CHAPTER 7 – AIRPORT PLANS

Kearny Municipal Airport Master Plan Update

7.1 INTRODUCTION

Airport plans graphically depict the proposed improvements for an airport for the 20-year planning period and beyond. These drawings, commonly referred to as the Airport Layout Plan (ALP) set, provide the physical details of the long-term development plan.

This chapter provides a narrative to accompany the eight sheets in the set of airport plans prepared for Kearny Municipal Airport, which include the following:

- Title Sheet and Index
- Airport Layout Drawing
- Terminal Area Plan
- Airspace Drawing
- Inner Approach Surface Drawing
- On-Airport Land Use Drawing
- Off-Airport Land Use Drawing
- Airport Property Map

Airport plans represent the overall development plan for the airport and generally include existing and proposed facilities, airspace, land use, and property ownership. The ALP set is an important tool for airport development and should be reviewed and updated regularly to reflect the completion of airport improvements and to reflect the most current FAA airport design standards. The FAA and ADOT Aeronautics Division publish an ALP checklist that summarizes the drawing detail and table data required.

The next chapter identifies the phasing of the proposed development shown on the ALP for the 20-year planning period along with their associated cost estimates.

A brief overview of each drawing in the ALP set follows.

7.2 TITLE SHEET AND INDEX

The Title Sheet and Index serves as a cover sheet and introduction to the ALP set of drawings. This sheet outlines the title and exhibit number of each drawing within the set and identifies the grant number associated with the state funding.

7.3 AIRPORT LAYOUT DRAWING

The Airport Layout Drawing is the most critical drawing in the set and requires review and acceptance by the ADOT Aeronautics Division and FAA (for NPIAS airports) prior to funding substantial airport improvement projects. The drawing should depict all existing and proposed facilities. The Kearny Municipal Airport Layout Drawing reflects all projects recommended in the Master Plan Update. Some highlights of the proposed

improvements for Kearny include the installation of a MIRL system, relocated airport access road, apron expansion, and additional hangar development.

Also necessary to the drawing is the Airport Data Table, Runway Data Table, Buildings/Facilities Table, All-Weather Wind Rose, and the Legend. Much of the table data is also illustrated directly on the drawing. The tables present both the existing and future conditions. Data and development issues requiring additional detail are addressed in the general notes.

The Airport Data Table includes information related to the airport overall such as airport elevation, airport reference point (ARP) coordinates, mean maximum daily temperature, and airport reference code. The airport reference code (ARC), which is ultimately B-I for Kearny, is defined in FAA AC 150/5300-13, *Airport Design*, and described in early sections of the master plan.

Highlights of the Runway Data Table include runway end elevations, approach category, aircraft design group, runway dimensions, runway surface and pavement strength, runway lighting and marking, approach aids, and runway safety area dimensions.

The all-weather wind rose presents wind conditions under all weather conditions. The all-weather wind rose indicates the frequency at which wind in specific categories of velocity occur and from what direction. Runway orientation is superimposed on the wind rose and the percentage of wind coverage for the all-weather condition is provided. For Kearny, the ADOT Aeronautics Division compiled 12 months of wind data that was incorporated into a wind rose since no other reliable wind data for Kearny is available. The wind data indicated that the runway currently has 97.59 percent of wind coverage at 12 mph (10.5 knots). While this exceeds the FAA's 95-percent wind coverage recommended for an airfield, the wind coverage should be calculated after 10 years of wind data collection. Kearny should continue to collect wind data at the airport until this requirement is met.

The vicinity map on the drawing shows the location of the airport in relation to the Town of Kearny including major roadways. The location map shows the Airport's geographic location within the state and in relation to Phoenix.

7.4 TERMINAL AREA PLAN

The Terminal Area Plan (TAP) is simply a large-scale plan view of the building area. Existing and future facilities such as hangars, aircraft apron, tiedowns, terminal building, airport manager's residence, airport vehicle access, and auto parking areas are shown. The TAP provides additional visual detail on the building area beyond that included on the Airport Layout Drawing. This drawing is often used in identifying lease lots for hangar development.

7.5 AIRSPACE DRAWING

The airspace surrounding the airfield should be free and clear of obstructions, when possible, that could be hazardous to aircraft. The Airspace Drawing, also referred to as Part 77 Airspace, depicts all of the imaginary airspace surfaces, their dimensions, and slopes. Depending on an obstruction's location and height, it may represent a hazard to air navigation impacting the operation of the airfield or simply a penetration that can be partially remedied with obstruction lighting, pilot notice, and similar actions. Mountainous terrain is a good example of an obstruction that cannot be mitigated and, therefore, often requires a combination of lighting and published notice. Substantial areas of penetration to Kearny's imaginary airspace surfaces exist due to the mountainous terrain that surrounds a large part of the community. The Airspace Drawing identifies these areas.

The Airspace Drawing for Kearny Municipal Airport addresses all of the applicable imaginary airspace surfaces to include:

- Primary Surface
- Approach Surface
- Horizontal Surface
- Transitional Surface
- Conical Surface

As described earlier in *Chapter 6*, the Town of Kearny should submit a completed FAA Form 7460-1, Notice of Proposed Construction, for any future development on and around the airport to allow the FAA the opportunity to review and comment on its potential adverse impact on the airspace surrounding the airport. While the FAA cannot prevent any development around the airport from occurring, their review and comment provides the Town with a better understanding of any safety and liability issues.

The principal imaginary surfaces shown in the airspace plan are described here to include definitions of each surface with a brief reference to their application at Kearny.

Primary Surface
The primary surface is a surface longitudinally centered on a runway. When the runway has a prepared hard surface, the primary surface extends 200 feet beyond each end of the runway. Since the existing and future condition for Kearny's Runway 8-26 is visual/ small aircraft exclusively, the primary surface width is 250 feet.

Approach Surface
The approach surface is a surface longitudinally centered on the extended runway centerline, which extends outward and upward from each end of the primary surface. Approach slope and dimensions are determined for each runway end based on the type of approach. Kearny's visual approach slope on both runway ends requires a 20:1 approach slope out a horizontal length of 5,000 feet.

Horizontal Surface
The horizontal surface is a horizontal plane 150 feet above the established airport elevation. Kearny Municipal Airport is at an elevation of 1,833 feet MSL. Therefore, the horizontal surface is at an elevation of 1,983 feet MSL. Arcs of specified dimensions set the plan dimensions of the horizontal surface forth from the end of the primary surface. A tangent line connects the arcs. These arcs correspond with the 5,000-foot approach surface length described earlier. Mountainous terrain around Kearny penetrates this surface is several locations.

Transitional Surface
The transitional surface is an inclined plane with a slope of 7:1 extending upward and outward from the primary and approach surfaces, terminating at the point where they intersect with the horizontal surface or any other surface where more critical restrictions are intercepted. According to the FAA, this surface is primarily used as a screening tool today to determine whether buildings or other structures are penetrating the airspace. Subsequently, a closer review of the penetrations is completed using guidance in *FAA AC 150/5300-13, Airport Design*, which states that the obstacle free zone (OFZ) must remain clear. For Kearny, parked aircraft obstruct the 7:1 transitional surface, but clear the OFZ as required. Kearny's OFZ starts at the same location as the 7:1 surface, but goes straight up since the runway is a visual runway serving small aircraft.

Conical Surface
The conical surface is an inclined plane extending upward and outward from the outer boundary of the horizontal surface at a slope of 20:1 for a horizontal distance of 4,000 feet. The top of the conical surface is at a height of 350 feet above the airport elevation, which is 2,183 feet MSL for Kearny. Mountainous terrain around Kearny penetrates the conical surface in several locations.

7.6 Inner Approach Surface Drawing

The Inner Approach Surface Drawing is derived from the Airspace Drawing. The drawing provides a detailed plan and profile view of the approach surface at each runway end. The physical features including topography, roads, obstructions and incompatible objects in these critical areas can be better identified. Both Runway 8 and 26 ends contain several trees that penetrate the Part 77 approach surfaces. An extensive survey of the tree obstructions was completed as part of the master planning process so the Town could determine what trees needed topping or removal. It should be noted that the penetrations are much less significant when applying the threshold siting surface standards. These standards are applied for displaced thresholds, which exists at Kearny. The Town is in the process of removing as many trees as feasible to enhance the safety of the runway approaches and eliminate the cost of future tree topping. Any remaining trees that cannot be removed will be topped to clear the approach surface to meet standards for the future displaced threshold.

7.7 On-Airport Land Use Drawing

The On-Airport Land Use Drawing takes the Airport Layout Drawing and categorizes the existing and future facilities into land use categories. Land use categories include the airfield operations area; general aviation (GA); terminal area; corporate GA/FBO; and aviation reserve. These land use areas may require adjustment in the future if the character of the airport changes.

