



May 1, 2024

Ms. Jie Bian
Transit Director, Broward County Transit
1 North University Drive-Suite 3100A
Ft Lauderdale, Florida 33309

Subject: Sole Source Aquifer Review/Concurrence for Broward Commuter Rail South

Dear Ms. Bian:

The U.S. Environmental Protection Agency, Region 4 received the Broward County Transit's (BCT) request on March 8, 2024, to review the above referenced project pursuant to Section 1424(e) of the Safe Drinking Water Act (SDWA), [42 U.S.C. § 300h-3](#). The objective of the EPA's review is to determine if the project lies within the boundaries, including recharge and streamflow source zones, of an EPA designated Sole Source Aquifer (SSA), and to determine if the project poses potential adverse health or environmental impacts. A SSA is the sole or principal water source for a designated area.

Broward Commuter Rail South project related to construction of rail stations undertaken by Broward County Transit, has been determined to lie inside the designated boundaries of the Biscayne Sole Source Aquifer and based on the information provided, may cause a significant impact to the aquifer system when the Project's rail station construction and/or construction dewatering is undertaken. However, with proper implementation of best management practices (BMPs), these potential impacts can be adequately reduced or properly mitigated. To that effect, when constructing roads, the BCT must adhere to the BMPs provide listed below.

1. FDOT Design Manual Chapter 320 Stormwater Pollution Prevention Plan (SWPPP)
2. FDOT Standard Specification for Road and Bridge Construction
 - a. Section 6 – Control of Materials
 - b. Section 104 – Prevention, Control, And Abatement of Erosion and Water Pollution
 - c. Section 455 – Structures Foundations
3. U.S. Bureau of Reclamation Engineering Geology Field Manual – Chapter 20 Water Control.
<https://www.usbr.gov/tsc/techreferences/mands/geologyfieldmanual-vol2/Chapter20.pdf>

Furthermore, all debris from any demolition of the existing structures must be properly contained and removed from the site prior to construction of the new structure. If applicable, all county flood plain management plans and public notification processes must be followed. During construction, it is the EPA's understanding and expectation that those responsible for the project will strictly adhere to all

Federal, State, and local government permits, ordinances, planning designs, construction codes, operation, maintenance, and engineering requirements, and any contaminant mitigation recommendations outlined by federal and state agency reviews. All best management practices for erosion and sedimentation control must also be followed and State and local environmental offices must be contacted to address proper drainage and storm water designs. Additionally, the project manager should contact State and local environmental officials to obtain a copy of any local Wellhead Protection Plans. The following website provides information regarding the Florida Department of Environmental Protection's Source Water Assessment and Protection Program (<http://www.dep.state.fl.us/swapp/Default.html>).

The EPA finds that, if the conditions outlined above are adhered to, this Project should have no significant impact to the aquifer system. Please note that this "no significant impact" finding has been determined based on compliance with the requirements outlined above and, on the information provided. Further, this finding only relates to Section 1424(e) of the SDWA, [42 U.S.C. § 300h-3](#). If there are any significant changes to the project, the EPA Region 4 office should be notified for further review. Other regulatory groups within the EPA responsible for administering other programs may, at their own discretion and under separate cover, provide additional comments.

Thank you for your concern with the environmental impacts of this project. If you have any questions, please contact Ms. Jayeeta Chakraborty at 404-562-8845 or Chakraborty.Jayeeta@epa.gov or Mr. Larry Cole at 404-562-9474 or Cole.Larry@epa.gov.

Sincerely,

**KHURRAM
RAFI**

Khurram Rafi, Manager
Groundwater and GIS Section
Safe Drinking Water Branch
Water Division
U.S. EPA, Region 4

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cc: Phil Schwab, Project Manager, FDOT, phil.schwab@dot.state.fl.us
Anna Bielawska, Project Coordinator, Broward Commuter Transit, ABIELAWSKA@broward.org
Jennifer Crumbliss, Project Manager, HDR, jennifer.crumbliss@hdrinc.com
Mike Ciscar, Project Manager, Corradino, MCiscar@CORRADINO.com
Rob Myers, Environmental Manager, Metric Engineering, Rob.Myers@metriceng.com

WATER QUALITY IMPACT EVALUATION CHECKLIST

PART 1: PROJECT INFORMATION

Project Name:	Broward Commuter Rail South
County:	Broward County
FM Number:	452240-1
Federal Aid Project No:	
Brief Project Description:	Provide three new passenger stations for commuter rail on the FEC rail line in southern Broward County

PART 2: DETERMINATION OF WQIE SCOPE

Does project discharge to surface or groundwater? ☒ Yes ☐ No

Does project alter the drainage system? ☒ Yes ☐ No

Is the project located within a permitted MS4? ☒ Yes ☐ No

Name: Broward County MS4
FLS000016-004 - Mayor Facility

If the answers to the questions above are no, complete the applicable sections of Part 3 and 4, and then check Box A in Part 5.

