

SEE AS-BUILT SHEETS 2-11

	RUNWAY DATA			
	R/W 18L-36R	ULTIMATE	ULTIMATE	WATERLANE
% WIND COVERAGE	99.3	99.8	99.3	N/A
INSTRUMENT RUNWAY	NONE	NONE	NONE	NONE
RUNWAY SURFACE TYPE	GRAVEL	SAME	GRAVEL	WATER
PAVEMENT STRENGTH	N/A	SAME	N/A	N/A
APPROACH SURFACES	20:1/34:1	SAME	20:1	20:1
APPROACH VISIBILITY MINIMUM	≥1 MILE/3/4 MILE	SAME	≥1 MILE	≥1 MILE
RUNWAY LIGHTING	MRL	SAME	NONE	NONE
RUNWAY MARKING	NONE	SAME	NONE	NONE
VISUAL APPROACH AIDS	PAPI, REL	SAME	NONE	NONE
R/W DIMENSIONS	60'x3400'	75'x4000'	60'x2500'	60' X 3000'
R/W SAFETY AREA	120'x3880'	150'x4800'	120'x2980'	N/A
R/W OBJECT FREE AREA (OFA)	300'x3880'	500'x4800'	250'x2980'	N/A
R/W OBSTACLE FREE ZONE (OFZ)	300'x3800'	300'x4400'	125'x2900'	N/A
T/W WIDTH	35'	50'	25'	NONE
T/W SAFETY AREA WIDTH	80'	120'	50'	NONE
T/W OFA	131'	186'	88'	NONE

AIRPORT DATA			
	PROPOSED	ULTIMATE	
AIRPORT ELEVATION (NAVD 88)	273.7	273.7	
AIRPORT REFERENCE CODE	BI	BI	
MEAN HIGH TEMP. HOTTEST MONTH (JULY)	72°F	SAME	
TAXIWAY LIGHTING	MTL	SAME	
RAMP LIGHTING	NONE	SAME	
NAVIGATION AIDS	GPS, BEACON	SAME	
COMMUNICATION AIDS	NONE	ROD	
AIRPORT REFERENCE POINT (ARP)	LAT. 64°58'17.82"N		LONG. 150°38'54.20"W
THRESHOLD 18L STA. 21+75	LAT. 64°58'32.295"N		LONG. 150°38'37.398"W
THRESHOLD 36R STA. 61+75 ULTIMATE	LAT. 64°58'35.423"N		LONG. 150°38'09.898"W
THRESHOLD 36R STA. 59+75 PROPOSED	LAT. 64°58'00.954"N		LONG. 150°38'05.110"W
THRESHOLD 18R STA. 20+15	LAT. 64°58'35.150"N		LONG. 150°38'44.806"W
THRESHOLD 36L STA. 45+15	LAT. 64°58'12.105"N		LONG. 150°38'05.182"W

NOTES:
NO OFZ PENETRATIONS.
NO THRESHOLD SITING PENETRATIONS.
DATA BASE CONTROL YEAR: NAD 83
NO DATA ON EXISTING AIRPORT IS INCLUDED

	LEGEND		
	EXISTING	PROPOSED	ULTIMATE
PROPERTY LINE	---	---	---
BUILDING RESTRICTION LINE (B.R.L.)	NONE	B.R.L.	B.R.L.
DEVELOPMENT			
WIND CONE & SEGMENTED CIRCLE	☼	☼	☼
BUILDING	▭	▭	▭
ROADWAY	—	—	—
AIRPORT REFERENCE POINT	○	○	○
ROTATING BEACON	⊙	⊙	⊙
ANTENNA/TOWER	⊙	⊙	⊙
CONTOURS	—	—	—

DESIGN AC	AS 5/18/15	Delete Page 1 of 11 and Replace with 2 of 11
DRAWN CAT		
CHECKED CML		
BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION - DESIGN AND ENGINEERING SERVICES
APPROVED
Patricia D. Miller
PATRICIA D. MILLER, P.E.
DATE 02/22/05
DESIGN GROUP CHIEF

AIRPORT LAYOUT PLAN APPROVED
BY LETTER DATED: 02/25/05
John T. Lovett
AIRPORTS DIVISION,
ALASKAN REGION, AAL-601
AIRSPACE REVIEW #04AAL-125NRA

THIS ALP WAS COMPILED FROM CONTROLLED
AERIAL PHOTOGRAPHY AND MAPPING DATED
9-21-2002.

MANLEY HOT SPRINGS
AIRPORT LAYOUT PLAN

SHEET
1 OF 11

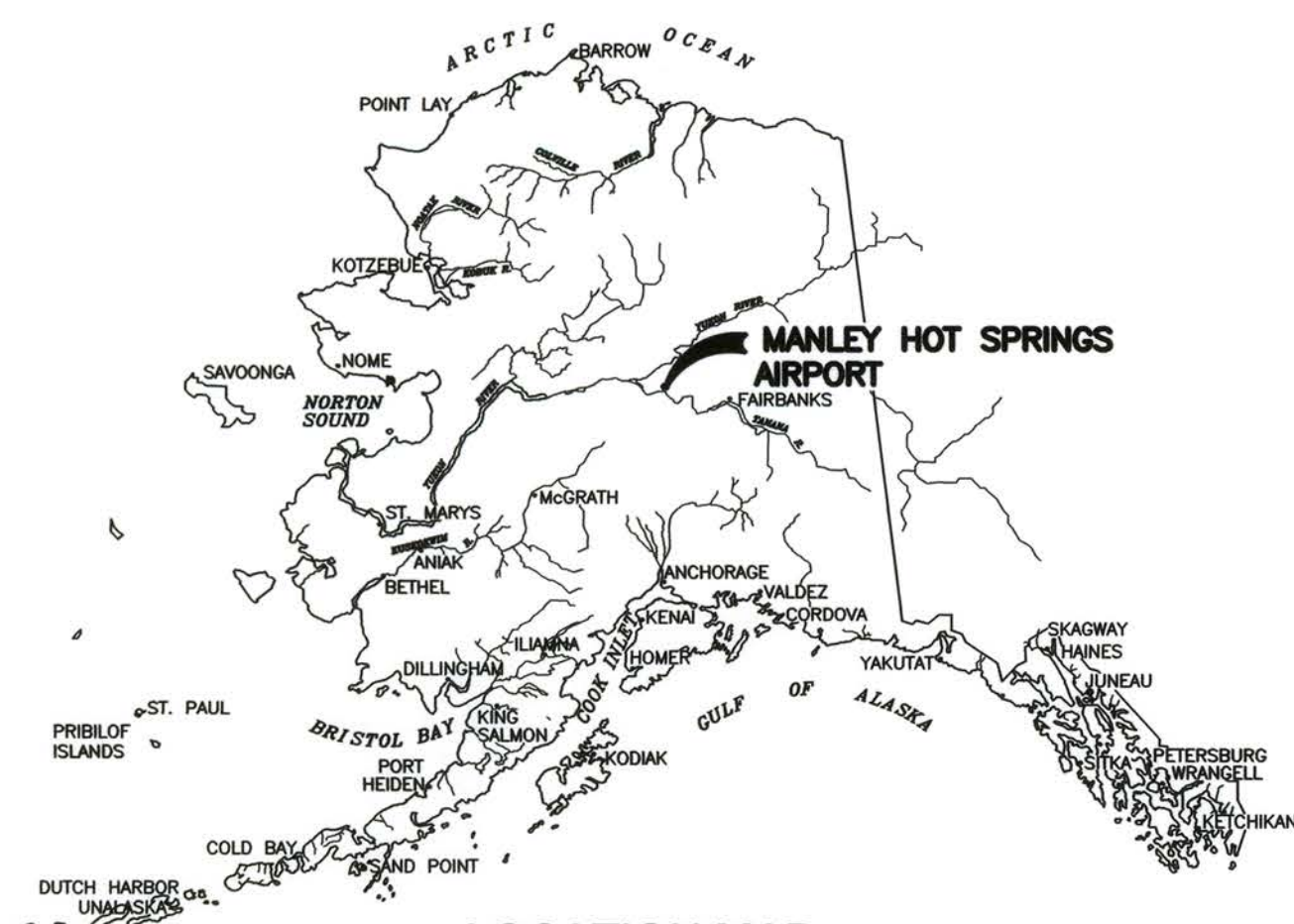
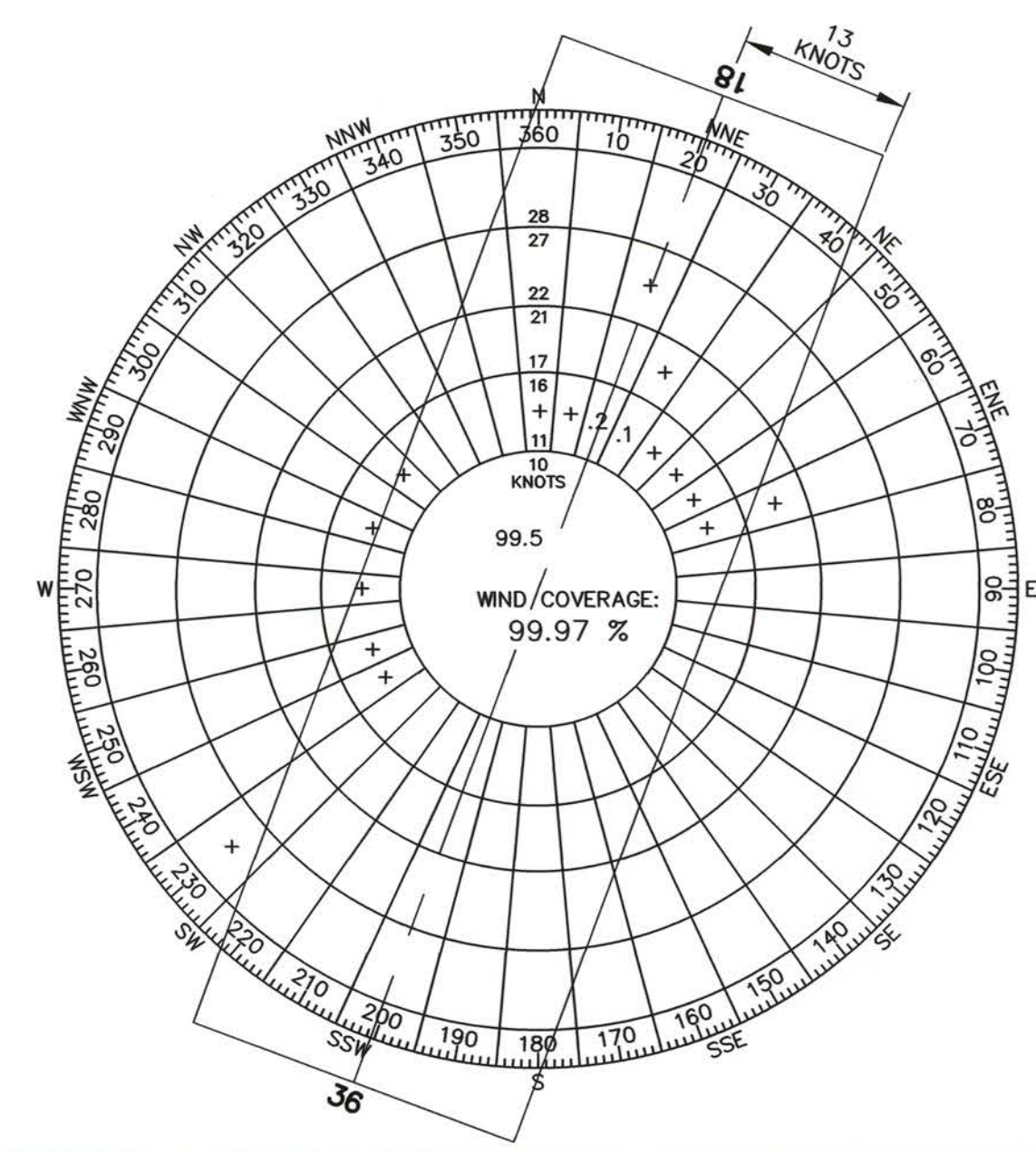
AIRPORT DATA

ITEM	EXISTING	ULTIMATE
ICAO IDENTIFIER	PAML	SAME
NATIONAL AIRPORT IDENTIFIER	MLY	SAME
FAA SITE NUMBER	50475.*A	SAME
AIRPORT REFERENCE CODE (ARC)	B-I	B-II
NPIAS SERVICE LEVEL (P, CS, R, GA)	GA	SAME
AASP CLASSIFICATION	COMMUNITY ON-ROAD	SAME
AIRPORT ELEVATION (NAVD88)	275.33'	SAME
MEAN MAX. TEMPERATURE, HOTTEST MONTH	73°F, JULY	SAME
AERONAUTICAL SURVEY TYPE	VERTICALLY GUIDED	SAME
MAGNETIC DECLINATION, YEAR, RATE OF CHANGE	17°43'48"E, 2015, 24.6"W / YEAR	SAME
AIRPORT AND TERMINAL NAVIGATION AIDS	ROT. BEACON, WINDCONE, SEGMENTED CIRCLE	ROT. BEACON, WINDCONE, SEGMENTED CIRCLE, SECONDARY WINDCONE, PAPI, REIL, GPS, RCO, AWOS

