Level I Contamination Screening Evaluation Report (Mainline)

Florida Department of Transportation

District 5

LPGA Boulevard PD&E Study

Limits of Project: From US 92 (SR 600) to Williamson Boulevard

Volusia County, Florida

Financial Management Number: 448456-1

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Date: March 2023

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.



LPGA BOULEVARD FROM US 92 (SR 600) TO WILLIAMSON BOULEVARD PD&E STUDY

FPID: 448456-1-22-01

Level I

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March 17, 2023

FDOT

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1.0 Executive Summary

On behalf of the Florida Department of Transportation (FDOT), this Level I Contamination Screening Evaluation Report (CSER) was prepared to support the LPGA Boulevard Project Development and Environment (PD&E) Study. This contamination evaluation was performed in accordance with Part 2, Chapter 20 of the FDOT's PD&E Manual (July 1, 2020). Additional right-of-way (ROW) is not anticipated at this time. Drainage sites will be evaluated for this PD&E Study and presented under a separate cover.

Based on the methodologies completed for this study, the following risk ratings were assigned to the 21 contamination sites identified along the project ROW:

Table 1 | Number of Contamination Sites per Risk Rating

High	Medium	Low	No
0	4	15	2

For the Medium rated sites (none were rated High), Level II testing should be considered, if deemed appropriate by the District Contamination Impact Coordinator. The Level II can include additional file review, hazardous material surveys, soil borings, monitoring well installation, soil and groundwater sampling, laboratory testing, and the use of field instruments such as an Organic Vapor Analyzer or Ground Penetrating Radar. Three sites were assigned a risk rating of Medium, in accordance with procedures outlined in Chapter 20, due to their active status as retail gasoline stations. Additional file review is recommended just prior to construction to verify regulatory status. The discovery of new discharges at these sites should be considered for field testing to determine presence and extent of contamination impacts to the project. For the fourth Medium rated site (Site 11 – Historic Railroad), Level II testing is recommended to determine soil and groundwater contaminant concentrations related to historical railroad operations.

For the locations rated No or Low for contamination, no further action is required. These locations have been determined not to have contamination risks which warrant further evaluation at this time.

Once final design plans are available, additional review is recommended in consideration of dewatering operations that may be necessary under the *National Pollutant Discharge Elimination System Generic Permit for Stormwater Discharges from Large and Small Construction Activities*. Verification testing may be warranted for contamination issues within 500 feet of the dewatering area. Chapter 20 identifies this as an "Additional Consideration" which does not require a risk rating.

2.0 Introduction

This document is provided to update a previous CSER (dated August 2020) that provided risk ratings for 17 contamination sites. Regulatory information was reviewed for these 17 contamination sites and for any newly identified contamination sites. Also provided in this document is the inclusion of five miles of LPGA Boulevard ROW that was not evaluated in the August 2020 CSER by performing research to 500 feet from the ROW per PD&E Manual Chapter 20.

3.0 Project Description

FDOT is conducting a PD&E Study of LPGA Boulevard from US 92 (International Speedway Boulevard) to Williamson Boulevard within the City of Daytona Beach in Volusia County (approximately 6.2 miles). The proposed improvements involve widening of LPGA Boulevard which will include the addition of bicycle and pedestrian facilities and modifications to the LPGA Boulevard/I-95 interchange.

A project location map is provided in **Figure 1**. Existing LPGA Boulevard is a two-lane roadway from US 92 to Tomoka Farms Road (east of the Tomoka River), a four-lane roadway from Tomoka Farms Road to the I-95 Southbound Ramps, and a six-lane roadway from the I-95 Southbound Ramps over I-95 to Williamson Boulevard. There are 14 intersections along the corridor including ramp terminals at the I-95 interchange, nine of which are signalized.

LPGA Boulevard is a county road maintained by Volusia County, except between Tomoka Farms Road and Technology Boulevard/Outlet Boulevard where FDOT maintains the limited access ROW to the I-95 interchange. Most of LPGA Boulevard does not have paved shoulders and sidewalks, and there are only limited areas of sidewalks between Tymber Creek Road and Williamson Boulevard.

I-95 is a six-lane, Strategic Intermodal System (SIS) facility and is a hurricane evacuation route. The I-95 interchange at LPGA Boulevard (Exit 265) is a partial cloverleaf interchange, or parclo interchange, with six on and off ramps. This interchange is located approximately 3.5 miles north of the I-95 and US 92 interchange and approximately 2.7 miles south of the I-95 and SR 40 interchange.

3.1 Purpose and Need

The purpose of this project is to accommodate existing and projected future travel demand, enhance safety, and improve operations for the LPGA Boulevard corridor and the I-95 interchange.

The need for the project is based on existing and future transportation demand and safety along the LPGA Boulevard corridor and at the interchange area. Improvements are necessary to address unacceptable levels of service (LOS) (below target LOS D and LOS E) and enhance the safety of travel conditions along LPGA Boulevard and at the I-95 interchange area.



Figure 1.1 Project Location Map

3.1.1 Transportation Demand

LPGA Boulevard from US 92 to Williamson Boulevard is currently operating near capacity. A review of existing (2021) traffic volumes in the project area showed an Annual Average Daily Traffic (AADT) of 12,000 vehicles per day for LPGA Boulevard from US 92 to Tomoka Farms Road and an AADT of up to 44,000 vehicles per day from Tomoka Farms Road through the I-95 interchange to Williamson Boulevard. Large, approved developments and active construction projects (such as LPGA Preserve, Indian Road Warehouse, and Tomoka Village), in combination with additional planned growth in the vicinity of LPGA Boulevard, are expected to increase traffic to levels that would exceed maximum service volumes for two-lane and six-lane, non-state, signalized roadways per the 2020 FDOT Quality/Level of Service (QLOS) Handbook. Future (2050) travel demands along LPGA Boulevard are expected to double or triple in some locations. The AADT between US 92 and Tymber Creek Road is expected to reach 36,000 vehicles per day. Heavy volumes are expected east of the I-95 interchange where AADT will reach 78,000 vehicles per day in 2050. These volumes will significantly exceed the existing roadway capacity and cause LPGA Boulevard to operate at LOS F.

The target LOS for I-95 and LPGA Boulevard is LOS D per FDOT and LOS E per Volusia County. The I-95 freeway segment approaching LPGA Boulevard currently functions at LOS D or better. However, queuing has been observed on the I-95 northbound and southbound off-ramps and on westbound LPGA Boulevard west of I-95, indicating capacity deficiencies. Based on anticipated growth, the quality of traffic flow on I-95 and LPGA Boulevard in the study area is expected to decline in future years. Without improvements to the LPGA Boulevard corridor, the intersections on LPGA Boulevard as well as the I-95 off-ramps are anticipated to operate over capacity in the future resulting in longer travel times to reach workplaces, schools, and businesses.

3.1.2 Safety

A review of crash data reported in the study area for the five-year period from January 1, 2015 to December 31, 2019 indicated there were 1,354 crashes, an average of 270 crashes per year. The most predominant crash type reported for the overall study area is rear-end crashes (37%). There were 11 reported fatal crashes, 414 injury crashes and 929 property-damage-only crashes reported for the overall study area.

The highest numbers of crashes correspond to the locations with deficient LOS. These include the I-95 northbound off-ramp to LPGA Boulevard with crashes during the intersection's right turn on red condition; the I-95 southbound loop on-ramp from LPGA Boulevard westbound, and the eastbound approach of LPGA Boulevard to Williamson Boulevard. There are also high numbers of crashes at the intersections and uncontrolled access points along LPGA Boulevard. Most of LPGA Boulevard lacks pedestrian and bicycle facilities, which creates unsafe conditions for nonmotorized users. Between 2015 and 2019 six pedestrian/bicycle crashes were reported within the study area.

Without improvements to the LPGA Boulevard corridor and at the I-95 interchange, the number of crashes is expected to continue to rise as future traffic volumes increase substantially, compromising the safety for both vehicular and nonmotorized users.

3.2 Description of Considered Alternatives

The PD&E Study evaluated the following alternatives.

- No-Build Alternative
- Transportation Systems Management and Operations (TSMO) Alternative
- Build Alternative

These alternatives are further described below.

3.2.1 No-Build Alternative

The No-Build Alternative maintains the existing roadway along LPGA Boulevard and loop ramp interchange configuration at the I-95 interchange. There are no additional planned and programmed improvements within the study limits. This alternative does not address the purpose and need for this project. However, it was evaluated throughout the PD&E Study process as a baseline for comparison against the No Build Alternative.

3.2.2 Transportation Systems Management and Operations

TSMO strategies for safety and congestion management, such as addition of turn lanes and storage lengths, signal timing optimization, auxiliary lanes, premium transit, and technology improvements were considered. However, these improvements by themselves do not address the levels of traffic demand projected to use LPGA Boulevard and the I-95 interchange in the design year (2050). It is noted that ramp metering (traffic signals on a ramp) was evaluated and included in the Build Alternative to control the rate vehicles enter a freeway facility. As part of the design and operational optimization of the proposed improvements, applicable TSMO strategies such as Wrong-Way Vehicle Detection Systems and Dynamic Speed Feedback Systems will be evaluated and included in the Build Alternative during the Design phase, as appropriate.

3.2.3 Build Alternative

One build alternative was developed and evaluated against the No-Build Alternative. The Build Alternative consists of widening LPGA Boulevard to an urban typical section with different number of lanes (depending on the future travel demand), intersection improvements, redesigning to the I-95 interchange to an innovative design concept called Signalized Turbine Interchange, and addition of shared use paths on both sides of the road to accommodate pedestrians and bicycles.

The proposed improvements along LPGA Boulevard are described as follows.

3.2.3.1 LPGA Boulevard from US 92 to Tymber Creek Road

An urban typical section with two 12-ft travel lanes in each direction separated by a 54-ft raised grass median is proposed, a distance of 4.5 miles. The wider median will allow for future addition of two more lanes should the travel demand warrant beyond the design year for this project. Bicyclists and pedestrians will be accommodated by 14-ft shared use paths on both

sides of the road. The design speed is 45 mph, and the proposed roadway improvements are within the existing 200-ft ROW.

3.2.3.2 LPGA Boulevard from Tymber Creek Road to Williamson Boulevard

An urban typical section with three to four 11-ft travel lanes in each direction separated by a variable width raised median, a distance of 1.7 miles. The wider median will allow for accommodation of up to triple left turn lanes at LPGA Boulevard and Outlet Boulevard/Technology Boulevard intersection and LPGA Boulevard and Williamson Boulevard intersection. At some intersections (and ramp terminals) exclusive right turn lanes are proposed to accommodate heavy turning traffic volumes. Bicyclists and pedestrians will be accommodated by 12-ft shared use paths on both sides of the road. The design speed is 35 mph and the proposed roadway improvements are within the existing185-ft to 320-ft of ROW.

3.2.3.3 Tomoka River Bridge

Tomoka River Bridge will be replaced with a single wider and longer bridge to accommodate widening of LPGA Boulevard and address bridge hydraulics including sea-level rise effect. The proposed bridge typical section for the Tomoka River Bridge is based on the typical section for the segment between Tymber Creek Road and Williamson Boulevard and includes three 11-ft travel lanes in each direction, left turn lanes, and 12-ft shared use paths on both sides of the bridge to accommodate pedestrians and bicycles. The bridge will be approximately 340 ft long.

3.2.3.4 Intersections

LPGA Boulevard improvements include the following intersection concepts.

- US 92 – Signalized Intersection
- Welshinger Butler Circle South – Roundabout
- Welshinger Butler Circle North – Signalized Intersection
- International Tennis Drive/International Golf Drive - Roundabout
- Tournament Drive – Signalized Intersection
- Tymber Creek Road – Signalized Intersection
- Tomoka Farms Road – Signalized Intersection with a Partial Thru-Cut and Restricted Control U Turn (RCUT)
- Outlet Boulevard/Technology Boulevard – Signalized Thru-Cut Intersection
- Williamson Boulevard – Signalized Intersection
- Concierge Boulevard – Right-In-Right-Out Intersection

3.2.3.5 I-95 Interchange

After consideration of the future (2050) demand volumes, potential future growth trends in the LPGA Boulevard area, and coordination with District 5, a Signalized Turbine Interchange concept was proposed to be evaluated at the I-95 interchange. This interchange concept is needed to accommodate heavy traffic flows which head to and from I-95; in addition to traffic volumes between the I-95 ramp terminals and the Outlet Boulevard/Technology Boulevard intersection. The Signalized Turbine Interchange is expected to address unbalanced and heavy traffic movements from/to I-95 and Technology Boulevard, Outlet Boulevard, and Williamson Boulevard.

The Signalized Turbine Interchange concept is an innovative low speed with signal controls interchange variant of the turbine interchange typically implemented in freeway-to-freeway (system) interchanges. Compared to a conventional high-speed turbine interchange, this concept has two levels, and its ramps are curved to connect along LPGA Boulevard with two-phase signals. The LPGA Boulevard is split into separate one-way pairs by 200 – 300 feet, providing additional queue storage of left turning vehicles without conflicting to the oncoming traffic.

The signalized turbine interchange concept spreads the traffic across westbound and eastbound LPGA Boulevard and, as a result, it moves high traffic volumes and provides enough queue storage between signalized ramp terminals. This concept would provide better safety and operational benefits than the other conventional concepts during the design year. Additionally, the Signalized Turbine Interchange can more easily allow for expansion of through lanes along LPGA Boulevard should future travel demand warrant

4.0 Methodology

A contamination screening was conducted to identify contamination issues from properties or operations located within the vicinity of the project. This evaluation consisted of the following tasks:

- A Contamination Site Map (**Appendix A**) was prepared using data acquired by Environmental Data Management, Inc. (EDM) and other resources to illustrate the locations of the contamination sites with respect to the project.
- An environmental database search using EDM was conducted on January 30, 2022 to identify sites, facilities or listings within the study area containing documented or suspected petroleum contamination or other hazardous materials. This report utilizes the 500-foot search distance as requested by the District Contamination Impact Coordinator (DCIC). The EDM report is used as a preliminary screening tool to identify facilities that are registered with various county, state, and federal agencies. The regulatory review of federal and state environmental records utilizes an integrated geographic information system database. The database report provides geocoded and non-geocoded regulatory listings of interest that are identified within the study area. Each listing is located by address, facility identification number and field verified where possible. All are reviewed for the potential of contamination to impact the project. The reviewed records include information compiled by the United States Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP), and other various reporting programs. A complete list of all regulatory record databases searched is included in the environmental database search report, provided in **Appendix B**. The facilities identified in the EDM report are evaluated in **Section 8.0**. Supplemental information found on the FDEP Map Direct and OCULUS databases is included in **Appendix E**.
- Aerial photographs were reviewed to develop a history of the previous land uses within the study area and to identify sites which may have historical uses that pose contamination concerns. Aerial photographs dated 1943, 1950, 1958, 1969, 1976, 1984, 1992, 1995, 1999, 2002, 2004-2012, 2014-2019 and 2021-2022 were reviewed from the EDM, and Google Earth databases. A summary of our review is discussed in **Section 5.2**. Site specific details are provided, where appropriate, in **Table 2.** Copies of the historical aerial photographs are presented in **Appendix C**.
- Topographic map review using imagery available from the United States Geological Survey (USGS) website. Topographic maps can be useful identifying contamination concerns such as railroads, mine lands, bulk storage tanks, and landfills/disturbed lands. Additionally, land use and water features, including elevation contours can be identified on topographic maps. The USGS 7.5-Minute “Eustis, Florida” Quadrangles dated 1952, 1970, 1980, 1988, and 1993 were reviewed as part of this study. The topographic maps are provided in **Appendix D**.

- Volusia County Property Appraiser database information was reviewed for suspect contamination sites where other resources may not have provided ample information regarding the site, or to determine addresses, parcel boundaries and other pertinent information.
- Performed a site reconnaissance to identify new and/or undocumented contamination sites, and to verify locations of documented contamination sites. Select photographs are provided in **Appendix F**.
- Assigned risk ratings for each contamination site or pond after evaluating the findings of each of the previously mentioned methodologies. The rating system defined in PD&E Manual is divided into four categories of risk which express the degree of concern for contamination problems. The four degrees of risk ratings are “No,” “Low,” “Medium,” and “High” and are defined as follows:

No Risk Site

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.

Low Risk Site

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.

Medium Risk Site

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, sites with abandoned in place underground petroleum storage tanks or currently operating gasoline stations should receive this rating.

High Risk Site

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 detailed description of each contamination site identified is provided in **Section 8.0**, **Table 2**.

5.0 Land Uses

Determination of previous land uses and occupancies is an important factor when evaluating the potential for contamination involvement. Developing a history of the project and surrounding areas can assist in determining the potential for releases or discharges of hazardous materials or petroleum products. To determine land uses for this project, a site reconnaissance and interviews (**Section 8.0**) were performed along with a review of historical aerial photographs and topographic maps. Contamination concerns noted during the review, including the site reconnaissance are discussed in **Section 8.0**, **Table 2**.

5.1 Site Reconnaissance

Site visits were conducted on February 8 and 9, 2022 to evaluate each property within and in close proximity to the mainline for contamination concerns. The site reconnaissance in conjunction with the desktop review allow the sites to be rated as to the degree of contamination concern as defined in **Section 4.0**. The reconnaissance included a systematic inspection of each parcel along the project corridor and surrounding areas looking for signs of contamination. This was achieved by driving, where possible, the project, and walking the parcels within and surrounding the project (where accessible) to gain specific information regarding the usage and condition of each contamination site. Photographs of the contamination concerns were taken during the site inspection. Select images are presented in **Appendix F**.

Some of the typical physical indicators for contamination concerns include: railroad tracks, fill ports and vent pipes associated with aboveground storage tanks (ASTs), underground storage tanks (USTs), oil/petroleum staining, drums, chemical containers, refuse, illicit dumping, solid waste, stressed vegetation, dry cleaning facilities, material handling from adjacent businesses, petroleum dispensers, excavated areas, agricultural use, chemical mix/load areas, stormwater outfall areas, surface water indicators, groundwater monitoring wells, restricted area/contamination/hazardous material/petroleum pipeline signage, cattle dip vats and other property uses that may present contamination concerns.

During the site reconnaissance on February 8, 2022, and February 9, 2022, LPGA Boulevard was observed as a two lane street from U.S. 92 to the I-95 Interchange. At the Interchange LPGA Boulevard was depicted as a multi lane highway through North Williamson Boulevard to the northeastern boundary of the study area. Major intersections within the project limits are LPGA Boulevard and North Williamson Boulevard, LPGA Boulevard with Outlet Boulevard, LPGA with North Tomoka Farms Road, and other smaller intersections for neighborhoods and smaller strip malls. The ROW pertaining to the southern and central portions of the study area has approximately a 100 foot buffer of grass separating LPGA Boulevard from vegetation such as planted pine trees that surround the study area.

5.2 Aerial Photographs

The years and sources of the aerial photographs reviewed are provided in **Section 4.0**. Copies of select historical aerial photographs are presented in **Appendix C**. The following is a summary of our review:

1943: Project area was depicted as woods and grassy fields as well as West International Speedway Boulevard depicted**.**

1950: Little to no changes depicted, possible former road depicted near south end of project.

1958: Little to no changes were depicted.

1969: I-95 and LPGA Boulevard interchange depicted under construction in northern portion of project area with little to no changed depicted elsewhere.

1976: LPGA Boulevard depicted intersecting with West International Speedway Boulevard with little to no changes elsewhere.

1984: Little to no changes depicted.

1992: Little to no changes depicted.

2003: I-95 and LPGA Boulevard interchange depicted in modern configuration, as well as more development around LPGA Boulevard in the northern and central portions of the project.

2012 – 2021: Some development along the I-95 and LPGA Boulevard interchange with little to no changes elsewhere.

Contamination concerns noted during the review of aerial photographs are discussed in **Table 2**.

5.3 USGS Topographic Maps

Topographic maps are reviewed to develop an understanding of previous land uses in the study area and to identify any areas that may show historical, natural and manmade features, which aid in determining contamination concerns. The following reviews are provided for the USGS 7.5-Minute topographic maps (**Appendix D**).

Daytona Beach topographic maps dated 1952 to 1993 have the areas around LPGA Boulevard and the I-95 and LPGA Boulevard interchange as shaded green which implies “woods”, white for “developed land,” and tangents of blue plants for “low wetted areas.” Little to no changes were depicted on these maps, where changes made were shaded in purple for “new development.” These purple shadings are first depicted in the 1970 Daytona Beach topographic map and subsequent years as development of the land increases. From 1952 to 1993 an old railroad (Site 11) is depicted intersecting LPGA Boulevard and the I-95 LPGA Boulevard interchange.

6.0 Hydrologic Features

6.1 Aquifers of Florida

The Floridan aquifer is found throughout Florida and extends into the southern portions of Alabama, Georgia, and South Carolina. This aquifer system is comprised of a sequence of limestone and dolomite, which thickens from about 250 feet in Georgia to about 3000 feet in south Florida. The Floridan aquifer system has been divided into an upper and lower aquifer separated by a unit of lower permeability. The upper Floridan aquifer is the principal source of water supply in most of north and central Florida. In the southern portion of the state, where it is deeper and contains brackish water, the aquifer has been used for the injection of sewage and industrial waste. Groundwater flow is generally from high elevations within the central portion of the state towards the east and west coasts.

The surficial aquifer system in Florida includes any otherwise undefined aquifers that are present at land surface. The surficial aquifer is mainly used for domestic, commercial, or small municipal supplies. The surficial aquifer system is generally under unconfined, or water table conditions and is made up of mostly unconsolidated sand, shelly sand, and shell. The aquifer thickness is typically less than 50 feet. Groundwater in the surficial aquifer generally flows from areas of higher elevation towards the coast or streams where it can discharge as base flow. Water enters the aquifer from rainfall and exits as base flow to streams, discharge to the coast, evapotranspiration, and downward recharge to deeper aquifers.

6.2 Hydrology – Site Reconnaissance

During the site reconnaissance, standing water was noted in manmade ponds intermittently throughout the project area. The topography of the project area is generally flat with a slight decreasing slope to the north.

6.3 Hydrology – USGS 7.5 Minute Topographic Maps

Topographic maps depict the Tomoka River oriented northwest/southeast intersecting LPGA Boulevard in the northern portion of the project, and to the east of the I-95 and LPGA Boulevard interchange. The Tomoka River remains outside, and between ROW's for both road corridors in the central and southern portions of the project area. No significant elevation differences were depicted throughout the project area except along the Tomoka River where the elevation subsidence range is up to five feet.

7.0 Interviews

Communication with landowners, facility operators, residents, and governmental agencies can aid in the understanding of past and current land uses within the study area. Where possible or when necessary, interviews or requests for information are collected in an effort to identify potential concerns associated with petroleum storage tanks; automotive or marine, maintenance, service or repair facilities; dry-cleaning processes; and other industrial or agricultural operations that could affect the project.

Due to sufficient information being available from the database search, as well as the historical aerial photographs and topographic maps, interviews with the past and present owners of properties were not conducted.

8.0 Project Impacts

Given the methodologies performed, 21 mainline sites were evaluated to identify contamination concerns which may impact the proposed improvements. The location of each mainline contamination sites is illustrated in **Appendix A**.

Table 2 | Contamination Site Information

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
1	**DAYTONA BEACH STADIUM SITE PART A-1900** LPGA BOULEVARD DAYTONA BEACH, FL 32114 FACILITY ID: ERIC_5662	EDM MapDirect	Adjoining LPGA ROW east	Heavy metals Cadmium Chromium	Low	**Land use:** During the site reconnaissance, the site was observed as a recreational sports facility with two parking areas located to the north and south of the site. The parking areas were depicted as grassy and paved concrete. Also depicted onsite was an area of ponded water along the ROW that extended from the site's northern boundary to its southern boundary. Site access was not possible due to locked gates preventing entry. **Contamination Concerns:** The Environmental Data Management's (EDM) report (**Appendix B**) identified this site in the Florida Department of Environmental Protection (FDEP) Eliminate, Reduce, Isolate, Control (ERIC) waste cleanup database, and Florida Department of Environmental Regulation (FDER) Sites list STCERC. The facility was also listed as a disaster debris staging area. The site's status was listed as complete in the Site Investigation Section program. The current status of the site was listed as closed, and no discharge date was provided. FDEP OCULUS files (**Appendix E**) provided a Surficial Groundwater Investigation report by Briley, Wild & Associates, Inc. (BWA) dated March 1989, which states in June 1987, a permit was filed for the construction of a waste water irrigation reuse system for the new Municipal Stadium Complex. Once the permit was approved, the need for a groundwater monitoring plan was required. Excessively high levels of Cadmium were depicted in seven groundwater monitoring well background samples that were collected on May 31, 1988. Chromium was also measured in one of the seven samples as well as a high level of gross alpha particle radiation activity. In September 1988, BWA assisted in determining that the sources of contamination stemmed from the fill dirt used to construct the stadium. The source of the fill dirt was a city-owned property adjacent to an area of suspected unauthorized plating waste dumping; henceforth, the fill dirt might be the source of the groundwater contamination. A December 6, 1988, site visit from the FDER's field investigation unit determined the source of cadmium in the monitoring well samples was a plated chain attached to the stainless steel bailer sampler, and that the source of chromium was a "passing anomaly" which has not shown up in the last two quarterly samples analyzed, except for one sample from MW-2 on September 8, 1988. Gross alpha particle radiation activity was sporadically found in monitoring wells MW-20, 22, 23, 24, and 25 and was recommended that these wells continue to be monitored to determine if further study is warranted. The half-life of the element Chromium-51 is 28 days, and the half-life for Cadmium-109 is 1.3 years. In conclusion, BWA recommended that the potential problems associated with contaminated fill dirt be addressed and appropriately mitigated, as well as the plugging and abandonment of groundwater monitoring wells no longer needed, and the petitioning of the FDER to reduce quarterly analytical requirements. No regulatory files were found after 1989. **Risk Rating:** Given the half-lives of both elements (Cadmium and Chromium) that are likely exhibiting *de minimus* conditions today, and no active discharges or remediation requirements, this site was assigned a risk rating of Low.

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
1A	**CITY OF DAYTONA WASTEWATER TREATMENT FACILITY PART A-1993** 3651 LPGA BOULEVARD DAYTONA BEACH, FL FACILITY ID: ERIC_5872	EDM MapDirect	Adjoining LPGA ROW east	Petroleum Diesel	Low	**Land use:** During the site reconnaissance, the site was observed as an operating wastewater treatment facility for the City of Daytona. Site access was not possible due to the security surveillance at the front gate and throughout the site. **Contamination Concerns:** EDM's report (**Appendix B**) has identified this site in its proximal records search but has provided no information. This site was not identified in the FDEP's Storage Tanks & Contamination Monitoring (STCM) database. Three discharges were reported: November 20, 1990 (given a No Further Action (NFA) March 22, 1991), March 15, 1993 (given a Site Rehabilitation Completion Order (SRCO) July 21, 1994, SRCO rescinded December 9, 2010), and June 3, 2010 (discovered during UST closure activities within the same area as the 1993 Discharge). FDEP OCULUS files (**Appendix E**) provided a Template Site Assessment Report dated October 29, 2015, which includes maps depicting the 1993 and 2010 discharge areas within the same location, and approximately 1,200 feet from the LPGA ROW. A Site Assessment Report (SAR) dated September 6, 2022 by Universal Engineering Sciences (UES) states a discharge of under 25-gallons of diesel from an Aboveground Storage Tank was reported on May 2, 2014 during the refueling of a 6,000-gallon UST located over 2,000 feet from the ROW. UES recommended NFA status for the reported discharge after remediation was concluded in 2022. **Risk Rating:** Given the location of the three discharges in excess of 1,200 feet from the LPGA Boulevard ROW, this site was assigned a risk rating of Low.
2	**GAINEY TRANSPORT TRUCK SPILL** I-95 NORTH AT MM 264 DAYTONA BEACH, FL 32114 FACILITY ID: 9802706	2020 CSER EDM	Within I-95 north bound mainline, approximately 260 feet south of project limit	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as an existing grassy median between the north and southbound lanes of I-95. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020. An SRCO was issued by FDEP on January 23, 2001. A risk rating of Low was assigned in the 2020 CSER. **Risk Rating:** Given an SRCO was issued, the risk rating of low remains unchanged.
2A	**MERCEDES-BENZ OF DAYTONA** 1188 NORTH TOMOKA FARMS ROAD DAYTONA BEACH, FL 32124 FACILITY ID: 9814578	2020 CSER EDM	Adjacent I-95 ROW west, approximately 500 feet southwest of project limit	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as a Mercedes-Benz dealership. No car maintenance areas were observed onsite. Typically, these areas are at the back of the facility, which the entire facility itself is located outside of the established 500 foot buffer for the study area. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020. A 2020 tank inspection indicated that the site was in compliance with applicable tank regulations with no reported discharge or evidence of contamination impacts. The 2020 CSER assigned the site a risk rating of Low. This site was identified in EDM's proximal records report. FDEP's STCM database lists the site with a 1,000-gallon unleaded gasoline AST installed June 6, 2015 that remains in service for non-retail purposes. The exact location of the AST is unknown, but the entirety of the site's singular building is located outside the established 500 foot buffer. **Risk Rating:** Given that no discharges have been reported and the site is beyond 500 feet from the project area, the risk rating of Low remains unchanged.

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
2B	**TRIPLE R TRANSPORT CORP** I-95 NORTBOUND MEDIAN MM 264 DAYTONA BEACH, FL 32114 FACILITY ID: 9815385	2020 CSER EDM	Within I-95 north bound mainline, approximately 260 feet south of project limit	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as an existing grassy median between the north and southbound lanes of I-95. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020, which reported that an SRCO was issued by FDEP on January 23, 2001. The 2020 CSER assigned the site a risk rating of Low. The site was not found in FDEP OCULUS, MapDirect, or EDM's files. **Risk Rating:** Given an SRCO was issued, the risk rating of Low remains unchanged.
3	**GARY YEOMANS FORD/FORMER GARY YEOMANS NISSAN** 1420 TOMOKA FARMS RD DAYTONA BEACH, FL 32124 FACILITY ID: 9804441, 9805402	2020 CSER EDM MapDirect	Adjoining I-95 ROW, approximately 190 feet west	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as Gary Yeomans Ford. No car maintenance areas were observed onsite from vantage points along the ROW. **Contamination Concerns:** EDM's report has identified that the current Gary Yeomans Ford (Facility ID 9804441) was a Former Gary Yeomans Nissan dealership (Facility ID 9805402). A 4,000-gallon unleaded gasoline AST was installed in November of 2001 and remains in service for Facility ID 9804441. This AST is located approximately 600 feet west of the project boundary. A 1,000-gallon unleaded gasoline AST was installed on May 1, 2002 and was removed in May of 2015 for Facility ID 9805402. EDM's report incorrectly identified the Former Gary Yeomans Nissan as Daytona Nissan. Daytona Nissan is listed at 950 Tomoka Farms Road approximately 1,800 feet southwest. Both sites were identified in a previous CSER report by FDOT District 5 dated August 2020 as separate sites. For Facility ID 9805402, the status as a small quantity hazardous material generator was closed in September 2013. Also, for Facility ID 9804441, a March 2018 tank inspection indicated that the site was in compliance with no discharges or compliance violations reported associated with either facility. The 2020 CSER assigned a risk rating of Low for both Gary Yeomans Ford and the Former Daytona Nissan. Both sites were combined in this report under Map ID 3 since both sites share the same address and to remain consistent with the EDM report. FDEP OCULUS files (**Appendix E**) provided a Storage Tank Compliance letter from the FDEP dated February 2, 2021 for Facility ID 9804441 that notes that the FDEP agreed with a January 2021 storage tank compliance inspection form and determined the site is in compliance. FDEP OCULUS files provided the most recent Storage Tank Compliance Inspection report form dated May 26, 2016 for Facility ID 9805402. The site was determined to be in compliance. **Risk Rating:** Given no reported discharges, the excessive distance of the AST from the project boundary, and both facilities having been found in compliance, the risk rating of Low remains unchanged for both facilities.

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
4	**SAMS CLUB #8138** 1460 CORNERSTONE BLVD DAYTONA BEACH, FL 32114 FACILITY ID: 9816708	2020 CSER EDM	Approximately 500 feet southeast of Interchange ROW	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as an operating retail gas station and wholesale store. The retail gas station was observed with several pump islands under a single canopy as well as a small structure used for storage. No groundwater monitoring wells were observed onsite. **Contamination Concerns:** EDM's report (**Appendix B**) lists the site as a retail gas station with three 20,000-gallon USTs (two ethanol E10 fuel, and one vehicular diesel). No discharge was reported. This site was identified in a previous CSER report by FDOT District 5 dated August 2020. The report did not list any discharges and assigned the site a risk rating of Low. FDEP OCULUS files (**Appendix E**) provided a Storage Tank Facility Routine Compliance Site Inspection Report dated April 1, 2021, which states the site was found in compliance. **Risk Rating:** Although the PD&E Manual states active gas stations should be assigned a medium risk rating, the location of the tank farm is approximately 500 feet southeast of the Interchange ROW. Given this significant separation distance and no reported discharges, this site was assigned a risk rating of Low.
5	**RACETRAC #2373** 2087 LPGA BLVD DAYTONA BEACH, FL 32124 FACILITY ID: 9815820	2020 CSER EDM	Adjoining LPGA ROW, approximately 60 feet southeast	Petroleum	**Medium**	**Land use:** During the site reconnaissance, the site was observed as an operating retail gas station. Minor petroleum stains were observed on the concrete near the pump islands, but these reflect *de minimis* conditions. No groundwater monitoring wells were observed onsite. **Contamination Concerns:** EDM's report (**Appendix B**) lists the site as a retail gas station with three 20,000-gallon USTs (two unleaded gasoline, and one vehicular diesel). No discharge was reported. This site was identified in a previous CSER report by FDOT District 5 dated August 2020. The report did not list any discharges and assigned the site a risk rating of Low. FDEP OCULUS files (**Appendix E**) provided a Storage Tank Facility Routine Compliance Site Inspection Report dated October 18, 2022, which states the site was not found in compliance. The facility was found in non-compliance due to lack of access to the dispenser sumps during the inspection. No contamination was noted in this report and the facility from October 2020 to August 2022 has passed tank operability/integrity tests. **Risk Rating:** Although no discharges have been reported at this site and minor non-compliance issues have occurred, the PD&E Manual states active gas stations should be assigned a Medium risk rating. The Low risk rating from the 2020 CSER was adjusted to **Medium**.

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
6	**BUC-EES #47** 2330 GATEWAY N DR DAYTONA BEACH, FL 32117 FACILITY ID: 9817837	2020 CSER EDM	Adjoining interchange ROW northeast	Petroleum	**Medium**	**Land use:** During the site reconnaissance, the site was observed as an operating retail gas station. Minor petroleum stains were observed on the concrete near the pump islands, but these reflect *de minimis* conditions. No groundwater monitoring wells were observed onsite. **Contamination Concerns:** EDM's report (**Appendix B**) lists the site as a retail gas station with six 40,000-gallon USTs (four ethanol E10 fuel, and two vehicular diesel), which have been in service since April 1, 2020 with no reported discharge. This site was identified in a previous CSER report by FDOT District 5 dated August 2020. The report stated the facility was still under construction and assigned a risk rating of Low. FDEP OCULUS files (**Appendix E**) provided a Storage Tank Facility Routine Compliance Site Inspection Report dated May 3, 2022, which states the site was found in compliance. **Risk Rating:** Although no discharges have been reported at this site, the PD&E Manual states active gas stations should be assigned a Medium risk rating. The low risk rating from the prior 2020 assessment was adjusted to **Medium**.
7	**7-ELEVEN FOOD STORE #32220** 2100 LPGA BLVD 32220 DAYTONA BEACH, FL 32117 FACILITY ID: 9701014	2020 CSER EDM	Adjoining LPGA ROW northwest	Petroleum	**Medium**	**Land use:** During the site reconnaissance, the site was observed as an active retail gas station. Three groundwater monitoring wells were observed onsite. Minor staining was observed on the concrete near the pump islands as well as a faint odor was present. **Contamination Concerns:** EDM's report (**Appendix B**) lists the site with six USTs during the site's history of operation. Four former 10,000-gallon USTs (three unleaded gasoline, one vehicular diesel) were onsite from September 1, 1997 to July 17, 2019. Two 20,000-gallon USTs (one ethanol E10, and one Bio-Diesel B20) were installed onsite on July 23, 2019. This site was identified in a previous CSER report by FDOT District 5 dated August 2020. Three discharges have been reported at this facility occurring in 2003 and 2005. The discharges were combined for the purposes of remediation work. Both the 2003 and 2005 discharges were issued an SRCO on December 3, 2010. The third discharge was reported July 2019 during tank removal activities where 1,358 tons of contaminated soil were removed from around the USTs and dispensers. Groundwater samples revealed petroleum contaminations in the tank excavation area, but additional assessment was not completed. The 2020 CSER assigned the site a risk rating of Medium. FDEP OCULUS files (**Appendix E**) provided a Contamination Assessment Addendum dated October 5, 2021 prepared by Aptim Environmental & Infrastructure, LLC (APTIM). The results of a July 27, 2021 groundwater sampling yielded no exceedances of the Groundwater Cleanup Target Levels (GCTLs) from groundwater monitoring wells located around the UST area. Depth to groundwater ranged from 5.34 to 5.72 feet below top of casing (btoc). Ground water flow was depicted to the northeast and flowing cross gradient to LPGA Boulevard on August 4, 2021. APTIM recommended the issuance of an NFA and SRCO. A Deliverable Review provided by the Alachua County Environmental Protection Department dated December 15, 2021 stated the site is unable to qualify for an NFA or SRCO. This site wasn't issued an NFA or SRCO due to the inability to collect groundwater samples from Temporary Monitoring Well TMW-1 (approximately 150 feet north of LPGA ROW). However, the Deliverable Review stated the site does appear to be a candidate for conditional closure under Risk Management Option II, where one year of monitoring data is required to qualify for a NFA with controls/conditions. **Risk Rating:** Given the site's status as an active retail gas station and in agreement with the 2020 CSER, the risk rating of **Medium** remains unchanged.

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
8	**LATITUDE MARGARITAVILLE** 2400 LPGA BOULEVARD DAYTONA BEACH, FL 32124	2020 CSER	Adjoining LPGA ROW northwest	N/A	No	**Land use:** During the site reconnaissance, the site was observed as a business sales center. No sources of contamination were observed onsite. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020, where it was determined the facility is a sales office for the Margaritaville residential development with no reported discharges or any indicators that suggest contamination. The 2020 CSER assigned the site a risk rating of Low. The site was not found in FDEP OCULUS, MapDirect, or EDM's files. **Risk Rating:** Given no discharges, no available regulatory information, no indicators of contamination, and despite the prior 2020 assessment issuing a risk rating of Low, the site was reassigned a risk rating of No.
9	**SHELTON TRUCKING SPILL SITE** I-95 NORTH AT LPGA BOULEVARD OVERPASS FACILITY ID: 2006-71-4244Z	2020 CSER	Within interchange eastbound ROW	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as the eastbound lane of LPGA Boulevard/I-95 interchange. No visible indicators of past petroleum contamination was noted at the presumed location of the spill. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020, where it was determined approximately 50 to 70-gallons of diesel fuel was discharged following a truck accident on January 3, 2006. Remediation documentation was submitted and approved for closure in September 2006.The 2020 CSER assigned the site a risk rating of Low. The site was not found in FDEP OCULUS, MapDirect, or EDM's files. **Risk Rating:** The risk rating of Low remains unchanged.
10	**DAYTONA BEACH AREA – AREO PARK BROWNFIELD** FACILITY ID: BF640401000	2020 CSER EDM map	Adjoining I-95 and LPGA ROW east	N/A	Low	**Land use:** During the site reconnaissance, the site was observed as the entire northeastern portion of the study area that begins after the LPGA Boulevard/I-95 interchange, and east of I-95. Present within the Brownfield area are strip malls, restaurants, storage facilities, offices, retail gas stations, and other businesses. A significant portion of the Brownfield area also remains undeveloped as woods and low wetted areas. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020. The Brownfield area appears to have been designated for economic development purposes and doesn't indicate specific contamination impacts within the project limits. The 2020 CSER assigned the site a risk rating of Low. **Risk Rating:** Given no specific contamination impacts were identified by this listing, the risk rating of Low remains unchanged.

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
11	**HISTORICAL RAILROAD**	2020 CSER Aerial photographs Topographic maps	Within interchange ROW and LPGA ROW	Arsenic Creosote Herbicides Pesticides PAHs	**Medium**	**Land use:** During the site reconnaissance, the site was observed as a grassy field with some low wetted areas adjoining to the north of Map ID 6 (Buc-EE's #47). No observable railroad grade, rails, ties, or associated items were observed onsite. Aerial photographs (**Appendix C**) depict the former Historical Railroad in 1943 bisecting the LPGA/I-95 interchange to the north and west, and again with LPGA Boulevard near the central portion of the study area until 1958. Portions of the railroad are no longer depicted in 1969. A portion of railroad was depicted to the northeast of I-95 in the general area of the interchange. Little to no changes were depicted from 1969 to 2003. From 2012 to 2021, ponded water/canal appears to be in the area of the former railroad. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020, where it was determined a former railroad that was oriented northeast/southwest bisected the study area crossing I-95 and LPGA Boulevard. This report noted that railroads are not sources of contamination, however the use of chemicals such as arsenic, creosote, Polynuclear Aromatic Hydrocarbons (PAHs), other inorganic constituents, pesticides, and herbicides are used for the preservation of railroad ties, and to keep vegetation off the tracks. The 2020 CSER assigned the site a risk rating of **Medium**. The site was not found in FDEP OCULUS, MapDirect, or EDM's files. **Risk Rating:** Given that no additional information was available to supplement the 2020 CSER findings, the risk rating of **Medium** remains unchanged.
12	**BIOLOGICAL CHECK STATION** TOMOKA RIVER AT LPGA BOULEVARD DAYTONA BEACH, FL FACILITY ID: 21FLA 27010924	2020 CSER	Adjoining LPGA ROW north	N/A	No	**Land use:** During the site reconnaissance, the site was observed as a low wetted area within the vicinity of the Tomoka River. Site access was not possible. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020. The site was identified using the FDEP's Impaired Waters database. The information provided on MapDirect at the Tomoka River and LPGA Boulevard intersection do not appear to be for this specific location. Several Storet, WIN monitoring stations and Impaired Water stations were listed at 11th Street Bridge, 11th Street Canal, and nearby Holly Hill. The 2020 CSER assigned the site a risk rating of Low. The site was not found in FDEP OCULUS, or EDM's files. **Risk Rating:** Given a lack of discharge, the Low risk rating from the 2020 CSER was adjusted to No.
13	**I-95 SPILL** I-95 SOUTH AT MM 264 WEST SIDE DAYTONA BEACH, FL FACILITY ID: 2016-71-56909Z	2020 CSER	Adjacent I-95 ROW approximately 110 feet west	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as a grassy area to the west of the southbound lane of I-95. No traffic control box was depicted on top of a concrete pad where the discharge occurred. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020, where it was determined approximately 150-gallons of diesel fuel was discharged on the west side of I-95 approximately one mile south of LPGA Boulevard on December 7, 2016. FDEP data indicated that the spill was remediated with approximately one yard of contaminated soil remaining under a traffic control box and concrete pad at this location. The 2020 CSER assigned the site a risk rating of Low. The site was not found in FDEP OCULUS, or EDM's files. **Risk Rating:** Given the separation distance of approximately 110 feet from the proposed northbound I-95 ROW, the risk rating of Low remains unchanged.

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
14	**POTENTIAL HISTORIC LANDFILL** NORTHWEST QUADRANT OF I-95	2020 CSER Google earth	Adjoining Interchange ROW west	Buried material	Low	**Land use:** Site access was not possible due to a fence. The site was observed as woods from a vantage point along the fence. Aerial Photographs (**Appendix C**) and Google Earth imagery depict the site as woods and undeveloped land from 1943 to 1958. From 1969 to 1976, the site was depicted as a roadway construction staging area with a borrow pit during the construction of I-95 and LPGA Boulevard. After 1976, the site was depicted as abandoned where vegetation growth has covered the area until 2022. Intermittent flooding and drying of the borrow pit has been depicted until 2022. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020, where it was depicted as disturbed/earthwork land from 1969 to 1976 aerial photographs. The site was disturbed during the time frame of roadway construction for LPGA Boulevard and I-95. A borrow pit was excavated immediately south of the property. It is possible that this site was used as an equipment/material staging during roadway construction. The 2020 CSER could not confirm landfill activity or buried debris and assigned the site a risk rating of Low. The site was not found in FDEP OCULUS, MapDirect, EDM's, or Volusia County Public Works website files. **Risk Rating:** Since no additional info was identified since the 2020 CSER, the risk rating of Low remains unchanged.
15	**PUBLIX SUPERMARKET #1664** 2630 LPGA BOULEVARD DAYTONA BEACH, FL 32124	Google earth	Adjoining LPGA ROW approximately 700 feet northwest	Petroleum	Low	**Land use:** During the site reconnaissance, the site was depicted as a Publix Super Market. An emergency generator was observed along the eastern wall towards the rear of the facility. Near it was an enclosure with no visible signage to indicate what was being stored inside of it. **Contamination Concerns:** This site was not identified in EDM's report or FDEP's STCM database. **Risk rating:** Given the location of the AST greater than approximately 710 feet from the ROW, this site was assigned a risk rating of Low.
16	**FATHER LOPEZ CATHOLIC HIGH SCHOOL** 3918 LPGA BOULEVARD DAYTONA BEACH, FL 32124	Google earth	Adjoining LPGA ROW west	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as a high school. A propane AST was observed in the southeastern portion of the site property using Google Earth imagery and is not considered a contamination issue. **Contamination Concerns:** This site was not identified in EDM's report or FDEP's STCM database. Typically, a diesel AST for an emergency generator is found on sites like this. No regulatory files have been found for the site. **Risk rating:** This site was assigned a risk rating of Low.

EDM Map ID	Site Information	Source	Distance from Study Area	Contaminants of Concern	Risk Rating	Comments
17	**PLANTED PINE TREES**	Aerial photographs Google earth	Adjoining LPGA Boulevard, Interchange ROW	Pesticides Herbicides	Low	**Land use:** During the site reconnaissance, planted pine trees were observed throughout the study area on both sides of the LPGA ROW near the southern and central portions where little to no development has occurred. Planted pine trees became less common near the northern portion of the study area near the LPGA/I-95 interchange, and towards the northeastern study area boundaries near Williamson Boulevard. **Contamination Concerns:** This site was not identified in EDM's report. According to the USEPAs *National Management Measures to Control Nonpoint Source Pollution from Forestry* (page 2-13) dated April 2005: *Fertilizers, herbicides, and pesticides are used to prepare a site for regeneration and to protect forests from disease and pests. Adverse effects on water quality due to forest chemical applications typically result from not following the specific application instructions for the chemical being used, such as specifications for the quantity to apply and the distance to maintain around watercourses (Norris and Moore, 1971). Generally, the water quality and aquatic biota threats due to fertilizers, herbicides, and pesticides are small because the chemicals are applied at most only one to three times at a harvest site and they specifically target biochemical pathways present only in plants, rendering them of little danger to aquatic animals. Furthermore, the half-lives of forestry herbicides are on the order of less than 100 days.* **Risk rating:** Given the half-life of chemicals used for preservation, this site was assigned a risk rating of Low.
18	**DAYTONA DODGE** 1520 NORTH TOMOKA FARMS ROAD DAYTONA BEACH, FL 32124 FACILITY ID: FLR00090894	2020 CSER	Adjoining interchange ROW southwest	Petroleum	Low	**Land use:** During the site reconnaissance, the site was observed as an operational car dealership. Majority of this site resides outside the 500 foot buffer for the study area. No car maintenance areas were observed onsite. Typically, these areas are at the back of the facility. **Contamination Concerns:** This site was identified in a previous CSER report by FDOT District 5 dated August 2020, where a small quantity hazardous material generator is listed. There were no reported discharges, compliance violations, or obvious evidence of contamination impacts observed. The 2020 CSER assigned the site a risk rating of Low. The site was not found in FDEP OCULUS, or EDM's files. **Risk rating:** The risk rating of Low remains unchanged.

9.0 Conclusions and Recommendations

9.1 Conclusions

Based on this contamination screening evaluation, a total of 21 contamination sites were identified within the project limits. The following table presents a summary of the risk ratings assigned for each contamination site/facility:

Table 3 | Summary of Risk Ratings

High	Medium	Low	No
0	4	15	2

9.2 Recommendations

Based on the conclusions of this study and the risk ratings noted above, the following recommendations are made.

- Additional information may become available or site-specific conditions may change from the time this report was prepared and should be considered prior to acquiring ROW and/or proceeding with roadway construction. If the preferred alignment changes, and/or new potential contamination sites are identified, this report should be revised and updated to reflect those changes. Drainage sites will be evaluated for this PD&E Study and presented under a separate cover.
- For the locations rated No or Low for contamination, no further action is required. These locations have been determined not to have any contamination risk to the study area at this time.
- Three Medium rated petroleum related contamination sites (Site 5, 6, and 7) are active retail gasoline stations. These sites were assigned a risk rating of Medium in accordance with Chapter 20 of the PD&E Manual. No other contamination concerns were noted and therefore Level II testing does not appear warranted. Although testing is not recommended at this time, a file review should be performed just prior to construction to verify regulatory status. As operational gasoline stations, discharges are always a possibility and therefore should be verified subsequent to publication of this report. Any newly reported discharges should be evaluated with field testing to determine impact to the project.
- Level II testing, if deemed appropriate by the District Contamination Impact Coordinator, is recommended for the following site:
    - Site 11- Historical Railroad (Medium risk rating): soil and groundwater analytical testing may include Polynuclear Aromatic Hydrocarbons by EPA Method 8270, RCRA 8 Metals by EPA Method 6010/7471 (including arsenic), Pesticides by

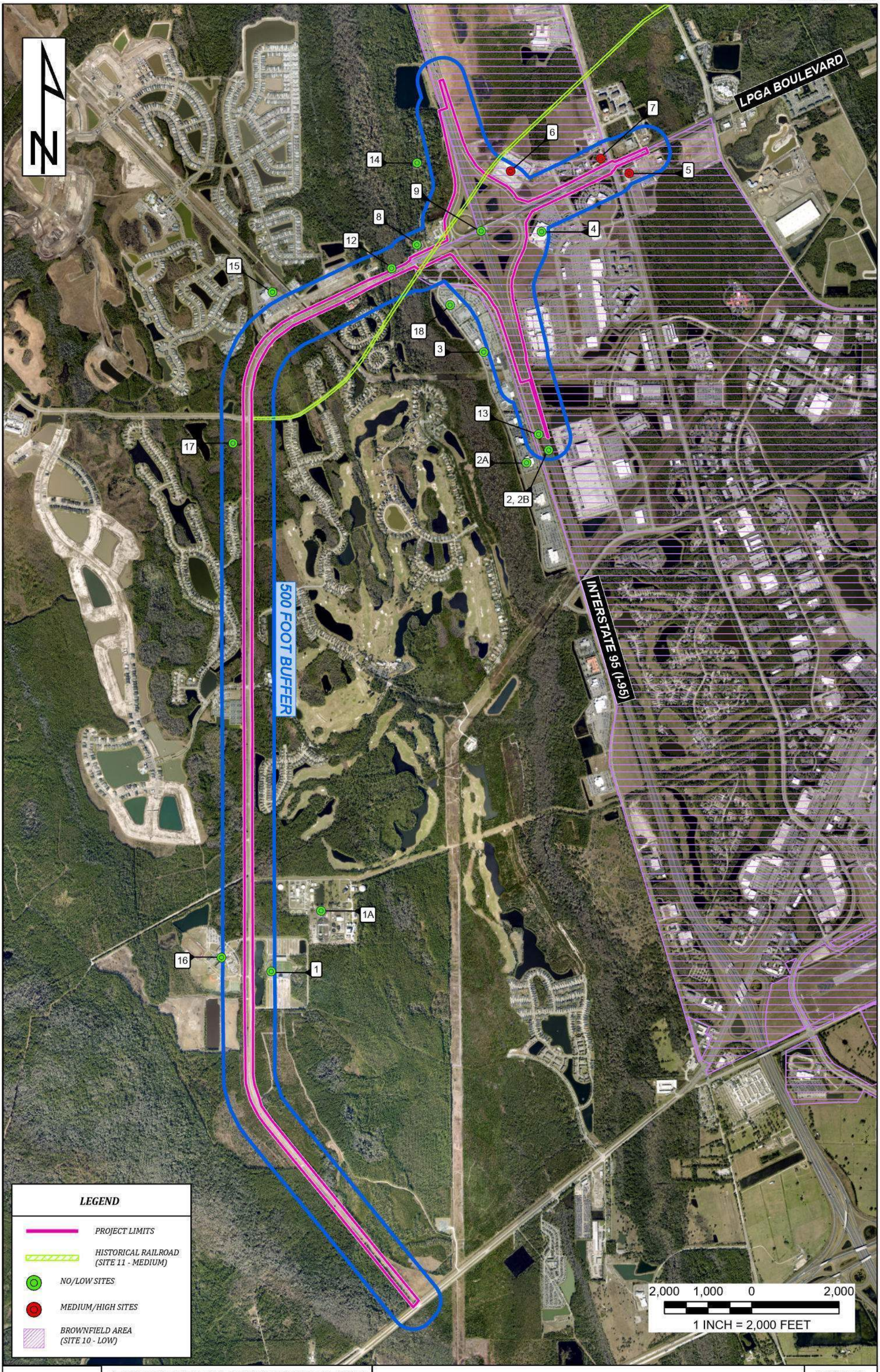
EPA Method 8081, and Herbicides by EPA Method 8151. Detections above the regulatory standard may require additional samples for delineation purposes.

- Once final design plans are available, additional review is recommended in consideration of dewatering operations that may be necessary under the *National Pollutant Discharge Elimination System Generic Permit for Stormwater Discharges from Large and Small Construction Activities*. Verification testing may be warranted for contamination issues within 500 feet of the dewatering area.

- Additional Considerations: In accordance with PD&E Manual, Part 2, Chapter 20, Section 20.2.2.2, projects which involve existing bridges, building structures, and possibly existing or abandoned utilities which will be moved or demolished may need surveys or screenings for Asbestos Containing Materials, Lead-Based Paint, and/or other Metal-Based Coatings. Such testing should be considered for the following structures:
    - Bridge No. 0171 and
    - Bridge No. 4038.

Appendix A Contamination Site Map

SOURCE: ARCGIS PRO 2023



	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			CONTAMINATION SITE MAP	SHEET NO.
TIERRA GEOTECHNICAL • MATERIALS ENVIRONMENTAL • ENGINEERING	TIERRA PROJECT NO.	COUNTY	FINANCIAL PROJECT ID	LPGA BOULEVARD FROM US 92 (SR 600) TO WILLIAMSON BOULEVARD PD&E STUDY	1
	5511-21-038E	VOLUSIA COUNTY	448456-1-22-01		

Appendix B EDM's Report

Environmental Data Report

500 Feet Radius Research

Subject Property:

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Prepared For:

Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Prepared By:

Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770

January 29, 2023

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January 29, 2023

Collin Duncan
Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Subject: **500 Feet Radius Research - EDM Project #26393**

Dear Mr. Duncan

Thank you for choosing Environmental Data Management, Inc. The following report provides the results of our environmental data research that you requested for the following location:

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

The following is a summary of the components contained within this report:

- **Executive Summary** –lists the databases that were searched for this report, the search distance criteria and the number of sites identified for each database.
- **Map of Study Area**– street map showing the location of the Subject Property and any regulatory listed sites identified within the search criteria.
- **Site Summary Table** –displays the Map ID number, Permit or Registration number, Name/Address and the Government Database(s) for the identified regulatory listed sites.
- **Detail Reports** – data detail for each database record identified.
- **Proximal Records Table** – a listing of potentially relevant sites identified just beyond the search criteria.
- **Non-Mapped Records Table** - lists those government records that do not contain sufficient address information to plot within our GIS system, but may still exist within your study area.
- **Addl Maps (where applicable)** – includes Recent Aerial Photo, USGS Topographic maps, FEMA Floodplain & NWI Wetland Map, map of statewide American Indian Lands and our Environmental Impact Areas map, showing the location of suspect sites such as NPL/STNPL, Brownfields, FUDS, etc.... Our Florida well data report is also include with the Standard and Comprehensive formats.
- **Agency List Descriptions –** defines the regulatory databases included in this report along with the dates that each database was last updated by the respective agency and EDM.

At EDM we take great pride in our work, and continually strive to provide you with the most accurate and thorough research service available. This report is only intended as a means to assist in identifying locations that may pose an environmental concern relative to the property under evaluation. Its use is not intended to replace the need for a complete environmental assessment or regulatory file review, but rather as a supplement to the overall evaluation.

Thank you again for selecting EDM as your data research provider. Should you have any questions regarding this report or our service, please feel free to contact us. We appreciate the opportunity to be of service to you and look forward to working with you in the future.

ENVIRONMENTAL DATA MANAGEMENT, INC.

Executive Summary

Report Date: 1/29/2023

Client Information	Project Information
Tierra Inc 7351 Temple Terrace Hwy Tampa, FL 33637 Client Job No: 448456-1-22-01 Client P.O. No:	500 Feet Radius Research LPGA Boulevard from US 92 (SR 600) to Williamson Boulvevard PD&E Study Volusia County, Florida EDM Job No# 26393

The following table displays the databases that were included in the research provided and the number of records identified for each database. Site distance values indicated in this report are measured from the boundary of the Subject Property. The absence of records in this table and the Site Summary Tables indicates that our research found no regulated sites within the specified search distances from the Subject Property.

AGENCY DATABASES RESEARCHED	Total # Found
EPA DATABASES	
National Priorities List(NPL)	0
SEMS Active Site Inventory List(SEMSACTV)	0
Comp Env Resp, Compensation & Liability Info Sys List(CERCLIS)	0
SEMS Archived Site Inventory List(SEMSARCH)	0
Archived Cerclis Sites(NFRAP)	0
RCRIS Handlers with Corrective Action(CORRACTS)	0
Tribal Tanks List(TRIBLTANKS)	0
Tribal Lust List(TRIBLLUST)	0
Brownfields Management System(USBRWNFLDS)	0
Institutional and/or Engineering Controls(USINSTENG)	0
NPL Liens List(NPLLIENS)	0
RCRA-Treatment, Storage and/or Disposal Sites(TSD)	0

*** Disclaimer ***
Please understand that the regulatory databases we utilize were not originally intended for our use, but rather for the source agency's internal tracking of sites for which they have jurisdiction or other interest. As a result of this difference in intended use, their data is frequently found to be incomplete or inaccurate, and is less than ideal for our use. Our report is not to be relied upon for any purpose other than to "point" at approximate locations where further evaluation may be warranted. No conclusion can be based solely upon our report. Rather, our report should be used as a first step in directing your attention at potential problem areas, which should be followed up by site inspections, interviews with relevant personnel, regulatory file review and other means as specified in the ASTM Standard E 1527-13. Readers proceed at their own risk in relying upon this data, in whole or in part, for use within any evaluation. More detailed language with regard to such limitations and our Terms and Conditions may be found on our website at edm-net.com.

