



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

Department of Transportation  
Federal Aviation Administration  
Orlando Airports District Office  
Orlando, Florida

**FINDING OF NO SIGNIFICANT IMPACT  
AND  
RECORD OF DECISION**

**Environmental Assessment for  
Non-Aeronautical Development  
at  
Jacksonville Executive at Craig Airport (CRG)**

Jacksonville, Florida

October 16, 2023

**BACKGROUND:** Jacksonville Executive at Craig Airport (CRG) is in Jacksonville, Florida, approximately nine miles east of downtown Jacksonville. The airport lies on approximately 1,432 acres owned and operated by Jacksonville Aviation Authority (JAA or Sponsor). The Airport is bounded to the west by St. Johns Bluff Road North and to the south by Atlantic Boulevard, both of which connect to Interstate Highway 295 to the west. The Airport is bounded by Kernan Boulevard to the east and by Monument Road and portions of McCormick Road to the north. CRG maintains two runways, Runway 05/23 and Runway 14/32. Runway 05/23 is 4,008 feet long by 100 feet wide, and Runway 14/32 is 4,004 feet long by 100 feet wide. As noted in the National Plan of Integrated Airports Systems (NPIAS) and Florida Aviation System Plan (FASP), CRG is a general aviation airport. Due to its location, size and proximity to downtown Jacksonville, the airport also serves as a reliever airport for Jacksonville International Airport (JAX). Additionally, the airport has numerous tenants, fuel storage facilities, aircraft storage facilities, and aircraft and airport maintenance facilities. CRG is home to two Fixed Based Operators (FBOs), an air charter operator, Jacksonville Sheriff's flight operations, corporate business operators, and four flight training schools.

JAA proposes to lease and develop approximately 80 acres of land within the southern portion of CRG for non-aeronautical development. JAA proposes to lease the property to a private developer who proposes to develop the site to and construct a distribution/warehouse building with associated parking areas and access roads.

The FAA's federal action is to approve the release of the Sponsor's federal obligations within the 80 acres parcel. FAA is releasing the aeronautical use provision, however, JAA retains ownership of the property. The property was originally conveyed to the City of Jacksonville by the War Assets Administration (Surplus Property Act) on May 1, 1947. The release, referred to as the FAA Proposed Action in the EA, is subject to review under the *National Environmental Policy Act of 1969* (NEPA). Accordingly, an EA was prepared by the Airport Sponsor for the FAA's use in complying with the requirements of NEPA, Council on Environmental Quality (CEQ) regulations implementing NEPA, FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, and FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*. Several proposed project components do not require Federal action; however, they depend on the portions of the project requiring FAA approval to be constructed or operated as planned and are, therefore, included in the analysis.

This Finding of No Significant Impact (FONSI) and Record of Decision (ROD) provides the FAA's environmental determination, approval, and conditions for agency actions necessary to implement the Proposed Action. This FONSI/ROD is based on information and analyses contained in the *Environmental Assessment for Non-Aviation Development at Jacksonville Executive at Craig Airport*, which is incorporated by reference, and other related documents available to the Agency. The ROD is issued in accordance with CEQ regulations at 40 CFR §1505.2.

**PROPOSED DEVELOPMENT PROJECT:** The Proposed Project includes the lease and development of approximately 80 acres of non-aviation land at CRG to a private tenant. The Proposed Project Site is located to the south of Runway 05/23 within airport property. JAA would lease the property at CRG to a private developer who plans to develop the site for light industrial use, consisting of a distribution/warehouse facility with associated parking areas and access roads (Exhibit 1-3 of the EA). To support the operation of this development, new access roads would be constructed to provide access from the Project Site to Atlantic Boulevard and General Doolittle. Construction is anticipated to begin late 2023 and would be completed in approximately 14 months.

The proposed development would consist of:

- Clearing, grading, and tree removal on approximately 65 acres of land;
- Construction of an industrial warehouse and distribution building, approximately 180,825 square feet in size;
- Construction of parking lots to accommodate 365 automobiles, 835 delivery vans, and 13 trucks;
- New access road connecting to General Doolittle Drive;
- New access road connecting to Atlantic Boulevard, including associated intersection improvements;
- Construction of stormwater management facilities; and
- Relocation of fencing.

The Proposed Project includes clearing and grading approximately 65 acres of land forested uplands and wetlands. The types of plant communities and habitats on the project site are common to the area and region. The project is anticipated to result in permanent impacts to approximately 2.85 acres of wetlands. The St. Johns River Water Management District (SJRWMD) and the Florida Department of Environmental Protection (FDEP) issued permits for the project in July 2023. Compliance with these permits ensures all impacts have been avoided to the greatest extent practicable, unavoidable impacts have been minimized, and a mitigation plan has been provided for unavoidable wetland impacts. The developer intends to purchase 2.00 credits in the St. Marks Pond Mitigation Bank to offset the impacts to wetlands.

The operation of the warehouse/distribution facility would result in a long-term increase in traffic on surrounding roadways due to the increase in employee vehicles, delivery vans, and delivery trucks. A Traffic Impact Analysis (TIA) was prepared in June 2022. The TIA was coordinated with, and approved by, the City of Jacksonville and the Florida Department of Transportation (FDOT). The Proposed Project includes the implementation of new access roads and intersection improvements at the proposed Atlantic Boulevard intersection. As a result of these improvements, the TIA concluded the Proposed Project would maintain an acceptable level of service on the surrounding roadways.

A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) shows that approximately 17 acres of the 1% annual chance flood (i.e. the

100-year flood elevation) are contained within the Proposed Project Site. Construction of access roadways will impact approximately 3.9 acres of 100-year floodplain within an existing drainage ditch on airport property. The affected areas of the floodplain include culverting approximately 450 linear feet of the existing ditch and re-shaping approximately 2,320 linear feet of the ditch. The culverts and ditch modifications would be designed to meet applicable local standards and requirements for floodplain management. Runoff from the new impervious surfaces would be detained and treated in separate stormwater ponds. No significant floodplain impacts are anticipated.

**FAA PROPOSED ACTION:** The Airport Sponsor's Proposed Project, as described above and in Section 1.3 of the EA, represents the Airport Sponsor's intended development at the airport. FAA has determined that the agency has approval authority regarding JAA's request to release the property from its federal obligations.

**REQUESTED FEDERAL ACTION:** The requested Federal actions associated with the proposed development project include the following:

1. Release of the Sponsor's federal obligations as the property was conveyed to the City of Jacksonville by the War Assets Administration (Surplus Property Act) on May 1, 1947.

**PURPOSE AND NEED:** Section 1.4 of the EA describes the purpose of and need for the Proposed Project, as identified by the Airport Sponsor. CRG's most recent Master Plan recommended the property, subject of the EA, be designated for future non-aviation commercial development, as the land was not needed to support aviation needs at the Airport. The Master Plan further determined the land could be released without adversely affecting the development, improvement, operation, or maintenance of the Airport. In addition, releasing the land would generate revenue for the Airport and ensure it is self-sustaining as required by FAA Grant Assurance #24<sup>1</sup>. The private developer has determined to meet their goals, the project site must include sufficient space to accommodate an industrial distribution/warehouse building with associated parking areas and provide access to major roadways.

**ALTERNATIVES:** Chapter 2 of the EA discusses potential alternatives to the Proposed Project, including the No-Action Alternative. A total of four (4) sites were considered for release and future non-aeronautical development at CRG. These sites were labeled north, west, east, and south (Exhibit 2-1 of the EA). The Blue Sky Golf Course is located on the north side of the Airport. This golf course underwent significant renovations in 2014 and continues to attract and accept new memberships. It would not be beneficial to replace the golf course with a different non-aeronautical development. To the west, the Airport contains development that supports the aeronautical uses at CRG, including hangars,

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<sup>1</sup>Grant Assurances for Airport Sponsors as amended on 5/2022 in 87 FR 25691 and found at [https://www.faa.gov/sites/faa.gov/files/airports/new\\_england/airport\\_compliance/assurances-airport-sponsors-2022-05.pdf](https://www.faa.gov/sites/faa.gov/files/airports/new_england/airport_compliance/assurances-airport-sponsors-2022-05.pdf)

FBOs, and various other aviation-related tenants. To the east of the airfield, the Airport is primarily composed of high-quality wetlands, commonly referred to as Cedar Swamp, which are within the 100-year floodplain. The south site is vacant and provides access to Atlantic Boulevard, less than one mile east of Interstate 295. This site provides sufficient space to accommodate the construction of a distribution/warehouse facility that is compatible with FAA airspace restrictions and design standards. As such, the south site was the only area considered for development in the EA because it was the only site that is vacant and available for non-aviation development.

No-Action Alternative – Under the No-Action Alternative, the Proposed Project would not be implemented. JAA would continue to maintain and operate the airport in its present state and the potential environmental effects associated with the Proposed Project would not be constructed on property at CRG. Although the No-Action Alternative would not satisfy the purpose of and need for the Proposed Project, it was retained for further detailed evaluation in the EA in accordance with NEPA and CEQ regulations.

**ENVIRONMENTAL IMPACTS:** The No-Action Alternative and FAA Proposed Action were evaluated for potential impacts on the environmental resource categories identified in FAA Order 1050.1F. The Affected Environment and Environmental Consequences sections of the EA (Chapters 3 & 4, respectively) provide a description of existing conditions and an analysis of direct, indirect, and cumulative impacts.

As noted previously, the environmental effects of the FAA Proposed Action and the dependent project components associated with the Federal action were examined in the EA. Under the No-Action Alternative, the FAA Proposed Action and the overall Proposed Project would not be implemented, and the environmental impacts associated with the proposed industrial distribution and warehouse facility would not occur.

**Air Quality** – The airport is in an area designated by the EPA as attainment with respect to all current National Ambient Air Quality Standards (NAAQS). Accordingly, the anticipated impacts to air quality due to the implementation of the Proposed Project are not subject to a State Implementation Plan (SIP), but was provided for informational and disclosure purposes. Implementation of the Proposed Project would result in an increase for both temporary and long-term emissions. Temporary emissions would result from construction of the distribution/warehouse facility and long-term emissions would result from the increase in vehicle traffic due to its operation. Although the area is not subject to a SIP, the estimated emissions would not exceed the federal de minimis thresholds for 2023 or 2024 (Table 4-1 and Appendix B of the EA). This indicates that implementation of the Proposed Project is not anticipated to cause or contribute to an exceedance of any NAAQS. Therefore, no significant air quality impacts are anticipated.

**Biological Resources** (including Fish, Wildlife, and Plants) – The Proposed Project site totals approximately 80 acres. The study area is comprised of several upland and wetland community types. Exhibit 3 of Appendix C in the EA summarizes the acreage of each land

use/vegetative cover type within the study area, but the dominant habitats include hardwood/conifer mixed forests, vegetated non-forested wetlands, and mixed forested wetlands.

The types of plant communities and habitats on the project site are common to the area and region. As described in the EA and further discussed below, the Proposed Project would have no effect on the Florida pine snake, little blue heron, tricolored heron, bald eagle, or gopher tortoise. The Proposed Project may affect, but is not likely to adversely affect, the Eastern indigo snake and Wood stork.

Federally-Listed Species – The eastern indigo snake and wood stork have the potential to exist within the Study Area (Exhibit 1-2 of the EA). The eastern indigo snake can use gopher tortoise burrows for shelter. Given the presence of gopher tortoise burrows within or near the Proposed Project site, the eastern indigo snake was given a moderate probability of occurrence. Using the *Eastern Indigo Snake Programmatic Effect Determination Key*<sup>2</sup> (Appendix C in the EA), it is anticipated that this project may affect, but is not likely to adversely affect the eastern indigo snake. A determination of “may affect but is not likely to adversely affect” was reached because the project is expected to impact fewer than 25 acres of xeric habitat and/or 25 gopher tortoise burrows. In compliance with Florida Fish and Wildlife Conservation Commission’s (FWC’s) *Gopher Tortoise Permitting Guidelines*, all potentially occupied gopher tortoise burrows will be excavated prior to the start of construction, ensuring the protection of the eastern indigo snake per USFWS guidance. Should an eastern indigo snake be found on-site, the snake must be allowed to vacate the area before work can resume.

The wood stork depends on wetland habitat for foraging and nesting. It frequently utilizes areas containing woody vegetation over standing water, preferably in cypress trees or mangroves. USFWS designates Core Foraging Areas (CFAs) for each documented wood stork colony by region. Duval County is within the North Florida region, which defines each CFA as a 13-mile radius surrounding the colony location. All wetlands and waterways within the 13-mile radius may be considered Suitable Foraging Habitat (SFH) for wood storks. Therefore, SFH does exist within the study area. The study area is also within the CFA of an active wood stork colony (Dee Dot Ranch), which is approximately 8.3 miles southeast of the project area (Exhibit 4, Appendix C in the EA). Mitigation provided for unavoidable wetland impacts is anticipated to satisfy mitigation requirements for the loss of SFH. Therefore, using the USACE/USFWS *Effect Determination Key for the Wood*

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<sup>2</sup> This Key was written for the U.S. Army Corp of Engineers (USACE) and approved by the USFWS North Florida and South Florida Field Offices on January 25, 2010. The field studies supporting the EA contain all the pertinent information that led to a finding of *Not Likely to Adversely Affect* (NLAA) the indigo snake and the Key states, “If the use of this Key results in a determination of NLAA, the Service concurs with this determination and no additional correspondence will be necessary.”

*Stork in Central and North Peninsular Florida*<sup>3</sup> (2008) it is anticipated that this project may affect, but not likely to adversely affect the wood stork.

While no longer considered a listed species under the ESA, the bald eagle is still afforded protection under the Bald and Golden Eagle Protection Act (BGEPA) of 1940 and the Migratory Bird Treaty Act of 1918 (MBTA). The USFWS defines two buffer zones from the central location of a nest that regulates activity restrictions based on their distance, the primary and secondary zones. The primary activity zone is 330 feet, and the secondary activity zone is 660 feet from the central location of the nest. Generally, if work is proposed within 660 feet of the nest, restrictions may be applicable. No documented eagle nests occur within 660 feet of the study area. The nearest known bald eagle nest is approximately 3,700 feet southwest of the study area (Appendix B).

State-Listed Species – As discussed in Section 3.2.2.2 of the EA, the gopher tortoise, Florida pine snake, little blue heron, and tricolored heron have the potential to exist within the Study Area. There is suitable foraging habitat present in the study area for the little blue heron and tri-colored heron; however, these avian species are highly mobile and can forage outside the site. If any individuals are present during construction, they would leave the area if disturbed. These species are unlikely to utilize the Study Area for nesting due to adjacent development and lack of suitable nesting trees over water. Typically, these species nest in colonies, which are tracked and documented by wildlife agencies. The nearest documented wading bird rookery is approximately 8.0 miles northeast of the project area (Appendix C of the EA). No listed wading birds were observed during the site inspection. Therefore, the Proposed Project is not likely to affect the little blue heron or tricolored heron.

A gopher tortoise survey was conducted in November 2021. The gopher tortoise is a state-threatened species that inhabits xeric and mesic forests, fields, and disturbed areas. A total of three potentially occupied gopher tortoise burrows were observed in the project area (Appendix C of the EA). While only three burrows were identified during the field survey, approximately 38 acres of habitat that may support this species is present on the parcel. In accordance with the FWC's *Gopher Tortoise Permitting Guidelines*, a gopher tortoise relocation permit will be needed to excavate or trap all burrows occurring on and within 25 feet of the construction site or areas where there may be site preparation activities. All active and inactive burrows will be excavated, and tortoises captured, or all tortoises will be trapped via approved methods, as outlined in the *Permitting Guidelines*. All excavated tortoises will be relocated to an FWC-approved Long Term Protected Recipient Site. JAA owns and operates a Long-Term Protected Recipient Site at Cecil Airport where there is capacity available to accommodate gopher tortoises excavated from

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<sup>3</sup> This Key was written for the U.S. Army Corp of Engineers (USACE) and approved by the USFWS North Florida and South Florida Field Offices on January 25, 2010. The field studies supporting the EA contain all the pertinent information that led to a finding of *Not Likely to Adversely Affect* (NLAA) the wood stork and the Key states, "If the use of this Key results in a determination of NLAA, the Service concurs with this determination and no additional correspondence will be necessary."

the Proposed Project. A gopher tortoise survey is only valid for 90 days, so a 100 percent survey of suitable habitat is required before relocation efforts begin (prior to construction).

The pine snake has a moderate probability of occurrence in the Study Area because of the presence of potentially occupied gopher tortoise burrows and well-drained habitat. Permitting and coordination conducted for the gopher tortoise with the FWC is anticipated to include the protection of the pine snake if a pine snake is encountered. By implementing conservation measures for snakes as outlined below and in conjunction with FWC, the Proposed Project is not likely to affect the Florida pine snake.

**Conservation Measures** – As discussed in the EA, the Sponsor is required to implement certain conservation measures. These measures are summarized below:

1. Prior to and during construction, the Sponsor will be required to implement USFWS Standard Protection Measures for the Eastern Indigo Snake.
2. Prior to construction, the Sponsor will re-survey appropriate habitats within the development area to confirm the presence or absence of gopher tortoise burrows. All potentially occupied burrows will be excavated, and tortoises will be relocated after obtaining applicable FWC permits.
3. Additional measures to prevent impacts on the eastern indigo snake, gopher tortoise, and Florida pine snake include establishing a protective 25-foot buffer around existing gopher tortoise burrows outside the project area, avoiding impacts to snakes occupying gopher tortoise burrows and suitable habitat outside the project area, and allowing individual snakes encountered to move away from the project area without interference. Clearing activities will cease until encountered snakes are outside of the project area.

Through on-site surveys, available habitat analysis, and the use of *Effects Determination Keys* for federally listed species, the FAA determined the Proposed Action and overall Proposed Project would not have a significant impact on biological resources, including natural habitats, common species of wildlife, and protected species.

**Climate** – Construction and operation of the Proposed Project would result in a temporary and long-term increase in greenhouse gas (GHG) emissions. Temporary emissions would result from construction of the distribution/warehouse facility and long-term emissions would result from the increase in vehicle traffic due to its operation. Table 4-2 in the EA provides an estimate of the annual GHG emissions inventory from these activities. These estimates are provided for information only as no Federal NEPA standard for the significance of GHG emissions from individual projects on the environment has been established. GHG emissions associated with the FAA Proposed Action and the overall Proposed Project are not anticipated to have a significant effect on climate or climate change.

**Coastal Resources** – The entire State of Florida is located within a coastal zone; however, the Proposed Project Site is approximately eight (8) miles inland of the nearest coastal waters and is not located within a designated coastal barrier resource zone. The Florida Department of State had no objections to the Proposed Project and, therefore, it is consistent with the Florida Coastal Management Program (FCMP).

**DOT Act, Section 4(f) Resources** – The nearest eligible Section 4(f) resource is Timucuan Ecological and Historic Preserve located approximately three miles northeast of the Study Area. The Proposed Project would neither directly nor indirectly impact the use of 4(f) resources. No culturally significant resources that could be eligible for protection under Section 4(f) are present in the EA study areas.

**Farmlands** – The Proposed Project Site is located on land committed to urban development as it is located within an “urbanized area” on the U.S. Census Bureau Map. Therefore, the FAA Proposed Action and overall Proposed Project would have no effect on farmlands.

**Hazardous Materials, Solid Waste, and Pollution Prevention** – The Study Area is currently vacant, has not been previously disturbed, and does not contain any signs of hazardous materials. While there are no records or evidence of any ground contaminating events at the Proposed Project Site, there is a potential for encountering hazardous substances during construction activities. The contractors are required to implement site-specific spill prevention, control, and countermeasure (SPCC) plans that reduce the potential for substantial impacts associated with regulated materials. Should construction activities discover underground storage tanks, waste materials, or other sources of environmental contamination, regulatory authorities will be notified, and the necessary site remediation completed.

All hazardous substances and wastes used or generated during the operation of the warehouse/distribution facility will be appropriately stored, labeled, and/or disposed of as required. Secondary containment where storage and handling of Petroleum, Oils, and Lubricants (POL) will take place, including maintenance bays and storage sites of single wall POL tanks, will be implemented as appropriate and required by the Clean Water Act. Where secondary containment is not directly practicable, spill ponds and oil water separators would be constructed downstream of POL related activities. These regulations and practices, combined with existing technologies and procedures developed to properly manage these substances, substantially reduce the risks of causing environmental contamination from the construction and operation of the Proposed Project. Therefore, the Proposed Project will not result in significant impacts related to hazardous materials.

The Proposed Project would create a temporary increase in solid waste generated during construction. The volume of solid waste is expected to be accommodated by surrounding landfills. Additionally, the operation of the warehouse/distribution facility would increase the amount of solid waste generated annually. However, the Proposed Project would not generate an unmanageable volume of solid waste and would not exceed the capacity of

the existing solid waste facilities. Therefore, the Proposed Project will not result in significant impacts related to solid waste.

The private developer is required to implement pollution prevention, spill prevention, and response plans documenting the measures that would be taken to prevent accidental releases to the environment and, should they occur, the actions that would be undertaken to minimize the environmental impact. The contractor(s) are required to implement SPCC plans that reduce the potential for substantial impacts associated with regulated materials. Therefore, the Proposed Project will not result in significant impacts from environmental contamination.

**Historical, Architectural, Archeological and Cultural Resources** – There are no resources listed on the National Register of Historic Places within or adjacent to the Area of Potential Effect (APE), which is equivalent to the Study Area. According to the National Park Service, the nearest National Register-listed resource is the Timucuan Ecological and Historic Preserve located approximately three (3) miles to the northeast of the APE.

A Cultural Resource Assessment Survey (CRAS) was completed in December 2021 (Appendix D in the EA). A review of the Florida Master Site File (FMSF) revealed that one historic resource has been previously recorded within the APE (8DU19043). The Craig Airfield Designed Historic Landscape (8DU19043) was first recorded during *A Cultural Resource Reconnaissance Survey of the Eagle Aviation Hangars at Craig Airport, Duval County, Florida* conducted by Environmental Services, Inc. in 2007. Approximately eight acres of the circa 1943 naval airfield were documented during this survey. The portion of the resource surveyed in 2007 was not original to the airfield and was comprised of concrete landing pads utilized by the National Guard from 1977 and 2002, rather than during WWII. As such, and because the entire airfield was not surveyed, the Craig Airfield (8DU19043) was considered to have insufficient information for determining NRHP eligibility by the SHPO in 2007. In addition, the Sandalwood Community Canal (8DU22593) was previously recorded outside, but within the vicinity of, the APE. The circa 1955 drainage canal was recorded during the *Technical Memorandum: Cultural Resource Assessment Survey Update for the Interstate 295 (State Road 9A) Ponds from the Dames Point Bridge to State Road 202 (Butler Boulevard), Duval County, Florida* and determined ineligible for listing in the NRHP in 2020.

Given the results of background research and field survey, which included a total of 41 shovel tests, no archaeological sites were discovered. As a result of the historic/architectural field survey, one previously recorded historic resource (8DU19043) was identified and re-evaluated and one historic resource (8DU23022) was newly identified, recorded, and evaluated. The newly identified historic resource (8DU23022) is a common example of a drainage canal found throughout the region and the State of Florida and it is not necessarily a significant embodiment of a type, period, or method of construction. Furthermore, background research did not reveal any historic associations with significant persons and/or events that are directly connected to the drainage canal.

