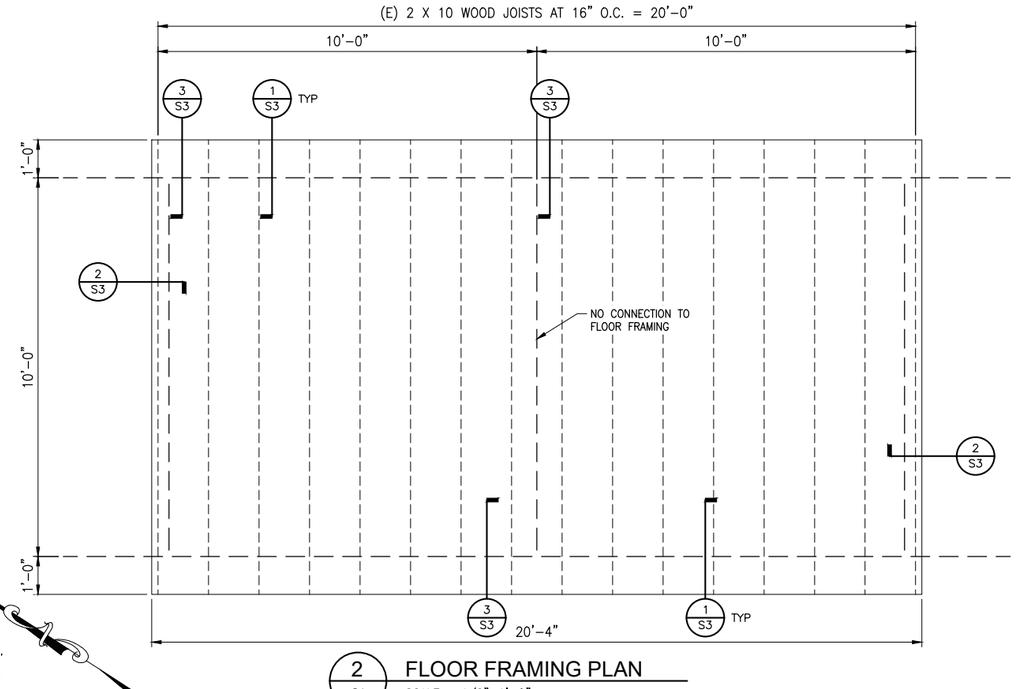
ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF ALASKA.

CONSTRUCTION SEQUENCE:

- TAKE PHOTOGRAPHS OF THE STRUCTURE BEFORE BEGINNING WORK TO DOCUMENT EXISTING CONDITIONS.
- DISCONNECT UTILITIES.
- LIFT BUILDING AS NEEDED TO INSTALL STEEL FRAME.
- INSTALL STEEL FRAME.
- USE THE STEEL FRAME TO LIFT AND MOVE THE BUILDING TO THE NEW SITE.
- PLACE NEW FOUNDATION PADS AT NEW SITE AS INDICATED BY THE FOUNDATION PLAN.
- LOWER THE BUILDING TO REST ON THE PREPARED FOUNDATIONS.
- ATTACH THE STEEL FRAME TO THE CONCRETE FOUNDATION PADS AS INDICATED IN THE DETAILS.
- CONNECT NEW UTILITIES.
- INSPECT FINAL WORK, COMPARING FINAL CONDITIONS TO RECORD PHOTOGRAPHS. REPAIR ANY DAMAGE CAUSED BY THE MOVE, RESTORING TO PREVIOUS CONDITIONS AS INDICATED IN THE PHOTOGRAPHS.



1 S1 FOUNDATION SKID PLAN
SCALE: 1/2"=1'–0"



2 S1 FLOOR FRAMING PLAN
SCALE: 1/2"=1'–0"

STATE OF ALASKA 49 TH
BRUCE E. HOPPER SE-14012
REGISTERED STRUCTURAL ENGINEER

STANTEC CONSULTING SERVICES INC.
725 EAST FIREWEED LANE, SUITE 200
ANCHORAGE, AK 99503-2245
(907) 276-4245
AUTHORIZATION TO PRACTICE
#AECC1277

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

TED STEVENS ANCHORAGE INT'L. AIRPORT
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
697DCK-22-T-00001
FLIGHT PLANNING BLDG STRUCTURAL NOTES AND STRUCTURAL PLANS

DATE: 7/8/2024
SHEET: S1 OF S4

Designed By: KJR
Drawn By: DJR
Checked By: BEH

Date Revised:
Layout Name: 7/08/2024, 4:50 PM Layout1
File Path and Name: U:\207301600\drawing\s\sheets\00831-ANC_S1-struc_plans.dwg

REEVE BUILDING STRUCTURAL NOTES

(APPLIES UNLESS NOTED OTHERWISE)

CODE:

2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) WITH MUNICIPALITY OF ANCHORAGE AMENDMENTS.

DESIGN LOADS:

RISK CATEGORY	II	
ROOF SNOW LOAD	42	PSF
P_G	50	PSF
C_E	1.0	
C_t	1.2	
I_S	1.0	
TYPICAL ROOF DEAD LOAD	12	PSF
WIND LOADS:		
V_{ULT}	130	MPH
V_{ASD}	102	MPH
EXPOSURE	C	
C_{pi}	±0.18	

SEISMIC LOADS:		
SEISMIC DESIGN CATEGORY	D	
IMPORTANCE I_E	1.0	
SITE CLASSIFICATION	D–DEFAULT	
S_S	1.5	
S_1	0.67	
STRUCTURAL SYSTEM:		
STEEL ORDINARY MOMENT FRAMES		
R:	6.5	
Ω_0:	3.0	
C_d	4	
S_{DS}	1.2	
S_{D1}	0.773	
ρ:	1.0	
EQUIVALENT LATERAL FORCE PROCEDURE		
BASE SHEAR	4.0	KIPS
C_S	0.18	

FOUNDATIONS:

FOOTINGS	DESIGN SOIL BEARING VALUE
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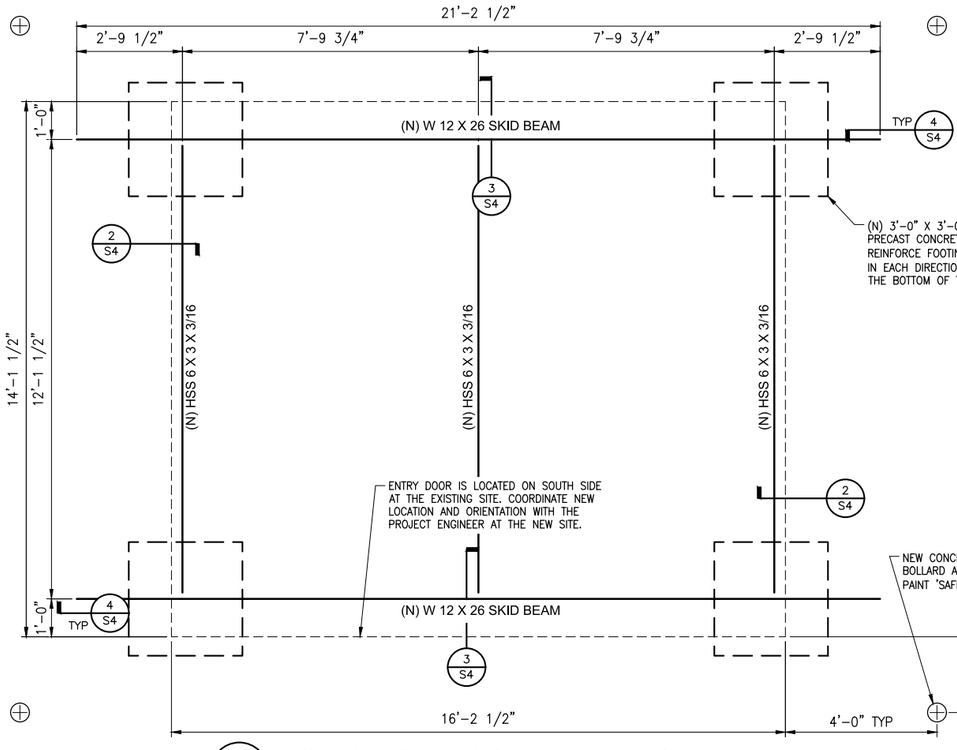

1 S2 FOUNDATION SKID PLAN - NEW WORK

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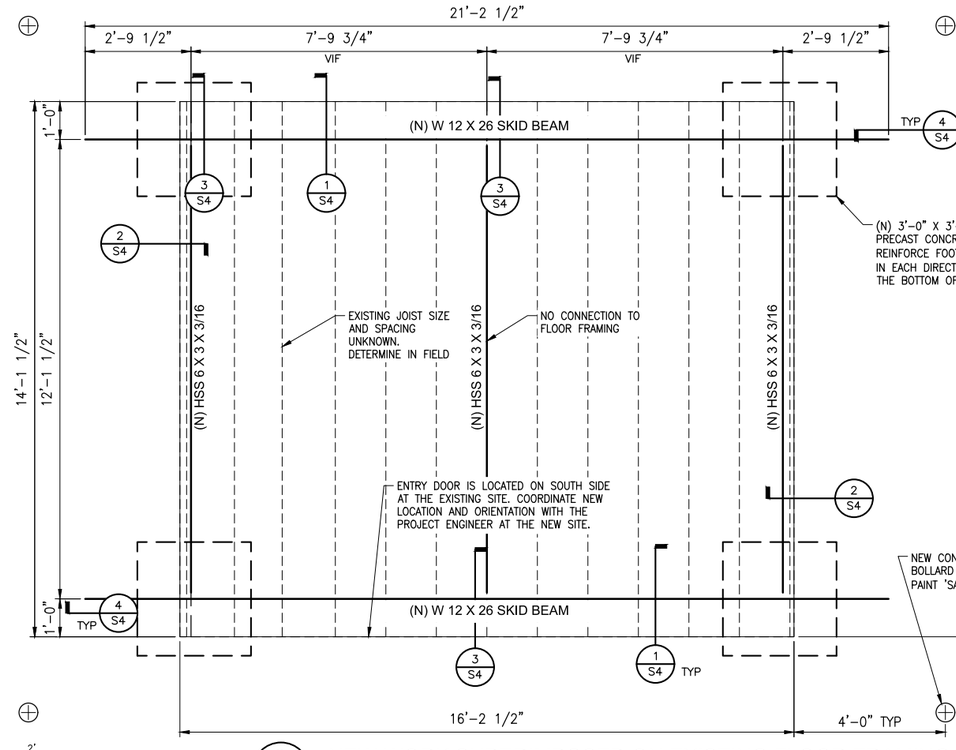

2 S2 NEW WORK SUPERIMPOSED ON EXISTING FLOOR FRAMING

SCALE: 1/2"=1'-0"

1' 0 1' 2'

Scale: 1/2"=1'-0"

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AUTHORIZATION TO PRACTICE
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BY	DATE	REVISION

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PROJECT No. CRMBS00831
697DCK-22-T-00001
REEVE AIR BLDG STRUCTURAL NOTES AND STRUCTURAL PLANS

DATE: 7/8/2024

SHEET: S2 OF S4

Designed By: KJR
Drawn By: DJR
Checked By: BEH

Date Revised: 7/08/2024, 4:51 PM
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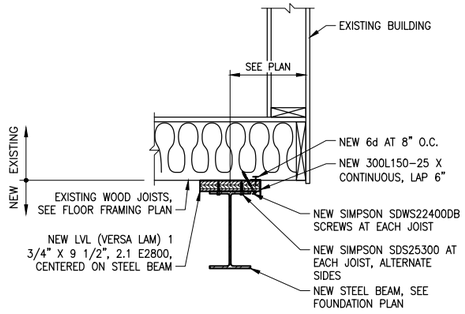
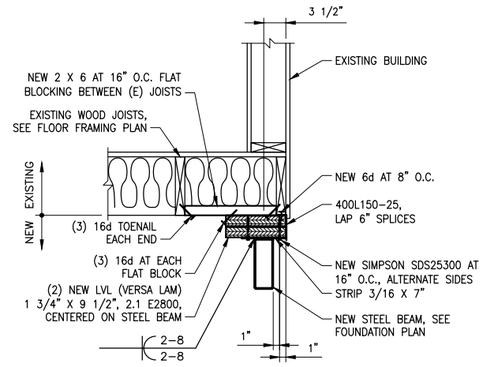


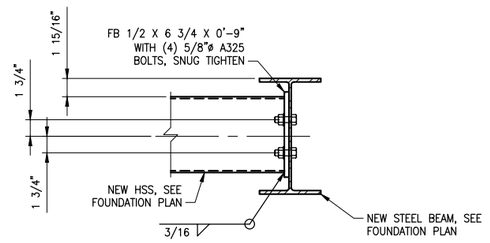
1 S3 EXISTING JOISTS AT NEW WF BEAM

SCALE: 1"=1'-0"



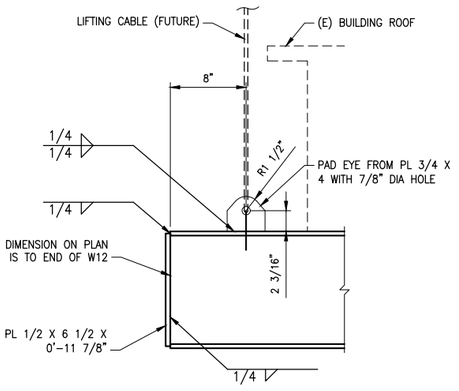
2 S3 EXISTING JOISTS AT NEW HSS BEAM

SCALE: 1"=1'-0"



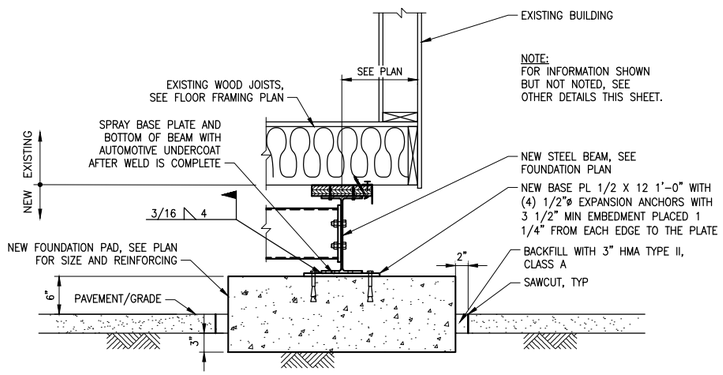
3 S3 NEW HSS AT NEW WF BEAM

SCALE: 1 1/2"=1'-0"



4 S3 PADEYE AT NEW STEEL BEAM

SCALE: 1 1/2"=1'-0"



5 S3 NEW BUILDING FOUNDATION PAD

SCALE: 1"=1'-0"

1' 0 6" 1' 2'

Scale: 1"=1'-0"

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STATE OF ALASKA 49TH BRUCE E. HOPPER SE-14012 REGISTERED STRUCTURAL ENGINEER

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FLIGHT PLANNING BLDG
STRUCTURAL DETAILS

DATE: 7/8/2024

SHEET: S3 OF S4

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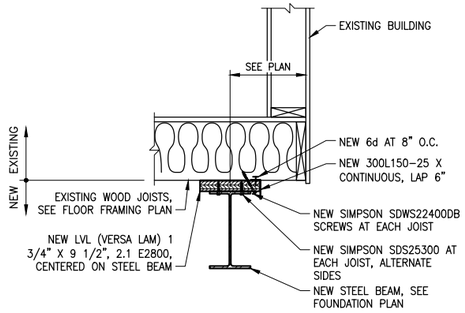
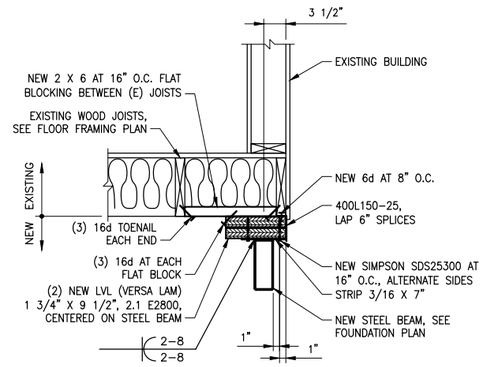


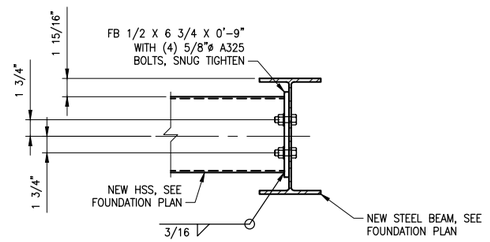
1 S4 EXISTING JOISTS AT NEW WF BEAM

SCALE: 1"=1'-0"



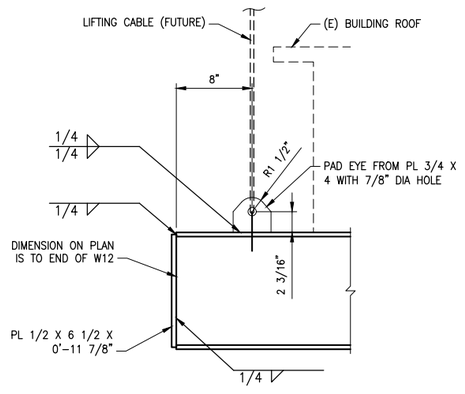
2 S4 EXISTING JOISTS AT NEW HSS BEAM

SCALE: 1"=1'-0"



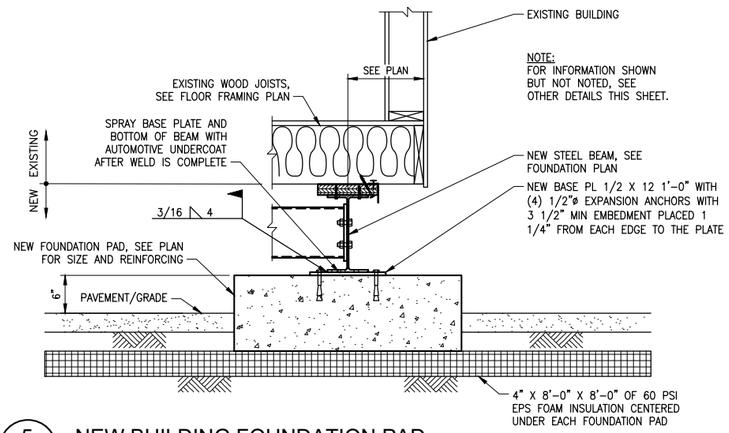
3 S4 NEW HSS AT NEW WF BEAM

SCALE: 1 1/2"=1'-0"



4 S4 PADEYE AT NEW STEEL BEAM

SCALE: 1 1/2"=1'-0"



5 S4 NEW BUILDING FOUNDATION PAD

SCALE: 1"=1'-0"

1' 0 6" 1' 2'

Scale: 1"=1'-0"

STATE OF ALASKA 49 TH BRUCE E. HOPPER SE-14012 REGISTERED STRUCTURAL ENGINEER

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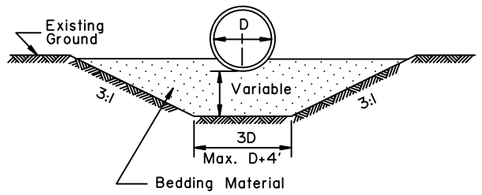
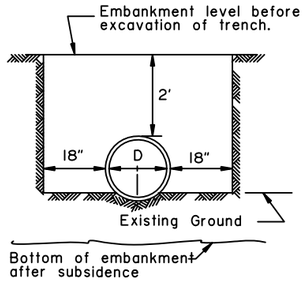
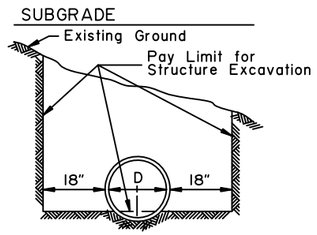


TYPE "A"
FOUNDATION STABILIZATION

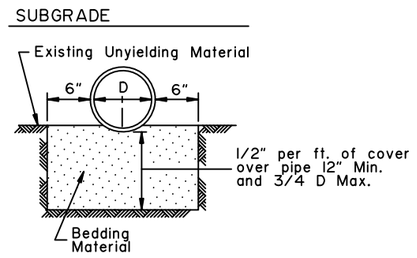
To be used in unstable areas as directed by the Engineer.



TYPE "B"



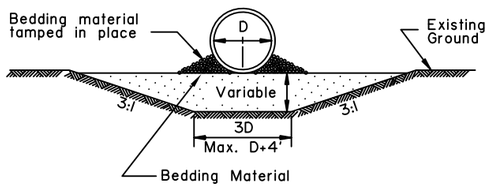
TYPE "C"



TYPE "D"
ROCK OR UNYIELDING MATERIAL

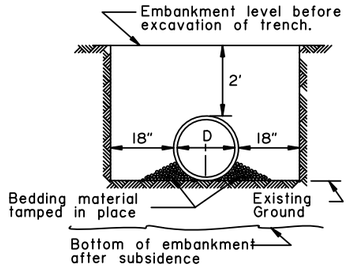
GENERAL NOTES:

1. Sidefill shall be placed and compacted with care under haunches of pipe and shall be brought up evenly and simultaneously on both sides of pipe to 1 foot above the top of the full length of the pipe.
2. Alternate installation methods may only be used when specified or approved by the Engineer.



'ALTERNATE'
TYPE "A"
FOUNDATION STABILIZATION

To be used in unstable areas as directed by the Engineer.