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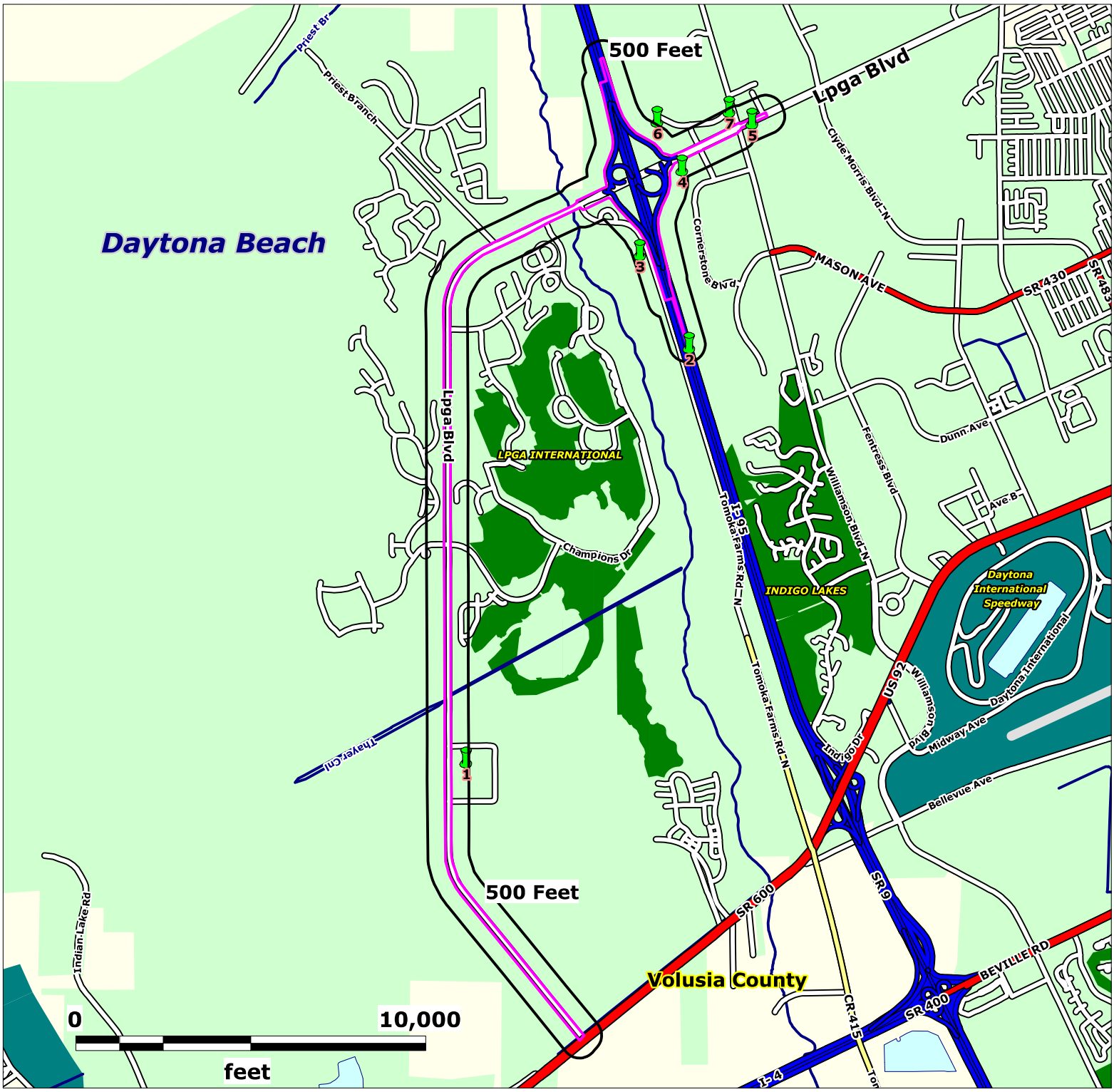
AGENCY DATABASES RESEARCHED	Total # Found
FDEP DATABASES	
State NPL Equivalent(STNPL)	0
State CERCLIS/SEMS Equivalent(STCERC)	3
Solid Waste Facilities List_Landfills(SLDWST_LF)	0
Leaking Underground Storage Tanks List(LUST)	2
Underground/Aboveground Storage Tanks(TANKS)	8
State Designated Brownfields(BRWNFLDS)	0
Voluntary Cleanup List(VOLCLNUP)	0
Institutional and/or Engineering Controls(INSTENG)	0
Dry Cleaners List(DRY)	0

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500 Feet Radius Research Report
Street Map



Source: US Census Bureau TIGER Files

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

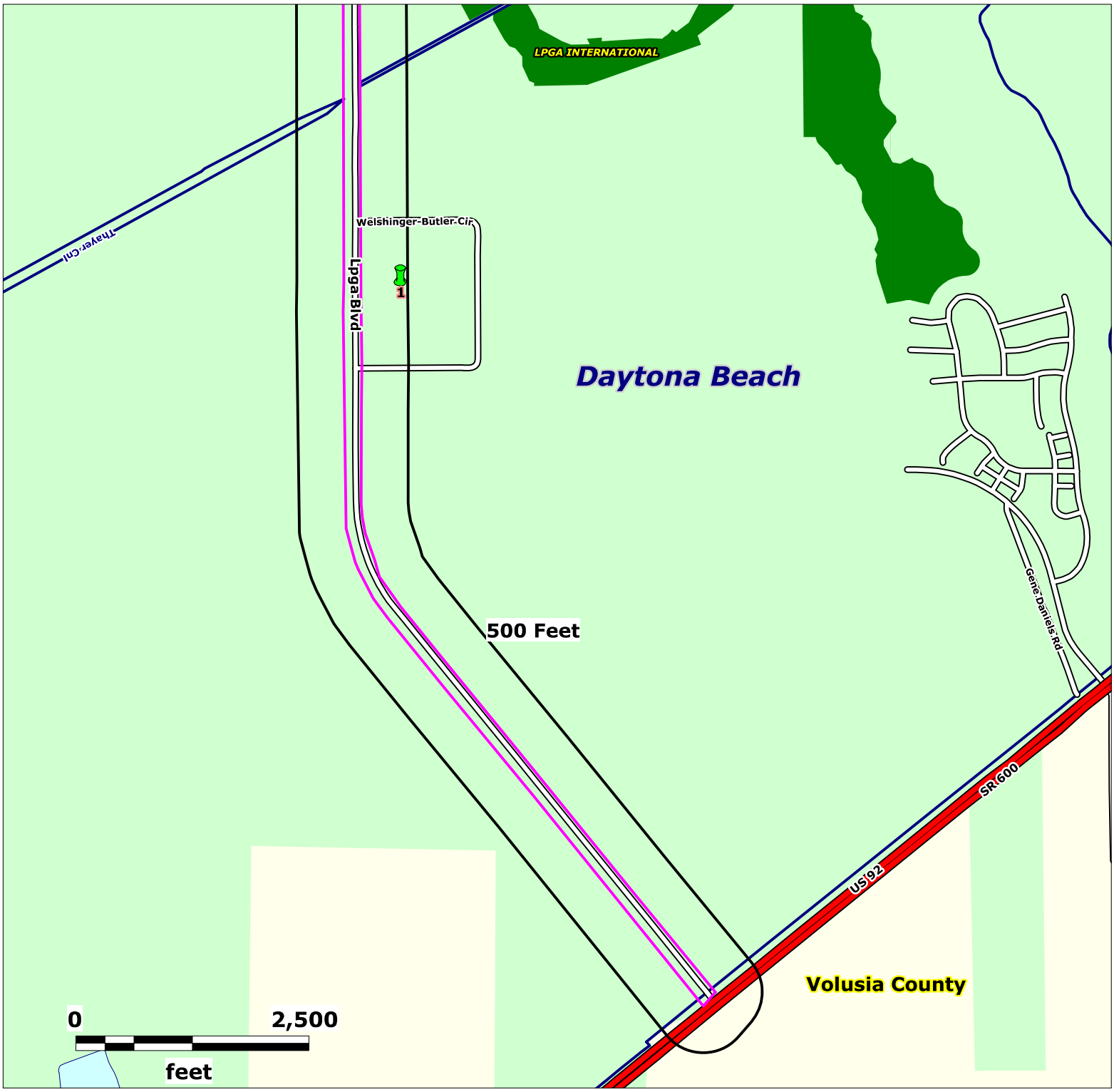
Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

500 Feet Radius Research Report
Street Map



Source: US Census Bureau TIGER Files

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

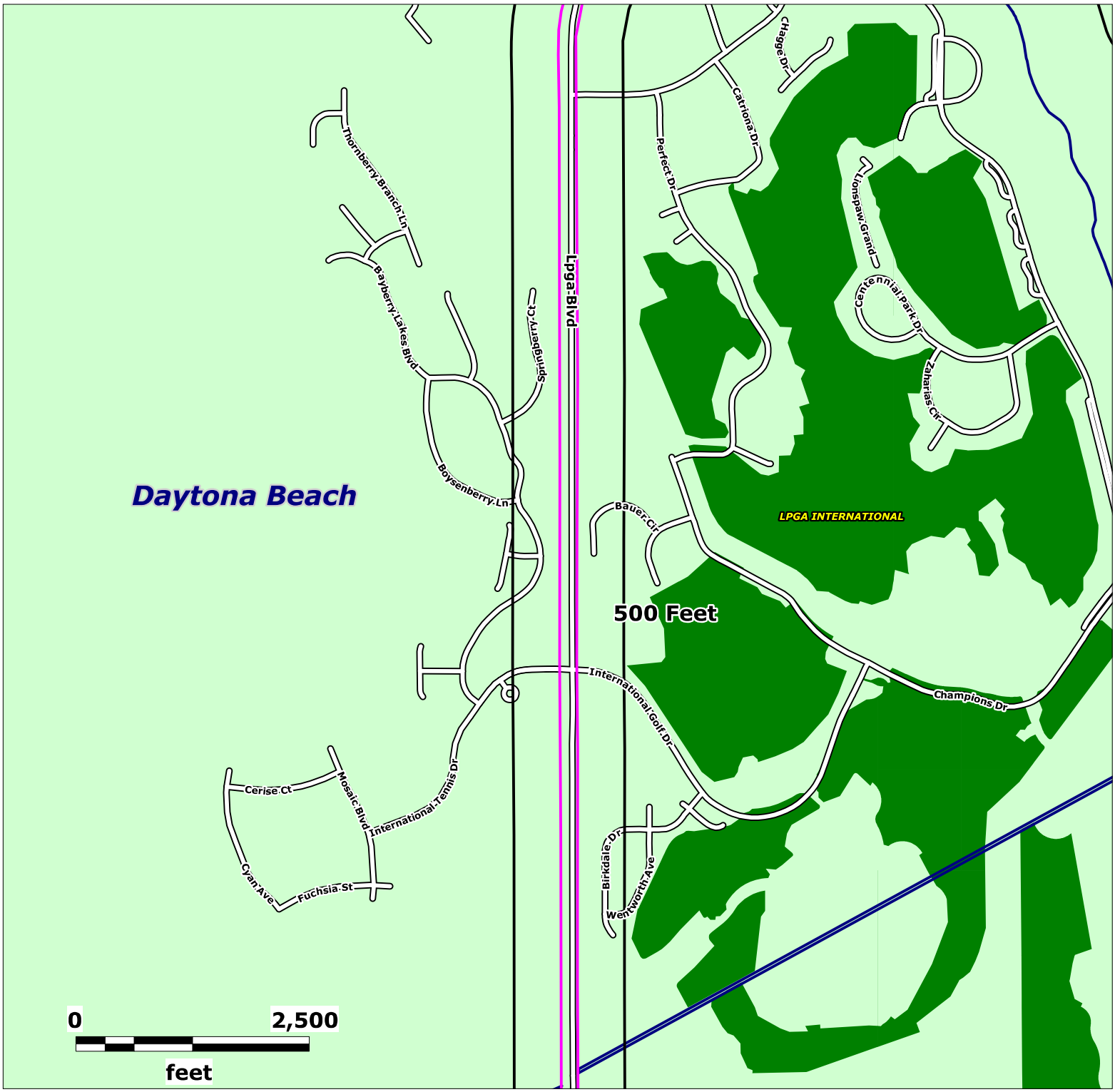
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Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

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Street Map



Source: US Census Bureau TIGER Files

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

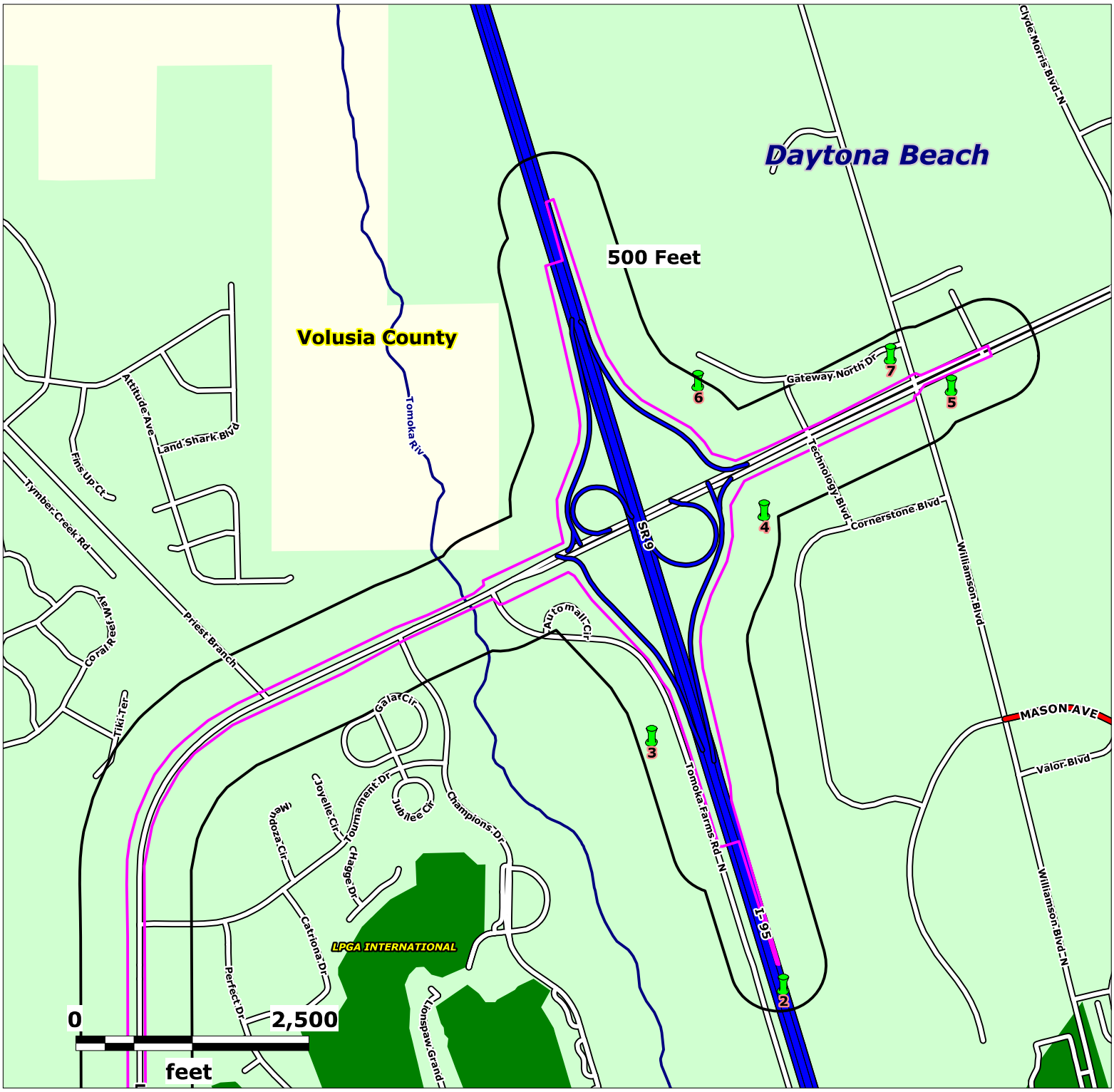
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EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

500 Feet Radius Research Report
Street Map



Source: US Census Bureau TIGER Files

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

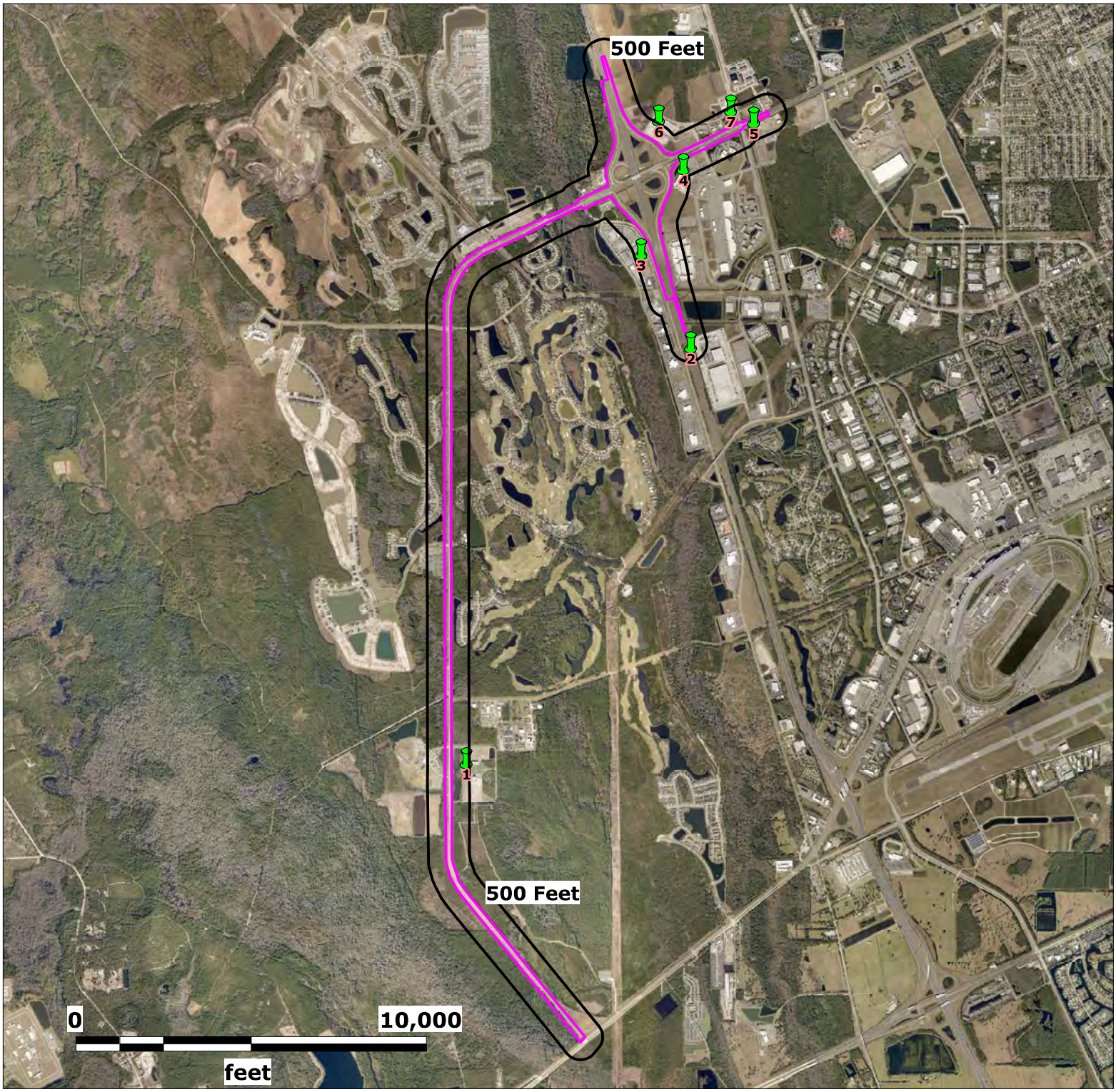
Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

500 Feet Radius Research Report
2021 Aerial Photo



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

500 Feet Radius Research Report
2021 Aerial Photo



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

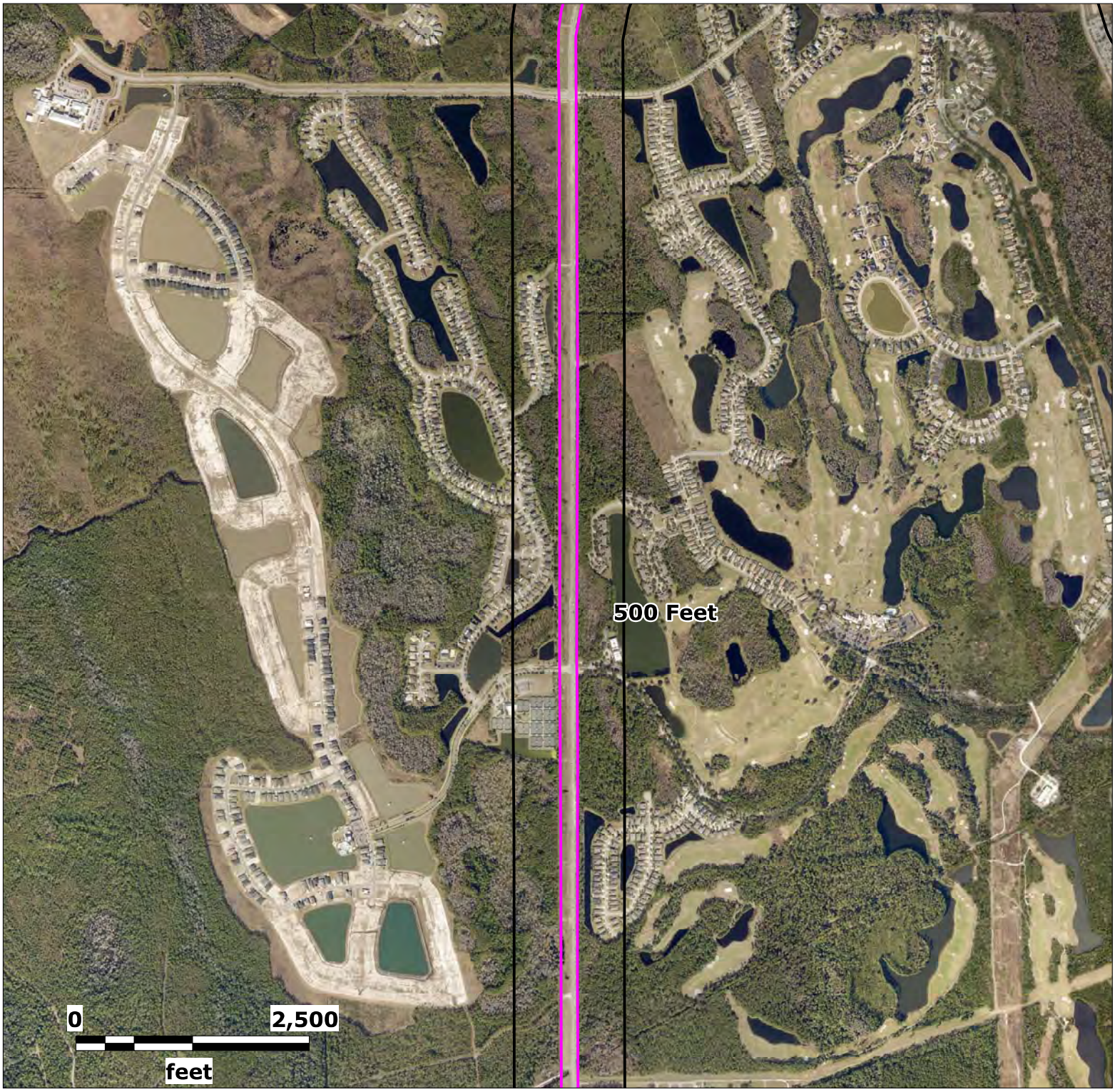
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Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

500 Feet Radius Research Report
2021 Aerial Photo



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

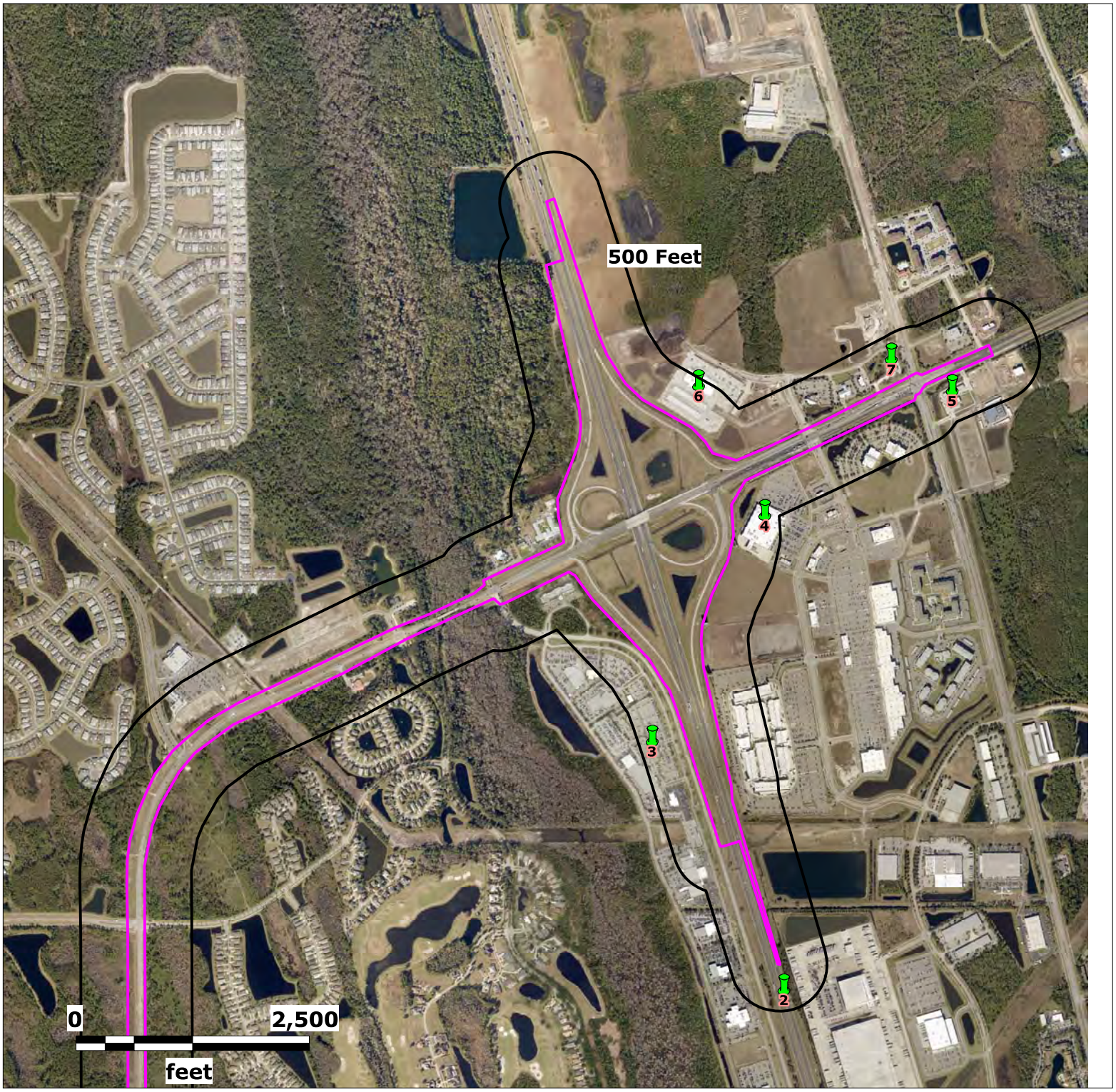
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Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

500 Feet Radius Research Report
2021 Aerial Photo



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

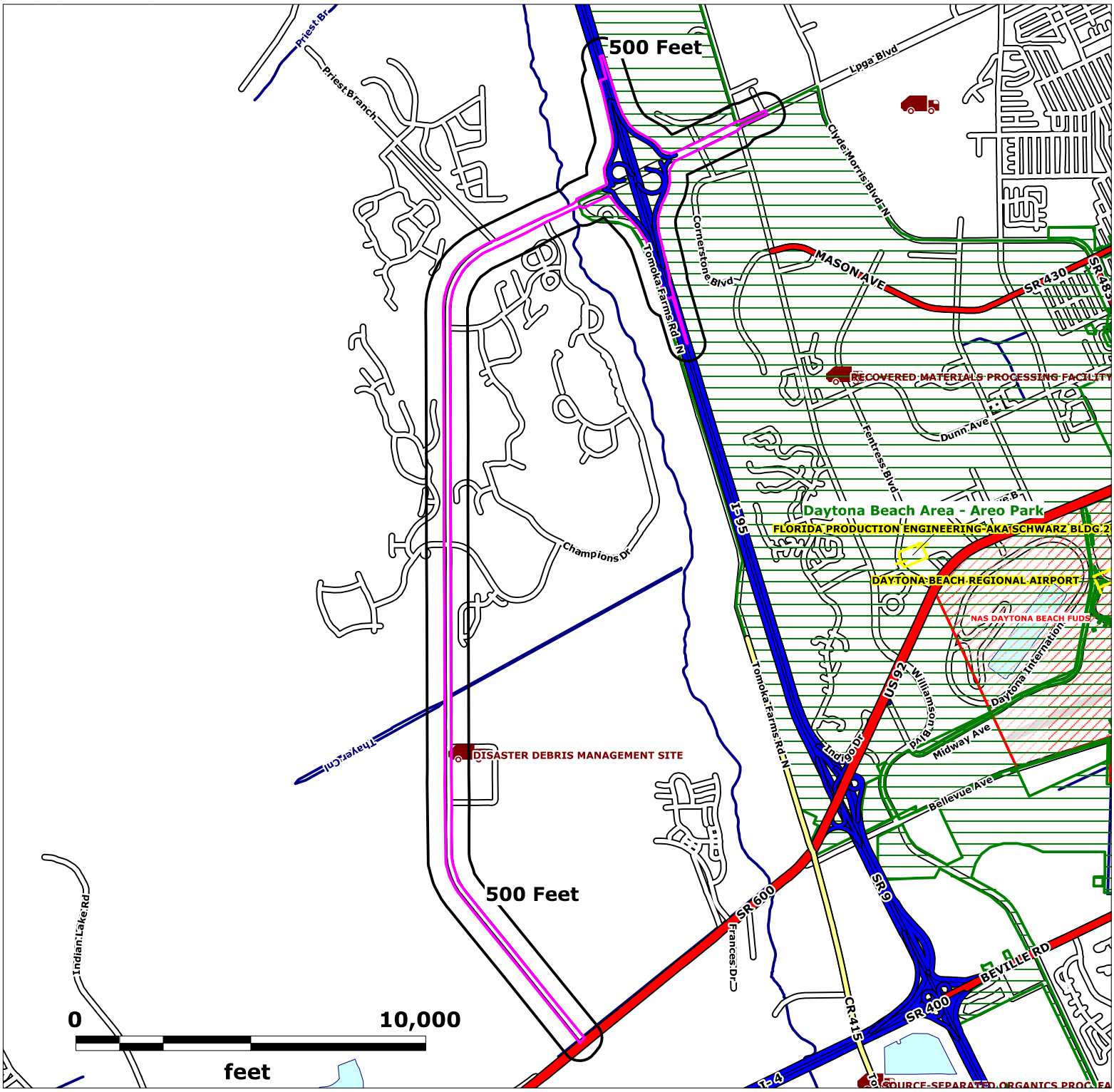
Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

500 Feet Radius Research Report
Environmental Impact Areas Map



Source: FDEP and USEPA Geodata

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600) to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

- FDEP Brownfield Areas
- FDEP Brownfield Sites
- USEPA NPL & FDEP STNPL Sites
- FDEP Delineated GW Contamination
- Formerly Used Defense Sites FUDS
- FUDS Munitions Response Areas
- FDEP Cattle Dipping Vat
- FDEP Solid Waste Sites
- Approximate Site Boundary
- Institutional Controls

ENVIRONMENTAL DATA MANAGEMENT

500 Feet Radius Research

Site Summary Table

Report Date: 1/29/2023

MapID / Prgm List	Fac ID No	Site Dist (mi)	Site Elev (ft)	Elev vs Sub Prop	Site Name	Site Address
1						
STCERC	5662	0.08	30.45	Higher	Daytona Beach Stadium Site Part A-1900	LPGA Boulevard Daytona Beach, FL 32114
STCERC	ERIC_5662	0.08	30.45	Higher	Daytona Beach Stadium Site Part A-1900	LPGA Boulevard Daytona Beach, FL 32114
2						
LUST	9802706	0.07	25.05	Higher	GAINEY TRANSPORT TRUCK SPILL	I-95 NORTH AT MM 264 DAYTONA BEACH, FL 32114
TANKS	9802706	0.07	25.05	Higher	GAINEY TRANSPORT TRUCK SPILL	I-95 NORTH AT MM 264 DAYTONA BEACH, FL 32114
TANKS	9815385	0.07	25.05	Higher	TRIPLE R TRANSPORT CORP	I-95 NORTBOUND MEDIAN MM 264 DAYTONA BEACH, FL 32114
3						
TANKS	9804441	0.07	21.75	Higher	GARY YEOMANS FORD	1420 TOMOKA FARMS RD DAYTONA BEACH, FL 32124
TANKS	9805402	0.07	21.75	Higher	DAYTONA NISSAN	1420 TOMOKA FARMS RD DAYTONA BEACH, FL 32124
4						
TANKS	9816708	0.07	27.07	Higher	SAMS CLUB #8138	1460 CORNERSTONE BLVD DAYTONA BEACH, FL 32114
5						
TANKS	9815820	0.05	29.97	Higher	RACETRAC #2373	2087 LPGA BLVD DAYTONA BEACH, FL 32124
6						
TANKS	9817837	0.07	0.00	-	BUC-EES #47	2330 GATEWAY N DR DAYTONA BEACH, FL 32117
7						
LUST	9701014	0.03	26.27	Higher	7-ELEVEN FOOD STORE #32220	2100 LPGA BLVD DAYTONA BEACH, FL 321177139
STCERC	9701014	0.03	26.27	Higher	7-ELEVEN FOOD STORE #32220	2100 LPGA BLVD DAYTONA BEACH, FL 321177139
TANKS	9701014	0.03	26.27	Higher	7-ELEVEN FOOD STORE #32220	2100 LPGA BLVD DAYTONA BEACH, FL 32117

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FDEP SITE INVESTIGATION SECTION SITES, FDEP ERIC WASTE CLEANUP SITES, FDEP CLEANUP SITES AND FDER SITES LIST

(STCERC)

FACILITY NAME AND LOCATION:

Daytona Beach Stadium Site Part A-1900
LPGA Boulevard
Daytona Beach, FL 32114

AGENCY SITE LAT/LON:
29.173616612963
-81.11750305398

MAP ID NUMBER: 1
Dist (Miles): 0.08
Direction:
Elev (Ft): 30.45
Elev vs Sub Prop: Higher

STCERC

FDEP INFORMATION PORTAL ON LINE DOCUMENTS (May Not Be Available For All Records)

SITE INVESTIGATION SECTION INFO:
SITE NO: 5662
ALT SITE NO: ERIC_5662
DISTRICT: CD

FDER SITES LIST INFO:
SITE NO:
LEAD UNIT:
PRJ MGR:
ATTY:
SUP UNIT:
STATUS:
STATUS DATE:

CLEANUP SITES INFO:
SRC DATA ID:
SRC DATA PGM:
PGM AREA:
CLNP CAT:
REM STATUS:
COMMENTS:

ERIC WASTE CLEANUP SITES INFO:
SRC FAC ID:

ERIC ID NO:
SRC FAC NAME:

SITE NAME:
SITE STATUS:

PROGRAM:
PROGRAM STATUS:
OFFSITE COMTAM KEY:

PROGRAM TYPE:
SITE PHASE DESCR:
ICR ?:

DISCHARGE DATE:

FACILITY NAME AND LOCATION:

Daytona Beach Stadium Site Part A-1900
LPGA Boulevard
Daytona Beach, FL 32114

AGENCY SITE LAT/LON:
29.173616612578
-81.11750305363

MAP ID NUMBER: 1
Dist (Miles): 0.08
Direction:
Elev (Ft): 30.45
Elev vs Sub Prop: Higher

STCERC

FDEP INFORMATION PORTAL ON LINE DOCUMENTS (May Not Be Available For All Records)

SITE INVESTIGATION SECTION INFO:
SITE NO:
ALT SITE NO:
DISTRICT: CD

FDER SITES LIST INFO:
SITE NO:
LEAD UNIT:
PRJ MGR:
ATTY:
SUP UNIT:
STATUS:
STATUS DATE:

CLEANUP SITES INFO:
SRC DATA ID:
SRC DATA PGM:
PGM AREA:
CLNP CAT:
REM STATUS:
COMMENTS:

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FDEP SITE INVESTIGATION SECTION SITES, FDEP ERIC WASTE CLEANUP SITES, FDEP CLEANUP SITES AND FDER SITES LIST

(STCERC)

ERIC WASTE CLEANUP SITES INFO:

ERIC ID NO: ERIC_5662

SITE NAME: Daytona Beach Stadium Site Part A-1900

SRC FAC ID: 29593

SRC FAC NAME: LPGA South Golf Course

SITE STATUS: CLOSED

PROGRAM: Site Investigation Section

PROGRAM TYPE: SIS

DISCHARGE DATE:

PROGRAM STATUS: COMPLETE

SITE PHASE DESCR: Phase 0 - Discovery

OFFSITE COMTAM KEY: CONTAMUNKNOWN

ICR ?: N

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FDEP LEAKING UNDERGROUND STORAGE TANKS REPORT

(LUST)

FACILITY ID NUMBER, NAME AND LOCATION

9802706
GAINEY TRANSPORT TRUCK SPILL
I-95 NORTH AT MM 264
DAYTONA BEACH, FL 32114-

FDEP INFORMATION PORTAL ON LINE DOCUMENTS (May Not Be Available For All Records)

OWNERSHIP INFO:

CU RESPONSIBLE PARTY
GAINEY TRANSPORT
6000 CLAY AVENUE
GRAND RAPIDS, MI 49548-

COUNTY ID: 64 VOLUSIA
AGCY LAT/LON(DMS): 29,12,12.1475 81,5,49.2274
FAC OPERATOR: CRAIG PREBB
FAC TEL #:

MAP ID NUMBER: 2

Dist (Miles): 0.07
Direction:
Elev (Ft): 25.05
Elev vs Sub Prop: Higher

LUST

FAC STATUS: CLOSED **FAC TYPE:** Q - Emergency Response Spill Site

SCORE **SCORE EFF DT:** **RANK:** **SCORE WHEN RANKED:**

DISCHARGE INFORMATION

Mapid: 2

DISCHARGE DATE: 10/21/1999

INSPECTION DATE:
CLEANUP WORK STATUS: COMPLETED
CLEANUP REQUIRED R - CLEANUP REQUIRED
CLEANUP COMBINED:
INFO SOURCE: D - DISCHARGE NOTIFICATION
DISCH CLNUP STATUS: 1/23/2001 NFA - NFA COMPLETE
CONTAMINATED MEDIA?: **SOIL:** Y **SUR WATER:** **GR WATER:** **MON WELL:** **# DW WELLS CONTAMINATED:**
POLLUTANT : D - Vehicular Diesel **GALLONS** 100 **OTHER**

CLEANUP INFORMATION

Mapid: 2

PGM ELIG OFF:
PGM ELIG SCORE: **PGM ELIG SCORE EFF DT:** **PGM ELIG R**
ELIG STAT: **ELIG STAT DT:** **APPL RCVD:** **LOI:** **ELIG LTR SNT:** **REDETERM:**
DEDUCT AMT: **DEDUCT PD TO DT:** **COPAY AMT:** **COPAY TO DT:** **CAP AMT:**
CLNUP PROG: **CLNUP OFF:** PCLP64 - VOLUSIA COUNTY DIVISION OF ENVIRONMENTAL MGMT

SITE ASSESSMENT*

CLNP RESP: -
FUND ELLIG: -
ACTUAL COMPLETION DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION PLAN*

CLEANUP RESP: -
FUND ELLIG: -
ORDER APPRV DATE:
ACTUAL COMPL DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION*

CLEANUP RESP: -
FUND ELLIG: -
ACTUAL COST:
YEARS TO COMPL: 0

SITE REHABILITATION COMPLETION REPORT*

ACTION TYPE: NFA - NO FURTHER ACTION
SUBMIT DATE: 01-03-2001
REVIEW DATE: 01-08-2001
ISSUE DATE: 01-23-2001
COMPL STATUS: A - APPROVED
COMPL STATUS DT: 01-09-2001
COMMENTS:

SOURCE REMOVAL*

CLEANUP RESP: RP - RESPONSIBLE PARTY
FUND ELLIG: -
ACTUAL COMPLETION DATE:
FREE PRODUCT REMOVAL?(Y/N):
SOIL REMOVAL? (Y/N):
SOIL TONNAGE REMOVED:
SOIL TREATMENT?(Y/N):
OTHER TREATMENT?:
ALT PROC STATUS:
ALT PROC STATUS DT:
ALT PROC COMMENT:

*** Data current as of November 2019**

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FDEP LEAKING UNDERGROUND STORAGE TANKS REPORT

(LUST)

TANKS Data for LUST Sites:

FACILITY ID NUMBER, NAME AND LOCATION

9802706
GAINEY TRANSPORT TRUCK SPILL
I-95 NORTH AT MM 264
DAYTONA BEACH, FL 32114

OWNERSHIP INFORMATION

,
CONTACT TEL #:
CONTACT:
FACILTY TEL #:
COUNTY ID: 64 VOLUSIA

MAP ID NUMBER: 2
Dist (Miles): 0.07
Direction:
Elev (Ft): 25.05
Elev vs Sub Prop: Higher

TANKS

FDEP INFORMATION PORTAL ON LINE DOCUMENTS (May Not Be Available For All Records)

FAC STATUS: CLOSED **FAC TYPE:** Emergency Response Spill Site

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)

CONSTRUCTION TYPE:
PIPING TYPE:
LEAK MONITORING:

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FDEP STORAGE TANKS REPORT

Report Date: 1/29/2023

(TANKS)

FACILITY ID NUMBER, NAME AND LOCATION

9815385
TRIPLE R TRANSPORT CORP
I-95 NORTBOUND MEDIAN MM 264
DAYTONA BEACH, FL 32114

OWNERSHIP INFORMATION

,
CONTACT: /
SITE COUNTY: 64 VOLUSIA
SITE LAT/LON (AGCY): /

MAP ID NUMBER: 2

Dist (Miles): 0.07
Direction:
Elev (Ft): 25.05
Elev vs Sub Prop: Higher

TANKS

FDEP INFORMATION PORTAL ON LINE DOCUMENTS **(May Not Be Available For All Records)**

FAC STATUS: CLOSED **FAC TYPE:** Emergency Response Spill Site

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)

CONSTRUCTION TYPE:
PIPING TYPE:
LEAK MONITORING:

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FDEP STORAGE TANKS REPORT

Report Date: 1/29/2023

(TANKS)

FACILITY ID NUMBER, NAME AND LOCATION

9804441
GARY YEOMANS FORD
1420 TOMOKA FARMS RD
DAYTONA BEACH, FL 32124

OWNERSHIP INFORMATION

GARY YEOMANS FORD
1420 N TOMOKA FARMS RD ATTN: GA
DAYTONA BEACH, FL 32124
CONTACT: GARY YEOMANS/3864518852

SITE COUNTY: 64 VOLUSIA
SITE LAT/LON (AGCY): 29 12 44 / 81 6 13

MAP ID NUMBER: 3

Dist (Miles): 0.07
Direction:
Elev (Ft): 21.75
Elev vs Sub Prop: Higher

TANKS

FDEP INFORMATION PORTAL ON LINE DOCUMENTS **(May Not Be Available For All Records)**

FAC STATUS: OPEN **FAC TYPE:** Fuel user/Non-retail

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
1	4000	01-Nov-2001	Unleaded Gas	ABOVEGROUND	IN SERVICE 01-Nov-2001

CONSTRUCTION TYPE: CI STEEL/DOUBLE WALL

PIPING TYPE: ABC ABV, NO SOIL CONTACT/STEEL/GALVANIZED METAL/FIBERGLASS

LEAK MONITORING: Q VISUAL INSPECTION OF ASTS

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FDEP STORAGE TANKS REPORT

Report Date: 1/29/2023

(TANKS)

FACILITY ID NUMBER, NAME AND LOCATION

9805402
DAYTONA NISSAN
1420 TOMOKA FARMS RD
DAYTONA BEACH, FL 32124

OWNERSHIP INFORMATION

BONDESEN HARDY NISSAN INC
950 N TOMOKA FARMS RD ATTN: STO
DAYTONA BEACH, FL 32124
CONTACT: NANCY GIBERSON (AP) | GAR/38648113

SITE COUNTY: 64 VOLUSIA
SITE LAT/LON (AGCY): /

MAP ID NUMBER: 3

Dist (Miles): 0.07
Direction:
Elev (Ft): 21.75
Elev vs Sub Prop: Higher

TANKS

FDEP INFORMATION PORTAL ON LINE DOCUMENTS **(May Not Be Available For All Records)**

FAC STATUS: CLOSED **FAC TYPE:** Fuel user/Non-retail

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
1	1000	01-May-2002	Unleaded Gas	ABOVEGROUND	REMOVED FROM SITE 01-May-2015

CONSTRUCTION TYPE: CIMN STEEL/DOUBLE WALL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF

PIPING TYPE: ABIK ABV, NO SOIL CONTACT/STEEL/GALVANIZED METAL/SUCTION PIPING SYSTEM/DISPENSER LINERS

LEAK MONITORING: QV VISUAL INSPECTION OF ASTS/SUCTION PUMP CHECK VALVE

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FDEP STORAGE TANKS REPORT

Report Date: 1/29/2023

(TANKS)

FACILITY ID NUMBER, NAME AND LOCATION

9816708
SAMS CLUB #8138
1460 CORNERSTONE BLVD
DAYTONA BEACH, FL 32114

OWNERSHIP INFORMATION

SAMS EAST INC C/O APTIM
8725 ROSEHILL RD #450 ATTN: LIC
LENEXA, KS 66215
CONTACT: CHRISTINE TIMS/ COMPLIANC/87782955

SITE COUNTY: 64 VOLUSIA
SITE LAT/LON (AGCY): /

MAP ID NUMBER: 4

Dist (Miles): 0.07
Direction:
Elev (Ft): 27.07
Elev vs Sub Prop: Higher

TANKS

FDEP INFORMATION PORTAL ON LINE DOCUMENTS **(May Not Be Available For All Records)**

FAC STATUS: OPEN **FAC TYPE:** Retail Station

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
1	20000	01-Jan-2019	Ethanol E10	UNDERGROUND	IN SERVICE 01-Jan-2019

CONSTRUCTION TYPE:	EIMNP	FIBERGLASS/DOUBLE WALL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/LEVEL GAUGES/ALARMS
PIPING TYPE:	FJN	DOUBLE WALL/PRESSURIZED PIPING SYSTEM/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING:	3FH	ELECTRONIC MONITOR PIPE SUMPS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
2	20000	01-Jan-2019	Ethanol E10	UNDERGROUND	IN SERVICE 01-Jan-2019

CONSTRUCTION TYPE:	EIMNP	FIBERGLASS/DOUBLE WALL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/LEVEL GAUGES/ALARMS
PIPING TYPE:	FJN	DOUBLE WALL/PRESSURIZED PIPING SYSTEM/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING:	3FH	ELECTRONIC MONITOR PIPE SUMPS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
3	20000	01-Jan-2019	Vehicular Diesel	UNDERGROUND	IN SERVICE 01-Jan-2019

CONSTRUCTION TYPE:	EILMNP	FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/LEVEL GAUGES/ALARMS
PIPING TYPE:	FJN	DOUBLE WALL/PRESSURIZED PIPING SYSTEM/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING:	3FH	ELECTRONIC MONITOR PIPE SUMPS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR

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FDEP STORAGE TANKS REPORT

Report Date: 1/29/2023

(TANKS)

FACILITY ID NUMBER, NAME AND LOCATION

9815820
RACETRAC #2373
2087 LPGA BLVD
DAYTONA BEACH, FL 32124

OWNERSHIP INFORMATION

RACETRAC PETROLEUM INC
200 GALLERIA PKWY SE #900 ATTN:
Atlanta, GA 30339
CONTACT: JORDAN WOODFIN / MAX BERM/770431

SITE COUNTY: 64 VOLUSIA
SITE LAT/LON (AGCY): /

MAP ID NUMBER: 5

Dist (Miles): 0.05
Direction:
Elev (Ft): 29.97
Elev vs Sub Prop: Higher

TANKS

FDEP INFORMATION PORTAL ON LINE DOCUMENTS **(May Not Be Available For All Records)**

FAC STATUS: OPEN **FAC TYPE:** Retail Station

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
1	20000	01-Jul-2017	Unleaded Gas	UNDERGROUND	IN SERVICE 01-Jul-2017

CONSTRUCTION TYPE:	AEIMOP	BALL CHECK VALVE/FIBERGLASS/DOUBLE WALL/SPILL CONTAINMENT BUCKET/TIGHT FILL/LEVEL GAUGES/ALARMS
PIPING TYPE:	CFJK	FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS
LEAK MONITORING:	234FG	VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
2	20000	01-Jul-2017	Unleaded Gas	UNDERGROUND	IN SERVICE 01-Jul-2017

CONSTRUCTION TYPE:	AEILMOP	BALL CHECK VALVE/FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/TIGHT FILL/LEVEL GAUGES/ALARMS
PIPING TYPE:	CFJK	FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS
LEAK MONITORING:	234FG	VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
3	20000	01-Jul-2017	Vehicular Diesel	UNDERGROUND	IN SERVICE 01-Jul-2017

CONSTRUCTION TYPE:	AEILMOP	BALL CHECK VALVE/FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/TIGHT FILL/LEVEL GAUGES/ALARMS
PIPING TYPE:	CFJK	FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS
LEAK MONITORING:	234FG	VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR

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FDEP STORAGE TANKS REPORT

Report Date: 1/29/2023

(TANKS)

FACILITY ID NUMBER, NAME AND LOCATION

9817837
BUC-EES #47
2330 GATEWAY N DR
DAYTONA BEACH, FL 32117

OWNERSHIP INFORMATION

BUC-EES FLORIDA LLC
327 FM 2004 RD
LAKE JACKSON, TX 77566
CONTACT: JASON HARRIS / JEFF NADAL/34677422

SITE COUNTY: 64 VOLUSIA
SITE LAT/LON (AGCY): /

MAP ID NUMBER: 6
Dist (Miles): 0.07
Direction:
Elev (Ft): 0.00
Elev vs Sub Prop: -

TANKS

FDEP INFORMATION PORTAL ON LINE DOCUMENTS **(May Not Be Available For All Records)**

FAC STATUS: OPEN **FAC TYPE:** Retail Station

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
1	40000	01-Apr-2020	Ethanol E10	UNDERGROUND	IN SERVICE 01-Apr-2020

CONSTRUCTION TYPE: EIMNOP — FIBERGLASS/DOUBLE WALL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS

PIPING TYPE: CFJK — FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS

LEAK MONITORING: 12345FGK — CONTINUOUS ELECTRONIC SENSING/VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/ELECTRONIC MONITOR DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
2	40000	01-Apr-2020	Ethanol E10	UNDERGROUND	IN SERVICE 01-Apr-2020

CONSTRUCTION TYPE: EILMNOP — FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS

PIPING TYPE: CFJK — FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS

LEAK MONITORING: 12345FGK — CONTINUOUS ELECTRONIC SENSING/VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/ELECTRONIC MONITOR DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
3	40000	01-Apr-2020	Vehicular Diesel	UNDERGROUND	IN SERVICE 01-Apr-2020

CONSTRUCTION TYPE: EILMNOP — FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS

PIPING TYPE: CFJK — FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS

LEAK MONITORING: 1345FGK — CONTINUOUS ELECTRONIC SENSING/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/ELECTRONIC MONITOR DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
4	40000	01-Apr-2020	Ethanol E10	UNDERGROUND	IN SERVICE 01-Apr-2020

CONSTRUCTION TYPE: EILMNOP — FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS

PIPING TYPE: CFJK — FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS

LEAK MONITORING: 12345FGK — CONTINUOUS ELECTRONIC SENSING/VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/ELECTRONIC MONITOR DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
5	40000	01-Apr-2020	Ethanol E10	UNDERGROUND	IN SERVICE 01-Apr-2020

CONSTRUCTION TYPE: EILMNOP — FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS

PIPING TYPE: CFJK — FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS

LEAK MONITORING: 12345FGK — CONTINUOUS ELECTRONIC SENSING/VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/ELECTRONIC MONITOR DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE

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FDEP STORAGE TANKS REPORT

Report Date: 1/29/2023

(TANKS)

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
6	40000	01-Apr-2020	Vehicular Diesel	UNDERGROUND	IN SERVICE 01-Apr-2020

CONSTRUCTION TYPE:	EILMNOP	FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS
PIPING TYPE:	CFJK	FIBERGLASS/DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS
LEAK MONITORING:	12345FGK	CONTINUOUS ELECTRONIC SENSING/VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/ELECTRONIC MONITOR DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/ELECTRONIC LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE

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FDEP SITE INVESTIGATION SECTION SITES, FDEP ERIC WASTE CLEANUP SITES, FDEP CLEANUP SITES AND FDER SITES LIST

(STCERC)

FACILITY NAME AND LOCATION:

7-ELEVEN FOOD STORE #32220
2100 LPGA BLVD
DAYTONA BEACH, FL 32117-7139

AGENCY SITE LAT/LON:
29.224263848291
-81.09446138197

MAP ID NUMBER: 7
Dist (Miles): 0.03
Direction:
Elev (Ft): 26.27
Elev vs Sub Prop: Higher

STCERC

FDEP INFORMATION PORTAL ON LINE DOCUMENTS (May Not Be Available For All Records)

SITE INVESTIGATION SECTION INFO:
SITE NO:
ALT SITE NO:
DISTRICT: CD

FDER SITES LIST INFO:
SITE NO:
LEAD UNIT:
PRJ MGR:
ATTY:
SUP UNIT:
STATUS:
STATUS DATE:

CLEANUP SITES INFO:
SRC DATA ID: 9701014
SRC DATA PGM: STCM
PGM AREA: TK
CLNP CAT: PETRO
REM STATUS: ACTIVE
COMMENTS:

ERIC WASTE CLEANUP SITES INFO:
SRC FAC ID:

ERIC ID NO:
SRC FAC NAME:

SITE NAME:
SITE STATUS:

PROGRAM:
PROGRAM STATUS:
OFFSITE COMTAM KEY:

PROGRAM TYPE:
SITE PHASE DESCR:
ICR ?:

DISCHARGE DATE:

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FDEP LEAKING UNDERGROUND STORAGE TANKS REPORT

(LUST)

FACILITY ID NUMBER, NAME AND LOCATION

9701014
7-ELEVEN FOOD STORE #32220
2100 LPGA BLVD
DAYTONA BEACH, FL 32117-7139

FDEP INFORMATION PORTAL ON LINE DOCUMENTS (May Not Be Available For All Records)

OWNERSHIP INFO:

ACCOUNT OWNER
7-ELEVEN INC.
PO BOX 711 ATTN: MGR-FL REGION
Dallas, TX 75221-711
(407)403-2995
COUNTY ID: 64 VOLUSIA
AGCY LAT/LON(DMS): 29,13,27.33 81,5,40.05
FAC OPERATOR: DAVID PETERSEN
FAC TEL #: (407)403-2995

MAP ID NUMBER: 7

Dist (Miles): 0.03
Direction:
Elev (Ft): 26.27
Elev vs Sub Prop: Higher

LUST

FAC STATUS: OPEN **FAC TYPE:** A - Retail Station

SCORE 30 **SCORE EFF DT:** 9/2/2008 **RANK:** **SCORE WHEN RANKED:**

DISCHARGE INFORMATION

DISCHARGE DATE: 3/11/2003

Mapid: 7

INSPECTION DATE:
CLEANUP WORK STATUS: COMPLETED
CLEANUP REQUIRED R - CLEANUP REQUIRED
CLEANUP COMBINED:
INFO SOURCE: D - DISCHARGE NOTIFICATION
DISCH CLNUP STATUS: 12/3/2010 SRCR - SRCR COMPLETE
CONTAMINATED MEDIA?: **SOIL:** Y **SUR WATER:** N **GR WATER:** Y **MON WELL:** N **# DW WELLS CONTAMINATED:** 0
POLLUTANT : B - Unleaded Gas **GALLONS** 0 **OTHER** UNKNOWN

CLEANUP INFORMATION

Mapid: 7

PGM ELIG OFF:
PGM ELIG SCORE: **PGM ELIG SCORE EFF DT:** **PGM ELIG R**
ELIG STAT: **ELIG STAT DT:** **APPL RCVD:** **LOI:** **ELIG LTR SNT:** **REDETERM:**
DEDUCT AMT: **DEDUCT PD TO DT:** **COPAY AMT:** **COPAY TO DT:** **CAP AMT:**
CLNUP PROG: **CLNUP OFF:** PCLP64 - VOLUSIA COUNTY DIVISION OF ENVIRONMENTAL MGMT

SITE ASSESSMENT*

CLNP RESP: -
FUND ELLIG: -
ACTUAL COMPLETION DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION PLAN*

CLEANUP RESP: -
FUND ELLIG: -
ORDER APPRV DATE:
ACTUAL COMPL DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION*

CLEANUP RESP: LP - LOCAL PROGRAM
FUND ELLIG: -
ACTUAL COST:
YEARS TO COMPL: 0

SITE REHABILITATION COMPLETION REPORT*

ACTION TYPE: SRCR - SITE REHABILITATION COMPLETION REPORT
SUBMIT DATE: 09-30-2010
REVIEW DATE: 11-05-2010
ISSUE DATE: 12-03-2010
COMPL STATUS: A - APPROVED
COMPL STATUS DT: 11-05-2010
COMMENTS:

SOURCE REMOVAL*

CLEANUP RESP: -
FUND ELLIG: -
ACTUAL COMPLETION DATE:
FREE PRODUCT REMOVAL?(Y/N):
SOIL REMOVAL? (Y/N):
SOIL TONNAGE REMOVED:
SOIL TREATMENT?(Y/N):
OTHER TREATMENT?:
ALT PROC STATUS:
ALT PROC STATUS DT:
ALT PROC COMMENT:

*** Data current as of November 2019**

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FDEP LEAKING UNDERGROUND STORAGE TANKS REPORT

DISCHARGE INFORMATION

Mapid: 7

DISCHARGE DATE: 11/22/2005

INSPECTION DATE:

CLEANUP WORK STATUS: COMPLETED

CLEANUP REQUIRED R - CLEANUP REQUIRED

CLEANUP COMBINED:

INFO SOURCE: D - DISCHARGE NOTIFICATION

DISCH CLNUP STATUS: 12/3/2010 SRCR - SRCR COMPLETE

CONTAMINATED MEDIA?: **SOIL:** Y **SUR WATER:** N **GR WATER:** Y **MON WELL:** N **# DW WELLS CONTAMINATED:** 0

POLLUTANT : B - Unleaded Gas **GALLONS** 0 **OTHER**

CLEANUP INFORMATION

Mapid: 7

PGM ELIG OFF:

PGM ELIG SCORE: **PGM ELIG SCORE EFF DT:** **PGM ELIG R**

ELIG STAT: **ELIG STAT DT:** **APPL RCVD:** **LOI:** **ELIG LTR SNT:** **REDETERM:**

DEDUCT AMT: **DEDUCT PD TO DT:** **COPAY AMT:** **COPAY TO DT:** **CAP AMT:**

CLNUP PROG: **CLNUP OFF:** PCLP64 - VOLUSIA COUNTY DIVISION OF ENVIRONMENTAL MGMT

SITE ASSESSMENT*

CLNP RESP: -
FUND ELLIG: -
ACTUAL COMPLETION DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION PLAN*

CLEANUP RESP: -
FUND ELLIG: -
ORDER APPRV DATE:
ACTUAL COMPL DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION*

CLEANUP RESP: LP - LOCAL PROGRAM
FUND ELLIG: -
ACTUAL COST:
YEARS TO COMPL: 0

SITE REHABILITATION COMPLETION REPORT*

ACTION TYPE: SRCR - SITE REHABILITATION COMPLETION REPORT
SUBMIT DATE: 09-30-2010
REVIEW DATE: 11-05-2010
ISSUE DATE: 12-03-2010
COMPL STATUS: A - APPROVED
COMPL STATUS DT: 11-05-2010
COMMENTS:

SOURCE REMOVAL*

CLEANUP RESP: -
FUND ELLIG: -
ACTUAL COMPLETION DATE:
FREE PRODUCT REMOVAL?(Y/N):
SOIL REMOVAL? (Y/N):
SOIL TONNAGE REMOVED:
SOIL TREATMENT?(Y/N):
OTHER TREATMENT?:
ALT PROC STATUS:
ALT PROC STATUS DT:
ALT PROC COMMENT:

*** Data current as of November 2019**

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FDEP LEAKING UNDERGROUND STORAGE TANKS REPORT

DISCHARGE INFORMATION

Mapid: 7

DISCHARGE DATE: 7/19/2019

INSPECTION DATE:

CLEANUP WORK STATUS: ACTIVE

CLEANUP REQUIRED R - CLEANUP REQUIRED

CLEANUP COMBINED:

INFO SOURCE: D - DISCHARGE NOTIFICATION

DISCH CLNUP STATUS: 4/15/2020 SA - SA ONGOING

CONTAMINATED MEDIA?: **SOIL:** N **SUR WATER:** N **GR WATER:** Y **MON WELL:** N **# DW WELLS CONTAMINATED:**

POLLUTANT : B - Unleaded Gas **GALLONS** **OTHER**

CLEANUP INFORMATION

Mapid: 7

PGM ELIG OFF:

PGM ELIG SCORE: **PGM ELIG SCORE EFF DT:** **PGM ELIG R**

ELIG STAT: **ELIG STAT DT:** **APPL RCVD:** **LOI:** **ELIG LTR SNT:** **REDETERM:**

DEDUCT AMT: **DEDUCT PD TO DT:** **COPAY AMT:** **COPAY TO DT:** **CAP AMT:**

CLNUP PROG: **CLNUP OFF:** PCLP1 - ALACHUA ENVIRONMENTAL PROTECTION DEPARTMENT

SITE ASSESSMENT*

CLNP RESP:
FUND ELLIG:
ACTUAL COMPLETION DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION PLAN*

CLEANUP RESP:
FUND ELLIG:
ORDER APPRV DATE:
ACTUAL COMPL DATE:
PAYMENT DATE:
ACTUAL COST:

REMEDIAL ACTION*

CLEANUP RESP:
FUND ELLIG:
ACTUAL COST:
YEARS TO COMPL:

SITE REHABILITATION COMPLETION REPORT*

ACTION TYPE:
SUBMIT DATE:
REVIEW DATE:
ISSUE DATE:
COMPL STATUS:
COMPL STATUS DT:
COMMENTS:

SOURCE REMOVAL*

CLEANUP RESP:
FUND ELLIG:
ACTUAL COMPLETION DATE:
FREE PRODUCT REMOVAL?(Y/N):
SOIL REMOVAL? (Y/N):
SOIL TONNAGE REMOVED:
SOIL TREATMENT?(Y/N):
OTHER TREATMENT?:
ALT PROC STATUS:
ALT PROC STATUS DT:
ALT PROC COMMENT:

*** Data current as of November 2019**

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FDEP LEAKING UNDERGROUND STORAGE TANKS REPORT

TANKS Data for LUST Sites:

FACILITY ID NUMBER, NAME AND LOCATION

9701014
7-ELEVEN FOOD STORE #32220
2100 LPGA BLVD
DAYTONA BEACH, FL 32117

OWNERSHIP INFORMATION

7-ELEVEN INC - GASOLINE CO
PO BOX 711 ATTN: MGR-FL REGION
Dallas, TX 75221
CONTACT TEL #: 4074032995
CONTACT: 7-ELEVEN INC - GASOLINE CO
FACILTY TEL #: 4074032995
COUNTY ID: 64 VOLUSIA

MAP ID NUMBER: 7
Dist (Miles): 0.03
Direction:
Elev (Ft): 26.27
Elev vs Sub Prop: Higher

TANKS

FDEP INFORMATION PORTAL ON LINE DOCUMENTS **(May Not Be Available For All Records)**

FAC STATUS: OPEN **FAC TYPE:** Retail Station

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
1	10000	01-Sep-1997	Unleaded Gas	UNDERGROUND	REMOVED FROM SITE 17-Jul-2019

CONSTRUCTION TYPE: STEEL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS/DOUBLE WALL-TANK JACKET
PIPING TYPE: PRESSURIZED PIPING SYSTEM/DISPENSER LINERS/DOUBLE WALL-PIPE JACKET/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING: VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE/AUTOMATIC TANK GAUGING-USTS

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
2	10000	01-Sep-1997	Unleaded Gas	UNDERGROUND	REMOVED FROM SITE 17-Jul-2019

CONSTRUCTION TYPE: SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS/DOUBLE WALL-TANK JACKET
PIPING TYPE: PRESSURIZED PIPING SYSTEM/DISPENSER LINERS/DOUBLE WALL-PIPE JACKET/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING: VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE/AUTOMATIC TANK GAUGING-USTS

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
3	10000	01-Sep-1997	Unleaded Gas	UNDERGROUND	REMOVED FROM SITE 17-Jul-2019

CONSTRUCTION TYPE: STEEL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS/DOUBLE WALL-TANK JACKET
PIPING TYPE: PRESSURIZED PIPING SYSTEM/DISPENSER LINERS/DOUBLE WALL-PIPE JACKET/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING: VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE/AUTOMATIC TANK GAUGING-USTS

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
4	10000	01-Sep-1997	Vehicular Diesel	UNDERGROUND	REMOVED FROM SITE 17-Jul-2019

CONSTRUCTION TYPE: STEEL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS/DOUBLE WALL-TANK JACKET
PIPING TYPE: PRESSURIZED PIPING SYSTEM/DISPENSER LINERS/DOUBLE WALL-PIPE JACKET/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING: VISUAL INSPECT PIPE SUMPS/ELECTRONIC MONITOR PIPE SUMPS/VISUAL INSPECT DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE/AUTOMATIC TANK GAUGING-USTS

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
5	20000	23-Jul-2019	Ethanol E10	UNDERGROUND	IN SERVICE 23-Jul-2019

CONSTRUCTION TYPE: FIBERGLASS/DOUBLE WALL/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS
PIPING TYPE: DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING: CONTINUOUS ELECTRONIC SENSING/ELECTRONIC MONITOR PIPE SUMPS/ELECTRONIC MONITOR DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE

TANK #:	TANK VOL(GALS):	INST.DATE:	TANK CONTENTS:	TANK POSITION:	TANK STATUS (as of...)
6	20000	23-Jul-2019	Bio-Diesel B20	UNDERGROUND	IN SERVICE 23-Jul-2019

CONSTRUCTION TYPE: FIBERGLASS/DOUBLE WALL/COMPARTMENTED/SPILL CONTAINMENT BUCKET/FLOW SHUT OFF/TIGHT FILL/LEVEL GAUGES/ALARMS
PIPING TYPE: DOUBLE WALL/PRESSURIZED PIPING SYSTEM/DISPENSER LINERS/APPROVED SYNTHETIC MATERIAL
LEAK MONITORING: CONTINUOUS ELECTRONIC SENSING/ELECTRONIC MONITOR PIPE SUMPS/ELECTRONIC MONITOR DISPENSER LINERS/MONITOR DBL WALL TANK SPACE/MECHANICAL LINE LEAK DETECTOR/MONITOR DBL WALL PIPE SPACE

EDM

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ENVIRONMENTAL DATA MANAGEMENT

500 Feet Radius Research

Proximal Site Summary Table

This table includes mapped sites whose plotted coordinates fall just outside of the ASTM or client defined research distance but whose property boundaries may still extend into the search area. These sites are typically large commercial or industrial tracts that may merit inclusion in the evaluation process. Detail data reports on any of these sites may be requested and will be sent as an addendum to this report at no additional cost.

