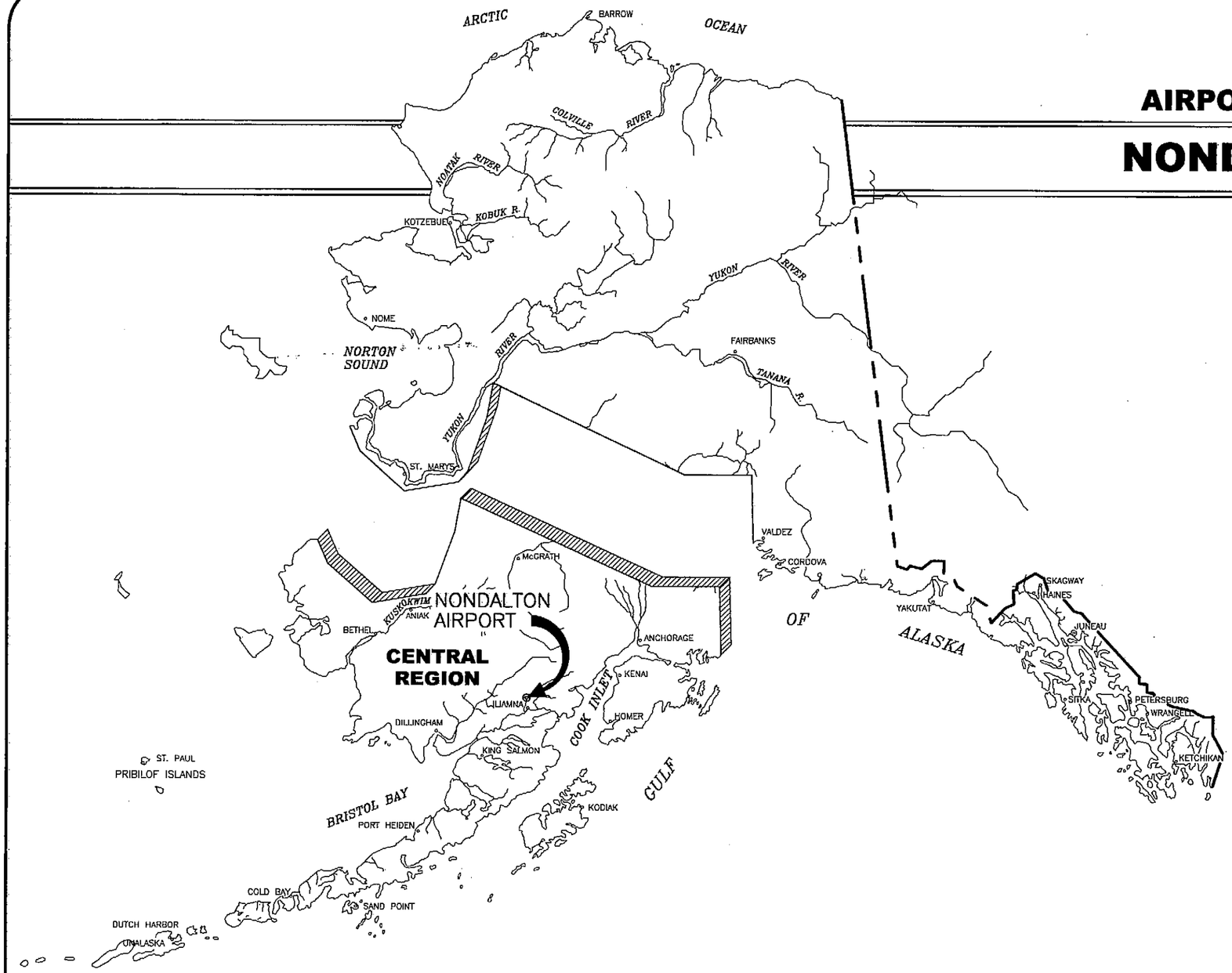
AIRPORT LAYOUT PLAN FOR

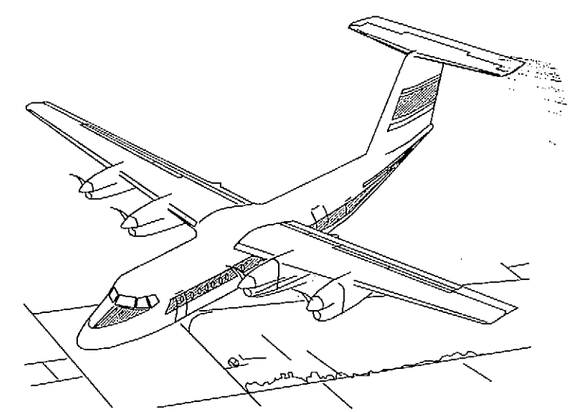
NONDALTON AIRPORT

2004



DRAWING INDEX

1 – COVER SHEET AND INDEX
2 – VICINITY MAP AND DATA TABLES
3 – EXISTING LAYOUT PLAN
4 – RUNWAY 02–20 PLAN AND PROFILE
5 – RUNWAY 12–30 PLAN AND PROFILE
6 – R/W 02–20 INNER PORTION OF THE APPROACH SURFACES
7 – R/W 12–30 INNER PORTION OF THE APPROACH SURFACES
8 – AIRPORT AIRSPACE
9 – PROPERTY PLAN
10 – PROPERTY PLAN
11 – NARRATIVE REPORT



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

CONCUR _____ DATE 7/2/04
STEVEN R. HORN, P.E. — CONSTRUCTION & OPERATIONS DIRECTOR

APPROVED _____ DATE 7/2/4
ROBERT A. CAMPBELL, P.E. — REGIONAL PRECONSTRUCTION ENGINEER

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 7/13/04
By: _____ DATE: 7/15/04
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

F.A.A. AIRSPACE REVIEW NUMBER: 03–AAL–23NRA

NONDALTON AIRPORT
AIRPORT LAYOUT PLAN

SHEET 1 OF 11

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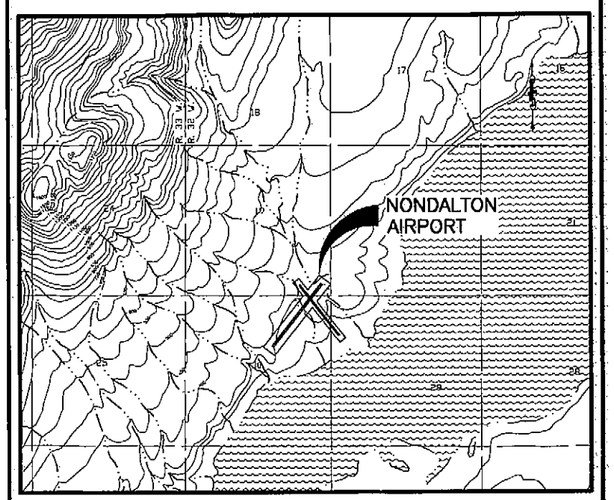
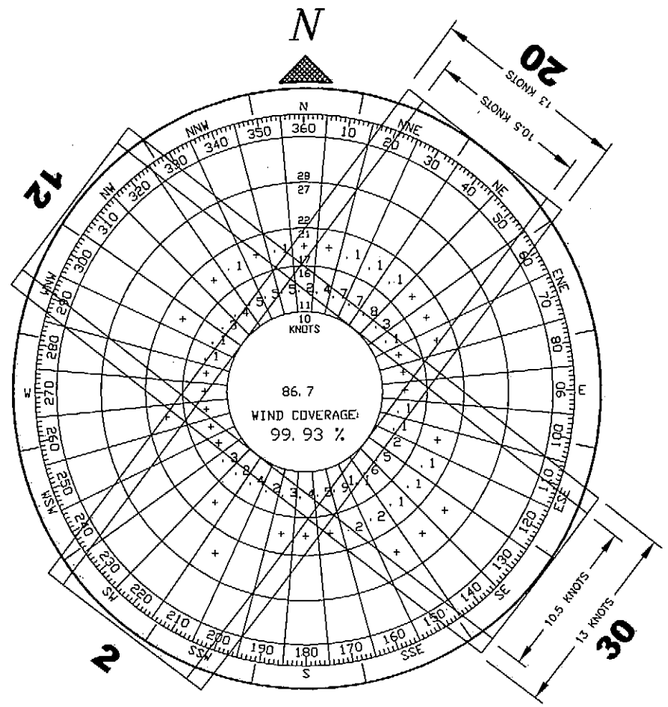
Date of Last Revision:



