



# Contamination Screening Evaluation Report

PD&E STUDY

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange (MP 57)

and

SR-9/I-95 at Gateway Boulevard Interchange (MP 58)

Palm Beach County, Florida

Prepared for:

Florida Department of Transportation - District Four

3400 West Commercial Boulevard

Ft. Lauderdale, Florida 33309-3421



Financial Management Number: 435804-1-22-01

Financial Management Number: 231932-1-22-01

ETDM Numbers: 14180 and 14180

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

## July 2017

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## **EXECUTIVE SUMMARY**

The Florida Department of Transportation (FDOT), District 4, is considering improvements to the state road (SR) 9 / I-95 and Gateway Boulevard and the SR-9/I-95 at SR-804/Boynton Beach Boulevard interchanges in Palm Beach County, Florida (project corridor). As part of the engineering process, this Contamination Screening Evaluation Report (CSER) was prepared in accordance with Part 2, Chapter 22 "Contamination Impacts" of the FDOT Project Development & Environment Manual, revised September 1, 2016. The objectives of this contamination screening evaluation (Level I Assessment) are to identify and evaluate potential contamination sources that can impact proposed project schedule and costs.

The preliminary evaluation included reviewing an environmental database and aerial photographs, performing a visual reconnaissance of the project corridor and surrounding area, obtaining pertinent environmental records from state and local agencies, and assigning potential contamination ratings for each source within and adjacent to the project corridor.

Available records reported many sources associated with hazardous waste management, petroleum storage systems/spills, cleaning or drycleaning activities, and environmental contamination within a one-quarter mile radius of the project corridor. An evaluation of site characteristics for these sources and associated environmental information identified 71 sources/facilities with a risk rating distribution as follows: 16 – High, 16 – Medium, 32 – Low, and 7 - No. Based on these risk ratings, construction activities may encounter soil or groundwater contamination which can potentially impact worker health, the environment, and construction schedule and costs if these sites are not addressed in the design.

A Level II Assessment is recommended for six sources/facilities and one pond site that have the potential to adversely impact the project if identified environmental concerns are not further investigated. The Level II Assessment should include the advancement of environmental soil borings and discrete groundwater sampling at specific locations within the project corridor that require subsurface construction (i.e. soil excavation and/or dewatering activities) near sources identified as having potential contamination. The Level II Assessment should include the collection and analysis of soil and groundwater samples for the appropriate analytical group parameters.

Knowing the extent of impacted media at these areas of concern in the design phase can expedite handling, disposal and/or treatment requirements, as well as protecting worker health and the environment during construction. It can also identify locations, within the project corridor, where certain construction methods require engineering controls so as not to exacerbate contaminant plumes.

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**LIST OF ACRONYMS**

2020 COR ACTION	2020 Corrective Action Program
ACRES	Assessment, Cleanup and Redevelopment Exchange System
APLUS	Aerial Photo Look-Up System
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
ATRP	Abandoned Tank Restoration Program
B/C	Benefit to Cost
BLVD	Boulevard
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
BTSC	Brownfields and Land Revitalization Technology Support Center
CAR	Contamination Assessment Report
CD	Concept Development
CDA	Conceptual Design Alternative
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP	CERCLIS sites designated “No Further Remedial Action Planned”
CESQG	Conditionally Exempt Small Quantity Generator
CINEMA	Countywide Information Network for Electronic Media Access
COAL ASH DOE	Steam-Electric Plan Operation Data
CoC	Constituents of Concern
CONSENT	Superfund (CERCLA) Consent Decrees Database
CORRACTS	Corrective Action Reports
CRA	Community Redevelopment Area
CSER	Contamination Screening Evaluation Report
CTL	Cleanup Target Level
D4	Florida Department of Transportation District 4
DCIC	District Contamination Impact Coordinator
DOD	Department of Defense



DOE	Department of Energy
DOT OPS	Department of Transportation, Office of Pipeline Safety
DRF	Discharge Reporting Form
DRI	Development of Regional Impact
DSSP	Drycleaning Solvent Surveillance Program
DTW	Depth to Water
EDI	Early Detection Incentive
EDR	Environmental Data Resources
EDR MGP	EDR Proprietary Manufactured Gas Plant Database
EDR US Hist Auto	Database of EDR Proprietary Historic Gas Stations
EDR US Hist Cleaner	Database of EDR Proprietary Historic Dry Cleaners
ERM	Environmental Resource Management
ERNS	Emergency Response Notification System
ETAT	Environmental Technical Advisory Team
ETDM	Efficient Transportation Decision Making
FAST Act	Fixing America's Surface Transportation Act
FBGS	Feet Below Land Surface
FDEO	Florida Department of Economic Opportunity
FDOT	Florida Department of Transportation
FHWA	Federal Highway Administration
FINDS	Facility Index System
FLUCFCS	Florida Land Use, Cover, and Forms Classification System
FL DEDB	Database of delineated areas of ethylene dibromide (EDB) groundwater contamination in Florida
FL DWM CONTAM	Florida listing of active or known sites that includes sites that need cleanup
FL FF TANKS	Site investigation section sites
FL RGA HWS	EDR database of Recovered Government Archive State Hazardous Waste Facilities
FL RGA LF	EDR database of Recovered Government Archive Solid Waste Facilities
FL RGA LUST	EDR database of Recovered Government Archive LUST
FL SHWS	Florida's State Hazardous Waste Sites

FL SITE INV SITES	A listing of site investigation section sites
FL SWF/LF	Florida Solid Waste Facilities/Landfills
FL SWRCY	Florida Recycling Centers Database
FL UIC	Florida Underground Injection Wells Database
FPLRIP	Florida Petroleum Liability and Restoration Insurance Program
FTTS	Federal Insecticide, Fungicide and Rodenticide Act / Toxic Substances Control Act Tracking System
FUDS	Formerly Used Defense Sites
GCTL	Groundwater Cleanup Target Level
GIS	Geographic Information System
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
HMIRS	Hazardous Materials Information Reporting System
HSIP	Highway Safety Improvement Program
HSWA	Hazardous and Solid Waste Amendments
ICIS	Integrated Compliance Information System
ID	Identification
ITS	Intelligent Transportation Systems
LAST	Leaking Aboveground Storage Tanks
LDCA	Location and Design Concept Acceptance
LOS	Level of Service
L RTP	Long Range Transportation Plan
LSAR	Limited Site Assessment Report
LSRAP	Limited Scope Remedial Action Plan
LSSI	Low Score Site Initiative
LTCAR	Limited Tank Closure Assessment Report
LUCIS	Land Use Control Information System
LUST	Leaking Underground Storage Tank
LWDD	Lake Worth Drainage District
MLTS	Material Licensing Tracking System
MPO	Metropolitan Planning Organization

## PD&E Study

SR-9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



MSE	Mechanically Stabilized Earth
MW	Monitoring Well
NA	Not Applicable
NADC	Natural Attenuation Default Criteria
NAI	No Additional Investigation
NEPA	National Environmental Policy Act
NFA	No Further Action
NFAP	No Further Action Proposal
NFRAP	No Further Remedial Action Planned
NPL	National Priority List
NPL LIENS	Federal Superfund Liens
NRCS	National Resources Conservation Service
OCP	Organochlorine Pesticides
OCULUS	FDEP Document Management System
ODI	Open Dump Inventory
OVA	Organic Vapor Analysis
PAC	Pre-Approved Advanced Cleanup
PADS	Polychlorinated biphenyl Activity Database System
PAH	Polynuclear Aromatic Hydrocarbons
PARM	Post Active Remediation Monitoring
PCB	Polychlorinated Biphenyl
PCB TRANSFORMER	Polychlorinated Biphenyl transformer registrations database
PD&E	Project Development and Environment
PRP	Potentially Responsible Parties
PWS	Public Water Supply
RAATS	Resource Conservation and Recovery Act Administrative Action Tracking System
RADINFO	Radiation Information Database
RAP	Remedial Action Plan
RCRA	Resource Conservation and Recovery Act

## PD&E Study

SR-9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



RCRA NonGen / NLR	RCRA - Non Generators database
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators database
RCRA-LQG	RCRA - Large Quantity Generators database
RCRA-SQG	RCRA - Small Quantity Generators database
RCRA-TSDF	RCRA - Treatment, Storage, and Disposal Facilities database
RMP	Risk Management Plans
ROD	Record of Decision
ROW	Right-of-Way
SCRD	State Coalition for Remediation of Drycleaners
SCTL	Soil Cleanup Target Level
SERPM	Southeast Regional Planning Model
SFWMD	South Florida Water Management District
SHSP	Highway Safety Improvement Program
SIS	Strategic Intermodal System
SOP	Standard Operating Procedure
SPUI	Single-Point Urban Interchange
SQG	Small Quantity Generator
SR	State Road
SRCO	Site Rehabilitation Completion Order
SSTS	Section 7 Tracking System
STIP	State Transportation Improvement Program
SUPER	State Underground Petroleum Environmental Response
SVOC	Semi-volatile Organic Compounds
TCAR	Tank Closure Assessment Report
TIP	Transportation Improvement Program
TRIS	Toxic Chemical Release Inventory System
TRPH	Total Recoverable Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
TSDF	Treatment, Storage, and Disposal Facilities

## PD&E Study

SR-9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



TSM&O	Transportation System Management and Operations
UMTRA	Database of Uranium Mill Tailing Sites
US AIRS	Aerometric Information Retrieval System
US BROWNFIELDS	Database of brownfield sites
US CDL	Database of Clandestine Drug Lab locations
US ENG CONTROLS	Database of sites with engineering controls in place
US FIN ASSUR	Financial Assurance Information database
US HIST CDL	National Clandestine Laboratory Register
US INST CONTROLS	Database of sites with institutional controls in place
US MINES	Database of mine identification numbers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank
VCP	Voluntary Cleanup Sites
VCP	Voluntary Cleanup Priority
VOC	Volatile Organic Compounds

## 1. Introduction

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study for interchange improvements located at SR-9/I-95 and Gateway Boulevard and SR-9/I-95 at SR-804/Boynton Beach Boulevard in Palm Beach County, Florida. The alternatives developed in this PD&E and the associated social, economic, and environmental analyses were evaluated according to the requirements of the National Environmental Policy Act (NEPA) and FDOT's PD&E Manual, Part 1, Chapter 5 in order to receive Location and Design Concept Acceptance (LDCA). 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 the Federal Highway Administration (FHWA) and FDOT.

The federal Fixing America's Surface Transportation Act (FAST Act, 2015) serves as the current regulatory and funding framework for transportation planning. The Palm Beach Metropolitan Planning Organization (MPO) is the government organization that provides transportation planning for Palm Beach County. The Palm Beach MPO's 2040 Long Range Transportation Plan (LRTP, October 2014) represents long-term transportation planning for Palm Beach County, while short-term planning is represented by the MPO's Transportation Improvement Program (TIP). The purpose of the LRTP is to identify the transportation needs of the community and establish priorities for funding those improvements in the TIP. The MPO priority projects are listed in the TIP Priority Projects FY 2016-2020 (April 2015).

FDOT lists planned projects with federal participation, including all MPO TIPs, in the State Transportation Improvement Program (STIP) which is submitted to and approved by the FHWA. The PD&E Study for SR-9/I-95 at SR-804 Boynton Beach Boulevard Interchange and at Gateway Boulevard Interchange is programmed for PD&E Study under the Fiscal Year 2015-2018 STIP.

While the improvements at both interchanges are not included in the cost feasible component of the 2040 LRTP, one highway project in the vicinity of the interchanges is provided in the LRTP needs component. This project is for the Strategic Intermodal System (SIS) implementation of managed lanes on I-95 from the Palm Beach/Broward County Line to Indiantown Road. Projects in the vicinity of both interchanges are identified in the STIP and include preliminary engineering for future capacity of SR-9/I-95 from Linton Boulevard to Indiantown Road (FM# 433109) and planned interchange improvements at SR-9/I-95 and Hypoluxo Road (FM# 413257) and at Woolbright Boulevard (FM #231932).

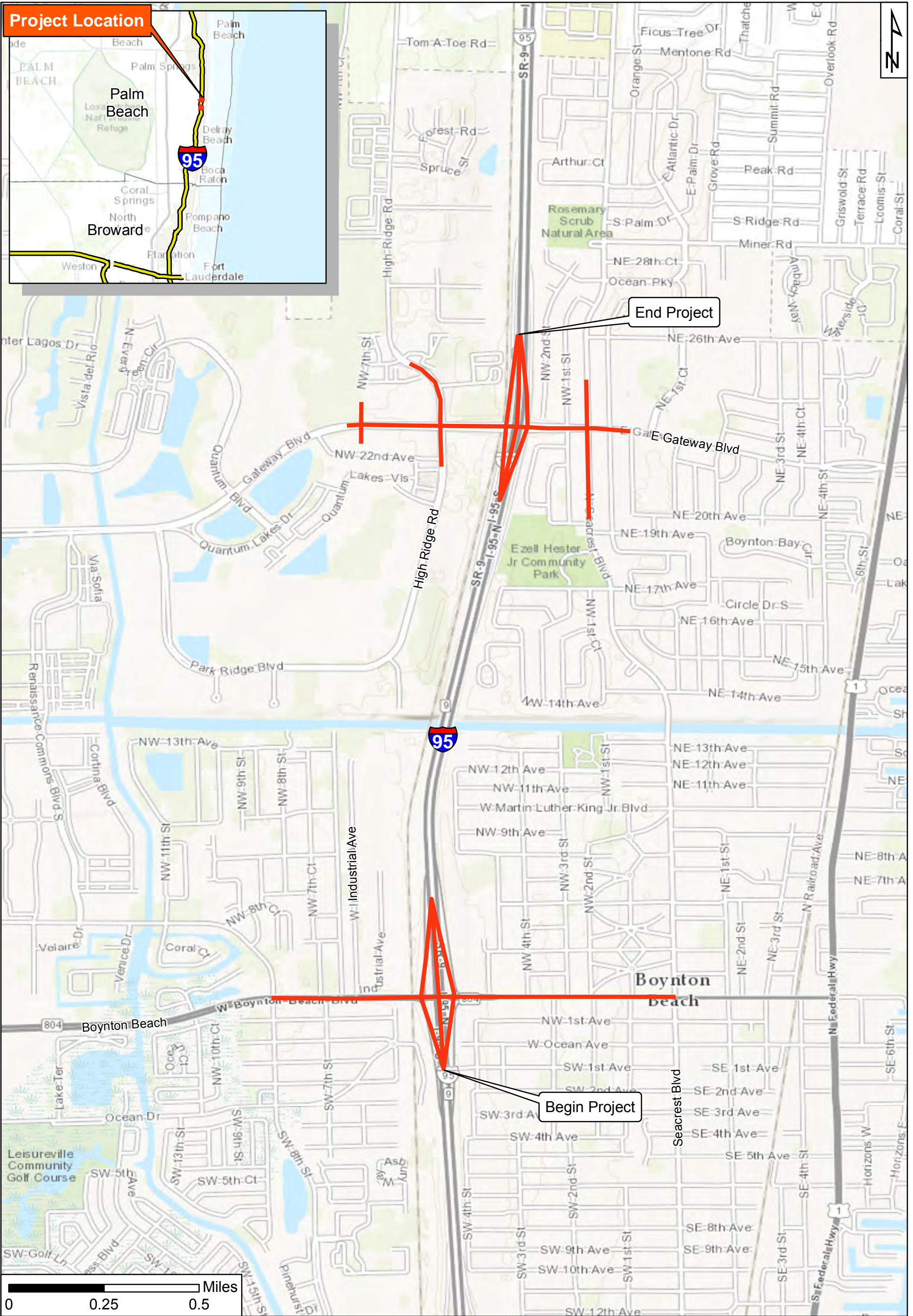
This Contamination Screening Evaluation Report (CSER) was prepared in accordance with Part 2, Chapter 22 "Contamination Impacts" of the FDOT PD&E Manual, revised September 1, 2016. The objectives of this evaluation are to identify and evaluate potential contamination impacts that may exist within or adjacent to the limits of the proposed right-of-way (ROW) and to provide recommendations relative to the identified present/past use of properties that may require further assessment, remediation, special handling, or that may have a potential for liability. Addressing contamination in soil, groundwater, surface water, and structures early in the project development process can reduce potential risks, impacts, and costs to FDOT. This report presents the findings of the contamination screening evaluation for the proposed improvements.

## **2. Project Description**

The project study area (study area) includes two interchanges. These interchanges are located in eastern Palm Beach County within the City of Boynton Beach between SR-9/I-95 at Woolbright Road to the south and SR-9/I-95 at Hypoluxo Road to the north. The SR-9/I-95 at SR-804/Boynton Beach Boulevard interchange is located on I-95 near milepost 57 between the Gateway Boulevard interchange (1.5 miles to the north) and the Woolbright Road interchange (1.0 mile to the south). The SR-9/I-95 at Gateway Boulevard interchange is located on SR-9/I-95 near milepost 58 between the Hypoluxo Road interchange (1.5 miles to the north) and the Boynton Beach Boulevard interchange (1.5 miles to the south). At Gateway Boulevard, the project area extends from west of High Ridge Road to east of Seacrest Boulevard. At Boynton Beach Boulevard, the project area extends from west of Industrial Avenue to east of Seacrest Boulevard. A project location map is provided in Figure 1.

### **2.1 Purpose and Need for Action**

The primary purpose of the proposed action is to enhance overall traffic operations at the existing interchanges of SR-9/I-95 at SR-804/Boynton Beach Boulevard and Gateway Boulevard by providing improvements to achieve acceptable Levels of Service (LOS) in the future condition (2045 Design Year). The proposed action will support redevelopment efforts in the vicinity of the interchange, meeting the overall vision of the City of Boynton Beach. In addition, goals of the project include improving safety conditions and enhancing emergency evacuation and response times. The proposed action is anticipated to improve traffic operations at the study interchanges through implementation of operational and capacity improvements that will maintain and improve mobility, improve safety, and support existing and future development at the study interchanges.



PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**PROJECT LOCATION  
 MAP**

**Figure 1**



**2.2 Transportation Capacity**

The study area was initially evaluated in the *I-95 (SR-9) Interchange at Boynton Beach Boulevard (SR-804) in Palm Beach County, Interchange Concept Development Report* (June 2014) and the *I-95 (SR-9) Interchange at Gateway Boulevard in Palm Beach County, Interchange Concept Development Report* (June 2014) [Concept Development (CD) Reports].

Based upon the traffic operations analysis conducted for the study area interchanges and adjacent signalized intersections and documented in the CD Reports, the existing operational capacity and overall traffic operations (i.e. LOS) are deficient. These deficiencies are based on existing and future AM and PM peak hour traffic conditions for intersection delay and safety performance. LOS is a quality measure describing operational conditions of these facilities. LOS classifications are designated from LOS A to LOS F, with LOS A representing the best operating conditions and LOS F representing the worst. Operational conditions considered in an LOS classification include speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Existing and future AM and PM peak hour conditions for Boynton Beach and Gateway Boulevards are shown in Tables 1 and 2.

**Table 1: Boynton Beach Boulevard Existing and Future AM and PM Peak Hour Conditions**

Boynton Beach Boulevard with	Existing AM Conditions		Existing PM Conditions		Future AM Conditions		Future PM Conditions	
	Level of Service (LOS)	Delay (sec) <sup>1</sup>	Level of Service (LOS)	Delay (sec) <sup>1</sup>	Level of Service (LOS)	Delay (sec) <sup>1</sup>	Level of Service (LOS)	Delay (sec) <sup>1</sup>
Industrial Avenue	B	12.5	C	24.9	C	26.7	E	58.4
SR-9/I-95 Southbound Ramps	E	68.4	B	19.5	F	138.2	D	43.1
SR-9/I-95 Northbound Ramps	C	31.9	D	44.4	F	130.0	F	144.5
Seacrest Boulevard	D	45.0	D	35.6	F	158.7	F	178.6

1. sec: Delay in seconds per vehicle

Source: *I-95 (SR-9) Interchange at Boynton Beach Boulevard in Palm Beach County, Interchange Concept Development Report* (June 2014)

**Table 2: Gateway Boulevard Existing and Future AM and PM Peak Hour Conditions**

Gateway Boulevard with	Existing AM Conditions		Existing PM Conditions		Future AM Conditions		Future PM Conditions	
	Level of Service (LOS)	Delay (sec) <sup>1</sup>	Level of Service (LOS)	Delay (sec) <sup>1</sup>	Level of Service (LOS)	Delay (sec) <sup>1</sup>	Level of Service (LOS)	Delay (sec) <sup>1</sup>
High Ridge Road	F	111.4	D	40.9	F	275.2	F	84.7
SR-9/I-95 Southbound Ramps	F	255.7	F	158.0	F	146.8	F	251.1
SR-9/I-95 Northbound Ramps	D	37.5	E	60.4	F	102.2	F	166.9
Seacrest Boulevard	D	43.6	D	38.4	F	195.2	F	204.9

1. sec: Delay in seconds per vehicle

Source: I-95 (SR-9) Interchange at Gateway Boulevard in Palm Beach County, Interchange Concept Development Report (June 2014)

Although the intersections operate at LOS E or better under existing conditions scenarios at Boynton Beach Boulevard many of the individual through and turning movements at the intersections (which include approaches to SR-9/I-95) operate at LOS F during future AM and PM peak periods. Under the existing conditions scenarios at Gateway Boulevard, all intersections operate at LOS E or better except at the Gateway Boulevard - High Ridge Road and SR-9/I-95 southbound ramp intersections. Without improvements, the intersections will continue to experience excessive delays and queue lengths, and will continue to operate below acceptable LOS standards and the interchange will have insufficient capacity to accommodate the projected travel demand.

**2.3 Economic Development**

The area surrounding the SR-9/I-95 at SR-804/Boynton Beach Boulevard interchange is urbanized containing a mixture of commercial, industrial, and residential land uses. According to the City of Boynton Beach Future Land Use Map, the SR-9/I-95 at SR-804/Boynton Beach Boulevard interchange falls within the designated Community Redevelopment Area (CRA). The residential neighborhoods and business districts of this area are intended to be redeveloped by implementing compact, more intensive urban growth patterns that provide opportunities for more efficient use and development of infrastructure, land, and other resources and services. The area surrounding the SR-9/I-95 at Gateway Boulevard interchange is urbanized containing a mixture of residential and recreational land uses to the east and commercial, office, industrial, and residential activities to the west as part of the Quantum Park Development of Regional Impact (DRI). According to the City of Boynton Beach Future Land Use Map, the area will continue to support the noted land uses.

Population within the vicinity of the Boynton Beach Boulevard interchange is anticipated to grow by approximately 10% from 2005 to 2035 primarily in the areas northeast and southwest of the interchange. Anticipated population growth within the vicinity of the Gateway Boulevard interchange is 46% with expected growth primarily east of Seacrest Boulevard and within the Quantum Park DRI. Employment in the vicinity of Boynton Beach Boulevard is projected to increase approximately 147% from 2005 to 2035 primarily in the areas northeast, east, and southwest of the

interchange. In the vicinity of Gateway Boulevard, employment is expected to increase by approximately 173% primarily in the areas west and southeast of the interchange. These projections are based on data derived from the enhanced Southeast Regional Planning Model (SERPM) version 6.5 Managed Lanes Model (upgraded to include specific subarea improvements for the I-95 Interchange Master Plan). Improving the transportation infrastructure at the study area interchanges and adjacent intersections will support the redevelopment efforts in the vicinity of these interchanges and the overall vision of the City of Boynton Beach growth and economic development as identified in the Heart of Boynton Community Redevelopment Plan Update (April 2014).

## **2.4 Secondary Criteria**

### **2.4.1 Safety**

The 2040 LRTP continues the requirement that the MPO carry out a planning process that increases the safety and security of the transportation system for motorized and non-motorized users. MAP-21 also establishes national performance goals for federal highway programs including:

- Safety - to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- System Reliability – to improve the efficiency of the surface transportation system.

MAP-21 continued the Highway Safety Improvement Program (HSIP) as a core federal program. To receive funding under this Program, states were required to develop Strategic Highway Safety Plans (SHSP). The SHSP is a data-driven, four to five year comprehensive plan that establishes statewide goals and objectives to reduce fatalities and serious injuries. In 2006, Florida completed development of a comprehensive SHSP. The overall goal of the SHSP is to reduce the number of fatalities in Florida to zero. Use of a systems approach in engineering is one of the objectives to be used in accomplishing this overall goal; to strike a balance between single unique locations and addressing the safety of the road network.

The CD Reports included a safety analysis of the study area. For the Boynton Beach Boulevard interchange, crash data analyzed from 2010 – 2012 indicated 214 crashes occurred with 69% being rear-end type crashes. Predominant crash locations were along Boynton Beach Boulevard at the SR-9/I-95 northbound on and off-ramps and the southbound off ramp. For the Gateway Boulevard interchange, crash data indicated 117 crashes occurred with 48% being rear-end type crashes. The segment of SR-9/I-95 in the vicinity of Gateway Boulevard is identified as a high crash segment having a higher crash rate compared with similar state roadways for the time period analyzed.

### **2.4.2 Emergency Evacuation and Response Times**

SR-9/I-95 and SR-804/Boynton Beach Boulevard serve as part of the emergency evacuation route network designated by the Florida Division of Emergency Management and Palm Beach County. As designated evacuation facilities, these roadways are critical in facilitating traffic flows during emergency evacuation periods. SR-804/Boynton Beach Boulevard is a major east-west corridor in eastern Palm Beach County providing linkage between SR-9/I-95 and Florida's Turnpike. Both Boynton Beach and Gateway Boulevards connect to other major arterials and highways of the state evacuation route network.

