

# Airport Plans



The planning process for the Ryan Airfield Master Plan has involved several analytic efforts in the previous chapters intended to project potential aviation demand, establish airside and landside facility needs, and evaluate options for improving the airport to meet those airside and landside facility needs. The process, thus far, has included the presentation of two draft working paper reports (representing the first four chapters of the Master Plan) to the Planning Advisory Committee (PAC) and the Tucson Airport Authority (TAA). A plan for the use of Ryan Airfield has evolved considering their input. The purpose of this chapter is to describe, in narrative and graphic form, the plan for the future use of Ryan Airfield.

## ***AIRFIELD PLAN***

The airfield plan for Ryan Airfield focuses on meeting Federal Aviation Administration (FAA) design and safety standards and improving airfield efficiency and safety. Several different methods of improving the airfield efficiency and safety will be undertaken including: an 800-foot extension on the west end of Runway 6R-24L to relocate the threshold west of the crosswind runway; additional exit taxiways; dual-parallel taxiways for the primary runway; additional holding aprons; and a helicopter training touchdown and lift-off area (TLOF) and heliport which will separate rotorcraft operations from fixed-wing operations.



Additional airfield improvements will be undertaken to accommodate increased use by a wider range of business jet aircraft and to meet FAA recommended runway lengths for the design aircraft of each runway. This results in projects to ultimately extend primary Runway 6R-24L to achieve an ultimate runway length of 8,300 feet, lengthening parallel Runway 6L-24R to achieve an ultimate length of 5,005 feet, and lengthening crosswind Runway 15-33 to 4,800 feet.

**Exhibit 5A** graphically depicts the proposed airfield improvements. The following text summarizes the elements of the airfield plan.

## **AIRFIELD DESIGN STANDARDS**

As discussed in Chapter Three, Facility Requirements, the primary runway at Ryan Airfield is currently designed to Airport Reference Code (ARC) B-II standards. Ultimately, as business jet activity at Ryan Airfield increases, the airport's critical aircraft will be in the ARC D-II category. To accommodate these larger and faster business jet aircraft, the primary runway will need to meet ARC D-II design standards. Assigning ARC D-II to the ultimate design of the primary runway provides for a wider range of corporate aircraft, including the Cessna Citation X, Challenger 600, and the Gulfstream IV.

One of the most notable effects of the ARC D-II design standards is that Runway 6R-24L will need to be widened to 100 feet. The runway safety area (RSA) and object free area (OFA) will widen and extend 1,000 feet

beyond the runway end. Having extra runway width and larger safety areas will make operations safer for aircraft with faster landing and takeoff speeds.

The parallel runway is planned to be designed to ARC B-II standards. This will allow it to be used by a wide range of aircraft from small single engine-piston to a variety of business jet aircraft. These design standards will allow the majority of aircraft operating at Ryan Airfield to utilize the parallel runway in situations when the primary runway is unavailable for use.

ARC B-I (small airplane only) design standards will be applied to Runway 15-33. The purpose of Runway 15-33 will continue to provide an alternative to the parallel runways during periods of high cross-winds, exclusively for small aircraft.

The ultimate airfield safety and facility design standards for each runway are shown in **Table 5A**.

## **AIRFIELD DEVELOPMENT**

In addition to capacity and airfield design improvements, drainage improvements throughout the airfield system will need to be undertaken. The airport is located in a 100-year floodplain, and as a result, its facilities need to be able to handle water runoff that flows from the south of the airport to the north. When Runway 6R-24L and its associated taxiways were originally constructed, drainage facilities, such as culverts under the runway, were not installed. As a result, water collects on the south side of the runway and sheet flows across the tax-

**LEGEND**

- - - Airport Property Line
- - - Ultimate Airport Property Line
- █ Ultimate Property Acquisition
- Runway Protection Zone (RPZ)
- █ Intermediate Perimeter Road & Fence
- █ Ultimate Airport Pavement
- █ Beyond 20-Year Pavement
- █ Ultimate Road / Parking

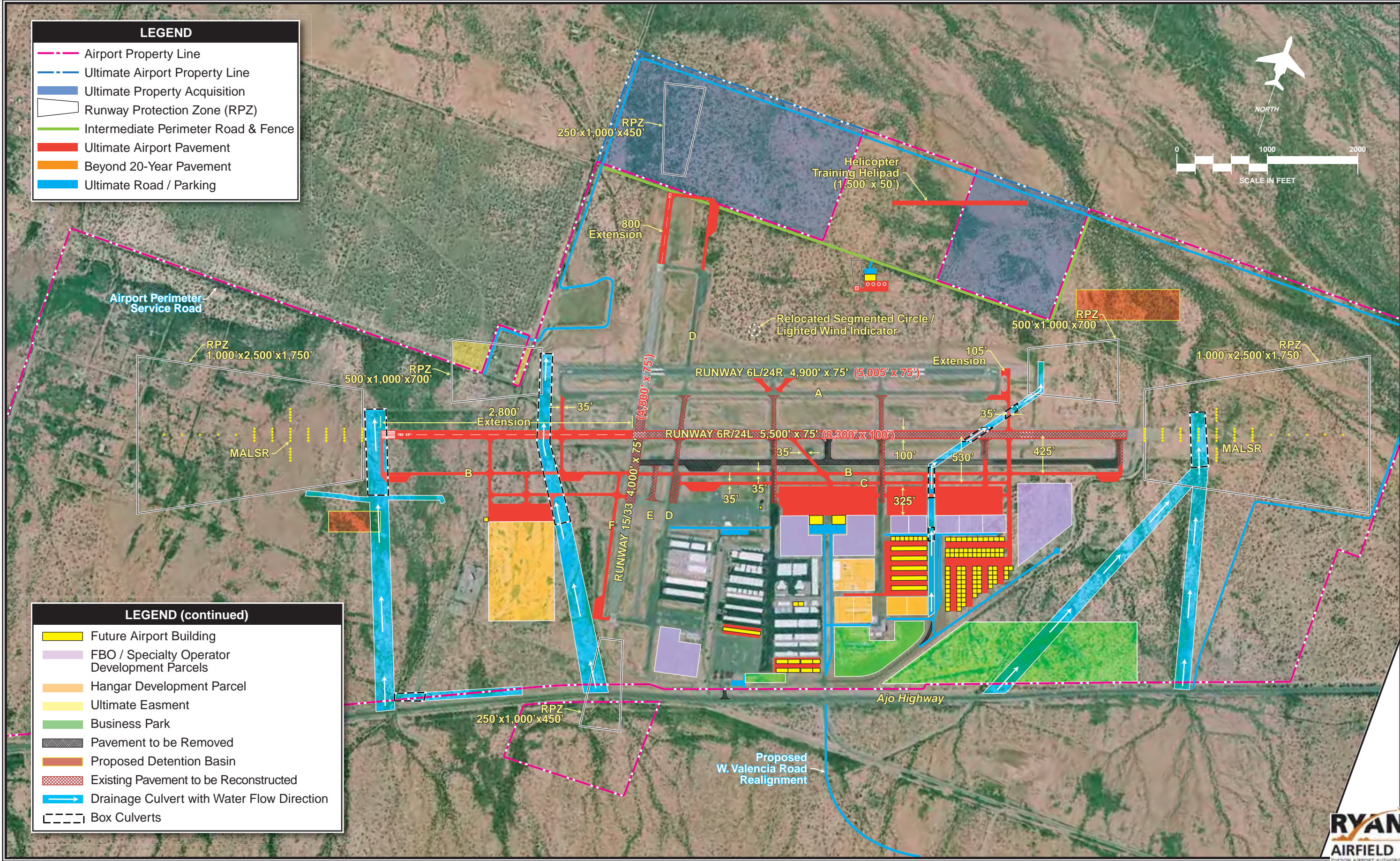
NORTH

0 1000 2000

SCALE IN FEET

**LEGEND (continued)**

- █ Future Airport Building
- █ FBO / Specialty Operator Development Parcels
- █ Hangar Development Parcel
- █ Ultimate Easment
- █ Business Park
- Pavement to be Removed
- █ Proposed Detention Basin
- Existing Pavement to be Reconstructed
- Drainage Culvert with Water Flow Direction
- Box Culverts



way and runway, creating pavement maintenance and aircraft operations issues. Due to the grade of the airfield, which slopes downward from the south to the northeast, and the limited grade from east to west, channeling the runoff around the runway is not possible. Therefore, drainage culverts need to be installed underneath Run-

way 6R-24L to provide a path for water flowage that will not damage infrastructure and endanger operations. According to Ryan Airfield's drainage master plan, which was prepared by Stantec in 2006 to properly install culverts, the full existing length of Runway 6R-24L will need to be raised over six feet.

<b>TABLE 5A Airfield Safety and Facility Dimensions (in feet)</b>			
	<b>Ultimate Runway 6R-24L</b>	<b>Ultimate Runway 6L-24R</b>	<b>Ultimate Runway 15-33</b>
<b>Airport Reference Code (ARC)</b>	D-II	B-II	B-I (small aircraft)
<b>Approach Visibility Minimums</b>	½ Mile Each End	One Mile Each End	One Mile Each End
<b><u>Runway</u></b>			
Length	8,300	5,005	4,800
Width	100	75	75
Runway Safety Area (RSA)			
Width	500	150	150
Length Beyond Runway End	1,000	300	300
Object Free Area (OFA)			
Width	800	500	500
Length Beyond Runway End	1,000	300	300
Obstacle Free Zone (OFZ)			
Width	400	400	250
Length Beyond Runway End	200	200	200
Precision Obstacle Free Zone (POFZ)			
Width	800	N/A	N/A
Length Beyond Runway End	200	N/A	N/A
Runway Centerline To:			
Hold Line	275	200	125
Parallel Taxiway Centerline	425	240	240
Edge of Aircraft Parking Apron	500	250	250
<b><u>Runway Protection Zone (RPZ)</u></b>			
Inner Width	1,000	500	250
Outer Width	1,750	700	450
Length	2,500	1,000	1,000
<b>Obstacle Clearance</b>	50:1	20:1	20:1
<b><u>Taxiways</u></b>			
Width	35	35	35
Safety Area Width	79	79	79
Object Free Area Width	131	131	131
Taxiway Centerline To:			
Parallel Taxiway/Taxilane	105	105	105
Fixed or Moveable Object	65.5	65.5	65.5
<b><u>Taxilanes</u></b>			
Taxilane Centerline To:			
Parallel Taxilane Centerline	97	97	97
Fixed or Moveable Object	57.5	57.5	57.5
Taxilane Object Free Area	115	115	115
Source:	FAA Advisory Circular (AC) 150/5300-13, <i>Airport Design, Change 14</i> ; 14 CFR Part 77, <i>Objects Affecting Navigable Airspace</i>		

The project to raise the primary runway will present the opportunity to set up the airport to meet ARC D-II design standards. The existing 300-foot centerline separation distance between Taxiway B and Runway 6R-24L does not meet the ultimate 425-foot ARC D-II design standard. Instead of reconstructing Taxiway B for drainage purposes at its present separation distance, the existing Taxiway B pavement will be removed and reconstructed at the appropriate 425-foot separation standard. This reconstruction will include proper drainage channels underneath the pavement.

Raising the primary runway and relocating Taxiway B will result in the need to raise portions of Runway 15-33 and other associated taxiways. FAA Advisory Circular 150/5300-13, *Airport Design*, states that the longitudinal grade limitations for airfield surfaces designed for approach categories C and D is from zero percent to 1.5 percent. To meet this grade limitation, 450-foot sections of Runway 15-33, Taxiway D, and Taxiway E south of Taxiway B will need to be raised. Additionally, 450-foot sections of Runway 15-33 and Taxiway D north of Runway 6R-24L will also need to be raised.

In conjunction with the runway raising project, the primary runway and associated taxiways will be strengthened to 75,000 pounds dual wheel loading (DWL). Strengthening the runway will allow it to be used by larger business jet aircraft such as the Gulfstream IV.

Once the drainage and strengthening projects have been completed, the

Runway 6R end is planned to be extended by 800 feet to the west. This will relocate the threshold to the west of the crosswind runway, which will improve airfield capacity and safety. The primary runway is planned to an ultimate length of 8,300 feet and a width of 100 feet. A dual-partial parallel Taxiway C is planned to be located 530 feet from the Runway 6R-24L centerline. This taxiway will improve airfield circulation and will meet ARC D-II runway and taxiway centerline separation standards.

A high-speed exit and right-angled exits are planned for the primary runway to reduce runway occupancy time and to improve airfield capacity. Each extension to the runway will also involve extending the relocated Taxiway B and additional holding aprons.

Runway 6L-24R is ultimately planned to be extended by 105 feet to the east for a length of 5,005 feet. A length greater than 5,000 feet will help with airfield capacity and backup capability when the primary runway is closed. It will also allow the existing and ultimate Runway 24R threshold access taxiways to meet separation standards. Ultimately, a taxiway is planned to provide access from the Runway 24R threshold south to a hangar development area and north to a potential third parallel runway.

Crosswind Runway 15-33 will remain designed exclusively for small airplanes. The runway is planned for an ultimate length of 4,800 feet to meet the FAA recommended runway length for this type of aircraft usage. An extension is planned 800 feet to the north along with parallel Taxiway D

and a new holding apron. A partial parallel taxiway is planned at the southwest end of Runway 15-33. This partial parallel taxiway will have a runway centerline separation distance of 150 feet, which meets the ARC B-I (small airplane exclusive) design standard.

A full-service general aviation heliport is planned to the north of the airfield. This heliport would be equipped with a full-stop helipad and adjoining helicopter parking spaces. The heliport is not intended to be used for helicopter training operations, but as an itinerant operations area for helicopters to park and receive fixed base operator (FBO) services. This site would segregate itinerant helicopter operations from fixed-wing operations to the greatest extent possible, improving airfield capacity and safety.

A helicopter training touchdown and lift-off area (TLOF) is planned adjacent to the heliport. This training TLOF is planned for a length of 1,500 feet and a width of 50 feet and would serve as a location for helicopters to conduct auto rotations and other training operations. This will relieve the crosswind runway of this type of use and improve airfield capacity and safety.

Runway 6R-24L is currently equipped with medium intensity runway lighting (MIRL). Runways 6R-24L and 15-33 are planned to have MIRL installed on existing and ultimate pavement. Medium intensity taxiway lighting (MITL) is installed on entrance/exit taxiways B2, B3, B4, B5, and B6. The

remainder of the taxiway system is not equipped with a lighting system. All existing and planned taxiways without MITL are planned to be equipped with MITL.

The extension of Runway 15 and the construction of the helicopter training TLOF and the airport perimeter service road will necessitate the acquisition of land north of the airport. A total of approximately 119.3 acres of land is proposed for acquisition divided between two parcels. Both parcels of land are presently privately owned and are recommended to be acquired by the TAA via fee simple acquisition. These parcels are identified on **Exhibit 5A** with blue shading.

The segmented circle and lighted wind indicator are currently located within the Runway 6R-24L object free area (OFA) and in an area planned for a future high-speed exit taxiway. Therefore, both should be relocated to an area outside of any proposed runway safety area and development. The airfield development concept relocates the segmented circle and lighted wind indicator to the north between Runway 6L-24R and the ultimate third parallel runway.

A paved airport perimeter service road is planned to allow public access to the heliport and to provide service and emergency vehicles access to all areas of the airfield. The initial and ultimate design of this perimeter road is depicted on **Exhibit 5A**. The perimeter road should remain clear of all runway safety areas where possible.

## ***LANDSIDE PLAN***

The landside plan for Ryan Airfield has been devised to safely, securely, and efficiently accommodate potential aviation demand. The landside plan provides for the development of the flight line to the east of the existing landside facilities area. The Landside Development Concept includes locations for FBO development, hangar development, and business development. The landside development concept is shown in detail on **Exhibit 5B**.