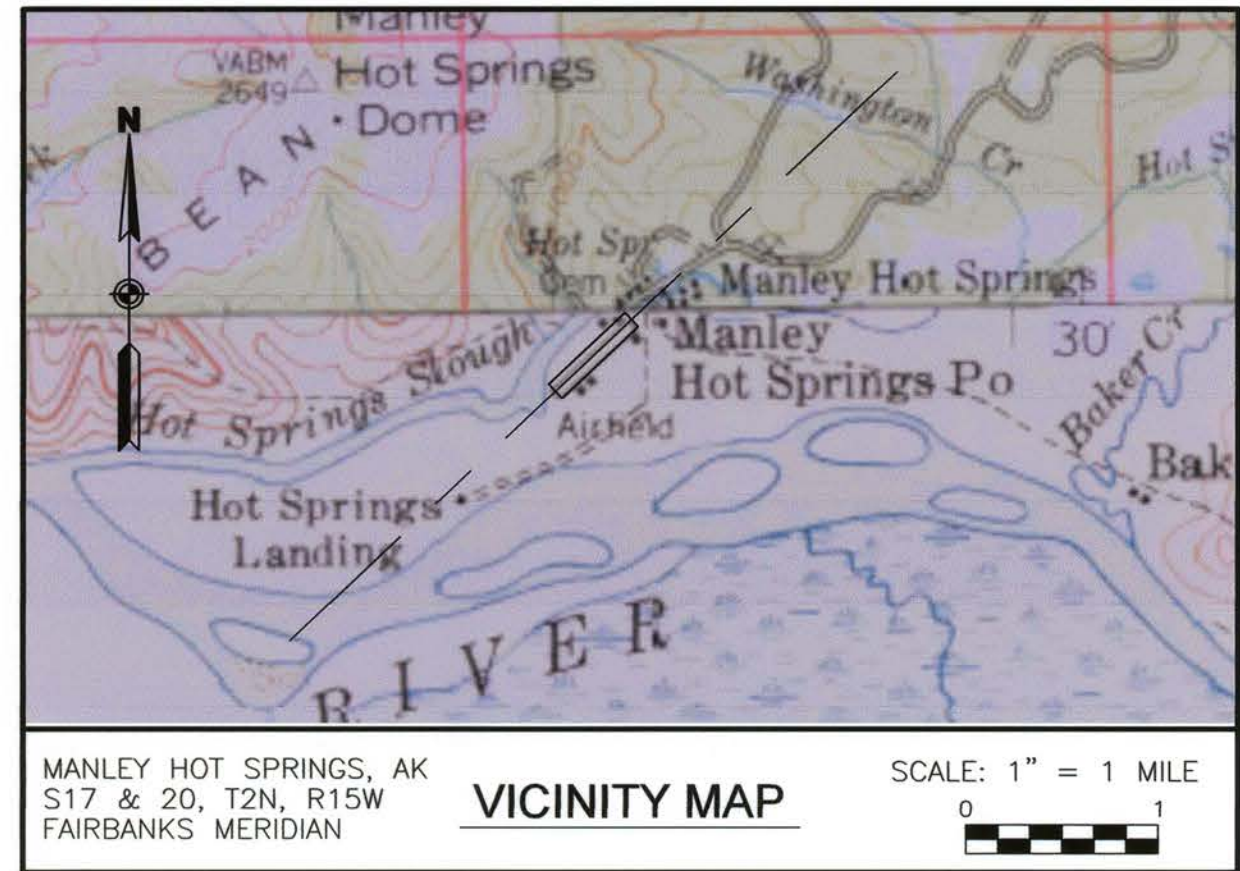
WIND DATA (ALL WEATHER)

RUNWAY	13 kt (B-II)
18L/36R	100.0%
18R/36L	100.0%

SOURCE: NDCD ISH/ISD
STATION NAME: MANLEY HOT SPRINGS
PERIOD: 2006-2014



LOCATION MAP



VICINITY MAP

SHEET INDEX

SHEET	TITLE
1	AIRPORT DATA
2	EXISTING AIRPORT LAYOUT PLAN
3	ULTIMATE AIRPORT LAYOUT PLAN
4	EXISTING/ULTIMATE TERMINAL PLAN
5	EXISTING INNER PORTION OF THE APPROACH SURFACE
6	ULTIMATE INNER PORTION OF THE APPROACH SURFACE - RUNWAY 18L/36R
7	ULTIMATE INNER PORTION OF THE APPROACH SURFACE - RUNWAY 18R/36L
8	ULTIMATE INNER PORTION OF THE APPROACH SURFACE - WATERLANE
9	AIRPORT AIRSPACE (FAR PART 77)
10	AIRPORT AIRSPACE PROFILES (FAR PART 77)

RUNWAY DATA

ITEM	RUNWAY 18L/36R		RUNWAY 18R/36L	WATERLANE
	EXISTING	ULTIMATE	ULTIMATE	EXISTING
FAR PART 77 APPROACH CAT. (UTILITY, OTHER THAN UTILITY)	UTILITY	SAME	UTILITY	UTILITY
FAR PART 77 APPROACH TYPE (V, C, NPA, PA)	V	NPA	V	V
RUNWAY DESIGN CODE (RDC)	B-I	B-II	B-I	B-I
DESIGN AIRCRAFT	BEECH 200	SAME	UNKNOWN	UNKNOWN
FAR PART 77 APPROACH SLOPE	20:1 / 20:1	20:1 / 34:1	20:1 / 20:1	20:1
VISIBILITY MINIMUM	V / V	≥1 SM / ≥3/4 SM	≥1 SM / ≥1 SM	≥1 SM
RUNWAY SURFACE	GRAVEL	SAME	GRAVEL	WATER
PAVEMENT STRENGTH (SW,DW,DTW x1000lbs)	N/A	N/A	N/A	N/A
TRUE MEAN BEARING	N 20°31'23.7" E	SAME	N 20°31'23.7" E	N/A
MAXIMUM ELEVATION ABOVE MSL	275.33'	SAME	272.75	261'
EFFECTIVE GRADE	0.00%	SAME	0.00%	N/A
RUNWAY TOUCHDOWN ZONE ELEVATIONS (NAVD 88)	RW 18: 275.27'	SAME	272.75	N/A
	RW 36: 275.33'	SAME	272.75	N/A
RUNWAY DIMENSIONS	60'x3400'	75'x4000'	60'x2500'	60'x3000'
RUNWAY SAFETY AREA (RSA) DIMENSIONS	120'x3880'	150'x4600'	120'x2980'	N/A
RSA LENGTH BEYOND RW ENDS	240'	300'	240'	N/A
RUNWAY PROTECTION ZONE (RPZ) DIMENSIONS	18L: 500'x700'x1000'	SAME	18R: 250'x450'x1000'	250'x450'x1000'
	36R: 500'x700'x1000'	36R: 1000'x1510'x1700'	36L: 250'x450'x1000'	
RUNWAY OBJECT FREE AREA (OFA) DIMENSIONS	400'x3880'	500'x4600'	250'x2980'	N/A
ROFA LENGTH BEYOND RW ENDS	300'	SAME	240'	N/A
RUNWAY OBSTACLE FREE ZONE (OFZ) DIMENSIONS	250'x3800'	300'x4400'	250'x2900'	N/A
RUNWAY LIGHTING TYPE	MIRL	SAME	NONE	NONE
RUNWAY MARKING TYPE (P, NP, NONE)	NONE	SAME	NONE	NONE
RUNWAY VISUAL APPROACH AIDS	NONE	PAPI/REIL	NONE	NONE

TAXIWAY DATA

ITEM	EXISTING	ULTIMATE
TAXIWAY A DIMENSIONS	35'x1880'	50'x1978'
TAXIWAY A SAFETY AREA (TSA) WIDTH	79'	118'
TAXIWAY A OBJECT FREE AREA (TOFA) WIDTH	131'	186'
TAXIWAY A LIGHTING	MITL	SAME
TAXIWAY B DIMENSIONS	N/A	35'x645'
TAXIWAY B SAFETY AREA (TSA) WIDTH	N/A	79'
TAXIWAY B OBJECT FREE AREA (TOFA) WIDTH	N/A	131'
TAXIWAY B LIGHTING	N/A	MITL

NON-STANDARD CONDITIONS

ITEM	STANDARD	EXISTING	ULTIMATE
PARALLEL RUNWAY SEPARATION	700'	400'	400'

GEOGRAPHIC COORDINATES (NAD 83) & ELEVATIONS (NAVD 88)

ITEM	EXISTING LATITUDE	EXISTING LONGITUDE	EXISTING ELEVATION	ULTIMATE LATITUDE	ULTIMATE LONGITUDE	ULTIMATE ELEVATION
ARP	64°59'16.63" N	150°38'51.25" W	N/A	64°59'17.53" N	150°38'54.18" W	N/A
RW 18L END	64°59'32.30" N	150°38'37.39" W	275.19'	SAME	SAME	SAME
RW 36R END	64°59'00.96" N	150°39'05.11" W	275.33'	64°58'55.43" N	150°39'10.00" W	275.33'
RW 18R END	N/A	N/A	N/A	64°59'35.15" N	150°38'44.80" W	272.75'
RW 36L END	N/A	N/A	N/A	64°59'12.11" N	150°39'05.18" W	271.83'

PACS & SACS

DESIGNATION	LATITUDE	LONGITUDE	ELLIPSOID HEIGHT	NORTHING	EASTING	ELEVATION	DESCRIPTION
MLY A	64°59'18.02" N	150°38'44.50" W	294.6'	4016251.83'	1540447.14'	265.35'	PACS
MLY B	64°59'00.14" N	150°39'00.59" W	295.62'	4014442.48'	1539736.50'	266.37'	SACS
MLY C	64°59'32.22" N	150°38'32.08" W	299.97'	4017689.83'	1540995.66'	270.73'	SACS

NOTES

- THIS DRAWING IS A COMPILATION OF GROUND SURVEY AND AERIAL MAPPING DATA COLLECTED DURING THE 2014 SEASON IN SUPPORT OF FAA AERONAUTICAL SURVEY #149647.
- THE HORIZONTAL COORDINATE SYSTEM FOR THIS PROJECT IS NAD 83 (2011) (EPOCH 2010) ALASKA STATE PLANE ZONE 4, U.S. FEET. THE VERTICAL DATUM FOR THIS PROJECT IS NAVD 88 (GEOID 12A).
- GROUND SURVEY WAS PERFORMED BY STANTEC MAY 10 THROUGH MAY 14, 2014. AERIAL MAPPING WAS PERFORMED BY KODIAK MAPPING USING IMAGERY COLLECTED JULY 4 AND JULY 5, 2014.
- PACS AND SACS POSITIONS SHOWN HEREIN ARE BASED ON NATIONAL GEODETIC SURVEY (NGS) PUBLISHED POSITIONS.

LEGEND

ITEM	EXISTING	ULTIMATE
AIRPORT REFERENCE POINT	⊙	⊙
ANTENNA	⊙	⊙
AWOS	⊙	⊙
BUILDING	▭	▭
BUILDING RESTRICTION LINE	—BRL—	—BRL—
BUSH	⊙	⊙
CENTER LINE	—	—
CONTOUR	—100—	—100—
FUEL TANK	▭	▭
FENCE	—x—	—x—
LIGHTING	*	*
PAPI	■ ■ ■ ■	■ ■ ■ ■
PROPERTY LINE	—	—
ROADWAY (GRAVEL)	—	—
ROTATING BEACON	⊙	⊙
RUNWAY (GRAVEL)	—	—
RUNWAY OBJECT FREE AREA	—OFA—	—OFA—
RUNWAY OBSTACLE CLEARANCE SURFACE	—	—
RUNWAY OBSTACLE FREE ZONE	—OFZ—	—OFZ—
RUNWAY SAFETY AREA	—RSA—	—RSA—
RUNWAY SHOULDER	—	—
RUNWAY PROTECTION ZONE	—RPZ—	—RPZ—
SEGMENTED CIRCLE	⊙	⊙
SURVEY MONUMENT	⊙	⊙
TAXIWAY (GRAVEL)	—	—
TREE	⊙	⊙
WATERBODY	—	—
WIND CONE	⊙	⊙

DESIGN	MMM
DRAWN	RWW
CHECKED	JGL

SLM	DATE	REVISIONS
7/27/11	RESIDENTIAL BOUNDARY	
4/6/15	CROSSING UPDATE	
	AS-BUILT ALP	fe

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION - DESIGN AND ENGINEERING SERVICES

APPROVED
Patricia D. Miller
PATRICIA D. MILLER, P.E.