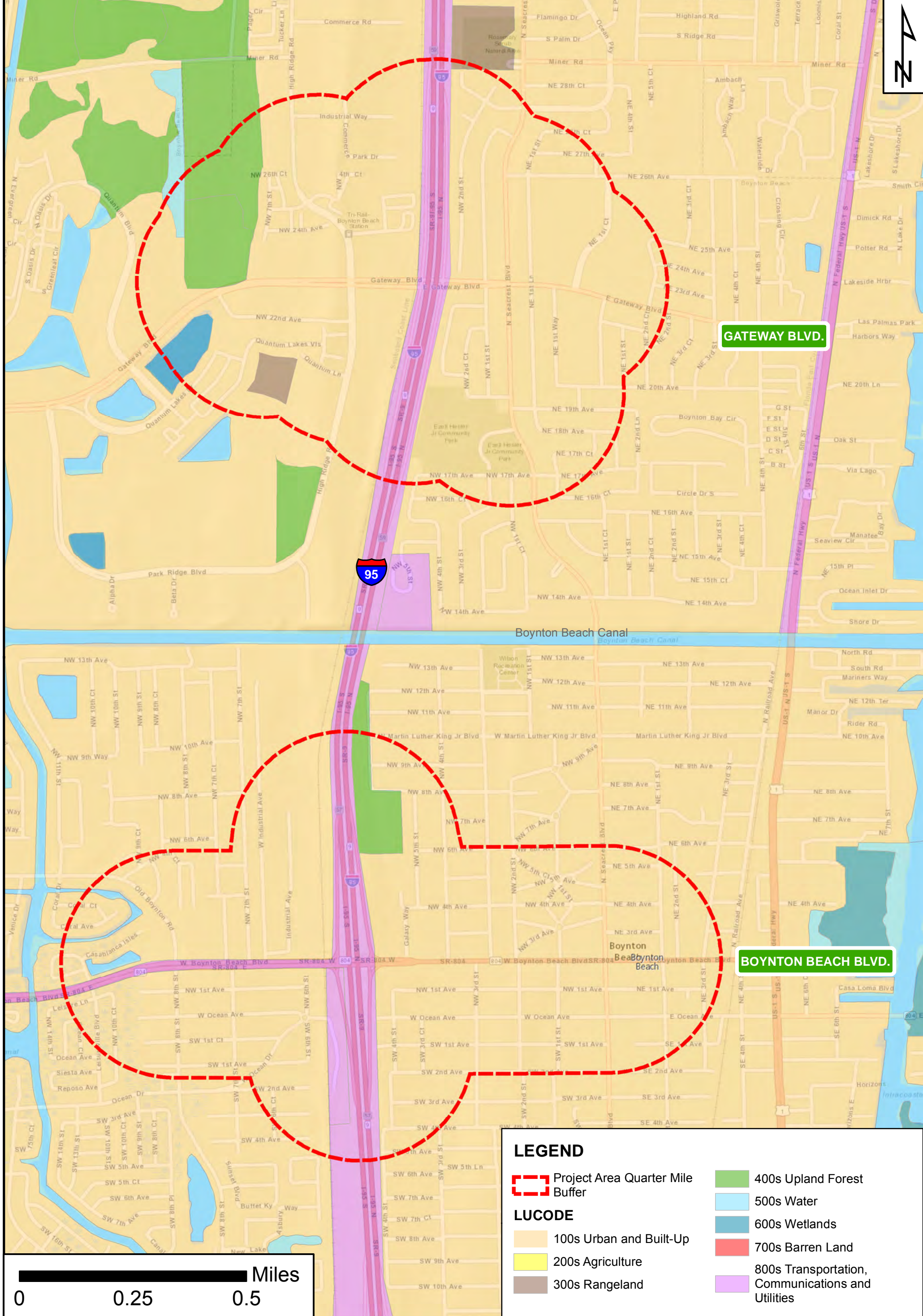
### 3. Land Use

The SR-9/I-95 at SR-804/Boynton Beach Boulevard interchange occurs within the City of Boynton Beach. The project area is partially located within the City's Community Redevelopment Area and is comprised primarily of transportation land use. The interchange and surrounding area is urbanized consisting of a mix of single and multifamily residential, commercial, office, light industrial, and public school land uses. According to the City of Boynton Beach Future Land Use Map, the project area remains urbanized with a mix of low and high density residential and local commercial uses.


The SR-9/I-95 at Gateway Boulevard interchange occurs within the City of Boynton Beach. The project area is partially located within the City's Community Redevelopment Area and the Quantum DRI. The project area is comprised primarily of transportation land use. The interchange and surrounding area is urbanized consisting of a mix of single and multifamily residential, commercial, light industrial, and transit land uses. According to the City of Boynton Beach Future Land Use Map, the project area remains urbanized with a mix of low and high density residential and local commercial uses. Existing land use is shown in Figure 2.

The proposed improvements associated with the Recommended Alternative will require a minimal amount of additional ROW and are not anticipated to significantly affect the land use in the area. The character of the study area remains unchanged and will continue to support the existing and future land uses within the project and surrounding area maintaining the goals of the City of Boynton Beach Future Land Use Map, the Community Redevelopment Area and Quantum DRI goals.

This project was reviewed by the appropriate agencies in the Efficient Transportation Decision Making (ETDM) process and assigned a summary degree of effect of minimal for land use. The Florida Department of Economic Opportunity (FDEO) assigned the degree of effect as none, the FHWA as minimal, and FDOT District Four as minimal. The proposed improvements are compatible with the City of Boynton Beach Comprehensive Plan and supports the plan's land use element. Effects on the area's character resulting from the project improvements are anticipated to be minor. The City of Boynton Beach does not have a Future Transportation Map. The FDOT will coordinate with the City of Boynton Beach to ensure that the project is included on the Future Transportation Map of the adopted Comprehensive Plan, and the Palm Beach MPO to ensure that funding is identified for future project phases in the TIP, LRTP, STIP, and FDOT Cost Feasible Plan.



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**EXISTING LAND USE MAP**  
 Source: South Florida Water Management District, 2011

**Figure 2**

## 4. Hydrologic Features

### 4.1 Regional Physiography, Geology and Hydrogeology

The project study area is located in Palm Beach County, Florida within the City of Boynton Beach along the alignment of I-95 at the intersections with Gateway Boulevard and Boynton Beach Boulevard. The study area is located in the Atlantic Coastal Plain Physiographic Province and the coastal ridge physiographic subdivision with the sandy flatwoods and the everglades to the west.

At the surface, Pamlico sand ranges from 2 to 10 feet in thickness. The Anastasia formation immediately underlies the surface sands. This formation is composed of sand, sandstone, limestone coquina and shell beds that underlie all of eastern Palm Beach County with a thickness ranging from 40 to 200 feet that increases moving eastward. The Caloosahatchee marl underlies the Anastasia formation. It is composed mainly of shelly sand, and sandy shell marl with minor amounts of limestone, and sandstone. The marly sands, sandy marl, and clay marl of the Tamiami, and upper Hawthorn Formations underlie the Caloosahatchee marl, and form a confining bed overlying the Floridan Aquifer. The upper part of the Hawthorn Formation is encountered at a depth of 400 feet near West Palm Beach, where it has a thickness of approximately 500 feet

Hydrogeologic units underlying the area may be described as two aquifers separated by a confining layer. The Pamlico sand, Anastasia formation, and the Caloosahatchee marl composed of permeable, sand, limestone, and shell beds comprise the water-table aquifer. The base of the water table aquifer is approximately 250 feet in the vicinity of the study area. The confining beds that separate the water table and Floridan Aquifers consists of approximately 300 feet of marly sand, sandy marl, and clay marl of the Tamiami and Hawthorn formations. The Floridan Aquifer, approximately 550 feet beneath the site, is composed of limestone of the Hawthorn (lower part), Tampa, Suwannee, Ocala, and Avon Park Formations ranging in age from 30 to 60 million years.

The permeable surficial sediments along the alignment are conducive to the contamination of underlying hydrogeologic units. If contamination were present beneath a particular property of interest the likelihood of soil contamination in the unsaturated zone would be elevated. Similarly the contamination of groundwater beneath this property would also be elevated. The likelihood for light non-aqueous phase liquids (i.e. petroleum products), or dissolved constituents to migrate from the area would largely be controlled by the permeability of sediments and the hydrogeologic gradient in the area. Dense non-aqueous phase liquids, commonly associated with chlorinated solvent losses, typically are influenced by permeability differentials in the subsurface such that pooling can occur on low permeability horizons located beneath the water table.

Figure 3 shows topography of the study area, obtained from United States Geological Survey (USGS). Topography in the area is relatively level with the exception of the embankments supporting the Gateway Boulevard and Boynton Beach Boulevard interchanges. Areas outside the corridor are also relatively level, having a slight downward slope toward the ocean and canals. The hydrogeologic gradient and associated groundwater flow direction would be primarily controlled by topography and the presence of surface water bodies exerting an influence on the potentiometric surface.

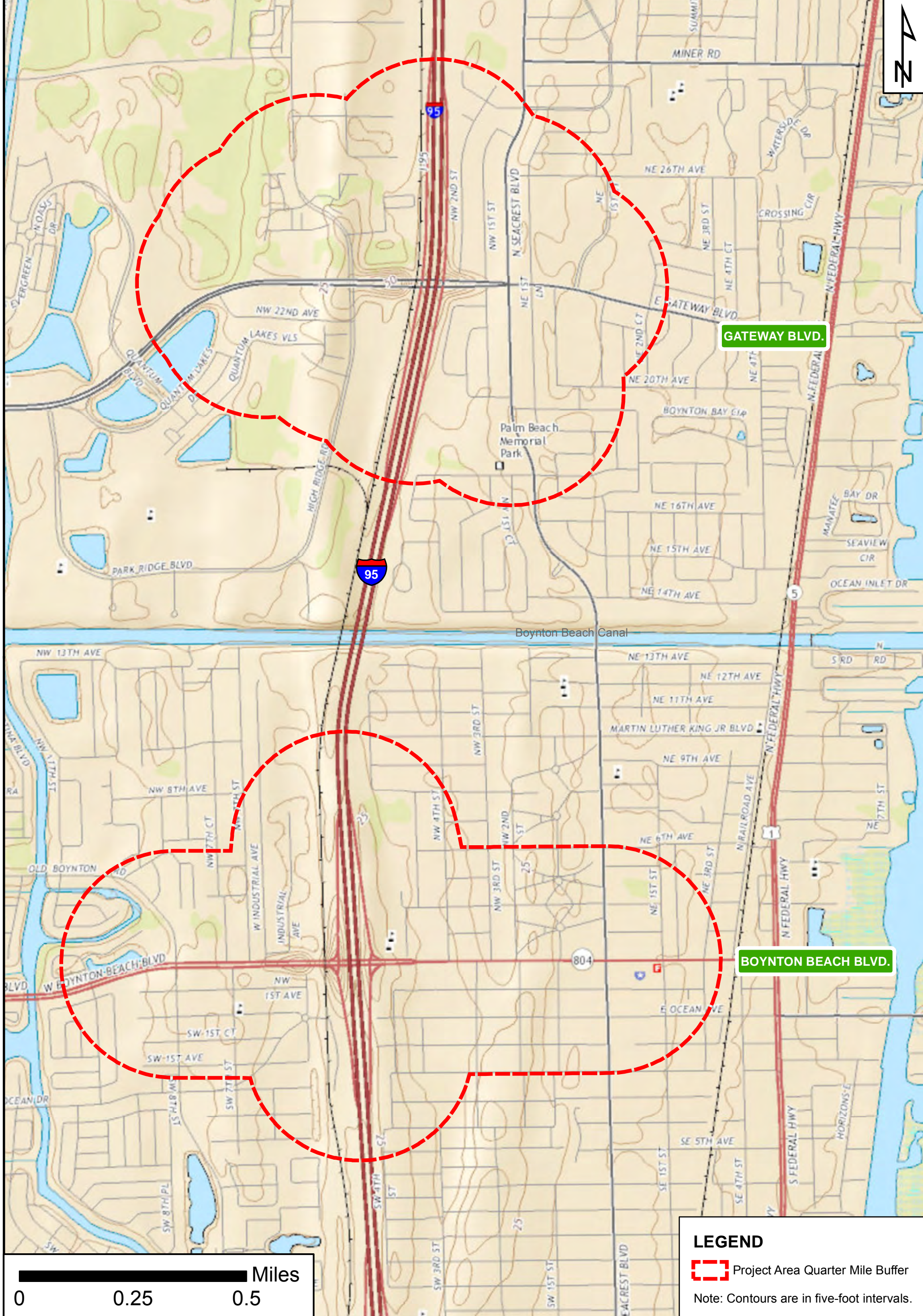
## PD&E Study

SR-9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



For the Boynton Beach Boulevard interchange, groundwater flow would generally be toward the east and west away from I-95. The groundwater flow direction in the remaining study area would be controlled by local topographic, drainage, and utility features.

For the Gateway Boulevard interchange, the groundwater flow direction on the east side of I-95 at the interchange would generally be to the northeast and southeast away from the interchange. Similarly, on the west side of I-95 at the interchange, the groundwater flow direction would generally be to the northwest and southwest away from the interchange. The groundwater flow direction in the remaining study area would be controlled by local topographic, drainage, and utility features.




GATEWAY BLVD.

BOYNTON BEACH BLVD.



**LEGEND**

 Project Area Quarter Mile Buffer

Note: Contours are in five-foot intervals.

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**TOPOGRAPHY MAP**

Source: United States Geological Survey, 2015 Lake Worth Quadrangle

**Figure 3**



**4.2 Soils**

Groundwater flow and contaminant transport are highly dependent on underlying sediments. Based on the Natural Resources Conservation Service (NRCS) Soil Survey, soil types within ¼-mile of proposed improvements are classified in Table 3 and shown in Figure 4.

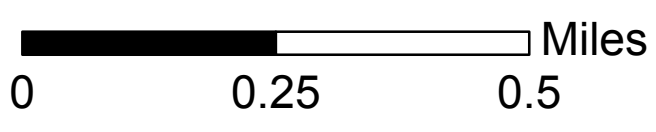
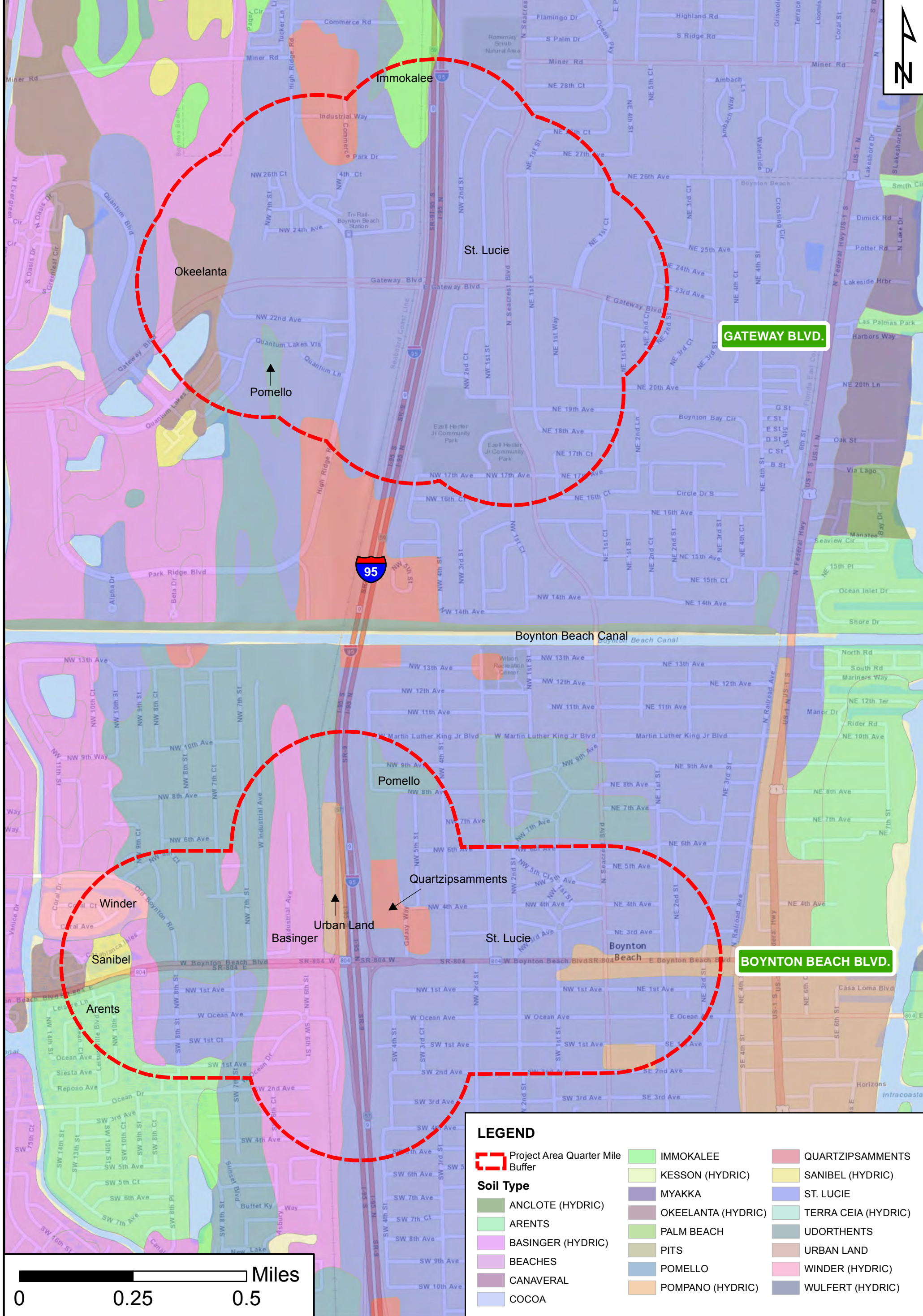
The primary soil type within the Gateway Boulevard project area is St. Lucie-Paola-Urban Land Complex, 0-8 percent slopes (excessively drained). In addition, there are small areas of Okeelanta Muck (very poorly drained), Pomello Fine Sand (moderately well drained), and Immokalee Fine Sand (Poorly Drained).

The primary soil types within the Boynton Beach Boulevard project area are St. Lucie-Paola-Urban Land Complex, 0-8 percent slopes (excessively drained), Basinger Fine Sand (poorly drained), and Pomello Fine Sand (moderately well drained). In addition, there are small areas of Quartzipsamments (well drained) and Urban Land.

St. Lucie-Paola-Urban Land Complex, Arents-Urban land complex, and Urban Land are all soil categories characterized by urban development, which have been placed as fill and/or altered by grading. Together, these make up approximately 63% of soils in the study area one-quarter mile buffer. Basinger Fine Sand, which makes up 15% of the project area one-quarter mile buffer, consists of poorly drained, sandy soils with the water table near the surface.

**Table 3: Soils within One-Quarter Mile of Proposed Improvements**

Soil Name	Slope	Drainage Class	Depth to Water Table	Percent Breakdown
St. Lucie-Paola-Urban Land Complex	0-8%	Excessively Drained	>80 inches	55%
Basinger Fine Sand	0-2%	Poorly Drained	2-18 inches	15%
Pomello Fine Sand	0-5%	Moderately Well Drained	24-42 inches	10%
Arents-Urban Land Complex	0-5%	Somewhat Poorly Drained	24-36 inches	4%
Quartzipsamments, shaped	0-5%	Well Drained	>80 inches	4%
Urban Land	-----	-----	-----	4%
Okeelanta Muck	0-1%	Very Poorly Drained	0 inches	3%
Immokalee Fine Sand	0-2%	Poorly Drained	6-18 inches	2%
Sanibel Muck	0-1%	Very Poorly Drained	0 inches	0.5%
Winder Fine Sand	0-2%	Poorly Drained	0-12 inches	0.5%



LEGEND		
	Project Area Quarter Mile Buffer	
Soil Type		
	ANCLOTE (HYDRIC)	
	ARENTS	
	BASINGER (HYDRIC)	
	BEACHES	
	CANAVERAL	
	COCOA	
	IMMOKALEE	
	KESSON (HYDRIC)	
	MYAKKA	
	OKEELANTA (HYDRIC)	
	PALM BEACH	
	PITS	
	POMELLO	
	POMPANO (HYDRIC)	
	QUARTZIPSAMMENTS	
	SANIBEL (HYDRIC)	
	ST. LUCIE	
	TERRA CEIA (HYDRIC)	
	UDORTHENTS	
	URBAN LAND	
	WINDER (HYDRIC)	
	WULFERT (HYDRIC)	

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**SOILS MAP**  
 Source: Natural Resources Conservation Service, 2012

**Figure 4**

A description of each soil complex identified within the project corridor is provided below:

**St. Lucie-Paola-Urban Land Complex** (55% of study area one-quarter mile buffer) consists of St. Lucie sand and Urban land. About 50 to 70 percent of this complex is open land, such as lawns, vacant lots, and playgrounds. These areas are made up of nearly level to sloping, excessively drained St. Lucie soils. In places, these soils have been modified by cutting, grading, or shaping for urban development. About 30 to 50 percent of the complex is covered by streets, sidewalks, driveways, patios, buildings, and other structures. The rest of the complex is made up of Paola and Pomello soils.

**Basinger Fine Sand** (15% of study area one-quarter mile buffer) consists of nearly level, poorly drained, deep, sandy soil in broad grassy sloughs. The water table is within 10 inches of the surface for 2 to 6 months in most years and within 10 to 30 inches for the rest of the year.

**Pomello Fine Sand** (10% of study area one-quarter mile buffer) consists of nearly level to gently sloping, moderately well drained, deep sandy soil that has a dark, weakly cemented layer below a depth of 30 inches. This soil is on low ridges and knolls. Slopes range from 0 to 5 percent. Under natural conditions, the water table is within 24 to 40 inches for 1 to 4 months during wet periods and below 40 inches during the remainder of the year.

**Arents-Urban Land Complex** (4% of study area one-quarter mile buffer) consists of nearly level, somewhat poorly drained, sandy soils and Urban Land. The soils formed in thick layers of sandy fill material that were placed over low, wet mineral soils to make areas suitable for urban use. This complex is about 60 to 75 percent Arents and 25 to 40 percent Urban Land. The soil material is generally rapidly permeable in all layers. The available water capacity is low or very low.

**Quartzipsamments, shaped** (4% of study area one-quarter mile buffer) consists of nearly level to gently sloping, well drained, deep, sandy soils in areas where natural soils have been altered by cutting down ridges and spreading the soil material over adjacent lower soils, by filling low areas above natural ground level, and by filling and shaping soil material to form golf courses. The water table is below a depth of 60 inches. Permeability is very rapid and the available water capacity is very low.

**Urban Land** (4% of study area one-quarter mile buffer) consists of areas that are 60 to more than 75 percent covered by streets, buildings, large parking lots, shopping centers, industrial parks, airports, and related facilities. Other areas, mostly lawns, parks, vacant lots, and playgrounds are generally altered to such an extent that the former soils cannot be easily recognized and are in tracts too small to be mapped separately.

**Okeelanta Muck** (3% of study area one-quarter mile buffer) consists of nearly level, very poorly drained, organic soil that has sandy mineral material within a depth of 40 inches. It is in large fresh water marshes and small, isolated depressions. Under natural conditions, the soil is covered by water, or the water table is within 10 inches of the surface for 6 to 12 months in most years, except during extended dry periods.

**Immokalee Fine Sand** (2% of study area one-quarter mile buffer) consists of nearly level, poorly drained, deep, sandy soil that has a dark colored layer below a depth of 30 inches that is weakly cemented with organic matter. This soil is

in broad flatwood areas. The water table is within 10 inches of the surface for 2 to 4 months during wet periods, within 10 to 40 inches for 8 months or more in most years, but it is below 40 inches in dry periods.

**Sanibel Muck** (0.5% of study area one-quarter mile buffer) consists of nearly level, very poorly drained, deep, sandy soil that has a thin organic layer on the surface. This soil is in depressions, drainageways, and broad flats. Under natural conditions, the water table is within 10 inches of the surface for 6 to 12 months in most years. Water covers the surface 2 to 6 months during wet periods.

**Winder Fine Sand** (0.5% of study area one-quarter mile buffer) consists of nearly level, poorly drained soil that has a sandy subsurface layer that tongues into a loamy subsoil at a depth of less than 20 inches. This soil is on broad, low flats and in depressions and poorly defined drainageways. Under natural conditions, the water table is within 10 inches of the surface for 2 to 6 months during most years. Some areas are flooded for periods of a few days to about 3 months.

### 4.3 Drainage and Surface Waters

The project study area is located in the C-15, C-16, and Intercoastal regional drainage basins as shown in Figure 5. The Boynton Beach Boulevard study area is in the C-15, C-16, and Intercoastal drainage basins. The Gateway Boulevard study area is in the C-16 and Intercoastal drainage basins. Figure 6 shows the canals in these drainage basins maintained by the South Florida Water Management District (SFWMD) and Lake Worth Drainage District (LWDD). The C-16 drainage basin is comprised of a canal system with the C-16 canal located between Boynton Beach Boulevard and Gateway Boulevard. The C-16 canal receives water from the C. Stanley Weaver Canal and Equalizing Canal Number 4 (E-4) discharging to the Intracoastal Waterway to the east of the project area.

Figure 7 shows surface water features in the vicinity of the project study area. There are several stormwater detention facilities and wetland areas within the project study area. There are no surface waters features (i.e. lakes, canals, etc.) within the immediate project area.

Regionally there are several surface water features and their localized drainage basins influencing the flow of surface and groundwater. These surface water features have the potential to draw contamination toward them. Surface water features around the Boynton Beach Boulevard interchange study area include the Boynton Beach Canal to the North, the Lake Ida Canal to the West, and the Intercoastal Waterway to the East. Surface water features around the Gateway Boulevard interchange study area include the Boynton Beach Canal to the South, the Lake Ida Canal and several storm water retention ponds to the West, and the Inter-coastal Waterway to the East.

The existing stormwater system west of I-95 collects runoff via pipes and outfalls to ponds whereas the system to the east of I-95 collects runoff via pipes and outfalls to the Intracoastal. Runoff at the interchanges along I-95 is collected in exfiltration trenches and existing dry retentions.

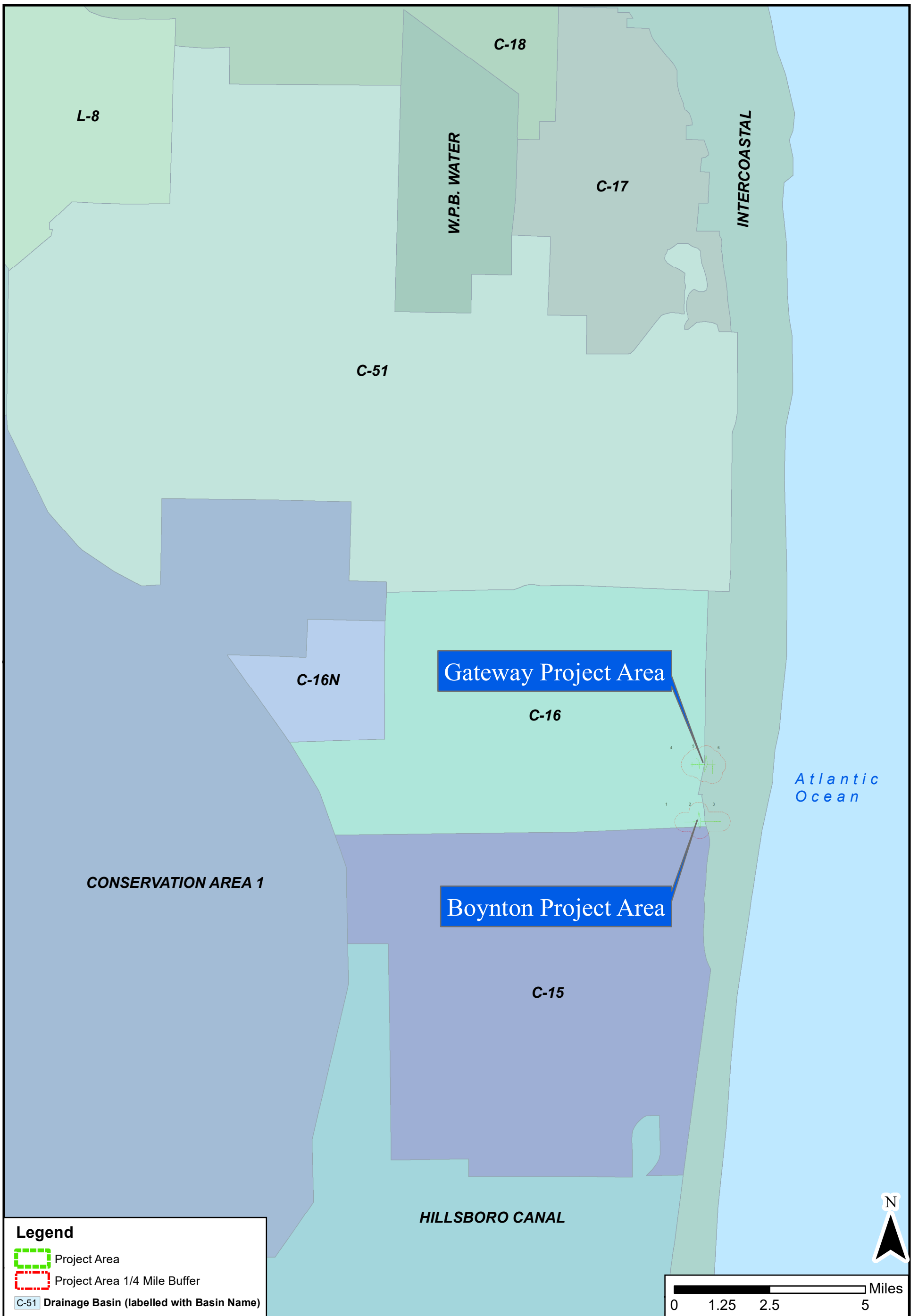
The additional impervious area for the proposed improvements along Gateway Boulevard and Boynton Beach Boulevard will be treated in new detention ponds. Additional impervious area along I-95 at the interchanges will be collected via modified exfiltration trenches and existing dry retentions, where feasible. Local stormwater management will prevent negative impacts to existing conveyances. Attenuation and water quality requirements will be met as required.

