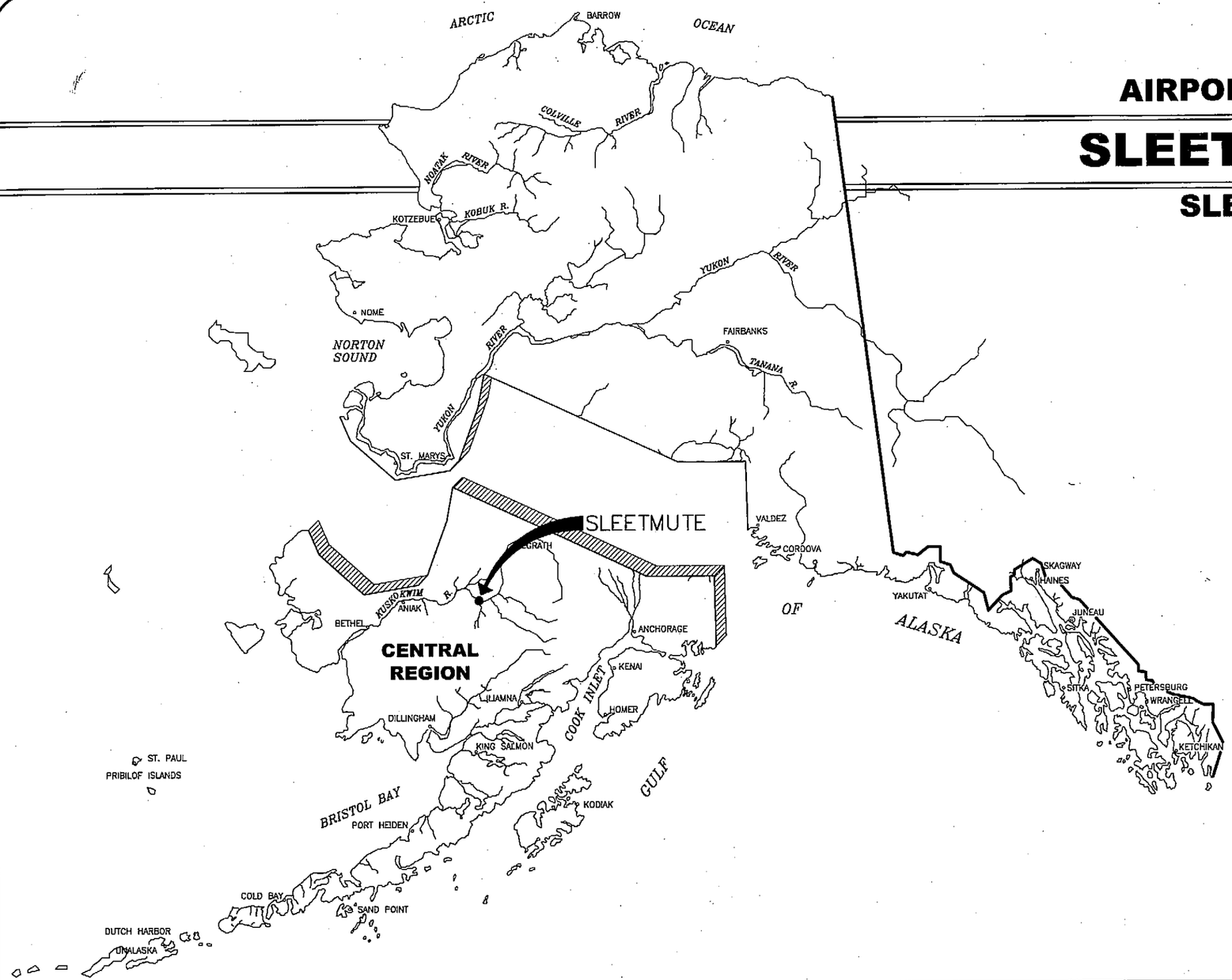
AIRPORT LAYOUT PLAN FOR

SLEETMUTE AIRPORT

SLEETMUTE, ALASKA

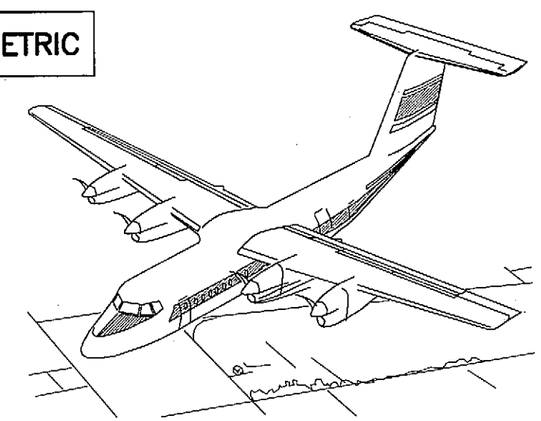
2003



DRAWING INDEX

1 – COVER SHEET AND INDEX
2 – VICINITY MAP AND DATA TABLES
3 – EXISTING LAYOUT PLAN
4 – PLAN AND PROFILE
5 – INNER APPROACH SURFACES PLAN AND PROFILE
6 – AIRPORT AIRSPACE
7 – PROPERTY PLAN
8 – PROPERTY PLAN
9 – PROPERTY PLAN
10 – NARRATIVE REPORT

METRIC



SPONSORED BY
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

CONCUR Gordon C. Keith DATE 10/23/03
GORDON C. KEITH, P.E. DIRECTOR OF CONSTRUCTION AND OPERATIONS

APPROVED Steven R. Horn DATE 10/23/03
STEVEN R. HORN, P.E. REGIONAL PRECONSTRUCTION ENGINEER

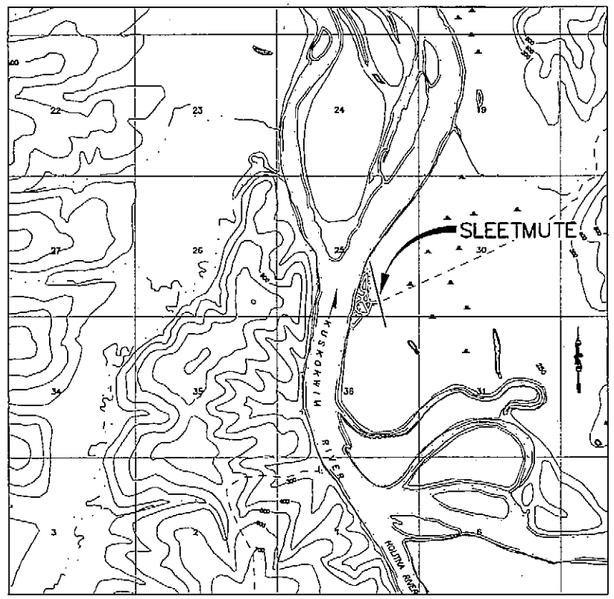
AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO AIP APPROVAL LETTER DATED 4/5/04
By: [illegible] DATE: 4/5/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-601

FAA AIRSPACE REVIEW NUMBER 03-AAL-47-NRA

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA
AIRPORT LAYOUT PLAN

SHEET 1 OF 10

File: and Date of Last Revision: W:\cad\data\Sleetmute\ALP 2002\dwg\alpsht1.dwg 10/22/2003 08:10:59 PM ADT

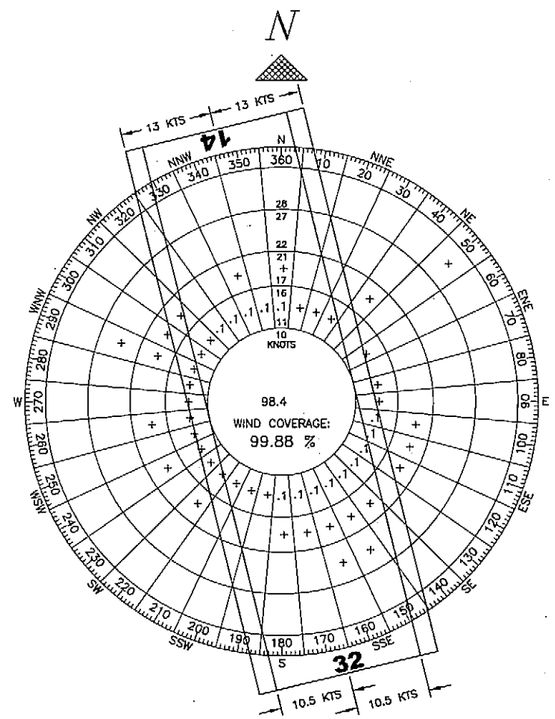


VICINITY MAP

T 19 N, R 44 W, SEC 25
SEWARD MERIDIAN
U.S.G.S. SLEETMUTE (C-4), ALASKA 1954

CONVERSION FACTORS FROM SI UNITS

TO CONVERT FROM	TO	MULTIPLY BY
STATION (1000 METERS (M))	FEET	3280.84
KILOMETER (KM)	MILE	0.6214
METER (M)	MILE	0.00062137
METER (M)	FOOT	3.28084
CENTIMETER (CM)	FOOT	0.0328084
CENTIMETER (CM)	INCH	0.3937008
SQUARE METER (M^2)	SQUARE FOOT	10.76391042
SQUARE METER (M^2)	SQUARE YARD	1.19599
SQUARE METER (M^2)	ACRE	0.00024711
CUBIC METER (M^3)	CUBIC FOOT	35.3146667
CUBIC METER (M^3)	CUBIC YARD	1.3079506
CUBIC METER (M^3)	GALLON (US LIQUID)	264.17204
CUBIC METER (M^3)	M. GAL.	0.26417204
KILOGRAM (KG)	POUND-MASS (LBF)	2.2046225
KILOGRAM (KG)	TON (SHORT)	0.00110231
NEWTON (N)	POUND-FORCE (LBF)	0.2248089
LUX (LX)	FOOTCANDLE	0.092903
DEGREE CELSIUS (°C)	DEGREE FAHRENHEIT	°F=(1.8 x °C)+32