PART 3: PROJECT BASIN AND RECEIVING WATER CHARACTERISTICS

Surface Water

Receiving water names: SOUTH FORT LAUDERDALE STATION - (WBID) 3226G3, ultimately discharges into the North Lake. FORT LAUDERDALE AIRPORT STATION - (WBID) 3226G3, ultimately discharges into the Dania Cut-off Canal. HOLLYWOOD STATION - (WBID) 3227A, ultimately discharges into the Tarpon River.

Water Management District: South Florida WMD

Environmental Look Around meeting date: ____/____/____ To Be Determined
Attach meeting minutes/notes to the checklist.

Water Control District Name(s) (list all that apply): NA

Groundwater

Sole Source Aquifer (SSA)? ☒ Yes ☐ No Name Biscayne

If yes, complete Part 5, D and complete SSA Checklist from EPA website ([Figure 11-1](#))

Other Aquifer? ☐ Yes ☒ No Name _____

Springs vents? ☐ Yes ☒ No Name _____

Well head protection area? ☐ Yes ☒ No Name _____

Groundwater recharge? ☐ Yes ☒ No Name _____

Notify District Drainage Engineer if karst conditions are expected or if a higher level of treatment may be needed due to a project being located within a WBID verified as Impaired in accordance with Chapter 62-303, F.A.C.

Date of notification: 12/18/2023

PART 4: WATER QUALITY CRITERIA

List all WBIDs and all parameters for which a WBID has been verified impaired, or has a TMDL in **Table 1**. This information should be updated during each re-evaluation as required.

Note: If BMAP or RAP has been identified in **Table 1**, **Table 2** must also be completed. *Attach notes or minutes from all coordination meetings identified in Table 2.*

EST recommendations confirmed with agencies? ☐ Yes ☒ No

BMAP Stakeholders contacted? ☐ Yes ☒ No

TMDL program contacted? ☐ Yes ☒ No

RAP Stakeholders contacted? ☐ Yes ☒ No

Regional water quality projects identified in the ELA? ☐ Yes ☒ No

If yes, describe:

Potential direct effects associated with project construction and/or operation identified? ☒ Yes ☐ No

If yes, describe: Increase in impermeable cover and erosion/sedimentation during construction

Discuss any other relevant information related to water quality including Regulatory Agency Water Quality Requirements. None

PART 5: WQIE DOCUMENTATION

- ☐ A. No involvement with water quality
- ☐ B. No water quality regulatory requirements apply.
- ☒ C. Water quality regulatory requirements apply to this project (provide Evaluator's information below). Water quality and stormwater issues will be mitigated through compliance with the design requirements of authorized regulatory agencies.
- ☐ D. EPA Ground/Drinking Water Branch review required. ☒ Yes ☐ No
Concurrence received? ☐ Yes ☐ No
If Yes, Date of EPA Concurrence: ____/____/____ (Attach the concurrence letter)

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by the Federal Highway Administration and FDOT.

Evaluator Name (print): G. Robert Myers III	
Title: Environmental Manager, Metric Engineering	
Signature:	Date:

Table 1: Water Quality Criteria

Receiving Waterbody Name (list all that apply)	FDEP Group Number / Name	WBID(s) Numbers	Classification (I,II,III,IIIL,IV,V)	Special Designations*	NNC limits**	Verified Impaired (Y/N)	TMDL (Y/N)	Pollutants of concern	BMAP, RA Plan or SSAC
North Lake		3226G3	IIIM	MS4	Estuary	Y	N	Bacteria, Copper	NA
Dania Cutoff Canal		3277E	IIIM	MS4	Estuary	Y	Y	Bacteria, Copper	NA
Tarpon Canal		32270	IIIM	MS4	Estuary	Y	Y	Bacteria, Copper	NA

* ONRW, OFW, Aquatic Preserve, Wild and Scenic River, Special Water, SWIM Area, Local Comp Plan, MS4 Area, Other

** Lakes, Spring vents, Streams, Estuaries

Note: If BMAP or RAP has been identified in Table 1, Table 2 must also be completed.

Table 2: Regulatory Agencies/Stakeholders Contacted

[illegible]

1.0 Project Information

1.a Contact person-

Jie Bian
Transit Director, Capital Planning and Project Development
Acting Assistant General Manager, Capital Programs
Broward County Transit (BCT)

1.b Contact email address

JBIAN@broward.org

1.c Contact mailing address

1 North University Drive-Suite 3100A
Plantation, Florida 33324

1.d Contact phone number

Phone (O): (954)357.8532
Phone (C): (954)980.2935

1.e Name of the project

Broward Commuter Rail South

1.f Project address or geographical coordinates.

The project is located in southern Broward County, Florida and proposes three new passenger rail stations on an existing Florida East Coast Rail line:

- Hollywood Station (City of Hollywood, between Tyler Street and Taylor Street, 33020)
(26° 0'44.93"N 80° 8'56.86"W)
- Fort Lauderdale-Hollywood International (FLL) Airport Station (33315)
(26° 4'21.54"N 80° 8'7.12"W)
- South Fort Lauderdale Station (City of Fort Lauderdale, between SW 15th Street and SW
17th Street, 33316)
(26° 6'2.19"N 80° 8'37.28"W)

2.0 Confirm SSA Project Review Is Needed

2.a / b The project is located entirely within the Biscayne Aquifer SSA (ID SSA34a)

2.c Federal transportation grant funds are sought from the Federal Transit Administration.

