

4.0 Off-Airport Land Use and Zoning

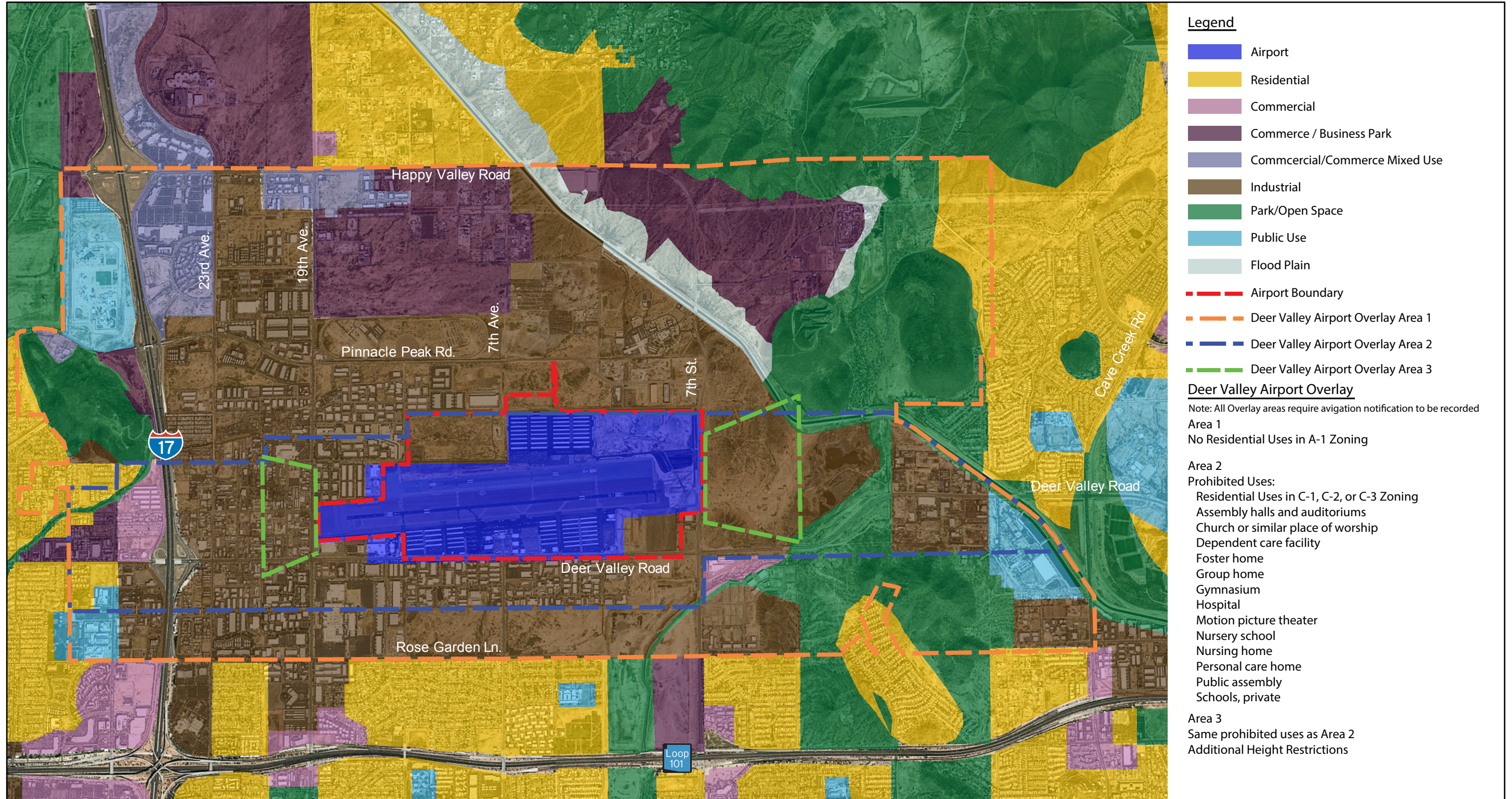
The City of Phoenix General Plan is a long-term comprehensive guide for physical development within the City of Phoenix and serves as the vision for future development. The General Plan Land Use Map indicates the intended predominate future function, density and characteristic use of land for the different parts of the City. The purpose of the Land Use Map is to depict generalized desired future land use and not the intended zoning of individual parcels; however, zoning granted after the adoption of the General Plan or subsequent amendments will be in conformity with the land use category depicted in the General Plan Land Use Map. The City is currently updating the General Plan which was last completed in 2002. While the Arizona Revised Statutes requires cities to update their plans every 10 years a five-year extension was incorporated into the law to allow incorporation of 2010 census data. The update to the General Plan will be completed in 2015.

The City is divided into 15 Urban Villages and each village has a Village Planning Committee that is appointed by the City Council. The Village Planning Committees assist the City of Phoenix Planning Commission in the performance of its responsibilities including: identifying areas or provisions of the General Plan text that need refinement and updating; identifying problems and needs related to implementation of the General Plan; defining in greater detail the intended future function, density and character of subareas of the village; and commenting on proposals for new zoning districts or land use districts. Each village participates in the development of the General Plan. DVT is located in the Deer Valley Village which is comprised of industrial zoned land along with residential and park/open space such as the Adobe Recreation Area. Land uses surrounding DVT along with specific zoning ordinances applicable to DVT and the surrounding areas are described in this chapter.

