

Alaskan Region Airports Division

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

Federal Aviation Administration

April 8, 2020

Jourde Mitchell ADOT&PF Aviation Design 4111 Aviation Ave Anchorage, AK 99519-6900

Dear Ms. Mitchell:

#### **Girdwood Airport**

#### Girdwood, Alaska As-Built Airport Layout Plan (8 August 2005) (Original ALP Airspace #2005-AAL-26-NRA)

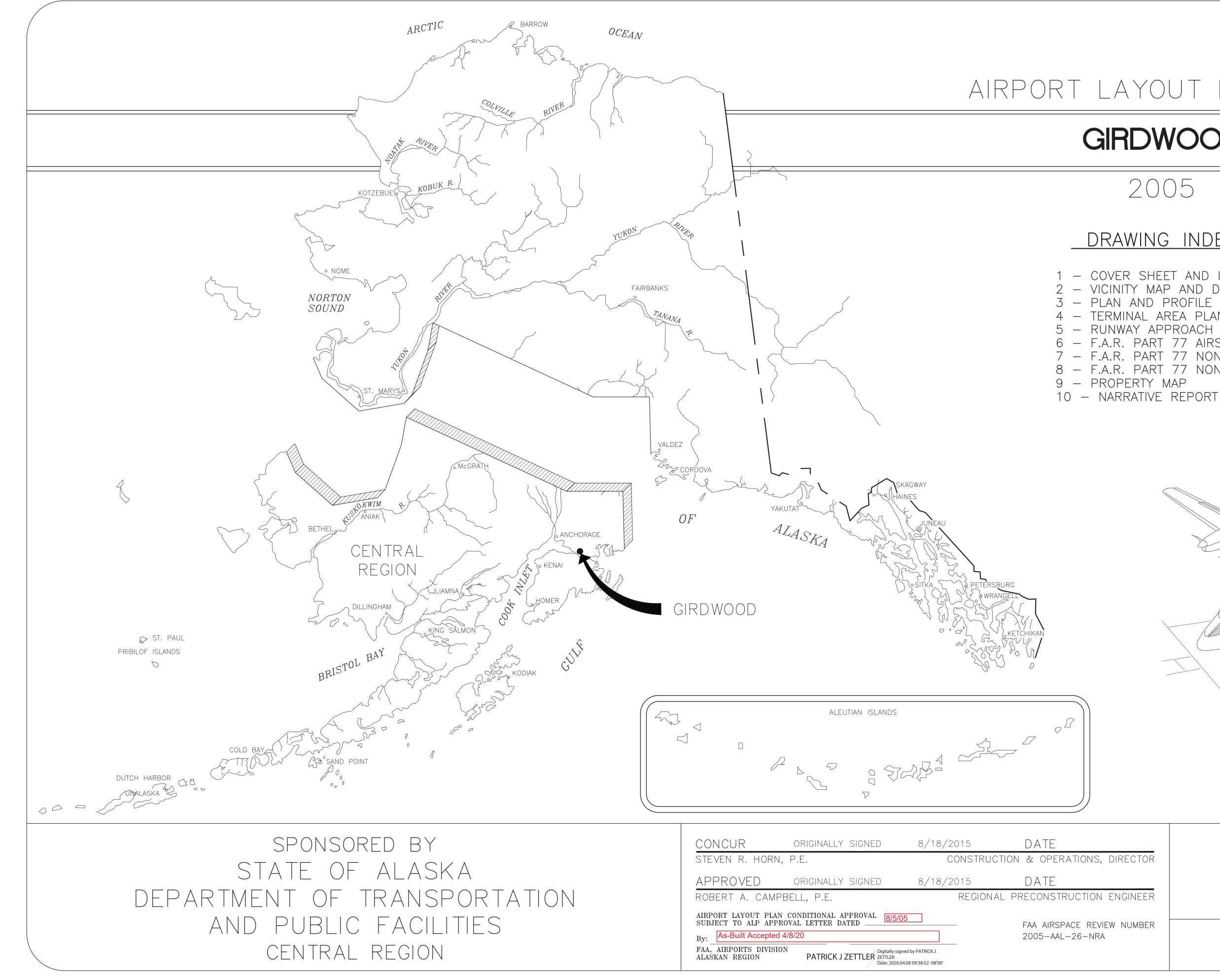
We have completed our review of the Girdwood Airport As-Built Airport Layout Plan (ALP) April 2020, and find it acceptable for documenting the existing conditions of the airport.

Please retain this letter in your files for future reference.

Sincerely,

PATRICK J ZETTLER Digitally signed by PATRICK J ZETTLER Date: 2020.04.08 09:47:52 -08'00'

Pat Zettler, P.E., Lead Engineer Airports Division



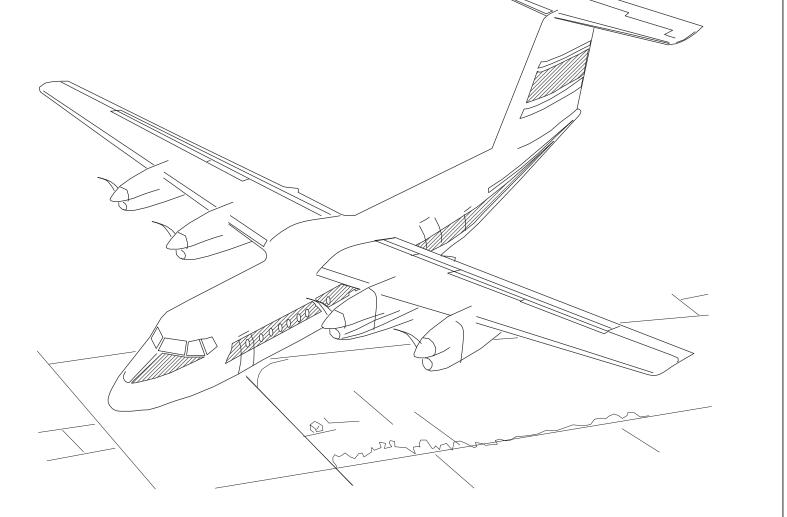
# AIRPORT LAYOUT PLAN FOR

# GIRDWOOD

2005

## DRAWING INDEX

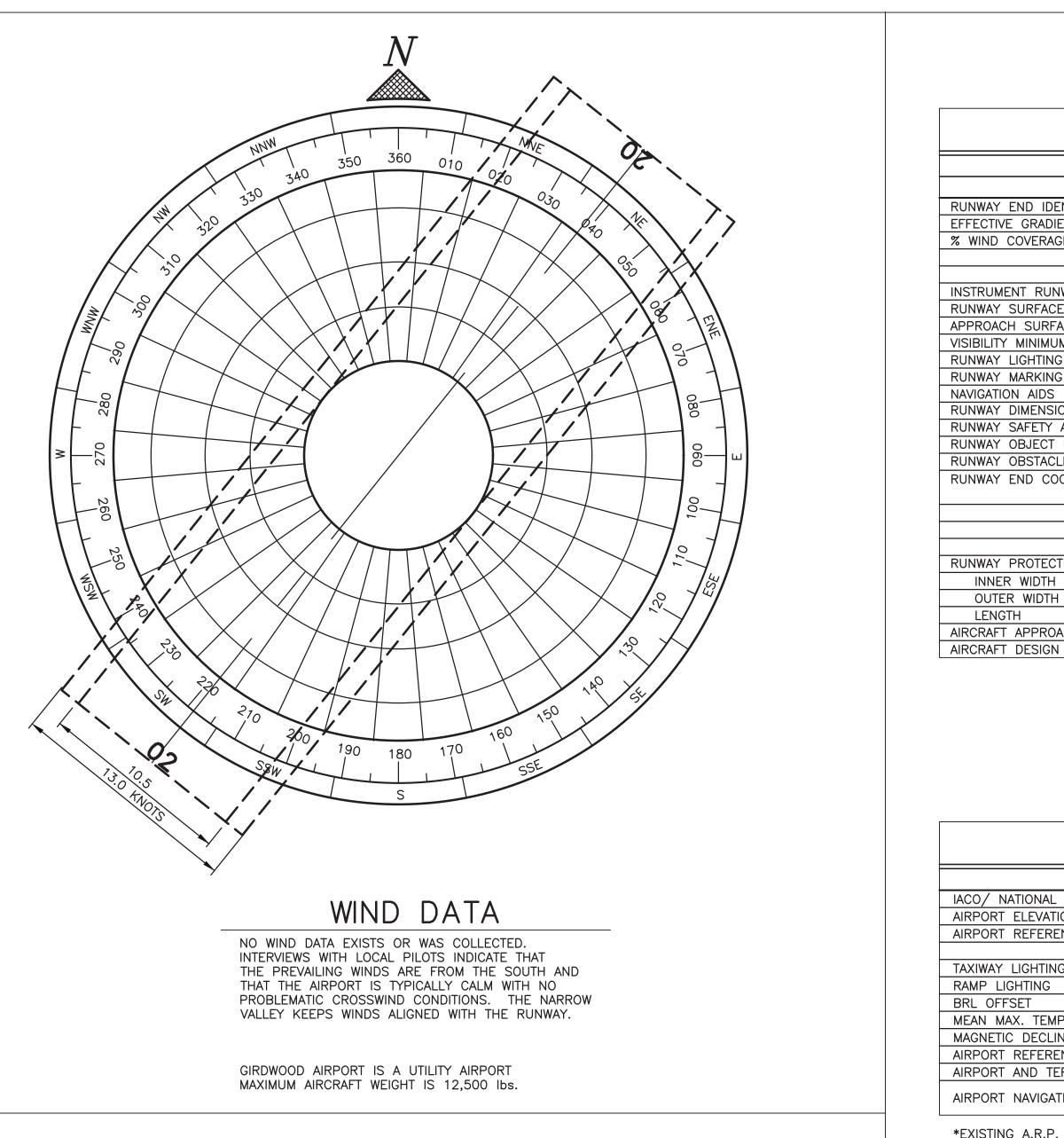
- COVER SHEET AND INDEX 2 - VICINITY MAP AND DATA TABLES - PLAN AND PROFILE - TERMINAL AREA PLAN - RUNWAY APPROACH SURFACES PLAN AND PROFILE 6 – F.A.R. PART 77 AIRSPACE - F.A.R. PART 77 NON-TERRAIN OBSTRUCTIONS 8 – F.A.R. PART 77 NON-TERRAIN OBSTRUCTION TABLES



