



AIRPORT MASTER PLAN

Working Paper No. 3

COCHISE COUNTY AIRPORT

WILLCOX, ARIZONA | APRIL 2014



ARMSTRONG

Chapter Four Alternatives



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4.1 INTRODUCTION

This chapter contains the description and evaluation of various development alternatives for the Cochise County Airport. The basis for the airside and landside alternatives was derived from the recommendations contained in the Facility Requirements chapter.

According to FAA AC 150/5070-6B, *Airport Master Plans*, each identified alternative's technical feasibility, economic and fiscal soundness, and aeronautical utility should be examined. Ultimately, development alternatives will only be considered that meet the County's planning needs and those that the FAA or County will be realistically able to implement.

4.2 DEVELOPMENT CONCEPTS

The overall objective of the alternatives analysis is to 1) review the facility requirements that have been determined necessary to meet FAA design standards, and to safely and efficiently accommodate aviation demand over the planning period and 2) evaluate the best way to implement the facility requirements as presented in Chapter 3.

A range of airside and landside alternatives are typically created and evaluated in both a quantitative and qualitative manner for implementing the different facility requirements. In other instances where less robust development is anticipated, the selection of a preferred development plan can result from a more qualitative and logical evaluation of the various options resulting from discussions with the sponsor, Technical Advisory Committee (TAC) and input from the public.

The following best planning tenets, as recommended in FAA AC 150/5070-6B, *Airport Master Plans*, apply to the evaluation of the development alternatives:

- Conforms to best practices for safety and security.
- Conforms to the intent of FAA and other appropriate design standards.
- Provides for the "highest and best" land use on and off airport.
- Allows for forecast growth throughout the planning period.
- Provides for growth beyond the planning horizon.
- Provides balance between developmental elements.
- Provides flexibility to adjust to unforeseen changes.
- Conforms to the airport owner's strategic vision.
- Conforms to relevant local, regional, and state transportation plans.
- Is technically and financially feasible.
- Is socially and politically feasible.
- Satisfies user's needs.

After evaluating the demonstrated needs in a qualitative manner, the future development needs and recommendations are presented herein for implementing the facility requirements described in Chapter 3.

A combination of effective airside and landside planning is essential to the successful development of the airport. Airside components for the most part include areas of the airfield where aircraft takeoff or land, taxi, and park. Landside components generally consist of a system of buildings, fueling facilities, roadways, and vehicle parking areas.

An alternative for the County involving both the airside and landside portions of the airport is a scenario where no improvements, alterations, or enhancements are made to the airfield at all, i.e. the airport remains in its current state with the existing airfield configuration and existing facilities. This would be considered a no-action alternative for development at the airport. However, over the last decade, the FAA and County have made a continuous investment in the airport infrastructure. To preserve the infrastructure and to ensure that additional federal funding is received, the County has an obligation to maintain the airport and make any necessary improvements.

4.3 AIRSIDE DEVELOPMENT

Airside development is typically the most critical and physically dominant feature of airport development and therefore a focal point of an airport's planning process. This section discusses the airside development alternatives and addresses the needs of the existing and future aviation demand identified in Chapter 3, Facility Requirements.

Alternative Considerations – Airside Development

- Maintain FAA design standards for RDC B-II
- Extension of Runway 3-21 by 345 feet
- Addition of crosswind runway and bypass taxiways
- Maintain FAA design standards for TDG 2
- Correction of non-standard taxilane configuration adjacent to the existing terminal building
- Identify areas to expand the existing aircraft parking apron
- Address the non-standard separation between the T- shade structure and T- hangar

4.3.1 RUNWAY DEVELOPMENT

As previously identified in Table 3-6, a 345-foot extension to Runway 3-21 is recommended in the planning period. If implemented, the extension would ultimately make Runway 3-21 6,440 feet long.

Alternatives were evaluated for the proposed lengthening to Runway 3-21. The alternatives are described below and illustrated on **Exhibit C**.

- Alternative 1: No-action
- Alternative 2: Extend Runway 3 to the southwest by 345 feet

Alternative 1: The no-action alternative represents a scenario where the Runway 3 is not extended at all and remains in its current configuration.

Alternative 2: This alternative extends the Runway 3 end by 345 feet. The runway extension would also include constructing a parallel taxiway and associated edge lighting. The future RPZ will remain entirely on existing airport property, therefore, no additional land would need to be acquired for this alternative.

