LOCATION MAP

NO SCALE

VICINITY MAP

NO SCALE

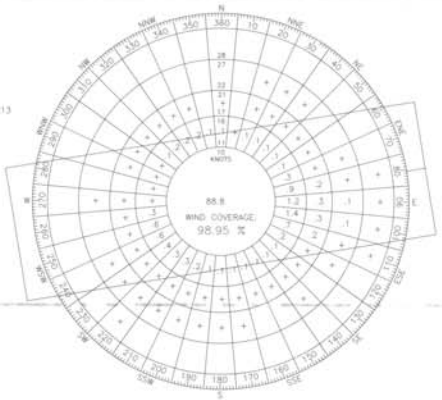
PROTRACTED T18N, R8W
KATEEL RIVER MERIDIAN
USGS SELAWIK (D3), ALASKA

EXISTING WIND ROSE

12 MPH/13.0 KNOTS

WIND DATA

PERCENT WIND COVERAGE
RUNWAY 6-24: 98.95%
WIND DATA PERIOD: 2008-2013
WIND DATA SOURCE: WRCC

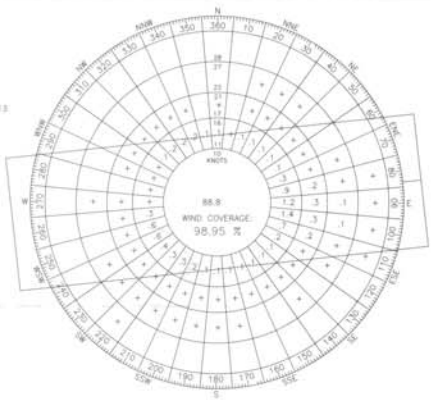


ULTIMATE WIND ROSE

12 MPH/13.0 KNOTS

WIND DATA

PERCENT WIND COVERAGE
RUNWAY 7-25: 98.95%
WIND DATA PERIOD: 2008-2013
WIND DATA SOURCE: WRCC



NOTES:

1. NO OFZ OBJECT PENETRATIONS.
2. NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS.
3. COORDINATE SYSTEM IS U.S. FEET NAD83(CORS96) (EPOCH 2003.00) ALASKA STATE PLANE ZONE 7 U.S. SURVEY FEET. THE PRIMARY CONTROL FOR THIS SURVEY IS "IAN A 2010".
4. THE VERTICAL DATUM IS GPS DERIVED ORTHOMETRIC HEIGHT IS U.S. SURVEY FEET, THAT APPROXIMATE NAVD88 USING GEOID09AK.
5. 2014-11-03 AIRPORT MAGNETIC DECLINATION IS 14° 16' 20"E AND CHANGES BY 18.8' PER YEAR. www.ngdc.noaa.gov/geomag-web/#declination
6. THIS ALP DRAWING SET IS UPDATED BASED ON AN INSTRUMENT PROCEDURE DEVELOPMENT SURVEY COMPLETED BY USKH, INC. IN 2011 AND A CONTROL AND TOPOGRAPHIC SURVEY PERFORMED BY USKH IN 11/10/2010, BOTH IN ACCORDANCE WITH FAA AC 150/5300-18B. THIS ALP WAS UPDATED IN ACCORDANCE WITH FAA AC 150/5300-13A AND 150/5070-6B IN JANUARY 2015.

SHEET INDEX

SHEET NO.	TITLE
1	AIRPORT DATA
2	EXISTING AIRPORT LAYOUT PLAN
3	ULTIMATE AIRPORT LAYOUT PLAN
4	EXISTING INNER PORTION OF APPROACH SURFACE
5	ULTIMATE INNER PORTION OF APPROACH SURFACE
6	AIRPORT AIRSPACE (FAR PART 77)
7	LAND USE DRAWING