Six potential pond sites, three for each project study area, are being evaluated adjacent to the potential improvements. Figure 8 depicts the potential pond sites. A description of each potential pond site is provided below, including location, size, and adjacent land use based on the Florida Land Use, Cover, and Forms Classification System (FLUCFCS). Additional information regarding the potential pond sites can be found in the *Pond Siting Report*.


- Pond Site 1 is located immediately north of Gateway Boulevard and west of the Quantum Village Shopping Plaza. This potential pond site is 0.95 acre and is located entirely within Melaleuca, FLUCFCS 4240 (SFWMD, 2011). This potential pond site is adjacent to Melaleuca (FLUCFCS 4240) to the west, Pine Flatwoods (FLUCFCS 4110) to the north, and Commercial and Services (FLUCFCS 1400) to the east.
- Pond Site 2 is located immediately south of Gateway Boulevard and west of I-95. This potential pond site is 3.27 acres and is within a vacant area that is classified as Commercial and Services, (FLUCFCS 1400). This

potential pond site is surrounded entirely by Commercial and Services (FLUCFCS 1400) and Transportation (FLUCFCS 810) land uses.

- Pond Site 3 is located east of I-95 and north of Gateway Boulevard, west of NE 2<sup>nd</sup> Court. This potential pond site is 0.94 acre and is within an area classified as Multiple Dwelling Units, High Rise <Three stories or more> (FLUCFCS 1340). This area is to the south of and associated with Village Royale on the Green East Club House Business Office. This potential pond site is surrounded entirely by Multi-Family (FLUCFCS 1340) and Single Family (FLUCFCS 1210) residential land use.
- Pond Site 4 is located north of Boynton Beach Boulevard and east of Old Boynton Road. This potential pond site is 0.75 acre and is within a vacant area that is classified as Fixed Single Family Units, (FLUCFCS 1210) and Commercial and Services, (FLUCFCS 1400). This potential pond site is adjacent to Single Family (FLUCFCS 1210) and Multi-Family (FLUCFCS 1330).
- Pond Site 5 is located south of Boynton Beach Boulevard and north of NW 1<sup>st</sup> Avenue, west of SW 2<sup>nd</sup> Street. This potential pond site is 0.74 acre and is within a vacant parcel classified as Fixed Single Family Units, (FLUCFCS 1210). This potential pond site is surrounded by Single Family (FLUCFCS 1210) and Commercial and Services (FLUCFCS 1400).
- Pond Site 6 is located north of Boynton Beach Boulevard and east of NW 4<sup>th</sup> Street. This pond site is 0.56 acre and is within a vacant parcel classified as Fixed Single Family Units (FLUCFCS 1210). This potential pond site is surrounded by Single Family (FLUCFCS 1210) land use.

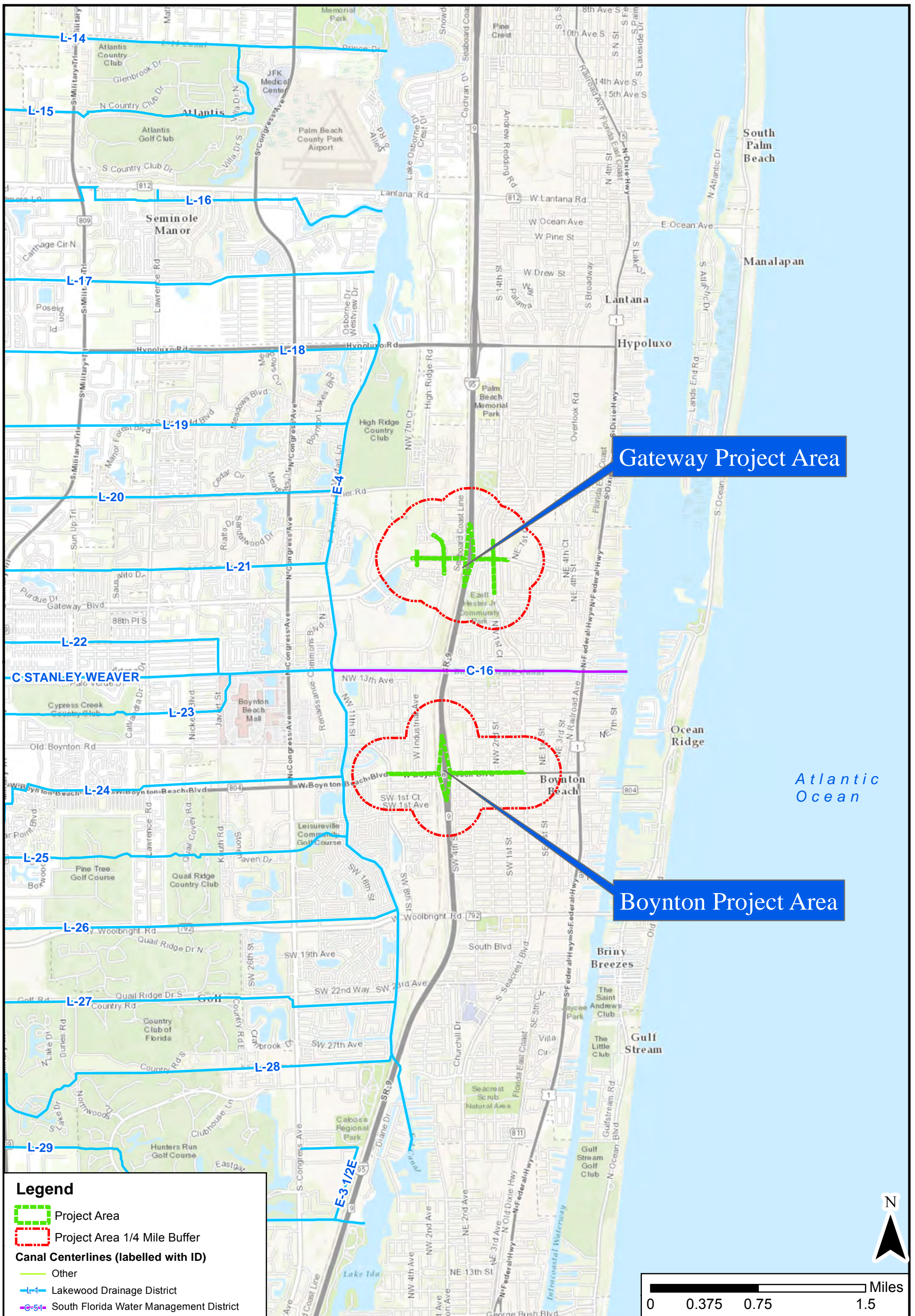


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**REGIONAL DRAINAGE  
 BASINS MAP**  
 Source: Florida Department of  
 Environmental Protection, 1999

**Figure 5**



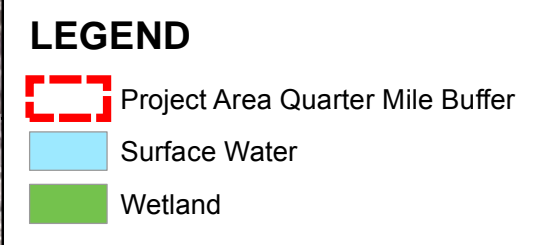
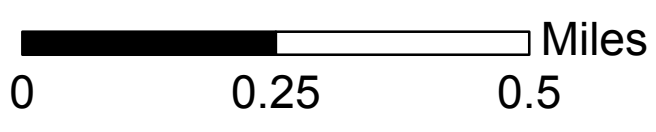
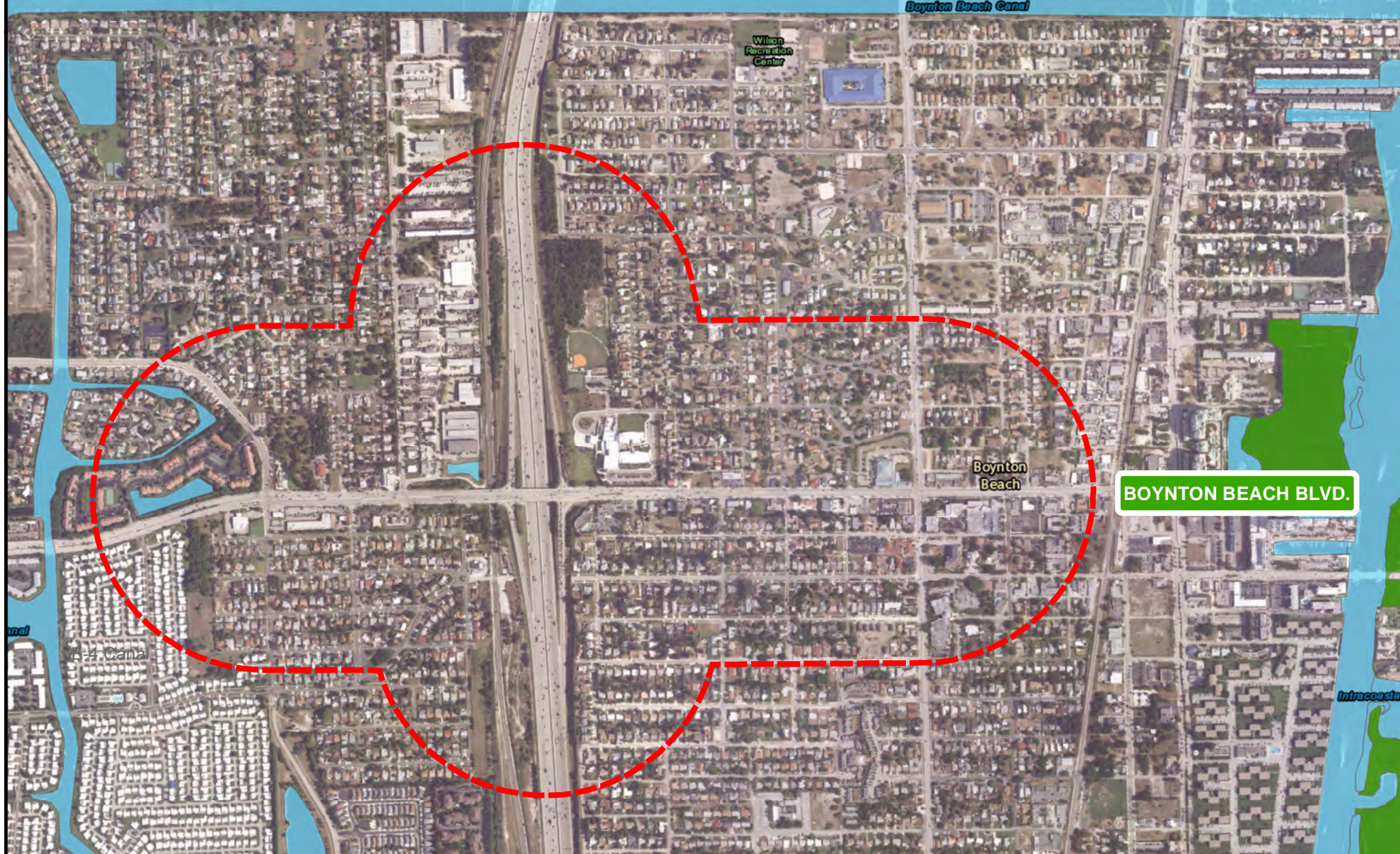
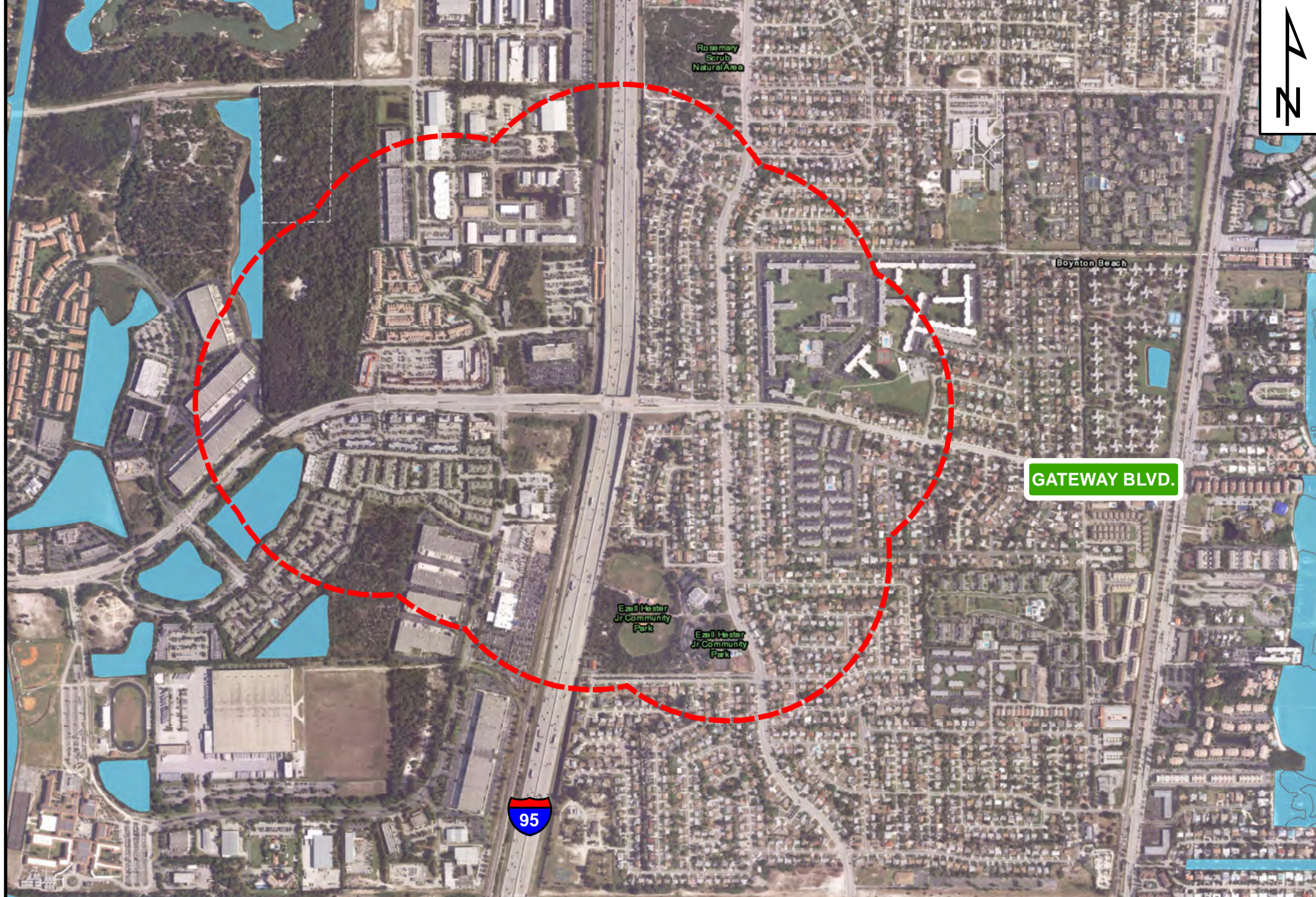
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**LOCAL DRAINAGE MAP**  
 Source: Lake Worth Drainage District, 2017

**Figure 6**





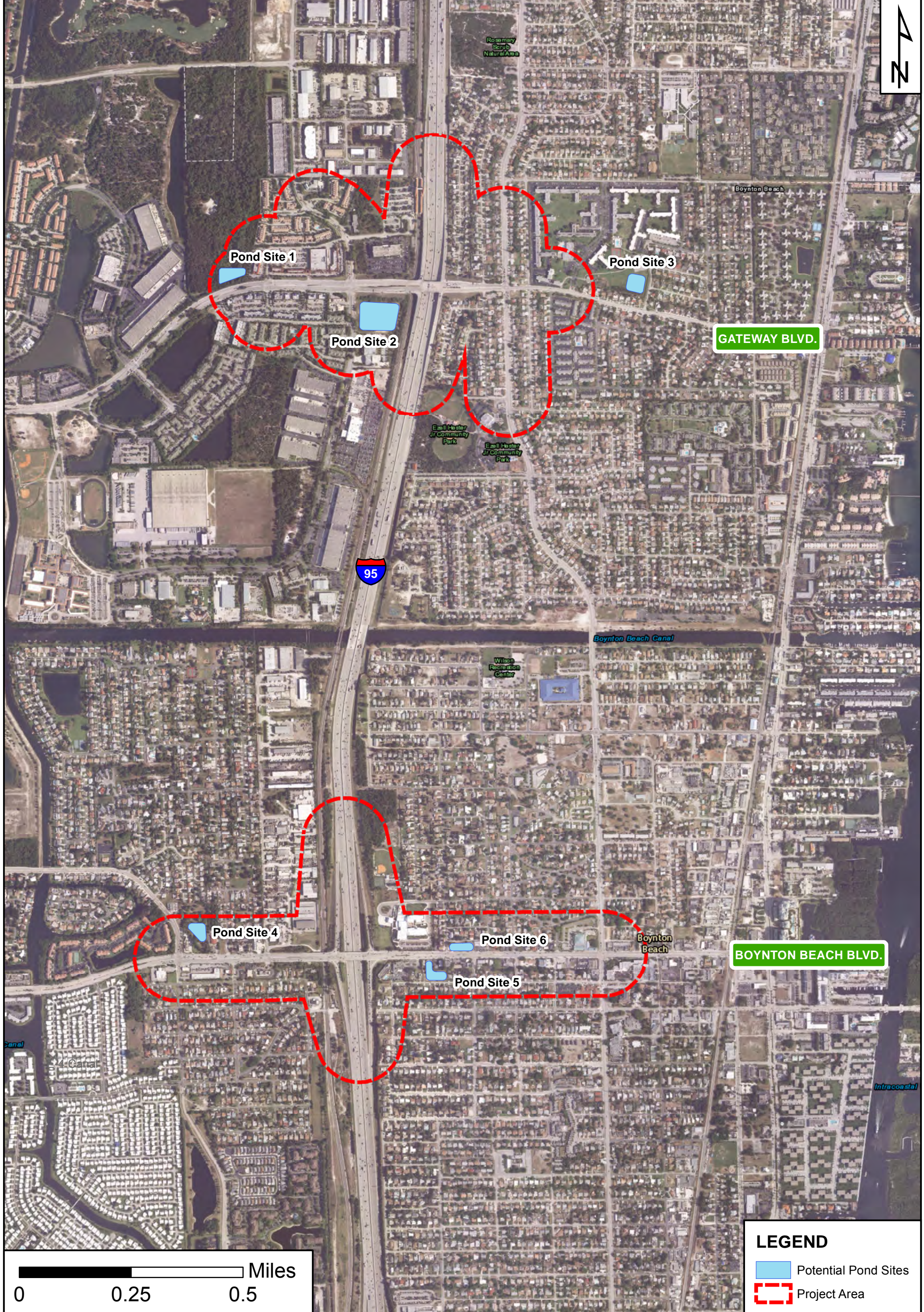
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**SURFACE WATER MAP**

Source: National Wetlands Inventory, 2014

**Figure 7**



**LEGEND**

- Potential Pond Sites
- Project Area

0      0.25      0.5  
Miles

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**POTENTIAL POND SITE  
 LOCATION MAP**

**Figure 8**

**4.4 Potable Water Supplies**

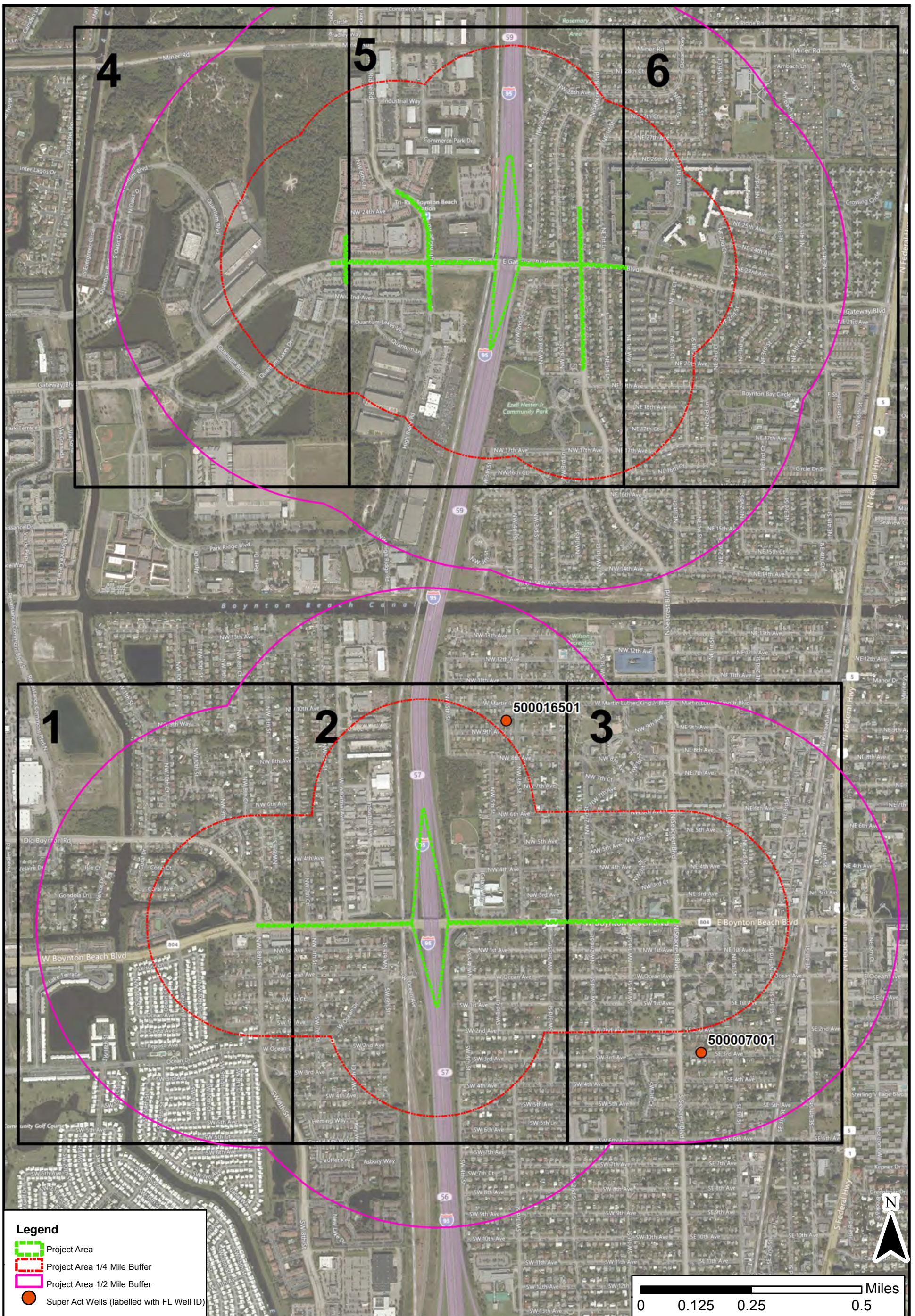
The proximity of the project corridor to public and private wellfields was investigated using FDEP Map Direct’s Public Water Supply (PWS) Wells data and Geographic Information System (GIS) Inventory’s State Underground Petroleum Environmental Response (SUPER) Act Program Risk Sources in Florida data. The SUPER Act was enacted by Florida State Legislature in 1986 in order to conduct drinking water well sampling and investigation around known or suspected contaminated petroleum facilities.

The PWS data provides statewide coverage of PWS wells, excluding federally owned facilities. For this investigation, PWS wells are defined as municipal or community well fields of greater than 100,000 gallons per day permitted capacity. A search radius of one-half mile was used to identify PWS wells for analysis. No PWS wells are located within one-half mile of the project corridor.

The SUPER Act Risk Sources in Florida data provides statewide coverage of information relating to petroleum and drycleaning facilities investigated as part of the SUPER Act and the Drycleaning Solvent Surveillance Program (DSSP). A search radius of one-half mile was used to identify public wells and one-quarter mile was used to identify private wells for analysis. One public SUPER Act well is located within one-half mile of the project corridor. No private SUPER Act wells are located within one-quarter mile of the project corridor. One private SUPER Act well is located just outside the one-quarter mile buffer and is included for reference. These wells are detailed in Table 4 and shown on Figure 9.

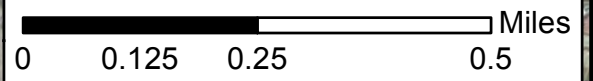
**Table 4: SUPER Act Wells within One-Half Mile of Proposed Improvements**

<b>FL Well ID</b>	<b>Address</b>	<b>Approximate Distance to Nearest Point of Project Corridor</b>	<b>Use</b>
500007001	Intersection of S Seacrest Blvd. and SE 3 <sup>rd</sup> Avenue Boynton Beach, FL 33435	485 feet	Non-Community PWS
500016501	1018 NW 4 <sup>th</sup> Street Boynton Beach, FL 33435	440 feet	Private



**Legend**

- Project Area
- Project Area 1/4 Mile Buffer
- Project Area 1/2 Mile Buffer
- Super Act Wells (labelled with FL Well ID)



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**POTABLE WATER  
 SUPPLIES MAP**

Source: Florida Department of Health, 2014

**Figure 9**

## 5. Methodology

This report identifies and evaluates known or potential contamination problems, presents recommendations concerning these problems, and discusses possible impacts to the proposed project. Methodologies used to complete this evaluation are in general conformance with the assessment standards as specified in Part 2, Chapter 22 of the FDOT PD&E Manual, as practical. Hazardous materials surveys for asbestos containing materials and metal based coatings were not included in this evaluation.

Data collected from preliminary site reconnaissance, regulatory agency database information review and subsequent historical land use research was used to identify critical areas for subsequent detailed review. A standard buffer distance of one-quarter mile was utilized to complete the primary search for registered facilities, historical research, and site reconnaissance to identify land uses with potential concerns. The one-quarter mile screening distance extends from the out limits of the project area along the I-95 corridor and the points at which interchange ramps connect with intersecting roadways. The one-quarter mile distance was selected to include potential offsite drainage ponds and to identify contamination sources that may be of concern when dewatering within the project limits.

### 5.1 Data Collection

#### 5.1.1 Environmental Database

As part of this Contamination Screening Evaluation, a computerized database search was requested from Environmental Data Resources, Inc. (EDR). The database search included the entire project corridor and a maximum radius of one mile in accordance with the American Society for Testing and Materials (ASTM) standard E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*.

The results of the database search served as a basis for the environmental regulatory review included in a typical Level I Assessment as described in Part 2, Chapter 22 "Contamination Impacts" of the FDOT PD&E Manual. Table 5 summarizes the results of the database search. A description of each government database included in the search is provided in Appendix A. An electronic version of the EDR Corridor Study Report is included with this publication.