The concept of extending Runway 21 to the northeast was dismissed because of the need to acquire non-airport owned land northeast of the airport. An extension to the northeast would place the future RPZ on private property. FAA recommends that airport sponsors control all land within a RPZ by either a fee simple or avigation easement. Therefore, the concept of extending to the northeast was dismissed from further consideration primarily because no additional land is needed for Alternative 2 as described above.

As identified in Chapter 3, Facility Requirements, there is adequate justification based on wind coverage to re-open Runway 14-32. Interest from airport users regarding the re-opening of Runway 14-32 has also been expressed to airport and county personnel. Alternatives were not developed for constructing a crosswind runway in a different location on the airfield other than where the closed runway is currently located. From a cost perspective, it is believed that the existing base material could be salvaged (although no subsurface investigations have been performed as part of the master plan) and re-used as the foundation for the pavement structure of a new runway. Likewise, the ground that Runway 14-32 is located on was previously disturbed during the initial construction of the runway; thus, less environmental impacts would result by having the runway remain in its current location. Finally, as previously mentioned in the Inventory and Facility Requirements chapters, the existing runway configuration does not provide for the recommended wind coverage of at least 95 percent for A-I, A-II, B-I, and B-II aircraft per FAA design standards. The addition of Runway 14-32 on the airfield would result in combined wind coverage of 98.5 percent at 10.5 knots, and 99.7 percent at 13 knots for these types of aircraft.

The Facility Requirements chapter recommends that Runway 14-32 be re-opened to a length of 5,790 feet. According to FAA AC 150/5300-13A, *Airport Design*, providing a crosswind runway requires that the line of sight, also referred to as the Runway Visibility Zone (RVZ), between intersecting runways be reviewed. The analysis of the RVZ reveals that Runway 14-32 cannot be re-opened at a length of 5,790 feet without significantly impacting the existing and recommended development within the terminal area. Therefore, a reduced runway length of 4,170 feet is recommended which will meet the forecasted needs of 75 percent of the small airplanes expected to use the crosswind runway as depicted in **Table 3-7** and will keep the RVZ clear of obstructions.

The recommended runway length of 4,170 feet and the location for Runway 14-32 is shown on the proposed development drawings, **Exhibit C**.

4.3.2 TAXIWAY DEVELOPMENT

The reconstruction of the closed portion of Taxiway A from the mid-point of the airfield to the end of Runway 3 (referenced in Chapter 1) is currently in the design phase. Once completed, Taxiway A will become a full parallel taxiway to Runway 3-21. It is anticipated that the new portion of taxiway will be constructed in mid-2014 and be completed by spring of 2015.

Removal of the connector taxiway (designated as Taxiway C on the current approved ALP) located approximately mid-field is recommended. The taxiway allows aircraft to taxi from the existing aircraft parking apron directly to the intersection of Runway 3-21 and the closed crosswind Runway 14-32. The connector taxiway is not at a right angle, but rather at an acute angle to both runways. The pavement of this connector taxiway has severely deteriorated, and

in fact is not currently in use because of its poor condition. Removal of this connector is recommended to improve airfield efficiency and reduce the potential for incursions.

As discussed, it is recommended Runway 14-32 be re-opened in the short-term planning period. If re-opened, bypass taxiway at both ends of Runway 3-21 are recommended to be constructed at the same time. If warranted by increased operations, a full parallel taxiway could be constructed later in the planning period, essentially connecting to the two bypass taxiways. Bypass taxiways and a parallel taxiway for Runway 14-32 should be constructed to meet RDC B-I (small) and TDG 2 design standards.

4.3.3 AIRCRAFT APRON

Based on the recommendations from Chapter 3, Facility Requirements, the size of the existing aircraft apron is not considered adequate for the planning period. Two separate apron configurations were developed to represent where additional aircraft apron space could be constructed. **Exhibit D** depicts the amount of aircraft apron that is needed for the planning period based on the recommendations in the Facility Requirements chapter. **Exhibit E** depicts an ultimate build-out scenario of aircraft apron to demonstrate where additional apron could be constructed, if warranted. Based on the facility requirements analysis, **Exhibit D** is the recommended development plan, while **Exhibit E** should be used as a planning guide for unforeseen growth at Cochise County Airport. As discussed in Chapter 3, additional apron may be needed that presently cannot be accurately predicted because of unanticipated growth or other circumstances. The County should monitor the utilization of the apron and make adjustments in the apron size as needed throughout the planning period.