MODIFICATIONS TO STANDARDS

NONE REQUIRED

RUNWAY DATA

ITEM	EXISTING		ULTIMATE	
	RUNWAY 6	RUNWAY 24	RUNWAY 7	RUNWAY 25
RUNWAY DESIGN CODE (RDC)	B-II-5000		B-II-5000	
RUNWAY REFERENCE CODE (RRC)	B-II-5000		B-II-5000	
PAEMENT STRENGTH	N/A		N/A	
RUNWAY SURFACE	GRAVEL		GRAVEL	
EFFECTIVE GRADE	0.96%		0.91%	
% WIND COVERAGE A-1, B-1	98.55% (10.4 KNOTS)		98.54% (10.4 KNOTS)	
% WIND COVERAGE B-11	98.95% (13 KNOTS)		98.95% (13 KNOTS)	
RUNWAY DIMENSIONS	3,400' X 100'		4,000' X 75'	
RUNWAY SAFETY AREA (RSA)	4,000' X 150'		4,600' X 150'	
– WIDTH	120'		150'	
– LENGTH BEYOND RUNWAY END	300'		300'	
GEODETIC POSITIONS (NAD 83)				
THRESHOLD LAT.	66°58'31.09"N	66°58'35.78"N	66°58'32.31"N	66°58'35.78"N
LONG.	160°26'53.82"W	160°25'29.22"W	160°27'9.35"W	160°25'29.22"W
RUNWAY LIGHTING	MIRL		MIRL	
RUNWAY PROTECTION ZONE (RPZ)	1,000' x 700' x 500'		1,000' X 700' X 500'	
RUNWAY MARKING	NONE		NONE	
PART 77 APPROACH SLOPE	20:1	34:1	20:1	34:1
FAR PART 77 APPROACH CATEGORY	OTHER THAN UTILITY		OTHER THAN UTILITY	
FAR PART 77 APPROACH TYPE (V, CA, NPA, PA)	NPA		NPA	
VISIBILITY MINIMUMS	≥ 1 MILE	≥ 1 MILE	≥ 1 MILE	≥ 1 MILE
DEPARTURE SURFACE	YES		YES	
RUNWAY OBJECT FREE AREA (ROFA)				
– WIDTH	300'		300'	
– LENGTH BEYOND RUNWAY END	300'		300'	
RUNWAY OBSTACLE FREE ZONE (ROFZ)				
– WIDTH	250'		250'	
– LENGTH BEYOND RUNWAY END	200'		200'	
THRESHOLD SIGING SURFACE (TSS)	20:1	20:1	20:1	20:1
NAVIGATION APPROACH AIDS	NONE	REIL, PAPI	NONE	REIL, PAPI
TOUCHDOWN ZONE ELEVATION (TDZE)	171.16'	145.73'	181.00'	147.00'
CRITICAL AIRCRAFT	CESSNA 208		BEECH 1900	

AIRPORT DATA

	EXISTING	ULTIMATE
ICAO IDENTIFIER	PAIK	SAME
NATIONAL AIRPORT IDENTIFIER	IAN	SAME
AIRPORT ELEVATION (NAVD88)	171.2'	181.0'
AIRPORT REFERENCE CODE	B-II	B-II
MEAN DAILY MAX. TEMP. HOTTEST MONTH (JULY)	64°F	64°F
RAMP LIGHTING	NONE	SAME
NAVIGATION AIDS	BEACON/PAPI/REIL	SAME
COMMUNICATION AIDS	NONE	SAME
NPIAS SERVICE LEVEL (P, CS, R, GA)	CS	CS
AIRPORT REFERENCE POINT (ARP) LAT.	N66°58'33.44"	N66°58'34.24"
LONG.	W160°26'11.52"	W160°26'18.72"
MAGNETIC DECLINEATION, YEAR, RATE OF CHANGE	14°16'20"E 2014 18.8'/YR	
AIRPORT FACILITIES	LIGHTED WINDCONE, ROTATING BEACON, AWSS	
CRITICAL AIRCRAFT	CESSNA 208	BEECH 1900

LEGEND

	EXISTING	ULTIMATE
PROPERTY LINE		
BUILDING RESTRICTION LINE (B.R.L.)	B.R.L.	B.R.L.
DEVELOPMENT		
WIND CONE & SEGEMENTED CIRCLE		
WIND CONE ONLY		
BUILDING		
ROADWAY		
FENCING		
AIRPORT REFERENCE POINT	SHORELINE/WATERLINE	
ROTATING BEACON	TREELINE	
ANTENNA/TOWER	THRESHOLD	
AWSS	OVERHEAD POWER	
SURVEY MONUMENT BRASS CAP	PAPI	
SURVEY MONUMENT	REIL	

TAXIWAY DATA

ITEM	EXISTING	ULTIMATE
TAXIWAY DESIGN GROUP	II	II
TAXIWAY DIMENSION	250' X 35'	250' X 35'
TAXIWAY SAFETY AREA WIDTH	80'	80'
TAXIWAY SHOULDER	15'	15'
TAXIWAY OBJECT FREE AREA WIDTH	131'	131'
TAXIWAY LIGHTING	MITL	MITL

DECLARED DISTANCES

	TORA	TODA	ASDA	LDA
EXISTING	3400'	3400'	3400'	3400'
ULTIMATE	4000'	4000'	4000'	4000'

DESIGN BTD
DRAWN BTD
CHECKED CFJ

BY	DATE	REVISIONS

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

APPROVED
ALBERT M. L. BECK, P.E. DATE 4/3/15
DESIGN GROUP CHIEF

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 4/14/15
FAA AIRSPACE REVIEW NUMBER 2015-AAL-9-NRA