4.1 General Plan Land Use

Land uses surrounding DVT as identified in the 2002 City of Phoenix General Plan Land Use Map, which was revised in June 2014, for the Deer Valley Village are depicted on **Figure 4-1**. Single and multi-family residential uses of all densities are shown as residential. A breakdown of residential densities can be found on the Deer Valley Village Land Use Map which is located on the Deer Valley Village Committee website⁶. Land immediately surrounding DVT is designated as industrial. To the south, land use is primarily comprised of residential with some limited commercial and open space. To the west of Interstate-17, there is a mixture of commercial, industrial, public, and park/open space land uses along Interstate-17 with residential and park/open space land uses further west. To the north, land use closest to DVT is designated as industrial, commercial, and commerce. North of Happy Valley Road areas are designated as residential and park/open space. To the east, areas are designated primarily as industrial and open space with residential land use along Cave Creek Road.

⁶ <https://www.phoenix.gov/pdd/pz/deer-valley-village-planning-committee>



Legend

- Airport
- Residential
- Commercial
- Commerce / Business Park
- Commercial/Commerce Mixed Use
- Industrial
- Park/Open Space
- Public Use
- Flood Plain
- Airport Boundary
- Deer Valley Airport Overlay Area 1
- Deer Valley Airport Overlay Area 2
- Deer Valley Airport Overlay Area 3

Deer Valley Airport Overlay

Note: All Overlay areas require aviation notification to be recorded

Area 1
No Residential Uses in A-1 Zoning

Area 2
Prohibited Uses:
Residential Uses in C-1, C-2, or C-3 Zoning
Assembly halls and auditoriums
Church or similar place of worship
Dependent care facility
Foster home
Group home
Gymnasium
Hospital
Motion picture theater
Nursery school
Nursing home
Personal care home
Public assembly
Schools, private

Area 3
Same prohibited uses as Area 2
Additional Height Restrictions

Deer Valley Village General Plan Land Use

Figure 4-1



Source: Based on City of Phoenix Deer Valley Village General Plan Land Use Map



NOT TO SCALE

Airport property is designated as public/aviation use with parcels in the northwest and southeast portions of airport property identified as industrial. These parcels were purchased in 2000, and their land use designations have not been changed from their previous designation within the General Plan.

4.2 Proposed Land Use

As part of the City's update of the General Plan, it is recommended that the land use identified for the parcels within DVT's property boundary be reclassified as public/airport. In addition, the areas outside the airport property line on the west side of DVT, which are currently identified as public/airport, be reclassified as industrial. The proposed future land use changes are depicted in **Figure 4-2**.

4.3 Airport Overlay District

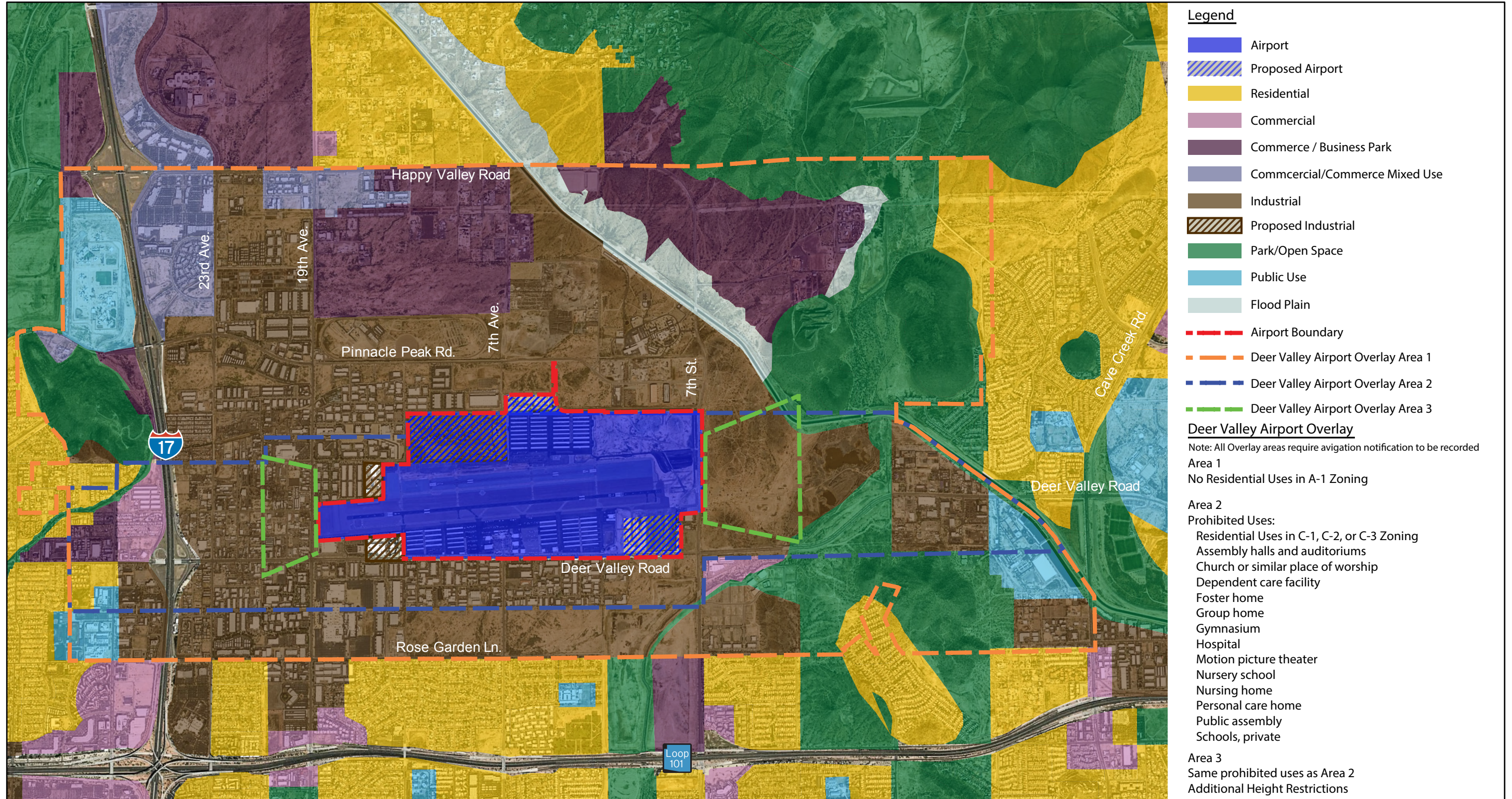
The purpose of the Zoning Ordinance G-5929 of the City of Phoenix (Phoenix Zoning Ordinance) is to establish standards and regulations to govern the use of land and structures in the City and to provide a process for review and approval of all proposed development of property in the City consistent with the implementation of the General Plan and other adopted goals, policies and standards of the City. The Phoenix Zoning Ordinance divides City property into use districts which specify allowable uses such as single and multi-family residential, commercial office, industrial, parking, high-rise, conservation, historic preservation, etc. Overlays are used to further regulate the use of specific areas due to special circumstances where additional land use or height restrictions are required for reasons such as compatibility or safety, such as surrounding an airport.

