
National Register of Historic Places	Code of Federal Regulations, Title 36,	Recognizes resources of local, state, and national significance that have been documented and evaluated
	Chapter I, Part 60	according to uniform standards and criteria.

The NRHP is authorized by the NHPA. It is the nation's official list of buildings, structures, objects, sites, and districts worthy of preservation because of their significance in American history, architecture, archeology, engineering, and culture. The NRHP recognizes resources of local, state, and national significance that have been documented and evaluated according to uniform standards and criteria. The NRHP is part of a national program managed by the National Park Service to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archaeological resources.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity and:

- A. are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. are associated with the lives of persons significant in our past; or
- C. embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. have yielded, or may be likely to yield, information important in prehistory or history.

In order to be eligible for listing in the NRHP, a property must retain sufficient integrity to convey its significance. The NRHP publication *How to Apply the National Register Criteria for Evaluation*, National Register Bulletin 15, establishes how to evaluate the integrity of a property: "Integrity is the ability of a property to convey its significance" (National Park Service, National Register of Historic Places 1991). The evaluation of integrity must be grounded in an understanding of a property's physical features, and how they relate to the concept of integrity. Determining which of these aspects are most important to a property requires knowing why, where, and when a property is significant. To retain historic integrity, a property must possess several, and usually most, aspects of integrity:

- 1. Location is the place where the historic property was constructed or the place where the historic event occurred.
- 2. **Design** is the combination of elements that create the form, plan, space, structure, and style of a property.
- 3. Setting is the physical environment of a historic property and refers to the character of the site and the relationship to surrounding features and open space. Setting often refers to the basic physical conditions under which a property was built and the functions it was intended to serve. These features can be either natural or manmade, including vegetation, paths, fences, and relationships between other features or open space.
- 4. **Materials** are the physical elements that were combined or deposited during a particular period or time, and in a particular pattern or configuration to form a historic property.
- 5. **Workmanship** is the physical evidence of crafts of a particular culture or people during any given period of history or prehistory and can be applied to the property as a whole, or to individual components.
- 6. **Feeling** is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, when taken together, convey the property's historic character.

7. Association is the direct link between the important historic event or person and a historic property.

3.3.1 Affected Environment

GSA conducted a cultural resource assessment survey (CRAS) at each of the three Proposed Action site alternatives. The survey entailed three principal tasks: background research, fieldwork, and laboratory analysis. Background research involved compiling environmental and cultural contexts for the survey area and surrounding region to assist with site identification and evaluation. Archaeological fieldwork consisted of surface and subsurface investigation within the parcel boundaries, using systematic probability-based strategies. The architectural survey included the subject parcels and adjacent parcels. Laboratory work involved cleaning, stabilizing, and inventorying recovered artifacts. Analysis focused on determining the chronological and functional associations of the sites, if found. Findings of the CRAS are summarized below. Section 1.6.3, Native American Coordination, summarized the tribes GSA contacted during scoping and review of the Draft EA. To date, GSA has not received responses from any of the tribes.

3.3.1.1 Archaeological Resources

Field methods used to complete the archaeological survey followed the *Cultural Resource Management Standards & Operational Manual* developed by the Florida Division of Historic Resources. The survey included visual inspection and systematic shovel testing. Specific field methods were determined by probability zones (defined from sensitivity maps) and by field observations on topography and environment. Factors affecting field methods included surface water, soil drainage, urbanization, and disturbance. High probability zones typically included elevated landforms adjacent to permanent fresh water sources. Low probability zones were upland areas over 100 meters from permanent fresh water sources. Moderate/medium probability zones, usually upland areas adjacent to wetlands, were between the high and low probability zones and share characteristics of both.

As previously stated, the APE for archaeological resources was the parcel boundary of each site alternative. The CRAS for each site alternative did not identify any archaeological sites (New South Associates 2020).

3.3.1.1 Historic Architecture

The architectural survey of the project's APE was conducted in accordance with regulations set forth in 36 CFR 800. Architectural properties aged 50 years or older were documented with digital photography and field notes. The purpose of the survey was to identify any properties that are either listed or eligible for listing on the NRHP. The fieldwork included survey of resources previously documented by the SHPO.

As previously stated, the APE for historic architecture included the parcel boundary of each site alternative and adjacent parcels. Findings include:

• **Kathleen Road**: Three historic architecture resources located on adjacent parcels to the site (also see Figure 3.3-1):

<u>CSX/Pemberton Ferry Branch Railroad Bridge (8PO8242)</u>, previously determined not eligible for listing in the NRHP in 2019 by Florida Department of Transportation (FDOT) / Federal Highway Administration (FHWA) for a CSX railroad bridge replacement project. This 260-foot long, fourspan bridge was constructed in 1961 by the FHWA to raise the at-grade CSX Railroad above the interstate then under construction. Dating from 1885, the railroad corridor was originally part of the South Florida Railroad (8PO8241) and later the Atlantic Coast Line Railroad and Seaboard Coastline Railroad. The 1961 standard-design bridge is constructed with steel plate girders, steel floor beams, and cross bracing supporting a precast concrete 18-foot wide deck on precast, prestressed rectangular concrete piers. The outside concrete abutment walls were replaced in 2005.

<u>CSX/Pemberton Ferry Branch Railroad Corridor (8PO8241)</u>, previously determined eligible by SHPO for listing in the NRHP in December of 2019 as a linear resource under Criterion A in the areas of Community Planning and Development, Transportation, and Agriculture. The NRHP

boundary was defined as the CSX Railroad corridor right-of-way (varying from 80 to 100 feet wide). The historic railroad corridor is located along the west side of the Kathleen Road Parcel at the I-4 interchange and protected from view by depressed topography and heavily wooded areas. The single-track railroad corridor was constructed around 1885 as part of the Pemberton Ferry Branch of the South Florida Railroad to connect Pemberton Ferry with Bartow. It eventually evolved into an important 57-mile segment of the Florida railroad network connecting to major ports and cities throughout the state and East Coast. Originally laid out by transportation engineer Henry B. Plant, this corridor served the passenger and freight depots at Lakeland and Bartow and south to Port Charlotte. The infrastructure of this segment of the railroad corridor has been repaired and replaced over time and does not exhibit distinctive characteristics or possess high artistic design or aesthetic value. However, the railroad corridor played a significant role in the development of the state by transporting agricultural and industrial products such as oranges, strawberries, lumber, turpentine, and phosphate, as well as tourists.

<u>Faith Church/Salvation Army Community Worship,</u> (previously unrecorded) located adjacent to the Kathleen Road Parcel at 2620 Kathleen Road. Dating from 1970, the Modernist church was renovated and enlarged with a detached garage in 1980, canopy lighting in 2003, and a large Sunday School wing and Gymnasium in 2005. The concrete block building complex features asphalt shingle gable roofs, stucco walls, vinyl covered eaves, and metal framed windows and doors. The detached garage is frame with vertical board siding. The Sunday School and Gymnasium wing is built with concrete block walls and metal wall panels. The Salvation Army wing has concrete block pilasters and replacement 1/1 vinyl sash windows. The 4.9-acre parcel features a playground, asphalt parking on west and south sides, and a front lawn.

• **Polk Parkway**: Two previously documented historic architecture resources; one located on the parcel and the other adjacent (also see Figure 3.3-2):

<u>Gateway Groves Pumphouse (8PO6213)</u>, located near the center of the parcel. In August 2001 and again in September 2016, the Florida SHPO determined the Gateway Groves Pumphouse, a small 8x8-foot shed dating from 1945 and currently in ruins, was not eligible for listing in the NRHP. The shed served as a pumphouse for a citrus grove located west of Lake Arietta and about 2 miles north of the Dixie Highway. A masonry pumphouse circa 2005 now exists on the site has an asphalt shingle hip roof, stucco walls, a metal door with a vent at the bottom, metal ventilated soffits, and external pipes.

Seaboard Airline Wahneta Railroad Corridor (8PO7117), located east of the parcel and dating from circa 1925. This segment had not been formally evaluated for NRHP eligibility, although other segments have been determined not eligible. The CSX/Seaboard Airline Wahneta Railroad Corridor is a 1926 single-track railroad corridor located east of the parcel. Headquartered in Richmond, Virginia, the railroad connected the northeast with major southern and Florida cities and resorts. Luxurious passenger streamliners operated from New York to Miami through Polk County from 1925-1953. The segment near the project site was abandoned by CSX in 1990, removed in the 1990s, and converted into the 6.5-mile TECO Auburndale Trail between Polk City and the Lake Myrtle Sports Complex at Auburndale. On September 26, 2016, in response to the SunTrax Test Facility project, located east of Polk Parkway (SR-100) and just north of this project site, the SHPO determined the railroad corridor within the APE of that project was not eligible for the NRHP. The APE for the SunTrax Test Facility encompassed the APE for the Polk Parkway site under consideration for the proposed CBOC.

• Lakeland Highland: No historic architecture resources are present in the APE.



Figure 3.3-1. Kathleen Road Parcel Surveyed Architectural Resources



Note: The figure does not include a photograph of the original pumphouse structure as it is no longer standing. Figure 3.3-2. Polk Parkway Parcel Surveyed Architectural Resources

3.3.2 Environmental Consequences

3.3.2.1 No Action Alternative

Under the No Action Alternative, no new CBOC would be constructed. There would be no change to existing conditions at any of the site alternatives; therefore, no impacts would occur and there would be no effect to cultural resources.

3.3.2.2 Proposed Action Alternatives

Based on the CRAS conducted at each of the Proposed Action site alternatives, GSA has concluded the proposed undertaking at any of the three sites will have no effect to cultural resources listed or eligible for listing on the NHRP located within the project's APE. GSA is consulting with the SHPO regarding concurrence of this determination. The following summarizes justification for GSA's no effect determination. Refer to Section 3.3.1.1 for additional details about each site.

• Kathleen Road: The CRAS did not identify any archaeological sites within the APE, therefore no effects are anticipated. Regarding the three historic architecture resources located within the APE: <u>CSX/Pemberton Ferry Branch Railroad Bridge (8PO8242)</u>, previously determined not eligible for listing in the NRHP.

<u>CSX/Pemberton Ferry Branch Railroad Corridor (8PO8241)</u>, previously determined eligible for listing in the NRHP as a linear resource under Criterion A in the areas of Community Planning and Development, Transportation, and Agriculture. The NRHP boundary was defined as the CSX Railroad corridor right-of-way. The historic railroad corridor is located along the west side of the Kathleen Road Parcel at the I-4 interchange and protected from view by depressed topography and heavily wooded areas. Due to the nature and scale of the CBOC project at this location, GSA concluded the proposed undertaking would have no effect to the NRHP-eligible CSX/Pemberton Ferry Branch Railroad Corridor (8PO8241).

<u>Faith Church/Salvation Army Community Worship</u>, (previously unrecorded) located adjacent to the Kathleen Road Parcel at 2620 Kathleen Road. Dating from 1970, the Modernist church was renovated and enlarged with a detached garage in 1980, canopy lighting in 2003, and a large Sunday School wing and Gymnasium in 2005. Due to the lack of historic integrity from the 1970 period of significance, GSA concluded that this resource is not eligible for listing in the NRHP.

• **Polk Parkway**: The CRAS did not identify any archaeological sites within the APE, therefore no effects are anticipated. Regarding the two previously documented historic architecture resources located within the APE:

<u>Gateway Groves Pumphouse (8PO6213)</u>, located near the center of the parcel. In August 2001 and again in September 2016, the Florida SHPO determined the Gateway Groves Pumphouse, a small shed dating from 1945 and currently in ruins, was not eligible for listing in the NRHP.

<u>Seaboard Airline Wahneta Railroad Corridor (8PO7117)</u>, located east of the parcel and dating from circa 1925. This segment had not been formally evaluated for NRHP eligibility, although other segments have been determined not eligible. The CRAS documented that this segment of the railroad corridor has been removed and converted into an asphalt walking trail in recent years. Due to the lack of integrity from the circa 1925-1970 period of significance, GSA concluded that this segment railroad corridor is not eligible for listing in the NRHP.

• Lakeland Highland: The CRAS did not identify any archaeological sites or historic architecture resources within the respective APE, therefore no effects are anticipated.

3.3.3 Measures to Avoid, Minimize and Mitigate Impacts

If during the construction of the facility, ground disturbances result in the inadvertent discovery of any bones, artifacts, foundations, or other signs of past human occupation of the area the construction would be stopped and a qualified archaeologist, federal agency representative and/or the Florida Division of Historical Resources would be contacted immediately for consultation before construction at that site could continue.

3.4 GEOLOGY & SOILS

3.4.1 Affected Environment

3.4.1.1 Geology

Each of the three Proposed Action site alternatives are located within the Atlantic Coastal Plains Geomorphic Province, which is composed of sedimentary rock and unlithified sediments and is mainly used for agricultural purposes. There are no hills or mountains within the geographic region of North America (USGS 2000). The sites are also located within an area identified as Region III by Florida the FDEP, consisting mostly of clayey sediments of low permeability, which can be associated with numerous sinkholes in the Central Florida region. In this region, cover collapse sinkholes are most common as they develop where overburden sediment and/or carbonate rock abruptly falls into an underlying cavity between the top of limestone and the overburden (FDEP 2020, FDEP 2017). Collapse sinkholes can develop and expand for hours, days, months, or years after the initial collapse and the cavity continues to collapse (FDEP 2017).

3.4.1.2 Topography

Table 3.4-1 presents the description of topography for each of the three Proposed Action sit alternatives.

Site Alternative	Topography
Kathleen Road (Alternative 1)	Generally sloping to the southwest and has an average elevation of 209 feet above mean sea level.
Lakeland Highlands (Alternative 2)	Somewhat uneven ground surface, but generally flat with an elevation ranging from 110 to 125 feet above mean sea level. The site generally slopes to the southwest.
Polk Parkway (Alternative 3)	Relatively flat with an elevation ranging from 165 to 175 feet above mean sea level. The site generally slopes to the southwest.

Table 3.4-1 Site Topography Description

3.4.1.3 Soils

Table 3.4-2 presents the description of soils for each of the three Proposed Action site alternative and Table 3.4-3 presents the soil properties.

Site Alternative	Soil Profile for Site
Kathleen Road (Alternative 1)	The extreme northwestern portion of the site contains Apopka fine sand, whereas the remainder of the site contains Tavares fine sand.
Lakeland Highlands (Alternative 2)	The extreme northwestern and western portion of the property contains Neilhurst sand, while the middle and southeastern portion of the property contains Haplaquents clayey soil. The northwestern portion of the property contains the Arents-water complex soils.
Polk Parkway (Alternative 3)	The entirety of this site contains Candler Sand.

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Site Alternative	Map Unit Name	Prime Farmland	Runoff Potential ¹	Soil Erosion Wind Erodibility Group ²	Drainage Class ³	Acres
Kathleen Road	Tavares fine sand, 0 to 5 percent slopes	No ⁴	Negligible	1	Moderately well drained	3.9
(Alternative 1)	Apopka fine sand, 0 to 5 percent slopes	No ⁴	Very low	1	Excessively drained	16.7
	Arents-Water complex	No	Negligible	N/A	N/A	6.6
Lakeland Highlands (Alternative 2)	Neilhurst sand, 1 to 5 percent slopes	No	Very high	8	Very poorly drained	8.9
(Alternative 2)	Haplaquents clayey	No	Very high	8	Very poorly drained	10.9
Polk Parkway (Alternative 3)	Candler sand, 0 to 5 percent slopes	No ⁴	Negligible	1	Excessively drained	16.4

Table 3.4-3. Soil Properties

¹Runoff potential is determined based on the rate of infiltration of the particular soil when not protected by vegetation and can provide an indication of how likely the soil is prone to erosion from rainfall.

²The Wind Erodibility Group, determined by NRCS, indicates the resistance of that specific soil type to blowing wind in cultivated areas. (1 = most susceptible; 8 = least). This gives an indication of how susceptible a particular soil is to wind erosion.

³Drainage class identifies the natural drainage conditions of the soil and the frequency of duration of wet periods.

⁴NRCS did not identify any Prime Farmland Soil regulated under the Farmland Protection Policy Act of 1981 enacted to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses (Public Law 97-98). NRCS did indicate farmland of unique importance, found at the Kathleen Road and Polk Parkway sites. NRCS classifies this soil is as land other than prime farmland used for producing specific high-value food (NRCS 2020). Both of these sites were previously used for citrus groves, but have since been cleared.

Source: NRCS 2020

As indicated in Appendix B, Phase 1 Environmental Site Investigation, potential soil contamination could occur at each of the three sites due to historical use. This could include pesticides from historic agricultural use at the Kathleen Road and Polk Parkway sites and occurrence of petroleum compounds at the Lakeland Highlands site from historic strip mine operations. In addition, the presence of USTs associated with past structures at the Kathleen Road site is possible.

3.4.2 Environmental Consequences

3.4.2.1 No Action Alternative

Under the No Action Alternative, construction of the built-to-suit CBOC would not occur on any of the proposed site alternatives and no impacts to geology, topography, or soils would occur. The sites would retain baseline conditions as described in Section 3.3.1.

3.4.2.2 Proposed Action Alternatives

Table 3.4-4 provides a summary comparison of potential impacts to geology, topography and soils among the three Proposed Action site alternatives.

Level of Impact	Alternative 1 – Kathleen Road	Alternative 2 – Lakeland Highlands	Alternative 3 – Polk Parkway
Topography	Negligible – relatively level terrain	Negligible – relatively level terrain	Negligible – relatively level terrain
Geology	Region III regarding potential for sinkholes	Region III regarding potential for sinkholes	Region III regarding potential for sinkholes
Soil Runoff Potential (erosion)	Negligible to Very Low	Negligible (25 percent of site) and Very High (75 percent of site)	Negligible
Contaminated Soils	Potential for pesticides and USTs	Potential for petroleum compounds	Potential for pesticides
Overall Impact	Minor	Minor	Minor

UST = underground storage tank

Construction

No major changes to site topography are expected to occur at any of the three site alternatives as a result of the Proposed Action. Construction of the proposed build-to-suit CBOC would have minor to negligible effects on topography as all three sites are relatively level, reducing the need for substantial changes to existing topography. Although some preliminary grading would be required, it is anticipated that the building and parking areas would be constructed near current grades and minor grading would be required for site stormwater management.

Less-than-significant impacts to geology would occur as a result of the Proposed Action at any of the three Proposed Action site alternatives. The possibility of sinkhole conditions at each of the three Proposed Action site alternatives could require geotechnical investigations and possible construction practices to be employed during construction such as dynamic ground improvement to compact and strengthen subsurface geology and to collapse unforeseen cavities. Recommendations from any geotechnical studies would be incorporated into the construction and design of the to-be-built CBOC to ensure the stability and integrity of the building and overall site.

Construction activities at any of the three site alternatives would result in less-than-significant, short-term impacts to soil from increased erosion potential during preliminary grading and construction. Construction activities would remove any existing vegetative cover and disturb/compact the soil at the selected site causing susceptibility to erosion. The Kathleen Road and Polk Parkway sites both have soils which are not readily susceptible to runoff, but are most susceptible to wind erosion. Approximately 75 percent of the Lakeland Highlands site contains soils located in the central and western portions of the site with very high runoff potential, increasing susceptibility to erosion from stormwater runoff. Measures to prevent and reduce soil erosion are discussed in Section 3.3.3.

As previously stated, the potential for soil contamination exists at each of the Proposed Action site alternatives which would require a Phase II investigation to determine if any contamination is present onsite. In accordance with Chapter 62-780, Florida Administrative Code, Risk Management Options, exposure risk to contaminated soils if present could be minimized by using engineering controls such as cover material (minimum of 2 feet of soil). Any contaminated soil excavated during regular construction operations could be buried elsewhere onsite under a 2 foot soil cover, or would need to be shipped offsite to a regulated facility as hazardous waste.

Operations

Impervious surface created by the new facility footprint, including the 650-space parking lot and the 127,900 square-foot facility would cause a permanent impact to soils. These impacts, however, would be less than significant regarding the overall soil resources in the region.

Operation of the proposed build-to-suit CBOC would have no impacts to geology or topography.

3.4.3 Measures to Avoid, Minimize and Mitigate Impacts

The potential for erosion would be minimized and/or avoided through compliance with an approved National Pollutant Discharge Elimination System (NPDES) permit issued by the FDEP which requires the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must include erosion and sediment control best management practices (BMPs) which may include:

- Use of silt fences or equivalent structural controls for all side slope and down slope boundaries of the construction area.
- As necessary, divert flow from exposed soils, store flows, retain sediment onsite, or otherwise limit runoff.
- Use of earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents, and temporary or permanent sediment basins.
- Control stormwater peak discharge rates and volume to minimize erosion at discharge outfalls.
- Minimize the amount of soil exposed during the construction activity.
- Minimize the disturbance of steep slopes.
- Minimize sediment discharges from the site.
- Minimize off-site vehicle traffic on sediment to minimize generation of dust and offsite sedimentation.
- Stabilization measures must be initiated within 7 calendar days after construction activities have temporarily or permanently ceased (FDEP 2015).

Before construction begins an Environmental Resource Permit (ERP) would be required to be obtained from the Southwest Florida Water Management District which will review stormwater management practices to avoid adverse impacts related to erosion and sedimentation (SWFWMD 2020).

Due to the potential for sinkholes, a visual site inspection by a licensed professional geologist may be necessary to identify potential surface anomalies indicating potential for sinkhole formation. If a concern exists, conduct a preconstruction geologic or geotechnical site investigation to identify potential karst hazards (FDEP 2017).

Additionally, if a Phase II investigation identifies soil contamination, use of engineering controls in accordance with Chapter 62-780, Florida Administrative Code, Risk Management Options would be required. This includes placement of cover material (minimum of 2 feet of soil) over contaminated locations or removal of excavated contaminated soils offsite to a regulated facility as hazardous waste.

A geophysical survey is recommended as part of the Phase II investigation at the Kathleen Road site to inspect for the presence of USTs onsite associated with past structures. Any USTs found onsite would be reported to FDEP upon discovery. The responsible party would then be required to conduct an investigation of the UST(s) and perform proper closure procedures in accordance with Chapter 62-761, F.A.C. If during investigation/closure activities contamination is discovered, the responsible party would be required to submit Discharge Report Form 62-761.900(1) to the County within 24 hours or before close of business the next day. Subsequently, the responsible party would proceed to Site Rehabilitation under Ch. 62-780, F.A.C., which would likely include additional soil and groundwater sampling.

3.5 WATER RESOURCES

3.5.1 Affected Environment

3.5.1.1 Surface Water

No surface water features exist within the Kathleen Road or the Polk Parkway sites. No flowing streams or rivers exist within the Lakeland Highlands site; however, a 1.7-acre surface water body is located at the site. This pond is considered a jurisdictional wetland, per the Biological Resources Assessment (see Appendix C). Table 3.5-1 provides general information regarding each site's watershed and nearest offsite surface water features downgradient of the three Proposed Action site alternatives.

Site Alternative	Nearest Surface Water Features	Receiving Water	Status of Receiving Water	HUC-12 Watershed
Kathleen Road (Alternative 1)	Unnamed intermittent stream 0.20 mile north of site Unnamed intermittent stream 0.25 mile southwest of site	Both intermittent streams flow about 2.2 miles downstream to Itchpepackesassa Creek	Itchpepackesassa Creek is impaired for use for fish and wildlife propagation due to oxygen depletion, algal growth, and pathogens (fecal coliform)	031002050101 Wiggins Prairie
Lakeland Highlands (Alternative 2)	Canal 0.23 mile north of site Canal west of Lakeland Highlands Road	Canal flows to swamps/marshes 0.47 mile east of the site Canal flows 1.8 miles downstream into Banana Creek Canal	Banana Creek Canal is impaired for use for fish and wildlife propagation due to impaired biota, algal growth, and oxygen depletion	031001010103 Lake Hancock
Polk Parkway (Alternative 3)	Canal 0.25 mile south of site Other local water features	Lake Myrtle Saddle Creek, located 4.2 miles from site	Saddle Creek is impaired for use for fish and wildlife propagation due to algal growth, oxygen depletion, and pathogens (fecal coliform)	031001010101 Lake Parker

Table 3.5-1.	Surface Water Features	in Vicinit	y of Alternative Sites
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HUC= hydrologic unit code

Source: USEPA 2010

3.5.1.2 Groundwater

The Floridan aquifer system, which is comprised of the Upper Floridan aquifer, a middle semi-confining unit, a middle confining unit, and the Lower Floridan aquifer, underlies the entire state of Florida, as well as portions of Alabama, Georgia, and South Carolina. The Upper Floridan aquifer meets most of the water demand for Polk County, including the cities of Lakeland and Auburndale. Water levels within the Upper Floridan aquifer change from season to season (based on the local rainy and dry seasons) and from year to year (depending on pumping and climate). A decrease in water demand in the 1970s coincided with discontinued phosphate mining, but increased pumping associated with ongoing agricultural needs and rapid development of the area has lowered the aquifer's potentiometric surface (Spechler and Kroening 2007). Primary sources of aquifer recharge are precipitation (in outcrop and unconfined areas), leakage from other aquifers, and lateral inflow from upgradient areas. Other sources of recharge include irrigation return flow, draining well recharge, and wastewater return flow (Bellino et al. 2018).

Groundwater quality in Polk County was assessed through the sampling of 130 wells in 2006. Nitrate was found at concentrations up to 26 milligrams per liter (mg/L) in the surficial aquifer, assumed to be the result of fertilizer application in local citrus farms. Nitrate was found at low levels in the Upper Floridan aquifer,

only exceeding 1.0 mg/L in three wells. However, chloride concentrations were found up to 61 mg/L, and sulfate concentrations up to 44 mg/L in the Upper Floridan aquifer (Spechler and Kroening 2007). As indicated in Appendix B, Phase 1 Environmental Site Investigation, potential groundwater contamination could occur at each of the three sites due to historical use. This could include migration of pesticides from historic agricultural use at the Kathleen Road and Polk Parkway sites as well as occurrence of petroleum compounds at the Lakeland Highlands site from historic strip mine operations.

The City of Lakeland's drinking water is obtained from 19 wells drilled 750 feet into the Floridan aquifer. Water drawn from 13 of these wells is treated at the T.B. Williams Water Treatment Plant prior to distribution, while water drawn from the remaining 6 wells is treated at the C.W. Combree Water Treatment Plant. Together, the two water treatment plants delivered over 8 billion gallons of water in 2019 (City of Lakeland 2020d). The City of Auburndale obtains its drinking water from seven deep production wells drilled into the Florida aquifer. In 2019, the city distributed over 2 billion gallons of water to its customers. (City of Auburndale 2020c). All drinking water for both cities meets or exceeds federal and state water quality requirements (City of Auburndale 2020c, City of Lakeland 2020d).

3.5.1.3 Wetlands

The Biological Resources Assessment (see Appendix C) did not identify any wetlands at the Kathleen Road site. As previously stated, the central portion of the Lakeland Highlands site contains a pond which is likely considered a jurisdictional wetland by the USACE and State of Florida. The Biological Resources Assessment also noted portions of the Polk Parkway site currently functioning as sprayfields and rapid infiltration ponds which would likely not qualify as jurisdictional wetlands under either the federal or state regulations.

3.5.1.4 Floodplains

FEMA maps show that no portion of either the Kathleen Road site nor the Polk Parkway site is located within a 100-year or 500-year floodplain (FEMA 2020).

FEMA Flood Panel 12105C0320G shows that a portion of the Lakeland Highlands site is located within the regulated 100-year floodplain and therefore has a 1 percent annual chance of flood. However, the flood elevation has been calculated as approximately 118 feet, and the lowest existing grade on the project site is approximately 127 feet (Chastain-Skillman 2020). Based on these calculations, the site lies above the special flood hazard area. A map revision is being requested by the site owner to correctly depict the 100-year floodplain within the Lakeland Highlands site.

3.5.1.5 Coastal Zone

The Florida Coastal Zone encompasses the entire state of Florida (FDEP 2020d). The Florida State Clearinghouse, administered by the FDEP, reviews federal projects for consistency with the Coastal Zone Management Act (CZMA). The CZMA was passed in 1972 to protect the country's coastal zones, defined as coastal waters and the adjacent shorelands extending outward to the outer limit of State title and ownership. Inward, coastal zones includes areas 'necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters, and to control those geographical areas which are likely to be affected by or vulnerable to sea level rise" (16 U.S.C. 1453).

3.5.2 Environmental Consequences

3.5.2.1 No Action Alternative

Under the No Action Alternative, no new CBOC would be constructed, and no impacts to water resources, including surface water, groundwater, wetlands, and floodplains, would occur. Existing conditions at each of the three considered site alternatives would remain as described in Section 3.4.1.

3.5.2.2 Proposed Action Alternatives

Table 3.5-2 summarizes and compares the potential effects occurring from construction and operation of a proposed CBOC at each of the considered alternative sites, assuming the proper implementation of measures presented in Section 3.4.3.

Potential	Alternative 1 – Kathleen	Alternative 2 – Lakeland	Alternative 3 – Polk Parkway
Impact	Road	Highlands	
Surface Water	Temporary minor stormwater	Temporary minor stormwater	Temporary minor stormwater
	effects during construction	effects during construction	effects during construction
Groundwater	Minor impacts from construction ¹	Minor impacts from construction ¹	Minor impacts from construction ¹
	Minor increases in	Minor increases in	Minor increases in
	groundwater withdrawals to	groundwater withdrawals to	groundwater withdrawals to
	meet drinking water demand	meet drinking water demand	meet drinking water demand
Wetlands	No effects anticipated	Permanent minor to moderate impacts during construction ²	Permanent minor impacts during construction ²
Floodplains	No effects anticipated	Minor to moderate ³	No effects anticipated
Coastal Zone	Pending State Review of	Pending State Review of	Pending State Review of Draft
Consistency	Draft EA Findings	Draft EA Findings	EA Findings
Overall Impact	Minor	Moderate	Minor

Table 3.5-2.	. Comparison of Alternatives – Water Resource	ces Impacts
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¹Assumes appropriate measures would be taken if groundwater contamination exists from historical site use (see Section 3.4.3).

²Assumes existing jurisdictional resources would be permitted and mitigated if avoidance is not possible.

³Impact rating for floodplains would be reduced to no impacts if FEMA approves the MT-2 Letter of Map Revision removing the FEMA Flood Zone A boundary from the Lakeland Highlands site. If the site remains within the FEMA Flood Zone A boundary, GSA would exclude the site as a viable alternative.

Construction

Construction activities causing ground disturbance, vegetation clearing, and increased vehicle and human presence increase the potential for erosion. Coupled with a permanent increase in impervious surface, stormwater effects would be expected from construction and operation of a proposed CBOC at any of the three considered alternative sites. Effects could arise from increased flow volumes and velocities and decreased water quality due to sedimentation and contamination of overland flow. The NPDES Permit Program requires construction site operators to obtain NPDES permit coverage for regulated land disturbances and associated discharges of stormwater runoff to state waters. The FDEP has been granted authority from the USEPA to administer the NPDES program in Florida. In Florida, all construction activities disturbing 1 acre or more of land are required to obtain a NPDES Construction Generic Permit and adhere to the permit's stormwater requirements. Requirements include the development of a site-specific SWPPP and inspections of discharge points, disturbed areas, materials storage areas, structural controls and construction entrances and exits at least once every 7 days and after every storm event resulting in at least 0.5 inch of rain. Construction at all three sites would require a NPDES Construction Generic Permit and SWPPP.

The FDEP also oversees the state of Florida's five water management districts; all three considered alternative sites are located within the Southwest Florida Water Management District. The water management districts are responsible for processing ERP applications for projects altering surface water flows, including generating stormwater runoff and filling in wetlands or other surface waters. Specifically, 62-300-020(2) Florida Administrative Code states that an ERP is required for any project that meets any of the following conditions, among others:

- Any project in, or, or over wetlands or other surface waters
- A total of more than 4,000 square feet of impervious and semi-impervious surface are subject to vehicular traffic
- A total of more than 9,000 square feet of impervious and semi-impervious surface area
- A total project area of more than 5 acres

Based on the above criteria, construction at any of the three sites would also trigger an ERP for permitting construction and operation of onsite surface water management systems. Adherence to the NPDES Construction Generic Permit, SWPPP, ERP conditions would minimize overall impacts from construction of the CBOC facility to minor.

As previously stated, the potential for groundwater contamination exists at each of the Proposed Action site alternatives which would require a Phase II investigation to determine if any contamination is present onsite. If groundwater contamination is present at the site, any dewatering during construction would require onsite treatment and a permit for discharge or would be sent offsite for treatment/disposal. Long-term remediation required by the land owner would depend on the nature and extent of contamination.

No natural surface water features or wetlands are present at the Kathleen Road site. A pond observed at the Lakeland Highlands site was identified as a jurisdictional feature during the Biological Resources Assessment site visit (see Appendix C). The developer of the Lakeland Highlands site would be required to obtain approval (e.g., Section 404 Permit) from the USACE and FDEP for unavoidable impacts to the pond. Additionally, the developer of the Polk Parkway site would require confirmation from the USACE that sprayfields are not considered jurisdictional wetlands. Disturbance to any jurisdictional features would likely require wetland mitigation at a ratio of up to 1:1 depending on the wetland quality. These mitigation efforts would reduce the overall level adverse effects to a minor to moderate level of significance.

All Proposed Action alternative sites drain to downstream impaired waterways (USEPA 2010). The impairments arise from algal growth, oxygen depletion, and fecal coliform; all of these impairments may result from local agricultural land use (i.e., fertilizer application and cattle grazing). While the construction and operation of the Proposed Action at any of the three considered sites may increase stormwater runoff and sedimentation, it is not expected to contribute toward the further impairment of any downstream water feature.

Neither the Kathleen Road nor Polk Parkway sites would affect floodplains, no further action is required under federal guidelines or GSA Order PBS 1095.8 and no adverse effects are anticipated. The site owner of the Lakeland Highlands site is currently coordinating with FEMA regarding a MT-2 Letter or Map Revision based on surrounding watershed model data and a Floodplain Calculations study performed for the Lakeland Highlands site. This study indicates the site is approximately 8 feet higher in elevation than the base floodplain elevation of 118 feet (Chastain-Skillman 2020). If FEMA does not approve the mapping revision and the site remains in the 100-year floodplain, GSA would exclude the site from selection as a viable alternative.

The Florida State Clearinghouse will review the findings of this Draft EA to determine potential effects to Florida's coastal zone and identify any relevant measures to reduce, avoid, or mitigate those impacts.

Operations

Impacts to water resources during operations would be negligible to minor. As previously stated, development of any site alternative would require and for permitting construction and operation of surface water management systems. The Southwest Florida Water Management District has published a manual of *Design Requirements for Stormwater Treatment and Management Systems* that outlines "district-specific design and performance criteria for stormwater quantity, flood control, stormwater quality and any special basin criteria or other requirements" (SWFWMD 2013). The proposed stormwater management for each

of the Proposed Action site alternatives would comply with the design criteria presented in this manual to manage stormwater runoff from impervious surfaces and minimize adverse effects.

The Upper Floridan aquifer serves as the source for drinking water for all three considered alternative sites. Operation of the proposed CBOC would increase the demand for water and associated groundwater withdrawals. This demand would contribute to the overall recent increased pumping of the aquifer, but the City of Lakeland and the City of Auburndale's existing utility systems have the capacity to accommodate the anticipated need of the Proposed Action.

3.5.3 Measures to Avoid, Minimize and Mitigate Impacts

The following measures would reduce potential for adverse effects to water resources:

- If the Phase II investigation determines groundwater contamination is present at the site, any dewatering during construction would be treated onsite and the developer would obtain a permit for discharge or would be sent offsite for treatment/disposal.
- If required, the land owner would perform long-term remediation required to treat historical onsite groundwater contamination.
- All conditions with the NPDES Construction Generic Permit, SWPPP, and ERP would be followed to reduce adverse effects from construction and increase of impervious surfaces. Sample erosion control methods, sediment containment systems, and temporary construction site BMPs include (State Erosion and Sediment Control Task Force 2013):
 - Maintaining, establishing, and using vegetation Maintaining existing vegetation is one of the most effective ways to minimize erosion. Vegetative filter strips, recommended to be at least 25 feet wide, can help reduce sediment in runoff by filter out larger suspended particles. Following site disturbance, temporary or permanent vegetation can be planted to stabilize soil and reduce runoff.
 - Applying and maintaining mulches Mulches can reduce soil erosion, temporarily stabilize soil, provide cover until vegetation can become established, and decrease the velocity of runoff allowing for increase infiltration. Manufactured mulch materials called rolled erosion control products, or erosion control blankets or mats, are also available and useful for slopes or drainage channels.
 - Applying soil tackifiers Soil tackifiers or binders can help adhere fibers together and can temporarily stabilize cut and fill areas.
 - Diverting and controlling runoff waters This may include temporary slope drains, vegetative buffer strips, grass-lined channels, diversion dikes, conveyance channels, rocklined channels, and check dams, among other options, to reduce runoff velocity and volume and associated erosion.
 - Sediment basins, ponds, and traps These structures slow the velocity of runoff in order to allow for the settlement of suspended soil particles.
 - Sediment barriers Common examples include silt fences, inlet barriers, turbidity barriers, and division barriers located along the site perimeter, below disturbed areas, below the toe of exposed slopes, below the toe of stream banks, around drains or inlets located in a sump, and downstream of areas underground construction activities
- For the Lakeland Highlands and Polk Parkway sites, the developer would consult with the USACE and FDEP to verify presence of jurisdictional features and a Section 404 Permit would be obtained for any unavoidable impacts to wetlands and Waters of the U.S. Unavoidable impacts would likely require a 1:1 mitigation/replacement.

3.6 BIOLOGICAL RESOURCES

3.6.1 Affected Environment

3.6.1.1 Vegetation

An ecoregion denote regions of similar lands and aquatic areas, vegetation communities, and habitats (and the type, quality, and quantity of environmental resources). USEPA uses a hierarchical system that identifies distinct ecoregions based on the spatial patterns of both the living and non-living components of the region, such as geology, physiography, vegetation, climate, soils, land use, wildlife, water quality, and hydrology. All three considered alternative sites are located within the Southern Coastal Plain Level III ecoregion. This ecoregion consists of mostly flat plains with numerous swamps, marshes and lakes. It was once covered by a forest of beech, sweetgum, southern magnolia, slash pine, loblolly pine, white oak, and laurel oak, but now mostly supports longleaf-slash pine forest, oak-gum-cypress forest in some low lying areas, pasture for beef cattle, and urban development (Purdue 2020).

The Biological Resources Assessment (see Appendix C) summarized vegetation observed at each of the three considered alternative sites as follows:

- Kathleen Road This site historically used for agriculture but has been abandoned since approximately 1984. Vegetation is therefore consistent with a disturbed site, though tree species such as live oak (*Quercus virginiana*), sand live oak (*Q. geminata*), and post oak (*Q. stellate*) exist throughout the site. Juvenile cabbage palms (*Sabal palmetto*), slash pine (*Pinus elliotii*), and laural cherry (*Prunus carolinia*) also appear in the canopy, while the subcanopy consists of Brazilian pepper (*Schinus terribenthifolius*), rattlebox (*Crotolaria* spp.), caesars weed (*Urena lobata*), wild grape (*Vitis* spp.), and beggar's tick (*Bidens alba*).
- Lakeland Highlands Vegetation observed onsite included grasses associated with maintained pastures, such as bahia (*Paspalum notatum*) and panicum (*Panicum* spp.), with isolated areas of reed grass (*Phragmites australis*). Willow (*Salix caroliniana*), primrose willow (*Ludwigia peruviana*), Chinese tallow (*Sapium sebiferum*), and alligator weed (*Alternanthera philoxeroides*) were associated with the small pond on the site.
- **Polk Parkway** Vegetation observed onsite included grasses associated with maintained pastures, such as bahia and panicum. Reed grass occurs within the rapid infiltration ponds. Other plants associated with these ponds include switch cane (*Arundinaria gigantean*), elderberry (*Sambucus canadensis*), and primrose willow.