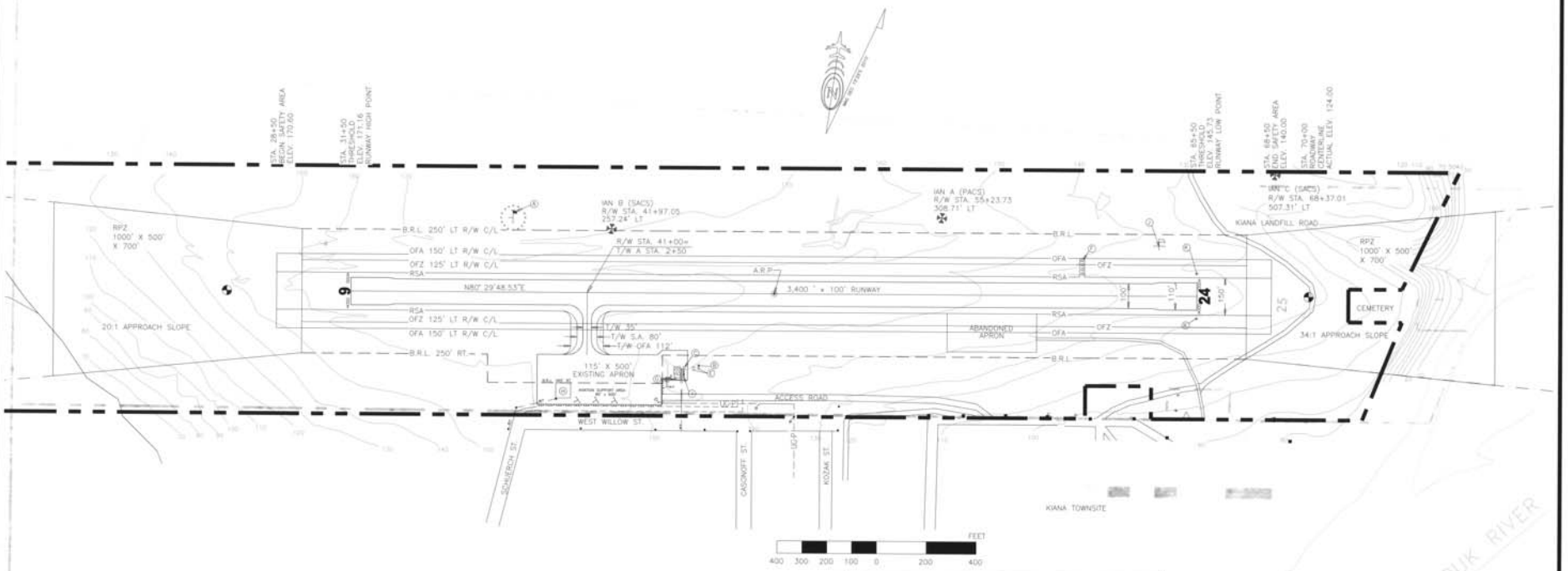
DATE 4/14/15
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-612

BOB BAKER MEMORIAL AIRPORT

KIANA, ALASKA

AIRPORT DATA

SHEET 1 OF 7



BUILDINGS/FACILITIES

BLD/FAC	DESCRIPTION	STATION/OFFSET	TOP ELEV. (MSL)
(A)	LIGHTED WIND CONE	38+00/300' LT	
(B)	AWSS	46+83/290' RT	
(C)	ELECTRICAL EQUIPMENT BUILDING	44+85/297' RT	172'
(D)	SREB	44+50/297' RT	179'
(E)	FAA FACILITY	45+32/296' RT	164'
(F)	PAPI	60+90/75' LT	
(G)	FUEL TANK	44+39/330' RT	
(H)	LEASED HANGAR	40+00/365' RT	184'
(I)	ROTATING BEACON	44+85/332' RT	
(J)	UNLIGHTED WIND CONE	66+00/194' RT	
(K)	REIL R/W 24	65+00/75' LT & 75' RT	

RUNWAY DATA

AIRPORT REFERENCE POINT (ARP)	LAT.	N66°58'33.44"
	LONG.	W160°26'11.52"
THRESHOLD 6 STA. 31+50	LAT.	N66°58'31.09"
	LONG.	W160°26'53.82"
THRESHOLD 24 STA. 65+50	LAT.	N66°58'35.78"
	LONG.	W160°25'29.22"
TOUCHDOWN ZONE ELEVATION		
	R/W 6	171.16'
	R/W 24	145.73'

LEGEND

	EXISTING	ULTIMATE
PROPERTY LINE		
BUILDING RESTRICTION LINE (B.R.L.)	B.R.L.	B.R.L.
DEVELOPMENT		
WIND CONE & SEGEMENTED CIRCLE		
WIND CONE ONLY		
BUILDING		
ROADWAY		
FENCING		
AIRPORT REFERENCE POINT	SHORELINE/WATERLINE	
ROTATING BEACON	TREELINE	
ANTENNA/TOWER	THRESHOLD	
AWSS	OVERHEAD POWER	
SURVEY MONUMENT BRASS CAP	PAPI	
SURVEY MONUMENT	REIL	

DESIGN BTD
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CHECKED CFJ

BY	DATE	REVISIONS

STATE OF ALASKA
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NORTHERN REGION – DESIGN AND ENGINEERING SERVICES
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DATE 4/3/15
DESIGN GROUP CHIEF

