DOUGLAS MUNICIPAL AIRPORT (DGL)

Airport Layout Plan Update & Narrative Report

PREPARED FOR:

CITY OF DOUGLAS

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Preface

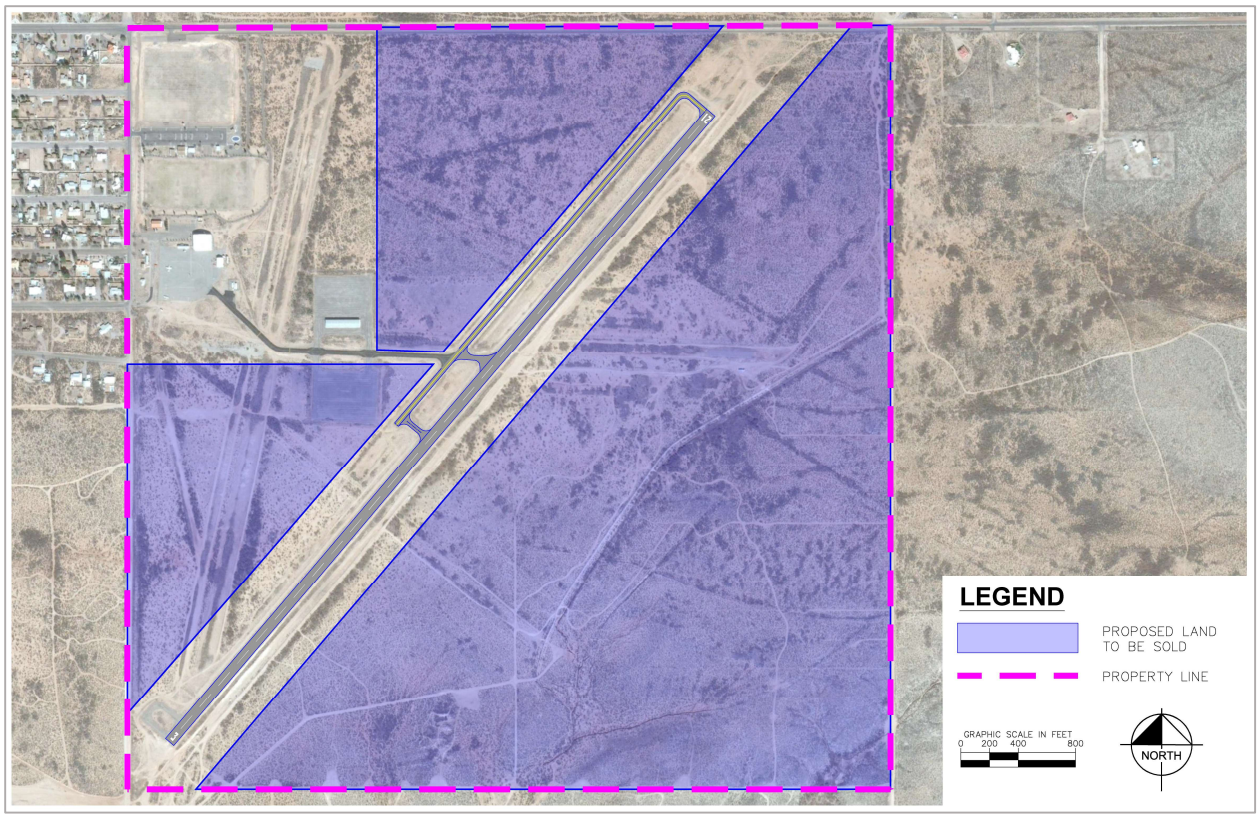
This project was adopted by the Douglas Airport Authority, City of Douglas Mayor, and City Council on April 10, 2024.

1. INTRODUCTION

Purpose of the ALP Update and the Narrative Report

The Douglas Municipal Airport (DGL or the Airport) completed an Airport Master Plan (AMP) and a corresponding Airport Layout Plan (ALP) in December of 2017, identifying various airport improvements to accommodate projected increases in future aviation activity at DGL. The AMP and ALP was intended to assist the City of Douglas (City or Airport Sponsor) with the necessary framework to guide future airport development in a cost-effective manner that would satisfy aviation demand and consider potential environmental and socioeconomic impacts.[1] Since the Arizona Department of Transportation – Multi-Modal Planning Division, Aeronautics Group's (ADOT) approval of the ALP in 2017, the Airport has not experienced a significant amount of change to its aviation activity. Therefore, the City has elected to sell an estimated 400 acres of Airport property to a private developer (JW Resources, LLC) to enhance Airport activities as depicted in **Figure 1-1**. JW Resources, LLC plans to develop the 400 acres for an industrial park, commercial and industrial activities, and hangar homes with access to the runway, while the City hopes that the underutilized land will bring more aviation related activity, additional hangar rentals, fuel sales, and commercial activities.

Figure 1-1: Proposed Land to be Sold



Source: Kimley-Horn

[1] US Department of Transportation (USDOT), Federal Aviation Administration (FAA), Advisory Circular (AC) 150/5070-6B - Change 2, *Airport Master Plans*, January 27, 2015.

In preparation for the sale of the estimated 400 acres of Airport-owned property to JW Resources, LLC, the City has decided to update the ALP to accurately reflect future development at DGL. It is the intent of this ALP Update and Narrative Report to provide ADOT with updated documents that reflect DGL's overall development plan.

Changes to the Airport Layout Plan Since Last Approval

This ALP update incorporates technical changes that reflect current FAA standards and guidance, included in Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5300-13B, *Airport Design*. Other notable changes to the ALP since the 2017 Airport Master Plan are identified below.

- Updated airport property boundary
- Updated depiction of existing facilities
- Updated depiction of future facilities
- Updated depiction of future airfield improvements
- Demolition of a segment of current Taxiway A-4
- Elimination of crosswind Runway 12/30
- Proposed land sale to JW Resources, LLC to build a future airport industrial park that includes commercial, industrial, mixed-use, and hangar home development.

A copy of the updated ALP is included as **Appendix A**.

2. INVENTORY

Introduction

The purpose of this chapter is to provide a detailed inventory of Airport facilities and Airport-related information such as land use, weather data, area airspace, and historical aviation activity to understand current conditions at DGL. This information forms a baseline, upon which sound decisions for the Airports' future can be made. Inventory information was obtained through site visits, discussions with Airport staff, and a review of FAA records and previous DGL planning documents. Inventory data is presented in the following subsections:

- Location
- Ownership and Management
- Douglas Municipal Airport's Role
- ADOT Grant History
- Existing Airport Facilities

Location

Douglas Municipal Airport is located in southeastern Arizona in Cochise County, approximately 2 miles east of Douglas' central business district. The Airport is situated at a field elevation of 4,173 feet above mean sea level (MSL), and currently encompasses 640 acres of land (pending the sale of approximately 400 acres). The geographic location of DGL is depicted in **Figure 2-1**.

Figure 2-1: Airport Location

Source: Nearmap 2023

Ownership and Management

DGL is a public-use facility owned and operated by the City of Douglas. According to the City's organizational information, the Airport falls under the jurisdiction of the Public Works Department and therefore is managed by the Director of Public Works. A copy of the property deed is included as **Appendix B**.

Douglas Municipal Airport's Role

As a general aviation (GA) airport, DGL provides vital support to the regional economy by connecting it to broader state and national economies.[2] Regular aviation-related uses include recreational activities such as flying for pleasure or tourism, personal transportation, and corporate or business travel.

The Airport is not included in the FAA National Plan of Integrated Airport Systems (NPIAS); therefore, it is not eligible to participate in national airport aid programs such as the Airport Improvement Program (AIP). However, DGL is included in Arizona's State Airports System Plan (SASP) and has received ADOT funding for development projects in the past.

ADOT Grant History

The grant history for the capital improvements performed at DGL is summarized in **Table 2-1**. The ADOT grant assurances are provided in **Appendix C**.

Table 2-1: ADOT Grant History

Year	Grant Number	Description	Amount
2002	E2S07	Install new perimeter fence [01X]; Land acquisition [05X].	$65,587.50
2004	E4S65	Crack seal, slurry seal and markings to Rwy 3/21, Twy A and hangar aprons; crack seal thin PFC overlay and markings to terminal apron.	$254,211.80
2012	E2S71	Install Security Fencing (around hangar area, aircraft parking apron area & new terminal area) approx. 1,200 feet.	$64,195.68
2013	E3S1C	Thin Asphalt Overlay/PFC (TWADM Sec 10).	$263,330.00
2014	E4S3Q	Install 5,280 ft (1 mile) of perimeter fencing, Ph. 2.	$174,442.23
2015	E5S30	Master Plan Update with a Business Plan component.	$247,499.50
2022	E2S3A01C	Perimeter Fencing/Install Perimeter Fence Phase 3	$400,000.00
2023	E3S4E 01C	Runway Rehabilitate, Rehabilitate Runway 3-21	$1,500,000.00

Source: Arizona Department of Transportation – Multimodal Planning Division, Aeronautics Group/City of Douglas, July 2023.

Existing Airport Facilities

An inventory of existing facilities at DGL was gathered using information from the 2017 AMP and ALP. Each component in an airport's infrastructure should work in harmony to support airport operations while providing room for growth to integrate with future demand.

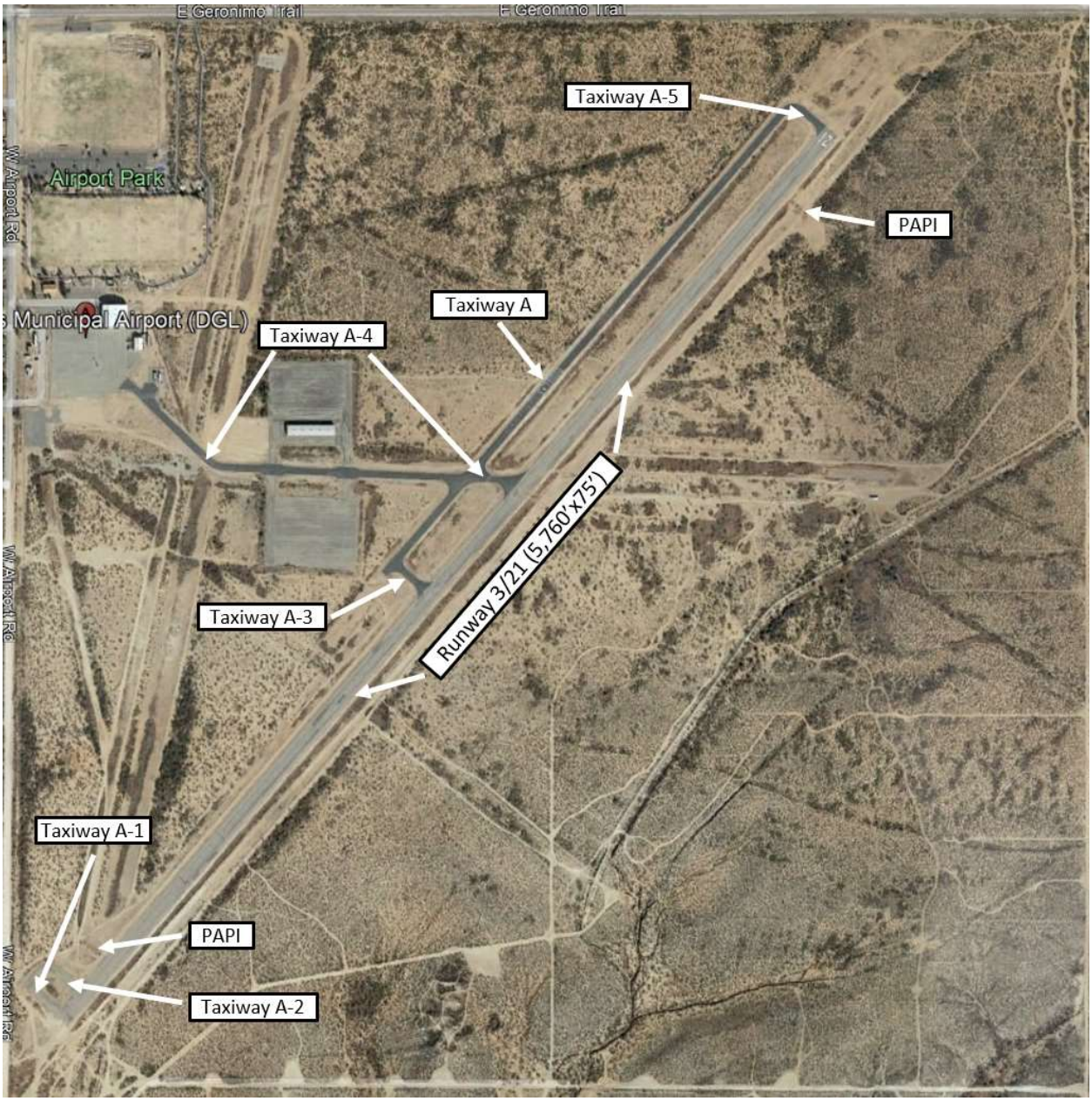
Figure 2-2 shows DGL's primary existing airfield facilities, which are described in the following sections:

- Runways
- Taxiways and Aircraft Parking Aprons

[2] City of Douglas, *Douglas Municipal Airport Master Plan Updated and Business Plan*, December 2017.

- Terminal Facilities
- Hangars
- Support Facilities
- Landside Access
- Instrument Approach Procedures

Figure 2-2: Existing Airfield Facilities



Source: Kimley-Horn, Google Earth

Runways

DGL has a single asphalt paved runway, Runway 3/21, which is 5,760 feet in length and 75 feet wide. The dimensions, conditions, and weight bearing capacity of the runway are shown in **Table 2-2**. Previously, a

dirt runway, Runway 18/36, existed west of the paved runway, but this strip has been closed indefinitely due to rocks and an uneven surface as well as tall brush obstructions present along most of its length.

Table 2-2: Runway 3-21 Specifications

Runway 3/21	
Length	5,760 feet
Width	75 feet
Surface/Conditions	Asphalt/ Fair

Source: FAA 5010 Master Record, September 2023

Runway Lighting, Markings, and Visual Aids

Runway lighting, markings, and visual aids promote safe and efficient movement of aircraft and ground vehicles on the airfield. **Table 2-3** provides a summary of the runway lighting, markings, and visual aids at DGL.

Table 2-3: Runway 03-21 Markings and NAVAIDs

Runway 3/21	
Runway Edge Lighting/Other	Medium Intensity Runway Lights (MIRL)/Runway End Identifier Lights (REILs)
Runway Marking/Condition	Basic/Good
Runway Visual Aids	4-light Precision Approach Path Indicator (PAPI) Runway 3 end and 21 end

Source: FAA 5010 Master Record, September 2023

Taxiways

The taxiway system at DGL is comprised of Taxiway A, connector Taxiways A-3-A-5, and turnaround Taxiways A-1 and A-2, as shown in **Figure 2-2**. Taxiway A is a partial parallel taxiway that runs northeast from Taxiway A-4 to the end of Runway 21. The taxiway is 35 feet wide and approximately 3,050 feet long. According to a pavement study performed by the Arizona Department of Transportation (ADOT) in 2022, the taxiway conditions at DGL were either poor or fair. The Airport does not currently have a full-length parallel taxiway along Runway 3/21; however, one is planned in the 2017 AMP long-term capital project recommendations. A summary of taxiways and conditions is provided in **Table 2-4**.

Table 2-4: DGL Taxiway System

DGL Taxiway System		
Taxiway	**Description**	**Condition**
A	Partial Parallel	Fair
A-1	Turnaround (South Portion)	Poor
A-2	Turnaround (North Portion)	Poor
A-3	Connector	Fair
A-4	Connector – Runway to Apron Area	Fair
A-5	Connector	Fair

Source: Arizona Department of Transportation

Aircraft Parking Aprons

Airport apron areas can vary based on the users they serve, activities conducted on them, and their location on the airfield. DGL currently has two apron parking areas. The Main Apron (A01) is

approximately 15,000 square yards in area and has nine aircraft tie-downs. This apron has a pavement condition index (PCI) of 25, which is considered to be poor condition.[3]

The second apron (A02) is comprised of two separate asphalt areas split by Taxiway A-4, the apron section located north of the taxiway (North Apron) is 15,500 square yards and the section located south of the taxiway is 17,000 square yards (South Apron). Each apron area has 18 aircraft tie-downs. Both sections of this apron area have a PCI of 49, which is categorized as poor condition.

Terminal Facilities

Currently there is not a traditional terminal building at DGL. Instead, there are three permanent on-airport buildings and a trailer. Portions of the permanent structures have been used to served GA users in the past, however, they are not currently being used for this purpose. The city-owned trailer is used as an airport operations office and office workspace for construction projects.

Hangars

Three hangar buildings are currently on the airfield at DGL: one large T-hangar, one large conventional hangar, and one small conventional hangar. The T-hangar building has 10 units, each capable of storing one small single or multi-engine piston aircraft. All T-hangar units are currently being leased. The large conventional hangar is approximately 12,500 square feet (SF) in size and houses six based aircraft, while the small conventional hangar is approximately 2,500 SF and has one based helicopter for Lifeline, an air ambulance company based at the Airport. **Figure 2-3** shows the location of the three hangar buildings on the Airport.

[3] ADOT Pavement Report on DGL: https://idea.appliedpavement.com/hosting/arizona/airport-details/docs/reports/douglas-report-2022.pdf

Figure 2-3: Existing Landside Facilities

Source: Kimley-Horn, Google Earth

Support Facilities

The support facilities at DGL include a fuel storage facility, vehicle parking area, airport fencing and security, and navigational aids (NAVAIDs). The fuel storage facility is located south of the small conventional hangar building on the east side of the primary apron. The Airport has two above ground fuel storage tanks, one of which provides AvGas, and the other Jet-A fuel. Both tanks have an individual capacity of approximately 12,000 gallons. Jet-A fuel is offered as self-service at the tank area, while

AvGas is available as self-service at the apron fuel facility located on the main apron. **Figure 2-3** displays the location of the Airport's fuel facilities.

The vehicle parking area is located just north of the primary apron and consists of 30 paved parking spots shared with the Border Air Museum. Outside of the perimeter fence, there is an additional 20 vehicles spaces of unpaved parking available immediately west of the main apron. The Airport perimeter fence runs around the entire property and varies in height from four to six feet tall.

NAVAIDS are electronic or visual devises located on the airfield that guide pilots during takeoff and landing operations. NAVAIDs at DGL include an airport beacon, segmented circle, and lighted wind indicator.

Landside Access

The airfield can be accessed through a gate located in the vehicle parking area. The gate requires a key card for access.

Instrument Approach Procedures

There are no published instrument approach procedures for the Airport. In addition, the FAA is not anticipated to implement a new approach procedure at DGL for the foreseeable future.

3. AVIATION DEMAND FORECASTS

A high level of importance should be given to aviation activity forecasting for its utility in planning for future facility needs. Forecasts provide relevant analysis that the Airport can use to measures its ability to accommodate existing and future activity, guiding future development.

The aviation activity occurring at DGL has remained relatively unchanged since the publishing of the 2017 AMP. As such, no new forecasts were developed for this ALP update. Instead, this chapter discusses the findings and preferred methodologies used to project aviation demand at DGL in the 2017 AMP. It is important to recognize that there can be short-term fluctuations in an airport's activity due to various unforeseen factors, but the 20-year forecasts still remain valid. The projections for the aviation demand forecast developed for DGL are outlined in the following sections:

- Aircraft Operations
- Based Aircraft
- Critical Aircraft
- Forecast Summary

The two primary elements examined in the 2017 demand forecast were aircraft operations and based aircraft. An aircraft operation consists of either a take-off or landing conducted by an aircraft. Therefore, a flight with one takeoff and landing would count as two operations. A based aircraft is defined as an aircraft that is airworthy and permanently stored at an airport. Based aircraft can be stored at various airports throughout the year, but the airport it is stored at for the majority of the year is considered its base for the purposes of record-keeping.

Aircraft Operations

Aircraft operations are the primary source of information used to track an airport's aviation activity. Aircraft operations are typically recorded on an annual basis, which serves as the measure to determine funding and design criteria at airports. Many airports in the United States are non-towered, meaning they do not have an air traffic control tower (ATCT) to record annual aircraft operations data. DGL is a non-towered airport, making it difficult to accurately track the frequency and types of aircraft operating at the Airport. In recent years, incremental operational growth for the Airport has been spurred by business and corporate activity due largely to the availability of Jet-A and 100LL fuel.

Preferred Aircraft Operations Forecast

The 2017 AMP utilized a market share methodology to forecast future aviation activity at DGL. Market share methodology determines future activity by calculating the percentage of annual operations at DGL compared to other airports in the region. The region is comprised of four airports: Cochise College Airport (P03), Bisbee Municipal Airport (P04), Bisbee-Douglas International Airport (DUG), and DGL. Projections from the 2017 AMP show a constant 25 percent share of regional operations occurring at DGL through the planning horizon. This equates to roughly 3,580 operations in 2036. Based on projected activity for the regional market, and airport master plan updates, the regional market share methodology was identified as the preferred methodology for aircraft operations. The preferred forecast for aircraft operations at DGL is presented in **Table 3-1**.

For the purposes of this report, an updated aircraft operations forecast was not required or developed due to the following factors: lack of new data, no reported changes by the Airport, and no desire for the

Airport to attract new aircraft to increase the critical aircraft. The Airport and its staff have not communicated a change in critical aircraft, nor expressed a desire to attract new aircraft to DGL to potentially increase the critical aircraft. Considering these factors, the current aircraft operations forecast will continue to be used.

Aircraft Operations – Operational Fleet Mix Forecast

An airport's fleet mix represents the breakdown of single-engine and multi-engine piston aircraft, jets, and helicopters comprising its annual operations. The operational fleet mix is used to determine airfield needs and the critical aircraft for an airport. At DGL, the fleet mix information is primarily sourced from information provided by airports tenants and is projected to remain consistent throughout the 20-year planning horizon. **Table 3-1** presents the projected annual operations for 2022 using the fleet mix data from the 2017 AMP. It is important to note that most recent FAA Form 5010.1 *Airport Master Record* for DGL show a drastic increase in aircraft operations from the 2017 AMP projection to 2023. As such, the table also presents the total operations and fleet mix percentages recorded in the 2023 5010 report. As shown, the fleet mix has remained relatively steady between the 2017 AMP projection and 2023, meaning the 2017 AMP forecasted fleet mix can be considered valid.

Table 3-1: Total Operational Fleet Mix Forecast

Year	Single-Engine	Multi-Engine	Jet	Helicopter	Turbo	Total Ops
2022 Projected Fleet Mix						
2022 Projected Fleet Mix	770	40	40	1,970	40	2,860
2022 Projected AMP Fleet Mix (Percent of Total)	27%	1%	1%	70%	1%	100%
2023 5010 Master Record						
2023 Operations	3,096	161	161	7,921	161	11,500
2023 Operations (Percent of Total)	27%	1%	1%	69%	1%	100%

Note: All percentages are approximations and do not represent exact values
Source: 2017 AMP, FAA 5010 Master Records

Based Aircraft

Historical information for based aircraft at DGL is extremely limited due to lack of regular and accurate record keeping. The Airport records the based aircraft information on both the FAA Form 5010.1 *Airport Master Record* and submits based aircraft quarterly reports to ADOT. The AMP identified an inventory of 12 based aircraft in 2017, while current ADOT quarterly reports indicate a total of 14 based aircraft and the 5010.1 *Airport Master Record* indicates a total of 22 based aircraft at DGL in 2023. As a result of these discrepancies, the historical based aircraft data from the 2017 AMP is used in this analysis.

Preferred Based Aircraft Forecast

The based aircraft forecast uses the same market share methodology used in the aircraft operations forecast. The market share methodology is the preferred forecast methodology for based aircraft because it uses actual data reported in airport master plans. This data shows that a 25 percent market share for DGL will remain unchanged when compared to the overall demand in the region. The Airport's master plan forecast for based aircraft is shown in **Table 3-2**.

Based Aircraft Fleet Mix Forecast

Similar to the operational fleet mix, an airport's based aircraft fleet mix helps determine facility needs by identifying the projected storage demand for specific aircraft classes. The majority of based aircraft at DGL are single-engine piston aircraft, as is common among most general aviation airports. National trends and FAA Terminal Area Forecasts (TAF) have shown an increase in jet aircraft in recent years, but despite the rise in jet operations it is not anticipated that DGL will have a based jet by 2036.[4] Due to the Airport's location and socioeconomic status, it is likely that single-engine piston, rotorcraft, and twin-engine aircraft will only account for a minimal portion of the based aircraft fleet mix at DGL.

According to the 2017 AMP, there were 10 single-engine aircraft, one twin-engine aircraft, and one helicopter based at the Airport. As of 2023, DGL reported to ADOT, 14 total based aircraft to include 12 single-engine aircraft, one twin-engine aircraft, and one helicopter while the recent 5010.1 Airport Master Record indicates 20 single-engine aircraft, one twin-engine aircraft, and one helicopter. These numbers exceed the based aircraft projections in 2026 by the current Airport's master plan as shown in **Table 3-2.** It is also anticipated that with the sale of property to JW Resources, LLC and their intent to build hangar homes and facilities that support a wide variety of aviation related business and services, the Airport's based aircraft will further increase beyond the 2036 forecast.

Table 3-2: 2017 AMP Based Aircraft Fleet Mix Forecast

Historical	Single-Engine	Multi-Engine	Jet	Helicopter	Total
2017	10	1	0	1	12
Projected					
2021	10	1	0	1	12
2026	11	1	0	1	13
2036	12	1	0	1	14

Source: Kimley-Horn

Critical Aircraft

As defined in FAA Advisory Circular (AC) 150/5300-13B: *Airport Design*, the FAA classifies airports by Airport Reference Code (ARC), which is used to determine the overall planning and design criteria for the Airport. The ARC is assigned based on the speed and size of the most demanding aircraft type that regularly operates at the Airport, meaning it records a minimum of 500 operations annually. This is known as the airport's 'critical aircraft'.

The Airport Reference Code (ARC) is an airport designation that is based on the highest Runway Design Code (RDC) of an airport's runways. The RDC consists of the Aircraft Approach Category (AAC), the Aircraft Design Group (ADG), and the approach visibility minimums. The AAC is based on the critical aircrafts approach speed, and the ADG is based on the wingspan and tail height of the critical aircraft. The approach visibility minimums are expressed in runway visual range (RVR) values and refer to the lowest approach visibility minimums for a specific runway. The ARC does not prohibit access for other aircraft that can operate safely on the airfield, its purpose is to provide planning and design guidance

[4] Terminal Area Forecasts (TAF): Official FAA forecast of aviation activity for U.S. airports. https://www.faa.gov/data_research/aviation/taf#:~:text=The%20Terminal%20Area%20Forecast%20(%20TAF,%2C%20and%20non%2Dtowered%20airports.

only. **Table 3-3** presents the FAA aircraft categories, design criteria, and approach visibility ranges used to define the RDC.

Table 3-3: FAA Aircraft Categories and Criteria

Aircraft Approach Category	Approach Speed	Airplane Design Group	Wingspan (feet)	Tail Height (feet)	Runway Visual Range (feet)	Approach Minimums (statute miles)
A	Less than 91	I	Less than 49	Less than 20	Visual	Visual Conditions
					5,000	Not lower than 1 mile
B	91 to 120	II	49 to 78	21 to 29	4,000	Not lower than 3/4 mile
C	121 to 140	III	79 to 117	30 to 44	2,400	Not lower than ½ mile
D	141 to 165	IV	118 to 170	45 to 59	1,600	Not lower than ¼ mile
E	166 or Greater	V	171 to 213	60 to 65	1,200	Lower than ¼ mile
N/A	N/A	VI	214 up to but less than 262	66 up to but less than 80	N/A	NA

Source: FAA Advisory Circular 150/5300-13B

Since publishing the 2017 AMP, the critical aircraft for DGL has not increased. As such, the Beechcraft Super King Air 200, a B-II (small) aircraft, is identified as the Airport's critical aircraft.[5] This aircraft does not meet the threshold of conducting 500 annual operations, which are required of a critical aircraft, however, it is an accurate reflection of the type of aircraft projected to operate at the Airport in the future. It is important to note DGL does receive other more demanding aircraft than the King Air 200, as identified in the FAA Traffic Flow Management System Counts (TFMSC) database, but the operations are infrequent and do not necessitate or require a change in the critical aircraft or ARC.

Forecast Summary

DGL has experienced minimal growth for based aircraft and annual operations since the publishing of the 2017 AMP. While recent data reporting to ADOT and the 5010 indicated an increase in based aircraft, data discrepancies don't confirm consistent growth. Additionally, JW Resources LLC has indicated their intent to develop aviation related infrastructure but has not provided an official development plan. As such future based aircraft growth cannot be realistically forecasted meaning the trends presented in the 2017 AMP are considered valid for this analysis. A summary of projected based aircraft and aircraft operations for DGL is shown in **Table 3-4**.

[5] The FAA defines a 'Small' aircraft as one with a Maximum Takeoff Weight (MTOW) of 12,500 lbs. or less.

Table 3-4: 2017 AMP Forecast Summary

Category	2021	2023	Projected	
			2026	2036
Total Operations	**2,860**	**11,500**	**3,030**	**3,580**
Single-Engine Piston	770	3,096	820	920
Multi-Engine Piston	40	161	50	70
Jet	40	161	50	70
Helicopter	1,970	7,921	2,060	2,450
Turbo	40	161	50	70
Total Based Aircraft	**12**	**22**	**13**	**14**
Single-Engine Piston	10	20	10	12
Multi-Engine Piston	1	1	1	1
Jet	0	0	0	0
Helicopter	1	1	1	1

Source: Kimley-Horn

4. FACILITY REQUIREMENTS

This section presents an analysis of facilities that would be required in addition to existing airport infrastructure to accommodate forecasted aviation activity and to meet state minimum facility requirements. The elements of facility requirements are addressed in the following sections:

- Airside Facility Requirements
- Landside Facility Requirements
- Typical Lease Agreements for Through-the-Fence Operations

A variety of sources were used to identify the standards applicable to the Airport's facilities, including:

- FAA AC 150/5300-13B *Airport Design*
- FAA Order 6560.20B: *Siting Criteria for Automated Weather Observing Systems*
- ADOT 2018 Arizona State Aviation System Plan (SASP)

Airside Facility Requirements

Airside facilities include infrastructure and equipment that accommodate aircraft operating at the airport. This report examined the following airside facilities:

- Runway System
- Taxiway System
- Navigational Aids and Weather Reporting

Runway System

The runway is the most important facility at an airport because it is used for nearly all aircraft operations. A runway should be designed to meet various runway dimensional and separation standards related to its length, width, and associated safety and protection areas. These standards are set based on the three components of the RDC: AAC, ADG, and approach visibility minima. Given the existing critical aircraft and approach procedures for DGL, Runway 3/21 should adhere to B-II(Small)-VIS design standards. **Table 4-1** presents these standards and compares them to the existing runway conditions at DGL.

Runway 3/21 is approximately 5,760 feet long and 75 feet wide. Required runway length is determined based on the mean high temperature, airport elevation, runway gradient, and critical aircraft. Given the critical aircraft has not changed since the 2017 AMP, this ALP Update did not analyze the required runway length for a King Air 200. Instead, a review of the 2017 AMP was performed, indicating the existing length is sufficient to meet the needs of aircraft operating at DGL. Runway width is based on the AAC and approach visibility minima for the runway. As shown in **Table 4-1**, Runway 3/21 meets the width requirements for a B-II airport with visual approach minimums (75 feet).

In addition to runway dimensional criteria, there are various protections areas that provide clearance from potential hazards to aircraft. These protection areas include the Runway Safety Area (RSA), Runway Object Free Area (ROFA), and Runway Protection Zone (RPZ). The RSA is an area surrounding the runway consisting of a flat, clear area that reduces the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway. The ROFA is an area surrounding the runway that consists of a surface limited to equipment necessary for air and ground navigation. The ROFA also

provides wingtip clearance to reduce aircraft damage in the event of a runway excursion. The RPZ is a trapezoidal shape extending from the runway ends that provides additional safety to people and objects on the ground. As shown in **Table 4-1**, Runway 3/21 meets the required dimensions for the RSA, ROFA, and RPZ. It is important to note that part of the Runway 3 RPZ partially extends into Mexico. For the Airport to be fully compliant, it should obtain an avigation easement for the portion of the RPZ that extends beyond the property line.

Table 4-1: Runway Dimensional Standards

Design Criteria	Runway 3/21		
	Existing Conditions (feet)	B-II (Small)-VIS Standards (feet)	Deficiencies
Runway Design			
Width	75	75	None
Shoulder Width	20	10	None
Runway Protection			
RSA Length beyond departure end	300	300	None
RSA Length prior to threshold	300	300	None
RSA Width	150	150	None
ROFA Length beyond departure end	300	300	None
ROFA Length prior to threshold	300	300	None
ROFA Width	500	500	None
ROFZ Length beyond runway end	200	200	None
ROFZ Width	400	400	None
RPZ Length	1,000	1,000	None
RPZ Inner Width	250	250	None
RPZ Outer Width	450	450	None
Runway Separation			
Holding Position	200	200	None
Parallel Taxiway/Taxilane Centerline	240	240	None
Aircraft Parking Area	355	250	None

Source: FAA Advisory Circular 150/5300-13B, 2017 ALP

Taxiway System

The taxiway system connects the runway to other operational areas on the airfield. The efficiency of a taxiway system varies based on its ability to facilitate aircraft movement while limiting safety risks. The following evaluates the current taxiway infrastructure at DGL compared to FAA design standards and identifies recommendations to meet the needs of various based and transient aircraft.

DGL has a partial parallel taxiway, Taxiway A, that is approximately 3,050 feet long. Taxiway A-4 extends approximately 1,800 feet west from taxiway A, connecting the aircraft parking areas to Runway 3/21. Taxiways A-1 and A-2 are turnaround taxiways at the end of Runway 03, while Taxiways A-3 and A-5 are connector taxiways that join Runway 3/21 and Taxiway A.

Taxiway dimensional and separation standards are determined by the ADG and Taxiway Design Group (TDG) of the aircraft that will use the facilities. The TDG is determined by the overall Main Gear Width (MGW) and the Cockpit to Main Gear Distance (CMG) of the Airport's critical aircraft. As stated in a previous section, the critical aircraft for DGL is a Beechcraft Super King Air 200, which is classified as ADG II and TDG-2A. The FAA taxiway design standards for ADG-II and TDG-2A aircraft classification is compared to the existing conditions at DGL in **Table 4-2**.

Table 4-2: Taxiway Design Standards Based on ADG and TDG

Item	Existing Conditions (feet)	FAA Standards TDG 2A (feet)
Taxiway Safety Area (TSA) Width	79	79
Taxiway Object Free Area (TOFA) Width	124	124
Taxiway Width	35	35
Taxiway Edge Safety Margin	7.5	7.5
Taxiway Shoulder Width	15	15

Source: FAA Advisory Circular 150/5300-13B, 2017 AMP

Based on the existing conditions of the taxiway system at DGL presented in **Table 4-2** and**,** the current width, safety, and separation areas of the taxiways, turnarounds, and connectors meet ADG-II/TDG-2A standards. The 2018 SASP recommended GA-community airports such as DGL should have a full or partial parallel taxiway, meaning the Airport currently meets state recommendations. In the 2017 AMP, the Airport and its tenants identified a full-length parallel taxiway as a need for DGL. It is anticipated that the existing taxiway system is adequate to accommodate projected demand, however, the development of a full-length parallel taxiway could enhance the airports' ability to meet additional demand in the future. The current taxiway system at DGL is presented in **Figure 2-2.**

Moreover, the Airport has identified a need for an additional taxiway that connects the aircraft parking areas to Runway 3/21. This additional taxiway would provide another access route to and from the main apron area and eliminate head-to-head conflicts on the current single taxiway. It is also recommended that the connection at the end of Taxiway A-4 between Taxiway A and Runway 3/21 be eliminated. This connection provides direct access from an apron area to an active runway and presents additional risk to pilots operating at the airport. According to FAA design criteria, taxiway geometry should require a pilot to make at least two turns before entering the runway, prompting situational awareness, and limiting the risk of runway incursions.

Navigational Aids and Weather Reporting

Navigational aids (NAVAIDs) are any visual or electronic devices that provide guidance information or position data to aircraft. The following section examines NAVAID facilities for DGL.

Segmented Circle/Windsock

A segmented circle and windsock are facilities that provide surface wind direction and traffic pattern information to pilots operating at DGL. The current location of this facility has been reported to not provide adequate visibility to users at the Airport. Therefore, it is recommended that this facility be relocated to a new location on the airfield that provides improved visual access to users.

Automated Weather Observation System (AWOS)

DGL does not currently have an automated weather reporting station. However, the 2008 Arizona System Plan recommended that DGL pursue the installation of this type of facility, specifically the installation of an automated weather observation system (AWOS). As a result, the 2017 AMP recommended installation of an AWOS as a project for the intermediate (6-10 year) timeframe. It is important to note that DGL is located within 11 miles of the nearest weather reporting station at Bisbee-Douglas International (DUG), however, having an AWOS at DGL would provide reporting of current weather conditions at DGL, greatly enhancing pilot safety at the Airport.

Per FAA Order 6560.20B: *Siting Criteria for Automated Weather Observing Systems*, the preferred siting of a weather reporting station is adjacent to the primary runway, between 500 and 1,000 feet of the runway centerline. The AWOS should also be located 1,000 to 3,000 feet from the runway threshold along the length of the runway. The horizontal distance between the facility and the potential locations for an AWOS are evaluated in **Section 5**.

Landside Facility Requirements

Landside facilities are those that provide services to airport users such as aircraft storage, terminal space, and aircraft apron space. This report examines the following landside facilities:

- Hangars
- Apron tie-downs

As noted in previous sections, 12 based aircraft were reported at the Airport in the 2017 AMP. Since then, the number of aircraft has continued to rise, most recently reaching 22 reported based aircraft in the 2023 Airport Master Record.

Aircraft storage at GA airports like DGL typically include conventional hangars, T-hangars, and apron tie-down areas. These storage types are explained below.

- Conventional Hangar – This type of hangar is a large building used to house multiple aircraft and often contains a large door through which aircraft can access the building.
- T-hangar – This type of hangar is an individual unit storage type, typically for small aircraft such as single-engine or light twin aircraft. These aircraft storage types are typically arranged in a linear fashion with multiple T-hangars units in a row.
- Apron Tie-down – An apron tie-down area is typically a parking space painted on airport pavement. It includes fixed points made of concrete, where an aircraft can be secured using

straps or cables. A tie-down does not provide protective covering for aircraft but it does prevent aircraft from moving or blowing from high winds.

The two conventional hangar buildings account for approximately 15,000 square feet of aircraft storage area, and currently house the majority of based aircraft at the Airport. The Airport also has one 10-unit T-hangar facility and 44 apron tie-down spots, which accommodate the rest of the based aircraft at DGL. Considering the quantity of aircraft projected in the based aircraft forecast, it is recommended that additional aircraft storage spaces be built to meet future demand.

Typical Lease Agreement for Through-the-Fence Operations

A through-the-fence (TTF) agreement is a business-related operation located off airport property that typically permits access to the airport runway or taxiway system through an access agreement. For airports included in the NPIAS, this type of business practice violates federal grant assurances, although in certain situations it is permissible. DGL is not recognized in the NPIAS, and therefore is not obligated to refrain from such access agreements.

As part of the proposed land sale to the private developer there are plans to construct hangar homes on the acquired land adjacent to the Airport. While this type of development is not prohibited at airports such as DGL, it is recommended that if a TTF agreement is reached, the Airport should charge access fees to generate revenue from users. The access fees should be commensurate to the amount of money it would cost for the entity to lease the same amount of property from the Airport. It is also important to note that this type of agreement is generally discouraged because it presents additional safety, security, and economic equity concerns for airport sponsors. Careful consideration should be given to both the positive and negative impacts of this type of agreement on the Airport prior to execution of the land sale. A copy of a typical TTF FAA sample agreement is included as **Appendix D**.

Summary of Facility Requirements

Based on the facility requirements identified in this section, a summary of recommended improvements to existing facilities at the Airport is presented in **Table 4-3**. Facility requirements in the table are categorized by facility type such as Airside or Landside.

Table 4-3: Facility Requirements – Summary

Facility Requirements
Airside Facilities
Construct full-length parallel taxiway
Construct additional taxiway from Taxiway A to Main Apron area
Demolish connection to Runway 3/21 at the end of Taxiway A-4
Relocate segmented circle and windsock facility
Install a weather reporting station (AWOS)
Landside Facilities
Develop additional aircraft storage areas (apron tie-down spots)
Develop through-the-fence agreement

Source: Kimley-Horn

5. PROPOSED DEVELOPMENT ALTERNATIVES

This chapter introduces a variety of development alternatives related to the Airport's taxiways, apron areas, and buildings & facilities. Alternatives were developed with the intent of meeting the requirements throughout the planning period and were analyzed using a specific set of evaluation criteria. The subsequent analysis led to the selection of a preferred alternative.

Alternative Evaluation Categories

The analysis of each of the alternatives progressed through the following evaluation criteria agreed to during the ALP Update process.

- Performance Requirements – Demand: This category evaluates alternatives based on the ability of the alternative to support forecasted demand.
- Development Flexibility: This category evaluates alternatives based on the ability of the alternative to support future development while providing flexibility in implementation.
- Maximize Airfield Efficiency: This evaluation category gauges the ability of the alternative to effectively move aircraft on the airfield while enhancing safety to minimize risk. Factors such as airfield access, circulation, and delay will be considered.
- Constructability: This category evaluates alternatives based on the ability to implement the alternative in logical and practical phases. Improper timing and sequence of construction can create delays, increase cost, and impact airport operations. Each alternative was examined to determine the degree of its impact on airport operations.
- Financial Impact – Cost: This category evaluates alternatives based on the impact to budget and probable development costs.

Evaluation Categories, Descriptions, and Criteria

A description of each evaluation criterion is provided in **Table 5-1**. Each alternative was evaluated and scored: (-1) if it was considered unfavorable relative to the intent of the criteria, (0) if it was neutral relative to the intent of the criteria, or (+1) if it was considered favorable relative to the intent of the criteria identified in the table. These criteria were used to make an objective, quantitative and measurable comparison of the alternatives. Subjective assessments, relying on professional judgment and industry experience, were necessary for some criteria due to the lack of a measurable metric that could be applied. The totaling of the scores for each alternative allows easier comparison.