VICINITY MAP

T 2 S, R 32 W, SEC. 19 & 30
SEWARD MERIDIAN
U.S.G.S. ILIAMNA (D-5), ALASKA



WIND DATA

WIND COVERAGE:	SPEED	R/W 2/20	R/W 12/30	TOTAL
	10.5 KNOTS	93.5%	94.53%	99.52%
	13 KNOTS	96.44%	96.98%	99.93%

SOURCE: HATTENBURG DILLEY & LINNELL ENGINEERING CONSULTANTS
STATION: NONDALTON, ALASKA
PERIOD: 05/2002 – 05/2003

MODIFICATIONS TO STANDARDS

ITEM	EXISTING	STANDARD	FUTURE
RUNWAY 12 APPROACH	9.3:1	20:1	RESTRICTED USE

BASIC DATA TABLE

RUNWAY DATA

ITEM		2 / 20 EXISTING	2 / 20 FUTURE	12 / 30 FUTURE
AIRPORT APPROACH CATAGORY		A	A	A
AIRPORT DESIGN GROUP		II	II	I
APPROACH SURFACES		20:1	20:1	20:1
INSTRUMENT RUNWAY		VISUAL	NPI	VISUAL
PAVEMENT STRENGTH		N/A	N/A	N/A
RUNWAY TYPE		UTILITY	UTILITY	UTILITY
% WIND COVERAGE	10.5 KNOTS	93.5%	93.5%	94.53%
	13 KNOTS	96.44%	96.44%	96.98%
RUNWAY DIMENSION		75'x2800'	75'x2800'	60'x2240'
RUNWAY SAFETY AREA DIMENSION		150'x3400'	150'x3400'	120'x2720'
GEODETIC POSITIONS (N.A.D. 83)				
THRESHOLD – 2	(LCMF) LAT.	*59°58'37.91" N	*59°58'37.91" N	
	(LCMF) LONG.	*154°50'37.84" W	*154°50'37.84" W	
THRESHOLD – 20	(LCMF) LAT.	*59°58'59.75" N	*59°58'59.75" N	
	(LCMF) LONG.	*154°50'04.22" W	*154°50'04.22" W	
THRESHOLD – 12	LAT.			59°58'59.29" N
	LONG.			154°50'19.43" W
THRESHOLD – 30	LAT.			59°58'42.02" N
	LONG.			154°49'52.02" W
RUNWAY TOUCHDOWN ELEVATION		301.4'/310.3'	301.4'/310.3'	271.2'/316'
RUNWAY LIGHTING		M.I.	M.I.	M.I.
RUNWAY PROTECTION ZONE DIMENSIONS	INNER	250'	500'	250'
	OUTER	450'	700'	450'
	LENGTH	1000'	1000'	1000'
RUNWAY MARKING		NONE	NONE	NONE
RUNWAY OBJECT FREE AREA DIMENSION		500'x3400'	500'x3400'	400'x2720'
RUNWAY OBSTACLE FREE ZONE DIMENSION		250'x3200'	250'x3200'	250'x2640'
VISIBILITY MINIMUM		VISUAL	1 S.M.	VISUAL
RUNWAY NAVIGATION AIDS		NONE	PAPI	NONE
RUNWAY SURFACE		GRAVEL	GRAVEL	GRAVEL
EFFECTIVE GRADE		0.31%	0.31%	2.0%

AIRPORT DATA

ITEM		EXISTING	FUTURE
ICAO IDENTIFIER		NONE	NONE
NATIONAL AIRPORT IDENTIFIER		NNL	NNL
AIRPORT ELEVATION (M.S.L.)		310.5	316
AIRPORT REFERENCE POINT (A.R.P.)	(LCMF) LAT.	*59°58'48.83" N	**59°58'49.64" N
	(LCMF) LONG.	*154°50'21.03" W	**154°50'14.23" W
MEAN MAX. TEMPERATURE, HOTTEST MONTH (JULY)		55.6°F	55.6°F
TERMINAL NAVIGATION AIDS		NONE	NONE
AIRPORT NAVIGATION AIDS		ROT. BEACON	ROT. BEACON
TAXIWAY LIGHTING & MARKING		M.I.	M.I.
RAMP LIGHTING		NONE	NONE
MAGNETIC DECLINATION, YEAR		18°53'E,2003	

* THE COORDINATE VALUES SHOWN AS (LCMF) ARE TAKEN FROM THE NONDALTON AIRPORT FAA GPS SURVEY, PERFORMED ON JULY 14, 1998 BY LCMF INCORPORATED. LCMF TIED ONE EXISTING AIRPORT MONUMENT AT CENTERLINE STA. 8+00 AND SET THE OTHER CONTROL POINTS DURING THIS SURVEY. SINCE ONLY ONE EXISTING SURVEY POINT WAS TIED, THIS SURVEY CANNOT BE TIED INTO PREVIOUS AIRPORT CONTROL SURVEYS.

**THE COORDINATE VALUES ARE APPROXIMATE CALCULATED VALUES BASED ON THE LCMF SURVEY REFERENCED ABOVE.

LEGEND

ITEM	EXISTING	FUTURE
PROPERTY LINE		
BUILDING RESTRICTION LINE		
TREES		
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		
PAPI		

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DATE:
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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
SUBJECT TO ALP APPROVAL LETTER DATED 7/13/04
By: [signature] DATE: 7/15/04
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-23NRA

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] 6/28/04
HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

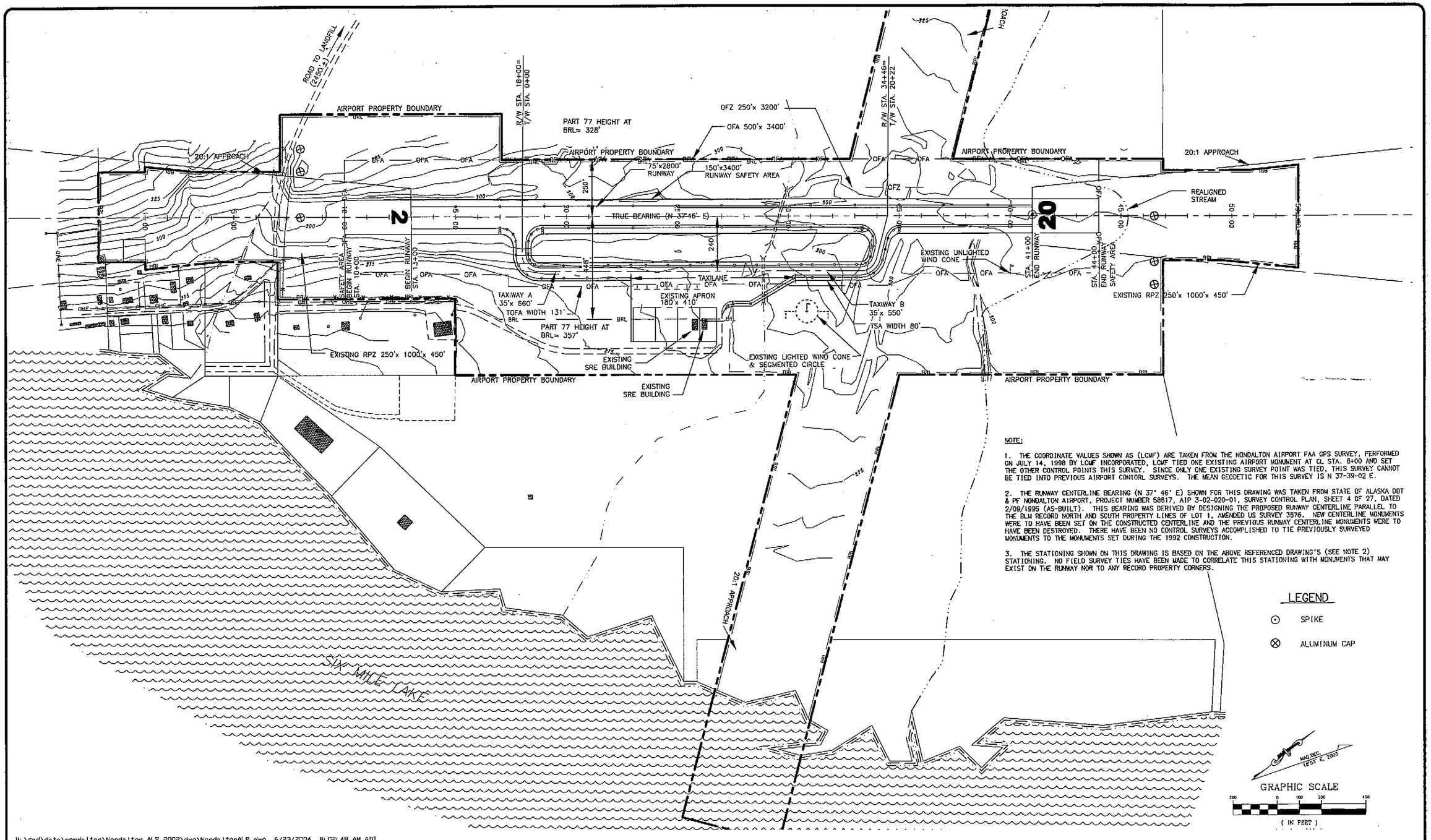
DATE 03/02/04
DESIGN JMR
DRAWN MGT
CHECKED TJS

NONDALTON AIRPORT
NONDALTON, ALASKA

AIRPORT LAYOUT PLAN

VICINITY MAP AND DATA TABLES

SHEET 2 OF 11



NOTE:

1. THE COORDINATE VALUES SHOWN AS (LCMF) ARE TAKEN FROM THE NONDALTON AIRPORT FAA GPS SURVEY, PERFORMED ON JULY 14, 1998 BY LCMF INCORPORATED, LCMF TIED ONE EXISTING AIRPORT MONUMENT AT CL STA. 8+00 AND SET THE OTHER CONTROL POINTS THIS SURVEY. SINCE ONLY ONE EXISTING SURVEY POINT WAS TIED, THIS SURVEY CANNOT BE TIED INTO PREVIOUS AIRPORT CONTORL SURVEYS. THE MEAN GEODETIC FOR THIS SURVEY IS N 37-39-02 E.

2. THE RUNWAY CENTERLINE BEARING (N 37° 46' E) SHOWN FOR THIS DRAWING WAS TAKEN FROM STATE OF ALASKA DOT & PF NONDALTON AIRPORT, PROJECT NUMBER 58817, AIP 3-02-020-01, SURVEY CONTROL PLAN, SHEET 4 OF 27, DATED 2/09/1995 (AS-BUILT). THIS BEARING WAS DERIVED BY DESIGNING THE PROPOSED RUNWAY CENTERLINE PARALLEL TO THE BLM RECORD NORTH AND SOUTH PROPERTY LINES OF LOT 1, AMENDED US SURVEY 3576. NEW CENTERLINE MONUMENTS WERE TO HAVE BEEN SET ON THE CONSTRUCTED CENTERLINE AND THE PREVIOUS RUNWAY CENTERLINE MONUMENTS WERE TO HAVE BEEN DESTROYED. THERE HAVE BEEN NO CONTROL SURVEYS ACCOMPLISHED TO TIE PREVIOUSLY SURVEYED MONUMENTS TO THE MONUMENTS SET DURING THE 1992 CONSTRUCTION.