MapID Prgm List	Fac ID No	Site Dist (mi)	Site Elev (ft)	Elev vs Sub Prop	Site Name	Site Address
1A						
LUST	8622691	0.18	30.01	Higher	DAYTONA BEACH CITY WWTP-WESTSIDE REGIONAL	3651 LPGA BLVD DAYTONA BEACH, FL 32117
LUST	8631486	0.18	30.01	Higher	DAYTONA BEACH CITY-BRENNA WTP	3651 LPGA BLVD DAYTONA BEACH, FL 32117
STCERC	5872	0.18	30.01	Higher	City of Daytona Beach Wastewater Treatment Facility Part A-1993	3651 Lpga Blvd Daytona Beach, FL 32124
STCERC	8622691	0.18	30.01	Higher	DAYTONA BEACH CITY WWTP-WESTSIDE REGIONAL	3651 LPGA BLVD DAYTONA BEACH, FL 32117
STCERC	ERIC_5872	0.18	30.01	Higher	City of Daytona Beach Wastewater Treatment Facility Part A-1993	3651 Lpga Blvd Daytona Beach, FL 32124
TANKS	8622691	0.18	30.01	Higher	DAYTONA BEACH CITY WWTP-WESTSIDE REGIONAL	3651 LPGA BLVD DAYTONA BEACH, FL 32117
TANKS	8631486	0.18	30.01	Higher	DAYTONA BEACH CITY-BRENNA WTP	3651 LPGA BLVD DAYTONA BEACH, FL 32117
2A						
TANKS	9814578	0.14	25.41	Higher	MERCEDES-BENZ OF DAYTONA BEACH	1188 N TOMOKA FARMS DAYTONA BEACH, FL 32127

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ENVIRONMENTAL DATA MANAGEMENT

500 Feet Radius Research

Non-Mapped Records Summary Table

This table is a listing of database records that have not been plotted within our mapping system. Detail data reports on any of these sites may be requested and will be sent as an addendum to this report at no additional cost.

Prgm List Fac ID No	Site Name	Site Address

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Agency List Descriptions

USEPA and State Databases are updated on a quarterly basis. Supplemental Databases are updated on an annual basis.

Florida Department of Environmental Protection (FDEP)

State Designated Brownfields(BRWNFLDS)

The FDEP Brownfields database contains a listing of State Designated Brownfield Areas and Brownfield Sites. Brownfields are typically defined as abandoned, idled or underused industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.

Agency File Date: 12/8/2022 **Received by EDM:** 12/28/2022 **EDM Database Updated:** 12/28/2022

Dry Cleaners List(DRY)

The FDEP Dry Cleaning Facilities List is comprised of data from the FDEP Storage Tank and Contamination Monitoring (STCM) database and the Drycleaning Solvent Cleanup Program- Priority Ranking List. It contains a listing of those Dry Cleaning sites (and suspected historical Dry Cleaning sites) who have registered with the FDEP and/or have applied for the Dry Cleaning Solvent Cleanup Program.

Agency File Date: 12/22/2022 **Received by EDM:** 12/28/2022 **EDM Database Updated:** 12/28/2022

Institutional and/or Engineering Controls(INSTENG)

The FDEP Institutional Controls Registry Database (INSTENG) contains sites that have had Institutional and/or Engineering Controls implemented to regulate exposure to environmental hazards

Agency File Date: 10/27/2022 **Received by EDM:** 11/1/2022 **EDM Database Updated:** 11/1/2022

Leaking Underground Storage Tanks List(LUST)

The FDEP LUST list identifies facilities and/or locations that have notified the FDEP of a possible release of contaminants from petroleum storage systems. This Report is generated from the FDEP Storage Tank and Contamination Monitoring Database (STCM).

Agency File Date: 11/1/2022 **Received by EDM:** 11/1/2022 **EDM Database Updated:** 11/1/2022

Solid Waste Facilities List_Landfills(SLDWST_LF)

The SLDWST_LF list identifies locations that have conducted solid waste landfill activities as determined by the applicable FDEP Facility Classifications. Sites listed with "##" after the Facility ID Number are historical locations, obtained from documents on record at local agencies.

Agency File Date: 12/28/2022 **Received by EDM:** 12/28/2022 **EDM Database Updated:** 12/29/2022

State CERCLIS/SEMS Equivalent(STCERC)

The STCERC list is compiled from the FDEP Site Investigation Section list, the Florida SITES list(historical) and the FDEP Cleanup Sites list. These sites are being assessed and/or cleaned up as a result of identified or suspected contamination from the release of hazardous substances. The FDEP Cleanup Sites list programs include: Brownfields, Petroleum, EPA Superfund (CERCLA), Drycleaning, Responsible Party Cleanup, State Funded Cleanup, State Owned Lands Cleanup and Hazardous Waste Cleanup.

Agency File Date: 8/19/2022 **Received by EDM:** 8/19/2022 **EDM Database Updated:** 8/19/2022

State NPL Equivalent(STNPL)

The FDEP State Funded Cleanup list contains facilities and/or locations where there are no viable responsible parties; the site poses an imminent hazard; and the site does not qualify for Superfund or is a low priority for EPA. Remedial efforts at these sites are currently being addressed through State funded cleanup action.

Agency File Date: 9/6/2022 **Received by EDM:** 10/4/2022 **EDM Database Updated:** 10/4/2022

Underground/Aboveground Storage Tanks(TANKS)

The FDEP TANKS list contains sites with registered aboveground and underground storage tanks containing regulated petroleum products.

Agency File Date: 10/4/2022 **Received by EDM:** 10/4/2022 **EDM Database Updated:** 10/6/2022

Voluntary Cleanup List(VOLCLNUP)

The VOLCLNUP List is derived from the FDEP Brownfields Site Rehabilitation Agreement (BSRA) database, the FDEP ERIC Waste Cleanup database and the FDEP Office of Waste Cleanup Responsible Party Sites database (not available as of June 2021). The VOLCLNUP List identifies sites that have signed an agreement to Voluntarily cleanup a site and/or sites where legal responsibility for site rehabilitation exists pursuant to Florida Statutes and is being conducted either voluntarily or pursuant to enforcement activity.

Agency File Date: 12/21/2022 **Received by EDM:** 12/29/2022 **EDM Database Updated:** 12/29/2022

United States Environmental Protection Agency (EPA)

Comp Env Resp, Compensation & Liability Info Sys List(CERCLIS)

The US EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database tracks potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are proposed to be on the NPL, are on the NPL and sites that are in the screening and assessment phase for possible inclusion on the NPL. The CERCLIS database was retired in November of 2013 and has been replaced by the Superfund Enterprise Management System (SEMS).

Agency File Date: 11/12/2013 **Received by EDM:** 2/18/2016 **EDM Database Updated:** 2/18/2016

RCRIS Handlers with Corrective Action(CORRACTS)

The US EPA Corrective Action Sites (CORRACTS) database is a listing of hazardous waste handlers that have undergone RCRA corrective action activity.

Agency File Date: 1/16/2023 **Received by EDM:** 1/19/2023 **EDM Database Updated:** 1/19/2023

Archived Cerclis Sites(NFRAP)

The US EPA NFRAP list contains archived data of CERCLIS records where the EPA has completed assessment activities and determined that no further steps to list the site on the NPL will be taken. NFRAP sites may be reviewed in the future to determine if they should be returned to CERCLIS based upon newly identified contamination problems at the site. The NFRAP database was retired in November of 2013 and has been replaced by the Superfund Enterprise Management System (SEMS) .

Agency File Date: 10/25/2013 **Received by EDM:** 2/18/2016 **EDM Database Updated:** 2/18/2016

National Priorities List(NPL)

The US EPA National Priorities List (NPL) contains facilities and/or locations where environmental contamination has been confirmed and prioritized for cleanup activities under the Superfund Program. EDM's NPL Report includes sites that are currently on the NPL as well as sites that have been Proposed, Withdrawn and/or Deleted from the list. Previously, information for the NPL was managed under the CERLIS data management system. In 2014 this system was replaced with the Superfund Enterprise Management System (SEMS). EPA last updated CERCLIS in November of 2013. EDM's NPL Report contains available SEMS data and the archived CERCLIS data relative to NPL sites.

Agency File Date: 9/6/2022 **Received by EDM:** 9/7/2022 **EDM Database Updated:** 9/7/2022

NPL Liens List(NPLLIENS)

The US EPA NPL Liens List identifies those sites where under authority granted by CERCLA, liens have been filed against real property in order to recover expenditures from remedial action or when the property owner receives a notice of potential liability.

Agency File Date: 5/23/2022 **Received by EDM:** 6/30/2022 **EDM Database Updated:** 6/30/2022

SEMS Active Site Inventory List(SEMSACTV)

The US EPA Superfund Enterprise Management System (SEMS) tracks potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. The SEMSACTV list contains sites that are on the National Priorities List (NPL) as well as sites that are prosposed for or in the screening and assessment phase for possible inclusion on the NPL. SEMS has replaced the CERCLIS database, which was retired in November of 2013.

Agency File Date: 12/22/2022 **Received by EDM:** 1/19/2023 **EDM Database Updated:** 1/19/2023

SEMS Archived Site Inventory List(SEMSARCH)

The US EPA Superfund Enterprise Management System (SEMS), contains archived data of CERCLIS or SEMS records where the EPA has completed assessment activities and determined that no further steps to list the site on the NPL will be taken. These sites may be reviewed in the future to determine if they should be returned to SEMS based upon newly identified contamination problems at the site. SEMS has replaced the CERCLIS database, which was retired in November of 2013. The SEMSARCH database contains these newly archived records under the SEMS database management system.

Agency File Date: 12/22/2022 **Received by EDM:** 1/19/2023 **EDM Database Updated:** 1/19/2023

Tribal Lust List(TRIBLLUST)

EDM's Tribal LUST list is derived from the USEPA Region IV Tribal Tanks database by extracting those sites with indicators of past and/or current releases.

Agency File Date: 2/24/2010 **Received by EDM:** 3/9/2010 **EDM Database Updated:** 3/9/2010

Tribal Tanks List(TRIBLTANKS)

The USEPA Region IV Tribal Tanks database lists Active and Closed storage tank facilities on Native American lands.

Agency File Date: 2/24/2010 **Received by EDM:** 3/9/2010 **EDM Database Updated:** 3/9/2010

RCRA-Treatment, Storage and/or Disposal Sites(TSD)

The EDM TSD list is a subset of the US EPA RCRAInfo system and identifies facilities that Treat, Store and/or Dispose of hazardous waste.

Agency File Date: 12/26/2022 **Received by EDM:** 12/30/2022 **EDM Database Updated:** 12/30/2022

Brownfields Management System(USBRWNFLDS)

The US EPA Brownfields program provides information on environmentally distressed properties that have received Grants or Targeted funding for cleanup and redevelopment . Tribal Brownfield sites are included in the USBRWNFLDS database.

Agency File Date: 1/3/2023 **Received by EDM:** 1/3/2023 **EDM Database Updated:** 1/13/2023

Institutional and/or Engineering Controls(USINSTENG)

The USINSTENG list is compiled from data elements contained in the NPL, CORRACTS, USBRWNFLDS and RCRAInfo databases.

Agency File Date: 1/17/2023 **Received by EDM:** 1/17/2023 **EDM Database Updated:** 1/17/2023

Environmental Impact Areas

Brownfield Areas and Sites

The FDEP Brownfields database contains a listing of State Designated Brownfield Areas and Brownfield Sites. Brownfields are typically defined as abandoned, idled or underused industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.

Agency File Date: 8/12/2022 **Received by EDM:** 8/15/2022 **EDM Database Updated:** 8/15/2022

https://floridadep.gov/waste/waste-cleanup/content/brownfields-program

Cattle Dipping Vats

From the 1910's through the 1950's, vats were filled with an arsenic solution for the control and eradication of the cattle fever tick. Other pesticides such as DDT where also widely used. By State law, all cattle, horses, mules, goats, and other susceptible animals were required to be dipped every 14 days. Under certain circumstances, the arsenic and other pesticides remaining at the site may present an environmental or public health hazard.

Some of the sites have been located and are currently under investigation. However, most of the listings are from old records of the State Livestock Board, which listed each vat as it was put into operation. In addition, some privately operated vats may have existed which were not listed by the Livestock Board. EDM's Cattle Dipping Vat sites are retrieved from the Voluntary Cleanup and STCERC datablases. For additional information on Cattle Dipping Vats visit the FDEP and FDOH websites at:

Agency File Date: 10/31/2018 **Received by EDM:** 1/25/2019 **EDM Database Updated:** 1/25/2019

https://floridadep.gov/waste/district-business-support/content/cattle-dipping-vats-cdv

http://www.floridahealth.gov/environmental-health/drinking-water/cattledipvathome.html

Formerly Used Defense Sites

The DoD is responsible for the environmental restoration of properties that were formerly owned by, leased to or otherwise possessed by the United States and operated under the jurisdiction of the Secretary of Defense prior to October 1986. Such properties are known as Formerly Used Defense Sites (FUDS). The Army is the executive agent for the program and the U.S. Army Corps of Engineers manages and directs the program's administration. For more information on the FUDS Program, including maps and data on individual sites, visit the Army Corps of Engineers website at:

Agency File Date: 5/29/2018 **Received by EDM:** 1/25/2019 **EDM Database Updated:** 1/25/2019

http://www.usace.army.mil/Missions/Environmental/Formerly-Used-Defense-Sites/

FUDS Munitions Response Sites

The DoD developed the Military Munitions Response Program (MMRP) in 2001 to addresses munitions-related concerns, including explosive safety, environmental, and health hazards from releases of unexploded ordnance (UXO), discarded military munitions (DDM), and munitions constituents (MC) found at locations, other than operational ranges, on active and Base Realignment and Closure (BRAC) installations and Formerly Used Defense Sites (FUDS) properties. The MMRP addresses non-operational range lands with suspected or known hazards from munitions and explosives of concern (MEC) which occurred prior to September 2002, but are not already included with an Installation Response Program (IRP) site cleanup activity. For more information on the FUDS MMRP Program, including maps and data on individual sites, visit the Army Corps of Engineers website at:

Agency File Date: 5/14/2018 **Received by EDM:** 1/25/2019 **EDM Database Updated:** 1/25/2019

http://www.asaie.army.mil/Public/ESOH/mmrp.html

Groundwater Contamination Areas

The Ground Water Contamination Areas GIS layer is a statewide map showing the boundaries of delineated areas of known groundwater contamination pursuant to Chapter 62-524, F.A.C., New Potable Water Well Permitting In Delineated Areas. 38 Florida counties have been delineated primarily for the agricultural pesticide ethylene dibromide (EDB), and to a much lesser extent, volatile organic and petroleum contaminants. This GIS layer represents approximately 427,897 acres in 38 counties in Florida that have been delineated for groundwater contamination. However, it does not represent all known sources of groundwater contamination for the state of Florida.

This information is intended to be used by regulatory agencies issuing potable water well construction permits in areas of ground water contamination to protect public health and the ground water resource. Permitted water wells in these areas must meet specific well construction criteria and water testing prior to well use. This dataset only indicates the presence or absence of specific groundwater contaminants and does not represent all known sources of groundwater contamination in the state of Florida.

Agency File Date: 8/15/2022 **Received by EDM:** 8/15/2022 **EDM Database Updated:** 9/7/2022

https://floridadep.gov/water/source-drinking-water/content/delineated-areas

Institutional Controls

The FDEP Institutional Controls GIS layer is a statewide map showing the approximate boundaries of delineated areas where Institutional Controls are in place.

An institutional control provides for certain restrictions on a property. For example, a site may be cleaned up to satisfy commercial contamination target levels and an institutional control may be placed on that property indicating that it may only be used for commercial activities. If the owner of the property ever wanted to use that property for residential purposes, the owner would have to ensure that any contamination meets residential target levels.

The locational data for this layer is provided by the responsible party and reviewed by FDEP staff. Neither FDEP or EDM assumes respondibility for the accuracy of the boundary data.

Agency File Date: 10/27/2022 **Received by EDM:** 11/1/2022 **EDM Database Updated:** 11/1/2022

https://ca.dep.state.fl.us/mapdirect/?webmap=cff8d21797184421ab4763d3e4a01e48

National Priorities List

The US EPA National Priorities List (NPL) contains facilities and/or locations where environmental contamination has been confirmed and prioritized for cleanup activities under the Superfund Program. EDM's NPL site boundaries data include sites that are currently on the NPL as well as sites that have been Proposed, Withdrawn and/or Deleted from the list.

Agency File Date: 11/14/2018 **Received by EDM:** 12/10/2018 **EDM Database Updated:** 1/22/2019

https://www.epa.gov/superfund/search-superfund-sites-where-you-live

Solid Waste Facilities

The FDEP SLDWST list identifies locations that have been permitted to conduct solid waste handling activities.

Agency File Date: 8/15/2022 **Received by EDM:** 8/15/2022 **EDM Database Updated:** 8/15/2022

https://floridadep.gov/waste

State Funded Cleanup Sites

The FDEP State Funded Cleanup list contains facilities and/or locations where there are no viable responsible parties; the site poses an imminent hazard; and the site does not qualify for Superfund or is a low priority for EPA. Remedial efforts at these sites are currently being addressed through State funded cleanup action.

Agency File Date: 3/30/2021 **Received by EDM:** 3/31/2021 **EDM Database Updated:** 3/31/2021

https://floridadep.gov/waste/waste-cleanup/documents/state-funded-cleanup-program-site-list

Appendix C Historical Aerials

Historical Aerial Photograph Report

Subject Property:

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Prepared For:

Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Prepared By:

Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770

January 30, 2023

Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770
(727) 586-1700
http://www.edm-net.com

January 30, 2023

Collin Duncan
Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Subject: **Historical Aerial Photos-- EDM Project #: 26393**
Client Project# 448456-1-22-01

Dear Mr. Duncan:

Thank you for choosing Environmental Data Management, Inc. The following report contains a series of Historical Aerial Photographic images for the following location:

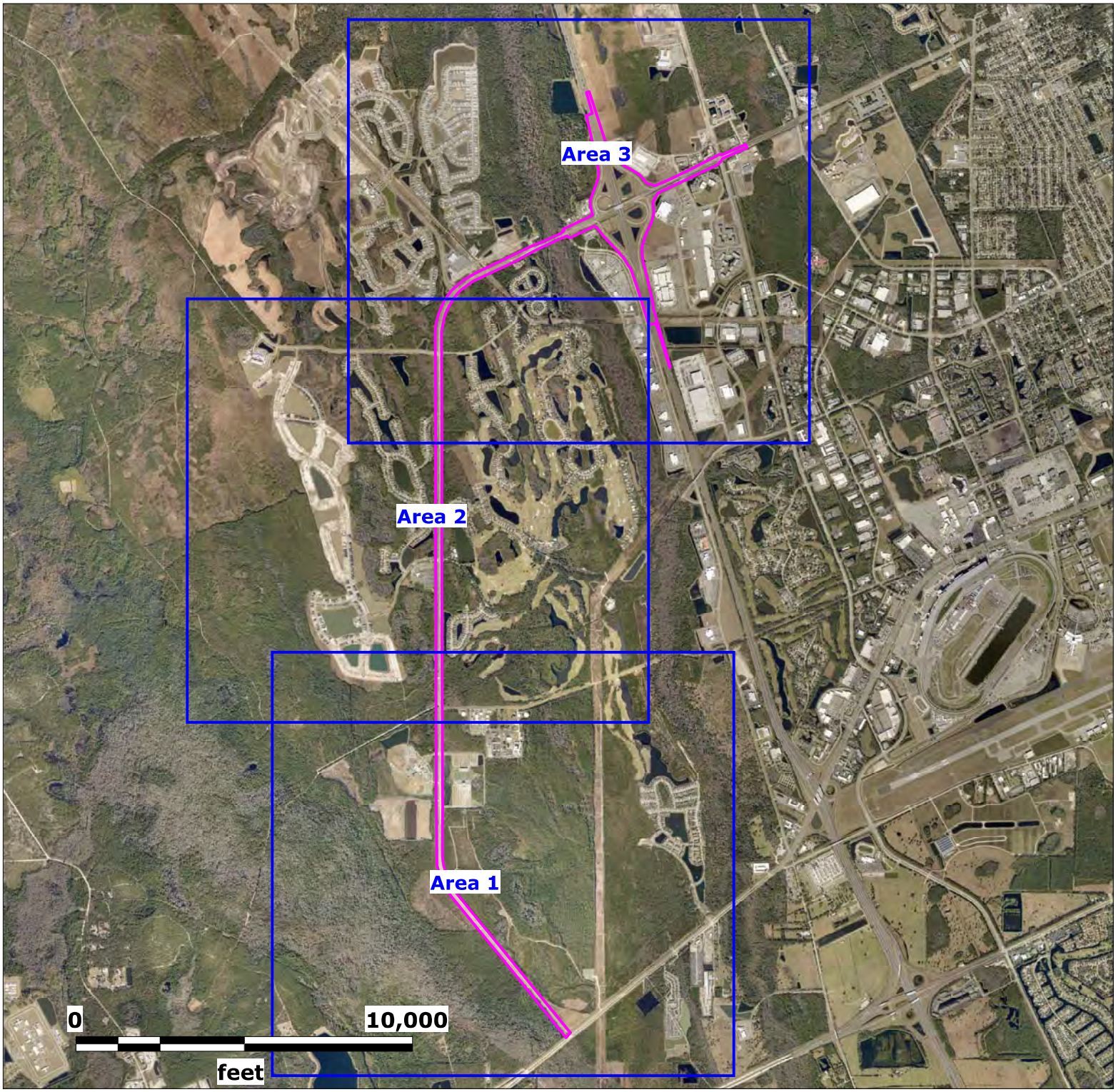
LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

These images were selected to provide you with an aerial photographic record of this location at approximate ten year intervals and/or one photograph per decade, where available.

Should you have any questions regarding this report or our service, please feel free to contact us. We appreciate the opportunity to be of service to you and look forward to working with you in the future.

ENVIRONMENTAL DATA MANAGEMENT, INC.

Historical Aerial Photo Index Map



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

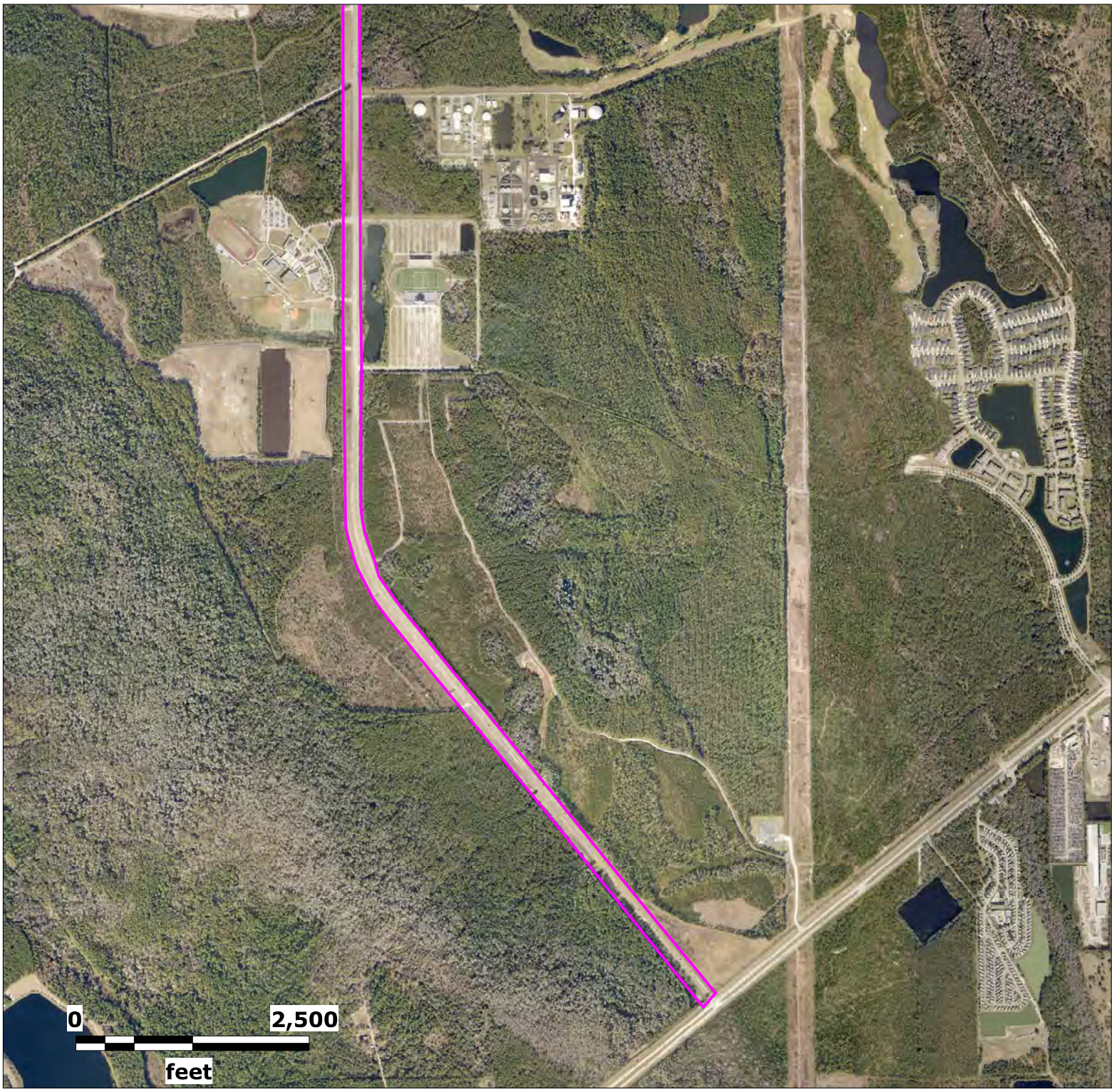
Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Approximate Site Boundary

Regulated Site

Aerial Photo Image
2021



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

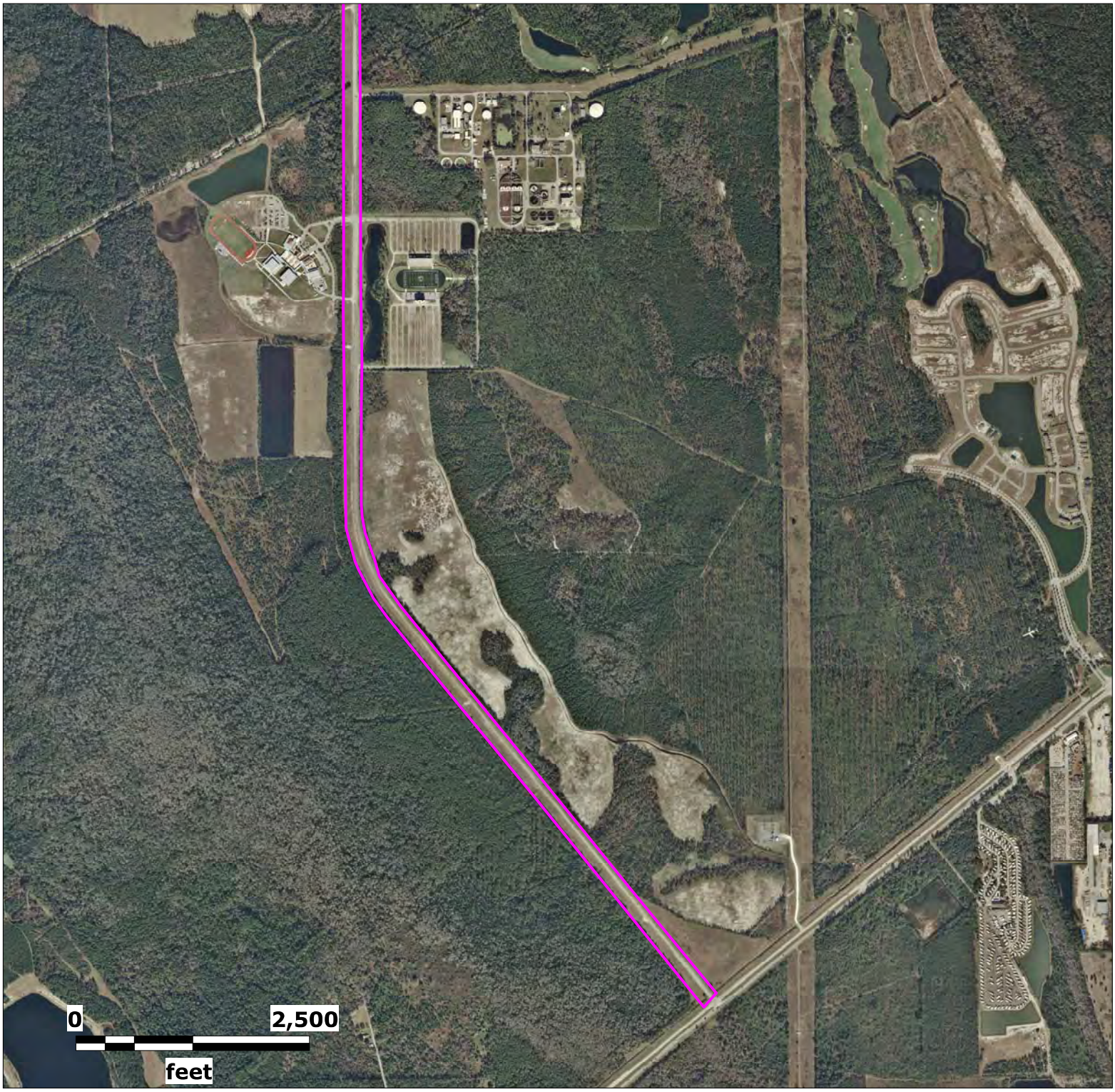
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
2012



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

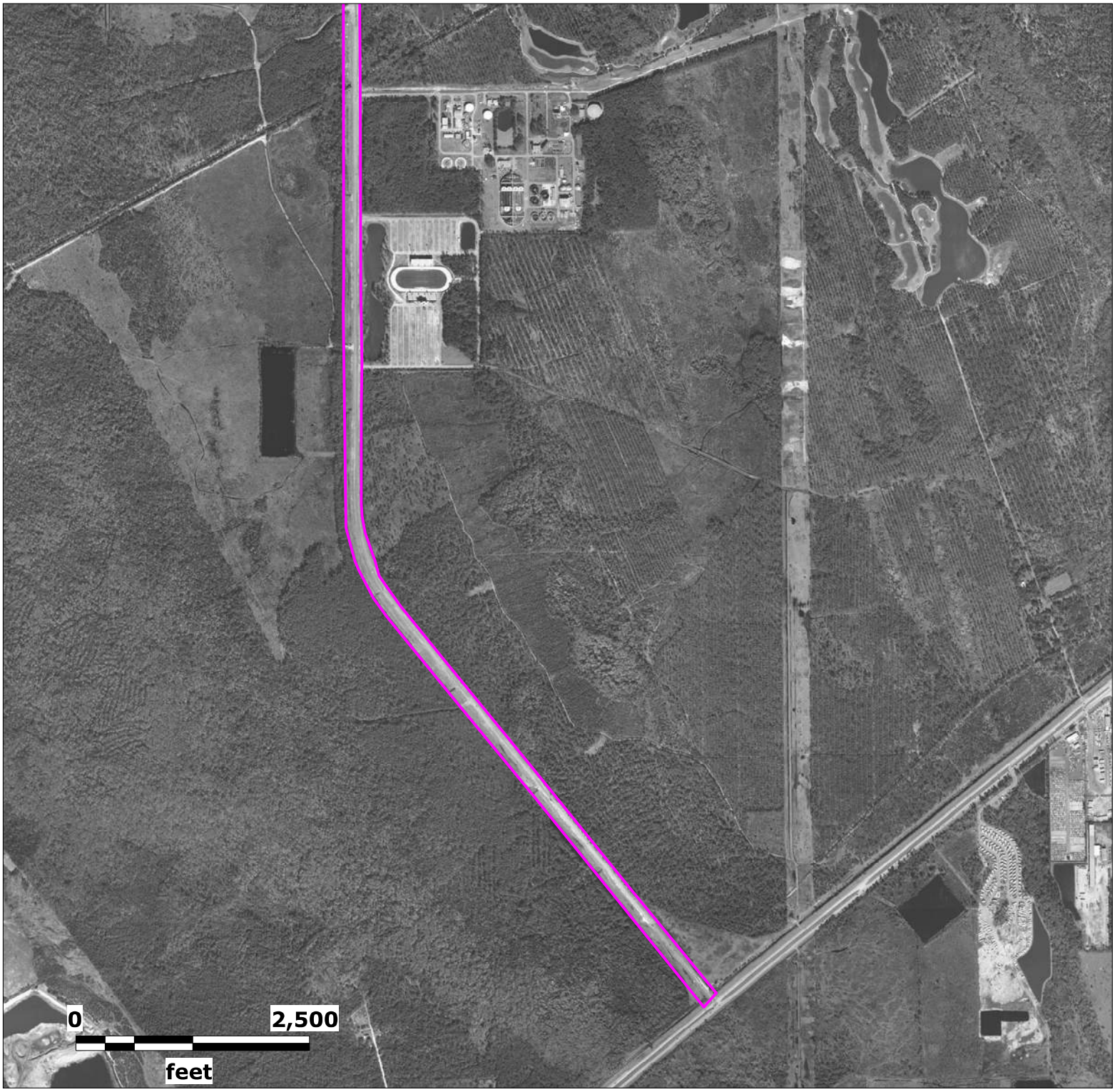
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
2003



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1992



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

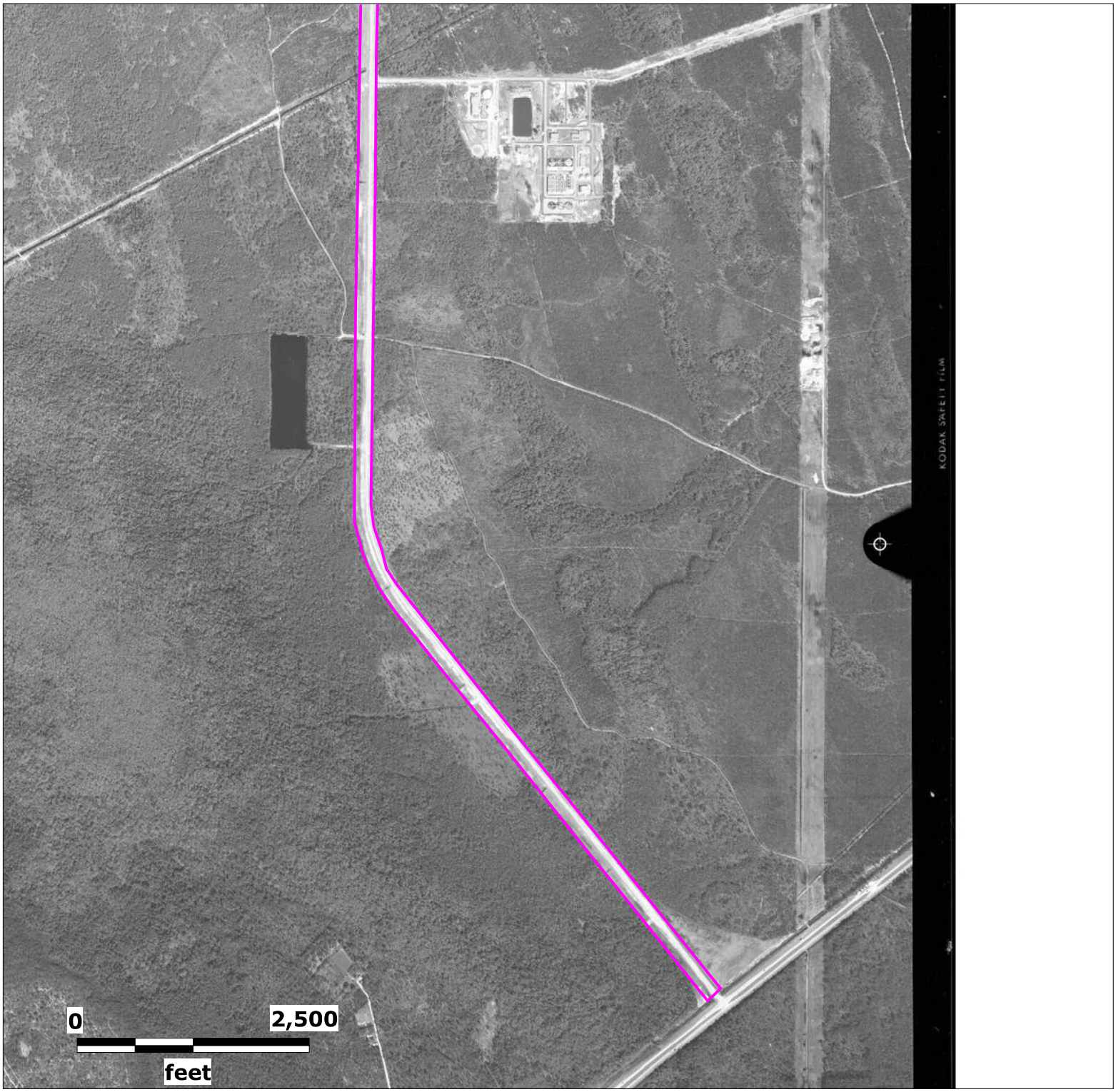
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1984



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

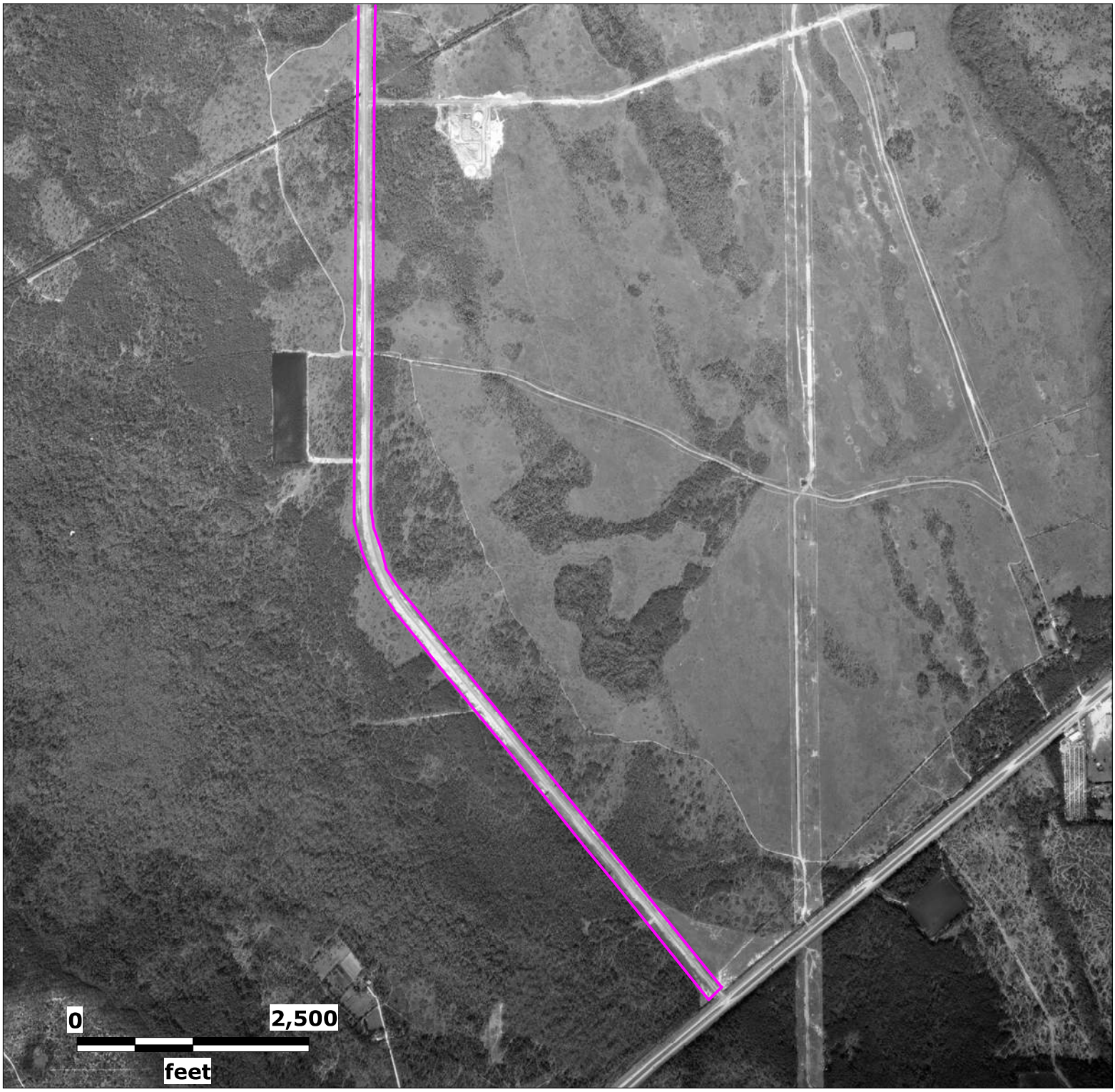
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1976



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

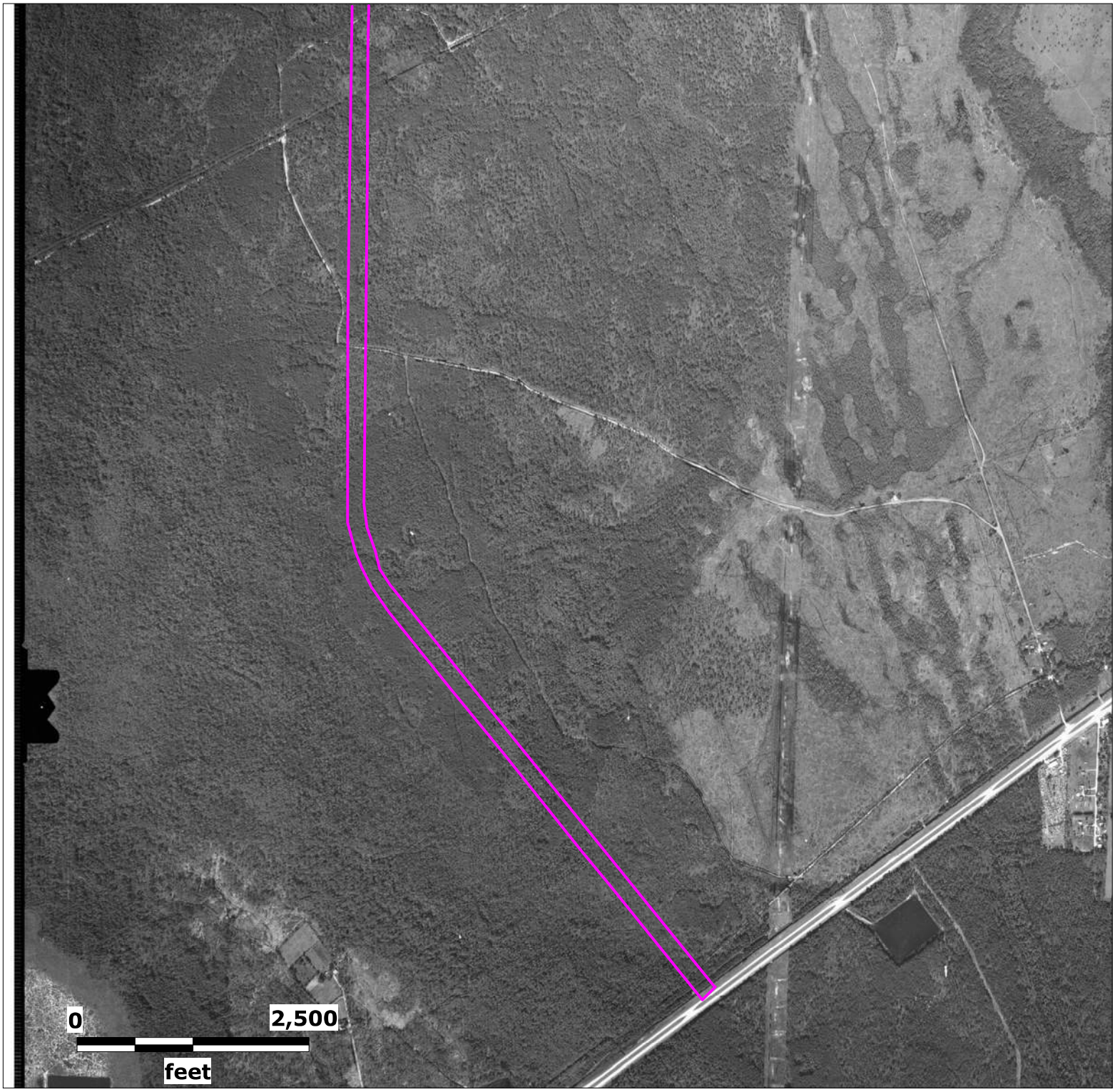
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1969



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

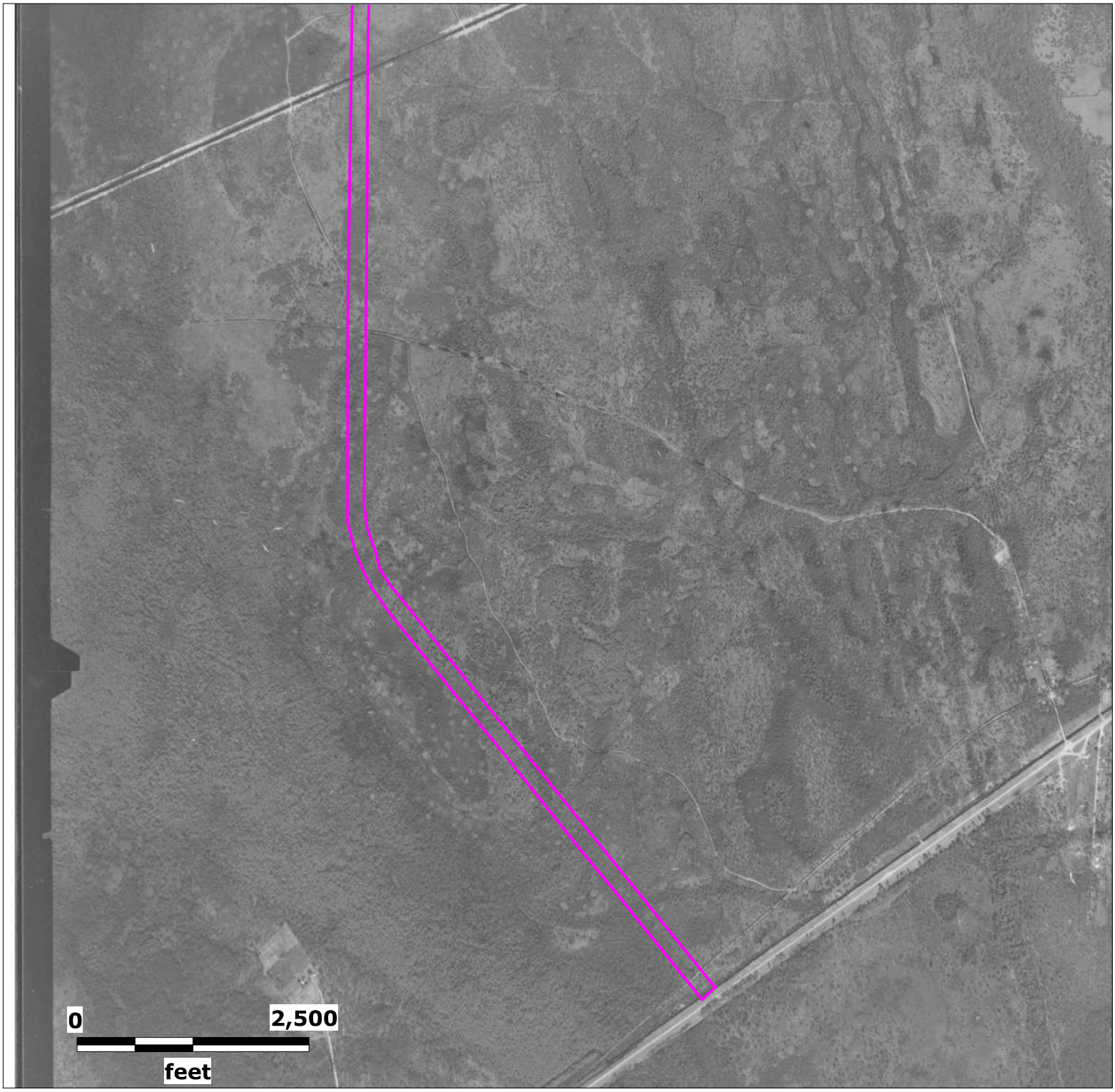
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1958



Source: University of Florida

Map Scale and Property Boundaries are Approximate

Subject Property

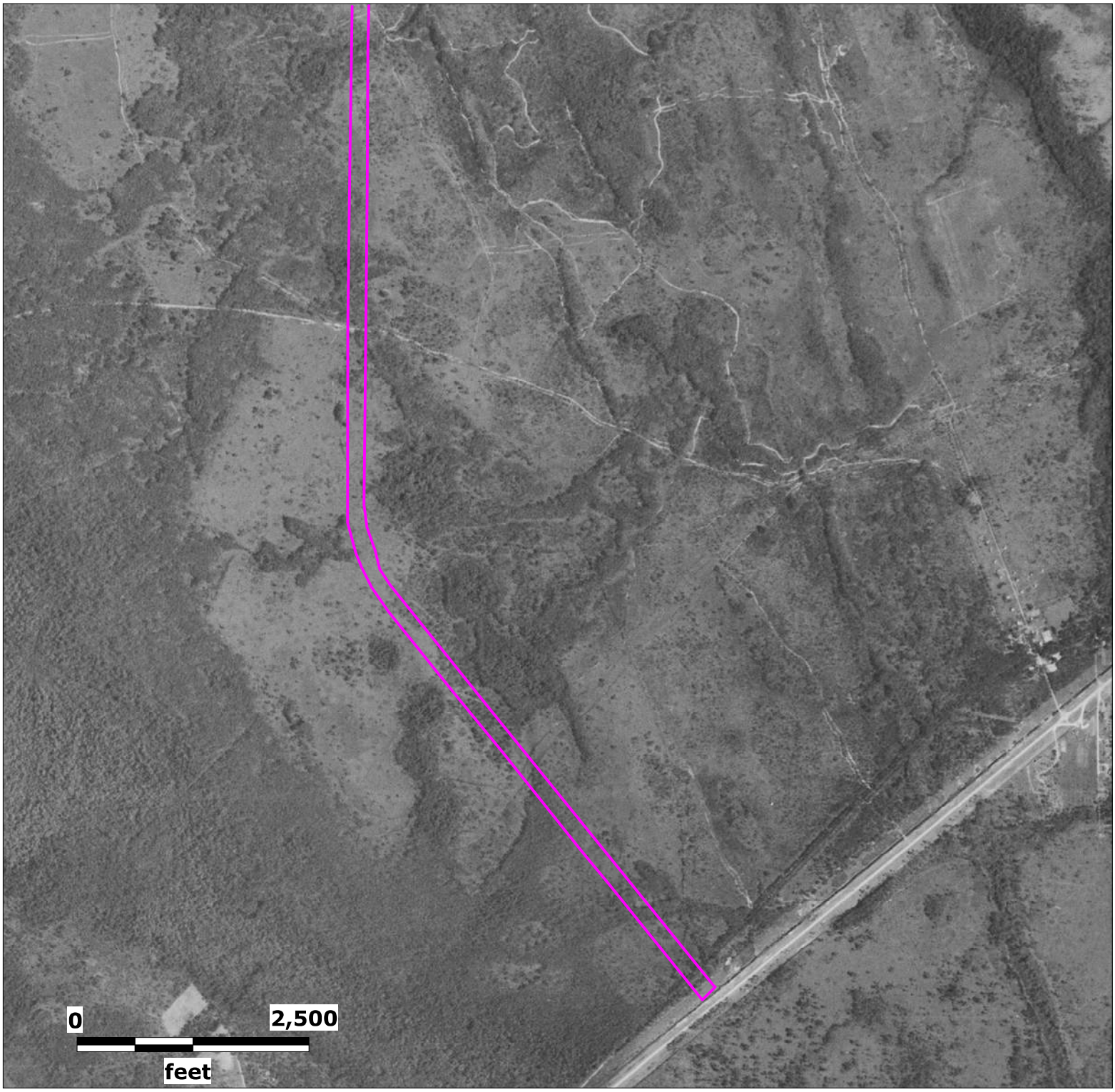
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1950