7.8 Off-Airport Land Use Drawing

The Off-Airport Land Use Drawing is based on the ultimate condition of the airport environs. The Plan depicts the airport property boundary, the type of zoning/land use around and in the vicinity of the airport, and the proposed Airport Influence Area (AIA), which represents the existing and future airport traffic pattern (see *Chapter 2 and 6* discussion). This drawing provides an overview of what types of existing and proposed community development (residential, etc.) is influenced by aircraft overflight. However, the Town also published a Future Land Use Plan in their Town of Kearny General Plan 2002, which depicts possible future land uses in the 10- to 20-year timeframe. A copy of this Plan is included in the Appendices for reference. While much of the future land use overlaps the Town's current zoning, there is a broader area covered.

7.9 Airport Property Map

The Airport Property Map is the last drawing of the ALP set. This drawing is provided to show details on how the various parcels of land within the boundaries of the airport were acquired. The existing airport property is depicted as one parcel. This parcel represents Town-owned property that was recently designated exclusively for airport use and subsequently recorded as airport property. As required, a legal description of the property was provided to the ADOT Aeronautics Division for their records. A copy is included in the Appendices.

Future fee simple and avigation easement acquisitions are also reflected on the property map. The avigation easements are necessary to provide the Town with control over the RPZs. The proposed fee simple acquisition will provide the additional property necessary to construct the proposed expansion of the apron and hangar areas and new airport access. The existing and future parcels are identified by ownership, acreage, and type of acquisition. As shown, there are four fee simple parcels and three avigation easement parcels identified for future acquisition. The property map may also be reviewed and updated regularly to serve as the Exhibit A needed for grant applications in the future.

KEARNY MUNICIPAL AIRPORT

KEARNY, ARIZONA

AIRPORT MASTER PLAN UPDATE

AIRPORT LAYOUT PLAN DRAWING SET

ADOT AERONAUTICS GRANT NO. E4S30

SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET AND INDEX
2	AIRPORT LAYOUT DRAWING
3	TERMINAL AREA PLAN
4	AIRPORT AIRSPACE DRAWING
5	INNER APPROACH SURFACE DRAWING
6	ON-AIRPORT LAND USE DRAWING
7	OFF-AIRPORT LAND USE DRAWING
8	AIRPORT PROPERTY MAP

LAST UPDATE: 4-03-2006

WILLDAN Serving Public Agencies

TOWN OF KEARNY
KEARNY, ARIZONA
KEARNY MUNICIPAL AIRPORT

REVISIONS
NO. | DESCRIPTION / DATE

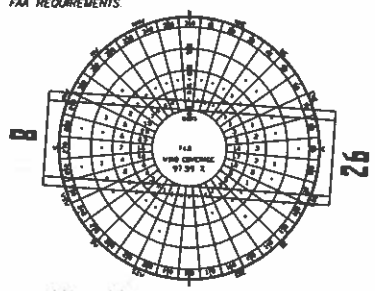
SCALE: NO SCALE
DATE: 2-28-2006
DESIGNED BY:
DRAWN BY: D.D.
CHECKED BY:
JOB NO.:
FILE NAME:

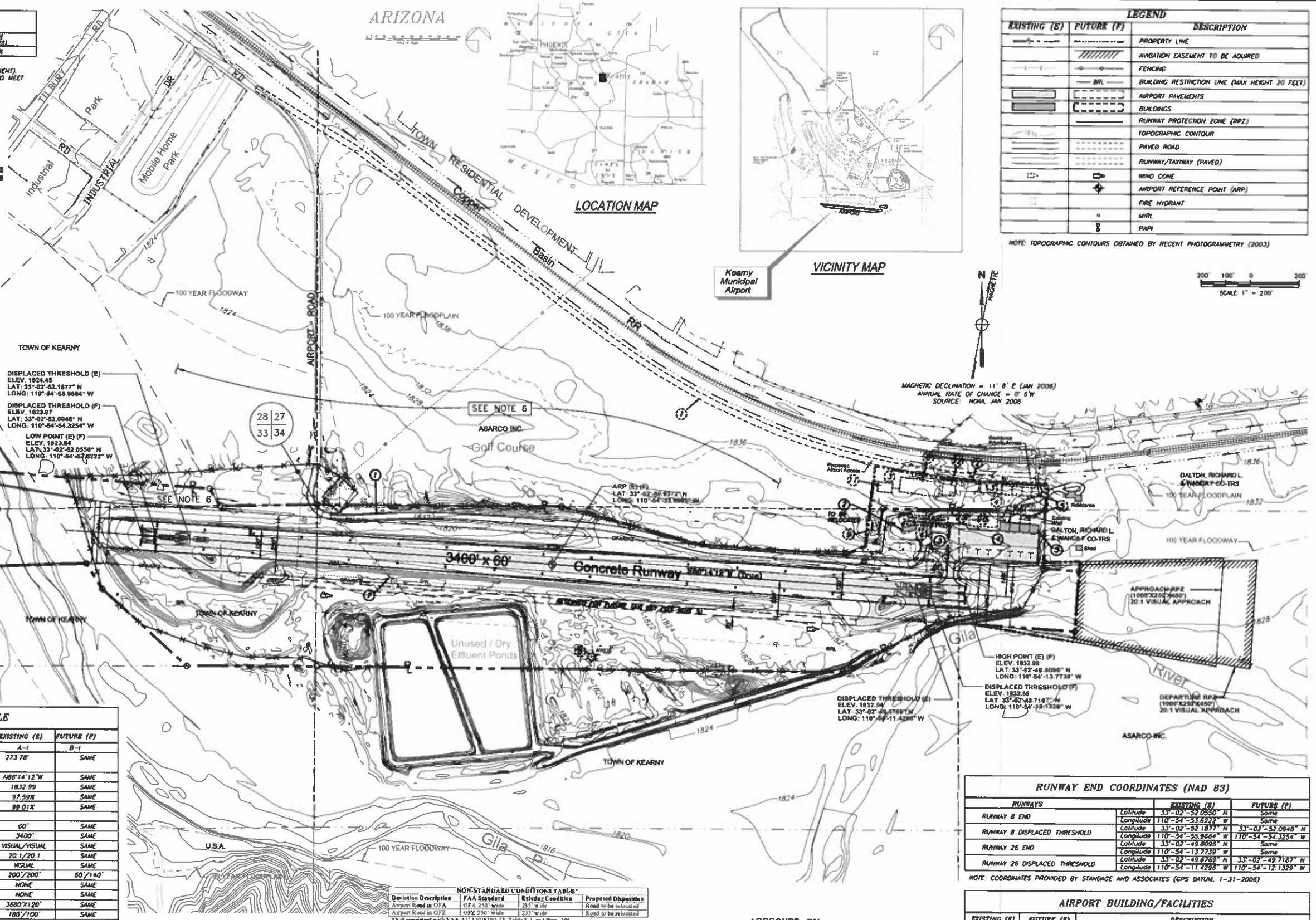
1

1 of 8 SH

WIND COVERAGE		
RUNWAYS	12 MPH (10.5 KNOTS)	15 MPH (13 KNOTS)
RUNWAY 8-26	97.59%	99.01%

SOURCE:
ADOT AERONAUTICS, APRIL 2004–APRIL 2005 (WIND INSTRUMENT).
WIND DATA COLLECTION SHOULD CONTINUE FOR 10 YEARS TO MEET FAA REQUIREMENTS.





LEGEND		
EXISTING (E)	FUTURE (F)	DESCRIPTION
		PROPERTY LINE
		AVIGATION EASEMENT TO BE AQUIRED
		FENCING
	BRL	BUILDING RESTRICTION LINE (MAX HEIGHT 20 FEET)
		AIRPORT PAVEMENTS
		BUILDINGS
		RUNWAY PROTECTION ZONE (RPZ)
		TOPOGRAPHIC CONTOUR
		PAVED ROAD
		RUNWAY/TAXIWAY (PAVED)
		WIND CONE
		AIRPORT REFERENCE POINT (ARP)
		FIRE HYDRANT
		MIRL
		PAPI