	4/2020	AS-BUILT MMEM & SIMONIS HANGERS
ΒY	DATE	REVISION

		BY	DATE		REVISION	
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UMBER	File: Z:\07072\24	. –	'	1 OF DWG Date of Last Rev	1 0 vision: 06/23/05 1=1	

T.11N. T.10N. 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Image: Second			
	HORAGE GIRDWOOD MILES 20 21 22 TERNA 30 29 THE AUSTRAL 34 36 31 32 33 PA 34	35		
	VICINITY MAP1 INCH = 1 MILET 10 N, R 2 E, SEC 8 & 9SEWARD MERIDIANU.S.G.S. SEWARD (D-6), ALASKA			
PROPERTY LINE BUILDING RESTRICTION LIN AVIGATION & HAZARD EAS AIRPORT REFERENCE POIN WIND CONE AND SEGMENT BUILDINGS BUILDING NUMBER FENCE UNPAVED ROADWAYS	EMENT T (A.R.P.) ED CIRCLE ()		ULTIMATE - BRL	
PAVED ROADWAYS/RUNWAY SHORELINE CONTOURS THRESHOLD MARKERS RUNWAY SAFETY AREA	Ś100 			
	AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER		4/2020	AS-BUILT MM
FILE: Z:\07072\207\CAD\ALP\GALP-c02.DWG DATE:06/23/05	DATED: By: FAA, AIRPORTS DIVISION ALASKAN REGION, 02AAL-190NRA DATE: FAA AIRSPACE REVIEW NUMBER: 2005-AAL-26-NRA	BY	DATE	



NON-STANDARD CONDITIONS					
ITEM	EXISTING	STANDARD	ULTIMATE		
RSA BEYOND RUNWAY 20 END	170	240	240		
RSA BEYOND RUNWAY 02 END	198	240	240		
ROFA BEYOND RUNWAY 20 END	170	240	240		
ROFA BEYOND RUNWAY 02 END	198	240	240		
ROFZ BEYOND RUNWAY 20 END	170	200	200		
ROFZ BEYOND RUNWAY 02 END	198	200	200		

ALL DISTANCES IN FEET

PROJECT MANAGER

THERE ARE NO OFZ PENETRATIONS FOR THIS AIRPORT.

APPROVED:

GARY E. LINCOLN, P.E.

THERE ARE NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS FOR THIS AIRPORT.

M	&	SIMONIS	HANGERS	
	RE	VISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION-DESIGN AND CONSTRUCTION-AVIATION
APPROVED:
HARVEY M. DOUTHIT, P.E. AVIATION DESIGN GROUP CHIEF

DATE:	05/04/05	
DESIGN:	DJG	
DRAWN:	LJW	
CHECKED:	DAH	

RUNWAY DATA			
		RUNWAY	02–20
ITEM	EXISTING	ULTIMATE	
DENTIFIER NUMBER		01/19	02/20
DIENT		1.382%	SAME
AGE 13 KNOTS			
16 KNOTS			
NWAY		NONE	SAME
CE		GRAVEL	SAME
FACES		20:1	SAME
UM		1 MILE	SAME
IG		NONE	SAME
IG		NONE	SAME
6		NONE	SAME
SIONS		2100' X 60'	SAME
AREA DIMENSIONS		2468' X 120'	2580' X 120'
T FREE AREA DIMENSIONS		2468' X 250'	2580' X 250'
CLE FREE ZONE DIMENSIONS		2468' X 250'	2500' X 250'
OORDINATES (NAD 83)			
RUNWAY 02	_AT.	60°58'00.52"N	60°58'00.17"N
	_ONG.	149°07'23.15"W	149°07'23.75"W
RUNWAY 20	_AT.	60°58'16.44"N	60°58'16.13"N
	_ONG.	149°06'56.14"W	149°06'56.68"W
CTION ZONE DIMENSIONS			
4		250'	SAME
Н		450'	SAME
		1000'	SAME
DACH CATAGORY		A	SAME
N GROUP		I	SAME

AIRPORT DATA			
ITEM		EXISTING	ULTIMATE
L AIRPORT IDENTIFIER		NONE / AQY	SAME
TION (M.S.L.)		150'	162'
ENCE POINT (A.R.P.)*	LAT.	60°57'58.20"N	60°58'08.15"N
	LONG.	149°07'33.00"W	149°07'10.21"W
NG		NONE	SAME
		NONE	SAME
		250	SAME
MPERATURE, HOTTEST MONTH (JULY)		65.0 <b>°</b> F	SAME
INATION, YEAR		21°28'E, 2005	SAME
ENCE CODE		A—I	A-1
ERMINAL NAVIGATION AIDS (ELECTRONIC)		NONE	SAME
ATION AIDS (VISUAL)		NONE	SAME
ATION AIDS (VISUAL)			

\*EXISTING A.R.P. COORDINATES ARE AS PUBLISHED IN THE ALASKA SUPPLEMENT.

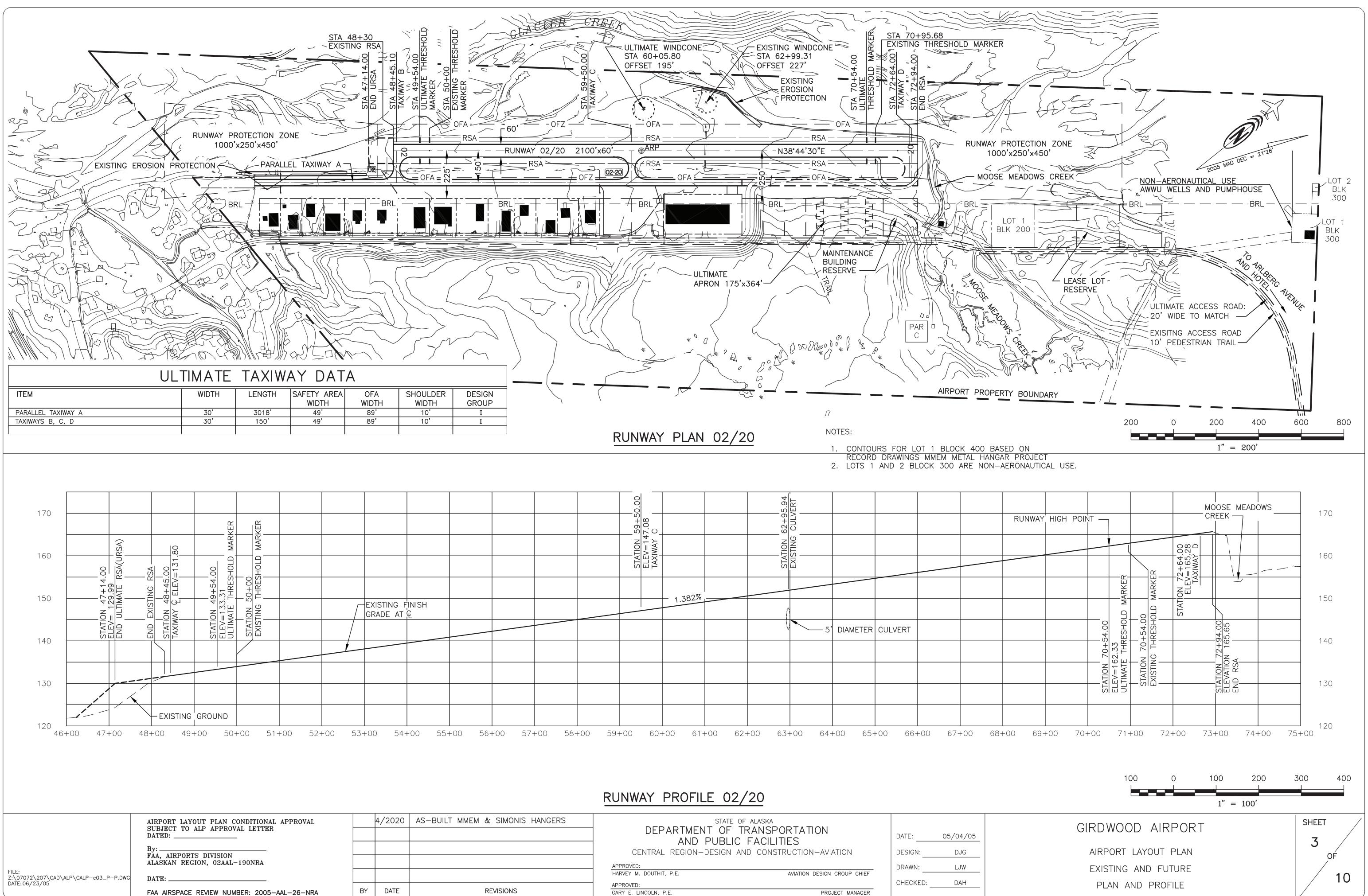
TAXIWAY DATA		
ITEM	EXISTING	ULTIMATE
TAXIWAY WIDTH	30'	30'
TAXIWAY OFFSET FROM RUNWAY	150'	150'