Table 5-1: Evaluation Categories, Descriptions, and Criteria

CATEGORY	SUBCATEGORY	DESCRIPTION	EVALUATION CRITERIA		
			FAVORABLE	NEUTRAL	UNFAVORABLE
Performance Requirements - Demand	Accommodates Forecasted Demand	Ability of the alternative to accommodate forecasted demand for operations and based aircraft	No facility constraints	Some facility constraints	Unable to accommodate demand
	Capacity	Ability to increase the capacity of an apron, parking position, or runway to accommodate additional aircraft	Greatly enhances capacity	No change to capacity	Greatly reduces capacity
Development Flexibility	Increases Development Potential	Ability of the alternative to support future development	High probability to support future development	Some future development potential	No future development potential
	Supports Adaptable Facilities	Ability of alternative to be modified to meet changing market conditions or regulatory requirements	Multiple options for facility modifications	Some options for facility modifications	No options for facility modifications
	Expansion Beyond Planning Period	Expansion capability beyond the 20-year planning period	Substantial expansion capability beyond the planning horizon	Moderate expansion capability beyond the planning horizon	No expansion capability beyond the planning horizon
Maximize Airfield Efficiency	Access and Circulation	Ability to effectively move aircraft around DGL airfield system	Greatly improves aircraft access and circulation	Maintains same level of aircraft access and circulation	Greatly reduces aircraft access and circulation
	Maintains or Enhances Operational Efficiency	Ability to reduce delay, inefficiencies, or conflicts	Greatly reduces delay and inefficiencies	Maintains same level of delay and inefficiencies	Creates excessive delay and inefficiencies
	Safety	Ability to maintain or enhance safety and minimize risk	Greatly enhances safety	Maintains same level of safety	Creates potentially unsafe condition
Constructability	Impact to Airport Operations	Extent to which the alternative impacts operations during construction	No impact	Slight impact	Substantial impact
	Ease of Implementation/Phasing Complexity	Ability of alternative to be phased or expanded to meet demand	Multiple options for incremental expansion	Fewer opportunities for incremental expansion	Inability to phase incrementally or expand
Financial Impact - Cost	Funding Potential	Potential to be funded through State grants	Fully State funded – (No Impact)	Partially State funded – (Moderate Impact)	No State funding – (Overburdens finances)
	Development Cost	Cost of development	Minimal costs	Medium costs	Excessive cost
	Maintenance / Operational Costs	Anticipated post-construction costs (total cost of ownership)	No increase	Moderate increase	Substantial increase

Source: Kimley-Horn

Evaluation Process

This section defines the evaluation process used to analyze development alternatives and how it was applied to future improvements at DGL. Developing multiple alternatives represents the first of a multi-step process. Development alternatives were created to respond to facility needs with the goal of identifying general preferences for both individual items within the alternative and the overall concept presented.

From the evaluation process, elements of a preferred alternative emerge that can best accommodate all required facility improvements. Based on input from the City, elements of various alternatives will be consolidated into a preferred alternative that can be further refined arriving at a preferred alternative. Once DGL selects the preferred alternatives, a Preferred Development Concept (PDC) is developed. It is important to note that the PDC does not have to consist of the highest ranked alternative. The PDC will then be integrated into the updated ALP drawings that will guide future improvements at the Airport.

Airport Development Alternatives

The initial airport development alternatives are used to facilitate a discussion and evaluation of the most efficient means to meet the facility needs of the Airport. The alternatives are organized into several groups:

- Taxiway Alternatives
- Apron Taxiway Alternatives
- Main Apron Alternatives
- Hangar Apron Alternatives
- Segmented Circle/Wind Indicator Alternatives
- Automated Weather Observation System (AWOS) Alternatives

Taxiway Alternatives

The taxiway system is what aircraft use to maneuver around the airfield. DGL's taxiways consist of pavement sections between Runway 3/21 and aircraft parking areas. The current taxiway system at DGL cannot adequately support future demand and capacity needs for aircraft operations. As such, the following proposed development alternatives will address these future needs with considerations to the safety and efficiency of the airfield.

Taxiway System Alternative 1

Alternative 1 (**Figure 5-1**) provides Runway 3/21 a full-length parallel taxiway, two aircraft run-up areas at each of the runway's approach ends, and a relocated taxiway connector. Existing Taxiway A is extended an additional 2,689 feet to the southwest to complete the final segment of the taxiway as a full-length parallel taxiway to Runway 3/21. Taxiways A-1 and A-2 are upgraded to provide a full aircraft run-up area with a taxiway bypass along with similar improvements to existing Taxiway A-5. Existing Taxiway A-4 would be demolished, and a new connector would be constructed to the north to eliminate the potential for an aircraft to directly access Runway 3/21 from an apron area.

Advantages of this alternative:

- The extension of Taxiway A is depicted on the Airport's currently approved ALP.
- Taxiway A as a full-length parallel taxiway supports aeronautical development at the Airport.

- Direct access to Runway 3/21 from an apron area by an aircraft is corrected to comply with FAA AC 150/5300-13B.
- The new segment of Taxiway A will help stimulate development to an undeveloped area of the Airport.
- The new segment of Taxiway A increases the level of safety by limiting direct access to the runway from future development.

Disadvantages of this alternative:

- The alternative allows for direct taxiway connections to Runway 3/21 on the east side from private development, which may not comply with FAA design standards.
- The City will need to provide a matching share for the construction costs of improvements.
- Increased pavement management and maintenance costs.

Taxiway System Alternative 2

Alternative 2 (**Figure 5-2**) provides a full-length parallel taxiway on each side of Runway 3/21, four additional aircraft run-up areas at each of the runway approach ends, and additional taxiway connectors on each side of the runway. The existing Taxiway A is extended to the southwest an additional 2,689 feet to the southwest to complete the taxiway as a full-length parallel taxiway west of Runway 3/21. Taxiways A-1 and A-2 will be upgraded to include a full aircraft run-up area with a taxiway bypass along with similar improvements to Taxiway A-5. The existing connector from Taxiway A-4 to Runway 3/21 would be demolished and a new connector would be constructed to eliminate the potential for an aircraft to directly access the runway from an apron area.

East of existing Runway 3/21, a new 5,758-foot full-length taxiway would be constructed, as well as two new aircraft run-up areas at the approach end of Runway 3 and Runway 21 and two additional midfield taxiway connectors.

Advantages of this alternative:

- The extension of Taxiway A is depicted on the Airport's currently approved ALP.
- Taxiway A as a full-length parallel taxiway supports aeronautical development at the Airport.
- Direct access to Runway 3/21 from an apron area by an aircraft is corrected to comply with FAA AC 150/5300-13B.
- The new segment of Taxiway A will help stimulate development to an undeveloped area of the Airport.
- Two full-length parallel taxiways provide additional level of safety and control by limiting direct access to the runway from future development.

Disadvantages of this alternative:

- The City will need to provide a matching share for the construction costs of improvements.
- Increased pavement management and maintenance costs.

No-Build Alternative

In addition to the preceding alternatives, a no-build alternative also exists where the City may choose to maintain the existing facilities without investing in DGL facility upgrades or expansion. The result of this alternative will be the inability of the Airport to accommodate demand beyond current facility capabilities.

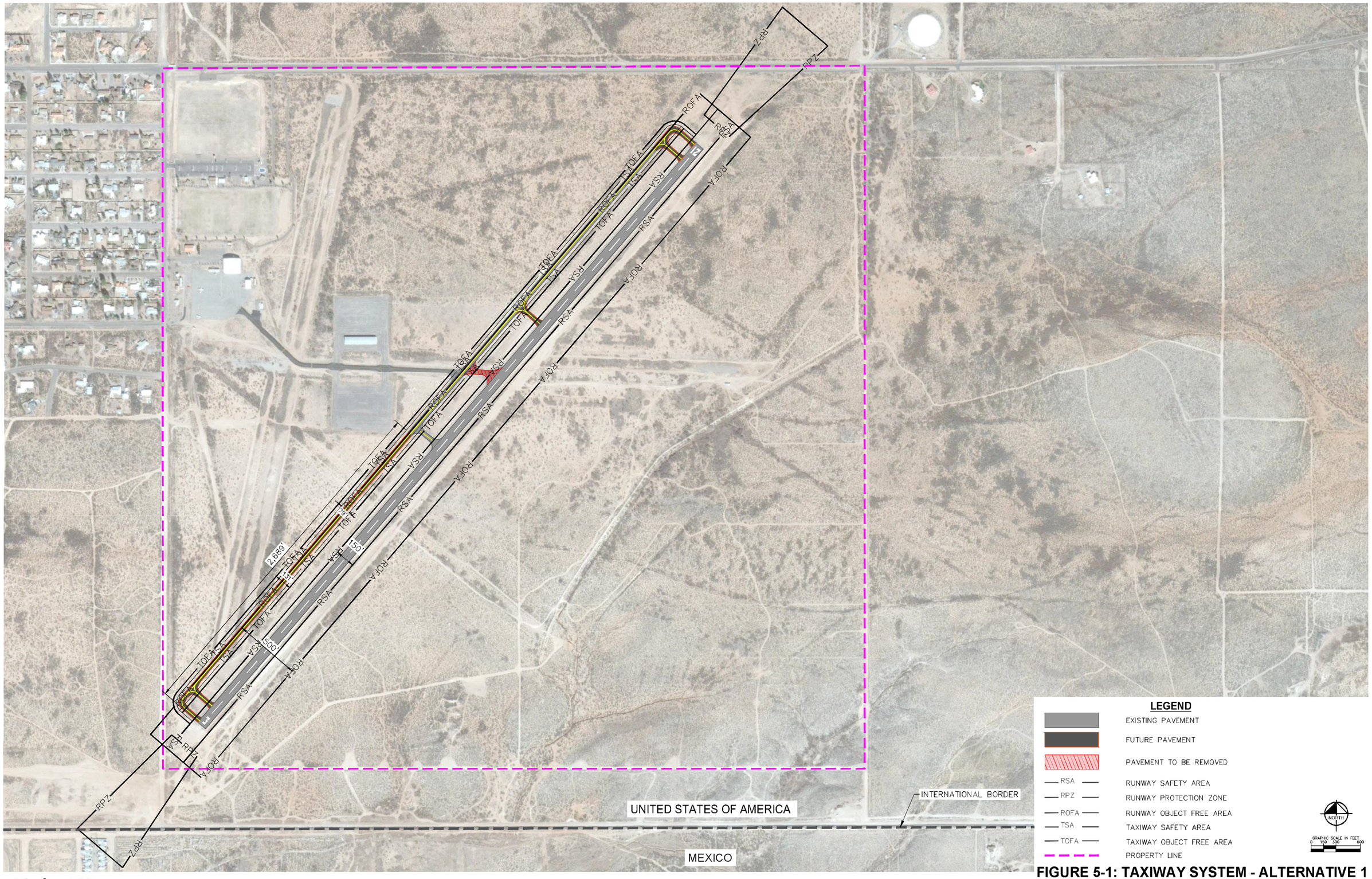


FIGURE 5-1: TAXIWAY SYSTEM - ALTERNATIVE 1

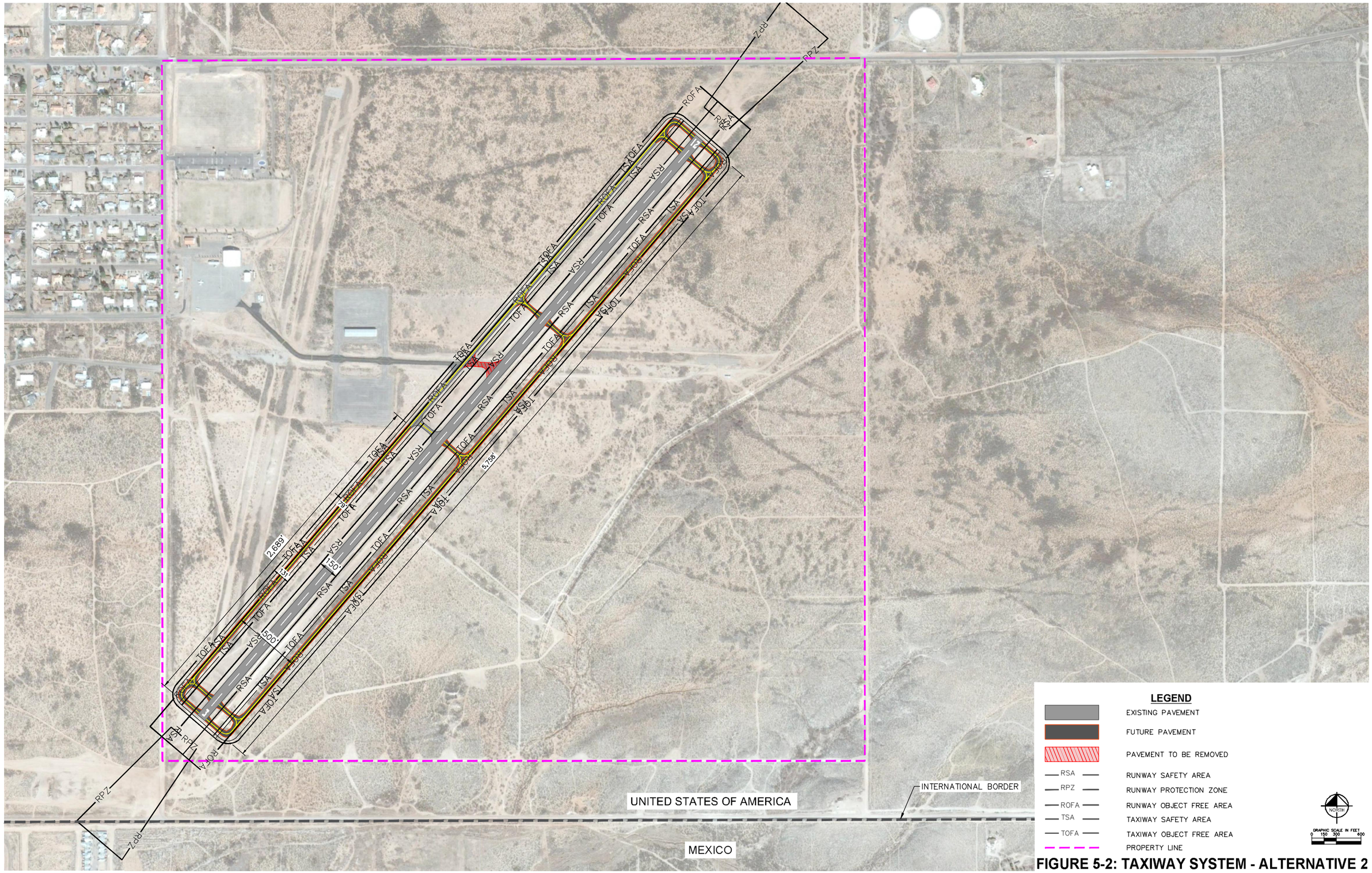


FIGURE 5-2: TAXIWAY SYSTEM - ALTERNATIVE 2

Taxiway System Alternatives Evaluation

Table 5-2 presents an evaluation of the various alternatives for the taxiway system at DGL.

Table 5-2: Summary Evaluation Matrix of Taxiway System Alternatives

CATEGORY	SUBCATEGORY	ALTERNATIVE 1	ALTERNATIVE 2	NO-BUILD
Performance Requirements – Demand	Accommodates Forecasted Demand	-1	+1	-1
	Capacity	+1	+1	-1
Development Flexibility	Increases Development Potential	0	+1	-1
	Supports Adaptable Facilities	0	+1	-1
	Expansion Beyond Planning Period	0	0	-1
Maximize Airfield Efficiency	Access and Circulation	0	+1	-1
	Maintains or Enhances Operational Efficiency	0	+1	-1
	Safety	0	+1	-1
Constructability	Impact to Airport Operations	0	0	+1
	Ease of Implementation/Phasing Complexity	+1	+1	0
Financial Impact - Cost	Funding Potential	+1	+1	0
	Development Cost	-1	-1	+1
	Maintenance / Operational Costs	-1	-1	+1
	Evaluation Total	0	+7	-5

Source: Kimley-Horn
Notes: Favorable: +1, Neutral: 0, Unfavorable: -1

Taxiway System Alternatives Evaluation Summary

The preferred alternative based on the evaluation scoring is **Alternative 2**. Individual evaluation categories were scored as follows:

- **Accommodates Forecasted Demand** – Alternative 1 received an unfavorable score because it would provide direct access to Runway 3/21 from private development. Alternative 2 received a

favorable score because having two full-length parallel taxiways to Runway 3/21 would provide additional ability to accommodate future demand for aircraft taxi operations on both sides of the runway.
  - The No-Build Alternative received an unfavorable score because it does not support development to meet future demand at the Airport.
- **Capacity –** Alternative 1 and Alternative 2 received favorable scores because airfield capacity can be increased by constructing full-length parallel taxiways to improve airfield circulation, eliminate back-taxi operations, and reduce runway occupancy time.
  - The No-Build Alternative received an unfavorable score since capacity is not able to be increased as there is no development associated with the No-Build Alternative.
- **Increased Development –** Alternative 1 received a neutral score because the proposed airfield development (parallel taxiway and new connectors) somewhat supports future airfield demand and aeronautical/non-aeronautical development west of the runway. Alternative 2 received a favorable score because the proposed airfield development (parallel taxiways and new connectors) will support future airfield demand and aeronautical/non-aeronautical development both east and west of the runway.
  - The No-Build Alternative received an unfavorable score as it does not support future demand or aeronautical/non-aeronautical development at the Airport.
- **Supports Adaptable Facilities –** Alternative 1 received a neutral score because the proposed airfield development on the west side of Runway 3/21 provides flexibility in meeting future market changes. Alternative 2 received a favorable score because the proposed airfield development surrounding Runway 3/21 provides the Airport the flexibility in meeting future market changes if additional airfield growth occurs east of the runway.
  - The No-Build Alternative received an unfavorable score as it does not support future demand or aeronautical/non-aeronautical development at the Airport.
- **Expansion Beyond Planning Period –** Alternative 1 and Alternative 2 received neutral scores because the proposed airfield development will allow the City to only maintain control of certain development areas and be able to expand the airfield beyond the planning period.
  - The No-Build Alternative received an unfavorable score because the proposed sale of land to the private developer limits the Airport's ability to expand their property and assets beyond the planning horizon. If no airfield modifications are planned for prior to the sale, they may not be able to be done after the land is sold.
- **Access and Circulation –** Alternative 1 received a neutral score because it only improves airfield access and circulation on the west side of Runway 3/21. Alternative 2 received a favorable score because is improves airfield access and circulation on both the east and west sides of Runway 3/21.
  - The No-Build Alternative received an unfavorable score because it does not improve airfield access and circulation around Runway 3/21.
- **Maintains or Enhances Operational Efficiency –** Alternative 1 received a neutral score because it only improves operational efficiency on the west side of Runway 3/21. Alternative 2 received a favorable score because is improves operational efficiency on both the east and west sides of Runway 3/21.
  - The No-Build Alternative received an unfavorable score because it does not improve operational efficiency around Runway 3/21.

- **Safety –** Alternative 1 received a neutral score because extending Taxiway A to a full-length parallel taxiway limits direct access to Runway 3/21 from private development only on the runway's west side. Alternative 2 received a favorable score because Runway 3/21 would have full-length parallel taxiways on its east and west sides protecting it from direct access from new development.
  - The No-Build Alternative received an unfavorable score as Runway 3/21 could be directly accessed from private development.
- **Impact to Airport Operations –** Alternative 1 and Alternative 2 received neutral scores because of construction impacts when extending Taxiway A, completing the connectors from Taxiway A to Runway 3/21, and constructing the new parallel taxiway to Runway 3/21.
  - The No-Build Alternative received a favorable score due to the lack of construction and no associated construction impacts to tenants and facilities.
- **Ease of Implementation/Phasing Complexity –** Alternative 1 and Alternative 2 received favorable scores because of the way Taxiway A and the east parallel taxiway to Runway 3/21 could be phased throughout construction.
  - The No-Build Alternative received a neutral score because there is no development associated with the No-Build Alternative.
- **Funding Potential –** Alternative 1 and Alternative 2 received favorable scores because airfield projects such as taxiway construction are eligible for state grant funding.
  - The No-Build Alternative received a neutral score since there is no development associated with the No-Build Alternative.
- **Development Cost –** Alternatives 1 and 2 received unfavorable scores because the cost to extend Taxiway A, all associated connectors, and develop the new parallel taxiway would be substantial.
  - The No-Build Alternative received a favorable score since there is no development associated with the No-Build Alternative, no development costs would be incurred.
- **Maintenance / Operational Costs –** Alternative 1 and Alternative 2 received unfavorable scores because additional pavement management and maintenance costs would be incurred.
  - The No-Build Alternative received a favorable score since there is no development associated with the No-Build Alternative, no additional pavement management and maintenance costs would be incurred.

Main Apron Taxiway System Alternatives

The single-lane taxiway section (Taxiway A-4) that connects the main apron area to Taxiway A presents a constraint to aircraft moving to or from the airfield. The proposed development alternatives address the current limitations of a single-lane taxiway access from the main apron area to Runway 3/21.

Main Apron Taxiway System Alternative 1

Alternative 1 (**Figure 5-3**) consists of a parallel taxiway south of existing Taxiway A-4 to allow for simultaneous aircraft taxi operations to and from the main apron area, as well as demolition of the existing Taxiway A-4 taxiway connector to Runway 3/21. The new taxiway would be 2,271 feet in length and meet B-II design standards. The proposed helipad would remain in its currently proposed position.

Advantages of this alternative:

- The new taxiway increases the safety and efficiency of aircraft taxi operations.

Disadvantages of this alternative:

- The City will need to provide a matching share for the construction costs of improvements.
- Increased pavement management and maintenance costs.
- Impacts the amount of available apron to be sold to the private developer.
- Requires some reconfiguration of the aircraft parking in the apron area.

Main Apron Taxiway System Alternative 2

Alternative 2 (**Figure 5-4**) consists of a parallel taxiway north of Taxiway A-4 and the North Apron to allow for simultaneous aircraft taxi operations to and from the main apron area, extension of existing Taxiway A-4 to provide a new connection to the apron area from the south, and demolition of the Taxiway A-4 "dog-leg" and taxiway connector to Runway 3/21. The new taxiway would be 2,171 feet in length and meet B-II design standards. The proposed helipad would remain in its currently proposed position.

Advantages of this alternative:

- The new taxiway increases the safety and efficiency of aircraft taxi operations.

Disadvantages of this alternative:

- The City will need to provide a matching share for the construction costs of improvements.
- Increased pavement management and maintenance costs.
- Requires some reconfiguration of the aircraft parking in the apron area.

No-Build Alternative

In addition to the preceding alternatives, a no-build alternative also exists where the City may choose to maintain the existing facilities without investing in DGL facility upgrades or expansion. The result of this alternative will be the inability of the Airport to accommodate demand beyond current facility capabilities.

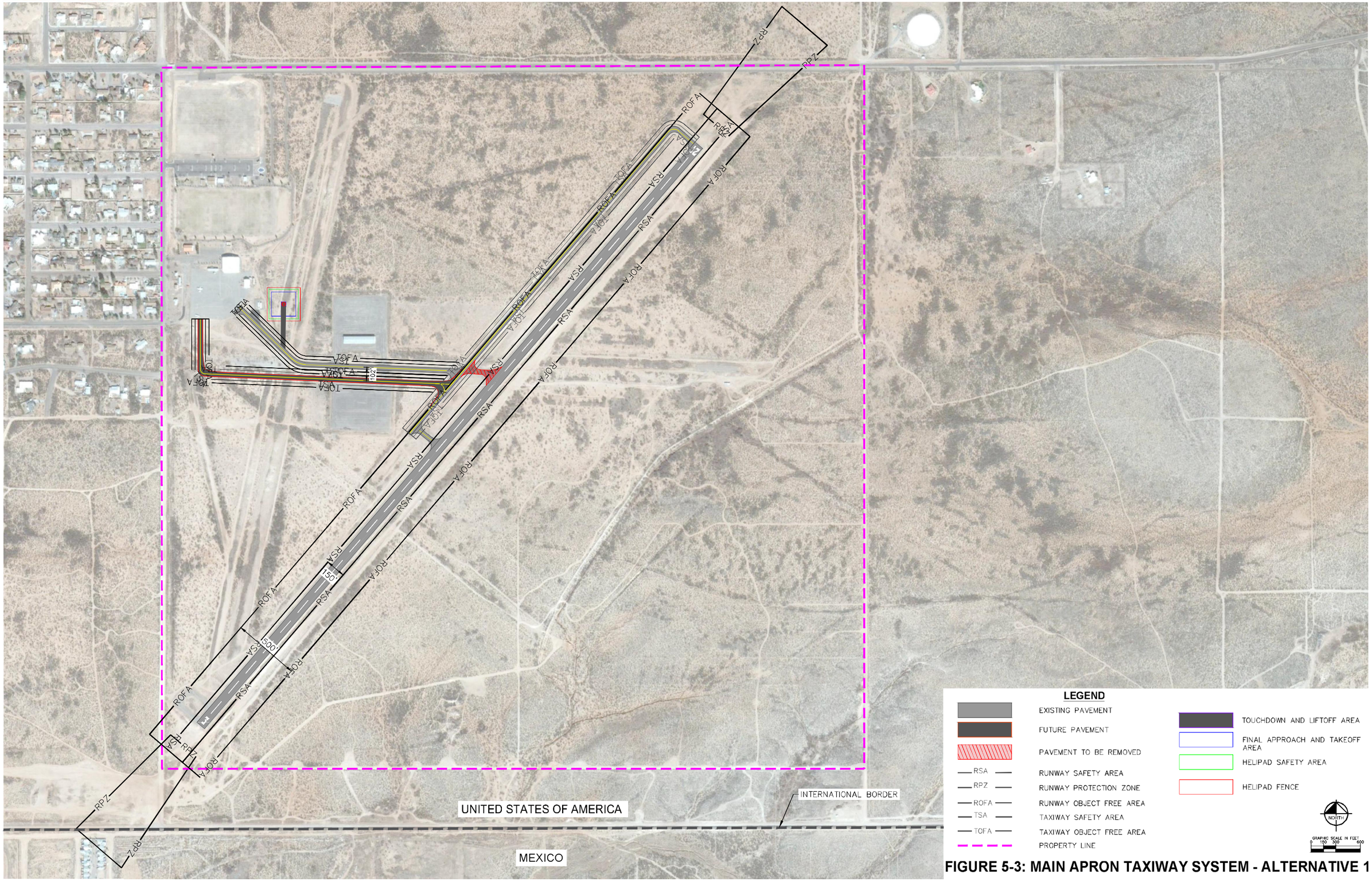


FIGURE 5-3: MAIN APRON TAXIWAY SYSTEM - ALTERNATIVE 1

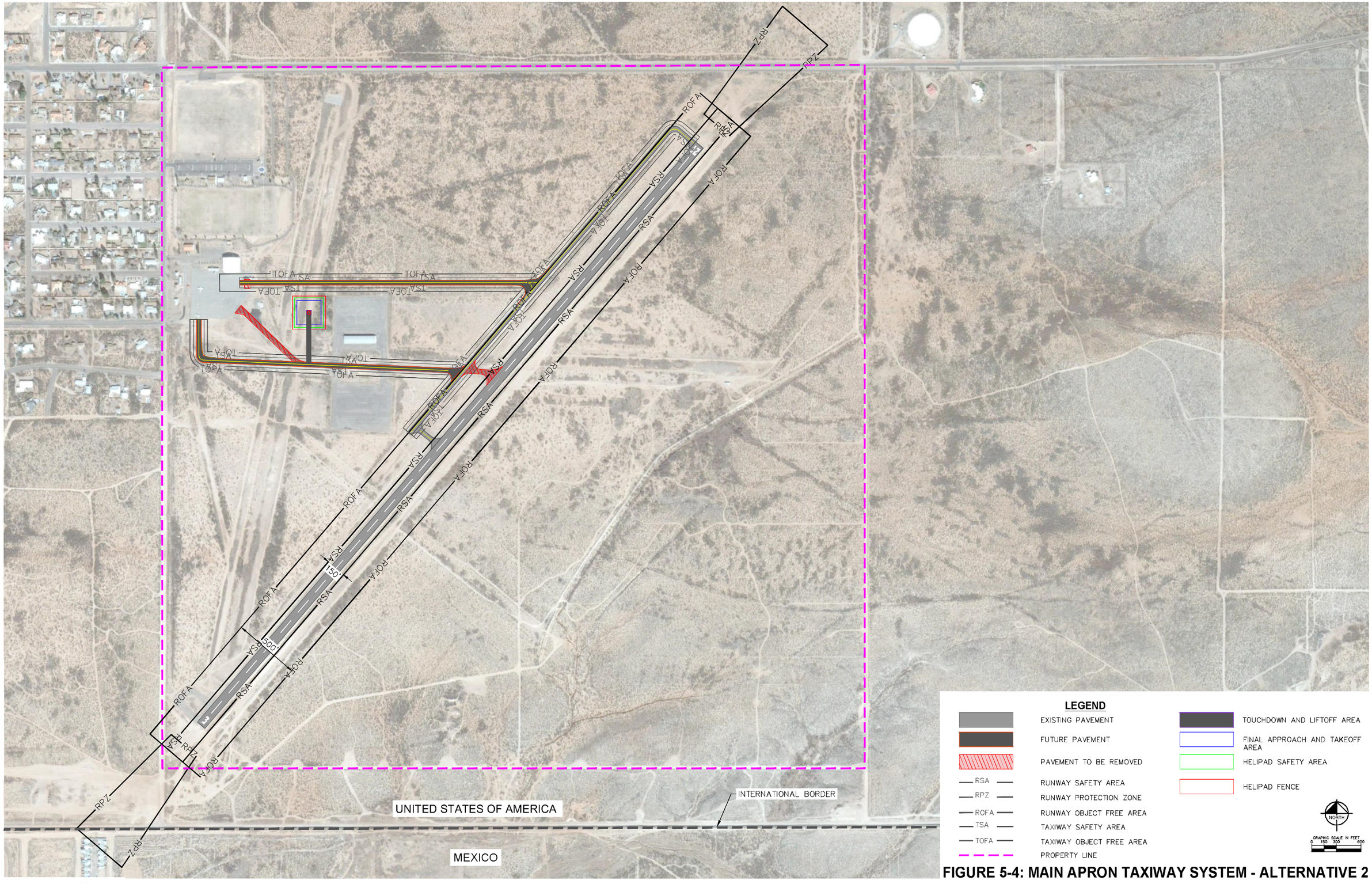


FIGURE 5-4: MAIN APRON TAXIWAY SYSTEM - ALTERNATIVE 2

Main Apron Taxiway System Alternatives Evaluation

Table 5-3 presents an evaluation of the three alternatives for the main apron taxiway system at DGL.

Table 5-3: Summary Evaluation Matrix of the Main Apron Taxiway System Alternatives

CATEGORY	SUBCATEGORY	ALTERNATIVE 1	ALTERNATIVE 2	NO-BUILD
Performance Requirements – Demand	Accommodates Forecasted Demand	+1	+1	-1
	Capacity	+1	+1	-1
Development Flexibility	Increases Development Potential	0	0	-1
	Supports Adaptable Facilities	+1	+1	-1
	Expansion Beyond Planning Period	0	+1	-1
Maximize Airfield Efficiency	Access and Circulation	+1	+1	-1
	Maintains or Enhances Operational Efficiency	+1	+1	-1
	Safety	+1	+1	-1
Constructability	Impact to Airport Operations	+1	-1	+1
	Ease of Implementation/Phasing Complexity	-1	-1	+1
Financial Impact - Cost	Funding Potential	+1	+1	0
	Development Cost	-1	-1	+1
	Maintenance / Operational Costs	-1	-1	+1
	Evaluation Total	+5	+4	-4

Source: Kimley-Horn
Notes: Favorable: +1, Neutral: 0, Unfavorable: -1

Main Apron Taxiway System Alternatives Evaluation Summary

The preferred alternative based on the evaluation scoring is **Alternative 1**. Individual evaluation categories were scored as follows:

- **Accommodates Forecasted Demand –** Alternative 1 and Alternative 2 received favorable scores because the proposed taxiway development would provide increased ability to handle future demand for aircraft taxi operations and provide additional routes to access the main apron area.
  - The No-Build Alternative received an unfavorable score because it does not support future demand or development at the Airport.
- **Capacity –** Alternative 1 and Alternative 2 received favorable scores because airfield capacity can be increased by constructing an additional taxiway that connects the main apron area to Taxiway A and minimizes hold times for aircraft taxi operations.
  - The No-Build Alternative received an unfavorable score because it does not support a future increase in taxiway capacity for the Airport.
- **Increased Development –** Alternative 1 received a neutral score because the proposed taxiway development (new parallel taxiway south of existing Taxiway A-4) somewhat supports increased airfield development, however, it will also impact the amount of apron space available for the proposed land sell to the private developer. Alternative 2 received a neutral score because the proposed taxiway development (new parallel taxiway north of Taxiway A-4) somewhat supports increase airfield development, however, it will also impact the land to be sold to the private developer.
  - The No-Build Alternative received an unfavorable score because it does not support increased demand or aeronautical/non-aeronautical development at the Airport.
- **Supports Adaptable Facilities –** Alternative 1 and Alternative 2 received favorable scores because both propose construction of one additional taxiway (from the main apron area to Taxiway A) which would provide flexibility to the airfield to meet changing market needs.
  - The No-Build Alternative received an unfavorable score because it does not support future facility adaptability.
- **Expansion Beyond Planning Period –** Alternative 1 received a neutral score because the proposed taxiway development would impact the apron area to be sold to the private developer and offers limited expansion capability in a future planning period. Alternative 2 received a favorable score because the proposed airfield development would allow the City to maintain control the apron and allow for expansion in a future planning period.
  - The No-Build Alternative received an unfavorable score because the proposed sale of land to the private developer limits the Airport's ability to expand their property and assets beyond the planning horizon.
- **Access and Circulation –** Alternative 1 and Alternative 2 received favorable scores because both propose construction of one additional taxiway which would provide improved access for aircraft taxi operations from the main apron area to Taxiway A.
  - The No-Build Alternative received an unfavorable score because it does not improve taxiway access from the main apron area to Taxiway A.
- **Maintains or Enhances Operational Efficiency –** Alternative 1 and Alternative 2 received favorable scores because they greatly improve operational efficiency during taxi operations from the main apron area to Taxiway A and reduce risk of aircraft conflict.
  - The No-Build Alternative received an unfavorable score because it does not provide opportunity for enhanced operational efficiency.
- **Safety –** Alternative 1 and Alternative 2 received favorable scores because the proposed taxiway development would spread aircraft taxi operations across the airfield, provide additional taxi

options from the main apron to Taxiway A. Both alternatives would eliminate direct access to Runway 3/21.
  - The No-Build Alternative received an unfavorable score as taxiway operations would remain the same, and therefore, would carry the same potential safety risks that exist currently.
- **Impact to Airport Operations –** Alternative 1 received a favorable score because the new taxiway could be constructed with minimal impact to normal airport operations. Alternative 2 received an unfavorable score because it would greatly impact normal operations of an airport tenant by requiring the relocation of the small conventional hangar on the east side of the main apron, which they currently occupy.
  - The No-Build Alternative received a favorable score since there is no development associated with the No-Build Alternative, no construction impacts would occur.
- **Ease of Implementation/Phasing Complexity –** Alternative 1 and Alternative 2 received unfavorable scores because construction of the additional taxiway for either project would not be able to be completed or phased with other projects.
  - The No-Build Alternative received a neutral score because there is no development associated with the No-Build Alternative.
- **Funding Potential –** Alternative 1 and Alternative 2 received favorable scores as airfield projects such as taxiway construction are grant eligible.
  - The No-Build Alternative received a neutral score since there is no development associated with the No-Build Alternative.
- **Development Cost –** Alternatives 1 and Alternative 2 received unfavorable scores because the cost to construct a new taxiway, extend an existing taxiway, demolish a taxiway connector, and relocate a hangar building (for Alternative 2 only) would be substantial.
  - The No-Build Alternative received a favorable score since there is no development associated with the No-Build Alternative, no development costs would be incurred.
- **Maintenance / Operational Costs –** Alternative 1 and Alternative 2 received unfavorable scores because additional pavement management and maintenance costs would be incurred.
  - The No-Build Alternative received a favorable score since there is no development associated with the No-Build Alternative, no additional pavement management and maintenance costs would be incurred.

Main Apron Expansion Alternatives

The main apron area is the primary location at DGL where aircraft park and access fuel services. To accommodate future based aircraft demand and capacity needs, improvements to the apron area are required. The proposed development alternatives address the limited apron space with various expansion improvements.

Main Apron Expansion Alternative 1

Alternative 1 (**Figure 5-5**) involves an easterly expansion on the existing main apron by 42,957 SF allowing for an additional six tie-down spaces. Access to the expanded apron will occur via a center taxilane capable of supporting B-II aircraft.

Advantages of this alternative:

- Airport-owned property will be developed for an additional six tie-downs or approximately 42,957 SF of apron pavement.

Disadvantages of this alternative:

- An existing hangar and storage area will need to be relocated.
- The City will need to provide a matching share for the construction costs of improvements.
- Increased pavement management and maintenance costs.
- Requires some reconfiguration of the aircraft parking in the apron area.

Main Apron Expansion Alternative 2

Alternative 2 (**Figure 5-6**) involves expanding the existing main apron to the south by 124,852 SF, allowing for an additional 15 tie-down spaces. Access to the expanded apron will occur via two center taxilanes capable of supporting B-II aircraft.

Advantages of this alternative:

- Airport-owned property will be developed for an additional 15 tie-downs, approximately 124,852 SF.

Disadvantages of this alternative:

- Impacts land proposed to be sold to private developer.
- Existing aircraft tie-down and aircraft parking area will need to be reconfigured.
- The City will need to provide a matching share for the costs of improvements.
- Increased pavement management and maintenance costs.

No-Build Alternative

In addition to the preceding alternatives, a no-build alternative also exists where the City may choose to maintain the existing facilities without investing in DGL facility upgrades or expansion. The result of this alternative will be the inability of the Airport to accommodate demand beyond current facility capabilities.

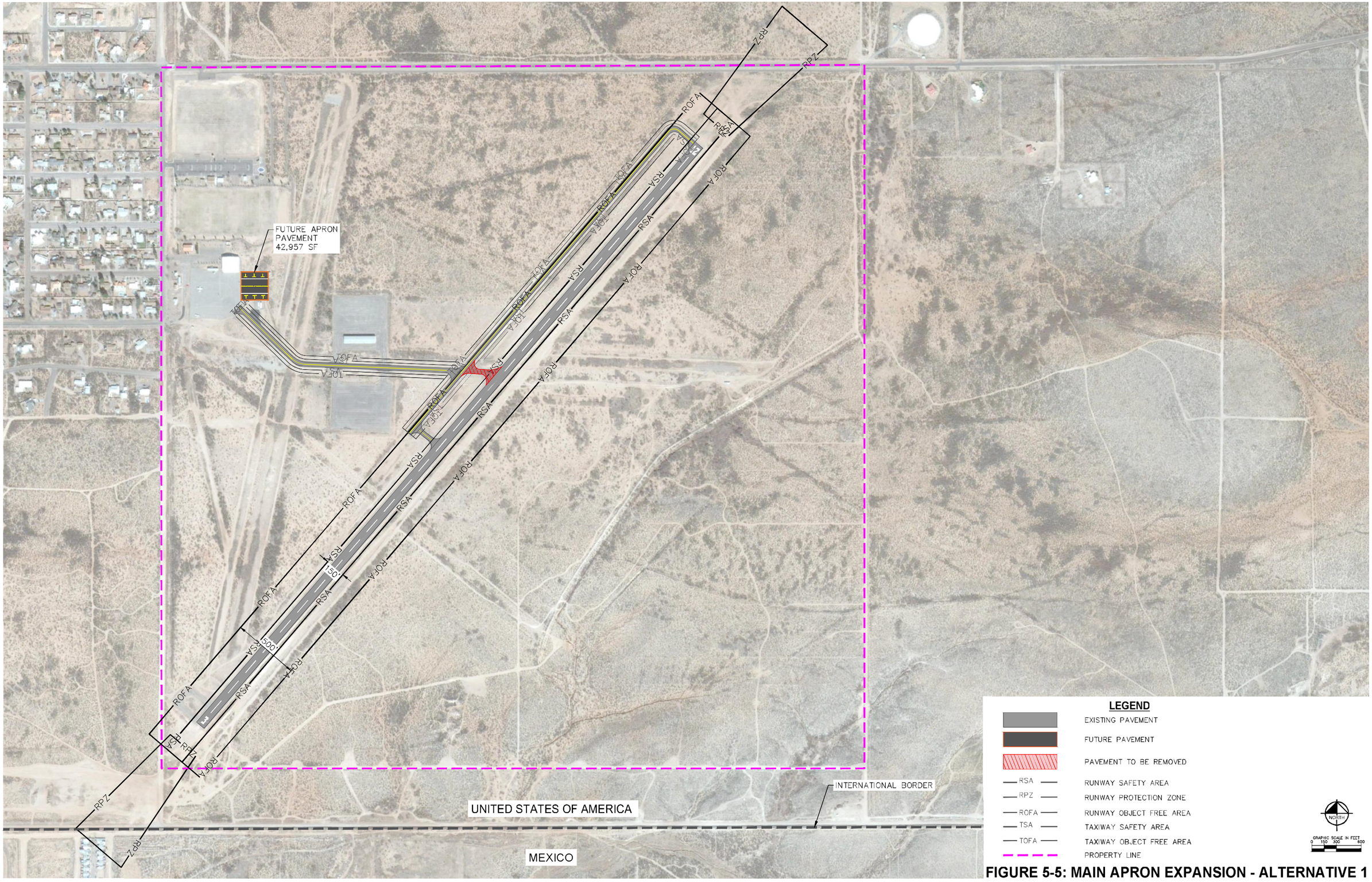


FIGURE 5-5: MAIN APRON EXPANSION - ALTERNATIVE 1

FUTURE APRON PAVEMENT 124,852 SF

INTERNATIONAL BORDER

UNITED STATES OF AMERICA

MEXICO

LEGEND

- EXISTING PAVEMENT
- FUTURE PAVEMENT
- PAVEMENT TO BE REMOVED
- RSA — RUNWAY SAFETY AREA
- RPZ — RUNWAY PROTECTION ZONE
- ROFA — RUNWAY OBJECT FREE AREA
- TSA — TAXIWAY SAFETY AREA
- TOFA — TAXIWAY OBJECT FREE AREA
- PROPERTY LINE

NORTH

GRAPHIC SCALE IN FEET
0 150 300 600

FIGURE 5-6: MAIN APRON EXPANSION - ALTERNATIVE 2

Main Apron Expansion Alternatives Evaluation

Table 5-4 presents an evaluation of the various alternatives for the main apron expansion at DGL.

