

U.S. Department Alaskan Region Airports Division of Transportation

222 W. 7th Avenue, Box #14 Anchorage, Alaska 99513-7587 Tel. (907) 271-5438 Fax (907) 271-2851

Federal Aviation Administration

May 22, 2014

Wolfgang Junge, P.E. Aviation Design Chief Central Region Department of Transportation and Public Facilities, State of Alaska P.O. Box 196900 Anchorage AK 99519-6900 This ALP is for the future Newtok community, which will be located at the Mertarvik site.

Dear Mr. Junge:

We have completed our review of the updated Airport Layout Plan (ALP) for the Newtok Airport, Metarvik, Alaska, and find it acceptable from a planning standpoint. The ALP was reviewed by FAA (airspace study 2014-AAL-79-NRA) and is conditionally approved. This determination does not constitute FAA approval or disapproval of the physical development involved in the proposal. It is a determination with respect to the safe and efficient use of navigable airspace by aircraft and with respect to the safety of persons and property on the ground.

In making this determination, the FAA has considered matters such as the effects the proposal would have on existing or planned traffic patterns of neighboring airports, the effects it would have on the existing airspace structure and projected programs of the FAA, the effects it would have on the safety of persons and property on the ground, and the effects that existing or proposed manmade objects (on file with the FAA), and known natural objects within the affected area would have on the airport proposal.

The FAA has only limited means to prevent the construction of structures near an airport. The airport sponsor has the primary responsibility to protect the airport environs through such means as local zoning ordinances, property acquisition, avigation easements, letters of agreement or other means. The approval, indicated by my signature, is given subject to the condition that the proposed landfill and sewage lagoon maintain a minimum separation requirement of 5,000 feet from the Newtok Airport. Notwithstanding, all items of development shall comply with the requirements of the National Environmental Policies Act of 1969 (P.L. 91-190). Approval of the plan does not indicate that the United States will participate in the cost of any development proposed. AIP funding requires evidence of eligibility and justification at the time a funding request is ripe for consideration.

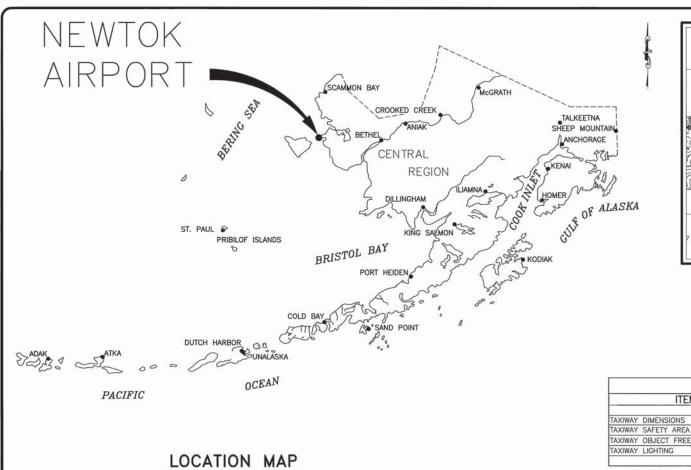
When construction of any proposed structure or development indicated on the plan is undertaken, such construction requires normal 45-day advance notification to FAA for review in accordance with applicable Federal Aviation Regulations (i.e., Parts 77, 157, 152, etc.). More notice is generally beneficial to ensure that all statutory, regulatory, technical and operational issues can be addressed in a timely manner.

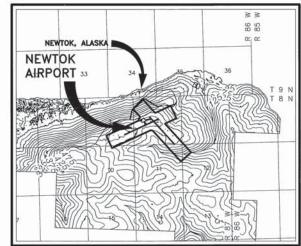
We are enclosing a copy of the approved ALP drawing set for your records. If you have any questions, please contact me at our office at (907-271-5445).

Sincerely,

Patricia Oien, Lead Planner

Enclosure: Newtok ALP





VICINITY MAP



T8N, R87W, SECTIONS 1, 2, 3, 10, 11, 12 SEWARD MERIDIAN USGS BAIRD INLET (D-8), ALASKA

TAXIWAY A DATA								
ITEM	EXISTING	NEAR-TERM	ULTIMATE					
TAXIWAY DIMENSIONS	- 4	50'x859'	50'x706'					
TAXIWAY SAFETY AREA (TSA) DIMENSIONS	ZO CABLY	118'x859'	118'x706'					
TAXIWAY OBJECT FREE AREA DIMENSIONS	-40-	186'x859'	186'x706'					
TAXIWAY LIGHTING	- 882	MITL	MITL					

TAXIW	AY B DATA	\	
ITEM	EXISTING	NEAR-TERM	ULTIMATE
TAXIWAY DIMENSIONS	- 4	4	50'x400'
TAXIWAY SAFETY AREA (TSA) DIMENSIONS	.0, 8	0, 8	118'x400'
TAXIWAY OBJECT FREE AREA DIMENSIONS	-4.0.	4,0,	186'x400'
TAXIWAY LIGHTING	- 1865	T 885	MITL

G	EOGI	RAPHI	С	CC	00	RDINA	41	ES	Т	ABLE					
ITEM		R-TERN TTUDE		0.000	10000	TERM		1000		MATE UDE				IATE TUDE	
ARP	60° 48	35.70"	N	164	30'	01.49"	W	60*	48'	35,40"	N	164	30'	19.71"	W
THRESHOLD RW 13	60" 48	3' 47.93"	N	164	30'	23.39"	W								
THRESHOLD RW 31	60° 48	3' 23.47"	N	164	29'	39.60"	W	60*	48'	18.28"	N	164	29'	30.31"	W
THRESHOLD RW 5								60°	48'	29.87"	N	164	31'	19.59"	W
THRESHOLD RW 23								60°	48'	45.49"	N	164	30'	05.57"	W

LEGE	טא			
ITEM	NEAR-TERM	ULTIMATE		
AIRPORT REFERENCE POINT (A.R.P.)	(A)	(A)		
ANTENNA		Å		
BLUFF		-		
BUILDINGS				
BUILDING RESTRICTION LINE				
FENCE	x x x	x x x		
PAPI	****	0000		
PROPERTY LINE				
REIL	●1	01		
ROADWAYS				
ROTATING BEACON	> ●€	>0€		
SHORELINE				
SURVEY MONUMENT	•	Φ		
THRESHOLD MARKERS/LIGHTS	000 000	∞ ∞		
TOPOGRAPHIC CONTOURS	100	100		
TREE (LARGE SINGLE)	●	₩		
TREELINE		·····		
VASI	**	0.0		
WIND CONE (LIGHTED / UNLIGHTED)	1	1		
WIND CONE AND SEGMENTED CIRCLE	①	(

