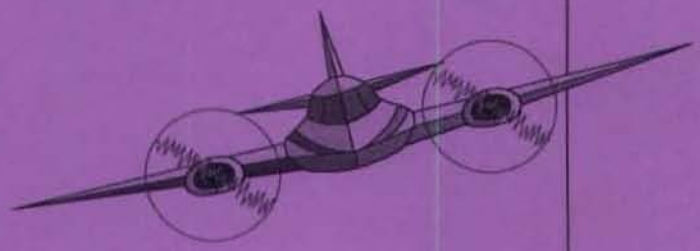
# Airport

# Specific

# Area

# Plan



City of Prescott
Adopted June 26, 2001

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# *AIRPORT SPECIFIC AREA PLAN (ASAP)*

## 1. INTRODUCTION

The planning area encompasses about 50-sq. miles and is dominated by undeveloped lands devoted to cattle ranching. Centered within ASAP is the region's general aviation airport – the Prescott Municipal (Ernest A. Love) Airport. Airport users, the Prescott Chamber of Commerce, and area industries have indicated an interest in planning for the area. In addition, the County Board of Supervisors, the region's Planning Commissions, and the Prescott City Council have acknowledged the need for airport area planning. Presently the only community plan in place is Yavapai County's 1991 Granite Dells Community Plan, which covers the south-central portion of ASAP. That Plan recommends a review by the end of 2000 to assess significant trends warranting any plan changes.

The 1997 Prescott General Plan supports this planning effort where it acknowledges the regional value of the airport and the need to protect it from encroachment of residential development. The General Plan also notes the airport's location central to the expanding municipalities Prescott, Prescott Valley, and Chino Valley – and promotes regional cooperation to achieve airport protection. The potential economic development impact of the Prescott Airport to the Tri-city area cannot be understated. A recent study by Embry Riddle Aeronautical University estimated an average annual $43.5 million in direct economic impact based on airport organizations, services and businesses.

Several land use issues have created a greater urgency for planning in the near term. The new arterial beltway – Pioneer Parkway/Airport Connector (SR 89A realigned) is anticipated to be completed in 2002, and will introduce new pressures and opportunities for development. The groundwater mining declaration for the Prescott Active Management Area (AMA) of 1998 means that all new residential development within the AMA must rely on alternate water supplies or on exempt individual wells (all of ASAP lies within the AMA). Finally there is a growing concern for the remaining antelope range in the Tri-city area, which greatly characterizes the ASAP area. A regionally based plan is needed to guide future land use should the existing ranches seek to develop their holdings, and to protect the viability of ranching for those land owners experiencing development pressures.

**PLANNING PROCESS**

The project was initiated in 1999 by the Prescott City Council, which led to a series of presentations to the County Board of Supervisors (BOS), The Airport Advisory Board, the Airport Users Group, City of Prescott, Town of Chino Valley, and the Regional Association of Local Governments (RALG). In addition, participants in the 2020 forum recently identified airport protection and regional planning cooperation for the airport area as primary goals. A similar theme was voiced at the 2001 Airport Visioning meeting. Individual meetings were held early with subject landowners to inform them of the planning effort and to solicit their ideas and concerns. A needs survey was done for the area industries with a focus on their location parameters, employee and transportation needs. Key staff from Chino Valley, Prescott Valley, Prescott, and Yavapai County met to brainstorm ideas. The City of Prescott

Community Development Dept. took the lead on writing the plan, based on the comments and information obtained.

## PLAN AREA

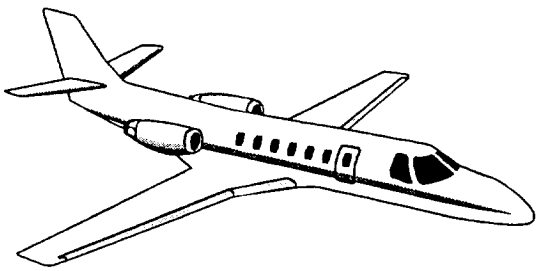
The plan area is divided into 3 sub-areas for planning purposes (Figure 1). The first is an inner influence area, centered on the intersection of the airport's two runways and extending 25 sq. miles to generally coincide with the 3-mile radius from the airport. This area is targeted for airport protection by addressing incompatible residential densities, rather than by restricting residential uses outright. Within this inner influence area are 1-mile wide strips that extend from the runways beyond the 60 Ldn noise contours. These strips are the initial aircraft approach and departure corridors, and therefore are the most critical areas for nuisance noise. For this reason, the airport might be best served if inappropriate residential uses, such as Side Road and Country Dells, are restricted from these areas.

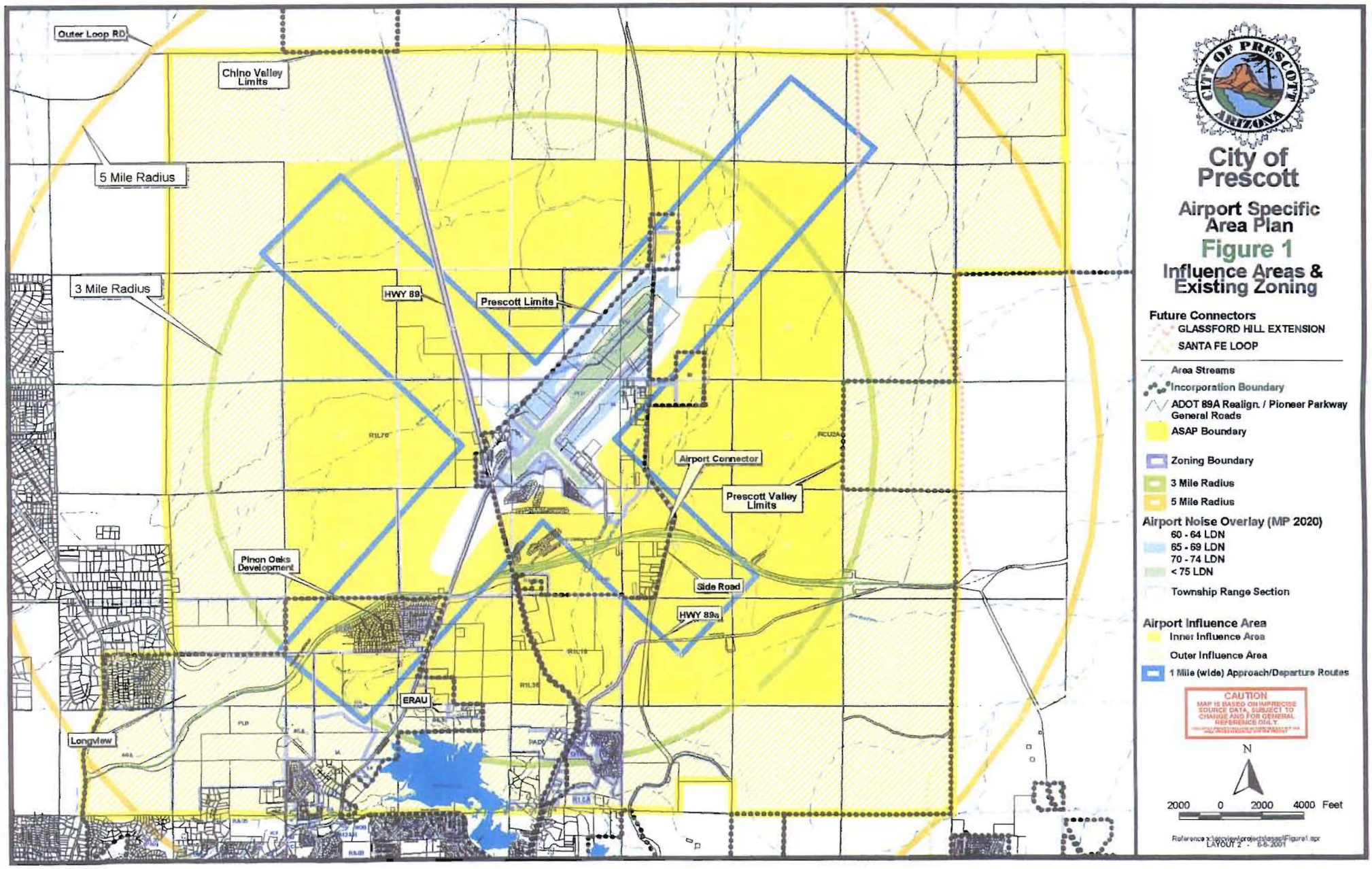
Because a significant number of overflights occur outside of these two influence areas, a third, outer influence area is also recommended. (Overflight track maps are provided in Appendix A). This outer influence area is generally a 1 sq. mile ring extending to the 5-mile radius from the runways' intersection. Figure 1 also shows the corporate limits for Prescott, Prescott Valley and Chino Valley and existing zoning. One can see that the primary jurisdiction within ASAP is Yavapai County, making the need for regional cooperation obvious.

To help document the proven concerns for encroachment of inappropriate land uses around the airport, the airport manager has prepared a white paper detailing airport and aircraft operations (Appendix B). This research describes local aircraft practices and selected case studies that highlight the need for limiting residential densities near the airport and for creating an Airport Influence Area and avigation easement requirement.

## GRANITE DELLS COMMUNITY PLAN

This 1991 community plan covers the SE quadrant of ASAP, and lands south of ASAP. Written by Yavapai County staff with the direct input of many Granite Dells residents, the plan calls for low intensity uses that maintain the rural character. Most of the land use designations are compatible with nearby airport activity – light commercial, low and very low density residential, and recreational (Appendix C). However, the Agricultural classification assigned to lands east of the abandoned railroad line (now the Peavine Trail) is a holding designation that anticipates future changes. This "Agricultural" designation may be the most significant area to plan for given the new arterials anticipated to cross Granite Dells Ranch and Point of Rocks Ranch. *The community plan also states that sound reverberation occurs as planes pass over the Granite Dells, and recommends that aircraft should therefore be routed around the Dells. This fact highlights the incompatibility concerns from housing located in relatively close proximity to the airport.*





Outer Loop RD
Chino Valley Limits
5 Mile Radius
3 Mile Radius
HWY 89
Prescott Limits
Airport Connector
Prescott Valley Limits
Pinon Oaks Development
Side Road
HWY 89a
ERAU
Longview
City of Prescott
Airport Specific Area Plan
Figure 1
Influence Areas & Existing Zoning
Future Connectors
GLASSFORD HILL EXTENSION
SANTA FE LOOP
Area Streams
Incorporation Boundary
ADOT 89A Realign. / Pioneer Parkway
General Roads
ASAP Boundary
Zoning Boundary
3 Mile Radius
5 Mile Radius
Airport Noise Overlay (MP 2020)
60 - 64 LDN
65 - 69 LDN
70 - 74 LDN
< 75 LDN
Township Range Section
Airport Influence Area
Inner Influence Area
Outer Influence Area
1 Mile (wide) Approach/Departure Routes
CAUTION
MAP IS BASED ON IMPRECISE SOURCE DATA, SUBJECT TO CHANGE AND FOR GENERAL REFERENCE ONLY.
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LAYOUT 2 - 6-6-2001

# 2. ASAP Goals and Objectives

The following goals and objectives have been used to frame the plan effort. These plan parameters, along with the input of interested individuals and area officials, have framed the plan discussion and the ASAP Plan Maps and Policies that begin on page 25.

## A. *IMMEDIATE AIRPORT PROTECTION*

***A.1 Establish an Airport Influence Area in accordance with Arizona statute. Identify and apply compatible land uses within that area which will allow the best opportunity for the continued development and operation of Prescott Municipal (Ernest A. Love) airport.***

A.1.1 Establish airport influence area boundaries for the Prescott Municipal Airport sufficient to protect the long-term viability of the airport. Evaluate the need for avigation easements within the airport influence area.

A.1.2 Create a multi-jurisdictional land use plan for the greater airport area that addresses the needs of the region's only airport, applicable jurisdictions, subject property owners, existing neighborhoods, and established industrial parks.

A.1.3 Investigate ways to promote implementation and adherence of ASAP recommendations by any and all area jurisdictions that may hold or attain land development regulatory authority.

## B. *LAND USE*

***B.1 Provide adequate commercial use opportunities that serve the needs of area neighborhoods, industrial operations and their employees, and the commuting public.***

B.1.1 Identify appropriate types and locations of commercial development given the evolving regional roadways that cross the plan area, and the service and shopping needs of existing and future residential neighborhoods.

B.1.2 Determine which, if any, of the interchanges along the planned Airport Connector are suitable for highway-related commercial development.

***B.2 Support commercial enterprises that capitalize on the scenic values of the area in ways that are appropriately sensitive to the environment.***

B.2.1 Investigate outside funding sources to enable the proposed multi-purpose center recently studied by the City of Prescott. The conceived conference center and equestrian facilities would provide a core use for other spin off non-residential uses appropriate between SR 89 and old 89A.

B.2.1 Consider permitting campgrounds and RV parks that capitalize on area trails, lakes, views and other outdoor amenities.

***B.3 Support existing and future employment centers given the need for well paying jobs, and the area's suitable terrain and anticipated road system.***

B.3.1 Inventory the needs and contributions of area employers to ascertain expansion goals, adequacy of infrastructure, and desired support services.

B.3.2 Evaluate sites suitable for new employment centers that concurrently capitalize on access availability and airport buffering.

***B.4 Plan to meet the region-wide need for a site that can house heavy industrial uses.***

B.4.1 Assess sites that may be appropriate for heavy industrial uses (such as an asphalt batch plant) that support the Tri-city region, based on input from applicable users, property owners, and applicable jurisdictions.

B.4.2 Site assessment for heavy industrial use shall include opportunities and impacts related to circulation infrastructure, environmental issues, truck travel times and routes, topography and wind patterns, and proximity to residential areas.

***B.5 Support residential development to the degree compatible with airport overflights, terrain, and the planned road system.***

B.5.1 Assess appropriate locations and densities of residential development within the greater airport influence area, taking into consideration airport activities, surrounding land uses, access, community plans, zoning, and other input from applicable surrounding jurisdictions, property owners, and other interested parties.

B.5.2 Evaluate if city-provided water and sewer service can provide sufficient incentives to locate and design residential areas compatible with the airport influence area goals.

## *C. OPEN SPACE & WILDLIFE HABITAT*

***C.1 Support historical ranching activities to the degree practical, given its compatibility with airport activity and influence on regional character.***

C.1.1 Confer with area ranchers to learn of their long-range plans and to identify ways to incorporate those plans into ASAP.

***C.2 Create open space amenities that serve multiple purposes by integrating natural drainageways for stormwater management, passive recreation, and wildlife habitat considerations into ASAP to the fullest extent practical.***

C.2.1 Solicit input from AZ Game and Fish on issues and concerns that pertain to the plan area, such as impacts to area antelope herds.

C.2.2 Identify valuable wildlife areas, such as significant stands of trees, washes, movement corridors, so that steps toward their preservation might be taken.

C.2.3 Seek open spaces that provide multiple benefits including stormwater drainage, wildlife habitat and movement areas, airport buffering, and character defining greenbelts.

C.2.4 Assess impacts and contributions from sand and gravel extraction operations, now occurring in Granite Creek, to determine **level of continued** support.

C.2.5 Utilize development designs - such as Planned Area Development (PAD) - that allow for flexibility while also creating connected open).

C.2.6 Evaluate for conditions that may create new bird habitats, given the possible conflicts with flying aircraft.

***C.3 Identify significant areas for consideration as designated open space.***

## D. CULTURAL RESOURCES

***D.1 Continue surveys of cultural resources, as development occurs, to enhance understanding and appreciation of historic and prehistoric archeological resources.***

## E. WATER and SEWER

***E.1 Utilize City of Prescott water and sewer services, or those of another central services provider, to the extent appropriate to influence desired land uses and their location.***

E.1.1 Determine if there is interest by the property owners in city-provided water and sewer service for future residential and/or commercial development of lands now under County jurisdiction, and if that interest extends to annexation of these lands at the time of development.

E.1.2 Evaluate the need for and availability of central water and sewer service for a possible new industrial site.

***E.2 Manage water and sewer services in ways that support responsible use of limited resources and capacities.***

E.2.1 Identify any existing developments on city water and individual septic as possibilities for tie in to city sewer in order to enhance recharge credit opportunities.

## F. CIRCULATION

***F.1 Create a circulation plan element that identifies existing, planned, and proposed arterial and collector streets needed to serve the plan area and the region.***

F.1.1 Map and describe the planned beltway known as the Airport Connector (SR 89A realigned)/Pioneer Parkway. Assess opportunities for and impacts from new collector streets that may feed into planned interchanges.

F.1.2 Evaluate the need and timing of a greater airport circumferential road that connects to both the Airport Connector and to SR 89.

F.1.3 Confer with applicable jurisdictions and property owners about plans and possible alignments for new roads connecting to Glassford Hill Road extension.

F.1.4 Existing and new road alignments should be evaluated for adequacy and suitability as truck routes, with input from industrial users.

F.1.5 Promote a circulation system that has many linkages in order to foster convenience, alternative routes and knitted neighborhoods.

***F.2 Support bike and pedestrian routes that further recreational and commuter pursuits.***

F.2.1 Create connected streets, sidewalks, and trail alignments that fit into a comprehensive and friendly pedestrian/bike routes system. Doing so supports fitness, recreation, and nonpolluting alternate modes of transportation.

F.2.2 Evaluate appropriate realignment of the Peavine Trail (rails-to-trails) segment that will be impacted by the northeasterly extension of the airport's main runway and expanding sand and gravel operations.

***F.3 Resolve the Side Road easement issue so that it may adequately serve existing residents and recommended future land uses.***

F.3.1 Investigate appropriate options to remedy this deficient "street" with inadequate access.

# 3. EXISTING CONDITIONS

## ZONING AND LAND USE

**Residential** - The ASAP acreage is predominately ranch land, split between 5 ranches, all but two hold grazing leases on the State Land Department's checkerboard sections within and outside of the plan area. These ranch lands have existing low-density residential zoning, mainly R1L 70 and RCU 2ac, *administered by Yavapai County*. County Health Department standards specify a minimum lot size of 2 acres for platted lots relying on individual wells and septic systems. However, there is no minimum acreage required for metes and bounds parcels (defined as 5 or fewer parcels created by a land split) on individual well and septic as long as minimum separations are met. State statutes also permit land splits that create 36-acre minimum parcels to go unregulated by counties. In any case, the existing R1L 70 and RCU 2ac county zoning on the subject ranch lands would be developable if well tests and percolation tests were positive.

*Also under County jurisdiction* are Sections 1 and 2, located between Willow Creek Road and SR 89A, which are zoned R1L 18 and R1L 35. These zones could allow residential subdivisions comparable to Prescott's Pinon Oaks and Long View Estates, respectively, if central water and sewer become available. Nearer SR 89 lies the Granite Gates assisted living facility (zoned PAD) and the Granite Gardens neighborhood (R1L 10 and 12), all under County jurisdiction. (Pinon Oaks was rezoned to R1L 18 while in the county and Unit 1 final plat was approved while in the county; Units 2 and 3 were approved by the City of Prescott).

In addition to Pinon Oaks (RA18) and Long View (RA35), existing residential enclaves *within Prescott city limits* include Southview (RA35), the Antelope Hills area neighborhoods (RA 9) at the airport, and the Heritage Mobile Home Park (RC) north of Willow Lake. The Prescott Boulders site (zoned RS, BA) lies at the NE intersection of SR 89 and Granite Dells Road and is approved for timeshare units in a mixed-use development. Farther south there is a mix of residential uses near Sandretto Drive that include apartments, single family homes in Sandretto Hills Estates (RA 9), the Willow Winds assisted living facility, and proposed patio and town home projects (RC). Near the airport is the Side Road metes and bounds area (RA 9) that takes its access from a private easement paralleling the old RR right-of-way.

An edge of *Prescott Valley town limits* lies within ASAP. A 10-ft. boundary around Section 28 was annexed years ago, but the interior 1-sq. mile section remains County jurisdiction zoned RCU 2ac. Also recently annexed into Prescott Valley is the approved 3,400-unit Granville development, anticipated along Glassford Hill Road south of SR 89A. *Chino Valley town limits* were recently extended one mile southward and proposed another7 miles eastward along the northern edge of the ASAP study area. A recent water service agreement with the City of Prescott restricts Chino Valley from annexing south of its new town limit line into ASAP.

Protecting the Airport from potential nearby incompatible land uses is important for the long-term viability of the Airport. It is not uncommon to see airports having to buy out nearby residences, or to close or relocate when residential development has crowded its borders. The "Airport Influence Areas: notice" (ARS 28-8485) gives airports operated by local governments authority to establish influence areas in proximity to airports which thereby provides County-recorded notice of the airport noise and overflights.

Noise contours have been mapped, reflecting the anticipated noise levels and frequencies based on the 20-year airport master plan. These noise contours are measured as day-night, weighted averages (Ldn), which are stated in decibels. The FAA and EPA use Ldn levels in their recommendations to restrict uses and occupancy levels, to require noise level reduction designs in new structures, and/or to require greater building integrity to withstand an airplane crash (see ZC Section 4.75 Airport Noise Overlay District). Specific restrictions based on federal guidelines do not extend into areas below the 65 Ldn levels, although the FAA is reportedly looking into lowering the threshold to the 55 Ldn. Such consideration reflects the fact that single events outside of the 65 Ldn can create nuisance noise levels sufficient to harass nearby residents. This is one important reason why ASAP looks beyond the noise contours in its land use recommendations.

Another reason for planning beyond the noise contours is public safety. Although aircraft mechanical failure and pilot error can happen anywhere at anytime, statistically it is more likely to happen where there is more aircraft flight activity (i.e. around an airport). Recently a slurry bomber had to drop its load not far from the Circle K on SR 89 after loosing power to one engine. In addition, takeoffs and landings can be challenging for some aircraft under heavy loads or high wind conditions. Creating clear zones, limiting the heights of structures and even trees, and controlling the density and proximity of residences are among the ways to improve the margin of public safety. Appendix A maps overflight patterns for the 21L/21R main runway (80% of operations) and a composite of the remaining 3 runways (20% of operations) The average maximum altitude of aircraft activity is about 500' within the bounds of ASAP. Takeoffs and landings average over 1 per minute during daylight hours.

The last reason for ASAP's extensive scope for land use planning is to protect the airport well beyond the year 2020. The Tri-city region has an opportunity to plan proactively for airport protection, which many larger jurisdictions now lament not having done before incompatible growth and development hemmed in their airports. ASAP is a long-range plan that promotes a responsible approach to land use changes. *Limitations can be loosened in the future as technologies improve, but attempting greater restrictions after the fact is extremely costly, if not impossible.*

Intersection of the Main and Crosswind runways, looking west to SR 89. Industries lie along Wilkinson Drive and Ruger Road.

**Non-residential** – There are 23 independent businesses located on the airport proper serving the needs of airport users. Off the airport property there is the city-developed Prescott Industrial AirPark that lies between Wilkinson Drive and the airport proper. Zoned IA, it is now built out. The privately developed Prescott AirPark is located east of Melville Drive on former State Trust land. Not yet built out, this industrial park contains the 32,000-sq. ft. Exsil plant and the new 65,000-sq. ft. Inter-Cal plant. There are also 5 smaller businesses in place in this park, and another 5 businesses are in the planning stages. Between these two industrial parks lie 120

acres of vacant, IA zoned land available for development. Sturm-Ruger's two manufacturing plants are located on Ruger Road, which bounds the west side of the airport area.

The City's airport wastewater treatment plant and recharge ponds are located beyond the terminus of Melville Road, adjacent to the Granite Creek wash and zoned IB. An undeveloped city-owned tract lies north of the airport. Zoned IA and IBD, the 74-acre tract has no existing access. Two borrow pits operate within Granite Creek, one of which is Hanson Aggregates (formerly Yavapai Materials) located east of Larry Caldwell Drive. This site was recently approved for a new concrete batch plant. The United Metro Materials site, located south of Larry Caldwell Drive, will be served by direct interchange access to the planned airport connector. Reportedly this sand and gravel pit and asphalt batch plant will be decommissioned soon, and a new concrete batch plant will be proposed.

Sandretto Park is another substantially built out, light industrial subdivision (IA & IBD) located west of Willow Creek Road. Embry Riddle Aeronautical University (ERAU) has a 500-acre tract presently devoted to campus-related uses. It includes 155 acres of undeveloped IA-zoned property. The balance is BA PAD, which includes the campus and student housing and is only partially developed. A few scattered commercially zoned sites exist along the arterial Willow Creek Road, including convenience gas stores at both the Willow Lake Road and SR 89 intersections.

## ECONOMIC DEVELOPMENT

The ASAP area contains most of Prescott's growing industrial base. Companies locating near the airport include aeronautical, manufacturing, and service industries. This area has grown steadily over the last decade and provides tremendous job opportunities for Tri-city residents. The vacant land near the Airport contains the largest concentration of available industrial-zoned property in Prescott, and should be encouraged to develop. To that end, a survey was distributed to 32 companies on and near the Airport. Almost 70% returned the survey, with the following notable results:

- There is significant support for an internal airport road that connects the entire airport.
- There is also significant support for a second access to the Prescott Airpark.
- In assessing why they chose their present location, the top 3 factors were its location and proximity to the Airport, cost of land/construction, and quality infrastructure.
- In assessing their needs for future expansion, the top 3 factors influencing their expansion are proximity to existing plant/airport, cost of land, and cost of construction.
- The #1 issue facing these companies is legislative concerns (federal/state/local) by a margin of 2 to 1. The next most frequent answer was emerging technologies, and then industry changes.
- The respondents used freight service at the airport as follows: 40% daily or frequently and 60% occasionally or never.
- Passenger service was used as follows: 45% daily or frequently and 55% occasionally or never.

Clearly, the ASAP area is the most appropriate for additional industrial development. These uses should be encouraged and facilitated to achieve the balanced economy Prescott and other area residents desire.