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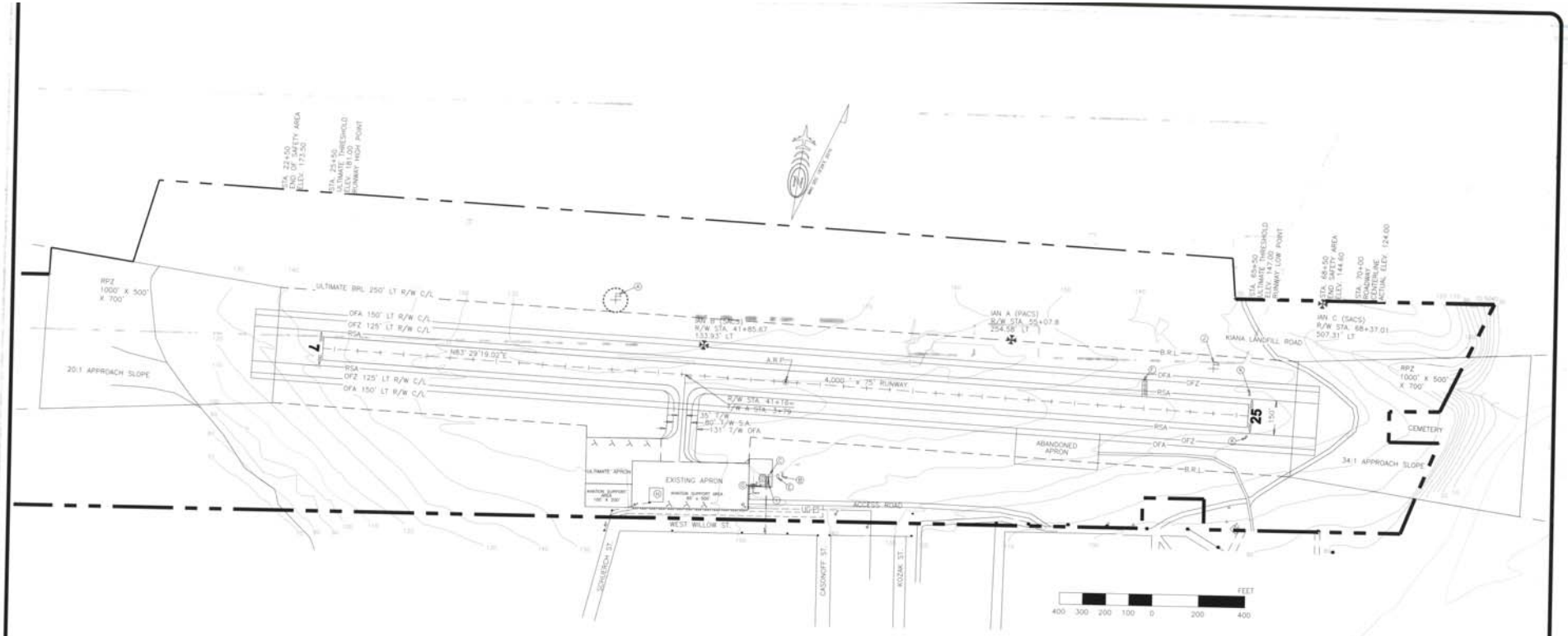
4/19/15
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-612

BOB BAKER MEMORIAL AIRPORT
KIANA, ALASKA
EXISTING AIRPORT LAYOUT PLAN

SHEET 2 OF 7



BUILDINGS/FACILITIES

BLD/FAC	DESCRIPTION	STATION/OFFSET	TOP ELEV. (MSL)
A	LIGHTED WIND CONE	37+95/300' LT	
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E	FAA FACILITY	45+50/401' RT	164'
F	PAPI	60+95/75' LT	
G	FUEL TANK	44+59/440' RT	
H	LEASED HANGAR	40+32/497' RT	184'
I	ROTATING BEACON	45+08/443' RT	
J	UNLIGHTED WIND CONE	63+86/193' RT	
K	REIL R/W 24	63+50/75' LT & 75' RT	

ULTIMATE RUNWAY DATA

AIRPORT REFERENCE POINT (ARP)	LAT.	N66°58'34.24"
	LONG.	W160°26'18.72"
THRESHOLD 7 STA. 31+50	LAT.	N66°58'32.31"
	LONG.	W160°27'9.35"
THRESHOLD 25 STA. 65+50	LAT.	N66°58'35.78"
	LONG.	W160°25'29.22"
ULTIMATE TOUCHDOWN ZONE ELEVATION		
	R/W 7	181.00'
	R/W 25	147.00'

LEGEND

	EXISTING	ULTIMATE
PROPERTY LINE		
BUILDING RESTRICTION LINE (B.R.L.)	B.R.L.	B.R.L.
DEVELOPMENT		
WIND CONE & SEGEMENTED CIRCLE		
WIND CONE ONLY		
BUILDING		
ROADWAY		
FENCING		

AIRPORT REFERENCE POINT		SHORELINE/WATERLINE	
ROTATING BEACON		TREELINE	
ANTENNA/TOWER		THRESHOLD	
AWSS		OVERHEAD POWER	
SURVEY MONUMENT BRASS CAP		PAPI	
SURVEY MONUMENT		REIL	