In November 2006 after the completion of the Deer Valley Airport Area Study, the City Council approved an amendment to the Phoenix Zoning Ordinance to create the Deer Valley Airport Overlay (DVAO) District. The DVAO District boundaries and regulations are delineated on the City's Official Supplementary Zoning Map No. 1116 and in Section 658 of the City of Phoenix Code. The DVAO District was developed to assist the City planning process by providing reasonable zoning objectives for the community. The goal is to prevent incompatible land uses with regard to airport noise, public safety, and airspace protection as required by the FAA to promote the long term viability of DVT, by:

- Ensuring land use compatibility with airport operations
- Protecting navigable airspace from physical encroachment
- Requiring permanent notice of flight operations to property owners

The DVAO District is divided into three separate regulation areas shown on **Figure 4-1**, and is generally bound by Happy Valley Road on the north, 29th and 31st Avenues on the west, Rose Garden Lane and its general alignment on the south and Cave Creek Road, the Central Arizona Project Canal, and the alignment of 16th and 20th Streets on the east. All areas are required to record with the Maricopa County Recorder's Office that a parcel resides within the overlay area. When a parcel falls partially into one or more of the regulated areas, the most restrictive regulation area shall apply for the entire parcel.

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Proposed General Plan Land Use

Figure 4-2



Source: Based on City of Phoenix Deer Valley Village General Plan Land Use Map with proposed future land uses.



NOT TO SCALE

Area 1 seeks to encourage industrial and commercial uses while prohibiting residential uses in A-1 Zoning except as used for a caretaker on industrial or agricultural parcels.

Areas 2 and 3 have the same restrictions as Area 1 and also prohibit any uses, such as places of assembly, which would be adversely impacted by aircraft noise, such as:

