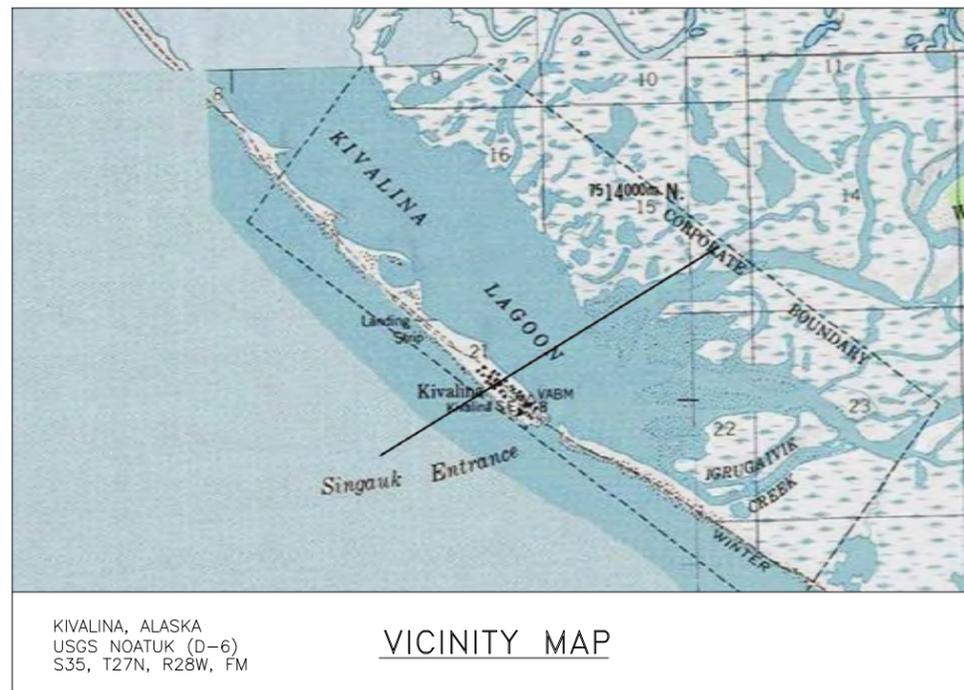




LOCATION MAP

KIVALINA AIRPORT AIRPORT LAYOUT PLAN KIVALINA, ALASKA



VICINITY MAP

KIVALINA, ALASKA
USGS NOATUK (D-6)
S35, T27N, R28W, FM

LEGEND		
ITEM	EXISTING	ULTIMATE
ANTENNA		
AIRPORT REFERENCE POINT		
BUILDING		
BUILDING RESTRICTION LINE		
CENTER LINE		
CONTOUR		
FUEL TANK		
LIGHTING		
PROPERTY LINE		
ROADWAY (GRAVEL)		
ROTATING BEACON		
RUNWAY (GRAVEL)		
RUNWAY OBJECT FREE AREA		
RUNWAY OBSTACLE CLEARANCE SURFACE		
RUNWAY OBSTACLE FREE ZONE		
RUNWAY SAFETY AREA		
RUNWAY SHOULDER		
RUNWAY PROTECTION ZONE		
SURVEY MONUMENT		
TAXIWAY (GRAVEL)		
WATERBODY		
WIND CONE		

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	AIRPORT DATA
3	EXISTING AIRPORT LAYOUT PLAN
4	ULTIMATE AIRPORT LAYOUT PLAN
5	EXISTING INNER PORTION OF APPROACH SURFACE
6	ULTIMATE INNER PORTION OF APPROACH SURFACE
7	AIRPORT AIRSPACE (FAR PART 77)

DRAWING NAME: H:\Info_Communities\Kivalina\02 ALP File\2020_As_Built\dwg's\Sheets\1309900KVL_ALP01.dwg PLOTTED: Feb 19, 2021 - 4:15pm

DESIGN LLC

DRAWN TCK

CHECKED JGL

BY	DATE	REVISIONS
KC	1/19/21	ASBUILT ALP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION

APPROVED

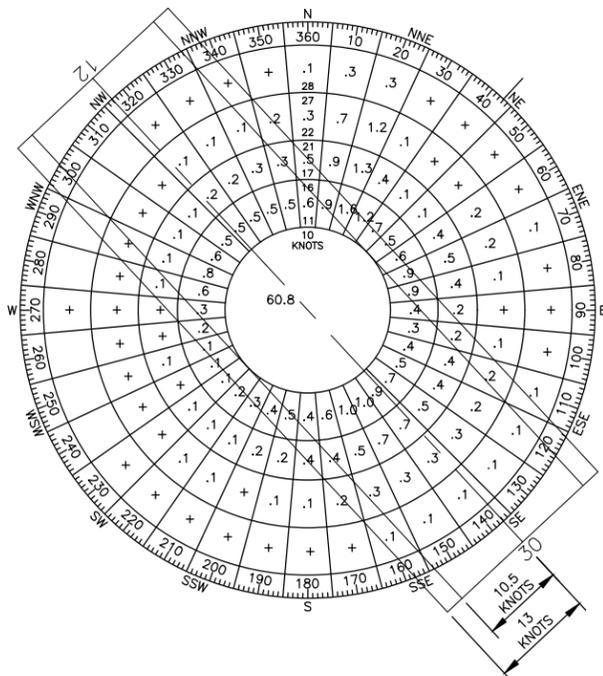
ALBERT M.L. BECK, P.E. DATE 4/28/21
PROJECT DELIVERY TEAM LEAD

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO
ALP APPROVAL LETTER DATED 8/11/2014
FAA AIRSPACE REVIEW NUMBER: 2001-AAL-48-NRA
As-Built Accepted
DATE: _____
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL- 601

KIVALINA AIRPORT
KIVALINA, ALASKA
TITLE SHEET

SHEET
1 OF 7

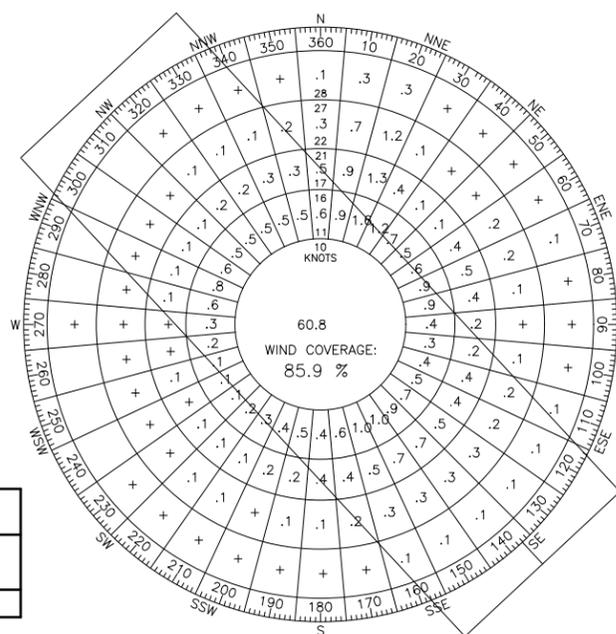
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ALL-WEATHER