## INFRASTRUCTURE

**Prescott Municipal Airport, Ernest A. Love Field** – The Prescott Municipal Airport was originally constructed in 1926, and renamed Ernest A. Love Field for a World War I fighter pilot from Prescott. The airport has grown to become the 2nd busiest airport in Arizona and the 8th busiest in the country among general aviation airports due largely to the student training activities of Embry Riddle

Aeronautical University. This general aviation airport also handles regular freight and mail deliveries, regional wildfire suppression (including slurry bombers), executive air services, recreational flying, and passenger service connecting to Sky Harbor in Phoenix. The Prescott Municipal Airport is an enterprise fund that generally operates on its own revenues, supplemented by state and federal grants when possible. Prescott City Council recently directed that General Fund contributions are also used. Significant improvements are planned for the airport that, once funded, will enhance its ability to continue serving the Central Yavapai Region.

The 1998 Airport Master Plan for City of Prescott's Ernest A. Love Field calls for phased improvements sufficient to meet the service demands of the regional airport through the year 2020 (see Executive Summary in Appendix D). Major capital improvements include new hangars, pavement and drainage improvements, constructing a new airline terminal and a public perimeter service road. In addition, planned runway extensions will allow for bigger passenger planes to serve the region.

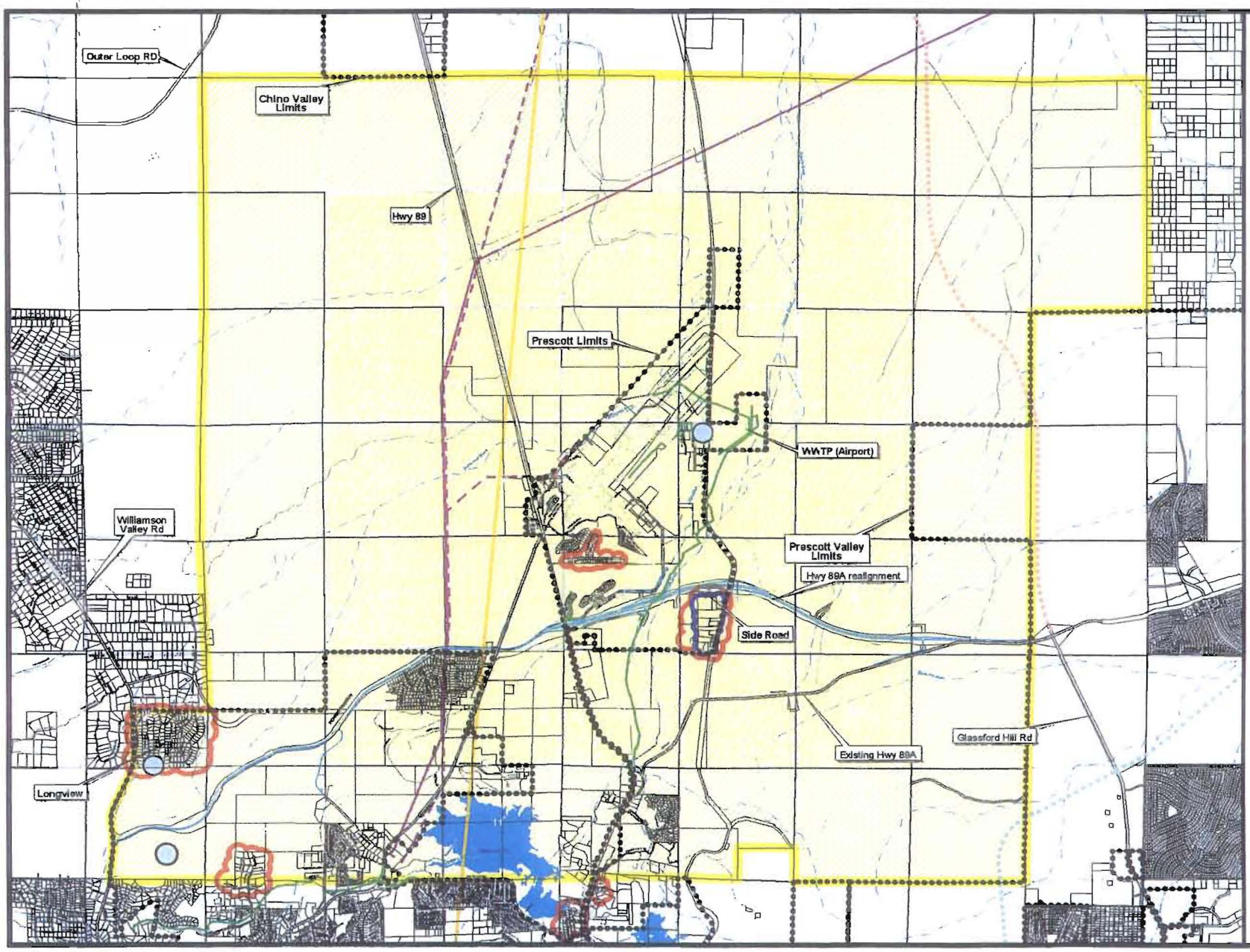
**Circulation** – Major arterials include SR 89 and Willow Creek Road running north-south, and SR 89A and Pioneer Parkway running east-west. All of these roads are the focus of major improvements designed to increase capacity and circulation alternatives in the region. SR 89, from Pioneer Parkway to Outer Loop Road, is due to be widened to 5 lanes around the year 2018. Willow Creek Road is undergoing widening to 5 lanes and due for completion around 2005.

SR 89A is a 2-lane route, most of which will be abandoned to the fronting property owners once the new Airport Connector is opened by late 2001/early 2002. The Airport Connector is designed as a controlled access highway with grade separated interchanges (Appendix E). It will connect to Pioneer Parkway, a new 4-lane controlled access arterial that connects Williamson Valley Road to SR 89. Figure 2 shows these regional roads as well as Prescott's major water and sewer infrastructure, and gas and power transmission lines.

Another planned controlled access highway is Glassford Hill extension, connecting SR 89A to Outer Loop Road in Chino Valley. Identified in the County's 20-year regional road plan and intended to be developer driven, the alignment of this road has implications for land use in proximity to the airport. Ultimately these combined arterials will provide an inner beltway for the region, to eventually be supplemented by the possible Tri-city Parkway connecting SR 89 to I-17. Appendix F shows the region's proposed 2018 road network, including the traffic volumes, service levels, and road widths.

The recent survey of airport area employers indicates interest in better circulation around the airport. A full 35% of the businesses responding pointed to the need for a street that encircles the airport, relieving the "one way in/one way out" condition that presently exists. The airport's 2020 Master Plan calls for such a road to be built as part of the Phase 3 improvements.

The new rails-to-trails Peavine Trail occupies what was the Atchison Topeka Santa Fe railroad right-of-way (ROW). The first segment from Watson Woods to SR 89A is open for public use. The second segment running from SR 89A to Section 7 north of the airport is now under negotiation for purchase to tie Watson Woods to Chino Valley's Peavine Trail link. Expansion plans for the main runway and aggregate mining within the historic RR ROW will necessitate adjusting a portion of the trail alignment. The trail adjustment could coincide with the future airport circumferential road and/or a multi-use open space corridor incorporating Granite Creek. Town of Prescott Valley is also pursuing a rails-to-trails link that would tie the Peavine Trail to Glassford Hill Road through Sections 7, 8, 9, and 10.




# City of Prescott

## Airport Specific Area Plan

## Figure 2

## Infrastructure

**Water Points**
- Tank

**Major Gas Lines**
- Citizens Utilities Company
- El Paso Natural Gas Company

**APS Power Corridors**
- 69 KV
- 230 KV

- Water Lines GT 6 Inch
- Sewer Lines GT 8 Inch

**Non Service Areas**
- Individual Septic
- Individual Well

- Incorporation Limits

**Future Connectors**
- GLASSFORD HILL EXTENSION
- SANTA FE LOOP

**Area Streams**
- ADOT 89A Realign. / Pioneer Parkway
- General Roads

- ASAP Boundary
- Township Range Section
- Inner Influence Area
- Outer Influence Area

CAUTION
MAP IS BASED ON IMPRECISE SOURCE DATA, SUBJECT TO CHANGE AND FOR GENERAL REFERENCE ONLY.

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**Water Service** – The ASAP area lies between Prescott and its primary water supply, the well fields in Chino Valley. A new 36" water transmission line is under construction, and will supplement the existing 18" water transmission main crossing Deep Well Ranch west of SR 89. Phases I and II are done, with Phase III being installed concurrent with the widening of Willow Creek Road. The expanded transmission line will increase city water production by more than 50% to meet peak demands of summer use. Three water tanks lie within ASAP - a new 2 million gallon (MG) tank recently installed on Section 8 Indian Hill, a 1.5-MG tank located at the end of Melville Road, and a 0.1-MG tank in the Longview subdivision. No new water tanks are planned at this time. Developed properties within ASAP utilize central water (either City of Prescott or the Granite Dells Water Company) except the Side Road neighborhood, which utilizes individual wells.

Eight-inch water lines generally serve the airport area industries, with a 10" water main NW of the main runway and a 12" water main within Melville Road ROW serving Exsil and the growing industrial park. These larger water mains and the increased water delivery from the Chino Valley transmission line will afford adequate water for future industrial and commercial development in the airport area. A new 12" alternate water loop is programmed in 2001 to feed into the airport water zone, which will increase service flows and supply to the greater airport area – especially along its east side where new industry is locating.

In 1998 the Prescott Active Management Area (AMA) was declared to no longer be in a state of "safe yield", meaning that groundwater is now being removed faster than it is replenished. This also means that any new residential subdivisions not already platted by August 21,1998 will need to acquire alternate water – either from surface water rights, use of effluent recharge credits, retirement of grandfathered irrigation rights, or from imported water from outside of the AMA. Present Council policy is to allocate up to 120 acre feet (AF) of alternate water per year for new residential development. City of Prescott is currently the only area water provider designated by AZ Dept. of Water Resources (ADWR) to have a 100-yr. assured water supply.

Prescott also has a legislative right to import 14,000 AF of groundwater from the Big Chino basin located outside of the AMA, although these water rights are under scrutiny by users of the Verde River for hydrological reasons.

Recently the Town of Chino Valley became a water supply company by purchasing water from City of Prescott thereby allowing the town to now serve selected commercial users. Residential uses in Chino Valley continue to rely on individual wells and septic. In 1999 the Town of Prescott Valley purchased the Shamrock Water Company, allowing the town more control over its water use policies. Like Prescott, any new residential development in Prescott Valley not already platted on assured water will need an alternate water source. Presently, however, the Town of Prescott Valley does not control any water rights outside of the AMA. The development of alternate water supplies and infrastructure will ultimately determine where and how future residential neighborhoods will occur within ASAP.

**Sewer Service** – Developed areas within ASAP are generally on central sewer served by the City of Prescott's airport wastewater treatment plant (WWTP). Exceptions are the metes and bounds Side Road area, Longview Estates, the Jack Drive and Perkins Drive areas, and scattered development east and west of SR 89 north of Willow Lake Road (Figure 2). The airport WWTP recently expanded its treatment capacity from 0.75 million gallons per day (MGD) to 2.25 MGD. The treatment plant is currently treating about 0.7 MGD. Following build-out of Prescott Lakes and Pinon Oaks developments, however, a remaining treatment surplus is expected of about 0.8 MGD.

Effluent recharge is a critical factor in Prescott's water management program. An estimated 37% of the City's water consumption is presently returned to the aquifer via the recharge ponds located on the NE side of the airport. This reuse and recovery rate is expected to increase to about 60% for new alternate water systems. A 24" effluent line runs from the Sundog WWTP to the recharge facility, delivering treated effluent from 2 of the City's 3 sewer treatment plants.

**LAND OWNERSHIP**

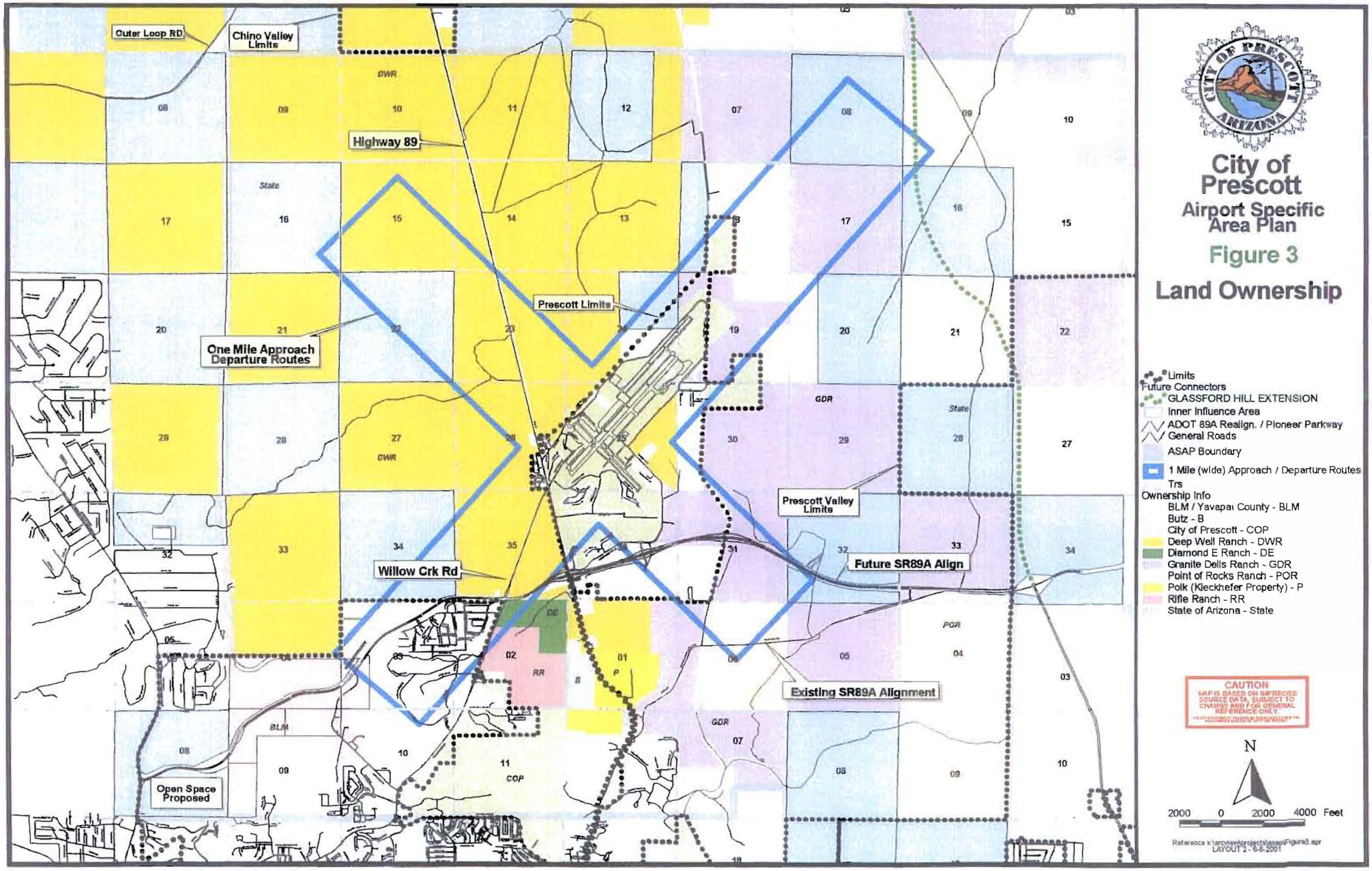
Deep Well Ranch lies mainly west of the old Atchison Topeka and Santa Fe railroad bed (now the Peavine Trail) and includes 15 sq. miles within ASAP. Jointly owned Granite Dells Ranch and Point of Rocks Ranch lie mainly east of the old RR line and comprise almost 14 sq. miles of the study area. Rifle Ranch and adjacent Diamond E Ranch include about 400 acres lying between Willow Creek Road and SR 89, south of the new airport connector alignment. The State Land Department owns approximately 13 sq. miles within ASAP. City of Prescott owns over 2,000 acres including the airport and some industrial land surrounding it – also Antelope Hills Golf Course, Willow Lake and Heritage Park. The City also co-leases with the County the 930-acre, BLM-owned Pioneer Park. Figure 3 maps the major land holdings.

**TERRAIN and WATER FEATURES**

Flat-to-gently rolling terrain greatly characterizes the area, with 3 isolated low ridgelines trending south to north. A few major promontories are scattered at the southern end of the plan area. These include the Granite Dells landform in the south-central part of ASAP, Glassford Hill in the SE corner, and State Land T14N R2W Section 8 Indian Hill in the SW corner of ASAP. Portions of these same landforms are targeted for open space acquisition once funding can be obtained. Elevation contours range from 4,860' in the Granite Creek channel to 5,600' on Glassford Hill. The flat areas average 5,000' above mean sea level. Landforms are visible on the steep slopes map (Figure 4).

Point of Rocks Ranch and Granite Dells Ranch looking south across Granite Creek and the effluent recharge pond - both located east of the Prescott Municipal Airport.

Granite Creek runs northerly through ASAP and east of the airport. The creek's braided floodway is over 1,000 feet wide in places and is noted as Zone A on FEMA Firm maps. The floodway and floodplain will need more detailed mapping in the future prior to development. The Chino Valley Irrigation District (CVID) ditch parallels and runs west of Granite Creek. The irrigation ditch veers northwesterly and crosses under the airport's main runway as it winds toward Chino Valley's retired croplands. The ditch is now used to transport surplus lake water to the City's recharge ponds.


Outer Loop RD
Chino Valley Limits
Highway 89
Prescott Limits
One Mile Approach Departure Routes
Prescott Valley Limits
Future SR89A Align
Willow Crk Rd
Existing SR89A Alignment
Open Space Proposed
DWR
State
GDR
DE
RR
B
P
BLM
COP
POR
CITY OF PRESCOTT ARIZONA
City of Prescott
Airport Specific Area Plan
Figure 3
Land Ownership
Limits
Future Connectors
GLASSFORD HILL EXTENSION
Inner Influence Area
ADOT 89A Realign. / Pioneer Parkway
General Roads
ASAP Boundary
1 Mile (wide) Approach / Departure Routes
Trs
Ownership Info
BLM / Yavapai County - BLM
Butz - B
City of Prescott - COP
Deep Well Ranch - DWR
Diamond E Ranch - DE
Granite Dells Ranch - GDR
Point of Rocks Ranch - POR
Polk (Kleckhefer Property) - P
Rifle Ranch - RR
State of Arizona - State
CAUTION
MAPS BASED ON IMPRECISE SOURCE DATA, SUBJECT TO CHANGE AND FOR GENERAL REFERENCE ONLY.
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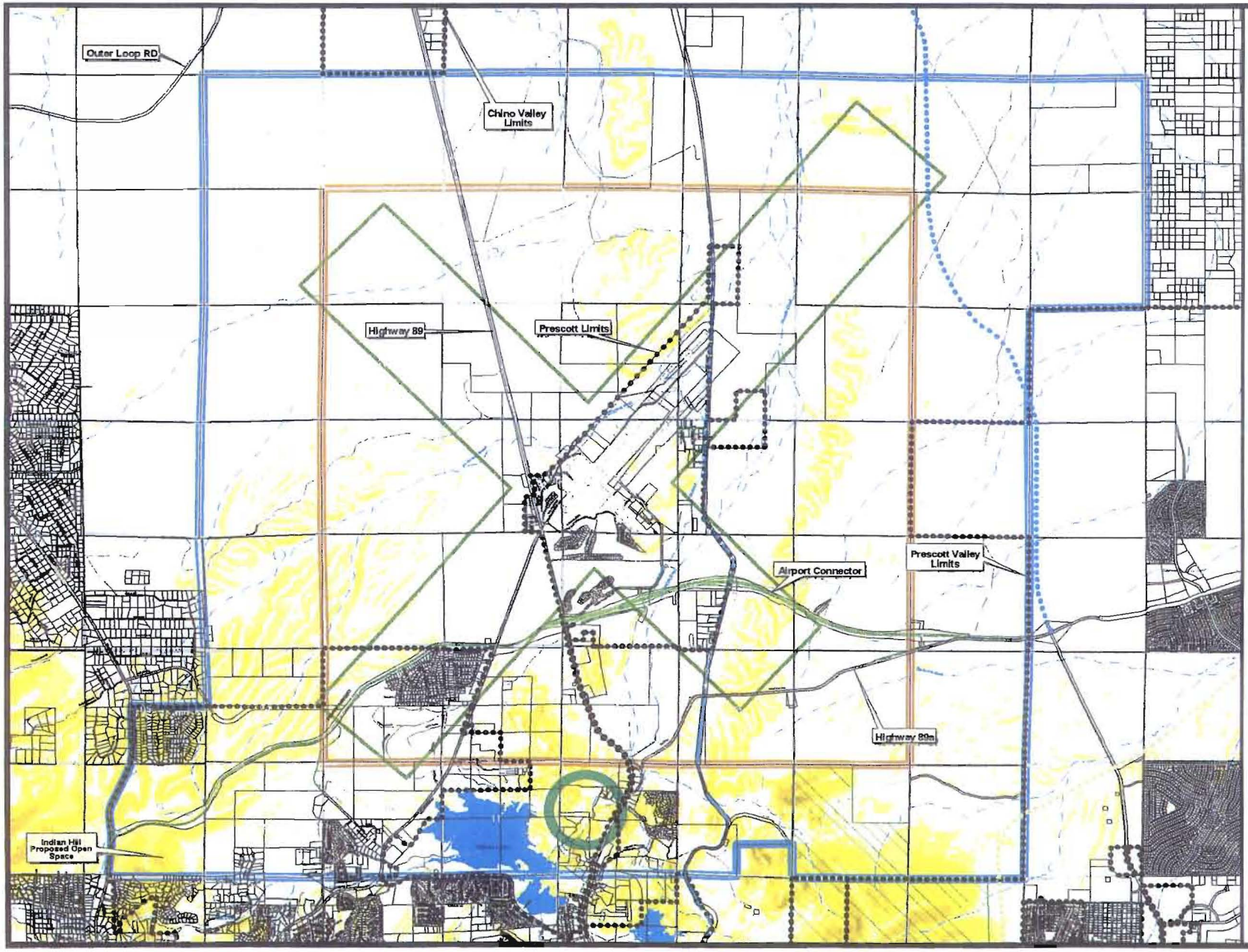
Reference x:\arcview\projects\asap\Figure3.apr
LAYOUT 2 - 6-6-2001




# City of Prescott

## Airport Specific Area Plan

## Figure 4

## Slopes

Future Connectors
- GLASSFORD HILL EXTENSION
- SANTA FE LOOP
- Area Streams
- 89A Realignment
- General Roads

Peavine Trail
- Future
- Existing
- Incorporation Boundary
- Granite Dells Proposed Open Space
- Glassford Hill API
- Township Range Section

Area Lakes
- Area Lakes
- Inner Influence Area
- Outer Influence Area
- One Mile Approach / Departure Routes

Slope Analysis
- 0 - 5 Degrees
- 5 - 10
- 10 - 20
- 20 - 30
- GT 30 Degrees

CAUTION
MAP IS BASED ON IMPRECISE SOURCE DATA, SUBJECT TO CHANGE AND FOR GENERAL REFERENCE ONLY.

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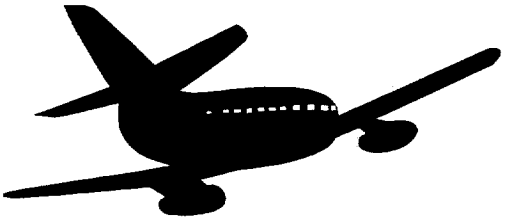
Layout 2 6-8-2001

# APPROVED AIRPORT SPECIFIC AREA PLAN
# A S A P



## POLICY STATEMENTS

The following policy statements are intended to guide future land use and development decision making. The policies represent the end product of meshing Goals and Objectives, Existing Conditions, and community and property owner comments. They are to be used in tandem with the adopted ASAP Land Use Plan Map and the adopted ASAP Circulation Map.

## AIRPORT INFLUENCE AREA MAP

The 28 sections mapped in Figure 5 indicate the specific area recommended for implementation. The Prescott City Council will be requested to adopt the Airport Influence Area and all applicable jurisdictions will be requested to adopt the map for Avigation Easement requirements.

## LAND USE PLAN MAP

The ASAP Land Use Map (Figure 6) and the Land Use Table attached are intended to guide general land uses and their intensities and densities. The Land Use Map covers a very large area and so the edges of any designation are a rough approximation of where it should be. When rezonings are sought and specific edges are proposed, determinations on Plan conformance should be based on the overall intent of the Plan. Appendix A, showing existing air traffic patterns and relative frequencies, should be used as guide when residential densities are considered.

## CIRCULATION PLAN MAP

The Circulation Map (Figure 7) is intended to show general alignments of future arterial streets and freeways. Alignments and intersections are subject to changes at the time of corridor studies. Biking lanes/paths and pedestrianways are also indicated, as they are considered important links throughout the Plan area.

# Approved AIRPORT SPECIFIC AREA PLAN (ASAP)

## A. INTERGOVERNMENTAL COOPERATION for AIRPORT PROTECTION

A.1 Yavapai County will be relied upon to support the ASAP Goals, Objectives, and Policies by agreeing to hold to existing zoning and to not increase densities or intensities of development beyond what is already entitled. ASAP property owners under County jurisdiction will therefore need to request annexation by a neighboring municipality to acquire rezonings, central water and sewer service, and city services sufficient to support urban/suburban development intensities. If no annexation has occurred within 5 years, the County may approve developments if in keeping with the adopted ASAP policies pertaining to airport protection, open space, and water management.

A.2 City of Prescott, Town of Prescott Valley, and Yavapai County agree to regionally support the viability of the Ernest A. Love Airport by mutually adopting and implementing the Policies within ASAP. This can be accomplished by adopting ASAP as part of each jurisdiction's General Plan, and through an Intergovernmental Agreement.

A.3 A map of the Airport Influence Area will be recorded with the Yavapai County Recorder. The purpose is to inform all owners and potential purchasers of property lying within the 28 sq. mile area of aircraft noise and overflights (see Figure 5).