Source: USGS Single Frame Collection

Map Scale and Property Boundaries are Approximate

Subject Property

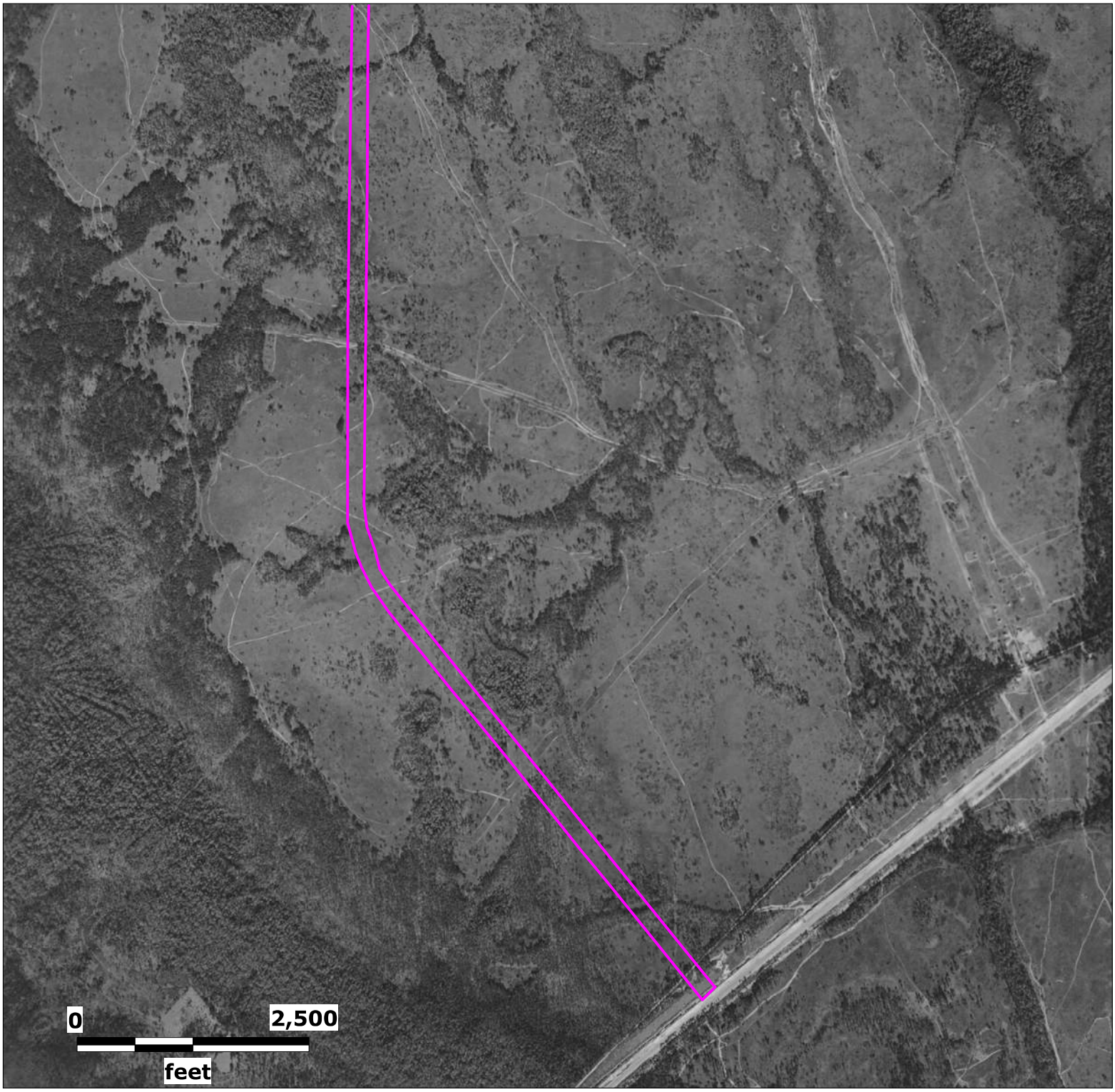
Approximate Site Location

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Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1943



Source: University of Florida

Map Scale and Property Boundaries are Approximate

Subject Property

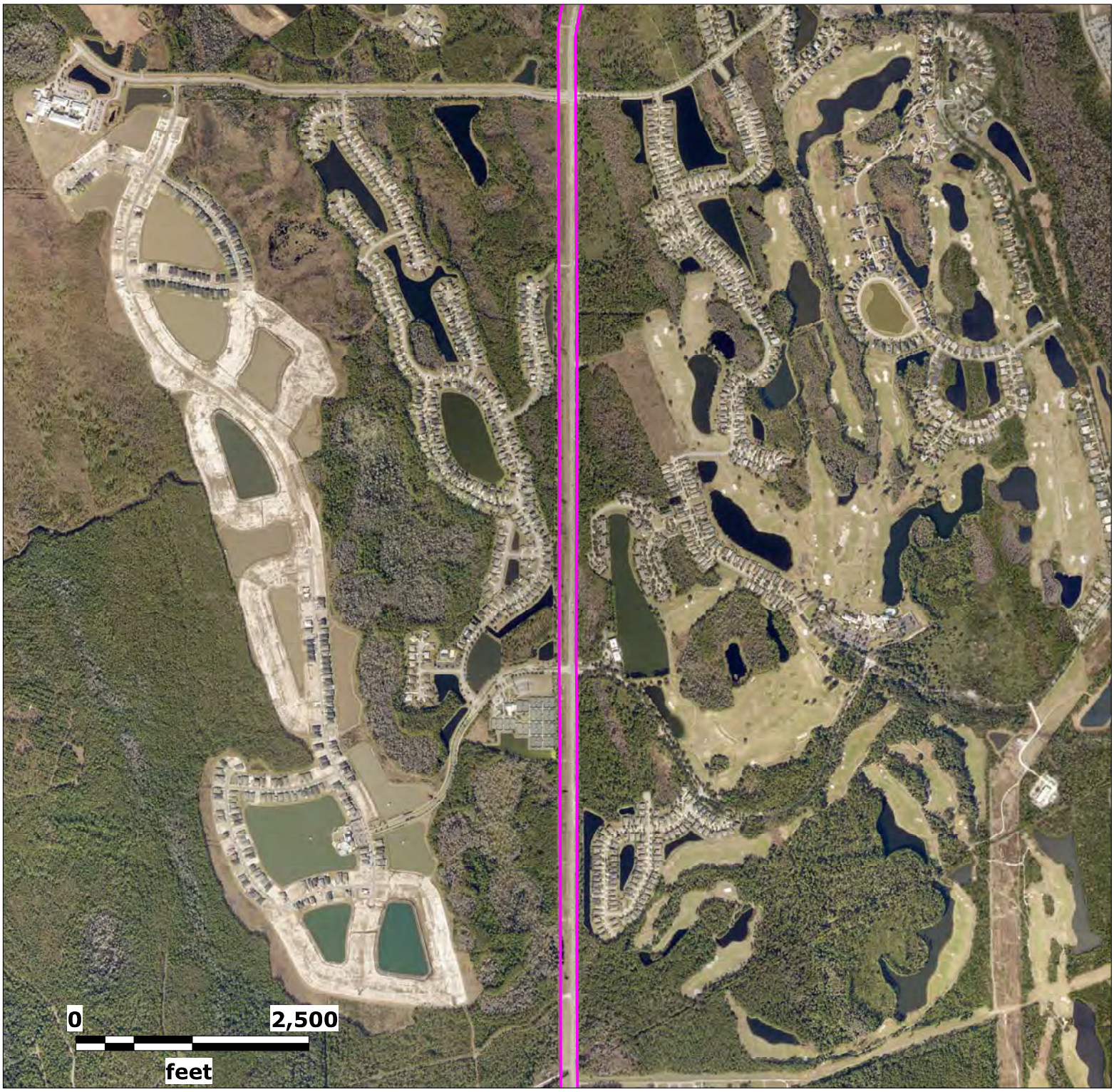
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
2021



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

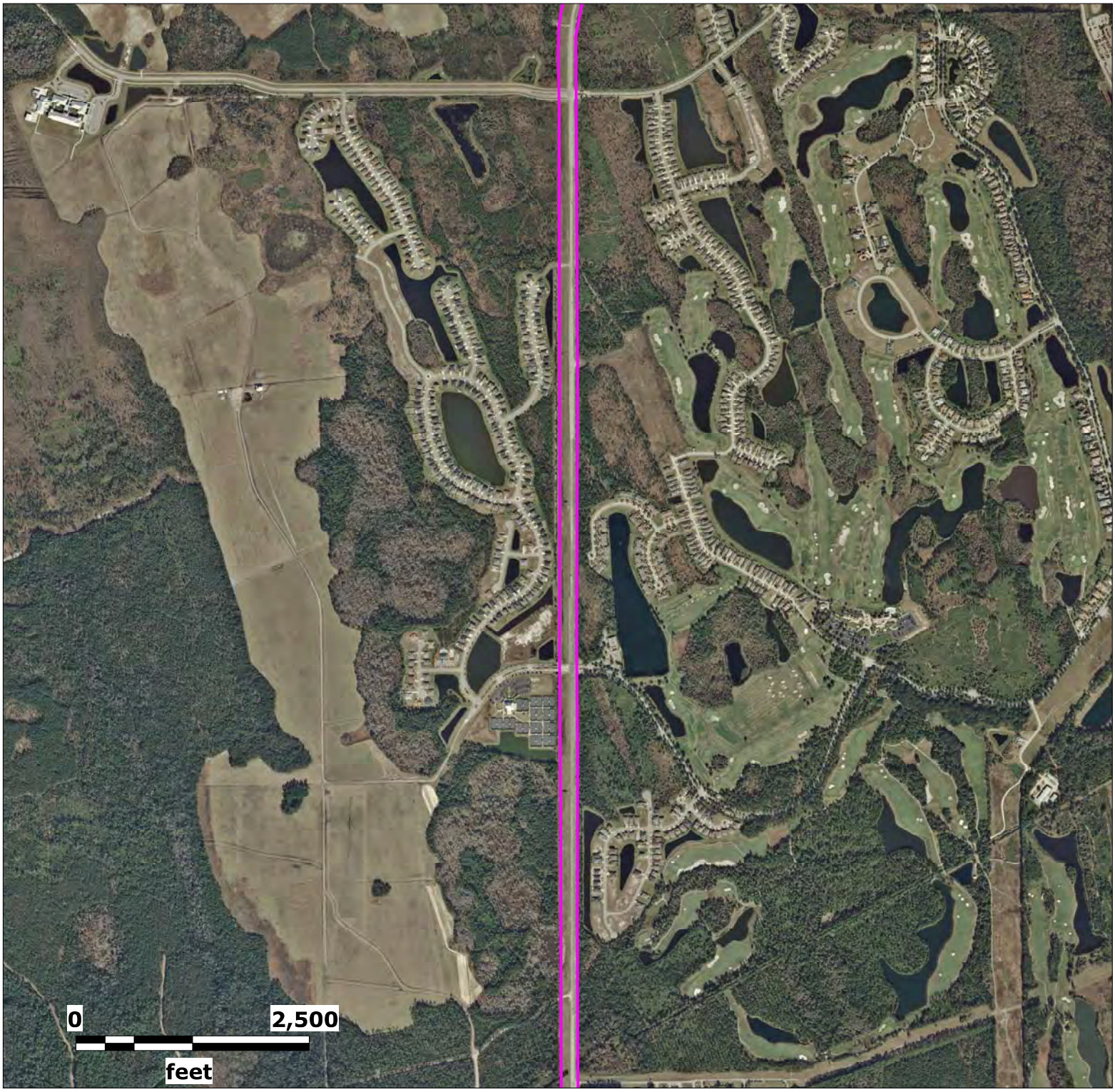
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
2012



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

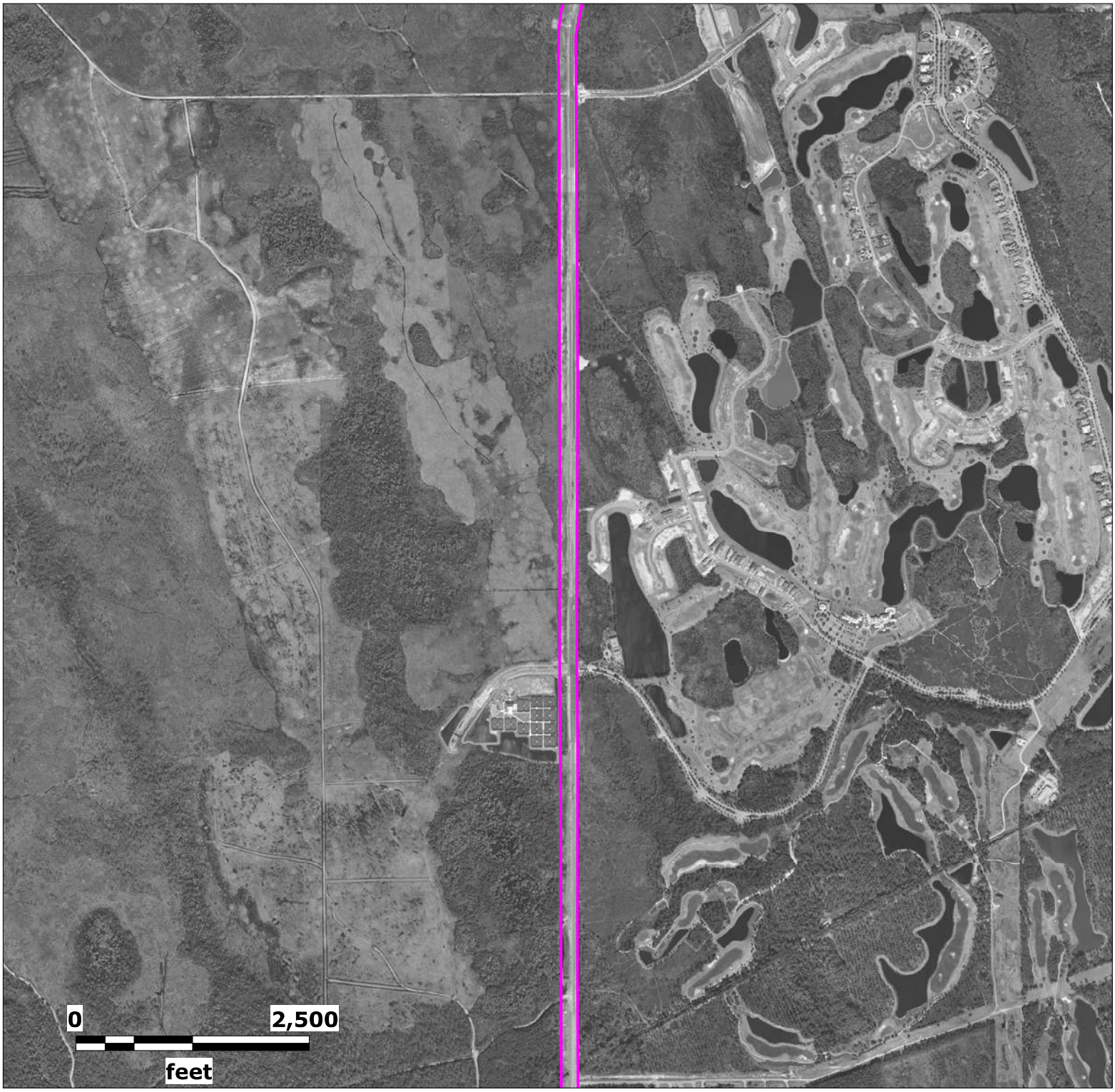
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
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Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
2003



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

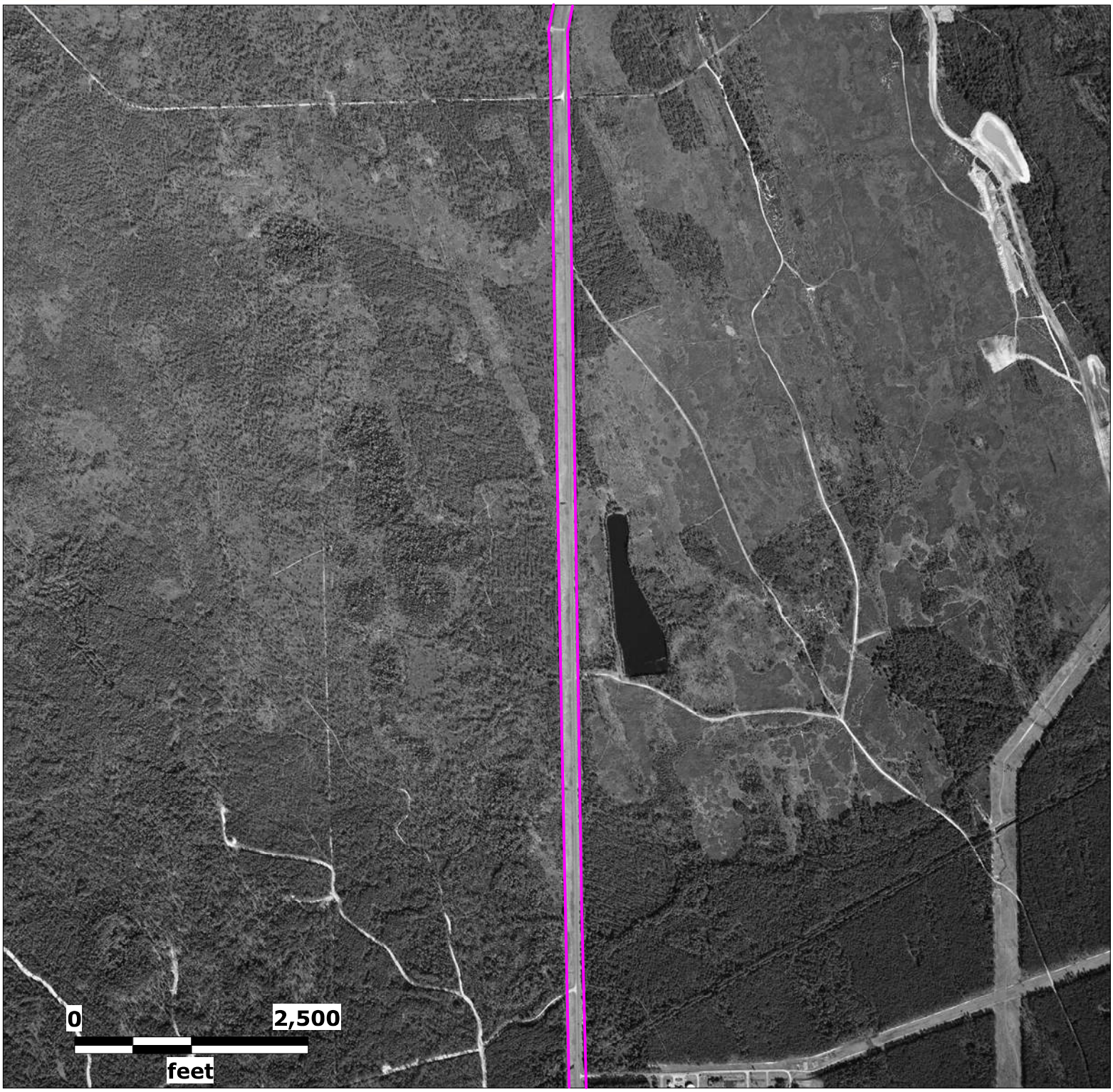
Approximate Site Location

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Volusia County, Florida

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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1992



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

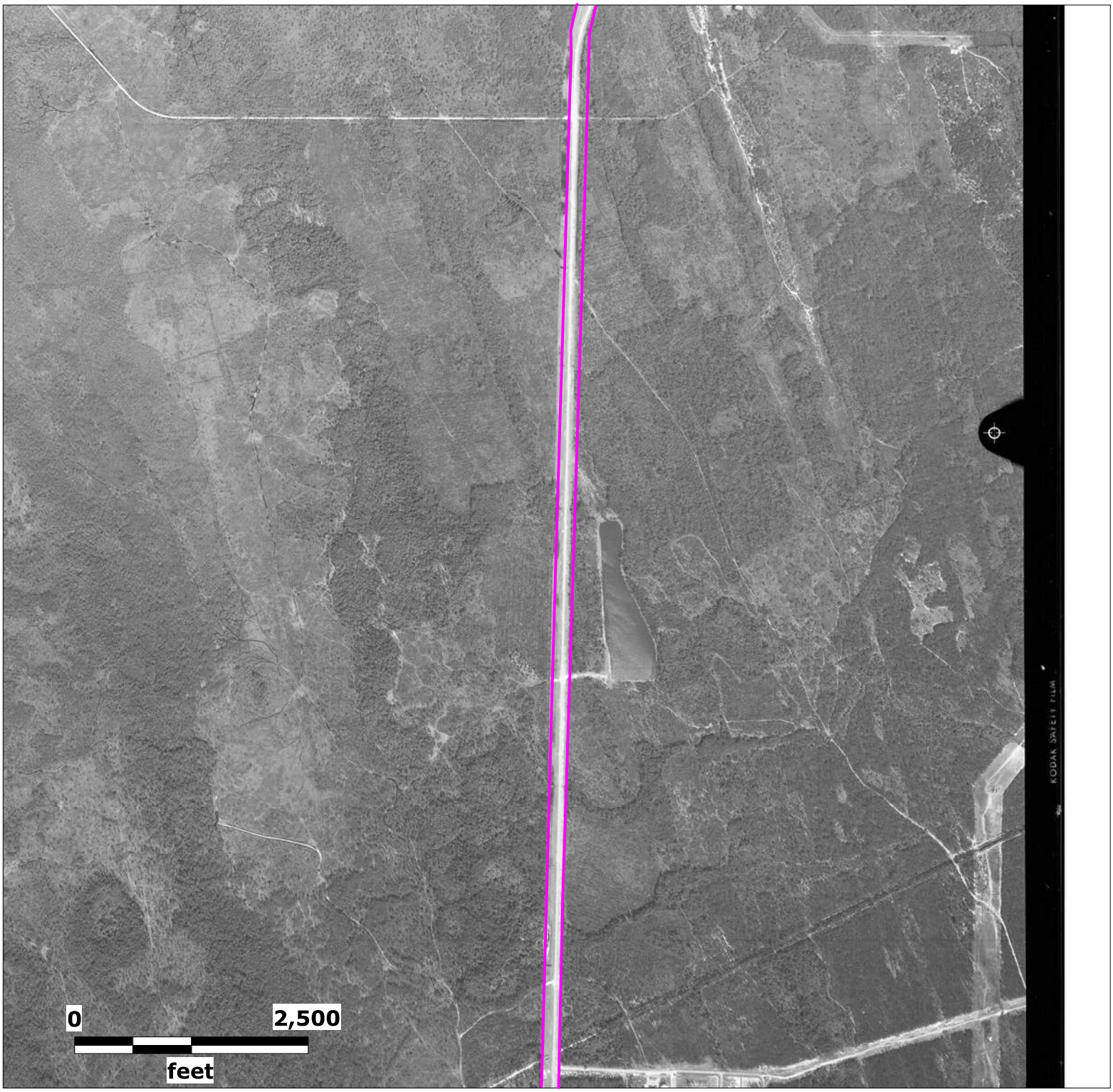
Approximate Site Location

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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1984



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

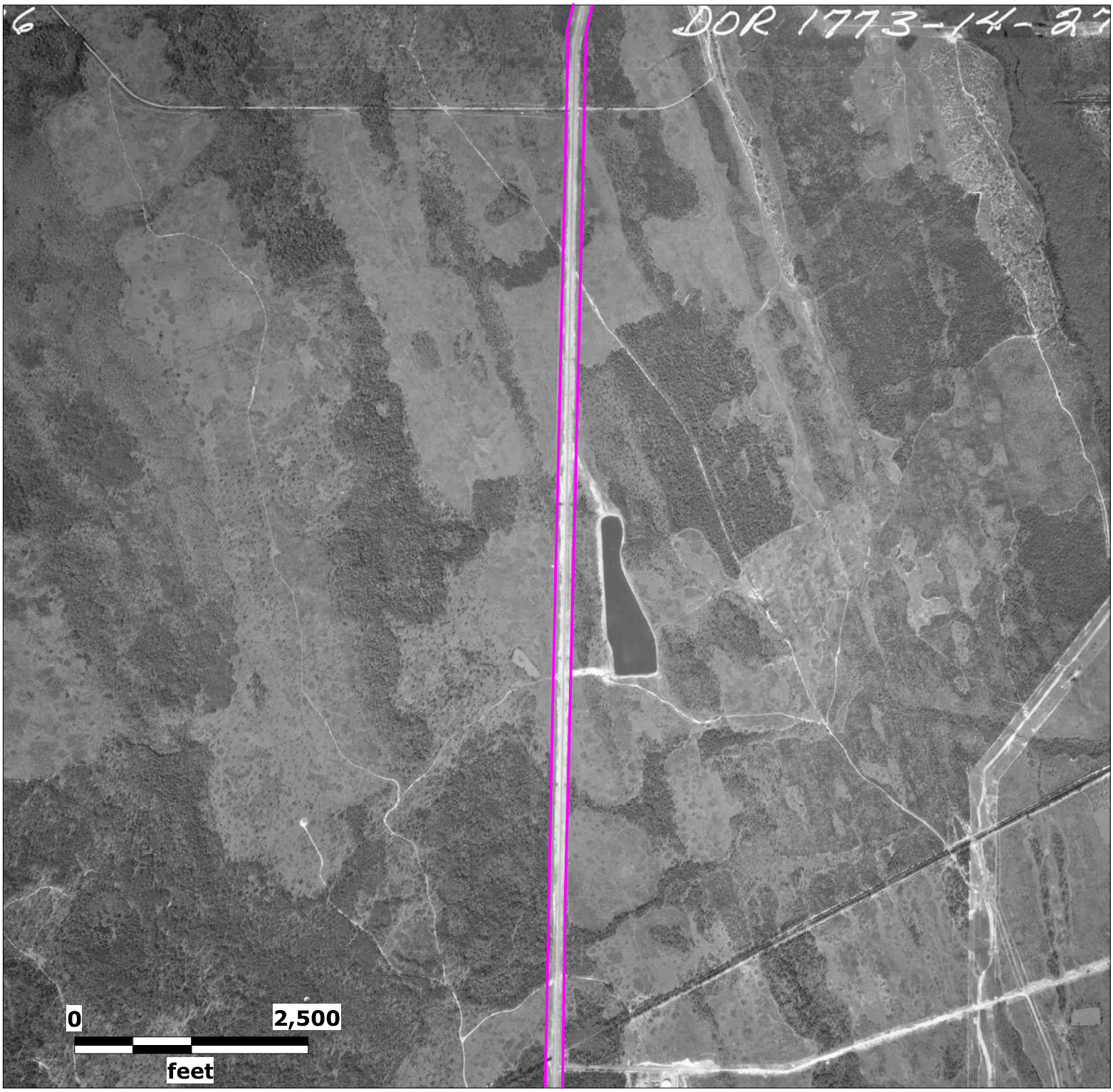
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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1976



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

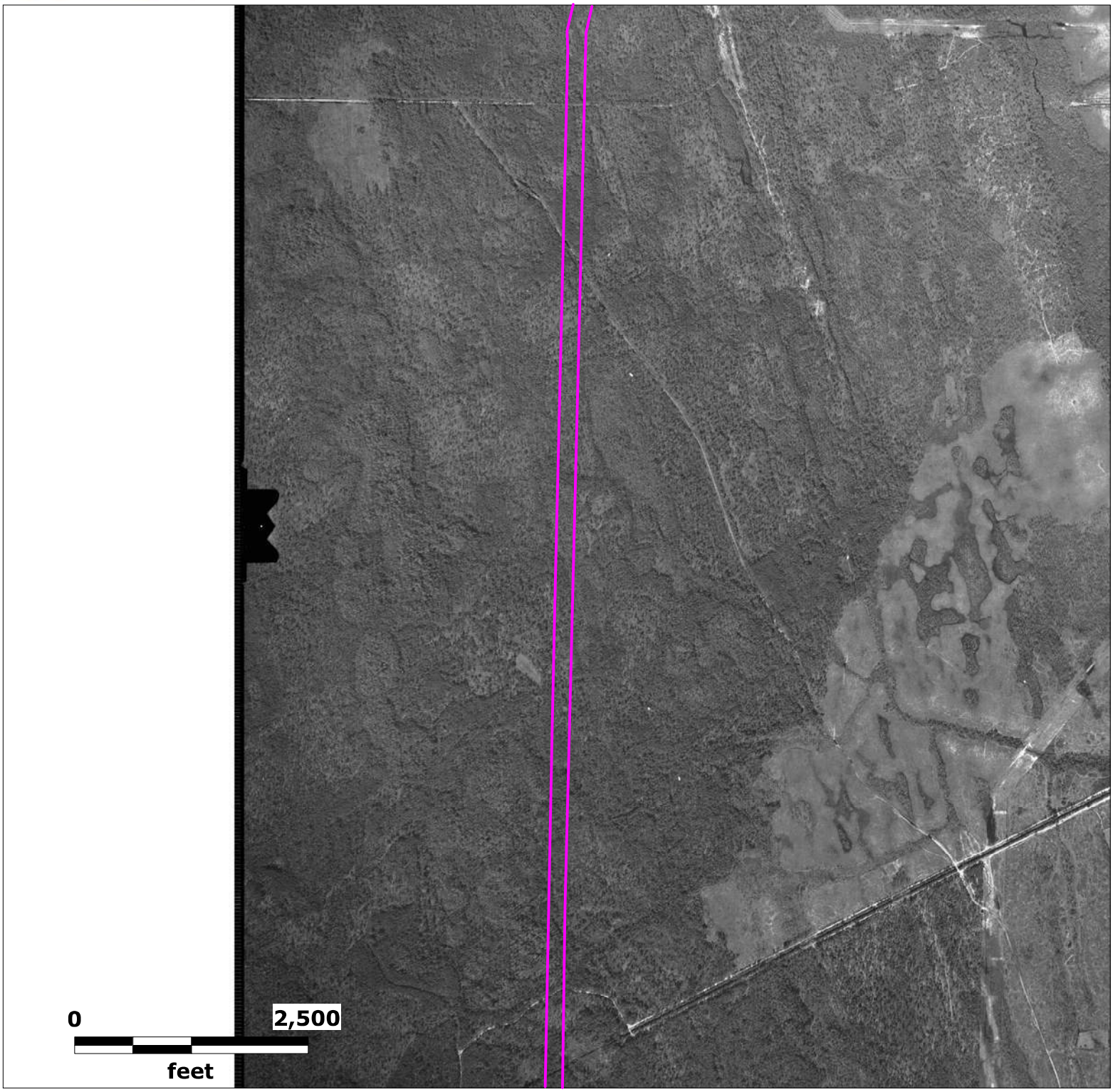
Approximate Site Location

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Volusia County, Florida

Lat (DMS): 29 11' 26.592"
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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1969



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

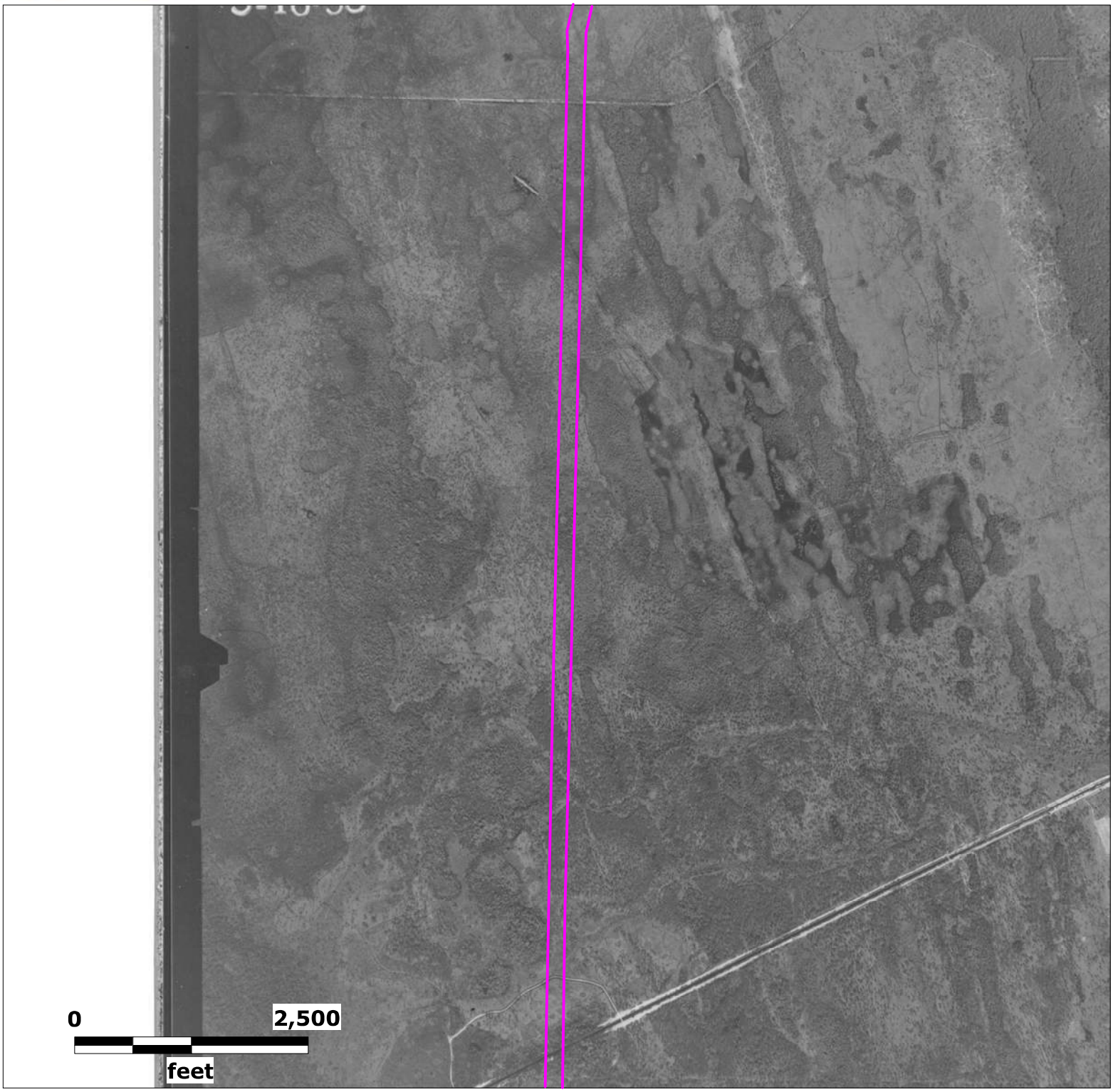
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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1958



Source: University of Florida

Map Scale and Property Boundaries are Approximate

Subject Property

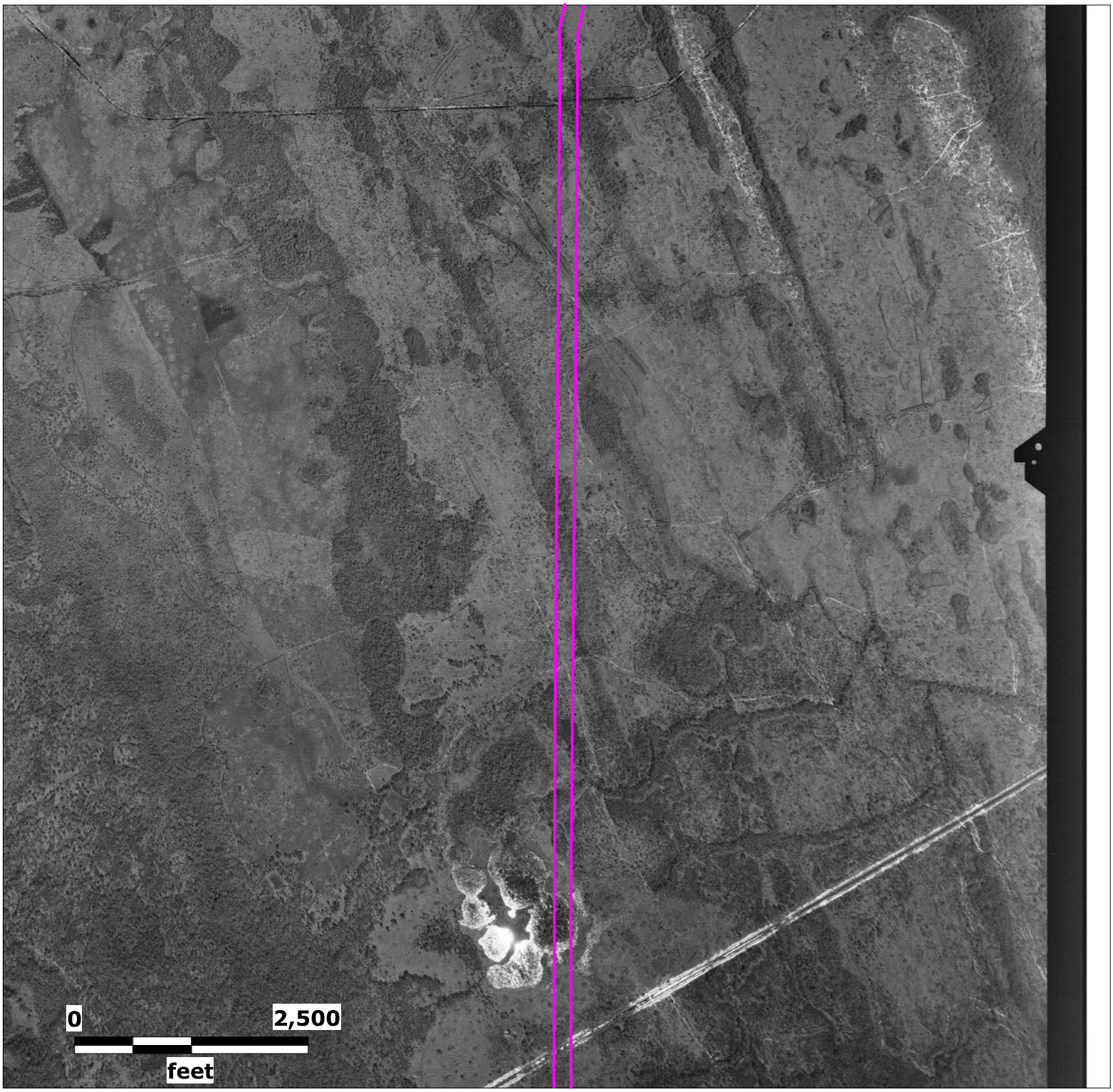
Approximate Site Location

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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1950



Source: USGS Single Frame Collection

Map Scale and Property Boundaries are Approximate

Subject Property

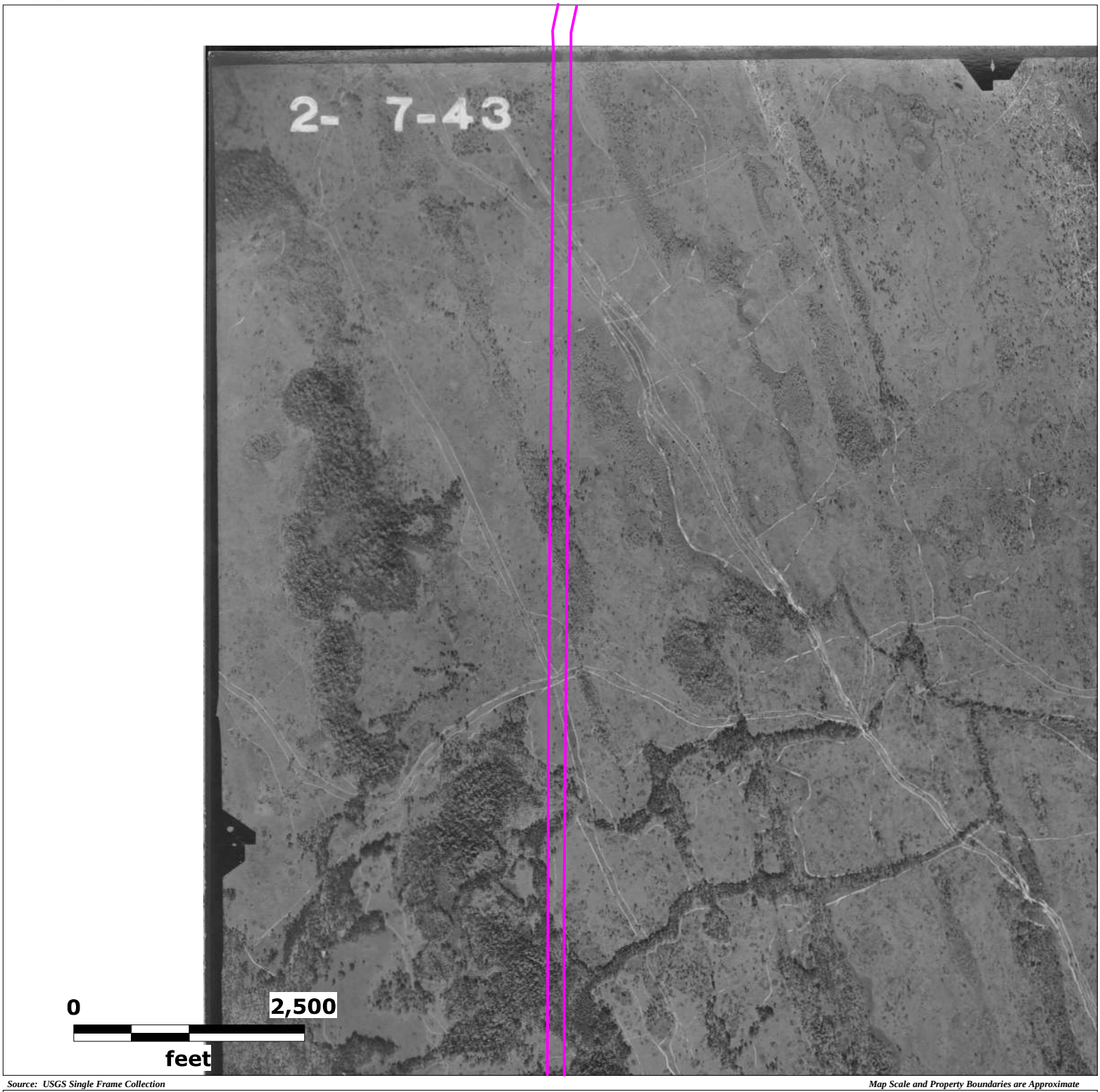
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January 29, 2023

Aerial Photo Image
1943



Source: USGS Single Frame Collection

Map Scale and Property Boundaries are Approximate

Approximate Site Location

Subject Property

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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
2021



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

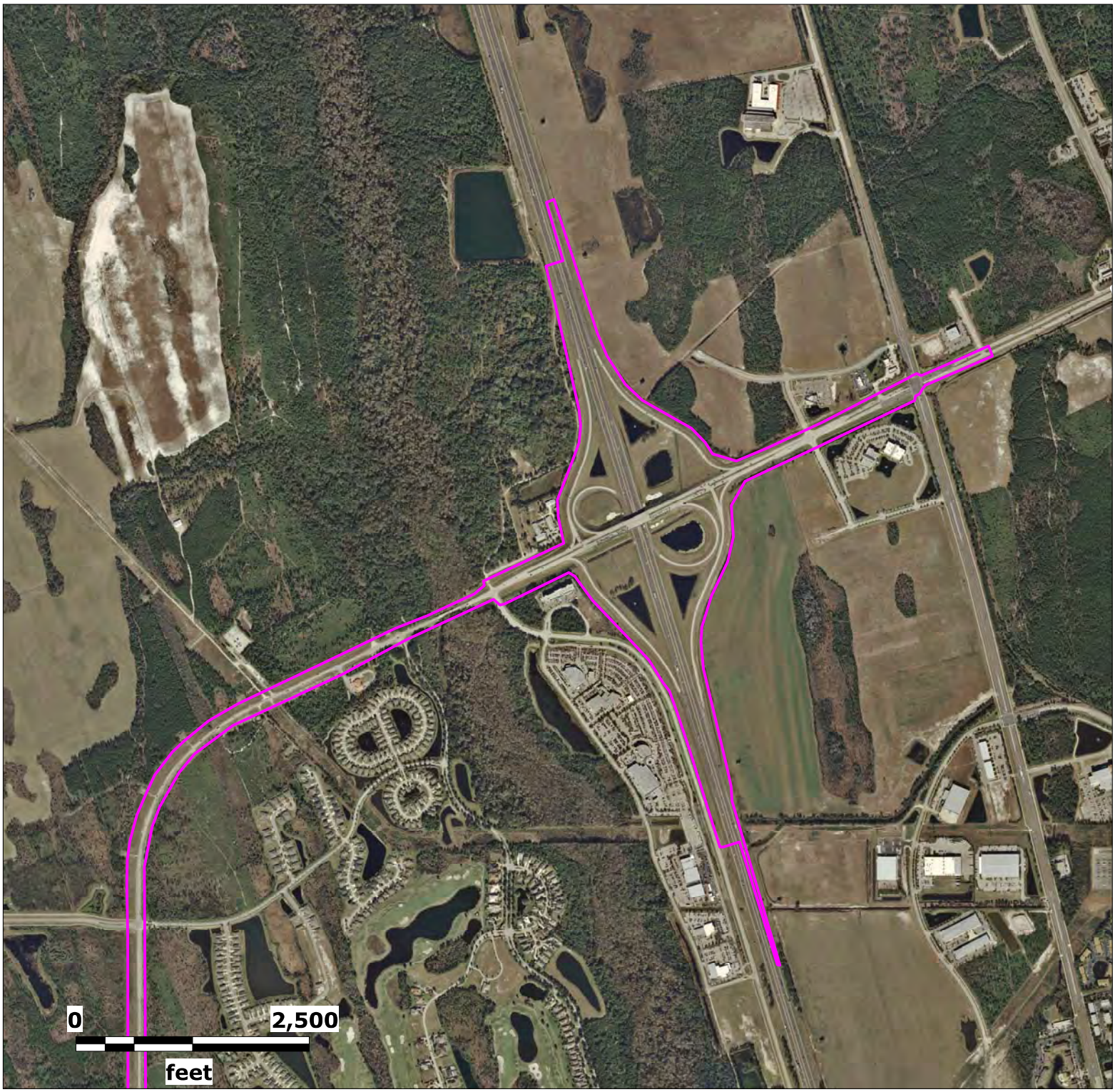
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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
2012



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

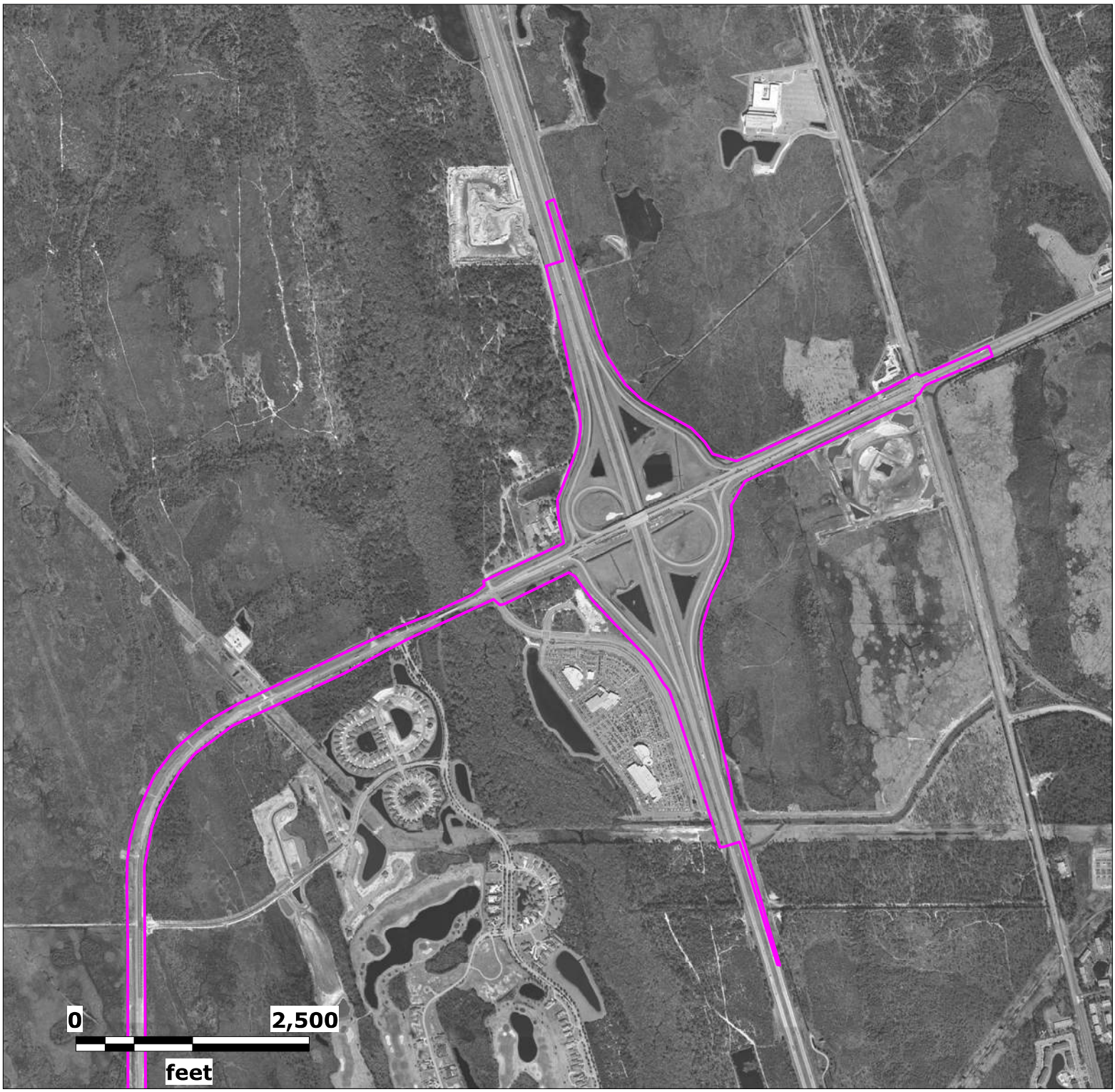
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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
2003



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

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LPGA Boulevard from US 92 (SR 600)
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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1992



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

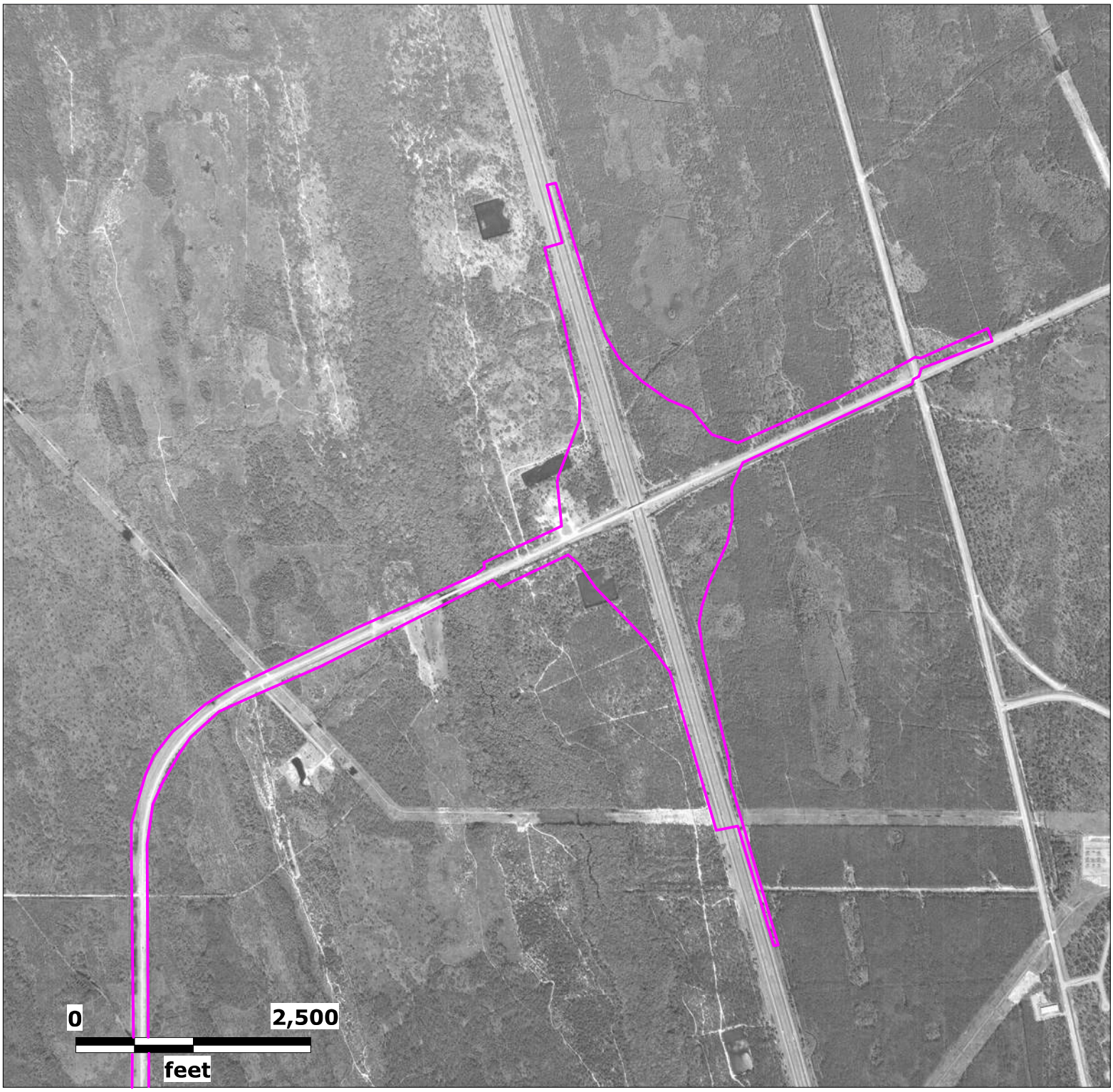
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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1984



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

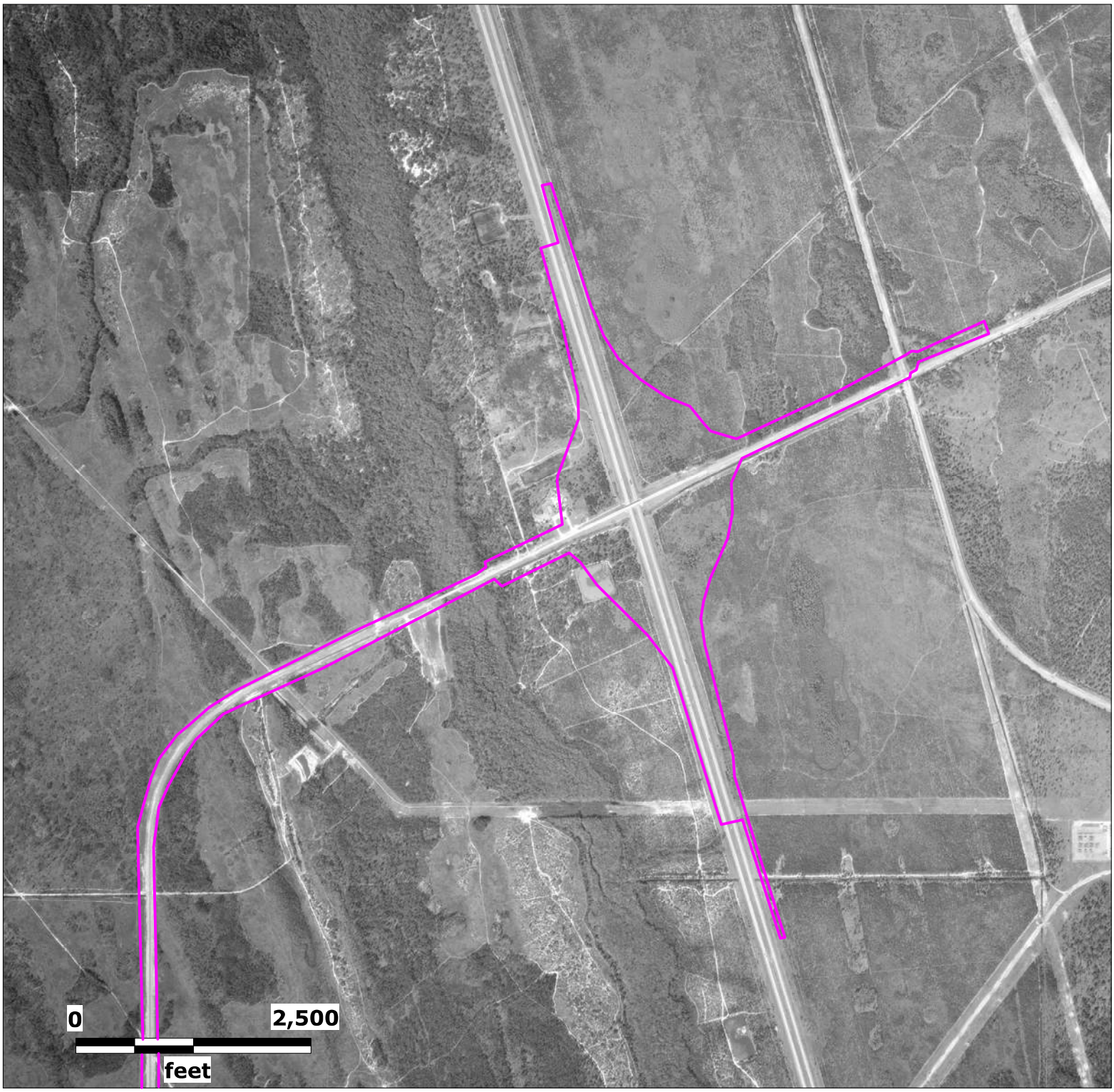
Approximate Site Location

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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1976