WIND DATA		
RUNWAY	10.5 kt (A-I)	13 kt (B-II)
12/30	79.82%	85.90%

SOURCE: NATIONAL WEATHER SERVICE/MESOWEST
STATION NAME: PAVL
PERIOD 11/2004 TO 7/2013
SAMPLED IN MILES PER HOUR



INSTRUMENT METEOROLOGICAL CONDITION

AIRPORT DATA		
ITEM	EXISTING	ULTIMATE
ICAO IDENTIFIER	PAVL	SAME
NATIONAL AIRPORT IDENTIFIER	KVL	SAME
FAA SITE NUMBER	50417.*A	SAME
AIRPORT REFERENCE CODE (ARC)	A-I	B-II
NPIAS SERVICE LEVEL (P, CS, R, GA)	CS	SAME
AIRPORT ELEVATION (NAVD88)	18.41'	SAME
MEAN MAX. TEMPERATURE, HOTTEST MONTH	52°, JULY	SAME
OBSTRUCTION SURVEY SOURCE & TYPE	AOC (SEE NOTES)	SAME
MAGNETIC DECLINATION, YEAR, RATE OF CHANGE	12°14'42"E, 2015 0°17.1'W / YEAR	SAME
AIRPORT AND TERMINAL NAVIGATION AIDS	AWOS, WINDCONE, GPS, ROTATING BEACON	SAME

RUNWAY 12-30 DATA		
ITEM	EXISTING	ULTIMATE
FAR PART 77 APPROACH CATEGORY (UTILITY, OTHER THAN UTILITY)	UTILITY	SAME
FAR PART 77 APPROACH TYPE (V, C, NPA, PA)	NPA	SAME
RUNWAY DESIGN CODE (RDC)	A-I-5000	B-II-5000
RUNWAY REFERENCE CODE (RRC)	A-I-5000	B-II-5000
CRITICAL AIRCRAFT	CESSNA 208	SAME
FAR PART 77 APPROACH SLOPE	20:1	SAME
APPROACH TSS SLOPE	20:1	SAME
VISIBILITY MINIMUM	≥ 1 SM	SAME
RUNWAY SURFACE	GRAVEL	SAME
PAVEMENT STRENGTH (SW,DW,DTW x1000lbs)	N/A	SAME
TRUE MEAN BEARING	S 42°54'12" E	SAME
MAXIMUM ELEVATION ABOVE MSL	N/A	SAME
EFFECTIVE GRADE	0.057%	SAME
RUNWAY TOUCHDOWN ZONE ELEVATIONS (NAVD 88)	RW 12: 18.41' RW 30: 18.41'	SAME
RUNWAY DIMENSIONS	60' x 3000'	75' x 3000'
RUNWAY SAFETY AREA (RSA) DIMENSIONS	120' x 3480'	150' x 3600'
RSA LENGTH BEYOND RW ENDS	240'	300'
RUNWAY PROTECTION ZONE (RPZ) DIMENSIONS	500'x700'x1000'	SAME
RUNWAY OBJECT FREE AREA (ROFA) DIMENSIONS	400' x 3480'	500' x 3600'
ROFA LENGTH BEYOND RW ENDS	240'	300'
RUNWAY OBSTACLE FREE ZONE (ROFZ) DIMENSIONS	250' x 3400'	SAME
PRECISION OBJECT FREE ZONE (POFZ) DIMENSIONS	N/A	SAME
RUNWAY LIGHTING TYPE	MIRL	SAME
RUNWAY MARKING TYPE (P, NP, NONE)	NONE	SAME
RUNWAY VISUAL APPROACH AIDS	NONE	SAME
RUNWAY LANDING AIDS	RNAV/GPS	SAME

NON-STANDARD CONDITIONS			
ITEM	STANDARD	EXISTING	ULTIMATE
LANDFILL SEPARATION	10,000'	1,800'	SAME
R/W 12 THRESHOLD LIGHTS	INBOARD (2'-10' OFFSET)	INBOARD (0' OFFSET)	INBOARD (2'-10' OFFSET)

GEOGRAPHIC COORDINATES (NAD 83) & ELEVATIONS (NAVD 88)						
ITEM	EXISTING LATITUDE	EXISTING LONGITUDE	EXISTING ELEVATION	ULTIMATE LATITUDE	ULTIMATE LONGITUDE	ULTIMATE ELEVATION
AIRPORT REFERENCE POINT	67°44'10.14"N	164°33'48.59"W	N/A	SAME	SAME	SAME
THRESHOLD RW 12	67°44'20.95"N	164°34'15.07"W	16.08'	SAME	SAME	SAME
THRESHOLD RW 30	67°43'59.34"N	164°33'22.10"W	17.79'	SAME	SAME	SAME

PACS & SACS								
PID	DESIGNATION	LATITUDE	LONGITUDE	ELLIPSOID HEIGHT	NORTHING	EASTING	ELEVATION	DESCRIPTION
DN5562	KVL A	67°44'01.65"N	164°33'22.31"W	9.68'	5022412.10	1840758.85	10.01'	PACS
DN5563	KVL B	67°44'24.08"N	164°34'18.87"W	9.62'	5024641.57	1838526.31	9.99'	SACS
DN5564	KVL C	67°43'46.66"N	164°32'44.55"W	15.79'	5020923.73	1842249.60	16.10'	SACS

- NOTES**
- THIS ALP DRAWING SET IS UPDATED BASED ON AN AIRPORT OBSTRUCTION CHART SURVEY (AOC) COMPLETED BY USKH INC. IN 2011 IN ACCORDANCE WITH FAA AC 150/5300-18B. THIS ALP WAS UPDATED IN ACCORDANCE WITH FAA AC 150/5300-13A AND 150/5070-6B IN JUNE 2013.
 - VERTICAL DATUM IS NAVD 1988 USING GEOID09AK AND REFERENCING PACS "KVL A"
 - HORIZONTAL DATUM IS NAD83 (2007). DRAWING COORDINATES ARE ALASKA STATE PLANE ZONE 8, U.S. SURVEY FEET, UNLESS NOTED OTHERWISE.

TAXIWAY DATA		
ITEM	EXISTING	ULTIMATE
TAXIWAY DESIGN GROUP	2	SAME
TAXIWAY DIMENSIONS	45' x 1600'	SAME
TAXIWAY SHOULDER WIDTH	10'	SAME
SEPARATION FROM PARALLEL RUNWAY	N/A	SAME
TAXIWAY (TSA) WIDTH	79'	SAME
TAXIWAY OBJECT FREE AREA (TOFA) WIDTH	131'	SAME
TAXIWAY LIGHTING	MITL	SAME
TAXIWAY MARKING	NONE	SAME

DESIGN LLC
DRAWN TCK
CHECKED JGL

BY	DATE	REVISIONS
KC	1/19/21	ASBUILT ALP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION

APPROVED
Albert M.L. Beck
ALBERT M.L. BECK, P.E.

DATE 4/28/21
PROJECT DELIVERY TEAM LEAD

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO
ALP APPROVAL LETTER DATED ____/____/____
FAA AIRSPACE REVIEW NUMBER: 2001-AAL-48-NRA