0 + 1 2 25 0 + 1 25	× MOIS	3 .2 .2 .3 .4	+ 0 1	}		
W 2 1 3 1.3	46.4 WIND COVERAGE:	.6 4 2 .6 3 .3	8 E			
+ 1 1	96.64 %	3 2	.1 8	RUNWAY 13/31	DATA 13 kt 89.26%	16 kt 94.76%
J + + 1	3 5 6 6	(.4)		5/23 COMBINED	77.35% 96.64%	-
+	.1 .1 .3	.5 .4				
+ + 200 55%	190 180 170	130	3)	\rightarrow		

WIND DATA

DATA SOURCE: DRYDEN INSTUMENTATION, COLLECTED FOR THIS PROJECT

FEBRUARY 2007 - JANUARY 2009

PERIOD:

NOT TO SCALE

NOTES:

- 1. THERE ARE NO DECLARED DISTANCES.
- 2. THERE ARE NO MODIFICATIONS TO STANDARDS.

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 5/22/14

FAA AIRSPACE REVIEW NUMBER: 2014-AAL-79-NCA

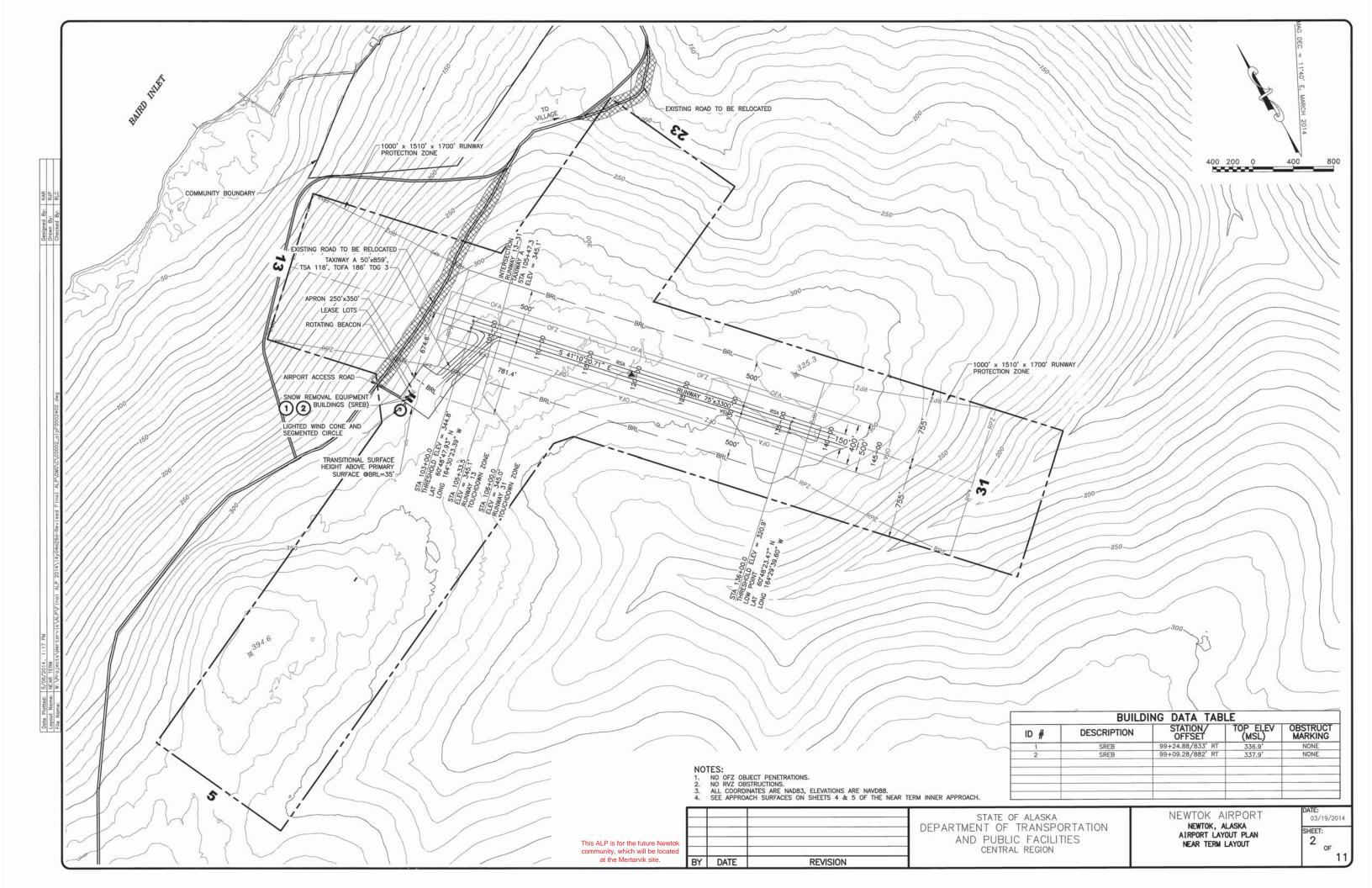
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL- 612

