

SECTION 3

Proposed Action

3.1 Introduction

The Proposed Action section provides a description of the Proposed Action. FAA Order 5050.4B states that the Proposed Action should “concisely describe the solution the airport sponsor wishes to implement to solve the problem(s) it is facing.”¹ Under NEPA, the National Environmental Policy Act of 1969 (NEPA), the “problem” is described within the Purpose and Need (Section 2 of this document). The “solution” refers to the Proposed Action of the airport sponsor.

3.2 Federal Action Requiring NEPA Review

FAA’s approval to amend OIA’s Airport Layout Plan (ALP) to depict the East Airfield Area is a federal action subject to NEPA. This EA has been prepared to assess the environmental impacts of the Proposed Action. Based upon the EA, the FAA will determine whether the proposed federal action is consistent with existing national environmental policies and objectives of section 101(a) of NEPA. The FAA will integrate compliance with other applicable federal environmental laws with NEPA as part of he EA. The FAA will then determine whether to adopt the EA and issue a Finding of No Significant Impact or perpare an environmental impact statement.

A federal action, as defined in FAA Order 5050.4B, includes “conditional, unconditional, or mixed approval of a first-time or changed airport layout plan”.² **Figure 3.2-1** shows the current conditionally approved (10/26/05) ALP for OIA and **Figure 3.2-2** shows sheet 10 (the project area) of the current~~ly~~ conditionally approved ALP. **Figure 3.2-3** shows the updated ALP dated June 2010 that has been submitted to the FAA for review and approval. **Figure 3.2-3-4** shows sheet ~~15~~10 (the project area) of this updated ALP. ~~depicts the amended ALP submitted to the FAA for review as a result of this environmental assessment. With the submittal of the updated ALP, GOAA is seeking unconditional approval of this element of the ALP.~~

Comment [VL1]: ESA – no revision necessary this comment is for my discussion with Legal

Comment [sbb2R1]: No response necessary

Comment [VL3]: New figure.

Comment [sbb4R3]: Amended ALP (first sheet) has been added as Figure 3.2-3. Figure 3.2-4 is the amended sheet 10 of the ALP set.

¹ FAA Order 5050.4B 706 (c)
² ~~FAA Order 5050.4B Chapter 1 (9) (g) (3).~~

3.3 Proposed Action

The revised ALP is designed to satisfy GOAA's obligations under 49 USC 47101 to, among other things, develop aviation facilities and enable the airport to be as self sustaining as possible.³ It is GOAA's vision for existing airport property that is not needed currently or in the future for commercial passenger service, to support Aviation Uses to increase revenue generation.⁴

Comment [VL5]: Is there a public document supporting this statement (e.g., Master Plan)?

Comment [sbb6R5]: See added footnote.

The Proposed Action is located in Orange County, Florida and the City of Orlando within the property boundaries of OIA (see **Figure 3.3-1** and **Figure 3.3-2**). The Proposed Action consists of developing approximately 1,325 acres of land on the northeastern portion of OIA's existing property for Aviation Uses (see **Figure 3.3-3**). GOAA's vision for providing Aviation Use development includes having the flexibility to accommodate market driven large scale Aviation Uses on airport property. In order for GOAA to remain competitive and responsive to potential business opportunities, the development layout plan presented in Figure 3.3-3 is conceptual in nature and represents a long term build out plan that could accommodate a single major development or multiple large scale developments. The Proposed Action includes ancillary and support uses that would be consistent with the use categories described in Figure 3.3-3. The intent of the development layout is to maximize the potential for shared infrastructure, promoting sustainable development design, and to locate a land use buffer comprised of "Airport Support Areas" between the "Airport Support District High Intensity Users" and a majority of existing residential areas located to the south of the Proposed Action area.