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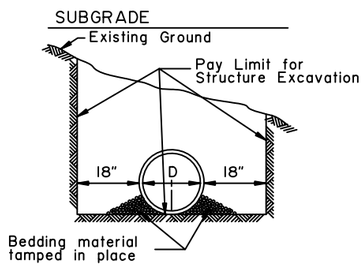
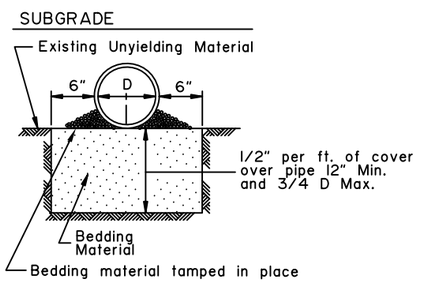
TYPE "B"

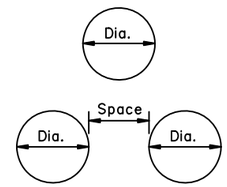


'ALTERNATE'
TYPE "C"



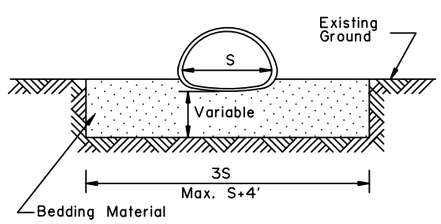
'ALTERNATE' TYPE "D"
ROCK OR UNYIELDING MATERIAL

D = Nominal Pipe Diameter



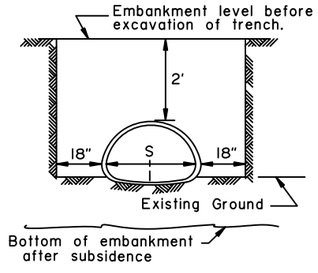
MULTIPLE INSTALLATIONS	
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Dia. of pipe or 3', whichever is less.

CULVERT PIPE

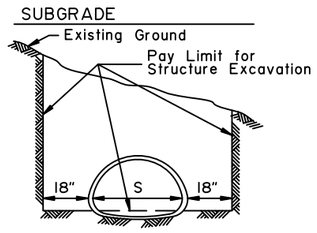


TYPE "A"
FOUNDATION STABILIZATION

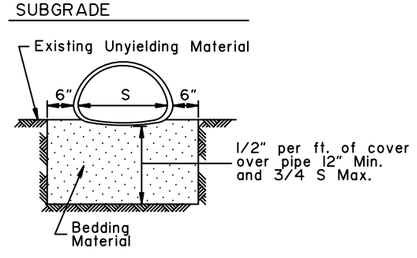
To be used in unstable areas as directed by the Engineer.



TYPE "B"

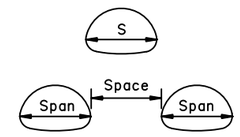


TYPE "C"



TYPE "D"
ROCK OR UNYIELDING MATERIAL

S = Nominal Pipe Arch Span



MULTIPLE INSTALLATIONS	
Dia.	Minimum Space Between Pipes
0" - 42"	24"
48" & Over	1/2 Span of pipe arch or 3', whichever is less.

ARCH

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT PIPE & ARCH INSTALLATION DETAILS

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

Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

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

CORRUGATED CIRCULAR ALUMINUM PIPE

Minimum & Maximum Cover for 2 2/3"X 1/2" Aluminum Pipe						
Gage		16	14	12	10	8
Thickness		0.060	0.075	0.105	0.135	0.164
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
12	12	100+	100+	100+	100+	100+
15	12	100	100+	100+	100+	100+
18	12	83	100+	100+	100+	100+
21	12	71	89	100+	100+	100+
24	12	62	78	100+	100+	100+
27	12		69	97	100+	100+
30	12		62	87	100+	100+
36	12		51	73	94	100+
42	12			62	80	100+
48	12			54	70	85
54	15			48	62	76
60	15				52	64
66	18					52
72	18					43

Minimum & Maximum Cover for 3" x 1" Aluminum Pipe						
Gage		16	14	12	10	8
Thickness		0.060	0.075	0.105	0.135	0.164
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
30	12	57	72	100+	100+	100+
36	12	47	60	84	100+	100+
42	12	40	51	72	96	100+
48	12	35	44	62	84	99
54	15	31	39	55	74	88
60	15	28	35	50	67	79
66	18	25	32	45	61	72
72	18	23	29	41	56	66
78	21		27	38	51	61
84	21			35	48	56
90	24			33	44	52
96	24			31	41	49
102	24				39	46
108	24				37	43
114	24					39
120	24					36

Minimum & Maximum Cover for 9" X 2 1/2" Aluminum Structural Plate Pipe*			
Thickness		0.125	0.150
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)
84	18	31	
90	18	27	
96	18	27	
102	18	24	
108	18	24	
114	18	21	
120	24	21	
126	24	19	
132	30	19	
138	30	18	
144	30	18	
150	30		22
156	30		22
162	36		20
168	36		20

*5.33 - 3/4" dia. steel bolts per foot.

CORRUGATED ALUMINUM PIPE-ARCH

Minimum & Maximum Cover for 2 2/3"X 1/2" Aluminum Pipe-Arch					
				2 Tons/Sf Corner Bearing Pressure	
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)
17	13	3 4/8	16 (0.060)	12	13
21	15	4 1/8	16 (0.060)	12	12
24	18	4 7/8	16 (0.060)	12	12
28	20	5 4/8	14 (0.075)	12	12
35	24	6 7/8	14 (0.075)	12	12
42	29	8 2/8	12 (0.105)	12	12
49	33	9 5/8	12 (0.105)	15	12
57	38	11	10 (0.135)	15	12
64	43	12 3/8	10 (0.135)	18	12
71	47	13 6/8	8 (0.164)	18	12

Minimum & Maximum Cover for 3" x 1" Aluminum Pipe-Arch					
				2 Tons/Sf Corner Bearing Pressure	
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)
60	46	18 6/8	14 (0.075)	15	20
66	51	20 6/8	14 (0.075)	18	20
73	55	22 7/8	14 (0.075)	21	20
81	59	20 7/8	12 (0.105)	21	16
87	63	22 7/8	12 (0.105)	24	16
95	67	24 3/8	12 (0.105)	24	16
103	71	26 1/8	10 (0.135)	24	16
112	75	27 6/8	8 (0.164)	24	16

Minimum & Maximum Cover for 9" x 2 1/2" Aluminum Multiplate Pipe-Arch*					
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	2 Tons/Sf Corner Bearing Pressure Max. Cover (Ft)
6-7	5-8	31.75	0.125	24	24
6-11	5-9	31.75	0.125	24	24
7-3	5-11	31.75	0.125	24	18
7-9	6-0	31.75	0.125	24	18
8-5	6-3	31.75	0.125	24	16
9-3	6-5	31.75	0.125	24	15
10-3	6-9	31.75	0.125	30	13
10-9	6-10	31.75	0.125	30	13
11-5	7-1	31.75	0.125	30	13
12-7	7-5	31.75	0.125	30	11
12-11	7-6	31.75	0.125	30	11
13-1	8-2	31.75	0.125	30	11
13-11	8-5	31.75	0.125	36	10
14-8	9-8	31.75	0.125	36	9
15-4	10-0	31.75	0.150	36	8
16-1	10-4	31.75	0.150	36	8
16-9	10-8	31.75	0.150	42	7
17-3	11-0	31.75	0.150	42	7
18-0	11-4	31.75	0.175	42	7
18-8	11-8	31.75	0.175	42	7

*5.33 - 3/4" dia. steel bolts per foot.

GENERAL NOTES:

1. All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
2. The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
3. No more than one type of pipe may be used on any single installation or installation grouping.
4. All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
5. See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
6. Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflection.
7. These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

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

Adoption Date: 7/17/2020

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

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

Minimum & Maximum Cover for 2 2/3" x 1/2" Steel Pipe						
Gage		16	14	12	10	8
Thickness		0.060	0.075	0.105	0.135	0.164
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
12	12	100+	100+	100+	100+	100+
15	12	100+	100+	100+	100+	100+
18	12	100+	100+	100+	100+	100+
21	12	100+	100+	100+	100+	100+
24	12	100+	100+	100+	100+	100+
30	12	83	100+	100+	100+	100+
36	12	69	86	100+	100+	100+
42	12	59	74	100+	100+	100+
48	12	51	64	91	100+	100+
54	12		57	80	100+	100+
60	12			72	93	100+
66	12			66	85	100+
72	12				78	95
78	12					84
84	12					73

Minimum & Maximum Cover fo 3" x 1" Steel Pipe						
Gage		16	14	12	10	8
Thickness		0.060	0.075	0.105	0.135	0.164
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
36	12			100+	100+	100+
42	12			100+	100+	100+
48	12		74	100+	100+	100+
54	12	53	66	93	100+	100+
60	12	47	59	83	100+	100+
66	12	43	54	76	98	100+
72	12	39	49	69	89	100+
78	12	36	45	64	82	100+
84	12	33	42	59	77	94
90	12	31	39	55	71	87
96	12	29	37	52	67	82
102	18	27	34	49	63	77
108	18		32	46	59	73
114	18		31	43	56	69
120	18		29	41	53	65
126	18			39	51	62
132	18			37	48	59
138	18			36	46	57
144	18				44	54

Minimum & Maximum Cover for 5" x 1" Steel Pipe						
Gage		16	14	12	10	8
Thickness		0.060	0.075	0.105	0.135	0.164
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
36	12	71	88	100+	100+	100+
42	12	60	76	100+	100+	100+
48	12	53	66	93	100+	100+
54	12	47	59	82	100+	100+
60	12	42	53	74	96	100+
66	12	38	48	67	87	100+
72	12	35	44	62	79	97
78	12	32	40	57	73	90
84	12	30	37	53	68	83
90	12	28	35	49	63	78
96	12	26	33	46	59	73
102	18	24	31	43	56	69
108	18		29	41	53	65
114	18		27	39	50	61
120	18		26	37	47	58
126	18			35	45	55
132	18			33	43	53
138	18			32	41	50
144	18				39	48

Minimum & Maximum Cover for 6" x 2" Steel Multiplate Pipe*								
Gage		12	10	8	7	5	3	1
Thickness		0.111	0.140	0.170	0.188	0.218	0.249	0.280
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
60	12	46	67	87	100	100+	100+	100+
66	12	42	60	79	91	100+	100+	100+
72	12	38	55	73	83	100+	100+	100+
78	12	35	51	67	77	93	100+	100+
84	12	32	47	62	71	86	100+	100+
90	12	30	44	58	67	80	95	100+
96	12	28	41	54	62	75	89	97
102	18	27	39	51	59	71	84	91
108	18	25	37	48	55	67	79	86
114	18	24	35	45	52	63	75	82
120	18	22	33	43	50	60	71	77
126	18	21	31	41	47	57	68	74
132	18	20	30	39	45	54	64	70
138	18	19	28	37	43	52	62	67
144	18	18	27	36	41	50	59	64

*4 - 3/4" dia. steel bolts per foot.

GENERAL NOTES

1. All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
2. The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
3. No more than one type of pipe may be used on any single installation or installation grouping.
4. All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
5. See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
6. Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflecton.
7. These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

CORRUGATED CIRCULAR STEEL PIPE

CORRUGATED STEEL PIPE-ARCH

Minimum & Maximum Cover for 2 2/3" X 1/2" Steel Pipe-Arch					
			2 Tons/Sf Corner Bearing Pressure		
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)
17	13	3 4/8	16 (0.060)	12	11
21	15	4 1/8	16 (0.060)	12	11
24	18	4 7/8	16 (0.060)	12	11
28	20	5 4/8	16 (0.060)	12	11
35	24	6 7/8	16 (0.060)	12	11
42	29	8 2/8	16 (0.060)	12	11
49	33	9 5/8	14 (0.075)	12	11
57	38	11	12 (0.109)	12	11
64	43	12 3/8	12 (0.109)	12	11
71	47	13 6/8	10 (0.138)	12	11
77	52	15 1/8	10 (0.138)	12	11
83	57	16 4/8	8 (0.168)	12	11

Minimum & Maximum Cover for 3"X 1"Steel Pipe-Arch					
			2 Tons/Sf Corner Bearing Pressure		
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)
53	41	10 2/8	14 (0.079)	12	10
60	46	18 6/8	14 (0.079)	15	29
66	51	20 6/8	14 (0.079)	15	29
73	55	22 7/8	14 (0.079)	18	18
81	59	20 7/8	14 (0.079)	18	15
87	63	22 7/8	14 (0.079)	18	15
95	67	24 3/8	14 (0.079)	18	15
103	71	26 1/8	14 (0.079)	18	14
112	75	27 6/8	14 (0.079)	21	14
117	79	29 4/8	12 (0.109)	21	14
128	83	31 2/8	10 (0.138)	24	14
137	87	33	10 (0.138)	24	14
142	91	34 6/8	10 (0.138)	24	13
150	96	36	10 (0.138)	30	13
157	96	38	10 (0.138)	30	13
164	105	40	10 (0.138)	30	14
171	110	41	10 (0.138)	30	13

Minimum & Maximum Cover for 5"X 1"Steel Pipe-Arch					
			2 Tons/Sf Corner Bearing Pressure		
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Thickness (In)	Min. Cover (In)	Max. Cover (Ft)
53	41	10 2/8	14 (0.079)	12	10
60	46	18 6/8	14 (0.079)	15	29
66	51	20 6/8	14 (0.079)	15	29
73	55	22 7/8	14 (0.079)	18	18
81	59	20 7/8	14 (0.079)	18	15
87	63	22 7/8	14 (0.079)	18	15
95	67	24 3/8	14 (0.079)	18	15
103	71	26 1/8	14 (0.079)	18	14
112	75	27 6/8	14 (0.079)	21	14
117	79	29 4/8	12 (0.109)	21	14
128	83	31 2/8	10 (0.138)	24	14
137	87	33	10 (0.138)	24	14
142	91	34 6/8	10 (0.138)	24	13
150	96	36	10 (0.138)	30	13
157	96	38	10 (0.138)	30	13
164	105	40	10 (0.138)	30	14
171	110	41	10 (0.138)	30	13

Minimum & Maximum Cover for Steel Multiplate Pipe-Arch 6" x 2" *					
			2 Tons/Sf Corner Bearing Pressure		
Span (Ft.-In.)	Rise (Ft.-In.)	Corner Radius (In)	Min. Gage (In)	Min. Cover (In)	Max. Cover (Ft)
6-1	4-7	18	12 (0.111)	12	14
7-0	5-1	18	12 (0.111)	12	12
7-11	5-7	18	12 (0.111)	12	10
8-10	6-1	18	12 (0.111)	18	9
9-9	6-7	18	12 (0.111)	18	8
10-11	7-1	18	12 (0.111)	18	6
11-10	7-7	18	12 (0.111)	18	5
12-10	8-4	18	12 (0.111)	24	5
13-3	9-4	31	10 (0.140)	24	11
14-2	9-10	31	10 (0.140)	24	10
15-4	10-4	31	10 (0.140)	24	9
16-3	10-10	31	10 (0.140)	30	8
17-2	11-4	31	10 (0.140)	30	8
18-1	11-10	31	10 (0.140)	30	7
19-3	12-4	31	10 (0.140)	30	7
19-11	12-10	31	10 (0.140)	30	6
20-7	13-2	31	10 (0.140)	36	6

*4 - 3/4" dia. steel bolts per foot.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

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

Adoption Date: 7/17/2020

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

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

Maximum Cover for Type S Corrugated Polyethelene Pipe	
Size (in)	Max. Cover (ft)
12	24
15	25
18	24
24	20
30	20
36	18
42	16
48	17

GENERAL NOTES

1. All materials and workmanship shall be in accordance with the State of Alaska Standard Specifications for Highway Construction.

2. For foundation and structural backfill details see Standard Plan D-01 "Culvert Pipe & Arch Installation Details".

3. Pipe cover height is measured from top of the pipe to top of rigid pavement, or to the bottom of subgrade for flexible pavement. In all cases the minimum cover shall be no less than 2 ft. Where loads traverse the culvert during construction minimum cover shall be no less than 4 ft.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

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

Adoption Date: 7/17/2020

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

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

D-04.22

ALUMINUM SPIRAL RIB PIPE

Minimum & Maximum Cover for Aluminum Spiral Rib Circular Pipe*					
Gage		16	14	12	10
Thickness		0.064	0.079	0.109	0.138
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
18	12	43	61		
21	12	38	52	84	
24	12	33	45	73	
30	15	26	36	58	
36	18	21	30	49	69
42	21		25	41	59
48	24			36	51
54	24			32	46
60	24			29	41
66	24				37
72	30				34

*¾ x ¾ x 7½ in. Corrugations

Minimum & Maximum Cover for Aluminum Spiral Rib Pipe-Arch*						
Gage			16	14	12	10
Thickness			0.060	0.075	0.105	0.135
Span (Ft.-In.)	Rise (Ft.-In.)	Min. Cover (In)	Max. Cover (Ft)			
20	16	12	16			
23	19	12	15			
27	21	15	13	13		
33	26	18	13	13	13	
40	31	21		13	13	
46	36	24			13	13
53	41	24			13	13
60	46	24			13	13
66	51	24				13

*¾ x ¾ x 7½ in. Corrugations

STEEL SPIRAL RIB PIPE

Minimum & Maximum Cover for Steel and Aluminized Steel Spiral Rib Circular Pipe*					
Gage		16	14	12	10
Thickness		0.064	0.079	0.109	0.138
Dia. (In)	Min. (In)	Max. (Ft)	Max. (Ft)	Max. (Ft)	Max. (Ft)
18	12	91			
24	12	68	95	100+	
30	12	54	76	100+	
36	12	45	63	100+	
42	12	38	54	90	
48	12	33	47	79	
54	18	30	42	70	
60	18	27	38	63	92
66	18	24	34	57	83
72	18		31	52	76
78	24		29	48	70
84	24		27	45	65
90	24			42	61
96	24			39	56
102	30			36	50
108	30			32	45

*¾ x ¾ x 7½ in. Corrugations.

Minimum & Maximum Cover for Steel Spiral Rib Pipe-Arch*					
			2 Tons/Sf Corner Bearing Pressure		
Thickness			0.064	0.079	0.109
Span (Ft.-In.)	Rise (Ft.-In.)	Min. Cover (In)	Max. Cover (Ft)		
20	16	12	13		
23	19	12	13		
27	21	12	11		
33	26	12	11		
40	31	12	11		
46	36	12	11		
53	41	18		11	
60	46	18		19	
66	51	18		19	
73	55	18			18
81	59	18			15
87	63	18			15
95	67	18			15

*¾ x ¾ x 7½ in. Corrugations

GENERAL NOTES

1. All material and workmanship shall be in accordance with the State of Alaska, Standard Specifications for Highway Construction.
2. The contractor shall select only pipes that meet specific height of cover criteria shown on the plans or in the special provisions.
3. No more than one type of pipe may be used on any single installation or installation grouping.
4. All structural plate pipes shall be placed on a pre-shaped foundation conforming to the depth of the bottom plates with clearance for assembling to the adjacent plates allowed.
5. See Standard Plan D-01 "Culvert Pipe & Arch Installation Details" for foundation and structural backfill details.
6. Minimum cover shall be measured from the top of pipe to the top of rigid pavement or to the bottom of flexible pavement subgrade. In all cases, the minimum cover shall not be less than 12". Minimum cover during construction shall be that required to protect the pipe from damage or deflecton.
7. These tables have been developed for an HL-93 live load and for compacted soil weighing 120 lbs. per cubic foot or less. If compacted soil cover exceeds 120 lbs. per cubic foot, the contractor shall use the depth of cover shown in the plans for the specific pipe. Where compacted soil cover exceeds 120 lbs. per cubic foot and no specific cover requirements are provided in the plans, the contractor shall determine the required minimum pipe cover in accordance with Section 12 of the 2017 AASHTO "LRFD Bridge Design Specifications".