3. THE STATIONING SHOWN ON THIS DRAWING IS BASED ON THE ABOVE REFERENCED DRAWING'S (SEE NOTE 2) STATIONING. NO FIELD SURVEY TIES HAVE BEEN MADE TO CORRELATE THIS STATIONING WITH MONUMENTS THAT MAY EXIST ON THE RUNWAY NOR TO ANY RECORD PROPERTY CORNERS.

LEGEND

⊙ SPIKE

⊗ ALUMINUM CAP

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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 7/13/04

By: [signature] DATE: 7/15/04

FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-23NRA

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] 6/24/04 HARVEY M. DOUTHIT, P.E. PROJECT MANAGER

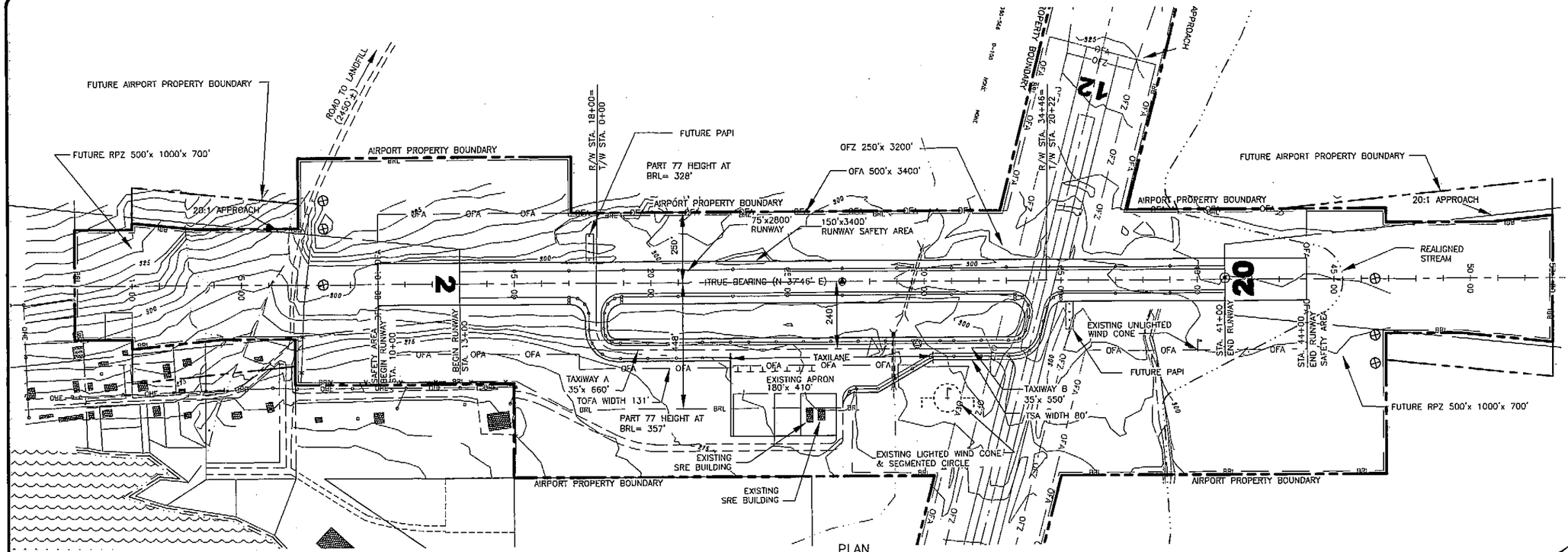
DATE 03/02/04
DESIGN JMR
DRAWN MGT
CHECKED TJS

NONDALTON AIRPORT
NONDALTON, ALASKA

AIRPORT LAYOUT PLAN

EXISTING LAYOUT PLAN

SHEET 3 OF 11



PLAN

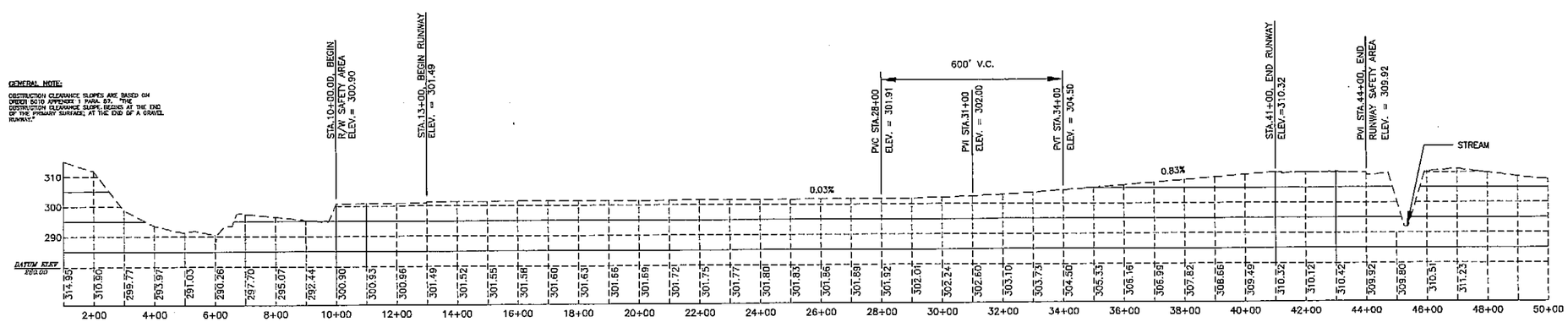
HORZ: 1"= 200'

MAG DEC. 18°53' E 2003

GRAPHIC SCALE

(IN FEET)

NOTE: NO OFZ OBJECT PENETRATIONS.



PROFILE

HORZ: 1"= 200'
VERT: 1"= 10'

LEGEND

⊙ SPIKE

⊗ ALUMINUM CAP

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FILE:

DATE: 1=1 v=plan

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By: [signature] DATE: 7/13/04

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ALASKAN REGION, AAL-601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-23NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

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

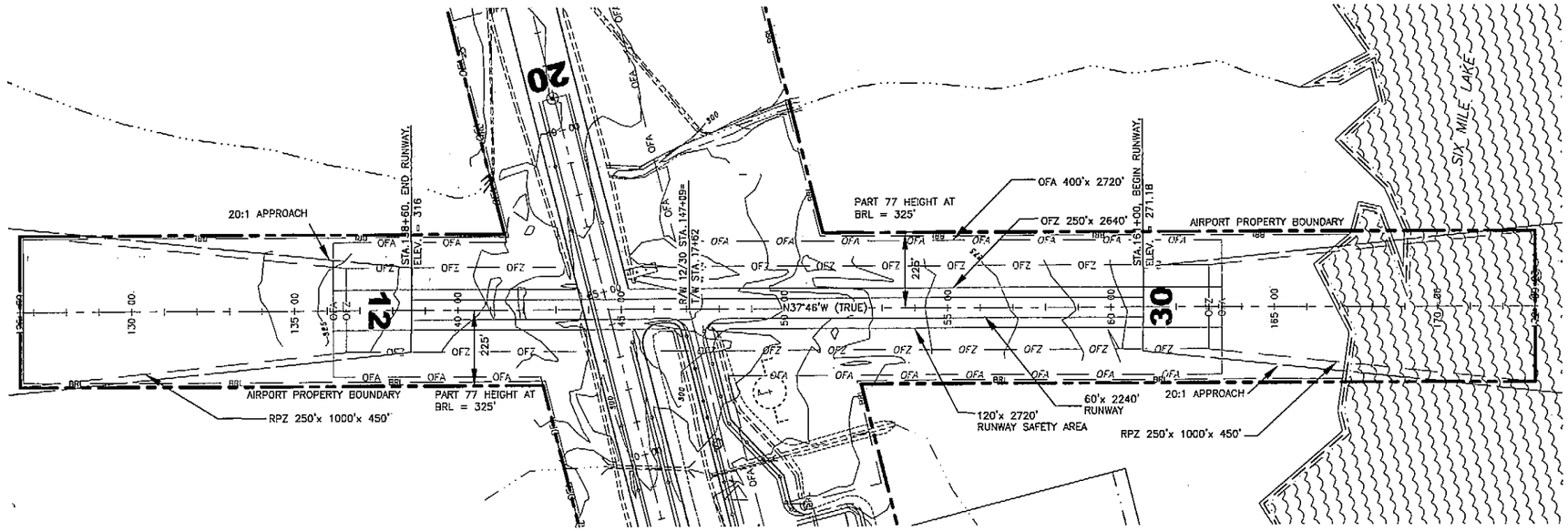
APPROVED: [signature] 6/24/04 HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

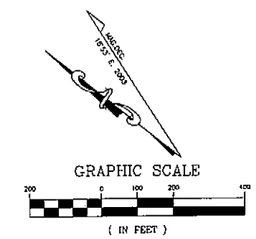
DATE 03/02/04
DESIGN JMR
DRAWN MGT
CHECKED TJS