RUNWAY DATA TABLE

DATA ELEMENTS - (RUNWAY 8-26)		EXISTING (E)	FUTURE (F)
APPROACH CATEGORY DESIGN GROUP CODE		A-I	B-I
RUNWAY AZIMUTH		273.76°	SAME
RUNWAY BEARING (TRUE)		N86°14'12"W	SAME
MAXIMUM RUNWAY ELEVATION (MSL)		1832.99	SAME
WIND COVERAGE (%)	12 MPH (10.5 KNOTS)	97.59%	SAME
	15 MPH (13 KNOTS)	99.01%	SAME
RUNWAY DIMENSIONS	WIDTH:	60'	SAME
	LENGTH:	3400'	SAME
RUNWAY INSTRUMENTATION		VISUAL/VISUAL	SAME
APPROACH SLOPE		20:1/20:1	SAME
APPROACH VISIBILITY MINIMUMS		VISUAL	SAME
THRESHOLD DISPLACEMENT		200'/200'	60'/140'
RUNWAY STOPWAY	WIDTH:	NONE	SAME
	LENGTH:	NONE	SAME
RUNWAY SAFETY AREA (RSA)	DIMENSIONS	3680'X120'	SAME
	LENGTH BEYOND RUNWAY END	180'/100'	SAME
OBJECT FREE AREA (OFA) (NOTE 2)	DIMENSIONS	3680'X250'	SAME
	LENGTH BEYOND RUNWAY END	180'/100'	SAME
OBSTACLE FREE ZONE (OFZ) (NOTE 2)	DIMENSIONS	3800'X250'	SAME
	LENGTH BEYOND RUNWAY END	200'	SAME
TAKEOFF RUN AVAILABLE (TORA)		3400'/3400'	SAME
ACCELERATE-STOP DISTANCE AVAILABLE (ASDA)		3260'/3340'	SAME
LANDING DISTANCE AVAILABLE (LDA)		3200/3200'	3200'/3200'
PAVEMENT STRENGTH	POUNDS	12,500	SAME
	TYPE	SINGLE WHEEL	SAME
RUNWAY SURFACE TYPE		CONCRETE	SAME
PAVEMENT SURFACE TREATMENT		CRACK SEAL	SAME
RUNWAY MARKING		BASIC	SAME
RUNWAY EFFECTIVE GRADIENT (%)		0.269%	SAME
RUNWAY LIGHTING (URL, MIRL, HIRL)		NONE	MIRL
RUNWAY APPROACH LIGHTING (ODALS, MALSAR, ECT.)		NONE	NONE
NAVAIDS (ILS, NDB, GPS)		NONE	NONE
VISUAL AIDS (PAPI, REIL, ETC.)		WIND SOCK	PAPI, WIND SOCK, ROTATING BEACON
14CFR PART 77 CATEGORY		VISUAL/VISUAL	SAME

NON-STANDARD CONDITIONS TABLE*

Deviation Description	FAA Standard	Existing Condition	Proposed Disposition
Airport Road in OFA	OFA 250' wide	235' wide	Road to be relocated
Airport Road in OFZ	OFZ 250' wide	235' wide	Road to be relocated

* In accordance with FAA AC 150/5300-13, Table 3-1, and Para 306

AIRPORT DATA TABLE

AIRPORT:	KEARNY MUNICIPAL AIRPORT (E67)
TOWNSHIP AND RANGE	4S, 14E (SECTIONS 27,28,33 & 34)
COUNTY:	PINAL
OWNER:	TOWN OF KEARNY

DATA ELEMENTS	EXISTING (E)	FUTURE (F)
APPROACH CATEGORY	A	B
AIRPLANE DESIGN GROUP	GROUP I	GROUP I
AIRPORT ELEVATION (M.S.L.) (NAVD 83)	1,833	SAME
MEAN MAX. TEMPERATURE (JULY)	103.1° F	SAME
AIRPORT AND TERMINAL NAVIGATION AIDS	NONE	NONE
AIRPORT REFERENCE POINT (ARP) COORDINATES (NAD 83) LATITUDE / LONGITUDE	33°-02'-50.9372" N / 110°-54'-33.8993" W	SAME

NOTES:

1. DUE TO LIMITED LAND AVAILABILITY, THERE IS ONLY ONE ALIGNMENT (5± DEGREES) POSSIBLE. LOCAL PILOTS INDICATE THAT CURRENT ALIGNMENT PROVIDES EXCELLENT WIND COVERAGE.
2. EXISTING AIRPORT ROAD IS 35 FEET INSIDE RUNWAY OFA AND OFZ. SEE NON-STANDARD CONDITIONS TABLE.
3. FUTURE HANGAR LOTS MAY INITIALLY BE OCCUPIED BY AIRCRAFT SHADES TO MINIMIZE INITIAL COSTS TO USERS OR AIRPORT SPONSOR.
4. TREE REMOVAL AND TOPPING WILL ELIMINATE THRESHOLD SITING SURFACE OBJECT PENETRATIONS.
5. INSUFFICIENT LAND IS AVAILABLE FOR PARALLEL TAXI WAY DEVELOPMENT ON NORTH SIDE WITHOUT IMPACTING GOLF COURSE. PARALLEL TAXI WAY DEVELOPMENT ON SOUTH SIDE IS CONTINGENT ON SUBSTANTIAL GROWTH IN ACTIVITY BEYOND 2025.
6. THE TOWN IS CONSIDERING THE POSSIBLE DEVELOPMENT OF AN INDUSTRIAL PARK ACCESS TAXI WAY AND ADDITIONAL AIRCRAFT PARKING APRON AREA BEYOND WHAT IS SHOWN ON THE ALP. A COMPREHENSIVE AIRPORT DRAINAGE STUDY AND GOLF COURSE REALIGNMENT STUDY ARE PROGRAMMED SO THE TOWN MAY DETERMINE THE POSSIBLE IMPACTS OF SUCH DEVELOPMENT BEFORE FURTHER CONSIDERATION.
7. SEE SHEET 5 FOR THRESHOLD SITING SURFACE PENETRATIONS (TREES).

APPROVED BY:

OFFICIAL'S NAME & TITLE _____ DATE _____

ADOT AERONAUTICS APPROVAL

Approved Conditionally _____
Subject to comments contained in our letter _____
Arizona Department of Transportation, Aeronautics Division

Bartley Dick, Director

The contents of this plan do not necessarily reflect the official views or policy of ADOT Aeronautics. Acceptance of these documents by ADOT Aeronautics does not in any way constitute a commitment on the part of the State of Arizona to participate in any development depicted herein nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public or state laws.

RUNWAY END COORDINATES (NAD 83)

RUNWAYS		EXISTING (E)	FUTURE (F)
RUNWAY 8 END	Latitude	33°-02'-52.0550" N	Same
	Longitude	110°-54'-53.8222" W	Same
RUNWAY 8 DISPLACED THRESHOLD	Latitude	33°-02'-52.1877" N	33°-02'-52.0948" N
	Longitude	110°-54'-55.9664" W	110°-54'-54.3254" W
RUNWAY 26 END	Latitude	33°-02'-49.8098" N	Same
	Longitude	110°-54'-13.7739" W	Same
RUNWAY 26 DISPLACED THRESHOLD	Latitude	33°-02'-49.6769" N	33°-02'-49.7187" N
	Longitude	110°-54'-11.4298" W	110°-54'-12.1329" W

NOTE: COORDINATES PROVIDED BY STANDAGE AND ASSOCIATES (GPS DATUM, 1-31-2006)

AIRPORT BUILDING/FACILITIES

EXISTING (E)	FUTURE (F)	DESCRIPTION
1	1	PAVED ACCESS ROAD
2	2	TRAILER (AIRPORT MANAGER RESIDENCE)
3	3	PAVED AUTOMOBILE PARKING
4	4	AIRCRAFT APRON
5	5	HANGARS (36X42 EACH) - SEE NOTE 3
	6	LARGE HANGARS (50X60 EACH) - CONVENTIONAL HANGARS
7		ABANDONED SEWER LINE AND PUMP STATION
	8	AWOS (AUTOMATED WEATHER OBSERVATION SYSTEM)
	9	FUEL FACILITY
	10	LARGE HANGAR
	11	TERMINAL
	12	WASH RACK
	13	INTERIM TIEDOWNS UNTIL NORTHEAST APRON AND HANGERS ARE COMPLETED. THEN, TAXILANE ACCESS WILL REPLACE INTERIM TIEDOWNS