The lead time in which to commence construction of a large scale aviation project contemplated for the East Airfield is 3 to 6 years in order to:

- develop a conceptual master plan;
- prepare and complete the FAA required NEPA documentation and review for an ALP approval;
- prepare, submit and obtain approval from the USACE and the USFWS for impacts to environmental resources; including, the development and implementation of mitigation plans designed to offset the wetland functions lost due to project construction;
- prepare, submit and obtain approval from the state of Florida (SFWMD) for the protection of water quality and to address impacts to environmental resources; including, the development and implementation of mitigation plans designed to offset the wetland functions lost due to project construction;
- prepare, submit, obtain Development of Regional Impact review and approval through the East Central Florida Regional Planning Council, the Florida Department of Community Affairs, other state agencies and approval from the City of Orlando

³ 49 U.S.C. Chapter 471

⁴ GOAA Executive Director's "State of the Airport" address, May 19, 2010 – Keys to Fiscal Stewardship – Keeping cost per enplaned passenger competitive by pursuing non-airline revenue and commercial development. GOAA "Strategic Update 2011" presented at the GOAA Board Workshop March 2, 2011 Fitch Affirms Greater Orlando Aviation Authority's Revenue Bonds at AA- and Affirms Sub Lien at A+. "Sound financial operations with Diverse source of operating revenues.... With airport generating significant revenue from non-airline sources...."

- ~~develop and implement mitigation plans designed to offset the wetland functions lost due to project construction;~~
- City of Orlando approval of site plans and building permits; and,
- Develop and implement financing arrangements to fund infrastructure and project construction, operation and maintenance.

Comment [VL7]: Isn't this part of the USACE and SFWMD approvals.

Comment [sbb8R7]: Yes. This information has been added to the USACE and SFWMD bullet items.

Given the above outlined approval process, the lead time to obtain all of the necessary governmental approvals for the Proposed Action development is estimate to be 3 to 6 years prior to initiating construction. Additional information regarding the development approval process is provided in **Appendix A.**

Comment [VL9]: Update and provide status of these processes.

Comment [sbb10R9]: The status of each of these items is provided in Table 3.5-1.

This Environmental Assessment evaluates the environmental impacts associated with the full utilization of the East Airfield site for Aviation Uses to enhance and diversify revenue generation at OIA. The proposed ALP revision reflects a master development/campus type plan where large-scale Aviation Uses are accommodated with efficient common airfield access, shared infrastructure and adjacent areas available for shared support uses. The plan also includes the flexibility to serve a full range of aircraft types (e.g. aircraft parking, taxiway/taxi lane sizing, and hangar or manufacturing facilities for a variety of building sizes and heights). This plan accommodates a single end-user, or multiple large scale Aviation Uses and fully evaluates the environmental impacts of the build-out for the project. No specific phasing can be presented at this time until ultimate end-users are identified and have committed to a presence at East Airfield. In addition, a phased development approach is not practicable to maintain flexibility and efficient use of the East Airfield site while meeting market demand and future end-user needs and constraints. The reasons that the EA does not include phasing but rather evaluates the potential impacts of the full build out of the Proposed Action are listed below.

- The specific elements of East Airfield will only be known when end-users provide minimum requirements for all or part of the development site.
- The size and timing of these specific uses will also only be known as proposals for development are received.
- Evaluating the environmental consequences of the full build-out allows for full assessment of the environmental impacts associated with the plan
- Evaluation of the full build-out avoids a piece-meal assessment of the environmental impacts associated with ~~a 30-year the -anticipated~~ build out of the project in 2030.
- Full assessment of the build-out establishes the commitments of mitigation for the entire site such as mitigation for wetlands and stormwater management.
- Providing the analysis of full build-out is consistent with the U.S. Army Corps of Engineers (USACE) and the South Florida Water Management District (SFWMD) permitting processes where permitting is required to be on the full development of the site.
- Full assessment of impacts associated with the project as required under NEPA.
- To ensure that planning and decisions reflect environmental values, to avoid delays later in the process and head off potential conflicts. (40 CFR 1501.2 paragraph 501)

Comment [VL11]: Isn't this inconsistent with the timeframe referenced in Chapter 2 – buildout by 2030?

Comment [sbb12R11]: See text change.