NONDALTON AIRPORT
NONDALTON, ALASKA

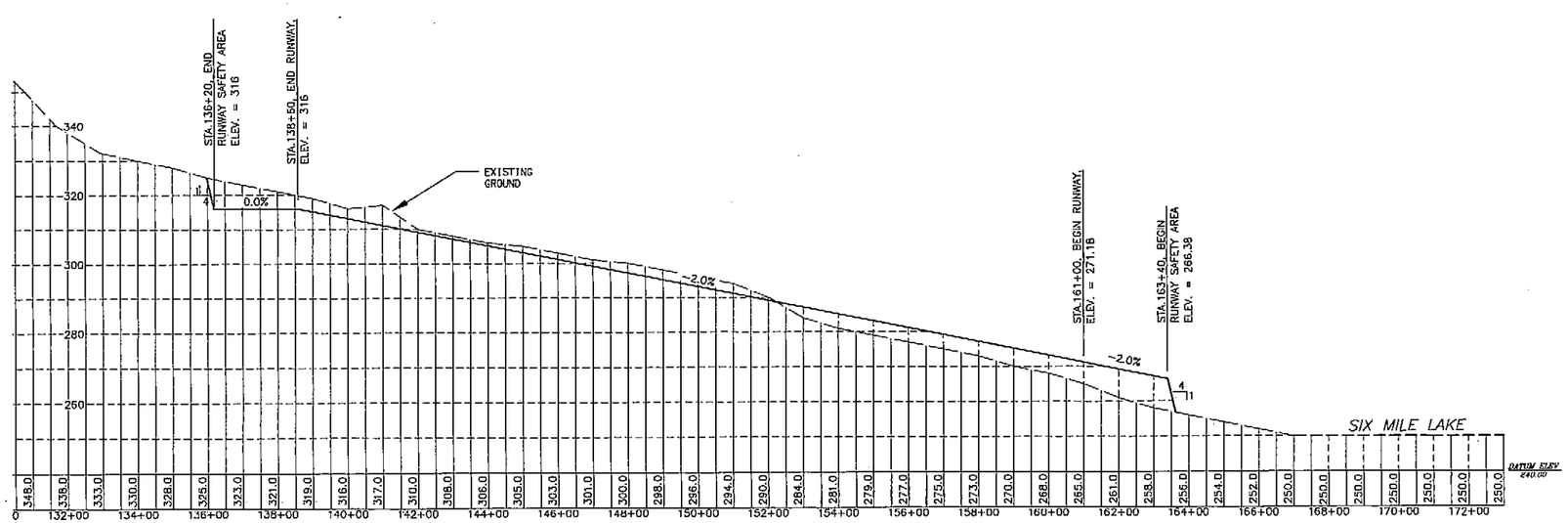
AIRPORT LAYOUT PLAN
RUNWAY 2-20
PLAN AND PROFILE

SHEET 4 OF 11





NOTE: NO OFZ OBJECT PENETRATIONS.



LEGEND

⊙ SPIKE

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AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 7/13/04

BY: [signature] DATE: 7/15/04

FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-23NRA

FILE:

DATE: 1=1 v=plan

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

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

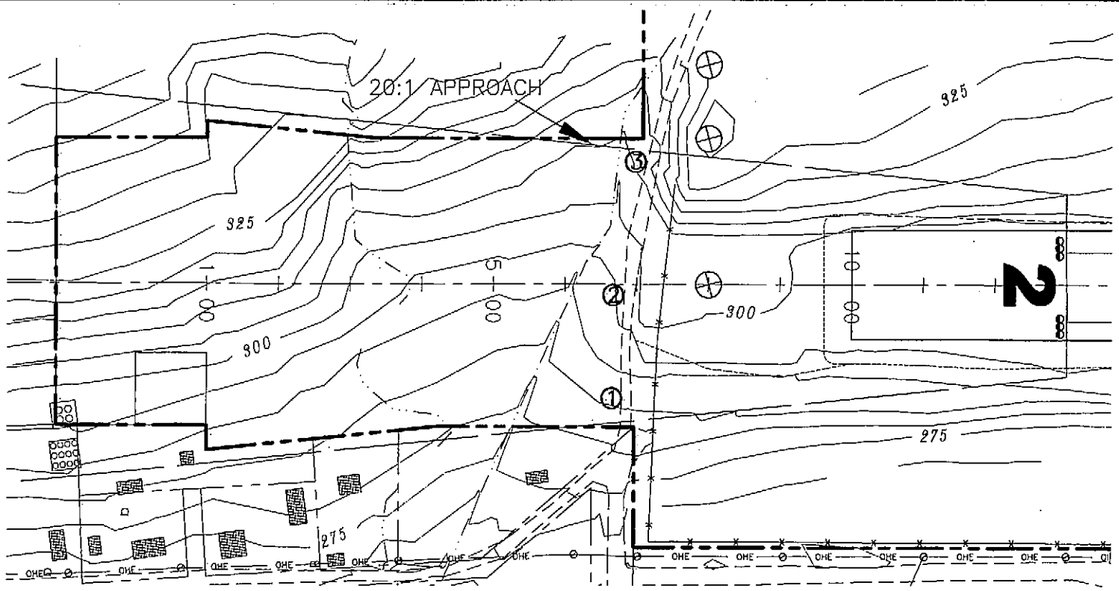
APPROVED: HARVEY M. DOUTHIT, P.E. FOR [signature] 6/24/04 — PROJECT MANAGER

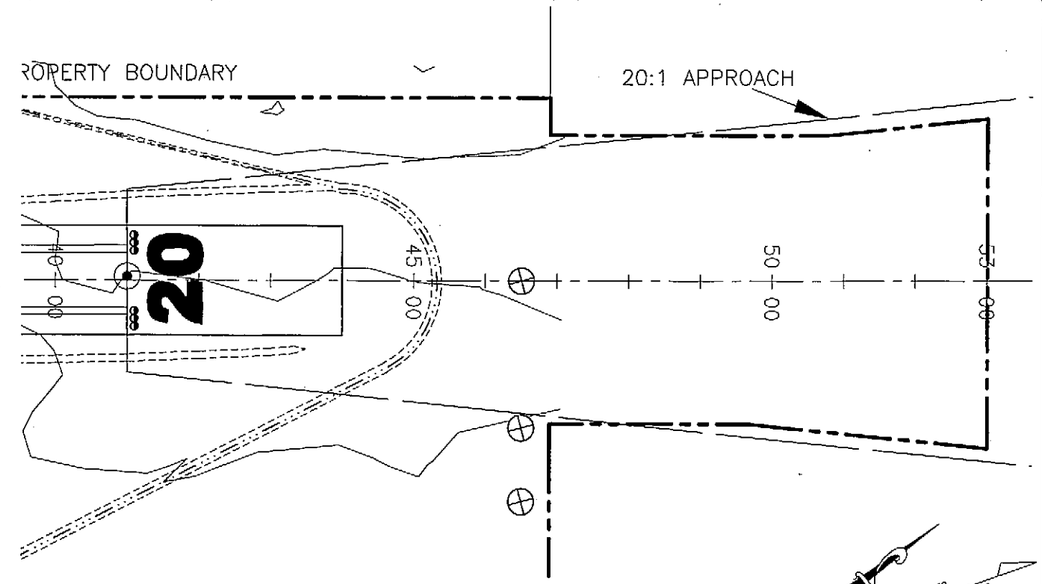
DATE 03/02/04
DESIGN JMR
DRAWN MGT
CHECKED TJS

NONDALTON AIRPORT
NONDALTON, ALASKA

AIRPORT LAYOUT PLAN
RUNWAY 12-30
PLAN AND PROFILE

SHEET 5 OF 11

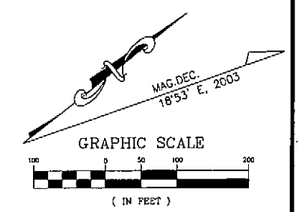




F.A.R. PART 77 IMAGINARY SURFACE OBSTRUCTION TABLE (INNER PORTION)								
OBSTRUCTION ID	DESCRIPTION	OBSTRUCTION DIST/OFFSET	OBSTRUCTION ELEVATION	SURFACE PENETRATED	SURFACE ELEVATION	AMOUNT OF PENETRATION	DISPOSITION	STAGE TO BE CORRECTED
1	ROAD	615/155	282	N/A	332	0	N/A	N/A
2	ROAD	632/0	298	N/A	333	0	N/A	N/A
3	ROAD	575/168	310	N/A	330	0	N/A	N/A

NOTES:

1. NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS.
2. OBSTRUCTION CLEARANCE SLOPE IS 34:1 FOR R/W 02 AND IS >50:1 FOR R/W 20.