As a result, 8DU23022 does not appear eligible for listing in the NRHP, either individually or as part of a historic district.

Based on this information, there will be no adverse effect on historic resources. The SHPO concurred with this finding in a letter dated March 30, 2023 (Appendix A in the EA). Additionally, coordination with the Miccosukee Tribe of Indians, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Tribe of Florida (STOF), and Seminole Nation of Oklahoma was conducted. A response was received from the STOF, and they stated that they had no objections to the project.

**Land Use** – The Proposed Project Site is located on the south side of the Airport property and is currently vacant. The area is zoned Public Buildings and Facilities, Business Park, and Planned Unit Development. The land uses adjacent to the Proposed Project Site include community/general commercial, planned unit development, and public buildings and facilities (airport uses). The Proposed Project is consistent with local plans related to land use and development. Therefore, no adverse impacts related to land use will occur with implementation of the Proposed Project.

**Natural Resources and Energy Supply** – Construction of the new facilities would require natural resources such as steel, gravel, sand, aggregate, concrete, asphalt, water, and other construction materials. These materials are not in short supply in the local area and consumption of these materials is not expected to deplete existing supplies. Operation of these proposed facilities would require the use of electricity, natural gas, and water. Electricity would be used to power and light the buildings and to light the parking areas. The developer has expressed interest in implementing electric vehicle charging infrastructure for the use of electric delivery vans. This has not yet been finalized. However, the potential need for electricity to support this infrastructure has been communicated with the local power supplier, JEA.

While the Proposed Project would increase the amount of energy and natural resources consumed in the short and long-term, the Proposed Project Site is in an urban area with a sufficient supply of electricity, natural gas, and water. Additionally, energy and water conservation features would be incorporated into the design of the proposed projects where feasible. Based on the analysis in the EA, the FAA Proposed Action and overall Proposed Project would not have a significant impact on natural resource or energy supplies.

**Noise and Noise-Compatible Land Use** – Construction noise would temporarily increase sound levels in the immediate vicinity of the construction and land clearing activities. Land clearing and grading operations are the noisiest, with such equipment generating noise levels as high as 76 to 101 dB within 50 feet of their operation (Table 4-3 in the EA). The potential noise impact associated with the operation of machinery on-site would be temporary and can be reduced using construction timing and staging. Major construction activities would be limited to daylight hours. Additionally, noise from construction equipment would likely not be discernible from other background noise sources such as

aircraft and roadway noise in most locations. No changes to the number of operations, fleet mix, runway use, or time of day of operations at the Airport are proposed as part of the Project. The nearest residence to the proposed project is greater than 1000 feet south of the project site and across Atlantic Boulevard. Therefore, there is no significant noise impacts to not-compatible land uses because of the Proposed Project.

**Socioeconomics, Environmental Justice, And Children’s Environmental Health and Safety Risks** – The Proposed Project includes the construction of a new north-south access road connecting the Proposed Project to Atlantic Boulevard and a new internal east-west access road that would connect to General Doolittle Drive. The internal east-west access road would provide additional access to the Proposed Project. The warehouse/distribution facility is anticipated to operate 24 hours per day and 7 days per week and would result in an increase in motor vehicles on Atlantic Boulevard from employee vehicles, delivery vans, and delivery trucks.

A Traffic Impact Analysis (TIA) was prepared in June 2022. The TIA was coordinated with, and approved by, the City of Jacksonville and the Florida Department of Transportation (FDOT). Based on coordination with the FDOT, the TIA developed and evaluated three scenarios to accommodate access to the Proposed Project with 2025 traffic volumes (Appendix F of the EA). In Scenario 3 (the Proposed Project), a new traffic signal would be installed at the intersection where the new north-south roadway, just west of the Duval Acura dealership, would intersect with Atlantic Boulevard. The existing traffic signal at the Duval Acura driveway will be removed and the driveway will be converted to right-in/right-out. Additionally, the existing eastbound left-turn lane at the Atlantic Boulevard / Duval Acura driveway / Sutton Lakes Boulevard intersection will be extended and an additional eastbound left-turn lane at the new intersection will be included. Scenario 3 was found by FDOT to result in less impacts to existing businesses and residences than the other scenarios. Therefore, Scenario 3 was recommended for implementation and is included in the Proposed Project. A public hearing was held in November 2022, and based on the TIA and the results of the public hearing process, Scenario 3 was approved by the City of Jacksonville and FDOT for implementation. The TIA concluded the Proposed Project would maintain an acceptable level of service (LOS) on the surrounding roadways. Therefore, the Proposed Project would not cause significant adverse impacts to surface transportation.

Temporary construction impacts could include increased commercial and construction traffic, increased traffic congestion, increased travel distances, and increased travel times for drivers. A construction management plan will be prepared which will specify hours of operation, haul routes, and similar controls to reduce these temporary impacts.

The Proposed Project occurs entirely on airport property and would not result in the acquisition or relocation of any residences, schools, childcare centers, or other similar facilities. No schools or childcare facilities are in areas that would be affected by the Proposed Project.

Four census block groups were identified within or adjacent to the Proposed Project Site. For this EA, Duval County was used as the reference area because the Proposed Project Site is in Duval County and its community is relevant to the demographic of the surrounding census block groups. Duval County contains 13.3 percent low-income and 48.5 percent minority populations. Using Duval County's population percentage as a threshold, three of the four census block groups identified potentially contain an EJ population (Exhibit 3-2 in the EA). The operation of the warehouse/distribution facility would result in a long-term increase in traffic on surrounding roadways. However, the Proposed Project includes the implementation of new access roads and intersection improvements, which would maintain an acceptable LOS on surrounding roadways. Therefore, no long-term impacts are anticipated on potential EJ populations.

Based on the analysis in the EA, the FAA Proposed Action and overall Proposed Project would not result in any significant socioeconomic, Environmental Justice, and children's health and safety risk impacts.

**Visual Effects Including Light Emissions** – The closest residential area is located approximately 400 feet to the south of the Proposed Project Site, on the opposite side of Atlantic Boulevard, a major multi-lane roadway. Although the facility is anticipated to operate 24 hours per day and 7 days per week, all proposed lighting will only illuminate the immediate area surrounding the warehouse/distribution facility and access roads. The lighting will be directed at angles that would not cause lighting impacts outside of the Proposed Project Site. Light emissions during the construction of the Proposed Project are not anticipated to cause any impact to the surrounding areas as most of the construction would occur during daytime hours. The Proposed Project Site is not visible from the nearest residential areas, south of Atlantic Boulevard. Therefore, the construction and operation of the Proposed Project would not result in a visual effect or additional light emissions that could create an annoyance or interfere with normal activities.

**Water Resources (including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)**

Wetlands – Under the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has the authority to regulate activities in waters of the U.S., including qualifying wetland areas. In Florida, this authority has been designated to the state through the FDEP and the state Water Management Districts. On-site wetlands were delineated in March 2021. Approximately 26.15 total acres of wetlands and 7,136 linear feet of ditches/surface waters were found within the Proposed Project Site (Table 3-6 and Appendix E in the EA). Wetland types in the study areas include Freshwater Non-Forested Wetlands, Baygalls, Mixed Wetland Hardwoods, Mixed Hardwood-Coniferous Swamps, and Gum Ponds. These wetland systems are mature, relatively undisturbed, and moderate to high in quality. The Proposed Project is anticipated to result in permanent impacts to approximately 2.85 acres of wetlands, as detailed in Table 4-5 and shown in Exhibit 4-2, *Wetland and Stream Impacts*. Additionally, construction of the proposed parking and access roads may

temporarily impact approximately 2,320 linear feet of the existing ditch/surface water. However, the Proposed Project includes the reshaping of the existing ditch and implements new drainage infrastructure to maintain water flow on the site. The project was designed to avoid and minimize as many existing wetlands within the site as possible.

Coordination between the developer and the SJRWMD regarding the final wetland delineation was completed and the SJRWMD issued a permit for this project on July 13, 2023. Additionally, FDEP issued a State 404 Program Permit for the project on July 21, 2023. Compliance with these permits ensures all impacts have been avoided to the greatest extent practicable, unavoidable impacts have been minimized, and a mitigation plan has been provided for unavoidable wetland impacts. Pending further coordination, it is anticipated the developer will purchase 2.00 credits in the St. Marks Pond Mitigation Bank. Therefore, the proposed project will not have significant impacts to wetlands.

Floodplains – A review of the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) shows that approximately 17 acres of the 1% annual chance flood (i.e. the 100-year flood elevation) are contained within the Proposed Project Site. The Proposed Project includes the construction of bridges along the existing east-west ditch (which is located within the 100-year floodplain), the reshaping of that existing ditch, and implementation of new drainage infrastructure to maintain water flow on the site (see Appendix E for more information). Therefore, this construction may temporarily impact approximately 3.9 acres of the 100-year floodplain (Exhibit 4-3 of the EA).

The developer has conducted a stormwater management plan for the final design of the Proposed Project which included a water quality analysis and floodplain analysis that confirmed the appropriate drainage would be maintained on the site. This stormwater management plan has been coordinated with the SJRWMD and all appropriate permits have been obtained. The Proposed Project would not result in a high probability of loss of human life, have substantial encroachment-associated costs or damage due to flooding, or cause adverse impacts on natural and beneficial floodplain value. Therefore, the Proposed Project is not anticipated to result in significant impacts to floodplains.

Surface Waters and Groundwater – Several ditches occur throughout the Proposed Project Site, the largest of which runs east-west along the southern boundary of the Proposed Project Site and serves to convey stormwater away from Airport property and adjacent development. Several smaller ditches run throughout the on-site uplands and wetlands and are utilized to convey stormwater away from the airfield. Construction of the Proposed Project includes culverting approximately 450 linear feet and reshaping 2,320 linear feet of the large east-west ditch. These modifications along with the implementation of new drainage infrastructure would maintain water flow on the site. Additionally, the Proposed Project includes an increase of approximately 34 acres of impervious surfaces. To account for the increase in impervious surface, up to eight stormwater facilities spanning a total of approximate 17 total acres would be provided throughout the site (Exhibits 1-3 and 4-2 of the EA).

BMPs will be incorporated into the project during and after construction to minimize stormwater runoff impacts. Contractors will be required to comply with all applicable Federal, state, and local laws and regulations, including FAA guidance contained in AC 150/5370-10H, *Standard Specifications for Construction of Airports*, including Item C-102, *Temporary Air and Water Pollution, Soil Erosion and Siltation Control*; AC 150/5320-15A *Management of Airport Industrial Waste*; and AC 150/5320-5D, *Airport Drainage Design*. Implementation of stormwater management programs, adherence to the National Pollutant Discharge Elimination System (NPDES) program requirements, and implementation of BMPs would prevent any significant water quality impacts to surface waters under the Proposed Project. Therefore, there will not be significant impacts to surface waters with the implementation of the Proposed Project.

Two groundwater wells owned and operated by JEA, Jacksonville's electric and water provider, are located within the Proposed Project Site (Exhibit 3-4 in the EA). These wells are used to supply water to the JEA Major Grid which provides water to most of Duval County and the northwest portion of St. Johns County. However, the wells are located outside of the area proposed for lease/release and all ground disturbance activities will occur outside of the prescribed radius for well safety. Design engineers will ensure that adequate drainage and stormwater management (as outlined above) is maintained during construction and post-project. All spill prevention and control regulations will be required to any prevent spills at the new facility from causing significant adverse impacts to groundwater.

Based on the analysis in the EA, the Proposed Project is not likely to contaminate surface waters or aquifers/wells used for public drinking water supply such that public health may be adversely affected. It will not adversely affect natural and beneficial surface water or groundwater resource values to a degree that substantially diminishes or destroys such values. Therefore, the Proposed Project would not significantly impact surface water or groundwater resources.

Wild and Scenic Rivers – The closest river designated under the National Wild and Scenic River System is the Wekiva River, located approximately 100 miles south of the study area. The construction and operation of the Proposed Project would not affect wild and scenic rivers.

**Cumulative Impacts** – The past, present, and future cumulative projects identified in Section 4.13 of the EA have generated, or are anticipated to generate, low to moderate environmental impacts. The impacts associated with the Proposed Action, when considered in addition to other cumulative projects, are not expected to exceed thresholds that would indicate a significant impact.

## **OTHER FEDERAL, STATE, AND LOCAL ACTIONS AND PERMITS:**

The Jacksonville Aviation Authority is required to obtain all permits and regulatory approvals necessary to implement the FAA Proposed Action and overall Proposed Project. The permits identified in the EA are listed below.

- St. Johns River Water Management District – Environmental Resource Permit
- Florida Department of Environmental Protection – NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities & State 404 Individual Permit
- Florida Fish and Wildlife Conservation Commission – 10 or Fewer Burrows Permit
- City of Jacksonville – Local building and construction permits.

**CONSISTENCY WITH APPROVED PLANS OR LAWS:** The FAA Proposed Action and overall Proposed Project is consistent with local plans and ordinances, as well as applicable plans, laws, and administrative environmental determinations of Federal, State, and local agencies. Federal, State, and local agencies were notified of the Proposed Project during the public comment period of the EA. No objections or concerns regarding consistency with plans or laws were raised.

**MITIGATION MEASURES:** Mitigation for the Proposed Action is described more fully in the following sections of the EA: Section 4.10.1 and Appendix F for traffic related impacts and Section 4.12.5 and Appendix E for impacts to floodplains and wetlands. The EA also describes voluntary mitigation measures and Best Management Practices that the Sponsor and developer can employ to ensure impacts are avoided or minimized.

**PUBLIC INVOLVEMENT:** Notification letters were sent to select Federal, State, and local agencies to inform them of the proposed development and preparation of the EA. This included submitting the proposed project to the Florida State Clearinghouse for coordinated state agency review. Prior to the initiation of this EA, a public hearing was held in November 2022 as part of the traffic study and analyses. Based the results of the public hearing process, intersection improvements (Scenario 3) were approved by the City of Jacksonville and FDOT for implementation.

The Draft EA was made available for review by the public, government agencies, and interested parties. The Draft EA was available online at the airport's website for viewing and download. Copies of the Draft EA were also available at JAA's administrative offices. A Notice of Availability of the Draft EA was published in *The Florida Times-Union* newspaper on June 2, 2023 and June 16, 2023. The comment period on the Draft EA opened on May 24, 2023 and closed on June 24, 2023. Comments were received from one federal agency, the U.S. Environmental Protection Agency (USEPA). The USEPA did not identify any significant impacts from the Proposed Action and did not suggest and substantive changes to the EA. USEPA's comments included technical recommendations

and best management practices to reduce any minor impacts associated with air quality, water quality, wetlands, hazardous materials, environmental justice, energy efficiency, and recycling (Appendix A of the EA). The comments were addressed throughout the Final EA document and specific responses to comments are included in Appendix A. No comments on the Draft EA were received from other Federal, State, or local agencies or the public.

**FEDERAL FINDING OF NO SIGNIFICANT IMPACT:** After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal action is consistent with existing national environmental policies and objectives as set forth in Section 101 of NEPA and other applicable environmental requirements and will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

APPROVED: \_\_\_\_\_  
Bart Vernace, Manager, Orlando Airports District Office

DATE: October 16, 2023

DISAPPROVED: \_\_\_\_\_

DATE: \_\_\_\_\_

## RECORD OF DECISION AND ORDER

I have carefully considered the FAA's statutory mandate to ensure the safe and efficient use of the national airspace system as well as the other aeronautical goals and objectives discussed in the EA. My review of the EA and determination regarding issuance of the FONSI included evaluation of the purpose and need that this proposed action would serve, the alternate means of achieving the purpose and need, the environmental impacts associated with these alternatives, and any mitigation necessary to preserve and enhance the human, cultural, and natural environment.

Under the authority delegated to me by the FAA Administrator, I find the FAA Proposed Action described in the attached EA is reasonably supported. I, therefore, direct that action be taken to carry forward the necessary agency actions discussed in the attached EA and FONSI.

APPROVED: \_\_\_\_\_  
Bart Vernace, Manager, Orlando Airports District Office

DATE: October 16, 2023

DISAPPROVED: \_\_\_\_\_

DATE: \_\_\_\_\_

### Judicial Review

This Record of Decision (ROD) represents the FAA's final decision and approval for the actions identified in the EA and constitutes a final order of the FAA Administrator subject to review by the Courts of Appeal of the United States in accordance with the provisions of 49 U.S.C. § 46110.

FINAL

# Environmental Assessment for Non-Aviation Development

Jacksonville Executive at Craig Airport

Jacksonville, Florida

PREPARED FOR

JACKSONVILLE AVIATION AUTHORITY

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

As lead Federal Agency pursuant to the National Environmental Policy Act of 1969

PREPARED BY

Landrum & Brown, Incorporated

October 2023

This environmental assessment becomes a Federal document when evaluated, signed, and dated by the Responsible FAA Official.

**BARTHOLOMEW  
VERNACE**

Digitally signed by  
BARTHOLOMEW VERNACE  
Date: 2023.10.16 10:13:43 -04'00'

Responsible FAA Official

Date



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## Acronyms

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The following is a list of acronyms used in the EA:

AC	Advisory Circular
ACEIT	Airport Construction Emissions Inventory Tool
ACS	American Community Survey
Airport	Jacksonville Executive at Craig Airport
APE	Area of Potential Effect
ATCT	Air Traffic Control Tower
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best management practices
CAA	Clean Air Act (as amended in 1990)
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFA	Core Foraging Areas
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> E	Carbon Dioxide Equivalent
CRG	Jacksonville Executive at Craig Airport
EA	Environmental Assessment
EJ	Environmental Justice
EO	Executive Order
ESA	Endangered Species Act
FAA	Federal Aviation Administration
F.A.C	Florida Administrative Code
FBO	Fixed Base Operator
FEMA	Federal Emergency Management Agency
FDEP	Florida Department of Environmental Protection
FIRM	Flood Insurance Rate Map
FNAI	Florida Natural Areas Inventory
FWC	Florida Fish and Wildlife Conservation Commission
GAO	General Accounting Office
GHG	Greenhouse Gas
GPS	Global Positioning System
H <sub>2</sub> O	Water Vapor
HFCs	Hydrofluorocarbons
ICAO	International Civil Aviation Organization
JAA	Jacksonville Aviation Authority
JAX	Jacksonville International Airport
JEA	Jacksonville Electric Authority
LWCF	Land and Water Conservation Fund Act
MOVES	Motor Vehicle Emission Simulator



N <sub>2</sub> O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969, as amended
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO <sub>x</sub>	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
NPIAS	National Plan of Integrated Airport Systems
NPL	National Priorities List
NRHP	National Register of Historic Places
O <sub>3</sub>	Ozone
PFC	Perfluorocarbons
PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter
PM <sub>10</sub>	particulate matter less than 10 microns in diameter
RCRA	Resource Conservation and Recovery Act of 1976
SF <sub>6</sub>	Sulfur Hexafluoride
SHPO	State Historic Preservation Office
SJRWMD	St. Johns River Water Management District
SO <sub>x</sub>	Sulfur Oxide
SPCC	Spill Prevention, Control and Countermeasure
Sponsor	Jacksonville Aviation Authority
SR	State Road
SWPPP	Storm Water Pollution Prevention Act
TSCA	Toxic Substances Control Act of 1976
USACE	U.S. Army Corps of Engineers
U.S.C.	U.S. Code
USDOT	U.S. Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VOC	Volatile Organic Compound
VOR	Very High Frequency Omni Directional Range

# 1 Purpose and Need

## 1.1 Introduction

This Environmental Assessment (EA), required by the National Environmental Policy Act of 1969 (NEPA), as amended (40 Code of Federal Regulations [CFR] 1500-1508) and prepared in accordance with Federal Aviation Administration (FAA) Orders 1050.1F, *Environmental Impacts: Policies and Procedures* and 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, analyzes the potential environmental effects of the release of federal obligations for non-aeronautical land at Jacksonville Executive at Craig Airport (CRG or Airport). The EA is required under NEPA because the project will require FAA to approve a change in land use from aeronautical to non-aeronautical.

CRG is located in Jacksonville, Florida, approximately nine miles east of downtown Jacksonville. The airport lies on approximately 1,432 acres owned and operated by Jacksonville Aviation Authority (JAA or Sponsor). The Airport is bounded to the west by St. Johns Bluff Road North and to the south by State Road (SR) 10 (Atlantic Boulevard), both which connect the Airport to Interstate 295 to the west of the Airport. The Airport is bounded by Kernan Boulevard North to the east and by Monument Road and portions of McCormick Road to the north. See **Exhibit 1-1, Airport Location**.

Based on the National Plan of Integrated Airports Systems (NPIAS) and Florida Aviation System Plan, CRG is defined as a reliever airport. Due to its location, size and proximity to downtown Jacksonville, the airport absorbs general aviation operations from busy commercial service airports, including Jacksonville International Airport (JAX).<sup>1</sup> As such, CRG consists of general aviation operations.

CRG maintains two runways, Runway 05/23 and Runway 14/32. Runway 05/23 is 4,008 feet long by 100 feet wide, and Runway 14/32 is 4,004 feet long by 100 feet wide.<sup>2</sup> Runway 14/32 is equipped with an instrument landing system in addition to Very High Frequency Omni Directional Range (VOR) and Global Positioning System (GPS) approaches to both ends of the runway. The runway system is supported by taxiways which provide access to several general aviation, fixed base operators (FBOs), and hangar storage facilities as well as airport administration and FAA Air Traffic Control Tower (ATCT) facilities. Additionally, landside facilities at the Airport consist of aviation and non-aviation facilities, including fuel storage facilities, aircraft storage facilities, and aircraft and airport maintenance facilities. Specifically, CRG is home to two FBOs, an air charter operator, Jacksonville Sheriff's flight operations, corporate business operators, and four flight training operations.

## 1.2 FAA Federal Action

The FAA's Federal Action is to approve the release of the Sponsor's federal obligations on approximately 80 acres of land as the property was conveyed to the City of Jacksonville by the War Assets Administration (Surplus Property Act) on May 1, 1947.

## 1.3 Proposed Project

The Proposed Project includes the lease and development of approximately 80 acres at CRG to a private developer which would be released from federal obligation. The Proposed Project Site is located

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<sup>1</sup> Jacksonville Aviation Authority, 2008 Master Plan Update, Craig Municipal Airport, Jacksonville, Florida, March 2009.

<sup>2</sup> Ibid.



to the south of Runway 05/23 within airport property, as shown in **Exhibit 1-2, Proposed Project Site**.<sup>3</sup> As part of the Proposed Project, JAA would lease the property at CRG to a private developer who would develop the site to accommodate an industrial distribution/warehouse building with associated parking areas. To support the operation of this development, new roadways would be constructed to connect the Proposed Project Site to Atlantic Boulevard. Construction is scheduled to begin late 2023 and would be completed in approximately 14 months.