DESIGN BTD
DRAWN BTD
CHECKED CFJ

BY	DATE	REVISIONS

STATE OF ALASKA
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NORTHERN REGION – DESIGN AND ENGINEERING SERVICES
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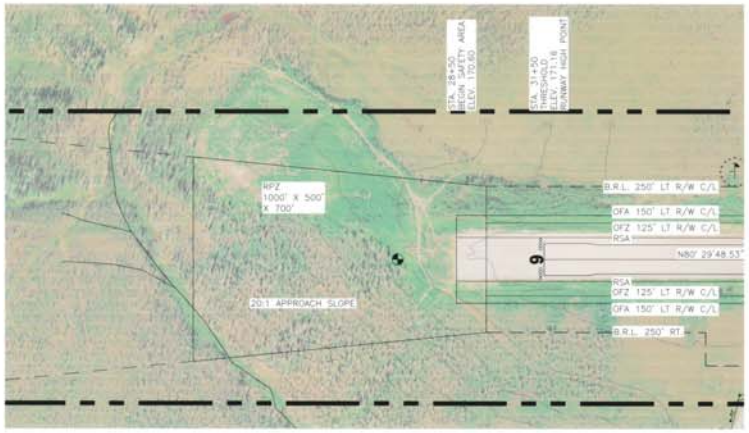
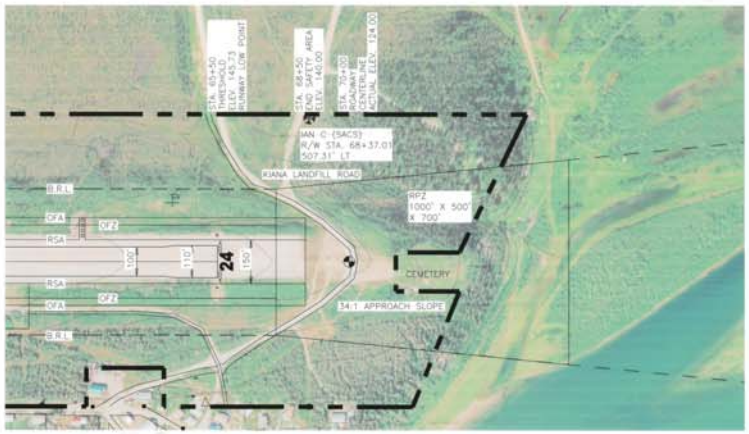
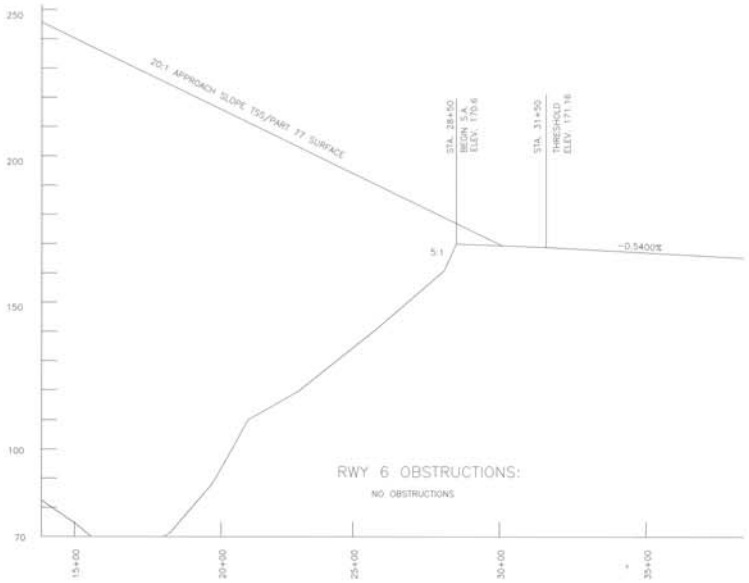
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-612 — DATE 4/14/15