LAST UPDATE: 4-02-2006

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TOWN OF KEARNY
KEARNY, ARIZONA
KEARNY MUNICIPAL AIRPORT

REVISIONS		
NO	DESCRIPTION / DA	
1.	AS-BUILT (200	
2.	MASTER PLAN,	
	FEB, 2008	

SCALE: 1"=200'
DATE: 1-20-2006
DESIGNED BY: [redacted]
DRAWN BY: O.D.
CHECKED BY: S.S.
JOB NO: 13878
FILE NAME: ALP_20

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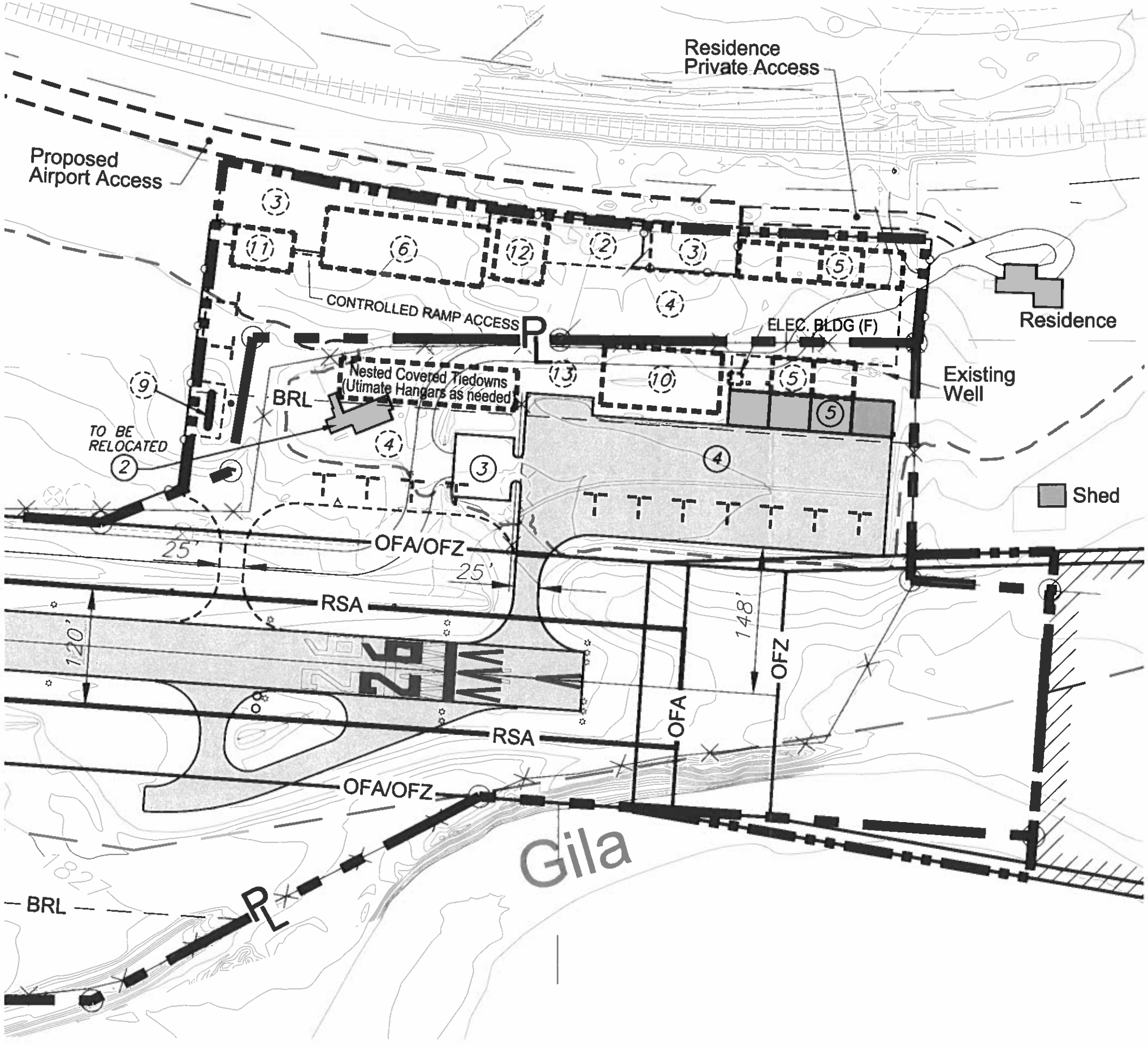
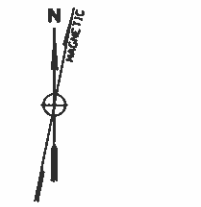
2 of 8 S



LEGEND		
EXISTING (E)	FUTURE (F)	DESCRIPTION
		PROPERTY LINE
		AVIGATION EASEMENT TO BE AQUIRED
		FENCING
	BRL	BUILDING RESTRICTION LINE (MAX HEIGHT 20 FEET)
		AIRPORT PAVEMENTS
		BUILDINGS
		RUNWAY PROTECTION ZONE (RPZ)
		TOPOGRAPHIC CONTOUR
		PAVED ROAD
		RUNWAY/TAXIWAY (PAVED)
		WIND CONE
		AIRPORT REFERENCE POINT (ARP)
		FIRE HYDRANT
		MIRL
		PAPI

NOTE: TOPOGRAPHIC CONTOURS OBTAINED BY RECENT PHOTOGRAMMETRY (2003)

NOTES:
PROPOSED PHASING FOR DEVELOPMENT IS IN MASTER PLAN, CHAPTER 8.



MAGNETIC DECLINATION = 11° 6' E (JAN 2006)
ANNUAL RATE OF CHANGE = 0° 6'W
SOURCE: NOAA, JAN 2006

AIRPORT BUILDING/FACILITIES			TOP ELEVATION (ESTIMATED)	
EXISTING (E)	FUTURE (F)	DESCRIPTION	(E)	(F)
1	1	PAVED ACCESS ROAD	1843	1851
2	2	TRAILER (AIRPORT MANAGER RESIDENCE)	1840	1850
3	3	PAVED AUTOMOBILE PARKING	1828	1838
4	4	AIRCRAFT APRON	1828	1838
5	5	HANGARS (36X42 EACH) - SEE NOTE 3, SHEET 2	1842	1850
	6	LARGE CONVENTIONAL HANGARS	-	1855
7		ABANDONED SEWER LINE AND PUMP STATION	1821	
	8	AWOS (AUTOMATED WEATHER OBSERVATION SYSTEM)	-	1836
	9	FUEL FACILITY	-	1837
	10	LARGE HANGAR	-	1845
	11	TERMINAL	-	1850
	12	WASH RACK	-	1850
	13	INTERIM TIEDOWNS UNTIL NORTHEAST APRON AND HANGERS ARE COMPLETED. THEN, TAXILANE ACCESS WILL REPLACE INTERIM TIEDOWNS	-	1839

NOTE: ALL TOP ELEVATIONS ARE ESTIMATED AND NOT SURVEYED

50' 25' 0 50'
SCALE 1" = 50'

LAST UPDATE 3-28-2006

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TOWN OF KEARNY
KEARNY, ARIZONA
KEARNY MUNICIPAL AIRPORT

REVISIONS	
NO	DESCRIPTION / DA

SCALE 1"=50'
DATE 3-28-2006
DESIGNED BY: WillDa
DRAWN BY D.D.
CHECKED BY S.S.
JOB NO. 1.3878
FILE NAME: Terminal

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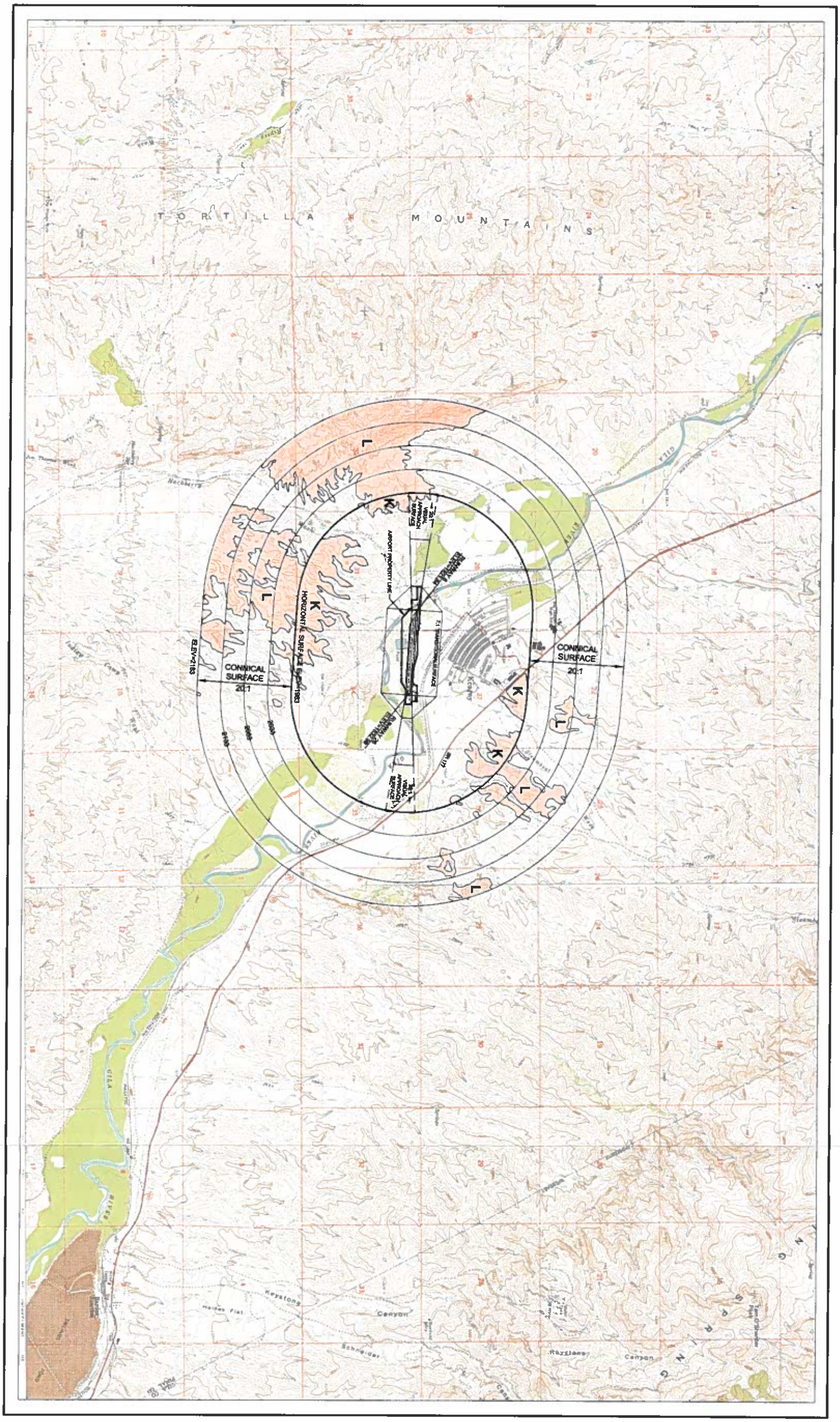
3 of 8 S

LAST UPDATE: 3-28-2006



Notes:

1. Source of map: U.S.G.S. 7.5 minute series (topographic) Hayden and Kearny (Az) Quad Maps
2. Details of ground centerline and obstruction elevations with the approach surfaces are shown on the "Inner Approach Surface" Drawing (sheet 5).