As presented in Chapter 1, Inventory, portions of the existing apron are in fair to poor condition and will require either rehabilitation or reconstruction in the planning period.

4.3.4 AIRFIELD LIGHTING AND SIGNAGE

The existing taxiway lighting on the two connector taxiways (Taxiway A-1 and A-2) are direct burial LED Medium Intensity Taxiway Lights (MITL). The remaining portion of Taxiway A is unlit as discussed in Chapter 1. There are two alternatives being considered for the future lighting/marketing of airfield taxiways. The first alternative consists of installing base mounted MITL with conduit along any new taxiways. The options for taxiway edge light fixtures include either incandescent bulbs or light emitting diodes (LEDs). The second alternative includes installing retro-reflectors along any new taxiways. This method of marking is inexpensive and requires little in the way of construction or maintenance. However, the downside is retro-reflectors are not as easily seen by pilots as MITL are. It is recommended that any new taxiway have MITL installed.

To improve the utility and reliability of Runway 14-32, it is recommended that Medium Intensity Runway Lights (MIRL) be installed when the runway is paved. The type of fixture (incandescent or LED) is a choice that should be made during the design phase.

For both the MITL and MIRL, preference is given to LED base mounted fixtures with conduit as they will significantly reduce the County's energy costs and have superior light quality over incandescent bulbs. LED fixtures for taxiways and runways (MIRL only) are FAA approved. It is important to note that LED fixtures do have higher initial costs. During the design phase of a

lighting project, the County along with the FAA and the design engineer can evaluate what type of light fixture (incandescent or LED) best meets the needs of the County.

The Inventory and Facility Requirements chapters briefly discussed the condition of some of the airfield signage and made recommendations for replacement and/or new installation where signage currently does not exist. In the short term, it is recommended that the County replace the retro-reflective and lighted airfield signs which were identified in the Inventory chapter as being in fair to poor condition. In the medium to long-term planning period, as new taxiways are constructed/re-constructed and MITL is installed on the taxiways, it is recommended that lighted signage also be installed at the same time and all retro-reflective signage be removed.

Other airport signage that is not considered airfield signage (airport entrance sign, for example) may be added and/or removed as the County sees fit. If chain-link fencing and access gates in the terminal and surrounding areas are installed at some point in the planning period, the corresponding landside signage would be installed as part of the that fencing project.

4.3.5 MISCELLANEOUS DEVELOPMENT PROJECTS

The alternatives drawing (**Exhibit C**) also depicts the preferred location for the following recommended airfield improvements:

- Replacement of rotating beacon and self-supporting tower
- Installation of a Precision Approach Path Indicator (PAPI) at each end of Runway 3-21 and Runway 14-32
- Installation of Runway End Identifier Lights (REIL) at each end of Runway 3-21 and Runway 14-32
- Replacement of lighted wind cone and segmented circle

4.4 LANDSIDE DEVELOPMENT

Landside development is an important aspect of a well functioning airport. This section discusses the landside development alternatives and addresses the needs of the existing and future aviation demand identified in Chapter 3, Facility Requirements.

Alternative Considerations – Landside Development

- Areas to relocate the existing terminal building
- Areas to construct additional aircraft hangars and storage
- Expansion of vehicle parking areas
- Relocation of existing fuel facility, as required
- Relocation of existing caretaker facility, as required
- Locations for aeronautical and non-aeronautical related revenue generating parcels

4.4.1 TERMINAL BUILDING

Terminal buildings provide visitors with a first impression of an airport. As discussed in Chapter 1, the airport terminal building at Cochise County Airport is in fair to poor condition. At a minimum, until a new building can be constructed, the building should be repaired or renovated to ensure that it meets current codes, and any short-term needed improvements to the building should be considered.

The proposed development plan depicts a new location for the terminal building based on the findings of the facility requirements analysis, which concluded that the size of the terminal building is not adequate for the planning period. It is proposed that a new terminal building be constructed north of its current location as depicted on **Exhibit D**. The new location would allow more room between the existing T-hangar and the terminal building. As presented in Chapter 1, Section 1.17.2, the existing space between the T-hangar and the terminal building does not meet the current Taxiway Design Group (TDG) 1 separation design standards or the proposed TDG-2 standards that have been proposed as the future design standard for the airfield. Relocating the terminal would resolve the TDG design standard issue, and also open up that area for future apron space if needed.