Table 5-4: Summary Evaluation Matrix for Main Apron Expansion Alternatives

CATEGORY	SUBCATEGORY	ALTERNATIVE 1	ALTERNATIVE 2	NO-BUILD
Performance Requirements – Demand	Accommodates Forecasted Demand	0	+1	-1
	Capacity	0	+1	-1
Development Flexibility	Increases Development Potential	+1	+1	-1
	Supports Adaptable Facilities	+1	+1	-1
	Expansion Beyond Planning Period	+1	+1	+1
Maximize Airfield Efficiency	Access and Circulation	0	0	0
	Maintains or Enhances Operational Efficiency	0	0	0
	Safety	0	0	0
Constructability	Impact to Airport Operations	-1	0	0
	Ease of Implementation/Phasing Complexity	-1	+1	0
Financial Impact – Cost	Funding Potential	+1	+1	0
	Development Cost	-1	-1	0
	Maintenance / Operational Costs	-1	-1	0
	Evaluation Total	0	+5	-3

Source: Kimley-Horn
Notes: Favorable: +1, Neutral: 0, Unfavorable: -1

Main Apron Expansion Alternatives Evaluation Summary

The preferred alternative based on the evaluation scoring is **Alternative 2**. Individual evaluation categories were scored as follows:

- **Accommodates Forecasted Demand –** Alternative 1 received a neutral score because the proposed apron extension would somewhat increase the Airport's ability to accommodate future demand of based aircraft. In contrast, Alternative 2 received a favorable score because it would greatly increase the Airports' ability to accommodate future demand of based aircraft by adding 15 tie-down spaces.
  - The No-Build Alternative received an unfavorable score because it does not support the future development or futures demands of the Airport.
- **Capacity –** Alternative 1 received a neutral score because it would somewhat increase apron capacity, adding six aircraft tie-down spaces. Alternative 2 received a favorable score because it would increase apron capacity by 15 aircraft tie-down spaces.
  - The No-Build Alternative received an unfavorable score since apron capacity is not able to be increased at there is not development associated with the No-Build Alternative.
- **Increased Development –** Alternative 1 and Alternative 2 received favorable scores because the proposed apron development would support future demand at the Airport by providing additional aircraft tie-down spaces.
  - The No-Build Alternative received an unfavorable score because it does not support future demand or aeronautical/non-aeronautical development at the Airport.
- **Supports Adaptable Facilities –** Alternative 1 and Alternative 2 received favorable scores because the proposed apron development would provide the Airport with additional aircraft parking facilities that support adaptability to market conditions.
  - The No-Build Alternative received an unfavorable score as it does not allow for future demand or aeronautical/non-aeronautical development at the Airport.
- **Expansion Beyond Planning Period –** Alternative 1 and Alternative 2 received favorable scores because the proposed apron development supports additional expansion beyond the current planning period.
  - The No-Build Alternative received a favorable score because of its potential to provide expansion in a future planning period and given the area is not currently constrained by existing facilities.
- **Access and Circulation –** Alternative 1 and Alternative 2 received neutral scores because the proposed apron development would not significantly impact access and circulation to the airfield system at the Airport.
  - The No-Build Alternative received a neutral score as not building the proposed alternatives has no impact on the access and circulation of the airfield.
- **Maintains or Enhances Operational Efficiency –** Alternative 1 and Alternative 2 received a neutral score because the proposed apron development has no significant impact on the operational efficiency of the airfield system at the Airport.
  - The No-Build Alternative received a neutral score because not expanding the apron area has no impact on the operational efficiency of the airfield.
- **Safety –** Alternative 1 and Alternative 2 received a neutral score because the proposed apron development would not have a significant impact on the safety of the airfield system at the Airport.
  - The No-Build Alternative received a neutral score because not expanding the apron area has no significant impact on the safety of the airfield.
- **Impact to Airport Operations –** Alternative 1 received an unfavorable score because construction of the apron expansion east would impact the existing small aircraft on the main

apron. Alternative 2 received a neutral score because of construction impacts when expanding the apron area south.
  - The No-Build Alternative received a neutral score due to the lack of construction and no associated construction impacts to tenants and facilities.
- **Ease of Implementation/Phasing Complexity –** Alternative 1 received an unfavorable score because construction of the apron expansion would be difficult to implement due to its impact on existing facilities. Alternative 2 received a favorable score because construction of the apron expansion can be implemented with ease.
  - The No-Build Alternative received a neutral score because there is no development associated with it.
- **Funding Potential –** Alternative 1 and Alternative 2 received favorable scores as projects related to the development of airport pavement systems are grant eligible.
  - The No-Build Alternative received a neutral score since there is no development associated with it.
- **Development Cost –** Alternative 1 and Alternative 2 received unfavorable scores because the cost to expand the main apron area, relocate existing structures, and reconfigure apron markings would be substantial.
  - The No-Build Alternative received a neutral score as there is no development cost associated with it.
- **Maintenance / Operational Costs –** Alternative 1 and Alternative 2 received unfavorable scores because additional pavement management and pavement maintenance would be incurred.
  - The No-Build Alternative received a neutral score as there is no maintenance or operational costs associated with the No-Build Alternative.

North Apron Expansion Alternatives

The North Apron area provides additional aircraft parking spaces and taxilanes for the hangar building located north of Taxiway A-4. The area surrounding the North Apron is undeveloped, providing space for additional aircraft storage spaces to be developed. The following development alternatives have been proposed to address this issue.

North Apron Expansion Alternative 1

Alternative 1 (**Figure 5-7**) involves expanding the existing North Apron to the east by 143,654 SF allowing for an additional 14 tie-down spaces. Access to the expanded apron will occur via a new taxiway connector to Taxiway A-4 supporting B-II aircraft. The helipad would remain in its currently planned position.

Advantages of this alternative:

- Airport-owned property will be developed for an additional 14 tie-downs and approximately 143,654 SF of apron space.

Disadvantages of this alternative:

- Impacts land that was planned to be sold to the developer.
- The City will need to provide a matching share for the construction costs of improvements.
- Increased pavement management and maintenance costs.

North Apron Expansion Alternative 2

Alternative 2 (**Figure 5-8**) involves expanding the existing North Apron to the north by 164,962 SF, allowing for an additional 14 tie-down spaces. Access to the expanded apron will occur via the existing apron taxilanes connecting to Taxiway A-4. The helipad would remain in its currently planned position.

Advantages of this alternative:

- Airport-owned property will be developed for an additional 14 tie-downs and approximately 164,962 SF of apron space.

Disadvantages of this alternative:

- Potentially impacts expansion of the adjacent park.
- The City will need to provide a matching share for the construction costs of improvements.
- Increased pavement management and maintenance costs.

North Apron Expansion Alternative 3

Alternative 3 (**Figure 5-9**) involves expanding the existing North Apron to the west by 142,587 SF allowing for an additional 14 tie-down spaces to be constructed. Access to the expanded apron will occur via a new taxiway connector to Taxiway A-4 supporting B-II aircraft. The 'dogleg' segment of Taxiway A-4 would be demolished, and the taxiway would be lengthened to connect into the south edge of the Main Apron at a 90-degree angle. The proposed helipad would be relocated south of the Main Apron, and immediately east (inside) of the Airport's perimeter fence.

Advantages of this alternative:

- Airport-owned property will be developed for an additional 14 tie-downs and approximately 142,587 SF of apron space.

Disadvantages of this alternative:

- The City will need to provide a matching share for the construction costs of improvements.
- Increased pavement management and maintenance costs.
- Requires some reconfiguration of the aircraft parking in the apron area.
- Requires relocation of the proposed helicopter landing pad and fuel storage facilities.
- Additional noise impacts to community/homes near the Airport.

No-Build Alternative

In addition to the preceding alternatives, a no-build alternative also exists where the City may choose to maintain the existing facilities without investing in DGL facility upgrades or expansion. The result of this alternative will be the inability of the Airport to accommodate demand beyond current facility capabilities.

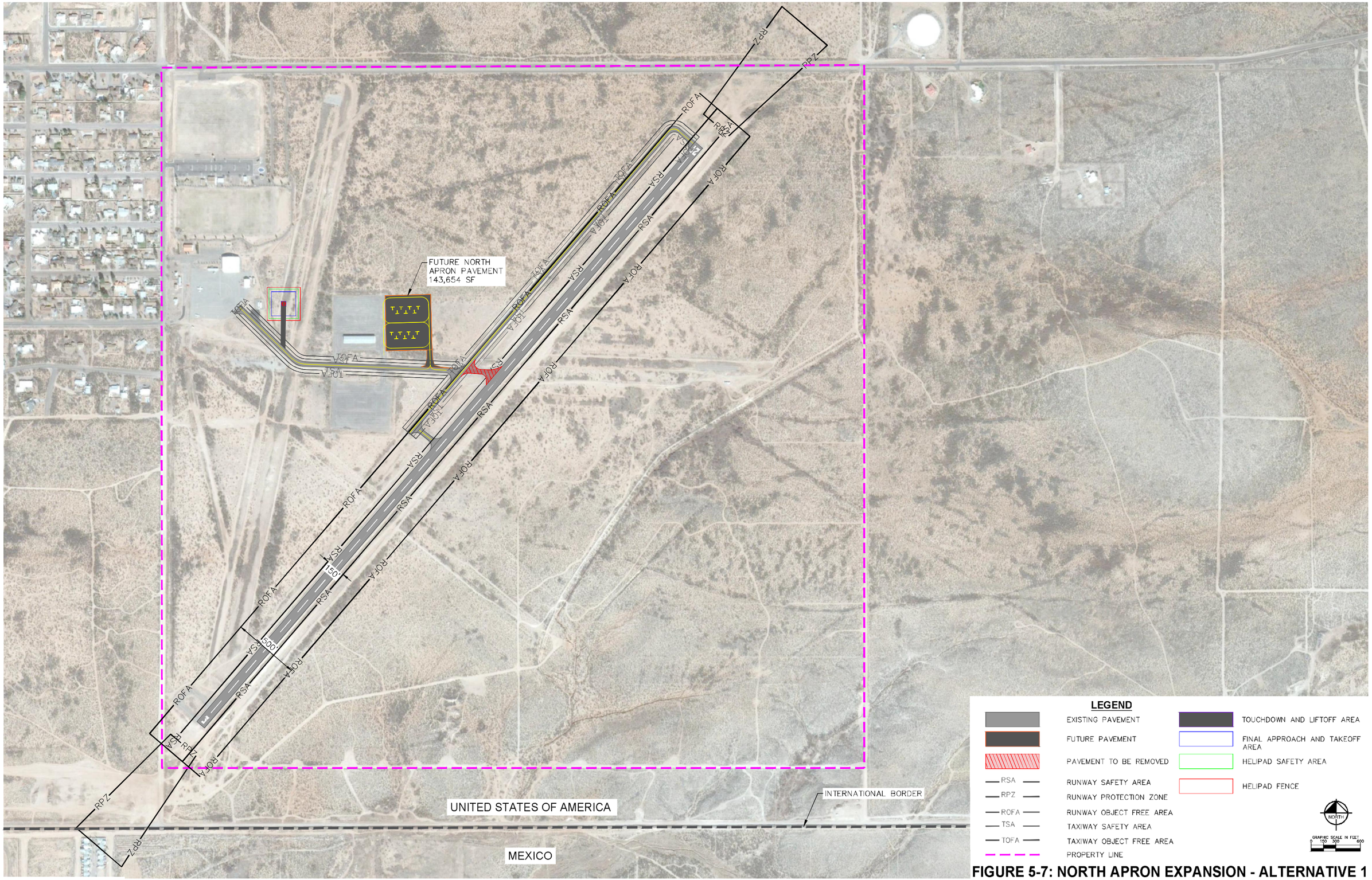


FIGURE 5-7: NORTH APRON EXPANSION - ALTERNATIVE 1

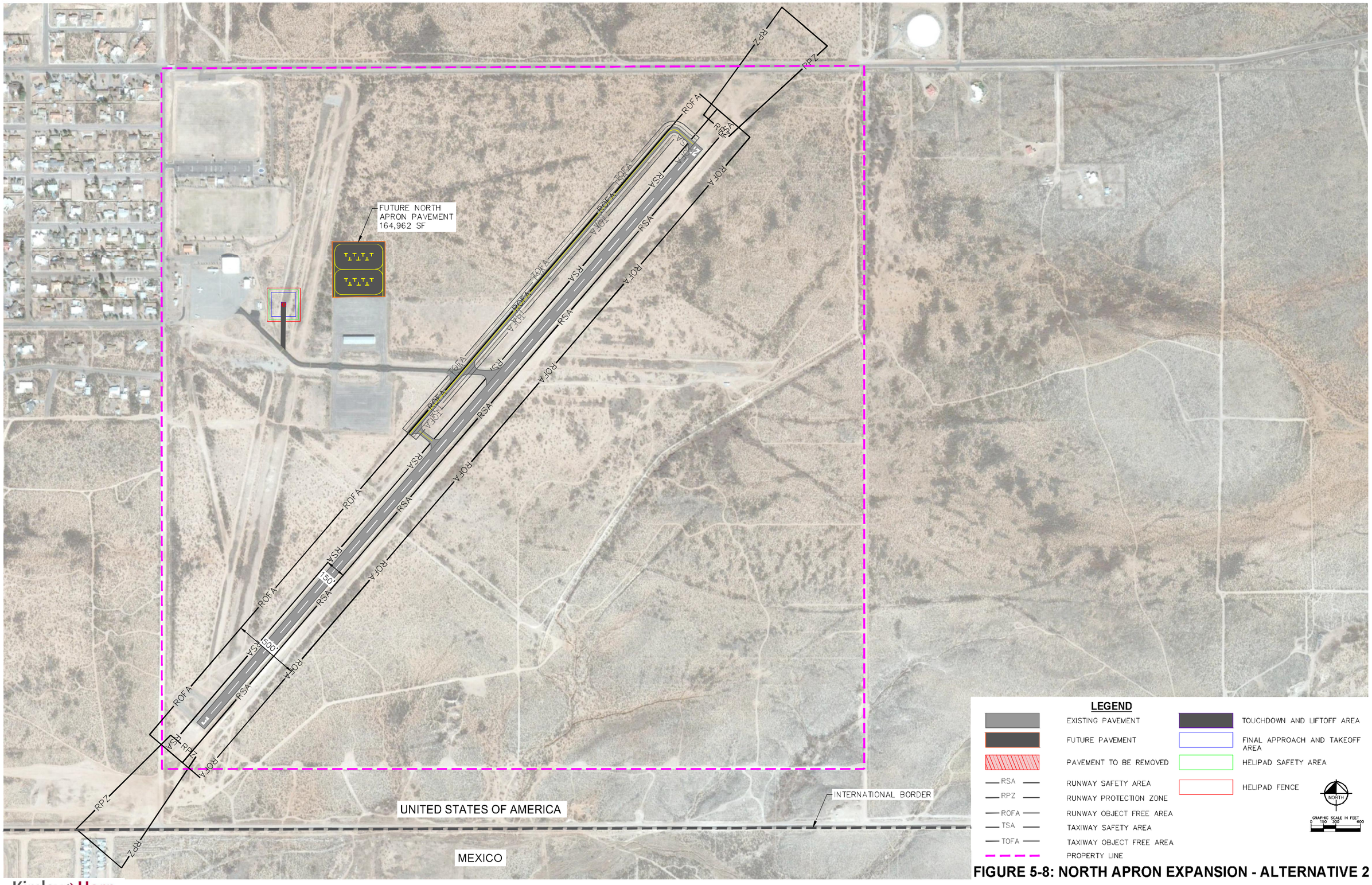


FIGURE 5-8: NORTH APRON EXPANSION - ALTERNATIVE 2

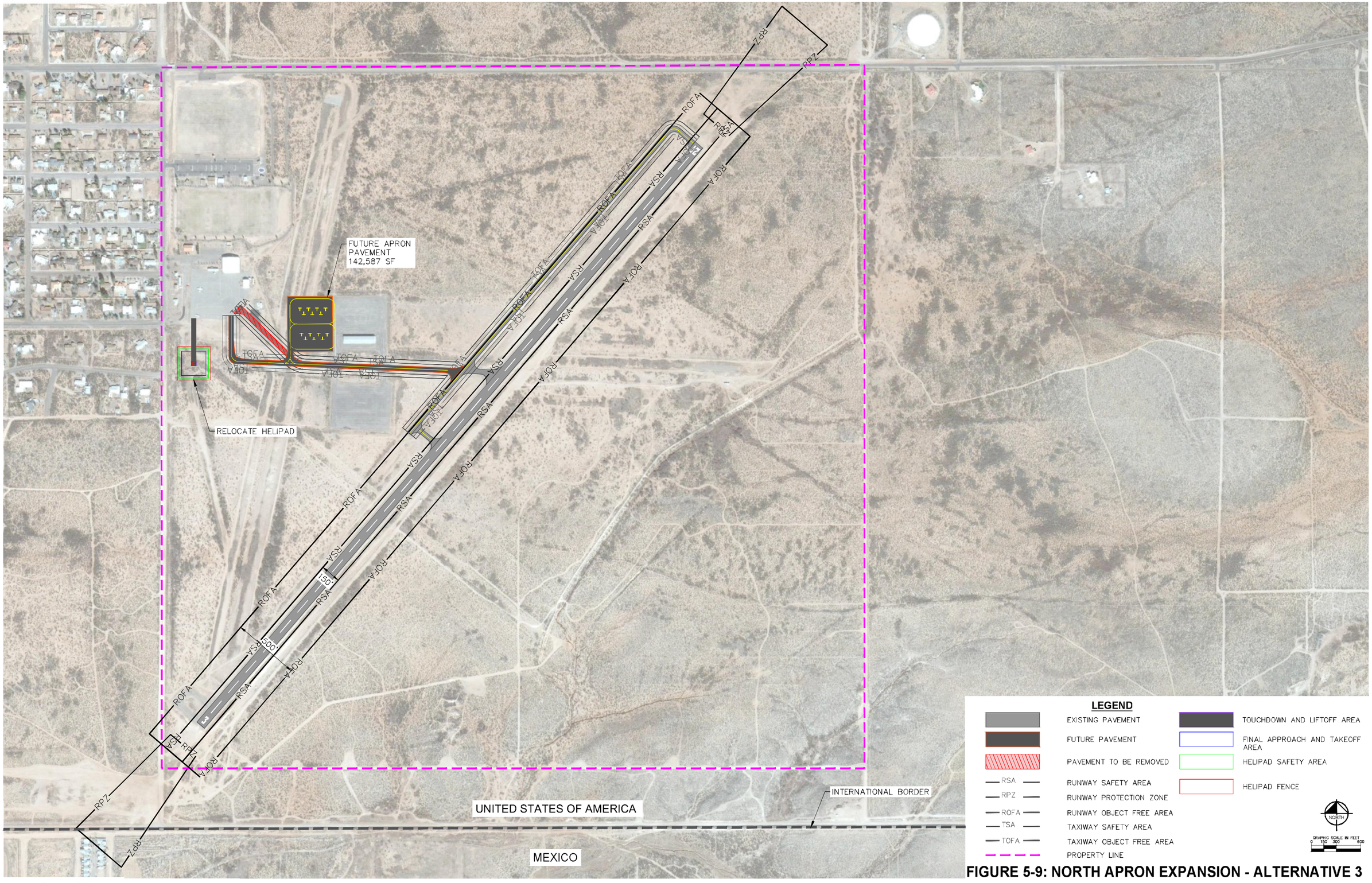


FIGURE 5-9: NORTH APRON EXPANSION - ALTERNATIVE 3

North Apron Expansion Alternatives Evaluation

Table 5-5 presents an evaluation of the various alternatives for the North Apron at DGL.

Table 5-5: Summary Evaluation Matrix of North Apron Expansion Alternatives

CATEGORY	SUBCATEGORY	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	NO-BUILD
Performance Requirements – Demand	Accommodates Forecasted Demand	+1	+1	+1	-1
	Capacity	+1	+1	+1	-1
Development Flexibility	Increases Development Potential	+1	-1	+1	0
	Supports Adaptable Facilities	+1	-1	+1	0
	Expansion Beyond Planning Period	0	+1	0	+1
Maximize Airfield Efficiency	Access and Circulation	0	0	0	0
	Maintains or Enhances Operational Efficiency	0	0	0	0
	Safety	0	0	0	0
Constructability	Impact to Airport Operations	0	0	-1	0
	Ease of Implementation/Phasing Complexity	-1	+1	-1	0
Financial Impact - Cost	Funding Potential	+1	+1	+1	0
	Development Cost	-1	-1	-1	0
	Maintenance / Operational Costs	-1	-1	-1	0
	Evaluation Total	+2	+1	+1	-1

Source: Kimley-Horn
Notes: Favorable: +1, Neutral: 0, Unfavorable: -1

North Apron Expansion Alternatives Evaluation Summary

The preferred alternative based on the evaluation scoring is **Alternative 1**. Individual evaluation categories were scored as follows:

- **Accommodates Forecasted Demand –** Alternative 1, Alternative 2, and Alternative 3 received favorable scores as the proposed apron expansion projects would increase the Airport's ability to support future demand of based aircraft.
  - The No-Build Alternative received an unfavorable score because it does not support development for future demand of the Airport.
- **Capacity –** Alternative 1, Alternative 2, and Alternative 3 received favorable scores because apron capacity would be increased substantially to support future need of aircraft tie-down spaces.
  - The No-Build Alternative received an unfavorable score since no increase in capacity would not support future airport development.
- **Increased Development –** Alternative 1 received a favorable score because the proposed apron development area would provide opportunity for expansion of the Airport Park facility. Alternative 3 received a favorable score because the proposed apron development area would support future demand and airfield development at the Airport. Alternative 2 an unfavorable score because the proposed apron development severely limits potential for future development of the apron or the Airport Park facility.
  - The No-Build Alternative received an unfavorable score because it does not support increased demand or aeronautical/non-aeronautical development at the Airport.
- **Supports Adaptable Facilities –** Alternative 1 and Alternative 3 received favorable scores because the proposed apron development would provide the Airport additional flexibility in meeting future market changes and facility demands. Alternative 2 received an unfavorable score because the proposed apron development area would limit the Airport's ability to change or adapt future facilities.
  - The No-Build Alternative received a neutral score as it does not support future demand or aeronautical/non-aeronautical development at the Airport.
- **Expansion Beyond Planning Period –** Alternative 1 and Alternative 3 received neutral scores because the proposed apron development would allow for expansion beyond the current planning period. Alternative 2 received a favorable score because the proposed apron development has substantial expansion capability beyond the current planning period.
  - The No-Build Alternative received a favorable score because of its potential to allow expansion beyond the current planning period.
- **Access and Circulation –** Alternative 1, Alternative 2, and Alternative 3 received neutral scores because the proposed apron development has no significant impact on access and circulation to the airfield system at the Airport.
  - The No-Build Alternative received a neutral score as not building the proposed alternatives has no impact on the access and circulation of the airfield.
- **Maintains or Enhances Operational Efficiency –** Alternative 1, Alternative 2, and Alternative 3 received neutral scores because the proposed apron development has no significant impact on the operational efficiency of the airfield system at the Airport.
  - The No-Build Alternative received a neutral score because not building the proposed alternatives has no impact on the operational efficiency of the airfield.
- **Safety –** Alternative 1, Alternative 2, and Alternative 3 received neutral scores because the proposed apron development would not have a significant impact on the overall safety of the airfield system at the Airport.

  - The No-Build Alternative received a neutral score because not building the proposed alternatives has no significant impact on the overall safety of the airfield.
- **Impact to Airport Operations –** Alternative 1 and Alternative 2 received neutral scores because construction of the proposed apron development would have minimal impact to normal airport operations. Alternative 3 received an unfavorable score because the proposed apron development would greatly impact normal operations/access for aircraft to and from the main apron area.
  - The No-Build Alternative received a neutral score due to the lack of construction and no associated construction impacts to tenants or facilities.
- **Ease of Implementation/Phasing Complexity –** Alternative 1 and Alternative 3 received unfavorable scores due to the difficulty associated with the location and implementation of construction for the apron areas and new connections into Taxiway A-4. Alternative 2 received a favorable score due to the way construction of the apron can be implemented with minimal complexity.
  - The No-Build Alternative received a neutral score because there is no development associated with the No-Build Alternative.
- **Funding Potential –** Alternative 1, Alternative 2, and Alternative 3 received favorable scores as projects related to the development of airport pavement systems are grant eligible.
  - The No-Build Alternative received a neutral score since there is no development associated with the No-Build Alternative.
- **Development Cost –** Alternative 1, Alternative 2, and Alternative 3 received unfavorable scores because the cost to expand the North Apron, extend and demolish portions of Taxiway A-4, and reconfigure the existing apron markings would be substantial.
  - The No-Build Alternative received a neutral score as there is no development cost associated with the No-Build Alternative.
- **Maintenance / Operational Costs –** Alternative 1, Alternative 2, and Alternative 3 received unfavorable scores because additional pavement management and pavement maintenance costs would be incurred.
  - The No-Build Alternative received a neutral score as there is no maintenance or operational costs associated with the No-Build Alternative.

Segmented Circle/Windsock Alternatives

A segmented circle and wind indicator (windsock) provides wind direction and traffic pattern information to pilots flying at DGL. Currently, only limited visual access to this important facility is available across the airfield. To address safety issues associated with the current location of the facility, the following proposed alternatives have been developed.

Segmented Circle/Windsock Alternative 1

Alternative 1 (**Figure 5-10**) involves relocating the existing segmented circle and lighted windsock north of Taxiway A-4 at the Taxiway A intersection. Pilots would have a clear view of the traffic pattern and wind direction indicators at the end of either taxiway for departure or while conducting a fly-by prior to landing.

Advantages of this alternative:

- The new location would allow for continued visibility of the segmented circle and lighted windsock by all arriving and departing traffic.

- The land that the segmented circle and lighted windsock currently sits on could be included in the sale and redeveloped for an apron expansion project.

Disadvantages of this alternative:

- The proposed location is on land planned to be sold to the private developer.
- The proposed location would require an easement or not be included in the land sale.
- Redevelopment of the existing segmented circle and windsock location does not have great expansion potential.

Segmented Circle/Windsock Alternative 2

Alternative 2 (**Figure 5-11**) involves relocating the existing segmented circle and lighted windsock approximately 2,300 feet north of Taxiway A-4, west of Taxiway A, and adjacent to the approach end of Runway 21. This location would provide departing and arriving aircraft a view of the traffic pattern and wind direction with the airfield's current configuration.

Advantages of this alternative:

- The land that the segmented circle and lighted windsock currently sits on could be included in the sale and redeveloped for an apron expansion project.

Disadvantages of this alternative:

- When Taxiway A is extended as a full-length parallel taxiway to Runway 3/21, the location will be difficult for pilots to see and obtain wind information.
- The proposed location is on land to be sold to the private developer.
- The proposed location would require an easement or not be included in the land sale.
- Redevelopment of the existing segmented circle and windsock location does not have great expansion potential.

No-Build Alternative

In addition to the preceding alternatives, a No-Build Alternative also exists where the City may choose to maintain the existing facilities without investing in DGL facility upgrades or expansion. The result of this alternative will be the inability of the Airport to accommodate demand beyond current facility capabilities.

FIGURE 5-10: SEGMENTED CIRCLE / WIND SOCK - ALTERNATIVE 1

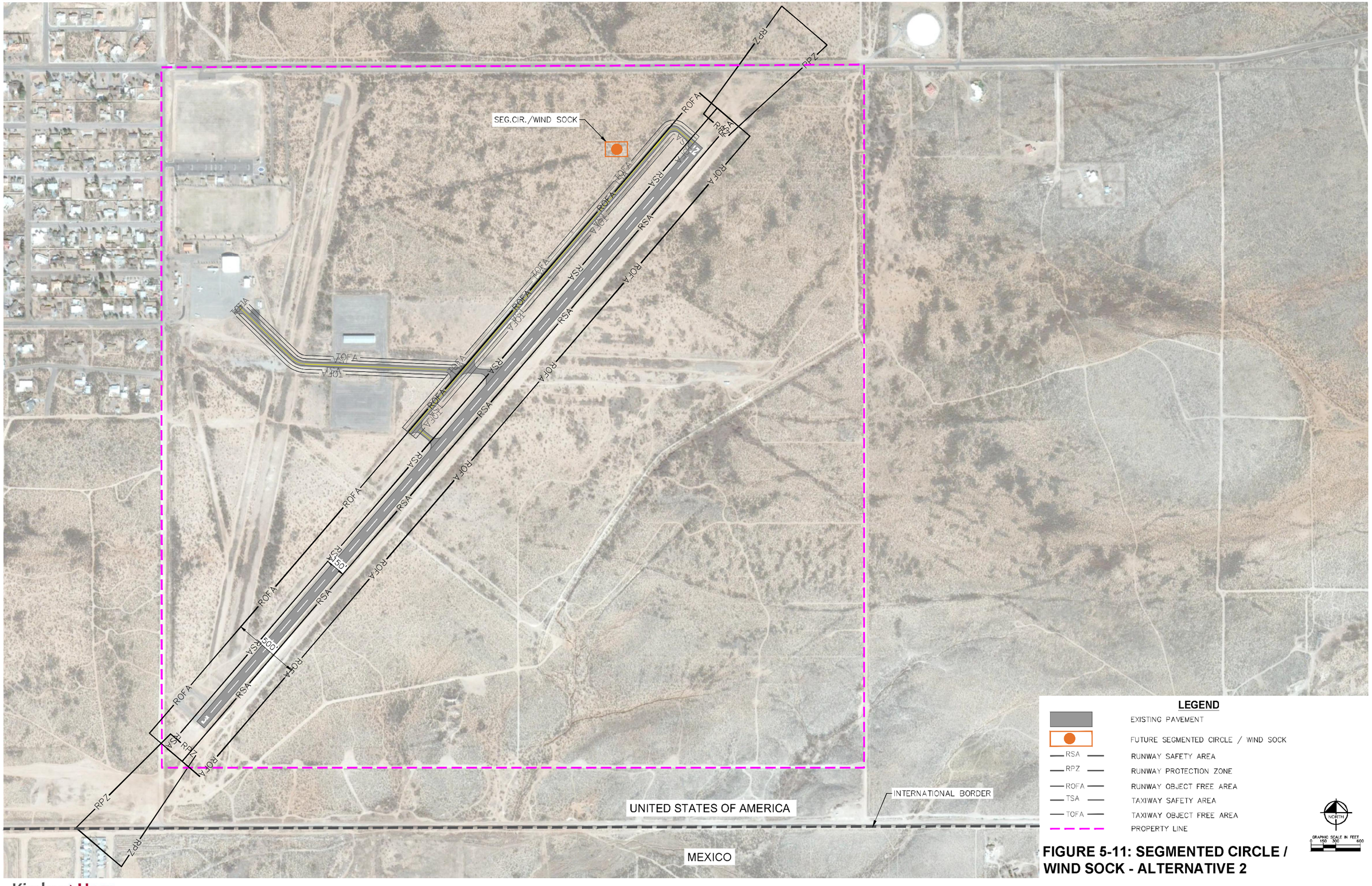


FIGURE 5-11: SEGMENTED CIRCLE / WIND SOCK - ALTERNATIVE 2

Segmented Circle/Windsock Alternatives Evaluation

Table 5-6 presents an evaluation of the various alternatives for the segmented circle/windsock at DGL.

Table 5-6: Summary Evaluation Matrix of Segmented Circle/Lighted Windsock Indicator Alternative

CATEGORY	SUBCATEGORY	ALTERNATIVE 1	ALTERNATIVE 2	NO-BUILD
Performance Requirements – Demand	Accommodates Forecasted Demand	0	0	0
	Capacity	-1	-1	-1
Development Flexibility	Increases Development Potential	-1	-1	-1
	Supports Adaptable Facilities	0	0	0
	Expansion Beyond Planning Period	0	0	0
Maximize Airfield Efficiency	Access and Circulation	0	-1	0
	Maintains or Enhances Operational Efficiency	+1	-1	+1
	Safety	+1	-1	+1
Constructability	Impact to Airport Operations	+1	-1	+1
	Ease of Implementation/Phasing Complexity	-1	-1	+1
Financial Impact - Cost	Funding Potential	-1	-1	0
	Development Cost	-1	-1	0
	Maintenance / Operational Costs	0	0	0
	Evaluation Total	-2	-9	+2

Source: Kimley-Horn
Notes: Favorable: +1, Neutral: 0, Unfavorable: -1

Segmented Circle/Windsock Alternatives Evaluation Summary

The preferred alternative based on the evaluation scoring is the **No-Build Alternative**. Individual evaluation categories were scored as follows:

- **Accommodates Forecasted Demand –** Alternative 1 and Alternative 2 received neutral scores as the proposed relocation sites present some facility constraints in meeting future demand.
  - The No-Build Alternative received a neutral score because it presents some constraints on future demand at the Airport.
- **Capacity –** Alternative 1 and Alternative 2 received unfavorable scores because the proposed relocation sites are on the land to be sold to the private developer and would not support capacity for other development alternatives.
  - The No-Build Alternative received an unfavorable score because the current location of the facility would impact capacity of other development alternatives.
- **Increased Development –** Alternative 1 and Alternative 2 received unfavorable scores because the proposed relocation sites offer extremely limited potential for increased development.
  - The No-Build Alternative received an unfavorable score because the current location of the facility does not support future development of the Airport.
- **Supports Adaptable Facilities –** Alternative 1 and Alternative 2 received a neutral score because the proposed relocation sites somewhat support options for facility modifications in the future.
  - The No-Build Alternative received a neutral score because it does not preclude facility modifications in the future.
- **Expansion Beyond Planning Period –** Alternative 1 and Alternative 2 received neutral scores as the proposed relocation sites offer moderate support for expansion beyond the current planning period.
  - The No-Build Alternative received a received a neutral score as it moderately supports expansion beyond the current planning period.
- **Access and Circulation –** Alternative 1 received a neutral score because the proposed location of the segmented circle/windsock would provide a similar level of access that currently exists at the Airport. Alternative 2 received an unfavorable score because the proposed location of the segmented circle/windsock would limit visual access for aircraft at the opposite end of Runway 3/21.
  - The No-Build Alternative received a neutral score as no change in location would have no change in access to the facility.
- **Maintains or Enhances Operational Efficiency –** Alternative 1 received a favorable score as the proposed location of the segmented circle/windsock could enhance operational efficiency of the airfield. Alternative 2 received an unfavorable score because the proposed location would result in a less efficient airfield.
  - The No-Build Alternative received a favorable score because the facility would maintain its current ability to reduce delays and inefficiencies by remaining in the same location.
- **Safety –** Alternative 1 received a favorable score because the proposed relocation site would increase safety and minimize risks for pilots obtaining weather information. Alternative 2 received an unfavorable score because the proposed relocation site could be more difficult to see from the Runway 3 end, giving pilots less information about prevailing wind conditions.
  - The No-Build Alternative received a favorable score because the facility would maintain its current ability to enhance safety by remaining in the same location.
- **Impact to Airport Operations –** Alternative 1 received a favorable score because relocating the segmented circle/windsock to the proposed site would have no impact to normal operations. Alternative 2 received an unfavorable score because relocating the segmented circle/windsock to the proposed site would impact pilots operating from Runway end 3.

  - The No-Build Alternative received a favorable score because there is no relocation associated with the No-Build option no impacts to normal operations would occur.
- **Ease of Implementation/Phasing Complexity –** Alternative 1 and Alternative 2 received unfavorable scores due to the nature of the facility, implementation could not be done incrementally.
  - The No-Build Alternative received a favorable score because the current location maintains current options for incremental expansion.
- **Funding Potential –** Alternative 1 and Alternative 2 received unfavorable scores because this type of project is not grant eligible.
  - The No-Build Alternative received a neutral score since there are no funding needs associated with the No-Build Alternative.
- **Development Cost –** Alternative 1 and Alternative 2 received unfavorable scores because of the costs associated with relocating existing infrastructure associated with the segmented circle and lighted windsock.
  - The No-Build Alternative received a neutral score since there is no new development associated with the No-Build Alternative, no development costs would be incurred.
- **Maintenance / Operational Costs –** Alternative 1 and Alternative 2 received neutral scores because no significant increase in maintenance or operational costs would be incurred because of these projects.
  - The No-Build Alternative received a neutral score because no significant increase in maintenance or operational costs would be incurred because of this project.

Automated Weather Observation System (AWOS) Alternatives

Alternatives for an Automated Weather Observation System (AWOS) were identified for the purpose of improving safety and efficiency at the Airport. An AWOS provides critical weather data such as surface conditions, temperature, and visibility to pilots at DGL. To provide accurate data, it is recommended that the AWOS system be located within 500 to 1,000 feet of the primary runway centerline and 1,000 to 3,000 feet of the runway threshold. The detailed siting criteria for this facility is explained in FAA Order 6560.20C: *Siting Criteria for Automated Weather Observing Systems*.[6] This section addressed the lack of an existing AWOS facility with the following alternatives.

AWOS Alternative 1

Alternative 1 (**Figure 5-12**) involves constructing a new AWOS approximately 500 feet southwest of the south apron area. This location falls within the recommended siting area for Runway 3, shown in the blue rectangle. The AWOS would be located in an area that is included in the land planned to be sold to the private developer.

Advantages of this alternative:

- The proposed location is compliant with current FAA siting criteria.
- ADOT state grant funds can be used to complete this project.

Disadvantages of this alternative:

- Impacts potential expansion and building height development for existing hangar apron and aircraft parking area to the northeast.

[6] Siting Criteria for Automated Weather Observing Systems (faa.gov)

- The proposed location is on land to be sold to the private developer.
- Siting requirements for the proposed facility intersect the Taxiway Safety Area (TSA) and Taxiway Object Free Area (TOFA) of a proposed taxiway alternative.

AWOS Alternative 2

Alternative 2 (**Figure 5-13)** involves constructing a new AWOS north of Taxiway A-4 adjacent to east side of the North Apron. This location falls within the recommended siting area for Runway 21, shown in the orange rectangle in Figure 5-13. The AWOS would be located outside of Taxiway A-4's safety and object-free areas. However, the proposed location is on land planned to be sold to the developer.

Advantages of this alternative:

- The proposed location is compliant with current FAA siting criteria.
- ADOT state grant funds can be used to complete this project.

Disadvantages of this alternative:

- Potential to impact the apron area to the south of the hangars.
- The proposed location is on land to be sold to the private developer.
- The location is not close to existing utilities.
- Siting requirements for the proposed facility intersect the TSA and TOFA of existing facilities.

AWOS Alternative 3

Alternative 3 (**Figure 5-14**) involves constructing a new AWOS on the east side of Runway 3/21. The location falls within the recommended siting area for the Runway 3 end, shown in the blue rectangle in Figure 5-14. The AWOS would be located outside of the safety and object-free areas of the proposed parallel taxiway stated in a previous alternative. However, the proposed location is on land to be sold to the private developer.

Advantages of this alternative:

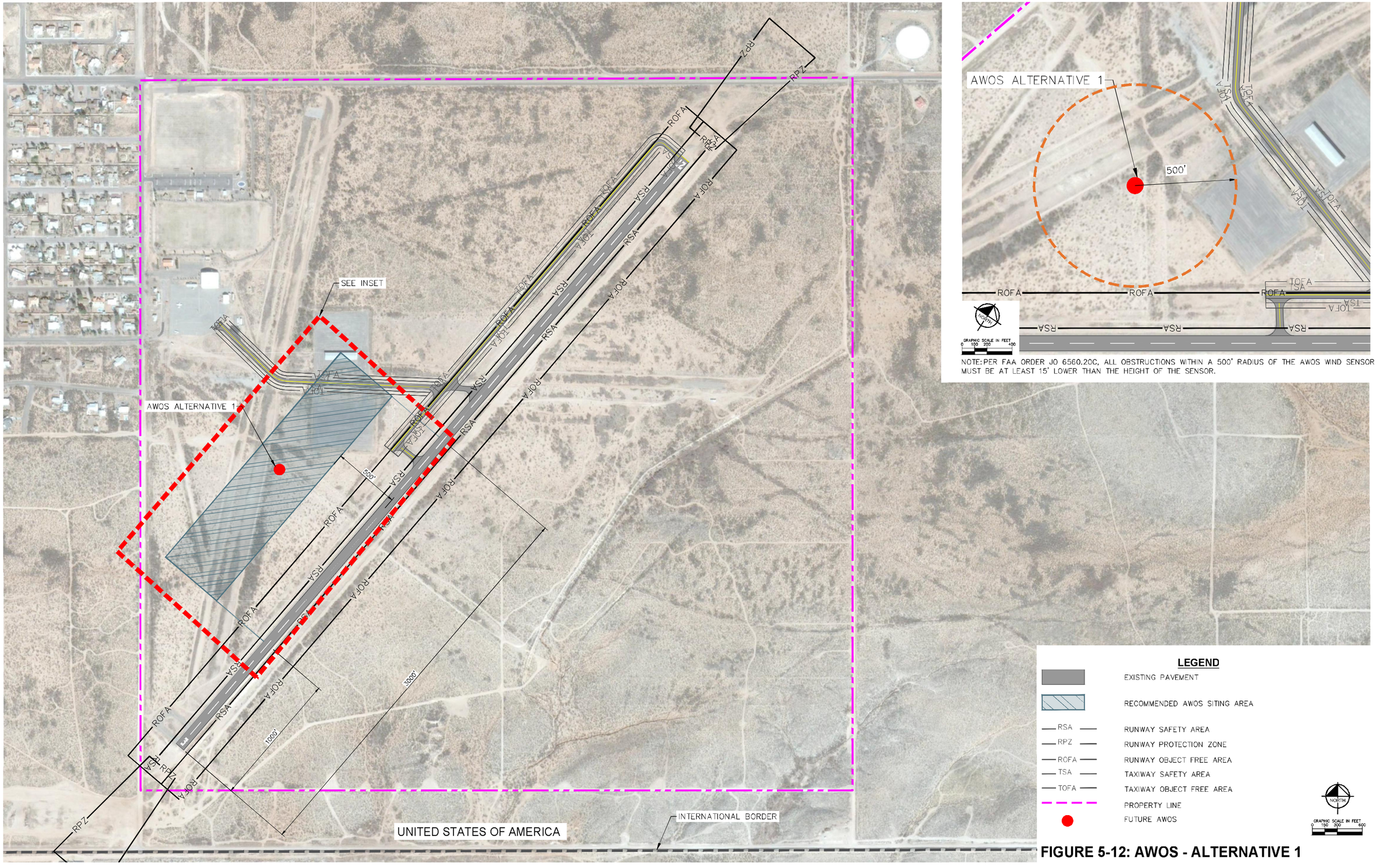
- The proposed location is compliant with FAA siting criteria.
- ADOT state grant funds can be used to complete this project.

Disadvantages of this alternative:

- The proposed location is on land to be sold to the private developer.
- The location is not close to existing utilities and would require utilities to be extended across or around the runways.
- The proposed location would require an easement for the facility.
- The facility would impact development potential for the surrounding area.

No-Build Alternative

In addition to the preceding alternatives, a no-build alternative also exists where the City may choose to maintain the existing facilities without investing in a new AWOS at DGL. The result of this alternative will be the inability of the Airport to accommodate demand beyond current facility capabilities.



NOTE: PER FAA ORDER JO 6560.20C, ALL OBSTRUCTIONS WITHIN A 500' RADIUS OF THE AWOS WIND SENSOR MUST BE AT LEAST 15' LOWER THAN THE HEIGHT OF THE SENSOR.