WIND DATA

	WIND SPEED	R/W 14/32	TOTAL
WIND COVERAGE:	10.5 KNOTS	99.72%	99.72%
	13.0 KNOTS	99.88%	99.88%

SOURCE: NATIONAL CLIMATIC DATA CENTER FOR SLEETMUTE AIRPORT.

OBSERVATION PERIOD: 1 JUL 94 THROUGH 30 JUN 96.

NON-STANDARD CONDITIONS

ITEM	EXISTING	STANDARD	ULTIMATE
RSA LENGTH BEYOND RUNWAY ENDS	60m [200']	72m [240']	72m [240']

APPENDIX 2 OBSTRUCTION TABLE

RUNWAY	OBSTRUCTION	SURFACE ELEVATION	OBSTUCTION ELEVATION	DISPOSITION

BASIC DATA TABLE

RUNWAY DATA

ITEM		RUNWAY 14/32 EXISTING	RUNWAY 14/32 ULTIMATE
EFFECTIVE GRADE		0.00%	0.00%
% WIND COVERAGE	10.5 KNOTS	99.72%	99.72%
	13 KNOTS	99.88%	99.88%
INSTRUMENT RUNWAY		NONE	NPI
RUNWAY SURFACE		GRAVEL	GRAVEL
PAVEMENT STRENGTH (LBS.)		N/A	N/A
APPROACH SURFACES		20:1	20:1
VISIBILITY MINIMUM		1600m	1600m
RUNWAY LIGHTING		MIRL	MIRL
TOUCHDOWN ELEVATION	RUNWAY 14	58 m. [190']	58 m. [190']
	RUNWAY 32	58 m. [190']	58 m. [190']
RUNWAY MARKING		NONE	NONE
RUNWAY NAVIGATION AIDS		NONE	PAPI
RUNWAY TYPE		UTILITY	UTILITY
AIRCRAFT APPROACH CATEGORY		B	B
AIRCRAFT DESIGN GROUP		I	I
RUNWAY SAFETY AREA DIMENSION		36m x 1065m [120' x 3500']	36m x 1149m [120' x 3780']
RUNWAY DIMENSION		18m x 945m [60' x 3100']	18m x 1005m [60' x 3300']
RUNWAY OBJECT FREE AREA DIMENSION		120m x 1089m [400' x 3580']	120m x 1149m [400' x 3780']
RUNWAY OBJECT FREE ZONE DIMENSION		75m x 1065m [250' x 3500']	75m x 1125m [250' x 3700']
RUNWAY PROTECTION ZONE DIMENSIONS	INNER	76m [250']	150m [500']
	OUTER	137m [450']	210m [700']
	LENGTH	300m [1000']	300m [1000']
GEODETIC POSITIONS (N.A.D. 83)			
THRESHOLD -- 14	LAT.	61°42'16.70" N	61°42'16.70" N
	LONG	157°10'04.77" W	157°10'04.77" W
THRESHOLD -- 32	LAT.	61°41'47.03" N	61°41'45.15" N
	LONG	157°09'49.57" W	157°09'48.62" W

TAXIWAY DATA

ITEM	TAXIWAY EXISTING	TAXIWAY ULTIMATE
TAXIWAY WIDTH	12m [40']	10.5m [35']
TAXIWAY SAFETY AREA WIDTH	15m [49']	24m [79']
TAXIWAY OBJECT FREE AREA	27m [89']	40m [131']

AIRPORT DATA

ITEM		EXISTING	ULTIMATE
ICAO / NATIONAL AIRPORT IDENTIFIERS		PASL / SLQ	
AIRPORT ELEVATION (M.S.L.)	LAT.	58 m. [190']	58 m. [190']
AIRPORT REFERENCE POINT (A.R.P.)	LONG.	61°42'01.87 N"	61°42'00.92" N
		157°09'57.17" W	157°09'56.69" W
TAXIWAY LIGHTING		MITL	MITL
RAMP LIGHTING		NONE	NONE
MEAN MAX. TEMPERATURE, HOTTEST MONTH (JULY)		14°C (57°F)	14°C (57°F)
MAGNETIC DECLINATION, YEAR		21°37'E, 2003	
AIRPORT REFERENCE CODE		B-I	B-I
TERMINAL NAVIGATION AIDS		NONE	NONE
AIRPORT NAVIGATION AIDS		ROT. BEACON	ROT. BEACON

LEGEND

ITEM	EXISTING	ULTIMATE
PROPERTY LINE		
BUILDING RESTRICTION LINE		
AIRPORT REFERENCE POINT (A.R.P.)		
WIND CONE AND SEGMENTED CIRCLE		
CONTOURS	100	100
ROADWAYS		
BUILDINGS		
ROTATING BEACON		
SHORELINE		
FENCE	-X-X-X-	-X-X-X-
THRESHOLD		
MONUMENTS		
PAPI	N/A	

W:\cad\data\Sleetmute\ALP 2002\dwg\alpshl2.dwg 10/22/2003 02:41:00 PM ADT

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 2/5/04
By: [signature] DATE: 4/5/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

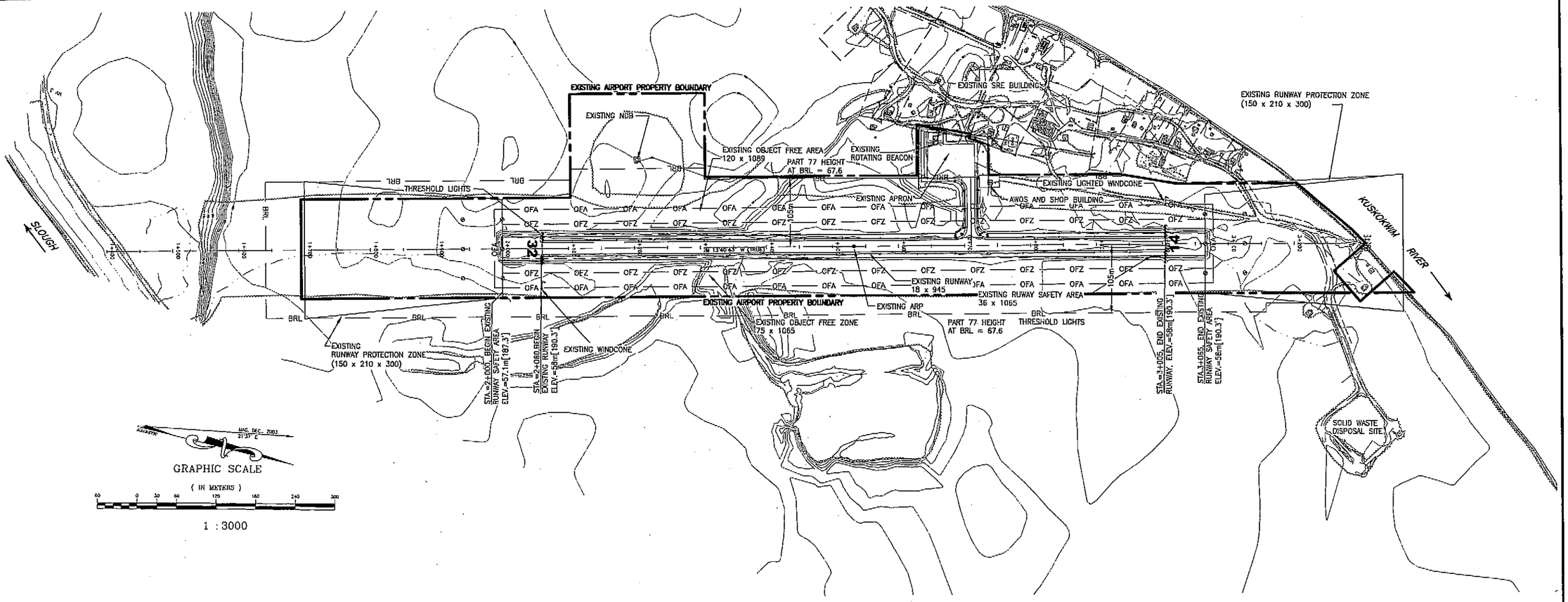
APPROVED: [signature] STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: [signature] HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