3.6.1.2 Wildlife

According to the Biological Resources Assessment (see Appendix C), no wildlife was observed during site visits to the three considered alternative sites. However, the assessment identified some typical species potentially occurring at each property, as follows:

- Kathleen Road The location and disturbed nature of the property would discourage many native species. However, wildlife associated with and accustomed to human development may inhabit the site, including raccoons (*Procyon lotor*), opossums (*Didelphis virginiana*), armadillos (*Dasypus novemcinctus*), and various birds.
- Lakeland Highlands The only animals observed were grazing cattle. However, armadillos are common in open fields, and bird species associated with cattle pastures, such as cattle egrets (*Bubulcus ibis*), would be expected to occur.

• **Polk Parkway** – Bird species observed using the onsite rapid infiltration ponds during the site visit include purple gallinule (*Porphyrula martinica*), common moorhen (*Gallinula chloropus*), redwinged blackbird (*Agelaius phoeniceus*), and common grackle (*Quiscalus quisacula*).

3.6.1.3 Migratory Birds

The USFWS implements the Migratory Bird Treaty Act (MBTA; 16 U.S.C 703-711) and the Bald and Golden Eagle Protection Act (16 U.S.C. 668). The MBTA prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the U.S. Secretary of the Interior. Most actions that result in take or permanent or temporary possession of protected species would constitute violations of the MBTA. "Take" under federal definition means to harass, harm (including habitat modification), pursue, hunt, shoot, would, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

The USFWS identified a list of protected migratory birds that may be associated with each of the three considered site alternatives. Table 3.6-1 presents these birds, along with a general summary of required breeding habitat.

Species	Breeding Season	Breeding Habitat
American kestrel (Falco sparverius paulus)	April 1 – August 21	Existing cavities along wood edges or in the middle of open ground
Bald eagle (<i>Haliaeetus leucocephalus</i>)	September 1 – July 31	Forested areas adjacent to large bodies of water
Black skimmer (<i>Rynchops niger</i>)	May 20 – September 15	Open sandy areas, gravel or shell bars with sparse vegetation, or broad mats of dead vegetation in saltmarsh
Common ground dove (Columbina passerine exigua)	February 1 – December 31	On the ground in a field
King rail (<i>Rallus elegans</i>)	May 1 – September 5	Freshwater marshes and brackish marshes
Least tern (<i>Sterna antillarum</i>)	April 20 – September 10	Shallow scrape in sand, soil, or pebbles on sandy or gravelly beaches and banks of rivers or lakes
Limpkin (Aramus guarauna)	January 15 – August 31	Nests not far from water
Prairie warbler (<i>Dendoica discolor</i>)	May 1 – July 31	Nests placed less than 10 feet from ground in shrubby habitats
Red-headed woodpecker (<i>Melanerpes erythrocephalus</i>)	May 10 – September 10	Cavities in forest edges or disturbed areas in deciduous woodlands
Swallow-tailed kite (<i>Elanoides forficatus</i>)	March 1 – June 30	Exposed nests near tallest trees in Open woodlands or stands of trees
Yellow warbler (Dendroica petechia gundlacki)	May 21 – August 10	Thickets and other disturbed or regrowing habitats along streams and wetlands

Table 3.6-1. Migratory Birds Potentially Associated with Alternative Sites

Source: The Cornell Lab 2020, USFWS 2020a

A site visit conducted while preparing the Biological Resource Assessment (see Appendix C) did not observe any migratory bird species at the three considered alternative sites. The disturbed nature of all three sites and their proximity to human development and activity make it unlikely that any of these protected would nest onsite.

3.6.1.4 Threatened and Endangered Species

The USFWS is responsible for implementing the federal Endangered Species Act (ESA; 16 U.S.C. 153 *et seq.*) for terrestrial and freshwater species. Projects that would result in "take" of any federally listed threatened or endangered species are required to obtain permits from the USWS; the permitting process facilitates determining if a project would jeopardize the continued existence of a listed species and that measures would be required to avoid jeopardizing the species.

The USFWS identified a list of 32 federally listed threatened and endangered species that may occur within the three considered site alternatives. State-listed species were identified through the Florida Natural Area Inventories. These federally and state-listed species that and their associated habitat requirements are presented in Table 3.6-2.

Species	Status	Habitat Requirements
		Mammals
Florida panther (<i>Puma concolor coryi</i>)	FE	Heavily forested areas in lowlands and swamps. Require a large range with an adequate population of deer or wild hog.
		Birds
Audubon's crested caracara (Polyborus plancus audubonii) (=Caracara cheriway)	FT	Open country, dry prairie with scattered cabbage palms, wetter prairies, and improved pastures.
Everglade snail kite (Rostrhamus sociabilis plumbeus)	FE	Large, open freshwater marshes.
Florida grasshopper sparrow (Ammodramus savannarum floridanus)	FE	Dry prairie with stunted saw palmetto and dwarf oaks, bluestems, and wiregrass.
Ivory-billed woodpecker (Campephilus principalis)	FE	Swampy forests, especially large bottomland river swamps and cypress swamps.
		Possibly extirpated.
Wood stork (<i>Mycteria americana</i>)	FT	Freshwater marshes, swamps, lagoons, ponds, and flooded fields. Nests in cypress trees, mangroves, or dead hardwoods over or adjacent to water.
Florida burrowing owl (<i>Athene cunicularia floridana</i>)	ST	High, sparsely vegetated sandy ground.
Florida sandhill crane (Antigone canadensis pratensis)	ST	Breed in open grasslands, marshes, and river banks. Roost in shallow water along river channels, on alluvial islands of braided rivers, or in basin wetlands.
Least tern (<i>Sternula antillarum</i>)	ST	Nest on sandy or gravelly beaches and banks of rivers or lakes, usually in areas with sparse or no vegetation.
Little blue heron <i>(Egretta caerule</i> a)	ST	Calm, shallow, freshwater habitats. Nests in trees or shrubs in freshwater areas.
Southeastern American kestrel (Falco sparverius paulus)	ST	Open or partly open habitat, including prairies, coasts, wooded streams, burned forest, cultivated land with scattered trees, open woodland, and suburbs. Nests in holes in trees.
Tricolor heron (<i>Egretta tricolor</i>)	ST	Salt and freshwater, including marshes, ponds, bayous, rivers, mangrove swamps, and lagoons.

Table 3.6-2. Federal and State-Listed Species Potentially Affected by Proposed Action

Table 3.6-2. Federal and State-Listed Species Potentially Affected by Proposed Action

Species	Status	Habitat Requirements		
		Reptiles		
Bluetail mole skink (<i>Eumeces egregius lividus</i>)	FT	Sand pine-rosemary scrub, areas of long-leaf pine-turkey oak, and open, loose St. Lucie fine sands. Within scrub areas, occupy localized pockets of sufficient leaf litter and moisture to provide food and nesting.		
Eastern indigo snake (<i>Drymarchon corais couperi</i>)	FT	Sandhill regions dominated by longleaf pines, turkey oaks, and wiregrass; coastal scrub; palmetto flats; brushy riparian corridors; and wet fields. Often found near wetlands and associated with gopher tortoise burrows.		
Sand skink (<i>Neoseps reynoldsi</i>)	FT	Occurs only on Florida's central ridges at elevations of 27 meters or more, in St. Lucie fine and Lakeland yellow sands. Inhabits loose sands of sand pine-rosemary scrub and sometimes longleaf pine- turkey oak areas or turkey oak barrens adjacent to scrub. Fossorial, but sometimes found under logs, leaf litter, or other debris.		
Pine snake (Pituophis melanoleucus)	ST	Xeric, pine-dominated or pine-oak woodlands with an open, low understory on sandy soils.		
Gopher tortoise (Gopherus polyphemus)	ST	Open habitats with well-drained sandy substrates that support a wide variety of herbaceous ground cover. Such areas include disturbed areas, sandhills, sand pine scrub, dry prairie, coastal grasslands, and mixed hardwood-pine.		
Short-tailed snake (<i>Lampropeltis extenuata</i>)	ST	Dry sandy uplands, especially longleaf pine-turkey oak (sandhills) and sometimes adjacent xeric oak and rosemary-sand pine scrub. Fossorial, but may be found under objects or in leaf litter.		
		Plants and Lichens		
Avon park harebells (Crotalaria avonensis)	FE	Upland habitats (scrub and sandhill), often along trails or open edges. Grows in full sun or partial shade.		
Britton's beargrass (<i>Nolina brittoniana</i>)	FE	Deep, fine-textured, well-drained sands of sand pine-evergreen oak scrub or longleaf pine-turkey oak sandhill.		
Carter's mustard (<i>Warea carteri</i>)	FE	Sandy clearings in open, pine-dominated ecosystems.		
Florida bonamia (<i>Bonamia grandiflora</i>)	FT	Deep, white, dry sands of ancient dunes and sandy ridges in clearings or openings of scrub habitat.		
Florida ziziphus (<i>Ziziphus celata</i>)	FE	Yellow sands in xeric upland habitats, including sandhills, Florida scrub, and pasturelands.		
Highlands scrub hypericum (<i>Hypericum cumulicola</i>)	FE	Patches of open, nutrient-poor sand within oak and rosemary scrub.		
Lewton's polygala (<i>Polygala lewtonii</i>)	FE	Sandhills characterized by longleaf pine and low scrub oaks, and transitional sandhill/scrub habitats. Occasionally powerline clearings or new roadsides.		
Papery whitlow-wort (<i>Paronychia chartacea</i>)	FT	Sand scrub of ancient dunes in white sand clearings or blowouts. Also sandy shores of sinkhole lakes.		
Pigeon wings (<i>Clitoria fragrans</i>)	FT	Undisturbed clearings of xeric sandhills and scrub communities on well-drained soils.		
Pygmy fringe-tree (<i>Chionanthus pygmaeus</i>)	FE	Xeric high and yellow sand of scrub, sandhill, and xeric hammocks. Occasionally found in longleaf pine-turkey oak communities, high pineland, dry hammocks, and transitional habitats.		

Table 3.6-2. Federal and State-Listed Species Potentially Affected by Proposed Action

Species	Status	Habitat Requirements
Sandlace (Polygonella myriophylla)	FE	Sand pine scrub and ancient sand dunes.
Scrub blazingstar (<i>Liatris ohlingerae</i>)	FE	Openings in oak-rosemary scrub and sand pine scrub.
Scrub buckwheat (<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>)	FT	Dry sandy pinelands and scrub.
Scrub lupine (<i>Lupinus aridorum</i>)	FE	Sandy openings in sand pine-rosemary-oak scrub.
Scrub mint (<i>Dicerandra frutescens</i>)	FE	Well-drained soils of scrub or sandhill vegetation. Locally abundant in sand pine-evergreen oak scrub.
Scrub plum (<i>Prunus geniculate</i>)	FE	Deep, yellow sands of longleaf pine-turkey oak sandhill and white, excessively leached, wind-deposited soils of evergreen scrub oak- sand pine scrub.
Short-leaved rosemary (Conradina brevifolia)	FE	White sands or sand pine-oak scrub.
Wide-leaf warea (<i>Warea amplexifolia</i>)	FE	Sunny openings with exposed sand in longleaf pine-turkey oak sandhills and sand pine-scrub oak scrub.
Wireweed (Polygonella basiramia)	FE	Bare patches within early sand pine-evergreen oak scrub.
Florida perforate cladonia (<i>Cladonia perforara</i>)	FE	Sandy openings in stabilized sand dunes with scrub vegetation.
Incised groove-bur (<i>Agrimonia incisa</i>)	ST	Sandy dry-mesic, usually upland in longleaf pine-deciduous scrub oak and sandy or sandy loam soils. Also open pine woods, bluffs, and small clearings.
Ashe's savory (Calamintha ashei)	ST	Dry pinelands and sand pine scrub in canopy openings and disturbed areas.
Many-flowered grass-pink (Calopogon multiflorus)	ST	Well-drained soils of open, damp pine savannas-flatwoods and meadows.
Sand butterfly pea (<i>Centrosema arenicola</i>)	SE	Open areas in slash pine-turkey oak sandhills and scrubby flatwoods.
Highlands goldenaster (<i>Chrysopsis highlandsensis</i>)	SE	Sand pine scrub and scrubby flatwoods.
Piedmont jointgrass (Coelorachis tuberculosa)	ST	Karst areas on the margins or shallow of lakes and ponds or in wet savanna swales with sandy peat or sandy peat-muck soils.
Cutthroatgrass (<i>Coleataenia abscissa</i>)	SE	Sandy, moisture-receiving slopes. May occur around small seasonal ponds in scrubby flatwoods and around depression marshes and ponds in wet flatwoods. Frequently found in pure stands with an open slash pine overstory.
Blushing scrub balm (<i>Dicerandra modesta</i>)	SE	Scrub and sandhills.
Hartwrightia (<i>Hartwrightia floridana</i>)	ST	Wet, peat-enriched, usually sphagnous substrates, usually in full sunlight or light shade. Typically found in slash pine/longleaf pine- saw palmetto-gallberry-titi flatwoods, pineland swamps or bogs, and acidic seepage areas.

Table 3.6-2. Federal and State-Listed Species Potentially Affected by Proposed Action

Species	Status	Habitat Requirements
Edison's ascyrum (<i>Hypericum edisonianum</i>)	SE	Sandy soil of low, wet prairies, depressions in pine flatwoods, and pond margins.
Star anise (<i>Illicium parviflorum</i>)	SE	Sandy loams or sandy peat mucks in hydric hammock and floodplain swamps along relatively large spring-fed streams. Also karst areas with moist soil.
Nodding pinweed (<i>Lechea cernua</i>)	ST	Deep sands with a mixture of evergreen scrub oaks. May be found under mature scattered pine or oak, but more frequently in sandy openings.
Florida spiny-pod (<i>Matelea floridana</i>)	SE	Upland hardwood forests.
Celestial lily (<i>Nemastyis floridana</i>)	SE	Low sunny areas in wet flatwoods, swamp, and marsh borders. Also in wet, grassy, sandy peat clearings in slash pine-saw palmetto vegetation and cabbage palm hammocks.
Hand fern (Ophioglossum palmatum)	SE	Epiphytic on persistent leaf bases of Sabal palmetto in moist hammocks.
Plume polypody (<i>Pecluma plumula</i>)	SE	Mesic and rockland hammocks.
Comb polypody (<i>Pecluma ptilota</i> var. <i>bourgeauana</i>)	SE	Rockland hammocks, strand swamps, and wet woods. Often on tree bases and fallen logs.
Terrestrial peperomia (<i>Peperomia humilis</i>)	SE	Shell mounds and limestone outcrops on mesic hammocks, coastal berms, and cypress swamps.
Yellow fringeless orchid (<i>Platanthera integra</i>)	SE	Wet pine flatwoods, wet prairies, sunny seepage slopes, organic sandy peat, depressions within pinelands, marshes, swamps, acid bogs, and low pine barrens.
Giant orchid (<i>Pteroglossaspis ecristata</i>)	ST	Scrub oak, pine rocklands, pine-palmetto flatwoods, fields, dry grassy clearings, and dry-mesic pine savannah.
Large-plumed beaksedge (<i>Rhynchospora megaplumos</i> a)	SE	Sands and sandy peats of pine flatwoods and flatwoods-sandscrub transition. Also scrubby flatwoods.
Florida willow (<i>Salix floridana</i>)	SE	Very wet, calcareous soils, usually in dense floodplain woods, edges of cool, clear spring runs, and roadside ditches.
Scrub bluestem (Schizachyrium niveum)	SE	Dry sandy areas in white sand sandhills scrub communities, rosemary scrub, sandpine scrub, and oak scrub.
Scrub stylisma (<i>Stylisma abdita</i>)	SE	Dry sandy soil in oak or sand pine scrub or turkey oak barrens.
Toothed maiden fern (<i>Thelypteris serrata</i>)	SE	Freshwater swamps, cypress sloughs, and boggy ponds.
Redmargin zephyrlily (Zephyranthes simponsii)	SE	Black, highly organic sands of wet pine flatwoods, meadows, pastures, roadsides, and glade borders.

FE = federal endangered; FT = federal threatened; SE = state endangered; ST = state threatened

Source: NatureServe 2020, The Cornell Lab 2020, USFWS 2020a Florida Natural Areas Inventory 2020, The Institute for Regional Conservation; Florida Fish and Wildlife Conservation Commission 2018

A site visit conducted while preparing the Biological Resource Assessment (see Appendix C) found no evidence of any known federally or state-listed species at any of the three considered alternative sites. Due to the open nature of the Lakeland Highlands and Polk Parkway sites, the potential exists for the state-listed Florida sandhill crane (*Antigone canadensis pratensis*) to frequent either of these sites to forage, which is

typical behavior for this species in central Florida. The overall disturbed nature, however, of all three sites and their proximity to human development and activity make it unlikely that any other of the protected species listed in Table 3.6-2 occur onsite.

3.6.2 Environmental Consequences 3.6.2.1 No Action Alternative

Under the No Action Alternative, no new CBOC would be constructed, and no impacts to biological resources, including vegetation, wildlife, migratory birds, and threatened and endangered species, would occur. Existing conditions at each of the three considered site alternatives would remain as described in Section 3.6.1.

3.6.2.2 Proposed Action Alternatives

Table 3.6-3 provides a generalized comparison of the potential effects of constructing and operating the proposed CBOC at the three considered alternative sites.

Potential Impact	Alternative 1 – Kathleen Road	Alternative 2 – Lakeland Highlands	Alternative 3 – Polk Parkway
Vegetation	Permanent minor impacts from construction	Permanent minor impacts from construction	Permanent minor impacts from construction
Wildlife	Minor impacts during construction and operation	Minor impacts during construction and operation	Minor impacts during construction and operation
Migratory Birds	Negligible impacts during construction and operation	Negligible impacts during construction and operation	Negligible impacts during construction and operation
Threatened and Endangered Species	No effects anticipated	No effects anticipated (federally-protected species) Potential for minor impacts to state-protected Florida sandhill crane during construction	No effects anticipated (federally-protected species) Potential for minor impacts to state-protected Florida sandhill crane during construction
Overall Impact	Minor	Minor	Minor

Table 3.6-3. Comparison of Alternatives – Biological Resources Impacts

Construction

Construction of the proposed CBOC at any of the three considered alternative sites would result in temporary and permanent effects to existing vegetation. Potential effects include loss of trees and shrubs during construction because of grading and excavation, soil erosion, removal of topsoil, and localized habitat loss. Clearing existing vegetation could allow for the establishment of non-native or invasive species. However, the existing plant communities observed at the three sites have been previously disturbed and are of generally low habitat quality. As such, potential impacts would be expected to be minor. Areas of vegetation and habitat would be permanently lost from placement of impervious surfaces and development. Temporarily disturbed areas would be stabilized with vegetation, typical of maintained open grassy areas, and detention basins.

Construction would also cause temporary increases in traffic, general human activity, and noise in the area, which would deter wildlife that may routinely utilize the area. Due to the previous disturbance that has occurred at all three sites, the lack of high-quality native habitat, and the generally developed nature surrounding the sites, impacts to native species would be negligible to minor.

Nesting birds would temporarily avoid using preferred nest sites within active construction areas. Nesting birds often resume use of remaining nest sites once construction is completed, assuming suitable habitat

remains onsite after clearing activities are complete. Permanent loss of nesting habitat mat result from construction of the Proposed Action.

If present during construction at the Lakeland Highlands or Polk Parkway sites, the state-listed Florida sandhill crane could be adversely affected from vegetation clearing and grading activities and associated noise and human activity. Any species onsite would likely relocate to adjacent habitat to forage. Loss of foraging habitat would not constitute an adverse effect to the species as this habitat is prevalent throughout the region. As no other federal or state-listed threatened or endangered species are known to occur at any of the three considered alternative sites, no impacts to such species would be anticipated.

Operation

Operation of the Proposed Action at any of the three considered alternative sites would cause permanent increases in traffic, general human activity, and noise in the area, which would deter wildlife that may routinely utilize the area. While many species would likely be displaced and find other suitable habitat or return to the site following the completion of construction, increased human and vehicular traffic could result in the accidental mortality of a limited number of small or less-mobile species. Overall effects, however, would be minor.

3.6.3 Measures to Avoid, Minimize and Mitigate Impacts

Potential adverse impacts to biological resources would be minimized to the extent possible through various measures, including:

- Revegetate disturbed areas with native plants adapted to the local climate and site conditions.
- Wash construction equipment prior to entering the site to avoid potential introduction of non-native or invasive species.
- Limit construction activities (e.g., brush removal, tree trimming, or grading) during the nesting season for any migratory bird species that may be present on the site. If such timing of construction is not practicable, coordinate with federal or state agencies and perform a survey for active migratory bird nests prior to initiating construction.
- Follow applicable nationwide standard conservation measures identified by the USFWS, including measures to protect habitat, avoid direct take of protected birds or their eggs during vegetation removal, prevent the introduction of invasive species, limit the increase of artificial lighting, minimize collision risk, prevent birds from becoming trapped or nesting in unsafe areas, prevent the introduction of chemical contamination, and minimize fire potential related to project activities (USFWS 2020b). The list of conservation measures include the following potentially applicable to the Proposed Action, among others:
 - Delineate and maintain project boundaries
 - Consult all local, state, and federal regulations for the development of an appropriate buffer distance between the development site and any wetland or waterway.
 - o Maximize use of disturbed land for all project activities.
 - To the extent practicable, limit construction activities to occur between dawn and dusk to avoid illumination of adjacent habitat.
 - Avoid the use of bright white light, such as metal halide, halogen, fluorescent, mercury vapor, and incandescent lamps.

3.7 AIR QUALITY

3.7.1 Affected Environment

Air quality is the measure of the atmospheric concentration of defined pollutants in a specific area. An air pollutant is any substance in the air that can cause harm to humans or the environment. Pollutants may be natural or human-made and may take the form of solid particles, liquid droplets, or gases. Natural sources of air pollution include smoke from wildfires, dust, and wind erosion. Human-made sources of air pollution include emissions from vehicles; dust from unpaved roads, agriculture, or construction sites; and smoke from human-caused fires. Air quality is affected by pollutant emission sources, as well as the movement of pollutants in the air via wind and other weather patterns.

3.7.1.1 Air Quality

USEPA Region 4 and the FDEP Division of Air Resources Management regulate air quality in Polk County, Florida. The CAA (42 USC 7401-7671q), as amended, gives USEPA the responsibility to establish the primary and secondary National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) that set acceptable concentration levels for seven criteria pollutants: particulate matter (less than or equal to 10 micrometers in aerodynamic size, PM₁₀), fine particulate matter (less than or equal to 2.5 micrometers in aerodynamic size, PM_{2.5}), sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O₃), and lead. Short-term standards (1-, 8-, and 24-hour periods) have been established for pollutants that contribute to acute health effects, while long-term standards (annual averages) have been established for pollutants that contribute to chronic health effects. Additionally, the CAA, as amended in 1990, places most of the responsibility to achieve compliance with NAAQS on individual states.

Certain geographic areas, typically defined by county, that are in violation of the NAAQS are classified as *nonattainment* areas, and those in accordance with the NAAQS are classified as *attainment* areas. *Maintenance* areas are *attainment* areas that were formerly designated *nonattainment* and have implemented plans to maintain their *attainment* status. States that contain *nonattainment* areas must adopt a State Implementation Plan (SIP) that is a compilation of goals, strategies, schedules, and enforcement actions designed to lead the state into compliance with all NAAQS. Polk County is currently designated by the USEPA as a NAAQS *maintenance* area for SO₂ (USEPA 2020a). Polk County was designated as a *nonattainment* area in 2018 and 2019 but was redesignated to a *maintenance* area in March 2020 when the USEPA approved the FDEP's amended SIP for SO₂.

Because the project would occur within a *maintenance* area, the General Conformity Rule requirements apply. The General Conformity Rule (40 CFR Part 51, Subpart W, and 40 CFR Part 93) was established under the CAA and ensures that the actions taken by Federal agencies do not interfere with a state's plans to attain and maintain the NAAQS. According to the rule, if a project takes place in an area that is in attainment, then the general conformity requirements do not apply to the project. The General Conformity Rule states that, if a project would result in a total net increase in direct and indirect emissions of nonattainment or maintenance area pollutants that are less than the applicable *de minimis* (i.e., negligible) thresholds established in 40 CFR 93.153(b), detailed conformity analyses are not required pursuant to 40 CFR 93.153(c). Consistent with the USEPA *de minimis* emissions rates (40 CFR 93.153), this analysis considers the *de minimis* threshold of 100 tons per year for the total annual direct and indirect emissions associated with the construction of the Proposed Action.

Since Polk County does not have a county-wide air quality division, the FDEP Division of Air Resources Management handles air resources in the county. The FDEP operates two ambient air quality monitoring sites in Polk County (FDEP 2020b). The Sikes Elementary School site (ID# D105-6005) monitors O₃ and SO₂. The Baptist Children's Home site (ID# D105-6006) monitors O₃, PM_{2.5}, and PM₁₀. Table 3.7-1 includes the NAAQS and available monitoring concentrations for criteria pollutants in Polk County.

Pollutant	Averaging Time	NAAQSª	Monitoring Data ^b (2019)
со	1-hour	35 ppm	-
	8-hour	9 ppm	_
NO ₂	1-hour	100 ppb	_
	Annual arithmetic mean	53 ppb	_
O ₃	1-hour	-	0.075 ppm
	8-hour	0.070 ppm	0.067 ppm
SO ₂	1-hour	75 ppb	33 ppb
	24-hour	140 ppb	4 ppb
PM _{2.5}	24-hour	35 μg/m³	21.3 µg/m³
	Annual arithmetic mean	12 μg/m³	_
PM 10	24-hour	150 μg/m³	61.7 μg/m³
	Annual arithmetic mean	-	_
Pbc	3-month average	0.15 μg/m ³	-
	30-day average	-	_

Table 3.7-1. Ambient Air Quality Standards andMeasured Criteria Pollutant Concentrations

 μ g = micrograms; CO = carbon monoxide; m³ = cubic meter; NO₂ = nitrogen dioxide; O₃ = ozone; Pb = lead; PM_{2.5} = particulate matter of diameter 2.5 microns or less; PM₁₀ = particulate matter of diameter 10 microns or less; ppb = parts per billion; SO₂ = sulfur trioxide Source: USEPA 2020b; FDEP 2020c

^a Only the primary NAAQS are listed.

^b Monitoring data based on monitor locations with the highest reported value within Polk County.

^c Lead is not considered further in this analysis because the project activities would generate lead emissions.

The existing climate of the Lakeland, Florida area is hot in the summer and mild in the winter. The warmest month is August with a monthly average maximum temperature of 94.2 degrees Fahrenheit (°F), while the coldest month is January with a monthly average minimum temperature of 50.2°F (NOAA 2020). The city receives an average annual amount of approximately 52 inches of total precipitation. Precipitation occurs throughout the year but is higher in the summer months, with June having the highest average precipitation of 8.7 inches (NOAA 2020).

3.7.1.2 Greenhouse Gas Emissions

Greenhouse gases (GHGs) are components of the atmosphere that contribute to the greenhouse effect and global warming. GHGs are gases that trap heat in the atmosphere by absorbing outgoing infrared radiation. GHG emissions occur from both natural processes as well as human activities. Water vapor is the most important and abundant GHG in the atmosphere; however, human activities produce only a small amount of the total atmospheric water vapor. The most common GHGs emitted from natural processes and human activities include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). The main source of GHGs from human activities is the combustion of fossil fuels such as oil, coal, and natural gas. Other examples of GHGs created and emitted primarily through human activities include fluorinated gases (e.g., perfluorocarbons) and sulfur hexafluoride. The main sources of these man-made GHGs are refrigerants and electrical transformers.

Each GHG has been assigned a global warming potential (GWP) by the USEPA (USEPA 2020c). The GWP is the ability of a gas or aerosol to trap heat in the atmosphere. The GWP rating system is standardized to CO_2 , which is given a value of one. For example, CH₄ has a GWP of 25, which means that it has a global

warming effect 25 times greater than CO_2 on an equal-mass basis. To simplify GHG analyses, total GHG emissions from a source are often expressed as a CO_2 equivalent, which is calculated by multiplying the emissions of each GHG by its GWP and adding the results together to produce a single, combined emission rate representing all GHGs. While CH_4 and N_2O have much higher GWPs than CO_2 , CO_2 is emitted in such large quantities that it is the predominant contributor to global CO_2 equivalent emissions from both natural processes and human activities.

3.7.2 Environmental Consequences

3.7.2.1 No Action Alternative

Under the No Action Alternative, GSA would not pursue a long-term lease and operation of a new buildto-suit CBOC for the VA. The VHA would continue to serve the Lakeland area Veterans through their existing under-sized facilities. Implementation of the No Action Alternative would result in no increased potential for adverse impact to air quality and GHGs, and existing conditions would remain unchanged.

3.7.2.2 Proposed Action

The below discussion provides a summary of potential construction and operational impacts to air quality and GHG that would occur as a result of the Proposed Action but are not unique to any of the Proposed Action site alternatives.

Construction

Air Quality

As explained in Section 3.7.1.1, the USEPA's General Conformity Rule under the CAA ensures that the actions taken by federal agencies do not interfere with a state's plans to attain and maintain the NAAQS (40 CFR 93.153(b)). Because Polk County is currently designated a *maintenance* area for SO₂, the General Conformity Rule requirements apply. For completeness, GSA estimated direct and indirect emissions of all applicable criteria pollutants (i.e., CO, VOCs [as a precursor for O₃], NO₂, SO₂, PM₁₀, and PM_{2.5}) for the construction phase of the proposed project. GSA then compared these estimated values to the General Conformity Rule's *de minimis* emissions thresholds to determine whether implementation of the Proposed Action would impact air quality in the region.

Construction emissions were estimated for on-road vehicles and nonroad construction equipment. Since a detailed construction plan has not yet been developed for the site, the number and types of construction equipment needed were estimated based on available data for other, similar projects, and in coordination with appropriate GSA staff. GSA estimated emissions rates from on-road vehicles such as privately-owned vehicles using industry standard emission rates (Argonne National Laboratory 2013). GSA estimated emission rates for nonroad vehicles such as excavators, cranes, graders, backhoes, and bulldozers using the USEPA MOVES model.

Table 3.7-2 presents the results of the conformity analysis using the potential air emissions from Alternative 2 which represents the potential highest level of disturbance since it is the largest potential project site (26.5 acres). To provide an upper bound for comparison, the analysis assumes the entire site would be disturbed.

Source		Crit	erial Pollutant	Emissions (t	ons)	
	СО	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	VOCs
Construction Equipment	16.08	16.25	0.84	0.77	0.03	1.49
Delivery Trucks	0.07	0.07	<0.01	<0.01	<0.01	0.01
Worker Vehicles	1.48	0.06	<0.01	<0.01	<0.01	0.06
Fugitive Dust ^a			61.06	4.58		
Paving Off Gases						0.02
Total	17.62	16.38	61.90	5.36	0.03	1.57
De minimis Threshold	100	100	100	100	100	100

Source: Argonne National Laboratory 2013; CalEEMod 2017; SCAQMD 1993; USEPA 2018

Note: Individual numbers may not sum to totals due to rounding.

a. Fugitive dust emissions were calculated using the Alternative 2 project area of 25.6 acres which represents the Alternative with the largest disturbance area.

CO = carbon monoxide; $NO_2 =$ nitrogen dioxide; $O_3 =$ ozone; Pb = lead; $PM_{2.5} =$ particulate matter of diameter 2.5 microns or less; $PM_{10} =$ particulate matter of diameter 10 microns or less; $SO_2 =$ sulfur trioxide; VOC = volatile organic compounds

As shown in Table 3.7-2, the total annual direct and indirect emissions associated with the construction of the Proposed Action using the upper bound analysis would not exceed the *de minimis* threshold rate for any of the criteria pollutants analyzed per the thresholds identified in Section 3.7.1. Therefore, further analysis under the General Conformity Rule is not required for any of the site alternatives. Construction of the Proposed Action at any of the three alternative sites would comply with all applicable federal, state, and local regulations relating to air quality, including any permitting and registration requirements.

Table 3.7-3 presents a comparison of each alternative's potential air quality impacts during construction.

Table 3.7-3. Comparison of Alternatives – Air Quality Construction Impacts

Level of Impact	Alternative 1 – Kathleen Road	Alternative 2 – Lakeland Highlands	Alternative 3 – Polk Parkway	
Exceeds <i>de minimis</i> Threshold	No	No	No	
Variance Among Alternative	Medium potential release of air emissions due to middle-size of site at 20.6 acres.	Greatest potential release of air emissions due to largest site acreage of 26.5 acres. As a result, PM ₁₀ , PM _{2.5} , and VOC emissions from fugitive dust and paving off-gases would be higher for Alternative 2 compared to the other alternatives.	Least potential release of air emissions due to smallest site acreage of 16.4 acres.	
Overall Impact	Temporary, minor impacts during construction.	Temporary, minor to moderate impacts during construction.	Temporary, minor impacts during construction.	

Greenhouse Gases

The Proposed Action would generate GHG emissions during construction activities, and in the short term would represent a negligible, incremental contribution to global GHG emissions and climate change. Short-term GHG emissions associated with the Proposed Action would primarily result from the use of fuel in construction equipment, worker vehicles, and delivery and refuse trucks. GHG emissions were estimated

using USEPA emission factors (USEPA 2018) and are presented in Table 3.7-4. The three Proposed Action site alternatives considered in this EA would utilize a similar amount and type of GHG-emitting equipment. The analysis assumes an 18-month construction duration for all alternatives, regardless of the variation in acres of the site. As a result, the estimated GHG emissions presented in Table 3.7-4 represent the potential emissions for each alternative.

	nom the	Proposed Action				
Source	(Greenhouse Gas Emissions (metric tons)				
	CO ₂	CH₄	N ₂ O	CO ₂ -eq		
Construction Equipment	299.70	0.02	0.01	302.39		
Delivery Trucks	80.09	<0.01	<0.01	80.37		
Worker Vehicles	186.00	0.01	<0.01	186.80		
Total	565.80	0.03	0.01	569.57		

Table 3.7-4. Estimated Construction-Related Greenhouse Gas Emissions from the Proposed Action

Source: CalEEMod 2017; USEPA 2018

Note: Individual numbers may not sum to totals due to rounding.

CO = carbon monoxide; NO_2 = nitrogen dioxide; O_3 = ozone; Pb = lead; $PM_{2.5}$ = particulate matter of diameter 2.5 microns or less; PM_{10} = particulate matter of diameter 10 microns or less; SO_2 = sulfur trioxide; VOC = volatile organic compounds

As shown in Table 3.7-4, construction related GHG emissions under the Proposed Action would represent less than 0.0003 percent of Florida's annual GHG emissions in 2017 (227 million metric tons of CO_2 equivalent) (EIA 2020). Table 3.7-5 presents a comparison of each alternative's potential GHG impacts during construction.

Level of Impact	Alternative 1 – Kathleen	Alternative 2 – Lakeland	Alternative 3 – Polk
	Road	Highlands	Parkway
Exceeds <i>de minimis</i> Threshold	No	No	No
Variance Among Alternative	Middle-size site at 20.6 acres but no variance in potential release of GHG emissions.	Largest site acreage of 26.5 acres but no variance in potential release of GHG emissions.	Smallest site acreage of 16.4 acres but no variance in potential release of GHG emissions.
Overall Impact	Temporary, negligible	Temporary, negligible	Temporary, negligible
	impacts during	impacts during	impacts during
	construction.	construction.	construction.

Table 3.7-5. Comparison of Alternatives – GHG Construction Impacts

Operations

Air Quality

Operation of a new CBOC building would have a long-term, negligible to minor impact on air quality. Onsite sources of air emissions would likely include fuel combustion for building heating, mobile sources of air emissions from vehicle use, and air emissions from offsite grid-supplied electricity to the building. Since all three alternative sites would offer the same services in a similar size CBOC building, it is assumed the operational air emissions would be similar for all three alternatives.

The heating and cooling of the building is not yet designed but it is likely that a natural gas-fired boiler would be used for heating. The new building would consist of approximately 127,900 RSF of floor space, which is larger than the existing CBOC facilities in the Lakeland area that total to approximately 23,000 RSF. As a result, the new building would use more fuel to heat the building, resulting in potentially higher air emissions relative to the existing CBOC facilities. The new building would include energy efficient

design and achieve Energy Star performance rating of 75 or higher. The actual energy performance of the new building would likely not be known until building design is substantially completed.

Operations of the new building would also require grid-supplied electricity, which is generated offsite, and, depending on the energy source, may result in air pollutant emissions. Compared to the existing CBOC facilities, the new building would be larger resulting in increased offsite air pollutant emissions but the energy efficient design would help mitigate the additional air emissions. The energy demand of the new building would not be known until building design is finalized.

An emergency generator would be required to provide backup power if an outage were to occur. Although design is not complete, the generator would be a duel-fuel style generator (i.e., natural gas and diesel fuel) to reduce air emissions. The generator selected would meet the VA requirements for generators to provide enough energy to power the facility for 72 hours at 100 percent capacity. GSA's selected developer would obtain any required air permits for the emergency generator from FDEP Division of Air Resources Management.

Mobile sources of air emissions would result from vehicle use by patients and employees along with delivery trucks. The new CBOC would have approximately two trucks per day for deliveries, waste removal, and other supplies and would accommodate an average of 225 patients per day for a total average of 350 patients per day. The VA estimates approximately 110 new employees would work at the new CBOC in addition to the existing 107 employees from the existing CBOC facilities. The total of 335 new employees and patients would produce air emissions from vehicular travel but those individuals would already produce air emissions for travel to other facilities in the area. It is likely that the new CBOC would result in less mobile emissions as the new facility would provide expanded services, requiring less regional travel for patients to acquire services offered in a single location under the Proposed Action.

Table 3.7-6 presents that estimated operational emissions from the new CBOC. This serves as an upper bound since the new CBOC would not create an increase in patients and staff but rather it would provide a new location in the region for the services offered. As a result, it is assumed that much of the estimated emissions would already occur in the region.

Source	Criterial Pollutant Emissions (tons per year)					
	СО	NO ₂	PM 10	PM _{2.5}	SO ₂	VOCs
Boiler Emissions	0.04	0.05	<0.01	<0.01	<0.01	<0.01
Patient and Worker Vehicles	8.30	0.35	0.02	0.02	0.02	0.31
Delivery Trucks	0.09	0.10	<0.01	<0.01	<0.01	0.01
Total	8.44	0.50	0.03	0.03	0.02	0.33

Table 3.7-6. Estimated Operational-Related Air Emissions from the Proposed Action

Source: Argonne National Laboratory 2013; USEPA 2018, 1995

Note: Individual numbers may not sum to totals due to rounding.

CO = carbon monoxide; $NO_2 =$ nitrogen dioxide; $O_3 =$ ozone; Pb = lead; $PM_{2.5} =$ particulate matter of diameter 2.5 microns or less; $PM_{10} =$ particulate matter of diameter 10 microns or less; $SO_2 =$ sulfur trioxide; VOC = volatile organic compounds

The FDEP issues air permits including Title V operating permits. A Title V permit is required if a facility emits or has the potential to emit 100 tons per year or more of any regulated air pollutant. Although operation of the CBOC would utilize fuel combustion equipment (boilers, emergency generators), a Title V operated permit is not anticipated to be required for the CBOC as this equipment is not anticipated to exceed the regulated thresholds (see Table 3.7-6). GSA's selected developer would secure any required air emissions permits from FDEP Division of Air Resources Management.