FIGURE 5-12: AWOS - ALTERNATIVE 1

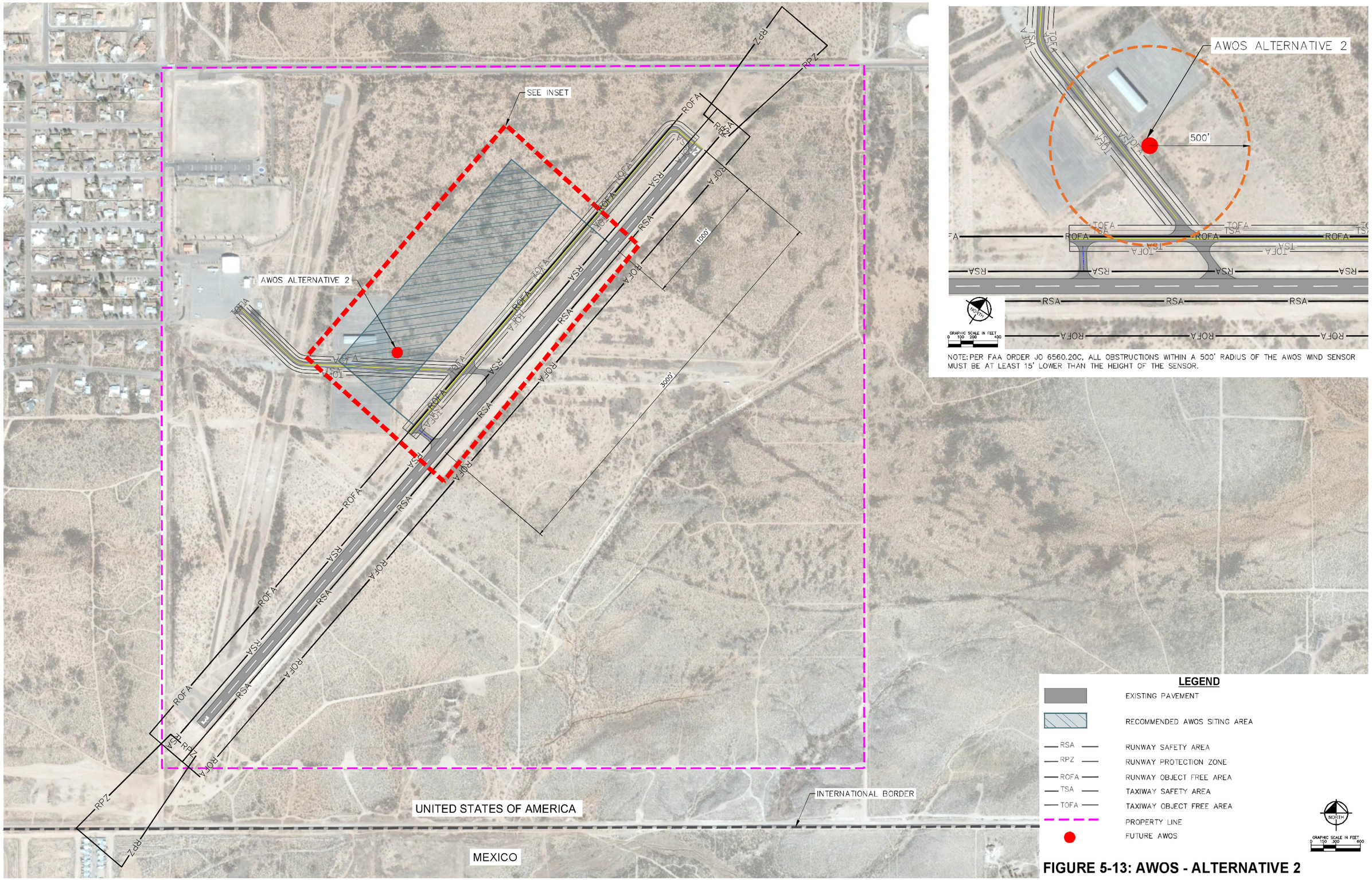
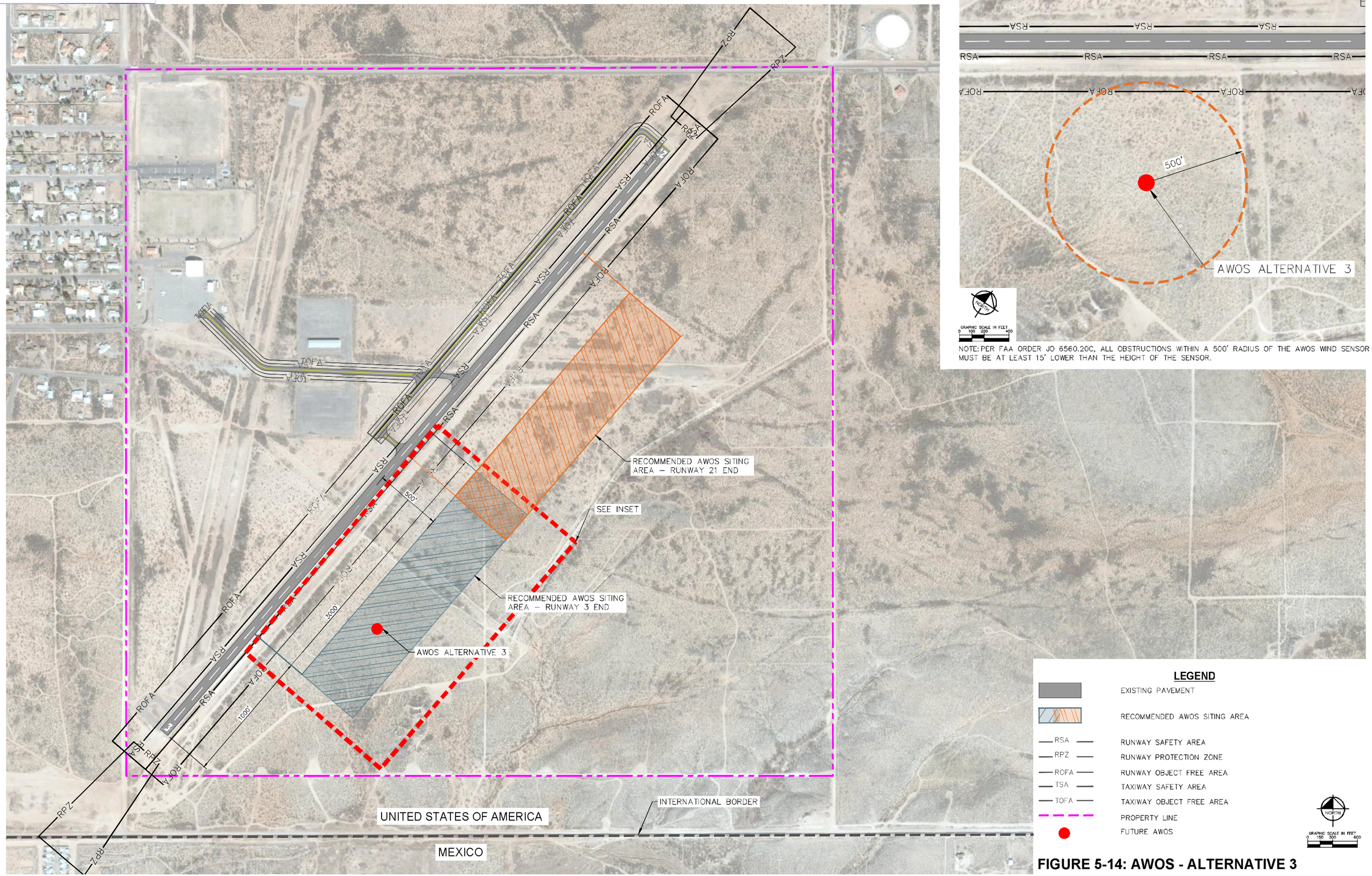


FIGURE 5-13: AWOS - ALTERNATIVE 2



NOTE: PER FAA ORDER JO 6560.20C, ALL OBSTRUCTIONS WITHIN A 500' RADIUS OF THE AWOS WIND SENSOR MUST BE AT LEAST 15' LOWER THAN THE HEIGHT OF THE SENSOR.

LEGEND

- EXISTING PAVEMENT
- RECOMMENDED AWOS SITING AREA
- RSA — RUNWAY SAFETY AREA
- RPZ — RUNWAY PROTECTION ZONE
- ROFA — RUNWAY OBJECT FREE AREA
- TSA — TAXIWAY SAFETY AREA
- TOFA — TAXIWAY OBJECT FREE AREA
- PROPERTY LINE
- FUTURE AWOS

NORTH
GRAPHIC SCALE IN FEET
0 150 300 600

FIGURE 5-14: AWOS - ALTERNATIVE 3

AWOS Alternatives Evaluation

Table 5-7 presents an evaluation of the various alternatives for the proposed AWOS at DGL.

Table 5-7: Summary Evaluation Matrix of AWOS Alternatives

CATEGORY	SUBCATEGORY	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	NO-BUILD
Performance Requirements – Demand	Accommodates Forecasted Demand	0	0	0	0
	Capacity	0	0	0	-1
Development Flexibility	Increases Development Potential	-1	-1	+1	-1
	Supports Adaptable Facilities	-1	-1	-1	0
	Expansion Beyond Planning Period	-1	-1	+1	0
Maximize Airfield Efficiency	Access and Circulation	0	0	0	0
	Maintains or Enhances Operational Efficiency	+1	+1	+1	-1
	Safety	+1	+1	+1	-1
Constructability	Impact to Airport Operations	0	0	0	+1
	Ease of Implementation/ Phasing Complexity	+1	-1	-1	+1
Financial Impact - Cost	Funding Potential	+1	+1	+1	0
	Development Cost	-1	-1	-1	+1
	Maintenance / Operational Costs	-1	-1	-1	+1
	Evaluation Total	-1	-3	+1	0

Source: Kimley-Horn
Notes: Favorable: +1, Neutral: 0, Unfavorable: -1

AWOS Alternatives Evaluation Summary

The preferred alternative based on the evaluation scoring is **Alternative 3**. Individual evaluation categories were scored as follows:

- **Accommodates Forecasted Demand –** Alternative 1, Alternative 2, and Alternative 3 received neutral scores as the proposed AWOS development presents some facility constraints in meeting future demand.
  - The No-Build Alternative received a neutral score because no development is associated with No-Build Alternative which presents some constraints on future demand.
- **Capacity –** Alternative 1, Alternative 2, and Alternative 3 received neutral scores because the proposed AWOS development would not enhance or reduce capacity at the Airport.
  - The No-Build Alternative received an unfavorable score because the absence of an AWOS at the airport limits the real-time weather data available to pilots, hindering operations during times of variable weather or visibility.
- **Increased Development –** Alternative 3 received favorable a score because the proposed AWOS development greatly supports future development at the Airport. Alternative 1 and Alternative 2 received unfavorable scores because the proposed AWOS development locations limit future development of airport hangars in the north and south apron areas due to the required obstacle height restriction within a 500-foot radius of the AWOS wind sensor.
  - The No-Build Alternative received a unfavorable score because the lack of onsite weather reporting may deter future developers from selecting the Airport to construct facilities.
- **Supports Adaptable Facilities –** Alternative 1, Alternative 2, and Alternative 3 received unfavorable scores because the proposed AWOS facility development does not support options for futures modifications.
  - The No-Build Alternative received a neutral score as it somewhat supports options for facility modifications in the future.
- **Expansion Beyond Planning Period –** Alternative 3 received a favorable score as the proposed AWOS location offers moderate ability for weather and NAVAID equipment to be expanded without impacting existing infrastructure. Alternative 1 and Alternative 2 received unfavorable scores because the proposed AWOS development greatly limits expansion in the north and south apron areas beyond the current planning period.
  - The No-Build Alternative received a neutral score as it does not impact the airport's ability to expand beyond the current planning period.
- **Access and Circulation –** Alternative 1, Alternative 2, and Alternative 3 received neutral scores because the proposed development would have minimal impact to the current level of access and circulation for the airfield.
  - The No-Build Alternative received a neutral score because it has minimal impact to access and circulation for the airfield.
- **Maintains or Enhances Operational Efficiency –** Alternative 1, Alternative 2, and Alternative 3 received favorable scores because the implementation of an AWOS would allow pilots to receive local real-time weather data, allowing them to make more informed go/no-go decisions to arrive or depart from DGL.
  - The No-Build Alternative received an unfavorable score as no AWOS development would create operational delays and inefficiency for the facility if pilots cannot get real-time weather data for the Airport.
- **Safety –** Alternative 1, Alternative 2, and Alternative 3 received favorable scores because the proposed AWOS development would greatly enhance safety for pilots operating at or near DGL.

  - The No-Build Alternative received an unfavorable score as not having an AWOS limits the amount of local weather information available for pilots attempting to arrive or depart from DGL.
- **Impact to Airport Operations –** Alternative 1, Alternative 2, and Alternative 3 received neutral scores as construction at the proposed development sites would have minimal impact to normal operations.
  - The No-Build Alternative received a favorable score as there is no construction associated with the No-Build, meaning no impact to tenants or facilities would occur.
- **Ease of Implementation/Phasing Complexity –** Alternative 1 received a favorable score because the location of the proposed AWOS development is the same location already identified on the previous ALP, and because the facility could tie into an existing electrical conduit with relative ease. Alternative 2 and Alternative 3 both received unfavorable scores because construction of the proposed AWOS development cannot be phased incrementally and would require utility extensions, greatly increasing the complexity of the project.
  - The No-Build Alternative received a favorable score because there no development associated with the No-Build Alternative.
- **Funding Potential –** Alternative 1, Alternative 2, and Alternative 3 received favorable scores because projects related to NAVAIDs are grant eligible.
  - The No-Build Alternative received a neutral score since there are no funding needs associated with the No-Build Alternative.
- **Development Cost –** Alternative 1, Alternative 2, and Alternative 3 received unfavorable scores because the costs associated with the proposed development sites and the AWOS would be substantial.
  - The No-Build Alternative received a favorable score because there are no associated development costs.
- **Maintenance / Operational Costs –** Alternative 1, Alternative 2, and Alternative 3 received unfavorable scores because additional maintenance and operational costs associated with the proposed development sites and the AWOS would be incurred.
  - The No-Build Alternative received a favorable score because no significant increase in maintenance or operational costs would be incurred.

Preferred Development Concept

The Airport's Preferred Development Concept (PDC), as shown in **Figure 5-15**, will successfully satisfy the Airport's needs through 2043. The PDC includes the preferred alternative selected from each set of proposed alternatives. A list of the selected alternatives is included below. It is important to note that the scoring of each alternative does not indicate it will be included in the PDC, rather it functions to facilitate a discussion about which alternative best meets the future needs of the Airport. In order to protect airfield safety areas a protective boundary line is shown in the figure immediately to the east of the proposed full-length parallel Taxiway B. Based upon the PDC, the ALP will be updated and submitted to ADOT for their ultimate approval.

- Taxiway System Alternative 2
- Main Apron Taxiway System Alternative 1
- Main Apron Expansion Alternative 2
- North Apron Expansion Alternative 1
- Segmented Circle/Wind Indicator No-Build Alternative

- AWOS Alternative 3

AIRPORT PROPERTY AREA

FUTURE AIRPORT-OWNED
PROPERTY: 206.9 ACRES
ACRES TO BE SOLD: 433.7 ACRES
EASEMENT ACRES: 12.9 ACRES

PROPOSED LAND TO BE SOLD: 67.1 ACRES

PROPOSED LAND TO BE SOLD: 53.9 ACRES

PROPOSED LAND TO BE SOLD: 312.7 ACRES

SEGMENTED CIRCLE / WIND SOCK

AWOS

PRIMARY EASEMENT FOR AWOS HEIGHT RESTRICTION

UNITED STATES OF AMERICA

MEXICO

INTERNATIONAL BORDER

RPZ

ROFA

TOFA

TOFAT

TSA

TOFAT

RSA

1000'

250'

500'

2,689'

5,758'

102'

LEGEND

- EXISTING PAVEMENT
- FUTURE PAVEMENT
- PAVEMENT TO BE REMOVED
- PROPOSED LAND TO BE SOLD
- RSA — RUNWAY SAFETY AREA
- RPZ — RUNWAY PROTECTION ZONE
- ROFA — RUNWAY OBJECT FREE AREA
- TSA — TAXIWAY SAFETY AREA
- TOFA — TAXIWAY OBJECT FREE AREA
- PROPERTY LINE
- TOUCHDOWN AND LIFTOFF AREA
- FINAL APPROACH AND TAKEOFF AREA
- HELIPAD SAFETY AREA
- HELIPAD FENCE
- WIND SOCK
- AWOS
- AWOS EASEMENT

NORTH

GRAPHIC SCALE IN FEET
0 150 300 600

FIGURE 5-15: PREFERRED DEVELOPMENT CONCEPT

6. CAPITAL DEVELOPMENT PROGRAM

Introduction

This chapter presents the Capital Improvement Program (CIP) for DGL based on the preferred development concept as presented in **Chapter 5 – Proposed Development Alternatives**. The CIP anticipates the use of both ADOT grants and local funds for project implementation. Rough order of magnitude (ROM) cost estimates for individual projects, based on current year project costs were prepared in 2023 dollars for the improvement projects identified as potentially being needed throughout the 20-year planning period. The ROM estimates are intended to be used for planning purposes only and should not be construed as construction cost estimates. Construction cost estimates can only be generated following the preparation of detailed engineering design documents.

Airport Capital Improvement Program

The potential capital improvements necessary to accommodate future needs at DGL were organized into three phases: Phase-I (0 to 5 years), Phase-II (6 to 10 years), and Phase-III (11 to 20 years). The proposed CIP for the Airport is provided in **Table 6-1**, **Table 6-2**, and **Table 6-3** and individual projects are depicted in **Figure 6-1**.

Table 6-1: Phase-I Near-Term Development (0 to 5 Years)

Project Number	Project Title	Total Project Cost	State Grant	Local Match
1	Design/Construct – New perimeter security fence along updated airport property boundary for a total of up to 25,015 LF.	$562,135	$505,922	$56,214
2	Design/Construct - Pavement maintenance for main apron A01DM-10 [(PCI 19) (135,000 SF)], north apron A02DM [(PCI 43) (139,500 SF)], and south apron A02DM [(PCI 43) (153,000 SF)] for a total of 427,500 SF.	$275,000	$247,500	$27,500
3	Design/Construct - Pavement maintenance for Taxiway ADM-10 (PCI of 57).	$120,000	$108,000	$12,500
4	Complete environmental documentation for new helipad, taxilane and fence construction.	$35,000	$31,500	$3,500
5	Design/Construct - New helipad located between existing Jet A fuel station and north t-hangar apron. TD and LO area 35' x 35' final approach and takeoff are 182.5' x 182.5'. Min separation 17.5' safety area width 20'.	$325,000	$292,500	$32,500
6	Equipment Purchase - Install new MIRL/HIRL Runway 3/21 edge lights to replace lights that are out of service to maintain a safe approach and landings to Runway 3/21. Project includes new electrical.	$300,000	$270,000	$30,000
7	Equipment Purchase - Install/replace PAPI lighting for Runway 3/21 that are out of service on both ends of the runway to maintain safe approaches and landings.	$100,000	$90,000	$10,000
8	Equipment Purchase - Install new (green-white) airport rotating beacon as the existing beacon is old and outdated. Not able to find replacement parts for the unto and the climbing ladder is unsafe; not meeting regular safety standards.	$350,000	$315,000	$35,000
9	Complete environmental documentation for Runway 3/21 RPZ land acquisition. Total land to be acquired is an estimated 8.96 acres.	$55,000	$49,500	$5,500
10	Land Acquisition - Acquire land for compliant Runway Protection Zones (RPZs) at the approach end of Runway 3 (5.27 acres) and Runway 21 (3.69 acres). Total land to be acquired is an estimated 8.96 acres.	$275,000	$247,500	$27,500

Project Number	Project Title	Total Project Cost	State Grant	Local Match
11	Design/Construct - New security fencing along helipad located between existing Jet A fuel station and north t-hangar apron. Safety area is 222.5' x 222.5' for a total of 890 LF.	$40,000	$36,000	$4,000
12	Complete environmental documentation for constructing Taxiway A and supporting connectors.	$55,000	$49,500	$5,500
13	Design/Construct - Extend existing Taxiway A (2,689' x 35') to a full-length parallel taxiway including the construction of A1, A2, A5, A6, and relocating A4 connectors. Project includes all necessary grading, drainage, utilities, lighting, markings, and signage.	$3,800,000	$3,420,000	$380,000
14	Design/Construct – New asphalt bi-directional access road (20’ wide x 980’ long) from Airport Road to the new hangar home complex and include an access-controlled entry/exit gate with fence. Project includes all necessary utilities, drainage, grading, low mast lighting, striping, and signage.	$1,320,000	$1,188,000	$132,000
	Total Phase-I Development Program Costs	**$7,612,135**	**$6,850,922**	**$761,214**

Source: Kimley-Horn

Table 6-2: Phase-II Mid-Term Development (6 to 10 Years)

Project Number	Project Title	Total Project Cost	State Grant	Local Match
15	Equipment purchase - Install Airport Weather Observation System (AWOS).	$250,000	$225,000	$25,000
16	Complete environmental documentation for hangar apron expansion.	$55,000	$49,500	$5,500
17	Design/Construct - Expand the existing north apron (A02DM) by 143,654 SF including a new taxilane connector in asphalt. Project includes all necessary grading, drainage, utilities, lighting, markings, and signage.	$3,200,000	$2,880,000	$320,000
18	Conduct Airport Master Plan Update, including AGIS.	$500,000	$450,000	$50,000
19	Conduct instrument approach study.	$450,000	$405,000	$45,000
20	Design/Construct - New terminal building (60' x 25'). Project includes all necessary grading, drainage, utilities, and supportive vehicle parking.	$700,000	$630,000	$70,000
	Total Phase-II Development Program Costs	**$5,155,000**	**$4,639,500**	**$515,500**

Source: Kimley-Horn

Table 6-3: Phase III Long-Term Development (11 to 20 Years)

Project Number	Project Title	Total Project Cost	State Grant	Local Match
21	Design/Construct - Conduct t-hangar apron pavement maintenance.	$350,000	$315,000	$35,000
22	Complete environmental documentation for Taxiway D construction.	$55,000	$49,500	$5,500
23	Design/Construct - New Taxiway D (2,271' x 35') including two new taxilane connectors in asphalt. Project includes all necessary grading, drainage, utilities, lighting, markings, and signage.	$2,300,000	$2,070,000	$230,000
24	Complete environmental documentation for main apron A01DM-10 expansion.	$55,000	$49,500	$5,500
25	Design/Construct - Expand the main apron A01DM-10 by 124,852 SF in asphalt. Project includes all necessary grading, drainage, utilities, lighting, markings, and signage.	$3,300,000	$2,970,000	$330,000
26	Design/Construct - New electrical vault for eastside taxiway improvements.	$300,000	$270,000	$30,000
27	Complete environmental documentation for new Taxiway B and connectors.	$55,000	$49,500	$5,500
28	Design/Construct - New full-length Taxiway B (5,758' x 35'), including the B1, B2, B3, B4, B5 and B6 connectors in asphalt. Project includes all necessary grading, drainage, utilities, lighting, markings, and signage.	$6,100,000	$5,490,000	$610,000
29	Design/Construct - Relocate E. Geronimo Trail Rd. out of inner portion of Runway 21 Runway Protection Zone.	$1,200,000	$1,080,000	$120,000
	Total Phase-III Development Program Costs	**$13,715,000**	**$12,343,500**	**$1,371,500**

SEGMENTED CIRCLE / WIND SOCK
AWOS
500'
PRIMARY EASEMENT FOR AWOS HEIGHT RESTRICTION
UNITED STATES OF AMERICA
MEXICO
INTERNATIONAL BORDER
5,758'
2,689'
150'
102'
100'

LEGEND

- 1 — PHASE I – (0 – 5 YEARS)
- 14 — PHASE II – (6 – 10 YEARS)
- 20 — PHASE III – (11 – 20 YEARS)
- EXISTING PAVEMENT
- FUTURE PAVEMENT
- PAVEMENT TO BE REMOVED
- RSA — RUNWAY SAFETY AREA
- RPZ — RUNWAY PROTECTION ZONE
- ROFA — RUNWAY OBJECT FREE AREA
- TSA — TAXIWAY SAFETY AREA
- TOFA — TAXIWAY OBJECT FREE AREA
- PROPERTY LINE
- TOUCHDOWN AND LIFTOFF AREA
- FINAL APPROACH AND TAKEOFF AREA
- HELIPAD SAFETY AREA
- HELIPAD FENCE
- WIND SOCK
- AWOS
- AWOS EASEMENT

NORTH
GRAPHIC SCALE IN FEET
0 150 300 600

FIGURE 6-1: PHASED DEVELOPMENT PLAN

APPENDIX A – AIRPORT LAYOUT PLAN

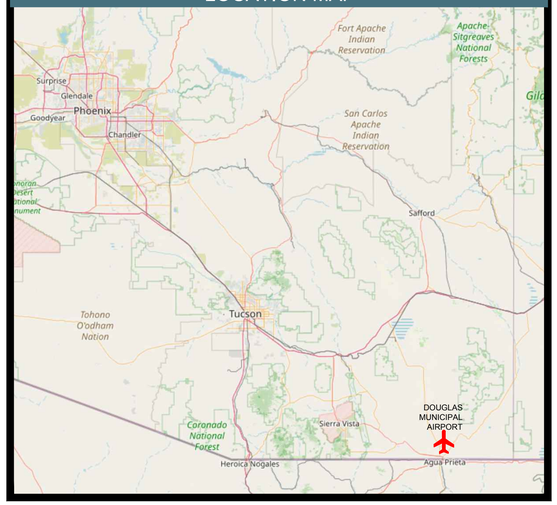
DOUGLAS MUNICIPAL AIRPORT

AIRPORT LAYOUT PLAN
CITY OF DOUGLAS
DOUGLAS, ARIZONA

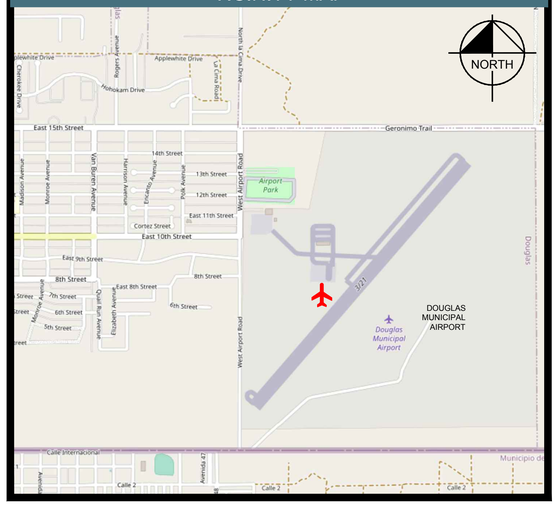
APRIL 2024

ARIZONA STATE MAP

LOCATION MAP



VICINITY MAP



ARIZONA DEPARTMENT OF TRANSPORTATION APPROVAL

APPROVED BY: DATE:

Matthew Munden
Aeronautics Group Manager
State Airport Engineer

CITY OF DOUGLAS APPROVAL

SUBMITTAL BY: DATE:

Ana Urguijo
City Manager

SHEET INDEX

	REVISIONS	BY	APPROVED	DATE
1.0	ALP UPDATE	ACI	–	10/01/94
2.0	CROSSWIND RUNWAY	ACI	–	10/01/99
3.0	REVALIDATION	ACI	MO	04/25/03
4.0	AIRPORT MASTER PLAN	KH	LP	12/12/17
5.0	ALP UPDATE / NARRATIVE REPORT	KH	AU	04/01/24

CITY OF DOUGLAS
425 E. 10TH ST, DOUGLAS, AZ, 85607

Kimley»Horn
1001 W. Southern Avenue Suite 131
Mesa, AZ 85210
www.kimley-horn.com

AIRPORT LAYOUT PLAN
INDEX SHEET

SHEET 1 OF 9 SHEETS

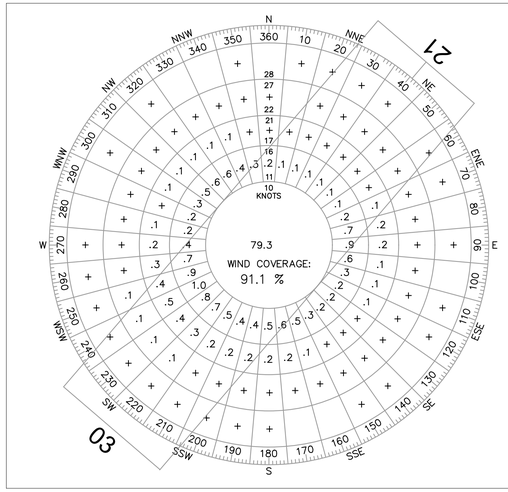
RUNWAY DATA			
ITEM		RUNWAY 03-21	
		EXISTING	FUTURE
APPROACH REFERENCE CODE		B/II (S)/VIS	
DESIGN AIRCRAFT	CRITICAL AIRCRAFT	BEECHCRAFT SUPER KING AIR 200	
	APPROACH SPEED (KNOTS	103	
	WINGSPAN	54'6"	
	MAX. CERTIFIED TAKEOFF	12,500	
APPROACH MINIMUMS		VISUAL	SAME
APPROACH TYPE		VISUAL	SAME
FAR PART 77 APPROACH SLOPE		20:1	SAME
RUNWAY PROTECTION ZONES (RPZ)	LENGTH	1,000'	SAME
	INNER WIDTH	250'	SAME
	OUTER WIDTH	450'	SAME
RUNWAY LENGTH		5,760'	SAME
RUNWAY WIDTH		75'	SAME
RUNWAY PAVEMENT		ASPHALT	SAME
PAVEMENT STRENGTH		12,500' lbs. SINGLE WHEEL GEAR (Est.)	SAME
RUNWAY LIGHTING		MIRL	SAME
APPROACH LIGHTING		REIL	SAME
RUNWAY MARKINGS		BASIC	SAME
% EFFECTIVE GRADIENT		0.6%	SAME
VISUAL APPROACH AIDS		PAPI	SAME
NAVIGATIONAL AIDS		WIND SOCK, SEGMENTED CIRLCE, ROTATING BEACON	AWOS, WIND SOCK, SEGEMENTED CIRCLE, ROTATING BEACON
RUNWAY SAFETY AREA (RSA)	LENGTH BEYOND RUNWAY	300'	SAME
	WIDTH	150'	SAME
RUNWAY OBJECT FREE AREA (ROFA)	LENGTH BEYOND RUNWAY	300'	SAME
	WIDTH	500'	SAME
RUNWAY OBJECT FREE ZONE (ROFZ)	LENGTH BEYOND RUNWAY	200'	SAME
	WIDTH	250'	SAME

AIRPORT DATA			
ITEM		EXISTING	FUTURE
AIRPORT IDENTIFIER		DGL	SAME
AIRPORT REFERENCE CODE		B-II (SMALL)	SAME
MEAN MAX. TEMP - HOTTEST MONTH (JUNE)		97°	
AIRPORT ELEVATION (NAVD 88) (MSL)		4,175.6'	SAME
AIRPORT & TERMINAL NAVAIDS		WINDSOCK, SEGMENTED CIRCLE, ROTATING BEACON, REILs, PAPIs	AWOS, WIND SOCK, SEGMENTED CIRCLE, ROTATING BEACH, REILs, PAPIs
AIRPORT REFERENCE POINT (ARP) COORDINATE (NAD 83)	LATITUDE	31° 20' 31.6802"	SAME
	LONGITUDE	109° 30' 16.4385"	SAME
MAGNECTIC VARIATION		09° 16' 48" E changing by 0.09° W per year	
NPIAS ROLE		NONE	SAME

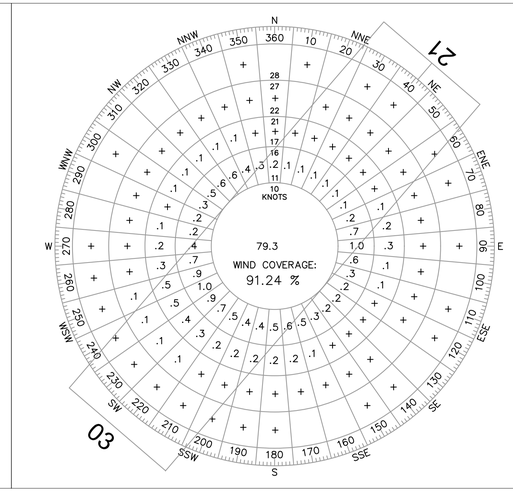
RUNWAY END COORDINATES AND ELEVATIONS				
RUNWAY		LATITUDE	LONGITUDE	ELEVATION (MSL)
RWY 3	EXISTING AND FUTURE	31° 20' 10.1778"	109° 30' 38.2201"	4,140.9'
RWY 21	EXISTING AND FUTURE	31° 20' 53.1815"	109° 29' 54.6541"	4,175.6'

TAXIWAY DATA																					
TAXIWAY	TYPE		ADG		TDG		WIDTH		SHOULDER		TSA		TOFA		TESM		TAXIWAY LIGHTING		TAXIWAY CL TO FIXED OR MOVEABLE OBJECT	
	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE	EXISTING	FUTURE
TWY A	Partial Parallel	Parallel	II	SAME	2A	SAME	35'	SAME	15'	SAME	79'	SAME	124'	SAME	7.5'	SAME	None	SAME	62'	SAME
TWY A1	Turnaround	Turnaround	II	SAME	2A	SAME	35'	SAME	15'	SAME	79'	SAME	124'	SAME	7.5'	SAME	None	SAME	62'	SAME
TWY A2	Turnaround	Turnaround	II	SAME	2A	SAME	35'	SAME	15'	SAME	79'	SAME	124'	SAME	7.5'	SAME	None	SAME	62'	SAME
TWY A3	Connector	Connector	II	SAME	2A	SAME	35'	SAME	15'	SAME	79'	SAME	124'	SAME	7.5'	SAME	None	SAME	62'	SAME
TWY A4	Connector	Connector	II	SAME	2A	SAME	35'	SAME	15'	SAME	79'	SAME	124'	SAME	7.5'	SAME	None	SAME	62'	SAME
TWY A5	Connector	Turnaround	II	SAME	2A	SAME	35'	SAME	15'	SAME	79'	SAME	124'	SAME	7.5'	SAME	None	SAME	62'	SAME
TWY A6	N/A	Turnaround	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY B	N/A	Parallel	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY B1	N/A	Turnaround	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY B2	N/A	Turnaround	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY B3	N/A	Connector	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY B4	N/A	Connector	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY B5	N/A	Turnaround	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY B6	N/A	Turnaround	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY C	N/A	Connector	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'
TWY D	N/A	Connector	N/A	II	N/A	2A	N/A	35'	N/A	15'	N/A	79'	N/A	124'	N/A	7.5'	None	SAME	N/A	62'

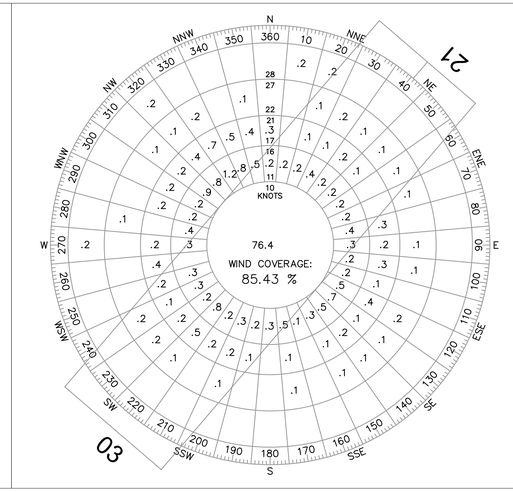
ALL-WEATHER WIND ROSE, 10.5 KNOTS



VFR WIND ROSE, 10.5 KNOTS



IFR WIND ROSE, 10.5 KNOTS



CROSSWIND COVERAGE TABLE						
	ALL WEATHER		VFR WIND COVERAGE		IFR WIND COVERAGE	
	10.5 KNOTS	13 KNOTS	10.5 KNOTS	13 KNOTS	10.5 KNOTS	13 KNOTS
EXISTING RUNWAY 03-21	91.1%	95.3%	91.2%	95.4%	85.4%	90.1%

WIND DATA SOURCE: DUG (STATION #722720) YEARS 2014-2023 FAA ADIP WEBSITE
HTTPS://ADIP.FAA.GOC/AGIS/WINDROSE, ACCESSED FEBRUARY 2024

ALP NOTES
A.) ALP prepared using design criteria from FAA Advisory Circular 150/5300-13B, *Airport Design* , and FAA Part 77 of the Federal Aviation Regulations (FAR), *Safe, Efficient Use, and Preservation of the Navigable Airspace* .
B.) All coordinates NAD 83 and all elevations NAVD 88; AGIS survey June 2016.
C.) Magnetic Declination source: National Oceanic and Atmospheric Administration, April 2017.
D.) Property calculations based on February 2024 property boundary survey.
E.) Service level sources: FAA National Plan of Integrated Airport Systems (NPIAS), 2023-2027 Report, and Arizona Department of Transportation (ADOT), State Aviation Systems Plan Update, Chapter Five: Airport Classification Analysis, updated October 2018.
F.) Temperature data source: National Oceanic and Atmospheric Administration, National Centers for Environmental Information November 2017

	REVISIONS	BY	APPROVED	DATE
1.0	ALP UPDATE	ACI	–	10/01/94
2.0	CROSSWIND RUNWAY	ACI	–	10/01/99
3.0	REVALIDATION	ACI	MO	04/25/03
4.0	AIRPORT MASTER PLAN	KH	LP	12/12/17
5.0	ALP UPDATE / NARRATIVE REPORT	KH	AU	04/01/24

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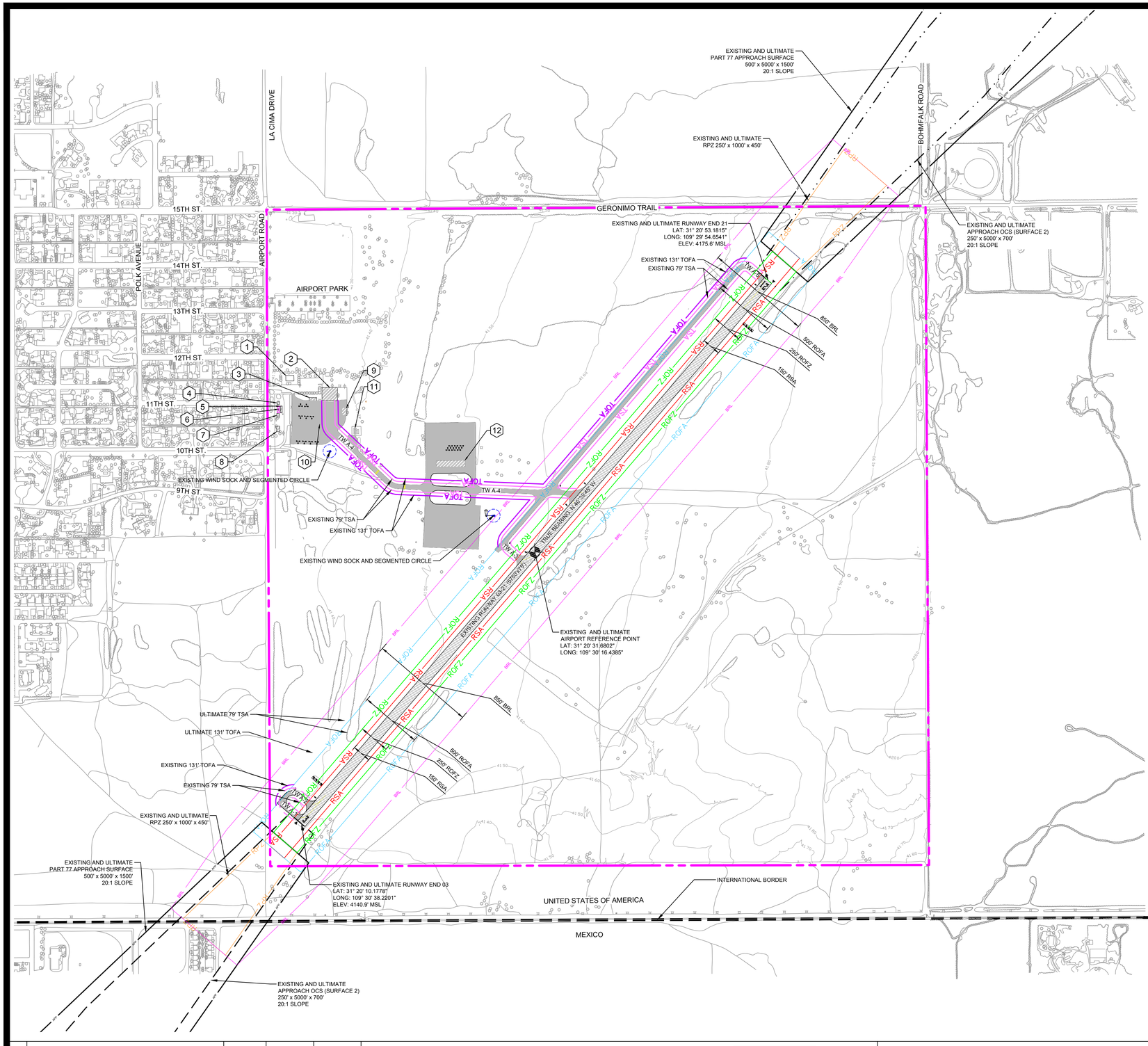
AIRPORT LAYOUT PLAN

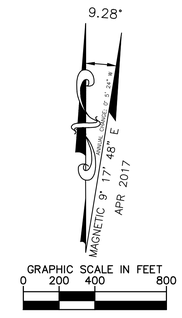
DATA SHEET

SHEET 2 OF 9 SHEETS



EXISTING BUILDINGS/FACILITIES INDEX TABLE			
NO.	DESCRIPTION	NO.	DESCRIPTION
1	BORDER AIR MUSEUM	7	OFFICES
2	HANGAR	8	OFFICES
3	OFFICES	9	HANGAR
4	OFFICES	10	FUEL FACILITY
5	OFFICES	11	FUEL FACILITY
6	ROTATING BEACON	12	HANGAR

LEGEND	
Description	Existing
Airport Property Line	
Runway Object Free Area (ROFA)	ROFA
Runway Object Free Zone (ROFZ)	ROFZ
Runway Safety Area (RSA)	RSA
25' Building Restriction Line (BRL)	BRL
Runway Protection Zone (RPZ)	RPZ
Part 77 Approach Surface	APP
Approach Surface (OCS)	
Taxiway Safety Area (TSA)	TSA
Taxiway Object Free Area (TOFA)	TOFA
Final Approach and Takeoff Area	N/A
Elevation	4190
Runway Pavements	
Airfield Pavements	
Buildings	
Segmented Circle	
Rotating Beacon	
Aircraft Tie-Downs	
Airport Reference Point	
PAPI	
REIL	
Fence	
Unpaved Path or Trail	
Lightpole	
Utility Pole	
Tree	
Brushline	