Mitigation for the environmental impacts, such as wetlands and listed species, are planned to occur off-site, ~~and are not part of the ALP amendment submitted to the FAA~~ (further details on this information can be found in Section 6.0).

Comment [VL13]: What does this mean?

Comment [sbb14R13]: Text deleted.

Table 3.3-1 outlines the land uses associated with the Proposed Action while **Figure 3.3-4** depicts the areas associated with each.

Information on the planned land use types are described in Sections 3.3.1 through 3.3.7. For planning purposes, a detailed concept plan was developed to illustrate potential building areas, apron areas, and general parking areas within the land use categories (see **Figure 3.3-5**). This detailed plan was developed using FAA design criteria (including taxiway design and clearances and aircraft turning radius requirements) ~~and local development codes, and Figure 3.3-5 is an example of a build out scenario that is consistent with the purpose and need. is conceptual in nature and final development of facilities and infrastructure may vary.~~

Comment [VL15]: ESA – no revision necessary
this comment is for my discussion with Legal

Comment [sbb16R15]: This text has been revised.

**TABLE 3.3-1
PROPOSED ACTION CONCEPTUAL SPACE SUMMARY**

Land Use	Area (approximate acres)
Airport Support District High Intensity	
Building Area	114
Parking ¹	68
Taxilane/Apron/Ancillary	416
Subtotal	598
Airport Support Areas	
Building Area	26
Parking ²	42
Ancillary Support Areas, Drives, landscaping, etc.	47
Subtotal	115
Stormwater	204
Wetlands	42
Existing Lake (not to be developed) – Lake Nona	
Fuel Farm	30
Other	
Existing Warehouse	14
Conceptual Rail Corridor	28
Taxiway	84
External Road Areas	6
Internal Roads, Access Ways, Landscape Areas, Utility Setbacks, Dry Detention, open space , etc.	244226
Subtotal	346
Total	1,325

1 Parking based on 1.5 spaces per 1,000 SF of building per City of Orlando Code
2 Parking based on 4 spaces per 1,000 SF of building per City of Orlando Code
SOURCE: GOAA, Schenkel Shultz Analysis, ESA Airports 2010.

3.3.1 Fuel Farm

A fuel farm is being proposed to provide the airport and ancillary users with a second fuel supply. The development of the fuel farm facility will be demand driven. Currently, the airport and its users have access to one fuel farm on the west side of the property. That facility is supplied by refinery sources from the gulf coast via barges across the Gulf of Mexico, a port facility in Tampa and pipeline from the port to central Florida. During the past five years, the impacts of hurricanes and other petroleum supply disruptions have caused the airport to nearly run out of fuel on several occasions. Except for the exceptional measures to “tanker” fuel to the airport via aircraft, the airport would have exhausted its fuel supply. [In January 2006, the Florida Department of Environmental Protection advanced Florida’s Energy Plan to Governor Bush that included recommendations to promote fuel diversity to the State of Florida.](#)

Comment [VL17]: See previous comment.

Comment [sbb18R17]: Text deleted. This statement was explained in section 2.4.3.

At Port Canaveral, a 3 million barrel fuel farm recently became operational. Thus, both east and west coast fuel sources can serve the needs of Central Florida. It will also be beneficial for a second fuel farm to be located on east side of the airfield for supply purposes since the current fuel farm is located on the west side of the airfield. Having a separate set of fuel farms provides another set of system redundancy in the event one becomes inoperable. It also improves the competitiveness of fuel price for users of fuel products.

For the Proposed Action, the 30 acre fuel farm is to be located in the northern portion of the proposed site area near State Road 528 (Beach Line Expressway) and utility (fuel pipeline) corridors that may provide future access to direct lines from Port Canaveral.

3.3.2 Airport Support District High Intensity

The airport support district high intensity area is approximately 600 acres and includes proposed large scale uses such as:

- aircraft maintenance,
- manufacturing,
- hangars, and
- cargo facilities.