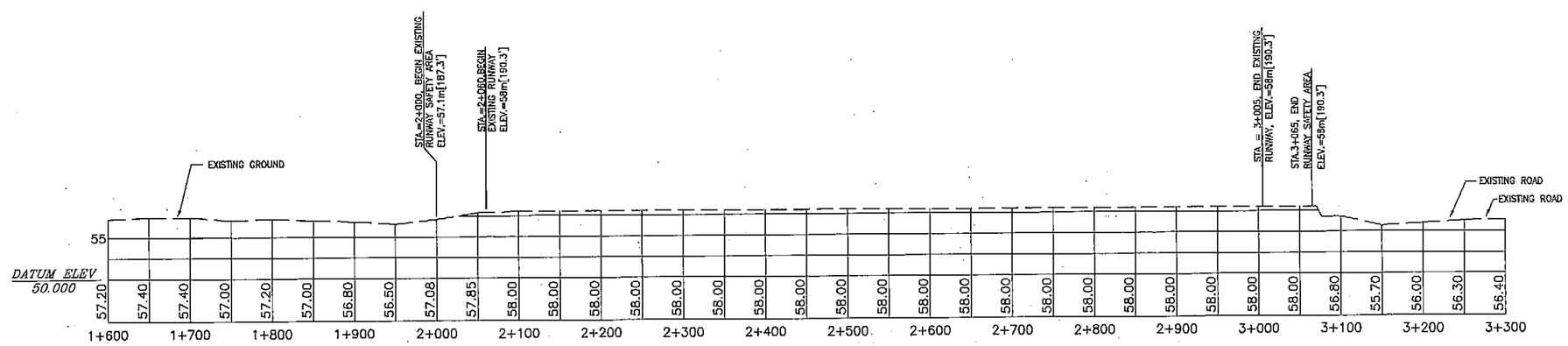
DATE 10/22/03
DESIGN JMR
DRAWN MGT
CHECKED TJS

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA

AIRPORT LAYOUT PLAN
AIRPORT DATA TABLES
VICINITY MAP

SHEET 2 OF 10





W:\cad\data\Sleetmute\ALP 2002\dwg\alpsht3.dwg 10/22/2003 03:03:51 PM ADT

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
SUBJECT TO ALP APPROVAL LETTER DATED 2/5/04

By: [signature] DATE: 2/5/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-610

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: [signature]
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: [signature]
HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

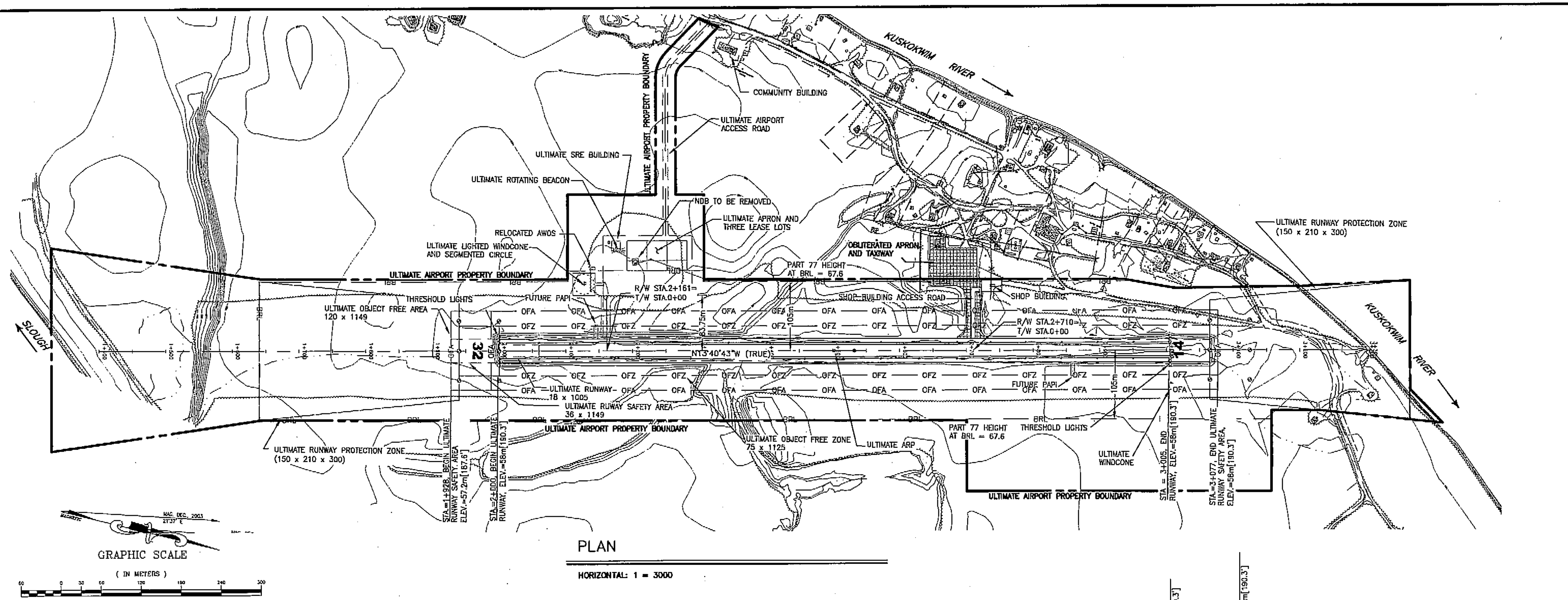
DATE 10/22/03
DESIGN JMR
DRAWN MGT
CHECKED TJS

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA

AIRPORT LAYOUT PLAN

EXISTING PLAN AND PROFILE

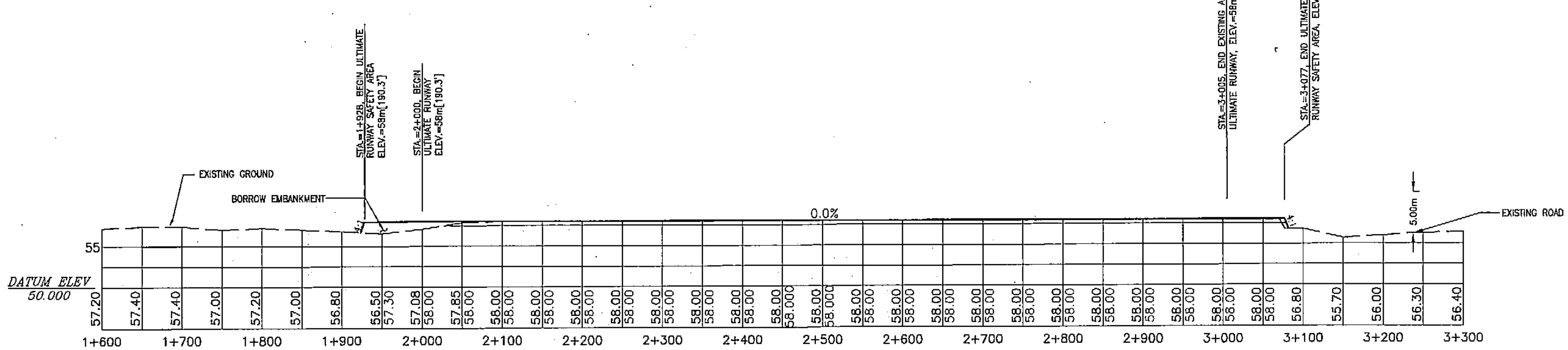
SHEET 3 OF 10



PLAN

HORIZONTAL: 1 = 3000

NOTE: NO OFZ OBJECT PENETRATIONS.