Greenhouse Gases

Operation of a new CBOC building would have a long-term, negligible to minor impact on GHG emissions. Similar to air emissions, onsite sources of GHGs include fuel use for building operations and vehicle use. Since all three alternative sites would offer the same services in a similar size CBOC building, the operational GHG emissions would be similar for all three alternatives. Therefore, operational GHG emissions are assumed to be the same across the alternatives.

The new building would likely result in increased fossil fuel-related GHG emissions due to its larger footprint but energy efficient building design would help reduce these effects. Additional sources of GHGs include fugitive leaks of refrigerants from cooling and refrigeration equipment. Although the new CBOC would be larger than the existing facilities, it would consolidate the services from two buildings into one. As a result, the new building would likely require a larger-sized cooling system as one system at the existing facilities but compared to the two existing facilities, it would reduce the cooling and refrigeration equipment.

Mobile sources of GHG emissions would result from vehicle use by patients and employees along with delivery trucks. The total of 335 new employees and patients would produce GHG emissions from vehicular travel but those individuals would already produce GHG emissions for travel to other facilities in the area. It is likely that the new CBOC would result in less GHG emissions as the new facility would provide expanded services, requiring less regional travel for patients to acquire services offered in a single location under the Proposed Action.

Operations of the new building would also require additional purchased electricity, since it would be larger than the existing facilities. Therefore, the potential indirect offsite GHG emissions are likely to be increased compared to current conditions but energy efficient building design would help reduce the potential effects.

3.7.3 Measures to Avoid, Minimize and Mitigate Impacts

Construction activities would generate fugitive dust and other emissions. Emissions from open areas (e.g., a construction site) require reasonable precautions to prevent PM from becoming airborne. The following BMPs would minimize particulate and other air pollutant emissions during construction:

- Covering open equipment when conveying or transporting material likely to prevent material from becoming airborne;
- Minimizing the use and number of trips of heavy equipment;
- Maintaining and tuning all engines per manufacturer specifications to perform at USEPA certification levels, where applicable, and to perform at verified standards applicable to retrofit technologies.
- Prohibiting construction vehicles both on- and off-site from excess idling;
- Prohibiting tampering with engines and requiring continuing adherence to manufacturer's recommendations;
- Using alternative fueled vehicles and construction equipment where feasible; and
- Using energy efficient lighting systems, such as LED technology, where feasible.

3.8 TRANSPORTATION AND PARKING

3.8.1 Affected Environment

3.8.1.1 Traffic

This section describes existing road networks and traffic conditions at the three Proposed Action site alternatives. Traffic conditions are presented in terms of the following parameters:

- Annual average daily traffic (AADT) counts, which are a measure of the volume of traffic flowing through a given roadway segment. The Florida Department of Transportation (FDOT) maintains a network of traffic count stations in the region.
- Level of service (LOS), often used to analyze traffic conditions, is an industry standard used to describe the operating conditions of a roadway segment or intersection. LOS is represented by a letter between A (free-flowing traffic) and F (highly congested traffic). LOS C, which represents stable flow with speed and maneuverability restricted by the amount of traffic, is usually considered to be an acceptable goal in traffic engineering. The Polk County Transportation Organization (TPO) 2040 Long Range Transportation Plan has a goal of ensuring that less than 10 percent of overall roadway miles operate at less than LOS C (i.e., at LOS D or E) during peak travel times (Polk County TPO 2016).

Kathleen Road Site

The Kathleen Road site is bounded to the southeast by Interstate 4 (I-4), which runs primarily in an eastwest direction in the vicinity of the site. I-4, a 6-lane freeway, is a state highway and is classified as a principal arterial road (Polk County TPO 2020). The site is bounded to the northeast by Kathleen Road (County Road 35A), a 4-lane, divided road that runs in a north-south direction and is classified as an urban collector by the Polk County TPO. Additionally, Mall Hill Drive, an undivided 2-lane local road, runs in an east-west direction near the project site and terminates at Kathleen Road directly opposite the proposed site. Mall Hill Drive is also classified as an urban collector.

Table 3.8-1 summarizes AADT and LOS data for major roadways near the Kathleen Road site.

Table 3.8-1. AADT and LOS Data for Roadways Near the Kathleen Road Site			
Roadway Segment	AADT	Peak LOS	
I-4, east of Kathleen Road	104,500	С	
I-4, west of Kathleen Road	109,000	С	
Kathleen Road, north of I-4	19,500	В	
Kathleen Road, south of I-4	36,000	С	
Mall Hill Drive	6,000	В	

Source: FDOT 2020a; Polk County TPO 2020

AADT = average annual daily count; LOS = level of service

Lakeland Highlands Site

The Lakeland Highlands site is located in an undeveloped area and is not immediately adjacent to any existing major roadway. The southwest corner of the site has direct access from Meadowland Park Drive which connects to Lakeland Highlands Road (County Road 37B), located approximately 0.25 miles to the west of the site, is the closest north-south roadway. Lakeland Highlands Road is 4-lane, divided road and is classified as an urban collector (Polk County TPO 2020). The closest east-west roadway is Polk Parkway (State Road 570), which is located approximately 0.2 miles to the south of the proposed site. Polk Parkway is a 4-lane freeway and is classified as a principal arterial.

Table 3.8-2 summarizes AADT and LOS data for	major roadways near the Kathleen Road site.
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		U	
Roadway Segment	AADT	Peak LOS	
Lakeland Highlands Road, north of Polk Parkway	25,500	В	
Lakeland Highlands Road, south of Polk Parkway	25,500	В	
Polk Parkway, east of Lakeland Highlands Road	38,100	В	
Polk Parkway, east of Lakeland Highlands Road	39,700	В	

Table 3.8-2. AADT	and LOS Data for	Roadways Near the	Lakeland Highlands Site

Source: FDOT 2020a; Polk County TPO 2020

AADT = average annual daily count; LOS = level of service

Polk Parkway Site

The Polk Parkway site is located in a largely undeveloped area and is bounded to the west by Spring Road, which is a 2-lane, undivided local road, and to the south by Braddock Road, which is also a 2-lane, undivided local road. SunTrax Boulevard, which will connect Braddock Road to the SunTrax autonomous vehicle testing facility currently being developed near the proposed site, is located immediately to the east of the proposed site. The proposed site is part of a larger planned commercial development whose primary entrance would be located on SunTrax Boulevard. The closest major roadway is Polk Parkway (State Road 570), which is located immediately to the west of Spring Road and runs in a north-south direction in the vicinity of the site. Polk Parkway is a 2-lane undivided highway and is classified as a principal arterial. This segment of Polk Parkway is planned to be widened to four lanes, with interchange improvements planned at Braddock Road (FDOT 2020b). The project is planned to be completed within the next five years.

Table 3.8-3 summarizes AADT and LOS data for major roadways near the Kathleen Road site.

		·····
Roadway Segment	AADT	Peak LOS
Polk Parkway	10,000	В
Spring Road	N/A	N/A
Braddock Road	N/A	N/A

Table 3.8-3. AADT and LOS Data for Roadways Near the Polk Parkway Site

Source: FDOT 2020a; Polk County TPO 2020

Note: Spring Road and Braddock Road are considered minor roads and are not included in the FDOT Traffic Count data or in the Polk County roadway network database.

AADT = average annual daily count; LOS = level of service

3.8.1.2 Public Transportation

Public transit in Polk County is provided by the Lakeland Area Mass Transit District, operating as Citrus Connection (Lakeland Area Mass Transit District 2020a). Citrus Connection includes all public transportation within the county including Winter Haven Area Transit, rural routes, and paratransit service. Citrus Connection provides fixed route bus service throughout Polk County, with service divided into two general areas – East County and West County. Bus fares are \$1.50 for adults, with reduced rates available for students, seniors, and persons with disabilities.

The Lakeland Area Mass Transit District also provides paratransit service throughout the county. Paratransit is a call ahead, door-to-door service using a fleet of small, wheelchair lift-equipped buses and is currently available to senior citizens, disadvantaged citizens, and citizens with disabilities throughout Polk County (Lakeland Area Mass Transit District 2020b). The cost of these services is a one-way fare of \$2, or co-pay as low as \$2. Individuals wishing to use paratransit service must submit an application form and, once approved, can make requests for transportation can over the phone.

Kathleen Road Site

The Kathleen Road site is served by the Citrus Connection Blue line, which is part of the West County bus route network (Lakeland Area Mass Transit District 2020c). The closest stops in either direction are located at the intersection of Kathleen Road and Mall Hill Drive, immediately outside the proposed site. The Blue line connects the Lakeland Downtown Terminal, located south of the proposed site, with neighborhoods located north of the proposed site along State Route 98. On weekdays, bus service on the Blue Line begins at 5:45am and ends at 7:25 pm, with buses arriving approximately every 45 minutes during peak periods and every hour at other times. There is limited service on Saturdays, starting at 7:15am and ending at 2:30pm, and no service on Sunday. Several transfer points link the Blue line to other Citrus Connection bus routes.

Lakeland Highlands Site

The Lakeland Highlands site currently offers limited access to public transportation. The Orange line, also part of the West County network, is the transit route closest to the Lakeland Highlands site (Lakeland Area Mass Transit District 2020d). The closest stops are located along East Edgewood Drive near the intersection with Lakeland Highlands Road, approximately one mile northwest of the proposed site. The Orange line starts at the Lakeland Downtown Terminal, located northwest of the proposed site, and operates along a loop through the neighborhoods south and east of downtown Lakeland. On weekdays, bus service on the Orange Line begins at 5:45am and ends at 6:45 pm, with buses arriving approximately every 1 hour and 30 minutes. Saturday service begins at 7:15 am and ends at 3:25 pm, and there is no service on Sunday. Several transfer points link the Orange line to other Citrus Connection bus routes.

Polk Parkway Site

The Polk Parkway site offers very limited access to public transportation. Bus route 50, part of the East County network, is the closest bus route to the site (Lakeland Area Mass Transit District 2020e). The nearest bus stops on route 50 are located at the intersection of Berkeley Road and Old Lakeland Auburndale Road, approximately 2.5 miles south of the proposed site. Bus route 50 connects neighborhoods in Auburndale, south of the proposed site, with the Downtown Winter Haven Bus Terminal. On weekdays, bus service on route 50 begins at 5:45am and ends at 7:00 pm, with buses arriving approximately every 1 hour and 30 minutes. Saturday service begins at 7:15 am and ends at 1:30 pm, and there is no service on Sunday. Transfer points link the Orange line to other Citrus Connection bus routes.

3.8.1.3 Pedestrian and Bicycle Infrastructure

Sidewalks along Kathleen Road provide pedestrian and bicycle access to the Kathleen Road site. There are no designated bike lanes or bike paths near this site.

Sidewalks are also present along Lakeland Highlands Road, which would support pedestrian access to or from bus stops along East Edgewood Drive as well as bicycle access to the site. There is also an on-street bicycle lane along part of Lakeland Highlands Road, starting approximately at the location of the proposed site and continuing north.

There are no sidewalks along any of the streets near the Polk Parkway site, including Polk Parkway, Braddock Road, or Spring Road. The Teco-Auburndale Bike Trail is a 6.5-mile multi-use trail that runs in a north-south direction and is located approximately 1,000 feet to the east of the site (Traillink 2020). The trail can be currently accessed from proposed site via Braddock Road.

3.8.1.4 Parking

None of the three proposed sites are located within a developed area. There is little or no existing public parking, either on- or off-street, near any of the three proposed sites.

3.8.2 Environmental Consequences

3.8.2.1 No Action Alternative

Under the No Action Alternative, GSA would not pursue a long-term lease and operation of a new buildto-suit CBOC for the VA. The VHA would continue to serve the Lakeland area Veterans through their existing under-sized facilities. Implementation of the No Action Alternative would not result in an increased potential for adverse impact to transportation, and existing conditions would remain unchanged.

3.8.2.2 Proposed Action

Table 3.8-4 summarizes impacts to transportation and parking under the Proposed Action and No Action Alternative. Impacts under each alternative are discussed in greater detail below.

Project Phase	Impact Category	Alternative 1 – Kathleen Road	Alternative 2 – Lakeland Highlands	Alternative 3 – Polk Parkway
	Traffic	Minor impact	Minor impact	Minor impact
Construction	Public Transportation	Minor impact	No impact	No impact
	Pedestrian and Minor impact		Minor impact	No impact
	Parking	No impact	No impact	No impact
Operations	Traffic	Negligible to minor impact	Negligible to minor impact	Negligible to minor impact
	Public Transportation	No impact	No impact	No impact
	Pedestrian and Bicycle Infrastructure	Pedestrian and No impact Bicycle Infrastructure		No impact
	Parking	No impact	No impact	No impact
	Overall Impact	Minor	Minor	Minor

Table 3.8-4.	Summarv	of Impacts t	to Transportation
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Construction

As discussed in Section 2.5.1, construction would take approximately 18 months. All construction activities, including staging/laydown, contractor parking and field trailer placement would remain within the respective property boundary. Construction access would occur from existing points of entry using existing roadway infrastructure. On average, construction would require 40 construction workers onsite and 5 trucks per day for deliveries and waste removal. Peak construction would last for approximately 8 months with a potential maximum of 70 construction workers and 9 trucks per day. In addition, street and sidewalk closures may be required for utility tie-ins. The existing roads connecting the proposed sites to primary arterials would be capable of handling any equipment that would be needed to be transported to the construction site.

Construction activities at any of the three alternative sites could have minor, temporary adverse effects on traffic in the immediate vicinity of the proposed site, due to trucks entering and exiting the site, as well as periodic, temporary street closures. During peak construction, approximately 79 additional vehicles (trucks and worker vehicles) would enter and exit the site daily. The resulting increase in traffic would equal less than approximately 1 percent of current AADT on Kathleen Road and Lakeland Highlands Road, and less than 2 percent of current AADT on Polk Parkway at Braddock Road. These changes would not be likely to adversely affect LOS or cause a noticeable increase in traffic congestion near the proposed sites.

Impacts to public transportation and pedestrian and bicycle traffic would be minor, and could occur as a result of temporary obstruction or closure of sidewalks and bicycle lanes. These effects could occur at the Kathleen Road and Lakeland Highlands sites. There would be no impacts at the Polk Parkway site since it is not located near public transportation and there are no sidewalks or bicycle lanes near the site.

Since all parking for construction workers would be on-site, there would be no impact on parking availability near any of the proposed sites.

Operations

As discussed in Section 2.5.2, the VA estimates that approximately 110 new employees would work at the new CBOC, in addition to the existing 107 employees. It is estimated that the new CBOC would serve approximately 350 Veterans per day. The proposed facility would include 650 parking spaces to accommodate staff and visitors.

Operations at the newly constructed facility would result in a small increase in vehicle traffic, but this increase would be minor compared to existing traffic levels and would not appreciably affect traffic or result in increased congestion near any of the proposed sites. During operations, approximately 217 employees would arrive at the site each morning and leave each evening. Additionally, an average of 350 Veterans would arrive at and depart the site throughout the day. As a result, overall traffic volumes would increase slightly near each of the proposed sites. Compared to existing traffic (as shown in Tables 3.8-1 through 3.7-3), AADT counts could increase up to 11% on Polk Parkway near Braddock Road, up to 6% on Kathleen Road, and up to 5% on Lakeland Highlands Road.

The increase in traffic due to workers entering and exiting the CBOC could have a negligible to minor adverse effect on traffic during peak hours. However, roadways near the proposed sites currently operate at LOS B or better, with the exception of I-4 near Kathleen Road. Therefore, any increase in peak hour traffic due to operation of the proposed CBOC would not be expected to noticeably degrade traffic. The arrival and departure of Veterans throughout the day would not be likely to have a noticeable impact on LOS or congestion near any of the proposed sites. Planned roadway improvements near the Polk Parkway site would further mitigate any adverse effects at this location.

There could be a slight increase in the use of public transportation by staff and visitors accessing the new CBOC, but this increase would not adversely affect the availability or capacity of public transportation in the region.

CBOC operations would not be expected to have an adverse effect on pedestrian or bicycle infrastructure. Since all parking would be on-site, there would be no effect on nearby parking availability.

3.8.3 Measures to Avoid, Minimize and Mitigate Impacts

The following BMPs would be used to minimize impacts to transportation during construction:

- Scheduling activities that could obstruct traffic, such as utility work, during off-peak hours when feasible;
- Scheduling truck deliveries during off-peak hours, when feasible.
3.9 NOISE

3.9.1 Affected Environment

3.9.1.1 Noise Overview

Sound is a physical phenomenon consisting of vibrations that travel through a medium, such as air, and are sensed by the human ear. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies depending on the type and characteristics of the noise, distance between noise source and receptor, receptor sensitivity, and time of day. Noise is often generated by activities essential to a community's quality of life, such as construction or vehicular traffic.

Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and sensed by the human ear.

Noise is defined as any unwanted sound. The human ear experiences sound as a result of pressure variations in the air. Sound varies by both intensity and frequency. The physical intensity or loudness level of noise is expressed quantitatively as the sound pressure level. Sound pressure levels are defined in terms of decibels (dB), which are measured on a logarithmic scale. Sound can be quantified in terms of its amplitude (loudness) and frequency (pitch). Frequency is measured in hertz, which is the number of cycles per second. The typical human ear can hear frequencies ranging from approximately 20 hertz to 20,000 hertz. Typically, the human ear is most sensitive to sounds in the middle frequencies where speech is found, and is less sensitive to sounds in the low and high frequencies.

Since the human ear cannot perceive all pitches or frequencies equally,

measured noise levels in dB will not reflect the actual human perception of the loudness of the noise. Thus, the sound measures can be adjusted or weighted to correspond to a scale appropriate for human hearing. The common sound descriptors used to evaluate the way the human ear interprets dB from various sources are as follows:

- **Decibel (dB)**: Sound pressure level measurement of intensity. The decibel is a logarithmic unit that expresses the ratio of a sound pressure level to a standard reference level.
- **A-Weighted Decibel Scale (dBA):** Often used to describe the sound pressure levels that account for how the human ear responds to different frequencies and perceives sound.
- Hertz: Measurement of frequency or pitch.
- Equivalent Sound Level (L_{eq}): The L_{eq} represents the average sound energy over a given period, presented in decibels.
- **Day-Night Average Sound Level (L**_{dn}): Day-night sound level (L_{dn}) is the 24-hour L_{eq}, but with a 10 dB penalty added to nighttime noise levels (10 p.m. to 7 a.m.) to reflect the greater intrusiveness of noise experienced during this time.
- Sensitive receptors: Locations or land uses associated with indoor or outdoor areas inhabited by humans or wildlife that may be subject to significant interference from noise (i.e., nearby residences, schools, hospitals, nursing home facilities and recreational areas).

The adjusted scales are useful for gauging and comparing the subjective loudness of sounds to humans. The threshold of perception of the human ear is approximately 3 dB. A 5-dB change is considered to be clearly noticeable to the ear, and a 10-dB change is perceived as an approximate doubling (or halving) of the noise level (MPCA 1999). Table 3.9-1 presents a list of sounds encountered in daily life and their approximate levels in dB.

Table 3.9-1. Perceived Change in Decidel Level					
Noise Level (dBA)	Description	Typical Sources			
140	Threshold of pain				
125	Uncomfortably loud	Automobile assembly line			
120	Uncomfortably loud	Jet aircraft			
100	Very loud	Diesel truck			
80	Moderately loud	Motor bus			
60	Moderate	Low conversation			
40	Quiet	Quiet room			
20	Very quiet	Leaves rustling			

Source: Liu and Lipták, 1997

dBA = A-weighted sound level in decibels

Ambient or background noise is a combination of various sources heard simultaneously. Calculating noise levels for combinations of sounds does not involve simple addition, but instead uses a logarithmic scale (HUD 1985). As a result, the addition of two noises, such as a garbage truck (100 dBA) and a lawn mower (95 dBA) would result in a cumulative sound level of 101.2 dBA, not 195 dBA.

Noise levels decrease (attenuate) with distance from the source. The decrease in sound level from any single noise source normally follows the "inverse square law." That is, the sound level change is inversely proportional to the square of the distance from the sound source. A generally accepted rule is that the sound level from a stationary source would drop approximately 6 dB each time the distance from the sound source is doubled. Sound level from a moving "line" source (e.g., a train or vehicle) would drop 3 dB each time the distance from the source is doubled (USDOT 2018).

Barriers, both manmade (e.g., sound walls) and natural (e.g., forested areas, hills, etc.) may reduce noise levels, as may other natural factors, such as temperature and climate. Standard buildings typically provide approximately 15 dB of noise reduction between exterior and interior noise levels (USEPA 1978). Noise generated by stationary and mobile sources has the potential to impact sensitive noise receptors, such as residences, hospitals, schools and churches. Persistent and escalating sources of sound are often considered annoyances and can interfere with normal activities, such as sleeping or conversation, such that these sounds could disrupt or diminish quality of life.

3.9.1.2 Existing Noise Environment

Table 3.9-2 presents the nearest sensitive receptors to the three Proposed Action site alternatives.

Table 3.9-2. Nearby Sensitive Receptors				
Receptor Type	Receptor	Direction from Alternative	Distance (feet)	
Alternative 1 – Kathleen Road				
Commercial	Salvation Army / 7-11	North	50	
Church	Faith Church	North	150	
Residence	Cambridge Cove Apartments	East	150	
Residence	Residential Area	Southeast	675	
Farm/Recreation	Maddox Ranch	West	700	

Alternative 2 – Lakeland Highlands Road				
Commercial	Commercial Sam's Club Southwest 50			
Park/Recreation	Holloway Park	East	350	
Childcare	La Petite Academy	Northwest	2,250	
Industrial	Glendale Wastewater Reclamation Facility	Northwest	2,500	
Residence	Residential Area	East	2,750	
Alternative 3 – Polk Parkway				
Residence	Residential Area	South	900	
Residence	Residential Area	East	1,500	
Industrial	SunTrax	North	1,500	
Recreation	Lake Myrtle Sports Park	Southeast	2,250	

Source: Google Earth 2020

dBA = A-weighted sound level in decibels

Alternative 1 – Kathleen Road

The proposed Alternative 1 site is located near the intersection of Kathleen Road and I-4. Residential and industrial areas are located to the south and east of the site across I-4. Additional residential areas are located north of the site across Kathleen Road. Undeveloped land is located to the west (see Figure 2-1). Table 3.9-2 provides further details about the nearby sensitive receptors.

As stated in Section 2.2.1, an existing CSX Transportation, Inc. Class I rail line is located adjacent to the southwestern boundary of the property. The presence of the rail line plays a role to the ambient noise environment, and a specific consideration for the siting of a CBOC facility as the frequency of train passes contributes to the existing noise levels at nearby sensitive receptors. Ambient noise levels change depending on the distance from a noise-sensitive receptor to the rail line. For instance, noise-sensitive receptors that are located between 10 and 30 feet from a railroad line typically experience an L_{dn} of 75 dBA when a train passes. Receptors between 30 and 240 feet from a rail line can hear L_{dn} levels between 70 and 60 dBA. Receptors located 500 feet or more from a rail line typically hear noise levels of 50 dBA or less when a train passes (USDOT 2012). Since the project area for Alternative 1 is adjacent to the rail line, the estimated existing ambient L_{dn} levels in the proposed project area are approximately 70 dBA during train passes (USDOT 2012).

Alternative 2 – Lakeland Highlands

The proposed Alternative 2 site is located on undeveloped land used for cattle grazing near the intersection of Polk Parkway (State Route 570) and Lakeland Highlands Road (see Figure 2-2). Commercial property is located to the southwest and west of the site. Residential areas are located further to the southwest across Polk Parkway. Undeveloped land is located south of the site across Polk Parkway. Holloway Park is located to the northeast of the site. Table 3.9-2 provides further details about the nearby sensitive receptors.

The closest roadways from Alternative 2 are the Polk Parkway at approximately 950 feet to the south and Lakeland Highlands Road approximately 1,250 feet to the west. At this distance, the existing ambient L_{eq} are approximately 50 and 40 dBA during daytime and nighttime periods, respectively. Existing L_{dn} levels in the proposed project area are approximately 50 dBA (USDOT 2012). Ambient (background) noise levels primarily occur from roadway traffic and nearby businesses.

Alternative 3 – Polk Parkway

The proposed Alternative 3 site is located on a mix of undeveloped land and land used as treated wastewater spray fields and rapid infiltration pond by the Auburndale Plant located northwest of the site across Polk Parkway (see Figure 2-3). The SunTrax autonomous vehicle testing site is located directly to the north. Undeveloped land is located directly to the east bordered by the Teco Auburndale Trail and residential areas. Additional undeveloped land is located to the west, across from Polk Parkway. Residential areas and the Lake Myrtle Sports Park are located to the south of the site. The site is approximately 0.3 mile west of Lake Arietta. Table 3.9-2 provides further details about the nearby sensitive receptors.

The closest roadways from Alternative 3 are Braddock Road approximately 50 feet to the south and Polk Parkway (SR 570) approximately 275 feet to the west. This portion of Polk Parkway is a two-lane parkway. At this distance, the existing ambient L_{eq} are approximately 55 and 45 dBA during daytime and nighttime periods, respectively. Existing L_{dn} levels in the proposed project area are approximately 55 dBA (USDOT 2012). Ambient (background) noise levels primarily occur from roadway traffic, nearby businesses including the SunTrax facility, and residences.

3.9.1.3 Noise Regulations

The Noise Control Act of 1972 (42 USC 4901) directs federal agencies to comply with applicable federal, state, interstate and local noise control regulations. The primary responsibility of addressing noise pollution has shifted to state and local governments. In 1974, the USEPA published its document entitled *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin on Safety*, which evaluated the effects of environmental noise with respect to health and safety (USEPA 1974). The document provides information for state and local agencies to use in developing their ambient noise standards. As set forth in the publication, the USEPA provided information suggesting that an $L_{eq(24)}$ of 70 dB is the level above which environmental noise could cause hearing loss if heard consistently over several years. An L_{dn} of 55 dB outdoors and 45 dB indoors is the threshold above which noise could cause interference or annoyance (USEPA 1974).

The Lakeland Code of Ordinances Chapter 70, Article II Noise Control regulates noise in the City of Lakeland, where Alternatives 1 and 2 are located. The Lakeland Noise Control Ordinance does not specify noise limits but it exempts construction activities for which Lakeland has issued a development permit, provided such activity occurs between 7 AM and 9 PM (City of Lakeland 2020b).

The Auburndale Code of Ordinances, Chapter 18, Article IV City Noise Control Ordinance regulates noise in City of Auburndale, where Alternative 3 is located. The Auburndale Noise Control Ordinance does not specify noise limits but it exempts construction activities within any residential zoning districts exempt from, or for which Lakeland has issued a development permit; provided such activity occurs between 6 AM and 9 PM (City of Auburndale 2020b).

3.9.2 Environmental Consequences

To evaluate impacts from noise, GSA considered the potential for noise levels to change as a result of the Proposed Action and No Action Alternatives. Considerations of the potential for changes in noise include new mobile and stationary sources from activities associated with construction and operation of the new CBOC.

3.9.2.1 No Action Alternative

Under the No Action Alternative, GSA would not construct the proposed new CBOC. No changes would be made to the existing sites, and the existing noise environment would remain unchanged.

3.9.2.2 Proposed Action

The below discussion provides a summary of potential construction and operational impacts from noise that would occur as a result of the Proposed Action but are not unique to any of the Proposed Action site

alternatives. Table 3.9-3 presents a comparison of each alternative's potential impacts from noise during construction.

Level of Impact	Alternative 1 – Kathleen Road	Alternative 2 – Lakeland Highlands	Alternative 3 – Polk Parkway
Exceeds Applicable Noise Regulations	No	No	No
Distance to Closest Noise- Sensitive Receptor (feet)	50	50	900
Existing Noise Environment	Existing noise from the rail line and roadways (Interstate-4) on adjacent property.	Existing noise from roadways (Polk Parkway) and nearby commercial and residential property.	Existing noise from roadways (Polk Parkway), nearby SunTrax vehicle testing site, and residential property.
Variance Among Alternative	The closest nearby sensitive receptors (commercial properties at 50 feet and residential and church property within 150 feet) would experience moderate noise levels due to the proximity to the construction area in addition to the existing noise from the rail line and interstate.	The closest nearby sensitive receptors (commercial property at 50 feet and a park at 350 feet) would experience moderate noise levels similar to Alternative 1 due to proximity to the construction area but the existing noise levels at the site are lower since there is no rail line.	The closest nearby sensitive receptors (residential areas at 900 and 1,500 feet) would experience the lowest noise levels from construction due to the largest distance to the closest receptor.
Overall Impact	Temporary, moderate impacts during construction.	Temporary, moderate direct impacts during construction.	Temporary, minor impacts during construction.

Table 3.9-3.	Comparison of Alternatives	– Noise C	Construction	Impacts
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Construction

Construction would take approximately 18 months and involve site preparation, excavation for foundations and utility tie-ins, hauling of debris and materials, and construction of the new CBOC building. The specific types of construction equipment and methods are not yet known, although are anticipated to by typical of standard building construction activities. Table 3.9-4 presents typical construction equipment and the corresponding noise levels. Table 3.9-5 presents the typical noise levels during construction.

The maximum average noise levels generated during construction would typically range from 78 to 89 dBA at a distance of 50 feet (see Table 3.9-4). Depending on the phase of construction, construction equipment could be operated concurrently. As a result, the analysis conservatively estimates noise levels at nearby receptors using the combined noise levels of several pieces of construction equipment (USDOT 2012).

Although construction would be temporary, potential noise impacts would be minimized to the extent possible by standard noise control measures, such as project scheduling, noise barriers, and using noise controls on equipment (e.g., mufflers). Activities would be consistent with normal construction activities and would be conducted during normal business hours. All construction activities would comply with the applicable noise regulations.

Equipment	Typical Noise Level at 50 feet (dBA)	Typical Noise Level at 500 feet (dBA)	Typical Noise Level at 1,000 feet (dBA)	Typical Noise Level at 1,500 feet (dBA)
Front Loader	80	60	54	50
Backhoe, excavator	80	60	54	50
Roller	85	65	59	55
Grader	85	65	59	55
Tractors, dozer	85	65	59	55
Truck	84	64	58	54
Pavers	85	65	59	55
Source: Lamancusa 2009; USDOT 2018				

Table 3.9-4. Estimated Construction Noise from Construction Activities

dBA = A-weighted decibel

Table 3.9-5. Noise Levels Associated with Outdoor Construct

Construction Phase	dBA Leq at 50 feet from Source			
Ground Clearing	84			
Excavation, Grading	89			
Foundations	78			
Structural	85			
Finishing	89			
Source: USEPA 1974; Bolt et al. 1971 dBA = A-weighted decibels; L_{eq} = Equivalent Sound Level				

Operations

Negligible, long-term noise impacts would be expected during operation of the new CBOC under the Proposed Action. Since all three alternative sites would offer the same services in a similar size CBOC building, the operational noise emissions would be similar for all three alternatives. Therefore, operational noise emissions are assumed to be the same across the alternatives.

Due to the nature of the activities associated with the CBOC, no new stationary sources of continuous noise are expected. The CBOC would be quiet medical facility with operational noise from HVAC systems typical of other comparably sized commercial buildings and grounds maintenance noise (such as lawn mowing or leaf blowers). Proposed operational activities at the new CBOC would also include vehicle traffic to and from the site. The vehicle traffic would not produce excessive noise, is consistent with the existing noise environment of the three Proposed Action site alternatives, and would not produce a significant adverse noise impact on surrounding land uses.

3.9.2.3 Alternative 1

Construction

Moderate, short-term adverse noise impacts would be expected during construction at the Alternative 1 site. Refer to Section 3.9.2.1 for information about construction activities including the typical construction equipment and potential noise levels. As discussed in Section 3.9.2.1, noise estimates conservatively assume concurrent operation of several pieces of construction equipment. Since the closest receptors to Alternative 1 are commercial properties, residences, and a church (see Table 3.9-2), the noise estimates

include the approximately 15 dBA noise reduction for standard buildings with windows and doors shut (USEPA 1978). As a result, the estimated combined noise levels at the commercial properties located approximately 50 feet to the north would reduce from 90 dBA to 75 dBA. The Cambridge Cove Apartment community and the Faith Church would experience noise levels of approximately 80 dBA at 150 feet but would be further reduce to 65 dBA at indoor locations.

As discussed in Section 3.9.1.2, the nearby receptors to the Alternative 1 site already experience noise from the existing rail line to the west and vehicle noise from I-4 and Kathleen Road. All construction activities would comply with the City of Lakeland's noise ordinance (see Section 3.9.1.3).

Operations

Negligible, long-term noise impacts would be expected during operation of the new CBOC at the Alternative 1 site. Refer to Section 3.9.2.1 for additional details about operational noise. As mentioned, Section 3.9.1.2, an existing rail line is located on the southwestern boundary of the site. The design of the proposed CBOC facility would maintain a 500-foot setback from the rail line to mitigate noise effects from rail operations.

3.9.2.4 Alternative 2

Construction

Moderate, short-term adverse noise impacts would be expected during construction at the Alternative 2 site. Refer to Section 3.9.2.1 for information about construction activities including the typical construction equipment and potential noise levels.

The closest sensitive receptors to the Alternative 2 site would be the commercial property (Sam's Club) that is approximately 50 feet to the southwest. The anticipated combined noise levels at 50 feet would be approximately 90 dBA but would reduce to 75 dBA due to the standard noise reduction for standard buildings. The next closest receptor is the Holloway Park at approximately 350 feet to the east which could experience noise levels of approximately 73 dBA. The daycare approximately 2,250 feet to the northwest and the residential area approximately 2,750 feet to the east would have interior noise levels of approximately 42 dBA and 40 dBA, respectively. All construction activities would comply with the City of Lakeland's noise ordinance (see Section 3.9.1.3).

Operations

Negligible, long-term noise impacts would be expected during operation of the new CBOC at the Alternative 2 site. Refer to Section 3.9.2.1 for additional details about operational noise.

3.9.2.5 Alternative 3

Construction

Minor, short-term adverse noise impacts would be expected during construction at the Alternative 3 site. Refer to Section 3.9.2.1 for information about construction activities including the typical construction equipment and potential noise levels.

The closest sensitive receptor to the Alternative 3 construction site would be the residential area that is approximately 900 feet to the south. The anticipated combined noise levels at 900 feet would be approximately 65 dBA but would reduce to 50 dBA due to noise reduction for standard buildings. At approximately 1,500 feet away, the next closest receptors are the residential area to the east and the SunTrax facility to the north. Construction noise would be approximately 60 dBA at these receptors but would reduce to 45 dBA while indoors. Construction noise at the Lake Myrtle Sporks Park approximately 2,250 feet to the southeast would be approximately 57 dBA. All construction activities would comply with Auburndale's noise ordinance (see Section 3.9.1.3).

Operations

Negligible, long-term noise impacts would be expected during operation of the new CBOC at the Alternative 3 site. Refer to Section 3.9.2.1 for additional details about operational noise.

3.9.3 Measures to Avoid, Minimize and Mitigate Impacts

Noise impacts would be minimized to the extent possible through various measures, including:

- Implementation of noise control measures, such as project scheduling, noise barriers, and using noise controls on equipment (e.g., mufflers).
- Conducting construction activities during normal business hours as specified in the applicable development permit.
- All construction activities would comply with the City of Lakeland and the City of Auburndale's noise ordinances.

3.10 ENVIRONMENTAL JUSTICE

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that federal agencies consider as a part of their action any disproportionately high and adverse human health or environmental effects to minority and low-income populations. Agencies are required to ensure that these potential effects are identified and addressed. The USEPA defines environmental justice as "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." The goal of "fair treatment" is not to shift risks among populations, but to identify potential disproportionately high adverse impacts on minority and low-income communities and identify alternatives to mitigate any adverse impacts.

3.10.1 Affected Environment

The analysis of minority and low-income populations focuses on U.S. Census Bureau data for geographic units (i.e., census tracts and block groups) that represent, as closely as possible, the potentially affected areas. A census tract is a geographic area for which the U.S. Census Bureau provides consistent sample data and is comprised of smaller census block groups. Census tracts generally contain a population between 1,200 and 8,000 people. A census block group is the smallest geographic area for which the U.S. Census Bureau provides consistent sample data, and generally contains a population between 600 and 3,000 individuals. Census data for minority populations are available at the block group level; however, data for incomes below the poverty level are currently available only for census tracts and larger areas.

The average minority population percentage of Polk County is approximately 40 percent, therefore a meaningfully greater minority population percentage relative to the general population of the county would be greater than 48 percent (U.S. Census Bureau 2020a). Figure 3.10-1 displays the block groups within 1-mile of each Site Alternative.



Source: U.S. Census Bureau 2018a

Figure 3.10-1. Minority Populations

Of the 9 block groups identified within 1 mile of the Kathleen Road site, 6 block groups exceed the meaningfully greater minority criterion. Of the 11 block groups identified within 1 mile of the Lakeland Highlands site 3 block groups exceed the meaningfully greater minority criterion. Of the 6 block groups identified within 1 mile of the Polk Parkway none of them have minority populations which exceed the meaningfully greater criterion (U.S. Census Bureau 2020a).

Low-income populations were evaluated using the absolute 50 percent and the relative 120 percent or greater criteria for potentially affected census tracts within the ROI. If a census tract's percentage of low-income individuals met the 50 percent criterion or was more than 120 percent of the total low-income population within Polk County (i.e., 18.2 percent), then the area was identified as having a low-income population (U.S. Census Bureau 2020b). Figure 3.10-2 displays the block groups within 1-mile of each Site Alternative.



Source: U.S. Census Bureau 2018b

Figure 3.10-2. Low Income Populations

Of the 9 block groups identified within 1 mile of the Kathleen Road site, 7 block groups exceed the lowincome meaningfully greater criterion. Of the 11 block groups identified within 1 mile of the Lakeland Highlands site 3 block groups exceed the low-income meaningfully greater minority criterion. Of the 6 block groups identified within 1 mile of the Polk Parkway site 3 block groups have low-income populations which exceed the meaningfully greater criterion (U.S. Census Bureau 2020b).

The USEPA EJSCREEN model serves as a screening-level tool to identify areas that may have a higher susceptibility to environmental justice impacts because of their demographic composition and existing exposure to environmental contaminants (e.g., air or water pollution) or proximity to facilities that may emit such contaminants or generate hazardous waste, and associated health risk. According to the model, populations within 1 mile of the Kathleen Road site alternative are within the highest state percentiles of the three site alternatives, including the 74th percentile for exposure to PM 2.5 and the 94th percentile for exposure to wastewater discharge. Populations within 1 mile of the Lakeland Highlands site alternative include within the 40th percentile for PM 2.5. Populations within 1 mile of the Polk Parkway site alternative

are within the lowest percentiles of the three site alternatives (5th percentile for PM 2.5 and 10th percentile for wastewater discharge).

3.10.2 Environmental Consequences

3.10.2.1 No Action Alternative

Under the No Action Alternative construction of the CBOC facility would not occur at any of the Site Alternatives, therefore no adverse impacts to environmental justice populations would be expected.

3.10.2.2 Proposed Action

Although each of the Proposed Action site alternatives are located in an area with low-income and/or minority environment justice populations, the Proposed Action would have negligible to minor impacts on the general population nearby. The potential for impacts to environmental justice populations near the Kathleen Road site may be slightly higher compared to the other alternative sites given existing air and water pollution levels near the site and associated health risks, as indicated by the EJSCREEN model.

Construction impacts, such as water quality, air quality, traffic, and noise, on nearby residential lands would be avoided and mitigated through use of best management practices (refer to Section 3.5.3, 3.7.3, 3.8.3 and 3.9.3, respectively), therefore minimizing any adverse effects to environmental justice populations within 1-mile of the proposed Site Alternatives. Beneficial impacts could occur from the temporary increase of jobs during construction.