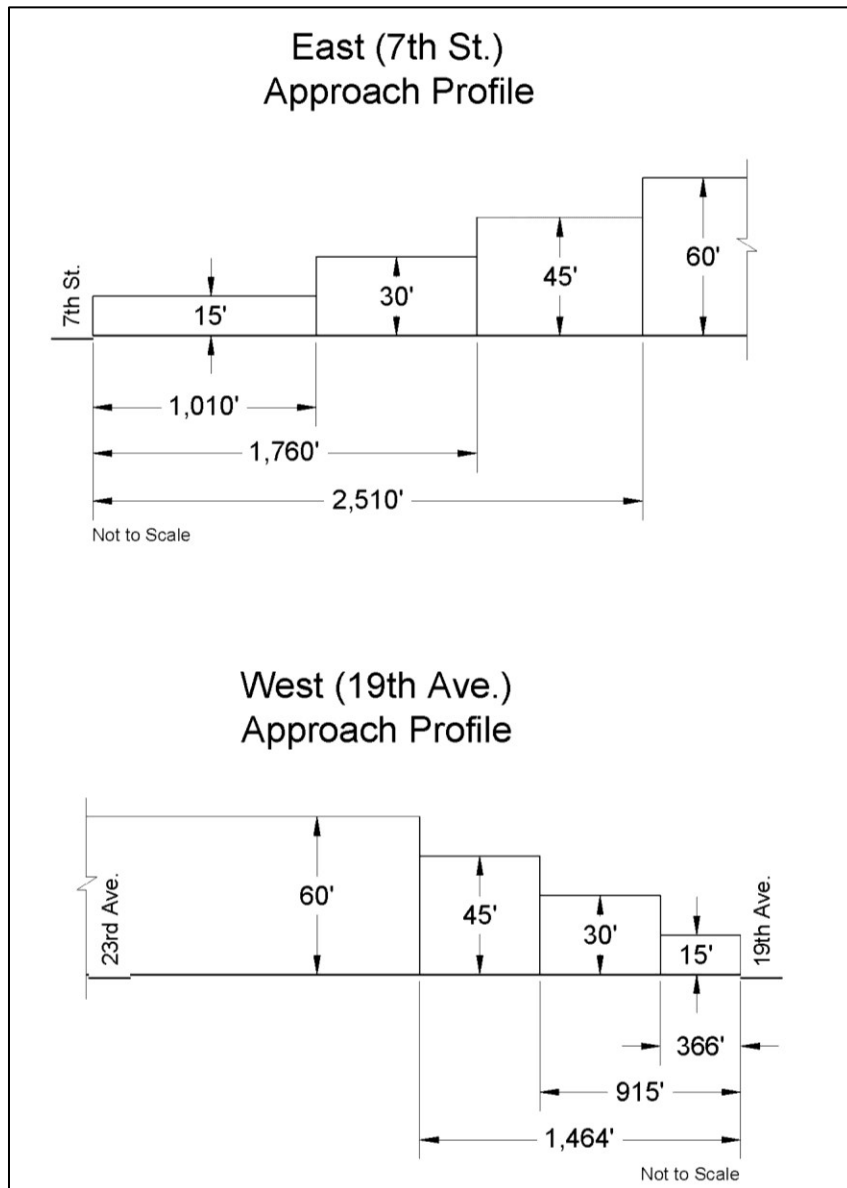
- Residential uses in C-1, C-2, or C-3 Zoning
- Assembly halls and auditoriums
- Churches or similar place of worship
- Dependent care facilities
- Foster homes or group foster care facilities
- Group homes for the handicapped
- Gymnasiums
- Hospitals
- Motion picture theaters
- Nursery schools
- Nursing homes
- Personal care homes
- Public assembly uses limited to active recreational and spectator only
- Schools, private

The underlying zoning for the use district establishes the allowable height for development within Areas 1 and 2. Area 3 incorporates additional height restrictions on structures as shown in **Figure 4-3**. Distances are measured horizontally from the existing natural grade of the site along the centerlines of 19th Avenue and 7th Street, respectively.

The Phoenix Building Construction Code also specifies that no building permit will be issued for a project in the City that may affect navigable airspace until a Notice of Proposed Construction or Alteration (FAA Form 7460-1) is filed with the FAA and a "No Hazard Determination" is received. A Form 7460-1 is required for:

- Any construction or alteration exceeding 200 feet above ground level
- Any construction or alteration:
 - Within 20,000 feet of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3,200 feet
 - Within 10,000 feet of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 feet
 - Within 5,000 feet of a public use heliport which exceeds a 25:1 surface
- Any highway, railroad or other traverse way where the prescribed adjusted height would exceed the above noted standards. Under FAR Part 77, roadway elevations are adjusted 15 feet above roadway level, interstate highway elevations are adjusted 17 feet above highway level, and railroad elevations are adjusted 23 feet above railway track level.
- Any construction or alteration located on a public use airport or heliport regardless of height or location
- When requested by the FAA

Figure 4-3: Deer Valley Airport Overlay Area 3 Height Restrictions



Source: Zoning Ordinances of the City of Phoenix, Section 658 Deer Valley Airport Overlay District Figure 1.

4.4 Off-Airport Terrain

The terrain surrounding DVT must be considered prior to selecting airport development alternatives. There are several hills located just to the east of DVT which may serve as constraints for the development of higher-precision approach procedures and changes to runway departure and arrival threshold locations. The hills are existing penetrations of the Runway 25L Part 77 Approach Surface and the Runway 7R and 7L Terminal Instrument Procedures (TERPS) Departure Surfaces. While it is not explicitly required to keep these surfaces clear of obstacle penetrations, they impact DVT's procedures, especially the departure procedure, Deer Valley One (Obstacle), which includes a sharp left turn after departure to allow aircraft to climb while maintaining lateral clearance from the hills. Some of the hills to the northeast of DVT are actively being mined which will reduce their elevation over time. A 2006 inventory of the adjacent hills is included below and locations are depicted in **Figure 4-4**. The inventory identifies the ownership, height, obstruction light status, whether it is within the Sonoran Preserve, its current status, and the existing impacts to air navigation. In the years since the inventory was conducted, Hills 4 and 6 have been mitigated and are no longer issues for airport development. It is recommended that coordination with the Arizona State Land Department is continued to identify opportunities for reducing the elevation of the hills below the encroached airspace surfaces.