DATE 02/22/05
DESIGN GROUP CHIEF

AIRPORT LAYOUT PLAN APPROVED
BY LETTER DATED: 02/25/05

John J. Lovett
AIRPORTS DIVISION,
ALASKAN REGION, AAL-601
AIRSPACE REVIEW #04AAL-125NRA

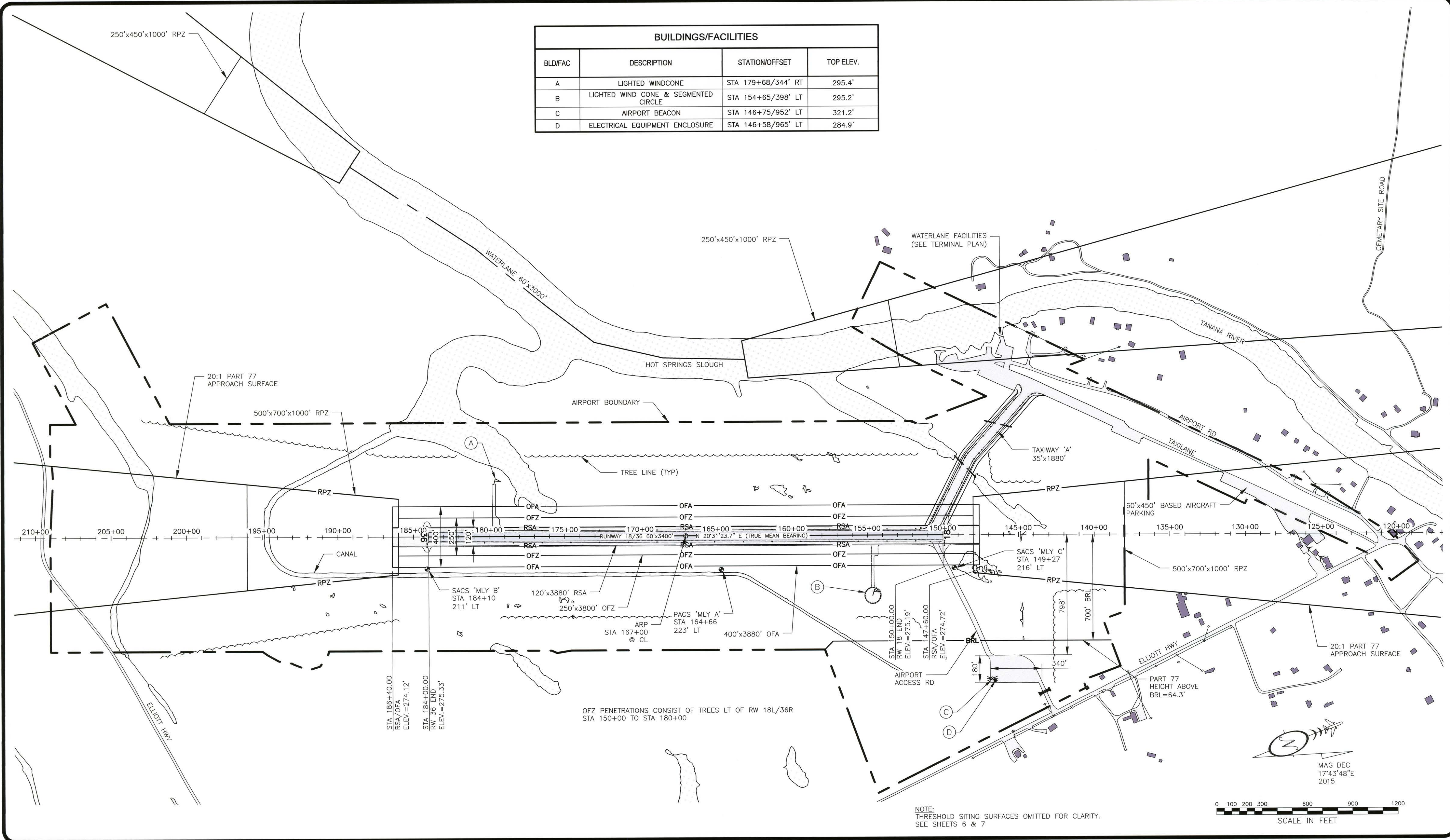
THIS ALP WAS COMPILED FROM CONTROLLED
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9-21-2002.

AS-BUILT ALP ACCEPTED BY FAA
LETTER DATED 5/21/15
Patricia D. Miller

MANLEY HOT SPRINGS
AIRPORT DATA

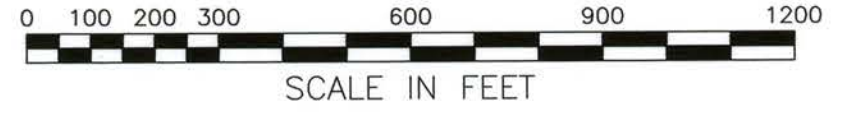
SHEET
2
OF
11

BUILDINGS/FACILITIES			
BLD/FAC	DESCRIPTION	STATION/OFFSET	TOP ELEV.
A	LIGHTED WINDCONE	STA 179+68/344' RT	295.4'
B	LIGHTED WIND CONE & SEGMENTED CIRCLE	STA 154+65/398' LT	295.2'
C	AIRPORT BEACON	STA 146+75/952' LT	321.2'
D	ELECTRICAL EQUIPMENT ENCLOSURE	STA 146+58/965' LT	284.9'



OFZ PENETRATIONS CONSIST OF TREES LT OF RW 18L/36R STA 150+00 TO STA 180+00

NOTE: THRESHOLD SITING SURFACES OMITTED FOR CLARITY. SEE SHEETS 6 & 7



DESIGN: MMM
DRAWN: RWW
CHECKED: JGL

SLM	DATE	REVISIONS
	7/27/11	RESIDENTIAL BOUNDARY CROSSING UPDATE
	4/6/15	AS-BUILT ALP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION - DESIGN AND ENGINEERING SERVICES

APPROVED
Patricia D. Miller
PATRICIA D. MILLER, P.E.

DATE: 02/22/05
DESIGN GROUP CHIEF

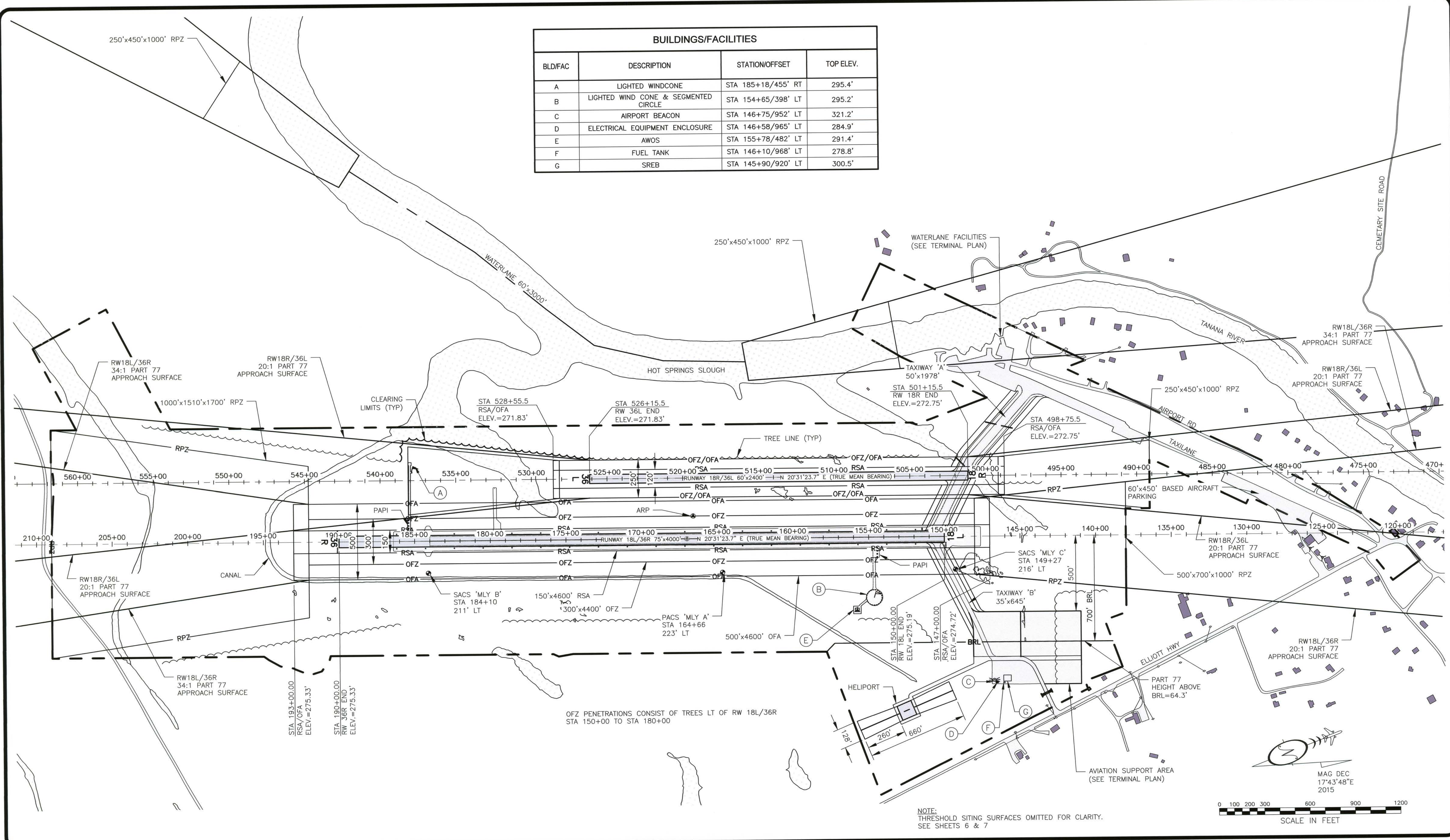
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John J. Lovett
AIRPORTS DIVISION,
ALASKAN REGION, AAL-601
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MANLEY HOT SPRINGS
EXISTING
AIRPORT LAYOUT PLAN

SHEET
3
OF
11

BUILDINGS/FACILITIES			
BLD/FAC	DESCRIPTION	STATION/OFFSET	TOP ELEV.
A	LIGHTED WINDCONE	STA 185+18/455' RT	295.4'
B	LIGHTED WIND CONE & SEGMENTED CIRCLE	STA 154+65/398' LT	295.2'
C	AIRPORT BEACON	STA 146+75/952' LT	321.2'
D	ELECTRICAL EQUIPMENT ENCLOSURE	STA 146+58/965' LT	284.9'
E	AWOS	STA 155+78/482' LT	291.4'
F	FUEL TANK	STA 146+10/968' LT	278.8'
G	SREB	STA 145+90/920' LT	300.5'



NOTE:
THRESHOLD SITING SURFACES OMITTED FOR CLARITY.
SEE SHEETS 6 & 7

0 100 200 300 600 900 1200
SCALE IN FEET

DESIGN MMM
DRAWN RWW
CHECKED JGL

SLM	DATE	REVISIONS
	7/27/11	RESIDENTIAL BOUNDARY CROSSING UPDATE
<u>AR</u>	4/6/15	AS-BUILT ALP <u>h</u>

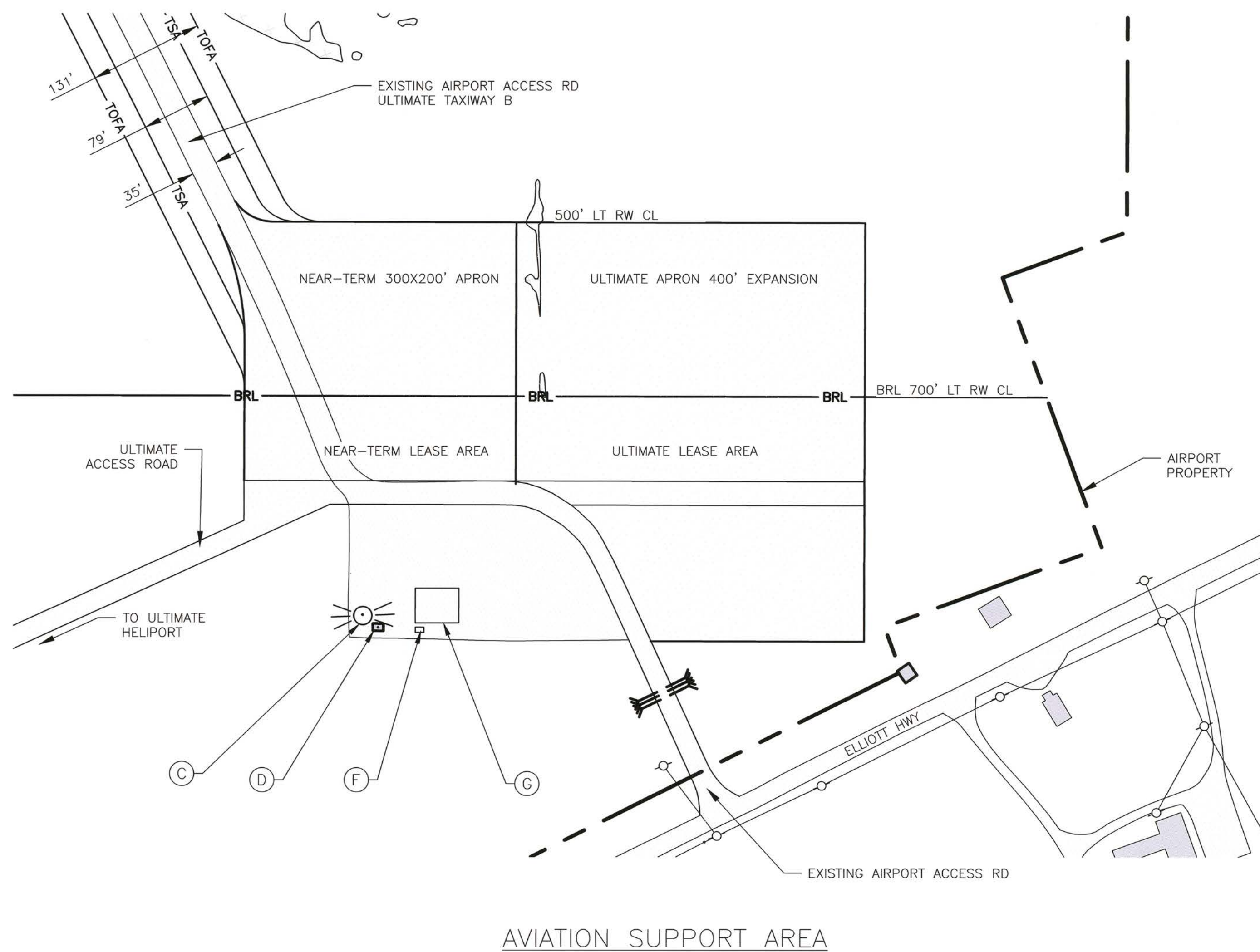
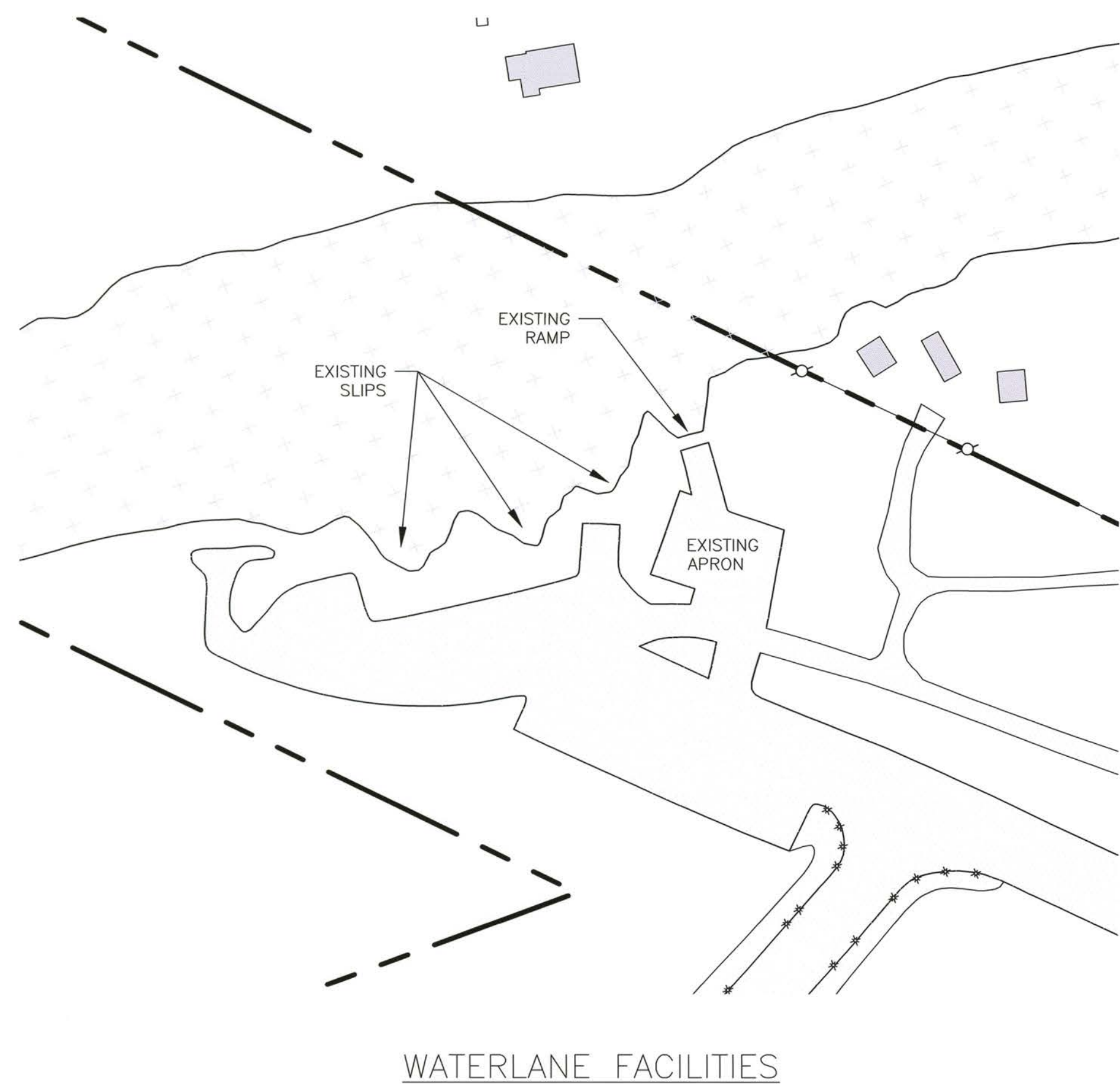
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION - DESIGN AND ENGINEERING SERVICES
APPROVED Patricia D. Miller DATE 02/22/05
PATRICIA D. MILLER, P.E. DESIGN GROUP CHIEF