SHEET	
2	
	)F
	10
	)

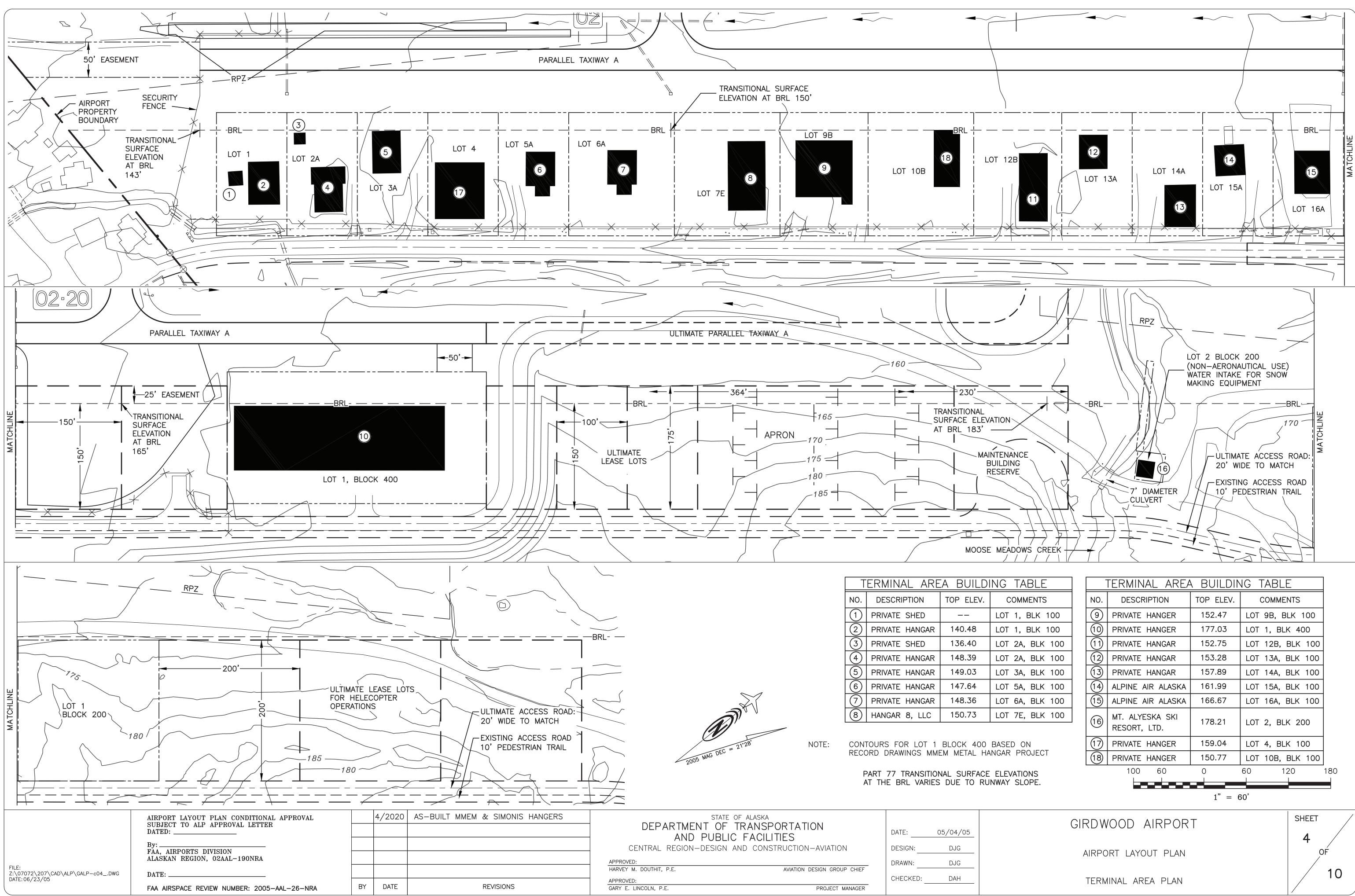
GIRDWOOD AIRPORT

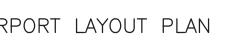
AIRPORT LAYOUT PLAN

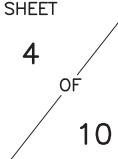
VICINITY MAP AND DATA TABLES



& SIMONIS HANGERS	STATE	OF ALASKA		
		TRANSPORTATION C FACILITIES	DATE:	05/04/05
	CENTRAL REGION-DESIGN	AND CONSTRUCTION-AVIATION	DESIGN:	DJG
	APPROVED:		DRAWN:	LJW
	HARVEY M. DOUTHIT, P.E.	AVIATION DESIGN GROUP CHIEF		
	APPROVED:		CHECKED:	DAH
REVISIONS	GARY E. LINCOLN, P.E.	PROJECT MANAGER		