The primary focus of the landside development concept is to provide adequate hangar and apron facilities while utilizing existing airport lands and utilities to the extent possible. This includes maintaining proper drainage channels and planning for future drainage facilities.

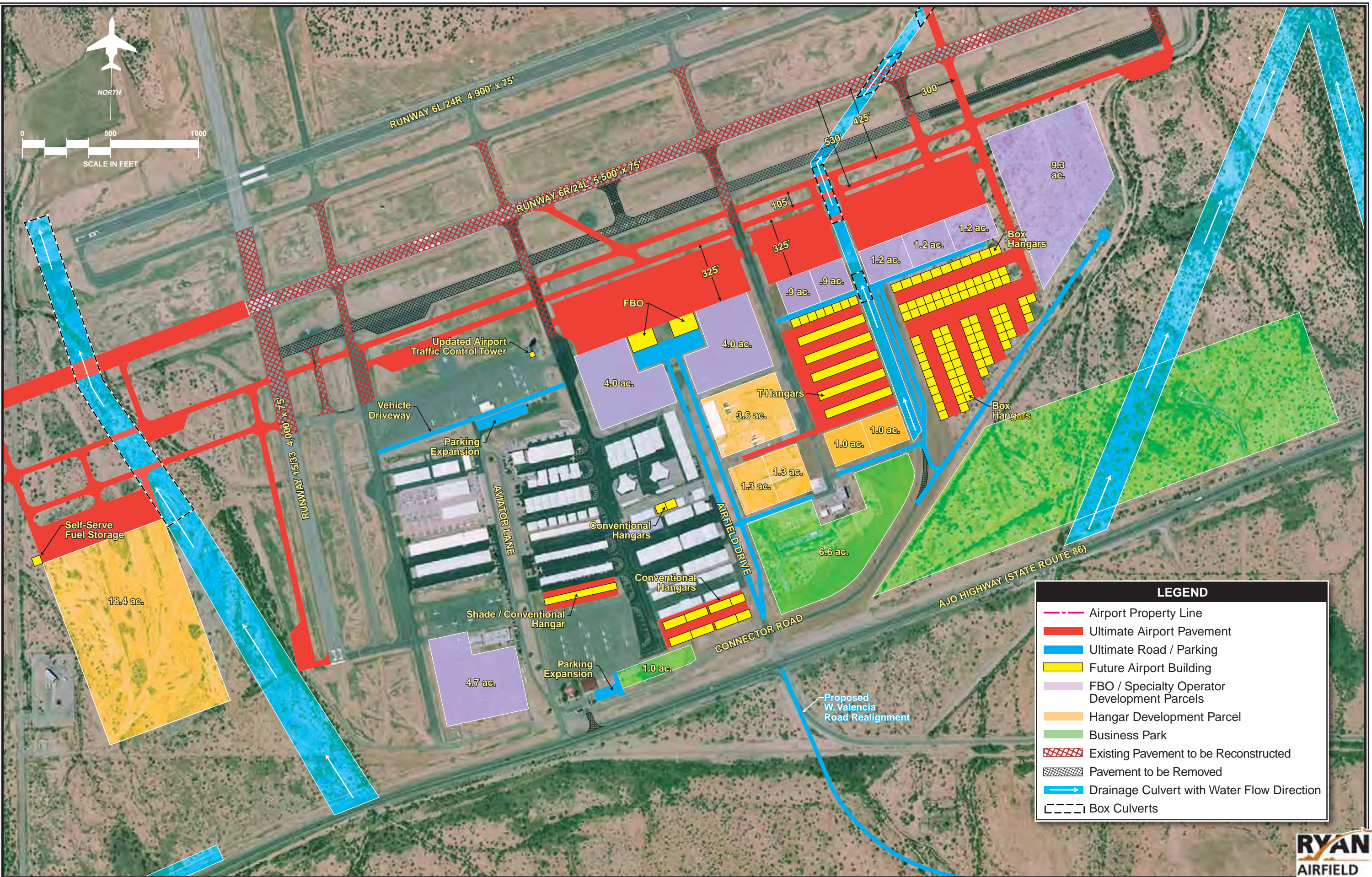
The flight line, parallel to the proposed Taxiway C and existing Taxiway B, is planned for the development of a total of approximately 88,200 square yards of apron. The easternmost apron is split into two separate aprons to allow for a drainage channel running from the south to the north. The access road to this area is also planned to allow for the drainage channel to run parallel on the west side of the road.

The westerly proposed apron serves two 15,000 square-foot conventional hangars planned for potential FBO development. Adjacent to these FBO hangars are two 4.0 acre parcels for similar FBO/specialty operator developments. These facilities will be served by a 4,444 square-yard auto-

mobile parking lot. The parking lot would be accessible via a new airport entrance intersection at Ajo Highway and Airfield Drive. Airfield Drive itself is planned to be developed into a “boulevard” style roadway.

Several hangar development parcels ranging in size from 1.0 acres to 3.6 acres are planned to the east of Airfield Drive. These parcels will be leased by the TAA to developers for the purpose of constructing hangar facilities. These parcels will serve as a valuable revenue source for the TAA. Five T-hangar facilities and a set of eight 2,500 square foot box hangars are planned in this area as well providing an additional 93 individual storage units. Five FBO/specialty operator development parcels ranging in size from 0.9 acres to 1.2 acres are planned south of the expanded apron areas. These parcels are ideal for an aviation-related business that would need direct access to the apron and the airfield. These parcels would also serve as a revenue source for the TAA. An additional 92 box hangars are planned to the south of the FBO/specialty operator parcels. These box hangars vary in size from 2,500 square feet to 3,000 square feet and can provide storage for multiple aircraft. A large 9.3 acre FBO/specialty operator parcel is planned at the far east end of the landside development area. This parcel will be reserved for an aviation-related business that would need direct airfield access and a large area for development to conduct its operations.

Several box/conventional style hangars are planned to the northwest of





the intersection of Airfield Drive and Connector Road. An additional shade hangar facility is planned to the north of the existing apron adjacent to the administration building. A new access road is planned to extend from Connector Road north to the apron to allow fuel trucks access to the self-service fuel facility. The administration building parking lot would be expanded east to this access road.

A 4.7 acre parcel of land adjacent to the flight school facility is planned to be reserved for any future expansion of the flight school facility. This could include the expansion of the apron, office/classroom facilities, and automobile parking.

The existing airport traffic control tower (ATCT) does not meet the space and functional needs of the airport traffic controllers. Therefore, a new ATCT is planned to be constructed on the same site as the existing ATCT. A temporary tower would be needed in the interim while the new ATCT is constructed. This temporary tower could be located adjacent to the existing tower. The new tower will be constructed to a higher elevation to allow for greater visibility of the airfield and taxiway areas and with increased area to allow for all needed equipment and office space.

The automobile parking lot immediately south of the north apron is planned to be expanded to the west. An airside automobile access road is planned to extend from Taxiway D across the north apron to Taxiway B2. This designated roadway provides a clear path for vehicles on the apron

reducing chances for potential incursions.

A 6.6 acre parcel of land northeast of the Airfield Drive and Connector Road intersection, a 1.0 acre parcel east of the airport administration building, and a 37.0 acre parcel along Ajo Highway are planned for the development of a business park. This land would be leased by the TAA to aviation or non-aviation related businesses that would not need access to the airfield. This type of development can generate a significant revenue source for the TAA. The airport's maintenance facilities would be maintained in their present location with an additional access road extending to the east.

In time it may become necessary for the development of land on the west side of Runway 15-33. This plan provides for a partial parallel taxiway to the southern portion of Runway 15-33 and a 16,225 square yard apron. An 18.4 acre parcel of land is reserved for ultimate hangar development. A self-service fuel storage facility is also planned in the west landside development area to eliminate the need for aircraft to taxi across an active runway to fuel.

## ***AIRPORT LAYOUT PLAN DRAWINGS***

Per FAA and Arizona Department of Transportation (ADOT) requirements, an official Airport Layout Plan (ALP) has been developed for Ryan Airfield. The "Draft" ALP drawing set (Sheets 1, through 18) can be found at the end

of this chapter. The airport layout drawing (ALD) (**Sheet 1**) graphically presents the existing and ultimate airport layout. The ALP is used, in part by the FAA and ADOT, to determine funding eligibility for future development projects. The ALP was prepared on a computer-aided drafting system for future ease of use. The computerized plan set provides detailed information of existing and future facility layout on multiple layers that permits the user to focus in on any section of the airport at a desirable scale. The plan can be used as base information for design and can be easily updated in the future to reflect new development and more detail concerning existing conditions as made available through design surveys.

A number of related drawings, which depict the ultimate airspace and landside development, are included with the ALP. The following provides a brief discussion of the additional drawings included with the “Draft” ALP:

**Data Sheet (Sheet 2)** – The data sheet provides tables, which present specific information for the airport including dimensions of airfield facilities and building uses.

**Terminal Area/Airport Landside Facilities Drawing (Sheet 3)** – The terminal area drawing provides greater detail concerning landside improvements on the east and west sides of the runway and at a larger scale than on the ALP.

**Airport Airspace Drawing (Sheets 4 and 5)** – The Airport Airspace

Drawing is a graphic depiction of the Title 14 Code of Federal Regulations (CFR) Part 77, *Objects Affecting Navigable Airspace*, regulatory criterion. The Airport Airspace Drawing is intended to aid local authorities in determining if proposed development could present a hazard to the airport and obstruct the approach path to a runway end. This plan should be coordinated with local land use planners.

**Airport Airspace Profile Drawing (Sheets 6 through 10)** – These drawings provide both plan and profile views of the 14 CFR Part 77 approach surfaces for each runway end. A composite profile of the extended ground line is depicted. Obstructions and clearances over terrain are shown as appropriate. The ultimate 40:1 precision approach surface for Runway 24L is shown to be obstructed by terrain.

**Inner Portion of the Approach Surface Drawings (Sheets 11 through 16)** – The Inner Portion of the Approach Surface Drawings are scaled drawings of the runway protection zone (RPZ) for each runway end. A plan and profile view of each RPZ is provided to facilitate identification of obstructions that lie within these safety areas. Detailed obstruction and facility data is provided to identify planned improvements and the disposition of obstructions (as appropriate).

**Airport Property Map/Exhibit A (Sheet 17)** – The Airport Property Map provides information on the acquisition and identification of all land tracts under the control of the airport. Both existing and future property

holdings are identified on the “Exhibit A” Property Map.

**On-Airport Land Use Drawing (Sheet 18)** – The On-Airport Land Use Drawing is a graphic depiction of the land use recommendations. When development is proposed, it should be directed to the appropriate land use area depicted on this plan.

There are five primary land use designations, they are:

- Airfield Operations
- General Aviation
- Revenue Support Aviation Related
- Commercial Industrial
- Open Space

These designations are defined in the glossary section of the Master Plan. The land use plan also delineates areas that have a mixed land use designation (denoted by contrasting stripes). The mixed land use designation provides a greater degree of flexibility in guiding future development

by allowing a range of uses that reflect the market condition and development patterns prevalent at the time of development.

## ***SUMMARY***

The Master Plan for Ryan Airfield has been developed in cooperation with the PAC, interested citizens, and the TAA. It is designed to assist the TAA in making decisions relative to the future use of Ryan Airfield as it is maintained and developed to meet its role as defined in Chapter Two.

Flexibility will be a key to the plan, since activity may not occur exactly as forecast. The Master Plan provides the TAA with options to pursue in marketing the assets of the airport for community development. Following the general recommendations of the plan, the airport can maintain its viability and continue to provide air transportation services to the region.









EX RWY 33  
 END EL 2418.0  
 TDZ EL 2418.0  
 N 32° 08' 04.671"  
 W 111° 10' 39.348"

**EXISTING AIRPORT BUILDING TABLE**

NO.	DESCRIPTION	TOP ELEV
1	FLIGHT SCHOOL	2435.8
2	T-HANGARS	2434.4
3	CLEARSPAN HANGARS	2434.8
4	NOSE SHADE HANGAR	
5	EXECUTIVE HANGAR	2428.5
6	EXECUTIVE HANGAR	2429.0
7	EXECUTIVE HANGAR	2426.2
8	EXECUTIVE HANGAR	2430.2
9	OFFICE BUILDING	2432.6
10	RESTAURANT	2442.0
11	TAA ADMINISTRATION BUILDING	2443.1
12	SELF-SERVE FUELING FACILITY	
13	SHADE HANGARS	2431.7
14	SHADE HANGARS	2432.9
15	T-HANGARS	2440.7
16	CONVENTIONAL HANGAR	2433.1
17	CONVENTIONAL HANGAR	2433.0
18	CONVENTIONAL HANGAR	2433.1
19	CONVENTIONAL HANGAR	2433.1
20	CONVENTIONAL HANGAR	2432.9
21	CONVENTIONAL HANGAR	2433.2
22	CONVENTIONAL HANGAR	2233.4
23	CONVENTIONAL HANGAR	2429.7
24	CONVENTIONAL HANGAR	2430.1
25	CONVENTIONAL HANGAR	2430.1
26	CONVENTIONAL HANGAR	2430.3
27	CONVENTIONAL HANGAR	2430.1
28	CONVENTIONAL HANGAR	2430.1
29	CONVENTIONAL HANGAR	2430.0
30	CONVENTIONAL HANGAR	2430.3
31	CONVENTIONAL HANGAR	2429.0
32	CONVENTIONAL HANGAR	2429.5
33	CONVENTIONAL HANGAR	2429.6
34	CONVENTIONAL HANGAR	2429.2
35	CONVENTIONAL HANGAR	2429.3
36	CONVENTIONAL HANGAR	2429.1
37	CONVENTIONAL HANGAR	2429.1
38	CONVENTIONAL HANGAR	2429.2
39	CONVENTIONAL HANGAR	2431.8
40	CONVENTIONAL HANGAR	2431.9
41	CONVENTIONAL HANGAR	2431.7
42	CONVENTIONAL HANGAR	2432.0
43	CONVENTIONAL HANGAR	2432.1
44	CONVENTIONAL HANGAR	2432.0
45	CONVENTIONAL HANGAR	2431.6
46	CONVENTIONAL HANGAR	2431.5

**EXISTING AIRPORT BUILDING TABLE**

NO.	DESCRIPTION	TOP ELEV
47	CONVENTIONAL HANGAR	2430.8
48	CONVENTIONAL HANGAR	2438.1
49	WASH RACK	2437.3
50	EXECUTIVE HANGAR	2445.7
51	CONVENTIONAL HANGAR	2447.1
52	CONVENTIONAL HANGAR	2444.0
53	CONVENTIONAL HANGAR	2446.0
54	CONVENTIONAL HANGAR	2445.8
55	CONVENTIONAL HANGAR	2447.0
56	CONVENTIONAL HANGAR	2444.1
57	CONVENTIONAL HANGAR	2445.4
58	CONVENTIONAL HANGAR	2443.4
59	CONVENTIONAL HANGAR	2442.0
60	EXECUTIVE HANGAR	2442.8
61	CONVENTIONAL HANGAR	2443.0
62	CONVENTIONAL HANGAR	2443.2
63	CONVENTIONAL HANGAR	2442.7
64	CONVENTIONAL HANGAR	2441.1
65	CONVENTIONAL HANGAR	2446.2
66	CONVENTIONAL HANGAR	2443.8
67	CONVENTIONAL HANGAR	2440.1
68	EXECUTIVE HANGAR	2440.6
69	EXECUTIVE HANGAR	2440.5
70	EXECUTIVE HANGAR	2445.8
71	CONVENTIONAL HANGAR	2441.8
72	EXECUTIVE HANGAR	2440.1
73	EXECUTIVE HANGAR	2440.2
74	EXECUTIVE HANGAR	2434.2
75	EXECUTIVE HANGAR	2439.6
76	EXECUTIVE HANGAR	2436.4
77	T-HANGARS	2436.0
78	T-HANGARS	2436.1
79	CONVENTIONAL HANGAR	2433.4
80	CONVENTIONAL HANGAR	2434.3
81	CONVENTIONAL HANGAR	2434.1
82	CONVENTIONAL HANGAR	2434.5
83	CONVENTIONAL HANGAR	2434.0
84	CONVENTIONAL HANGAR	2432.3
85	CONVENTIONAL HANGAR	2432.1
86	CONVENTIONAL HANGAR	2431.9
87	CONVENTIONAL HANGAR	2431.7
88	CONVENTIONAL HANGAR	2431.6
89	CONVENTIONAL HANGAR	2434.1
90	CONVENTIONAL HANGAR	2438.9
91	CONVENTIONAL HANGAR	2438.9
92	CONVENTIONAL HANGAR	2439.0