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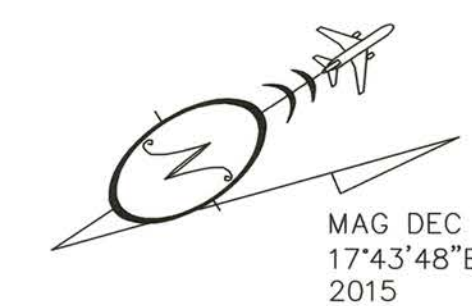
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MANLEY HOT SPRINGS
ULTIMATE
AIRPORT LAYOUT PLAN

SHEET
4 OF
11



BUILDINGS/FACILITIES				
BLD/FAC	DESCRIPTION	STATION/OFFSET	TOP ELEV.	EXISTING/ULTIMATE
C	AIRPORT BEACON	STA 146+75/952' LT	321.2'	EXISTING
D	ELECTRICAL EQUIPMENT ENCLOSURE	STA 146+58/965' LT	284.9'	EXISTING
F	FUEL TANK	STA 146+10/968' LT	278.8'	ULTIMATE
G	SREB	STA 145+90/920' LT	300.5'	ULTIMATE



DESIGN MMM
DRAWN RWW
CHECKED JGL

SLM	DATE	REVISIONS
	7/27/11	RESIDENTIAL BOUNDARY CROSSING UPDATE
	4/6/15	AS-BUILT ALP
BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION - DESIGN AND ENGINEERING SERVICES

APPROVED
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PATRICIA D. MILLER, P.E.

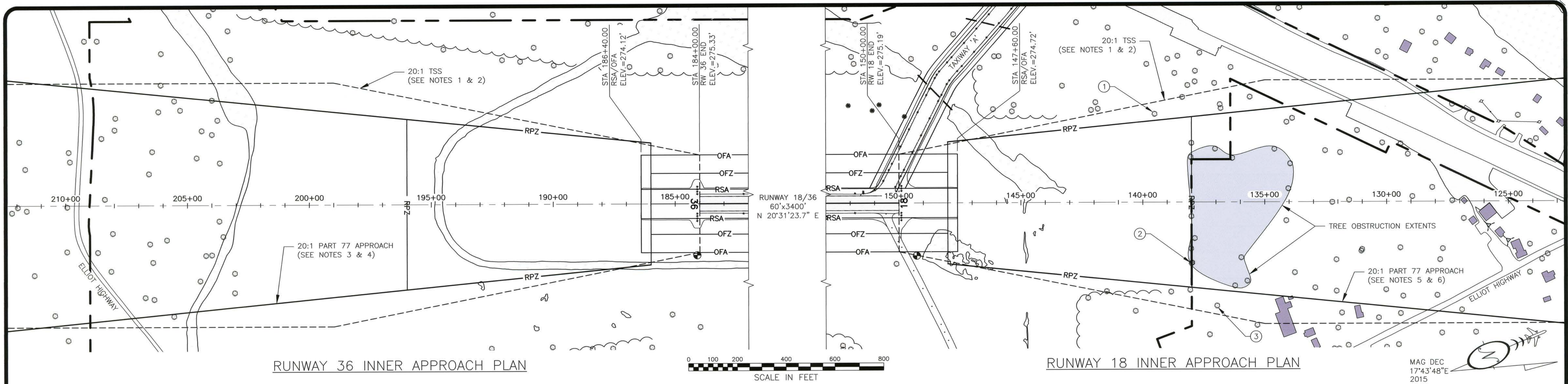
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MANLEY HOT SPRINGS
EXISTING/ULTIMATE
TERMINAL PLAN

SHEET
5 OF
11

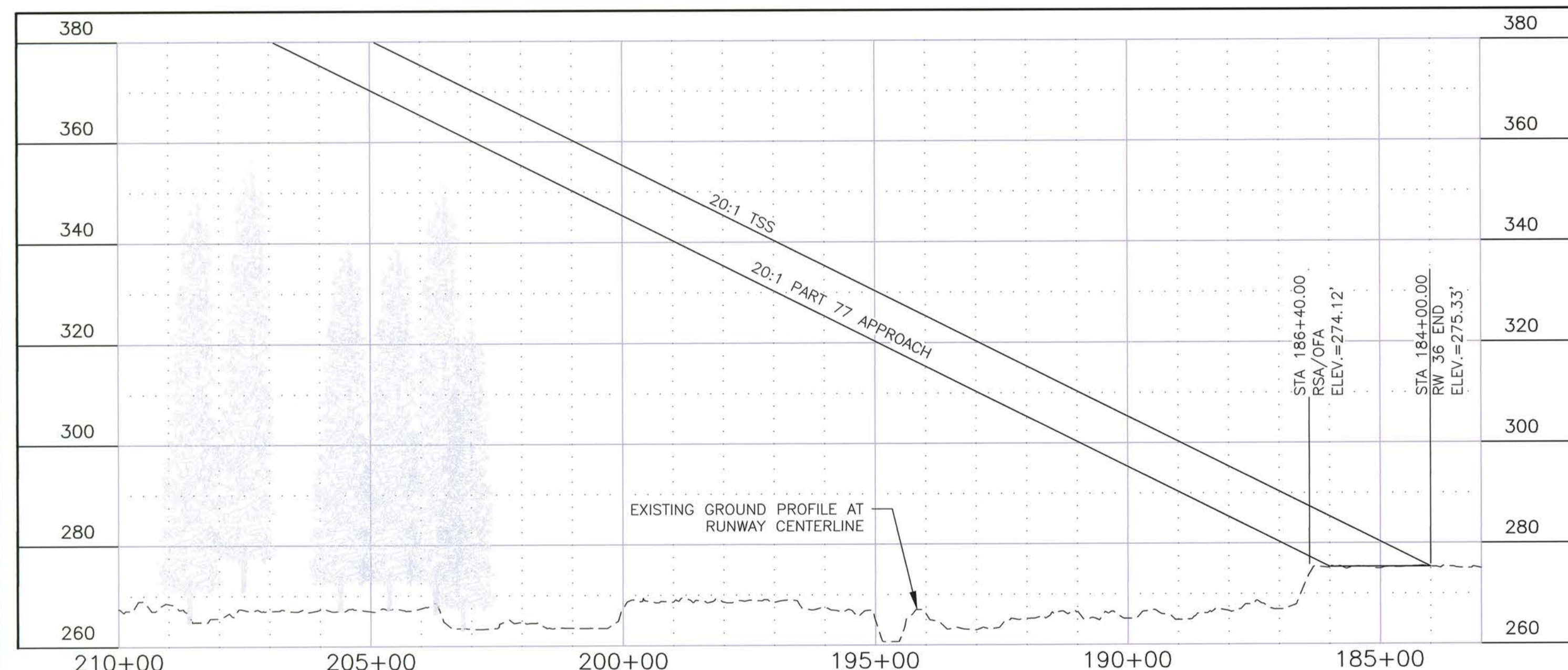


RUNWAY 36 INNER APPROACH PLAN

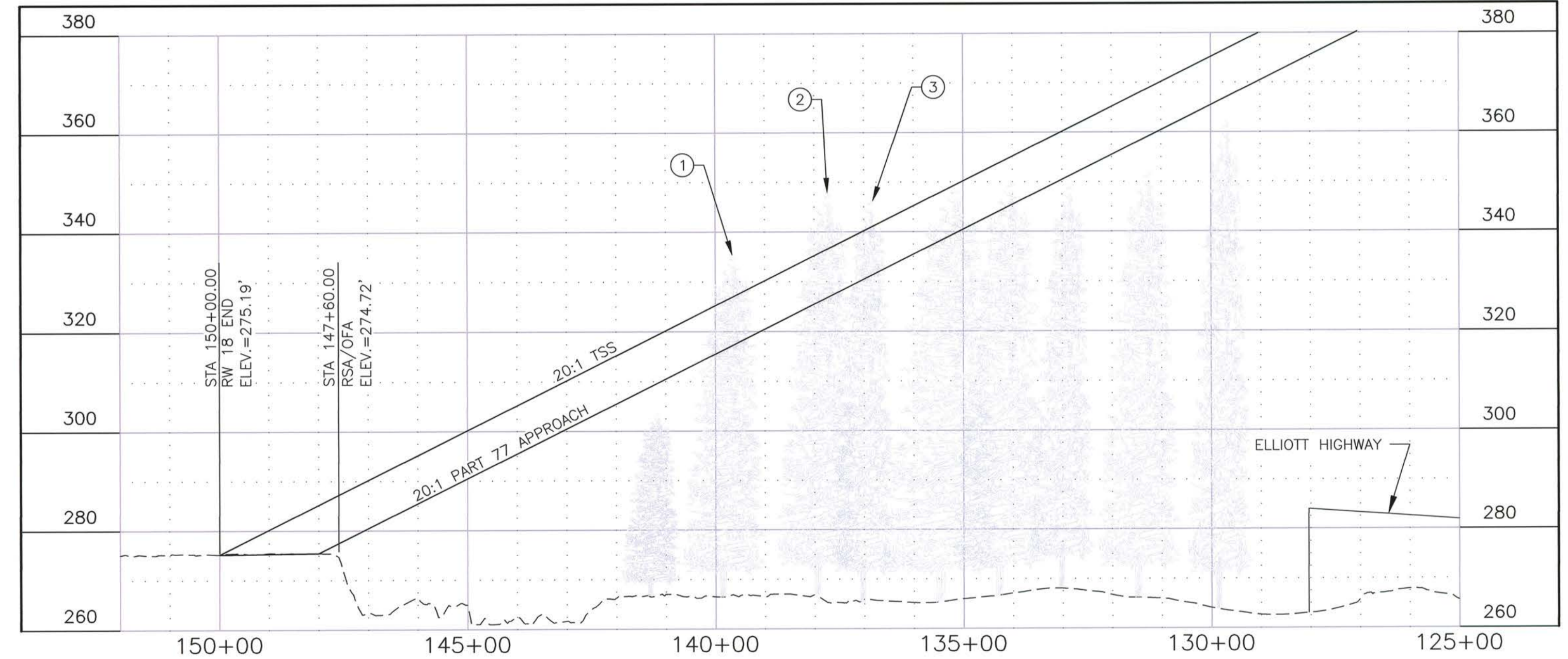
RUNWAY 18 INNER APPROACH PLAN



MAG DEC 17°43'48"E 2015



RUNWAY 36 INNER APPROACH PROFILE



RUNWAY 18 INNER APPROACH PROFILE

ID#	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
	NONE						

- GENERAL NOTES:
- TSS DIMENSION = 400'x1000'x1500'x8500' (TYPE 3, TABLE 3-2, AC 150/5300-13A)
 - TSS SLOPE EXTENDS 10000' AT 20:1
 - RW 36 PART 77 APPROACH SURFACE DIMENSION = 500'x2000'x5000'
 - RW 36 PART 77 APPROACH SURFACE EXTENDS 5000' AT 20:1
 - RW 18 PART 77 APPROACH SURFACE DIMENSION = 500'x2000'x5000'
 - RW 18 PART 77 APPROACH SURFACE EXTENDS 5000' AT 20:1
 - PART 77 ROAD OBSTRUCTION HEIGHTS ARE INCLUDED (10' FOR PRIVATE ROAD & 15' FOR PUBLIC ROAD)