Operation of the proposed CBOC would not have any adverse impacts to environmental justice populations nearby. Beneficial impacts could occur from the increase of approximately 110 new employees for operations of the new CBOC facility.

Therefore, construction and operations of the Proposed Action at any of the three site alternatives would not cause disproportionately high and adverse human health or environmental effects to minority and lowincome populations.

3.10.3 Measures to Avoid, Minimize and Mitigate Impacts

No additional measures beyond those identified in the other resource sections in this analysis would be required.

3.11 CUMULATIVE EFFECTS

As defined by CEQ, cumulative effects are those that "result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, without regard to the agency (federal or non-federal) or individual who undertakes such other actions" (40 CFR 1508.7). Cumulative effects analysis captures the effects that result from the Proposed Action in combination with the effects of other actions taken during the duration of the Proposed Action at the same time and place. Cumulative effects may be accrued over time and/or in conjunction with other pre-existing effects from other activities in the area (40 CFR 1508.25); therefore, pre-existing impacts and multiple smaller impacts should also be considered. Overall, assessing cumulative effects involves defining the scope of the other actions and their interrelationship with the Proposed Action to determine if they overlap in space and time.

The NEPA and CEQ regulations require the analysis of cumulative environmental effects of a Proposed Action on resources that may often manifest only at the cumulative level. Cumulative effects can result from individually minor, but collectively significant actions taking place at the same time, over time. As noted above, cumulative effects are most likely to arise when a Proposed Action is related to other actions that could occur in the same location and at a similar time.

GSA identified the following reasonably foreseeable projects within Polk County and in proximity to the Proposed Action Alternative Sites which may result in incremental adverse cumulative effects:

Florida Polytechnic University

Florida Polytechnic University was established in 2012 and has plans to continue to expand its campus (Florida Polytechnic University 2018). Construction is currently underway on a two-story, 90,000-square foot Applied Research Center, which will be located on the northwest side of the campus approximately 5 miles from the Polk Parkway site. The Applied Research Center will have space for research and teaching laboratories, student design spaces, conference rooms, faculty offices, study areas for graduate students, and administrative space (Florida Polytechnic University 2020). Construction is expected to be completed in 2021. Minor beneficial socioeconomic effects may be anticipated from construction and operation of the Applied Research Center.

Lakeland North Business Center

The Lakeland North Business Center is currently under construction, but when complete in the third quarter of 2021 will be comprised of two buildings encompassing almost 300,000 square feet of manufacturing, distribution, and warehousing space. The complex will be supported by 90 trailer parking spaces and 250 parking spaces for cars (Crescent Communities 2020). Located at 900 North Chestnut Street, the Lakeland North Business Center is located approximately 4 miles south of the Kathleen Road site and approximately 8 miles northwest of the Lakeland Highlands site. Minor socioeconomic effects would be expected from construction and operation of the Lakeland North Business Center due to creation of jobs and increased local spending. The associated increase in traffic may result in minor adverse transportation effects.

<u>SunTrax</u>

The SunTrax facility currently consists of a 2.25-mile oval for high-speed testing and is located on the property adjacent to the north of the Polk Parkway site. Construction of the following 10 new test facilities is planned for the infield and completed by winter 2021 (SunTrax 2020):

- 1. Main entry campus includes a 20,000-square foot welcome center with offices, classrooms, and event spaces.
- 2. Workshops and warehouses includes a 27,000-square foot warehouse building and a 56,000-square foot workshop.
- 3. Roadway geometry track comprised of an undulating track on a manufactured hill-scape.

- 4. Loop tracks incorporates entrance and exit ramps into a multi-lane continuous loop track.
- 5. High-speed oval a 2.25-mile track with a 70-mile per hour design speed and 1 mile of 5-lane straightaways.
- 6. Urban/suburban consists of reconfigurable facades that can simulate city-like buildings. The track also simulates urban intersections and signals with varied pavements and markings.
- 7. Pick-up/drop-off replicates multi-modal passenger transfers with adjustable lane striping, signaling, and curb-side pick-up and drop-off scenarios. This facility would simulate airports, hotels, and transit centers.
- 8. Sensor test chamber enclosed structure to test sensors under manufactured rain, lightning, smoke, fog, and dust conditions.
- 9. Braking and handling includes noise, vibration, and harshness surfaces for durability scenarios and low-friction surfaces for braking and lone-keeping scenarios.
- 10. Technology pad consists of a 28-acre paved open space that can accommodate vehicle testing and replicate real-world configurations.

Construction and operation of these test facilities may have minor adverse effects on air quality and noise. Minor beneficial impacts would also be expected due to job creation and an increase in local spending.

Other Area Projects

The cities of Lakeland and Auburndale are planning to continue their recent rapid rate of growth. Planned visions include the Central Florida Innovation District, envisioned as a 3,000-acre area to grow the local economy through innovation and research supported by the nearby Florida Polytechnic University and SunTrax facility (Central Florida Development Council 2019a). Plans for this district remain under development, and no date has been set for construction. The City of Auburndale recently published The Lakes District Comprehensive Plan (2019), which outlines a plan to "enhance the character of the Lakes District by reducing the encroachment of suburban sprawl while accommodating opportunities for economic development and growth" (Central Florida Development Council 2019b). In order to support the planned commercial and industrial growth, several housing development projects are planned. These include a subdivision consisting of 739 single-family homes on 346 acres (Lowndes 2020). Foreseeable area projects could have adverse effects on air quality and transportation due to increased local traffic. City services and utilities could also become strained by a rapid increase in population. Planning these projects in accordance with city planning documents (i.e., comprehensive plans) would help maintain potential effects at minor levels. Minor beneficial socioeconomic effects could also be anticipated due to creation of jobs and increased spending within the local economy. The City of Lakeland has also released its fiscal year 2021 paving schedule for roads maintained by the city (City of Lakeland 2020b). The list includes Lakeland Highlands Road, and work on any local road in the vicinity of the proposed alternative sites could have minor adverse effects on traffic in the vicinity.

3.11.1 No Action Alternative

Implementation of the No Action Alternative would result in no increased potential for adverse cumulative impacts. Construction of the Proposed Action would not occur, and existing conditions at each of the three considered site alternatives would remain unchanged over existing baseline conditions. As such, the No Action Alternative would not contribute to cumulative effects within the City of Lakeland or the City of Auburndale.

3.11.2 Proposed Action

Table 3.11-1 summarizes the level of potential effects due to the Proposed Action, along with an assessment for potential cumulative incremental impacts from reasonably foreseeable regional projects previously identified at the beginning of this section. For those resources anticipated to have none to negligible impacts

due to the Proposed Action, no cumulative adverse effects are anticipated as the Proposed Action would not generate a measurable impact to incrementally add to resource impacts from other regional projects.

Resource	Summary of	f Impact by Proposed Action Alternative		Cumulative Effect
	Alternative 1	Alternative 2	Alternative 3	
Land Use (including Planning and Zoning)	Minor	Moderate	Minor	Minor. Proposed Action would cause minor to moderate impacts to existing land uses through site development, however, it would comply with local zoning. Adherence to comprehensive plans would minimize the potential for cumulative impacts from other regional development.
Geology & Soils	Minor	Minor	Minor	Minor. Proposed Action would cause permanent loss of soils from development, similar to other proposed regional development. Use of BMPs typical of construction projects to protect soil resources and to account for sinkholes would minimize impacts.
Water Resources (including groundwater, surface water, wetlands, and floodplains)	Minor	Moderate	Minor	Moderate . Proposed Action would cause an increase of impervious surface and potential for stormwater runoff; overall effects would be minor through appropriate permitting and stormwater management. The regional rapid rate of growth could cause incremental increases of increased stormwater runoff and sedimentation into receiving waterbodies, potentially resulting in moderate adverse effects to stormwater and water quality.
Biological Resources	Minor	Minor	Minor	Moderate. Proposed Action would cause minor impacts from loss of habitat. The regional rapid rate of growth could cause incremental increases of decline in regional habitat from development resulting in moderate adverse effects to biological resources.
Cultural Resources	Negligible	Negligible	Negligible	Negligible. Proposed Action would not have negligible impacts.
Air Quality	Minor	Minor	Minor	Minor. Minor increases in local traffic associated with surrounding development and regional rapid rate of growth could cause incremental increases of traffic on roadways and associated air emissions.
Transportation and Parking	Minor	Minor	Minor	Moderate. Minor increases in local traffic associated with surrounding development and regional rapid rate of growth could cause incremental increases of traffic on roadways.
Noise	Moderate (construction)	Moderate (construction)	Minor (construction)	Minor. Increase of noise due to the Proposed Action would be primarily due to construction. Effects could be

Table 3.11-1. Cumulative Effect Analysis by Resource

Resource	Summary of Impact by Proposed Action Alternative			Cumulative Effect
-	Alternative 1	Alternative 2	Alternative 3	
	Negligible (Operations)	Negligible (Operations)	Negligible (Operations)	enhanced if construction of other projects were occurring at the same time, however, adherence to local ordinances and use of BMPs would reduce overall impacts.
Utilities and Infrastructure	Negligible	Negligible	Negligible	Negligible. Proposed Action would have negligible impacts.
Materials and Wastes	Negligible	Negligible	Negligible	Negligible. Proposed Action would have negligible impacts.
Socioeconomics	Beneficial	Beneficial	Beneficial	Beneficial . Proposed Action along with other regional development would cause an increase in jobs and economic growth.
Environmental Justice	Minor	Minor	Minor	Minor. The Proposed Action would not have disproportionately high and adverse impacts to environmental justice populations, and therefore, would not incrementally add to any potential disproportionately high and adverse impacts from other regional projects.
Health and Safety	Negligible	Negligible	Negligible	Negligible. Proposed Action would have negligible impacts.

3.11.3 Irreversible and Irretrievable Commitment of Resources

NEPA CEQ regulations require environmental analyses to identify "...any irreversible and irretrievable commitments of resources that would be involved in the proposal should it be implemented" (40 CFR 1502.16). Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the resulting effects on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy, minerals) that cannot be replaced within a reasonable timeframe. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural site).

The Proposed Action would have irreversible impacts on the land from the development of the site and establishment of the CBOC facility and parking areas. This type of development would preclude the land from uses such as agriculture and grazing. The use of energy, labor, materials, and funds from development of the chosen site would also represent an irretrievable commitment. Irretrievable impacts would result from the use of fuel and other nonrenewable resources for construction and operations. No irreversible or irretrievable commitment of protected natural or cultural resources is expected to result from the Proposed Action. Implementation of standard operating procedures and the measures identified in this EA would reduce the potential for the irreversible or irretrievable loss of natural resources as a result of the Proposed Action. No measures would be required for cultural resources as the CRAS did not identify any listed or potentially eligible resources with the APE of any of the sites.

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APPENDIX A AGENCY COORDINATION

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A.1 Scoping

GSA sent initial scoping letters to the following agencies and Native American Tribes:

<u>Federal</u>

- U.S. Army Corps of Engineers (USACE), Jacksonville Regulatory Division
- USEPA, Region 4 NEPA Program Office
- USFWS, South Florida Ecological Office¹

<u>State</u>

- Florida Department of State, Division of Historical Resources
- Florida Department of Environmental Protection, State Clearinghouse
- Florida Fish and Wildlife Conservation Commission
- Southwest Florida Water Management District

Local

- Polk County Manager
- Polk County Land Development Division
- Polk County Parks and Natural Resources Division
- City of Lakeland Mayor
- City of Lakeland Commissioners; Southeast, Southwest and Northeast Districts
- City of Lakeland Planning and Zoning Board

Native American Tribes

- Miccosukee Tribe of Indians
- Muscogee (Creek) Nation
- Seminole Nation of Oklahoma
- Seminole Tribe of Florida

¹Note: The letter containing the U.S. Fish and Wildlife Service IPAC species list is located in the Biological Resource Assessment Report (Appendix C of this EA).

Sample Scoping Letter



GSA, Southeast Sunbelt Region

October 29, 2020

Ntale Kajumba Acting Chief, NEPA Program Office USEPA Region 4 61 Forsyth Street, SW Atlanta, GA 30303-8960

SUBJECT: Intergovernmental and Interagency Coordination of Environmental Planning (NEPA Scoping Letter): New Community-Based Outpatient Clinic (CBOC) for the Department of Veterans Affairs (VA) in Lakeland, Florida

Please be advised that the General Services Administration (GSA) will be preparing an Environmental Assessment (EA) to analyze the potential impacts from a proposed land lease within the Lakeland, Florida area to accommodate construction and operation of a new Community-Based Outpatient Clinic (CBOC) for the Department of Veterans Affairs (VA). The new facility would consist of approximately 127,900 net usable square feet and 650 parking spaces and include appropriate stormwater management features. The existing leased CBOC facilities in the Lakeland area consist of two leased facilities, located at 4237 and 4235 South Pipkin Road in the Parkway Corporate Center near the Polk Parkway, totaling approximately 23,000 rentable square feet (RSF). This CBOC was originally established to provide comprehensive primary care services to Veterans who reside in Polk and surrounding counties.

The proposed project would replace the existing CBOC with a new right-sized, state-of-theart, energy-efficient health care facility with enlarged and consolidated Primary Care and certain Specialty Care services, and also improve overall Veteran satisfaction in the Lakeland area.

The EA will consider three sites for land lease, construction, and operation of a new CBOC (see Figure 1 for a general overview). These sites are described as follows and shown on Figures 2 through 4 of the attached enclosures:

- Alternative 1 (Kathleen Road) This Alternative consists of a 20.6-acre wooded site near Interstate 4 (I-4) at Kathleen Road. Residential and industrial areas are located to the south and east of the site across I-4. Additional residential areas are located north of the site across Kathleen Road. Undeveloped land is located to the west.
- Alternative 2 (Lakeland Highlands) This Alternative consists of a 26.5-acre site with undeveloped land used for cattle grazing near the intersection Polk Parkway (State Route 570) and Lakeland Highlands Road. A Sam's Club Warehouse is located on adjacent property to the southwest of the site. Residential areas are located further to the southwest across Polk Parkway. Undeveloped land is located directly west and to the south of the site across Polk Parkway. Holloway Park is located to the north and east of the site.



Alternative 3 (Polk Parkway) – This Alternative consists of a 16.4-acre site near the
intersection of Braddock Road and Polk Parkway (SR 570). The site is located on
undeveloped land used as treated wastewater spray fields and rapid infiltration pond by
the Auburndale Plant, located northwest of the site across Polk Parkway. The SunTrax
autonomous vehicle testing site is located directly to the north. Undeveloped land is
located directly to the east bordered by the Teco Auburndale Trail and residential areas.
Additional undeveloped land is located to the west, across from Polk Parkway. Residential
areas and the Lake Myrtle Sports Park are located to the south of the site.

As part of the site alternative analysis, GSA is conducting ecological surveys to include wetland and habitat for species of concern, Phase I cultural resource surveys, and Phase I Environmental Site Assessments regarding potential for site contamination. Findings of these studies will be incorporated into the EA document.

The "no action" alternative is included and analyzed to provide a baseline for comparison with impacts from the project and also to satisfy federal requirements for analyzing "no action" under the National Environmental Policy Act (NEPA) (40 Code of Federal Regulations [CFR] 1502.14(d)). The "no action" alternative assumes that the existing Lakeland CBOC would remain in place and no new site would be utilized.

Interested parties are invited to identify the issues, within their statutory responsibilities, regarding the scope of the EA. Comments must be received by November 13, 2020 and emailed to <u>gregory.king@gsa.gov</u>.

Thank you for your participation in the Environmental Review Process.

Sincerely,

GREGORY KING

Digitally signed by GREGORY KING Date: 2020.10.28 09:52:45 -04'00'

Greg King Project Manager GSA Public Buildings Service Region 4 Leasing Division | Project 77 Forsyth Street SW Atlanta, GA 30303

Enclosures:

Exhibit 1 – Site Location Overview Exhibit 2 – Kathleen Road Site (Alternative 1) Exhibit 3 – Lakeland Highlands Site (Alternative 2) Exhibit 4 – Polk Parkway Site (Alternative 3)





Exhibit 1 – Site Location Overview











Exhibit 3 – Lakeland Highlands Site (Alternative 2)





Exhibit 4 – Polk Parkway Site (Alternative 3)

USEPA Scoping Comment

------ Forwarded message ------From: Kajumba, Ntale <<u>Kajumba.Ntale@epa.gov</u>> Date: Fri, Dec 11, 2020 at 8:46 AM Subject: EPA comments on the New Community-Based Outpatient Clinic (CBOC), Lakeland Florida To: Greg King - 4PLP <<u>gregory.king@gsa.gov</u>> Cc: Santamaria, Rafael <<u>Santamaria.Rafael@epa.gov</u>>, Dean, Kenneth <<u>Dean.William-Kenneth@epa.gov</u>>

Hi Greg,

Again, it was great talking to you and thanks for your patience. As promised, please see comments below is a review of the VA project discussed below.

Ntale

Dear Mr. King:

The U.S. Environmental Protection Agency (EPA) Region 4 has reviewed your letter, dated October 29, 2020, regarding the New Community-Based Outpatient Clinic (CBOC) project. According to your letter, the Department of Veterans Administration (VA) is preparing an Environmental Assessment (EA) to analyze the impacts from a proposed land lease to accommodate the construction and operation of a new CBOC within the Lakeland, Florida area. The new facility would consist of approximately 127,900 net usable square feet and 650 parking spaces. It would replace two existing leased CBOC facilities, located on South Pipkin Road, totaling approximately 23,000 rentable square feet. The new facility will be right-sized, state-of-the-art, energy-efficient health care facility with enlarged and consolidated Primary Care and certain Specialty Care services.

According to the letter, the EA will consider three alternative sites for land lease, construction, and operation of the new CBOC facility: (1) a 20-acre wooded site at Kathleen Road near Interstate 4; (2) a 26.5-acre site with undeveloped land used for cattle grazing, near the intersection of Polk Parkway and Lakeland Highlands Road; and (3) a 16.4-acre site with undeveloped land used as a treated wastewater spray fields and rapid infiltration pond, near the intersection of Braddock Road and Polk Parkway. A "No-Action" alternative will also be included and analyzed in the EA.

Based on the EPA's review of available information, the following comments are provided for your consideration.

1. Environmental Justice:

- a. The EPA reviewed data and information available in the EPA's Environmental Justice Screening and Mapping Tool, EJ Screen (<u>https://www.epa.gov/ejscreen</u>) for a radius of 0.5 miles of each alternative site. Based on the available data and information, Alternative 1 has the highest percentage of minority and low-income residents within a 0.5-mile radius of the site, with percentages of 60% and 52%, respectively. The percentage of minority residents and low-income residents within a 0.5-mile radius of Alternative 2 are 28% and 38%, respectively. Alternative 3 has the lowest percentage of minority residents and low-income residents within a 0.5-mile radius, at 17% and 19%, respectively.
- b. Based on a review of data available in the EPA's EJ Screen, Alternative 1 has the highest percentiles for the EJ Indexes ranging from the 72nd State percentile for PM 2.5 to the 94th State percentile for Wastewater Discharger Indicator. The EJ Indexes for Alterative 2 range from the 24th to the 62nd percentile. Alternative 3 has the lowest percentiles for the EJ Indexes, with a range from the 2nd to the 20th percentiles.
- 2. Stormwater Management:

(a) The EPA reviewed data and information available in the EPA's NEPAssist mapping tool (https://www.epa.gov/nepa/nepassist) for a radius of 0.5 miles of each alternative site. Alternative Site 1 is located within 0.5 miles of an unidentified stream and freshwater wetlands. Alternative Site 2 is

located within 0.5 miles of freshwater ponds and wetlands. Alternative Site 3 is located within 0.5 miles of Lake Arietta. The EPA encourages implementing best management practices during and after construction to minimize stormwater impacts on water resources. Coverage under a statewide National Pollutant Discharge Elimination System (NPDES) construction stormwater general permit is required for projects that disturb one acre or more of contiguous land. The EPA recommends that erosion control and sediment control measures be implemented in accordance with the State's NPDES construction general permit requirements, and that the measures be addressed during the design and construction phases of the project.

(b) The addition of impervious surfaces, such as rooftops and parking areas, associated with the proposed project can increase stormwater flows. The EPA acknowledges the VA's proposal to include stormwater management features at the site of the new facility. The EPA anticipates that best management practices to minimize stormwater runoff from the impervious surfaces will be evaluated in the EA.

The EPA appreciates the opportunity to provide scoping comments on the proposed project. We look forward to reviewing and commenting on the environmental assessment when it becomes available. If you have any questions regarding the EPA's comments, please contact Rafael Santamaria by phone at (404) 562-8376 or via email at santamaria.rafael@epamail.epa.gov.

Ntale Kajumba

NEPA Section, Chief

Strategic Programs Office

Office of the Regional Administrator

U.S. EPA, Region 4

61 Forsyth Street, S.W.

Atlanta, Georgia 30303

(404) 562-9620

Kajumba.ntale@epa.gov

APPENDIX B PHASE 1 ENVIRONMENTAL SITE INVESTIGATION

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This Appendix contains the Phase 1 Environmental Site Assessments for the Kathleen Road (Alternative 1), Lakeland Highlands (Alternative 2), and Polk Parkway (Alternative 3) sites.

Information from these reports includes the Executive Summary, main body of the report and the following appendices: Appendix A (Figures) and Appendix G (Photographs). Appendices not provided but considered in the main summary of findings and in the EA Administrative Record are: Appendix B (City Directory Search Report), Appendix C (Sanborn Fire Insurance Maps), Appendix D (Historical Topographic Maps), Appendix E (Historical Aerial Photographs), Appendix F (Current Property Deed and Environmental Lien Search Report), Appendix H (Radius Map Report) and Appendix I (Qualifications of Preparer).

REPORT



DRAFT Phase I Environmental Site Assessment (ESA) for 2330 Kathleen Road

Lakeland, Polk County, Florida

December 2020



Prepared for: U.S. General Services Administration, Region 4 Public Building Service Southeast Sunbelt Region Atlantan, Georgia

Prepared by:

Potomac-Hudson Engineering, Inc. 77 Upper Rock Circle, Suite 302, Rockville, Maryland 20850 Tel 301.907.9078 Fax 301.907.3446 www.phe.com



FOR

2330 KATHLEEN ROAD

CITY OF LAKELAND POLK COUNTY, FLORIDA

"I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR Part 312 Subpart B."

"I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Christophe Br

Christopher Rua, CHMM Project Manager Potomac-Hudson Engineering, Inc.



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EXECUTIVE SUMMARY

Potomac-Hudson Engineering, Inc. (PHE) conducted a Phase I Environmental Site Assessment (ESA) pursuant to the guidelines (E 1527-13) of the American Society for Testing and Materials (ASTM) and the United States Environmental Protection Agency's (EPA) "*Standards and Practices for All Appropriate Inquiries*" (40 *Code of Federal Regulations* [CFR] Part 312). The Phase I ESA includes interviews with key personnel, review of historical documents, maps and aerial photographs, and a site inspection. The purpose of the Phase I ESA is to identify Recognized Environmental Conditions (RECs), including both controlled and historical RECs, at the site resulting from past and present usage or condition of the property.

The subject property, Kathleen Road Lakeland Property, is located at 2330 Kathleen Road in Lakeland, Polk County, Florida, and identified by the Polk County Property Appraiser (PCPA) as Parcel Identification Nos.: 23-28-03-000000-021020, 23-28-02-000000-043020, and 23-28-02-000000-044030 and owned by Interchange Group, LLC. The approximately 20.6-acre subject property is currently undeveloped, wooded, and vacant. PHE observed evidence of homeless campand markers indicating a buried natural gas pipeline on the subject property. A mound of concrete debris in addition to other scattered trash were also observed. The subject property is not serviced by municipal water and sanitary sewer, although connections to the municipal system are available in the area. This Phase I ESA provides an update of a previous Phase I ESA performed for this property by ECS Florida, LLC (ECS) in May 2020.

The subject property is located in a mixed-use residential and commercial area of Lakeland, Florida. The subject property is bound on the north by a 7-Eleven gas station and convenience store, followed by Faith Church; on the east by Kathleen Road, followed by Cambridge Cove Apartments; on the south by undeveloped land, followed by Interstate Highway 4; and on the southwest by railroad tracks, followed by a rural-residential property. PHE did not identify environmental issues at adjoining or nearby properties that are believed to present a recognized environmental condition (REC) at the subject property.

Based on the records search, site reconnaissance, and interviews, it appears that the subject property was previously utilized as agricultural row-crop land (most likely an orchard). According to an aerial photograph, in 1941 the subject property was utilized as row crops and developed with a single building structure. In 1984, the subject property no longer appeared to function as agricultural (row-crop/orchard) land and was depicted as undeveloped/vacant land in a 1994 aerial photograph. The PCPA online database reported the subject property as either vacant or improved between 1944 and 1972 due to a lack of historic sales information. The subject property was listed as vacant beginning in 1979 to present. City directories reviewed between 2003 and 2018 did not list the subject property as being occupied.

Historical records prior to 1941 were not reasonably ascertainable for the subject property.

Our review of historical information for adjoining or nearby properties identified the area as originally a rural-residential and agricultural area that transitioned to a commercial and residential area of Lakeland, Florida.

The report did not identify the subject property on the databases researched. The Environmental Data Resources (EDR) report identified several off-site properties within the minimum ASTM

search distances. Based on our review of available public records, PHE does not consider the listings to be potential sources of soil, groundwater, or vapor impact to the subject property. Therefore, PHE does not consider the listed sites to be RECs for the subject property.

Based upon the information gathered pursuant to the preparation of this report, the following RECs have been identified for the subject property:

- The long-term historic usage of the property as row-crop agricultural land (approximately 43 years) presents risk of impact to soil and/or groundwater at the property originating from potential on-site activities such as the regular application of agricultural chemicals, or from discharges associated with on-site storage or handling of these chemicals. Therefore impacts of historical herbicides and pesticides on the subject property are likely, and a REC has been identified (REC-1).
- Based upon a review of aerial photographs and historical topographic maps, the site contained one or more small structures, possibly a residence and a storage shed or barn. The presence of former buildings presents the possibility that underground storage tanks (USTs) used for heating oil or a septic tank system used for wastewater disposal may have been present onsite. This has been identified as REC-2.

Based upon the information gathered pursuant to the preparation of this report, the following data failure/data gap has been identified for the subject property:

- Persons with first-hand knowledge of the former agricultural usage or operations at the site could not be identified, and therefore interviews with such persons could not conducted. This data gap is considered to be of moderate significance.
- Responses from all regulatory agencies for which informational requests were submitted under either the Freedom of Information Act (FOIA) or the Open Public Records Act (OPRA) have not been received at the time of delivery of this report. This data gap is considered to be of moderate significance.
- Sanborn Fire Insurance Maps do not exist for the subject property or immediate surrounding areas. This data gap is considered to be of minor significance.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

Potomac-Hudson Engineering, Inc. (PHE) conducted a Phase I Environmental Site Assessment (ESA) pursuant to the guidelines (E 1527-13) of the American Society for Testing and Materials (ASTM) and the United States Environmental Protection Agency's (EPA) "*Standards and Practices for All Appropriate Inquiries*" (40 *Code of Federal Regulations* [CFR] Part 312), commonly referred to as All Appropriate Inquiry (AAI), for the property located at 2330 Kathleen Road in Lakeland, Polk County, Florida. This Phase I ESA provides an update of a previous Phase I ESA performed for this property by ECS Florida, LLC (ECS) in May 2020.

The purpose of an AAI due diligence report is to identify conditions "indicative of releases and threatened releases of hazardous substances, pollutants, contaminants, petroleum and petroleum products, and controlled substances (as defined in 21 United States Code [U.S.C.] 802) on, at, in, or to the subject property." The scope of the definition is intended to include those releases which have occurred onsite, as well as those which have occurred off-site that may migrate onto the subject property.

The purpose of an ASTM Phase I ESA, while similar in scope and nature to an AAI due diligence report, is to determine the existence of "Recognized Environmental Conditions" (RECs) at the subject property. The following is a description of REC as defined in ASTM E 1527-13:

"Recognized Environmental Condition" is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."

The ASTM E 1527-13 document also discusses two specific subsets of RECs, namely Controlled RECs and Historical RECs. Per ASTM:

"Controlled Recognized Environmental Condition" is defined as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

"Historical Recognized Environmental Condition" is defined as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls."

1.2 LIMITATIONS AND EXCEPTIONS OF THE ESA

This Phase I ESA was conducted with the following limitations and exceptions, some of which were established to define the scope of work and focus the assessment:

• Although a limited search for environmental liens and activity use limitations (AULs) for the site was performed by Environmental Data Resources, Inc. (EDR), an exhaustive search for these items was not conducted nor intended as part of this Phase I ESA.

It should be noted that all statements, findings, and conclusions contained in this Phase I ESA are based upon: (i) site conditions at the time of the reconnaissance and inspection of the property; (ii) review of written or illustrated historical documents as available; and (iii) information reported to PHE by others. While there are no indications that the information provided is suspect, PHE does not assume responsibility for errors and omissions in the information assembled to produce this Phase I ESA.

No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with a property, and this practice recognizes reasonable limits of time and cost.

This report has been prepared solely for the benefit of General Services Administration (GSA) (the "User" of this report as defined by ASTM E 1527-13) and may not be relied upon by any other party (except for any designated lending institution) without the written authorization of PHE. PHE assumes no responsibility or liability for third-party use of this Phase I ESA.

2.0 SITE DESCRIPTION

2.1 LOCATION AND GENERAL CHARACTERISTICS

The property (hereafter referred to as the site or subject property) for this report is located at 2330 Kathleen Road in Lakeland, Polk County, Florida. The property is approximately 20.6 acres in area and is currently owned by Interchange Group, LLC.

The subject property is located on the southwest side of Kathleen Road, immediately north of its interchange with Interstate Highway 4 (I-4). The site is bordered to the northeast by Kathleen Road; to the east and southeast by the right-of-way for I-4 and its exit ramps; to the southwest by railroad tracks for the Seaboard Coast Line; and to the north by a church and an undeveloped wooded property.

The location of the site is depicted on the most current 7.5-minute series United States Geologic Survey (USGS) Topographic Map (2012) as shown in **Figure 1**. A recent (2017) aerial photograph for the site is provided as **Figure 2**, and a copy of the tax map for the site is attached as **Figure 3**. Figures 1 through 3 are provided in **Appendix A** of this report.

2.2 PHYSICAL SETTING

2.2.1 TOPOGRAPHY AND HYDROLOGY

The site is located on the Lakeland USGS 7.5-minute series Quadrangle (2012), depicted at an approximate scale of 1:24,000 (1 inch = 2,000 feet) as shown in Figure 1 in **Appendix A**. The map provides a regional overview of the topography in the vicinity of the subject property. Additional site-specific topographic information was found in the Radius Map Report for the site provided by EDR as presented in **Appendix H**. According to the Radius Map Report, the center of the subject property is at an elevation of approximately 210 feet above mean sea level (msl). Based on information provided by both sources, the topography across the site slopes downward generally towards the west and northwest, in the direction of an unnamed tributary to Itchepackesassa Creek, which is the nearest water body to the subject property is towards the west and northwest based upon surface topography; however, actual groundwater flow direction has not been confirmed.

The EDR Radius Report depicts a wetland area that has been previously mapped by the Florida Department of Environmental Protection on the southeast portion of the subject property. However, no obvious onsite wetland areas were observed during the site visit.

The subject property does not contain any surface waterbodies, and no portion of the property lies within the 100-year or 500-year floodplains as mapped by the Federal Emergency Management Agency (FEMA).

2.2.2 SOILS

Soils information was provided by the Natural Resources Conservation Service's (NRCS) Web Soil Survey (WSS). The WSS is a web-based soil data clearinghouse that contains data compiled

from the original hardcopy soil surveys but that have been modified slightly for consistency across county lines. For this site, the soils information presented in WSS originated from the United States Department of Agriculture's (USDA's) *Soil Survey of Polk County, Florida* (1990).

According to these sources, the Apopka fine sand and Tavares fine sand soil map units are present on the site. According to the *Soil Conservation Service SSURGO data*, neither of the soil types at the site are hydric (i.e., those soils typically found in wetlands).

2.3 HISTORICAL PROPERTY USE

The historical uses of the site were determined through a review of historical aerial photographs, historical topographic maps, and a chain-of-title search, as well as an interview with the current property owner. City Directory information for the site was also utilized to the extent possible, as well as information obtained from a variety of other sources. The results of these searches are discussed below.

2.3.1 CITY DIRECTORY REVIEW

City directories are public reference materials that contain information concerning property ownership, usage, and other details (e.g., telephone number, the owner's occupation, etc.). They are similar to a telephone directory but typically contain greater amounts of information. They are usually produced annually or semi-annually and are arranged by business or resident name, type of business, and/or street address. These can be valuable resources in determining the prior use or ownership of a property.

EDR was retained to perform a review of commonly known and readily available city directory resources for the subject property address and immediately adjacent addresses and provide an abstract of the findings. City directory information for the site and adjacent properties was obtained by EDR for the years 1960, 1964, 1969, 1974, 1979, 1984, 1989, 1992, 1995, 2000, 2005, 2010, 2014, and 2017. The information provided was based upon a review of EDR's own digital archive of city directory information (1992 through 2017), as well as Polk's City Directories (1960 through 1989).

The subject property address (2330 Kathleen Road) was not listed in any of the directories. The Environmental Lien and AUL search provided by EDR (refer to Section 2.3.4) confirmed that Interchange Group, LLC has owned the property since 2007.

Two potential uses of concern were identified located in close proximity to the subject property:

- 1969, Batey's Standard Service Station, 1837 Kathleen Road (200 feet southeast); and
- 2014 and 2017, Circle K (gas station), 3025 Kathleen Road (1,500 feet north).

In addition to the above, Griffin Cash Grocery was identified at 2600 Kathleen Road from 1964 through 1974. In 1979, the address has changed to 3110 Kathleen Road. This remained the same in 1984. In 1989 and 1992, this address is listed as Pop's Country Station, which was identified in the EDR Radius Report has being the location of a leaking underground storage tank. However, based on its location, it does not appear to be of concern at the subject property.

No other adjacent uses of potential environmental concern were identified in the EDR City Directory Abstract.

A copy of the City Directory Abstract provided by EDR is included in Appendix B.

2.3.2 HISTORICAL MAP REVIEW

2.3.2.1 Sanborn Maps

As stated earlier, EDR conducted a search for Sanborn Fire Insurance Maps which covered the subject property; however, no such maps exist for the subject property or immediately surrounding area.

A copy of the Sanborn Map Report indicating *No Coverage* for the site is included in **Appendix** C.

2.3.2.2 Topographic Maps

Historical and current topographic maps for the site were provided by EDR for the years 1944, 1975, 1987, 1994, and 2012 (Lakeland Quadrangle; 7.5-minute series and Plant City East Quadrangle; 7.5-minute). An additional topographic map was provided from 1944 (Plant City Quadrangle; 7.5-minute). A copy of the current (2012) topographic map is provided as Figure 1 in **Appendix A**; copies of all topographic maps are provided in **Appendix D**.

Limited information about the subject property can be obtained from the historical topographic maps due to the small size of the site and the limited level of detail included in a typical topographic map.

On the 1944 topographic map, a single structure is depicted onsite, adjacent to Kathleen Boulevard. Most of the remainder of the site is depicted as orchard with the exception of the southeast corner. In this area an unimproved road is depicted terminating onsite. This roadway extends offsite to the east for approximately 1 mile. Kathleen Road and the railroad tracks are depicted; however, I-4 does not yet exist.

On the 1975 topographic map, the small structure no longer appears, and the property is depicted as being entirely orchard. Faith Church is also depicted immediately northwest of the site. I-4 and its interchange with Kathleen Boulevard have been constructed.

The 1975, 1987, 1994, and 2012 maps all depict the site as undeveloped and situated between 190foot and 220-foot elevation contours. The 1994 map shows large development of areas to the north and to the west of the subject property, but the land immediately surrounding and at the subject property remains undeveloped through 2012.

2.3.3 AERIAL PHOTOGRAPH REVIEW

Copies of historical black-and-white aerial photographs for the site were provided by EDR for the years 1941, 1949, 1952, 1957, 1960, 1968, 1971, 1977, 1980, and 1993 (all at scale: 1 inch = 500 feet); color aerial photographs for the site were also provided by EDR for the years 1999, 2007, 2010, 2013, and 2017 (all at scale: 1 inch = 500 feet). Copies of all aerial photographs provided by EDR are included in **Appendix E**.

Between 1941 and 1957 the subject property appears to be utilized for agricultural usage, mostly likely an orchard The property appears to have two buildings or structures located on its northeastern portion near Kathleen Boulevard. It's possible the building closest to the road is the same structure that appears on the 1944 topographic map and could be a residence, while the

second building to the rear appears slightly larger and could be a shed or barn. However, the exact uses of the buildings cannot be determined through the aerial photograph due to the relatively small scale. Elsewhere in the vicinity of the site are large tracts of farmland and orchards, as well as a CSX railroad.

No significant changes to the site are noticeable on the 1960 aerial photograph. The land to the east and south of the site appears to be under redevelopment as a highway.

The site appears relatively unchanged in the 1968, 1971, 1977, and 1980. Development of residential properties appear to the east and to the south of the property.

In the 1993 aerial photograph the orchard rows begin to disappear as the property remains undeveloped. Residential property development and signs of other development also appear on this aerial photograph to the north and northwest.

The 1999 aerial photograph depicts a wooded property with no further development. Elsewhere, the development to the north and northwest of the property is better defined and complete.

Little or no site-specific changes are visible in the 2007, 2010, 2013, and 2017 aerial photographs provided by EDR. Further development occurs in 2010 to the northeast of the property.

The aerial photograph review confirmed the prior use of the site for agricultural purposes from at least the 1940s until the 1980s. The aerial photographs also confirmed the existence of two structures onsite prior to the current development of the site. No additional RECs were identified in the aerial photograph review.

2.3.4 **REGULATORY AGENCY FILE REVIEW**

Earlier this year, Freedom of Information Act (FOIA) requests were sent by ECS to various regulatory agencies at the local, state, and federal levels in order to obtain additional information concerning the subject property. The agencies contacted include:

- The Department of Health of Polk County (DOH), the Florida Department of Environmental Protection (FDEP), and Lakeland Fire Marshall (LFM) regarding any known environmental concerns associated with the subject property and adjoining properties. ECS received a response from FDEP, DOH, and LFM which indicated that they did not have records for the subject property which represent RECs.
- To supplement the ECS requests, PHE submitted a FOIA request for the site to the U.S. Environmental Protection Agency (EPA) Region 4 Office in Atlanta, GA on November 16, 2020. No response has been received at this time.
- EDR was also retained to search for records at the City of Lakeland, Building Inspection Division. No records pertaining to the subject property were found.

2.3.5 ENVIRONMENTAL LIENS

EDR was retained to obtain a copy of the current property deed and identify any environmental liens or AULs at the subject property as per AAI requirements.

No environmental liens or AULs were identified by EDR for the site (please refer to Section 4.1 for additional information and limitations regarding this search). The current property deed

indicates the property was purchased from Fay Marie Troiano, Trustee by Interchange Group, LLC on May 31, 2020, and recorded in the Polk County Clerk's Office on June 6, 2020.

Copies of both the Environmental Lien Report and the current property deed are provided in Appendix F.

2.3.6 USER-PROVIDED INFORMATION

PHE was provided with the following items from the User of this report:

- Phase I Environmental Site Assessment, prepared by ECS Florida, LLC (ECS), dated May 7, 2020
- Cultural Resource Assessment Survey (Executive Summary only), prepared by Archaeological Consultants, Inc., dated May 2020
- Federal Emergency Management Agency (FEMA) National Flood Hazard Layer FIRMette, retrieved May 8, 2020
- Legal Description and Tax Parcel Maps

Any pertinent information provided in the above documents has been incorporated into this Phase I ESA report, where applicable and appropriate.