Table 5: Summary of Database Findings

Government Database	Number of Sites Found	Government Database	Number of Sites Found	Government Database	Number of Sites Found	Government Database	Number of Sites Found
<b>Federal Records</b>		<b>Federal Records (Cont'd)</b>		<b>Federal Records (Cont'd)</b>		<b>State and Local Records (Cont'd)</b>	
NPL	0	UMTRA	0	COAL ASH EPA	0	FL NPDES	2
Proposed NPL	0	ODI	0	2020 COR ACTION	1	FL AIRS	2
Delisted NPL	0	US MINES	0	PRP	0	FL TIER 2	4
NPL LIENS	0	TRIS	0			FL Cattle Dip. Vats	0
CERCLIS	0	TSCA	0			FL SITE INV SITES	0
CERC-NFRAP	0	FTTS	0	<b>State and Local Records</b>		FL FF TANKS	0
LIENS 2	0	HIST FTTS	0	FL SHWS	0	FL DWM CONTAM	8
CORRACTS	1	SSTS	0	FL SWF/LF	9	FL CLEANUP SITES	8
RCRA-TSDF	1	ICIS	0	FL UIC	0	FL RESP PARTY	4
RCRA-LQG	1	PADS	0	FL SWRCY	0		
RCRA-SQG	5	MLTS	0	FL LUST	21	<b>Tribal Records</b>	
RCRA-CESQG	16	RADINFO	0	FL TANKS	8	INDIAN RESERVE	0
RCRA NonGen / NLR	16	FINDS	30	FL UST	30	INDIAN ODI	0
US ENG CONTROLS	0	RAATS	0	FL LAST	0	INDIAN LUST	0
US INST CONTROL	0	RMP	0	FL AST	13	INDIAN UST	0
ERNS	0	COAL ASH DOE	0	FL SITES	0	INDIAN VCP	0
HMIRS	0	EPA WATCH LIST	0	RI Manifests	1		
DOT OPS	0	US FIN ASSUR	1	FL SPILLS	2	<b>EDR Proprietary Historical Databases</b>	
US CDL	0	PCB TRANSFORMER	0	FL ENG CONTROLS	0	EDR MGP	0
US BROWNFIELDS	0	US HIST CDL	0	FL INST CONTROL	0	EDR US Hist Auto	26
DOD	0	SCRD DRYCLEANERS	0	FL VCP	0	EDR US Hist Cleaner	5
FUDS	0	FEMA UST	0	FL DRYCLEANERS	0	FL RGA HWS	0
LUCIS	0	FEDERAL FACILITY	0	FL PRIORITY CLEANERS	1	FL RGA LF	0
CONSENT	0	LEAD SMELTERS	0	FL DEDB	0	FL RGA LUST	5
ROD	0	US AIRS	1	FL BROWNFIELDS	0		

Note: Sites may be listed in more than one database.

#### 5.1.2 Search Engines and Other Database Resources

Specialized search engines such as FDEP's Document Management System (OCULUS), Information Portal, and Map Direct, along with Palm Beach County's Countywide Information Network for Electronic Media Access (CINEMA) were used to identify regulated facilities within the study area. OCULUS is used by FDEP to store and organize regulatory documents. OCULUS was used in this analysis to obtain regulatory information regarding Storage Tanks, Hazardous Waste, Solid Waste, and Waste Cleanup. CINEMA is a database that provides information on Palm Beach County's environmental permits, licenses, and regulatory enforcement. Table B-1 in Appendix B provides documentation of identified facilities.

#### 5.1.3 Historical Aerial Photograph Review

Available aerial photographs from 1964 to present was reviewed to identify previous and current land uses which may have the potential to adversely impact project implementation at the proposed interchanges. Historical aerial photographs were obtained from the FDOT's Aerial Photo Look-Up System (APLUS) database and Google Earth Services. A minimum of one aerial photograph was reviewed per decade starting with the 1960's. When available, additional historical aerial photographs were reviewed within a decade.

#### 5.1.4 Corridor Reconnaissance

A project corridor walk-through was performed for the purpose of observing signs of possible contamination sources such as odors, spills, stains, excavations, storage areas, drains, and the presence of stressed vegetation. The site visits included a visual inspection of adjacent properties for any visible signs of potential contamination sources that could adversely impact the project corridor. Appendix C provides photographic documentation of the project corridor. Photo numbers were assigned to correspond to Site Numbers as listed in Table B-1 in Appendix B. There are situations when individual photographs were not captured for a site. This typically occurred when field personnel had limited site access and/or specific site features of concern were in a secured area. In these circumstances, the photo number corresponding to the site was not allocated and as a result the photo numbers jump in sequence.

#### 5.1.5 Field Methods

No additional soil and/or groundwater testing was performed as part of this investigation.

#### 5.1.6 Interview with Local Agency Officials and Property Owner Representatives

On January 21, 2016, an interview was conducted with a Palm Beach County Environmental Resources Management (ERM) representative. Mr. Steve Rial, P.G., concurred that the initial research had identified the pertinent potential contamination sources within the project study area.

In addition, the FDEP Southeast District was contacted on May 26, 2016, regarding the lack of information related to several identified contamination sources. Mr. Paul Wierzbicki, P.G., confirmed the FDEP Information Portal, OCULUS, and Map Direct websites contain all electronic documentation for regulated facilities and he could not provide facility-specific information beyond that found in the databases. Mr. Wierzbicki stated that a file review would have to be

conducted to determine if additional (i.e. non-electronic) information existed for any facility. Data associated with petroleum-contaminated facilities, hazardous waste and landfill information, or other site investigation data identified by the review of regulatory agency database information did not require further clarification.

## 5.2 Potential Impact Determination

More than 100 sites were evaluated within the proposed project area. Each site identified within the defined one-quarter mile buffer distance from the proposed improvements was evaluated for its potential impact and assigned a rating of High, Medium, Low, or No potential risk. Sites were rated based on their characteristics, not their distance from the proposed improvements. Risk ratings were assigned in accordance with Part 2, Chapter 22, Section 2.2.3 of the FDOT PD&E Manual and as further defined by the *FDOT D4 DCIC approach to the CSER*. The *FDOT D4 DCIC approach to the CSER* document is provided for reference in Appendix D. Details of the rating criteria for all risk levels are discussed below.

### 5.2.1 High Risk

Any site that has had a release that has not been resolved or is still under investigation/monitoring/cleanup is rated a High risk. Sites historically or currently operating as gas stations or drycleaning facilities that are not in a program and have never been assessed are also rated a High risk. A High risk rating indicates that after a review of all available information, there is a potential for contamination problems. In addition, further assessment may be required to determine the actual presence and/or levels of contamination and the need for remedial action.

The *FDOT D4 DCIC Approach to the CSER* also specifies that any property adjacent to an unresolved release/spill is also rated High risk. At the direction of FDOT, this criteria is not reasonable for the project area or scope and will not be implemented as part of this report.

### 5.2.2 Medium Risk

If a site had any previous releases, then it is a Medium risk even if there is documented cleanup and the site has been “finalized” (e.g. no further action (NFA) or site rehabilitation completion order (SRCO)). While it appears the release/spill has been “addressed” there are many examples of rebound and/or missed or migrated contaminants for this type of site that preclude a Low risk rating. In addition, it can be difficult to determine why the release occurred (i.e. faulty equipment, poor procedures and practices, undertrained employees etc.) so the “risk” associated with the original release could still be present thereby earning at least a Medium risk rating for the property as a release/spill can occur at any time and might not be detected.

If an underground storage tank (UST) or aboveground storage tank (AST) was removed from a site, but there is no tank closure assessment report (TCAR) on file, then the site is rated a Medium risk.

### 5.2.3 Low Risk

A Low risk rating indicates that the former or current operation has a hazardous waste generator identification (ID) number, or deals with hazardous materials; however, based on all available information, there is no reason to believe



there would be any involvement with contamination in relation to this project. A Low risk site can be any licensed facility that stores hazardous materials and/or potential contaminants and has never had a documented release or violation for a release. If a licensed material “storer” had a minor, well documented violation in the past that was well manage, not repeated, and completely addressed and documented, this site would be a Low risk. This rating could also apply to a retail store that blends paint.

This is the lowest possible rating a gasoline station operating within current regulations can receive (i.e. in compliance with no violations). Some Low risk sites, such as gas stations in compliance, should be reevaluated during the final design phase. If an UST or AST was removed from a site, and there is a TCAR which documents that no soil or groundwater contamination was detected during removal, then it can be rated Low risk. Regardless of current regulatory status, if a site had any release in the past it is not a Low risk. Low risk sites must never have had any releases.

#### 5.2.4 No Risk

A No risk rating indicates that after a review of all available information there is nothing to indicate contamination would be a problem. It is possible contaminants were handled on the property; however, all information indicates contamination problems should not be expected.

## **6. Alternative Alignments**

NEPA project development must consider a range of alternatives that meet the purpose and need of the project while balancing engineering requirements, impacts, and benefits. Project alternatives include the No-Build, Transportation Systems Management & Operations, and Build Alternatives.

FDOT is committed to the practicable avoidance and minimization of potential impacts to the social and natural environment when considering approval of proposed transportation projects. The study of alternatives and associated environmental consequences were evaluated according to NEPA and FDOT's PD&E process. This study process allows for coordination during the alternatives development process and thorough consideration of alternatives developed.

### **6.1 No Build Alternative**

NEPA requires that doing nothing to existing conditions be considered during the environmental review process. This alternative is designated as the No-Build Alternative, signifying that no new improvements or construction would take place. Although this alternative does not meet the purpose and need for the project, it will be considered serving as a baseline for comparison against other alternatives. The No-Build Alternative retains the existing roadway and interchange improvements and would not have any direct impacts to the physical, natural, and social environments, ROW, structures, or utilities.

### **6.2 Transportation System Management and Operations (TSM&O) Alternative**

The TSM&O Alternative includes implementation of non-capacity improvements to the existing transportation network that improve traffic flow, manage congestion, and maximize highway operations. Intelligent transportation systems (ITS), multimodal applications, adjusting signal phasing and timing, auxiliary lane additions, and higher land-use density strategies are TSM&O instruments used to maximize transportation infrastructure utilization. Such improvements are often less costly and require little to no ROW compared to physical expansion of the transportation network.

TSM&O improvements alone would not adequately accommodate the future year traffic volumes within the project's area of influence. The TSM&O Alternative alone is not considered a viable alternative, however, the build alternatives developed will incorporate viable TSM&O improvements.

### **6.3 Alternative Travel Modes**

Multimodal facilities such as transit routes currently exist within the proposed project limits. The existing modes are incorporated into the build alternatives with current design standards. The Build Alternative for this project will include bicycle lanes and sidewalks that will connect to existing facilities to the east and west of the project limits. The transit routes within the study area will not be affected by the Build Alternative. Alternative travel modes are not anticipated to reduce the future demand near this interchange.

## 6.4 Alternative Development

As part of the PD&E Study, several roadway improvement alternatives were considered for improving traffic operations and safety near the SR-804/Boynton Beach Boulevard and Gateway Boulevard interchanges. The interchanges were initially evaluated in Concept Development Reports completed by the FDOT through the I-95 Master Plan Project. The SR-9/I-95 Interchange at SR-804/Boynton Beach Boulevard, Palm Beach County, Interchange Concept Development Report (2014) and SR-9/I-95 Interchange at Gateway Boulevard, Palm Beach County, Interchange Concept Development Report (2014) developed and evaluated conceptual design alternatives for geometric criteria, impacts on structures, drainage, signing, and utilities, adjoining side street connections, signalized intersections, and constructability.

The recommended improvements resulted in development of a Conceptual Design Alternative (CDA). The CDA has been retained and will be evaluated as a build alternative in this PD&E Study. A Tier 1 Alternatives Evaluation Technical Memorandum (March 2016) was prepared that identified preliminary alternatives that improved traffic operations and safety. In addition to the CDA, eight conceptual alternatives were developed for SR-804/Boynton Beach Boulevard and three for Gateway Boulevard interchanges. A preliminary screening of each alternative was completed with respect to the purpose and need for the project, traffic operations, traffic safety, constructability, cost, right of way, environmental, and socio-economic impacts.

Of the preliminary alternatives developed, the following build alternatives were retained for full evaluation for each interchange. All Build Alternatives will incorporate TSM&O improvements and will be developed further as the project progresses.

- Alternative 1 - CDA
- Alternative 2 - Streamlined CDA
- Alternative 3 - Single-point Urban Interchange (SPUI)

## 6.5 Build Alternatives

### 6.5.1 SR-9/I-95 at SR-804/Boynton Beach Boulevard Interchange

**Alternative 1 – CDA.** This build alternative was retained from the Concept Development Reports previously prepared and discussed in Section 3.4. The development of this alternative considered practical design and evaluated traditional turn lane improvements for the existing Tight Urban Diamond Interchange configuration to optimize the benefit to cost (B/C) ratio without imperiling traffic operations and safety.

For this alternative, proposed improvements are described below and shown in **Figure 1 in Appendix E**.

1. A new westbound right turn lane to Industrial Avenue.
2. Dual left and triple right turn lanes in the southbound direction at the I-95 southbound ramp terminal intersection.

3. Continuously flowing channelized eastbound right turn lane and dual westbound left turn lanes that create three SR-9/I-95 southbound on-ramp lanes. The third lane on the SR-9/I-95 southbound on-ramp is merged south of the ramp terminal intersection from the right side to tie into the existing dual lane on-ramp.
4. Dual left turn lanes in the eastbound and westbound along SR-804/Boynton Beach Boulevard.
5. Triple left turn lanes and single channelized right turn lane in the northbound direction at the northbound I-95 ramp terminal intersection.
6. Dual left turn lanes with extended queue lengths, single channelized right turn lane and additional through lane in the westbound direction along SR-804/Boynton Beach Boulevard east of the SR-9/I-95 bridge.
7. Continuously flowing channelized westbound right turn lane and dual eastbound left turn lanes that create three SR-9/I-95 northbound on-ramp lanes. Two of the three lanes on this SR-9/I-95 northbound on-ramp are merged north of the ramp terminal intersection from the right to tie into the existing axillary lane between SR-804/Boynton Beach Boulevard and Gateway Boulevard.
8. Increase right turn storage lane along eastbound SR-804/Boynton Beach Boulevard at the northbound SR-9/I-95 ramp terminal intersection.
9. New right turn storage lane in the eastbound direction at the SR-804/Boynton Beach Boulevard and Seacrest Boulevard intersection.

Alternative 1 also adds an additional westbound through lane between SR-9/I-95 southbound ramp terminal and Old Boynton Road/SW 8<sup>th</sup> Street. This additional westbound through lane is dropped near the intersection of SR-804/Boynton Beach Boulevard and Old Boynton Road/SR 8<sup>th</sup> Street as a westbound right turn lane.

**Alternative 2 – Streamlined CDA.** This build alternative enhances Alternative 1 and avoids reconstruction of the SR-804/Boynton Beach Boulevard bridges over the CSX/SFRC railroad (Bridge Number 930289) and SR-9/I-95 (Bridge Number 930285). This alternative retains most of Alternative 1 proposed improvements, but proposes the below described enhancements and are shown in **Figure 2 in Appendix E**.

1. A closed median between 7<sup>th</sup> Street and Old Boynton Road.
2. Dual right turn lanes, a single left turn lane, and a shared left/right lane in the southbound direction at the SR-9/I-95 southbound ramp terminal intersection.
3. Continuously flowing channelized eastbound right turn lane and dual westbound left turn lanes that create three SR-9/I-95 southbound on-ramp lanes. The third lane on the SR-9/I-95 southbound on-ramp is merged south of the ramp terminal intersection from the left side to tie into the existing dual lane on-ramp.
4. Triple left and dual channelized right turn lanes in the northbound direction at the I-95 northbound ramp terminal intersection.

Alternative 2 eliminates the additional westbound through lane between SR-9/I-95 southbound ramp terminal and Old Boynton Road/SW 8<sup>th</sup> Street added by the Alternative 1.

**Alternative 3 – SPUI.** This build alternative proposes the construction of a new SPUI at the SR-9/I-95 and SR-804/Boynton Beach Boulevard Interchange. A SPUI configuration combines turning movements at the SR-9/I-95 northbound and southbound exit ramps to operate under a single traffic control device, resulting in a high capacity interchange. The following improvements are proposed for this alternative and are shown in **Figure 3 in Appendix E**.

1. Convert existing dual ramp terminal signalized intersections into a single signalized intersection to serve both southbound and northbound ramp terminals. This Alternative will also replicate all improvements considered along SR 904/Gateway Boulevard and the SR-9/I-95 northbound and southbound ramps under Alternative 2 as described above.

#### 6.5.2 SR-9/I-95 at Gateway Boulevard Interchange

**Alternative 1 – CDA.** This Build Alternative was retained from the Concept Development Reports previously prepared and discussed in Section 3.4. The development of this alternative considered practical design and evaluated traditional turn lane improvements for the existing Tight Urban Diamond Interchange configuration to optimize the benefit to cost (B/C) ratio without imperiling traffic operations and safety.

For this alternative, proposed improvements are described below and shown in **Figure 4 in Appendix E**.

1. Dual left turn lanes and a single right turn lane in the eastbound direction at the Gateway Boulevard and High Ridge Road intersection.
2. Dual left turn lanes and a single right turn lane in the northbound direction at the Gateway Boulevard and High Ridge Road intersection.
3. Triple left turn lanes from southbound High Ridge Road to eastbound Gateway Boulevard.
4. Dual left and right turn lanes in the southbound direction at the SR-9/I-95 southbound ramp terminal intersection.
5. Dual right turn lanes from eastbound Gateway Boulevard to southbound SR-9/I-95.
6. Triple left and single right turn lanes in the northbound direction at the SR-9/I-95 northbound ramp terminal intersection.
7. Dual left turn lanes from northbound Seacrest Boulevard to westbound Gateway Boulevard.
8. Single right turn lane from southbound Seacrest Boulevard to westbound Gateway Boulevard.

Alternative 1 adds an additional through lane in the eastbound and westbound direction to create an eight lane typical section along Gateway Boulevard within the project limits between Quantum Boulevard and NE 1<sup>st</sup> Way.

**Alternative 2 – Streamlined CDA.** This build alternative enhances Alternative 1 along with retaining most of Alternative 1 proposed improvements including the additional through lane in the eastbound and westbound direction along Gateway Boulevard between Quantum Boulevard and NE 1<sup>st</sup> Way. Most of the SR-9/I-95 northbound and southbound ramp termini turn lane improvements are retained from Alternative 1 with adjustments to the intersection turn lane improvements at High Ridge Road.

For this alternative, proposed modifications are described below and shown in **Figure 5 in Appendix E**.

1. Dual left turn lanes from southbound High Ridge Road to eastbound Gateway Boulevard as opposed to triple left turn lanes in Alternative 1.
2. A single right turn lane and shared thru/right turn lane from eastbound Gateway Boulevard to southbound SR-9/I-95.

3. Triple left and dual right turn lanes in the northbound direction at the SR-9/I-95 northbound ramp terminal intersection.

**Alternative 3 – SPUI.** This build alternative proposes the construction of a new SPUI at the SR-9/I-95 at Gateway Boulevard Interchange. A SPUI configuration combines turning movements at the SR-9/I-95 northbound and southbound exit ramps to operate under a single traffic control device, resulting in a high capacity interchange. The following improvements are proposed for this alternative and are shown in **Figure 6 in Appendix E**.

1. Convert existing dual ramp terminal signalized intersections into a single signalized intersection to serve both southbound and northbound ramp terminals. This Alternative will also replicate all improvements considered along Gateway Boulevard and the SR-9/I-95 northbound and southbound ramps under Alternative 2 as described above.

#### ***Recommended Alternative***

Following the July 28, 2016 alternatives public workshop, a meeting was held with FDOT to discuss the comprehensive resources evaluation, transportation and traffic studies, costs, and involvement of the public, local, and state officials, and select a recommended alternative for each interchange. The recommended alternatives for the project area were chosen by FDOT on January 26, 2017. Alternative 2, the Streamlined Concept Development Alternative, was chosen for the SR 804/Boynton Beach Boulevard Interchange and Alternative 3, Single Point Urban Interchange, was chosen for the Gateway Boulevard Interchange. These two options require the least amount of ROW acquisitions in comparison to other alternatives proposed, except for the No-Build Alternative.

## 7. Project Impacts

Section 7 of the CSER provides a summary table of the historical imagery review, depicts the location of each potential contamination source within one-quarter mile of the project corridor, and provides a narrative discussion detailing sources of concern.

### 7.1 Historical Imagery Review

Aerial photographs are presented as Figures 10-1 through 10-8. A map grid has been superimposed on each photograph to orient the image in reference to the current project study areas. The center of grid 2 and grid 5 on the aeriels approximate the location of each interchange, Boynton Beach Boulevard and Gateway Boulevard, respectively. The results of the historical imagery review are presented in tabular form as Tables 6 and 7. Further detail is provided in the digital files, included with this publication, allowing electronic manipulation of each photograph.

To facilitate aerial photograph review, the two interchanges were each sub-divided into four geographic quadrants: Southwest, Southeast, Northwest, and Northeast. These quadrants are defined at the interchange: I-95 delineates west and east and either Boynton Beach Boulevard or Gateway Boulevard delineates north and south. No new areas of contamination concern were identified, as a result of the aerial photograph review, within the limits of the defined one-quarter mile buffer distance from the proposed improvements. A brief summary of the historical imagery review for each interchange is presented below.

#### 7.1.1 SR-9/I-95 at SR-804/Boynton Beach Boulevard Interchange

##### Southwest

In 1964, the majority of land in this quadrant was undeveloped with a few residential homes in the northeast and a rail road transportation facility in the east. In 2016, a majority of the quadrant is developed, consisting primarily of residential homes. Commercial businesses are present along Boynton Beach Boulevard. Additional detail on each aerial photograph evaluated is provided in Table 6.

##### Southeast

In 1964, the majority of land was residential. A few commercial businesses were present along Boynton Beach Boulevard. In 2016, a majority of the land is developed. Commercial businesses are present along Boynton Beach Boulevard and residential homes are present throughout the quadrant. Additional detail on each aerial photograph evaluated is provided in Table 6.

##### Northwest

In 1964, the majority of the land was undeveloped. A few residential homes were scattered in the middle and southwest of the quadrant, while the commercial buildings were located near the rail road. In 2016, the majority of the quadrant is developed with a large commercial/industrial complex adjacent to the rail road and residential homes and apartment/condominium units present in the west. Additional detail on each aerial photograph evaluated is provided in Table 6.

Northeast

In 1964, a majority of the land was developed with residential homes. In 2016, a majority of the land is developed with mixed residential, commercial, and institutional land use. Additional detail on each aerial photograph evaluated is provided in Table 6.

7.1.2 SR-9/I-95 at Gateway Boulevard Interchange

Southwest

In 1964, the majority of land in this quadrant was undeveloped. In 2016, a majority of the quadrant is developed with mixed commercial and residential land use. Additional detail on each aerial photograph evaluated is provided in Table 7.

Southeast

In 1964, the majority of land was undeveloped with small areas of residential homes. In 2016, a majority of land is developed with residential homes. A community center with athletic fields occupies the southwest corner of the quadrant. Additional detail on each aerial photograph evaluated is provided in Table 7.

Northwest

In 1964, the majority of land was undeveloped. In 2016, the majority of land is developed with mixed commercial/industrial and residential land use. A wetland area in the middle of the quadrant remains undeveloped. Additional detail on each aerial photograph evaluated is provided in Table 7.

Northeast

In 1964, 75% of land was developed with residential homes, while the other 25% was undeveloped. In 2016, land throughout the quadrant is developed with residential homes and apartment buildings/condominium units. Additional detail on each aerial photograph evaluated is provided in Table 7.