These facilities would be located in areas with direct access to the airfield. Building areas in this land use are estimated to be 5 million square feet and include 7,500 parking spots for surface vehicles per City of Orlando Code. The remaining area would be comprised of aircraft apron and parking areas and support infrastructure. The site is configured to maximize airfield access and aviation development through the use of apron and ramp areas located perpendicular to the eastern runway. The aircraft parking aprons provide the dimensional clearances required to accommodate dual airport design group⁵ (ADG) Group V taxilanes and parking for Group V aircraft on each side of the dual taxiway system. The configuration is also adequate to accommodate Group VI aircraft on a single Group VI taxilane located between the Group V taxilanes. Aircraft movement areas have been configured to ensure safe and efficient movement of aircraft as prescribed in FAA Guidance documents (FAA Advisory Circulars and Orders).

Comment [VL19]: Web research indicates that this amount of square footage and acreage would accommodate an EADS facility, a Boeing facility, and a Vought facility. This does not appear to be a realistic development proposal for the next 20 years but instead represents a 100 % buildout of the property over a long time frame, in any event longer than 20 years.

Comment [sbb20R19]: See section 2.4.1.1 Major Aviation Facilities – Market considerations

3.3.3 Airport Support Areas

The airport support area is approximately 115 acres and is located along the southern portion of the Proposed Action area along Dowden Road. Uses in this area may include aviation business offices, flight training centers, and air traffic control facilities. This area is viewed as a transitional land use buffer between the Airport Support District High Intensity and the residential areas to the south of the Proposed Action area. Building areas in this land use are estimated to be 1.15 million square feet and approximately 4,600 surface vehicle parking spaces. The remaining area would include

Comment [VL21]: Again, this appears to be 100 % build out of the area. Discuss how many aviation business offices, flight training centers, and air traffic control facilities would be able to be developed in an area that can accommodate 1.15 million square feet and 4,600 parking spaces. This amount of square footage could accommodate a major shopping mall and parking.

Comment [sbb22R21]: See section 2.4.1.1 Major Aviation Facilities – Market considerations

⁵ FAA Advisory Circular 5300-13, Change 15 Airport Design Handbook

support infrastructure, building set back area, and landscape areas. All airport support areas will be developed relative to design standards outlined in the Southeast [Orlando Sector Plan](#) and [City of Orlando Land Use Development Code](#) to the extent that they do not create an aeronautical hazard or are modified during the [DRI review process \(see Section 5.3.5 – Regional Planning and Surrounding Area Development\)](#).⁶

Comment [VL23]: It might be helpful at some point to explain the process more completely in a footnote. It is only briefly described and a description may help explain how the process fits into this sentence, for example.

3.3.4 Proposed Stormwater Management Areas

Approximately 204 acres of [storm water wet](#) detention and [retention-dry pre-treatment swales](#) have been incorporated into the conceptual layout of the Proposed Action. Design calculations have determined the extent to which water storage and water treatment areas are necessary for the impervious areas that are comprised of the airport support district high intensity uses, airport support areas, and internal transportation areas (see Section 6.0 for further details). The calculated areas have been completed in accordance with applicable federal and state regulations. The location [and components](#) of the stormwater [management system areas](#) ~~has~~ been [designed in accordance with regulatory agency requirements and in consideration of placed in a manner to decrease the potential](#) wildlife hazard attractant to the airfield area. The location of the stormwater [management system components areas are-is](#) conceptual in nature and ~~would will~~ be finalized during construction permitting.

Comment [sbb24R23]: See added footnote and added information in Section 5.3.5

The SFWMD ~~issuance-issued of an conceptual~~ environmental resource ~~conceptual approval~~ permit for the East Airfield development area on August 30, 2010. This permit provided the regulatory approval of the conceptual surface water management system design to serve full development of ~~would provide conceptual approval of the overall design of the surface and stormwater management system to serve~~ the project.⁷ The SFWMD environmental resource conceptual approval permit does not authorize construction of any portion of the ~~conceptually approved surface~~ water management system. However, prior to ~~any~~ construction, GOAA will obtain an environmental resource construction permit to authorize the ~~actual~~ construction of the [surface water management system project or portion thereof](#). ~~As part of that application process, detailed design features including incorporation of appropriate design considerations in accordance with the FAA A.C. 150/5200-33B “Wildlife Hazard Attractants on or near Airports” will be submitted to the SFWMD for review. Construction of the stormwater management system would not be required until development of the Proposed Action was initiated and a construction permit was issued.~~

Comment [VL25]: Need to add a discussion regarding FAA design and approval of stormwater ponds on the airport.

