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

# CONTAMINATION SCREENING EVALUATION REPORT

SR 9/I-95 Project Development and Environment Study
From South of Woolbright Road to North of Woolbright Road
Boynton Beach, Palm Beach County, Florida
(From Mile Post 13.560 to Mile Post 13.995)

FPID: 437279-1-22-02
ETDM #: 14341

Prepared for:

Florida Department of Transportation
District Four
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

DECEMBER 2020

# Table of Contents



# List of Figures



# List of Tables



# Appendices

# 1. SUMMARY OF PROJECT

## 1.1 Project Description

This report contains information regarding the SR 9/I-95 (I-95) from South of Woolbright Road to North of Woolbright Road Project Development and Environment (PD&E) Study (Mile Post 13.560 to Mile Post 13.995). This project has been developed in compliance with Title VI of the Civil Rights Act of 1964 and other related federal and state nondiscrimination authorities. Neither the Florida Department of Transportation (FDOT) nor this project will deny the benefits of, exclude from participation in, or subject to discrimination anyone on the basis of race, color, national origin, age, sex, disability, or family status.

The FDOT, District Four is conducting a PD&E Study to identify long-term needs of I-95 and develop design concepts to address traffic spillback onto I-95, reduce congestion at the I-95 and Woolbright Road interchange, improve interchange operations, and improve safety at the study interchange through the 2045 design year horizon. This study will also consider Strategic Intermodal System (SIS) connector improvements needed within the project area and is consistent with plans for the I-95 mainline, including the potential extension of I-95 Managed Lanes through Palm Beach County. This proposed study is investigating alternatives to improve the overall operating conditions and enhance safety within the interchange.

The improvements to the I-95 Interchange at Woolbright Road will provide additional capacity for vehicles travelling east-west as well as operational improvements north-south through the interchange. Local and network connectivity for the City of Boynton Beach will be improved.

The Interchange of I-95 at Woolbright Road is located in Palm Beach County in the City of Boynton Beach. The project limits along I-95 extend from just south of Woolbright Road at SW 23rd Avenue to just north of Woolbright Road about 2,000-feet north of the interchange. The project limits along Woolbright Road extend from the SW 18th Street on the west to just east of I-95 at SW 2nd Street. The project area includes the signalized intersections at SW 8th Street, and the I-95 southbound and northbound ramps. The South Florida Rail Corridor (SFRC)/CSX Railroad is adjacent to the project corridor and runs parallel along the west side of I-95. Tri-Rail operates along this rail corridor, with the nearest station; Boynton Beach Tri-Rail Station located 2.68 miles to the north of Woolbright Road, just north of the Gateway Boulevard interchange. (Figure 1 -1 – Project Location Map).

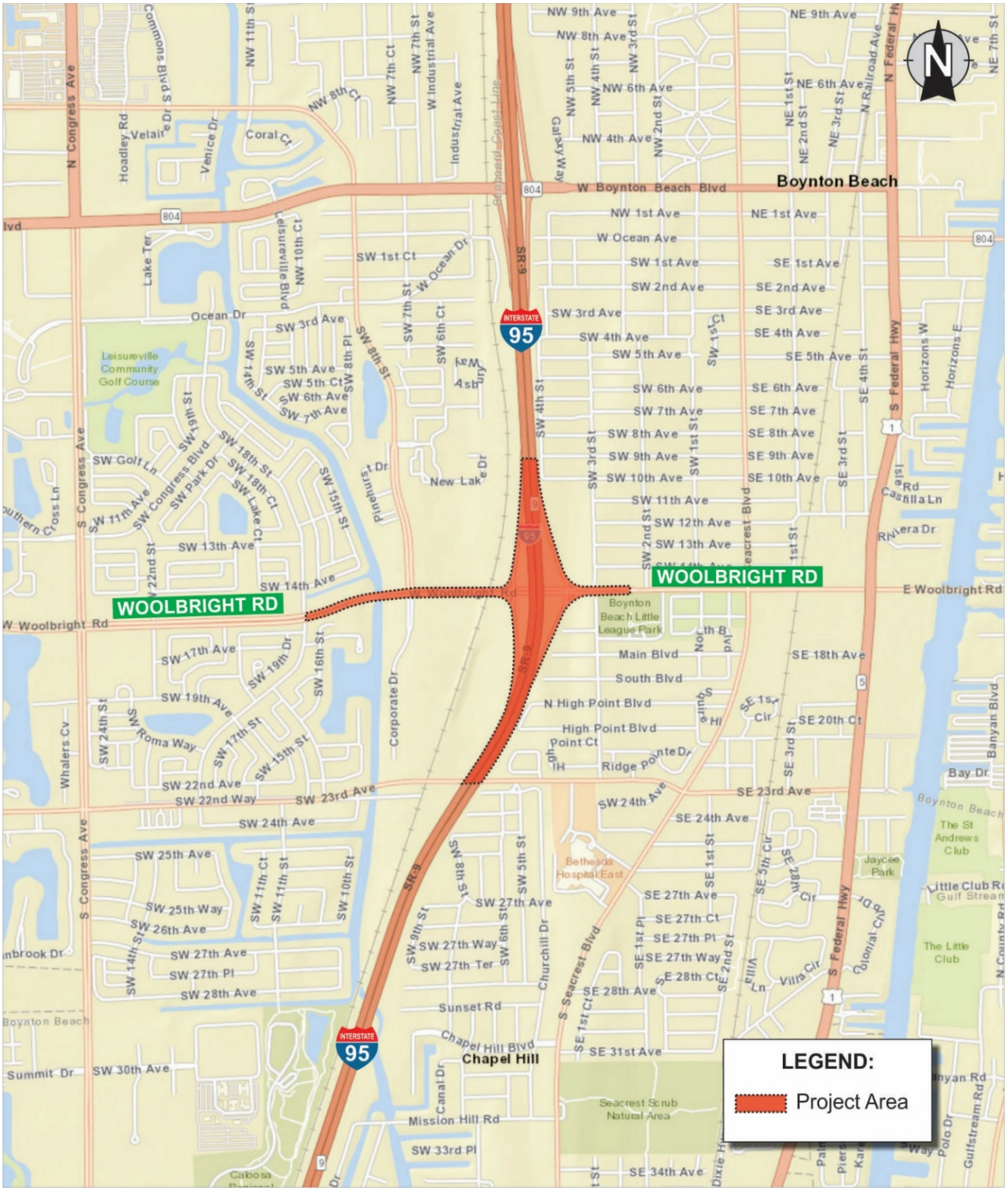



**Figure 1- 1. Project Location Map**

Within the project limits, I-95 is a ten-lane divided interstate freeway providing four general purpose lanes and one high occupancy vehicle (HOV) lane in each direction. The project will be designed to complement the I-95 interim interchange design-build project recently completed, which constructed one additional left-turn lane onto I-95 in both the eastbound and westbound directions; a free-flow right-turn lane from the southbound off-ramp; and designated bicycle lanes along Woolbright Road within the limits of the interchange.

Woolbright Road is currently a six-lane urban divided minor arterial to the west of I-95 and a four-lane urban divided minor arterial to the east of I-95. There is a raised median from SW 18th Street west of I-95 to just west of SW 2nd Street east of I-95. At SW 2nd Street, Woolbright Road transitions to a five-lane roadway section with a two-way left-turn lane in the middle. There are sidewalks on both sides of Woolbright Road throughout the project area and designated bicycle lanes within the limits of the interchange.

The land use adjacent to the interchange is zoned as Public Usage, Single Family, Duplex, Neighborhood Commercial, and Light Industrial. The area southeast of the interchange is zoned Recreation, Multi Family, Public Usage, and Planned Unit Development. Zoning northwest of the interchange consists of Planned Commercial Development, Planned Unit Development, Light Industrial, Office Professional, Neighborhood Commercial, and Single Family, and southwest of the interchange is zoned Community Commercial, Office Professional, Planned Industrial Development, and Single Family.

Improvement to the I-95 interchange at Woolbright Boulevard is consistent with the Cost Feasible Plan of the Palm Beach County Metropolitan Planning Organization (MPO)'s 2045 Long Range Transportation Plan (LRTP). "The purpose is to improve interchange operations and reduce congestion, reduce potential for traffic spillback onto I-95, and increase safety. The improvements are needed to ensure that the I-95 interchange will meet FDOT Level-of-Service standards through year 2045."

This project has been screened through the Efficient Transportation Decision Making (ETDM) process. The Advance Notification (AN) was distributed during the programing screening event, which occurred on October 23, 2017. The Programming Screen Summary Report was re-published on May 3, 2018 and can be viewed under the ETDM # 14341.

## 1.2 Background

The FDOT made improvements to the I-95 mainline in Palm Beach County in the 1990s and 2000s, adding High Occupancy Vehicle (HOV) lanes and auxiliary lanes from south of Linton Boulevard to north of PGA Boulevard. Minor interchange improvements were also made to eight of the existing 18 interchanges along this section of the corridor. At the time of the project, FDOT committed to re-examine the need for long-term improvements at those interchanges that were not improved during the I-95 mainline project. FDOT District Four also identified the need to re-examine the 2003 I-95 Master Plan Study for Palm Beach County to develop new improvements to interchanges based on changes in traffic volumes and updated design standards since the Master Plan was developed.

A Concept Development Report (CDR) was prepared by the FDOT District Four Office of Planning and Environmental Management in August of 2014. The following are the recommendations identified for short-term improvements that have been recently completed as part of the Design-Build project:

- One additional left-turn lane onto I-95 in both the eastbound and westbound directions;
- A free-flow right-turn lane from the southbound off-ramp; and
- Designated bicycle lanes along Woolbright Road within the limits of the interchange.

## 1.3 Purpose and Need

The purpose of this study is to identify long-term needs of I-95 and develop concepts to address traffic spillback onto I-95, reduce congestion on I-95 and Woolbright Road, improve interchange operations, and improve safety at the I-95 and Woolbright Road interchange through the 2045 design year horizon. This project will also consider SIS connector improvements needed within the project area and will be consistent with plans for the I-95 mainline, including the potential extension of I-95 Express lanes through Palm Beach County.

Additional considerations for the purpose and need for this project are further described in the following sections that include System Linkage, Capacity, Transportation Demand, Social Demands/Economic Development, Modal Interrelationships, and Safety.

System Linkage: I-95 is a part of the state's Strategic Intermodal System (SIS) and the National Highway System (NHS). A need exists to ensure that I-95 continues to meet the minimum requirements as a component of those two systems. The project is not proposing to change system linkage; however, the interchange modifications would improve movements within the existing systems. The proposed project at I-95 and Woolbright Road will

help improve connectivity and capacity within the roadway network by addressing traffic spillback onto I-95 and improving interchange connections.

Capacity: Using field review data collected in 2018, A.M. and P.M. peak conditions were observed at all intersections in the study area. At the Corporate Drive/SW 8th Street intersection, during the P.M. peak hour, all approaches experienced minimal queues, except for the westbound and eastbound directions. The westbound left-turn queue experienced spillback into the through lanes and the eastbound direction experienced long queues. During the P.M. peak hour on the I-95 southbound ramp intersection, the eastbound approach experienced long queues, but all queues cleared the intersection during each signal cycle. The southbound approach experienced significant queues, with the queue not clearing during one signal cycle. During the P.M. peak hour at the I-95 northbound ramps intersection, the eastbound approach experienced minimal queue buildup and the northbound and westbound approaches experienced long queues; however, all queues cleared the intersection in one signal cycle for all approaches.

Transportation Demand: Interchange improvements to I-95 at Woolbright Road is included in the Palm Beach County TPA's 2045 LRTP under projects funded with SIS revenues, which includes federal funds. The project is consistent with the plans for the I-95 mainline, including the extension of express lanes into Palm Beach County.

Social Demands/Economic Development: Social and economic demands on the I-95 corridor will continue to increase as population and employment increase. The Palm Beach County TPA 2040 LRTP states that the population would grow 27 percent from 1.32 million in 2010 to 1.68 million in 2040. The employment was also forecasted to grow from 571,000 to 820,000 employees in the same 30 year period for an increase of nearly 44 percent. The predicted increase in population and employment will increase congestion in the study area.

Modal Interrelationships: Currently, sidewalks and crosswalks are provided on both sides of Woolbright Road. Palm Tran Route 70 services Seacrest Boulevard both north and south of Woolbright Road east of the interchange, as well as the Boynton Beach Tri-Rail station 2.68 miles north of Woolbright Road. The project proposes to provide undesignated bicycle lanes on both sides of Woolbright Road. Capacity improvements at the interchange will enhance the mobility of people and goods by alleviating current and future congestion at the interchange and the surrounding freight and transit networks. Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses in the area.

Safety: The crash data for the latest available five-year period (2012 to 2016) along Woolbright Road (93220000) from SW 8 Street to S. Seacrest Boulevard was retrieved from FDOT's Crash Analysis Reporting System (CARS) on-line database and from Signal 4 Analytics database. The study corridor encompasses the I-95 Interchange. The crash data from both databases were summarized separately for the entire corridor and for the I-95 interchange.

Overall, there was a total of 680 crashes during the 5-year period. Based on crash severity, of the 680 crashes reported, 240 (35.5%) were injury type crashes, 437 (64.3%) were property damage only crashes, and three fatal crashes were reported. Two of the fatal crashes occurred in 2012 and were classified as overturn and collision with parked vehicle type and the third fatal crash occurred in 2016 and it was classified as angle collision. There were 150 wet pavement crashes (22.1%) reported. The frequency of wet pavement crashes was constant through the 5-year analysis period. This may indicate a crash pattern of wet pavement crashes. There were 171 nighttime/dusk/dawn/dark crashes (25.1%) reported. The leading crash type was rear-end with a total of 338 crashes (49.7%) followed by sideswipe with a total of 94 crashes (13.8%). Careless driving or negligent manner was the most predominate contributing causes of these crashes. Most of the crashes (178) occurred during the morning hours (6 AM to 9 AM), which correspond to the typical morning rush period.

# 2. PROPOSED ALTERNATIVES

The following describes the alternatives considered for this project.

No Build Alternative

- This alternative would keep the existing interchange roadway network into the future without improvements.
- The No Build Alternative has a number of positive aspects, since it would not require expenditure of public funds for design, right-of-way acquisition, construction, or utility relocation. Traffic would not be disrupted due to construction, therefore, avoiding inconveniences to local residents and businesses. Also, there would be no direct or secondary impacts to the environment, the socio-economic characteristics, or community cohesion of the area.
- The No Build Alternative fails to fulfill the purpose and need of the project. Operational and safety conditions within the interchange area will become progressively worse as traffic volumes continue to increase, thereby increasing the number of crashes and deteriorating access of this interchange.

Alternative 1 – Tight Diamond Interchange (TDI)– Recommended Alternative

- Modify the existing Diamond Interchange by widening the existing Woolbright Road bridge over I-95 and the bridge over the South Florida Rail Corridor to accommodate one additional through lane in each direction through the interchange
- Add one additional left-turn lane (triple lefts) at the northbound and southbound I-95 off-ramp intersections
- Add one additional westbound through lane at the Corporate Drive/SW 8th Street intersection
- Add one additional left-turn lane in the eastbound and westbound direction at the Corporate Drive/SW 8th Street intersection
- Widen the existing bridge over the E-4 Canal to accommodate the additional westbound through lane and bicycle lanes
- Extend the bicycle lanes from the interchange to SW 18th Street
- Refer to Figure 2-1.

Alternative 2 – Diverging Diamond Interchange (DDI)

- Reconstruct the existing Diamond Interchange to a Diverging Diamond Interchange (DDI) configuration, which provides three continuous through lanes through the interchange with two free flow left-turn lanes into the I-95 on-ramps
- Add one additional westbound through lane at the Corporate Drive/SW 8th Street intersection

- Add one additional left-turn lane in the eastbound and westbound direction at the Corporate Drive/SW 8th Street intersection
- Widen the existing bridge over the E-4 Canal to accommodate the additional westbound through lane and bicycle lanes
- Extend the bicycle lanes from the interchange to SW 18th Street
- Refer to Figure 2-2.

Alternative 3 – Single Point Urban Interchange (SPUI)

- Reconstruct the existing Diamond Interchange to a Single Point Urban Interchange (SPUI) configuration, which provides two continuous through lanes through the interchange
- Add one additional left-turn lane (triple lefts) at the southbound I-95 off-ramp intersection
- Add one additional westbound through lane at the Corporate Drive/SW 8th Street intersection
- Add one additional left-turn lane in the eastbound and westbound direction at the Corporate Drive/SW 8th Street intersection
- Widen the existing bridge over the E-4 Canal to accommodate the additional westbound through lane and bicycle lanes
- Extend the bicycle lanes from the interchange to SW 18th Street
- Refer to Figure 2-3.