The proposed development would consist of:

- Clearing, grading, and tree removal of approximately 65 acres;
- Construction of an industrial distribution building approximately 180,825 square feet;
- Construction of parking lots to accommodate 365 automobiles, 835 delivery vans, and 13 trucks;
- New access road connecting to General Doolittle Drive;
- New access road connecting to Atlantic Boulevard, including associated intersection improvements;
- Construction of stormwater facilities; and
- Relocation of fencing.

See **Exhibit 1-3, Proposed Project** for a depiction of the proposed development within the Proposed Project Site.

## 1.4 Purpose and Need for Proposed Action

### 1.4.1 Need

JAA does not produce revenue from vacant, undeveloped land not required for existing or future aeronautical use. In the Airport's 2008 Master Plan Update, JAA recommended a development concept for CRG that reinforced the needs of all airport tenants and provided the most reasonable and fiscally responsible development scenario for the airport's short and long-term requirements within the Jacksonville aviation system.<sup>4,5</sup> This development concept recommended no land acquisition was required to support future aviation development. The property, subject of this EA, was recommended to be released and redeveloped as commercial development to provide JAA revenue in order to maintain self-sustainability under Grant Assurance 24.

### 1.4.2 Purpose

The purpose of this project is for FAA to release the Sponsor's federal obligation on vacant land that is no longer needed for aviation purposes so the Sponsor can produce a greater benefit from the release than the retention of the land. FAA Order 5190.6B, Change 2, *Airport Compliance Manual*, allows FAA to release federal obligations of property acquired as federal surplus property if more value may be obtained from a disposal of specific parcels than the retention of those parcels for revenue production under leasing. The Master Plan recommended the property, subject of this EA, be designated for future non-aviation commercial development, as the land was not needed to support aviation needs at the Airport. The Master Plan also determined the land could be released without adversely affecting the

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<sup>3</sup> For the purpose of this EA, the Proposed Project Site extends past the 80 acres proposed for lease and development at CRG

<sup>4</sup> Jacksonville Aviation Authority, 2008 Master Plan Update, Craig Municipal Airport, Jacksonville, Florida, March 2009.

<sup>5</sup> While JAA has initiated an update to the CRG Airport Layout Plan, no changes to the land use of the subject property are anticipated

development, improvement, operation, or maintenance of the Airport. In addition, releasing the land would generate more revenue than leaving it vacant. Furthermore, the Sponsor would receive a fair market value for the property. Therefore, it is anticipated that more value may be obtained from the lease of this property than in its current use.

In addition, the private developer has determined in order to meet their goals, the project site must include sufficient space to accommodate an industrial distribution/warehouse building with associated parking areas, be constructible, and provide access to major roadways.

## 1.5 Document Content and Organization

This document is organized as follows:

- **Table of Contents** lists the chapters, exhibits, and tables presented throughout the EA. It also lists the appendices and contains the acronym list.
- **Chapter 1** describes the purpose and need for the Proposed Action
- **Chapter 2** describes alternatives to the Proposed Action
- **Chapter 3** describes the affected environment
- **Chapter 4** describes the environmental impacts of the Proposed Action and of the No Action Alternative
- **Chapter 5** includes the list of preparers of this document
- **Chapter 6** includes the references used in support of this document

An EA is a disclosure document prepared for the Federal agency (in this case the FAA) responsible for approving a proposed Federal or Federally-funded action, in compliance with the requirements set forth by the Council on Environmental Quality (CEQ) in its regulations implementing NEPA. The purpose of this EA is to investigate, analyze, and disclose the potential impacts of the Proposed Action and its reasonable alternatives. In this case, the FAA is responsible for reviewing and approving actions that pertain to airports and their operation. As such, this EA has been prepared in accordance with FAA Orders 1050.1F Change 1, Environmental Impacts: Policies and Procedures and 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions, and took into consideration guidance included in the FAA Environmental Desk Reference for Airport Actions.

This EA was also prepared pursuant to other laws relating to the quality of the natural and human environments, including:

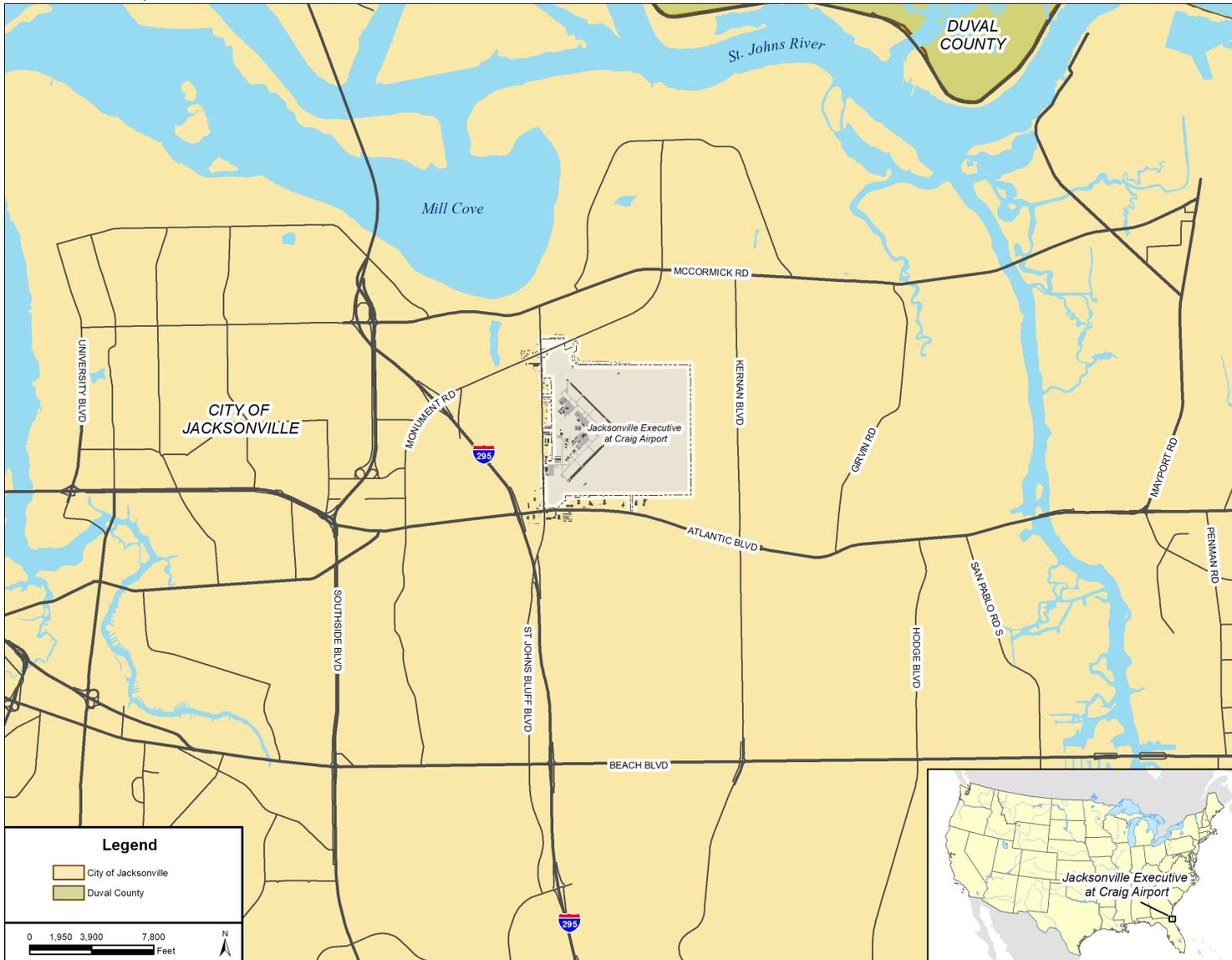
- The Department of Transportation Act, 49 U.S.C., § 303 (formerly Section 4(f))
- 49 U.S.C., §40114, as amended
- 49 U.S.C., §§47101, et seq.
- Executive Order 11990, Protection of Wetlands
- Executive Order 11988, Floodplain Management
- Executive Order 11593, Protection and Enhancement of the Cultural Environment
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- Federal Aviation Act of 1958 recodified as 49 U.S.C. §§40101, et seq.
- The Airport and Airway Improvement Act of 1982, 49 U.S.C. §47108, as amended
- National Historic Preservation Act, 16 U.S.C. §470(f), as amended
- 36 CFR Part 800, Advisory Council on Historic Preservation
- Archaeological and Historic Preservation Act, 16 U.S.C. §469(a)
- Archaeological Resource Protection Act, 16 U.S.C. §470(aa)



- Farmland Protection Policy Act, 7 U.S.C. §73, and implementing regulations at 7 CFR §658
- Clean Air Act, 42 U.S.C. §§7401, et seq., and implementing regulations at 40 CFR Parts 51 and 93
- Clean Water Act, 33 U.S.C. §§121, et seq., and implementing regulations at 33 CFR §§325 and 33 CFR §336
- 33 CFR Parts 320-330, Regulatory Programs of the Corps of Engineers
- Endangered Species Act, 16 U.S.C. §661, et seq., as amended
- Other laws, regulations, and policies as applicable

Notices about the subject project were published in The Florida Times-Union newspaper on June 2, 2023 and June 16, 2023. Copies of this document are available online at <https://www.flyjacksonville.com/jaxex/content.aspx?id=52>. See **Appendix A, Agency and Public Involvement** for more information on the advertisement of the Draft EA and the comments received during the comment period (June 2, 2023 through July 3, 2023).

**EXHIBIT 1-1, AIRPORT LOCATION**



Source: Landrum & Brown, 2022

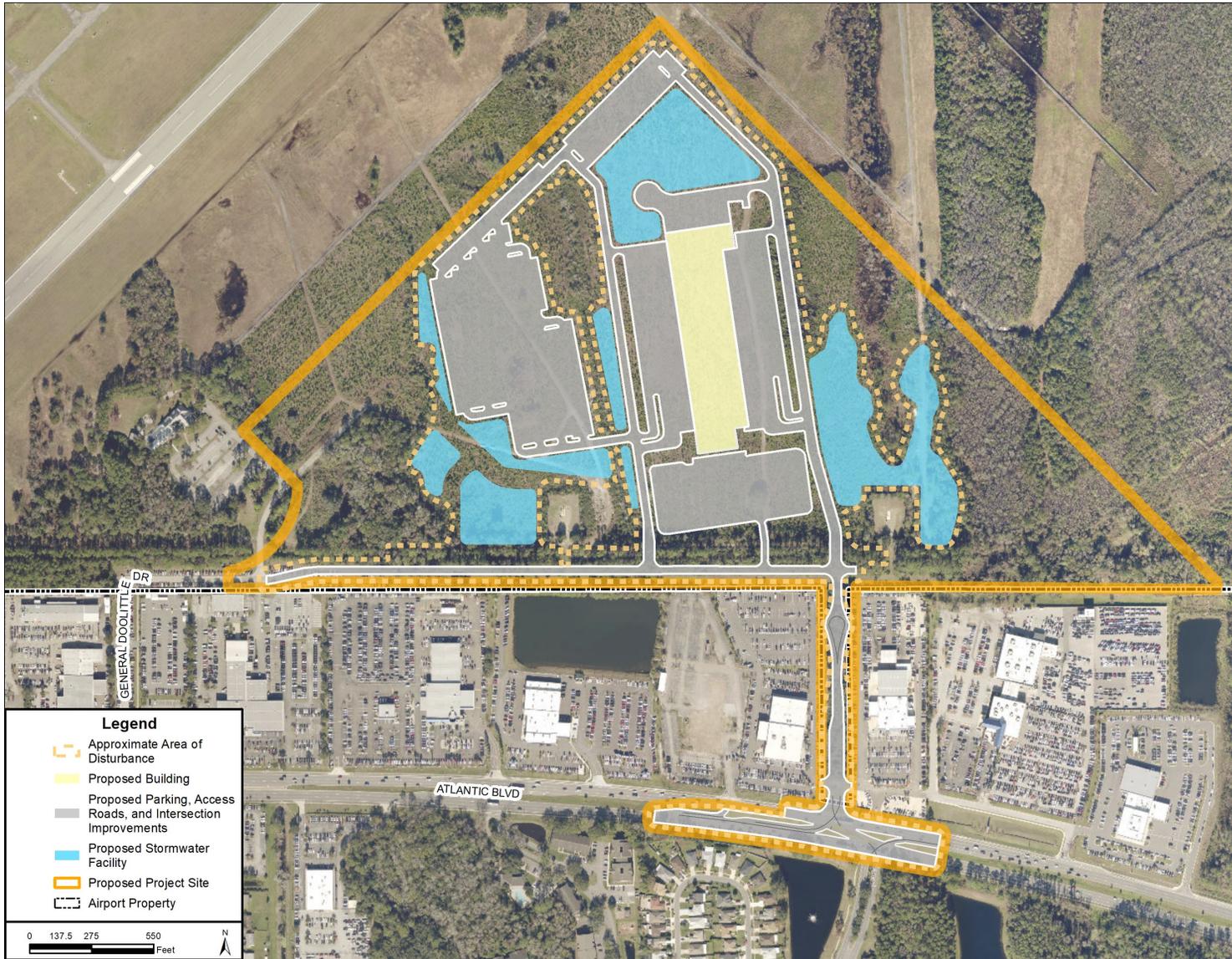


EXHIBIT 1-2, PROPOSED PROJECT SITE



Source: Landrum & Brown, 2022

**EXHIBIT 1-3, PROPOSED PROJECT**



Source: Landrum & Brown, 2022

## 2 Alternatives

Specific Federal Aviation Administration (FAA) guidance was issued under FAA Orders 1050.1F and 5050.4B which require a thorough and objective assessment of the Proposed Action, the No Action alternative, and all reasonable alternatives that would achieve the stated purpose and need for the action. Section 6-2.1(d) of FAA Order 1050.1F provides the following guidance on the content of the alternative's analysis for an Environmental Assessment (EA):

*“The alternatives discussed in an EA must include those that the approving official will consider. There is no requirement for a specific number of alternatives or a specific range of alternatives to be included in an EA. An EA may limit the range of alternatives to the proposed action and No Action when there are no unresolved conflicts concerning alternative uses of available resources. Alternatives are to be considered to the degree commensurate with the nature of the proposed action and agency experience with the environmental issues involved. Generally, the greater the degree of impacts, the wider the range of alternatives that should be considered. The preferred alternative, if one has been identified, should be indicated. For alternatives considered but eliminated from further study, the EA should briefly explain why these were eliminated.”*

### 2.1 Alternatives Considered for Further Environmental Evaluation

Other sites on the Jacksonville Executive at Craig Airport (CRG or Airport) property were considered for further detailed environmental review, including four main site areas at the airport: north, west, east, and south. As shown in **Exhibit 2-1, Development Alternatives**, the Blue Sky Golf Course is located on the north side of the Airport. This golf course underwent \$1.5 million in renovations in 2014 and continues to attract and accept new memberships. To the west, the Airport contains development that supports aviation activity at CRG. To the east of the airfield, the Airport is primarily composed of wetlands, commonly referred to as Cedar Swamp, which are within the 100-year floodplain.<sup>6</sup> To the south, the Airport is primarily composed of vacant land. As such, the south site is the only area considered for development in this EA because it was the only site that is vacant and available for non-aviation development. Therefore, two alternatives were carried forward for further detailed environmental evaluation in the EA, the No Action Alternative and the Proposed Project, as described in the following section.

#### 2.1.1 No Action

With the No Action Alternative, the proposed development would not be implemented. As such, the No Action Alternative does not meet the stated purpose and need for this project. Although not always reasonable, feasible, prudent, nor practicable, the No Action Alternative is a required alternative under NEPA and serves as the baseline for the assessment of future conditions/impacts. To satisfy the intent of NEPA, FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*; FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*; and other special purpose environmental laws, the No Action Alternative is carried forward in the analysis of environmental consequences provided in Chapter 4.

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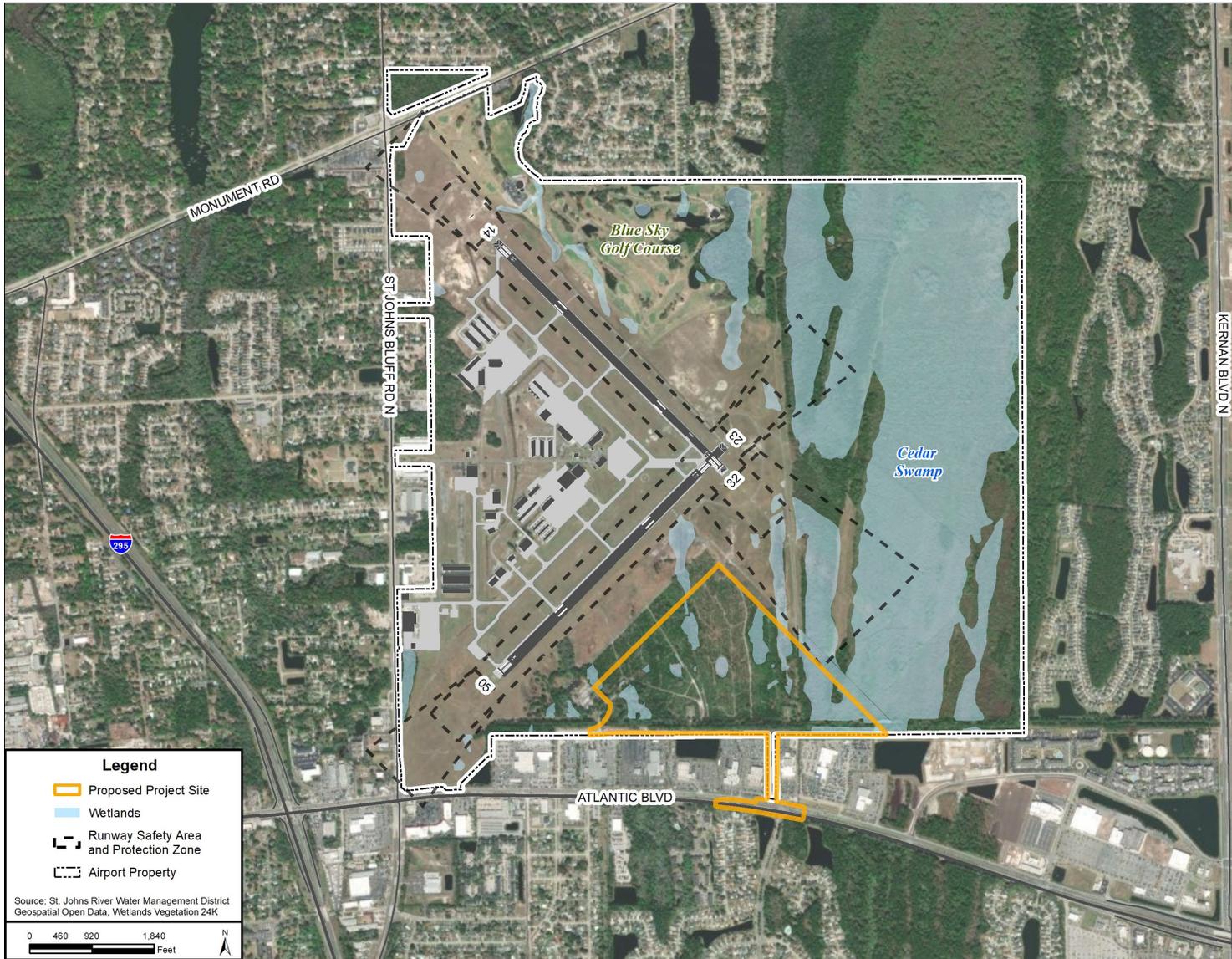
<sup>6</sup> FEMA's National Flood Hazard Layer (NFHL) Viewer, Accessed January 2022, Available online: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>



### **2.1.2 Proposed Project**

The Proposed Project Site is vacant and located on the south side of the Airport property, with access to Atlantic Boulevard less than one mile east of Interstate 295. This site provides sufficient space to accommodate the construction of a distribution/warehouse facility that is compatible with FAA airspace restrictions and design standards. Additionally, the vegetation of this site would allow for development. Therefore, this alternative is being carried forward for detailed environmental review.

**EXHIBIT 2-1, DEVELOPMENT ALTERNATIVES**



Source: Landrum & Brown, 2022

## 3 Affected Environment

Federal Aviation Administration (FAA) Order 5050.4B states the affected environment section of an Environmental Assessment (EA) should succinctly describe only those environmental resources the proposed project and its reasonable alternatives are likely to affect. The amount of information on potentially affected resources should be based on the expected impact and be commensurate with the impact's importance. The following provides a description of the existing environmental conditions in and around the vicinity of the Jacksonville Executive at Craig Airport (CRG or Airport).

### 3.1 Proposed Project Setting

CRG is a reliever airport located on approximately 1,320 acres of land within Duval County, Florida. The Proposed Project Site is vacant and located on the south side of the Airport property, with access to Atlantic Boulevard less than one mile east of Interstate 295. The Proposed Project would occur primarily on property currently owned by the Jacksonville Airport Authority (JAA). Exhibit 1-3, *Proposed Project*, shows the location of the Proposed Project Site.

### 3.2 Resources Potentially Affected

#### 3.2.1 Air Quality

The Airport is located within Duval County. In the past, Duval County was designated as nonattainment for the 1979 1-hour ozone standard. However, on March 6, 1995, the United States Environmental Protection Agency (USEPA) determined the area had attained the ozone standard and was redesignated to maintenance. Furthermore, the area was redesignated to attainment on June 15, 2005 when the 1979 1-hour ozone standard was revoked. As such, the area is currently in attainment for all criteria pollutants (see **Appendix B, Air Quality** for more information).

#### 3.2.2 Biological Resources

The Proposed Project Site contains primarily upland vegetation with wetlands and surface waters. Field surveys were conducted in November 2021 to identify the presence and potential habitat of Federal and state-listed species on the Proposed Project Site in accordance with Section 7 of the Endangered Species Act and Chapter 68A-27 Florida Administrative Code (F.A.C.), as amended. The field survey is provided in **Appendix C, Biological Resources**.

##### 3.2.2.1 **FEDERALLY THREATENED AND ENDANGERED SPECIES**

Databases from the U.S. Fish and Wildlife Service (USFWS) and the Florida Natural Areas Inventory (FNAI) were reviewed to identify Federally-listed species known to occur in Duval County. Species that were determined to have some probability of occurrence within the Proposed Project Site based on the presence of suitable habitat and observations were assigned a probability of occurrence (low, moderate, high, or observed), defined as follows:

- Low – Species that are known to occur in the county, but for which preferred habitat is limited in the Proposed Project Site.
- Moderate – Species that are known to occur in the county, and whose suitable habitat is well represented within or adjacent to the Proposed Project Site, but no observations or positive indicators exist to verify their presence.
- High – Species that are known to occur in the county and are suspected to occur based on known ranges and existence of sufficient preferred habitat within or immediately adjacent to the Proposed Project Site, or species which have been previously observed or documented within the Proposed Project Site.



- Observed – Species or their sign were seen within the Proposed Project Site.

**Table 3-1** identifies the Federally-listed species that were designated a “moderate,” “high,” or “observed” probability of occurrence. Species assigned a “low” probability of occurrence are not likely to occur within the Proposed Project Site and are not evaluated for potential impacts in this EA. For more information on these species, see Appendix C.