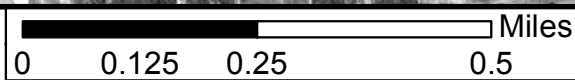
PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Historical Imagery  
 February 21, 1964**

Source: FDOT APLUS

**Figure 10-1**



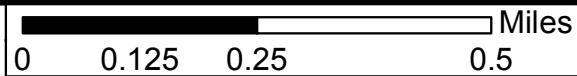
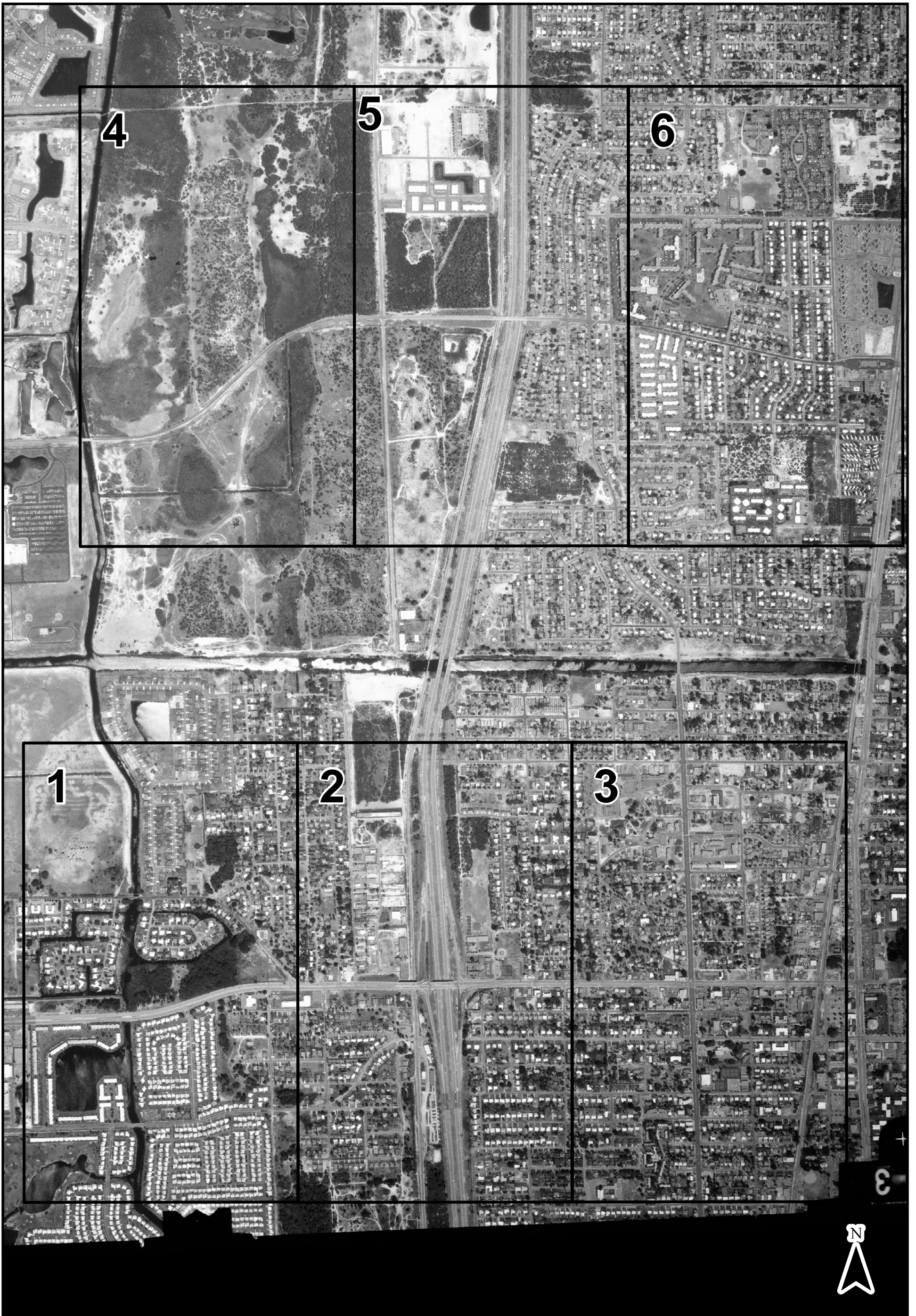
PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Historical Imagery**  
**April 12, 1977**

Source: FDOT APLUS

**Figure 10-2**



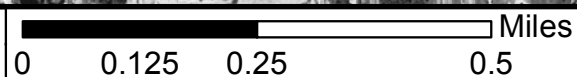
PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Historical Imagery**  
**April 23, 1986**

Source: FDOT APLUS

**Figure 10-3**



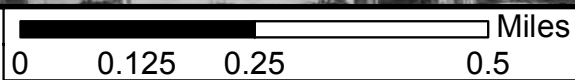
PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Historical Imagery**  
**February 11, 1991**

Source: FDOT APLUS

**Figure 10-4**



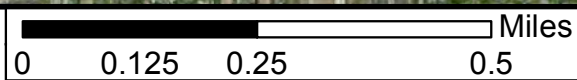
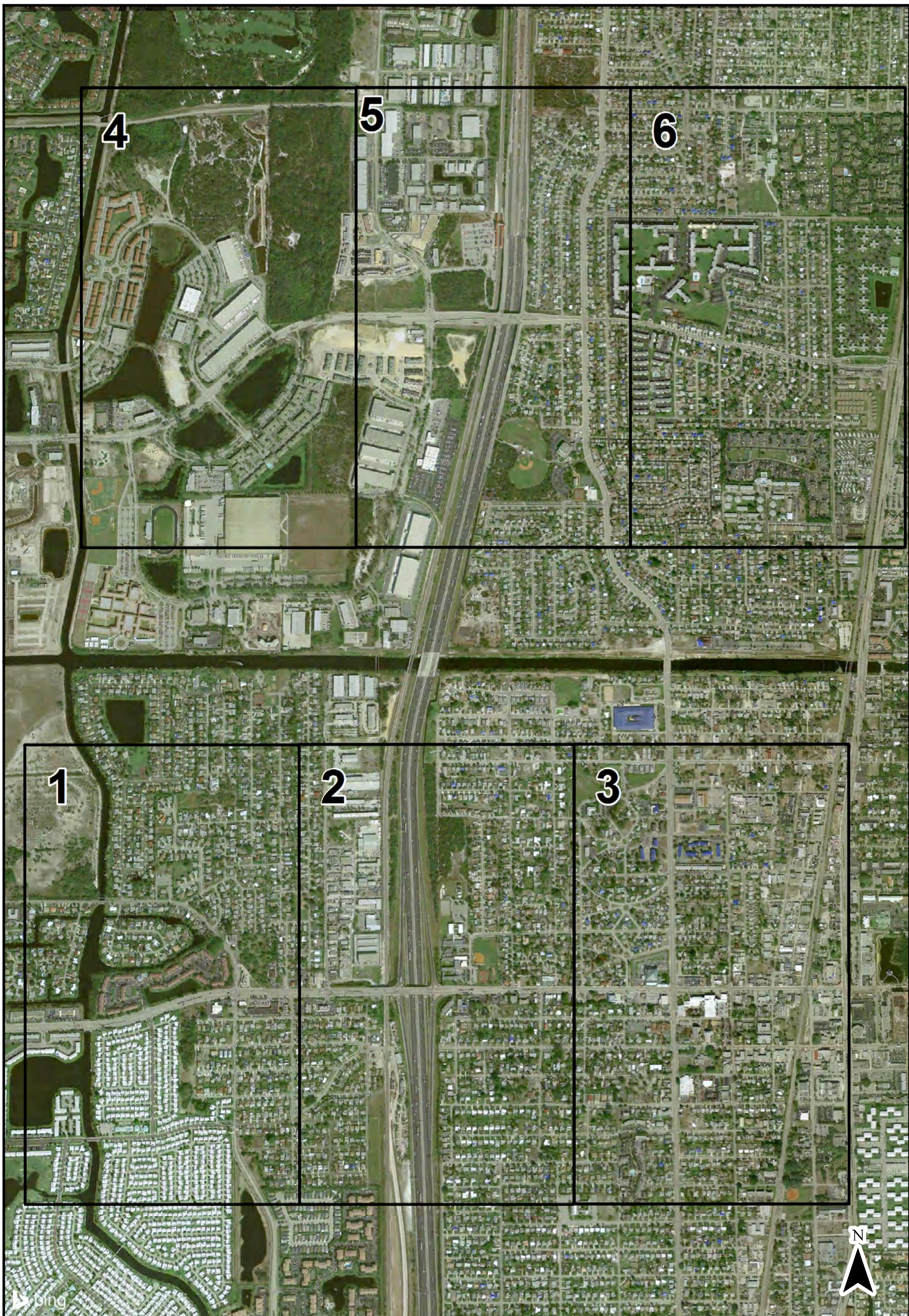
PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Historical Imagery**  
**January 25, 1995**

Source: FDOT APLUS

**Figure 10-5**



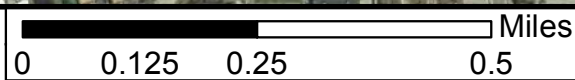
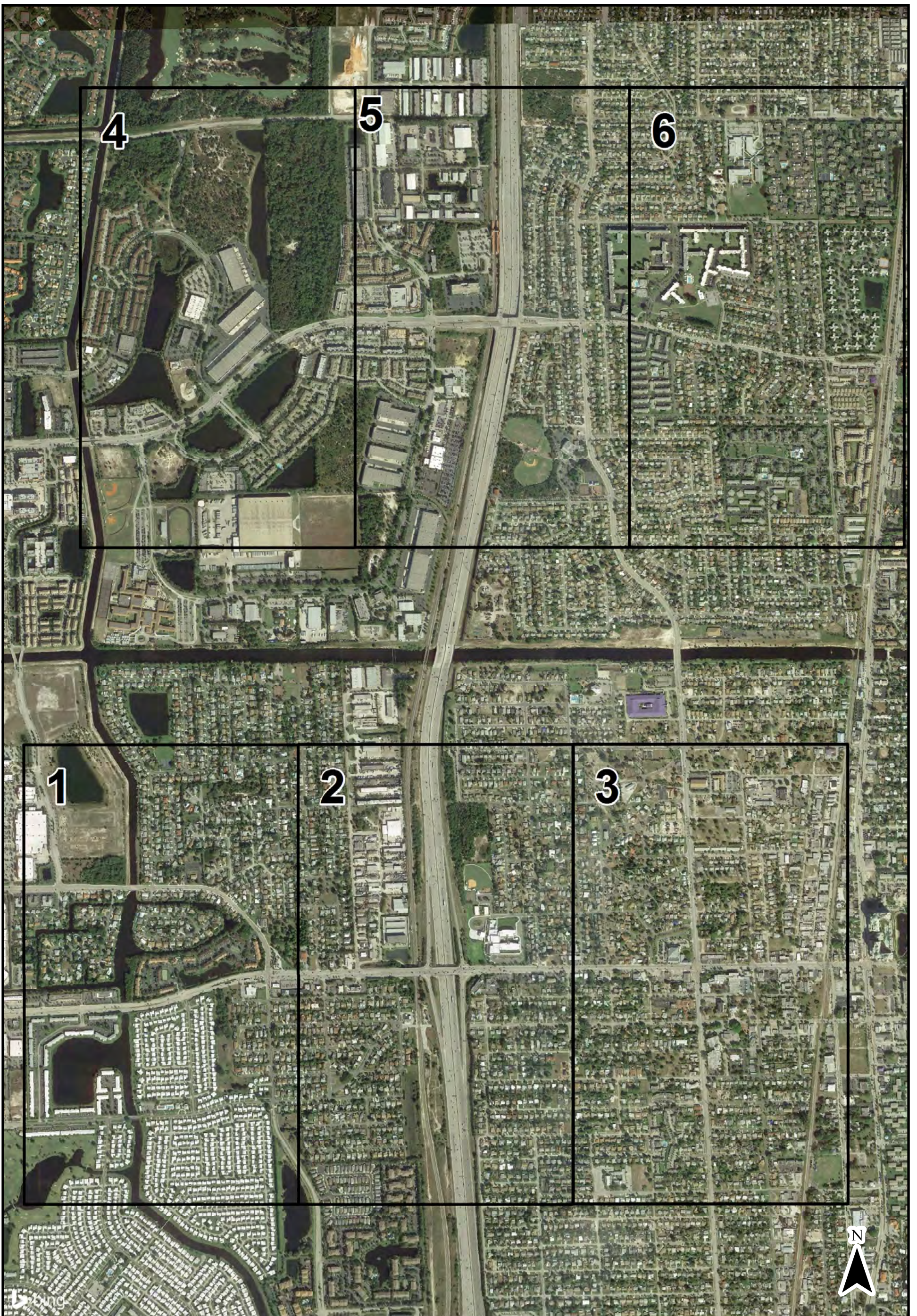
PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Historical Imagery**  
**December 30, 2004**

Source: Google Earth

**Figure 10-6**



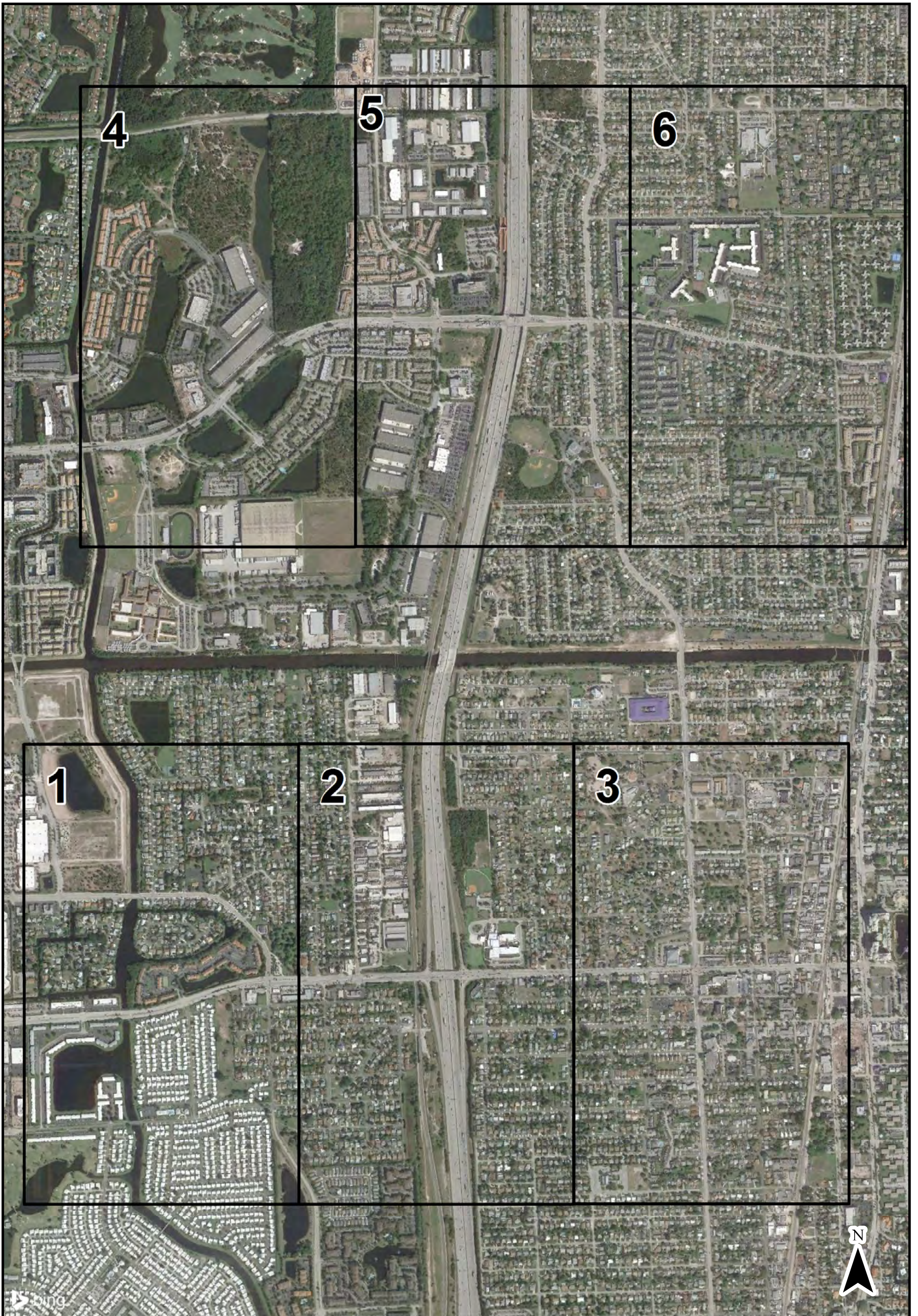
PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



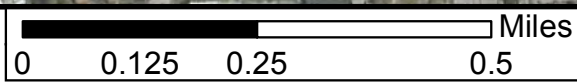
**Historical Imagery**  
**January 18, 2014**

Source: Google Earth

**Figure 10-7**



PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Historical Imagery**  
**February 16, 2016**

Source: Google Earth

**Figure 10-8**



**Table 6**  
**Historical Imagery Review - SR-9/I-95 at SR-804/Boynton Beach Boulevard Interchange**

Quadrant	Year of Aerial Photograph							
	1964	1977	1986	1991	1995	2004	2014	2016
<p align="center">Southwest  (South of Boynton Beach Blvd and West of I-95)</p>	<p>The majority of the quadrant is undeveloped land. A few residential buildings are visible in the northeast area of the quadrant.</p> <p>Several rail cars and a railroad transportation-type facility is visible along the eastern edge of the quadrant.</p>	<p>A significant residential development is visible in the western half of the quadrant.</p> <p>No major changes are evident in the eastern half of the quadrant.</p> <p>A commercial building is visible adjacent to West Boynton Beach Boulevard near the middle of the quadrant.</p> <p>Approximately 30 rail cars are evident in the photograph near the railroad transportation facility noted in the 1964 photograph.</p>	<p>Commercial development is visible adjacent to West Boynton Beach Boulevard in the eastern half of the quadrant.</p> <p>There is a visible increase in residential buildings in the eastern half of the quadrant.</p> <p>The railroad transportation facility significantly expanded and there now appears to be a storage-type facility on the property.</p> <p>I-95 and the Boynton Beach Blvd overpass are now present.</p>	<p>Minor commercial development is visible adjacent to West Boynton Beach Boulevard in the eastern half of the quadrant.</p> <p>No other major changes are evident in this photograph.</p>	<p>Some land has been cleared in the southeast corner of the quadrant.</p> <p>No other major changes are evident in this photograph.</p>	<p>Minor commercial development is visible adjacent to West Boynton Beach Boulevard in the eastern half of the quadrant.</p> <p>The cleared land noted in the 1994 photograph has been developed into homes and apartment complexes.</p> <p>No other major changes are evident in this photograph.</p>	<p>The railroad facility originally noted in the 1964 photograph is no longer present in this photograph. This land no longer has buildings or rail cars on it.</p> <p>No other major changes are evident in this photograph.</p>	<p>No major changes are evident in this photograph.</p>
<p align="center">Southeast  (South of Boynton Beach Blvd and East of I-95)</p>	<p>The majority of the quadrant is residential.</p> <p>There is a small area of cleared land in the middle of the quadrant.</p> <p>Several commercial buildings are visible adjacent to East Boynton Beach Blvd.</p>	<p>Commercial development expanded adjacent to East Boynton Beach Boulevard with several new buildings visible in this photograph.</p> <p>Residential development also expanded slightly.</p> <p>The area of cleared land is still visible.</p>	<p>Commercial development expanded in the northwest corner of the quadrant with several new buildings visible adjacent to East Boynton Beach Boulevard.</p> <p>Residential development also expanded in the middle of the quadrant. The cleared land first noted in the 1964 photograph was developed into homes and apartment complexes.</p> <p>I-95 and the Boynton Beach Blvd overpass are now present.</p>	<p>Minor commercial re-development is visible adjacent to East Boynton Beach Boulevard in the northeast corner of the quadrant. Additional re-redevelopment is visible 2 blocks south.</p>	<p>No major changes are evident in this photograph.</p>	<p>No major changes are evident in this photograph.</p>	<p>Two former commercial properties along the eastern edge of the quadrant have been cleared.</p> <p>No other major changes are evident in the photograph.</p>	<p>The commercial properties noted in the 2014 photograph are currently being re-developed.</p> <p>Some residential development is visible in the middle of the quadrant.</p> <p>No other major changes are evident in the photograph.</p>

**Table 6**  
**Historical Imagery Review - SR-9/I-95 at SR-804/Boynton Beach Boulevard Interchange**

Quadrant	Year of Aerial Photograph							
	1964	1977	1986	1991	1995	2004	2014	2016
<p align="center">Northwest  (North of Boynton Beach Blvd and West of I-95)</p>	<p>The majority of the quadrant is undeveloped land.</p> <p>A few commercial buildings are visible in the southeast corner. Numerous rail cars are visible near these buildings. These buildings are on the Marcal Paper Company site.</p> <p>Residential buildings are scattered in the middle and southwest of the quadrant.</p> <p>A possible junk yard is visible near the western corner of Old Boynton Road and West Boynton Beach Boulevard.</p>	<p>Commercial development expanded along the southeastern edge of the quadrant.</p> <p>Residential development expanded in the center of the quadrant along the southern edge.</p> <p>The possible junk yard noted in the 1964 photo is no longer present.</p>	<p>The commercial/industrial area along the southeastern edge of the quadrant significantly expanded with numerous new buildings.</p> <p>Residential development also expanded throughout the center of the quadrant.</p> <p>The northwest corner of the quadrant is still undeveloped.</p> <p>West Boynton Beach Boulevard was expanded to multiple lanes in each direction.</p> <p>I-95 and the Boynton Beach Blvd overpass are now present.</p>	<p>Continued expansion of the commercial/industrial area along the eastern edge of the quadrant is visible. Several new, large buildings are visible in the far northeast corner of the quadrant.</p> <p>The buildings first identified in the 1964 photograph in the southeast corner of the quadrant are no longer present in this photograph.</p> <p>New residential development is visible adjacent to West Boynton Beach Boulevard.</p> <p>Commercial development is visible adjacent to West Boynton Beach Boulevard on the western edge of the quadrant.</p>	<p>No major changes are evident in this photograph.</p>	<p>Continued expansion of the commercial/industrial area along the eastern edge of the quadrant is visible with several, new medium to large size buildings.</p> <p>I-95 was expanded and no longer has a center median.</p>	<p>The previously undeveloped northeast corner of the quadrant has now been developed and includes a stormwater pond and shopping center. Some land remains cleared in this area.</p> <p>No other major changes are evident in this photograph.</p>	<p>No major changes are evident in this photograph.</p>
<p align="center">Northeast  (North of Boynton Beach Blvd and East of I-95)</p>	<p>The majority of the quadrant is residential.</p> <p>A large industrial property is visible in the southwest corner of the quadrant. It appears a crane or radio tower is present on the property. The property extends several hundred feet to the north.</p> <p>Several commercial buildings are visible adjacent to East Boynton Beach Boulevard.</p>	<p>Residential development is evident in the central and southeastern portions of the quadrant.</p> <p>The industrial property in the southwest corner of the quadrant is still visible. A school is also visible in this area.</p> <p>Vacant land is visible on the western edge and in the central portion of the quadrant.</p> <p>No other major development is noted in this photograph.</p>	<p>I-95 and the Boynton Beach Blvd overpass are now present.</p> <p>The industrial area noted in the 1964 photograph is no longer present. I-95 now covers this property.</p> <p>The school property in the southwest corner was re-developed since 1977. It is still a school with a new building and grounds layout.</p> <p>Minor residential development is visible throughout the quadrant.</p> <p>Significant commercial development is visible along Railroad Avenue on the eastern edge of the quadrant.</p>	<p>The school in the southwest corner expanded to the north.</p> <p>Other minor commercial development is visible in the quadrant.</p>	<p>No major changes are evident in this photograph.</p>	<p>A school was developed or re-developed near the northern edge of the quadrant.</p> <p>No other major changes are evident in this photograph.</p>	<p>The school property in the southwest corner was re-developed since 2004. It is still a school with a new building and grounds layout.</p> <p>No other major changes are evident in the photograph.</p>	<p>No major changes are evident in this photograph.</p>

**Table 7**  
**Historical Imagery Review - SR9/I-95 at Gateway Boulevard Interchange**

Quadrant	Year of Aerial Photograph							
	1964	1977	1986	1991	1995	2004	2014	2016
<p>Southwest  (South of Gateway Blvd and West of I-95)</p>	<p>Quadrant is mostly undeveloped. Approximately 75% of the land is cleared and 25% is covered with trees. No structures are evident in the photograph.</p>	<p>The majority of this quadrant remained unchanged. There is an increase in cleared land along the east of the quadrant.</p> <p>A building is now present in the northeast corner of the quadrant.</p> <p>Gateway Blvd is now present in the west of the quadrant.</p>	<p>The majority of this quadrant remained unchanged. Minor road improvement is noted in the east of the quadrant.</p> <p>The building noted in the 1977 photograph is no longer present.</p> <p>I-95 and the Gateway Blvd overpass are now present.</p>	<p>Road development is present throughout the quadrant. New retention ponds are visible in the west of the quadrant.</p> <p>A large commercial/industrial building is now visible in the southwest of the quadrant.</p>	<p>No major change is evident in this photograph.</p>	<p>Major development is noted throughout this quadrant. Several large commercial/ industrial businesses and apartment/condo units are visible in the photograph.</p> <p>A gas station is present along East Gateway Boulevard and High Ridge Road.</p>	<p>Previously undeveloped areas in the southeast corner of the quadrant and adjacent to Gateway Boulevard have been developed to include a mix of commercial and residential buildings.</p> <p>A new fire station has been developed near the corner of Gateway Boulevard and I-95 in the northeast corner of the quadrant immediately south of a vacant lot.</p>	<p>No major change is evident in this photograph.</p>
<p>Southeast  (South of Gateway Blvd and East of I-95)</p>	<p>More than 50% of the quadrant is undeveloped land. Residential structures are visible in the northwest, south, and northeast areas of the quadrant.</p>	<p>Residential development expanded in all areas of the quadrant. Two pockets of undeveloped land remain.</p>	<p>Residential development expanded slightly in this photograph.</p> <p>I-95 and the Gateway Blvd overpass are now present.</p>	<p>Residential development expanded slightly in this photograph.</p> <p>The east pocket of undeveloped land noted in the 1977 photograph has been cleared and is under development.</p> <p>The west pocket of undeveloped land noted in the 1977 photograph remains undeveloped.</p>	<p>The area of land under development in the 1991 photograph is now apartment buildings.</p> <p>The west pocket of undeveloped land in the 1991 photograph has now been developed into a school and sports fields.</p> <p>No other major changes or development are noted in the photograph.</p>	<p>No major change is evident in this photograph.</p>	<p>A property on the eastern edge of the quadrant was redeveloped. Site was a mobile home park and vehicle storage yard in the 2004 photograph. Site is now a residential complex.</p>	<p>No major change is evident in this photograph.</p>

**Table 7**  
**Historical Imagery Review - SR9/I-95 at Gateway Boulevard Interchange**

Quadrant	Year of Aerial Photograph							
	1964	1977	1986	1991	1995	2004	2014	2016
<p>Northwest  (North of Gateway Blvd and West of I-95)</p>	<p>Quadrant is mostly undeveloped. Approximately 50% of the land is cleared and 50% is covered by trees. No structures are evident in this photograph.</p> <p>At this time, Gateway Blvd did not extend west of the railroad tracks.</p>	<p>A commercial building is now visible in the northeast corner of the quadrant surrounded by an increase in cleared land.</p> <p>Gateway Blvd is now present in the west of the quadrant.</p>	<p>Commercial development expanded in the northeast corner of the quadrant. Several large buildings are noted in this area.</p> <p>I-95 and the Gateway Blvd overpass are now present.</p>	<p>New retention ponds and associated roadway improvements are present in the west of the quadrant.</p> <p>A small, new commercial or transportation facility is visible adjacent to the rail corridor and south of the existing commercial buildings in the northeast corner of the quadrant.</p>	<p>No major change is evident in this photograph. One new building is noted in the west of the quadrant.</p>	<p>Major development is noted in this quadrant. A large residential development with apartment/condo units are present in the west. Commercial development expanded immediately east of this residential area.</p> <p>The transportation facility noted in the 1991 photograph expanded with a large parking lot to the west, adjacent to the facility.</p> <p>Expansion is also noted in the business park in the northeast corner of the quadrant. A residential development is visible to the southwest of the business park.</p>	<p>A previously undeveloped property in the southeast corner of the quadrant at the corner of Gateway Boulevard and I-95 has been developed into an office-type building.</p> <p>Next to this property, a new shopping center has been developed across High Ridge Road and adjacent to Gateway Boulevard.</p>	<p>Ongoing development is visible adjacent to Gateway Boulevard and along the northern edge of the quadrant. The developments appear to be office-type buildings and a residential complex, respectively.</p> <p>No other major change is evident in this photograph.</p>
<p>Northeast  (North of Gateway Blvd and East of I-95)</p>	<p>Approximately 75% of the land in this quadrant has residential structures on it.</p> <p>A large area in the south of the quadrant is uncleared and undeveloped.</p> <p>A large area on the eastern edge of the quadrant is cleared and undeveloped.</p> <p>No commercial structures are noted in the photograph.</p>	<p>Residential development expanded throughout the quadrant.</p> <p>Apartment buildings are now visible on the uncleared area from the 1964 photograph.</p> <p>There is no development on the cleared area located on the eastern edge of the quadrant.</p> <p>No commercial development is noted in the photograph.</p>	<p>Residential development expanded in the quadrant with additional apartment buildings and homes visible in the photograph.</p> <p>The cleared area on the eastern edge of the quadrant noted in the 1964 and 1977 photographs now shows residential, multi-family development.</p> <p>I-95 and the Gateway Blvd overpass are now present.</p>	<p>No major change is evident in this photograph.</p>	<p>No major change is evident in this photograph.</p>	<p>No major change is evident in this photograph.</p>	<p>Redevelopment of a school property is visible in the middle of the quadrant.</p> <p>No other major change is evident in this photograph.</p>	<p>No major change is evident in this photograph.</p>

### 7.2 Potential Contamination Sources

Potential contamination sources were identified along the project corridor using a combination of data systems that include a computerized database search, environmental records, aerial photographs, and ROW survey maps, as well as a corridor reconnaissance performed in January 2016.

After a thorough review of records and information obtained from site reconnaissance, it was discovered that multiple database listings (e.g. sources with different names with an identical address) actually represented one source. In these situations, these sources were combined into a single potential contamination source using the best available descriptor to name the source (i.e. current business name, vacant lot, etc.).

One of the data systems (EDR DataMap™ Corridor Study) used to identify potential contamination sources found 20 unmapped sites. These sites, known as Orphan Sites, are unmapped due to poor or inadequate address information. Each Orphan Site was reviewed in an attempt to manually locate these potential contamination sources. One Orphan Site was identified within the one-quarter mile project area buffer. This site had already been captured as a potential contamination source through another data system. Twelve of the remaining Orphan Sites were greater than one-quarter mile from the project area and seven could not be located. Table B-1 (Appendix B) lists potential contamination sources and includes contamination risk ratings, sampling recommendations, and regulatory review for each source identified within the one-quarter mile project study area.