The new terminal should be constructed to approximately 4,800 square feet to meet the forecasted demand. Adequate space is available north of the existing terminal building for the construction of the new terminal building as shown on **Exhibit D**.

Figure 4-1 depicts a typical conceptual floor plan for a terminal building at a general aviation airport. The floor plan most suitable for Cochise County Airport would be developed in greater detail in the project design phase. In general, a terminal building for a general aviation airport should include the following:

- Pilot lounge
- Flight planning room
- Airport manager's office
- Meeting room
- Restrooms
- Common area/lobby
- Storage

Construction of the terminal building could be either conventional construction, pre-fabricated, or modular. Each building type has advantages and disadvantages and varying costs to consider. The new terminal building should be designed with at least a 20-year lifespan with minimal renovation and upgrades needed. Attention should be given in the design phase to ensure the building's functionality throughout the entire planning period. A new terminal building will also allow the opportunity to incorporate numerous sustainable features such as a high-energy efficient heating and cooling system, solar hot water, rainwater harvesting, LED lighting, drought tolerant landscaping, and the use of low VOC and recycled materials in the construction of the building.

The proposed dimensions of the new terminal building are relatively small; therefore, it is not recommended that the County seek a LEED rating on the new building. However, steps should be taken to ensure the building is designed to LEED guidelines as much as practical. Seeking a

LEED rating on a new building is more practical for larger buildings (25,000 square feet or more) due to the cost of administering the LEED rating process.

The demolition of the old terminal building will provide an opportunity to donate any salvageable materials or fixtures to either the Tucson or Sierra Vista Habitat for Humanity organizations. Donating as much of the old building material as possible will reduce the amount that goes to the landfill.



FIGURE 4-1 TYPICAL GA TERMINAL BUILDING FLOOR PLAN

Source: ACI, 2014

4.4.2 HANGAR DEVELOPMENT

Hangar development is an important aspect at nearly every airport, including GA airports. When properly utilized, hangars are often a good source of revenue for the airport sponsor. As indicated by the facility requirements analysis in Chapter 3, the Airport is likely to need additional T-hangars (or shaded tie-downs) and conventional box hangars of various sizes (small, medium, and large) in the planning period. Furthermore, in order to address the taxilane separation design standards discussed in Section 4.4.1 of this chapter, alternative locations for the existing County owned T-hangar and shaded tie-down structure have been recommended. Likewise, several other locations on the airfield have been identified and reserved for hangar/shaded tie-down space to meet both current and long-term needs at the Airport. The suggested location for the existing T-hangar and shaded tie-down structure and the future land reserved for more hangar development if needed is illustrated on **Exhibit D**. The timing, size, and location of all future hangar development should ultimately be based on user demand.

4.4.3 AIRPORT SUPPORT AND MAINTENANCE

The support and maintenance building serves an important function for the Airport. The existing storage building at Cochise County Airport is not adequate for the planning period. Therefore, alternative locations for a new Airport support and maintenance building will be included in this Master Plan (shown on **Exhibit D**). It is recommended that a new 1,200 to 3,000 square-foot support and maintenance building be constructed. The need to protect existing equipment, as well as future equipment, is crucial to the upkeep of the airfield and landside areas of the airport.

4.4.4 RELOCATION OF FUEL FACILITY

Relocation of the existing skid-mounted fuel facility is necessary once the terminal building is relocated and additional apron is constructed. Fuel facilities should be located adjacent to the edge of pavement allowing access from the landside. **Exhibit D** illustrate the proposed new fuel facility location.

Besides the proposed relocation of the fuel facility, it is recommended that the fueling facility add a self-fueling option for airport users that need fuel outside of the normal business hours of the airport staff. This could be done by adding a credit card payment device at the fueling facility. In addition to the self-fueling option, it is also recommend that the County invest in a more sophisticated aviation fuel management and accounting software system in order to keep more accurate fuel sales data. Several companies in the aviation market provide this type of software and integrated systems, such as TouchStar, Varec FuelsManager, and MyFBO, just to name a few. The County should conduct research into the various software systems and select one that best meets their current and future needs for fuel sale tracking at the Airport. Both the credit card reader and the fuel sale tracking software are recommended to be implemented in the short-term planning period.