3.0 Project Location

The project is located along the Florida East Coast Rail Line in southern Broward County, Florida. Project activities would occur in three distinct locations where new passenger rail stations are proposed, in the City of Hollywood, by the FLL Airport, and in South Fort Lauderdale. Those locations are shown on the attached map and described above in Section 1.0. The entirety of the project occurs within the Biscayne Aquifer SSA area.

3.a Soils within 500 feet of proposed project activities are presented in the table below and shown in Figures 1 through 3. At the proposed Hollywood Station groundwater flow is to the west and at the FLL Airport Station groundwater flow is to the south, towards the Dania Cutoff Canal.

Table 1. Soil Types within 500 foot project area

NRCS Soil Type	Environmental Association	Approximate Percent of Project Area
Hollywood Station		
Dade-Urban Land Complex	This soil type consists of moderately deep, well drained, very rapidly permeable soils on slightly elevated, sandy coastal prairies. They formed in sandy marine sediments over soft, porous limestone. Most areas of these soils are used for community development. Natural vegetation consists of south Florida slash pine, live oak, laurel oak, scrub live oak, saw palmetto, and other grasses. This is not a hydric soil.	0.28%
Duette-Urban Land Complex	This soil type consists of very deep, moderately well drained, moderately rapidly permeable soils on slightly elevated knolls of ridges in flatwoods areas of the Lower Coastal Plains of Florida. These soils were formed in thick beds of sandy marine sediments. Most areas of this soil type are in scrub vegetation and used for wildlife habitat. Natural vegetation is primarily sand pine, sand live oak, rosemary, saw palmetto, and fetterbush. This is not a hydric soil.	16.65%
Urban Land	This map unit consists of areas that are more than 70 percent covered by airports, shopping centers, parking lots, large buildings,	15.05%

	streets and sidewalks, and other structures, so that the natural soil is not readily observable. This is not a hydric soil.	
FLL Airport Station		
Arents-Urban Land Complex	This soil type consists of soils that have been filled, graded, and shaped for urban development. It is found north of Port Everglades, where the natural soils have been extensively modified by excavation for canals and open water areas and filling in of adjacent areas. There is little natural vegetation. This is not a hydric soil.	1.06%
Dade-Urban Land Complex	See Environmental Association above.	8.25%
Margate Fine Sand	This soil type consists of nearly level, poorly drained, sandy soil that is underlain by limestone. It is on nearly level, low terraces between the Everglades and the low, sandy Atlantic Coastal Ridge. This is a hydric soil.	0.15%
Matlacha, Limestone Substratum-Urban Land Complex	This soil type consists of soils that are nearly level, somewhat poorly drained that form as a result of earthmoving operations in areas that are underlain by limestone bedrock. Most natural vegetation has been removed. The existing vegetation consists of South Florida slash pine and various scattered weeds. This is not a hydric soil.	0.17%
Pennsuco Silty Clay Loam	This soil type consists of deep, poorly and very poorly drained, moderately slowly permeable soils on lowlands as a result of finely divided stratified calcareous sediments that were deposited in marine or fresh waters over limestone. Tidal areas are dominated by mangroves, giant leather fern, and salt tolerant grasses. Vegetation in undrained areas consists of sawgrass, reeds, sedges, grasses, and scattered cabbage palm. This is a hydric soil.	21.1%
Perrine Silty Clay Loam	This soil type consists of moderately deep, poorly drained, moderately slowly to moderately permeable soils in lowlands along the Atlantic Coast of Peninsular Florida. They formed in calcareous silty and loamy sediments of marine or freshwater origin over limestone. Vegetation includes American and white mangroves, sawgrass, sedges, reeds, and scattered palm trees. This is a hydric soil.	1.06%
Perrine Variant Silt Loam	This soil type consists of moderately deep, very poorly drained, very slowly to moderately permeable soils in lowlands along the Atlantic Coast of Peninsular Florida. They formed in calcareous silty and loamy sediments of marine or freshwater origin over limestone. Vegetation includes American and white mangroves, sawgrass, sedges, reeds, and scattered palm trees. This is a hydric soil.	5.82%
Urban Land	See Environmental Association above.	10.38%

Water	-	2.13%
South Fort Lauderdale Station		
Dade-Urban Land Complex	See Environmental Association above.	5.53%
Immokalee, Limestone Substratum-Urban Land Complex	This complex consists of Immokalee, limestone substratum, and Urban land. Depth to the water table depends on the established drainage in the area and the amount of fill material that has been added, but the water table is deeper in most areas than is normal for undrained Immokalee soils. This is not a hydric soil.	0.23%
Urban Land	See Environmental Association above.	12.14%

3.b Wells Near the Project

Wells withing approximately 500 feet of the project were identified using the Florida Department of Environmental Protection Map Direct web tool, including layers for Underground Injection Control Class V Non-ASR Wells, Permitted Oil and Gas Wells, Florida Geological Survey Wells, Water Supply Restoration Wells, Underground Injection Control Monitoring Wells, Confined Aquifer Well List Frame, Florida Geological Survey Boreholes, Underground Injection Control Class V ASR Wells, Underground Injection Control Class I Wells, and Private Wells from Generalized Well Information System

Data from the US Geological Survey National Ground-Water Monitoring Network was used to determine depths to water tables at each proposed station.