ID#	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
①	TREE	139+50/362' RT	340'	328'	TSS	12'	REMOVE
②	TREES (HP)	137+97/248' LT	351'	335'/325'	TSS/PART 77	16'/26'	REMOVE
③	TREE	136+95/425' LT	346'	340'	TSS	6'	REMOVE

(HP) = HIGH POINT OF OBSTRUCTION
PART 77 PENETRATIONS RANGE FROM 1'-26'
TSS PENETRATIONS RANGE FROM 2'-16'

DESIGN: MMM
DRAWN: RWW
CHECKED: JGL

SLM	DATE	REVISIONS
	7/27/11	RESIDENTIAL BOUNDARY CROSSING UPDATE
	4/6/15	AS-BUILT ALP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION - DESIGN AND ENGINEERING SERVICES

APPROVED
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PATRICIA D. MILLER, P.E.

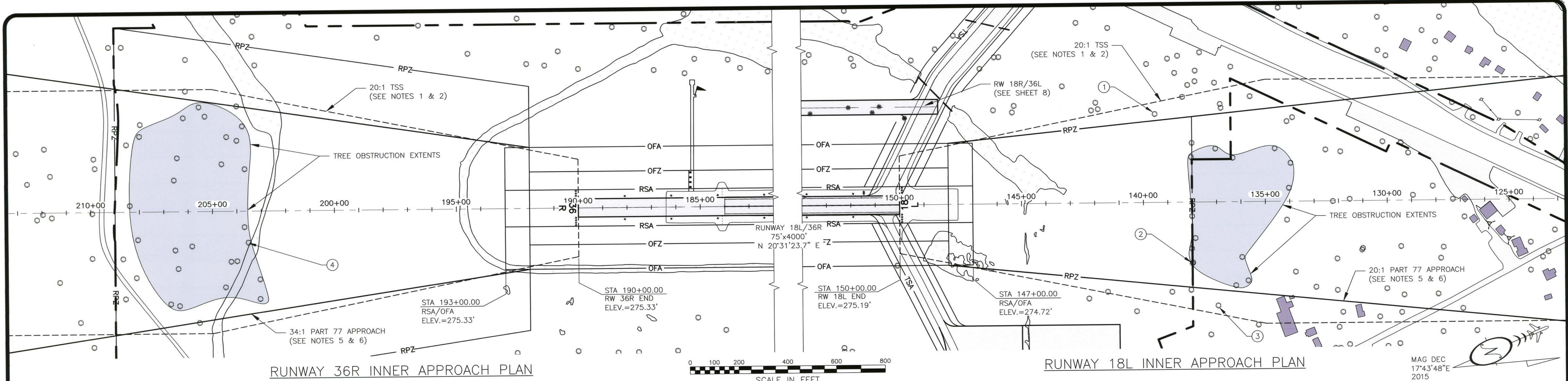
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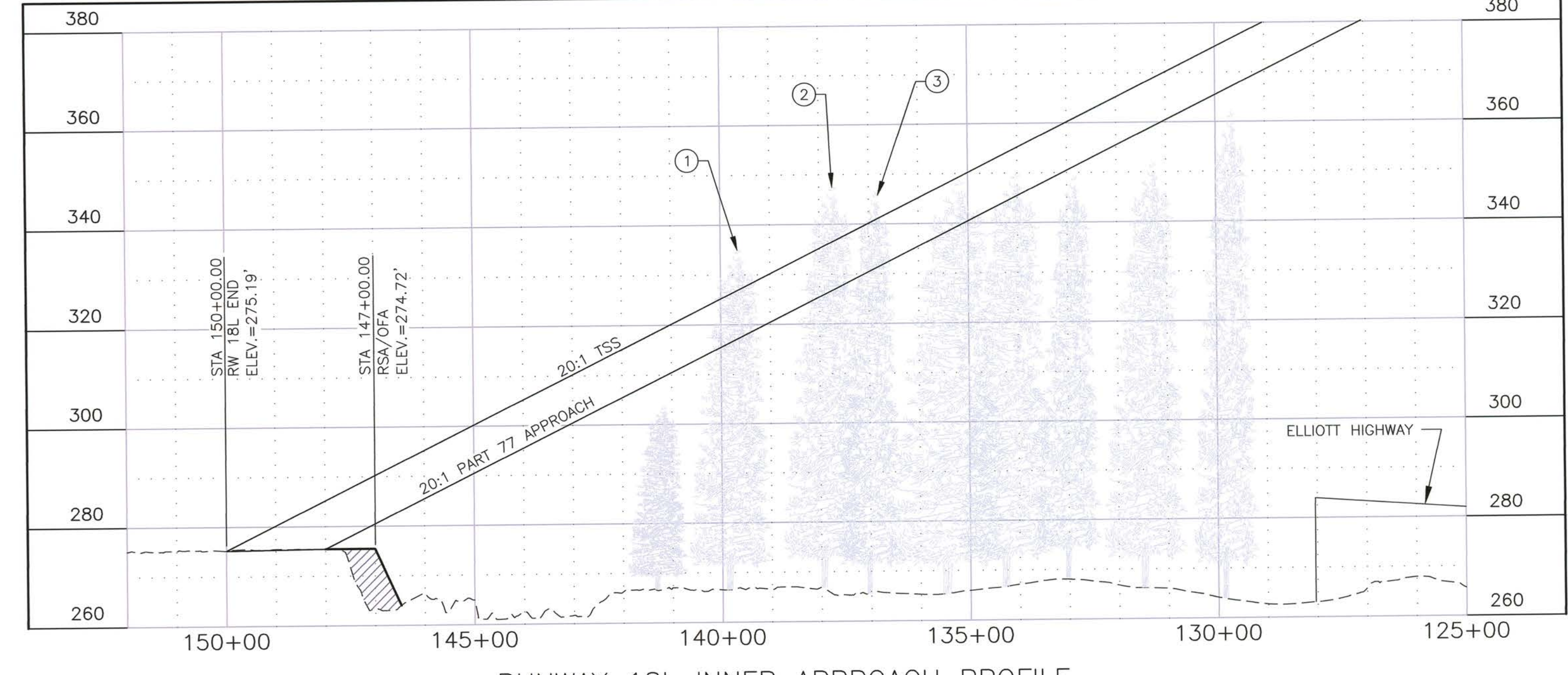
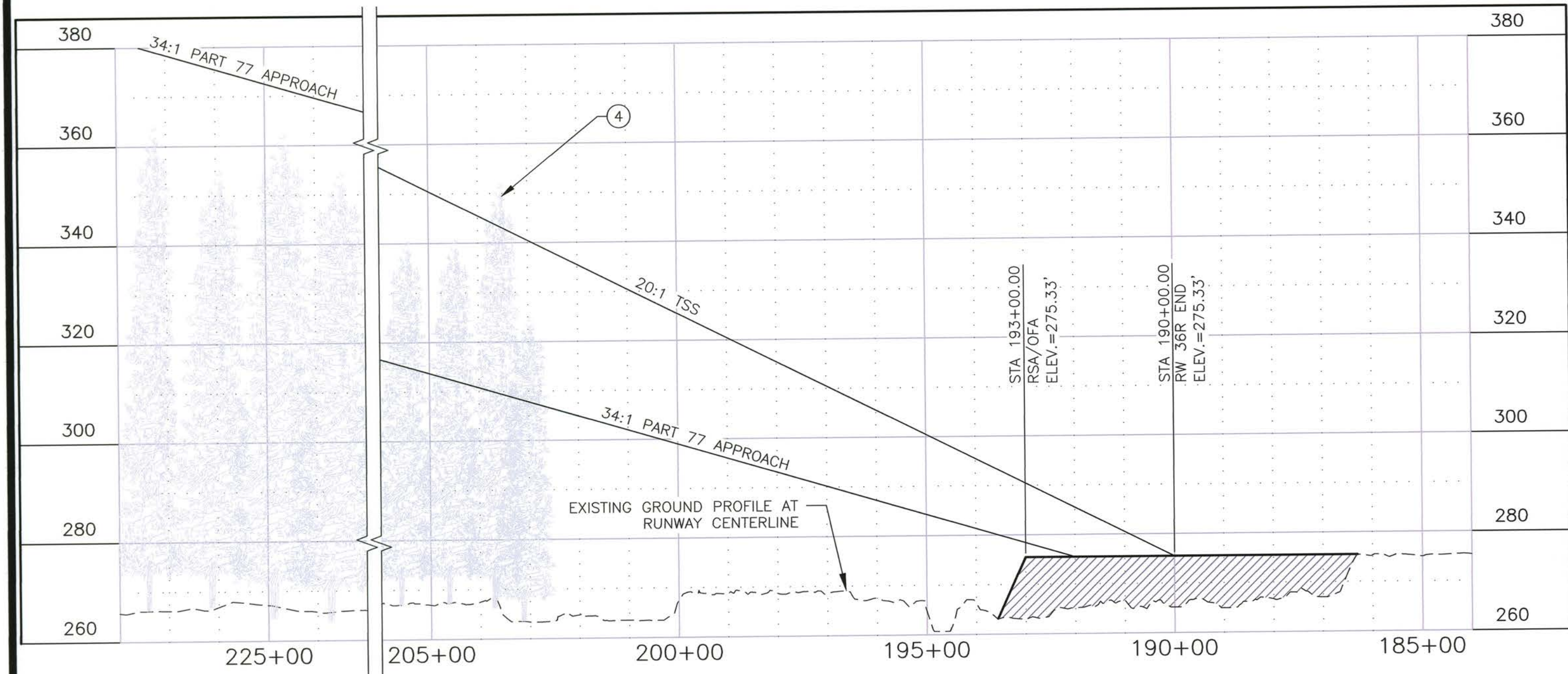
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MANLEY HOT SPRINGS
EXISTING INNER PORTION
OF THE APPROACH SURFACE

SHEET
6 OF
11



MAG DEC 174°48'E 2015



RUNWAY 36R INNER APPROACH PROFILE

RUNWAY 18L INNER APPROACH PROFILE

ID#	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
④	TREES (HP)	203+52/129' LT	348'	309'	PART 77	39'	REMOVE
④	TREE	203+52/129' LT	348'	343'	TSS	5'	REMOVE

(HP) = HIGH POINT OF OBSTRUCTION
PART 77 PENETRATIONS RANGE FROM 1'-39'

- GENERAL NOTES:
- TSS DIMENSION = 400'x1000'x1500'x8500' (TYPE 3, TABLE 3-2, AC 150/5300-13A)
 - TSS SLOPE EXTENDS 10000' AT 20:1
 - RW 36R PART 77 APPROACH SURFACE DIMENSION = 500'x3500'x10000'
 - RW 36R PART 77 APPROACH SURFACE EXTENDS 10000' AT 34:1
 - RW 18L PART 77 APPROACH SURFACE DIMENSION = 500'x2000'x5000'
 - RW 18L PART 77 APPROACH SURFACE EXTENDS 5000' AT 20:1
 - PART 77 ROAD OBSTRUCTION HEIGHTS ARE INCLUDED (10' FOR PRIVATE ROAD & 15' FOR PUBLIC ROAD)

ID#	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
①	TREE	139+50/362' RT	340'	328'	TSS	12'	REMOVE
②	TREES (HP)	137+97/248' LT	351'	335'/325'	TSS/PART 77	16'/26'	REMOVE
③	TREE	136+95/425' LT	346'	340'	TSS	6'	REMOVE

(HP) = HIGH POINT OF OBSTRUCTION.
PART 77 PENETRATIONS RANGE FROM 1'-26'
TSS PENETRATIONS RANGE FROM 2'-16'

DESIGN_MMM
DRAWN_RWW
CHECKED_JGL

BY	DATE	REVISIONS
SLM	7/27/11	RESIDENTIAL BOUNDARY CROSSING UPDATE
RWW	4/6/15	AS-BUILT ALP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION - DESIGN AND ENGINEERING SERVICES

APPROVED
Patricia D. Miller
PATRICIA D. MILLER, P.E.