A.4 To further protect the airspace within the same 28 sq. mile influence area and to better inform property owners of aircraft noise and overflights, all applicable jurisdictions should agree to require a dedicated avigation easement from the subject property owner(s) prior to land development activity within the identified influence area. An avigation easement will be dedicated before finalization of one or more of the following events:

1) annexation into any of the 3 Tri-city municipalities
2) rezoning
3) approval of a subdivision plat or replat
4) approval of a conditional use permit
5) approval of a special use permit
6) approval of a land splits
7) approval of a general plan or specific area plan amendment
8) issuance of a building permit for a new building or structure.

A.5 Sufficient comment opportunity shall be mutually provided by applicable jurisdictions prior to votes on proposed General Plan or Specific Area Plan amendments, rezonings, plat approvals, and conditional/special use permits that are requested within ASAP.

A.6 To increase cooperation and reduce unwarranted competition among our region's local governments, applicable jurisdictions agree to investigate alternative mechanisms for regional cost and revenue sharing that help achieve ASAP Goals, Objectives, and Policies for the region's collective benefit.

# City of Prescott

## Airport Specific Area Plan

### Figure 5

### Airport Influence Area - Avigation Easements

- Section Boundaries
- General Roads
- Prescott Limits
- Prescott Valley Limits
- Airport Influence Area / Avigation Easement

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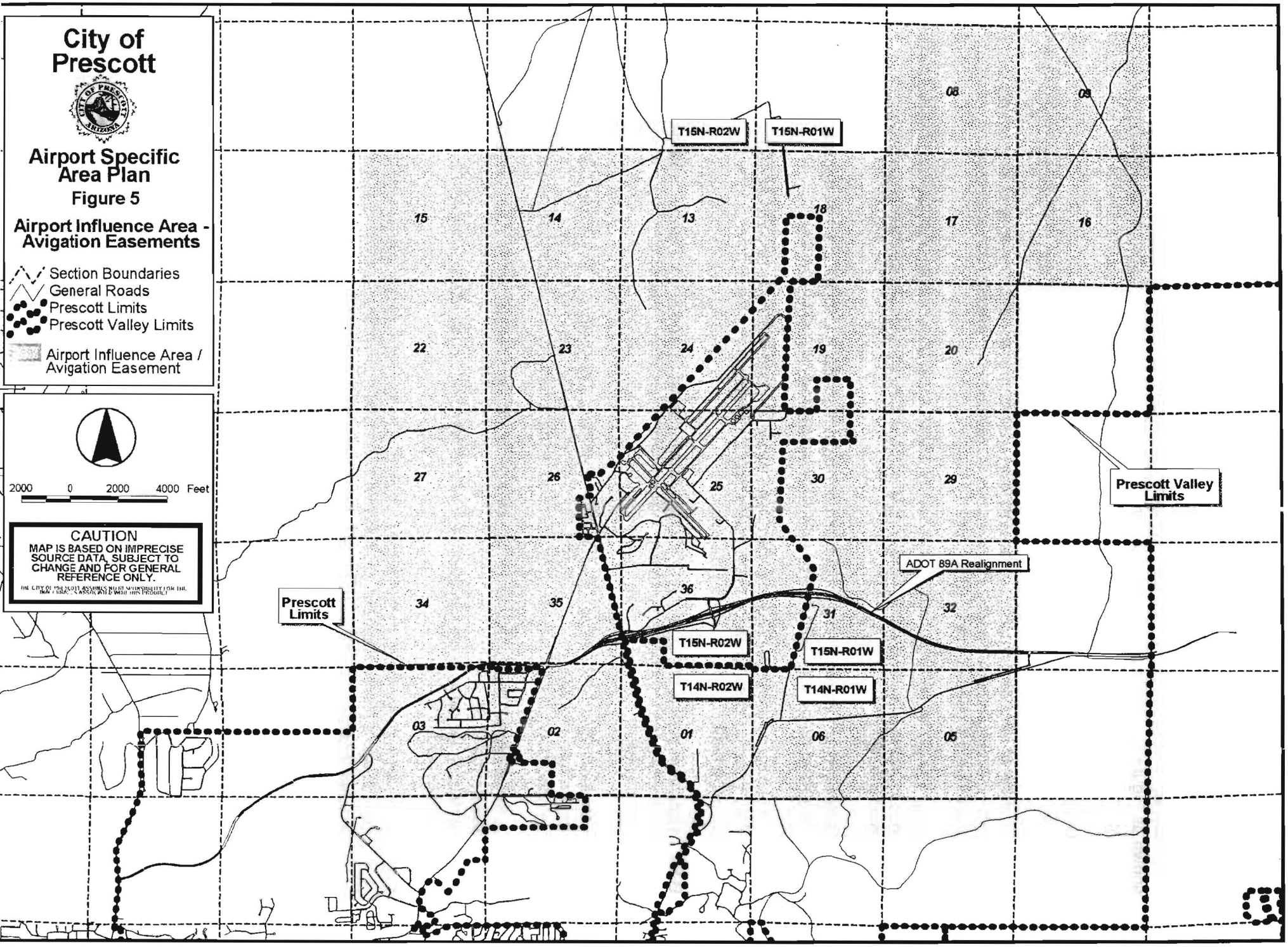
**CAUTION**
MAP IS BASED ON IMPRECISE SOURCE DATA, SUBJECT TO CHANGE AND FOR GENERAL REFERENCE ONLY.
THE CITY OF PRESCOTT ASSUMES NO RESPONSIBILITY FOR THE INACCURACY ASSOCIATED WITH THIS PRODUCT



## B. LAND USE POLICIES

The following land use policies work in tandem with the ASAP Land Use Table and the Plan Map shown as Figure 6. Both are intended as general descriptions of preferred land use types and locations.

**Non-residential**

B.1 ASAP supports ranching on lands surrounding the airport, to the degree that ranch owners wish to continue their operations, since this is a land use compatible with airport activities. The "ranching" map classification is intended to be a holding designation to be re-evaluated using ASAP Goals, Objectives, and Policies once subject property owners wish to pursue development opportunities in the future.

B.2 Commercial retail/service centers are supported along stretches of the Airport Connector and at nodes along Glassford Hill Road and other future arterial streets where there is good access and visibility.

B.3 Employment centers are recommended at locations strategic to buffering the airport and where they have ready access to nearby residential areas and commercial centers.

B.4 Additional commercial uses may be supported along future arterials, denoted as residential on the Figure 6 Land Use Map, when integrated into a comprehensive master planned development.

B.5 Light commercial comparable to Neighborhood-oriented Business is supported outside of the recommended Mixed-used Villages when comprehensively designed into a master planned community.

B.6 Low-intensity business uses such as offices, professional services, lodges, and mini storage units shall be used as a transitioning non-residential land use in proximity to established neighborhoods. Adequate and attractive buffering is required to screen adjacent unlike uses.

B.7 A "town center" is desirable within the Mixed-use Villages denoted at the future nodes of Great Western and SR 89A and at Great Western and Glassford Hill Road. Such a center will knit smaller scale retail and services with civic and open space/park area to create a dynamic people place for the community.

B.8 Commercial areas with a strong component of recreation are encouraged along SR 89 and old 89A where natural amenities, good access and market opportunities exist. Example uses include (but are not limited to) hotels, motels, time-share resorts, lodges and B & Bs, campgrounds and RV parks, equestrian and multi-purpose centers, and dude ranches featuring swimming, riding, and fishing activities. This plan designation generally does not support residences and does not intend to preclude commercial uses with no recreational component.

B.9 Some additional employment acreage is recommended between the airport and the west bank of Granite Creek wash.

B.10 Sand and gravel extraction is supported within the Granite Creek Wash, and any realignment of the future Peavine Trail shall be located and designed for adequate separation from possible mining activities.

# ASAP LAND USE TABLE – supplements Figure 6

## ASAP Land Use Classifications with Intended Scale and Type of Use

(Provided as examples but may not be all inclusive)

**RANCHING - (Holding Designation)**
Grazing, agricultural activities, utility infrastructure, ranch houses and outbuildings, and other operations ancillary to ranching. This designation is intended to be revisited in the future when the property owners wish to quit ranching and consider developing. New land use designations will be determined based on adopted ASAP goals and objectives.

**NATURAL OPEN SPACE**
Open drainages, highly visible promontories, wildlife movement corridor/habitat, passive recreation (hiking trail, wildlife viewing), limited utility infrastructure and airport buffering. May include sand and gravel extraction, as permitted, within the Granite Creek wash.

**RECREATIONAL OPEN SPACE**
Active parks/regional parks, ball fields, tennis courts, swimming pools, golf courses, parking lots, ramadas, concessions and storage buildings, zoos, trails, and trail heads.

**MIXED COMMERCIAL/EMPLOYMENT**
Retail, services, civic, hospitality, office, wholesaling/warehousing, light manufacturing, aviation activities on airport, and screened storage. Other industrial uses may occur as permitted by City Council. Uses such as lodging, schools, and churches may not be permitted or desired within the airport's 65 LdN noise contour. *No new residential uses are permitted within the 1-mile wide swaths; however, outside of the swaths residential development may be permitted at a maximum density of 1 dwelling unit per 5 acres.*

**COMMERCIAL (Low intensity businesses where near established neighborhoods)**
Retail, services, office, hospitality, and civic. Where this designation occurs in close proximity to established residential neighborhoods, permitted uses shall be limited to low intensity operations. Appropriate uses include office; non auto-related services, civic, lodges and B & Bs, and mini-storage - minor retail may be appropriate. Residential Office and Neighborhood-Oriented Business zoning districts should be considered. Buffering and screening between unlike uses will be required. *No new residential uses are permitted within the 1-mile wide swaths; however, outside of the swaths residential development may be permitted at a maximum density of 1 dwelling unit per 5 acres.*

**MIXED COMMERCIAL/RECREATION**
Retail, non auto-related services, civic, and office. Highly encouraged are recreation-related uses including resorts, hotels, motels, lodges, equestrian facilities, campgrounds, RV parks, miniature golf, fishing camps and swimming pools. Golf courses and time-share casitas may be permitted subject to water allocations and short-term stay requirements of casita visitors. *No new residential uses are permitted within the 1-mile wide swaths; however, outside of the swaths residential development may be permitted at a maximum density of 1 dwelling unit per 5 acres.*

**MIXED COMMERCIAL/STUDENT HOUSING**
University campus-related uses and activities, offices, and enclosed/screened storage are permitted, *as are college dormitories inside and outside of the 1-mile wide swaths.* Permitted commercial uses are retail, services, office, hospitality, and civic.

**LOW DENSITY RESIDENTIAL**
Maximum density range is 1 to 2 acre lots (0.5 to 1 DU/1 ac). Clustering homes is permitted per PAD. Civic uses such as schools and churches and home occupations may also be included. Golf courses, neighborhood parks may be permitted based on water allocation. *No new residential development is permitted within the 1-mile wide swaths.*

**MEDIUM DENSITY RESIDENTIAL**
Maximum density range is 2-6 dwellings per acre (2 to 6 DUs/ ac). Clustering homes is permitted per PAD. Civic uses such as schools and churches and home occupations may also be included. Golf courses, neighborhood parks may be permitted based on water allocation. *Build out of Golf Links, Pinon Oaks, and Antelope Hills-area subdivisions is permitted inside and outside of the 1-mile wide swaths given the vested plats.*

**MIXED-USE VILLAGES**
Maximum density range is 7-20 dwellings per acre (7 to 20 DUs/ ac). Single-family attached and detached units, apartment buildings, and manufactured home parks are permitted. To achieve the desired neo-traditional synergy, permitted uses include high-density residential, civic, office, neighborhood-oriented businesses, small parks, and generous pedestrian amenities. A golf course may be permitted based on water allocation. *No new residential development is permitted within the 1-mile wide swaths.*

B.11 New industrial/employment center acreage is recommended on the west side of Ruger Road to provide added land for future employers in proximity to the airport and SR 89. The extent of this area should be of sufficient width to help buffer the airport and to allow a new street intersection on SR 89 spaced adequately from the intersection of SR 89 and Ruger Road, per ADOT's SR 89 access management plan.

B.12 Asphalt batch plants are not supported within ASAP.

**Residential**

B.13 Mixed-use "villages" that integrate high density residential with shopping, services and recreation are supported within the outer influence area as mapped in Figure 6. Generally locate higher density residential only where supported by air traffic levels - where there are either no overflights mapped or where overflights are generated only from runways other than the Main Runway 21/ and 21/R, as denoted on Appendix A.

B.14 No new residential development is permitted within the 1-mile wide approach/departure paths except for build-out of existing approved plats and parcels, and for student housing at Embry Riddle Aeronautical University. Densities are also limited within the inner influence area to spaces of moderate air traffic activity. ASAP supports no increase in residential densities via rezonings for these areas except as indicated on the land use plan map (Figure 6).

B.15 Use of planned area development (PAD) is encouraged as a tool to move residential densities from areas inappropriate for residential uses to areas more suitable for residential developments compatible with airport protection. PAD designs, conservation easements, and publicly dedicated open space are also recommended to achieve connected open spaces between developments and neighborhoods.

B.16 ASAP residential uses are indicated as density ranges on the plan map in Figure 6. The overall number of dwellings permitted will ultimately be based on alternate water service agreements and the communities elected officials' decisions on how best to allocate this resource.

B.17 To help halt any further RA 9 residential development south of the Crosswind Runway, consider providing City-funded construction of water and sewer lines and a public Side Road built to city standards. Such improvements should be offered as incentives for this residential area to (re)develop to an appropriate non-residential use such as retail or employment.

B.18 Low and medium density residential designation shown on Figure 6 may include one or more golf courses if approved by the water provider. A golf course may be similarly considered within a Mixed-use Village.

## C. Open Space and Wildlife Habitat

C.1 Support ranching to the extent desired by the ranch owners so that their lifestyle and the rural character that it affords may continue in proximity to evolving development. Examples include providing buffering around development that adjoins ranchland, and by providing shared cattle/wildlife roadway underpasses wherever feasible.

C.2 Utilize the 100-year flood limit of Granite Creek Wash, other lesser drainages, and adjacent areas to create a multi-purpose greenbelt(s) that supports stormwater drainage, passive recreation, wildlife movement corridors and habitat, and community character. Area jurisdictions should negotiate with applicable property owners to obtain and expand these wildlife friendly open spaces as requests for zoning entitlements, annexation, water allocations and central services are received.

C.3 Actively pursue with applicable landowners the feasibility of using conservation easements to gain targeted open space in a manner that directly benefits them through tax relief.

C.4 Protect existing year-round watering holes and consider creating additional ones where appropriate, as may be permitted by AZ Department of Water Resources, to help wildlife survive the stress of habitat loss and increasing fragmentation.

C.5 Promote roadway and rural land tract fencing that meets the minimum standards of AZ Game and Fish to improve the safety of deer and antelope fence crossings. This may be required along developments and streets where City of Prescott funds have been utilized.

C.6 Work with applicable land owners and AZ Game and Fish specialists to identify appropriate locations and reasonable extents of the recommended "gap fencing" designed to help antelope cross busy highways more safely.

C.7 Complete the Glassford Hill Arizona Preserve Initiative (API) acquisition so that the mountaintop can remain for future generations. To support continued ranching, the coordination plan for Glassford Hill API should accommodate the needs of applicable ranchers to the fullest extent reasonable.

C.8 Work with sand and gravel extraction landowners to reclaim or rehabilitate any permanently closed borrow pits.

C.10 Preserve the unique granite rock outcrops throughout the plan area to enhance nearby development where it occurs and protect the regions' scenic beauty.

C.11 Utilize, and expand through generous development setbacks, major power line easements as supplemental wildlife movement corridors.

C.12 Create a regional park that serves all age and interest groups by providing such active recreational amenities as ballparks and fields, swimming pool, tennis courts, and a trailhead to the Peavine Trail if a link can be created.

## D. CULTURAL RESOURCES

D.1 Initiate a mutual protocol between area jurisdictions to require a minimum Class I cultural resources survey of subdivisions or other developments of 20 acres or more that are located on ridges and hilltops where the likelihood of relics is moderate to high.

## E. WATER AND SEWER

E.1 To further water quality protection and regional water management goals, evaluate the long-term costs and benefits of bringing city sewer infrastructure to existing non-sewered neighborhoods. Identified neighborhoods include the Longview Subdivision, the Jack Drive and Perkins Drive areas, and the developments east and west of SR 89 north of Willow Lake Road (see Figure 2).

E.2 Consider City of Prescott funding for water and sewer service extension to the Side Road/Country Dells area as an incentive for development and redevelopment as non-residential uses that are more compatible with the nearby airport activity.

E.3 By mutual agreement, any applicable jurisdiction will work to promote new development that utilizes central sewer service that, in turn, permits groundwater recharge credits.

E.4 Evaluate alternate water service requests on the merits of the project's ability to meet ASAP's recommendations, and in relation to the region's water availability and areas to be served.

## F. CIRCULATION

The following policies supplement the Circulation Plan Map shown as Figure 7.

F.1 Encourage retaining old 89A for public access, including for bicyclists and pedestrians, by accepting it as a city street, if and when the ranches so dedicate and become annexed.

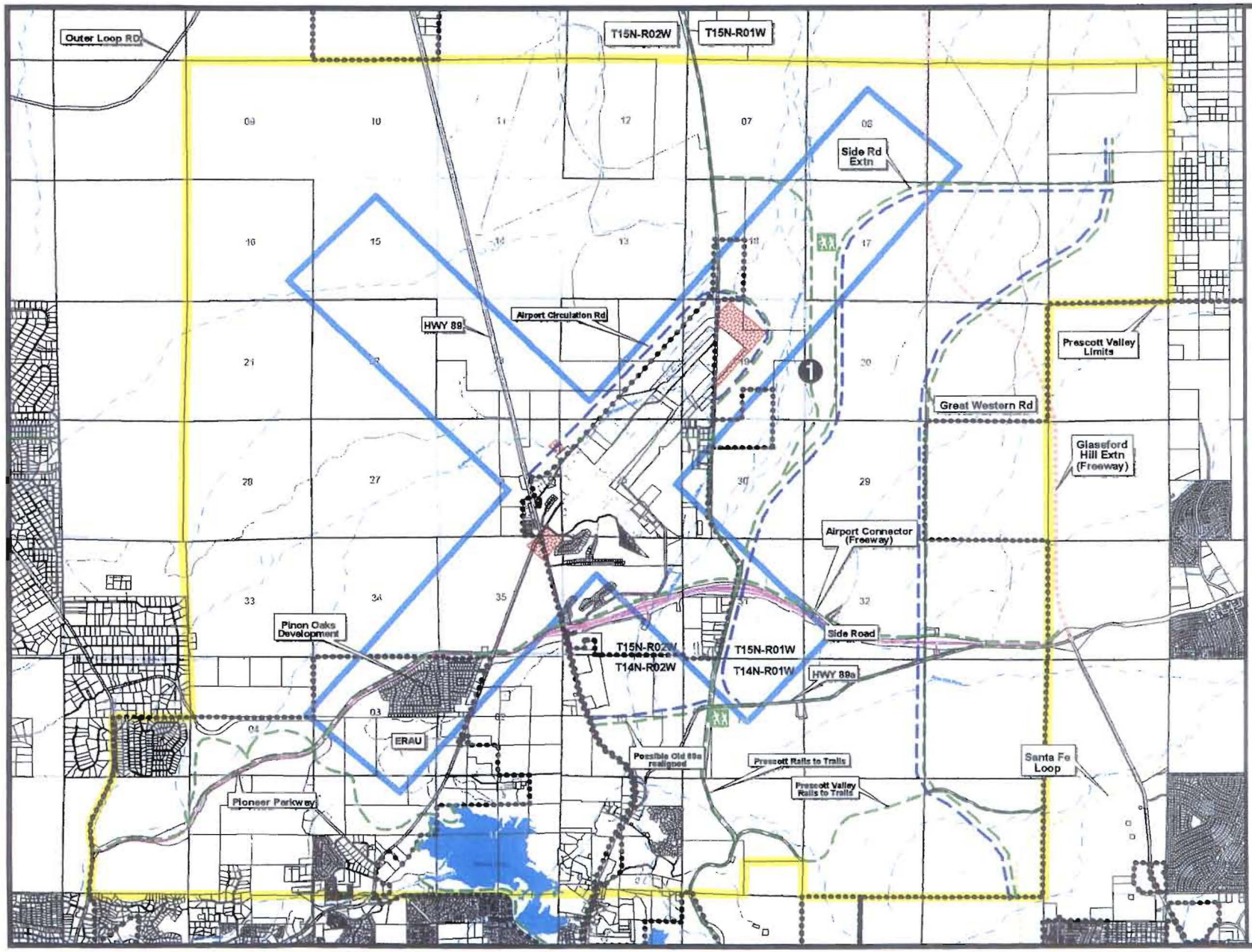
F.2 Consider a public/private partnership with private parties such as landowners Polk (Kieckhefer), Granite Dells Ranch and Point of Rocks Ranch to construct a new bridge crossing at Granite Creek for old 89A when such funding assistance is tied to significant economic development projects supported by ASAP.

F.3 Pursue land acquisition for the main runway's NE clear zone so that an airport circumferential road can be built connecting SR 89 to the new Airport Connector (see Figure 7). The circumferential road could either extend Ruger Road around the clear zone to Melville Road, or it could include a new street north of and parallel to Ruger Road that opens up additional land for future industrial use on the west side of airport.

F.4 Correct the private Side Road deficiency by combining a portion of rails-to-trails' 100-ft. wide right-of-way with the existing private access easement to create a standard 50-ft. public ROW. Consider City-funded street construction for Side Road as an incentive for property owners to convert to non-residential uses.

F.5 Require streets in multiple directions interconnecting developments to enhance traffic dispersion, public safety, and a cohesive circulation system. This is not intended to preclude private, gated streets where overall public circulation needs are met. Utilize traffic calming designs to slow traffic where needed.

F.6 Support and pursue funding sources to build safe trails in alternative alignments that may be necessary for rails to trails that traverse through ASAP.




# City of Prescott

## Airport Specific Area Plan

## Figure 7

## Circulation Plan

Proposed Future Road/Trail Alignments
- Future Arterial Streets
- Future Trail

Trailhead

ADOT 89A Realign. / Pioneer Parkway General Roads

ASAP Boundary

1 Mile (wide) Runway Approach & Departure Routes

Township Range Section

Recommended Airport Clear Zones

1 Alternative alignment of Peavine Trail (Rails to Trails) if original railroad bed proves infeasible.

Reference: LAYOUT 2 : 6-6-2001

F.7 Fund and construct a rails-to-trails trailhead at old SR 89A, and within Section 17 at the proposed regional park if a trail link to the Peavine Trail can be created.

F.8 Require connections for public walkways and bike paths between neighborhoods to promote fitness, recreation and a sense of community.

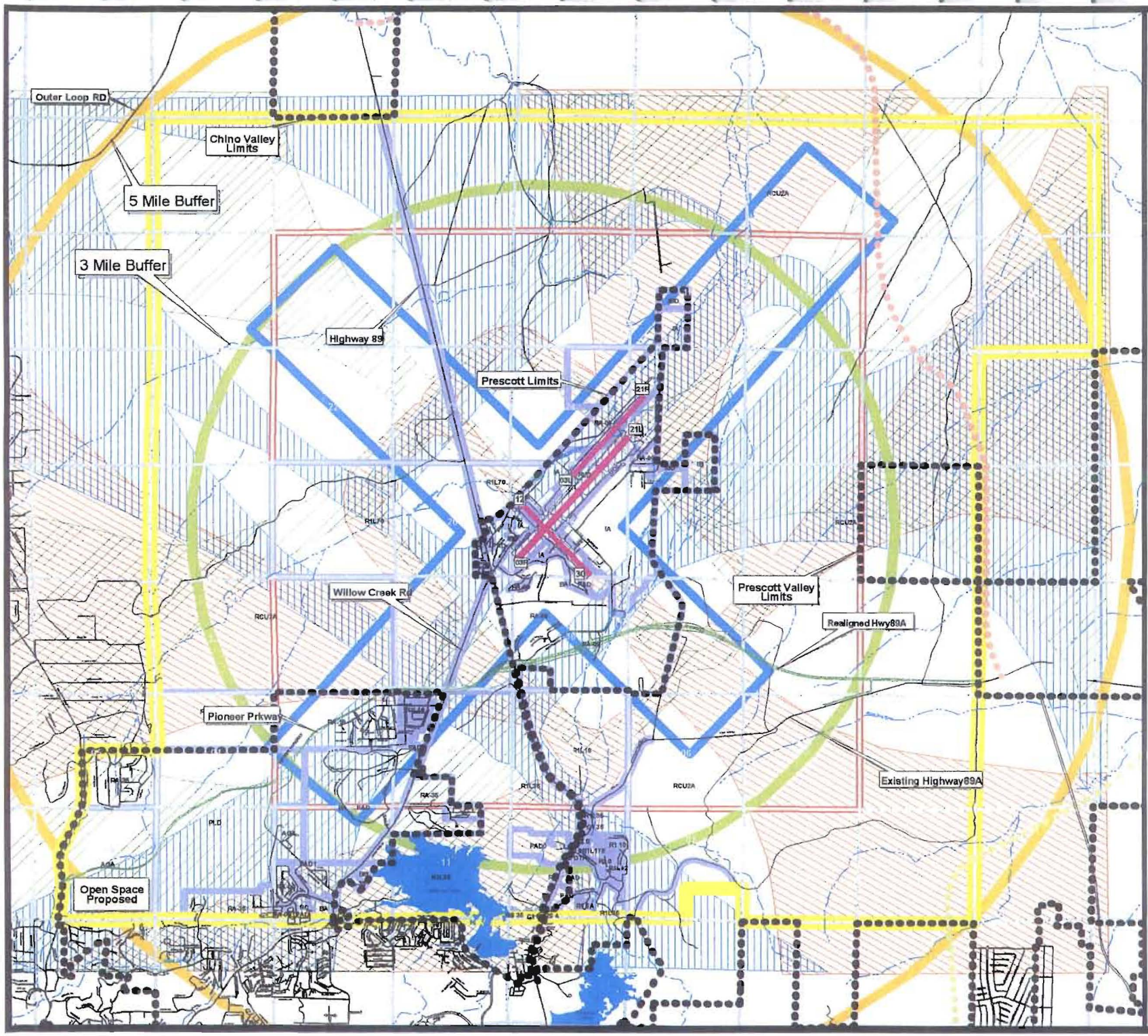
F.9 New arterial and collector streets constructed within ASAP should be designed with wider, outer travel lanes or with designated bike lanes to promote clean alternative transportation opportunities.

