

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
TECHNICAL REPORT COVERSHEET

CONTAMINATION SCREENING EVALUATION REPORT

Florida Department of Transportation
District 6

**Ludlam Trail Corridor
Project Development & Environment (PD&E) Study**

From SW 80th Street to 400 feet North of NW 7th Street
Miami-Dade County, Florida

Financial Management Number: 444236-1-22-01
ETDM Number: 14369

April 2021

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

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List of Acronyms

µg/L	Micrograms per liter
ADA	Americans with Disabilities Act
AMRC	American Management Resources Corporation
AST	Aboveground Storage Tank
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
BaPE	Benzo(a)pyrene
CAR	Contamination Assessment Report
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CSER	Contamination Screening Evaluation Report
DERM	Department of Environmental Resource Management
DDMS	Disaster Debris Management Site
DRF	Discharge Reporting Form
EDI	Early Detection Incentive
EDR	Environmental Data Resources, Inc.
EDTM	Efficient Transportation Decision Making
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FECR	Florida East Coast Railroad
FINDS	Facility Index System
GCTL	Groundwater Cleanup Target Level
IW	Industrial waste
LQG	Large Quantity Generators
MDC	Miami-Dade County
MDPROS	Miami-Dade County Parks, Recreation and Open Spaces
mg/kg	Milligram per kilogram
MTBE	Methyl Tert-Butyl Ether
MOP	Monitoring Only Plan
NADC	Natural Attenuation Default Concentration
NFA	No Further Action
NPL	National Priorities List
PD&E	Project Development and Environment
PCE	Perchloroethene
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
ROW	Right-of-way
SAR	Site Assessment Report
SCTL	Soil Cleanup Target Level
SFWMD	South Florida Water Management District
SWL	Solid Waste Landfill
SQG	Small Quantity Generators
SRCR	Site Rehabilitation Completion Report
TCE	Trichloroethene

TRPH	Total Recoverable Petroleum Hydrocarbons
TSAR	Template Site Assessment Report
USEPA	U.S. Environmental Protection Agency
UST	Underground Storage Tank

1.0 INTRODUCTION

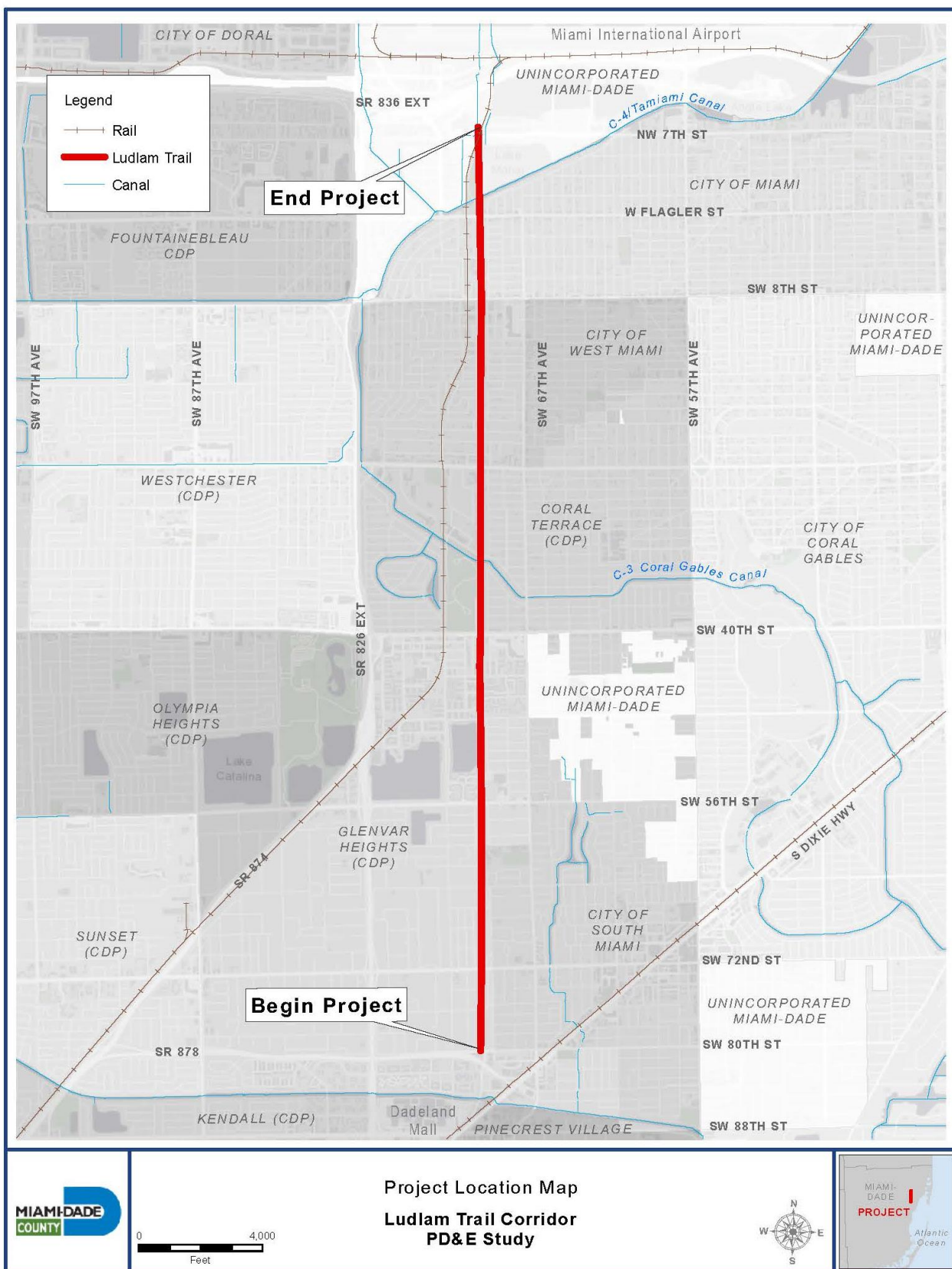
This Contamination Screening Evaluation Report (CSER) provides information in support of the Ludlam Trail Corridor Project Development and Environment (PD&E) Study. The Miami-Dade County Parks, Recreation and Open Spaces (MDPROS) Department, in coordination with the Florida Department of Transportation (FDOT), is currently conducting a PD&E Study for the Ludlam Trail Corridor, which stretches from SW 80th Street to 400 feet north of NW 7th Street, between 69th and 70th Avenue, in Miami-Dade County.

This report identifies and evaluates known or potential contaminated sites within or adjacent to the project corridor that may affect implementation of the project. This report also presents recommendations for potential additional analysis.

1.1 Project Description and Location

MDPROS is proposing to develop a 5.6-mile multi-use trail within the former Florida East Coast Railroad (FECR) railroad corridor (i.e., the Ludlam Trail Corridor, or proposed project). As a priority paved land trail from the Florida Greenways and Trails System (FGTS) Priority Network and Shared-Use Nonmotorized (SUN) Trail Network, the proposed publicly accessible transportation corridor will serve bicyclists, pedestrians, and users of other types of non-motorized vehicles. In addition, the proposed project is anticipated to provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers.

The proposed project limits extend along a segment of the former FECR rail corridor from SW 80th Street to 400 feet north of NW 7th Street, between 69th and 70th Avenue (Error! Reference source not found.**Figure 1-1**). The project primarily occurs within the former FECR right-of-way (ROW) with the exception of proposed improvements at road and street crossings. The ROW for the proposed Ludlam Trail Corridor is approximately 100 feet wide for most of its length, although it narrows to between 75 and 80 feet in some areas and down to 18 feet in sections designated for mixed-use development. The project study area traverses sections of the City of Miami, the City of South Miami, and unincorporated Miami-Dade County, and is immediately adjacent to the City of West Miami. The Ludlam Trail Corridor project location is shown in **Figure 1-1**.



1.2 Project Background

In December 2018, MDPROS acquired the land formerly used as a railroad corridor from FECR. Approximately one (1) mile of the northernmost section of the corridor has an Interim Trail Use designation by the Surface Transportation Board (STB) and, although the rails have been removed, the corridor could be re-activated for railroad use in the future. The remaining approximate five (5)-mile portion of the corridor has been fully abandoned from railroad use since 2006. The County will develop the Ludlam Trail Corridor for public use, as a shared-use trail for non-motorized use. Miami-Dade County intends to utilize a variety of funding sources (e.g., federal, state, local) for the project through a Local Agency Program (LAP) agreement.

Consistent with the *Miami-Dade County Comprehensive Development Master Plan* (2018)¹ and zoning approvals, FECR has retained parcels for mixed-use development of the proposed Ludlam Trail Corridor. The locations of the development nodes include the north/south sides of SW 40th Street/Bird Road, SW 24th Street/Coral Way, and from SW 8th Street/Tamiami Trail/Calle Ocho to SW 12th Street. Miami-Dade County acquired an 18-foot wide perpetual easement through the proposed development nodes for continuity of the Ludlam Trail.

1.3 Project Purpose and Need

The purpose of the proposed Ludlam Trail Corridor Project is to encourage the use of alternate modes of transportation and enhance overall connectivity and accessibility to schools, parks, transit stations, and bus stops for as many as 30,500 residents present within two miles of the proposed project corridor. The proposed project will provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers, and will serve bicyclists, pedestrians, and other non-motorized vehicle users. The need for the proposed project is based on the criteria identified below.

1.3.1 Primary Criteria

Area Wide Network/System Linkage

The proposed project supports the vision of the *Miami-Dade County Park and Open Space System Master Plan*, a primary element of which is to “provide an interconnected trail system which offers transportation alternatives and reduces traffic congestion.” The Master Plan provides a 50-year unifying vision for a livable and sustainable Miami-Dade County, which involves the development of a seamless system of greenways, trails, and water trails. The Ludlam Trail will be a vital component of this network as it will link open spaces and civic institutions to neighborhoods, while offering a reliable transportation alternative. From a regional perspective, the proposed project will connect to the Metrorail Dadeland North Station to the south; the proposed Strategic Miami Area Rapid Transit (SMART) Plan Corridor #2 (East-West Corridor) near NW 7th Street to the north; and to other planned trails including The Underline/East Coast Greenway, South Dade Trail, Snapper Creek Trail, East/West Trail, and Merrick Trail.

¹ Miami-Dade County Department of Regulatory and Economic Resources, 2018. Adopted Components Comprehensive Development Master Plan for Miami-Dade County, Florida. As adopted October 2, 2013 and as amended through February 28, 2018.

1.3.2 Secondary Criteria

Social and Economic Demand

According to the *Miami-Dade County Trail Benefits Study – Ludlam Trail Case Study* (2011)², development of the Ludlam Trail Corridor will improve public mobility for walking and biking to schools, parks, and transit stations, resulting in a reduction of daily vehicle trips in the project vicinity. By providing additional non-motorized transportation options, fewer vehicles will likely travel on the surrounding roadway network, which will help to reduce traffic congestion on major arterials in the area. Furthermore, the proposed project will enhance mobility and strengthen connections to neighboring communities, providing increased opportunities for economic development.

² Miami-Dade County Parks and Recreation Department, 2011. Miami-Dade County Trail Benefits Study, Ludlam Trail Case Study. Prepared by AECOM. January 2011.

2.0 PROJECT ALTERNATIVES

The project study area, which extends 5.6 miles in length and has an average width of 100 feet, is of sufficient size to identify potential direct and indirect effects of the Preferred Alternative that may occur within or adjacent to the proposed project corridor.

2.1 Preferred Alternative

Based on preliminary engineering designs, the Ludlam Trail will consist of a 12-foot-wide bike path and an 8-foot-wide pedestrian path with an adjacent 2-foot soft natural surface, separated in areas by a 14-foot grassed buffer. Generally, the paths will run along the center of the trail ROW. The Ludlam Trail will provide access to activity centers (i.e., schools, parks, and transit centers) via a multi-use path that can accommodate bicyclists and pedestrians. Connections to neighborhoods and parking facilities will also be provided via a multi-use path. Additionally, way-finding signage that indicates points of interest, interpretive information, or other signage, as appropriate, may be installed along the trail corridor.

There will be two potential configurations for the Ludlam Trail (see **Figures 2-1 and 2-2** for Proposed Typical Cross Sections):

- **Scenario 1 / Buffered Separation:** The trail consists of a 12-foot wide bike trail and an 8-foot wide pedestrian trail separated by a landscape buffer that varies in width from 4 to 14 feet, with a 2-foot soft natural surface adjacent to the pedestrian trail.
- **Scenario 2 / No Separation:** The trail consists of a 12-foot-wide bike trail and an 8-foot-wide pedestrian trail with an adjacent 2-foot soft natural surface. The bike and pedestrian trails are separated by an 18-inch pavement stripe.

2.1.1 Roadway Crossings

The Ludlam Trail will cross several major roadways, closely aligned to the center point of the Trail ROW. All crossings will be compliant with the Americans with Disabilities Act (ADA). Additionally, information signs that indicate points of interest may be installed as appropriate. There will be two (2) options for roadway crossings along the Ludlam Trail:

- **At-Grade Crossings:** At these crossings, the trail will be divided by a raised median into bicycle and pedestrian paths. The crossing will include ADA tactile warning strips and curb cuts, a lean bar, and an area to turn around between the curbed median and the roadway. Each crossing will have signage for both the trail users and street traffic, a mid-crossing refuge island, High Emphasis Crosswalk for pedestrians and Green Bicycle Crossing, cut-off pedestrian safety lighting at all crossings, potentially a High-Intensity Activated CrossWalk also known as a HAWK signal or a Pedestrian Hybrid Beacon also known as Rectangular Rapid Flashing Beacon (RRFB), and a push button actuator for the crossing.
- **Above-Grade Crossings:** These crossings will include an elevated (above-grade or grade separated) crossing that will carry the Ludlam Trail across the existing roadway. This type of above-grade crossing is proposed at four (4) locations: SW 40th Street/Bird Road, SW

24th Street/Coral Way, SW 8th Street/Tamiami Trail/Calle Ocho, and West Flagler Street. The above-grade crossing at West Flagler Street will also have elevators and stairs.

During the Ludlam Trail PD&E Study, site specific conditions, such as volume of vehicle traffic, signal proximity, and driveway access points were considered to determine the specific type of roadway crossing most appropriate for each roadway crossing location. During the final design phase, intersection sight distance will be determined for selecting the appropriate control at a mid-block path-roadway intersection and approvals for sign placement will be obtained as necessary prior to construction.

2.1.2 Bridges

The proposed project corridor crosses two (2) canals – the Coral Gables/C-3 Canal and the Tamiami/C-4 Canal. Each of these canals are managed by the South Florida Water Management District (SFWMD). The existing bridge across the C-3 Canal is located approximately 0.5 mile north of SW 40th Street, in the northeast corner of A.D. “Doug” Barnes Park. The existing bridge across the C-4 Canal is located approximately 0.1 mile north of West Flagler Street adjacent to Robert King High Park. The existing bridges spanning each canal were originally part of the FEC rail line. As part of the proposed Ludlam Trail project, the structurally deficient bridges will be removed and replaced. The existing bridges currently consist of in-water pilings that will be removed as part of this project. It is anticipated that the new replacement bridges will each be single span without any structural elements (e.g., pilings, columns, foundations, etc.) placed in the canal. Details regarding the removal and replacement of each of the bridges will be determined in the final design phase of this project.

2.1.3 Development Nodes

The Ludlam Trail corridor also includes nodes of private development at three (3) major roadway crossings: SW 40th Street/Bird Road, SW 24th Street/Coral Way, and from SW 8th Street/Tamiami Trail/Calle Ocho to SW 12th Street. The development nodes will be sensitive to and compatible with the adjacent areas (e.g., a neighborhood mixed-use development fronting the trail corridor, which will serve the specific needs of trail users, such as bike/skate shops, outdoor cafes, flexible office space, and multi-family residential areas). The development node areas will include an 18 ft wide perpetual easement for the trail to ensure connectivity of the trail through the length of the project corridor.

2.1.4 Trail Improvements

Tree plantings and other forms of landscaping will surround the proposed Ludlam Trail, providing users with shade, improving aesthetics, and providing a buffer to adjacent single-family residences. It is anticipated that pedestrian rest areas will be located throughout the trail corridor and may offer trail amenities (e.g., wayfinding signs, information signs, shaded benches or outdoor seating areas, trash receptacles, drinking fountains or spigots, bike racks and bike repair stations, security lighting). Proposed trailheads may also contain aesthetic features (e.g., decorative display fountains, opportunities for public artwork displays). Details regarding these trail improvements will be developed during the final design phase of this project.

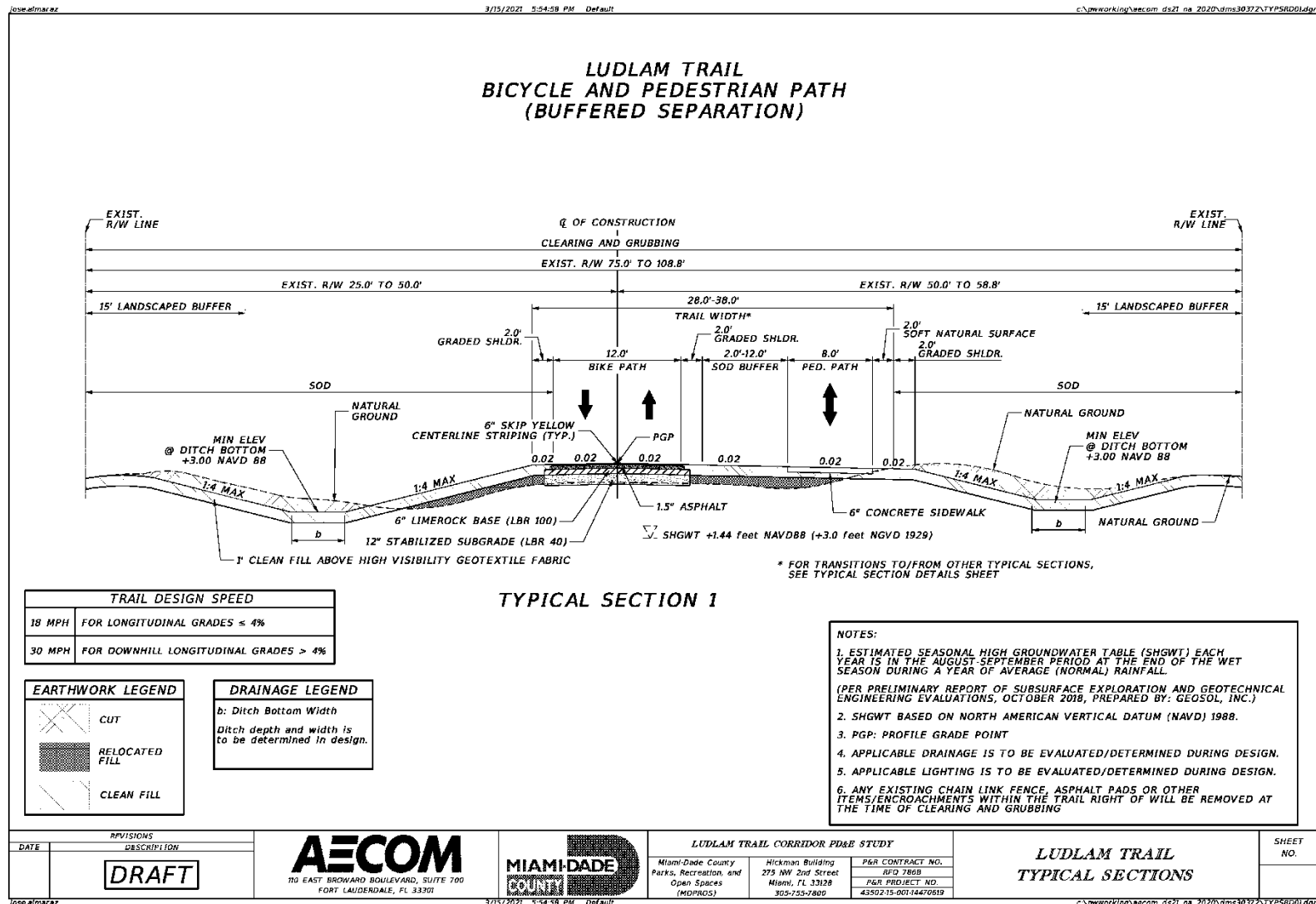


Figure 2 - 1: Proposed Typical Cross Section for the Ludlam Trail Bicycle and Pedestrian Path (Buffered Separation)

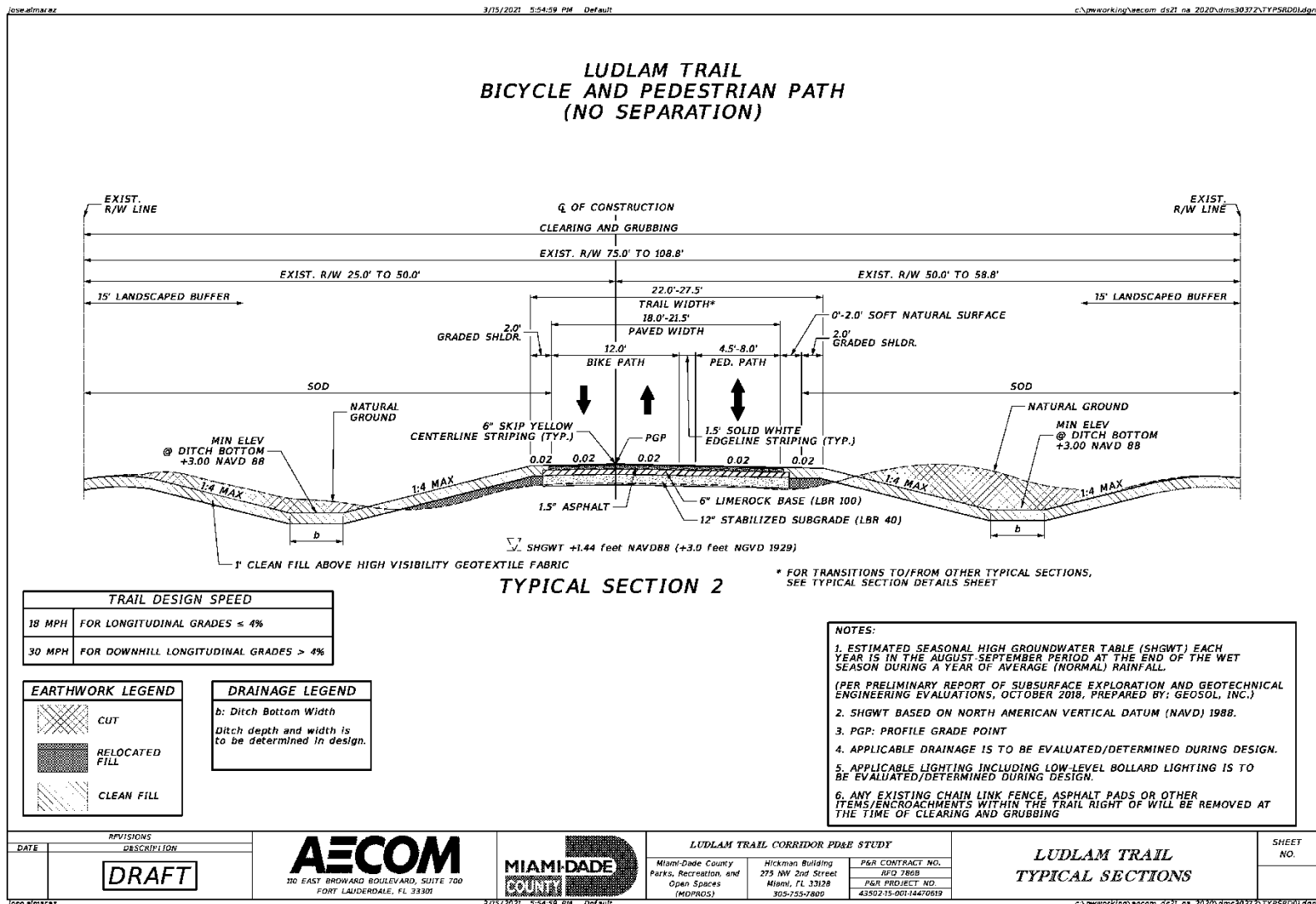


Figure 2 - 2: Proposed Typical Cross Section for the Ludlam Trail Bicycle and Pedestrian Path (No Separation)

3.0 METHODOLOGY

3.1 Site Reconnaissance

A site reconnaissance was performed on November 6, 2019 to document existing conditions and identify potential properties or operations located within the project vicinity that may present a risk of petroleum contamination or other contamination to soil or groundwater that could impact the project activities. Photographs taken during the site reconnaissance and the field notes are attached as **Appendix B**.

The project area was visually inspected for evidence of contamination, such as stressed vegetation, vent and fill pipes, accumulated areas of debris, evidence of buried materials, areas of soil staining, etc. The site reconnaissance did not indicate potential contamination related issues beyond the concerns described below.

3.2 Aerial Photography Review

The project corridor spans from NW 7th Street to SW 80th Street. GFA International, Inc. prepared two (2) Phase I Environmental Site Assessment (ESA) reports dated December 18, 2014 and December 22, 2014, for Miami-Dade County. In the first Phase I ESA, a historical aerial review was conducted from 1951 to 2013 for the project corridor spanning from NW 7th Street to SW 8th Street while the second Phase I ESA included an aerial review from 1951 to 2014 for the project corridor starting from north of SW 8th Street and ending west of the Dadeland Mall at SW 88th Street. The Phase I reports are included as **Appendix C**. Aerial photographs from 2013 to 2018 were reviewed at the Miami Dade County's office in Miami Downtown for the project corridor to evaluate historical land uses to determine potential contamination concerns. No concerns, other than the concerns listed in Section 7, were identified in the aerial photograph review. A summary of the review of historical aerial photography provided in Phase I ESAs and a review of aerial photographs from 2013 to 2018 conducted by AECOM at the Miami Dade County's office is provided in **Table 3-1**.

Table 3 - 1: Summary of Aerial Photograph Review

Aerial Date	Summary of Observed Conditions
1951	The areas around NW 7 th Street seemed undeveloped. A small structure is visible on the property adjoining the south of SW 7 th Street to the west. Railway development is visible.
1968	Robert King High Park is observed west of the corridor and a man-made lake is observed on east of the corridor. A railroad spur is observed south of SW 8 th Street. Open storage is observed in properties located along the railroad spur. A large commercial building is observed west of the corridor by SW 12 th Street. No other significant changes observed.
1973	A large industrial building is visible south of SW 24 th Street and west of corridor. One (1) industrial railroad spur is observed by SW 12 th Street. No other significant changes observed.
1978	The railroad spur observed south of SW 8 th Street is no longer available. Residential development is observed west of project corridor near SW 12 th Street. No other significant changes observed.

Aerial Date	Summary of Observed Conditions
1985	The present-day extensions located in the rear portions of the buildings located in the northwestern property are observed between SW 12 th Street and SW 21 st Street. No other significant changes observed.
1991	An industrial railroad spur and present-day concrete patch are observed north of SW 40 th Street. No other significant changes observed.
1994, 1998, 2002, 2005	No other significant changes observed.
2009	The large building observed north of SW 12 th Street is no longer observed. The railroad tracks between SW 12 th Street and SW 21 st Street are no longer observed. No other significant changes observed.
2013	Lumber facility operating south of SW 7 th Street is no longer visible. No other significant changes observed. The conditions appear similar to current conditions.
2014	The areas to the east and west of the project corridor consist mainly of residential properties and commercial properties. There are very few recreational areas in the vicinity of the corridor. There is no evidence of any illegal dumping, landfills, or other activities that might pose an environmental concern.
2016	Throughout the span of the project corridor, there has been minimal changes to the east and west. Slight increase in commercial properties. No change in the residential properties east and west of the corridor.
2017	Throughout the span of the project corridor, there has been minimal changes to the east and west. Slight increase in commercial properties. No change in the residential properties east and west of the corridor.
2018	Throughout the span of the project corridor, there has been no change in the development to the east and west. A pile of material was observed south of NW 7 th Street which appeared to be of construction materials.

3.3 Public Record Review

The evaluation of the potential for contamination within the study limits involved a review of information available in the Public Records regarding registered hazardous waste generators, transporters, and users as well as registered petroleum storage facilities, U.S. Environmental Protection Agency (USEPA) Superfund or potential Superfund sites, and sites where releases or discharges of hazardous materials have been reported to regulatory agencies. The public file review summaries were also provided by Environmental Data Resources, Inc. (EDR). The EDR report is provided as **Appendix D**. In addition to the review of the summaries provided by EDR, available regulatory agency files were reviewed by AECOM for sites included in later sections. Copies of relevant documents for High and Medium risk sites are provided in **Appendix E**.

The findings from previous Phase I and Phase II ESA Reports were reviewed in addition to the file review described above. The two (2) Phase I reviews from 2014 were reviewed during the file review to evaluate the potential for contamination. However, as the Phase I assessment was conducted in 2014, a new EDR report was requested and the sites with potential contamination concern listed in the latest EDR report were reviewed. The findings from Phase II assessment conducted on the project corridor is summarized in the subsequent sections.

The EDR screening tool maps the approximate locations of sites within the following buffers:

1. 500 feet from the ROW line for petroleum, drycleaners, and non-petroleum sites
2. 1,000 feet from the ROW line for non-landfill solid waste sites such as recycling facilities, transfer stations and debris placement areas
3. ½ mile from the ROW line for Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), National Priorities List (NPL), Superfund sites, or Landfill sites.

Any known or potential environmental liabilities based on information contained in various federal and state databases is reported by the EDR screening tool. These databases include:

1. *Federal NPL Site List*
2. *Federal Delisted NPL Site List*
3. *Federal Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) List*
4. *Federal CERCLIS NFRAP Site List;*
5. *Federal Resource Conservation and Recovery Act (RCRA) CORRACTS Facilities List*
6. *Federal RCRA non-CORRACTS TSD Facilities List*
7. *Federal RCRA Generators List*
 - *Large Quantity Generators (LQG) of Hazardous Wastes*
 - *Small Quantity Generators (SQG) of Hazardous Wastes*
 - *Very Small Quantity Generators (VSQG) of Hazardous Wastes*
 - *Conditionally Exempt Small Quantity Generators (CESQG) of Hazardous Wastes*
8. *Federal Emergency Response Notification System (ERNS) List*
9. *State- and Tribal-equivalent CERCLIS*
 - *Florida's State-Funded Action Sites*
10. *State and Tribal Landfill and/or Solid Waste Disposal Site Lists*
11. *State and Tribal Leaking Storage Tanks Lists*
12. *State and Tribal Registered Storage Tank Lists*
 - *Florida Underground Storage Tank (UST) Database*
 - *Florida Aboveground Storage Tank (AST) Database*
13. *State and tribal Voluntary Cleanup Sites*
 - *Florida Voluntary Cleanup Program database*
14. *Local lists of Hazardous Waste / Contaminated Sties*
 - *Florida Priority Cleaners list from the Department of Environmental Protection*
15. *Other Ascertainable Records*
 - *RCRA NonGen / NLR (facilities that no longer generate hazardous wastes).*
 - *FL Miami-Dade County HWS Hazardous Waste Agency from the Miami-Dade County Department of Environmental Resources Management.*
 - *Florida Drycleaners list, from the Florida Department of Environmental Protection.*
 - *FL Miami-Dade IW: Miami-Dade County Industrial Waste List (DERM)*
 - *FL DWM CONTAM: A listing of active or known sites that need cleanup but are not actively being working on because the agency currently does not have funding (primarily petroleum and dry-cleaning).*

The EDR reported one (1) RCRA-SQG site, 32 RCRA-VSQG sites, 31 sites with USTs, six (6) sites with ASTs, and 24 sites listed as RCRA Non-Generators/ No Longer Regulated. All facilities listed in the EDR report were considered for inclusion. Facilities that are permitted, but not included in databases that list the sites

with potential contamination concerns were removed from consideration for further review as no contamination concerns are expected from such sites.

All facilities listed in the contaminated sites databases in the EDR that had a potential to have an impact to the project were included in the review. This includes, but is not limited to, all facilities with underground and above ground storage tanks, drycleaners, landfills, and other industrial waste (IW) generators.

3.4 Florida Department of Environmental Protection (FDEP)

The FDEP has compiled several database lists, which are useful in identifying potential sources of soil or groundwater contamination within the study area. The following FDEP lists were reviewed within a 1-mile radius of the project corridor:

1. Registered USTs (REG UST),
2. Leaking USTs (LUST),
3. State Sites (CERCLIS and NPL Equivalents), and
4. Solid Waste Landfills (SWL)

The above listing contains the common abbreviation for each database. Lists 1 and 2 (REG UST and LUST) document facilities with registered underground fuel storage tanks and facilities where leaking underground storage tanks or fuel spills have been reported, respectively. Lists 3 and 4 (CERCLIS/NPL and SWL) document sites where known hazardous material contamination exists and the existence of registered or known landfills, respectively.

3.5 U.S. Environmental Protection Agency

The USEPA has also compiled several lists used for identifying potential sources of hazardous materials contamination within the study area. The lists reviewed for this evaluation include:

1. Facility Index System (FINDS),
2. RCRA Treatment, Storage, Disposal,
3. RCRA Corrective Action Sites,
4. RCRA Generator,
5. RCRA No Longer Regulated Generator,
6. ERNS,
7. Toxic Release Inventory System,
8. CERCLIS,
9. NPL, and
10. National Pollution Discharge Elimination System (NPDES).

The above listings contain the common abbreviation for each database. The FINDS list indicates businesses or organizations which are subject to EPA regulations. The list further indicates which USEPA program office has responsibility for facilities contained in the FINDS list. The RCRA list is generated by the USEPA office which is responsible for management of hazardous wastes. Being listed on the FINDS or RCRA list does not mean that there is a contamination problem, but merely indicates that the facility is properly registered with the USEPA. The ERNS list is a report documenting spills at which emergency assistance

was required to abate any imminent danger to the environment or health and safety of the public. The CERCLIS list is a master list of all potential Superfund sites. The NPL list includes active Superfund sites. The NPDES is a list of facilities receiving and discharging effluents to and from the environment.

3.6 Miami-Dade County Division of Environmental Resources Management (DERM)

The DERM has been contracted by the FDEP to perform inspections and maintain records of each registered underground and aboveground petroleum facilities in Miami-Dade County, Florida. Due to this, for some of the sites with contamination concerns, DERM is the lead regulatory agency. Additionally, DERM manages other contaminated sites with non-petroleum contamination.

3.7 Agency Coordination

Agency coordination to obtain contamination-related information occurred through the ETDM Planning and Programming Screening (ETDM #14369). The latest ETDM Programming Screening Summary Report was published on January 30, 2019. For this project, the FDEP and the South Florida Water Management District (SFWMD) reviewed the project and did not provide any comments on project effects for contamination. The USEPA reviewed the project and listed a degree of effect of “Substantial” for contamination. The Summary Degree of Effect for contaminated sites was also listed as “Substantial” for contamination for this project in the ETDM Programming Screening Summary Report. The relevant sections of the ETDM Summary Report have been provided as **Appendix A**. Additional agency coordination efforts relevant to each potential contaminated area are discussed in the following sections of this report.

3.8 Contamination Potential Risk Ranking System

For sites identified in the Public Record as having reported contamination to a regulatory agency (FDEP, USEPA, and DERM), a search of available regulatory agency files database was made to gather information on the nature and extent of reported contamination.

After gathering and reviewing the above information and performing the site reconnaissance, a contamination risk ranking was assigned to sites that were identified as having a potential risk of existing soil or groundwater contamination. Please note that the contamination risk potential rating is based on current conditions and may not reflect conditions which may exist in the future.

The contamination potential risk or rating system follows the FDOT Chapter 20 PD&E guidelines and can be defined by the following four (4) categories:

1. **No** - A review of available information on the property and a review of the conceptual or design plans indicates there is no potential contamination impact to the project. It is possible that contaminants have been handled on the property. However, findings from the Level I evaluation indicate that contamination impacts are not expected.
2. **Low** - A review of available information indicates that past or current activities on the property have an ongoing contamination issue; the site has a hazardous waste generator identification (ID) number, or the site stores, handles, or manufactures hazardous materials. However, based on the review of conceptual or design plans and/or findings from the Level I evaluation, it is not likely that there would be any contamination impacts to the project.

3. **Medium** - After a review of conceptual or design plans and findings from a Level I evaluation, a potential contamination impact to the project has been identified. If there is insufficient information (such as regulatory records or site historical documents) to make a determination as to the potential for contamination impact, and there is reasonable suspicion that contamination may exist, the property should be rated at least as a “Medium”. Properties used historically as gasoline stations and which have not been evaluated or assessed by regulatory agencies, or sites with abandoned in place underground petroleum storage tanks should receive this rating.
4. **High** - After a review of all available information and conceptual or design plans, there is appropriate analytical data that shows contamination will substantially impact construction activities, have implications to ROW acquisition or have other potential transfer of contamination related liability to the FDOT. A recommendation for each site with a rating of medium or high should include a listing of the analytical parameters of concern and media (e.g., soil, groundwater), a discussion of potential involvement with ROW acquisition and/or construction and if the site is anticipated to warrant additional (Level II or III) assessment.

4.0 LAND USE

The Ludlam Trail Corridor is located in Miami-Dade County, which is part of the Southeast Florida Region of Palm Beach, Broward, and Miami-Dade Counties.

A total of 14 land use classifications were identified within the project study area. **Table 4-1** lists the acreage and percentage of each land use type within the project study area. An aerial map depicting the generalized Florida Land Use, Cover and Forms Classification System (FLUCCS) boundaries of existing land uses within the Build Alternatives is included as **Figure 4-1**.

110 - 130 Residential: Residential land uses range from high-density urban housing developments to low-density rural areas characterized by a relatively small number of homes per acre. The variation extends from the multi-family apartment complexes generally located in larger urban centers to those single-family houses sometimes having lot sizes of more than one (1) acre. Areas of low intensity residential land use [generally less than one (1) dwelling unit per five (5) acres], such as farmsteads, will be incorporated in other categories to which they relate. However, rural residential and recreational type subdivisions will be included in the Residential category since this land is almost entirely committed to residential use even though it may include forest or range types.

In most instances the boundary will be clear when new housing developments abut clearly defined agricultural areas. Conversely, the residential boundary may be vague and difficult to discern when residential development is sporadic and occurs in smaller isolated units developed over an extended period of time in areas with mixed or less intensive land uses. A careful evaluation of density and overall relationship of these areas to the total urban complex must be made.

Other land use categories may embrace areas that meet the Residential category requirement. Often such residential sections are an integral component of the category with which they are associated and should be included within that category. For example, in the Institutional category residential units may be found on military bases in the form of barracks, apartments, dormitories or homes and on college and university campuses in the form of apartments and dormitories in close proximity to instructional buildings. Agricultural field operations and resort facilities commonly provide temporary lodging for their employees and these areas should be classified under Agriculture and Commercial and Services respectively.

140 – Commercial and Services: Commercial areas are predominantly associated with the distribution of products and services. This category is composed of a large number of individual types of commercial land uses which often occur in complex mixtures.

The Commercial and Services category includes all secondary structures associated with an enterprise in addition to the main building and integral areas assigned to support the base unit. Included are sheds, warehouses, office buildings, driveways, parking lots and landscaped areas.

Other types of Commercial areas include shopping centers and commercial strip developments. These areas have distinctive patterns which are readily identifiable on aerial photographs. Frequently, individual houses and other classes of urban land use may be found within commercial areas. Such uses normally are not delineated unless they can be plotted into polygons of at least one (1) acre size at Level III. Otherwise, the Mixed category should be used.

Commercial use which cannot be easily identified on aerial photography is the commercial resort. These businesses cater to vacationing patrons and often contain associated recreational facilities such as swimming pools and ball courts.

150 – Industrial: The Industrial category embraces those land uses where manufacturing, assembly or processing of materials and products are accomplished. Industrial areas include a wide array of industry types ranging from light manufacturing and industrial parks to heavy manufacturing plants. Also included are those facilities for administration and research, assembly, storage and warehousing, shipping and associated parking lots and grounds.

Typical examples of industrial types found in Florida are pulp and lumber mills, oil refineries with tank farms, chemical plants and brick making plants. Stockpiles of raw materials, large power sources and solid waste product disposal areas are visible industrial features and are easily identified on conventional aerial photography.

170 – Institutional: Educational, religious, health and military facilities are typical components of this category. Included within a particular institutional unit are all buildings, grounds and parking lots that compose the facility. Those areas not specifically related to the purposes of the institution should be excluded. For example, agriculture areas not specifically associated with correctional, educational or religious institutions are placed in the appropriate Agricultural categories.

Educational institutions encompass all levels of public and private schools, colleges, universities, training centers, etc. The entire areas enclosing buildings, campus open space, dormitories, recreational facilities and parking lots are included in this category when they are identifiable.

Military facilities are characterized by a wide variety of features including training camps, missile sites, etc. Administration, storage, repair, security and other functional military buildings plus the practice ranges, storage areas, equipment storage lots and buffer zones compose the institutional military facilities. Auxiliary land uses, particularly residential, commercial and other supporting uses located on a military base, are included in the Institutional category.

180 – Recreational: Recreational areas are those areas whose physical structure indicates that active user-oriented recreation is or could be occurring within the given physical area. This category would include golf courses, parks, swimming beaches and shores, marinas, fairgrounds, etc. (Note: Swimming beaches are identifiable by such features as bath houses, picnic areas, service stands and large parking lots adjacent to the beach areas.) In order to make this recreational determination, supplemental information may often be required.

190 – Open Land: This category includes undeveloped land within urban areas and inactive land with street patterns but without structures. Open Land normally does not exhibit any structures or any indication of intended use. Often, urban inactive land may be in a transitional state and ultimately will be developed into one (1) of the typical urban land uses although at the time of the inventory, the intended use may be impossible to determine from aerial photo interpretation alone.

410 – Upland Coniferous Forests: Any natural forest stand whose canopy is at least 66 percent dominated by Coniferous species is classified as a Coniferous Forest. However, pine plantation monocultures will fall under the Tree Plantation category (the 440 class). The similar morphology of the pine species occurring in Florida makes them difficult to distinguish from one another on aerial photographs.

420 and 430 – Upland Hardwood Forests: This classification of upland forest lands has a crown canopy with at least a 66 percent dominance by hardwood tree species. This class, like the Upland Conifer class, is reserved for naturally generated stands. Hardwood plantations, where they occur, fall under the 440 class.

510 – Streams and Waterways: This category includes rivers, creeks, canals and other linear water bodies. Where the water course is interrupted by a control structure, the impounded water area will be placed in the Reservoirs category (530). The boundary between streams and lakes, reservoirs or the ocean is the straight line across the mouth of the stream unless the mouth is more than one (1) mile (1.85 kilometers) wide. In that case, the rule given under Bays and Estuaries (540) is followed.