State of Alaska DOT&PF
ALASKA STANDARD PLAN

PIPE AND ARCH TABLES

Adopted as an Alaska Standard Plan by: Carolyn Morehouse

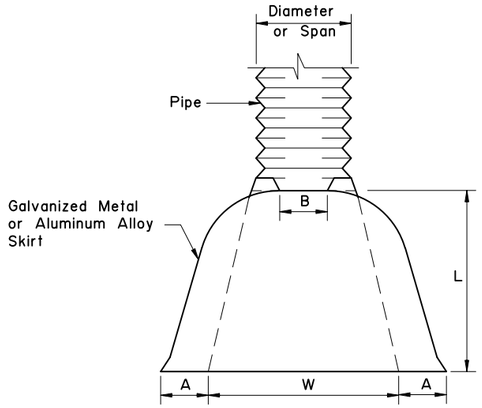
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

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

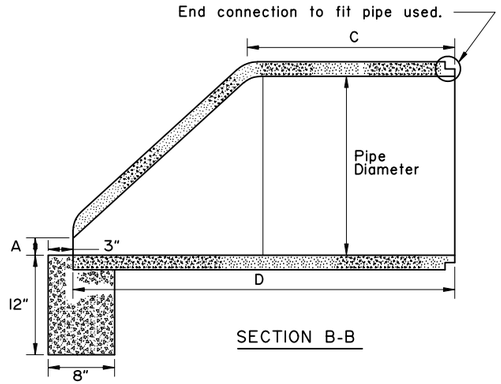
Next Code and Standards Review date: 7/8/2030

D-04.22



PLAN

ROUND AND PIPE ARCH

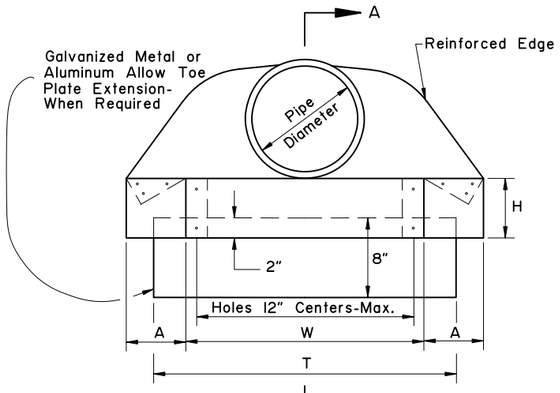


SECTION B-B

MINIMUM DIMENSIONS					
Pipe Diameter	A	B	C	D	E
12"	4"	1 3/4"	24"	46"	24"
18"	9"	2"	25"	50"	36"
24"	9 1/2"	2 1/2"	30"	72"	48"
30"	12"	3"	20"	73"	60"
36"	15"	3 3/8"	35"	97"	72"
42"	21"	3 3/4"	35"	98"	78"
48"	24"	4 1/4"	26"	98"	84"
54"	27"	4 5/8"	33"	99"	82"

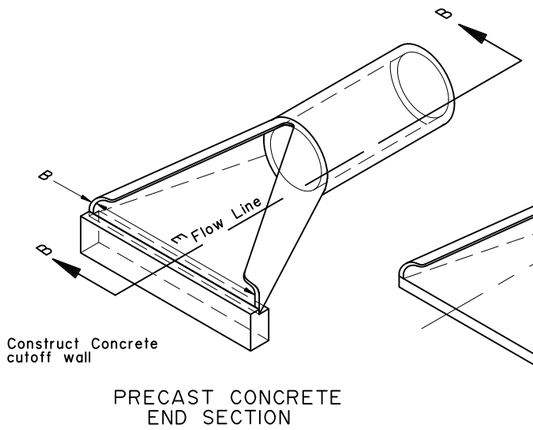
ROUND PIPE									
Pipe Diam. Inches	Thickness For Aluminum	Thk. for Galv. Metal	Dimension Inches A 1" Tol.	B Max.	H 1" Tol.	L 1 1/2" Tol.	W 2" Tol.	T 2" Tol.	Skirt	Approx. Slope
12"	0.060	0.064	6"	6"	6"	21"	24"	34"	1 Pc.	2 1/2
15"	0.060	0.064	7"	8"	6"	26"	30"	40"	1 Pc.	2 1/2
18"	0.060	0.064	8"	10"	6"	31"	36"	46"	1 Pc.	2 1/2
21"	0.060	0.064	9"	12"	6"	36"	42"	52"	1 Pc.	2 1/2
24"	0.075	0.064	10"	13"	6"	41"	48"	58"	1 Pc.	2 1/2
30"	0.075	0.079	12"	16"	8"	51"	60"	70"	1 Pc.	2 1/2
36"	0.105	0.079	14"	19"	9"	60"	72"	94"	2 Pc.	2 1/2
42"	0.105	0.109	16"	22"	11"	69"	84"	106"	2 Pc.	2 1/2
48"	0.105	0.109	18"	27"	12"	78"	90"	112"	2 Pc.	2 1/4
54"	0.105	0.109	18"	30"	12"	84"	102"	122"	2 Pc.	2 1/4
60"	0.135	0.109	18"	33"	12"	87"	114"	134"	3 Pc.	2 1/4
66"	0.135	0.109	18"	36"	12"	87"	120"	142"	3 Pc.	2 1/4
72"	0.135	0.109	18"	39"	12"	87"	126"	146"	3 Pc.	2 1/4
78"	— —	0.109	18"	42"	12"	87"	132"	152"	3 Pc.	1 1/4
84"	— —	0.109	18"	45"	12"	87"	138"	158"	3 Pc.	1 1/6

PIPE-ARCH										
Pipe-Arch Dimension Inches Span	Rise	Thickness for Aluminum	Thk. for Galv. Metal	Dimension Inches A 1" Tol.	B Max.	H 1" Tol.	L 1 1/2" Tol.	W 2" Tol.	T 2" Tol.	Skirt	Approx. Slope
17"	13"	0.060	0.064	7"	9"	6"	19"	30"	40"	1 Pc.	2 1/2
21"	15"	0.060	0.064	7"	10"	6"	23"	36"	46"	1 Pc.	2 1/2
24"	18"	0.060	0.064	8"	12"	6"	28"	42"	52"	1 Pc.	2 1/2
28"	20"	0.075	0.064	9"	14"	6"	32"	48"	58"	1 Pc.	2 1/2
35"	24"	0.075	0.079	10"	16"	6"	39"	60"	70"	1 Pc.	2 1/2
42"	29"	0.105	0.079	12"	18"	8"	46"	75"	85"	1 Pc.	2 1/2
49"	33"	0.105	0.109	13"	21"	9"	53"	85"	103"	2 Pc.	2 1/2
57"	38"	0.105	0.109	18"	26"	12"	63"	90"	114"	2 Pc.	2 1/2
64"	43"	0.105	0.109	18"	30"	12"	70"	102"	130"	2 Pc.	2 1/4
71"	47"	0.135	0.109	18"	33"	12"	77"	114"	144"	3 Pc.	2 1/4
77"	52"	0.135	0.109	18"	36"	12"	84"	120"	158"	3 Pc.	2 1/4
83"	57"	0.135	0.109	18"	39"	12"	90"	126"	170"	3 Pc.	2 1/4

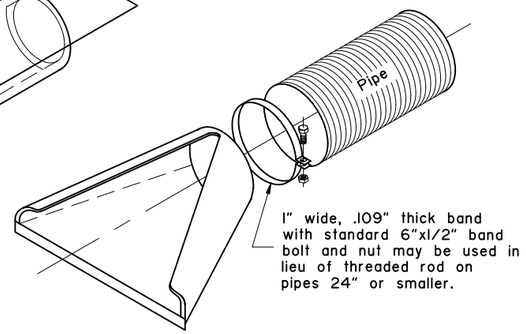


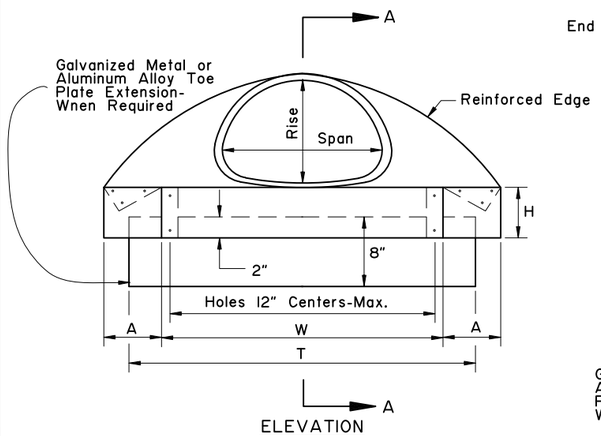
ELEVATION

ROUND PIPE



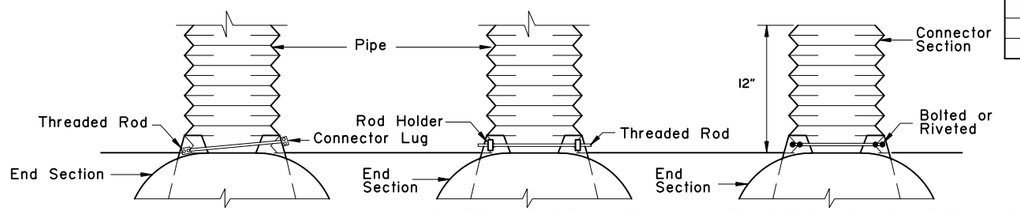
PRECAST CONCRETE END SECTION





ELEVATION

PIPE ARCH

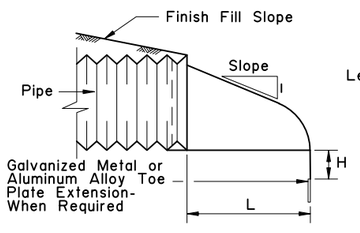


For 12" thru 24" Round Pipe with Annular Corrugations

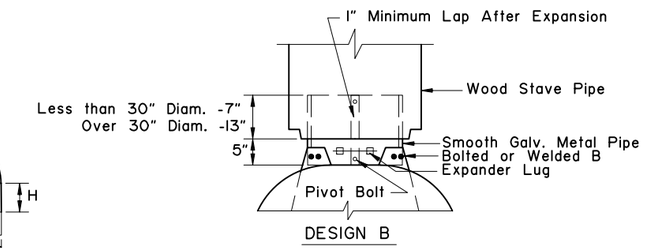
For 30" & 36" Round Pipe and 18"x11" thru 58"x36" Pipe Arch with Annular Corrugations.

For 42" thru 84" Round Pipe and 65"x40" thru 85"x54" Pipe Arch with Annular Corrugations and All Helically Corrugated Pipe and Pipe Arch.

DESIGN A



SECTION A-A



DESIGN B

METAL END SECTION CONNECTED TO WOOD STAVE PIPE

GENERAL NOTES:

1. Toe plate extensions will be required only when provided for on the plans. When required, the toe plate extensions shall be punched with holes to match those in lip of skirt and fastened with 3/8 inch or larger galvanized nuts and bolts and shall be the same gage as the end section.
2. Galvanized Metal or Aluminum Alloy End Sections may be used on Wood Stave and Plastic Pipe.
3. All 3 piece bodies shall have 12 gage sides and 10 gage center panels. Multiple panel bodies shall have lap seams which are to be tightly joined by 3/8" galvanized rivets or bolts.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT END SECTIONS

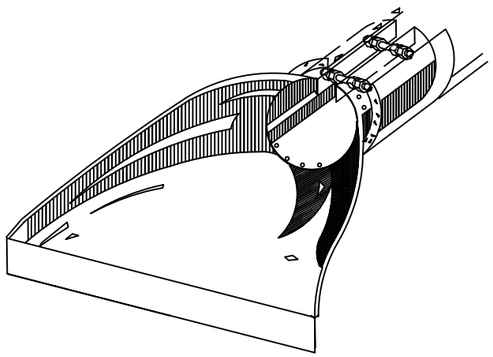
Adopted as an Alaska Standard Plan by:
Kenneth J. Fisher, P.E.
Chief Engineer

Adoption Date: 02/08/2019

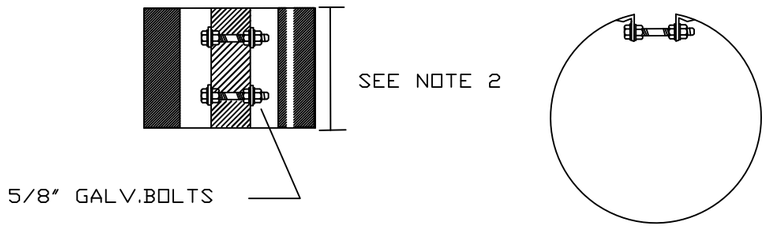
Last Code and Stds. Review By: Date:

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

D-06.10



FOR CONNECTING CONCRETE PIPE OR CORRUGATED POLYETHYLENE PIPE TO METAL END SECTION.



GENERAL NOTES

1. See general notes on sheet 1 of 3.
2. See sheet 1 of 3 for metal end section dimensions.
3. Insert bolts, washers and rivets shall be galvanized. Insert thickness is the same as the end section.
4. Use culvert inserts only at inlet.

METAL INSERTS FOR USE WITH CORRUGATED PLASTIC PIPE AND METAL END SECTIONS

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT END SECTIONS

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Chief Engineer

Adoption Date: 02/08/2019

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By: Date:

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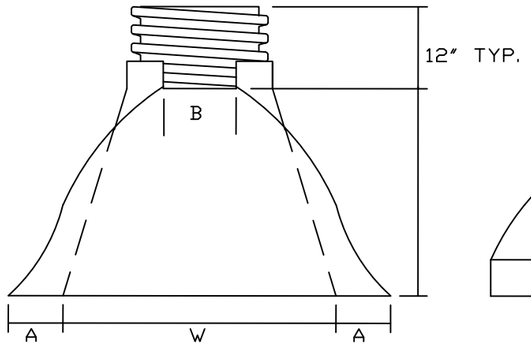
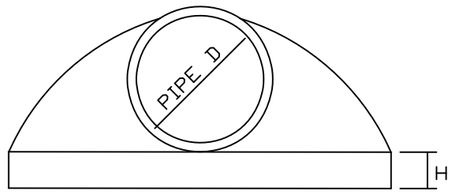
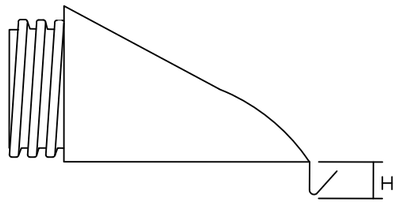


TOP VIEW



END VIEW



SIDE VIEW

PIPE DIAMETER	DIMENSIONS IN MILLIMETERS				
	A(1"±)	B MAX	H(1"±)	L(1/2"±)	W(2"±)
12" and 15"	6 1/2"	10"	6 1/2"	25"	29"
18"	7 1/2"	15"	6 1/2"	32"	35"
24"	7 1/2"	18"	6 1/2"	36"	45"
30"	10 1/2"	N/A	7"	53"	68"
36"	10 1/2"	N/A	7"	53"	68"

PLASTIC END SECTION FOR CORRUGATED PLASTIC PIPE

GENERAL NOTES

1. Plastic flared end sections may be used with HDPE corrugated culvert pipes where noted in project plans or approved by project engineer.
2. Consult manufacturer's recommendations for proper sizing and coupling devices. Recommended fasteners may include connecting bands or cinch ties. Fittings across dimension B may include threaded rods with wing nuts or bolts and washers. plastic welds may be recommended.
3. Align coupling to accomodate pipe corrugations.
4. Metal components e.g. bolts or washers must be galvanized.
5. Attachment of end section should preserve culvert alignment and not impair pipe function. Use end sections only on culvert inlet.
6. Toe plate extensions will be required only when designated on the plans.
7. End sections will not be used on HDPE culvert pipes larger than 36" unless indicated by project plans or approved by the Engineer.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT END SECTIONS

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

Adoption Date: 02/08/2019

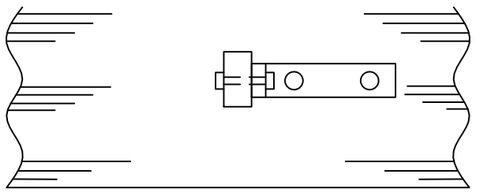
Last Code and Stds. Review
By: Date:

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

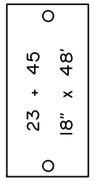
D-06.10

DIRECTION OF TRAFFIC

Shoulder of Road



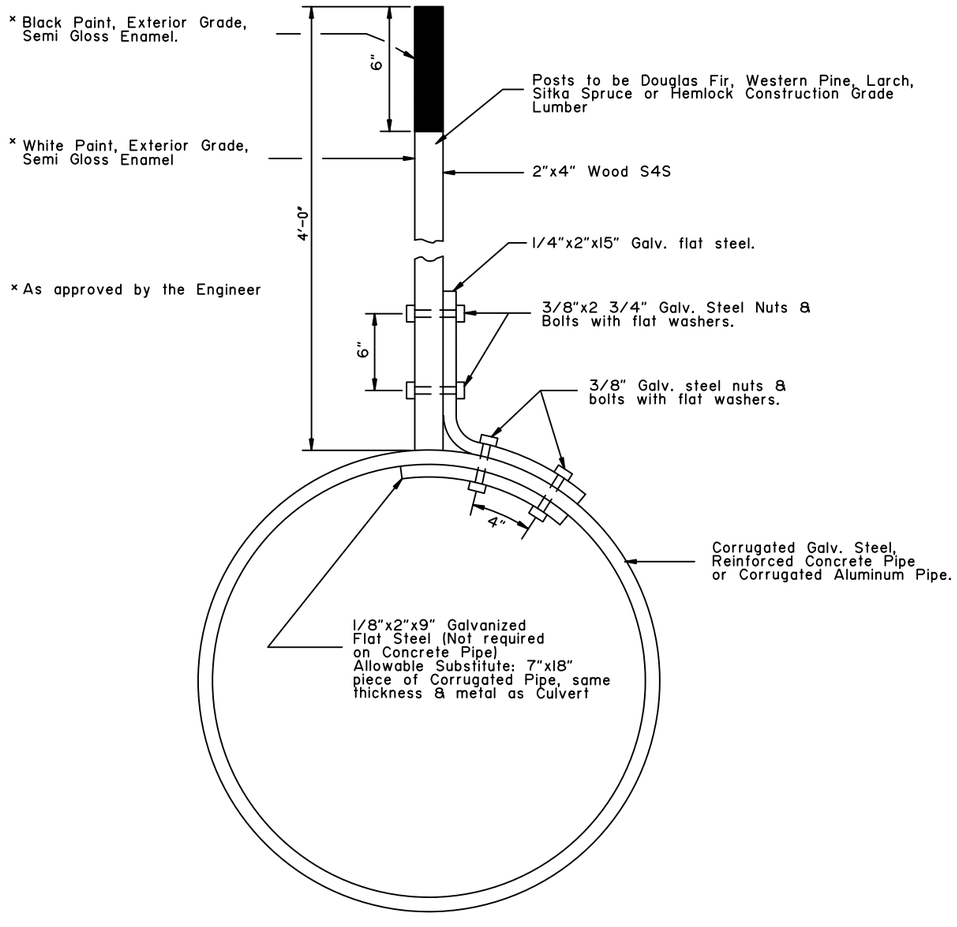
TOP VIEW



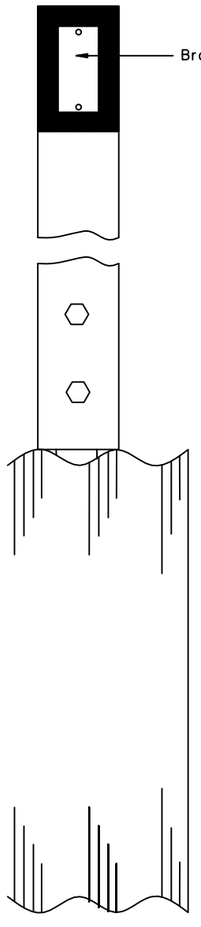
Sta. and size of Culvert to be stamped into a 2"x4"x0.064" thick brass plate, fastened, with No. 8 round head brass screws, to the marker post as shown. Plate to be on side of post facing traffic.

GENERAL NOTES:

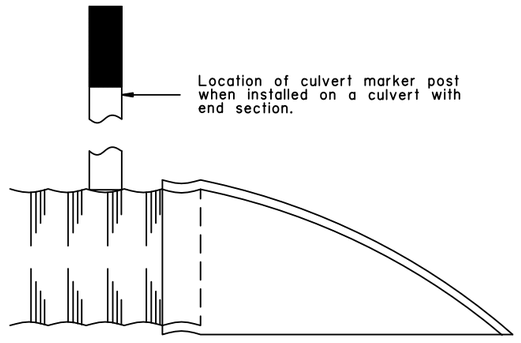
1. Culvert marker post shall be installed with galvanized steel hardware meeting the following requirements: Galvanizing for nuts and washers shall meet the requirements of ASTM A-153, Class C. Galvanizing for steel mounting supports shall meet the requirements of MIL-P-26915A, or ASTM A-153, Class C.



END VIEW



SIDE VIEW



END SECTION SIDE VIEW

State of Alaska DOT&PF
ALASKA STANDARD PLAN

CULVERT MARKER POST

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

Adoption Date: 02/08/2019

Last Code and Stds. Review
By: Date:

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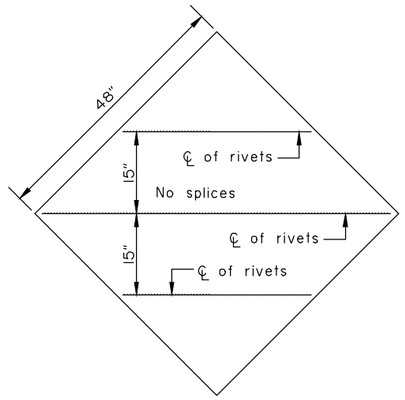
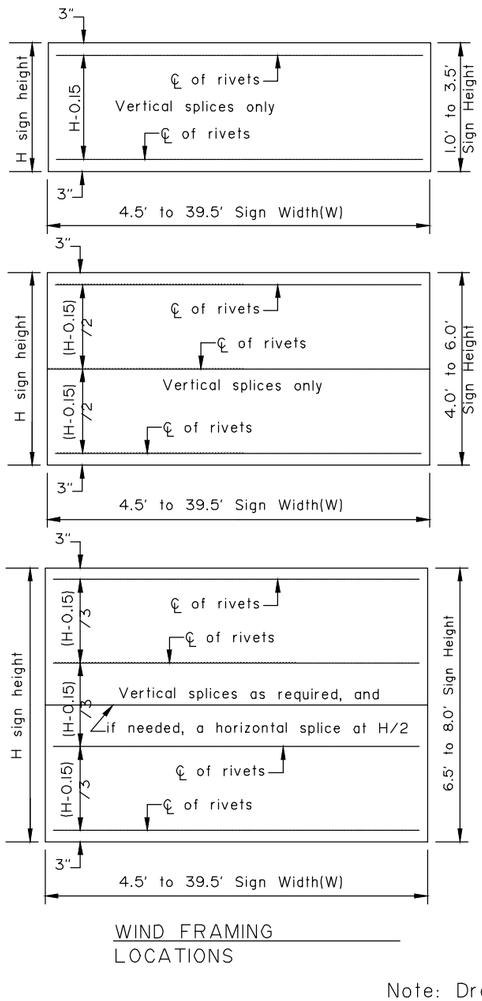
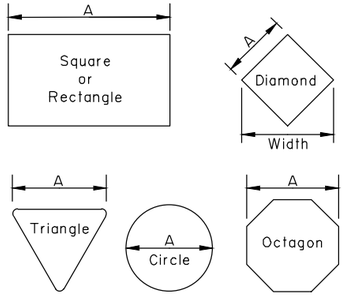




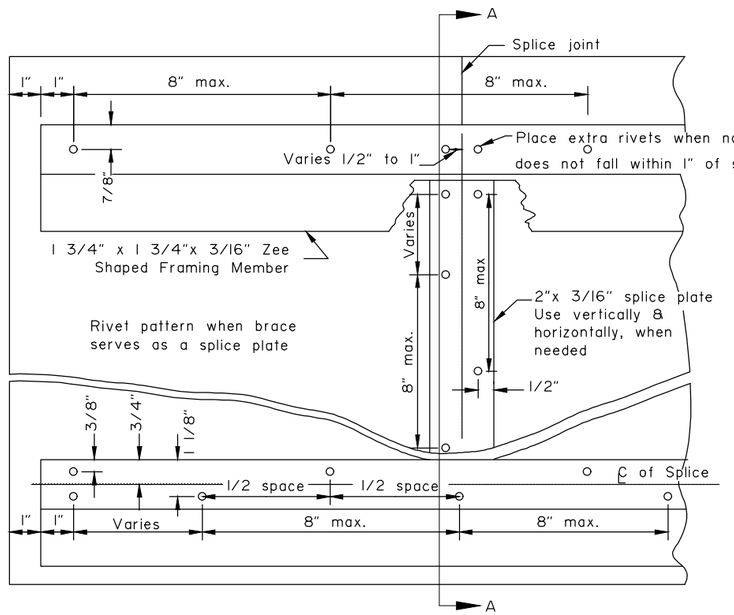
WIND FRAMING LOCATIONS



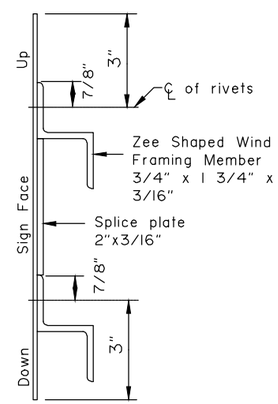
Maximum size unframed signs using 0.125" thick aluminum sheeting.	
Sign Shape	A
Squares, Shields, and Route Markers	48"
Rectangles	48"
Diamonds	48"
Triangles	48"
Rounds and Octagons	48"