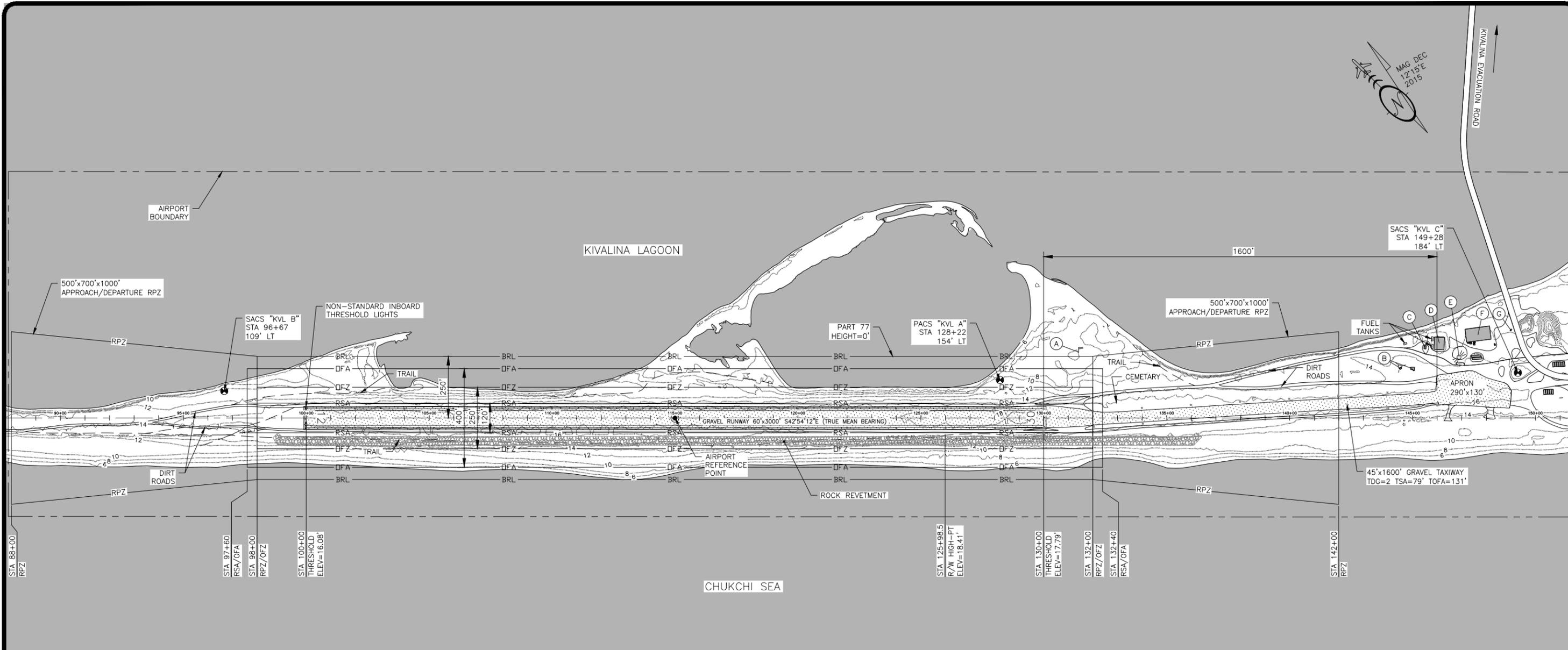
DATE: _____
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-601

KIVALINA AIRPORT
KIVALINA, ALASKA

AIRPORT DATA

SHEET
2 OF 7

DRAWING NAME: H:\Info_Communities\Kivalina\02 ALP File\2020_Aa_Built\dwg's\1309900KVL_ALP02.dwg PLOTTED: Feb 22, 2021 - 2:03pm



BUILDINGS/FACILITIES			
BLD/FAC	DESCRIPTION	STATION/OFFSET	TOP ELEV.
(A)	LIGHTED WINDCONE	131+42/267' LT	30.2'
(B)	AWOS W/OBST. LIGHTING	144+48/209' LT	46.7'
(C)	ELECTRICAL EQUIPMENT ENCLOSURE	145+50/285' LT	21.4'
(D)	SREB	146+10/300' LT	33.1'
(E)	ROTATING BEACON	146+90/247' LT	47.6'
(F)	STORAGE BUILDING	147+65/340' LT	27.0'
(G)	UTILITY POLE	149+00/357' LT	37.0'



DESIGN LLC
 DRAWN TCK
 CHECKED JGL

BY	DATE	REVISIONS
KC	1/19/21	ASBUILT ALP

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
 NORTHERN REGION

APPROVED

 ALBERT M.L. BECK, P.E. DATE 4/28/21
 PROJECT DELIVERY TEAM LEAD

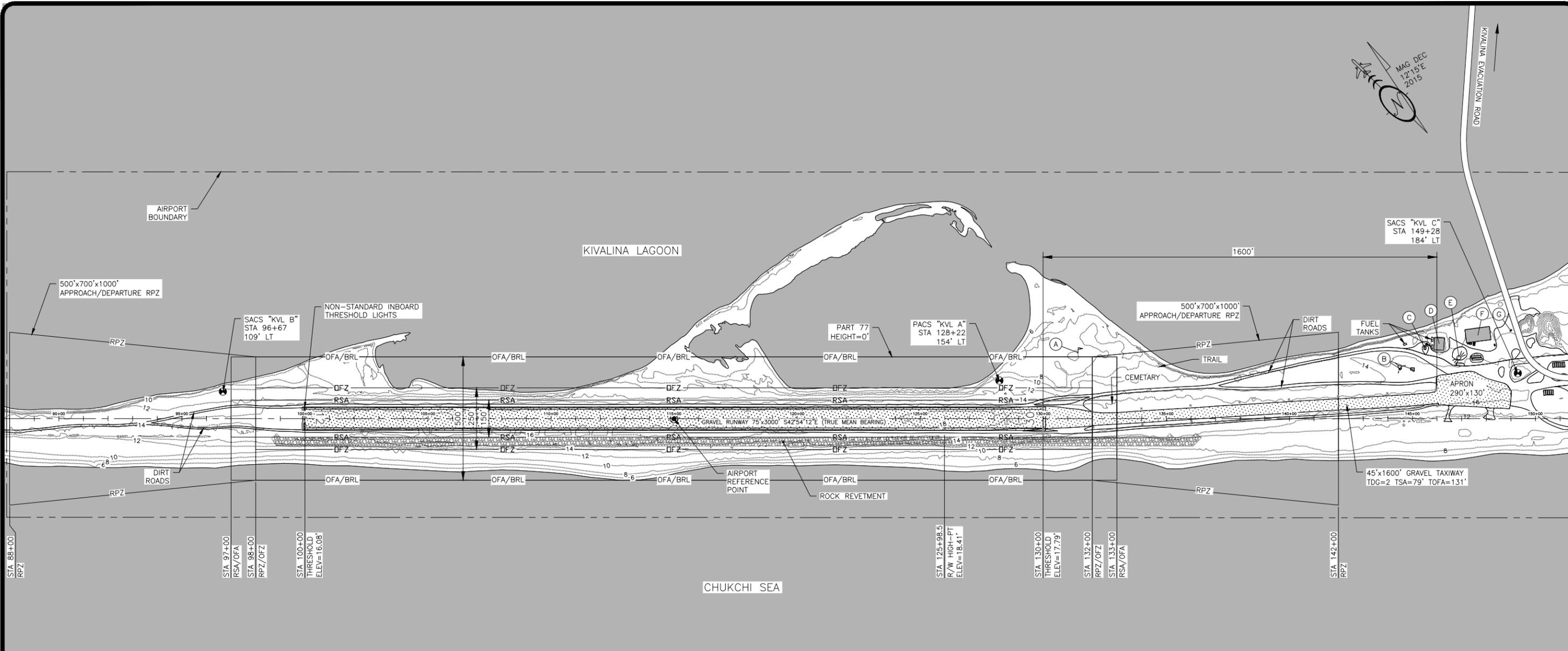
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 ALP APPROVAL LETTER DATED ____/____/____
 FAA AIRSPACE REVIEW NUMBER: 2001-AAL-48-NRA

DATE: _____
 FAA, AIRPORTS DIVISION ALASKAN REGION, AAL- 601

KIVALINA AIRPORT
 KIVALINA, ALASKA
 EXISTING
 AIRPORT LAYOUT PLAN

SHEET
 3 OF 7

DRAWING NAME: H:\Info_Communities\Kivalina\02 ALP File\2020_Aa_Built\dwg's\Sheets\1309900KVL_ALP03.dwg PLOTTED: Feb 22, 2021 - 2:03pm