**EXISTING AIRPORT BUILDING TABLE**

NO.	DESCRIPTION	TOP ELEV
93	CONVENTIONAL HANGAR	2436.7
94	CONVENTIONAL HANGAR	2435.2
95	CONVENTIONAL HANGAR	2434.4
96	CONVENTIONAL HANGAR	2433.9
97	EXECUTIVE HANGAR	2433.4
98	EXECUTIVE HANGAR	2432.5
99	EXECUTIVE HANGAR	2438.8
100	MAINTENANCE FACILITIES	2442.0
101	SOLID WASTE TRANSFER STATION	
102	ELECTRICAL VAULT	

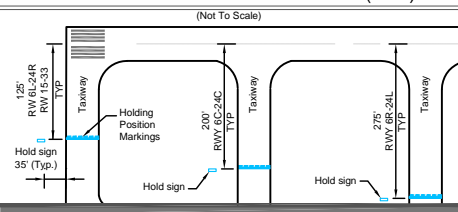
NA - NOT AVAILABLE

**ULTIMATE AIRPORT BUILDING TABLE**

NO.	DESCRIPTION	TOP ELEV*
101	SHADE HANGARS	2430.9
102	CONVENTIONAL HANGAR	2448.0
103	CONVENTIONAL HANGAR	2450.0
104	CONVENTIONAL HANGAR	2448.0
105	CONVENTIONAL HANGAR	2449.0
106	CONVENTIONAL HANGAR	2448.0
107	CONVENTIONAL HANGAR	2450.0
108	CONVENTIONAL HANGAR	2448.0
109	CONVENTIONAL HANGAR	2448.0
110	CONVENTIONAL HANGAR	2432.0
111	CONVENTIONAL HANGAR	2432.0
112	T-HANGARS	2436.0
113	T-HANGARS	2436.0
114	T-HANGARS	2436.0
115	T-HANGARS	2436.0
116	T-HANGARS	2436.0
117	BOX HANGAR	2436.0
118	BOX HANGAR	2436.0
119	BOX HANGAR	2434.0
120	BOX HANGAR	2436.0
121	BOX HANGAR	2436.0
122	BOX HANGAR	2435.0
123	BOX HANGAR	2435.0
124	BOX HANGAR	2435.0
125	HELICOPTER FBO	2446.0
126	ELECTRICAL VAULT	2418.0

\* - ESTIMATED

**HOLD POSITION MARKINGS/SIGN (TYP)**



**LEGEND**

EXISTING	ULTIMATE	DESCRIPTION
---	---	AIRPORT PROPERTY LINE
●	●	SECTION CORNERS
○	○	AIRPORT REFERENCE POINT (ARP)
★	★	AIRPORT ROTATING BEACON
---	---	AVIGATION EASEMENT
---	---	BUILDING RESTRICTION LINE
---	---	STRUCTURES ON AIRPORT
N/A	---	ABANDON
---	---	STRUCTURE OFF AIRPORT
---	---	FENCING
---	---	AIRPORT PAVEMENT
N/A	---	ABANDON PAVEMENT
---	---	HELICOPTER PARKING
N/A	---	HELICOPTER TRAINING PAD
---	---	HOLD MARKING
---	---	TIE DOWN
○	○	SURVEY MONUMENT WITH IDENTIFIER
---	---	OBJECT FREE AREA
---	---	RUNWAY SAFETY AREA
---	---	OBSTACLE FREE ZONE
---	---	RUNWAY PROTECTION ZONE
---	---	ULTIMATE RUNWAY VISIBILITY ZONE
---	---	ULTIMATE PAPI
---	---	RUNWAY END IDENTIFIER LIGHTS
---	---	LIGHTED WINDSOCK
---	---	TOPOGRAPHY
---	---	EXISTING LOCALIZER
---	---	GLIDESLOPE CRITICAL AREA
---	---	MALSR

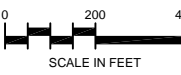
- Aviation Related Revenue Support
- Non-Aviation Revenue Support
- Hangar Development Parcels

**GENERAL NOTES:**

- HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 - NAD83, STATE PLANE, ARIZONA CENTRAL, FIPS 0202; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 - NAVD88.
- ALL EXISTING RUNWAY END ELEVATIONS, COORDINATES, AND BEARINGS NOTED IN THIS ALP FROM ASIS DATASHEET SYSTEMS, <http://avnwww.jcabi.gov/datasheet/> PER STANTEC CONSULTING
- SURVEY MAPPING OF ON AIRPORT ENVIRONS PROVIDED BY STANTEC CONSULTING.
- ALL ULTIMATE COORDINATES CALCULATED WITH GEOB3A



Magnetic Declination  
 10° 47' East (June 2008)  
 Annual Rate of Change  
 00° 06' West (June 2008)

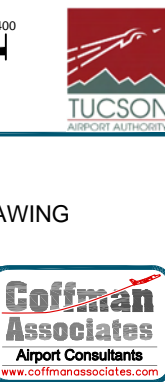


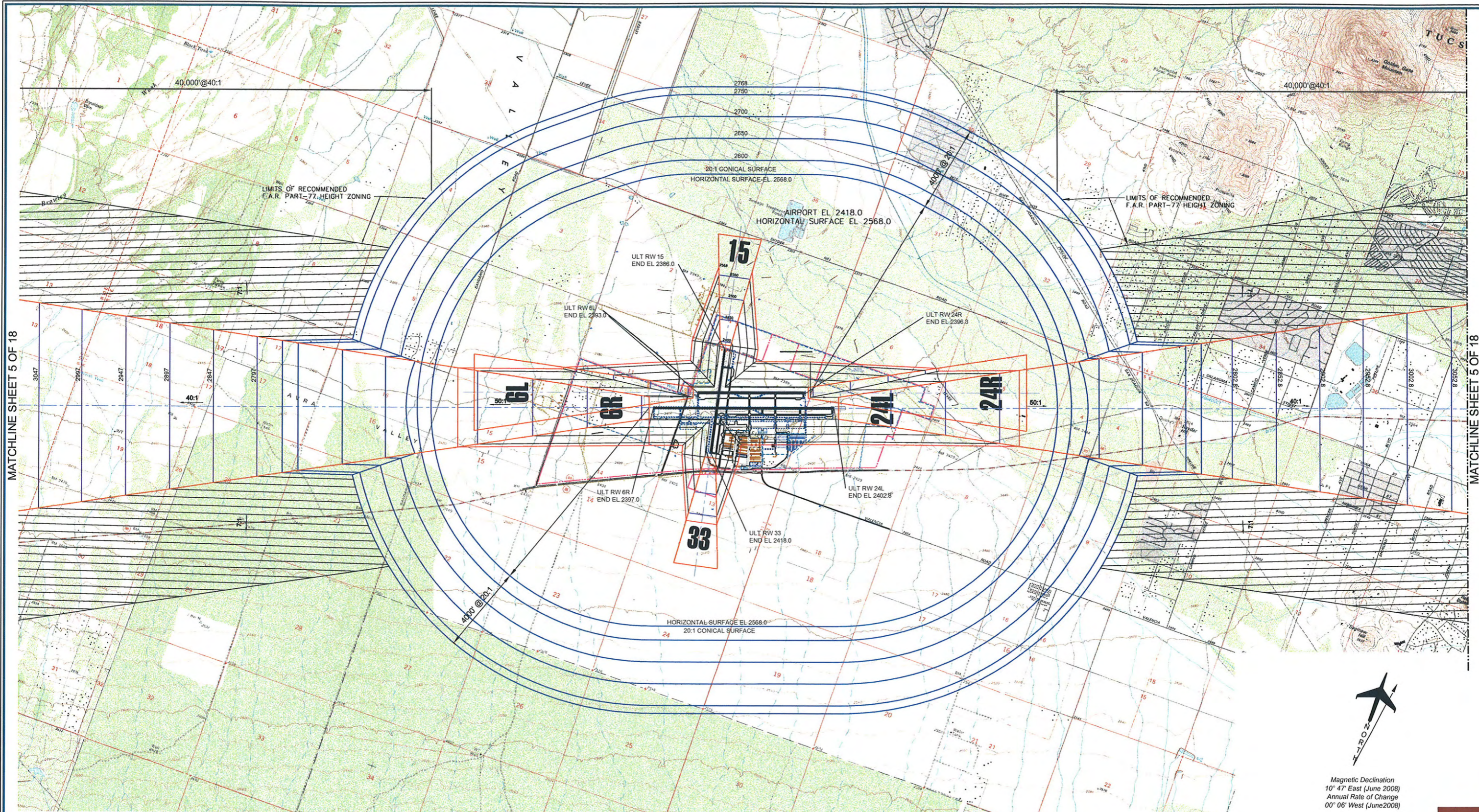
**RYAN AIRFIELD**  
**TERMINAL AREA DRAWING**  
 Tucson, Arizona

**PLANNED BY:** Eric S. Pfeiffer  
**DETAILED BY:** Diana L. Hopkins  
**APPROVED BY:** James M. Harris

**October 6, 2009** SHEET **3** OF **18**

THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.





MATCHLINE SHEET 5 OF 18

MATCHLINE SHEET 5 OF 18



Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)



No.	Description	Top Elevation	Distance from Ult RW End	Offset from RW Centerline	Penetration	Surface Penetrated	Proposed Remediation

- GENERAL NOTES:**
1. THE FOLLOWING USGS QUAD MAPS APPLIED AS BACKGROUND: BROWN MOUNTAIN, CAT MOUNTAIN, COCORAQUE BUTTE, SAN XAVIER, SAN XAVIER MISSION SW, THREE POINTS, AND TUCSON.
  2. SEE THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE-IN OBSTRUCTION DETAILS.

No.	REVISIONS	BY	DATE
1	UPDATED AIRPORT MASTER PLAN	K.L.W. M.F.J.	12/07/00
2	UPDATED AIRPORT MASTER PLAN	R.A.L. S.G.B.	02/29/00
3	UPDATED FOR REVALIDATION	M.E.S. M.F.J.	10/29/96
4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H. J.M.H.	06/02/96

**RYAN AIRFIELD**  
**AIRSPACE DRAWING I**

DRAFT

Tucson, Arizona

PLANNED BY: Eric S. Pfeifer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris

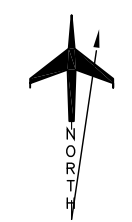
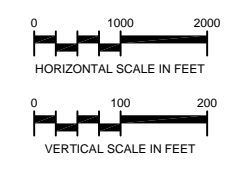
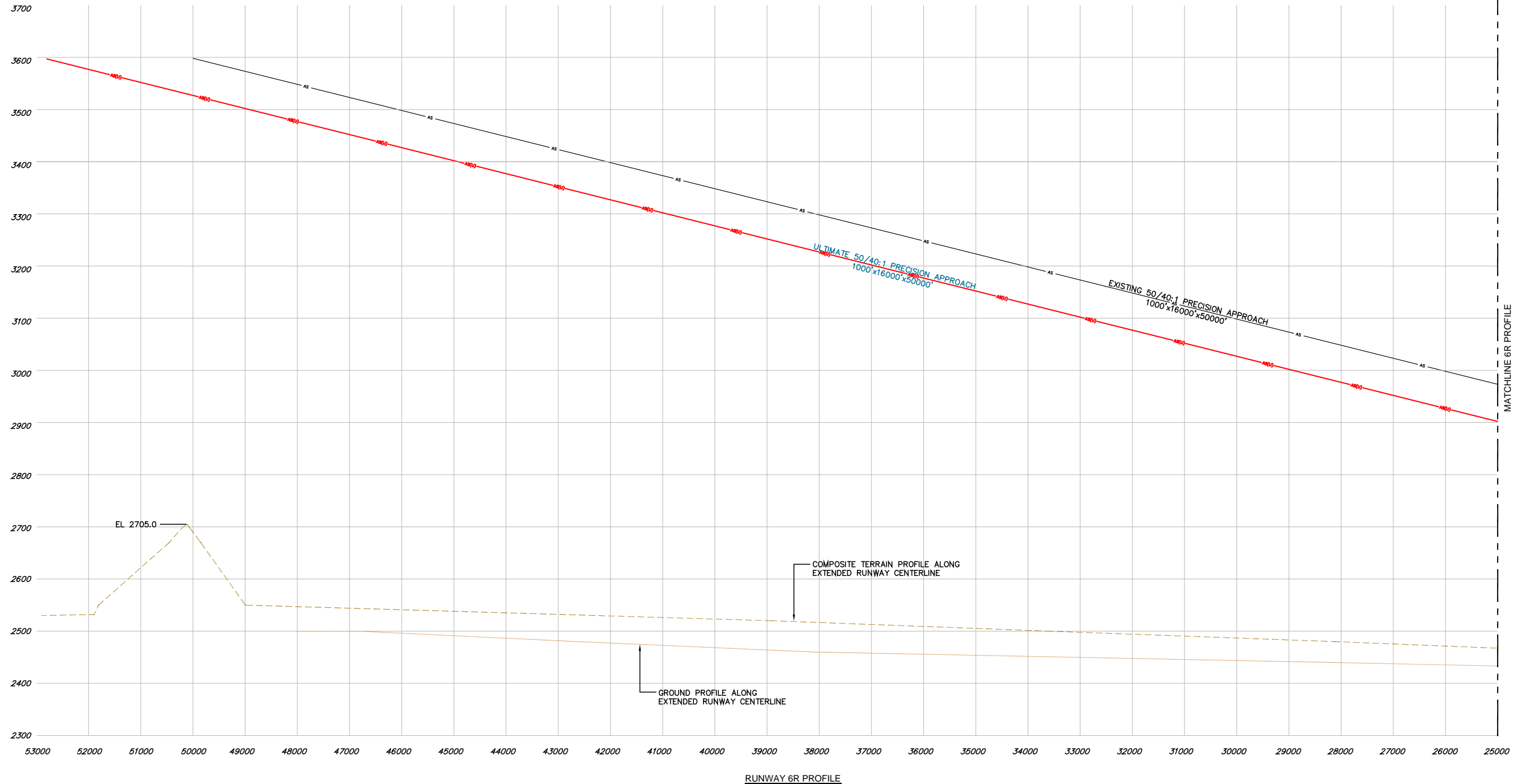
October 6, 2009 SHEET 4 OF 18

**Coffman Associates**  
Airport Consultants  
www.coffmanassociates.com









Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)

RUNWAY 6R OBSTRUCTION TABLE						
No.	Description	Top Elevation	Distance from RW End	Offset from Centerline	Penetration	Remediation
-	NONE FOUND	-	-	-	-	-

**GENERAL NOTES:**

- ELEVATIONS ADJUSTED UPWARD 10' FOR A PRIVATE ROAD, 15' FOR A PUBLIC ROAD, 17' FOR AN INTERSTATE HIGHWAY, AND 23' FOR A RAILROAD PER PART 77-OBJECTS AFFECTING NAVIGABLE AIRSPACE, SUBPART C, SECTION 77.23.
- SEE THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE-IN DETAILS.