F.10 Work with trail advocates, biking enthusiasts, and property owners to create a paved multi-purpose path parallel to (but outside of) the Airport Connector's northerly ROW edge to connect Pioneer Parkway to SR 89A at the future Great Western intersection. Work closely with the Yavapai County Public Works and ADOT to help ensure that any future controlled access roads include a safely separated path for walking and biking while still meeting ADOT's freeway standards.

F.10 Utilize public-private partnerships to create attractive, landscaped boulevards that provide pedestrian and biking facilities and contribute to the region's character and quality. The first example might be Glassford Hill Road extension that runs between and connects all 3 of the region's municipalities.

F.11 Investigate use of targeted impact fees generated within ASAP to help fund public infrastructure and services within ASAP.

# APPENDIX A




# City of Prescott

## Airport Specific Area Plan

## Appendix A

### Airport Runway Approach Patterns

- Runway Locations
- Limits
- Future Connectors
  - GLASSFORD HILL EXTENSION
  - SANTA FE LOOP
- Area Streams
- ADOT 89A Realign. / Pioneer Parkway
- General Roads
- Township Range Section
- ASAP Boundary
- Zoning Boundary
- 1 Mile (wide) Runway Extensions
- 3 Mile Buffer
- 5 Mile Buffer
- Inner Influence Area

Airport Approach Patterns
- RWY 12
- RWY 30
- RWY 3R/3L Main

Basic data provided by the local FAA office reflecting air traffic patterns as of 2000.

CAUTION
MAP IS BASED ON IMPRECISE SOURCE DATA, SUBJECT TO CHANGE AND FOR GENERAL REFERENCE ONLY.

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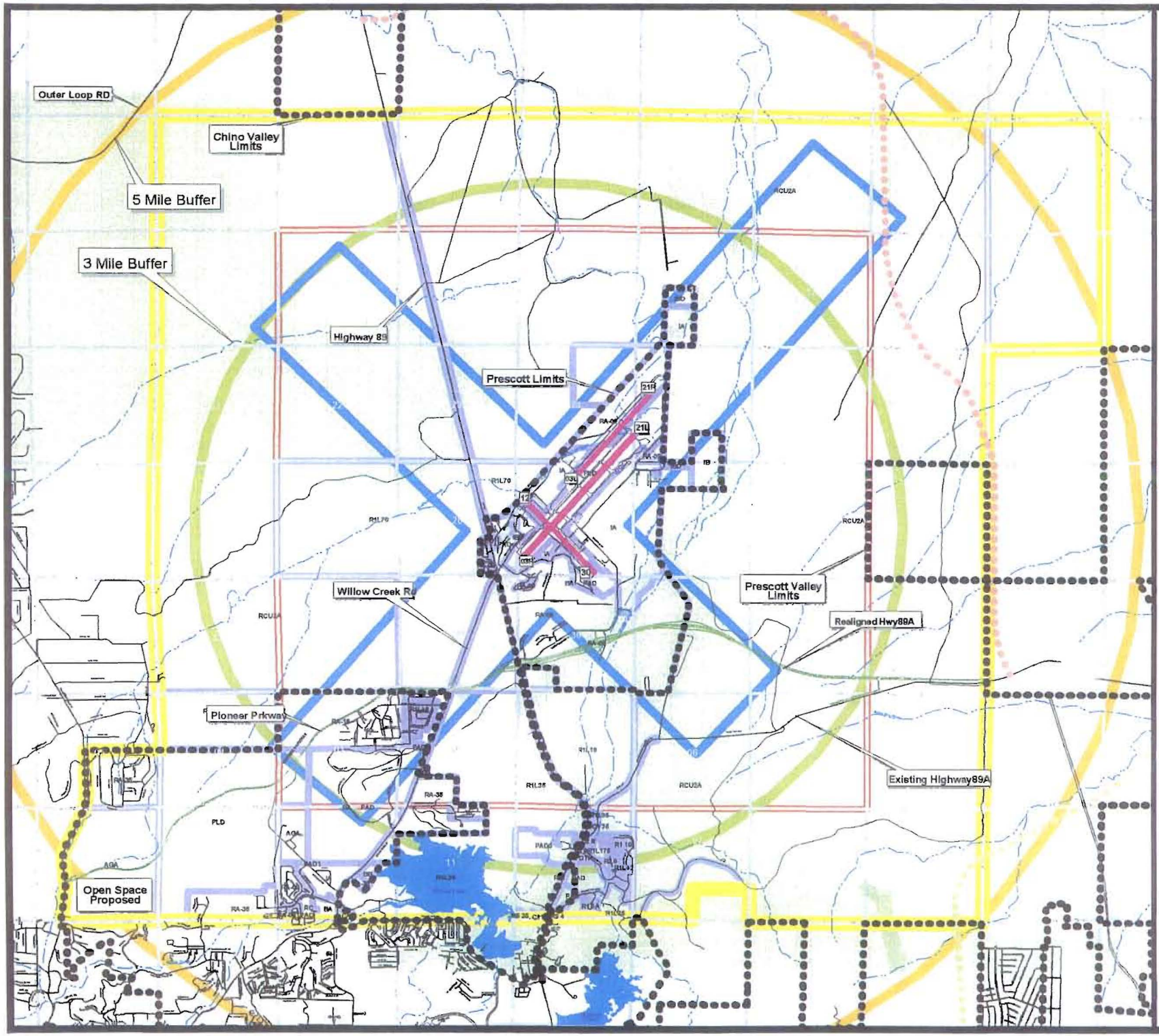


# City of Prescott

## Airport Specific Area Plan

## Appendix A

### Airport Runway Approach Patterns RWY 21L/21R

- Runway Locations
- Limits
- Future Connectors
  - GLASSFORD HILL EXTENSION
  - SANTA FE LOOP
- Area Streams
- ADOT 89A Realign. / Pioneer Parkway
- General Roads
- Township Range Section
- ASAP Boundary
- Zoning Boundary
- 1 Mile (wide) Runway Extensions
- 3 Mile Buffer
- 5 Mile Buffer
- Inner Influence Area
- Airport Approach Patterns RWY 21L/21R Main

Basic data provided by the local FAA office reflecting air traffic patterns as of 2000.

CAUTION
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Approach LO1 5-18-2001

# APPENDIX B

To: Tom Guice, Community Development Director

From Rick Severson, Airport Manager

RE: Airport and Aircraft Operations Supplement to the Airport Specific Area Plan

Date: 05/30/01

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The following information is offered to provide insight to the conclusions and recommendations of the draft *Airport Specific Area Plan* (ASAP). It reflects my thirty-two years of direct experience handling aircraft noise issues and developing aircraft noise control and land use compatibility plans for airports in Texas and California and my 35 years of piloting experience.

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## Section 1

Prescott Airport History & Unique Characteristics:

Prescott Airport was started in 1926 by the Yavapai County Chamber of Commerce. The airport became Ernest A. Love Field and was taken over by the City of Prescott in 1928. The location of the facility has not changed in the ensuing 75 years.

The airport is configured with three runways of which only one is capable of handling up to transport size aircraft. Each runway is marked with number corresponding with the magnetic heading of the runway centerline. Runway 21, for instance, has a magnetic heading of 210 degrees. Runways 21L and 21R are parallel runways labeled left (L) and right (R) for positive pilot identification. The same left / right designation applies to the opposite (03) end of the runways. The third runway (12 /30) is the runway used during crosswind conditions.

| | | | |
|---|---|---|---|
| Runway 21L | 03R | 7616 feet long | Frequent large aircraft |
| Runway 21R | 03L | 4862 feet long | light aircraft only |
| Runway 12 | 30 | 4408 feet long | light aircraft only |

Aircraft takeoff and land into the wind, therefore wind conditions are of prime importance in determining runway orientation. Where prevailing winds are predominately in one direction, runways are oriented in that direction. Our prevailing winds are from the southwest. Runways 21 left and right, due to the wind orientation, receive the majority of the traffic.

The frequency of traffic by runway designation and time of day have been calculated using the following assumptions.

1. 90% of airport activity occurs between sunrise and an hour after sunset.
2. Runway 21L and 21R handles 80% of the traffic.
3. Runway 3L and 3R handle 10% of the traffic.
4. Runway 12 handles 6% of the traffic.
5. Runway 30 handles 4% of the traffic.

The FAA ranks airports by the number of operations (takeoffs or landings) that occur at the facility on an annual basis. In 1999 the airport experienced 350,000 operations. This level of activity ranked the airport number two in Arizona and 32nd in the nation. Based upon 350,000 annual operations we can arrive at the following conclusions based upon 350 flying days annually: *

1. 1,028 aircraft operations occur each 24 hours.
2. 900 operations occur during daytime or early evening and 128 operations occur each night.
3. Operations on runways 21R and 21L occur 280 days per year.
4. Operations on runways 3R and 3L occur 35 days per year.
5. Operations on runway 12 occur 21 days per year.
6. Operations on runway 30 occur 14 days per year.

(* These figures are representative averages. Actual usage each day depends upon factors such as the day of the week, the time of the year and weather conditions.)

Runway 21L is also equipped with an Instrument Landing System (ILS). The system consists of radio transmitters near the runway that send signals to the aircraft enabling the pilot to locate the runway end in bad weather using instrumentation inside the cockpit. This system is augmented by information from global positioning satellites (GPS) and a ground-based radio beacon (Drake VOR) located near Chino Valley.

The airport runways are surrounded by various aviation-related businesses. These businesses include flight schools, aircraft rental services, mechanics, charter operators, the FAA control tower and flight service station, U.S. Forest Service, auto rental companies, America West Airlines, and a restaurant. Private aircraft are stored in hangars and on parking aprons. All of this activity is contained on 760 acres owned by the City and leased to the aircraft operators. The City sells all the fuel purchased on the airport. Revenues from the property leases and the fuel sales go directly into the operation of the airport. A city fire station located on airport property provides crash fire rescue services.

The types of aircraft that use the airport are predominately Class A, typically four passenger single engine aircraft that can be represented by a Cessna 172 and Class B, typically four passenger twin engine aircraft that can be represented by the Beechcraft Dutchess. The exhibits illustrate the current and forecasted mix of aircraft types.

## Section 2

The Rules of the Air:

FAA regulations require the pilot of an aircraft to remain 1,000 feet above the ground over populated areas and 500 above the ground over unpopulated areas except for the purpose of takeoff or landing. Helicopters are excepted from this regulation. No person may operate an aircraft or helicopter in such a manner that it presents an undue hazard to persons or property on the ground. Noise does not constitute a hazard by FAA definition.

The airport traffic patterns for aircraft operating under visual flight rules (VFR) follow the FAA standard which is taught to all pilots. Each of Prescott airport's three runways have a published direction and initial altitude for arrivals and a published direction for departures. An attached exhibit illustrates the standard FAA traffic pattern for parallel runways. The size of the pattern varies with aircraft performance, pilot skills, the number of aircraft in the pattern and weather conditions. It is important to note that within five miles of the airport pilots may request and fly variations to the standard pattern with control tower approval. In addition the tower controllers frequently will request pilots to fly variations to the standard pattern in the interest of safety or to expedite traffic flow.

The control tower sequences arrivals, departures and airport over-flights at altitudes up to 7,500 above sea level and within a five-mile radius around the airport. During VFR weather conditions it is the responsibility of the pilot to see and avoid other aircraft, the tower controller assists the pilot in that responsibility. Due to the volume of air traffic the efficient use of all the airspace assigned to the air traffic controllers becomes extremely important to assure flight safety.

## Section 3

The FAA:

Two of the questions often asked by noise sensitive persons are, "Why can't the airport close down at night?" and "Why can't we keep noisy aircraft out of our airport?".

The answer to these questions are that the City has a contractual obligation to the Federal government in exchange for receiving federal funds that requires the airport to be open at all times. The City is also obligated to open the airport to all sizes and types of aircraft that can safely use the facility.

*Air Traffic Control*

Deviations from the normal traffic flow for noise considerations are not a primary responsibility of the controller and may create distraction for both the controller and the pilot from the primary mission of flight safety. Therefore, the FAA has been reluctant, except in extreme cases, to participate in local noise abatement programs. State and local jurisdictions are pre-empted by federal law regarding the regulation of aircraft in flight. Local airport noise abatement plans which direct pilots to fly certain altitudes and headings to avoid noise sensitive areas cannot be regulatory in nature.

*Noise Control Programs*

The FAA will only participate in noise programs established under an FAR part 150/161 study, provided the study shows a significant aircraft noise problem associated with airport operations that produces incompatible land uses. The available mitigation remedies under the program include special aircraft arrival and departure procedures, buyout and redevelopment of areas into compatible uses, the installation soundproofing insulation, changes in runways or other airport facilities, nigh-time curfews on airport operations and capital improvements on airport to mitigate noise. The recommendations of the study are subject to a cost benefit analysis, which will determine the priority for implementation and the eligibility for any federal funding. Local noise restrictions on airport must remain voluntary and non-regulatory unless approved by the FAA under a part 150/161 study.

The Part 150 study would address situations where the airport may be closed or become constrained due to circumstances such as, the failure of the local authorities to adequately control land use around an airport or an unexpected demand for aviation services resulting in more intensive airport use. The locations where the study has been conducted typically have been heavy commercial service airports and general aviation airports with a significant number of jet operations by older and noisier corporate jets. Presently, we do not have the magnitude of problems that would indicate the need for such a study. The majority of land around the Prescott airport is currently compatible with our forecasted demand for aviation services.

*Stage 3 aircraft design*

Since year 2000 the FAA has required air carrier aircraft to meet more stringent noise requirements commonly referred to as Stage 3. The perceived noise level has been reduced significantly as a result of the legislation. Most jet aircraft in service today have been designed or retrofitted to meet the new regulations. As a result of the new regulations jet aircraft noise has now become significantly less of a factor in the total noise generated by airport operations.

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## Section 4

Effects of Density Altitude on Aircraft Performance:

Prescott airport is located in high terrain at an elevation of 5,025 feet above sea level. Aircraft climb performance on takeoff is significantly degraded at our altitude compared to the same aircraft flying at airports with an elevation near sea level. In the summer, higher air temperatures combine with the elevation to even more significantly degrade aircraft climb performance (See Exhibits). This is why aircraft are observed flying lower on takeoff in the summer as compared with the winter. The climb performance of a Cessna 172 in winter is 465 feet per minute and in summer the climb rate can drop to as low as 285 feet per minute. The Beechcraft Dutchess in winter can climb at 900 feet per minute and in summer it is reduced to 600 feet per minute. The performance of jet aircraft is also degraded as a result of air density.

Noise reduction techniques, such as reducing power or making low level turns becomes less of an option at high altitude airports where power is already reduced from the effect of air density and turning reduces the lifting force of the wings. It is part of a pilot's responsibility and training to calculate the effect of air density on aircraft performance before taking off to insure a safe flight.

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## Section 5

Airport Master Plan - Noise Contours:

The current airport master plan was approved in 1998. It projects the need for airport facilities and services to meet forecasted airport demand through the year 2020. The master plan includes noise contours for the projected 2020 aircraft operations. The noise contours are averages of single event operations of various aircraft types. While the noise contours are indicative of where residential should not be allowed, the lack of noise contours should not be taken as an indication of where residential may be a suitable land use over other choices, if available. Where to locate residential property is a local decision. Other concerns such as single event noise exposure and quality of life may dictate a different land use decision, other than residential, in the vicinity of busy aircraft traffic patterns.

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## Section 6

Noise Complaints:

The noise complaint history for the airport reflects that complaints come infrequently and the complainers are from residential neighborhoods within five miles of the airport but outside the 65 LdN noise contour within which residential land uses are not recommended. The runway 21L/R traffic patterns in the vicinity of the departure (southwest) end as well as the pattern entry and downwind leg are the busiest pattern segments at the airport where noise complaints can be anticipated to occur. Once an aircraft is established in the downwind leg approaching a base leg or the final approach the pilot will usually reduce power to initiate a descent to the runway. We expect to experience fewer complaints in the area of the base leg. Once established on final the pilot will often increase power to fly a stabile descent to the runway.

Jet aircraft usually fly an ILS approach where the final approach leg extends five miles from the airport. As the pilot completes landing gear and flap extension and increases power to overcome drag and stabilize the approach, perceived noise levels increase. This increase in power in addition to the repetition of over-flights over the same specific track produces noise complaints. This is the reason for the extension in the runway 21 approach and departure route to five miles and the inclusion of the additional area into the airport influence area.

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## Section 7

Runway Approach and Departure Routes:

The runway approach and departure routes, each one-mile wide, are designed to protect the runway approaches and departures from incompatible development. The approach route to runway 21L has been previously discussed. The routes are designed to contain an aircraft's initial climb as well as to provide an area to maneuver while avoiding traffic conflicts or during a go around after a missed landing approach without having to overfly incompatible development. Aircraft fly arrivals and departures at speeds of 75 to 125 miles per hour. At an average of 90 miles per hour the aircraft will fly one half mile to the edge of the route in 23 seconds. At 125 miles per hour, a jet aircraft on centerline could reach the outer edge of this area in 15 seconds.

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## Section 8

Comparable Airports:

No two airports are alike. Differences in geographic setting, runway layout, land area, local economics and weather all play a role in the level of activity an airport generates. We can draw some conclusions from the history of other general aviation airports.

Scottsdale, Arizona is an example of a busy general aviation airport in a highly urbanized area with an itinerant aircraft activity level comparable to the future Prescott Airport after the build out of the surrounding land identified in the ASAP plan. Attached are Exhibits from the Scottsdale airport noise monitor. Scottsdale experiences complaints from outside the published LdN noise contours and as far away as five miles from the airport. This is typical of high activity airports in an urban setting.

Flagstaff airport is an example of an airport that has identified an airport influence area and initiated avigation easements. The airport is in a rural area like Prescott and does not experience a significant number of noise complaints. (See Exhibits). The Flagstaff influence area is smaller than the ASAP proposal however Flagstaff has only one runway and significantly fewer total operations.

The attached exhibits illustrate the measures that have been enacted by airports to reduce aircraft noise levels. One major conclusion that can be reached by all these examples is that aircraft noise sensitivity around an airport extends beyond the published noise contours and includes the traffic patterns flown by arriving and departing aircraft within three to five miles from the runway.

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## Section 9

Avigation Easements and the Airport Influence Area:

Arizona Statute allows an airport operator to enact an Airport Influence Area to provide notice to landowners of the near-by airport. The legislation is attached as an exhibit. The City may also require avigation easements within the airport influence area as part of the normal zoning and permitting process. An avigation easement grants any aircraft operating to and from the airport to fly over the grantors' land at altitudes allowed by the federal air regulations from now into perpetuity. The easement helps protect the airport from lawsuits by landowners desiring to close or constrain the airport operation. A copy of the suggested avigation easement language is attached as an exhibit. The combination of an adopted Airport Influence Area with Avigation Easements will provide protection for the airport and insure that future home owners are notified of the airport activity prior to the purchase of their home.

**TABLE 3A**
**Aircraft Operational Mix Forecast**
**Ernest A. Love Field**

| | Aircraft Classification | | | |
|---|---|---|---|---|
| **Year** | **A** | **B** | **C** | **D** |
| 1995 | 87% | 11% | 2% | 0% |
| 2000 | 85% | 12% | 3% | 0% |
| 2005 | 83% | 13% | 4% | 0% |
| 2010 | 81% | 14% | 5% | 0% |
| 2015 | 79% | 15% | 6% | 0% |
| 2020 | 77% | 16% | 7% | 0% |

**Definitions**

| | |
|---|---|
| **Class A:** | Small single-engine, gross weight 12,500 pounds or less |
| Examples: | Cessna 172/182, Mooney 201, Beech Bonanza, Piper Cherokee/ Warrior |
| **Class B:** | Small, twin-engine, gross weight 12,500 pounds or less |
| Examples: | Beech 1300, Cessna 402, Lear 25, Mitsubishi MU-2, Piper Navajo, Rockwell Shrike, Beech 99, Cessna Citation I, Beech King Air 100 |
| **Class C:** | Large aircraft, gross weight 12,500 pounds to 300,000 pounds |
| Examples: | Douglas DC-9, Beech King Air 200, Boeing 727/737/757/767, Gulfstream III, Citation II, DeHavilland DH-8, Lear 35/55, Swearingen Metro, Beech 1900 |
| **Class D:** | Large aircraft, gross weight more than 300,000 pounds |
| Examples: | Lockheed L-1011, Douglas DC-8-60/70, Boeing 747, Airbus A-300/A-310 |

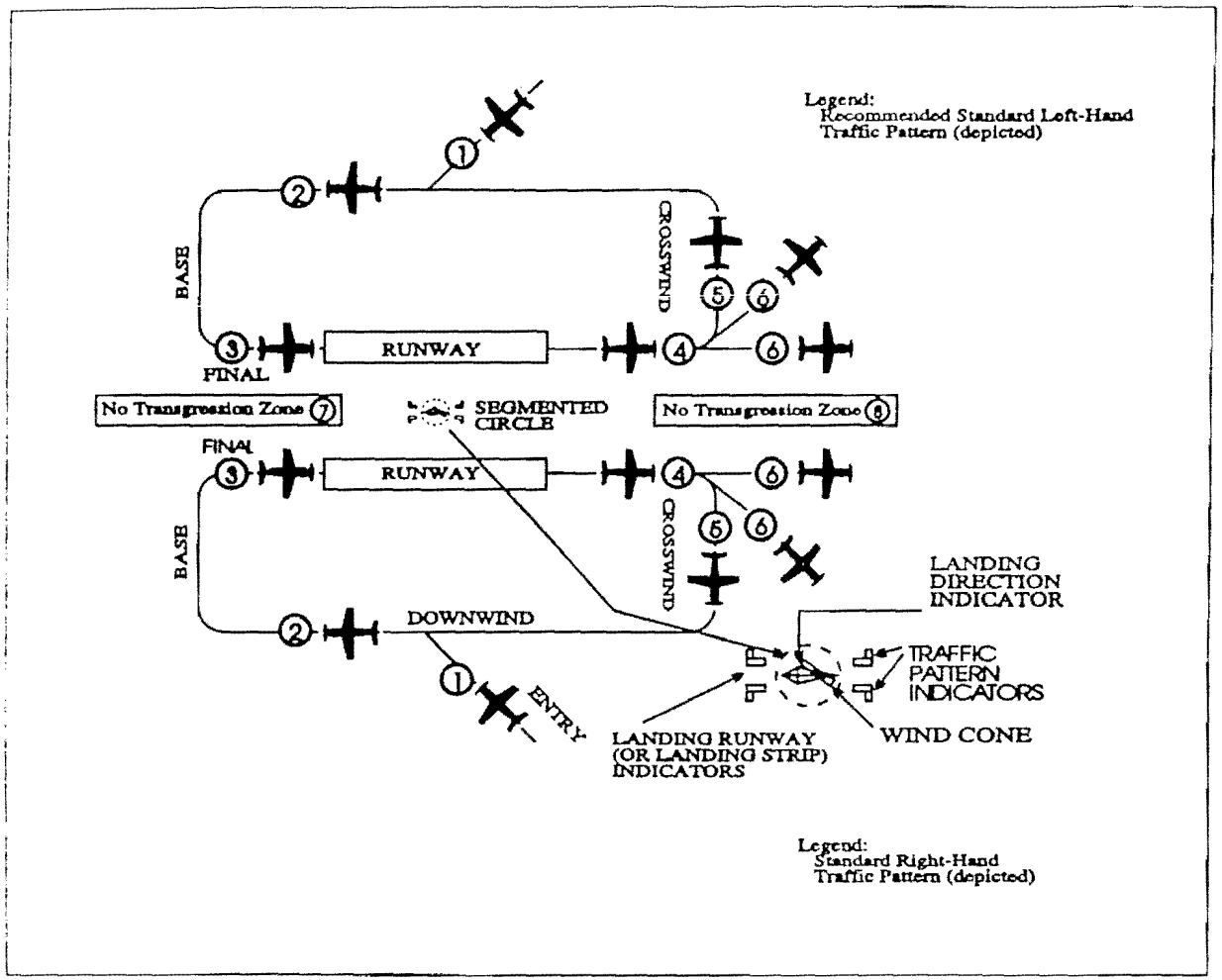



*FIG 4-3-3 See Key to Traffic Pattern Operations below.*

*EXAMPLE-*
*KEY TO TRAFFIC PATTERN OPERATIONS*
*① ENTER PATTERN IN LEVEL FLIGHT, ABEAM THE MIDPOINT OF THE RUNWAY, AT PATTERN ALTITUDE. (1,000' AGL IS RECOMMENDED PATTERN ALTITUDE UNLESS ESTABLISHED OTHERWISE...)*

*② MAINTAIN PATTERN ALTITUDE UNTIL ABEAM APPROACH END OF THE LANDING RUNWAY ON DOWNWIND LEG.*

*③ COMPLETE TURN TO FINAL AT LEAST 1/4 MILE FROM THE RUNWAY.*

*④ CONTINUE STRAIGHT AHEAD UNTIL BEYOND DEPARTURE END OF RUNWAY.*

*⑤ IF REMAINING IN THE TRAFFIC PATTERN, COMMENCE TURN TO CROSSWIND LEG BEYOND THE DEPARTURE END OF THE RUNWAY WITHIN 300 FEET OF PATTERN ALTITUDE.*

*⑥ IF DEPARTING THE TRAFFIC PATTERN, CONTINUE STRAIGHT OUT, OR EXIT WITH A 45 DEGREE TURN (TO THE LEFT WHEN IN A LEFT-HAND TRAFFIC PATTERN; TO THE RIGHT WHEN IN A RIGHT-HAND TRAFFIC PATTERN) BEYOND THE DEPARTURE END OF THE RUNWAY, AFTER REACHING PATTERN ALTITUDE.*

*⑦ DO NOT OVERSHOOT FINAL OR CONTINUE ON A TRACK WHICH WILL PENETRATE THE FINAL APPROACH OF THE PARALLEL RUNWAY.*

*⑧ DO NOT CONTINUE ON A TRACK WHICH WILL PENETRATE THE DEPARTURE PATH OF THE PARALLEL RUNWAY.*

## 4-3-5. UNEXPECTED MANEUVERS IN THE AIRPORT TRAFFIC PATTERN

There have been several incidents in the vicinity of controlled airports that were caused primarily by aircraft executing unexpected maneuvers. ATC service is based upon observed or known traffic and airport conditions. Controllers establish the sequence of arriving and departing aircraft by requiring them to adjust flight as necessary to achieve proper spacing. These adjustments can only be based on observed traffic, accurate pilot reports, and anticipated aircraft maneuvers. Pilots are expected to cooperate so as to preclude disrupting traffic flows or creating conflicting patterns. The pilot-in-command of an aircraft is directly responsible for and is the final authority as to the operation of the aircraft. On occasion it may be necessary for pilots to maneuver their aircraft to maintain spacing with the traffic they have been sequenced to follow. The controller can anticipate minor maneuvering such as shallow "S" turns. The controller cannot, however, anticipate a major maneuver such as a 360 degree turn. If a pilot makes a 360 degree turn after obtaining a landing sequence, the result is usually a gap in the landing interval and, more importantly, it causes a chain reaction which may result in a conflict with following traffic and an interruption of the sequence established by the tower or approach controller. Should a pilot decide to make maneuvering turns to maintain spacing behind a preceding aircraft, the pilot should always advise the controller if at all possible. Except when requested by the controller or in emergency situations, a 360 degree turn should never be executed in the traffic pattern or when receiving radar service without first advising the controller.