**TABLE 3-1, FEDERALLY-LISTED SPECIES THAT MAY OCCUR WITHIN THE PROPOSED PROJECT SITE**

TAXONOMIC GROUP	SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	PROBABILITY OF OCCURRENCE
Reptile	<i>Drymarchon corais couperi</i>	Eastern Indigo Snake	T	Moderate
Bird	<i>Mycteria americana</i>	Wood Stork	T	Moderate

Note: T = Threatened: species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

**Eastern Indigo Snake (*Drymarchon corais couperi*)** – The eastern indigo snake is a Federally-threatened species that is linked to xeric habitats and gopher tortoise burrows, and forages in both uplands and wetlands. No xeric habitat was identified in the Proposed Project Site. However, three potentially occupied gopher tortoise burrows were observed during the November 2021 field survey. Because of the presence of potentially-occupied gopher tortoise burrows, the eastern indigo snake was given a moderate probability of occurrence.

**Wood Stork (*Mycteria americana*)** – The wood stork is a Federally-listed threatened species. The wood stork is a wetland-dependent wading bird that lives in areas containing woody vegetation over standing water, preferably in cypress trees or mangroves. The wood stork ranges across the state except for the western half of the panhandle. It routinely travels six to 25 miles to foraging sites and is known to fly between 60 to 80 miles to find food. It feeds in areas of calm and clear water that is between two to 16 inches deep. The wood stork requires areas that have long hydroperiods that allow for its prey to reproduce, and droughts that concentrate its prey into small pools making it easier to catch. The USFWS designates Core Foraging Areas (CFAs) for each documented wood stork colony by region. In Duval County, all wetlands and waterways within the 13-mile radius of a wood stork colony may be considered Suitable Foraging Habitat (SFH) for wood storks. The Proposed Project Site is located within the CFA of an active wood stork colony located approximately 8.3 miles to the southeast. As such, the wetlands within the Proposed Project Site are considered SFH. However, no wood storks were observed during field investigation. Therefore, this species was given a moderate probability of occurrence.

**3.2.2.2 STATE THREATENED AND ENDANGERED SPECIES**

Databases from the USFWS, the FNAI, and the Florida Wildlife Commission were reviewed to identify state-listed species known to occur in Duval County. **Table 3-2** identifies the state-listed species that were designated at least a “moderate” probability of occurrence and summarizes the probability of occurrence within the Proposed Project Site for those listed species that may occur. Species assigned a “low” probability of occurrence are not likely to occur within the Proposed Project Site and are not evaluated for potential impacts in this EA. For more information on these species, see Appendix C.



**TABLE 3-2, STATE-LISTED SPECIES THAT MAY OCCUR WITHIN THE PROPOSED PROJECT SITE**

TAXONOMIC GROUP	SCIENTIFIC NAME	COMMON NAME	STATE STATUS	PROBABILITY OF OCCURRENCE
Reptile	<i>Gopherus polyphemus</i>	Gopher Tortoise	ST	Observed
Reptile	<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake	ST	Moderate
Bird	<i>Egretta caerulea</i>	Little Blue Heron	ST	Moderate
Bird	<i>Egretta tricolor</i>	Tricolored Heron	ST	Moderate

Note: ST = State threatened: species listed by the state that are likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Gopher Tortoise (*Gopherus polyphemus*) – The gopher tortoise is a state-threatened species and a candidate for Federal listing under the Endangered Species Act (ESA). This species inhabits xeric and mesic forests, fields, and disturbed areas. A total of three potentially occupied gopher tortoise burrows were observed in the Proposed Project Site during the November 2021 field survey.

Florida Pine Snake (*Pituophis melanoleucus mugitus*) – Similar to the eastern indigo snake, the state-threatened pine snake is linked to xeric habitats and to gopher tortoise burrows. This species is found throughout Florida, with preferred habitat including longleaf pine woodlands, xerophytic oak woodlands, sand pine scrub, pine flatwoods on well-drained soils, and old fields on former sandhill sites. Due to the presence of potentially occupied gopher tortoise burrows and well-drained habitat within the Proposed Project Site, this species was given a moderate probability of occurrence.

Little blue heron (*Egretta caerulea*) – The little blue heron is state-threatened species that forages in a wide variety of freshwater, brackish, and saline wetlands and waterways, including ponds and ditches. The little blue heron nests in mixed colonies in flooded trees or shrubs, or on islands. The wetlands and surface waters provide suitable foraging habitat for this species. However, none were observed during the November 2021 field survey. As such, this species was given a moderate probability of occurrence in the Proposed Project Site.

Tricolored heron (*Egretta tricolor*) – Similar to the little blue heron, the tricolored heron is state-threatened species that forages in a wide variety of freshwater, brackish, and saline wetlands and waterways, including ponds and ditches. The tricolored heron also nests in mixed colonies in flooded trees or shrubs, or on islands. The wetlands and surface waters provide suitable foraging habitat for this species. However, none were observed during the November 2021 field survey. As such, this species was given a moderate probability of occurrence in the Proposed Project Site.

**3.2.2.3 BALD AND GOLDEN EAGLE PROTECTION ACT**

The bald eagle is afforded protection under the Bald and Golden Eagle Protection Act (BGEPA) of 1940 and the Migratory Bird Treaty Act of 1918 (MBTA), as amended. Databases from the USFWS, the FNAI, and the Florida Wildlife Commission were reviewed to identify bald and golden eagles known to occur in Duval County.

Bald Eagle (*Haliaeetus leucocephalus*) - Bald eagles are large raptors that average 14 pounds with a wingspan of approximately eight feet as adults. They are brown with white head and tail feathers and range across North America utilizing a variety of habitats including coastal areas, rivers, lakes, and other territories in proximity to their preferred food, fish. In Florida, there are over 1,000 documented nesting pairs of bald eagles. Restrictions regarding work around their nests are in place and vary based on the time of year and distance from the nest. The USFWS Florida Ecological Services Field Offices in Jacksonville defines two buffer zones from the central location of a nest that defines activity restrictions



based on their distance, the primary and secondary zones. The primary activity zone is 330 feet, and the secondary activity zone is 660 feet from the central location of the nest. Generally, if work is proposed within 660 feet of the nest, restrictions may be applicable. No documented eagle nests occur within 660 feet of the Proposed Project Site.

### 3.2.3 Climate

Greenhouse gases (GHG) are gases that trap heat in the earth's atmosphere. Both naturally occurring and man-made GHGs primarily include water vapor (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Sources that require fuel or power are the primary sources that would generate GHGs.

Research has shown there is a direct correlation between fuel combustion and GHG emissions. In terms of U.S. contributions, the General Accounting Office (GAO) reports that "domestic aviation contributes about three percent of total carbon dioxide emissions, according to USEPA data," compared with other industrial sources, including the remainder of the transportation sector (20 percent) and power generation (41 percent).<sup>7</sup> The International Civil Aviation Organization (ICAO) estimates that GHG emissions from aircraft account for roughly three percent of all anthropogenic GHG emissions globally.<sup>8</sup> Climate change due to GHG emissions is a global phenomenon, so the affected environment is the global climate.<sup>9</sup>

### 3.2.4 Coastal Resources

The entire State of Florida is located within a coastal zone;<sup>10</sup> however, the Proposed Project Site is approximately eight miles inland of the nearest coastal waters and is not located within a designated coastal barrier resource zone.<sup>11</sup>

### 3.2.5 Department of Transportation Act, Section 4(f)

Resources protected under Section 4(f) of the Department of Transportation Act [49 USC 303(c)] include parks, recreation areas, wildlife/waterfowl refuges, and historic sites of national, state, or local significance. The closest Section 4(f) resource is the Timucuan Ecological and Historic Preserve located approximately three miles to the northeast.

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<sup>7</sup> Aviation and Climate Change. GAO Report to Congressional Committees, (2009).

<sup>8</sup> Alan Melrose, "European ATM and Climate Adaptation: A Scoping Study," in ICAO Environmental Report. (2010).

<sup>9</sup> As explained by the U.S. Environmental Protection Agency, "greenhouse gases, once emitted, become well mixed in the atmosphere, meaning U.S. emissions can affect not only the U.S. population and environment but other regions of the world as well; likewise, emissions in other countries can affect the United States." Climate Change Division, Office of Atmospheric Programs, U.S. Environmental Protection Agency, Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act 2-3 (2009).

<sup>10</sup> National Oceanic and Atmospheric Administration, Office for Coastal Management, *Coastal Zone Management Programs*, Accessed November 4, 2021, Available online: <https://coast.noaa.gov/czm/mystate/>

<sup>11</sup> U.S. Fish and Wildlife Service, *Coastal Barrier Resources System*, Accessed November 4, 2021, Available online: <https://www.fws.gov/cbra/Maps/Mapper.html>

### 3.2.6 Farmlands

The Proposed Project Site is located on land committed to urban development as it is located within the “urbanized area” on the Census Bureau Map.<sup>12</sup> Therefore, the Proposed Project Site does not contain farmlands and no discussion of farmlands is included in this EA.

### 3.2.7 Hazardous Materials, Solid Waste, and Pollution Prevention

#### 3.2.7.1 HAZARDOUS MATERIALS

The Proposed Project Site is vacant, has not been disturbed, and does not contain any signs of hazardous materials. The USEPA’s online database shows no active or archived Superfund National Priorities List (NPL) sites within the Proposed Project Site.<sup>13</sup> The Florida Department of Environmental Protection (FDEP) Contaminator Locator Map shows no hazardous waste sites within the Proposed Project Site.

#### 3.2.7.2 SOLID WASTE

Solid waste at airports is generally related to operational and construction activities. The Airport’s municipal solid waste is collected by independent waste hauling providers contracted by the City of Jacksonville. Three active landfills are located within Duval County, including Trail Ridge Landfill, Inc which receives general non-hazardous household, commercial, industrial, and agricultural wastes, and Keystone Landfill and Otis Road Disaster Recovery Debris Management and Recycling which receive construction and demolition debris, asbestos, and other waste types.<sup>14,15</sup>

#### 3.2.7.3 POLLUTION PREVENTION

The Airport implements a Storm Water Pollution Prevention Plan (SWPPP) for the entire airport, which includes measures to minimize pollutant runoff into receiving water bodies. Additionally, the City of Jacksonville has a recycling contract with Republic Services in which all recyclables collected in Jacksonville are sent to this single-stream facility and are separated for recycle using an advanced sorting process.<sup>16</sup>

### 3.2.8 Historical, Architectural, Archeological, and Cultural Resources

The National Historic Preservation Act (NHPA) is the primary Federal law governing the preservation of historic and prehistoric resources, encompassing art, architecture, archaeological, and other cultural resources. Section 106 of the NHPA requires that, prior to approval of a Federal or Federally-assisted project, or before the issuance of a license, permit, or other similar approval, Federal agencies take into account the effect of the project on properties that are on or eligible for listing on the National Register of Historic Places (NRHP).

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<sup>12</sup> United State Census Bureau, TIGERweb, Urban Areas, Accessed January 6, 2023, Available online: [https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb\\_restmapservice.html](https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_restmapservice.html)

<sup>13</sup> USEPA, Superfund National Priorities List (NPL) Sites with Status Information, Accessed January 2, 2023, Available online: <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1>

<sup>14</sup> Florida Department of Environmental Protection, Solid Waste Facility Inventory Report, Accessed December 13, 2022, Available online: [https://fldeploc.dep.state.fl.us/www\\_wacs/Reports/SW\\_Facility\\_Inventory\\_res1.asp](https://fldeploc.dep.state.fl.us/www_wacs/Reports/SW_Facility_Inventory_res1.asp)

<sup>15</sup> Solid Waste Management in Florida, Accessed December 13, 2022, Available online: [https://p2infohouse.org/ref/17/fl/dwm/documents/swm/swm\\_99/chapters/landfill.pdf](https://p2infohouse.org/ref/17/fl/dwm/documents/swm/swm_99/chapters/landfill.pdf)

<sup>16</sup> *Sustainable Jacksonville*, 2016, Accessed December 13, 2022, Available online: <https://northfloridagreenchamber.org/wp-content/uploads/2019/07/Sustainable-Jacksonville-2016-Report.pdf>



For the purpose of this EA, the Proposed Project Site is considered to be the Area of Potential Effects (APE). A cultural resource assessment survey of the APE was conducted in December 2021. This included an extensive background research and literature review and a field survey, which included reconnaissance and shovel testing.<sup>17</sup>

The historical/architectural field survey resulted in the identification and re-evaluation of one previously recorded historic resource (8DU19043) and the identification and evaluation of one newly identified historic resource (8DU23022) within the APE. This includes the Craig Airfield Designed Historic Landscape (8DU19043) and the associated Craig Airfield Canal (8DU23022), constructed in circa (ca.) 1943. Overall, the newly identified historic resource (8DU23022) is a common example of a drainage canal found throughout the region and the State of Florida and it is not a significant embodiment of a type, period, or method of construction. Furthermore, background research did not reveal any historic associations with significant persons and/or events that are directly connected to the drainage canal. As a result, 8DU23022 does not appear eligible for listing in the NRHP, either individually or as part of a historic district. In addition, the Craig Airfield Designed Historic Landscape (8DU19043) – as contained within the APE – provides insufficient information for determining NRHP eligibility due to a lack of contributing historic resources. As such, there are no registered properties or properties listed eligible for inclusion on the NRHP. The closest NRHP-listed resource is the Timucuan Ecological and Historic Preserve located approximately three miles to the northeast.

The FAA coordinated with the Florida State Historic Preservation Office (SHPO) regarding the APE and the results of the field survey. Additionally, FAA coordination with the Miccosukee Tribe of Indians, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Tribe of Florida, and Seminole Nation of Oklahoma is ongoing. See **Appendix D, *Historic, Architectural, Archeological, and Cultural Resources*** for more information.

### 3.2.9 Land Use

The Proposed Project Site is located on the south side of the Airport property and is currently vacant. The area is zoned Public Buildings and Facilities, Business Park, and Planned Unit Development.<sup>18</sup> The land uses adjacent to the Proposed Project Site include community/general commercial, planned unit development, and public buildings and facilities (airport uses). Additionally, the Proposed Project Site has direct access to Atlantic Boulevard. South of Atlantic Boulevard, land uses are low density and medium density residential. As such, the residences nearest to the Proposed Project Site are located approximately 400 feet to the south.

### 3.2.10 Natural Resources and Energy Supply

Buildings and parking lots at the Airport require electricity and natural gas for lighting, cooling, and heating. Electricity is used for cooling and lighting for buildings, lighting for aircraft and vehicle parking areas, airfield lighting systems, roadway lighting, and other facilities. Jacksonville Electric Authority (JEA) provides electricity, water, and natural gas to the Airport. The Airport is located within a highly urbanized area with adequate access to natural resources for construction projects and operation of facilities.

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<sup>17</sup> Archaeological field survey methods consisted of surface reconnaissance combined with systematic and judgmental subsurface testing at offset 50 and offset 100 meter (m) intervals. Shovel tests were circular and measured approximately 50 centimeters (cm) in diameter by at least 1 m in depth unless precluded by natural impediments such as groundwater intrusion. All soil removed from the shovel tests was screened through a 0.64 cm mesh hardware cloth to maximize the recovery of artifacts.

<sup>18</sup> Duval City Planning Map, Accessed January 6, 2023, Available online: <https://maps.coj.net/DuvalCivilPlanning/>



### 3.2.11 Noise and Noise Compatible Land Use

The Proposed Project Site is located on the south side of the Airport property to the south of the airfield. As a result, the Proposed Project Site experiences noise from aircraft operating at the Airport. The closest residence is located approximately 1,500 feet to the south of the proposed distribution/warehouse facility and is located south of Atlantic Boulevard.

### 3.2.12 Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety Risks

#### 3.2.12.1 SOCIOECONOMICS

Socioeconomics is an umbrella term used to describe aspects of a project that are either social or economic in nature. A socioeconomic analysis evaluates how elements of the human environment such as population, employment, housing, and public services might be affected by the Proposed Project and alternatives.

Section 1508.14 of the CEQ Regulations requires all Federal agencies to conduct a socioeconomic analysis in the event that economic or social and natural environmental effects are interrelated as a result of the proposed project and alternative(s). This would include an evaluation of how elements of the human environment such as population, employment, housing, and public services might be affected by the proposed project and alternative(s).

#### Population

The Proposed Project Site is located in Duval County, Florida. Demographic data of the population within Duval County and the State of Florida is shown in **Table 3-3**.

**TABLE 3-3, DEMOGRAPHIC DATA**

	DUVAL COUNTY, FLORIDA	STATE OF FLORIDA
<b>Population</b>	995,567	21,538,187
Not Hispanic	882,878	15,840,947
White	492,039	11,100,503
Black / African American	286,344	3,127,052
American Indian / Alaskan Native	2,306	42,169
Asian	48,652	629,626
Native Hawaiian or Pacific Islander	960	11,521
Other	52,577	930,076
Hispanic	112,689	5,697,240
<b>Percent Minority</b>	<b>50.6%</b>	<b>48.5%</b>
<b>Percent Low Income*</b>	<b>14.5%</b>	<b>13.3%</b>

\* The Department of Health and Human Services poverty guideline level in 2020 for a family/household of one was \$12,760 and for a household/family of four was \$26,200.

Note: At the time of this writing, the U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171) contained population data by race and ethnicity for census block groups and counties but did not contain the data needed to estimate percent below the poverty level for census block groups or counties. As such, the U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171) was used to identify population by ethnic and race and estimate percent minority while the U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates was used to estimate percent population below the poverty level.

Source: U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171); American Community Survey (ACS) 2020: ACS 5-Year Estimates Detailed Tables; Landrum & Brown analysis, 2022.



## Public Services and Social Conditions

Public services in Duval County include such facilities as educational institutions, medical services, and emergency response services.

- Educational Institutions: Duval County is encompassed by the Duval County Public School District. No schools are located within or adjacent to the Proposed Project Site.<sup>19</sup> Waterleaf Elementary School #160 is the closest school, located approximately 5,250 feet northeast of the Proposed Project Site on Kemper Road.
- Medical Services: Duval County is supported by multiple hospital networks. The closest medical center, Memorial Emergency Center - Atlantic, is located approximately 5,000 feet southeast of the Proposed Project Site.
- Emergency Response Services: Airport rescue and fire-fighting facilities are provided by the local Jacksonville Fire Department. Fire station response is provided primarily by Jacksonville Fire Station 30, located approximately 2.21 miles from the airport.<sup>20</sup>

## Local Traffic Patterns

The Proposed Project would increase traffic on Atlantic Boulevard and would require the construction of a new access road connecting onto Atlantic Boulevard. A Traffic Impact Analysis (TIA) evaluated the existing level of service (LOS),<sup>21</sup> delay,<sup>22</sup> and volume to capacity ratio<sup>23</sup> of two intersections on Atlantic Boulevard near the Proposed Project Site, as identified in **Exhibit 3-1** and presented below in **Table 3-4**. Based on consultation with Florida Department of Transportation (FDOT), an overall LOS of D (or higher) is considered an acceptable condition for signalized intersections. Furthermore, because these two signalized intersections operate on a coordinated cycle length of 190 seconds during the AM peak hour and 200 seconds during the PM peak hour, FDOT uses the volume to capacity ratio of a determinant factor of the intersection's ability to serve the traffic demand. FDOT considers a volume to capacity ratio less than 1.0 to be an acceptable condition for signalized intersections.

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<sup>19</sup> Duval County Public Schools, mySchool Location tool, Accessed December 13, 2021, Available online: <https://www.myschoollocation.com/duvalcountypublicschools/>

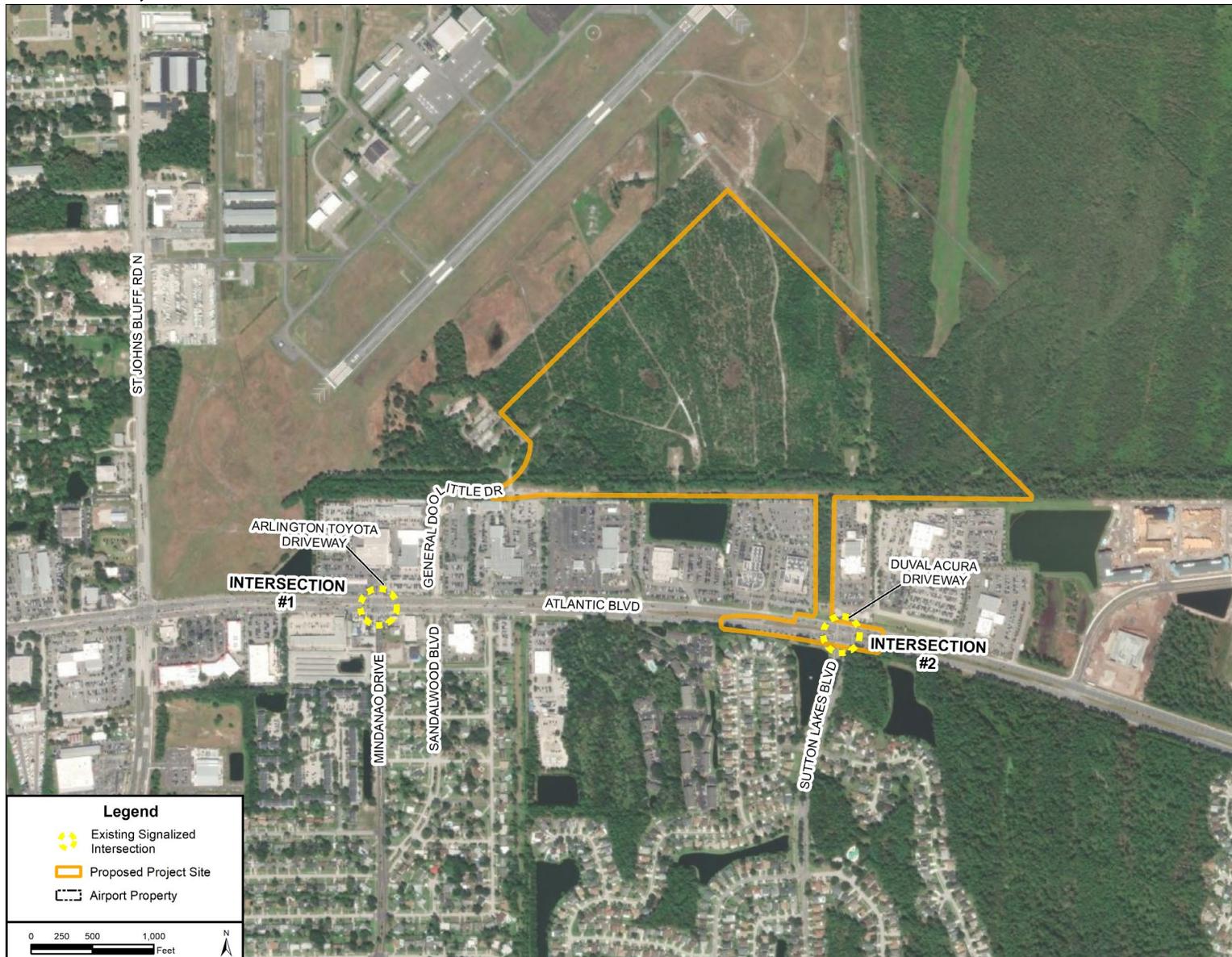
<sup>20</sup> Boone County GIS. Available on-line: <http://www.boonecountygis.com>. Accessed on November 2, 2020.