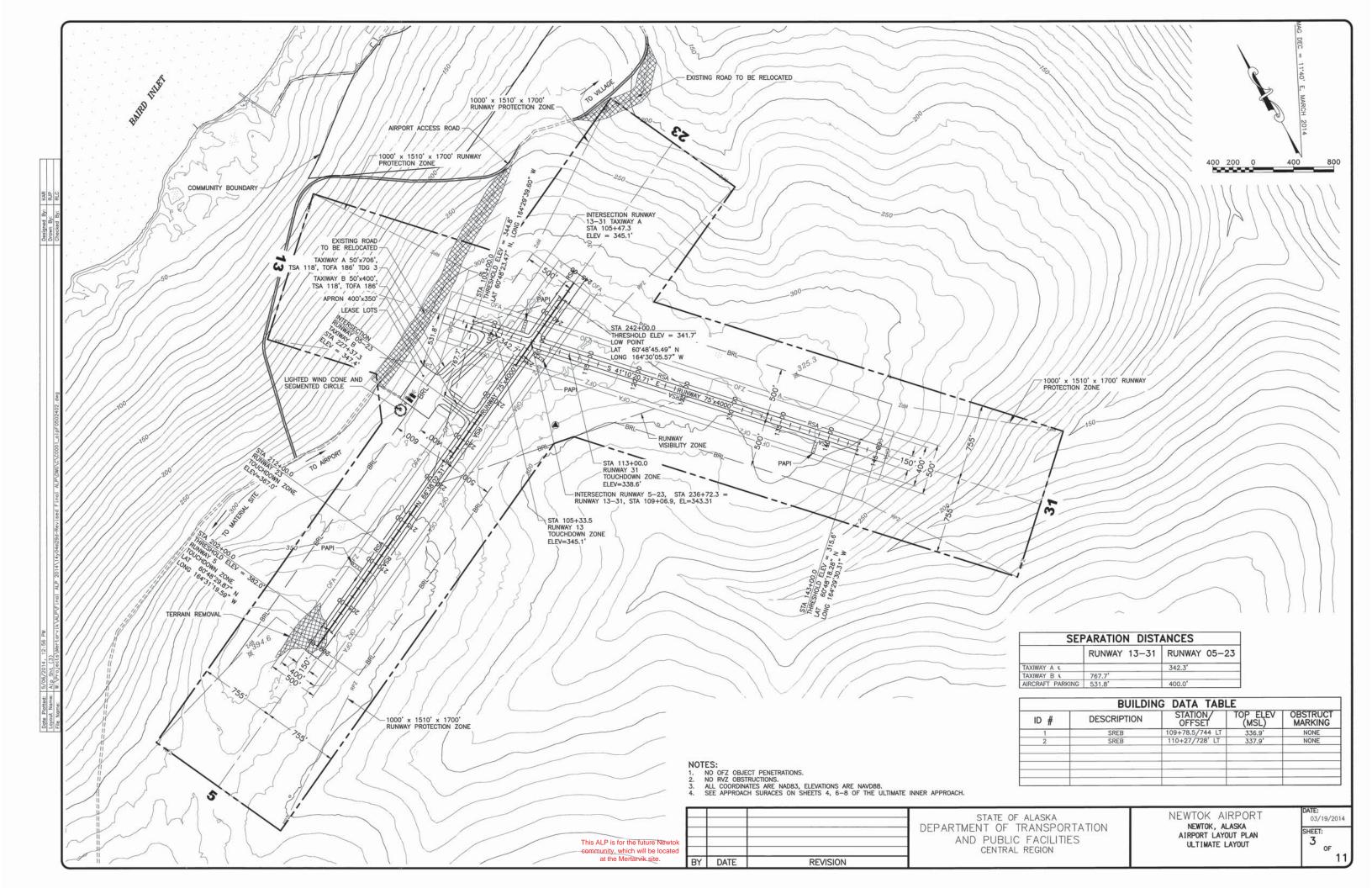
ITEM	EXISTING	NEAR-TERM	ULTIMATE
ICAO IDENTIFIER		TBD	TBD
NATIONAL AIRPORT IDENTIFIER	4	TBD	TBD
FAA SITE NUMBER	- 6	TBD	TBD
AIRPORT ELEVATION (NAVD 88)	, CAST	344.8'	382'
AIRPORT REFERENCE CODE	0/2	B-II	B-II
CRITICAL AIRCRAFT		SHORTS SD 330 SHERPA	BEECH 1900
MEAN MAXIMUM TEMPERATURE, HOTTEST MONTH		63' F (JULY)	63° F (JULY)
AIRPORT AND TERMINAL NAVAIDS	40,	BEACON, WINDCONE, SEGMENTED CIRCLE	BEACON, WINDCONE, SEGMENTED CIRCLE
OBSTRUCTION SURVEY SOURCE AND TYPE		NONE	NVG
MAGNETIC DECLINATION, YEAR, RATE OF CHANGE EPOCH YEAR 2010		11°37' E, MARCH 2014	- 0°13' W / YEAR
TAXIWAY LIGHTING / MARKING		MITL	MITL
NPIAS SERVICE LEVEL		cs	CS