530 – Reservoirs: Reservoirs are artificial impoundments of water. They are used for irrigation, flood control, municipal and rural water supplies, recreation and hydro-electric power generation. Dams, levees, other water control structures or the excavation itself usually will be evident to aid in the identification.

740 – Disturbed Land: Disturbed Lands are those areas which have been changed due primarily to human activities other than mining. In Florida, these areas may be rather extensive and often appear outside of urban areas.

810 – Transportation: Transportation facilities are used for the movement of people and goods; therefore, they are major influences on land and many land use boundaries are outlined by them.

Highways are easily identifiable on medium altitude photography. Highways include areas used for interchanges, limited access rights-of-way and service facilities. The center median, pavement and sizable buffer zone should be included even if exact boundaries cannot be detected.

The Transportation category encompasses rail-oriented facilities including stations, round-houses, repair and switching yards and related areas. Airport facilities include runways, intervening land, terminals, service buildings, navigational aids, fuel storage, parking lots and a limited buffer zone and fall within the Transportation category.

Transportation areas also embrace ports, docks, shipyards, dry docks, locks and water course control structures designed for transportation purposes. The docks and ports include buildings, piers, parking lots and adjacent water utilized by ships in the loading and unloading of cargo or passengers. Locks, in addition to the actual structures, include the control buildings, power supply buildings, docks and surrounding supporting land use (i.e., parking lots and green areas).

Table 4 - 1: Existing Land Use/Vegetative Cover within the Project Study Area

FLUCCS Code	Description	Acres	Percentage
110	Residential, Low Density (Less Than Two Dwelling Units Per Acre)	204	5.0
120	Residential, Medium Density (Two-Five Dwelling Units Per Acre)	2136	51.9
130	Residential, High Density (Six Or More Dwelling Units Per Acre)	266	6.5
140	Commercial and Services	582	14.1
150	Industrial	216	5.2

170	Institutional	98	2.4
180	Recreational	108	2.6
190	Open Land	52	1.3
410	Upland Coniferous Forests	13	0.3
420	Upland Hardwood Forests	3	0.1
430	Upland Hardwood Forests (Continued)	12	0.3
510	Streams and Waterways	56	1.4
530	Reservoirs	203	4.9
740	Disturbed Land	17	0.4
810	Transportation	152	3.7

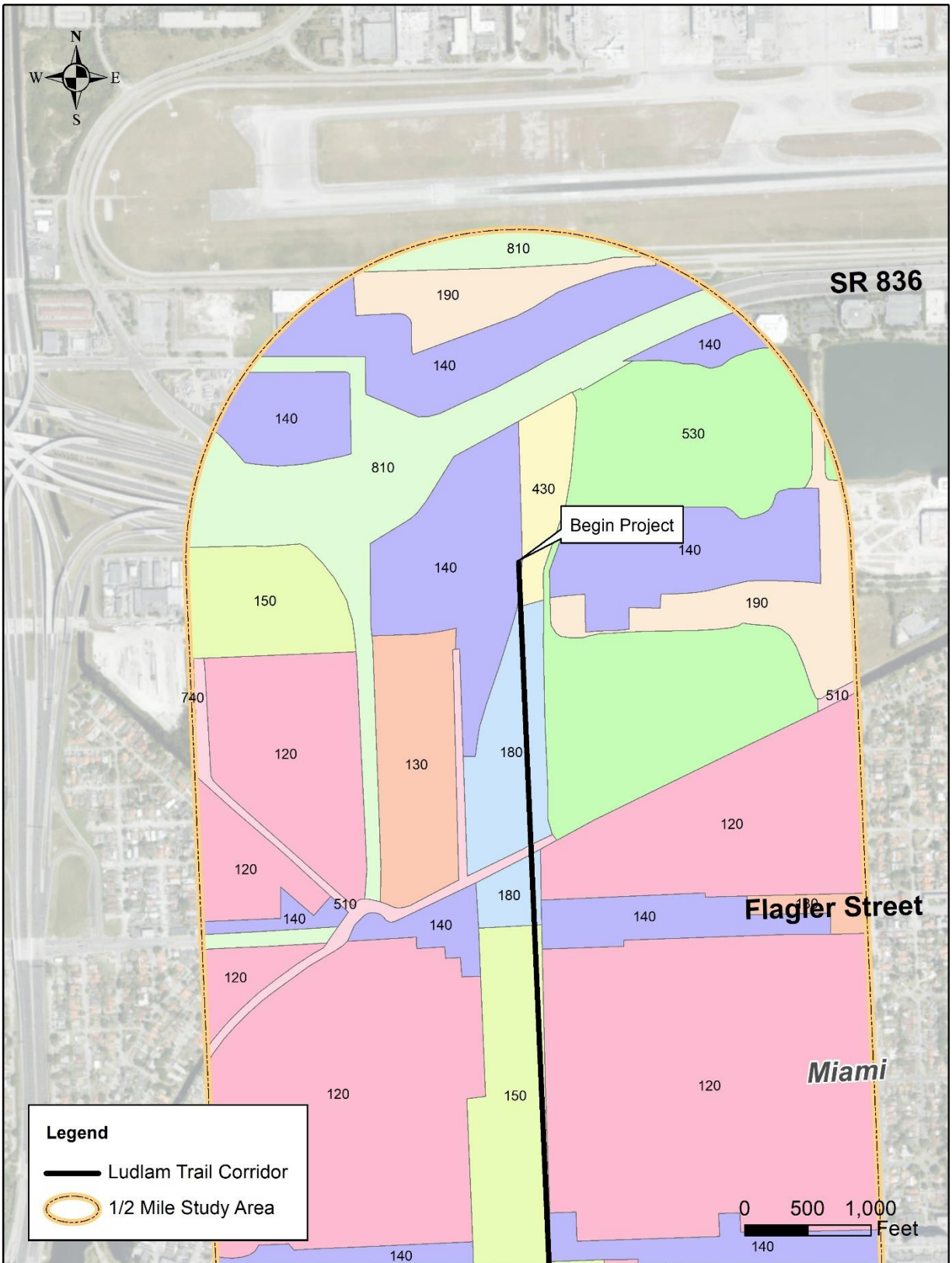


Figure 4 - 1: Existing Land Use (1 of 4)

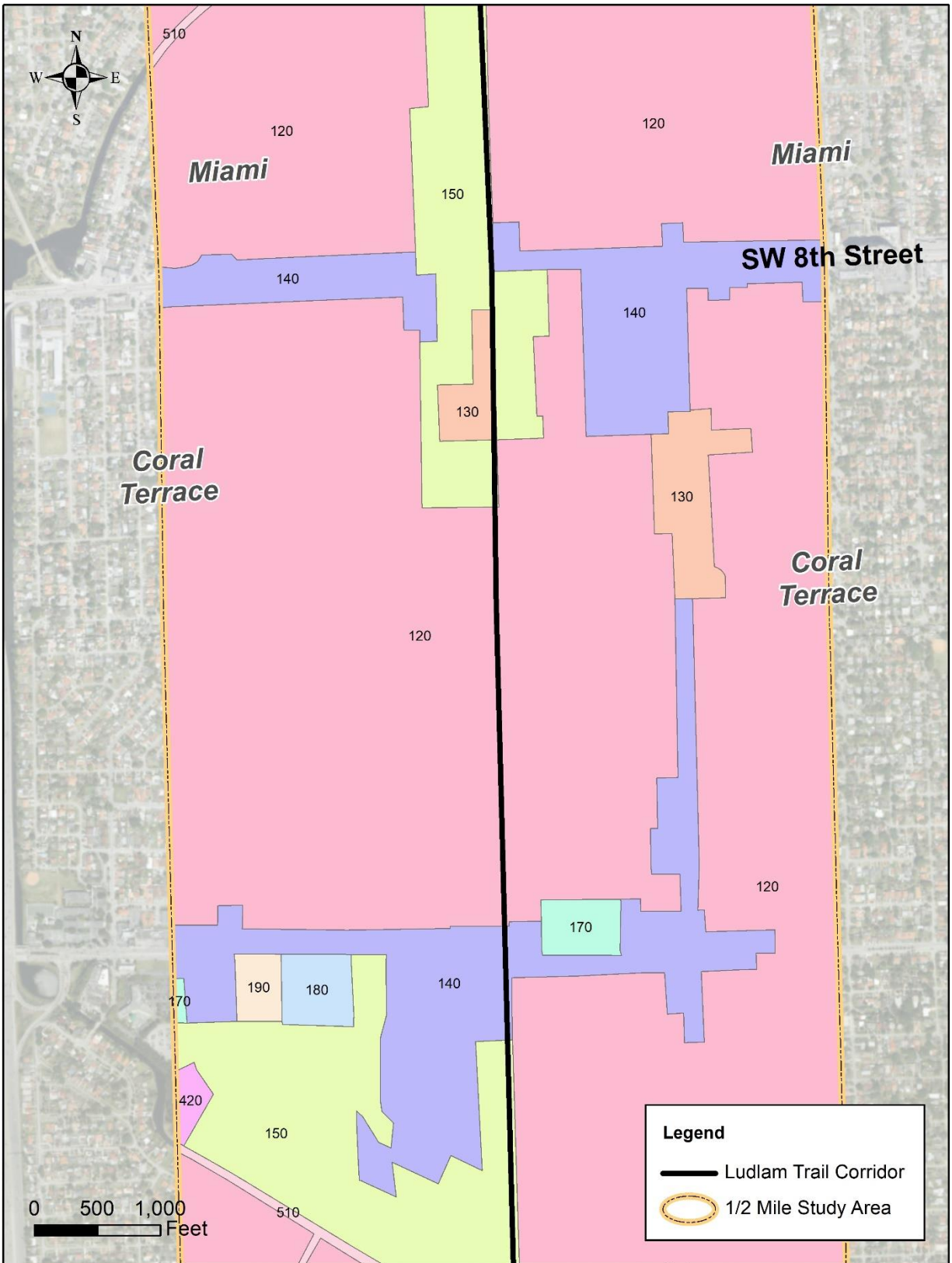


Figure 4 - 1: Existing Land Use (2 of 4)

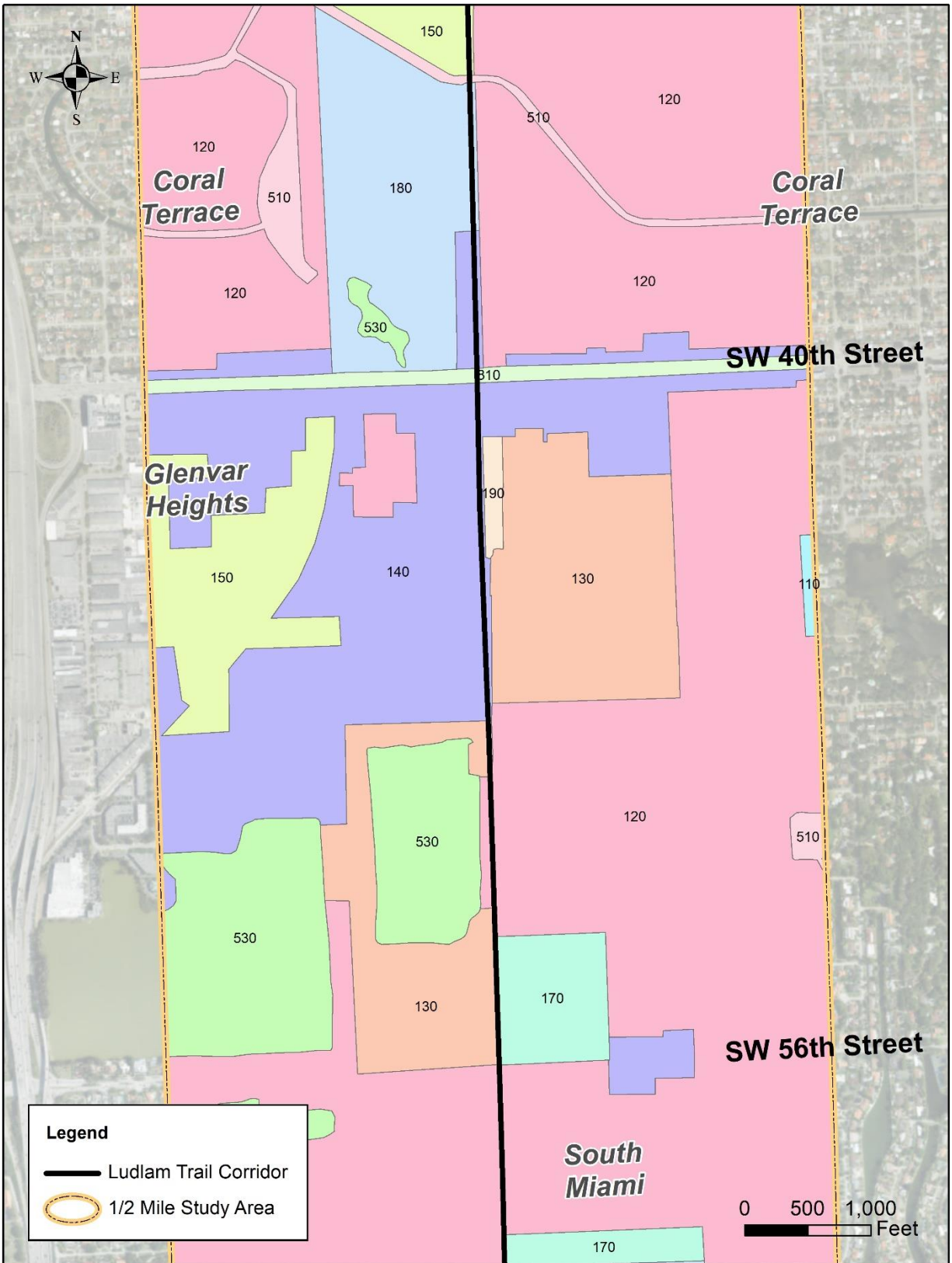


Figure 4 - 1: Existing Land Use (3 of 4)

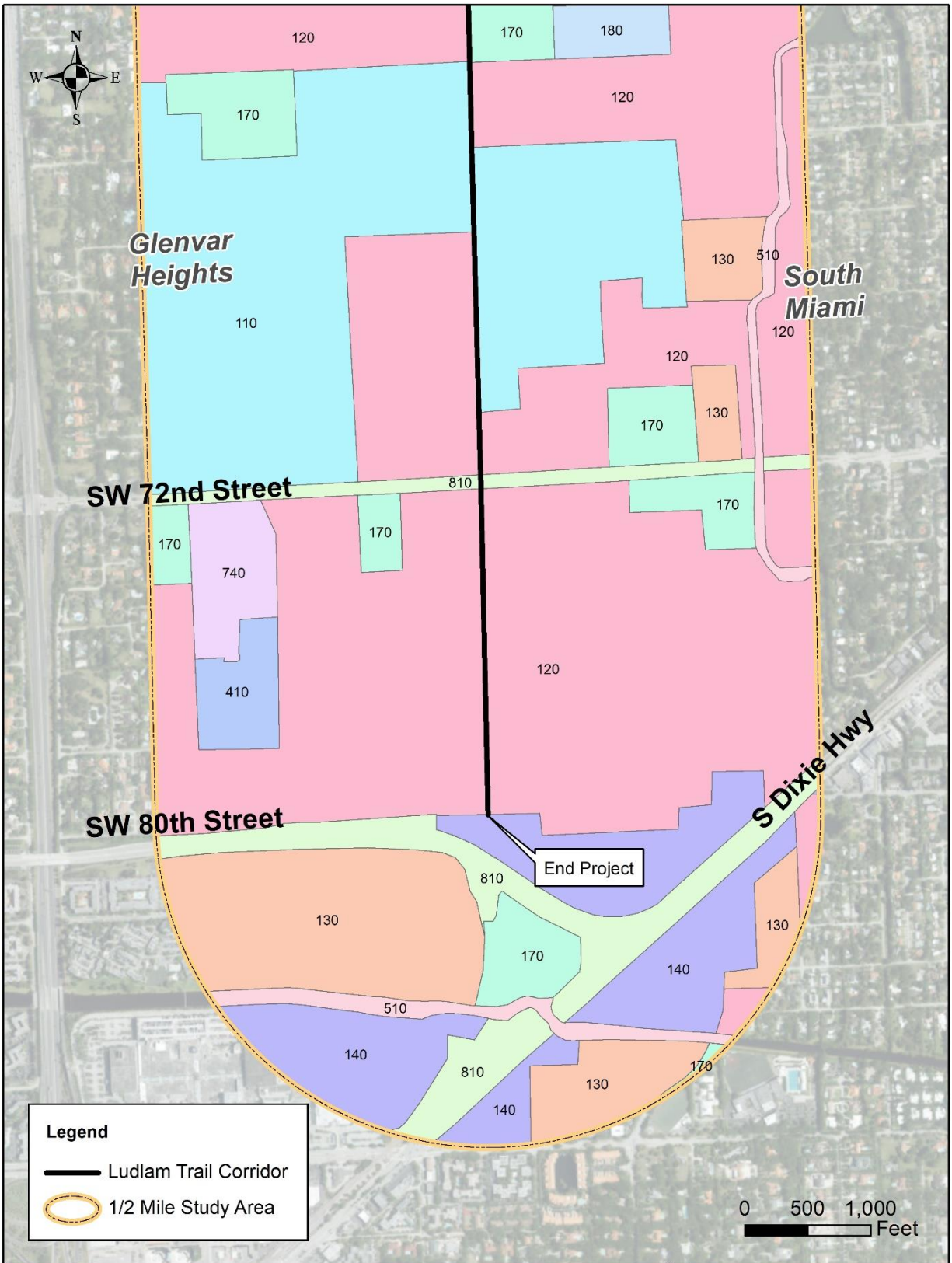


Figure 4 - 1: Existing Land Use (4 of 4)

5.0 HYDROLOGIC FEATURES

The geology and the hydrology of the project area are provided in the following sections.

5.1 Geology

Beginning with the most recently deposited sediments, forming the top of the Biscayne Aquifer in Miami-Dade County is the relatively thin layer of quartz Pleistocene marine-terrace deposits grouped together as the “Pamlico Sands,” extending to a depth of about five (5) feet below land surface. The Pamlico Sands are underlain by the Miami Oolite Limestone, a soft oolitic Pleistocene age limestone having extensive secondary porosity, generally less than 40 feet thick. Underlying the Miami Oolite is the Pleistocene age Anastasia Formation, a porous, sandy, shelly, limestone marl with nodular and shelly carbonate cemented sandstone interbedded with sand and approximately 100 feet thick. The Key Largo Limestone, a “crystalline, very porous, coralline limestone,” appears as a localized lens in the Anastasia Formation. The upper part of the underlying Tamiami Formation, of Miocene-Pliocene age, consists of moldic limestone, calcareous sandstone, and sand. These units are underlain by the Miocene-age Hawthorn Formation, which is composed of “interbedded siltstone, claystone, and quartz sand.” Due to their low permeability, the Lower Tamiami Formation and the Upper Hawthorne Formation comprise the intermediate confining layer below the Biscayne Aquifer.

5.1.1 Soils

Based on the Soil Survey of Miami-Dade County, Florida, the project study area is comprised of six (6) mapped soil units (**Figure 5-1**). According to the Hydric Soils of Florida Handbook, one (1) (Biscayne Marl, drained) of the six (6) soil types identified within the project study area is classified as hydric. **Table 5-1** lists the acreage and percentage of each mapped soil type within the Build Alternatives.

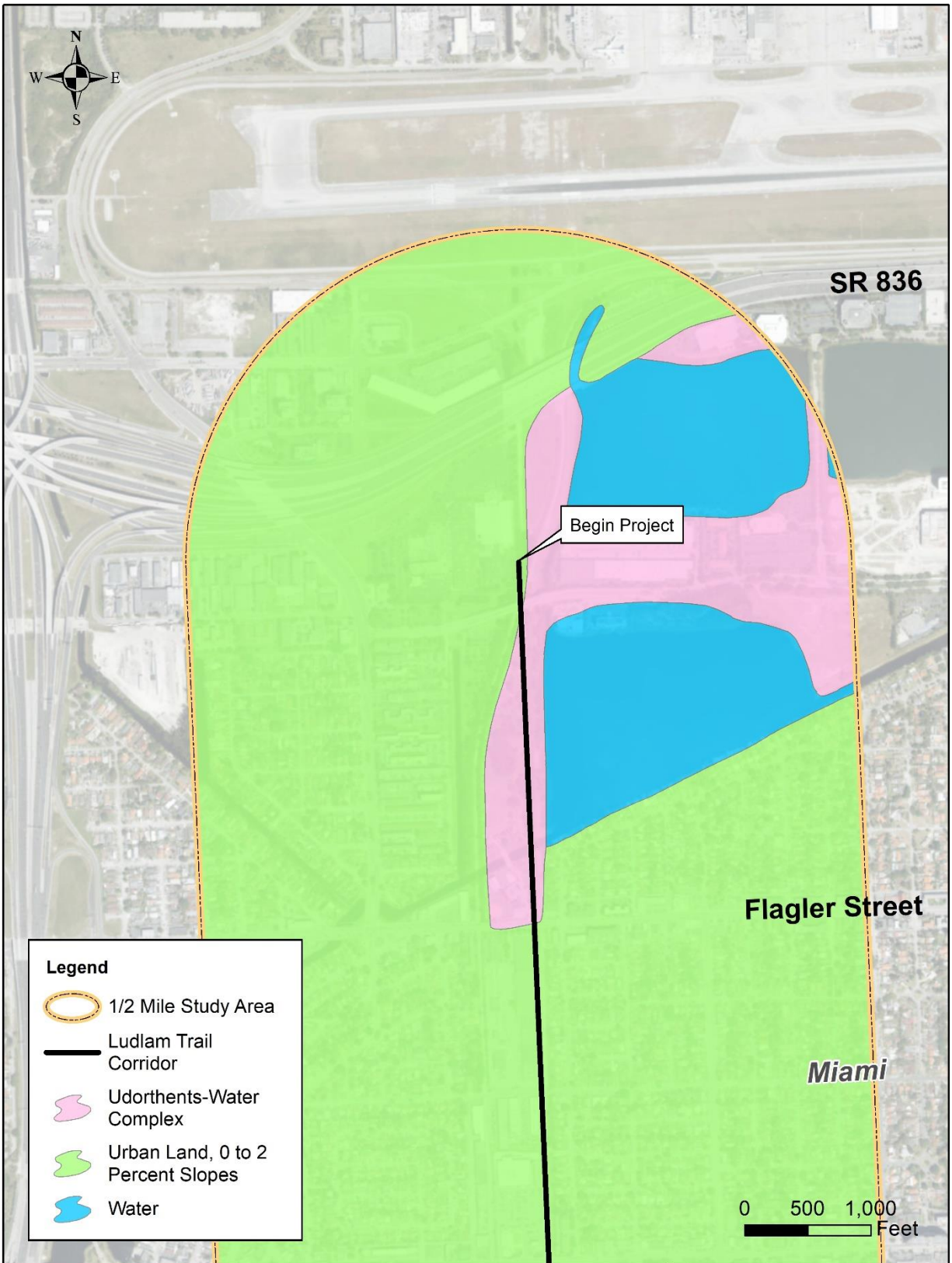


Figure 5 - 1: Soil Types and Coverage within the Project Study Area (1 of 4)

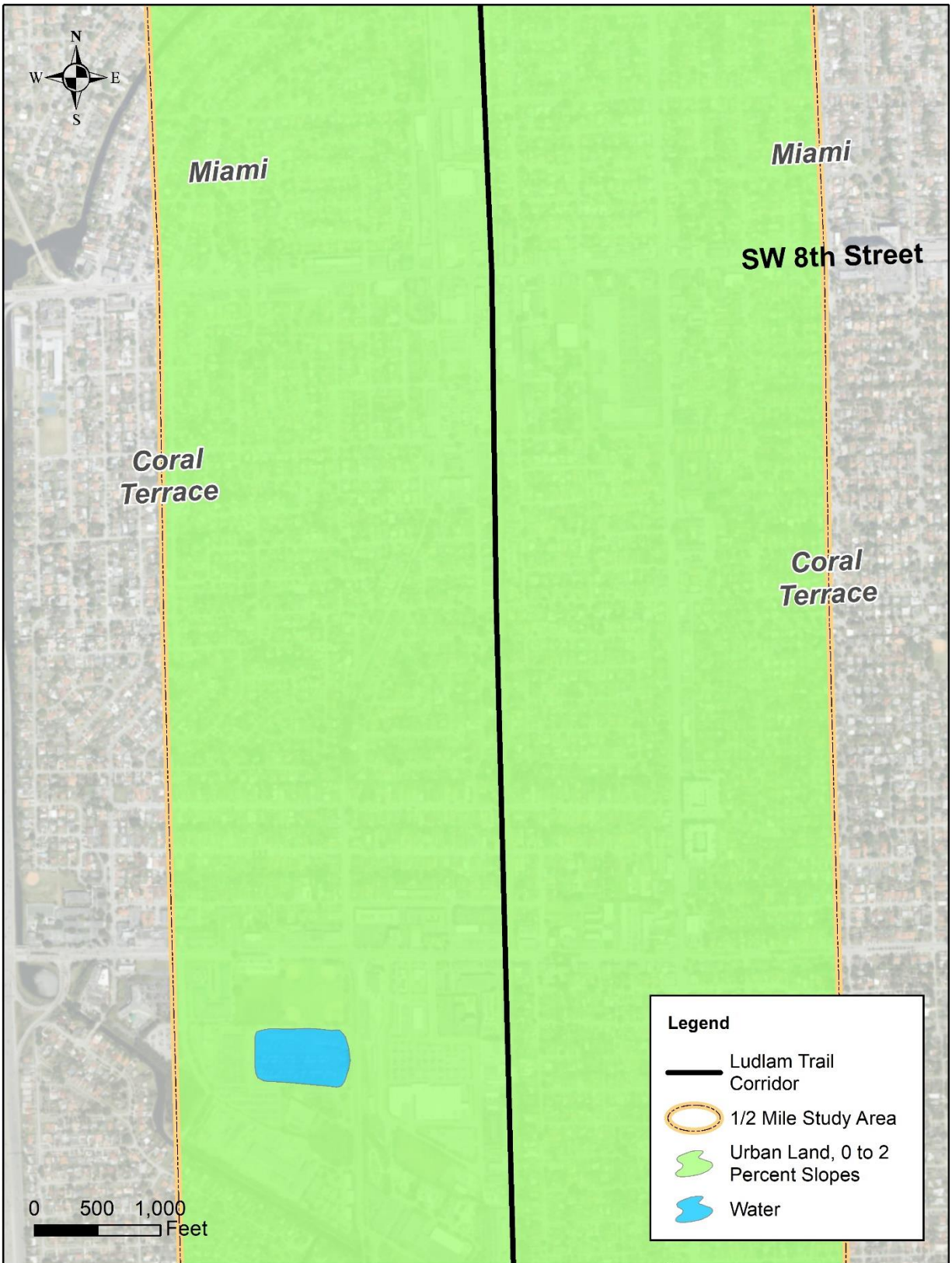


Figure 5 - 1: Soil Types and Coverage within the Project Study Area (2 of 4)

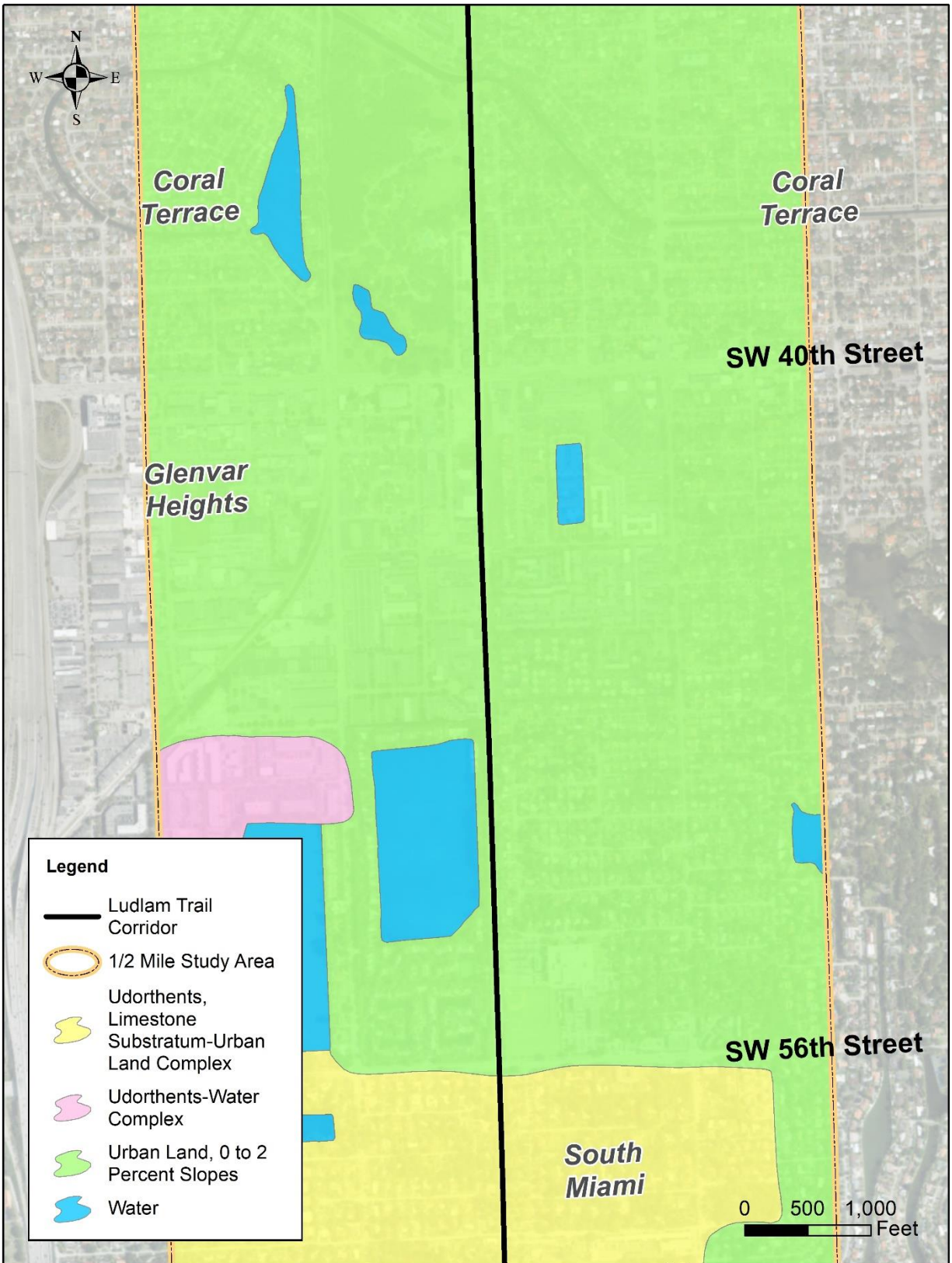


Figure 5 - 1: Soil Types and Coverage within the Project Study Area (3 of 4)

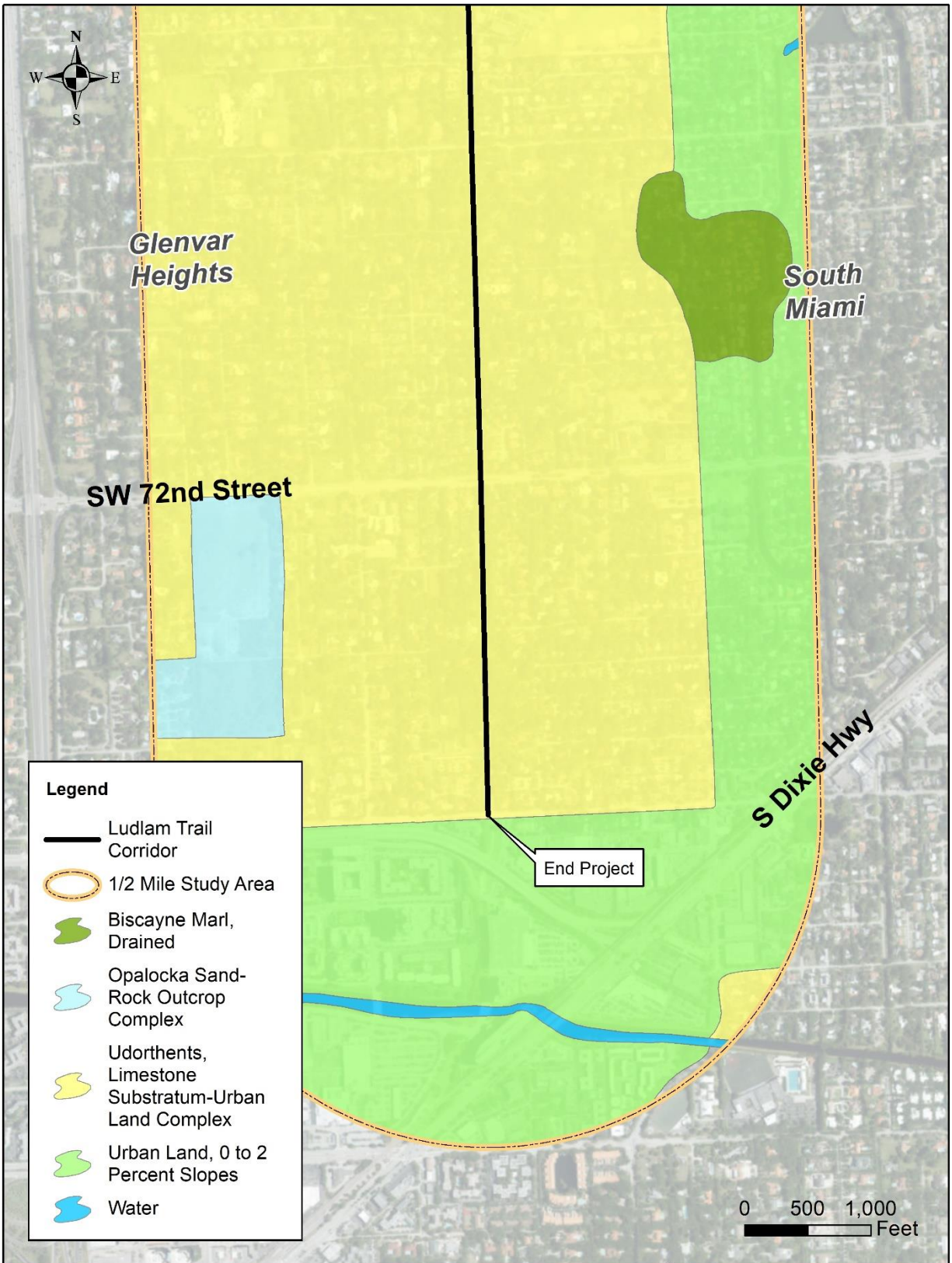


Figure 5 - 1: Soil Types and Coverage within the Project Study Area (4 of 4)

Table 5 - 1: Soil Types and Coverage within the Project Study Area

Soil Type	Acres in AOI	Percent of AOI
Krome very gravelly loam	1.2	0.0%
Udorthents-Water complex	121.6	3.0%
Udorthents, limestone substratum-Urban land complex	764.9	18.6%
Urban land, 0 to 2 percent slopes	2,931.7	71.2%
Biscayne marl, drained	26.8	0.7%
Opalocka sand-Rock outcrop complex	35.9	0.9%
Water	235.7	5.7%

5.2 Hydrology

Groundwater and surface water drainage are influenced by both local geology and topography. The water table generally conforms to the land surface and lateral groundwater flow in the area of the site is slow due to the flat terrain. However, due to the highly transmissive characteristics of the underlying aquifer, there is a high potential for rapid movement of the groundwater.

The hydrology of the area consists of surface water bodies, shallow depressional wetlands, and groundwater. The Coral Gables (C-3) canal and Tamiami (C-4) canal also traverse the corridor. The Biscayne Aquifer underlies the project area as well as the entire Miami-Dade County. The Biscayne Aquifer is the principal source of drinking water for Miami-Dade County. The aquifer is a surficial, unconfined aquifer, which extends from the ground surface to a depth of more than 300 feet along the coast. The depth to groundwater fluctuates from two (2) to three (3) feet above mean sea level during the wet season to one (1) foot above mean sea level during the dry season. Recharge of the aquifer is through infiltration of precipitation and surface water. Since the aquifer is surficial, the groundwater within it can be affected by various land uses. The proposed project is not anticipated to have negative impacts to the Biscayne Aquifer system. All necessary precautions and best management practices pertaining to construction will be followed to prevent adverse impacts to the underlying sole source aquifer.

The Miami-Dade County Wellfield Protection Program protects the aquifer by restricting land uses within the vicinity of the public wellfield. The section of the project corridor between SW 48th Lane and SW 72nd Street is within the maximum protection zone of Alexander Orr Wellfield. No other part of the study area is located within the wellfield protection zone. All phases of work will comply with the requirements of Miami-Dade County Environmental Protection Ordinance (Section 24 of the Miami-Dade County Code). All necessary precautions and best management practices pertaining to construction will be followed to prevent adverse impacts to potable water quality.

Historically, the natural topography of South Florida has been flat. Precipitation has percolated into the surficial soils or was transported by sheet flow to the south into the Everglades or east to the coast via sloughs and rivers bisecting the Atlantic Coastal Ridge. Both local geology and topography influence the groundwater and surface water drainage. Based on U.S. Geological Survey Report (Biscayne Aquifer, Southeast Region) Water Resources Investigations 78-107 prepared in cooperation with the USEPA, the regional direction of groundwater flow is to the southeast. Groundwater flow within the upper portion of the aquifer is influenced by the proximity of surface water bodies and may be variable.

6.0 INTERVIEWS

Per the PD&E Manual, AECOM personnel conducted on site interviews with the property owners/tenants/occupants, where applicable, at twelve (12) sites on November 6, 2019. These sites were identified in our database search and further evaluation of these sites was conducted. The purpose of the interviews was to obtain environmental/contamination related information at the site in addition to the information available in the regulatory databases. The interview logs, which include the details of the interview question and answers, are presented in **Appendix F**. Based on the information collected during the interviews, no additional information other than the information included in **Section 7.0** was available to AECOM personnel from the property owners/ tenants/occupants.

7.0 CONTAMINATION CONCERNS

The proposed project has been evaluated and potential contamination concerns have been identified for the proposed viable project build alternatives. For the viable build concepts, the degree of potential contamination concerns is equivalent due to the location and distance of the potential contaminated sites with reference to the proposed project layout.

As a result of a review of all available data, such as agency file reviews at DERM and FDEP; the EDR database report; historic data reviews including aerial photography; and the site reconnaissance; the following 15 sites were identified to pose potential contamination concerns to the proposed project. The 15 identified sites, with risk rating (low risk, medium risk, and high risk) associated with the project development, are described below. The locations of these sites are identified on **Figure 7-1** and are summarized in **Table 7-1** and **Table 7-2**. The two (2) alternatives as are within the same corridor with similar footprints and hence the contamination concerns for both alternatives would be the same as shown in **Table 7-2**.

Also, the findings from previous Phase I and Phase II ESA Reports were reviewed in addition to the file review described above. The two (2) Phase I assessments from 2014 were reviewed during the file review to evaluate the potential for contamination. However, as the Phase I assessments were conducted in 2014, a new EDR report was requested and the sites with potential contamination concern listed in the latest EDR report were reviewed. The findings from Phase II assessment conducted on the project corridor were reviewed and summarized in the subsequent sections. It should be noted that the Phase II assessments were conducted on the project corridor itself and the results are reviewed to determine the potential contamination concern.

After a review of the information for the identified sites, site reconnaissance was conducted to confirm the locations of these sites and to identify any additional sites that could pose potential contamination concerns to the proposed construction activities. The locations of identified sites are confirmed and no additional sites with potential contamination concerns were identified.

Table 7 - 1: Potential Contaminated Sites in the Vicinity of the PD&E Study

Rank	Property Description	DERM Permit # / FDEP Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance Project Corridor	Contamination Concern/ Regulatory Status
H1	Ludlam Trail Corridor NW 7 th St to SW 80 th St at SW 69 th Ave, Miami, FL	HWR-836	DERM	No	--	Existing arsenic/Polycyclic Aromatic Hydrocarbon (PAH) contamination in soils and Groundwater
H2	Jak Service Center Inc. DBA United Fuel 6900 SW 8 th Street Miami, FL	8503663	FDEP	Yes	100-feet East	Existing petroleum contamination in Groundwater/ Site Assessment
M1	Robert King High Park 7025 W Flagler Street Miami, FL	HWR-00915, CLII- 20100048/ 104915	FDEP	No	80 feet west	Existing arsenic contamination in Groundwater/ Site Closure
M2	Dade County School Board - Transportation 7011 SW 4 th Street Miami, FL	UT-01354, IW5-03102/ 8628726	FDEP	No	150-feet East	Existing petroleum contamination in soil and Groundwater/ Multiple Status
M3	Farina's Radiators 918 SW 69 th Avenue Miami, FL	UT-02171, IW5-00640/ 8839885	FDEP	No	100 feet East	No information available for review/ No cleanup Required
M4	Braman Honda 7000 Coral Way Miami, FL	IW5-12042/ 8943259	FDEP	No	150 feet West	Historical metal contamination in the vicinity/ No cleanup Required
M5	Gold Coast Oil Corp 2835 SW 71 st Avenue Miami, FL Miami Dade County	HWR-00141/ ERIC_3786	USEPA/FDEP	No	1000 feet West	Historical chlorinated solvent contamination in Groundwater
L1	Gort's Car Wash 6850 SW 8 th Street Miami, FL	9101916	FDEP	No	380 feet East	Historical petroleum in soil/ Site Assessment
L2	Al Springer Roofing Inc 890 SW 69 th Avenue Miami, FL	UT-00746/ 9046905	FDEP	No	Adjacent, 80 feet East	Existing petroleum contamination in Groundwater/ Remedial Action

Rank	Property Description	DERM Permit # / FDEP Facility ID	Environmental Compliance Agency	Regulated Storage Tanks	Distance Project Corridor	Contamination Concern/ Regulatory Status
L3	Chevron Coral Way 6901 Coral Way Miami, FL	UT-00455/ 8505946	FDEP	Yes	150 feet East	No Concerns/ No Further Action (NFA)
L4	Danville-Findorff Inc. 2811 SW 70 th Avenue Miami, FL	UT-03079, IW5-03460/ 8622111	FDEP	No	150 feet West	No Concerns/ Site Rehabilitation Completion Order (SRCO)
L5	L3 Harris Dade TCC S23 3925 SW 70 th Avenue Miami, FL	8622135	FDEP	No	100 feet West	No Concerns/ NFA
L6	PJ Constructors 4100 SW 70 th Court Miami, FL	9100997	FDEP	No	400 feet West	No Concerns/ Site Rehabilitation Completion Report (SRCR)
L7	Gulfside Supply Inc. 4241 SW 70 th Court Miami, FL	UT-02520/ 8629013	FDEP	No	100 feet West	No Concerns/ NFA
L8	Causey Roofing Corp 7004 SW 45 th Street Miami, FL	8736441	FDEP	No	Adjacent	No Concerns/ NFA

Table 7 - 2: Number of Potential Contaminated Sites in the Vicinity of the PD&E Study

Project Alternative	Contamination Risk			
	No	Low	Medium	High
1 & 2	0	8	5	2



Figure 7 - 1: Potential Contamination Concerns (1 of 4)



Figure 7 – 1: Potential Contamination Concerns (2 of 4)



Figure 7 – 1: Potential Contamination Concerns (3 of 4)



Figure 7 – 1: Potential Contamination Concerns (4 of 4)

7.1 Regulatory Database Review

HIGH RISK SITE #1

Ludlam Corridor

Between NW 7th and NW 80th Streets

Miami, FL

DERM File Number: HWR-836

The subject site – Ludlam Corridor, extends from NW 7th Street to SW 80th Street in Miami, Florida. The corridor was historically used as a railroad corridor. Currently, the corridor is vacant land being evaluated for contamination for future use as a shared-use trail.