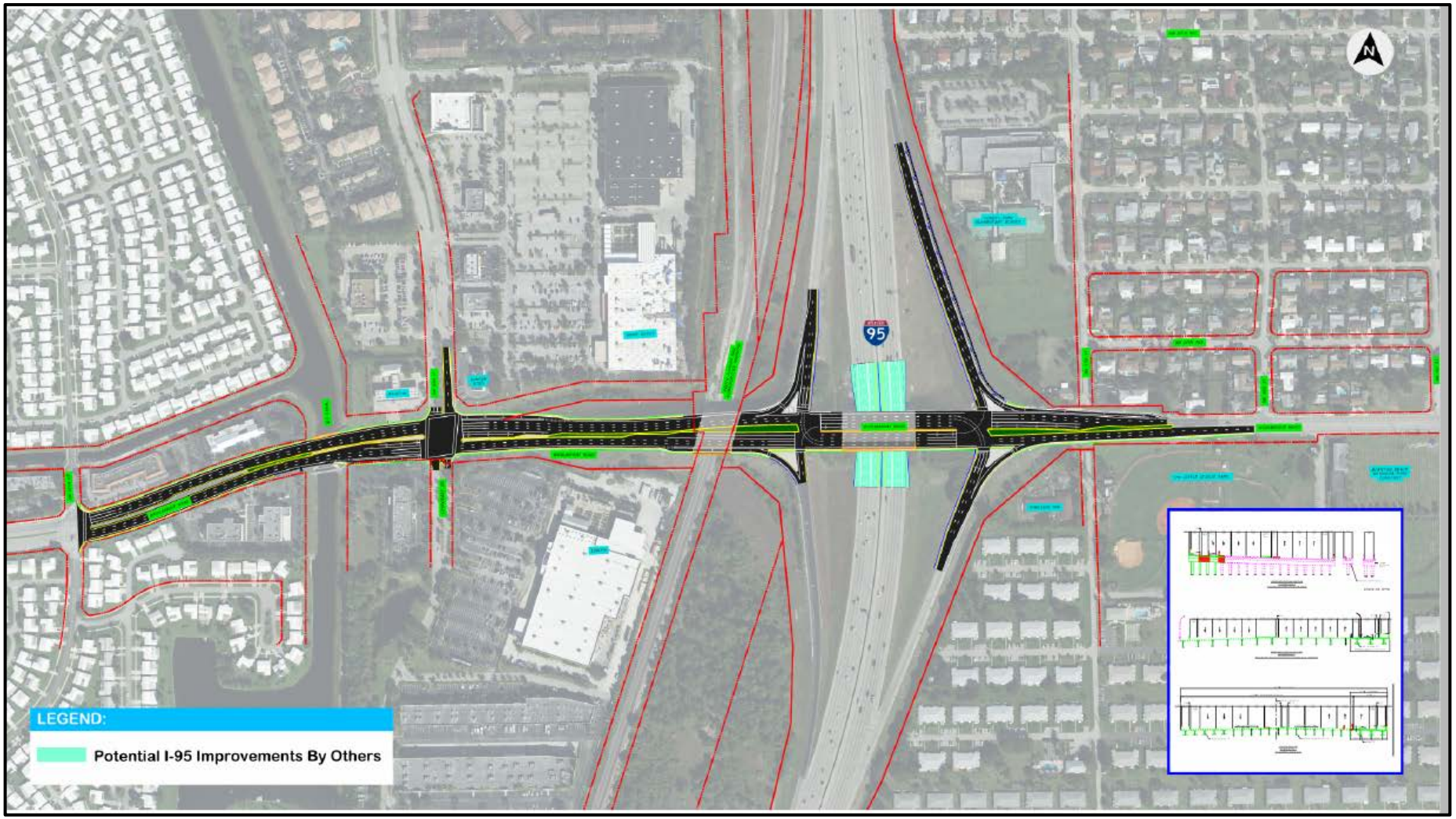



**Figure 2- 1. Alternative 1: TDI**

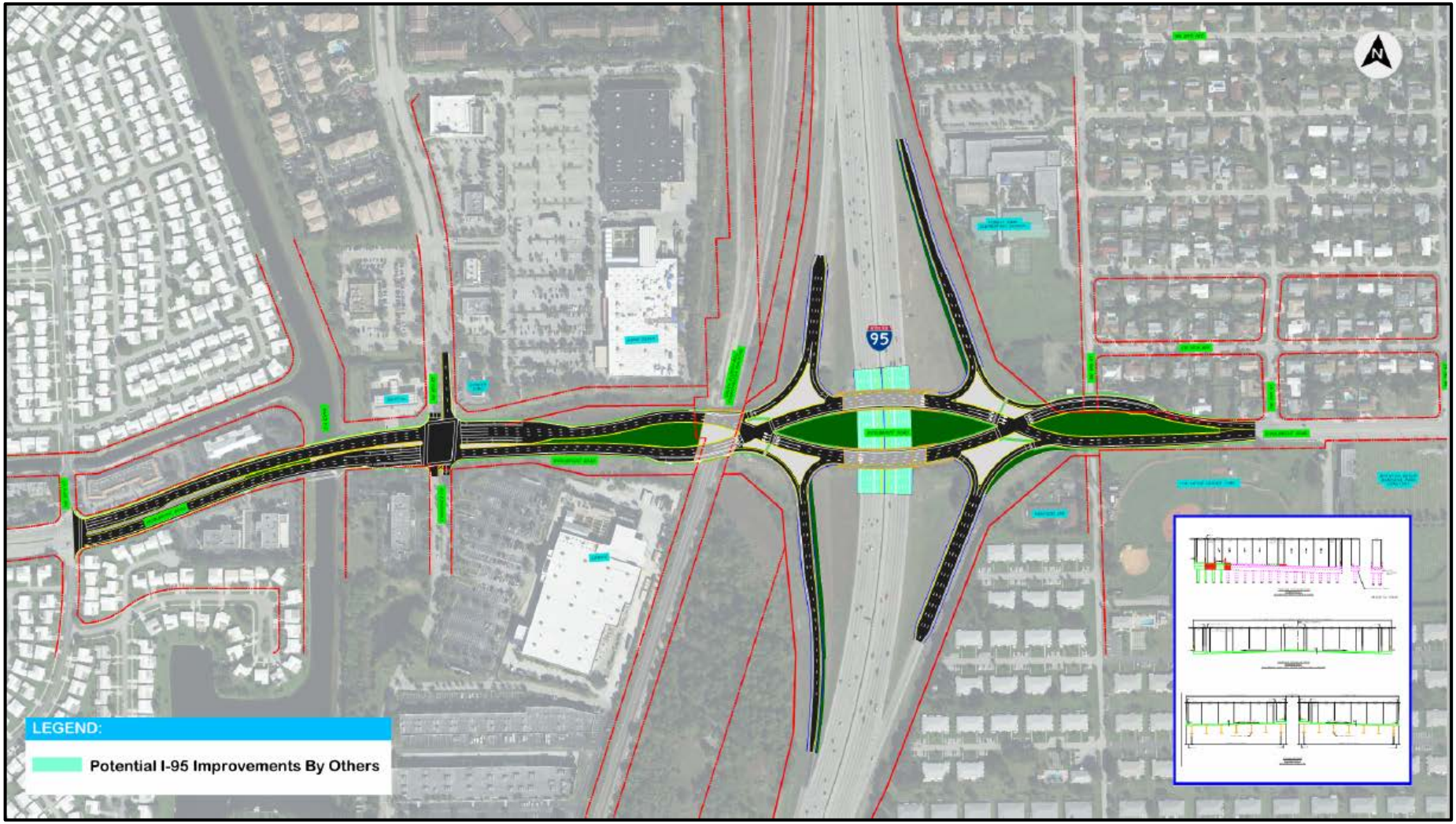



**Figure 3- 2:. Alternative 2: DDI**

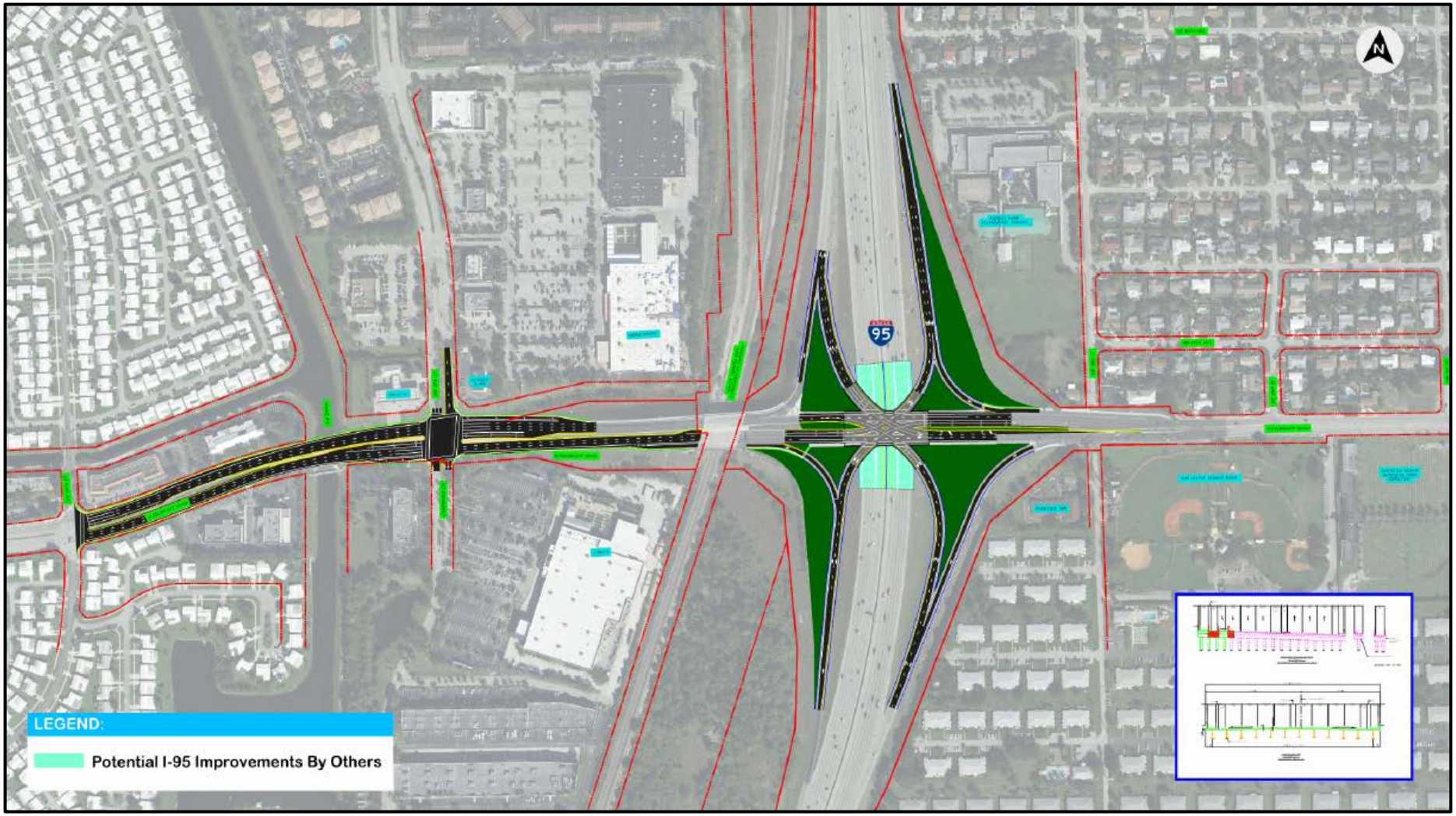



**Figure 4- 3:. Alternative 3: SPUI**

# 3 EXISTING LAND USE

Existing land use within the project area was determined through the interpretation of aerial photography (Figure 3-1 – Aerial Map) and a field reconnaissance of the project corridor conducted on May 27, 2020. Existing land use within a 500-foot buffer of the project limits was based on the Florida Land Use, Cover and Forms Classification System (FLUCCS) (FDOT, 1999) using the South Florida Water Management District (SFWMD) 2014-2016 land use/land cover layer (Figure 3-2 – Existing Land Use Map).

The existing land use within 500 feet of the project corridor is predominantly roads and highways (FLUCCS Code 8140), consisting of I-95. Fixed single-family units (FLUCCS Code 1210) is second most dominant land use in the 500-foot buffer. Followed by shopping centers (FLUCCS Code 1411) as the third most dominant land use. Other land uses in the project corridor, in order of percent areal coverage within the buffer, include other multiple dwelling units, upland mixed coniferous/ hardwood, pine flatwoods, parks and zoos, educational facilities, commercial and services, open land, channelized waterways, canals, other light industries and cemeteries.

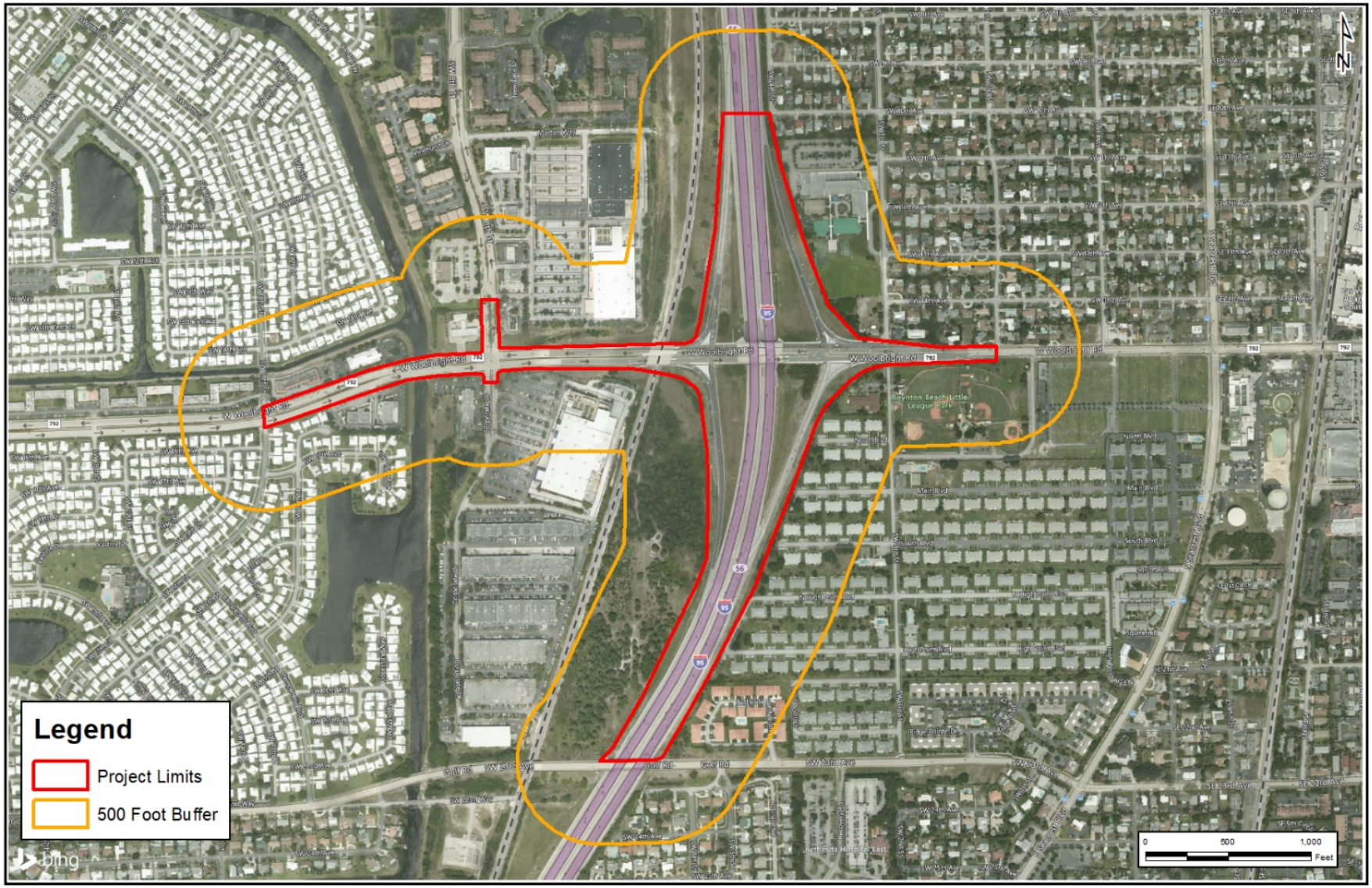



**Figure 3- 1 -. Aerial Map**

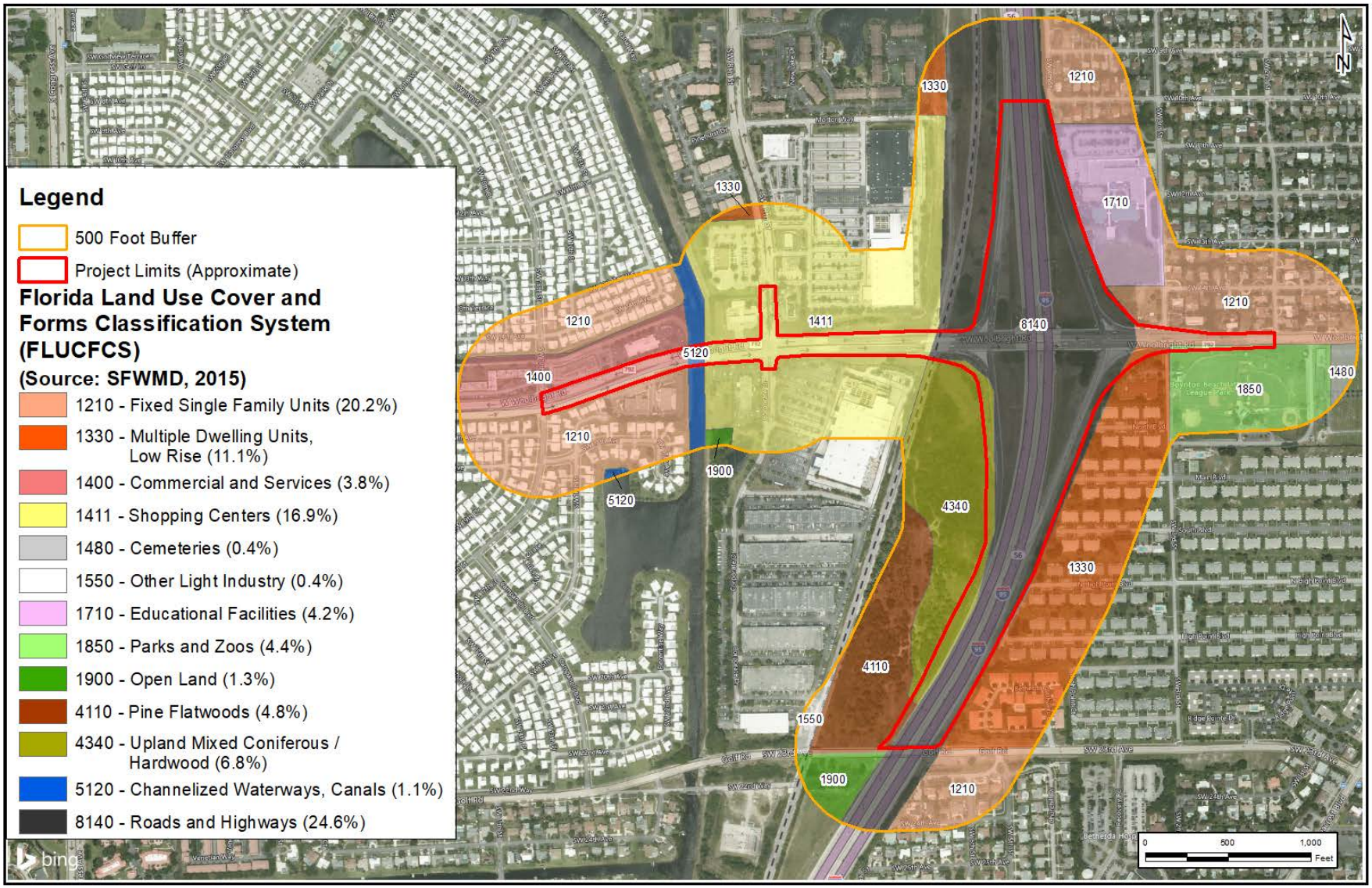



**Figure 3- 2 – Land Use Map**

# 4 HYDROLOGIC FEATURES

According to the USGS Ground Water Atlas of the United States (Miller, 2000), the County is generally underlain by the Surficial Aquifer System. The surficial aquifer is mainly used for domestic, commercial, or small municipal supplies. The surficial aquifer system is generally under unconfined conditions and is comprised of mostly unconsolidated sand, shelly sand, and shell. The aquifer thickness is less than 50 feet in some areas but can range up to 400 feet in Indian River and St. Lucie Counties. The surficial aquifer is separated from the Florida aquifer by a thick clayey confining unit.

Groundwater in the surficial aquifer generally flows from areas of higher elevation towards the coast or streams where it can discharge as baseflow. Water enters the aquifer from rainfall and exits as baseflow to streams, discharge to the coast, evapotranspiration, and downward recharge to deeper aquifers. The C-4 canal is located within the immediate project area. Existing surface drainage is generally flat, relying primarily on infiltration and retention features for removal. Groundwater is typically encountered at a depth of five to fifteen feet below land surface and the project is located within Zone 2, Zone 3 and Zone 4 of the Palm Beach County Wellfield.

According to the USDA Soil Survey data (https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx) , soils within the project area are primarily classified as urban land complexes consisting largely of Pomello fine sand and St. Lucie-Paola-Urban land complex units consisting of low slope and well drained fine sand composition. Other soil complexes less prevalent in the project area include Basinger sand type (Figure 4-1 – Soil Map)

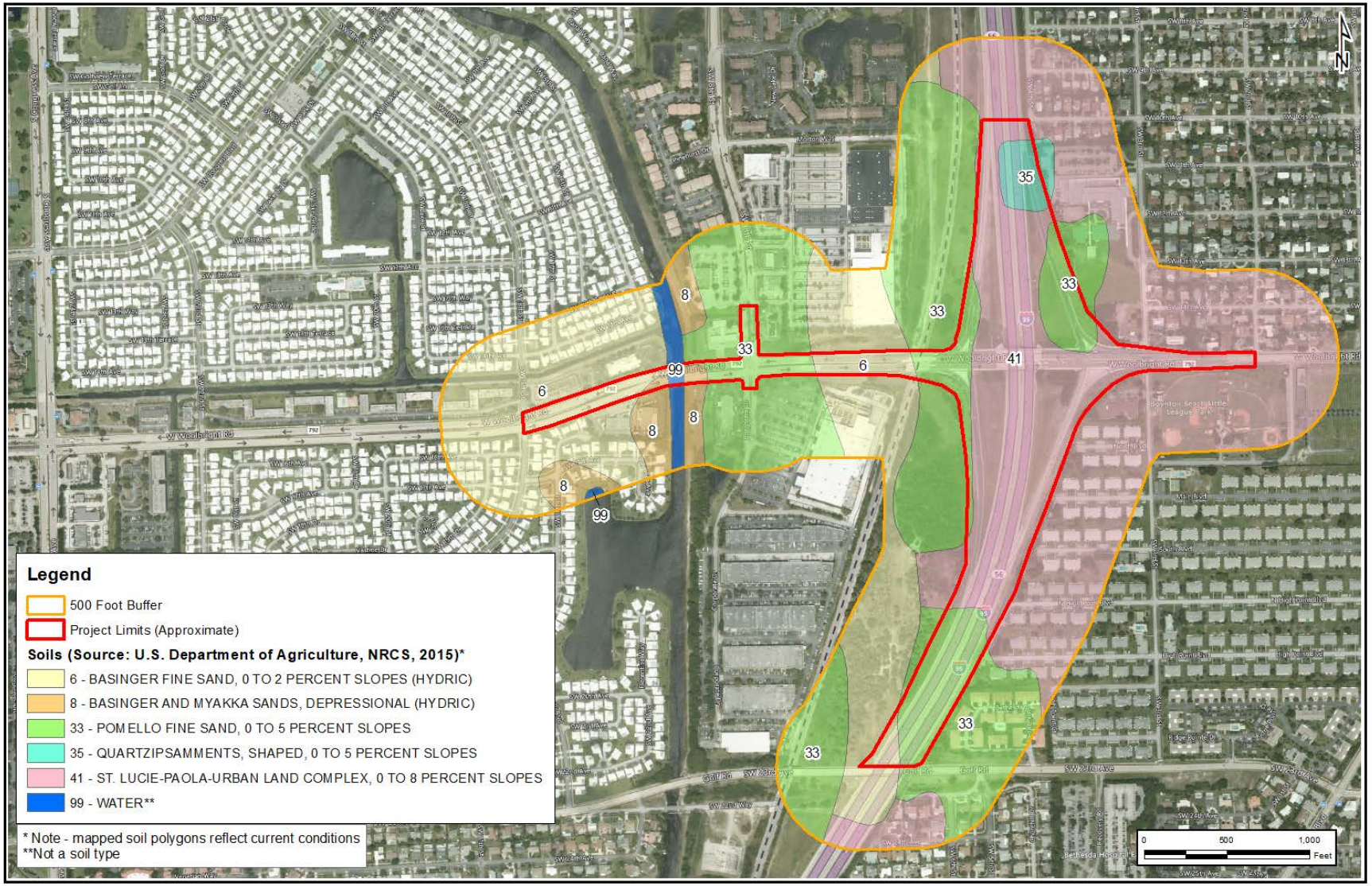



**Figure 4- 1 – Soils Map**

# 5 METHODOLOGY

This evaluation was performed using procedures generally conforming to, and as specified in, FDOT Project Development and Environment (PD&E) Manual guidelines (Part 2, Chapter 20, effective June 14, 2019).

A search of known and potentially contaminated sites was conducted using state and federal databases. Sources included in our review included the FDOT Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST), the Florida Department of Environmental Protection (FDEP) Contamination Locator Map and FDEP Map Direct tool. Copies of the output from the EST and FDEP Map Direct Tool are included in Appendix A.

A search for existing and potential contaminated sites was conducted to include the following: a) petroleum, drycleaners, and non-petroleum sites within 500 feet of the ROW line; b) non-solid waste landfill within 1000 feet of the corridor; c) known landfills within 1,000 feet of the corridor; d) National Priority Lists (NPL) and EPA Superfund sites, landfill sites within 0.5 mile of the ROW line.

A regulatory file review of selected sites identified within the search buffers was conducted using the FDEP OCULUS Database. Interviews with public officials were not conducted as regulatory information was readily available from public sources.

A review of historical information was conducted. Aerial photographs were obtained from a variety of sources, including the University of Florida and FDOT to evaluate historical land use patterns and indications of activities that could result in contamination along the project corridor.

A field reconnaissance was conducted on June 11, 2020 to verify information reviewed and to identify other potential contamination concerns within the vicinity of the project based upon visual observations. No additional sites to those identified during the database search were identified during the site visit. A photolog compiled during the site visit is included in Appendix B.

Risk ratings were assigned in accordance with FDOT PD&E Manual guidelines. The rating system is divided into four risk rating categories: High, Medium, Low and No Concern. The known presence of contamination may not necessarily represent a high cause for concern if the regulatory agencies are aware of the situation and corrective actions, where necessary, are either complete or are underway, and these actions will not have an adverse impact on the proposed project. The following risk ratings were assigned:

- "No": A review of available information on the property and a review of the conceptual or design plans indicates there is no potential for contamination to impact the project. It is possible that contaminants had been handled on the property. However, findings from the contamination screening evaluation indicate that contamination impacts are not expected.
- "Low": A review of available information indicates that former or current activities on the property have an ongoing contamination issue, have 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 contamination screening evaluation, it is not likely that there would be any contamination impacts to the project.
- "Medium": After a review of conceptual or design plans and findings from a contamination screening 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": 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.

# 6 PROJECT IMPACTS AND REGULATORY STATUS OF SITES

After a review of available data, including the ETDM EST and FDEP records, several sites of potential contamination concern were identified for the alternatives considered. Table 1 presents the number of potentially contaminated sites identified for each of the alternatives considered.

**Table 1: Preliminary Contamination Screening Evaluation per Build Alternative**

| Alternative | Risk Ratings | | | | |
|---|---|---|---|---|---|
| | No | Low | Medium | High | Total |
| Alternative 1 (TDI) – Recommended Alternative | 3 | 4 | 3 | 0 | 10 |
| Alternative 2 (DDI) | 3 | 4 | 3 | 0 | 10 |
| Alternative 3 (SPUI) | 3 | 4 | 3 | 0 | 10 |

All sites identified are common to all the alternatives. The location and ratings for each site, as well as the project limits for the recommended alternative, Alternative 1-TDI, and associated drainage ponds are depicted on Figure 6-1: Site Location Map.

Based on an evaluation of the data and information collected and the site reconnaissance conducted on June 11, 2020 a summary of information compiled for each site is provided in Table 2. No non-landfills solid waste sites were identified within 1,000 feet of the corridor, or Superfund CERCLA or landfill sites within 0.5 miles of the corridor. A photographic documentation log is included in Appendix B.