BOB BAKER MEMORIAL AIRPORT
KIANA, ALASKA
ULTIMATE AIRPORT LAYOUT PLAN

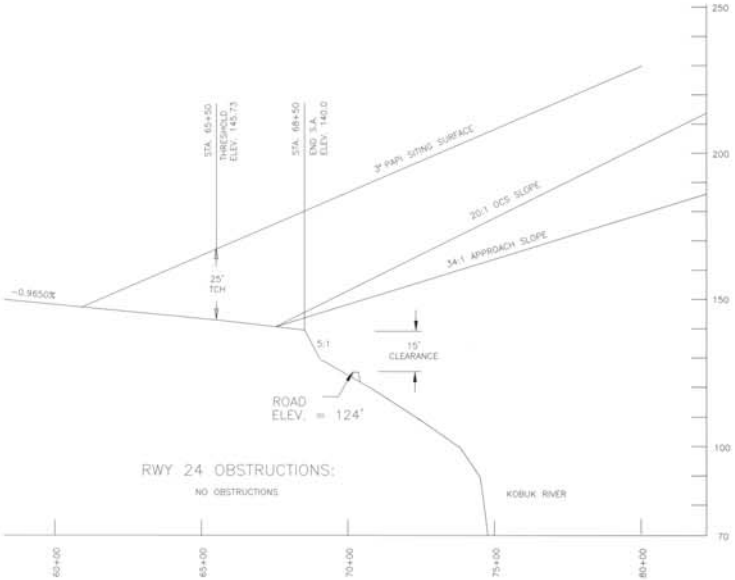
SHEET 3 OF 7







EXISTING RUNWAY PROFILE



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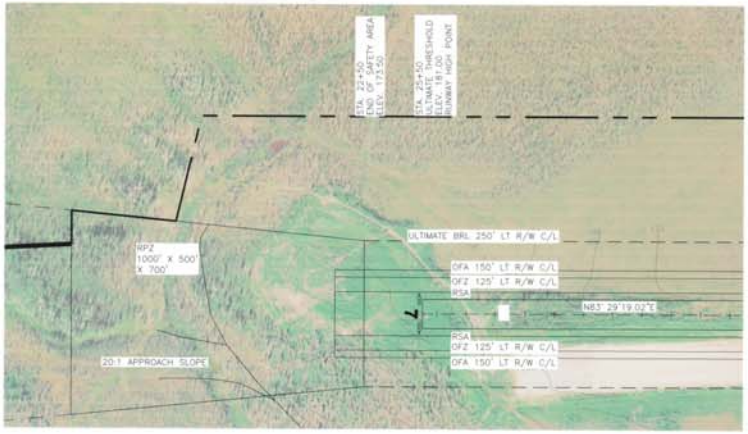
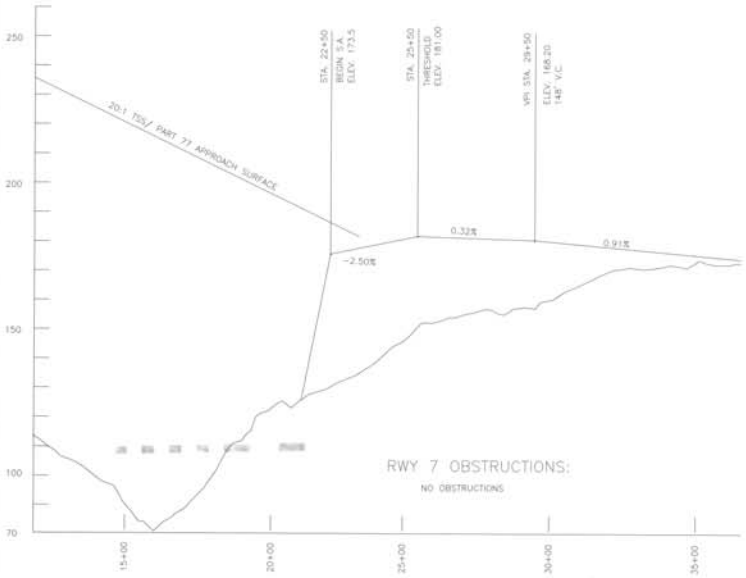
BOB BAKER MEMORIAL AIRPORT
KIANA, ALASKA

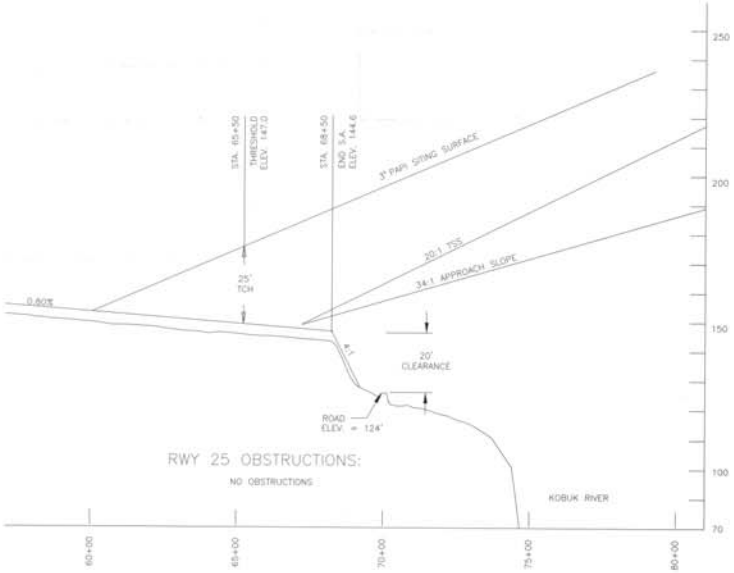
EXISTING INNER PORTION OF APPROACH SURFACES

SHEET 4 OF 7





ULTIMATE RUNWAY PROFILE



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BOB BAKER MEMORIAL AIRPORT
KIANA, ALASKA
ULTIMATE INNER PORTION OF APPROACH SURFACES

SHEET 5 OF 7

AIRSPACE PLAN

FEET
4,000 0 2,000 4,000

F.A.R. PART 77 SURFACE OBSTRUCTION TABLE

ID NUMBER	PENETRATION ELEVATION	AMOUNT OF PENETRATION	DESCRIPTION	EFFECTED AREA	DISPOSITION
1	480' MAXIMUM	149'	TERRAIN	HORIZONTAL	TO REMAIN
2	980' MAXIMUM	499'	TERRAIN	CONICAL	TO REMAIN
3	396' MAXIMUM	65'	TERRAIN	HORIZONTAL	TO REMAIN
4	370' MAXIMUM	39'	TERRAIN	CONICAL/HORIZONTAL	TO REMAIN