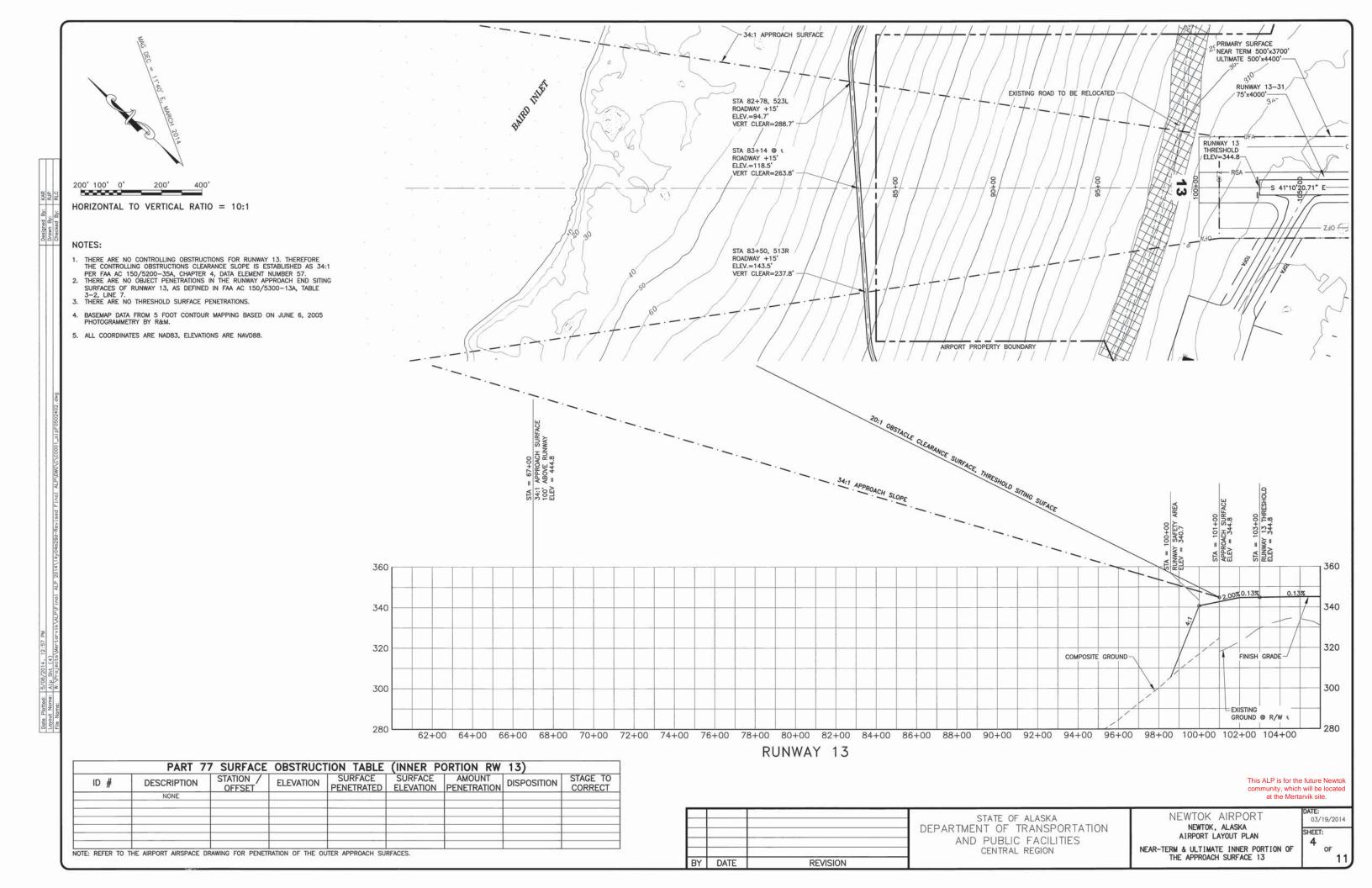
RUNWA	Y 13/31 DA	IA	
ITEM	EXISTING	NEAR-TERM	ULTIMATE
		(13/31)	(13/31)
RUNWAY TYPE UTILITY OR OTHER THAN UTILITY		OTHER THAN UTILITY	OTHER THAN UTILITY
FAR PART 77 APPROACH CATEGORY (V, NPI, P)		NPI / NPI	NPI / NPI
APPROACH SURFACES		34:1 / 34:1	34:1 / 34:1
VISIBILITY MINIMUM		> 3/4 MILE	> 3/4 MILE
RUNWAY SURFACE		GRAVEL	GRAVEL
PAVEMENT STRENGTH SW, DW, DTW, DDTW x1000lbs	4,	N/A	N/A
RUNWAY DESIGN CODE	. 8	B-II-4000'	B-II-4000'
TRUE BEARING	· CA	S 41'10'20.71" E	S 41'10'16.69" E
EFFECTIVE GRADE (MEETS LOS REQUIREMENTS)	0/2	0.7%	, 0.7%
TOUCHDOWN ELEVATION (NAVD 88)	Prof. Calle	345.1' / 345.0'	345.1' / 338.6'
RUNWAY DIMENSIONS	4	75' x 3300'	75' x 4000'
RUNWAY SAFETY AREA (RSA) DIMENSIONS	<u> </u>	75' x 3900'	150' x 4600'
LENGTH BEYOND R/W END	4	300' / 300'	300' / 300'
RUNWAY PROTECTION ZONE (RPZ) DIMENSIONS		1000' x 1510' x 1700'	1000' x 1510' x 1700
RUNWAY OBJECT FREE AREA (ROFA) DIMENSIONS		500' x 3900'	500' x 4600'
LENGTH BEYOND R/W END OR STOPWAY		300' / 300'	300' / 300'
RUNWAY OBSTACLE FREE ZONE (ROFZ) DIMENSIONS		400' x 3700'	400' x 4400'
RUNWAY LIGHTING		M.I.R.L.	M.I.R.L.
RUNWAY MARKING TYPE		N/A	N/A
RUNWAY VISUAL APPROACH AIDS		NONE	PAPI, REIL