No.	REVISIONS	BY	DATE
1	UPDATED AIRPORT MASTER PLAN	K.L.W. M.F.J.	12/07/00
2	UPDATED AIRPORT MASTER PLAN	R.A.L. S.G.B.	02/29/00
3	UPDATED FOR REVALUATION	M.E.S. M.F.J.	10/29/96
4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H. J.M.H.	08/02/96

**RYAN AIRFIELD**  
**AIRPORT AIRSPACE PROFILE II**  
**6R**

DRAFT

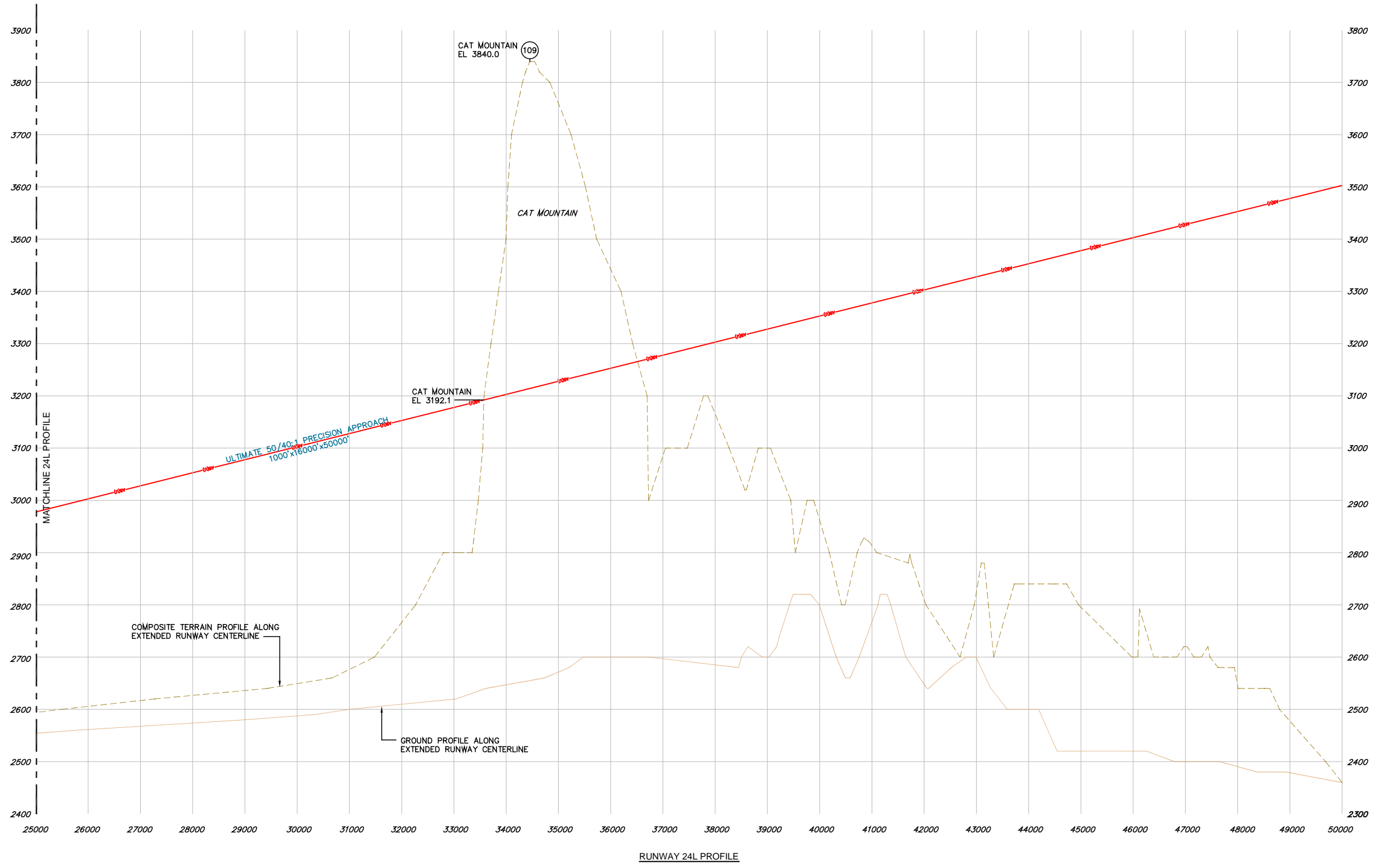
Tucson, Arizona

PLANNED BY:	Eric S. Pfeifer
DETAILED BY:	Diana L. Hopkins
APPROVED BY:	James M. Harris

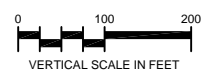
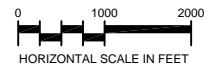
October 6, 2009 SHEET 7 OF 18



Coffman Associates \\Coffman\GAD Files\CAD\Projects\AP\6R\6R.dwg Printed Date: 10-06-09 01:56:05 PM @gphaha



Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)



RUNWAY 24L OBSTRUCTION TABLE						
No.	Description	Elevation	Distance from RW End	Offset from Centerline	Penetration	Remediation
109	CAT MOUNTAIN	3840'	34,654'	2,653' R	626'	REQUEST AERONAUTICAL STUDY

No.	REVISIONS	BY	DATE
1	UPDATED AIRPORT MASTER PLAN	K.L.W. M.F.J.	12/07/00
2	UPDATED AIRPORT MASTER PLAN	R.A.L. S.G.B.	02/29/00
3	UPDATED FOR REVALIDATION	M.E.S. M.F.J.	10/29/96
4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H. J.M.H.	08/02/96

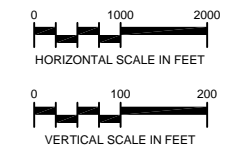
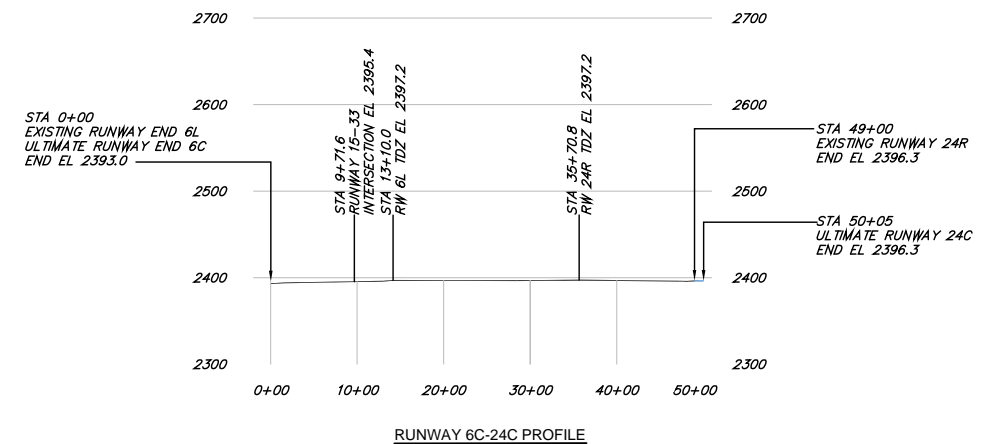
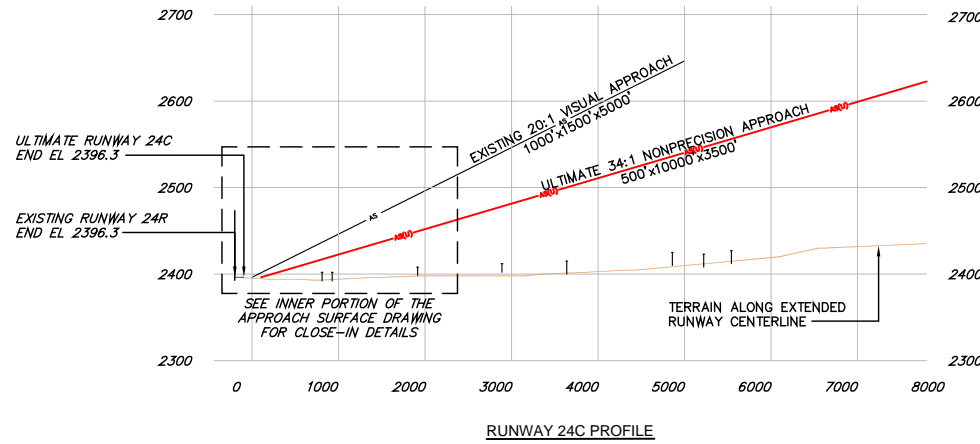
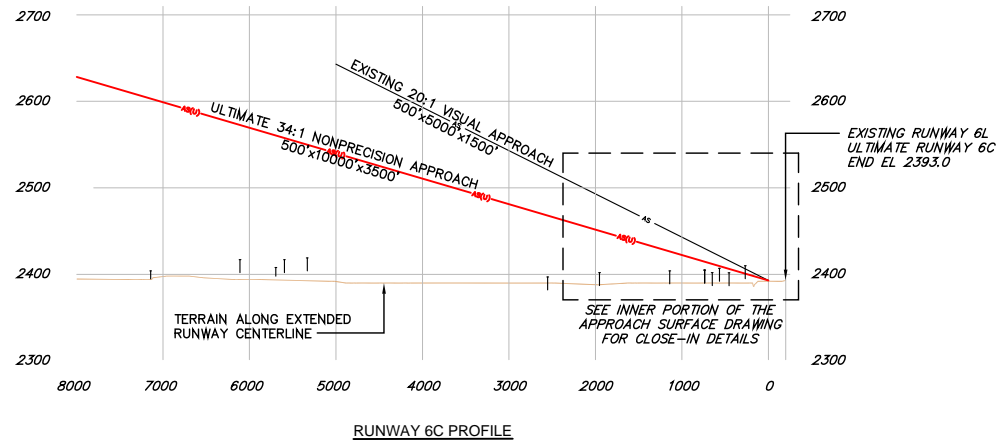
**RYAN AIRFIELD**  
**AIRPORT AIRSPACE PROFILE III**  
**24L**  
**DRAFT**  
Tucson, Arizona

PLANNED BY: Eric S. Pfeifer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris



October 6, 2009 SHEET 8 OF 18

THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.



Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)

RUNWAY 6C OBSTRUCTION TABLE						
No.	Description	Top Elevation	Distance from RW End	Offset from Centerline	Penetration	Remediation
-	NONE FOUND	-	-	-	-	-

RUNWAY 24C OBSTRUCTION TABLE						
No.	Description	Top Elevation	Distance from RW End	Offset from Centerline	Penetration	Remediation
-	NONE FOUND	-	-	-	-	-

**GENERAL NOTES:**

- ELEVATIONS ADJUSTED UPWARD 10' FOR A PRIVATE ROAD, 15' FOR A PUBLIC ROAD, 17' FOR AN INTERSTATE HIGHWAY, AND 23' FOR A RAILROAD PER PART 77—OBJECTS AFFECTING NAVIGABLE AIRSPACE, SUBPART C, SECTION 77.23.
- SEE THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE-IN OBSTRUCTION DETAILS.

No.	REVISIONS	BY	DATE
1	UPDATED AIRPORT MASTER PLAN	K.L.W.	M.F.J. 12/07/00
2	UPDATED AIRPORT MASTER PLAN	R.A.L.	S.G.B. 02/29/00
3	UPDATED FOR REVALIDATION	M.E.S.	M.F.J. 10/29/96
4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H.	J.M.H. 08/02/96

**RYAN AIRFIELD**

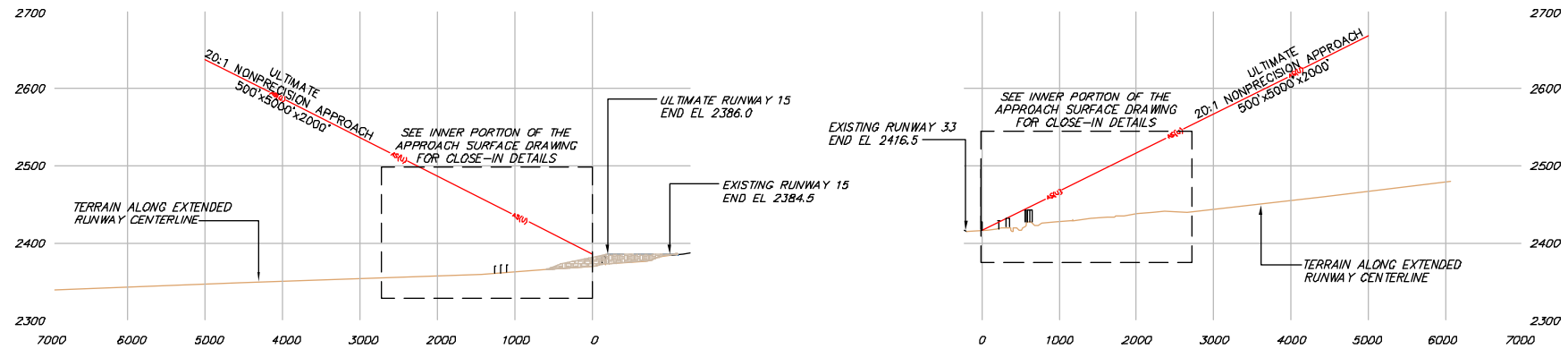
**AIRPORT AIRSPACE PROFILE 6L-24R**

**Tucson, Arizona**

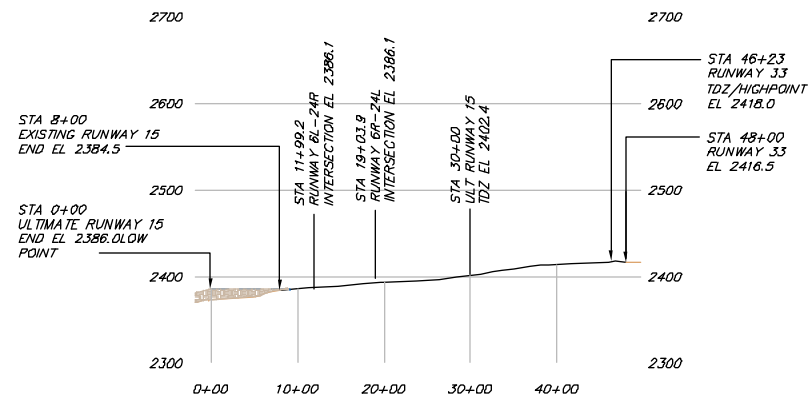
PLANNED BY: Eric S. Pfeifer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris

October 6, 2009 SHEET 9 OF 18

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Airport Consultants  
www.goffmanassociates.com



RUNWAY 15-33 APPROACH PROFILES



RUNWAY 15-33 PROFILE

RUNWAY 15 OBSTRUCTION TABLE						
No.	Description	Top Elevation	Distance from RW End	Offset from Centerline	Parameter	Remarks
-	NONE FOUND	-	-	-	-	-

RUNWAY 33 OBSTRUCTION TABLE						
No.	Description	Top Elevation	Distance from RW End	Offset from Centerline	Parameter	Remarks
-	NONE FOUND	-	-	-	-	-



Magnetic Declination  
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Annual Rate of Change  
00° 06' West (June 2008)



**GENERAL NOTES:**

- ELEVATIONS ADJUSTED UPWARD 10' FOR A PRIVATE ROAD, 15' FOR A PUBLIC ROAD, 17' FOR AN INTERSTATE HIGHWAY, AND 23' FOR A RAILROAD PER PART 77-OBJECTS AFFECTING NAVIGABLE AIRSPACE, SUBPART C, SECTION 77.23.
- SEE THE INNER PORTION OF THE APPROACH SURFACE DRAWINGS FOR CLOSE-IN OBSTRUCTION DETAILS.
- RUNWAY 15-33 IS DESIGNATED FOR SMALL AIRCRAFT ONLY.