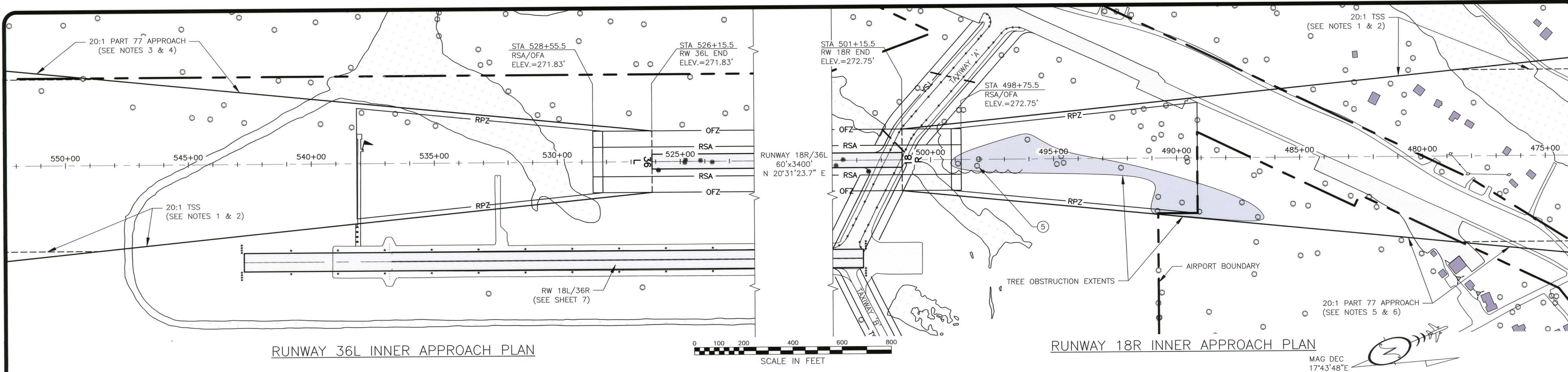
DATE 02/22/05
DESIGN GROUP CHIEF

AIRPORT LAYOUT PLAN APPROVED
BY LETTER DATED: 02/25/05
John T. Lovett
AIRPORTS DIVISION,
ALASKAN REGION, AAL-601
AIRSPACE REVIEW #04AAL-125NRA

THIS ALP WAS COMPILED FROM CONTROLLED
AERIAL PHOTOGRAPHY AND MAPPING DATED
9-21-2002.

MANLEY HOT SPRINGS
ULTIMATE INNER PORTION
OF THE APPROACH SURFACE
RUNWAY 18L/36R

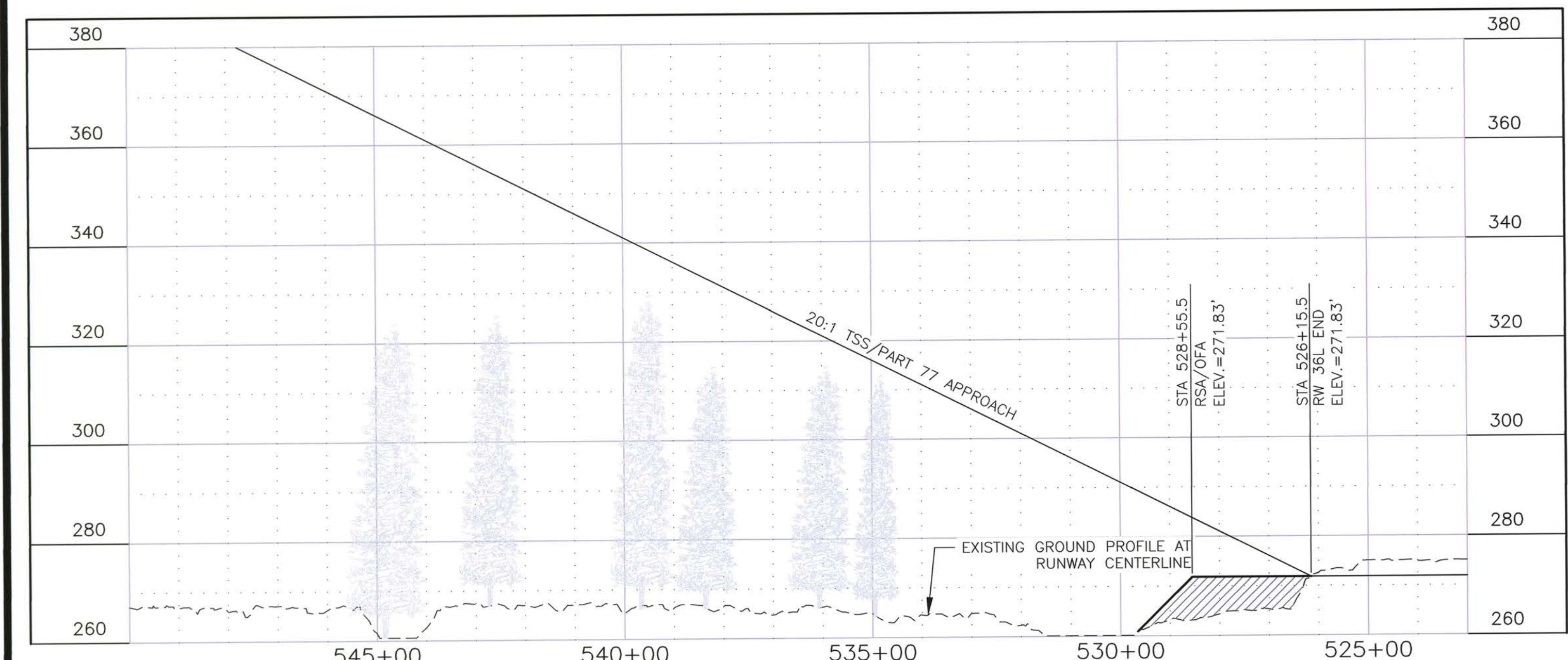
SHEET 7 OF 11



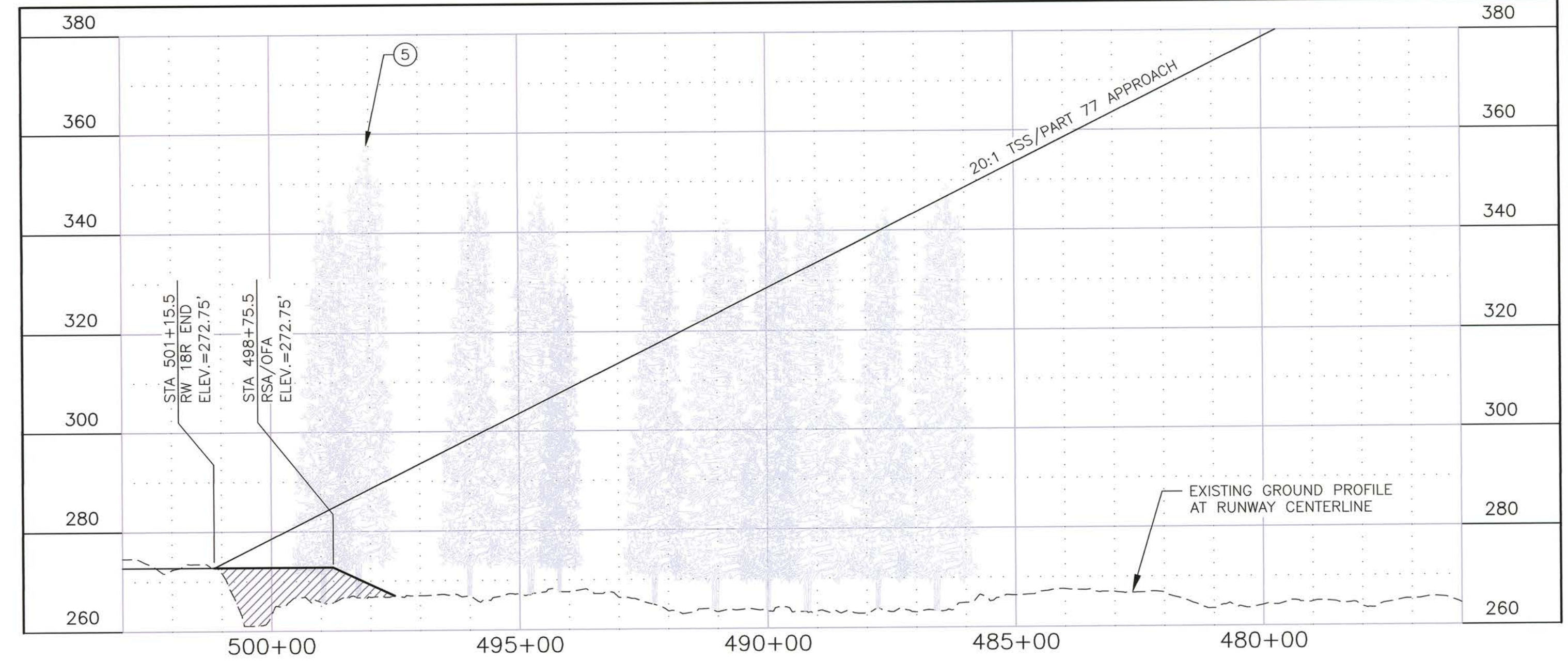
RUNWAY 36L INNER APPROACH PLAN

RUNWAY 18R INNER APPROACH PLAN

MAG DEC 17°43'48"E 2015



RUNWAY 36L INNER APPROACH PROFILE



RUNWAY 18R INNER APPROACH PROFILE

ID#	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
	NONE						

- GENERAL NOTES:
- TSS DIMENSION = 250'x700'x2250'x2750' (TYPE 2, TABLE 3-2, AC 150/5300-13A)
 - TSS SLOPE EXTENDS 5000' AT 20:1
 - RW 36L PART 77 APPROACH SURFACE DIMENSION = 250'x1250'x5000'
 - RW 36L PART 77 APPROACH SURFACE EXTENDS 5000' AT 20:1
 - RW 18R PART 77 APPROACH SURFACE DIMENSION = 250'x1250'x5000'
 - RW 18R PART 77 APPROACH SURFACE EXTENDS 5000' AT 20:1
 - PART 77 ROAD OBSTRUCTION HEIGHTS ARE INCLUDED (10' FOR PRIVATE ROAD & 15' FOR PUBLIC ROAD)

ID#	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
(5)	TREES (HP)	498+11/26' LT	358'	288'	PART 77	70'	REMOVE

(HP) = HIGH POINT OF OBSTRUCTION
PART 77 PENETRATIONS RANGE FROM 1'-70'
TSS PENETRATIONS RANGE FROM 1'-70'

DESIGN_MMM
DRAWN_RWW
CHECKED_JGL

SLM	DATE	REVISIONS
	7/27/11	RESIDENTIAL BOUNDARY CROSSING UPDATE
	4/6/15	AS-BUILT ALP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
NORTHERN REGION - DESIGN AND ENGINEERING SERVICES

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Patricia D. Miller
PATRICIA D. MILLER, P.E.