4.4.5 RELOCATION OF CARETAKER FACILITY

To accommodate the proposed development as depicted on **Exhibit D**, the existing caretaker facility would need to be relocated. It is proposed the caretaker facility be relocated to a new location on the airport property and continue to function as a caretaker facility in accordance with the current FBO lease agreement. The proposed new location of the caretaker facility is also illustrated on the Exhibits mentioned above.

4.4.6 EXPANSION OF VEHICLE PARKING AREA

By relocating the terminal building, reconfiguring and paving the vehicle parking area would be appropriate to enhance access for airport users and to provide convenient access to the new terminal building. As discussed in the Facility Requirements chapter, the overall size of existing parking area should be adequate for the planning period. As new hangars are constructed, the need for additional parking may be needed as shown on **Exhibit D**.

4.4.7 AERONAUTICAL/NON-AERONAUTICAL DEVELOPMENT

As previously mentioned in Chapter 1, the Airport encompasses approximately 960 acres. This is a more than adequate amount of land for today's existing aeronautical activities, as well as the forecasted aeronautical activities within the 20-year planning period. If and when the County decides to implement any of the alternative landside developments described above, namely

the aircraft apron, hangar, and terminal building, the option to designate some parcels of land for revenue generating aeronautical use in this area also becomes available. Likewise, there is an abundance of unused land directly to the north, east, and southeast of the existing main airport development area that could be used for non-aeronautical development in the future should demand warrant it. This also assumes that the land to be developed will be approved for non-aeronautical use by the FAA and re-zoned as compatible land use adjacent to airports. Again, it is important that any redevelopment of the vacant land be compatible with the airport as defined by the FAA. The portions of land that have been designated for aeronautical and non-aeronautical uses are illustrated on **Exhibit C**.

4.4.8 MISCELLANEOUS DEVELOPMENT PROJECTS

The installation of enhanced perimeter fencing and associated gates along the existing airport boundary is recommended to restrict inadvertent entry to the Airport by unauthorized people and wildlife. In addition, chain-link fencing topped with three-strands of barbed wire and electric access control gates are recommend in the terminal area in order to separate the landside area from the air operations area (AOA).

FAA Advisory Circular 150/5220-16D, *Automated Weather Observing System (AWOS) for Non-Federal Applications* describes the different types of AWOS and FAA Order 6560.20B, *Siting Criteria for Automated Weather Observing Systems* provides guidance on the siting of an AWOS. Based on the Order, a proposed AWOS site has been selected north of Runway 3-21 and east of the closed Runway 14-32. The AWOS will require power to be brought to the site for the various weather sensors. The AWOS also has a 500-foot diameter critical area surrounding the site which will need to be protected from development in order to provide accurate weather information. Based on the proposed AWOS location, the critical area will remain entirely on airport property eliminating the need to secure an easement on adjacent lands. The proposed location will also allow for the most direct route to an available power source. The closest power source is the existing airfield electrical building located approximately 2,000 feet away adjacent to the airport entrance road. An access road to the AWOS is also proposed to allow for the required re-occurring maintenance of the AWOS.

4.5 ENVIRONMENTAL IMPACTS

The proposed development projects will likely cause limited short-term effects resulting from construction activities. These short-term construction impacts would not persist beyond the construction period, and no long-term impacts are expected as a result of the proposed development at the Airport. The proposed projects are not expected to exceed the significant impact threshold for the impact resource categories defined by FAA Order 5050.4B, *Environmental Handbook* and FAA Order 1050.1E, *Environmental Impacts: Policies and Procedures*. The resource impact categories and potential environmental impacts are evaluated in Chapter 6, Environmental Overview.

4.6 DEVELOPMENT COSTS

The planning costs for the proposed development presented in this Chapter will be discussed in more detail in Chapter 7, Airport Development and Financial Plan. Development costs discussed in this Chapter are for planning purposes only, are based on 2014 dollars, and reflect level of magnitude costs. The costs in **Table 4-1** are derived from the consultant’s knowledge of contactors, construction material suppliers, and work performed at comparable facilities. The costs presented are not intended to be the full range of costs associated with each project. Additional costs such as operating and maintenance are not included. The objective of quantifying construction costs is to aid the County in the decision making process. A recommended development phasing plan, along with refined probable costs, will be presented in Chapter 7.