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3.0 SITE RECONNAISSANCE

3.1 SITE VISIT

PHE personnel inspected the subject property on November 9, 2020. The weather at the time of the site visit was cloudy and drizzly with a temperature around 80 degrees Fahrenheit.

The subject property is approximately 20.6 acres in size and consists of undeveloped, wooded land. The site is largely closed canopy, deciduous forest; however there were numerous trails and areas of tall grasses and scrub-shrub vegetation. Water and sewer services are available in the vicinity of the subject property through municipal and private entities. Evidence of structures associated with the subject property was not noted, with the exception of one open vertical pipe observed on the ground surface.

Kathleen Road, located along the eastern property boundary, affords access to the subject property. A large trail used as a right-of-way for a subsurface natural gas line crosses the property. Evidence of trespassing and unauthorized use was widespread. Significant amounts of debris consisting of bottles, cans, tires, and household trash were observed scattered on the subject property. A mound of concrete was observed near the central-western property boundary, along with treated wood and other construction and demolition debris. The mounding of the soil onsite at the southeastern portion of the property indicates earth-moving activities had occurred previous. PHE also observed three homeless camp areas across the subject property, including one which was occupied at the time of the site visit.

Selected photographs of the site taken during the site inspection are included in Appendix G.

3.2 INTERVIEWS

The following was excerpted from the ECS Phase I ESA:

Justinano C. Marquez III, G.I.T. interviewed Ms. Heather Howard, representing FD Stonewater, via executed questionnaires dated May 1, 2020. She has limited knowledge related to the subject property and associated activities. The property was acquired by her firm on April 24, 2020 and was vacant and undeveloped at the time or purchase. She indicated that she is not aware of 1) environmental concerns associated with the subject property; 2) any pending, past, or threatened administrative litigation or administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the subject property; or 3) any government notices regarding any possible violation of environmental laws or possible liability related to hazardous substances or petroleum products.

4.0 USER RESPONSIBILITIES

As stated earlier, the designated "User" of this report is the U.S. GSA, the prospective purchaser of the property. Per ASTM guidelines, certain aspects of a Phase I ESA are designated as the "User's Responsibility" and therefore are excluded from the scope of work conducted by the consultant (unless otherwise requested by the User). Items designated as User's Responsibility include potentially confidential information (such as property purchase price); information that may be otherwise collected as part of a property transaction (e.g., chain-of-title documentation); or specific information for which the User may be privy to as part of his or her knowledge of the site or surrounding community. It is the User's responsibility to convey any specific information or knowledge he or she may possess about the subject property pursuant to the items listed below to the Environmental Professional preparing this report.

Items defined as User's Responsibility per ASTM E 1527-13 are described below.

4.1 ENVIRONMENTAL LIENS AND ACTIVITY USE LIMITATIONS

An exhaustive search for environmental liens or AULs (e.g., deed restriction) for the property was not conducted. Environmental liens and AULs are typically uncovered during routine property transaction processes, such as performing a review of the current property deed and compiling a chain-of-title.

Although not required by ASTM as indicated, PHE conducted a limited search for environmental liens on the property through EDR. EDR also provided PHE with a copy of the current property deed. Based on a cursory review, no environmental liens or AULs were identified for the property.

Both the Environmental Liens Search Report and current property deed are included in **Appendix F** of this report.

4.2 SPECIALIZED OR ACTUAL KNOWLEDGE OR EXPERIENCE

PHE assumes that all specialized and/or actual knowledge of the User regarding the subject property has been made known to PHE. The User bears responsibility to provide all commonly known or reasonably ascertainable information obtained by the User to PHE.

4.3 EVALUATION OF PURCHASE PRICE

The User is responsible for identifying the appropriate root cause if the subject property's purchase price is significantly lower than fair market value of the property assuming the property was not contaminated. If the property is being offered at a significantly lower price than would normally be expected, the User should attempt to identify the reason(s) for the reduced prices.

Based upon his or her knowledge of the site in connection to the purchase prices and other factors, the User must consider the degree of obviousness of the presence or likely presence of releases or threatened releases at the property.

4.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION WITHIN THE COMMUNITY

The User must take into account any commonly known or reasonably ascertainable information within the local community about the property. If the User is aware of any commonly known or reasonably ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, the User should communicate such information to PHE.

5.0 REGULATORY DATABASE SEARCH

EDR was retained to perform a computerized search of various regulatory databases regarding the subject property and/or surrounding properties. The search radii for each database were based on the recommendations made in ASTM E 1527-13 as minimum search distances.

The records and associated search radii that were reviewed during the computerized database search are presented below. The search included federal, state, local, and Indian Tribal databases. **Table 5-1** provides a summary of the regulatory databases searched by EDR.

Database	Description*	Radius (miles)
EPA NPL	Sites designated for Superfund cleanup	1.00
De-listed NPL	National Priority List deletions	1.00
Proposed NPL	Proposed National Priority List Sites	1.00
NPL Liens	Superfund liens by EPA	1.00
SEMS	Potential CERCLA sites reported to EPA and currently under review	0.50
FEDERAL FACILITY	NPL/BRAC sites in CERCLIS database involving FERRO	0.50
SEMS ARCHIVE	EPA No Further Remedial Action Planned Site	0.50
CORRACTS	Sites with completed or ongoing corrective actions under RCRA	1.00
EPA RCRA-TSDF	Facilities that treat, store, or dispose of hazardous materials	0.50
EPA RCRA-LQG	Sites that generate large quantities of hazardous materials	0.25
EPA RCRA-SQG	Sites that generate small quantities of hazardous materials	0.25
EPA RCRA-VSQG	Sites that generate very small quantities of hazardous materials	0.25
FL HW GEN	Florida state-level hazardous waste generators	0.25
US ENG CONTROLS	EPA sites with pathway elimination methods (caps, liners, etc.)	0.50
US INST CONTROLS	EPA sites with closed case(s) with restrictions	0.50
LUCIS	Land use control information, Navy base realignment & closure	0.50
EPA ERNS	Sites with previous hazardous waste spills	ТР
SHWS	FL State-Funded Action Sites	1.00
SWF/LF	Solid Waste Facilities/Landfill Sites	0.50
FL HWS RE-EVAL	Inactive contaminated sites in FL undergoing reevaluation	1.00
FL HIST HWS	Sites with ongoing remediation or engineering/institutional controls	ТР
FL RGA HWS	Archived/inactive hazardous waste sites	TP
FL SWF/LF	Solid waste disposal/landfill sites	0.50
FL RGA LF	Archived/inactive landfills	ТР
FL LUST	Sites with leaking USTs	0.50
FL HIST LUST	Closed or inactive sites with leaking USTs in FL	0.50
FL RGA LUST	Archived/inactive leaking UST sites	ТР
INDIAN LUST	Sites with leaking USTs on Indian land	0.50
UST	Sites with registered USTs	0.25
FF Tanks	A listing of federal facilities with storage tanks	0.25

Table 5-1. Summary of Regulatory Databases Searched

Potomac-Hudson Engineering, Inc.

Database	Description*	Radius (miles)
INDIAN UST	Sites with registered USTs on Indian land	0.25
FEMA UST	FEMA-owned USTs	
TANKS	Listing of storage tank facilities in FL	
HIST MAJOR FACILITIES	Former sites having large storage capacity of hazardous substances	
FL ENG CONTROLS	FL sites with pathway elimination methods (caps, liners, etc.)	
FL INST CONTROLS	FL sites with closed case(s) with restrictions	0.50
FLVCP	Sites/facilities enrolled in the Voluntary Cleanup Program	0.25
INDIAN VCP	Sites/facilities enrolled in a Voluntary Cleanup Program on Indian land	0.50
U.S. Brownfields	Suspected soil and/or groundwater contamination sites	0.50
FL Brownfields	FL suspected soil and/or groundwater contamination sites	0.50
Debris Region 9	Illegal dump site locations on Torres Martinez Indian Reservation	0.50
ODI	Open dumps inventory (non-compliance disposal facilities)	0.50
INDIAN ODI	Open dumps inventory (non-compliance disposal facilities) of sites on Indian land	0.50
SWRCY	Approved Class B recycling facilities	0.50
FL HIST LF	Solid waste facility directory (landfills)	0.50
CDL	Clandestine drug labs	ТР
US CDL	National Clandestine Laboratory Register	ТР
US HIST CDL	Former clandestine drug labs	ТР
PFAS	PFOS and PFOA-contaminated sites	0.50
DWM CONTAM	Known sites with contamination but currently not actively being	0.50
	remediated due to funding	
LIENS 2	CERCLA lien information	ТР
HMIRS	Hazardous spill incidents reported to DOT	ТР
FLSPILLS	Hazardous material incidents with land contamination as reported to FDEP	ТР
FL SPILLS 90	Chemical, oil, or hazardous substance spills recorded after 1990	ТР
FL SPILLS 80	Chemical, oil, or hazardous substance spills recorded before 1990	ТР
FL Cleanup Sites	FDEP Cleanup Sites – Contamination Locator Map Listings	ТР
DOT OPS	DOT pipeline safety incident and accident data	ТР
DOD	Department of Defense sites	1.00
FUDS	Formerly Used Defense Sites	1.00
CONSENT	Legal settlements that establish responsibility and standards for	1.00
	cleanup of NPL sites	
ROD	Record of decision files for NPL sites	1.00
UMTRA	Uranium Mill Tailings Sites	0.50
SITE INV SITES	Sites listed in the FDEP Site Investigation Section	
US MINES	Mine Master Index File	
MINES MRDS	Mineral Resources Data System	ТР
Abandoned Mines	Abandoned mine sites	0.25

Table 5-1. Summary of Regulatory Databases Searched

Database	Description*	Radius (miles)
TRIS	Facilities that release toxic chemicals to air, water, or land in quantities reportable under SARA	ТР
TSCA	Toxic chemical use or storage (includes PCBs and asbestos)	
FTTS	FIFRA (Federal Insecticide, Fungicide & Rodenticide Act)/ TSCA (Toxic Substances Control Act) Tracking System	ТР
HIST FTTS	Complete case listing of FIFRA/TSCA	ТР
FL Cattle Dipping Vats	Sites with cattle dipping vats	0.25
SSTS	Section 7 Tracking Systems	ТР
ICIS	National enforcement and compliance program support	ТР
PADS	PCB activity database of EPA	ТР
MLTS	Sites which possess or use radioactive material	ТР
RADINFO	Facilities regulated for radiation and radioactivity	ТР
FINDS	Facility information and pointers from EPA	ТР
RAATS	Enforcement actions under RCRA	ТР
RMP	Sites required by EPA to implement Risk Management Plans	ТР
UIC	Sites with underground injection control wells	ТР
FL MANIFESTDEBD	Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells.	0.25
FL DRYCLEANERS	A listing of registered dry cleaners in FL	0.25
Tier 2	Sites having large storage capacity of hazardous substances	0.25
NPDES	National Pollutant Discharge Elimination System	ТР
INDIAN RESERV	Sites that lie within the boundaries of Indian Reservations	1.00
SRCD DRYCLEANERS	State coalition of registered dry cleaners listing	0.50
Priority Cleaners	Priority Ranking List for dry-cleaning facilities	
Coal Gas	Former coal gas sites	1.00
COAL ASH EPA	EPA-listed sites with surface impoundments containing coal ash	0.50
COAL ASH DOE	Power plants that store coal ash in surface ponds	ТР
NPDES	Wastewater Facility Regulation Database	ТР
US Financial Assurance	Past and present hazardous waste TSDFs	ТР
FL Financial Assurance	Financial assurance listings	ТР
FUSRAP	DOE-identified sites with radioactive contamination	1.00
PRP	A listing of verified Potentially Responsible Parties	ТР
US AIRS	EPA air pollution point sources	ТР
FL AIRS	FDEP air pollution point sources	ТР
Asbestos	Asbestos notification listing	ТР
Lead Smelters	Former lead smelter site locations	ТР
2020 Corrective Action	Sites expected to require RCRA corrective action	0.25
EPA Watch List	Sites with suspected or alleged regulatory violations	ТР
PCB Transformer	Registration database for transformers containing PCBs	ТР

Table 5-1	. Summary	of Regulatory	Databases	Searched
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Database	Description*		
EDR Manufactured Gas	Former manufactured gas sites	1.00	
Plants			
EDR Hist Auto Stations	Listing of former gas stations assembled by EDR	0.125	
EDR Historical Cleaners	Listing of former dry cleaners assembled by EDR	0.125	
IHS Open Dumps	A listing of all open dumps located on Indian Land in the U.S.	0.50	
Abandoned Mines	An inventory of land and water impacted by past mining activities	0.25	
Docket HWC	Federal Agency Hazardous Waste Compliance Docket Facilities	ТР	
UXO	A listing of unexploded ordnance site locations	1.00	
ECHO	Compliance and enforcement information for regulated facilities	ТР	
Fuels Program	EPA Fuels Program Registered Listings	0.25	

Table 5-1. Summary of Regulatory Databases Searched

* See Database Reference Guide in EDR report for complete definitions. TP – target property (subject property)

5.1 SUBJECT PROPERTY

The subject property was not identified by EDR Radius Report as being listed in any regulated databases.

5.2 SURROUNDING PROPERTIES

The EDR database search report identified three facilities or locations within 0.25 mile of the subject property that were included in one or more regulatory databases:

- 7-Eleven Store #38118, 2580 Kathleen Road This listing is located on the northeast adjoining property and was identified on the UST database. PHE reviewed available documentation from FDEP's Oculus website and found that this active petroleum fueling facility currently stores petroleum products in two 20,000-gallon USTs containing ethanol E10 and vehicular diesel, reportedly installed in May 2018. The USTs' construction details indicate the tanks are double-walled and equipped with continuous electronic leak detection sensors. An October 15, 2018 inspection report indicated that the facility is incompliance with no listed violations or reports of releases. No discharges or out-of-compliance inspections have been reported at the facility. Based on the apparent lack of contamination present, PHE does not consider this listing to represent a REC for the subject property.
- Griffin Cash Grocery, 2600 Kathleen Road This site was listed in the EDR Hist Auto Database because of its potential to have been a convenience store with a gas station based on its name. However, the site does not appear in any other regulatory database, and no records of spills, releases, or other incidents at this facility were found. Refer to Section 2.3.1, City Directories.
- **2222 West Bella Vista Street** Multiple listings were identified in the EDR Radius Report at this address, under several different but similar facility names. These included:
 - **Owens Brockway Glass-Laroche Industries.** Under this name, the address above was listed in the aboveground storage tank (AST) database due to the former presence of two 1,000-gallon ASTs onsite. One AST contained an ammonia compound, while the other contained a non-specified unregulated substance. Both ASTs were removed in 2001.
 - Former Owens Brockway Glass Container, Inc. Under this name, the address above is listed in the RCRA Non-Generators/No Longer Regulated (RCRA Non-Gen/NLR) database because it was formerly registered as a large quantity generator of hazardous waste. Between 1984 and 2004, the facility was cited by FDEP for a total of 20 violations, mostly related to paperwork and planning issues. No spills, releases, or other environment incidents were noted in any of the violations.
 - **Owens Brockway Glass Container, Inc.** Under this name, the address above is listed in seven different regulatory databases. Of note is the occurrence of a fuel oil spill in 1990, which resulted in soil and groundwater contamination at this location. Initially, approximately 33 tons of contaminated soil were removed, and

several groundwater monitoring wells were installed at the site. After several years of quarterly groundwater monitoring, the site was given a letter of No Further Action from FDEP. Based on data collected during groundwater monitoring, groundwater flow is towards the southeast at this location. Since this facility is south (downgradient) of the subject property, no concerns from groundwater are anticipated.

• *Owens Corning Insulating Systems, LLC.* Under this name, the address above is listed in four databases. The only items pertinent to the subject property are the same as those discussed above.

A total of six additional sites were identified within 0.5 mile of the subject property. Given the distances involved and relative elevation compared to the subject property, they do not appear to be of concern.

A copy of the Radius Map Report from EDR is included in Appendix H.

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6.0 EVALUATION

On the basis of the foregoing interviews, site reconnaissance, records search, and the resulting information assembled, the following RECs and other potential concerns have been identified for the subject property. The findings and recommendations identified in this section are based upon the data gathered herein, subject to the data gaps identified in **Section 6.1**.

6.1 DATA GAPS

Data gaps are defined by ASTM as "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information." Data gaps may be considered significant if they have the potential to substantially affect the outcome of the findings and conclusions of the report. Other data gaps may be considered inconsequential based on a variety of factors, including the type or nature of the site, the availability of alternative sources of information, or the projected usefulness of the missing data. ASTM Phase I protocols require the Environmental Professional preparing the Phase I ESA report to identify data gaps and include a statement regarding the significance of any such gaps.

The following data gap was identified with respect to this Phase I ESA for the subject property:

- Persons with first-hand knowledge of the former agricultural usage or operations at the site could not be identified, and therefore interviews with such persons could not conducted. This data gap is considered to be of moderate significance.
- Sanborn Fire Insurance Maps do not exist for the subject property or immediate surrounding areas. This data gap is considered to be of minor significance.
- Responses from all regulatory agencies for which informational requests were submitted under either the Freedom of Information Act (FOIA) or the Open Public Records Act (OPRA) have not been received at the time of delivery of this report. This data gap is considered to be of moderate significance.

6.2 FINDINGS AND CONCLUSIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 for the property located at 2330 Kathleen Boulevard, Lakeland, Florida, herein referred to as the "subject property" or "site". Any exceptions to, or deletions from, this practice are described in **Sections 1.2** and **6.1** of this report.

6.2.1 RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs)

This assessment has revealed no evidence of RECs in connection with the subject property except for the following:

• The long-term historic usage of the property as row-crop agricultural land (approximately 43 years) presents risk of impact to soil and/or groundwater at the property originating from potential on-site activities such as the regular application of agricultural chemicals, or from discharges associated with on-site storage or handling of these chemicals. Therefore,

impacts of historical herbicides and pesticides on the subject property are likely, and a REC has been identified (REC-1).

Based upon a review of aerial photographs and historical topographic maps, the site contained one or more small structures, possibly a residence and a storage shed or barn. The presence of former buildings presents the possibility that underground storage tanks (USTs) used for heating oil or a septic tank system used for wastewater disposal may have been present onsite. This has been identified as REC-2.

6.2.2 CONTROLLED RECS

No controlled RECs were identified at the subject property.

6.2.3 HISTORICAL RECS

No historical RECs were identified at the subject property.

6.2.4 **DE MINIMIS CONDITIONS**

As indicated previously, large amounts of waste, including household trash, concrete rubble, wood debris, and tires were observed onsite, along with homeless dwellings and other evidence of trespassing. This type of surficial waste is considered *de minimis* from a Phase I ESA perspective and does not represent a REC; however, these materials will need to be properly characterized and disposed of prior to site development.

6.2.5 OUT-OF-SCOPE CONSIDERATIONS

During the preparation of this Phase I ESA, PHE obtained information regarding out-of-scope environmental or health and safety conditions with respect to the subject property. As a value-added service only, PHE has provided a brief summary of these items. Please note, however, that this list is not intended to be comprehensive or exhaustive.

Radon

Polk County has been designated as Radon Zone 2 by the EPA. Sites within Radon Zone 2 have average indoor radon levels greater than 2.0, but less than 4.0, picoCuries/Liter (pCi/L). The designated EPA Action level for radon is 4.0 pCi/L.

The Radius Report provided by EDR contains some baseline radon information for Polk County. The National Radon Database has been developed by the EPA and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 through 1992 and has been supplemented by information collected at private sources, such as universities and research institutions.

A total of 88 sites were tested for radon in Polk County as part of the National Radon Database study. Of these, 11 percent of the samples collected on the first floor living space contained radon levels in excess of the EPA Action level of 4.0 pCi/L (a total of 1 percent of the samples collected exceeded 20 pCi/L). The average radon level for first floor living areas was 1.130 pCi/L.

For basement levels, all of the sites tested contained radon levels less than 4.0 pCi/L. The average concentration of basement radon levels being 0.440 pCi/L.

In addition to the EPA data, PHE reviewed the Radon Protection Map at the Florida Department of Health website for large buildings developed by the Florida Department of Business and Professional Regulation (DBPR). Greater than 5 percent of all such new buildings in Polk County are expected to have annual radon levels above the EPA action level of 4.0 pCi/L of air. The site lies in an area of Polk County where DBPR has determined that passive radon controls are generally recommended for new buildings.

Wetlands

Although no obvious wetland areas were observed, a cursory inspection for wetlands prior to any construction or other site development activities is recommended.

6.3 OPINION OF ENVIRONMENTAL PROFESSIONAL

Based on a review of the information assembled during the preparation of this Phase I ESA, the Environmental Professional provides the following opinions with respect to RECs identified at the property:

- Shallow soil sampling is recommended to inspect for impacts from pesticide application at the site based on its prior use for agricultural purposes.
- A geophysical survey is recommended to inspect for the presence of USTs onsite in accessible areas formerly occupied by structures.

7.0 REFERENCES

- American Society for Testing and Materials (ASTM). 2013. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. E 1527-13. West Conshohocken, PA.
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- EDR. 2020. Database Search (Radius) Report, October 28, 2020.
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- Natural Resource Conservation Service (NRCS), United States Department of Agriculture (USDA). 2020. Web Soil Survey. <u>http://websoilsurvey.nrcs.usda.gov</u>. November 16, 2020.

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United States Environmental Protection Agency. 2005. Standards and Practices for All Appropriate Inquiries; Final Rule. 40 CFR Part 312. November 1, 2005.

United States Geologic Survey, 1944, 1975, 1987, 1994, and 2012. Lakeland and Plant City East, FL Quadrangles. Current and Historical Topographic Maps. Provided by Environmental Data Resources, Inc. October 28, 2020.

APPENDIX A

Figures







APPENDIX G

Photographs



Photo 1: View of natural gas right-of-way onsite.



Photo 2: Typical view of wooded area on south side of site.


Photo 3: View of vegetation near center of site.



Photo 4: View of vegetation on eastern side of site.



Photo 5: Discarded tires onsite.



Photo 6: Concrete rubble and other building debris onsite.



Photo 7: Typical view of trash onsite.



Photo 8: View of homeless shelter onsite.



Photo 9: View of second homeless shelter onsite.



Photo 10: View of pipe observed on south side of site.



Photo 11: View of small ridge on far south side of site.



Photo 12: View of railroad tracks adjacent to the site.

REPORT



DRAFT

Phase I Environmental Site Assessment (ESA) for

Lakeland Highlands Road & Polk Parkway West Lakeland, Polk County, Florida

December 2020



Prepared for: U.S. General Services Administration, Region 4 Public Building Service Southeast Sunbelt Region Atlanta, Georgia

Prepared by:

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DRAFT PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)

FOR

LAKELAND HIGHLANDS ROAD & POLK PARKWAY WEST

CITY OF LAKELAND POLK COUNTY, FLORIDA

"I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR Part 312 Subpart B."

"I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Christophe Br

Christopher Rua, CHMM Project Manager Potomac-Hudson Engineering, Inc.

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DRAFT Phase I Environmental Site Assessment Lakeland Highlands Road & Polk Parkway West, Lakeland, Florida

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EXECUTIVE SUMMARY

Potomac-Hudson Engineering, Inc. (PHE) conducted a Phase I Environmental Site Assessment (ESA) pursuant to the guidelines (E 1527-13) of the American Society for Testing and Materials (ASTM) and the United States Environmental Protection Agency's (EPA) "*Standards and Practices for All Appropriate Inquiries*" (40 *Code of Federal Regulations* [CFR] Part 312). The Phase I ESA includes interviews with key personnel, review of historical documents, maps and aerial photographs, and a site inspection. The purpose of the Phase I ESA is to identify Recognized Environmental Conditions (RECs), including both controlled and historical RECs, at the site resulting from past and present usage or condition of the property.

The subject property covers about 26.45 acres and is located about 0.25-mile northeast of the interchange between the Polk Parkway (State Route [SR] 570) and Lakeland Highlands Road, in south Lakeland, Florida (Figure 1). According to the database maintained by the Polk County Property Appraiser (PCPA), the subject property consists of a portion of a single parcel of land identified by Parcel Identification Number (PIN) 24-28-33- 000000-041010 (Cover Page). A copy of the Property Record Card and aerial photograph obtained from the PCPA is included in Appendix A. This Phase I ESA provides an update of a previous Phase I ESA performed for this property by Madrid Engineering Group, LLC (Madrid) in April 2020.

The subject property set back from Lakeland Highlands Road by about 1,200 feet. Entry into the property is via a chained and locked gate in the southwest corner. The property is currently in use as a pasture for grazing cattle and is enclosed by a continuous barb wire fence.

As mapped on the Lakeland, FL Quadrangle published by the United States Geological Survey (USGS), the subject property is located within Section 33, Township 24 South, Range 28 East in southeastern Lakeland, Polk County, Florida.

According to the PCPA, the current owner of the property is identified as Holloway Park Foundation, Inc., who took ownership in January 2020 from E. Edward Holloway, Jr. who purchased the property in January 1999.

Based upon the information gathered pursuant to the preparation of this report, the following RECs have been identified for the subject property:

• Activities associated with historical strip mining onsite, specifically the use of fuels, including kerosene, as extenders for the froth flotation separation process.

Based upon the information gathered pursuant to the preparation of this report, the following data failure/data gap has been identified for the subject property:

- Responses from all regulatory agencies for which informational requests were submitted under either the Freedom of Information Act (FOIA) or the Open Public Records Act (OPRA) have not been received at the time of delivery of this report. This data gap is considered to be of moderate significance.
- Sanborn Fire Insurance Maps do not exist for the subject property or immediate surrounding areas. This data gap is considered to be of minor significance.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

Potomac-Hudson Engineering, Inc. (PHE) conducted a Phase I Environmental Site Assessment (ESA) pursuant to the guidelines (E 1527-13) of the American Society for Testing and Materials (ASTM) and the United States Environmental Protection Agency's (EPA) "*Standards and Practices for All Appropriate Inquiries*" (40 *Code of Federal Regulations* [CFR] Part 312), commonly referred to as All Appropriate Inquiry (AAI), for the 26.45-acre property located at 26.45 acres, and is located about 0.25 mile northeast of the interchange between the Polk Parkway (State Route [SR] 570) and Lakeland Highlands Road, in south Lakeland, Florida. This Phase I ESA provides an update of a previous Phase I ESA performed for this property by Madrid Engineering Group, LLC (Madrid) in April 2020.

The purpose of an AAI due diligence report is to identify conditions "indicative of releases and threatened releases of hazardous substances, pollutants, contaminants, petroleum and petroleum products, and controlled substances (as defined in 21 United States Code [U.S.C.] 802) on, at, in, or to the subject property." The scope of the definition is intended to include those releases which have occurred onsite, as well as those which have occurred off-site that may migrate onto the subject property.

The purpose of an ASTM Phase I ESA, while similar in scope and nature to an AAI due diligence report, is to determine the existence of "Recognized Environmental Conditions" (RECs) at the subject property. The following is a description of REC as defined in ASTM E 1527-13:

"Recognized Environmental Condition" is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."

The ASTM E 1527-13 document also discusses two specific subsets of RECs, namely Controlled RECs and Historical RECs. Per ASTM:

"Controlled Recognized Environmental Condition" is defined as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

"Historical Recognized Environmental Condition" is defined as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls."

1.2 LIMITATIONS AND EXCEPTIONS OF THE ESA

This Phase I ESA was conducted with the following limitations and exceptions, some of which were established to define the scope of work and focus the assessment:

• Although a limited search for environmental liens and activity use limitations (AULs) for the site was performed by Environmental Data Resources, Inc. (EDR), an exhaustive search for these items was not conducted nor intended as part of this Phase I ESA.

It should be noted that all statements, findings, and conclusions contained in this Phase I ESA are based upon: (i) site conditions at the time of the reconnaissance and inspection of the property; (ii) review of written or illustrated historical documents as available; and (iii) information reported to PHE by others. While there are no indications that the information provided is suspect, PHE does not assume responsibility for errors and omissions in the information assembled to produce this Phase I ESA.

No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with a property, and this practice recognizes reasonable limits of time and cost.

This report has been prepared solely for the benefit of General Services Administration (GSA) (the "User" of this report as defined by ASTM E 1527-13) and may not be relied upon by any other party (except for any designated lending institution) without the written authorization of PHE. PHE assumes no responsibility or liability for third-party use of this Phase I ESA.

2.0 SITE DESCRIPTION

2.1 LOCATION AND GENERAL CHARACTERISTICS

The property (hereafter referred to as the site or subject property) encompasses about 26.45 acres and is located about 0.25-mile northeast of the interchange between the Polk Parkway (SR 570) and Lakeland Highlands Road, in south Lakeland, Florida (Figure 1). According to the database maintained by the Polk County Property Appraiser (PCPA), the subject property consists of a portion of a single parcel of land with the Parcel Identification Number (PIN) 24-28-33-000000-041010. (During a previous Phase I ESA conducted for this site in April 2020, Madrid Engineering Group, LLC [Madrid] noted that the PIN for the subject property was identified as 24-28-33-000000-032010. During the course of this assessment the source parcel that measured about 89 acres was divided into several smaller parcels. One of these parcels [041010] represents the subject property.) This Phase I ESA provides an update of a previous Phase I ESA performed for this property by Madrid in April 2020.

The subject property is set back from Lakeland Highlands Road by about 1,200 feet. Entry into the property is via a chained and locked gate in the southwest corner. The property is currently in use as a pasture for grazing cattle and is enclosed by a continuous barb wire fence.

According to the PCPA, the current owner of the property is identified as Holloway Park Foundation, Inc., who took ownership in January 2020 from Edward E. Holloway, Jr. who purchased the property in January 1999.

The location of the site is depicted on the most current 7.5-minute series United States Geologic Survey (USGS) Topographic Map (2012) as shown in **Figure 1**. A recent (2017) aerial photograph for the site is provided as **Figure 2**, and a copy of Polk County parcel map for the site is attached as **Figure 3**. Figures 1 through 3 are provided in **Appendix A** of this report.

2.2 PHYSICAL SETTING

2.2.1 TOPOGRAPHY AND HYDROLOGY

The site is located on the Lakeland USGS 7.5-minute series Quadrangle (2012), depicted at an approximate scale of 1:24,000 (1 inch = 2,000 feet) as shown in Figure 1 in **Appendix A**. The map provides a regional overview of the topography in the vicinity of the subject property. Additional site-specific topographic information was found in the Radius Map Report for the site provided by EDR as presented in **Appendix H**. According to the Radius Map Report, the center of the subject property is at an elevation of approximately 113 feet above mean sea level (msl). The ground surface is somewhat uneven, with low and smooth relief.

The general hydrogeology of Polk County includes an unconfined surficial aquifer separated from the Floridan aquifer by the Hawthorn Group. The surficial aquifer is recharged by rainfall, can yield small to moderate amounts of water to small diameter wells, and is generally considered to be non-potable. The Floridan Aquifer may reach 2,000 feet in thickness and is the primary source of public water supply.

The direction of the surficial aquifer usually follows the topography of the land and flows toward surface bodies of water. At the time of the inspection, there was no standing water in the retention pond, or in drainage ditches near the subject property. The depth to the prevailing water table, along with the direction of groundwater flow in the surficial aquifer could not be determined within the context of this assessment.

Regarding floodplains onsite, the following information was excerpted from a letter written by Vanasse Hangen Brustlin, Inc. (VHB) to The Molasky Group, dated April 17, 2020:

"According to FEMA Flood Panel 12105C0320G dated December 22, 2016, portions of the project site fall within Zone A, indicating a 1 percent annual chance of flood. A Base (100-Year) Flood Elevation (BFE) has not been established for this special flood hazard area (SFHA).

Based on surrounding watershed model data provided by the Southwest Florida Water Management District, the flood elevation is approximately 118.40 ft. (NAVD 1988). Topographic survey for the area indicates that the lowest existing grade on the project site is 129.00 ft. (NAVD 1988). It does not appear the SFHA currently shown for the project site matches the existing topography. Therefore, it is reasonable to assume that project area is outside the SFHA.

To remove the project site from the FEMA SFHA, we will request a MT-2 Letter of Map Revision (LOMR) through FEMA. As the SFHA does not have an established BFE, VHB will need to complete further research and develop a hydrologic and hydraulic model for this area. The model and associated application package will be reviewed by FEMA and, once approved, the map revision will go into effect."

It is likely that the earth-moving activities at the site caused by the former strip-mining activities has resulted in evolving topography and hydrology of the land surface in this area.

2.2.2 SOILS

Soils information was provided by the Natural Resources Conservation Service's (NRCS) Web Soil Survey (WSS). The WSS is a web-based soil data clearinghouse that contains data compiled from the original hardcopy soil surveys but that have been modified slightly for consistency across county lines. For this site, the soils information presented in WSS originated from the United States Department of Agriculture's (USDA's) *Soil Survey of Polk County, Florida* (1990).

According to these sources, the following soil map units are present on the site:

- Arents Water Complex
- Neilhurst Sand, 1 to 5% slopes
- Haplaquents clay

According to the *Soil Conservation Service SSURGO data*, the Haplaquents clay soils are hydric (i.e., those soils typically found in wetlands). In addition, these soils are characteristic as the result of strip-mining activities.

2.3 HISTORICAL PROPERTY USE

The historical uses of the site were determined through a review of historical aerial photographs, historical topographic maps, and a chain-of-title search, as well as an interview with the current property owner. City Directory information for the site was also utilized to the extent possible, as well as information obtained from a variety of other sources. The results of these searches are discussed below.

2.3.1 CITY DIRECTORY REVIEW

City directories are public reference materials that contain information concerning property ownership, usage, and other details (e.g., telephone number, the owner's occupation, etc.). They are similar to a telephone directory but typically contain greater amounts of information. They are usually produced annually or semi-annually and are arranged by business or resident name, type of business, and/or street address. These can be valuable resources in determining the prior use or ownership of a property.

EDR was retained to perform a review of commonly known and readily available city directory resources for the subject property address and immediately adjacent addresses and provide an abstract of the findings.

The Subject Property is mapped within the present-day city limits of Lakeland, Florida. Copies of the City Directory for Lakeland Highlands Road (Boulevard) date back to 1984. As the property is land-locked and does not have a formal address and given that the past land use includes extensive strip mining, the property itself does not appear as a listing in the City Directory.

No other adjacent uses of potential environmental concern were identified in the EDR City Directory Abstract.

A copy of the City Directory Abstract provided by EDR is included in Appendix B.

2.3.2 HISTORICAL MAP REVIEW

2.3.2.1 Sanborn Maps

As stated earlier, EDR conducted a search for Sanborn Fire Insurance Maps which covered the subject property; however, no such maps exist for the subject property or immediately surrounding area.

A copy of the Sanborn Map Report indicating *No Coverage* for the site is included in **Appendix** C.

2.3.2.2 Topographic Maps

Historical and current topographic maps for the site were provided by EDR for the years 1944, 1949, 1950, 1972, 1975, 1987, 1994, and 2012 (Lakeland Quadrangle; 7.5-minute series). A copy of the current (2012) topographic map is provided as Figure 1 in **Appendix A**; copies of all topographic maps are provided in **Appendix D**.

Limited information about the subject property can be obtained from the historical topographic maps due to the small size of the site and the limited level of detail included in a typical topographic map.

All of the topographic maps show extensive surface mining has occurred at the subject property. EDR reports the elevation at the subject property is 113 feet above msl.

2.3.3 AERIAL PHOTOGRAPH REVIEW

Copies of historical black-and-white aerial photographs for the site were provided by EDR for the years 1941, 1952, 1957, 1960, 1968, 1971, 1977, 1980, and 1993 (all at scale: 1 inch = 500 feet); color aerial photographs for the site were also provided by EDR for the years 1999, 2007, 2010, 2013, and 2017 (all at scale: 1 inch = 500 feet). Copies of all aerial photographs provided by EDR are included in **Appendix E**.

In the 1941 aerial photograph the subject property is vacant and generally undeveloped. However, there is a drainage canal that has been dug along the eastern portion of the property. Historical phosphate mining with typical dragline windrows are present to the east. Lakeland Highlands Road is present about 1,200 feet to the west.

The 1952 aerial photograph shows the entirety of the subject property has been subjected to strip mining leaving a substantial area of open water and discontinuous windrows that are oriented generally north – south. It appears that some waste clays may have been deposited in some areas of this site. There is a railspur about 1,000 feet north of the site; the rail line extends along the eastern side of Lakeland Highlands Boulevard to a rail loading facility.

The 1957 aerial photograph shows the windrows have been smoothed and flattened somewhat. It appears that sand tailings deposits are focused at the northwest portion of the property.

In the 1968 aerial photograph, site grading has allowed vegetation to grow over most of the southern portion of the property. The rail loading facility has been dismantled, along with the rail line.

The 1971 aerial photograph shows that most of the property has been re-cleared of vegetation, leaving a thick stand of growth along the eastern edge. Several single-track vehicle pathways are present on the property and surrounding ground.

No significant changes to the site are noticeable on the 1977, 1980, and 1993 aerial photographs. In the 1993 aerial photograph, the shopping plaza 0.5 mile to the north has been built. About 1,000 feet south, a surface road has been built along the right-of-way of the future Polk Parkway.

The 1999 aerial photograph shows vegetation along the eastern edge of the subject property has been re-cleared; this earthwork has resulted in what would be noted as a small pond during the site inspection. Construction is underway for the Polk Parkway (SR 570).

In the 2007 aerial photograph, site re-grading has left a bare stripe down the central axis of the property. Sam's Club has been constructed adjacent to the southwest corner. Lowe's Home Improvement has been built on the west side of Lakeland Highlands Boulevard.

Minimal changes to the property are visible in the 2010 and 2013 aerial photographs.

In the 2017 aerial photograph, there is generally less vegetation present on the subject property.

The aerial photograph review confirmed the prior use of the site for phosphate mining dates back to the period between 1941 and 1952 followed by several decades of re-shaping and re-vegetation. Certain types of phosphate mining historically utilized various fuel oils, such as kerosene, as extenders in the froth flotation separation process. Once the phosphate was removed, the sand

tailings and clay slimes were placed back together in the mined area. Therefore, the former phosphate strip mining onsite has been identified as a REC.

2.3.4 **REGULATORY AGENCY FILE REVIEW**

Freedom of Information Act (FOIA) requests were sent to various regulatory agencies at the local, state, and federal levels in order to obtain additional information concerning the subject property. The agencies contacted include:

- *Polk County, FL*. No response has been received.
- *Florida Department of Environmental Protection.* No records found.
- U.S. Environmental Protection Agency, Region 4. No response has been received.

In addition to the above, EDR also searched for building department records at the following agencies:

- City of Winter Haven, Building and Licensing Department
- City of Lakeland, Building Inspection Division
- Polk County, Building Division.

No records pertaining to the subject property were found at these agencies.

2.3.5 ENVIRONMENTAL LIENS

EDR was retained to obtain a copy of the current property deed and identify any environmental liens or AULs at the subject property as per AAI requirements.

No environmental liens or AULs were identified by EDR for the site (please refer to Section 4.1 for additional information and limitations regarding this search). The current property deed indicates the property was purchased from E. Edward Holloway, Jr. and Mary Ann Holloway by Holloway Park Foundation, Inc. on March 16, 2020.

Copies of both the Environmental Lien Report and the current property deed are provided in Appendix F.