HORIZONTAL: 1 = 3000 VERTICAL: 1 = 150

W:\cad\data\Sleetmute\ALP 2002\dwg\alpsht3.dwg 10/22/2003 03:03:51 PM ADT

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 3/5/04
By: [signature] DATE: 3/5/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-610

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

DATE 05/06/03
DESIGN JMR
DRAWN MGT
CHECKED TJS

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA
AIRPORT LAYOUT PLAN
ULTIMATE PLAN AND PROFILE

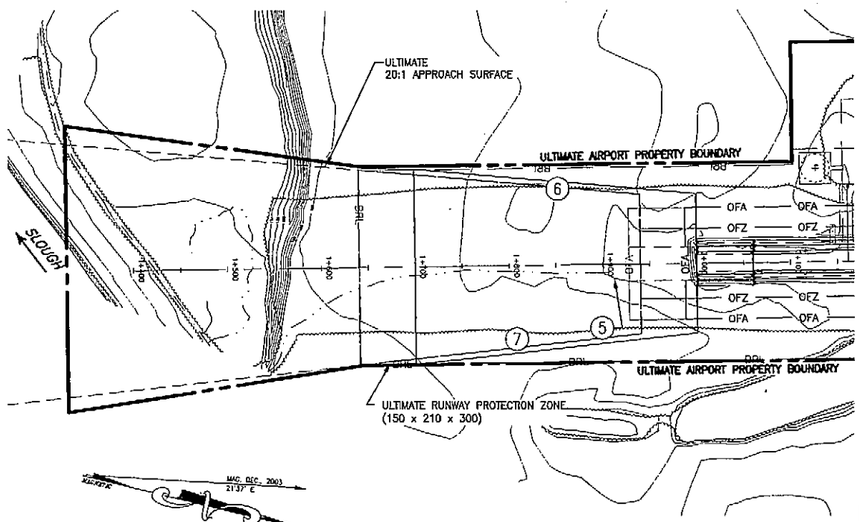
SHEET 4 OF 10

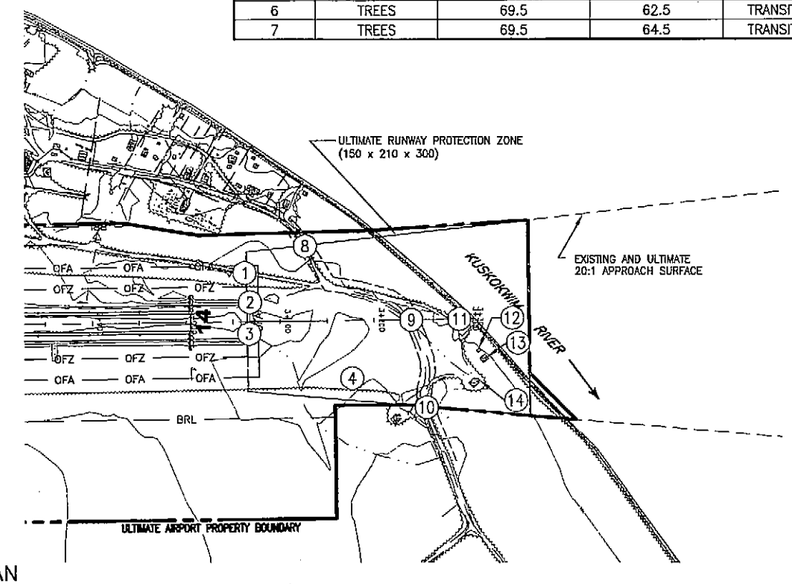
OBJECTS BENEATH THE APPROACH SURFACE

NUMBER	DESCRIPTION	ELEVATION	VERTICAL CLEARANCE	DISPOSITION
9	ROAD	56.2	2.34	NONE
10	ROAD	55.3	3.8	NONE
11	ROAD	56	4.09	NONE
12	BUILDING	55.9	6.3	REMOVAL
13	BUILDING	55.8	6.56	REMOVAL
14	BUILDING	55.7	6.34	REMOVAL

OBSTRUCTION TABLE FOR RUNWAY 14/32 APPROACHES

NUMBER	DESCRIPTION	OBJECT ELEV.	PART 77 ELEV.	SURFACE	APPROACH SLOPE	PENETRATION	DISPOSITION
1	ROAD	60.3	58	TRANSITIONAL	20:1	2.3	REMOVAL
2	TRAIL	62.1	58	TRANSITIONAL	20:1	4.1	REMOVAL
3	TRAIL	62.1	58	TRANSITIONAL	20:1	4.1	REMOVAL
4	TREES	68.5	67	TRANSITIONAL	20:1	1.5	REMOVAL
5	TRAIL	61	59	TRANSITIONAL	20:1	2	REMOVAL
6	TREES	69.5	62.5	TRANSITIONAL	20:1	7	REMOVAL
7	TREES	69.5	64.5	TRANSITIONAL	20:1	5	REMOVAL





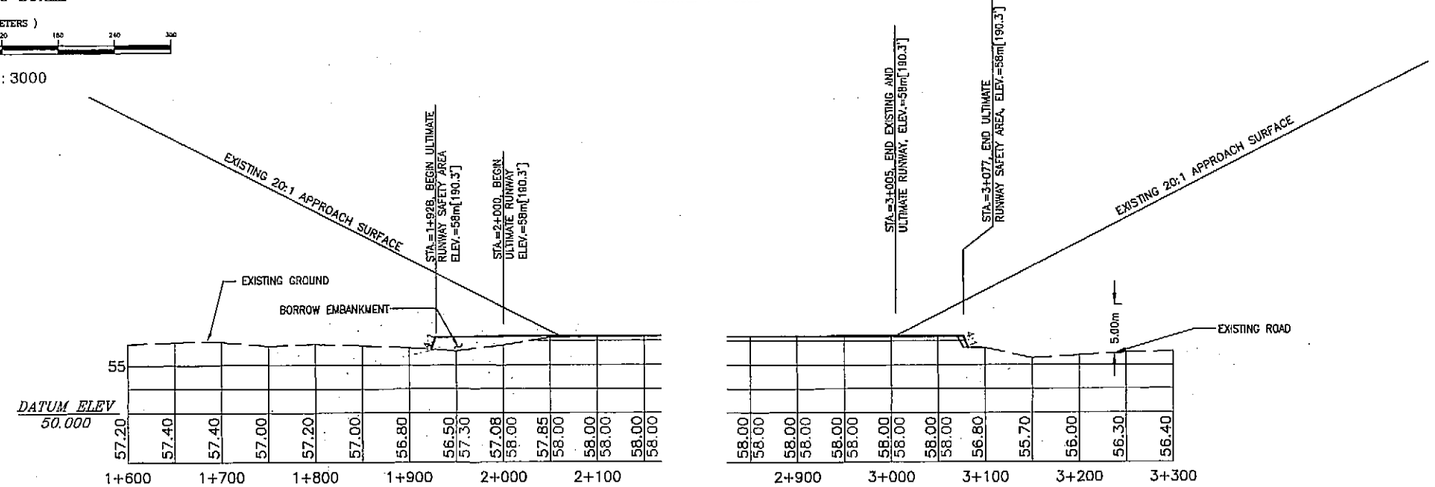
GRAPHIC SCALE

(IN METERS)

1 : 3000

PLAN

HORIZONTAL: 1 = 3000



HORIZONTAL: 1 = 3000 VERTICAL: 1 = 150

NOTES

1. NO THRESHOLD SITING SURFACE PENETRATIONS.
2. OBSTRUCTION CLEARANCE SLOPE > 50:1.

W:\cad\data\Sleetmute\ALP 2002\dwg\alpsht3.dwg 10/22/2003 03:03:51 PM ADT

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 3/5/04

By: [signature] DATE: 3/5/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: [signature]
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF