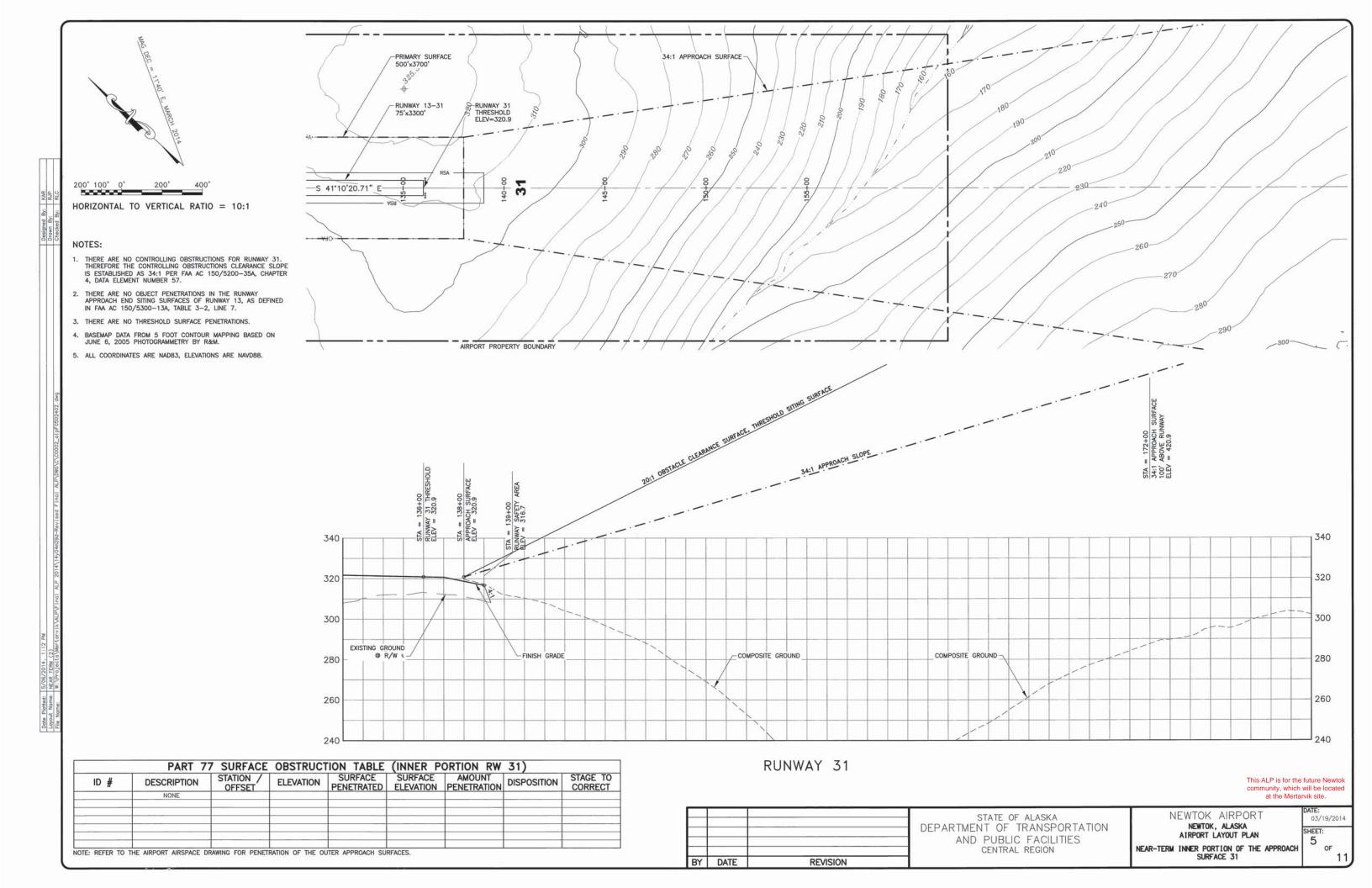
RUNWAY	5/23 DATA		
ITEM	EXISTING	NEAR-TERM	ULTIMATE
RUNWAY TYPE UTILITY OR OTHER THAN UTILITY			OTHER THAN UTILITY
FAR PART 77 APPROACH CATEGORY (V, NPI, P)			NPI / NPI
APPROACH SURFACES			34:1 / 34:1
VISIBILITY MINIMUM			> 3/4 MILE
RUNWAY SURFACE			GRAVEL
PAVEMENT STRENGTH SW, DW, DTW, DDTW x1000lbs	,	,	N/A
RUNWAY DESIGN CODE	2		B-II-4000
TRUE BEARING	- AD	CABLE	N 66'38'02.31" E
EFFECTIVE GRADE	10.	1,6,	1%
TOUCHDOWN ELEVATION (NAVD88)	Reliciale	000	382.0' / 367.0'
RUNWAY DIMENSIONS	P,	P,	75' x 4000'
RUNWAY SAFETY AREA (RSA) DIMENSIONS	4	4	150' x 4600'
LENGTH BEYOND R/W END	<u> </u>	- Joi	300' / 300'
RUNWAY PROTECTION ZONE (RPZ) DIMENSIONS			1000' x 1510' x 1700'
RUNWAY OBJECT FREE AREA (ROFA) DIMENSIONS			500' x 4600'
LENGTH BEYOND R/W END OR STOPWAY			300' / 300'
RUNWAY OBSTACLE FREE ZONE (ROFZ) DIMENSIONS			400' x 4400'
RUNWAY LIGHTING			M.I.R.L.
RUNWAY MARKING TYPE			N/A
RUNWAY VISUAL APPROACH AIDS			PAPI, REIL

				DRAWING INDEX	(
			SHT#	TITLE	
BY	DATE)	REVISION DATE:	1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10 - 10 -	AIRPORT DATA NEAR TERM LAYOUT ULTIMATE LAYOUT NEAR—TERM & ULTIMATE INNER PORTION OF THI NEAR—TERM INNER PORTION OF THE APPROACH SL ULTIMATE INNER PORTION OF THE APPROACH SL ULTIMATE INNER PORTION OF THE APPROACH SL ULTIMATE INNER PORTION OF THE APPROACH SL AIRPORT AIRSPACE AIRPORT COMPOSITE PROFILES AIRPORT PROPERTY MAP	SURFACE 31 JRFACE 31 JRFACE 5
RECO	JETH M. MORTON MMENSED:	PRECONSTRUCTION DATE:	Thon engineer	is ALP is for the future Newton which will be located at the Me	,
\top	ST EPARTMEN AND I	TATE OF ALASKA T OF TRANSPORTA PUBLIC FACILITIES ENTRAL REGION	ATION	NEWTOK AIRPORT NEWTOK, ALASKA AIRPORT LAYOUT PLAN AIRPORT DATA	DATE: 03/19/2014 SHEET: 1