**Table 2: Summary of Preliminary Contamination Screening Evaluation**

| Site ID | Name | Facility ID | Regulatory Database | Distance to and Direction From Corridor (Feet) | Storage Tanks Present | Contamination of Concern | Site Information | Risk Rating |
|---|---|---|---|---|---|---|---|---|
| 1 | BETHESDA COPY CENTER<br>3800 S CONGRESS AVE STE #15 | CHAZ ID: FLD981932551 | CHAZ<br>RCRA | 300<br>Northeast | None | None | The main function of the facility is to print forms used by Bethesda Health Systems. Rollers are cleaned with press wash using rags. Used rags are stored in a labeled and closed container. Film screens are created on site using a film developer. Developer and fixer wastes are removed from site about once a year. This facility was not identified on regulatory databases as being contaminated. No records of outstanding violations or discharges were identified during our review of regulatory records. This facility is registered as a conditionally exempt small quantity hazardous waste generator. Based on the facility information reviewed, contamination impacts are not expected. | No |
| 2 | BETTY SEINFELD CENTER<br>1501 CORPORATE DR | CHAZ ID: FLR000065573 | CHAZ<br>RCRA | 90<br>South | None | None | This facility was occupied by the Betty Seinfeld Breast Center and was registered as a small quantity generator of silver in 2000. The facility was reportedly closed around 2003. This facility was not identified on regulatory databases as being contaminated. No records of outstanding violations or discharges were identified during our review of regulatory records. Based on the facility information reviewed, contamination impacts are not expected. | No |
| 3 | BOCA RATON ASSOCIATES<br>1501 CORPORATE DRIVE | SQG ID: 79738 | SQG<br>RCRA | 90<br>South | None | None | This facility was not identified in regulatory databases as being contaminated. Based on the site location within a medical office, it is expected that the facility is associated with medical services. No records of outstanding violations or discharges were identified during our review of regulatory records. This facility is registered as a small quantity hazardous waste generator. Based on the facility information reviewed, contamination impacts are not expected. | No |
| 4 | LOWES OF BOYNTON BEACH FL #1111<br>1500 CORPORATE DR | CHAZ/CESQG ID: FLR000151035 | CHAZ<br>CESQG<br>RCRA | 110<br>South | 1,500 – Gal Diesel AST | None | This facility was not identified in regulatory databases as being contaminated. This facility stores a 1500-gallon diesel AST associated with an emergency generator No records of outstanding violations or discharges were identified during our review of regulatory records. This facility is registered as a conditionally exempt small quantity hazardous waste generator. Based on the facility information reviewed, it is not likely that there would be any contamination impacts to the project. | Low |
| 5 | HOME DEPOT #6309<br>1500-1520 SW 8TH ST | CHAZ ID: FLR000111914<br>STCM ID: 9810769 | CHAZ<br>STCM<br>RCRA | 165<br>North | 1,320- Gal Diesel AST | None | This facility was not identified in regulatory databases as being contaminated. This facility stores a 1,320-gallon diesel AST associated with a generator. No records of outstanding violations or discharges were identified during our review of regulatory records. Based on the facility information reviewed, it is not likely that there would be any contamination impacts to the project. | Low |
| 6 | FOREST PARK ELEMENTARY SCHOOL<br>1201 SW 3RD ST | CHAZ ID: FLD982158115 | CHAZ<br>RCRA | 75<br>East | AST | None | This facility was not identified in regulatory databases as being contaminated. This facility is registered as a conditionally exempt small quantity hazardous waste generator. Based on the site visit conducted as part of this evaluation, the school houses a generator and associated AST. The specifications of the AST were not available based on review of regulatory records. No records of outstanding violations or discharges were identified during our review of | Low |

**Table 2: Summary of Preliminary Contamination Screening Evaluation**

| Site ID | Name | Facility ID | Regulatory Database | Distance to and Direction From Corridor (Feet) | Storage Tanks Present | Contamination of Concern | Site Information | Risk Rating |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | regulatory records. Based on the facility information reviewed, it is not likely that there would be any contamination impacts to the project. | |
| 7 | DIRECT TRANSPORT-DELRAY SPILL<br>ATLANTIC AVENUE & WOOLBRIGHT RD. | STCM ID: 9202780 | SCTM | 10<br>South | None | Petroleum | A discharge resulted from an accidental release of approximately 7,500 gallons of diesel fuel onto the unpaved median of I-95 between Atlantic Avenue and Woolbright Road in November 1990. Upon completion of source removal and subsequent groundwater monitoring, the discharge was granted no further action from FDEP in 1994. Based on the facility information reviewed, t is not likely that there would be any contamination impacts to the project. | Low |
| 8 | SAVE ON DRY CLEANERS<br>1859 W WOOLBRIGHT RD | CHAZ/SQG ID: FLR000103671<br>STCM ID: 9809009 | CHAZ<br>STCM<br>SQG<br>RCRA | 75<br>North | None – Historical Tanks Removed | Solvents | This facility operated a drycleaner between 2002 and 2011. This facility was not identified on regulatory databases as being contaminated and was identified as a vacant commercial space during the June 11, 2020 site visit. No records of outstanding violations or discharges were identified during our review of regulatory records. This facility is no longer present at this location. A former AST storing tetrachloroethylene installed circa 2007 has been removed from this facility. Former activities on the property included storage and handling of hazardous materials in some capacity. Based on insufficient regulatory information and lack of assessment data for this site, it is likely that contamination associated with the former activities may have gone undetected. | Medium |
| 9 | BLESSED WOOLBRIGHT CLEANERS<br>RDS OF BOYNTON INC<br>1869 SW 15TH AVE | CHAZ ID: FLR000050401 | CHAZ<br>RCRA | 75<br>North | None | Solvents | This drycleaner facility was registered as a conditionally exempt small quantity hazardous waste generator in 1998. This facility was not identified on regulatory databases as being contaminated and was identified as a vacant commercial space during the June 11, 2020 site visit. No records of outstanding violations or discharges were identified during our review of regulatory records. This facility is registered as a conditionally exempt small hazardous waste quantity generator. Former and current activities on the property included storage and handling of hazardous materials in some capacity. Based on insufficient regulatory information and lack of assessment data for this site, it is likely that contamination associated with the former activities may have gone undetected. | Medium |
| 10 | RACETRAC #459<br>905 W WOOLBRIGHT RD | STCM ID: 9600708 | SCTM | 35<br>West | 12,000-Gal Unleaded Gas UST<br>12,000-Gal Diesel UST<br>12,000-Unleaded Gas UST | Petroleum | This facility is an active gas station housing three USTs installed in 1995. No records of outstanding violations or discharges were identified during our review of regulatory records. This facility has been assigned a Medium risk rating based on the current operation of the gasoline station. This site is was observed to be under construction during the site visit conducted on June 11, 2020. | Medium |

FDEP = Florida Department of Environmental Protection
CHAZ: FDEP Compliance & Enforcement Tracking for Hazardous Waste Facilities
STCM: Storage Tank Contamination Monitoring
AST: Aboveground Storage Tank
EPA = United States Environmental Protection Agency
RCRA = US EPA Resources Conservation and Recovery Action
SQG = Hazardous Waste Small Quantity Generator
UST: Underground Storage Tank

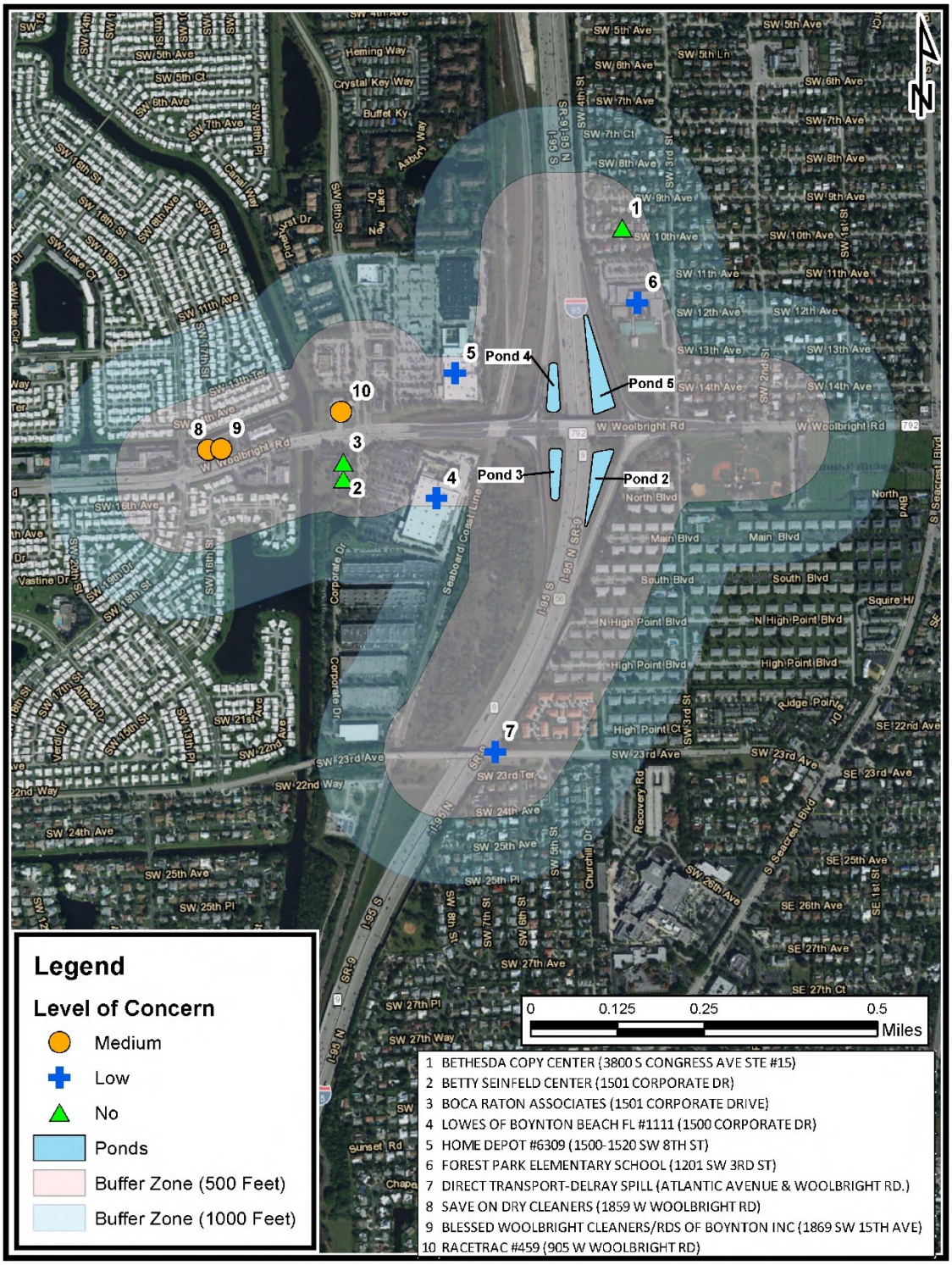



**Figure 6 - 1–Potential Contaminated Site Location Map**

# 7 HISTORICAL INFORMATION

Evaluation of historical aerial photography can assist with the identification of sources of potential contamination associated with historical land use such as landfills, lagoons, industrial areas, or agricultural activities. Although generally flown at medium to high altitudes, aerial photographs may be useful in visually comparing historic and current conditions. They may be helpful in evaluating conditions of apparent environmental concern on or near the project corridor at the time the photographs were taken. Evaluation of these aerial photographs may be limited by the quality and scale of the photographs.

Aerial photographs between 1964 and 2015 were obtained from FDOT, University of Florida databases and Google Earth. Copies of select aerial photographs reviewed are included in Appendix C. A summary of the relevant observations is presented in Table 3 below.

**Table 3: Historical Aerial Photograph Review**

| Year | Observations |
|---|---|
| 1964 | The project area is mainly undeveloped. The railroad corridor is present with residential properties present to the east and undeveloped land to the west. C-4 canal is present at this time. Little League Park located on the south side of Woolbright Road appears to be under construction. Agricultural activities are observed on the northeast quadrant of the I-95 interchange. |
| 1969 | The roadway for I-95 is observed on this aerial photograph. The areas adjacent to the corridor are undeveloped with development apparent farther to the east and south. Agricultural activities continue to be present on the northeast quadrant of the I-95 interchange. The areas west of I-95 remain mostly undeveloped. |
| 1975 | Additional roadway improvements at the I-95 interchange are observed. Increased development is observed in the area. Residential development has expanded to areas abutting east to I-95 and along Woolbright Road. The areas along Woolbright Road between the C-4 canal and I-95 remain undeveloped with the exception of the railroad. |

| Table 3: Historical Aerial Photograph Review | |
|---|---|
| 1986 | Signs of development are apparent on the areas along Woolbright Road between the C-4 canal and I-95 are observed. |
| 1991 | No significant changes with the exception of the development of the Home Depot shopping plaza located on the north side of Woolbright Road west of I-95. |
| 1995 | No significant changes apparent within the project corridor and immediate vicinity are observed. |
| 2002 | No significant changes with the exception of the development of the Lowe's shopping plaza located on the south side of Woolbright Road west of I-95 and the presence of the Racetrac station (Site 13) on the northern side of Woolbright Road. . |
| 2006-2015 | No significant changes within the project corridor and immediate vicinity observed between 2006 and 2015. |
| 2016 | The southwest portion of the infield area between I-95 and the northbound onramp have been cleared and appear to be utilized for storage. The nature of the materials or equipment stored cannot be ascertain from the aerial photographs. |
| 2017 | Construction activities between I-95 and the northbound onramp are observed. Equipment staging continues on the south portion of the infield as observed in 2016. Clearing is also observed in the infield area between I-95 and the southbound offramp. |
| 2019 | Construction activities between I-95 and the on/offramps is completed and the areas and equipment have been removed. |

Agricultural land use was observed on the northeast quadrant of the I-95 interchange in the 1964 and 1969 aerial photographs. These areas have been redeveloped and are currently partly occupied by the Forest Park Elementary School campus and right of way infields along the north onramps to I-95. Potential soil impacts associated with the former application of agricultural chemicals would likely have been removed during the redevelopment and alteration of the area. Therefore, this historical land use is not considered likely to impact the project.

# 8 BRIDGES

Bridge 930301 located eastbound/westbound on Woolbright Road over the I-95 and Bridge 930300 located eastbound/westbound on Woolbright Road over the railroad are located within the proposed construction of the project. Bridges 930301 and 930300 are concrete bridges and have been tested for the presence of asbestos-containing materials (ACM). Bridge 934461 is located over the E-4 canal within the proposed construction project and has not been tested at the time of this report.

The Asbestos Survey Reports (ASR) for Bridge 930301 and 930300 did not document the presence of ACM in the material tested in those bridges. Copies of the ASRs are included in **Appendix D**. Bridge 934461 has not been tested and will required testing during design.

# 9 CONCLUSIONS

This CSER has revealed the presence of three sites of no risk (Site 1 to Site 3), four sites of low risk (Site 4 to Site 7) and three medium risk rating sites (Site 8 through Site 10). No additional assessment (Level II or Level III) is recommended for no risk sites based on the absence of contamination expected for those sites based on current or historic operations and regulatory information reviewed during this evaluation.

Site 10 (Racetrack Station located at 905 W Woolbright Rd.) has been assigned a medium risk rating based on the current operation of a gasoline station housing three USTs. However, no records of discharges or outstanding violations were identified for this facility. Therefore, based on the absence of contamination records associated with this facility, no additional assessment (Level II or Level III) is deemed necessary. The proposed work in the vicinity of Site 10 is limited to lane widening and the facility is at a lower elevation than the adjacent project corridor. The elevation gradient would be expected to promote groundwater flow away from the corridor; additionally, the presence of the C-4 canal ma influence the groundwater to flow to the east. Due to fact that actual contamination has not been documented at this site, the distance between the USTs and the ROW, the elevation difference and the minimally invasive work anticipated for this portion of the project, additional assessment is not recommended. If invasive work that requires dewatering is proposed, then groundwater assessment would be recommended. If groundwater testing is conducted, laboratory analysis should include petroleum contaminants including polynuclear aromatic hydrocarbons using EPA Test Method 8270 (or equivalent), volatile organic aromatics using EPA Test Method 8260 (or equivalent) and total recoverable petroleum hydrocarbons using the Florida Residual Petroleum Organics Method.

Site 8 (Save On Dry Cleaners located at 1859 W Woolbright Rd) and Site 9 (Blessed Woolbright Cleaners located at 1869 SW 15th Avenue) have been assigned a medium risk rating based on the former operation of drycleaner facilities at each of these locations. However, no records of discharges or outstanding violations were identified for these facilities. The proposed work in the vicinity of Site 8 and Site 9 is limited to lane widening. Therefore, based on the absence of contamination records associated with these sites, no additional assessment (Level II or Level III) is deemed necessary. If invasive work that requires dewatering is proposed, then groundwater assessment would be recommended. If groundwater testing is conducted, laboratory analysis should include volatile organic hydrocarbons (VOHs) using EPA Test Method 8260 (or equivalent).

Regulatory file review should be updated prior to construction to ascertain if new releases are documented.

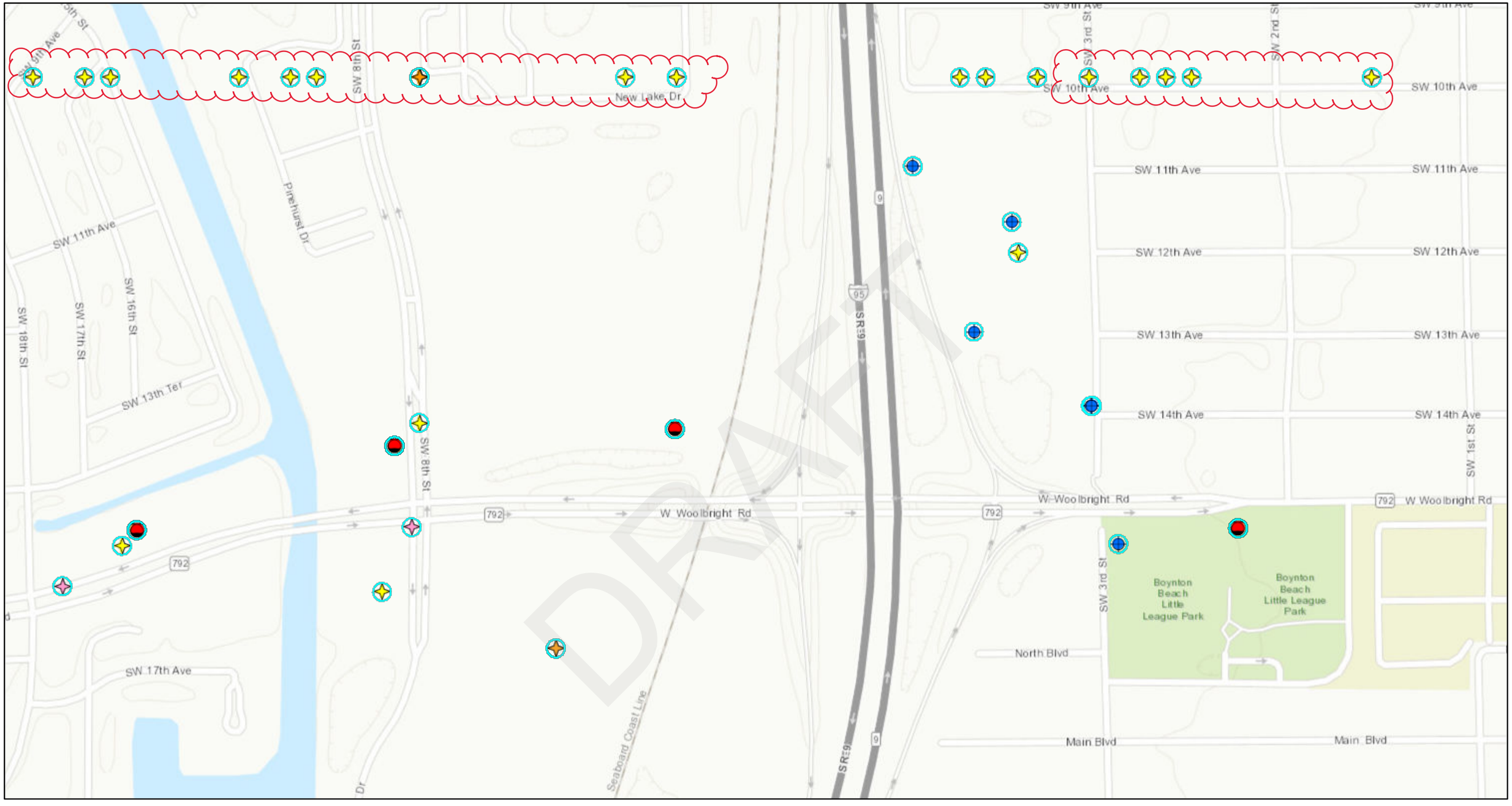
Agricultural land use was observed on the northeast quadrant of the I-95 interchange in the 1964 and 1969 aerial photographs. These areas have been redeveloped and are currently partly occupied by the Forest Park Elementary School campus and right of way infields along the north onramps to I-95. Potential soil impacts associated with the former application of agricultural chemicals would likely have been removed during the redevelopment and alteration of the area. Therefore, this historical land use is not considered likely to impact the project.

Bridge 934461 has not been tested for the presence of ACM and will required testing during design.

# Appendix A

Environmental Database Documentation

# Standard Map




March 30, 2020

1:4,514

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

- Hazardous Waste Transfer Facilities
- Waste Cleanup CLOSED Responsible Party Sites
- State Funded Cleanup Sites

Sites outside 500-ft buffer

Solid Waste Facilities

- Facility
- General Disposal Area

FDEP, DWM, FDEP,DWM, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, FGS Staff, FDEP/DWM/BWC



Map created by Map Direct, powered by ESRI.

DEP Cleanup Sites

- BROWNFIELD SITES
- PETROLEUM
- SUPERFUND
- OTHER WASTE CLEANUP

Petroleum Contamination Monitoring (PCTS) Discharges

- ELIGIBLE DISCHARGES OPEN
- INELIGIBLE DISCHARGES OPEN
- ELIGIBLE DISCHARGES COMPLETED
- INELIGIBLE DISCHARGES COMPETED

Storage Tank Contamination Monitoring (STCM)

Florida Geological Survey (FGS) Wells

State-Owned Lands Cleanup Program (SOLCP) Sites

Storage Tank Contamination Monitoring (STCM)

Petroleum Contamination Monitoring (PCTS) Discharges

- ELIGIBLE DISCHARGES OPEN
- INELIGIBLE DISCHARGES OPEN
- ELIGIBLE DISCHARGES COMPLETED
- INELIGIBLE DISCHARGES COMPETED

Registered Tanks from Storage Tank Contamination Monitoring (STCM)

DEP Cleanup Sites

- BROWNFIELD SITES
- PETROLEUM
- SUPERFUND
- OTHER WASTE CLEANUP

Florida Opportunity Zones

Brownfield Areas

Brownfield Sites

Florida Institutional Controls Registry

Drycleaning Solvent Program Cleanup Sites

Waste Cleanup OPEN Responsible Party Sites

Waste Cleanup INACTIVE Responsible Party Sites

Active Fuel Facilities

County Small Quantity Generators (SQG)

Large Quantity Hazardous Waste Generators (LQGs)

Small Quantity Hazardous Waste Generators (SQGs)

Hazardous Waste Treaters Storers and Disposers (TSDs)

Hazardous Waste Transporter Facilities

Compliance and Enforcement Tracking for HAZardous (CHAZ) Facilities

Hazardous Waste Treaters Storers and Disposers (TSDs)

Solid Waste Disaster Debris Management Sites

Solid Waste Facilities

- Facility
- General Disposal Area
- Waste Processing Area

Solid Waste Test Sites

- Gas Condensate Sample Point
- Leachate Collection Sample Point
- Monitor Well
- Private Supply Well
- Public Supply Well
- Soil/Ash/ Sediment Sample
- Solid Waste Effluent Monitoring Point
- Solid Waste Influent Monitoring Point
- Surface Water Sample Point

Florida Superfund Waste Cleanup Sites

- NPL
- Superfund

Solid Waste Facilities

- Facility
- General Disposal Area
- Waste Processing Area

Florida State Funded Cleanup Sites

Waste Cleanup CLOSED Responsible Party Sites

Hazardous Waste Transfer Facilities

| HANDLER_ID | EPA_ASSIGNE | USERNAME | TIME_STAMP | ME_ID | OFFICE | ME_NAME | PHYS_ADDRESS_1 |
|---|---|---|---|---|---|---|---|
| FLD984167288 | 6/15/1988 | HERRING_\ | 12/30/1997 | 38200 | SED | Geosyntec Inc | 3050 SW 14th Pl Ste 18 |
| FLD982167470 | 5/15/1988 | CHAZ_LOA | 10/18/1996 | 45746 | SED | TNT Auto Body Inc | 1420 SW 30th Ave |
| FLD982155756 | 1/15/1988 | CHAZ_LOA | 10/18/1996 | 46046 | SED | Mr D Auto Body & Painting | 400 W Industrial Ave |
| FLD981932551 | 11/15/1987 | CHAZ_LOA | 10/18/1996 | 60488 | SED | Bethesda Copy Center | 3800 S Congress Ave Ste #15 |
| FLD982091167 | 6/15/1987 | CHAZ_LOA | 10/18/1996 | 33096 | SED | J White Aluminum Products Inc | 215 SE 8th Ave |
| FLD982100729 | 4/15/1987 | CHAZ_LOA | 10/18/1996 | 43811 | SED | Village Square Dry Cleaners II | 11098 S Military Trl |
| FLD981868631 | 12/15/1986 | CHAZ_LOA | 10/18/1996 | 54958 | SED | Palm Beach County School District - South T | 1302 SW 30th Ave |
| FLD981868516 | 12/15/1986 | CHAZ_LOA | 10/18/1996 | 45178 | SED | Palm Beach County Schools - South Mainte | 505 S Congress Ave |
| FLD981868573 | 12/15/1986 | CHAZ_LOA | 10/18/1996 | 40351 | SED | South Tech Academy | 1300 SW 30th Ave # A |
| FLD984194209 | 3/15/1991 | CHAZ_LOA | 10/18/1996 | 44584 | SED | Ideal Painting & Body Inc | 625 Industrial Ave |
| FLR000151035 | 11/26/2008 | WILSON_J | 11/26/2008 | 26159 | SED | Lowes of Boynton Beach FL #1111 | 1500 Corporate Dr |
| FLR000065573 | 5/16/2000 | HERRING_\ | 5/16/2000 | 34585 | SED | Betty Seinfeld Center | 1501 Corporate Dr |
| FLR000103671* | 11/24/2003 | LAW_T | 11/24/2003 | 62280 | SED | Save On Dry Cleaners | 1859 W Woolbright Rd |
| FLR000050401 | 11/17/1998 | HERRING_\ | 11/17/1998 | 63142 | SED | Blessed Woolbright Cleaners | 1869 Sw 15th Ave |
| FLR000111914 | 8/19/2004 | LAW_T | 8/20/2004 | 40051 | SED | Home Depot #6309 | 1520 SW 8th St |
| FLD982158115 | 3/15/1988 | CHAZ_LOA | 10/18/1996 | 49132 | SED | Forest Park Elementary School | 1201 SW 3rd St |
| FLD984191320 | 12/15/1990 | HERRING_\ | 12/1/1998 | 44728 | SED | Star Enterprise | 9094 S Military Trl |
| FLD980709778 | 3/15/1991 | CHAZ_LOA | 10/18/1996 | 50799 | SED | F H Foster Oil | 319 Industrial Ave |
| FLD984173013 | 7/15/1990 | HERRING_\ | 12/1/1998 | 40702 | SED | Star Enterprise | 433 Nw 2nd Ave |
| FLD984173021 | 7/15/1990 | CHAZ_LOA | 10/18/1996 | 55550 | SED | Texaco #240211315 | 2921 S Federal Hwy |
| FLD982129595 | 1/15/1990 | CHAZ_LOA | 10/18/1996 | 38264 | SED | Dubois Farms Inc | 5450 Flavor Pict Rd |
| FLD984171199 | 10/15/1989 | CHAZ_LOA | 10/18/1996 | 40795 | SED | Polydex Pharmaceuticals Ltd | 1401 Neptune Dr |
| FLD981924830 | 2/15/1987 | CHAZ_LOA | 10/18/1996 | 46115 | SED | Eli Lilly | Jog Road And Military Trail |
| FLD982122871 | 6/15/1989 | CHAZ_LOA | 10/18/1996 | 48425 | SED | Nu Look 1 Hour Cleaners | 1313 W Boynton Blvd |

*within 500 ft of project limits but it is not shown on the map output.