Hill 1

Ownership: Arizona State Land Department (ASLD)

Height: 1,560 feet MSL

Obstruction Light: Yes, on leased parcel

Sonoran Preserve: Outside of Sonoran Preserve boundary

Current Status: ASLD has issued permit to F & F Construction to use the hill for borrow for Deer Valley Road extension

Master Plan Impact:

- Penetrates the Runway 7R Departure Surface by 50 feet

Hill 2

Ownership: ASLD

Height: 1,636 feet MSL

Obstruction Light: Yes, on leased parcel

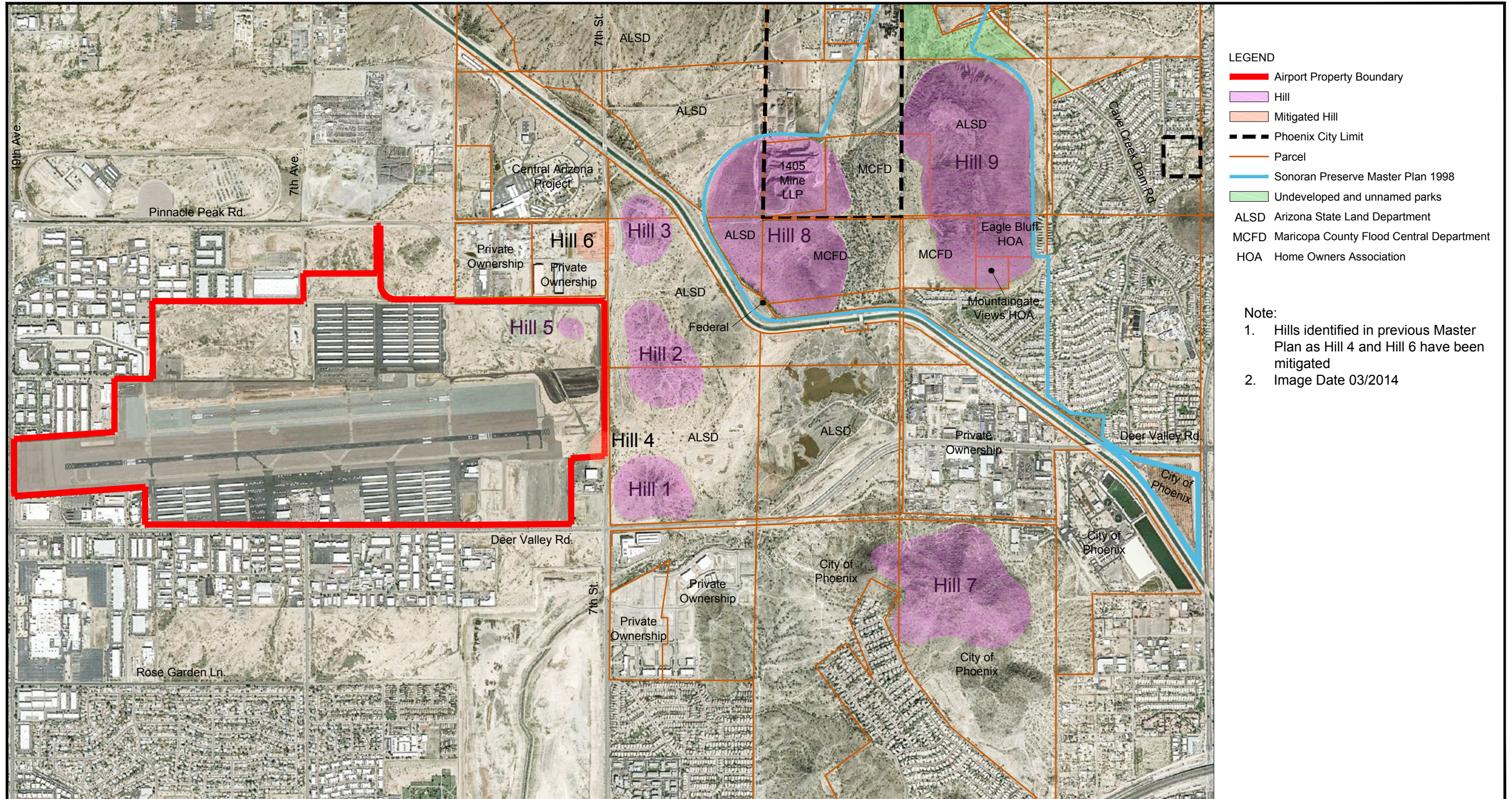
Sonoran Preserve: Outside of Sonoran Preserve boundary

Current Status: ASLD has issued permit to F & F Construction to use the hill for borrow for Deer Valley Road extension

Master Plan Impact:

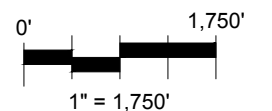
- Contributes to current Runway 25L threshold displacement
- Penetrates the Runway 25L Part 77 approach surface by 16 feet
- Penetrates the Runway 7L Departure Surface by 48 feet

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Hills Inventory

Figure 4-4



Hill 3**Ownership:** ASLD**Height:** 1,600 feet MSL**Obstruction Light:** No**Sonoran Preserve:** Outside of Sonoran Preserve boundary**Current Status:** ASLD has issued permit to F & F Construction to use the hill for borrow for Deer Valley Road extension**Master Plan Impact:** No Impacts**Hill 4 (MITIGATED)****Ownership:** City of Phoenix (Phoenix Deer Valley Airport)**Height:** Ground Level**Obstruction Light:** Not applicable**Sonoran Preserve:** Outside of Sonoran Preserve boundary**Current Status:** Hill has been mitigated (removed) and is no longer a constraint**Master Plan Impact:** No impacts**Hill 5****Ownership:** City of Phoenix (Phoenix Deer Valley Airport)**Height:** 1,513 feet MSL**Obstruction Light:** No**Sonoran Preserve:** Outside of Sonoran Preserve boundary**Current Status:** None**Master Plan Impact:**

- Potential impacts to future on-airport development. Hill will require evaluation and potential removal prior to development