TABLE 4-1 DEVELOPMENT COSTS SUMMARY

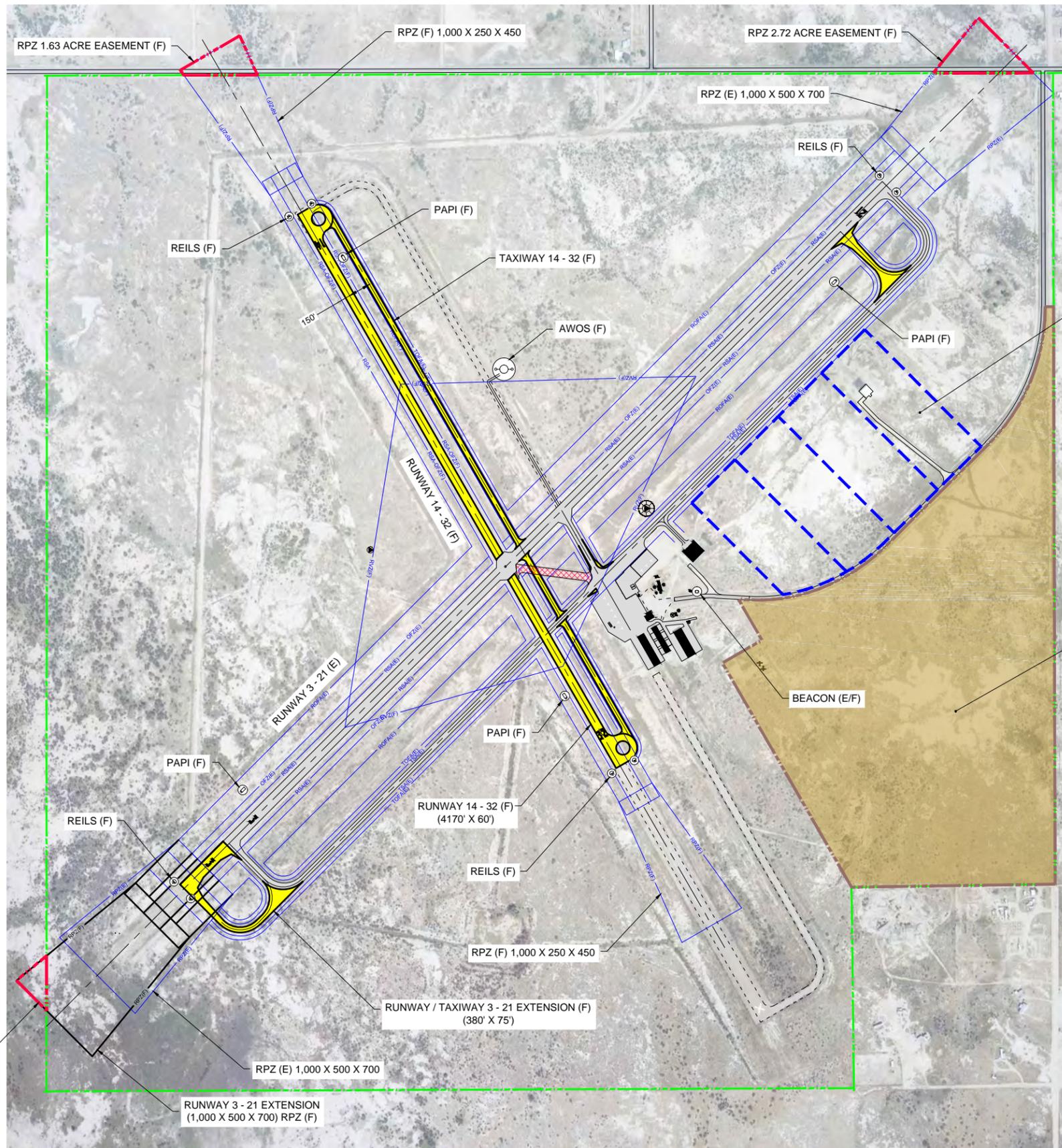
Development Feature	Project Description	Probable Costs (2014 dollars)
Runway 3-21 Extension	Extend Runway 3, construct parallel taxiway, install edge lighting and signage	\$ 500,000
Runway 14-32	Re-open Runway 14-32, install edge lighting and signage	\$ 3,000,000
Bypass Taxiway	Construct bypass taxiways on Runway 14-32, and install associated edge lighting and signage	\$ 250,000
Parallel Taxiway	Construct parallel Taxiway to Runway 14-32 and install edge lighting and signage	\$ 1,300,000
Remove Taxiway	Remove exit taxiway	\$ 35,000
Aircraft Apron	Construct aircraft parking apron and install edge lighting and signage	\$ 780,000
Fuel Storage	Relocate existing fuel storage facility and install a credit card payment reader	\$ 75,000
AWOS	Install AWOS and associated power connection	\$ 300,000
Visual and Navigational Aids	Install REILs on Runway 3-21 and Runway 14-32 (both ends)	\$ 150,000
	Install PAPIs on Runway 3-21 and Runway 14-32 (both ends)	\$ 500,000
	Relocate wind cone and install segmented circle	\$ 65,000
	Replace rotating beacon and tower	\$ 80,000
Fencing	Install airfield perimeter fencing, gates, and appurtenances	\$ 500,000 ¹
Hangar Development	Construct aircraft storage hangars (average SF cost)	\$ 80 to \$100 per SF ²
Terminal Building	Construct new terminal building (average SF cost)	\$ 100 per SF ³
Airport Support and Maintenance Building	Construct new airport support and maintenance building	\$70 to \$90 per SF
Vehicle Parking	Construct vehicle parking	\$ 375,000