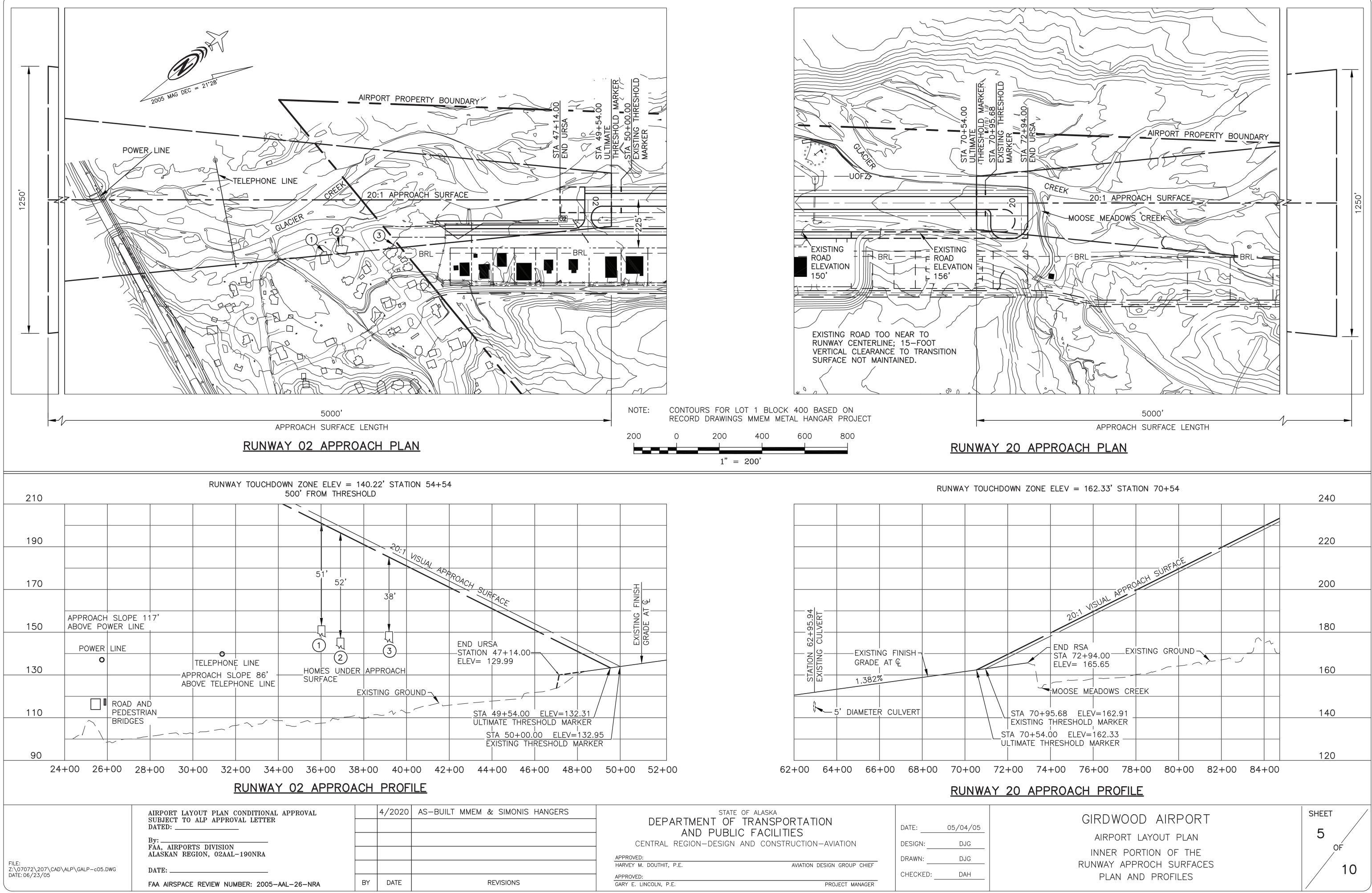




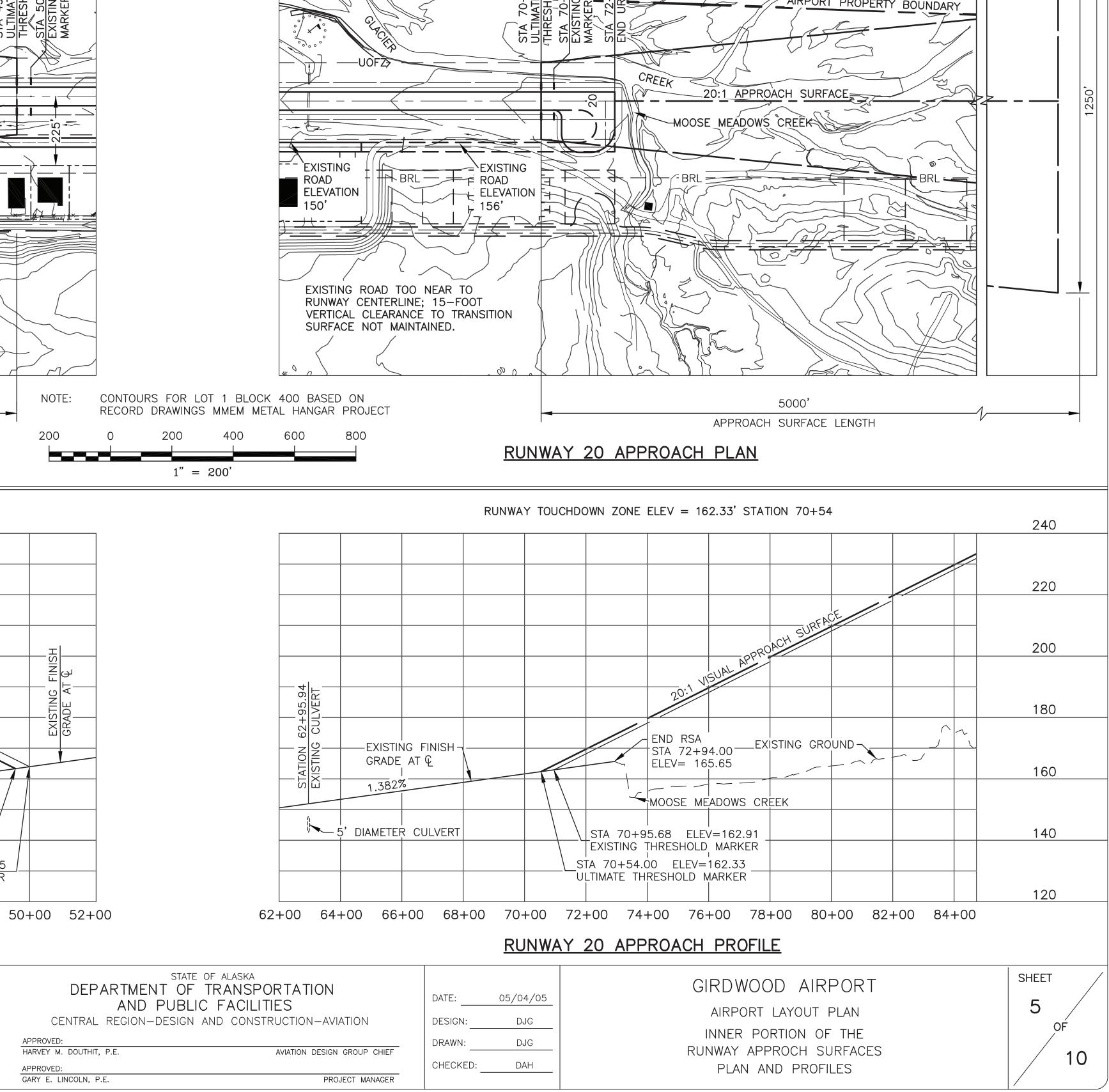


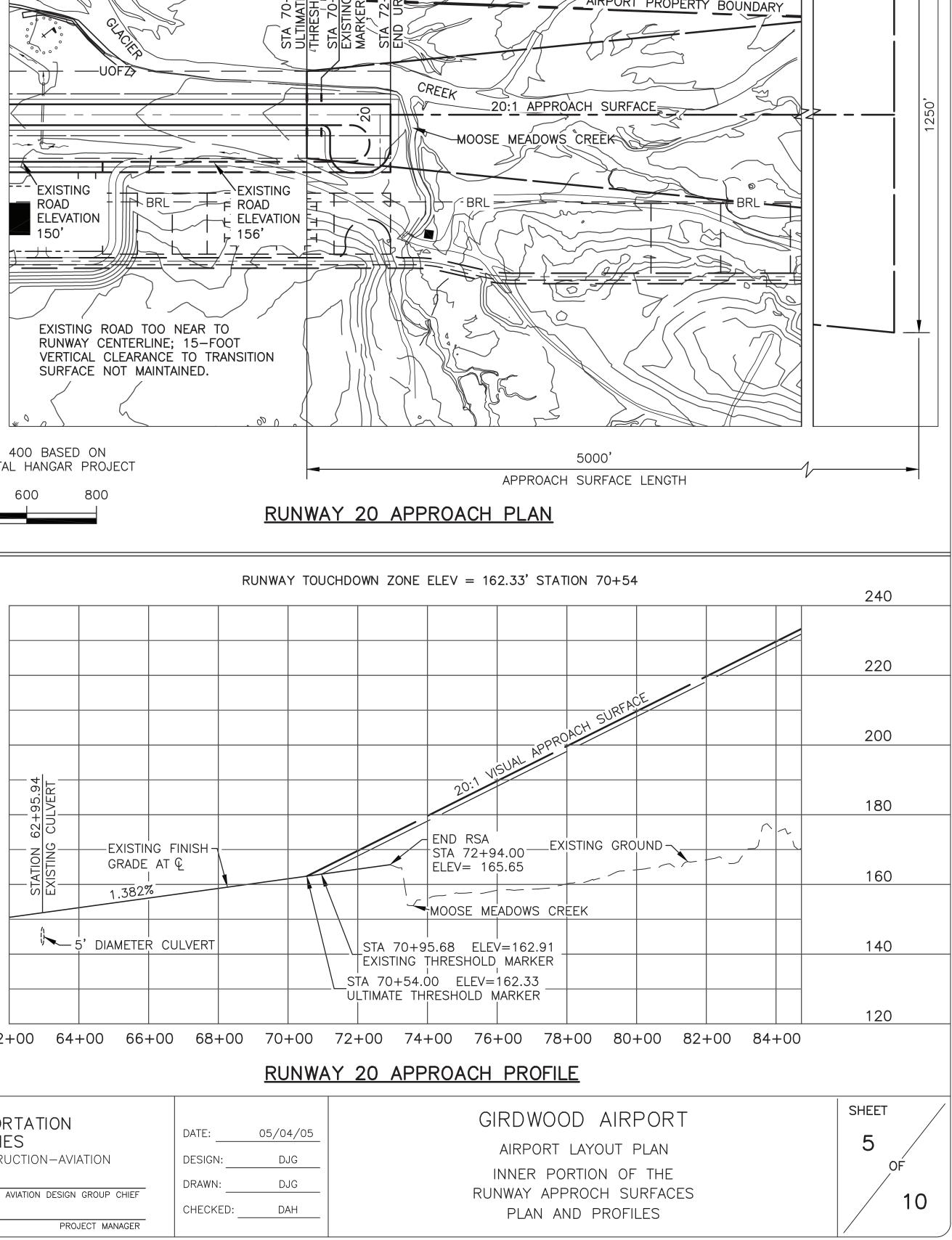
G	TABL	E
С	OMMENT	S
.OT	1, BLK	100
.OT	1, BLK	100
.OT	2A, BL	K 100
.OT	2A, BL	K 100
.OT	3A, BL	K 100
.OT	5A, BL	K 100
.OT	6A, BL	K 100
.OT	7E, BL	K 100