SURVEY DATE: 11/10/2010
ELEVATIONS BASED ON MSL

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

DESCRIPTION	DIMENSION
ESTABLISHED AIRPORT ELEVATION	181.0'
RUNWAY THRESHOLD ELEVATION	RW7: 181.0' \ RW25: 147.0'
PRIMARY SURFACE	500' X 4400'
HORIZONTAL SURFACE ELEVATION	331.0'
HORIZONTAL SURFACE RADIUS	10,000'
APPROACH SURFACE	400' X 1000' X 1500'
APPROACH SURFACE SLOPE	RW7: 20:1 \ RW25: 34:1
CONICAL SURFACE WIDTH	4000' @ 20:1
TRANSITIONAL SURFACE SLOPE	7:1

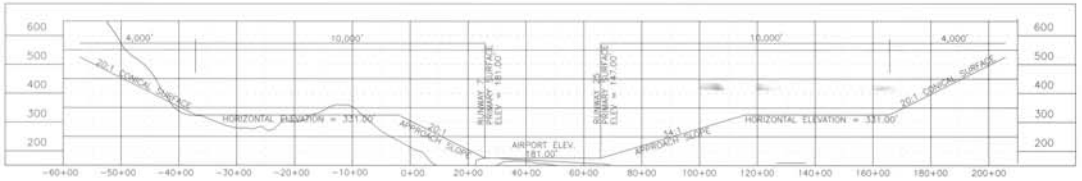
NON-STANDARD CONDITIONS

ITEM	STANDARD	EXISTING	ULTIMATE
LANDFILL SEPARATION	5000'	3,297'	3,297'
SEWAGE LAGOON SEPARATION	5000'	3926'	3,926'

LEGEND

331'	AIRSPACE ELEVATION (SUFACE DIVIDERS)
— — —	AIRSPACE SURFACE DIVIDERS
381'	AIRSPACE ELEVATION (50' INCREMENTS)
	EXISTING GROUND ELEVATIONS
— — —	RUNWAY CENTERLINE (EXTENDED)

AIRSPACE PROFILE



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DESIGN BTD
DRAWN BTD
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BY	DATE	REVISIONS

STATE OF ALASKA
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NORTHERN REGION – DESIGN AND ENGINEERING SERVICES
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DATE 4/3/15

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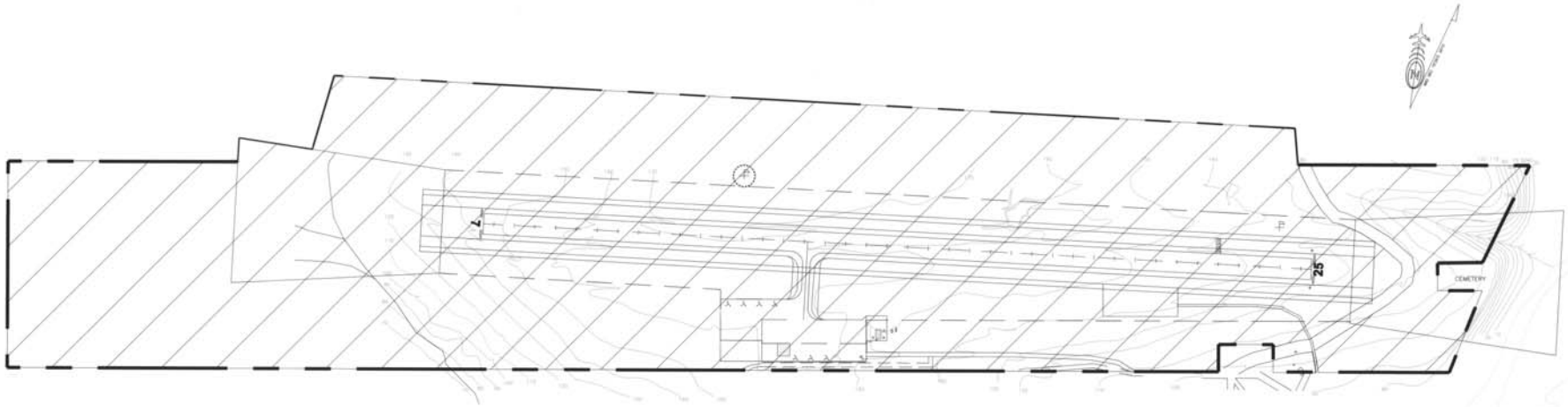
DATE 4/14/15