<sup>21</sup> Level of service (LOS) is a measure that evaluates quality of traffic conditions at an intersection or specific approach. Ranging from A through F, LOS is based on the average time a driver's movement is impeded to navigate a desired traffic movement.

<sup>22</sup> Delay refers to the comparison between the actual travel time and free-flow travel time. Delay is influenced not only by traffic volumes but also the intersection control (signalization, stop-controlled, etc.).

<sup>23</sup> The volume to capacity (v/c) ratio represents the adequacy of an intersection to accommodate vehicular demand. Typically, a v/c ratio of less than 0.85 indicates that the capacity of an intersection is expected to sufficiently handle the volume demand without significant queues or delays. Ratios greater than 1.0 would indicate that the intersection is saturated with the volume exceeding the available capacity and heavy congestion with long queues and delay would be expected. When intersections operate with a long cycle length, even very small volumes of side street traffic will operate at poor levels of service. Therefore, when evaluating signals with long cycle lengths, volume to capacity (v/c) ratios can be considered a more determinant factor of the intersection's ability to serve the traffic demand.

JACKSONVILLE EXECUTIVE AT CRAIG AIRPORT  
ENVIRONMENTAL ASSESSMENT FOR  
NON-AVIATION DEVELOPMENT  
**EXHIBIT 3-1, EXISTING INTERSECTIONS**



Source: Landrum & Brown, 2023

LANDRUM & BROWN  
FINAL | OCTOBER 2023

AFFECTED ENVIRONMENT | 3-1



**TABLE 3-4, EXISTING INTERSECTION LEVEL OF SERVICE, DELAY, AND V/C RATIO**

ID	INTERSECTION	PEAK	
1	Atlantic Boulevard / Arlington Toyota Driveway / Mindanao Drive	AM	B (11.8)
		PM	C (20.3)
		v/c ratio	All movements < 1.0
2	Atlantic Boulevard / Duval Acura Driveway / Sutton Lakes Boulevard	AM	C (24.7)
		PM	C (31.0)
		v/c ratio	WBL PM > 1.0 All other movements < 1.0

Note: LOS= level of service; v/c ratio = volume to capacity ratio

Source: Traffic Impact Analysis, Kimley Horn, June 2022.

As shown in Table 3-4, both intersections operate at an overall level of service C or better during both peak hours. For both intersections, all movement v/c ratios are well under 1.0, except for the westbound left-turn movement at the Atlantic Boulevard / Duval Acura driveway / Sutton Lakes Boulevard intersection, which operates with a volume to capacity ratio greater than 1.0 during the PM peak hour.

### 3.2.12.2 ENVIRONMENTAL JUSTICE

Environmental justice (EJ) is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies. Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, requires all Federal agencies to identify and address disproportionate and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. The Executive Order also directs Federal agencies to incorporate environmental justice into their overall missions by conducting their programs and activities in a manner that provides minority and low-income populations an opportunity to participate in agency programs and activities.

U.S. Department of Transportation (DOT) Order 5610.2, *Environmental Justice in Minority Populations and Low-Income Populations*, was issued to implement Executive Order 12898 and updated in DOT Order 5610.2(a).<sup>24</sup> DOT Order 5610.2(a) defines minorities as people who are Black, Hispanic or Latino, Asian American, American Indian, Alaskan Native, Native Hawaiian, or other Pacific Islander. Minority populations are defined as “any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program,

<sup>24</sup> U.S. Department of Transportation (DOT) Order 5610.2, *Environmental Justice in Minority Populations and Low-Income Populations*, was issued on April 15, 1997. Order 5610.2(a), Department of Transportation Updated Environmental Justice Order, was issued on May 2, 2012.



policy or activity.”<sup>25</sup> The DOT Order defines a low-income population as “any readily identifiable group” of persons whose median household income is at or below the poverty guidelines of the U.S. Department of Health and Human Services, “who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy or activity.”<sup>26</sup>

The identification of minority and low-income communities within or adjacent to the Proposed Project Site was conducted through an assessment of U.S. Census Bureau data.<sup>27</sup> Four census block groups were identified within or adjacent to the Proposed Project Site. For the purpose of this analysis, Duval County was used as the reference area because the Proposed Project Site is located in Duval County and its community is relevant to the demographic of the surrounding census block groups. As previously stated, the reference area, Duval County, contains 13.3 percent low-income and 48.5 percent minority populations. In order to identify if a census block group contained EJ populations, the percentage of low-income and minority populations for Duval County was used as a threshold. If a census block group’s percentage of low-income and minority populations exceeds those of Duval County, the census block group was identified as potentially containing an EJ population. As shown in **Exhibit 3-2** and in **Table 3-5**, three of the four census block groups identified potentially containing an EJ population.

**TABLE 3-5, DEMOGRAPHIC DATA BY CENSUS BLOCK GROUP**

DUVAL COUNTY CENSUS TRACT BLOCK GROUP	PERCENT MINORITY POPULATION <sup>1</sup>	PERCENT LOW INCOME POPULATION <sup>2</sup>	ENVIRONMENTAL JUSTICE POPULATION?
Block Group 2, Census Tract 143.28, Duval County, Florida	47.9%	5.1%	NO
Block Group 1, Census Tract 143.38, Duval County, Florida	65.4%	4.4%	YES
Block Group 2, Census Tract 143.43, Duval County, Florida	50.6%	2.0%	YES
Block Group 1, Census Tract 143.44, Duval County, Florida	53.1%	0.0%	YES

<sup>1</sup> U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171)

<sup>2</sup> U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

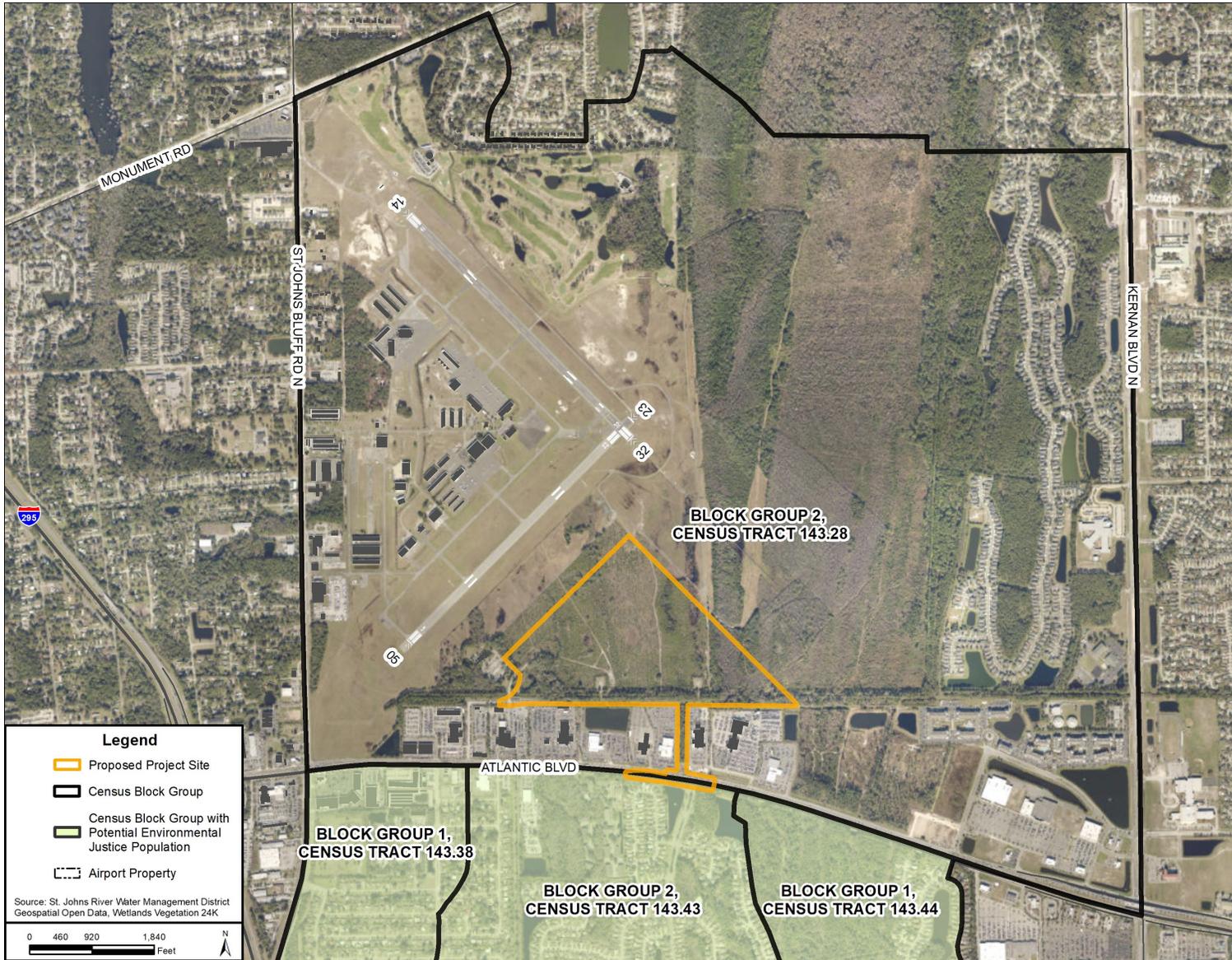
Source: U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171); American Community Survey 2020: ACS 5-Year Estimates Detailed Tables; Landrum & Brown analysis, 2022.

<sup>25</sup> Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994.

<sup>26</sup> Ibid.

<sup>27</sup> At the time of this writing, the U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171) contained population data by race and ethnicity for census block groups and counties but did not contain the data needed to estimate percent below the poverty level for census block groups or counties. As such, the U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171) was used to identify population by ethnic and race and estimate percent minority while the U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates was used to estimate percent population below the poverty level.

**EXHIBIT 3-2, CENSUS BLOCK GROUPS WITH POTENTIAL ENVIRONMENTAL JUSTICE POPULATION**



Source: Landrum & Brown, 2023



**3.2.12.3 CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS**

Pursuant to EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, Federal agencies are directed to make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children. Environmental health risks and safety risks include risks to health or to safety that are attributable to products or substances that a child is likely to come in contact with or ingest, such as air, food, drinking water, recreational waters, soil, or products they might use or be exposed to.

There are no schools, day care centers, or parks within or adjacent to the Proposed Project Site. Waterleaf Elementary School #160 is the closest school, located approximately 5,250 feet northeast of the Proposed Project Site on Kemper Road. The closest parks are the Blue Sky Golf Club located approximately 1,500 feet to the north and the Brookview Elementary School Park located approximately 6,300 feet to the southwest.

**3.2.13 Visual Effects**

**3.2.13.1 LIGHT EMISSIONS**

The Proposed Project Site is vacant and consists of primarily upland vegetation with wetlands and surface waters. The land uses adjacent to the Proposed Project Site, community/general commercial, planned unit development, and public buildings and facilities (airport uses), all have lighting illuminating existing buildings and parking areas.

**3.2.13.2 VISUAL RESOURCES/VISUAL CHARACTER**

The Proposed Project Site is vacant and consists of primarily upland vegetation with wetlands and surface waters. These features are not visible from the nearest residential areas which are located south of Atlantic Boulevard.

**3.2.14 Water Resources**

**3.2.14.1 WETLANDS**

Wetland delineations occurred in March 2021. The delineation identified multiple wetlands within the Proposed Project Site. Approximately 26.15 total acres of wetlands were found within the Proposed Project Site, as presented in **Table 3-6**. These resources are shown on **Exhibit 3-3, Wetlands**. More detailed information regarding the wetlands and streams is located in **Appendix E, Water Resources**.

**TABLE 3-6, WETLANDS LOCATED WITHIN THE PROPOSED PROJECT SITE**

WETLANDS	LINEAR FEET	ACREAGE
Freshwater Non-Forested Wetlands	N/A	1.66
Baygall	N/A	2.46
Mixed Wetland Hardwoods	N/A	2.34
Mixed Hardwood-Coniferous Swamps	N/A	3.69
Gum Pond	N/A	16.00
<b>Total</b>	<b>N/A</b>	<b>26.15</b>

Note: Totals may not sum due to rounding

Source: Landrum & Brown, 2022; LG2 Environmental Solutions, Inc., 2021; Kimley-Horn, 2021.

**3.2.14.2 FLOODPLAINS**

Floodplains are valued for their natural flood and erosion control, enhancement of biological productivity, and socioeconomic benefits and functions. The 100-year flood elevation (i.e., areas with a one percent annual chance of flooding) has been adopted by the Federal Emergency Management Agency (FEMA) as the base flood for floodplain management purposes. A review of the Flood Insurance Rate Map (FIRM) 12031C0384H prepared by FEMA indicates approximately 17 acres of the

Proposed Project Site contains a 100-year floodplain (Zone AE and Zone AH), as shown on **Exhibit 3-4, Floodplains**. The existing 100-year floodplain includes the existing ditch which runs west-east along the southern boundary of the Proposed Project Site and serves to convey stormwater away from Airport property and adjacent development. This also includes a segment of the Cedar Swamp in the southeast portion of the Proposed Project Site.

### **3.2.14.3 SURFACE WATERS**

The wetland delineation additional identified approximately 7,136 linear feet of ditches/artificial intermittent streams within the Proposed Project Site, as shown on Exhibit 3-3, **Wetlands**. The ditches/artificial intermittent streams are composed of several ditches occurring throughout the Proposed Project Site, the largest of which runs west-east along the southern boundary of the Proposed Project Site and serves to convey stormwater away from Airport property and adjacent development. Several smaller ditches run throughout the on-site uplands and wetlands and are utilized to convey stormwater away from the airfield. The Proposed Project Site is within the Lower St. Johns River Basin<sup>28</sup> and the Chicopit Bay sub-watershed (HUC 030801031606). Chicopit Bay flows northeast through the Proposed Project Site and continues northeast as it flows toward into the St. Johns River and ultimately into the Mayport Basin and Atlantic Ocean.

### **3.2.14.4 GROUNDWATER**

According to FAA 1050.1F Desk Reference, groundwater is defined as subsurface water that occupies the space between sand, clay, and rock formations. The vast majority of the public water systems in Florida use ground water as their source. Two groundwater wells owned and operated by JEA are located within the Proposed Project Site, as shown in **Exhibit 3-5, Groundwater Wells**. These wells are used to supply water to the JEA Major Grid which provides water to most of Duval County and the northwest portion of St. Johns County.<sup>29</sup>

### **3.2.14.5 WILD AND SCENIC RIVERS**

No wild and scenic rivers are present in Duval County.<sup>30</sup> The closest wild and scenic river is the Wekiva River located over 100 miles to the southwest of the Airport.

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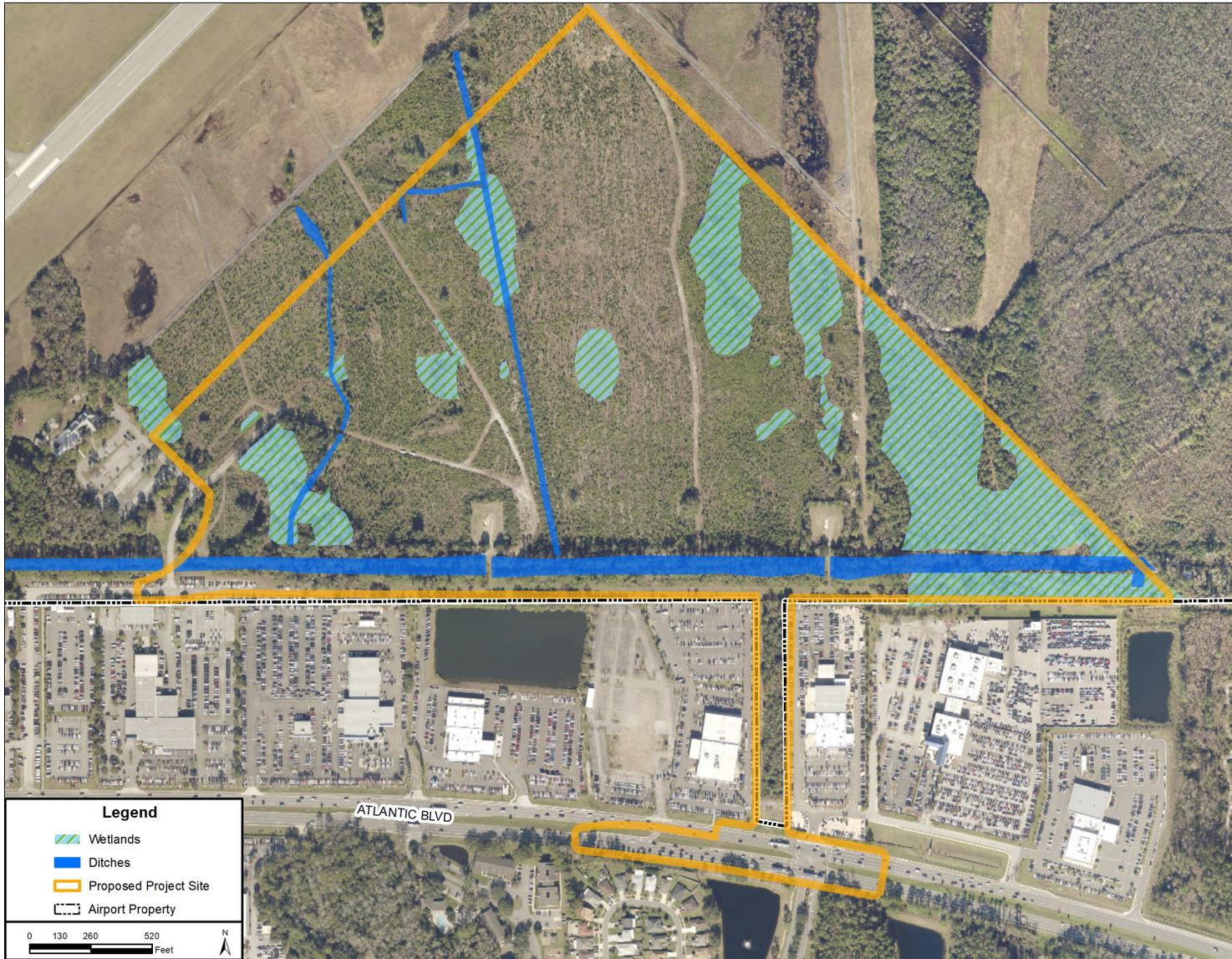
<sup>28</sup> St. Johns River Water Management District, Environmental Data, Accessed December 13, 2021, Available online: <http://webapub.sjrwmd.com/agws10/edqt/>

<sup>29</sup> Florida Department of Environmental Protection Geospatial Open Data, Public Water Supply (PWS) Wells (Non-Federal), Accessed December 10, 2021, Available online: <https://geodata.dep.state.fl.us/datasets/public-water-supply-pws-wells-non-federal/explore?location=27.934334%2C-83.466600%2C6.64>

<sup>30</sup> National Park Service, *Interactive Map of NPS Wild and Scenic Rivers*, Accessed December 14, 2021, Available online: <https://nps.maps.arcgis.com/apps/View/index.html?appid=ff42a57d0aae43c49a88daee0e353142>