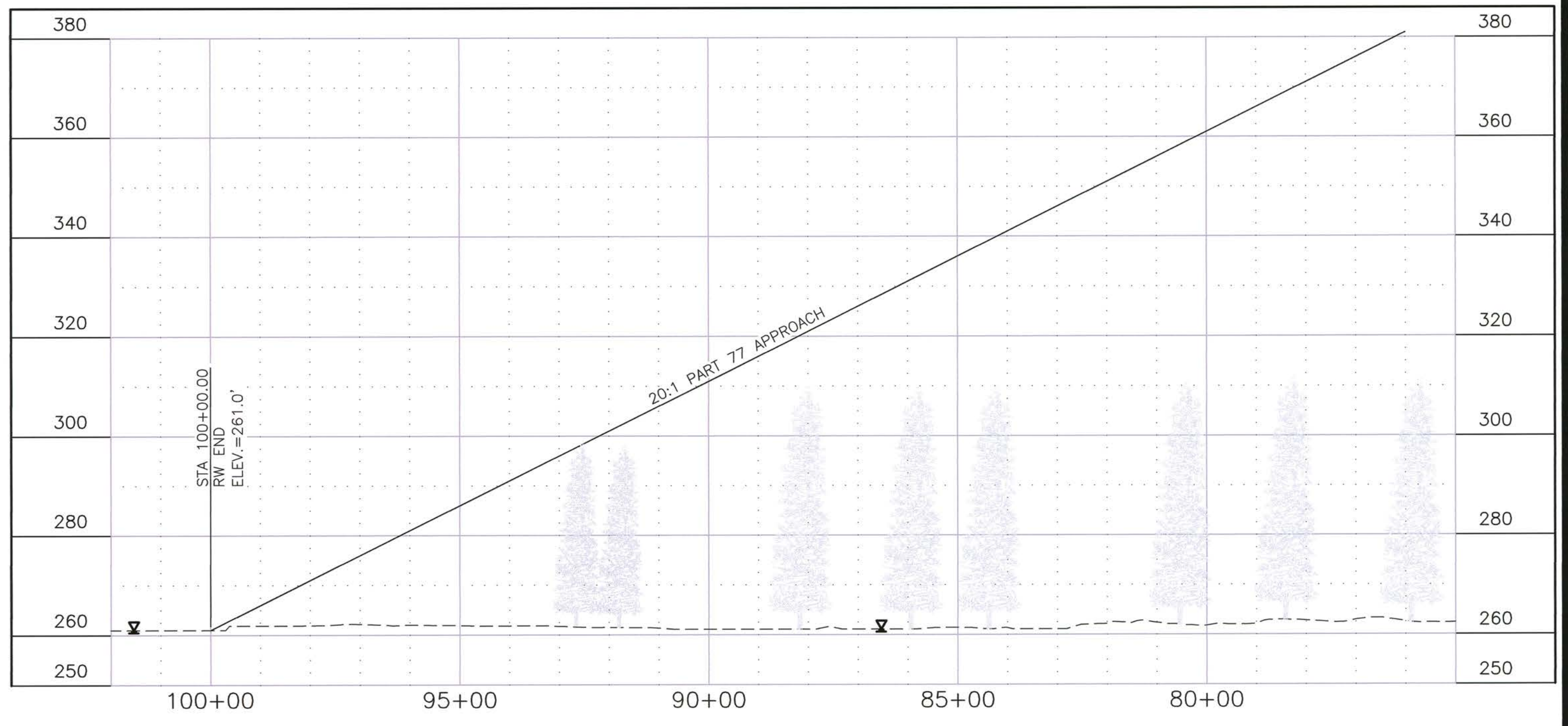
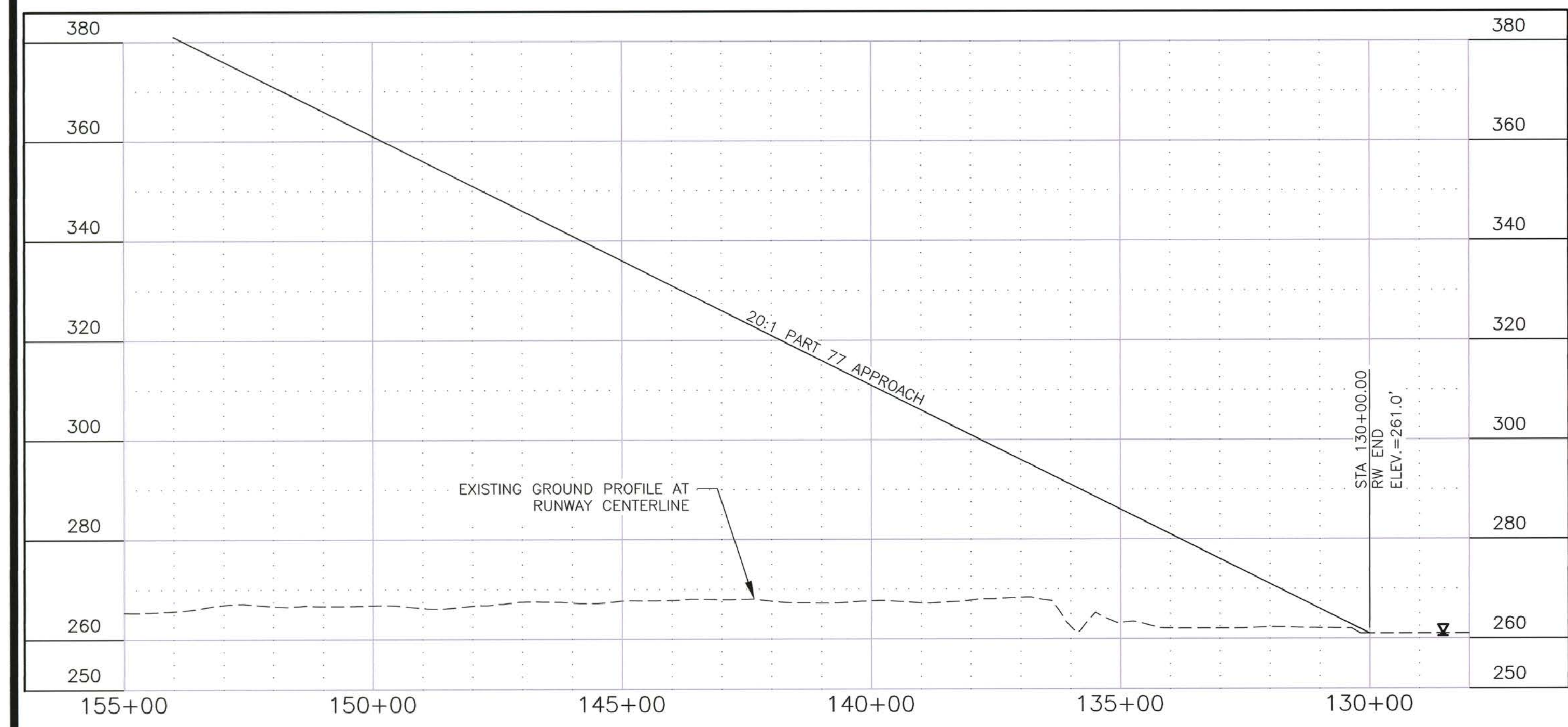
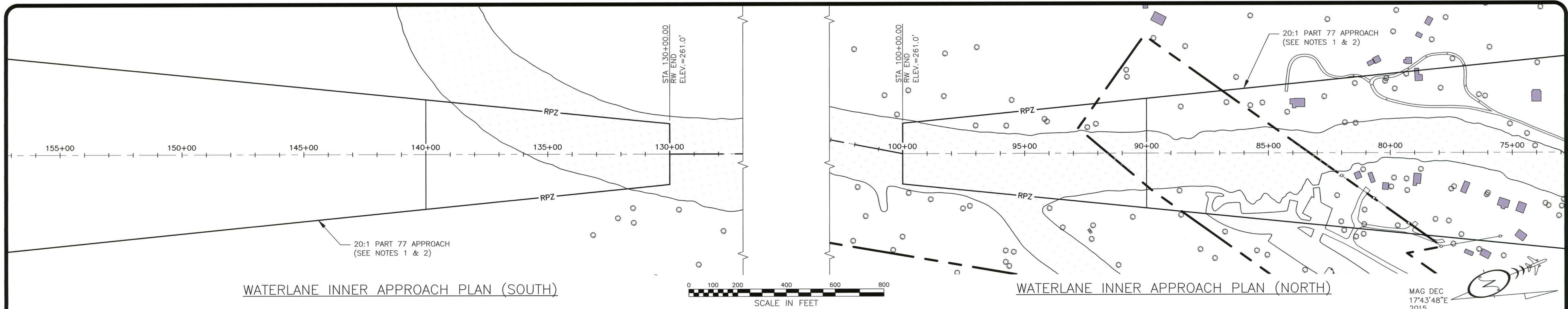
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AIRPORTS DIVISION,
ALASKAN REGION, AAL-601
AIRSPACE REVIEW #04AAL-125NRA

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9-21-2002.

MANLEY HOT SPRINGS
ULTIMATE INNER PORTION
OF THE APPROACH SURFACE
RUNWAY 18R/36L

SHEET 8 OF 11



WATERLANE INNER APPROACH PROFILE (SOUTH)

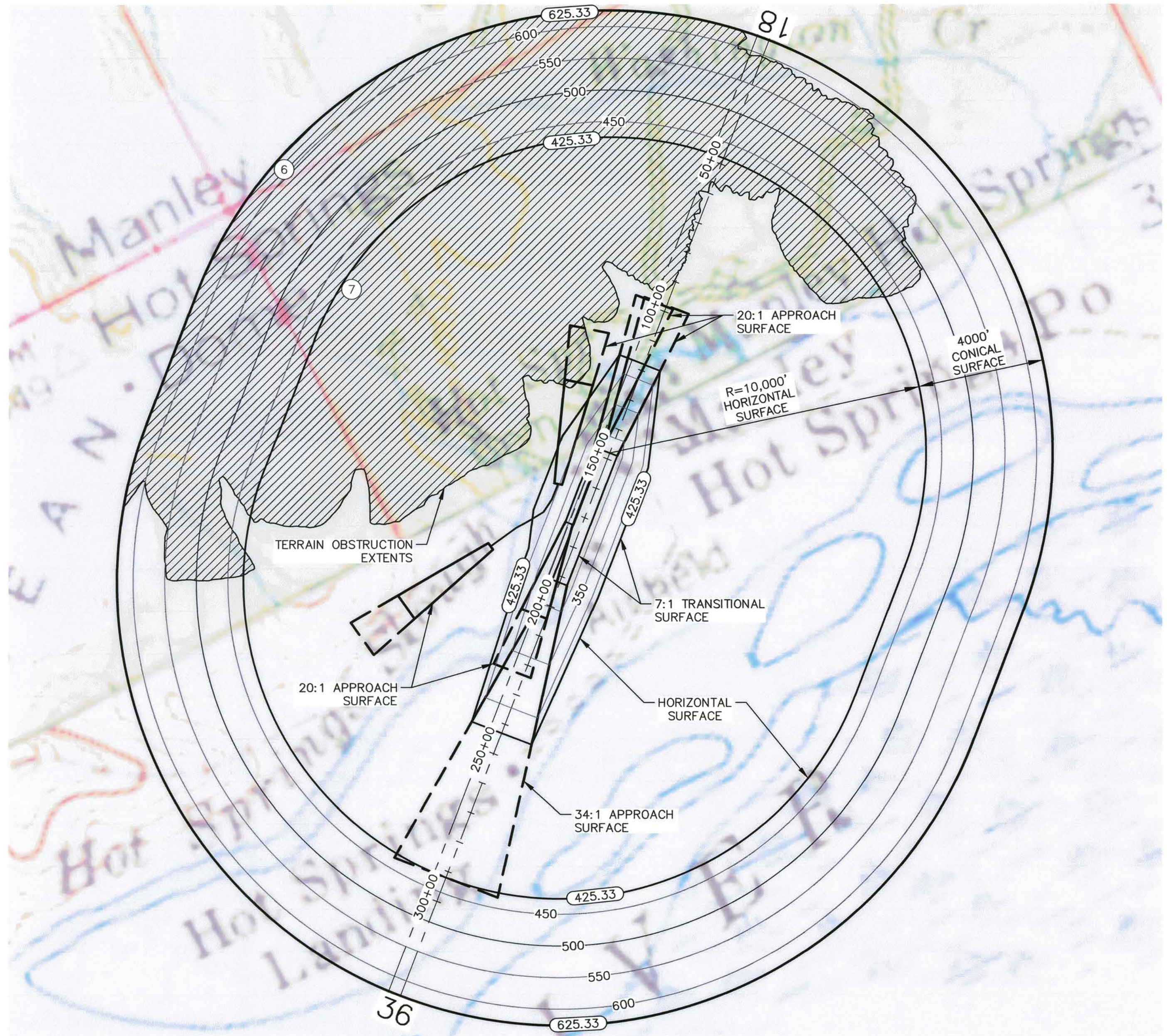
WATERLANE INNER APPROACH PROFILE (NORTH)

ID#	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
	NONE						

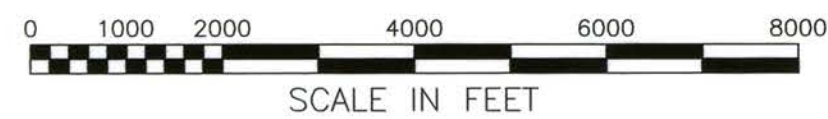
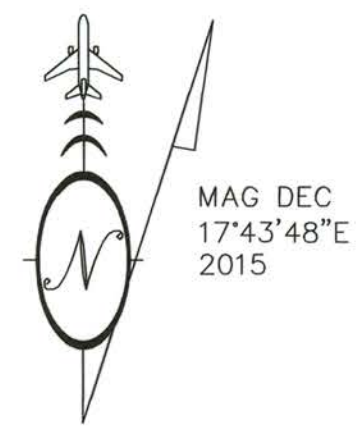
GENERAL NOTES:
 1. PART 77 APPROACH SURFACE DIMENSION = 250'x1250'x5000'
 2. PART 77 APPROACH SURFACE EXTENDS 5000' AT 20:1

ID#	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE ELEV.	SURFACE PENETRATED	SURFACE PENETRATION	DISPOSITION
	NONE						

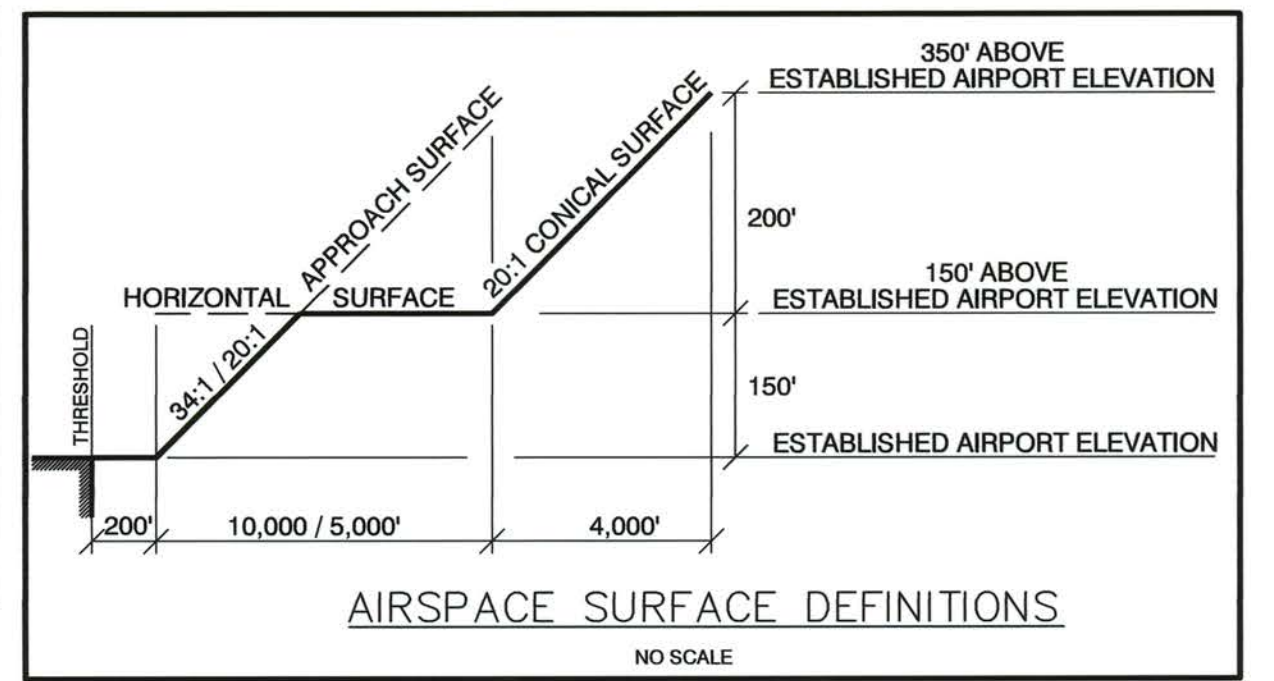
DESIGN: MMM DRAWN: RWW CHECKED: JGL	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>SLM</td> <td>7/27/11</td> <td>RESIDENTIAL BOUNDARY</td> </tr> <tr> <td></td> <td></td> <td>CROSSING UPDATE</td> </tr> <tr> <td>AS</td> <td>4/6/15</td> <td>AS-BUILT ALP</td> </tr> <tr> <td>BY</td> <td>DATE</td> <td>REVISIONS</td> </tr> </table>	SLM	7/27/11	RESIDENTIAL BOUNDARY			CROSSING UPDATE	AS	4/6/15	AS-BUILT ALP	BY	DATE	REVISIONS	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES NORTHERN REGION - DESIGN AND ENGINEERING SERVICES APPROVED <i>Patricia D. Miller</i> PATRICIA D. MILLER, P.E.	AIRPORT LAYOUT PLAN APPROVED BY LETTER DATED: 02/25/05 <i>John J. Lovett</i> AIRPORTS DIVISION, ALASKAN REGION, AAL-601 AIRSPACE REVIEW #04AAL-125NRA	THIS ALP WAS COMPILED FROM CONTROLLED AERIAL PHOTOGRAPHY AND MAPPING DATED 9-21-2002.	MANLEY HOT SPRINGS EXISTING/ULTIMATE INNER PORTION OF THE APPROACH SURFACE WATERLANE	SHEET 9 OF 11
SLM	7/27/11	RESIDENTIAL BOUNDARY																
		CROSSING UPDATE																
AS	4/6/15	AS-BUILT ALP																
BY	DATE	REVISIONS																
		DATE: 02/22/05 DESIGN GROUP CHIEF																