GRAPHIC SCALE IN FEET
0 200 400 800

MAGNETIC DECLINATION SOURCE:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), APRIL 2017

	REVISIONS	BY	APPROVED	DATE
1.0	ALP UPDATE	ACI	–	10/01/94
2.0	CROSSWIND RUNWAY	ACI	–	10/01/99
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5.0	ALP UPDATE / NARRATIVE REPORT	KH	AU	04/01/24

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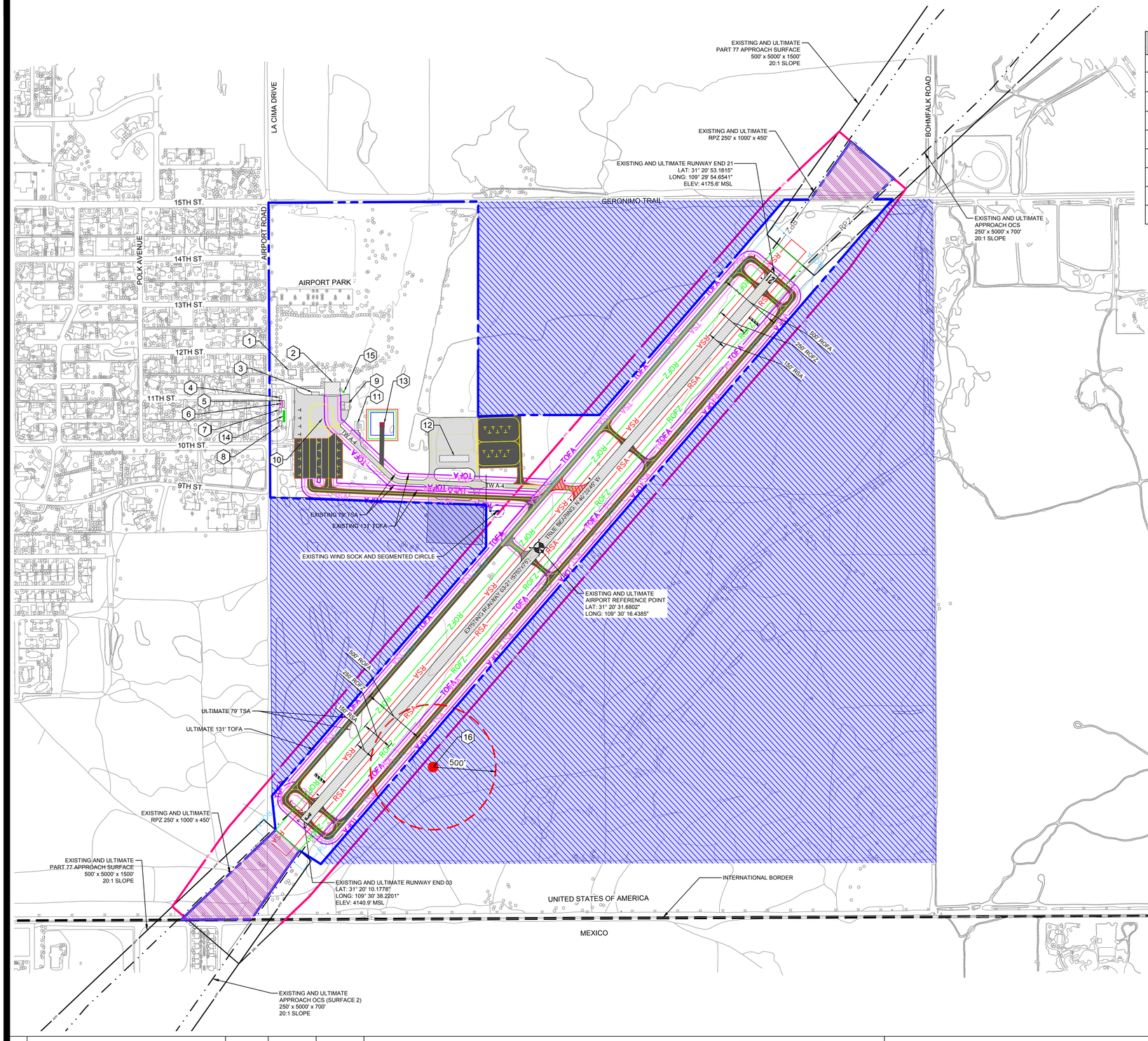
AIRPORT LAYOUT PLAN

AIRPORT LAYOUT PLAN - EXISTING

SHEET 3 OF 9 SHEETS



BUILDINGS/FACILITIES INDEX TABLE

NO.	DESCRIPTION	NO.	DESCRIPTION
1	BORDER AIR MUSEUM	9	HANGAR
2	HANGAR	10	FUEL FACILITY
3	OFFICES	11	FUEL FACILITY
4	OFFICES	12	HANGAR
5	OFFICES	13	HELIPAD (F)
6	ROTATING BEACON	14	TERMINAL (F)
7	OFFICES	15	ELECTRICAL VAULT (F)
8	OFFICES	16	AWOS (F)

LEGEND

Description	Existing	Future
Airport Property Line		
Runway Object Free Area (ROFA)	ROFA	ROFA
Runway Object Free Zone (ROFZ)	ROFZ	ROFZ
Runway Safety Area (RSA)	RSA	RSA
25' Building Restriction Line (BRL)	BRL	BRL
Runway Protection Zone (RPZ)	RPZ	RPZ
Runway Visibility Zone (RVZ)	N/A	RVZ
Part 77 Approach Surface	APP	APP
Approach Surface (OCS)		
Taxiway Safety Area (TSA)	TSA	TSA
Taxiway Object Free Area (TOFA)	TOFA	TOFA
Elevation	41 90	
Runway Pavements		
Airfield Pavements		
Buildings		
Segmented Circle		
Rotating Beacon		
Aircraft Tie-Downs		
Airport Reference Point		N/A
PAPI		
REIL		
Unpaved Path or Trail		N/A
Lightpole		N/A
Utility Pole		N/A
Tree		N/A
Brushline		N/A
Airport Property to be Sold		N/A
AWOS / AWOS Clear Area		
Demolition		
Airport Property to be Acquired	N/A	
Electrical Vault	N/A	
Touchdown and Liftoff Area	N/A	
Final Approach and Takeoff Area	N/A	
Helipad Safety Area	N/A	
Helipad Fence	N/A	

GRAPHIC SCALE IN FEET
0 200 400 800

MAGNETIC DECLINATION SOURCE:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), APRIL 2017

	REVISIONS	BY	APPROVED	DATE
1.0	ALP UPDATE	ACI	–	10/01/94
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AIRPORT LAYOUT PLAN

AIRPORT LAYOUT PLAN - FUTURE

SHEET 4 OF 9 SHEETS

BUILDINGS/FACILITIES INDEX TABLE

NO.	DESCRIPTION	NO.	DESCRIPTION
1	BORDER AIR MUSEUM	9	HANGAR
2	HANGAR	10	FUEL FACILITY
3	OFFICES	11	FUEL FACILITY
4	OFFICES	12	HANGAR
5	OFFICES	13	HELIPAD (F)
6	ROTATING BEACON	14	TERMINAL (F)
7	OFFICES	15	ELECTRICAL VAULT (F)
8	OFFICES		

LEGEND		
Description	Existing	Future
Airport Property Line		
Taxiway Safety Area (TSA)	TSA	TSA
Taxiway Object Free Area (TOFA)	TOFA	TOFA
Fence	— x — x — x —	
Elevation	4190	
Airfield Pavements		
Buildings		
Rotating Beacon		
Aircraft Tie-Downs		
Unpaved Path or Trail		N/A
Lightpole		N/A
Utility Pole		N/A
Tree		N/A
Brushline		N/A
Touchdown and Liftoff Area	N/A	
Final Approach and Takeoff Area	N/A	FATO
Helipad Safety Area	N/A	
Helipad Fence	N/A	

HELIPAD FENCE

222.5' x 222.5' HELIPAD SAFETY AREA

182.5' x 182.5' FINAL APPROACH & TAKEOFF AREA

EXISTING TEMPORARY HELIPAD

ULTIMATE HELIPAD LOCATION

35.0'

35.0'

ULTIMATE 131' TAXIWAY OBJECT FREE AREA (TOFA)

ULTIMATE 79' TAXIWAY SAFETY AREA (TSA)

79' TAXIWAY SAFETY AREA (TSA)

EXISTING 131' TAXIWAY OBJECT FREE AREA (TOFA)

TW 1-1

9.28°

MAGNETIC 9° 17' 48" E
CHANGE 0° 5' W
APR 2017

GRAPHIC SCALE IN FEET
0 25 50 100

MAGNETIC DECLINATION SOURCE:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), APRIL 2017

1"=50' N/A

	REVISIONS	BY	APPROVED	DATE
1.0	ALP UPDATE	ACI	–	10/01/94
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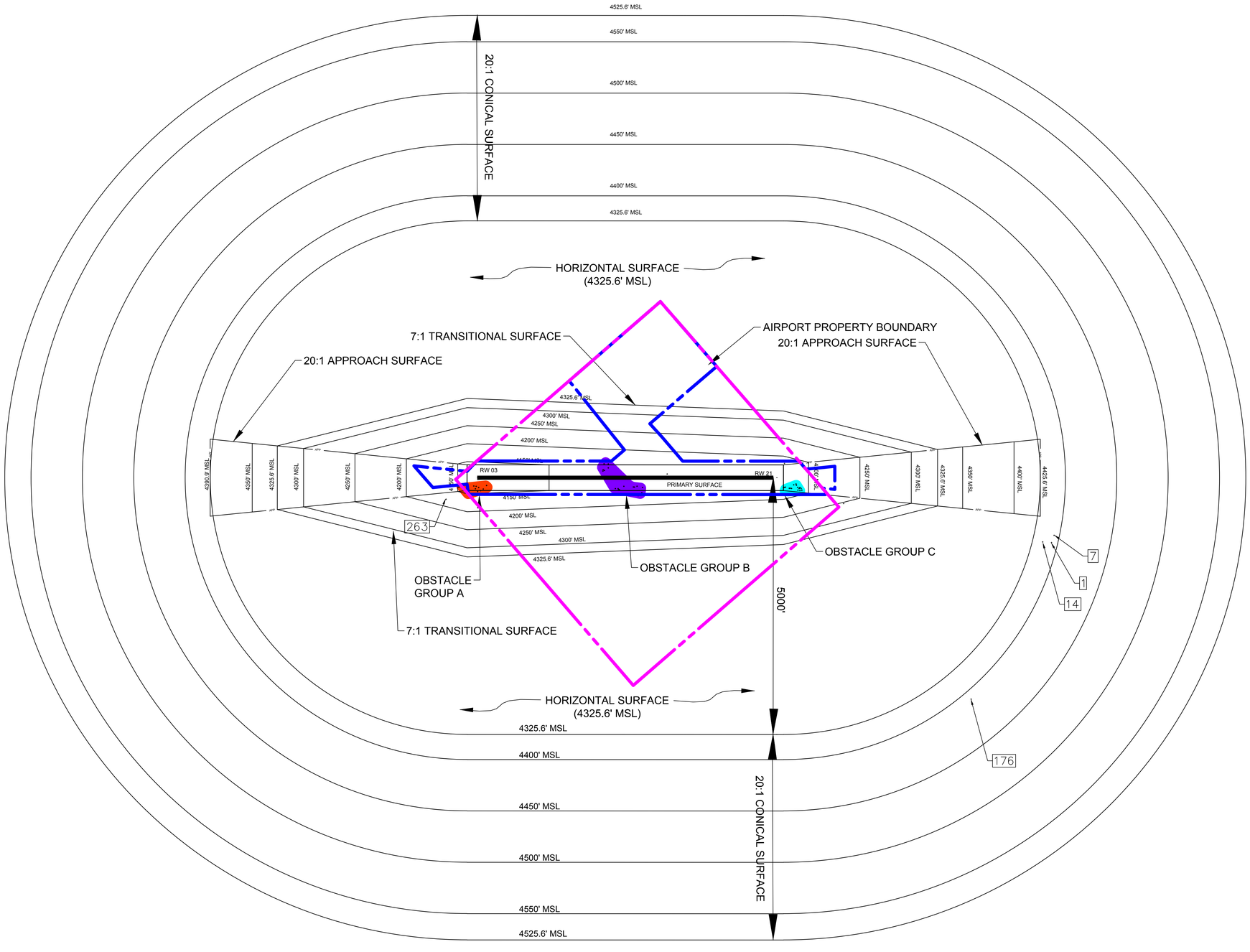
AIRPORT LAYOUT PLAN

TERMINAL AREA PLAN

SHEET 5 OF 9 SHEETS



PART 77 OBSTRUCTION DATA

OID	Group	Description	Object Height [ft MSL]	Penetrated Surface	Penetration	Disposition	FAA STUDY/ID#
1		GROUND	4365.7	CONICAL	21.6	NO ACTION	
7		GROUND	4363.0	CONICAL	18.0	NO ACTION	
14		GROUND	4344.8	CONICAL	9.3	NO ACTION	
38		TOWER	4258.8	TRANSITIONAL	5.4	MARK AND LIGHT	
52		BUSH	4183.5	TRANSITIONAL	3.2	REMOVE	
97	C	TREE	4195.0	APPROACH (RW 21)	3.4	REMOVE	
98	C	TREE	4201.9	APPROACH (RW 21)	11.0	REMOVE	
99	C	TREE	4192.8	APPROACH (RW 21)	3.3	REMOVE	
100	C	TREE	4196.5	APPROACH (RW 21)	4.9	REMOVE	
101	C	TREE	4193.6	APPROACH (RW 21)	0.8	REMOVE	
102	C	TREE	4192.9	APPROACH (RW 21)	3.2	REMOVE	
103	C	BUSH	4190.8	APPROACH (RW 21)	2.6	REMOVE	
104	C	BUSH	4189.7	APPROACH (RW 21)	1.9	REMOVE	
105	C	BUSH	4189.0	APPROACH (RW 21)	3.4	REMOVE	
106	C	BUSH	4193.8	APPROACH (RW 21)	0.3	REMOVE	
108	C	BUSH	4190.9	APPROACH (RW 21)	9.6	REMOVE	
109	C	BUSH	4190.0	APPROACH (RW 21)	7.9	REMOVE	
110	C	BUSH	4189.6	APPROACH (RW 21)	6.1	REMOVE	
111	C	BUSH	4189.0	APPROACH (RW 21)	11.5	REMOVE	
112	C	BUSH	4188.4	APPROACH (RW 21)	12.1	REMOVE	
113	C	BUSH	4188.6	APPROACH (RW 21)	13.0	REMOVE	
176		TOWER	4465	CONICAL	106.9		2011AWP08325OE
263		LIGHT_POLE	4182.8570	TRANSITIONAL	3.1	MARK AND LIGHT	
1910	B	TREE	4173.3890	TRANSITIONAL	7.1	REMOVE	
1913	B	TREE	4175.4340	TRANSITIONAL	1.7	REMOVE	
1915	B	TREE	4172.9350	PRIMARY	15.7	REMOVE	
1918	B	TREE	4172.9920	TRANSITIONAL	2.3	REMOVE	
1929	B	TREE	4172.8780	PRIMARY	15.4	REMOVE	
1940	B	TREE	4175.9450	PRIMARY	16.7	REMOVE	
1941	B	TREE	4176.5130	PRIMARY	17.2	REMOVE	
1942	B	TREE	4174.4690	PRIMARY	16.3	REMOVE	
1943	B	TREE	4173.5030	PRIMARY	15.9	REMOVE	
1944	B	TREE	4173.7870	PRIMARY	16.1	REMOVE	
1948	B	TREE	4177.0810	PRIMARY	17.5	REMOVE	
1949	B	TREE	4176.7410	PRIMARY	16.5	REMOVE	
2024	A	TREE	4148.9330	APPROACH (RW 3)	0.1	REMOVE	
2034	B	TREE	4162.2940	PRIMARY	5.9	REMOVE	
2035	B	TREE	4162.4870	PRIMARY	6.7	REMOVE	
2037	B	TREE	4163.9610	TRANSITIONAL	5.1	REMOVE	
2038	B	TREE	4164.0660	TRANSITIONAL	5.1	REMOVE	
2042	B	TREE	4161.9560	PRIMARY	6.1	REMOVE	
2043	B	TREE	4162.0040	PRIMARY	6.1	REMOVE	
2085	A	TREE	4145.5470	PRIMARY	4.2	REMOVE	
2086	A	TREE	4145.7880	PRIMARY	4.1	REMOVE	
2087	A	TREE	4150.6160	PRIMARY	9.0	REMOVE	
2124		TREE	4172.2970	PRIMARY	9.2	REMOVE	
2139	A	TREE	4146.3670	PRIMARY	4.4	REMOVE	
2171	A	TREE	4147.4780	PRIMARY	4.8	REMOVE	
2172	A	TREE	4147.7190	PRIMARY	5.2	REMOVE	
2173	A	TREE	4146.2230	PRIMARY	1.2	REMOVE	
2174	A	TREE	4147.0920	PRIMARY	4.4	REMOVE	

OBSTACLE DATA FROM FAA DOF DATED 3.26.2017

LEGEND		
Description	Existing	Future
Airport Property Line		

GRAPHIC SCALE IN FEET
0 500 1000 2000

MAGNETIC DECLINATION SOURCE:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), APRIL 2017

	REVISIONS	BY	APPROVED	DATE
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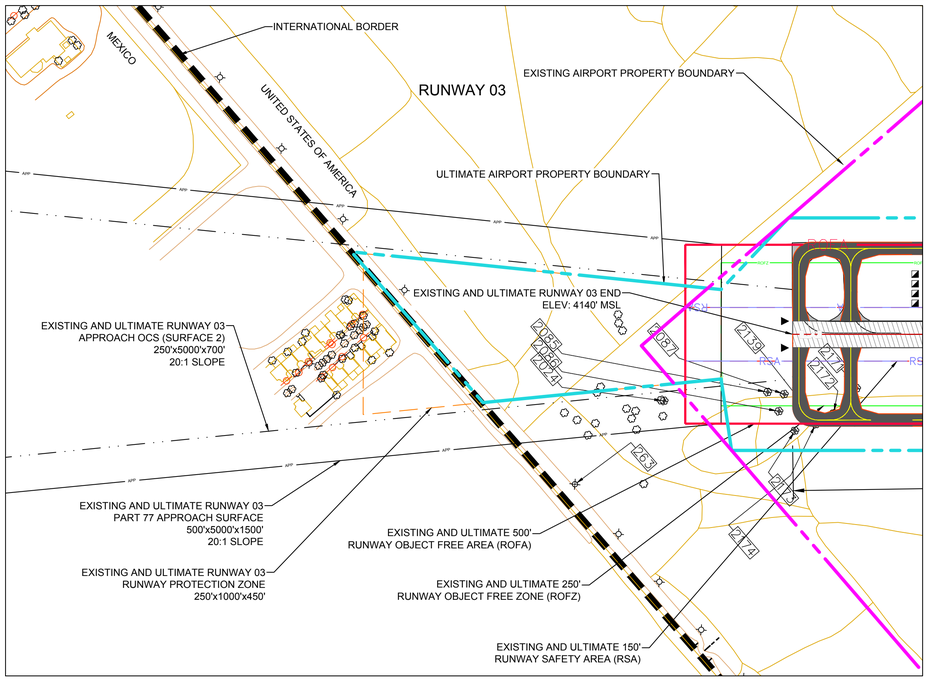
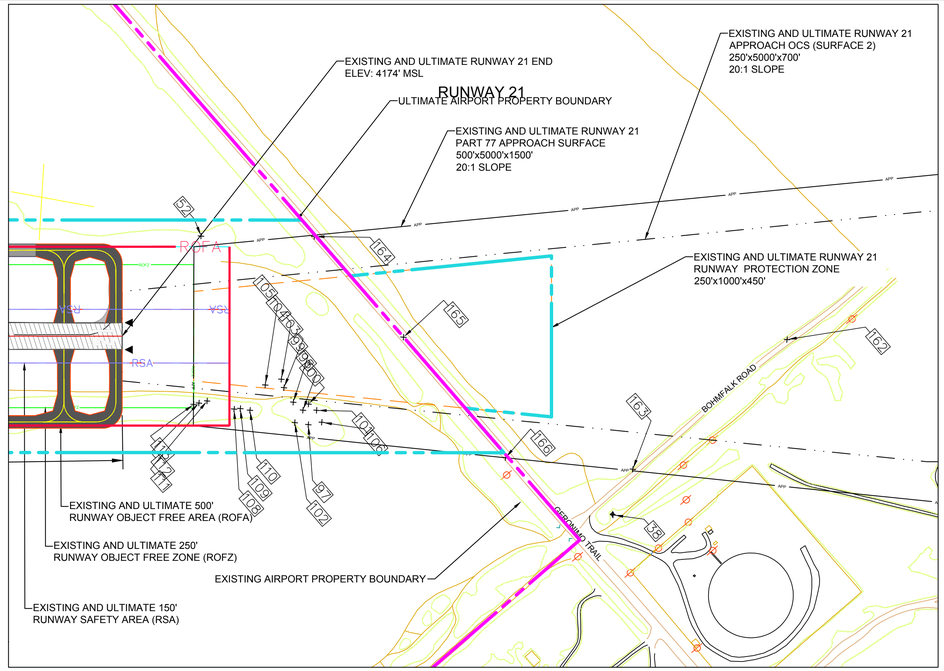
AIRPORT LAYOUT PLAN

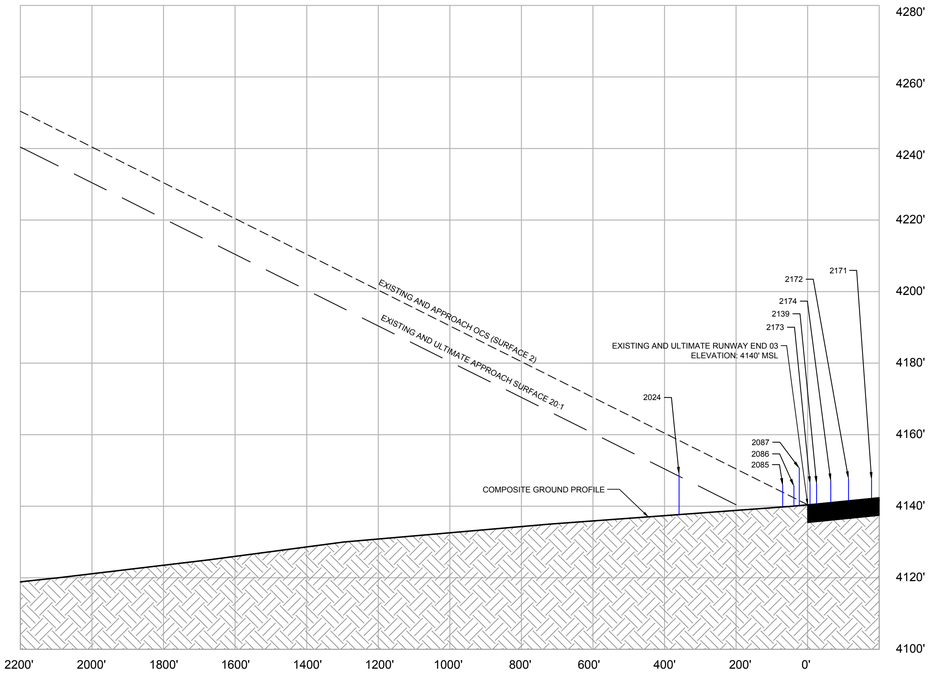
FAR PART 77 AIRSPACE

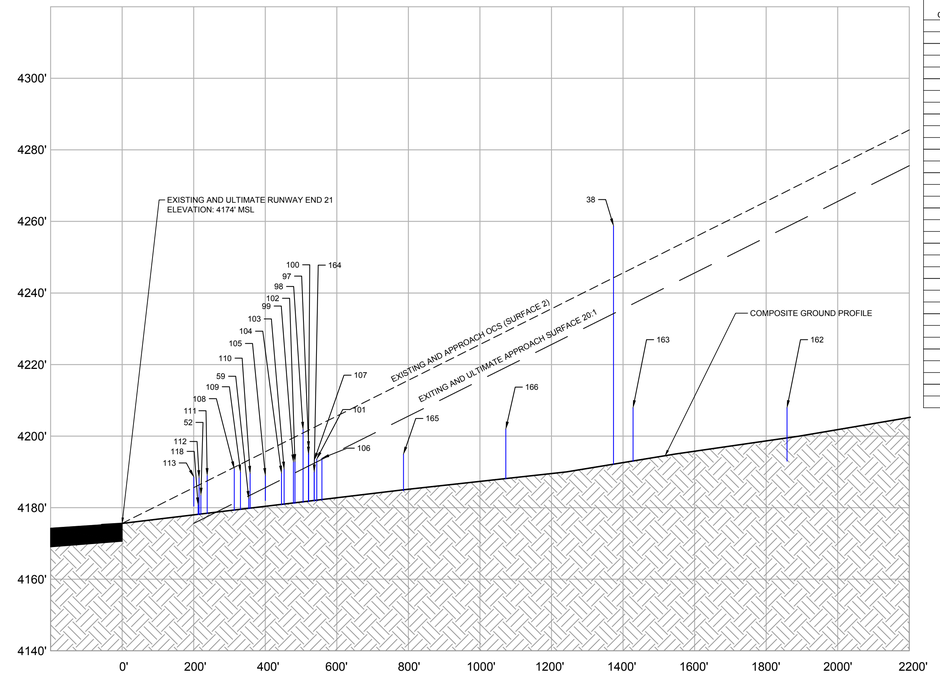
SHEET 6 OF 9 SHEETS





Description	
Airport Property Line	
Runway Object Free Area (ROFA)	
Runway Object Free Zone (ROFZ)	LEGEND
Runway Safety Area (RSA)	Existing / Ultimate
25' Building Restriction Line (BRL)	
Runway Protection Zone (RPZ)	
Part 77 Approach Surface	ROFZ / ROFA
Approach OCS	ROFZ / RSA
Elevation	RSA / BRL
Runway Pavements	BRL
Airfield Pavements	APP / APP
Buildings	
PAPI	41 90 / N/A
REIL	
Fence	
Unpaved Path or Trail	
Lightpole	
Utility Pole	
Tree	
Brushline	N/A
	N/A
	N/A
	N/A
	N/A





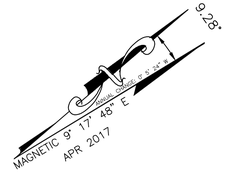
OBSTRUCTION DATA - INNER PORTION OF THE APPROACH

OID	DESCRIPTION	OBJECT HEIGHT [FT MSL]	PENETRATED SURFACE	PENETRATION	DISPOSITION	FAA STUFY/ID#
38	TOWER	4258.8	TRANSITIONAL	5.4	RK AND LIGHT	
97	TREE	4195	APPROACH (RW 21)	3.4	REMOVE	
98	TREE	4201.9	APPROACH (RW 21)	11	REMOVE	
99	TREE	4192.8	APPROACH (RW 21)	3.3	REMOVE	
100	TREE	4196.5	APPROACH (RW 21)	4.9	REMOVE	
101	TREE	4193.6	APPROACH (RW 21)	0.8	REMOVE	
102	TREE	4192.9	APPROACH (RW 21)	3.2	REMOVE	
103	BUSH	4190.8	APPROACH (RW 21)	2.6	REMOVE	
104	BUSH	4189.7	APPROACH (RW 21)	1.9	REMOVE	
105	BUSH	4189.0	APPROACH (RW 21)	3.4	REMOVE	
106	BUSH	4193.8	APPROACH (RW 21)	0.3	REMOVE	
108	BUSH	4190.9	APPROACH (RW 21)	9.6	REMOVE	
109	BUSH	4190.0	APPROACH (RW 21)	7.9	REMOVE	
110	BUSH	4189.6	APPROACH (RW 21)	6.1	REMOVE	
111	BUSH	4189.0	APPROACH (RW 21)	11.5	REMOVE	
112	BUSH	4188.4	APPROACH (RW 21)	12.1	REMOVE	
113	BUSH	4188.6	APPROACH (RW 21)	13.0	REMOVE	
162	BOHMFALK_ROAD	4205 (EST.)	NONE	NONE	NONE	
163	BOHMFALK_ROAD	4206 (EST.)	NONE	NONE	NONE	
164	GERONIMO_TRAIL	4207 (EST.)	NONE	NONE	NONE	
165	GERONIMO_TRAIL	4208 (EST.)	NONE	NONE	NONE	
166	GERONIMO_TRAIL	4209 (est.)	NONE	NONE	NONE	
263	LIGHT_POLE	4182.857	TRANSITIONAL	2.9	REMOVE	
2024	TREE	4148.933	APPROACH (RW 3)	0.1	REMOVE	
2085	TREE	4145.547	PRIMARY	3.9	REMOVE	
2086	TREE	4145.788	PRIMARY	3.9	REMOVE	
2087	TREE	4150.616	PRIMARY	8.7	REMOVE	
2139	TREE	4146.367	PRIMARY	4.1	REMOVE	
2171	TREE	4147.478	PRIMARY	4.4	REMOVE	
2172	TREE	4147.719	PRIMARY	5	REMOVE	
2173	TREE	4146.223	PRIMARY	1	REMOVE	
2174	TREE	4147.092	PRIMARY	4.3	REMOVE	

OBSTACLE DATA FROM FAA DOF DATE 03.26.2017

GRAPHIC SCALE IN FEET
0 100 200 400

MAGNETIC DECLINATION SOURCE:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), APRIL 2017



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1.0	ALP UPDATE	ACI	–	10/01/94
2.0	CROSSWIND RUNWAY	ACI	–	10/01/99
3.0	REVALIDATION	ACI	MO	04/25/03
4.0	AIRPORT MASTER PLAN	KH	LP	12/12/17
5.0	ALP UPDATE / NARRATIVE REPORT	KH	AU	04/01/24

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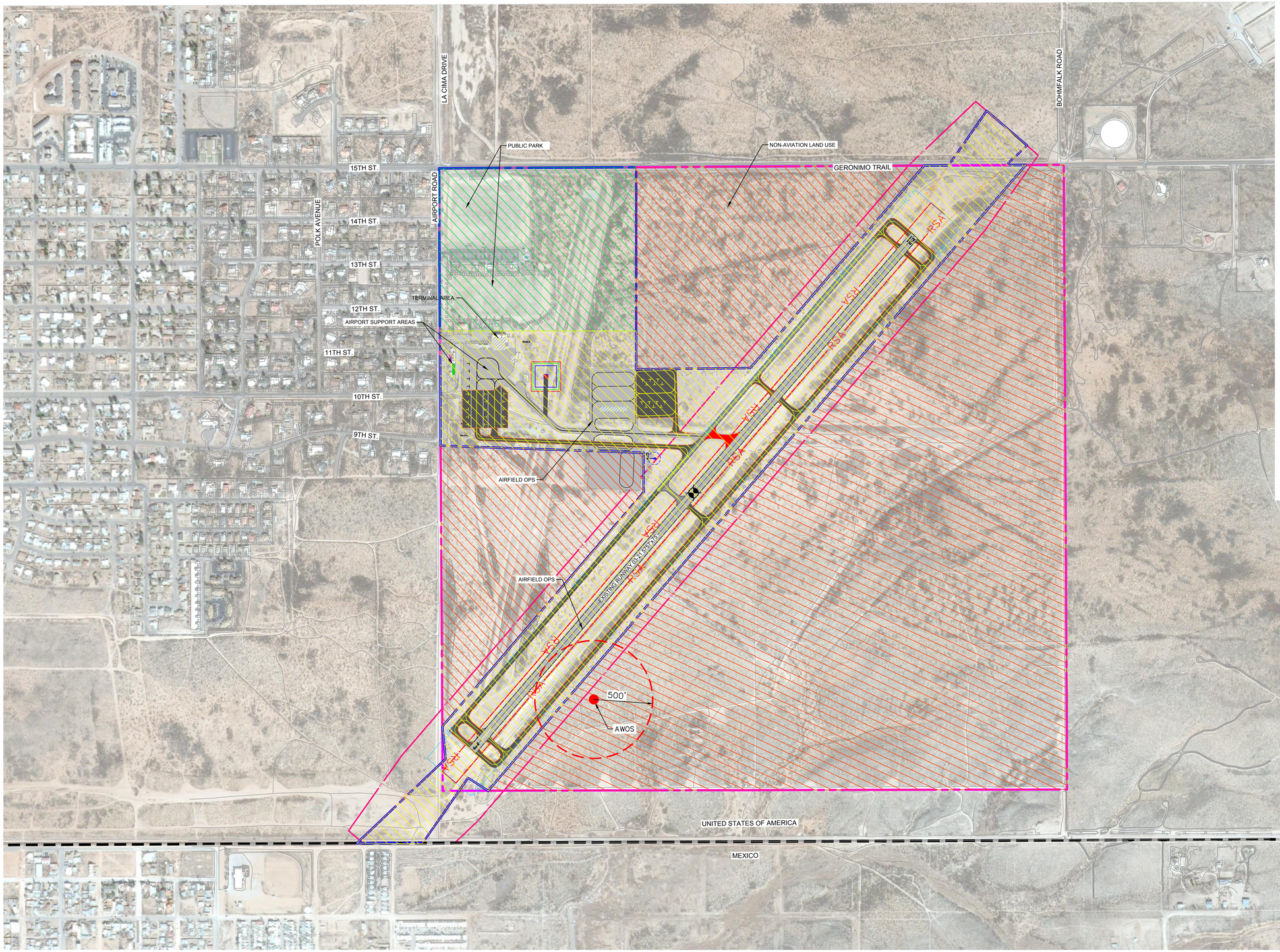
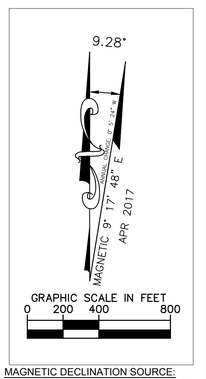
AIRPORT LAYOUT PLAN

INNER PORTION OF THE APPROACH - RW 03-21



LEGEND		
Description	Existing	Ultimate
Airport Property Line		
Runway Object Free Area (ROFA)	ROFA	ROFA
Runway Safety Area (RSA)	RSA	RSA
Runway Protection Zone (RPZ)	RPZ	RPZ
25' Building Restriction Line (BRL)		BRL
Runway Pavements		
Airfield Pavements		
Buildings		
Existing & Future Aviation Land Use		
Non-Aviation Land Use		
Public Park		
AWOS Clear Zone		
Segmented Circle		
Rotating Beacon		
Airport Reference Point		
Fence		
Unpaved Path or Trail		N/A
Lightpole		N/A
Utility Pole		N/A
Tree		N/A
Brushline		N/A
Demolition		
Touchdown and Liftoff Area	N/A	
Final Approach and Takeoff Area	N/A	
Helipad Safety Area	N/A	
Helipad Fence	N/A	



MAGNETIC DECLINATION SOURCE:
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), APRIL 2017

	REVISIONS	BY	APPROVED	DATE
1.0	ALP UPDATE	ACI	–	10/01/94
2.0	CROSSWIND RUNWAY	ACI	–	10/01/99
3.0	REVALIDATION	ACI	MO	04/25/03
4.0	AIRPORT MASTER PLAN	KH	LP	12/12/17
5.0	ALP UPDATE / NARRATIVE REPORT	KH	AU	04/01/24

CITY OF DOUGLAS
425 E. 10TH ST, DOUGLAS, AZ, 85607

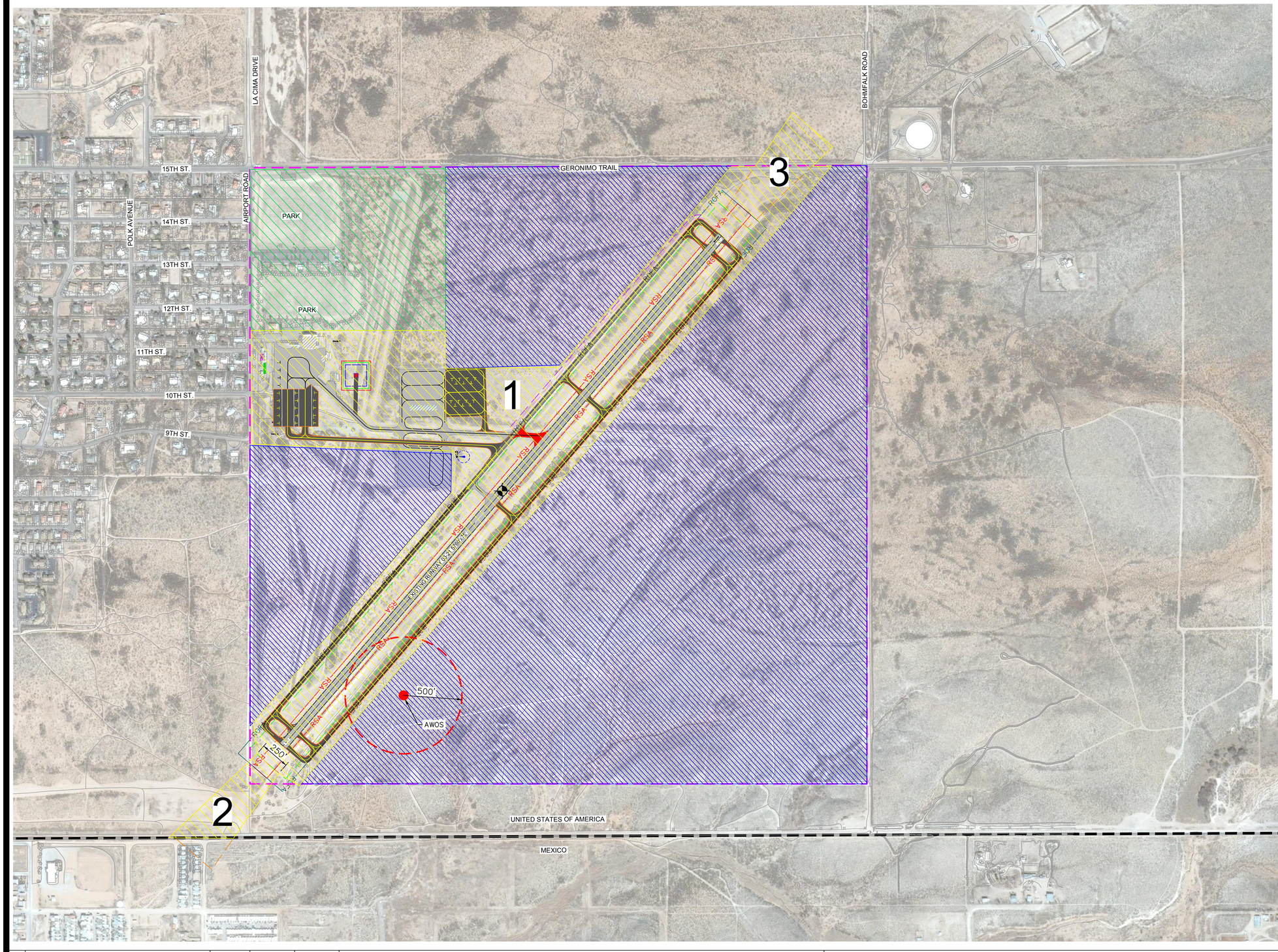
Kimley»Horn
1001 W. Southern Avenue Suite 131
Mesa, AZ 85210
www.kimley-horn.com

AIRPORT LAYOUT PLAN

ON- AIRPORT LAND USE MAP

SHEET 8 OF 9 SHEETS

K:\EAV_Aviation\098249008 - DGL ALP Update & Narrative Report\Reports\Task 3.0 - Airport Layout Plan\CADD\Douglas- Land Use Map.dwg Mar 25, 2024 sandra.quirozramirez
XREFS: xDouglas_TB



LEGEND		
Description	Existing	Ultimate
Airport Property Line		
Runway Object Free Area (ROFA)	ROFA	ROFA
Runway Safety Area (RSA)	RSA	RSA
Runway Protection Zone (RPZ)	RPZ	RPZ
Runway Pavements		
Airfield Pavements		
Buildings		
Existing & Future Aviation Land Use		
Property to be Sold		
Public Park		
AWOS Clear Zone		
Segmented Circle		
Rotating Beacon		
Airport Reference Point		
Fence		
Unpaved Path or Trail		N/A
Lightpole		N/A
Utility Pole		N/A
Tree		N/A
Brushline		N/A
Demolition		
Touchdown and Liftoff Area	N/A	
Final Approach and Takeoff Area	N/A	
Helipad Safety Area	N/A	
Helipad Fence	N/A	

EXISTING AIRPORT PROPERTY

MAP NUMBER	DATE OF ACQUISITION	GRANTOR	TYPE OF ACQUISITION	ACREAGE	TAX PARCEL NUMBER
1	UNKNOWN	UNKNOWN	ACQUISITIONS	643.2	410-01-005

NOTE: AIRPORT PROPERTY BOUNDARY SURVEY CONDUCTED BY TRACE IN 2017.

FUTURE AIRPORT PROPERTY

MAP NUMBER	DATE OF ACQUISITION	GRANTOR	TYPE OF ACQUISITION	ACREAGE	TAX PARCEL NUMBER
2	FUTURE	-	-	9.2	-
3	FUTURE	-	-	11	-

GRAPHIC SCALE IN FEET
0 200 400 800

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AIRPORT LAYOUT PLAN

PROPERTY MAP

SHEET 9 OF 9 SHEETS

APPENDIX B – DGL PROPERTY DEED

STATE OF ARIZONA.

PATENT No. 1612

For SCHOOL Lands
(School, Institutional or University.)

(GREAT SEAL OF THE STATE OF ARIZONA.)

TO ALL UNTO WHOM THESE PRESENTS SHALL COME, GREETING:

WHEREAS, City of Douglas, Douglas, Arizona, of the County of Cochise and State of Arizona in accordance with the provisions of the laws of the State of Arizona, approved and in force at the time of the purchase of the land herein designated and described, and at the time of the execution of this conveyance, has made full payment as appears from the records of the State Land Department of the State of Arizona of and for the following described real estate, lying and situate in the County of Cochise and State of Arizona, to-wit:

All of Section Sixteen (16), Township Twenty-four (24), South, Range Twenty-eight (28) East, G. & S. R. B. & M.

containing 640 acres, more or less, which said described land has been purchased by the said City of Douglas, Douglas, Arizona, it having made payment in full to the State of Arizona of all purchase money and such interest as may have been due therefor.

NOW, KNOW YE, That the State of Arizona in consideration of the premises, and in conformity with the laws of the State of Arizona, has sold and granted, and by these presents does sell and grant unto the said City of Douglas, Douglas, Arizona, and to its successors and assigns the said land above described; TO HAVE AND TO HOLD the same as above specified, together with all the rights, privileges, immunities and appurtenances of whatsoever nature hereunto belonging unto the said City of Douglas, Douglas, Arizona and to its successors and assigns forever.