## PRESCOTT

**ERNEST A. LOVE FLD** (PRC) 7 N UTC−7 N34°39.27′ W112°25.18′ PHOENIX H-2C, L-4E IAP

5045 B S4 FUEL 100LL, JET A TPA—See Remarks LRA ARFF Index Ltd.

**RWY 03R-21L:** H7550X150 (ASPH-PFC) S-63, D-80, DT-100 MIRL 1.0% up SW

**RWY 03R:** REIL. PAPI(P4L)—GA 4.0° TCH 45′. Thld dsplcd 790′. Road.

**RWY 21L:** MALSR. REIL. PAPI(P4L)—GA 3.0° TCH 45′. Rgt tfc.

**RWY 03L-21R:** H4846X60 (ASPH) S-12.5 MIRL 0.8% up SW

**RWY 03L:** PAPI(P2L)—GA 3.0° TCH 40′. Thld dsplcd 811′. **RWY 21R:** PAPI(P2L)—GA 3.0° TCH 40′. Rgt tfc.

**RWY 12-30:** H4408X75 (ASPH) S-12.5 MIRL 0.6% up NW

**RWY 12:** PAPI(P2L)—GA 3.0° TCH 40′. **RWY 30:** PAPI(P2L)—GA 3.0° TCH 40′.

**AIRPORT REMARKS:** Attended 1300–0500Z. 100LL/Jet A fuel unavbl 0500–1300Z. Rwy 03L-21R CLOSED 0500–1300Z. CLOSED to air carrier ops with more than 30 passenger seats except PPR call arpt manager 520-445-7860. Acft departing Rwy 21L continue rwy heading until across highway and make immediate left turn. 20′ drop off 300′ from apch end Rwy 12. Rwy 21L designated calm wind rwy. Extensive student training. Twy D lgts OTS indef. Twy D1 restricted to acft 12,500 pounds or less. Twy A lgts OTS indef. PAPI Rwy 21R OTS indef. Rwy 21L PAPI OTS indef. Rwy 03R-21L SW 68′ CLOSED indef. Overnight parking fee. TPA Rwy 12-30 and E of Rwy 03-21 6045(1000) light acft. TPA W of Rwy 03-21 5845(800) light acft. TPA for large acft, all turbo prop/jet and high performance acft all rwys 6545(1500). After 0500Z ACTIVATE MIRL Rwy 03R-21L—CTAF. For MIRL Rwy 12-30 preset med ints dusk-dawn. NOTE: See Land and Hold Short Operations Section.

**WEATHER DATA SOURCES:** ASOS (520)717-1287.

**COMMUNICATIONS:** CTAF 125.3 ATIS 127.2 (1300–0500Z) UNICOM 122.95

PRESCOTT FSS (PRC) on arpt. 122.4 122.2 TF 1-800-WX-BRIEF. NOTAM FILE PRC.

ALBUQUERQUE CENTER APP/DEP CON 128.45

PRESCOTT TOWER 125.3 (1300–0500Z) GND CON 121.7

**AIRSPACE:** CLASS D svc (1300–0500Z) continuous.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PRC. VHF/DF ctc FSS.

DRAKE (H) VORTACW 114.1 DRK Chan 88 N34°42.15′ W112°28.82′ 120° 4.1 NM to fld. 4963/14E.

ILS/DME 108.5 I-PRC Chan 22 Rwy 21L. ILS/DME unmonitored 0500–1300Z.

# CLIMB - TWO ENGINE

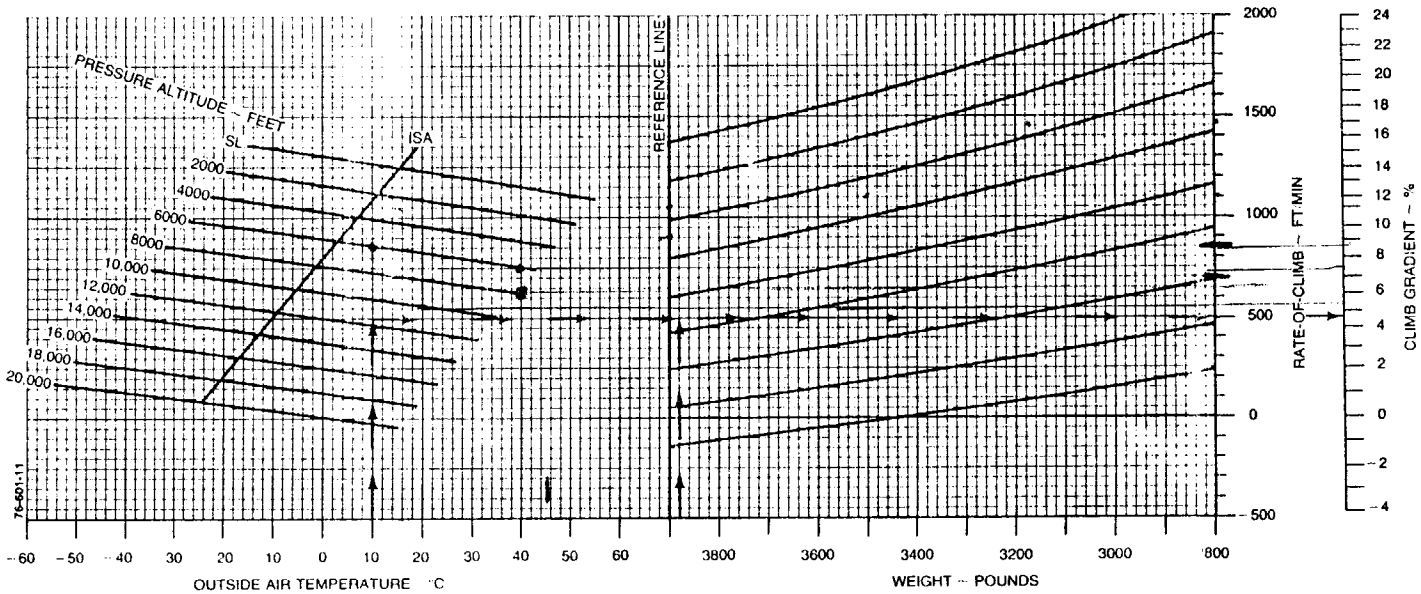
## CLIMB SPEED 85 KNOTS (ALL WEIGHTS)

ASSOCIATED CONDITIONS:

| | |
|---|---|
| POWER | MAXIMUM CONTINUOUS AT 2700 RPM |
| FLAPS | UP |
| LANDING GEAR | UP |
| COWL FLAPS | OPEN |
| MIXTURE | FULL RICH (ABOVE 5000 FT LEAN TO 75° - 100°F ON RICH SIDE OF PEAK EGT) |

EXAMPLE:

| | |
|---|---|
| OAT | 10°C |
| PRESSURE ALTITUDE | 11,500 FT |
| WEIGHT | 3880 LBS |
| RATE OF CLIMB | 500 FT/MIN |
| CLIMB GRADIENT | 4.6% |



## SHORT FIELD TAKEOFF DISTANCE AT 2200 POUNDS

CONDITIONS:

Flaps 10°
Full Throttle Prior to Brake Release
Paved, level, dry runway
Zero Wind
Lift Off: 44 KIAS
Speed at 50 Ft: 50 KIAS

| Press Alt In Feet | 0°C | | 10°C | | 20°C | | 30°C | | 40°C | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Grnd Roll Ft | Total Ft To Clear 50 Ft Obst | Grnd Roll Ft | Total Ft To Clear 50 Ft Obst | Grnd Roll Ft | Total Ft To Clear 50 Ft Obst | Grnd Roll Ft | Total Ft To Clear 50 Ft Obst | Grnd Roll Ft | Total Ft To Clear 50 Ft Obst |
| S. L. | 610 | 1055 | 655 | 1130 | 705 | 1205 | 760 | 1290 | 815 | 1380 |
| 1000 | 665 | 1145 | 720 | 1230 | 770 | 1315 | 830 | 1410 | 890 | 1505 |
| 2000 | 725 | 1250 | 785 | 1340 | 845 | 1435 | 905 | 1540 | 975 | 1650 |
| 3000 | 795 | 1365 | 860 | 1465 | 925 | 1570 | 995 | 1685 | 1065 | 1805 |
| 4000 | 870 | 1490 | 940 | 1605 | 1010 | 1725 | 1090 | 1855 | 1165 | 1975 |
| 5000 | 955 | 1635 | 1030 | 1765 | 1110 | 1900 | 1195 | 2035 | 1275 | 2175 |
| 6000 | 1050 | 1800 | 1130 | 1940 | 1220 | 2090 | 1310 | 2240 | 1400 | 2395 |
| 7000 | 1150 | 1985 | 1245 | 2145 | 1340 | 2305 | 1435 | 2475 | 1540 | 2650 |
| 8000 | 1270 | 2195 | 1370 | 2375 | 1475 | 2555 | 1580 | 2745 | 1695 | 2950 |

NOTES:

1. Short field technique as specified in Section 4.
2. Prior to takeoff from fields above 3000 feet elevation, the mixture should be leaned to give maximum RPM in a full throttle, static runup.
3. Decrease distances 10% for each 9 knots headwind. For operation with tail winds up to 10 knots, increase distances by 10% for each 2 knots.
4. For operation on dry, grass runway, increase distances by 15% of the "ground roll" figure.

Figure 5-5. Short Field Takeoff Distance (Sheet 3 of 3)





## MAXIMUM RATE-OF-CLIMB AT 2550 POUNDS

CONDITIONS:

Flaps Up
Full Throttle

| PRESS ALT FT | CLIMB SPEED KIAS | RATE OF CLIMB - FPM | | | |
|---|---|---|---|---|---|
| | | -20°C | 0°C | 20°C | 40°C |
| S.L. | 74 | 855 | 785 | 710 | 645 |
| 2000 | 73 | 760 | 695 | 625 | 560 |
| 4000 | 73 | 685 | 620 | 555 | 495 |
| 6000 | 73 | 575 | 515 | 450 | 390 |
| 8000 | 72 | 465 | 405 | 345 | 285 |
| 10,000 | 72 | 360 | 300 | 240 | 180 |
| 12,000 | 72 | 255 | 195 | 135 | --- |

≈ 400 FT/NM ≈ 300 FT/NM

NOTE:

1. Mixture leaned above 3,000 feet for maximum RPM.

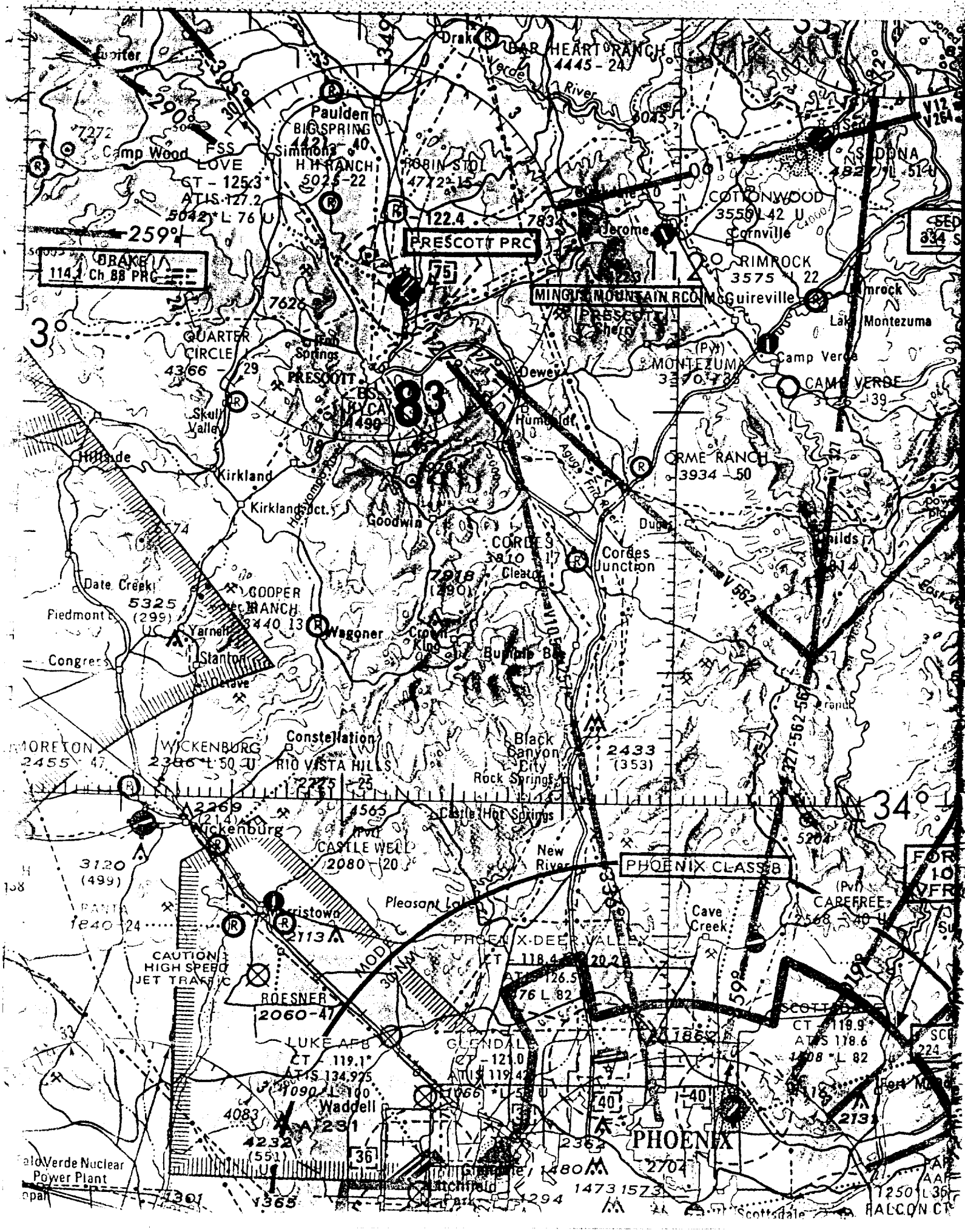
@ 5 NM

2000 FT AGL VS.

1500 FT/NM

25% DECREASE IN PERFORMANCE

Figure 5-6. Maximum Rate of Climb



Drake
BAR HEART RANCH
4445 - 24
Verde River
Paulden
BIG SPRING
4421 - 40
Simmons
H H RANCH
5025 - 22
ROBIN STOL
4772 - 15
Camp Wood
FSS
LOVE
CT - 125.3*
ATIS 127.2
5042 * L 76 U
DRAKE
114.1 Ch 88 PRC
PRESCOTT PRC
122.4
Jerome
COTTONWOOD
3550 L 42 U
Cornville
RIMROCK
3575 L 22
McGuireville
Rimrock
Lake Montezuma
MINGUS MOUNTAIN RCO
PRESCOTT
Sherry
MONTEZUMA
Camp Verde
CAMP VERDE
QUARTER
CIRCLE
4366 - 29
Iron Springs
PRESCOTT
Skull Valley
Dewey
Humboldt
Hillside
Kirkland
Kirkland Jct.
Goodwin
ORME RANCH
3934 - 50
Dugas
CORDES
Cleator
Cordes Junction
Date Creek
5325
(299)
Piedmont
COOPER
RANCH
3440 13
Yarnell
Wagoner
Crown King
Stanton
Congress
Detave
Bumble Bee
Constellation
WICKENBURG
2386 L 50 U
RIO VISTA HILLS
2275 - 25
Black Canyon City
Rock Springs
2433
(353)
Castle Hot Springs
Wickenburg
CASTLE WELL
2080 - 20
New River
PHOENIX CLASS B
Pleasant Lake
Cave Creek
CAREFREE
2568 - 40 U
PHOENIX-DEER VALLEY
CT - 118.4
ATIS 126.5
76 L 82
CAUTION
HIGH SPEED
JET TRAFFIC
ROESNER
2060 - 47
LUKE AFB
CT - 119.1*
ATIS 134.925
1090 L 100
GLENDALE
CT - 121.0
ATIS 119.42
Waddell
PHOENIX
2704
Scottsdale
Fort Mc
Verde Nuclear
Power Plant
Litchfield Park
FALCON CT

Prescott
Municipal
Airport

6546 Crystal Lane
Prescott, AZ 86301
520.445.7860; 771.5861 fax
www.prcairport.com

## Airport Operations, Fuel Service & FAA

| | |
|---|---|
| Airport Operations (1300-0500 ZULU) | 445.7860 |
| City of Prescott (FBO) (1300-050 ZULU) | 771.5862 |
| Chevron: Avgas 100LL, Jet A/wPRIST | |
| Prescott Tower (1300-0500 ZULU) | 445.2160 |
| Prescott AFSS | 778.7810 |
| ASOS (1300-0500 ZULU) | 717.1287 |

## Requested Noise Abatement Procedures

1. When runway 21L is in use - Maintain runway heading until crossing Highway 89.
2. When Runway 30 is in use - Left traffic for aircraft in closed traffic.
3. When Runway 12 is in use - Right traffic for aircraft in closed traffic.
4. Departure from Runways 12, 30 and 03R will be discouraged during the following times:
   - Monday - Friday prior to 7AM;
   - Weekends and Holidays prior to 8 AM
5. Piston aircraft operators are requested to use *AOPA "Noise Awareness Steps"*.
6. Turbine/Jet aircraft are requested to use *N.B.A.A. Standard Noise Abatement Departure* procedures or comparable procedure of aircraft manufacturer.
7. Helicopters are requested to use *HAI ' Recommended Noise Abatement Measures'*.

Thank You for Flying Neighborly

**Appendix B**

***Attachments retained on file, but which have been deleted from printing in the Final Report.***

1. Prescott Municipal Airport Noise Complaint Form
2. Scottsdale Noise Complaint Record
3. Scottsdale Noise Abatement Q&A
4. Pinion Oaks Avigation Easement
5. Arizona Revised Statutes 28-8485 titled Airport influence Areas; notice
6. Flagstaff, Arizona Airport Influence Area Ordinance
7. Flagstaff, Arizona; Airport Avigation Easement
8. Carlsbad, California; McClellan-Palomar Airport Part 150 Noise study information

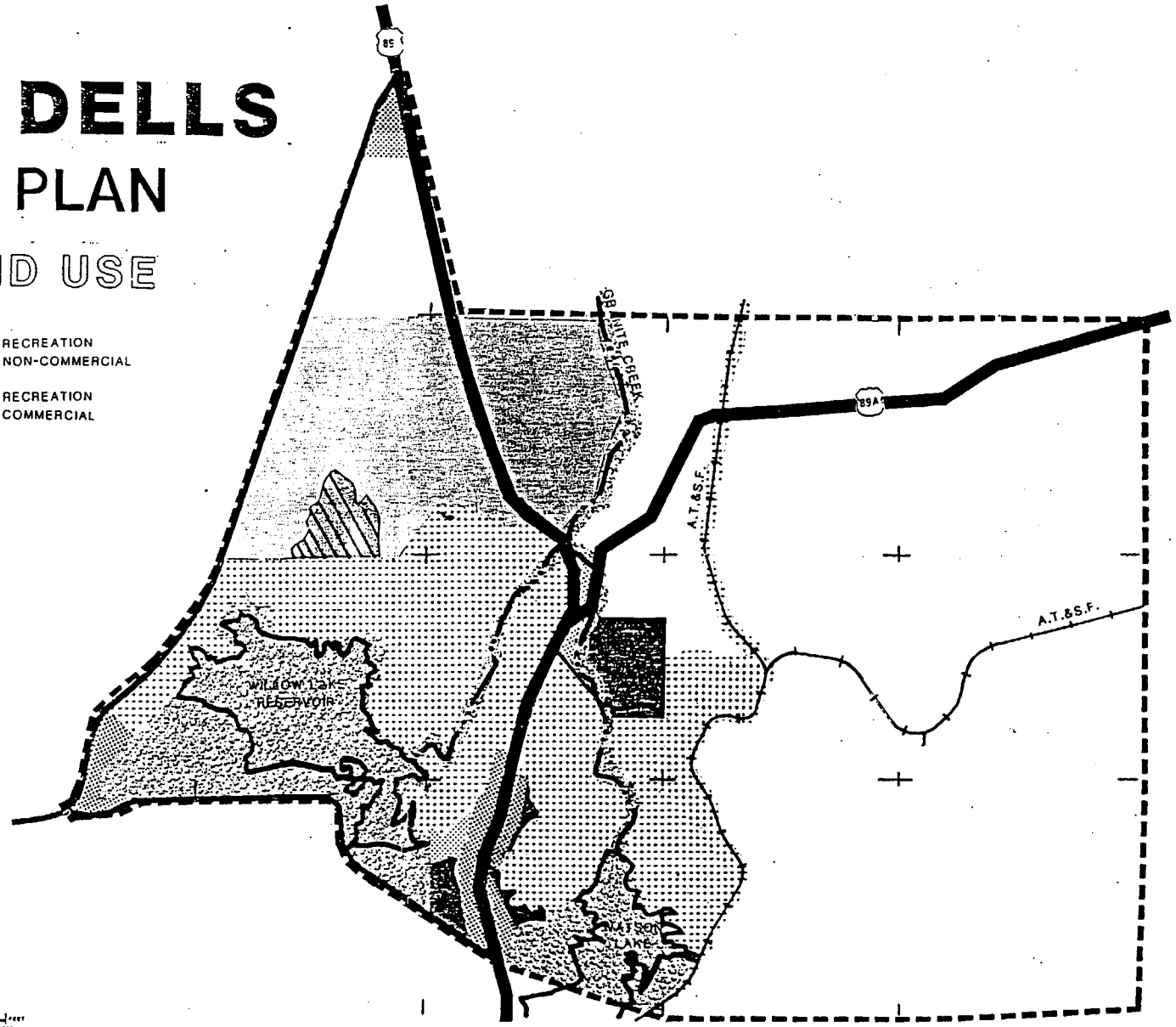
# APPENDIX C

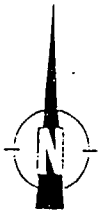
# GRANITE DELLS
## COMMUNITY PLAN
### PROPOSED LAND USE

**RESIDENTIAL:**
- MEDIUM DENSITY
- LOW DENSITY
- VERY LOW DENSITY

**NON-RESIDENTIAL:**
- LIGHT COMMERCIAL
- LOW IMPACT COMMERCIAL
- AGRICULTURAL
- RECREATION NON-COMMERCIAL
- RECREATION COMMERCIAL

**ROADS:**
BROKEN LINES REFLECT UNPAVED/UNIMPROVED STATUS OF CORRIDORS
- ARTERIAL (MIN. 100' R.O.W.)
- COLLECTOR (MIN. 50' R.O.W.)
- COLLECTOR (SUBSTANDARD)
- RESIDENTIAL
- PRIVATE ACCESS (NO R.O.W.)



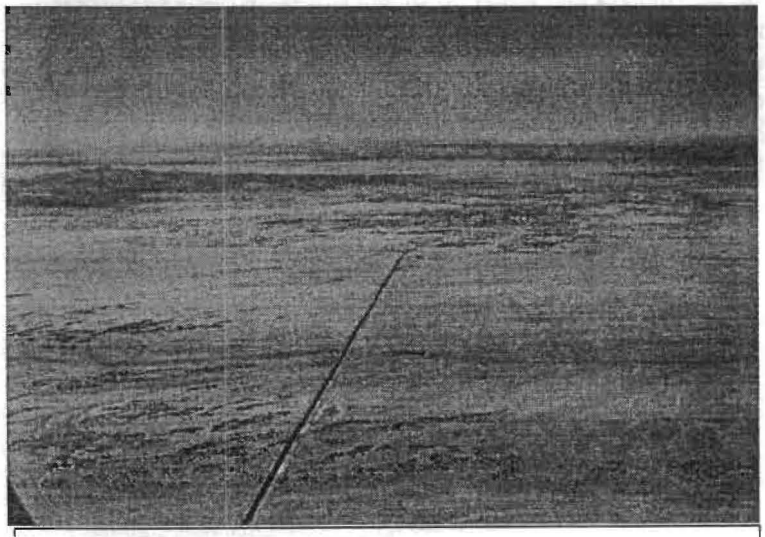

PLAN BDRY.

Bottleneck Wash drains from SW to NE across Deep Well Ranch toward the airport where it meets with Granite Creek. An unnamed wash runs northward from existing SR 89A toward Coyote Springs north of Prescott Valley; the headwaters of the Agua Fria River originate from the north side of Glassford Hill. These stream channels will influence developability and any future road alignments. The city-owned reservoir Willow Lake, the few water features at the Antelope Hills Golf Course, and several stock ponds are the only known bodies of standing water in the plan area.