Hill 6 (MITIGATED)**Ownership:** Airpark 30, LLC**Height:** 1,510 feet MSL**Obstruction Light:** Not applicable**Sonoran Preserve:** Outside of Sonoran Preserve boundary**Current Status:** Recently mined for materials**Master Plan Impact:** No impacts**Hill 7****Ownership:** City of Phoenix**Height:** 2,075 feet MSL**Obstruction Light:** Yes, on City-owned property**Sonoran Preserve:** Outside of Sonoran Preserve boundary**Current Status:** No current plans**Master Plan Impact:**

- Penetrates the Runway 7R Departure Surface by 4 feet

Hill 8

Ownership: 1405 Mine, LLP; Maricopa County Flood Control District

Height: North Peak - 1,840 feet MSL; South Peak – 1,700 feet MSL

Obstruction Light: Yes (north peak), on small parcel owned by the City of Phoenix

Sonoran Preserve: Within Sonoran Preserve boundary

Current Status: 1405 Mine, LLP is presently mining its property on the north side of the hill. This portion is outside of City limits and mining permits were approved by Maricopa County.

Master Plan Impact:

South Peak penetrates the Runway 7L Departure Surface by 45 feet

Hill 9

Ownership: ASLD; Maricopa County Flood Control District; Eagle Bluff Homeowners

Association; Mountain Gate Views, LLC

Height: North Peak - 1,943 feet MSL; South Peak – 1,938 feet MSL

Obstruction Light: Yes, but no known parcel lease or ownership

Sonoran Preserve: Within Sonoran Preserve boundary

Current Status: City of Phoenix has made application to ASLD to acquire the property as part of a voter-approved Sonoran Preserve initiative; however, there is no available funding to acquire the property. The City has interest in preservation of parcels under other ownership.

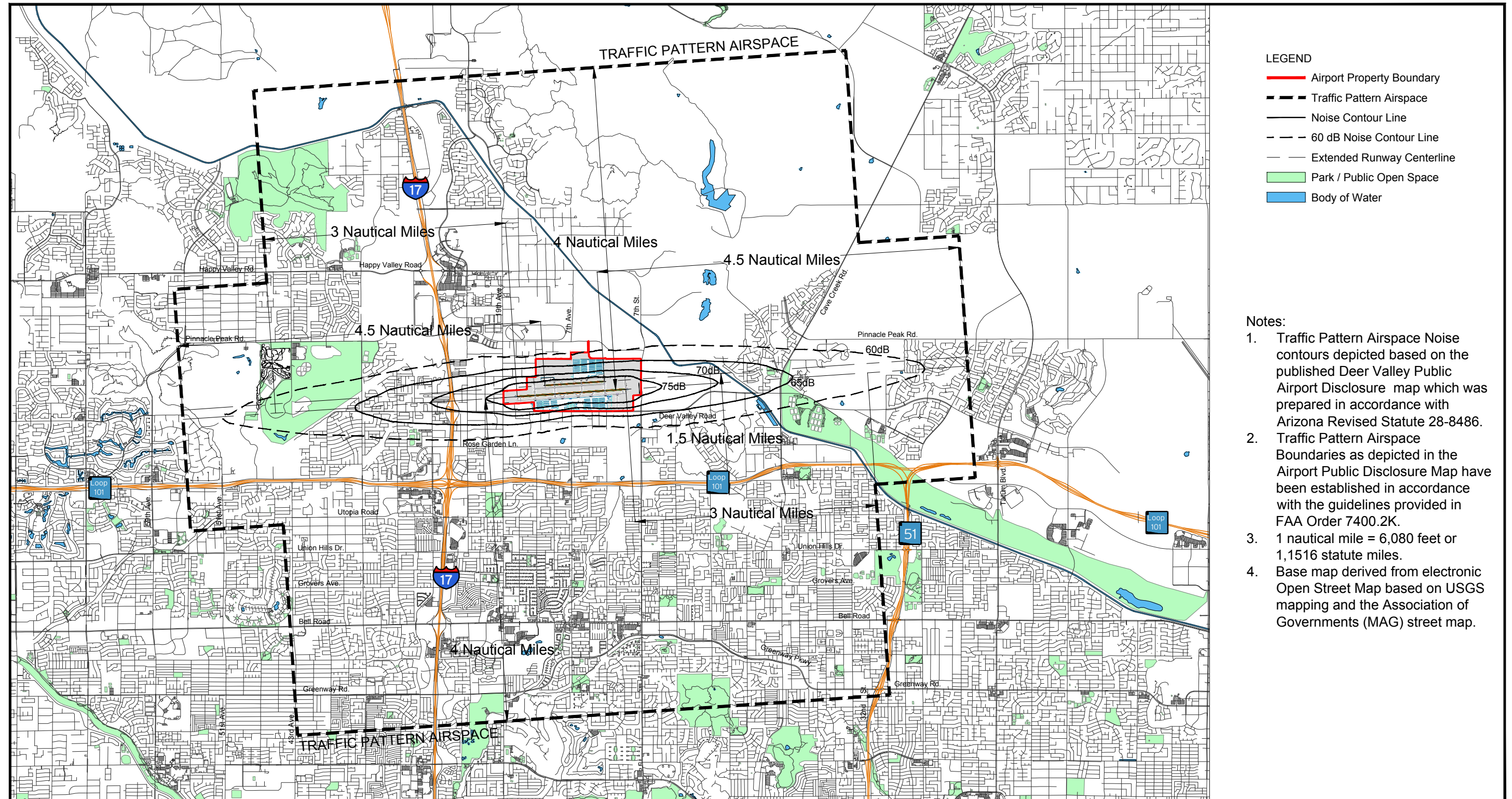
Master Plan Impact:

- South Peak penetrates Runway 7R Departure Surface by 217 feet

4.5 Public Airport Disclosure Map

Arizona Revised Statute (ARS) 28-8486, Public Airport Disclosure, requires that public airport owners publish a map depicting the boundary of the “territory in the vicinity of the public airport”. The territory is defined as property that is within the traffic pattern airspace defined by the FAA which includes property that experiences a Day-Night Average Sound level (DNL) of 60 decibels or higher in counties with more than 500,000 residents (in counties with 500,000 thousand residents or less the threshold is 65 decibels). The DNL is calculated for a 20-year forecast condition and the current noise contours were developed in 2007. ARS 28-8486 requires the State Real Estate Office prepare a disclosure map in conjunction with the airport owner that is recorded with the county and available to the public. The map must be sufficient to notify owners and potential purchasers of property that the property is located in or outside of a territory in the vicinity of a public airport. The Deer Valley public airport disclosure boundary and noise contours are depicted on **Figure 4-5**. The published Public Airport Disclosure Map is provided in **Appendix D**.

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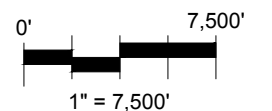


- LEGEND**
- Airport Property Boundary
 - Traffic Pattern Airspace
 - Noise Contour Line
 - 60 dB Noise Contour Line
 - Extended Runway Centerline
 - Park / Public Open Space
 - Body of Water

- Notes:**
1. Traffic Pattern Airspace Noise contours depicted based on the published Deer Valley Public Airport Disclosure map which was prepared in accordance with Arizona Revised Statute 28-8486.
 2. Traffic Pattern Airspace Boundaries as depicted in the Airport Public Disclosure Map have been established in accordance with the guidelines provided in FAA Order 7400.2K.
 3. 1 nautical mile = 6,080 feet or 1,1516 statute miles.
 4. Base map derived from electronic Open Street Map based on USGS mapping and the Association of Governments (MAG) street map.