Numerous assessments have been conducted at the site. Two (2) Phase I ESA Reports were prepared in December 2014 to determine if any Recognized Environmental Concerns were present within the vicinity of the corridor. The first Phase I ESA included the subject corridor from NW 7th Street to SW 8th Street and the second one included the subject corridor from SW 8th Street to SW 88th Street (ending at the west of Dadeland Mall). Based on the Phase I assessment, DERM recommended Phase II soil and groundwater assessments for the corridor.

Based on the comments received, a sampling plan was submitted on July 27, 2017 in which soil sampling was proposed, which included collection of 200 samples along the corridor and analyzing for Total Recoverable Petroleum Hydrocarbons (TRPHs), Polycyclic Aromatic Hydrocarbons (PAHs), arsenic, cadmium, chromium, copper and lead. Additionally, groundwater sampling was proposed in the sampling plan that included collection of 46 samples via monitoring wells and analysis for Volatile Organic Compounds (VOCs), PAHs, TRPHs, arsenic, cadmium, chromium, copper and lead. The sampling plan was approved by DERM and the field work was conducted between August 2017 and October 2017. The laboratory analytical results indicated presence of arsenic in the soils with highest concentration reported at 101 milligrams/kilogram (mg/kg), with an average of 10.9 mg/kg. The arsenic concentrations were compared to the Soil Cleanup Target Level (SCTL) of 2.1 mg/kg as mentioned in the Chapter 24 of Code of Miami-Dade County (MDC). Benzo(a)pyrene equivalent (BaPE) was reported in various samples exceeding the SCTL of 0.1 mg/kg pursuant to Chapter 24, Code of MDC, with a calculated range of 0 mg/kg to 31 mg/kg and an average concentration of 1.5 mg/kg. TRPH concentrations were reported at five (5) soil samples above the residential SCTL of 340 mg/kg. However, the speciated hydrocarbons concentrations were below the SCTLs and hence TRPH was not believed to be a potential contaminant of concern in soil. Additionally, laboratory analysis reported concentrations of all the remaining parameters that were tested for below the direct exposure SCTLs. The groundwater analysis indicated presence of arsenic in concentrations ranging up to 192 micrograms/liter (µg/L) above the Groundwater Cleanup Target Level (GCTL) of 10 µg/L pursuant to Chapter 24, Code of MDC. Resampling at the locations exceeding the GCTLs also reported concentrations of arsenic above the GCTLs. The remaining parameters tested were reported below the applicable GCTLs. Based on the analytical results, a No Further Action with Conditions (NFAC) closure was recommended, including institutional and engineering controls. This included using the hard surface (pavement, pavers, etc.) of trail and 2-feet of clean fill cap or 1-foot of clean fill with high-visibility, puncture resistant fabric as effective engineering controls. Further, during a meeting with DERM on October 16, 2017, it was discussed that a cut and fill analysis was necessary to evaluate the impacted soil management following a topographic survey.

In DERM's correspondence dated October 31, 2017 in response to the Phase II Report, DERM acknowledged the NFAC request with institutional and engineering controls; however, DERM requested

additional hot spot sampling regardless of the closure option elected. Furthermore, DERM indicated that irrespective of the closure option elected, soils at the property boundary, or boundary of the engineering control, if applicable, should meet the residential soil cleanup standards or applicable background concentrations, and leachability based on groundwater criteria. Per DERM's request in their October 2017 memorandum, a boundary sampling plan for soil and groundwater was developed and included in reports dated November 22, 2017 and December 7, 2017.

Following this, soil and groundwater sampling was conducted in February 2018 per that plan. The groundwater analytical data from February 2018 indicated presence of arsenic in groundwater above the Chapter 62-777 Florida Administrative Code (FAC) GCTLs. Out of 39 monitoring wells, three (3) shallow monitoring wells had arsenic above 62-777 FAC GCTL of 10 µg/L. The arsenic contamination in groundwater ranged from 1 µg/L to 197 µg/L. It was concluded that the groundwater contamination appears to be attenuated prior to reaching the property boundary. Arsenic concentration in the intermediate monitoring well was below the 62-777 FAC GCTL. All other parameters were below their respective GCTLs.

The soil analytical data indicated pentachlorophenol at one (1) soil boring at a concentration above the 62-777 FAC SCTL in the 0.5'-2' interval, but subsequent leachability test indicated that pentachlorophenol was not leaching to the groundwater. In addition to this, two (2) soil samples reported concentrations of BaPE above the 62-777 FAC direct exposure SCTL of 0.2 mg/kg (the anthropogenic background concentration in the top 6 inches, established by MDC). Additional assessment of soil and groundwater contamination was recommended at the site in order to delineate the arsenic contamination. Subsequent to this, boundary soil sampling was conducted in March 2018. The assessment indicated presence of BaPE soil concentrations in the top two (2) feet above the SCTL of 0.1 mg/kg. Additionally, three (3) samples indicated benzo (a) anthracene concentrations above the Leachability Based Groundwater Criteria of 0.8 mg/kg. However, based on the historical absence of PAHs in the groundwater at this site, it was concluded that PAHs do not appear to be leaching from the soil to the groundwater.

Based on the analytical results and recommendations, DERM requested an Opinion of Probable Construction Cost (OPCC) to conduct remediation of on-site impacted soil. The remediation technique included removal and disposal of contaminated soil on the site and implementing suitable engineering controls (clean soil or impermeable surface cover). In a response dated June 15, 2018, DERM requested off-site delineation of soils where exceedances of arsenic and BaPE were observed.

Additional events of assessment were conducted in September 2018 and May 2019 in order to delineate the soil contamination on the site so that the remedial costs could be optimized. The soil sampling indicated elevated levels of BaPE at the boundaries of the property. The data from this assessment of soil from 0-6" from surface indicated some exceedances of the residential SCTLs and some above the commercial SCTLs. Based on the statistical analysis performed for the 0-6" from the surface, it was concluded that the BaPE concentrations observed were consistent with the MDC's background concentrations. The arsenic results (145 ug/L) for MW-9I exceeded the GCTL. The arsenic groundwater results for vertical delineation (MW-9D) and the two (2) wells for horizontal delineation to the west (MW-9I and MW-9W-2S) were below the GCTL. In response to these reports, DERM in their memo indicated that in accordance with DERM's letter dated September 4, 2018, it was demonstrated that the arsenic plume was sufficiently delineated and the areas where potential leaching due to soil contamination were proposed to be addressed with groundwater monitoring. To address the documented groundwater contamination and potential leachable soils, a Remedial Action Plan (RAP) was requested in support of NFAC. Additionally, due to the documented soil and groundwater contamination, DERM requested a Soil

Management Plan (along with Health and Safety Plan, Dust Control Plan, and Air Monitoring Plan) prior to submitting the construction/drainage plans.

Due to known presence of soil and groundwater contamination on the proposed project corridor, any proposed activities related to soil handling and stormwater management would need to be conducted per the Soil Management Plan and other plans discussed above. Based on the review, the risk rating for this site is **High Risk**.

HIGH RISK SITE #2

Jak Service Center Inc. DBA United Fuel

6900 SW 8th Street

Miami, FL

Miami Dade County

FDEP Facility ID: 8503663

The site is located approximately 100-feet east of the corridor. The site is currently operated as a vehicular fuel service station and convenience store by United Fuel.

Free floating product was observed on the surface of the groundwater exposed during the removal of the vehicular fuel UST system in 1991. The free-floating product was recovered using absorbent material. Approximately 80 cubic yards of petroleum contaminated soil were removed from the UST excavation and thermally treated at an off-site facility. Groundwater assessment conducted at the site indicated presence of petroleum contamination. Following this, a Discharge Reporting Form (DRF) was submitted on January 9, 1992.

A Contamination Assessment Report (CAR) was submitted to the DERM on February 3, 1993. The CAR did not identify any soil with OVA readings greater than one (1) ppm. However, dissolved phase petroleum hydrocarbons, specifically benzene, toluene, ethylbenzene, total xylenes (BTEX) compounds, MTBE, naphthalene, 1-methylnaphthalene and lead were detected at concentrations above the SCTLs in the vicinity of the former UST system. A CAR Addendum dated May 27, 1994 provided the additional horizontal and vertical definition of dissolved phase hydrocarbons. Concentrations of BTEX compounds were above the GCTLs.

A new UST system was installed in September 1995. This facility currently houses two (2) 10,000-gallon capacity USTs used to store regular and premium unleaded gasoline, and one (1) 10,000-gallon capacity UST used to store diesel fuel.

No assessment activities were conducted after May 1994 until June 2018, when soil samples were collected and analyzed for petroleum compounds. None of the samples analyzed indicated presence of target petroleum compounds above the respective SCTLs. Groundwater samples collected indicated presence of petroleum compounds above their respective GCTLs. The groundwater sample collected from MW-1 indicated 1-methylnaphthalene (40.2 µg/l) and 2-methylnaphthalene (38.9 µg/l) above the GCTL of 28 µg/l and below the Natural Attenuation Default Concentration (NADC) of 280 µg/l. The concentration of naphthalene (84.9 µg/l) was above the GCTL of 14 µg/l and below the NADC of 140 µg/l in the groundwater sample collected from MW-7 and concentrations of 1-methylnaphthalene (75.1 µg/l) and 2-methylnaphthalene (118 µg/l) were above the GCTL of 28 µg/l and below the NADC of 280 µg/l in the groundwater sample collected from MW-7.

Another DRF was submitted on July 3, 2019 due to reported failure of the integrity test. However, this issue was resolved, and the facility was back in compliance per regulatory letter dated July 17, 2019.

Additional assessment activities have been recommended for the site to delineate the groundwater contamination vertically and horizontally. The groundwater flow direction was reported to be towards the northeast, which is away from the project corridor. Given the location of the subject site close to the project corridor and existing groundwater contamination, the risk rating for this site is **High Risk**.

MEDIUM RISK SITE #1

Robert King High Park

7025 W Flagler Street

Miami, FL

Miami Dade County

DERM/ FDEP Facility ID: HWR-00915, CLII-20100048/ 104915

This site is located approximately 80 feet west of the project corridor. The site currently operates as a Disaster Debris Management Site (DDMS) for MDC for mixed debris. On January 19, 2018, FDEP issued an email notifying the site contact of the site's closure after an inspection, which documented that all debris on site was removed and no evidence of pollutant discharges being released. In addition, the email stated that the site would no longer be allowed to store or process debris on site.

On May 10, 2018, the Environmental Monitoring & Restoration Division issued a letter with comments on a baseline and closure sampling report dated February 9, 2018. This report was not available for review. Subsequently, DERM submitted a letter on November 14, 2018 issuing comments on a groundwater sampling report dated October 17, 2018. This report was also not available for review. The comments from DERM identified an exceedance of arsenic at a monitoring well and a site investigation was requested to identify potential nearby sources of contamination.

On April 2, 2019, FDEP issued a notice confirming pre-authorization of a DDMS for 2019. The notice listed several locations, including the site.

On September 25, 2019, DERM issued a follow-up notice to the November 14, 2018 letter requesting the submittal of a SAR for the site due to the exceedance of arsenic documented in the groundwater sampling from October 2018. The notice indicated that to date, a SAR has not been submitted for review and/or approval.

Information on groundwater flow direction was not available for review. Given the location of the subject site is close to the project corridor but limited information on the site's potential contamination is available, the risk rating for this site is **Medium Risk**.

MEDIUM RISK SITE #2

Dade County School Board - Transportation

7011 SW 4th Street

Miami, FL

Miami Dade County

DERM/ FDEP Facility ID: UT-01354, IW5-03102/ 8628726

The site is located adjacent to the project corridor, approximately 150-feet east of the corridor. The site is currently used for parking and fleet maintenance for the Miami-Dade County School system and administration offices. The site houses five (5) 4,000-gallon leaded gasoline underground storage tanks (abandoned in place in 1989) and two (2) 12,000-gallon USTs [one (1) unleaded gasoline and one (1) diesel] that are no longer active as of 2013.

On September 28, 2016, a Site Assessment Report (SAR) was submitted for the site. The findings of the report included detection of free-floating product in MW-1 through MW-4 and collecting groundwater samples from MW-9 through MW-13 to confirm the extent of the petroleum contamination at the site. The laboratory results of the groundwater samples did not indicate an exceedance of GCTLs for all the parameters tested, confirming that the extent of the petroleum contamination is within the limits of the underground storage tanks. It was recommended that the existing USTs be removed and that source removal in the location of each tank be conducted and to confirm the extent of petroleum in the soil.

On November 26, 2018, a Templated Site Assessment Report (TSAR), submitted by Advanced Environmental Technologies, included the results of soil and groundwater assessment conducted at the site. The laboratory analytical results of the soil sampling indicated presence of TRPH that exceeded the Residential Direct Exposure Levels of 340 mg/kg, as well as for BaPE of 0.1 mg/kg. The groundwater investigation section of the TSAR recommended that an additional monitoring well be installed to the north of MW-11 since TRPH was detected at a concentration of 8,300 µg/L in MW-11, and additional monitoring of the new monitoring well and MW-1 through MW-4 and MW-10 through MW-12. The TSAR also stated that while free product was observed during the assessment activities conducted in 2015 and 2016, no free product was observed during the 2017 and 2018 assessment. Currently, additional assessments have been recommended by the consultant to determine the presence of free product which could be a potential source of contamination. No further assessment reports were available for review. Also, no remediation activities have been planned at this time.

The groundwater flow direction was reported to be towards the east-northeast, which is towards the project corridor. Given the location of the subject site is close to the project corridor and additional groundwater assessment is being recommended, the risk rating for this site is **Medium Risk**.

MEDIUM RISK SITE #3

Farina's Radiators

918 SW 69th Avenue

Miami, FL

Miami Dade County

DERM/ FDEP Facility ID: UT-02171, IW5-00640/ 8839885

This facility is located 100 feet east of the project corridor. The groundwater flow was documented to be towards the southwest.

A discharge was reported in an Early Detection Incentive (EDI) application on February 9, 1987. The discharge was described to be of radiator wash and rinse water. A CAR was submitted to FDEP on April 1986, which is not available for review in the regulatory files. FDEP issued a letter on May 14, 1987 with review comments for the report. The comments state that the groundwater sampling data indicates groundwater violations at the site. On February 1, 1988, FDEP determined that the site was not eligible for state-administered cleanup because the contaminants on site were not petroleum products.

A Remedial Action Report Addendum documenting additional post-remediation assessment was submitted to FDEP in April 1996. However, on July 23, 2008, FDEP issued a letter updating the cleanup status of the site to No Cleanup Required in Petroleum Contamination Monitoring Database. The letter indicates that due to noncompliance with assessment requirements, DERM collected samples. Since the sample results were below cleanup target levels, DERM closed the case administratively and an NFA letter was not issued until July 2008.

Currently, the site is a vacant land. Per FDEP's memo, no cleanup is required in reference to petroleum products at the site. However, there exists a potential of metals contamination at the site. Based on the limited information available on the site's potential contamination, the risk rating for this site is **Medium Risk**.

MEDIUM RISK SITE #4

Braman Honda

7000 Coral Way

Miami, FL

Miami Dade County

DERM/ FDEP Facility ID: IW5-12042/ 8943259

This facility is located 150 feet west of the project corridor. The facility housed one (1) 1,000-gallon UST, which was removed in May 2000. Groundwater and soil contamination were found in the vicinity of the property, 800 feet west of the project corridor.

From 1942 to 1981, the site was used as a wood treatment facility, which used chromated copper arsenate as the main treating compound. The facility was demolished in 1982 and efforts were made to remove the treating compounds stored in tanks on site. Concentrations of heavy metals zinc, cadmium, and lead were found to be in excess of the USEPA drinking water regulatory requirements during the July 1983 and December 1983 groundwater sampling events. The soil assessment results indicated an exceedance in the concentration of organic compounds was detected at several locations.

In 1984, a site assessment was conducted, which concluded that there was an increase in the levels of arsenic and chromium in the soil and groundwater since previous sampling activities. No additional contamination/assessment documentation is available in the regulatory files.

A discharge was reported through an EDI application in December 1988. However, in February 1991, FDEP determined that the site was not eligible for EDI as the contaminants on site were not petroleum related products (arsenic and chromium). In May 2009, FDEP issued a letter updating the cleanup status of the site to No Cleanup Required in PCT.

The groundwater flow was noted to be southeast towards the Coral Gables Canal. Considering the proximity of this site's location to the project corridor and the uncertain extent of contamination, the risk rating for this site is **Medium Risk**.

MEDIUM RISK SITE #5

Gold Coast Oil Corp

2835 SW 71st Avenue

Miami, FL

Miami Dade County

DERM FDEP Facility ID: HWR-00141/ ERIC_3786

The site is located approximately 1,000-feet west of the project corridor. The site, which previously operated as an oil reclamation facility, was on the Superfund program's NPL from 1987 until it was removed from the NPL in 1996. Facility operations caused contamination of groundwater and soil severe enough to pose a threat to human health and the environment. Particularly of concern was the contamination of the Biscayne aquifer, which is the only source of drinking water for Miami-Dade County. The groundwater contaminants include trichloroethene (TCE), tetrachloroethene/perchloroethene (PCE), 1,1-dichloroethane (DCE), trans-1,2-dichloroethene, toluene, and methylene chloride.

Soil remedial activities were conducted in February 1989 and March 1990, resulting in the removal of approximately 900 cubic yards of contaminated soils and waste. Groundwater remedial activities started in February 1989 via a groundwater recovery and treatment system that treated over 80 million gallons of water over a duration of four (4) years, resulting in significant reduction in the contaminant levels.

In February 1994, a report titled "Technical Impracticability Evaluation of Further Groundwater Restoration at the Gold Coast Oil NPL site, Miami, Florida" was prepared for the USEPA. This report summarized the remedial activities that have taken place at the site since 1990 and concluded that pumping via the groundwater recovery, treatment, and discharge system should be terminated as any additional pumping would remove an insignificant level of the parameters TCE and PCE present.

In February 1996, a Close-Out report was submitted for the site for review and approval by the USEPA and FDEP for the deletion of the site from the NPL upon successful completion of soil and groundwater remedial activities. The site was deleted from the NPL on October 09, 1996.

The last report available for review is from January 2011 which summarized the field activities conducted as part of semi-annual sampling of groundwater and surface water. Additionally, the report contained summary of operation and maintenance of the onsite remediation system consisting of extraction and treatment system. Contaminants, such as PCE, TCE, DCE, vinyl chloride, were detected in groundwater and surface water exceeding the applicable standards. The report recommended continuing the semi-annual sampling as a decreasing trend of the Contaminant of Concern (CoC) was observed. No additional reports were available for review.

The groundwater flow direction was reported to be towards the southwest, which is away from the project corridor. Considering the proximity of this site's location to the project corridor and reported remediation activities, the risk rating for this site is **Medium Risk**.

LOW RISK SITE #1

Gort's Car Wash

6850 SW 8th Street

Miami, FL

Miami Dade County

FDEP Facility ID: 9101916

The site is located approximately 380-feet east of the corridor. The site is currently operated as a commercial car wash facility. This site previously housed three (3) 2,000-gallon USTs containing unleaded gasoline. The tanks were removed on June 26, 1992 and free-floating product was found in the excavation area. This resulted in the submittal of a DRF on the same day. A duplicate discharge, dated December 27, 1988, was subsequently reported. On May 6, 2004 FDEP issued a memorandum rescinding the duplicate discharge.

On November 19, 1993, FDEP issued a letter determining that the site was eligible for state-administered cleanup under the Abandoned Tank Restoration Program. However, no assessment reports of subsequent field activities are documented on FDEP's Oculus until February 2018.

On March 12 and 13, 2019, American Management Resources Corporation (AMRC) conducted soil sampling at the five (5) locations recommended in their February 18, 2019 proposal. A total of ten (10) samples were collected, and results indicated that organic vapor analyzer (OVA) readings varied between 0 ppm and 14.2 ppm in the 0 to 5 feet depth interval, between 0 ppm and 1.6 ppm in the 6 to 8-foot depth interval, and 0 ppm to 56.6 ppm at the 8 to 10-foot interval. The analytical results indicated that none of the samples collected exceeded the SCTLs except at one (1) location, SB-2, which had a BaPE result of 0.2 mg/kg, which exceeds the Residential SCTL of 0.1 mg/kg. On March 19 and 20, 2019, groundwater samples were collected from the five (5) monitoring wells, MW-1, MW-2, MW-3, MW-4, and MW-5 and were analyzed for the Chapter 62-780 FAC Table C parameters. Laboratory results determined that there were no GCTL exceedances for any of the parameters tested. An additional assessment was recommended to determine presence of contamination in the southern portion of the site.

AMRC conducted the additional site assessment on July 8, 2019 in order to delineate the extent of the contamination at the site. Soil samples were collected from four (4) soil borings to a depth of 6 feet below land surface near SB-2. The laboratory results indicated that there were no SCTL exceedances for any of the parameters tested. In addition, the benzo(a)pyrene results during this sampling event contradicted the results at SB-2 during the March 2019 soil sampling activities since no exceedances of BaPE were present. Laboratory results for the groundwater samples determined that there were no GCTL exceedances for any of the parameters tested.

The groundwater flow direction was reported to be towards the northeast, which is away from the project corridor. Given the location of the subject site close to the project corridor and no existing groundwater or soil contamination, the risk rating for this site is **Low Risk**.

LOW RISK SITE #2

Al Springer Roofing Inc

890 SW 69th Avenue

Miami, FL

Miami Dade County

DERM/ FDEP Facility ID: UT-00746/ 9046905

The site is located adjacent and approximately 80-feet east of the corridor. The site is currently owned by A-1 Property Services, Inc. and operated as a commercial roofing business. The site housed three (3) underground tanks from 1975 to 1986: one (1) 4,000-gallon unleaded gasoline tank, one (1) 500-gallon diesel tank, and one (1) 1000-gallon diesel tank. In 1990, petroleum product was detected, which was followed by the removal and disposal of the three (3) tanks on March 8, 1991. The soil surrounding the tanks had high OVA readings and the contamination was confirmed by sampling during removal.

Approximately 13.5 cubic yards of soil was excavated and disposed, and the associated documentation of the assessment activities was sent to DERM for review.

Soil sampling at six (6) boring locations was conducted by Southeastern Environmental Associates on May 20, 1992. Soil boring SB-3 reported 200 parts per million (ppm) of TRPH and SB-6 reported 20 ppm of TRPH. The analytical results did not exceed the cleanup standard of 460 ppm, as defined in Chapter 62-780 FAC. Groundwater samples were collected from seven (7) monitoring wells (MW). The samples were analyzed for all the constituents of the Kerosene and Mixed Product analytical groups. Wells MW-1, MW-3, and MW-4 indicated elevated levels of volatile organic aromatics. Based on the analytical results, a Monitoring Only Plan (MOP) was recommended.

On December 4, 2015, BTEX Engineering submitted a letter report that included a summary of groundwater assessment activities conducted on November 17, 2015. Groundwater samples were collected and analyzed for petroleum compounds. These groundwater samples indicated presence of petroleum compounds above their respective GCTLs. Concentrations of 1-methylnaphthalene (81 µg/l) and 2-methylnaphthalene (88.2 µg/l) were above the GCTL of 28 µg/l and below the NADC of 280 µg/l in the groundwater sample collected from MW-3. Based on the results of the field activities, BTEX Engineering recommended that remedial action be conducted at the site.

On March 14, 2016, the FDEP Petroleum Restoration Program issued review letter indicating that the work performed in the Low Score Site Initiative Site Assessment Report dated January 11, 2016 was successfully completed. The report was not available for review. However, in the review letter, FDEP agreed with the report's recommendation to discontinue field activities. FDEP also agreed to add the discharge into the priority score funding order.

On April 1, 2016, FDEP sent a letter to the owner of Al Springer property indicating that neighboring property owners were notified about the existing contamination at the Al Springer site. Based on the review of the regulatory files, the property located at 850 SW 69th Avenue and situated to the north of the Al Springer property received this notification. Per the notification, both properties are owned by the same owner, Daisy HF, LLC. Additionally, based on the 2015 assessment, groundwater contamination appears to have migrated to the property to the north of Al Springer property.

The groundwater flow direction was reported to be towards southeast, which is away from the project corridor. Though the location of this site is close to the project corridor, as no assessment or remedial activities are proposed for this site, the risk rating for this site is **Low Risk**.

LOW RISK SITE #3

Chevron Coral Way

6901 Coral Way

Miami, FL

Miami Dade County

DERM/ FDEP Facility ID: UT-00455/ 8505946

This facility is located 150 feet east of the project corridor. The facility housed four (4) 3,000-gallon gasoline UST, two (2) 10,000-gallon gasoline USTs, one (1) 4,000-gallon diesel fuel UST, and one (1) 550-gallon waste oil UST, which were removed in July 1993. Currently, the facility houses one (1) 10,000-gallon vehicular diesel UST and two (2) 12,000-gallon gasoline USTs.

A discharge was reported on July 15, 1993. A memo dated October 5, 1995 was issued by FDEP in response to a contamination assessment report and NFA proposal dated May 16, 1995. However, the assessment report was not available for review at this time. The memo only stated that the NFA was approved for the site.

Currently, the site continues to operate as a gas station. Based on the available information, the risk rating for this site is **Low Risk**.

LOW RISK SITE #4

Danville-Findorff Inc.

2811 SW 70th Avenue

Miami, FL

Miami Dade County

DERM/ FDEP Facility ID: UT-03079, IW5-03460/ 8622111

This facility is located 150 feet west of the project corridor. The facility housed one (1) 6,000-gallon UST for unleaded gas and one (1) 6,000-gallon UST for diesel fuel. The tanks were closed and removed from the site in October 1993.

A discharge was reported on June 24, 1992. A CAR and CAR Addendum/MOP was submitted to FDEP in August and December 1994, respectively, and both documents were approved by FDEP on May 24, 1995. Groundwater sampling conducted in November 1994 indicated all parameters below detectable levels. The groundwater flow was noted to be towards the southwest. A Template Site Assessment Report (TSAR) and NFA Proposal were submitted to FDEP on May 5, 2017.

The TSAR and NFA Proposal were approved by FDEP on May 24, 2018, and the cleanup status was updated to Site Rehabilitation Completion Order. Currently, the site operates as a car towing lot. Based on the available information, the risk rating for this site is **Low Risk**.

LOW RISK SITE #5

L3 Harris Dade TCC S23

3925 SW 70th Avenue

Miami, FL

Miami Dade County

FDEP Facility ID: 8622135

This facility is located 100 feet west of the project corridor. The facility formerly housed one (1) 6,000-gallon UST for unleaded gas and one (1) 6,000-gallon UST for diesel fuel, which were removed in October 1994. During tank removal activities, soil and groundwater samples were collected and analyzed. The parameters for EPA Method 610 (naphthalene, fluoranthene, acenaphthylene, fluorene, and pyrene) were below detection levels. Several parameters for EPA Method 602 (methyl tert-butyl ether [MTBE], benzene, toluene, and total xylenes) were found to be above detection limits, prompting the filing of a Discharge Notification Form. The discharge was reported on January 23, 1995.

The groundwater sampling results indicated all parameters analyzed below detectable levels, and an NFA Proposal was submitted to FDEP and was later approved on October 20, 1998. No groundwater flow information was available for review. Currently, the site continues to operate as the Florida Power and

Light Miami Southwest Service Center. Based on the available information, the risk rating for this site is **Low Risk**.

LOW RISK SITE #6
PJ Constructors
4100 SW 70th Court
Miami, FL
Miami Dade County
FDEP Facility ID: 9100997

This facility is located 400 feet west of the project corridor. The facility housed one (1) 4,000-gallon UST, one (1) 8,000-gallon UST, and one (1) 10,000-gallon UST. The USTs were removed in September 1991.

A discharge was reported on March 8, 1991. A CAR dated September 17, 1993 was approved by FDEP on November 4, 1993. On February 21, 1994, FDEP approved a MOP for the site that was conducted quarterly for a period of one (1) year. The groundwater sampling results indicated all parameters analyzed below GCTLs. The groundwater flow was noted to be towards the south.

A Site Rehabilitation Completion Report (SRCR) was submitted to FDEP and was later approved on July 5, 1995. Currently, the site address no longer exists. Based on the available information, the risk rating for this site is **Low Risk**.

LOW RISK SITE #7
Gulfside Supply Inc.
4241 SW 70th Court
Miami, FL
Miami Dade County
DERM/ FDEP Facility ID: UT-02520/ 8629013

This facility is located 100 feet west of the project corridor. A discharge was reported on August 22, 1993. A CAR was submitted to FDEP on August 19, 1994 but a copy of the CAR is not available for review in the regulatory files. No groundwater flow information was available for review.

The CAR and NFA proposal were approved by FDEP on October 17, 1994, and the cleanup status was updated to NFA. Currently, the site operates as a commercial roofing supply store. Based on the available information, the risk rating for this site is **Low Risk**.

LOW RISK SITE #8
Causey Roofing Corp
7004 SW 45th Street
Miami, FL
Miami Dade County
FDEP Facility ID: 8736441

This facility is located 75 feet west of the project corridor. The facility was previously used as a commercial roofing company that housed one (1) 2,000-gallon UST for unleaded gas, which was removed in April 1994.

A discharge was reported on September 2, 1994. Subsequently, a CAR and an NFA Proposal were submitted to FDEP. However, report summarizing the assessment activities was not available for review. No groundwater flow information was available for review.

The NFA proposal was approved by FDEP on November 9, 1994. The facility currently operates as an automotive accessories' supplier, with no storage tanks. Based on the available information, the risk rating for this site is **Low Risk**.

8.0 SUMMARY OF ASBESTOS SURVEY REPORTS

Two bridges are present along the project corridor:

1. Located on the Coral Gables Canal (C3) approximately 0.5-mile north of SW 40th Street, near the intersection of the project corridor and N Waterway Drive and
2. Located on Tamiami Canal (C4) approximately 0.1-mile north of the intersection of the project corridor and West Flagler Street.

The proposed construction includes removal of these two (2) existing bridges and replacement of each with a single span bridge. Considering the age of these bridges, prior to any proposed construction activities, such as repairs, modifications or demolition, appropriate testing will be required for heavy metals and/or asbestos-containing materials.

9.0 CONCLUSIONS AND RECOMMENDATIONS

In accordance with Volume 2, Chapter 20 (dated January 14, 2019) of the FDOT PD&E Manual, potential contamination impacts in the area surrounding the project corridor were identified.

After a review of all available data, such as agency file reviews at FDEP, Miami-Dade DERM, the EDR database report, Ludlam Trail Corridor Phase I and Phase II reports, aerial photography, and confirmed by site reconnaissance, contamination of soil and groundwater has been documented in the vicinity and within the project corridor. A total of 15 sites of potential environmental concern were identified within the applicable buffers of project corridor; of these, two (2) sites, including the proposed corridor, are rated as High risk, five (5) sites are rated as Medium risk, and eight (8) sites are rated as Low risk. The status of the sites will be updated accordingly at each future design phase.

The FDOT District VI Planning and Environmental Management Office will utilize the information contained in this report to determine the need for additional investigation during the design phase of the Project. The Level II Contamination Assessment investigation may be conducted prior to any ROW acquisition and/or prior to the design phase, should any become necessary. Based on the findings of updated future review and Level II investigation, the design engineers may be instructed to avoid the areas of concern or to include special provisions with the plans to require that the construction activities performed in the areas of concern be performed or supervised by a contamination assessment and remediation contractor specified by the FDOT.

It must be recognized that the possibility exists that some contaminated substances, petroleum products, or environmental contamination not identified during this assessment may exist on or in the immediate vicinity of the project. This is because regulatory agency records are not always complete; not all leaks, spills, and discharges are reported; not all USTs and ASTs are registered. It is unknown if any registered substances were illegally dumped or were deposited during past construction activities.

If construction dewatering will be necessary during construction, dewatering permits may need to be obtained prior to conducting any dewatering operations. The permits required include but not limited to a Water Use Permit from SFWMD and a Class V Dewatering Permit from DERM. The contractor will be held responsible for ensuring compliance with any necessary dewatering permit(s). The dewatering plan will need to consider the radius of influence of any dewatering activity on nearby contamination plumes to avoid potential contamination plume exacerbation. The soil and groundwater assessments conducted within the Ludlam corridor between 2017 and 2019 indicated presence of arsenic and BaPE in the top two (2) feet at the site. Additional boundary assessments conducted in 2018 to delineate the contamination on site indicated that BaPE concentrations along the site boundary are within the background concentrations at the site. Based on that, an engineering control plan was recommended in a report dated October 18, 2017. This included using the hard surface (pavement, pavers, etc.) of trail and 2-feet of clean fill cap or 1-foot of clean fill with high-visibility, puncture resistant fabric as effective engineering controls.

The existing groundwater contamination will be taken into consideration during drainage design phase for the subject project. The drainage design will be finalized during the design phase. Previously unidentified areas of contamination in construction will be addressed through adherence of FDOT Standard Specifications for Road and Bridge Construction subsection 120.1.2.

APPENDIX A
ETDM Summary
Report



Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAUT
SECRETARY

ETDM Summary Report

Project #14369 - Ludlam Trail Corridor

Final Programming Screen - Published on 07/02/2019

Generated by Megan McKinney (on behalf of FDOT District 6)

Printed on: 7/02/2019

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Introduction to Programming Screen Summary Report

The Programming Screen Summary Report shown below is a read-only version of information contained in the Programming Screen Summary Report generated by the ETDM Coordinator for the selected project after completion of the ETAT Programming Screen review. The purpose of the Programming Screen Summary Report is to summarize the results of the ETAT Programming Screen review of the project; provide details concerning agency comments about potential effects to natural, cultural, and community resources; and provide additional documentation of activities related to the Programming Phase for the project. Available information for a Programming Screen Summary Report includes:

- Screening Summary Report chart
- Project Description information (including a summary description of the project, a summary of public comments on the project, and community-desired features identified during public involvement activities)
- Purpose and Need information (including the Purpose and Need Statement and the results of agency reviews of the project Purpose and Need)
- Specific information regarding the potential transportation improvement such as alternatives or road segments that were reviewed; an overview of ETAT Programming Screen reviews; and agency comments concerning potential effects and degree of effect, by issue, to natural, cultural, and community resources
- Project Scope information, consisting of general project recommendations resulting from the ETAT Programming Screen review, permits, and technical studies required (if any)
- Class of Action determined for the project
- Dispute Resolution Activity Log (if any)

The legend for the Degree of Effect chart is provided in an appendix to the report.

For complete documentation of the project record, also see the GIS Analysis Results Report published on the same date as the Programming Screen Summary Report.

The Florida Department of Transportation may adopt this planning product into the environmental review process, pursuant to Title 23 Sec. USC 168(4)(d) or the state project development process.

#14369 Ludlam Trail Corridor

District: District 6

County: Miami-Dade

Planning Organization: FDOT District 6

Plan ID: Not Available

Federal Involvement: Other Federal Funding FHWA Funding Other Federal Permit

LAP Agency Miami-Dade County

Agency Preparing NEPA Document: Local Agency (with FDOT oversight)

Contact Information: Dat Huynh (305) 470-5201 Dat.Huynh@dot.state.fl.us

Snapshot Data From: Programming Screen Summary Report Re-published on 07/02/2019 by Megan McKinney

Issues and Categories are reflective of what was in place at the time of the screening event.

	Social and Economic							Cultural			Natural					Physical					
	Land Use Changes	Social	Relocation Potential	Farmlands	Aesthetic Effects	Economic	Mobility	Section 4(f) Potential	Historic and Archaeological Sites	Recreation Areas	Wetlands and Surface Waters	Water Quality and Quantity	Floodplains	Wildlife and Habitat	Coastal and Marine	Noise	Air Quality	Contamination	Infrastructure	Navigation	Special Designations
Alternative #1 From: SW 80th Street To: 400' North of NW 7th Street Re-Published: 07/02/2019 Reviewed from 10/22/2018 to 12/06/2018)	2	2	0	N/A	1	1	1	3	3	1	2	2	2	2	2	N/A	2	4	2	N/A	2

Purpose and Need

Purpose and Need

The purpose of the Ludlam Trail Corridor is to provide an alternate mode of transportation which enhances overall accessibility to schools, parks, transit stations, and bus stops for as many as 30,550 people living within two miles of the proposed project. The trail will provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers, and will serve bicyclists, pedestrians, and other types of non-motorized users. The need for the project is based on the following criteria:

PRIMARY CRITERIA

AREA WIDE NETWORK/SYSTEM LINKAGE

The project supports the vision of the *Miami-Dade County Parks and Open Space System Master Plan*, a primary element of which is to "provide an interconnected trail system which offers transportation alternatives and reduces traffic congestion". The plan provides a 50-year unifying vision for a livable, sustainable Miami-Dade County which involves the development of a seamless system of greenways, trails, and water trails. The Ludlam Trail is a vital component of this network as it links open spaces and civic institutions to neighborhoods, while offering a reliable transportation alternative. From a regional perspective, the trail will connect to the Metrorail Dadeland North Station to the south, the proposed Orange Line Metrorail NW 7th Station to the north, and to other planned trails including the M-Path Extension, South Dade Trail, Snapper Creek Trail, East/West Trail and Merrick Trail. The Ludlam Trail will serve as a major component of the Miami-Dade County Parks and Open Space Master Plan Greenway System's segment titled the Miami Loop, which envisions a connected system of publicly-accessible greenway trails including the Ludlam Trail, The Underline (a.k.a The East Coast Greenway), Miami River Greenway and the Perimeter Trail.

SECONDARY CRITERIA

SOCIAL AND ECONOMIC DEMAND

According to the *Miami-Dade County Trail Benefits Study - Ludlam Trail Case Study* (attached in the EST), development of the trail would improve mobility for walking and biking to schools, parks, transit stations, and miscellaneous errands resulting in a reduction of vehicle daily trips in the project vicinity. By providing non-motorized transportation options, fewer vehicles will travel on the surrounding roadway network which will help to reduce traffic congestion on major arterials. Furthermore, the trail will enhance mobility and strengthen connections to neighboring communities, providing an opportunity for economic development.

PROJECT STATUS

The project is identified in the Fiscal Year (FY) 2018-2023 Tentative FDOT Five Year Work Program and the State Transportation Improvement Program (STIP) with \$293,610 allocated for the Planning Study (2019) and \$13,000,000 for other project phases [Corridor Acquisition/Right-of-Way (2018) and Construction (2021)]. The project is also included in the FY 2018-2022 Miami-Dade Transportation Planning Organization (TPO) Transportation Improvement Program (TIP). While the Ludlam Trail Corridor is not specifically cited in the Miami-Dade TPO 2040 Long Range Transportation Plan (LRTP), an amendment request to include the project will be presented to the TPO Governing Board for approval on October 25, 2018.

The Ludlam Trail Corridor District was adopted as part of the *Miami-Dade Comprehensive Development Master Plan* in 2017, establishing the trail as a district of countywide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. The former railway corridor is anticipated to be a publicly accessible, pedestrian and bicycle trail with certain nodes of responsible development that is sensitive and compatible to the adjacent areas. Furthermore, the project supports the vision of the Miami-Dade County Parks and Open Space System Master Plan, which is to "provide an interconnected trail system which offers transportation alternatives and

reduces traffic congestion, creates new recreation opportunities, increases property values, protects natural resources, and encourages tourism and business development". During future project phases, FDOT will coordinate with Miami-Dade County and the Miami-Dade TPO to ensure that required project funding is identified in the TIP, LRTP, STIP, and Work Program.

Project Description

The Miami-Dade County Parks, Recreation, and Open Spaces (MDPROS) Department, in coordination with the Florida Department of Transportation, is proposing to develop a 5.6-mile multi-use trail within the former Florida East Coast (FEC) railroad corridor. While the majority of the trail is located within unincorporated Miami-Dade County, a portion of the northern part of the corridor is located within the City of Miami. The project site extends from SW 80th Street to 400+/- feet north of NW 7th Street at approximately 69th Avenue and crosses two canals (C-3/Coral Gables Canal and C-4/Tamiami Canal), both of which currently have railroad bridge crossings. Right-of-way for the corridor is approximately 100 feet wide for most of its length and narrows to 80 feet in some areas. As a future component of the Shared-Use Nonmotorized (SUN) Trail Network, the publicly-accessible trail will serve bicyclists, pedestrians, and other types of non-motorized users; as well as provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers. Tree plantings and other forms of landscaping will surround the trail providing users with shade from the canopy. Other amenities such as pedestrian rest areas with benches/outdoor seating will be available throughout the trail, along with aesthetic features such as fountains and opportunities for public artwork. The project will also include nodes of responsible development/redevelopment at major roadway crossings that are sensitive and compatible to the adjacent areas and consistent with the County's Comprehensive Development Master Plan (CDMP) and Corridor District zoning classification.

PROJECT BACKGROUND

The MDPROS Department is working towards the acquisition of land which was formerly used as a railroad corridor by Florida East Coast Industries (FECI). This includes an approximately one-mile section of the corridor which has an Interim Trail Use designation by the Surface Transportation Board and could be re-activated for railroad use in the future. A 5.0+/- mile portion of the corridor has been fully abandoned from railroad use. Once acquired, the County will develop the trail for public use, while FECI will retain parcels on either side of the major road crossings for mixed-use development, as is consistent with the County's Comprehensive Development Master Plan (CDMP) and Corridor District zoning classification. As a part of the transaction, the County is acquiring an 18-foot wide easement through the proposed development nodes to ensure the trail is continuous through the corridor. Miami-Dade County intends to utilize Federal/State funds for the project through a Local Agency Program (LAP) agreement with the Florida Department of Transportation.

Summary of Public Comments

Charrettes were previously conducted in Miami-Dade County Commission Districts 6 and 7. Presentations summarizing the results of these public outreach efforts are included as attachments in the EST.