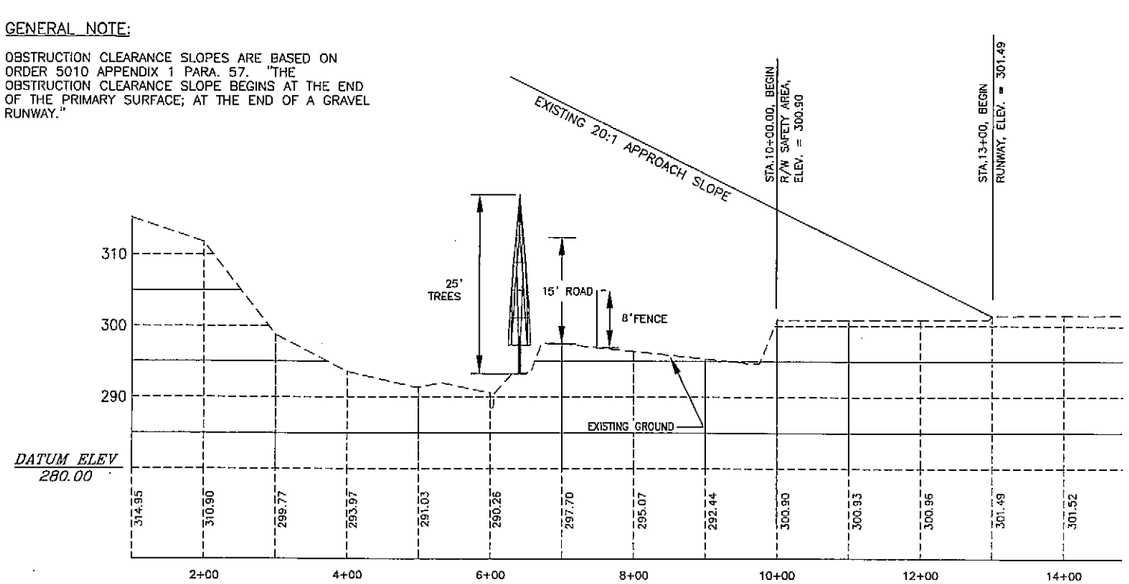
GENERAL NOTE:

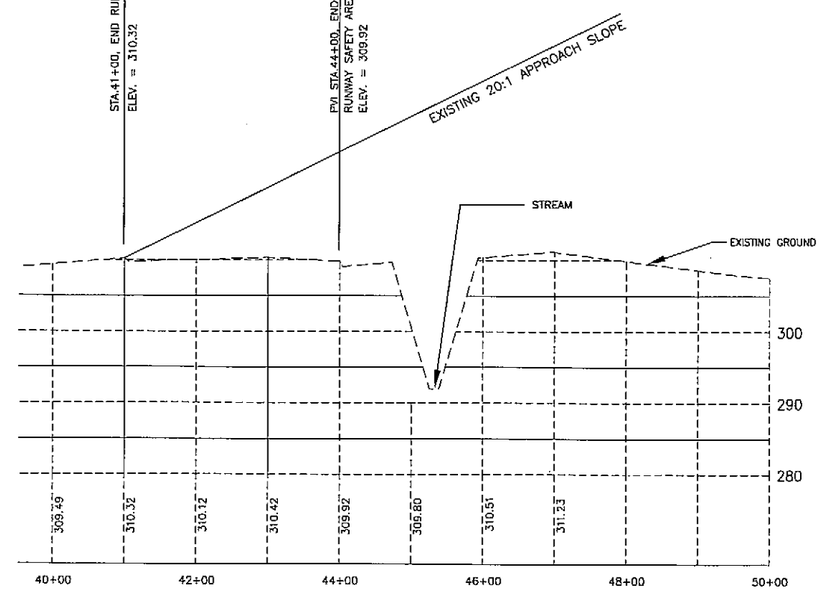
OBSTRUCTION CLEARANCE SLOPES ARE BASED ON ORDER 5010 APPENDIX 1 PARA. 57. "THE OBSTRUCTION CLEARANCE SLOPE BEGINS AT THE END OF THE PRIMARY SURFACE; AT THE END OF A GRAVEL RUNWAY."

LEGEND

⊙ SPIKE

⊗ ALUMINUM CAP





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DATE: 1=1 vaplan

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ALASKAN REGION, AAL-601

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BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

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

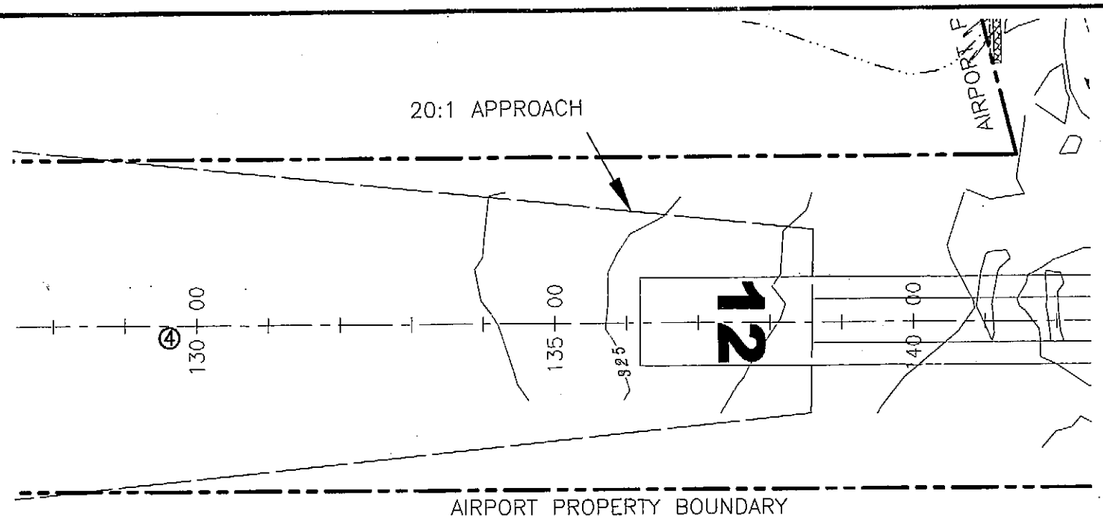
APPROVED: [signature] for HARVEY M. DOUTHIT, P.E. 6/24/04 PROJECT MANAGER

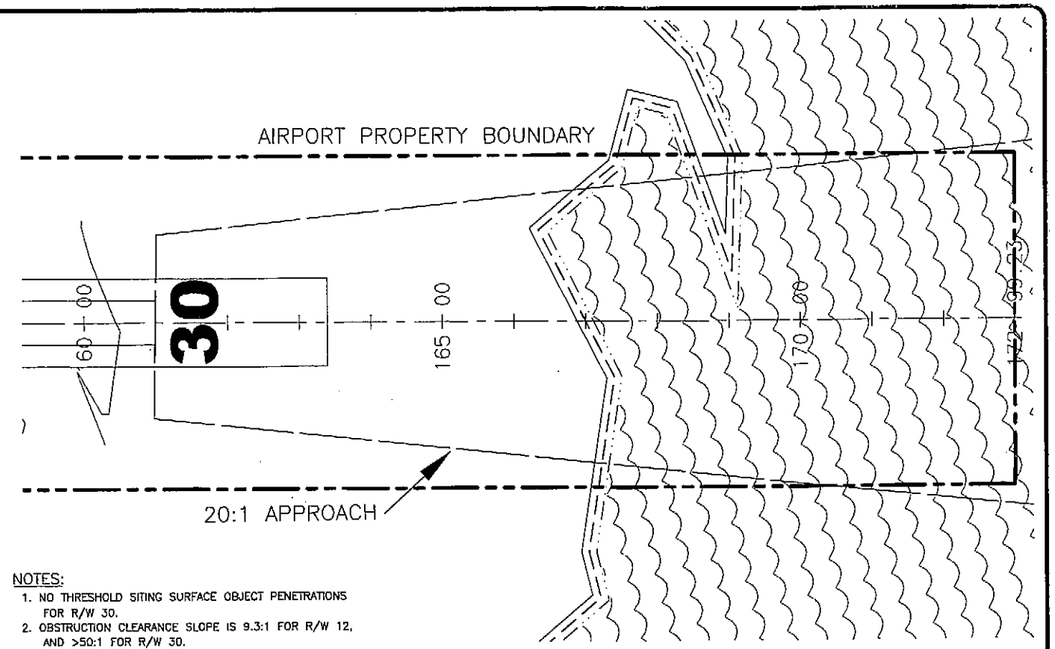
DATE 06/23/04
DESIGN JMR
DRAWN MGT
CHECKED TJS