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

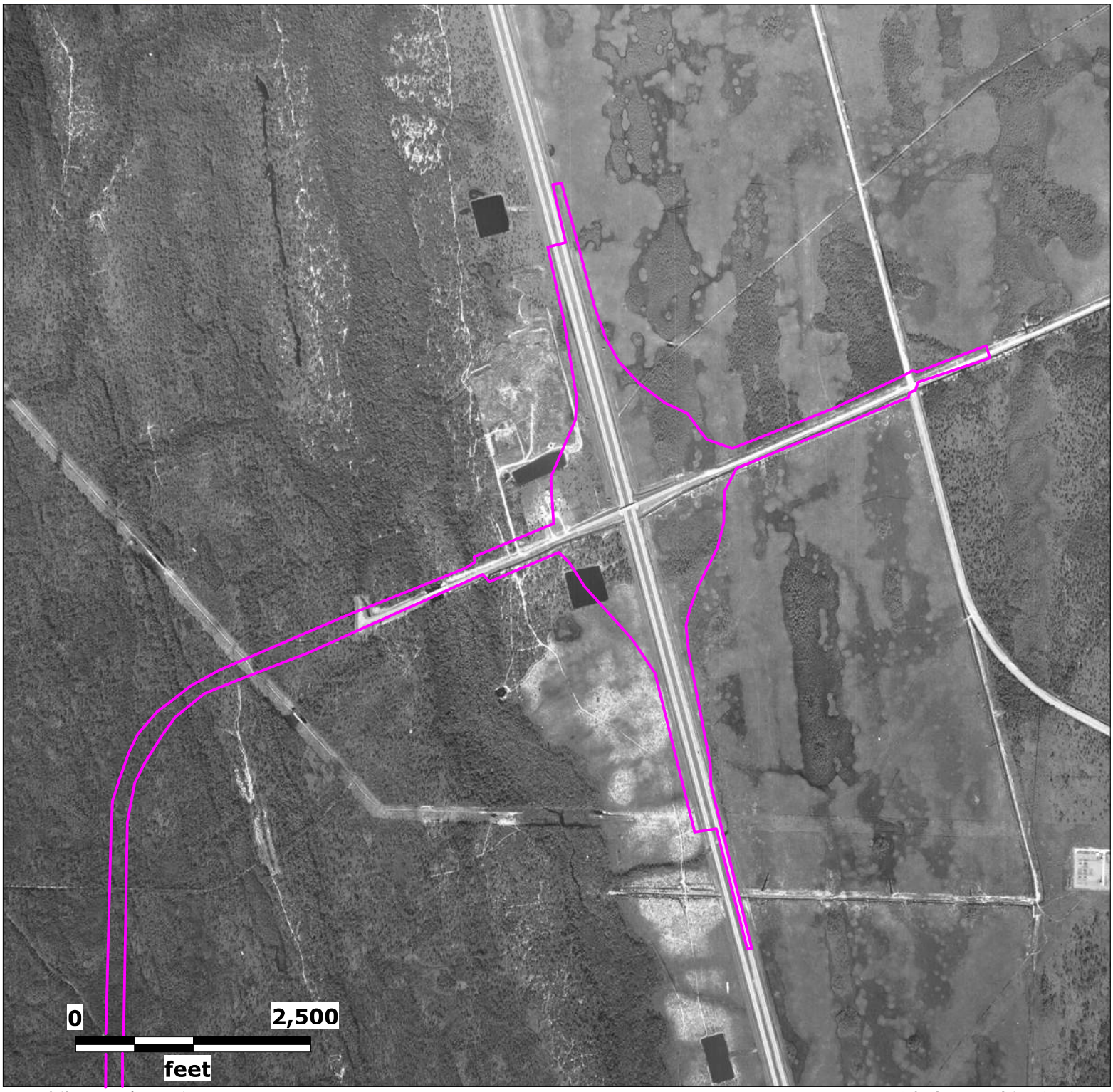
Approximate Site Location

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to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1969



Source: Florida Department of Transportation

Map Scale and Property Boundaries are Approximate

Subject Property

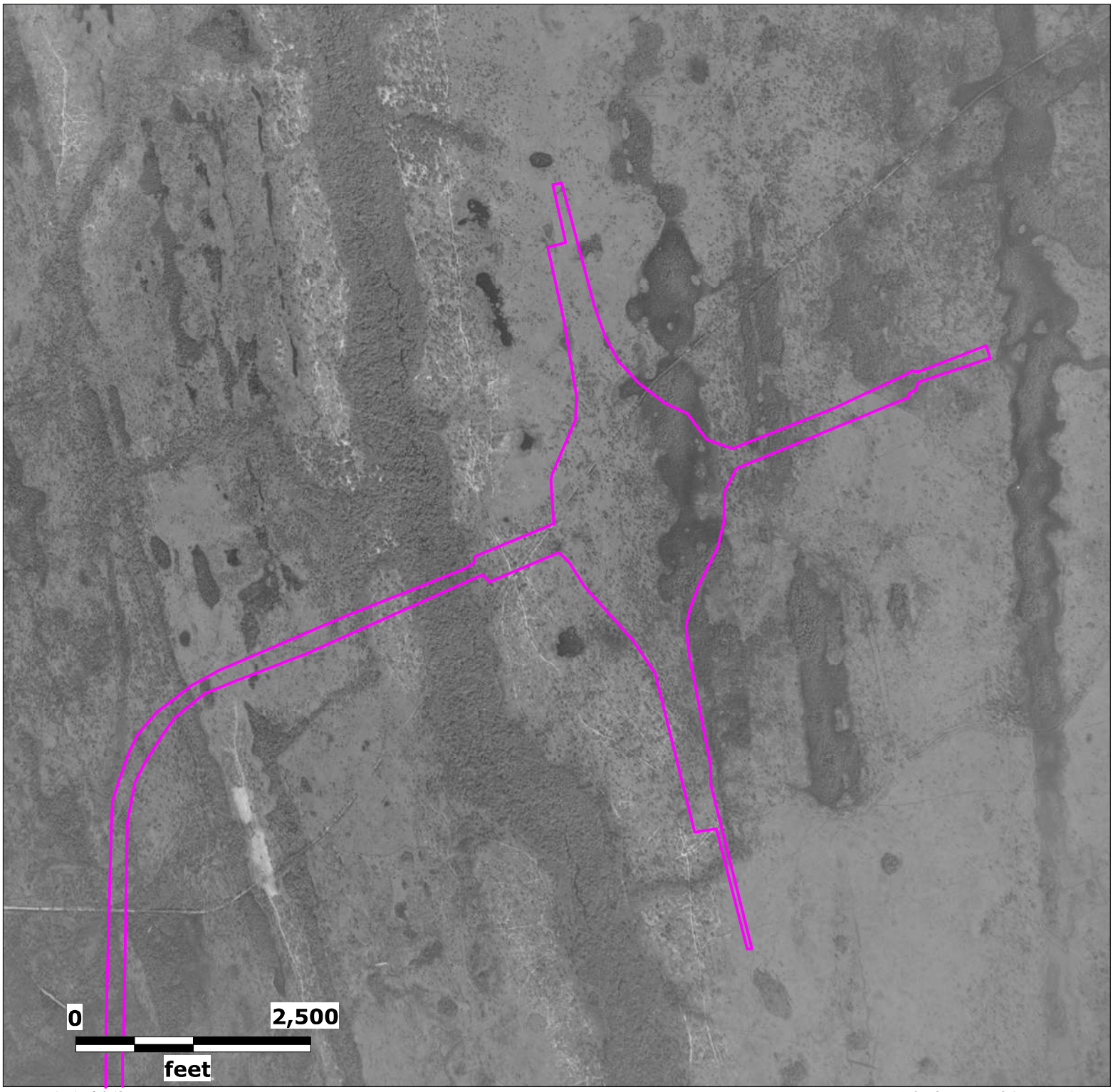
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
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Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1958



Source: University of Florida

Map Scale and Property Boundaries are Approximate

Approximate Site Location

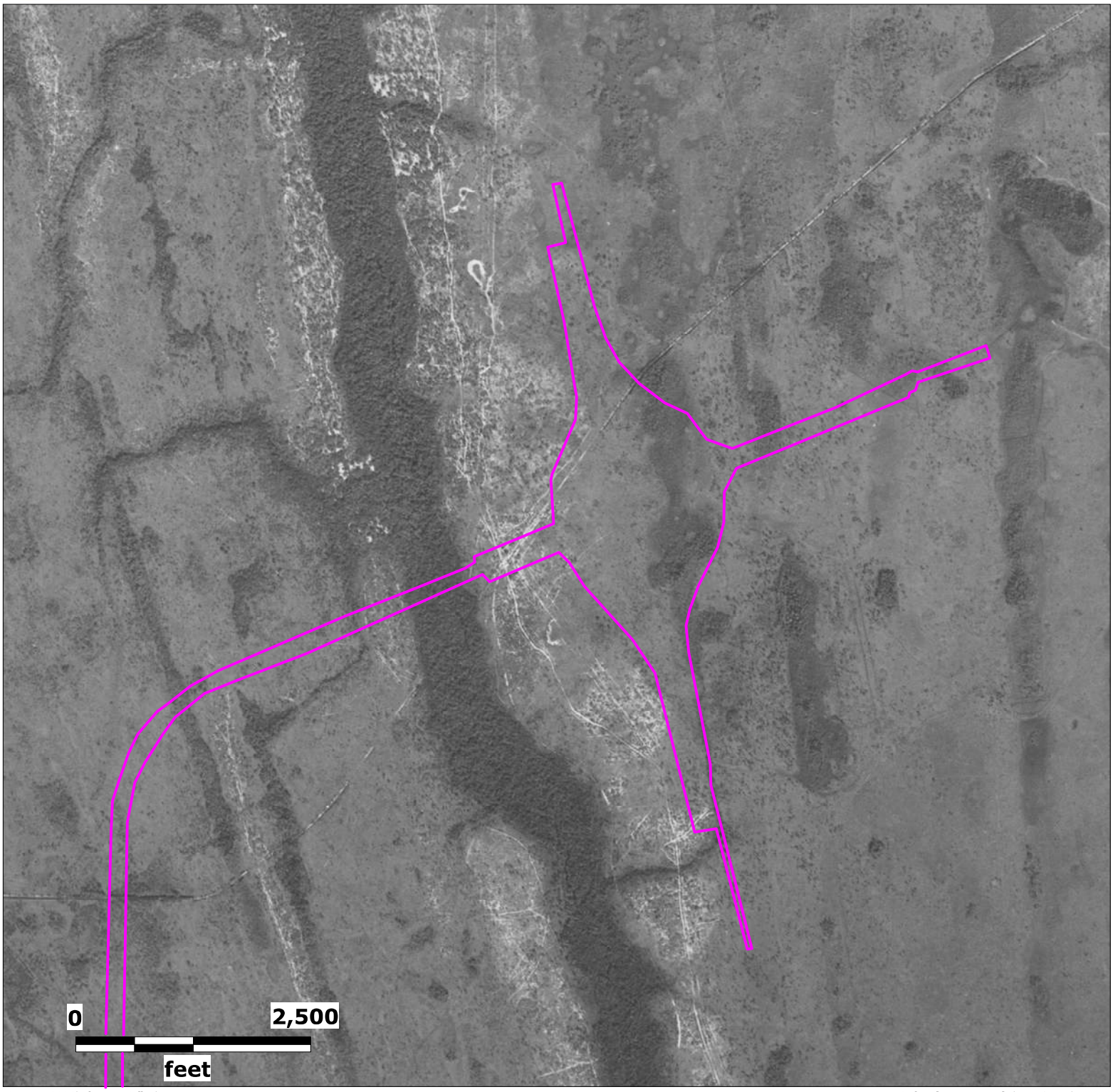
Subject Property

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1950



Source: USGS Single Frame Collection

Map Scale and Property Boundaries are Approximate

Subject Property

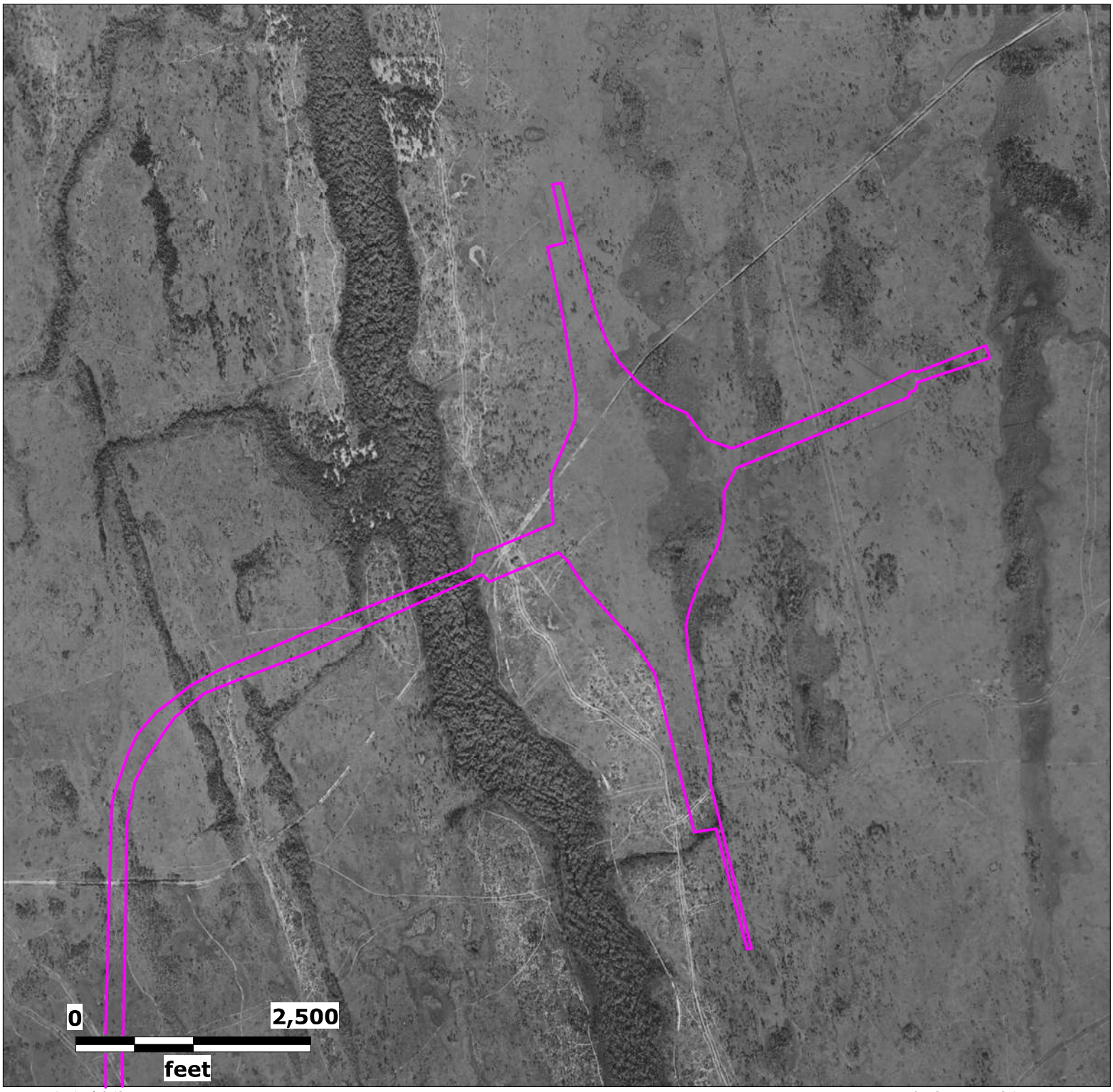
Approximate Site Location

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Volusia County, Florida

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EDM Job No: 26393
January 29, 2023

Aerial Photo Image
1943



Source: University of Florida

Map Scale and Property Boundaries are Approximate

Subject Property

Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
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Volusia County, Florida

Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Appendix D Topographic Maps

Historical Topographic Map Report

Subject Property:

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida
Daytona Beach Quadrangle

Prepared For:

Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Prepared By:

Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770

January 29, 2023

Environmental Data Management, Inc.
2840 West Bay Drive, Suite 208
Belleair Bluffs, Florida 33770
(727) 586-1700
http://www.edm-net.com

January 29, 2023

Collin Duncan
Tierra Inc
7351 Temple Terrace Hwy
Tampa, FL 33637

Subject: **Historical Topographic Maps-- EDM Project #: 26393**

Dear Mr. Duncan:

Thank you for choosing Environmental Data Management, Inc. The following report contains a series of Historical Topographic Maps for the following location:

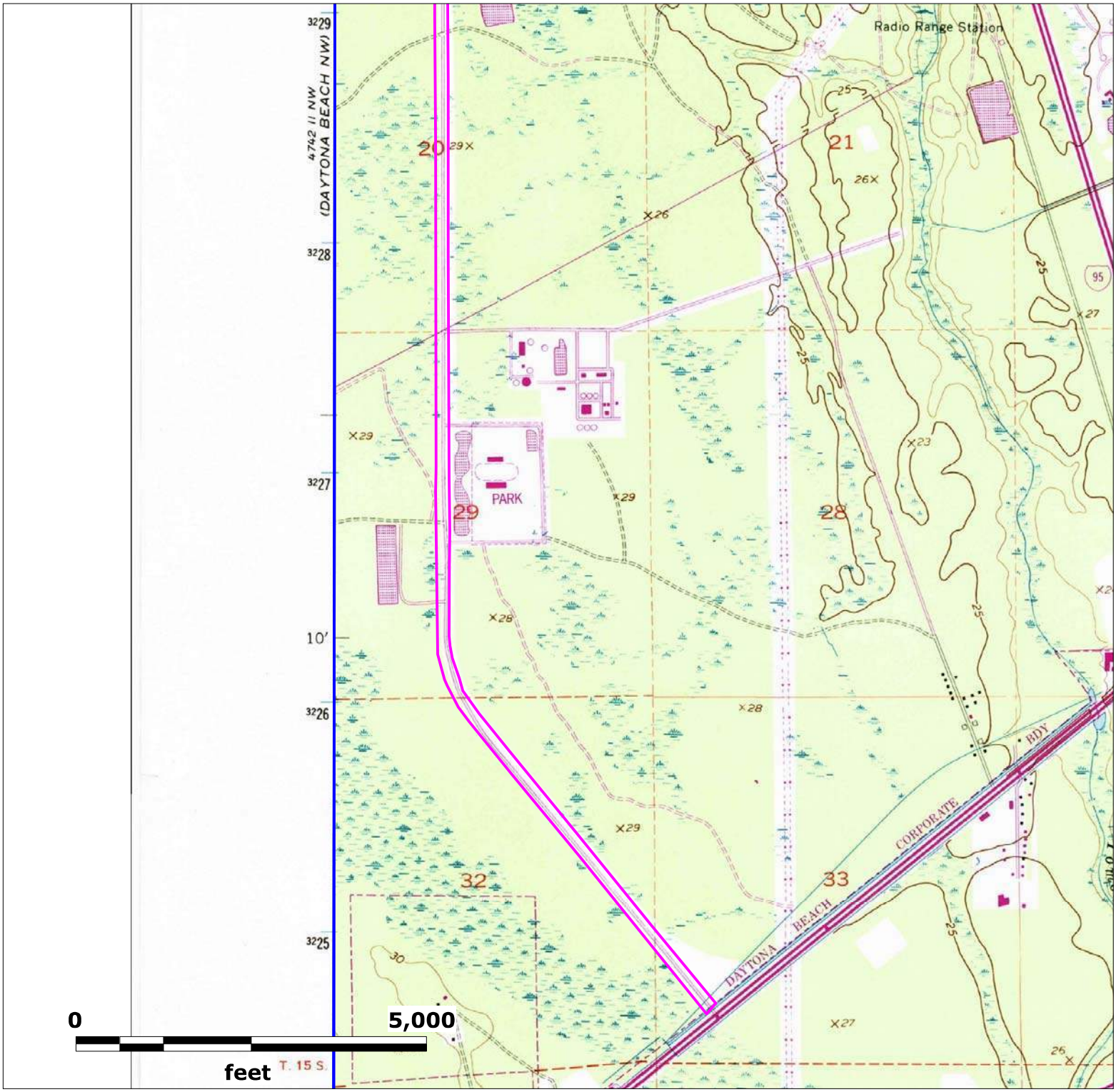
LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida
Daytona Beach Quadrangle

These maps were obtained from the digital map collections of the US Geological Survey. Only 7.5 Minute Series maps were selected for this report.

Should you have any questions regarding this report or our service, please feel free to contact us. We appreciate the opportunity to be of service to you and look forward to working with you in the future.

ENVIRONMENTAL DATA MANAGEMENT, INC.

Historical Topographic Map
Daytona Beach 1993



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

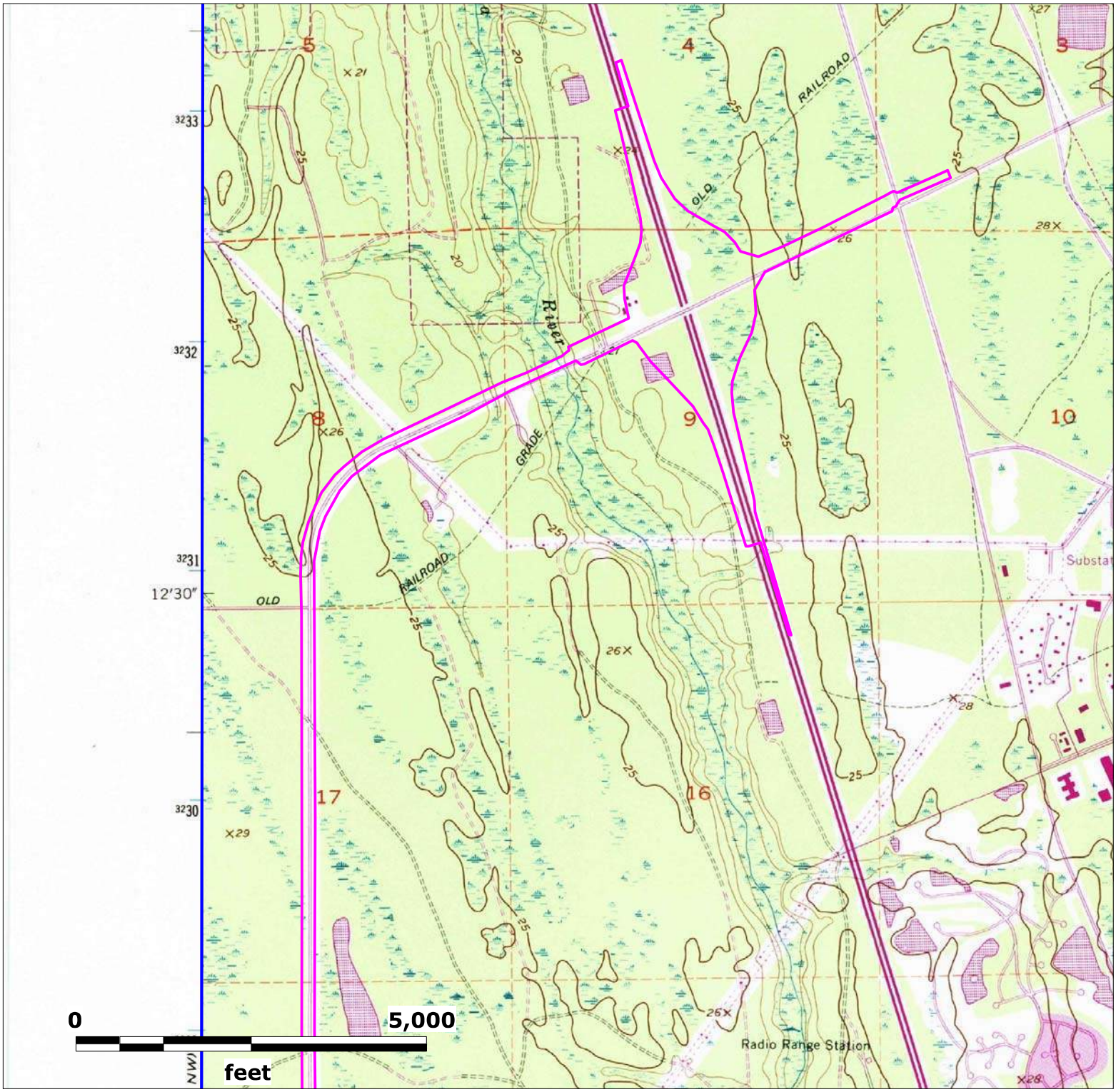
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

Lat (DMS): 29 11' 26.592"
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EDM Job No: 26393
January 29, 2023

Historical Topographic Map
Daytona Beach 1993



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

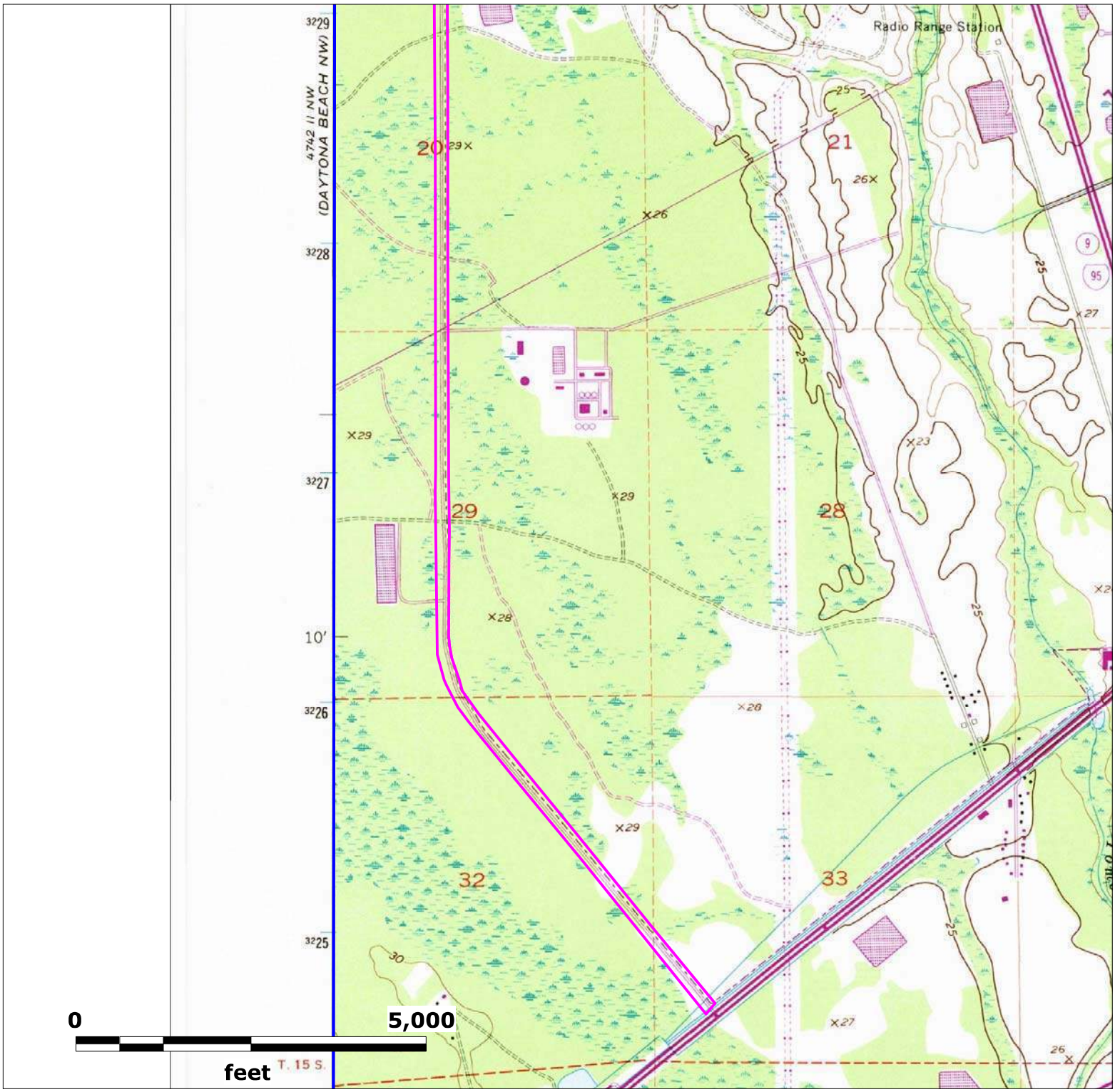
Approximate Site Location

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Volusia County, Florida

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EDM Job No: 26393
January 29, 2023

Historical Topographic Map
Daytona Beach 1988



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

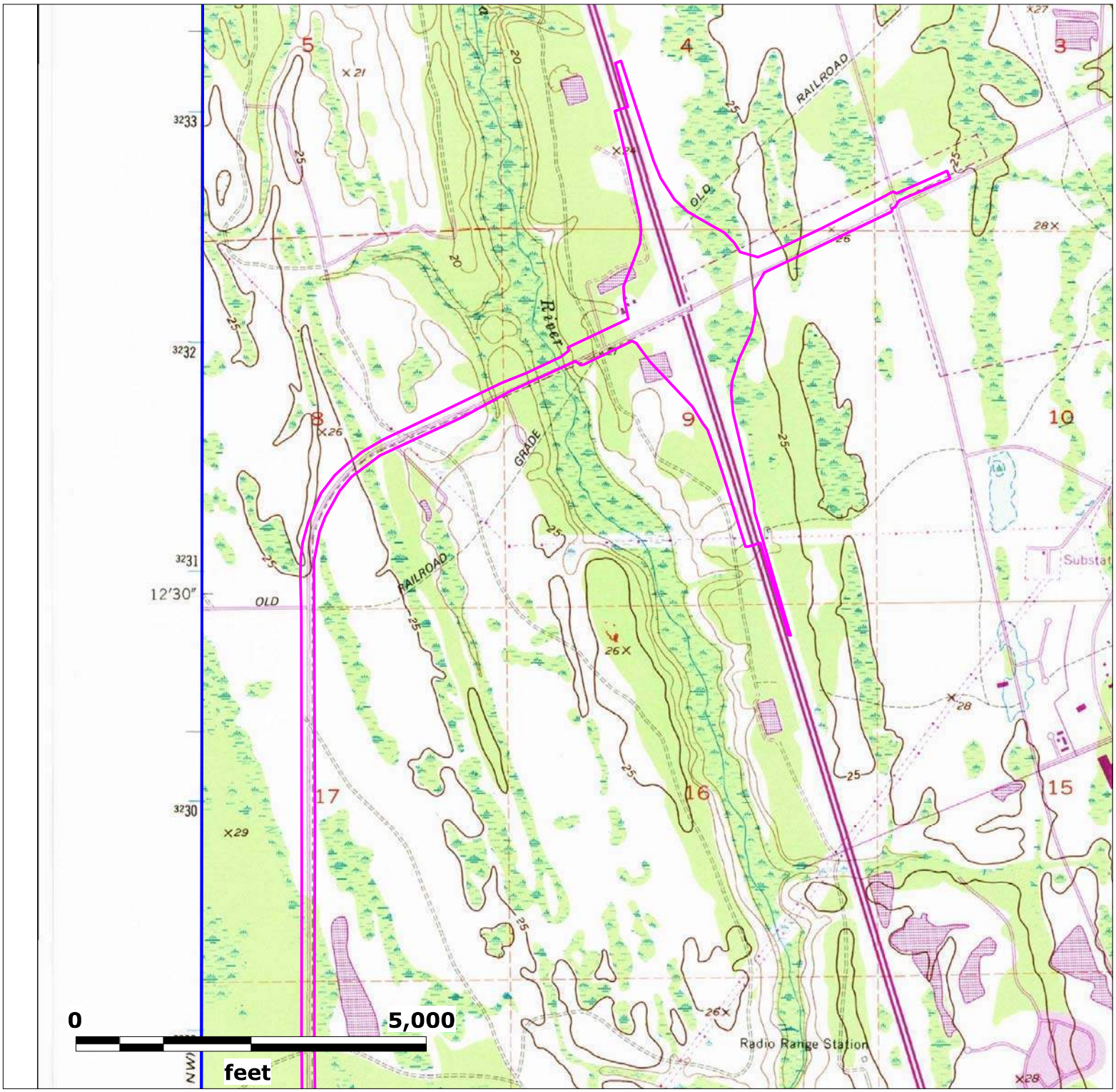
Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
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Volusia County, Florida

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EDM Job No: 26393
January 29, 2023

Historical Topographic Map
Daytona Beach 1988



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
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EDM Job No: 26393
January 29, 2023

Historical Topographic Map
Daytona Beach 1980



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

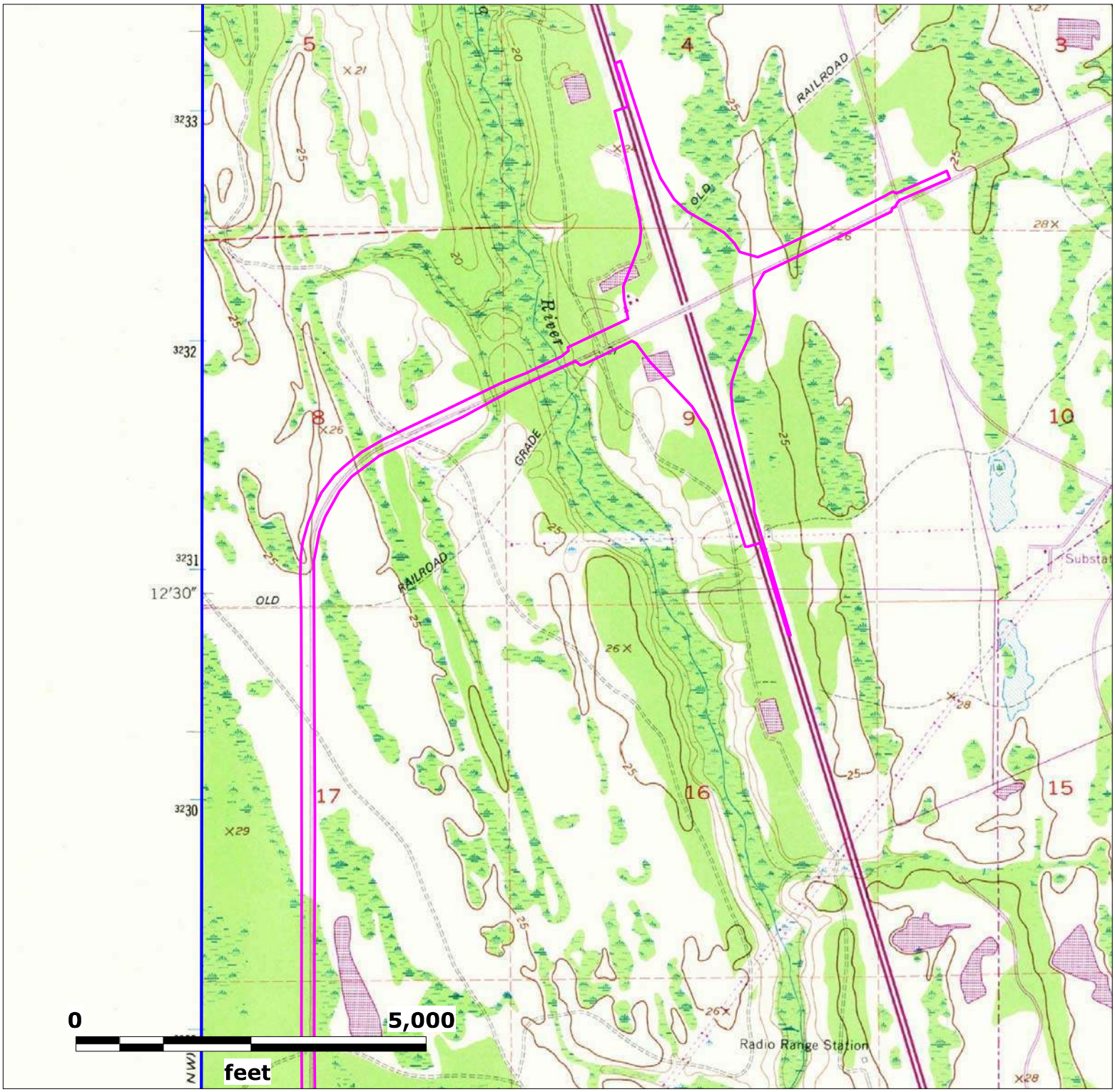
Approximate Site Location

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Volusia County, Florida

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EDM Job No: 26393
January 29, 2023

Historical Topographic Map
Daytona Beach 1980



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

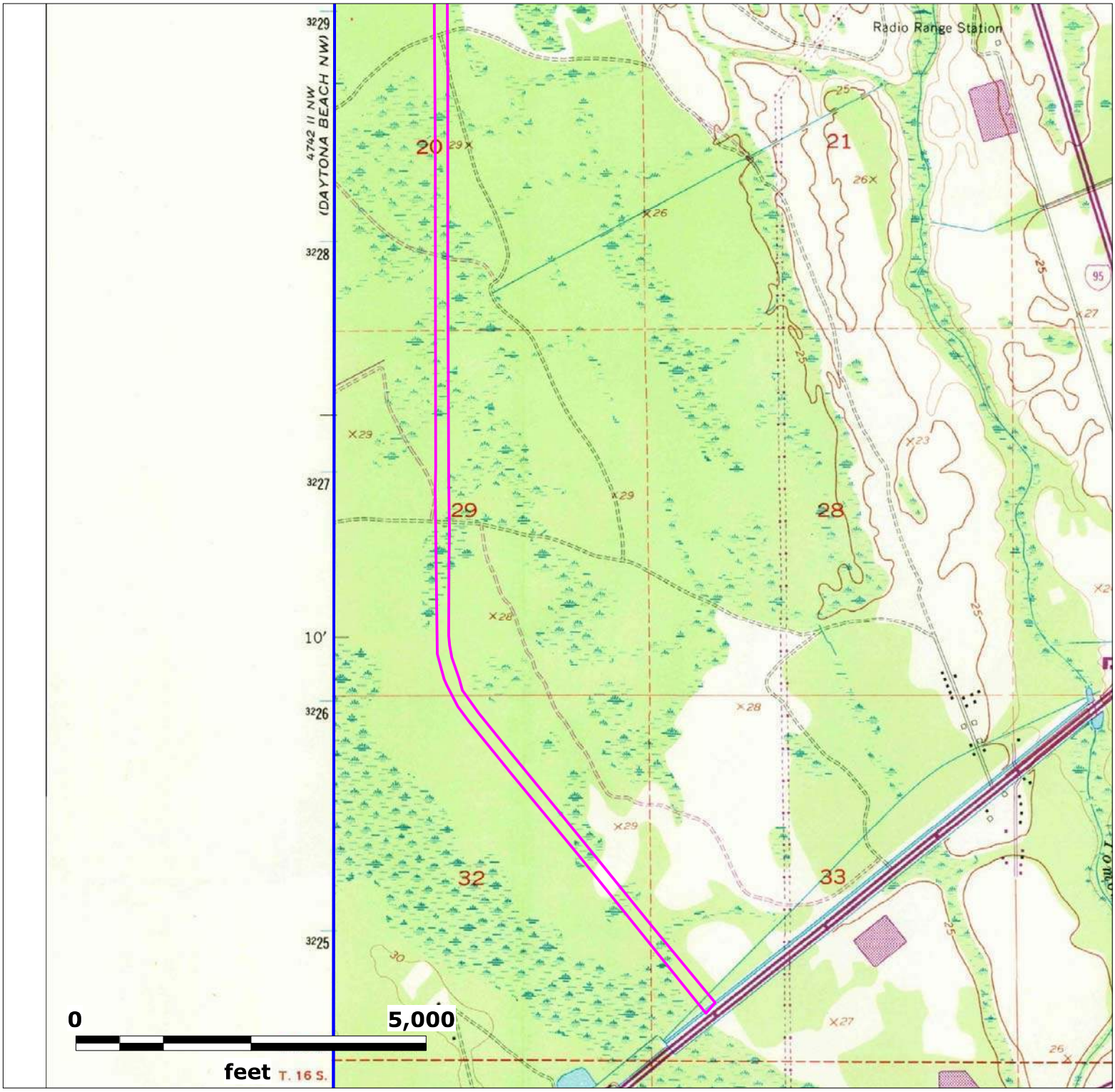
Approximate Site Location

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EDM Job No: 26393
January 29, 2023

Historical Topographic Map
Daytona Beach 1970



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

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EDM Job No: 26393
January 29, 2023

Historical Topographic Map
Daytona Beach 1970



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

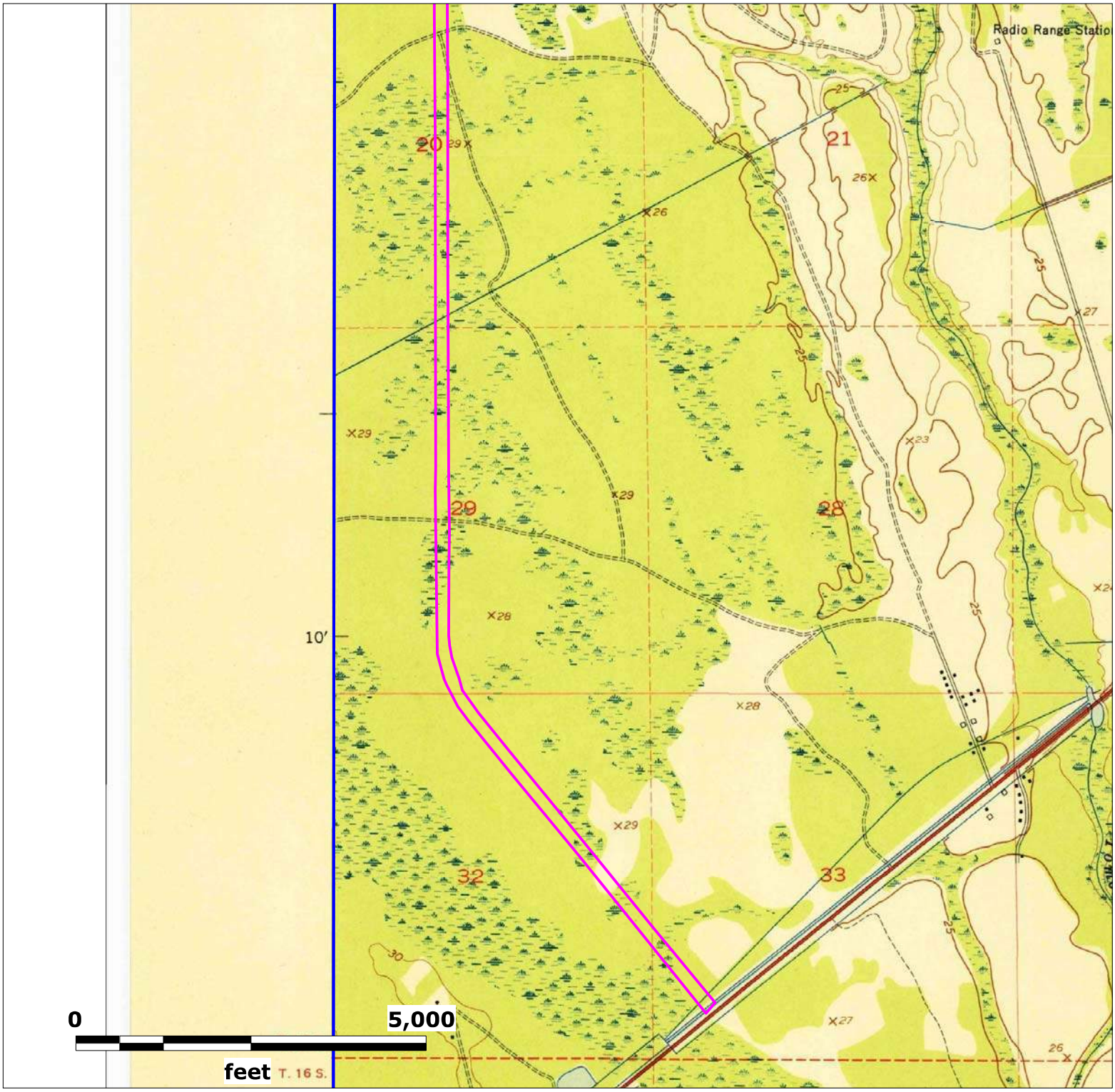
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EDM Job No: 26393
January 29, 2023

Historical Topographic Map
Daytona Beach 1952



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

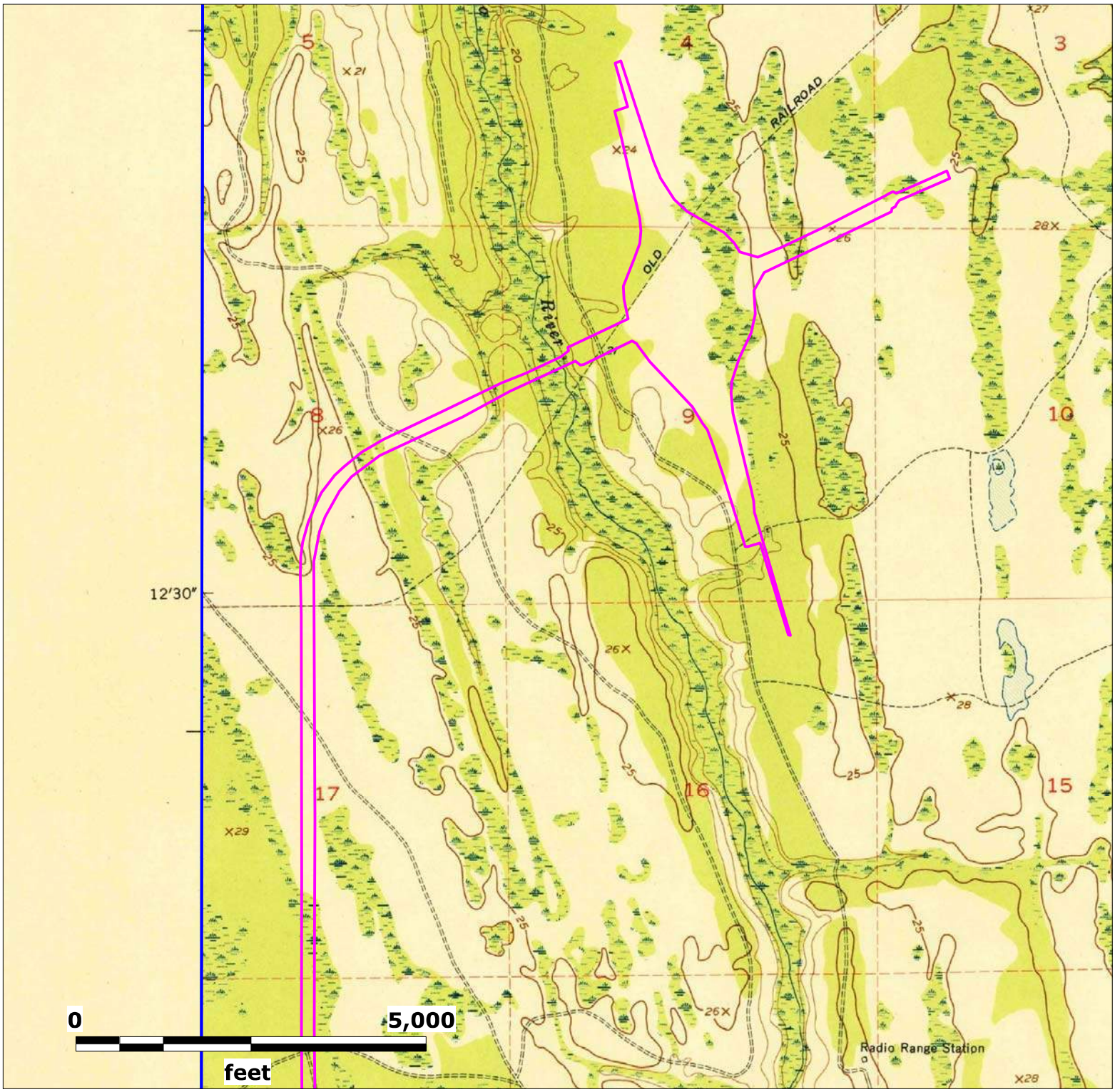
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January 29, 2023

Historical Topographic Map
Daytona Beach 1952



Source: USGS Historical Topographic Map Collection

Map Scale and Property Boundaries are Approximate

Subject Property

Approximate Site Location

LPGA Boulevard from US 92 (SR 600)
to Williamson Boulvevard PD&E Study
Volusia County, Florida

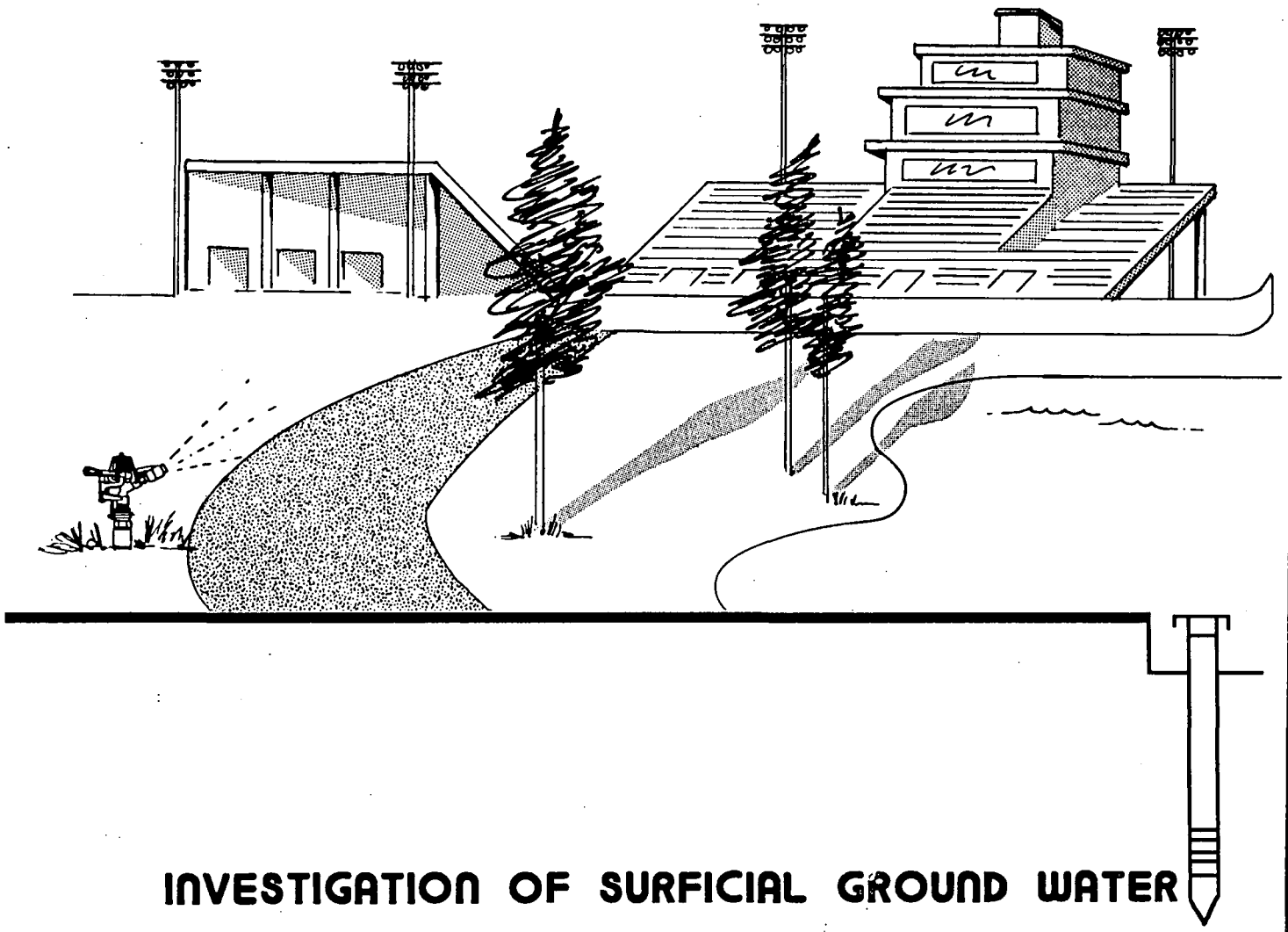
Lat (DMS): 29 11' 26.592"
Lon (DMS: -81 7' 11.6076"

EDM Job No: 26393
January 29, 2023

Appendix E Supplemental Information

SITE 1 –

DAYTONA BEACH STADIUM SITE PART A - 1900



INVESTIGATION OF SURFICIAL GROUND WATER

AT THE

DAYTONA BEACH MUNICIPAL STADIUM COMPLEX

DAYTONA BEACH, FLORIDA

MARCH, 1989

DB-89071-9R

Briley, Wild and Associates
Consulting Engineers And Planners

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Briley, Wild
and Associates
Consulting Engineers And Planners

March 24, 1989

DB 89071-9R

Mr. Domenic D'Agresta, P.E.
Deputy City Engineer
City of Daytona Beach
Box 511
Daytona Beach, Florida 32015

Re: City of Daytona Beach
Municipal Stadium Complex
Groundwater Investigation

Dear Mr. D'Agresta:

Enclosed are five copies of the report entitled "Investigation of Surficial Ground Water at the Daytona Beach Municipal Stadium Complex". This report summarizes the results of a study to determine the source of cadmium, chromium and gross alpha values initially reported to the Florida Department of Environmental Regulation on August 11, 1988.

The report concludes that there is no cadmium or chromium contamination of the groundwater in the vicinity of the Municipal Stadium Complex.

Periodic higher than normally expected levels of gross alpha activity in the groundwater have been noticed in a relatively confined area along the property line which separates the Stadium site from the Brennan Water Treatment Plant/Regional Wastewater Treatment Plant Complex. While these observations are not consistent enough to warrant remedial action, continued monitoring is advisable.

The report contains several recommendations which should be considered, and we invite your attention specifically to that section of the report.

We appreciate the opportunity of providing these services and will be pleased to discuss the contents of this report at your convenience.

Very truly yours,

BRILEY, WILD & ASSOCIATES, INC.
CONSULTING ENGINEERS & PLANNERS

James Robert Sloane

James Robert Sloane, P.E.
Project Manager

JRS/mk
cc: Mr. Bryan Baker, FDER-Tallahassee
Mr. William Bostwick, PE, FDER-Orlando
Mr. John Gentry, PE. FDER-Tallahassee
Mr. Al Stodgill, FDER-Tallahassee
Dr. Geoffrey Watts, FDER-Tallahassee
Mr. Edwin Worth, FDER-Orlando

P.O. Box 607 · Ormond Beach, Florida 32074-0607 · 904-672-5660
Offices in Ormond Beach, Daytona Beach, Clearwater, and Bradenton

EXECUTIVE SUMMARY

As part of the construction permit requirements for an effluent spray field at the new Daytona Beach Municipal Stadium Complex, the City was required to provide analyses of ground water in the spray application area. The first set of seven monitor well background samples collected on May 31, 1988 and submitted to the Florida Department of Environmental Regulation (FDER) showed excessively high cadmium levels in all seven samples. One sample was high in chromium, and one sample showed a high level of gross alpha activity.

In September, 1988, Briley, Wild & Associates, Inc. (BWA) was retained to assist the City in determining the source of these higher-than-normal background levels. Because the fill dirt which was used to construct the stadium had come from a City-owned property adjacent to an area of suspected unauthorized plating waste dumping, the City staff was concerned that the fill dirt might be the source of the apparent ground water contaminants.

Since the first two sets of analytical tests were conducted by two different laboratories with similar results, laboratory analytical error was eliminated as a possible cause even before the formal investigation began. The first formal investigation efforts then were directed toward identifying the extent of the ground water contamination plume. Sampling and analytic work on the fill at both the stadium complex and the City fill source site on Clyde Morris Boulevard was begun shortly thereafter. Test work on the fill soil at both sites resulted in the conclusion that the fill was not contaminated with cadmium, chromium, or gross alpha emitters. However, analyses on the ground water at the Clyde Morris site showed similar high levels of cadmium. Gross alpha and chromium values in the fill dirt area ground water were found to be within normally expected background levels. Similar analyses on the soil and ground water in the area between the City's fill dirt source and the Industrial Waste Services (IWS) facility just to the west of the fill source did show high levels of cadmium and chromium.

Six of the monitor wells in a confined area near the north border of the Stadium complex showed widely varying levels of gross alpha activity. Virtually all of the monitor well samples collected in an attempt to define the limits of the suspected cadmium plume showed excessively high levels of cadmium.

After two meetings with FDER - Orlando, a meeting with FDER's ground water experts in Tallahassee occurred on November 15, 1988. At this meeting it was agreed that FDER would send its field investigation unit to Daytona Beach. The field team arrived in Daytona Beach on December 6 and installed its own monitor wells, took samples, and arranged for the samples to be analyzed in FDER's Tallahassee laboratory.

Samples from these wells were provided to the City's Environmental Laboratory and to Envirolab in Ormond Beach. All three laboratories' analytical results were in agreement, indicating that there was no excessive cadmium in the samples tested. It was concluded that the suspected cadmium contamination of the ground water did not, in fact, exist.

The search for the cadmium source was thus reduced to two possibilities; (1) well construction techniques/materials, or (2) sampling procedures. The well construction techniques and materials of construction possibility was quickly eliminated through the analytical testing of the materials used to construct the wells, and the testing of the water used to install the wells.

Subsequent testing of the sampling devices by City staff proved that the source of the cadmium in the monitor well samples collected by City staff was a plated chain attached to the stainless steel bailer sampler.

The high chromium levels found in earlier monitor well samples apparently was a passing anomaly which has not shown up in the last two quarterly samples analyzed. Except for one MW #2 sample collected on September 8, 1988, high gross alpha values greater than 15.0 pCi/Lhave not occurred in the seven monitor wells used in the quarterly sampling program. However, higher than normal gross alpha activity has sporadically been found in monitor wells 20, 23, 22, 24 and 25. It is recommended that these wells continue to be monitored for gross alpha to determine if further study is warranted.

This study has also shown that there is an area of contaminated dirt between the IWS site and the City's fill source site on Clyde Morris Boulevard. While this contamination does not appear to impose an immediate threat to the environment or to the City's fill dirt supply, it is recommended that this potential problem be addressed and appropriately mitigated.

Other recommendations include the plugging and abandonment of monitor wells no longer needed, and the petitioning of FDER to reduce quarterly analytical requirements.

SECTION 1

INTRODUCTION

This report provides a summary of the efforts and results of a cooperative study between the City of Daytona Beach and Briley, Wild & Associates which investigated what appeared to be contamination of the groundwater aquifer in the vicinity of the new Daytona Beach Municipal Stadium complex. The study involved the construction and sampling of numerous surficial groundwater monitoring wells, and the analysis and interpretation of results provided by those samples. Contamination constituents studied included cadmium, chromium, and gross alpha emitters.

The quality of soil used as fill dirt at the Stadium site was investigated as was the ground water and fill at the site from which the fill was taken. This report is prepared in response to the September 7, 1988 request by the Florida Department of Environmental Regulation (FDER) that the City determine the cause of high cadmium and chromium values first reported on August 11, 1988.

SECTION 2

BACKGROUND

In June of 1987, the City of Daytona Beach (City) applied to the Florida Department of Environmental Regulation (FDER) for a permit to construct a wastewater spray irrigation reuse system for the City's new Municipal Stadium complex. The complex is comprised of approximately 50 acres of City-owned land contiguous to the Daytona Beach Water/Wastewater Treatment facilities on 11th Street.

On February 11, 1988, FDER issued Construction Permit DC 64-134696 which included a requirement for a Ground Water Monitoring Plan. This plan required that the City collect water samples and provide extensive analyses of groundwater in the application area prior to any actual spraying of reuse water. This data was to be used to provide background water quality data base so that the effect of long term reuse water application can be determined. The Plan also requires that the City resample the Site every three months. Analyses required for the quarterly samples are significantly reduced from those needed for the background data.

In anticipation of these requirements, the City installed seven surficial groundwater monitoring wells throughout the Stadium complex in December, 1987. In May of 1988, the City purged the wells and collected the first set of samples for the background analyses. The samples were sent to Pioneer Laboratory in Pensacola for the required analytical work. The initial inorganic analytical results report was submitted to FDER on August 11, 1988.