Within approximately 500 feet of the limits of construction at the proposed Hollywood Station, there are 25 Underground Injection Control Class V Non-ASR Wells, 1 underground injection control monitoring well, and 1 Florida Geological Survey Borehole Location (number 17402). The depth to water table in the project area is approximately 6.5 feet below the land surface. The depth to water table at the nearest USGS monitoring station is approximately 11 feet..

Within approximately 500 feet of the limits of construction of the proposed FLL Airport Station, there is 1 Underground Injection Control Class V Non-ASR Well. The depth to water table at the neared USFWS monitoring station is approximately 5 feet.

Within approximately 500 feet of the limits of construction of the proposed South Fort Lauderdale Station, there are 8 Underground Injection Control Class V Non-ASR Wells. The depth to water table in the project area is reported as 6 to 7 feet below the land surface and at the neared USFWS monitoring station the depth to water table is approximately 5 feet.

3.C No wetlands occur in or adjacent to the project and none would be impacted by the proposed project. There would be no discharge into, loss of, or creation of wetlands by the project.

Figure 1: Soil Types in Hollywood Station Project Area

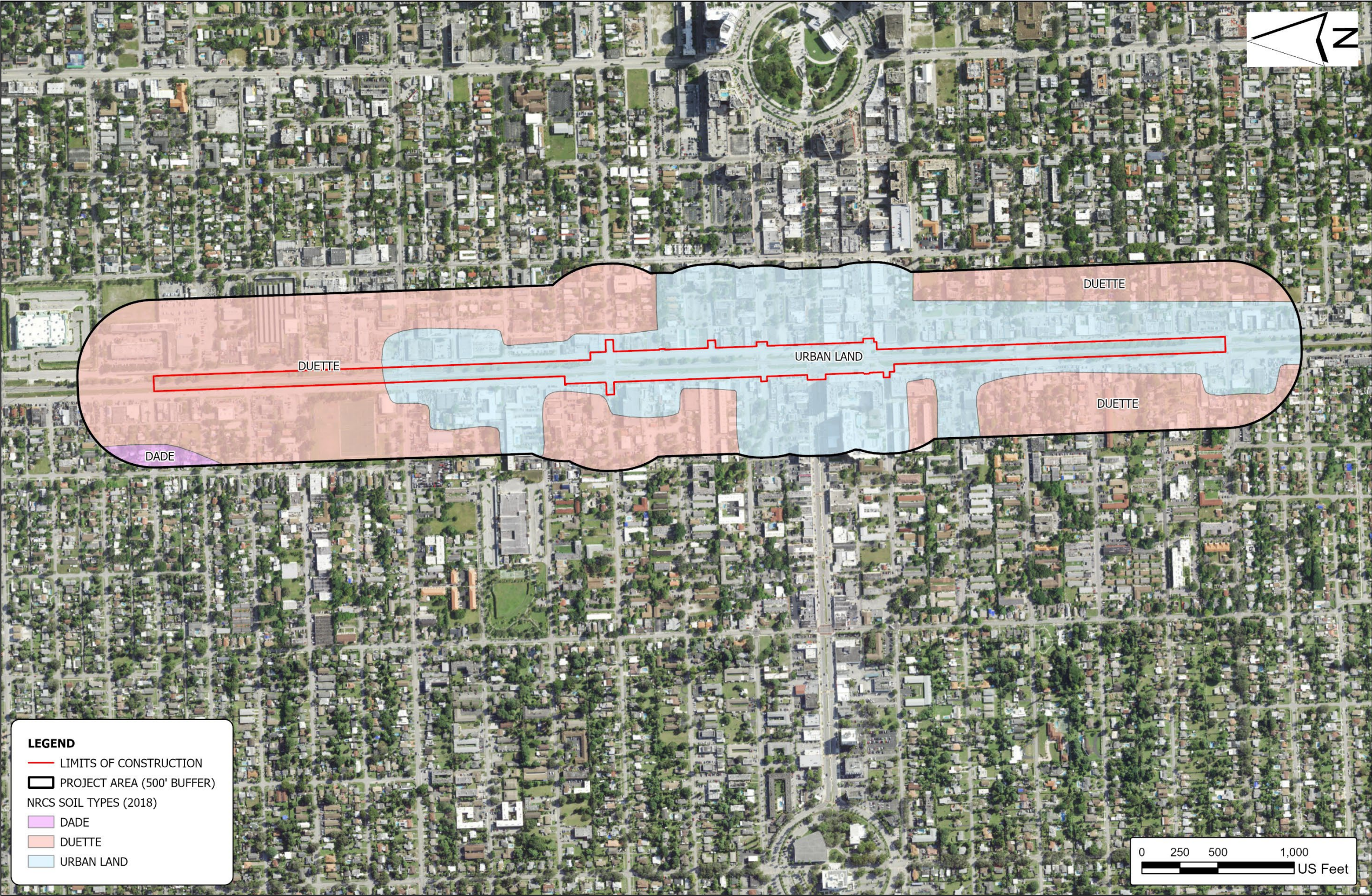


Figure 2: Soil Types in FLL Airport Station Project Area

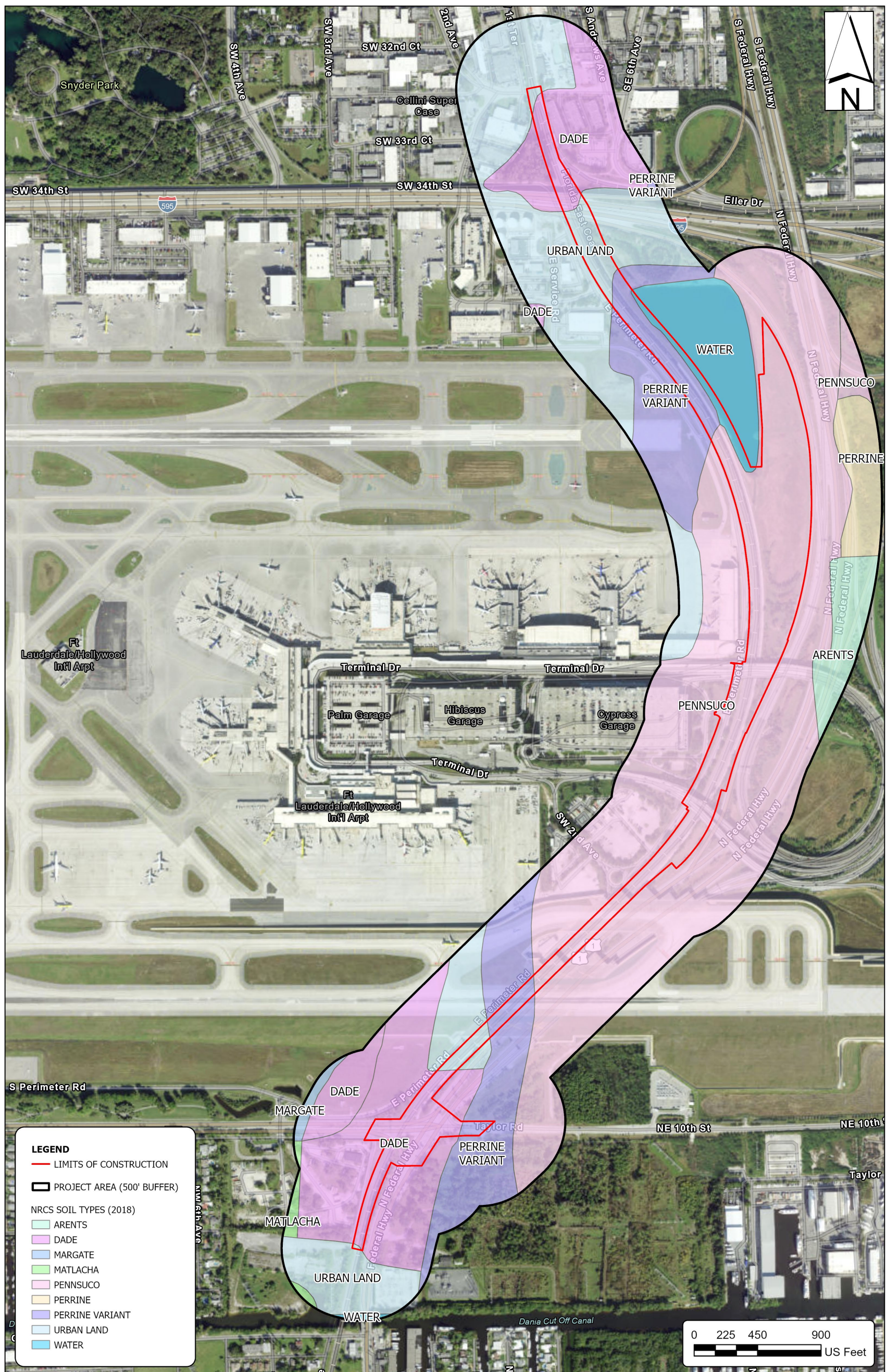
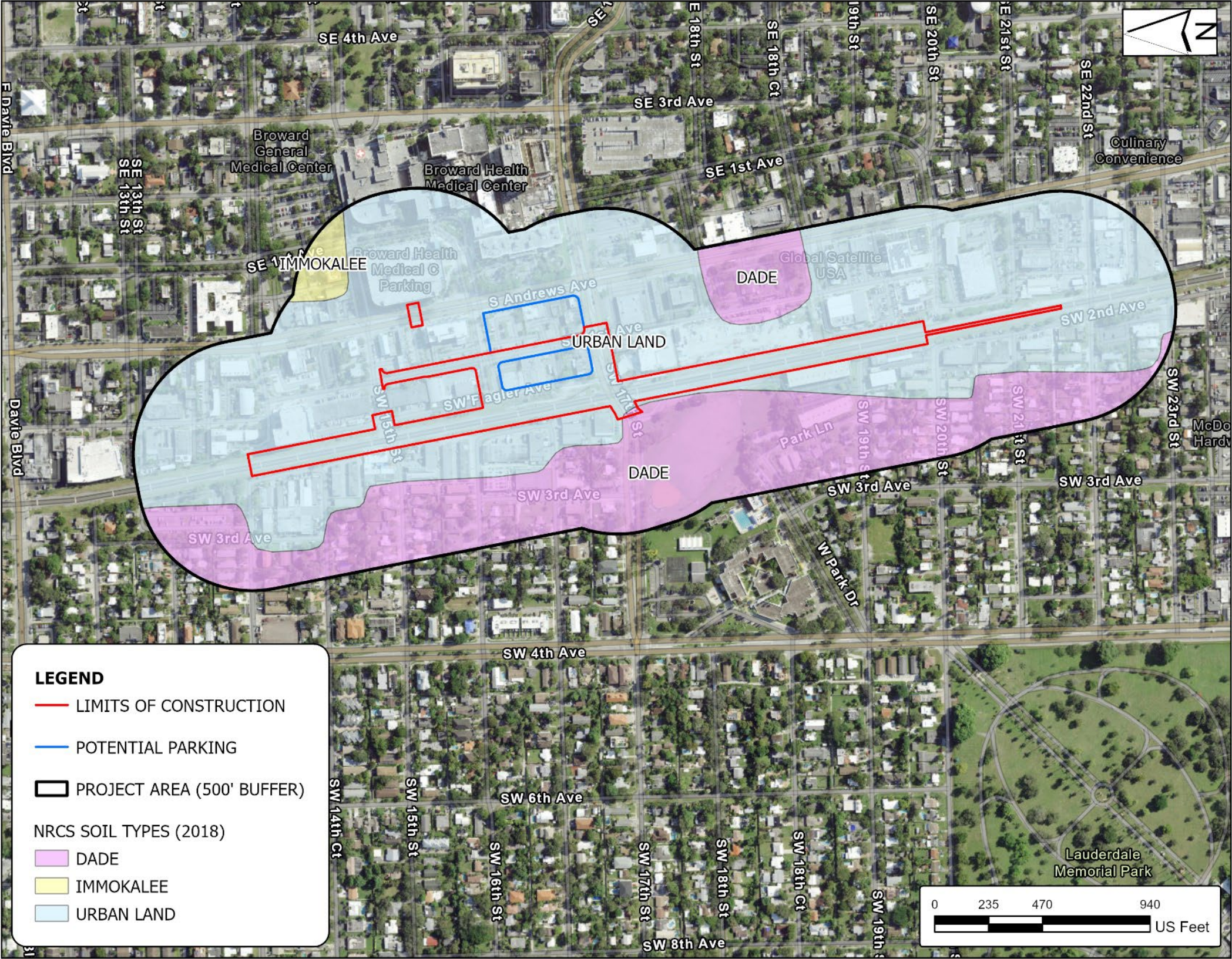