Planning Consistency Status

Federal Consistency Determination

Date of Determination: 02/12/2019 by Chris Stahl

FDEP Clearinghouse Determination: CONSISTENT with Coastal Zone Management Program.

US Coast Guard Review

The USCG District Bridge Office for USCG District 7 has reviewed this project and provides the following determination(s):

No bridges were found requiring permits.

These determinations remain valid unless the proposed project changes to include additional unassessed bridges or the project scope changes.

No further involvement from the USCG is required unless the proposed project changes to include additional unassessed bridges or the project scope changes.

Out of Jurisdiction, No Permit Required

Analysis Area	Water Crossing	Latitude	Longitude	Comments
Alternative #1	CANAL/DITCH AT NW 7 ST	25.777404934 2	- 80.308011008 8	Not in USCG Jurisdiction.

Lead Agency

FDOT Office of Environmental Management

Participating and Cooperating Agencies

Participating and Cooperating agencies are not applicable for this class of action.

Exempted Agencies

Agency Name	Justification	Date
Federal Transit Administration	FTA has requested to be exempt from reviewing any non-transit projects.	06/18/2018

Community Desired Features

No desired features have been entered into the database. This does not necessarily imply that none have been identified.

User Defined Communities Within 500 Feet

No user defined communities were found within a 500 ft. buffer distance for this project.

Census Places Within 500 Feet

- Coral Terrace
- Glenvar Heights
- Miami
- South Miami

Purpose and Need Reviews

FDOT Office of Environmental Management

Acknowledgment	Date Reviewed	Reviewer	Comments
Accepted	11/27/2018	Lindsay Guthrie (Lindsay.Guthrie@dot. state.fl.us)	Purpose and Need Accepted.

FL Department of Agriculture and Consumer Services

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	11/29/2018	Steve Bohl (Steve.Bohl@freshfro mflorida.com)	Do not impact any Florida Forest Service facility sites.

FL Department of Economic Opportunity

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	12/06/2018	Matt Preston (matt.preston@deo.m yflorida.com)	No Purpose and Need comments found.

FL Department of State

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/25/2018	Adrianne Daggett (Adrianne.Daggett@do s.myflorida.com)	No Purpose and Need comments found.

FL Fish and Wildlife Conservation Commission

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	11/26/2018	Fritz Wettstein (fritz.wettstein@myfw c.com)	No Purpose and Need comments found.

National Marine Fisheries Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/23/2018	Jennifer Schull (Jennifer.Schull@noaa.gov)	No Purpose and Need comments found.

National Park Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	11/26/2018	Anita Barnett (anita_barnett@nps.gov)	No Purpose and Need comments found.

Seminole Tribe of Florida

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	12/05/2018	Victoria Menchaca (victoriamenchaca@seminoletribe.com)	No Purpose and Need comments found.

South Florida Water Management District

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/25/2018	Trisha Stone (tstone@sfwmd.gov)	No Purpose and Need comments found.

US Army Corps of Engineers

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	11/20/2018	Lisa Lovvorn (Lisa.S.Lovvorn@usace.army.mil)	Understood.

US Coast Guard

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	11/19/2018	Randall Overton (randall.d.overton@uscg.mil)	No jurisdictional waterways for Coast Guard bridge permitting purposes

US Environmental Protection Agency

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	11/14/2018	Kim Gates (gates.kim@epa.gov)	The USEPA has no comments on the purpose and need at this time.

US Fish and Wildlife Service

Acknowledgment	Date Reviewed	Reviewer	Comments
Understood	10/25/2018	John Wrublik (john_wrublik@fws.gov)	No Purpose and Need comments found.

The following organizations were notified but did not submit a review of the Purpose and Need:

- FL Department of Environmental Protection
- Miami-Dade Expressway Authority
- Natural Resources Conservation Service

Alternative #1

Description

Name	From	To	Type	Status	Total Length	Cost	Modes	SIS
Unnamed	SW 80th Street	400' North of NW 7th Street	New Alignment	ETAT Review Complete	5.6 mi.		Bicycle Pedestrian	N

Segment Description(s)

Location and Length

Segment Record	Segment Name	Facility Name	Beginning Location	Ending Location	Length (mi.)	Roadway Id	BMP	EMP
S-001	Segment 1	Segment 1			5.641	Digitized		

Jurisdiction and Class

Segment Record	Segment Name	Jurisdiction	Urban Service Area	Functional Class
S-001	Segment 1			

Base Conditions

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Segment 1				

Interim Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Segment 1				

Needs Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Segment 1				












Cost Feasible Plan

Segment Record	Segment Name	Year	AADT	Lanes	Config
S-001	Segment 1				

Funding Sources

No funding sources found.

Project Effects Overview for Alternative #1

Issue	Degree of Effect	Organization	Date Reviewed
Social and Economic			
Mobility	 Enhanced	FDOT District 6	12/06/2018
Land Use Changes	 Minimal	FDOT District 6	12/06/2018
Land Use Changes	 Enhanced	FL Department of Economic Opportunity	12/06/2018
Economic	 Enhanced	FDOT District 6	12/06/2018
Economic	 Enhanced	FL Department of Economic Opportunity	12/06/2018
Social	 Minimal	FDOT District 6	12/06/2018
Social	 Moderate	US Environmental Protection Agency	12/06/2018
Relocation Potential	 None	FDOT District 6	12/06/2018
Aesthetic Effects	 Enhanced	FDOT District 6	12/06/2018
Cultural			
Recreation Areas	 None	FL Department of Environmental Protection	12/05/2018
Recreation Areas	 None	National Park Service	11/26/2018

Recreation Areas	N/A	N/A / No Involvement	South Florida Water Management District	10/25/2018
Historic and Archaeological Sites	2	Minimal	Seminole Tribe of Florida	12/05/2018
Historic and Archaeological Sites	3	Moderate	FL Department of State	10/25/2018
Natural				
Wetlands and Surface Waters	3	Moderate	US Environmental Protection Agency	12/06/2018
Wetlands and Surface Waters	0	None	FL Department of Environmental Protection	12/05/2018
Wetlands and Surface Waters	2	Minimal	US Army Corps of Engineers	11/20/2018
Wetlands and Surface Waters	2	Minimal	US Fish and Wildlife Service	10/25/2018
Wetlands and Surface Waters	2	Minimal	South Florida Water Management District	10/25/2018
Wetlands and Surface Waters	2	Minimal	National Marine Fisheries Service	10/23/2018
Wildlife and Habitat	2	Minimal	FL Department of Agriculture and Consumer Services	11/29/2018
Wildlife and Habitat	2	Minimal	FL Fish and Wildlife Conservation Commission	11/26/2018
Wildlife and Habitat	2	Minimal	US Fish and Wildlife Service	10/25/2018
Wildlife and Habitat	2	Minimal	South Florida Water Management District	10/25/2018
Coastal and Marine	2	Minimal	South Florida Water Management District	10/25/2018
Coastal and Marine	2	Minimal	National Marine Fisheries Service	10/23/2018
Floodplains	2	Minimal	South Florida Water Management District	10/25/2018
Water Quality and Quantity	3	Moderate	US Environmental Protection Agency	12/11/2018
Water Quality and Quantity	0	None	FL Department of Environmental Protection	12/05/2018
Water Quality and Quantity	2	Minimal	South Florida Water Management District	10/25/2018
Physical				
Air Quality	2	Minimal	US Environmental Protection Agency	11/14/2018
Navigation	0	None	US Army Corps of Engineers	11/20/2018
Navigation	N/A	N/A / No Involvement	US Coast Guard	11/19/2018
Contamination	4	Substantial	US Environmental Protection Agency	12/11/2018
Contamination	N/A	N/A / No Involvement	South Florida Water Management District	10/25/2018
Special Designations				
Special Designations	3	Moderate	US Environmental Protection Agency	12/06/2018
Special Designations	2	Minimal	South Florida Water Management District	10/25/2018

ETAT Reviews and Coordinator Summary: Social and Economic

Mobility

Project Effects


Coordinator Summary Degree of Effect: 1 Enhanced assigned 01/30/2019 by FDOT District 6

Comments:

The Ludlam Trail Corridor extends 5.6 miles from SW 80th Street to 400+/- feet north of NW 7th Street and crosses two canals. It is proposed to be constructed within the former Florida East Coast (FEC) railroad corridor. The trail is located within a Transportation Disadvantaged Service Provider Area, as well as within the vicinity of FDOT RCI bridges, trails, and bus routes. Overall, the trail is anticipated to serve as a mobility option to accommodate potential travel demand as a result of area growth. Per review of the Advance Notification Package issued on 10-22-2018, the Miami-Dade Transit (MDT) Division of Miami-Dade Department of Transportation and Public Works (DTPW) opined that the Ludlam Trail Corridor will improve bicycle and pedestrian mobility and access to the multitude of existing transit services that traverse the project corridor at major intersections. The Miami-Dade Parks, Recreation and Open Spaces Department (PROS) requested to be included in all project phases to assist FDOT with potential shared use trail connections; these connections are critical in closing first-mile and last-mile gaps and improving mobility and access to and from transit hubs and also increasing use within the Ludlam Trail Corridor. The Miami-Dade Fire Rescue Department (MDFR) requested that a general site plan for the entirety of the Ludlam Trail Corridor be submitted to MDFR in order to assure that dedicated emergency passages are in compliance with the MDFR Access Road Requirements. MDFR noted that during the platting and permitting stages of this project, the proffered site plan for each node must be reviewed by the Fire Engineering & Water Supply Bureau to assure compliance with the Florida Fire Prevention Code (FFPC) and National Fire Protection Association (NFPA) standards. MDFR stated that by providing non-motorized transportation options, fewer vehicles will travel on the surrounding roadway network which will help to reduce traffic congestion on major arterials and enhance emergency response times. The Miami-Dade Aviation Department (MDAD) indicated that there is no objection to the proposed trail provided that there are no conflicts with aviation regulations and Miami-Dade County's Code. The Miami-Dade County Seaport Department indicated no objection to the project. The Miami-Dade Police Department indicated no comment but stated that specific comments would be provided on the project, as needed, during the permitting phase.

The Ludlam Trail Corridor is intended to provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, shopping centers, and transit stops. The trail is anticipated to improve and encourage walking and biking to access schools, parks, transit stations, and to perform miscellaneous errands resulting in a reduction of vehicle daily trips in the project vicinity. Fewer vehicles and non-motorized transportation options will help to reduce traffic congestion on major area arterials. For these reasons, a Summary Degree of Effect of Enhanced has been assigned to the Mobility issue.

During the Project Development phase, a Public Involvement Plan will be implemented by FDOT District Six in coordination with the Miami-Dade Transportation Planning Organization, City of Miami, and Miami-Dade County [in accordance with Part 1, Chapter 11 of the PD&E Manual] to solicit input from the general public on potential project effects and enhancements regarding mobility within the area. A Sociocultural Effects Evaluation will also be conducted [in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual].

Degree of Effect:  *Enhanced* assigned 12/06/2018 by Lauren Brooks, FDOT District 6

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects**Identified Resources and Level of Importance:****100-Foot Buffer:****Transportation Disadvantaged Service Provider Areas (TDSP) in Florida - 2010 (1)**

- Miami-Dade Transit Authority

FDOT RCI Bridges (1)

- 874229

Existing Recreational Trails (1)

- Miller Drive Sidepath

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (1)

- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Bus Transit Routes (26)**500-Foot Buffer:****Transportation Disadvantaged Service Provider Areas (TDSP) in Florida - 2010 (1)**

- Miami-Dade Transit Authority

FDOT RCI Bridges (2)

- 874229

- 870559

Housing Units with No Vehicle Available: 1,086 (10.00%)

Existing Recreational Trails (1)

- Miller Drive Sidepath

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (1)

- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Bus Transit Routes (31)

1,320-Foot (Quarter-Mile) Buffer:

Transportation Disadvantaged Service Provider Areas (TDSP) in Florida - 2010 (1)

- Miami-Dade Transit Authority

FDOT RCI Bridges (7)

- 874228

- 871036

- 874229

- 871075

- 870655

- 870559

- 871074

Existing Recreational Trails (1)

- Miller Drive Sidepath

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (2)

- CSX RR Corridor

- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Bus Transit Routes (35)

Comments on Effects to Resources:

The Ludlam Trail Corridor is a 5.6-mile multi-use trail within the former Florida East Coast (FEC) railroad corridor. The project extends from SW 80th Street to 400+/- feet north of NW 7th Street (at approximately 69th Avenue) and crosses two canals (C-3/Coral Gables Canal and C-4/Tamiami Canal), both of which have railroad bridge crossings. Right-of-way along the corridor is approximately 100 feet wide narrowing to 80 feet in some areas.

The project is located within a Transportation Disadvantaged Service Provider Area (Miami-Dade Transit Authority), as well as within the vicinity of seven FDOT RCI bridges, one existing recreational trail [Miller Drive Sidepath], and one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network of which the Ludlum Trail Corridor will be included]. There are also 35 bus routes that service the project area.

From April 2010 to July 1, 2017, Miami-Dade County experienced a 10.2% increase in population. The City of Miami population grew by 16.0%, and the City of South Miami grew by 5.2% during the same time period. According to the University of Florida Bureau of Economic and Business Research (BEBR), Miami-Dade County employment is expected to increase by 40% from 2010 to 2040. The effects of the noted population and employment growth will increase demand on the transportation system contributing to increased congestion and delays for residents and visitors in south Florida.

The trail will provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, shopping centers, and transit stops. It is intended to serve bicyclists, pedestrians, and other types of non-motorized users. According to the Miami-Dade County Trail Benefits Study - Ludlam Trail Case Study, development of the trail will improve and encourage walking and biking to access schools, parks, transit stations, and to perform miscellaneous errands resulting in a reduction of vehicle daily trips in the project vicinity. Fewer vehicles and non-motorized transportation options will help to reduce traffic congestion on major area arterials.

For these reasons, the project is anticipated to enhance short-term and long-term mobility within the project area.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

During the Project Development phase, FDOT District Six will engage the surrounding communities in coordination with the Miami-Dade Transportation Planning Organization, City of Miami, and Miami-Dade County to solicit input on potential project effects and enhancements regarding mobility within the area.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Land Use Changes

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 01/30/2019 by FDOT District 6

Comments:

Land use surrounding the corridor is identified primarily as residential; pockets of commercial and industrial uses are located at or near major arterial roadway crossings. The Ludlam Trail Corridor District was adopted as part of the Miami-Dade County Comprehensive Development Master Plan (CDMP) in 2017. The project supports the vision of the Miami-Dade County Parks and Open Space System Master Plan and various Miami-Dade Transportation Planning Organization (TPO) bicycle/pedestrian plans. FDEO stated that the project is compatible with development goals and is consistent with the comprehensive plans of Miami-Dade County and City of Miami. FDEO specifically noted that the project is supported and referenced in the Miami Comprehensive Neighborhood Plan Transportation Element and included on Figure 3.1 in the Special District section of the CDMP Future Land Use Element. FDEO also commented that while the project is not located within an Area of Critical State Concern or the Coastal High Hazard Area, nor does it encroach on any military base, it is located in close proximity to several parks potentially protected by Section 4(f). Per review of the Advance Notification Package issued on 10-22-2018, the Miami-Dade County Department of Regulatory and Economic Resources (RER) stated that the Ludlam Trail Corridor District within the County's Special District land use category allows compatible development authorized to occur at four designated development areas. RER added that the Miami-Dade County Board of County Commissioners adopted Resolution No. R-939-18 that included funding for purchase of lands within the Ludlam Trail Corridor. Miami-Dade County Parks, Recreation and Open Space Department (PROS) and the Miami-Dade TPO confirmed that they are working to advance an amendment to include the project in the Miami-Dade TPO's 2040 Long Range Transportation Plan (LRTP). The project is included in the FY 2018-2022 Miami-Dade TPO's Transportation Improvement Program (TIP), FDOT's FY 2018-2023 Tentative Five-Year Work Program, and FDOT's State Transportation Improvement Program (STIP).

Impacts or changes to proximate land uses are not anticipated as a result of the project. Overall, the project is consistent with the land use vision for the project area. Therefore, a Summary Degree of Effect of Minimal has been assigned to the Land Use Changes issue.

During the Project Development phase, a Public Involvement Plan will be implemented by FDOT District Six in coordination with the Miami-Dade TPO, City of Miami, and Miami-Dade County [in accordance with Part 1, Chapter 11 of the PD&E Manual] to obtain feedback from residents and business owners on potential project effects to surrounding communities and potential mitigative solutions. A Sociocultural Effects Evaluation will also be conducted [in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual]. In addition, FDOT District Six will coordinate with Miami-Dade County, the City of Miami, and the Miami-Dade TPO, respectively, to ensure that the project is consistent with the local government comprehensive plan(s) and that required project funding is identified in the LRTP, TIP, STIP, and FDOT Work Program.

Degree of Effect: 2 *Minimal* assigned 12/06/2018 by Lauren Brooks, FDOT District 6

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Identified Resources and Level of Importance:

Miami-Dade County Comprehensive Development Master Plan

100-Foot Buffer:**2010 Census Designated Places (4)**

- South Miami
- Glenvar Heights
- Coral Terrace
- Miami

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

Brownfield Location Boundaries (4)

- Central Miami Area
- Coral Terrace
- Glenvar Heights
- Miami EZ Expansion Area

500-Foot Buffer:**2010 Census Designated Places (4)**

- South Miami
- Glenvar Heights
- Coral Terrace
- Miami

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

Brownfield Location Boundaries (5)

- Central Miami Area
- Coral Terrace
- Glenvar Heights
- Miami EZ Expansion Area
- 7090 Coral Way

1,320-Foot (Quarter-Mile) Buffer:**2010 Census Designated Places (4)**

- South Miami
- Glenvar Heights
- Coral Terrace
- Miami

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

Brownfield Location Boundaries (5)

- Central Miami Area
- Coral Terrace
- Glenvar Heights
- Miami EZ Expansion Area
- 7090 Coral Way

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 104.74 / 5.43%
- 1210 FIXED SINGLE FAMILY UNITS / 959.65 / 49.71%
- 1320 MOBILE HOME UNITS / 7.02 / 0.36%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 98.04 / 5.08%
- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 53.98 / 2.80%
- 1400 COMMERCIAL AND SERVICES / 188.77 / 9.78%
- 1411 SHOPPING CENTERS / 72.71 / 3.77%
- 1550 OTHER LIGHT INDUSTRY / 109.71 / 5.68%

- 1700 INSTITUTIONAL / 17.31 / 0.90%
- 1710 EDUCATIONAL FACILITIES / 42.38 / 2.20%
- 1850 PARKS AND ZOOS / 98.91 / 5.12%
- 1900 OPEN LAND / 34.51 / 1.79%
- 4370 AUSTRALIAN PINE / 11.59 / 0.60%
- 5120 CHANNELIZED WATERWAYS - CANALS / 12.09 / 0.63%
- 5300 RESERVOIRS / 81.65 / 4.23%
- 8140 ROADS AND HIGHWAYS / 37.53 / 1.94%

Comments on Effects to Resources:

The Ludlam Trail Corridor is predominantly located within unincorporated Miami-Dade County; the northern portion of the corridor is located within the City of Miami. The project additionally traverses four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami).

Land use surrounding the corridor is identified primarily as residential; pockets of commercial and industrial uses are located at or near major arterial roadway crossings. The Miami-Dade County Enterprise Zone (EZ) occupies 6.55% (126.46 acres) of the 1,320-foot project buffer and five brownfields are also present (7090 Coral Way, Central Miami Area, Coral Terrace, Glenvar Heights and Miami EZ Expansion Area).

The Ludlam Trail Corridor District was adopted as part of the *Miami-Dade Comprehensive Development Master Plan* in 2017, establishing the trail as a district of countywide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. As the Ludlam Trail is proposed within former Florida East Coast (FEC) railway right-of-way, it is anticipated to be a publicly accessible pedestrian/bicycle trail to contain certain nodes of responsible development that are sensitive and compatible to the adjacent areas. The project supports the vision of the Miami-Dade County Parks and Open Space System Master Plan, which is to *"provide an interconnected trail system which offers transportation alternatives and reduces traffic congestion, creates new recreation opportunities, increases property values, protects natural resources, and encourages tourism and business development"*.

Transportation Plan Consistency:

The project is identified in the Fiscal Year (FY) 2018-2023 Tentative FDOT Five Year Work Program and the State Transportation Improvement Program (STIP) with \$293,610 allocated for the Planning Study (2019) and \$13,000,000 for other project phases [Corridor Acquisition/Right-of-Way (2018) and Construction (2021)]. The project is also included in the FY 2018-2022 Miami-Dade Transportation Planning Organization (TPO) Transportation Improvement Program (TIP). While the Ludlam Trail Corridor is not specifically cited in the Miami-Dade TPO 2040 Long Range Transportation Plan (LRTP), the TPO Governing Board will consider/approve an amendment request to include the project.

Overall the project is consistent with the land use vision for the project area. Therefore, minimal changes to proximate land uses are anticipated as a result of the project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

During the Project Development phase, FDOT District Six will engage residents and business owners in coordination with the Miami-Dade TPO, City of Miami, and Miami-Dade County to solicit input on potential project effects to surrounding communities and work to identify potential solutions. FDOT District Six will also coordinate with Miami-Dade County, the City of Miami, and the Miami-Dade TPO, respectively, to ensure that the project is consistent with the local government comprehensive plan(s) and that required project funding is identified in the LRTP, TIP, STIP, and FDOT Work Program.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 1 *Enhanced* assigned 12/06/2018 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comprehensive Plan(s) Reviewed:

Miami Comprehensive Neighborhood Plan (MCNP) and Miami-Dade County Comprehensive Development Master Plan (CDMP).

Comments on Effects to Resources:

Compatibility with Community Development Goals and Comprehensive Plan:

The project is compatible with both the City of Miami and Miami-Dade County's development goals and consistent with their comprehensive plans.

The proposed project is supported and referenced in the Transportation Element of the MCNP:

Objective TR-2.9: Provide a safe and effective bikeway/sidewalk/greenway network that advances healthy lifestyles, improves quality of life, better links origins and destinations, and provides alternative mode choices to automobile trips.

Policy TR-2.9.1: The City will continue to support the implementation of the Underline, the Ludlam Trail, and other 'green corridors', which aim to improve the local bicycle network with enhanced amenities that encourage a more active, healthy lifestyle and the use of alternative modes of transportation.

The project is included and detailed extensively in the Special District Section of the CDMP Future Land Use Element.

Future Transportation Map:

The project is included on the Figure 3.1 Ludlam Trail Corridor District Map in the Special District Section of the FLUE.

Land Uses:

Future Land Use Map categories surrounding the project, include: Single Family Residential, Light Industrial, and Public Parks and Recreation (City of Miami). Low Density Residential, Medium Density Residential, Estate Density, Business and Office, Industrial and Office, and Parks and Recreation (Miami-Dade County).

Parks:

Palmer Park, All America Park, Trinity Pineland County Park, AD (Doug) Barnes Park, and Brothers to the Rescue Memorial Park are located in close proximity to the proposed project. FDOT should analyze potential impacts to these 4(f) resources.

Area of Critical State Concern (ACSC), Coastal High Hazard Area (CHHA), and Military Bases:

The project is not located within an Area of Critical State Concern or the CHHA, nor does it encroach on any military bases.

Other Planning-Related Items:

None.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Economic

Project Effects

Coordinator Summary Degree of Effect: 1 Enhanced assigned 01/30/2019 by FDOT District 6

Comments:

The Ludlam Trail Corridor District, adopted as part of the Miami-Dade Comprehensive Development Master Plan in 2017, establishes the trail as a district of countywide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. Economic benefits based on implementation of the trail include increases in surrounding property values, retail sales, and employment, which will generate additional property and sales tax revenue. In addition, access to an improved multimodal transportation system along with an increased ability to reach more destinations through multiple transportation modes gives households in the area a relative economic advantage over other locations with less mobility. FDEO stated that the project has some potential as a recreational amenity to attract/enhance new development to the outskirts of the City of Miami and unincorporated Miami-Dade County. FDEO added that the project is not located within a Rural Area of Opportunity.

The Ludlam Trail Corridor will provide residents with another viable transportation option and serve as an amenity to attract new businesses to the area. For these reasons, a Summary Degree of Effect has been assigned to the Economic issue.

During the Project Development phase, a Public Involvement Plan will be implemented by FDOT District Six in coordination with the Miami-Dade Transportation Planning Organization, City of Miami, and Miami-Dade County [in accordance with Part 1, Chapter 11 of the PD&E Manual] to solicit input from residents and business owners regarding potential economic enhancements/impacts as a result of the project as well as potential solutions. A Sociocultural Effects Evaluation will also be conducted [in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual].

Degree of Effect: 1 Enhanced assigned 12/06/2018 by Lauren Brooks, FDOT District 6

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

100-Foot Buffer:

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

500-Foot Buffer:

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

1,320-Foot (Quarter-Mile) Buffer:

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 104.74 / 5.43%
- 1210 FIXED SINGLE FAMILY UNITS / 959.65 / 49.71%
- 1320 MOBILE HOME UNITS / 7.02 / 0.36%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 98.04 / 5.08%
- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 53.98 / 2.80%
- 1400 COMMERCIAL AND SERVICES / 188.77 / 9.78%
- 1411 SHOPPING CENTERS / 72.71 / 3.77%
- 1550 OTHER LIGHT INDUSTRY / 109.71 / 5.68%
- 1700 INSTITUTIONAL / 17.31 / 0.90%
- 1710 EDUCATIONAL FACILITIES / 42.38 / 2.20%
- 1850 PARKS AND ZOOS / 98.91 / 5.12%
- 1900 OPEN LAND / 34.51 / 1.79%
- 4370 AUSTRALIAN PINE / 11.59 / 0.60%
- 5120 CHANNELIZED WATERWAYS - CANALS / 12.09 / 0.63%
- 5300 RESERVOIRS / 81.65 / 4.23%
- 8140 ROADS AND HIGHWAYS / 37.53 / 1.94%

Comments on Effects to Resources:

The Miami-Dade County Enterprise Zone (now Opportunity Zone), which serves to attract new businesses to the area through

incentive programs thereby boosting the area's economic conditions, occupies 6.55% of the 1,320-foot project buffer. In addition, the Ludlam Trail Corridor District was adopted as part of the Miami-Dade Comprehensive Development Master Plan in 2017, establishing the trail as a district of countywide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. The Miami-Dade County Trail Benefits Study - Ludlam Trail Case Study projects economic benefits based on implementation of the corridor including increases in property values (within a half-mile of a proposed access point to the trail), retail sales, and employment, which will generate additional property and sales tax revenue. In addition, access to an improved multimodal transportation system along with an increased ability to reach more destinations through multiple transportation modes gives households in the area a relative economic advantage over other locations with less mobility.

According to the University of Florida Bureau of Economic and Business Research (BEBR), the population of Miami County is expected to increase by over 30% from 2010 to 2040. Employment is expected to increase by 40% during the same time period. Mobility options are needed to accommodate the expected growth in the area. The Ludlam Trail Corridor will provide residents with another viable transportation option and serve as an amenity to attract new businesses to the area. For these reasons, the project is anticipated to enhance economic conditions of the surrounding communities and Miami-Dade County as a whole.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

During the Project Development phase, FDOT District Six will engage residents and business owners in coordination with the Miami-Dade Transportation Planning Organization, the City of Miami, and Miami-Dade County to solicit input on potential economic enhancements/impacts as a result of the project as well as potential solutions.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **1** Enhanced assigned 12/06/2018 by Matt Preston, FL Department of Economic Opportunity

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comprehensive Plan(s) Reviewed:

Miami Comprehensive Neighborhood Plan (MCNP) and Miami-Dade County Comprehensive Development Master Plan (CDMP).

Comments on Effects to Resources:

The project *is not* located within a Rural Area of Opportunity.

The project has some potential as a recreational amenity to attract/enhance new development to the outskirts of the City of Miami and unincorporated Miami-Dade County. There is little to no potential for the project to generate additional employment opportunities.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Social

Project Effects

Coordinator Summary Degree of Effect: 2 Minimal assigned 01/30/2019 by FDOT District 6

Comments:

The Ludlam Trail Corridor is predominantly located within unincorporated Miami-Dade County; the northern portion of the corridor is located within the City of Miami. The project additionally traverses four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami). Given the length of the trail and the surrounding dense urbanized environment, several community features exist within the quarter-mile project buffer.

Compared to the demographic characteristics for Miami-Dade County, the 500-foot project buffer contains notably higher White and Hispanic population percentages, a significantly lower African-American population percentage, a lower percentage of individuals age 18 and under, a higher percentage of individuals age 65 and over, a similar percentage of housing units with no vehicle available, and a higher median family income (\$4,833 more). In addition, 137 of the 268 census blocks [11,232 of 34,125 individuals] within the 500-foot project buffer contain a minority population greater than 40%. Limited English Proficiency (LEP) accommodations will also be required during public outreach efforts of the Project Development phase as census block groups encompassing the 500-foot project buffer contain 12,019 persons or 36.83% that "speak English less than very well". USEPA further analyzed the demographic characteristics for the quarter-mile project buffer and cited higher percentages for the low income population, population with less than high school education, and population over 64 years of age compared to county averages; the quarter-mile project buffer also has a comparable minority population percentage to the county. USEPA provided more specific demographics for Miami-Dade County's six trail segments to better determine where these special populations are located. USEPA recommended conducting public outreach activities that reduce language barriers and evaluating and implementing measures to reduce potential impacts from project construction activities (i.e., air emissions, fugitive dust, noise, vibrations, etc.). USEPA requested to review the project Public Involvement Plan once it is prepared.

Overall, the Ludlam Trail Corridor is expected to enhance community cohesion and the social environment by providing non-motorized transportation accommodations, improving opportunities for physical activity and a healthy lifestyle, and providing potential amenities within the corridor to meet both the livability and mobility goals expressed by Miami-Dade County and surrounding communities. While no neighborhood division or social isolation nor disproportionate effects on special populations (primarily minority and low income populations) are anticipated as a result of the project, access to proximate residences could temporarily be affected as a result of project construction. For this reason, a Summary Degree of Effect of Minimal has been assigned to the Social issue.

During the Project Development phase, a Public Involvement Plan will be implemented by FDOT District Six in coordination with the Miami-Dade Transportation Planning Organization, City of Miami, and Miami-Dade County [in accordance with Part 1, Chapter 11 of the PD&E Manual] to solicit input from the general public [targeting the transportation disadvantaged and LEP populations] on potential project effects related to community cohesion and social interaction as well as potential solutions to ensure that both the social and transportation needs of the surrounding communities are addressed through the project. Public outreach activities will include LEP accommodations. A Sociocultural Effects Evaluation will also be conducted [in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual].

Degree of Effect: 2 Minimal assigned 12/06/2018 by Lauren Brooks, FDOT District 6

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

100-Foot Buffer:

2010 Census Designated Places (4)

- South Miami
- Glenvar Heights
- Coral Terrace
- Miami

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

Brownfield Location Boundaries (4)

- Central Miami Area

- Coral Terrace
- Glenvar Heights
- Miami EZ Expansion Area

Developments of Regional Impact (1)

- Waterford at Blue Lagoon

Geocoded Homeowner and Condominium Associations (1)

- Coral Terrace Condo

Religious Centers (Points) (1)

- Jehovah's Witnesses

FDOT RCI Bridges (1)

Railroads in the State of Florida

- Connector 289.19 feet
- Mainline 30,346.30 feet

Local Florida Parks and Recreational Facility Boundaries (2)

- A D Barnes Park
- Robert King High / Carlos Arboleya Camp Ground

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (1)

- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Existing Recreational Trails (1)

- Miller Drive Sidepath

Florida Site File Field Survey Project Boundaries (6)

- Dade County Archaeological Survey Interim Report
- Dade County Historic Survey, Phase II: Final Report
- A Cultural Resource Assessment Survey for State Road 90/S.W. 8th Street from: State Road 826/Palmetto Expressway To: S.W. 27th Avenue, Volume 1: Report, Volume 2: Appendices
- Charlie's Body Shop/ MD 1132-C
- Cultural Resource Assessment of the FGHG Tower Location in Miami-Dade County, Florida
- Cultural Resource Assessment Survey (CRAS) for the Florida East Coast Railway, LLC Abandonment Exemption in Miami-Dade County, Florida

Florida Site File Historic Bridges (1)

- FEC Railroad Bridge at Tamiami Canal

Florida Site File Historic Standing Structures (1)

- Tropic Garden Motel

Florida Site File Resource Groups (8)

- Flagler Street
- CSX Railroad
- Little River Spur of the FEC Railroad
- Spur of the Seaboard Air Line RR
- Bird Road Historic Highway
- Callie Ocho Historic Highway
- Tamiami Canal
- Sunset Drive

500-Foot Buffer:

2010 Census Designated Places (4)

- South Miami
- Glenvar Heights
- Coral Terrace
- Miami

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

Brownfield Location Boundaries (5)

- Central Miami Area
- Coral Terrace

- Glenvar Heights
- Miami EZ Expansion Area
- 7090 Coral Way

Developments of Regional Impact (1)

- Waterford at Blue Lagoon

Geocoded Government Buildings (1)

- US Post Office - Ludlam

Geocoded Health Care Facilities (2)

- Mestre-Canals, Luis F., M.D
- Applemed Research Inc.

Geocoded Homeowner and Condominium Associations (7)

- Bird Villas Condo
- Square Townhouse Condos
- Coral Terrace Condo
- Flagler Suites Condo
- Gables Pointe III, A Condo
- Futura Gables Condo # 4
- Madrid Terrace Condo

Schools (1)

- South Miami K-8 Center

Religious Centers (Points) (2)

- Iglesia Evangelica Los Pinos Nuevos
- Jehovah's Witnesses

Group Care Facilities (6)

- Caring For You ALF 3
- Victoria's Dedicated Retirement Home
- South Miami SR. High School
- South Miami K-8 Center
- South Miami Senior High School Annex
- South Miami K-8 Center Annex

Mobile Home and RV Parks (1)

- Mobile Terrace Mobile Home Park

FDOT RCI Bridges (2)

Railroads in the State of Florida

- Connector 689.33 feet
- Mainline 36,918.02 feet

Local Florida Parks and Recreational Facility Boundaries (2)

- A D Barnes Park
- Robert King High / Carlos Arboleya Camp Ground

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (1)

- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Existing Recreational Trails (1)

- Miller Drive Sidepath

Florida Site File Field Survey Project Boundaries (8)

- Dade County Archaeological Survey Interim Report
- Dade County Historic Survey, Phase II: Final Report
- A Cultural Resource Assessment Survey for State Road 90/S.W. 8th Street from: State Road 826/Palmetto Expressway To: S.W. 27th Avenue, Volume 1: Report, Volume 2: Appendices
- Cultural Resources Assessment Survey of Bridge No. 876412 Over Tamiami Canal
- Charlie's Body Shop/ MD 1132-C
- Cultural Resource Assessment of the FGHG Tower Location in Miami-Dade County, Florida
- A Cultural Resource Assessment Survey of the Road Transfer of SR 986 /Sunset Drive / SW 72nd Street from SW 62nd Avenue to US-1 / S Dixie Highway, County: Miami-Dade
- Cultural Resource Assessment Survey (CRAS) for the Florida East Coast Railway, LLC Abandonment Exemption in Miami-Dade County, Florida

Florida Site File Historic Bridges (2)

- FEC Railroad Bridge at Tamiami Canal
- Bridge #876412

Florida Site File Historic Standing Structures (7)

- 6855 SW 52nd Street
- 6899 SW 62nd Terrace
- El Crucero Restaurant
- Tropic Garden Motel
- Leon' Liquors
- 6900 Sunset Drive
- 6871 Sunset Drive

Florida Site File Resource Groups (9)

- Flagler Street
- CSX Railroad
- Venetian Canal
- Little River Spur of the FEC Railroad
- Spur of the Seaboard Air Line RR
- Bird Road Historic Highway
- Callie Ocho Historic Highway
- Tamiami Canal
- Sunset Drive

1,320-Foot (Quarter-Mile) Buffer:**2010 Census Designated Places (4)**

- South Miami
- Glenvar Heights
- Coral Terrace
- Miami

Enterprise Zones (Now Opportunity Zone) (1)

- Miami-Dade County

Brownfield Location Boundaries (5)

- Central Miami Area
- Coral Terrace
- Glenvar Heights
- Miami EZ Expansion Area
- 7090 Coral Way

Community Centers (Points) (3)

- Armando Badia Senior Center
- Lions Club - Miami Nicaraguan
- Inner Look Empowerment Center

Developments of Regional Impact (1)

- Waterford at Blue Lagoon

Geocoded Government Buildings (1)

- US Post Office - Ludlam

Geocoded Health Care Facilities (23)**Geocoded Homeowner and Condominium Associations (21)****Geocoded Laser Facilities (1)**

- N/A

Schools (7)

- South Miami Middle School
- South Miami K-8 Center
- Coral Terrace Elementary School
- AA Children's Academy II
- Palmetto Christian School
- South Miami Senior High School
- Tiny Steps Daycare Learning Center

Religious Centers (Points) (11)

- Francis Burns United Methodist Church

- Iglesia Evangelica Los Pinos Nuevos
- RLDS Iglesia Restaurada
- Jehovah's Witnesses
- Templo Biblico De Miami
- St. Luke Christian Methodist Episcopal Church
- Palmetto Presbyterian Church
- Friends of the Orphans Florida
- Fellowship Church
- Iglesia Cristiana Camino Nuevo
- South Miami Lutheran Church

Group Care Facilities (21)

Mobile Home and RV Parks (1)

- Mobile Terrace Mobile Home Park

FDOT RCI Bridges (7)

Railroads in the State of Florida

- Connector 1,522.14 feet
- Mainline 51,389.02 feet
- Spur 797.79 feet

Local Florida Parks and Recreational Facility Boundaries (5)

- Brothers to the Rescue Memorial Park
- A D Barnes Park
- Robert King High / Carlos Arboleya Camp Ground
- Palmer (South Miami) Park
- Flagami Park

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (2)

- CSX RR Corridor
- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Existing Recreational Trails (1)

- Miller Drive Sidepath

Florida Site File Field Survey Project Boundaries (12)

Florida Site File Historic Bridges (2)

- FEC Railroad Bridge at Tamiami Canal
- Bridge #876412

Florida Site File Historic Standing Structures (14)

Florida Site File Resource Groups (9)

- Flagler Street
- CSX Railroad
- Venetian Canal
- Little River Spur of the FEC Railroad
- Spur of the Seaboard Air Line RR
- Bird Road Historic Highway
- Callie Ocho Historic Highway
- Tamiami Canal
- Sunset Drive

2008 SFWMD FL Land Use and Land Cover / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 104.74 / 5.43%
- 1210 FIXED SINGLE FAMILY UNITS / 959.65 / 49.71%
- 1320 MOBILE HOME UNITS / 7.02 / 0.36%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 98.04 / 5.08%
- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 53.98 / 2.80%
- 1400 COMMERCIAL AND SERVICES / 188.77 / 9.78%
- 1411 SHOPPING CENTERS / 72.71 / 3.77%
- 1550 OTHER LIGHT INDUSTRY / 109.71 / 5.68%
- 1700 INSTITUTIONAL / 17.31 / 0.90%

- 1710 EDUCATIONAL FACILITIES / 42.38 / 2.20%
- 1850 PARKS AND ZOOS / 98.91 / 5.12%
- 1900 OPEN LAND / 34.51 / 1.79%
- 4370 AUSTRALIAN PINE / 11.59 / 0.60%
- 5120 CHANNELIZED WATERWAYS - CANALS / 12.09 / 0.63%
- 5300 RESERVOIRS / 81.65 / 4.23%
- 8140 ROADS AND HIGHWAYS / 37.53 / 1.94%

Comments on Effects to Resources:

The Ludlum Trail Corridor is predominantly located within unincorporated Miami-Dade County; the northern portion of the corridor is located within the City of Miami. The project additionally traverses four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami). Residential uses primarily compose the project area. A Development of Regional Impact, the Waterford at Blue Lagoon, is located at the northern end of the project.

Community features identified within the 1,320-foot project buffer include: three community centers [Armando Badia Senior Center, Lions Club - Miami Nicaraguan, & Inner Look Empowerment Center], one government building, 23 health care facilities, 21 homeowner and condominium associations, one laser facility, seven schools, 11 religious centers, 21 group care facilities, one mobile home and RV park, five local Florida parks/recreational facility boundaries, one existing recreational trail [Miller Drive Sidepath], one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network of which the Ludlum Trail Corridor will be included], 12 Florida Site File field survey project boundaries, two Florida Site File historic standing bridges, 14 Florida Site File historic standing structures, and nine Florida Site File resource groups. In addition, the northern portion of the project occurs within one Enterprise Zone (now an Opportunity Zone); four brownfield sites are also located near the center and northern end of the trail segment (Central Miami Area, Coral Terrace, Glenvar Heights, & Miami EZ Expansion Area).

The table below presents the demographic data for both the 500-foot project buffer and Miami-Dade County. Compared to Miami-Dade County, the 500-foot project buffer contains notably higher White and Hispanic population percentages, a significantly lower African-American population percentage, a lower percentage of individuals age 18 and under, a higher percentage of individuals age 65 and over, a similar percentage of housing units with no vehicle available, and a higher median family income (\$4,833 more).

Demographic / 500-Foot Buffer / Miami-Dade County

White (Race)* / 88.6% / 73.8%

African-American (Race)* / 5.8% / 18.9%

Other*** (Race)* / 5.5% / 7.3%

Hispanic (Ethnic Group)* / 77.5% / 65.0%

Age 65+** / 17.6% / 14.1%

Under Age 18** / 16.2% / 21.9%

Housing Units w/o Vehicle** / 10.0% / 11.1%

Median Family Income** / \$54,898 / \$50,065

* Source: US Census Bureau (2010 US Census)

** Source: US Census Bureau (2010 American Community Survey)

*** Other includes Asian, American Indian, Native Hawaiian & Other Pacific Islander Alone, Some Other Race, & Two or More Races.

Minority Population Greater than 40%:

137 out of the 268 census blocks within the 500-foot project buffer contain a minority population greater than 40%; a total of 11,232 out of 34,125 individuals within the buffer area (32.91%) comprise the minority population of these census blocks.

Limited English Proficiency (LEP) Accommodations:

It is important to note that the census block groups encompassing the project contain 12,019 persons or 36.83% that "speak English less than very well". According to issued guidance, Limited English Proficiency (LEP) accommodations should be considered based on the number or proportion of LEP persons in the eligible service population/affected area, the frequency of which LEP persons may come into contact with project development activities, the importance of the proposed project service/action to LEP persons, and resources available. Given the near equal percentage of persons in the area that "speak English less than very well" compared to Miami-Dade County as a whole (35.52%), Limited English Proficiency (LEP) accommodations will likely be required during public outreach efforts of the Project Development phase.