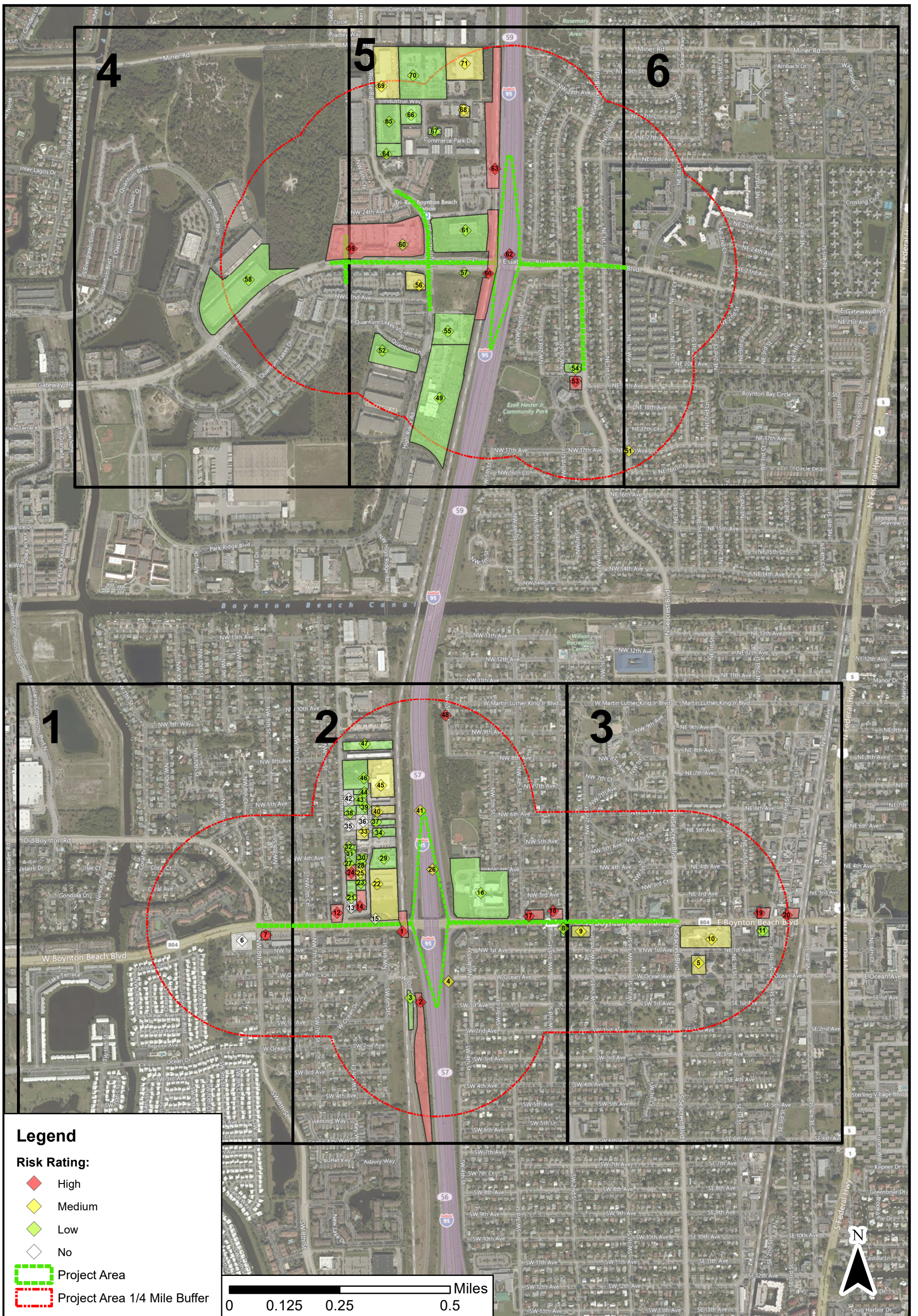
### 7.3 Contamination Risk Rating

Interviews were conducted, available EDR information reviewed, and documents obtained from FDEP’s OCULUS and Palm Beach County’s CINEMA databases to determine the current regulatory status of each potential contamination source. Each source’s history and regulatory status were evaluated (and in some cases noted the lack of available regulatory information), and then assigned a contamination risk rating in accordance with FDOT District 4 (D4) criteria (reference Appendix B, Table B-1) relative to encountering impacted soil or groundwater. Table 8 provides a summary of the High, Medium, Low, and No risk ratings. An electronic version of the EDR Corridor Study Report and regulatory documents are included with this publication.

**Table 8: Summary of Potential Contamination Sources Risk Ratings**

Risk Rating	Number of Sites		
	Gateway Blvd. Interchange	Boynton Beach Blvd. Interchange	Total
High	5	11	16
Medium	5	11	16
Low	12	20	32
No	1	6	7
<b>Total</b>	23	48	71

The High, Medium, Low, and No risk rated sites are detailed in Sections 7.5 through 7.8. Figures 11-1 through 11-9 illustrate the location of potential contamination sources within the project study area.



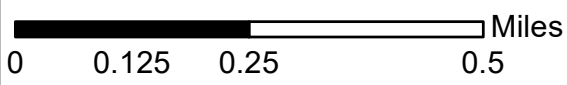
**Legend**

**Risk Rating:**

- ◆ High
- ◆ Medium
- ◆ Low
- ◆ No

Project Area

Project Area 1/4 Mile Buffer

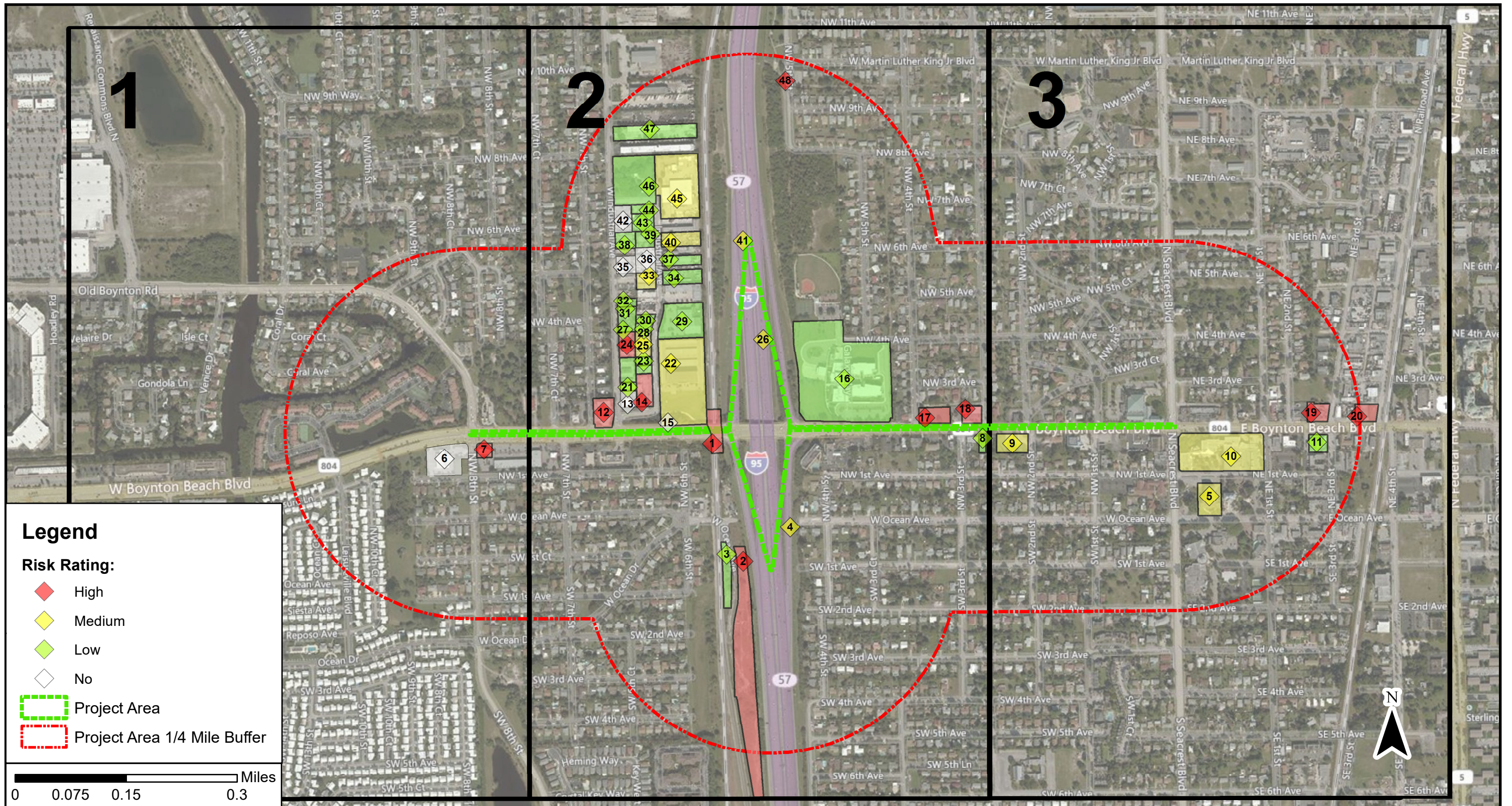


PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



Potential Contamination Sites - Map Section Index

Figure 11-1

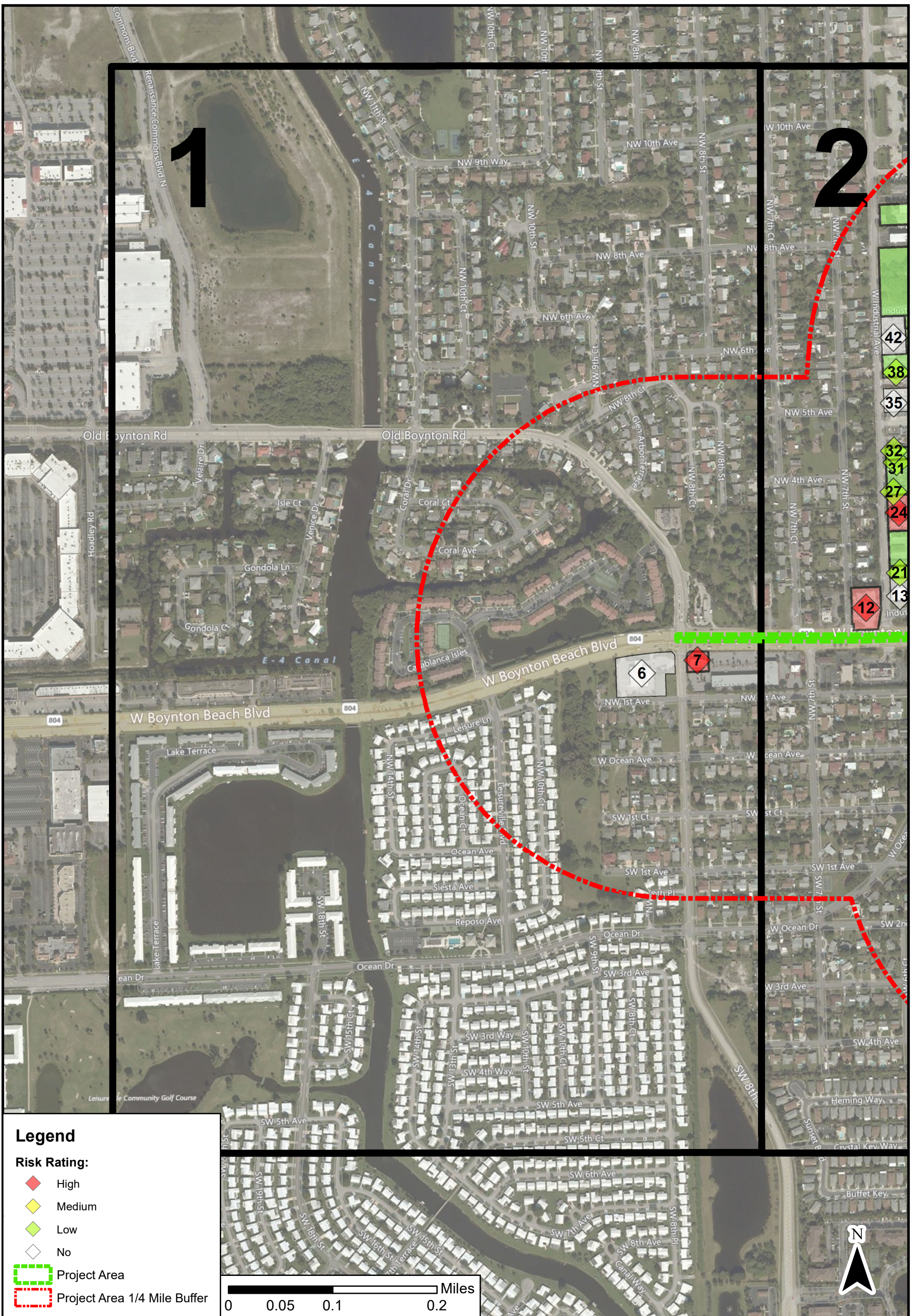


PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Potential Contamination Sites  
 Boynton Beach Blvd. Interchange  
 Map Section Index**

**Figure 11-2**



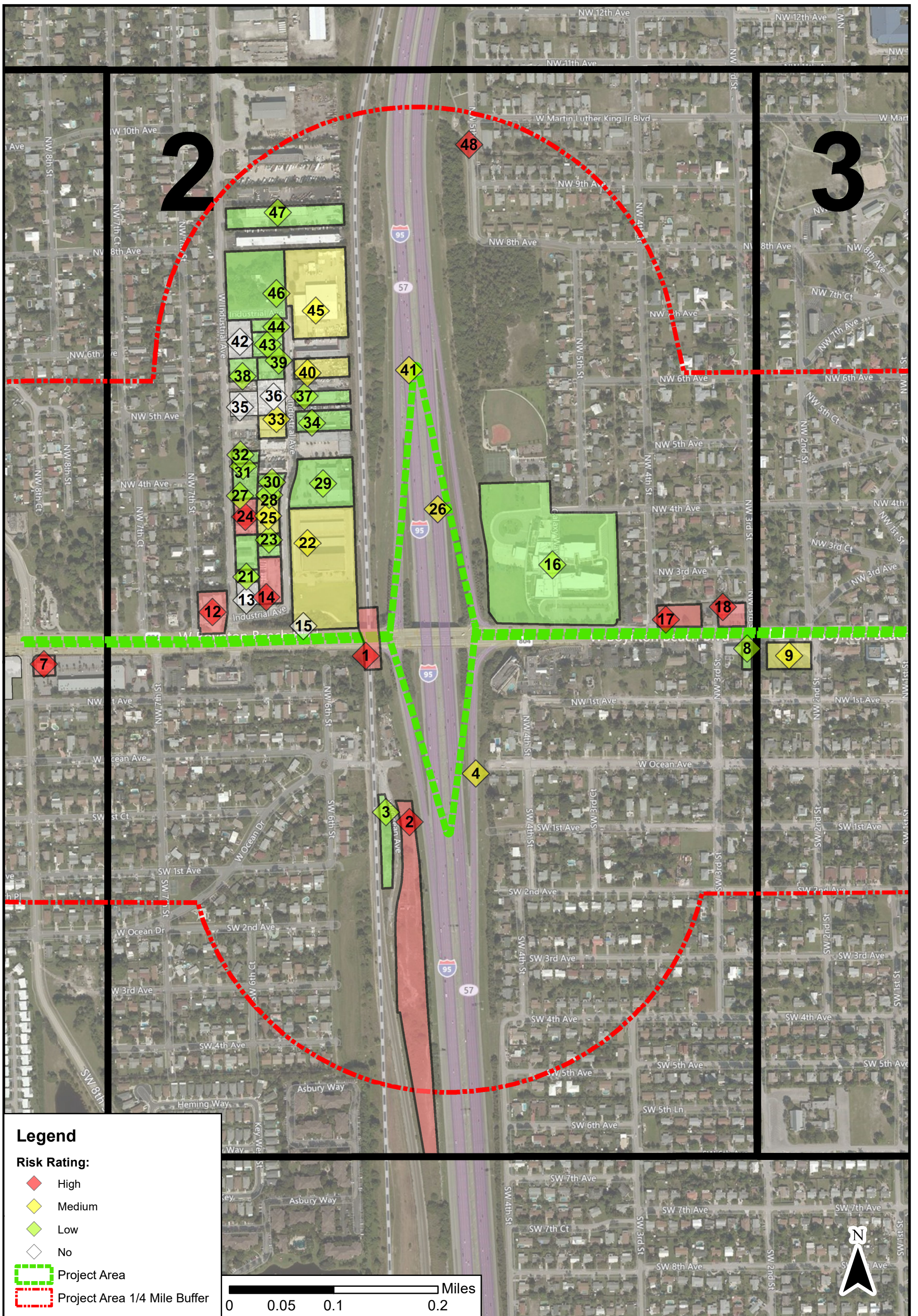
PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181




**Potential  
 Contamination Sites  
 Map Section 1**

**Figure 11-3**



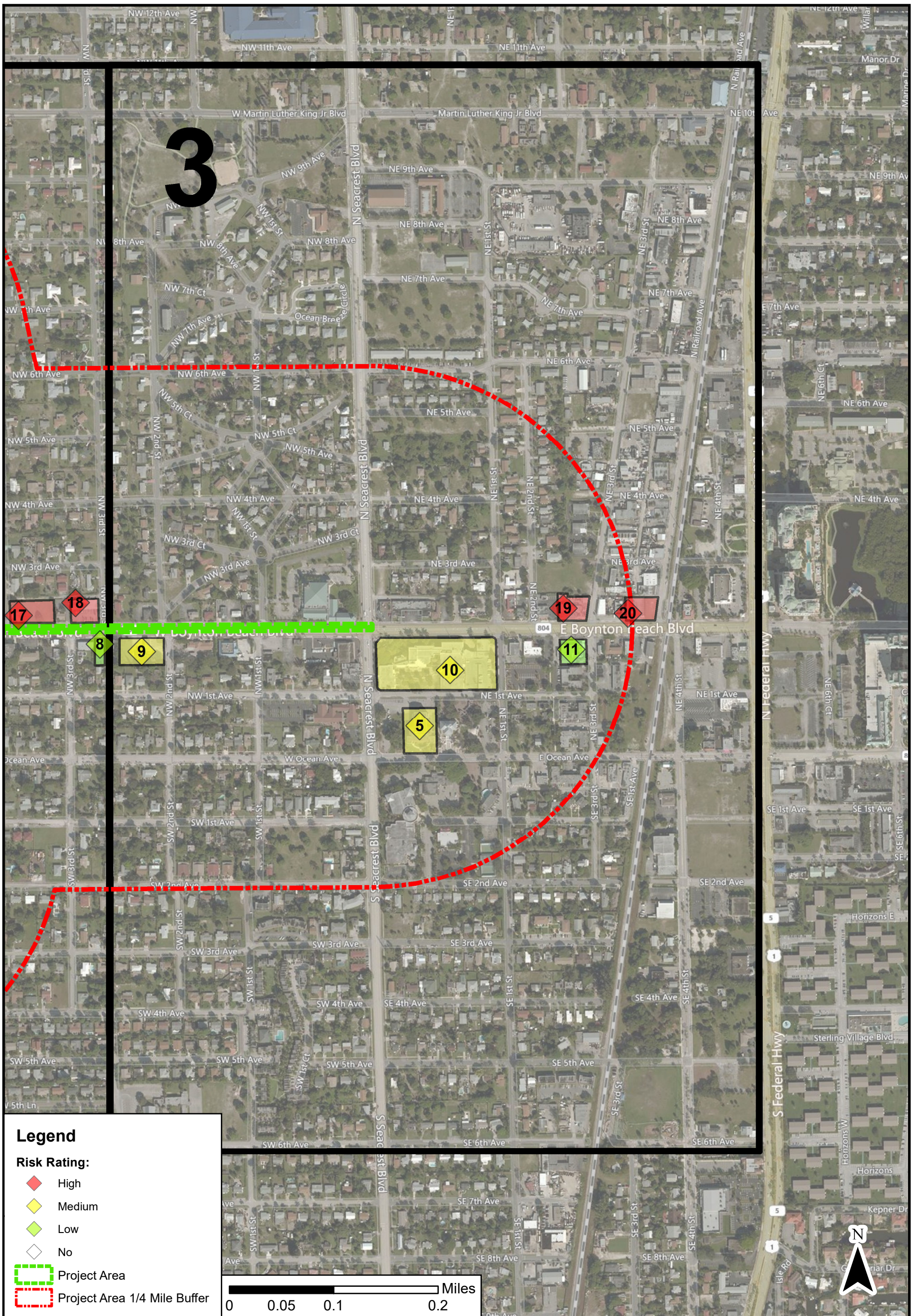


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 ETDM Nos. 14180 and 14181



**Potential  
 Contamination Sites  
 Map Section 2**

**Figure 11-4**

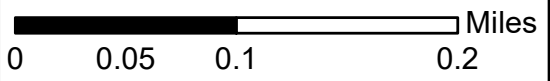


**Legend**

**Risk Rating:**

- ◆ High
- ◆ Medium
- ◆ Low
- ◆ No

- Project Area
- Project Area 1/4 Mile Buffer

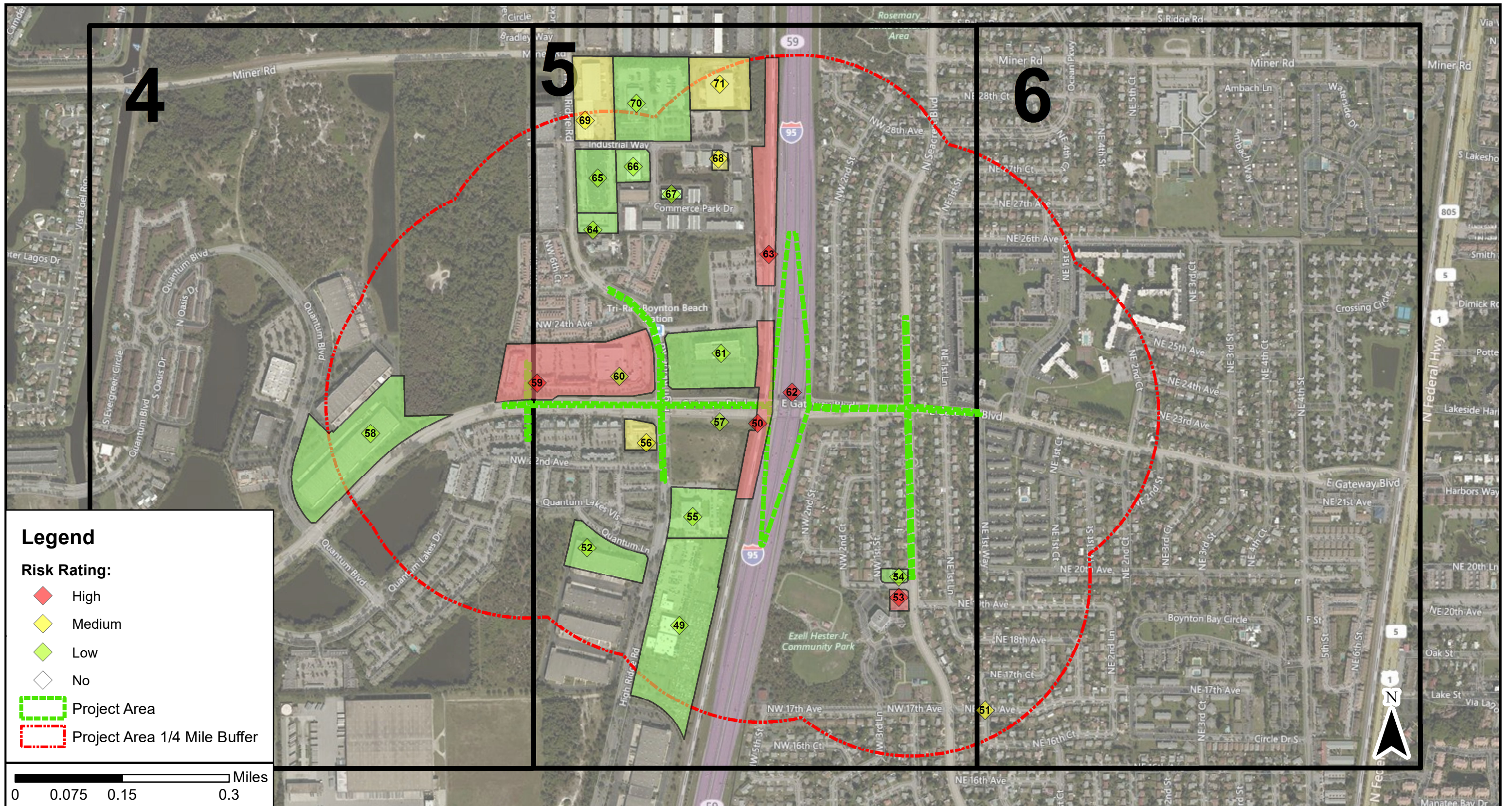


PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Potential Contamination Sites  
 Map Section 3**

**Figure 11-5**

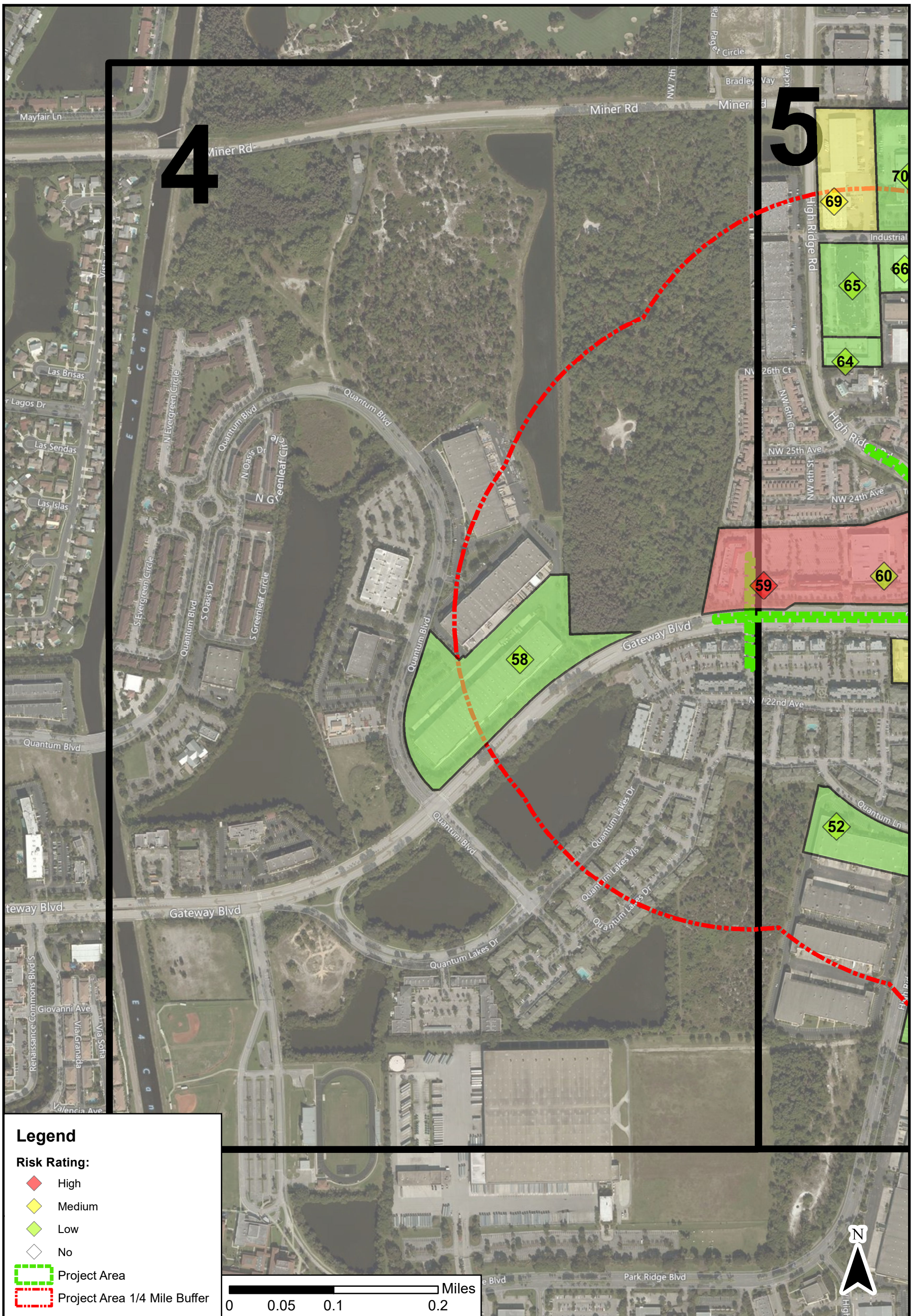


PD&E Study  
 SR-9/I-95 at SR-804/Boynton Beach Blvd Interchange  
 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