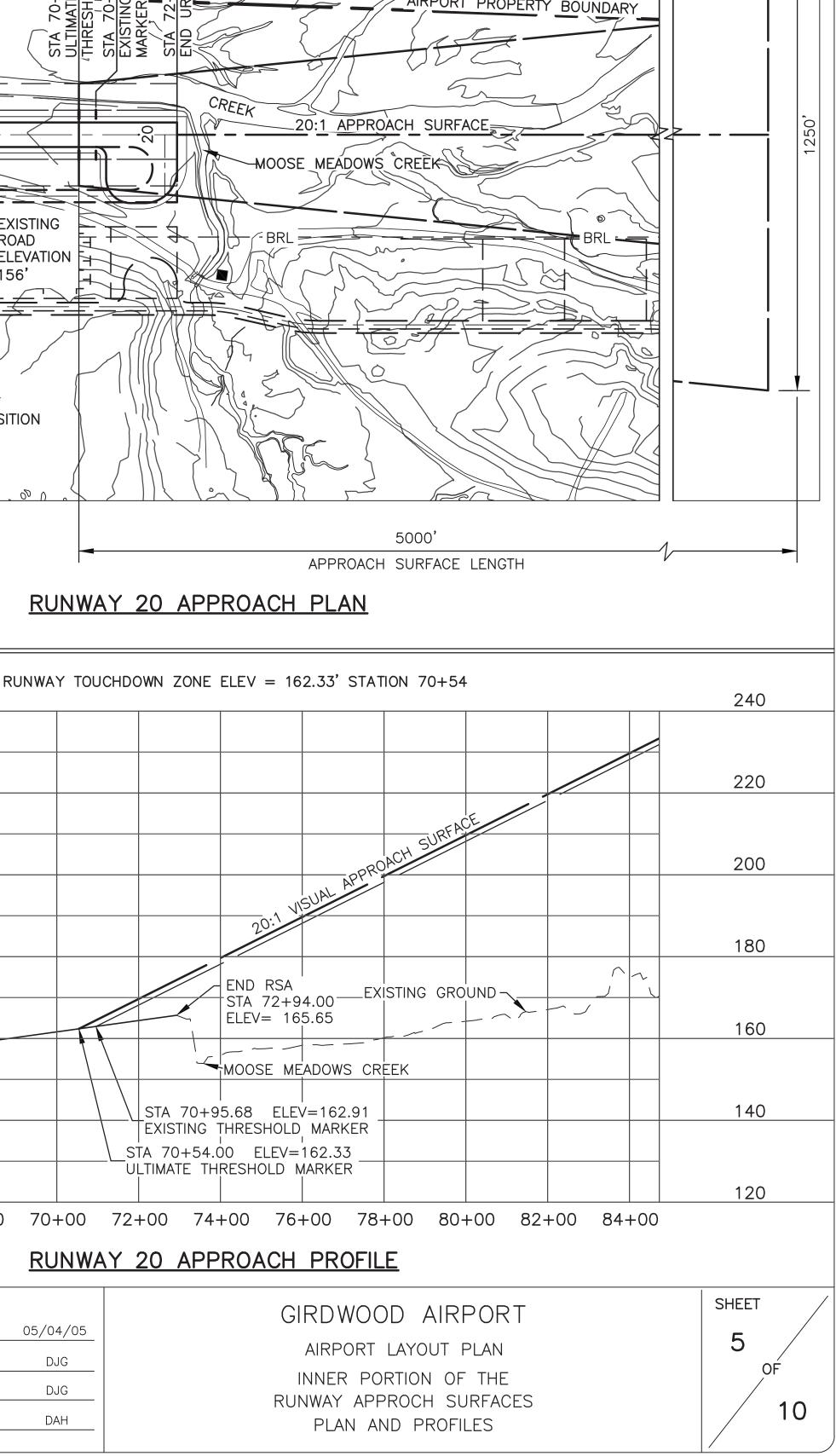
	/	<u> </u>		
-	TERMINAL AREA	BUILDIN	IG TABLE	
NO.	DESCRIPTION	TOP ELEV.	COMMENTS	
9	PRIVATE HANGER	152.47	LOT 9B, BLK 100	
10	PRIVATE HANGER	177.03	LOT 1, BLK 400	
(11)	PRIVATE HANGAR	152.75	LOT 12B, BLK 100	
(12)	PRIVATE HANGAR	153.28	LOT 13A, BLK 100	
13	PRIVATE HANGAR	157.89	LOT 14A, BLK 100	
(14)	ALPINE AIR ALASKA	161.99	LOT 15A, BLK 100	
(15)	ALPINE AIR ALASKA	166.67	LOT 16A, BLK 100	
(16)	MT. ALYESKA SKI RESORT, LTD.	178.21	LOT 2, BLK 200	
(17)	PRIVATE HANGER	159.04	LOT 4, BLK 100	
18	PRIVATE HANGER	150.77	LOT 10B, BLK 100	
	100 60	0	60 120	180
			•	