BUILDINGS/FACILITIES			
BLD/FAC	DESCRIPTION	STATION/OFFSET	TOP ELEV.
(A)	LIGHTED WINDCONE	131+42/267' LT	30.2'
(B)	AWOS W/OBST. LIGHTING	144+48/209' LT	46.7'
(C)	ELECTRICAL EQUIPMENT ENCLOSURE	145+50/285' LT	21.4'
(D)	SREB	146+10/300' LT	33.1'
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(G)	UTILITY POLE	149+00/357' LT	37.0'

DESIGN LLC
DRAWN TCK
CHECKED JGL

BY	DATE	REVISIONS
KC	1/19/21	ASBUILT ALP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION

APPROVED
Albert M.L. Beck
ALBERT M.L. BECK, P.E. DATE 4/28/21
PROJECT DELIVERY TEAM LEAD

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO
ALP APPROVAL LETTER DATED ___/___/___
FAA AIRSPACE REVIEW NUMBER: 2001-AAL-48-NRA

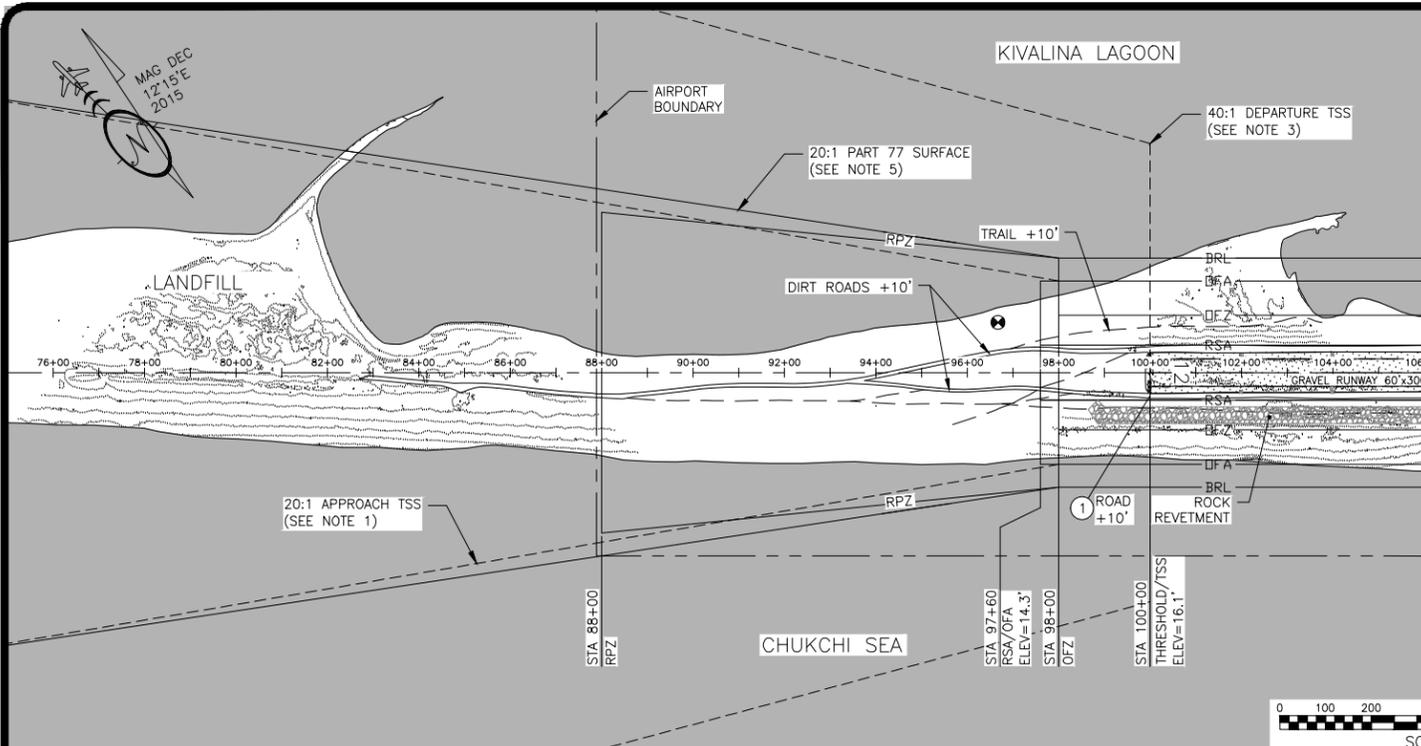
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FAA, AIRPORTS DIVISION ALASKAN REGION, AAL- 601