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

LIGHT SIGNS



RIVET DETAIL FOR ZEE SHAPED WIND FRAMING & SPLICE PLATE



SECTION A-A

Note: Drawing not to scale

GENERAL NOTES

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

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SIGN FRAMING

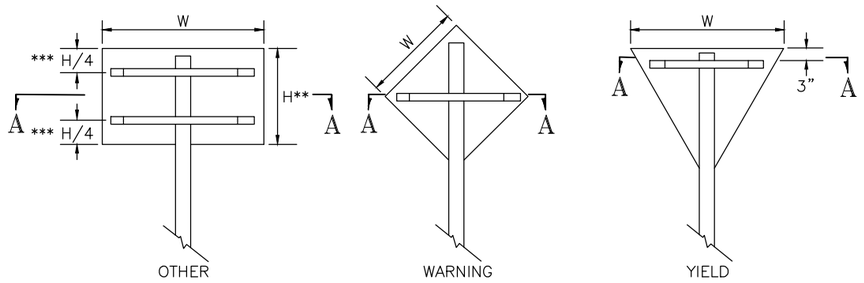
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

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

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

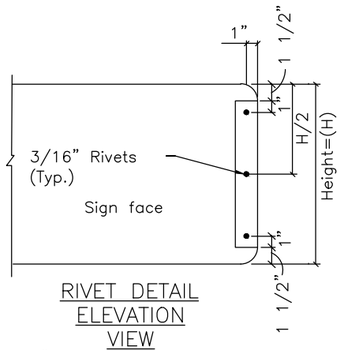
S-00.12



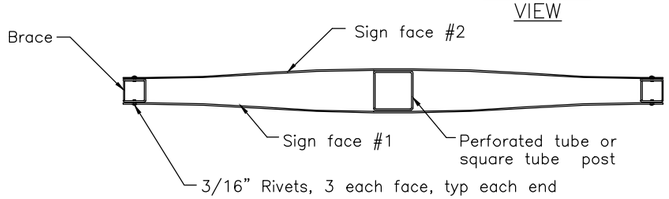
*** Use one brace when H ≤ 18"
Use two braces when 18"< H < 48"
Use three braces when H ≥ 48"

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

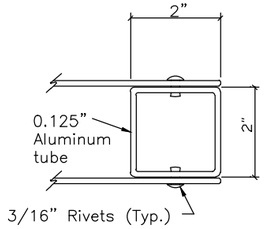
SIGN BRACING PLACEMENT



RIVET DETAIL ELEVATION VIEW

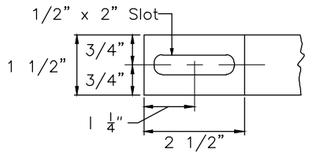


PLAN VIEW

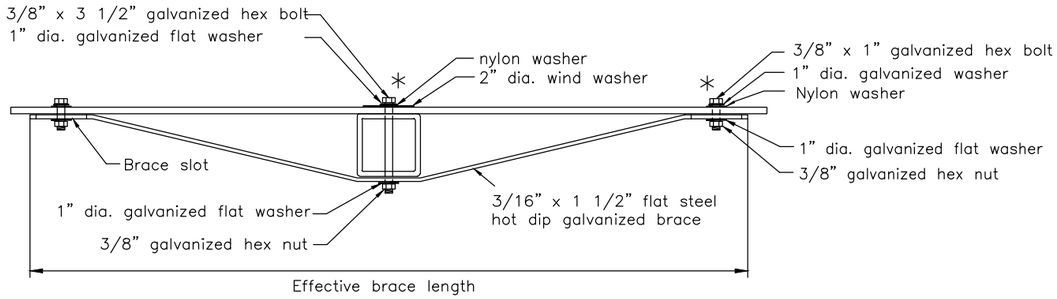


END BRACE DETAIL

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



DETAIL OF BRACE SLOT
Elevation view



TUBE POST SIGN BRACING SECTION A-A
Plan view

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

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

< 30" No bracing required and use square tube

Note: Drawing not to scale

State of Alaska DOT&PF
ALASKA STANDARD PLAN

BRACING FOR SIGNS MOUNTED ON SINGLE POST

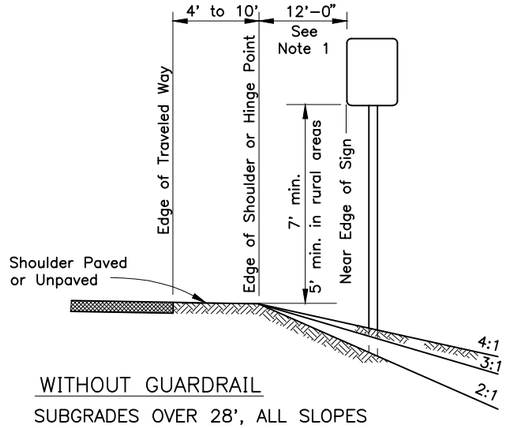
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

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

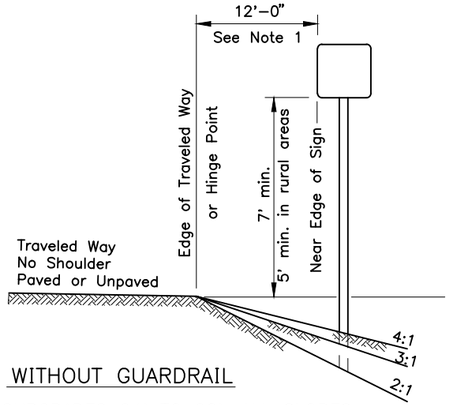
Next Code and Standards Review date: 7/8/2030

S-01.02



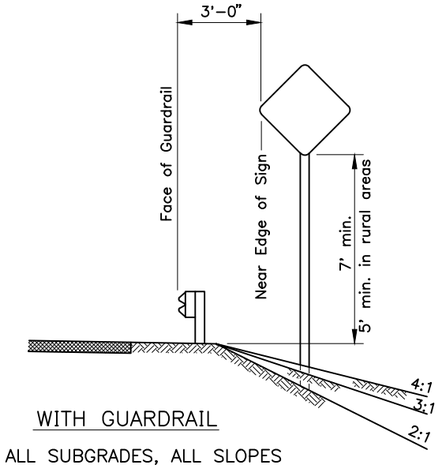
WITHOUT GUARDRAIL

SUBGRADES OVER 28', ALL SLOPES



WITHOUT GUARDRAIL

SUBGRADES 24' TO 28', ALL SLOPES

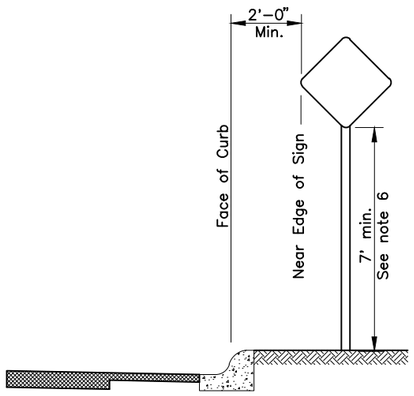


WITH GUARDRAIL

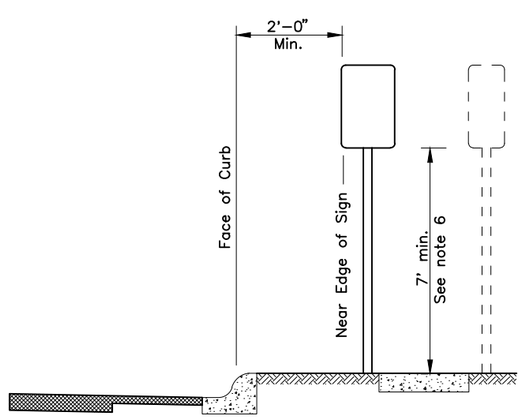
ALL SUBGRADES, ALL SLOPES

GENERAL NOTES

1. Unless shown otherwise on the plans, the standard sign offset is 12'. The minimum is 6' where shoulder width is 6' or greater.
2. Add 6" to mounting height on unpaved roads.
3. If signs extend over bike paths, the minimum vertical clearance is 8' 0".
4. When signs are placed 30' or more from the edge of traveled way, mount them with the bottom of the sign at least 5' above the road surface at the near edge of the road.
5. When multiple hinged sign supports are used, mount hinges at least 7' above the ground.
6. Minimum mounting height is 7'–0" where parking or pedestrian movements are likely to occur, or where sings extend over sidewalks.
7. For construction signs in rural areas, mounting height shall be 7' minimum.

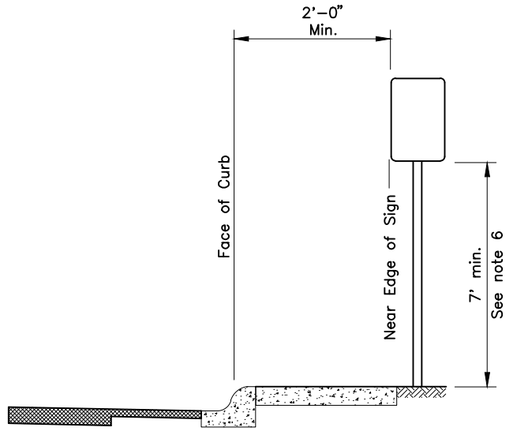


CURB WITHOUT SIDEWALK

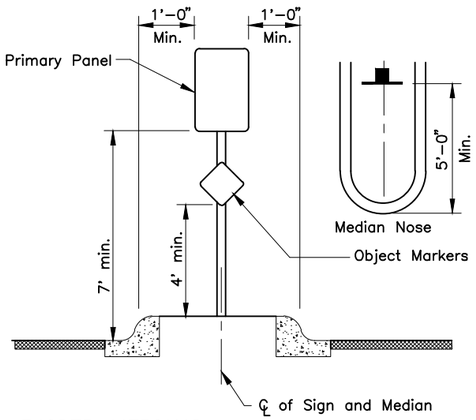


CURB WITH PARKWAY AND SIDEWALK

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

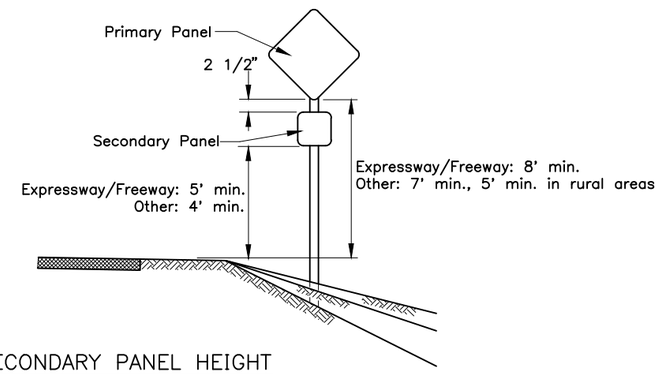


CURB WITH SIDEWALK WITHOUT PARKWAY



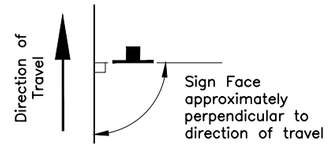
RAISED MEDIANS

Minimum 4' Width for Signing



SECONDARY PANEL HEIGHT

ALL TWO PANEL MOUNTING



SIGN POSITIONING

State of Alaska DOT&PF
ALASKA STANDARD PLAN

POST MOUNTED SIGN
OFFSET AND HEIGHT

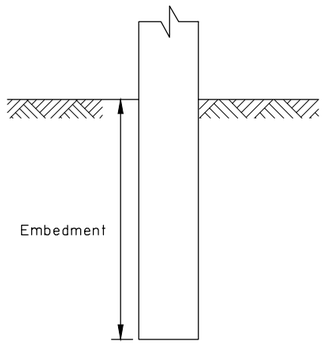
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

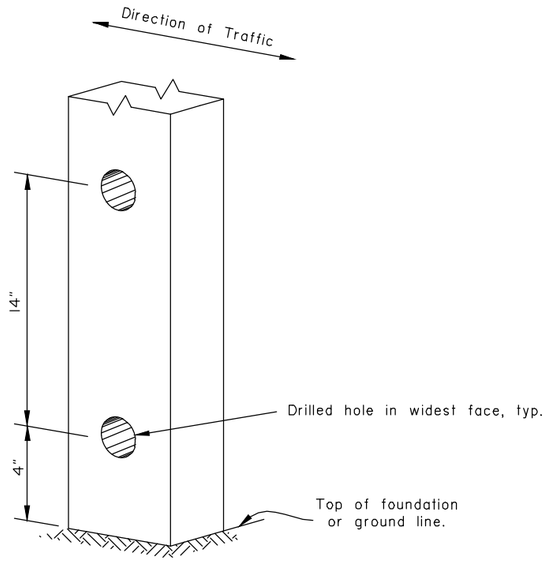
Adoption Date: 7/17/2020

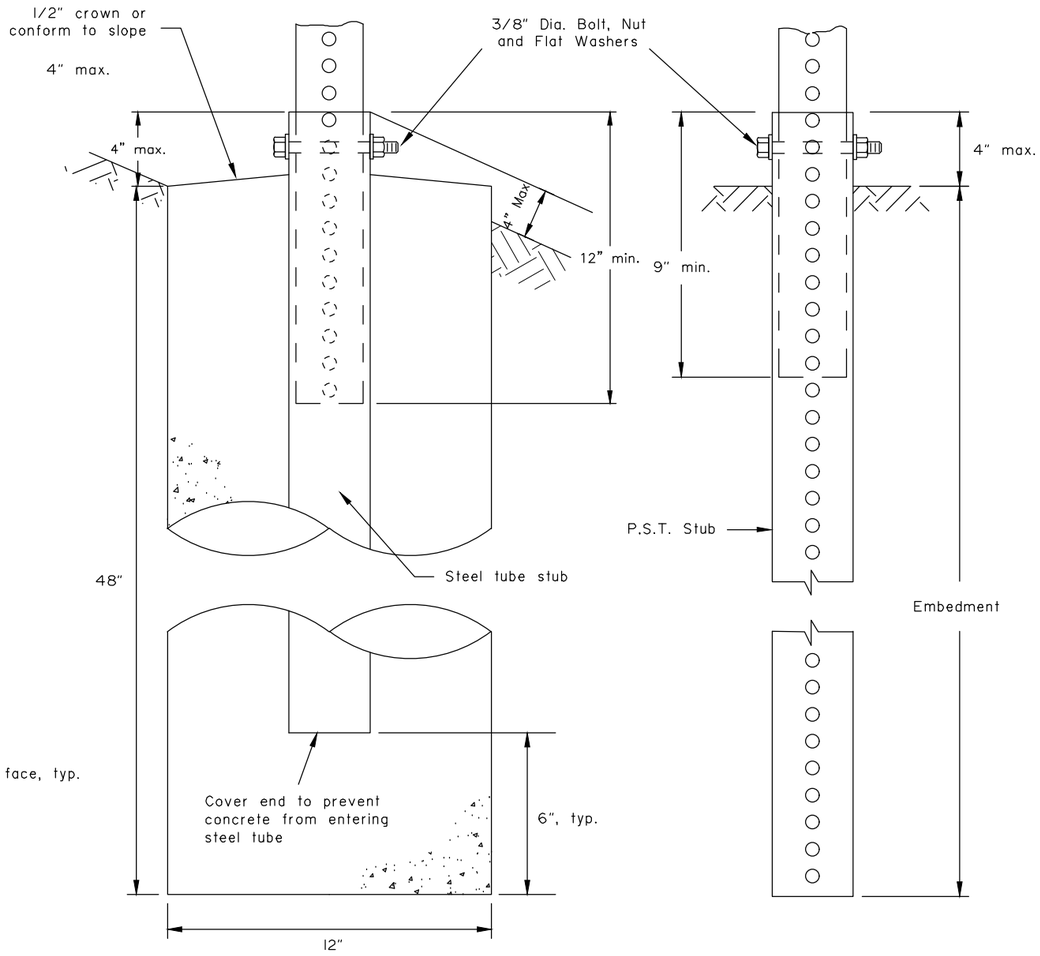
Last Code and Stds. Review
By: KLK Date: 7/8/2020

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

S-05.02







SLEEVE TYPE
CONCRETE FOUNDATION

SLEEVE TYPE*
SOIL EMBEDMENT

GENERAL NOTES:

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

SIGN POST SPACING NOTES:

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

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

* Embedment depth applies in both strong and weak soil.

WOOD POSTS

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

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

PERFORATED STEEL TUBE (PST) POSTS

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

TUBE SIGN POST SPACING

Note: Drawing not to scale

State of Alaska DOT&PF
ALASKA STANDARD PLAN

LIGHT SIGN STRUCTURE
POST EMBEDMENT

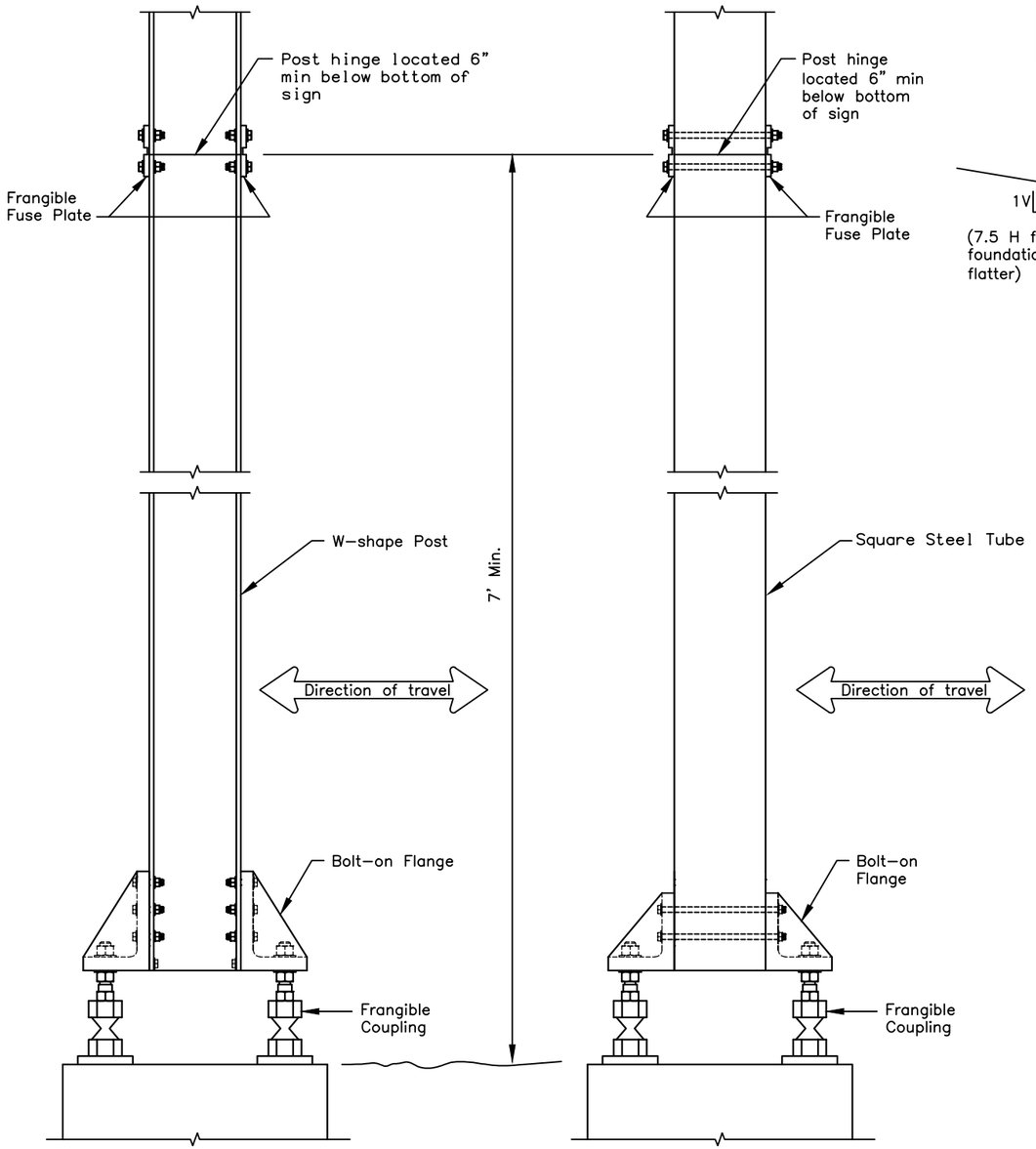
Adopted as an Alaska Standard Plan by: Carolyn Morehouse
Carolyn Morehouse, P.E.
Chief Engineer

Adoption Date: 7/17/2020

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

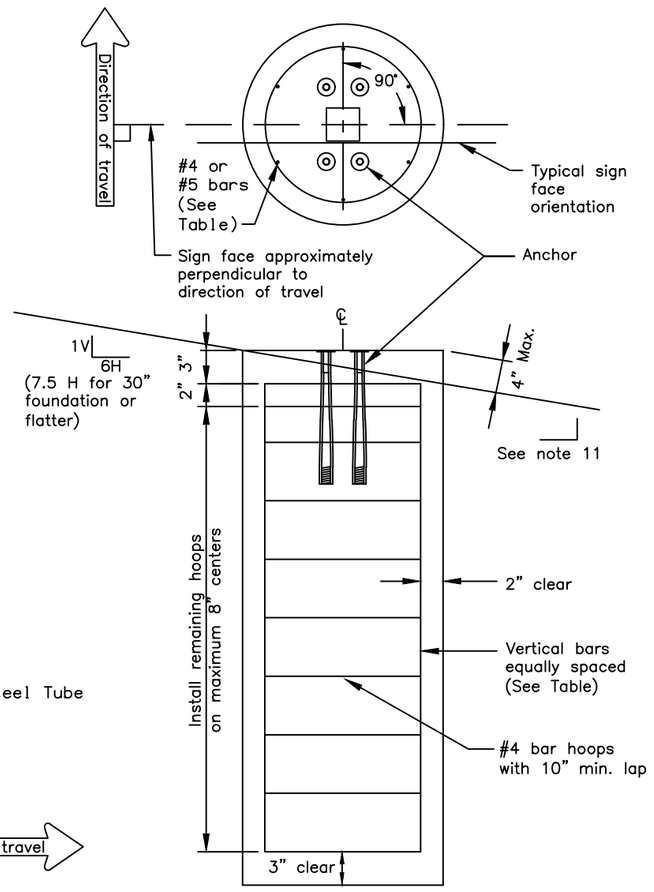
Next Code and Standards Review date: 7/8/2030