APPROVED: [signature]
HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

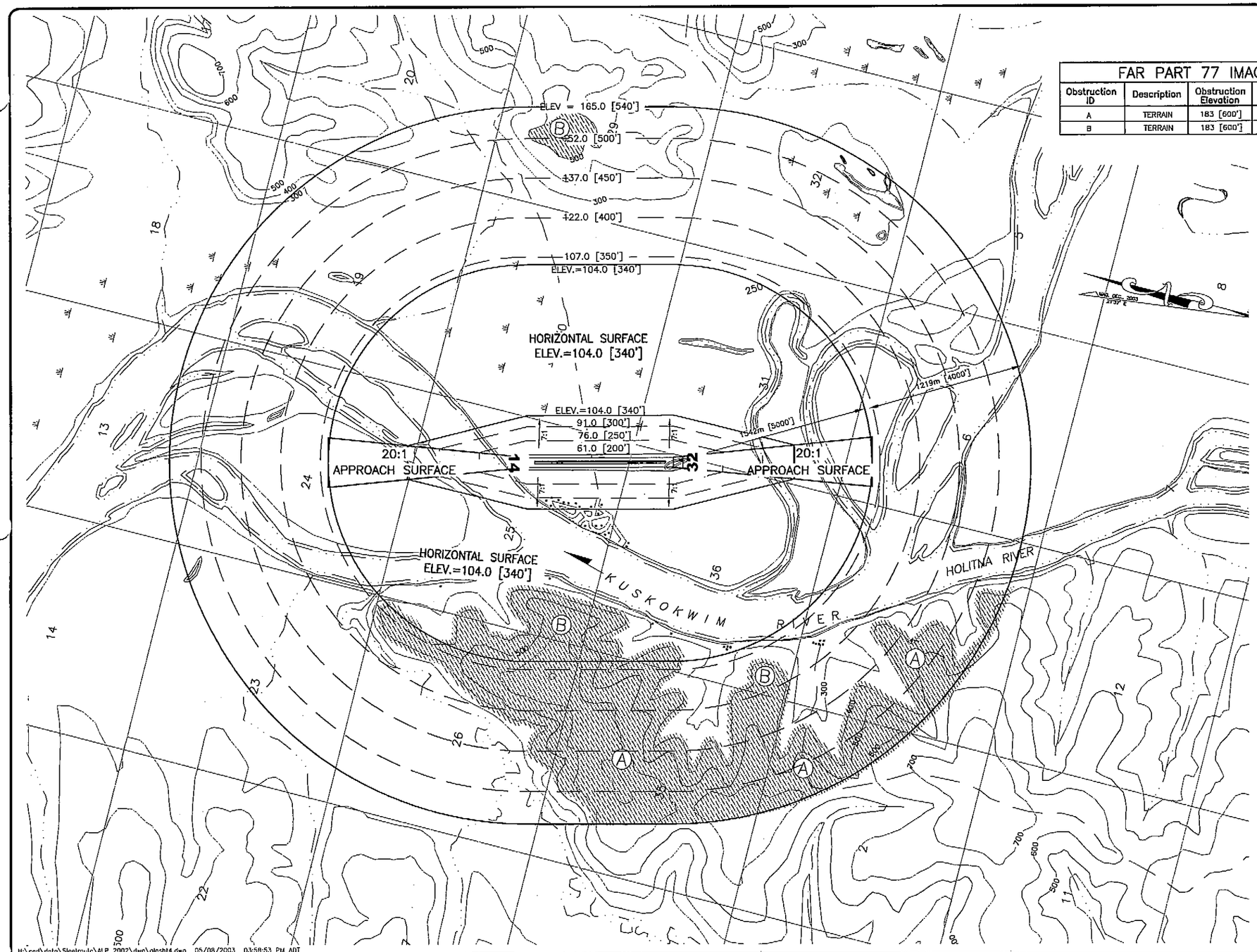
DATE 10/22/03
DESIGN JMR
DRAWN MGT
CHECKED TJS

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA

AIRPORT LAYOUT PLAN

INNER PORTION OF THE APPROACH SURFACES

SHEET 5 OF 10



FAR PART 77 IMAGINARY SURFACE OBSTRUCTION TABLE							
Obstruction ID	Description	Obstruction Elevation	Surface Penetrated	Part 77 Surface Elevation	Max. Amount of Penetration	Disposition	Stage
A	TERRAIN	183 [600']	CONICAL	103 [340']	80 [260']	N/A	EXISTING
B	TERRAIN	183 [600']	HORIZONTAL	103 [340']	80 [260']	N/A	EXISTING

NOTES

1. OBSTRUCTION ELEVATIONS ARE ESTIMATED FROM USGS MAPPING.
2. ULTIMATE AIRPORT ELEVATION IS 58 [190'].
3. USGS QUADRANGLE MAP SLEETMUTE C-4 (1954) WAS USED FOR THE BASE MAP.
4. PER APPENDIX 2, SECTION E OF PARAGRAPH 5, NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS.

LEGEND

PENETRATION INTO FAR PART 77 AIRSPACE

CREEK

GRAPHIC SCALE

2000 0 1000 2000 4000

(IN FEET)

H:\ced\data\Sleetmute\ALP 2002\dwg\alpsht4.dwg 05/08/2003 03:59:53 PM ADT

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 2/5/04

BY: DATE: 2/5/04

FAA AIRPORTS DIVISION ALASKAN REGION, 601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF

APPROVED: HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

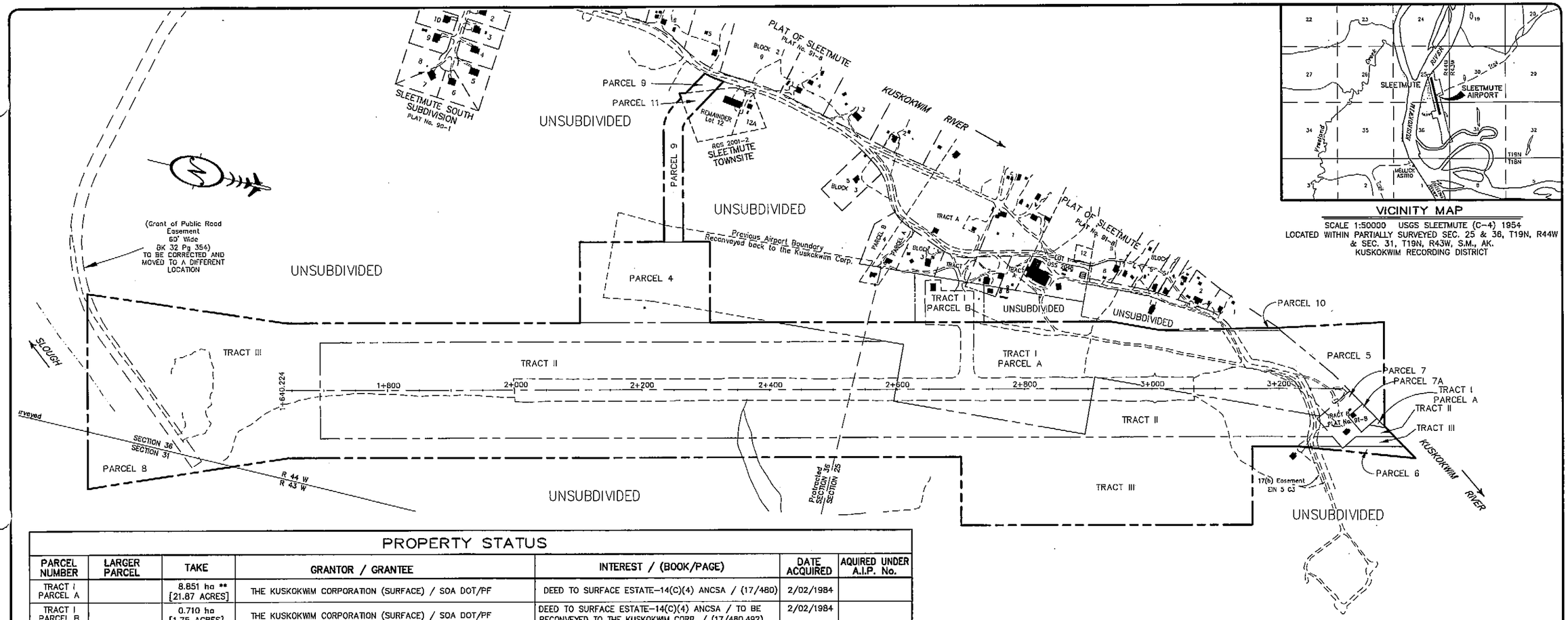
DATE 10/22/03
DESIGN JMR
DRAWN MGT
CHECKED TJS

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA

AIRPORT LAYOUT PLAN

AIRPORT AIRSPACE

SHEET 6 OF 10



VICINITY MAP

SCALE 1:50000 USGS SLEETMUTE (C-4) 1954
LOCATED WITHIN PARTIALLY SURVEYED SEC. 25 & 36, T19N, R44W & SEC. 31, T19N, R43W, S.M., AK.
KUSKOKWIM RECORDING DISTRICT