Figure 3: Soil Types in Fort Lauderdale Station Project Area



4.0 Project Description

4.a The project will result in a total increase in impervious cover of 7.51 acres from all three proposed passenger stations. At the Hollywood Station, an increase of 0.71 acres of impervious cover is anticipated. At the FLL Airport Station, an increase of 6.22 acres is anticipated, and at the South Fort Lauderdale Station, an increase of 0.58 acres of impervious cover is anticipated.

4.b The maximum depth of excavation is anticipated to be approximately 35 feet. The exact depth will be determined during the design phase of the project.

4.c No wells will be installed or modified as a part of this project.

4.d Deep pilings/foundations that are in excess of 10 feet below the land surface will be required at the FLL Airport Station. Construction procedures and diagrams of the pilings have not been developed and will be determined during the design phase of this project.

5.0 Stormwater Management

5.a The project will require French drains at the South Fort Lauderdale Station but no injection wells. The French drains are needed because of the limited right-of-way and linear nature of this rail project. The soils in these areas show relatively high infiltration rates.

5.b Stormwater at the Hollywood Station would be managed through dry detention swales along the tracks. At the FLL Airport Station, existing Stormwater Pond US1-6 will be modified to accommodate stormwater management needs. At the South Fort Lauderdale Station, stormwater management will be provided through swales along the tracks and in French drains, and a dry pond would accommodate drainage from a parking garage. During construction, stormwater will be managed in accordance with the Florida Department of Transportation's *Standard Specifications for Road and Bridge Construction*. This will include the implementation of Best Management Practices to avoid and minimize downstream impacts from erosion and sedimentation. The project will also be designed to comply with the requirements of a South Florida Water Management District Environmental Resource Permit. Additional details will be determined during design and permitting phases.

6.0 Chemical Use and Storage

6.a No quantities of hazardous chemicals or petroleum above routine household quantities will be used or stored in the project review area.