NONDALTON AIRPORT
NONDALTON, ALASKA

AIRPORT LAYOUT PLAN
R/W 2-20 INNER PORTION OF THE APPROACH SURFACES

SHEET 6 OF 11



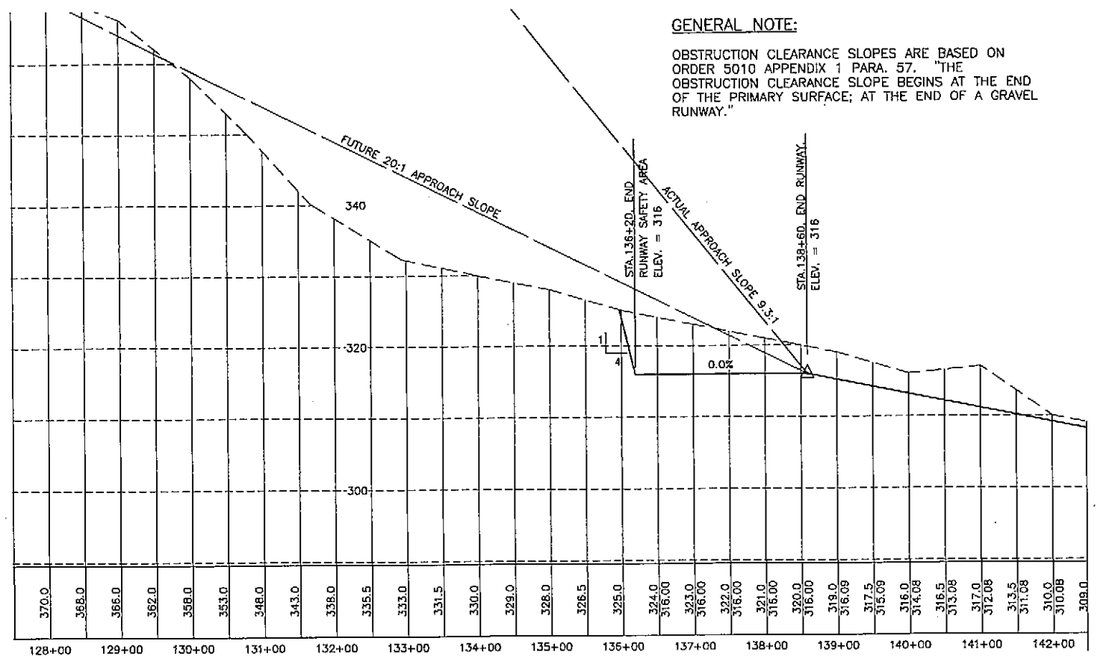


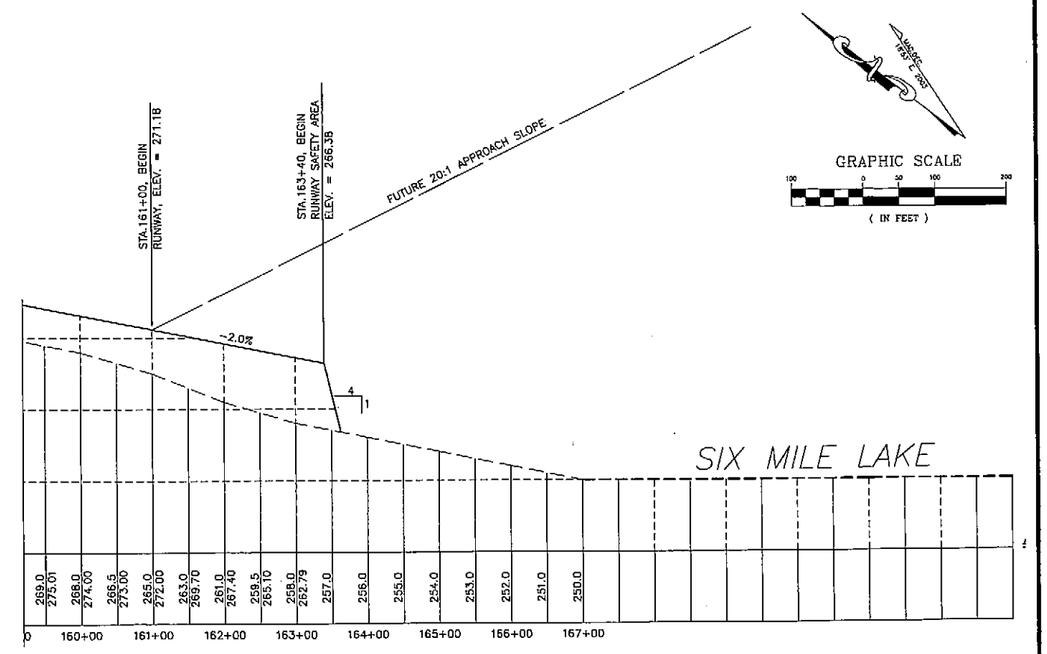
F.A.R. PART 77 IMAGINARY SURFACE OBSTRUCTION TABLE (INNER PORTION)								
OBSTRUCTION ID	DESCRIPTION	OBSTRUCTION DIST/OFFSET	OBSTRUCTION ELEVATION	SURFACE PENETRATED	SURFACE ELEVATION	AMOUNT OF PENETRATION	DISPOSITION	STAGE TO BE CORRECTED
4	TERRAIN	900/0	360--566	APPROACH	360-566	0-100	NONE	NONE

NOTES:
1. NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS FOR R/W 30.
2. OBSTRUCTION CLEARANCE SLOPE IS 9.3:1 FOR R/W 12, AND >50:1 FOR R/W 30.

GENERAL NOTE:

OBSTRUCTION CLEARANCE SLOPES ARE BASED ON ORDER 5010 APPENDIX 1 PARA. 57. "THE OBSTRUCTION CLEARANCE SLOPE BEGINS AT THE END OF THE PRIMARY SURFACE; AT THE END OF A GRAVEL RUNWAY."





GRAPHIC SCALE
100 0 50 100 200
(IN FEET)

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FILE:
DATE: 1=1 v=plan

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 7/13/04
By: [signature] DATE: 7/13/04
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

FAA AIRSPACE REVIEW NUMBER: 03-AAL-23NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

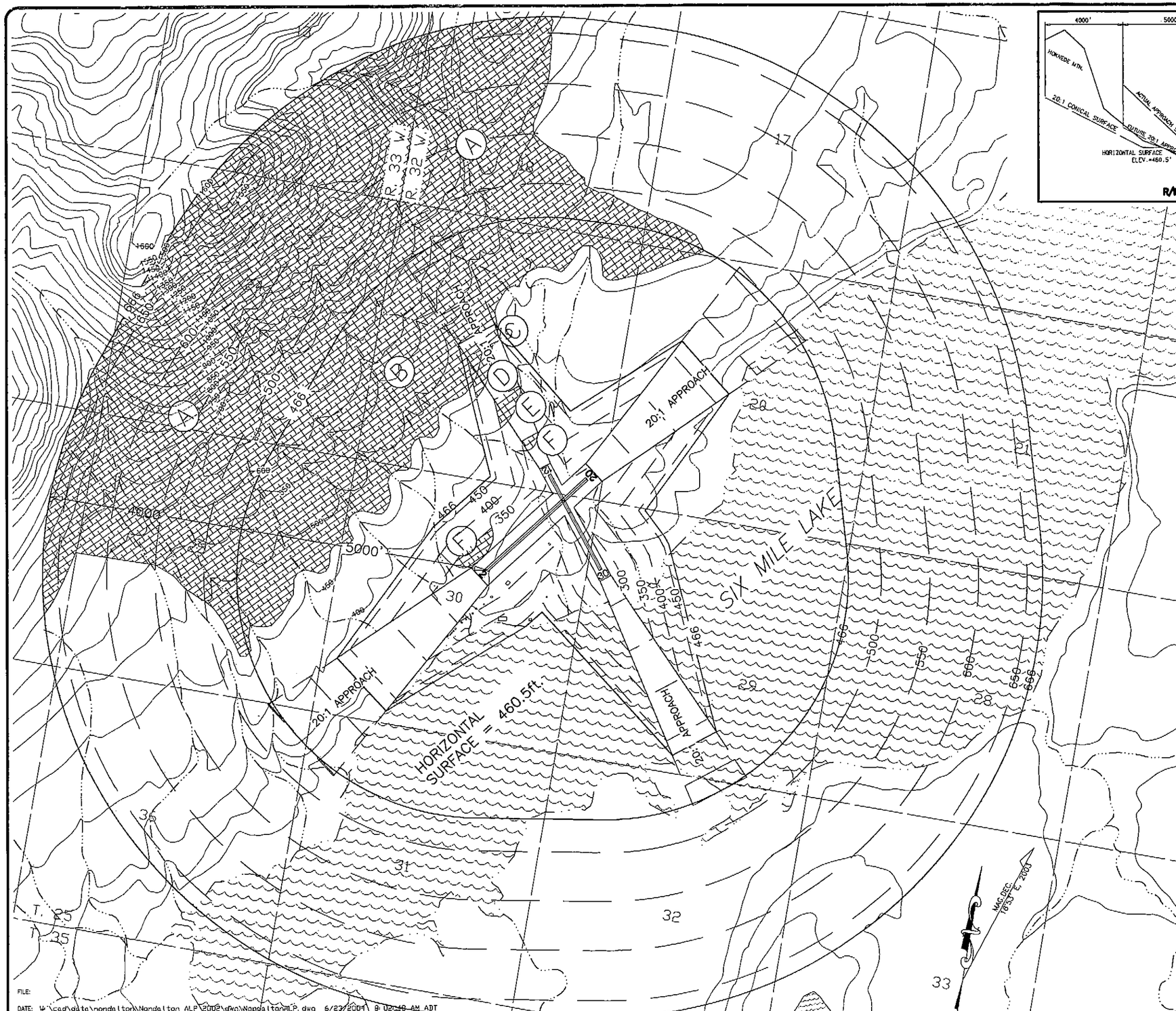
APPROVED: [signature] STEPHEN M. RYAN, P.E. DESIGN SECTION CHIEF
APPROVED: [signature] FOR HARVEY M. DOUTHIT, P.E. 6/24/04 PROJECT MANAGER

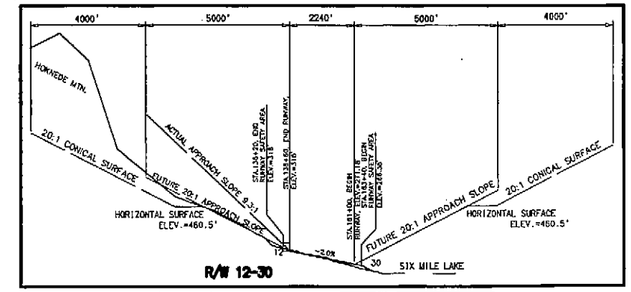
DATE 06/23/04
DESIGN JMR
DRAWN MGT
CHECKED TJS

NONDALTON AIRPORT
NONDALTON, ALASKA

AIRPORT LAYOUT PLAN
R/W 12-30 INNER PORTION OF THE APPROACH SURFACES

SHEET 7 OF 11





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	1650'	Conical	666'	984'	N/A	Existing
B	Terrain	655'	Horizontal	466'	184.5'	N/A	Existing
C	Terrain	470'	Transitional	450'-466'	20'	N/A	Existing
D	Terrain	461'	Transitional	400'-450'	20'	N/A	Existing
E	Terrain	410'	Transitional	350'-400'	10'	N/A	Existing
F	Terrain	360'	Transitional	300'-350'	40'	N/A	Existing

NOTES:

1. USGS QUADRANGLE MAPS ILIAMNA D-5 AND LAKE CLARK A-5 WERE USED FOR THE BASE MAP.
2. OBSTRUCTION ELEVATIONS ARE ESTIMATED FROM USGS MAPPING.
3. ULTIMATE AIRPORT ELEVATION IS 316'.
4. PER APPENDIX 2, SECTION E OF PARAGRAPH 5, NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS.