KIVALINA AIRPORT
KIVALINA, ALASKA

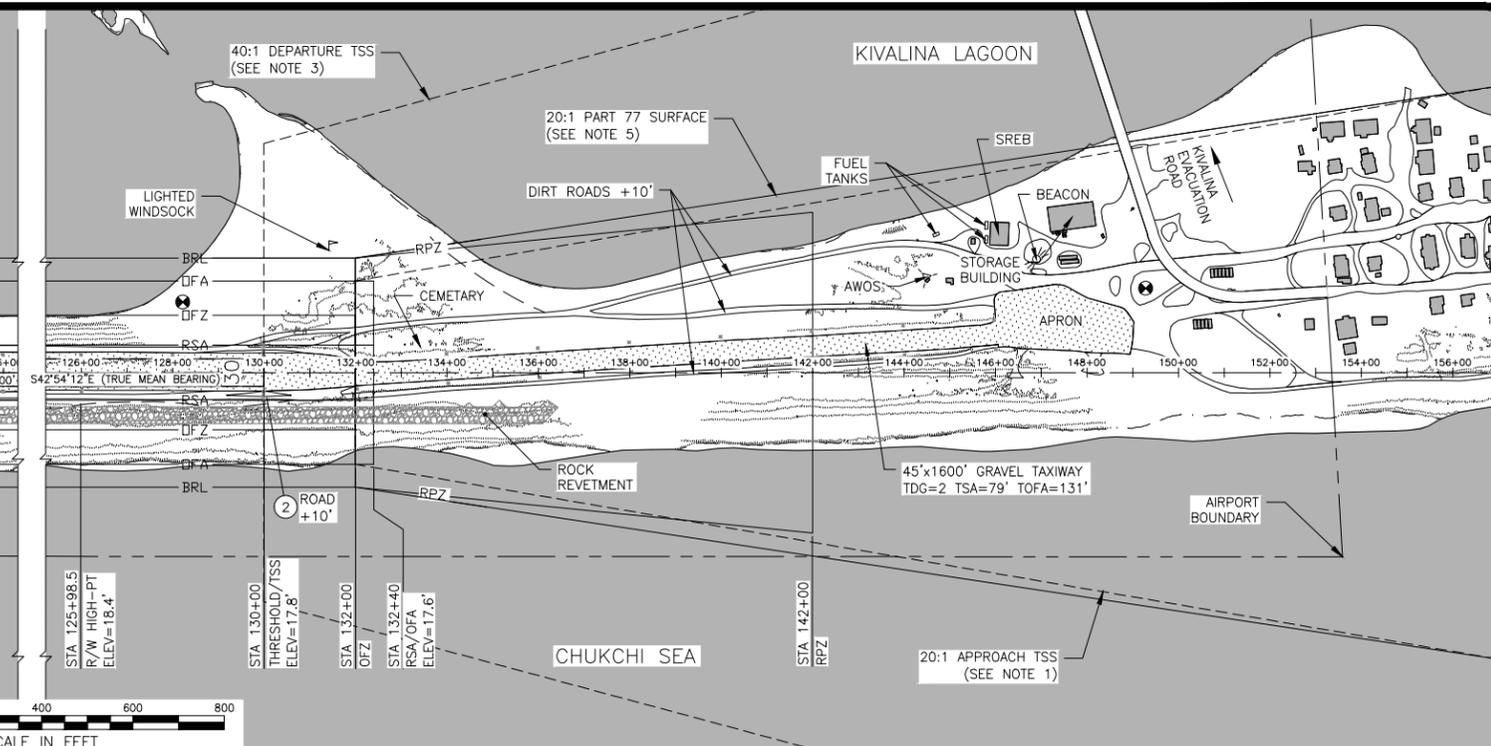
ULTIMATE
AIRPORT LAYOUT PLAN

SHEET
4 OF 7

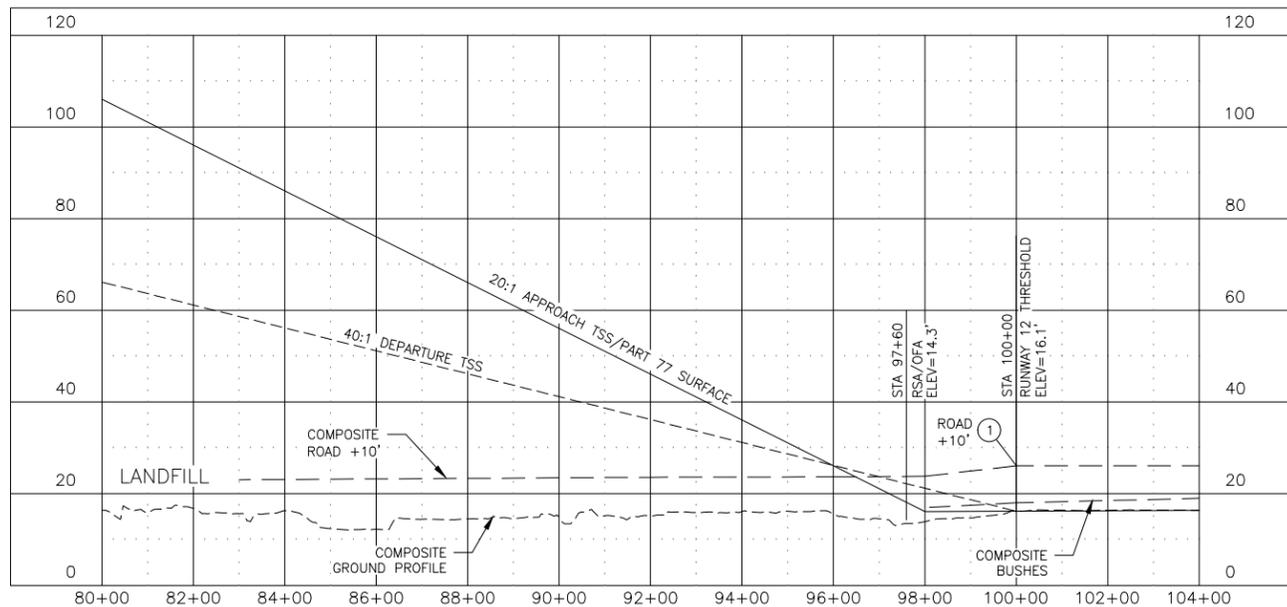
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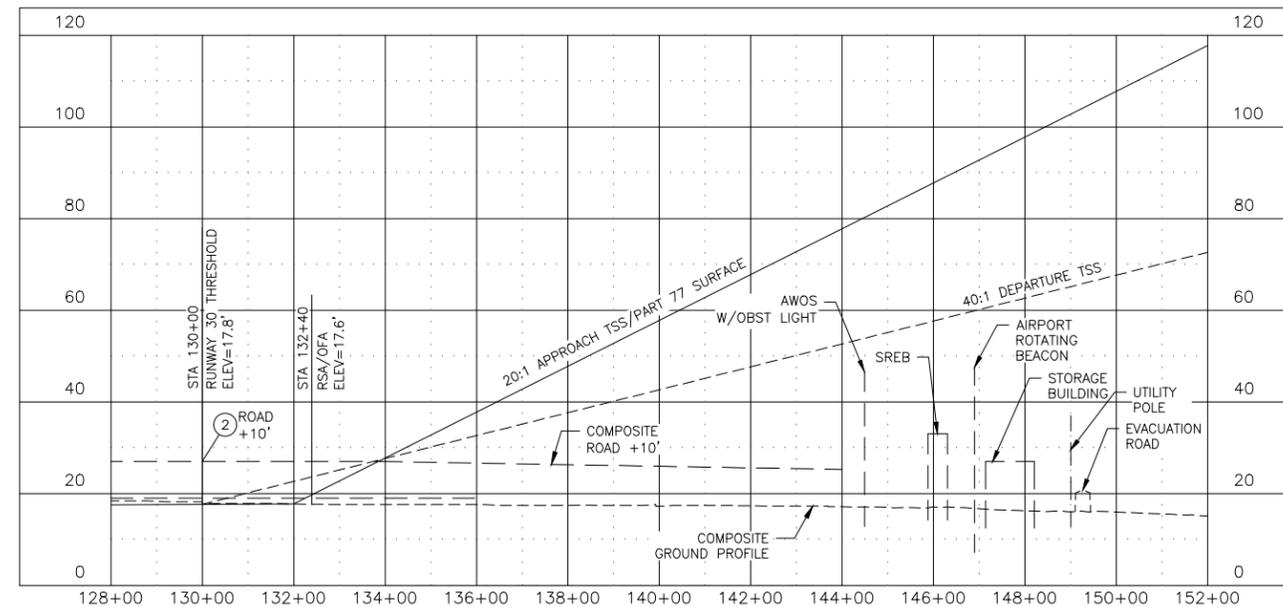
RUNWAY 12 INNER APPROACH PLAN



RUNWAY 30 INNER APPROACH PLAN



RUNWAY 12 INNER APPROACH PROFILE



RUNWAY 30 INNER APPROACH PROFILE

GENERAL NOTES:

1. APPROACH TSS DIMENSION = 400'x3800'x10000' (TYPE 4, TABLE 3-2, AC 150/5300-13A)
2. APPROACH TSS SLOPE EXTENDS 10000' AT 20:1
3. DEPARTURE TSS DIMENSION = 1000'x6466'x10200'
4. DEPARTURE TSS SLOPE EXTENDS 10200' AT 40:1
5. PART 77 APPROACH SURFACE DIMENSION = 500'x2000'x5000'
6. PART 77 APPROACH SURFACE EXTENDS 5000' AT 20:1
7. PART 77 ROAD OBSTRUCTION HEIGHTS ARE INCLUDED (10' FOR PRIVATE ROAD & 15' FOR PUBLIC ROAD)
8. R/W 12 HAS OBSTACLE FREE ZONE & THRESHOLD SITING SURFACE PENETRATIONS.
9. R/W 30 HAS OBSTACLE FREE ZONE & THRESHOLD SITING SURFACE PENETRATIONS.

OBSTRUCTION TABLE (INNER PORTION R/W 12)

ID #	DESCRIPTION	STATION /OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
①	ROAD +10'	100+00/ 50' RT	25.1'	16.1'	TSS/PART 77	9.0'	NONE

OBSTRUCTION TABLE (INNER PORTION R/W 30)

ID #	DESCRIPTION	STATION /OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
②	ROAD +10'	130+00/ 50' RT	27.0'	18.0'	TSS/PART 77	9.0'	NONE

DESIGN	LLC	
DRAWN	TCK	
CHECKED	JGL	
BY	DATE	REVISIONS
KC	1/19/21	ASBUILT ALP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION

APPROVED
Albert M.L. Beck
ALBERT M.L. BECK, P.E.