PROPERTY STATUS

PARCEL NUMBER	LARGER PARCEL	TAKE	GRANTOR / GRANTEE	INTEREST / (BOOK/PAGE)	DATE ACQUIRED	AQUIRED UNDER A.I.P. No.
TRACT I PARCEL A		8.851 ha ** [21.87 ACRES]	THE KUSKOKWIM CORPORATION (SURFACE) / SOA DOT/PF	DEED TO SURFACE ESTATE-14(C)(4) ANCSA / (17/480)	2/02/1984	
TRACT I PARCEL B		0.710 ha [1.75 ACRES]	THE KUSKOKWIM CORPORATION (SURFACE) / SOA DOT/PF	DEED TO SURFACE ESTATE-14(C)(4) ANCSA / TO BE RECONVEYED TO THE KUSKOKWIM CORP. / (17/480,492)	2/02/1984	
TRACT II		17.132 ha ** [42.33 ACRES]	STATE OF ALASKA, DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS / SOA DOT/PF	30 YR LEASE (SURFACE) / (17/544) Amended, does not affect term of lease / (18/145)	3/22/1984 10/02/1984	
TRACT III		20.367 ha ** [50.33 ACRES]	THE KUSKOKWIM CORPORATION (SURFACE) / SOA DCRA	HELD IN TRUST / (17/424) (2003-000075) TO BE ACQUIRED		
PARCEL 4		2.614 ha [6.46 ACRES]	THE KUSKOKWIM CORPORATION / SOA DOT/PF	NAVIGATIONAL AID FACILITY EASEMENT, 30 YEAR SURFACE LEASE / (19/327)	7/09/1986	
PARCEL 5		1.310 ha [3.24 ACRES]	STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES	TO BE ACQUIRED		
PARCEL 6		0.153 ha [0.38 ACRES]	THE KUSKOKWIM CORPORATION (SURFACE)	TO BE ACQUIRED		
PARCEL 7	0.324 ha [0.802 ACRES]	0.324 ha [0.802 ACRES]	HERBIE EQNATY (23/854)	TO BE ACQUIRED		
PARCEL 7A	0.100ha [0.246 ACRES]	0.100ha [0.246 ACRES]	SALLIE LOUISE & DAVID PAUL HOLLOWAY (23/503, 23/574)	TO BE ACQUIRED		
PARCEL 8		1.025 ha [2.53 ACRES]	THE KUSKOKWIM CORPORATION (SURFACE) / SOA DCRA	HELD IN TRUST / (17/424) (2003-000075) TO BE ACQUIRED		
PARCEL 9		0.739 ha [1.83 ACRES]	THE KUSKOKWIM CORPORATION (SURFACE)	TO BE ACQUIRED		
PARCEL 10		0.060 ha [0.15 ACRES]	THE KUSKOKWIM CORPORATION (SURFACE) / SOA DOT/PF	QC DEED TO SURFACE ESTATE / (28/646)	4/14/1997	PN: 51799
PARCEL 11	0.614 ha [1.52 ACRES]	0.114 ha [0.28 ACRES]	THE KUSKOKWIM CORPORATION (SURFACE)	TO BE ACQUIRED		

** area does not include Parcel 7

SOA DOT/PF = STATE OF ALASKA DEPT. OF TRANSPORTATION & PUBLIC FACILITIES
SOA DCRA = STATE OF ALASKA, DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS

LEGEND
- AIRPORT BOUNDARY
- PARCEL BOUNDARY
- RUNWAY CENTERLINE

GRAPHIC SCALE
(IN METERS)
60 0 30 60 120 180 240 300

1 : 3000

SEE SHEETS 2 AND 3 FOR ADDITIONAL DETAIL

Modified By: plh
MODIFIED
Date Modified: 4/14/03, 4/30/03, 6/11/03
DATE
Plot Ratio and View:
PLOT
File:
G:\DATA\SLEETMUTE\ROW\7903VP01.DWG

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALF APPROVAL LETTER DATED 2/5/04

By: [signature] DATE: 2/5/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

BY	DATE	REVISIONS
plh	6/11/03	Modified Parcel 7, added Parcel 7A
plh	4/13/03	Updated Property Status Table

DESIGNED BY JSR
CHECKED BY WDC
DRAWN BY JSR
DATE 1/24/97

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA
AIRPORT LAYOUT PLAN
PROPERTY PLAN

SHEET 1 OF 3

NOTES

1. The Field Survey was performed by Tryck Nyman Hayes, Inc., September 19 to September 28, 1995 and August 5 to August 8, 1996.
2. The Basis of Bearings is the Geodetic Forward Bearing, S 82°58'12" E, from NGS Station "Mellick Astro" 1951 to NGS Station "Tower" 1951, per National Geodetic Survey Data Sheets dated July 1995.
3. The Bearings shown are local plane bearings as oriented to the Basis of Bearings, and distances shown are reduced to horizontal ground distances.
4. The Basis of Elevations is NGS Station "Mellick Astro" 1951, per NGS data sheet dated July 1995, Elevation = 72.3m M.S.L.
5. The minimum closure of all traverses meets or exceeds 1:10,000.
6. The Centerline of the existing runway was located by establishing the mid-point of each set of runway end threshold lights.
7. The lines between Sections 25 and 36, T19N, R44W, and between Section 36, T19N, R44W and Section 31, T19N, R43W, Seward Meridian, have not been surveyed. The locations shown are computed from GPS ties to the WCMC's on the line between Sections 36 and 1, and the BLM plat of T19N, R44W, S.M., Alaska, approved March 31, 1978.
8. Meter to Foot conversion factor is 3937/1200.
9. The natural meanders of the ordinary high water line of the Kuskokwim River form the northerly property boundary of Tract I–Parcel A, Tract II, Tract III, Parcel 6, and Parcel 7, and the southerly property boundary of Parcel 5.
10. The following Documents, recorded in the Kuskokwim Recording District, were referenced this Survey:
    - Plat of Sleetmute, Plat No. 91–8, recorded 7/25/91.
    - Tract I
      - Deed, recorded 2/22/64, in Book 17, at Page 480
      - Commissioner's Deed, dated 11/21/66, recorded in Book 19, at Page 525
    - Tracts II and III
      - Quitclaim Deed, recorded 2/10/84, in Book 17, at Page 424
      - Lease Amendment No. 1, recorded 10/12/84, in Book 18, at Page 143
    - Parcel 4
      - Navigational Aid Facility Easement, recorded 7/11/86, in Book 19, at Page 327

(Grant of Public Road Easement 60' Wide BK 32 Pg 354) TO BE CORRECTED AND MOVED TO A DIFFERENT LOCATION

LEGEND

- FOUND 1975 A.D.A. REBAR AND ALCAP
- SET REBAR AND ALCAP LS 7537 1995
- MONUMENT FOUND
- FOUND NGS BRASS CAP MONUMENT
- FOUND B.L.M. BRASS CAP MONUMENT
- TBM SET
- 189.513m [654.57'] MEASURED OR COMPUTED DIMENSION, METERS [FEET]
- ((654.95')) RECORD DIMENSION, [FEET] SEE NOTE No. 10

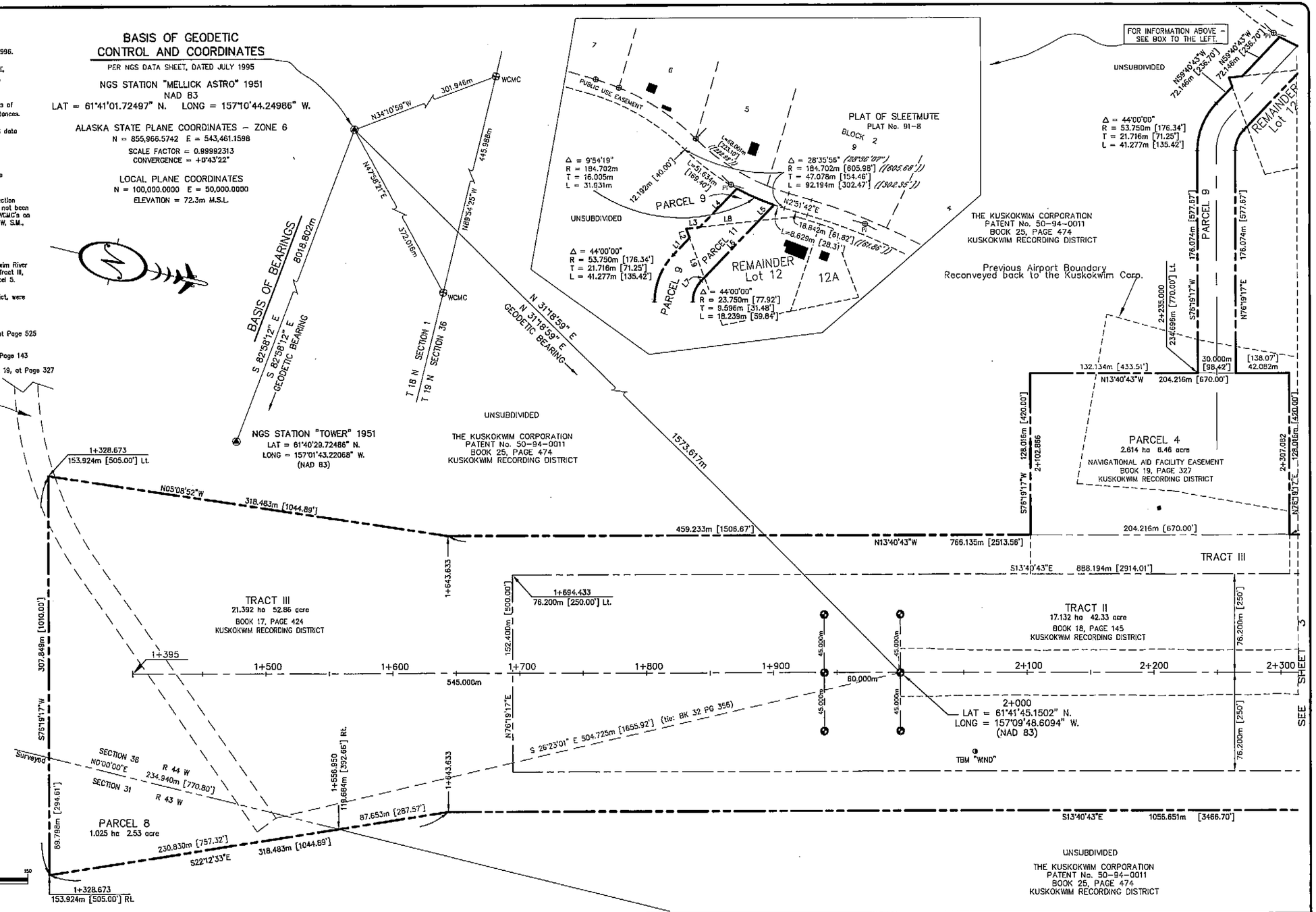
LINE TABLE		
LINE	BEARING	DISTANCE
L1	N 59°40'43" W	18.283
L2	S 56°00'00" W	7.560
L3	N 19°49'00" W	10.631
L4	N 59°40'43" W	42.428
L5	S 59°40'43" E	17.318
L6	S 59°40'43" E	61.788
L7	S 59°40'43" E	3.858
L8	N 19°49'00" W	46.806
L9	N 56°00'00" E	33.288