No.	REVISIONS	BY	DATE
1	UPDATED AIRPORT MASTER PLAN	KL.W.	M.F.J.
2	UPDATED AIRPORT MASTER PLAN	R.A.L.	S.G.B.
3	UPDATED FOR REVALUATION	M.E.S.	M.F.J.
4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H.	J.M.H.

**RYAN AIRFIELD**  
**AIRPORT AIRSPACE PROFILE 15-33**

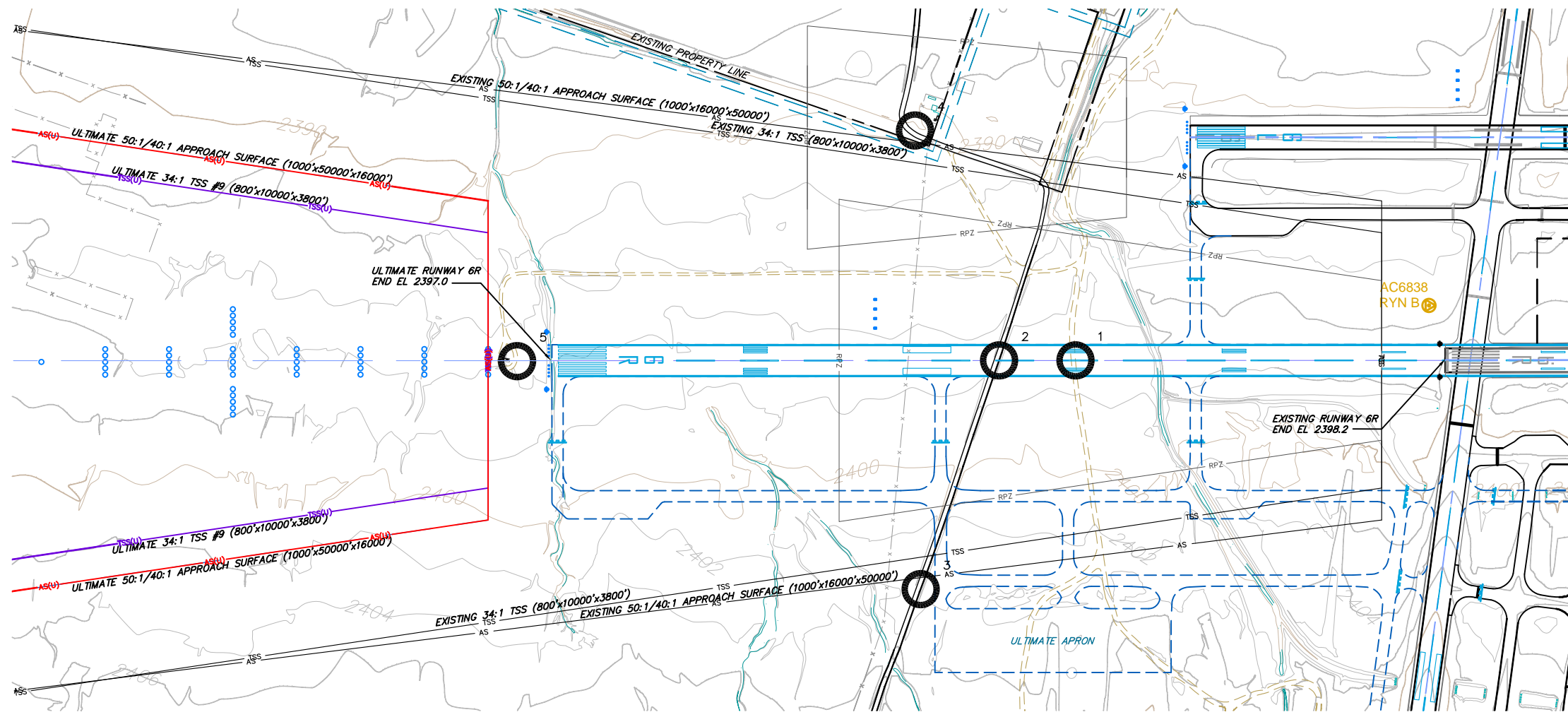
Tucson, Arizona

**DRAFT**

PLANNED BY: Eric S. P. Pa  
 DETAILED BY: Jason J. Posner  
 APPROVED BY: Jason J. Posner

Gordon J. L. 2009 SHEET 10 OF 18

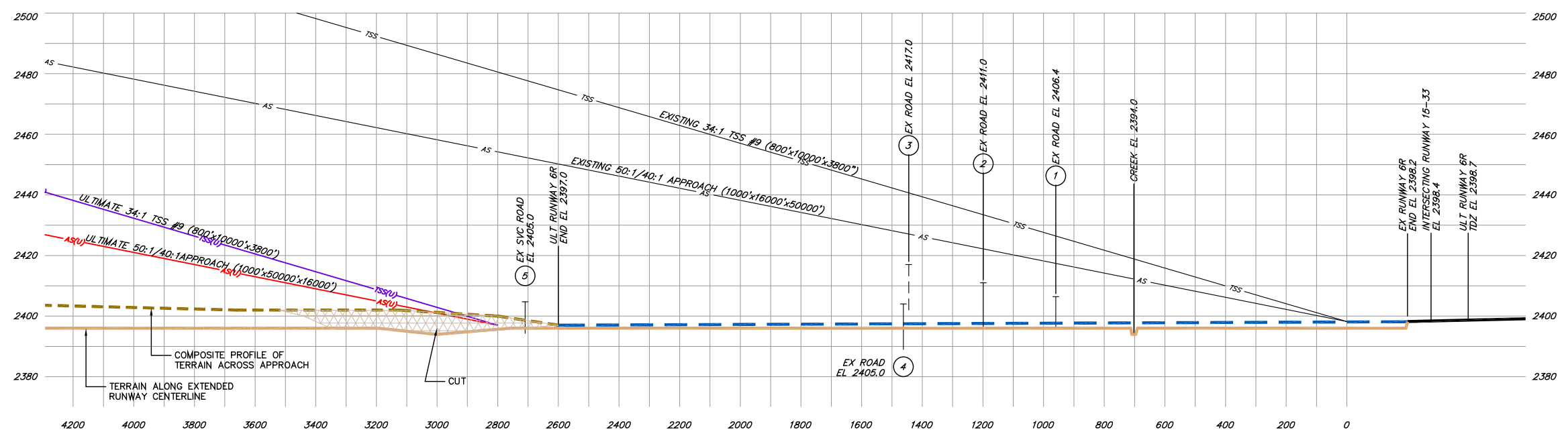
**Coffman Associates**  
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www.coffmanassociates.com



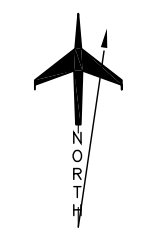
**RUNWAY 6R PLAN**

EXISTING RUNWAY 6R OBSTRUCTION TABLE						
No.	Description	Top Elevation	Distance from Exist RW End	Offset from Centerline	Penetration	Remediation
NONE FOUND						

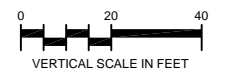
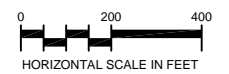
ULTIMATE RUNWAY 6R OBSTRUCTION TABLE						
No.	Description	Top Elevation	Distance from Ult RW End	Offset from Centerline	Penetration	Remediation



**RUNWAY 6R PROFILE**



Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)



**RYAN AIRFIELD**

**IPASD 6R**  
**DRAFT**

**Tucson, Arizona**

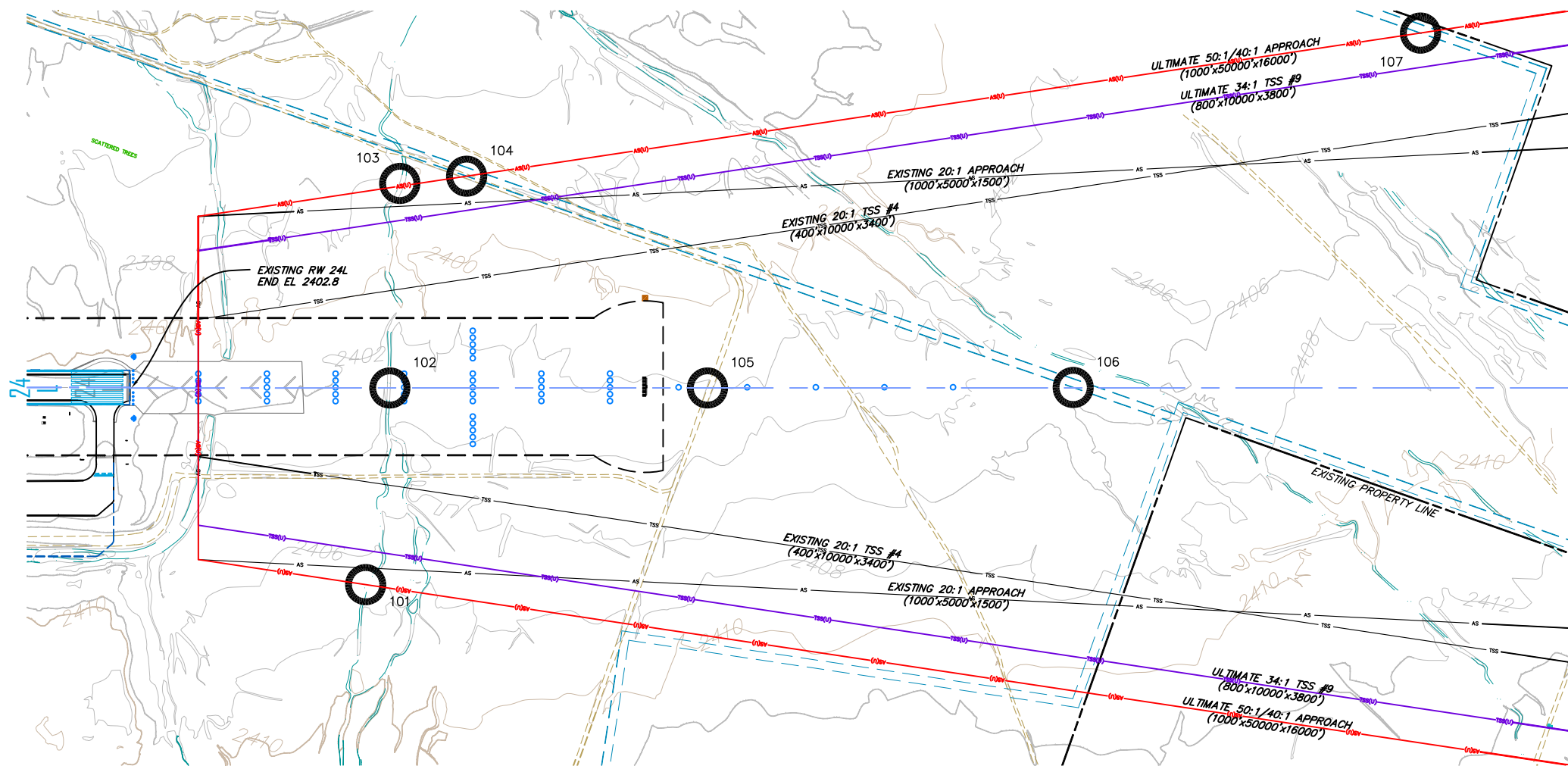
No.	REVISIONS	BY	DATE
1	UPDATED AIRPORT MASTER PLAN	K.L.W. M.F.J.	12/07/00
2	UPDATED AIRPORT MASTER PLAN	R.A.L. S.G.B.	02/29/00
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4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H. J.M.H.	08/02/96

PLANNED BY: Eric S. Pfeiffer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris



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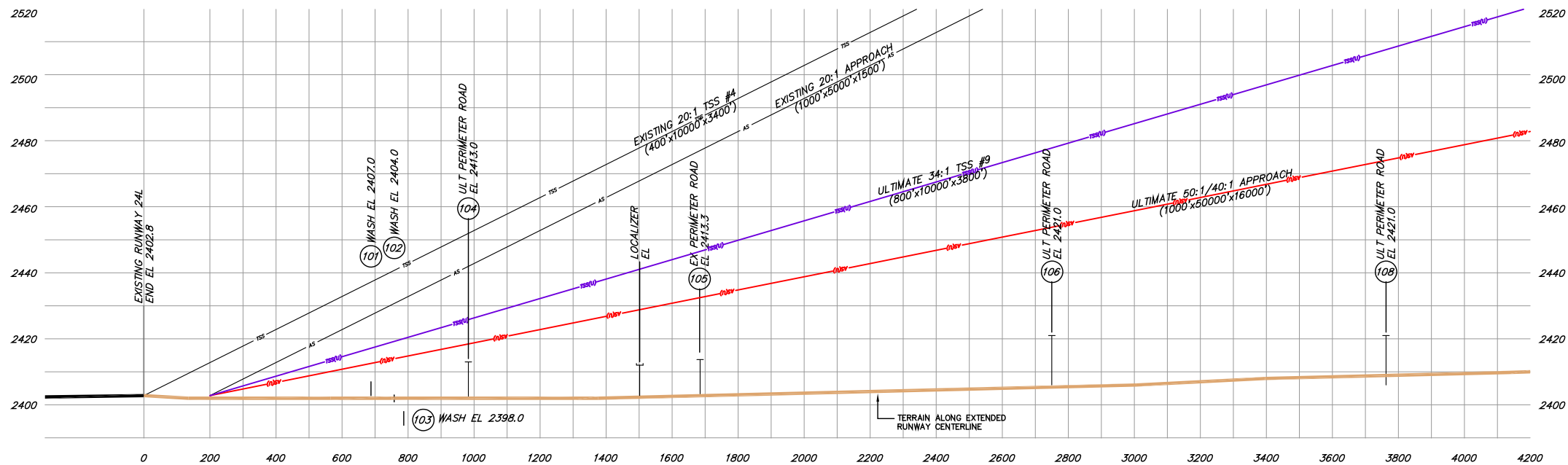
THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE OFFICIAL VIEW OR POLICY OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.