The purpose of the Ludlum Trail Corridor is to provide an alternate mode of transportation to the 30,550 people living within two miles of the proposed project, as well as those working or visiting the area. The trail will provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, shopping centers, and transit stops. It is intended to serve bicyclists, pedestrians, and other types of non-motorized users. Access to an improved multimodal transportation

system along with an increased ability to reach more destinations through multiple transportation modes gives households in the area a relative economic advantage over other locations with less mobility.

Overall, the project is expected to enhance community cohesion and the social environment by providing non-motorized transportation accommodations; improving opportunities for physical activity and a healthy lifestyle; and providing potential amenities (e.g., pocket parks, benches, fountains, shade trees, and landscaped buffer areas, etc.) within the corridor to meet both the livability and mobility goals expressed by Miami-Dade County and surrounding communities. While no neighborhood division or social isolation nor disproportionate effects on special populations (primarily minority and low income populations) are anticipated as a result of the project, access to proximate residences could temporarily be affected as a result of project construction. For this reason, overall impacts on the social environment and community cohesion as a result of the project are anticipated to be minimal.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

During the Project Development phase, FDOT District Six will engage residents and business owners in coordination with the Miami-Dade Transportation Planning Organization, the City of Miami, and Miami-Dade County to solicit input on potential project effects related to community cohesion and social interaction as well as potential solutions to ensure that both the social and transportation needs of the surrounding communities are addressed through the project.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **3** *Moderate* assigned 12/06/2018 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

The USEPA would like to review the following PD&E support document:

Public Involvement Plan (FDOT's Public Involvement Handbook, July 2015)

Direct Effects

Identified Resources and Level of Importance:

A social impact can be defined as any action or activity that affects how people live, work, play, relate to one another, organize to meet their needs, and function as individuals and/or society. In particular, transportation actions can impact community cohesion, goals, and mobility, as well as the everyday quality of life of its citizens.

In the *Agency Operating and Funding Agreement for Continuing Participation in the Efficient Transportation Decision Making and Transportation Project Development Processes between United States Environmental Protection Agency and Federal Highway Administration and Florida Department of Transportation*, January 23, 2015, FDOT requested the USEPA's focus on environmental justice considerations for this issue. Therefore, the resources of particular concern are minority, elderly, low-income, disabled, and other special populations.

Historically, these special populations were underrepresented in transportation project planning processes due to inadequate opportunities for involvement. However, federal laws enacted since 1964 now protect their civil rights, including:

- Civil Rights Act of 1964;
- Rehabilitation Act of 1973;
- Age Discrimination Act of 1975;
- Rehabilitation Act Amendments of 1978; and
- Americans with Disabilities Act of 1990.

The federal government has also established policies to ensure transportation agencies take action to overcome potential linguistic,

institutional, cultural, economic, historical, or other barriers that may impede the public's ability to understand the information provided and become involved in the decision-making process. These policies include:

- Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* [February 11, 1994]; and
- Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency* [August 11, 2000].

Comments on Effects to Resources:

The USEPA's online EJSCREEN* tool (<http://www2.epa.gov/ejscreen>) generated the following demographics for the 0.25-mile buffer specified in FDOT's PD&E Manual (Part 2, Chapter 4) for evaluating social impacts in urban areas:

Ludlum Trail Corridor With 0.25-Mile Buffer

Approximate Total Population = 20,722

Minority Population = **85%** [County Average** = **86.8%**, State Average = **44%**]

Low Income Population = **41%** [County Average = **16.7%**, State Average = **37%**]

Linguistically Isolated Population = 28% [County Average = 73.8%, State Average = 7%]

Population with Less than High School Education = **22%** [County Average = **19%**, State Average = **13%**]

Population Under 5 Years of Age = 4% [County Average = 5.8%, State Average = 5%]

Population Over 64 Years of Age = **19%** [County Average = **16%**, State Average = 19%]

However, this data summarizes demographics along the entire corridor, thereby masking areas where special populations are concentrated. In addition to three municipalities (i.e., the cities of Miami, South Miami, and West Miami) and two Census Designated Places (i.e., Coral Terrace and Glenvar Heights), the trail traverses diverse land use zones and socioeconomic strata. Consequently, utilizing Miami-Dade County's division of the trail into six segments (Ludlum Trail Corridor Charette Report, August 2015, <http://www.miamidade.gov/zoning/library/reports/ludlam-trail-report.pdf>) produces more accurate demographic information for evaluating impacts to special populations:

Segment 1 (north of NW 7th Street to SW 8th Street) With 0.25-Mile Buffer

Approximate Total Population = 6,745

Minority Population = **90%** [County Average** = **86.8%**, State Average = **44%**]

Low Income Population = **50%** [County Average = **16.7%**, State Average = **37%**]

Linguistically Isolated Population = 44% [County Average = 73.8%, State Average = 7%]

Population with Less than High School Education = **33%** [County Average = **19%**, State Average = **13%**]

Population Under 5 Years of Age = 3% [County Average = 5.8%, State Average = 5%]

Population Over 64 Years of Age = **21%** [County Average = 16%, State Average = 19%]

Segment 2 (SW 8th Street to SW 24th Street) With 0.25-Mile Buffer

Approximate Total Population = 6,325

Minority Population = **92%** [County Average** = **86.8%**, State Average = **44%**]

Low Income Population = **51%** [County Average = **16.7%**, State Average = **37%**]

Linguistically Isolated Population = 42% [County Average = 73.8%, State Average = 7%]

Population with Less than High School Education = **26%** [County Average = **19%**, State Average = **13%**]

Population Under 5 Years of Age = 5% [County Average = 5.8%, State Average = 5%]

Population Over 64 Years of Age = **20%** [County Average = **16%**, State Average = **19%**]

Segment 3 (SW 24th Street to SW 40th Street) With 0.25-Mile Buffer

Approximate Total Population = 4,922

Minority Population = **94%** [County Average** = **86.8%**, State Average = **44%**]

Low Income Population = **37%** [County Average = **16.7%**, State Average = **37%**]

Linguistically Isolated Population = 28% [County Average = 73.8%, State Average = 7%]

Population with Less than High School Education = **25%** [County Average = **19%**, State Average = **13%**]

Population Under 5 Years of Age = 3% [County Average = 5.8%, State Average = 5%]

Population Over 64 Years of Age = **17%** [County Average = **16%**, State Average = 19%]

Segment 4 (SW 40th Street to SW 56th Street) With 0.25-Mile Buffer

Approximate Total Population = 4,959

Minority Population = 73% [County Average** = 86.8%, State Average = **44%**]

Low Income Population = **31%** [County Average = **16.7%**, State Average = 37%]

Linguistically Isolated Population = 13% [County Average = 73.8%, State Average = **7%**]

Population with Less than High School Education = 13% [County Average = 19%, State Average = 13%]

Population Under 5 Years of Age = 3% [County Average = 5.8%, State Average = 5%]

Population Over 64 Years of Age = **18%** [County Average = **16%**, State Average = 19%]

Segment 5 (SW 56th Street to SW 72nd Street) With 0.25-Mile Buffer

Approximate Total Population = 2,377

Minority Population = 70% [County Average** = 86.8%, State Average = **44%**]

Low Income Population = **26%** [County Average = **16.7%**, State Average = 37%]

Linguistically Isolated Population = 9% [County Average = 73.8%, State Average = **7%**]

Population with Less than High School Education = 6% [County Average = 19%, State Average = 13%]

Population Under 5 Years of Age = 4% [County Average = 5.8%, State Average = 5%]

Population Over 64 Years of Age = 16% [County Average = 16%, State Average = 19%]

Segment 6 (SW 72nd Street to SW 80th Street) With 0.25-Mile Buffer

Approximate Total Population = 1,967

Minority Population = 79% [County Average** = 86.8%, State Average = **44%**]

Low Income Population = **30%** [County Average = **16.7%**, State Average = 37%]

Linguistically Isolated Population = 22% [County Average = 73.8%, State Average = **7%**]

Population with Less than High School Education = 5% [County Average = 19%, State Average = 13%]

Population Under 5 Years of Age = **8%** [County Average = **5.8%**, State Average = **5%**]

Population Over 64 Years of Age = **19%** [County Average = **16%**, State Average = 19%]

Based on this data, as much as 44% of the population in the project area will be excluded from public outreach activities absent efforts to remove language barriers. For consistency with FDOT's *Limited English Proficiency (LEP) Guide* ([http://www.fdot.gov/equalopportunity/InvestigationsandCompliance/FDOT Limited English Proficiency \(LEP\) Guidance.pdf](http://www.fdot.gov/equalopportunity/InvestigationsandCompliance/FDOT%20Limited%20English%20Proficiency%20(LEP)%20Guidance.pdf)) and the Federal Highway Administration's *How to Engage Low-Literacy and Limited-English-Proficiency Populations in Transportation Decisionmaking* (www.fhwa.dot.gov/planning/publications/low-limited/), the USEPA recommends complying with Executive Order 13166, *Improving Access to Services for Persons with Limited English Proficiency* (<https://www.fhwa.dot.gov/civilrights/programs/lep.cfm>).

* Although use of EJSCREEN is discussed in USEPA policy (https://www.epa.gov/sites/production/files/2016-05/documents/052216_ej_2020_strategic_plan_final_0.pdf), it is a pre-decisional screening tool. It was not designed to be the basis for agency decision-making or determinations regarding the existence or absence of EJ concerns, nor should it be used to identify or label an area as an "EJ Community." Rather, EJSCREEN highlights locations that may be candidates for further review and/or outreach. EJSCREEN data needs to be supported by community-specific demographic information and local knowledge. (https://www.epa.gov/sites/production/files/2015-05/documents/ejscreen_technical_document_20150505.pdf)

** Source: U.S. Census, <https://www.census.gov/quickfacts/fact/table/miamidadecountyflorida/POP060210>

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The Purpose and Need states that "[c]harrettes were previously conducted in Miami-Dade County Commission Districts 6 and 7", but no mention was made of additional public involvement activities. During the time since the charrettes were held (early 2015), new residential areas have been constructed (especially in zip code 33155, https://www.zillow.com/homes/miami-fl-33155_rb/) and are planned (Prestige partnership plans \$100M rental complex to replace mobile home park - 600 to 800 apartments will be located next to the planned Ludlam Trail, Oct 2, 2018, <https://therealdeal.com/miami/2018/10/02/prestige-partnership-plans-100m-rental-complex-to-replace-mobile-home-park/>), and new residents have moved into existing homes along the trail corridor. Moreover, the fencing of the trail in early 2018 due to the discovery of soil and groundwater contamination (Contamination along rail line puts damper on Ludlam Trail project, Feb 14, 2018, <https://www.miamiherald.com/news/local/community/miami-dade/west-miami-dade/article200013484.html>) created community concern. We encourage additional outreach, especially to the homeowners, businesses, and schools adjacent to the trail.

We also recommend identifying all potential impacts from construction activities, including air emissions, fugitive dust, noise, and

vibration. Measures to avoid and minimize these impacts consistent with applicable state and local regulations and the *FDOT Standard Specifications for Road and Bridge Construction* need to be evaluated and implemented.

Additional Comments (optional):

The USEPA would like to review the following PD&E support document:

Public Involvement Plan (FDOT's Public Involvement Handbook, July 2015)

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Relocation Potential

Project Effects

Coordinator Summary Degree of Effect: 0 None assigned 01/30/2019 by FDOT District 6

Comments:

Land use surrounding the project is identified primarily as residential; pockets of commercial and industrial uses are located at or near major arterial roadway crossings. The project is consistent with the future land use vision for the area. Due to the fact that the Ludlam Trail Corridor is proposed to be developed within the right-of-way of an abandoned railway, no residences or businesses are anticipated to be displaced. For these reasons, a Summary Degree of Effect of None has been assigned to the Relocation Potential issue.

During the Project Development phase, a Public Involvement Plan will be implemented by FDOT District Six in coordination with the Miami-Dade Transportation Planning Organization, City of Miami, and Miami-Dade County [in accordance with Part 1, Chapter 11 of the PD&E Manual] to solicit input from surrounding property owners on potential project effects to adjacent properties and alternatives that may minimize impacts. A Sociocultural Effects Evaluation will also be conducted [in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual]. A detailed assessment of relocation effects will be performed during the Project Development phase as further evaluation and refinement of the project alternative(s) occurs and specific information regarding right-of-way needs becomes available.

Degree of Effect: 0 None assigned 12/06/2018 by Lauren Brooks, FDOT District 6

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

100-Foot Buffer:

2008 SFWMD Residential Areas / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 8.49 / 6.18%
- 1210 FIXED SINGLE FAMILY UNITS / 66.57 / 48.43%
- 1320 MOBILE HOME UNITS / 2.32 / 1.69%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 5.11 / 3.72%
- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 0.76 / 0.55%

500-Foot Buffer:

2008 SFWMD Residential Areas / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 38.58 / 5.50%
- 1210 FIXED SINGLE FAMILY UNITS / 334.04 / 47.60%
- 1320 MOBILE HOME UNITS / 7.02 / 1.00%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 32.06 / 4.57%
- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 5.10 / 0.73%

- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 5.10 / 0.73%

1,320-Foot (Quarter-Mile) Buffer:

2008 SFWMD Residential Areas / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 104.74 / 5.43%
- 1210 FIXED SINGLE FAMILY UNITS / 959.65 / 49.71%
- 1320 MOBILE HOME UNITS / 7.02 / 0.36%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 98.04 / 5.08%
- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 53.98 / 2.80%

Comments on Effects to Resources:

Land use surrounding the corridor is identified primarily as residential; pockets of commercial and industrial uses are located at or near major arterial roadway crossings. The project is consistent with the future land use vision for the area. Due to the fact that the Ludlam Trail Corridor is proposed to be developed within the right-of-way of an abandoned railway, relocation impacts to properties located along the trail are not anticipated.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

During the Project Development phase, FDOT District Six will engage appropriate property owners in coordination with the Miami-Dade Transportation Planning Organization, City of Miami, and Miami-Dade County to solicit input on potential project effects to adjacent properties and identify alternatives that may minimize impacts. Further assessment of relocation effects will be conducted during the Project Development phase as more detailed and finalized project information regarding right-of-way needs becomes available.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Aesthetic Effects

Project Effects

Coordinator Summary Degree of Effect: 1 *Enhanced* assigned 01/30/2019 by FDOT District 6

Comments:

The Ludlam Trail Corridor traverses four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami). Residential uses primarily compose the project area. Community features associated with aesthetics reported within the 1,320-foot project buffer include: brownfields, homeowner and condominium associations, group care facilities, a mobile home and RV park, parks/recreational facility boundaries, trails, and cultural resources. Per review of the Advance Notification Package issued on 10-22-2018, the Miami-Dade Parks, Recreation and Open Spaces Department (PROS) recommended that street trees and landscaping be included as part of the project and requested to be included in all project phases to assist FDOT in their efforts to minimize impacts to existing and planned recreation facilities and to provide input on design solutions in and adjacent to these facilities. The Division of Environmental Resources Management (DERM) of the Miami-Dade County Department of Regulatory and Economic Resources stated that a Miami-Dade County Tree Permit is required prior to the removal and/or relocation of any tree that is subject to the tree preservation and protection provisions of the Code.

Adopted as part of the Miami-Dade Comprehensive Development Master Plan in 2017, the Ludlam Trail Corridor District establishes the trail as a district of countywide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. The project will not affect vista or viewsheds except at locations where elevated structures are proposed. These crossings will be designed consistent with the project vision, community framework, and components of the design guidelines. The project is also consistent with the land use vision for the area. For these reasons, a Summary Degree of Effect of Enhanced has been assigned to the Aesthetics Effects issue.

During the Project Development phase, a Public Involvement Plan will be implemented by FDOT District Six in coordination with the Miami-Dade Transportation Planning Organization, City of Miami, and Miami-Dade County [in accordance with Part 1, Chapter 11 of the PD&E Manual] to solicit input from residents and business owners on potential project effects as well as opinions and preferences regarding general design concepts related to corridor aesthetics. FDOT District Six will also conduct a Sociocultural Effects Evaluation [in accordance with Part 2, Chapter 4 of the FDOT PD&E Manual] and, specifically, an Aesthetic Effects Evaluation [in accordance with Part 2, Chapter 5 of the FDOT PD&E Manual].

Degree of Effect: **I** *Enhanced* assigned 12/06/2018 by Lauren Brooks, FDOT District 6

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

100-Foot Buffer:

Brownfield Location Boundaries (4)

- Central Miami Area
- Coral Terrace
- Glenvar Heights
- Miami EZ Expansion Area

Geocoded Homeowner and Condominium Associations (1)

- Coral Terrace Condo

Local Florida Parks and Recreational Facility Boundaries (2)

- A D Barnes Park
- Robert King High / Carlos Arboleya Camp Ground

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (1)

- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Existing Recreational Trails (1)

- Miller Drive Sidepath

Florida Site File Field Survey Project Boundaries (6)

- Dade County Archaeological Survey Interim Report
- Dade County Historic Survey, Phase II: Final Report
- A Cultural Resource Assessment Survey for State Road 90/S.W. 8th Street from: State Road 826/Palmetto Expressway To: S.W. 27th Avenue, Volume 1: Report, Volume 2: Appendices
- Charlie's Body Shop/ MD 1132-C
- Cultural Resource Assessment of the FGHG Tower Location in Miami-Dade County, Florida
- Cultural Resource Assessment Survey (CRAS) for the Florida East Coast Railway, LLC Abandonment Exemption in Miami-Dade County, Florida

Florida Site File Historic Bridges (1)

- FEC Railroad Bridge at Tamiami Canal

Florida Site File Historic Standing Structures (1)

- Tropic Garden Motel

Florida Site File Resource Groups (8)

- Flagler Street
- CSX Railroad
- Little River Spur of the FEC Railroad
- Spur of the Seaboard Air Line RR
- Bird Road Historic Highway
- Callie Ocho Historic Highway
- Tamiami Canal
- Sunset Drive

2008 SFWMD Residential Areas / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 8.49 / 6.18%
- 1210 FIXED SINGLE FAMILY UNITS / 66.57 / 48.43%
- 1320 MOBILE HOME UNITS / 2.32 / 1.69%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 5.11 / 3.72%

- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 0.76 / 0.55%

500-Foot Buffer:

Brownfield Location Boundaries (5)

- Central Miami Area
- Coral Terrace
- Glenvar Heights
- Miami EZ Expansion Area
- 7090 Coral Way

Geocoded Homeowner and Condominium Associations (7)

- Bird Villas Condo
- Square Townhouse Condos
- Coral Terrace Condo
- Flagler Suites Condo
- Gables Pointe III, A Condo
- Futura Gables Condo # 4
- Madrid Terrace Condo

Group Care Facilities (6)

- Caring For You ALF 3
- Victoria's Dedicated Retirement Home
- South Miami SR. High School
- South Miami K-8 Center
- South Miami Senior High School Annex
- South Miami K-8 Center Annex

Mobile Home and RV Parks (1)

- Mobile Terrace Mobile Home Park

Local Florida Parks and Recreational Facility Boundaries (2)

- A D Barnes Park
- Robert King High / Carlos Arboleya Camp Ground

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (1)

- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Existing Recreational Trails (1)

- Miller Drive Sidepath

Florida Site File Field Survey Project Boundaries (8)

- Dade County Archaeological Survey Interim Report
- Dade County Historic Survey, Phase II: Final Report
- A Cultural Resource Assessment Survey for State Road 90/S.W. 8th Street from: State Road 826/Palmetto Expressway To: S.W. 27th Avenue, Volume 1: Report, Volume 2: Appendices
- Cultural Resources Assessment Survey of Bridge No. 876412 Over Tamiami Canal
- Charlie's Body Shop/ MD 1132-C
- Cultural Resource Assessment of the FGHG Tower Location in Miami-Dade County, Florida
- A Cultural Resource Assessment Survey of the Road Transfer of SR 986 /Sunset Drive / SW 72nd Street from SW 62nd Avenue to US-1 / S Dixie Highway, County: Miami-Dade
- Cultural Resource Assessment Survey (CRAS) for the Florida East Coast Railway, LLC Abandonment Exemption in Miami-Dade County, Florida

Florida Site File Historic Bridges (2)

- FEC Railroad Bridge at Tamiami Canal
- Bridge #876412

Florida Site File Historic Standing Structures (7)

- 6855 SW 52nd Street
- 6899 SW 62nd Terrace
- El Crucero Restaurant
- Tropic Garden Motel
- Leon' Liquors
- 6900 Sunset Drive

- 6871 Sunset Drive

Florida Site File Resource Groups (9)

- Flagler Street
- CSX Railroad
- Venetian Canal
- Little River Spur of the FEC Railroad
- Spur of the Seaboard Air Line RR
- Bird Road Historic Highway
- Callie Ocho Historic Highway
- Tamiami Canal
- Sunset Drive

2008 SFWMD Residential Areas / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 38.58 / 5.50%
- 1210 FIXED SINGLE FAMILY UNITS / 334.04 / 47.60%
- 1320 MOBILE HOME UNITS / 7.02 / 1.00%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 32.06 / 4.57%
- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 5.10 / 0.73%

1,320-Foot (Quarter-Mile) Buffer:

Brownfield Location Boundaries (5)

- Central Miami Area
- Coral Terrace
- Glenvar Heights
- Miami EZ Expansion Area
- 7090 Coral Way

Geocoded Homeowner and Condominium Associations (21)

Group Care Facilities (21)

Mobile Home and RV Parks (1)

- Mobile Terrace Mobile Home Park

Local Florida Parks and Recreational Facility Boundaries (5)

- Brothers to the Rescue Memorial Park
- A D Barnes Park
- Robert King High / Carlos Arboleya Camp Ground
- Palmer (South Miami) Park
- Flagami Park

OGT: Hiking Trails Priorities (2018-2022) (1)

- Ludlam Trail Corridor

OGT: Multi-Use Trails Opportunities (2)

- CSX RR Corridor
- Ludlam Trail Corridor

Shared-Use Nonmotorized (SUN) Trail Network in Florida (1)

- Ludlam Trail Corridor

Existing Recreational Trails (1)

- Miller Drive Sidepath

Florida Site File Field Survey Project Boundaries (12)

Florida Site File Historic Bridges (2)

- FEC Railroad Bridge at Tamiami Canal
- Bridge #876412

Florida Site File Historic Standing Structures (14)

Florida Site File Resource Groups (9)

- Flagler Street
- CSX Railroad
- Venetian Canal
- Little River Spur of the FEC Railroad
- Spur of the Seaboard Air Line RR
- Bird Road Historic Highway
- Callie Ocho Historic Highway
- Tamiami Canal

- Sunset Drive

2008 SFWMD Residential Areas / Acres / Percent

- 1110 FIXED SINGLE FAMILY UNITS / 104.74 / 5.43%
- 1210 FIXED SINGLE FAMILY UNITS / 959.65 / 49.71%
- 1320 MOBILE HOME UNITS / 7.02 / 0.36%
- 1330 MULTIPLE DWELLING UNITS - LOW RISE / 98.04 / 5.08%
- 1340 MULTIPLE DWELLING UNITS - HIGH RISE / 53.98 / 2.80%

Comments on Effects to Resources:

The Ludlum Trail Corridor is predominantly located within unincorporated Miami-Dade County; the northern portion of the corridor is located within the City of Miami. The project additionally traverses four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami). Residential uses primarily compose the project area.

Community features associated with aesthetics reported within the 1,320-foot project buffer include: five brownfields, 21 homeowner and condominium associations, 21 group care facilities, one mobile home and RV park, five local Florida parks/recreational facility boundaries, one existing recreational trail [Miller Drive Sidepath], and one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network of which the Ludlum Trail Corridor will be included]. Cultural resources additionally exist within the project area.

Adopted as part of the Miami-Dade Comprehensive Development Master Plan in 2017, the Ludlum Trail Corridor District establishes the trail as a district of countywide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. The project will not affect vista or viewsheds except at locations where elevated structures are proposed. There are five elevated structures proposed at major intersections to accommodate safe crossings. These crossings will be designed consistent with the project vision, community framework, and components of the design guidelines such as materials, color and typography, brand, lighting, and dimensions. The project is also consistent with the land use vision for the area. For these reasons, the proposed project improvements are anticipated to enhance the aesthetic character of the corridor and surrounding area.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

During the Project Development phase, FDOT District Six will engage residents and business owners in coordination with the Miami-Dade Transportation Planning Organization, City of Miami, and Miami-Dade County to solicit input on potential project effects as well as opinions and preferences regarding general design concepts related to aesthetics.

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Farmlands

Project Effects

Coordinator Summary Degree of Effect: N/A N/A / No Involvement assigned 01/30/2019 by FDOT District 6

Comments:

There are no farmlands reported within the 200-foot project buffer. The project is consistent with the existing and future land use vision for the project area. In addition, the project occurs within the Miami Urbanized Area. For these reasons, a Summary Degree of Effect of N/A/No Involvement has been assigned to the Farmlands issue.

During the Project Development phase, the Farmland Conversion Impact Rating form for corridor projects (NRCS-CPA-06) will be

completed by FDOT District Six [in accordance with Part 2, Chapter 6 of the FDOT PD&E Manual] and submitted to the NRCS ETAT representative to confirm that no farmland resources are impacted by the project alternative(s).

None found

The following organization(s) were expected to but did not submit a review of the Farmlands issue for **Alternative #1**: Natural Resources Conservation Service

ETAT Reviews and Coordinator Summary: Cultural

Recreation Areas

Project Effects

Coordinator Summary Degree of Effect: **1** *Enhanced* assigned 01/30/2019 by FDOT District 6

Comments:

The following recreational features are reported within the 1,320-foot project buffer: five local Florida parks/recreational facility boundaries, one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network of which the Ludlum Trail Corridor will be included] and one existing recreational trail [Miller Drive Sidepath].

FDEP, NPS, and SFWMD did not provide any comments on project effects for this issue. The Miami-Dade Parks, Recreation and Open Spaces Department (PROS) requested to be included in all project phases to assist FDOT 1) in their efforts to minimize impacts to existing and planned recreation facilities and to provide input on design solutions in and adjacent to these facilities, as well as 2) with potential shared use trail connections; these connections are critical in closing first-mile and last-mile gaps and improving mobility and access to and from transit hubs and also increasing use within the Ludlum Trail Corridor.

The proposed trail is intended to enhance overall access and connectivity to existing and planned recreational features in the long term. As such, a Summary Degree of Effect of Enhanced has been assigned to the Recreation Areas issue.

An assessment of potential impacts to identified recreational resources will be conducted during the Project Development phase. FDOT District Six will further coordinate with relevant agencies on any required studies, documentation, and commitments needed to adequately address identified resources in accordance with federal, state, and local laws and regulations. Future environmental documentation will include an evaluation of the primary, secondary, and cumulative impacts of the proposed project on recreational resources and/or public land.

Degree of Effect: **0** *None* assigned 12/05/2018 by Chris Stahl, FL Department of Environmental Protection

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **0** *None* assigned 11/26/2018 by Anita Barnett, National Park Service

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: N/A N/A / No Involvement assigned 10/25/2018 by Trisha Stone, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

No comments.

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Section 4(f) Potential

Project Effects

Coordinator Summary Degree of Effect: 3 Moderate assigned 01/30/2019 by FDOT District 6

Comments:

Potentially protected Section 4(f) resources reported within the 1,320-foot project buffer include: five local Florida parks/recreational facility boundaries, one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network of which the Ludlum Trail Corridor will be included], one existing recreational trail [Miller Drive Sidepath], two Florida Site File historic bridges [one has not been evaluated by the State Historic Preservation Officer (SHPO) and the other - FEC railroad bridge at Tamiami Canal - is eligible for listing in the National Register of Historic Places (NRHP)], three Florida Site File historic standing structures that have not been evaluated by the SHPO, and five Florida Site File resource groups that are eligible for listing in the NRHP (including the Little River spur of the FEC railroad, CSX railroad, Spur of the Seaboard Air Line railroad, Bird Road, and the Tamiami Canal).

A Summary Degree of Effect of Moderate has been assigned to the Section 4(f) Potential issue due to 1) the presence of NRHP-eligible resources and previously recorded resources in need of evaluation within the project vicinity and 2) the fact that a comprehensive cultural resource assessment survey will be needed.

During the Project Development phase, a Section 4(f) Determination of Applicability will be conducted [in accordance with Part 2,

Chapter 7 of the FDOT PD&E Manual] to determine the extent of Section 4(f) involvement and focus any required documents on the avoidance and/or minimization of impacts to the cited resources. FDOT District Six will further coordinate with relevant agencies on the required studies, documentation, and commitments needed to adequately address any identified resources in accordance with federal, state, and local laws and regulations.

None found

Historic and Archaeological Sites

Project Effects

Coordinator Summary Degree of Effect: 3 *Moderate* assigned 01/30/2019 by FDOT District 6

Comments:

The following historic and archaeological resources are reported within the 1,320-foot project buffer: two Florida Site File historic bridges [one has not been evaluated by the State Historic Preservation Officer (SHPO) and the other - FEC railroad bridge at Tamiami Canal - is eligible for listing in the National Register of Historic Places (NRHP)], 14 Florida Site File historic standing structures (three have not been evaluated by the SHPO and 11 are ineligible for listing on the NRHP), nine Florida Site File resource groups [five are eligible for listing on the NRHP (including the Little River spur of the FEC railroad, CSX railroad, Spur of the Seaboard Air Line railroad, Bird Road, and the Tamiami Canal) and four are ineligible], and 12 Florida Site File field survey project boundaries. Two National Historic Preservation Act - Florida Certified Local Governments (City of Miami and Miami-Dade County) are also present. In addition, the trail will cross two State Historic Highways [Sunset Drive and SR 90 (Calle Ocho)].

FDOS acknowledged the presence of un-evaluated and unrecorded resources in the vicinity of the project since no comprehensive survey has been conducted for the project area. FDOS stated that all cultural resources, including potential historic districts, within the area of potential effect should be documented and assessed for NRHP-eligibility. STOF noted that unknown archaeological and historic resources could be disturbed and/or destroyed as a result of the project and requested to review the comprehensive survey once it is completed. Per review of the Advance Notification Package issued on 10-22-2018, the Miami-Dade County Office of Historic Preservation (OHP) recommended that a comprehensive survey be conducted along the Ludlam Trail Corridor and be submitted to the OHP for review and comment.

While the project is not expected to result in direct impacts to cultural resources, a Summary Degree of Effect of Moderate has been assigned to the Historic and Archaeological Sites issue due to the presence of NRHP-eligible resources and previously recorded resources in need of evaluation within the project vicinity, as well as the fact that a comprehensive survey will be needed.

During Project Development, FDOT District Six will conduct a Cultural Resource Assessment Survey (CRAS) [in accordance with Part 2, Chapter 8 of the FDOT PD&E Manual] to determine the presence of historic and archeological resources in the project area. The resultant CRAS report will be consistent with the specifications set forth in Chapter 1A-46 Florida Administrative Code and will be submitted to the FDOS, STOF, and the Miami-Dade County OHP for review and comment. FDOT District Six will also coordinate with the noted agencies when conducting the CRAS.

Degree of Effect: 2 *Minimal* assigned 12/05/2018 by Victoria Menchaca, Seminole Tribe of Florida

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Cultural Resources Assessment Survey

Direct Effects

Identified Resources and Level of Importance:

Unknown archaeological or historical resources

Comments on Effects to Resources:

Unknown archaeological and historic resources could be disturbed and/or destroyed

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Thank you for contacting the Seminole Tribe of Florida - Tribal Historic Preservation Office (STOF-THPO). The proposed undertaking does fall within in the STOF Area of Interest. When the Cultural Resources Assessment Survey has been completed, we would respectfully like to ask to be sent a copy so that we may complete our assessment pursuant to Section 106 of the National Historic Preservation Act and its implementing authority, 36 CFR 800.

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **3** *Moderate* assigned 10/25/2018 by Adrienne Daggett, FL Department of State

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

Since the project area has not been comprehensively surveyed, a survey should be conducted for this project. All cultural resources, including potential historic districts, within the area of potential effect should be documented and assessed for NRHP eligibility. The resultant survey report shall conform to the specifications set forth in Chapter 1A-46 Florida Administrative Code, FDOT PD&E Manual Part 2, Chapter 12 and will need to be forwarded to this agency (or the appropriate Federal Agency) for review and comment.

Direct Effects

Identified Resources and Level of Importance:

As reported; given that the area has not been systematically surveyed, there is the potential for unrecorded historic resources as well.

Comments on Effects to Resources:

The project has the potential to impact cultural resources within and adjacent to the proposed project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

This office will consult with the project sponsors to avoid, minimize, or mitigate any adverse effects to significant cultural resources.

Additional Comments (optional):

Since the project area has not been comprehensively surveyed, a survey should be conducted for this project. All cultural resources, including potential historic districts, within the area of potential effect should be documented and assessed for NRHP eligibility. The resultant survey report shall conform to the specifications set forth in Chapter 1A-46 Florida Administrative Code, FDOT PD&E Manual Part 2, Chapter 12 and will need to be forwarded to this agency (or the appropriate Federal Agency) for review and comment.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

This office will consult with the project sponsors to avoid, minimize, or mitigate any adverse effects to significant cultural resources.

**ETAT Reviews and Coordinator Summary: Natural
Wetlands and Surface Waters**

Project Effects

Coordinator Summary Degree of Effect: **2** *Minimal* assigned 01/30/2019 by FDOT District 6

Comments:

The National Wetlands Inventory database identifies 8.4 acres (3.04%) of lacustrine wetlands within the 200-foot project buffer; these wetlands are associated with waterbodies located west of the trail near SW 56th Street and at the northern end of the project corridor in the vicinity of the C-4/Tamiami Canal. USEPA identified a few additional acreages of wetlands within the same buffer. NMFS and USACE indicated that these wetlands appear to be low to moderate quality. NMFS and SFWMD reported that the project crosses the C-3/Coral Gables and C-4/Tamiami Canals west of salinity control structures; these surface waters have a downstream open tidal connection to Biscayne Bay and are hydrologically connected to the Atlantic Ocean. NMFS commented that Essential Fish Habitat (EFH) would not be impacted by the proposed project, and no EFH Assessment is required. All of the agencies stated that every effort should be made to avoid and minimize impacts to wetlands and jurisdictional waters of the United States; if impacts are unavoidable, full compensatory mitigation should take place. USACE added that a wetland survey should be conducted within the study area to identify the wetlands and a jurisdictional determination should be completed. USACE noted that the proposed project corridor is NOT within a service area of a permitted compensatory mitigation bank. SFWMD stated that an Environmental Resource Permit will be required. USEPA requested to review the Natural Resources Evaluation.

Due to the fact that the Ludlam Trail Corridor is proposed to be developed within the right-of-way of an abandoned railway, no direct impacts to wetlands are anticipated. Therefore, a Summary Degree of Effect of Minimal has been assigned to the Wetlands and Surface Waters issue.

During the Project Development phase, potential wetland impacts will be assessed through a Natural Resources Evaluation [conducted in accordance with Part 2, Chapter 9 of the FDOT PD&E Manual]. All necessary measures will be taken to avoid and/or minimize impacts to wetlands during project design. Should avoidance and/or minimization not be practicable, a Mitigation Plan will be prepared. Best management practices will be utilized during construction and compensatory mitigation will be provided in the event that any adverse wetland impacts are identified. In addition, all applicable permits [including a SFWMD ERP and USACE 404 Permit] will be obtained or modified in accordance with federal, state, and local laws and regulations. Further, the proposed stormwater management system for the project will be developed to meet the design and performance criteria established in the SFWMD ERP Applicant's Handbook Volumes I and II for the treatment and attenuation of discharges to nearby waterbodies. The design will also make every effort to maximize the treatment of stormwater runoff from the proposed project.

Degree of Effect: 3 *Moderate* assigned 12/06/2018 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

The USEPA would like to review the following PD&E support document:

Natural Resource Evaluation (PD&E Manual, Part 2, Chapter 9)

Direct Effects**Identified Resources and Level of Importance:**

Wetlands and other surface waters provide important and beneficial functions, including providing essential fish and wildlife habitat, buffering water quality impacts, storing floodwaters, and maintaining surface water flow during dry periods. However, "[a]s development increased and more paved areas covered the land, stormwater runoff became the primary source of pollution to surface waters in Florida" (http://www.swfwmd.state.fl.us/publications/files/stormwater_systems.pdf). The most common contaminants in highway runoff are heavy metals, inorganic salts, volatile organics, petroleum hydrocarbons, bacteria, pesticides/herbicides, and suspended solids that accumulate on the road surface as a result of regular highway operation and maintenance activities.

Various federal, state, and local laws have been enacted to protect surface water resources. The Clean Water Act (CWA) established the basic structure for regulating discharges of pollutants into the waters of the United States (including coastal fringe wetlands) and provides statutory authority for various regulatory programs. Section 402 of the CWA requires permitting of all municipal, industrial and commercial facilities that discharge wastewater or stormwater directly from a point source. CWA Section 404, which is administered by the U.S. Army Corps of Engineers in coordination with the USEPA, governs the discharge of dredged or fill material into surface waters.

Comments on Effects to Resources:

Utilizing data from the U.S. Fish & Wildlife Service's National Wetlands Inventory, the EST reported the following wetlands acreage in the 200-foot buffer:

- Lacustrine = 8.58 acres
- Palustrine = 0.32 acres
- Riverine = 0.71 acres

According to the U.S. Fish & Wildlife Service's Wetland Mapper (<https://www.fws.gov/wetlands/data/Mapper.html>), these wetlands features are associated with the following waters of the United States (from north to south):

- Lake Mahar - Part of 305.83-acre Lacustrine System wetlands and deepwater habitats
- Tamiami (C-4) Canal - Part of 1963.69-acre Riverine System wetlands and deepwater habitats contained within a channel
- Coral Gables (C-3) Canal - Part of 1963.69-acre Riverine System wetlands and deepwater habitats contained within a channel
- Unnamed lake in Lakeridge Condominiums (south of SW 48th Lane and along west side of trail) - 29.73-acre Lacustrine System (nontidal) wetlands and deepwater habitats
- Two unnamed freshwater ponds between SW 61st Street and west side of trail - 0.83 acre total of Palustrine System (nontidal) wetlands
- Snapper Creek (C-2) Canal - Part of 1963.69-acre Riverine System wetlands and deepwater habitats contained within a channel

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Consistent with Section 404 of the Clean Water Act, the project should avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in jurisdictional waters of the United States. Furthermore, any wetland losses allowed under a Corps Section 404 permit must be mitigated (https://www.epa.gov/sites/production/files/2015-08/documents/mitigation_rule_factsheet.pdf).

Additional Comments (optional):

The USEPA would like to review the following PD&E support document:

Natural Resource Evaluation (PD&E Manual, Part 2, Chapter 9)

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 12/05/2018 by Chris Stahl, FL Department of Environmental Protection

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 11/20/2018 by Lisa Lovvorn, US Army Corps of Engineers

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Although 8.4 acres of lacustrine wetlands are within the 200 foot project buffer, these wetlands are associated with waterbodies

located west of the trail near SW 56th Street and at the northern end of the project corridor in the vicinity of the C-4/Tamiami Canal. Therefore, the level of importance would be minimal for a multi-use trail for capacity and safety improvements along an existing railway.

Comments on Effects to Resources:

The wetlands are along an existing railway corridor which would have been secondarily impacted so a functional assessment should reveal a lower quality of wetlands along the corridor.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The Corps recommends a continued emphasis on wetland avoidance and minimization opportunities through the planning process. A wetland survey should be conducted within the study area to identify the wetlands and a jurisdictional determination should be completed. A review of the Corps RIBITS indicates that the proposed project corridor is NOT within a service area of a permitted compensatory mitigation bank.

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

See previous comments on direct effects.

Comments on Effects to Resources:

See previous comments on effects to resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

See previous comments on avoidance, minimization and mitigation opportunities.

Degree of Effect: **2** *Minimal* assigned 10/25/2018 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

Wetlands

Comments on Effects to Resources:

Service Comments, Wetlands and Fish and Wildlife Resources (Degree of Effect-minimal): Wetlands provide important habitat for fish and wildlife. Wetlands may occur within and near the project site. We recommend that these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the Florida Department of Transportation provide mitigation that fully compensates for the loss of important resources.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: **2** *Minimal* assigned 10/25/2018 by Trisha Stone, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

An Environmental Resource Permit would be required from the South Florida Water Management District.

Direct Effects**Identified Resources and Level of Importance:**

The proposed project corridor crosses two surface waters: the C-4/Tamiami Canal and the C-3/Coral Gables Canal. Both of these surface waters have a downstream open tidal connection to Biscayne Bay.

Comments on Effects to Resources:

Minimal surface waters resources or habitats impacts are anticipated which would result from the construction and operation of the proposed project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:**Additional Comments (optional):**

An Environmental Resource Permit would be required from the South Florida Water Management District.

CLC Recommendations:**Indirect Effects****Identified Resources and Level of Importance:****Comments on Effects to Resources:****Recommended Avoidance, Minimization, and Mitigation Opportunities:**

Degree of Effect: 2 *Minimal* assigned 10/23/2018 by Jennifer Schull, National Marine Fisheries Service

Coordination Document: No Involvement

Coordination Document Comments:

Coordination should continue under the Fish and Wildlife Coordination Act.

Direct Effects**Identified Resources and Level of Importance:**

Based on our review of the information provided on the EST website, GIS-based effects analysis on wetlands and interpretation of aerial photographs, NOAA's National Marine Fisheries Service (NMFS) has determined that lacustrine wetlands are located within the project corridor. These wetlands appear to be low to moderate in quality. The project crosses the C-3 (Coral Gables) and C-4 (Tamiami) canals west of salinity control structures. These canals are hydrologically connected to Biscayne Bay and the Atlantic Ocean.

Comments on Effects to Resources:

The wetlands present within the project corridor provide water quality functions, such as removal of sediments, excess nutrients, and contaminants, which benefit and support these aquatic ecosystems. Through hydrological connections, these wetlands also contribute plant material and other useable nutrients (both dissolved and particulate organic matter) into aquatic food webs that include recreationally, commercially, and ecologically important species within downstream estuaries. If wetland impacts are unavoidable, sequential minimization and mitigation should take place.

In addition to the direct impacts from filling wetlands, construction activities may impact adjacent wetlands through sedimentation and runoff.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Magnuson-Stevens Act: Based on the project location west of salinity control structures, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes that essential fish habitat (EFH) would not be impacted by the proposed road modifications; accordingly, we offer no comments pursuant to the EFH provisions of the Magnuson-Stevens Act (P.L. 104-297); and this project will not require an EFH Assessment. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH. However, coordination under the Fish and Wildlife Coordination Act should continue.

Endangered Species Act: We are not aware of any threatened or endangered species or critical habitat under the purview of NMFS that occur within the project area. However, it should be noted that a "no effect" determination must be made by the action agency and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

Fish and Wildlife Coordination Act: The comments NMFS provided regarding sequential mitigation are in accordance with the Fish and Wildlife Coordination Act.