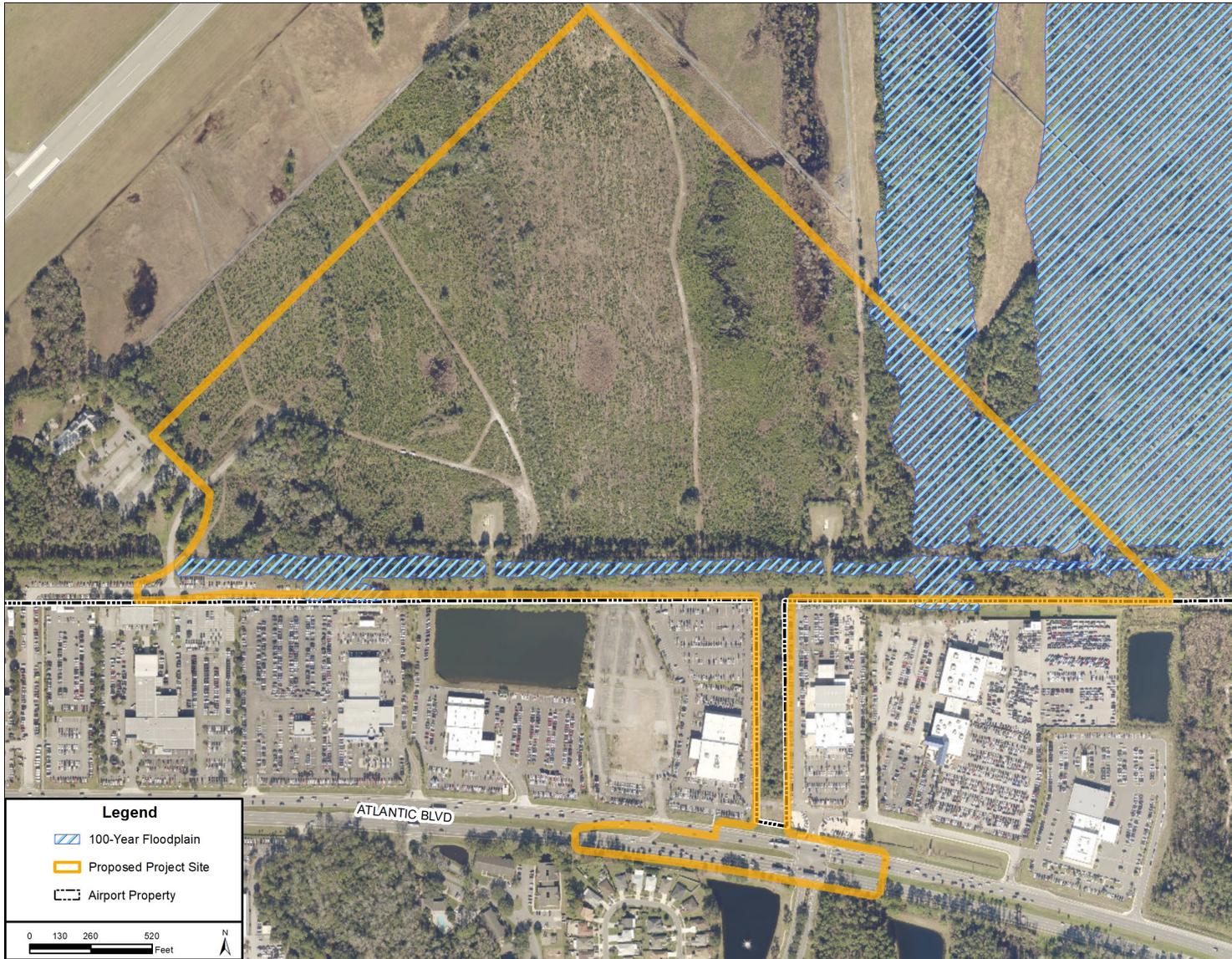


**EXHIBIT 3-3, WETLANDS AND STREAMS**



Source: Landrum & Brown, 2022

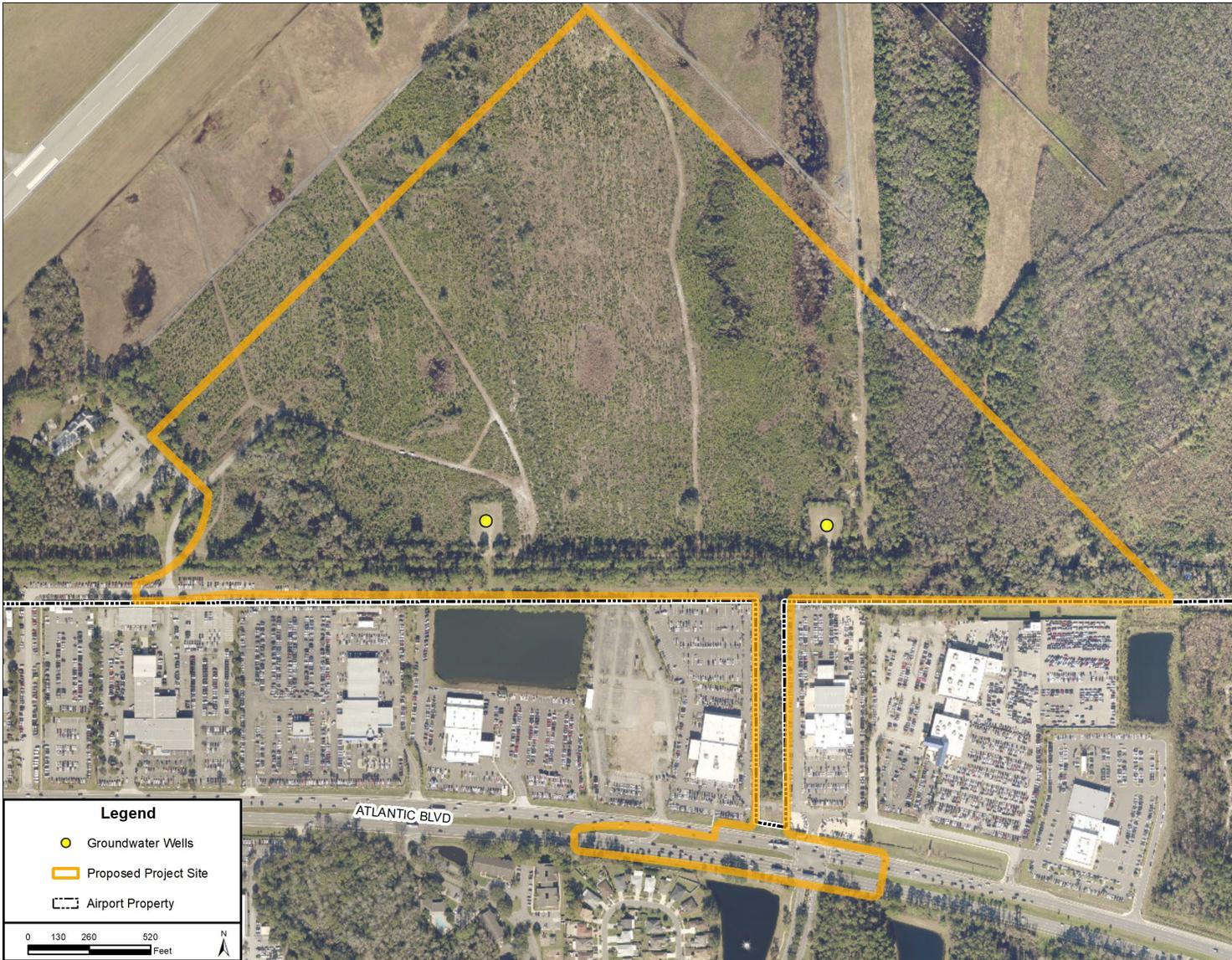
**EXHIBIT 3-4, FLOODPLAINS**



Source: Landrum & Brown, 2022



**EXHIBIT 3-5, GROUNDWATER WELLS**



Source: Landrum & Brown, 2022

## 4 Environmental Consequences

This chapter of the Environmental Assessment (EA) presents the analysis of potential environmental impacts that would result from implementation of the Proposed Project and the No Action. The analysis presented in this chapter includes considerations of direct and indirect impacts and their significance and possible conflicts with the objectives of Federal, regional, state, tribal, and local land use plans, policies, and controls for the area concerned. This chapter also presents a discussion of mitigation measures, where applicable, to avoid and minimize potential adverse environmental impacts of the Proposed Project.

This chapter focuses on those environmental resources that may potentially be affected by the Proposed Project or No Action. Construction impacts are analyzed within each applicable environmental resource category. This chapter of the EA is organized to address the following topics:

- Air Quality
- Biological Resources
- Climate
- Department of Transportation (DOT) Section 4(f)
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historical, Architectural, Archeological, and Cultural Resources
- Land Use
- Natural Resources and Energy Supply
- Noise and Noise Compatible Land Use
- Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety Risks
- Visual Effects
  - Light Emissions
  - Visual Resources and Visual Character
- Water Resources
  - Wetlands and Streams
  - Floodplains
  - Surface Waters
  - Groundwater
- Cumulative Impacts

As discussed in Chapter 3, coastal resources, farmlands, and wild and scenic rivers are not present within the Proposed Project Site and would not be affected by the Proposed Project or No Action. Therefore, a discussion of potential impacts to these resource categories is not included in this chapter.

### 4.1 Air Quality

The Proposed Project would be implemented in Duval County, which the U.S. Environmental Protection Agency (USEPA) has designated as in “attainment” for all criteria pollutants. The anticipated impacts to air quality due to the implementation of the Proposed Project are provided for informational purposes. Furthermore, the impacts to air quality due to the Proposed Project were determined in accordance with the guidelines provided in Federal Aviation Administration (FAA), *Aviation Emissions and Air Quality Handbook Version 3, Update 1*,<sup>31</sup> and FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions*, which together with the guidelines of FAA Order 1050.1F,

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<sup>31</sup> FAA, *Aviation Emissions and Air Quality Handbook Version 3, Update 1*, January 2015.



*Environmental Impacts: Policies and Procedures*, constitute compliance with all the relevant provisions of NEPA and the Clean Air Act (CAA), as amended in 1990.

**No Action**

The No Action does not involve any construction activities or changes in operational activities at the Airport. Therefore, the No Action would not cause any impacts to air quality.

**Proposed Project**

Implementation of the Proposed Project would result in an increase in temporary and long-term emissions. Temporary emissions would result from construction of the distribution/warehouse facility and long-term emissions would result from the increase in vehicle traffic due to its operation. **Table 4-1** shows the estimated emissions from construction and operation of the Proposed Project. See **Appendix B, Air Quality** for additional information.

**TABLE 4-1, ANNUAL CRITERIA POLLUTANT EMISSIONS INVENTORY**

EMISSION SOURCES	CO (ST)	VOC (ST)	NO <sub>x</sub> (ST)	SO <sub>x</sub> (ST)	PM <sub>10</sub> (ST)	PM <sub>2.5</sub> (ST)
<b>2023</b>						
Construction	18.4	0.5	5.2	0.0	10.6	0.5
<i>2023 Subtotal</i>	<i>18.4</i>	<i>0.5</i>	<i>5.2</i>	<i>0.0</i>	<i>10.6</i>	<i>0.5</i>
<b>2024</b>						
Construction	6.4	0.5	4.9	0.0	2.9	0.6
Operation	2.2	0.2	0.9	0.0	0.0	0.0
<i>2024 Subtotal</i>	<i>8.5</i>	<i>0.6</i>	<i>5.8</i>	<i>0.0</i>	<i>2.9</i>	<i>0.6</i>
<i>Federal de minimis Threshold</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>

Note: ST: short tons, CO: carbon monoxide, VOC: volatile organic compounds, NO<sub>x</sub>: nitrogen oxides, SO<sub>x</sub>: sulfur oxides, PM<sub>10</sub>: particulate matter less than 10 microns in diameter, PM<sub>2.5</sub>: particulate matter less than 2.5 microns in diameter

Total emissions may not sum exactly due to rounding.

This analysis assumed the use of gasoline delivery vehicles. While electric delivery vehicles may be used by the developer and operator of the facility in the future, the exact fleet, percentage, or timeline is not available. The use of electric delivery vehicles would result in lower operational emissions than disclosed.

Source: Landrum & Brown analysis using the Airport Construction Emissions Inventory Tool (ACEIT) and the USEPA’s Motor Vehicle Emissions Simulator version 3 (MOVES3), 2022.

Although the Proposed Project would occur in an area in “attainment” for all criteria pollutants, the emissions are compared to *de minimis* thresholds to identify if the Proposed Project has the potential to create a new violation of the National Ambient Air Quality Standards (NAAQS) and would result in a potentially significant air quality impact. Because the estimated emissions would not exceed the *de minimis* thresholds for 2023 or 2024, implementation of the Proposed Project is not anticipated to cause or contribute to an exceedance of any NAAQS. Therefore, the Proposed Project would not result in significant air quality impacts.

While the construction of the Proposed Project would be expected to contribute to fugitive dust in and around the construction site, the Jacksonville Aviation Authority (JAA) would ensure that all possible measures would be taken to reduce fugitive dust emissions by adhering to guidelines included in FAA

Advisory Circular, *Standard Specifications for Construction of Airports*.<sup>32</sup> Methods of controlling dust and other airborne particles would be implemented to the maximum possible extent and may include, but not limited to, the following:

- Exposing the minimum area of erodible earth
- Applying temporary mulch with or without seeding
- Using water sprinkler trucks
- Using covered haul trucks
- Using dust palliatives or penetration asphalt on haul roads
- Using plastic sheet coverings

Measures to reduce diesel emissions, such as switching to cleaner fuels, retrofitting current equipment with emission reduction technologies, repowering older equipment with modern engines, replacing older vehicles, and reducing idling through operator training and contracting policies, would be considered and utilized, if appropriate, to the extent practicable.

## 4.2 Biological Resources

FAA Order 1050.1F states that a significant impact to biological resources (including fish, wildlife, and plants) would occur when the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) determines that the action would be likely to jeopardize the continued existence of a Federally-listed threatened or endangered species, or would result in the destruction or adverse modification of Federally-designated critical habitat. The FAA has not established a threshold of significance for species of concern or non-listed species; however, the following factors should be considered, as noted in Order 1050.1F:

- A long-term or permanent loss of unlisted plant or wildlife species (i.e., extirpation of the species from a large project area);
- Adverse impacts to special status species (e.g., state species of concern, species proposed for listing, migratory birds, bald and golden eagles) or their habitats;
- Substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or their populations; or
- Adverse impacts on a species' reproductive success rates, natural mortality rates, non-natural mortality (e.g., road kills and hunting), or ability to sustain the minimum population levels required for population maintenance.

### No Action

The No Action does not involve any development; therefore, there would be no impacts to biological resources.

### Proposed Project

As discussed in Section 3.2.2, *Biological Resources*, two Federally-listed and four state-listed species were found to have a “moderate,” “high,” and “observed” probability of occurrence in the Proposed Project Site. Potential impacts to these species due to the implementation of the Proposed Action are discussed in the following section. Based on the analyses presented, it is anticipated the Proposed Project would not have a significant impact on listed species or their critical habitat. See **Appendix C, Biological Resources** for more information.

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<sup>32</sup> FAA Advisory Circular, *Standard Specifications for Construction of Airports*, Item C-102, Temporary Air and Water Pollution, Soil Erosion, and Siltation Control, AC 150/5370-10H (December 21, 2018).



### *Federally-Listed Species*

Eastern Indigo Snake (*Drymarchon corais couperi*) – As discussed in Section 3.2.2, the eastern indigo snake was given a moderate probability of occurrence because of the presence of potentially-occupied gopher tortoise burrows within the Proposed Project Site. The USFWS’s *Eastern Indigo Snake Programmatic Effect Determination Key* was used to assess the potential impacts to the eastern indigo snake. A determination of “may affect, but is not likely to adversely affect” was reached using the Effect Determination Key because the project is expected to impact fewer than 25 acres of xeric habitat and/or 25 gopher tortoise burrows. Any permit will be conditioned such that all identified gopher tortoise burrows and other refugia will be excavated prior to the start of construction, ensuring the protection of the eastern indigo snake per USFWS guidance. Should an eastern indigo snake be found on-site, the snake must be allowed to vacate the area before work can resume.

Wood Stork (*Mycteria americana*) – As discussed in Section 3.2.2, the wood stork was given a moderate probability of occurrence in the Proposed Project Site. The United States Army Corp of Engineers (USACE)/USFWS’s *Effect Determination Key for the Wood Stork in Central and North Peninsular Florida* was used to assess the potential impacts to the wood stork. A determination of “may affect, but is not likely to adversely affect” was reached using the Effect Determination Key because mitigation provided for unavoidable wetland impacts is anticipated to satisfy mitigation requirements for the loss of suitable foraging habitat.

### *State-Listed Species*

Gopher Tortoise (*Gopherus polyphemus*) – As discussed in Section 3.2.2, a total of three potentially occupied gopher tortoise burrows were observed in the Proposed Project Site during the November 2021 field survey. In accordance with Florida Fish and Wildlife Conservation Commission (FWC) rules and regulations, a 100 percent survey for the gopher tortoise will be conducted within 90 days of construction. Any potentially impacted burrows will be excavated and relocated per FWC rules and regulations. If fewer than ten burrows are identified during the 100 percent survey, a *10 or Fewer Burrows Permit* will be required. If more than ten burrows are identified, then, most likely, a Conservation Permit will be required from FWC. All excavated tortoises will be relocated to an FWC-approved Long Term Protected Recipient Site. JAA owns and operates a Long-Term Protected Recipient Site at Cecil Airport where there is capacity available to accommodate gopher tortoises excavated from the Proposed Project Site as part of this EA.

Florida Pine Snake (*Pituophis melanoleucus mugitus*) – As discussed in Section 3.2.2, the pine snake was given a moderate probability of occurrence in the Proposed Project Site because of the presence of potentially-occupied gopher tortoise burrows and well-drained habitat. Permitting and coordination conducted for the gopher tortoise with the FWC is anticipated to include the protection of the pine snake, such as limited relocation, in the event that a pine snake is encountered.

Little blue heron (*Egretta caerulea*) and tricolored heron (*Egretta tricolor*) – As discussed in Section 3.2.2, the little blue heron and the tricolored heron were given a moderate probability of occurrence. However, there were no visual observations of these species during the November 2021 field survey. Additionally, these species are highly mobile and can easily forage outside of the Proposed Project Site. As such, no effect to these species is anticipated.



### 4.3 Climate

Although there are no Federal standards for aviation-related greenhouse gas (GHG) emissions, it is well-established that GHG emissions can affect climate.<sup>33</sup> The Council on Environmental Quality (CEQ) has indicated that climate should be considered in NEPA analyses.

#### No Action

Under the No Action, there would be no increase in project specific GHG emissions.

#### Proposed Project

Construction and operation of the Proposed Project would result in a temporary and long-term increase in GHG emissions. As previously discussed, temporary emissions would result from construction of the distribution/warehouse facility and long-term emissions would result from the increase in vehicle traffic due to its operation. **Table 4-2** provides an estimate of the annual GHG emissions inventory from these activities. These estimates are provided for information only as no Federal NEPA standard for the significance of GHG emissions from individual projects on the environment has been established. See **Appendix B, Air Quality** for a discussion on the methodology and software used to develop the estimated GHG emissions.

**TABLE 4-2, ANNUAL GHG EMISSIONS INVENTORY**

YEAR	CO <sub>2</sub> E
2023 (Construction)	5,712.2
2024 (Construction and Operation)	4,074.0

Note: CO<sub>2</sub>E: Carbon Dioxide equivalent. The use of electric delivery vehicles may be implemented by the developer and operator of the facility, which would result in lower operational emissions than disclosed.

Source: Landrum & Brown analysis using the Airport Construction Emissions Inventory Tool (ACEIT) and the USEPA’s Motor Vehicle Emissions Simulator version 3 (MOVES3), 2022

### 4.4 Department of Transportation Act, Section 4(f)

The Federal statute that governs impacts in this category is commonly known as the Department of Transportation (DOT) Act of 1966, Section 4(f) provisions. Section 4(f) of the DOT Act was recodified and renumbered as Section 303(c) of U.S. Code Title 49 (49 U.S.C.). FAA Orders 5050.4B and 1050.1F continue to refer to this statute as Section 4(f) to avoid confusion. Section 4(f) provides that the “Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land off a public park, recreation area, or wildlife or waterfowl refuge of national, state, or local significance, or land of an historic site of national, State, or local significance, only if there is no feasible and prudent alternative to the using that land and the program or project includes all possible planning to minimize harm resulting from the use.”<sup>34</sup> Two types of impacts to a Section 4(f) resource, physical or constructive use, can occur from a Proposed Project. A physical use would occur if the Proposed Project or alternative(s) would involve an actual physical taking of Section 4(f) property through purchase of land or a permanent easement, physical occupation of a portion or all of the property, or alteration of structures or facilities on the property. Constructive use occurs when the impacts of a project on a Section 4(f) property are so severe that the activities, features, or attributes

<sup>33</sup> See *Massachusetts v. E.P.A.*, 549 U.S. 497, 508-10, 521-23 (2007).

<sup>34</sup> FAA 1050.1F Desk Reference version 2, Chapter 5, Department of Transportation Act, Section 4(f), February 2020.



that qualify the property for protection under Section 4(f) are substantially impaired. The FAA may also make a *de minimis* impact determination with respect to a physical use of Section 4(f) property if, after taking into account any measures to minimize harm, the result is either:

- A determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or wildlife or waterfowl refuge for protection under Section 4(f); or
- A Section 106 finding of no adverse effect or no historic properties affected.
- Section 6(f) of the Land and Water Conservation Fund Act (LWCF) is also pertinent to Section 4(f) lands. Section 6(f) prohibits recreational facilities funded under the LWCF from being converted to non-recreational use unless approval is received from the director of the grantor agency.

### **No Action**

The No Action does not involve any development; therefore, there would be no impacts to Section 4(f) resources.

### **Proposed Project**

As discussed in Section 3.2.5, no Section 4(f) resources were identified within the Proposed Project Site. Therefore, no impacts to Section 4(f) resources would result from the Proposed Project.

## **4.5 Hazardous Materials, Solid Waste, and Pollution Prevention**

The potential impacts resulting from hazardous materials, solid waste collection, control, and disposal due to airport projects are assessed under four primary laws that govern the handling and disposal of hazardous materials, chemicals, substances, and wastes:

- Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), (as amended by the Superfund Amendments and Reauthorization Act of 1986 and the Community Environmental Response Facilitation Act of 1992);<sup>35</sup>
- Pollution Prevention Act of 1990;<sup>36</sup>
- Toxic Substances Control Act of 1976, as amended (TSCA);<sup>37</sup> and
- Resource Conservation and Recovery Act of 1976 (RCRA), (as amended by the Superfund Amendments and Reauthorization Act of 1986 and the Community Environmental Response Facilitation Act of 1992).<sup>38</sup>

The two statutes most pertinent to FAA actions, when constructing and operating airport facilities and navigational aids, are RCRA and CERCLA. RCRA governs the generation, treatment, storage, and disposal of hazardous wastes. CERCLA provides for consultation with natural resources' trustees and cleanup of any release of a hazardous substance (excluding petroleum) into the environment.

### **No Action**

The No Action does not involve any development; therefore, the existing conditions at the Airport would remain in place. No changes related to hazardous materials, solid waste, or pollution prevention would occur.

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<sup>35</sup> 42 U.S.C. 9601-9675.

<sup>36</sup> 42 U.S.C. 1310-1319.

<sup>37</sup> 15 U.S.C. 2601-2692

<sup>38</sup> 42 U.S.C. 6901-6992(k)

## Proposed Project

### *Hazardous Materials*

As discussed in Section 3.2.7, the Proposed Project Site is vacant, has not been disturbed, and does not contain any signs of hazardous materials. While there are no records or evidence of any ground contaminating events at the Proposed Project Site, there is a potential for encountering hazardous substances during construction activities. The contractors would be required to implement site-specific spill prevention, control, and countermeasure (SPCC) plans that reduce the potential for substantial impacts associated with regulated materials. Should construction activities discover underground storage tanks, waste materials, or other sources of environmental contamination, regulatory authorities would be notified, and the necessary site remediation completed. The use of obstruction reduction techniques would be considered and utilized, if appropriate, to the extent practicable.

Additionally, all hazardous substances and wastes used or generated during the operation of the warehouse/distribution facility would be stored, labeled, and disposed of in accordance with Federal and state laws. Secondary containment where storage and handling of Petroleum, Oils, and Lubricants (POL) will take place, including maintenance bays and storage sites of single wall POL tanks, will be implemented as appropriate and required by the Clean Water Act. Where secondary containment is not directly practicable, spill ponds and oil water separators would be constructed downstream of POL related activities. These regulations and practices, combined with existing technologies and work practices developed to properly manage these substances, substantially reduce the risks of causing environmental contamination from the construction and operation of the Proposed Project. Therefore, the Proposed Project is not likely to result in significant impacts related to hazardous materials.

### *Solid Waste*

The Proposed Project would create a temporary increase in solid waste generated during construction. The volume of solid waste is expected to be accommodated by surrounding landfills. The developer would divert, recycle, or re-use construction waste to the extent feasible. Construction waste not diverted, recycled, or re-used would be transported to and disposed of in local permitted construction/demolition debris facilities or in accordance with applicable state and local requirements.

Additionally, the operation of the warehouse/distribution facility would increase the amount of solid waste generated annually. However, the Proposed Project would not generate an unmanageable volume of solid waste and would not exceed the capacity of the existing solid waste facilities. Therefore, the Proposed Project is not likely to result in significant impacts related to solid waste.

### *Pollution Prevention*

The developer would be required to implement pollution prevention, spill prevention, and response plans documenting the measures that would be taken to prevent accidental releases to the environment and, should they occur, the actions that would be undertaken to minimize the environmental impact. As previously stated, the contractor(s) would be required to implement SPCC plans that reduce the potential for substantial impacts associated with regulated materials. Therefore, the Proposed Project is not likely to result in significant impacts from environmental contamination.

## 4.6 Historical, Architectural, Archeological, and Cultural Resources

The *National Historic Preservation Act of 1966* (NHPA)<sup>39</sup> and the *Archeological and Historic Preservation Act of 1974*<sup>40</sup> are primary Federal laws governing the preservation of historic and

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<sup>39</sup> Public Law 89-665; 16 U.S.C. 470 et seq.

<sup>40</sup> Public Law 86-523, 16 U.S.C. 469-469c-2



prehistoric resources, encompassing art, architecture, archeological, and other cultural resources. Section 106 of the NHPA requires that, prior to approval of a Federal or Federally-assisted project, or before the issuance of a license, permit, or other similar approval, Federal agencies take into account the effect of the project on properties that are on or eligible for listing on the National Register of Historic Places (NRHP).

### **No Action**

The No Action does not involve any development; therefore, there would be no impacts to historic, architectural, archeological, and cultural resources.