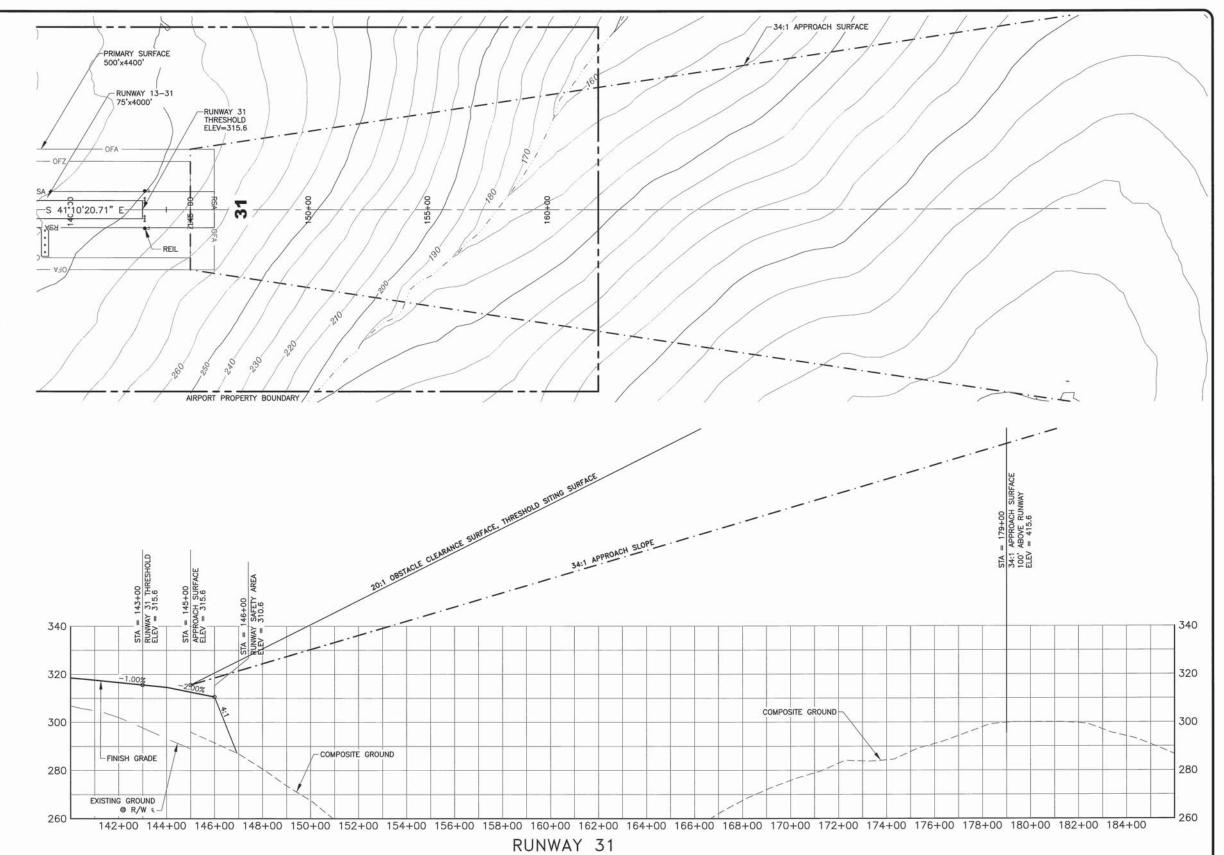






NOTES:

- THERE ARE NO CONTROLLING OBSTRUCTIONS FOR RUNWAY 31. THEREFORE THE CONTROLLING OBSTRUCTIONS CLEARANCE SLOPE IS ESTABLISHED AS 34:1 PER FAA AC 150/5200-35A, CHAPTER 4, DATA ELEMENT NUMBER 57.
- THERE ARE NO OBJECT PENETRATIONS IN THE RUNWAY APPROACH END SITING SURFACES OF RUNWAY 13, AS DEFINED IN FAA AC 150/5300-13A, TABLE 3-2, LINE 7.
- 3. THERE ARE NO THRESHOLD SURFACE PENETRATIONS.
- BASEMAP DATA FROM 5 FOOT CONTOUR MAPPING BASED ON JUNE 6, 2005 PHOTOGRAMMETRY BY R&M.
- 5. ALL COORDINATES ARE NAD83, ELEVATIONS ARE NAVD88.



ID #	DESCRIPTION	STATION / OFFSET	ELEVATION	SURFACE PENETRATED	SURFACE ELEVATION	AMOUNT PENETRATION	DISPOSITION	STAGE
	NONE							

	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION
1	CENTRAL REGION

NEWTOK AIRPORT NEWTOK, ALASKA SHEET: AIRPORT LAYOUT PLAN 6 JLTIMATE INNER PORTION OF THE APPROACH SURFACE 31

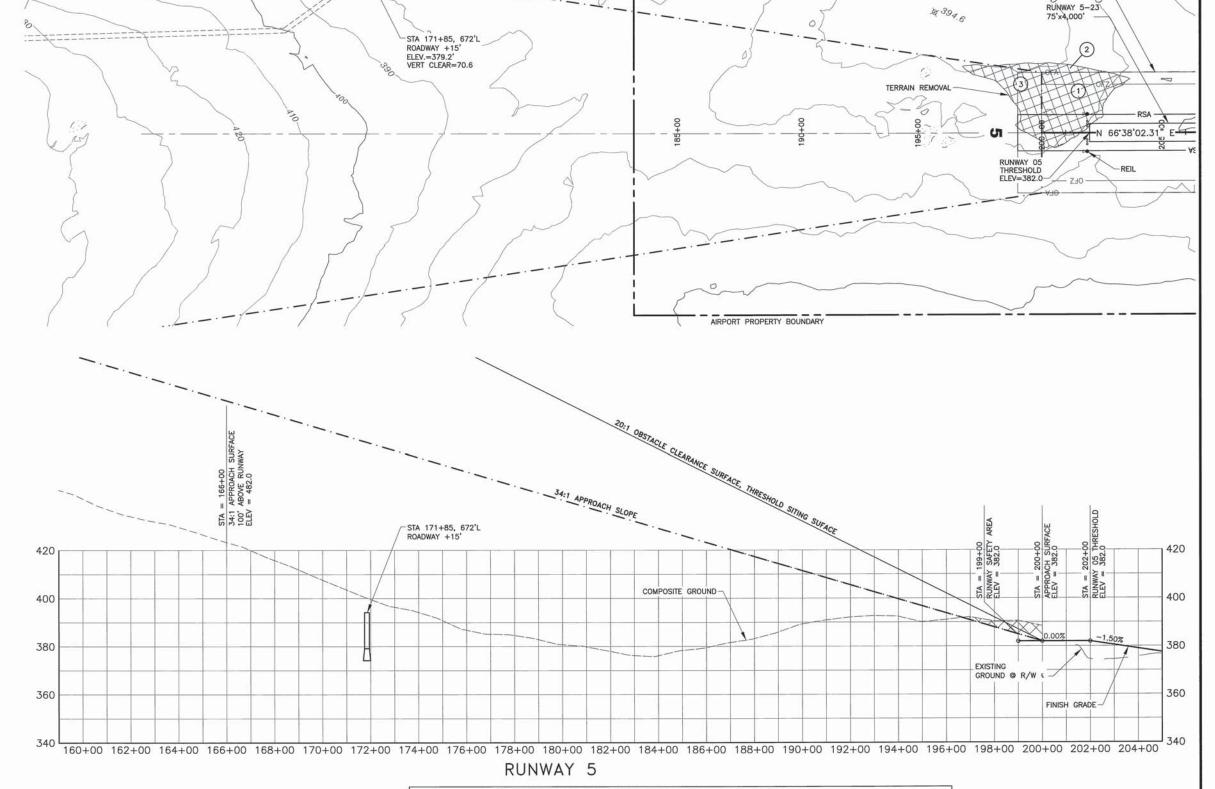
03/19/2014 OF

This ALP is for the future Newtok community, which will be located at the Mertarvik site.