Additional Comments (optional):

Coordination should continue under the Fish and Wildlife Coordination Act.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Wildlife and Habitat

Project Effects

Coordinator Summary Degree of Effect: 2 Minimal assigned 01/30/2019 by FDOT District 6

Comments:

The 200-foot project buffer occurs within the South Florida Ecosystem Management Area; USFWS Consultation Areas for the American crocodile, Florida bonneted bat, Miami-Dade Keys plants, and snail kite; Critical Habitat for the West Indian Manatee; Wood Stork Core Foraging Area (CFA); Rare Range for the Florida black bear; Rare and Imperiled Fish Habitat for the mountain mullet (associated with C-4/Tamiami Canal); and Florida Managed Areas/Public Land (A.D. "Doug" Barnes Park).

FDACS requested that the trail avoid impacts to Florida Forest Service facility sites. FWC stated that it is a member of the Florida Greenways and Trails Council, which supports the development of the Ludlam Trail; minimal impacts to fish or wildlife resources are anticipated as a result of the project. SFWMD reiterated that portions of the project corridor located in/on/over the C-4/Tamiami Canal and the C-3/Coral Gables Canal are accessible to and within the known range of the West Indian manatee; practicable project design construction methodologies/modifications to reduce and eliminate direct and secondary impacts to the West Indian manatee will be required as part of the Environmental Resource Permit Application. USFWS reported that federally listed species and fish and wildlife resources occur in the project area and requested that FDOT prepare a Biological Assessment for the project. USFWS specifically stated that any lost foraging habitat for the wood stork be replaced within the CFA of the affected nesting colony; for impacts of 5 or more acres, a functional assessment must be conducted using the USFWS Wood Stork Foraging Analysis Methodology on the foraging habitat to be impacted and the foraging habitat provided as mitigation. USFWS added that a survey should be conducted following USFWS guidance to determine the status of the Florida bonneted bat on the project site. USFWS recommended that FDOT use native wild flowers, bushes, and trees in the landscaping of the trail to benefit fish and wildlife resources (including pollinators). Per review of the Advance Notification Package issued on 10-22-2018, the Division of Environmental Resources Management (DERM) of the Miami-Dade County Department of Regulatory and Economic Resources reported that the project is adjacent to A.D. Barnes Park, which contains County-designated Natural Forest Community (NFC) and land managed by the Miami-Dade County Environmentally Endangered Lands (EEL) Program. DERM stated that an erect barrier should be placed along the edge of the park prior to any work commencing to minimize potential damage to the NFC/EEL property. DERM indicated that the park is maintained by periodic prescribed burns; the trail may be affected by smoke events from the prescribed burns or unexpected wildfires as it lies within the potential smoke dispersion corridor. DERM noted that the Tamiami and Coral Gables Canals along with all associated lagoons and waterways are Critical Habitat for the West Indian manatee and FWC Manatee Protection Conditions for In-Water Work should be implemented for all aspects of construction. DERM added that Miami-Dade County's Manatee Protection Plan (MPP) requires that all new or replacement culverts and outfalls accessible to manatees be designed to prevent entrapment of or injury to these animals. DERM requested that FDOT coordinate review of planned activities with USFWS, FWC, and Miami-Dade County before conducting any work or activities on the project site and surrounding area. DERM also requested that FDOT inform Miami-Dade County in writing as early as possible if USFWS determines that the project will result in a "take" of endangered or threatened species.

Given the fact that the project area is predominantly urban and measures will be taken to avoid and/or minimize project impacts to identified resources to the greatest extent practicable, a Summary Degree of Effect of Minimal has been assigned to the Wildlife and Habitat issue.

The final design of the project will avoid and/or minimize impacts to wetlands/wildlife and habitat to the greatest extent possible and appropriate mitigation will be provided for unavoidable impacts. Agency guidelines will be followed, and best management practices will also be utilized during project activities. During the Project Development phase, a Natural Resources Evaluation will be prepared in compliance with Section 7 of the Endangered Species Act of 1973, as amended (16 USC 1531 et seq) and in accordance with Part 2, Chapter 16 of the FDOT PD&E Manual. Further, informal consultation with FWS, USFWS, and Miami-Dade County will occur during the Project Development phase in order to determine any site specific measures required for the project.

Degree of Effect: 2 *Minimal* assigned 11/29/2018 by Steve Bohl, FL Department of Agriculture and Consumer Services

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

Do not impact any Florida Forest Service facility sites.

Comments on Effects to Resources:

Do not impact any Florida Forest Service facility sites.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Do not impact any Florida Forest Service facility sites.

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Do not impact any Florida Forest Service facility sites.

Comments on Effects to Resources:

Do not impact any Florida Forest Service facility sites.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Do not impact any Florida Forest Service facility sites.

Degree of Effect: 2 *Minimal* assigned 11/26/2018 by Fritz Wettstein, FL Fish and Wildlife Conservation Commission

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

No significant wildlife resources were identified in the project area. The Florida Greenways and Trails Council, of which the Florida Fish and Wildlife Conservation Commission is a member, supports the development of the Ludlam Trail, which is on the Greenways and Trails Priority Map. We believe this trail will provide a safe opportunity for an outdoor experience in an urban environment.

Comments on Effects to Resources:

Minimal impacts to fish or wildlife resources are anticipated to result from this project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

No significant wildlife resources were identified in the project area.

Comments on Effects to Resources:

Minimal impacts to fish or wildlife resources are anticipated to result from this project.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/25/2018 by John Wrublik, US Fish and Wildlife Service

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects**Identified Resources and Level of Importance:**

Federally listed species and fish and wildlife resources

Comments on Effects to Resources:

Federally-listed species -

The Service has reviewed our Geographic Information Systems (GIS) database for recorded locations of Federally listed threatened and endangered species on or adjacent to the project study area. The GIS database is a compilation of data received from several sources. Based on review of our GIS database, the Service notes that the following Federally listed species may occur in or near the project area.

Wood Stork

The project corridor is located in the Core Foraging Area (CFA; all lands within 18.6 miles) of three active nesting colonies of the endangered wood stork (*Mycteria americana*). The Service believes that the loss of wetlands within a CFA due to an action could result in the loss of foraging habitat for the wood stork. To minimize adverse effects to the wood stork, we recommend that any lost foraging habitat resulting from the project be replaced within the CFA of the affected nesting colony. Moreover, wetlands provided as mitigation should adequately replace the wetland functions lost as a result of the action. The Service does not consider the preservation of wetlands, by itself, as adequate compensation for impacts to wood stork foraging habitat, because the habitat lost is not replaced. Accordingly, any wetland mitigation plan proposed should include a restoration, enhancement, or creation component. In some cases, the Service accepts wetlands compensation located outside the CFA of the affected wood stork nesting colony. Specifically, wetland credits purchased from a "Service Approved" mitigation bank located outside of the CFA would be acceptable to the Service, provided that the impacted wetlands occur within the permitted service area of the bank.

For projects that impact 5 or more acres of wood stork foraging habitat, the Service requires a functional assessment be conducted using our "Wood Stork Foraging Analysis Methodology" (Methodology) on the foraging habitat to be impacted and the foraging habitat provided as mitigation. The Methodology can be found at: https://www.fws.gov/verobeach/BirdsPDFs/20120712_WOST_Forage_Assessment_Methodology_Appendix.pdf.

Florida bonneted bat

The project corridor is located in the geographic range and the Service's consultation Area for the endangered Florida bonneted bat (FBB; *Eumops floridanus*). We recommend that a survey based on the Service's guidance be conducted on the project site to determine the status of the FBB on the project site. Our most current FBB survey guidance is available upon request and includes both a roosting and acoustic survey component.

The Service believes that the following federally listed species have the potential to occur in or near the project site: wood stork, FBB, eastern indigo snake (*Drymarchon couperi* = *Drymarchon corais couperi*), West indian manatee (*Trichechus manatus*), and Federally listed plants (<http://www.fws.gov/verobeach/ListedSpeciesPlants.html>). Accordingly, the Service recommends that the Florida Department of Transportation (FDOT) prepare a Biological Assessment for the project (as required by 50 CFR 402.12) during the FDOT's Project Development and Environment process.

Fish and Wildlife Resources -

Wetlands provide important habitat for fish and wildlife. Wetlands may occur within and near the project site. We recommend that

these valuable resources be avoided to the greatest extent practicable. If impacts to these wetlands are unavoidable, we recommend the Florida Department of Transportation provide mitigation that fully compensates for the loss of important resources.

To benefit fish and wildlife resources, including pollinators such as butterflies and bees, we recommend that the Florida Department of Transportation use native wild flowers, bushes and trees in the landscaping of the trail. Native plants are more drought resistant than exotic grasses and native wild flowers can be maintained by mowing.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/25/2018 by Trisha Stone, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

An Environmental Resource Permit would be required from the South Florida Water Management District.

Direct Effects

Identified Resources and Level of Importance:

The portions of the proposed project corridor located in/on/over the C-4/Tamiami Canal and the C-3/Coral Gables Canal are accessible to and within the know range of the West Indian manatee (*Trichechus manatus latirostris*).

Practicable project design construction methodologies modifications to reduce and eliminate direct and secondary impacts to the West Indian manatee would be required to be demonstrated, in accordance with Subsection 10.2.2 of the Environmental Resource Permit Applicant's Handbook, Volume I.

Comments on Effects to Resources:

No comments.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

An Environmental Resource Permit would be required from the South Florida Water Management District.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Coastal and Marine

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 01/30/2019 by FDOT District 6

Comments:

The project falls within the Biscayne Bay Coastal Estuarine Drainage Area. Coastal and marine resources reported within the 200-foot project buffer include: 813.8 linear feet of environmentally sensitive shorelines, which are associated with the C-3/Coral Gables Canal. In addition, 8.4 acres (3.04%) of lacustrine wetlands are present within the 200-foot project buffer. NMFS and SFWMD reported that the project crosses the C-3/Coral Gables and C-4/Tamiami Canals west of salinity control structures; these surface waters have a downstream open tidal connection to Biscayne Bay and are hydrologically connected to the Atlantic Ocean. NMFS confirmed that Essential Fish Habitat (EFH) would not be impacted by the proposed project, and no EFH Assessment is required. SFWMD stated that there is the potential for mangroves and/or other marine/brackish vegetation to be present within the project area and added that trimming of mangroves would need to be conducted in accordance with the Mangrove Trimming and Preservation Act, Sections 403.9321-403.9333, Florida Statutes. SFWMD indicated that an Environmental Resource Permit (ERP) would be required for the alteration or removal of mangroves or the filling of coastal wetlands.

The project will be designed to meet state water quality and quantity requirements, and best management practices will be utilized during project activities. However, for the above noted reasons, a Summary Degree of Effect of Minimal has been assigned to the Coastal and Marine issue.

During the Project Development phase, potential impacts to sensitive coastal and marine resources will be assessed through a Natural Resources Evaluation [conducted in accordance with Part 2, Chapter 9 of the FDOT PD&E Manual]. All necessary measures will be taken to avoid and/or minimize impacts to identified resources during project design. Further, the proposed stormwater management system for the project will be developed to meet the design and performance criteria established in the SFWMD ERP Applicant's Handbook Volumes I and II for the treatment and attenuation of discharges to nearby waterbodies. The design will also make every effort to maximize the treatment of stormwater runoff from the proposed project.

Degree of Effect: 2 *Minimal* assigned 10/25/2018 by Trisha Stone, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

An Environmental Resource Permit would be required from the South Florida Water Management District. It is recommended that a pre-application meeting be conducted to discuss potential impacts to coastal and marine resources.

Direct Effects

Identified Resources and Level of Importance:

The proposed project corridor includes surface waters of the C-4/Tamiami Canal and the C-3/Coral Gables Canal which are tidally connected to Biscayne Bay at the downstream ends. Therefore, there is the potential for mangroves and/or other marine/brackish vegetation to be present within the project area.

Comments on Effects to Resources:

Trimming of mangroves would need to be conducted in accordance with the Mangrove trimming and Preservation Act, Sections 403.9321-403.9333, Florida Statutes.

An Environmental Resource Permit would be required for the alteration or removal of mangroves, or filling of coastal wetlands.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

An Environmental Resource Permit would be required from the South Florida Water Management District. It is recommended that a pre-application meeting be conducted to discuss potential impacts to coastal and marine resources.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/23/2018 by Jennifer Schull, National Marine Fisheries Service

Coordination Document: No Involvement

Coordination Document Comments:

Coordination should continue under the Fish and Wildlife Coordination Act.

Direct Effects

Identified Resources and Level of Importance:

Based on our review of the information provided on the EST website, GIS-based effects analysis on wetlands and interpretation of aerial photographs, NOAA's National Marine Fisheries Service (NMFS) has determined that lacustrine wetlands are located within the project corridor. These wetlands appear to be low to moderate in quality. The project crosses the C-3 (Coral Gables) and C-4 (Tamiami) canals west of salinity control structures. These canals are hydrologically connected to Biscayne Bay and the Atlantic Ocean.

Comments on Effects to Resources:

The wetlands present within the project corridor provide water quality functions, such as removal of sediments, excess nutrients, and contaminants, which benefit and support these aquatic ecosystems. Through hydrological connections, these wetlands also contribute plant material and other useable nutrients (both dissolved and particulate organic matter) into aquatic food webs that include recreationally, commercially, and ecologically important species within downstream estuaries. If wetland impacts are unavoidable, sequential minimization and mitigation should take place.

In addition to the direct impacts from filling wetlands, construction activities may impact adjacent wetlands through sedimentation and runoff.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Magnuson-Stevens Act: Based on the project location west of salinity control structures, information provided in the ETDM website, and GIS-based analysis of impacts, NOAA's National Marine Fisheries Service (NMFS) concludes that essential fish habitat (EFH) would not be impacted by the proposed road modifications; accordingly, we offer no comments pursuant to the EFH provisions of the Magnuson-Stevens Act (P.L. 104-297); and this project will not require an EFH Assessment. Further consultation on this matter is not necessary unless future modifications are proposed and you believe that the proposed action may result in adverse impacts to EFH. However, coordination under the Fish and Wildlife Coordination Act should continue.

Endangered Species Act: We are not aware of any threatened or endangered species or critical habitat under the purview of NMFS that occur within the project area. However, it should be noted that a "no effect" determination must be made by the action agency and the reasoning underlying the determination should be documented in a project file. Please coordinate closely with the U.S. Fish and Wildlife Service for other species listed under the Endangered Species Act that may require consultation.

Fish and Wildlife Coordination Act: The comments NMFS provided regarding sequential mitigation are in accordance with the Fish and Wildlife Coordination Act.

Additional Comments (optional):

Coordination should continue under the Fish and Wildlife Coordination Act.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Floodplains

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 01/30/2019 by FDOT District 6

Comments:

According to the DFIRM 100-Year Floodplain Data, the 200-foot project buffer is located within 8.08 acres (2.92%) of Flood Zone AE and 34.1 acres of Flood Zone AH (12.34%). Per review of the Advance Notification Package issued on 10-22-2018, the Division of Environmental Resources Management (DERM) of the Miami-Dade County Department of Regulatory and Economic Resources confirmed these flood zones within the project vicinity. SFWMD stated that an Environmental Resource Permit (ERP) is required and impacts to floodplain storage need to be compensated in accordance with the ERP Applicant's Handbook Volume II. SFWMD added that a pre-application meeting is recommended with SFWMD staff once construction plans have been developed. Despite the considerable amount of 100-year floodplain within the project corridor, the project is to be developed within abandoned railway right-of-way and is not anticipated to affect flood heights or base floodplain limits. As such, a Summary Degree of Effect of Minimal has been assigned to the Floodplains issue.

During Project Development, a Location Hydraulics Report will be prepared [in accordance with Part 2, Chapter 13 of the FDOT PD&E Manual] to avoid and/or minimize impacts. All necessary permits will be obtained in accordance with federal, state, and local laws and regulations. In addition, impacts to floodplain storage will be compensated in accordance with the SFWMD ERP Applicant's Handbook Volumes I & II.

Degree of Effect: 2 *Minimal* assigned 10/25/2018 by Trisha Stone, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

An Environmental Resource Permit is required from the South Florida Water Management District (SFWMD). Once construction plans have been developed a pre-application meeting with SFWMD staff is recommended.

Direct Effects

Identified Resources and Level of Importance:

Impacts to floodplain storage need to be compensated in accordance with the Environmental Resource Permit Applicant's Handbook Volume II.

Comments on Effects to Resources:

No comment.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

An Environmental Resource Permit is required from the South Florida Water Management District (SFWMD). Once construction plans have been developed a pre-application meeting with SFWMD staff is recommended.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Water Quality and Quantity

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 01/30/2019 by FDOT District 6

Comments:

The project is located within the watersheds of three impaired waters: C-2/Snapper Creek (fecal coliform), C-3/Coral Gables Canal (fecal coliform) and C-4/Tamiami Canal (mercury in fish tissue). Also present within the 200-foot project buffer are the Biscayne Aquifer (a Sole Source Aquifer), a recharge area of the Floridan Aquifer, and one Super Act Well.

USEPA stated that the project will increase impervious land cover leading to additional stormwater runoff which will impact the Biscayne aquifer (which is close to the surface, extremely porous, and near canals). USEPA confirmed that the project is located in the drainage basins of three verified impaired waterbodies and noted that of particular concern within the project corridor will be the potential impact of increased fecal coliform load from pet feces. USEPA reiterated that appropriate stormwater treatment systems and best management practices must be employed during construction and post-construction consistent with MS4 permit requirements. USEPA recommended completing a Water Quality Impact Evaluation (WQIE) Checklist and requested to review the checklist, as well as recommended the evaluation of Low Impact Development (LID) practices during PD&E. SFWMD reiterated that the project must be designed to meet the stormwater water quality and quantity criteria of the Environmental Resource Permit (ERP) Applicant's Handbook Volumes I & II, including Appendix E of Volume II pertaining to Impaired Waters criteria, and stated that an ERP is required. Per review of the Advance Notification Package issued on 10-22-2018, the Division of Environmental Resources Management (DERM) of the Miami-Dade County Department of Regulatory and Economic Resources reported that the trail is located within the maximum Pumpage Wellfield Protection Area of the Alexander Orr Wellfield. DERM commented that the sources of potable water for the area are the Hialeah/Preston and the Alexander Orr Water Treatment Plants, which are owned and operated by Miami-Dade County Water and Sewer Department (WASD). DERM noted that the trail is located within WASD's franchised sewer service area. DERM stated that a stormwater drainage system is required to provide flood protection and stormwater quality treatment for any new development within the Ludlam Trail Corridor. DERM reiterated that any proposed drainage and water management system must comply with the regulations from all the permitting agencies having jurisdiction. DERM indicated that a portion of the Ludlam Trail Corridor is adjacent to the County's Coral Gables Canal; as such, a DERM Class II permit may be required for any proposed drainage system that contains an outfall or overflow system in, on, or upon any water body of Miami-Dade County, and a DERM Class III permit is required for construction within any County canal right-of-way, reservation, or easement. WASD confirmed that the proposed project lies within WASD's water and sewer service areas and that they have water mains, sanitary gravity sewer lines, and sanitary sewer force mains that intercept the proposed project. WASD recommended that FOOT coordinate with its Utility Coordination Staff for the future development of the proposed project.

While additional and more stringent stormwater treatment requirements for discharge into impaired waters will be required, the proposed trail is not a capacity improvement project and will not be utilized by motorized vehicles. Therefore, a Summary Degree of Effect of Minimal has been assigned to the Water Quality and Quantity issue.

During the Project Development phase, FDOT District Six will coordinate with the appropriate agencies concerning the necessary studies, documentation, and commitments needed to adequately address all identified resources. The proposed stormwater facility design will include, at a minimum, the volumetric retention/detention water quantity requirements for the water quality impacts as required by the current Miami-Dade County Code and/or SFWMD rules; the system will be developed to meet the design and performance criteria established in the SFWMD ERP Applicant's Handbook Volumes I and II [including Appendix E] for the treatment and attenuation of discharges to nearby waterbodies. The design will also make every effort to maximize the treatment of stormwater runoff from the proposed project. A Stormwater Pollution Prevention Program (SWPPP) will be implemented (as required by NPDES permits) to control the effects of stormwater runoff during construction. A Water Quality Impact Evaluation will be conducted [in accordance with Part 2, Chapter 11 of the FDOT PD&E Manual]. FDOT District Six will additionally comply with the Sole Source Aquifer Memorandum of Understanding given potential impacts to the Biscayne Aquifer. All necessary permits [including an ERP and DERM permits] will be obtained in accordance with federal, state, and local laws and regulations during subsequent phases. Best management practices will be utilized during project activities.

Degree of Effect: 3 Moderate assigned 12/11/2018 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

The USEPA would like to review the following PD&E support document:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 11)

Direct Effects

Identified Resources and Level of Importance:

Stormwater from impervious surfaces in urban environments conveys contaminants to surface water bodies, wetlands, and groundwater. Runoff may contain dissolved or suspended anthropogenic contaminants, of which metals, nutrients, volatile organics, petroleum hydrocarbons, bacteria, pesticides/herbicides, and suspended solids are the most common.

The principal law governing pollution of the nation's surface waters is the Clean Water Act (CWA), previously known as the Water Pollution Control Act. Amendments in 1972 established the National Pollutant Discharge Elimination System (NPDES) permitting program for wastes discharged from discrete sources, such as pipes from manufacturing facilities and wastewater treatment plants (i.e., point sources). Recognizing the need to address stormwater pollution (i.e., nonpoint sources), the U.S. Congress amended the

CWA's NPDES provisions in 1987. The USEPA promulgated regulations for medium to large Municipal Separate Storm Sewer Systems (MS4s) in 1990 and small MS4s in 1999. In October 2000, the USEPA delegated authority to the Florida Department of Environmental Protection (FDEP) to implement the MS4 programs. FDEP's regulatory requirements for MS4 permits are set forth in Chapter 62-624, F.A.C. (http://www.dep.state.fl.us/water/stormwater/npdes/MS4_1.htm).

The State also administers its own Environmental Resource Permitting (ERP) program for activities involving the alteration of surface water flows (<http://www.dep.state.fl.us/WATER/wetlands/erp/index.htm>). The ERP program, which is implemented by the Florida Department of Environmental Protection (FDEP) and the five Water Management Districts, is wholly separate from the federal MS4 permit program and has no underpinning federal requirements.

Comments on Effects to Resources:

"The greatest concern regarding maintaining the quality of the County's surface waters continues to be pollutant discharges in the watershed and nonpoint source discharges of stormwater runoff in the canal systems"

(http://www.miamidade.gov/mayormemo/Air_and_Water_Quality_of_Miami_-_Dade_County_-_Report.pdf).

As stated in the Preliminary Environmental Discussion Comments Report, the project will increase impervious land cover. The additional stormwater runoff will impact the Biscayne aquifer, which is close to the surface and extremely porous, and nearby canals. According to FDEP's Map Direct: Verified List WBIDs and TMDLs Map

(<http://fddep.maps.arcgis.com/home/webmap/viewer.html?webmap=1b4f1bf4c9c3481fb2864a415fbeca77>), the Ludlam Trail Corridor is located in the drainage basins of three verified impaired waterbodies:

- C-4/Tamiami Canal (WBID 3286) - verified impaired for DO and mercury in fish tissue (https://ofmpub.epa.gov/tmdl_waters10/attains_waterbody.control?p_au_id=FL3286B&p_cycle=2012),
- C-3/Coral Gables Canal (WBID 3292) - verified impaired for DO and fecal coliform (https://ofmpub.epa.gov/tmdl_waters10/attains_waterbody.control?p_au_id=FL3292&p_cycle=2012), and
- C-2/Snapper Creek (WBID 3293) - verified impaired for DO and fecal coliform (https://ofmpub.epa.gov/tmdl_waters10/attains_waterbody.control?p_au_id=FL3293&p_cycle=2012).

Of particular concern in the project corridor will be the potential impact of the increased fecal coliform load from pet feces.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Even though TMDLs are not yet in place to address fecal coliform and DO impairments in the canals, action should be taken to avoid, minimize, and/or mitigate further impacts. Consistent with MS4 permit requirements, appropriate stormwater treatment systems and best management practices must be employed during construction (i.e., temporary BMPs) and post-construction (i.e., permanent BMPs during the operational life of the facility). As described in FDOT's Project Development and Environment (PD&E) Manual (i.e., its process for complying with the National Environmental Policy Act), the USEPA recommends completing a Water Quality Impact Evaluation (WQIE) Checklist. The following information is needed to demonstrate compliance with federal and state MS4 requirements:

- whether the project discharges to surface waters and verified impaired waterbodies;
- the project's location in a permitted MS4;
- pollutants of concern in the verified impaired waterbodies;
- applicable TMDLs;
- applicable water quality requirements, including Waste Load Allocations (WLAs) in the TMDLs and MS4 permit conditions; and
- direct effects associated with project construction and operation.

Moreover, to reduce the quantity and improve the quality of stormwater generated in the project corridor, the USEPA encourages the evaluation of Low Impact Development (LID) practices during PD&E. Various resources on LID practices are available, including:

- NCHRP Report 565: Evaluation of Best Management Practices for Highway Runoff Control (2006), <http://www.trb.org/Main/Blurbs/158397.aspx>, which includes three additional documents: User's Guide for BMP/LID Selection (Guidelines Manual), Appendices to the User's Guide for BMP/LID Selection, and Low-Impact Development Design Manual for Highway Runoff Control (LID Design Manual);
- EPA's Stormwater Discharges from Transportation Sources Innovative Materials website, <https://www.epa.gov/npdes/stormwater-discharges-transportation-sources-innovative-materials>

Additional Comments (optional):

The USEPA would like to review the following PD&E support document:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 11)

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 0 *None* assigned 12/05/2018 by Chris Stahl, FL Department of Environmental Protection

Coordination Document: PD&E Support Document As Per PD&E Manual

Direct Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/25/2018 by Trisha Stone, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

An Environmental Resource Permit is required from the South Florida Water Management.

Direct Effects

Identified Resources and Level of Importance:

SFWMD concurs with the assignment of a minimal degree of effect, provided that the project is designed to meet the stormwater water quality and quantity criteria of the Environmental Resource Permit Applicant's Handbook Volumes I & II, including Appendix E of Volume II pertaining to Impaired Waters criteria.

To avoid degradation of water quality during construction and operation of the project, the design would need to meet the criteria in Environmental Resource Permit Applicant's Handbook Volume I and II.

Comments on Effects to Resources:

No comment.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

An Environmental Resource Permit is required from the South Florida Water Management.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

ETAT Reviews and Coordinator Summary: Physical

Noise

Project Effects

Coordinator Summary Degree of Effect: N/A N/A / No Involvement assigned 01/30/2019 by FDOT District 6

Comments:

Once constructed, the project will provide for passive, non-motorized activities (walking, biking, etc.) that typically do not generate noise levels of concern. Due to this project being a Type III noise project, no noise analysis is required. Therefore, a Summary Degree of Effect of N/A / No Involvement has been assigned to the Noise issue.

During the Project Development phase, a Public Involvement Plan will be implemented by FDOT District Six in coordination with the Miami-Dade Transportation Planning Organization [in accordance with Part 1, Chapter 11 of the PD&E Manual] to solicit opinions from residents and business owners on potential noise and vibration effects related to the proposed project improvements. Any identified potential effects will be assessed and noise abatement criteria will be followed in accordance with Part 2, Chapter 18 of the FDOT PD&E Manual.

None found

Air Quality

Project Effects

Coordinator Summary Degree of Effect: 2 Minimal assigned 01/30/2019 by FDOT District 6

Comments:

The EST GIS Analysis data layer titled "Air Quality Maintenance Areas" indicates that the project is located within the Southeast Florida Airshed. However, the metadata states that the information is based on 1990 data. As such, current information published on the USEPA website was consulted for the project. The current data indicates that the project is not located within a USEPA-designated Air Quality Maintenance or Non-Attainment Area for any of the six criteria pollutants (ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and small particulate matter) specified by the USEPA in National Ambient Air Quality Standards. Therefore, the Clean Air Act conformity requirements do not apply to this project at this time. USEPA recommended implementing measures to reduce diesel emissions during construction and controlling fugitive dust by watering or applying other controlled materials in accordance with FDOT's Standard Specifications for Road and Bridge Construction. USEPA requested to review the Air Quality Technical Memorandum.

While no permanent effects to air quality are anticipated, due to the fact that potential temporary impacts to air quality could occur as a result of emissions from equipment and dust generated from project construction activities, a Summary Degree of Effect of Minimal has been assigned to the Air Quality issue.

During Project Development, an Air Quality Technical Memorandum will be prepared [in accordance with Part 2, Chapter 19 of the FDOT PD&E Manual]. A coatings assessment will also be performed prior to any work involving paint removal, if required based on design of the project alternative(s).

Degree of Effect: 2 Minimal assigned 11/14/2018 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

The USEPA would like to review the following PD&E support document:

Air Quality Technical Memorandum (PD&E Manual, Part 2, Chapter 19)

Direct Effects

Identified Resources and Level of Importance:

Resource: Air quality that complies with standards established by the USEPA pursuant to the federal Clean Air Act.

Level of Importance: To protect public health and welfare nationwide, the USEPA has established National Ambient Air Quality Standards (NAAQS) for six "criteria pollutants" (<https://www.epa.gov/criteria-air-pollutants/naaqs-table>): particulate matter (PM), ozone (O3), sulfur dioxide (SO2), nitrogen dioxide (NO2), carbon monoxide (CO), and lead (Pb). States are required to adopt enforceable plans to achieve and maintain air quality that meets these standards. The USEPA has also established National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for 187 pollutants known or suspected to cause serious health effects (<https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications>).

Comments on Effects to Resources:

The project area is currently in attainment with the National Ambient Air Quality Standards and the EPA does not anticipate emissions from the project being significant enough to impact the area's attainment status. However, localized impacts to air quality could occur as a result of fugitive dust and exhaust emissions generated by equipment during project construction.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The USEPA recommends implementing measures to reduce diesel emissions during construction, such as switching to cleaner fuels, retrofitting current equipment with emission reduction technologies, repowering older engines with newer cleaner engines, replacing older vehicles, and reducing idling through operator training and/or contracting policies. We also encourage controlling fugitive dust by watering or the application of other controlled materials in accordance with FDOT's *Standard Specifications for Road and Bridge Construction*.

Additional Comments (optional):

The USEPA would like to review the following PD&E support document:

Air Quality Technical Memorandum (PD&E Manual, Part 2, Chapter 19)

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Infrastructure

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 01/30/2019 by FDOT District 6

Comments:

The 200-foot project buffer contains 70 onsite sewage facilities, one Federal Aviation Administration (FAA) obstruction, one wireless antenna structure, two RCI railroad crossings, 20 Bureau of Transportation Statistics (BTS) grade-level railroad crossings, 30,942 linear feet of mainline railroad, and railway [0.8 mile (2016 data)/5.8 miles (2015 data)] which has been fully abandoned from railroad use. Per review of the Advance Notification Package issued on 10-22-2018, the Miami-Dade County Water and Sewer Department (WASD) indicated that the proposed project corridor lies within WASD's water and sewer service areas and recommended that FDOT coordinate with its utility coordination staff for the future development of the proposed project. The Miami-Dade County Solid Waste Department stated that the proposed project will have no impact on its operations.

While a number of features are within proximity to the project, the trail is proposed to be constructed within the right-of-way of

abandoned railway. Therefore, a Summary Degree of Effect of Minimal has been assigned to the Infrastructure issue.

An assessment of potential impacts to identified infrastructure-related resources, including utilities, will be conducted during the Project Development phase [in accordance with Part 2, Chapter 21 of the FDOT PD&E Manual]. FDOT District Six will further coordinate with relevant agencies on required studies, documentation, and commitments needed to adequately address identified resources in accordance with federal, state, and local laws and regulations.

None found

Navigation

Project Effects

Coordinator Summary Degree of Effect: N/A N/A / No Involvement assigned 01/30/2019 by FDOT District 6

Comments:

The project crosses two SFWMD canals (C-3/Coral Gables Canal and C-4/Tamiami Canal), neither of which is navigable where the project corridor crosses the canal. No direct impacts to navigation are expected as proposed bridge modifications (if any) will not alter existing vertical and horizontal clearances. USACE and USCG confirmed that no navigable waters are present within the project area. For these reasons, a Summary Degree of Effect of N/A / No Involvement has been assigned to the Navigation issue.

Degree of Effect: 0 None assigned 11/20/2018 by Lisa Lovvorn, US Army Corps of Engineers

Coordination Document: To Be Determined: Further Coordination Required

Direct Effects

Identified Resources and Level of Importance:

No navigable waters are reported within the project area; therefore, no involvement regarding navigation is anticipated.

Comments on Effects to Resources:

None.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

None.

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

None.

Comments on Effects to Resources:

None.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

None.

Degree of Effect: N/A N/A / No Involvement assigned 11/19/2018 by Randall D Overton, US Coast Guard

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

No jurisdictional waterways for Coast Guard bridge permitting purposes

Comments on Effects to Resources:

No jurisdictional waterways for Coast Guard bridge permitting purposes

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Contamination

Project Effects

Coordinator Summary Degree of Effect: 4 *Substantial* assigned 01/30/2019 by FDOT District 6

Comments:

The 200-foot project buffer contains four brownfields, 25 Miami-Dade County Department of Environmental Resources Management (DERM) contaminated sites, one FDEP offsite contamination notice, 13 hazardous waste facilities, five petroleum contamination monitoring sites, 14 storage tank contamination monitoring sites, five Super Act Risk Sources, one Super Act Well, one toxic release inventory site, 15 USEPA Resource Conservation and Recovery Act (RCRA) regulated facilities, and abandoned railway. Based on preliminary spot testing conducted as part of the railway acquisition process, evidence has been found of soil and groundwater contamination along the former rail corridor. The area has been fenced off for further testing and will not be accessible for public use until remediation and safety plans are developed and implemented.

USEPA confirmed the presence of numerous hazardous and solid waste facilities, petroleum contamination and storage tank contamination monitoring sites, and RCRA regulated facilities within the 500-foot project buffer and recommended that FDOT consult other federal and state mapping tools to identify/verify potentially contaminated sites in the project corridor (USEPA provided a list of mapping tools to be consulted). USEPA also indicated that several RCRA (Subtitles C and I) and federal Superfund sites are adjacent to the project corridor based on information from NEPAAssist and Map Direct. USEPA stated that while the project footprint may not directly impact contaminated sites, proposed stormwater management systems and other project construction activities should avoid these areas. USEPA recommended conducting a Contamination Screening Evaluation and requested to review the Contamination Screening Evaluation Report. Per review of the Advance Notification Package issued on 10-22-2018, the Division of Environmental Resources Management (DERM) of the Miami-Dade County Department of Regulatory and Economic Resources confirmed that the Ludlam Trail Corridor has records of current contamination issues and noted that a DERM tracking number (HWR -836) has been assigned to the project. DERM stated that all DERM records related to the discovery of soil and groundwater contamination within the Ludlam Trail Corridor can be located within the file. DERM requested a copy of all additional environmental site investigation reports for review and inclusion in the referenced DERM tracking file. DERM indicated that a DERM Class VI may be required for any installation of new drainage systems in contaminated areas; any construction, development, drainage, and dewatering at the subject site will also require review and approval from the DERM Environmental Monitoring and Restoration Division as it relates to environmental contamination issues. SFWMD noted that dewatering is not anticipated.

A Summary Degree of Effect of Substantial has been assigned to the Contamination issue due to the high number of potential contamination features within close proximity to the corridor and potential impacts to existing sources of sub-surface contamination as a result of the project.

Contamination [including any required permits] will be evaluated during the Project Development phase in accordance with federal, state, and local laws and regulations. A Contamination Screening Evaluation Report [similar to Phase I and Phase II Audits] will be prepared in accordance with Part 2, Chapter 20 of the FDOT PD&E Manual, including site specific surveys to assess existing known subsurface contamination as well as historical contamination release. Any identified sites will be investigated to determine their potential risk, and proper mitigation will take place if medium to high risk sites are identified. Contingency Plans/"Special Provisions for Unidentified Areas of Contamination" shall be included in the project's construction contract documents. These provisions will specify procedures to follow in the event any hazardous material or suspected contamination is encountered during construction.

Degree of Effect: 4 *Substantial* assigned 12/11/2018 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

The USEPA would like to review the following PD&E support document:

Contamination Screening Evaluation Report (PD&E Manual, Part 2, Chapter 20)

Direct Effects**Identified Resources and Level of Importance:**

FDOT defines a contaminated site as "Any contiguous land, sediment, surface water, or groundwater areas that contain contaminants that may be harmful to human health or the environment" (PD&E Manual, Part 2, Chapter 20). To address potential impacts, major federal laws govern the remediation of contaminated sites, including the Resource Conservation and Recovery Act of 1976 (RCRA), as amended; and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended. RCRA provides the foundation for three distinct, yet interrelated, regulatory programs: hazardous waste management (Subtitle C), solid waste management (Subtitle D), and the Underground Storage Tank program (Subtitle I). [See Basics of RCRA, <https://www.epa.gov/enforcement/resource-conservation-and-recovery-act-rcra-and-federal-facilities>]. CERCLA established requirements for cleaning up uncontrolled or abandoned hazardous-waste sites, as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment, using a federal "Superfund" financed by a tax on the chemical and petroleum industries. CERCLA was amended in 2002 by the Small Business Liability Relief and Brownfields Revitalization Act, which codified the USEPA's practices, policies and guidance for cleaning up and redeveloping brownfields sites. A brownfield is defined as "a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." [See Overview of the Brownfields Program, <https://www.epa.gov/brownfields/overview-brownfields-program>]

Comments on Effects to Resources:

Although the EST reports numerous Hazardous and Solid Waste Facilities, Petroleum Contamination and Storage Tank Contamination Monitoring Sites, and RCRA Regulated Facilities in the 500-foot buffer, FDOT contractors (e.g., see the Contamination Screening Technical Memo for ETDM Project #14324, page 3, http://www.swflroads.com/sr60/over-csx/documents_publications.html) and the USEPA (e.g., see our comments on ETDM Projects #14311 and #14322) have found inaccuracies in EST data. As a result, we encourage using other federal and state mapping tools to identify potentially contaminated sites in the project corridor, such as:

- NEPAAssist, <https://www.epa.gov/nepa/nepassist>
- Cleanups in My Community, <https://www.epa.gov/cleanups/cleanups-my-community>
- FDEP's Map Direct: Contamination Locator, <http://ca.dep.state.fl.us/mapdirect/?focus=contamlocator>
- FDEP's Solid Waste Map, <https://www.arcgis.com/home/webmap/viewer.html?webmap=4d6f754de3334bbbdd652c9a44d06ef>
- FDEP's Institutional Control Registry Areas Map, http://myflorida-floridadisaster.opendata.arcgis.com/datasets/a8dedaa86ba4434bbe48b69686ad3c72_11

Based on information in NEPAAssist and Map Direct: Contamination Locator, the following RCRA (Subtitles C and I) and federal Superfund sites are adjacent to the project corridor. There are no federally-funded Brownfield sites within 4 miles of the trail.