### **Proposed Project**

The historical/architectural field survey resulted in the identification and re-evaluation of one previously recorded historic resource (8DU19043) and the identification and evaluation of one newly identified historic resource (8DU23022) within the Area of Potential Effects (APE). This includes the Craig Airfield Designed Historic Landscape (8DU19043) and the associated Craig Airfield Canal (8DU23022), constructed in circa (ca.) 1943. Overall, the newly identified historic resource (8DU23022) is a common example of a drainage canal found throughout the region and the State of Florida and it is not a significant embodiment of a type, period, or method of construction. Furthermore, background research did not reveal any historic associations with significant persons and/or events that are directly connected to the drainage canal. As a result, 8DU23022 does not appear eligible for listing in the NRHP, either individually or as part of a historic district. In addition, the Craig Airfield Designed Historic Landscape (8DU19043) – as contained within the APE – provides insufficient information for determining NRHP eligibility due to a lack of contributing historic resources. As such, there are no registered properties or properties listed as being eligible for inclusion on the NRHP in the APE for this project. The closest NRHP-listed resource is the Timucuan Ecological and Historic Preserve located approximately three miles to the northeast. Therefore, it is anticipated the Proposed Project would not result in impacts to historic, architectural, archeological, and cultural resources.

Based on this information, the FAA made the finding of **no adverse effect on historic properties**. The SHPO concurred with this finding in a letter dated March 30, 2023 (see **Appendix A, Agency and Public Involvement**). Additionally, coordination with the Miccosukee Tribe of Indians, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Tribe of Florida, and Seminole Nation of Oklahoma was conducted. Feedback from the Seminole Tribe of Florida was received, and they stated that they had no objections to the project at this time (see Appendix A).

## **4.7 Land Use**

The FAA has not established a significance threshold for land use impacts, other than those related to noise impacts. However, CEQ Regulations require that NEPA documents discuss any inconsistency with approved state and/or local plan(s) and law(s). Furthermore, the NEPA document should discuss potential hazards to aviation such as landfills, wildlife refuges, or wetland mitigation that may attract wildlife species that could be hazardous to aviation and could result in potential structure-height impacts.

### **No Action**

The No Action would not involve any development or cause any changes to existing land use; therefore, no adverse land use compatibility impacts would occur.

### **Proposed Project**

As stated in Section 3.2.9, the Proposed Project Site is located on the south side of the Airport property and is currently vacant. The area is zoned Public Buildings and Facilities, Business Park, and Planned Unit Development. The land uses adjacent to the Proposed Project Site include community/general commercial, planned unit development, and public buildings and facilities (airport uses). As such, the Proposed Project is consistent with local plans related to land use and development. Therefore, no adverse impacts related to land use would occur with implementation of the Proposed Project.

## **4.8 Natural Resources and Energy Supply**

Sections 1502.16(e) and (f) of the CEQ Regulations require that Federal agencies consider energy requirements, natural resource requirements, and potential conservation measures for a Proposed Project and its alternatives.

### **No Action**

The No Action does not involve any development; therefore, there would be no impacts to natural resources or the supply of energy.

### **Proposed Project**

The Proposed Project would include the construction and operation of a warehouse/distribution facility. Construction of the proposed expanded and new facilities would require natural resources such as steel, gravel, sand, aggregate, concrete, asphalt, water, and other construction materials. These materials are not in short supply in the Jacksonville area and consumption of these materials is not expected to deplete existing supplies. Operation of these proposed facilities would require the use of electricity, natural gas, and water. Electricity would be used to power and light the buildings and to light the parking areas.<sup>41</sup> Natural gas would be used for gas-fired water heaters, kitchen equipment, and other gas-fired appliances. Water would be used for cleaning, vehicle washing, sewer, and other activities.

While the Proposed Project would increase the amount of energy and natural resources consumed in the short and long-term, the Proposed Project Site is located in an urban area with a sufficient supply of electricity, natural gas, and water. Additionally, energy and water conservation features would be incorporated into the design of the proposed projects where feasible. Therefore, the Proposed Project is not expected to result in adverse impacts to the local supply of energy or natural resources.

## **4.9 Noise and Noise Compatible Land Use**

Based on FAA guidance, noise due to construction of a Proposed Project should be assessed in an environmental document. Therefore, the following section addresses potential noise impacts related to the construction of the Proposed Project.

### **No Action**

The No Action does not involve any development; therefore, there would be no impacts related to noise.

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<sup>41</sup> The developer has expressed interest in implementing the electric vehicle charging infrastructure for the use of electric delivery vans. This has not yet been finalized. However, the potential need for electricity to support this infrastructure has been communicated with the local power supplier.



## Proposed Project

The Proposed Project would not result in changes to the number of operations, fleet mix, runway use, or time of day of operations at the Airport. Therefore, no significant operational noise impacts would result from the Proposed Project.

Noise from construction equipment and trucks may be audible within and adjacent to the Proposed Project Site. **Table 4-3** depicts an estimate of the typical maximum sound level energy from various types of construction equipment that is likely to be used during construction of the Proposed Project. The total sound energy would be a product of a machine's sound level, the number of such machines in service, and the average time they operate.

**TABLE 4-3, CONSTRUCTION EQUIPMENT NOISE**

CONSTRUCTION EQUIPMENT	TYPICAL MAXIMUM SOUND LEVEL (LMAX) IN DB(A) AT 50 FEET
Dump Truck	76
Concrete Mixer Truck	79
Jackhammer	89
Scraper	84
Dozer	82
Paver	77
Generator	81
Impact Pile Driver	101
Rock Drill	81
Pump	81
Pneumatic Tools	85
Backhoe	78

Source: Federal Highway Administration, *Construction Noise Handbook, 9.0 Construction Equipment Noise Levels and Ranges*.

Construction activities associated with the Proposed Project are not expected to result in noise impacts to residential or other public land uses due to the limited amount of time the construction activity would occur. Major construction activities would be limited to daylight hours. Additionally, noise from construction equipment would likely not be discernible from other background noise sources such as aircraft and roadway noise in most locations. Therefore, no significant noise impacts from construction activities would result from the Proposed Project.

## 4.10 Socioeconomics, Environmental Justice, and Children’s Environmental Health and Safety Risks

### 4.10.1 Socioeconomics

The FAA has not established a significance threshold for socioeconomics; however, in general, the significance of socioeconomic impacts is determined by the magnitude and duration of the impacts, whether beneficial or adverse. According to FAA Order 1050.1F, potential impacts to consider include:

- inducing substantial economic growth,
- dividing or disrupting an established community,
- extensive relocation of housing when sufficient replacement housing is unavailable,
- extensive relocation of businesses that would cause economic hardship,

- disruption of local traffic patterns, or
- substantial loss of the community tax base.

### No Action

The No Action does not involve any development or changes to the physical characteristics of the Airport; therefore, there would be no impacts related to socioeconomics.

### Proposed Project

The Proposed Project would not cause the relocation of housing, relocation of businesses, disruption of an established community, or the loss of the community tax base. The implementation of the Proposed Project is anticipated to induce economic growth through temporary employment during construction of the warehouse/distribution facility and long-term employment for its operation.

Temporary construction impacts could include increased commercial and construction traffic, increased traffic congestion, increased travel distances, and increased travel times for drivers. A construction management plan would be prepared which, based on the selected contractor(s) haul plan, would specify hours of operation, haul routes, and similar controls. It is expected that such a plan would be consistent with normal contracting practices because it is not likely that a contractor would schedule haul activities during extreme congestion periods or weather conditions because it could increase costs to the contractor and affect the schedule.

The Proposed Project includes the construction of a new north-south access road connecting the Proposed Project to Atlantic Boulevard and a new internal east-west access road that would connect to General Doolittle Drive. The internal east-west access road would provide additional access to the Proposed Project.<sup>42</sup> The warehouse/distribution facility is anticipated to operate 24 hours per day and 7 days per week and would result in an increase in motor vehicles on Atlantic Boulevard from employee vehicles, delivery vans, and delivery trucks.

A Traffic Impact Analysis (TIA) was prepared in June 2022 and was coordinated with and approved by the City of Jacksonville and the Florida Department of Transportation (FDOT). Based on coordination with the FDOT, the TIA developed and evaluated three scenarios to accommodate access to the Proposed Project with 2025 traffic volumes (see Appendix F for more information). The three scenarios evaluated in the TIA are described below:

- **Scenario 1:** The existing traffic signals would remain in place and motor vehicles would access the Proposed Project through the Duval Acura Driveway and the Atlantic Boulevard / General Doolittle Drive intersection. Additionally, the existing eastbound left-turn lane at the Atlantic Boulevard / Duval Acura driveway / Sutton Lakes Boulevard would be extended.
- **Scenario 2:** The existing traffic signal at the Atlantic Boulevard / Arlington Toyota driveway / Mindanao Drive intersection would be removed and a new traffic signal would be implemented at the Atlantic Boulevard / General Doolittle Drive / Sandalwood Boulevard intersection. This scenario is subject to a public hearing process. Additionally, the existing eastbound left-turn lane at the Atlantic Boulevard / Duval Acura driveway / Sutton Lakes Boulevard would be extended.
- **Scenario 3 (Proposed Project – see Exhibit 1-3):** A new traffic signal would be implemented at the new intersection where the new north-south roadway just west of the Duval Acura dealership would intersect with Atlantic Boulevard. The existing traffic signal at the Duval Acura

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<sup>42</sup> Owners of the existing dealerships adjacent to this road may construct connections to this road to provide heavy vehicles destined for these businesses an alternate route



driveway would be removed and the driveway would be converted to right-in/right-out. Additionally, the existing eastbound left-turn lane at the Atlantic Boulevard / Duval Acura driveway / Sutton Lakes Boulevard would be extended and an additional eastbound left-turn lane at the new intersection would be implemented. This scenario is subject to a public hearing process.

The analysis evaluated the scenarios using projected 2025 traffic volumes during the current peak hour times for Atlantic Boulevard (7:00 am to 8:00 am and 4:00 pm to 5:00 pm) as well as the peak hour of project-related arrival traffic (9:30 am to 10:30 am) and departure traffic (10:00 am to 11:00 am). See **Table 4-4** for the anticipated LOS for each intersection evaluated (see **Exhibit 4-1**). Based on consultation with FDOT, an overall LOS of D (or higher) and a volume to capacity ratio less than 1.0 are considered an acceptable condition for signalized intersections.

Table 4-4 demonstrates that each of the scenarios would maintain a LOS D or better. However, Scenario 1 would result in a v/c ratio greater than one during the peak hour of inbound project traffic for the eastbound left-turn movement at the Atlantic Boulevard / Duval Acura Driveway / Sutton Lakes Boulevard intersection. Because Scenarios 2 and 3 would provide a LOS D or better and a volume to capacity ratio less than 1.0, Scenarios 2 and 3 are considered to provide an acceptable condition for signalized intersections. Furthermore, Scenario 3 was found by FDOT to result in less impacts to existing businesses and residences than Scenario 2. Therefore, Scenario 3 was recommended for implementation and is included in the Proposed Project.

A public hearing was held on November 3, 2022 and based on the TIA and the results of the public hearing process, Scenario 3 was approved by the City of Jacksonville<sup>43</sup> and FDOT<sup>44</sup> for implementation. As such, no significant impacts related to socioeconomics would result from the Proposed Project.

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<sup>43</sup> Site work permit obtained July 24, 2023

<sup>44</sup> FDOT permit obtained August 9, 2023



**TABLE 4-4, FUTURE INTERSECTION LEVEL OF SERVICE, DELAY, AND V/C RATIO**

ID	Intersection	Peak Hour	BASELINE*	SCENARIO 1	SCENARIO 2	SCENARIO 3
1	Atlantic Boulevard / Arlington Toyota Driveway / Mindanao Drive	AM	B (11.8)	B (13.2)	N/A	B (13.2)
		PA**	N/A	B (12.6)	N/A	B (12.6)
		PD**	N/A	B (10.6)	N/A	B (10.6)
		PM	C (20.3)	C (23.6)	N/A	C (23.6)
		v/c ratio	All movements < 1.0	All movements < 1.0	N/A	All movements < 1.0
2	Atlantic Boulevard / Duval Acura Driveway / Sutton Lakes Boulevard	AM	C (24.7)	C (27.2)	C (27.1)	N/A
		PA**	N/A	C (31.5)	B (16.5)	N/A
		PD**	N/A	C (27.8)	B (15.8)	N/A
		PM	C (31.0)	D (36.9)	C (33.5)	N/A
		v/c ratio	WBL PM > 1.0, All other movements < 1.0	EBL PA** > 1.0, All other movements < 1.0	All movements < 1.0	N/A
3	Atlantic Boulevard / General Doolittle Drive / Sandalwood Boulevard	AM	N/A	N/A	B (18.4)	N/A
		PA**	N/A	N/A	B (16.5)	N/A
		PD**	N/A	N/A	B (18.9)	N/A
		PM	N/A	N/A	D (43.0)	N/A
		v/c ratio	N/A	N/A	All movements < 1.0	N/A
4	Atlantic Boulevard / Proposed North-South Road / Sutton Lakes Boulevard	AM	N/A	N/A	N/A	C (26.3)
		PA**	N/A	N/A	N/A	C (25.6)
		PD**	N/A	N/A	N/A	C (24.7)
		PM	N/A	N/A	N/A	D (40.6)
		v/c ratio	N/A	N/A	N/A	All movements < 1.0

\* 2022 traffic volumes used to present the baseline

\*\* PA denotes project-related peak arrival traffic (9:30 am to 10:30 am) and PD denotes project-related peak departure traffic (10:00 am to 11:00 am)

Note: AM denotes 7:00-8:00 AM peak hour AM traffic and PM denotes 4:00-5:00 PM peak hour PM traffic

Source: Traffic Impact Analysis, Kimley Horn, June 2022.



**EXHIBIT 4-1, FUTURE INTERSECTIONS ANALYZED IN TRAFFIC IMPACT ANALYSIS**



Source: Landrum & Brown, 2023; Kimley-Horn, 2022.

#### **4.10.2 Environmental Justice**

A significance threshold for Environmental Justice (EJ) has not been defined by the FAA. However, potential impacts would occur if disproportionately high and adverse environmental impacts in one or more environmental categories were to occur to environmental populations. In addition, unique impacts to an environmental justice population should also be considered even if there is no significant impact from other environmental categories.

##### **No Action**

The No Action does not involve any development or changes to the Airport; therefore, there would be no impacts related to environmental justice populations.

##### **Proposed Project**

Implementation of the Proposed Project would result in an increase in traffic on surrounding roadways due to construction activities which may result in a temporary impact to the potential EJ populations identified in Section 3.2.12.2. However, this impact would be temporary and would only occur during construction. Additionally, the operation of the warehouse/distribution facility would result in a long-term increase in traffic on surrounding roadways due to the increase in motor vehicles from employee vehicles, delivery vans, and delivery trucks. However, as discussed in Section 4.10.1, the Proposed Project includes the implementation of access roads and intersection improvements at the new Atlantic Boulevard intersection which would maintain an acceptable LOS on surrounding roadways. As such, no long-term impacts are anticipated on potential EJ populations. Therefore, the Proposed Project would not result in impacts that would be disproportionately high and adverse to the potential EJ populations.

#### **4.10.3 Children's Environmental Health and Safety Risks**

Executive Order 13045 directs Federal agencies to analyze their policies, programs, activities, and standards for any environmental health or safety risks that may disproportionately affect children. The FAA has not established a significance threshold for Children's Environmental Health and Safety Risks. However, according to FAA Order 1050.1F, potential impacts from other environmental categories should be assessed to determine if they have the potential to lead to a disproportionate health or safety risk to children.

##### **No Action**

The No Action does not involve any development or changes to the Airport; therefore, there would be no impact related to health or safety risk to children.

##### **Proposed Project**

Implementation of the Proposed Project would not create environmental health risks or safety risks for any persons, regardless of age. Therefore, no potential or significant adverse impacts to children's health and safety would occur with implementation of the Proposed Project.

#### **4.11 Visual Effects**

According to FAA Order 1050.1F, visual effects include light emissions and visual resources/visual character. These factors should be considered in an environmental review.

##### **No Action**

The No Action does not involve any development or changes to the Airport; therefore, there would be no impact related to light emissions or visual resources/visual character.



## Proposed Project

### Light Emissions

As discussed in Section 3.2.13, the closest residential area is located approximately four hundred feet to the south of the Proposed Project Site, south of Atlantic Boulevard. Although the facility is anticipated to operate 24 hours per day and 7 days per week, all proposed lighting will only illuminate the immediate area surrounding the warehouse/distribution facility and access roads. The lighting will be directed at angles that would not cause lighting impacts outside of the Proposed Project Site. Light emissions during the construction of the Proposed Project are not anticipated to cause any impact to the surrounding areas as most of the construction would occur during daytime hours. Therefore, no significant impacts from light emissions would occur.

### Visual Resources/Visual Character

As discussed in Section 3.2.13, the Proposed Project Site is not visible from the nearest residential areas which are located south of Atlantic Boulevard. Therefore, the Proposed Project would not significantly alter the views from these areas and no significant visual impacts are expected to occur.

## 4.12 Water Resources

In FAA Order 1050.1F, water resources include wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers, which function as a single, integrated natural system. Disruption of any one part of this system can have consequences to the functioning of the entire system.

### 4.12.1 Wetlands

The USACE and the USEPA define wetlands as: "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

### No Action

The No Action does not involve any development that would cause impacts to wetlands or streams.

### Proposed Project

The Proposed Project is anticipated to result in permanent impacts to approximately 2.85 acres of wetlands, as detailed in **Table 4-5** and shown in **Exhibit 4-2, Wetland and Stream Impacts**.

**TABLE 4-5, IMPACTS TO WETLANDS DUE TO THE PROPOSED PROJECT**

WETLANDS	ACREAGE
Freshwater Non-Forested Wetlands	1.55
Baygall	1.20
Mixed Hardwood-Coniferous Swamps	0.10
<b>Total</b>	<b>2.85</b>

Source: Landrum & Brown, 2022; LG<sup>2</sup> Environmental Solutions, Inc., 2021; Kimley-Horn, 2021.

### 4.12.2 Floodplains

Floodplains are defined by Executive Order 11988, *Floodplain Management*, as "the lowland and relatively flat areas adjoining inland and coastal waters including flood prone areas of offshore islands, including at a minimum, that area subject to a one percent or greater chance of flooding in any given year" (i.e., area inundated by a 100-year flood). DOT Order 5650.2 defines the values served by floodplains to include "natural moderation of floods, water quality maintenance, groundwater recharge,

fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, and forestry.”

### **No Action**

The No Action does not involve any development that would cause impacts to floodplains.

### **Proposed Project**

As discussed in Section 3.2.14.2, *Floodplains*, a 100-year floodplain is located within the Proposed Project Site. To access the site, the existing east-west ditch (which is within the 100-year floodplain) will have to be crossed along multiple points. To convey water under these crossings, four (4) 48-inch pipes are proposed at the two western crossings, while the crossing at the east side will be four (4) 42-inch pipes. To show that there would be no significant impacts from these crossings, the Interconnected Channel and Pond Routing Model (ICPR 4) was used to compare the max stage at specific nodes within the east-west ditch in both the pre- and post- development condition. There are some minor increases to the maximum water height within the channel (less than one inch), however these increases occur on airport property and are reduced towards the property boundaries (see Table 2 in the Stormwater Management Plan, Appendix E). In order to incorporate these improvements, the existing ditch would also be reshaped, which includes a modification of the cross-sectional configuration of the ditch. The combination of these improvements would maintain water flow on the site. As such, construction of the Proposed Project would impact approximately 3.9 acres of the 100-year floodplain, as shown in **Exhibit 4-3, Floodplain Impacts**.

These activities will be mitigated by the Stormwater Management Plan as discussed above and in Appendix E. This stormwater management plan has been coordinated with the St. Johns River Water Management District (SJRWMD) and all appropriate permits have been obtained. The Proposed Project would not result in a high probability of loss of human life, have substantial encroachment-associated costs or damage due to flooding, or cause adverse impacts on natural and beneficial floodplain value. Therefore, the Proposed Project is not anticipated to result in significant impacts to floodplains.

### **4.12.3 Surface Waters**

#### **No Action**

The No Action does not involve any development that would result in impacts to surface waters.

#### **Proposed Project**

Construction of the proposed parking and access roads includes the culverting of approximately 450 linear feet and the reshaping of 2,320 linear feet of the existing ditch/artificial intermittent stream. However, these impacts and the implementation of new drainage infrastructure would maintain water flow on the site. Additionally, the Proposed Project includes an increase of approximately 34 acres of impervious surfaces. To account for the increase in impervious surface, up to eight stormwater facilities spanning a total of approximate 17 total acres would be provided throughout the site (see Exhibit 1-3 and 4-2 for the proposed stormwater facilities). The stormwater facilities proposed for the site are referred to as “wet ponds,” which are constructed basins that have a permanent pool of water throughout the year. Stormwater from the project would be collected in these wet ponds which will provide treatment before the runoff exits the site. As previously stated, the developer has conducted a stormwater management plan for the final design of the Proposed Project which included a water quality analysis and floodplain analysis that confirmed the appropriate drainage would be maintained on the site. This stormwater management plan has been coordinated with the St. Johns River Water



Management District and all appropriate permits have been obtained. Therefore, it is not anticipated that water quality standards would be exceeded with the implementation of the Proposed Project.

Furthermore, BMPs would be incorporated into the project during and after construction to minimize stormwater impacts. Contractors will be required to comply with all applicable Federal, state, and local laws and regulations, including FAA guidance contained in AC 150/5370-10H, *Standard Specifications for Construction of Airports*, including Item C-102, *Temporary Air and Water Pollution, Soil Erosion and Siltation Control*; AC 150/5320-15A *Management of Airport Industrial Waste*; and AC 150/5320-5D, *Airport Drainage Design*. Implementation of stormwater management programs, adherence to the National Pollutant Discharge Elimination System (NPDES) program requirements, and implementation of BMPs would prevent any significant water quality impacts to surface waters under the Proposed Project.

The design of the proposed stormwater facilities includes best practices identified in the FAA AC 150/5200-33C, *Hazardous Wildlife Attractants on or Near Airports*. Additionally, in accordance with FAA AC 150/5200-33C and the Airport's wildlife hazardous management plan, the JAA will have the right to access the proposed development to facilitate the elimination or control of any attractants of wildlife that may be hazardous to aviation and to conduct any required inspections related to wildlife attractants. In the event hazardous wildlife are detected, an FAA Qualified Airport Wildlife Biologist will evaluate the risk and recommend other mitigation measures which may include, netting, mesh, bird balls, tinsel, decoys or other devices or measures.

#### **4.12.4 Groundwater**

##### **No Action**

The No Action does not involve any development that would cause new impacts to groundwater.

##### **Proposed Project**

As discussed in Section 3.2.14.4, there are two wells located within the Proposed Project Site. However, the wells are located outside of the area proposed for lease and all ground disturbance activities would occur outside of the prescribed radius (75 feet) for well safety. Design engineers will ensure that adequate drainage and stormwater management is maintained during construction and post-project. All spill prevention and control regulations would be met to prevent spills from causing significant adverse impacts to groundwater.