Indicates Airspace Penetrations

N MAGNETIC

MAGNETIC DECLINATION = 11° 6' E (JAN 2006)
ANNUAL RATE OF CHANGE = 0° 6'W
SOURCE: NOAA, JAN 2006

2000' 1000' 0 2000'
(FEET)

OBSTRUCTION TABLE*

Object	Description	Top Elevation	Surface	Penetration	Remarks*
A	River	1815' MSL	Approach	clears	River below runway elev.
B	Trees	up to 1848' MSL	Approach	range 6' - 22'	To be removed or trimmed
C	Trees	up to 1855' MSL	Transitional	range 5' - 29'	To be removed or trimmed
D	Tree	1836' MSL	Primary	12'	To be removed or trimmed
E	Trees	up to 1854' MSL	Transitional	range 12' - 16'	To be removed or trimmed
F	Aircraft Parking	1847' MSL	Transitional	14'	Remains, clears OFZ
G	Access Road	1846' MSL	Primary	13'	To be relocated
H	Trees	up to 1868' MSL	Approach	range 1' - 13'	To be removed or trimmed
I	Tree	1869' MSL	Transitional	12'	To be removed or trimmed
J	Fence	1829' MSL	Primary	clears	Fence below runway elev.
K	Terrain	up to 2,044 MSL	Horizontal	range 1' - 61'	Publish terrain notice**
L	Terrain	up to 2,540 MSL	Conical	range 1' - 397'	Publish terrain notice**

*See Sheet 5 for Obstructions A through J

**Recommend publishing notice to pilots in Airport Facility Directory that high unmarked terrain is in vicinity of airport