Dade County Stores & Mail Distribution, 7001 SW 4th Street, Miami 33144

- EPA RCRA ID #FLR000002170 - Conditionally Exempt Small Quantity Generator (CESQG) with no recorded violations in the past 5 years (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLR000002170/facility!search>)

Dade County School Board - Transportation/Dade County Transportation Fac, 7011 SW 4th Street, Miami 33144

- EPA ID #FLD981867815 - CESQG with no recorded violations in the past 5 years (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD981867815/facility!search>)
- FDEP Storage Tank Contamination Monitoring (STCM) Facility ID #8628726 - Ongoing cleanup of petroleum discharges in 1984, 1986, 1987, 1989, 1992, 1996, and 2012 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8628726/gis-facility!search>)

Dade County South Trans East, 7009 SW 4th Street, Miami 33144

- EPA ID #FLR000002220 - Notified in 1995 as SQG; 2014 Miami-Dade County inspection report indicated that address does not exist (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLR000002220/facility!search>)

Walmart Neighborhood Market #4140, 6991 SW 8th Street, Miami 33144

- EPA ID #FLR000213249 - Notified in 2014 at CESQG; no documented violations (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLR000213249/facility!search>)
- STCM Facility ID #9814067 - No record of petroleum discharge (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9814067/gis-facility!search>)

Perfection Body Shop, 7017 SW 8th Street, Miami 33144

- EPA ID #FLD984186767 - Notified in 1991 as SQG; in 2011, FDEP inspector found vacant property where facility had been located (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD984186767/facility!search>)

Jak Service Center Inc DBA United Fuel, 6900 SW 8th Street, Miami 33144

- STCM Facility ID #8503663 - Active investigation of petroleum discharges found during Underground Storage Tank (UST) removals in 1991 and 1995 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8503663/gis-facility!search>)

Anthony's Paint & Body Shop, 810 SW 69th Avenue, Miami 33144

- EPA ID #FLD984259341 - Notified as SQG in 1993 and updated in 2012 as CESQG; no documented violations (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD984259341/facility!search>)

Al Springer Roofing, 890 SW 69th Avenue, Miami 33144

- STCM Facility ID #9046905 - Open investigation of petroleum discharge in 1991; off-site contamination notice issued in 2016 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9046905/gis-facility!search>)

Farina Radiator, 918 SW 69th Avenue, Miami 33144

- EPA ID #FLT950052787 - Notified as CESQG, but no process or waste code information is available (https://ofmpub.epa.gov/enviro/rcrainfoquery_3.facility_information?pgm_sys_id=FLT950052787)
- STCM Facility ID #8839885 - Non-petroleum discharge in 1984; Miami-Dade County sampling showed contamination below applicable cleanup target levels; FDEP made No Cleanup Required determination in 2018 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8839885/gis-facility!search>)
- Facility purchased by Century Plumbing in 2008 (<http://www.centurywholesale.us/>)

Auto Elite Collision Team (previously known as Oscar Paint & Body Shop), 940 SW 69th Avenue, Miami 33144

- EPA ID #FLD982100885 - CESQG with no documented violations (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD982100885/facility!search>)

Viva Liz Inc., 994 SW 69th Avenue, Miami 33144

- EPA ID #FLD982149114 - Notified as SQG in 1990; updated in 1991 as CESQG and as non-handler in 2014; no documented hazardous waste releases (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD982149114/facility!search>)

Dyplast Foam Insulation Industries Inc. (previously known as Apache Products Company), 1020 SW 69th Avenue, Miami 33144

- EPA ID #FLD982107591 - Notified as SQG in 1987; in 2011, FDEP inspector found vacant property where facility had been located (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD982107591/facility!search>)
- STCM Facility ID #8630642 - no tank-related documents available online

Wawa Food Market #5260, 6971 SW 24th Street, Miami 33155

- STCM Facility ID #9816382 - tanks registered in 2018 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9816382/gis-facility!search>)

Chevron Coral Way (previously known as OK Satellite Corp.), 6901 Coral Way, Miami 33155

- EPA ID #FLT950050948 - Notified as CESQG, but no process or waste code information is available
- STCM Facility ID #8505946 - Petroleum discharge discovered during tank removal in 1993; FDEP approved No Further Action in 1995; no record of subsequent discharges (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8505946/facility!search>)

Perfection Paint & Body Shop, 6900 Coral Way, Miami 33155

- EPA ID #FLR000076638 - Notified as SQG in 2001; determined by Miami-Dade County to be operating as CESQG in 2014; no documented hazardous waste releases (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLR000076638/facility!search>)

Braman Honda (previously known as Coral Way Properties), 7000 Coral Way, Miami 33144

- STCM Facility ID #8943259 - Discharge of arsenic and chromium in 1987; Braman purchased property in 1996; no record of petroleum discharge (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8943259/facility!search>)

Davidson Lumber Company (previously known as Miami Wood Treating Company), 7000 Coral Way, Miami 33155

- EPA ID #FLD043122589 - wood treating facility that operated from 1942 through 1981; provided notification of hazardous waste activity in 1980, but did not comply with RCRA requirements (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD043122589/gis-facility!search>)
- FDEP Site ID #65701 - Waste Cleanup Closed Responsible Party; extensive onsite and soil contamination (i.e., heavy metals, volatile and semi-volatile organic compounds) addressed under RCRA corrective action program (http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/COM_65701/gis-facility!search); site was considered by EPA for inclusion on the Superfund National Priorities List, but it did not score high enough

Pan American Coral Terrace Ltd, 7090 SW 24th Street (Coral Way), Miami 33155

- FDEP Site ID #311758 - Waste Cleanup Closed Responsible Party; property owners are subject to development conditions specified in the FDEP Cleanup Agreement Document signed in 2012 (http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/COM_311758/gis-facility!search)
- Property is the former location of Davidson Lumber Company/Miami Wood Treating; information about the cleanup and the contamination remaining in site soils and groundwater is available in the *Supplemental Site Assessment Report & Conceptual No Further Action With Conditions Plan* dated March 30, 2012

BJ's Wholesale Club #367, 7050 Coral Way, Miami 33155

- EPA ID #FLR000209007 - Notified as CESQG in 2014; no documented hazardous waste releases (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLR000209007/facility!search>)
- STCM Facility ID #9814104 - tanks installed in 2014; no record of petroleum release (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9814104/gis-facility!search>)

Lopefra Corporation, 2601 SW 69th Court, Miami 33155

- STCM Facility ID #8839486 - No record of petroleum discharge (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8839486/gis-facility!search>)

H & M Body Shop, 2675 SW 69th Court, Miami 33155

- EPA ID #FL0000040428 - Notified as CESQG in 1993; no record of violations or releases (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FL0000040428/facility!search>)

Oxford Building Services, 2701 SW 69th Court, Miami 33155

- STCM Facility ID #8505735 - No record of petroleum discharge (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8505735/gis-facility!search>)

[documents/8505735/gis-facility!search](http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8505735/gis-facility!search))

Haul O Way Towing Service Inc., 2721 SW 69th Court, Miami 33155

- STCM Facility ID #9200501 - No record of petroleum discharge (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9200501/gis-facility!search>)

Danville - Findorff Inc., 2811 SW 70th Avenue, Miami 33155

- STCM Facility ID #8622111 - Petroleum discharge in 1992; FDEP issued Site Rehabilitation Completion Order in May 2018 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8622111/gis-facility!search>)

Gold Coast Oil Corporation (and Solvent Extraction Inc.), 2835 SW 71st Avenue, Miami 33330

- EPA ID #FLD071307680 - Provided notification of hazardous waste activity in 1980 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD071307680/facility!search>)
- FDEP Cleanup Site #ERIC_3786 - EPA conducted RCRA inspection in March 1981 and found numerous violations; site investigation in June 1981 revealed soil and groundwater contamination from 3,000-4,000 drums stored onsite, many of which were leaking; primary contaminants included volatile and semi-volatile organic compounds and heavy metals; EPA added the site to the Superfund National Priorities List in October 1981; remedial activities were conducted by the property owner, CSX Transportation; site was deleted from the NPL in 1996 (http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/ERIC_3786/gis-facility!search)
- FDEP's Map Direct: Contamination Locator shows an extensive plume of groundwater contamination centered on the former Gold Coast Oil site and underlying approximately 950 feet of the Ludlam Trail corridor; contaminants include heavy metals, herbicides, insecticides, volatile and semi-volatile organic compounds, and petroleum-related chemicals (i.e., benzene, toluene, xylenes, and MTBE)

Florida Power & Light Southwest Service Center, 3925 SW 70th Avenue, Miami 33155

- EPA ID #FLD000807560 - Non-handler (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD000807560/facility!search>)
- STCM Facility ID #8622135 - Petroleum discharge in 1995; FDEP approved No Further Action in 1998 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8622135/gis-facility!search>)
- Tank facility identified in Map Direct as Harris Dade TCC S23

Michie Coin Laundry, 6891 SW Bird Road, Miami 33155

- STCM Facility ID #9501079 - No documents available online (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9501079/gis-facility!search>)

U.S. Postal Service - Ludlam Branch, 6900 SW 40th Street, Miami 33155

- STCM Facility ID #8520604 - Tank removed in 1995 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8520604/gis-facility!search>)

Trail Builders Supply Company (also known as Ameri-Lumber), 7004 Bird Road (SW 40th Street), Miami 33155

- STCM Facility ID #8506283 - Tanks removed in 1991 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8506283/gis-facility!search>)

P. J. Constructors Inc., 4100 SW 70th Court, Miami 33155

- STCM Facility ID #9100997 - Petroleum discharge in 1991; FDEP approved Site Rehabilitation Completion Report in 1995 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9100997/gis-facility!search>)

Master Custom Auto Center, 4201 SW 70th Court, Miami 33155

- EPA ID #FLD984234609 - Notified as CESQG in 1992; Miami-Dade County inspector found different business (non-waste generating) operating at the location in 2012 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD984234609/gis-facility!search>)

Gulfside Supply Inc. (previously known as Prudential Building Materials), 4241 SW 70th Court, Miami 33155

- STCM Facility ID #8629013 - Petroleum discharge in 1993; FDEP approved No Further Action Proposal in 1996 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8629013/gis-facility!search>)

Coma Cast Corporation, 4383 SW 70th Court, Miami 33155

- STCM Facility ID #9401768 - No record of petroleum discharge (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/9401768/gis-facility!search>)

Miami Auto Outlet Inc. (previously known as Bayco Paint & Body Shop), 7040 SW 44th Street, Miami 33155

- EPA ID #FLD982159709 - SQG with no record of release (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD982159709/gis-facility!search>)

Causey Roofing Corporation, 7004 SW 45th Street, Miami 33155

- STCM Facility ID #8736441 - Petroleum release in 1994; FDEP approved No Further Action Proposal in 1994 and tank was reported as removed in 1994 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8736441/gis-facility!search>)

Bird-Miller Realty Ltd (previously known as Peeples Properties), 7003 SW 46th Street, Miami 33155

- STCM Facility ID #8628991 - Tank removed in 1990; no record of petroleum discharge (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/8628991/gis-facility!search>)

Economy Auto Service, 6960 SW 47th Street, Miami 33155

- EPA ID #FLD982096109 - Notified as SQG in 1987; FDEP inspector found closed facility and property advertised as available for lease in 2010 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD982096109/gis-facility!search>)

Miami Classic (previously known as Santoyo Auto Body Shop), 6950 SW 47th Street, Miami 33155

- EPA ID #FLD984200857 - Notified as SQG in 1991; Miami-Dade County inspector found different business (non-waste generating) operating at the location in 2012 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD984200857/facility!search>)

Quality Auto Repairs, 6956 SW 47th Street, Miami 33155

- EPA ID #FLD981755291 - Notified as SQG in 1988; FDEP inspector found closed facility and property advertised as available for lease in 2010 (<http://prodenv.dep.state.fl.us/DepNexus/public/electronic-documents/FLD981755291/gis-facility!search>)

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The USEPA supports conducting a Contamination Screening Evaluation to (1) verify the sites described in our comments, (2) determine if any of these sites will be impacted by the project, and (3) assess the presence of unreported sources of sub-surface contamination within the project right-of-way. Potential issues involving contaminated sites on land include leaking underground petroleum storage tanks, leaking above-ground storage tanks, improper storage and/or disposal of hazardous materials, spills and/or leaks from transportation vehicles, etc. If encountered and disturbed during construction, a contaminated site could result in surface and/or groundwater water pollution. Additionally, while the project footprint may not directly impact contaminated sites, proposed stormwater management systems and other project construction activities should avoid these areas.

Additional Comments (optional):

The USEPA would like to review the following PD&E support document:

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: N/A *N/A / No Involvement* assigned 10/25/2018 by Trisha Stone, South Florida Water Management District

Coordination Document: No Involvement

Direct Effects

Identified Resources and Level of Importance:

It is not anticipated that dewatering would be required for construction of the proposed project. Therefore, the South Florida Water Management District would not have any involvement.

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

The following organization(s) were expected to but did not submit a review of the Contamination issue for **Alternative #1**: FL Department of Environmental Protection

ETAT Reviews and Coordinator Summary: Special Designations

Special Designations

Project Effects

Coordinator Summary Degree of Effect: 2 *Minimal* assigned 01/30/2019 by FDOT District 6

Comments:

There are no Outstanding Florida Waters, Aquatic Preserves, Scenic Highways, or Wild and Scenic Rivers within the 200-foot project buffer.

SFWMD stated that any proposed work in/on/over the C-4/Tamiami Canal and the C-3/Coral Gables Canal will require a SFWMD Right-of-Way Permit and recommended that a pre-application meeting be conducted to discuss issues associated with the proposed project. USEPA requested to view the Water Quality Impact Evaluation (WQIE) and noted that the trail crosses three canals that drain to Biscayne Bay, a State-designated Outstanding Florida Water (OFW) and Aquatic Preserve as well as home to the Biscayne National Park (also an OFW). USEPA indicated that stormwater runoff poses one of the greatest threats to the bay's water quality, and the primary source of stormwater discharge is the SFWMD's system of canals, levees, and control structures. USEPA also identified the presence of the Biscayne Aquifer, a Sole Source Aquifer, and noted that while projects seeking federal assistance must be reviewed by USEPA [per the Sole Source Aquifer Memorandum of Understanding (MOU)], the MOU specifies that bicycle and pedestrian facilities will not normally need to be referred to USEPA for review and comment as they are assumed to not adversely affect water quality. USEPA additionally confirmed that the project is located within the maximum pumpage wellfield protection area

affect water quality. USEPA additionally confirmed that the project is located within the maximum pumpage wellfield protection area of Miami-Dade County's Alexander Orr Wellfield. USEPA reiterated that appropriate stormwater treatment systems and best management practices must be employed during construction, and throughout the operational life of the facility, to protect surface waters and prevent impacts to groundwater. USEPA recommended evaluation of Low Impact Development (LID) practices during PD&E.

Due to some issues and concerns reported by SFWMD and USEPA regarding permitting and water quality, a Summary Degree of Effect of Minimal has been assigned to the Special Designations issue.

The proposed project will be designed to meet state water quality and quantity requirements, and best management practices will be utilized during project activities. Further, the proposed stormwater system will be developed to meet the design and performance criteria established for the treatment and attenuation of discharges to impaired waters and OFWs and the SFWMD Environmental Resource Permit Applicant's Handbook Volumes I and II [including Appendix E]. During the Project Development phase, FDOT District Six will coordinate with the appropriate agencies concerning the necessary studies, documentation, and commitments needed to adequately address all identified resources and avoid and/or minimize any potential project impacts. A Water Quality Impact Evaluation Checklist will be prepared [in accordance with Part 2, Chapter 11 of the FDOT PD&E Manual]. FDOT District Six will additionally comply with the Sole Source Aquifer MOU given potential impacts to the Biscayne Aquifer. All necessary permits [including a SFWMD Right-of-Way Permit] will be obtained in accordance with federal, state, and local laws and regulations during subsequent phases.

Degree of Effect: 3 *Moderate* assigned 12/06/2018 by Kim Gates, US Environmental Protection Agency

Coordination Document: PD&E Support Document As Per PD&E Manual

Coordination Document Comments:

The USEPA would like to review the following PD&E support document:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 11)

Direct Effects

Identified Resources and Level of Importance:

The PD&E Manual (Part I, Chapter 3) defines the Special Designations category as comprised of Outstanding Florida Waters (Rule 62-302.700, F.A.C.), Aquatic Preserves (Rule 62-302.700(2)(f), F.A.C.), Scenic Highways (PD&E Manual, Part 2, Chapter 29), and Wild & Scenic Rivers (Rule 62-302.700(2)(d), F.A.C.). In addition, the *Agency Operating and Funding Agreement for Continuing Participation in the Efficient Transportation Decision Making and Transportation Project Development Processes between United States Environmental Protection Agency and Federal Highway Administration and Florida Department of Transportation* (AOFA), January 23, 2015, identifies Sole Source Aquifers as Special Designations under the USEPA's purview. Federal responsibilities pursuant to the Safe Drinking Water Act also include wellhead protection (<http://www.epa.gov/sourcewaterprotection/source-water-protectionbasics>).

Comments on Effects to Resources:

Outstanding Florida Waters, State Aquatic Preserves, Florida Scenic Highways, and Wild & Scenic Rivers

Based on information in the EST, no Outstanding Florida Waters, State Aquatic Preserves, Florida Scenic Highways or Wild & Scenic Rivers are located in the project vicinity. However, the Ludlam Trail Corridor crosses three canals that drain to Biscayne Bay, a State-designated Outstanding Florida Water (OFW) and Aquatic Preserve, as well as home to the Biscayne National Park (also an OFW). Stormwater runoff poses one of the greatest threats to the bay's water quality, and the primary source of stormwater discharge is the South Florida Water Management District's system of canals, levees, and control structures.

Sole Source Aquifer Designation

The Biscayne aquifer, underlying Miami-Dade, Broward, and part of Palm Beach counties, supplies virtually all of the potable water needs for more than 6 million residents* in southeastern Florida, including the Florida Keys. Consistent with the Safe Drinking Water Act (SDWA), which defines a Sole Source Aquifer as an underground water source that supplies at least 50% of the drinking water to the overlying area (<http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/solesourceaquifer.cfm>), the USEPA designated the Biscayne aquifer as a Sole Source Aquifer (44 Federal Register 58797, October 11, 1979).

Once an area is designated as a Sole Source Aquifer (SSA), no commitments of federal financial assistance may be made to projects that the USEPA determines could contaminate the aquifer and create a significant hazard to public health. To ensure compliance with SDWA requirements, FDOT, FHWA, and the USEPA executed a Sole Source Aquifer Memorandum of Understanding (MOU) in January

1999 that identifies the types of proposed projects to be forwarded to the USEPA for evaluation and comment. FDOT has applied for federal assistance for the project, but the MOU specifies (see Attachment D, [http://www.fdot.gov/environment/pubs/SSA MOU Attachments.pdf](http://www.fdot.gov/environment/pubs/SSA%20MOU%20Attachments.pdf)) that the construction of bicycle and pedestrian lanes, paths, and facilities "are assumed not to generally adversely affect water quality, and will not normally be referred to the EPA . . . for SSA review and comment."

* https://en.wikipedia.org/wiki/Miami_metropolitan_area

Alexander Orr Wellfield Protection Area

As documented by Miami-Dade County in its Initial Recommendations Report for the Ludlam Trail Corridor, Application No. 9 in the May 2015 Comprehensive Development Management Plan (CDMP) Amendment Cycle (<http://www.miamidade.gov/planning/library/reports/planning-documents/2015-05-recommendation-to-application-9.pdf>), "A portion on the corridor to be designated as 'Recreational Trail' (from SW 52nd Street to SW 71st Street) is located within the maximum pumpage wellfield protection area of the Alexander Orr Wellfield. Development of the subject property shall be in accordance with the regulations established in Section 24-43 of the Code."

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Stormwater runoff and its potential impact on water quality should be properly evaluated and addressed during PD&E. Appropriate stormwater treatment systems and best management practices must be employed during construction, and throughout the operational life of the facility, to protect surface waters and prevent impacts to groundwater. Of note is that the Sole Source Aquifer MOU memorializes FDOT's commitment to designing federal-aid projects in SSA-designated areas in a manner that will prevent the introduction of contaminants in quantities or concentrations that could create a significant hazard to public health, or which may require a public water system to install additional treatment to prevent such adverse effect ([http://www.fdot.gov/environment/pubs/SSA MOU.pdf](http://www.fdot.gov/environment/pubs/SSA%20MOU.pdf)).

We also recommend evaluating Low Impact Development (LID) practices to reduce the quantity and improve the quality of stormwater generated in the project corridor. Various resources on LID practices are available, including:

- NCHRP Report 565: Evaluation of Best Management Practices for Highway Runoff Control (2006), <http://www.trb.org/Main/Blurbs/158397.aspx>, which includes three additional documents: User's Guide for BMP/LID Selection (Guidelines Manual), Appendices to the User's Guide for BMP/LID Selection, and Low-Impact Development Design Manual for Highway Runoff Control (LID Design Manual);
- EPA's Stormwater Discharges from Transportation Sources Innovative Materials website, <https://www.epa.gov/npdes/stormwater-discharges-transportation-sources-innovative-materials>; and
- UF/ IFAS Extension Low-Impact Development web page, <https://ffl.ifas.ufl.edu/lowimpactdev.htm>

Additional Comments (optional):

The USEPA would like to review the following PD&E support document:

Water Quality Impact Evaluation (PD&E Manual, Part 2, Chapter 11)

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Degree of Effect: 2 *Minimal* assigned 10/25/2018 by Trisha Stone, South Florida Water Management District

Coordination Document: Permit Required

Coordination Document Comments:

A Right-of-Way Permit would be required from the South Florida Water Management District.

Direct Effects

Identified Resources and Level of Importance:

Any proposed work in/on/over the C-4/Tamiami Canal and the C-3/Coral Gables Canal will require a Right-of-Way Permit from the South Florida Water Management District.

It is recommended that the a pre-application meeting be conducted to discuss any issues associated with the proposed project.

Comments on Effects to Resources:

No comment.

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Additional Comments (optional):

A Right-of-Way Permit would be required from the South Florida Water Management District.

CLC Recommendations:

Indirect Effects

Identified Resources and Level of Importance:

Comments on Effects to Resources:

Recommended Avoidance, Minimization, and Mitigation Opportunities:

Eliminated Alternatives

There are no eliminated alternatives for this project.

Project Scope

General Project Recommendations

There are no general project recommendations identified for this project in the EST.

Anticipated Permits

Permit	Type	Conditions	Assigned By	Date
Environmental Protection Agency Sole Source Aquifer Review	Federal		FDOT District 6	10/22/18
DERM Class III	County/Municipality - Local	[Miami-Dade County DERM Class III Right-of-Way Permit]	FDOT District 6	05/01/19
SFWMD Right-of-Way Occupancy Permit	State		FDOT District 6	05/01/19
DERM Class IV Wetlands Permit	County/Municipality - Local	[Miami-Dade County DERM Class IV Wetlands and Tree Removal/Relocation Permit]	FDOT District 6	05/01/19
SFWMD Environmental Resource Permit	Water		FDOT District 6	05/01/19
Section 404 - Individual or General	USACE	and a USACE Section 408 Agency Review	FDOT District 6	05/01/19
National Pollutant Discharge Eliminated System	FDEP	/Notice of Intent	FDOT District 6	05/01/19

Permitting Timetable

Federal Permitting Agencies identified are also Co-operating Agencies for the development of this project. Permit application occurs when design plans are developed with sufficient engineering detail to support a complete permit application. This is expected to occur within one year FEIS/ROD approval and Location Design Concept Approval for the selected alternative, unless otherwise agreed upon during project development.

Anticipated Technical Studies

Technical Study Name	Type	Conditions	Assigned By	Date
Corridor Report	ENGINEERING	[Conceptual Master Plan, 30% Concept Plans, and Existing Conditions Assessment Technical Memorandum]	FDOT District 6	05/01/2019
Geotechnical Report	ENGINEERING		FDOT District 6	05/01/2019
Typical Section Package	ENGINEERING		FDOT District 6	05/01/2019
Contamination Screening Evaluation Report	ENVIRONMENTAL		FDOT District 6	05/01/2019
Traffic Analysis	ENGINEERING	[Traffic Analysis Methodology Memorandum and Traffic Analysis Technical Memorandum]	FDOT District 6	05/01/2019
Sociocultural Effects Evaluation	Other		FDOT District 6	05/01/2019
Comments and Coordination Report	Other		FDOT District 6	05/01/2019
Preliminary Engineering Report	ENGINEERING		FDOT District 6	05/01/2019
Air Quality Technical Memorandum	ENVIRONMENTAL		FDOT District 6	05/01/2019
Safety Report	ENGINEERING	[Safety Analysis Memorandum]	FDOT District 6	05/01/2019
Water Quality Impact Evaluation	ENVIRONMENTAL		FDOT District 6	05/01/2019
Survey and Mapping Report	ENGINEERING	[Survey Work]	FDOT District 6	05/01/2019
Cultural Resource Assessment Survey	ENVIRONMENTAL		FDOT District 6	05/01/2019
Conceptual Drainage Report	ENGINEERING		FDOT District 6	05/01/2019

Public Involvement Plan	Other		FDOT District 6	05/01/2019
Public Hearing Transcript	Other		FDOT District 6	05/01/2019
Type 2 CE	ENVIRONMENTAL		FDOT District 6	05/01/2019
Utility Assessment Package	ENGINEERING		FDOT District 6	05/01/2019
Section 4(f) Determination of Applicability	ENVIRONMENTAL	[Form No. 650-050-45]	FDOT District 6	05/01/2019
Bridge Analysis Report	ENGINEERING	[Bridge Inspection Report]	FDOT District 6	05/01/2019
Section 4(f) de Minimis Package	ENVIRONMENTAL		FDOT District 6	05/01/2019
Sole Source Aquifer Letter	ENVIRONMENTAL		FDOT District 6	05/01/2019
Natural Resources Evaluation (NRE)	ENVIRONMENTAL	(to include an assessment of wetlands, endangered species, and Essential Fish Habitat)	FDOT District 6	05/01/2019

Class of Action

Potential for Significant Impacts? *

Issues/Resources	Sig	Sig?	NoSig	NoInv	NoIm	Comments
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A. Social and Economic

1. Social			✓			
2. Economic			✓			
3. Land Use Changes			✓			
4. Mobility			✓			
5. Aesthetic Effects			✓			
6. Relocation Potential			✓			
7. Farmland				✓		

B. Cultural

1. Section 4(f)			✓			
2. Historic Sites/Districts			✓			
3. Archaeological Sites			✓			
4. Recreational Areas			✓			

C. Natural

1. Wetlands and Other Surface Waters			✓			
2. Aquatic Preserves and Outstanding FL Waters				✓		
3. Water Quality and Stormwater			✓			
4. Wild and Scenic Rivers				✓		
5. Floodplains			✓			
6. Coastal Zone Consist.			✓			
7. Coastal Barrier Resources				✓		
8. Protected Species and Habitat			✓			
9. Essential Fish Habitat				✓		

D. Physical

1. Highway Traffic Noise				✓		
2. Air Quality			✓			
3. Contamination			✓			
4. Utilities and Railroads			✓			
5. Construction			✓			
6. Bicycles and Pedestrians			✓			
7. Navigation				✓		

* **Potential Impact Determination:** Sig = Significant Impact; Sig? = Question of Significance; NoSig = No Significant Impact; NoInv = No Involvement, Issue is absent; NoIm = No Impact

Class of Action Determination

Class of Action	Other Actions	Lead Agency	Cooperating Agencies	Participating Agencies
Type 2 Categorical Exclusion	Section 4(f) Evaluation Section 106 Consultation Endangered Species Assessment Consultation	FDOT Office of Environmental Management	No Cooperating Agencies have been identified.	US Army Corps of Engineers

Class of Action Signatures

Name	Agency	Review Status	Date	ETDM Role
Dat Huynh	FDOT District 6	ACCEPTED	06/28/2019	FDOT ETDM Coordinator

Comments:

Of the 21 issues examined for the project as part of the Programming Screen Summary Report (published on January 30, 2019), the following Summary Degrees of Effect (DOE) were assigned:

N/A / No Involvement - 3 issues

None - 1 issue

Enhanced - 4 issues

Minimal - 10 issues

Moderate - 2 issues [Section 4(f) Potential and Historic and Archaeological Sites]

Substantial - 1 issue [Contamination]

Reasons for the assigned DOE of Substantial to the one issue and Moderate to the two issues are described below. A supporting statement for the recommended Class of Action is also included.

Contamination: A high number of potential contamination features are within close proximity to the corridor. Based on preliminary spot testing conducted as part of the railway acquisition process, evidence has been found of soil and groundwater contamination along the former rail corridor; the area has been fenced off for further testing. A Contamination Screening Evaluation Report will be prepared, including site specific surveys, to assess existing known subsurface contamination as well as historical contamination release. Identified sites will be investigated to determine their potential risk, and proper mitigation will take place if medium to high risk sites are identified. Contingency Plans/"Special Provisions for Unidentified Areas of Contamination" will be included in the project's construction contract documents.

Section 4(f) Potential: Recreational and historic resources potentially protected under Section 4(f) exist within the project vicinity. A Section 4(f) Determination of Applicability will be prepared to determine the extent of Section 4(f) involvement and focus any required documents on the avoidance and/or minimization of impacts to the cited resources.

Historic and Archaeological Sites: National Register of Historic Places (NRHP)-eligible resources and previously recorded resources in need of evaluation are present within the project vicinity; unknown archaeological and historic resources of significance to the Seminole Tribe of Florida could additionally be present. A comprehensive survey is needed. A Cultural Resource Assessment Survey (CRAS) will be conducted to determine the presence of historic and archeological resources in the project area. The CRAS will be submitted to the Florida Department of State Division of Historical Resources, Seminole Tribe of Florida, and Miami-Dade County Office of Historic Preservation for review and comment.

As part of the Project Development and Environment (PD&E) Study, Miami-Dade County will continue to conduct agency coordination and research to further address potential project-related impacts. All pertinent technical studies will be performed in accordance with the FDOT PD&E Manual, and preliminary measures will be established to offset unavoidable impacts. The project is identified in local and state plans and is anticipated to provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers; no capacity improvements are proposed as part of this project. For these reasons, FDOT District Six recommends a Type 2 Categorical Exclusion (Type 2 CE) as the appropriate Class of Action for this project.

Michael McDaniel	FDOT Office of Environmental Management	ACCEPTED	07/01/2019	Lead Agency ETAT Member
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The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated 12/14/2016 and executed by FHWA and FDOT.

Dispute Resolution Activity Log

There are no dispute actions identified for this project in the EST.

Appendices

Preliminary Environmental Discussion Comments

Social and Economic

Land Use Changes

Analysis Area

Areas: Alternative #1

Degree of Effect: Minimal

Comments:

The project is located primarily within unincorporated Miami-Dade County, with a portion of the northern part of the trail corridor located within the City of Miami. The project additionally traverses four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami). The Ludlam Trail is proposed within former Florida East Coast (FEC) railway right-of-way. Land use surrounding the corridor is identified primarily as residential with pockets of commercial and industrial uses located at or near major arterial roadway crossings. The Miami-Dade County Enterprise Zone (EZ) occupies 6.55% (126.46 acres) of the 1,320-foot project buffer and five brownfields are also present (7090 Coral Way, Central Miami Area, Coral Terrace, Glenvar Heights and Miami EZ Expansion Area).

The Ludlam Trail Corridor District was adopted as part of the Miami-Dade Comprehensive Development Master Plan in 2017, establishing the trail as a district of countywide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. The former railway corridor is anticipated to be a publicly accessible, pedestrian and bicycle trail with certain nodes of responsible development/redevelopment that are sensitive and compatible to the adjacent areas (e.g., neighborhood mixed-use fronting the trail corridor which serves specific needs of trail users such as bike/skate shops, outdoor cafes, flexible office space and multi-family residential). Furthermore, the project supports the vision of the Miami-Dade County Parks and Open Space System Master Plan, which is to "*provide an interconnected trail system which offers transportation alternatives and reduces traffic congestion, creates new recreation opportunities, increases property values, protects natural resources, and encourages tourism and business development*". It is anticipated that the land use designation of the future Ludlam Trail Corridor will be a transportation facility. The project is consistent with the existing and future land use vision for the project area. Therefore, minimal changes to proximate land uses are anticipated as a result of the project.

Social

Analysis Area

Areas: Alternative #1

Degree of Effect: Minimal

Comments:

The project traverses four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami), including several neighborhood communities. The Miami-Dade County Enterprise Zone, which serves to attract new businesses to the area through incentive programs thereby boosting the area's economic conditions, occupies 6.55% (126.46 acres) of the 1,320-foot project buffer. Other community features reported within the 1,320-foot project buffer include: five brownfields, two community centers, one Development of Regional Impact, one government building (US Post Office), 23 health care facilities, 21 homeowner and condominium associations, one laser facility, seven schools, 11 religious centers, 21 group care facilities, one mobile home and RV park, seven FDOT RCI bridges, 51,389 linear feet of mainline railroad, five local Florida parks/recreational facility boundaries, one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network, of which the Ludlum Trail corridor (this project) will be a part of], one existing recreational trail [Miller Drive Sidepath], 12 Florida Site File field survey project boundaries, two Florida Site File historic standing bridges, 14 Florida Site File historic standing structures, and nine Florida Site File resource groups.

Compared to the demographic characteristics of Miami-Dade County, the census level block groups within the 500-foot project buffer contain a higher percentage of those over 65, a lower percentage of minority populations, and a higher median family income. There is just over a 1% differential in the Limited English Proficiency (LEP) population, with the affected County block groups having a higher percentage of individuals that "speak English less than very well". No neighborhood division or social isolation is expected to occur as a result of the project. Overall, the project is expected to enhance community cohesion and the social environment by providing non-motorized transportation accommodations; improving opportunities for physical activity and a healthy lifestyle; and providing potential amenities (e.g., pocket parks, benches, fountains, shade trees and landscaped buffer areas, etc.) within the corridor to meet both the livability and mobility goals expressed by the County and surrounding communities. However, minimal involvement regarding social aspects is anticipated given that access to proximate residences, businesses, and recreational features could temporarily be affected and/or modified as a result of project construction.

Relocation Potential

Analysis Area

Areas: Alternative #1

Degree of Effect: None

Comments:

Land use surrounding the corridor is identified primarily as residential with pockets of commercial and industrial uses located at or near major arterial roadway crossings. Due to the fact that the Ludlum Trail Corridor is proposed to be developed within the right-of-way of an abandoned railway, relocation impacts to properties located along the trail are not anticipated.

Farmlands

Analysis Area

Areas: Alternative #1

Degree of Effect: N/A / No Involvement

Comments:

There are no farmlands reported within the 200-foot project buffer. The project is consistent with the existing and future land use vision for the project area. In addition, the project occurs within the Miami Urbanized Area. For these reasons, no involvement regarding farmlands is anticipated as a result of the project.

Aesthetic Effects

Analysis Area

Areas: Alternative #1

Degree of Effect: Enhanced

Comments:

Land use surrounding the corridor is identified primarily as residential with pockets of commercial and industrial uses located at or near major arterial roadway crossings. Community features associated with aesthetics reported within the 1,320-foot project buffer include: four census designated places (South Miami, Glenvar Heights, Coral Terrace, and Miami); five brownfields; 21 homeowner and condominium associations; 21 group care facilities; one mobile home and RV park; five local Florida parks/recreational facility boundaries, one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network, of which the Ludlum Trail corridor (this project) will be a part of], one existing recreational trail [Miller Drive Sidepath]; as well as historic features and numerous residential areas. The project is anticipated to improve the visual appeal of the area by replacing an abandoned railroad corridor with an active, well-maintained and aesthetically pleasing linear park and trail. In addition, amenities such as pedestrian rest areas, benches, fountains, shade trees and landscaped buffer areas could be provided. As such, the proposed project improvements are anticipated to enhance the aesthetic character of the corridor and surrounding areas.

Economic

Analysis Area

Areas: Alternative #1

Degree of Effect: Enhanced

Comments:

The Miami-Dade County Enterprise Zone (now Opportunity Zone), which serves to attract new businesses to the area through incentive programs thereby boosting the area's economic conditions, occupies 6.55% of the 1,320-foot project buffer. In addition, the Ludlum Trail Corridor District was adopted as part of the Miami-Dade Comprehensive Development Master Plan in 2017, establishing the trail as a district of countywide significance to enhance regional mobility, provide opportunities for physical activity, and stimulate the economic vitality of the area. The *Miami-Dade County Trail Benefits Study - Ludlum Trail Case Study* (attached in the EST) projects economic benefits based on implementation of the corridor including increases in property values (within 1/2 mile of a proposed access point to the trail), retail sales and employment, which will generate additional property and sales tax revenue. The addition of the trail will also provide more desirable alternatives for transportation disadvantaged populations. For these reasons, the project is anticipated to enhance economic conditions for the surrounding communities and the County.

Mobility

Analysis Area

Areas: Alternative #1

Degree of Effect: Enhanced

Comments:

The Ludlum Trail corridor extends north-south from SW 80th Street to just north of NW 7th Street in Miami-Dade County. The project is located within a Transportation Disadvantaged Service Provider Area (Miami-Dade Transit Authority), as well as within the vicinity of seven FDOT RCI bridges, one existing recreational trail [Miller Drive Sidepath], and one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network, of which the Ludlum Trail corridor (this project) will be a part of]. There are also 35 bus routes that service the project area.

The trail will provide a safe, dedicated, and direct means of non-motorized transportation to and from areas of residences, work, schools, parks, and shopping centers, and will serve bicyclists, pedestrians, and other types of non-motorized users. According to the *Miami-Dade County Trail Benefits Study - Ludlum Trail Case Study* (attached in the EST), development of the trail would improve mobility for walking and biking to schools, parks, transit stations, and miscellaneous errands resulting in a reduction of vehicle daily trips in the project vicinity. By providing non-motorized transportation options, fewer vehicles will travel on the surrounding roadway network which will help to reduce traffic congestion on major arterials. For these reasons, the project is anticipated to enhance mobility for all modes of transportation.

Cultural

Section 4(f) Potential

Analysis Area

Areas: Alternative #1

Degree of Effect: Moderate

Comments:

Potentially protected Section 4(f) resources reported within the 1,320-foot project buffer include: five local Florida parks/recreational facility boundaries, one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network, of which the Ludlum Trail corridor (this project) will be a part of], one existing recreational trail [Miller Drive Sidepath], 12 Florida Site File field survey project boundaries, two Florida Site File historic bridges [one has not been evaluated by the State Historic Preservation Officer (SHPO) and the other - FEC railroad bridge at Tamiami Canal - is eligible for listing in the National Register of Historic Places (NRHP)], 14 Florida Site File historic standing structures (three have not been evaluated by SHPO and 11 are ineligible for listing on the NRHP), and nine Florida Site File resource groups (five are eligible for listing on the NRHP, including the Little River spur of the FEC railroad, CSX railroad, Spur of the Seaboard Air Line railroad, Bird Road and the Tamiami Canal, and four are ineligible).

Moderate involvement regarding Section 4(f) potential is anticipated due to the presence of NRHP-eligible resources and previously recorded resources in need of evaluation within the project vicinity, and the fact that a comprehensive cultural resource assessment survey will be needed.

Historic and Archaeological Sites

Analysis Area

Areas: Alternative #1

Degree of Effect: Moderate

Comments:

The following historic and archaeological resources are reported within the 1,320-foot project buffer: 12 Florida Site File field survey project boundaries, two Florida Site File historic bridges [one has not been evaluated by the State Historic Preservation Officer (SHPO) and the other - FEC railroad bridge at Tamiami Canal - is eligible for listing in the National Register of Historic Places (NRHP)], 14 Florida Site File historic standing structures (three have not been evaluated by SHPO and 11 are ineligible for listing on the NRHP), and nine Florida Site File resource groups (five are eligible for listing on the NRHP, including the Little River spur of the FEC railroad, CSX railroad, Spur of the Seaboard Air Line railroad, Bird Road and the Tamiami Canal, and four are ineligible). Two National Historic Preservation Act - Florida Certified Local Governments [City of Miami and Miami-Dade County] are also present. In addition, the trail will cross two State Historic Highways [Sunset Drive and SR 90 (Calle Ocho)]. While the project is not expected to result in direct impacts to cultural resources, moderate involvement regarding historic and archaeological sites is anticipated due to the presence of NRHP-eligible resources and previously recorded resources in need of evaluation within the project vicinity, as well as the fact that a comprehensive cultural resource assessment survey will be needed.

Recreation Areas

Analysis Area

Areas: Alternative #1

Degree of Effect: Enhanced

Comments:

The following features are reported within the 1,320-foot project buffer: five local Florida parks/recreational facility boundaries, one Office of Greenways and Trails (OGT) multi-use trail opportunity/hiking trail priority [part of the Shared-Use Nonmotorized (SUN) Trail Network, of which the Ludlum Trail corridor (this project) will be a part of] and one existing recreational trail [Miller Drive Sidepath]. The proposed trail is intended to enhance overall access and connectivity to these features in the long term.

Natural

Wetlands and Surface Waters

Analysis Area

Areas: Alternative #1

Degree of Effect: Minimal

Comments:

The National Wetlands Inventory database identifies 8.4 acres (3.04%) of lacustrine wetlands within the 200-foot project buffer; these wetlands are associated with waterbodies located west of the trail near SW 56th Street and at the northern end of the project corridor in the vicinity of the C-4/Tamiami Canal. Since the project is not expected to result in direct impacts to wetlands, minimal involvement regarding wetland resources is anticipated. Impacts to wetlands will be further evaluated in future phases of project development.

Water Quality and Quantity

Analysis Area

Areas: Alternative #1

Degree of Effect: Minimal

Comments:

The project is located within the watersheds of three impaired waters: C-2/Snapper Creek (fecal coliform), C-3/Coral Gables Canal (fecal coliform) and C-4/Tamiami Canal (mercury in fish tissue). Also present within the 200-foot project buffer are the Biscayne Aquifer (a Sole Source Aquifer), a recharge area of the Floridan Aquifer, and one Super Act Well. The proposed stormwater facility design will include, at a minimum, the volumetric retention/detention water quantity requirements for the water quality impacts as required by the current Miami-Dade County Code (Chapter 24, Section 24-58, F.A.C.) and/or SFWMD rules (Chapters 40E-4, 40E-40, 63-302, and 62-330, F.A.C.). Improvements to the drainage and stormwater management system will be included in the project design to accommodate the increase in impervious area. The proposed stormwater management system for the project will be developed to meet the design and performance criteria established in the SFWMD Environmental Resource Permit Applicant's Handbook Volumes I and II for the treatment and attenuation of discharges to nearby waterbodies. More stringent requirements of stormwater treatment and attenuation associated with discharge to impaired waters will be involved due to the sensitivity of the resources. The design will also make every effort to maximize the treatment of stormwater runoff from the proposed project. A Stormwater Pollution Prevention Program (SWPPP) will be implemented (as required by NPDES permits) to control the effects of stormwater runoff during construction. While additional and more stringent stormwater treatment requirements for discharge into impaired waters will be required, the proposed trail is not a capacity improvement project and will not be utilized by motorized vehicles. Therefore, minimal involvement regarding water quality and quantity resources is anticipated.

Floodplains

Analysis Area

Areas: Alternative #1

Degree of Effect: Moderate

Comments:

According to the DFIRM 100-Year Floodplain Data, the 200-foot project buffer is located within 8.08 acres (2.92%) of Flood Zone AE and 34.1 acres of Flood Zone AH (12.34%). While the proposed improvements are not anticipated to affect flood heights or base floodplain limits, moderate involvement regarding floodplains is anticipated due to the notable amount of 100-year floodplain within the vicinity of the project.

Wildlife and Habitat

Analysis Area

Areas: Alternative #1

Degree of Effect: Minimal

Comments:

The 200-foot project buffer occurs within the South Florida Ecosystem Management Area and FWS Consultation Areas for the American crocodile, Florida bonneted bat, Miami-Dade Keys plants, and snail kite. In addition, the project area is designated as Critical Habitat for the West Indian Manatee and falls within a Wood Stork Core Foraging Area. Other resources cited in the EST data include Black Bear Range (rare), Florida Invasive Plants (Laurel Fig), Florida Managed Areas/Public Land (A.D. "Doug" Barnes Park), and Rare and Imperiled Fish (Mountain Mullet - associated with the Tamiami Canal). The project also crosses two SFWMD canals (C-3/Coral Gables Canal and C-4/Tamiami Canal), both of which currently have railroad bridge crossings. While a number of species potentially exist within the vicinity of the project, minimal involvement regarding wildlife and habitat resources is anticipated given the fact that the project area is predominantly urban and measures will be taken to avoid and/or minimize project impacts to identified resources to the greatest extent practicable.

Coastal and Marine

Analysis Area

Areas: Alternative #1

Degree of Effect: Minimal

Comments:

The project falls within the Biscayne Bay Coastal Estuarine Drainage Area. Coastal and marine resources reported within the 200-foot project buffer include: 813.8 linear feet of environmentally sensitive shorelines, which are associated with the C-3/Coral Gables Canal. In addition, 8.4 acres (3.04%) of lacustrine wetlands are present within the 200-foot project buffer. The identified wetlands do not appear to contain estuarine habitats nor are they located near marine fishery habitats; therefore, they are not anticipated to serve as Essential Fish Habitat. The project will be designed to meet state water quality and quantity requirements, and best management practices will be utilized during construction. Therefore, minimal involvement regarding coastal and marine resources is anticipated.

Physical

Noise

Analysis Area

Areas: Alternative #1

Degree of Effect: N/A / No Involvement

Comments:

Once constructed, the project will provide for passive, non-motorized activities (walking, biking, etc.) that typically do not generate noise levels of concern. Due to this project being a Type III noise project, no noise analysis is required.

Air Quality

Analysis Area

Areas: Alternative #1

Degree of Effect: None

Comments:

The EST GIS Analysis data layer titled "Air Quality Maintenance Areas" indicates that the project is located within the Southeast Florida Airshed. However, the metadata states that the information is based on 1990 data. As such, current information published on the USEPA website was consulted for the project. The current data indicates that the project is not located within a USEPA-designated Air Quality Maintenance or Non-Attainment Area for any of the six criteria pollutants (ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, and small particulate matter) specified by the USEPA in National Ambient Air Quality Standards. Therefore, the Clean Air Act conformity requirements do not apply to this project at this time. While potential temporary impacts to air quality could occur as a result of emissions from equipment and dust generated from project construction activities, no permanent effects to air quality are anticipated.