On September 1, 1988, the FDER sent a letter to the City expressing concern over the unexpectedly high cadmium levels in all of the monitor well samples. Values obtained from this set of samples ranged from 0.2 mg/L to 1.8 mg/L. Normally, cadmium in surficial waters is expected to be less than 0.003 mg/L. FDER also commented on monitor well #2 which, at 0.25 mg/L chromium, was

higher than expected. FDER requested that the City determine the cause of the high cadmium and chromium values.

As a result of FDER's letter, the City resampled MW #1 through MW #7 on September 8, 1988. Cadmium values ranged from 0.085 to 1.5 mg/L. Although these results were somewhat lower than previous figures, they were still far higher than normal background levels. Chromium values, on the other hand, ranged from less than 0.002 mg/L up to 0.150 mg/L. Chromium in MW #2 dropped to 0.100 mg/L while the value for MW #3 increased from less than 0.01 mg/L up to 0.150 mg/L. These values indicated to the City that chromium contamination was not a significant problem, but should be monitored through the quarterly analysis program.

Meanwhile, the first set of Radiological data from the May 31, 1988, samples was received from Pioneer Laboratories. The gross alpha analytical values reported by Pioneer ranged from 0.0 to 13.4 pCi/L. Because several of the gross alpha values were somewhat higher than expected, the City elected to collect another set of samples on September 8, 1988, for radiological analysis by the Post, Buckley, Schuh & Jernigan (PBSF) Laboratory in Orlando. On September 16, 1988, (PBSJ) Labs telephoned the City to report the results. The values provided generally showed even higher gross alpha levels with values ranging from 1.8 to 158 pCi/L.

On September 21, 1988, the City staff contacted Briley, Wild & Associates to assist the City in determining the cause and extent of the cadmium/chromium contamination and the significance of the gross alpha results. This report provides a detailed account of the study, describes conclusions reached, and offers recommendations for future actions.

SECTION 7

CONCLUSIONS

Although the most recent quarterly samples collected from MW #1 through MW #7 still show somewhat higher values than would normally be expected in Volusia County area ground water, it is suspected that the slightly elevated values are the result of previous contact with the stainless steel bailer sampler chain. We fully expect these value to decline to normally expected levels of <0.010 mg/L as fresh ground water flows into the monitor wells. Therefore, we conclude that:

1. No significant contamination of the ground water by cadmium occurred.
2. The high cadmium values in various ground water samples was caused by elution of cadmium from a plated chain attached to the stainless steel bailer sampler.
3. There is no excessive chromium contamination of the ground water in the Stadium complex. The single high chromium level reported for MW #2 on the initial May 31, 1988 sampling is not indicative of typical chromium analyses.
4. The fill material removed from the Clyde Morris site and placed in the Stadium complex is not contaminated with cadmium, chromium, or gross alpha emitters.
5. There is a contaminated fill area between the Industrial Waste Service complex and the City's fill site on Clyde Morris Boulevard which was evidently used for solid waste disposal and may have been used for waste sludge disposal. This area does not appear to prevent any immediate threat to the City's fill source, nor does it appear to present any immediate threat to the local environment.
6. The area of high gross alpha ground water readings is confined to a relatively small area along the northern boundary of the Stadium complex. The readings vary considerably from one sample period to another. The source and level of the gross alpha activity has not been definitely established.

SECTION 8

RECOMMENDATIONS

As a result of the conclusions drawn from the investigation, the following recommendations are offered:

1. In a letter dated October 19, 1988, FDER added cadmium and chromium to the Permit-required list of monitor well analytical tests that must be reported to FDER on a quarterly basis. Once four sets of quarterly analyses have been collected, and cadmium and chromium have stabilized, the City should petition FDER to eliminate the cadmium and chromium reporting requirements.
2. Because the gross alpha situation is not fully resolved, it is suggested that additional attempts be made to sample MW #25. If MW #25 remains dry, another deeper well should be placed nearby and sampled for gross alpha activity. Monitor wells 20, 21, 23 and 24 should also be sampled and analyzed quarterly. The results of subsequent analyses should be reviewed to determine the necessity of further action.
3. Although the contaminated soil behind the Industrial Waste Service site on Clyde Morris Boulevard does not appear to pose any immediate threat to the City's fill dirt supply or the environment, it is recommended that the City attempt to determine the source of this material so that a clean-up effort can be appropriately initiated. Additional core samples should be collected and tested for toxic leachates via the E.P. Tox test method. If the fill is found to exceed acceptable limits, then the party responsible for the contamination should be required to cleanup the site as appropriate. In any case, further dumping should be stopped. In the meantime, use of the fill dirt from the eastern portion of the City's site should pose no unacceptable risks.

4. Upon FDER acceptance of this report and its recommendations, the City should plug and abandon MW's #8 through #19, #22, #26 through #30, #32 through #39, and #41 through #58. Monitor wells #20, #21, #23, #24, and #25 can be plugged once the gross alpha situation is resolved, and MW #27 and #40 can be plugged once the contaminated fill area behind the Industrial Waste Service facility is resolved.

5. For future City projects, the City should require that any proposed fill dirt be analyzed for potential contamination prior to the placement of the fill dirt. This will assure that construction projects are not delayed or negated by fill-dirt induced ground water contamination.

SITE 1A –

CITY OF DAYTONA WASTEWATER TREATMENT FACILITY PART A- 1993

Florida Department of Environmental Protection
Division of Waste Management
Bureau of Petroleum Storage Systems
Petroleum Cleanup

TEMPLATE SITE ASSESSMENT REPORT
[Signature Page]

DATE: October 29, 2015

Site FDEP Facility ID #: 64/8622691 Score: 74

Site Name: Daytona Beach WWTP – Westside Regional

Address: 3651 LPGA Boulevard

City: Daytona Beach

County: Volusia

Consultant Company: Andreyev Engineering, Inc.

Address: 4055 St John's Parkway

City, State, Zip: Sanford, FL 32771

Consultant Rep.: Shawkat Ali

Phone #: 407-330-7763

Responsible Party Name: Daytona Beach WWTP – Westside Regional

Address: 3651 LPGA Boulevard

City, State, Zip: Daytona Beach, FL 32124

Responsible Party Rep.: Jack Rawlins

Phone #: 386-736-5927 Ext. 12095

Program

- [ ] Preapproval — *WO#:*
- [ ] State Cleanup — *TA#:*
- [ ] Bid Project — *Contract #:* / *Site #:*
- [ ] Non-Program / Voluntary Cleanup

Cluster Site? yes [ ] no [X]

If yes, indicate facility ID #s & Site Names

	Facility ID #	Site Name
1)		
2)		
3)		
4)		
5)		

CERTIFICATION:

A Qualified Registered Professional Engineer or Registered Professional Geologist Certification

I hereby certify that I have supervised the field work (as summarized in the "Recent Site Assessment Activities" section) and preparation of this report, in accordance with Florida Rules and Regulations. As a registered professional geologist and/or professional engineer, as authorized by Chapters 492 or 471, Florida Statutes, I certify that I am a qualified groundwater professional, with knowledge and experience in groundwater contamination assessment and cleanup. To the best of my knowledge, the information and laboratory data summarized in the "Recent Site Assessment Activities" section (including the applicable attachments) are true, accurate, complete, and in accordance with applicable State Rules and Regulations. ***Include a hard (paper) copy of this cover page, signed and sealed, when submitting the report electronically.***

Consultant Name: Shawkat Ali

PE or PG License #: FL PE 52568

Signature: Shawkat Ali Date: 10/29/15 FLORIDA Stamp or Seal

SHAWKAT ALI LICENSE NO. 52568 STATE OF FLORIDA PROFESSIONAL ENGINEER

SECTION I - Facility & Discharge Information/Initial Abatement
Daytona Beach WWTP – Westside Regional

☐ *Cluster Site*

Part _____ Facility FDEP# 64/8622691 Site Name: Daytona Beach WWTP – Westside Regional

I-A) Site Description

Please provide a brief description of the site. What type of business or businesses (if any) are currently operating at the present/former facility? Describe where all former and current fuel tanks, lines and dispensers were/are located (indicating how this information was obtained). Describe any access constraints (utility conduits, canopies, land cover, etc.) which also might influence the placement of monitoring wells and/or the installation of soil borings. Indicate whether there are any owner issues or traffic concerns which might effect when the work can be performed? ***Please indicate when the requested information is best illustrated on the site map.***

This site contains a wastewater treatment facility that encompasses 117.95 acres, which is owned and operated by the City of Daytona Beach, as shown in **Figure 2** in **Appendix A.** The facility contains multiple buildings, structures, aboveground treatment tanks, and control systems that are utilized for wastewater treatment services. The facility is registered with the Florida Department of Environmental Protection (FDEP) as utilizing five petroleum diesel aboveground storage tanks (ASTs). These include a 12,000-gallon gasoline AST and a 12,000-gallon diesel AST that are used for fueling City of Daytona Beach fleet vehicles. Two 6,000-gallon diesel ASTs and a 4,000-gallon diesel AST provide fuel for emergency generators. Three former petroleum underground storage tanks (USTs) were removed. A 1,500 gallon diesel UST was removed on October 1, 1999; a 12,000-gallon gasoline UST was removed on May 1, 2010, and a 12,000-gallon diesel UST was removed on May 1, 2010. Three petroleum discharges have been reported for this facility. The first petroleum discharge was reported as a discharge on October 29, 1990, for a release of approximately 300 to 400-gallons of diesel fuel near a pump house adjacent to the 1,500-gallon diesel underground UST. The second petroleum discharge was reported as a discharge on March 15, 1993 for the diesel fuel dispensing line for the 12,000-gallon diesel UST (Tank #14); and the third discharge was reported on June 3, 2010, for the 12,000-gallon gasoline UST (Tank #15). Both tank #14 and tank #15 were removed in May 1, 2010. The following summary information is provided for each petroleum discharge:

First Petroleum Discharge, October 29, 1990: For the first petroleum discharge, 210 tons of petroleum contaminated soil was removed for proper disposal, and site assessment activities were conducted. On March 22, 1991, the Volusia County Environmental Management issued a No Further Action letter pursuant to the requirements specified in Chapter 62-770, FAC.

Second Petroleum Discharge, March 15, 1993: For the second petroleum discharge, the piping was repaired and 110 tons of petroleum contaminated soil was removed for proper disposal. Site assessment activities were conducted by Universal Engineering Sciences (UES), and on July 21, 1994, the FDEP issued a Site Rehabilitation Completion Order (SRCO), pursuant to the requirements specified in Chapter 62-770, FAC.

Third Petroleum Discharge, June 3, 2010: The third petroleum discharge was reported as a result of tank closure assessment activities for the 12,000-gallon gasoline UST. A temporary monitoring well, TMW-2, was installed in the center of the former 12,000-gallon gasoline UST, and detected benzene at 196 micrograms per liter (ug/L), above the Groundwater Cleanup Target Level (GCTL) of 1.0 ug/L; ethylbenzene was detected at 101 ug/L, above the GCTL of 30 ug/L; toluene was detected at 494 ug/L, above the GCTL of 40 ug/L; and total xylenes were detected at 450 ug/L, above the GCTL of 20 ug/L.

On October 12, 2010, UES submitted a request to the FDEP asking that the SRCO issued on July 21, 1994, for the discharge reported on March 13, 1993, be rescinded. Based on this request, on December 9, 2010, the FDEP rescinded the SRCO dated July 21, 1994. The subject site was assigned a Priority Score of 74 on May 24, 2011. From 2011 through 2013, UES has conducted additional site assessment and remedial activities pursuant to Chapter 62-770, FAC, under the FDEP Pre-Approval Program.

In March 2013, UES conducted source removal activities around the former diesel 12,000-gallon UST, which resulted in the removal and proper disposal of approximately 233 tons of petroleum contaminated soil and the removal and proper disposal of 427 gallons of petroleum contaminated water. The results were summarized in the Source Removal Report May 31, 2013. On August 30, 2013, the Source Removal Report was approved by the Volusia County Environmental Management Department. No additional site assessment or remediation activities have been conducted since that time.

Site map (Figure 2 & 3) illustrating all current & former tanks, lines and dispensers (including utilities, canopies, etc.) is included in Appendix A & B

Site Name: Daytona Beach WWTP-Westside Regional

Facility ID #: 64/8622691

Date: October 29, 2015

I-B) Petroleum System/Tank History

List current and former UST's and/or AST's operated at site. Systems (PAST AND PRESENT) must be illustrated on Site Plan. This information should be a summary of the Department's STCM database, all tank closure reports (if applicable) and site owner & operator information.

ID#	AST or UST	Size (gallons)	Installation Date	Contents (unleaded gasoline/ diesel/etc.)	Status (active, removed or abandoned [in place])	Date Removed or Abandoned (if applicable)
16	AST	12,000	5/1/10	Diesel	Active	
17	AST	12,000	5/1/10	Gasoline	Active	
3	AST	6,000	10/1/99	Generator Diesel	Active	
4	AST	6,000	10/1/99	Emergency Generator Diesel	Active	
5	AST	4,000	10/1/99	Emergency Generator Diesel	Active	
14	UST	12,000	7/1/84	Vehicular Diesel	Removed	5/1/2010
15	UST	12,000	7/1/84	Unleaded Gas	Removed	5/1/2010
1G	UST	1,500	11/1/80	Vehicular Diesel	Removed	10/1/1999
2G	UST	1,500	2/1/91	See Note below		

-If above information is different then the Department's STCM database, please indicate source of updated information:

There is conflicting information in Oculus about Tank 2G. On a FDEP Storage Tank Facility Registration form (package entitled 'Historical Registration Record" within Permitting_Authorization profile) dated March 23, 2005, there is a comment that "Tank 2G apparently never existed" and initialed by Volusia County Environmental Management personnel.

	YES	NO
Active Site? If yes, please indicate method, date and extent of latest tank and line tightness test (include copy of tightness test results). If tank tightness test results are not available, please explain why they are not necessary or indicate when next tightness test will be performed.	X	

The latest FDEP inspection of the facility was on 6/15/2015 and the facility was found to be in compliance.

The facility passed the Annual Inline Leak Detector Test and Annual Operability Test on 11/26/14 and next due date of testing is 11/26/2015.

Copy of tightness test results included in Appendix _____

I-B) Petroleum System/Tank History (continued)

Petroleum System Closure? *If yes, briefly describe type of petroleum system (AST, UST, distribution lines, etc.) and closure activities conducted.* ***Description not needed if copy of system tank closure report included.***	YES	NO
	X	

Note: Section I-C should be used to document soil, groundwater or product removal performed during closures.

Three underground storage tanks (UST) have been removed from the site.

One 1,500-gallon UST (Tank # 1G) installed on 11/1/1980 was removed on 10/1/1999.

Two 12,000-gallon UST (Tank #14 and #15) installed on 7/1/1984 were removed on 5/1/2010.

☐ Description of system closure activities included in attached tank closure report.

Copy of tank or system closure report (if applicable) included in Appendix _____

I-C) Release Information

	Discovery Date(s)	Program Type(s): *ATRP, EDI, PCPP, PLRIP or Non-program* *(please indicate if a non-program discharge has been combined with an eligible discharge)*
1st	10/29/1990	NREQ Status on June 2, 2004
2nd	3/13/1993	PLRIP
3rd	6/3/2010	Non-Program
4th		
5th		
6th		

-Source description and release history that includes date(s) of release(s), cause(s) of release(s), where they occurred, type(s) of product released and volume(s) of release(s) [please explain how estimates were derived].

The **first discharge** occurred on November 29, 1990 from a 1,500 gallon UST that supplied a diesel emergency generator located next to a pump house. Approximately 300 to 400 gallons of diesel fuel was reportedly released. An Initial Remedial Action (IRA) was completed by Universal Engineering Sciences (UES) following the discharge. During the IRA, 210 tons of contaminated soil, the 1,500-gallon UST, and product lines were removed from the site. In follow up to the IRA, UES performed a preliminary contamination assessment in 1991 at the facility to assess the impact of the diesel spill that resulted in a No Further Action from Volusia County dated March 22, 1991. A copy of the preliminary contamination assessment report (PCAR) is attached in Appendix H for ease of reference.

The **second discharge** occurred in March 15, 1993 as a result of breaks in an out-of-service diesel dispensing line that ran from the UST to an on-site generator. An estimated 75 gallons of diesel fuel was believed to be released from two points in the line. The majority of the release occurred near the diesel UST and affected the asphalt drive area and the drainage

swales located just east of the release point. The other line break was located 400 feet west of the UST near a large holding tank and pump. A minor amount of diesel was released at this point and was confined to a small drainage swale. After repairing the dispensing line, City of Daytona Beach personnel excavated the diesel affected soils from both release points and were properly disposed of. In response to the release, UES performed a Contamination Assessment in February 1994 and based on the soil and groundwater results a No Further Action was recommended. A site rehabilitation completion order (SRCO) was issued for this discharge on July 21, 1994. A copy of the contamination assessment report (CAR) is attached in Appendix I for ease of reference.

The **third discharge** was reported on June 3, 2010 during the completion of the UST closure assessment, following the removal of the two 12,000-gallon USTs on May 1, 2010. Laboratory analytical results for temporary monitoring well TMW-2, located in the center of the former gasoline UST, detected benzene, toluene, ethylbenzene and total xylenes above GCTLs.

- Suspected type(s) of product released:

[ ]	Leaded Gasoline	[X]	Diesel/Kerosene	[X]	Unleaded Gasoline
[ ]	Used Oil	[ ]	Unknown	[ ]	Other: _____

I-D) Initial Abatement/Source Removal

(Soil/Groundwater/Free Product removal during tank closures):

	YES	NO	N/A
Was soil contamination detected during petroleum system closure? If yes, please briefly describe extent of petroleum impacts and method(s) used to identify soil contamination.	X		

1990 Discharge: Following the diesel fuel discharge from the former 1,500-gallon UST located next to the pump building in 1990, Universal Engineering Sciences (UES) conducted an Initial Remedial Action (IRA) during which 210.29 tons of contaminated soil was removed. Confirmatory soil samples were not collected during the soil excavation.

1993 Discharge: The second discharge (on March 15, 1993) was a result of breaks at two locations in an out-of-service diesel dispensing line. The piping was repaired and no pipes or tanks were removed at this time. However, approximately 110 cubic yards of soil were excavated from the drainage swales at both release points by City of Daytona Beach personnel and placed on visqueen sheeting for later disposal. On August 12, 1993, UES arranged for the disposal of the stockpiled soils. Prior to transportation, UES screened representative samples throughout the stockpiles with an Organic Vapor Analyzer (OVA). Results of the screening indicated that soils throughout the stockpile continually registered responses greater than 50 parts per million on the OVA. Confirmatory soil samples were not collected during the soil excavation.

May 2010 UST Closure: Two 12,000-gallon USTs were removed on May 1, 2010. During the closure assessment, Isotropy, Inc. personnel collected soil samples from 14 boring locations for OVA screening. The OVA soil screening indicated the presence of potentially

impacted soils around the perimeter of the UST on the west side of the dispenser island. Confirmatory laboratory soil samples (B-6-2 and B-10-2) were collected from within the tank excavations. Soil sample B-6-2 was collected from the location with the highest OVA reading of 174 ppm, located on the east wall of the diesel UST excavation / west side of dispenser island. Soil sample B-10-2 was collected on the west wall of the gasoline UST excavation / east side of dispenser island. Soil analytical results for soil sample B-6-2 indicated the presence of ethylbenzene, total xylenes, and TRPH but were below SCTLs. Soil analytical results for soil sample B-10-2 were below detection levels.

Site map (Figure _____) illustrating soil sampling locations is included in Appendix _____

Tabular summary of soil sampling results (Table _____) is included in Appendix _____

Was contaminated soil removed? *If yes, please describe the horizontal and vertical extents of the soil removal and indicate where contaminated soil might still exist.*	YES	NO	N/A
	X		

1990 Discharge: As a result of the 1990 discharge, approximately 210.29 tons of contaminated soil was removed from the former location of the 1,500-gallon UST that serviced an emergency diesel generator.

1993 Discharge: Following the March 15, 1993 discharge, approximately 110 cubic yards of soil was excavated from the drainage swales at both release points by City of Daytona Beach personnel and placed on visqueen sheeting for later disposal.

May 2010 UST Closure: No soil was reportedly removed during the tank closure of the two 12,000 gallon USTs that was performed on May 1, 2010. The OVA soil screening survey indicated the presence of potentially impacted soils around the perimeter of the diesel UST on the western side of the dispenser island. The sample with the highest OVA response, soil sample B-6-2 (collected at 2-3 feet bls), of 174 ppm, was selected for laboratory analyses. Laboratory results for B-6-2 detected trace amounts of Ethylbenzene, Xylenes, and TRPH but were below SCTLs. Laboratory results for Benzene, Toluene, MTBE and semi-volatiles were below laboratory detection levels.

March 2013 Source Removal: A total of 232.7 tons of petroleum impacted soil was excavated and transported to a licensed landfill in Okeechobee, Florida for proper disposal. After the soil removal, eleven (11) confirmatory soil samples were collected and tested for VOAs, PAHs and TRPH. The results indicated contaminants of concern (COCs) were below regulatory cleanup target levels.

Approximate depth to water at time of excavation (if known) _____ *feet bls*

Approximate amount removed _____ *tons* ☐ *yds*^{3} ☐ *Date:* _____

Disposal method: _____

I-D) Initial Abatement/Source Removal (continued)

	YES	NO	N/A
Was groundwater contamination detected during petroleum system closure? *If yes, please indicate whether wells were installed (including their construction details if possible) and indicate the maximum levels for petroleum contaminants of concern that were detected.*	X		

1990 Discharge: Following the 1990 discharge, after the contaminated soil was removed and later backfilled with clean soil, two monitoring wells were installed by Universal Engineering Sciences (UES) on February 7, 1991 in the location where the diesel spill had occurred. Each well was installed to a depth of 25 feet and consisted of 2-inch diameter PVC pipe with 10 feet of screen and 15 feet of riser. Each monitoring well was sampled for the Kerosene Analytical Group (KAG) and total lead. The groundwater analytical results for the two wells were below laboratory detection limits.

1993 Discharge: In response to the 1993 discharge at two points, FDEP installed and sampled three groundwater monitor wells on-site (DBWW-1, DBWW-2, and DBWW-3). Monitor well DBWW-1 was placed near release point two, approximately 400 feet west of the UST's locations. Monitor well DBWW-2 was placed east of release point one, near the affected drainage swale. Monitor well DBWW-3 was placed near release point one, just south of the diesel UST. Results of analysis of groundwater samples from DBWW-3 indicated concentrations of naphthalene (130 ug/l) and benzene (18 ug/l) and were above respective GCTLs. Groundwater analytical results for DBWW-1 were below GCTLs and DBWW-2 indicated a small concentration of naphthalene (9.9 ug/l) that is below GCTL.

May 2010 UST Closure: During the tank closure assessment in May 2010, two temporary monitor wells (TMW-1 and TMW-2) were installed by Isotropy in the center of each UST excavation. Results of analysis of groundwater samples from TMW-2, located at the center of the former gasoline UST, indicated that concentrations of benzene (196 ug/l), ethylbenzene (101 ug/l), toluene 494 (ug/l), and total xylenes (450 ug/l) and were above respective GCTLs. Groundwater analytical results for TMW-1, located in the center of the diesel UST, were below the respective GCTLs.

Site map (Figure _____) illustrating groundwater sampling locations is included in Appendix _____

	YES	NO	N/A
Was contaminated water removed? *If yes, please identify removal location(s) and describe method of removal.*		X	

Approximate volume removed: _____ *gallons* *Date(s):* _____

Disposal method: _____

I-D) Initial Abatement/Source Removal (continued)

	YES	NO	N/A
Was free product detected during petroleum system closure? If yes, please describe location(s) where product was observed and thickness observed.		X	

Site map (Figure ____) illustrating locations where free product was observed is included in Appendix ____
Tabular summary of product thickness (Table ____) is included in Appendix ____

	YES	NO	N/A
Was free product removed? If yes, please identify removal location(s) and describe method of removal.			X

Volume removed: _____ *gallons* *Date(s):* _____
Disposal method: _____

SECTION II - Background Site Assessment Information

II-A) Risk & Receptor Evaluation

	YES	NO	Unknown
Are large (>100,000 gallons per day) public supply potable wells located within 1/2 mile? If yes, please indicate distance(s) and direction(s) from site, if they are located downgradient and if the well(s) are screened deeper than contamination. If unknown, please explain.	X		

Four large public supply wells are located within a 1/2 mile of the site. The Brennan Water Plant Well No. 1 (AAC3607) is located 179 meters south of the site. The Brennan Water Plant Well No. 49 (AAC3606) is located 199 meters north of the site. The Brennan Water Plant Well No. 2 (AAC3605) is located 431 meters northwest of the site. The City of Daytona Beach Well No. 48 (AAC3604) is located 784 meters northeast of the site. The locations of the wells are shown in the Potable Well Survey Map shown in Appendix A.

Potable well survey map (Figure 6) is included in Appendix A
Potable well construction summary (Table _____) is included in Appendix _____

	YES	NO	Unknown
Are water wells, including irrigation, industrial and all potable wells (<100,000 gallons per day), located within1/4 mile? If yes, please identify the type(s) of wells, their distances and directions from the site, if they are located downgradient and if the well(s) are screened deeper than the contamination. If unknown, please explain.		X	

Water well survey map (Figure _____) is included in Appendix _____
Water well construction summary (Table _____) is included in Appendix _____

II-B) Previous Site Assessment

Information not described in Section I ("release information" or "initial abatement/source removal")

	YES	NO
Was site assessment work performed? *If yes, please indicate who performed it (with reason performed) and dates performed (see table below)*	X	

List of all reports where site assessment information was originally submitted to the FDEP (oldest to most recent):

Date of report	Title of report	Company that prepared report
March 7, 1991	Preliminary Contamination Assessment Report	Universal engineering Sciences
February 10, 1994	Contamination Assessment Report	Universal Engineering Sciences
June 2010	UST Closure Monitoring Report	Isotropy, Inc.
October 18, 2010	Request for Regulatory Status Review	Universal Engineering Sciences

	YES	NO
Was soil assessment performed? *If yes, please briefly describe work performed and discuss results.* ***A description of the sampling results can be omitted if the data are included with current tabular summaries and soil plume maps (if applicable).***	X	

March 7, 1991 *Preliminary Contamination Assessment Report (PCAR)*: Universal Engineering Sciences (UES) prepared a PCAR in follow up to an Initial Remedial Action (IRA) that was completed by UES in response to an approximate 300 to 400 gallon diesel fuel spill located next to a pump house at the site. Copy of the PCAR is attached in Appendix H for ease of reference. During the IRA, 210 tons of contaminated soil was removed and incinerated at C.A. Meyer's soil remediation plant. A soil assessment was not completed for the PCAR. However, two monitoring wells were installed and sampled in the area where the diesel spill occurred. Laboratory results were below detection levels and UES recommended a No Further Action (NFA) for the 1991 discharge event. On March 22, 1991, Volusia County Environmental Management issued a NFA letter for the site.

February 10, 1994 *Contamination Assessment Report* (CAR): UES prepared a CAR in response to a release on March 15, 1993 of an unknown amount of diesel fuel from a product dispensing line at the subject site. The CAR included a soil screening assessment using an OVA for 22 soil sample locations. The results of the soil screening indicated that the soils above the ambient groundwater table registered responses below the "excessively contaminated" standard of 50 ppm for the kerosene group. Based on the results of this CAR, UES recommended a No Further Action on the site associated with the March 13, 1993 event. Copy of the CAR is attached in Appendix I for ease of reference. A Site Rehabilitation Completion Order (SRCO) was given to the facility on July 21, 1994.

June 2010 *UST Closure Monitoring Report:* Isotropy, Inc. performed a UST closure assessment during the removal of the two 12,000 gallon USTs, which included a soil screening assessment, using an OVA, for 14 soil sample locations collected from around the perimeters of the two UST excavation areas. The OVA screening survey indicated the presence of potentially impacted soils around the perimeter of the diesel UST on the west side of the dispenser island.

A confirmatory soil sample (B-6-2) was collected at the location of the highest reading identified as B-6, located on the west side of the dispenser island. Soil analytical results indicated low levels of ethylbenzene, total xylenes, and TRPH that were below cleanup target levels. OVA screening on the perimeter of the gasoline UST excavation only had trace indications of impacted soil. A confirmatory soil sample (B-10-2) was collected from this excavation and the laboratory results were below detection levels. Based on the findings of the UST closure assessment, Isotropy anticipated that additional assessment work was needed in relation to their findings.

Request for Regulatory Status Review: Universal Engineering Science (UES) initiated site assessment activities in June 2010 in the vicinity of the two former 12,000-gallon USTs that were removed from the site during May 2010. During site assessment activities, a soil sample (CSS-1) was collected on September 30, 2010 in the vicinity of monitor well DBWW-3, which was previously installed by FDEP in the location of the diesel fuel discharge. Laboratory analysis of soil sample CSS-1 detected 2-methylynaphthalene and TRPH above their respective Direct Exposure Residential soil cleanup target levels (SCTLs). Also, naphthalene, 1-methylnaphthalene, and acenapthylene, were above their respective leachability based on groundwater criteria SCTLs.

October 2011 Template Site Assessment Report (TSAR): During field activities for the Site Assessment, UES completed thirty soil borings to depths extending approximately 2 feet into the shallow groundwater table. During the completion of these soil borings, samples were collected at one-foot intervals and field screened with OVA-FID. OVA responses greater than 10 parts per million (ppm) were observed in the soils recovered from the vadose zone (0-4.5 feet bls) from soil borings SB-3, SB-4, SB-9, SB-11, SB-13, SB-15, SB-20, and SB-21. Soils recovered at and below the groundwater table from soil borings SB-4, SB-9, SB-11 to SB-16, and SB-25 to SB-28 elicited net OVA responses greater than 10 ppm. The soil screening results are shown in Table 1 of Appendix F.

Following the completion of the soil screening, six soil samples were collected for laboratory analysis from those locations and depths which represented relative “high”, “medium”, and “low” net OVA response levels. Soil samples SS-2 (collected from SB-9@ 2 feet) and SS-5 (collected from SB-25 @ 2 feet) were the “high” samples. Soil samples SS-1 (collected from SB-4 @ 2 feet) and SS-3 (collected at SB-11 @ 2 feet) were the “medium” samples. Soil samples SS-4 (collected from SB-13 @ 3 feet) and SS-6 (collected from SB-15 @ 3 feet) were the “low” samples. These soil samples were analyzed for those COCs listed in Table B, Chapter 62-770, F.A.C. Laboratory analysis of soil samples SS-1, SS-2, and SS-3 detected total petroleum hydrocarbons (TPH) above its Direct Exposure Soil Cleanup Target Level (SCTL) of 460 milligrams per kilogram (mg/kg). Laboratory analysis of soil samples SS-1, SS-2, SS-3, and SS-4 exceeded Leachability based on groundwater criteria for naphthalene, 1-methylnaphthalene, and 2-methylnaphthalene of 1.2 mg/kg, 3.1 mg/kg, and 8.5 mg/kg. Laboratory analysis of soil samples SS-5, and SS-6 did not detect any common petroleum constituents at concentrations greater than applicable regulatory guidance concentrations. The summary table of soil analytical test results are shown in Table 2 of Appendix F.

☐ Results included in current soil OVA screening and soil analytical summary tables.

Site map (Figure 4) illustrating sampling locations is included in Appendix F
Tabular summary of soil sampling results (Table 1 &2) is included in Appendix F

II-B) Previous Site Assessment (continued)

Have monitoring wells been installed? *If yes, briefly identify where the wells were installed and describe their construction. Please indicate if the wells are still on-site.* ***The well descriptions and can be omitted if the information is included in a current tabular summaries.***	YES	NO
	X	

Preliminary Contamination Assessment Report: On February 7, 1991, UES installed two permanent groundwater monitor wells at the site. The wells were located on each side of the pump room building in the backfilled areas, as found in the previous soil IRA, in the areas where the diesel spill occurred. The monitor wells in this location are currently abandoned.

FDEP Assessment: In April 1993, the FDEP installed three monitor wells (DBWW-1, DBWW-2, and DBWW-3) in the locations of the two reported diesel spill locations. Monitor well DBWW-1 was placed near release point two, approximately 400 feet west of the USTs' locations. Monitor well DBWW-2 was placed just east of release point one, near the affected drainage swale. Monitor well DBWW-3 was placed near release point one, near the southwest corner of the diesel UST. The monitor wells are currently abandoned.

Contamination Assessment Report: In October 1993, UES personnel installed six permanent monitor wells (MW-1, MW-2, MW-3, MW-4D, MW-5, and MW-6). MW-1, MW-2, and MW-3 are shallow wells located in lateral positions to the spill area. MW-5 and MW-6 are shallow wells located in downgradient and upgradient positions respectively. MW-4D is a deep well also placed downgradient of the spill area to evaluate the vertical extent of contamination at the site. These monitor wells are currently abandoned.

UST Closure Assessment: In May 2010, Isotropy installed two temporary wells (TMW-1 and TMW-2) in the center of each UST location. The wells are no longer on-site.

Request for Regulatory Status Review: In August 2010, UES installed five monitor wells (MW-1 through MW-5) around the locations of the former 12,000-gallon USTs. These wells are currently on-site.

October 2011, Template Site Assessment Report (TSAR): As a part of the site assessment UES installed new monitor wells (PW-1 through PW-10 and PDW-1). The summary installation details of these existing wells are shown in Appendix G and well completion logs are shown in the 2011 TSAR in Appendix J.

Site map (Figure 3-5) illustrating well locations is included in Appendix C & E
Tabular summary of well construction details (Table 1) is included in Appendix C

	YES	NO
Has direct push (geoprobe) groundwater grab-sampling been performed? *If yes, briefly identify the locations and depths where the samples were collected..* ***A description of the sample locations and results can be omitted if the information is included in current site maps and tabular summaries***		X

Site map (Figure _____) illustrating the groundwater sampling results is included in Appendix _____
Tabular summary of groundwater sampling results (Table _____) is included in Appendix _____

II-B) Previous Site Assessment (continued)

	YES	NO
Was groundwater sampling performed? *If yes, briefly describe what sampling was performed and summarize results.* ***A description of the sampling results can be omitted if the data are included with the current tabular summaries and groundwater plume maps (if applicable).***	X	

Preliminary Contamination Assessment Report (PCAR): Following the discharge event in February 1991, located next to a pump house on site, UES collected two groundwater samples from monitoring wells MW-1 and MW-2. The samples were analyzed for Kerosene Analytical Group compounds and total lead. All values for all samples tested were below detection levels. Copy of the PCAR is attached in Appendix H.

On **April 27, 1993**, the FDEP collected groundwater samples from DBWW-1, DBWW-2, and DBWW-3, which were installed in the areas of the two reported March 13, 1993 spill locations. The FDEP analyzed the groundwater samples for common diesel fuel indicators by EPA Method 625. Results of analysis of groundwater samples from DBWW-3 indicated concentrations of naphthalene (130 ug/l) and benzene (18 ug/l) and were above respective GCTLs. Groundwater analytical results for DBWW-1 were below GCTLs and DBWW-2 indicated a small concentration of naphthalene (9.9 ug/l) that is below GCTL.

Contamination Assessment Report (CAR): On December 11, 1993, UES conducted groundwater sampling of the monitoring wells MW-1, MW-2, MW-3, MW-4D, MW-5, and MW-6. The groundwater samples were analyzed for Kerosene Analytical Group compounds. The laboratory analytical results indicate detection of trace concentrations of total VOAs were detected in the samples from MW-2 (1.8 ug/l) and MW-4D (0.73 ug/l). A small concentration of total naphthalenes was detected in the samples from MW-2 (6.94 ug/l). Copy of the CAR is attached in Appendix I.

UST Closure Monitoring Report: On May 24, 2010, Isotropy collected groundwater samples from TMW-1 and TMW-2 and were analyzed for BTEX/MTBE by EPA Method 8260B and

semi-volatiles by EPA Method 8270C. Results of analysis of groundwater samples from TMW-2, located in the center of the former gasoline UST, indicated that concentrations of benzene (196 ug/l), ethylbenzene (101 ug/l), toluene 494 (ug/l), and total xylenes (450 ug/l) were detected above GCTLs. Groundwater analytical results for TMW-1, located in the center of the diesel UST had volatile and semi-volatile compounds.

October 2011, Template Site Assessment Report (TSAR): UES sampled five existing monitor wells (MW-1 through MW-5) on June 13 and 14, 2011. After the installation of the new monitor wells (PW-1 through PW-10 and PDW-1), UES sampled the wells on August 23, 2011 and August 27, 2011. Laboratory results for monitor wells PW-1 through PW-10 and MW-2 through MW-5 did not detect any COCs at concentrations above GCTLs. Laboratory results detected COCs in monitor wells MW-1 and PDW-1 that exceeded GCTLs. MW-1 is a shallow monitor well (screened from 3 to 13 feet bls), which had a benzene concentration of 7.8 ug/l. MW-1 is located east of the dispenser island in the former location of the 12,000-gallon gasoline UST. PDW-1 is a deep monitor well (screened from 20 to 25 feet bls), which had concentrations of naphthalene (23 ug/l), 1-methylnaphthalene (31 ug/l), and 2-methylnaphalene (33 ug/l) that exceeded GCTLs. PDW-1 is adjacent to PW-1 that is located southwest of the former 12,000-gallon diesel UST. A copy of the 2011 TSAR is attached in Appendix J.

☐ Results included in current groundwater analytical summary table.

Site map (Figure _____) illustrating sampling locations is included in Appendix _____
Tabular summary of groundwater results (Table _____) is included in Appendix _____

	YES	NO
Has free product been observed in wells or excavations (not including tank and/or system closures)? If yes, please describe. ***A description of the thickness measured can be omitted if the previous data are included with the current tabular summaries and illustrated on current free product plume maps (if applicable).***	☐	X

Site map (Figure _____) illustrating locations where free product was observed is included in Appendix _____
Tabular summary of free product thickness (Table _____) is included in Appendix _____

II-B) Previous Site Assessment (continued)

	YES	NO
Has the previous site assessment been approved by the FDEP (was a CAR or SAR approval letter issued?)	X	

Date site assessment (or contamination assessment) was approved: _____

PCAR approved March 22, 1991
CAR approved July 21, 1994

II-C) Previous Remediation

	YES	NO
Has a Remedial Action Plan been prepared? *If yes, please briefly describe the remedial strategy.* ***The description of the remedial strategy can be omitted if the RAP was implemented (this item will be addressed in the active remediation section that follows).***		X

Date of RAP: _____ Prepared by: _____

☐ Remedial Action Plan approved by FDEP. Date of RAP approval order _____

	YES	NO
Was soil excavation (not associated with a system closure) performed? *If yes, please briefly describe work performed and discuss results.* ***The description of the source removal can be omitted if already discussed in the initial abatement section.***	X	

Following the March 13, 1993 diesel fuel discharge, which occurred from two separate locations along an out-of-service diesel dispensing line, City of Daytona Beach personnel excavated the impacted soil from the drainage swales at both release points. The soils were stockpiled on and covered with visqueen on-site to await proper disposal. On August 12, 1993, UES screened the stockpiled soil using an OVA. Results of the screening indicated that soils throughout the stockpile continually registered responses greater than 50 parts per million on the OVA, and according to FAC 17-770.600 were considered excessively contaminated. The stockpiled soils were transported to C.A. Meyers Paving and Construction Company where they were thermally treated.

During the source removal activities of March 2013**,** a total of 232.7 tons of petroleum impacted soil was excavated and transported to a licensed landfill in Okeechobee, Florida for proper disposal. After the soil removal, eleven (11) confirmatory soil samples were collected and tested for VOAs, PAHs and TRPH. The results indicated contaminants of concern (COCs) were below regulatory cleanup target levels.

Approximate depth to water at time of excavation (if known) _____ *feet*

Site map (Figure_____) illustrating sampling locations and extent of excavation(s) is included in Appendix _____

Tabular summary of soil sampling results (Table_____) is included in Appendix _____

III-B) Groundwater Investigation

[monitoring wells/hollow stem auger]

	YES	NO
Were monitoring wells installed (or abandoned)? *If yes, briefly identify which wells were installed/abandoned and describe their construction.* ***The well locations and construction details can be omitted if the information is included in current site maps and tabular summaries.***		X

A total of eleven (11) existing monitoring wells were sampled as part of this current Supplemental Site Assessment Activities. The wells were installed by Universal Engineering Sciences (UES) as a part of previous site assessment activities at the site. Tables 4 and 5 in Appendix G contain a summary of the construction details of the monitoring wells sampled during the Supplemental Site Assessment. The monitoring well completion reports for the existing wells are given in Appendix J.

Site map (Figure 4) illustrating the well locations is included in Appendix E
Tabular summary of well construction details (Table 4,5) is included in Appendix G
Monitoring well completion reports are included in Appendix J

	YES	NO
Was direct push (geoprobe) groundwater grab-sampling performed? *If yes, briefly identify the locations and depths where the samples were collected..* ***A description of the sample locations and results can be omitted if the information is included in current site maps and tabular summaries***		X

Site map (Figure _____) illustrating the groundwater sampling results is included in Appendix _____
Tabular summary of groundwater sampling results (Table _____) is included in Appendix _____

III-B) Groundwater Investigation (continued)

[groundwater sampling]

	YES	NO
Was groundwater sampling performed? *If yes, please provide a brief discussion of groundwater purging and sampling methodology and identify the wells that were sampled. If no, please explain.* ***A description of the sampling results can be omitted if the information is illustrated in current contaminant plume maps and tabular summaries***	X	

A total of eleven (11) existing groundwater monitoring wells were sampled for BTEX + MTBE and PAH according to the Scope of Work (SOW) of this Supplemental Site Assessment. Two (2) monitoring wells (MW-1 and PW-1) were sampled for Natural Attenuation Monitoring (NAM) parameters as specified in the SOW. The purge water generated during sampling on December 5, 2014 was containerized and placed back into the wells following sampling. During the re-sampling of PW-1 and PDW-1 on April 30, 2015, the purge water was discharged on the open concreted area of the site and left for evaporation.

If groundwater sampling not performed, indicate date of last sampling event (if applicable): _____

Indicate wells sampled on that date (if applicable): _____

Site map (Figure 3-5) illustrating the groundwater sampling results is included in Appendix B

Tabular summary of groundwater sampling results (Table 3, 5-A, 5-B) is included in Appendix E

Groundwater field sampling logs are included in Appendix E

Groundwater samples (previous sampling events included) have been collected and analyzed for:

Required for all suspected GAG/KAG sites.

[X] BTEX/MTBE	[X] PAHs	[ ] TRPHs

Required for all contaminated GAG/KAG sites.

[ ] EDB	[ ] Lead (Pb)	[ ] VOHs

Required for all suspected used oil (or unknown fuel type) contaminated sites.

[ ] Priority Pollutant Volatile Organics & Extractable Organics	[ ] As, Cd, Cr, Pb	[ ] TRPHs

III-B) Groundwater Investigation (continued)

	YES	NO	N/A
Was groundwater IDW generated? If yes, please explain why disposal on-site was not possible.		X	

Volume of contaminated groundwater disposed of: _____ [ ] *drums* [ ] *gallons*

[groundwater results]

	YES	NO	N/A
Was groundwater contamination identified above the applicable Cleanup Target Levels? If yes, indicate locations where highest concentrations detected with depths encountered. If "N/A", please explain.	X		

The laboratory analytical results for EPA Method 8260 (VOAs) are summarized in **Table 2**, and are shown in **Figure 4** in **Appendix E**. The laboratory analytical results for EPA Method 8270D (PAHs) parameters are summarized in **Table 3** and are shown in **Figure 5** in **Appendix E**. The laboratory analyses results for the monitoring wells sampled on December 5, 2013 are included in included in **Appendix D**. The laboratory analyses results for monitoring wells PW-1 and PDW-1 resampled on April 30, 2015 are included in **Appendix E. Table 2** in **Appendix E** contains the results for the natural attenuation parameters (methane, iron, nitrate, sulfate, and orthophosphate) in monitoring wells PW-1 and MW-1. The following summary information is provided:

EPA Method 8260 (VOAs) and Additional Parameters: For EPA Method 8260 (VOAs) parameters, no parameters were detected in the monitoring wells sampled on December 5, 2014 and April 30, 2015 above applicable GCTLs, except: Benzene was detected in MW-1 at 15.0 micrograms per liter (ug/L); in PW-7 at 16.0 ug/L; and in PW-8 at 5.6 ug/L, above the GCTL of 1.0 ug/L and the estimated plume area with benzene above GCTL is indicated in **Figure 4** in **Appendix E**.

For additional parameters: In monitoring well PW-1, iron was detected at 1,430 ug/L, above the GCTL of 300 ug/L. The iron exceedance is believed to be naturally occurring (soil formation related) and is not considered a petroleum products' contaminant of concern (COC).

EPA Method 8270D (PAHs) Parameters: No EPA Method 8270D (PAHs) parameters were detected above applicable GCTLs in the monitoring wells sampled on December 5, 2014 and April 30, 2015, except the following:

Benzo(a)anthracene was detected in PW-2 at 0.12 ug/L and in PW-3 at 0.11 ug/L, above the GCTL of 0.05 ug/L.

Approximate volume of contaminated groundwater: _____ *gallons*

Plume maps [Figure(s) _____] illustrating extent of groundwater contamination is/are included in Appendix _____

III-B) Groundwater Investigation (continued)

	YES	NO	N/A
Has horizontal delineation been completed in the surficial aquifer? If no, please describe where additional sampling is required (indicating wells and needed analyses) and/or additional monitoring wells should be installed (indicating proposed screened intervals for each). If "N/A", please explain.	X		

Benzene was detected in MW-1, PW-7 and PW-8 which exceeded the GCTL. The approximate horizontal extent of the benzene exceeding the GCTL is 30 feet wide and 35 feet long as shown in Figure 4 in Appendix E.

Site map (Figure _____) illustrating proposed monitoring well locations is included in Appendix _____

	YES	NO	N/A
Has vertical delineation been completed in the plume area? If no, please describe where additional sampling is required (indicating needed analyses) and/or identify locations where vertical extent well(s) should be installed (indicating proposed screened intervals, single or double cased and length of surface casings). If "N/A", please explain.		X	

Site map (Figure _____) illustrating proposed vertical extent well locations is included in Appendix _____

III-B) Groundwater Investigation (continued)

Is the lower aquifer(s) contaminated? *If yes, please describe location and estimated depth of contamination. If unknown, please explain.*	YES	NO	Unknown
		X	

Only one (1) lower aquifer monitoring well (PDW-1) was included for sampling in the SOW for the Supplemental Site Assessment. PDW-1 did not indicate any parameter above the respective GCTL and thus the lower aquifer is believed to be not contaminated.

Cross-section (Figure _____) illustrating vertical extent of contamination is included in Appendix _____

Were natural attenuation parameter data collected? *If yes, please specify which parameters were collected (and where collected) and provide interpretation of results.*	YES	NO
	X	

Natural attenuation parameter data for methane, iron, nitrate, sulfate and orthophosphate were collected from the groundwater samples of shallow monitoring wells MW-1 and PW-1.

Site map (Figure _____) illustrating natural attenuation parameter data is included in Appendix _____

Tabular summary of parameter sampling results (Table 2) is included in Appendix E

III-D) Comments

Any issues or concerns not addressed in previous questions which might help better describe the degree and extent of the contamination at this site.

During the removal of the two 12,000-gallon USTs performed by K.C. Petroleum (PCC#1256768) on May 19, 2010, a heavy rainfall event and a high water table caused the diesel UST to break the tie downs and pop up to the surface. This simultaneously caused a 12-inch water line to break and fill the excavation to the ground surface. The UST did remain in one piece while it was removed from the excavation. It is possible an unknown amount of petroleum contact water overflowed out of the excavation spilling onto the asphalt roadway to the south.

SECTION IV - Impacted Media

IV-A) Lithologic Summary

The impacted aquifer(s) can be best characterized by the following description (predominantly):

[X]	Sands [SW, SP, SM]	[ ]	Sandy Clay, Clayey Sand or Silty Clays [SC, ML, CL]	[ ]	Clays [CH]
[ ]	Intermingled Sands and Clays	[ ]	Intermingled Sands, Clays and Limestone	[ ]	Limestone [LS]

Please describe a typical soil column and all defined aquifers (perched/upper/lower). This should include a brief description of the site lithology (using the Unified Soil Classification System), and all other geologic and/or hydrogeologic characteristics of the area which might influence migration or transport of the contamination.

Overall, the lithology of the soils in the vicinity of the site consists of poorly sorted brown, gray to green fine sands (SP) with irregular layers of silty sands (SM) and occasional shell layers from land surface to 30.0 feet bls. The shallow groundwater table was encountered between 1.6 to 3.5 feet bls across the area of investigation. Based on the results of the previous soil borings performed on-site, a low permeability or confining layer was not encountered from the ground surface to 30.0 feet bls. A geologic/hydrologic cross section across the site is shown Figure 10 of Appendix F.

Lithologic cross-section (Figure 10) is included in Appendix F

Is the lithologic information obtained to date sufficient to characterize the impacted media? *If no, please explain [indicating area(s) where additional lithologic data are needed].* ***A map illustrating where the additional borings/wells need to be located can be omitted if those locations have been identified in the soil and/or groundwater sections.***	YES	NO
	[X]	[ ]

Site map illustrating proposed lithologic boring locations (Figure _____) is included in Appendix _____

IV-B) Hydrologic Summary

	YES	NO
Have all the monitoring well tops-of-casings been surveyed? *If no, please describe why this information has not been obtained. [Note, the TOC survey does not have to be performed by a Professional Land Surveyor. However, if the monitoring wells are installed prior to the survey, then the TOCs should be included in the Professional Land Survey.]*	X	

The top of casing (TOC) elevations were surveyed during previous investigation at the site. The survey was based on a bench mark of elevation 29.50 feet at the finished floor level of the maintenance building.

	YES	NO
Was a professional land survey performed? *If yes, please indicate date of survey, whether it was saved on disk (indicating type of program), and who performed it. Also indicate which monitoring wells (if any) were included in the survey.* *[Note: the site map must be based on the professional land survey.]*	X	

A professional land survey was performed by Stillwater Technologies in March 2010 for K.C. Petroleum, Inc., when the two 12,000-gallon USTs were removed and the existing two 12,000 gallon ASTs were installed. No recent monitoring wells were included in the survey.

	yes	no
Is original signed and sealed professional land survey included?		X
Is copy of electronic version of land survey (labeled with ID #, site name & report date) included?		X

	YES	NO
Have depth to groundwater and groundwater flow direction in the upper zone aquifer been determined? *If yes, please indicate average depth to water and fluctuation range (low/high stand) in all impacted areas of the site. If no, please explain.*	X	

The depth to groundwater was measured on December 5, 2014 and April 30, 2015, from the top-of-casing to the nearest hundredth of a foot in each of the monitoring wells with a water level indicator. The average depth-to-water during the sampling events was about 1.8 feet bls and the direction of groundwater flow was determined to move towards the southwest. The groundwater contour map for the measurements obtained on April 30, 2015 is included as attached Figure 3 in Appendix C. Based on the groundwater elevation measurements, the estimated direction of groundwater flow for the upper superficial aquifer in the area of investigation is to the east and southeast.

Site map(s) [Figure(s) 3] illustrating upper zone water table elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix C

Tabular summary of all groundwater elevation data (Table 1) is included in Appendix C

IV-B) Hydrologic Summary (continued)

	YES	NO
Have depth to groundwater and groundwater flow direction(s) in lower and/or intermediate aquifer(s) been determined?		X

If yes, please indicate average depth to water and fluctuation range in vertical extent wells (low/high stand). If no, please explain.

Insufficient data has been collected to determine depth of groundwater and groundwater flow direction in lower and/or intermediate aquifers.

Site map [Figure(s)_____] illustrating lower/intermediate zone water table elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix _____

	YES	NO
Are perched aquifer conditions suspected? *If yes, please indicate estimated depth and thickness of perched zone and whether perched zone extends across entire site.*		X

Site map (Figure _____) illustrating estimated lateral extent of perched zone (when it does not extend across entire site), water level elevations and interpretation(s) of groundwater flow direction(s) is/are included in Appendix _____

	YES	NO	Unknown
Is the site tidally influenced? *If yes, please indicate tidal fluctuation range and whether groundwater flow direction might change during tidal cycle. If unknown, please indicate whether this issue is important at this site (outlining data collection plan if needed).*		X	

Considering the distance of the site from the Atlantic Ocean or any tidal river, the site is unlikely to be tidally influenced.

Site map(s) [Figure(s)_____] illustrating changes in flow direction is/are included in Appendix _____

IV-B) Hydrologic Summary (continued)

	YES	NO	Unknown
Is groundwater flow in the impacted aquifers being influenced by pumping from nearby water supply wells?			X

If yes, please explain how this was determined and indicate which water well(s) are influencing groundwater flow. If unknown, please indicate whether this issue is important at this site (outlining data collection plan if needed).

There are four large public supply wells within a half mile of the area of investigation. The closest well is located 586 feet to the south. These wells withdraw from the underlying Floridan Aquifer. Regional Stratigraphic information indicates that the surficial aquifer is separated from the underlying Floridan aquifer by the low permeability beds of Hawthorne Formation.

Site map(s) [Figure(s) _____] illustrating changes in flow direction due to pumping from nearly water supply wells is/are included in Appendix _____

	YES	NO	N/A
Has the average hydraulic gradient (ft/ft) been determined? *If yes, please indicate range of values (if applicable) and whether gradient is uniform across the site. Is there evidence of a vertical gradient? If "N/A", please explain.*	X		

The hydraulic gradient, based on data collected during the April 30, 2015 sampling event between monitoring wells PW-4 and PW-8 was 0.0115 ft/ft to the east to southeast. The vertical gradient, based on data collected from shallow monitor well PW-1 and deep monitor well PDW-1 on April 30, 2015 was 0.0104 ft/ft.

Hydraulic gradient data and calculations included in Appendix _____

	YES	NO
Have any aquifer tests been performed at the subject site? *If yes, please describe test method (slug test, pumping test, etc.), which wells were used, date performed and summarize test results [transmissivity, hydraulic conductivity, rate of groundwater flow, pumping rates (gpm), etc.]*	X	

Aquifer tests were performed at the site for the Contamination Assessment Report (CAR) completed in February 1994. The hydraulic conductivity of the on-site soils were estimated by both laboratory and field methods. A laboratory hydraulic conductivity (k) was estimated by performing falling/constant head permeability tests in the laboratory. For this purpose, two representative samples were analyzed in UES' laboratory: (1) a gray to green silty sand from boring B-1 at 7.0 feet; and (2) a gray to green silty sand from boring B-2 at 7.0 feet. The laboratory hydraulic conductivity (k) of these samples was measured to be 1) 0.14 feet per day (ft/day), and 2) 2.0 ft/day, respectively.

Two slug tests were also performed at well locations MW-2 and MW-3 using a transducer probe and an ORS data logger. The slug tests were reduced using the Bouwer and Rice Method (June 1976). The horizontal hydraulic conductivity (Kh) was calculated to be 0.16 ft/day at MW-2 and

0.19 ft/day at MW-3. An average (Kh) of 0.18 ft/day was calculated in the upper flow zone of the surficial aquifer. Calculations for the aquifer tests performed by UES can be found in Appendix D of the Contamination Assessment Report dated February 10, 1994 attached as Appendix I.

Aquifer test data and calculations included in Appendix I

TEMPLATE SITE ASSESSMENT REPORT

Site Name: Daytona Beach WWTP-Westside Regional

Facility ID #: 64/8622691

Date: October 29, 2015

SECTION V - Post Assessment Summary & Recommendations

Filled out AFTER site assessment has been completed

V-A) Site Assessment Summary

SOIL INVESTIGATION DATA

Is there vadose zone soil contamination? Yes [X] No [ ]

Soil Screening Results — Were SPLP or TCLP extractions & analyses performed? Yes [ ] No [X]

[X] FID [ ] PID [ ] Other _____ Highest OVA concentration (ppm) 206

Sample #: _____ Depth (ft): 1-2 Date Sampled 6/9/11

Above SCTLs	Contaminants of Concern	Conc. (mg/kg) or if SPLP (ug/l)	Sample #	Depth (ft)	Date Sampled	Leachability SCTL (mg/kg)	Exposure SCTL (mg/kg)
[ ]	Benzene					0.007	1.1
[ ]	Ethylbenzene					0.6	1,500
[ ]	Toluene					0.5	7,500
[ ]	Total Xylenes					0.2	130
[ ]	MTBE					0.09	4,400
[X]	TRPH	13,000 mg/kg	SS-3	2	6/14/11	340	460
[X]	Naphthalene	37 mg/kg	SS-4	3	6/14/11	1.2	55
[X]	Other [1-Methylnaphthalene]	130 mg/kg	SS-4	3	6/14/11	3.1	200
[X]	Other [2-Methylnaphthalene]	230 mg/kg	SS-4	3	6/14/11	8.5	210

GROUNDWATER INVESTIGATION DATA

Is there groundwater contamination? Yes [X] No [ ]

Maximum Contaminant Levels (latest sampling data prior to RA implementation):

Above CTLs	Contaminants of Concern	Conc.(ug/l)	Well #	Date Sampled	GCTL (ug/L)
[X]	Benzene	15.0, 16.0, 5.6	MW-1, PW-7 and PW-8	12/5/2014	1
[ ]	Toluene				40
[ ]	Ethylbenzene				30
[ ]	Total Xylenes				20
	Total VOAs (BTEX)				n/a
[ ]	MTBE				20
[ ]	EDB				0.02
[ ]	TRPHs				5000
[ ]	Lead (total)				15
[ ]	Naphthalene				14
	Total Naphthalenes				n/a
	Other PAHs				n/a
[X]	Other [Benzo(a)anthracene]	0.12, 0.11	PW-2, PW-3	12/5/2014	0.05
[ ]	Other [ ]				

Free product present? Yes [ ] No [X] Where? _____ Maximum thickness (ft) _____

Estimated depth of contamination (ft) 2-12 Lower aquifer(s) contaminated? Yes [ ] No [X]

GROUNDWATER ELEVATION DATA

Depth to groundwater in upper zone water-table wells (ft): 1.46 to 2.19 Average (ft): 1.78

Depth to groundwater in lower zone vertical extent wells (ft): _____ to _____ Average (ft): _____

Observed maximum range of upper zone fluctuation (ft): _____ Tidally influenced? Yes [ ] No [X]

V-A) Site Assessment Summary (continued)

	YES	NO
Are all the documents submitted to date adequate to meet the site assessment requirements of Rule 62-770.600, Florida Administrative Code (F.A.C.)?	X	

V-B) Recommendations

	YES	NO
Is No Further Action (NFA) without conditions recommended? If yes, please provide reasons NFA is appropriate.		X

	YES	NO
Is No Further Action (NFA) with conditions recommended? If yes, please provide reasons conditional NFA is appropriate and describe the conditions [the needed institutional or engineering controls] *pursuant to Rule 62-770.680(2), F.A.C.*		X

V-B) Recommendations (continued)

	YES	NO
Is Remediation by Natural Attenuation (RNA) recommended for any portion of the groundwater plume? *If yes, please provide reasons RNA is appropriate and outline proposed monitoring plan. Is/are the temporary point(s) of compliance [the downgradient well(s)] off-site?*	X	

Based on the latest supplementary site assessment, contamination of benzene was observed at shallow monitoring wells MW-1, PW-7 and PW-8 and benzo(a)anthracene was encountered in shallow monitoring wells PW-2 and PW-3. Remediation by Natural Attenuation (RNA) is recommended for the groundwater contamination present at the site.