2.3.6 USER-PROVIDED INFORMATION

PHE was provided with the following items from the User of this report:

- Phase I Environmental Site Assessment, prepared by Madrid Engineering Group, Inc., dated April 2020
- Cultural Resources Study for the Proposed Lakeland VA Property (Parcel D), Lakeland, Florida, prepared by SEARCH, April 29, 2020
- Letter from VHB to The Molasky Group regarding FEMA Flood Zones, dated April 17, 2020
- Legal Description and Tax Parcel Maps

Any pertinent information provided in the above documents has been incorporated into this Phase I ESA report, where applicable and appropriate.

3.0 SITE RECONNAISSANCE

3.1 SITE VISIT

PHE personnel inspected the subject property on November 9, 2020. The weather at the time of the site visit was cloudy and drizzly with a temperature around 80 degrees Fahrenheit.

The subject property is generally rectangular in shape, oriented in a north-south direction, and is bounded by a barb wire fence. Access to the property was via a locked gate in the southwestern corner of the site, opposite a retail development.

About 20 to 30 cattle were present on the property at the time of the site inspection. There was no boundary, border, or fence line along the western edge of the subject property, allowing cattle to range westward to the edge of the right-of-way of Lakeland Highlands Road. In the south-central portion of the property there was a wood corral used to load and handle cattle.

A long sandy path had been cleared and grubbed over the length of the property. This path extended from gate to gate and appeared to provide access onto the neighboring property to the north. Most of the ground surface on the subject property was covered with ankle-high to knee-high grasses along with areas of mowed grass. Areas of bare sandy soils were located across the northern portions of the site, as well as a large pile of sand. Standing water, along with rushes and sedges, were observed along west-central portions of the site, indicative of hydric soils and potential wetland areas.

With the exception of the retail shopping center (Sam's Club) and parking lot to the southwest, immediately surrounding property in all directions is undeveloped. To the west of the site is a wooded area with trails associated with Holloway Park. Agricultural lands lie to the north and east. Further to the east is Lakelands Highway Boulevard.

Selected photographs of the site taken during the site inspection are included in Appendix G.

3.2 INTERVIEWS

The following was excerpted from the Madrid Phase I ESA (April 2020):

" [T]he current owner is not aware of any known current or historical environmental aspects of the subject property. They did disclose that during historical phosphate mining operations, kerosene was used as a "flotation agent". In Madrid's understanding, kerosene was used in beneficiation plants to help in the separation of (waste) clay from sand-size fraction of the main feed line. Kerosene may have been part of the fluids used to pump sediments back to the mine cut to help re-level the ground surface. This was an industry practice. Several studies have been conducted by research-based institutions to investigate long-term effects, if any that the use of kerosene as a flotation agent may have had on post-mining environmental quality of a mine cut, with little practical resolution."

4.0 USER RESPONSIBILITIES

As stated earlier, the designated "User" of this report is the U.S. GSA, the prospective purchaser of the property. Per ASTM guidelines, certain aspects of a Phase I ESA are designated as the "User's Responsibility" and therefore are excluded from the scope of work conducted by the consultant (unless otherwise requested by the User). Items designated as User's Responsibility include potentially confidential information (such as property purchase price); information that may be otherwise collected as part of a property transaction (e.g., chain-of-title documentation); or specific information for which the User may be privy to as part of his or her knowledge of the site or surrounding community. It is the User's responsibility to convey any specific information or knowledge he or she may possess about the subject property pursuant to the items listed below to the Environmental Professional preparing this report.

Items defined as User's Responsibility per ASTM E 1527-13 are described below.

4.1 ENVIRONMENTAL LIENS AND ACTIVITY USE LIMITATIONS

An exhaustive search for environmental liens or AULs (e.g., deed restriction) for the property was not conducted. Environmental liens and AULs are typically uncovered during routine property transaction processes, such as performing a review of the current property deed and compiling a chain-of-title.

Although not required by ASTM as indicated, PHE conducted a limited search for environmental liens on the property through EDR. EDR also provided PHE with a copy of the current property deed. Based on a cursory review, no environmental liens or AULs were identified for the property.

Both the Environmental Liens Search Report and current property deed are included in **Appendix F** of this report.

4.2 SPECIALIZED OR ACTUAL KNOWLEDGE OR EXPERIENCE

PHE assumes that all specialized and/or actual knowledge of the User regarding the subject property has been made known to PHE. The User bears responsibility to provide all commonly known or reasonably ascertainable information obtained by the User to PHE.

4.3 EVALUATION OF PURCHASE PRICE

The User is responsible for identifying the appropriate root cause if the subject property's purchase price is significantly lower than fair market value of the property assuming the property was not contaminated. If the property is being offered at a significantly lower price than would normally be expected, the User should attempt to identify the reason(s) for the reduced prices.

Based upon his or her knowledge of the site in connection to the purchase prices and other factors, the User must consider the degree of obviousness of the presence or likely presence of releases or threatened releases at the property.

4.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION WITHIN THE COMMUNITY

The User must take into account any commonly known or reasonably ascertainable information within the local community about the property. If the User is aware of any commonly known or reasonably ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, the User should communicate such information to PHE.

5.0 REGULATORY DATABASE SEARCH

EDR was retained to perform a computerized search of various regulatory databases regarding the subject property and/or surrounding properties. The search radii for each database were based on the recommendations made in ASTM E 1527-13 as minimum search distances.

The records and associated search radii that were reviewed during the computerized database search are presented below. The search included federal, state, local, and Indian Tribal databases. **Table 5-1** provides a summary of the regulatory databases searched by EDR.

Database	Description*	Radius (miles)
EPA NPL	Sites designated for Superfund cleanup	1.00
De-listed NPL	National Priority List deletions	1.00
Proposed NPL	Proposed National Priority List Sites	1.00
NPL Liens	Superfund liens by EPA	1.00
SEMS	Potential CERCLA sites reported to EPA and currently under review	0.50
FEDERAL FACILITY	NPL/BRAC sites in CERCLIS database involving FERRO	0.50
SEMS ARCHIVE	EPA No Further Remedial Action Planned Site	0.50
CORRACTS	Sites with completed or ongoing corrective actions under RCRA	1.00
EPA RCRA-TSDF	Facilities that treat, store, or dispose of hazardous materials	0.50
EPA RCRA-LQG	Sites that generate large quantities of hazardous materials	0.25
EPA RCRA-SQG	Sites that generate small quantities of hazardous materials	0.25
EPA RCRA-VSQG	Sites that generate very small quantities of hazardous materials	0.25
FL HW GEN	Florida state-level hazardous waste generators	0.25
US ENG CONTROLS	EPA sites with pathway elimination methods (caps, liners, etc.)	0.50
US INST CONTROLS	EPA sites with closed case(s) with restrictions	0.50
LUCIS	Land use control information, Navy base realignment & closure	0.50
EPA ERNS	Sites with previous hazardous waste spills	ТР
SHWS	FL State-Funded Action Sites	1.00
SWF/LF	Solid Waste Facilities/Landfill Sites	0.50
NJ HWS RE-EVAL	Inactive contaminated sites in NJ undergoing reevaluation	1.00
NJ HIST HWS	Sites with ongoing remediation or engineering/institutional controls	ТР
FL RGA HWS	Archived/inactive hazardous waste sites	ТР
FL SWF/LF	Solid waste disposal/landfill sites	0.50
FL RGA LF	Archived/inactive landfills	ТР
FL LUST	Sites with leaking USTs	0.50
NJ HIST LUST	Closed or inactive sites with leaking USTs in NJ	0.50
FL RGA LUST	Archived/inactive leaking UST sites	ТР
INDIAN LUST	Sites with leaking USTs on Indian land	0.50
UST	Sites with registered USTs	0.25
FF Tanks	A listing of federal facilities with storage tanks.	0.25

Table 5-1. Summary of Regulatory Databases Searched

Potomac-Hudson Engineering, Inc.

Database	Description*	Radius (miles)
INDIAN UST	Sites with registered USTs on Indian land	0.25
FEMA UST	FEMA-owned USTs	0.25
TANKS	Listing of storage tank facilities in FL	0.25
HIST MAJOR FACILITIES	Former sites having large storage capacity of hazardous substances	0.50
FL ENG CONTROLS	FL sites with pathway elimination methods (caps, liners, etc.)	0.50
FL INST CONTROLS	FL sites with closed case(s) with restrictions	0.50
FLVCP	Sites/facilities enrolled in the Voluntary Cleanup Program	0.25
INDIAN VCP	Sites/facilities enrolled in a Voluntary Cleanup Program on Indian land	0.50
U.S. Brownfields	Suspected soil and/or groundwater contamination sites	0.50
FL Brownfields	FL suspected soil and/or groundwater contamination sites	0.50
Debris Region 9	Illegal dump site locations on Torres Martinez Indian Reservation	0.50
ODI	Open dumps inventory (non-compliance disposal facilities)	0.50
INDIAN ODI	Open dumps inventory (non-compliance disposal facilities) of sites on Indian land	0.50
SWRCY	Approved Class B recycling facilities	0.50
NJ HIST LF	Solid waste facility directory (landfills)	0.50
CDL	Clandestine drug labs	ТР
US CDL	National Clandestine Laboratory Register	ТР
US HIST CDL	Former clandestine drug labs	ТР
PFAS	PFOS and PFOA-contaminated sites	0.50
DWM CONTAM	Known sites with contamination but currently not actively being remediated due to funding	0.50
LIENS 2	CERCLA lien information	ТР
HMIRS	Hazardous spill incidents reported to DOT	ТР
FLSPILLS	Hazardous material incidents with land contamination as reported to FDEP	ТР
FL SPILLS 90	Chemical, oil, or hazardous substance spills recorded after 1990	ТР
FL SPILLS 80	Chemical, oil, or hazardous substance spills recorded before 1990	ТР
FL Cleanup Sites	FDEP Cleanup Sites – Contamination Locator Map Listings	ТР
DOT OPS	DOT pipeline safety incident and accident data	ТР
DOD	Department of Defense sites	1.00
FUDS	Formerly Used Defense Sites	1.00
CONSENT	Legal settlements that establish responsibility and standards	1.00
	for cleanup of NPL sites	
ROD	Record of decision files for NPL sites	1.00
UMTRA	Uranium Mill Tailings Sites	0.50
SITE INV SITES	Sites listed in the FDEP Site Investigation Section	0.50
US MINES	Mine Master Index File	0.25
MINES MRDS	Mineral Resources Data System	TP
Abandoned Mines	Abandoned mine sites	0.25

Table 5-1. Summary of Regulatory Databases Searched

Potomac-Hudson Engineering, Inc.

Database	Description*	Radius (miles)
TRIS	Facilities that release toxic chemicals to air, water, or land	ТР
ΤϚϹΑ	Toxic chemical use or storage (includes PCBs and asbestos)	ТР
FTTS	FIERA (Federal Insecticide, Fungicide & Rodenticide Act)/	ТР
	TSCA (Toxic Substances Control Act) Tracking System	
HIST FTTS	Complete case listing of FIFRA/TSCA	ТР
FL Cattle Dipping Vats	Sites with cattle dipping vats	0.25
SSTS	Section 7 Tracking Systems	ТР
ICIS	National enforcement and compliance program support	ТР
PADS	PCB activity database of EPA	ТР
MLTS	Sites which possess or use radioactive material	ТР
RADINFO	Facilities regulated for radiation and radioactivity	ТР
FINDS	Facility information and pointers from EPA	ТР
RAATS	Enforcement actions under RCRA	ТР
RMP	Sites required by EPA to implement Risk Management Plans	ТР
UIC	Sites with underground injection control wells	ТР
NJ/NY MANIFESTDEBD	Ethylene dibromide (EDB), a soil fumigant, that has been detected in	0.25
	drinking water wells.	
FL DRYCLEANERS	A listing of registered dry cleaners in FL	0.25
Tier 2	Sites having large storage capacity of hazardous substances	0.25
NPDES	National Pollutant Discharge Elimination System	ТР
INDIAN RESERV	Sites that lie within the boundaries of Indian Reservations	1.00
SRCD DRYCLEANERS	State coalition of registered dry cleaners listing	0.50
Priority Cleaners	Priority Ranking List for dry-cleaning facilities	
Coal Gas	Former coal gas sites	1.00
COAL ASH EPA	EPA-listed sites with surface impoundments containing coal ash	0.50
COAL ASH DOE	Power plants that store coal ash in surface ponds	ТР
NPDES	Wastewater Facility Regulation Database	ТР
US Financial Assurance	Past and present hazardous waste TSDFs	ТР
FL Financial Assurance	Financial assurance listings	ТР
FUSRAP	DOE-identified sites with radioactive contamination	1.00
PRP	A listing of verified Potentially Responsible Parties	ТР
US AIRS	EPA air pollution point sources	ТР
FL AIRS	FDEP air pollution point sources	ТР
Asbestos	Asbestos notification listing	ТР
Lead Smelters	Former lead smelter site locations	ТР
2020 Corrective Action	Sites expected to require RCRA corrective action	0.25
EPA Watch List	Sites with suspected or alleged regulatory violations	ТР
PCB Transformer	Registration database for transformers containing PCBs	ТР

Table 5-1. Summary of Regulatory Databases Searched

Database	Description*	Radius (miles)
EDR Manufactured Gas	Former manufactured gas sites	1.00
Plants		
EDR Hist Auto Stations	Listing of former gas stations assembled by EDR	0.125
EDR Historical Cleaners	Listing of former dry cleaners assembled by EDR	0.125
IHS Open Dumps	A listing of all open dumps located on Indian Land in the U.S.	0.50
Abandoned Mines	An inventory of land and water impacted by past mining activities	0.25
Docket HWC	Federal Agency Hazardous Waste Compliance Docket Facilities	ТР
UXO	A listing of unexploded ordnance site locations	1.00
ECHO	Compliance and enforcement information for regulated facilities	TP
Fuels Program	EPA Fuels Program Registered Listings	0.25

Table 5-1. Summary of Regulatory Databases Searched

* See Database Reference Guide in EDR report for complete definitions. TP – target property (subject property)

5.1 SUBJECT PROPERTY

The subject property was not identified by EDR Radius Report as being listed in any regulated databases.

5.2 SURROUNDING PROPERTIES

The EDR database search report identified three facilities or locations within 0.25 mile of the subject property that were included in one or more regulatory databases:

- Sam's Club #4794, 3530 Lakeland Highlands Road This listing is located on the southwest adjoining property and was identified in five regulatory databases:
 - Underground Storage Tank (UST). The facility is included in this database because of the presence of two USTs onsite: a 20,000-gallon gasoline tank and a 20,000-gallon diesel tank, both of which were installed in 2007.
 - *Financial Assurance.* EPA requires UST owners and operators have the ability to pay for cleanup or third-party liability compensation. Therefore, Sam's Club is required to meet this obligation.
 - *Very Small Generator Quantity Generator (VSQG)*. A VSQG is an entity that generates 220 pounds or less of hazardous waste per month. As a retail pharmacy, certain pharmaceuticals are considered hazardous waste when they are no longer usable.
 - Leaking Underground Storage Tanks (LUST) and Tanks. This property is included in these databases as the result of soil and groundwater contamination previously discovered at the site. On September 5, 2002, during excavation activities associated with development of the property, a petroleum odor was observed. Subsequent soil and groundwater sampling revealed the presence of petroleum hydrocarbons. Additional sampling revealed additional detections of

these compounds, but at concentrations below action levels. The site subsequently received a letter of No Further Action required.

- Lakeland City-Glendale WWTF, 1825 Glendale Street City of Lakeland Wastewater Treatment Facility is listed in nine databases, including those indicative of site contamination, and is located about 0.25 mile west of the subject property. Based on its location and elevation, it is not expected that contamination from this site would impact the subject property.
- A Z Products, 2525 S. Combee Road This is a site with confirmed soil and groundwater contamination. However, it is located just under 1 mile from the site and is not expected to be a concern.

A copy of the Radius Map Report from EDR is included in Appendix H.

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6.0 EVALUATION

On the basis of the foregoing interviews, site reconnaissance, records search, and the resulting information assembled, the following RECs and other potential concerns have been identified for the subject property. The findings and recommendations identified in this section are based upon the data gathered herein, subject to the data gaps identified in **Section 6.1**.

6.1 DATA GAPS

Data gaps are defined by ASTM as "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information." Data gaps may be considered significant if they have the potential to substantially affect the outcome of the findings and conclusions of the report. Other data gaps may be considered inconsequential based on a variety of factors, including the type or nature of the site, the availability of alternative sources of information, or the projected usefulness of the missing data. ASTM Phase I protocols require the Environmental Professional preparing the Phase I ESA report to identify data gaps and include a statement regarding the significance of any such gaps.

The following data gap was identified with respect to this Phase I ESA for the subject property:

- Sanborn Fire Insurance Maps do not exist for the subject property or immediate surrounding areas. This data gap is considered to be of minor significance.
- Responses from all regulatory agencies for which informational requests were submitted under either the Freedom of Information Act (FOIA) or the Open Public Records Act (OPRA) have not been received at the time of delivery of this report. This data gap is considered to be of moderate significance.

6.2 FINDINGS AND CONCLUSIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 for the Lakeland Highlands Property, Lakeland, Florida, herein referred to as the "subject property" or "site". Any exceptions to, or deletions from, this practice are described in **Sections 1.2** and **6.1** of this report.

6.2.1 RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs)

This assessment has revealed no evidence of RECs in connection with the subject property except for the following:

• Activities associated with historical strip mining onsite has been identified as a REC for the subject property, specifically the use of fuels as extenders for the froth flotation separation process. The use of kerosene onsite for this purpose was confirmed during an interview with the current proper owner previously performed by Madrid. Additionally, the concern is elevated given that petroleum compounds were found in soil and groundwater on an adjacent parcel to the southwest that was formerly a part of the same strip mine operation.

6.2.2 CONTROLLED RECS

No controlled RECs were identified at the subject property.

6.2.3 HISTORICAL RECS

No historical RECs were identified at the subject property.

6.2.4 **DE MINIMIS CONDITIONS**

No de minimis conditions were observed.

6.2.5 OUT-OF-SCOPE CONSIDERATIONS

During the preparation of this Phase I ESA, PHE obtained information regarding out-of-scope environmental or health and safety conditions with respect to the subject property. As a value-added service only, PHE has provided a brief summary of these items. Please note, however, that this list is not intended to be comprehensive or exhaustive.

Radon

Polk County has been designated as Radon Zone 2 by the EPA. Sites within Radon Zone 2 have average indoor radon levels greater than 2.0, but less than 4.0, picoCuries/Liter (pCi/L). The designated EPA Action level for radon is 4.0 pCi/L.

The Radius Report provided by EDR contains some baseline radon information for Polk County. The National Radon Database has been developed by the EPA and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 through 1992 and has been supplemented by information collected at private sources, such as universities and research institutions.

A total of 88 sites were tested for radon in Polk County as part of the National Radon Database study. Of these, 11 percent of the samples collected on the first floor living space contained radon levels in excess of the EPA Action level of 4.0 pCi/L (a total of 1 percent of the samples collected exceeded 20 pCi/L). The average radon level for first floor living areas was 1.130 pCi/L.

For basement levels, all of the sites tested contained radon levels less than 4.0 pCi/L. The average concentration of basement radon levels being 0.440 pCi/L.

In addition to the EPA data, PHE reviewed the Radon Protection Map at the Florida Department of Health website for large buildings developed by the Florida Department of Business and Professional Regulation (DBPR). Greater than 5 percent of all such new buildings in Polk County are expected to have annual radon levels above the US EPA action level of 4.0 pCi/L of air. The site lies in an area of Polk County where DBPR has determined that passive radon controls are generally recommended for new buildings.

Wetlands

At least one moderately-sized wetland area was observed in the west-central portion of the site, based on cursory observations made during the site inspections. These areas were broad grassy

areas that may have been used as ponds. A formal wetland delineation is recommended prior to site development.

6.3 OPINION OF ENVIRONMENTAL PROFESSIONAL

Based on a review of the information assembled during the preparation of this Phase I ESA, the Environmental Professional provides the following opinions with respect to RECs identified at the property:

• Soil sampling is recommended to inspect for impacts from petroleum application at the site based on its prior use for phosphate strip mining. Groundwater sampling may also be necessary based on the results of soil sampling.

7.0 REFERENCES

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United States Geologic Survey, 1944, 1949, 1950, 1972, 1975, 1987, 1994, and 2012. Lakeland, FL Quadrangle. Current and Historical Topographic Maps. Provided by Environmental Data Resources, Inc. October 28, 2020.

APPENDIX A

Figures






APPENDIX G

Photographs



Photo 1: Typical view of site, looking north.



Photo 2: Typical view of site, looking east.



Photo 3: View of cattle onsite.



Photo 4: View at north edge of site, looking south.



Photo 5: View of main cattle area, looking south.



Photo 6: View of sand pile onsite.



Photo 7: View of corral onsite.



Photo 8: View of low-lying area onsite.

APPENDIX H

Radius Map Report

REPORT



DRAFT Phase I Environmental Site Assessment (ESA) for

Spring Road and Polk Parkway Lakeland, Polk County, Florida

December 2020



Prepared for: U.S. General Services Administration, Region 4 Public Building Service Southeast Sunbelt Region Atlanta, Georgia

Prepared by:

Potomac-Hudson Engineering, Inc. 77 Upper Rock Circle, Suite 302, Rockville, Maryland 20850 Tel 301.907.9078 Fax 301.907.3446 www.phe.com



DRAFT PHASE I ENVIRONMENTAL SITE ASSESSMENT (ESA)

FOR

SPRING ROAD AND POLK PARKWAY

CITY OF LAKELAND POLK COUNTY, FLORIDA

"I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR Part 312 Subpart B."

"I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Christophe Br

Christopher Rua, CHMM Project Manager Potomac-Hudson Engineering, Inc.

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EXECUTIVE SUMMARY

Potomac-Hudson Engineering, Inc. (PHE) conducted a Phase I Environmental Site Assessment (ESA) pursuant to the guidelines (E 1527-13) of the American Society for Testing and Materials (ASTM) and the United States Environmental Protection Agency's (EPA) "*Standards and Practices for All Appropriate Inquiries*" (40 *Code of Federal Regulations* [CFR] Part 312). The Phase I ESA includes interviews with key personnel, review of historical documents, maps and aerial photographs, and a site inspection. The purpose of the Phase I ESA is to identify Recognized Environmental Conditions (RECs), including both controlled and historical RECs, at the site resulting from past and present usage or condition of the property. This Phase I ESA provides an update of a previous Phase I ESA performed for this property by Terracon Consultants, Inc. (Terracon) in April 2020.

The subject property is located at Spring Road, Auburndale, Polk County, Florida. The subject property is a 16.36-acre portion of the 59.74-acre property identified as Polk County Parcel ID No. 25-27-29-000000-012010. The site is located north of Braddock Road and is bound by Spring Road on the west side and SunTrax Boulevard on the east side. The eastern portion of the subject property is currently used by the City of Auburndale as a treated wastewater spray field and a rapid infiltration pond. The western portion of the property is cleared, grass-covered land.

The subject property is located in a mixed-use residential and open space area of Auburndale, Florida. The subject property is bound on the north by grassy fields and undeveloped areas; on the east by open fields followed by a residential development; on the south by a second infiltration pond, followed by Spring Road and a residential development; and on the west by Polk Parkway, followed by a wooded, undeveloped property. PHE did not identify environmental issues at adjoining or nearby properties that are believed to present a REC at the subject property.

Based on the records search, site reconnaissance, and interviews, the site existed as undeveloped land since 1941 until at least 1952 with a road transecting the northern portion of the site from east to west. Citrus groves were present throughout the site from 1958 until 1993. In 1999, rows of citrus trees were only present in the easternmost portion of the site. The potential accumulation of agrichemicals, particularly arsenic, attributed to previous on-site routine grove maintenance between 1958 and 2010 and the potential for surficial soil impact represents a REC to the site. By 1999, a rapid infiltration pond was present in the eastern portion of the site for the City of Auburndale Regional Wastewater Treatment Facility (WWTF). The on-site spray field and rapid infiltration ponds for the City of Auburndale WWTF are permitted through the Florida Department of Environmental Protection (FDEP).

Two groundwater monitor wells with above grade steel protectors were observed in the northeast portion of the site, and two groundwater monitor wells with above grade steel protectors were observed in the northwest portion of the site. At both locations, the top to the steel casing of one of the monitor wells was removed, and the 2-inch diameter PVC well casing was visible with water close to the top of the well casing. These monitor wells coincide with the monitor wells/abandoned monitor wells for the City of Auburndale Regional WWTF and are not considered RECs.

The report did not identify the subject property on the databases researched. The Environmental Data Resources (EDR) report identified several off-site properties within the minimum ASTM

search distances. Based on our review of available public records, PHE does not consider the listings to be potential sources of soil, groundwater, or vapor impact to the subject property. Therefore, PHE does not consider the listed sites to be RECs for the subject property.

Based upon the information gathered pursuant to the preparation of this report, the following REC has been identified for the subject property:

• Citrus groves were present throughout the site from 1958 until at least 1993. In 1999, rows of citrus trees were only present in the easternmost portion of the site. The potential accumulation of agrichemicals, particularly arsenic, attributed to previous on-site routine grove maintenance between 1958 and 2010, and the potential for surficial soil impact represents a REC to the site.

Based upon the information gathered pursuant to the preparation of this report, the following data failure/data gap has been identified for the subject property:

- Persons with first-hand knowledge of the former agricultural usage or operations at the site could not be identified, and therefore interviews with such persons could not conducted. This data gap is considered to be of moderate significance.
- Responses from all regulatory agencies for which informational requests were submitted under either the Freedom of Information Act (FOIA) or the Open Public Records Act (OPRA) have not been received at the time of delivery of this report. This data gap is considered to be of moderate significance.
- Sanborn Fire Insurance Maps do not exist for the subject property or immediate surrounding areas. This data gap is considered to be of minor significance.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

Potomac-Hudson Engineering, Inc. (PHE) conducted a Phase I Environmental Site Assessment (ESA) pursuant to the guidelines (E 1527-13) of the American Society for Testing and Materials (ASTM) and the United States Environmental Protection Agency's (EPA) "*Standards and Practices for All Appropriate Inquiries*" (40 *Code of Federal Regulations* [CFR] Part 312), commonly referred to as All Appropriate Inquiry (AAI), for the property located at Spring Road and Polk Parkway in Lakeland, Polk County, Florida. This Phase I ESA provides an update of a previous Phase I ESA performed for this property by Terracon Consultants, Inc. (Terracon) in April 2020.

The purpose of an AAI due diligence report is to identify conditions "indicative of releases and threatened releases of hazardous substances, pollutants, contaminants, petroleum and petroleum products, and controlled substances (as defined in 21 United States Code [U.S.C.] 802) on, at, in, or to the subject property." The scope of the definition is intended to include those releases which have occurred onsite, as well as those which have occurred off-site that may migrate onto the subject property.

The purpose of an ASTM Phase I ESA, while similar in scope and nature to an AAI due diligence report, is to determine the existence of "Recognized Environmental Conditions" (RECs) at the subject property. The following is a description of REC as defined in ASTM E 1527-13:

"Recognized Environmental Condition" is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."

The ASTM E 1527-13 document also discusses two specific subsets of RECs, namely Controlled RECs and Historical RECs. Per ASTM:

"Controlled Recognized Environmental Condition" is defined as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

"Historical Recognized Environmental Condition" is defined as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls."

1.2 LIMITATIONS AND EXCEPTIONS OF THE ESA

This Phase I ESA was conducted with the following limitations and exceptions, some of which were established to define the scope of work and focus the assessment:

• Although a limited search for environmental liens and activity use limitations (AULs) for the site was performed by Environmental Data Resources, Inc. (EDR), an exhaustive search for these items was not conducted nor intended as part of this Phase I ESA.

It should be noted that all statements, findings, and conclusions contained in this Phase I ESA are based upon: (i) site conditions at the time of the reconnaissance and inspection of the property; (ii) review of written or illustrated historical documents as available; and (iii) information reported to PHE by others. While there are no indications that the information provided is suspect, PHE does not assume responsibility for errors and omissions in the information assembled to produce this Phase I ESA.

No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with a property, and this practice recognizes reasonable limits of time and cost.

This report has been prepared solely for the benefit of General Services Administration (GSA) (the "User" of this report as defined by ASTM E 1527-13) and may not be relied upon by any other party (except for any designated lending institution) without the written authorization of PHE. PHE assumes no responsibility or liability for third-party use of this Phase I ESA.

2.0 SITE DESCRIPTION

2.1 LOCATION AND GENERAL CHARACTERISTICS

The property (hereafter referred to as the site or subject property) for this report is located at Spring Road, Auburndale, Polk County, Florida. The subject property is a 16.36-acre portion of the 59.74-acre property identified as Polk County Parcel ID No. 25-27-29-000000-012010.

The site is located north of Braddock Road and is bound by Spring Road on the west side and SunTrax Boulevard on the east side. The eastern portion of the subject property is currently used by the City of Auburndale as a treated wastewater spray field and a rapid infiltration pond. The western portion of the property is cleared grass covered land.

The location of the site is depicted on the most current 7.5-minute series United States Geologic Survey (USGS) Topographic Map (2012) as shown in **Figure 1**. A recent (2017) aerial photograph for the site is provided as **Figure 2**, and a copy of the tax map for the site is attached as **Figure 3**. Figures 1 through 3 are provided in **Appendix A** of this report.

2.2 PHYSICAL SETTING

2.2.1 TOPOGRAPHY AND HYDROLOGY

The site is located on the Auburndale, FL USGS 7.5-minute series Quadrangle (2012), depicted at an approximate scale of 1:24,000 (1 inch = 2,000 feet) as shown in Figure 1 in **Appendix A**. The map provides a regional overview of the topography in the vicinity of the subject property. Additional site-specific topographic information was found in the Radius Map Report for the site provided by EDR as presented in **Appendix H**. According to the Radius Map Report, the center of the subject property is at an elevation of approximately 168 feet above mean sea level (msl). Based on information provided by both sources, the topography of the surrounding area is relatively flat with a general slope to the southwest in the vicinity of the site. Based on information provided by EDR, the direction of shallow groundwater flow is toward the southwest in the immediate vicinity of the site and to the northeast at the property; however, actual groundwater flow direction has not been confirmed. Lake Arietta is located approximately 4,000 feet east of the site.

No portion of the property lies within the 100-year or 500-year floodplains as mapped by the Federal Emergency Management Agency (FEMA). No wetland areas as mapped by the National Wetland Inventory or the Florida Department of Environmental protection (FDEP) are located onsite.

2.2.2 SOILS

Soils information was provided by the Natural Resources Conservation Service's (NRCS) Web Soil Survey (WSS). The WSS is a web-based soil data clearinghouse that contains data compiled from the original hardcopy soil surveys but that have been modified slightly for consistency across county lines. For this site, the soils information presented in WSS originated from the United States Department of Agriculture's (USDA's) *Soil Survey of Polk County, Florida* (1990).

According to these sources, the soil type at the site is Candler Sand, 0 to 5 percent slopes. This soil type is nearly level to gently sloping and excessively drained. It is typically found on the uplands and knolls on the flatwoods. In its natural state, during years of normal rainfall, this soil type has a seasonally high water table at a depth of greater than 80 inches (6.7 feet). Candler fine sand is predominantly sandy throughout the defined depth of 80 inches (6.7 feet). According to the *Soil Conservation Service SSURGO data*, this soil type is not considered hydric (i.e., those soils typically found in wetlands).

2.3 HISTORICAL PROPERTY USE

The historical uses of the site were determined through a review of historical aerial photographs, historical topographic maps, and a chain-of-title search, as well as an interview with the current property owner. City Directory information for the site was also utilized to the extent possible, as well as information obtained from a variety of other sources. The results of these searches are discussed below.

2.3.1 CITY DIRECTORY REVIEW

City directories are public reference materials that contain information concerning property ownership, usage, and other details (e.g., telephone number, the owner's occupation, etc.). They are similar to a telephone directory but typically contain greater amounts of information. They are usually produced annually or semi-annually and are arranged by business or resident name, type of business, and/or street address. These can be valuable resources in determining the prior use or ownership of a property.

No city directory coverage was identified for the site or immediately adjacent properties. A copy of the City Directory Abstract provided by EDR is included in **Appendix B**.

2.3.2 HISTORICAL MAP REVIEW

2.3.2.1 Sanborn Maps

As stated earlier, EDR conducted a search for Sanborn Fire Insurance Maps which covered the subject property; however, no such maps exist for the subject property or immediately surrounding area.

A copy of the Sanborn Map Report indicating *No Coverage* for the site is included in **Appendix** C.

2.3.2.2 Topographic Maps

Historical and current topographic maps for the site were provided by EDR for the years 1944, 1988, 1994, and 2012 (Auburndale; 7.5-minute series). A copy of the current (2012) topographic map is provided as Figure 1 in **Appendix A**; copies of all topographic maps are provided in **Appendix D**.

Limited information about the subject property can be obtained from the historical topographic maps due to the small size of the site and the limited level of detail included in a typical topographic map.

On the 1944 topographic map, the site is shown as wooded and an unimproved road is depicted as bisecting the subject property from east to west. All other roads in the vicinity of the site are depicted as unimproved.

One the 1988 topographic map, the site is no longer shown as wooded and the unimproved road onsite is gone. Braddock Road is visible as an unimproved road, as is Spring Road.

No obvious site-specific changes are visible in the 1994 topographic map.

One the 2012 topographic map, the topography at the site has changed as the elevation appears to have lowered slightly. The 175-foot contour located on the southeast corner of the subject property in 1994 is now depicted small and located offsite, and a 160-foot contour now appears along the west side of the site.

2.3.3 AERIAL PHOTOGRAPH REVIEW

Copies of historical black-and-white aerial photographs for the site were provided by EDR for the years 1941, 1949, 1952, 1960, 1968, 1971, 1977, and 1980 (all at scale: 1 inch = 500 feet); color aerial photographs for the site were also provided by EDR for the years 1994, 1999, 2007, 2010, 2013, and 2017 (all at scale: 1 inch = 500 feet). Copies of all aerial photographs provided by EDR are included in **Appendix E**.

Between 1941 and 1952 the subject property and surrounding properties remain undeveloped with a road transecting the northern portion of the site from east to west. Access roads are present in the western portion of the site.

The aerial photographs provided from 1958 through 1994 show the subject property and surrounding properties were developed as citrus groves. The road at the northern portion of the site remains, but a new road now transects the eastern portion of the site from north to south.

The 1999 aerial photograph no longer shows the western portion of the site cleared. The citrus grove is still present at the easternmost portion of the site. A rectangular pond is present in the southeast portion of the site. This aerial photograph also shows evidence of the Polk Parkway under construction to the south and west of the subject property, while other surrounding properties still contain citrus groves.

The entire site and properties to the north and south of the site are clear of citrus groves by the time of the 2007 aerial photograph. Polk Parkway construction is completed in this aerial photograph.

It appears the citrus groves return to the northern portion of the subject property and the property to the north of the site in the 2010 aerial photographs.

Minimal changes are evident to the subject property and surrounding properties in the 2013 and 2017 aerial photographs.

The aerial photograph review confirmed the prior use of the entire site for citrus groves from at least 1958 until at least 1993. In 1999, rows of citrus trees were only present in the easternmost portion of the site. The potential accumulation of agrichemicals, particularly arsenic, attributed to previous on-site routine grove maintenance between 1958 and 2010, and the potential for surficial soil impact represents a REC to the site.

2.3.4 OWNERSHIP AND OPERATIONAL HISTORY

The following information was excerpted from the Terracon Phase I ESA:

"Based on a review of the Polk County Property Appraiser records, the current owner of the site is J Everett Allen & Sons Inc. which acquired the site through a Special Warranty Deed dated July 24, 2017 from the City of Auburndale. Previous owners identified include the City of Auburndale (1995 to 2017); private owners (1981 to 1995), Goldenbough Citrus Groves, Inc. (1978 to 1981), and Orange-Co of Florida, Inc. (prior to 1978)."

2.3.5 **REGULATORY AGENCY FILE REVIEW**

Earlier this year, Freedom of Information Act (FOIA) requests were sent by Terracon to various regulatory agencies at the local, state, and federal levels in order to obtain additional information concerning the subject property. The agencies contacted, and responses received, are provided below:

Florida Department of Health in Polk County (FDOH-Polk)

According to Ralph Meder of the Petroleum Cleanup Division of the Florida Department of Health in Polk County (FDOH-Polk), there was a petroleum-related spill when constructing the SunTrax in proximity to the parent parcel. This was an overspill issue with an aboveground, non-regulated, portable tank. It has been remediated by a small source removal. Records can be found in Oculus under facility ID# 539817169 Florida Turnpike SunTrax. Terracon reviewed the Source Removal Report dated February 2018 by Cliff Berry, Inc. for the SunTrax facility discharge. Based on a review of the report, a 3,000-gallon diesel fuel discharge occurred approximately 100 feet north of Braddock Road, estimated to be greater than 600 feet south of the site. Source removal was completed, and groundwater assessment was conducted. On January 8, 2019, FDOH-Polk stated that the diesel spill impacts from the discharge had been fully remediated and a Site Rehabilitative Cleanup Order would be prepared. Based on the completed cleanup status and distance from the site, this discharge does not represent a REC to the site.

Polk County Accela Citizen Portal

A search of the Polk County Citizen Portal did not identify building permits associated with the site.

Southwest Florida Water Management District (SWFWMD)

A search of the SWFWMD General Permit Viewer online mapping database did not identify Environmental Resource Permits (ERPs) or Well Construction Permits (WCPs) plotted on the site.

FDEP Southwest District – Kevin Miller – Wastewater Section

Terracon contacted the FDEP in regard to the on-site wells which may be potentially associated with the nearby City of Auburndale Regional Wastewater Treatment Facility (WWTF). Mr. Miller provided Terracon with the FDEP Facility ID #FLA016559 for this facility. Based on a review of regulatory documentation for this facility on the FDEPs OCULUS website, the City of Auburndale Regional WWTF has been a permitted facility for more than 20 years, the on-site spray field and rapid infiltration ponds are used for the disposal of treated wastewater, and the on-site monitor wells are required under the FDEP approved permit for this facility.

U.S. Environmental Protection Agency, Region 4

To supplement the Terracon FOIA requests, PHE submitted an electronic information request to the EPA, Region 4 Office on November 18, 2020. No response has been received at the time of delivery of this report.

Additional Agencies

In addition to the above, EDR was also retained to search for building department records at the following agencies:

- City of Auburndale, Office of Community Development
- Polk County, Building Division

No records pertaining to the subject property were identified at these offices.

2.3.6 ENVIRONMENTAL LIENS

EDR was retained to obtain a copy of the current property deed and identify any environmental liens or AULs at the subject property as per AAI requirements.

No environmental liens or AULs were identified by EDR for the site (please refer to **Section 4.1** for additional information and limitations regarding this search). The current property deed indicates the property was purchased from the City of Auburndale by J. Everett Allen & Sons, Inc. on July 24, 2017, and recorded in the Polk County Court Clerk's Office on July 27, 2017.

Copies of both the Environmental Lien Report and the current property deed are provided in Appendix F.

2.3.7 USER-PROVIDED INFORMATION

PHE was provided with the following items from the User of this report:

- Phase I Environmental Site Assessment, prepared by Terracon Consultants, Inc., dated May 1, 2020
- Phase I(a) Desktop Survey of Cultural Resource Concerns for a Proposed Veterans Administration Lease Acquisition in the City of Auburndale, Polk County, Florida, prepared by Buried Past Consulting, LLC, dated April 2020
- Federal Emergency Management Agency (FEMA) National Flood Hazard Layer FIRMette, April 2019
- Legal Description and Tax Parcel Maps

Any pertinent information provided in the above documents has been incorporated into this Phase I ESA report, where applicable and appropriate.

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3.0 SITE RECONNAISSANCE

3.1 SITE VISIT

PHE personnel inspected the subject property on November 9, 2020. The weather at the time of the site visit was cloudy and humid with showers and a temperature around 85 degrees Fahrenheit.