Sites confirmed within 500 feet of the site. Remaining facilities are located outside the 500-ft buffer.

| FACILITY_ID | REGULATED | CC_COUNTY_ID | COUNTY | FACILITY_NAME | ADDRESS1 | CITY | FACILITY_STATUS | FACILITY_TYPE_CODE | FACILITY_TYPE | FACILITY_CLEANUP_STATUS_CODE | FACILITY_CLEANUP_STATUS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9809009 | N | 50 | PALM BEA( | SAV-ON CLEANERS | 1869 WOOLBRIGHT RD | BOYNTON | CLOSED | 1 | Drycleaner | null | null |
| 9600708 | Y | 50 | PALM BEA( | RACETRAC #459 | 905 W WOOLBRIGHT RD | BOYNTON | OPEN | A | Retail Station | null | null |
| 9810769 | Y | 50 | PALM BEA( | HOME DEPOT #0224 | 1500 SW 8TH ST | BOYNTON | OPEN | C | Fuel user/Non-retail | null | null |
| 9809153 | N | 50 | PALM BEA( | BOYNTON BEACH CITY UTIL | 124 E WOOLBRIGHT RD | BOYNTON | CLOSED | H | Local Government | null | null |

| LOC_ID | FAC_ID | STATUS | CONTAM | NAME | FAC_TYPE | SITE_TYPE | FAC_STAT | CONTAM_I | ADDRESS1 | CITY |
|---|---|---|---|---|---|---|---|---|---|---|
| 62451 | 9809009 | REVIEWED | null | SAV-ON CLEANERS | 1 | Drycleaner | CLOSED | null | 1869 WOOLBRIGHT RD | BOYNTON BEACH |
| 62595 | 9809153 | REVIEWED | null | BOYNTON BEACH CITY UTIL | H | Local Government | CLOSED | null | 124 E WOOLBRIGHT RD | BOYNTON BEACH |
| 49915 | 9600708 | REVIEWED | null | RACETRAC #459 | A | Retail Station | OPEN | null | 905 W WOOLBRIGHT RD | BOYNTON BEACH |
| 64153 | 9810769 | REVIEWED | null | HOME DEPOT #0224 | C | Fuel user/Non-retail | OPEN | null | 1500 SW 8TH ST | BOYNTON BEACH |

| SQG_FACIL | OFFICE_NA | DISTRICT | CC_COUNT | COUNTY_N | GENERATOR_STATUS | EPA_ID | OTHER_ID | BUSINESS_NAME | FACILITY_STREET_N | FACILITY_STREET_NAME | FACILITY_CITY |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 130935 | RPC10 | null | 50 | PALM BEA | NOT A HAZARDOUS WASTE GENERATOR | null | 73-03439 | SAV ON DRY CLEANERS | 1869 | WOOLBRIGHT ROAD | BOYNTON BEACH |
| 79738 | RPC10 | null | 50 | PALM BEA | NOT A HAZARDOUS WASTE GENERATOR | null | 73-02725 | BOCA RATON ASSOCIATES | 1501 | CORPORATE DR | BOYNTON BEACH |

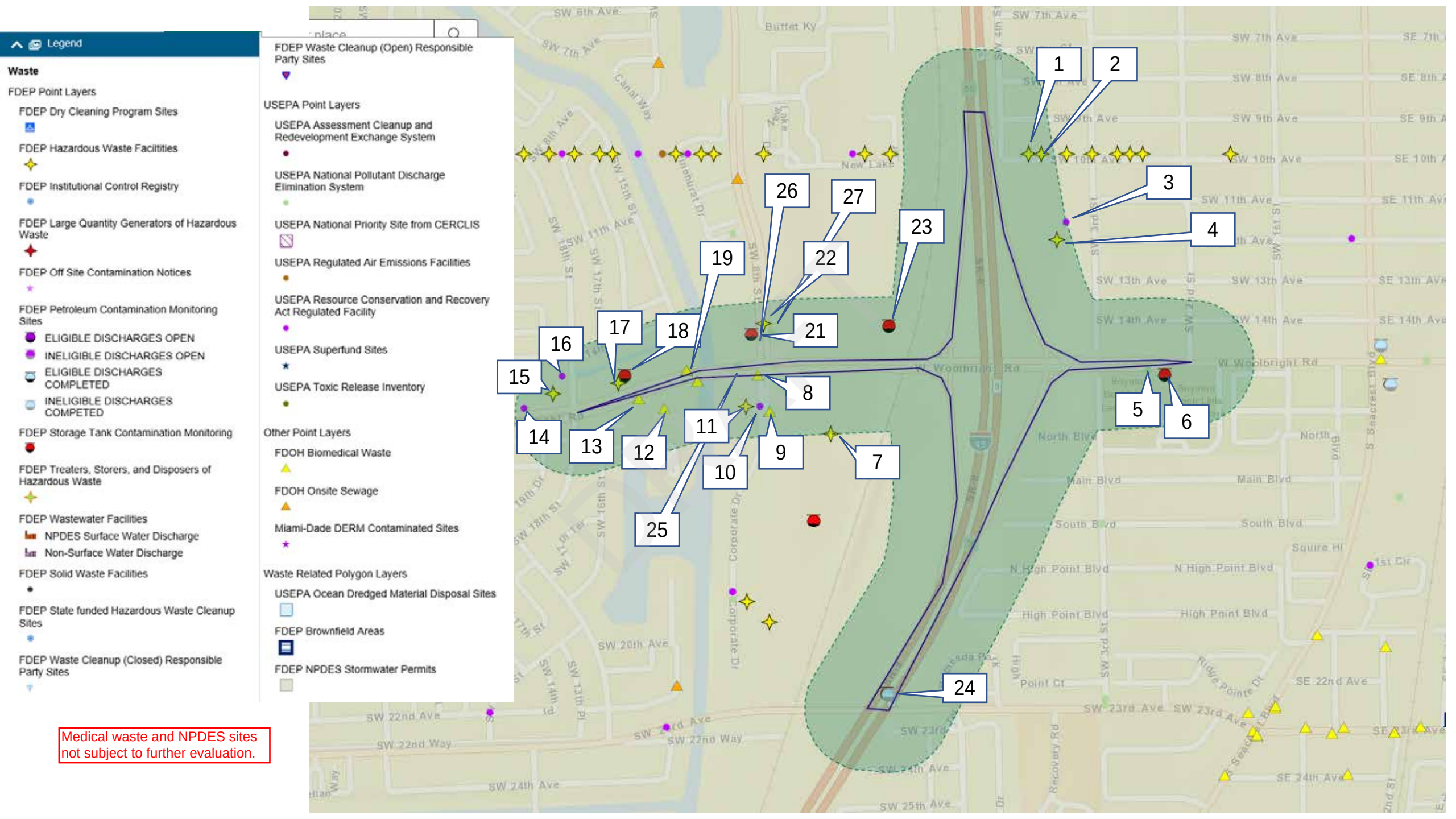
Sites confirmed within 500 feet of the site.

| HANDLER_ | SITE_ID | NAME | CITY | ZIP5 | ZIP4 | COUNTY_N | OFFICE | NOTIFIED | FAC_INS_T | LAST_INSP_D | OBJECTID | ADDRESS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FLR000151 | 26159 | Lowes of Boynton Beach FL #1111 | Boynton Be | 33426 | 6648 | Palm Beacl | SED | 11/26/2008 | CESQG-CAS | 11/20/2008 | 3507 | 1500 Corporate Dr |
| FLD982122 | 48425 | Nu Look 1 Hour Cleaners | Boynton Be | 33426 | null | Palm Beacl | SED | 6/15/1989 | null | null | 421 | 1313 W Boynton Blvd |

Sites confirmed within 500 feet of the site.

# Woolbright and I95 Contamination

FM: 437279-1-22-02


Legend
Waste
FDEP Point Layers
FDEP Dry Cleaning Program Sites
FDEP Hazardous Waste Facilities
FDEP Institutional Control Registry
FDEP Large Quantity Generators of Hazardous Waste
FDEP Off Site Contamination Notices
FDEP Petroleum Contamination Monitoring Sites
ELIGIBLE DISCHARGES OPEN
INELIGIBLE DISCHARGES OPEN
ELIGIBLE DISCHARGES COMPLETED
INELIGIBLE DISCHARGES COMPETED
FDEP Storage Tank Contamination Monitoring
FDEP Treaters, Storers, and Disposers of Hazardous Waste
FDEP Wastewater Facilities
NPDES Surface Water Discharge
Non-Surface Water Discharge
FDEP Solid Waste Facilities
FDEP State funded Hazardous Waste Cleanup Sites
FDEP Waste Cleanup (Closed) Responsible Party Sites
FDEP Waste Cleanup (Open) Responsible Party Sites
USEPA Point Layers
USEPA Assessment Cleanup and Redevelopment Exchange System
USEPA National Pollutant Discharge Elimination System
USEPA National Priority Site from CERCLIS
USEPA Regulated Air Emissions Facilities
USEPA Resource Conservation and Recovery Act Regulated Facility
USEPA Superfund Sites
USEPA Toxic Release Inventory
Other Point Layers
FDOH Biomedical Waste
FDOH Onsite Sewage
Miami-Dade DERM Contaminated Sites
Waste Related Polygon Layers
USEPA Ocean Dredged Material Disposal Sites
FDEP Brownfield Areas
FDEP NPDES Stormwater Permits
1
2
3
4
5
6
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8
9
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24
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27
Medical waste and NPDES sites not subject to further evaluation.

| Number | Listing | Name | Address | ID | Notes |
|---|---|---|---|---|---|
| 1 | FDEP Hazardous Waste Facility | MR D AUTO BODY & PAINTING | 400 W INDUSTRIAL AVE, BOYNTON BEACH | FLD982155756 | |
| 2 | FDEP Hazardous Waste Facilities | BETHESDA COPY CENTER | 3800 S CONGRESS AVE STE #15 | FLD981932551 | |
| 3 | USEPA Resource Conservation and Recovery Act Regulated Facility | PALM BEACH COUNTY FOREST PARK ELEM | 1201 SW 3RD ST | Fips Code: 12099 | |
| 4 | FDEP Hazardous Waste Facilities | FOREST PARK ELEMENTARY SCHOOL | 1201 SW 3RD ST | FLD982158115 | |
| 5 | USEPA National Polluant Discharge Elimination System* | REGIONAL FORCEMAIN JACK & BORE | Unknown | Fips Code: FL099 | |
| 6 | FDEP Storage Tank Contamination Monitoring | BOYNTON BEACH CITY UTIL | 124 E WOOLBRIGHT RD | N/A | |
| 7 | FDEP Hazardous Waste Facilities<br>&<br>USEPA Resource Conservation and Recovery Act Regulated Facility | LOWES OF BOYNTON BEACH FL #1111 | 1500 CORPORATE DR | FLR000151035<br>&<br>Fips Code: 12099 | |
| 8 | FDOH Biomedical Waste* | RIVERWALK DENTAL GROUP | 1501 CORPORATE DRIVE, SUITE 140 | Entity number: 1584763 | |
| 9 | FDOH Biomedical Waste* | APPLETON HOME HEALTH SERVICE LLC | 1708 B CORPORATE DRIVE | Entity number: 1264439 | |
| 10 | USEPA Resource Conservation and Recovery Act Regulated Facility | BETTY SEINFELD CENTER | 1501 CORPORATE DR | Fips code: 12099 | |
| 11 | FDEP Hazardous Waste Facilities | BETTY SEINFELD CENTER | 1501 CORPORATE DR | FLR000065573 | |
| 12 | FDOH Biomedical Waste* | INFINITY HOME CARE OF DISTRICT 9 LLC | 1700 W WOOLBRIGHT ROAD, SUITE 7 | Entity Number: 1660608 | |
| 13 | FDOH Biomedical Waste* | EAR, NOSE AND THROAT ASSOCIATES OF SOUTH FLORIDA | 1800 W WOOLBRIGHT ROAD, UNIT 201 | Entity Number: 1495212 | |



*Biomedical Waste and NPDES facilities omitted from further assessment.

| Number | Listing | Name | Address | ID | Notes |
|---|---|---|---|---|---|
| 14 | USEPA Resource Conservation and Recovery Act Regulated Facility | RDS OF BOYNTON INC | 1869 SW 15TH AVE | FLR000050401 | |
| 15 | FDEP Hazardous Waste Facilities | SAVE ON DRY CLEANERS | 1859 W WOOLBRIGHT RD | FLR000103671 | |
| 16 | USEPA Resource Conservation and Recovery Act Regulated Facility | SAVE ON DRY CLEANERS | 1859 W WOOLBRIGHT RD | FLR000103671 | |
| 17 | FDEP Hazardous Waste Facilities | BLESSED WOOLBRIGHT CLEANERS | 1869 SW 15TH AVE | FLR000050401 | |
| 18 | FDEP Storage Tank Contamination Monitoring | SAV-ON CLEANERS | 1869 WOOLBRIGHT RD | N/A | |
| 19 | FDOH Biomedical Waste* | FLORIDA EYE MICROSURGICAL INST | 1717 WOOLBRIGHT ROAD | Entity Number: 1260364 | |
| 20 | FDOH Biomedical Waste* | SIPERSTEIN DERMATOLOGY | 9897 HAGEN RANCH ROAD | Entity Number: 1287518 | |
| 21 | FDEP Storage Tank Contamination Monitoring | RACETRAC #459 | 905 W WOOLBRIGHT RD | N/A | |
| 22 | FDEP Hazardous Waste Facilities | HOME DEPOT #6309 | 1520 SW 8TH ST | FLR000111914 | |
| 23 | FDEP Storage Tank Contamination Monitoring | HOME DEPOT #0224 | 1500 SW 8TH ST | N/A | |
| 24 | FDEP Petroleum Contamination Monitoring Sites<br>&<br>FDEP Storage Tank Contamination Monitoring | DIRECT TRANSPORT-DELRAY SPILL | ATLANTIC AVE & WOOLBRIGHT RD | N/A | |
| 25 | USEPA National Polluant Discharge Elimination System* | RACE TRAC NO.459 | 905 WEST WOOLBRIGHT ROAD | FLG072273 | |
| 26 | USEPA National Polluant Discharge Elimination System* | ALTA CHASE | NA | Fips Code: FL099 | |
| 27 | USEPA National Polluant Discharge Elimination System* | STAPLES- BOYNTON BEACH | 1540 8TH STREET | Fips Code: 12099 | |

# Appendix B

Photograph Documentation Log

**PHOTODOCUMENTATION LOG**


**Photo 1 –** View of Lowes of Boynton Beach, FL #1111, 1500 Corporate Dr., facing east.


**Photo 2** – View of Home Depot #6309, 1500-1520 SW 8th St., facing northeast.

**PHOTODOCUMENTATION LOG**

**Photo 3 –** View of building associated with Betty Seinfeld Center and Boca Raton Associates sites, 1501 Corporate Dr., facing northwest.

**Photo 4 –** View of Forest Park Elementary School, 1201 SW 3rd St., facing northwest.

**PHOTODOCUMENTATION LOG**

**Photo 5 –** View of generator and associated tank located in the rear of Forest Park school building.

**Photo 6 –** View of Direct Transport-Delray Spill Atlantic Avenue & Woolbright Rd. site, facing west, showing SW 23rd Street overpass over SR 9/I-95.

**PHOTODOCUMENTATION LOG**


**Photo 7 –** View of former location of Save On Dry Cleaners (1859 W. Woolbright Rd.) and Blessed Woolbright Cleaners/RDS of Boynton, Inc. (1869 SW 15th Ave.), facing north, showing vacant commercial space (on left) and My Choice Rx pharmacy (on right) within the Leisureville Shopping Center.

**Photo 8 –** View of Racetrac #459 site, 905 W. Woolbright Rd., facing north, showing ongoing construction activities.

# Appendix C

Historical Aerial Photographs

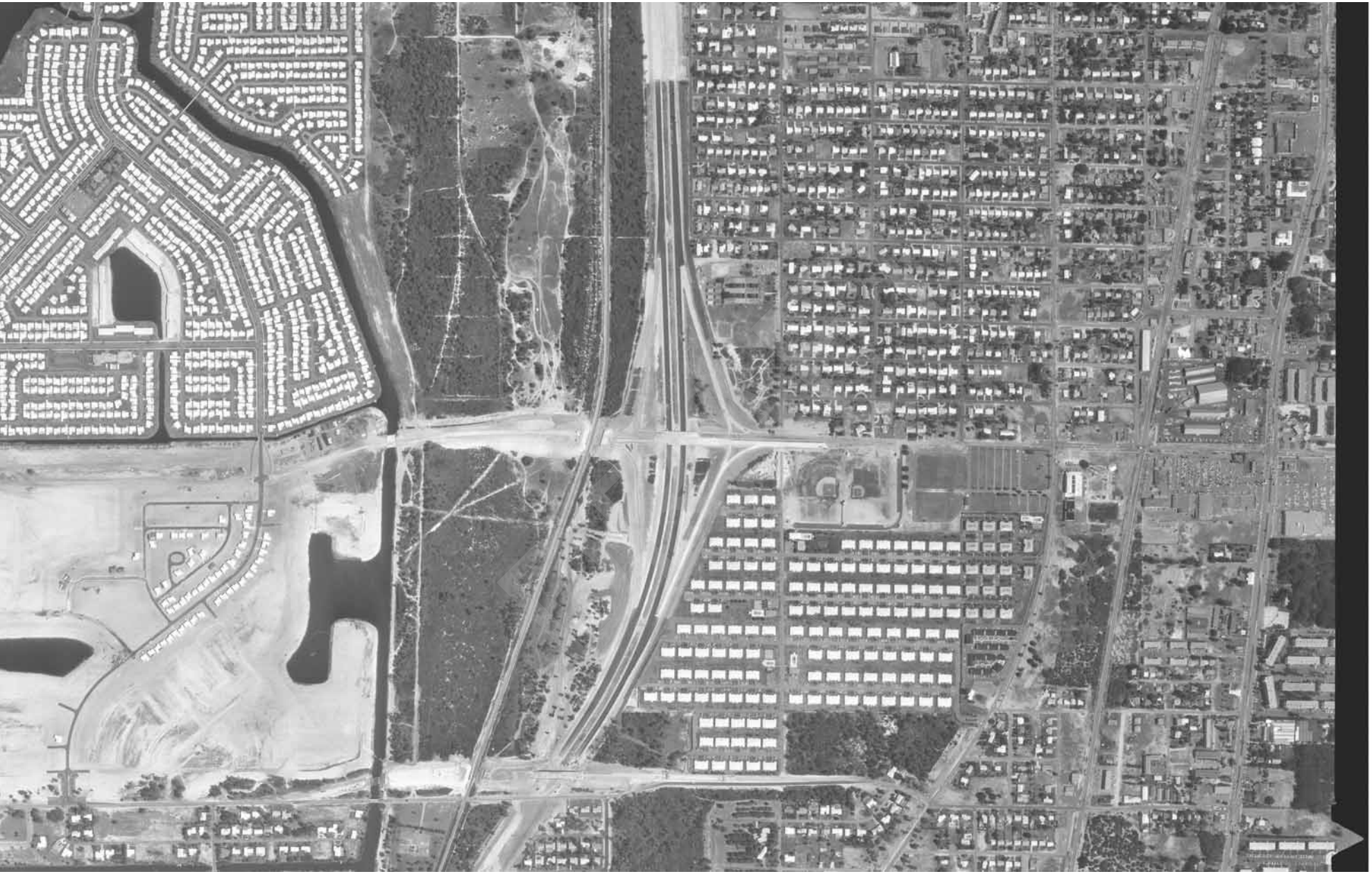
N

1964


N
1969

N

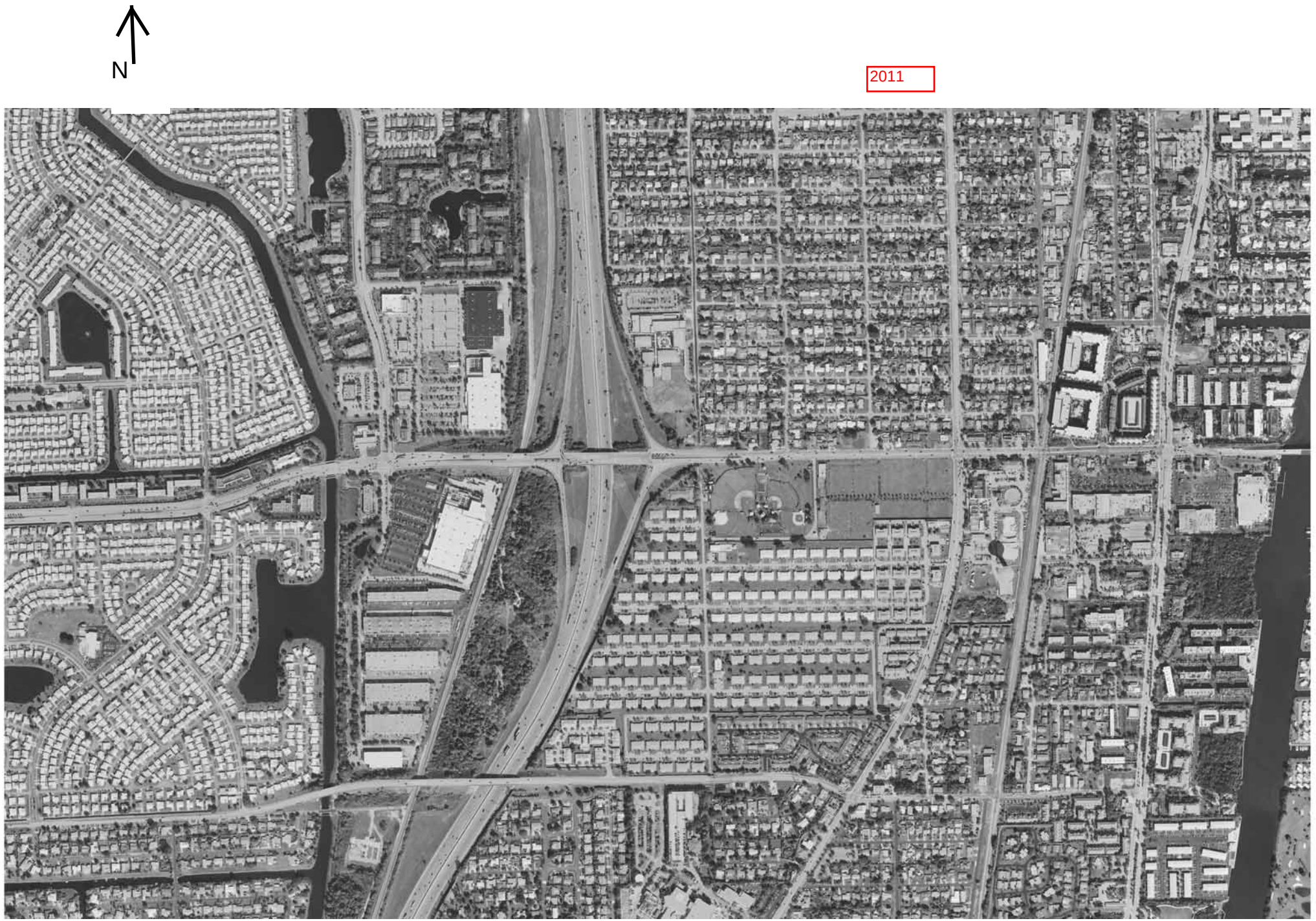
1975




N
1986


N
1991


N
2006


N
2011

N

2015

N

2019

# Appendix D

ASBESTOS SURVEY REPORTS FOR BRIDGE NO. 930301 AND 930300

# ASBESTOS SURVEY REPORT

# Eastbound/Westbound Woolbright Road
# Over CSX Railroad
# Bridge No. 930300 (MP 0.992)
# Palm Beach County, Florida

## GLE Project No.: 11000-11072

## Financial Project No.: 416525-2

**Prepared for:**

## Florida Department of Transportation
## District IV
## 3400 West Commercial Boulevard
## Fort Lauderdale, Florida 33309-3421