Monitoring Wells: MW-1, PW-2, PW-3, PW-7 and PW-8

Contaminants: Benzene, benzo(a)anthracene Frequency: Semi-annual Duration: 3 years

	YES	NO
Is Source Removal (soil or free product) recommended? *If yes, please outline proposed method and extent of source removal (is dewatering needed?)*		X

Site map (Figure _____) illustrating proposed extent of excavation is included in Appendix _____

V-B) Recommendations (continued)

	YES	NO
Is a Limited Scope Remedial Action Plan (LSRAP) needed? *If yes, please provide reasons for performing limited remediation and briefly outline plan for remediation.*		X

Site map (Figure_____) illustrating locations of any proposed recovery wells (if applicable) is included in Appendix _____

If RAP already approved for site...

	YES	NO
Is a Remedial Action Modification Plan (RAMP) needed? *If yes, please provide reasons for continuing approved RA at the site and indicate proposed modifications.*		X

V-B) Recommendations (continued)

	YES	NO
Is a Remedial Action Plan (RAP) needed? *If yes, please provide reasons for performing in-situ remediation at the site and indicate which remediation technology or combination of technologies is recommended or should be evaluated (with reasons for recommendation).*		X

	YES	NO
Is a Pilot Test recommended? *If yes, please indicate recommended remedial technology and outline specifics of proposed pilot test. Details include area of site where test is planned, recovery/air sparging well construction details, which wells will be used to evaluate test, proposed recovery and/or pumping and/or blowing rates and plan for IDW disposal (if applicable).*		X

The FDEP should be consulted before preparing a pilot test outline.

Site map (Figure_____) illustrating pilot test layout is included in Appendix _____

V-C) Comments

Any issues or concerns not addressed in previous questions which might influence remediation decisions at this site.

SECTION VI - Program Issues
(for state funded cleanup sites)

List of all consultant company personnel (not subcontractor employees) that participated in the field work or helped to prepare the report:

Name	Duties	Dates On-Site (if applicable)		
Shawkat Ali	Senior Project Engineer	4/15/2015	thru	
Mark Livingston	Field Work	4/30/2015	&	
Miguel Rodriguez	Field Work	12/5/2015	&	
			thru	
			thru	
			Thru	
			Thru	
			Thru	
			Thru	

VI-A) Work Plan and Cost Summary

Briefly summarize initial work plan.

Performed Supplemental Site Assessment of the site after three (3) reported discharges in 1990, 1993 and 2010 and the site assessment and source removal activities performed between 2011 and 2013.

Copy of original work order or task assignment is included in appendix A

Was any extra work authorized? *If yes, please summarize extra work planned for site.*	YES	NO
		X

Copies of all authorization forms are included in Appendix _____

VI-A) Work Plan and Cost Summary (continued)

	YES	NO
Was any planned work <u>not</u> performed? If yes, please describe work not performed with reasons why not performed.		X

	YES	NO
Are there any changes in cost from original work order or task assignment? If yes, please describe the changes and cost adjustments that will be required for invoicing.		X

Copies of all needed subcontractor and/or materials invoices and draft change order cost template included in Appendix _____

VI-B) <u>Next Proposal</u>

	YES	NO
Is detailed cost proposal for next scope of work included? If no, please explain why proposal not provided:		X

Proposal included in Appendix n/a

APPENDIX A

Order No. AAD12B

Version Number: 1
Internal Version: false
Issued on Tue, 05 Aug, 2014
Created on Tue, 05 Aug, 2014 by Ariba System

Supplier:
Andreyev Engineering Inc
4055 St. John's Parkway
Sanford, FL 32771
United States
Phone: 1407-330-7763
Fax: 1407-330-7765
Contact: James Jarmolowski

Ship To:
DEP-PETROLEUM RESTORATION PROGRAM SECTION 2
BMC RM 430 MS 4545
2600 BLAIR STONE RD
TALLAHASSEE, FL 32399
United States

Deliver To:
Jack Rawlins (Contracts)

Bill To:
DEP-PETROLEUM RESTORATION PROGRAM SECTION 2
BMC RM 430 MS 4545
2600 BLAIR STONE RD
TALLAHASSEE, FL 32399
United States

Entity Description: Department of Environmental Protection
Organization Code: 37450404555
Object Code: 000000-139900
Expansion Option: JQ
Exemption Status: No
Exemption Reason?:

Item	Description	Part Number	Unit	Qty	Need By	Unit Price	Extended Amount
1	**Contractor has been selected to perform a ...**		Dollar	6,932	None	$1.00000 USD	$6,932.00000 USD

Contractor has been selected to perform a Supplemental Site Assessment (SSA) at the Daytona Beach City WWTP-Westside Regional Facility, 3651 LPGA Boulevard, Daytona Beach, Volusia County, Florida, FAC ID 648622691. Attachment A, Scope of Work, attached to the purchase order (PO) describes the work to be completed by the Contractor. All work shall be performed in accordance with the terms of the Agency Term Contract (ATC). The PRP reference number for this project is 733-019A.

Attache
d hereto and made a part of this PO is Attachment B - Schedule of Pay Items and Other Related Documents. Pay Items are at or below the negotiated maximum rates included in the ATC. Contractor must submit the appropriate completed documents from Attachment B to the Site Manager with each deliverable, as instructed. Contractor must submit to PRP_Accounting@dep.s
tate.fl.us a completed invoice package (Attachment B – Schedule of Pay Items documents including Invoice and deliverable approval letter with the Site Manager-approved Invoice Rate Sheet). Upon completion and approval of all work under this PO, Contractor shall submit a signed Release of Claims document, along with the final invoice. Contractor must include Subcontractor Utilization Report form, included as a tab on Attachment B, with each invoice.

The Department will retain 10% of the total amount of each payment made. Contractor may submit a request for release of retainage upon completion, and DEP approval of, all work performed under this PO.

The Department will evaluate the Contractor as specified in the Agency Term Contract.

The Contractor agrees to perform the services described in the PO in accordance with the terms of its ATC (as those terms may have been amended) which are in effect on date of issuance of the PO. The applicable ATC terms are available at the following URL:
https://facts.
fldfs.com/Search/Con
tractDetail.aspx?Age
ncyId=370000&Contrac
tId=GC733

Distributors?: N
Requester: Jack Rawlins (Contracts)
Ship To Code: DEP309S
State Contract ID:
Contract ID:
Requester Phone:
PR No.: PR8129238
MyGreenFlorida Content: N
Method of Procurement:: J - agency ITN per section 287.057(3)
Shipping Method: Best Way
FOB Code: INC-Dest
FOB Code Description: Destination freight paid by vendor and included in price. Title passes upon receipt. Vendor files any claims.
Encumber Funds: Yes
PO Start Date: Tue, 5 Aug, 2014

PO End Date: Thu, 2 Apr, 2015
Fiscal Year Indicator: 2015
PUI#: 3701
Site Code: 370000-12
Terms and Conditions: http://dms.myflorida.com/mfmp_PO_TC
P Card Order?: No

	Total	$6,932.00000 USD

Comments

- Judith A. Pennington (Contracts), 07/29/2014:
  The following attachments are attached hereto and made a part of this Purchase Order.

  Attachment A – Scope of Work
  Attachment B – Schedule of Pay Items and Other Related Documents
  Attachment C – Request for Change (Judith A. Pennington (Contracts), Tue, 29 Jul, 2014)
- Sharon A. Lee (Contracts), 07/30/2014:
  PRP ref #733-019A (Sharon A. Lee (Contracts), Wed, 30 Jul, 2014)

Attachments

- ATTACHMENT by **Judith A. Pennington (Contracts)** on *Tuesday, July 29, 2014 at 2:53 PM*
  Attachment A - SSA Scope of Work - 648622691.pdf (293616 bytes)
- ATTACHMENT by **Judith A. Pennington (Contracts)** on *Tuesday, July 29, 2014 at 2:53 PM*
  Attachment B - Schedule of Pay Items & Other Related Documents - 648622691.xls (2548736 bytes)
- ATTACHMENT by **Judith A. Pennington (Contracts)** on *Tuesday, July 29, 2014 at 2:53 PM*
  Attachment C - Request for Change.xls (45568 bytes)

Volusia County
FLORIDA

Growth and Resource Management Department
Environmental Management

July 15, 2015

Shawkat Ali, Ph.D., P.E.
Andreyev Engineering, Inc.
511 Central Park Drive, Suite 1
Sanford, FL 32771

sent via Email

Subject: Deliverable Review-Task 2 Interim Report RTC
Daytona Beach WWTP-Westside Regional
3651 LPGA Blvd., Daytona Beach, Volusia County
FDEP Facility ID #648622691
Discharge Date: March 3, 1993 (PLRIP)

Dear Mr. Ali:

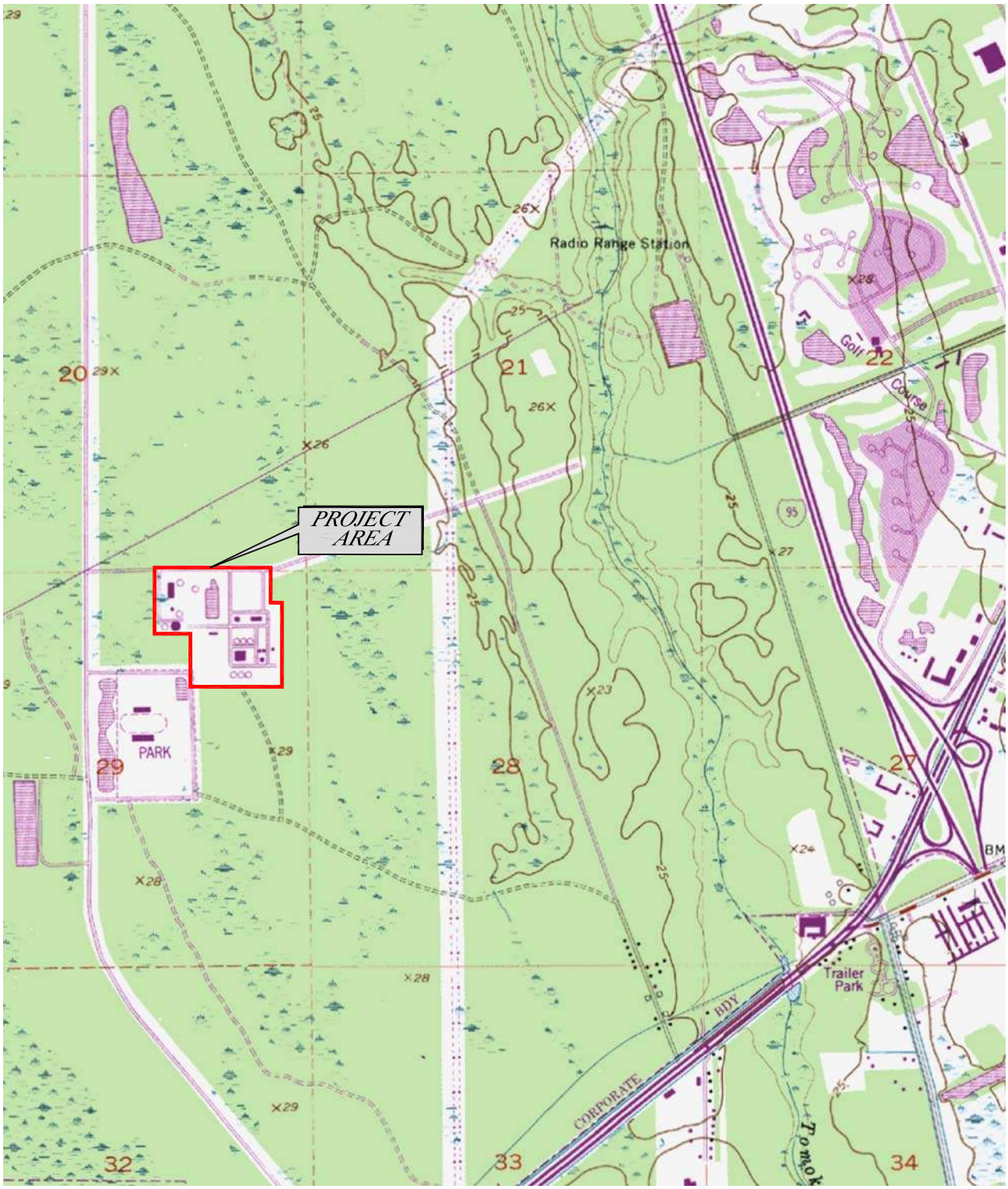
Volusia County Environmental Management (VCEM) has reviewed the "Response to Task 2 – Interim Report Review Comments" (Report) dated June 24, 2015, received June 24, 2015 and due June 13, 2015, submitted for this facility. The Report documents the sampling of monitoring wells PW-1 and PDW-1 on April 30, 2015. These monitoring wells were inadvertently not sampled during the December 5, 2014 sampling trip as prescribed in the original Scope of Work. VCEM appreciates this work being conducted at your own expense to rectify the situation. However, the SOW still called for the Task 2 deliverable to be a Supplemental Site Assessment Report in the Template Site Assessment Report (TSAR) format. This prescribed TSAR was to contain all historical and recent assessment information so that thorough analyses of the information would result in the proper recommendations for further action toward cleanup of this discharge. Your written response to this review letter is to consist of that TSAR with recommendations and is due within 30 days of the date of this letter.

If you should have any questions about the review, please contact me at (386)-736-5927 or at the letterhead address.

Sincerely,

Jack Rawlins
Environmental Specialist II

cc: Ms. Shannon Ponitz, P.E., Utilities Engineering Manager, City of Daytona Beach, 125 Basin St., Daytona Beach 32114 – ponitzs@codb.us
ec: FDEP-Oculus



GRAPHIC SCALE: 1"=2000'

REFERENCE:
U.S.G.S. DAYTONA BEACH, FLA.
QUADRANGLE MAP
DATED 1952
REVISED 1993
SECTION 29
TOWNSHIP 15 SOUTH
RANGE 32 EAST

Andreyev Engineering, Inc.

TASK 2 – INTERIM REPORT

VOLUSIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT

3651 11th STREET
DAYTONA BEACH, VOLUSIA COUNTY, FL

U.S.G.S. TOPOGRAPHIC MAP

APPROXIMATE SCALE:	DATE: 01/12/15	ENGINEER: SB
1"=2000'	PN: FDEP-14-0035	DRAWN BY: DLS

FIGURE 1



0 200 400 800

GRAPHIC SCALE: 1"=400'

LEGEND:

APPROXIMATE SUBJECT PROPERTY BOUNDARY

Andreyev Engineering, Inc.

APPROXIMATE SCALE:	DATE: 01/12/15	ENGINEER: SB
1"=400'	PN: FDEP-14-0035	DRAWN BY: DLS

TASK 2 – INTERIM REPORT

VOLUSIA COUNTY REGIONAL WASTEWATER TREATMENT PLANT

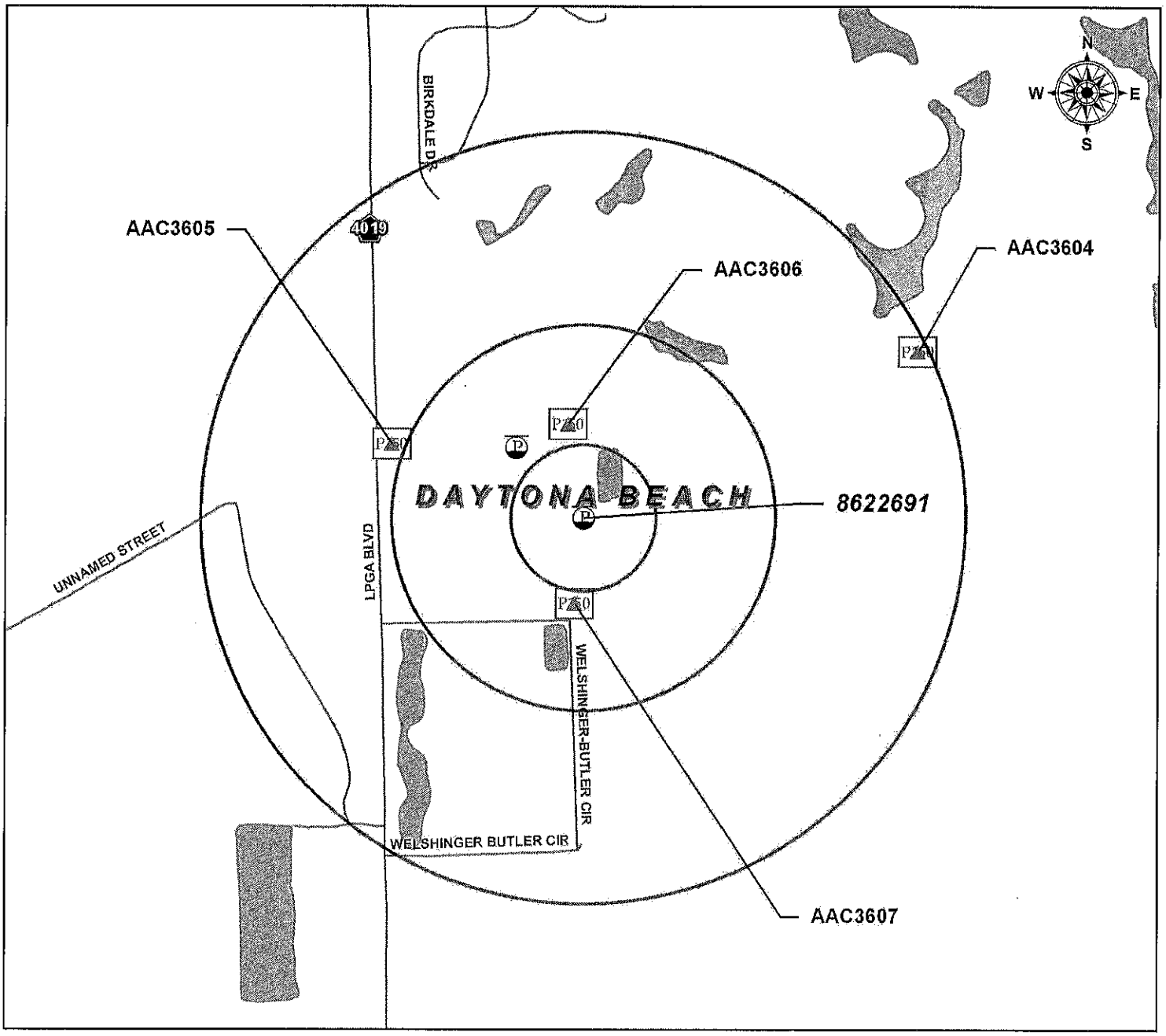
3651 11th STREET
DAYTONA BEACH, VOLUSIA COUNTY, FL

2014 AERIAL PHOTOGRAPH

FIGURE 2

8622691
DAYTONA BEACH CITY WWTP-WESTSIDE REGIONAL
3651 LPGA BLVD
DAYTONA BEACH, FL 32124

Latitude/Longitude: 29.177154 -81.115273
DDMMSS: 29 10 37.7544 81 6 54.9828
Number of large public wells (>150,000 gpd) within the 1/2 mile: 4
Number of small public and private wells within the 1/4 mile: 0



Sample Results--Petroleum*

- ★ >1/2 MCL/HAL
- ● <1/2 MCL/HAL
- ■ <1/4 MCL/HAL
- ▲ Sampled, no detect
- ⚑ Not sampled within last year (3 years if large Community PWS)
- ⌖ No sample found for this analysis

* The following chemicals were use for the Petroleum Indicator analysis: Benzene, Ethylbenzene, Toluene, Xylenes (Total), Napthalene, and Methyl-Tert-Butyl-Ether (MTBE)

SDWA PWS Wells

Design Capacity
- PS <150,000 gpd
- P150 ≥150,000 gpd

Facility Type

- Ⓟ Petroleum
- Ⓟ Proximity Threat
- Ⓓ Drycleaner
- Ⓣ Toxics
- ? Other
- Ⓒ Cattle Dip Vat

FLORIDA DEPARTMENT OF HEALTH

Florida Department of Health
Bureau of Water Programs
Potable Well Survey

Disclaimer
This product is for reference purposes only and is not to be construed as a legal document. Any reliance on the information contained herein is at the user's own risk. The Florida Department of Health and it's agents assume no responsibility for any use of the information contained herein or any loss resulting therefrom.

Signature: _____

APPROVED

5/5/2011
hoovergj
VOLUSIA

FIGURE 6

UNIVERSAL ENGINEERING SCIENCES

Geotechnical Engineering | Construction Materials Testing and Inspection
Building Code Compliance | Environmental Services | Facilities Consulting

...grounded in excellence

Received
--September 16, 2022--
Alachua County
Environmental Protection
Department

SITE ASSESSMENT REPORT

Conducted on

West Regional Waste Water Treatment Plant (WWTP)
3651 LPGA Boulevard, Daytona Beach, Florida
Facility ID #8622691
UES Project No. 0440.2200030.0000
UES Report No. 140457

Report Date: September 6, 2022

Prepared for:
City of Daytona Beach
950 Belleview Avenue
Daytona Beach, Florida 32115
Attention: Mr. Eric Smith, Project Engineer

Prepared by:
Universal Engineering Sciences
911 Beville Road, Suite 3
South Daytona, Florida 32119
(386) 756-1105
www.UniversalEngineering.com

UNIVERSAL ENGINEERING SCIENCES
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St. Petersburg, FL
Tampa, FL
Tifton, GA
West Palm Beach, FL

September 6, 2022

Mr. Eric Smith, Project Engineer
City of Daytona Beach
950 Bellevue Avenue
Daytona Beach, Florida 32115

Reference: **SITE ASSESSMENT REPORT (SAR)**
West Regional Waste Water Treatment Plant (WWTP)
3651 LPGA Boulevard
Daytona Beach, Volusia County, Florida
Facility ID #8622691
UES Project No. 0440.2200030.0000
UES Report No. 140457

On behalf of The City of Daytona Beach, Universal Engineering Sciences (UES) has completed this Site Assessment Report (SAR) for the above-referenced property (the "subject property"). The purpose of this Site Assessment is in requirement to confirm the presence, extent or absence of impacted soils and/or groundwater in the subsurface within the vicinity of a 6,000-gallon aboveground storage tank (AST) on the subject property. The attached report contains a summary of available site historic background, the conducted SAR field investigations, findings for this assessment activity, and its supporting documents.

The SAR was conducted in general accordance with Chapter 62-780, Florida Administrative Code (FAC) and Florida Department of Environmental Protection (FDEP) standards and regulations. If you have any comments or questions regarding the information contained within this report or if we can be of further service, please contact the undersigned herein at (239) 995-1997 or at the following emails: jrommel@universalengineering.com; slaracuente@universalengineering.com.

Respectfully submitted,
Universal Engineering Sciences

Joseph R. Rommel II
Senior Project Manager
jrommel@universalengineering.com

Samuel R. Laracuente, P.G.
Senior Manager Corporate Environmental Services
slaracuentebernat@universalengineering.com

CERTIFICATION

PROFESSIONAL GEOLOGIST LICENSED IN THE STATE OF FLORIDA

I, Samuel R. Laracuente, P.G. with Florida Professional Geologist License # PG2988, a full-time employee of Universal Engineering Sciences, certify that I currently hold an active license in the State of Florida and am competent through education and/or experience to provide the service contained in this Site Assessment Report (SAR) for The City of Daytona Beach. As a registered professional geologist, as authorized by Chapter 492, Florida Statues, I certify that, to the best of my knowledge, the information and laboratory data summarized in this report (including the applicable attachments) are true, accurate, complete, and in my professional judgment, this report is in accordance with Florida Rules and Regulations and was prepared under my responsible charge. I certify that Universal Engineering Sciences holds an active Board of Professional Geologists Certificate of Authorization No. GB33, to provide this service.



Consultant Name: Universal Engineering Sciences
Certificate of Authorization No. GB33
Samuel R. Laracuente, P.G., for the firm
P.G. License #: PG2988

Signature: _____

Date: 9/06/2022

FIGURES

USGS Site Location Plan ..... Figure 1
Site Vicinity Map ..... Figure 2
Soil / Groundwater Sample Location Map..... Figure 3
Soil Analytical Map..... Figure 4
Historic Soil Analytical Map..... Figure 5
Groundwater Elevation Data and Flow Direction ..... Figure 6

TABLES

Soil Analytical Summary – Non-Carcinogenic PAHs 8270 ..... Table 1
Soil Analytical Summary – Carcinogenic PAHs 8270 ..... Table 2
Groundwater Analytical Summary – BTEX, MTBE..... Table 3
Groundwater Analytical Summary – PAHs 8260 and TRPH..... Table 4
Groundwater Elevation Summary..... Table 5

APPENDIX A

Soil Boring Logs ..... A

APPENDIX B

Monitoring Well Permits..... B

APPENDIX C

Groundwater Sampling Logs..... C

APPENDIX D

Laboratory Analytical Reports ..... D

APPENDIX E

Benzo(a)Pyrene Conversion Charts ..... E

APPENDIX F

Interim Source Removal Report..... F

1.0 INTRODUCTION

Universal Engineering Sciences (UES) was retained by The City of Daytona Beach (the "Client") to complete a Site Assessment Report (SAR) from investigation activities conducted at the City of Daytona Beach West Regional Wastewater Treatment Plant located at 3651 LPGA Boulevard in Daytona Beach, Volusia County, Florida (the "subject property"). This report describes UES' field activities, sampling methodology, summarizes the site historic background and provides a summary of the current soil and groundwater environmental conditions, based on field investigation work and laboratory analytical results. Refer to the **Figures** section of the report, **Figures 1** and **2** for a "United States Geological Survey (USGS) Site Location Map," and a "Site Vicinity Map," respectively. **Table 1** through **Table 4** summarize soil and groundwater analytical data obtained during site assessment activities.

2.0 LIMITING CONDITIONS AND RELIANCE

2.1 Limitations and Exceptions

The findings of this report represent our professional judgment; UES offers or extends no warranty, expressed or implied. These findings are current with the dates of our site work and the information cited herein. The conclusions presented are based on the data provided, observations, and conditions that existed on the date of the on-site activities. This report should not be relied upon to represent property conditions on other dates or at locations other than those specifically cited within the report. UES can accept no responsibility for interpretations of these data made by other parties.

No Environmental Site Assessment can eliminate all uncertainty. Furthermore, any sample, either surface or subsurface, taken for chemical analysis may or may not be representative of a larger population. Professional judgment and interpretation are inherent in the process and uncertainty is inevitable. Additional assessment may be able to reduce uncertainty.

Even when a soil assessment is performed with an appropriate site-specific standard of care, certain conditions present especially difficult detection problems. Such conditions may include, but are not limited to, complex geological settings, the fate and transport characteristics of certain hazardous substances and petroleum products, the distribution of existing contamination, physical limitation imposed by the location of utilities and other man-made objects, and the limitation of assessment technologies. SARs do not generally require an exhaustive assessment of environmental conditions on a property. If hazardous substances or petroleum products are confirmed on a parcel of property, the extent of further assessment is related to the degree of uncertainty that is acceptable to the user with respect to the real estate transaction.

In expressing the opinions stated in this report, UES has exercised the degree of skill and care ordinarily exercised by a reputable and competent environmental professional in the same area and time frame given the same facts and circumstances. Documentation and data provided by the Client or other interested parties, or from the public domain, and referred to in the preparation of this assessment, have

been used and referenced with the understanding that UES assumes no responsibility or liability for their accuracy. The information contained in this report, including its conclusions, is based on the information that was made available to UES during the assessment and upon the services described that were performed. Because the report is based on available information, some of its conclusions could be different if the information upon which it is based is determined to be false, inaccurate, or contradicted by additional information.

3.0 BACKGROUND

- According to a Florida Division of Emergency Management correspondence dated May 2, 2014, the City of Daytona Beach reported a discharge of diesel fuel that occurred during refueling of a 6,000-gallon aboveground storage tank (AST). Refer to **Figure 2** in the figures section for the AST location within the subject property. The discharge was mitigated immediately upon discovery, and it was determined that a quantity of less than 25 gallons was released. The discharge was promptly reported to the State Watch Center (# 2014-3196) and the National Response Center (NRC #1081573).

- According to an Interim Source Removal (ISR) Report (UES Report No. 128424) prepared by Universal Engineering Sciences (UES) dated March 11, 2015, an interim source removal was conducted at this facility on August 5, 2014 to excavate and remove diesel-fuel impacted soils that resulted from the May 2, 2014 petroleum products discharge from a 6,000-gallon aboveground storage tank. The ISR was included as an appendix to this report (**Appendix F**).

    - Approximately 15.33 tons of petroleum-fuel impacted soils were excavated and transported to a permitted disposal facility in Mulberry, Florida operated by Clark Environmental.

    - Ten (10) confirmatory sidewall soil samples (SS-1 through SS-10) were collected from the source removal excavation sidewall at a depth of two and a half (2.5) and three (3.0) feet below land surface (bls) and submitted for laboratory chemical analysis. Due to the high water table at the time of the source removal (approximately 3 feet bls), no soil samples were collected from the bottom of the source removal excavation. The soil samples collected were submitted to Advanced Environmental Laboratories (AEL) in Jacksonville, Florida and were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl tertiary-butyl ether (MTBE) via United States Environmental Protection Agency (USEPA) Method 8260; polynuclear aromatic hydrocarbons (PAHs) via USEPA Method 8270; and total recoverable petroleum hydrocarbons (TRPH) via the FL-PRO Method respectfully.

    - Laboratory analytical results indicated that soil samples SS-7 through SS-9 detected benzo(a)pyrene above Florida Department of Environmental Protection (FDEP) Commercial / Industrial Direct Exposure Soil Cleanup Target Levels (STCLs). Laboratory analytical results indicated that soil samples SS-1, SS-6, and SS-10 detected Benzo(a)pyrene above FDEP Residential Direct SCTLs.

- Upon completion of source removal excavation activities, permitted monitoring well MW-1 was installed to a depth of 12 (twelve) feet bls in the approximate center of the former source removal excavation area. On September 11, 2014, groundwater samples were collected from permitted monitoring well MW-1. The groundwater samples were submitted to AEL and were analyzed for BTEX and MTBE via USEPA Method 8260, PAHs via USEPA Method 8270, and TRPH vial FL-PRO Method respectfully.

    - Laboratory analytical results indicated that no chemicals of concern (COCs) were detected in groundwater samples collected from permitted monitoring well MW-1 above FDEP Groundwater Cleanup Target Levels (GCTLs).

- On February 24, 2015, confirmatory soil samples (SS-1R, SS-6R, SS-7R, SS-8R, SS-9R, and SS-10R) were collected at a depth of two and a half (2.5) and three (3.0) feet bls from the same six soil sample locations (SS-1, SS-6, SS-7, SS-8, SS-9, and SS-10) that had previously detected Benzo(a)pyrene above FDEP SCTLs. The soil samples were submitted to AEL and were analyzed for Benzo(a)pyrene via USEPA Method 8270.

    - Laboratory analytical results indicated that Benzo(a)pyrene was not detected in soil samples (SS-1R, SS-6R, SS-7R, SS-8R, SS-9R, and SS-10R) collected above FDEP SCTLs.

- Based on analytical data from soil and groundwater, it was UES opinion and recommendation that no further action was warranted for this discharge.

Alachua County Environmental Protection Department stated the following through a correspondence letter dated February 17, 2022:

- No further action is not appropriate and this discharge is not eligible for closure at this time.
- While the confirmatory soil samples demonstrated that Benzo(a)pyrene was not present at concentrations above SCTLs, they did not address the concentrations of the other 6 carcinogenic PAHs that were reported in the original sidewall soil samples. Absent any additional data, we must conclude that the other carcinogenic PAH compounds are still present as reported in the original samples.
- The Benzo(a)pyrene Conversion calculations were re-run using the benzo(a)pyrene concentrations from the confirmatory samples while retaining the concentrations of the other carcinogenic PAHs from the original samples. These calculations demonstrate that even with the updated benzo(a)pyrene data, concentrations of the other carcinogenic PAHs are high enough that the calculated benzo(a)pyrene equivalents still exceed Chapter 62-777 SCTLs.
- Since this discharge has not been resolved, you are required to complete a formal site assessment (SAR) that meets all of the requirement of Chapter 62-780 FAC.

As requested by the Client on May 4, 2022 and in requirement of Alachua County Environmental Protection Department, UES completed a SAR investigation by conducting the following activities at the subject property.

- Review of historical records, in specific the Interim Source Removal Report dated March 11, 2015.

- Strategic installation of soil borings – June 28, 2022.
    - soil sampling, visual/manual description and chemical laboratory analysis
- Strategic installation of permanent groundwater monitoring wells – June 28, 2022.
    - Water level measurements and well development
- Groundwater sampling – July 6, 2022.
- Well elevations survey – August 15, 2022.

Below is a summary of the findings from each investigation to complete the SAR in accordance to Chapter 62-780 of the Florida Administrative Code at the subject property.

4.0 SITE DESCRIPTION

4.1 Site Location and Area Land Use

The ("subject property") is located at 3651 LPGA Boulevard in Daytona Beach, Volusia County, Florida (Parcel ID # 5228-00-00-0030). The area of concern where a 6,000-gallon aboveground storage tank (AST) was located within the subject property and herein under assessment, comprised of a 3,300 +/- square-foot (0.08 +/- acre) area within the 50.95 +/- acres of land operated as the West Regional Wastewater Treatment Plant. The subject property is located within Section 28, Township 15 South, and Range 32 East, as referenced in the USGS topographic quadrangle map titled "Daytona, Florida" provided as **Figure 1**.

The adjoining property to the north consists of an undeveloped vegetated parcel of land. The adjoining property to the east consists of an undeveloped vegetated parcel of land. The adjoining property to the south consists of an undeveloped vegetated parcel of land and The City of Daytona Beach Municipal Stadium. The adjoining property to the west consists of LPGA Boulevard and an undeveloped vegetated parcel of land beyond.

4.2 Surface Water Bodies

According to on-site inspections and available data resources, one retention pond exists on the north central portion of the subject property. According to the U.S. Fish and Wildlife National Wetlands Inventory Website, wetlands are located on the subject property.

4.3 Area Wells

Information pertaining to public wells (Non-Federal) within ½ mile radius of the subject property was researched using FDEP Open Map Direct resources, specifically the Division of Water Resource Management as part of this assessment. No public drinking water wells were identified within ½ mile of the subject property.

5.0 SITE ASSESSMENT

5.1 Regional Geology and Hydrogeology

The general geology and hydrogeologic characteristics in the vicinity of the subject property were explored through review of available literature and field assessment activities, including soil sampling, installation of monitoring wells, groundwater sampling and water level measurements. The results and conclusions of these findings are discussed below.

5.1.1 Regional Geology

The general geology of Volusia County is characterized by 20 to 50 feet of undifferentiated fine to medium grained sand, clayey sand and shell of Pleistocene to Holocene age overlying the Pliocene to Miocene age Hawthorn Group. The Hawthorn is approximately 20 to 70 feet thick in the project area and is comprised of interbedded layers of clay, clayey sand, shell and calcareous silty clay. The Ocala Limestone (late Eocene Age) and the Avon Park Limestone (late middle Eocene age) formations underlie the Hawthorn Group and extend to depths 1,200 or more feet. According to the 1980 Soil Conservation Service, Volusia County Soil Survey, surficial soils at the subject property are classified primarily as Candler sand. Candler sands are well to excessively drained soils that have a water table greater than six (6) feet. These soils have high infiltration rates and do not meet the requirements of a hydraulic soil.

5.1.2 Regional Hydrogeology

The general hydrogeology of Volusia County includes an unconfined surficial aquifer separated from the Floridian aquifer by the Hawthorn Group. The surficial aquifer consists of 20 to 70 feet of fine to medium grained sand, clayey sand and shell. It is recharged by rainfall and can yield small to moderate amounts of water to small diameter wells. The Floridian aquifer may reach over 2,000 feet in thickness and is the primary source of the public water supply. The direction of shallow groundwater flow is generally toward surface water bodies and is a subdued replica of the surface topography. The general direction of shallow groundwater flow, based on the USGS Topographic Map, is most likely to the north towards the northeast. Surface water (retention pond) were observed on the north central portion of the subject property on the day of site reconnaissance.

5.1.3 Site Lithology

The lithology sequences beneath the subject property (to approximately 15 feet below ground surface) were identified during the installation of soil borings and monitoring wells. The generalized stratigraphic profile of the soils found in soil borings and well locations installed by UES at the subject property is presented in the table below. The soil profile was prepared from field soil boring logs of recovered continuous soil core samples that were visually described and manually classified using the Unified Soil Classification System (USCS – ASTM D2487) by an Environmental Scientist member of our staff.

General Depths Below Ground Surface (feet)	Soil Description
0 - 7	Poorly Graded Sand, Grayish Brown, Moist, Loose, Fine – Medium Sand, Trace Roots
7 - 10	Medium Dense, Find Sand, Trace Silt
10 - 15	Poorly Graded Sand, Light Brownish Gray, Moist, Medium Dense, Fine Sand, Trace Silt
15 – 20*	Poorly Graded Sand, Moist, Medium Dense, Fine Sand, Trace Silt
* Termination Depth Refer to **Appendix A**, Soil Boring logs for detail description of recovered soil cores.	

Sampling was performed in general accordance with FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Refer to **Figure 3** in the **Figures** section of this report for a map illustrating the locations of the soil borings and permanent monitoring well locations as well as historical sample locations from the ISR report. Refer to **Tables 1** through **Table 4** in the **Tables** section of this report for soil and groundwater analytical data. Soil boring logs are presented in **Appendix A**.

6.0 SOIL AND GROUNDWATER ASSESSMENT

6.1 Soil Assessment

On June 28, 2022, UES conducted site investigation activities that included the installation of six (6) soil borings (SB-11 through SB-16) utilizing hand auger technique for the upper 5 feet bgs and Direct Push Technology (DPT) from 5 feet bgs to maximum exploration depth. Continuous soil samples were collected at each location for visual-manual description following the Unified Soil Classification System according to ASTM-D2488 and screening with a Photoionization detector. Soil samples were screened at every 1 foot interval throughout the vadose zone. None of the collected soil samples from any sampling location recorded PID reading concentrations greater than 0 ppm in any of the recovered depth intervals throughout the vadose zone. Drilling and sampling activities were performed in general accordance with FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Soil samples for chemical analysis were collected into laboratory supplied glass containers in accordance with FDEP's SOPS for Field Activities, placed into an ice-packed cooler and then transported under proper chain-of-custody documentation to a NELAP certified laboratory for chemical analysis.

One (1) soil boring (SB-11) was advanced at the location of former soil boring SB-7 to a depth of five feet below land surface (bls). One (1) soil boring (SB-12) was advanced at the location of former soil boring SB-8 to a depth of five feet bls. One (1) soil boring (SB-13) was advanced at the location of former soil boring SB-10 to a depth of five feet bls. One (1) soil boring (SB-14) was advanced at the former location of SB-1 to a depth of eighteen feet bls. One (1) soil boring (SB-15) was advanced at the location of former soil boring SB-6 to a depth of twelve and a half feet bls. One (1) soil boring (SB-16) was advanced at the location of former soil boring SB-9 to a depth of twenty feet bls.

Continuous soil sampling was used to collect and field screen recovered soil cores from existing ground surface to maximum exploration depth. Soil sample SS-11 was collected at a depth of 2.0-2.5 feet bls for

laboratory analysis. Soil sample SS-12 was collected at a depth of 2.0-2.5 feet bls. Soil sample SS-13 was collected at a depth of 1.5-2.0 feet bls. Soil sample SS-14 was collected at a depth of 2.0-2.5 feet bls. Soil sample SS-15 was collected at a depth of 2.0-2.5 feet bls. SS-16 was collected at a depth of 2.0-2.5 feet bls.

Soil samples were collected into laboratory supplied glass containers in accordance with FDEP's SOPS for Field Activities, placed into an ice-packed cooler and then transported under proper chain-of-custody documentation to a NELAP certified laboratory for chemical analysis. Soil samples SS-11 through SS-16 were analyzed for polycyclic aromatic hydrocarbons (PAHs) full list via United States Environmental Protection Agency (USEPA) method 8270.

Based on our findings and after evaluation of the laboratory analytical data of the soil samples collected, chemicals of concern were not detected above its respective Florida Department of Environmental Protections (FDEPs) Soil Cleanup Target Levels (SCTLs) as specified in Table II Chapter 62-777 F.A.C., dated April 2005. Refer to **Table 1** and **Table 2** in the **Tables** section of this report for direct comparison between results of all chemicals of concern in soil and their respective Residential, Commercial/Industrial SCTLs. Refer to **Figure 4** in the **Figures** section of this report for a map illustrating the locations of the soil boring locations. Soil boring logs are presented in **Appendix A**. Benzo(a)Pyrene Conversion Charts are presented in **Appendix E**.

6.2 Groundwater Assessment

On June 28, 2022, UES conducted the installation of three (3) permitted permanent monitoring wells (MW-1R, MW-2, and MW-3) utilizing a DPT drill rig with rotary capabilities to drive hollow stem augers. The location of each permanent monitoring well is depicted on **Figure 3** in the figures section of this report. Continuous soil samples were recovered, field screened with a PID detector and visually-manually described following the Unified Soil Classification System according to ASTM-D2488. None of the recovered soil samples in the vadose zone recorded PID reading concentrations above 0 ppm. Drilling and sampling activities were performed in general accordance with FDEP's Standard Operating Procedures for Field Activities (DEP-SOP-001/01). Groundwater samples for chemical analysis were collected into laboratory supplied glass containers in accordance with FDEP's SOPS for Field Activities, placed into an ice-packed cooler and then transported under proper chain-of-custody documentation to a NELAP certified laboratory for chemical analysis.

After well installation each well was developed by the over pumping method using a peristaltic pump and new unused disposable Teflon tubing.

6.2.1 Groundwater Monitoring Well Installation

On June 28, 2022, UES conducted the installation of three permanent monitoring wells (MW-1R, MW-2, and MW-3) which were installed by a Florida Licensed Water Well Driller utilizing a DPT drilling rig with rotary capabilities to drive hollow stem augers to the desired installation depth.

Permanent monitoring well MW-1R was installed to an approximate depth of 18 feet bgs and constructed with 8 feet of 2-inch diameter solid schedule 40 PVC and 10 feet of schedule 40 PVC 0.010-inch slotted screen. The annulus or space between the well screen and the borehole sidewalls was backfilled with 20/30 silica sand from the bottom of the wells to one foot above the well screen. In addition, six inches of 30/65 silica sand was placed immediately on top of the filter pack followed by neat cement grout to 1 foot bgs to complete the annular space seal.

Permanent monitoring well MW-2 was installed to an approximate depth of 12.5 feet bgs and constructed with 2.5 feet of 2-inch diameter solid schedule 40 PVC and 10 feet of schedule 40 PVC 0.010-inch slotted screen. The annulus or space between the well screen and the borehole sidewalls was backfilled with 20/30 silica sand from the bottom of the wells to one foot above the well screen. In addition, six inches of 30/65 silica sand was placed immediately on top of the filter pack followed by neat cement grout to 1 foot bgs to complete the annular space seal.

Permanent monitoring well MW-3 was installed to an approximate depth of 18 feet bgs and constructed with 8 feet of 2-inch diameter solid schedule 40 PVC and 10 feet of schedule 40 PVC 0.010-inch slotted screen. The annulus or space between the well screen and the borehole sidewalls was backfilled with 20/30 silica sand from the bottom of the wells to one foot above the well screen. In addition, six inches of 30/65 silica sand was placed immediately on top of the filter pack followed by neat cement grout to 1 foot bgs to complete the annular space seal.

The monitoring wells were developed prior to sampling in general accordance with FDEP SOPs by over pumping the wells with a peristaltic pump until the effluent ran clear and free of sediments to ensure adequate hydraulic connection with the aquifer. The monitoring well permits for permanent monitoring wells MW-1R, MW-2, and MW-3 are included in **Appendix B**. The permanent monitoring well locations provided as **Figure 3.** A monitoring well construction diagrams for permanent monitoring wells MW-1R, MW-2, and MW-3 are included in **Appendix A**. The permanent monitoring well locations provided as **Figure 3.**

6.2.2 Groundwater Sampling and Collection Methodology

On July 6, 2022, UES conducted a groundwater sampling event at the subject property. An initial round of groundwater levels was collected immediately prior to groundwater sampling collection. Depth to water was measured at each well from the top of the casing using an electric Solinst ® model 101 P2 water level meter.

Also, water level was gauged in the wells to monitor water draw down during sampling and the appropriate purge volumes for each monitoring well. Well purging was accomplished using a peristaltic pump fitted with disposable HDPE tubing. The monitoring wells were purged at a low flow rate (less than one gallon per minute) while temperature, pH, conductivity, dissolved oxygen and turbidity readings were recorded using a flow cell. Purging continued until groundwater quality parameters were stable within 10% of three consecutive readings to ensure stabilization of groundwater chemistry prior to sample

collection. Groundwater Sampling Logs are presented in **Appendix C** in the appendices section of this report.

Groundwater samples were collected into laboratory-supplied containers in accordance with FDEP's SOPS for Field Activities, placed into an ice-packed cooler and then transported under proper chain-of-custody documentation to a NELAP certified laboratory for chemical analysis of the following parameters:

- Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX) and Methyl Tertiary Butyl Ether (MTBE) by Method 8260,
- Polycyclic Aromatic Hydrocarbons (PAHs) by Method 8270,
- And Total Recoverable Petroleum Hydrocarbons (TRPH) via FL-PRO Method.

Review of the laboratory analytical report documented all tested constituent's BTEX, MTBE, PAHs, and TRPH below each respective FDEP GCTLs as defined in Chapter 62-777, F.A.C. The groundwater analytical data summary for this SAR has been provided in **Table 3** and **Table 4**. The groundwater sampling logs and laboratory analytical reports have been provided as **Appendix C** and **Appendix D**, respectively.

6.2.3 Groundwater Elevation and Flow Direction

A top-of-casing elevation survey was completed on August 15, 2022 as part of the assessment activities. Shallow groundwater flow direction across the subject property during the July 6, 2022 gauging event was calculated with a general NNE heading and hydraulic gradient of 0.75 ft/ft. The July 6, 2022 groundwater elevation map showing potentiometric lines and flow direction has been provided in **Figure 5** of this report. The groundwater elevation data summary has been provided as **Table 5** of this report.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

The SAR was conducted in accordance with Chapter 62-780, FAC. The purpose of this Site Assessment is in requirement to confirm the presence, extent or absence of VOCs, PAHs, and TRPH in soil and/or groundwater, due to an accidental release reported in 2014 on the vicinity of a former 6,000-gallon diesel fuel AST tank. Based on historical data from the ISR report, the data collected on the field and the analytical reports for soil and groundwater, UES provides the following conclusions:

- Based on the ISR report dated March 11, 2015;
  - approximately 25 gallons of diesel fuel was accidentally leaked during fuel delivery activities. As a result approximately 15.33 tons of fuel impacted soils were excavated and confirmation soil and groundwater samples were collected and analyzed for BTEX, MTBE and TRPH.

- Six (6) confirmation soil samples between depth intervals of 2 feet to 3 feet detected concentrations of PAH, specifically concentrations of Benzo(a)pyrene above its established SCTL.
- One (1) groundwater sample was collected and analyzed for BTEX, MTBE and TRPH. Laboratory results for this sample had no concentrations detected for the COC.

- Based on the SAR investigation presented in this report;
  - None of the analyzed constituents of concern in the six (6) soil samples collected during this SAR investigation; SS-11 (2.0-2.5'), SS-12 (2.0-2.5'), SS-13 (1.5-2.0'), SS-14 (2.0-2.5'), SS-15 (2.0-2.5'), and SS-16 (2.0-2.5') to confirm the concentrations detected and reported in the ISR report exceeded their respective FDEP SCTLs.

- None of the analyzed constituents of concern in groundwater samples collected from the three (3) newly installed permanent monitoring wells (MW-1R, MW-2, and MW-3) exceeded their respective FDEP GCTLs.

7.2 Recommendations

Based upon the findings of this soil and groundwater assessment investigation presented on this SAR under the requirements of chapter 62-780 F.A.C., it is UES professional opinion that:

- the documented diesel fuel accidental released reported in 2014 in the vicinity of a former 6,000 gallon AST tank was an isolated and localized event,
- the accidental release was mitigated in compliance to Florida environmental regulation,
- a No Further Action (NFA) status should be warranted for the subject property in relation to the reported accidental release of 2014 on the area in which the former 6,000-gallon AST was located. Therefore, after the regulatory agency has reviewed and approved this site assessment report, UES recommends proper abandonment of all three (3) installed permanent monitoring wells on-site for completion and compliance with standard practices provided in Rule 40D-3.531, F.A.C. for "Abandoned Well Plugging".

FIGURES



F-1	**SITE LOCATION PLAN**	CITY OF DAYTONA BEACH WESTSIDE REGIONAL WASTE WATER TREATMENT PLANT 3651 LPGA BOULEVARD DAYTONA BEACH, FL	DRAWN FOR	-	UNIVERSAL ENGINEERING SCIENCES LLC 1748 INDEPENDENCE BLVD. SARASOTA, FL. 941-358-7410
	OBTAINED FROM USGS 2022		DRILLED BY	CH	
			DRAWN BY	RLD	
			DRAWING DATE	7/11/2022	
		PROJECT NO: 0440.2200030.0000 / REPORT NO: -	SCALE	NOT TO SCALE	



F-2

SITE VICINITY MAP

OBTAINED FROM GOOGLE EARTH

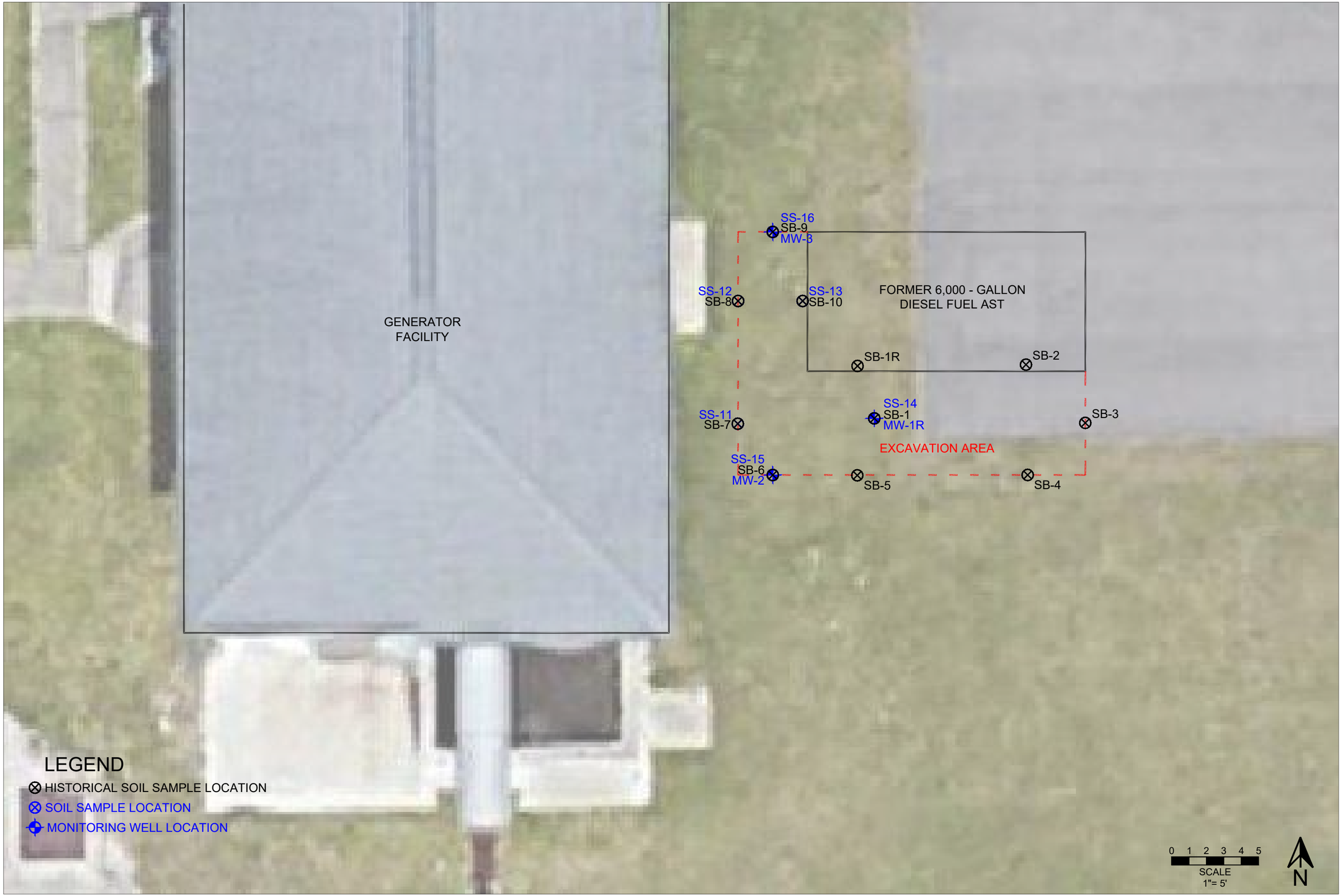
CITY OF DAYTONA BEACH WESTSIDE
REGIONAL WASTE WATER
TREATMENT PLANT
3651 LPGA BOULEVARD
DAYTONA BEACH, FL

PROJECT NO:
0440.2200030.0000

REPORT NO:
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DRAWN FOR	-
ENVIRONMENTALIST	CH
DRAWN BY	RLD
DRAWING DATE	7/11/2022
SCALE	NOT TO SCALE

UNIVERSAL
ENGINEERING SCIENCES LLC
1748 INDEPENDENCE BLVD.
SARASOTA, FL.
941-358-7410



UNIVERSAL
ENGINEERING SCIENCES LLC
1748 INDEPENDENCE BLVD.
SARASOTA, FL.
941-358-7410

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ENVIRONMENTALIST	CH
DRAWN BY	RLD
DRAWING DATE	7/11/2022
SCALE	1INCH = 5 FOOT

PROJECT NO.
0440.2200030.0000

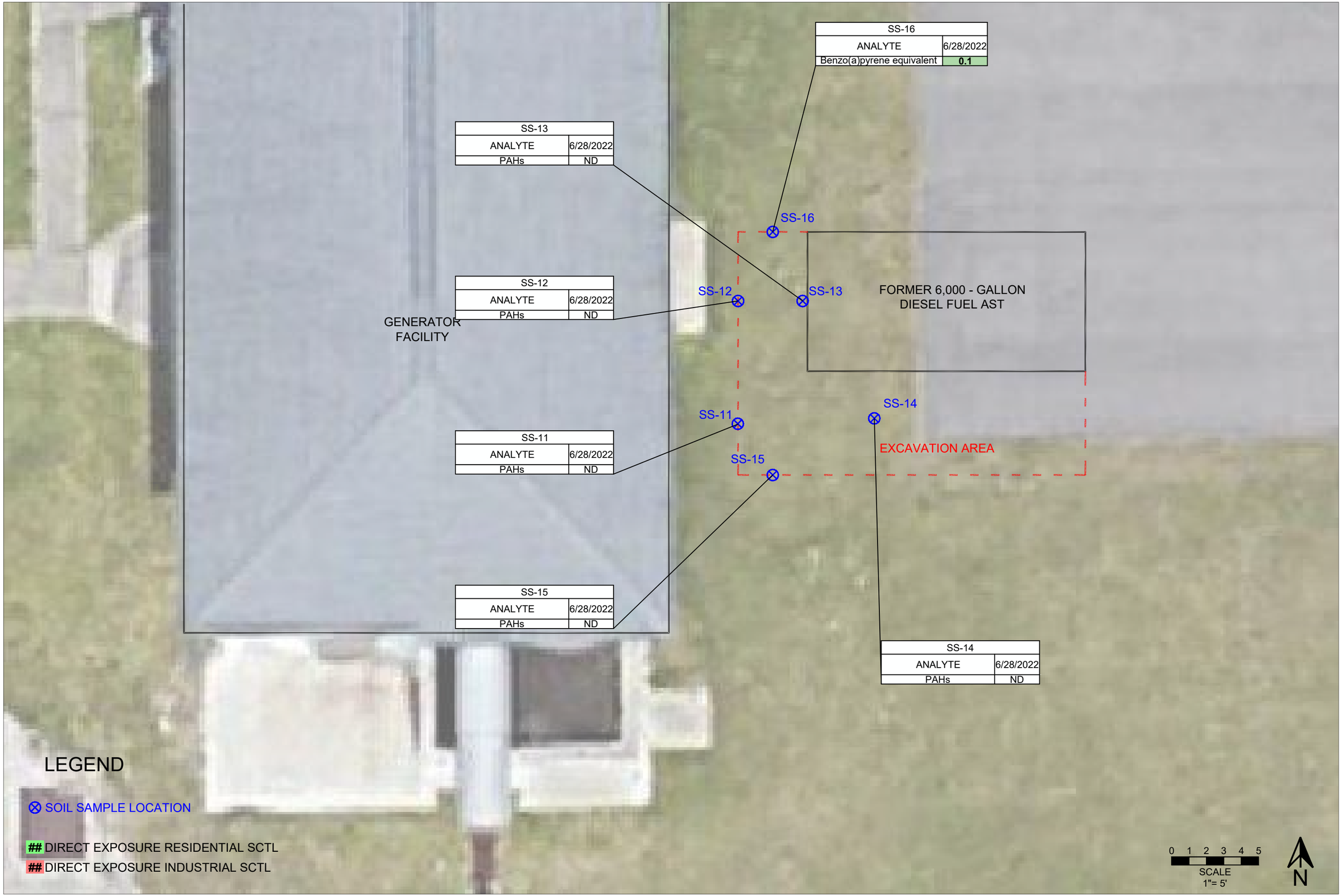
REPORT NO.
-

CITY OF DAYTONA BEACH WESTSIDE
REGIONAL WASTE WATER
TREATMENT PLANT
3651 LPGA BOULEVARD
DAYTONA BEACH, FL

SOIL / GROUNDWATER SAMPLE LOCATION MAP

THIS MAP SHOWS APPROXIMATE LOCATION

F-3



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SARASOTA, FL.
941-358-7410

DRAWN FOR: -
ENVIRONMENTALIST: CH
DRAWN BY: RLD
DRAWING DATE: 7/11/2022
SCALE: 1INCH = 5 FOOT

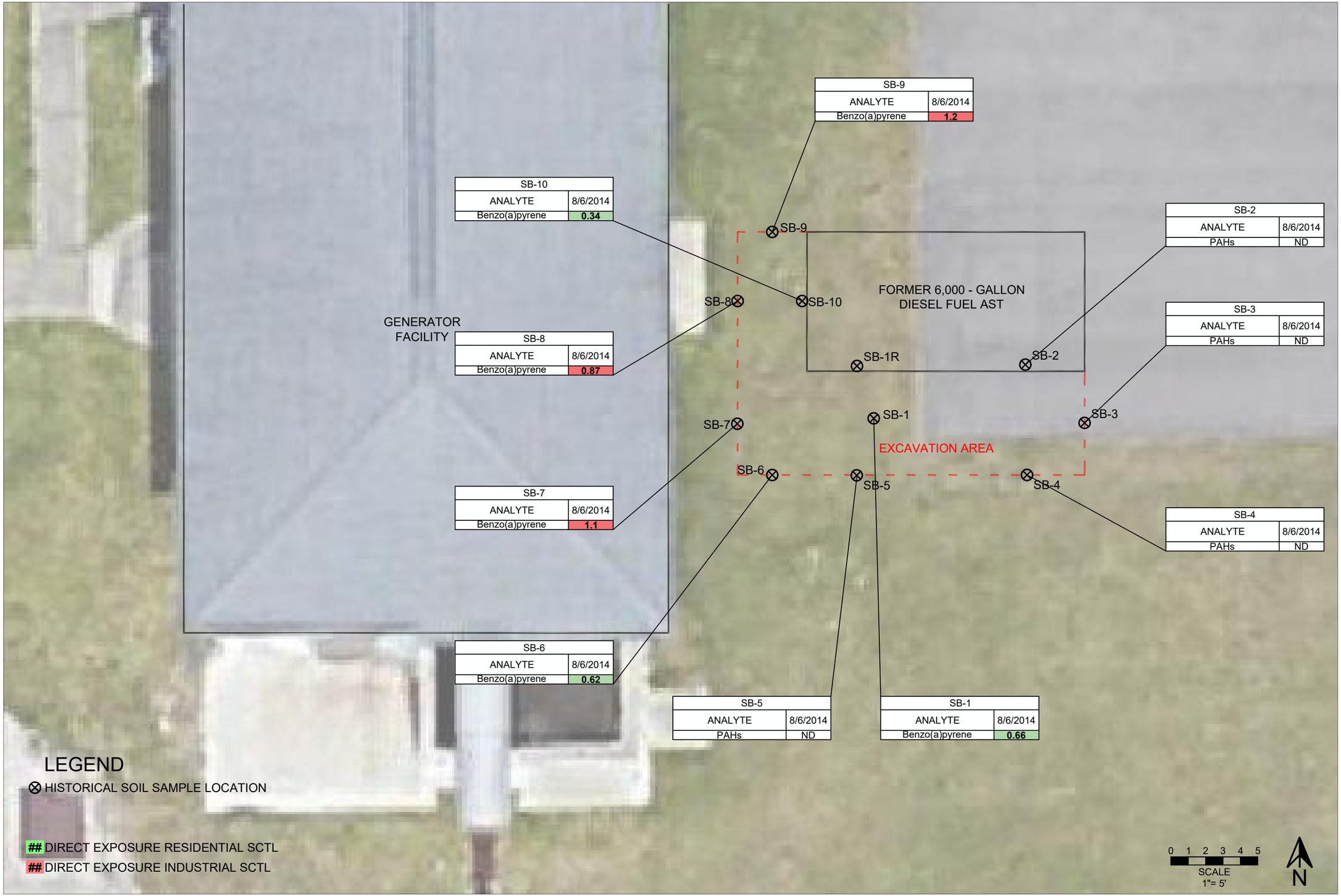
PROJECT NO: 0440.2200030.0000
REPORT NO: -

CITY OF DAYTONA BEACH WESTSIDE
REGIONAL WASTE WATER
TREATMENT PLANT
3651 LPGA BOULEVARD
DAYTONA BEACH, FL

SOIL ANALYTICAL

THIS MAP SHOWS APPROXIMATE LOCATION

F-4



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SARASOTA, FL.
941-358-7410

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ENVIRONMENTALIST	CH
DRAWN BY	RLD
DRAWING DATE	7/11/2022
SCALE	1INCH = 5 FOOT

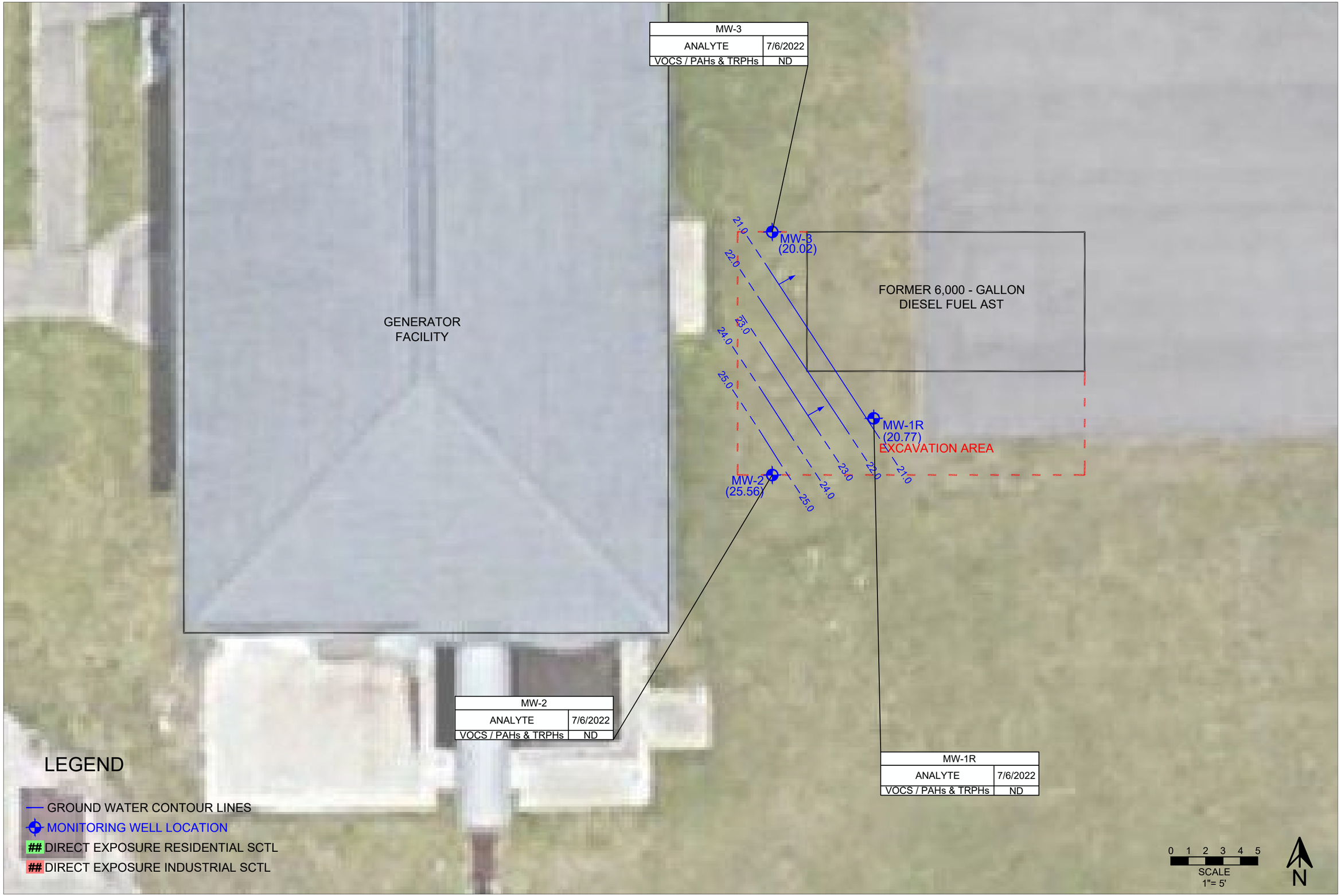
PROJECT NO. 0440.2200030.0000
REPORT NO. -

CITY OF DAYTONA BEACH WESTSIDE
REGIONAL WASTE WATER
TREATMENT PLANT
3651 LPGA BOULEVARD
DAYTONA BEACH, FL

HISTORICAL SOIL ANALYTICAL

THIS MAP SHOWS APPROXIMATE LOCATION

F-5



UNIVERSAL ENGINEERING SCIENCES LLC
1748 INDEPENDENCE BLVD.
SARASOTA, FL.
941-358-7410

DRAWN FOR: -
ENVIRONMENTALIST: CH
DRAWN BY: RLD
DRAWING DATE: 7/11/2022
SCALE: 1INCH = 5 FOOT

PROJECT NO: 0440.2200030.0000
REPORT NO: -

CITY OF DAYTONA BEACH WESTSIDE
REGIONAL WASTE WATER
TREATMENT PLANT
3651 LPGA BOULEVARD
DAYTONA BEACH, FL

GROUNDWATER ELEVATION DATA AND FLOW DIRECTION

THIS MAP SHOWS APPROXIMATE LOCATION

F-6

SITE 3 –

GARY YEOMANS FORD/FORMER GARY YEOMANS NISSAN

Florida Department of Environmental Protection

Contracted Local Program
3615 McCrory Place, Suite 200
Orlando, Florida 32803

Ron DeSantis
Governor

Jeanette Nunez
Lt. Governor

Noah Valenstein
Secretary

February 2, 2021

Report and letter emailed to: gboyle@anewford.com & egrubbs@anewford.com.