This patent is issued subject to any and all easements or rights of way heretofore legally obtained and no in full force and effect.

In Testimony Whereof, I, John C. Phillips Governor of the State of Arizona, have caused these letters to be made patent, and the Great Seal of the State of Arizona to be hereunto attached.

Given under my hand at the City of Phoenix, Arizona, this eleventh day of August, A. D. 1930.

(SIGNED) JOHN C. PHILLIPS
Governor of the State of Arizona.

(SEAL) ATTEST:
I. F. FRAZIER
Secretary of State of the State of Arizona

(ON BACK THEREOF)

6495

Fee $1.95

STATE OF ARIZONA)
; ss
COUNTY OF COCHISE)

I hereby certify that the within instrument was filed and recorded at request of City of Douglas, Douglas, Ariz. Sept. 17, 1930 11 A. M., in Book 109 Deeds R. E. on pages 262-263.

Witness my hand and Official Seal the day and year aforesaid.

(SEAL)

M. L. HUTCHISON
COUNTY RECORDER.

BY: M. L. HUTCHISON
RECORDER.

Q. M. C. Form No. 290 (Old No. 92.
Authorized Dec. 20, 1919
Revised Sept. 25, 1925

WAR DEPARTMENT

C
O
P
Y

RELEASE
(CORPORATIONS)

W 04 193 eng 3688

WHEREAS, on the 17th day of March, 19 44

City of Douglas (Arizona), (A Municipal Corporation)

a corporation existing under and by virtue of the laws of the State of Arizona

with its principal office located in the city of Douglas

county of ____, and State of Arizona

did lease, demise, and let unto the United States of America certain premises situated in the city of

____, county of Cochise, and State of

Arizona, and more particularly described as follows:

All that certain real property known as "Douglas International Airport" situate in Cochise County, State of Arizona, more particularly described as follows:

All of Section Sixteen (16) and Fourteen (14) acres in the Northwest quarter of the Northwest quarter ($NW\frac{1}{4}NW\frac{1}{4}$) of Section Twenty-one (21), Township Twenty-four South (T24S), Range Twenty-eight East (R28E), Gila and Salt River Base and Meridian, containing 654 acres, more or less.

Together with all improvements located thereon excepting superintendant's dwelling, garage, office, weather bureau, gasoline storage and pump, and filling station, but including all other facilities including runways, taxi and landing strips, machine shop, beacon tower, beacons, flood lights and a hangar containing approximately 12,000 sq. ft.,

and,

WHEREAS, the use of said premises is no longer required by the United States of America and possession of said property having been redelivered by the United States of America to the lessor, on

the 5th day of December, 19 44

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS, that we, ____

City of Douglas (Arizona)

for and in consideration of the cancellation of said lease and the redelivery to us of possession by the United States of America of the property hereinbefore described, on the 5th day of December, 19 44, the receipt of which in good condition is hereby acknowledged, have remised, released, and forever discharged, and by these presents do for ourselves, our successors, and assigns, remise, release, and forever discharge the United States of America, its officers and agents, of and from all manner of actions, liability, and claims which against the United States of America, its officers and agents, we or they ever had, now have, or ever will have upon, or by reason of any matter, cause, or thing whatsoever, particularly arising out of said lease and the occupation by the United States of America of the aforementioned property. Subject to payment of rental to and including the 5th day of December, 1944.

IN WITNESS WHEREOF, we have caused these presents to be signed by our Mayor

attested by our City Clerk, and our corporate seal to be hereto affixed this

6th day of December, 19 44 (SEAL)

Attest:

/s/ Henry M. Beard
City Clerk

CITY OF DOUGLAS (ARIZONA)
A Municipal Corporation

By /s/ Everett J. Jones
Mayor

APPENDIX C – ADOT GRANT ASSURANCES

EXHIBIT A

Sponsor Assurances

Upon acceptance of the grant offer by the Sponsor, these assurances will become a part of this Agreement. The Sponsor hereby covenants and agrees with the State as follows:

General

1) That the Project is consistent with plans (existing at the time of approval of the Project) of political jurisdictions authorized by the State to plan for the development of the area surrounding the Airport and has given fair consideration to the interest of communities in or near where the Project is to be located. In making a decision to undertake any airport development Project under this Agreement the Sponsor insures that it has undertaken reasonable consultation with affected parties using the Airport at which the Project is proposed. All appropriate development standards of Federal Aviation Administration (FAA) Advisory Circulars, Orders, or Federal Regulations shall be complied with. All related state and federal laws shall be complied with.

2) That these covenants shall become effective upon execution of this Agreement for the Project or any portion thereof, made by the State and shall remain in full force and effect throughout the useful life of the facilities or the planning project's duration developed under the grant, but in any event, not less than twenty (20) years from the date of acceptance of the grant offer by the Sponsor.

3) The Sponsor certifies in this Agreement that it is a political subdivision of the State and is the public agency with control over a public-use Airport and/or on behalf of the possible future development of an Airport and is eligible to receive grant funds for the development or possible development of an Airport under its jurisdiction.

4) The Sponsor further agrees it holds good title, satisfactory to the State, to the landing area of the Airport or site thereof, or will give assurance satisfactory to the State that good title will be acquired.

5) That the Sponsor is the owner or lessee of the property or properties on which the Airport is located and that the lease guarantees that the Sponsor has full control of the use of the property for a period of not less than twenty (20) years from the date of this Agreement. All changes in airport ownership or to an airport lease shall be approved by the State.

6) The Sponsor agrees that it has sufficient funds available for that portion of the project costs which are not to be paid by the State (or the United States).

7) The Sponsor agrees to provide and maintain competent supervision to complete the Project in conformance with this Agreement.

8) Preserving Rights and Powers: The Sponsor agrees it shall not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions and assurances in this Agreement without written permission from the State, and shall act promptly to acquire, extinguish or modify any outstanding rights or claims of right by others which would interfere with such performance by the Sponsor. This will be done in a manner acceptable to the State. The Sponsor shall not sell, lease, encumber or otherwise transfer or dispose of any part of its title or other interests in the property shown on the airport property map included in the most recent FAA-approved Airport Layout Plan, or to that portion of the property upon which State

funds have been expended, for the duration of the terms, conditions and assurances in this Agreement without approval by the State. If the transferee is found by the State to be eligible under Title 49, United States Code, to assume the obligations of this Agreement and to have the power, authority and financial resources to carry out such obligations, the Sponsor shall insert in the contract or document transferring or disposing of Sponsor's interest and make binding upon the transferee all the terms, conditions and assurances contained in this Agreement.

9) Public Hearings: In Projects involving the location of an Airport, an airport runway or a major runway extension, the Sponsor has afforded the opportunity for public hearings for the purpose of considering the economic, social and environmental impacts of the Airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the State, submit a copy of such hearings to the State.

Financial

Pursuant to A.R.S. 35-326, the Sponsor may elect to utilize the Local Government Investment Pool ("LGIP") maintained by the state treasurer. The Sponsor shall request written approval from the State to use the LGIP. Thereafter, the State may deposit the funds authorized by the grant into the Sponsor's account. After approval of the reimbursements by the state, the funds shall be disbursed through the LGIP account to the Sponsor. The disbursements shall be made pursuant to the applicable laws and regulations.

The Sponsor shall establish and maintain for each Project governed by this Agreement, an adequate accounting record to allow State personnel to determine all funds received (including funds of the Sponsor and funds received from the United States or other sources) and to determine the eligibility of all incurred costs of the Project. The Sponsor shall segregate and group project costs into cost classifications as listed in the Specific Provisions of Exhibit C.

Record Keeping

The Sponsor shall maintain accurate records of all labor, equipment and materials used in this Project and that upon reasonable notice, shall make available to the State, or any of their authorized representatives, for the purpose of audit and examination all records, books, papers or documents of the recipient relating to work performed under this Agreement. For airport development Projects, make the Airport and all airport records and documents affecting the Airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the State upon reasonable request.

Airport Based Aircraft Reporting

The Sponsor shall furnish to the State on a quarterly basis, a current detailed listing (including: Registration/N Number, Name, Address and Phone Number of Owner) of all based aircraft on the Airport in a form approved by the State.

Airport Layout Plan

1) The Sponsor shall maintain a current signed/approved Airport Layout Plan (ALP) of the Airport, which shows building areas and landing areas, indicating present and planned development and to furnish the State an updated ALP of the Airport as changes are made.

2) The Sponsor shall be required to prepare an ALP for update or revalidation in accordance with current FAA and State standard guidelines. The ALP will indicate any deviations from FAA design standards as outlined in current FAA

Advisory Circulars, orders or regulations. A copy of the signed/approved ALP in electronic format shall be forwarded to the State after authentication by FAA or the State.

3) The Sponsor shall assure that there are no changes to the airport property boundaries, together with any off-site areas owned or controlled by the Sponsor which support the Airport or its operations as a part of this project.

4) If a change or alteration is made at the Airport which the State determines adversely affects the safety, utility or efficiency of the Airport, or any State funded property on or off Airport which is not in conformity with the ALP as approved by the State, the Sponsor will, if requested by the State, eliminate such adverse affect in a manner approved by the State.

Immediate Vicinity Land Use Restriction

The Sponsor shall restrict the use of land, adjacent to or in the immediate vicinity of the Airport, to activities and purposes compatible with normal airport operations and to take appropriate action including the adoption of appropriate zoning laws. In addition, if the Project is for noise compatibility or to protect the 14 CFR Part 77 imaginary surfaces of the Airport, the Sponsor will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the Airport, of the noise compatibility program measures or the imaginary surfaces of the Airport upon which State funds have been expended.

Airport Operation

1) The Sponsor shall promote safe airport operations by clearing and protecting the approaches to the Airport by removing, lowering, relocating, marking and/or lighting existing airport hazards and to prevent, to the extent possible, establishment or creation of future airport hazards. The Sponsor shall take appropriate action to assure such terminal airspace as is required to protect instrument and visual operations to the Airport (including established minimum flight altitudes) will be adequately cleared and protected by preventing the establishment or creation of future airport hazards. The Sponsor shall promptly notify airmen of any condition affecting aeronautical use of the Airport.

2) The Sponsor further agrees to operate the Airport for the use and benefit of the public and to keep the Airport open to all types, kinds and classes of aeronautical use without discrimination between such types, kinds and classes; provided that the Sponsor shall establish such fair, equal and nondiscriminatory conditions to be met by all users of the Airport as may be necessary for the safe and efficient operation of the Airport; and provided further, that the Sponsor may prohibit any given type, kind or class of aeronautical use of the Airport if such use would create unsafe conditions, interfere with normal operation of aircraft, or cause damage or lead to the deterioration of the runway or other airport facilities.

3) In any agreement, contract, lease or other arrangement under which a right or privilege at the Airport is granted to any person, firm or corporation to conduct or engage in any aeronautical activity for furnishing services to the public at the Airport, the Sponsor shall insert and enforce provisions requiring said person, firm or corporation:

   a) to furnish services on a reasonable and not unjustly discriminatory basis to all users thereof and charge reasonable
      and not unjustly discriminatory prices for each unit or service;

   b) and be allowed to make reasonable and nondiscriminatory discounts, rebates or similar types of price reductions to volume purchasers;

c) each Fixed Based Operator (FBO) and Air Carrier at the Airport shall be subject to the same rates, fees, rentals and other charges as are uniformly applicable to all other FBOs and Air Carriers making the same or similar uses of the Airport and utilizing the same or similar facilities;

d) each Air Carrier using such Airport shall have the right to service itself or to use any FBO that is authorized or permitted by the Airport to serve any Air Carrier at the Airport.

4) The Sponsor shall not exercise or grant any right or privilege which operates to prevent any person, firm or corporation operating aircraft on the Airport from performing any services on its own aircraft with its own employees (including but not limited to maintenance, repair and fueling) that it may choose to perform. In the event the Sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by a commercial aeronautical operator authorized by the Sponsor under these provisions.

5) The Sponsor shall suitably operate and maintain the Airport and all facilities thereon or connected therewith which are necessary for airport purposes and to prohibit any activity thereon which would interfere with its use for aeronautical purposes and to operate essential facilities, including night lighting systems, when installed, in such manner as to assure their availability to all users of the Airport; provided that nothing contained herein shall be construed to require that the Airport be operated and maintained for aeronautical uses during temporary periods when snow, flood or other climatic conditions interfere substantially with such operation and maintenance.

6) The Sponsor shall not permit an exclusive right for the use of the Airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, providing services at an Airport by a single FBO shall not be construed as an "exclusive right" if:

a) it would be unreasonably costly, burdensome or impractical for more than one FBO; and

b) if allowing more than one FBO to provide such services would require a reduction of space leased pursuant to an existing agreement between a single FBO and the Airport.

Note: Aeronautical activities that are covered by this paragraph include, but are not limited to: charter flights, pilot training, aircraft rental, sightseeing, air carrier operations, aircraft sales and services, aerial photography, agricultural spraying, aerial advertising and surveying, sale of aviation petroleum products whether or not conducted in conjunction with any other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity.

7) The Sponsor shall terminate any exclusive right to conduct an aeronautical activity now existing at the Airport before any grant of assistance from the State. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the Airport is used as an Airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with State funds.

8) Airport Pavement Preservation Program: The Sponsor certifies that they have implemented an effective pavement preservation management program at the Airport in accordance with Public Law 103-305 and with the most current associated FAA policies and guidance for the replacement, reconstruction or maintenance of pavement at the Airport. The Sponsor assures that it shall use and follow this program for the useful life of the pavement

constructed, reconstructed or repaired with financial assistance from the State and that it will provide such reports on pavement condition and pavement management programs as may be required by the State.

Sponsor Transactions

The Sponsor shall refrain from entering into any transaction which would deprive the Sponsor of any of the rights and powers necessary to perform any or all of the covenants made herein, unless by such transaction the obligation to perform all such covenants is assumed by another public agency eligible to assume such obligations and having the power, authority and financial resources to carry out such obligations; and, if an arrangement is made for management or operation of the Airport by an agency or person other than the Sponsor, the Sponsor shall reserve sufficient powers and authority to insure that the Airport will be operated and maintained in accordance with these covenants or insure that such an arrangement also requires compliance therewith.

Airport Revenues

The Sponsor shall maintain a fee and rental structure for the facilities and services at the Airport which will make the Airport as self-sustaining as possible under the circumstances existing at the particular Airport, taking into account such factors as the volume of traffic and economy of collection. All revenues generated by the Airport (and any local taxes established after Dec 30, 1987), will be expended by it for the capital or operating costs of the Airport; the local airport system; or the local facilities which are owned or operated by the owner or operator of the Airport and which are directly or substantially related to the actual air transportation of passengers or property, on or off the Airport.

Disposal of Land

1) For land purchased under a grant for airport development purposes (it is needed for aeronautical purposes, including runway protection zones, or serve as noise buffer land; and revenue from the interim use of the land contributed to the financial self-sufficiency of the Airport), the Sponsor shall apply to the State and FAA for permission to dispose of such land. If agreed to by the State and/or FAA, the Sponsor shall dispose of such land at fair market value and make available to the State and FAA an amount that is proportionate to the State and FAA's share of the cost of the land acquisition. That portion of the proceeds of such disposition, which is proportionate to the share of the cost of acquisition of such land, shall be (a) reinvested in another eligible airport development Project or Projects approved by the State and FAA or (b) be deposited to the Aviation Trust Fund if no eligible Project exists.

2) Disposition of such land shall be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the Airport.

EXHIBIT B

General Provisions

Employment of Consultants

The term consultant, as used herein, includes planners, architects and/or engineers. If a consultant is to be used for this Project, the Sponsor agrees to consider at least three (3) consultant firms. If the Sponsor has contracted with or will contract with a consultant on a retainer basis, the Sponsor assures to the State that prior to entering such a contract, at least three (3) consultants were or will be considered. The Sponsor shall submit to the State, for review and approval, a copy of the request for proposals and/or request for qualifications, and the proposed consultant contract prior to its execution and upon award of the contract, a fully executed copy. All requests for qualifications and requests for proposals shall be in accordance with A.R.S. 34, Chapters 1, 2 and 6, and shall include a list of projects and project locations to be awarded project contracts.

Contracts

1) The Sponsor as an independent entity and not as an agent of the State may obtain the services required in order to fulfill the work outlined in the Project Description as approved by the State for funding in the Airport Capital Improvement Program. All contracts awarded to accomplish the project work described in this Agreement shall state:

   a) The name of the consultant authorized to perform the work and to communicate on behalf of the Sponsor;

   b) The Sponsor must insure that contracts issued under this Agreement comply with the provisions of Arizona Executive Order 75-5 as amended by Arizona Executive Order 2009-9, relating to equal opportunity;

   c) The terms for termination of the contract either for failure to perform or in the best interest of the Sponsor;

   d) The duly authorized representatives of the State shall have access to any books, documents, papers and records of the consultant and/or contractor which are in any way pertinent to the contract for a period of five years, in accordance with A.R.S. 35-214, for the purpose of making inspections, audits, examinations, excerpts and transcriptions.

2) All contracts shall stipulate and make clear:

   a) The responsibilities of the consultant to gain authorization for changes on the Project which may have an affect on the contract price, scope, or schedule;

   b) That all construction contractors and sub-contractors hired to perform services, shall be in compliance with A.R.S. 32, Chapter 10.

   c) That any materials, including reports, computer programs or files and other deliverables created under this Agreement are the sole property of the Sponsor. That these items shall be made available to the public. The Contractor/Consultant is not entitled to a patent or copyright on these materials and may not transfer the patent or copyright to anyone else.

d) That any travel shall be reimbursable by the State only within the rules and costs in accordance with the State of Arizona Travel Policy.

Conflict of Interest

Each consultant submitting a proposal shall certify that it shall comply with, in all respects, the rules of professional conduct set forth in Arizona Administrative Code R4-30-301. In addition, a conflict of interest shall be cause for disqualifying a consultant from consideration; or terminating a contract if the conflict should occur after the contract is made. A potential conflict of interest includes, but is not limited to:

1) Accepting an assignment where duty to the client would conflict with the consultant's personal interest, or interest of another client.

2) Performing work for a client or having an interest which conflicts with this contract.

Reports

The Sponsor shall submit monthly status reports during planning, shall submit monthly status reports during design, and shall submit weekly reports during construction. All reports shall reflect, at a minimum, the progress accomplished in relation to the Grant and Project schedules and milestones, the reasons for any changes, and the recommended corrections of problems encountered. Upon completion of the Project, the Sponsor shall submit a letter to the State specifying that the Project has been completed to their satisfaction and that the consultant and the contractor have completed their contractual responsibilities.

Changes

Any changes to the consultant contract, authorized by the Sponsor, that include additional funds, time and/or scope, shall be by amendment and shall be approved by the State prior to being made in order to be eligible for reimbursement. Approval of a change by the State shall not obligate the State to provide reimbursement beyond the maximum funds obligated by this Agreement. Any increase to the amount of funds authorized hereunder, to the expiration date of this agreement, or to the scope of work included in this agreement must be by formal amendment, and signed by all parties.

Any changes to the contract documents, authorized by the Sponsor, must be approved by the State prior to any changes being made in order to be eligible for reimbursement.

Audit

Upon completion of the Project, the Sponsor agrees to have an audit performed. The audit examination may be a separate project audit or in accordance with the Single Audit Act of 1984 (Single Audit). If the Sponsor is required under law to have a Single Audit, this Project shall be considered for inclusion in the scope of examination.

The Sponsor shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of the grant, the total cost of the Project in connection with which the grant is given or used, and the amount or nature of that portion of the cost of the Project supplied by other sources, and such other financial records pertinent to the Project. The accounts and records will be kept in accordance with A.R.S. 35-214.

In any case in which an independent audit is made of the accounts of a Sponsor relating to the disposition of the proceeds of a grant relating to the Project in connection with which the grant was given or used, it shall file a certified copied of such audit with the State not later than six (6) months following the close of the fiscal year in which the audit was made.

The Sponsor shall make available to the State or any of their other duly authorized representatives, for the purpose of audit and examination, any books, documents, papers and records of the recipient that are pertinent to the grant. The Sponsor further agrees to provide the State a certified copy of the audit report. The State is to determine the acceptability of this audit.

Suspension

If the Sponsor fails to comply with any conditions of this Agreement, the State, by written notice to the Sponsor, may suspend participation and withhold payments until appropriate corrective action has been taken by the Sponsor. Costs incurred during a period of suspension may not be eligible for reimbursement by the State.

Failure to Perform

If the Sponsor fails to comply with the conditions of this Agreement the State, may by written notice to the Sponsor, terminate this Agreement in whole or in part. The notice of termination will contain the reasons for termination, the effective date, and the eligibility of costs incurred prior to termination. The State shall not reimburse any costs incurred after the date of termination.

Termination for Convenience

When the continuation of the Project will not produce beneficial results commensurate with the further expenditure of funds or when funds are not appropriated or are withdrawn for use hereunder, the State may terminate this Agreement. In the case where continuation of the Project will not produce beneficial results, the State and the Sponsor shall mutually agree upon the termination either in whole or in part. In the case where funds are no longer available or have been withdrawn or not appropriated, or the Project is no longer in the State's best interest, the State shall have the right of termination as its sole option. The State shall not reimburse any costs incurred after receipt of the notice of termination. The Governor pursuant to A.R.S. Section 38-511 hereby puts all parties on notice that this Agreement is subject to cancellation.

Waiver by State

No waiver of any condition, requirement or right expressed in this Agreement shall be implied by any forbearance of the State to declare a default, failure to perform or to take any other action on account of any violation that continues or repeats.

Compliance with Laws

The Sponsor shall comply with all Federal, State and Local laws, rules, regulations, ordinances, policies, advisory circulars, and decrees that are applicable to the performance hereunder.

Arbitration

In the event of a dispute, the parties agree to use arbitration to the extent required by A.R.S. Section 12-1518.

Jurisdiction

Any litigation between the Sponsor and the State shall be commenced and prosecuted in an appropriate State court of competent jurisdiction within Maricopa County, State of Arizona.

Excess of Payments

If it is found that the total payments to the Sponsor exceed the State's share of allowable project costs, the Sponsor shall promptly return the excess to the State. Final determination of the State's share of allowable costs shall rest solely with the State. Any reimbursement to the Sponsor by the State not in accordance with this Agreement or unsubstantiated by project records will be considered ineligible for reimbursement and shall be returned promptly to the State.

State Inspectors

At any time and/or prior to final payment of funds for work performed under this Agreement, the State may perform an inspection of the work performed to assure compliance with the terms herein and to review the workmanship of the Sponsor's contractors and/or consultants. No inspector is authorized to change any provisions of this Agreement or any provisions of Agreements between the Sponsor and the Sponsor's contractor and/or consultant.

Indemnification

The State of Arizona, acting by and through the Arizona Department of Transportation, does not assume any liability to third persons nor will the Sponsor be reimbursed for the Sponsor's liability to third persons resulting from the performance of this Agreement or any subcontract hereunder.

The Sponsor shall indemnify and hold harmless the State, any of their departments, agencies, officers and employees from any and all liability, loss or damage the State may suffer as a result of claims, demands, costs or judgments of any character arising out of the performance or non-performance of the Sponsor or its independent contractors in carrying out any provisions of this Agreement. In the event of any action, this indemnification shall include, but not be limited to, court costs, expenses of litigation and reasonable attorney's fees.

Required Provisions Deemed Inserted

Each and every provision of law and clause required by law to be inserted in this Agreement shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, this Agreement shall forthwith be physically amended to make such insertion or correction.

Property of the Sponsor and State

Any materials, including reports, computer programs or files and other deliverables created under this Agreement are the sole property of the Sponsor. The Contractor/Consultant is not entitled to a patent or copyright on these materials and may not transfer the patent or copyright to anyone else. The Sponsor shall give the State unrestricted authority to publish, disclose, distribute and otherwise use at no cost to the State any of the material prepared in connection with this grant. At the completion of the project, the Sponsor shall provide the State with an electronic copy, in a format useable by the State, and one hard copy in a format useable by the State, of final plans, specifications, reports, planning documents, and/or other published materials as produced as a result of this project.

EXHIBIT C

Specific Provisions and Project Schedules

Provisions for Planning

Financial Cost Categories

The Sponsor shall segregate and group project costs in categories as follows:

1) "Planning" (as applicable), including consulting services.

2) "Sponsor Administration" directly associated with this Project (not to exceed 5% of planning consulting services).

3) "Sponsor Force Account" contribution (if applicable).

4) "Other" with prior approval of the State.

Planning Documents

1) The Sponsor shall include in all published material in connection with the planning Project a notice that the material was prepared under a grant provided by the State. The Sponsor shall give the State unrestricted authority to publish, disclose, distribute and otherwise use any of the material prepared in connection with this grant.

2) The Sponsor shall make planning material available for examination by the public and agrees that no material prepared with funds under this Project shall be subject to copyright. That approval of this Project grant or approval of the planning material developed as a part of this grant does not constitute or imply assurance or commitment on the part of the State to approve pending or future application for a State grant or funding.

3) The Sponsor shall appoint a Planning Advisory Committee (PAC) for this Project, which will have the opportunity to furnish information, and review the plan as it is developed. Members of the PAC shall be as deemed appropriate to address the special issues of the Project, except that at least one member shall be a non-aviation citizen of the area, and one shall be a representative of the ADOT Aeronautics Group. An invitation will be given to the affected military installations and the Arizona State Land Department (as appropriate) to participate on the Planning Advisory Committee. The Sponsor shall hold a minimum of three meetings throughout the Project, including a minimum of two meetings between the Sponsor, the consultant, and the PAC. A minimum of one public meeting shall be held during the Project. The Sponsor may not accomplish the final acceptance of the plan until the State has reviewed and commented on the work performed. The comments provided by the State shall not be construed as approval of the planning document.

4) If the planning performed under this Agreement covers an existing or future airport not located on properties owned or leased by the Sponsor, the Sponsor agrees to obtain full control of the property for a period of not less than twenty (20) years. All changes to airport ownership or to any airport lease shall be approved by the State.

5) At the completion of the Project, the Sponsor agrees to provide an electronic copy, in a format usable by the State, of final plans, planning documents, and/or other published materials produced as a result of this planning Project.

Project Schedules for Planning

The Schedule Forms are intended to identify and monitor project scope, costs, and basic milestones that will be encountered during various phases of the Project. The Sponsor shall complete these three schedules showing the project description and total costs, project reimbursements (cash flow) schedule and project milestones.

Schedule One shows the total Project estimated costs associated with each share - State and Federal and Local. Schedule Two shows a projected cash flow for State funds only. The Sponsor is to estimate requests to the State for Project reimbursement. Schedule Three shows anticipated dates of Project milestones. These schedules will be used to keep track of the Project's progress. Be sure to develop realistic schedules.

As the project progresses, and the original reimbursement schedule and or milestone dates change, the Sponsor must submit a revised Schedule to the State for approval.

Schedule One
Project Description and Funding Allocation

Detailed Project Description: [Enter Project Description Here - include FAA AIP # if F/S/L]

_____

_____

_____

Project Cost Category	**Total Estimated Project Cost**	**Estimated Local Share**	**Estimated Federal Share**	**Estimated State Share***
Planning Costs	$	$	$	$
Sponsor Administration**	$	$	$	$
Sponsor Force Account Work***	$	$	$	$
Other	$	$	$	$
Total Project Costs	$	$	$	$

*Total of this column to be used in Schedule Two.
** Sponsor Administration is not eligible for reimbursement above 5% of the planning consulting service costs.
*** All force account work is to be approved by the State prior to the grant agreement being signed.

Schedule Two
Planning Project Reimbursement Schedule

The Sponsor must complete this Project Reimbursement Schedule showing the projected cash flow of State grant funds only for this Project. Projections must include all consultant and contractor services. The reimbursement schedule should be a realistic schedule and will be used to keep track of a project's progress. Reimbursement requests must be submitted regularly by the Sponsor while the grant is active. The cash flow should reflect when a request is submitted to the State, not when invoices are paid by the Sponsor.

Instructions:

1) For "Total State Funds" below, enter the Total Project Costs/Estimated State Share from Schedule One.

2) For each month/year, indicate the projected reimbursement request amount for **State Funds Only** (use whole dollars only, e.g. $540 or $1,300).

3) Continue the process by entering a Zero (Ø) in the month/year for which no reimbursement is anticipated and/or a dollar amount of the reimbursement, until the total State funds are accounted for in the cash flow.

Total State Funds: $_____

Projected Reimbursement Requests / State Cash Flow

Calendar Year	Jan	Feb	Mar	Apr	May	Jun
2020	$	$	$	$	$	$
2021	$	$	$	$	$	$
2022	$	$	$	$	$	$
2023	$	$	$	$	$	$
2024	$	$	$	$	$	$
Calendar Year	Jul	Aug	Sep	Oct	Nov	Dec
2020	$	$	$	$	$	$
2021	$	$	$	$	$	$
2022	$	$	$	$	$	$
2023	$	$	$	$	$	$
2024	$	$	$	$	$	$

Grants expire 4 years from the date approved by the State Transportation Board. The Sponsor shall schedule the work to be completed within the 4 years.

Schedule Three
Planning Project Milestones

Milestone Duration Guidelines

The below duration periods are intended to provide guidelines for you to consider. These are average time periods (in calendar days), but it is understood these periods may vary by Sponsor and Project, and are subject to modification. If an entry on the form is not applicable write N/A.

1) The Consultant Selection Phase for all Projects, regardless of type, is approximately ninety (90) days but should not exceed one hundred eighty (180) days.
2) The Planning Phase is subject to the type and complexity of the Project, however, most planning projects can be accomplished within seven hundred thirty (730) days.
3) State review periods should be fifteen (15) days.

Milestones	Duration # of Days	Start Date Proposed	Completion Date Proposed
Consultant Selection Phase		**mm/dd/year**	**mm/dd/year**
Submit Scope for State Review/Approval*			
Submit Contract for State Review/Approval			
Award Consultant Contract			
Planning Phase			
Sponsor Issue Notice to Proceed			
Submit Aircraft Forecasts to FAA			
First Planning Advisory Committee Meeting			
Public Workshop			
Final Planning Advisory Committee Meeting			
Submit Final Draft to FAA and State			
Final Phase			
Master Plan Approval of Board/Council			
Submit Final Report and Draft ALP			
Submit Approved ALP to State			
Submit Final Reimbursement Request and Sponsors Closeout Letter			

* The solicitation for qualifications and the resulting service agreements must contain a list of projects, including this grant project, per A.R.S. 34, Chapter 6

APPENDIX D – SAMPLE FAA AGREEMENTS

Federal Aviation Administration

Memorandum

Date: July 21, 2021

To: Regional Directors
Regional Compliance Specialists

From: Kevin C. Willis, Director, Office of Airport Compliance and Management Analysis (ACO-1) X78741

Subject: ACTION: Compliance Guidance Letter 2021-03 – FAA Review of Existing and Proposed Residential Through-the-Fence Access Agreements

I. SUMMARY AND DEFINITIONS: This Compliance Guidance Letter (CGL) replaces and supersedes the guidance issued on September 16, 2013 (Compliance Guidance Letter 2013-1 – Federal Aviation Administration (FAA) Review of Existing and Proposed Residential Through-the-Fence Access Agreements. The purpose of this CGL is to provide updated internal guidance to FAA's Airports personnel responsible for reviewing existing and proposed residential through-the-fence access agreements incorporating section 185 of the FAA Reauthorization Act of 2018 (P.L 115-254) signed October 5, 2018.

On February 14, 2012, the FAA Modernization and Reform Act of 2012 was enacted (P.L. 112-95). Section 136 of this law states:

> …a sponsor of a general aviation airport shall not be considered to be in violation of this subtitle, or to be in violation of a grant assurance made under this section or under any other provisions of law as a condition for the receipt of Federal financial assistance for airport development, solely because the sponsor enters into an agreement that grants to a person that owns residential real property adjacent to or near the airport access to the airfield of the airport for the following:
> (A) Aircraft of the person.
> (B) Aircraft authorized by the person.

In addition, this law outlines specific conditions and limitations that must be in the access agreement. Beginning on October 1, 2014, an airport sponsor with an existing residential through-the-fence access arrangement will be required to demonstrate evidence of compliance with this law. Specifically, these airport sponsors are required to update their airport layout

plans to depict points of residential through-the-fence access and provide a copy or copies of their access agreements to demonstrate the sponsor's compliance with the law.
For the purposes of this CGL, the following definitions apply:

- Airport Property – All real property identified on the airport sponsor's most recent Exhibit A, on file with FAA for the airport.

- Access – An access point for taxiing aircraft across the airport boundary; or the right of the owner of a particular off-airport residential property to use an airport access point to taxi an aircraft between the airport and that property.

- Access Agreement – A written agreement between an airport sponsor and a residential property owner or an association representing residential property owners that prescribes the rights, responsibilities, charges, duration, and other terms the airport sponsor determines are necessary to establish and manage the airport sponsor's relationship with the residential property owner.

- Commercial Service Airport – A public airport in a State that the Secretary determines has at least 2,500 passenger boardings each year and is receiving scheduled passenger aircraft service.

- Existing Access – Any residential through-the-fence access arrangement certified to the FAA in response to CGL 2011-1.

- Extend an Access – An airport sponsor's consent to renew or extend an existing right to access the airport from residential property or property zoned for residential use.

- General Aviation Airport – A general aviation airport as defined at 49 U.S.C., § 47102(8) as a public airport in a State that does not have commercial service or has scheduled service with less than 2,500 passenger boardings each year. This definition excludes privately-owned reliever airports.

- New Access – Any residential through-the-fence access arrangement executed on or after February 14, 2012.

- Privately-Owned Reliever Airport – A privately-owned airport the Secretary designates to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community.

- Residential Property – A piece of real property used for single- or multi-family dwellings; duplexes; apartments; primary or secondary residences even when co-located with a hangar; hangars that incorporate living quarters for permanent or long-term use; and time-share hangars with living quarters for variable occupancy of any term.

- Transfer of Access – Sale or transfer of a residential property or property zoned for residential use with existing through-the-fence access; or subdivision, development, or

sale as individual lots of a residential property or property zoned for residential use with existing through-the-fence access.

- Triggering Event – An action that requires the airport sponsor to update its residential through-the-fence access plan or resubmit an access agreement review sheet prior to the expiration of the accepted access plan/agreement. (See section IV.A.3)

  The following actions are triggering events at commercial service airports:

  1. Development of an airport master plan or an update to an existing master plan.

  2. Significant revisions to an airport layout plan, such as changes to a runway's length, width or pavement strength; revised taxiway(s); change in design aircraft; change in runway approach procedures; land acquisition; new or modified aircraft hangar/parking areas; etc.

  3. Requests for Federal participation in land acquisition.

  4. Identification of a safety concern.

  5. Substantial changes to the access agreement.

  The following actions are triggering events at general aviation airports:

  1. A substantial change to the access agreement.

  2. When airport sponsor and residential property owners are able to make any modification to such an agreement.

Furthermore, on October 5, 2018, FAA Reauthorization Act of 2018 (P.L 115-254) was enacted. Section 185 states that P.L. 112-95

> Shall not apply to an agreement described in section 135 of P.L. 112-95 that was made before the enactment of P.L. 112-95 that the Secretary determines does not comply with such terms and conditions but involves property that is subject to deed or lease restrictions that are considered perpetual and that cannot readily be brought into compliance.

Section 185 of P.L. 115-254 also states

> However, if the Secretary determines that the airport sponsor and residential property owners are able to make any modification to such an agreement on or after the date of enactment of this paragraph, the exemption provided by this paragraph shall no longer apply.

II. BACKGROUND: On March 14, 2011, FAA amended Grant Assurance 5, *Preserving Rights and Powers*, to prohibit new residential through-the-fence access arrangements and published an interim policy to address existing residential through-the-fence access.[1] The interim policy required all AIP grant-eligible airport sponsors to certify their status. Those sponsors with existing access agreements were directed to depict their residential through-the-fence access points on their airport layout plan (ALP) and develop access plans to address:

- General Authority for Control of Airport Land and Access;
- Safety of Airport Operations;
- Recovery of Costs of Operating the Airport;
- Protection of Airport Airspace; and
- Compatible Land Uses Around the Airport.

The self-certification process identified 121 existing residential-through-fence agreements. This chart identifies the number of existing residential through-the-fence agreements by type of airport in each region.

FAA Region	Number of Existing Residential Through-the-Fence Access Agreements		
	GA Airports	Commercial Service Airports	Total
Alaska	4	1	5
Central	7	0	7
Eastern	13	0	13
Great Lakes	23	1	24
New England	6	0	6
Northwest Mountain	31	2	33
Southern	12	0	12
Southwest	12	0	12
Western Pacific	9	0	9
Total	117	4	121

On February 14, 2012, the FAA Modernization and Reform Act of 2012 was signed into law (P.L. 112-95). Section 136 of this law permits general aviation airport sponsors, as defined in the statute, to enter into residential through-the-fence agreements with property owners or associations representing property owners. This must be a written agreement that requires the property owner to:

- Pay access charges that the sponsor determines to be comparable to those fees charged to tenants and operators on-airport making similar use of the airport;
- Bear the cost of building and maintaining the infrastructure the airport sponsor determines is necessary to provide access to the airfield from property located adjacent to or near the airport;
- Maintain the property for residential, noncommercial use for the duration of the agreement;
- Prohibit access to the airport from other properties through the property of the property owner; and

[1] See 76 Fed. Reg. 15028 (March 18, 2011).

- Prohibit any aircraft refueling from occurring on the property.

In order to implement this law, FAA issued an amendment to the sponsor assurances on April 10, 2012.[2] Grant Assurance 5(g) now states:

> Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

Grant Assurance 29, *Airport Layout Plan*, has been amended to require all proposed and existing access points used to taxi aircraft across the airport property boundary are to be depicted on the ALP.

On July 30, 2012, FAA published a notice in the Federal Register proposing to rescind the interim policy on residential through-the-fence access to federally-obligated airports for general aviation airports and proposing to finalize the interim policy for the four commercial service airports with existing access.[3] This notice also explained how FAA proposes to implement section 136. The FAA accepted comments on its interpretation of the law and the proposed policy. On July 16, 2013, FAA published a notice in the Federal Register responding to the comments, explaining its interpretation of the law, and finalizing its policy with regard to commercial service airports.[4]

III. INTERPRETATION OF THE LAWS:

A. Enforcement: The FAA interprets the inclusion of specific terms and conditions as Congress' intent for the FAA to enforce section 136 of P.L. 112-95 and its amendment in section 185 in P.L. 115-254 accordingly. In its implementation, the FAA will ask airport sponsors to demonstrate their compliance with the law. Airport sponsors with existing access had to provide evidence of compliance no later than October 1, 2014. Airport sponsors of general aviation airports proposing to establish new access agreements must provide evidence of compliance before establishing an access point. The FAA acknowledges that its approach to sponsors with existing access will be different than the posture taken with sponsors of general aviation airports proposing to establish new agreements. This is because airport sponsors with existing agreements may have ceded important rights and powers through the execution of these existing agreements, and their ability to comply with the terms and conditions of the law may be severely hampered. The FAA intends to address such situations on a case-by-case basis consistent with section 136 of P.L. 112-95 and its amendment in section 185 of P.L. 115-254. General aviation airports proposing to establish new agreements must

[2] See 77 Fed. Reg. 22376 (April 13, 2012).
[3] See 77 Fed. Reg. 44515 (July 30, 2012).
[4] See 78 Fed. Reg. 42419 (July 16, 2013).

comply with the terms and conditions contained in section 136 of P.L. 115-254. The FAA will not waive these terms and conditions for new agreements.

B. Applicability: The definition of "general aviation airport" included in the statute excludes privately-owned reliever airports. The FAA has identified seven privately-owned reliever airports with existing residential through-the-fence access agreements. In implementing section 136 of P.L. 112-95, the FAA will grandfather these airports and treat them in a manner similar to publically-owned general aviation airports determined to be grandfathered by section 185 of P.L. 115-254. However, going forward, FAA will apply the statutory prohibition on privately-owned general aviation airports and disallow these airports from entering into new residential through-the-fence agreements.

C. Commercial Activities: Both section 136 of P.L. 112-95 and its amendment in section 185 of P.L. 115-254 state that residential property owners must maintain their property for residential, non-commercial use for the duration of the agreement. The FAA interprets both laws as a prohibition on commercial aeronautical services offered by residential through-the-fence users or any third parties that might compete with on-airport aeronautical service providers even if those services currently are not provided. In implementing this provision, the FAA will limit the scope of this condition to commercial aeronautical activities only. The FAA will not concern itself with unrelated commercial activities that may be permitted by local regulation.

D. Existing Mixed-Use Properties: The FAA is aware of some existing residential through-the-fence agreements that permit the co-location of homes and aeronautical businesses (mixed-use properties). In these cases, the FAA will require airport sponsors to execute two separate agreements with the homeowner. One agreement must address the duration, rights, and limitations of the homeowner's residential through-the-fence access. The second agreement must be consistent with FAA's current policies on commercial through-the-fence activities and ensure the off-airport business does not result in unjust economic discrimination for on-airport aeronautical service providers. The FAA encourages sponsors with mixed-use properties to adopt long-term plans to relocate the off-airport commercial aeronautical activity onto the airport when feasible and practicable. Going forward, airport sponsors proposing to establish a residential through-the-fence arrangement must meet the statutory terms and conditions, including the prohibition on using the residential property for commercial aeronautical services by the residential through-the-fence users or any third parties that might compete with on-airport aeronautical service providers, even if those services currently are not provided. New agreements proposing to co-locate or mix residential and commercial aeronautical activities will not be consistent with the law.

E. Authorized Access: Section 136 of P.L. 112-95 and its amendment in section 185 of P.L. 115-254 states that residential property owners must prohibit access to the airport from other properties through the property of the property owner. The FAA interprets this as a prohibition on unauthorized access to the airport; this condition does not necessarily prescribe a scenario in which all residential through-the-fence users must

have their own dedicated access point to enter the airport. Compliance with this condition will require access agreements stipulate that residential through-the-fence access agreement holders are prohibited from permitting unauthorized users (any individual not a party to an access agreement with the airport sponsor) to pass through or "piggyback" on their access to enter the airport. The FAA expects airport sponsors to establish policies, restrictions, and/or requirements to be imposed on fly-in guests who taxi from the airport to visit off-airport residents. Going forward, FAA will encourage sponsors of general aviation airports proposing to establish new residential through-the-fence agreements to limit the number of access points in a manner that is consistent with airport planning practices.

F. Fueling: Section 136 of P.L. 112-95 and its amendment in section 185 of P.L. 115-254 states that residential property owners must prohibit any aircraft refueling from occurring on the property. The FAA interprets this as a prohibition on the sale of fuel from residential property. The FAA will not concern itself with self-fueling activities which may be permitted by local regulation.

G. Duration of Agreements: Section 136 of P.L. 112-95 and its amendment in section 185 of P.L. 115-254 does not specify or limit the duration of agreements for residential through-the-fence access. Therefore, the FAA will not require these agreements contain any specific limitation on the duration.