F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-23NRA

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 7/12/04

By: [signature] DATE: 7/12/04
FAA AIRPORTS DIVISION
ALASKAN REGION, AAL-601

BY	DATE	REVISIONS

DATE 06/23/04
DESIGN JMR
DRAWN MGT
CHECKED TJS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: STEPHEN M. RYAN, P.E. DESIGN SECTION CHIEF
APPROVED: HARVEY M. BOURKE, P.E. PROJECT MANAGER 6/24/04

NONDALTON AIRPORT

NONDALTON, ALASKA

AIRPORT LAYOUT PLAN

AIRPORT AIRSPACE

SHEET 8 OF 11

FILE:
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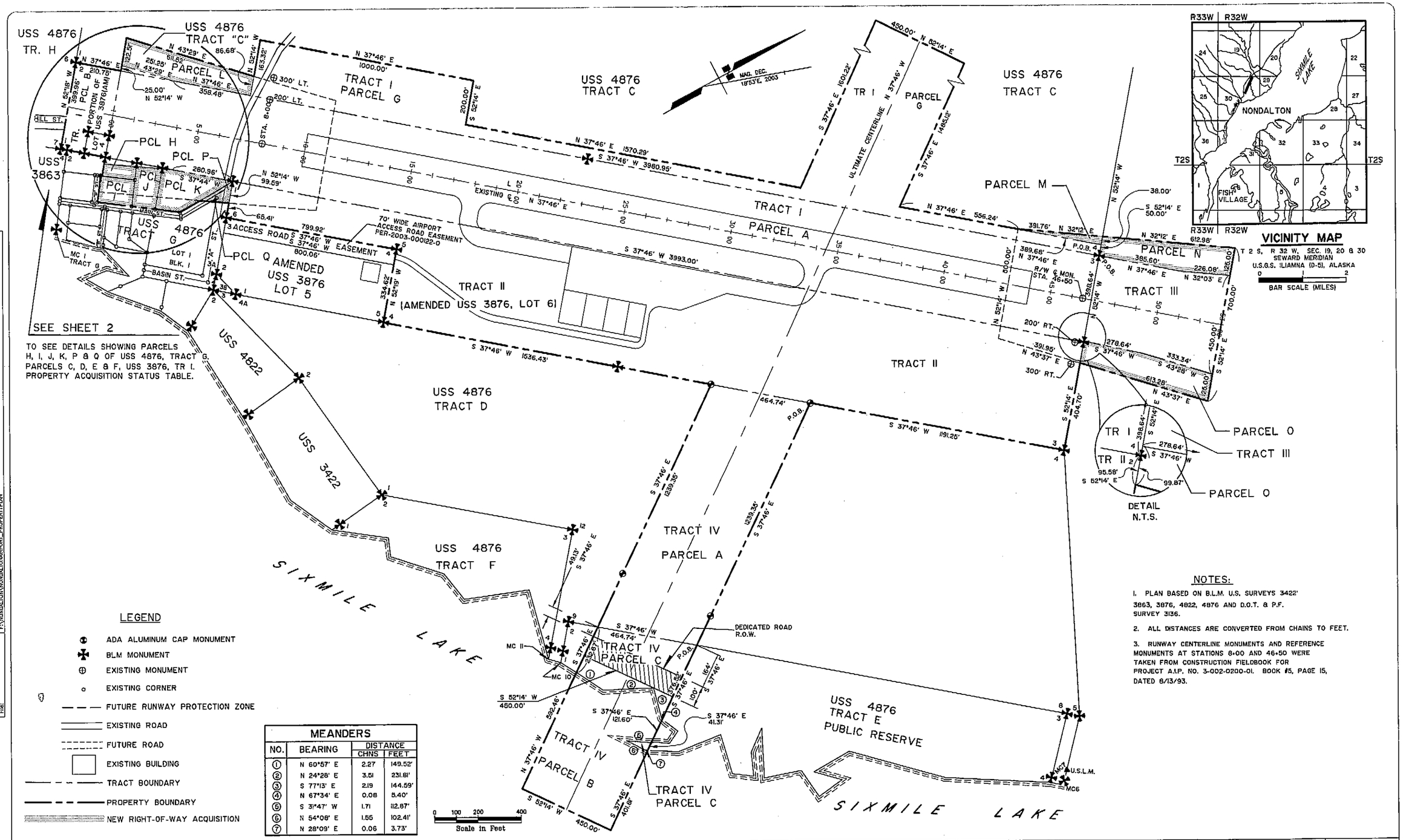

LEGEND

- ADA ALUMINUM CAP MONUMENT
- BLM MONUMENT
- EXISTING MONUMENT
- EXISTING CORNER
- FUTURE RUNWAY PROTECTION ZONE
- EXISTING ROAD
- FUTURE ROAD
- EXISTING BUILDING
- TRACT BOUNDARY
- PROPERTY BOUNDARY
- NEW RIGHT-OF-WAY ACQUISITION

MEANDERS			
NO.	BEARING	DISTANCE CHNS	DISTANCE FEET
1	N 60°57' E	2.27	149.52'
2	N 24°28' E	3.51	231.81'
3	S 77°13' E	2.19	144.59'
4	N 67°34' E	0.08	5.40'
5	S 31°47' W	1.71	112.87'
6	N 54°08' E	1.55	102.41'
7	N 28°09' E	0.06	3.73'

NOTES:

1. PLAN BASED ON B.L.M. U.S. SURVEYS 3422' 3863, 3876, 4822, 4876 AND D.O.T. & P.F. SURVEY 3136.
2. ALL DISTANCES ARE CONVERTED FROM CHAINS TO FEET.
3. RUNWAY CENTERLINE MONUMENTS AND REFERENCE MONUMENTS AT STATIONS 8+00 AND 46+50 WERE TAKEN FROM CONSTRUCTION FIELDBOOK FOR PROJECT A.I.P. NO. 3-002-0200-01. BOOK #5, PAGE 15, DATED 8/13/93.

Date Plotted: 05.20.04
Plot Ratio and Layout: 1=1, layout=
File: F:\NONDALTON\NONDALTONAIRPORT_PROPERTYPLAN

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 7/13/04
By: [signature] DATE: 7/15/04
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BY	DATE	REVISIONS

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DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: [signature]
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF
APPROVED: [signature] FOR 6/29/04
HARVEY M. DOUTHIT, P.E. — PROJECT MANAGER

DATE 06-14-04
DESIGN
DRAWN GE
CHECKED TJS

NONDALTON AIRPORT

PROPERTY PLAN

SHEET 9 OF 11

DETAIL SHEET

PROPERTY ACQUISITION STATUS

TRACT	PARCEL	ACRES LARGER	ACRES TAKE	ACRES REMAINDER	OWNERSHIP	INTEREST	DATE ACQUIRED
*I	A	41.86	41.86	NONE	STATE OF ALASKA D.O.T. & P.F.	SEC. 516 PATENT ACQUIRED FROM USA	7/14/86
*I	B	1.90	1.90	NONE	STATE OF ALASKA D.O.T. & P.F.	SEC. 516 PATENT ACQUIRED FROM USA	7/14/86
*I	C	171.517	0.072	171.445	CITY OF NONDALTON	FEE SIMPLE	4/10/92
*I	D	0.652	0.082	0.570	CITY OF NONDALTON	FEE SIMPLE	4/10/92
*I	E	0.504	0.030	0.474	NICKOLI BALLUTA	FEE SIMPLE BK 29, PG 364	7/24/2000
*I	F	0.937	0.003	0.934	CITY OF NONDALTON	FEE SIMPLE	4/10/92
*I	G	171.517	25.102	146.415	CITY OF NONDALTON	FEE SIMPLE	4/10/92
*II		39.64	39.64	NONE	STATE OF ALASKA D.O.T. & P.F.	SEC. 516 PATENT ACQUIRED FROM USA	7/14/86
III		LARGE	5.711	LARGE	NONDALTON NATIVE CORP. (SURFACE)	FEE SIMPLE	4/27/92
					BRISTOL BAY NATIVE CORP. (SUBSURFACE)	FEE SIMPLE	4/24/92
IV	A	88.016	12.803	75.213	CITY OF NONDALTON	FEE SIMPLE	4/10/92
IV	B	LARGE	6.237	LARGE	STATE OF ALASKA D.N.R.	A & H EASEMENT BK 20, PG 818	9/14/92
IV	C	20.523	2.931	17.592	CITY OF NONDALTON	FEE SIMPLE	4/10/92
	H	0.570	0.197	0.364	AGGIE HOBSON	FEE SIMPLE	TBA
	I	0.439	0.439	NONE		FEE SIMPLE	TBA
	J	0.474	0.474	NONE	NICKOLI BALLUTA	FEE SIMPLE	TBA
	K	0.935	0.935	NONE	CITY OF NONDALTON	FEE SIMPLE	TBA
	L	LARGE	1.064	LARGE	CITY OF NONDALTON	FEE SIMPLE	TBA
	M	LARGE	0.170	LARGE	CITY OF NONDALTON	FEE SIMPLE	TBA
	N	LARGE	1.692	LARGE	CITY OF NONDALTON	FEE SIMPLE	TBA
	O	LARGE	1.664	LARGE	NONDALTON NATIVE CORP. (SURFACE)	FEE SIMPLE	TBA
					BRISTOL BAY NATIVE CORP. (SUBSURFACE)	FEE SIMPLE	TBA
	P	1.639	0.005	1.634	CITY OF NONDALTON	FEE SIMPLE	TBA
	Q	LARGE	0.145	LARGE	CITY OF NONDALTON	A & H EASEMENT	TBA

* TRACTS I & 2 - SETTLEMENT & RELEASE BY NICKOLI BALLUTA, BK. 29, PG. 364 (7-24-2000)

LEGEND

- ADA ALUMINUM CAP MONUMENT
- BLM MONUMENT
- EXISTING MONUMENT
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Date Plotted:	05.20.04
Plot Ratio and Layout:	1=1, layout=
File:	F:\NONDALTON\NONINAT\NARROFF_PROPERTYPLAN

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BY: _____ DATE: 7/15/04

FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-601

F.A.A. AIRSPACE REVIEW NUMBER: 03-AAL-23NRA

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 W. DOUTHIT, P.E. FOR — 6/24/04 PROJECT MANAGER

DATE 06-14-04
DESIGN _____
DRAWN GE
CHECKED TJS

NONDALTON AIRPORT

PROPERTY PLAN

USS 3876, TRACT I, PARCELS C, D, E, & F DETAILS
USS 4876, TRACT G, PARCELS H, I, J, K, P & Q DETAILS

SHEET 10 OF 11

NONDALTON
NARRATIVE REPORT

A. Purpose
This narrative report is included with the Airport Layout Plan (ALP) for Nondalton in accordance with Federal Aviation Administration (FAA) Airport Design Advisory Circular (AC) 150/5300-13, Change 7, Appendix 7. The rationale for improvements to the Nondalton is outlined in this narrative report.