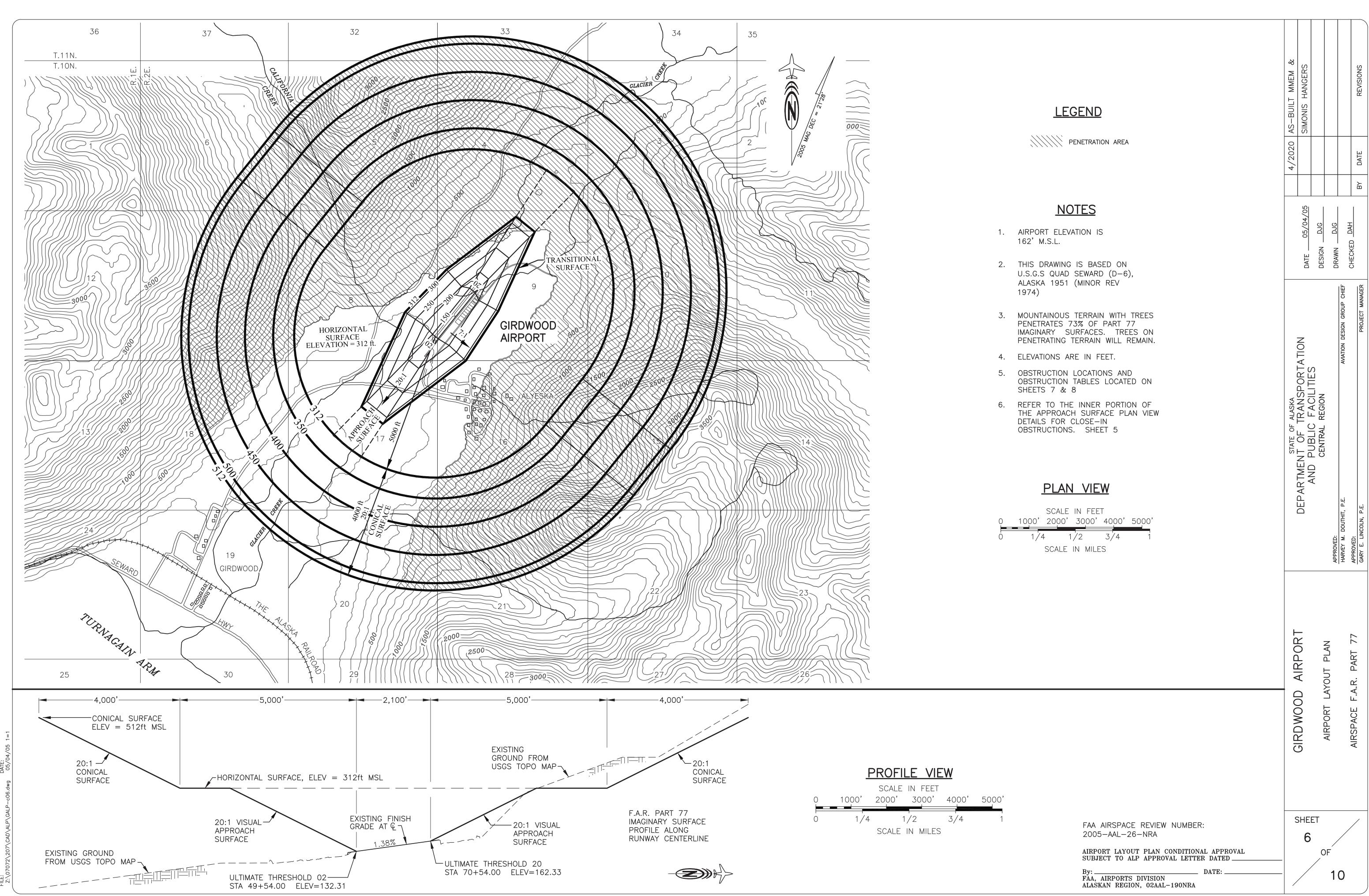


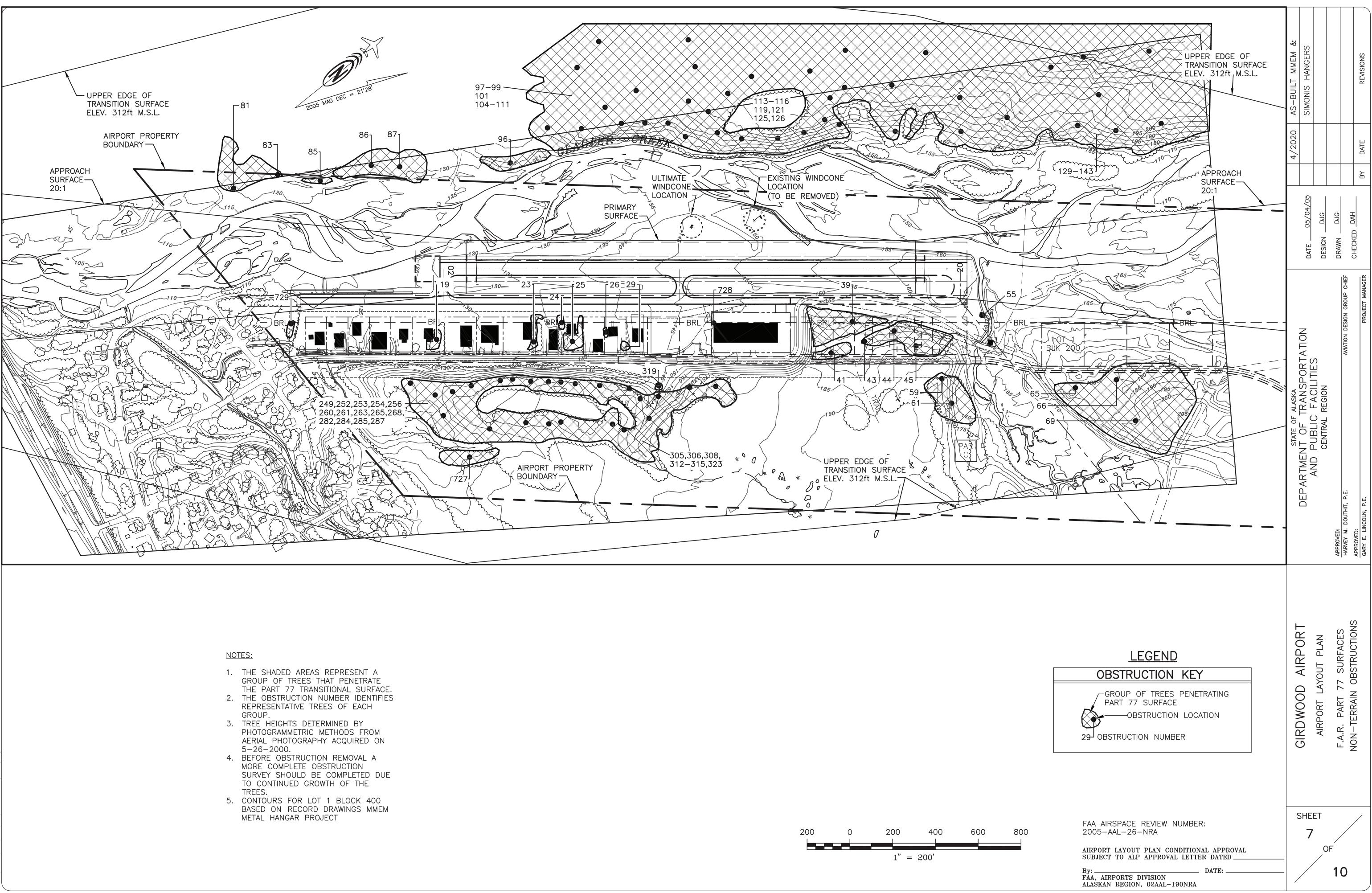
EXISTING THRESHOLD MARKI							U
44+00 46+00 48+00	50+00 52+00	62+00	64+00	66+00	68+00	70+00	) 72
						RUNV	VAY
M & SIMONIS HANGERS	DEPARTMENT O			CHIEF	DATE: DESIGN: DRAWN:	05/04/05 DJG DJG	<u> </u>
REVISIONS	APPROVED: GARY E. LINCOLN, P.E.		PROJECT MA	NAGER	CHECKED: _	DAH	_

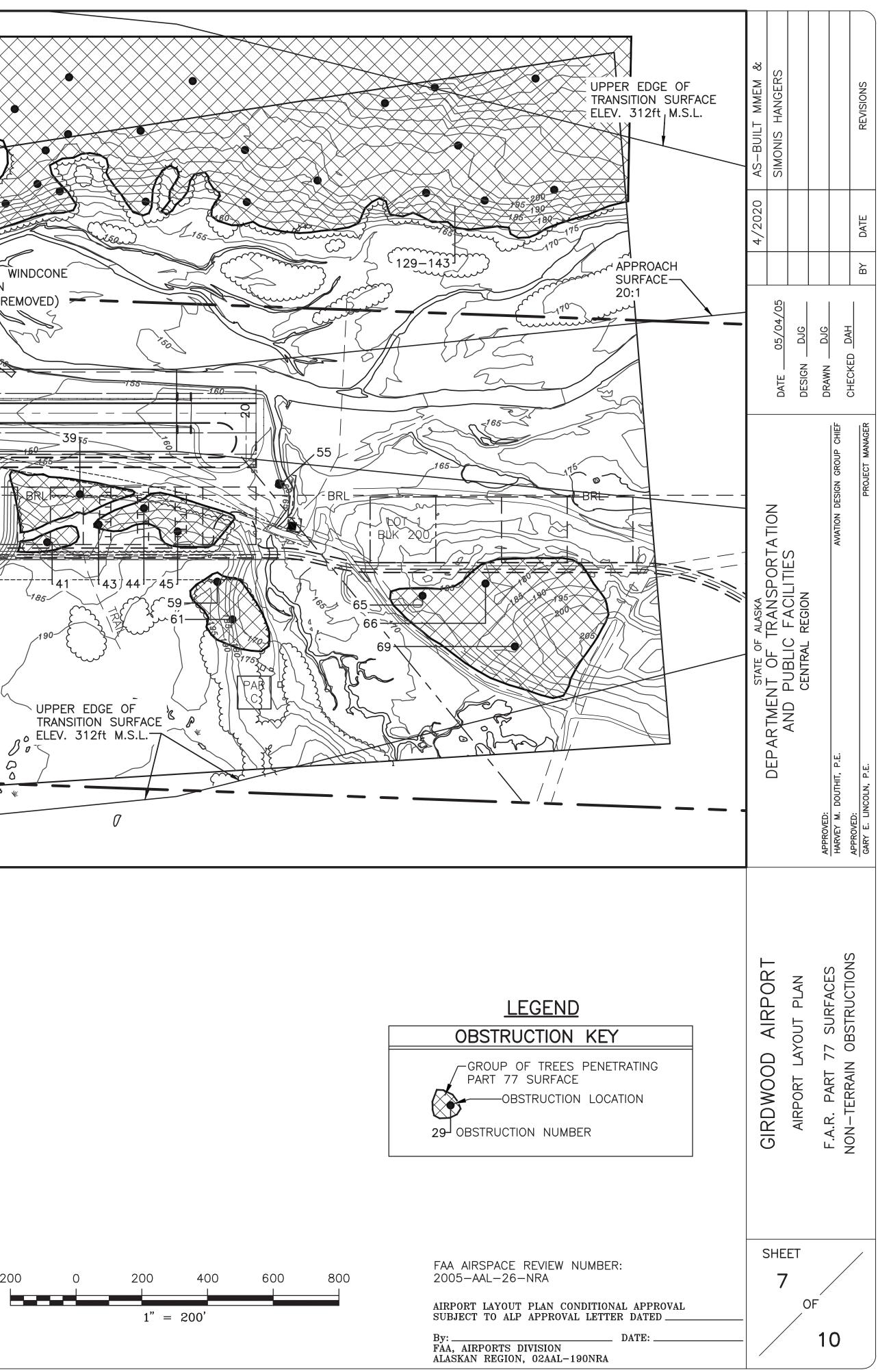












				<u>ON TABLE</u>	
OBSTRUCTION NUMBER	OBSTRUCTION ELEVATION	OBSTRUCTION	AMOUNT OF OBSTRUCTION	DESCRIPTION	DISPOSITIO
19	167	YES	12	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
23	179	YES	9	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
24	176	YES	23	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
25	185	YES	30	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
26	191	YES	26	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
39	200	YES	23	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
41	197	YES	7	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
43	194	YES	3	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
44	187	YES	8	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
45	198	YES	1	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
55	190	YES	4	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
59	231	YES	12	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIOI
61	247	YES	6	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
65	271	YES	22	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
66	278	YES	25	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
69	288	YES	4	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
81	217	YES	10	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
83	223	YES	15	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
85	199	YES	2	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	REMOVE
86	225	YES	26	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
87	207	YES	14	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
96	192	YES	4	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
97	244	YES	30	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
98	231	YES	15	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
99	269	YES	14	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
101	233	YES	2	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
104	254	YES	30	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
105	255	YES	30	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
106	263	YES	46	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
110	241	YES	5	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
111	247	YES	25	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
113	246	YES	27	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
114	274	YES	12	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
115	239	YES	17	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
116	238	YES	11	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
119	248	YES	11	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
121	263	YES	28	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
125	274	YES	9	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
126	256	YES	22	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
129	270	YES	5	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
130	264	YES	21	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
131	262	YES	3	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
134	308	YES	8	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
137	298	YES	32	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
138	320	YES	7	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
139	297	YES	6	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
140	285	YES	16	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
142	309	YES	27	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO
143	342	YES	15	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	NO ACTIO