Potential Contamination Sites  
 Gateway Blvd. Interchange  
 Map Section Index

Figure  
 11-6



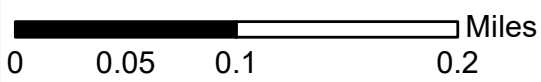
**Legend**

**Risk Rating:**

- ◆ High
- ◆ Medium
- ◆ Low
- ◇ No

▭ Project Area

▭ Project Area 1/4 Mile Buffer

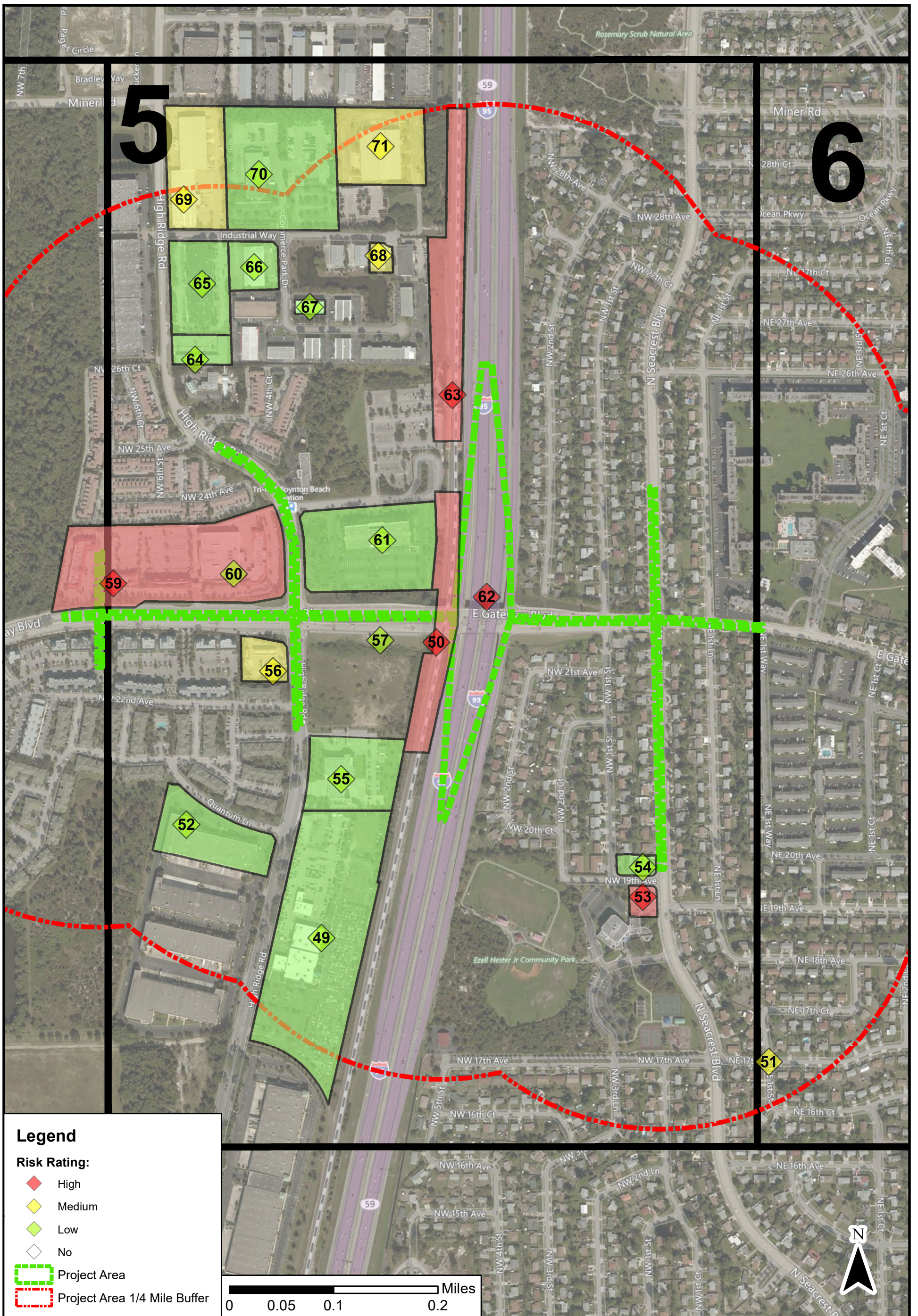


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 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Potential  
 Contamination Sites  
 Map Section 4**

**Figure 11-7**

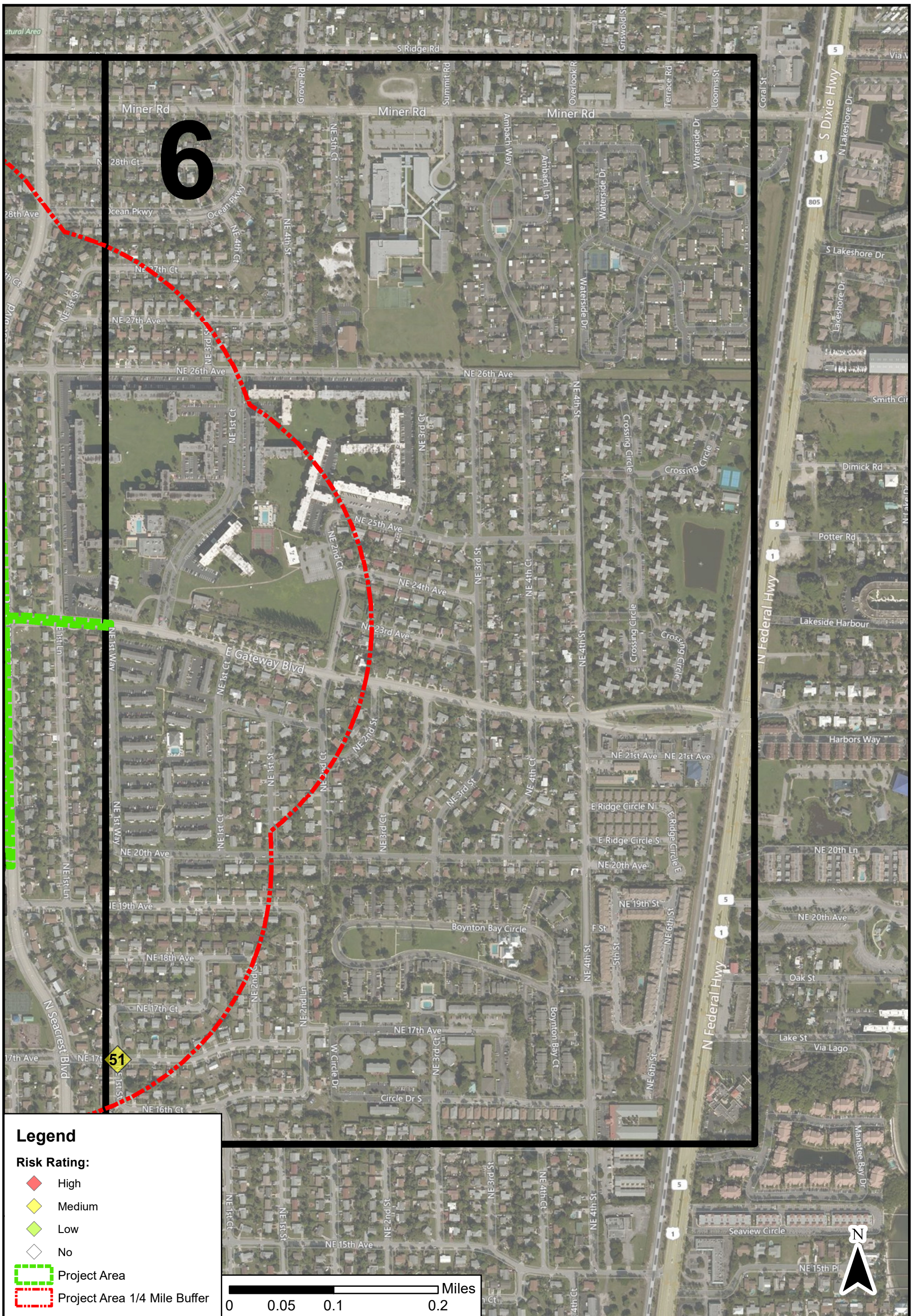


PD&E Study  
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 SR-9/I-95 at Gateway Blvd Interchange  
 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Potential  
 Contamination Sites  
 Map Section 5**

**Figure 11-8**

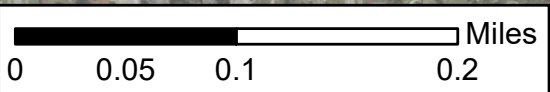


**Legend**

**Risk Rating:**

- ◆ High
- ◆ Medium
- ◆ Low
- ◇ No

- ▭ Project Area
- ▭ Project Area 1/4 Mile Buffer



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 FM Nos. 435804-1-22-01; 231932-1-22-01  
 ETDM Nos. 14180 and 14181



**Potential  
 Contamination Sites  
 Map Section 6**

**Figure 11-9**

#### **7.4 Analysis of Potential Contamination Sources**

This evaluation identified more than 100 non-residential facilities (sites) within the study area. Some sites occupy more than one address, some addresses have more than one site, and there are many inconsistencies in the business names and addresses used in the databases. Therefore, parcel boundaries are used to organize the data rather than addresses or business names. The use of parcel boundaries also facilitates the evaluation of potential contamination risks during ROW acquisition.

Sites were evaluated independently. If applicable, conduits for potential contamination migration were identified, and adjacent activities and conditions were addressed at the adjacent site. Former activities and conditions are described in each site narrative if known and applicable. Table B-1 lists all the potential contamination sites identified within the one-quarter mile screening area, arranged by site number (Site No.). Locations of the sites are shown on Figures 11-1 through 11-9. The parcel boundaries are color-coded by risk rating as noted in the legend. Site numbers were assigned geographically, starting in the south quadrant, then moving from west to east across a horizontal transect, and concluding in the north quadrant. As noted above, some sites contain multiple business names and addresses.

The following narratives summarize site activities, regulatory status (if any), and risk rating rationale for identified potential contamination sources. In addition to each source's name, address, and facility IDs, the narratives include photo numbers, figure references, and distances to the project corridor.

#### **7.5 High Risk Sites**

This section addresses all High Risk sites located within the one-quarter mile screening area.

**Site No. 1 (High Risk)**

Site Name:	TRCL at Boynton Beach Boulevard
Site Address:	Railroad Corridor, Boynton Beach, FL
Photo Nos.:	1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	Adjacent
Contamination Concerns:	Petroleum, Hazardous Waste, Herbicides, Pesticides, Coal Ash, PCBs
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk based on the potential for contamination on the property from historical railway operations. The site does not have documented contamination but is presumed contaminated.

Rail corridors are at high risk for soil and/or groundwater contamination. This risk derives from the potential for unreported spills associated with historical and ongoing use in transporting freight, as well as rail industry maintenance practices. The US Environmental Protection Agency (USEPA) considers railfields, which include rail tracks and railroad rights-of-way, as a subset of brownfield properties. EPA states that “residual contamination including herbicides, petroleum products and byproducts, metals, and creosote, is often present as a result of the former railroad operations and associated industrial activities” (USEPA August 2005).

In many cases, rail corridors through urban areas connect or previously connected to loading / unloading areas at adjacent industrial sites with a spur. USEPA notes that railway yards may consist of any combination of track and switching areas, engine maintenance buildings, engine fueling areas, bulk and container storage and transfer stations, and storage areas for materials used in track and engine maintenance. USEPA also notes that, “virtually any type of chemical contamination could be present because of the variety of chemicals used at and transported through railroad yards” (BTSC July 2017).

This site was inspected during corridor reconnaissance. Field personnel did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

The entire rail corridor within the project buffer is not identified as High risk. Site No. 1 is a section of the rail corridor defined as 100 feet north and south of the Boynton Beach Boulevard and TRCL intersection. Based on alternatives presented in Section 6 and the concept plans presented in Appendix E, the rail corridor in this area will be directly impacted by construction activities. If a design change encroaches on other areas of the rail corridor beyond this site, those areas should be re-evaluated.



**Site No. 2 (High Risk)**

Site Names:	Vacant Land / Rail Corridor; Former Four Steel Corporation
Site Address:	518 West Ocean Drive, Boynton Beach, FL 33426
Photo Nos.:	2-1, 2-2, 2-3
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	136 feet
Contamination Concerns:	Petroleum, Hazardous Waste, Herbicides, Pesticides, Coal Ash, PCBs
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk based on the potential for contamination on the property from historical industrial and railway operations. The site does not have documented contamination but is presumed contaminated.

The historical aerial review revealed this property has been associated with railway operations since at least 1964. The 1964 aerial photograph show railcars onsite and a transportation-type facility. Significant expansion of the facility was visible in the 1986 aerial photograph. The railcars and associated facilities were no long present in the 2014 aerial photograph.

The former Four Steel Corporation had one 2,000 gallon UST for leaded/unleaded gasoline and one 5,000 gallon UST for vehicular diesel. Both tanks were installed in February 1981 and removed from the site in July 1997. The TCAR indicates no soil or groundwater contamination was detected during tank removal. Field reconnaissance personnel observed a concrete pad onsite. The site is classified as a non-generator of hazardous waste. The site does not have documented leaks or environmental contamination related to petroleum or hazardous waste.

Field reconnaissance personnel did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. However, the operation of a rail system has a variety of potential sources that can contribute to environmental impacts along rail corridors. Typical sources include petroleum or chemical leaks from rail cars, leaking transformers, herbicides, railroad ties, and coal ash and cinder.

**Site No. 7 (High Risk)**

Site Names:	7-Eleven; Former Power Service Station
Site Address:	744 West Boynton Beach Boulevard, Boynton Beach, FL 33426
Photo No.:	No photo
Figure Nos.:	11-1, 11-2, 11-3
FDEP/EPA Facility ID:	None
Distance to Project:	64 feet
Contamination Concerns:	Petroleum, Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk due to potential historical operations as a gas / automobile service station, the lack of information regarding tanks, and the lack of a documented site assessment.

EDR lists this site as a historical gas station/filling station/auto station with a record from 1983. A commercial building is first visible on this site in the 1977 aerial photograph. The footprint of this building resembles an auto service station. Neither a canopy nor pump islands are visible in the aerial. The property currently operates as a 7-Eleven convenience store. The current building is first visible in a 1999 aerial photograph. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 12 (High Risk)**

Site Names:	BP-4 Points Market; Former Georges Texaco; Former Knop Alan F Automotive Service; Former Pinewood Texaco Inc.; Former Boynton Beach 1995 Texaco; Former Boynton Texaco Service Center Inc.; Former Boynton Beach Boulevard & I95 Texaco Inc.
Site Address:	645 Boynton Beach Boulevard; Boynton Beach, FL 33426
Photo Nos.:	12-1, 12-2
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	8514185
Distance to Project:	41 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk based on unresolved contamination on the property.

The site has one 12,000 gallon unleaded gasoline UST and one 12,000 gallon compartmentalized unleaded gasoline and diesel fuel UST installed in June 2005. The site also has one 275 gallon waste oil AST installed in April 1992.

The site had one 2,000 gallon kerosene UST, one 2,000 gallon mineral spirits UST, and one 550 gallon waste oil UST installed in June 1984 and removed in February 1991. The TCAR from February 1991 indicates petroleum contaminated soils were not detected in the area of the closed tanks. Soil and groundwater sampling was not conducted due to the site's Early Detection Incentive (EDI) status.

The site had one 4,000 gallon and two 8,000 gallon unleaded gasoline USTs and one 4,000 gallon diesel fuel UST installed in June 1984 and removed in June 2005. The limited tank closure assessment report (LTCAR), from August 2005, indicates elevated organic vapor concentrations were measured in soils suggesting excessively contaminated soil. Approximately 58 tons of petroleum impacted soil were removed from the site. Soil and groundwater sampling was not conducted due to the site's EDI status.

In addition to the tanks listed above, tank registration records indicate the site had five more USTs with unknown install/removal dates, unknown size, and unknown contents. Property records indicate the site was leased to Texaco in 1962 and these tanks could have been associated with this historical station.

A discharge reporting form (DRF) was submitted on August 18, 1987, due to petroleum detected in compliance monitoring wells. The site was approved for State cleanup under the EDI program in December 1987. A 1995 contamination assessment report (CAR) indicates groundwater flow direction to the west, northwest, and southwest toward NW 7<sup>th</sup> Street / Boynton Beach Boulevard. The CAR also indicated the presence of excessively contaminated

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soils based on organic vapor analysis and groundwater analysis revealed constituents of concern (CoCs) above groundwater cleanup target levels (GCTLs). In April 2016, Aerostar submitted a proposal to perform additional site assessment.

Field personnel observed monitoring wells onsite. Personnel did not observe a remediation system onsite.

**Site No. 14 (High Risk)**

Site Names:	Palmdale Oil Company; F. H. Foster Oil Corporation, Inc.
Site Address:	319 Industrial Avenue; Boynton Beach, FL 33426
Photo Nos.:	14-1, 14-2, 14-3, 14-4
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility IDs:	8623212, 990155, FLD980709778
Distance to Project:	185 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk based on unresolved contamination on the property.

Field personnel observed the site operates as a commercial fueling facility for Pacific Pride. The site has six 15,000 gallon ASTs installed in 1965, three for unleaded gasoline and three for vehicular diesel. The site also has two 6,000 gallon vehicular diesel ASTs installed in November 2011 and one 300 gallon waste oil AST (install date unknown). A 2015 tank inspection report notes a minor non-compliance related to a line leak detector test.

The site had two 2,000 gallon gasoline and diesel USTs and one 4,000 gallon diesel UST installed in March 1987. All three tanks were removed in December 2009. A TCAR for the removal of these tanks was not required because existing site contamination encompassed the tank pit. Records indicate the site also had three more USTs (one 1,000 gallon, one 3,000 gallon, and one 4,000 gallon) with unknown install and removal dates and contents.

A DRF was submitted on April 20, 1994, in response to petroleum in a compliance monitoring well. A DRF was also submitted on July 22, 1994, for a surface spill of petroleum. In July 1994, the state approved site eligibility for cleanup funding under the Florida Petroleum Liability and Restoration Insurance Program (PLRIP).

A January 1995 CAR measured depth-to-water (DTW) at 6-8 feet below land surface (fbls) and groundwater flow direction toward the southeast. No free floating product was observed. Excessively contaminated unsaturated soils were detected near the former dispenser rack with an estimated volume of 120 cubic yards. This report documented a dissolved hydrocarbon plume slightly down-gradient of the former loading rack. In 1995, groundwater and soil contamination appear to be contained onsite. The CAR suggested a remedial action plan (RAP) be prepared and implemented to complete site rehabilitation. A February 1995 letter from Palm Beach County ERM accepted the CAR and required the development of a RAP within 60 days. No RAP was available in FDEP OCULUS or Palm Beach County ERM CINEMA for review. An FDEP communication log from June 2016 indicates site assessment activities will be resuming in June/July 2016.

The Site notified as a conditionally exempt small quantity generator (CESQG) in March 1991 for benzene waste. The site does not have documented violations or environmental contamination related to hazardous waste. EDR indicates

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the facility has air emission unit(s) in operation, on standby status, temporarily shut down, or on long-term reserve shutdown.

**Site No. 17 (High Risk)**

Site Names:	Vacant Land; Former Texaco #021-1318; Former Star Enterprise; Former A B C Texaco
Site Address:	433 West Boynton Beach Blvd.; (433 NW 2 <sup>nd</sup> Avenue); Boynton Beach, FL 33435
Photo No.:	No Photo
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility IDs:	8513795, FLD984173013
Distance to Project:	34 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk based on unresolved contamination on the property.

The site has had many tanks historically:

- Two 7,500 gallon USTs for leaded and unleaded gas installed in 1967 and removal unknown.
- One 4,000 gallon UST for diesel fuel installed in 1971 and removal unknown.
- One 10,000 gallon UST, one 12,000 gallon UST, and one 8,000 gallon UST for unleaded gas, along with one 10,000 gallon UST for diesel all installed in 1987 and removed in May 1995.
- Two 550 gallon USTs for waste oil, one of which was installed in 1987 and removed in May 1995. Installation and removal of the other is unknown.

The site had reported discharges in June 1990 and January 1993 accepted into the FDEP's PLRIP. A pump and treat remediation system began operation in November 1992 and continued until April 1995. ESA activities in May 1999 did not detect CoCs above cleanup target levels (CTLs). A SRCO was issued in August 1999 and rescinded in May 2004. December 2003 groundwater sampling results showed naphthalene above GCTLs. February 2004 confirmatory soil and groundwater sampling detected total xylenes above soil cleanup target levels (SCTLs) and several CoCs above GCTLs.

A Limited Scope Remedial Action Plan was developed in 2016. Sept 2015 data indicates DTW in the study area was 14.5 fbls and groundwater flow direction was toward the northwest. Sept 2015 groundwater sampling also detected CoCs Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX) and Naphthalenes above GCTLs. The groundwater contamination plume is estimated at approximately 900 square feet, located near the southern property boundary. The vertical extent of the plume is estimated to be 35 fbls. The RAP proposes a 20x20x18 foot excavation and air sparging for 30 days.

In December 2002, the site listed as a non-generator of hazardous waste. The site formerly generated benzene waste. The site does not have documented environmental contamination related to hazardous waste.

**Site No. 18 (High Risk)**

Site Name: Lloyds of Boynton Coin Laundry  
Site Address: 409 West Boynton Beach Boulevard, Boynton Beach, FL 33426  
Photo No.: No photo  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: None  
Distance to Project: 33 feet  
Contamination Concerns: Hazardous Material / Drycleaning Solvents  
Project: Boynton Beach Boulevard Interchange

This site is identified as High risk because the facility operates as a dry cleaner and has never been assessed.

EDR lists this site as a potential historical dry cleaner with records from 1983, 1988, 2011, and 2012. This facility currently operates as a self-service coin laundry offering drycleaning services. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review. No monitoring wells were observed onsite during field reconnaissance.



**Site No. 19 (High Risk)**

Site Names:	F1 Auto Services & Tires; Former FINA - Fred & Joes Auto & A/C Repair; Former MAPCO No. 8609
Site Address:	319 East Boynton Beach Boulevard; Boynton Beach, FL 33435
Photo No.:	19
Figure Nos.:	11-1, 11-2, 11-5
FDEP/EPA Facility ID:	8842221
Distance to Project:	945 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk based on unresolved contamination on the property.

The site had three USTs in the 1950s for leaded gas, waste oil, and kerosene. The original USTs were replaced with two 10,000 gallon USTs for unleaded gas and one 500 gallon UST for waste oil in October 1980. These USTs were removed in April 1993.

In May 1993 during tank closure activities, the site had reported a discharge. The site was approved for FDEP Pre-Approved Advanced Cleanup (PAC) funding in February 2013. In the December 2015 supplemental site assessment report (SSAR), DTW was 9.6 fbls and groundwater flow direction was toward the south. Groundwater contamination above GCTLs persists in monitoring well MW-2 for BTEX and Naphthalene CoCs.

Field personnel observed monitoring wells onsite.

**Site No. 20 (High Risk)**

Site Name:	Coin Laundry Dry Cleaner; Former Boynton Laundry
Site Address:	415 Boynton Beach Boulevard, Boynton Beach, FL 33435
Photo Nos.:	20-1, 20-2, 20-3
Figure Nos.:	11-1, 11-2, 11-5
FDEP/EPA Facility ID:	None
Distance to Project:	1,287 feet
Contamination Concerns:	Hazardous Material / Drycleaning Solvents
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk because the property operates as a drycleaner and has never been assessed.

EDR lists this site as a potential historical dry cleaner with records from 2011-2012. This facility currently operates as a self-service coin laundry offering drycleaning services. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 24 (High Risk)**

Site Names: Neighborhood Gallery & Fine Art Appraisers;  
Former Marcinkoski Gradall Inc.;;  
Former Florida Truck Maintenance

Site Address: 422 West Industrial Avenue, Boynton Beach, FL 33426

Photo No.: 24

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility IDs: 8735560, 79692

Distance to Project: 539 feet

Contamination Concern: Petroleum

Project: Boynton Beach Boulevard Interchange

This site is identified as High risk based on a tank closure assessment form indicating groundwater contamination is present on the property.

As Marcinkoski Gradall Inc., the site had one 10,000 gallon diesel UST installed in February 1983 and one 550 gallon waste oil UST with an unknown install date. Both tanks were removed in November 1991. A tank closure assessment form indicates groundwater sampling detected CoCs above GCTLs. No sampling results were available for review. A tank closure inspection report form states soil OVA readings were clean around the tank and there were no obvious signs of contamination. No TCAR was available for review. During a 1992 inspection, FDEP noted no visual signs of contamination and indicated both excavations were covered with concrete slabs and monitoring wells had been removed.

As Florida Truck Maintenance, the site was formerly registered as a hazardous waste generator. A 2007 inspection indicates the site is out of business and no longer a hazardous waste generator. The site does not have documented violations or environmental contamination related to hazardous waste.

**Site No. 48 (High Risk)**

Site Name:	Residences; Former Luther Street Dump
Site Address:	South-Southeast of Old Cemetery on NW 5 <sup>th</sup> Street Between Northwest 9 <sup>th</sup> Avenue and Martin Luther King Jr. Boulevard, East of Railroad Tracks covered by I-95; Palm Beach County, FL
Photo No.:	No Photo
Figure Nos.:	11-1, 11-2, 7-4
FDEP/EPA Facility ID:	None
Distance to Project:	1,162 feet
Contamination Concerns:	Petroleum, Hazardous Waste, Solvents, Herbicides, Pesticides, Lead
Project:	Boynton Beach Boulevard Interchange

This site is identified as High risk based on the potential for contamination on the property from historical landfill operations.

EDR records and the Palm Beach County Solid Waste Authority indicate this site was a small neighborhood dump opened prior to 1968 and inactive prior to 1986. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review. If subsurface activities will take place near the site, a file review can be requested for FDEP to source archived records from microfiche files.