6.b There are no underground or aboveground storage tanks at any of the proposed passenger station locations; however, at the South Fort Lauderdale Station Parking Alternative 1 includes an area with a historic record of underground storage tanks and no confirmation of removal. Parking Alternative 2 includes an area with an existing above-ground fuel storage tank. Any existing tanks would be removed in accordance with local, state, and Federal regulations, no new tanks are anticipated under the proposed project.

7.0 Waste Management

7.a Any liquid or solid wastes generated during construction will be managed in accordance with all local, state, and Federal Laws. A National Pollution Discharge Elimination (NPDES) Permit is anticipated and will require measures to avoid and minimize impacts. Additional details will be determined during the design and permitting phases.

7.b Only routine quantities of liquid and solid waste are anticipated and will be sent to a permitted sanitary landfill or publicly-owned treatment works. There are no individual disposal systems such as cesspools, septic tanks with leach fields or seepage areas, pit toilets, or privately-owned sewerage systems.

7.c A Contamination Screening Evaluation Report (Phase I) was conducted for this project and is available separately. It identified a total of 36 sites of potential contamination risk within 150 feet of the project, including 11 Medium Risk and 25 Low Risk sites. Most of the sites were identified because of the presence or historic presence of storage tanks. Three sites were listed in the Florida Department of Environmental Protection Cleanup Sites database but these sites are all separated from the project by Dixie Highway and approximately 50 feet. There are no EPA National Priorities List Sites within 150 feet of the project. The Dania Beach Brownfield overlaps the southern part of the limits of construction at the FLL Airport Station. That brownfield area does not include the proposed station or any areas of excavation deeper than 10 feet. The Poinciana Crossing Green Reuse (1801 SW 1st Ave) site was listed in a brownfields database and is located adjacent to the project at the proposed South Fort Lauderdale Station. There are no contamination plumes, monitoring wells, or soil contamination that are anticipated to be disturbed by the proposed project. The Medium risk sites are recommended for additional investigations during project design and permitting phases to further reduce risks from contamination.

7.d This is not an agricultural project and there will be no involvement with animal waste.

7.e There will be no burial of flocks or disposal of animals.

8.0 Other Available Information

8.a Standard Best Management Practices will be implemented and are described in the Florida Department of Transportation *Standard Specifications for Road and Bridge Construction*. It is anticipated that the project will require a National Pollution Discharge Elimination System Permit and an Environmental Resource Permit from the South Florida Water Management District.

8.b The project is not anticipated to provide improvements that are beneficial to the Sole-Source Aquifer.

9.0 Previous Environmental Assessments

9.a There are no known prior Environmental Assessments regarding this project, though earlier feasibility and corridor development studies have occurred. Prior coordination occurred with the US Environmental Protection Agency through the Florida Department of Environmental Protection Efficient Transportation Decision Making system and resulted in a summary degree of effect of Moderate regarding impacts to the Biscayne Sole-Source Aquifer.



Sole Source Aquifers for Drinking Water

CONTACT US <<https://epa.gov/dwssa/forms/contact-us-about-sole-source-aquifers-drinking-water>>

EPA Region 4 Sole Source Aquifer Project Review Form – Section B: Determination of Potential Project Impacts to the Sole Source Aquifer

Welcome to the Environmental Protection Agency (EPA) Region 4's Sole Source Aquifer (SSA) project review form. The EPA SSA Protection Program is authorized by section 1424(e) of the Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300 et. Seq., and 21 U.S.C. 349). Under the SSA Protection Program, EPA reviews proposed projects that will both: 1) be located within the SSA project review area and; 2) receive federal financial assistance. The review area may include the area overlying the SSA, its recharge zone, and source areas of streams that flow into the SSA's recharge zone. The EPA's review is intended to determine any possible contamination to the SSA from submitted projects. Your accurate submission of information will help us determine any possible contamination.

Please complete this form in its entirety and as well as the two-part submission process. Keep the email received at the end of submission process for your records. This email will serve as the official record of the decision and may be required by the federal agency funding your project. Thank you.

ATTENTION

The answers to the following questions must be submitted via email to the EPA Region 4 to complete this project's review. Please submit your answers to R4-SSA@epa.gov.

Date: February 26, 2024

Project Name: Broward Commuter Rail South

Sole Source Aquifer Name: Biscayne Aquifer (Florida)

Dear Jie Bian:

Based on the information you have provided the **Broward Commuter Rail South project requires** a Sole Source Aquifer (SSA) review under Section 1424(e) of the Safe Drinking Water Act of 1974 (Public Law 93-523, 42 U.S.C. § 300 et. seq). Your responses to the below questions will assist the EPA's SSA Program in evaluating whether the proposed project has the potential to contaminate a SSA through a recharge zone. EPA may request additional information as necessary. Please email your answers to R4-SSA@epa.gov.

1. Provide Project Information:

- a. Contact person
- b. Contact email address
- c. Contact mailing address
- d. Contact phone number
- e. Name of the project
- f. Project address or geographical coordinates.