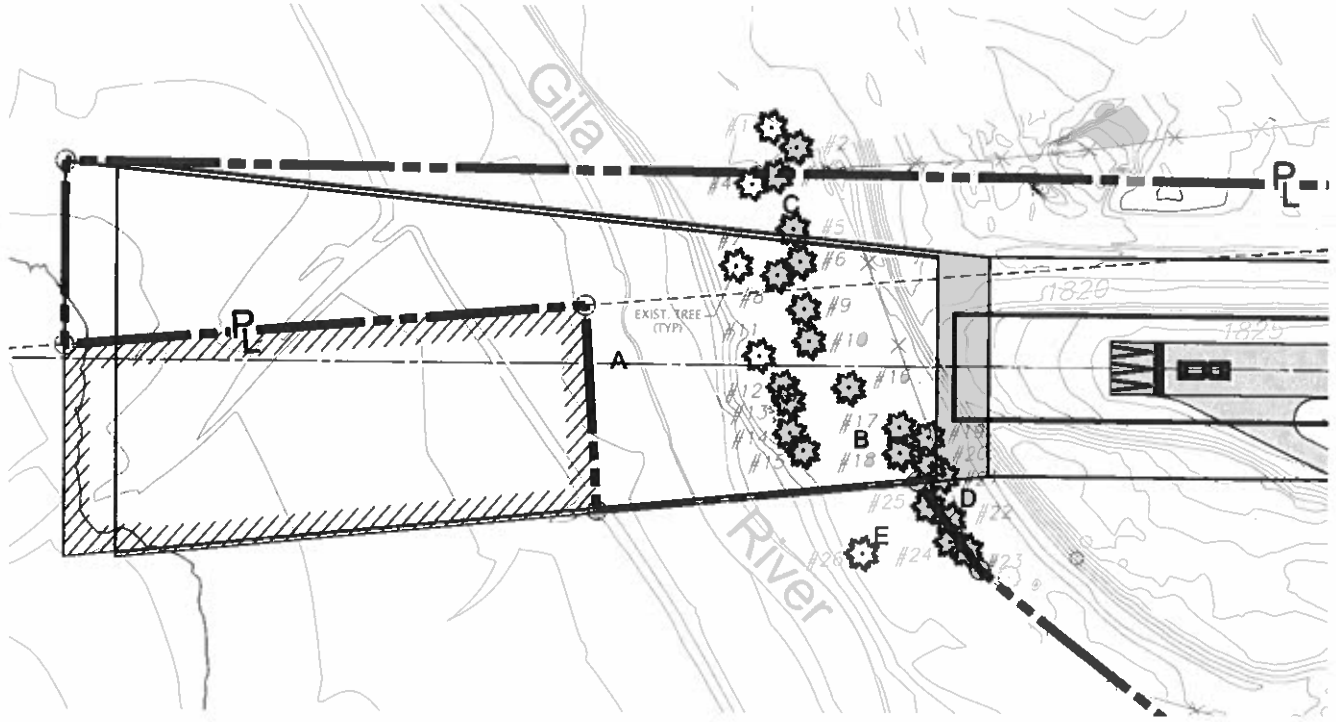
TOWN OF KEARNY
KEARNY, ARIZONA
KEARNY MUNICIPAL AIRPORT

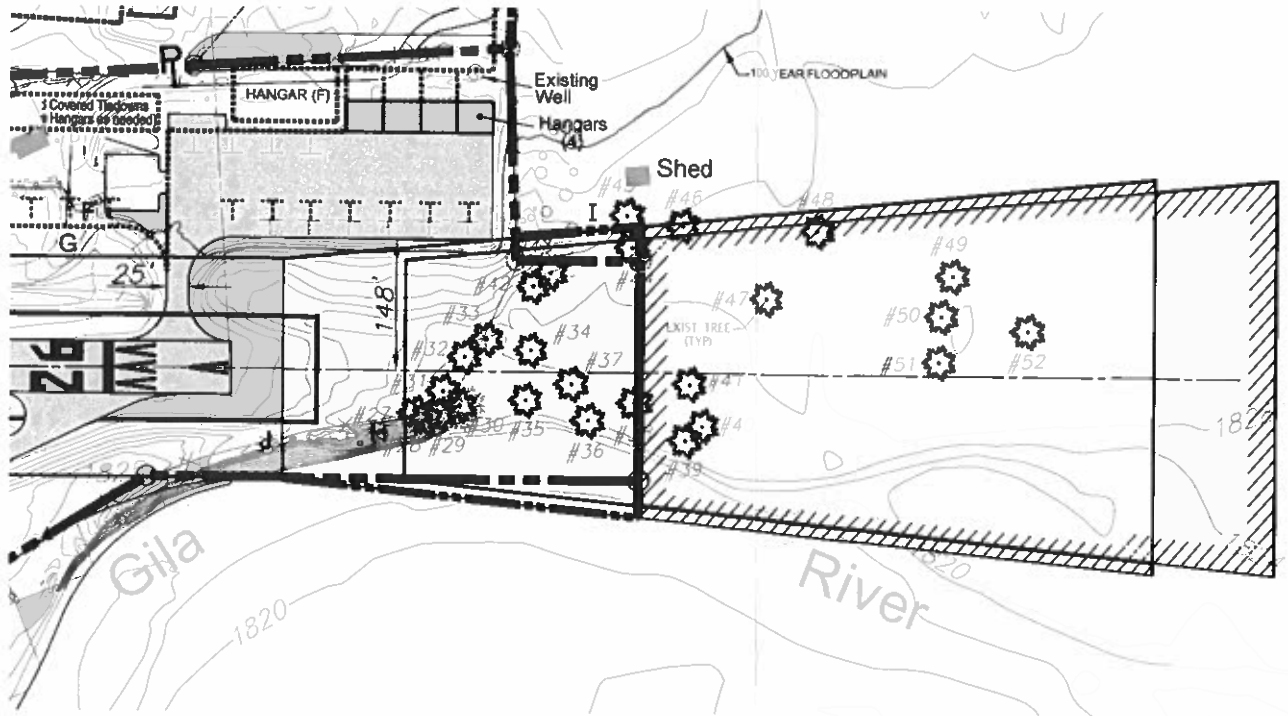
WILLDAN
Serving Public Agencies

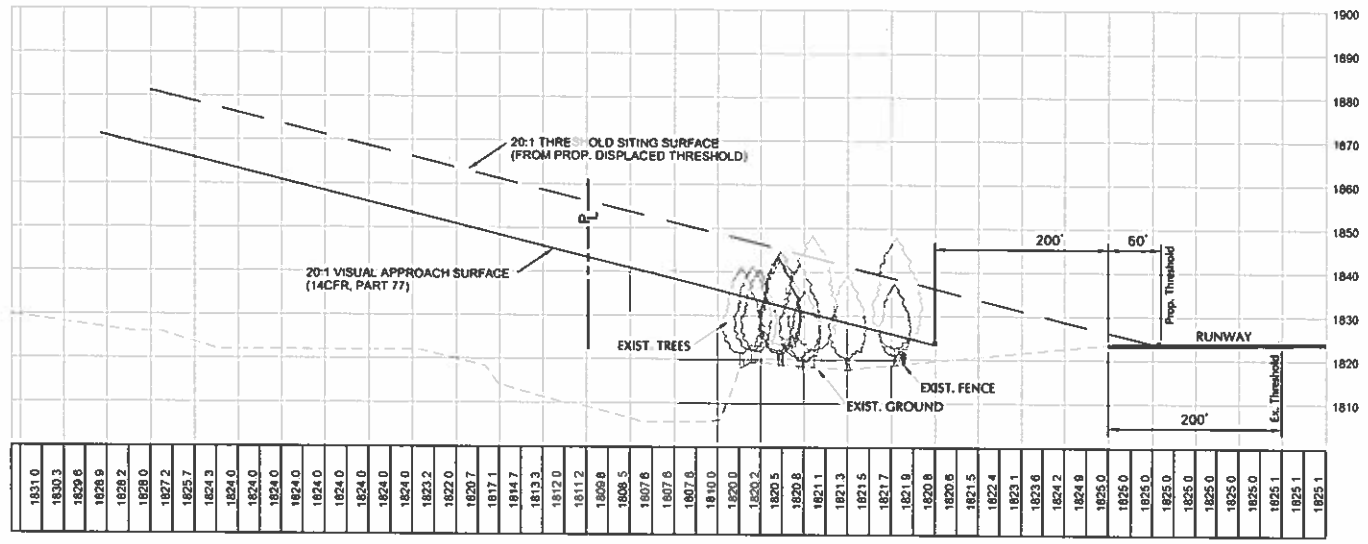
NO	DESCRIPTION / DATE
	REVISIONS

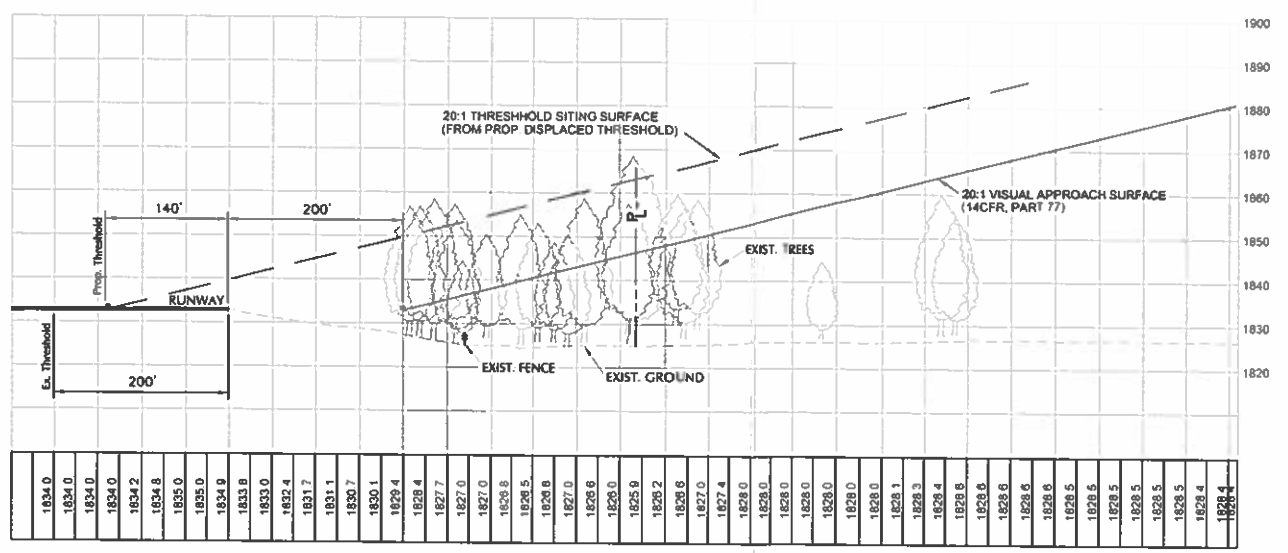
SCALE: 1"=2000'
DATE: 3-28-2006
DESIGNED BY: WMS
DRAWN BY: D.D.
CHECKED BY: S.S.
JOB NO. 13078
FILE NAME: Airport

4









TREE TABLE		
TREE #	TOP ELEVATION	APPROX. TREE HEIGHT
1	1855.1	37.7'
2	1837.3	19.2'
3	1839.7	21.8'
4	1842.3	26.8'
5	1842.0	22.8'
6	1839.8	16.8'
7	1841.2	26.3'
8	1843.3	27.9'
9	1844.9	25.6'
10	1848.2	29.5'
11	1840.5	21.3'
12	1844.8	25.8'
13	1838.8	19.8'
14	1841.9	23.2'
15	1838.8	19.5'
16	1839.1	21.3'
17	1837.5	22.8'
18	1847.9	29.1'
19	1837.7	19.3'
20	1837.2	18.8'
21	1835.6	16.7'
22	1844.8	25.4'
23	1847.8	29.0'
24	1848.8	28.5'
25	1841.2	19.2'
26	1854.2	38.1'

TREE TABLE		
TREE #	TOP ELEVATION	APPROX.
27	1856.8	
28	1856.8	
29	1858.5	
30	1857.7	
31	1851.4	
32	1844.4	
33	1830.3	
34	1847.4	25.3'
35	1854.3	28.4'
36	1857.6	32.0'
37	1850.3	25.0'
38	1858.0	32.1'
39	1859.3	33.3'
40	1858.3	32.4'
41	1857.3	31.9'
42	1852.9	25.6'
43	1848.8	19.6'
44	1867.8	38.1'
45	1868.6	37.4'
46	1865.8	37.1'
47	1850.9	23.2'
48	1844.3	18.9'
49	1855.4	29.0'
50	1859.8	27.0'
51	1859.9	32.9'
52	1859.0	31.8'

*Majority of trees clear the threshold siting surface for the future displaced threshold on Runway 8 and 26

Runway 8 Obstruction Table

Object	Description	Top Elevation	Surface	Penetration	Remarks*
A	River	1815' MSL	Approach	clears	River below runway elev.
B	Trees	up to 1848' MSL	Approach	range 6' - 22'	To be removed or trimmed
C	Trees	up to 1855' MSL	Transitional	range 5' - 29'	To be removed or trimmed
D	Tree	1836' MSL	Primary	12'	To be removed or trimmed
E	Trees	up to 1854' MSL	Transitional	range 12' - 16'	To be removed or trimmed
F	Aircraft Parking	1847' MSL	Transitional	14'	Remains, clears OFZ

*Majority of trees clear the threshold siting surface for the future displaced threshold on Runway 8 and 26

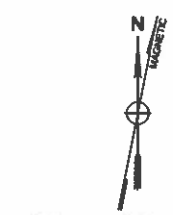
Runway 26 Obstruction Table

Object	Description	Top Elevation	Surface	Penetration	Remarks*
G	Access Road	1846' MSL	Primary	13'	To be relocated
H	Trees	up to 1868' MSL	Approach	range 1' - 13'	To be removed or trimmed
I	Tree	1869' MSL	Transitional	12'	To be removed or trimmed
J	Fence	1829' MSL	Primary	clears	Fence below runway elev

*Majority of trees clear the threshold siting surface for the future displaced threshold on Runway 8 and 26

NOTES:

1. Source of map: U.S.G.S. 7.5 minute series (topographic) Hayden and Kearny (Az) Quad Maps.
2. Tree Survey completed by Standage and Associates, 2005.