RE: In Compliance
GARY YEOMANS FORD
1420 TOMOKA FARMS RD
DAYTONA BEACH, FL 32124
Volusia County – Tanks Compliance
FDEP Facility ID#: 64/9804441

To those concerned:

A storage tank compliance inspection and file review was conducted at the above noted facility on January 21, 2021, by the Orange County Environmental Protection Division, on behalf of the Florida Department of Environmental Protection. Based on the information provided during and following the inspection, the facilities were determined to be in compliance with the Department's storage tank rules and regulations. The copy of the inspection report is attached for your records.

The Department appreciates your efforts to maintain these facilities in compliance with state and federal rules. Should you have any questions or comments, please contact Brittany Finney at 321-689-8611 or Brittany.Finney@ocfl.net.

Sincerely,

Brittany Finney
Brittany Finney
Senior Environmental Specialist
Orange County Environmental Protection Division

Enclosure: Inspection report with attachments

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road. Tallahassee, Florida 32399-

Division of Waste Management
Bureau of Petroleum Storage Systems

Storage Tank Facility Annual Compliance Site Inspection Report

Facility Information:

Facility ID:	9805402	County:	VOLUSIA	Inspection Date:	05/26/2016
Facility Type:	C -Fuel user/Non-retail				
Facility Name:	DAYTONA NISSAN			# Of Inspected ASTs:	0
	1420 TOMOKA FARMS RD			USTs:	0
	DAYTONA BEACH, FL 32124			Mineral Acid Tanks:	0
Latitude:	29° 12' 53.1046"				
Longitude:	81° 6' 19.1777"				
LL Method:	DGPS				

Inspection Result:

Result : In Compliance

Description: Facility is In Compliance.

Financial Responsibility Over Due

Financial Responsibility: INSURANCE

Insurance Carrier: CHARTIS SPECIALTY INSURANCE CO

Effective Date: 06/01/2013 Expiration Date: 06/01/2014

Signatures:

TKOREP - ORANGE CNTY ENVIRONMENTAL PROTECTION DIVISION

Storage Tank Program Office

(407) 836-1499

Storage Tank Program Office Phone Number

Facility ID: 9805402

Jacqueline Perry	No One Avl
INSPECTOR NAME	**REPRESENTATIVE NAME**
	
INSPECTOR SIGNATURE	**REPRESENTATIVE SIGNATURE**

Owners of UST facilities are reminded that the Federal Energy Policy Act of 2005 and 40 CFR 280 Subpart J, requires Operator Training at all facilities by October 15, 2018. For further information please visit: http://www.dep.state.fl.us/waste/categories/tanks/pages/op_train.htm

Site Visit Comments

05/26/2016

On site for routine compliance inspection. Business had relocated and tank had been removed. Unable to make contact and obtain a signature. Registration had been updated. Facility is listed as closed.

SITE 4 –

SAMS CLUB #8138

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400
Division of Waste Management
Petroleum Storage Systems
Storage Tank Facility Routine Compliance Site Inspection Report

Facility Information:

Facility ID: 9816708 County: VOLUSIA Inspection Date:04/01/2021
Facility Type: A - Retail Station
Facility Name: SAMS CLUB #8138 # of inspected ASTs: 0
1460 CORNERSTONE BLVD USTs: 3
DAYTONA BEACH, FL 32114 Mineral Acid Tanks: 0
Latitude: 29° 13' 14.7353"
Longitude: 81° 5' 53.0675"
LL Method: DPHO

Inspection Result:

Result: In Compliance

Signatures:

TKOREP - ORANGE CNTY ENVIRONMENTAL PROTECTION DIVISION (407) 836-1499

Storage Tank Program Office and Phone Number

Brittany N Finney

Inspector Name



Inspector Signature
Principal Inspector
ORANGE CNTY ENVIRONMENTAL PROTECTION DIVISION

Ricardo Cervantes

Representative Name



Representative Signature

Sam's Club

Owners of UST facilities are reminded that the Federal Energy Policy Act of 2005 and 40 CFR 280 Subpart J requires Operator Training at all facilities by October 13, 2018. For further information please visit: https://floridadep.gov/waste/permitting-compliance-assistance/content/underground-storage-tank-operator-training

Financial Responsibility:

Financial Responsibility: INSURANCE

Insurance Carrier: INDIAN HARBOR INSURANCE COMPANY

Effective Date: 05/01/2020 Expiration Date: 05/01/2021

Findings:
Class A Owner Training Certificates are present.
Class B Maintenance Training Certificates are present.
Class C Operator Training Certificates are present.

Completed System Tests

Type	Date Completed	Results	Reviewed	Next Due Date	Comment
Annual Operability - Line Leak Detector	03/02/2021	Passed	04/01/2021	03/02/2022	testing by Tanknology
Integrity Test - Double-walled Spill Bucket	03/04/2020	Passed	06/03/2020	03/04/2023	testing by Tanknology
Annual Operability - Release Detection	03/02/2021	Passed	04/01/2021	03/02/2022	Tanknology - VR TLS-450 PLUS including tank interstitial sensors, UDC and piping sump sensors
Breach of Integrity Test	03/04/2019	Passed	04/22/2019	03/04/2022	Tanknology - 4 STP sumps and 8 UDCs passed hydro-tests
Integrity Test - Double-walled Spill Bucket	03/02/2021	Passed	04/01/2021	03/02/2024	vacuum testing of double-walled spill buckets
Annual Operability - Overfill Protection	03/02/2021	Passed	04/01/2021	03/02/2022	testing of flapper valves; testing by Tanknology

Reviewed Records

Record Category	Record type	From Date	To Date	Reviewed Record Comment
Two Years	Certificate of Financial Responsiblity	07/11/2019	04/01/2021	

Site Visit Comments

04/01/2021
Report will be emailed to: Christine.Tims@walmart.com.

Records review: The current placard was available for review. Insurance documentation provided for review from the time of the tank installations. Operator training A/B/C certificates were available. Monthly visual inspections & liquid status print-outs provided for review; no issues or liquid accumulation noted. All testing provided; current and passing results noted.

Physical inspection results: Access to equipment provided by Adams Tank & Lift. The fill port covers were properly labeled. Double-walled spill buckets & secondary gauges were dry. Flapper valves in place for overfill protection. The STP sumps and dispenser sumps were dry. All entry boots appeared intact. Shear valves appeared to be properly anchored. Hoses and breakaways were in acceptable condition. Tank interstitials, STP sumps, and dispenser sumps are monitored on a Veeder-root; sensors show as normal.

Inspection Photos

Added Date 04/01/2021

Facility picture



SITE 5 –

RACETRAC #2373

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400
Division of Waste Management
Petroleum Storage Systems
Storage Tank Facility Routine Compliance Site Inspection Report

Facility Information:

Facility ID: 9815820 County: VOLUSIA Inspection Date:10/18/2022
Facility Type: A - Retail Station
Facility Name: RACETRAC #2373 # of inspected ASTs: 0
2087 LPGA BLVD USTs: 3
DAYTONA BEACH, FL 32124 Mineral Acid Tanks: 0
Latitude: 29° 13' 26.0098"
Longitude: 81° 5' 33.0079"
LL Method: DPHO

Inspection Result:

Result: Minor Out of Compliance

Signatures:

TKOREP - ORANGE CNTY ENVIRONMENTAL PROTECTION DIVISION (407) 836-1499

Storage Tank Program Office and Phone Number

Brittany N Finney

Inspector Name



Inspector Signature
Principal Inspector
ORANGE CNTY ENVIRONMENTAL PROTECTION DIVISION

Mariah Ungerer

Representative Name



Representative Signature

Racetrac

Owners of UST facilities are reminded that the Federal Energy Policy Act of 2005 and 40 CFR 280 Subpart J requires Operator Training at all facilities by October 13, 2018. For further information please visit: https://floridadep.gov/waste/permitting-compliance-assistance/content/underground-storage-tank-operator-training

Financial Responsibility:

Financial Responsibility: SELF-INSURANCE - LETTER FROM CHIEF FINANCIAL OFFICER

Insurance Carrier:

Effective Date: 12/15/2021 Expiration Date: 12/15/2022

Findings:

Class A Owner Training Certificates are present.

Class B Maintenance Training Certificates are present.
Class C Operator Training Certificates are present.

Completed System Tests

Type	Date Completed	Results	Reviewed	Next Due Date	Comment
Annual Operability - Line Leak Detector	08/26/2022	Passed	09/14/2022	08/26/2023	All PLLDs tested
Annual Operability - Overfill Protection	08/26/2022	Passed	09/14/2022	08/26/2023	All tanks' overfill sensor/alarm systems tested
Annual Operability - Release Detection	08/26/2022	Passed	09/14/2022	08/26/2023	Tanknology- TLS450 including 5 annular, 5 piping sump, 9 UDCs sensors and high level alarm
Annual Operability - Release Detection	08/26/2022	Passed	09/14/2022	08/26/2023	All double wall fill port spill containments' leak gauges tested
Integrity Test - Dispenser Sump	10/08/2020	Passed	10/12/2020	10/08/2023	testing by Tanknology
Integrity Test - Double-walled Spill Bucket	12/23/2020	Passed	02/18/2021	12/23/2023	Testing by Tanknology
Integrity Test - Piping Sump	10/08/2020	Passed	10/12/2020	10/08/2023	testing of transition sumps; testing by Tanknology
Integrity Test - STP Sump	10/08/2020	Passed	10/12/2020	10/08/2023	testing by Tanknology
Line Tightness Test	08/26/2022	Passed	09/14/2022	08/26/2022	All lines tested

Reviewed Records

Record Category	Record type	From Date	To Date	Reviewed Record Comment
Three Years	Monthly Release Detection Results	08/17/2020	10/18/2022	
Three Years	Certificate of Financial Responsiblity	08/17/2020	10/18/2022	

Violations:

Type:	Violation
Significance:	Minor
Rule:	62-761.100(3)
Violation Text:	No reasonable access provided.
Explanation:	The dispenser sumps were not accessible during the inspection.
Corrective Action:	Please supply pictures inside the dispenser sumps. Or, alternatively, please supply the October or November monthly visual inspection.

Site Visit Comments

10/18/2022
Report will be emailed to: hmatlock@racetrac.com; jwoodfin@racetrac.com; FDEP_Correspondence@racetrac.com; Connie.DeCourcey@atcgs.com; mburmeister@racetrac.com; environmental@racetrac.com.

Records review: The current placard was available for review. Insurance documentation provided for review from the time of the last compliance inspection. Operator A/B & C training certificates were available. Monthly visual inspections & liquid status reports were supplied for review for the past two years. Liquid status alarms were noted within the dispenser sumps & STP/piping sumps at various times. Please ensure that all liquid status alarms are investigated, and petroleum contact water (PCW) is removed promptly. Testing is passing and current.

NOTE: In accordance with new regulations, please keep three years of records (monthly visual inspections, testing, insurance, etc) for future inspection purposes.

Physical inspection results: Access to equipment provided by Cliff Berry. The fill port covers were properly labeled. Spill buckets were pumped out during the inspection. Secondary gauges appeared dry. High fuel level alarms in place for overfill protection. The STP sumps were mostly clean and dry; entry boots appeared intact. The dispenser sumps were not accessible during the inspection; violation cited. All hoses and breakaways appeared to be in good condition. Tank interstitials, STP sumps, piping sumps, and dispenser sumps are monitored on a Veeder-root; sensors show as normal.

Inspection Photos

Added Date 11/01/2022

tank pad



SITE 6 –

BUC-EE'S #47

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400
Division of Waste Management
Petroleum Storage Systems
Storage Tank Facility Routine Compliance Site Inspection Report

Facility Information:

Facility ID: 9817837 County: VOLUSIA Inspection Date:05/03/2022
Facility Type: A - Retail Station
Facility Name: BUC-EES #47 # of inspected ASTs: 0
2330 GATEWAY N DR USTs: 6
DAYTONA BEACH, FL 32117 Mineral Acid Tanks: 0
Latitude: 29° 13' 22.8716"
Longitude: 81° 6' 3.6736"
LL Method: DPHO

Inspection Result:

Result: In Compliance

Signatures:

TKOREP - ORANGE CNTY ENVIRONMENTAL PROTECTION DIVISION (407) 836-1499

Storage Tank Program Office and Phone Number

Brittany N Finney

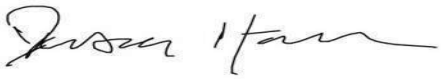
Inspector Name



Inspector Signature
Principal Inspector
ORANGE CNTY ENVIRONMENTAL PROTECTION DIVISION

Jason Harris

Representative Name



Representative Signature

Buc-ee's

Owners of UST facilities are reminded that the Federal Energy Policy Act of 2005 and 40 CFR 280 Subpart J requires Operator Training at all facilities by October 13, 2018. For further information please visit: https://floridadep.gov/waste/permitting-compliance-assistance/content/underground-storage-tank-operator-training

Financial Responsibility:

Financial Responsibility: INSURANCE

Insurance Carrier: LIBERTY SURPLUS INSURANCE CORP

Effective Date: 09/30/2021 Expiration Date: 09/30/2023

Findings:

Class A Owner Training Certificates are present.

Class B Maintenance Training Certificates are present.
Class C Operator Training Certificates are present.

Completed System Tests

Type	Date Completed	Results	Reviewed	Next Due Date	Comment
Annual Operability - Line Leak Detector	02/08/2022	Passed	05/01/2022	02/08/2023	Testing of electronic PLLDs; Tested by Valley Tank Testing
Annual Operability - Overfill Protection	02/08/2022	Passed	05/01/2022	02/08/2023	Testing of flapper valves within the 10 regulated tanks; tested by Valley Tank Testing
Annual Operability - Release Detection	02/08/2022	Passed	05/01/2022	02/08/2023	Testing of release detection sensors monitoring 6 tank interstitials, 10 STP sumps, and 52 dispenser sumps
Integrity Test - Dispenser Sump	01/18/2021	Passed	03/10/2021	01/18/2024	All dispenser containments hydro tested
Integrity Test - Double-walled Spill Bucket	02/19/2021	Passed	03/10/2021	02/19/2024	Tank #10, low-grade non-ethanol insert installed, retested
Integrity Test - Double-walled Spill Bucket	02/09/2021	Passed	03/10/2021	02/09/2024	Fill port spill containments vacuum tested
Integrity Test - STP Sump	01/18/2021	Passed	03/10/2021	01/18/2024	All piping/STP sump containment hydrostatic tests

Reviewed Records

Record Category	Record type	From Date	To Date	Reviewed Record Comment
Three Years	Electronic Release Detection Equip. Monthly Checks	03/01/2021	05/03/2022	

Site Visit Comments

05/03/2022
Report will be emailed to: jason.harris@buc-ees.com & environmental@buc-ees.com.

Records review: The current placard was posted onsite. Insurance documentation was provided for review from the time of the tank installation. Operator training A/B & C certificates were available for multiple employees. Visual inspections and liquid status reports were provided for review from the time of installation; no alarms/liquid accumulation noted. All testing is passing and current. Testing is performed by Valley Tank Testing.

Physical inspection results: The facility is equipped with six 40,000-gallon compartmented tanks. All tanks/compartments are regulated, with the exception of a DEF compartment on tank 6. Facility representatives provided access to: 10 spill buckets, 10 STP sumps, and 52 dispenser sumps. The fill port covers are properly marked. Spill buckets are double-walled and appear to be in good condition. Spill bucket secondary gauges show as dry. Tanks are equipped with flapper valves for overfill protection. All STP sumps and dispenser sumps were mostly clean and dry. Sumps appeared to be well-maintained. Shear valves appear to be properly anchored. All entry boots appear intact within sumps. All fuel hoses and breakaways are in good condition. Facility is equipped with two Veeder-root monitoring devices for release

detection. Release detection sensors are present within the tank interstitials, STP sumps, and all dispenser sumps. Tanks are also equipped with automatic shut-down if a leak is detected. All release detection sensors showed as normal at the time of the inspection.

Inspection Photos

Added Date 05/16/2022

Facility picture



Added Date 05/16/2022

Tank pad



Added Date 05/16/2022

Tank pad



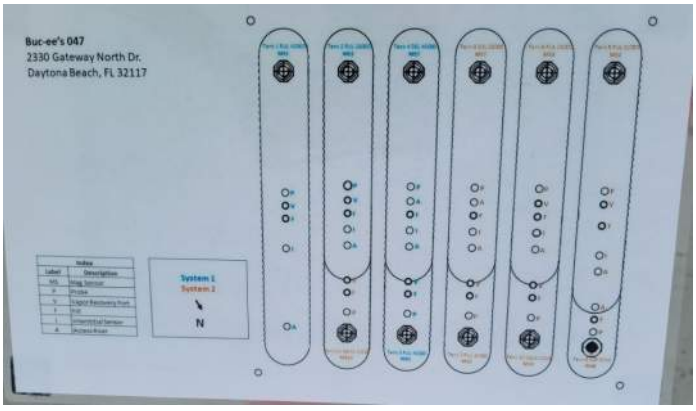
Added Date 05/16/2022

Tank pad



Added Date 05/16/2022

Tank chart



Added Date 05/16/2022

Dispensers at site



Added Date 05/16/2022

Dispensers at site continued



Added Date 05/16/2022

System 1 Veeder-root monitoring



Added Date 05/16/2022

System 2 Veeder-root monitoring



SITE 7 –

7-ELEVEN FOOD STORE #32220

APTIM
1228 Winter Garden Vineland Road
Winter Garden, FL 34787
Tel: +1 407 287 3200
Fax: +1 407 287 3201
www.APTIM.com

October 5, 2021

RECEIVED
-- 05 OCT 2021 --
ALACHUA COUNTY
ENVIRONMENTAL
PROTECTION

Mr. Ted A. Goodman, P.G.
Petroleum Programs Manager
Alachua County Environmental Protection Department
408 W. University Avenue, Suite 106
Gainesville, Alachua County, Florida 32601

Subject: Contamination Assessment Addendum
7-Eleven Store No. 32220
2100 LPGA Boulevard
Daytona Bach, Volusia County, Florida 32117
FDEP Facility ID No. 64/9701014
Project: 631011454

Dear Mr. Goodman:

Aptim Environmental & Infrastructure, LLC (APTIM) is pleased to present the results of this recently completed contamination assessment addendum at the 7-Eleven Store No. 32220, located at 2100 LPGA Boulevard, Daytona Beach, Florida (**Figure 1**). This work was completed on behalf of 7-Eleven, Inc., and in response to the ACEPDs review letter of the Site Assessment Report (dated June 28, 2021, **Attachment A**) which requested at least one additional round of groundwater samples from the four monitoring wells prior to the site being considered for a No Further Action (NFA) and site closure.

Groundwater Monitoring Well Sampling and Laboratory Analytical Results

On July 27, 2021, APTIM purged and sampled the four (MW-1, MW-2, MW-3 and MW-4) groundwater monitoring wells. Prior to purging, water levels were collected utilizing an electronic water level indicator accurate to within 0.01 ft. The water level information, presented in **Table 1**, was used to create a groundwater surface contour map (**Figure 2**). As illustrated, the interpreted shallow groundwater surface across the former project area is in the northeast direction, which is consistent with the gradient reported in the APTIM site assessment report.

During well purging, APTIM recorded groundwater field parameters which are presented along with the groundwater sampling logs and YSI field instrument calibration worksheet in **Attachment B**. Groundwater samples, labeled MW-1, MW-2, MW-3, and MW-4, were preserved on wet ice and transported to Eurofins TestAmerica in Pensacola, Florida, for laboratory analysis, including volatile organic compounds by EPA Method 8260B, semi-volatile organic compounds by EPA Method 8270D LL, and total recoverable petroleum hydrocarbons by FDEP Method FL-PRO. Laboratory analytical results reported all analytes at either below the Chapter 62-777, Table II, Groundwater Cleanup Target Levels (GCTLs), or below the laboratory method detection limit, which were below the GCTLs.

Groundwater analytical results are summarized in **Table 2** and are illustrated in **Figure 3**. Copies of the groundwater laboratory analytical report and chain-of-custody record are provided in **Attachment C**.

Conclusions and Recommendation

Since there were no State GCTL exceedances in the four groundwater samples collected from around the UST area, APTIM recommends that an NFA be issued for these activities. Following issuance of the NFA, APTIM will abandon the four wells and request a Site Rehabilitation Completion Order.

Disclaimer

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client and the county, unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, Alachua County Environmental Protection Department and the Florida Department of Environmental Protection. APTIM is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. APTIM does not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

In the event revisions or clarifications are necessary that can be addressed via email to accelerate and streamline the process, please email daniel.roebke@aptim.com. If you have any questions or require further information, please call (407) 287-3245.

Sincerely,
Aptim Environmental & Infrastructure, LLC

Daniel Roebke
Project Manager

Shawn D. Flynn
Project Geologist
State of Florida License No. 1954
Date: _____

Attachments: Tables (2)
Figures (3)
Attachments (3)

cc: Project File 631011454

TABLES

TABLE 1: GROUNDWATER ELEVATION DATA

Facility Name: 7-Eleven Store 32220 **Facility ID No. 64/9701014**

WELL NO.	MW-1			MW-2			MW-3			MW-4					
DIAMETER (inches)	1			1			1			1					
WELL DEPTH (ft bls)	12.00			12.00			12.00			12.00					
SCREEN INTERVAL (feet)	2-12			2-12			2-12			2-12					
TOC ELEVATION (feet)	95.82			96.00			95.88			95.98					
DATE	DTW	ELE	Diff	DTW	ELE	Diff	DTW	ELE	Diff	DTW	ELE	Diff	DTW	ELE	Diff
02/21/20	5.45	90.37		5.34	90.66		5.36	90.52		5.72	90.26				
07/27/21	4.80	91.02		4.67	91.33		4.69	91.19		5.02	90.96				

WELL NO.															
DIAMETER (inches)															
WELL DEPTH (ft bls)															
SCREEN INTERVAL (feet)															
TOC ELEVATION (feet)															
DATE	DTW	ELE	Diff	DTW	ELE	Diff	DTW	ELE	Diff	DTW	ELE	Diff	DTW	ELE	Diff

Notes:
DTW = depth to water
Diff = GW depth difference from previous measurement
ELE = elevation (Based on arbitrary datum)
ft bls = feet below land surface

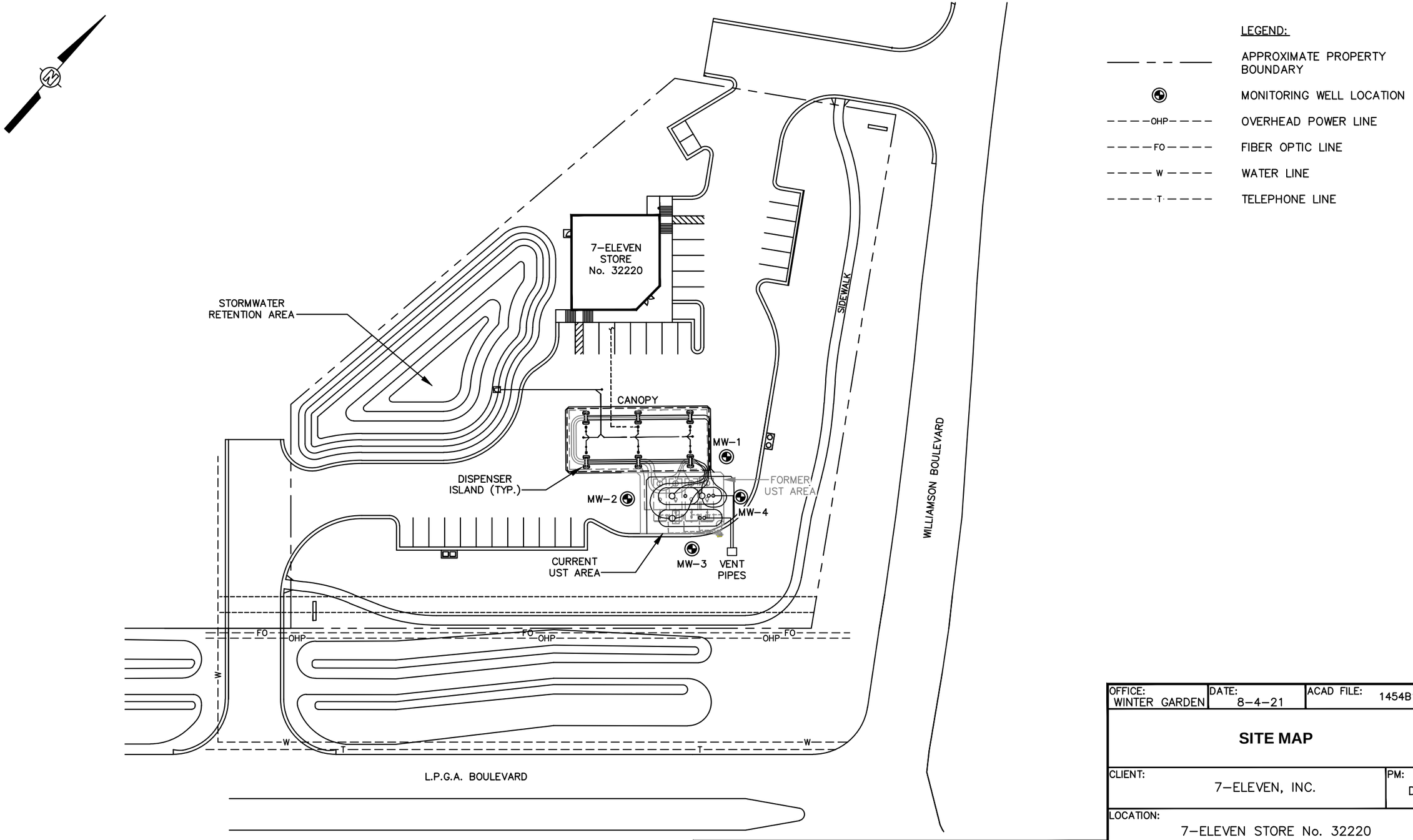
TABLE 2: GROUNDWATER ANALYTICAL SUMMARY

Facility Name: 7-Eleven Store 32220 **Facility ID No. 64/9701014**

Sample		Laboratory Analysis (µg/L)																												
ID Number	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Isopropylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Ethylene Dibromide	Lead	TRPH	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd) pyrene	Naphthalene	1-Methyl-naphthalene	2-Methyl-naphthalene	Phenanthrene	Pyrene
GCTLs		1	40	30	20	20	0.8	10	10	0.02	15	5,000	20	210	2,100	0.05	0.2	0.05	210	0.5	4.8	0.005	280	280	0.05	14	28	28	210	210
NADCs		100	400	300	200	200	8	100	100	2	150	50,000	200	2,100	21,000	5	20	5	2,100	50	480	0.5	2,800	2,800	5	140	280	280	2,100	2,100
CLOSURE SAMPLING																														
TW-1	07/18/19	**59.8**	**646**	**132**	**910**	2.39 (I)	**36.5**	**192**	**58.40**	0.00998 U	2.00 U	1.41	0.232 (I)	0.0719 U	0.0801 U	0.0446 U	0.0649 U	0.0446 U	0.0621 U	0.0739 U	0.0607 U	0.0683 U	0.258 (I)	0.258 (I)	0.0446 U	**20.7**	7.83	11.5	0.771 U	0.199 U
SITE ASSESSMENT (2/21/20) SITE ASSESSMENT ADDENDUM (7/27/21)																														
MW-1	02/21/20	0.250 U	0.241 U	0.271 U	0.500 U	0.440 U	0.520 U	0.241 U	0.338 U	0272 U	-	0.238 U	0.223 U	0.0719 U	0.0801 U	0.0446 U	0.0649 U	0.0446 U	0.0621 U	0.0739 U	0.0607 U	0.0683 U	0.208 U	0.223 U	0.0446 U	1.18 U	0.573 U	0.596 U	0.771 U	0.199 U
	07/27/21	0.380 U	0.410 U	0.500 U	1.60 U	0.740 U	0.530 U	0.820 U	0.560 U	-	-	339 U	0.0225 U	0.0206 U	0.0244 U	0.0253 U	0.0694 U	0.0169 U	0.0404 U	0.0375 U	0.0347 U	0.0460 U	0.0873 U	0.0291 U	0.0300 U	0.230	0.0638 U	0.0366 U	0.0685 U	0.0873 U
MW-2	02/21/20	0.250 U	0.241 U	0.271 U	0.500 U	0.440 U	0.520 U	0.241 U	0.338 U	0272 U	-	0.238 U	0.223 U	0.0719 U	0.0801 U	0.0446 U	0.0649 U	0.0446 U	0.0621 U	0.0739 U	0.0607 U	0.0683 U	0.208 U	0.223 U	0.0446 U	1.18 U	0.573 U	0.596 U	0.771 U	0.199 U
	07/27/21	0.380 U	0.410 U	0.500 U	1.60 U	0.740 U	0.530 U	0.820 U	0.560 U	-	-	352 U	0.0228 U	0.0209 U	0.0247 U	0.0257 U	0.0704 U	0.0171 U	0.0409 U	0.0381 U	0.0352 U	0.0466 U	0.0885 U	0.0295 U	0.0304 U	0.193	0.0647 U	0.0371 U	0.0694 U	0.0885 U
MW-3	02/21/20	0.250 U	0.241 U	0.271 U	0.500 U	0.440 U	0.520 U	0.241 U	0.338 U	0272 U	-	0.238 U	0.223 U	0.0719 U	0.0801 U	0.0446 U	0.0649 U	0.0446 U	0.0621 U	0.0739 U	0.0607 U	0.0683 U	0.208 U	0.223 U	0.0446 U	1.18 U	0.573 U	0.596 U	0.771 U	0.199 U
	07/27/21	0.380 U	0.410 U	0.500 U	1.60 U	0.740 U	0.530 U	0.820 U	0.560 U	-	-	328 U	0.0227 U	0.0208 U	0.0246 U	0.0255 U	0.0700 U	0.0170 U	0.0407 U	0.0379 U	0.0350 U	0.0464 U	0.0880 U	0.0293 U	0.0303 U	0.0473 U	0.0643 U	0.0369 U	0.0691 U	0.0880 U
MW-4	02/21/20	0.250 U	0.241 U	0.271 U	0.500 U	0.440 U	0.520 U	0.241 U	0.338 U	0272 U	-	0.238 U	0.223 U	0.0719 U	0.0801 U	0.0446 U	0.0649 U	0.0446 U	0.0621 U	0.0739 U	0.0607 U	0.0683 U	0.208 U	0.223 U	0.0446 U	1.18 U	0.573 U	0.596 U	0.771 U	0.199 U
	07/27/21	0.380 U	0.410 U	0.500 U	1.60 U	0.740 U	0.530 U	0.820 U	0.560 U	-	-	322 U	0.0225 U	0.0206 U	0.0244 U	0.0253 U	0.0694 U	0.0169 U	0.0404 U	0.0375 U	0.0347 U	0.0460 U	0.0873 U	0.0291 U	0.0300 U	0.0469 U	0.0638 U	0.0366 U	0.0685 U	0.0873 U

NADCs = Natural Attenuation Default Concentrations per Chapter 62-777, Table V, FAC
BOLD = GCTL Exceedance
BOLD and SHADED = NADC Exceedance
µg/L = micrograms per liter
MTBE = methyl tertiary butyl ether
TRPH = Total Recoverable Petroleum Hydrocarbons
U = Analyzed for but not detected
J3 = Estimated value; value may not be accurate. Spike recovery or RPD outside of criteria.
(I) = Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
V = Indicates that the analyte was detected at or above the method detection limit in both the sample and the associated method blank and the value of 10 times the blank value was equal to or greater than the associated sample value.

FIGURES



APTIM ENVIRONMENTAL & INFRASTRUCTURE, LLC
1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

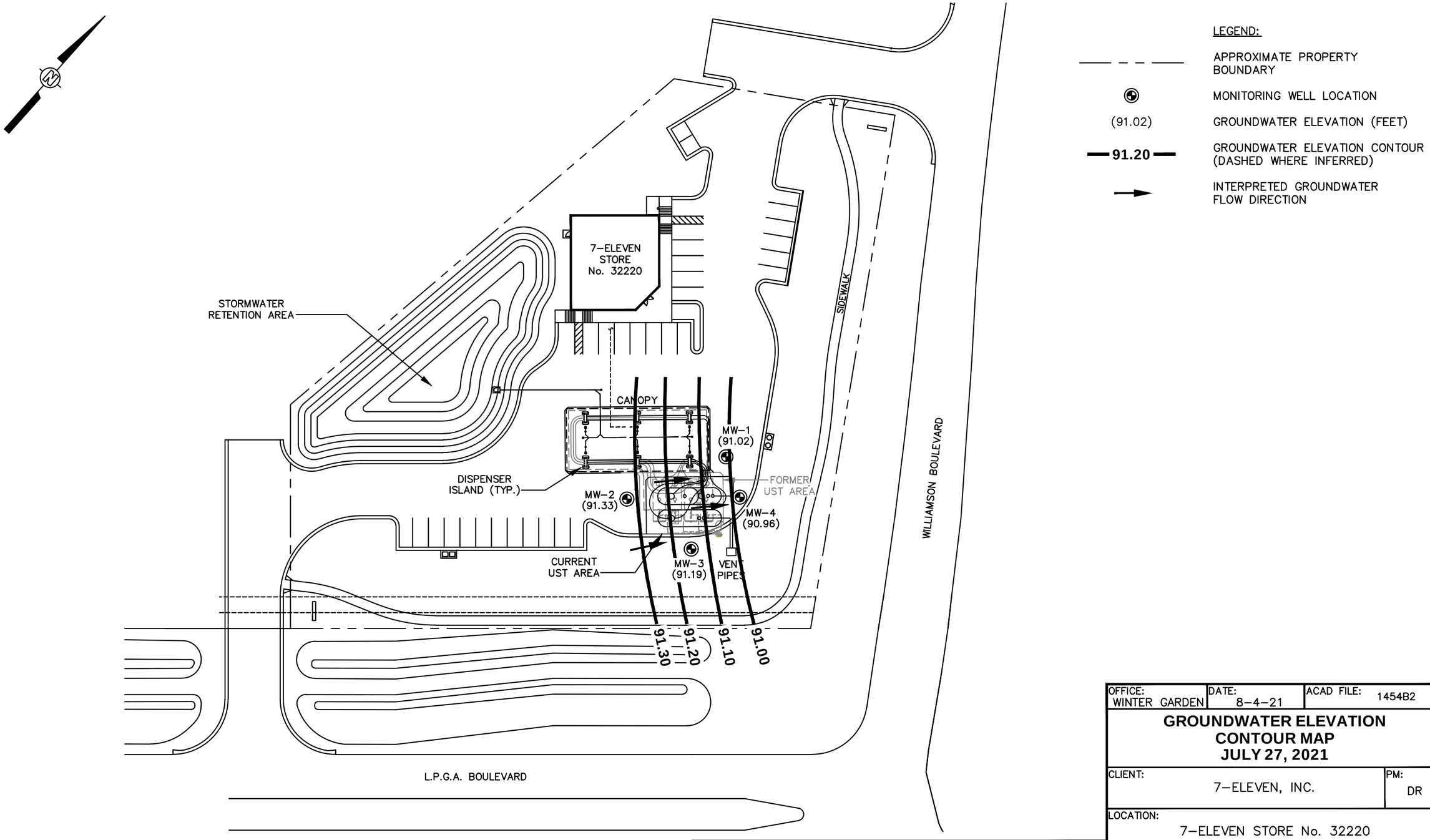
OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	8-4-21	1454B1

SITE MAP

CLIENT:	PM:
7-ELEVEN, INC.	DR

LOCATION:
7-ELEVEN STORE No. 32220
2100 L.P.G.A. BOULEVARD
DAYTONA BEACH, VOLUSIA COUNTY, FLORIDA
FDEP FACILITY ID No. 64/9701014

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	631011454	1



APTIM ENVIRONMENTAL & INFRASTRUCTURE, LLC
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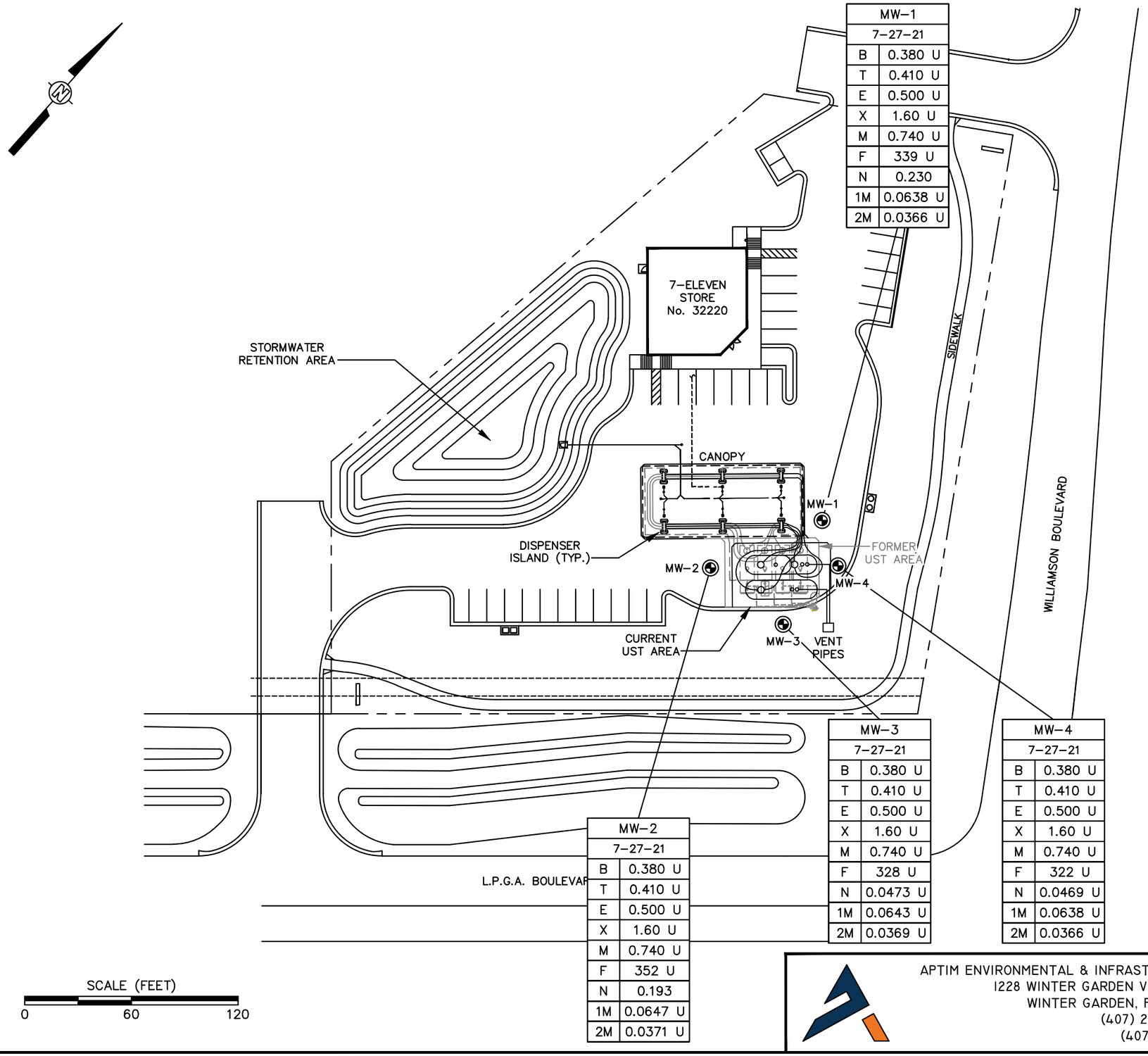
OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	8-4-21	1454B2

GROUNDWATER ELEVATION CONTOUR MAP JULY 27, 2021

CLIENT:	PM:
7-ELEVEN, INC.	DR

LOCATION:
7-ELEVEN STORE No. 32220
2100 L.P.G.A. BOULEVARD
DAYTONA BEACH, VOLUSIA COUNTY, FLORIDA
FDEP FACILITY ID No. 64/9701014

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	631011454	2



LEGEND:

APPROXIMATE PROPERTY BOUNDARY

MONITORING WELL LOCATION

MW–1	
7–27–21	
B	0.380 U
T	0.410 U
E	0.500 U
X	1.60 U
M	0.740 U
F	339 U
N	0.230
1M	0.0638 U
2M	0.0366 U

SAMPLE IDENTIFICATION
DATE OF SAMPLE
BENZENE CONCENTRATION (ug/L)
TOLUENE CONCENTRATION (ug/L)
ETHYLBENZENE CONCENTRATION (ug/L)
TOTAL XYLENES CONCENTRATION (ug/L)
MTBE CONCENTRATION (ug/L)
TRPH CONCENTRATION (ug/L)
NAPHTHALENE CONCENTRATION (ug/L)
1–METHYLNAPHTHALENE CONC. (ug/L)
2–METHYLNAPHTHALENE CONC. (ug/L)

U — ANALYTE BELOW METHOD DETECTION LIMIT

APTIM ENVIRONMENTAL & INFRASTRUCTURE, LLC
1228 WINTER GARDEN VINELAND ROAD
WINTER GARDEN, FLORIDA 34787
(407) 287-3200 OFFICE
(407) 287-3201 FAX

OFFICE:	DATE:	ACAD FILE:
WINTER GARDEN	8–4–21	1454B3

GROUNDWATER ANALYTICAL SUMMARY MAP JULY 27, 2021

CLIENT: 7–ELEVEN, INC.

PM: DR

LOCATION:
7–ELEVEN STORE No. 32220
2100 L.P.G.A. BOULEVARD
DAYTONA BEACH, VOLUSIA COUNTY, FLORIDA
FDEP FACILITY ID No. 64/9701014

DESIGNED:	DRAWN:	PROJECT NO.:	FIGURE:
DR	SDJF	631011454	3

ATTACHMENT A

Alachua County Environmental Protection Department,
Deliverable Review dated June 28, 2020

Alachua County Environmental Protection Department

Stephen Hofstetter, *Director*

June 28, 2021

Mr. Daniel Roebke
Aptim Environment & Infrastructure, LLC
1228 Winter Garden Vineland Road
Winter Garden, Florida 34787

VIA EMAIL TRANSMISSION ONLY TO: ***daniel.roebke@aptim.com***

Subject: **Deliverable Review**
Site Assessment Report
7-Eleven Food Store #32220
2100 LPGA Boulevard
Daytona Beach, Volusia County
FDEP Facility ID# 64/9701014
Discharge Date: July 19, 2019 (Non-Program)

Dear Mr. Roebke:

The Alachua County Environmental Protection Department (ACEPD), on behalf of the Florida Department of Environmental Protection (FDEP), has reviewed the Site Assessment Report (SAR) dated April 15, 2020 (received April 15, 2020) submitted for the referenced facility. The submittal has been determined to be complete.

Due to the detection of petroleum hydrocarbon compounds in the groundwater sample collected from temporary well TW-1 during the tank closure at concentrations above groundwater cleanup target levels, the FDEP will require at least one additional round of groundwater samples from the four monitoring wells installed for the assessment of the July 19, 2019 discharge. Groundwater samples should be analyzed for Volatile Organic Aromatics/Volatile Organic Halocarbons (VOAs/VOHs) via EPA Method 8260 and Polycyclic Aromatic Hydrocarbons (PAHs) via EPA Method 8270. Since lead, TRPH, and EDB were not detected in any previous groundwater samples at concentrations above their applicable cleanup target levels, it is not necessary to analyze the groundwater samples for these parameters.

Please submit the results of this round of groundwater sampling to this office in an addendum to the SAR within 90 days of receipt of this letter (by September 27, 2021). If the next round of groundwater analyses returns results that are all below groundwater cleanup target levels, then this discharge may be considered for no further action and site closure in accordance with Chapter 62-780.680(1) at that time.

If you should have any questions about this review, please contact the undersigned at (352) 264-6843, at the letterhead address, or via email at tgoodman@alachuacounty.us.

Sincerely,

Ted A. Goodman, P.G.
Petroleum Programs Manager

cc: Shellena Hussein, 7-Eleven, Inc., 3200 Hackberry Rd, Irving, TX 75063

ec: OCULUS File

Alachua County Environmental Protection Department

Stephen Hofstetter, *Director*

December 15, 2021

Mr. Daniel Roebke
Aptim Environment & Infrastructure, LLC
1228 Winter Garden Vineland Road
Winter Garden, Florida 34787

VIA EMAIL TRANSMISSION ONLY TO: ***daniel.roebke@aptim.com***

Subject: **Deliverable Review**
Site Assessment Report Addendum Response to Comments
7-Eleven Food Store #32220
2100 LPGA Boulevard
Daytona Beach, Volusia County
FDEP Facility ID# 64/9701014
Discharge Date: July 19, 2019 (Non-Program)

Dear Mr. Roebke:

The Alachua County Environmental Protection Department (ACEPD), on behalf of the Florida Department of Environmental Protection (FDEP), has reviewed the Site Assessment Report Addendum (SARA) Response to Comments dated December 1, 2021 (received December 1, 2021; due November 19, 2021) submitted for the referenced facility. The submittal has been determined to be complete.

Due to the inability to collect groundwater samples closer to the location of temporary monitoring well TW-1 to confirm that groundwater quality at that location meets State standards, the site does not qualify for No Further Action. However, the site does appear to be a candidate for conditional closure under Risk Management Option II (RMO II) as provided in Chapter 62-780 Florida Administrative Code (FAC),

To qualify for No Further Action with Controls (NFAC) under RMO II, at least one year of monitoring data is required to demonstrate that the groundwater contaminant plume is shrinking or stable. Since two groundwater sampling events have been conducted to date, ACEPD recommends the following groundwater sampling plan to satisfy the requirements of Chapter 62-780.680(2), FAC:

MONITORING PERIOD	WELLS	ANALYTES
January-March	MW-1, MW-2, MW-3, MW-4	BTEX+MTBE; PAHs; Isopropylbenzene; 1,2,4-Trimethylbenzene; 1,3,5-Trimethylbenzene
April - June	MW-1, MW-2, MW-3, MW-4	BTEX+MTBE; PAHs; Isopropylbenzene; 1,2,4-Trimethylbenzene; 1,3,5-Trimethylbenzene

Results should be submitted in periodic groundwater monitoring reports. Each monitoring report shall include updated figures and tables as well as a discussion of that quarter's analytical results. ACEPD recommends including a groundwater elevation contour map in each monitoring report to document any

changes in groundwater flow patterns. Monitoring reports should be submitted within 45 days of completion of each groundwater sampling event.

If 7-Eleven, Inc. wishes to pursue conditional closure in accordance with Chapter 62-780.680(2), FAC, then 7-Eleven should submit a letter on company letterhead to my attention confirming this selection. ACEPD will respond with a letter acknowledging this choice and outlining the components and steps needed to achieve NFAC status.

If you should have any questions about this review, please contact the undersigned at (352) 264-6843, at the letterhead address, or via email at tgoodman@alachuacounty.us.

Sincerely,

Ted A. Goodman, P.G.
Petroleum Programs Manager

cc: Shellena Hussein, 7-Eleven, Inc., 3200 Hackberry Rd, Irving, TX 75063

ec: OCULUS File

Appendix F Site Photographs

Site Photographs – Mainline



Near southern boundary of study area
LPGA Boulevard looking northwest



Site 1 – Daytona Beach Stadium Site Part A-1900 sign
LPGA Boulevard looking northeast



Site 1 - Daytona Beach Stadium Site Part A-1900 sign
LPGA Boulevard looking east



Site 1A – City of Daytona Wastewater Treatment Facility Part A-1993
LPGA Boulevard looking east



Site 1A – City of Daytona Wastewater Treatment Facility Part A-1993
LPGA Boulevard looking east



Site 2A – Mercedes-Benz of Daytona
North Tomoka Farms Road looking west



Site 3 – Gary Yeomans Ford/Former Gary Yeomans Nissan
North Tomoka Farms Road looking west



Site 4 – Sams Club #8138
Near Cornerstone Boulevard looking southwest



Site 5 – Racetrac #2373
LPGA Boulevard near northwestern boundary of study area



Site 6 – BUC-EES #47
Near Gateway Drive/I-95 interchange looking northwest



Site 6 – BUC-EES #47
Near Gateway Drive/I-95 interchange looking northeast



Site 7 – 7-Eleven Food Store #32220
LPGA Boulevard looking northwest



Site 8 – Latitude Margaritaville
LPGA Boulevard looking northwest



Site 11 – Historic Railroad
Near Gateway Drive/I-95 interchange looking north



Site 11 – Historic Railroad
Near Gateway Drive/I-95 interchange looking southeast



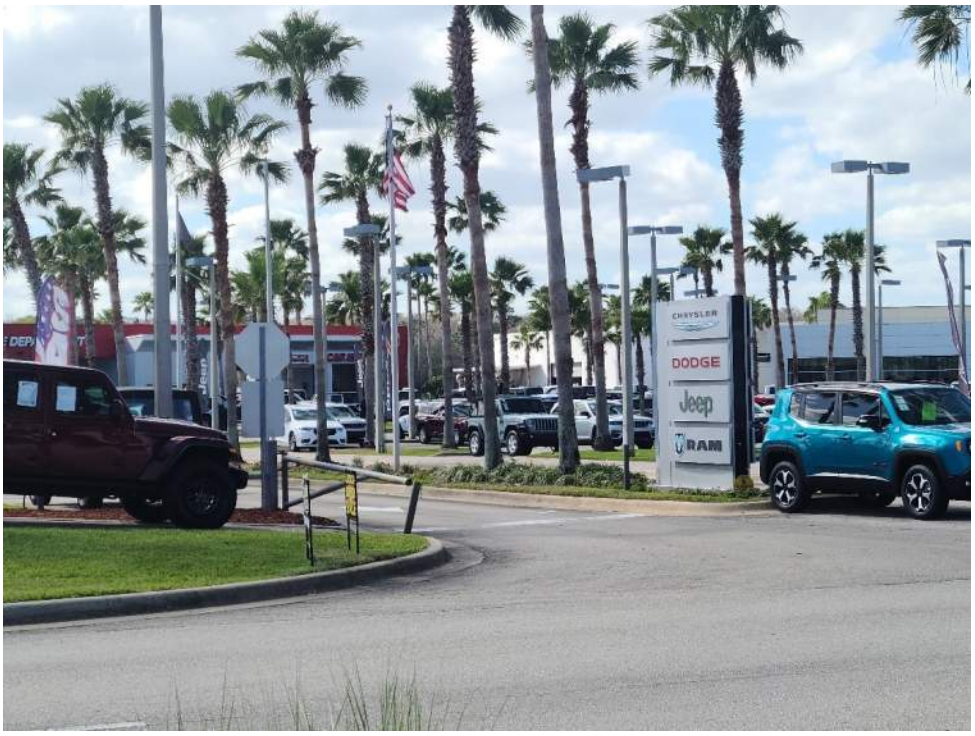
Site 15 – Publix Supermarket #1664
LPGA Boulevard looking northwest



Site 15 – Publix Supermarket #1664 emergency generator
Eastern wall of building towards the rear



Site 16 – Father Lopez Catholic High school
LPGA Boulevard looking southwest



Site 17 – Daytona Dodge
North Tomoka Farms Road looking southwest



Site 17 – Daytona Dodge
North Tomoka Farms Road looking southwest



Near northern boundary of study area
LPGA Boulevard looking west



Florida Department of Transportation District 5

Environmental Management Office

719 S. Woodland Blvd.

DeLand, FL 32720