**SOILS and VEGETATION**

The Lonti soil series dominates the area and is characterized by slow permeability with clayey and gravelly soils that have moderate-to-high shrink swell potential. Lynx soils define the drainageways with sand specified within Granite Creek. Lynx soils are subject to flooding, have moderately slow permeability, are fair for topsoil, and have a high plasticity index. Rock lands with severe bedrock and shallow soils lie in the south.

The vegetation cover is chaparral with stands of pinon and juniper trees located on the isolated uplands. Riparian vegetation extends within Granite Creek north to about the City's recharge ponds, beyond which it is a dry wash. All of these environments support mule deer and havalina. Grassland, which is prime pronghorn antelope habitat, dominates the lower and flatter sections.



Deep Well Ranch looking north along SR 89 toward Chino Valley. Note transition from chaparral to grassland vegetation. Bottleneck Wash runs left to right mid photo.

**WILDLIFE HABITAT**

The Arizona Game and Fish Dept. was requested for input on wildlife matters within the ASAP boundaries; however, the comments received do not necessarily reflect the policies of the City of Prescott (Appendix G). Noted are the prime antelope range and the lake/riparian habitats that cover ASAP. AZ Game and Fish has identified selected plants and animals that are classified as sensitive (S) including the American redstart (WC, S), the Belted kingfisher (WC, S), Mexican garter snake (WC, S), the Arizona toad (S), the Maricopa tiger beetle (S), and the Arizona phlox (S). In addition, the first three species are also classified as Wildlife of Special Concern (WC).

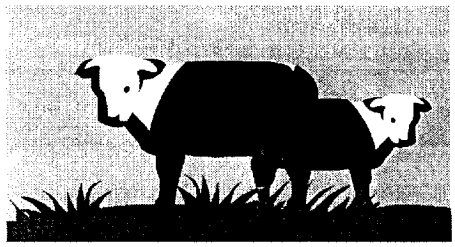
The Department points out that new roads and developments will further fragment the existing pronghorn populations (estimated at about 370 head within ASAP), and will create additional barriers to wildlife moving between Glassford Hill and range lands to the north. Local Game and Fish experts noted that the planned Glassford Hill Rd. extension, in addition to the pending Airport Connector, will strand and isolate populations now able to move among the Tri-cities. The use of underpasses where Glassford Hill extension and other new roads cross drainages, is also suggested to help antelope and other wildlife negotiate major roadways more safely. A design comfortable to antelope, who are generally more skittish than deer or livestock, is also described in Appendix G.

The airport connector will have 2 cattle underpasses located east of Side Road. Each are pre-designed as double vaulted 12'x12' culvert boxes, which will be lighted. One is 280 feet long, the other 460 feet long – both probably too narrow and too long to draw antelope. The fencing will be standard wildlife fence.

Although conceptual only, the antelope "preserve" recently proposed by local open space advocates could theoretically extend through a middle portion of the ASAP area that ties Glassford Hill to grasslands north of ASAP. Including and paralleling Granite Creek wash, such an open space band could provide regional drainage, wildlife habitat, a movement corridor, and an airport buffer. Game and Fish wildlife managers explain that mule deer (estimated at about 125 head), javalina, and various predators will travel along the washes, whereas the pronghorn antelope will generally resist enclosed areas. Antelope prefer the high flats or ridgelines from which they can see any approaching predators

Watering holes are a common need for all types of wildlife. Wildlife experts recommend that efforts be taken to maintain year-round water in some of the existing ponds, and that a perennial pond be created and supplied by the CVID effluent ditch water. Any areas isolated by roads should also have a water source for wildlife or the animals will be pressed to move, in turn causing animal deaths and traffic accidents.

Where new developments and roads occur, the Department recommends specific fencing designs friendly to antelope and other wild game. To educate the community, specifications could be added to building permits for fences and road signs could be erected warning of antelope. Roadside fence placement is recommended to allow antelope staging areas for safer road crossings. Reportedly, pronghorn will more readily cross roads where (or when) traffic levels are low and where fencing is safer and does not contribute to injury or predation. Any wildlife corridors should obviously be contiguous, contain adequate forage, and have as few barriers as possible. Fencing along wildlife corridors should be standard game fence; however more restrictive fencing should be used to contain domestic dogs.



# 4. PLAN DISCUSSION

## A. *IMMEDIATE AIRPORT PROTECTION*

### *A.1 Establish an Airport Influence Area in accordance with Arizona statute. Identify and apply compatible land uses within that area which will allow the best opportunity for the continued development and operation of Prescott Municipal (Ernest A. Love) airport.*

Establishing an official airport influence area is the primary and most effective method of airport protection. Based on professional experience and research, the airport manger recommends an airport influence area that extends generally 3-5 miles from the runways' intersection based on the length and activity level of each of the 4 runways. This is well within the FAA practice of monitoring all flights within a 5-mile radius of an airport for safety reasons. Once adopted by Prescott City Council and recorded with the County Recorder, the airport influence area would provide, through the title report, notice of overflights and aircraft noise to land buyers.

The second option available for ensuring airport protection is the use of avigation easements, which are a more rigorous form of notice that run with the dedicating property, and typically grant "Navigable Airspace" above the dedicating property. Gaining avigation easements within the recommended airport influence area will only occur if required by the applicable ASAP jurisdiction. The responsibility for protecting the airport through avigation easements and from inappropriate land uses must be shared by all applicable jurisdictions for the Plan to be effective. There is a strong sense of multi-jurisdictional support for the airport and what it provides the region. To strengthen implementation of ASAP policies, Yavapai County and Town of Prescott Valley and City of Prescott should adopt the Plan as their own. Applicable jurisdictions should be provided adequate comment opportunity on proposed General Plan amendments, annexation, preliminary and final plats, rezonings, and special or conditional uses proposed within the bounds of ASAP.

Discussions among local government officials reveal a genuine interest for increasing regional cooperation on land use and development within ASAP. This support may include regional cost and revenue sharing so that mutual benefits and responsibilities can result. Such a mechanism would be groundbreaking for the region, and would reduce divisive competition between municipalities for new commercial development. What form this may take will require an open dialog and much research. Sales tax revenue sharing between municipalities tied to level of related public infrastructure expenditures may be one approach. What role, if any, the Town of Chino Valley might have given its recent agreement not to annex into the ASAP area would need to be fleshed out. This proposal could be crafted to raise needed capital improvement dollars for the planned improvements to the airport itself.

Controlling the type and placement of specific land uses in proximity to the airport is an essential component of long-term protection of the airport. Compatible land uses close to the airport include industrial, commercial, ranching and open space. Concentrations of residential development near the airport are not desirable, although low density residential may be reasonable outside the approach and departure corridors where air traffic patterns are light. The following discussion addresses land-use issues within ASAP.

## B. LAND USE

### *B.1 Provide adequate commercial use opportunities that serve the needs of area neighborhoods, industrial operations and their employees, and the commuting public.*

Increasing residential development creates the need for new commercial development to serve a growing community. Employment centers also need commercial services convenient for employees. Therefore mixing uses by allowing neighborhood-scale retail and services near residential areas and employment centers increases convenience and reduces vehicular trips. Larger commercial centers that may include gas stations are appropriate where good access and visibility are available, such as at intersections along the Airport Connector including those at Glassford Hill Road, at Side Road, and at SR 89.

The SW quadrant of the Side Road/Airport Connector intersection might also support a mix of retail and recreational use or employment center. This area is currently zoned RA9 and partially developed as metes and bounds residential; however its close proximity to the Crosswind runway makes the residential zoning and use undesirable. Commercial development would also be appropriate at the future intersections of Glassford Hill Road and proposed Side Road extension and proposed Great Western, as well as at future intersections of other arterial streets.

This plan area, with its unique consideration for airport protection and regional industrial opportunities, promotes non-residential uses. Due to the large size and relative blank slate, the commercial designations are intentionally broad. Offices, professional services, mini-storage, hotels and other moderately intensive businesses should be used to transition single-family neighborhoods into more intensive commercial districts where multi-family residential is discouraged due to air traffic patterns. One should refer to Appendix A when there is a question.

### *B.2 Support commercial enterprises that capitalize on the scenic values of the area in ways that are appropriately sensitive to the environment.*

An opportunity exists to feature ASAP's beautiful granite rock landforms, lakes and views into a commercial area that incorporates outdoor recreation. Campgrounds, lodges, hotels and RV parks are among the businesses possible. The conceived multi-purpose center that includes an equestrian element could help set the character and land use patterns in the southern portion of ASAP. Clearly there are many more possibilities here than standard franchise business development. The Phippen Art Museum is an excellent example. Consideration should also be given to recruiting retail businesses that market to outdoor recreationists.

### *B.3 Support existing and future employment centers given the need for well paying jobs, and the area's suitable terrain and anticipated road system.*

Employment centers - which include business/office parks, wholesaling and warehouses, and light manufacturing are an important land use component. Moderately intensive in off-site impacts and strong on job creation, such uses provide a very good buffer between the airport's industrial uses and other, less intensive uses beyond. A recent needs survey taken from airport area employers indicates that for several their expansion factors include proximity to employees' homes, land cost, access to highways, infrastructure, and proximity to the airport. Nearly half of the 22 respondents indicated

regular use of airfreight services, and the same number indicated frequent-to-daily use of air passenger service.

Areas appropriate for employment uses include those between Willow Creek Road and SR 89 north of the Pioneer Parkway, and much of the area south of the Airport connector Road near Side Road. Expanding some of the employment (industrial) area around the airport is also advisable – such as on the SE side of the airport to capitalize on the existing Melville Rd./Larry Caldwell Drive access to the Airport Connector interchange.

In short, we as a region need to reserve measurable areas for employment and industrial use within ASAP - given its central location to the growing Tri-cities region, its proximity to the airport and expanding surface road infrastructure, and its flat buildable land. Identifying areas for long-term job creation is important, but doing so does not inherently change land use today. It will take many years for ASAP to build out, and then only if the landowners desire to quit ranching.

### *B.4 Plan to meet the region-wide need for sites that can house heavy industrial uses.*

Conversations have been ongoing among Tri-city staffs and others to try and identify sites suitable for asphalt and concrete batch plants, which are an unpleasant though necessary use. One site identified lies within ASAP at the northern end of the Prescott city limits. The vacant, City of Prescott-owned site includes about 24 acres zoned IBD, and 50 acres zoned IA which allows batch plants by special use permit. The site is very isolated from development yet is reasonably close to SR 89. Some view this area as well situated with regard to prevailing winds, separation and visibility from proposed residential areas, access to aggregate sources, and proximity to infrastructure. Nearby property owners do not wish a batch plant to locate here. Area neighbors and some airport advocates do not wish an asphalt batch near the airport at all. If no firm position can be reached via ASAP, perhaps such decisions should remain with elected officials on a case-by-case basis. With a batch plant supported or not, coupling that site with an expanded industrial area southwestward to SR 89 would allow private property owners a similar level of development opportunity and support the airport perimeter truck route connecting SR 89 to Melville/Wilkinson.

### *B.5 Support residential development to the degree compatible with air traffic, terrain, and the planned road system.*

Lands well outside the 60 LdN noise contour are subject to nuisance noise and overflights. For this reason, medium-to-high residential densities are a concern within the inner influence area because of the strong likelihood of noise complaints that can be detrimental to operations and expansion of the airport. Any residences within the mapped 1-mile wide approach and departure corridors are a concern for the same reason.

The predominant county zoning allows relatively low density throughout ASAP at either 1.6 acre or 2 acre minimum residential lot size. This is true for most of the privately owned ranches and the checkerboard State Land sections. Developing in this pattern is problematic because subdivisions in the Prescott AMA must prove a 100-year assured water supply, even for individual wells. Splitting into 36-acre parcels or into 5-or-fewer metes and bounds parcels on exempt wells is possible, however. This scenario is not desirable for several reasons – 1) it would create sprawl and preclude other desirable uses near the airport, 2) it would proliferate individual wells and septic systems, 3) it would create more roads which waste land, 4) it would not approach highest and best use of the land, and 5) it would further fragment antelope and other wildlife movement areas.

A more rational approach is to transfer the allowed densities from the approach/departure corridors, the Granite Creek wash, and from areas targeted for commercial or employment uses to create residential clusters located in or near the outer influence area. The sending areas would provide desired open space for airport buffering, regional drainage, passive recreation, and wildlife habitat and movement corridors, while the receiving areas would gain densities sufficient to warrant municipal water and sewer service and create real neighborhoods. In this scenario densities could triple or quadruple for the receiving areas. Ideally the developers of the private land would acquire the related State Land sections so that a comprehensive master plan can result.

Another method might be to simply rezone as open space those areas so targeted (perhaps with landowners also dedicating conservation easements for tax benefits), and appropriately rezone other areas targeted for medium-to-high density residential development. These actions would be part of the property owner application for development entitlements, including water allocation. Low-density residential development might be more appropriate for the outer edges of the inner influence area or where routine air traffic patterns are minimal.

For discussion purposes, low-density might be 1-2 acre parcels, medium-density 2-6 dwelling units (DUs) per acre, and high-density 7 to 20 DUs per acre allowing apartments and manufactured home parks. Higher density communities are important to allow at appropriate locations – near access and services, and away from heavy air traffic. Mixed-use villages should be located at major nodes such as at Great Western and the Airport Connector, and at Great Western and Glassford Hill extension. Well-designed village or town centers incorporate light business, higher density residential, civic and recreational facilities that offer cohesive and walkable neighborhoods. Because densities are higher, housing costs are somewhat lower and therefore should be more attainable by median and lower middle income households. ASAP affords an opportunity to bring together good jobs, reasonable housing costs, short commute times.

Densities necessary to build neighborhoods and a balanced community need central water and sewer, which generally means annexation into a servicing municipality. Significant negotiations between property owners and any annexing municipality would be needed to package water and other infrastructure, zoning entitlements, open space, and other related agreements. Planning for these rural properties is not intended to prompt development or hasten annexation, but rather to identify a preferred end result once market forces, infrastructure availability, and other factors are ready. The land use plan map that follows shows what major property owners wish for their lands filtered through the goals and objectives of the ASAP.

## C. *OPEN SPACE & WILDLIFE HABITAT*

### *C.1 Support historical ranching activities to the degree practical, given its compatibility with airport activity and influence on regional character.*

The Tri-city area is fortunate to have large expanses of ranchland that contribute to the rural character overall. This land use plan, in and of itself, is not intended to hasten development of the surrounding ranch land. However, coordinating with ranchers on their development plans (as they may arise) is one way of helping the ranching families. By communicating visions and ideas now, there should become a shared understanding of the long-term goals and use of the land. Some may wish to develop and others may choose to continue ranching - facilitating both for the region's benefit is the ideal. Conservation easements may be appropriate to consider for any who wish to release some land for development yet retain some lands for open space and cattle grazing.

### *C.2 Integrate wildlife habitat considerations into ASAP to the fullest extent practical.*

The AZ Department of Game and Fish has provided a good deal of information and advice for this plan. Chaparral is dominant in the southwestern half of ASAP and appeals to mule deer and javalina, whereas Grassland is dominant in the northeastern half of the plan area and appeals to pronghorn. The animals will share watering holes and some movement corridors and habitat where necessary. Assuming that development is an eventuality for lands within ASAP, the primary recommendations from Game and Fish, include providing adequate, connected open spaces for movement corridors and habitat, wildlife friendly roadside fencing, watering holes, wildlife underpasses, and use of "gap" fencing to help antelope cross busy streets more safely.

Discussions regarding sand and gravel extraction indicate that the wildlife are already acclimated to these operations within the Granite Creek Wash, and that it is better to have a few large borrow pits than several in the wash and on the hillsides. No new water features are proposed at this time. Any future significant water features proposed with development would need to be assessed based on size and proximity to the airport. To date, there are no reported contacts between birds and aircraft using the municipal airport.

## *D. CULTURAL RESOURCES*

### *D.1 Continue surveys of cultural resources, as development occurs, to enhance understanding and appreciation of historic and prehistoric archeological resources.*

Conversations with both City of Prescott and Yavapai County Cultural Resource Specialists reveal a generally moderate likelihood of historic and prehistoric relics within ASAP. They advise a low likelihood on the flats and a moderate likelihood on the ridges. There have been significant finds in the southern portions of ASAP revealed by the cultural surveys required as part of road building. This practice should also extend to city- or county-approved private developments of any real magnitude.

## *E. WATER and SEWER*

### *E.1 Utilize municipal water and sewer service to the extent appropriate to influence desired land uses and their location.*

Presently the only central water service provider for future residential subdivisions within ASAP is City of Prescott, although this could change if Town of Prescott Valley acquires an alternate water source too. The allocation of alternate water supplies sufficient to support significant new residential development is likely given municipal efforts to acquire additional alternate sources and to expand effluent recharge efforts. Residential densities, phasing, other land uses, golf courses, zoning and design elements such as open space and trails will be matters of negotiation once development proposals are received. This plan begins to set a framework for some of these questions.

There is estimated to be a 0.8 MGD capacity remaining at the Prescott Airport Wastewater Treatment Plant (WWTP) once Pinon Oaks and Prescott Lakes complete build out. This surplus sewer treatment capacity could support approximately 3,200 homes. Prescott Valley's WWTP has an existing capacity of 2.5 MGD, most of which will be consumed by Universal Homes; however, expansion to 4.5 MGD is

anticipated mid- 2001. Ultimately, residential development within ASAP should be on central water and sewer so the region's water resources can be better managed. The maintenance cost savings to Prescott and Prescott Valley for cooperating on wastewater treatment service may provide further impetus for regional cost-revenue sharing.

## *F. CIRCULATION*

### *F.1 Create a circulation plan element that identifies existing, planned, and proposed arterial and collector streets needed to serve the plan area and the region.*

The Airport Connector is now under construction and when completed will provide the region's first freeway, tying Pioneer Parkway to SR 89A for a new east-west beltway. The four interchanges planned will link to intersecting streets, of which the SR 89 and the Glassford Hill Rd. intersections will be primary for commuting traffic. At least one collector-level street would be warranted that ties Glassford Hill Rd. extension to SR 89, perhaps best located south of Black Hill about 1.5 miles north of the airport's main runway. This alignment would help anchor future commercial nodes and create a separation of 2 miles from the intersection of Outer Loop Rd and SR 89 at the north. Due to property owner preference, it is probably best to consider this alignment when (if) Deep Well indicates an interest in developing. Any new east-west collector street will impact wildlife movement corridors making game fencing imperative and gap fencing advisable where roads cross any reserved movement areas.

An east-west connector street tying Williamson Valley Road (WVR) to SR 89 is tougher to imagine given the existing residential development that lines WVR. Possible options lie outside of the ASAP study area and the scope of this plan, although a continuation of the alignment south of Black Hill described above may be feasible in the very long term. Any future development of significant scale on this west side will certainly need to assess connections to Pioneer Parkway and Outer Loop Road as well as to SR 89.

Connecting Ruger Road to Melville Road to create a circumfrential road around the airport is planned as part of the Prescott Airport's 2020 Master Plan. Industrial users indicate interest in this occurring sooner than the Phase 3 period planned. Accumulation of funds to build the connection influences the timing. Extending Ruger Road to the city's vacant IA tract by an eventual industrial user could provide a major segment of the connection. Another proposal is to create a new road that runs from SR 89 (north of Ruger Road's intersection), and encircles the main runway's clear zone to intersect with Melville Road on the east. The new road alignment would open up additional land for industrial/employment and help separate future industrial traffic from residential. Only one road need extend northeastward to the City's IA tract, however.

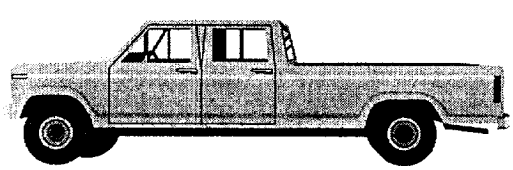
Some in the biking community have suggested that old Hwy 89A remain open to maintain a desirable paved link between Prescott and Prescott Valley. This may be an option for the private property owners to consider as they look into overall master planning of the ranch and the need for access and street frontage. A possible realignment of old 89A to create a new bridge and intersection at SR89 may be indicated should the conceived multi-purpose center be constructed on the Polk property.

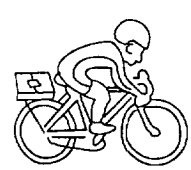
### *F.2 Support bike and pedestrian routes that further recreational and commuter pursuits.*

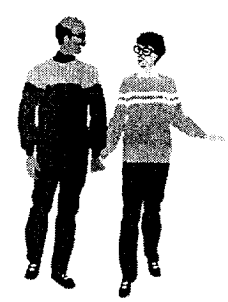
This and other Prescott specific area plans promote alternative modes of transportation as responsible and sustainable functions of community planning. As a general rule when new collector or arterial streets are planned and built, bike lanes and sidewalks (or separated multi-use trails) should be provided. Controlled access highways such as Glassford Hill Road extension should creatively include bike lanes and walkways, perhaps adjacent to right-of-way, since they are not part of the ADOT standard design. The 8-ft. wide outer shoulders and 12-ft. wide separated trail designed into Pioneer Parkway, will unfortunately not be extended as part of the Airport Connector link to SR 89A – due both to the freeway design of the Airport Connector and to limited funds. Facilitating an alternative east-west link is therefore desired. One response is to gain a trail alignment north of and parallel to the airport connector ROW, allowing bicyclists and pedestrians a safe route from Pioneer Parkway to the Peavine Trail. Another desirable east-west link is the former railroad bed that connects the Peavine Trail near Glassford Hill Road running eastward to Prescott Valley. The Town is pursuing grants for this acquisition. An improved trailhead is also desired at the existing informal parking area at Side Road and old 89A.

The next segment of the Peavine Trail north of SR 89A is presently under acquisition negotiations and will require some adjustments to the original railroad bed alignment. Safety is primary for trail users in this increasingly busy area. A trail adjustment eastward will be necessary to accommodate extensions of the main and parallel runways, and is also to skirt the heavy aggregate extraction within Granite Creek wash. The trail can be included in the design of the airport circumferential road or even be realigned to the east side of the wash if plans and mining operations can ensure a safe and pleasant trail alignment. Also until the grade-separated Side Road interchange is constructed, the trail will use Airport Connector right-of-way to cross under the connector at Granite Creek and then regain the original north-south trail. The Side Road overpass will replace this detour once construction funds are budgeted. Last where Ruger Road would be extended northeastward, the trail might best go under the road through a culvert at the CVID ditch.

The condition of Side Road itself has been a problem for the dozen or so homes that use this private, narrow unpaved access easement. Because of the street conditions, sanitation trucks are not able to service the individual houses, which have increased in number through metes and bounds land splitting. These homes also rely on individual well and septic due to lack of nearby water and sewer mains. The RA 9 area is less than 1 mile from the crosswind runway, and is of primary concern to the Airport Advisory Board as a residential use. Options include 1) do nothing for this area of substandard infrastructure, 2) work with property owners to create an improvement district for street/water/sewer improvements, or 3) consider a partnership between the City and the property owners whereby the city funds all or most of the improvements in exchange for (re)development that is nonresidential. If the 3rd option is pursued, it should extend to other vacant land west of Side Road known as Country Dells. The Side Road constructed to city standards within a 50-ft. wide public right-of-way (ROW) could be a combination of the existing easement, existing County ROW, and a portion of Peavine Trail 100- ft. wide ROW. Side Road would need to be improved northward to its planned intersection with the Airport Connector.







# APPENDIX D

## Aviation Demand Forecasts

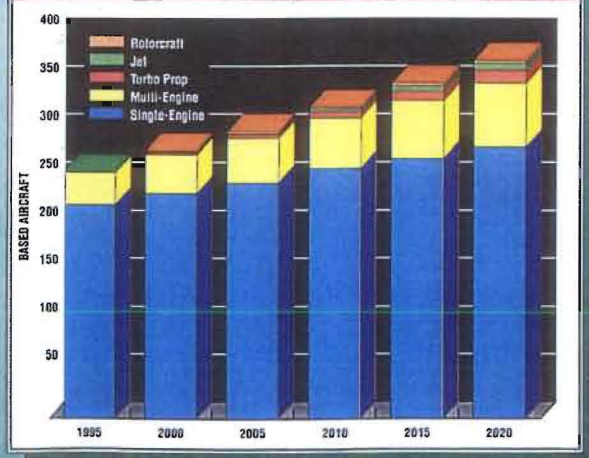
The preparation of the Prescott Municipal Airport Master Plan involved a comprehensive evaluation of the anticipated aviation needs for the region. Forecasts of future airline enplanements (aircraft boardings), aircraft operations (takeoffs and landings), and the number of based aircraft were used to assess the capability of the airport to accommodate future aviation demand and establish future facility needs.

Regional population and economic growth are anticipated to contribute to a gradual increase in all segments of aviation at Prescott Municipal Airport. Based aircraft and general aviation aircraft operations growth are expected to be driven mostly by greater use of the airport by business and corporate users. Training operations conducted by Embry Riddle Aeronautical University are expected to continue to comprise the majority of all aircraft operations at the airport.