Comment [sbb26R25]: See revised text for requested information.

3.3.5 Existing Lake

Table 3.3-1 includes approximately 20 acres of “Lake” land use which is comprised of the portion of the project boundary that extends into Lake Nona. This acreage is included in the Proposed Action but is not included in the development footprint of the Proposed Action.

⁶ Under Section 380.06, Florida Statutes, any development which, because of its character, magnitude, or location, would have a substantial effect upon the health, safety, or welfare of citizens of more than one county constitutes a [Development of Regional Impact \(DRI\)](#). Section 380.0651, Florida Statutes, establishes thresholds which if exceeded requires that the proposed development undergo the DRI level of review in Section 380.06, Florida Statutes. The DRI level of review established in Section 380.06, Florida Statutes is described more fully in Section 5.3.5 ~~As explained in Section 5.3.5.1~~

⁷ On August 30, 2010 the SFWMD issued a conceptual ERP to GOAA for the project site (see section 6.20 for details).

3.3.6 Other Land Uses

There are 346 acres of “other” land uses listed in Table 3.3-1 which include the following: existing warehouse, conceptual rail corridor, taxiway, external roadway areas, internal roadway areas, [open space](#) etc. The land uses in Table 3.3-1 represent the conceptual space requirements anticipated for full development of the Proposed Action. Construction of infrastructure would not be required until development of a Proposed Action is initiated and a construction permit is issued.

3.3.7 ~~Wetlands~~

~~Approximately 12 acres of wetlands located in the southwest portion of the site would not be impacted by the project. This area consists of forested and herbaceous wetlands directly adjacent to Lake Nona.~~

3.4 Wetland Mitigation

~~On a federal level, under the rules set forth in Section 404(b)(1) of the Clean Water Act, mitigation for unavoidable loss of functions from the discharge of dredged or fill material to wetlands is required as a component of the Proposed Action (See Section 6.20.2). The amount of mitigation required for such impacts has been calculated using the Modified Wetland Rapid Assessment Procedure (MWRAP) for wetlands subject to Corps regulatory jurisdiction under Section 404. [The current USACE permit application \(No. SAJ-2006-2640 \(IP-JSC\) for the proposed action identifies](#) ~~The~~ unavoidable discharge of dredged or fill material to [245.09256.88](#) acres of ~~wetlands~~ [Waters of the U.S. that](#) will result in the loss of [145.35153.92](#) MWRAP functional units. These impacts will be fully offset by deducting [145.35153.92](#) MWRAP functional mitigation credits from mitigation work successfully completed by GOAA at the Disney Wilderness Preserve ([further details are in Section 6.20](#)).~~

~~On a state level, the amount of mitigation for wetland impacts associated with the construction of the surface water management system required under Chapter 373, Part IV, Florida Statutes, has been calculated using the Uniform Mitigation Assessment Method (UMAM). [South Florida Water Management District \(SFWMD\) has issued a conceptual Environmental Resource Permit \(ERP\) for the proposed action \(Permit Modification No. 48-00063-S-03, issued August 30, 2010\). The permit identifies](#) ~~A~~ adverse impacts to [235.99247.77](#) acres of wetlands which ~~require~~ [mitigation under Chapter 373, Part IV, Florida Statutes,](#)~~ will result in the functional loss of [143.25151.29](#) UMAM debits. These ~~functional loss of 151.29 UMAM debits has been fully offset through the purchase of 151.29 mitigation credits from the following three mitigation banks: Quickdraw Mitigation Bank (Permit No. 49-00003-M), Southport Mitigation Bank (Permit No. 49-00002-M), and Bullfrog Bay Mitigation Bank (Permit No. 53-00004-M). The East Airfield development area lies within the service area of all three mitigation banks~~ ~~impacts will be fully offset through the purchase of 143.25 UMAM credits from one to three mitigation banks whose mitigation credit service area includes OIA.~~ The mitigation banks are located

outside the recommended separation criteria for mitigation banks in FAA AC 150/5200-33B. In addition to the UMAM mitigation, the airport sponsor has caused the county to acquire a 29 acre off-site parcel, known as the Hampton Bay parcel, to off-set wetland mitigation.