DATE 4/28/21
PROJECT DELIVERY TEAM LEAD

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO
ALP APPROVAL LETTER DATED ____/____/____
FAA AIRSPACE REVIEW NUMBER: 2001-AAL-48-NRA

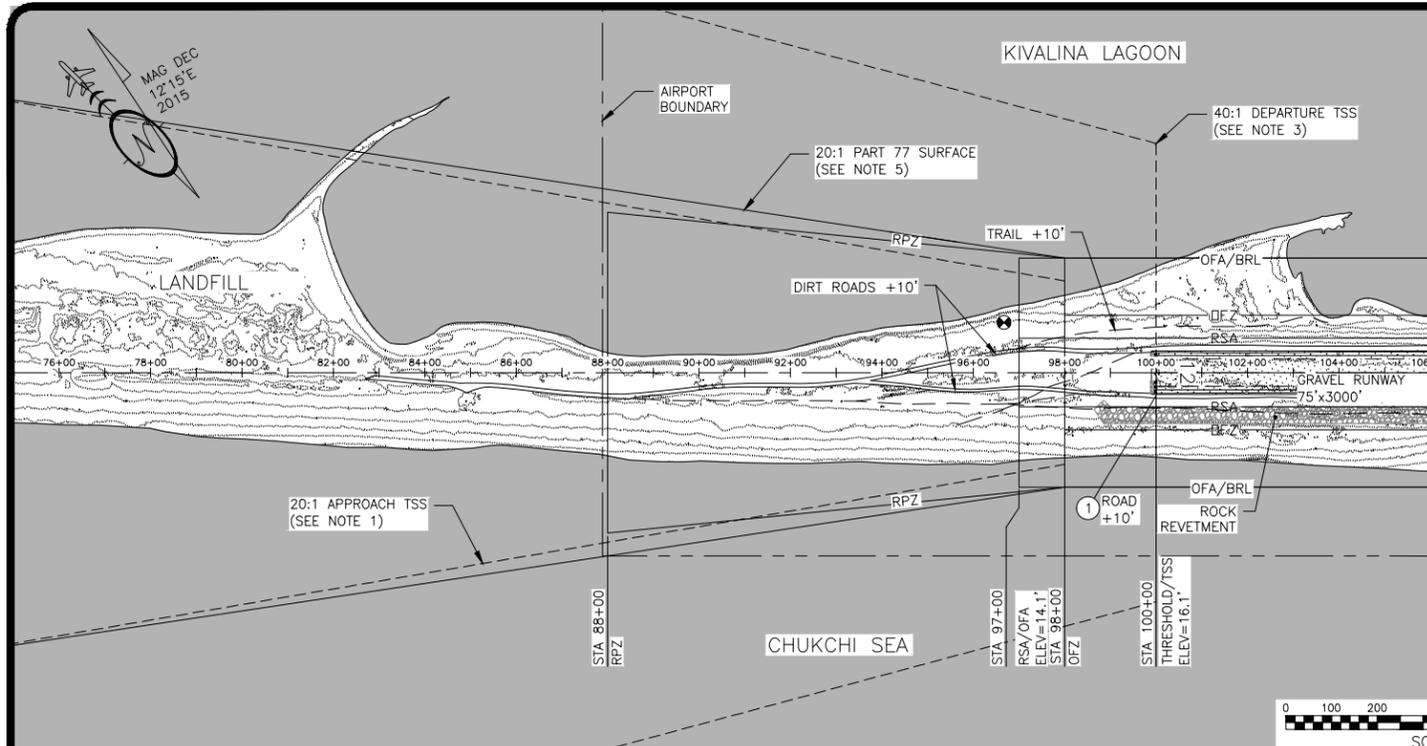
DATE: _____
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-601