## February 2011

GLE

1000 NW 65th Street
Suite 100
Ft. Lauderdale, Florida 33309
954-968-6414 • Fax 954-968-6090

# ASBESTOS SURVEY TITLE SHEET

**Bridge Number**: 930300

**MP**: 0.992

**Location**: Eastbound/Westbound Woolbright Road over CSX Railroad

**County**: Palm Beach

**FPN Number**: 416525-2

**Owner Agency**: Florida Department of Transportation, District IV

**Date of Survey**: January 31, 2011

**Consultant**: GLE Associates, Inc.

**Consultant Address**: 1000 NW 65th Street, Suite 100

**City, State, Zip**: Ft. Lauderdale, FL 33309

**Phone**: (954) 968-6414

Emory D. Dare
Environmental Scientist

Robert B. Greene, PE, PG, CIH
Licensed Asbestos Consultant, EA 0000009

February 28, 2011

Mr. Kaled Essraowi
HCR, LLC
430 South Congress Ave., Suite 1D
Delray Beach, Florida 33445

**RE: Asbestos Survey – Final Report**
**Eastbound/Westbound Woolbright Road over CSX Railroad**
**Bridge No. 930300 (MP 0.992)**
**Palm Beach County, Florida**

Financial Project No.: 416525-2
GLE Project No.: 11000-11072

Dear Mr. Essraowi:

GLE Associates, Inc. (GLE) performed a survey for asbestos-containing materials (ACM) on January 31, 2011, at the eastbound/westbound Woolbright Road Bridge (No. 930300) (MP 0.992) over the CSX Railroad in Palm Beach County, Florida. The survey was performed by Mr. Emory Dare and Mr. Brandon Christensen of GLE. This report outlines the sampling and testing procedures, and presents the results along with our conclusions and recommendations.

GLE appreciates the opportunity to serve as your consultant on this project. If you should have any questions or if we can be of further service, please do not hesitate to call.

Sincerely,
**GLE Associates, Inc.**

Emory D. Dare
Environmental Scientist

Robert B. Greene, PE, PG, CIH
Asbestos Consultant, EA-0000009

EDD/MBC/RBG/hjg

D:\Work\ASB\11000\11072 Handex ACM-LBP 11 FDOT Bridges\930300\REPORT\Bridge 930300 Report.doc

# TABLE OF CONTENTS

# 1.0 EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

The purpose of this survey was to identify accessible asbestos-containing materials (ACM) and their locations associated with the eastbound/westbound Woolbright Road Bridge No. 930300 (MP 0.992) over the CSX Railroad in Palm Beach County, Florida. The survey was conducted pursuant to NESHAP (National Emission Standards for Hazardous Air Pollutants) requirements associated with the scheduled renovation plans. The survey was performed on January 31, 2011, by Mr. Emory Dare and Mr. Brandon Christensen of GLE, EPA/AHERA (Environmental Protection Agency/Asbestos Hazard Emergency Response Act) accredited asbestos inspectors. Personnel Certifications are provided in **Appendix A**. The scope of this survey did not include evaluation of architectural plans, the quantification of materials for abatement purposes, or removal cost estimating.

## 1.2 STRUCTURAL DESCRIPTION

The bridge is constructed of poured-in-place reinforced concrete and multi-beam structures with two supporting slope abutments. Substructure is provided by two pre-stressed concrete intermediate bent frames. According to the Bridge Inspection Report File Review provided by Handex following a review of the FDOT files for the subject bridge, bridge components include neoprene bearing assemblies, associated with the end and intermediate bent caps. The bridge overlies/intersects the CSX Railroad and accommodates lanes of traffic traveling in the eastbound/westbound direction of Woolbright Road in Palm Beach County, Florida.

# 2.0 PROCEDURES

## 2.1 ASBESTOS SURVEY PROCEDURES

The survey was performed by visually observing accessible areas of the bridge. EPA/AHERA accredited asbestos inspectors performed the visual observations.

After the overall visual survey was completed, representative sampling areas were determined. The surveyors delineated homogeneous areas of suspect materials and samples of each material were obtained in general compliance with OSHA (Occupational Safety and Health Act) and NESHAP regulations. The field surveyors determined sample locations based on previous experience. Both friable and non-friable materials were sampled. A friable material is one that can be crushed when dry by normal hand pressure. This survey did not include the demolition of bridge components.

After completion of the fieldwork, the samples were delivered to GLE's in-house laboratory, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory, for analysis. Laboratory Certifications are included in **Appendix A**. The samples were analyzed by Polarized Light Microscopy (PLM) coupled with dispersion staining in general accordance with

EPA 600/R-93/116. Utilizing this procedure, the various asbestos minerals (chrysotile, amosite, crocidolite, actinolite, tremolite, and anthophyllite) can be determined. The percentages of asbestos minerals in the samples were visually determined by the microscopist. Please note that the EPA designates all materials containing greater than 1% asbestos as an "asbestos-containing material".

The information provided is derived from file review of the FDOT's Bridge Inspection Reports, and review of available proposed and historical bridge construction and renovation plans. Bridge inspections are performed by the FDOT on an annual or biannual basis, and define the existing conditions of each individual bridge and bridge components and indicate any maintenance or renovation performed on the bridge structure. A copy of the bridge inspection report file review is provided in **Appendix B**.

# 3.0 RESULTS

## 3.1 SUSPECT ASBESTOS-CONTAINING MATERIALS

A total of 54 samples of suspect asbestos-containing materials were collected from the bridge during the survey representing 12 different homogeneous areas. Those suspect asbestos-containing materials that were present and accessible for sampling are listed in the following table:

| Homogeneous Area Number | Homogeneous Area Description – Location |
|---|---|
| M-01 | Black Neoprene Bearing Pad – End Bent Backwall |
| M-02 | Class 5 Finish – End Bent Backwall |
| M-03 | Rip Rap Bag – Slope |
| M-04 | Rip Rap Mortar – Slope |
| M-05 | Class 5 Finish – Beam Span |
| M-06 | Class 5 Finish – Parapet Wall |
| M-07 | Black Particle Board – Backwall |
| M-08 | Tan Reflector Adhesive – Guardrail |
| M-09 | Gray Expansion Joint Sealant – Deck and Sidewalk |
| M-10 | Concrete – Deck |
| M-11 | Black Bitumen Reflector Adhesive – Deck |
| M-12 | Black Bitumen Sealant – Sidewalk at Parapet Wall |

The results of the laboratory analysis and chain of custody are included in **Appendix C**. For further documentation, photographs of the various materials sampled are included in **Appendix D**. The sample locations are indicated on the enclosed Sample Location Diagram in **Appendix E**.

# 4.0 CONCLUSIONS AND RECOMMENDATIONS

## 4.1 GENERAL

**None of the materials sampled by GLE during the survey were defined as "asbestos-containing materials" (ACM).**

United States Code, Title 15 Commerce and Trade, Chapter 53 Toxic Substances Control, Section 2642 Definitions and 40 CFR 763 define an "asbestos-containing material" as any material containing greater than 1% asbestos.

Additionally, in accordance with U.S. EPA regulation 40 CFR 61, Asbestos NESHAP, if an analysis by PLM indicates that no asbestos is detected in any samples that are representative of the material being evaluated; or analysis by "point counting" indicates that 1% or less asbestos is detected in all of the representative samples, then the material being evaluated is **not** classified as an "asbestos-containing material". **Note, results obtained by "point counting" are considered the definitive analytical result.**

# 5.0 LIMITATIONS AND CONDITIONS

Because of the hidden nature of many bridge components it may be impossible to determine if all of the suspect bridge materials have been located and subsequently tested. Destructive testing in some instances is not a viable option. We cannot, therefore, guarantee that all potential ACM has been located. For the same reasons, estimates of quantities and/or conditions are subject to readily apparent situations, and our findings reflect this condition. We do warrant, however, that the investigations and methodology reflect the prevailing standard of care in the environmental industry.

The intermediate bents (which include various bearing materials and assemblies) were inaccessible due to their height. GLE was unable to access the underside of the bridge with a boom lift due to the configuration of the slope adjacent to the bridge and the configuration of the railroad, see cover photo **Appendix D-1**. Information provided by the Florida Department of Transportation (FDOT) indicates that end bents/intermediate bents on the bridge are manufactured using the same construction methods and from like materials and constitute a homogeneous group. According to the Bridge Inspection Report File Review provided by Handex following a review of the FDOT files for the subject bridge, approximately 76 neoprene bearing pads are present, associated with the end and intermediate bent caps.

Any materials found during construction activities not addressed in this survey report should be assumed to be ACM until sampling and analysis documents otherwise.

The information contained in this report was prepared based upon specific parameters and regulations in force at the time of this report. The information herein is only for the specific use of Florida Department of Transportation and GLE. GLE accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, unless prior written authorization has been obtained from GLE.

# APPENDIX A
# Personnel and Laboratory Certifications

# Asbestos Consulting & Training Systems

38938.7038CERT/BIR

900 N.W. 5TH Avenue, Fort Lauderdale, Florida 33311 (954) 524-7208

## *This is to Certify that*

# Brandon Christensen

XXX-XX-4647

9110-D SW 20th St. , Davie,FL

## *has successfully completed an English*

## Asbestos Building Inspection Refresher

6-Aug-10 TO 6-Aug-10

Individual above has completed the requsite training for accreditation under TSCA Title II

Meets state requirements of 326 IAC (IDEM) and FL49-0001020/CN-0006273.

NDAAC Provider #451 Trainer(s): James F. Stump

TEST SCORE: 82 % Training Address: 900 Northwest Fifth Ave., Fort Lauderdale, Fl 33311

Successful course completion based on exam score on: 08/06/10

***This Certificate Expires:***

**6-Aug-11** 08/06/11

Processed By:

Seagull

To Authenticate Certificate:

**www.seagulltraining.com**

**1-800-966-9933**

UNDER CIVIL AND CRIMINAL PENALTIES OF LAW FOR MAKING OR SUBMISSION OF FALSE OR FRAUDULENT STATEMENTS OR REPRESENTATIONS (18 U.S.C. 1001 AND 15 U.S.C. 2615), I CERTIFY THAT THIS TRAINING COMPLIES WITH ALL APPLICABLE REQUIREMENTS OF TITLE II OF THE "TOXIC SUBSTANCES CONTROL ACT", 40 CFR PART 763 OR 763 SUBPART E, OTHER APPLICABLE FEDERAL, STATE OR LOCAL REQUIREMENTS, AS AMENDED.

**James F. Stump, Course Sponsor**

**Certificate Number.....** 143806

**Course Number SE1031**



LITHO. IN U.S.A.

# Asbestos Consulting & Training Systems

38811.4673CERT/BIR

900 N.W. 5TH Avenue, Fort Lauderdale, Florida 33311 (954) 524-7208

## This is to Certify that

## Emory Dare

XXX-XX-6313

4020 SW 152nd Ave. , Miramar,FL

## has successfully completed an English

## Asbestos Building Inspection Refresher

26-Mar-10 TO 26-Mar-10

Individual above has completed the requsite training for accreditation under TSCA Title II

Meets state requirements of 326 IAC (IDEM) and FL49-0001020/CN-0006273.

NDAAC Provider #451 Trainer(s): Mark Knick

TEST SCORE: 84 % Training Address: 900 NW 5th Ave, Fort Lauderdale, FL 33311

Successful course completion based on exam score on: 03/26/10

**This Certificate Expires:**

**26-Mar-11** 03/26/11

Processed By:

Seagull

To Authenticate Certificate:

www.seagulltraining.com

1-800-966-9933

UNDER CIVIL AND CRIMINAL PENALTIES OF LAW FOR MAKING OR SUBMISSION OF FALSE OR FRAUDULENT STATEMENTS OR REPRESENTATIONS (18 U.S.C. 1001 AND 15 U.S.C. 2615), I CERTIFY THAT THIS TRAINING COMPLIES WITH ALL APPLICABLE REQUIREMENTS OF TITLE II OF THE "TOXIC SUBSTANCES CONTROL ACT", 40 CFR PART 763 OR [illegible] APPLICABLE FEDERAL, STATE OR LOCAL REQUIREMENTS, AS AMENDED.

James F. Stump, Course Sponsor

Certificate Number..... 138676

Course Number SE1012



LITHO. IN U.S.A.

# GLE Associates, Inc. FL 49-0001218

4300 W. Cypress Street ~ Suite 400 ~ Tampa, Florida 33607 ~ (813) 241-8350

certifies that

John Simmons

has completed the requisite training for

ASBESTOS MANAGEMENT PLANNER REFRESHER

accreditation under TSCA Title II Course No.: FL 49-0002825

conducted on

October 2, 2010

at

TAMPA, FLORIDA

Certificate Number

4770

Passed Exam: 88%

EPA Accreditation Expires: 10/2/2011

Instructor

GLE Associates, Inc.

Robert B. Greene

**STATE OF FLORIDA**

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

(850) 487-1395

GREENE, ROBERT BLAIR
GLE ASSOCIATES INC
4300 W CYPRESS STREET SUITE 400
TAMPA FL 33607

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto **www.myfloridalicense.com**. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!

STATE OF FLORIDA AC# 5348917
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

EA0000009 11/19/10 108130228

ASBESTOS CONSULTANT - ENGINEER
GREENE, ROBERT BLAIR
GLE ASSOCIATES INC

IS LICENSED under the provisions of Ch.469 FS.
Expiration date: NOV 30, 2012 L10111901357

DETACH HERE

AC# 5348917

**STATE OF FLORIDA**

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT

SEQ# L10111901357

| DATE | BATCH NUMBER | LICENSE NBR |
|---|---|---|
| 11/19/2010 | 108130228 | EA0000009 |

The ASBESTOS CONSULTANT - ENGINEER
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2012

GREENE, ROBERT BLAIR
GLE ASSOCIATES INC
3109 W DR MARTIN LUTHER KING JR BLV
SUITE 550
TAMPA FL 33607

CHARLIE CRIST
GOVERNOR

CHARLIE LIEM
SECRETARY

DISPLAY AS REQUIRED BY LAW

United States Department of Commerce
National Institute of Standards and Technology

# Certificate of Accreditation to ISO/IEC 17025:2005

**NVLAP LAB CODE: 102003-0**

## GLE Associates, Inc.

Tampa, FL

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:*

## BULK ASBESTOS FIBER ANALYSIS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2010-04-01 through 2011-03-31

*Effective dates*

Sally S. Bruce

*For the National Institute of Standards and Technology*

# APPENDIX B
# Bridge Inspection Report File Review

**BRIDGE INSPECTION REPORT FILE REVIEW**

Project FID/FM: 416525-2

Production Date: Design Build

Project Manager: Yanique Hopkins

Letting Date: 4-13-11

County: Palm Beach

State Road:

FACILITY CARRIED: Wolbright Road

FACILITY INTERSECTED: C.S.X. R/R

BRIDGE NUMBER: 930300 MILE POINT: 0.992 YEAR BUILT: 1975

**END BENT DESCRIPTION** Poured-in-place reinforced concrete, multi-beam

PILE TYPE / CONSTRUCTION: 18" Prestressed concrete.

CAP / COLUMN DESCRIPTION: 1 & 4 each w/20 piles

**INTERMEDIATE BENT DESCRIPTION**

PILE TYPE / CONSTRUCTION: 2 and 3 each w/ (16) piles

CAP / COLUMN DESCRIPTION: (4) poured-in-place reinforced concrete.

**BEARING PADS DESCRIPTION**

MATERIALS / CONSTRUCTION: Neoprene bearing assemblies.

ADDITIONAL: 76 bearings

ADDITIONAL NOTES:

no ~~caps~~. columns.

38 beams -

Conducted By: Melissa Ellison Date: 1/28/14

Representing: HCA

# APPENDIX C
# Analytical Results and Chain of Custody

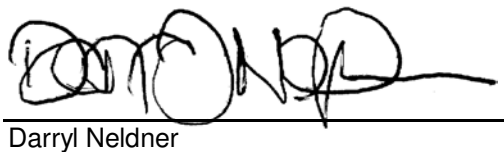
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930300

11000-11072

| Sample | Sample Type | Fiber Type | |
|---|---|---|---|
| M-01A | Black Neoprene Bearing Pad | 100% | Polymer |
| M-01B | Black Neoprene Bearing Pad | 100% | Polymer |
| M-01C-QC | Black Neoprene Bearing Pad | 100% | Polymer |
| M-01D | Black Neoprene Bearing Pad | 100% | Polymer |
| M-01E | Black Neoprene Bearing Pad | 100% | Polymer |
| M-01F | Black Neoprene Bearing Pad | 100% | Polymer |
| M-02A | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02B | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02C | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02D | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02E | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02F | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-03A-QC | Rip Rap Bag | 100% | Quartz, Calcite, Clay, Mica |
| M-03B | Rip Rap Bag | 100% | Quartz, Calcite, Clay, Mica |
| M-03C | Rip Rap Bag | 100% | Quartz, Calcite, Clay, Mica |

Analyst / Approved Signatory:



Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA-600 and EPA 40 CFR 763.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.
The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
(>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.



Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

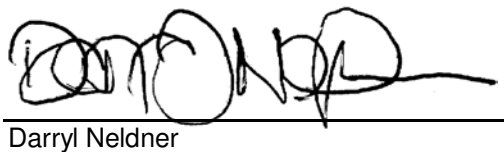
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930300

11000-11072

| Sample | Sample Type | Fiber Type | |
|---|---|---|---|
| M-03D | Rip Rap Bag | 100% | Quartz, Calcite, Clay, Mica |
| M-03E | Rip Rap Bag | 100% | Quartz, Calcite, Clay, Mica |
| M-03F | Rip Rap Bag | 100% | Quartz, Calcite, Clay, Mica |
| M-04A | Rip Rap Mortar | 100% | Quartz, Calcite, Clay, Mica |
| M-04B | Rip Rap Mortar | 100% | Quartz, Calcite, Clay, Mica |
| M-04C | Rip Rap Mortar | 100% | Quartz, Calcite, Clay, Mica |
| M-04D | Rip Rap Mortar | 100% | Quartz, Calcite, Clay, Mica |
| M-04E-QC | Rip Rap Mortar | 100% | Quartz, Calcite, Clay, Mica |
| M-04F | Rip Rap Mortar | 100% | Quartz, Calcite, Clay, Mica |
| M-05A | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-05B | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-05C | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-05D | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-05E | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-05F | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-06A | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-06B | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |

Analyst / Approved Signatory:



Darryl Neldner

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** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.
The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
(>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.

*** This report shall not be reproduced except in full, without the written approval of the laboratory. GLE Report # 13720

Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

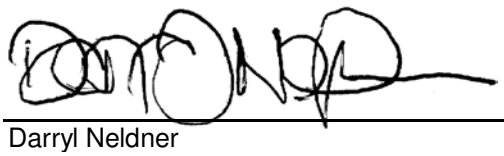
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930300

11000-11072

| Sample | Sample Type | Fiber Type | |
|---|---|---|---|
| M-06C-QC | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-06D | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-06E | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-06F | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-07A | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-07B | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-07C | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-08A | Tan Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-08B | Tan Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-08C | Tan Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-09A-QC | Grey Expansion Joint Sealant | 100% | Polymer |
| M-09B | Grey Expansion Joint Sealant | 100% | Polymer |
| M-09C | Grey Expansion Joint Sealant | 100% | Polymer |
| M-10A | Concrete | 100% | Quartz, Calcite, Clay, Mica |

Analyst / Approved Signatory:



Darryl Neldner

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** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.
The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
(>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.



Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

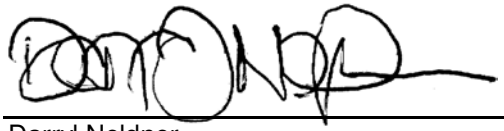
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930300

11000-11072

| Sample | Sample Type | Fiber Type | |
|---|---|---|---|
| M-10B | Concrete | 100% | Quartz, Calcite, Clay, Mica |
| M-10C | Concrete | 100% | Quartz, Calcite, Clay, Mica |
| M-11A | Black Bitumen Reflector Adhesive | 100% | Bitumen |
| M-11B | Black Bitumen Reflector Adhesive | 100% | Bitumen |
| M-11C | Black Bitumen Reflector Adhesive | 100% | Bitumen |
| M-12A | Black Bitumen Sealant | 100% | Bitumen |
| M-12B-QC | Black Bitumen Sealant | 100% | Bitumen |
| M-12C | Black Bitumen Sealant | 100% | Bitumen |

Analyst / Approved Signatory:



Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA-600 and EPA 40 CFR 763.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.



Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

**CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM**

GLE Associates, Inc.
3109 W. Martin Luther King Jr. Blvd, Suite 550
Tampa, FL 33607
Tel. (813) 241-8350 FAX (813) 241-8737

**CLIENT:** Handex
**PROJECT #:** 11000-11072
**PROJECT:** Bridge 930300
**LABORATORY SENT TO:** GLE
**DATE:** 01/31/2011

LAB 13220

**SAMPLE INFORMATION**

| SAMPLE # | DESCRIPTION/ LOCATION | SAMPLE # | DESCRIPTION/ LOCATION |
|---|---|---|---|
| M-01 A-F | Black Neoprene Bearing Pad – End Bent Backwall | M-10 A-C | Concrete – Deck |
| M-02 A-F | Class 5 Finish – End Bent Backwall | M-11 A-C | Black Bitumen Reflector Adhesive – Deck |
| M-03 A-F | Rip Rap Bag – Slope | M-12 A-C | Black Bitumen Sealant – Sidewalk at Parapet Wall |
| M-04 A-F | Rip Rap Mortar – Slope | | |
| M-05 A-F | Class 5 Finish – Beam Span | | |
| M-06 A-F | Class 5 Finish – Parapet Wall | | |
| M-07 A-C | Black Particle Board – Backwall | | |
| M-08 A-C | Tan Reflector Adhesive – Guardrail | | |
| M-09 A-C | Grey Expansion Joint Sealant – Deck and Sidewalk | | |

| | |
|---|---|
| **IMPORTANT TOTAL NUMBER OF SAMPLES SUBMITTED:** | **54** |
| **IMPORTANT POSITIVE STOP ANALYSIS:** | No |
| **IMPORTANT CODE TYPE (PLM; PLM1; PLM 2; ETC.):** | PLM9 |
| **IMPORTANT E-MAIL RESULTS TO:** | Rafe Padgett/Emory Dare |

**SAMPLE INSTRUCTIONS**

TO BE ANALYZED FOR ASBESTOS CONTENT BY POLARIZED LIGHT MICROSCOPY WITH DISPERSION STAINING

TURNAROUND TIME DEADLINE

→ → RETURN SAMPLES TO GLE ASSOCIATES USE TRANSMITTAL

**02/04/11 / 12:00pm** **SAMPLE ANALYSIS DEADLINE**
**date / time**

**REPORT RESULTS TO THE ADDRESS ABOVE**

| | |
|---|---|
| CHAIN OF CUSTODY: GLE ASSOCIATES, INC. | CHAIN OF CUSTODY: LABORATORY |
| PACKAGED BY: E. Dare | SAMPLES RECEIVED BY: |
| DATE PACKAGED: 01/31/2011 | DATE: |
| METHOD OF TRANSMITTAL: FedEx | TIME: |
| TRANSMITTED BY: L. Strachan | CONDITION OF PACKAGED SAMPLES: |

| CHAIN OF CUSTODY: RETURNED TO GLE ASSOCIATES, INC. | |
|---|---|
| RECEIVED BY: | DATE: |
| INVENTORIED BY: | DATE: |
| REPACKAGED AND SEALED BY: | DATE: |



D:\Work\ASB\11000\11072 Handex ACM-LBP 11 FDOT Bridges\860431\COC 860431.doc

# APPENDIX D
# Photographic Documentation


Upper Photo:
Bridge No. 930300

Lower Photo:
Bridge No. 930300 Side View

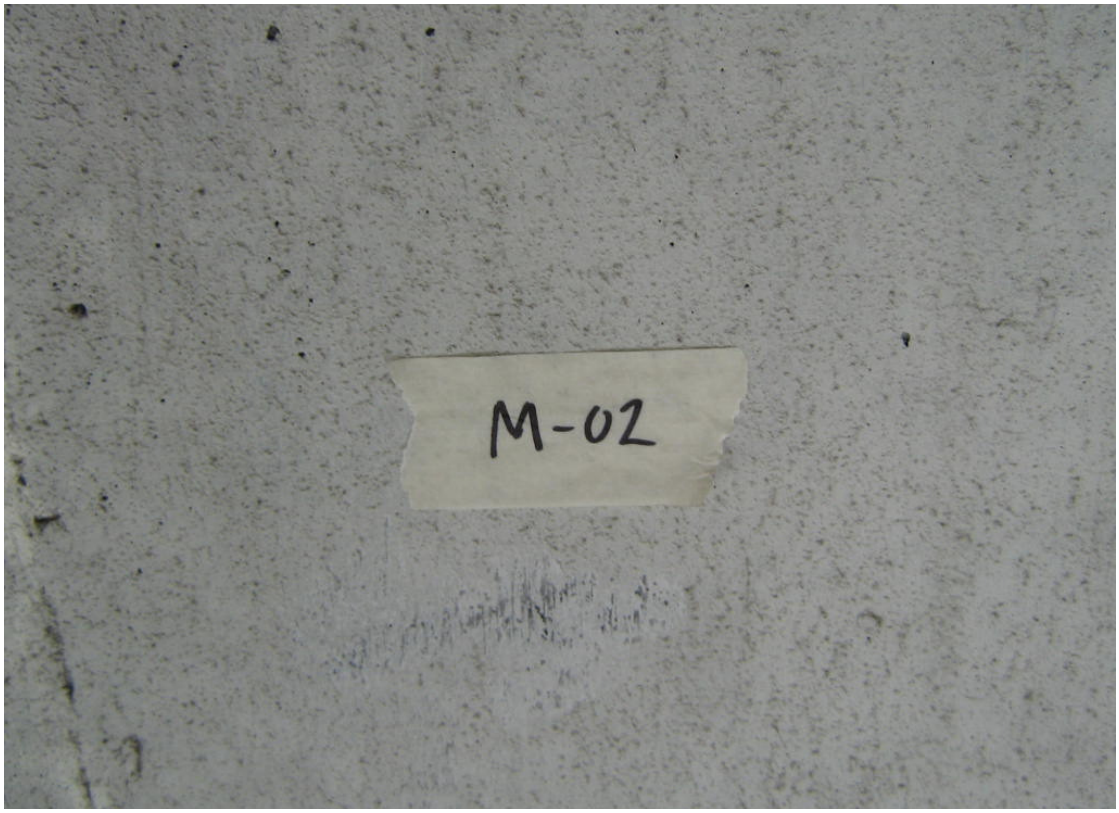
Photograph Date:
January 31, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930300
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-1 |
| Date | |
| 2/1/2011 | |


Upper Photo:
Black Neoprene Bearing Pad- End Bent Backwall

Lower Photo:
Class 5 Finish- End Bent Backwall

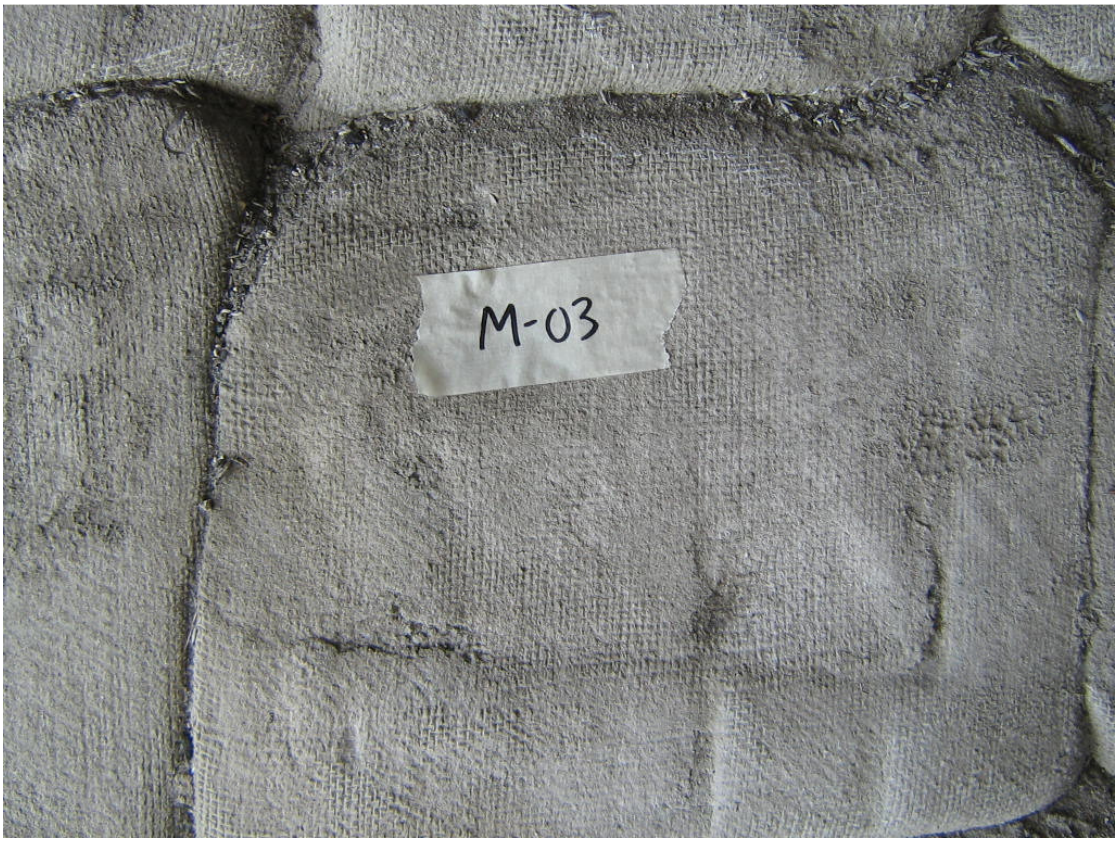
Photograph Date:
January 31, 2010

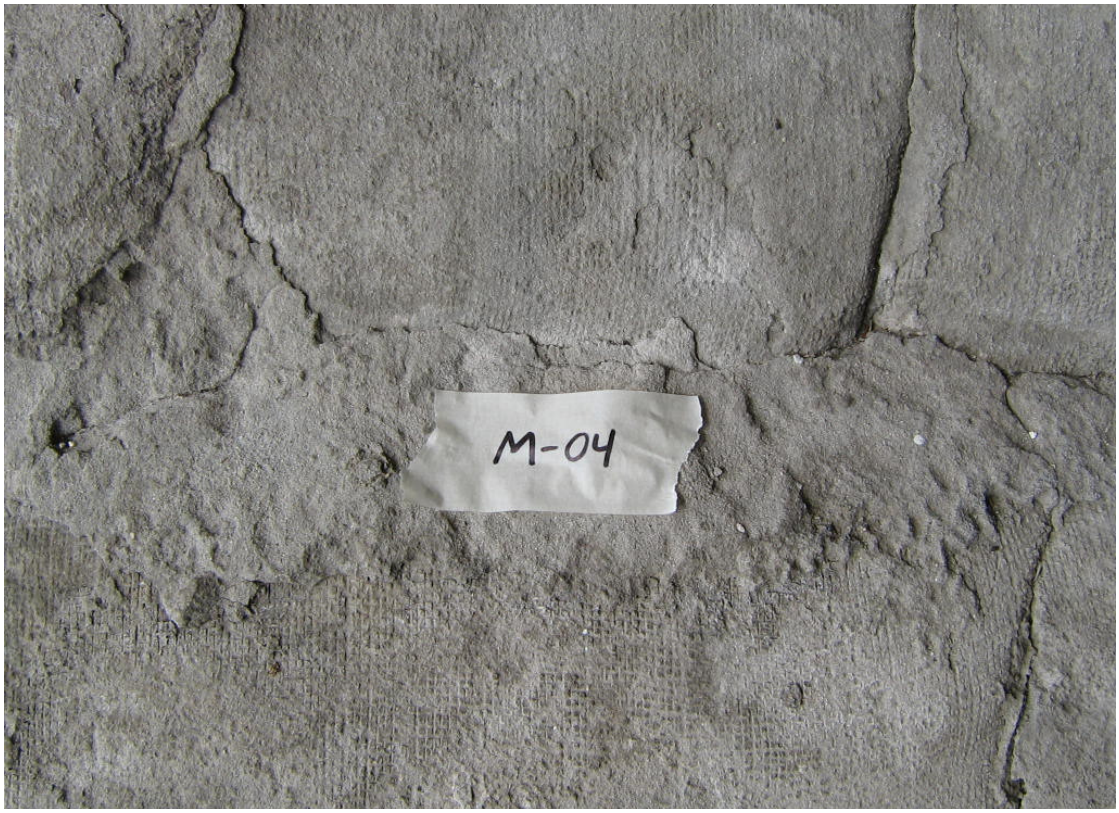
Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930300
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-2 |
| Date | |
| 2/1/2011 | |




Upper Photo:
Rip Rap Bag – Slope

Lower Photo:
Rip Rap Mortar – Slope

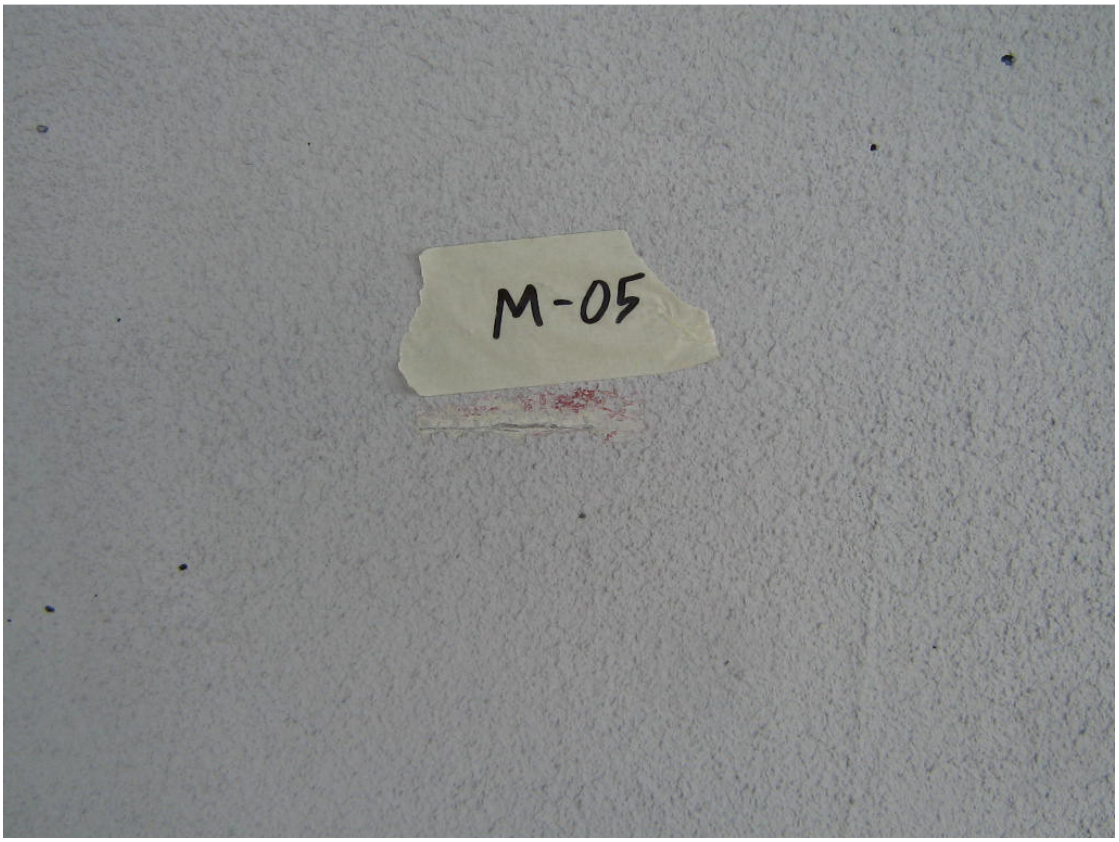
Photograph Date:
January 31, 2011

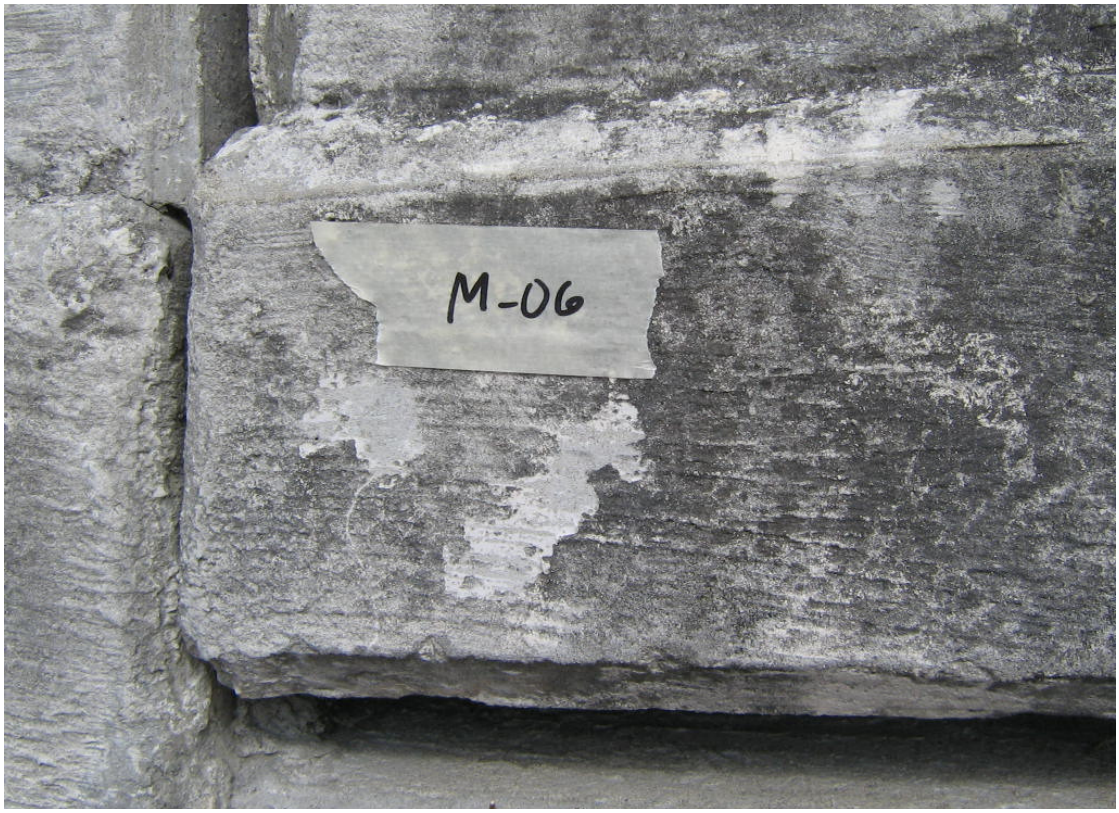
Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930300
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-3 |
| Date | |
| 2/1/2011 | |




Upper Photo:
Class 5 Finish - Beam Span

Lower Photo:
Class 5 Finish - Parapet Wall

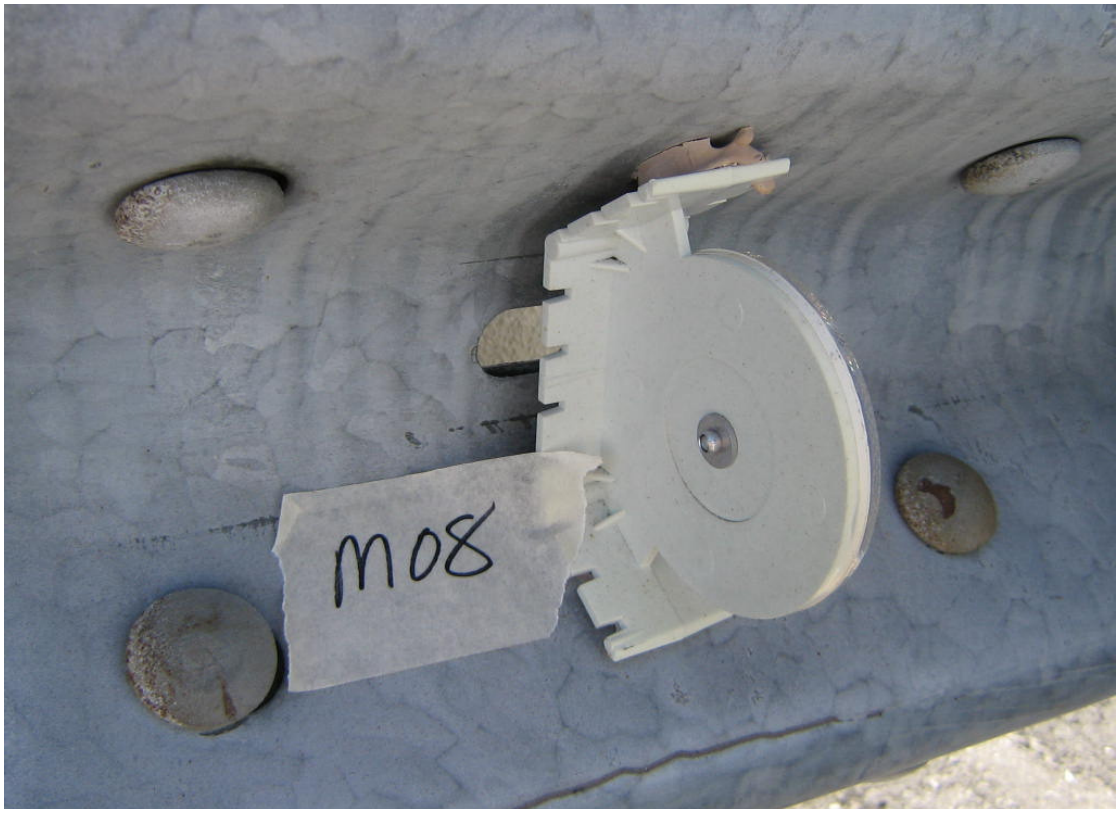
Photograph Date:
January 31, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930300
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-4 |
| Date | |
| 2/1/2011 | |


Upper Photo:
Black Particle Board - Backwall

Lower Photo:
Tan Reflector Adhesive - Guardrail

Photograph Date:
January 31, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930300
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-5 |
| Date | |
| 2/1/2011 | |



Upper Photo:
Grey Expansion Joint Sealant - Deck and Sidewalk

Lower Photo:
Concrete - Deck

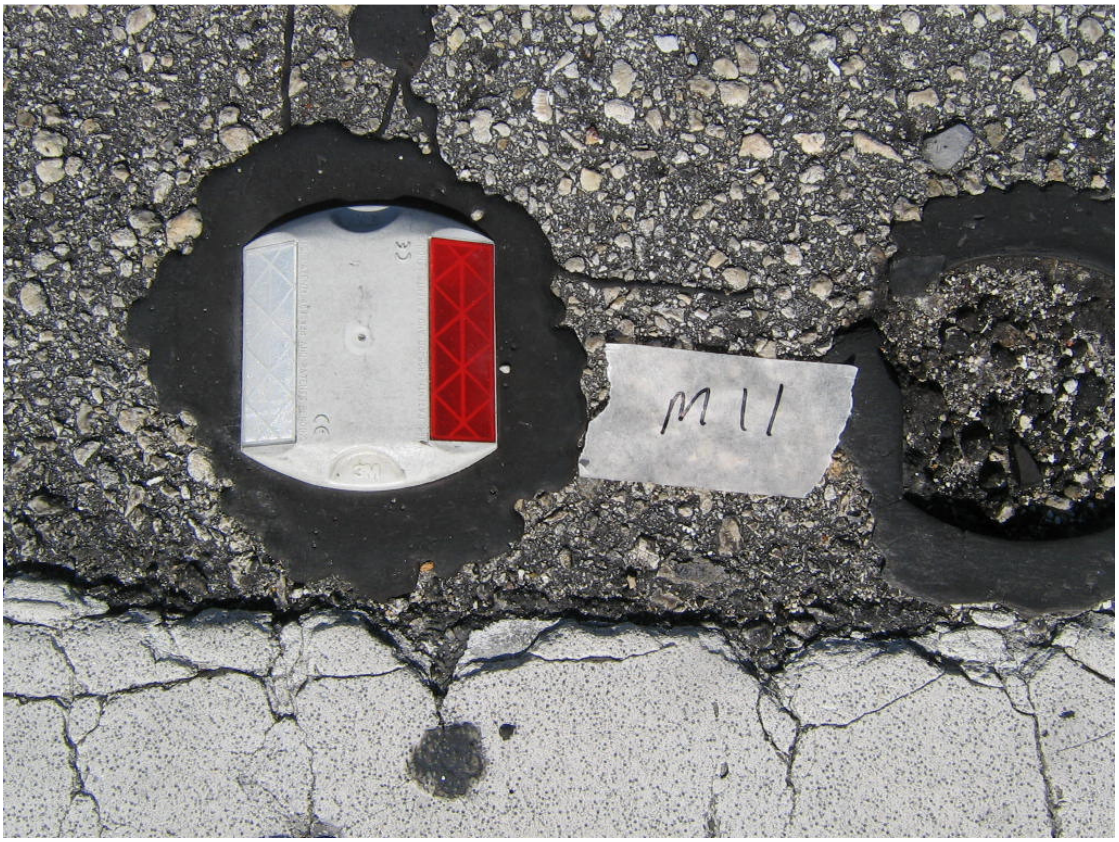
Photograph Date:
January 31, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930300
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-6 |
| Date | |
| 2/1/2011 | |