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OBSTRUCTION TABLE								
OBSTRUCTION NUMBER	OBSTRUCTION ELEVATION	OBSTRUCTION	AMOUNT OF OBSTRUCTION	DESCRIPTION	DISPOSITION			
249	203	YES	1	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
252	216	YES	10	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
253	240	YES	22	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
254	205	YES	5	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
256	215	YES	20	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
260	194	YES	1	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
261	194	YES	1	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
263	211	YES	16	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
265	231	YES	6	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
268	225	YES	2	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
282	234	YES	8	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
284	202	YES	5	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
285	241	YES	17	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
287	214	YES	16	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
290	211	YES	11	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
305	241	YES	6	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
306	240	YES	10	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
308	241	YES	38	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
312	226	YES	19	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
313	254	YES	39	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
314	257	YES	29	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
315	230	YES	16	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
319	216	YES	9	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
321	236	YES	26	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
323	227	YES	17	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
727	234	YES	10	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			
728	177.03	YES	10	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	TO REMAIN			
729	177	YES	10	OBSTRUCTION TO 7:1 TRANSITIONAL SURFACE	SELECTIVE REMOVAL			

OBSTRUCTION ELEVATION IS THE ELEVATION OF THE TREE TOPS ABOVE M.S.L.

AMOUNT OF OBSTRUCTION IS THE VERTICAL HEIGHT OF TREE ABOVE THE PART 77 SURFACE

TREE HEIGHTS DETERMINED BY PHOTOGRAMMETRIC METHODS FOR AERIAL PHOTOGRAPHY ACQUIRED ON 5–26–2000.

RUNWAY ELEVATION IS 162'M.S.L.

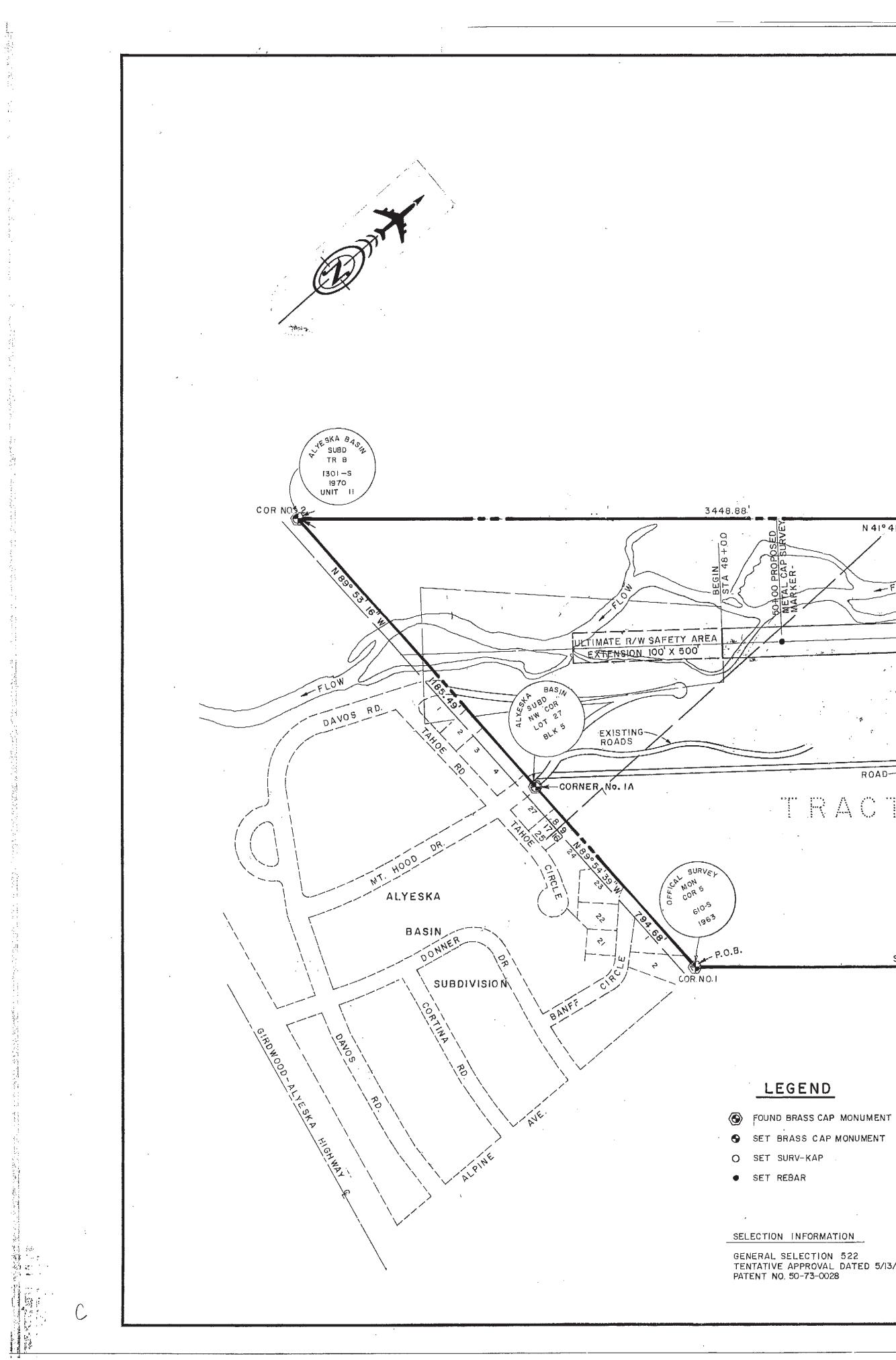
ELEVATIONS ARE IN FEET.

						$\overline{}$
AS-BUILT MMEM &	SIMONIS HANGERS					REVISIONS
4/2020						DATE
	DATE 05/04/05	DESIGN DJG	DRAWN DJG/LJW			BY
STATE OF ALASKA	DEPARIMENT OF IRANSPORTATION	AIND FUDLIC FACILITIES CENTRAL REGION		HARVEY M. DOUTHIT, P.E. AVIATION DESIGN GROUP CHIEF	APPROVED:	GARY E. LINCOLN, P.E. PROJECT MANAGER
		OBSTRUCTION TABLE	E A D DADT 77 CLIDEACES		NON-IERRAIN OBSIRUCTIONS	
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FAA AIRSPACE REVIEW NUMBER: 2005–AAL–26–NRA

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED \_\_\_\_\_

By: \_\_\_\_\_ DATE: \_\_\_\_\_ FAA, AIRPORTS DIVISION ALASKAN REGION, 02AAL-190NRA



		· ·	PRO	PERTY	STATUS
	TRACT	PARCEL		O. AREA ACRES	
	I.		10465	, 174.75	Q.C.D. GRANTED BY A.D.L. NO. 28448
		-			
U OFF					
		C	W C () SEC 9 /C ILMT		
			1971 28448		
	ACIER CRI	EEK .33			MAY
N 41° 41' 54" E 5,800.00'	•		1	METAL CAP	A 73 + 00
FLOW	RUNWAY 100' X	2500 N 3			
	TAX1WAY	*		*	1080 65. VS
ROAD					288
					123 F. 1. 68
					r.
S4I° 40' I3"W	<b>4,485.4</b> 4 51.51'			· · · · · · · · · · · · · · · · · · ·	
				:	
SEND NOTES		_			