MAGNETIC DECLINATION = 11° 6' E (JAN 2006)
ANNUAL RATE OF CHANGE = 0° 6'W
SOURCE: NOAA, JAN 2006

LAST UPDATE: 3-28-2006

WILLDAN
Serving Public Agencies

TOWN OF KEARNY
KEARNY, ARIZONA
KEARNY MUNICIPAL AIRPORT

REVISIONS	
NO	DESCRIPTION / DA

SCALE: 1"=100'(H) 1"
DATE: 3-28-2006
DESIGNED BY: [illegible]
DRAWN BY: D.D.
CHECKED BY: S.S.
JOB NO.: 1.3878
FILE NAME: Approac

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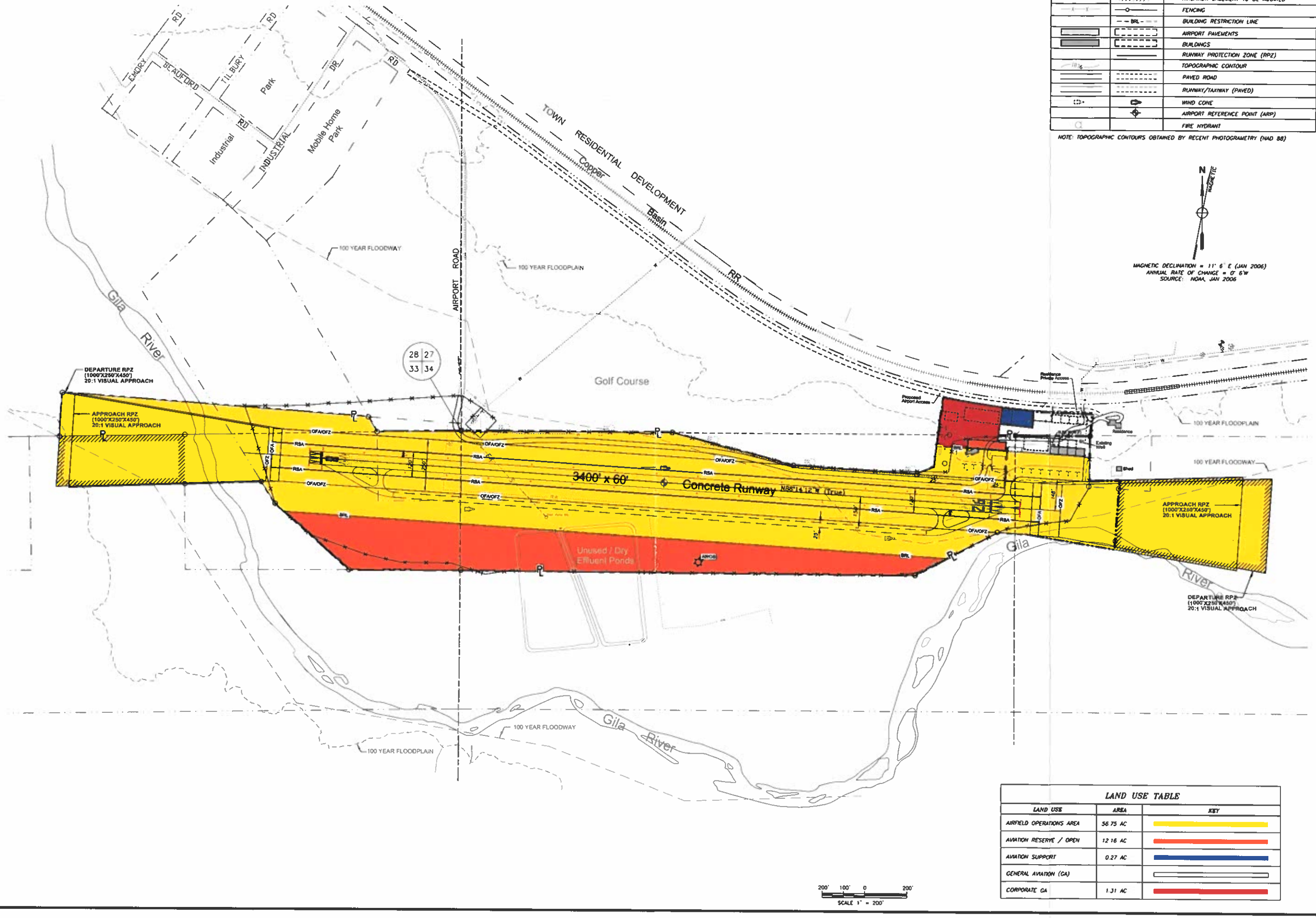
5 of 8 S



LEGEND		
EXISTING (E)	FUTURE (F)	DESCRIPTION
		PROPERTY LINE
		AVIGATION EASEMENT TO BE AQUIRED
		FENCING
		BUILDING RESTRICTION LINE
		AIRPORT PAVEMENTS
		BUILDINGS
		RUNWAY PROTECTION ZONE (RPZ)
		TOPOGRAPHIC CONTOUR
		PAVED ROAD
		RUNWAY/TAXIWAY (PAVED)
		WIND CONE
		AIRPORT REFERENCE POINT (ARP)
		FIRE HYDRANT

NOTE: TOPOGRAPHIC CONTOURS OBTAINED BY RECENT PHOTOGRAMETRY (NAD 88)

N
MAGNETIC

MAGNETIC DECLINATION = 11° 6' E (JAN 2006)
ANNUAL RATE OF CHANGE = 0° 6'W
SOURCE: NOAA, JAN 2006

LAND USE TABLE		
LAND USE	AREA	KEY
AIRFIELD OPERATIONS AREA	56.75 AC	
AVIATION RESERVE / OPEN	12.16 AC	
AVIATION SUPPORT	0.27 AC	
GENERAL AVIATION (GA)		
CORPORATE GA	1.31 AC	

LAST UPDATE: 4-02-2006

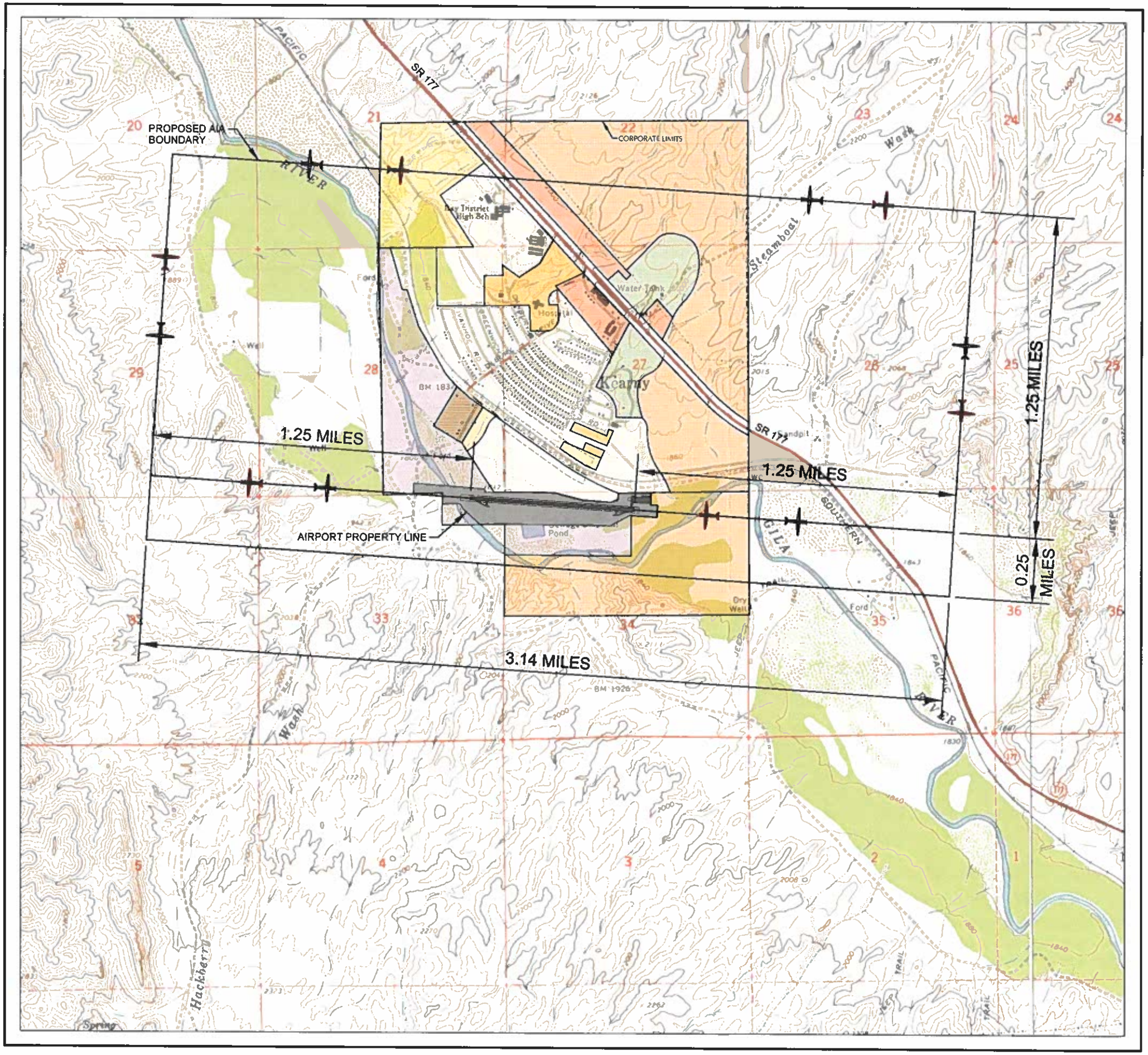
WILLDAN
Serving Public Agencies

TOWN OF KEARNY
KEARNY, ARIZONA
KEARNY MUNICIPAL AIRPORT

REVISIONS	
NO	DESCRIPTION / DA

SCALE: 1"=200'
DATE: 3-28-2006
DESIGNED BY: WB
DRAWN BY: DD
CHECKED BY: SS
JOB NO: 13878
FILE NAME: 0ALand

6



LEGEND

EXISTING (E)	FUTURE (F)	DESCRIPTION
		PROPERTY LINE
		AIRPORT AREA
1836		TOPOGRAPHIC CONTOUR
		RUNWAY 8 TRAFFIC PATTERN
		RUNWAY 26 TRAFFIC PATTERN