AIRSPACE PLAN



LEGEND	
	AIRSPACE ELEVATION (SURFACE DIVIDERS)
	AIRSPACE SURFACE DIVIDERS (NON CONTROLLING)
	AIRSPACE ELEVATION (50' INCREMENTS)
	RUNWAY CENTERLINE (EXTENDED)
	TERRAIN OBSTRUCTION EXTENTS



**ULTIMATE RUNWAY F.A.R. PART 77 DIMENSIONS
OTHER THAN UTILITY, NPA, >1 S.M.**

DESCRIPTION	RUNWAY 18L/36R	RUNWAY 18R/36L
ESTABLISHED AIRPORT ELEVATION	275.33'	275.33'
RUNWAY THRESHOLD ELEVATION	RW 18L: 275.19' / RW 36R: 275.33'	RW 18R: 272.75' / RW 36L: 271.83'
PRIMARY SURFACE DIMENSION	500' x 4400'	250' x 2500'
HORIZONTAL SURFACE ELEVATION	425.33'	425.33'
HORIZONTAL SURFACE RADIUS	10000'	10000'
APPROACH SURFACE DIMENSION	500' x 3500' x 10000'	250' x 1250' x 5000'
APPROACH SURFACE SLOPE	34:1	20:1
CONICAL SURFACE WIDTH	4000' @ 20:1	4000' @ 20:1
TRANSITIONAL SURFACE SLOPE	7:1	7:1

F.A.R. PART 77 SURFACE OBSTRUCTION TABLE

ID #	DESCRIPTION	STATION/OFFSET	ELEV.	SURFACE PENETRATED	SURFACE ELEV.	SURFACE PENETRATION	DISPOSITION
6	TERRAIN (HP)	101+20/13170' RT	2170'	TRANSITIONAL	625'	1545'	TO REMAIN
7	TERRAIN (HP)	128+90/9800' RT	1535'	HORIZONTAL	425.33'	1110'	TO REMAIN

HP = HIGH POINT OF TERRAIN OBSTRUCTION
STATION AND OFFSET ARE IN REFERENCE TO RUNWAY 18L/36R CENTERLINE ALIGNMENT.

NOTES:

- REFER TO INNER PORTION OF APPROACH SURFACE (SHEETS 6-8) FOR CLOSE IN OBSTRUCTIONS ANALYZED WITH THE TSS & PART 77 APPROACH SURFACE.
- THERE ARE NO KNOWN HEIGHT RESTRICTIONS.
- REFER TO THE AIRPORT LAYOUT PLAN (SHEETS 3 & 4) FOR BUILDING LOCATIONS AND ELEVATIONS.
- GROUND SURFACE INFORMATION WAS PROVIDED BY AN AERIAL MAPPING SUBCONTRACTOR. A CAREFUL COMPARISON WITH SURVEYED DATA WAS MADE TO ENSURE THAT ALL INFORMATION MEETS THE ACCURACY REQUIREMENTS ESTABLISHED IN AC 150/5300-18B.

DESIGN MMM
DRAWN RWW
CHECKED JGL

SLM	DATE	REVISIONS
	7/27/11	RESIDENTIAL BOUNDARY CROSSING UPDATE
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STATE OF ALASKA
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NORTHERN REGION - DESIGN AND ENGINEERING SERVICES

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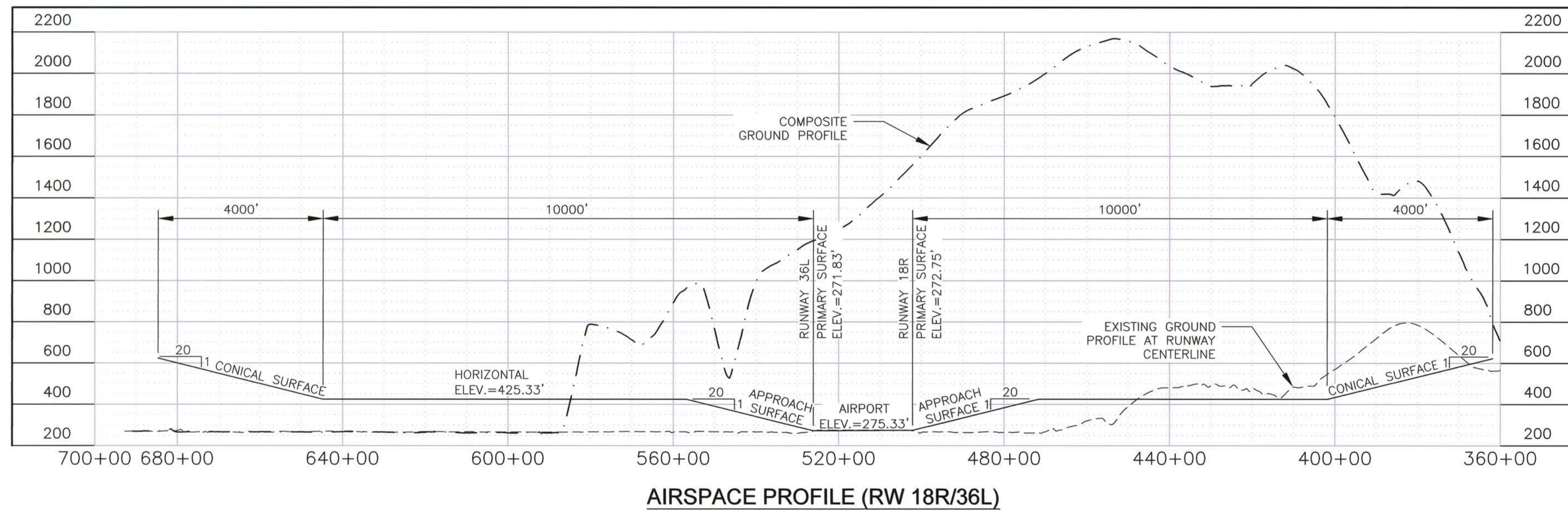
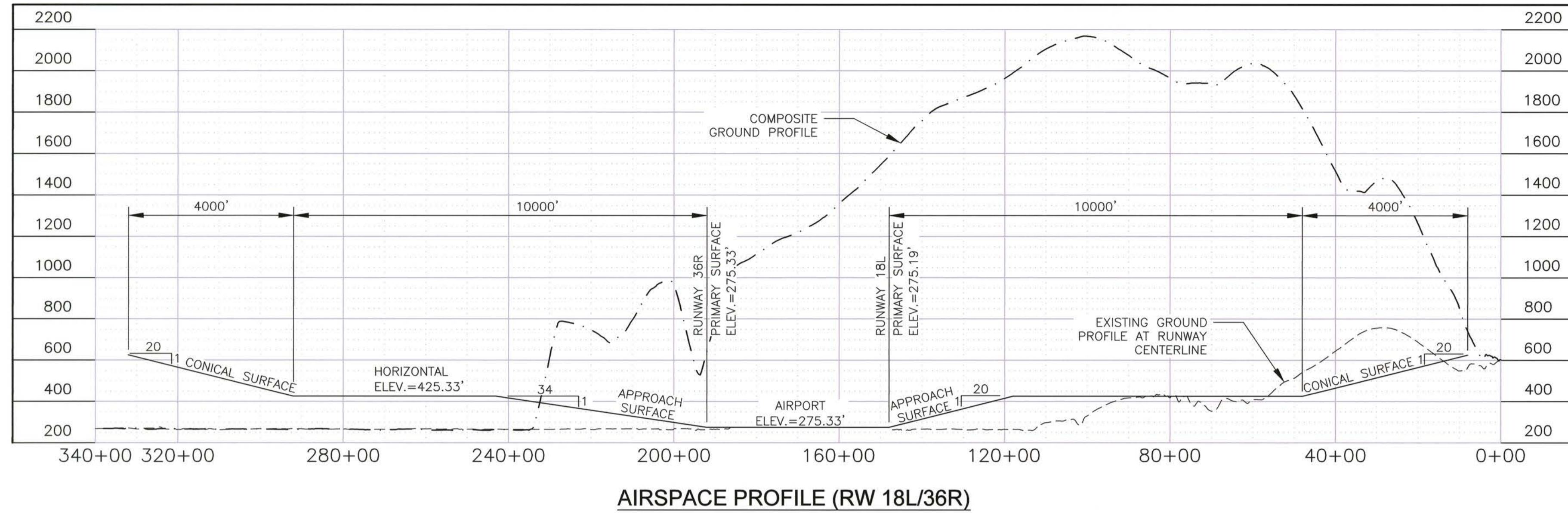
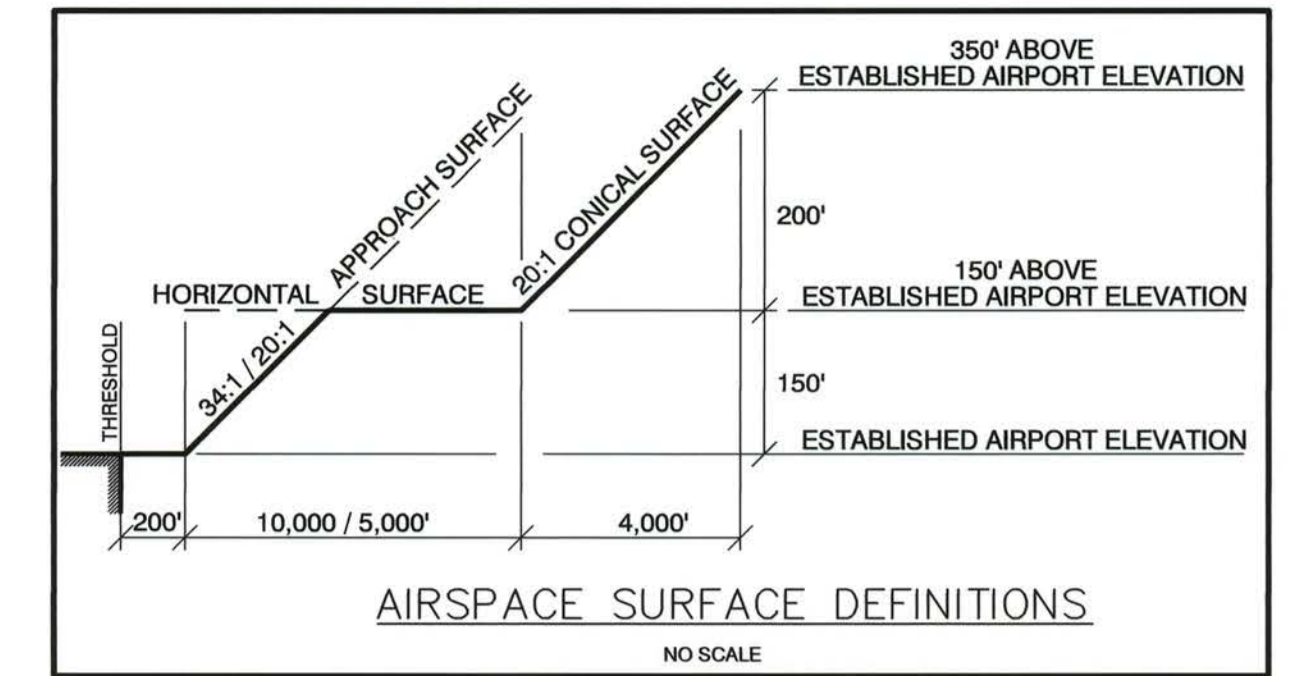
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MANLEY HOT SPRINGS
AIRPORT AIRSPACE
(FAR PART 77)

SHEET
10
OF
11



DESIGN	MMM	SLM	7/27/11	RESIDENTIAL BOUNDARY
				CROSSING UPDATE
DRAWN	RWW	OB	4/6/15	AS-BUILT ALP <i>PL</i>
CHECKED	JGL			
BY	DATE	REVISIONS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
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MANLEY HOT SPRINGS
AIRPORT AIRSPACE PROFILES
(FAR PART 77)