GRAPHIC SCALE

(IN METERS)

30 0 15 30 60 90 120 150

1 : 1500



Modified By: plh
MODIFIED
Date Modified: 4/14/03, 6/11/03
DATE
Plot Ratio and View:
PLOT
File:
C:\DATA\SLEETMUTE\ROW\79D3VP02.DWG

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 2/4/04

By: [signature] DATE: 2/5/04
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

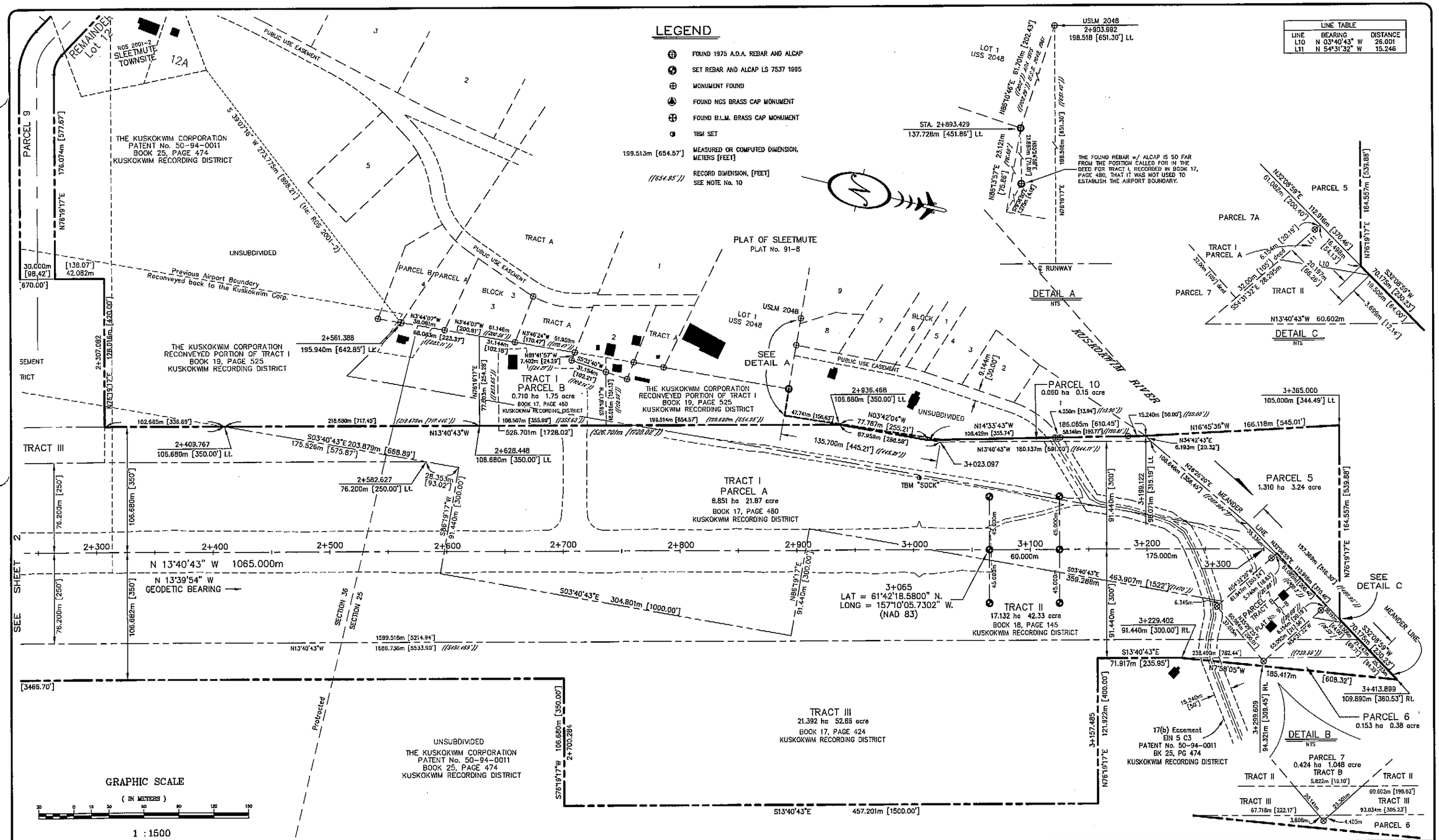
BY	DATE	REVISIONS
plh	6/11/03	Public Road Esmt. BK32 PG354, to be changed
plh	4/13/03	Added easements and new subdivisions near airport

DESIGNED BY JSR
CHECKED BY WDC
DRAWN BY JSR
DATE 1/24/97

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA
AIRPORT LAYOUT PLAN
PROPERTY PLAN

SHEET 2 OF 3



Modified By: plh
MODIFIED
Date Modified: 4/14/03, 6/11/03
DATE
Plot Ratio and View:
PLOT
File:
G:\DATA\SLEETMUTE\ROW\7903VP02.DWG

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
SUBJECT TO ALP APPROVAL LETTER DATED 2/5/04
By: [signature] DATE: 2/5/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

BY	DATE	REVISIONS
plh	6/11/03	Modified Parcel 7, added Parcel 7A
plh	4/13/03	Added easements and new subdivisions near airport

DESIGNED BY JSR
CHECKED BY WDC
DRAWN BY JSR
DATE 1/24/97

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA
AIRPORT LAYOUT PLAN
PROPERTY PLAN

SHEET 3 OF 3

SLEETMUTE AIRPORT
AIRPORT LAYOUT PLAN
NARRATIVE

A. Purpose

This narrative report is included with the Airport Layout Plan (ALP) for Sleetmute in accordance with Federal Aviation Administration (FAA) Airport Design Advisory Circular (AC) 150/5300-13, Change 7, Appendix 7. The design of this project is being completed in metric units and all measurements and units are in accordance with ASTM E 380-93. Metric dimensions for future construction items are in accordance with FAA AC 150/5300-13. English dimensions are approximate except when used for existing conditions and are for information only. The rationale for improvements to the Sleetmute is outlined in this narrative report.

B. Introduction

Sleetmute is located on the east bank of the Kuskokwim River, 1.5 miles north of its junction with the Holitna River. It lies 130 kilometers (80 miles) east of Aniak, 267 kilometers (166 miles) northeast of Bethel, and 400 kilometers (250 miles) west of Anchorage. It lies at approximately 61degrees N Latitude and -157 degrees W Longitude. (Sec.25, T019N, R044W, Seward Meridian.)

The 2000 U.S. census documents a population of 100 persons at Sleetmute.

Population History:

1940 86
1950 120
1960 122
1970 109
1980 107
1990 105
2000 100

Sleetmute was founded by Ingalik Indians. The Sleetmute Airport was originally constructed in the early 1940's at a location adjacent to the present location. In 1986, the runway was realigned to its present location. Most cash income in Sleetmute is derived seasonally from BLM firefighting, trapping, or from cannery work in other communities. The school is the primary employer. One resident holds a commercial fishing permit. 60% of the village's food is derived from subsistence fishing, hunting and gathering. Poor fish returns since 1997 have significantly affected the community. Transportation to the community is accomplished by air and seasonal river access. Air transport serves as the sole year round mode of transportation to Sleetmute.

C. Airport Usage and Forecasts

The Alaska Aviation System Plan (AASP) has designated this airport as a Community Class Airport, which is defined as the primary access to a small rural community of at least 25 permanent year-round residents without reliable alternate year round access.

Since there is no tower at the Sleetmute Airport, estimates of aircraft are based on the fleet of current users and current schedules and the Airport Master Record (FAA Form 5010). The FAA Form 5010 reports the following data for annual operations:

Air Taxi	700
GA Local	100
GA Itinerant	50
Military	0
Total	850

The FAA reports 850 enplanements at Sleetmute for 2002.