IV. IMPLEMENTATION: For the purposes of this CGL, state block grant program participants must implement the same actions as an FAA Airport District Office (ADO). The tools referenced below are listed in Appendix A; the internal toolkit is located at Q:\National\ACO-100\RTTF Toolkit, and the external toolkit is located at http://www.faa.gov/airports/airport_compliance/residential_through_the_fence/.

A. Existing Access:

1. Notification: ADOs are required to notify airport sponsors with existing access about the statutory requirements contained in P.L. 112-95, the revised guidance for the review of access agreements, and the timeline for compliance with the law. Notification had to occur by August 30, 2013. A sample notification letter is in the internal electronic toolkit. (See Appendix A)

2. Airport Layout Plan: The sponsor assurances require all proposed and existing access points used to taxi aircraft across the airport property boundary to be depicted on the ALP. Sponsors with existing access are required to update their airport layout plan (ALP) to identify the locations on the airport boundary that serve as points of access for off-airport residents. A temporary designation through a pen and ink change[5] is acceptable until an ALP is updated.

3. FAA Review of Access Agreements and Acceptance of Access Plans:

[5] When the FAA receives an ALP depicting existing residential through-the-fence access points, the FAA will accept those access points as "pen and ink changes" to the ALP. No environmental analysis is required.

a. General Aviation Airports and Privately-Owned Reliever Airports: Access agreements submitted by sponsors of general aviation airports and privately-owned reliever airports with existing access will be reviewed by ADOs and Regional Offices. Regional Offices will determine if access agreements submitted by sponsors of general aviation airports and privately-owned reliever airports effectively address the terms and conditions contained in P.L. 112-95. This is discussed further in section V below.

b. Commercial Service Airports: Access plans submitted by sponsors of commercial service airports with existing access will be reviewed by ADOs, Regional Offices, and ACO-100. ACO-100 will accept access plans submitted by sponsors of commercial service airports with existing access which effectively address the terms and conditions contained in P.L. 112-95 and are consistent with the sponsor assurances. This is discussed further in section V below.

The FAA's review of an access agreement and its acceptance of an access plan is valid for a period not to exceed 20 years or until a triggering event occurs.[6]

4. Evidence of Compliance: Airport sponsors with existing residential through-the-fence agreements must provide evidence of compliance no later than October 1, 2014. Although the terms and conditions outlined in Sec. 136 of P.L. 112-95 became effective on February 14, 2012, FAA recognizes that airport sponsors may need time to amend existing residential through-the-fence agreements to reflect these requirements.

   In most cases, FAA defines evidence of compliance as the airport sponsor's submission of documentation as outlined in Appendix C and E. ADOs have the flexibility to apply their knowledge of the airport sponsor's particular situation when recommending to the Regional Office or ACO-100 a finding that the sponsor has demonstrated evidence of compliance. To ensure efficient review and approval, ADOs should encourage airport sponsors with existing residential through-the-fence access agreements to complete and submit their documentation 180 days before it is due.

   Failure to establish evidence of compliance may result in further compliance action.

5. Monitoring: ADOs are responsible for tracking the submission of access agreements and access plans by airport sponsors covered in their jurisdiction. ADOs are strongly encouraged to utilize the sample letters contained in the internal electronic toolkit to remind sponsors of their due date. Regional Offices

[6] This does not prevent sponsors of general aviation airports from contemplating or executing residential through-the-fence agreements for a term which exceeds 20 years. This simply states FAA's desire to review these arrangements every 20 years or when a triggering event occurs.

and ACO-100 will track the FAA's acceptance of access plans. ACO-100 has created a spreadsheet to monitor this activity. The spreadsheet is in the internal electronic toolkit. ADOs or Regional Offices must update the spreadsheet periodically as information is sent to and received from airport sponsors. Regional offices are required to update the spreadsheet and notify ACO-100 each time a residential through-the-fence agreement is accepted. Regional offices are also required to scan and save a copy of all correspondence related to the review in their regional folder in the internal toolkit.[7]

6. Triggering Events: If the ADO becomes aware of a triggering event, the ADO must notify the airport sponsor of the need to resubmit its access agreement or update its access plan. AIP grants issued to sponsors of commercial service airports with existing access for the development of an airport master plan or master plan update should include a special condition requiring the airport sponsor to update its access plan as part of its planning process. AIP grants for projects that will result in a significant change to the airport, such as changes to the runway's length, width, or pavement strength; revised taxiway(s); change in design aircraft; change in runway approach procedures; new or modified aircraft parking area(s), etc. or land acquisition must not be issued before FAA review of an updated access plan.

B. New Access: Prior to establishing a new access point, sponsors of general aviation airports must submit an updated ALP for FAA review and a copy of the (draft) access agreement and access agreement review sheet. The FAA will review the (draft) access agreement as part of the ALP review. However, ADOs may not sign an updated ALP depicting a new residential through-the-fence access point before the FAA has confirmed that the (draft) access agreement will comply with the law.

Before unconditionally approving an ALP depicting a new residential through-the-fence access point, the ADO must comply with the National Environmental Policy Act (NEPA) and any applicable Federal environmental laws, regulations, and/or orders. ADOs should discuss the proposed ALP changes with the sponsor and determine the environmental review required.

In accordance with Grant Assurance 5(g), sponsors of commercial service airports may not enter into new residential through-the-fence agreements. Privately-owned reliever airports are also prohibited from establishing new residential through-the-fence access agreements.

ADOs are responsible for tracking the submission of requests to establish new residential through-the-fence access agreements by airport sponsors covered in their

[7] This includes the access agreement(s), access agreement review sheet(s), access plans if required, the ADO's memo to the Regional Office, and associated memos/correspondence sent by the Regional Office. Regional offices are not required to save ALPs as part of an airport sponsor's residential through-the-fence access package. Each package should be saved and named with the airport's location identifier and the date it was accepted by the Region (e.g., ABC 10-1-13).

jurisdiction. ADOs are strongly encouraged to utilize the sample letters contained in the internal electronic toolkit. Regional Offices and ACO-100 will track the FAA's acceptance of ALPs proposing new residential through-the-fence access arrangements. ACO-100 has created a spreadsheet to monitor this activity. The spreadsheet is in the internal electronic toolkit. ADOs or Regional Offices must update the spreadsheet periodically as information is sent to and received from airport sponsors. Regional offices are required to update the spreadsheet and notify ACO-100 each time an ALP depicting a new residential through-the-fence access arrangement is accepted. Regional offices are also required to scan and save a copy of all correspondence related to the review in their regional folder in the internal toolkit.[8]

C. Oversight: ACO-100 will conduct periodic program audits to ensure FAA staff complies with the review process outlined in this CGL.

V. CONTENT AND FAA REVIEW OF ACCESS AGREEMENTS AND ACCESS PLANS: The laws impose specific terms and conditions on residential through-the-fence access agreements. All access agreements and access plans must effectively address these terms and conditions; the FAA cannot waive or modify these terms. The FAA's planned process for implementing the laws and reviewing access plans in the future is graphically depicted in Appendix B.

A. General Aviation Airports and Privately-Owned Reliever Airports with Existing Access: General aviation airports and privately-owned reliever airports with existing residential through-the-fence access agreements must submit a copy or copies of their access agreements and complete the access agreement review sheet contained in Appendix C. If the airport sponsor has entered into identical agreements with numerous residential through-the-fence users, only one copy of that agreement and one access review sheet must be submitted. If the airport sponsor has entered into different agreements with residential through-the-fence users, then the airport sponsor must submit a copy of each different agreement with a separate access agreement review sheet.

Although general aviation airports and privately-owned reliever airports are not required to develop mitigation measures to ensure consistency with their sponsor assurances, FAA strongly encourages airport sponsors to thoroughly evaluate how these agreements may impact the sponsor's ability to meet its Federal obligations. The FAA is not precluded from investigating a potential grant assurance violation associated with or resulting from an airport sponsor's residential through-the-fence arrangement.

[8] This includes the access agreement(s), access agreement review sheet(s), the ADO's memo to the Regional Office, and associated memos/correspondence sent by the Regional Office. Regional offices are not required to save ALPs as part of an airport sponsor's residential through-the-fence access package. Each package should be saved and named with the airport's location identifier and the date it was accepted by the Region (e.g., ABC 10-1-13).

ADOs will review access agreements submitted by general aviation airports and privately-owned reliever airports with existing access. The ADO will conduct its review of the plan using the checklist contained in Appendix D of this CGL. Complete and acceptable submissions should be reviewed within 60 days of receipt. The ADO may request an airport sponsor provide more detailed information or amend its agreement if the access agreement does not meet the requirements of the law. Once the ADO has completed its review, the ADO will forward the access plan to the Region under a cover memo.

A second review will be conducted by the Regional Office. The Regional Office will conduct its review of the plan using the checklist contained in Appendix D of this CGL. Complete and acceptable submissions should be reviewed within 60 days of receipt. The Regional Office may request an airport sponsor to provide more detailed information or amend its agreement if the access agreement does not meet the requirements of the law. If the Regional Office finds the access agreement does not effectively address the statutory requirements contained in the laws, the Regional Office will forward the access agreement to ACO-100 under a cover memo.

ACO-100 will only review access agreements for general aviation airports with existing access when a Regional Office cannot verify that the agreement complies with the statutory requirements contained in the laws. Should this occur, ACO-100 will work with the airport sponsor to identify alternative methods of compliance on a case-by-case basis and report these issues to interested Congressional Committees. If ACO-100 and the airport sponsor cannot identify any actions to address the statutory requirements contained in the laws, ACO-100 may review the matter for further compliance action. ACO-100 will notify the airport sponsor, the Regional Office, and the ADO of its action.

Access agreements that effectively address the statutory requirements contained in the laws will be accepted by the Regional Office. The Regional Office will notify the airport sponsor, the ADO, and ACO-100 of its action. The internal electronic toolkit contains a sample cover memo and sample letters. (See Appendix A)

B. Commercial Service Airports with Existing Access: Access plans developed by sponsors of commercial service airports with existing residential through-the-fence access agreements must address the statutory requirements contained in the law and ensure consistency with their grant assurances as described in Appendix E. Sponsors of commercial service airports with existing access must demonstrate that the access arrangement does not impede the airport sponsor's current or future compliance with its sponsor assurances. In some cases, the airport sponsor may propose mitigation measures intended to address the potential for non-compliance in the future. The FAA can work with airport sponsors to identify appropriate mitigation measures to address concerns related to current and future consistency with the sponsor assurances. However, FAA is not precluded from investigating a potential grant assurance violation associated with or resulting from an airport sponsor's residential through-the-fence arrangement.

ADOs will review access plans submitted by commercial service airports with existing access. The ADO will conduct its review of the plan using the checklist contained in Appendix F of this CGL. Complete and acceptable access plans should be reviewed within 60 days of receipt. The ADO may request an airport sponsor to provide more detailed information or propose more effective mitigation measures if the access plan does not meet the requirements of the law or is inconsistent with the sponsor's grant assurances. Once the ADO has completed its review, the ADO will forward the access plan to the Region under a cover memo.

A second review will be conducted by the Regional Office. The Regional Office will conduct its review of the plan using the checklist contained in Appendix F of this CGL. Complete and acceptable access plans should be reviewed within 60 days of receipt. The Regional Office may request an airport sponsor to provide more detailed information or propose more effective mitigation measures if the access plan does not meet the requirements of the law or is inconsistent with the sponsor's grant assurances. Once the Regional Office has completed its review, the Regional Office will forward the plan to ACO-100 under a cover memo.

ACO-100 will review access plans forwarded by Regional Offices using the checklist contained in Appendix F of this CGL. ACO-100 may request an airport sponsor to provide more detailed information or propose more effective mitigation measures if the access plan does not meet the requirements of both laws or is inconsistent with the sponsor's grant assurances. Only ACO-100 can accept an access plan submitted by a commercial service airport with existing access. If ACO-100 finds the access plan does not effectively address the statutory requirements contained in the law or is inconsistent with the airport sponsor's assurances, then ACO-100 may review the matter for further compliance action. ACO-100 will notify the airport sponsor, the Regional Office, and the ADO of its action.

C. General Aviation Airports Proposing New Access: General aviation airports proposing to establish new residential through-the-fence access agreements must submit the following:

1. An updated ALP depicting the proposed access point(s);
2. A copy of the (draft) access agreement(s); and
3. Access agreement review sheet(s) contained in Appendix C.

Although these sponsors are not required to develop mitigation measures to ensure consistency with their sponsor assurances, FAA strongly encourages airport sponsors to thoroughly evaluate how these agreements may impact the sponsor's ability to meet its Federal obligations. The FAA is not precluded from investigating a potential grant assurance violation associated with or resulting from an airport sponsor's residential through-the-fence arrangement. Airport sponsors proposing to establish new residential through-the-fence access agreements must have an ALP signed by FAA before establishing the access point(s).

ADOs must review the ALP changes and (draft) access agreements submitted by general aviation airports proposing new access. The ADO must review the ALP per the FAA's guidance for ALP review.[9] The ADO must review the (draft) access agreement using the checklist in Appendix D of this CGL. FAA approval of ALP updates and (draft) access agreements for new residential through-the-fence access must be based on the scope, detail, and quality of each submission. The ADO may request an airport sponsor to provide more detailed information or amend its agreement if the (draft) access agreement does not meet the requirements of the law. ADOs should work with airport sponsors to ensure the proposed residential through-the-fence arrangement is consistent with the sponsor's future airport development as proposed on the ALP. Once the ADO has completed its review, the ADO will forward the proposal to the Region under a cover memo. The cover memo must also discuss the sponsor's future plans for the airport, based on the ADO's review of the proposed ALP.

A second review will be conducted by the Regional Office. Complete and acceptable ALP changes and (draft) access agreements should be reviewed within 90 days of receipt. The Regional Office will conduct its review of the draft access agreement using the checklist contained in Appendix D of this CGL. The Regional Office will verify that the proposed residential through-the-fence arrangement is consistent with the sponsor's future airport development as proposed on the ALP. The Regional Office may request an airport sponsor to provide more detailed information or amend its agreement if the (draft) access agreement does not meet the requirements of the law. The Regional Office may reject the proposal to establish new residential through-the-fence access if:

1. The (draft) access agreement does not effectively address the statutory requirements contained in the law; or
2. The proposed arrangement is not consistent with the sponsor's future plans for the airport.

Airport sponsors may request headquarters review of a proposal rejected by a Regional Office. This request shall be made, in writing, to ACO-100. ACO-100 will coordinate the headquarters review. APP-400, AAS-100, AAS-300, and ACO-100 will participate in this review. ACO-100 will notify the airport sponsor, the Regional Office, and the ADO of headquarters' action.

The Regional Office will accept (draft) access agreements that effectively address the statutory requirements contained in the law and are verified as consistent with the sponsor's future plans for the airport. The Regional Office will notify the ADO and ACO-100 of its action, and the ADO will approve the ALP pursuant to Chapter Two

[9] ALPs submitted in accordance with the FAA's Standard Operating Procedure for FAA Review and Approval of Airport Layout Plans (ALPs), should be reviewed as described in that SOP. If the ALP submitted does not meet current standards or was developed using other guidance, ADOs may use Appendix H to review the residential through-the-fence component of the ALP.

of FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airports Actions*. The approved ALP must contain a special condition stipulating FAA will not pay to relocate, soundproof, or mitigate noise at any homes with residential through-the-fence access. The ADO will notify the airport sponsor of these actions. The internal electronic toolkit contains a sample cover memo and sample letters. (See Appendix A)

D. Commercial Service Airports Proposing to Extend/Renew Existing Access: Sponsors of commercial service airports proposing to extend or renew existing residential through-the-fence access agreements must also address supplemental standards for compliance as described in Appendix I. The supplemental standards require the airport sponsor to fully comply with the law and ensure that the continuation of the residential through-the-fence arrangement will be consistent with their grant obligations. However, FAA is not precluded from investigating a potential grant assurance violation associated with or resulting from an airport sponsor's residential through-the-fence arrangement.

ADOs will review the revised access plans submitted by commercial service airports proposing to extend or renew existing access. The ADO will conduct its review of the plan using the checklist contained in Appendix J of this CGL. Complete and acceptable access plans should be reviewed within 60 days of receipt. The ADO may request an airport sponsor provide more detailed information or propose more effective mitigation measures if the revised access plan does not meet the requirements of the law, is inconsistent with the sponsor's grant assurances, or does not meet the supplemental standards. Once the ADO has completed its review, the ADO will forward the access plan to the Region under a cover memo.

A second review will be conducted by the Regional Office. The Regional Office will conduct its review of the plan using the checklist contained in Appendix J of this CGL. Complete and acceptable access plans should be reviewed within 60 days of receipt. The Regional Office may request an airport sponsor provide more detailed information or propose more effective mitigation measures if the access plan does not meet the requirements of the law, is inconsistent with the sponsor's grant assurances, or does not meet the supplemental standards. Once the Regional Office has completed its review, the Regional Office will forward the plan to ACO-100 under a cover memo.

ACO-100 will review the revised access plans forwarded by Regional Offices using the checklist in Appendix J of this CGL. ACO-100 may request an airport sponsor to provide more detailed information or propose more effective mitigation measures if the access plan does not meet the requirements of the law, is inconsistent with the sponsor's grant assurances, or does not meet the supplemental standards. Only ACO-100 can accept a revised access plan submitted by a commercial service airport proposing to extend or renew existing access. If ACO-100 finds the access plan does not effectively address the statutory requirements of law, is inconsistent with the airport sponsor's assurances, or does not meet the supplemental standards, then ACO-

100 may review the matter for further compliance action. ACO-100 will notify the airport sponsor, the Regional Office, and the ADO of its action.

VI. EXTENSIONS/RENEWALS/TRANSFERS OF ACCESS AGREEMENTS: Airport sponsors secure their rights and powers by negotiating agreements that preserve their flexibility to plan for the airport's future. Therefore, FAA encourages airport sponsors negotiating residential through-the-fence agreements to consider short terms that can be renewed or extended at the sponsor's option.

The extension or renewal of a residential through-the-fence access agreement at a general aviation airport or a privately-owned reliever airport is not considered a triggering event that requires submission of a revised access agreement to the FAA if the length of extension or renewal does not exceed the term of the FAA's acceptance of the original (or any subsequently updated) access agreements. For example, suppose the FAA accepted a sponsor's access agreement on October 1, 2014, and the sponsor uses two-year access agreement terms with its residential users. In that case, the FAA would not need to review that sponsor's access agreement again in 2016 simply because the sponsor renewed agreements (previously reviewed by FAA) with its residential users for another two years. However, should the airport sponsor make other changes to the terms of the agreement, then the FAA will need to review an updated access agreement to determine that the modified agreement meets the requirements of both laws.

In situations when the transfer of residential through-the-fence access from one residential property owner to another requires the airport sponsor's concurrence, FAA may treat the access as an extension or renewal. This occurs when a homeowner who is a party to a residential through-the-fence access agreement sells their property to another individual who must then execute a residential through-the-fence access agreement with the airport sponsor to utilize an existing access point. If the airport sponsor limits the term of the access agreement with the new property owner to a timeframe covered by its FAA-accepted access agreement or plan and the agreement is substantially similar to those agreements already reviewed by FAA, the airport sponsor does not need to submit a revised access agreement or plan. However, if the airport sponsor incorporates terms which are substantially different than those previously reviewed by FAA or permits a term of access which exceeds its accepted access agreement or plan, then the sponsor is required to submit a draft access agreement and review sheet before executing the agreement with the new residential user to meet the requirements of both laws.

In situations when residential through-the-fence access can be legally transferred from one residential property owner to another without the airport sponsor's review and/or consent, the FAA will treat the access as existing. For example, this may occur when a homeowner sells a property with deeded, perpetual access. Airport sponsors are not required to notify the FAA of these transactions unless the residential through-the-fence access agreement is substantially modified.

Commercial service airports that seek to extend or renew their existing agreements are required to meet supplemental standards outlined in the FAA's *Policy on Existing Through-the-Fence Access to Commercial Service Airports from A Residential Property*. The supplemental standards are also outlined in Appendix I.

VII. AIRPORT SPONSOR ELIGIBILITY FOR AIP GRANTS:

A. Airport Sponsors Currently in Compliance:

1. AIP Grants Issued in Accordance with 49 U.S.C., § 47114

All airport sponsors that are currently in compliance with their grant assurances remain eligible for AIP grants issued in accordance with 49 U.S.C., § 47114. Beginning on October 1, 2014, airport sponsors with existing residential through-the-fence access agreements must demonstrate evidence of compliance.

Note that AIP investments must be related to general public demand at the airport. Costs associated with on-airport infrastructure and facilities used exclusively or primarily for the accommodation of residential through-the-fence users are considered private-use and are ineligible for AIP funding.

2. AIP Grants Issued in Accordance with 49 U.S.C., § 47115

ADOs and Regional Offices may decline to invest AIP grants issued in accordance with 49 U.S.C., §47115 at airports with existing residential through-the-fence access before verifying the sponsor's compliance with the law.

B. Airport Sponsors Currently in Noncompliance: Noncompliant airport sponsors are ineligible to receive AIP grants. Airport sponsors that are currently in noncompliance due to grant assurance violations associated with residential through-the-fence agreements must submit a corrective action plan that includes a residential through-the-fence access agreement and/or access plan.

VIII. AIP ELIGIBILITY OF COSTS ASSOCIATED WITH ACCESS PLANS

A. Immediate ALP Update Depicting Existing Access: Grant Assurance 29 requires airport sponsors with or proposing residential through-the-fence agreements to depict access points on the ALP. A temporary designation through a pen and ink change[10] is acceptable until an ALP is updated as part of a master plan. Costs associated with this ALP revision are not AIP eligible; FAA Order 5100.38C, *Airport Improvement Program Handbook*, at paragraph 300.c. states that AIP grants may be used to fund ALPs when they are part of master planning or indirect costs associated with other airport development funded with an AIP grant.

B. Existing Residential Through-the-Fence Access Agreements and Plans: Costs associated with existing residential through-the-fence access agreements and plans are not AIP-eligible.

C. ALP Updates and Access Agreements Proposing New Access: ALP updates proposing new access are allowable costs for AIP funding only if included as an incidental cost associated with an AIP-funded master plan and ALP update.

[10] When the FAA receives an ALP depicting existing residential through-the-fence access points, the FAA will accept those access points as "pen and ink changes" to the ALP. No environmental analysis is required.

However, costs associated with the development of a draft access agreement are not AIP-eligible.

Issues related to AIP eligibility must be coordinated with APP-520.

IX. SPECIAL CONDITION IN FUTURE GRANTS AT COMMERCIAL SERVICE AIRPORTS WITH EXISTING ACCESS: Once FAA accepts a commercial service airport sponsor's residential through-the-fence access plan, all future AIP grants will be conditioned upon the inclusion of the following special grant condition:

> Update Accepted Residential Through-the-Fence Access Plan: The Sponsor agrees that it will enforce/implement the Residential Through-the-Fence Access Plan, accepted by the FAA on [INSERT DATE]. It is further agreed that any changes required to the Residential Through-the-Fence Access Plan that result from this grant project will be incorporated into the Residential Through-the-Fence Access Plan, which the Sponsor will update and submit to FAA before grant closeout.

X. DETERMINATION OF COMPLIANCE STATUS: The current FAA Order 5190.6, *FAA Airport Compliance Manual*, at paragraph 2.9, states that the ADO must make a determination regarding the airport sponsor's compliance with its Federal obligations before issuing an AIP grant.

A. Compliance Determinations at Airports with Existing Access: The laws preclude FAA from making a finding of noncompliance at a general aviation airport solely because an airport sponsor enters into an agreement granting residential through-the-fence access. However, the laws do not exempt these sponsors from complying with their grant assurance obligations. The law establishes specific terms and conditions that must be reflected in the residential through-the-fence arrangement. In Fiscal Years 2013 and 2014, the FAA will refrain from initiating investigations at airports with existing access. This will provide airport sponsors with existing access ample time to develop an access agreement or plan that effectively addresses the terms and conditions included in the law. However, this does not preclude the FAA from initiating a compliance action if there is reason to believe a compliance issue exists beyond merely granting a residential through-the-fence arrangement.

   Beginning on October 1, 2014, an airport sponsor's failure to submit evidence of compliance with the law may be reviewed for further compliance action.

B. Compliance Determinations at General Aviation Airports with Access Agreements: The FAA's acceptance of an airport's (draft) access agreement represents an agency finding that the airport sponsor has met the requirements of the laws. However, the FAA is not precluded from altering or revoking its acceptance of an airport sponsor's access agreement if either of the following occurs:

   1. The airport sponsor fails to enforce its access agreement; or

2. A Director's Determination or Final Agency Decision, resulting from an investigation under 14 CFR, part 16, requires the airport sponsor to take corrective action(s).

The FAA's acceptance of an airport sponsor's access agreement does not preclude FAA from initiating a compliance action if there is reason to believe a compliance issue exists beyond merely granting a residential through-the-fence arrangement.

C. Compliance Determinations at Privately-Owned Reliever Airports and Commercial Service Airports: While the law is explicit in its permission for public-owned general aviation airports to enter into residential through-the-fence agreements, it is silent concerning commercial service airports and privately-owned reliever airports. The FAA has interpreted this silence to continue the prohibition on the establishment of new residential through-the-fence agreements at these airports. Grant Assurance 5(g) reflects this prohibition. Violations of Grant Assurance 5(g) may result in enforcement action under 14 CFR, part 16.

D. Compliance Determinations at General Aviation Airports which Establish New Access Points without FAA Approval of an Updated ALP: Before establishing an access point for residential through-the-fence access, general aviation airports are required to depict the proposed access point(s) on the ALP and requested to submit a (draft) access agreement(s) which complies with the law for FAA review. Establishing a new access point not depicted on an FAA-approved ALP may result in a violation of Grant Assurance 29, *Airport Layout Plan*. General aviation airports that establish new access points before FAA approves of a revised ALP may be reviewed for further compliance action. General aviation airports that execute new access agreements prior to demonstrating evidence of compliance do so at their own risk. FAA employees may not approve an ALP establishing a new access point if the (draft) access agreement does not comply with the terms and conditions of the law.

XI. ACTION IF AIRPORT IS UNABLE TO COMPLY: The FAA recognizes that some airports with existing residential through-the-fence access agreements may not be able to comply with the terms and conditions contained in the law and/or their sponsor assurances due to the type of arrangement previously negotiated, which is in addition to those airports meeting the requirements in section 185 of P.L. 115-254. In these cases, the FAA will determine if the airport still substantially serves its intended function in the National Plan of Integrated Airport Systems. These determinations will be made by Airport's Planning and Environmental Division (APP-400) in accordance with FAA Order 5090.3C, *Field Formulation of the National Plan of Integrated Airport Systems (NPIAS)*, or subsequent pertinent guidance that may be developed by the FAA.

A. Airports Continuing to Serve a Function in the NPIAS: In cases where the airport still substantially serves its intended function in the NPIAS, FAA will consider a reduced level of future AIP investments at the airport. ACO-100, APP-400, and APP-520 will analyze these airports on a case-by-case basis and provide more specific guidance to the ADO.

B. Airports No Longer Serving a Function in the NPIAS: Airports which no longer serve their intended function in the NPIAS will be removed from the NPIAS. ACO-100, APP-400, and APP-520 will analyze these airports on a case-by-case basis and provide more specific guidance to the ADO.

References and Resources

P.L. 112-95, Sec. 136
P.L. 115-254, Sec. 185
Airport Improvement Program (AIP): Policy Regarding Access to Airports From Residential Property (76 Fed. Reg. 44515; July 30, 2012)
FAA Grant Assurances
FAA Order 5190.6, *FAA Airport Compliance Manual*
FAA Order 5100.38C, *Airport Improvement Program Handbook*
FAA Order 5300.1F, *Modifications to Agency Airport Design, Construction, and Equipment Standards*
FAA Order 5090.3C, *Field Formulation of the National Plan of Integrated Airport Systems (NPIAS)*
M. Daniel Carey and Cliff Davenport v. Afton-Lincoln County Municipal Airport Joint Powers Board, FAA Docket No. 16-06-06, (January 19, 2007) (Director's Determination)
FAA's Residential Through-the-Fence Electronic Toolkit (internal) at Q:\National\ACO-100\RTTF Toolkit
FAA's Residential Through-the-Fence Electronic Toolkit (external) at:
http://www.faa.gov/airports/airport_compliance/residential_through_the_fence/

APPENDIX A

The internal electronic toolkit is available at Q:\National\ACO-100\RTTF Toolkit. The following documents are available:

Internal Toolkit

Tool	Target Date for Use of Tool	Available for use by
Monitoring Spreadsheet (to track status of interim policy implementation)	On-going	ADO Region ACO-100
Sample Notification Letter Advising Sponsors with Existing RTTF of Change in Law	By August 30, 2013	ADO Region
Sample Letter to Sponsor Acknowledging Receipt of RTTF documentation	Upon receipt of RTTF documentation	ADO Region ACO-100
Sample Request for More Information from Sponsors	During review of RTTF documentation	ADO Region ACO-100
Sample Letter to Sponsors Identifying Noncompliance with the Law and/or Need for More Mitigation Measures	During review of RTTF documentation	ADO Region ACO-100
Sample Letter to Sponsor Stating RTTF Documentation Has Been Forwarded to Region/ACO-100	Upon completion of ADO/Regional review	ADO Region
Cover Memo to Transmit RTTF Documentation to Regional Office/ACO-100	Upon completion of ADO/Regional review	ADO Region
Sample Letter to Sponsors with Existing Access that Have Not Submitted an Access Agreement(s) and/or Access Plan	No later than June 2, 2014	ADO Region
Sample Letter Accepting a GA Sponsor's (Draft) Access Agreement	Ongoing	Region
Sample Letter to Sponsors Who Express Interest in Establishing New RTTF	On-going	ADO Region ACO-100

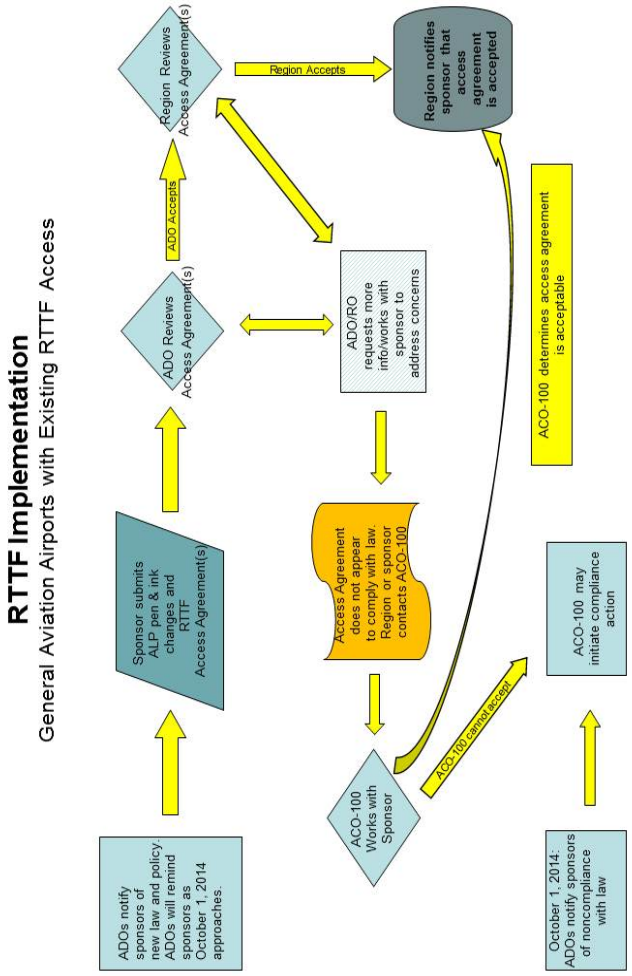
Special Condition for AIP Grants	Grants issued to sponsors with accepted RTTF access plans in FY15 and beyond	ADO Region ACO-100
Special Condition for ALP Approval	Upon approval of an ALP depicting new RTTF at a general aviation airport	ADO/Region
Sample Easements	On-going	ADO Region ACO-100

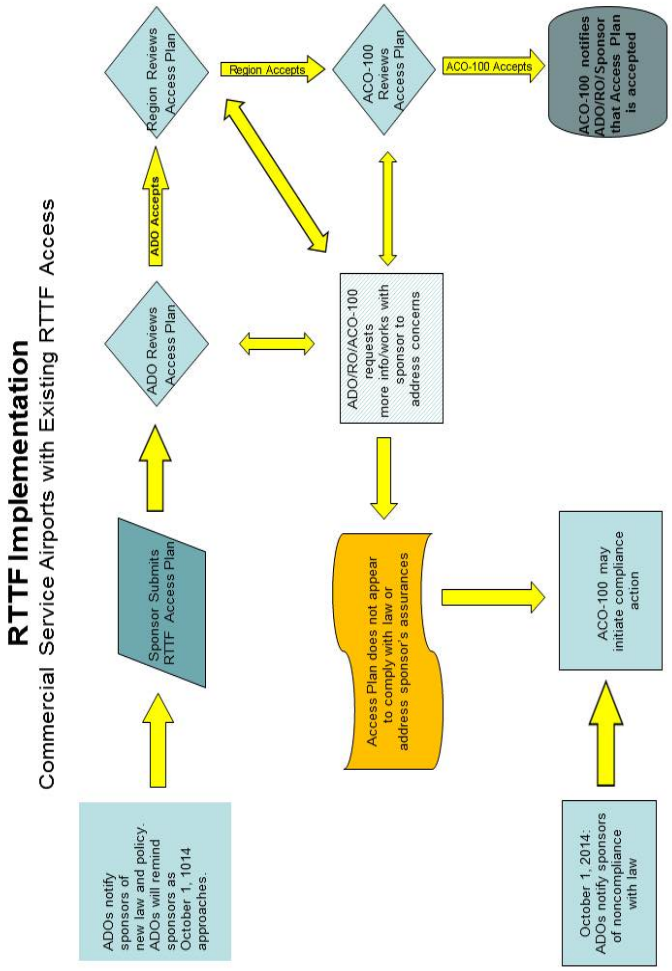
The external electronic toolkit is available at: http://www.faa.gov/airports/airport_compliance/residential_through_the_fence/. The following documents are available:

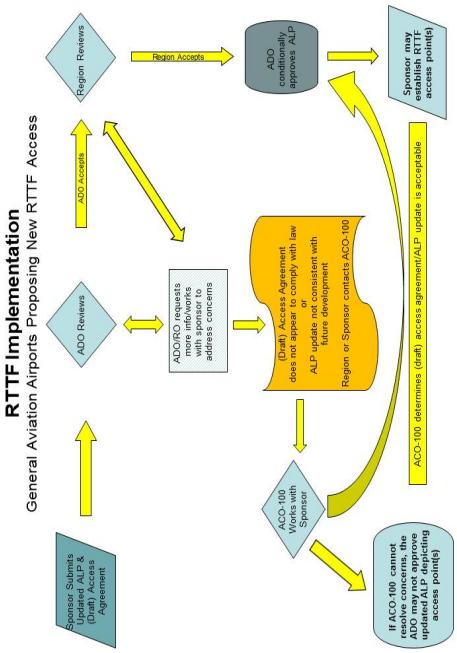
External Toolkit

Tool	Target Date for Use of Tool
FAA's Interpretation of the FMRA's Section 136	Ongoing
FAA Recommendations for Airport Sponsors Considering Residential Through-the-Fence Access Agreements	Ongoing
Access Agreement Review Sheet for Airport Sponsors with Existing Access (Appendix C)	Prior to October 1, 2014
Access Agreement Review Sheet for Airport Sponsors Proposing New Access (Appendix G)	Ongoing
Sample Access Agreement and Review Sheet	Ongoing
Final Policy on Existing Through-the-Fence Access to Commercial Service Airports from a Residential Property	Ongoing
Sample Access Plan	Ongoing
Sample Sponsor Certification	Ongoing
Supplemental Standards for Commercial Service Airports Proposing to Extend/Renew Existing Access (Appendix I)	Ongoing
Special Condition for AIP Grants	Grants issued to sponsors with accepted RTTF access plans in FY15 and beyond
Special Condition for ALP Approval	Ongoing
Sample RTTF Summary Table	Ongoing
Examples of Rate-Setting Methodologies	Ongoing

APPENDIX B


RTTF Implementation
General Aviation Airports with Existing RTTF Access
ADOs notify sponsors of new law and policy. ADOs will remind sponsors as October 1, 2014 approaches.
Sponsor submits ALP pen & ink changes and RTTF Access Agreement(s)
ADO Reviews Access Agreement(s)
ADO Accepts
Region Reviews Access Agreement(s)
Region Accepts
Region notifies sponsor that access agreement is accepted
ADO/RO requests more info/works with sponsor to address concerns
Access Agreement does not appear to comply with law. Region or sponsor contacts ACO-100
ACO-100 Works with Sponsor
ACO-100 determines access agreement is acceptable
ACO-100 cannot accept
ACO-100 may initiate compliance action
October 1, 2014: ADOs notify sponsors of noncompliance with law


RTTF Implementation
Commercial Service Airports with Existing RTTF Access
ADOs notify sponsors of new law and policy. ADOs will remind sponsors as October 1, 1014 approaches.
Sponsor Submits RTTF Access Plan
ADO Reviews Access Plan
ADO Accepts
Region Reviews Access Plan
Region Accepts
ADO/RO/ACO-100 requests more info/works with sponsor to address concerns
Access Plan does not appear to comply with law or address sponsor's assurances
ACO-100 Reviews Access Plan
ACO-100 Accepts
ACO-100 notifies ADO/RO/Sponsor that Access Plan is accepted
October 1, 2014: ADOs notify sponsors of noncompliance with law
ACO-100 may initiate compliance action


RTTF Implementation
General Aviation Airports Proposing New RTTF Access
Sponsor Submits Updated ALP & (Draft) Access Agreement
ADO Reviews
ADO/RO requests more info/works with sponsor to address concerns
(Draft) Access Agreement does not appear to comply with law or ALP update not consistent with future development
Region or Sponsor contacts ACO-100
ADO Accepts
Region Reviews
Region Accepts
ADO conditionally approves ALP
Sponsor may execute RTTF access point(s)
ACO-100 Works with Sponsor
ACO-100 determines (draft) access agreement/ALP update is acceptable
If ACO-100 cannot resolve concerns the ADO may not approve updated ALP depicting access point(s)

APPENDIX C

Access Agreement Review Sheet

Documentation:
Provide copies of the written access agreement(s) between the sponsor and residential through-the-fence user(s) or association(s) representing residential through-the-fence users. Sponsors who have entered into a residential through-the-fence agreement with an association may need to provide additional documentation such as covenants, conditions, and restrictions (CC&Rs). If the same agreement is used with multiple residents, the sponsor is only required to submit one copy of the agreement with an explanation noting the number of residences to which it pertains. Identify the document (if more than one type of document is submitted), page number, or paragraph which verifies the following:

1. The residential through-the-fence user pays airport access charges that are comparable to tenants and operators on-airport making similar use of the airport.
   Document: _____
   Page number or paragraph: _____

   If this page or paragraph does not define tenants and operators on-airport making similar use of the airport, explain how the airport sponsor defines this term and the fee/rate structure charged to these tenants.

   _____
   _____
   _____

   If this page or paragraph does not include an escalation clause, explain if the fees/rates charged to the residential through-the-fence user increase on the same schedule as the fees/rates for tenants and operators on-airport making similar use of the airport.

   _____
   _____
   _____

   If the two fee schedules do not transparently appear to be equivalent, explain the rationale used by the airport sponsor to make such determination.

   _____
   _____
   _____

2. Residential through-the-fence users bear the cost of building and maintaining the infrastructure the airport sponsor determines is necessary to provide aircraft located on the adjacent property to or near the airport access to the airfield of the airport.
   Document: _____
   Page number or paragraph: _____

3. The residential through-the-fence user is prohibited from using their property, or permitting any third party from using their property, for any commercial aeronautical purpose for the duration of the access agreement.
   Document: _____
   Page number or paragraph: _____

4. Access to the airport from unauthorized users, through the property of the residential through-the-fence access agreement holder, is prohibited.
   Document: _____
   Page number or paragraph: _____

5. The residential through-the-fence user is prohibited from selling aviation fuel on their property.
   Document: _____
   Page number or paragraph: _____

This agreement has been executed with (insert number) residential through-the-fence (user(s) or homeowners association(s)).

APPENDIX D

FAA Review and Action on Access Agreements submitted by General Aviation Airports and Privately-Owned Reliever Airports with Existing Access

Terms and Conditions Required by Statute:

- ☐ Is the sponsor comparing residential through-the-fence users to similarly-situated on airport tenants and users? Comparing residential through-the-fence users to itinerant users is not consistent with the law.

- ☐ Is the access fee paid by residential through-the-fence users higher than or equivalent to the fees paid by similarly situated on-airport users and tenants?

- ☐ Does the airport sponsor require residential through-the-fence users to bear the cost of building and maintaining the infrastructure the airport sponsor determines necessary to provide access to the airfield?

- ☐ Does the airport sponsor prohibit commercial aeronautical uses, whether provided by the property owner or a third party, on the property of the residential through-the-fence users? Commercial aeronautical activities on property owned by individuals with residential through-the-fence access are prohibited by law. Therefore, homeowners may not co-locate any type of commercial aeronautical activity on their residential property or permit a third party to offer any commercial aeronautical services.

- ☐ Does the airport sponsor prohibit access to the airport from unauthorized users through the property of the residential through-the-fence users?

- ☐ Does the airport sponsor prohibit the sale of aviation fuels on the property of the residential through-the-fence users?

- ☐ Review the access agreement(s). Are the terms consistent with answers provided to the questions above? If the terms of the agreement expressly permit any activities prohibited by the law, the airport sponsor lacks an effective mechanism to address its legal requirements. Does the access agreement clearly outline the terms and duration of access?

Action:
ADOs should summarize their answers to the questions above in the forwarding memorandum. If the airport sponsor fails to address any statutorily required terms and conditions the ADO should not forward the plan to the Region.

Regional Offices should compare the ADO's assessment of the access agreement(s) to the information provided on the review sheet. If the ADO's assessment lacks sufficient detail or does not accurately describe the access agreement(s), the Regional Office should not accept the access agreement(s). If the access agreement(s) effectively addresses the legal requirements associated with residential through-the-fence access, the Regional Office may accept the access

agreement(s). If the access agreement(s) presents inherent conflicts with the laws, the Regional Office must contact ACO-100.