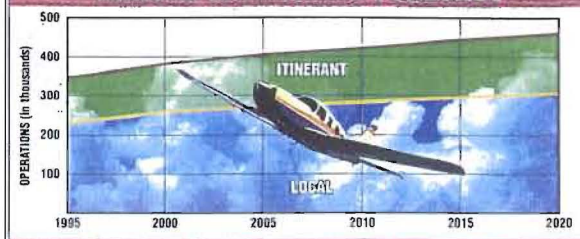
**AVIATION FORECAST SUMMARY**

| | 1995 | 2000 | 2005 | 2010 | 2015 | 2020 |
|---|---|---|---|---|---|---|
| Based Aircraft | 258 | 280 | 300 | 325 | 350 | 374 |
| Annual Operations | | | | | | |
| Itinerant Operations | 117,378 | 123,202 | 132,854 | 139,317 | 147,710 | 154,296 |
| Local Operations | 229,306 | 258,640 | 272,240 | 282,440 | 296,040 | 305,560 |
| Total Annual Operations | 346,684 | 381,842 | 405,094 | 421,757 | 443,750 | 459,856 |
| Annual Passenger Enplanements | 10,256 | 15,000 | 22,000 | 27,000 | 33,000 | 40,000 |

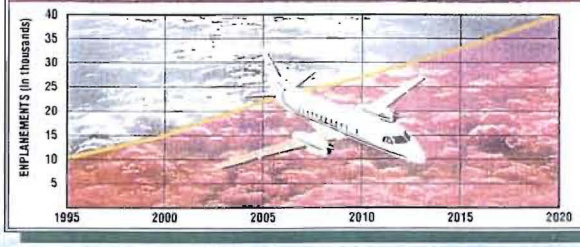
**BASED AIRCRAFT FORECAST**




**ANNUAL OPERATIONS FORECAST**




**ANNUAL ENPLANEMENTS FORECAST**




## Plan Implementation

The development and use of Prescott Municipal Airport has been a significant contributor to the economic development of the City of Prescott. The master plan has examined how the community can further capitalize on the unique opportunities offered by this important community asset. The plan provides a blueprint for development to meet the challenges of the future, and ensure that the airport remains a viable, safe, and productive facility. The master plan estimates the total cost to implement the recommended airport improvement plan over the next twenty 20-years at $36.7 million; of which $22.7 million is eligible for federal and state funding assistance. This plan is not intended to happen overnight. Rather it will require community-wide dedication, coordination, and cooperation over many years. The result will be an airport that continues to not only be an economic asset, but a source of community pride.

**For further information, please contact:**

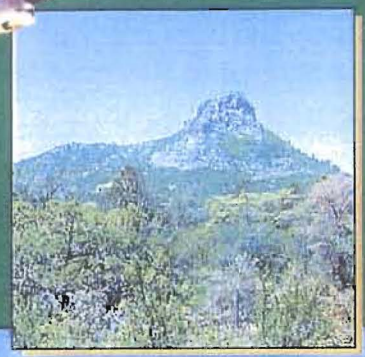

Airport Manager
Ernest A. Love Field
6346 Crystal Lane
Prescott, AZ 86301
(520) 445-7860


ERNEST A. LOVE FIELD

Coffman Associates

# ERNEST A. LOVE FIELD

Prescott, Arizona



## AIRPORT MASTER PLAN

**Executive Summary**

## Airport Master Plan Process

The Prescott Municipal Airport, Ernest A. Love Field, Airport Master Plan was undertaken by the City of Prescott to identify potential airport facility needs over the next twenty years and outline a direction for the airport's future development. The initiation of the master plan was in response to the ever-changing needs of the air transportation industry and the need to integrate the airport into the overall economic development of the City of Prescott. The preparation of this master plan is evidence that the City of Prescott recognizes the importance of the airport in community development and the associated challenges inherent in providing for future aviation needs.

An important part of the planning process was the direct involvement of a Planning Advisory Committee consisting of airport users, local and regional officials, and private citizens. The Planning Advisory Committee met four times during the study to review findings and recommendations and provide input. The information was also made available to the general public through two public information workshops.

## Background

Prescott Municipal Airport is owned and operated by the City of Prescott. An Airport Advisory Commission, made-up of local residents, provides guidance and direction to the City Council in the development and operation of the airport.

A full-range of commercial airline and general aviation services are available at Prescott Municipal Airport. The City provides aircraft parking and storage facilities, an airline terminal, commercial hangars, and fuel services at the airport. Airport tenants include Embry Riddle Aeronautical University, Federal Aviation Administration Flight Service Station, U.S. Forest Service, and various aviation businesses providing a full-range of services from aircraft maintenance to flight training and aircraft charter. Scheduled airline service is provided by America West Express (Mesa Airlines) with daily flights to Phoenix. Priority and small package service is provided by FedEx and United Parcel Service. There are approximately 260 general aviation aircraft based at the airport.

Prescott Municipal Airport features a 7,616-foot long by 150-foot wide primary runway, 4,862-foot long by 60-foot wide parallel runway and 4,408-foot long by 75-foot wide crosswind runway. Air traffic control services at the airport are provided by the Federal Aviation Administration from an air traffic control tower located along the south side of the airport. Navigational aids to the primary runway aid aircraft operations during inclement weather conditions.

## Recommended Airport Plan

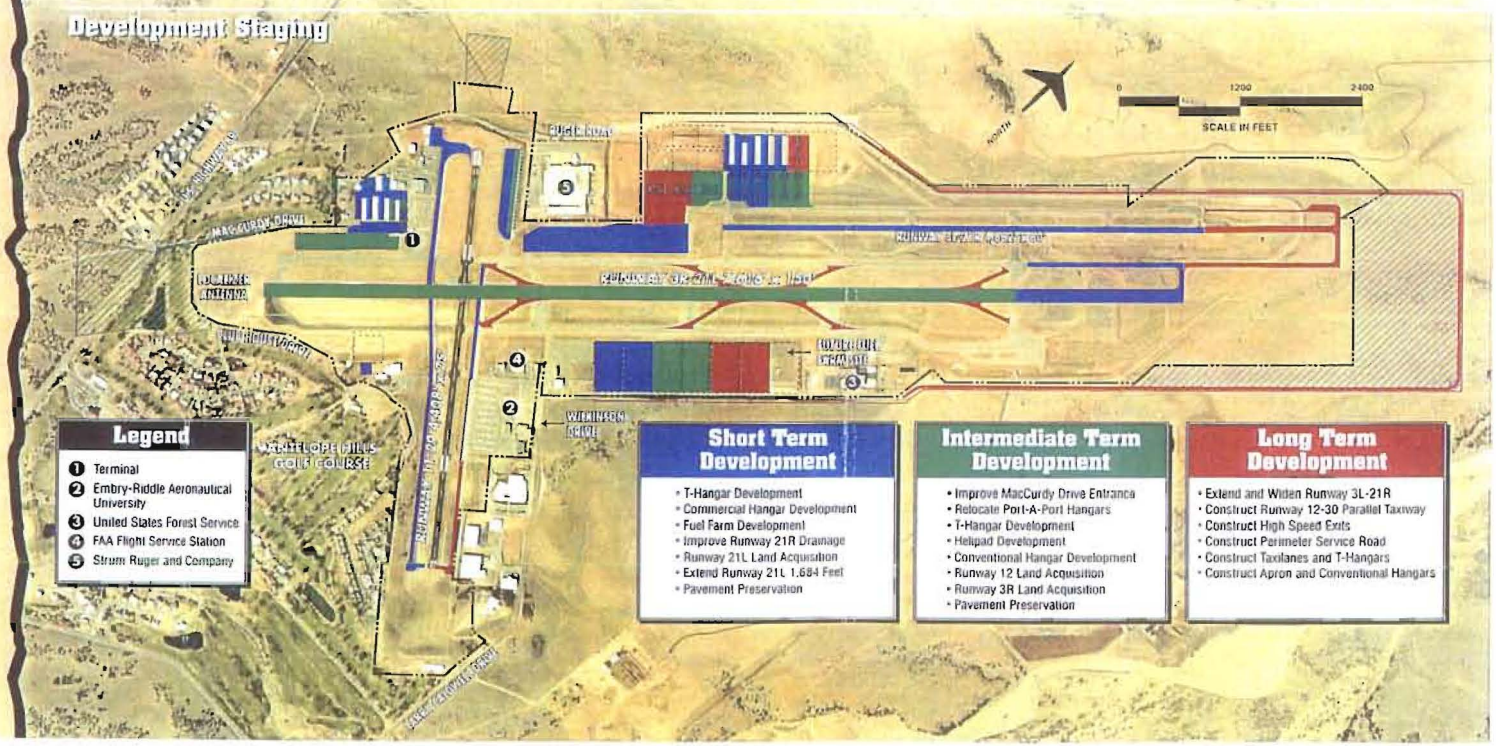
The Prescott Municipal Airport, as an integral part of the local, regional, and national air transportation system, must provide essential aviation services; however, it also plays an important role in the overall economic development of the local community. This master plan provides recommendations for the orderly development of essential airport facilities as well as guidance in increasing the economic benefit of the airport to the local community.

The master plan analysis concluded that the existing primary runway (Runway 3R-21L) length limits some aircraft operations during the warmest summer months. Therefore, the master plan has recommended a 1,684-foot extension of the runway to accommodate the takeoff requirements of aircraft currently using (or expected to use) the airport. In order to effectively serve all training aircraft, the parallel runway (Runway 3L-21R) is recommended to be widened to 75 feet and extended 1,338 feet to the north. To increase airfield capacity, the master plan recommends additional runway exit taxiways and providing a full-length parallel taxiway along the north side of Runway 12-30.

Potential growth in airline passenger traffic could eventually create the need for additional airline terminal building area. The master plan provides for the removal of the existing terminal building (built in 1947) and construction of a new terminal building in the same location to serve both scheduled airline and general aviation activities. Roadway and automobile parking improvements are also anticipated with new terminal construction.

General aviation is an important part of the airport's activity. The master plan provides for the relocation and consolidation of hangar facilities and the further development of T-hangars and larger commercial (clear-span type) hangars which can store multiple aircraft.

The master plan provides for the development of industrial/commercial facilities on airport property to enhance economic development opportunities for the city. In addition, the master plan provides areas for the development of commercial/industrial facilities with a need for airfield access.



# APPENDIX E

## REGIONAL ROADWAY DESCRIPTIONS

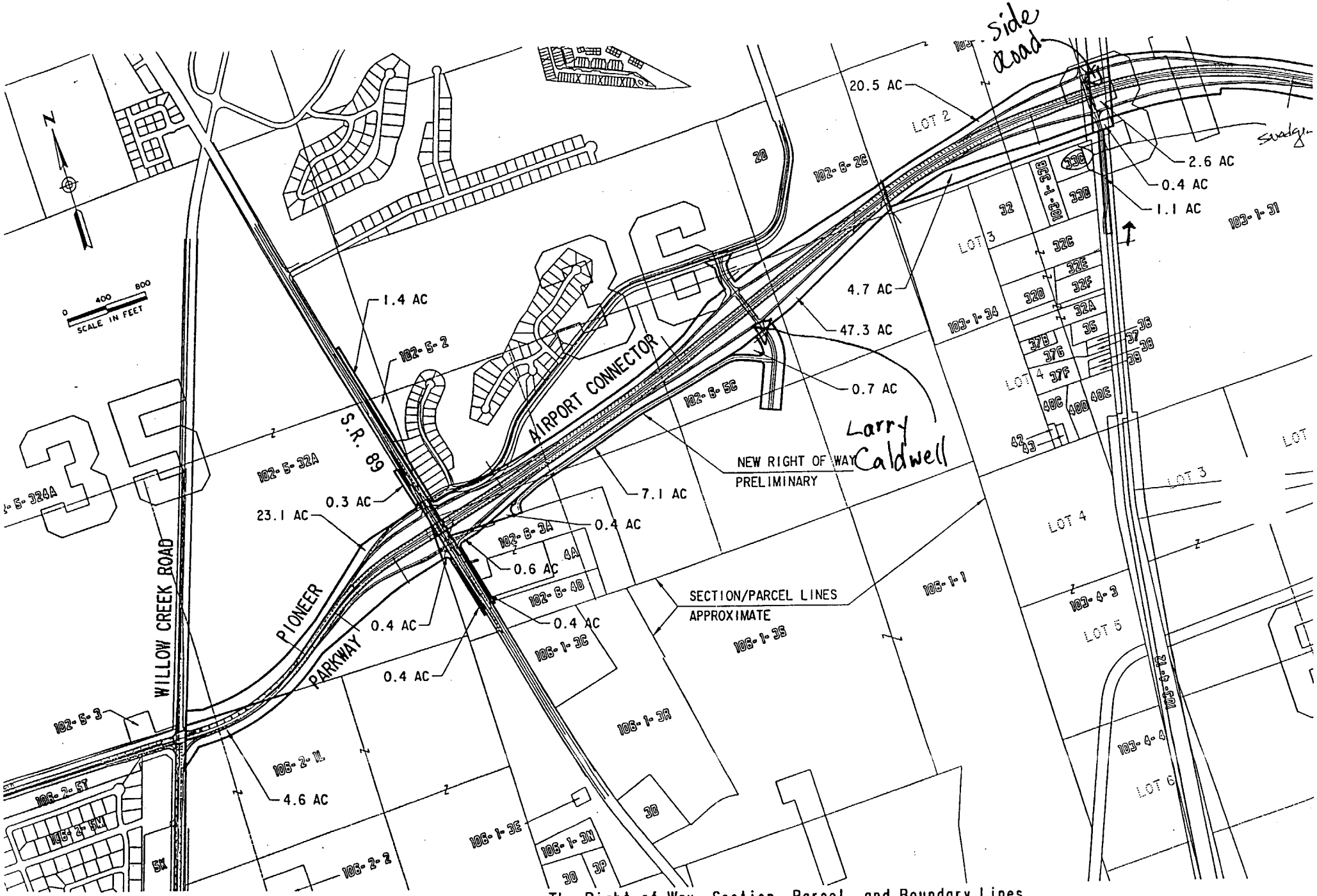
*Airport Connector (SR 89A realigned)*
The new Airport Connector will diverge from SR 89A (at T15N, R1W, Section 33), becoming a divided 4-lane State Route with controlled access at designated interchanges. There are four planned, grade-separated interchanges between State Route 89A and State Route 89. Moving from east to west these include Great Western Drive, Side Road, Larry Caldwell, and SR 89. Larry Caldwell will become a cul-de-sac at its intersection with SR 89.

The typical road section includes four 12-ft. lanes, a 38-ft. center median, 4-ft. wide inner shoulders, and 10-ft. wide outer shoulders all within a variable width ROW depending on terrain. The discontinued segment of SR 89A will be vacated to the adjoining property owners, who may wish to use it as an access street in the future. The Airport Connector is under construction and due for completion due around November 2001. No pedestrian or bicycle paths are designed into the ADOT right-of-way.

*Pioneer Parkway*
West of SR 89, the Airport Connector will taper to the newly built 4-lane, divided county road known as Pioneer Parkway. Pioneer Parkway now extends from SR 89 to Williamson Valley Road, and provides what will be the second half of a new east-west beltway. Ultimately it is possible that Pioneer Parkway will connect to Iron Springs Road, tying in with County Road 15 and points south and west, to provide an improved alternate route to the mountainous SR 89 South.

The anticipated traffic levels on this roadway necessitate limited access. There are 7 planned intersections, all but one of which will be at-grade. The first is a temporary at-grade, signalized intersection at SR 89 lined up with Larry Caldwell Drive, which will eventually be replaced with the grade-separated Airport Connector interchange. At-grade, signalized intersections on Pioneer Parkway exist at Willow Creek Road and at Williamson Valley Road. Two of the remaining (non-signalized) intersections fall on Pioneer Park property, one lying just west of the Embry Riddle Aeronautical University tract, and the second lying SE of Longview Estates (to be built at a later date). The last two planned intersections are to be located 1) in Section 8 just east of Williamson Valley Road, and 2) in Pinon Oaks subdivision west of Willow Creek Road. Both intersections will be built by developers as development occurs.

The road section includes a 20-ft center median; four 12-ft. travel lanes, 4-ft. wide inner shoulders, 8-ft. wide outer shoulders and a 12-ft. wide separated trail. The ROW width will vary. Two 10'x10' pedestrian underpasses and one 16'x14' equipment underpass are programmed between the two non-signalized Pioneer Park intersections. Revegetated cut and fill banks are also called for.

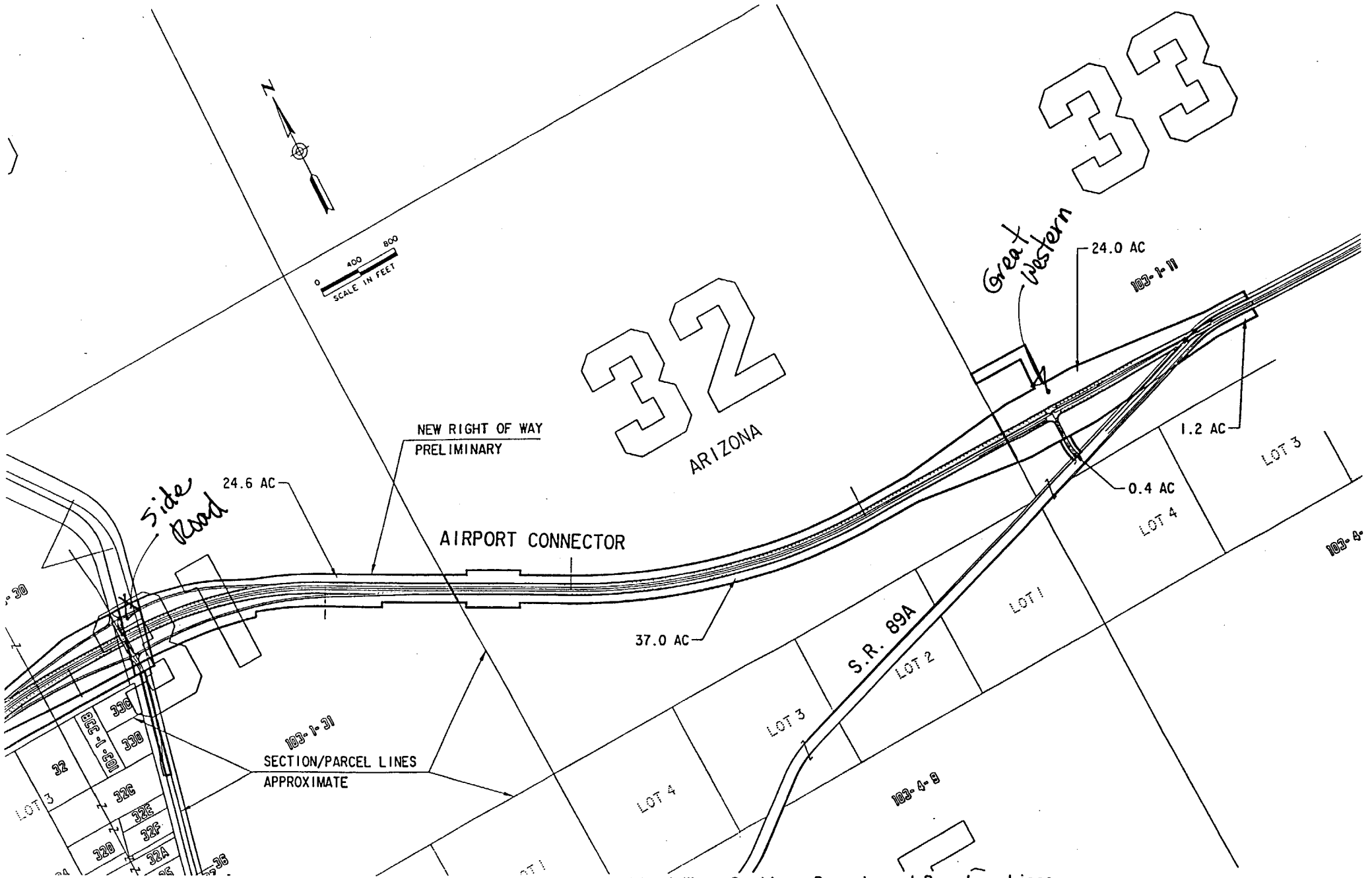



All New Right of Way is Limited Access

The Right of Way, Section, Parcel, and Boundary Lines and Right of Way Areas Shown Hereon are Approximate and Subject to Change Pending Field Surveys and Final Design Requirements.

DAVA & ASSOCIATES, INC.
PLAN. ENGINEERING SURVEYING

CLIENT: YAVAPAI COUNTY
JOB: 333APC/WCR
PRELIM R O W AREAS
DATE:
DRAWN BY:
SHEET 1 OF 7

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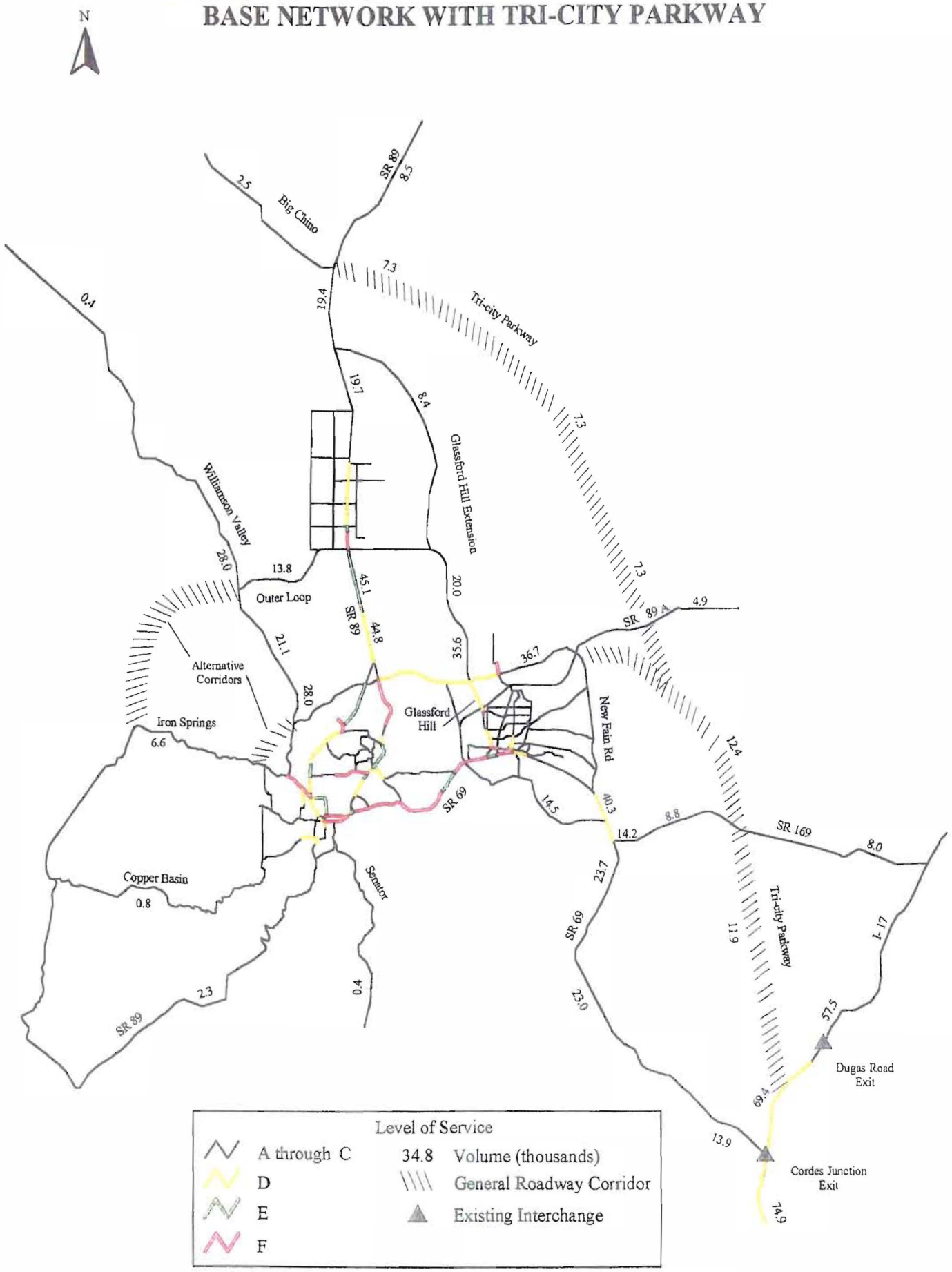
DAVA & ASSOCIATES, INC

CLIENT: YAVAPAI COUNTY
JOB: 539APC/WCK
PRELIM R O W AREAS
DATE: MAR 9
DRAWN BY: AAR
SHEET 2 OF 2

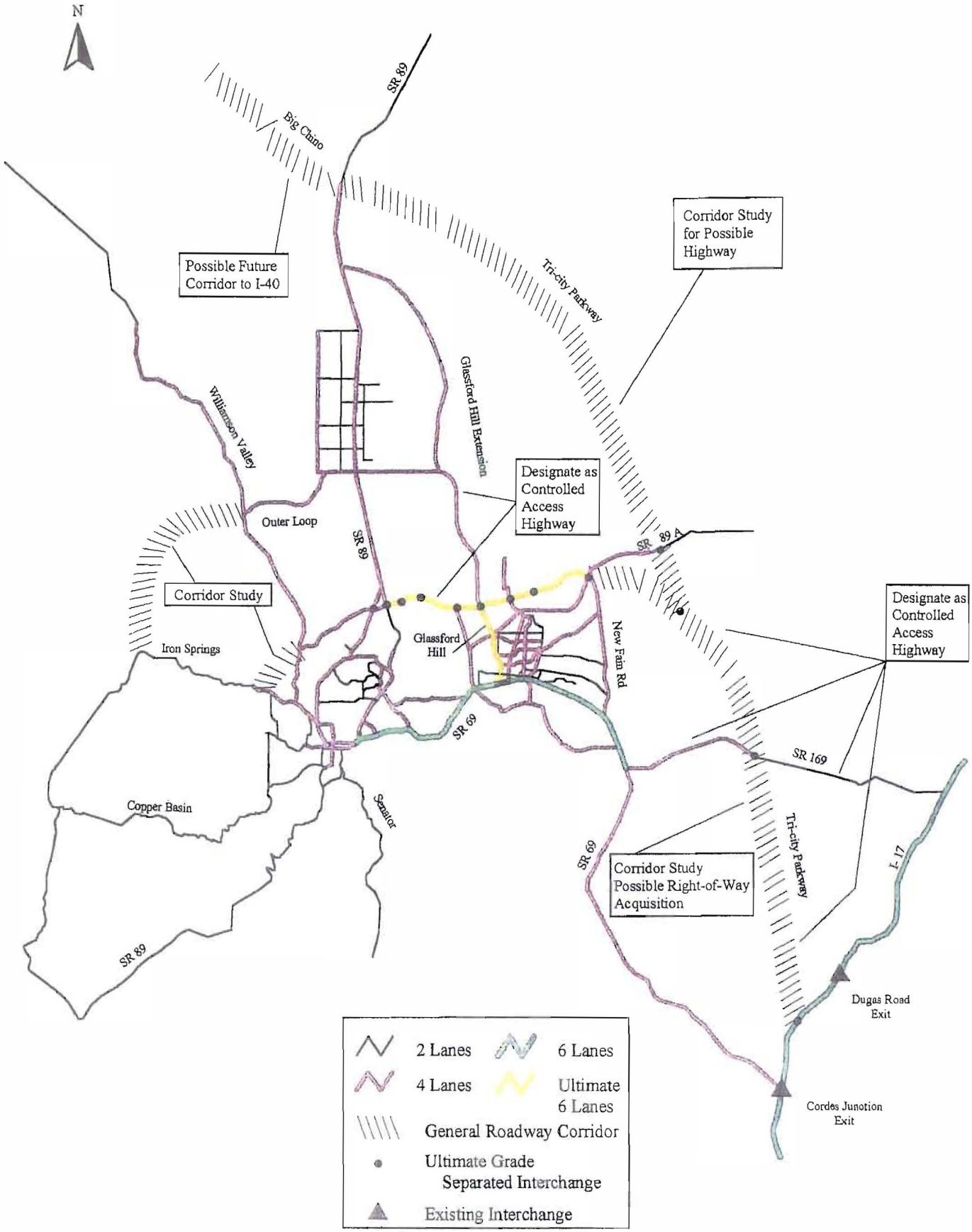
# APPENDIX F

# FIGURE 10. 2018 PEAK-HOUR LEVEL OF SERVICE BASE NETWORK WITH TRI-CITY PARKWAY



# APPENDIX G

# FIGURE 14. 2018 RECOMMENDED TRANSPORTATION PLAN



THE STATE OF ARIZONA
**GAME AND FISH DEPARTMENT**
2221 WEST GREENWAY ROAD, PHOENIX, AZ 85023-4399
(602) 942-3000 • WWW.AZGFD.COM

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JOE CARTER, SAFFORD
WILLIAM BERLAT, TUCSON
DIRECTOR
DUANE L. SHROUFE
DEPUTY DIRECTOR
STEVE K. FERRELL

**Kingman Office, 5325 N. Stockton Hill Rd., Kingman, AZ 86401-1037**

April 8, 2000

Ms. Julie M. Pindzola
Long Range Planner
City of Prescott
P.O. Box 2059
Prescott, Arizona 86302

RECEIVED
APR 12 2000
COMMUNITY DEVELOPMENT

Re: Proposed Airport Specific Area Plan

Dear Ms. Pindzola:

The Arizona Game and Fish Department (Department) has reviewed the map you provided outlining the area of interest for the proposed Airport Specific Area Plan. The map does not specify Plan actions, but lists buffer zones around the airport, zoning boundaries, future connector roads, and airport noise influence areas. The Department offers the following comments pertaining to wildlife occurrences and wildlife use within this area.