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



FRANGIBLE COUPLING SYSTEM FOR W–SHAPE POST

FRANGIBLE COUPLING SYSTEM FOR SQUARE STEEL TUBES



SIGN POST FOUNDATION
See Table for depth and diameter

POST SIZE & TYPE	FOUNDATION *			REINFORCEMENT					
	DIA.	MIN. DEPTH	CY^3 CONC.	VERTICAL BARS			HOOPS		
				QTY.	SIZE	LGTH.	QTY.	SIZE	DIA.
2 1/2" TUBE	1'–6"	6'–0"	0.39	7	#5	5'–6"	10	#4	1'–2"
3" TUBE	1'–6"	6'–0"	0.39	7	#5	5'–6"	10	#4	1'–2"
3 1/2" TUBE	1'–6"	6'–0"	0.39	7	#5	5'–6"	10	#4	1'–2"
4" TUBE	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
4 1/2" TUBE	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
5" TUBE	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
W6 x 9	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
W6 x 12	2'–6"	6'–0"	1.09	8	#8	5'–6"	10	#4	2'–2"
W6 x 15	3'–0"	6'–6"	1.70	8	#11	6'–0"	12	#4	2'–8"
W6 x 30	3'–0"	7'–6"	1.96	8	#11	7'–0"	13	#4	2'–8"

FOUNDATION TABLE

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

GENERAL NOTES

1. Furnish sign posts with NCHRP 350 compliant frangible couplings designed to break away safely when struck from any direction. There is no MASH compliant device at this time. See SPDR report for more info.
2. Furnish frangible coupling systems with bolt–on flanges.
3. Details on this sheet illustrate only the general components of a frangible coupling system, and are not intended to specify a particular product.
4. Install frangible fuse plates as specified by the manufacturer and hinged joints when multiple posts are used to support a sign. Do not use round pipes.
5. Install the components of the breakaway system, including hinges, in accordance with the written instructions of the system manufacturer.
6. Use Class A, B or W concrete conforming to Sections 501 or 550 of the Standard Specifications. Furnish ASTM A615 grade 60 steel bars for concrete reinforcement conforming to AASHTO M31.
7. Spiral reinforcing steel may be substituted for hoops in concrete foundation. Spiral option shall consist of #3 plain spiral with 6" pitch with three flat turns at the top and one flat turn at the bottom.
8. Install the concrete anchors using a rigid template. Locate the anchors on centers and within tolerances specified by the manufacturer.
9. Install the anchors in fresh concrete as recommended by the manufacturer. Adjust the template's final position until it is level. Remove and replace all foundations that need more than 2 shims under any 1 coupling or more than a total of 3 shims under any pair of couplings to plumb the post.
10. Drill the holes for attaching brackets before the sign posts are hot dip galvanized. Test fit templates in the holes to ensure the brackets can be installed square to the posts.
11. Special grading detail and/or shielding may be required to maintain 4" maximum clear distance.

State of Alaska DOT&PF
ALASKA STANDARD PLAN

SIGN POST BASE AND FOUNDATION

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

Adoption Date: 7/17/2020

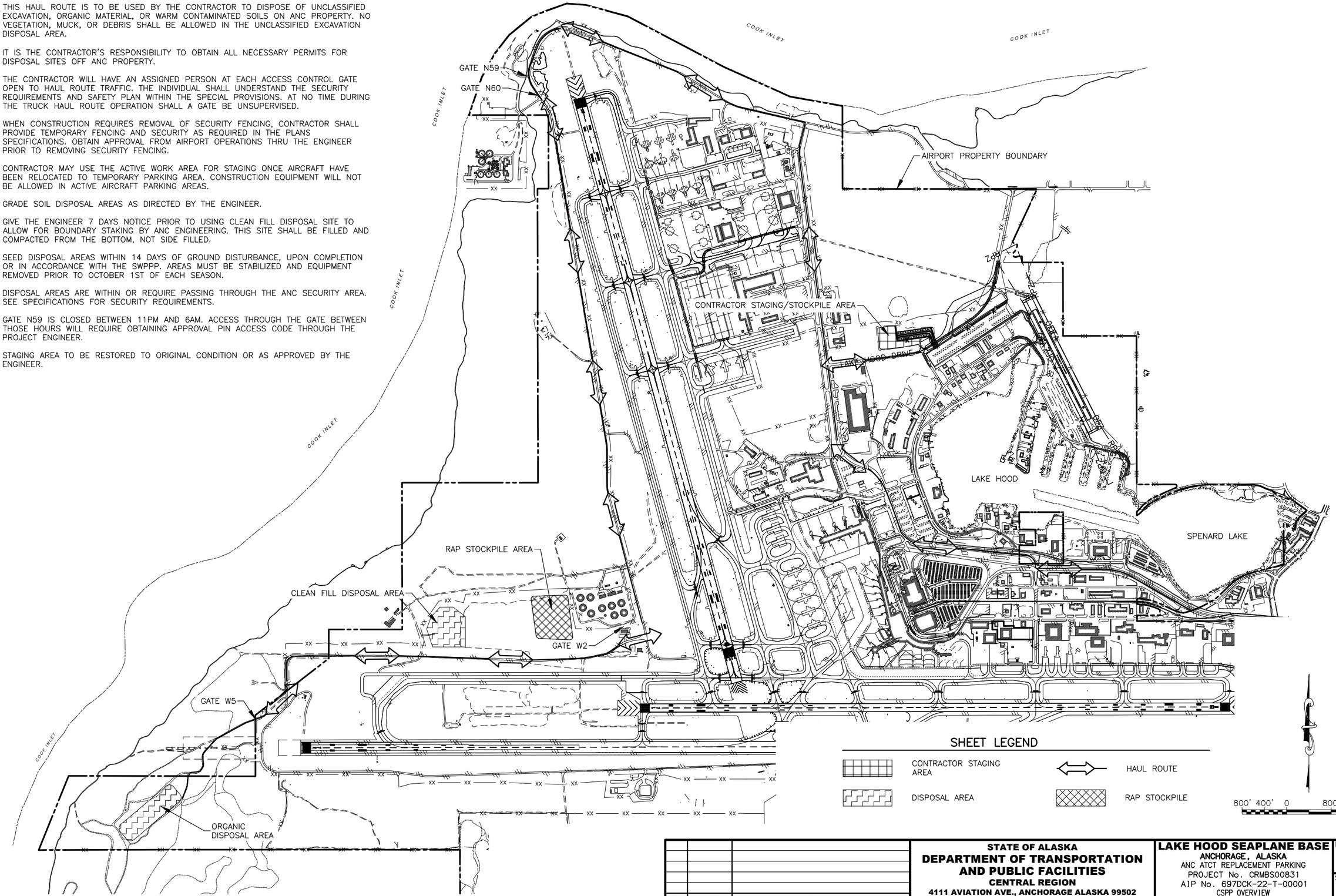
Last Code and Stds. Review
By: KLK, MJM Date: 7/8/2020

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

S-31.02

SHEET NOTES:

1. THIS HAUL ROUTE IS TO BE USED BY THE CONTRACTOR TO DISPOSE OF UNCLASSIFIED EXCAVATION, ORGANIC MATERIAL, OR WARM CONTAMINATED SOILS ON ANC PROPERTY. NO VEGETATION, MUCK, OR DEBRIS SHALL BE ALLOWED IN THE UNCLASSIFIED EXCAVATION DISPOSAL AREA.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS FOR DISPOSAL SITES OFF ANC PROPERTY.
3. THE CONTRACTOR WILL HAVE AN ASSIGNED PERSON AT EACH ACCESS CONTROL GATE OPEN TO HAUL ROUTE TRAFFIC. THE INDIVIDUAL SHALL UNDERSTAND THE SECURITY REQUIREMENTS AND SAFETY PLAN WITHIN THE SPECIAL PROVISIONS. AT NO TIME DURING THE TRUCK HAUL ROUTE OPERATION SHALL A GATE BE UNSUPERVISED.
4. WHEN CONSTRUCTION REQUIRES REMOVAL OF SECURITY FENCING, CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AND SECURITY AS REQUIRED IN THE PLANS SPECIFICATIONS. OBTAIN APPROVAL FROM AIRPORT OPERATIONS THRU THE ENGINEER PRIOR TO REMOVING SECURITY FENCING.
5. CONTRACTOR MAY USE THE ACTIVE WORK AREA FOR STAGING ONCE AIRCRAFT HAVE BEEN RELOCATED TO TEMPORARY PARKING AREA. CONSTRUCTION EQUIPMENT WILL NOT BE ALLOWED IN ACTIVE AIRCRAFT PARKING AREAS.
6. GRADE SOIL DISPOSAL AREAS AS DIRECTED BY THE ENGINEER.
7. GIVE THE ENGINEER 7 DAYS NOTICE PRIOR TO USING CLEAN FILL DISPOSAL SITE TO ALLOW FOR BOUNDARY STAKING BY ANC ENGINEERING. THIS SITE SHALL BE FILLED AND COMPACTED FROM THE BOTTOM, NOT SIDE FILLED.
8. SEED DISPOSAL AREAS WITHIN 14 DAYS OF GROUND DISTURBANCE, UPON COMPLETION OR IN ACCORDANCE WITH THE SWPPP. AREAS MUST BE STABILIZED AND EQUIPMENT REMOVED PRIOR TO OCTOBER 1ST OF EACH SEASON.
9. DISPOSAL AREAS ARE WITHIN OR REQUIRE PASSING THROUGH THE ANC SECURITY AREA. SEE SPECIFICATIONS FOR SECURITY REQUIREMENTS.
10. GATE N59 IS CLOSED BETWEEN 11PM AND 6AM. ACCESS THROUGH THE GATE BETWEEN THOSE HOURS WILL REQUIRE OBTAINING APPROVAL PIN ACCESS CODE THROUGH THE PROJECT ENGINEER.
11. STAGING AREA TO BE RESTORED TO ORIGINAL CONDITION OR AS APPROVED BY THE ENGINEER.



SHEET LEGEND

- CONTRACTOR STAGING AREA
- DISPOSAL AREA
- HAUL ROUTE
- RAP STOCKPILE

800' 400' 0 800' 1600'

BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
CSPP OVERVIEW

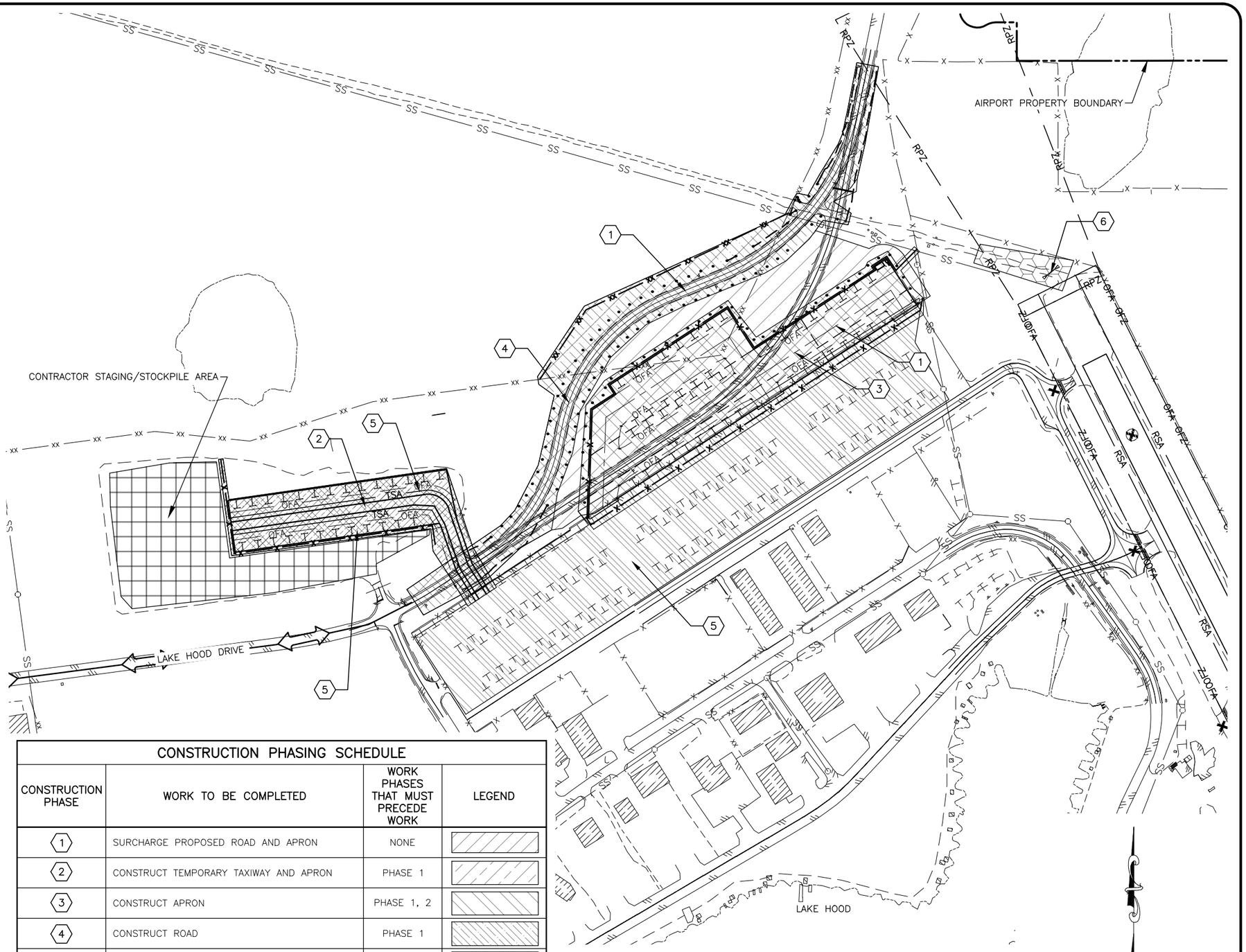
DATE: 04/07/2025
SHEET: AC1 OF AC14

Designed By: TRI
Drawn By: RJB
Checked By: TRI

Date Revised: 4/07/2025, 9:40 AM
Layout Name: Overview
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-CSPP.dwg

GENERAL SAFETY REQUIREMENTS

1. SEE APPENDIX C OF THE SPECIFICATIONS FOR THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH THE SAFETY REQUIREMENTS AS REQUIRED IN THE CSPP. ALL SAFETY RELATED WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND NO ADDITIONAL PAYMENT WILL BE MADE.
2. THE CONTRACTOR SHALL SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD), PER FAA AC 150/5370-2G, TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ISSUANCE OF A NOTICE TO PROCEED. IF THE SPCD DIFFERS FROM WHAT IS SHOWN OR IF SUBSEQUENT CHANGES ARE MADE, SUBMIT A REVISION TO THE ENGINEER FOR REVIEW AND APPROVAL
3. CONSTRUCTION SHALL BE PLANNED TO MINIMIZE DISTURBANCE TO AIRCRAFT OPERATIONS. COORDINATE CLOSURES WITH AIRPORT OPERATIONS THROUGH THE ENGINEER.
4. ALL CONSTRUCTION VEHICLES AND EQUIPMENT SHALL OPERATE A FLASHING YELLOW BEACON WHEN WORKING ON THE AIRPORT.
5. SEE THE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION ON ELECTRICAL PHASING AND ASSOCIATED REQUIREMENTS.
8. THE CONTRACTOR MUST REPORT ANY SAFETY ISSUES TO THE ENGINEER AND AIRPORT OPERATIONS UPON DISCOVERY. THE CONTRACTOR MUST TAKE IMMEDIATE ACTION TO RESOLVE SAFETY ISSUES AS DIRECTED.
9. IMMEDIATELY REMOVE ALL FOREIGN OBJECT DEBRIS (FOD) FROM ACTIVE SURFACES UPON DISCOVERY OR NOTIFICATION. FAILURE TO REMOVE FOD MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER. STATION ADEQUATE CLEANING EQUIPMENT AT THE JOB SITE FOR IMMEDIATE CLEANUP OF ANY MATERIAL SPILLS ON ALL ACTIVE RUNWAY, TAXIWAY, AND APRON SURFACES.
10. FOLLOW THE REQUIREMENTS FOR A DRINKING WATER PROTECTION AREA (DWPA) PER THE ACGP.
11. DAMAGE TO FAA FACILITIES, INCLUDING POWER DISRUPTION, SHALL BE IMMEDIATELY REPAIRED IN A MANNER ACCEPTABLE TO FAA AT THE CONTRACTOR'S EXPENSE.
12. CONTRACTOR SHALL FOLLOW LOCKOUT-TAGOUT PROCEDURES AS DEFINED IN SPECIFICATION SECTIONS L-125. CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOUR NOTICE TO THE ENGINEER PRIOR TO CONNECTING TO EXISTING LIGHTING EQUIPMENT.
13. THE CONTRACTOR SHALL VACATE THE STAGING AREAS AND DISPOSAL SITES BY CONTRACT COMPLETION DATE.
14. WHENEVER THE PLANS OR SPECIFICATIONS CALL FOR COORDINATION, NOTIFICATION, CONTACT, OR OTHER INTERACTION WITH FAA, TSA, AIRPORT MANAGEMENT, MAINTENANCE AND OPERATIONS, AIR CARRIERS, AIRPORT TENANTS, AIRPORT USERS, ANY LOCAL, STATE, OR FEDERAL AGENCY, GROUP, OR ASSOCIATION, OR THE GENERAL PUBLIC, SUCH ACTIVITY SHALL BE DONE THROUGH, IN THE PRESENCE OF, OR WITH THE WRITTEN APPROVAL OF THE ENGINEER, ALLOW SUFFICIENT TIME FOR COORDINATION AND APPROVALS WITHIN PROPOSED WORK SCHEDULES.
15. WHEN THE WORK IS COMPLETED, THE CONTRACTOR, THROUGH THE ENGINEER, SHALL NOTIFY THE AIRPORT MANAGER THE WORK WHICH NEEDED A NOTAM HAS BEEN COMPLETED AND THE NOTAM CAN BE CANCELED.
16. PROVIDE AN ACCESS PLAN FOR APPROVAL BY THE ENGINEER. APPROVAL OF ACCESS PLAN IS REQUIRED PRIOR TO BEGINNING OF WORK. ACCESS PLAN SHALL INCLUDE, BUT IS NOT LIMITED TO, SCHEDULING WORK, SEPARATION OF AIRCRAFT AND PASSENGERS FROM ACTIVE CONSTRUCTION, TRAFFIC CONTROL DEVICES REQUIRED, AND HAZARD MARKER BARRIER LOCATIONS. SEE GCP-80 AND APPENDIX C FOR DETAILS.
17. THE PROJECT WILL REQUIRE CLOSURE OF RW 14/32. COORDINATE THROUGH THE ENGINEER PRIOR TO OPENING OR CLOSING AREAS TO AIRCRAFT OPERATIONS. ALLOW FOR ISSUANCE OF NOTAMS BY AIRPORT MANAGEMENT TO KEEP ALL AIRPORT USERS INFORMED OF CLOSED AREAS AND APRON, TW, AND RW STATUS.
18. RW AND TW CLOSURES CAN BE PROPOSED AND PUT INTO AFFECT ONLY WITH THE APPROVAL OF THE ENGINEER. TEMPORARY CLOSURES OF RW 14/32 IS ANTICIPATED FOR REMOVAL AND CONSTRUCTION OF STORM DRAIN SYSTEM.
19. PROVIDE WEEKLY NOTIFICATIONS OF ACTIVE AIRPORT AREAS AND CONSTRUCTION ACTIVITIES TO THE CONTACTS LISTED IN THE CONSTRUCTION SAFETY AND PHASING PLAN AND/OR SPECIFICATIONS. CARRY OUT CONTINUING COORDINATION THROUGH THE ENGINEER USING WEEKLY BRIEFINGS WITH AIRPORT OPERATIONS, AIRPORT MAINTENANCE, AIRPORT RESCUE AND FIRE FIGHTING (ARFF) PERSONNEL, AND AIRPORT USERS TO KEEP EVERYONE AWARE OF THE STATUS AND CHANGES OF AIRPORT SURFACES IN RELATION TO GROUND TRAFFIC. PROVIDE DETAILED DRAWINGS INDICATING TRAFFIC ROUTES FOR GROUND TRAFFIC. INDICATE CLOSED AREAS AND PROVIDE UPDATED DRAWINGS AS CONSTRUCTION PROCEEDS.
20. PLACE HAZARD MARKER BARRIERS WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER FOR EACH PHASE. HAZARD MARKER BARRIERS ARE SHOWN AT APPROXIMATE LOCATIONS. ADDITIONAL LOCATIONS OR ADJUSTMENTS MAY BE REQUIRED. PLACE HAZARD MARKER BARRIERS IN ACCORDANCE WITH SPECIFICATIONS ITEM P-670, THE CSPP, AND AS APPROVED BY THE ENGINEER. THE ENGINEER MAY DIRECT THE PLACEMENT OF ADDITIONAL BARRIERS AS DEEMED NECESSARY. MONITOR HAZARD MARKER BARRIERS FREQUENTLY. CORRECT DEFICIENCIES IMMEDIATELY.
21. CLEAR EQUIPMENT FROM WORK AREAS WHEN REQUESTED BY THE ENGINEER. NO EQUIPMENT OR MATERIAL STOCKPILES MAY REMAIN IN CRITICAL AREAS; RW OBJECT FREE AREAS; TW OBJECT FREE AREAS; OR ON CLOSED RW, TW, OR APRONS DURING NON-WORK HOURS.