**RUNWAY 24L PLAN**

EXISTING RUNWAY 24L OBSTRUCTION TABLE							
No.	Description	Top Elevation	Distance from Exist RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
NONE FOUND							

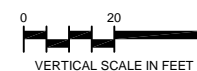
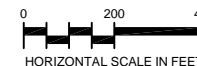
ULTIMATE RUNWAY 24L OBSTRUCTION TABLE							
No.	Description	Top Elevation	Distance from Ult RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
105	EXISTING PERIMETER ROAD	2413	184	0	11	1	TO BE RELOCATED



**RUNWAY 24L PROFILE**



Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)



No.	REVISIONS	BY	DATE
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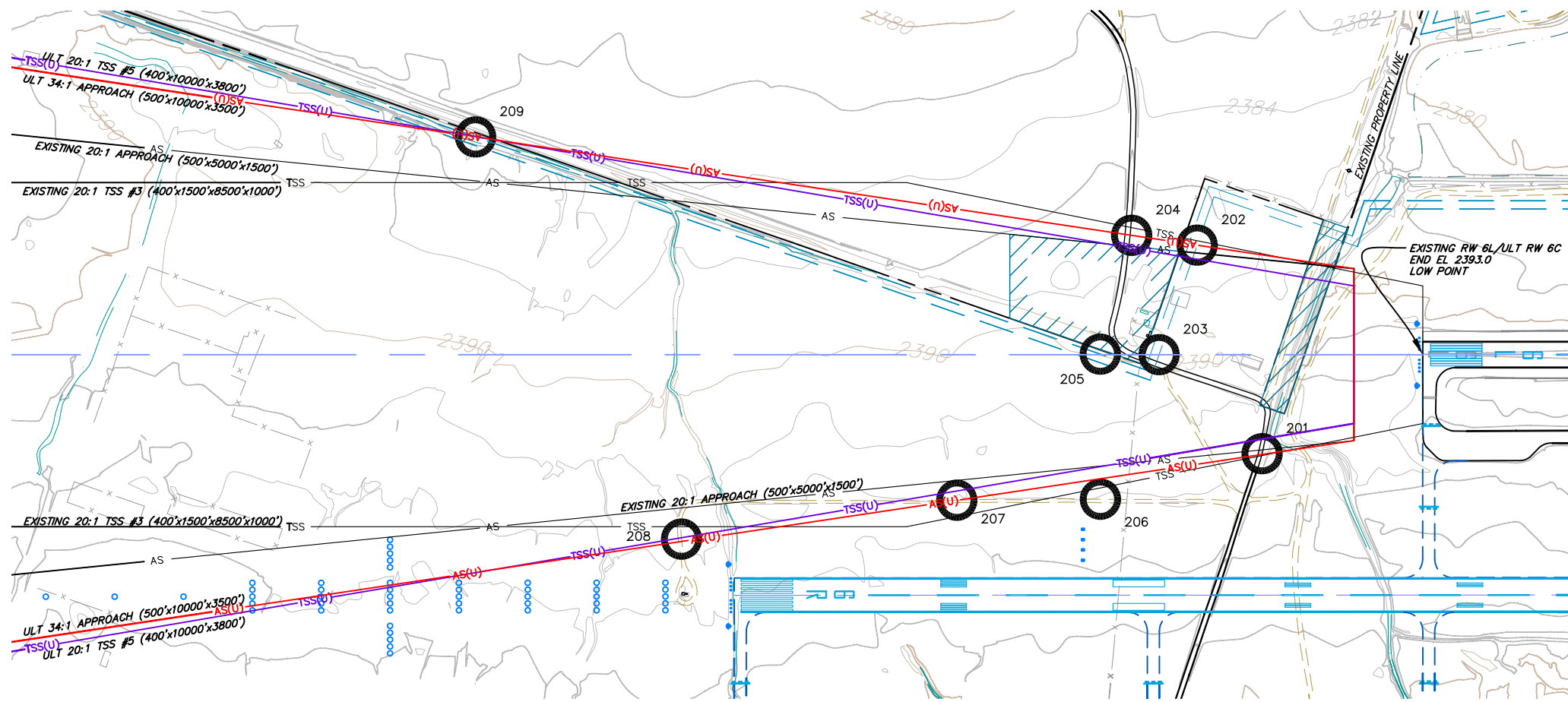
**RYAN AIRFIELD**  
**IPASD 24L**  
**DRAFT**  
**Tucson, Arizona**

PLANNED BY: Eric S. Pfeiffer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris

October 6, 2009 SHEET 12 OF 18

\*THE PREPARATION OF THESE DOCUMENTS WAS FINANCED IN PART THROUGH A PLANNING GRANT FROM THE FEDERAL AVIATION ADMINISTRATION AS PROVIDED UNDER SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, AS AMENDED. THE CONTENTS DO NOT NECESSARILY REFLECT THE ORIGINAL VIEWS OR OPINIONS OF THE FAA. ACCEPTANCE OF THESE DOCUMENTS BY THE FAA DOES NOT IN ANY WAY CONSTITUTE A COMMITMENT ON THE PART OF THE UNITED STATES TO PARTICIPATE IN ANY DEVELOPMENT DEPICTED HEREIN NOR DOES IT INDICATE THAT THE PROPOSED DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.\*

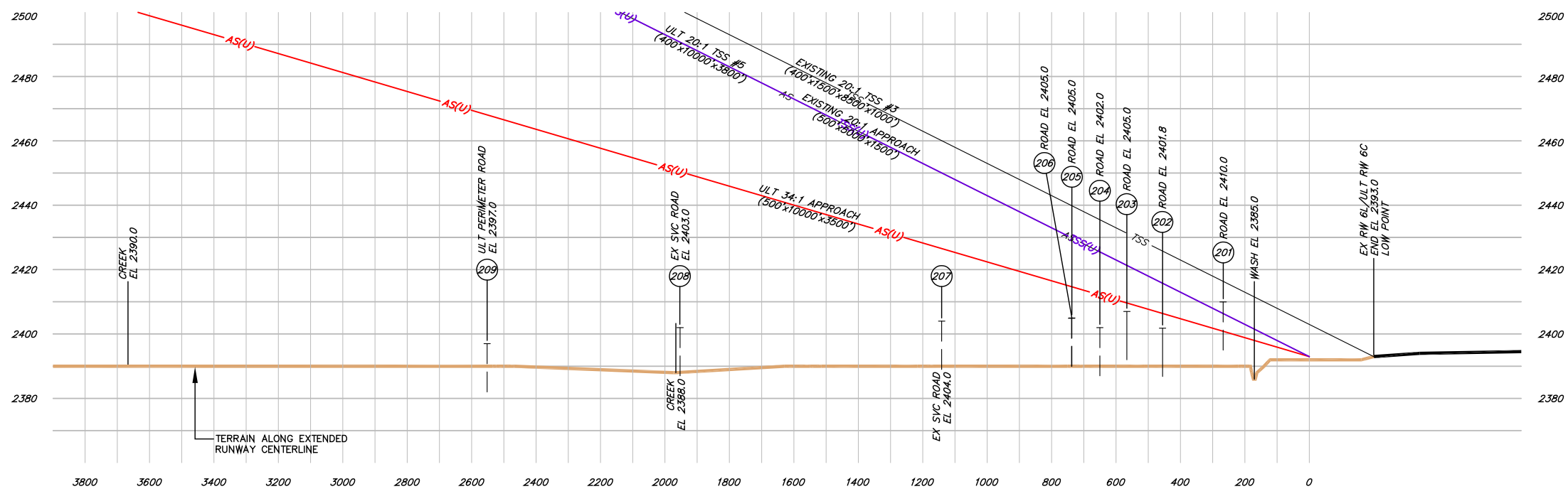




**RUNWAY 6C PLAN**

EXISTING RUNWAY 6L OBSTRUCTION TABLE							
No.	Description	Top Elevation	Distance from Exist RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
201	ACCESS ROAD	2410	467	288 R	4	4	RELOCATE ROAD

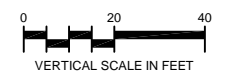
ULTIMATE RUNWAY 6C OBSTRUCTION TABLE							
No.	Description	Top Elevation	Distance from Ult RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
201	ACCESS ROAD	2410	467	288 R	4	0	RELOCATE ROAD



**RUNWAY 6C PROFILE**



Magnetic Declination  
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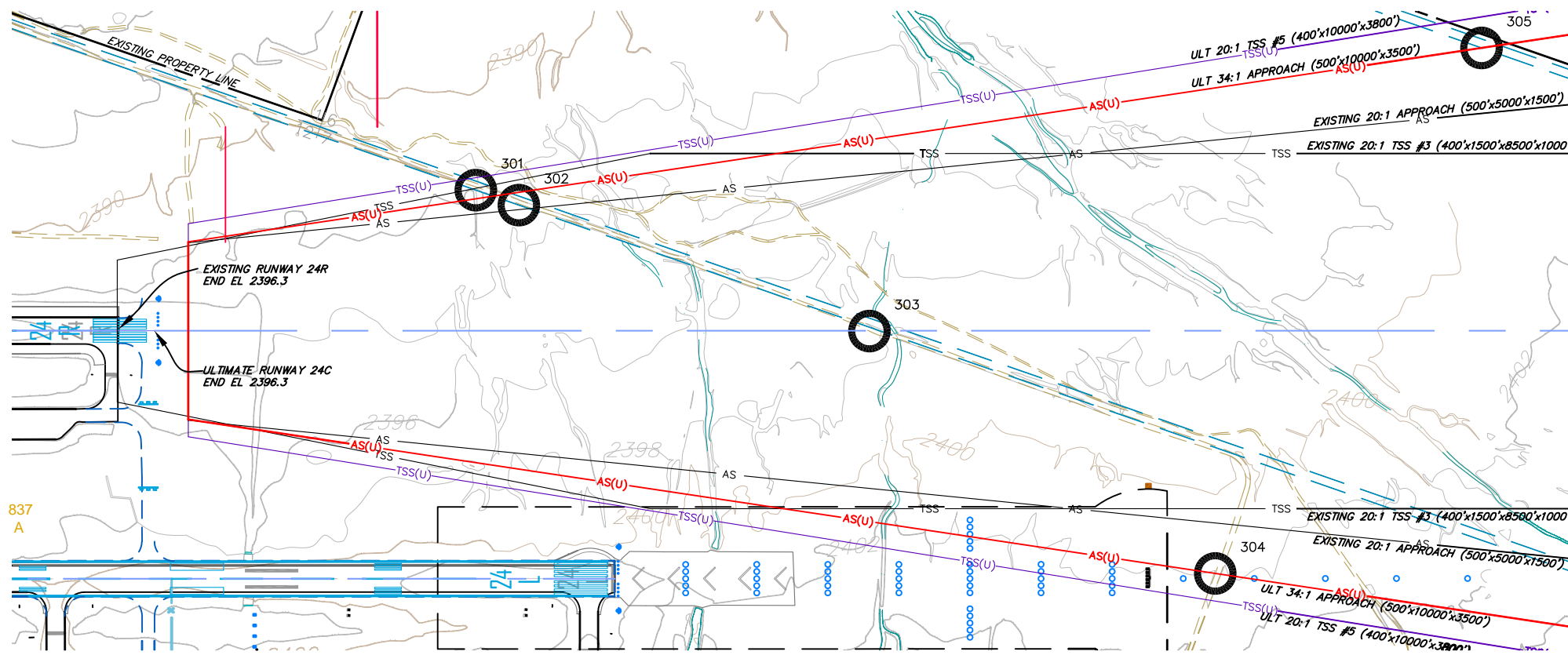
**RYAN AIRFIELD**  
**IRASD 6L**  
**DRAFT**  
Tucson, Arizona

PLANNED BY: Eric S. Pfeiffer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris



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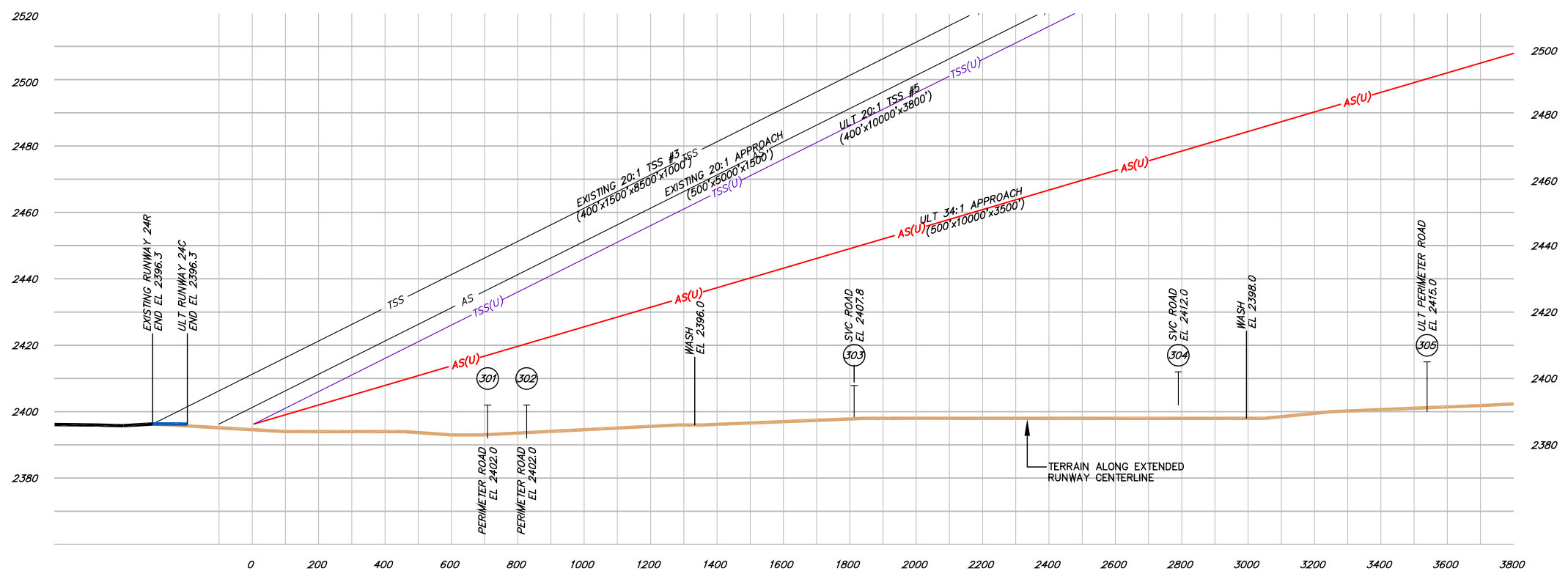
**RUNWAY 6C PLAN**

EXISTING RUNWAY 6L OBSTRUCTION TABLE

No.	Description	Top Elevation	Distance from Exist RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
	NONE FOUND						

ULTIMATE RUNWAY 6C OBSTRUCTION TABLE

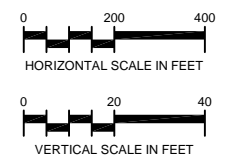
No.	Description	Top Elevation	Distance from Ult RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
	NONE FOUND						



**RUNWAY 6C PROFILE**



Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)



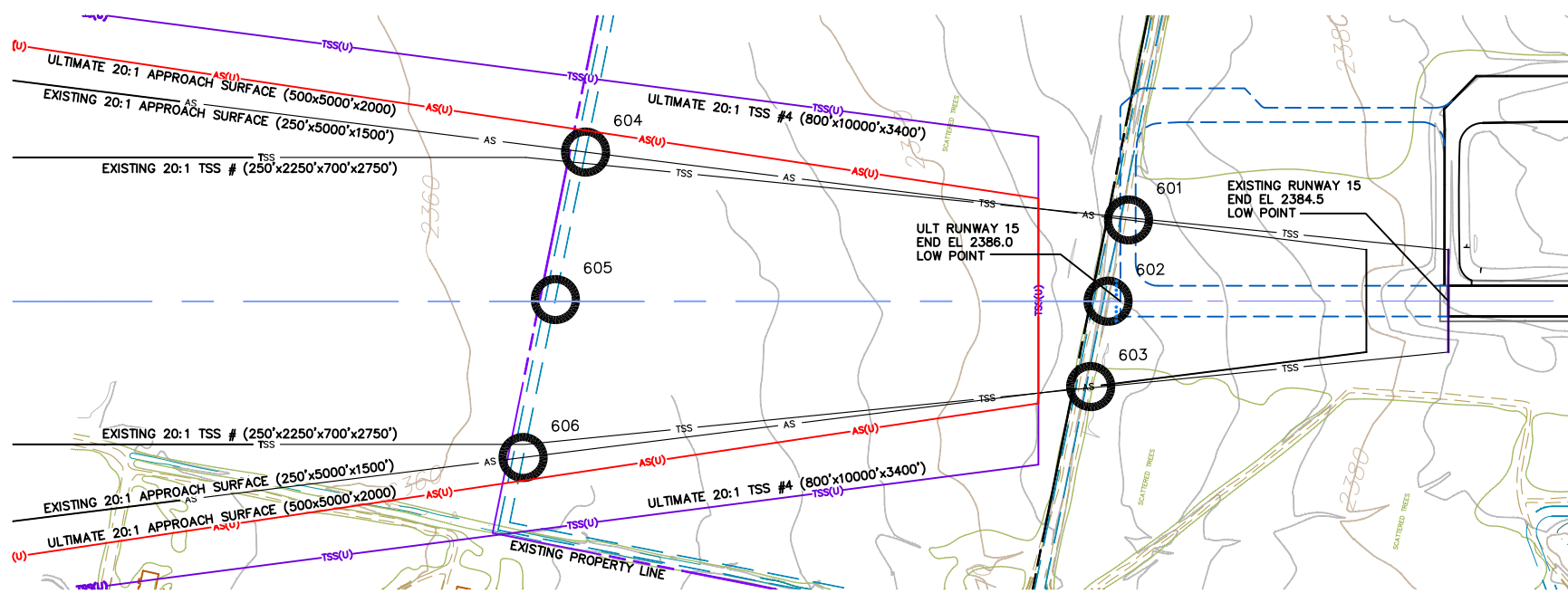
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4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H. J.M.H.	08/02/96