2. Confirm an SSA project review is needed.

- a. Is any portion of the project or the property(ies) involved located within a designated SSA project review area? A searchable interactive map of designated SSA project review areas is available at <https://www.epa.gov/dwssa> <<https://www.epa.gov/dwssa>>. **If the answer to this question is no, EPA does not need to review the project under the SSA program.**
- b. If the project is located in a SSA, please provide the name of the Aquifer.
- c. What Federal funding source is being sought or proposed? **If no Federal financial assistance is sought or proposed, EPA does not need to review the project under the SSA program.**

3. Provide the location of the project, a map, and the name of the SSA(s) within which the project is located. Descriptions and/or maps with the information below would be helpful if available and applicable.

- a. What is known about local hydrogeology in the project review area (e.g., soil types, depth to groundwater, groundwater flow direction)?
- b. Are there any known wells in the project review area (including groundwater wells; shallow injection wells; and oil, geothermal, and mineral exploration wells) and how close are they to the project?
- c. Are there any wetlands within the project review area? If applicable, describe any discharge to, loss of, or creation of wetlands by the project.

4. Provide project description, including, but not limited to, answers to the applicable questions below.

- a. Will the project result in any increase of impervious surface (e.g., concrete, asphalt)? If so, what is the area (e.g., square feet or acres)?
- b. What is the depth of excavation?
- c. Will any wells be installed or modified as part of the project (of any use type, including groundwater wells' shallow injection wells; and oil, geothermal, and mineral exploration wells)? For new/proposed wells, indicate depth of wells, depth of casing, casing diameter, and, for water wells, the anticipated average and maximum water demand from the wells during normal operation (gallons per minute).
- d. Are there any deep pilings or foundations (e.g., greater than 10 feet below land surface) that will be installed, modified, or disturbed during the project? If yes include construction procedures and diagrams of these deep pilings or foundations.

5. Describe storm water management for the project area.

- a. Will the project require the use of shallow injection wells (i.e., dry wells, French drains, sumps, and drainfields)? **If the answer to this question is yes, please provide EPA with an explanation as to why these shallow injection wells are required.**
- b. How will storm water be managed on this site during construction and after the project is complete, including treatment if applicable?

6. Describe chemical use and storage associated with the project.

- a. Will quantities of hazardous chemicals or petroleum above routine household quantities be used or stored in the project review area?
- b. Are there any aboveground storage tanks or underground storage tanks present or to be installed? Fuel tanks are often involved in projects that include generators and/or pump stations. If applicable, include details of such tanks, including spill containment and spill response plans.

7. Describe waste management related to the project, including, but not limited to, answers to the applicable questions below.
- a. Will any liquid or solid waste be generated during construction (e.g., construction/drilling fluids, excavation dewatering fluids, or demolition debris)? If so, how will it be managed?
 - b. How will liquid or solid waste be managed after project completion, other than routine quantities of household wastes to a permitted sanitary landfill or publicly-owned treatment works (e.g., describe any on-site treatment/disposal, industrial wastewater, or other waste generation)? If applicable, provide details about any individual disposal systems such as cesspools, septic tanks with leach fields or seepage areas, pit toilets, or privately-owned sewerage systems, including those owned by a homeowners' association.
 - c. Are there any known brownfield or hazardous waste sites in close proximity to the project review area (e.g., sites listed on the EPA National Priorities List [i.e., Superfund sites], state-designated brownfield or clean-up sites)? Do any such contaminated sites have underground contamination plumes, monitoring wells, or soil contamination that may be disturbed by the project? Include details such as the name(s) and location(s) of the brownfield or hazardous waste site(s).
 - d. For agricultural projects involving animals, how will animal wastes be managed?
 - e. For burial of flocks or disposal of animals, what Best Management Practices ("BMPs") are planned to protect the SSA from contamination?
8. Provide any other available information (examples below) that could be helpful in determining if this project may potentially create a significant hazard to public health through contamination of a SSA.
- a. Are BMPs planned to address any possible risks or concerns? If so, which BMPs will be used?
 - b. Does the project include any improvements that may be beneficial to any SSA, such as improvements to the publicly-owned treatment works?
9. Are any previous environmental assessments available regarding the project or project area? If yes, please provide a copy of any/all assessments.

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[SSA Home <https://www.epa.gov/dwssa>](https://www.epa.gov/dwssa)

[Basic Information <https://www.epa.gov/dwssa/overview-drinking-water-sole-source-aquifer-program#what_is_ssa>](https://www.epa.gov/dwssa/overview-drinking-water-sole-source-aquifer-program#what_is_ssa)

[Guidance on SSA Designation <https://www.epa.gov/dwssa/guidance-petitioning-sole-source-aquifer-ssa-designation>](https://www.epa.gov/dwssa/guidance-petitioning-sole-source-aquifer-ssa-designation)

[SSA Project Review <https://www.epa.gov/dwssa/sole-source-aquifer-project-review#coord>](https://www.epa.gov/dwssa/sole-source-aquifer-project-review#coord)

[SSA Locations <https://www.epa.gov/dwssa/map-sole-source-aquifer-locations>](https://www.epa.gov/dwssa/map-sole-source-aquifer-locations)

Contact Us <<https://epa.gov/dwssa/forms/contact-us-about-sole-source-aquifers-drinking-water>> to ask a question, provide feedback, or report a problem.

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