BY DATE REVISION HORIZONTAL TO VERTICAL RATIO = 10:1

NOTES:

- AFTER REMOVAL OF TERRAIN PENETRATIONS PROPOSED TO BE REMOVED UNDER ULTIMATE DEVELOPMENT, THERE WILL BE NO CONTROLLING OBSTRUCTIONS FOR RUNWAY 5. THEREFORE THE CONTROLLING OBSTRUCTIONS CLEARANCE SLOPE IS ESTRABLISHED AS 34:1 PER FAA AC 150/5200-35A, CHAPTER 4, DATA ELEMENT NUMBER 57.
- AFTER REMOVAL OF TERRAIN PENETRATIONS, THERE WILL BE NO OBJECT PENETRATIONS IN THE APPROACH END SITING SURFACES OF RUNWAY 5, AS DEFINED IN FAA AC 150/5300-13A, TABLE 3-2 LINE 7.
- AFTER REMOVAL OF TERRAIN PENETRATIONS, THERE WILL BE NO THRESHOLD SURFACE PENETRATIONS.
- BASEMAP DATA FROM 5 FOOT CONTOUR MAPPING BASED ON JUNE 6, 2005 PHOTOGRAMMETRY BY R&M.
- 5. ALL COORDINATES ARE NAD83, ELEVATIONS ARE NAVD88.



34:1 APPROACH SURFACE

	PART 7	77 SURFACE	OBSTRUC	TION TABLE	(INNER I	PORTION RW	5)	
ID #	DESCRIPTION	STATION / OFFSET	ELEVATION	SURFACE PENETRATED	SURFACE ELEVATION	AMOUNT PENETRATION	DISPOSITION	STAGE TO CORRECT
1	TERRAIN	200+58, 222.6'L	387.6'	PRIMARY	382.0'	5.6'	TO BE REMOVED	ULTIMATE
2	TERRAIN	200+82, 250'L	388.5'	TRANSITIONAL	382.0'	6.5'	TO BE REMOVED	ULTIMATE
3	TERRAIN	199+90, 228.0'L	386.6'	APPROACH	382.3'	4.3'	TO BE REMOVED	ULTIMATE

NOTE: REFER TO THE AIRPORT AIRSPACE DRAWING FOR PENETRATION OF THE OUTER APPROACH SURFACES.

ID #	DESCRIPTION	STATION / OFFSET	ELEVATION	SURFACE ELEVATION	AMOUNT PENETRATION	DISPOSITION	STAGE TO CORRECT
1	TERRAIN	200+58, 222.6L	387.6'	382.0'	5.6'	TO BE REMOVED	ULTIMATE

This ALP is for the future Newtok community, which will be located at the Mertarvik site.

			STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION
Ņ	DATE	DEVISION	SECULIARISM ASSOCIATION AND ASSOCIATION ASSOCI

NEWTOK AIRPORT	DATE: 03/19/2014
NEWTOK, ALASKA	SHEET:
AIRPORT LAYOUT PLAN	7
ULTIMATE INNER PORTION OF THE APPROACH	OF
SURFACE 5	1

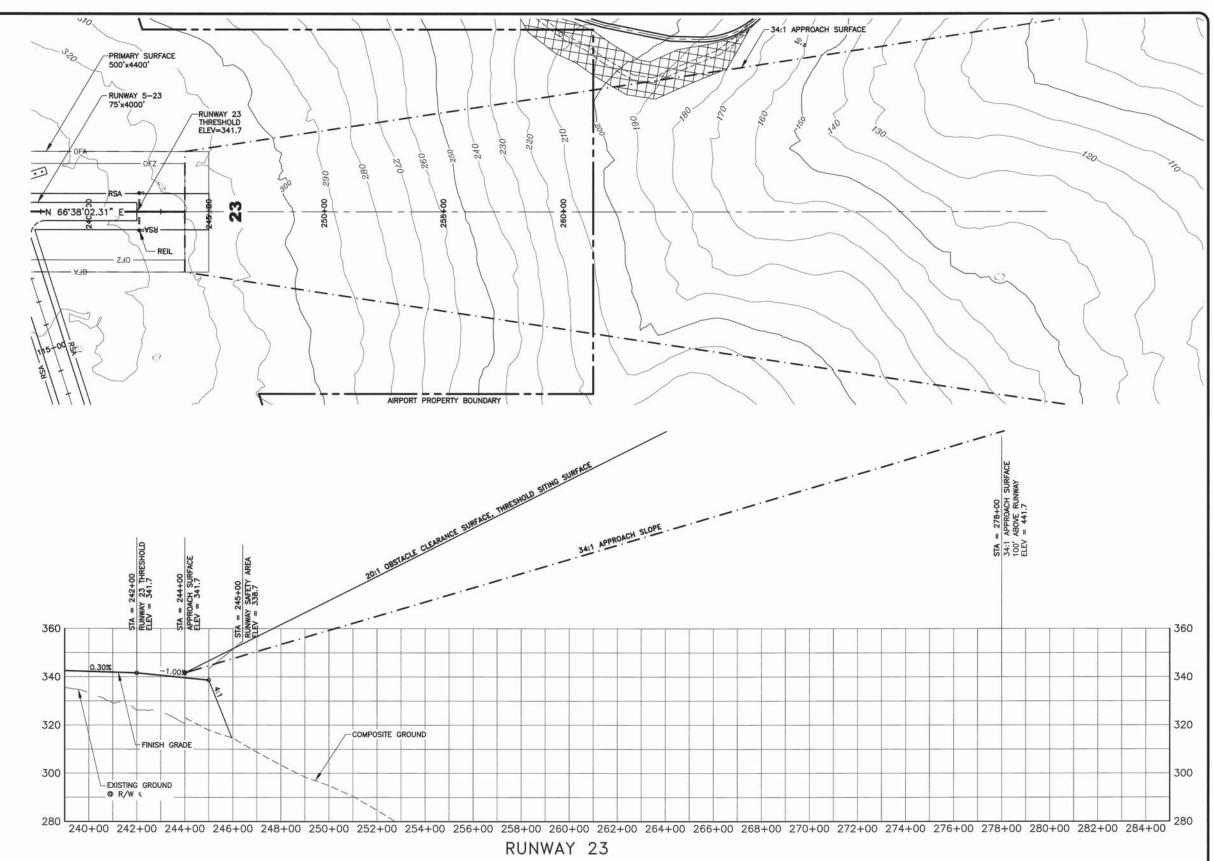
PRIMARY SURFACE

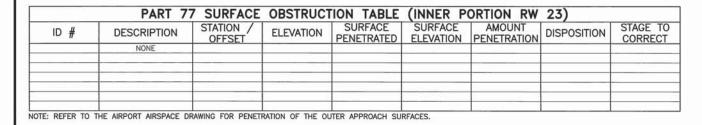
200' 100' 0' 200' 400'