BOB BAKER MEMORIAL AIRPORT
KIANA, ALASKA
AIRSPACE & COMPOSITE APPROACH PROFILES

SHEET 6 OF 7



LEGEND

- ROAD WITH 60 FOOT ROW
- BUILDINGS
- AIRPORT BOUNDARY
- AVIATION USE AREA

FEET
500 250 0 250 500

DESIGN BTD
DRAWN BTD
CHECKED CEJ

BY	DATE	REVISIONS

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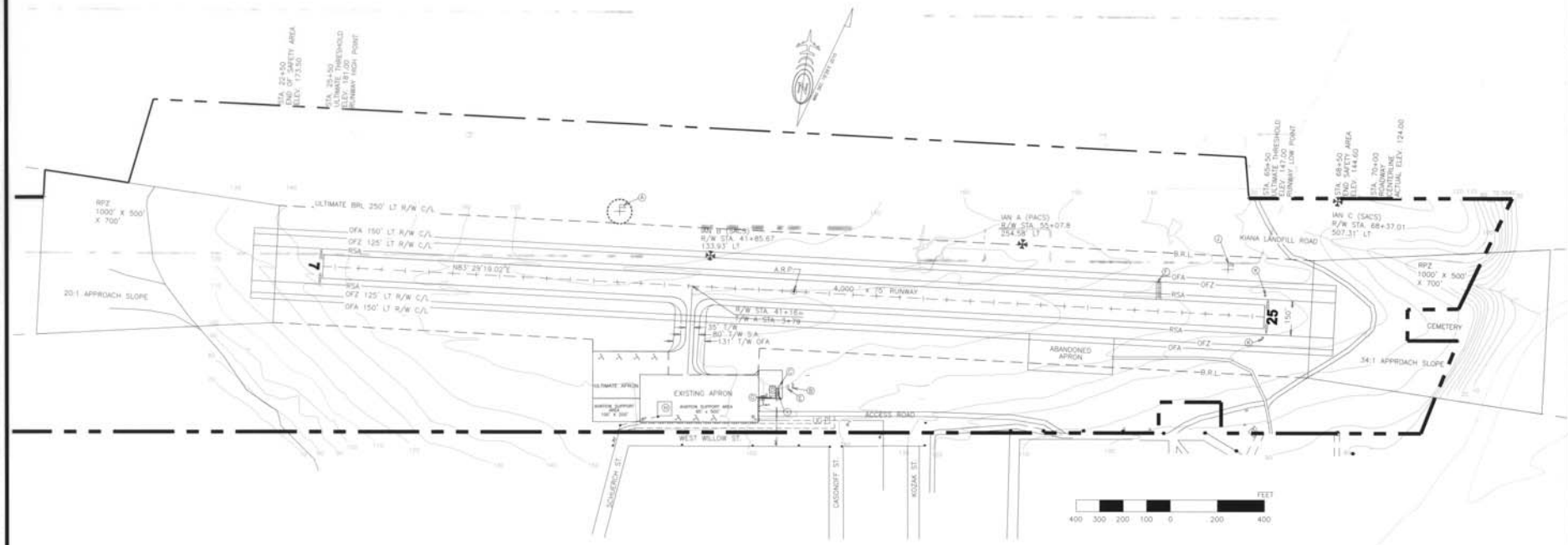
BOB BAKER MEMORIAL AIRPORT
KIANA, ALASKA
LAND USE DRAWING

SHEET 7 OF 7



BUILDINGS/FACILITIES

BLD/FAC	DESCRIPTION	STATION/OFFSET	TOP ELEV. (MSL)
(A)	LIGHTED WIND CONE	37+95/300' LT	
(B)	AWSS	45+69/403' RT	
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ULTIMATE RUNWAY DATA

AIRPORT REFERENCE POINT (ARP)	LAT.	N66°58'34.24"
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THRESHOLD 25 STA. 65+50	LAT.	N66°58'35.78"
	LONG.	W160°25'29.22"
ULTIMATE TOUCHDOWN ZONE ELEVATION		
	R/W 7	181.00'
	R/W 25	147.00'

LEGEND

	EXISTING	ULTIMATE
PROPERTY LINE		
BUILDING RESTRICTION LINE (B.R.L.)	B.R.L.	B.R.L.
DEVELOPMENT		
WIND CONE & SEGEMENTED CIRCLE		
WIND CONE ONLY		
BUILDING		
ROADWAY		
FENCING		

AIRPORT REFERENCE POINT	⊙	SHORELINE/WATERLINE	
ROTATING BEACON		TREELINE	
ANTENNA/TOWER	△	THRESHOLD	
AWSS	△	OVERHEAD POWER	
SURVEY MONUMENT BRASS CAP		PAPI	□□□□
SURVEY MONUMENT		REIL	◇

DESIGN BTD
DRAWN BTD
CHECKED CFJ

BY	DATE	REVISIONS

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

APPROVED
ALBERT M. L. BECK, P.E. — DESIGN GROUP CHIEF
DATE 4/13/15

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 4.14.15.
FAA AIRSPACE REVIEW NUMBER 2015-AAL-5-NRA
FAA, AIRPORTS DIVISION ALASKAN REGION, AAL-612
DATE 4/14/15

BOB BAKER MEMORIAL AIRPORT
KIANA, ALASKA
ULTIMATE AIRPORT LAYOUT PLAN

SHEET 3 OF 7