Upper Photo:
Black Bitumen Reflector Adhesive - Deck

Lower Photo:
Black Bitumen Sealant - Sidewalk at Parapet Wall

Photograph Date:
January 31, 2011

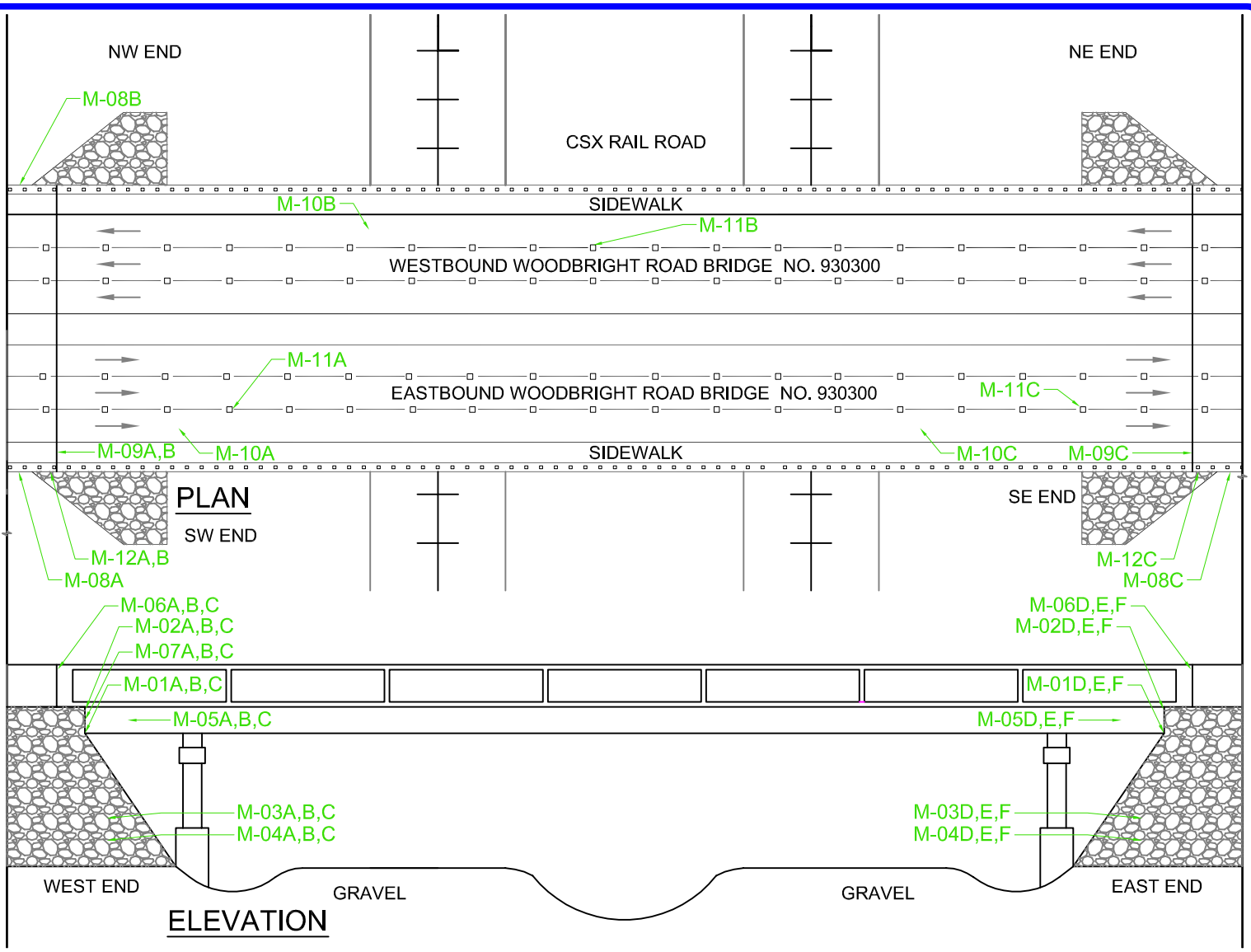
Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930300
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-7 |
| Date | |
| 2/1/2011 | |

# APPENDIX E
# Sample Location Diagram




| HOMOGENEOUS AREAS: | |
|---|---|
| M-01 | BLACK NEOPRENE BEARING PAD - END BENT BACKWALL |
| M-02 | CLASS 5 FINISH - END BENT - BACKWALL |
| M-03 | RIP RAP BAG - SLOPE |
| M-04 | RIP RAP MORTAR - SLOPE |
| M-05 | CLASS 5 FINISH - BEAM SPAN |
| M-06 | CLASS 5 FINISH - PARAPET WALL |
| M-07 | BLACK PARTICLE BOARD - BACKWALL |
| M-08 | TAN REFLECTOR ADHESIVE - GUARDRAIL |
| M-09 | GRAY EXPANSION JOINT SEAL - DECK AND SIDEWALK |
| M-10 | CONCRETE - DECK |
| M-11 | BLACK BITUMEN REFLECTOR ADHESIVE - DECK |
| M-12 | BLACK BITUMEN SEALANT - SIDEWALK AT PARAPET WALL |

## GENERAL NOTES:

THE NOTES AND LEGEND ASSOCIATED WITH THIS DRAWING ARE PROVIDED TO ASSIST THE REMEDIATION CONTRACTOR PERFORMING WORK AT THE STUDY SITE IN IDENTIFYING AREAS WHERE WORK WILL BE CONDUCTED. THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE CORRESPONDING ASBESTOS SURVEY REPORT.

| LEGEND |
|---|
| POSITIVE SAMPLE LOCATIONS INDICATE ASBESTOS CONTAINING MATERIAL. |
| NEGATIVE SAMPLE LOCATIONS INDICATE NON-ASBESTOS CONTAINING MATERIAL. |

N
W E
S

## SAMPLE LOCATION DIAGRAM

BRIDGE NO. 930300
EAST/WESTBOUND WOODBRIGHT ROAD
OVER CSX RAILROAD
PALM BEACH COUNTY, FLORIDA

Prepared for:
HANDEX CONSULTING & REMEDIATION, LLC
430 S. CONGRESS AVE., STE 1D
DELRAY BEACH, FL 33445

Prepared By: GLE ASSOCIATES, INC.
1000 N.W. 65TH STREET, SUITE 100
FT. LAUDERDALE, FL 33309
PH. (954) 968-6414 fAX. (954) 968-6090

GLE
Facilities and Environmental Consultants

| | |
|---|---|
| GLE CAD NO. | CAD/PROJ/11000/11072 |
| DRAWN: B. HAAS | JOB NO.: 11000-11072 |
| CHECKED: B. CHRISTENSEN | SHEET: E-1 |
| DATE: 02/10/11 | OF 1 SHEET(S) |

# ASBESTOS SURVEY REPORT

# Eastbound/Westbound Woolbright Road
# Over Interstate 95/State Road 9
# Bridge No. 930301 (MP 1.096)
# Palm Beach County, Florida

## GLE Project No.: 11000-11072

## Financial Project No.: 416525-2

**Prepared for:**

## Florida Department of Transportation
## District IV
## 3400 West Commercial Boulevard
## Fort Lauderdale, Florida 33309-3421

## February 2011

GLE

1000 NW 65th Street
Suite 100
Ft. Lauderdale, Florida 33309
954-968-6414 • Fax 954-968-6090

# ASBESTOS SURVEY TITLE SHEET

**Bridge Number**: 930301

**MP**: 1.096

**Location**: Eastbound/Westbound Woolbright Road over Interstate 95/State Road 9

**County**: Palm Beach

**FPN Number**: 416525-2

**Owner Agency**: Florida Department of Transportation, District IV

**Date of Survey**: February 1, 2011

**Consultant**: GLE Associates, Inc.

**Consultant Address**: 1000 NW 65th Street, Suite 100

**City, State, Zip**: Ft. Lauderdale, FL 33309

**Phone**: (954) 968-6414

Emory D. Dare
Environmental Scientist

Robert B. Greene, PE, PG, CIH
Licensed Asbestos Consultant, EA 0000009

February 28, 2011

Mr. Kaled Essraowi
HCR, LLC
430 South Congress Ave., Suite 1D
Delray Beach, Florida 33445

**RE: Asbestos Survey – Final Report**
**Eastbound/Westbound Woolbright Road over Interstate 95/State Road 9**
**Bridge No. 930301 (MP 1.096)**
**Palm Beach County, Florida**

Financial Project No.: 416525-2
GLE Project No.: 11000-11072

Dear Mr. Essraowi:

GLE Associates, Inc. (GLE) performed a survey for asbestos-containing materials (ACM) on February 1, 2011, at the eastbound/westbound Woolbright Road Bridge No. 930301 (MP 1.096) over I-95/SR9 in Palm Beach County, Florida. The survey was performed by Mr. Emory Dare and Mr. Brandon Christensen of GLE. This report outlines the sampling and testing procedures, and presents the results along with our conclusions and recommendations.

GLE appreciates the opportunity to serve as your consultant on this project. If you should have any questions or if we can be of further service, please do not hesitate to call.

Sincerely,
**GLE Associates, Inc.**

Emory D. Dare
Environmental Scientist

Robert B. Greene, PE, PG, CIH
Asbestos Consultant, EA-0000009

EDD/MBC/RBG/hjg

D:\Work\ASB\11000\11072 Handex ACM-LBP 11 FDOT Bridges\930301\REPORT\Bridge 930301 Report.doc

# TABLE OF CONTENTS

# 1.0 EXECUTIVE SUMMARY

## 1.1 INTRODUCTION

The purpose of this survey was to identify accessible asbestos-containing materials (ACM) and their locations associated with the eastbound/westbound Woolbright Road Bridge No. 930301 (MP 1.096) over I-95/SR9 in Palm Beach County, Florida. The survey was conducted pursuant to NESHAP (National Emission Standards for Hazardous Air Pollutants) requirements associated with the scheduled renovation plans. The survey was performed on February 1, 2011, by Mr. Emory Dare and Mr. Brandon Christensen of GLE, EPA/AHERA (Environmental Protection Agency/Asbestos Hazard Emergency Response Act) accredited asbestos inspectors. Personnel Certifications are provided in **Appendix A**. The scope of this survey did not include evaluation of architectural plans, the quantification of materials for abatement purposes, or removal cost estimating.

## 1.2 STRUCTURAL DESCRIPTION

The bridge is constructed of pre-stressed concrete and beam structures with two supporting slope abutments. Substructure is provided by three pre-stressed concrete intermediate bent frames. According to the Bridge Inspection Report File Review provided by Handex following a review of the FDOT files for the subject bridge, bridge components include composite neoprene bearing pads and steel plates, associated with the end and intermediate bent caps. The bridge overlies/intersects I-95/SR9 and accommodates lanes of traffic traveling in the eastbound/westbound direction of Woolbright Road in Palm Beach County, Florida.

# 2.0 PROCEDURES

## 2.1 ASBESTOS SURVEY PROCEDURES

The survey was performed by visually observing accessible areas of the bridge. EPA/AHERA accredited asbestos inspectors performed the visual observations.

After the overall visual survey was completed, representative sampling areas were determined. The surveyors delineated homogeneous areas of suspect materials and samples of each material were obtained in general compliance with OSHA (Occupational Safety and Health Act) and NESHAP regulations. The field surveyors determined sample locations based on previous experience. Both friable and non-friable materials were sampled. A friable material is one that can be crushed when dry by normal hand pressure. This survey did not include the demolition of bridge components.

After completion of the fieldwork, the samples were delivered to GLE's in-house laboratory, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory, for analysis. Laboratory Certifications are included in **Appendix A**. The samples were analyzed by Polarized Light Microscopy (PLM) coupled with dispersion staining in general accordance with

EPA 600/R-93/116. Utilizing this procedure, the various asbestos minerals (chrysotile, amosite, crocidolite, actinolite, tremolite, and anthophyllite) can be determined. The percentages of asbestos minerals in the samples were visually determined by the microscopist. Please note that the EPA designates all materials containing greater than 1% asbestos as an "asbestos-containing material".

The information provided is derived from file review of the FDOT's Bridge Inspection Reports, and review of available proposed and historical bridge construction and renovation plans. Bridge inspections are performed by the FDOT on an annual or biannual basis, and define the existing conditions of each individual bridge and bridge components and indicate any maintenance or renovation performed on the bridge structure. A copy of the bridge inspection report file review is provided in **Appendix B**.

# 3.0 RESULTS

## 3.1 SUSPECT ASBESTOS-CONTAINING MATERIALS

A total of 69 samples of suspect asbestos-containing materials were collected from the bridge during the survey representing 17 different homogeneous areas. Those suspect asbestos-containing materials that were present and accessible for sampling are listed in the following table:

| Homogeneous Area Number | Homogeneous Area Description – Location |
|---|---|
| M-01 | Class 5 Finish – End Bent Backwall |
| M-02 | Class 5 Finish – Beam Span |
| M-03 | Black Neoprene Bearing Pad – End Bent Backwall |
| M-04 | Class 5 Finish – Column |
| M-05 | Black Particle Board – End Bent Backwall |
| M-06 | Black Bitumen Sealant – Slope |
| M-07 | Class 5 Finish – Intermediate Cap |
| M-08 | Black Particle Board – Intermediate Cap |
| M-09 | Black Neoprene Bearing Pad – Intermediate Cap |
| M-10 | Class 5 Finish – Parapet Wall |
| M-11 | Beige Reflector Adhesive – Metal Guardrail |
| M-12 | Gray Reflector Adhesive – Metal Guardrail |
| M-13 | Concrete – Deck |
| M-14 | Gray Expansion Joint Seal – Deck |
| M-15 | Black Bitumen Sealant – Deck |
| M-16 | Black Bitumen Reflector Adhesive – Deck |
| M-17 | Gray Reflector Adhesive – Deck |

The results of the laboratory analysis and chain of custody are included in **Appendix C**. For further documentation, photographs of the various materials sampled are included in **Appendix D**. The sample locations are indicated on the enclosed Sample Location Diagram in **Appendix E**.

# 4.0 CONCLUSIONS AND RECOMMENDATIONS

## 4.1 GENERAL

**None of the materials sampled by GLE during the survey were defined as "asbestos-containing materials" (ACM).**

United States Code, Title 15 Commerce and Trade, Chapter 53 Toxic Substances Control, Section 2642 Definitions and 40 CFR 763 define an "asbestos-containing material" as any material containing greater than 1% asbestos.

Additionally, in accordance with U.S. EPA regulation 40 CFR 61, Asbestos NESHAP, if an analysis by PLM indicates that no asbestos is detected in any samples that are representative of the material being evaluated; or analysis by "point counting" indicates that 1% or less asbestos is detected in all of the representative samples, then the material being evaluated is **not** classified as an "asbestos-containing material". **Note, results obtained by "point counting" are considered the definitive analytical result.**

# 5.0 LIMITATIONS AND CONDITIONS

Because of the hidden nature of many bridge components it may be impossible to determine if all of the suspect bridge materials have been located and subsequently tested. Destructive testing in some instances is not a viable option. We cannot, therefore, guarantee that all potential ACM has been located. For the same reasons, estimates of quantities and/or conditions are subject to readily apparent situations, and our findings reflect this condition. We do warrant, however, that the investigations and methodology reflect the prevailing standard of care in the environmental industry.

Information provided by the Florida Department of Transportation (FDOT) indicates that end bents/intermediate bents on the bridge are manufactured using the same construction methods and from like materials and constitute a homogeneous group.

Any materials found during construction activities not addressed in this survey report should be assumed to be ACM until sampling and analysis documents otherwise.

The information contained in this report was prepared based upon specific parameters and regulations in force at the time of this report. The information herein is only for the specific use of Florida Department of Transportation and GLE. GLE accepts no responsibility for the use, interpretation, or reliance by other parties on the information contained herein, unless prior written authorization has been obtained from GLE.

# APPENDIX A
# Personnel and Laboratory Certifications

# Asbestos Consulting & Training Systems

38938.7038CERT/BIR

900 N.W. 5TH Avenue, Fort Lauderdale, Florida 33311 (954) 524-7208

## *This is to Certify that*

# Brandon Christensen

XXX-XX-4647

9110-D SW 20th St. , Davie,FL

## *has successfully completed an English*

## Asbestos Building Inspection Refresher

6-Aug-10 TO 6-Aug-10

Individual above has completed the requsite training for accreditation under TSCA Title II

Meets state requirements of 326 IAC (IDEM) and FL49-0001020/CN-0006273.

NDAAC Provider #451 Trainer(s): James F. Stump

TEST SCORE: 82 % Training Address: 900 Northwest Fifth Ave., Fort Lauderdale, Fl 33311

Successful course completion based on exam score on: 08/06/10

***This Certificate Expires:***

**6-Aug-11** 08/06/11

Processed By:

Seagull

To Authenticate Certificate:

**www.seagulltraining.com**

**1-800-966-9933**

UNDER CIVIL AND CRIMINAL PENALTIES OF LAW FOR MAKING OR SUBMISSION OF FALSE OR FRAUDULENT STATEMENTS OR REPRESENTATIONS (18 U.S.C. 1001 AND 15 U.S.C. 2615), I CERTIFY THAT THIS TRAINING COMPLIES WITH ALL APPLICABLE REQUIREMENTS OF TITLE II OF THE "TOXIC SUBSTANCES CONTROL ACT", 40 CFR PART 763 OR 763 SUBPART E, OTHER APPLICABLE FEDERAL, STATE OR LOCAL REQUIREMENTS, AS AMENDED.

**James F. Stump, Course Sponsor**

**Certificate Number.....** 143806

**Course Number SE1031**



LITHO. IN U.S.A.

# Asbestos Consulting & Training Systems

38811.4673CERT/BIR

900 N.W. 5TH Avenue, Fort Lauderdale, Florida 33311 (954) 524-7208

## This is to Certify that

## Emory Dare

XXX-XX-6313

4020 SW 152nd Ave. , Miramar,FL

## has successfully completed an English

## Asbestos Building Inspection Refresher

26-Mar-10 TO 26-Mar-10

Individual above has completed the requsite training for accreditation under TSCA Title II

Meets state requirements of 326 IAC (IDEM) and FL49-0001020/CN-0006273.

NDAAC Provider #451 Trainer(s): Mark Knick

TEST SCORE: 84 % Training Address: 900 NW 5th Ave, Fort Lauderdale, FL 33311

Successful course completion based on exam score on: 03/26/10

**This Certificate Expires:**

**26-Mar-11** 03/26/11

Processed By:

Seagull

To Authenticate Certificate:

www.seagulltraining.com

1-800-966-9933

UNDER CIVIL AND CRIMINAL PENALTIES OF LAW FOR MAKING OR SUBMISSION OF FALSE OR FRAUDULENT STATEMENTS OR REPRESENTATIONS (18 U.S.C. 1001 AND 15 U.S.C. 2615), I CERTIFY THAT THIS TRAINING COMPLIES WITH ALL APPLICABLE REQUIREMENTS OF TITLE II OF THE "TOXIC SUBSTANCES CONTROL ACT", 40 CFR PART 763 OR [illegible] APPLICABLE FEDERAL, STATE OR LOCAL REQUIREMENTS, AS AMENDED.

James F. Stump, Course Sponsor

Certificate Number..... 138676

Course Number SE1012



LITHO. IN U.S.A.

# GLE Associates, Inc. FL 49-0001218

4300 W. Cypress Street ~ Suite 400 ~ Tampa, Florida 33607 ~ (813) 241-8350

certifies that

John Simmons

has completed the requisite training for

ASBESTOS MANAGEMENT PLANNER REFRESHER

accreditation under TSCA Title II Course No.: FL 49-0002825

conducted on

October 2, 2010

at

TAMPA, FLORIDA

Certificate Number

4770

Passed Exam: 88%

EPA Accreditation Expires: 10/2/2011

Instructor

GLE Associates, Inc.

Robert B. Greene

**STATE OF FLORIDA**

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

ASBESTOS LICENSING UNIT
1940 NORTH MONROE STREET
TALLAHASSEE FL 32399-0783

(850) 487-1395

GREENE, ROBERT BLAIR
GLE ASSOCIATES INC
4300 W CYPRESS STREET SUITE 400
TAMPA FL 33607

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto **www.myfloridalicense.com**. There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!

STATE OF FLORIDA AC# 5348917
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

EA0000009 11/19/10 108130228

ASBESTOS CONSULTANT - ENGINEER
GREENE, ROBERT BLAIR
GLE ASSOCIATES INC

IS LICENSED under the provisions of Ch.469 FS.
Expiration date: NOV 30, 2012 L10111901357

DETACH HERE

AC# 5348917

**STATE OF FLORIDA**

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
ASBESTOS LICENSING UNIT

SEQ# L10111901357

| DATE | BATCH NUMBER | LICENSE NBR |
|---|---|---|
| 11/19/2010 | 108130228 | EA0000009 |

The ASBESTOS CONSULTANT - ENGINEER
Named below IS LICENSED
Under the provisions of Chapter 469 FS.
Expiration date: NOV 30, 2012

GREENE, ROBERT BLAIR
GLE ASSOCIATES INC
3109 W DR MARTIN LUTHER KING JR BLV
SUITE 550
TAMPA FL 33607

CHARLIE CRIST
GOVERNOR

CHARLIE LIEM
SECRETARY

DISPLAY AS REQUIRED BY LAW

United States Department of Commerce
National Institute of Standards and Technology

# Certificate of Accreditation to ISO/IEC 17025:2005

**NVLAP LAB CODE: 102003-0**

## GLE Associates, Inc.

Tampa, FL

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:*

## BULK ASBESTOS FIBER ANALYSIS

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

2010-04-01 through 2011-03-31

*Effective dates*

Sally S. Bruce

*For the National Institute of Standards and Technology*

# APPENDIX B
# Bridge Inspection Report File Review

**BRIDGE INSPECTION REPORT FILE REVIEW**

Project FID/FM: 416525-2

Production Date: Design Build

Project Manager: Yanique Hopkins

Letting Date: 4-13-11 LAP letting Bid openings.

County: Palm Beach

State Road: Various

FACILITY CARRIED: Woolbright Rd.

FACILITY INTERSECTED: I-95

BRIDGE NUMBER: 930301 MILE POINT 1.096 YEAR BUILT 1975

**END BENT DESCRIPTION** Prestressed piles & beams.

PILE TYPE / CONSTRUCTION: 18" prestressed

CAP / COLUMN DESCRIPTION: 124 piles. 18 piles each

**INTERMEDIATE BENT DESCRIPTION**

PILE TYPE / CONSTRUCTION: Piers 2 & 4 @ (28) piles each Pier 3 @ 32 piles

CAP / COLUMN DESCRIPTION: All are 3' in diameter & various heights 3 pier caps (2) end bent caps.

**BEARING PADS DESCRIPTION**

MATERIALS / CONSTRUCTION: Composite Neoprene & Steel plates.

ADDITIONAL: 80 bearings.

ADDITIONAL NOTES:

3 piers type multi-column open Bent types. Type II & IV prestressed 40 beams. concrete.