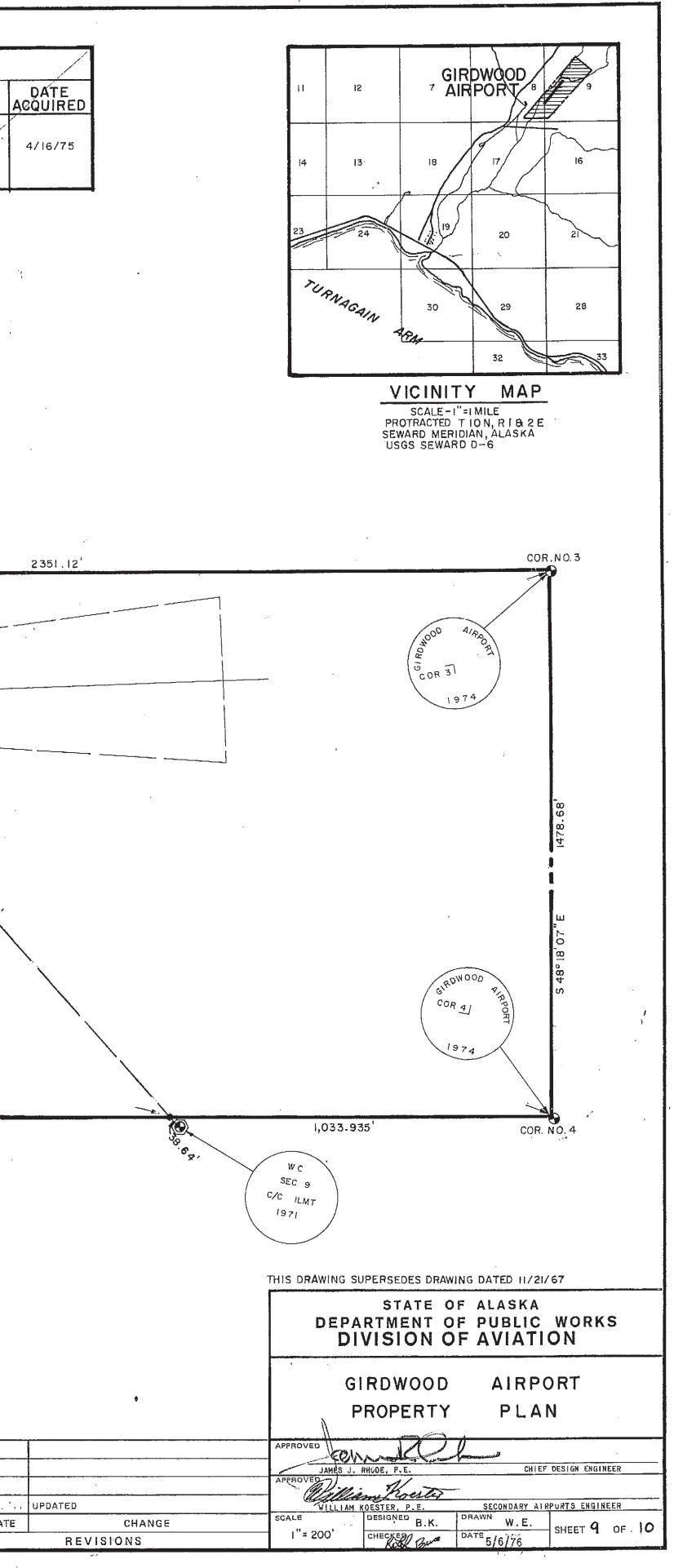
SET BRASS CAP MONUMENT

SELECTION INFORMATION

GENERAL SELECTION 522 TENTATIVE APPROVAL DATED 5/13/64 PATENT NO. 50-73-0028

1.) BEARINGS & DISTANCES TAKEN FROM ASLS # 74 - 131, SURVEYED BY BOMHOFF & ASSOC.

BY DATE



## 1. BACKGROUND

The community of Girdwood is located about 37 miles southeast of Anchorage; the population is approximately 1,800. Girdwood is a part of the Municipality of Anchorage (MOA). The Girdwood Board Of Supervisors advises the MOA of local Girdwood issues. Girdwood is a resort community with few retail outlets, the majority of Girdwood residents rely on Anchorage for provisions.

The Girdwood Airport is located approximately half way up the valley adjacent to Glacier Creek at latitude 60° 58'N and longitude 149° 07"W. The unlighted, gravel surfaced runway is 2,100' X 60' and has an airport reference code of A-1. There are no instrument approaches.

## 2. FORECASTS

General aviation and commercial aircraft currently use Girdwood Airport. There is one year—round commercial operator and one seasonal operator located on the airport. The commercial aircraft provide services for flightseeing, helicopter skiing and charter to remote locations.

The following forecast is from the Girdwood Airport Master Plan and is based on the base year estimate for aircraft operations (5,550) and passenger enplanements (4,100). These base year values were derived from actual aircraft counts and data provided by airport tenants. The forecast values represent a growth rate of 1.5% per year to the year 2021.

Table 1: Forecasts

Item	0-5 years	6—10 Years	11—20 Years	
Total annual operations	5,979	6,441	7,475	
Total annual itinerant operations	5,860	6,312	7,325	
Local operations	120	129	150	
Emplanements	4,417	4,758	5,522	
Number of based aircraft	24	27	32	

### MOST DEMANDING AIRCRAFT

The majority of air traffic at the Girdwood Airport consists of small, single engine aircraft, reference code A-1. The local commercial operator has shifted its aircraft fleet from fixed wing aircraft to Robinson R-22 and R-44 helicopters. A seasonal heli-skiing operator uses Astar 350 helicopters for a few months in spring. Rarely, light twin engine aircraft (B-1) have been seen on the airport.

## 3. RATIONALE FOR PROPOSED IMPROVEMENTS NEAR TERM 0-5 YEARS

A. Runway Safety Area length deficient at both runway ends.

Rationale: Bring up to FAA standards by relocating both runway thresholds and by extending the runway embankment 116 feet to the south. This new section of embankment will need erosion protection from Glacier Creek.

Estimated Cost: \$214,000

B. Erosion protection along Glacier Creek

Rationale: To protect runway; Glacier Creek is actively eroding the bank upon which the airport is located. The segmented circle is 10 feet from this eroding edge. Approximately 1,400 feet of creek bank will require protection.

Estimated Cost: \$375,000

C. Remove trees growing within the developed areas that are obstructing navigable airspace.

Rationale: FAR Part 77 establishes standards for determining obstructions to navigable airspace. Many trees on the lease lots penetrate the Part 77 transition surface.

Estimated Cost: \$50,000

D. Lower the power line and telephone line crossing Glacier Creek, to same elevation as the Alyeska Highway Bridge.

Rationale: Provide increased clearance and safety for aircraft departing Runway 20

Estimated cost: \$111,000

FILE: Z:\07072\207\CAD\ALP\GALP—C08.DWG DATE:05/04/05	AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED: By: FAA, AIRPORTS DIVISION ALASKAN REGION, 02AAL-190NRA DATE:			APPROVED: DR HARVEY M. DOUTHIT, P.F. AVIATION DESIGN GROUP CHIEF	ESIGN: DIG RAWN: LJW
DATE: 05/04/05	FAA AIRSPACE REVIEW NUMBER: 2005-AAL-26-NRA	BY	DATE REVISIONS	APPROVED: CH GARY E. LINCOLN, P.F. PROJECT MANAGER	HECKED: <u>}A</u> V-DAH

#### 6-10 YEARS

A. Pave the existing airport access road

Rationale: Reduce dust and traffic noise created by frequent traffic as it passes through the adjacent neighborhood to and from the airport

Estimated Cost: \$250,000

B. Construct new lease lots and maintenance building reserve north of the existing apron

Rationale: Provide lease lots to satisfy the forecast demand

Estimated Cost: \$3,500,000 of which \$2,300,000 is for the excavation 230,000 cubic yards of material require removal

C. Extend parallel taxiway to the north

Rationale: To provide access to the runway for the new lease lots.

Estimated cost: \$75,000

#### 11-20 YEARS

A. Construct new airport access road to provide north access

Rationale: Provide a new airport access road for vehicle traffic to remove traffic impact to the adjacent neighborhood. The existing access road through the neighborhood will be gated at the airport property boundary.

Estimated Cost: \$1,900,000

### 4. RATIONALE FOR MODIFICATIONS OF STANDARDS OR UNUSUAL CONDITIONS

There are no modifications to standards.

Girdwood Airport is located in narrow valley surrounded by mountains that range from 4,000 to 6,000 feet high within 2.3 miles of the runway. These mountains penetrate 73% of the Part 77 imaginary surfaces. Most of these mountains are also covered by trees.

There are no terrain or object penetrations to the 20:1 approach surface to Runway 02. The 20:1 approach surface to Runway 20 has terrain penetration off airport property.

Penetrating trees located within the existing and proposed developed areas will be removed (obstructions 18-55).

The trees that penetrate the transition surface and are located on the opposite side of Glacier Creek (obstructions 81-143) that are off airport property will remain. Securing permission to remove these trees would be difficult and local pilots have not registered any complaints about encroaching trees.

Many trees located between the airport access road and the northeast airport property boundary on the fringe of Moose Meadows penetrate the 7:1 transition surface (obstructions 137-331,727). These trees cover a hillside and are in an area used recreationally by local residents. Only selective tree removal or topping of the highest trees is recommended for this area.

No wind data exists or was collected for the Girdwood Airport. Local pilots report that the prevailing winds are up or down the valley in general alignment with the runway; no dangerous crosswind conditions have been reported.

## **GIRDWOOD AIRPORT**

AIRPORT LAYOUT PLAN

NARRATIVE REPORT