DVT Public Airport Disclosure Boundary

Figure 4-5

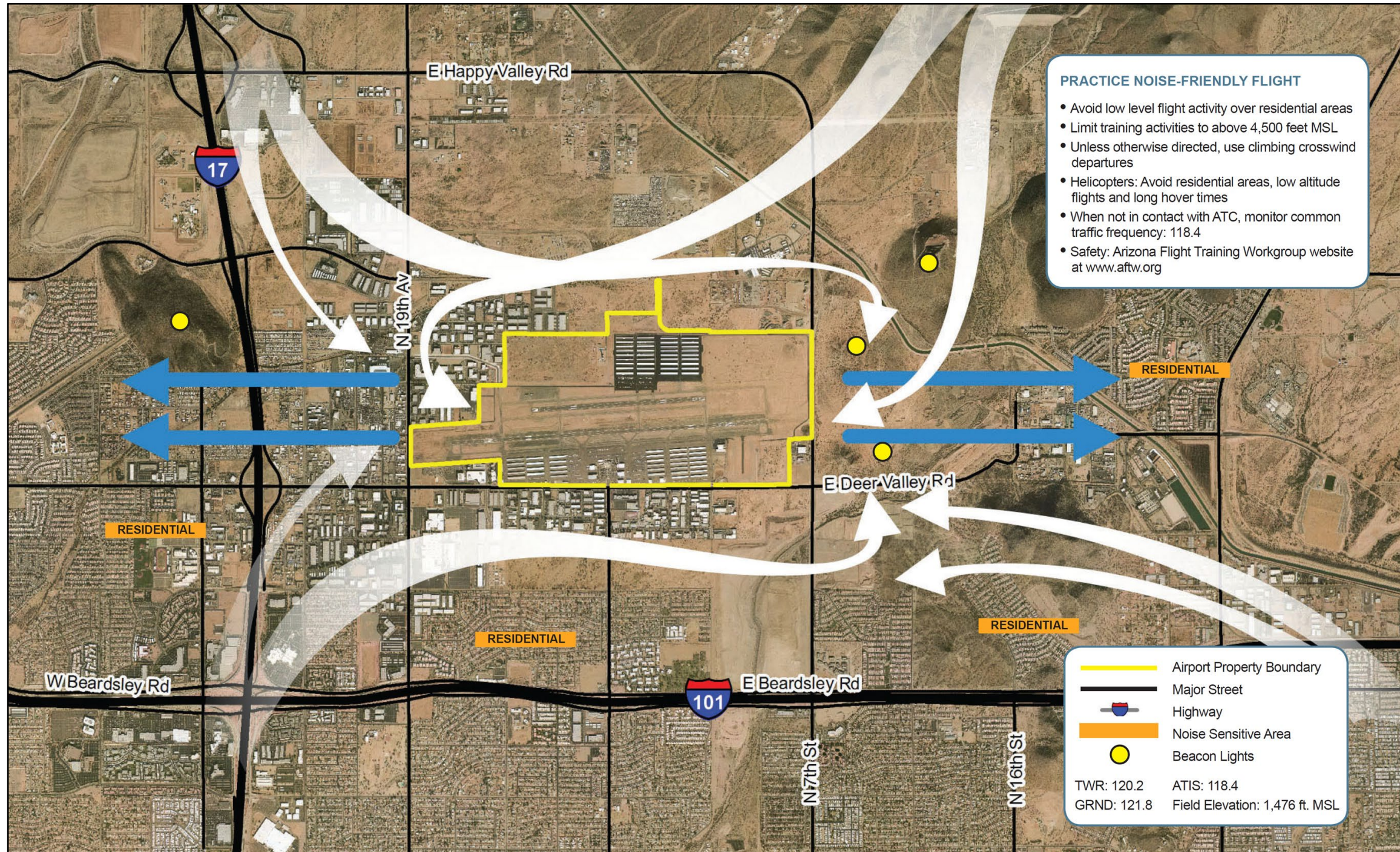


4.6 Voluntary Noise Abatement Procedures

Pilots at DVT are encouraged to practice noise awareness and use noise friendly procedures. The Deer Valley Airport Pilot Guide outlines the Airport Owners and Pilots Association noise awareness guidelines as follows, and as depicted in **Figure 4-6**. These are voluntary guidelines that pilots are requested to adhere to them when safe to do so.

1. If practical, avoid noise-sensitive areas. Make every effort to fly at or above 3,500 feet MSL over such areas when overflight can be avoided.
2. Consider using a reduced power setting if flight must be low because of cloud cover or overlying controlled airspace or when approaching the airport of destination. Propellers generate more noise than engines; flying with the lowest practical RPM setting will reduce aircraft noise substantially.
3. Perform stalls, spins and other practice maneuvers over uninhabited terrain.
4. Familiarize yourself and comply with airport noise abatement procedures.
5. On takeoff, gain altitude as quickly as possible without compromising safety. Begin takeoffs at the start of a runway, not an intersection.
6. Use PAPI. This will indicate a safe glide-path and allow a smooth, quiet descent to the runway.
7. Retract the landing gear either as soon as a landing straight ahead on the runway can no longer be accomplished or as soon as the aircraft achieves a positive rate of climb. If practical, maintain best-angle of-climb airspeed until reaching 50 feet or an altitude that provides clearance from terrain or obstacles. Then accelerate to best-rate-of-climb airspeed. If consistent with safety, make the first power reduction at 500 feet.
8. Fly a tight landing pattern to keep noise as close to the airport as possible. Practice descent to the runway at low power settings and with as few power changes as possible.
9. If possible, do not adjust the propeller control for flat pitch on the downwind leg; instead, wait until short final. This practice not only provides a quieter approach, but also reduces stress on the engine and propeller governor.
10. Avoid low-level, high-power approaches, which not only create high noise impacts, but also limit options in the event of engine failure.
11. Flying between 11 pm and 7 am should be avoided whenever possible.
12. 700 feet of separation between runways.
13. Simultaneous departures and arrivals on runways.

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PRACTICE NOISE-FRIENDLY FLIGHT

- Avoid low level flight activity over residential areas
- Limit training activities to above 4,500 feet MSL
- Unless otherwise directed, use climbing crosswind departures
- Helicopters: Avoid residential areas, low altitude flights and long hover times
- When not in contact with ATC, monitor common traffic frequency: 118.4
- Safety: Arizona Flight Training Workgroup website at www.aftw.org

1. If practical, avoid noise-sensitive areas. Make every effort to fly at or above 3,500 feet MSL over such areas when overflight can be avoided.
 2. Consider using a reduced power setting if flight must be low because of cloud cover or overlying controlled airspace or when approaching the airport of destination. Propellers generate more noise than engines; flying with the lowest practical RPM setting will reduce aircraft noise substantially.
 3. Perform stalls, spins and other practice maneuvers over uninhabited terrain.
 4. Familiarize yourself and comply with airport noise abatement procedures.
 5. On takeoff, gain altitude as quickly as possible without compromising safety. Begin takeoffs at the start of a runway, not an intersection.
 6. Use PAPI. This will indicate a safe glide-path and allow a smooth, quiet descent to the runway.
 7. Retract the landing gear either as soon as a landing straight ahead on the runway can no longer be accomplished or as soon as the aircraft achieves a positive rate of climb. If practical, maintain best-angle-of-climb airspeed until reaching 50 feet or an altitude that provides clearance from terrain or obstacles. Then accelerate to best-rate-of-climb airspeed. If consistent with safety, make the first power reduction at 500 feet.
 8. Fly a tight landing pattern to keep noise as close to the airport as possible. Practice descent to the runway at low power settings and with as few power changes as possible.
 9. If possible, do not adjust the propeller control for flat pitch on the downwind leg; instead, wait until short final. This practice not only provides a quieter approach, but also reduces stress on the engine and propeller governor.
 10. Avoid low-level, high-power approaches, which not only create high noise impacts, but also limit options in the event of engine failure.
 11. Flying between 11 p.m. and 7 a.m. should be avoided whenever possible.
 12. 700 feet of separation between runways.
 13. Simultaneous departures and arrivals on runways.
- Note: Note: These are general recommendations; some may not be advisable for every aircraft in every situation. No noise reduction procedure should be allowed to compromise flight safety.

Source: Deer Valley Airport Pilot Guide

DVT Voluntary Noise Reduction Procedures

Figure 4-6



NOT TO SCALE