**RYAN AIRFIELD**  
**IPASD 24R**  
**DRAFT**  
**Tucson, Arizona**  
PLANNED BY: Eric S. Pfeiffer  
DETAILED BY: Diana L. Hopkins  
APPROVED BY: James M. Harris



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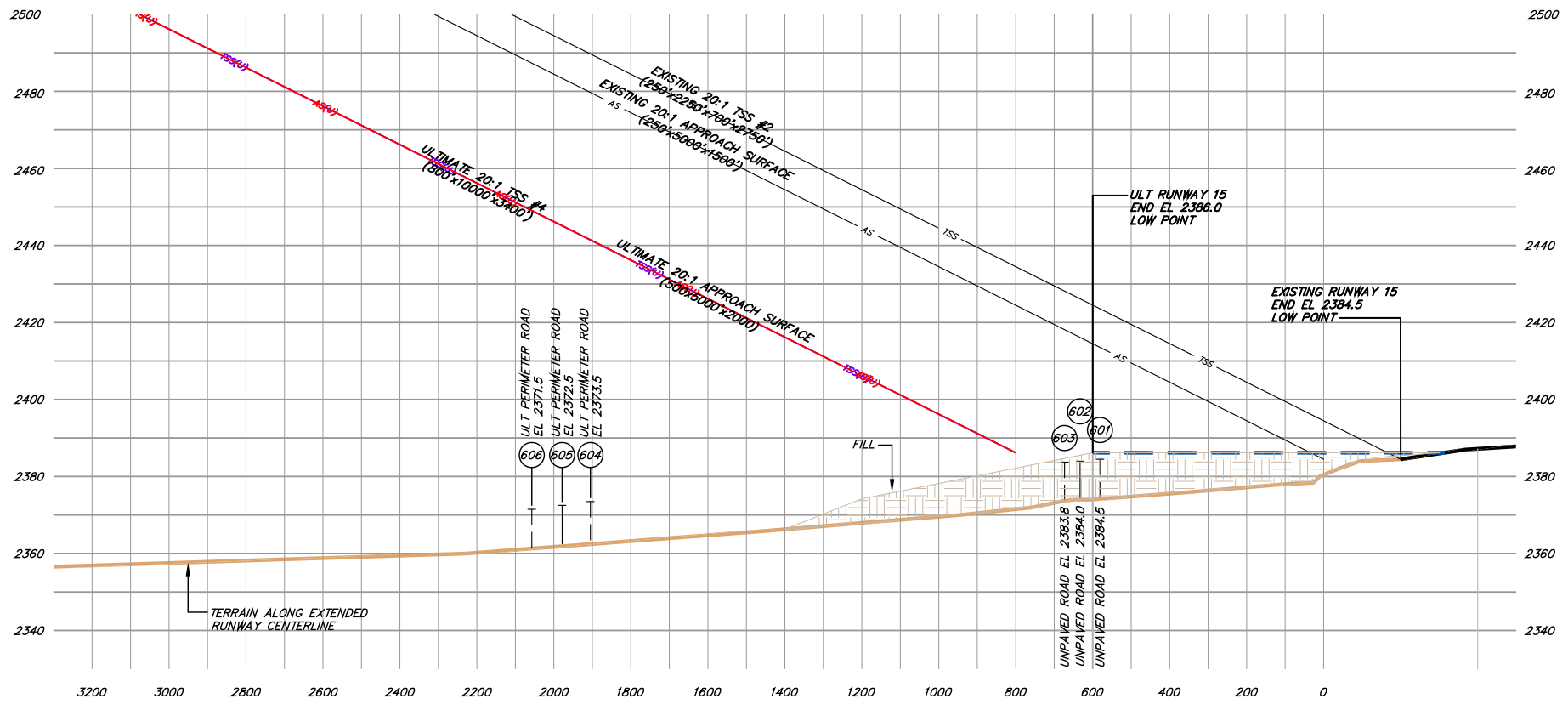
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RUNWAY 15 PLAN

No.	Description	Top Elevation	Distance from Exist RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
	UNPAVED ROAD						

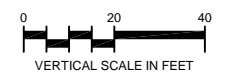
No.	Description	Top Elevation	Distance from Ult RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
601	UNPAVED ROAD	2384.5	780	198 L	9	9	REROUTE OR CLOSE ROAD TO CLEAR TSS
602	UNPAVED ROAD	2384.0	850	0	7	7	REROUTE OR CLOSE ROAD TO CLEAR TSS



RUNWAY 15 PROFILE



Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)



RYAN AIRFIELD

**DRAFT**

Tucson, Arizona

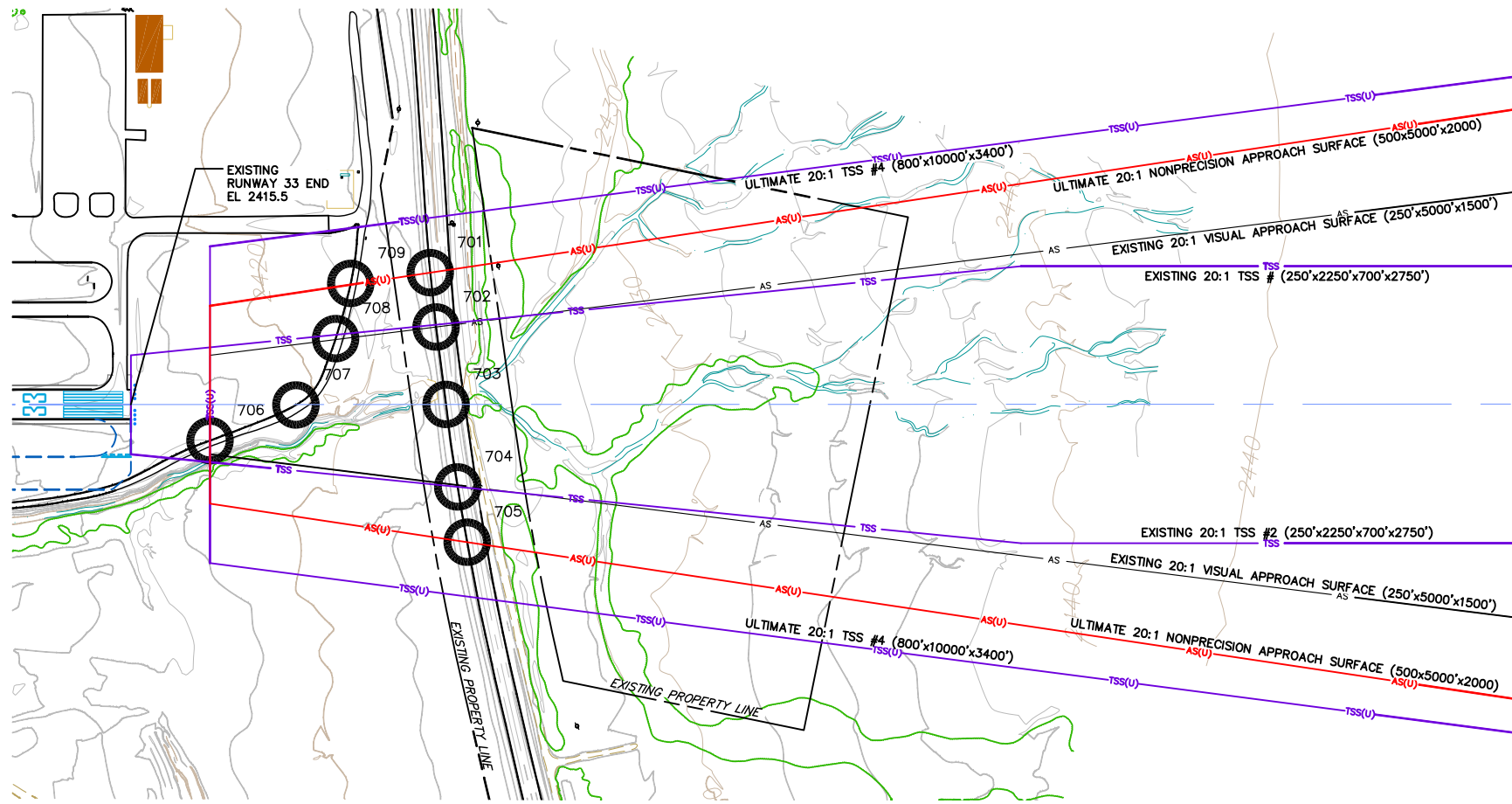
No.	REVISIONS	BY	DATE
1	UPDATED AIRPORT MASTER PLAN	K.L.W. M.F.J.	12/07/00
2	UPDATED AIRPORT MASTER PLAN	R.A.L. S.G.B.	02/28/00
3	UPDATED FOR REVALUATION	M.E.S. M.F.J.	10/29/96
4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H. J.M.H.	08/02/96

PLANNED BY: Eric S. Pfeiffer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris

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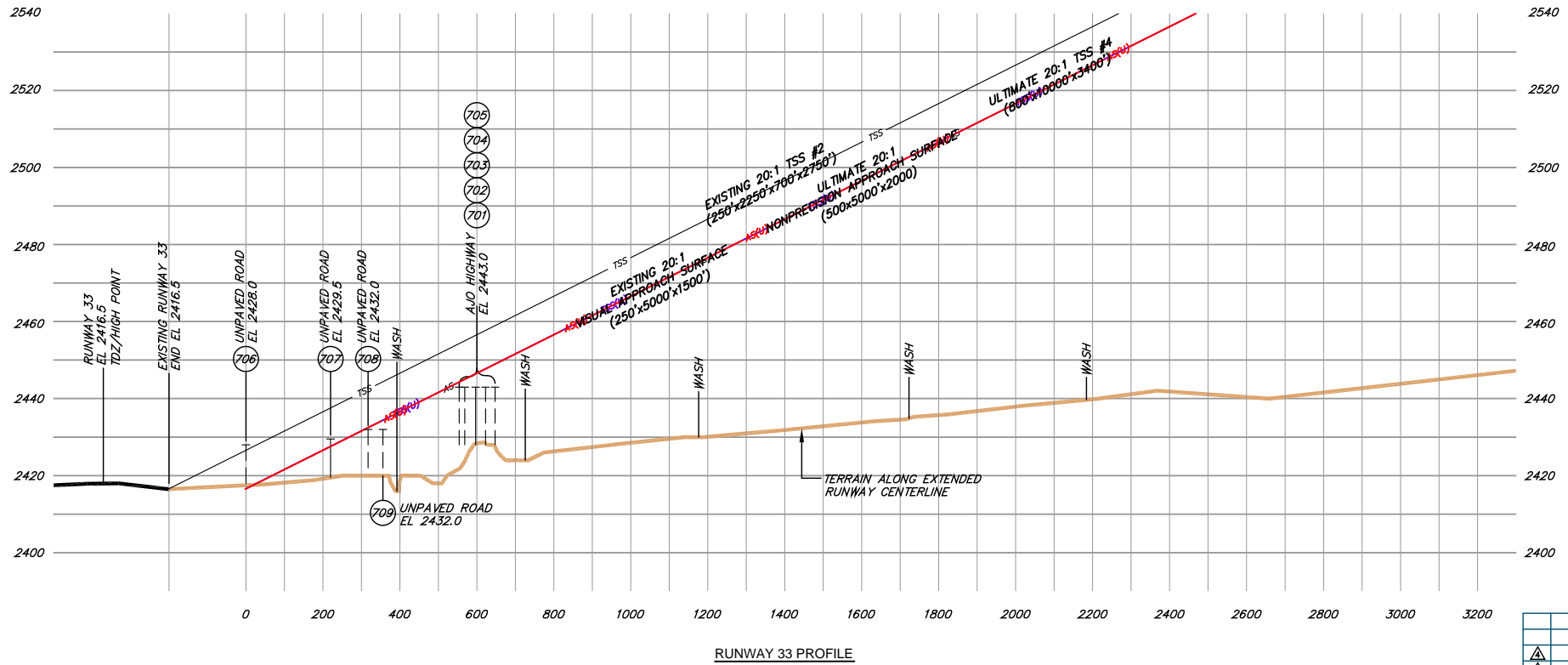


RUNWAY 33 PLAN

EXISTING RUNWAY 33 OBSTRUCTION TABLE							
No.	Description	Top Elevation	Distance from Exist RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
706	SERVICE ROAD	2428	200	91 L	12	2	ROUTER OR CLOSE SERVICE ROAD TO CLEAR TSS
707	SERVICE ROAD	2430	417	0	2	0	CLEAR TSS; NAR

NAR - NO ACTION REQUIRED

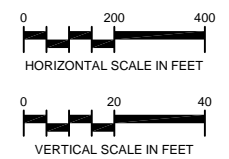
ULTIMATE RUNWAY 33 OBSTRUCTION TABLE							
No.	Description	Top Elevation	Distance from Ult RW End	Offset from Centerline	Approach Penetration	TSS Penetration	Remediation
706	SERVICE ROAD	2428	200	91 L	10	10	ROUTER OR CLOSE SERVICE ROAD TO CLEAR TSS
707	SERVICE ROAD	2430	417	0	1	1	ROUTER OR CLOSE SERVICE ROAD TO CLEAR TSS



RUNWAY 33 PROFILE



Magnetic Declination  
10° 47' East (June 2008)  
Annual Rate of Change  
00° 06' West (June 2008)



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3	UPDATED FOR REVALIDATION	M.E.S. M.F.J.	10/29/96
4	REVISED/UPDATED ALP (FAA/ADOT APPROVAL)	W.E.H. J.M.H.	08/02/96

**RYAN AIRFIELD**  
**IRASD 33**  
**DRAFT**  
Tucson, Arizona

PLANNED BY: Eric S. Pfeiffer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris



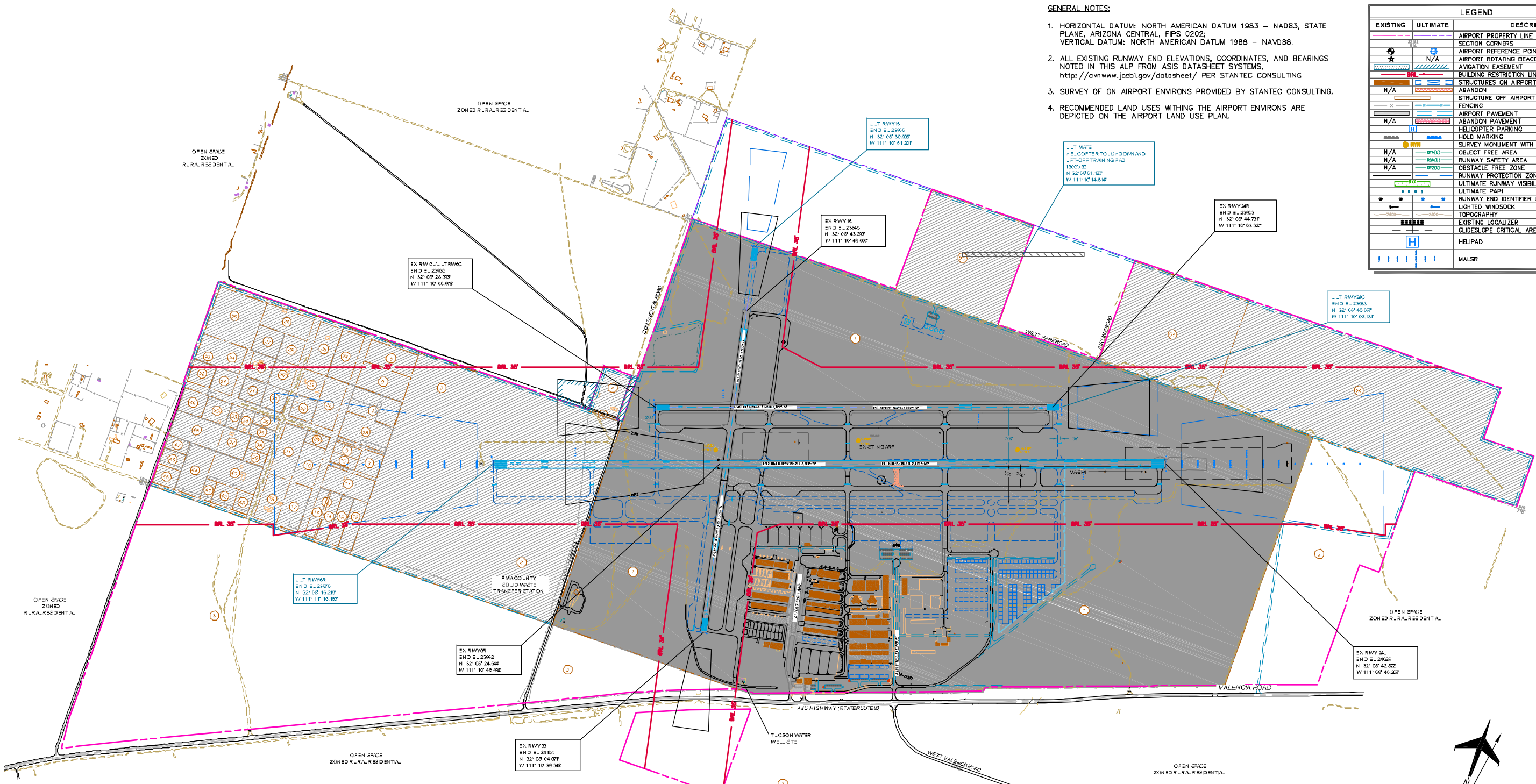
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**GENERAL NOTES:**

- HORIZONTAL DATUM: NORTH AMERICAN DATUM 1983 - NAD83, STATE PLANE, ARIZONA CENTRAL, FIPS 0202; VERTICAL DATUM: NORTH AMERICAN DATUM 1988 - NAVD88.
- ALL EXISTING RUNWAY END ELEVATIONS, COORDINATES, AND BEARINGS NOTED IN THIS ALP FROM ASIS DATASHEET SYSTEMS. <http://avnwww.jccbi.gov/datasheet/> PER STANTEC CONSULTING
- SURVEY OF ON AIRPORT ENVIRONS PROVIDED BY STANTEC CONSULTING.
- RECOMMENDED LAND USES WITHIN THE AIRPORT ENVIRONS ARE DEPICTED ON THE AIRPORT LAND USE PLAN.

EXISTING	ULTIMATE	DESCRIPTION
---	---	AIRPORT PROPERTY LINE
---	---	SECTION CORNERS
---	---	AIRPORT REFERENCE POINT (ARP)
---	---	AIRPORT ROTATING BEACON
---	---	AVIGATION EASEMENT
---	---	BUILDING RESTRICTION LINE
---	---	STRUCTURES ON AIRPORT
---	---	ABANDON
---	---	STRUCTURE OFF AIRPORT
---	---	FENCING
---	---	AIRPORT PAVEMENT
---	---	ABANDON PAVEMENT
---	---	HELICOPTER PARKING
---	---	HOLD MARKING
---	---	SURVEY MONUMENT WITH IDENTIFIER
---	---	OBJECT FREE AREA
---	---	RUNWAY SAFETY AREA
---	---	OBSTACLE FREE ZONE
---	---	RUNWAY PROTECTION ZONE
---	---	ULTIMATE RUNWAY VISIBILITY ZONE
---	---	ULTIMATE PAPI
---	---	RUNWAY END IDENTIFIER LIGHTS (REILS)
---	---	LIGHTED WINDSOCK
---	---	TOPOGRAPHY
---	---	EXISTING LOCALIZER
---	---	GLIDESLOPE CRITICAL AREA
---	---	HELIPAD
---	---	MALS/R



TRACI	ACREAGE	PROPERTY INTEREST	ACQUISITION DATE	PROJECT NUMBER
1	905.72	FEE SIMPLE	8/1/51	ORIGINAL PURCHASE
2	160	FEE SIMPLE	6/77	ADA 182
3	408	FEE SIMPLE	12/31/98	LAND TRADE
4	5	FEE SIMPLE	5/18/94	AIP 08/ADOT 419
5	3.9	FEE SIMPLE	5/2/97	ADOT 617
6	4.6	FEE SIMPLE	5/2/96	ADOT 617
7	4.7	FEE SIMPLE	7/15/98	AIP 10/ADOT 557
8	2	FEE SIMPLE	1/19/95	AIP 07/ADOT 218/318
9	1.1	FEE SIMPLE	7/18/94	AIP 07/ADOT 218/318
10	1.1	FEE SIMPLE	11/19/93	AIP 07/ADOT 218/318
11	3.9	FEE SIMPLE	11/13/92	AIP 07/ADOT 218/318
12	2.1	FEE SIMPLE	9/29/93	AIP 08/ADOT 419
13	2.1	FEE SIMPLE	9/4/91	ADOT 915
14	1.5	FEE SIMPLE	1/19/94	AIP 07/ADOT 218/318
15	0.3	FEE SIMPLE	3/29/94	AIP 07/ADOT 218/318
16	1.8	FEE SIMPLE	3/29/94	AIP 07/ADOT 218/318
17	3.9	FEE SIMPLE	6/27/94	AIP 07/ADOT 218/318
18	3.7	FEE SIMPLE	12/2/98	AIP 10/ADOT 557
19	3.2	FEE SIMPLE	7/10/98	AIP 10/ADOT 557
20	1.0	FEE SIMPLE	12/24/91	ADOT 915
21	4.2	FEE SIMPLE	1/19/94	AIP 09/ADOT 419
22	4.2	FEE SIMPLE	2/24/95	AIP 09/ADOT 419
23	2.2	FEE SIMPLE	3/28/95	AIP 08/ADOT 419
24	4.2	FEE SIMPLE	10/27/97	ADOT 719
25	4.1	FEE SIMPLE	8/22/94	AIP 09/ADOT 419
26	4.0	FEE SIMPLE	11/29/95	AIP 08/ADOT 419
27	2.5	FEE SIMPLE	8/28/97	ADOT 719
28	2.2	FEE SIMPLE	9/18/94	AIP 09/ADOT 419
29	2.1	FEE SIMPLE	10/3/95	AIP 09/ADOT 419
30	2.1	FEE SIMPLE	6/3/94	AIP 09/ADOT 419
31	1.8	FEE SIMPLE	6/4/92	ADOT 915

TRACI	ACREAGE	PROPERTY INTEREST	ACQUISITION DATE	PROJECT NUMBER
32	1.6	FEE SIMPLE	6/26/98	AIP 08/ADOT 419
33	1.1	FEE SIMPLE	5/15/98	AIP 10/ADOT 557
34	1.0	FEE SIMPLE	3/24/98	AIP 10/ADOT 557
35	1.0	FEE SIMPLE	11/4/94	AIP 09/ADOT 419
36	1.1	FEE SIMPLE	10/18/98	AIP 09/ADOT 419
37	2.8	FEE SIMPLE	10/19/96	AIP 09/ADOT 419
38	1.0	FEE SIMPLE	1/2/97	ADOT 617
39	1.1	FEE SIMPLE	1/3/97	ADOT 617
40	4.6	FEE SIMPLE	9/19/97	ADOT 719
41	1.1	FEE SIMPLE	9/18/96	ADOT 617
42	1.7	FEE SIMPLE	5/6/97	ADOT 719
43	1.1	FEE SIMPLE	9/18/96	ADOT 617
44	1.4	FEE SIMPLE	3/10/98	ADOT 517
45	1.6	FEE SIMPLE	3/15/96	AIP 09/ADOT 419
46	1.0	FEE SIMPLE	8/31/92	AIP 07/ADOT 419
47	1.2	FEE SIMPLE	1/21/99	ADOT 719
48	4.7	FEE SIMPLE	10/3/94	AIP 07/ADOT 419
49	2.0	FEE SIMPLE	9/18/96	ADOT 617
50	2.1	FEE SIMPLE	7/27/95	AIP 09/ADOT 419
51	1.8	FEE SIMPLE	2/17/95	AIP 07/ADOT 218/318
52	1.8	FEE SIMPLE	12/1/94	ADOT 719
53	1.1	FEE SIMPLE	5/28/92	AIP 07/ADOT 218/318
54	3.2	FEE SIMPLE	5/28/92	AIP 07/ADOT 218/318
55	0.3	FEE SIMPLE	5/18/94	AIP 08/ADOT 419
56	8.7	FEE SIMPLE	9/3/99	AIP 10/ADOT 557
57	1.9	FEE SIMPLE	12/10/99	AIP 08/ADOT 419
58	4.7	FEE SIMPLE	5/26/00	AIP 08/ADOT 419
59	11.0	FEE SIMPLE	1/18/01	ADOT E1124
60	40	FEE SIMPLE	12/18/01	ADOT E2521
61	45	FEE SIMPLE	11/21/02	ADOT E2521

PROPERTY LEGEND	
---	Existing Property Boundary Line
---	F.L.S. Property Boundary Line
---	1:1 Section Boundary Line
■	Property Interest Originally
■	Property Interest with Healed Fences
■	Property Interest with Non-Healed Fences



Magnetic Declination  
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Annual Rate of Change  
00° 06' West (June 2008)



**RYAN AIRFIELD  
AIRPORT PROPERTY MAP**  
Tucson, Arizona

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4	REWS/D/UPDATED ALP (FAA/ADOT APPROVAL)	WE.H. J.M.H.	08/02/98

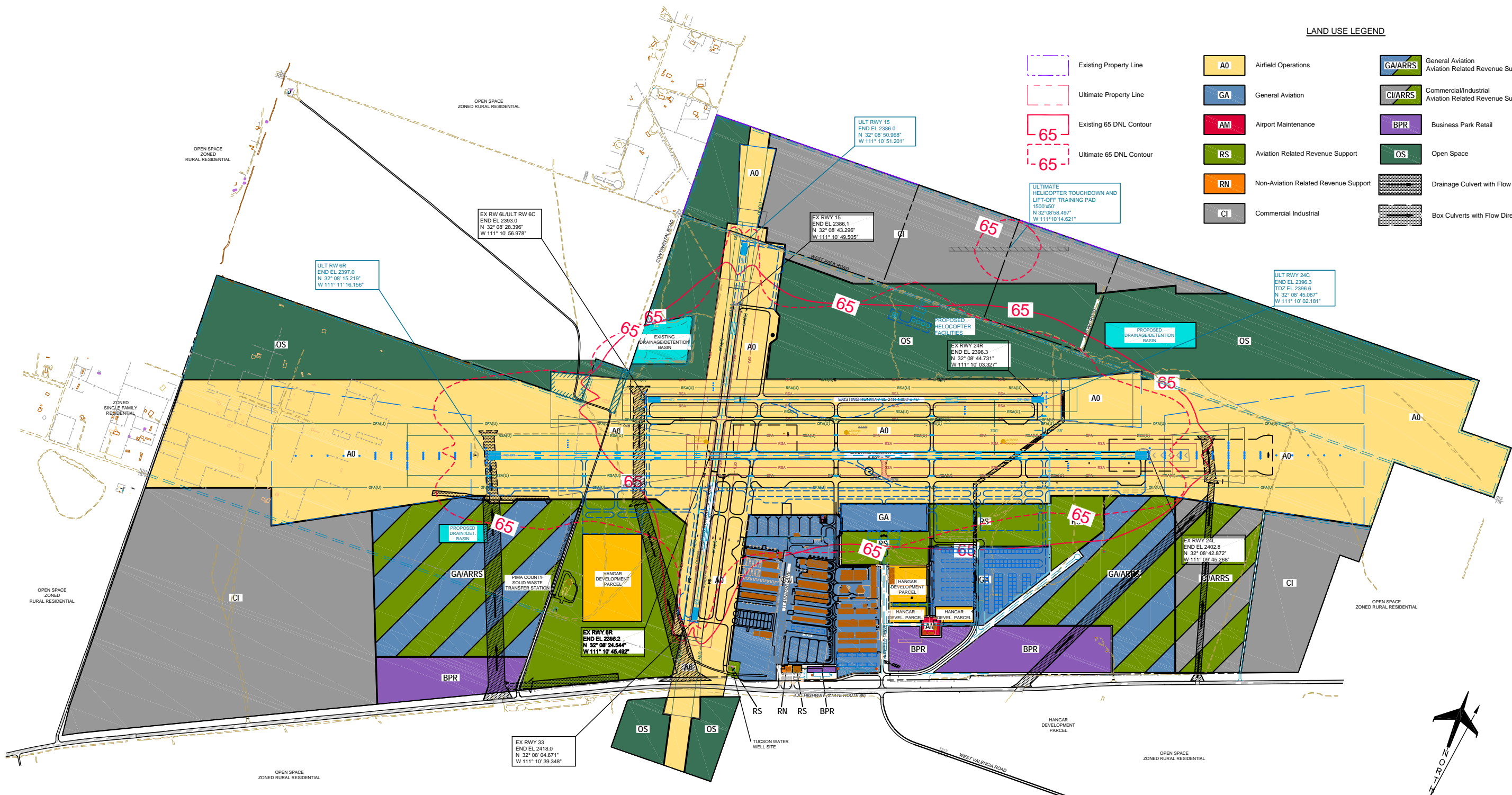
PLANNED BY: Eric S. Coffman  
 DETAILED BY: Eric S. Coffman  
 APPROVED BY: Eric S. Coffman



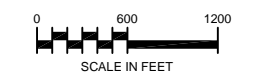
Coffman Associates, 6100 N. Oracle Road, Suite 100, Tucson, AZ 85705, Phone: 520-298-1111, Fax: 520-298-1112, www.coffmanassociates.com

LAND USE LEGEND

- A0 Airfield Operations
- GA General Aviation
- AM Airport Maintenance
- RS Aviation Related Revenue Support
- RN Non-Aviation Related Revenue Support
- CI Commercial Industrial
- GA/ARRS General Aviation Aviation Related Revenue Support
- CI/ARRS Commercial/Industrial Aviation Related Revenue Support
- BPR Business Park Retail
- OS Open Space
- Drainage Culvert with Flow Direction
- Box Culverts with Flow Direction



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Annual Rate of Change  
00° 06' West (June 2008)



**RYAN AIRFIELD**  
**AIRPORT LAND USE DRAWING**  
Tucson, Arizona

PLANNED BY: Eric S. Pfeiffer  
 DETAILED BY: Diana L. Hopkins  
 APPROVED BY: James M. Harris

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