#### **4.12.5 Mitigation, Avoidance, and Minimization Measures**

As described in Chapter 2, the area to the east of the airfield is primarily composed of wetlands which are considered a 100-year floodplain. As such, the implementation of the Proposed Project would avoid impacts to the Cedar Swamp and result in minimized impacts to wetlands and the 100-year floodplain.

Coordination between the private developer and the SJRWMD regarding the final wetland delineation has been completed and the SJRWMD has issued a permit for this project on July 13, 2023. Additionally, the FDEP has issued a State 404 Program Permit for the project on July 21, 2023. Compliance with these permits ensures all impacts have been avoided to the greatest extent practicable, unavoidable impacts have been minimized, and a mitigation plan has been provided for unavoidable wetland impacts. Pending further coordination, it is anticipated the developer will purchase 2.00 credits in the St. Marks Pond Mitigation Bank. With implementation of a mitigation plan to compensate for the losses of wetlands resulting from the construction of the Proposed Project, the environmental impact would not be significant.

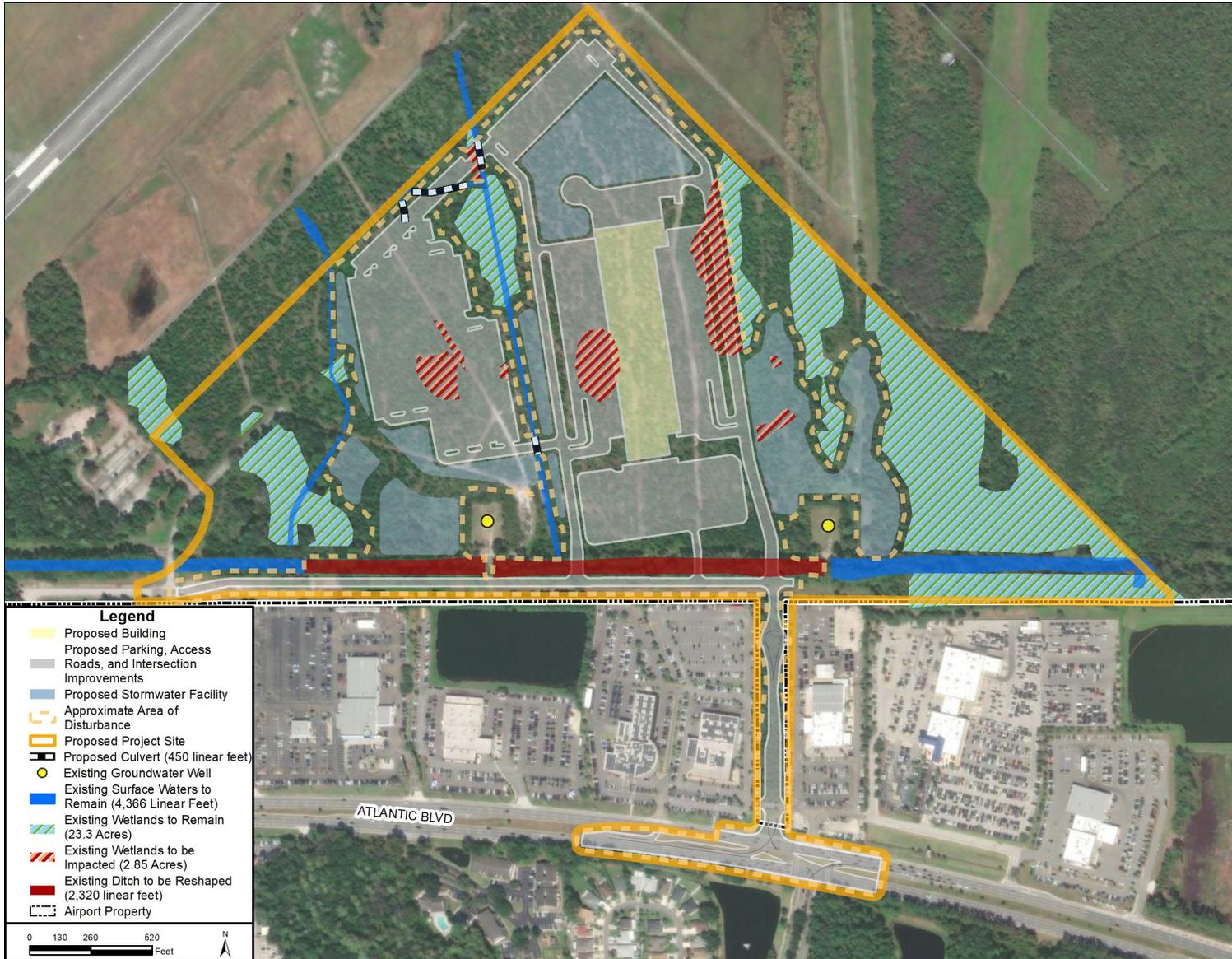
Additionally, BMPs would be incorporated into the project during and after construction to minimize stormwater impacts. Contractors would be required to comply with all applicable Federal, state, and local laws and regulations, including FAA guidance contained in AC 150/5370-10H, *Standard Specifications for Construction of Airports*, including Item C-102, *Temporary Air and Water Pollution, Soil Erosion and Siltation Control*; AC 150/5320-15A, *Management of Airport Industrial Waste*; and AC 150/5320-5D, *Airport Drainage Design*. Implementation of stormwater management programs, adherence to the NPDES program requirements, and implementation of BMPs would prevent any significant water quality impacts to surface waters under the Proposed Project. Furthermore, the use of stormwater management practices, such as "green infrastructure" or "low impact development," would be considered and utilized, if appropriate, to the extent practicable.<sup>45</sup>

The design of the proposed stormwater facilities includes best practices identified in the FAA AC 150/5200-33C, *Hazardous Wildlife Attractants on or Near Airports*. Additionally, in accordance with FAA AC 150/5200-33C and the Airport's wildlife hazardous management plan, the JAA will have the right to access the proposed development to facilitate the elimination or control of any attractants of wildlife that may be hazardous to aviation and to conduct any required inspections related to wildlife attractants. In the event hazardous wildlife are detected, an FAA Qualified Airport Wildlife Biologist (QAWB) will be required to evaluate the risk and recommend other mitigation measures which may include, netting, mesh, bird balls, tinsel, decoys or other devices or measures.

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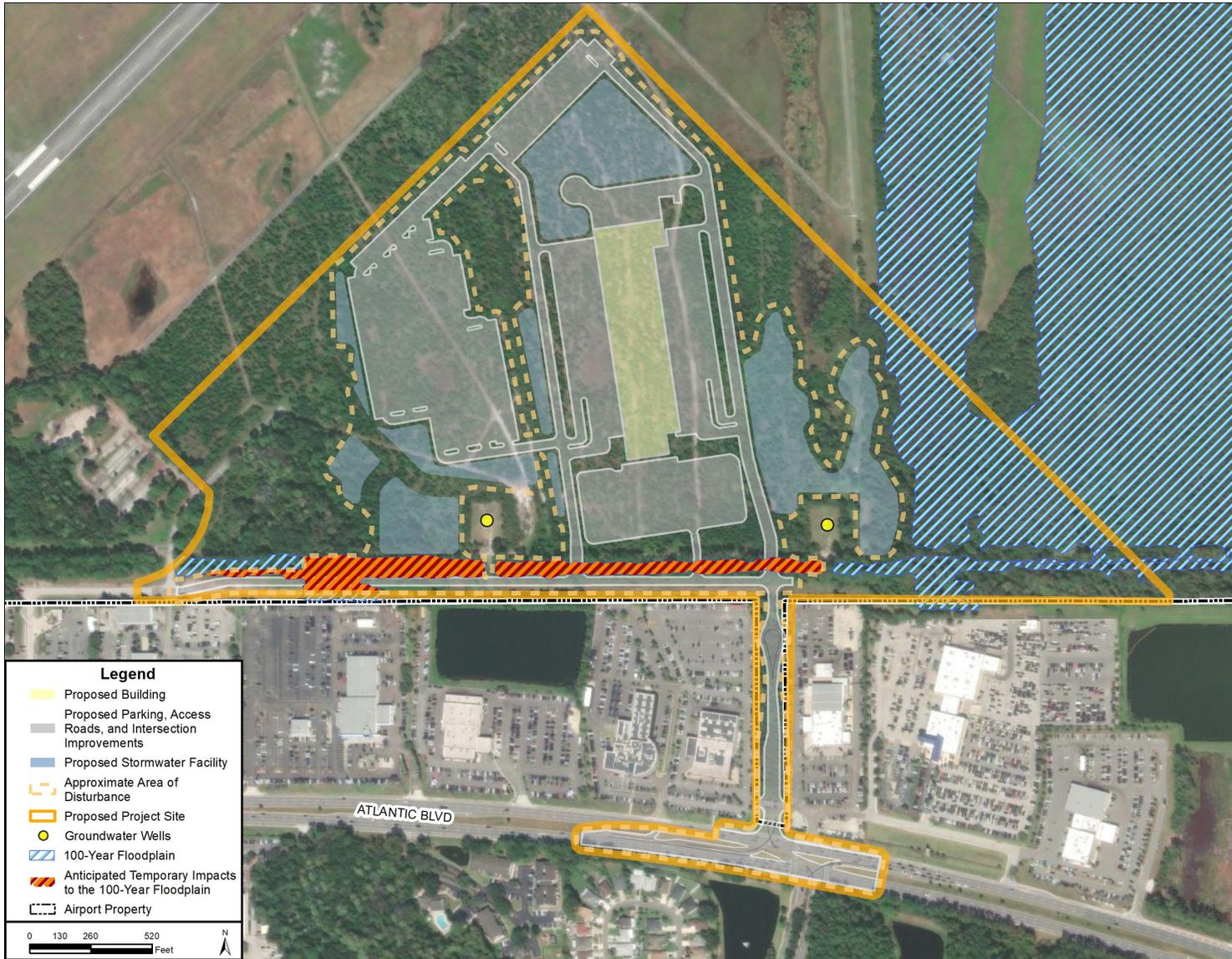
<sup>45</sup> "Green infrastructure" encompasses approaches and technologies to infiltrate, evapotranspire, capture and reuse stormwater to maintain or restore natural hydrologies.

**EXHIBIT 4-2, WETLAND AND STREAM IMPACTS**



Source: Landrum & Brown, 2022; LG2 Environmental Solutions, Inc., 2021; Kimley-Horn, 2021.

**EXHIBIT 4-3, FLOODPLAIN IMPACTS**



Source: Landrum & Brown, 2022; LG2 Environmental Solutions, Inc., 2021; Kimley-Horn, 2021.



## 4.13 Cumulative Impacts

The CEQ NEPA regulations (40 CFR 1508.7) define a cumulative impact as "...the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency, Federal or non Federal, or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time." This cumulative impact analysis was conducted to comply with the intent of FAA Order 1050.1F, DOT Order 5610.1C, and the January 1997 CEQ guidance.

The construction of the Proposed Project is planned to occur from 2023 to 2024. With the exception of temporary construction related impacts, the cumulative environmental impact of the Proposed Project is expected to be minimal. Extensive preventive procedures would be put into place to avoid and minimize any potential adverse impacts during construction. As described in the following sections, the Proposed Project is consistent with the overall planning mission of the City of Jacksonville and would not result in adverse cumulative impacts.

### 4.13.1 Past Projects

Past projects are actions that occurred in the past five years and may warrant consideration in determining the environmental impacts of an action. Past projects at the Airport include runway pavement rehabilitation and Taxiway A3 Relocation. No significant environmental impacts were identified for any of the projects.

### 4.13.2 Present Projects

Present projects are any other actions that are occurring in the same general time frame as the Proposed Project. The following projects are currently under construction or construction is planned to begin in 2023 on Airport property: taxiway relocation, reorganization of taxiways, and airfield lighting rehabilitation. Off-Airport projects include residential building repairs, roadway resurfacing projects, intersection improvements, and pedestrian safety improvements.

### 4.13.3 Reasonably Foreseeable Future Projects

Reasonably foreseeable future projects are actions that may affect projected impacts of a Proposed Project and are not remote or speculative. Reasonably foreseeable future projects on Airport property include, but are not limited to: new roadways and entrance construction, new hangar construction, fence relocation and removal, and taxiway reconfiguration and extension. Reasonably foreseeable future projects off Airport property are anticipated to include the continuation of residential building repairs, roadway resurfacing and repairs, intersection improvements, and pedestrian safety improvements.

Potential environmental impacts are unknown. However, for purposes of disclosing potential cumulative impacts it is assumed these projects would result in an increase in impervious surfaces at the Airport, which would increase stormwater runoff. In addition, it is assumed these projects would require removal of solid waste.

### 4.13.4 Cumulative Impacts by Environmental Category

Cumulative impacts must be evaluated relative to the effects of the Proposed Project for each environmental category. Significant cumulative impacts are determined according to the same thresholds of significance used in the evaluation of each environmental category in the environmental consequences discussion.

For environmental resources where construction and implementation of the Proposed Project would have no environmental impact, there is no potential for an adverse cumulative environmental impact to occur. Therefore, the following discussion of cumulative impacts discusses only those environmental categories where environmental impacts could result from implementation of the Proposed Project. Those categories are biological resources; socioeconomics, environmental justice, and children's health and safety risks; and water resources.

#### **4.13.4.1 BIOLOGICAL RESOURCES**

Past, present, and reasonably foreseeable future actions, and the Proposed Project could affect biological resources. However, as discussed in Section 4.2, the appropriate permits would be obtained prior to construction and the required mitigation will be implemented. As such, the Proposed Project would not have a significant impact on listed species or their critical habitat. Therefore, implementation of the Proposed Project, when combined with other past, present, or reasonably foreseeable projects, would not result in significant adverse impacts to biological resources.

#### **4.13.4.2 SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS**

As discussed in Section 4.10, the Proposed Project would result in an increase in surface vehicle traffic. Through consultation with the City of Jacksonville and FDOT, the Proposed Project would maintain an acceptable LOS and volume to capacity ratio and was approved for implementation. As such, no significant impacts related to traffic would result from the Proposed Project. No additional cumulative traffic impacts would be expected because the TIA prepared for this project included future growth projections into the analysis. Therefore, the implementation of the Proposed Project, when combined with other past, present, or reasonably foreseeable future projects, would not result in significant adverse traffic impacts.

#### **4.13.4.3 WATER RESOURCES**

As discussed in Section 4.12, Water Resources, the Proposed Project would result in impacts to wetlands located in the Proposed Project Site. Coordination between the private developer and the St. Johns River Water Management District (SJRWMD) regarding the final wetland delineation has been completed and the SJRWMD has issued a permit for this project. Additionally, the FDEP has issued a State 404 Program Permit for the project. Compliance with these permits ensures all impacts have been avoided to the greatest extent practicable, unavoidable impacts have been minimized, and a mitigation plan has been provided for unavoidable wetland impacts. Pending further coordination, it is anticipated the developer will purchase 2.00 credits in the St. Marks Pond Mitigation Bank. With implementation of a mitigation plan to compensate for the losses of wetlands resulting from the construction of the Proposed Project, the environmental impact would not be significant.

Additionally, the implementation of the Proposed Project would result in temporary impacts to floodplains located in the Proposed Project Site. However, the temporary impacts are related to the construction of bridges, the reshaping of the existing ditch, and new drainage infrastructure to maintain water flow on the site. These activities would be temporary, and the Proposed Project would not result in a high probability of loss of human life, have substantial encroachment-associated costs or damage due to flooding, or cause adverse impacts on natural and beneficial floodplain value. The developer has conducted a stormwater management plan for the final design of the Proposed Project which included a water quality analysis and floodplain analysis that confirmed the appropriate drainage would be maintained on the site. This stormwater management plan has been coordinated with the St. Johns River Water Management District and all appropriate permits have been obtained. Therefore, the Proposed Project is not anticipated to result in significant impacts to floodplains.



Implementation of the Proposed Project combined with the implementation of one or more of the past, present, and reasonably foreseeable future actions would not result in a cumulative impact to water resources because each of these projects is required to have its own protective measures and permits to avoid and minimize impacts during implementation of the project. The other past, present, or reasonably foreseeable future projects would be required to comply with all existing and future water quality regulatory criteria and permit requirements. In addition, these past, present, or reasonably foreseeable future projects would also be required to develop BMPs that would ensure that concentrations of pollutants of concern do not exceed regulatory criteria. Therefore, there would be no significant cumulative impacts to water resources.

#### **4.13.5 Summary of Cumulative Impacts**

The level of cumulative impacts anticipated to occur within these environmental resource categories is not significant due to the types of past, present, and reasonably foreseeable future projects, the extent of the built environment in which they would occur, the lack of certain environmental resources in the area, and the mitigation measures identified for the Proposed Project. Therefore, implementation of the Proposed Project would not result in significant cumulative environmental impacts.



## **5 List of Preparers**

### **5.1 Jacksonville Aviation Authority**

Lauren Scott, A.A.E., ACE, Senior Manager Aviation Planning, provided input and Airport information throughout the process and responsible for managing and review of the Environmental Assessment.

### **5.2 Landrum & Brown**

Sarah Potter, Executive Vice President, provided guidance and technical input of the Environmental Assessment.

Gaby Elizondo, AICP, Senior Consultant, responsible for project management and is the principal author of the Environmental Assessment.

## 6 References

15 United States Code (U.S.C.) 2601-2692

40 Code of Federal Regulations [CFR] 1500-1508

42 U.S.C. 9601-9675

42 U.S.C. 1310-1319

42 U.S.C. 6901-6992(k)

49 U.S.C. 303(c)

Alan Melrose, "European ATM and Climate Adaptation: A Scoping Study," in ICAO Environmental Report. (2010).

Aviation and Climate Change. GAO Report to Congressional Committees, (2009).

Bald and Golden Eagle Protection Act (BGEPA) of 1940

Boone County GIS. Available on-line: <http://www.boonecountygis.com>. Accessed on November 2, 2020.

Duval City Planning Map, Accessed January 6, 2023, Available online: <https://maps.coj.net/DuvalCivilPlanning/>

Duval County Public Schools, mySchool Location tool, Accessed December 13, 2021, Available online: <https://www.myschoollocation.com/duvalcountypublicschools/>

Executive Order 11988, Floodplain Management

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994.

Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks*,

FAA, Advisory Circular 150/5320-15A Management of Airport Industrial Waste

FAA, Advisory Circular 150/5320-5D, Airport Drainage Design.

FAA, Advisory Circular 150/5370-10H, Standard Specifications for Construction of Airports, December 21, 2018, Item C-102, Temporary Air and Water Pollution, Soil Erosion and Siltation Control.

FAA), Aviation Emissions and Air Quality Handbook Version 3, Update 1, July 2015.

FAA, FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, July 16, 2015.

FAA, Order 5050.4B National Environmental Policy Act (NEPA) Implementing Instructions for Airport Projects. April 28, 2006

FAA, Order 5190.6B, Change 2, *Airport Compliance Manual*

FAA 1050.1F Desk Reference version 2, Chapter 5, Department of Transportation Act, Section 4(f), February 2020.

Federal Aviation Administration (FAA) Land Use Compatibility Guidelines, 14 CFR Part 150.

Federal Highway Administration, Construction Noise Handbook, 9.0 Construction Equipment Noise Levels and Ranges. Available online: [http://www.fhwa.dot.gov/environment/noise/construction\\_noise/handbook/handbook09.cfm](http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm), Accessed December 2022.



FEMA's National Flood Hazard Layer (NFHL) Viewer, Accessed January 2022, Available online: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>

Florida Administrative Code (F.A.C.) Chapter 68A-27

Florida Department of Environmental Protection Geospatial Open Data, Public Water Supply (PWS) Wells (Non-Federal), Accessed December 10, 2021, Available online: <https://geodata.dep.state.fl.us/datasets/public-water-supply-pws-wells-non-federal/explore?location=27.934334%2C-83.466600%2C6.64>

Florida Department of Environmental Protection, Solid Waste Facility Inventory Report, Accessed December 13, 2022, Available online: [https://fldeploc.dep.state.fl.us/www\\_wacs/Reports/SW\\_Facility\\_Inventory\\_res1.asp](https://fldeploc.dep.state.fl.us/www_wacs/Reports/SW_Facility_Inventory_res1.asp)

Jacksonville Aviation Authority, 2008 Master Plan Update, Craig Municipal Airport, Jacksonville, Florida, March 2009.

Massachusetts v. E.P.A., 549 U.S. 497, 508-10, 521-23 (2007).

Migratory Bird Treaty Act of 1918 (MBTA)

National Oceanic and Atmospheric Administration, Office for Coastal Management, Coastal Zone Management Programs, Accessed November 4, 2021, Available online: <https://coast.noaa.gov/czm/mystate/>

National Park Service, Interactive Map of NPS Wild and Scenic Rivers, Accessed December 14, 2021, Available online: <https://nps.maps.arcgis.com/apps/View/index.html?appid=ff42a57d0aae43c49a88daee0e353142>

Public Law (P.L.) 86-523, 16 U.S.C. 469-469c-2

P.L. 89-665; 16 U.S.C. 470 et seq.

P.L. 91-190, 42 U.S.C. 4321, et. seq., National Environmental Policy Act, 1969, Section 102(2)(c).

Solid Waste Management in Florida, Accessed December 13, 2022, Available online: [https://p2infohouse.org/ref/17/fl/dwm/documents/swm/swm\\_99/chapters/landfill.pdf](https://p2infohouse.org/ref/17/fl/dwm/documents/swm/swm_99/chapters/landfill.pdf)

Sustainable Jacksonville, 2016, Accessed December 13, 2022, Available online: <https://northfloridaagriculturechamber.org/wp-content/uploads/2019/07/Sustainable-Jacksonville-2016-Report.pdf>

St. Johns River Water Management District, Environmental Data, Accessed December 13, 2021, Available online: <http://webapub.sjrwmd.com/agws10/edqt/>

U.S. Census Bureau, 2020 Census Redistricting Data (Public Law 94-171)

U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates

U.S. Census Bureau, TIGERweb, Urban Areas, Accessed January 6, 2023, Available online: [https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb\\_restmapservice.html](https://tigerweb.geo.census.gov/tigerwebmain/TIGERweb_restmapservice.html)

U.S. Department of Transportation (DOT) Order 5610.2, Environmental Justice in Minority Populations and Low-Income Populations, was issued on April 15, 1997. Order 5610.2(a), Department of Transportation Updated Environmental Justice Order, was issued on May 2, 2012.

U.S. DOT Order 5650.2



U.S. Environmental Protection Agency (USEPA), Technical Support Document for Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act 2-3 (2009).

USEPA, Green Book Nonattainment Status for Each County by Year.

USEPA, 40 CFR Part 50 (40 CFR Part 50) National Primary and Secondary Ambient Air Quality Standards (NAAQS)

USEPA, Superfund National Priorities List (NPL) Sites with Status Information, Accessed January 2, 2023, Available online: <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1>

U.S. Fish and Wildlife Service, *Coastal Barrier Resources System*, Accessed November 4, 2021, Available online: <https://www.fws.gov/cbra/Maps/Mapper.html>