¹Wildlife fence is based on an average cost of \$13 per foot. ²Hangar development is based on demand; ³Cost includes demolition of existing terminal building and relocation of existing caretaker facility
 Source: ACI, 2014

4.7 ALTERNATIVE DEVELOPMENT SUMMARY

Development alternatives presented in this Chapter addressed both airside and landside needs for the planning period. Airside alternatives include a proposed extension to Runway 3-21 in order to meet design standards and to satisfy runway length recommendations presented in the Facility Requirements chapter. It is also recommended to re-open Runway 14-32 as the crosswind runway. Additionally, taxiway and runway lighting alternatives are suggested in order to enhance safety on the airfield, along with several other airside improvements. Landside alternatives include proposed hangar development locations and a new terminal building.

The recommended development alternatives will be carried forward and incorporated into the Airport Layout Plan (ALP) based on input that will be gathered from the Sponsor (Cochise County), the FAA, and the Technical Advisory Committee (TAC) during a scheduled alternatives development review meeting.

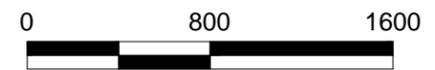


FUTURE CORPORATE PARCELS

FUTURE NON-AERONAUTICAL DEVELOPMENT PARCEL (APPROX. 103.7 ACRES)

RPZ EASEMENT 0.81 ACRES (F)

- LEGEND**
- FUTURE AIRFIELD PAVEMENT
 - REMOVALS
 - EXISTING BUILDINGS
 - EXISTING PAVEMENT
 - DEVELOPMENT PARCEL
 - EXISTING AIRPORT PROPERTY LINE
 - FUTURE AIRPORT PROPERTY LINE
 - FUTURE CORPORATE PARCEL
 - FUTURE AIRPORT PROPERTY EASEMENT
 - FUTURE AWOS
 - FUTURE REIL
 - FUTURE PAPI
 - FUTURE BEACON