The Department's Heritage Data Management System has been accessed and current records show that the special status species listed below have been documented as occurring in the project vicinity.

| COMMON NAME | SCIENTIFIC NAME | STATUS |
|---|---|---|
| **American redstart** | *Setophaga ruticilla* | **WC, S** |
| **belted kingfisher** | *Ceryle alcyon* | **WC, S** |
| **Mexican garter snake** | *Thamnophis eques megalops* | **WC, S** |
| **Arizona toad** | *Bufo microscaphus microscaphus* | **S** |
| **Maricopa tiger beetle** | *Cincindela oregona maricopa* | **S** |
| **Arizona phlox** | *Phlox amablis* | **S** |

## STATUS DEFINITIONS

WC - **Wildlife of Special Concern in Arizona**. Species whose occurrence in Arizona is or may be in jeopardy, or with known or perceived threats or population declines, as described by the Department's listing of **Wildlife of Special Concern in Arizona** (WSCA, in prep.). Species included in WSCA are currently the same as those in **Threatened Native Wildlife in Arizona** (1988).

S - **Sensitive.** Species classified as "**sensitive**" by the Regional Forester when occurring on lands managed by the U.S.D.A. Forest Service.

Many of the species listed above are associated with riparian vegetation or lake/stream habitats. Granite Creek, Willow Lake, and Watson Lake fall within the 3 to 5 mile buffer around the airport. These three areas provide important habitat for birds, including nesting habitat. It would be beneficial to keep these areas out of most flight paths during bird breeding periods (spring). There is a heron rookery at Watson Woods that would be very susceptible to noise pollution. Airport noise pollution could also impact recreational activities and aesthetics at Willow and Watson Lakes.

The area in question also supports pronghorn populations from Game Management Units 19A and 19B. These populations are independent of each other due to multiple barriers (i.e. roads and fences). Further fragmentation of this area should be avoided at all costs, especially if there is to be any hope of providing habitat connectivity to the proposed Glassford Hill Reserve. Planned roads illustrated on the draft Airport Specific Area Plan map include the airport connector road off of Highway 89A, the Pioneer Parkway, the Glassford Hill Road and Extension, and the Santa Fe Loop. These roads all have the potential to increase antelope habitat fragmentation, as does any residential housing or commercial developments.

Department studies have demonstrated that roads and fencing can be significant barriers to pronghorn movements. Ockenfels et al. (1992, 1994, and 1997) concluded that fenced, paved roadways obstructed pronghorn movements and animals avoided areas within one kilometer of maintained roads, probably due to traffic disturbances. Habitat fragmentation caused by roads and urban developments can isolate pronghorn populations resulting in limited gene flow (inbreeding), increased mortalities from road kills, and herds completely trapped by developments without available habitat or movement corridors (e.g. the willow lake herd).

The Department discourages additional urban developments within the Airport Specific Area, and to eliminate or reduce the impacts of roads on pronghorn populations, the Department recommends several mitigation options highlighted by Ockenfels et al. (1994). First, we recommend routing new highways with fenced right-of-ways outside of pronghorn habitat, avoiding all potential conflicts. Second, we recommend right-of-way fencing modifications for those roadways which fall within antelope habitat. Our preference is to not require right-of-way fencing along roads, as research indicates pronghorn readily cross paved two-lane unfenced roadways (Ockenfels et al. 1997). If a roadway does require fencing, the Department recommends using our standard game fence specifications (enclosed), except the bottom strand of smooth wire should be approximately 18-20" from the ground so pronghorn can more easily cross the fence. Other fence modifications could include: 1) Selecting sites to install "gap" fencing. This involves moving the right-of-way fence approximately 200 yards away from the roadway, and running it parallel to the road for a distance of 200 yards. This will provide a rectangular "gap", or staging area, for pronghorn to enter the right-of-way without having to immediately face traffic and cross the road; 2) At known trails or movement corridors, combining and securing the bottom two fence strands in a length of PVC pipe to create an access point that will allow antelope to move underneath the right-of-way fence ("goat bars"); and 3)

constructing highway underpasses or overpasses. Although studies have shown that pronghorn rarely use underpasses (Ward et. al. 1980), Ockenfels et al. (1994) suggest that a short underpass with a width greater than 9.1 meters might accommodate pronghorn.

Other mitigation measures that could potentially benefit antelope populations within the Airport Specific Area include new antelope watering sources, maintaining potential travel corridors, and the availability of funds for future antelope translocations to enhance genetic diversity in isolated populations. Department personnel would be available to provide expertise and assistance in site selection for any of the mitigation measures or fencing recommendations listed above.

At the airport runway, antelope and coyotes currently get through an existing perimeter fence and onto or near the runway itself (the air traffic controller warns planes when antelope pose a hazard). Antelope-proof fencing would be appropriate here for safety reasons.

The Department appreciates the opportunity to comment on the Airport Specific Area Plan. We look forward to continued coordination and cooperation on this project in the future. If you have any questions concerning this letter, please contact me at the Kingman Regional Office, (520) 692-7700.

Sincerely,

Duane J. Aubuchon

Duane J. Aubuchon
Habitat Program Manager

cc: Rod Lucas, Region III Supervisor
Eric Gardner, East Sector Field Supervisor
Tom Bagley, Wildlife Manager, Cottonwood
Scott Poppenberger, Wildlife Manager, Prescott Valley
Bill Ough, Wildlife Manager, Unit 19B

Enclosure

LITERATURE CITED

Ockenfels, R.A., C.L. Dorothy, and J. D. Kirkland. 1992. Mortality and home range of pronghorn fawns in central Arizona. Proc. Pronghorn Antelope Workshop 15:78-92.

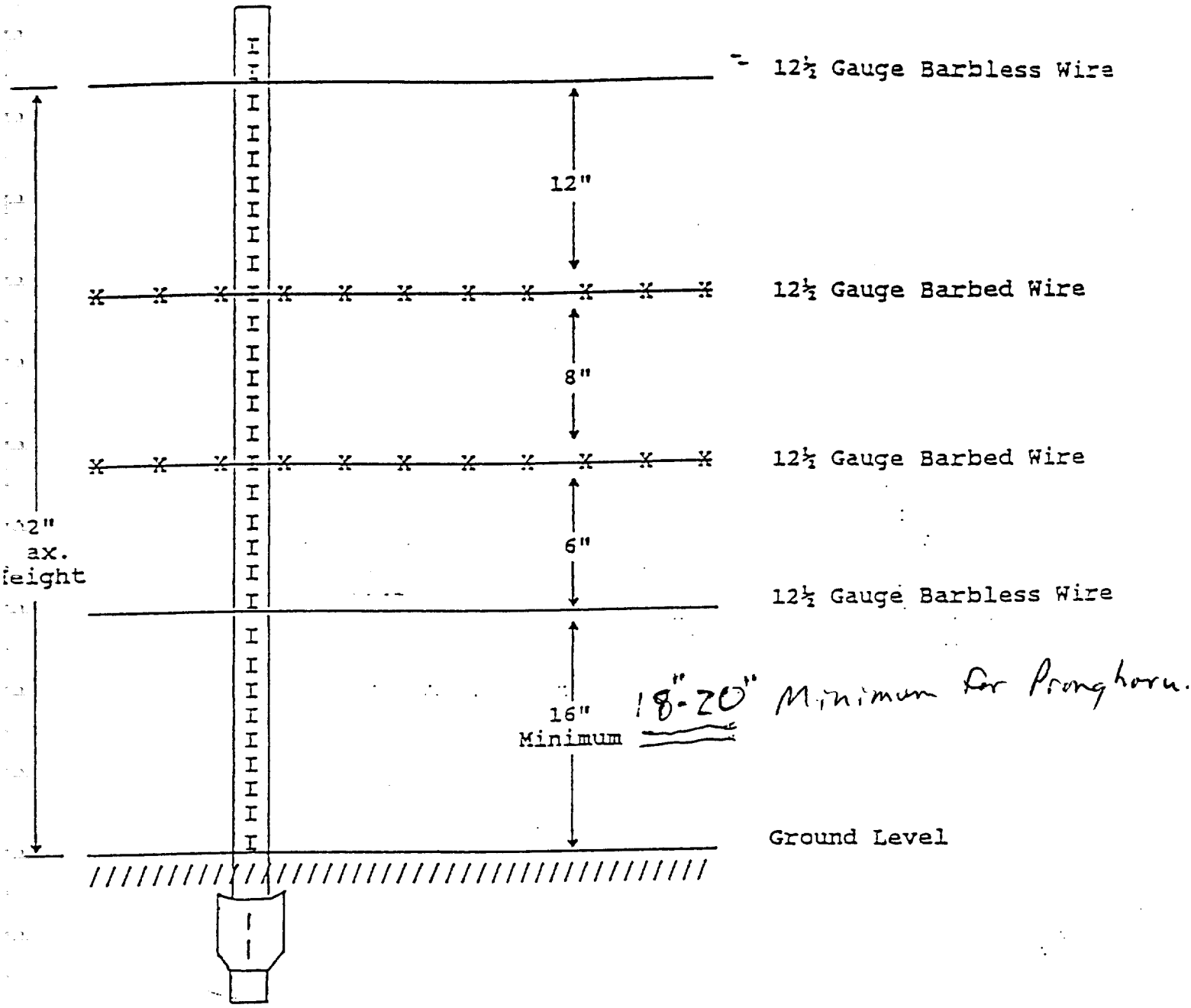
Ockenfels, R.A., A. Alexander, C. L. Dorothy Ticer, and W.K. Carrel. 1994. Home ranges, movement patterns and habitat selection of pronghorn in central Arizona. Arizona Game and Fish Dep. Tech. Rep. 13. 80pp.

Ockenfels, R.A., C. L. Dorothy Ticer, A. Alexander, J.A. Wennerlund, P.A. Hurley, and L.L. Bright. 1996. Statewide evaluation of pronghorn habitat in Arizona. Arizona Game and Fish Dep. Fed. Aid. Wildl. Restor. Proj. W-78-R Final Rep., Phoenix. 296pp.

Ockenfels, R.A., W.K. Carrel, and C. van Riper III. 1997. Home ranges and movements of pronghorn in northern Arizona. Biennial Conf. Res. Colorado Plateau 3:45-61.

Ward, A.L., N.E. Farnwalt, S.E. Henry, and R.A. Hodorff. 1980. Effects of highway operation practices and facilities on elk, mule deer, and pronghorn antelope. Fed. Highway Adm. Rep. FHWA-RD-79-143, Washington, D.C. 48pp.

# STANDARD GAME FENCE SPECIFICATIONS




dditional Specifications:

- 20 - 25 feet between T-posts.
- At least 3 equally spaced stays between each post.
- Modifications to this design may be requested for fencing anticipated to be routinely encountered by elk, bighorn sheep or pronghorn.

Revised 11/93
Habitat Branch
DLW:RAC:rs

ATTACHMENT 1: State Highway 89A Fence Characteristics

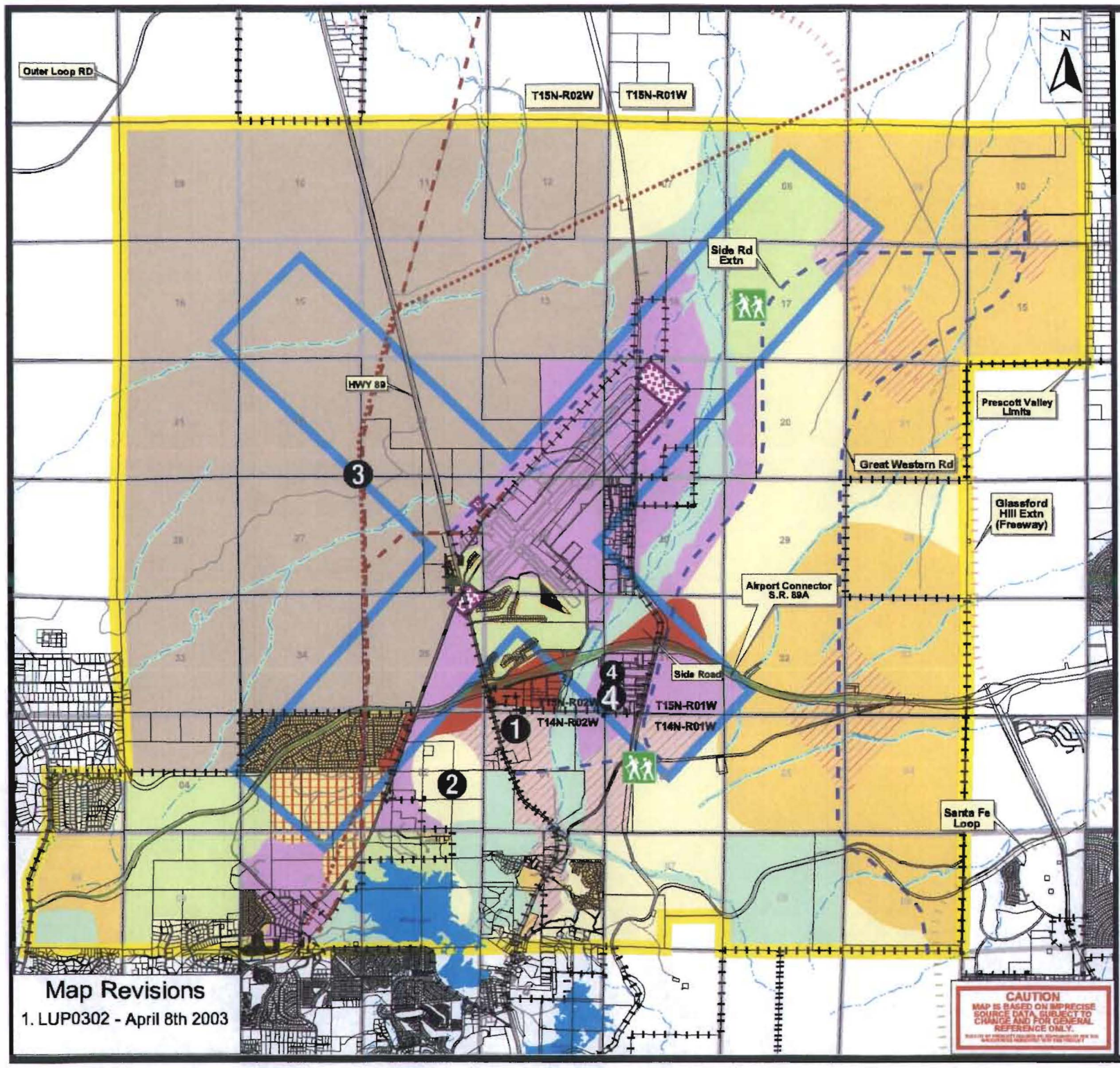
On 06/08/00 Bill Ough and Scott Poppenberger of the Arizona Game and Fish Department, evaluated the characteristics of existing right of way fences along Highway 89 From Granite Creek to Glassford Hill road.

Fence Characteristics evaluated were:
1. Total height
2. Type of wire
3. Spacing between strands starting with gap between ground and bottom strand (W)
4. Distance between 'T' posts
5. Number of stays between posts

Four sites were evaluated, one site per mile from Granite Creek to Glassford Hill Rd. At each site, the fence was evaluated on both the north and south side of Hwy 89A.

The following results were obtained:

| Total Height | W1 | W2 | W3 | W4 | W5 | Post Dist. | Stays | Wire Type |
|---|---|---|---|---|---|---|---|---|
| SITE 1 | | | | | | | | |
| (South side HWY 89A) | | | | | | | | |
| 46" | 12" | 12" | 11" | 11" | - | 24' | 3,wire | all barbed |
| (North side HWY 89A) | | | | | | | | |
| 47" | 9" | 9" | 10" | 10" | 10" | 24' | 3,wire | all barbed |
| SITE 2 | | | | | | | | |
| (South side HWY 89A) | | | | | | | | |
| 43" | 11" | 10" | 13" | 9" | - | 25' | 3,wire | all barbed |
| (North side HWY 89A) | | | | | | | | |
| 47" | 13" | 12" | 13" | 9" | - | 25' | 3, wire | all barbed |
| SITE 3 | | | | | | | | |
| (South side HWY 89A) | | | | | | | | |
| 48" | 14" | 12" | 12" | 10" | - | 25' | 3,wire | all barbed |
| (North side HWY 89A) | | | | | | | | |
| 48" | 12" | 13" | 13" | 9" | - | 25' | 3,wire | all barbed |
| SITE 4 | | | | | | | | |
| (South side HWY 89A) | | | | | | | | |
| 47" | 13" | 12" | 12" | 10" | - | 25' | 3,wire | all barbed |
| (North side HWY 89A) | | | | | | | | |
| 45" | 10" | 12" | 12" | 10" | - | 25' | 3,wire | all barbed |




# City of Prescott

## Airport Specific Area Plan

## Figure 6

### Landuse Plan

Amended

**Proposed Future Road Alignments**

- Future Arterial Streets
- Recommended Airport Clear Zones
- ASAP Boundary
- 1 Mile (wide) Approach / Departure Routes (No new residential except as specified in Land Use Table.)
- Township Range Section
- Trailhead

APS Power Corridor
- 69 KV
- 230 KV

**Landuse (Proposed)**

- RANCHING (HOLDING DESIGNATION)
- NATURAL OPEN SPACE - may include Sand and Gravel Extraction in Granite Crk Wash; may include expanded Open Space areas through entitlement processes.
- RECREATIONAL OPEN SPACE
- MIXED COMM/EMPLOYMENT Residential permitted <= 1 DU / 5 Acres
- COMMERCIAL Low intensity non-residential uses targeted near established neighborhoods.
- MIXED COMM / RECREATION Residential permitted <= 1 DU / 5 Acres
- MIXED COMMERCIAL/STUDENT HOUSING (ERAU)
- LOW DENSITY RES - 0.5 - 1.0 DU / Acre Residential may include Golf Courses
- MED DENSITY RES 2-5 DU/AC Residential may include Golf Courses
- MIXED-USE VILLAGES: 7 - 20 DU / Acre (may include a golf course)

1. DEEP WELL RANCH - Secondary Land Use to permit No more than 5 home sites on the 160 Acre Area. (Density 1 DU / 35 Acres)
2. RIFLE RANCH - Very Low Density permitting 1 DU / 5 Acres (Clustering based on preserving rock outcrop areas)
3. Powerline Easements with generous development setbacks to create wildlife movement corridors.
4. SVENTEK/WILKINSON PROPERTY - Secondary residential land use of up to 10 Single-family homes permitted as described in Settlement Agreement #03-016.

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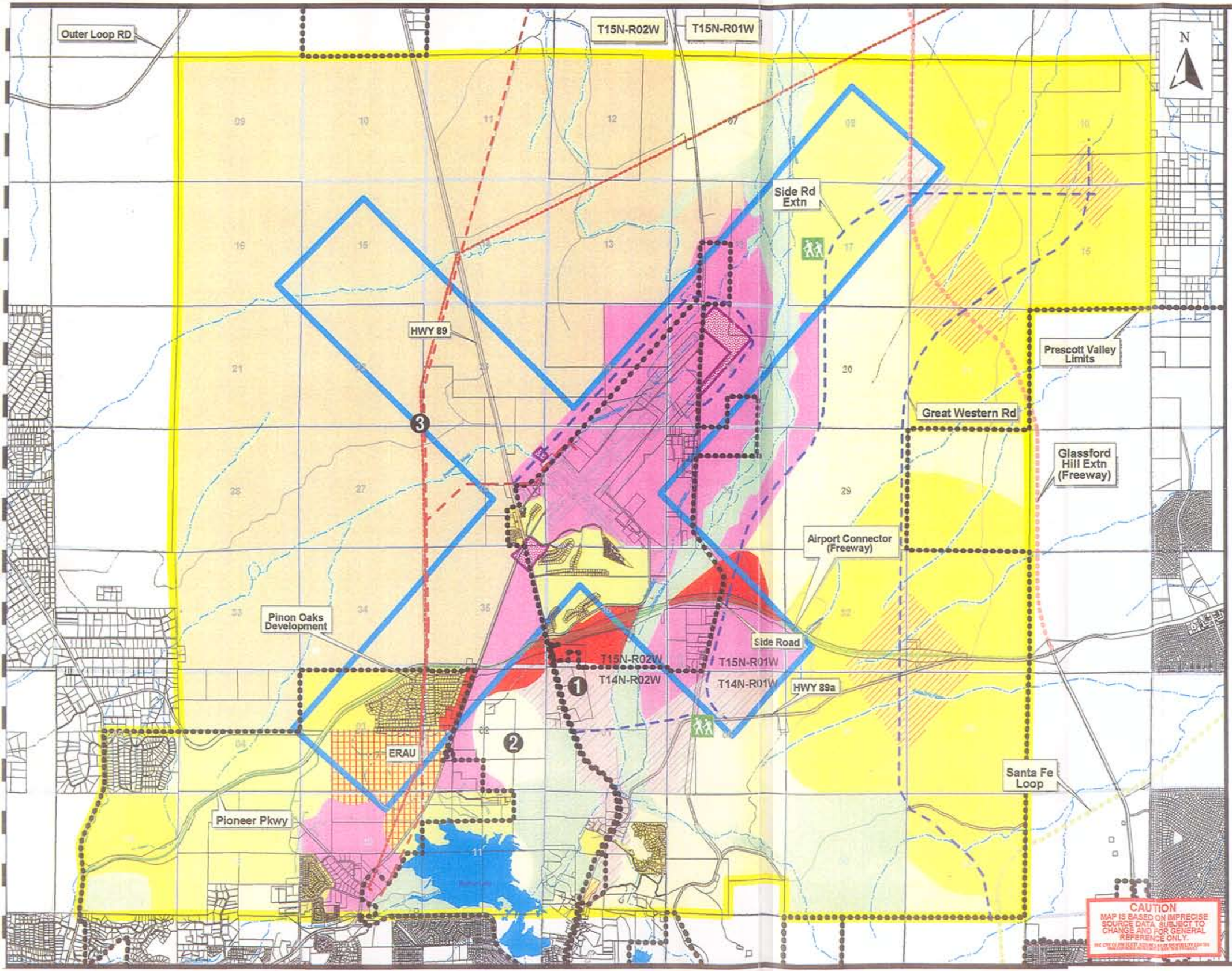
Reference x:\arcview\projects\asap\Figure6amended2_8x11.apr
LAYOUT 2 - 5-6-2001




# City of Prescott

## Airport Specific Area Plan

## Figure 6

### Landuse Plan

**Proposed Future Road Alignments**

- Future Arterial Streets
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- 1 Mile (wide) Approach / Departure Routes (No new residential except as specified in Land Use Table.)
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APS Power Corridor
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- 230 KV

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- MIXED COMMERCIAL/STUDENT HOUSING (ERAU)
- LOW DENSITY RES - 0.5 - 1.0 DU / Acre Residential may include Golf Courses
- MED DENSITY RES 2-6 DU/AC Residential may include Golf Courses
- MIXED-USE VILLAGES: 7 - 20 DU / Acre (may include a golf course)

1. DEEP WELL RANCH - Secondary Land Use to permit No more than 5 home sites on the 180 Acre Area. (Density 1 DU / 35 Acres)
2. RIFLE RANCH - Very Low Density permitting 1 DU / 5 Acres (Clustering based on preserving rock outcrop areas)
3. Powerline Easements with generous development setbacks to create wildlife movement corridors.

2000 0 2000 4000 Feet

Reference x:\arcview\projects\asap\Figure6.apr
LAYOUT 2 - 8-6-2001