For local level review by the City of Orlando, OIA is located within the City of Orlando wetland permitting is completed once a SFWMD permit is issued. The following excerpt from —As noted in the Conservation Element of the Orlando Growth Management Plan, Policy 1.4.4 states

“The City acknowledges the unique role that the Orlando International Airport plays in the economic health and well-being of the Central Florida area. In order to protect this role, and the public investment in the airport, it is necessary to allow expansion of airport facilities consistent with reasonable protection of existing wetland systems and mitigation of necessary impacts. Therefore, on Orlando International Airport property, issuance of a permit by the Department of Environmental Protection and/or the South Florida Water Management District for impacts to wetlands shall be sufficient to demonstrate compliance with the City wetland regulations.”

Therefore, no additional mitigation will be required to comply with the City of Orlando’s wetland regulations.

3.5 Required Permits

There are a number of permits which GOAA or the end user/tenant will may be required to obtain for full development of the Proposed Action. These are discussed in Section 6. Table 3.5-1 lists the major permits required.

Comment [VL27]: What about the DRI order? Is that a requirement prior to development? Clarify for the reader in a separate section.

Comment [sbb28R27]: See revised table and text. Further DRI discussion has been added to section 5.3.5.

**TABLE 3.5-1
SUMMARY OF REQUIRED PERMITS/APPROVALS**

Permit	Lead Agency	Status	Responsible Entity
<u>Stationary Source Air Construction & Operation</u>	FDEP	Prior to Construction of <u>Stationary Source Activities</u>	GOAA/End User
Gopher Tortoise Incidental Take	FWC	Permit Issued	GOAA
Migratory Bird Permit	USFWS	Prior to <u>Commencing Construction Activities</u>	GOAA
NPDES	FDEP	Prior to <u>Commencing Construction Activities</u>	GOAA/End User
Environmental Resource Conceptual Permit	SFWMD	<u>In-Process Permit Issued</u>	GOAA
Environmental Resource Construction Permit	SFWMD	Prior to <u>Commencing Construction Activities</u>	GOAA/ <u>End User</u>
Section 404 Dredge and Fill Permit	USACE	Application in Process ^a	GOAA
Wastewater <u>Collection</u>	FDEP	Prior to Construction <u>Activities of Waste Water Collection System</u>	GOAA/End User
Potable Water <u>Distribution</u>	FDEP	Prior to Construction <u>Activities of Potable Water Distribution System</u>	GOAA/End User
<u>Local Development Order (DRI process)</u>	<u>City of Orlando</u>	<u>Prior to Construction</u>	<u>GOAA/End User</u>

| [a. The USACE permit application was revised and resubmitted November 2010](#)

SOURCE: GOAA, BDA, ESA, 2010.

Figure (11x17)

**3.2-1 OIA Conditionally Approved ALP –
October 26, 2005**

Figure (11x17)
3.2-2 OIA ALP Concept Sheet 10 of 11 –
October 26, 2005

Figure (11x17)
**3.2-3 East Airfield Development Area –
Amended ALP Submittal**

Back of 11x17

Figure
3.3-1 Vicinity Map

Figure
3.3-2 Project Location Map

Figure (11x17)

3.3-3 East Airfield Development Area Conceptual Plan

Figure (11x17)
**3.3-4 East Airfield Development Area
Conceptual Plan – Land Use Acreage**

Figure (11x17)

3.3-5 East Airfield Detailed Conceptual Plan