SCALE IN FEET

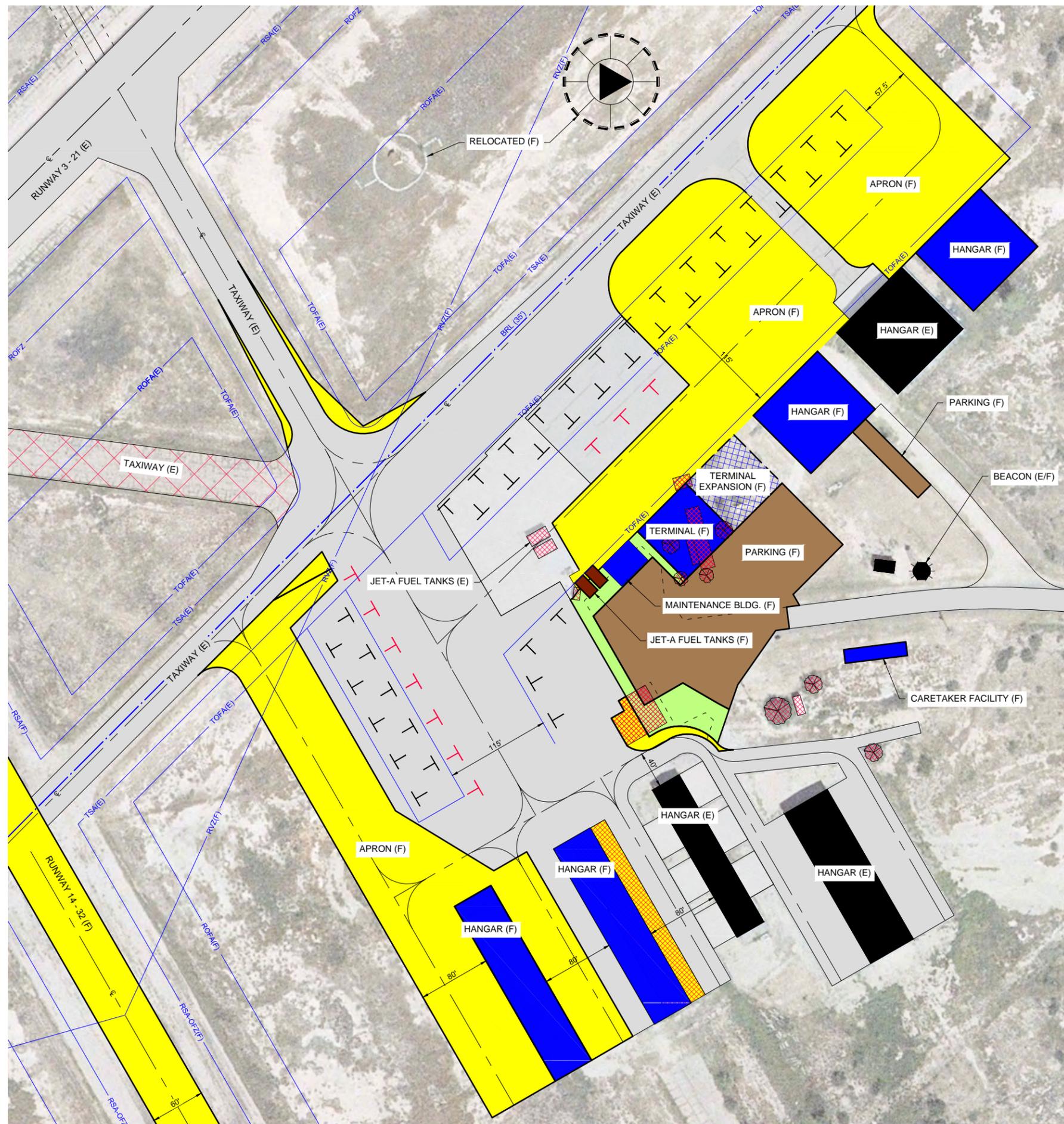
EXHIBIT C



ARMSTRONG
 PLANNING ENGINEERING CONSTRUCTION

COLORADO: 970.242.0101 ARIZONA: 602.803.7079 NEW MEXICO: 505.508.2192
 www.armstrongconsultants.com

Cochise County Airport Wilcox, Arizona	
AIRSIDE DEVELOPMENT	
SCALE: PER BAR SCALE	DATE: 03/2014
DRAWN: LDS	FILE: 6171601-AIRSIDE
CHKD: JPZ	JOB NO.: 136171



FUTURE TIEDOWNS: QTY. 41

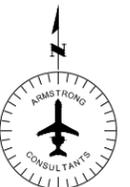
LEGEND

- FUTURE BUILDINGS
- FUTURE AIRFIELD PAVEMENT
- FUTURE PARKING PAVEMENT
- FUTURE TURF
- REMOVALS
- EXISTING BUILDINGS (TO REMAIN)
- EXISTING PAVEMENT



SCALE IN FEET

EXHIBIT D



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COCHISE COUNTY AIRPORT Wilcox, Arizona	
FUTURE LANDSIDE DEVELOPMENT	
SCALE: PER BAR SCALE	DATE: 03/2014
DRAWN: LDS	FILE: 6171601-LANDSIDE
CHKD: JZP	JOB NO.: 136171