Conducted By: Melanie Ewen Date: 1/28/11

Representing: HCA

# APPENDIX C
# Analytical Results and Chain of Custody

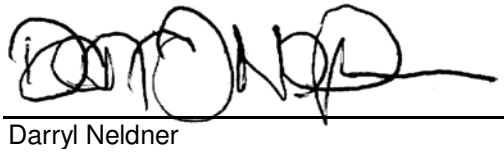
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930301

11000-11072

| Sample | Sample Type | Fiber Type | |
|---|---|---|---|
| M-01A | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-01B | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-01C-QC | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-01D | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-01E | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-01F | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02A | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02B | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02C | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02D | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02E | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-02F | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-03A-QC | Black Neoprene Bearing Pad | 100% | Polymer |
| M-03B | Black Neoprene Bearing Pad | 100% | Polymer |
| M-03C | Black Neoprene Bearing Pad | 100% | Polymer |

Analyst / Approved Signatory:



Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA-600 and EPA 40 CFR 763.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.
The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
(>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.



Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

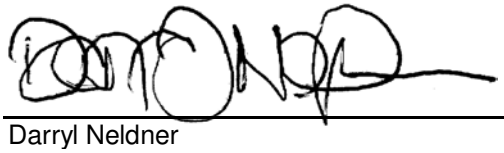
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930301

11000-11072

| Sample | Sample Type | Fiber Type | |
|---|---|---|---|
| M-03D | Black Neoprene Bearing Pad | 100% | Polymer |
| M-03E | Black Neoprene Bearing Pad | 100% | Polymer |
| M-03F | Black Neoprene Bearing Pad | 100% | Polymer |
| M-04A | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-04B | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-04C | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-05A | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-05B-QC | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-05C | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-05D | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-05E | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-05F | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |

Analyst / Approved Signatory:



Darryl Neldner

* Polarized Light Microscopy coupled with dispersion is the technique used for identification in accordance with EPA-600 and EPA 40 CFR 763.

** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested.
The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.
(>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.



Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

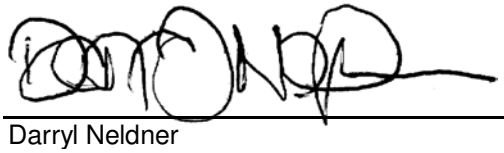
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930301

11000-11072

| Sample | Sample Type | Fiber Type | |
|---|---|---|---|
| M-06A | Black Bitumen Sealant | 100% | Bitumen |
| M-06B | Black Bitumen Sealant | 100% | Bitumen |
| M-06C | Black Bitumen Sealant | 100% | Bitumen |
| M-06D | Black Bitumen Sealant | 100% | Bitumen |
| M-06E | Black Bitumen Sealant | 100% | Bitumen |
| M-06F-QC | Black Bitumen Sealant | 100% | Bitumen |
| M-07A | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-07B | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-07C | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-08A | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-08B | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-08C | Black Particle Board | 90%<br>10% | Cellulose/paper<br>Bitumen |
| M-09A | Black Neoprene Bearing Pad | 100% | Polymer |
| M-09B | Black Neoprene Bearing Pad | 100% | Polymer |

Analyst / Approved Signatory:



Darryl Neldner

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(>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.



Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

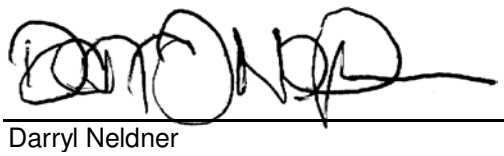
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930301

11000-11072

| Sample | Sample Type | | Fiber Type |
|---|---|---|---|
| M-09C | Black Neoprene Bearing Pad | 100% | Polymer |
| M-10A-QC | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-10B | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-10C | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-10D | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-10E | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-10F | Class 5 Finish | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-11A | Beige Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-11B | Beige Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-11C | Beige Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-12A | Gray Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-12B-QC | Gray Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-12C | Gray Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-13A | Concrete | 100% | Quartz, Calcite, Clay, Mica |
| M-13B | Concrete | 100% | Quartz, Calcite, Clay, Mica |
| M-13C | Concrete | 100% | Quartz, Calcite, Clay, Mica |

Analyst / Approved Signatory:



Darryl Neldner

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** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.



Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

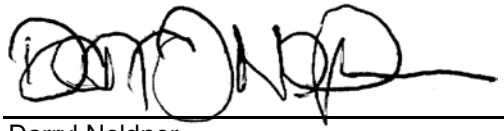
# SUMMARY OF BULK SAMPLE ANALYSIS

## Handex; Bridge 930301

11000-11072

| Sample | Sample Type | Fiber Type | |
|---|---|---|---|
| M-14A | Gray Expansion Joint Seal | 100% | Polymer |
| M-14B | Gray Expansion Joint Seal | 100% | Polymer |
| M-14C | Gray Expansion Joint Seal | 100% | Polymer |
| M-15A | Black Bitumen Sealant | 100% | Bitumen |
| M-15B | Black Bitumen Sealant | 100% | Bitumen |
| M-15C-QC | Black Bitumen Sealant | 100% | Bitumen |
| M-16A | Black Bitumen Reflector Adhesive | 100% | Bitumen |
| M-16B | Black Bitumen Reflector Adhesive | 100% | Bitumen |
| M-16C | Black Bitumen Reflector Adhesive | 100% | Bitumen |
| M-17A | Gray Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-17B | Gray Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |
| M-17C | Gray Reflector Adhesive | 100% | Polymer, Quartz, Calcite, Clay, Mica |

Analyst / Approved Signatory:



Darryl Neldner

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** The percentage of each component is visually estimated. The result of this analysis relate only to the material tested. The report shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. (>1% greater than one percent, <1% less than one percent) QC - Sample reanalyzed for QA/QC.



Analysis performed by GLE Associates, Inc. NVLAP #102003-0, CO AL-17485, TX 30-0337

Feedback regarding laboratory performance should be addressed to lab@gleassociates.com.

## CHAIN OF CUSTODY/SAMPLE TRANSMITTAL FORM

GLE Associates, Inc.
3109 W. Martin Luther King Jr. Blvd, Suite 550
Tampa, FL 33607
Tel. (813) 241-8350 FAX (813) 241-8737

**CLIENT:** Handex
**PROJECT #:** 11000-11072
**PROJECT:** Bridge 930301
**LABORATORY SENT TO:** GLE
**DATE:** 02/01/2011
LAB - 13722

### SAMPLE INFORMATION

| SAMPLE # | DESCRIPTION/ LOCATION | SAMPLE # | DESCRIPTION/ LOCATION |
|---|---|---|---|
| M-01 A-F | Class 5 Finish – End Bent Back Wall | M-10 A-F | Class 5 Finish – Parapet Wall |
| M-02 A-F | Class 5 Finish – Beam Span | M-11 A-C | Beige Reflector Adhesive- Guardrail |
| M-03 A-F | Black Neoprene Bearing Pad – End Bent Backwall | M-12 A-C | Gray Reflector Adhesive - Guardrail |
| M-04 A-C | Class 5 Finish - Column | M-13 A-C | Concrete - Deck |
| M-05 A-F | Black Particle Board – End Bent Back Wall | M-14 A-C | Gray Expansion Joint Seal - Deck |
| M-06 A-F | Black Bitumen sealant - Slope | M-15 A-C | Black Bitumen Sealant – Deck |
| M-07 A-C | Class 5 Finish – Intermediate Cap | M-16 A-C | Black Bitumen Reflector Adhesive - Deck |
| M-08 A-C | Black Particle Board – Intermediate Cap | M-17 A-C | Gray Reflector Adhesive - Deck |
| M-09 A-C | Black Neoprene Bearing Pad – Int. Cap | | |

| | |
|---|---|
| **IMPORTANT TOTAL NUMBER OF SAMPLES SUBMITTED:** | 69 |
| **IMPORTANT POSITIVE STOP ANALYSIS:** | No |
| **IMPORTANT CODE TYPE (PLM; PLM1; PLM 2; ETC.):** | PLM9 |
| **IMPORTANT E-MAIL RESULTS TO:** | Rafe Padgett/Emory Dare |

### SAMPLE INSTRUCTIONS

TO BE ANALYZED FOR ASBESTOS CONTENT BY POLARIZED LIGHT MICROSCOPY WITH DISPERSION STAINING

TURNAROUND TIME DEADLINE

→ → RETURN SAMPLES TO GLE ASSOCIATES USE TRANSMITTAL

02/07/11 / 12:00pm **SAMPLE ANALYSIS DEADLINE**
**date / time**

### REPORT RESULTS TO THE ADDRESS ABOVE

| CHAIN OF CUSTODY: GLE ASSOCIATES, INC. | CHAIN OF CUSTODY: LABORATORY |
|---|---|
| PACKAGED BY: B Christensen | SAMPLES RECEIVED BY: |
| DATE PACKAGED: 02/01/2011 | DATE: |
| METHOD OF TRANSMITTAL: FedEx | TIME: |
| TRANSMITTED BY: L. Strachan | CONDITION OF PACKAGED SAMPLES: |

| CHAIN OF CUSTODY: RETURNED TO GLE ASSOCIATES, INC. | |
|---|---|
| RECEIVED BY: | DATE: |
| INVENTORIED BY: | DATE: |
| REPACKAGED AND SEALED BY: | DATE: |

PAGE: 1 OF 1

# APPENDIX D
# Photographic Documentation


Upper Photo:
Bridge No. 930301

Lower Photo:
Bridge No. 930301 Side View

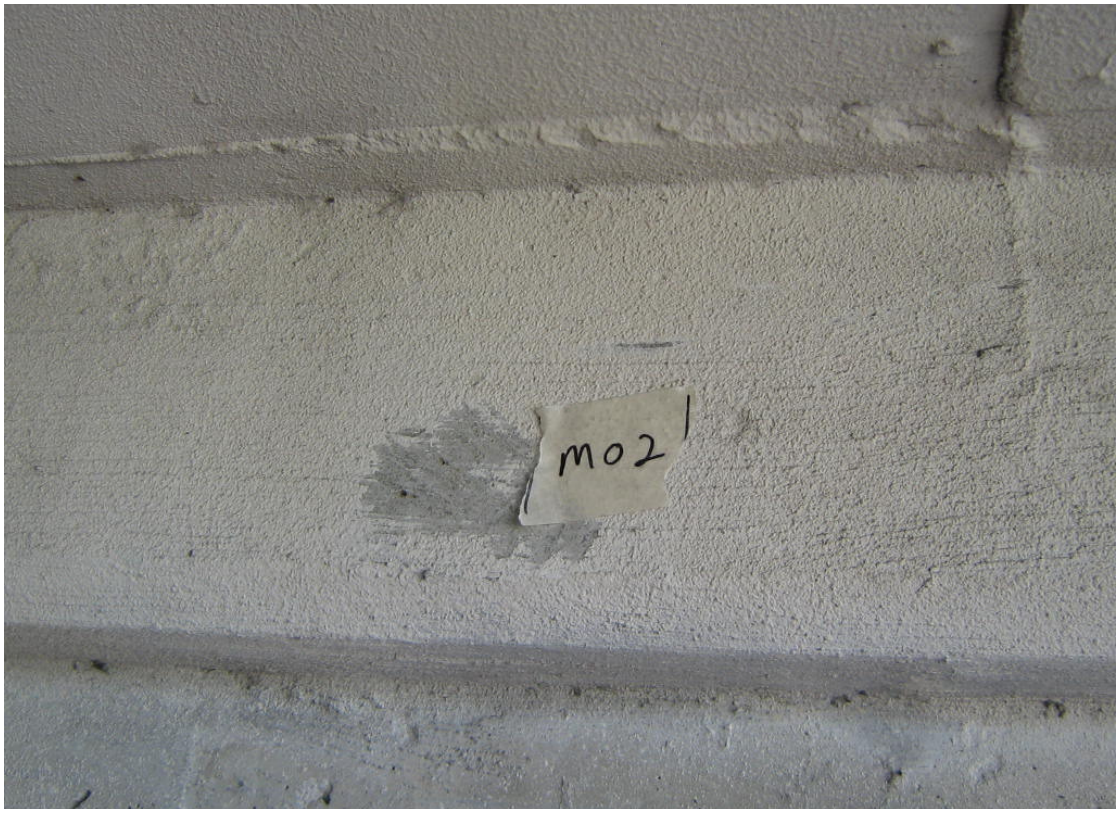
Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-1 |
| Date | |
| 2/1/2011 | |


Upper Photo:
Class 5 Finish - End Bent Backwall

Lower Photo:
Class 5 Finish - Beam Span

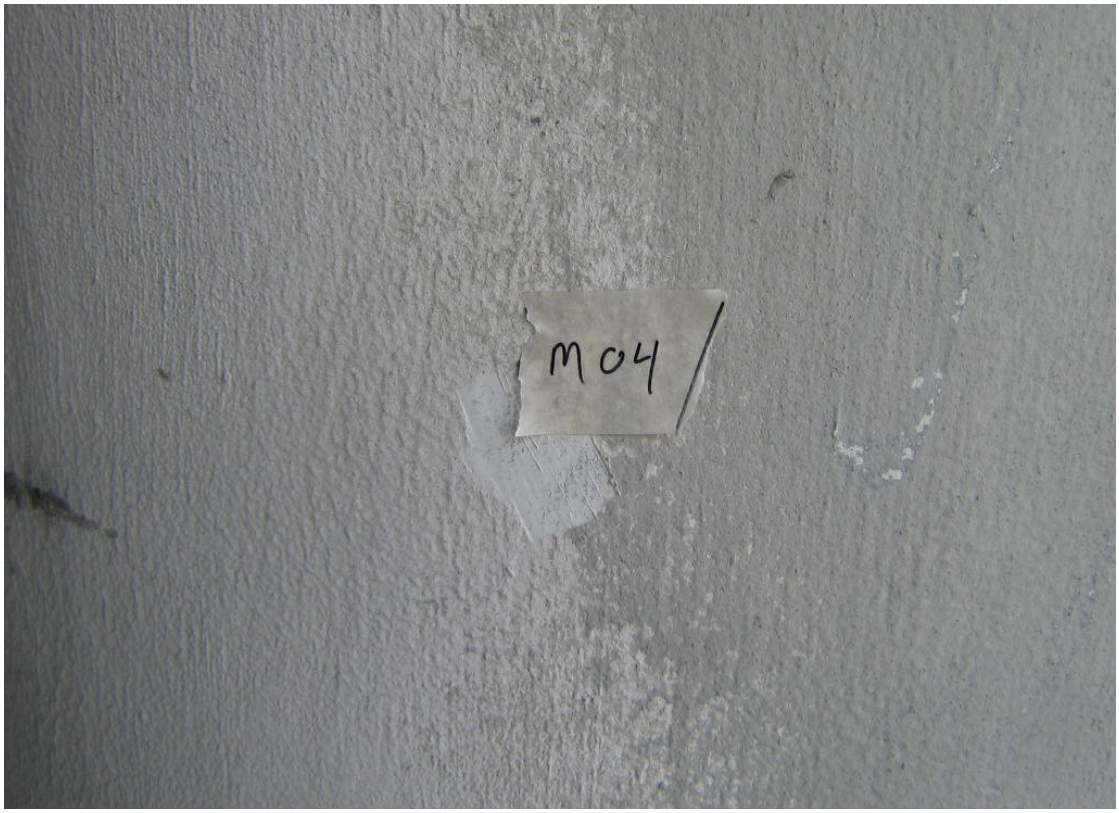
Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-2 |
| Date | |
| 2/1/2011 | |


Upper Photo:
Black Neoprene Bearing Pad - End Bent Backwall

Lower Photo:
Class 5 Finish - Column

Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-3 |
| Date | |
| 2/1/2011 | |



Upper Photo:
Black Particle Board - End Bent Backwall

Lower Photo:
Black Bitumen Sealant - Slope

Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-4 |
| Date | |
| 2/1/2011 | |



Upper Photo:
Class 5 Finish- Intermediate Cap

Lower Photo:
Black Particle Board- Intermediate Cap

Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-5 |
| Date | |
| 2/1/2011 | |



Upper Photo:
Black Neoprene Bearing Pad - Intermediate Cap

Lower Photo:
Class 5 Finish - Parapet Wall

Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-6 |
| Date | |
| 2/1/2011 | |



Upper Photo:
Beige Reflector Adhesive - Metal Guardrail

Lower Photo:
Grey Reflector Adhesive - Metal Guardrail

Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-7 |
| Date | |
| 2/1/2011 | |



Upper Photo:
Concrete - Deck

Lower Photo:
Gray Expansion Joint Seal - Deck

Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-8 |
| Date | |
| 2/1/2011 | |



Upper Photo:
Black Bitumen Sealant - Deck

Lower Photo:
Black Bitumen Reflector Adhesive - Deck

Photograph Date:
February 1, 2011

Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-9 |
| Date | |
| 2/1/2011 | |


Upper Photo:
Gray Reflector Adhesive - Deck

Photograph Date:
February 1, 2011

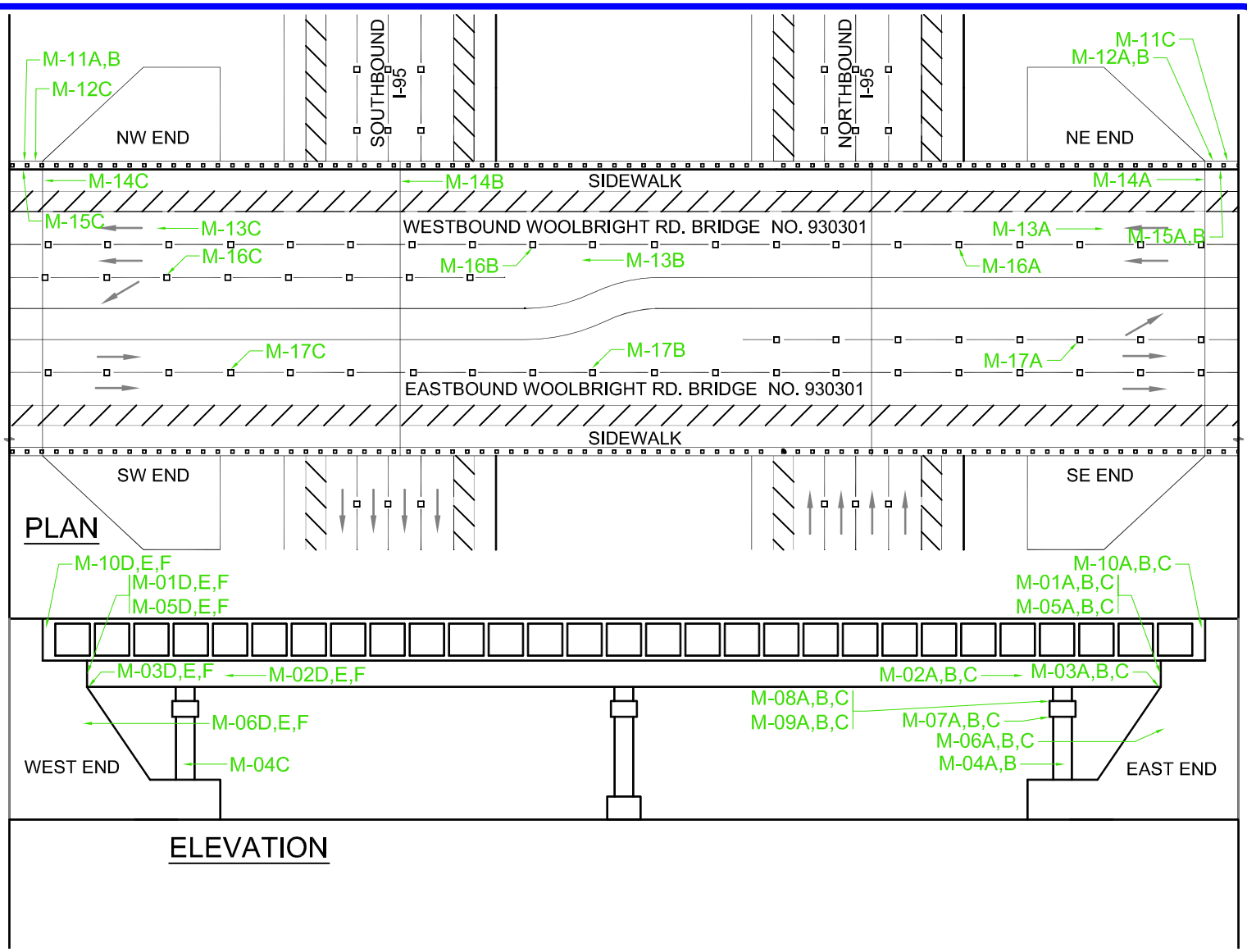
Prepared By: GLE Associates, Inc.
1000 NW 65th Street – Suite #100
Fort Lauderdale, FL 33309

GLE Facilities and Environmental Consultants

Bridge No. 930301
Palm Beach County, Florida

| Drawn | Job # |
|---|---|
| DPB | 11000-11072 |
| Checked | Figure |
| LS | D-10 |
| Date | |
| 2/1/2011 | |

# APPENDIX E
# Sample Location Diagram

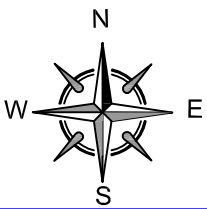



## GENERAL NOTES:

THE NOTES AND LEGEND ASSOCIATED WITH THIS DRAWING ARE PROVIDED TO ASSIST THE REMEDIATION CONTRACTOR PERFORMING WORK AT THE STUDY SITE IN IDENTIFYING AREAS WHERE WORK WILL BE CONDUCTED. THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE CORRESPONDING ASBESTOS SURVEY REPORT.

| LEGEND |
|---|
| POSITIVE SAMPLE LOCATIONS INDICATE ASBESTOS CONTAINING MATERIAL. |
| NEGATIVE SAMPLE LOCATIONS INDICATE NON-ASBESTOS CONTAINING MATERIAL. |

| HOMOGENEOUS AREAS: | |
|---|---|
| M-01 | CLASS 5 FINISH - END BENT BACKWALL |
| M-02 | CLASS 5 FINISH - BEAM SPAN |
| M-03 | BLACK NEOPRENE BEARING PAD - END BENT BACKWALL |
| M-04 | CLASS 5 FINISH - COLUMN |
| M-05 | BLACK PARTICLE BOARD - END BENT BACKWALL |
| M-06 | BLACK BITUMEN SEALANT - SLOPE |
| M-07 | CLASS 5 FINISH - INTERMEDIATE CAP |
| M-08 | BLACK PARTICLE BOARD - INTERMEDIATE CAP |
| M-09 | BLACK NEOPRENE BEARING PAD - INTERMEDIATE CAP |
| M-10 | CLASS 5 FINISH - PARAPET WALL |
| M-11 | BEIGE REFLECTOR ADHESIVE - METAL GUARDRAIL |
| M-12 | GRAY REFLECTOR ADHESIVE - METAL GUARDRAIL |
| M-13 | CONCRETTE - DECK |
| M-14 | GRAY EXPANSION JOINT SEAL - DECK |
| M-15 | BLACK BITUMEN SEALANT - DECK |
| M-16 | BLACK BITUMEN REFLECTOR ADHESIVE - DECK |
| M-17 | GRAY REFLECTOR ADHESIVE - DECK |




# SAMPLE LOCATION DIAGRAM

BRIDGE NO. 930301
EASTBOUND/WESTBOUND WOOLBRIGHT ROAD
OVER NORTH/SOUTHBOUND I-95
PALM BEACH COUNTY, FLORIDA

Prepared for:
HANDEX CONSULTING & REMEDIATION, LLC
430 S. CONGRESS AVE., STE 1D
DELRAY BEACH, FL 33445

Prepared By: GLE ASSOCIATES, INC.
1000 N.W. 65TH STREET, SUITE 100
FT. LAUDERDALE, FL 33309
PH. (954) 968-6414 fAX. (954) 968-6090

GLE
Facilities and Environmental
Consultants

| | |
|---|---|
| GLE CAD NO. | CAD/PROJ/11000/11072 |
| DRAWN: B. HAAS | JOB NO.: 11000-11072 |
| CHECKED: B. CHRISTENSEN | SHEET: E-1 |
| DATE: 02/10/11 | OF 1 SHEET(S) |