CONSTRUCTION PHASING SCHEDULE

CONSTRUCTION PHASE	WORK TO BE COMPLETED	WORK PHASES THAT MUST PRECEDE WORK	LEGEND
1	SURCHARGE PROPOSED ROAD AND APRON	NONE	
2	CONSTRUCT TEMPORARY TAXIWAY AND APRON	PHASE 1	
3	CONSTRUCT APRON	PHASE 1, 2	
4	CONSTRUCT ROAD	PHASE 1	
5	REMOVE TEMPORARY TAXIWAY AND APRON	PHASE 3	
6	INSTALL STORM WATER IMPROVEMENTS	NONE	

BY	DATE	REVISION

STATE OF ALASKA
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PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
CSPP OVERVIEW DETAIL

DATE: 04/07/2025
SHEET: AC2 OF AC14

Designed By: TRI
Drawn By: RJB
Checked By: TRI
Date Revised:
Layout Name: 4/07/2025, 9:40 AM Overview Detail
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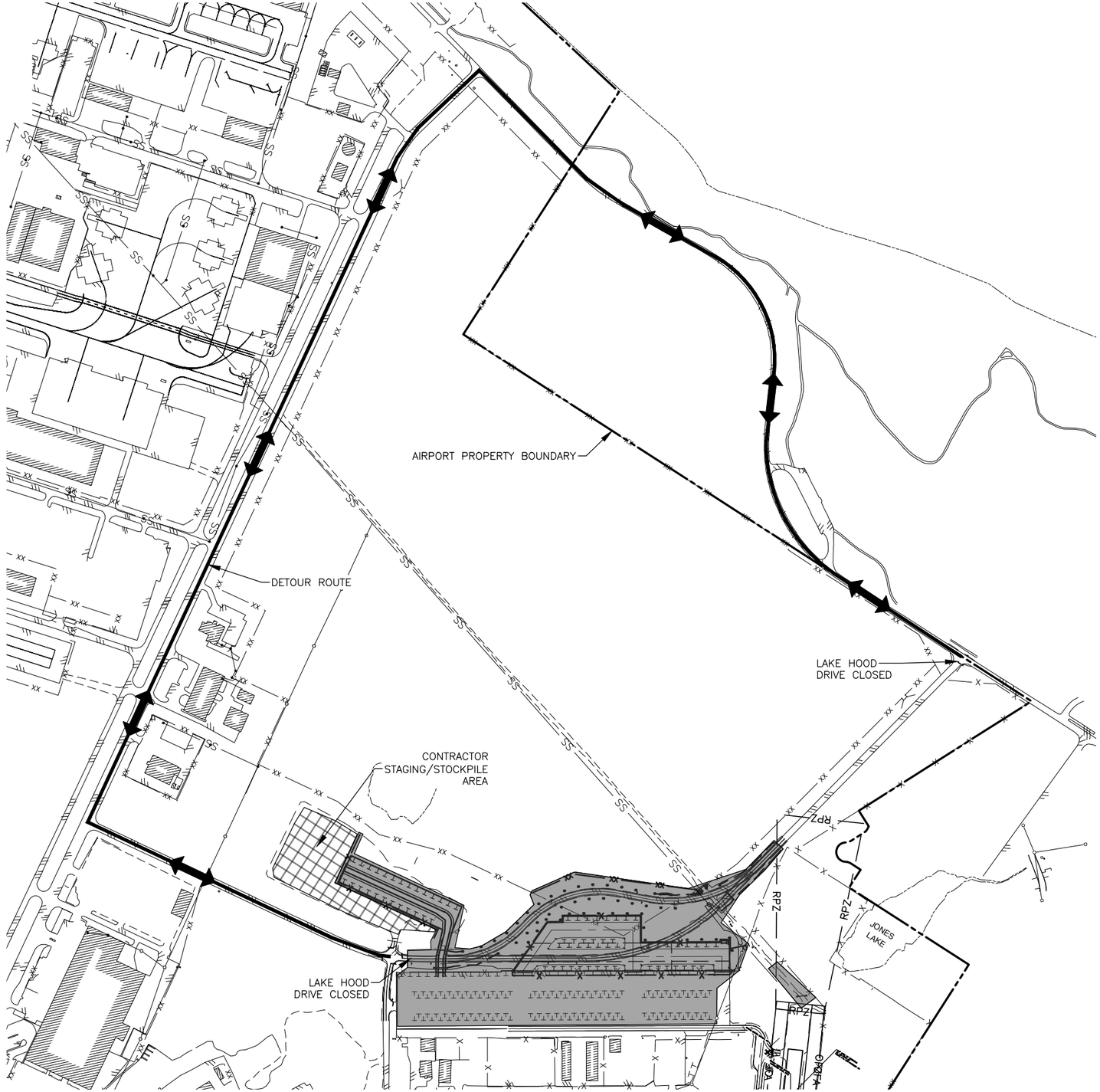
LEGEND

WORK AREA

DETOUR ROUTE



NOTES:

1. DETOUR ROUTE MUST BE IMPLEMENTED PRIOR TO THE CLOSING OF LAKE HOOD DRIVE. SEE GCP SUBSECTION 70.08 FOR PUBLIC NOTICE REQUIREMENTS.
2. WHEN REQUIRED FOR PHASE 1 CONSTRUCTION, IMPLEMENT DETOUR ROUTE, CONSIDERING NECESSARY PERMITS OR APPROVALS.
3. PROVIDE CLEAR SIGNAGE, MARKINGS, AND ANY REQUIRED TRAFFIC CONTROL MEASURES TO GUIDE MOTORISTS AND PEDESTRIANS ALONG THE DETOUR ROUTE.
4. MONITOR AND MAINTAIN THE DETOUR ROUTE THROUGHOUT THE PROJECT'S DURATION, ADJUSTING AS NECESSARY TO ADDRESS ANY ISSUES OR CHANGES IN CONSTRUCTION CONDITIONS.

Designed By:	TRI
Drawn By:	RJB
Checked By:	TRI

Date Revised:	4/07/2025, 9:40 AM
Layout Name:	Detour
File Path and Names:	W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-CSPP.dwg

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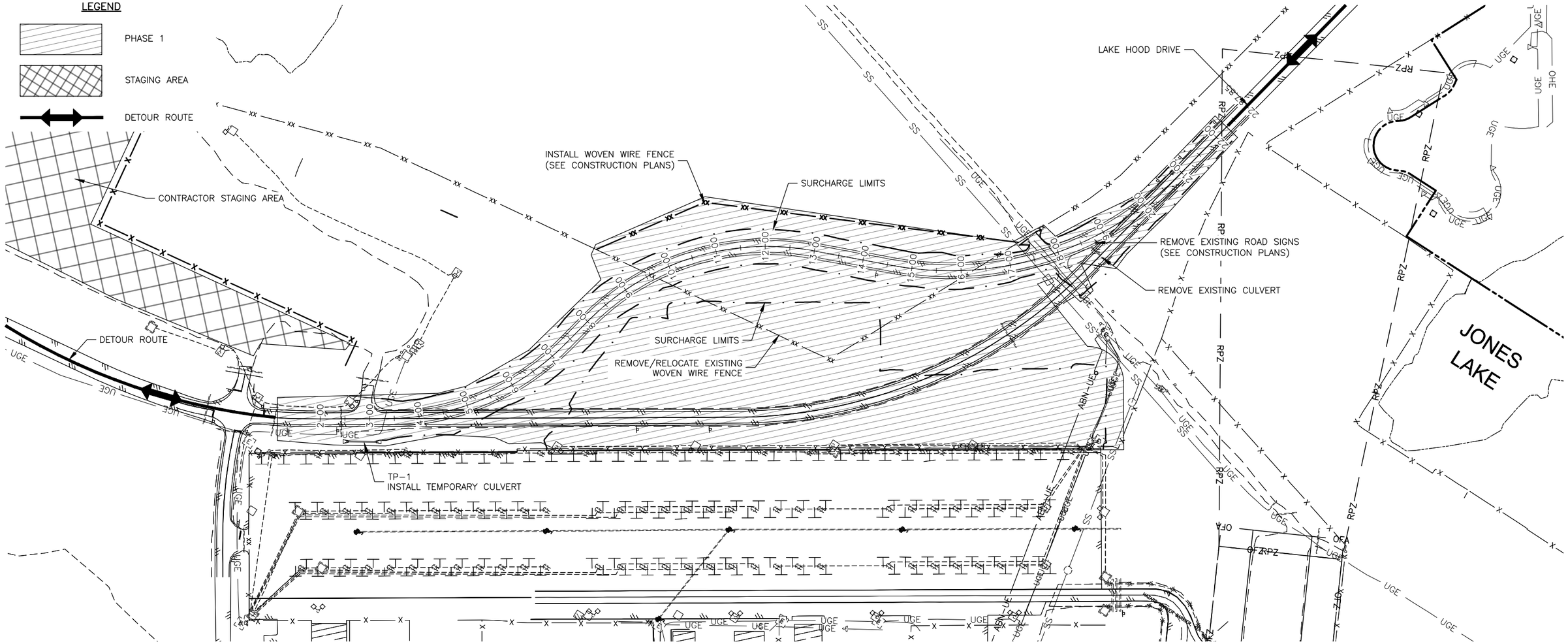
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
DETOUR ROUTE

DATE: 04/07/2025

SHEET: AC3 OF AC14



COMPLETE THE FOLLOWING PRIOR TO PHASE 1 CONSTRUCTION:

- INSTALL BEST MANAGEMENT PRACTICES (BMPS) PER CONTRACTORS APPROVED SWPPP AS DEFINED IN CONTRACT SPECIFICATION P-641

COMPLETE THE FOLLOWING DURING PHASE 1 CONSTRUCTION:

- REMOVE AND RELOCATE WOVEN WIRE FENCE
- REMOVE EXISTING ROAD SIGNS
- REMOVE EXISTING CULVERT
- INSTALL TEMPORARY CULVERT AND DRAINAGE IMPROVEMENTS
- REMOVE EXISTING PAVEMENT FROM ROAD

COMPLETE THE FOLLOWING AFTER PHASE 1 CONSTRUCTION:

- REMOVE BMP'S UNRELATED TO SURCHARGE WORK
- SURCHARGE ROAD AND APRON

NOTES:

1. CONTRACTOR SHALL MAINTAIN THE EXISTING DRAINAGE DITCH ALONG THE APRON AND LAKE HOOD DRIVE DURING PHASE 1 TO MANAGE STORMWATER RUNOFF.
2. IMPORTED MATERIAL MAY ONLY BE STAGED IN THE CONTRACTOR STAGING AREA AS DIRECTED BY THE ENGINEER.
3. SURCHARGE TO BE PLACED IN THAWED CONDITIONS AND MAINTAINED FOR A MINIMUM OF SIX MONTHS. (SEE CONSTRUCTION PLANS).

100' 50' 0 100' 200'

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Drawn By:	RJB
Checked By:	TRI

Date Revised:	4/07/2025, 9:40 AM
Layout Name:	Phase 1
File Path and Name:	W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-CSPP.dwg

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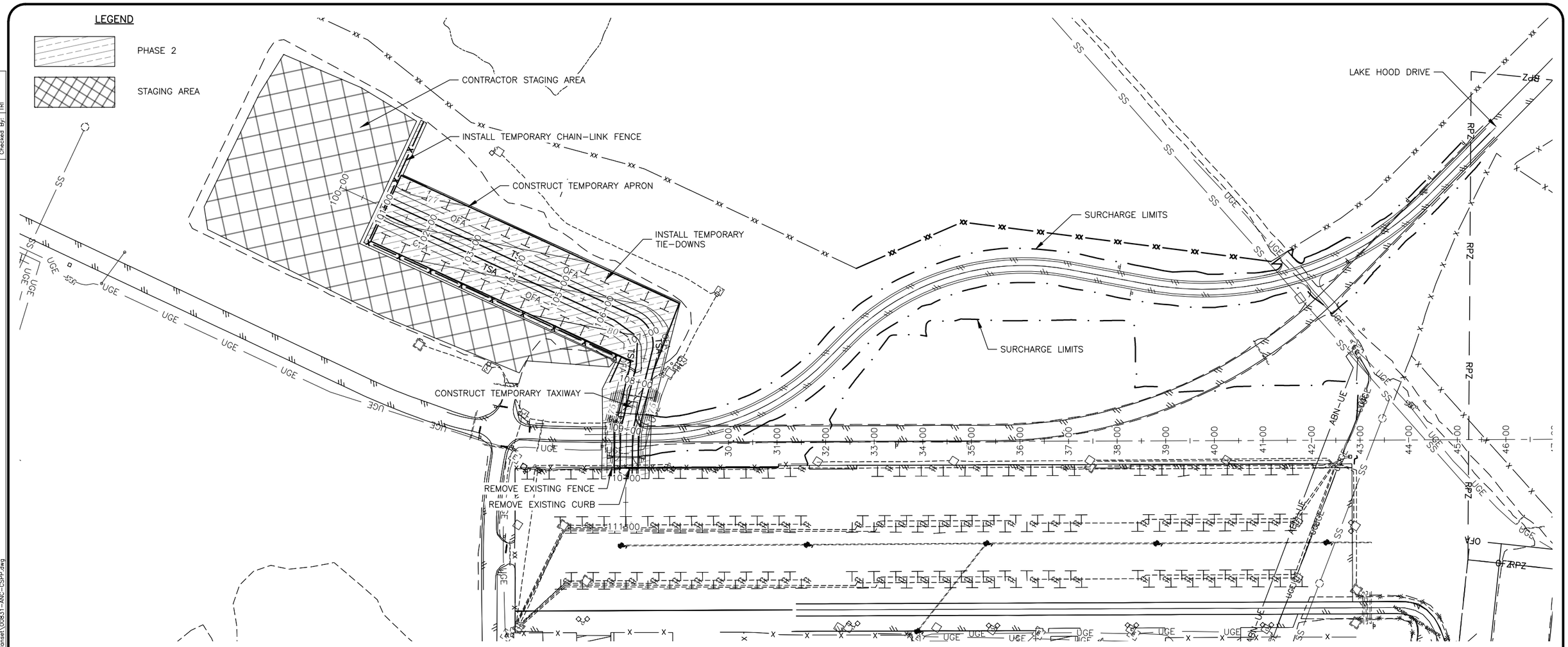
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
CSPP PHASE 1

DATE: 04/07/2025

SHEET: AC4 OF AC14



COMPLETE THE FOLLOWING PRIOR TO PHASE 2 CONSTRUCTION:

- INSTALL BMPS PER CONTRACTORS APPROVED SWPPP AS DEFINED IN CONTRACT SPECIFICATION P-641
- REMOVE SURCHARGE FROM ROAD AND APRON

COMPLETE THE FOLLOWING DURING PHASE 2 CONSTRUCTION:

- REMOVE EXISTING FENCE AND CURB AND GUTTER WITHIN PHASE 2 LIMITS
- INSTALL TEMPORARY CHAIN-LINK FENCE WITHIN PHASE 2 LIMITS
- CONSTRUCT TEMPORARY TAXIWAY AND APRON
- INSTALL TEMPORARY TIE-DOWNS

COMPLETE THE FOLLOWING AFTER PHASE 2 CONSTRUCTION:

- REMOVE BMP'S
- APPLY TOPSOIL AND SEED WITHIN PHASE 2 LIMITS
- RELOCATE AIRCRAFT TO CONSTRUCTED TEMPORARY PARKING

NOTES:

1. CONTRACTOR TO PROVIDE TEMPORARY ANCHORS FOR AIRCRAFT PARKING AS DIRECTED BY THE ENGINEER.

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ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
CSPP PHASE 2

DATE: 04/07/2025

SHEET: AC5 OF AC14

Designed By: TRI
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Checked By: TRI

Date Revised: 4/07/2025, 9:40 AM
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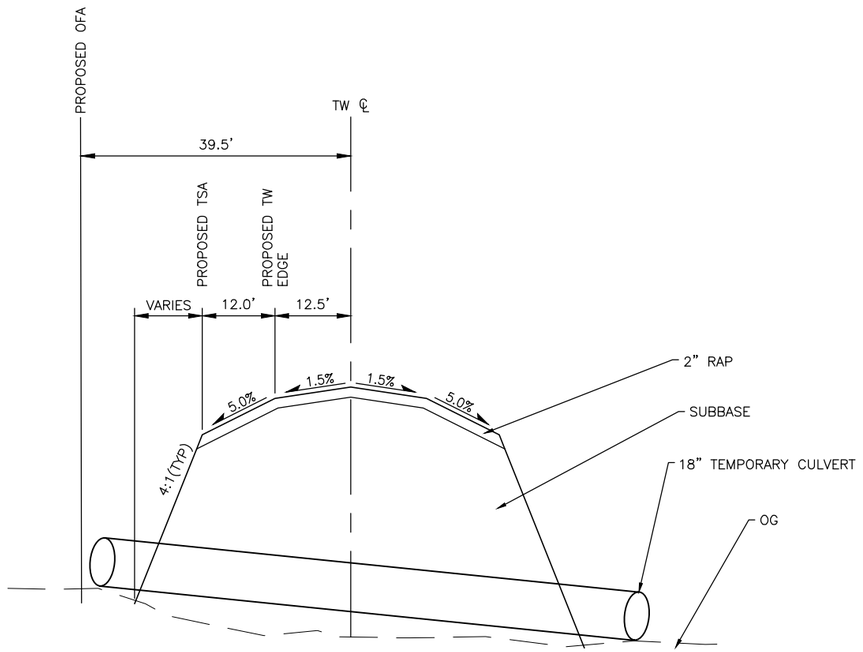
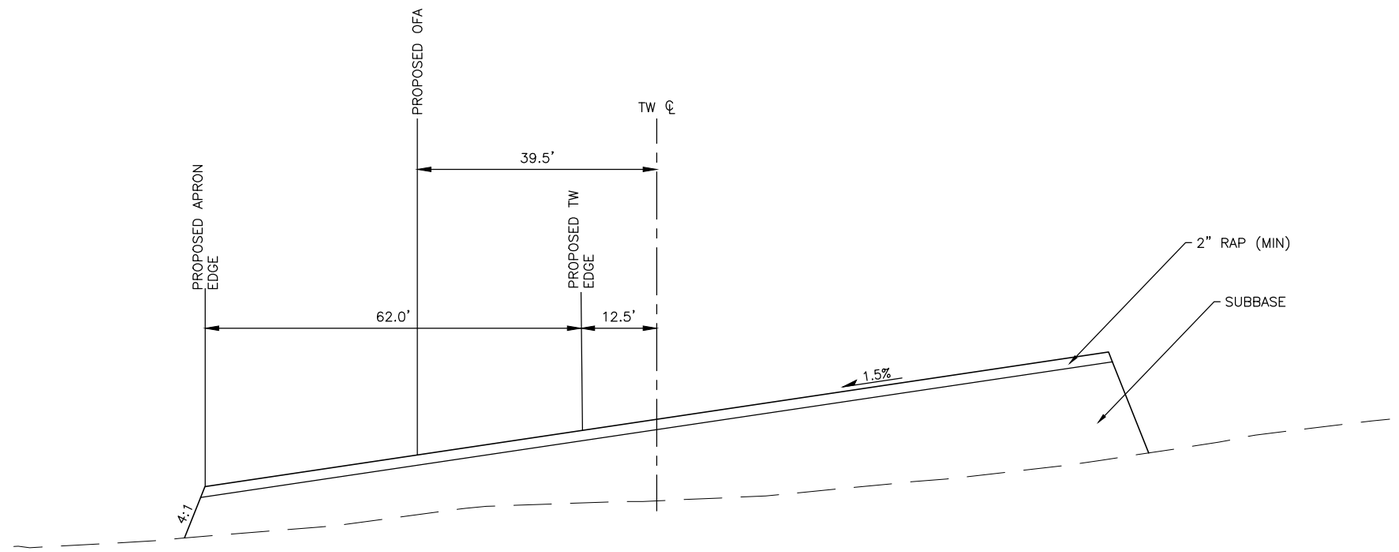


1 AC6 TEMPORARY TAXIWAY TYPICAL SECTION

STA 107+66.16 TO 109+80.00
NOT TO SCALE



NOTES:
1. SCARIFY, GRADE, AND COMPACT EXISTING MATERIAL TO A SMOOTH, EVEN, AND UNIFORMLY COMPACTED SURFACE. REFER TO SPECIFICATION P-161. ADDITIONAL RAP MAY BE REQUIRED TO ACHIEVE A UNIFORM SURFACE AS DIRECTED BY THE ENGINEER.