B. Introduction
This Airport Layout Plan supercedes the Nondalton ALP approved by the FAA on September 23, 1992.

Nondalton is located on the west shore of Six Mile Lake, between Lake Clark and Iliamna Lake, 190 miles southwest of Anchorage. It lies at approximately 59d 58m N Latitude, 154d 51m W Longitude. (Sec. 30, T002S, R032W, Seward Meridian.) Nondalton is located in the Iliamna Recording District. The area encompasses 8.4 sq. miles of land and .4 sq. miles of water. Nondalton lies in the transitional climatic zone.

The 2001 U.S. census documents a population of 221 persons at Nondalton.

Population History:

1940 82
1950 103
1960 205
1970 184
1980 173
1990 176
2000 221

Nondalton is a Tanaina Indian name first recorded in 1909 by the U.S. Geological Survey. The village was originally located on the north shore of Six Mile Lake, but in 1940, wood depletion in the surrounding area and growing mud flats caused the village to move to its present location on the west shore. The post office, established in 1938, relocated with the villagers. Nondalton formed an incorporated city government in 1971. A federally recognized tribe is located in the community: Nondalton Tribal Council. 90% of the population are Alaska Native or part Native. It is a Tanaina Indian (Athabascan and Iliamna) village with a fishing and subsistence lifestyle. Fishing in Bristol Bay is an important source of income in Nondalton. Fourteen residents hold commercial fishing permits. Gold and copper are mined in the area. One source of summer employment is firefighting. Nondalton is primarily accessible by air and water.

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 Nondalton 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	500
GA Local	100
GA Itinerant	600
Military	0
Total	1200

The FAA reports 2,450 enplanements at Nondalton for 2001.

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

Air Taxi 480
Charters 1510

The current operators report 3,792 enplanements at Nondalton for 2001.

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

Currently, Lake & Penn Air operate a daily flight to Nondalton seven days a week and Iliamna Air Taxi operates a flight to Nondalton three days a week. The remaining operators use the Nondalton airport by charter only. Penn Air, Mulchitna Air, Lake & Penn Air, Iliamna Air Taxi, and Lake Clark Air Service all deliver freight to Nondalton. Iliamna Air Taxi delivers all the mail to Nondalton. Birchwood Air, Lake & Penn Air, Lake Clark Air and Iliamna Air Taxi all assist with medical flights. There are four single engine aircraft based at Nondalton. Era Aviation, Northern Air Cargo, Evergreen International do not currently conduct any operations at the Nondalton airport nor do any of these operators plan to in the future.

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 Nondalton Airport is estimated at 2% a year (1.02^n where n equals the number of years). 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)

There is no near-term development plan for Nondalton Airport.

Mid-Term Development (6-10 years)

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

Long-Term Development (11-20 years)

Long-term development will consist of constructing a 2,240-foot crosswind runway. Constructing a crosswind runway is estimated to cost $2,300,000 in 2002 dollars.

E. Design Rationale
1. Airport Reference Code (ARC)

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

The most demanding aircraft to use the airport on a regular basis is the Piper Navajo. The Piper Navajo, a design group B-I aircraft has an approach speed of 100 knots, a wingspan of 40.7 feet, and a maximum take off weight of 6200 lbs. There is no future plan to change the current critical aircraft. The annual operation for the Piper Navajo into Nondalton is 625.

2. Wind Coverage

A wind coverage analysis was performed with wind data obtained from Hattenburg Dilley & Linnell Engineering Consultants for the Nondalton Airport. The existing runway 2/20 provides 93.5% and 96.44% coverage at 10.5 and 13 knots, respectfully. FAA recommends that a crosswind runway be considered if the wind coverage is below 95%. Crosswind runway 12/30 combined with runway 2/20 provides 99.52% and 99.93% coverage at 10.5 and 13 knots respectfully. Wind data is in excess of 95%, but with correspondance with the FAA, Nondalton maintenance and operations manager and pilots we will provide a crosswind runway at the Nondalton Airport.

3. Runway and Taxiway

R/W 2-20
The existing runway length is 2,800 feet. The runway length for the Nondalton Airport was computed using FAA's Airport Design for Microcomputers program. For small aircraft with less than 10 passenger seats, the program recommends a length of 2,830 feet for 95% coverage. This runway has been developed to handle A-II aircraft. Future development of this runway will accommodate Non-Precision Instrument approaches.

R/W 12-30
Long-term development calls for the construction of a crosswind runway. The length of this runway (2,240 feet) is based on the requirements of AC 150/5325-4. Where it states; a crosswind runway should have a length of at least 80% of the primary runway length.

The existing taxiways are designed to accommodate Group II aircraft.

Runway 12 has obstructions in the 20:1 approach surface. The obstructions are from the terrain of Hoknede Mountain. The approach slope is 9.3:1 and runway 12 has a restricted use associated with it.

4. Apron

The existing Apron is 180 feet by 410 feet and is set back 260 feet from the runway. The existing apron meets the recommended standards. Currently the apron contains two snow removal equipment building with a rotating beacon and seven aircraft tie downs. The existing lease lot area of 300 x 100 feet has no current leaseholders. The future lease lots will consist of one private 96 x 100 feet lot and one commercial 150 x 100 feet lot.

5. Local Roads

Currently the Department of Transportation has a road construction project scheduled to begin in the 2006 construction season. The project consists of constructing a road that will connect the communities of Iliamna and Nondalton. The Iliamna airport is a B-III category airport with a main runway length of 4,800 feet and a crosswind runway length of 5,085 feet. Both runways were paved in 2003. Following suit of near by communities, a majority of the freight for Nondalton will be flown into Iliamna and trucked over to Nondalton once the road is completed.

6. Property Status

The existing Nondalton Airport is operated by DOT & PFA and is located on approximately 136 acres of land. A property plan has been included as part of this ALP.

F. Community Involvement
The Department of Transportation has received on February 12, 2004 a resolution (#03-13) by the city of nondalton in support of the Airport Layout Plan.

G. 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.

H. Hazards to Navigation
The existing sewage lagoon in Nondalton is approximately 4,900 feet away from the south end of the runway. The existing solid waste disposal site is located approximately 2,450 feet northwest of the runway. Both of these sites are less than the recommended 5,000 feet. Correspondence with the Alaska Native Tribal Health Consortium shows the future solid waste disposal site will be relocated approximately 3 miles away from the runway and the future sewage lagoon will be relocated approximately 5,100 feet away from the runway in 2-3 years.

I. Modifications to Standards
The proposed development is intended to fully conform to FAA standards.

J. Encroachments in Part 77 Surfaces
The terrain obstructions located on the northwest side of the airport penetrate the conical, horizontal and transitional surfaces to a maximum height of 984 feet. The obstructions will not be removed.

K. Future Land Development
Proposed airport development will be entirely on airport property

Table 1
Operators and Aircraft Using Nondalton Airport

OPERATOR	AIRCRAFT	DESIGN GROUP
Penn Air	Piper PA-32 Cherokee	A-I
Mulchitna Air	Cessna 207	A-I
King Air Flying Service	Piper PA-32 Cherokee	A-I
	Piper PA-28 Cherokee	A-I
Lake & Penn Air	Cessna 206	A-I
	Caravan 208	A-II
Iliamna Air Taxi	Piper Navajo	B-I
	Cessna 207	A-I
	Beechcraft Baron	B-I
	DHC-2 Beaver	A-I
	Pilatus	A-II
	Beechcraft Bonanza A-36	A-I
Shannons Air	Cessna 172	A-I
	Piper PA-32 Cherokee	A-I
Birchwood Air Service	Piper Navajo	B-I
Lake Clark Air Service	Cessna 180	A-I
	Cessna 206	A-I
	Cessna 207	A-I
	Beechcraft Bonanza A-36	A-I
	Piper Navajo	B-I
	Stinson 10-A	A-I
Bristol Bay Air	Cessna 207	A-I

Table 2
Forecast of Future Operations

ITEM	PRESENT	0 - 5 yrs	6 - 10 yrs	11 - 20 yrs
Total Annual Operations	1990	2197	2426	2957
Annual Enplanements	3792	4187	4622	5635
Annual Scheduled Operations	480	530	585	713
Annual Non-Scheduled Operations	1510	1667	1841	2244

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NONDALTON AIRPORT
NONDALTON, ALASKA

AIRPORT LAYOUT PLAN
NARRATIVE REPORT

SHEET 11 OF 11