NOTE: TOPOGRAPHIC CONTOURS OBTAINED BY RECENT PHOTOGRAMETRY (NAD 88)

ZONING / LAND USE TABLE

R1-10	SINGLE FAMILY RESIDENCE SCHOOLS, CHURCHES, PARKS ETC.
R1-6	SINGLE FAMILY RESIDENCE - R1-10 USES.
R-2	MULTIPLE FAMILY RESIDENCE
A-R	AGRICULTURE-RESIDENTIAL SINGLE FAMILY DWELLINGS, CHURCHES, LIVESTOCK
M-H	SIGNGLE HOME DIST.-MOBILE HOME PARKS & SUBDIVISIONS ONE MOBILE HOME PER LOT
C-1	GENERAL COMMERCIAL ZONING DISTRICT RESIDENTIAL USES PROHIBITED
C-2	LIGHT COMMERCIAL ZONING DISTRICT R1-6 & R-2 USES PROHIBITED
IND-1	LIGHT INDUSTRIAL DISTRICT LIGHT MANUFACTURING, WAREHOUSES, FREIGHT, ETC.
	AIRPORT PROPERTY

SOURCE: TOWN OF KEARNY

NOTES:

1. THE TOWN OF KEARNY'S CURRENT ZONING ORDINANCE IS REPRESENTED ON THIS OFF-AIRPORT LAND USE DRAWING TO IDENTIFY WHAT TYPES OF DEVELOPMENT ARE PERMITTED OR CURRENTLY EXIST WITHIN THE AIRPORT'S TRAFFIC PATTERN. THE TOWN OF KEARNY'S FUTURE LAND USE PLAN, PUBLISHED IN THE KEARNY GENERAL PLAN 2002, IS INCLUDED IN THE AIRPORT MASTER PLAN APPENDICES FOR REFERENCE. THE FUTURE LAND USE PLAN COVERS A BROADER AREA THAN THE TOWN'S CURRENT ZONING SHOWN ON THIS PLAN. THE GENERAL PLAN 2002 STATES THAT THE FUTURE LAND USE PLAN " REFLECTS SUGGESTED LAND USE FOR THE COMMUNITY OVER THE NEXT TEN TO TWENTY YEARS. IT IS A COMPILATION OF THE VARIOUS ALTERNATIVES CONSIDERED AND INCLUDES 10 CATEGORIES." PLEASE SEE THE KEARNY MUNICIPAL AIRPORT MASTER PLAN APPENDICES.
2. AIRPORT TRAFFIC PATTERN TO THE NORTH AND 1/4-MILE BUFFER TO THE SOUTH REPRESENT THE PROPOSED AIRPORT INFLUENCE AREA (AIA), WHICH DEFINES VICINITY OF AIRPORT IMPACTED BY AIRCRAFT OVERFLIGHT. IT IS RECOMMENDED THAT THE TOWN ADOPT THE AIA AND CONSIDER IT IN FUTURE LAND USE PLANNING AND ZONING EFFORTS.

N MAGNETIC

MAGNETIC DECLINATION = 11° 6' E (JAN 2006)
ANNUAL RATE OF CHANGE = 0° 6'W
SOURCE: NOAA, JAN 2006

1000' 500' 0 1000' 2000'
(FEET)

WILLDAN
Serving Public Agencies

TOWN OF KEARNY
KEARNY, ARIZONA
KEARNY MUNICIPAL AIRPORT

REVISIONS	
NO.	DESCRIPTION / DA

SCALE: 1"=1000'
DATE: 4-03-2006
DESIGNED BY:
DRAWN BY: D.D.
CHECKED BY:
JOB NO.: 1800
FILE NAME: Off.mxd

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7 of 8

LAST UPDATE: 3-28-2006

ARIZONA

LOCATION MAP

VICINITY MAP

Kearny Municipal Airport

LEGEND		
EXISTING (E)	FUTURE (F)	DESCRIPTION
		PROPERTY LINE
		PARCEL LINES
		AVIGATION EASEMENT TO BE AQUIRED
		FENCING
	BRL	BUILDING RESTRICTION LINE (MAX HEIGHT 20 FEET)
		AIRPORT PAVEMENTS
		BUILDINGS
		RUNWAY PROTECTION ZONE (RPZ)
		TOPOGRAPHIC CONTOUR
		PAVED ROAD
		RUNWAY/TAXIWAY (PAVED)
		WIND CONE
		AIRPORT REFERENCE POINT (ARP)
		FIRE HYDRANT

N MAGNETIC

MAGNETIC DECLINATION = 11° 6' E (JAN 2006)
ANNUAL RATE OF CHANGE = 0° 6'W
SOURCE: NOAA, JAN 2006

TOWN RESIDENTIAL DEVELOPMENT
Copper Basin RR
AIRPORT ROAD
INDUSTRIAL RD
EMORY RD
BEAUFORD RD
TILBURY RD
Industrial
Park
Mobile Home Park
100 YEAR FLOODWAY
100 YEAR FLOODPLAIN
TOWN OF KEARNY
Gila River
ASARCO INC.
Golf Course
28 | 27
33 | 34
DEPARTURE RPZ (1000'X250'X4590') 20:1 VISUAL APPROACH
APPROACH RPZ (1000'X250'X450') 20:1 VISUAL APPROACH
3400' x 60' Concrete Runway
OFA/OFZ
RSA
BRL
Unused / Dry Effluent Ponds
AWOS
GLASPIE, DALLAS A&M
U.S.A.
Proposed Airport Access
Residence Private Access
DALTON, RICHARD L. & WANDA F CO-TRS
Existing Well
APPROACH RPZ (1000'X250'X450') 20:1 VISUAL APPROACH
DEPARTURE RPZ (1000'X250'X450') 20:1 VISUAL APPROACH

200' 100' 0 200'
SCALE 1" = 200'

PROPERTY TABLE

PARCEL NO.	ACREAGE	ACQUISITION TYPE	DATE ACQUIRED	REMARKS
(1)	39.55 ACRES	AIRPORT PROPERTY DESIGNATION BY THE TOWN	IN PROGRESS, JANUARY 2006	TOWN OF KEARNY
(2)	1.61 ACRES	FEE SIMPLE (F)	TO BE ACQUIRED	ASARCO INC.
(3)	1.78 ACRES	FEE SIMPLE (F)	TO BE ACQUIRED	DALTON, RICHARD L & WANDA F
(4)	0.17 ACRES	AVIGATION EASEMENT (F) **	TO BE ACQUIRED	DALTON, RICHARD L & WANDA F
(5)	6.55 ACRES	AVIGATION EASEMENT (F) **	TO BE ACQUIRED	ASARCO INC.
(6)	3.35 ACRES	AVIGATION EASEMENT (F) **	TO BE ACQUIRED	GLASPIE, DALLAS A & M
(7)	0.11 ACRES	FEE SIMPLE (F)	TO BE ACQUIRED	DALTON, RICHARD L & WANDA F
(8)	0.20 ACRES	FEE SIMPLE (F)	TO BE ACQUIRED	ASARCO INC.

** ADOT AERONAUTICS RECOMMENDS FEE SIMPLE PURCHASE, WHEN POSSIBLE, FOR THESE PARCELS AVIGATION EASEMENTS ARE NEEDED, AT A MINIMUM.

LAST UPDATE: 4-03-2006

WILLDAN
Serving Public Agencies

TOWN OF KEARNY
KEARNY, ARIZONA
KEARNY MUNICIPAL AIRPORT

REVISIONS	
NO.	DESCRIPTION / DATE

SCALE: 1"=200'
DATE: 3-28-2006
DESIGNED BY: [illegible]
DRAWN BY: D.D.
CHECKED BY: S.S.
JOB NO: 13878
FILE NAME: ALP_20

8