A survey conducted by the current operators report the following data for annual operations:

Air Taxi	864
Charters	403

The current operators report 2,016 enplanements at Sleetmute for 2002.

See Table 1 for operators and aircraft using the Sleetmute Airport.

Currently, Hageland Aviation operates a daily flight to Sleetmute six days a week from Aniak to Sleetmute. Flight Alaska, Arctic Transportation Services, Inland Air Service, and Tanana Air all operate a flight to Sleetmute three days a week from Aniak to Sleetmute. Vanderpool Flying Service and Everts Air Fuel use the Sleetmute airport by charter only. Vanderpool Flying Service departs from Red Devil and Everts Air Fuel departs from Fairbanks and Kenai. All operators deliver freight to Sleetmute. All operators with scheduled flights deliver the mail to Sleetmute. Inland Air Service holds the main medical contract, but all operators assist with medical flights. Everts Air Fuel operates one flight a month to Sleetmute. Era Aviation, Northern Air Cargo and Evergreen International do not currently conduct any operations at the Sleetmute airport nor do any of these operators plan to in the future. There is one permanently based single engine aircraft in Sleetmute. The airport is currently served primarily by single engine airplanes within the Airplane Category A-1.

See Table 2, for the forecast of future operations according to the survey conducted by the current operators. The projected future aircraft operations are based on current conditions for 5, 10, and 20 years into the future. These estimates are based on population forecasts, forecasts of current activity levels along with phone surveys of the carriers. The growth used for the Sleetmute Airport is estimated to be a flat growth rate. These parameters were considered to be a better predictor of the future activity than combining traditional forecasting parameters of the future operations with the future aircraft.

D. Staged Development

Near-Term Development (0-5 years)

Near-term development will consist of purchasing a motor grader. Which is estimated to cost $186,667 in 2002 dollars.

Mid-Term Development (6-10 years)

There is no mid-term development plan for Sleetmute Airport.

Long-Term Development (11-20 years)

Long-term development will bring the existing runway into compliance with B-I airport standards and construct a new aircraft-parking apron. Work will include increasing the runway length to 1,005 meters (3,300 feet) and the safety areas, resurfacing the existing runway with a 250-millimeter (9 inch) aggregate surface course and constructing a new aircraft parking apron, new taxiway, and access road to the new apron. Additional lighting, wind cones, segmented circle, installation of PAPI's and a snow removal equipment building will also be constructed. It is estimated to cost $2,400,000 in 2002 dollars.

E. Design Rationale

The major needs for this airport are to upgrade the existing facilities to current B-I Airport Reference Code standards and to relocate the existing apron.

1. Airport Reference Code (ARC)

The existing Airport Reference Code is B-I. There are a category A-I, A-II, and A-III aircraft operating on a regular basis at this facility.

The most demanding aircraft to use the airport on a regular basis is the Cessna 207 (Super Skywagon). The Cessna 207, a design group A-I aircraft has an approach speed of 76.7 knots, a wingspan of 10.93 meters (36 feet), and a maximum take off weight of 1,724 kg (3,800 lbs).

2. Wind Coverage

A wind coverage analysis was performed with wind data obtained from the National Climatic Data Center for the Sleetmute Airport. Wind coverage at the Sleetmute Airport is currently 99.72% at 10.5 knots and 99.88 % at 13 knots based on this wind data. No change to the runway alignment is necessary.

3. Runway

The existing runway length is 945 meters (3,100 feet) and width is 18 meters (60 feet).

The length of the existing runway is being extended to 1,005 meters (3,300 feet) to accommodate 100% of the small aircraft with less than 10 passenger seats. This length is necessary for reasonable safety standards based on the expected use of the airport. The existing safety area is being extended 12 meters (39 feet) off each runway end to meet the accepted standard length of 72 meters (240 feet).

2002 Yukon-Kuskokwim Delta Transportation Plan recommends that the Sleetmute airport runway dimensions be increased to 1,005 meters (3,300 feet) in length and 18 meters (60 feet) wide in the long-term development plan.

4. Taxiway

There is one taxiway, which exits from Runway 14/32 and is approximately 12 by 9.75 meters (40 by 320 feet) in size. A new taxiway will exit from Runway 14/32 at station 2+161.5, approximately 100 meters (240 feet) north of the approach end of Runway 32. This taxiway will be constructed to a 10.5 meters (35 feet) width by 102.5 meters (336 feet) in length and extend to the east edge of the apron. The safety area on this taxiway will be 24 meters (79 feet). The safety area dimension is standard for Airplane Design Group II. A portion of the existing taxiway will remain for access to the AWOS and shop building.

5. Navigation Aids

The state owned NDB will be removed when the ultimate apron is constructed. PAPI's will be installed on both runway ends.

6. Apron

The existing Apron is 51.8 meters (170 feet) wide and 76.2 meters (250 feet) in length. Future expansion of the existing apron is restricted by the close proximity of the village. An ultimate apron will be constructed approximately 500 meters (1640 feet) south of the existing apron, in an area suitable for further development. The ultimate apron is set back 83.75 meters (275 feet) from the runway centerline. The ultimate apron will measure 80 meters (255 feet) by 134 meters (439 feet). Four aircraft tie downs are proposed for the apron. The aircraft parking area will meet the accepted standards for a community class airport. The existing snow removal equipment building will be removed and a new snow removal equipment building will be constructed on the ultimate apron. The existing apron will be obliterated.

7. Access Roads

A new access road will be constructed from the existing village road to the proposed apron location for access to the aircraft parking area. This road will be approximately 412.5 meters (1,353 feet) in length and 7.5 meters (24.5 feet) wide.

F. Property Status

The existing Sleetmute Airport is owned and operated by DOT & PF on approximately 53.50 hectares (132.20 acres) of land. A property plan has been included as part of this ALP.

G. Hazards to Navigation

The existing landfill is located 363 meters (1,200 feet) Northeast of runway end 14. This is less than the recommended 1,524 meters (5,000 feet). The Department of Environmental Conservation has no plans to relocate the existing landfill as of January 22, 2003.

H. Community Involvement

The residents of the village of Sleetmute and neighboring villages have been informed of the planned development by the Alaska DOT/PF Environmental Section by written correspondence and through a public meeting workshop held at Sleetmute. The completion of this project requires an Environmental Assessment which provides additional opportunities for community input. Letters from residents of the community are on file at DOT, Central Region offices. The Alaska DOT/PF Environmental Section sent scoping letters to the required governmental agencies on July 19, 1998.

I. Modifications to Standards

The existing runway length is 945 meters (3,100 feet) with safety areas that extend 60 meters (200 feet) past the end of the runwway.

J. Encroachments in Part 77 Surfaces

There are terrain obstructions on the west side of the airport. The terrain penetrates the horizontal and conical surfaces to a maximum height of 80 meters (260 feet). The obstructions will not be removed.

K. Future Land Development

Property will be acquired around the existing airport for the long-term development plan. Strucures located on property to be acquired will be removed.

L. Appendix 2 Obstructions

Appendix 2 section e of paragraph 5 of the Airport Design AC is for approach end of runways expected to support instrument straight-in night operations. It states that no object should penetrate a surface that starts 200 feet out from the threshold and at the elevation of the runway centerline at the threshold and slopes upward from the starting point at a slope of 20(horizontal) to 1(vertical). There are no threshold siting surface object penetrations for runway 2-20.

Table 1
Operators and Aircraft Using Sleetmute

OPERATOR	AIRCRAFT	DESIGN GROUP
Flight Alaska	Cessna 207	A-I
Arctic Transportation Services	Cessna 207	A-I
	Casa 212	A-II
Vanderpool Flying Service	Cessna 185	A-I
	Cessna 207	A-I
Inland Air Service	Cessna 172	A-I
	Cessna 207	A-I
Tanana Air	Piper Saratoga	A-I
Hageland Aviation	Cessna 207	A-I
Evert's Fuel	C-46	A-III

Table 2
Forecast of Future Operations

ITEM	Present	0-5 yrs	6-10 yrs	11-20 yrs
Total Annual Operations	1267	1267	1267	1267
Annual Enplanements	2016	2016	2016	2016
Annual Scheduled Operations	864	864	864	864
Annual Non-Scheduled Operations	403	403	403	403

W:\cad\data\Sleetmute\ALP 2002\dwg\alpsht6.dwg 10/20/2003 03:57:06 PM ADT

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 4/1/04
By: DATE: 4/1/04
FAA AIRPORTS DIVISION
ALASKAN REGION, 601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-47-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
APPROVED: STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

DATE 10/22/03
DESIGN JMR
DRAWN MGT
CHECKED TJS

SLEETMUTE AIRPORT
SLEETMUTE, ALASKA

AIRPORT LAYOUT PLAN
NARRATIVE REPORT

SHEET 10 OF 10