The subject property is approximately 16.36 acres in size. The eastern portion of the site includes the majority of one of two rapid infiltration ponds for the City of Auburndale Regional WWTF. The pond is surrounded by an earth berm several feet in height and contained some water at the time of the site reconnaissance. An overhead pipe was observed in the northwest corner of the pond in the north-central portion of the site. In addition, the northernmost portion of the eastern portion of the site is part of a treated wastewater spray field for the City of Auburndale Regional WWTF. The western portion of the site is cleared, grass-covered land.

Two groundwater monitor wells with above grade steel protectors were observed in the northeast portion of the site and two additional groundwater monitor wells with above grade steel protectors were observed in the northwest portion of the site. At both locations, the top to the steel casing of one of the monitor wells was removed and the 2-inch diameter PVC well casing was visible with water close to the top of the well casing. These monitor wells coincide with the monitor wells/abandoned monitor wells for the City of Auburndale Regional WWTF.

Two PVC pipes were observed sticking up from the ground on the west side of the site. Neither had caps/plugs or any additional casing around them. They appeared to be temporary well points; however, their exact purpose is unknown.

Selected photographs of the site taken during the site inspection are included in Appendix G.

3.2 INTERVIEWS

Scott D. Graf of Terracon interviewed Mr. Ralph Allen, President of J. Everett Allen & Sons, Inc., via telephone on April 29, 2020. The following was excerpted from the Terracon Phase I ESA:

According to Mr. Allen:

- J. Everett Allen & Sons, Inc. acquired the site in 2016 or 2017. They previously owned the property to the west, which was sold to the Florida Turnpike Authority and they "swapped" that land for the spray field property, of which the site is a part.
- *A Phase I ESA was not performed when they acquired the site.*
- *He is unaware of any environmental or geotechnical reports of environmental significance associated with the site.*
- The prior owner of the site was the City of Auburndale.
- The site and adjoining properties are used by the City of Auburndale for a spray field for disposal of treated wastewater. The City of Auburndale is constructing a new spray field on the "old ranch property" to the west of the Polk Parkway and when the construction of

the new spray field is completed in September/October 2020, the city will discontinue the use of the on-site spray field.

- *He is unaware of any environmental concerns associated with the nature of the onsite businesses.*
- Potable water is provided by the City of Auburndale.
- *He is unsure if municipally supplied wastewater service is available for the site and he indicated that no septic tanks are located on the site.*
- There are no irrigation wells or water supply wells located on the site.
- When asked about the groundwater monitoring wells located in the northeast and northwest corners of the site, he indicated that he was unaware that groundwater monitoring wells are located on the site and was not aware of any groundwater monitoring results for the site. However, he was aware that the on-site/adjoining spray field was permitted through the FDEP and provided contact information for John Dickson at the City of Auburndale for additional information.
- *Tampa Electric may provide electrical service to the site.*
- Natural gas is not provided to the site.
- *He is unaware of any aboveground or underground petroleum or chemical storage tanks to exist on the site currently or historically.*
- *He is unaware of any spills or releases of petroleum or hazardous materials.*
- *He is unaware of any illegal dumping or unpermitted landfilling at the site.*
- *He is unaware of any environmental concerns associated with the site or the adjoining properties.*

4.0 USER RESPONSIBILITIES

As stated earlier, the designated "User" of this report is the U.S. GSA, the prospective purchaser of the property. Per ASTM guidelines, certain aspects of a Phase I ESA are designated as the "User's Responsibility" and therefore are excluded from the scope of work conducted by the consultant (unless otherwise requested by the User). Items designated as User's Responsibility include potentially confidential information (such as property purchase price); information that may be otherwise collected as part of a property transaction (e.g., chain-of-title documentation); or specific information for which the User may be privy to as part of his or her knowledge of the site or surrounding community. It is the User's responsibility to convey any specific information or knowledge he or she may possess about the subject property pursuant to the items listed below to the Environmental Professional preparing this report.

Items defined as User's Responsibility per ASTM E 1527-13 are described below.

4.1 ENVIRONMENTAL LIENS AND ACTIVITY USE LIMITATIONS

An exhaustive search for environmental liens or AULs (e.g., deed restriction) for the property was not conducted. Environmental liens and AULs are typically uncovered during routine property transaction processes, such as performing a review of the current property deed and compiling a chain-of-title.

Although not required by ASTM as indicated, PHE conducted a limited search for environmental liens on the property through EDR. EDR also provided PHE with a copy of the current property deed. Based on a cursory review, no environmental liens or AULs were identified for the property.

Both the Environmental Liens Search Report and current property deed are included in **Appendix F** of this report.

4.2 SPECIALIZED OR ACTUAL KNOWLEDGE OR EXPERIENCE

PHE assumes that all specialized and/or actual knowledge of the User regarding the subject property has been made known to PHE. The User bears responsibility to provide all commonly known or reasonably ascertainable information obtained by the User to PHE.

4.3 EVALUATION OF PURCHASE PRICE

The User is responsible for identifying the appropriate root cause if the subject property's purchase price is significantly lower than fair market value of the property assuming the property was not contaminated. If the property is being offered at a significantly lower price than would normally be expected, the User should attempt to identify the reason(s) for the reduced prices.

Based upon his or her knowledge of the site in connection to the purchase prices and other factors, the User must consider the degree of obviousness of the presence or likely presence of releases or threatened releases at the property.

4.4 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION WITHIN THE COMMUNITY

The User must take into account any commonly known or reasonably ascertainable information within the local community about the property. If the User is aware of any commonly known or reasonably ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, the User should communicate such information to PHE.

5.0 REGULATORY DATABASE SEARCH

EDR was retained to perform a computerized search of various regulatory databases regarding the subject property and/or surrounding properties. The search radii for each database were based on the recommendations made in ASTM E 1527-13 as minimum search distances.

The records and associated search radii that were reviewed during the computerized database search are presented below. The search included federal, state, local, and Indian Tribal databases. **Table 5-1** provides a summary of the regulatory databases searched by EDR.

Database	Description*	Radius (miles)
EPA NPL	Sites designated for Superfund cleanup	1.00
De-listed NPL	National Priority List deletions	1.00
Proposed NPL	Proposed National Priority List Sites	1.00
NPL Liens	Superfund liens by EPA	1.00
SEMS	Potential CERCLA sites reported to EPA and currently under review	0.50
FEDERAL FACILITY	NPL/BRAC sites in CERCLIS database involving FERRO	0.50
SEMS ARCHIVE	EPA No Further Remedial Action Planned Site	0.50
CORRACTS	Sites with completed or ongoing corrective actions under RCRA	1.00
EPA RCRA-TSDF	Facilities that treat, store, or dispose of hazardous materials	0.50
EPA RCRA-LQG	Sites that generate large quantities of hazardous materials	0.25
EPA RCRA-SQG	Sites that generate small quantities of hazardous materials	0.25
EPA RCRA-VSQG	Sites that generate very small quantities of hazardous materials	0.25
FL HW GEN	Florida state-level hazardous waste generators	0.25
US ENG CONTROLS	EPA sites with pathway elimination methods (caps, liners, etc.)	0.50
US INST CONTROLS	EPA sites with closed case(s) with restrictions	0.50
LUCIS	Land use control information, Navy base realignment & closure	0.50
EPA ERNS	Sites with previous hazardous waste spills	ТР
SHWS	FL State-Funded Action Sites	1.00
SWF/LF	Solid Waste Facilities/Landfill Sites	0.50
NJ HWS RE-EVAL	Inactive contaminated sites in NJ undergoing reevaluation	1.00
NJ HIST HWS	Sites with ongoing remediation or engineering/institutional controls	ТР
FL RGA HWS	Archived/inactive hazardous waste sites	ТР
FL SWF/LF	Solid waste disposal/landfill sites	0.50
FL RGA LF	Archived/inactive landfills	ТР
FL LUST	Sites with leaking USTs	0.50
NJ HIST LUST	Closed or inactive sites with leaking USTs in NJ	0.50
FL RGA LUST	Archived/inactive leaking UST sites	ТР
INDIAN LUST	Sites with leaking USTs on Indian land	0.50
UST	Sites with registered USTs	0.25
FF Tanks	A listing of federal facilities with storage tanks.	0.25

Table 5-1. Summary of Regulatory Databases Searched

Potomac-Hudson Engineering, Inc.

Database	Description*	Radius (miles)
INDIAN UST	Sites with registered USTs on Indian land	0.25
FEMA UST	FEMA-owned USTs	0.25
TANKS	Listing of storage tank facilities in FL	0.25
HIST MAJOR FACILITIES	Former sites having large storage capacity of hazardous substances	0.50
FL ENG CONTROLS	FL sites with pathway elimination methods (caps, liners, etc.)	0.50
FL INST CONTROLS	FL sites with closed case(s) with restrictions	0.50
FLVCP	Sites/facilities enrolled in the Voluntary Cleanup Program	0.25
INDIAN VCP	Sites/facilities enrolled in a Voluntary Cleanup Program on Indian land	0.50
U.S. Brownfields	Suspected soil and/or groundwater contamination sites	0.50
FL Brownfields	FL suspected soil and/or groundwater contamination sites	0.50
Debris Region 9	Illegal dump site locations on Torres Martinez Indian Reservation	0.50
ODI	Open dumps inventory (non-compliance disposal facilities)	0.50
INDIAN ODI	Open dumps inventory (non-compliance disposal facilities) of sites on Indian land	0.50
SWRCY	Approved Class B recycling facilities	0.50
NJ HIST LF	Solid waste facility directory (landfills)	0.50
CDL	Clandestine drug labs	ТР
US CDL	National Clandestine Laboratory Register	ТР
US HIST CDL	Former clandestine drug labs	ТР
PFAS	PFOS and PFOA-contaminated sites	0.50
DWM CONTAM	Known sites with contamination but currently not actively being remediated due to funding	0.50
LIENS 2	CERCLA lien information	ТР
HMIRS	Hazardous spill incidents reported to DOT	ТР
FLSPILLS	Hazardous material incidents with land contamination as reported to FDEP	ТР
FL SPILLS 90	Chemical, oil, or hazardous substance spills recorded after 1990	ТР
FL SPILLS 80	Chemical, oil, or hazardous substance spills recorded before 1990	ТР
FL Cleanup Sites	FDEP Cleanup Sites – Contamination Locator Map Listings	ТР
DOT OPS	DOT pipeline safety incident and accident data	ТР
DOD	Department of Defense sites	1.00
FUDS	Formerly Used Defense Sites	1.00
CONSENT	Legal settlements that establish responsibility and standards for cleanup of NPL sites	1.00
ROD	Record of decision files for NPL sites	1.00
UMTRA	Uranium Mill Tailings Sites	0.50
SITE INV SITES	Sites listed in the FDEP Site Investigation Section	0.50
US MINES	Mine Master Index File	0.25
MINES MRDS	Mineral Resources Data System	ТР
Abandoned Mines	Abandoned mine sites	0.25

Table 5-1. Summary of Regulatory Databases Searched

Potomac-Hudson Engineering, Inc.

Database	Description*	Radius (miles)
TRIS	Facilities that release toxic chemicals to air, water, or land	ТР
	in quantities reportable under SARA	
TSCA	Toxic chemical use or storage (includes PCBs and asbestos)	TP
FTTS	FIFRA (Federal Insecticide, Fungicide & Rodenticide Act)/ TSCA (Toxic Substances Control Act) Tracking System	ТР
HIST FTTS	Complete case listing of FIFRA/TSCA	ТР
FL Cattle Dipping Vats	Sites with cattle dipping vats	0.25
SSTS	Section 7 Tracking Systems	ТР
ICIS	National enforcement and compliance program support	ТР
PADS	PCB activity database of EPA	ТР
MLTS	Sites which possess or use radioactive material	ТР
RADINFO	Facilities regulated for radiation and radioactivity	ТР
FINDS	Facility information and pointers from EPA	ТР
RAATS	Enforcement actions under RCRA	ТР
RMP	Sites required by EPA to implement Risk Management Plans	ТР
UIC	Sites with underground injection control wells	ТР
NJ/NY MANIFESTDEBD	Ethylene dibromide (EDB), a soil fumigant, that has been detected in drinking water wells.	0.25
FL DRYCLEANERS	A listing of registered dry cleaners in FL	0.25
Tier 2	Sites having large storage capacity of hazardous substances	0.25
NPDES	National Pollutant Discharge Elimination System	ТР
INDIAN RESERV	Sites that lie within the boundaries of Indian Reservations	1.00
SRCD DRYCLEANERS	State coalition of registered dry cleaners listing	0.50
Priority Cleaners	Priority Ranking List for dry-cleaning facilities	
Coal Gas	Former coal gas sites	1.00
COAL ASH EPA	EPA-listed sites with surface impoundments containing coal ash	0.50
COAL ASH DOE	Power plants that store coal ash in surface ponds	ТР
NPDES	Wastewater Facility Regulation Database	ТР
US Financial Assurance	Past and present hazardous waste TSDFs	ТР
FL Financial Assurance	Financial assurance listings	ТР
FUSRAP	DOE-identified sites with radioactive contamination	1.00
PRP	A listing of verified Potentially Responsible Parties	ТР
US AIRS	EPA air pollution point sources	ТР
FL AIRS	FDEP air pollution point sources	ТР
Asbestos	Asbestos notification listing	ТР
Lead Smelters	Former lead smelter site locations	ТР
2020 Corrective Action	Sites expected to require RCRA corrective action	0.25
EPA Watch List	Sites with suspected or alleged regulatory violations	ТР
PCB Transformer	Registration database for transformers containing PCBs	ТР

Table 5-1. Summary of Regulatory Databases Searched

Database	Description*	Radius (miles)
EDR Manufactured Gas Plants	Former manufactured gas sites	1.00
EDR Hist Auto Stations	Listing of former gas stations assembled by EDR	0.125
EDR Historical Cleaners	Listing of former dry cleaners assembled by EDR	0.125
IHS Open Dumps	A listing of all open dumps located on Indian Land in the U.S.	0.50
Abandoned Mines	An inventory of land and water impacted by past mining activities	0.25
Docket HWC	Federal Agency Hazardous Waste Compliance Docket Facilities	ТР
UXO	A listing of unexploded ordnance site locations	1.00
ECHO	Compliance and enforcement information for regulated facilities	TP
Fuels Program	EPA Fuels Program Registered Listings	0.25

Table 5-1. Summary of Regulatory Databases Searched

* See Database Reference Guide in EDR report for complete definitions. TP – target property (subject property)

5.1 SUBJECT PROPERTY

The subject property was not identified by EDR Radius Report as being listed in any regulated databases.

5.2 SURROUNDING PROPERTIES

The EDR database search report identified three facilities or locations within 0.25 mile of the subject property that were included in one or more regulatory databases:

- Auburndale City Braddock Rd WWTP, 890 Braddock Road This site, located 0.22 mile southwest of the subject property, is listed in the FDEP Aboveground Storage Tank (AST) database. This site contains one 2,000-gallon diesel fuel AST associated with an emergency generator. The tank was installed in 1997 and is equipped with spill and overfill protection and is double-walled. No reported spills or leaks have occurred.
- Polk County Braddock Roads Disaster Debris Management Site (DDMS), 815 Braddock Road – This site, located 0.32 mile from the subject property, is listed in the EDR Solid Waste Facility/Landfill (SWF/LF) database. In September 2017, this site received approval from FDEP to operate as a DDMS to temporarily stage debris generated by Hurricane Irma. The authorization became effective on September 28, 2017. An inspection was subsequently conducted by FDEP on May 24, 2018. The following is excerpted from the inspection report:

"The Facility accepted [construction and demolition] C&D debris while operating and was required to take soil samples where the C&D debris was staged. The analytical results of the soil sampling were provided to the Department via email on April 2, 2018. Review of the analytical report did not indicate exceedances of the soil cleanup target levels in Chapter 62-777, F.A.C., Table 2."

A closure letter was subsequently sent by FDEP to the site in June 6, 2018. Based on this information provided, this site does not represent a REC for the subject property.

One site was noted in the "Orphan Summary" of the EDR Radius Report. Orphan sites are those that, for one reason or another, could not be properly mapped. This site was reportedly in the location of Spring Road and Braddock Road and was listed in the FDEP Asbestos database. During the renovation of a barn roof in 2017, asbestos was discovered and subsequently removed. Based on this information, this site does not represent a REC for the subject property.

No other sites were identified in the EDR Radius Report.

A copy of the Radius Map Report from EDR is included in Appendix H.

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6.0 EVALUATION

On the basis of the foregoing interviews, site reconnaissance, records search, and the resulting information assembled, the following RECs and other potential concerns have been identified for the subject property. The findings and recommendations identified in this section are based upon the data gathered herein, subject to the data gaps identified in **Section 6.1**.

6.1 DATA GAPS

Data gaps are defined by ASTM as "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information." Data gaps may be considered significant if they have the potential to substantially affect the outcome of the findings and conclusions of the report. Other data gaps may be considered inconsequential based on a variety of factors, including the type or nature of the site, the availability of alternative sources of information, or the projected usefulness of the missing data. ASTM Phase I protocols require the Environmental Professional preparing the Phase I ESA report to identify data gaps and include a statement regarding the significance of any such gaps.

The following data gap was identified with respect to this Phase I ESA for the subject property:

- Persons with first-hand knowledge of the former agricultural usage or operations at the site could not be identified, and therefore interviews with such persons could not conducted. This data gap is considered to be of moderate significance.
- Sanborn Fire Insurance Maps do not exist for the subject property or immediate surrounding areas. This data gap is considered to be of minor significance.
- Responses from all regulatory agencies for which informational requests were submitted under either the Freedom of Information Act (FOIA) or the Open Public Records Act (OPRA) have not been received at the time of delivery of this report. This data gap is considered to be of moderate significance.

6.2 FINDINGS AND CONCLUSIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM E1527-13 for the property located at Spring Road and Polk Parkway, Lakeland, Florida, herein referred to as the "subject property" or "site". Any exceptions to, or deletions from, this practice are described in **Sections 1.2** and **6.1** of this report.

6.2.1 RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs)

This assessment has revealed no evidence of RECs in connection with the subject property except for the following:

• Citrus groves were present throughout the site from at least 1958 until at least 1993. In 1999, rows of citrus trees were only present in the easternmost portion of the site. The potential accumulation of agrichemicals, particularly arsenic, attributed to previous on-site

routine grove maintenance between 1958 and 2010 and the potential for surficial soil impact represents a REC to the site.

6.2.2 CONTROLLED RECs

No controlled RECs were identified at the subject property.

6.2.3 HISTORICAL RECS

No historical RECs were identified at the subject property.

6.2.4 **DE MINIMIS CONDITIONS**

No de minimis conditions were observed.

6.2.5 OUT-OF-SCOPE CONSIDERATIONS

During the preparation of this Phase I ESA, PHE obtained information regarding out-of-scope environmental or health and safety conditions with respect to the subject property. As a value-added service only, PHE has provided a brief summary of these items. Please note, however, that this list is not intended to be comprehensive or exhaustive.

Radon

Polk County has been designated as Radon Zone 2 by the EPA. Sites within Radon Zone 2 have average indoor radon levels greater than 2.0, but less than 4.0, picoCuries/Liter (pCi/L). The designated EPA Action level for radon is 4.0 pCi/L.

The Radius Report provided by EDR contains some baseline radon information for Polk County. The National Radon Database has been developed by the EPA and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 through 1992 and has been supplemented by information collected at private sources, such as universities and research institutions.

A total of 88 sites were tested for radon in Polk County as part of the National Radon Database study. Of these, 11 percent of the samples collected on the first floor living space contained radon levels in excess of the EPA Action level of 4.0 pCi/L (a total of 1 percent of the samples collected exceeded 20 pCi/L). The average radon level for first floor living areas was 1.130 pCi/L.

For basement levels, all of the sites tested contained radon levels less than 4.0 pCi/L. The average concentration of basement radon levels being 0.440 pCi/L.

In addition to the EPA data, PHE reviewed the Radon Protection Map at the Florida Department of Health website for large buildings developed by the Florida Department of Business and Professional Regulation (DBPR). Greater than 5 percent of all such new buildings in Polk County are expected to have annual radon levels above the EPA action level of 4.0 pCi/L of air. The site lies in an area of Polk County where DBPR has determined that passive radon controls are generally recommended for new buildings.

6.3 OPINION OF ENVIRONMENTAL PROFESSIONAL

Based on a review of the information assembled during the preparation of this Phase I ESA, the Environmental Professional provides the following opinions with respect to RECs identified at the property:

- Shallow soil sampling is recommended to inspect for impacts from pesticide application at the site based on its prior use for agricultural purposes.
- GSA should communicate with the FDEP Southwest District to identify if groundwater monitoring will be required at the site after the City of Auburndale stops discharging treated wastewater to the on-site and adjoining spray fields and rapid infiltration ponds. If groundwater monitoring at the site is no longer required by the FDEP, the on-site monitor wells should be properly abandoned in accordance with Southwest Florida Water Management District (SWFWMD) regulations.

7.0 REFERENCES

- American Society for Testing and Materials (ASTM). 2013. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. E 1527-13. West Conshohocken, PA.
- Buried Past Consulting, LLC. 2020. *Phase I(a) Desktop Survey of Cultural Resource Concerns for a Proposed Veterans Administration Lease Acquisition in the City of Auburndale, Polk County, Florida*. Prepared for US Federal Properties Co. LLC. April 2020.
- Environmental Data Resources (EDR). 2020. Building Permits Report, October 29, 2020. Information obtained by EDR from City of Auburndale, Community Development. 1996 – 2019.
- EDR. 2019. *City Directory Abstract*, November 2, 2020. Information obtained by EDR from EDR Digital Archives and Polk's City Directories. Years var. 1940-2017.
- EDR. 2020. Database Search (Radius) Report, October 29, 2020.
- EDR. 2020. Environmental Lien and AUL Search Report, October 30, 2020.
- EDR. 2020. *Historical Aerial Photographs*. November 2, 2020. Years 1941, 1949, 1952, 1960, 1968, 1971, 1977, 1980, 1993, 1994, 1999, 2007, 2010, 2013, and 2017.
- EDR. 2019. Sanborn Map Report. October 29, 2020. No coverage found.
- Federal Emergency Management Agency (FEMA). 2020. National Flood Hazard Layer FIRMette.
- Florida Department of Environmental Protection (FDEP). 2020. *Electronic Document Management System (OCULUS)*. Regulatory files, reports, plans, and correspondence. Accessed November 18, 2020.
- Natural Resource Conservation Service (NRCS), United States Department of Agriculture (USDA). 2020. Web Soil Survey. <u>http://websoilsurvey.nrcs.usda.gov</u>. November 16, 2020.
- Polk County, Florida. 2020. Legal Description and Tax Parcel Map.
- Terracon Consultants, Inc. (Terracon). 2020. Phase I Environmental Site Assessment, Lakeland VA Clinic Spring Road Site, Spring Road, Lakeland, Polk County, FL. Prepared for US Federal Properties, Co. LLC. May 1, 2020.
- United States Environmental Protection Agency. 2005. Standards and Practices for All Appropriate Inquiries; Final Rule. 40 CFR Part 312. November 1, 2005.

United States Geologic Survey, 1944, 1988, 1994, and 2012. Lakeland and Auburndale, FL Quadrangles. Current and Historical Topographic Maps. Provided by Environmental Data Resources, Inc. October 28, 2020.

APPENDIX A

Figures




PHE



Figure 2. 2017 Aerial Photograph

Scale: As Shown

Source: EDR



APPENDIX G

Photographs



Photo 1: Typical view of site, looking east.



Photo 2: Typical view of site, looking north.



Photo 3: Typical view of site, looking south.



Photo 4: Typical view of site, looking west.



Photo 5: Monitoring wells on northwest corner of the site.



Photo 6: Open monitoring well on northwestern corner of the site.



Photo 7: Monitoring wells at northeast corner of the site.



Photo 8: Open monitoring well at northeastern corner of the site.



Photo 9: Overhead pipe at northwestern corner of the onsite infiltration pond.



Photo 10: Sign posted on west side of site.



Photo 11: View of onsite infiltration pond, looking northeast.



Photo 12: View of west side of onsite infiltration pond.



Photo 13: View of PVC pipe on west side of site.



Photo 14: View of second PVC pipe on west side of site.

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APPENDIX C BIOLOGICAL RESOURCE ASSESSMENT REPORT

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Biological Resource Assessment for the Proposed Department of Veterans Affairs Community Based Outpatient Clinic (CBOC), Lakeland, Florida



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1.0 INTRODUCTION

Dial Cordy and Associates Inc. (DCA) was retained by Potomac-Hudson Engineering, Inc. (PHE) to perform a biological resource assessment on three potential sits for the Department of Veterans Affairs (VA) Community Based Outpatient Clinic (CBOC), Lakeland, Polk County, Florida. DCA conducted a general habitat and resource assessment to (1) document existing site conditions; (2) identify vegetation/habitat communities; and (3) identify suitable habitat for threatened and endangered species as well as other protected species within the potential project boundaries. This report will support the Environmental Assessment (EA) being prepared by PHE for the VA to satisfy requirements under the National Environmental Policy Act (NEPA).

1.1 Project Purpose

The purpose of the Project is to lease approximately 111,217 square feet (SF) for an Outpatient Clinic in the vicinity of Lakeland, Florida. The new facility would enlarge and consolidate Primary Care and certain Specialty Care services within the Lakeland area. The facility would improve overall Veteran satisfaction for the region.

1.2 Project Location

Three potential sites are located within the general Lakeland, Florida region (Figure 1). The three potential sites investigated in the study include (1) Kathleen Boulevard Site (Figure 2); (2) Lakeland Highlands Site (Figure 3); and Polk Parkway Site (Figure 4).

2.0 REGULATORY FRAMEWORK

The following section briefly summarizes the federal and state statutes and regulations pertaining to the biological resources that occur or potentially occur within the Survey Area. The Project would be obligated to comply with all applicable federal and state statutes, regulations, and laws throughout Project construction.

2.1 Federal Statutes and Regulations

2.1.1 National Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) of 1994 (42 U.S. Code [U.S.C] § 4321 *et seq.*), as amended, establishes protection of the environment as a national priority and mandates that environmental impacts must be considered before any federal action likely to significantly affect the environment is undertaken. The Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508) provides guidance to federal agencies in implementing NEPA. It was determined that an EA would be prepared for this project to satisfy NEPA requirements.









2.1.2 Federal Endangered Species Act (FESA)

The federal Endangered Species Act (FESA) of 1973 (16 U.S.C § 1351 *et seq.*), administered by the USFWS, provides the legal framework for the listing and protection of species that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which those species rely are considered a "take" under the FESA. Section 9(a) of the FESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Critical habitat is another term defined and used in the FESA and refers to specific geographic areas that contain features considered necessary for endangered or threatened species to recover. Applicants for projects that could result in take, or result in destruction or adverse modification of critical habitat, are required to initiate consultation with the USFWS pursuant to Section 7 or Section 10 of the FESA, depending on whether there is federal nexus (i.e. another federal permit is required by the project).

A Section 7 consultation is required when there is a nexus between endangered species' use of a site and an associated federal action for a proposed impact. Under Section 7, take of a listed species can be authorized via a letter or Biological Opinion issued by the USFWS for non-marine related listed species issues.

2.1.3 Clean Water Act Section 404

Under Section 404 of the Clean Water Act (CWA, 33 U.S.C. § 404), the USACE regulates the discharge of dredged or fill material into jurisdictional waters of the United States (waters of the U.S.), which include those waters listed in 33 Code of Federal Regulation (CFR) 328.3 (Definitions).1 USACE is authorized, as delegated by the U.S. Environmental Protection Agency (EPA), to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. USACE must determine that no discharge of dredged or fill material should be permitted if there is a practicable alternative that would be less damaging to aquatic resources or if significant degradation would occur to waters of the U.S. or wetlands. The Project would be subject to USACE Atlantic Division (Jacksonville District) jurisdiction.

2.1.4 Clean Water Act Section 401

Section 401 of the CWA (33 U.S.C. § 401) requires states to certify that any activity that may result in discharge into waters of the U.S. will comply with state water quality standards. All permits issued by USACE under Section 404 of the CWA require certification pursuant to Section 401. The Southwest Florida Water Management District (SWFWMD), as delegated by the EPA and State Water Resources Control Board, is the state agency responsible for issuing a CWA Section 401 Water Quality Certification or waiver.

2.1.5 Migratory Birds

All migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA, 16 U.S.C. § 703 *et seq.*), as amended under the Migratory Bird Treaty Reform Act of 2004 (70 FR 12710). The MBTA makes it unlawful, except as formally permitted, to "take" (pursue, hunt, take, capture, or kill) migratory birds, except under permits for special situations such as imminent threat to human safety or

scientific research. The law currently applies to more than 1,000 species, including most native birds, and covers the destruction or removal of active nests of those species. The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on disturbance of active bird nests during the nesting season (generally February 1 to August 31). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests. This regulation will pertain to construction activities that have the potential to affect nesting birds either through vegetation removal and land clearing or other construction or operation-related disturbance.

2.1.6 Bald Eagle And Golden Eagle Protection Act (BGEPA)

Bald and golden eagles, their eggs, and their nests receive additional protection under the Bald Eagle and Golden Eagle Protection Act (BGEPA, 16 U.S.C. § 668 *et seq.*). The BGEPA states "no person shall take, possess, sell, purchase, barter, offer for sale, transport, export, or import any bald or golden eagle alive or dead, or any part, nests or eggs, thereof without a valid permit to do so."

2.2 State Of Florida Statutes And Regulations

2.2.1 Florida Endangered And Threatened Species Act

Florida Statute §379.411 declares that it is unlawful for a person to intentionally kill or wound any species of fish or wildlife listed as endangered, threatened, or of special concern (as determined by the state of Florida) or to intentionally destroy the eggs or nest of any such fish or wildlife, except as provided for in the rules of various state agencies. Wildlife Rule 68A-27.003 of the Florida Administrative Code states that no person shall pursue, molest, harm, harass, capture, possess, or sell any endangered species or parts thereof or their nests or eggs except as authorized by specific permit. This rule also lists all the endangered species in the state.

2.2.2 Gopher Tortoise Protection

Gopher tortoises are a threatened wildlife species and are protected by state law, Chapter 68A-27, Florida Administrative Code. Gopher tortoises must be relocated before any land clearing or development takes place, and property owners must obtain permits from the Florida Fish and Wildlife Conservation Commission before they can move them. For more information about permitting guidelines or the laws protecting gopher tortoises please contact the gopher tortoise biologist in your region.

Rule 68A-27.003: The gopher tortoise (*Gopherus polyphemus*) is hereby declared to be threatened, and shall be afforded the protective provisions specified in this paragraph. No person shall take, attempt to take, pursue, hunt, harass, capture, possess, sell or transport any gopher tortoise or parts thereof or their eggs, or molest, damage, or destroy gopher tortoise burrows, except as authorized by Commission permit or when complying with Commission approved guidelines for specific actions which may impact gopher tortoises and their burrows. A gopher tortoise burrow is a tunnel with a cross-section that closely approximates the shape of a gopher tortoise. Permits will be issued based upon whether issuance would further management plan goals and objectives.

2.3 Local Regulations

There are no specific local laws or regulations regarding natural resources that apply to the proposed project or properties.

3.0 METHODS

3.1 Literature Review and Database Search

The purpose of the literature review and database search is to determine which species and other biological resources identified as special-status by federal and state resource agencies have the potential to occur within one mile of the Project Survey Area, and to obtain contextual information relevant to the Survey Area which may not be evident during field surveys. The following sources were consulted:

- 7.5-minute USGS topographic quadrangle maps;
- Aerial imagery of the Study Area;
- Florida Natural Areas Inventory Database (FNAI 2020);
- National Wetlands Inventory (NWI) Wetlands (USFWS 2020d);
- Natural Resource Conservation Service (NRCS) Web Soil Survey (NRCS 2020a);
- National List of Hydric Soils (NRCS 2020b);
- Previous studies conducted specifically for the Project:
 - Phase 1 ESA Kathleen Boulevard Lakeland Property (ECS 2020)
 - Phase 1 ESA Proposed VA Outpatient Facility , Lakeland, FL (Madrid Engineering Group 2020)
 - Phase 1 ESA Lakeland VA Clinic Spring Road Site (Terracon 2020)

3.2 Biological Field Survey

A biological field survey of the three sites was conducted by DCA on October 20-21, 2020. The survey was conducted on foot and included a 25-foot buffer of the proposed Project sites. A reconnaissance-level survey was completed for the study areas to determine vegetative characteristics of the sites as well as to identify suitable habitat for any federally or state listed protected species and for any presence or signs of the species. A formal wetland or aquatic resource delineation was not completed, but any wetlands or potential wetlands were noted and indicated on resource maps. Site photographs were recorded and included in the report.

4.0 RESULTS

4.1 Kathleen Boulevard Site

4.1.1 General Description

The Kathleen Boulevard site is approximately 20.6 acres of vacant, undeveloped property and is predominately vegetated by hardwood trees, shrubs, and vines. A number of paths and dirt roads traverse the site, and is scattered with household and construction debris. The average elevation of the property is 209 feet above mean sea level and has a general slope towards

the southwest. Although the property was historically used for agriculture prior to 1984, it has been abandoned and undeveloped since that time.

4.1.2 Soils

The majority of the soils on the property consist of Apopka fine sand, 0 to 5 percent slopes, with a smaller portion consisting of Tavares fine sand, 0 to 5 percent (Figure 5).

The Apopka soil series consists of very deep, well drained, moderately slowly permeable soils on upland ridges, side slopes and knolls of the North Central Florida Ridge, the South-Central Florida Ridge, and the Florida Flatwoods. They formed in thick beds of sandy and loamy marine or eolian deposits. Historically, areas with this spol type were cleared and used for citrus and tame pasture. Natural vegetation for these areas consists of bluejack oak (*Quercus incana*), turkey oak (*Q. laevis*), post oak (*Q. stellate*), live oak (*Q. virginiana*), and longleaf pine (*Pinus palustrus*). Typical natural understory vegetation consists of bluestem (*Andropogon spp.*, dogfennel (*Eupatorium compositifolium*), paspalum (*Paspalum spp.*), and pineland threeawn (*Aristida spp.*).

Tavares fine sand is closely related to Apopka fine sand and is similar in distribution, drainage, and natural vegetation.

4.1.3 Vegetation and Habitat

Vegetation on the Kathleen Boulevard site consists of a variety of species associated with disturbed sites, although many remnant tree species such as live oak (*Q. virginiana*), sand live oak (*Q. geminata*), and post oak (*Q. stellate*) are scattered throughout the site. Other canopy species include juvenile cabbage palms (*Sabal palmetto*), slash pine (*P. elliotii*), and laural cherry (*Prunus carolinia*).

The subcanopy species include Brazilian pepper (*Schinus terribenthifolius*), rattlebox (*Crotolaria* spp.), caesars weed (*Urena lobata*), wild grape (*Vitis* spp.), and beggar's tick (*Bidens alba*). Photograph locations taken at the site are shown on Figure 6 and the photographs are included in Appendix A.

4.1.4 Wetlands

No federally or state jurisdictional wetlands were identified during the site inspection.

4.1.5 Wildlife

No wildlife species or signs of use were observed during the site visit. The disturbed and isolated nature of the site and proximity to development and roadways would discourage many native wildlife species from utilizing the site. However, it would be expected that some wildlife species associated with development could be present. These would include raccoons (Procyon lotor), possums (*Didelphis virginiana*), armadillos (*Dasypus novemcinctus*), and a variety of bird species.





4.1.6 Threatened or Endangered Species

A list of federally and state listed threatened, endangered, or candidate species for Polk County is located in Table 1. The Florida Natural Area Inventories list is included in Appendix B. In addition, the U.S. Fish and Wildlife Service (FWS) identified a total of 32 federally listed species potentially occurring on the project area. The FWS also indicated that there are no critical habitat within the proposed project area (Appendix C).

During the site visit, no signs of presence of federally or state listed species were observed. The disturbed nature of the site as well as the site's proximity to active human presence would not be conducive for the majority of the listed species.

Scientific Name	Common Name	Federal Status	State Status			
Plants and Lisbans						
Agrimonia incisa	Incised groove-bur	-	Т			
Bonamia grandiflora	Florida bonamia	Т	E			
Calamintha ashei	Ashe's savory	-	Т			
Calopogon multiflorus	Many-flowered grass-pink	-	Т			
Centrosema arenicola	Sand butterfly pea	-	E			
Chionanthus pygmaeus	Pygmy fringe tree	E	E			
Chrsopsis highlandsensis	Highlands goldenaster	-	E			
Cladonia perforate	Perforated reindeer lichen	E	E			
Clitoria fragrans	Scrub pigeon-wing	Т	E			
Coelorachis tuberculosa	Piedmont jointgrass	-	Т			
Coleataenia abscissa	Cutthroatgrass	-	E			
Conradina brevifolia	Short-leaved rosemary	E	E			
Crotalaria avonensis	Avon Park rabbit-bells	E	E			
Dicerandra frutescens	Scrub mint	E	E			
Dicerandra modesta	Blushing scrub balm	-	E			
Eriogonum longifolium var. gnaphalifolium	scrub buckwheat	Т	E			
Hartwrightia floridana	hartwrightia	-	Т			
Hypericum cumulicola	Highlands Scrub hypericum	E	E			
Hypericum edisonianum	Edison's ascyrum	-	E			
Illicium parviflorum	star anise	-	E			
Lechea cernua	nodding pinweed	-	Т			
Lechea divaricata	pine pinweed	-	E			
Liatris ohlingerae	Florida blazing star	E	E			
Lupinus aridorum	scrub lupine	E	E			
Matelea floridana	Florida spiny-pod	-	E			
Nemastylis floridana	celestial lily	-	E			
Nolina brittoniana	Britton's beargrass	E	E			
Ophioglossum palmatum	hand fern	-	E			
Paronychia chartacea var.	paper-like nailwort	Т	E			
chartacea						
Pecluma plumula	plume polypody	-	E			
Pecluma ptilota var. bourgeauana	comb polypody	-	E			

Table 1. Federal and State Listed Species for Polk County, Florida

Scientific Name	Common Name	Federal Status	State Status	
Peperomia humilis	terrestrial peperomia	-	F	
Platanthera integra	vellow fringeless orchid	-	F	
Polygala lewtonii	Lewton's polygala	F	F	
Polygonella basiramia	Elorida jointweed	 F	F	
Polygonella myriophylla	Small's jointweed	 E	E	
Prunus geniculata	scrub plum	 E	E	
Pteroglossaspis ecristata	giant orchid	-	T	
Rhvnchospora megaplumosa	large-plumed beaksedge	-	E	
Salix floridana	Florida willow	-	E	
Schizachvrium niveum	scrub bluestem	-	E	
Stvlisma abdita	scrub stylisma	-	E	
Thelvpteris serrata	toothed maiden fern	-	E	
Warea amplexifolia	clasping warea	E	E	
Warea carteri	Carter's warea	E	E	
Zephyranthes simpsonii	redmargin zephyrlily	-	Т	
Ziziphus celata	scrub ziziphus	E	E	
	Reptiles			
Alligator mississippiensis	American Alligator	SAT	FT	
Drymarchon couperi	Eastern Indigo Snake	Т	FT	
Gopherus polyphemus	Gopher Tortoise	С	ST	
Lampropeltis extenuata	Short-tailed Snake	-	ST	
Pituophis melanoleucus	Pine Snake	-	ST	
Plestiodon egregius lividus	Blue-tailed Mole Skink	Т	FT	
Plestiodon reynoldsi	Sand Skink	Т	FT	
	Diada			
	Biras			
Ammodramus savannarum	Florida Grasshopper Sparrow	E	FE	
floridanus				
Antigone canadensis pratensis	Florida Sandhill Crane	-	ST	
Aphelocoma coerulescens	Florida Scrub-Jay	Т	FT	
Athene cunicularia floridana	Florida Burrowing Owl	-	ST	
Caracara cheriway	Crested Caracara	Т	FT	
Dryobates borealis	Red-cockaded Woodpecker	E	FE	
Egretta caerulea	Little Blue Heron	-	ST	
Egretta tricolor	Tricolored Heron	-	ST	
Falco sparverius paulus	Southeastern American Kestrel	-	ST	
Mycteria americana	Wood Stork	Т	FT	
Rostrhamus sociabilis	Snail Kite	E	FE	
Sternula antillarum	Least Tern	-	ST	
	Ivianinais			
Eumops floridanus	Florida bonneted bat	F	FF	
		L	· L	
	federally listed. FT federally thre		un didata	

E – endangered; T – threatened; FE – federally listed; FT – federally threatened; C – candidate species for future listing; SAT – treated as threatened due to similarity of appearance with a threatened species

4.2 Lakeland Highlands Site

4.2.1 General Description

The Lakeland Highlands site is approximately 26.45 acres and it located ¼ mile northeast of the interchange between Polk Parkway (SR570) and Lakeland Highlands Road. The property is currently cleared and is in use as a pasture for cattle grazing. Historic use of the property has included strip mining, but it has remained graded and cleared and relatively unchanged since. The average elevation of the property is 113 feet above sea level.