KIVALINA AIRPORT
KIVALINA, ALASKA

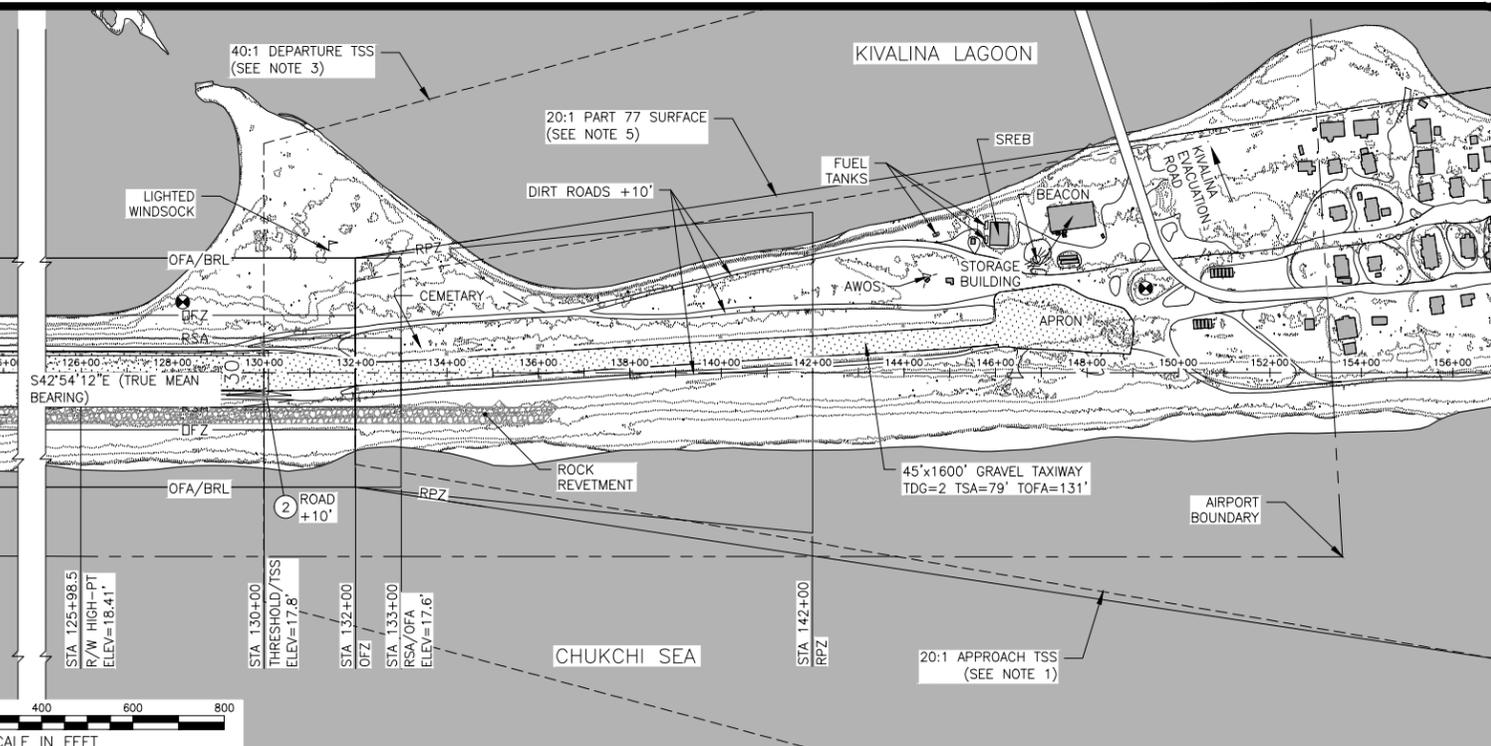
EXISTING
INNER PORTION OF APPROACH SURFACE

SHEET
5
OF
7

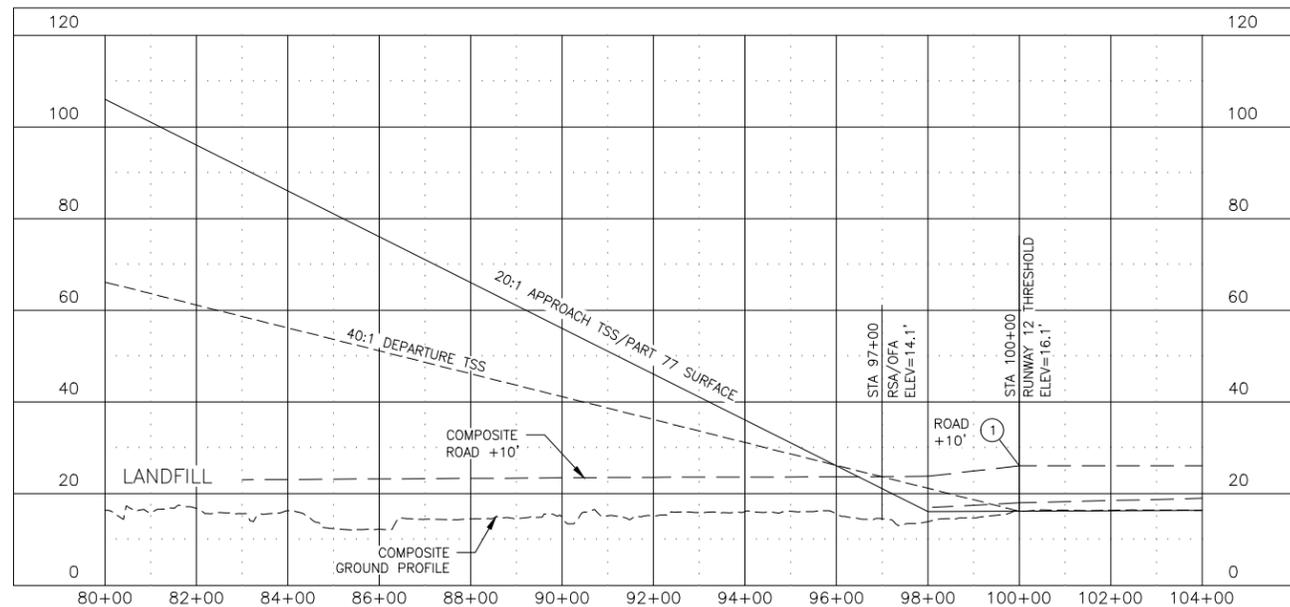
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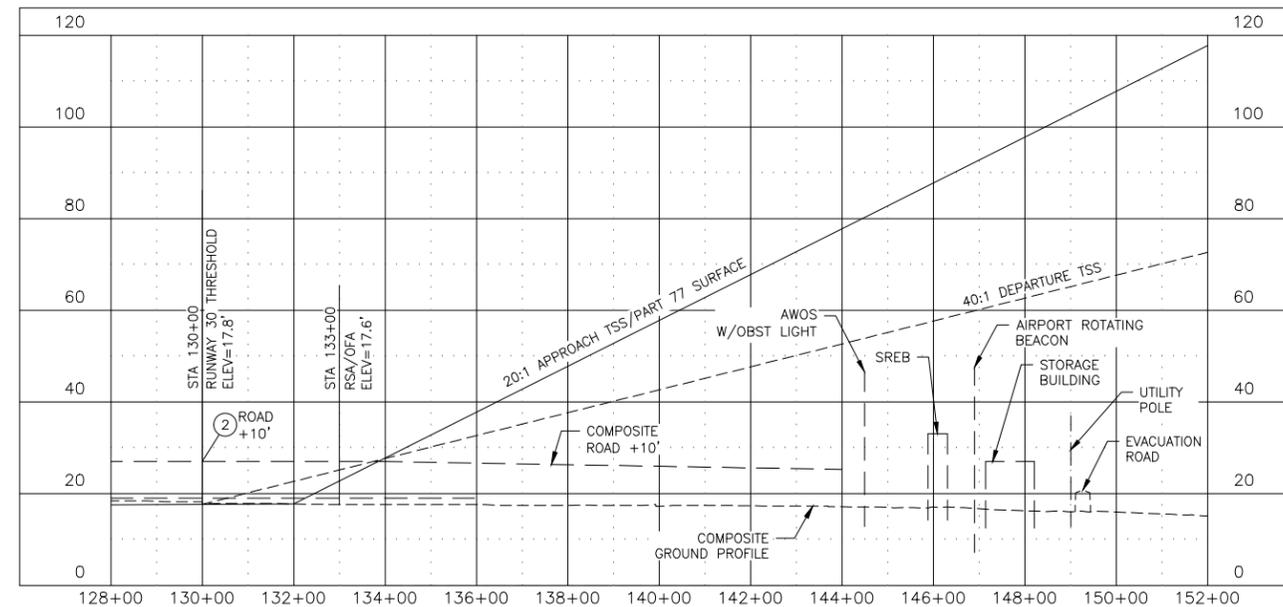
RUNWAY 12 INNER APPROACH PLAN



RUNWAY 30 INNER APPROACH PLAN



RUNWAY 12 INNER APPROACH PROFILE



RUNWAY 30 INNER APPROACH PROFILE

GENERAL NOTES:

1. APPROACH TSS DIMENSION = 400'x3800'x10000' (TYPE 4, TABLE 3-2, AC 150/5300-13A)
2. APPROACH TSS SLOPE EXTENDS 10000' AT 20:1
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OBSTRUCTION TABLE (INNER PORTION R/W 12)

ID #	DESCRIPTION	STATION /OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
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OBSTRUCTION TABLE (INNER PORTION R/W 30)

ID #	DESCRIPTION	STATION /OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
②	ROAD +10'	130+00/ 50' RT	27.0'	18.0'	APPROACH TSS	9.0'	NONE

DESIGN	LLC
DRAWN	TCK
CHECKED	JGL
BY	DATE
KC	1/19/21
ASBUILT	ALP
REVISIONS	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION

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Albert M.L. Beck
ALBERT M.L. BECK, P.E.