2 AC6 TEMPORARY APRON TYPICAL SECTION

STA 101+03.14 TO 107+66.16
NOT TO SCALE

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ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
TEMPORARY TAXIWAY AND APRON
TYPICAL SECTIONS AND DETAILS

DATE: 04/07/2025

SHEET: AC6 OF AC14

Designed By: TRI
Drawn By: RJB
Checked By: TRI

Date Revised: 4/07/2025, 9:40 AM
Layout Name: TEMP TAXIWAY APRON SECTIONS
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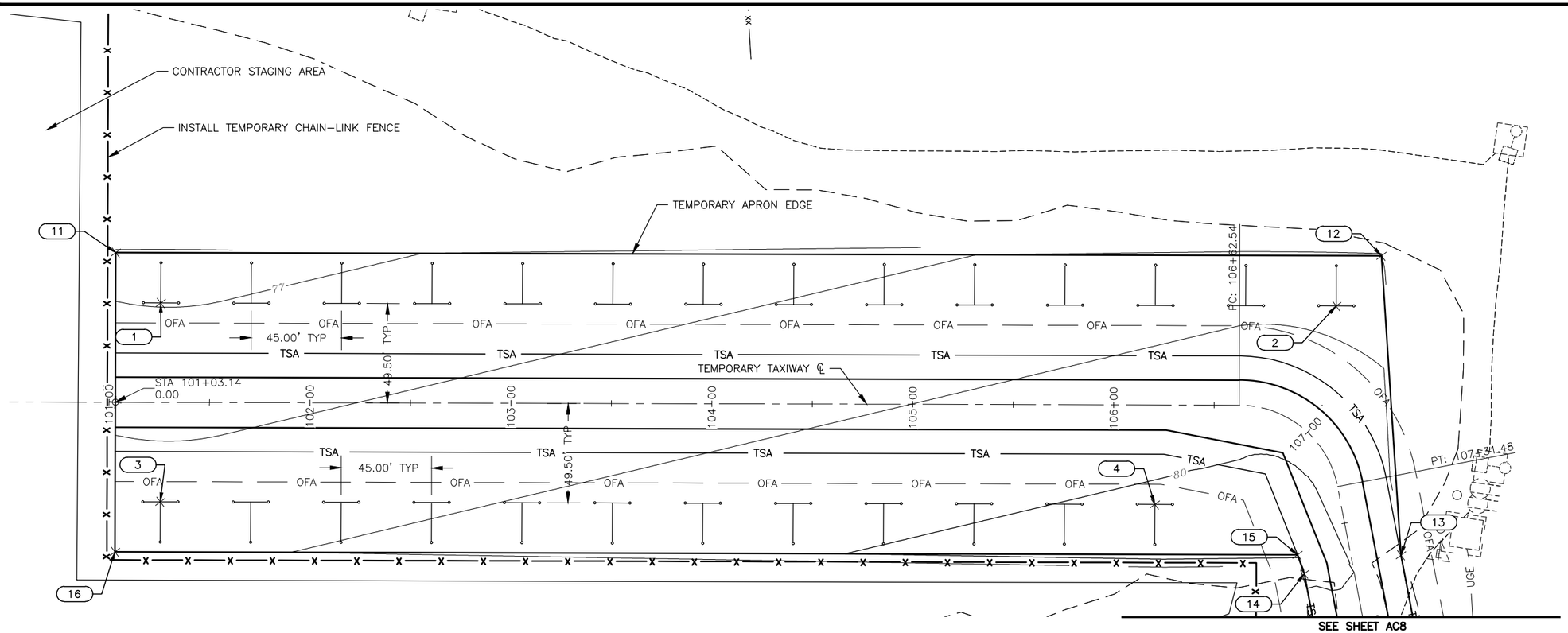
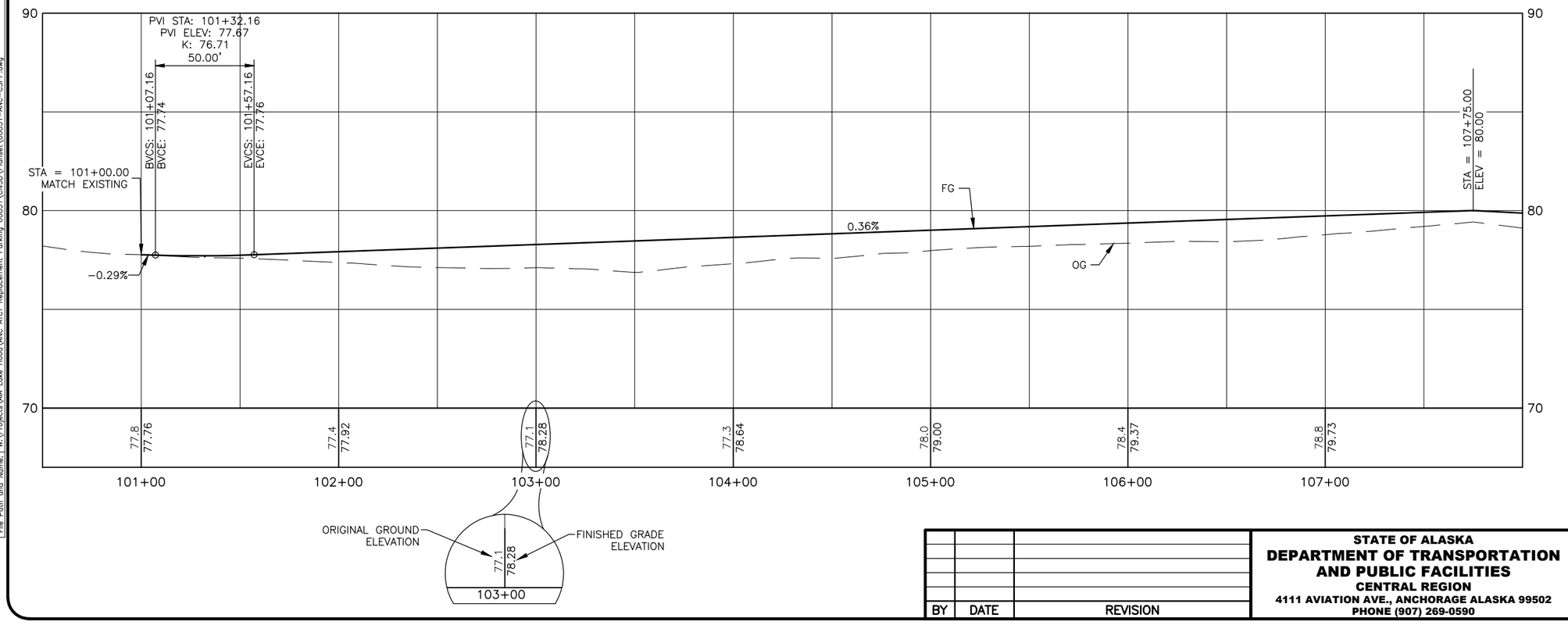
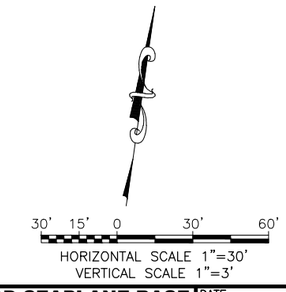


TIE-DOWN TABLE		
POINT #	STATION	OFFSET
1	101+25.64	49.50LT
2	106+85.05	60.51LT
3	101+25.64	49.50RT
4	106+20.64	49.50RT

APRON EDGE TABLE			
POINT #	STATION	OFFSET	ELEVATION
11	101+03.14	74.50LT	76.64
12	106+88.33	93.12LT	78.29
13	107+70.92	24.50LT	79.59
14	107+70.92	24.50RT	80.28
15	107+61.11	26.00RT	80.34
16	101+03.14	74.50RT	78.87





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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
TEMPORARY APRON AND TAXIWAY
PLAN & PROFILE

DATE: 04/07/2025
SHEET: AC7 OF AC14

Designed By: TRI
Drawn By: RJB
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Date Revised:
Layout Name: 4/07/2025, 9:41 AM
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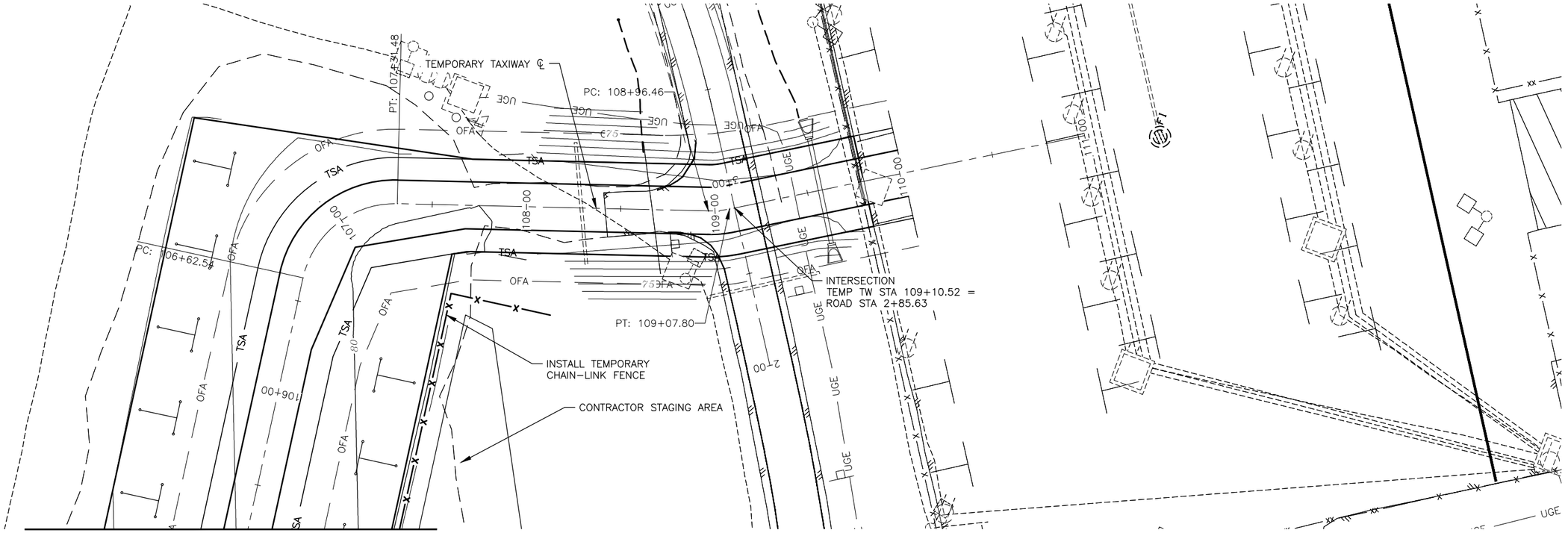
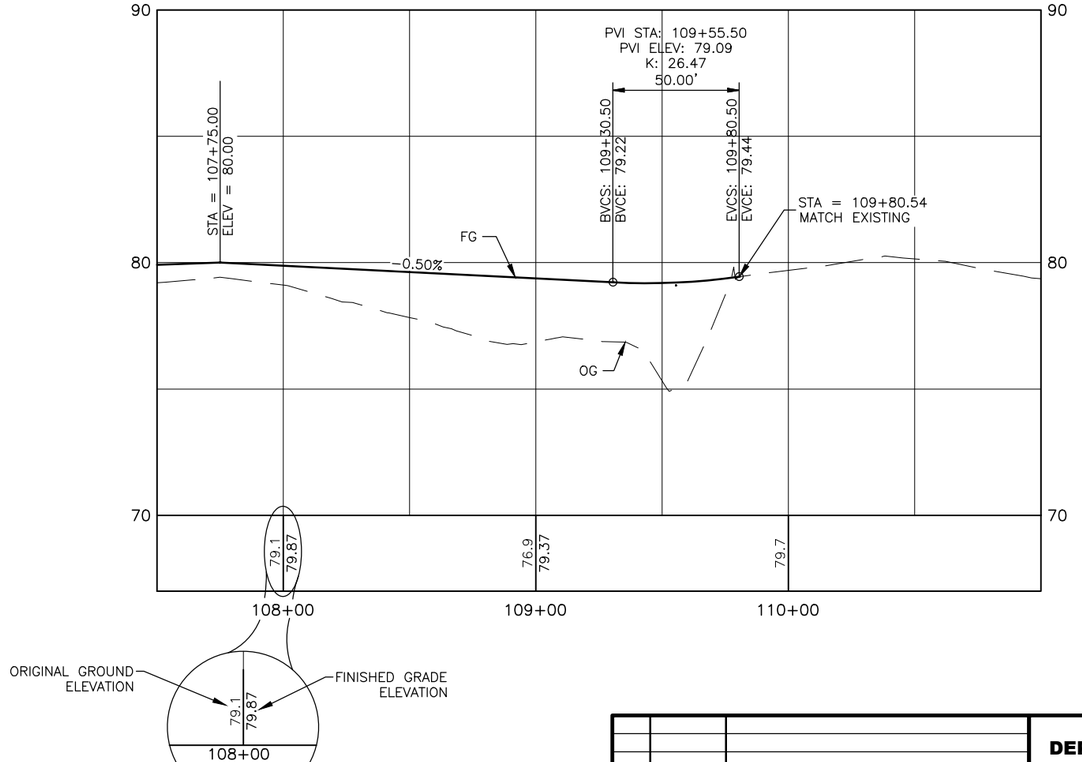
TEMP APRON P&P





30' 15' 0 30' 60'

HORIZONTAL SCALE 1"=30'
VERTICAL SCALE 1"=3'

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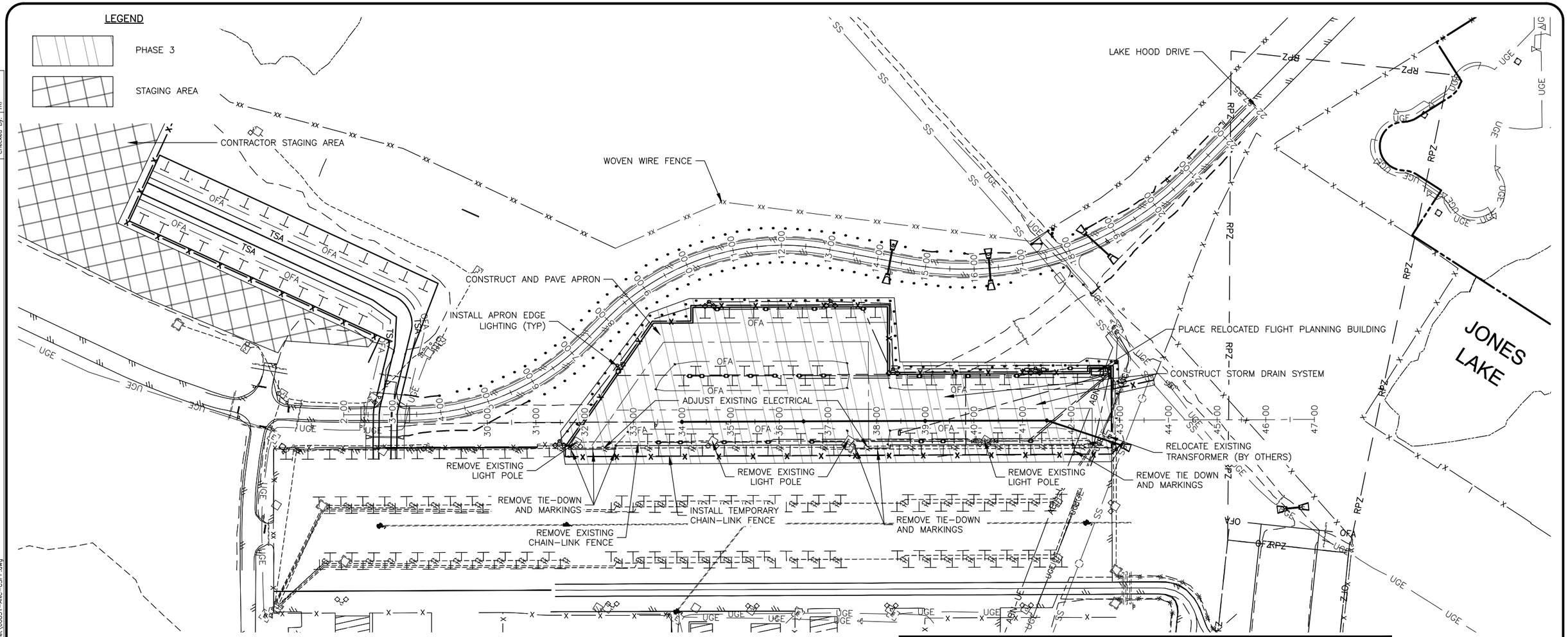
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
TEMPORARY TAXIWAY
PLAN & PROFILE

DATE: 04/07/2025

SHEET: AC8 OF AC14

Designed By: TRI
Drawn By: RJB
Checked By: TRI

Date Revised: 4/07/2025, 9:41 AM
Layout Name: TEMP TW P&P
File Path and Names: W:\Projects\ANC Lake Hood\ANC ATCT Replacement Parking 00831\Civil\Planset\00831-ANC-CSPP.dwg



COMPLETE THE FOLLOWING PRIOR TO PHASE 3 CONSTRUCTION:

- INSTALL BMPS PER CONTRACTORS APPROVED SWPPP AS DEFINED IN CONTRACT SPECIFICATION P-641

COMPLETE THE FOLLOWING DURING PHASE 3 CONSTRUCTION:

- REMOVE EXISTING TIE DOWNS AND MARKINGS
- REMOVE EXISTING APRON EDGE LIGHTING
- PERFORM EXCAVATION OF PAVEMENT WITHIN PHASE 3 LIMITS
- REMOVE EXISTING CHAIN-LINK FENCE WITHIN PHASE 3 LIMITS
- INSTALL TEMPORARY CHAIN-LINK FENCE WITHIN PHASE 3 LIMITS
- CONSTRUCT STORM DRAIN SYSTEM WITHIN PHASE 3 LIMITS
- CONSTRUCT/PAVE APRON SURFACE
- PERFORM GRADING WORK
- ADJUST UTILITIES FOR CIVIL IMPROVEMENTS
- PREPARE APRON FOR RELOCATED FLIGHT PLANNING BUILDING
- INSTALL WEATHERPROOF OUTLETS AND TIE-DOWNS
- INSTALL APRON EDGE LIGHTING
- PLACE RELOCATED FLIGHT PLANNING BUILDING
- INSTALL APRON MARKINGS WITHIN PHASE 3 LIMITS

COMPLETE THE FOLLOWING AFTER PHASE 3 CONSTRUCTION:

- REMOVE BMP'S

NOTES:

1. CONSTRUCTION TRAFFIC SHALL NOT BE PERMITTED WITHIN THE ECHO APRON AREA WITH THE EXCEPTION OF THAT REQUIRED TO CONSTRUCT THE TEMPORARY SECURITY FENCE.
2. ENSURE EQUIPMENT ACCESS AND ACCOMMODATION OF CONSTRUCTION NEEDS ARE MAINTAINED.
3. REMOVE TEMPORARY FENCING AND BARRIERS UPON COMPLETION.

BY	DATE	REVISION

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
CSPP PHASE 3

DATE: 04/07/2025

SHEET: AC9 OF AC14

Designed By: TRI
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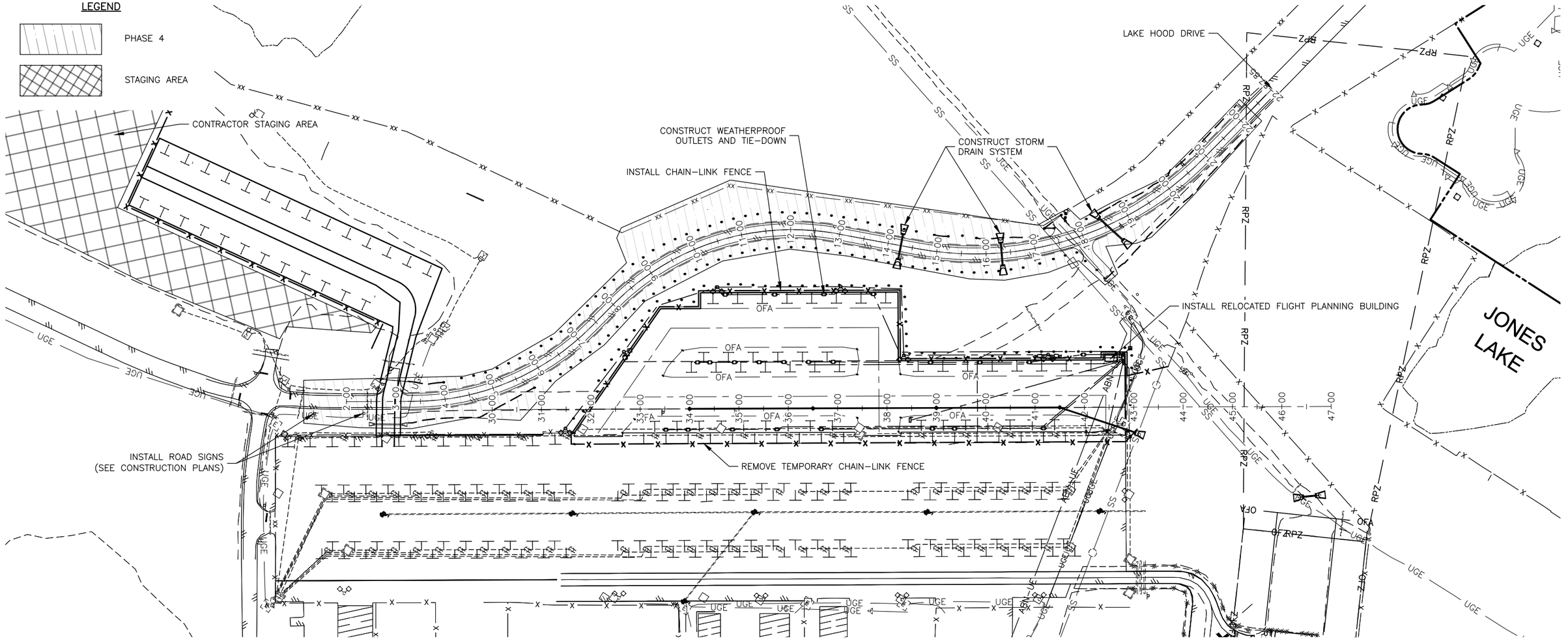

COMPLETE THE FOLLOWING PRIOR TO PHASE 4 CONSTRUCTION:

- INSTALL BMPS PER CONTRACTORS APPROVED SWPPP AS DEFINED IN CONTRACT SPECIFICATION P-641

COMPLETE THE FOLLOWING DURING PHASE 4 CONSTRUCTION:

- INSTALL CHAIN-LINK FENCE WITHIN PHASE 3 LIMITS
- REMOVE TEMPORARY CHAIN-LINK FENCE WITHIN PHASE 3 LIMITS
- CONSTRUCT STORM DRAIN SYSTEM WITHIN PHASE 4 LIMITS
- CONSTRUCT LAKE HOOD DRIVE
- INSTALL ROAD SIGNS
- INSTALL ROADWAY MARKINGS
- PERFORM GRADING WORK

COMPLETE THE FOLLOWING AFTER PHASE 4 CONSTRUCTION:

- ENSURE PROPER GRADING, DRAINAGE, AND TOPSOIL AND SEED WORK IS MAINTAINED OR ALIGNS WITH NEW CONSTRUCTION
- REMOVE TEMPORARY CHAIN-LINK FENCE
- REMOVE BMP'S
- RELOCATE AIRCRAFT FROM TEMPORARY APRON TO PERMANENT APRON