4.2.2 Soils

Soils on the property consist of Arents-Water complex, Neilhurst sand, 1 to 5 percent slopes, and Haplaquents clayey (Figure 7). Arents-Water complex soils are characteristic of open water ponds with long steep mounds of soil material as a result of phosphate mining. This soil type is moderately suitable for pasture, although it can also be suitable for planted slash pine (*P. elliotii*). Natural vegetation is not associated with this soil type.

Neilhurst sand are excessively drained soils closely associated with phosphate and silica mining operations. Like Arents, this soil type is moderately suitable for pasture, although it can also be suitable for planted slash pine (*P. elliotii*).

Haplaquents clayey soils consist of slimey clay and are a byproduct of phosphate mining operations. The predominate use for areas with these soils are as pasture for livestock.

4.2.3 Vegetation and Habitat

Vegetation identified during the site visit included typical grasses associated with maintained pastures such as bahia (*Paspalum notatum*) and Panicum (*Panicum* spp.), with isolated areas of reed grass (*Phragmites australis*) in the lower areas.

Associated with the small pond on the site, vegetation consisted of willow (*Salix caroliniana*), primrose willow (*Ludwigia peruviana*), Chinese tallow (*Sapium sebiferum*), and alligator weed (*Alternanthera philoxeroides*). Photograph locations taken at the site are shown on Figure 8 and the photographs are included in Appendix A.

4.2.4 Wetlands

A wetland delineation was not conducted on the site, but wetlands identified consisted of a 1.74 acre pond located in the central portion of the site near the dirt road along the western side (Figure 8). The pond is considered jurisdictional wetland for by the federal and state agencies. The pond slopes off to the southeast towards a low field on the south end of the site. Due to the past history of strip mining on the property, consultation with the USACE and SWFWMD personnel would be required to determine status to determine permitting requirements and potential mitigation for any impacts incurred by the project.





4.2.5 Wildlife

Wildlife observed on the property during the site visit was limited to the cattle grazing on the site. Typical avian species associated with cattle pastures such as cattle egrets (*Bubulcus ibis*) would be expected to occur. Armadillos (*D. novemcinctus*) would also be a typical species found in open fields such as the site.

4.2.6 Threatened or Endangered Species

A list of federally and state listed threatened, endangered, or candidate species for Polk County is located in Table 1. In addition, the U.S. Fish and Wildlife Service (FWS) identified a total of 32 federally listed species potentially occurring on the project area. The FWS also indicated that there are no critical habitat within the proposed project area.

During the site visit, no signs of presence of federally or state listed species were observed. The disturbed nature of the site as well as the site's proximity to active human presence would not be conducive for the majority of the listed species. Due to the open nature of the site, the potential exists for the state listed Florida sandhill crane (*Antigone Canadensis pratensis*) to frequent the site to forage, which is typically behavior for this species in central Florida.

4.3 Polk Parkway Site

4.3.1 General Description

The Polk Parkway site is a 16.36 acre portion of a 59.74 acre property located on Spring Road and is currently used as a treated wastewater spray field and rapid infiltration pond. Much of the site to the north was not accessible during the site visit due to the sprayfield activity. The western portion of the site is a maintained field vegetated by various grasses. The elevation of the property is approximately 165-175 feet NGVD. The topography is relatively flat with a general slope to the southwest. Prior to its current use, the property mainly existed as a citrus grove.

4.3.2 Soils

The only soil type on the project site is Candler sand, 0 to 5 percent slopes (Figure 9). The Candler series consists of very deep, excessively drained, very rapidly to rapidly permeable soils on uplands of Southern Florida Flatwoods, South Central Florida Ridge, Eastern Gulf Coast Flatwoods and the Atlantic Coast Flatwoods (MLRA 153A. They formed in thick beds of eolian or sandy marine deposits. Many areas of this soil type are used for citrus crops and tame pasture. Native vegetation consists of bluejack oak (*Q. incana*), turkey oak (*Q. laevis*), sand post oak (*Q. stellate*), and longleaf pine (*P. palustrus*), sand pine (*P. clausa*), sand live oak (*Q. geminate*), chapman oak (*Q. chapmanii*) and myrtle oak (*Q. myrtfolia*) with a sparse understory of lopsided indiangrass (*Sorghastrum mutans*), gopher apple (*Licania michauxii*), and pineland threeawn (*Aristida* spp).


4.3.3 Vegetation and Habitat

Vegetation identified during the site visit included typical grasses associated with maintained pastures such as bahia (*Paspalum notatum*) and Panicum (*Panicum* spp.). Scattered areas of reed grass (*Phragmites australis*) in some of the areas within the bermed rapid infiltration ponds. Additional vegetation located within ponds included switch cane (*Arundinaria gigantean*), elderberry (*Sambucus canadensis*), and primrose willow (*L. peruviana*). Photograph locations taken at the site are shown on Figure 10 and the photographs are included in Appendix A.

4.3.4 Wetlands

Although portions of the project site currently function as sprayfields and rapid infiltration ponds, these areas would not qualify as jurisdictional wetlands under either the federal or state regulations. Therefore, no jurisdictional wetlands are located on the project site.

4.3.5 Wildlife

The only wildlife observed during the site visit were a number of avian species utilizing the rapid infiltration ponds such as purple gallinule (*Porphyrula martinica*) and common moorhen (*Gallinula chloropus*), and various songbirds such as red-winged blackbird (*Agelaius phoeniceus*) and common grackle (*Quiscalus quisacula*).

4.3.6 Threatened or Endangered Species

A list of federally and state listed threatened, endangered, or candidate species for Polk County is located in Table 1. In addition, the U.S. Fish and Wildlife Service (FWS) identified a total of 32 federally listed species potentially occurring on the project area. The FWS also indicated that there are no critical habitat within the proposed project area.

During the site visit, no signs of presence of federally or state listed species were observed. The disturbed nature of the site as well as the site's proximity to active human presence would not be conducive for the majority of the listed species. Due to the open nature of the site, the potential exists for the state listed Florida sandhill crane (*Antigone Canadensis pratensis*) to frequent the site to forage, which is typically behavior for this species in central Florida.



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Appendix A

Site Photographs

Kathleen Boulevard Site Photographs





Photograph 1

Photograph 2



Photograph 3



Photograph 4



Photograph 5



Photograph 6

Lakeland Highland Site Photographs



Lakeland Highlands Photograph 1



Lakeland Highlands Photograph 2



Lakeland Highlands Photograph 3



Lakeland Highlands Photograph 4



Lakeland Highlands Photograph 5



Lakeland Highlands Photograph 6



Lakeland Highlands Photograph 7

Polk Parkway Photographs



Polk Parkway Photograph 1



Polk Parkway Photograph 2

Appendix B

Florida Natural Areas Inventory Tracking List for Polk County, Florida

FNAI Tracking List

POLK COUNTY 172 Total Elements Found Last Updated: April 2019

Scientific Name is linked to the FNAI Online Field Guides when available.

- links to **NatureServe Explorer**, an online encyclopedia of more than 55,000 plants, animals, and natural communities in North America, compiled by the **NatureServe** network of natural heritage programs, of which the Florida Natural Areas Inventory is a member.

- links to a species distribution map (Adobe SVG viewer required). If your browser does not support Adobe SVG, try this link

SEARCH RESULTS

NOTE: This is not a comprehensive list of all species and natural communities occurring in the location searched. Only elements documented in the FNAI database are included and occurrences of natural communities are excluded. Please see FNAI Land Cover information or Reference Natural Community map for more information on communities.

Plants and Lichens		EXPLANATIO					
Scientific Name					Federal Status		
Agrimonia incisa	ir	ncised groove-bur	G3	S2		Т	
Bonamia grandiflora	F	Iorida bonamia	G3	S3	Т	E	
Calamintha ashei	Α	she's savory	G3	S3		Т	
Calopogon multiflorus	n	nany-flowered grass-pink	G2G3	S2S3		Т	
Centrosema arenicola	S	and butterfly pea	G2Q	S2		E	

Chionanthus pygmaeus	pygmy fringe tree	G2G3	S2S3	BE	E
Chrysopsis highlandsensis	highlands goldenaster	G2	S2		E
Cladonia perforata	perforate reindeer lichen	G1	S1	E	E
Clitoria fragrans	scrub pigeon-wing	G3	S3	Т	E
Coelorachis tuberculosa	Piedmont jointgrass	G3	S3		Т
Coleataenia abscissa	cutthroatgrass	G3	S3		E
Conradina brevifolia	short-leaved rosemary	G2Q	S2	E	E
Crotalaria avonensis	Avon Park rabbit-bells	G1	S1	E	E
Dicerandra frutescens	scrub mint	G1	S1	E	E
Dicerandra modesta	blushing scrub balm	G1	S1	N	E
Eriogonum longifolium var. gnaphalifolium	scrub buckwheat	G4T3	S3	Т	E
Gymnopogon chapmanianus	Chapman's skeletongrass	G3	S3		N
Hartwrightia floridana	hartwrightia	G2	S2		Т
Hypericum cumulicola	Highlands Scrub hypericum	G2	S2	E	E
Hypericum edisonianum	Edison's ascyrum	G2	S2		E
Illicium parviflorum	star anise	G2	S2		E
Lechea cernua	nodding pinweed	G3	S3		Т
Lechea divaricata	pine pinweed	G2	S2		E
Liatris ohlingerae	Florida blazing star	G2	S2	E	E
Lupinus aridorum	scrub lupine	G3T1	S1	E	E
Matelea floridana	Florida spiny-pod	G2	S2		E
Myriophyllum laxum	Piedmont water milfoil	G3	S3		Ν
Nemastylis floridana	celestial lily	G2	S2		E

Nolina brittoniana	Britton's beargrass	G3	S3	E	E
Ophioglossum palmatum	hand fern	G4	S2		E
Paronychia chartacea var. chartacea	paper-like nailwort	G3T3	S3	Т	E
Pavonia spinifex	yellow hibiscus	G4G5	S2		N
Pecluma plumula	plume polypody	G5	S2		E
Pecluma ptilota var. bourgeauana	comb polypody	G5?TNF	RS2		E
Peperomia humilis	terrestrial peperomia	G5	S2		E
Platanthera integra	yellow fringeless orchid	G3G4	S3		E
Polygala lewtonii	Lewton's polygala	G2	S2S3	E	E
Polygonella basiramia	Florida jointweed	G3	S3	E	E
Polygonella myriophylla	Small's jointweed	G3	S3	E	E
Prunus geniculata	scrub plum	G3	S3	E	E
Pteroglossaspis ecristata	giant orchid	G2G3	S2		Т
Rhynchospora megaplumosa	large-plumed beaksedge	G2	S2		E
Salix floridana	Florida willow	G2	S2		E
Schizachyrium niveum	scrub bluestem	G1G2	S1S2		E
Stylisma abdita	scrub stylisma	G3	S3		E
Thelypteris serrata	toothed maiden fern	G5	S1		E
Warea amplexifolia	clasping warea	G1	S1	E	E
Warea carteri	Carter's warea	G3	S3	E	E
Zephyranthes simpsonii	redmargin zephyrlily	G2G3	S2S3		Т
Ziziphus celata	scrub ziziphus	G1	S1	E	E

Clams and Mussels			E	XPL	ANA	ΓΙΟΝ
Scientific Name Cor					Federal Status	State Status
Utterbackia peninsularis	Pe	eninsular Floater	G2G3	S2S3		N
Villosa amygdala	Flo	orida Rainbow	G3	S3		N

Snails and Allies			I	EXPL	ANA	ΓΙΟΝ
Scientific Name					Federal Status	State Status
Praticolella bakeri		Ridge Scrubsnail	G2G	3 S2S3		N

Spiders		E	XPL	ANA	ΓΙΟΝ
Scientific Name		Global Rank	State Rank	Federal Status	State Status
Geolycosa xera	McCrone's Burrowing Wolf Spider	G2G3	S2S3		N
Latrodectus bishopi	Red Widow Spider	G2G3	S2S3		N
Phidippus workmani	Workman's Jumping Spider	G2G3	S2S3		N
Sosippus placidus	Lake Placid Funnel Wolf Spider	G1G2	S1S2		N

Millipedes		EXPLANATION
Scientific Name		GlobalState FederalState Rank RankStatus Status
Floridobolus penneri	Florida Scrub Milliped	e G1G2 S1S2 N

Mayflies	EXPLANATION
Scientifie Nome	Global State Federal State

Hexagenia bilineata		A Mayfly	G5	S2	N
Stenacron floridense		A Mayfly	G3G4	S3S4	N

Dragonflies and Damselflies		E	XPL	ANATION
Scientific Name				FederalState StatusStatus
Didymops floridensis	Maidencane Cruiser	G4	S4	Ν
Gomphaeschna antilope	Taper-tailed Darner	G4	S4	N
Hetaerina americana	American Rubyspot	G5	S2	N
Nehalennia pallidula	Everglades Sprite	G3	S3	N
Progomphus alachuensis	Tawny Sanddragon	G3	S3	N

Grasshoppers and Allies	EXPLANATIO					
Scientific Name Common		Name		State Rank	Federal Status	
Melanoplus forcipatus	Broad Ce Grasshop	Broad Cercus Scrub Grasshopper				N
Melanoplus tequestae		Grasshopper	G2G3	S2S3		N
Schistocerca ceratiola	Rosemary	y Grasshopper	G2G3	S2S3		N
Typhloceuthophilus floridanus	Blind Poc Cricket	ket Gopher Cave	G2	S2		N

True Bugs and Allies		E	XPL	ANA	ΓΙΟΝ	
Scientific Name						State Status
Keltonia robusta	Con	radina Mirid Bug	G2	S2		N
Keltonia rubrofemorata	Scru	ub Wireweed Mirid Bug	G2	S2		N

Telamona archboldi		Archbold's Treehopper	G1	S1		N	
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Beetles		EXPL	ANATION
Scientific Name	Common Name Global Rank	State F	ederalState Status_Status
Aethecerinus hornii	Horn's Aethecerinus Long- G2 Horned Beetle	S2	N
Aneflomorpha delongi	Delong's Aneflomorpha G2 Long-Horned Beetle	S1S2	N
Anomala exigua	Pygmy Anomala Scarab G1 Beetle	S1	N
Anomala eximia	Archbold Anomala Scarab G2 Beetle	S2	Ν
Aphodius aegrotus	Small Pocket Gopher G3G4 Aphodius Beetle	S3?	N
Aphodius laevigatus	Large Pocket Gopher G3G4 Aphodius Beetle	S3?	N
Aphodius troglodytes	Gopher Tortoise Aphodius G2G3 Beetle	S2	N
Bolbocerosoma hamatum	Bicolored Burrowing Scarab G3G4 Beetle	S3	N
Chelyoxenus xerobatis	Gopher Tortoise Hister G2G3 Beetle	S2	N
Cicindela highlandensis	Highlands Tiger Beetle G2G3	S2S3	N
Cicindela scabrosa	Scrub Tiger Beetle G3	S3	N
Copris howdeni	Howden's Copris Beetle G3?	S1S2	N
Diplotaxis rufa	Red Diplotaxis Beetle G2G3	S2S3	N
Enaphalodes archboldi	Archbold Scrub Oak Long- G1G2 horned Beetle	S1S2	N
Geopsammodius morrisi	Morris' Tiny Sand-loving G1 Scarab	S1	N
Geopsammodius relictillus	Relictual Tiny Sand-loving G2G3 Scarab	S2S3	N
Haroldiataenius saramari	Sand Pine Scrub Ataenius G3G4 Beetle	S3S4	N
Hypotrichia spissipes	Florida Hypotrichia Scarab G3G4 Beetle	S3S4	Ν
Ischyrus dunedinensis	Three Spotted Pleasing G2G3 Fungus Beetle	S2S3	N

Leiopsammodius deyrupi	Scrub Little Mole Scarab	G1G2	S1S2	N
Odontotaenius floridanus	Archbold Bess Beetle	G1G2	S1S2	N
Onthophagus aciculatulus	Sandyland Onthophagus Beetle	G2	S2	N
Onthophagus polyphemi polyphemi	Punctate Gopher Tortoise Onthophagus Beetle	G2G3T2T3	3S2	N
Onychomira floridensis	A Comb-Clawed Beetle	G1	S1	Ν
Peltotrupes profundus	Florida Deepdigger Scarab Beetle	G3	S3	N
Phyllophaga elizoria	Elizoria June Beetle	G2	S2	N
Phyllophaga elongata	Elongate June Beetle	G3	S3	N
Phyllophaga okeechobea	Diurnal Scrub June Beetle	G2	S2	N
Phyllophaga panorpa	Southern Lake Wales Ridge June Beetle	G1	S1	N
Pleotomodes needhami	Ant-loving Scrub Firefly	G1G2	S1S2	N
Plesioclytus relictus	Florida Relictual Long- horned Beetle	G1	S1	N
Polyphylla starkae	Auburndale Scrub Scarab Beetle	G1	S1	N
Romulus globosus	Round-Necked Romulus Long-Horned Beetle	G1G2	S1S2	N
Selonodon archboldi	Archbold Cebrionid Beetle	G1G2	S1S2	N
Selonodon floridensis	Florida Cebrionid Beetle	G2G4	S2S4	N
Serica delicata	Delicate Silky June Beetle	G2	S2	N
Serica frosti	Frost's Silky June Beetle	G1G2	S1S2	N
Trigonopeltastes floridana	Scrub Palmetto Flower Scarab Beetle	G2G3	S2S3	N
Typocerus fulvocinctus	Yellow-banded Typocerus Long-horned Beetle	G2G3	S2S3	N

Caddisflies	EXPLANATION
Scientific Name	Global State Federal State

Cernotina truncona	Florida Cernotinan Caddisfly	G4	S3	N
Chimarra florida	Floridian Finger-net Caddisfly	G4	S3S4	N
Nectopsyche tavara	Tavares White Miller Caddisfly	G3	S3	N
Oecetis porteri	Porter's Long-horn Caddisfly	G3G4	S2S3	N
Orthotrichia curta	Short Orthotrichian Microcaddisfly	G4	S2S3	N

Butterflies and Moths		EXPLANATION					
Scientific Name			Global Rank		Federal Status	State Status	
Atrytone arogos arogos	Arogo	os Skipper	G3T1T2	S1		N	
Ceratophaga vicinella	Goph	er Tortoise Shell Moth	G1G3	S1S2		N	
Euphyes berryi	Berry	's Skipper	G2	S2		N	
Euphyes dukesi calhouni	Calho	oun's Skipper	G3T1	S1		N	
Hesperia meskei straton	Easte	ern Meske's Skipper	G3G4T3	S2S3		N	
Satyrodes appalachia	Арра	lachian Brown	G4	S2S3		N	

Ants, Bees, and Wasps		EXPLANATIO				
Scientific Name					Federal Status	State Status
Bombus fraternus	Sout	thern Plains Bumble Bee	G2G4	S1S2		N
Dasymutilla archboldi	Lake	e Wales Ridge Velvet Ant	G2G3	S2S3		N
Dorymyrmex flavopectus	Bi-co	olored Scrub Cone Ant	G2	S2		N
Photomorphus archboldi	Noc	turnal Scrub Velvet Ant	G2	S2		N

Fishes		E	XPL	ANA	ΤΙΟΝ
Scientific Name				Federal Status	
Enneacanthus chaetodon	Blackbanded Sunfish	G3G4	S1S3		N

Amphibians		E	XPL	ANA	ΤΙΟΝ
Scientific Name		Global Rank		Federal Status	
Lithobates capito	Gopher Frog	G3	S3		N

Reptiles			ЕХР	LAN	ATION
Scientific Name				Federa Status	
Alligator mississippiensis	American Alligator	G5	S4	SAT	FT(S/A)
Clemmys guttata	Spotted Turtle	G5	S2S3		N
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3		N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	Т	FT
Gopherus polyphemus	Gopher Tortoise	G3	S3	С	ST
Lampropeltis extenuata	Short-tailed Snake	G3	S3		ST
Lampropeltis getula	Common Kingsnake	G5	S2S3		N
Pituophis melanoleucus	Pine Snake	G4	S3		ST
Plestiodon egregius lividus	Blue-tailed Mole Skink	G5T2	S2	Т	FT
Plestiodon reynoldsi	Sand Skink	G2	S2	Т	FT
Sceloporus woodi	Florida Scrub Lizard	G2G3	S2S3		N

Birds		E	XPL	ANA	TION
Scientific Name				Federa Status	
Ammodramus savannarum floridanus	Florida Grasshopper Sparrow	G5T1	S1	E	FE
Antigone canadensis pratensis	Florida Sandhill Crane	G5T2	S2		ST
Aphelocoma coerulescens	Florida Scrub-Jay	G2?	S2	Т	FT
Aramus guarauna	Limpkin	G5	S3		N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3		ST
Buteo brachyurus	Short-tailed Hawk	G4G5	S1		N
Caracara cheriway	Crested Caracara	G5	S2	Т	FT
Dryobates borealis	Red-cockaded Woodpecker	G3	S2	E	FE
Dryobates villosus	Hairy Woodpecker	G5	S3		N
Egretta caerulea	Little Blue Heron	G5	S4		ST
Egretta thula	Snowy Egret	G5	S3		N
Egretta tricolor	Tricolored Heron	G5	S4		ST
Elanoides forficatus	Swallow-tailed Kite	G5	S2		N
Eudocimus albus	White Ibis	G5	S4		N
Falco sparverius paulus	Southeastern American Kestrel	G5T4	S3		ST
Haliaeetus leucocephalus	Bald Eagle	G5	S3		N
Mycteria americana	Wood Stork	G4	S2	Т	FT
Nyctanassa violacea	Yellow-crowned Night-heron	G5	S3		N
Nycticorax nycticorax	Black-crowned Night-heron	G5	S3		N
Pandion haliaetus	Osprey	G5	S3S4		Ν
Peucaea aestivalis	Bachman's Sparrow	G3	S3		N
Plegadis falcinellus	Glossy Ibis	G5	S3		Ν

Rostrhamus sociabilis		Snail Kite	G4G5	S2	E	FE
Sternula antillarum		Least Tern	G4	S3	N	ST

Mammals		E	XPL		TION
Scientific Name				Federa Status	
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S1		Ν
Eptesicus fuscus	Big Brown Bat	G5	S3		N
Eumops floridanus	Florida bonneted bat	G1	S1	E	FE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T37	?S3		N
Neofiber alleni	Round-tailed Muskrat	G3	S3		N
Podomys floridanus	Florida Mouse	G3	S3		N
Sciurus niger niger	Southeastern Fox Squirrel	G5T5	S3		N
Ursus americanus floridanus	Florida Black Bear	G5T4	S4		N

Other Elements			EXPLANATION				
Scientific Name						Federal Status	
Bird Rookery				G5	SNR		N

Appendix C

U.S. Fish and Wildlife Service List of Threatened and Endangered Species for the Project Sites



United States Department of the Interior

FISH AND WILDLIFE SERVICE South Florida Ecological Services Field Office 1339 20th Street Vero Beach, FL 32960-3559 Phone: (772) 562-3909 Fax: (772) 562-4288 <u>http://fws.gov/verobeach</u>



In Reply Refer To: Consultation Code: 04EF2000-2021-SLI-0078 Event Code: 04EF2000-2021-E-00177 Project Name: VA Lakeland CBOC - Kathleen Road Site October 28, 2020

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/ eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/correntBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Florida Ecological Services Field Office

1339 20th Street Vero Beach, FL 32960-3559 (772) 562-3909

Project Summary

Consultation Code:	04EF2000-2021-SLI-0078
Event Code:	04EF2000-2021-E-00177
Project Name:	VA Lakeland CBOC - Kathleen Road Site
Project Type:	DEVELOPMENT
Project Description:	GSA's Proposed Action to provide the VA with a long-term lease and operation of a build-to-suit CBOC in the Lakeland, Florida area. The proposed project would replace the existing 23,000 square-foot CBOC located at 4237 and 4235 South Pipkin Road with a new 127,900 net usable square feet state-of-the-art, energy-efficient health care facility, 650 parking spaces, and appropriate stormwater management features. The Proposed Action includes consideration of a build-to-suit CBOC on 3 different site alternatives identified during GSA's developer proposal process. The Kathleen Road site is identified here.

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/28.073660369613226N81.9902833048622W</u>



Counties: Polk, FL

Endangered Species Act Species

There is a total of 32 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Florida Panther <i>Puma (=Felis) concolor coryi</i>	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/1763	
Habitat assessment guidelines:	
https://ecos.fws.gov/ipac/guideline/assessment/population/8/office/41420.pdf	
Puma (=mountain Lion) Puma (=Felis) concolor (all subsp. except coryi)	Similarity of
Population: FL	Appearance
No critical habitat has been designated for this species.	(Threatened)
Species profile: https://ecos.fws.gov/ecp/species/6049	(In cutched)

Birds

NAME	STATUS
Audubon's Crested Caracara <i>Polyborus plancus audubonii</i> Population: FL pop. No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8250</u>	Threatened
Everglade Snail Kite Rostrhamus sociabilis plumbeus There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/7713</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/1221/office/41420.pdf</u>	Endangered
Florida Grasshopper Sparrow Ammodramus savannarum floridanus No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/32</u>	Endangered
Ivory-billed Woodpecker Campephilus principalis No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8230</u>	Endangered
Whooping Crane <i>Grus americana</i> Population: U.S.A. (CO, ID, FL, NM, UT, and the western half of Wyoming) No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/758</u>	Experimental Population, Non- Essential
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8477</u> Habitat assessment guidelines: <u>https://ecos.fws.gov/ipac/guideline/assessment/population/124/office/41420.pdf</u>	Threatened

Reptiles

NAME	STATUS
American Alligator Alligator mississippiensis No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/776</u>	Similarity of Appearance (Threatened)
Bluetail Mole Skink Eumeces egregius lividus No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2203</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/178/office/41420.pdf</u>	Threatened
Eastern Indigo Snake Drymarchon corais couperi No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/646</u>	Threatened
Sand Skink <i>Neoseps reynoldsi</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4094</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/179/office/41420.pdf</u>	Threatened

Flowering Plants

NAME	STATUS
Avon Park Harebells <i>Crotalaria avonensis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/7093</u>	Endangered
Britton's Beargrass Nolina brittoniana No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4460</u>	Endangered
Carter's Mustard Warea carteri No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5583</u>	Endangered
Florida Bonamia Bonamia grandiflora No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2230</u>	Threatened
Florida Ziziphus Ziziphus celata No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2950</u>	Endangered
Highlands Scrub Hypericum Hypericum cumulicola No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2940</u>	Endangered
Lewton's Polygala <i>Polygala lewtonii</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/6688</u>	Endangered
Papery Whitlow-wort Paronychia chartacea No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1465</u>	Threatened
Pigeon Wings <i>Clitoria fragrans</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/991</u>	Threatened
Pygmy Fringe-tree <i>Chionanthus pygmaeus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1084</u>	Endangered
Sandlace Polygonella myriophylla No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5745</u>	Endangered
Scrub Blazingstar <i>Liatris ohlingerae</i> No critical habitat has been designated for this species.	Endangered

NAME	STATUS
Species profile: <u>https://ecos.fws.gov/ecp/species/864</u>	
Scrub Buckwheat <i>Eriogonum longifolium var. gnaphalifolium</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5940</u>	Threatened
Scrub Lupine <i>Lupinus aridorum</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/736</u>	Endangered
Scrub Mint <i>Dicerandra frutescens</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/799</u>	Endangered
Scrub Plum Prunus geniculata No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2238</u>	Endangered
Short-leaved Rosemary <i>Conradina brevifolia</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2929</u>	Endangered
Wide-leaf Warea <i>Warea amplexifolia</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/412</u>	Endangered
Wireweed Polygonella basiramia No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1718</u>	Endangered
Liabana	

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NAME	STATUS
Florida Perforate Cladonia <i>Cladonia perforata</i>	Endangered
No critical habitat has been designated for this species.	0
Species profile: <u>https://ecos.fws.gov/ecp/species/7516</u>	

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



United States Department of the Interior

FISH AND WILDLIFE SERVICE South Florida Ecological Services Field Office 1339 20th Street Vero Beach, FL 32960-3559 Phone: (772) 562-3909 Fax: (772) 562-4288 <u>http://fws.gov/verobeach</u>



In Reply Refer To: Consultation Code: 04EF2000-2021-SLI-0079 Event Code: 04EF2000-2021-E-00179 Project Name: VA Lakeland CBOC - Lakeland Highlands Site October 28, 2020

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/ eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/correntBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Florida Ecological Services Field Office

1339 20th Street Vero Beach, FL 32960-3559 (772) 562-3909

Project Summary

Consultation Code:	04EF2000-2021-SLI-0079
Event Code:	04EF2000-2021-E-00179
Project Name:	VA Lakeland CBOC - Lakeland Highlands Site
Project Type:	DEVELOPMENT
Project Description:	GSA's Proposed Action to provide the VA with a long-term lease and operation of a build-to-suit CBOC in the Lakeland, Florida area. The proposed project would replace the existing 23,000 square-foot CBOC located at 4237 and 4235 South Pipkin Road with a new 127,900 net usable square feet state-of-the-art, energy-efficient health care facility, 650 parking spaces, and appropriate stormwater management features. The Proposed Action includes consideration of a build-to-suit CBOC on 3 different site alternatives identified during GSA's developer proposal process. The Lakeland Highlands site is identified here.

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/28.00140317222565N81.91898141250334W</u>



Counties: Polk, FL

Endangered Species Act Species

There is a total of 32 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Florida Panther <i>Puma (=Felis) concolor coryi</i>	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/1763	
Habitat assessment guidelines:	
https://ecos.fws.gov/ipac/guideline/assessment/population/8/office/41420.pdf	
Puma (=mountain Lion) Puma (=Felis) concolor (all subsp. except coryi)	Similarity of
Population: FL	Appearance
No critical habitat has been designated for this species.	(Threatened)
Species profile: <u>https://ecos.fws.gov/ecp/species/6049</u>	(In cutched)

Birds

NAME	STATUS
Audubon's Crested Caracara <i>Polyborus plancus audubonii</i> Population: FL pop. No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8250</u>	Threatened
Everglade Snail Kite Rostrhamus sociabilis plumbeus There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/7713</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/1221/office/41420.pdf</u>	Endangered
Florida Grasshopper Sparrow Ammodramus savannarum floridanus No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/32</u>	Endangered
Ivory-billed Woodpecker Campephilus principalis No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8230</u>	Endangered
Whooping Crane <i>Grus americana</i> Population: U.S.A. (CO, ID, FL, NM, UT, and the western half of Wyoming) No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/758</u>	Experimental Population, Non- Essential
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8477</u> Habitat assessment guidelines: <u>https://ecos.fws.gov/ipac/guideline/assessment/population/124/office/41420.pdf</u>	Threatened

Reptiles

NAME	STATUS
American Alligator <i>Alligator mississippiensis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/776</u>	Similarity of Appearance (Threatened)
Bluetail Mole Skink <i>Eumeces egregius lividus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2203</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/178/office/41420.pdf</u>	Threatened
Eastern Indigo Snake Drymarchon corais couperi No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/646</u>	Threatened
Sand Skink <i>Neoseps reynoldsi</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4094</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/179/office/41420.pdf</u>	Threatened
Flowering Plants

NAME	STATUS
Avon Park Harebells <i>Crotalaria avonensis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/7093</u>	Endangered
Britton's Beargrass Nolina brittoniana No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4460</u>	Endangered
Carter's Mustard Warea carteri No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5583</u>	Endangered
Florida Bonamia Bonamia grandiflora No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2230</u>	Threatened
Florida Ziziphus Ziziphus celata No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2950</u>	Endangered
Highlands Scrub Hypericum Hypericum cumulicola No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2940</u>	Endangered
Lewton's Polygala <i>Polygala lewtonii</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/6688</u>	Endangered
Papery Whitlow-wort Paronychia chartacea No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1465</u>	Threatened
Pigeon Wings <i>Clitoria fragrans</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/991</u>	Threatened
Pygmy Fringe-tree <i>Chionanthus pygmaeus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1084</u>	Endangered
Sandlace <i>Polygonella myriophylla</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5745</u>	Endangered
Scrub Blazingstar <i>Liatris ohlingerae</i> No critical habitat has been designated for this species.	Endangered

NAME	STATUS
Species profile: <u>https://ecos.fws.gov/ecp/species/864</u>	
Scrub Buckwheat <i>Eriogonum longifolium var. gnaphalifolium</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5940</u>	Threatened
Scrub Lupine <i>Lupinus aridorum</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/736</u>	Endangered
Scrub Mint Dicerandra frutescens No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/799</u>	Endangered
Scrub Plum Prunus geniculata No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2238</u>	Endangered
Short-leaved Rosemary <i>Conradina brevifolia</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2929</u>	Endangered
Wide-leaf Warea Warea amplexifolia No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/412</u>	Endangered
Wireweed Polygonella basiramia No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1718</u>	Endangered
Liabana	

Lichens

NAME	STATUS
Florida Perforate Cladonia <i>Cladonia perforata</i>	Endangered
No critical habitat has been designated for this species.	_
Species profile: <u>https://ecos.fws.gov/ecp/species/7516</u>	

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



United States Department of the Interior

FISH AND WILDLIFE SERVICE South Florida Ecological Services Field Office 1339 20th Street Vero Beach, FL 32960-3559 Phone: (772) 562-3909 Fax: (772) 562-4288 <u>http://fws.gov/verobeach</u>



In Reply Refer To: Consultation Code: 04EF2000-2021-SLI-0080 Event Code: 04EF2000-2021-E-00181 Project Name: VA Lakeland CBOC - Polk Parkway Site October 28, 2020

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/ eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/correntBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

South Florida Ecological Services Field Office

1339 20th Street Vero Beach, FL 32960-3559 (772) 562-3909

Project Summary

Consultation Code:	04EF2000-2021-SLI-0080
Event Code:	04EF2000-2021-E-00181
Project Name:	VA Lakeland CBOC - Polk Parkway Site
Project Type:	DEVELOPMENT
Project Description:	GSA's Proposed Action to provide the VA with a long-term lease and operation of a build-to-suit CBOC in the Lakeland, Florida area. The proposed project would replace the existing 23,000 square-foot CBOC located at 4237 and 4235 South Pipkin Road with a new 127,900 net usable square feet state-of-the-art, energy-efficient health care facility, 650 parking spaces, and appropriate stormwater management features. The Proposed Action includes consideration of a build-to-suit CBOC on 3 different site alternatives identified during GSA's developer proposal process. The site identified here is Polk Parkway.

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/28.106633632544543N81.82823390420441W</u>



Counties: Polk, FL

Endangered Species Act Species

There is a total of 32 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Florida Panther <i>Puma (=Felis) concolor coryi</i>	Endangered
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/1763	
Habitat assessment guidelines:	
https://ecos.fws.gov/ipac/guideline/assessment/population/8/office/41420.pdf	
Puma (=mountain Lion) Puma (=Felis) concolor (all subsp. except coryi)	Similarity of
Population: FL	Appearance
No critical habitat has been designated for this species.	(Threatened)
Species profile: <u>https://ecos.fws.gov/ecp/species/6049</u>	(1 cuteneu)

Birds

NAME	STATUS
Audubon's Crested Caracara <i>Polyborus plancus audubonii</i> Population: FL pop. No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8250</u>	Threatened
Everglade Snail Kite Rostrhamus sociabilis plumbeus There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/7713</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/1221/office/41420.pdf</u>	Endangered
Florida Grasshopper Sparrow Ammodramus savannarum floridanus No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/32</u>	Endangered
Ivory-billed Woodpecker Campephilus principalis No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8230</u>	Endangered
Whooping Crane <i>Grus americana</i> Population: U.S.A. (CO, ID, FL, NM, UT, and the western half of Wyoming) No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/758</u>	Experimental Population, Non- Essential
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8477</u> Habitat assessment guidelines: <u>https://ecos.fws.gov/ipac/guideline/assessment/population/124/office/41420.pdf</u>	Threatened

Reptiles

NAME	STATUS
American Alligator Alligator mississippiensis No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/776</u>	Similarity of Appearance (Threatened)
Bluetail Mole Skink Eumeces egregius lividus No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2203</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/178/office/41420.pdf</u>	Threatened
Eastern Indigo Snake Drymarchon corais couperi No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/646</u>	Threatened
Sand Skink <i>Neoseps reynoldsi</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4094</u> Species survey guidelines: <u>https://ecos.fws.gov/ipac/guideline/survey/population/179/office/41420.pdf</u>	Threatened

Flowering Plants

NAME	STATUS
Avon Park Harebells <i>Crotalaria avonensis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/7093</u>	Endangered
Britton's Beargrass Nolina brittoniana No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/4460</u>	Endangered
Carter's Mustard Warea carteri No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5583</u>	Endangered
Florida Bonamia Bonamia grandiflora No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2230</u>	Threatened
Florida Ziziphus Ziziphus celata No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2950</u>	Endangered
Highlands Scrub Hypericum Hypericum cumulicola No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2940</u>	Endangered
Lewton's Polygala <i>Polygala lewtonii</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/6688</u>	Endangered
Papery Whitlow-wort <i>Paronychia chartacea</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1465</u>	Threatened
Pigeon Wings <i>Clitoria fragrans</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/991</u>	Threatened
Pygmy Fringe-tree <i>Chionanthus pygmaeus</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1084</u>	Endangered
Sandlace Polygonella myriophylla No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5745</u>	Endangered
Scrub Blazingstar <i>Liatris ohlingerae</i> No critical habitat has been designated for this species.	Endangered

NAME	STATUS
Species profile: <u>https://ecos.fws.gov/ecp/species/864</u>	
Scrub Buckwheat <i>Eriogonum longifolium var. gnaphalifolium</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5940</u>	Threatened
Scrub Lupine <i>Lupinus aridorum</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/736</u>	Endangered
Scrub Mint Dicerandra frutescens No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/799</u>	Endangered
Scrub Plum Prunus geniculata No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2238</u>	Endangered
Short-leaved Rosemary <i>Conradina brevifolia</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2929</u>	Endangered
Wide-leaf Warea Warea amplexifolia No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/412</u>	Endangered
Wireweed <i>Polygonella basiramia</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1718</u>	Endangered
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NAME	STATUS
Florida Perforate Cladonia <i>Cladonia perforata</i>	Endangered
No critical habitat has been designated for this species.	Ū.
Species profile: <u>https://ecos.fws.gov/ecp/species/7516</u>	

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

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