DATE **4/28/21**
PROJECT DELIVERY TEAM LEAD

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ALP APPROVAL LETTER DATED ____/____/____
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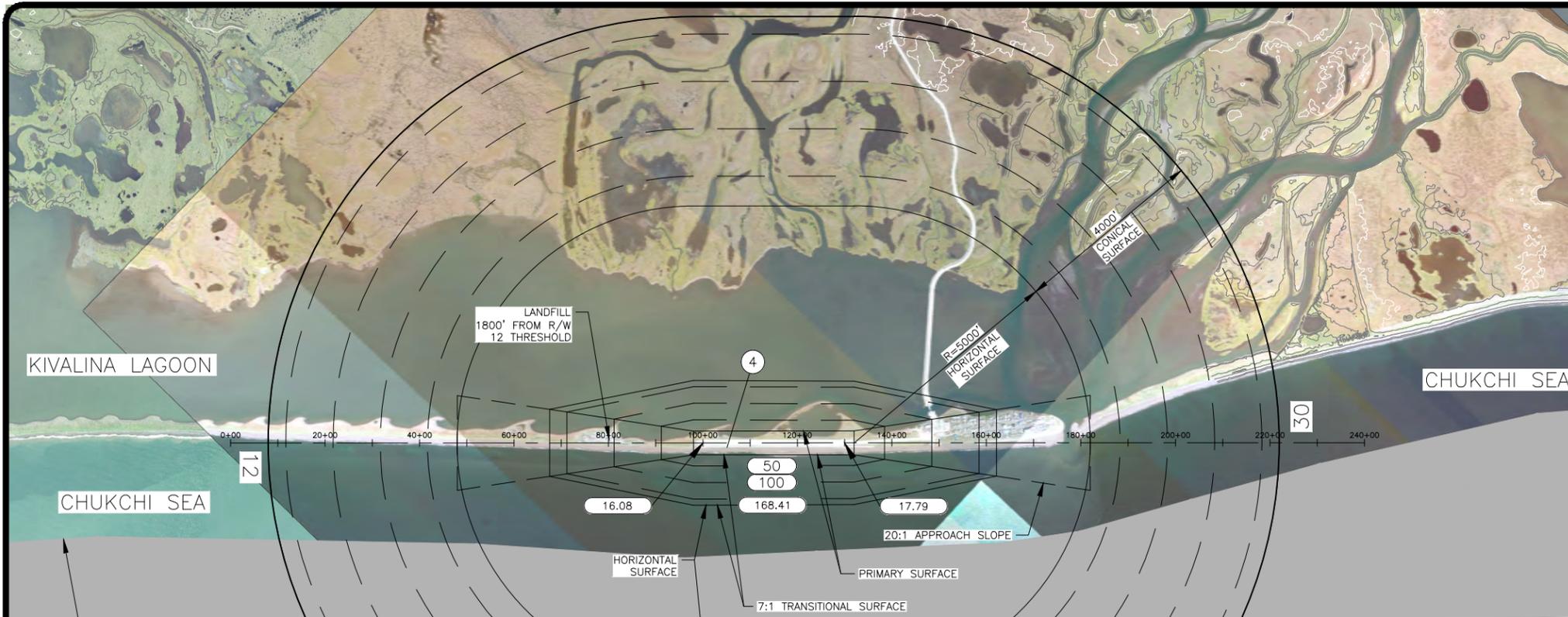
DATE: _____
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-601

KIVALINA AIRPORT
KIVALINA, ALASKA

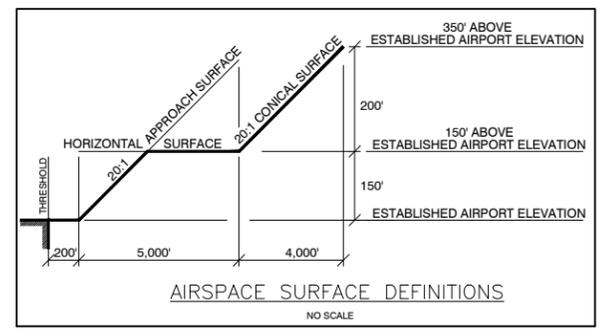
ULTIMATE
INNER PORTION OF APPROACH SURFACE

SHEET
6
OF
7

DRAWING NAME: H:\Info_Communities\Kivalina\02 ALP File\2020_Aa_Built\dwg's\Sheets\1309900KV\ALP06.dwg PLOTTED: Feb 19, 2021 - 4:46pm

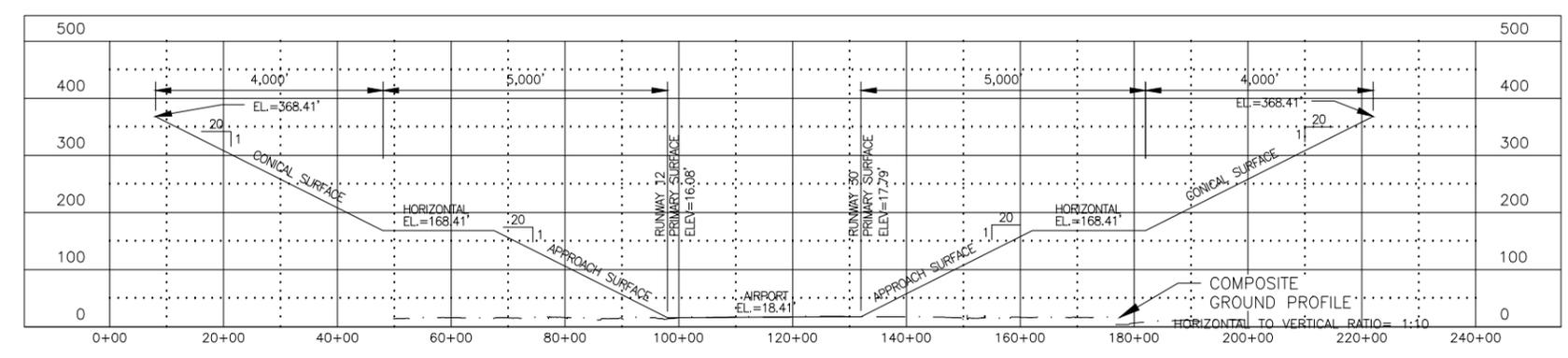


AIRSPACE PLAN



LEGEND	
	AIRSPACE ELEVATION (SURFACE DIVIDERS)
	AIRSPACE SURFACE DIVIDERS (NON CONTROLLING)
	AIRSPACE ELEVATION (50' INCREMENTS)
	EXISTING GROUND ELEVATIONS
	RUNWAY CENTERLINE (EXTENDED)

ULTIMATE RUNWAY F.A.R. PART 77 DIMENSIONS UTILITY, NPA, ≥1 S.M.	
DESCRIPTION	DIMENSION
ESTABLISHED AIRPORT ELEVATION	18.41'
RUNWAY THRESHOLD ELEVATION	RW12: 16.08' \ RW30: 17.79
PRIMARY SURFACE	500'x3400'
HORIZONTAL SURFACE ELEVATION	168.41'
HORIZONTAL SURFACE RADIUS	5000'
APPROACH SURFACE	500'x2000'x5000'
APPROACH SURFACE SLOPE	20:1
CONICAL SURFACE WIDTH	4000' @ 20:1
TRANSITIONAL SURFACE SLOPE	7:1



AIRSPACE PROFILE

F.A.R. PART 77 SURFACE OBSTRUCTION TABLE							
ID #	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE PENETRATED	SURFACE ELEV.	SURFACE PENETRATION	DISPOSITION
④	TERRAIN (HP)	105+00/ 95' RT	18.3'	PRIMARY	16.3'	2.0'	TO REMAIN

- (HP=HIGH POINT OF TERRAIN OBSTRUCTION)
- NOTES:**
- REFER TO INNER PORTION OF APPROACH SURFACE (SHEETS 4 & 5) FOR CLOSE IN OBSTRUCTIONS ANALYZED WITH THE THRESHOLD SITING AND PART 77 SURFACES.
 - THERE ARE NO KNOWN HEIGHT RESTRICTIONS.
 - REFER TO THE AIRPORT LAYOUT PLAN (SHEETS 2 & 3) FOR BUILDING LOCATIONS AND ELEVATIONS.
 - GROUND SURFACE INFORMATION WAS PROVIDED BY AN AERIAL MAPPING SUBCONTRACTOR. A CAREFUL COMPARISON WITH SURVEYED DATA WAS MADE TO ENSURE THAT ALL INFORMATION MEETS THE ACCURACY REQUIREMENTS ESTABLISHED IN AC 150/5300-18B.

DESIGN	LLC
DRAWN	TCK
CHECKED	JGL
BY	DATE
KC	1/19/21
ASBUILT	ALP
REVISIONS	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION

APPROVED
Albert M.L. Beck
ALBERT M.L. BECK, P.E.

DATE **4/28/21**
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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO
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DATE: _____
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL- 601

KIVALINA AIRPORT
KIVALINA, ALASKA

AIRPORT AIRSPACE (FAR PART 77)

SHEET
7 OF 7