APPENDIX E

Access Plans: Required Documentation and Narrative from Commercial Service Airport Sponsors with Existing Access

A. Access Agreement Review Sheet

Provide copies of the written access agreement(s) between the sponsor and residential through-the-fence user(s) or association(s) representing residential through-the-fence users. Sponsors who have entered into a residential through-the-fence agreement with an association may need to provide additional documentation such as covenants, conditions, and restrictions (CC&Rs). If the same agreement is used with multiple residents, the sponsor is only required to submit one copy of the agreement with an explanation noting the number of residences to which it pertains. Identify the page number or paragraph which documents the following:

1. The residential through-the-fence user pays airport access charges that are comparable to tenants and operators on-airport making similar use of the airport.
Document: _____
Page number or paragraph: _____

If this page or paragraph does not define tenants and operators on-airport making similar use of the airport, explain how the airport sponsor defines this term and the fee/rate structure charged to these tenants.

_____
_____
_____

If this page or paragraph does not include an escalation clause, explain if the fees/rates charged to the residential through-the-fence user increase on the same schedule as the fees/rates for tenants and operators on-airport making similar use of the airport.

_____
_____
_____

If the two fee schedules do not transparently appear to be equivalent, explain the rationale used by the airport sponsor to make such determination.

_____
_____
_____

2. Residential through-the-fence users bear the cost of building and maintaining the infrastructure the airport sponsor determines is necessary to provide aircraft located on the adjacent property to or near the airport access to the airfield of the airport.
Document: _____
Page number or paragraph: _____

3. The residential through-the-fence user is prohibited from using their property, or permitting any third party from using their property, for any commercial aeronautical purpose for the duration of the access agreement.
Document: _____
Page number or paragraph: _____

4. Access to the airport from unauthorized users, through the property of the residential through-the-fence access agreement holder, is prohibited.
Document: _____
Page number or paragraph: _____

5. The residential through-the-fence user is prohibited from selling aviation fuel on their property.
Document: _____
Page number or paragraph: _____

This agreement has been executed with (insert number) residential through-the-fence (user(s) or homeowners association(s)).

B. Airport and Access Drawing, Summary Table, & Narrative
Required Documentation:

1. Provide an airport and access drawing (scale 1"=200' to 1"=600') which clearly depicts all existing and proposed:
    - Airport and residential through-the-fence parcels;
    - Runways (length, width, orientation, thresholds, hold lines);
    - Runway Safety Areas, Object Free Areas, Precision Obstacle Free Areas (if applicable), and Runway Protection Zones;
    - Taxiways;
    - Navigational aids;
    - On-airport structures (hangars, buildings, fuel facilities, ramps, roads, etc.)
    - Off-airport structures adjacent to the airport's property boundary, include all residential through-the-fence lots (identify lots by number or letter);
    - Fences and gates;
    - All existing and proposed residential through-the-fence access points; and
    - Municipal boundaries.

2. Provide a summary table which describes the following as associated with each residential through-the-fence parcel:
    - Access point utilized as referenced on the airport and access drawing sheet;

- Development name (if the residence is part of a community, platted subdivision, etc.)
- Lot;
- Owner;
- Number of residential improvements proposed;
- Number of residential improvements constructed;
- Type of residential improvement (single family home, apartment, undeveloped parcel, etc.);
- Enabling instrument (access agreement, lease, deed, easement, etc.);
- Date of execution or recording;
- Term of agreement;
- Number of access points granted;
- Number of access points currently utilized;
- Zoning designation and the entity controlling zoning for that parcel;
- The access fee collected annually;
- Number of aircraft associated with each residence; and
- If there are any restrictions in the enabling instrument restricting the sale, assignment, or subleasing of the property.

3. Provide a description of the airport that identifies the number of aircraft based on the airport and the estimated or actual number of annual local and itinerant operations.

4. Provide a description of the hangar/tie-down space available on the airport property as identified on the airport and access drawing. This description must include the total number of hangars/tie-downs on airport property, the number of hangars/tie-downs currently rented, and the number available for rent. If all on-airport hangars/tie-downs are currently rented, the description must include what steps the sponsor is taking or plans to take to develop additional hangar/tie-down space.

C. General Authority for Control of Airport Land and Access: Grant Assurance 5, Preserving Rights and Powers, prohibits airport sponsors from taking any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in the grant agreement without the written approval of the Secretary. This includes maintaining sufficient control of access points and operations across airport boundaries to maintain safe operations, and to make changes in airport land use to meet future needs.

Required Documentation:

1. Provide a detailed description of the nature, structure, duration, and terms associated with each residential through-the-fence access arrangement.
2. Provide copies of access agreements and/or governing documents (i.e., agreements, easements, deeds, Covenants, Conditions, and Restrictions or CC&Rs, etc).
3. Provide copies of any avigation easements the sponsor might hold.
4. Describe how the access agreements/governing documents are subordinate to the airport sponsor's grant assurances. If they are not, explain how the sponsor can invoke changes to the agreement to ensure ongoing compliance with its grant obligations.

5. Describe the airport sponsor's legal ability to impact zoning changes around the airport. Describe the current zoning for and around the airport. Describe any steps the airport sponsor has taken to limit new residential zoning around the airport.
6. Describe any access controls that residential through-the-fence users must utilize when taxiing onto airport property. If there is no fence, describe the signage or markings used to delineate airport property from private property.
7. Describe the process utilized to educate your local community and residential through-the-fence users about your Federal obligations as an airport sponsor.
8. If the airport sponsor has established any short-term or long-term plans for eliminating residential through-the-fence access, describe those plans.

D. Safety of Airport Operations: Grant Assurance 19, Operation and Maintenance, requires the airport sponsor to ensure the airport and all facilities which are necessary to serve the aeronautical users of the airport are operated at all times in a safe and serviceable condition.

Required Documentation:

1. Provide a copy of any specific rules/requirements that apply only to residential through-the-fence users (if established). Explain how residential through-the-fence users are subject to the same rules and regulations as on-airport users.
2. Describe any process the sponsor has developed to sanction residential through-the-fence users who violate the airport's rules and regulations.
3. Describe any restrictions or special requirements imposed on fly-in guests who taxi from the airport's property to visit off-airport residents. Describe how those restrictions or special requirements are communicated to the residential through-the-fence users and their guests. Describe how the sponsor monitors this practice.
4. Describe the mechanism used to separate aircraft and vehicular traffic.
5. Describe the mechanism used to prevent residential/domestic activities (i.e., dog walking, sports, etc.) from occurring on airport property, and particularly within the air operations area associated with runway safety areas, runway protection zones, runway object free zones, taxiway safety areas, obstacle free areas, object free areas and primary surface properties. Describe how this is monitored and enforced.
6. Describe the mechanism used to prevent through-the-fence residents from establishing potential wildlife attractants (i.e., water detention ponds, gardens, composting lots, etc.) near the airport. If wildlife attractants have been established, describe how the airport requires through-the-fence residents to mitigate.
7. Describe how aircraft access each runway threshold from the RTTF access points. Identify any residential through-the-fence taxi routes that preclude the sponsor from meeting any FAA design standards. Describe any plans the airport sponsor may have to meet the FAA design standards in the future. If proposing a modification to standards, a Safety Assessment Screening must be completed and the requirements contained in FAA Order 5300.1F, *Modifications to Agency Airport Design, Construction, and Equipment Standards* must be addressed.
8. At Part 139 commercial service airports, ensure this operation is in accordance with 14 CFR Part 139 and the Airports Certification Manual.

E. Rates and Charges: Grant Assurance 24, Fee and Rental Structure, requires an airport sponsor to maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport. Residential through-the-fence users are not protected by Grant Assurance 22, Economic Nondiscrimination, and the FAA will not entertain allegations of unreasonableness for residential through-the-fence access.

Required Documentation:
1. A description of how the airport sponsor collects access fees from residential through-the-fence users and their guests who taxi from the airport to an off-airport residence.

F. Protection of Airport Airspace: Grant Assurance 20, Hazard Removal and Mitigation, requires airport sponsors to take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

Two of FAA's prime objectives are to promote air safety and the efficient use of the navigable airspace. Title 14 CFR, part 77, "Objects affecting the navigable airspace," establishes standards and notification requirements for objects affecting navigable airspace. Notification of an off-airport project under FAA Form 7460-1, Notice of Proposed Construction or Alteration, prompts FAA to conduct an aeronautical study based on information provided by its proponent to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. The FAA's authority to promote the safe and efficient use of the navigable airspace, whether concerning existing or proposed structures, is predominantly derived from title 49 U.S.C., § 44718; § 44718 does not provide specific authority for FAA to regulate or control how land (i.e., real property) may be used in regard to structures that may penetrate navigable airspace. In addition, the Federal Government lacks the authority to regulate local land use. Therefore, it is critical that airport sponsors identify tools they can use to protect the airport's airspace both on and off the airport.

Required Documentation:
1. A description of the mechanism used by the airport sponsor to ensure that homes, hangars, other structures, and off-airport taxiways do not penetrate the airport's protected surfaces. If available, provide verification that airspace studies were conducted for residential through-the-fence homes, hangars, other structures, and off-airport taxiways.
2. A description of the mechanism used to require residential through-the-fence users to complete FAA Form 7460-1, Notice of Proposed Construction or Alteration, when they propose to erect and/or alter structures on their property.
3. A description of the mechanism used to require residents to trim/remove trees and/or any other potential obstructions.
4. A description of any legal powers and/or authorities the airport sponsor might have to prohibit new construction determined to be a hazard to air navigation.

G. Compatible Land Uses Around the Airport: Grant Assurance 21, Compatible Land Use, requires airport sponsors to take appropriate action, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations.

Required Documentation:

1. A description of the mechanism used by the airport sponsor to monitor proposed and actual zoning changes/designations in land use surrounding the airport. Describe how the sponsor plans to avoid residential encroachment or other noncompatible land uses.
2. A description of any actions the airport sponsor may be taking to educate the local zoning/land use authority about the sponsor's obligations as a federally-obligated airport.
3. A description of any plans the airport sponsor may have with regard to the acquisition of avigation easements.
4. Does the residential use conflict with any current or planned aviation uses at the airport? If it does, describe the airport sponsor's plans to address this conflict.
5. A description of any local or state requirements or limitations with regard to the proximity of homes and aeronautical activities. Do any off-airport structures conflict with the current or future establishment of fueling activities, aircraft maintenance, flight training, aircraft charter, banner towing, crop dusting, parachuting, aircraft storage, etc.?
6. A description of the airport sponsor's mechanism for receiving and tracking noise complaints. Please also note how this program is promoted to the local community.

H. Sponsor Certification: Airport sponsors may certify their access plan with the sample certification form, by passing a local resolution, or submitting a signed affidavit. A sample certification form is in the external electronic toolkit at:

http://www.faa.gov/airports/airport_compliance/residential_through_the_fence/

APPENDIX F

FAA Review and Action on Access Plans submitted by Commercial Service Airports with Existing Access

A. Terms and Conditions Required by Statute

Review:

- ☐ Is the sponsor comparing residential through-the-fence users to similarly-situated on airport tenants and users? Comparing residential through-the-fence users to itinerant users is not consistent with the law.
- ☐ Is the access fee paid by residential through-the-fence users higher than or equivalent to the fees paid by similarly situated on-airport users and tenants?
- ☐ Does the sponsor require residential through-the-fence users to bear the cost of building and maintaining the infrastructure the airport sponsor determines necessary to provide access to the airfield?
- ☐ Does the sponsor prohibit commercial aeronautical uses on the property, whether provided by the property owner or a third party, of the residential through-the-fence users? Commercial aeronautical activities on property owned by individuals with residential through-the-fence access are prohibited by law. Therefore, homeowners may not co-locate any type of commercial aeronautical activity on their residential property, or permit a third party to offer any commercial aeronautical services.
- ☐ Does the sponsor prohibit access to the airport from unauthorized users through the property of the residential through-the-fence users?
- ☐ Does the sponsor prohibit the sale of aviation fuels on the property of the residential through-the-fence users?
- ☐ Review the access agreement(s). Are the terms consistent with the answers provided to the questions above? If the terms of the agreement expressly permit any activities prohibited by the law, the sponsor lacks an effective mechanism to address its legal requirements. Does the access agreement clearly outline the terms and duration of access?

Action:

ADOs should summarize their answers to the questions above in section II of the forwarding memorandum. If the sponsor fails to address any statutorily required terms and conditions the ADO should not forward the plan to the Region.

Regional Offices should compare the ADO's assessment of the access plan to the access agreement(s) itself. If the ADO's assessment lacks sufficient detail or does not accurately describe the access agreement(s), the Regional Office should not accept the access plan. If the access agreement(s) presents inherent conflicts with the law, the Regional Office must note this in its forwarding memo to ACO-100.

ACO-100 should summarize their answers to the questions above in the letter of findings to the sponsor.

B. Airport and Access Drawing, Summary Table, & Narrative

Review:
- ☐ Has the ADO/RO compared the airport and access drawing submitted with the access plan to the ALP and Exhibit A on file with the FAA?
- ☐ Do any access points conflict with planned future development at the airport?
- ☐ Is land available for future aeronautical development on the airport?
- ☐ Has the sponsor identified any nearby land for future acquisition?

Action:
ADOs should summarize their answers to the questions above in section III of the forwarding memorandum.

Regional Offices should compare the ADO's assessment of the access plan to the plan itself. If the ADO's assessment lacks sufficient detail or does not accurately describe the access plan, the Regional Office should supplement the answers provided.

ACO-100 should summarize their answers to the questions above in the letter of findings to the sponsor.

C. General Authority for Control of Airport Land and Access: An airport sponsor is required to demonstrate it has sufficient control of access points and operations across airport boundaries to maintain safe operations, and to make changes in airport land use to meet future needs.

Review:
- ☐ Verify all required documentation is included.
- ☐ Are the access agreements(s)/governing documents subordinate to the sponsor's grant assurances? If not, how does the sponsor ensure compliance with Grant Assurance 5?
- ☐ Do the access agreement(s)/governing documents contain any noise restrictions not approved by the FAA in a part 150 or part 161 study? Does the airport's 5010 data sheet or the Airport Facilities Directory note any mandatory noise restrictions?
- ☐ Does the sponsor have good title to all of the property depicted on its property map?
- ☐ Should the sponsor conduct a title search to verify ownership of any particular parcels?
- ☐ Is the sponsor taking steps to ensure that undeveloped land around the airport is zoned for airport-compatible purposes?
- ☐ Is the sponsor taking steps to identify and protect its real property?
- ☐ Is the sponsor taking steps to educate its local community and residential through-the-fence users about the grant assurances?
- ☐ Does the sponsor propose any short-term or long-term plans for eliminating the residential through-the-fence access?

Action:
ADOs should review all materials submitted by the sponsor and complete the review checklist. Any areas of concern should be noted to ACO-100 in section IV of the forwarding memorandum.

Regional Offices should compare the ADO's assessment of the access plan to the plan itself. If the ADO's assessment lacks sufficient detail or does not accurately describe the access plan, the Regional Office should supplement the answers provided.

ACO-100 should review all materials submitted by the sponsor to determine if the sponsor has sufficient authority for control of airport land and access. ACO-100 should note any practices or stipulations that could impact the sponsor's ability to meet its grant assurance obligations.

D. Safety of Airport Operations: An airport sponsor is required to demonstrate that its residential through-the-fence arrangement does not impede its safe operation of the airport.

Review:

- ☐ Is the sponsor taking steps to ensure that residential through-the-fence users and their guests are subject to requirements at least as stringent as those that on-airport tenants must follow?
- ☐ Are private-use taxiways noted on the airport's 5010 data sheet or the Airport Facilities Directory?
- ☐ Is the sponsor taking sufficient steps to ensure aircraft and vehicular traffic are separated?
- ☐ Is the sponsor taking sufficient steps to prevent residential/domestic activities from occurring on the airport's property?
- ☐ Is the sponsor taking sufficient steps to prevent and/or mitigate wildlife attractants on residential through-the-fence properties?
- ☐ Do any residential through-the-fence access points require airport users to utilize higher-risk procedures or maneuvers such as back-taxiing, direct access to the runway, entering the runway from a nonperpendicular taxiway, or crossing public roads to enter the airport? Verify that any modifications to standards have been processed in accordance with the requirements contained in FAA Order 5300.1F, *Modifications to Agency Airport Design, Construction, and Equipment Standards*.
- ☐ Is the sponsor proposing to consolidate or relocate any access points? Will this impact any projects proposed in the sponsor's capital improvement plan?

Action:

ADOs should review all materials submitted by the sponsor and complete the review checklist. Any areas of concern should be noted to ACO-100 in section V of the forwarding memorandum.

Regional Offices should compare the ADO's assessment of the access plan to the plan itself. If the ADO's assessment lacks sufficient detail or does not accurately describe the access plan, the Regional Office should supplement the answers provided.

ACO-100 should review all materials submitted by the sponsor, and in consultation with AAS, determine if the sponsor has sufficiently addressed the safety of airport operations. ACO-100 should note any practices that impact safety at the airport and make any necessary recommendations.

E. Rates and Charges: An airport sponsor is required to demonstrate it can and does collect fees from residential through-the-fence users comparable to those charged to airport tenants. The

rates and charges paid by residential through-the-fence users cannot result in unjust discrimination against on-airport tenants. The schedule of rates and charges should promote the goal of financial self-sustainability for the airport.

Review:

- ☐ Does the sponsor have an effective program in place to collect the access fees and verify that all residential through-the-fence users are paying their access fee?
- ☐ Does the schedule of rates and charges impede the sponsor's ability to pursue the goal of self-sustainability for the airport?

Action:

ADOs should review all materials submitted by the sponsor and complete the review checklist. Any areas of concern should be noted to ACO-100 under section VI of the forwarding memorandum.

Regional Offices should compare the ADO's assessment of the access plan to the plan itself. If the ADO's assessment lacks sufficient detail or does not accurately describe the access plan, the Regional Office should supplement the answers provided.

ACO-100 should review all materials submitted by the sponsor to determine if the schedule of rates and charges is consistent with Grant Assurances 22 and 24. ACO-100 should summarize their answers to the questions above in the letter of findings to the airport sponsor.

F. Protection of Airport Airspace: Grant Assurance 20, Hazard Removal and Mitigation, requires airport sponsors to take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

Two of FAA's prime objectives are to promote air safety and the efficient use of the navigable airspace. Title 14 CFR part 77, "Objects affecting the navigable airspace," establishes standards and notification requirements for objects affecting navigable airspace. Notification of an off-airport project under FAA Form 7460-1, Notice of Proposed Construction or Alteration, prompts FAA to conduct an aeronautical study based on information provided by its proponent to identify potential aeronautical hazards in advance to prevent or minimize the adverse impacts to the safe and efficient use of navigable airspace. The FAA's authority to promote the safe and efficient use of the navigable airspace, whether concerning existing or proposed structures, is predominantly derived from title 49 U.S.C., § 44718; § 44718 does not provide specific authority for FAA to regulate or control how land (i.e., real property) may be used in regard to structures that may penetrate navigable airspace. In addition, the Federal Government lacks the authority to regulate local land use. Therefore, it is critical that airport sponsors identify tools they can use to protect the airport's airspace both on and off the airport.

Review:

- ☐ Does the sponsor currently have an effective mechanism to protect the airport's airspace?

- ☐ Was construction of the existing homes, hangars, other structures, and off-airport taxiways properly studied by the FAA?

Action:
ADOs should summarize their answers to the questions above in section VII of the forwarding memorandum. Any areas of concern should be noted to ACO-100.

Regional Offices should compare the ADO's assessment of the access plan to the plan itself. If the ADO's assessment lacks sufficient detail or does not accurately describe the access plan, the Regional Office should supplement the answers provided.

ACO-100 should summarize their answers to the questions above in the letter of findings to the sponsor.

G. Compatible Land Uses Around the Airport: An airport sponsor is required to demonstrate the potential for noncompatible land use adjacent to the airport boundary is minimized consistent with Grant Assurance 21, Compatible Land Use.

Review:
- ☐ Does the sponsor currently have an effective mechanism to monitor zoning/land use changes around the airport?
- ☐ Does the sponsor appear to understand its obligations with regard to Grant Assurance 21, Compatible Land Use?
- ☐ Does the sponsor propose any short-term or long-term plans for acquiring avigation easements that should be incorporated into the sponsor's capital improvement plan?
- ☐ If the residential use conflicts with current or proposed aeronautical development, does the sponsor have a satisfactory plan to address this conflict?
- ☐ Do any state or local requirements or limitations associated with the proximity of homes and aeronautical activities impede current or proposed future aeronautical development?
- ☐ Does the sponsor currently have an effective mechanism for receiving, tracking, and responding to noise complaints? Is this program promoted to the community?

Action:
ADOs should summarize their answers to the questions above in section VIII of the forwarding memorandum. Any areas of concern should be noted to ACO-100.

Regional Offices should compare the ADO's assessment of the access plan to the plan itself. If the ADO's assessment lacks sufficient detail or does not accurately describe the access plan, the Regional Office should supplement the answers provided.

ACO-100 should summarize their answers to the questions above in the letter of findings to the sponsor.

H. Sponsor Certification: Airport sponsors may certify their access plan with the sample certification form, by passing a local resolution, or submitting a signed affidavit. A sample certification form is in the external electronic toolkit at: http://www.faa.gov/airports/airport_compliance/residential_through_the_fence/.

Review:

- ☐ Verify the sponsor has certified its access plan by including the sample certification form, by passing a local resolution, or by submitting a signed affidavit.

APPENDIX G

Required Documentation from General Aviation Airport Sponsors Proposing New Access

Required Documentation:
1. Updated ALP
2. (Draft) Access Agreement(s)
3. Access Agreement Review Sheet(s)

Revised ALP

Prior to submitting an ALP proposing a new access point(s), the sponsor must review their ALP to ensure:

- The proposed access point(s) do not conflict with current or planned development.
- The location of the proposed home(s) does not conflict with current or planned development.
- Adequate areas to accommodate forecasted growth are identified.

Access Agreement Review Sheet

Documentation:
Provide copies of the (draft) written access agreement(s) between the sponsor and residential through-the-fence user(s) or association(s) representing residential through-the-fence users. If the same agreement will be used with multiple residents, the sponsor is only required to submit one copy of the (draft) agreement with an explanation noting the number of residences to which it will apply. Identify the page number or paragraph which documents the following:

1. The residential through-the-fence user pays airport access charges that are comparable to tenants and operators on-airport making similar use of the airport.
Page number or paragraph: _____

If this page or paragraph does not define tenants and operators on-airport making similar use of the airport, explain how the airport sponsor defines this term and the fee/rate structure charged to these tenants.

_____
_____
_____

If this page or paragraph does not include an escalation clause, explain if the fees/rates charged to the residential through-the-fence user increase on the same schedule as the fees/rates for tenants and operators on-airport making similar use of the airport.

_____
_____
_____

If the two fee schedules do not transparently appear to be equivalent, explain the rationale used by the airport sponsor to make such determination.

_____
_____
_____

2. Residential through-the-fence users bear the cost of building and maintaining the infrastructure the airport sponsor determines is necessary to provide aircraft located on the adjacent property to or near the airport access to the airfield of the airport.
Page number or paragraph: _____

3. The residential through-the-fence user is prohibited from using their property, or permitting any third party, for any commercial aeronautical purpose for the duration of the access agreement.
Page number or paragraph: _____

4. Access to the airport from other properties through the property of the residential through-the-fence access agreement holder is prohibited.
Page number or paragraph: _____

5. The agreement prohibits the sale of aviation fuels from the property of the residential through-the-fence user.
Page number or paragraph: _____

This (draft agreement or agreement) (will be or has been) executed with (insert number) residential through-the-fence (user(s) or homeowners association(s)).

FAA Recommendations for Draft Residential Through-the-Fence Agreements:

- A subordination clause which acknowledges the residential through-the-fence agreement is subordinate to the airport sponsor's current and future Federal obligations.
- A legal indemnification clause requiring residential through-the-fence user(s) to acknowledge that their property will be affected by aircraft noise and emissions and waiving any right to bring an action against the airport sponsor for operations at the airport.
- A hazard removal clause to ensure the sponsor maintains a mechanism for mitigating (removal, tree trimming, marking, lighting, etc.) potential airport hazards and for stopping construction or establishment of airport hazards. Residential through-the-fence user(s) must be directed to complete and file FAA Form 7460-1, Notice of Proposed Construction or Alteration, and obtain a "no hazard" determination prior to erecting and/or altering any structures on their property.
- A defined term which does not exceed a reasonable airport planning horizon.
- A mechanism which allows the airport sponsor to impose and enforce the safety requirements and airport operating rules on residential through-the-fence user(s).
- Access fees/charges that are comparable to the rates charged to tenants and operators on the airport making similar use of the airport and a mechanism to increase the access fee/charges

on the same schedule used for tenants and operators on the airport making similar use of the airport.

- A provision which prohibits any commercial aeronautical uses, whether offered by the property owner or a third party.
- Avigation easements that permit unobstructed flight through the airspace necessary for takeoff and landing at the airport.

APPENDIX H

FAA Review and Action on Access Agreements and ALPs Proposing New Access at General Aviation Airports

Updated ALP

***This checklist should only be used if the ALP submitted was not prepared in accordance with the FAA's Standard Operating Procedure for FAA Review and Approval of Airport Layout and includes a residential through-the-fence access point(s).

- ☐ Are the taxiway/taxilane dimensions for the residential access taxiway(s) depicted from the airport boundary to existing infrastructure?
- ☐ Are all safety dimensions depicted?
- ☐ Are all obstruction surfaces (14 CFR part 77, threshold siting, all design surfaces contained in Advisory Circular 150-5300-13, *Airport Design*, etc.) clear?
- ☐ Do all the proposed structures associated with the residential use (houses, hangars, garages, etc.) include elevations? Do any of these structures penetrate any clear zone?
- ☐ Do any proposed structures associated with the residential component (houses, hangars, garages, etc.) impact existing or planned navigational aids or other equipment?
- ☐ Does the sponsor maintain control of all Runway Protection Areas and Runway Protection Zones? If not, how does the sponsor ensure no residential activities are permitted in these areas?
- ☐ If the sponsor has an air traffic control tower, does the tower have a clear line of sight to view the access point?
- ☐ If the sponsor does not utilize physical access controls, such as fencing and gates, can the sponsor adequately separate residential activities from the airport property?

Access Agreement Review Sheet

Use Appendix D to review the (draft) access agreement(s).

Special Conditions

The approved ALP must contain a special condition stipulating the FAA will not pay to relocate, soundproof, or mitigate noise at any homes with residential through-the-fence access.

APPENDIX I

Revised Access Plans: Required Documentation and Supplemental Standards for Commercial Service Airport Sponsors Proposing to Extend/Renew Existing Access

Required Documentation:

1. Copies of draft access agreement(s) and/or governing documents (i.e. agreements; easements; deeds; Covenants, Conditions, and Restrictions, etc.) developed to meet the standard of compliance for existing residential through-the-fence agreements and reflecting the supplemental standards listed below.
2. A current (developed or revised within the last five years) airport master plan.
3. An updated ALP. All access points should be depicted and proposed for FAA's unconditional approval.
4. A revised residential through-the-fence access plan developed to meet the standard of compliance for existing residential through-the-fence access at commercial airports (see Appendix E) and reflecting the supplemental standards listed below.

The following supplemental standards must be addressed in the revised access plan:

- The new access agreement fully complies with the terms and conditions contained in section 136 of P.L. 112-95.
- The term of access does not exceed 20 years.
- Explains how one of the following applies:
    a) The airport's current master plan (developed or revised within the last five years) identifies adequate areas for growth that are unaffected by the current residential through-the-fence access; or
    b) The airport sponsor has the legal right to terminate the through-the-fence access agreement to accommodate airport development; or
    c) The airport sponsor can require its residential through-the-fence user(s) to relocate their access points, at the expense of the user(s), to improve safety on or off the airport to accommodate growth on the airport.
- The revised access agreement allows the airport sponsor to impose and enforce safety requirements and airport operating rules on residential through-the-fence user(s) identical to those imposed on airport tenants and transient users.
- The airport sponsor obtains avigation easements from residential through-the-fence user(s) for overflight, including unobstructed flight through the airspace necessary for takeoff and landing at the airport.
- The access plan explains how residential through-the-fence user(s) acknowledge that their property will be affected by aircraft noise and emissions and that aircraft noise and emissions may change over time.
- The revised access agreement contains a provision in which residential through-the-fence user(s) acknowledge that their property will be affected by aircraft noise and emissions and waives any right to bring an action against the airport sponsor for operations at the airport.
- The revised access agreement requires residential through-the-fence user(s) to complete and file FAA Form 7460-1, Notice of Proposed Construction or Alteration, and obtain a "no hazard" determination prior to erecting and/or altering any structures on their property.

- The revised access agreement contains a provision addressing the sponsor's mechanism for mitigating (removal, tree trimming, marking, lighting, etc.) existing airport hazards, and for stopping construction or establishment of future airport hazards, including wildlife attractants.
- The airport sponsor or local zoning authority has adopted measures to limit future use and ownership of the residential through-the-fence properties to aviation-related uses (in this case, hangar homes) or development the FAA generally considers as compatible with airport operations (if available under state law).
- Any restrictions or provisions adopted by a homeowners association(s) or other entity representing the residential through-the-fence users are enforceable by the airport sponsor and may not be cancelled without cause.
- The access agreement is subordinate to the airport sponsor's current and all future federal obligations.
- The access plan describes the airport sponsor's ongoing program to counsel residential through-the-fence users about their rights and responsibilities under the access agreement as well as the airport sponsor's federal obligations.

APPENDIX J

FAA Review and Action on Revised Access Plans submitted by Commercial Service Airport Sponsors Proposing to Extend/Renew Existing Access

Review:

- ☐ Verify all required documentation is included.
- ☐ Verify completion of the environmental review needed to unconditionally approve any access points on the updated ALP.
- ☐ Review the revised residential through-the-fence access plan as required under Appendix F applying the following supplement standards:
  - ☐ Does the plan fully comply with the terms and conditions required by statute?
  - ☐ Is the access agreement subordinate to the sponsor's obligations?
  - ☐ Does the revised access plan address the sponsor's ability to accommodate future growth?
  - ☐ Has the sponsor or local zoning authority adopted measures to limit future use and ownership of the residential through-the-fence property to aviation-related uses such as hangar homes or development the FAA generally considers as compatible with airport operations (if available under state law)?
  - ☐ Does the sponsor have an ongoing program to counsel residential through-the-fence users about their rights and responsibilities under the access agreement as well as the sponsor's Federal obligations?
  - ☐ Are any restrictions or provisions adopted by a homeowners association(s) or other entity representing the residential through-the-fence users enforceable by the sponsor? Can they be cancelled without cause?
- ☐ Review the revised residential through-the fence access agreement.
  - ☐ Is the term of access limited to 20 years or less?
  - ☐ Does the revised access agreement require residential through-the-fence user(s) to acknowledge that their property will be affected by aircraft noise and emissions and that aircraft noise and emissions may change over time?
  - ☐ Does the revised access agreement contain a provision in which residential through-the-fence user(s) acknowledge that their property will be affected by aircraft noise and emissions and waive any right to bring an action against the sponsor for operations at the airport?
  - ☐ Does the revised access agreement allow the sponsor to impose and enforce safety requirements and operating rules on residential through-the-fence user(s) identical to those imposed on airport tenants and transient users?
  - ☐ Does the revised access agreement contain a provision addressing the sponsor's mechanism for mitigating (removal, tree trimming, marking, lighting, etc.) existing airport hazards, and for stopping construction or establishment of future airport hazards, including wildlife attractants?
  - ☐ Does the revised access agreement require residential through-the-fence user(s) to complete and file FAA Form 7460-1, Notice of Proposed Construction or Alteration, and obtain a "no hazard" determination prior to erecting and/or altering any structures on their property?

☐ Has the sponsor obtained avigation easements from residential through-the-fence user(s) for overflight, including unobstructed flight through the airspace necessary for takeoff and landing at the airport?

Action:
ADOs/Regional Offices should review all materials submitted by the sponsor and complete the review checklists. Any areas of concern should be noted to ACO-100 in the corresponding section of the forwarding memorandum. Specific concerns related to previous FAA recommendations or the sponsor's ability to address the supplemental standards should be noted.

ACO-100 should review all materials submitted by the sponsor to determine if the airport sponsor meets all standards of compliance for existing residential through-the-fence access agreements, as well as the supplemental standards. ACO-100 may recommend changes to the revised access agreement and/or plan needed to address these standards. Final FAA acceptance authorizes the sponsor to extend or renew the existing access agreement.

Special Conditions
The approved ALP must contain a special condition stipulating the FAA will not pay to relocate, soundproof, or mitigate noise at any homes with residential through-the-fence access.

SAMPLE AGREEMENT FOR AIRPORT ACCESS

This Airport Access Agreement ("Agreement") is made and entered into this ___th day of _____, 20XX, by and between the COUNTY/CITY/AIRPORT AUTHORITY OF XXXXXXXX, a MUNICIPAL CORPORATION/POLITICAL SUBDIVISION of the State of XXXXXXX (referred to as "XXXXX" or as "Owner"), and _____, a(n) individual/association/limited liability company/corporation organized and existing under the laws of the State of XXXXXX (referred to as "_____" or as "User"), located at *insert address;*

This Agreement incorporates and is based upon the following representations and understandings:

WHEREAS, COUNTY/CITY/AIRPORT AUTHORITY is the owner (Owner) and operator of XXXXXXXX Airport, located in the County of XXXXXXXX, State of XXXXXX (the "Airport"), with the power to grant rights and privileges with respect to the Airport, pursuant to the provisions of the (State Code or Law), among other federal, state, and local laws, rules and regulations; and

WHEREAS, the User (User) owns real property (Adjacent to or in the XXXX Airpark) (referred to as Lot XX), immediately adjacent to the physical property of the Airport; and

WHEREAS, the User seeks the right to taxi aircraft from (Lot XX or XXXX Airpark) "through-the-fence" to the Airport property and to its runway and taxiway system; and

WHEREAS, the parties desire to enter into this Agreement to comply with, the

FAA Modernization and Reform Act of 2012 (P.L. 112-95) section 136 that permits general aviation airport sponsors to enter into residential through-the-fence agreements with property owners or associations representing property owners provided these agreements comply with certain conditions set forth in this Agreement;

Now, therefore and in consideration of the mutual terms and conditions hereinafter set forth, the Owner and User hereby agree to the following:

ARTICLE I – PROPERTY WITH RIGHT OF ACCESS

Legal description of property with right of access:

LOT XX, XXXXXXXX COUNTY, SECTION X, T42N, R 17, T.9N., R.13W., CITY OF XXXX, XXXXXXXX COUNTY, XX, BEGINNING AT THE NORTHWEST CORNER OF SAID LOT XX, THENCE N25°24'35"E 500.5 FEET ALONG THE NORTHERLY LINEOF SAID LOT XX; THENCE S25°10'42"E 500.5 FEET ALONG THE EASTERLY LINE OF SAID LOT XX; THENCE S25°10'42"W 500.5 FEET FROM SAID NORTHERLY LINE OF LOT XX; THENCE N25°42'42"W 500.5 FEET ALONG THE WESTERLY LINE OF SAID LOT XX TO POINT OF BEGINNING.

ARTICLE II – TERM OF AGREEMENT

The term of this Access Agreement shall commence on Month XX, 20XX, and shall continue for a 5-year period, through and including Month XX, 20XX. Upon the consent of the Owner, this Access Agreement may be renewed, subject to any changes deemed necessary by the Owner, for three (3) additional terms.

ARTICLE III – PROHIBITIONS

1. No Commercial Aeronautical Uses: User shall not permit any person or entity to engage in any temporary or permanent commercial aeronautical activity on the land owned by the User described herein above. This prohibition includes the following but is not limited to any activity or service for compensation, exchange, trading, buying, selling, or hire or any other revenue producing activity whether or not a profit is derived, which makes possible, or is required for the operation of an aircraft, or contributes to or is required for, the safety of such operations.
2. Sale of Aviation Fuels Prohibited: User shall not permit any person or entity to sell aviation fuels on land owned by User described herein above.
3. Prohibitions and Restrictions on Access: The User is specifically prohibited from granting or selling any access/egress to the Airport through the aforementioned property to any other parties. This restriction also includes the User taking reasonable precautions acceptable to the Owner to prevent the accidental access to the Airport by vehicles, pedestrians, pets, etc.

ARTICLE IV – ACCESS FEE TO OWNER

User agrees to pay the access fees to the Owner:

1. Owner's Basis for Access Fee: The access fee is based on the rates and charges of other on-airport tenants and operators making similar use of the airport. For the purposes of this agreement the access fee is based upon the tie-down rental fee which is $XXX.XX per (month/year). This rental fee is subject to

annual adjustments.

2. User's Access Fee: Based upon the forgoing rate outlined above the access fee to be paid is $XXX.XX (monthly/annually) on (__th of the month, or the first day of Month __ of the year). This fee will be increased in accordance with the on-airport fees outlined above throughout the term of this agreement.
3. Payment: All payments required to be made by User under this Agreement shall be made payable to the "Owner," and shall be delivered or mailed to the address below:

XXXX Airport
100 Airport Road
City, State, 12345

4. Penalty for Late Payment: Owner will assess a late penalty of $XX for every day User fails to remit payment after the payment date described above.

ARTICLE V - CONSTRUCTION AND MAINTENANCE OF PRIVATE-USE INFRASTRUCTURE

It is understood and agreed that the User shall construct all private-use infrastructure, required and acceptable to the Owner, at User's sole cost and expense. All required private-use infrastructure such as, taxiway, fence, sign(s), taxiway lights, gates, security controls, etc., shall be listed and depicted in Exhibit 1 to this agreement. Accordingly, User covenants and agrees as follows:

1. Construction and Maintenance: To construct the private-use infrastructure on the

User's or Owner's property as may be required. All construction on Owner's property must be approved by Owner 90 days prior to the commencement of construction. During the term of this Agreement, User shall also be solely responsible for all maintenance (snow removal, utility costs, turf or pavement maintenance, pavement markings, etc.) of said private-use infrastructure and shall at all times maintain it in good repair.

2. Construction Costs: Notwithstanding anything herein contained to the contrary, User expressly agrees to pay any and all costs associated with private-use infrastructure (taxiway, fence, signs, taxiway lights, electrical power, gates, security controls, etc.) required by the Owner. These costs are in addition to the access fees described above.

ARTICLE VI - AGREEMENT SUBORDINATE TO GRANT ASSURANCES, AGREEMENTS WITH UNITED STATES, AND FEDERAL OBLIGATIONS.

This Agreement shall be nonexclusive and shall at all times be subordinate to the provisions of any existing or future agreements between the Owner and the United States Government, or to any order issued by the United States Government, or to any grant assurances of the Airport, or to any of the Airport's or the Owner's Federal obligations.

The User agrees to abide by the Airport Rules and Regulations in effect as of the date of this agreement and as may be amended from time to time.

ARTICLE VII - TERMINATION OF AGREEMENT

1. Events of Default by User: Owner, at its option, may declare this Agreement terminated in its entirety upon the happening of any one or more of the following events and may exercise all rights related to the termination of this Agreement:

   a. The User access fees outlined in Article IV, or any part thereof, are unpaid for 30 days, or

   b. If User shall file a voluntary petition in bankruptcy, or make a general assignment for the benefit of creditors, or if the User is adjudicated as bankrupt, or User otherwise assigns or attempts to assign its interest herein without the required prior written consent of Owner; or

   c. If User shall use or permit the use of the User's premises at any time for any purpose which is not authorized by this Agreement, or if User shall use or permit the use thereof in violation of any law, rule or regulation, (including the airport rules and regulations), to which the User has agreed to conform.

   d. User fails to meet any term or condition of this agreement.

2. Notice of Default: If the User shall default in the performance of any other term of this Agreement (except the payment of fees), then the Owner shall send to the User a written notice of default, specifying the nature of the default, and User shall, within thirty (30) days after the date of the notice, cure and remedy the default, and this Agreement shall then continue as before.

   a. If the User shall fail to timely cure and remedy such default, the Owner shall

have the right to declare, by written notice to the User, that the User is in default, and to use all remedies available to the Owner under this Agreement. However, if by its nature, such default cannot be cured within such thirty (30) day period, such termination shall not be effective if the defaulting party commences to correct such default within said thirty (30) days and corrects the same as promptly as reasonably practicable.

b. Termination of this Agreement for non-payment of fees to Owner by User shall not become effective until after the expiration of fifteen (15) days written notice thereof by Owner to User and User fails to pay all moneys owed, fully within said period.

ARTICLE VIII – NOTICES

1. Notice/Addresses: All notices, requests, or other communications, required or permitted to be given hereunder shall be in writing and delivered by via certified or registered mail, addressed to the appropriate party at its address as follows:

XXXX Airport
100 Airport Road
City, State, 12345
222-555-5555

RTTF User/Association
300 Airpark Rd.
City, State, 12345
222-555-5550

IN WITNESS WHEREOF, the parties have executed these presents by their duly authorized officers.

EXECUTED IN THE PRESENCE OF:	**OWNER:** ***insert name***
_____	_____
	Commissioners
_____	_____
	USER: ***insert name***
_____	_____
_____	_____

APPENDIX C

Access Agreement Review Sheet

Documentation:

Provide copies of the written access agreement(s) between the sponsor and residential through-the-fence user(s) or association(s) representing residential through-the-fence users. Sponsors who have entered into a residential through-the-fence agreement with an association may need to provide additional documentation such as covenants, conditions, and restrictions (CC&Rs). If the same agreement is used with multiple residents, the sponsor is only required to submit one copy of the agreement with an explanation noting the number of residences to which it pertains. Identify the document (if more than one type of document is submitted), page number, or paragraph which verifies the following:

1. The residential through-the-fence user pays airport access charges that are comparable to tenants and operators on-airport making similar use of the airport.

   Document: Access Agreement

   Page number or paragraph: Article IV

   If this page or paragraph does not define tenants and operators on-airport making similar use of the airport, explain how the airport sponsor defines this term and the fee/rate structure charged to these tenants.

RTTF users are similarly situated to on-airport tenants renting tie-downs.

   If this page or paragraph does not include an escalation clause, explain if the fees/rates charged to the residential through-the-fence user increase on the same schedule as the fees/rates for tenants and operators on-airport making similar use of the airport.

See Article IV - access fee escalates on the same schedule as tie-down fees.

   If the two fee schedules do not transparently appear to be equivalent, explain the rationale used by the airport sponsor to make such determination.

N/A

2. Residential through-the-fence users bear the cost of building and maintaining the infrastructure the airport sponsor determines is necessary to provide aircraft located on the adjacent property to or near the airport access to the airfield of the airport.

   Document: Access Agreement

   Page number or paragraph: Article V

3. The residential through-the-fence user is prohibited from using their property, or permitting any third party from using their property, for any commercial aeronautical purpose for the duration of the access agreement.

   Document: Access Agreement

   Page number or paragraph: Article III(1)

4. Access to the airport from unauthorized users, through the property of the residential through-the-fence access agreement holder, is prohibited.

   Document: Access Agreement

   Page number or paragraph: Article III(3)

5. The residential through-the-fence user is prohibited from selling aviation fuel on their property.

   Document: Access Agreement

   Page number or paragraph: Article III(2)

This agreement has been executed with 3 residential through-the-fence users.