Contamination

Analysis Area

Areas: Alternative #1

Degree of Effect: Substantial

Comments:

The 200-foot project buffer contains four brownfields, 25 Miami-Dade County Department of Environmental Resources Management (DERM) contaminated sites, one FDEP offsite contamination notice, 13 hazardous waste facilities, five petroleum contamination monitoring sites, 14 storage tank contamination monitoring sites, five Super Act Risk Sources, one Super Act Well, one toxic release inventory site, 15 USEPA Resource Conservation and Recovery Act (RCRA) regulated facilities, and 0.8 mile (2016 data)/5.8 miles (2015 data) of abandoned railway. Based on preliminary spot testing conducted as part of the railway acquisition process, evidence has been found of soil and groundwater contamination along the former rail corridor. The area has been fenced off for further testing and will not be accessible for public use until remediation and safety plans are developed and implemented. A Contamination Screening Evaluation Report will be prepared during the Project Development phase in accordance with Part 2, Chapter 20 of the FDOT PD&E Manual, as well as all federal, state, and local laws and regulations. Any identified sites will be investigated to determine their potential risk, and proper mitigation will take place if medium to high risk sites are identified. Due to the presence of soil and groundwater contamination areas from former rail facilities within the corridor, substantial involvement regarding contamination is anticipated.

Infrastructure

Analysis Area

Areas: Alternative #1

Degree of Effect: Moderate

Comments:

The 200-foot project buffer contains 70 onsite sewage facilities, one Federal Aviation Administration (FAA) obstruction, one wireless antenna structure, two RCI railroad crossings, 20 Bureau of Transportation Statistics (BTS) grade-level railroad crossings, 30,942 linear feet of mainline railroad, and 0.8 mile (2016 data)/5.8 miles (2015 data) of railway which has been fully abandoned from railroad use. Given the number of features within proximity to the project and the fact that the trail is proposed to be developed within the right-of-way of an abandoned railway, moderate involvement regarding infrastructure-related features is anticipated.

Navigation

Analysis Area

Areas: Alternative #1

Degree of Effect: None

Comments:

The project crosses two SFWMD canals (C-3/Coral Gables Canal and C-4/Tamiami Canal), neither of which is navigable where the project corridor crosses the canal. No direct impacts to navigation are expected as proposed bridge modifications (if any) will not alter existing vertical and horizontal clearances.

Special Designations

Special Designations: Outstanding Florida Waters

Analysis Area

Areas: Alternative #1

Degree of Effect: N/A / No Involvement

Comments:

No designated Outstanding Florida Waters are reported within the 200-foot project buffer; therefore, no involvement regarding this specially-designated resource is anticipated.

Special Designations: Aquatic Preserves

Analysis Area

Areas: Alternative #1

Degree of Effect: N/A / No Involvement

Comments:

No designated Aquatic Preserves are reported within the 200-foot project buffer; therefore, no involvement regarding this specially-designated resource is anticipated.

Special Designations: Scenic Highways

Analysis Area

Areas: Alternative #1

Degree of Effect: N/A / No Involvement

Comments:

There are no Scenic Highways reported within the project vicinity; therefore, no involvement regarding this specially-designated resource is anticipated.

Special Designations: Wild and Scenic Rivers

Analysis Area

Areas: Alternative #1

Degree of Effect: N/A / No Involvement

Comments:

No designated Wild and Scenic Rivers are reported within the project vicinity; therefore, no involvement regarding this specially-designated resource is anticipated.

Advance Notification Comments

FL Department of State Comment --

no comments/consistent

--Adrianne Daggett, 10/25/2018

No response

FL Fish and Wildlife Conservation Commission Comment --

Wildlife and Habitat Effect: Minimal

Identified Resources and Level of Importance:

No significant wildlife resources were identified in the project area. The Florida Greenways and Trails Council, of which the Florida Fish and Wildlife Conservation Commission is a member, supports the development of the Ludlam Trail, which is on the Greenways and Trails Priority Map. We believe this trail will provide a safe opportunity for an outdoor experience in an urban environment.

Comments on Effects to Resources:

Minimal impacts to fish or wildlife resources are anticipated to result from this project.

Coordinator Feedback:

We appreciate the opportunity to provide input on the new trail opportunity and the conservation of fish and wildlife resources. Please contact conservationplanningservices@myfwc.com to submit further documents for review, and Brian Barnett at (772) 579-9746 or brian.barnett@MyFWC.com for further overall coordination on this project.

--Fritz Wettstein, 11/26/2018

No response

Seminole Tribe of Florida Comment --

Thank you for contacting the Seminole Tribe of Florida - Tribal Historic Preservation Office (STOF-THPO). The proposed undertaking does fall within in the STOF Area of Interest. When the Cultural Resources Assessment Survey has been completed, we would respectfully like to ask to be sent a copy so that we may complete our assessment pursuant to Section 106 of the National Historic Preservation Act and its implementing authority, 36 CFR 800.

--Victoria Menchaca, 12/5/2018

No response

US Army Corps of Engineers Comment --

No issues identified in the Advanced Notification package.

--Lisa Lovvorn, 11/20/2018

No response

GIS Analyses

Since there are so many GIS Analyses available for Project #14369 - Ludlam Trail Corridor, they have not been included in this ETDM Summary Report. GIS Analyses, however, are always available for this project on the Public ETDM Website. Please click on the link below (or copy this link into your Web Browser) in order to view detailed GIS tabular information for this project:

Special Note: Please be sure that when the GIS Analysis Results page loads, the **Programming Screen Summary Report Re-published on 07/02/2019 by Megan McKinney Milestone** is selected. GIS Analyses snapshots have been taken for Project #14369 at various points throughout the project's life-cycle, so it is important that you view the correct snapshot.

Project Attachments

Note: Attachments are not included in this Summary Report, but can be accessed by clicking on the links below:

Date	Type	Size	Link / Description
12/10/2018	Ancillary Project Documentation	2.55 MB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=27248 AN Comments - Miami-Dade County RER Attachment 3
12/10/2018	Ancillary Project Documentation	12 KB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=27247 AN Comments - Miami-Dade County RER Attachment 2
12/10/2018	Ancillary Project Documentation	522 KB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=27246 AN Comments - Miami-Dade County RER Attachment 1
12/10/2018	Ancillary Project Documentation	1.4 MB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=27245 AN Comments - Miami-Dade County RER
10/19/2018	Form SF-424: Application for Federal Assistance	180 KB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=25853 Form SF-424: Application for Federal Assistance
04/01/2015	Ancillary Project Documentation	4.75 MB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=25341 Ludlam Trail Corridor Charrette Presentation (District 7)
04/01/2015	Ancillary Project Documentation	3.78 MB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=25340 Ludlam Trail Corridor Charrette Presentation (District 6)
06/01/2011	Ancillary Project Documentation	22.18 MB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=25339 Miami-Dade County Trail Design Guidelines & Standards - Ludlam Trail Case Study
12/01/2007	Ancillary Project Documentation	13.73 MB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=25338 Miami-Dade County Parks & Open Space System Master Plan
11/16/2011	Ancillary Project Documentation	1.64 MB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=25337 Benefits of Trails Handout
01/01/2011	Ancillary Project Documentation	29.31 MB	http://etdmpub.fl.a-etat.org/est/servlet/blobViewer?blobID=25336 Miami-Dade County Trail Benefits Study - Ludlam Trail Case Study

Degree of Effect Legend

Color Code	Meaning	ETAT	Public Involvement
N/A	Not Applicable / No Involvement	There is no presence of the issue in relationship to the project, or the issue is irrelevant in relationship to the proposed transportation action.	
0	None (after 12/5/2005)	The issue is present, but the project will have no impact on the issue; project has no adverse effect on ETAT resources; permit issuance or consultation involves routine interaction with the agency. The <i>None</i> degree of effect is new as of 12/5/2005.	No community opposition to the planned project. No adverse effect on the community.
1	Enhanced	Project has positive effect on the ETAT resource or can reverse a previous adverse effect leading to environmental improvement.	Affected community supports the proposed project. Project has positive effect.
2	Minimal	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
2	Minimal to None (assigned prior to 12/5/2005)	Project has little adverse effect on ETAT resources. Permit issuance or consultation involves routine interaction with the agency. Low cost options are available to address concerns.	Minimum community opposition to the planned project. Minimum adverse effect on the community.
3	Moderate	Agency resources are affected by the proposed project, but avoidance and minimization options are available and can be addressed during development with a moderated amount of agency involvement and moderate cost impact.	Project has adverse effect on elements of the affected community. Public Involvement is needed to seek alternatives more acceptable to the community. Moderate community interaction will be required during project development.
4	Substantial	The project has substantial adverse effects but ETAT understands the project need and will be able to seek avoidance and minimization or mitigation options during project development. Substantial interaction will be required during project development and permitting.	Project has substantial adverse effects on the community and faces substantial community opposition. Intensive community interaction with focused Public Involvement will be required during project development to address community concerns.

5	Potential Dispute (Planning Screen)	Project may not conform to agency statutory requirements and may not be permitted. Project modification or evaluation of alternatives is required before advancing to the LRTP Programming Screen.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
5	Dispute Resolution (Programming Screen)	Project does not conform to agency statutory requirements and will not be permitted. Dispute resolution is required before the project proceeds to programming.	Community strongly opposes the project. Project is not in conformity with local comprehensive plan and has severe negative impact on the affected community.
	No ETAT Consensus	ETAT members from different agencies assigned a different degree of effect to this project, and the ETDM coordinator has not assigned a summary degree of effect.	
	No ETAT Reviews	No ETAT members have reviewed the corresponding issue for this project, and the ETDM coordinator has not assigned a summary degree of effect.	

Project-Level Hardcopy Maps

14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street

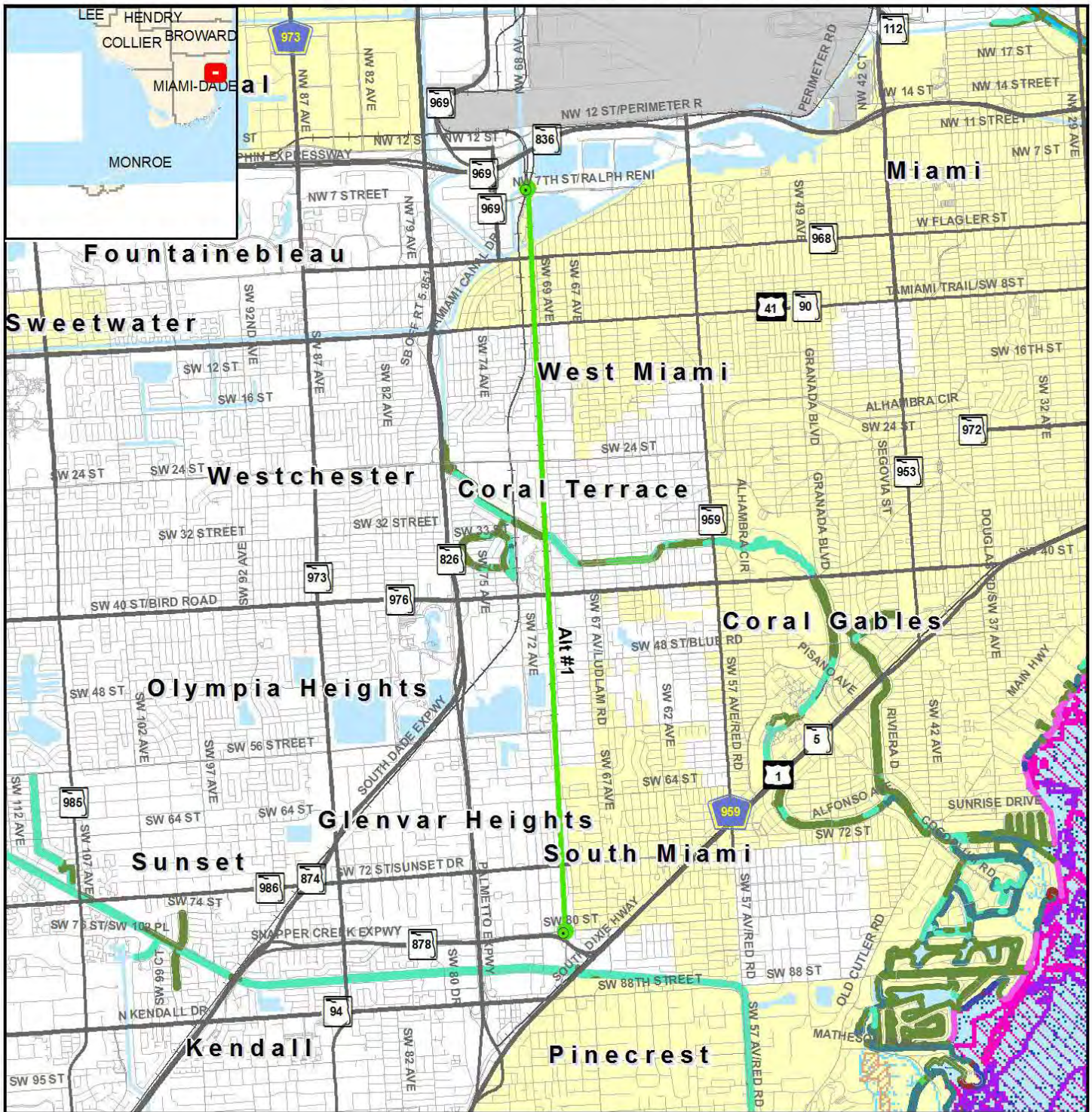


Age Distribution Map



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14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street

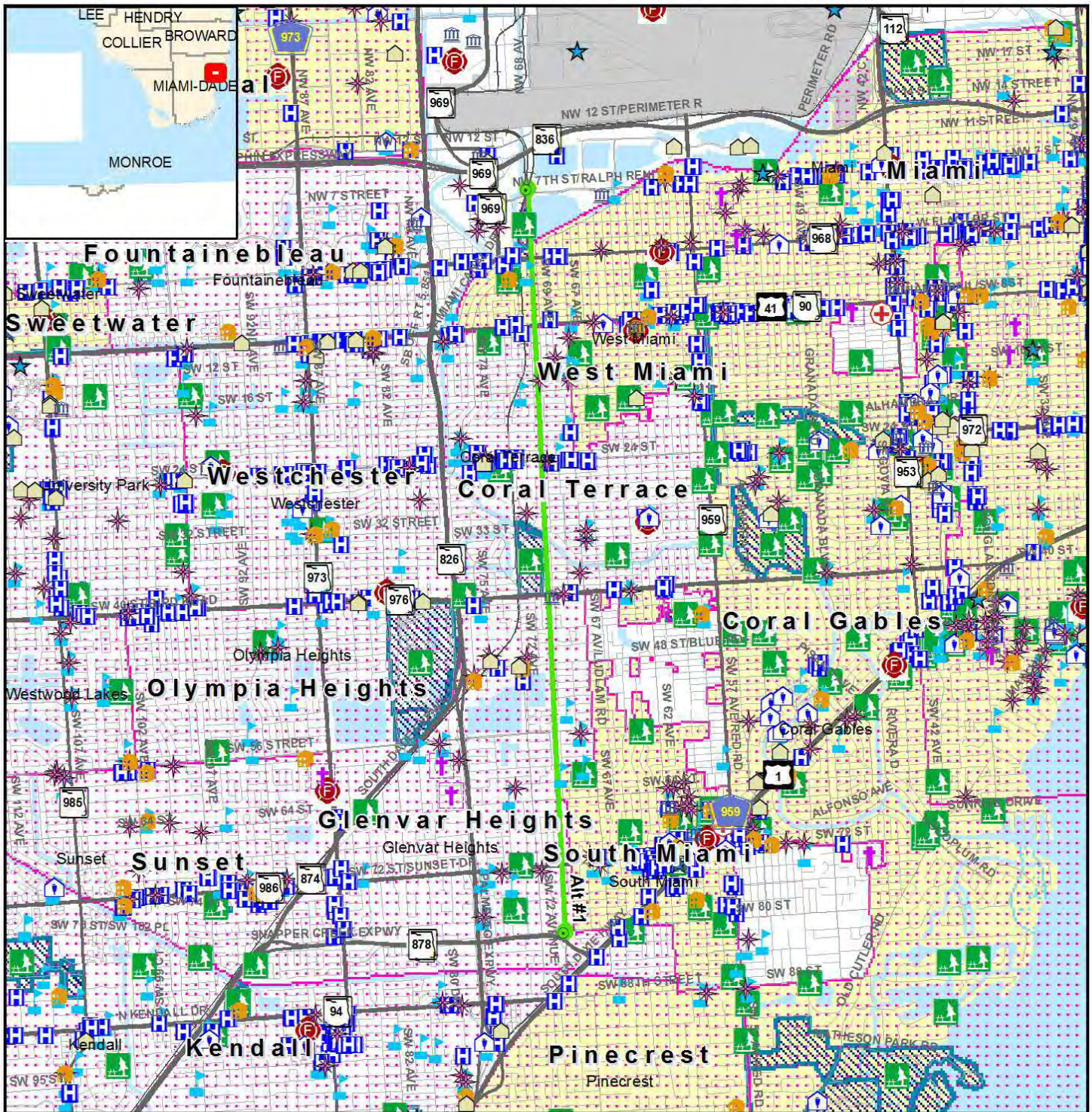


Coastal and Marine Map



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14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street



Community Services Map

- | | | | | |
|--|------------------|------------------|-------------|---------------------------------|
| ■ ETDM Alternative | Government | Law Enforcement | Health Care | Recreational Trail |
| ● ETDM Alternative Terminus | Civic Center | Place of Worship | School | Community Boundary |
| Major Road | Cemetery | Cultural Center | Park | Conservation or Recreation Area |
| Local Road or Trail | Social Service | Fire Station | | |
| City Limits | Community Center | | | |

Data Sources:
US Geological Survey; FL Department of Transportation; NAVTEQ; FL Property Appraisers; FL Natural Areas Inventory

0 0.3 0.6 1.2 Miles



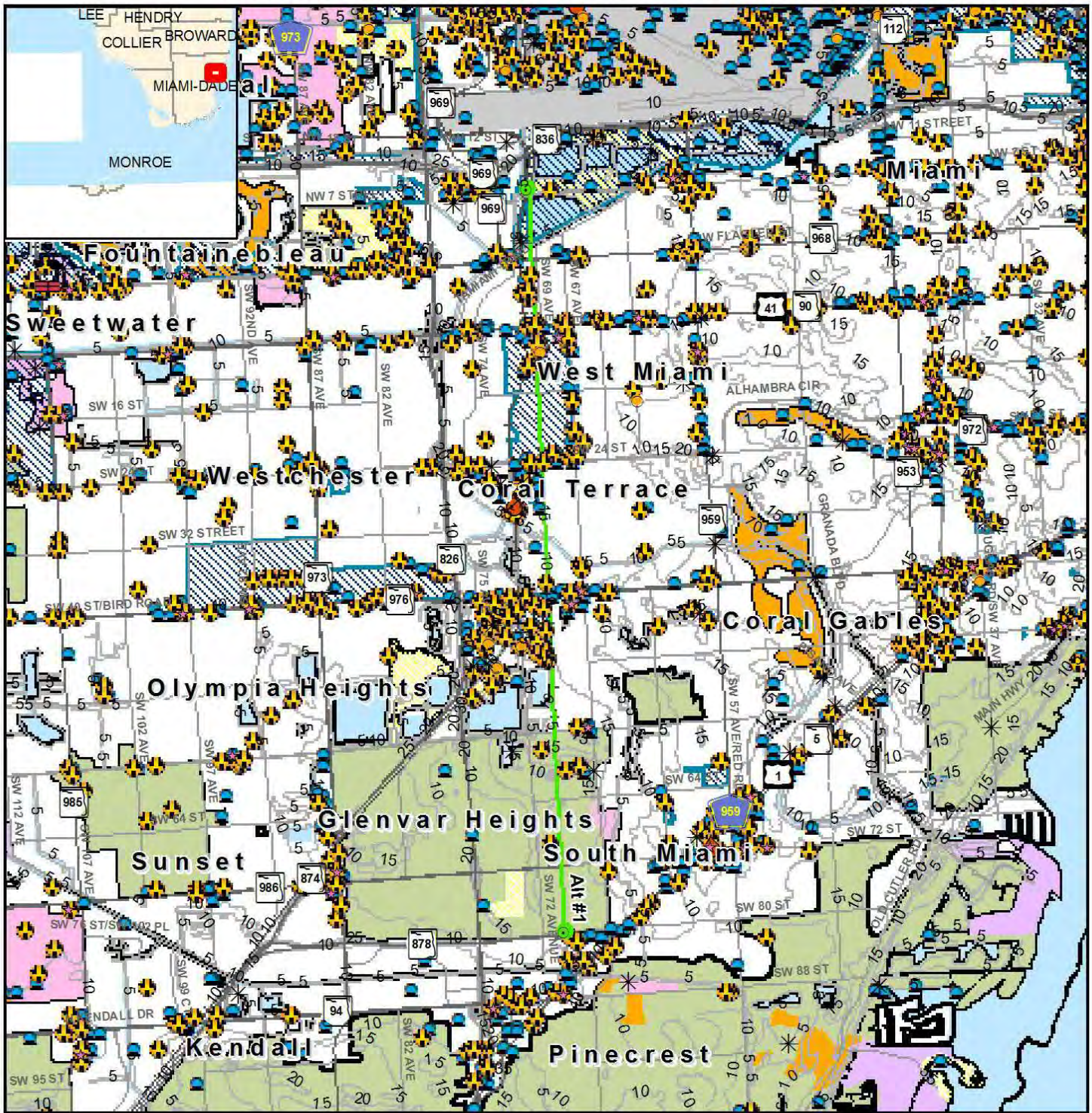
etdm
Environmental Screening Tool



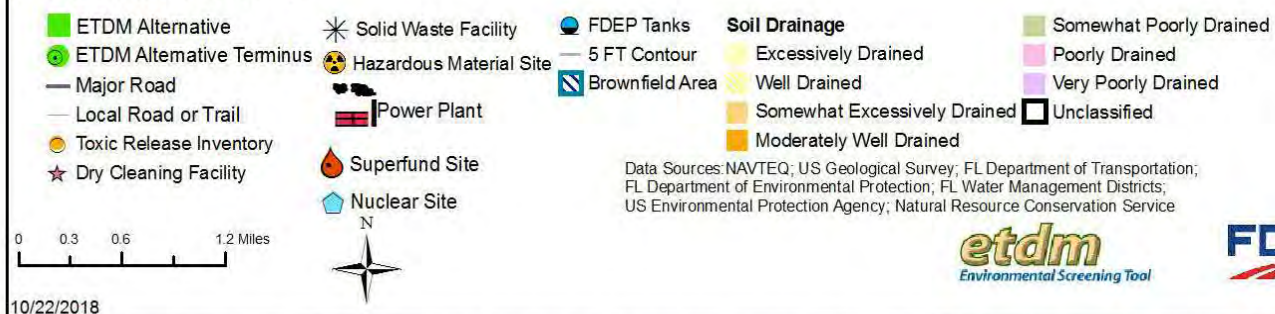
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14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street



Contamination Map



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Cultural Resources Data Map

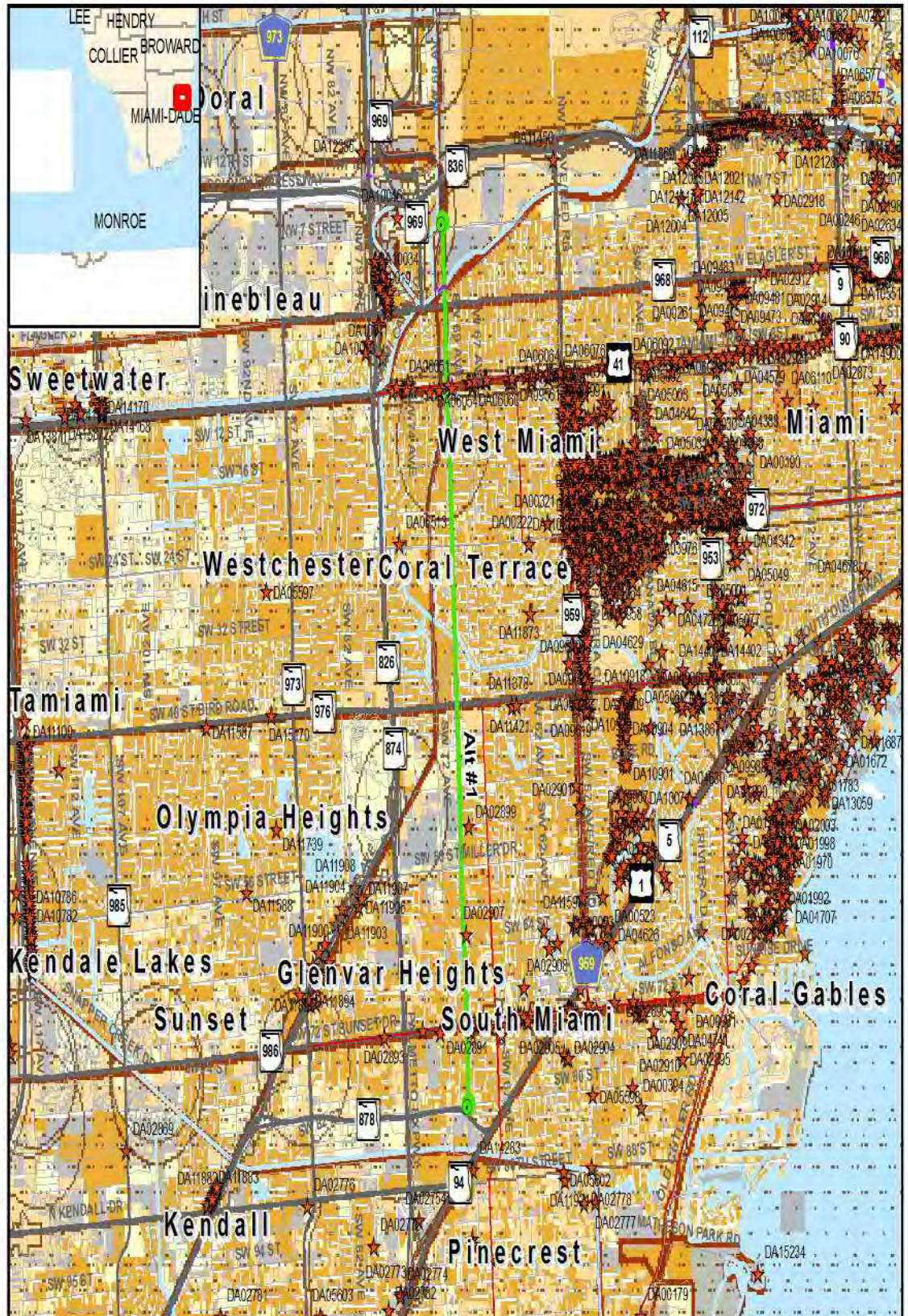
- ETDM Alternative
- Major Road
- Local Road or Trail
- ★ Historic Structure
- Historic Bridge
- State Historic Highway
- ▨ Historic Cemetery
- ▭ Historic Resource Group
- ▭ Cultural Resource Field Survey Area
- ETDM Alternative
- Year Built**
- Pre 1970
- Post 1980
- 1970 - 1979
- Parcels w/ no values



etdm
Environmental Screening Tool



Data Sources:
NAVTEQ
US Geological Survey
Florida Department of Transportation
Florida Department of State
Bureau of Archaeological Research



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Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.

14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street



Farmlands Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Cropland/Pastureland
- Nurseries/Vineyards
- Specialty Farms
- Tree Crops
- Rural Open Lands
- Prime Farmland Soils

Data Sources:
 NAVTEQ
 Florida Water Management Districts
 US Geological Survey
 Natural Resources Conservation Services

0 0.3 0.6 1.2 Miles



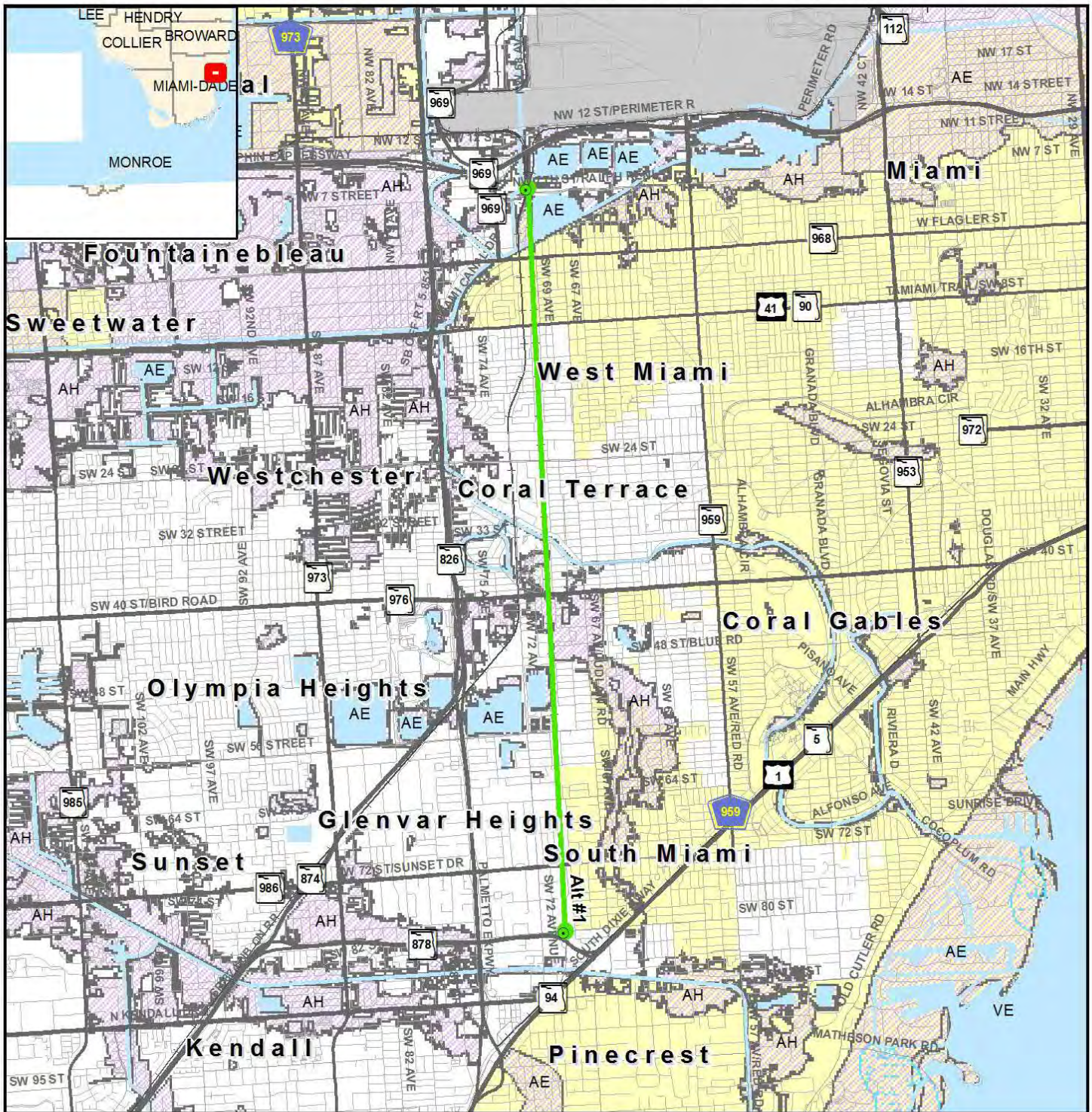
etdm
 Environmental Screening Tool



10/22/2018

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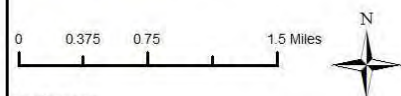
14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street



Floodplains Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- City Limits
- Special Flood Hazard Area

Data Sources:
NAVTEQ
US Geological Survey
Federal Emergency Management Agency



etdm
Environmental Screening Tool



10/22/2018

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14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street



Historic Resource Map

- ETDM Alternative
- ETDM Alternative Terminus
- Major Road
- Local Road or Trail
- Year Built
 - Pre 1970
 - Post 1980
 - 1970 - 1979
 - Parcels w/ no values
- ★ Historic Structure
- Historic Bridge
- State Historic Highway
- Historic Cemetery
- Historic Resource Group
- Cultural Resource Field Survey Area

Data Sources:
 NAVTEQ
 US Geological Survey
 Florida Department of Transportation
 Florida Department of State,
 Bureau of Archaeological Research

Note: Historic properties depicted on this map represent resources listed in the Florida Master Site File excluding archeological site locations, which, pursuant to Chapter 267.135, Florida Statutes, may be exempt from public record (Chapter 119.07, Florida Statutes). Absence of features on the map does not necessarily indicate an absence of resources in the project vicinity.

0 0.35 0.7 1.4 Miles



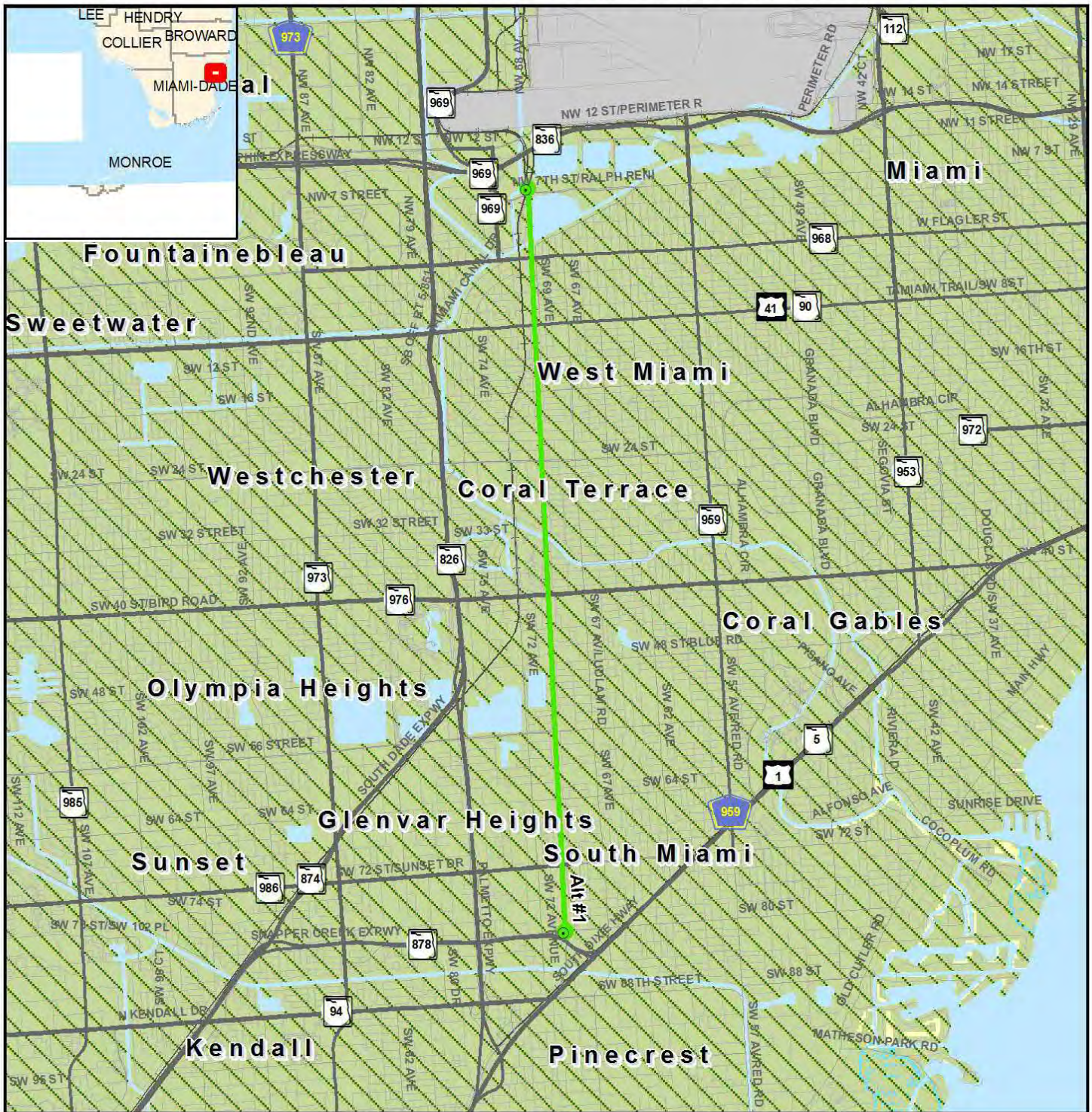
10/22/2018

etdm
 Environmental Screening Tool

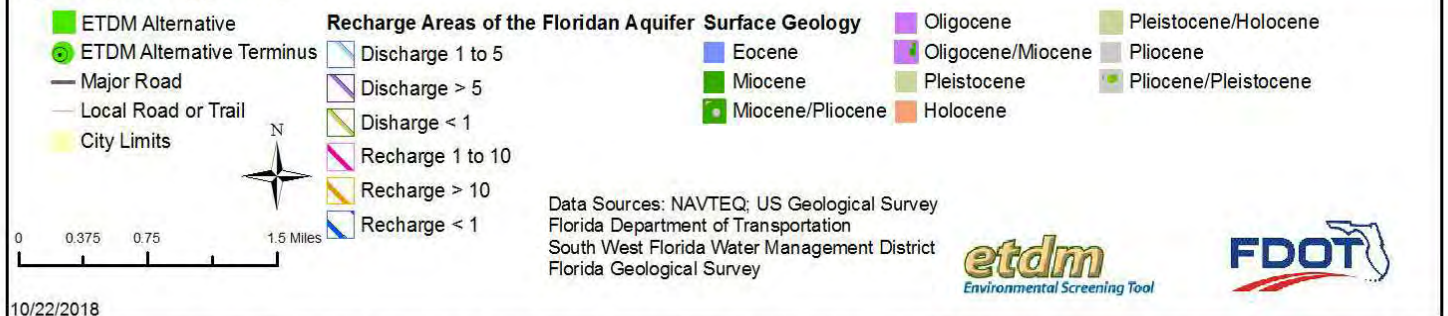


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14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street

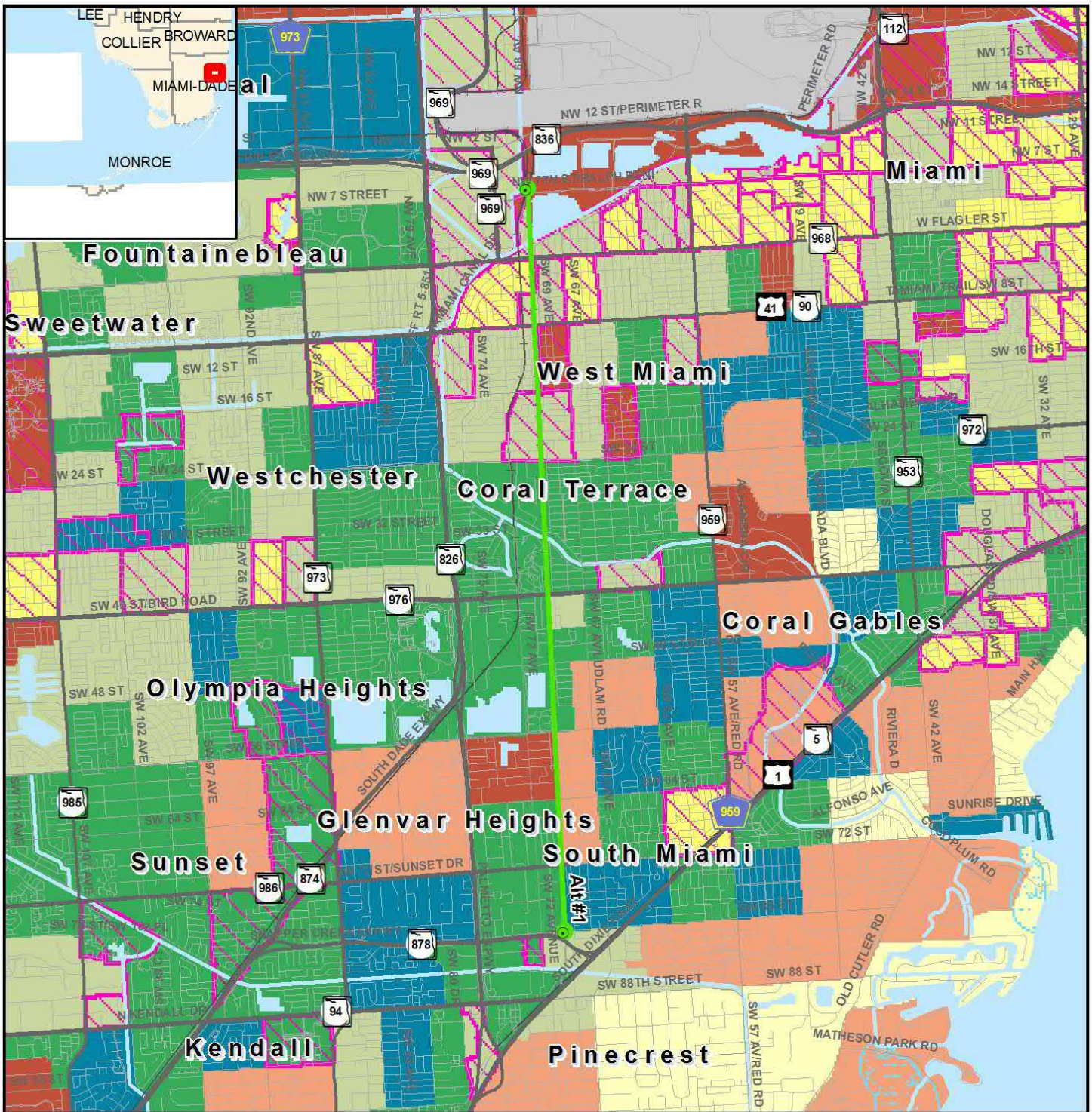


Hydrogeology Map

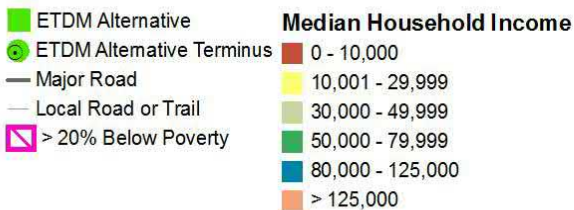


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14369 Ludlam Trail Corridor SW 80th Street to 400' North of NW 7th Street



Income Map



Data Sources:
US Geological Survey
FL Department of Transportation
NAVTEQ
US Census Bureau (2010)

etdm
Environmental Screening Tool



10/22/2018

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