HORIZONTAL TO VERTICAL RATIO = 10:1

NOTES:

- THERE ARE NO CONTROLLING OBSTRUCTIONS FOR RUNWAY 23. THEREFORE THE CONTROLLING OBSTRUCTIONS CLEARANCE SLOPE IS ESTABLISHED AS 34:1 PER FAA AC 150/5200-35A, CHAPTER 4, DATA ELEMENT NUMBER 57.
- THERE ARE NO OBJECT PENETRATIONS IN THE RUNWAY APPROACH END SITING SURFACES OF RUNWAY 23, AS DEFINED IN FAA AC 150/5300-13A, TABLE 3-2, LINE 7.
- 3. THERE ARE NO THRESHOLD SURFACE PENETRATIONS.
- BASEMAP DATA FROM 5 FOOT CONTOUR MAPPING BASED ON JUNE 6, 2005 PHOTOGRAMMETRY BY R&M.
- 5. ALL COORDINATES ARE NADB3, ELEVATIONS ARE NAVDBB.

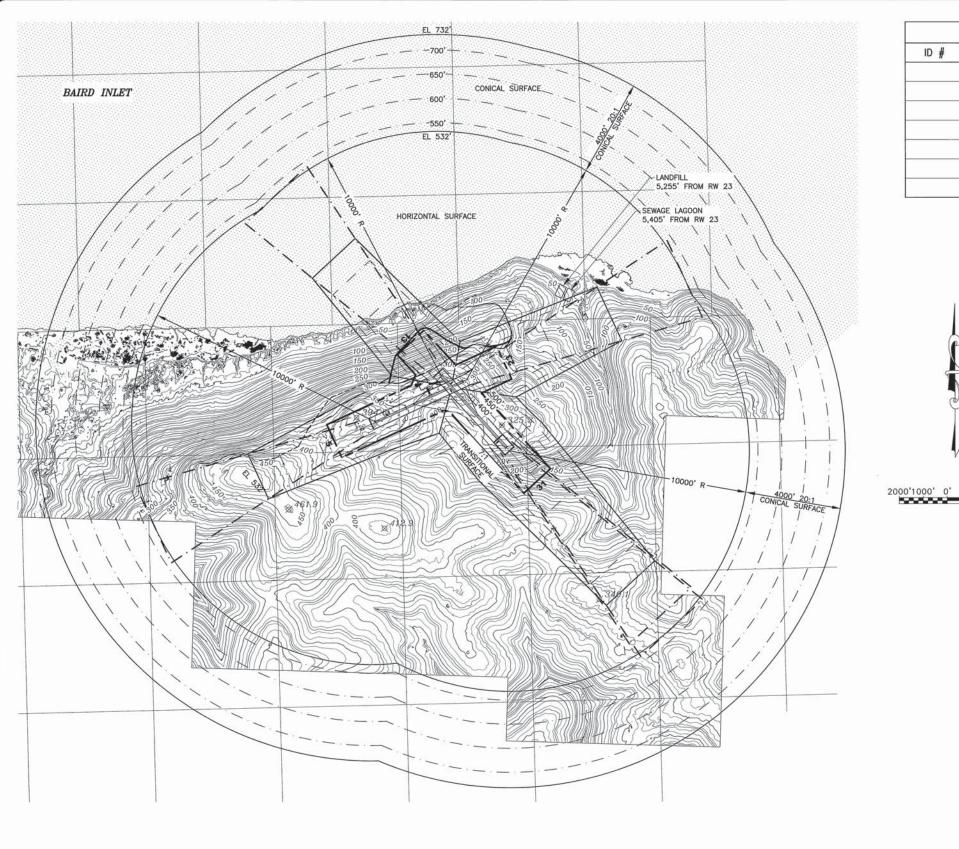




		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION	
DATE	DEMICION	CENTRAL REGION	П

This ALP is for the future Newtok community, which will be located at the Mertarvik site.

١	NEWTOK AIRPORT	03/19/2014
	NEWTOK, ALASKA AIRPORT LAYOUT PLAN ULTIMATE INNER PORTION OF THE APPROACH SURFACE 23	SHEET: 8 OF 11



F.A.R. PART 77							
DESCRIPTION	STA/OFFSET	ELEVATION	SURFACE PENETRATED	SURFACE ELEVATION	AMOUNT OF PENETRATION	DISPOSITION	STAGE TO CORRECT
NONE							
	DESCRIPTION	DESCRIPTION STA/OFFSET	DESCRIPTION STA/OFFSET ELEVATION	DESCRIPTION STA/OFFSET ELEVATION SURFACE PENETRATED	DESCRIPTION STA/OFFSET ELEVATION SURFACE PENETRATED ELEVATION	DESCRIPTION STA/OFFSET ELEVATION SURFACE SURFACE AMOUNT OF PENETRATED ELEVATION PENETRATION	PENETIATED ELEVATION PENETIATION



- 1. AIRPORT ELEVATION IS 382' (NAVD 88).
- APPROACH SURFACES ARE 34:1 BEGINNING 200' BEYOND THE THRESHOLD.
- BASE MAP DATA FROM 5 FOOT CONTOUR MAPPING BASED ON JUNE 6, 2005 PHOTOGRAMMETRY.
- 4. REFER TO THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE—IN OBSTRUCTIONS.
- 5. PRIMARY SURFACE WIDTH IS 500'.
- 6. THERE ARE NO KNOWN ORDINANCE OR STATUTE HEIGHT RESTRICTIONS.
- 7. RUNWAY THRESHOLD 13: EL 344.8' RUNWAY THRESHOLD 31: EL 315.6' RUNWAY THRESHOLD 5: EL 382.0' RUNWAY THRESHOLD 23: EL 341.7'
- 8. ALL COORDINATES ARE NAD83, ELEVATIONS ARE NAVD88.

	r.A.K.	PART 77 SI	DREACE OF				ION)	
ID #	DESCRIPTION	STATION / OFFSET	ELEVATION	SURFACE PENETRATED	SURFACE ELEVATION	AMOUNT PENETRATION	DISPOSITION	STAGE CORRE
	NONE							
		1						

\Box		
RY	DATE	REVISION

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION

This ALP is for the future Newtok community, which will be located at the Mertarvik site.

NEWTOK AIRPORT NEWTOK, ALASKA AIRPORT LAYOUT PLAN AIRPORT AIRSPACE

03/19/2014 SHEET: 9 OF

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