NOTES:

1. CONSTRUCTION TRAFFIC SHALL NOT BE PERMITTED WITHIN THE ECHO APRON.

BY	DATE	REVISION

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ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
CSPP PHASE 4

DATE: 04/07/2025

SHEET: AC10 OF AC14

Designed By: TRI
Drawn By: RJB
Checked By: TRI

Date Revised: 4/07/2025, 9:42 AM
Layout Name: Phase 4
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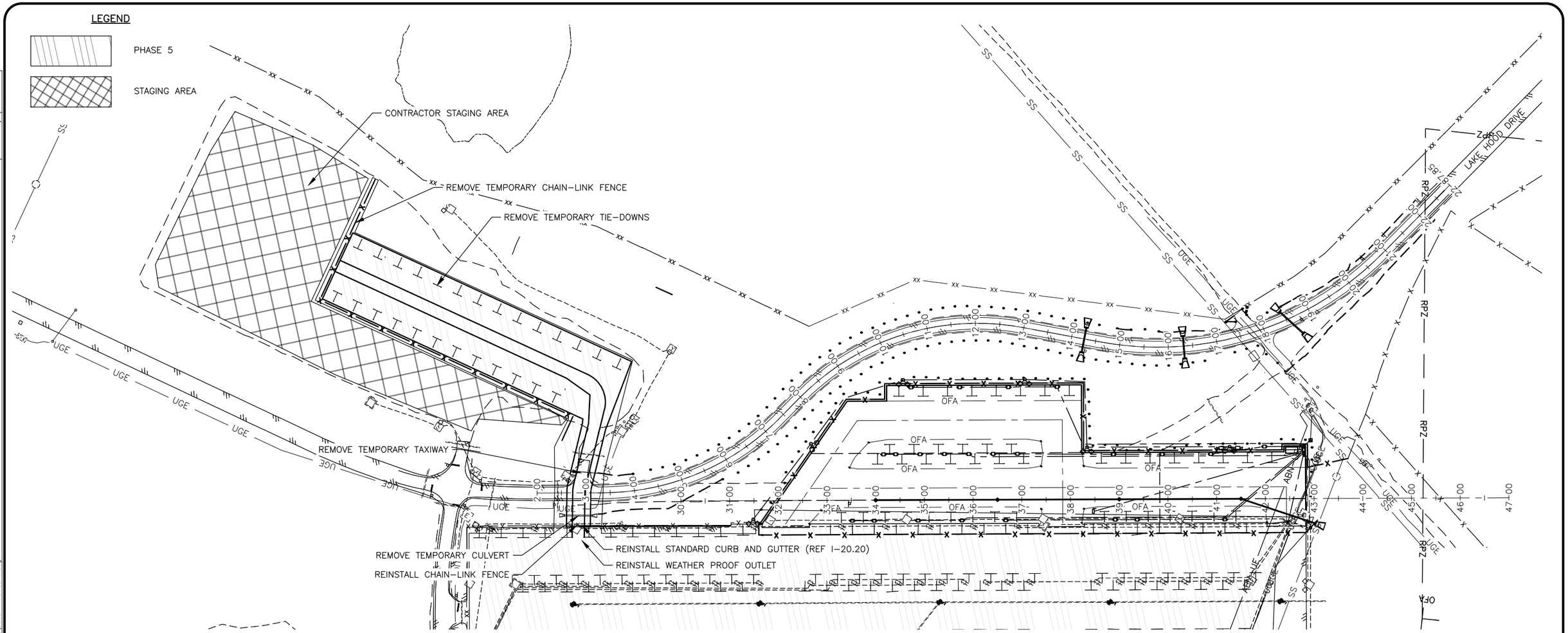

COMPLETE THE FOLLOWING PRIOR TO PHASE 5 CONSTRUCTION:

- INSTALL BMPS PER CONTRACTORS APPROVED SWPPP AS DEFINED IN CONTRACT SPECIFICATION P–641

COMPLETE THE FOLLOWING DURING PHASE 5 CONSTRUCTION:

- REMOVE TEMPORARY CHAIN–LINK FENCE WITHIN PHASE 2 LIMITS
- REMOVE TEMPORARY ACCESS WITHIN PHASE 2 LIMITS
- RE–PAVE LAKE HOOD DRIVE WITHIN PHASE 3 LIMITS
- INSTALL CHAIN–LINK FENCE AND CURB WITHIN PHASE 2 LIMITS
- REMOVE TEMPORARY TIE–DOWNS WITHIN PHASE 2 LIMITS
- REMOVE TEMPORARY TAXIWAY WITHIN PHASE 2 LIMITS
- REMOVE TEMPORARY CULVERT WITHIN PHASE 2 LIMITS
- RE–INSTALL WEATHERPROOF OUTLETS WITHIN PHASE 2 LIMITS
- INSTALL APRON EDGE LIGHTING WITHIN PHASE 2 LIMITS
- INSTALL APRON NUMBERING WITHIN PHASE 5 LIMITS

COMPLETE THE FOLLOWING AFTER PHASE 5 CONSTRUCTION:

- ENSURE PROPER GRADING, DRAINAGE, AND TOPSOIL AND SEED WORK IS MAINTAINED OR ALIGNS WITH NEW CONSTRUCTION
- REMOVE BMPS
- REMOVE LAKE HOOD DRIVE DETOUR

Designed By:	TRI
Drawn By:	RJB
Checked By:	TRI
Date Revised:	4/07/2025, 9:42 AM
Layout Name:	Phase 5
File Path and Name:	W:\Projects\ANA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-CSPP.dwg

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LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
CSPP PHASE 5

DATE: 04/07/2025

SHEET: AC11 OF AC14

LEGEND

PHASE 6

STAGING AREA

ILLUMINATED RUNWAY CLOSURE MARKER

TAXIWAY CLOSURE MARKER (VINYL MESH PANEL)

HAZARD MARKER BARRIER

REMOVE AND CONSTRUCT STORM DRAIN SYSTEM

RUNWAY CLOSURE MARKER, ILLUMINATED PANEL (TYP) (SEE NOTE 2) 2/AC14

75' X 2,200' RW 14-32 N26.64°W

3/AC14 HAZARD MARKER BARRIER (TYP)

1/AC14 TAXIWAY CLOSURE MARKER (TYP)

100' 50' 0 100' 200'

COMPLETE THE FOLLOWING PRIOR TO PHASE 6 CONSTRUCTION:

- PLACE HAZARD BARRIER MARKERS AND RW AND TW CLOSURE MARKERS. (COORDINATE WITH LAKE HOOD OPERATIONS THROUGH PROJECT MANAGER.)
- ISSUE A NOTAM FOR RW 14/32 CLOSURE

COMPLETE THE FOLLOWING DURING PHASE 6 CONSTRUCTION:

- REMOVE AND CONSTRUCT STORM DRAIN SYSTEM WITHIN PHASE 6 LIMITS

COMPLETE THE FOLLOWING AFTER PHASE 6 IS COMPLETE:

- REMOVE HAZARD BARRIER MARKERS AND RW AND TW CLOSURE MAKERS
- OPEN RW 14/32 FOR AIRCRAFT USE
- REMOVE ANY NOTAMS

NOTES:

1. PHASE 6 CAN BE PERFORMED CONCURRENTLY WITH OTHER PHASES AT THE DISCRETION OF THE ENGINEER.
2. COORDINATE WITH ANC OPERATIONS AND FIELD MAINTENANCE FOR THE RUNWAY CLOSURE MARKERS, REFERENCE SPECIFICATIONS P-671.

Designed By:	TRI
Drawn By:	RJB
Checked By:	TRI
Date Revised:	4/07/2025, 9:42 AM
Layout Name:	Phase 6
File Path and Name:	W:\Projects\ANA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Plonset\00831-ANC-CSPP.dwg

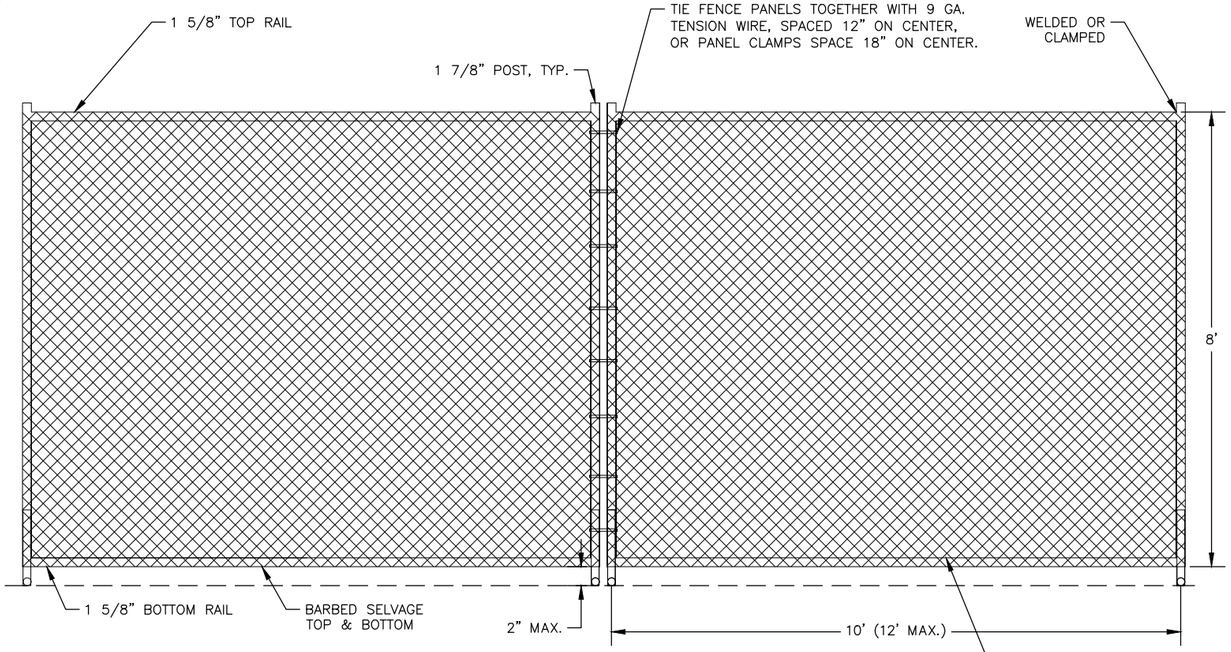
BY	DATE	REVISION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
CSPP PHASE 6

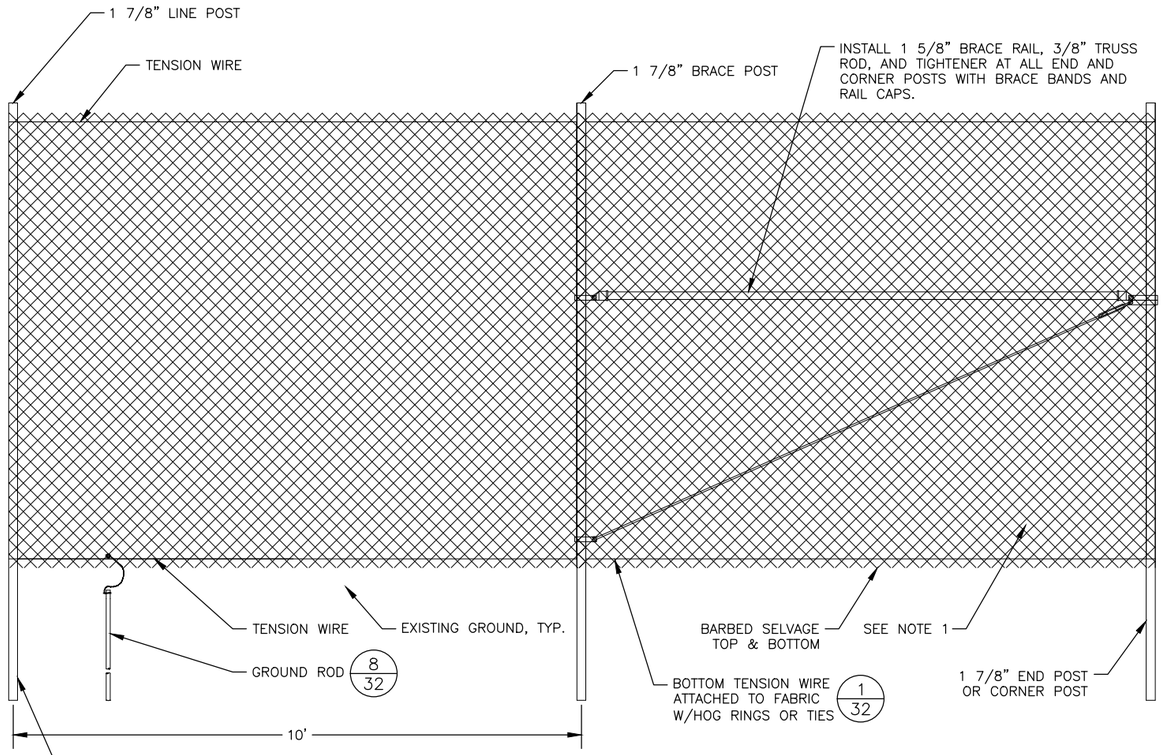
DATE: 04/07/2025

SHEET: AC12 OF AC14



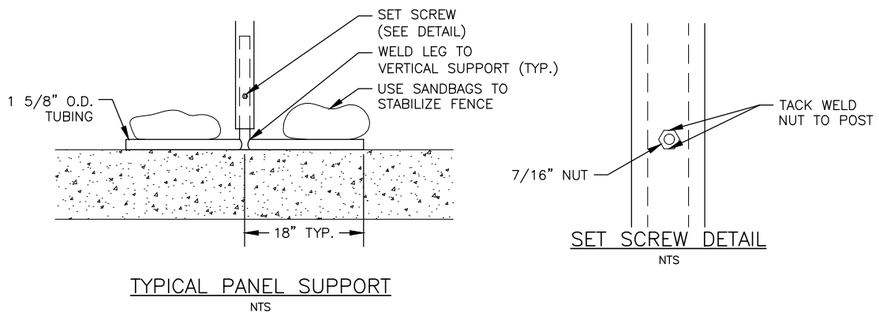
TYPICAL TEMPORARY FENCE PANEL

NTS



TYPICAL TEMPORARY FENCE WITH DRIVEN POSTS

NTS

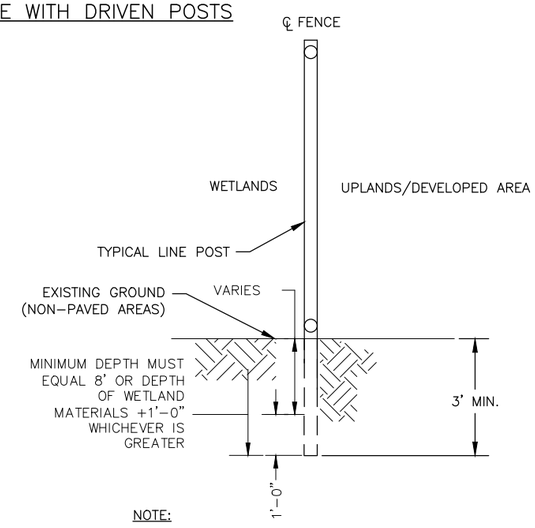


TYPICAL PANEL SUPPORT

NTS

SET SCREW DETAIL

NTS



NOTE:

1. AT THE CONTACTOR'S OPTION, DRIVEN POSTS CAN BE USED IN NON-PAVED AREAS.

TYPICAL LINE POST DETAIL

NTS

GENERAL NOTES:

1. INSTALL FENCE FABRIC TAUT ON PANELS. SECURE FABRIC TO POSTS AND RAILS EVERY 12".
2. PROTECT WELDS AND AREAS OF GALVANIZATION DAMAGE BY FABRICATION BY HOT DIP GALVANIZING PANELS AFTER FABRICATION, OR APPLYING HIGH ZINC DUST CONTENT PAINT PER ASTM A-780 TO THE AFFECTED AREAS.
3. SEE SHEET 32 FOR FENCING DETAILS.

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PHONE (907) 269-0590

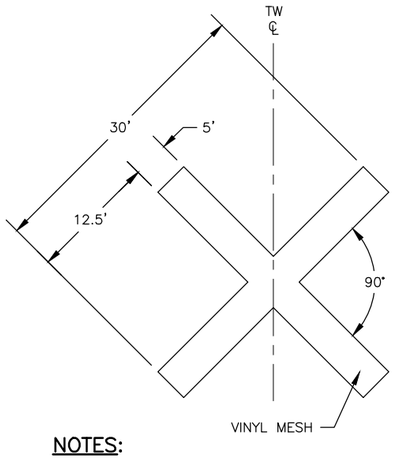
LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
TEMPORARY FENCING DETAILS

DATE: 04/07/2025

SHEET: AC13 OF AC14

Designed By: TRI
Drawn By: RJB
Checked By: TRI

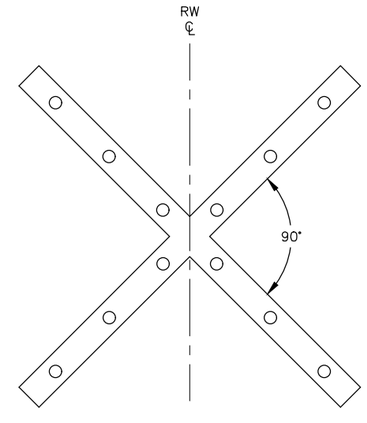
Date Revised: 4/07/2025, 9:42 AM
Layout Name: Chain-link Fence Details
File Path and Names: W:\Projects\ANA Lake Hood\ANC ATCT Replacement Parking 00831\Civ3D\Planset\00831-ANC-CSPP.dwg



NOTES:

1. TW CLOSURE MARKERS WILL BE YELLOW.
2. INSTALL TW CLOSURE MARKERS ALONG THE CENTERLINE AT THE ENTRANCE TO THE CLOSED TW.
3. TW CLOSURE MARKERS ARE PAID UNDER ITEM P671.040.0000

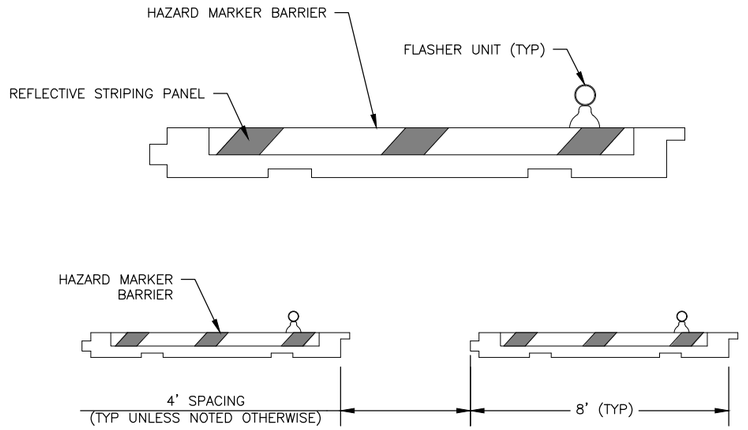
1 AC14 TAXIWAY CLOSURE MARKER DETAIL
NTS



NOTES:

1. RW CLOSURE MARKER WILL BE LIGHTED.
2. INSTALL RW CLOSURE MARKER NEAR THRESHOLD OF THE CLOSED RW.
3. ILLUMINATED RUNWAY CLOSURE MARKER WILL BE PROVIDED BY ANC. THE CONTRACTOR SHALL COORDINATE WITH ANC AIRFIELD MAINTENANCE THROUGH THE ENGINEER TO OBTAIN THE ILLUMINATED RUNWAY CLOSURE MARKERS. FURTHER REQUIREMENTS ARE DESCRIBED IN SPECIFICATION P-671.

2 AC14 ILLUMINATED RUNWAY CLOSURE MARKER DETAIL
NTS



NOTES:

1. HAZARD MARKER BARRIERS ARE NOT TO BE PLACED WITHIN 250 FEET OF AN ACTIVE RW CENTERLINE.
2. PLACE BARRIERS TO SEPARATE CONSTRUCTION AREAS FROM OPEN PORTIONS OF THE AIRPORT.
3. DISTANCE BETWEEN BARRIERS CAN BE ADJUSTED FOR CONSTRUCTION TRAFFIC.
4. BARRIERS MUST BE LOCATED OUTSIDE THE SAFETY AREA OF ACTIVE TAXIWAYS.
5. FLAGS TO BE USED FOR PHASE 1 TEMPORARY RW END ONLY. SEE SHEET AD2 FOR LOCATION.

3 AC14 CONSTRUCTION CLOSURE HAZARD MARKER BARRIER DETAIL
NTS

GENERAL NOTES:

1. MAINTAIN RW AND TW CLOSURE MARKERS AS CONSTRUCTION ALLOWS.
2. RW CLOSURE MARKERS ARE TO BE PLACED AT EACH END OF RW 14/32.
3. TW CLOSURE MARKERS ARE TO BE PLACED AT THE ENTERANCES OF TW H. (H1, H2, H3, AND H4)
4. PLACE BARRIERS TO LIMIT ACCESS TO THE CLOSED RW.
5. ALTERNATE BETWEEN WHITE AND ORANGE HAZARD MARKER BARRIERS AND FLAGS.
6. AIRPORT MAINTENANCE AND OPERATIONS WILL SUPPLY HAZARD MARKER BARRIERS.

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STATE OF ALASKA
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4111 AVIATION AVE., ANCHORAGE ALASKA 99502
PHONE (907) 269-0590

LAKE HOOD SEAPLANE BASE
ANCHORAGE, ALASKA
ANC ATCT REPLACEMENT PARKING
PROJECT No. CRMBS00831
AIP No. 697DCK-22-T-00001
RUNWAY, TAXIWAY CLOSURE MARKER DETAILS, & HAZARD BARRIER DETAIL

DATE: 04/07/2025
SHEET: AC14 OF AC14

Designed By: TRI
Drawn By: RJB
Checked By: TRI
Date Revised: 4/07/2025, 9:42 AM
Layout Name: Marker Details
File Path and Names: W:\Projects\AIA Lake Hood\ANC ATCT Replacement Parking 00831\Civil3D\Planset\00831-ANC-CSPP.dwg