**Site No. 50 (High Risk)**

Site Name:	TRCL at Gateway Boulevard
Site Address:	Railroad Corridor, Boynton Beach, FL
Photo Nos.:	50-1, 50-2, 50-3, 50-4
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	None
Distance to Project:	Adjacent
Contamination Concerns:	Petroleum, Hazardous Waste, Herbicides, Pesticides, Coal Ash, PCBs
Project:	Gateway Boulevard Interchange

This site is identified as High risk based on the potential for contamination on the property from historical railway operations. The site does not have documented contamination but is presumed contaminated.

Rail corridors are at high risk for soil and/or groundwater contamination. This risk derives from the potential for unreported spills associated with historical and ongoing use in transporting freight, as well as rail industry maintenance practices. The USEPA considers railfields, which include rail tracks and railroad rights-of-way, as a subset of brownfield properties. EPA states that “residual contamination including herbicides, petroleum products and byproducts, metals, and creosote, is often present as a result of the former railroad operations and associated industrial activities” (USEPA August 2005).

In many cases, rail corridors through urban areas connect or previously connected to loading / unloading areas at adjacent industrial sites with a spur. USEPA notes that railway yards may consist of any combination of track and switching areas, engine maintenance buildings, engine fueling areas, bulk and container storage and transfer stations, and storage areas for materials used in track and engine maintenance. USEPA also notes that, “virtually any type of chemical contamination could be present because of the variety of chemicals used at and transported through railroad yards” (BTSC July 2017).

This site was inspected during corridor reconnaissance. Field personnel did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

The entire rail corridor within the project buffer is not identified as High risk. Site No. 50 is a section of the rail corridor defined by the area of encroachment of the build alternatives into the railroad ROW north and south of the Gateway Boulevard and TRCL intersection. Based on alternatives presented in Section 6 and the concept plans presented in Appendix E, the rail corridor in this area will be directly impacted by construction activities. If a design change encroaches on other areas of the rail corridor beyond this site, those areas should be re-evaluated.

**Site No. 53 (High Risk)**

Site Names: Rainbow City Food Store;  
Former Woods Seacrest Texaco Service;  
Former Emils Texaco Service;  
Former Seacrest Service Station;  
Former Seacrest Texaco Service;  
Former Rainbow City Grocery

Site Address: 1919 North Seacrest Boulevard, Boynton Beach, FL 33435

Photo Nos.: 53-1, 53-2

Figure Nos.: 11-1, 11-6, 11-8

FDEP/EPA Facility ID: 8842431

Distance to Project: 97 feet

Contamination Concern: Petroleum

Project: Gateway Boulevard Interchange

This site is identified as High risk based on historically operating as a gas station and the lack of a site assessment.

EDR records list this site as a historical gas station/filling station/auto station since 1965. This site currently operates as a convenience store. According to tank registration records, three USTs were improperly abandoned in place in 1984 and removed in March 1989. Tank sizes and contents are not detailed in the records. No TCAR was available for review. The site does not have documented leaks or environmental contamination related to petroleum. The site was denied state cleanup funding in 1989 because there has been no documented contamination.

**Site No. 59 (High Risk)**

Site Name: Jackie's One Price Dry Cleaning  
Site Address: 1025 Gateway Boulevard, Suite 301 A, Boynton Beach, FL 33426  
Photo No.: 59  
Figure Nos.: 11-1, 11-6, 11-7, 11-8  
FDEP/EPA Facility ID: 9812137  
Distance to Project: Adjacent  
Contamination Concerns: Hazardous Material / Drycleaning Solvents  
Project: Gateway Boulevard Interchange

This site is identified as High risk because the facility operates as a dry cleaner and has never been assessed.

New Dry Cleaner registered in June 2010. Registration form lists HD2000 as the solvent used by the facility. No information could be sourced as to the manufacturer or chemical composition of HD2000. The site does not have documented violations or environmental contamination related to hazardous waste.

The site is located in the Quantum Village shopping center.

**Site No. 62 (High Risk)**

Site Name:	Prime Masonry, Inc. Spill
Site Address:	I-95 at Gateway Boulevard; Boynton Beach, FL 33426
Photo Nos.:	62-1, 62-2, 62-3, 62-4
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	123458
Distance to Project:	Within Corridor
Contamination Concern:	Petroleum
Project:	Gateway Boulevard Interchange

This site is identified as High risk based on the potential for unresolved contamination on the property and lack of an associated initial remedial action report (IRAR) on file.

On January 27, 1996, a truck accident caused a petroleum release requiring an emergency response cleanup. On February 27, 1996, 165 gallons (three 55 gallon drums) of contaminated soil were removed from the site. Records indicate the source of contamination was a pipe leak at the exterior of a tank. Pipe was removed from tank and tank plugged as appropriate. FDEP requested an IRAR to document cleanup activities and assess site status. The IRAR was not available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.



**Site No. 63 (High Risk)**

Site Name:	Tri-Rail Tracks Spill
Site Address:	Lantana Station to Boynton Beach Station, Boynton Beach, FL 33426
Photo No.:	No photo
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	9803517
Distance to Project:	Adjacent
Contamination Concern:	Petroleum
Project:	Gateway Interchange

This site is identified as High risk based on unresolved contamination on the property.

In October 1992, TRCL reported a discharge of an estimated 1,400 gallons of diesel. The discharge was caused by the puncture of the train's tank resulting in soil and ground water contamination. The tank puncture occurred south of the Lantana Station and the tank continued to discharge until the train stopped at the Boynton Beach Station. The train was travelling south during this discharge. Most of the fuel was lost at the Boynton Beach Station. Records indicate a CAR was being completed and cleanup is required. Cleanup is currently designated as inactive. Documents pertaining to contamination extent (i.e. CAR) and cleanup activities were not available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

## 7.6 Medium Risk Sites

This section addresses all Medium Risk sites located within the one-quarter mile screening area.

### **Site No. 4 (Medium Risk)**

Site Name:	Hess Tanker Spill
Site Address:	I-95 Northbound at Boynton Beach Blvd. Off Ramp, Boynton Beach, FL 33426
Photo No.:	No photo
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	9502635
Distance to Project:	Adjacent
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on documented cleanup of previous contamination.

On August 23, 1995, a Hess Gasoline tanker truck released 7,500 gallons of unleaded gasoline on I-95 northbound at Boynton Beach Boulevard off ramp. Contaminated soil was removed to a depth of 7-9 feet (~730 tons). Groundwater was encountered at a depth of 7 feet. A total of 5,785 gallons of product and petroleum impacted water were removed from the site. Additional groundwater testing was conducted in June 1999. Based on the non-detect of volatile organic aromatics (VOA) compounds in the groundwater samples, the site was granted SRCO-NFA status in February 2000.

Subsequent roadway improvements have impacted the site of this spill.

**Site No. 5 (Medium Risk)**

Site Names:	City of Boynton Beach; Former Palm Beach County - Boynton Beach Elementary
Site Address:	141 East Ocean Avenue, Boynton Beach, FL 33435
Photo No.:	5
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility IDs:	8734598, FLD982158123
Distance to Project:	438 feet
Contamination Concerns:	Petroleum, Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on UST removal from the site and lack of an associated TCAR on file.

The site had one 500 gallon UST for fuel oil installed in July 1976 and removed in June 1986. No TCAR was available for review. The site formerly used halogenated solvents in degreasing and notified as a SQG. The site currently classified as a non-generator of hazardous waste. The site does not have documented leaks or environmental contamination related to petroleum or hazardous waste.

Palm Beach County sold the property to the City of Boynton Beach. One building of the former school property has been turned into a museum, Schoolhouse Children's Museum & Learning Center. The other building where the fuel tank was located is currently vacant.

Field personnel did not observe AST/USTs.

**Site No. 9 (Medium Risk)**

Site Names:	Marathon; Majestic-Patel Roger; Former Boynton Beach Service; Former Phillips Sixty Six; Former Alis Boynton Beach Oil Corporation Service Station; Former Texaco Alis Boynton Beach Oil Corporation; Former AAA Complete Auto Repair
Site Address:	302 West Boynton Beach Boulevard, Boynton Beach, FL 33435
Photo Nos.:	9-1, 9-2, 9-3
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	8513924
Distance to Project:	47 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on documented cleanup of previous contamination.

The site has one 275 gallon AST for waste oil installed in April 1992. The site also has two 12,000 gallon USTs installed in July 2005 for unleaded gasoline and diesel fuel. The two USTs were deemed in compliance during a 2015 inspection.

The site formerly had four 6,000 gallon USTs for unleaded gasoline installed in 1982 and removed in May 2005, and one 550 gallon UST for used oil removed in June 1993 (installation unknown). The LTCAR from May 2005 indicates elevated organic vapor concentrations were measured in soils. Soil and groundwater sampling was not conducted due to the site's EDI status. No TCAR was available for the June 1993 tank removal.

Sampling in April 1987 as part of the early detection initiative detected petroleum constituents in the monitoring wells. The site was eligible for State cleanup under the EDI program. The low score site initiative assessment report (LSSIR) from 2013 measured DTW at 12.4 - 14.4 fbls and an easterly hydraulic gradient in the shallow ground water. Soil and groundwater sampling indicated CoCs at or below GCTLs. Based on this report and supplemental sampling, a SRCO-NFA was issued in December 2014.

Field personnel observed one monitoring well onsite.

**Site No. 10 (Medium Risk)**

Site Names:	City of Boynton Beach; Boynton Beach City Hall; Boynton Beach City Police Department
Site Address:	100 East Boynton Beach Boulevard and 135 NE 1 <sup>st</sup> Avenue, Boynton Beach, FL 33435
Photo No.:	No photo
Figure Nos.:	11-1, 11-2, 11-5
FDEP/EPA Facility IDs:	8944850; 8630462; 95992
Distance to Project:	70 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on UST removal from the site and lack of an associated TCAR on file.

The City Hall site had one 1,000 gallon UST for generator diesel fuel installed in February 1987 and removed in February 2002. TCAR indicates no soil or groundwater contamination was detected during tank closure. The site does not have documented leaks or environmental contamination related to petroleum. The site listed in EDR as a former waste tire collector. No records found in reference to a tire collection facility.

The Police Department site had one 10,000 gallon UST for unleaded gasoline installed in September 1984 and removed in May 1989. No TCAR was available for review. The site does not have documented leaks or environmental contamination related to petroleum.

**Site No. 22 (Medium Risk)**

Site Names:	Public Storage; Former Marcal Paper Company Inc.
Site Address:	350 East Industrial Avenue, Boynton Beach, FL 33426
Photo Nos.:	22-1, 22-2
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	8840591
Distance to Project:	46 feet
Contamination Concerns:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on UST removal from the site and lack of an associated TCAR on file.

The site had one 4,000 gallon and one 2,000 gallon vehicular diesel USTs, and two 1,000 gallon unleaded gasoline USTs that were removed in April 1988. No install date was provided. No TCAR was available for review. The site does not have documented leaks or environmental contamination related to petroleum.

**Site No. 25 (Medium Risk)**

Site Name: Vacant Building;  
Former Thompson Movers

Site Address: 501 Industrial Avenue, Boynton Beach, FL 33424

Photo Nos.: 25-1, 25-2, 25-3, 25-4

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility ID: 9400860

Distance to Project: 540 feet

Contamination Concerns: Petroleum

Project: Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on UST removal from the site and lack of an associated TCAR on file.

The site had two 550 gallon gasoline USTs removed in January 1990. No install date for the tanks was recorded. FDEP inspection notes from during the tank pull indicate soil appeared clean based on field observations. Soil OVA sampling was ongoing during the inspection. No TCAR was available for review. A 1994 Inspection report form noted 10 to 12-55 gallon drums present onsite. The content of these drums was unknown. The site does not have documented leaks or environmental contamination related to petroleum.

Field personnel did not observe USTs onsite. The site contained concrete junk, parts, and concrete yard art. Property appeared abandoned.

**Site No. 26 (Medium Risk)**

Site Name: SYSCO Food Services Spill  
Site Address: Northbound I-95, 1/8th mile north of Boynton Beach Boulevard Overpass  
Boynton Beach, FL 33426  
  
Photo No.: No photo  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: 9803708  
Distance to Project: Within Corridor  
Contamination Concern: Petroleum  
Project: Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on documented cleanup of previous contamination.

On October 3, 1998, A SYSCO truck released 100 gallons of vehicular diesel onto the grassy median area on I-95 northbound 1/8th of a mile north of Boynton Beach Boulevard overpass. Contaminated soil was removed to a depth of 12 feet (~88 tons). Groundwater was encountered at a soil boring depth of 16 feet; groundwater contamination was deemed unlikely.

Subsequent roadway improvements have impacted the site of this spill. There is no longer a grassy median along this section of I-95. Area is currently covered by roadway.



**Site No. 33 (Medium Risk)**

Site Name:	Edward Jim
Site Address:	523 Industrial Avenue, Boynton Beach, FL 33426
Photo No.:	33
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	8735542
Distance to Project:	625 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on UST removal from the site and lack of an associated TCAR on file.

The site had one 550 gallon AST on a skid. The site also had four 1,000 gallon USTs for waste oil, diesel, and leaded gas. Three USTs were installed in 1980 and the other in 1976. All tanks were filled with concrete and abandoned in place in 1988 and 1989. No TCAR was available for review. The site does not have documented leaks or environmental contamination related to petroleum.

Field personnel did not observe USTs/ASTs onsite. The site appears to be used for building race cars (Indy style vehicles).

**Site No. 40 (Medium Risk)**

Site Names: Bollenbacher Trucking Inc.  
Site Address: 614 East Industrial Avenue, Boynton Beach, FL 33426  
Photo Nos.: 40-1, 40-2  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: 8736024  
Distance to Project: 332 feet  
Contamination Concerns: Petroleum  
Project: Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on AST removal from the site and lack of an associated TCAR on file.

The site had one 4,000 gallon diesel fuel AST installed in January 1986 and removed in October 1990. No TCAR was available for review. Based on a 1988 record, the site also had one 200 gallon new oil AST and one 175 gallon used oil AST. Records do not indicate install or removal dates for these ASTs. An inspection report from October 1988 mentions the need to clean up spills around the ASTs. An inspection report from November 1990 mentions observation of stained soil near the ASTs.

Field personnel did not observe a company name on the location or an AST onsite.

**Site No. 41 (Medium Risk)**

Site Name:	Quick and Easy Trucking Spill
Site Address:	I-95, One-Quarter Mile North of Boynton Beach Boulevard Southbound, Boynton Beach, FL 33435
Photo No.:	No Photo
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	9802545
Distance to Project:	Adjacent
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on documented cleanup of previous contamination.

On November 22, 1999, a Quick & Easy truck was involved in a vehicular accident and overturned in the median of I-95, one-quarter mile north of Boynton Beach Boulevard. The truck's saddle tanks ruptured as a result of the accident and released 190 gallons of diesel fuel. Contaminated soil was removed from a 56 x 39 x 4.5 foot area (~140 tons). Groundwater was not encountered during excavation. Groundwater depth was estimated at 12 fbls in the area. Soil sample analysis from the bottom of the pit indicated xylenes and total recoverable petroleum hydrocarbons (TRPH) levels higher than SCTLs. Soil re-sampling in May 2000 did not detect CoCs above SCTLs. The site was granted SRCO-NFA status in September 2000.

Subsequent roadway improvements have impacted the site of this spill.

**Site No. 45 (Medium Risk)**

Site Name: Ridgeway Plumbing, Inc.  
Site Address: 640 East Industrial Avenue, Boynton Beach, FL 33425  
Photo No.: 45  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: 8838180  
Distance to Project: 377 feet  
Contamination Concerns: Petroleum  
Project: Boynton Beach Boulevard Interchange

This site is identified as Medium risk based on documented cleanup of previous contamination.

The site had one 5,000 gallon unleaded gasoline UST installed in February 1987 and removed August 2000.

The site reported a discharge in February 1994 as a result of excessively contaminated water samples from onsite compliance wells. The suspected discharge source was an overflow or a loose extractor riser. A limited contamination assessment (LCA) was conducted in May 1994. The limited contamination assessment report (LCAR) concluded no free product was present in the monitoring wells, no contaminated soils were present, and MTBE (methyl tert-butyl ether) and benzene contamination was present in groundwater. The site was granted NFA status in September 1994.

The September 2000 TCAR indicates no soil or groundwater contamination was detected during removal of the 5,000 gallon tank.

**Site No. 51 (Medium Risk)**

Site Name: Mora Engineering Spill  
Site Address: NE 17<sup>th</sup> Avenue and NE 1<sup>st</sup> Street, Boynton Beach, FL 33435  
Photo No.: No photo  
Figure Nos.: 11-1, 11-6, 11-8  
FDEP/EPA Facility ID: 9806961  
Distance to Project: 2,048 feet  
Contamination Concern: Petroleum  
Project: Gateway Boulevard Interchange

This site is identified as Medium risk based on documented cleanup of previous contamination.

In November 2004, an aboveground temporary fuel tank being transported became unsecured and released 40 gallons of vehicular diesel. The incident spilled 35 gallons onto the roadway and 5 gallons onto the grassy swale at the intersection of NE 17<sup>th</sup> Avenue and NE 1<sup>st</sup> Street. Free product was collected using oil absorbent material. Contaminated soil was removed to a depth of 6 feet (~8.5 tons). Soil sampling results did not detect any CoCs above SCTLs. Groundwater was not encountered during source removal. No groundwater testing was conducted. The site was granted SRCO-NFA status in May 2005.

**Site No. 56 (Medium Risk)**

Site Names: 7-Eleven Store #34857;  
Former Exxon Mobil Oil Corporation #18205;  
Former Mobile #02-LXD

Site Address: 850 Gateway Boulevard, Boynton Beach, FL 33426

Photo No.: 56

Figure Nos.: 11-1, 11-6, 11-8

FDEP/EPA Facility IDs: 9802376, FLR000165829

Distance to Project: 43 feet

Contamination Concerns: Petroleum, Hazardous Wastes

Project: Gateway Boulevard Interchange

This site is identified as Medium risk based on documented cleanup of previous contamination.

The site has three USTs installed in December 1999: two 12,000 gallon USTs for unleaded gasoline and one 10,000 gallon UST for vehicular diesel. All tanks deemed in compliance during 2014 inspection.

Discharge reported in October 2006 when staining was observed in the pea-gravel surrounding the fill and vapor return risers during spill bucket replacement. Petroleum impacted soils were excavated. SRCO-NFA granted in February 2007.

Exxon applied for a hazardous waste ID in 2010 as a CESQG. Current status as a CESQG is closed. The site does not have documented violations or environmental contamination related to hazardous waste.

Exxon Mobil Corp sold this site to 7-Eleven in April 2011.

**Site No. 68 (Medium Risk)**

Site Names:	Euro Granite and Stone; Former Snapp Nursery
Site Address:	550 Industrial Way, Boynton Beach, FL 33426
Photo No.:	No photo
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	8839058
Distance to Project:	657 feet
Contamination Concern:	Petroleum
Project:	Gateway Boulevard Interchange

This site is identified as Medium risk based on AST removal from the site and lack of an associated TCAR on file.

The site had two 550 gallon ASTs installed in November 1987 for unleaded gasoline and generator diesel. Tanks removed in 1991 based on an updated tank registration. No TCAR or other information related to tank removal/closure was available for review. The site does not have documented leaks or environmental contamination related to petroleum.

**Site No. 69 (Medium Risk)**

Site Names:	Sherwin Williams; Former KKF Realty-Maintenance Warehouse; Former STS Southeast
Site Address:	2900 High Ridge Road, Boynton Beach, FL 33426
Photo Nos.:	69-1, 69-2
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility IDs:	9501939, 8630769
Distance to Project:	1,103 feet
Contamination Concerns:	Petroleum, Hazardous Waste
Project:	Gateway Boulevard Interchange

This site is identified as Medium risk based on documented cleanup of previous contamination.

Records indicate KKF Realty site never had tanks, but reported a February 1992 kerosene discharge. A natural attenuation monitoring (NAM) plan was approved in July 1993 and monitored for 5 quarters until March 1995. A 2014 limited site assessment (LSA) did not detect soil or groundwater contamination. A SRCO was issued in August 2014 based on LSA results. In 1992, ground water flow was east.

STS Southeast Site address was 2950 High Ridge Road. Today, this address appears to be encompassed by the 2900 High Ridge Road building. STS had one tank based on a 1986 tank registration form. Owner of tank is listed as Sematic International Inc. A 1994 record states the site has no regulated tanks, but had one hazardous substance tank until 1992 that contained chromate and water. No TCAR or other documents related to tank removal were available for review.



**Site No. 71 (Medium Risk)**

Site Names: Braddock Metallurgical Aerospace Service, Inc.;  
Former Sermatech International Inc.;  
Former Sermatech Power Solutions;  
Former Sermatech of Boynton Beach

Site Address: 507 Industrial Way, Boynton Beach, FL 33426

Photo No.: No photo

Figure Nos.: 11-1, 11-6, 11-8

FDEP/EPA Facility IDs: 9400310; FLD000776666

Distance to Project: 956 feet

Contamination Concern: Hazardous Waste

Project: Gateway Boulevard Interchange

This site is identified as Medium risk based on AST removal from the site and lack of an associated TCAR on file.

The site had one 5,000 gallon AST removed in November 1993. Tank contents are documented as "Other." No TCAR or other documents related to tank removal were available for review. The site does not have documented leaks or environmental contamination related to petroleum.

Records indicate company was bought in 2003 and no longer has hazardous waste disposal. Inactive generator of hazardous waste. The site does not have documented violations or environmental contamination related to hazardous waste.

## 7.7 Low Risk Sites

This section addresses all Low Risk sites located within the one-quarter mile screening area.

### **Site No. 3 (Low Risk)**

Site Name:	American Tower #519
Site Address:	519 West Ocean Drive, Boynton Beach, FL 33426
Photo No.:	3
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	8735719
Distance to Project:	259 feet
Contamination Concerns:	Petroleum, Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as Low risk because a petroleum AST was observed onsite with no visual environmental concerns.

The site was identified during field reconnaissance. Reconnaissance personnel observed a cell tower and emergency generator AST onsite. Reconnaissance personnel did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 8 (Low Risk)**

Site Names:	Boynton Beach Dental Center; Former Steamatic
Site Address:	326 West Boynton Beach Boulevard, Boynton Beach, FL 33426
Photo No.:	No photo
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	80181
Distance to Project:	47 feet
Contamination Concern:	Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

This site is listed as a non-generator of hazardous waste and out of business as Boynton Beach Dental Center. EDR lists this site as a potential historical dry cleaner with a record from 1983 for Steamatic. Steamatic was a carpet and rug cleaning service. The site does not have documented violations or environmental contamination related to hazardous waste.

**Site No. 11 (Low Risk)**

Site Name:	Bruno Auto Body & Painting
Site Address:	217 NE 3 <sup>rd</sup> Street, Boynton Beach, FL 33435
Photo No.:	11
Figure Nos.:	11-1, 11-2, 11-5
FDEP/EPA Facility ID:	FLD982112203
Distance to Project:	954 feet
Contamination Concern:	Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

This facility notified as a SQG of solvent waste in April 2010. The facility had a minor violation in 2010 for improper disposal of paint filters. No other violations are reported in the records. The site does not have documented environmental contamination related to hazardous waste.

**Site No. 16 (Low Risk)**

Site Name: Palm Beach County School District - Galaxy Elementary School  
Site Address: 301 Galaxy Way, Boynton Beach, FL 33435  
Photo Nos.: 16-1, 16-2  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility IDs: 8630569, FLD982157935  
Distance to Project: 44 feet  
Contamination Concern: Petroleum  
Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release. The risk rating is also based on a tank closure assessment form which documents that no soil contamination was detected during UST removal.

The site had one 1,000 gallon UST for boiler/generator diesel installed in 1958 and closed in place in October 1997. The tank closure assessment form indicates no soil contamination was detected during tank closure (i.e. hydrocarbon levels were lower than 50 ppm). The site does not have documented environmental contamination related to petroleum.

The site notified as a CESQG in February 2009 for ignitable, corrosive, and reactive wastes. The site does not have documented violations or environmental contamination related to hazardous waste.

Field personnel did not observe AST/USTs onsite. A vent pipe was observed at the delivery area on the north side of school.

**Site No. 21 (Low Risk)**

Site Names: Precision Auto Body Works;  
Former Mr. D Auto Body & Painting

Site Address: 400 West Industrial Avenue, Boynton Beach, FL 33426

Photo No.: 21

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility ID: FLR000061465, FLD982155756

Distance to Project: 302 feet

Contamination Concern: Hazardous Waste

Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

Precision Auto Body Works: The site notified in September 2013 as a CESQG for ignitable waste. A September 2013 hazardous waste inspection report indicates the site notified as a SQG in December 1999 for spent paint booth filters and spent paint but operates as a CESQG. The site does not have documented environmental contamination related to hazardous waste.

Mr. D Auto Body & Painting: The site notified as a non-generator in November 2010. The site previously notified as a SQG for solvents in August 1988. The site had hazardous waste management violations but no reported environmental contamination related to hazardous waste.

**Site No. 23 (Low Risk)**

Site Name: George Evesson Property  
Site Address: 409 East Industrial Avenue, Boynton Beach, FL 33435  
Photo Nos.: 23-1, 23-2  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: 9400602  
Distance to Project: 481 feet  
Contamination Concerns: Petroleum  
Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk based on letters which document that no soil or groundwater contamination was detected during UST removal.

The site had one 2,000 gallon UST for unleaded gas removed in May 1990. No install date provided. A letter referring to the tank closure states no contaminated soils were detected by organic vapor analysis (OVA) field detection methods. Another letter referring to groundwater sampling indicates xylenes were detected below GCTLs. A 1994 inspection report notes the facility is closed. The site does not have documented leaks or environmental contamination related to petroleum.

Field personnel did not observe a company name on the site. Building had a help wanted sign for landscapers. No USTs were observed. Personnel observed a portable AST with pump handle in the front of the property.

**Site No. 27 (Low Risk)**

Site Name: Marcinkoski Gradall Inc.  
Site Address: 510 West Industrial Avenue, Boynton Beach, FL 33426  
Photo Nos.: 27-1, 27-2, 27-3, 27-4  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: None  
Distance to Project: 721 feet  
Contamination Concerns: Petroleum  
Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk based on the property's use as an auto storage yard and because the property has never had a documented petroleum tank, hazardous waste generator ID, or environmental contamination.

The site was identified during field reconnaissance. This facility currently operates as an auto storage yard. Field personnel observed heavy construction equipment for Marcinkoski Gradall Inc. stored at this site. Internet search records indicate the site is owned by Lois K Marcinkoski Trust Agreement and Raymond A Marcinkoski Trust Agreement. No records were available in FDEP OCULUS or Palm Beach County ERM CINEMA databases for review for this address. FDEP OCULUS records found for Marcinkoski Gradall Inc. reference 422 West Industrial Ave (Site No. 24).

Field personnel noted a diesel odor at the site.



**Site No. 28 (Low Risk)**

Site Names: All About Autos;  
Former L.T. Automotive;  
Former Japanese Quality Car Service Inc.

Site Address: 505 Industrial Avenue, Boynton Beach, FL 33426

Photo No.: 28

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility ID: 78778

Distance to Project: 628 feet

Contamination Concerns: Petroleum, Hazardous Waster

Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property.

EDR lists this site as a historical gas station/filling station/auto station with records for Japanese Quality Car Service Inc. from 2001-2009. The facility currently operates as an auto service company under the name of All About Autos. L.T. Automotive formerly occupied the site as a hazardous waste generator. A 2011 facility detailed list report indicates L.T. Automotive was out of business and no longer a hazardous waste generator. The site does not have documented violations or environmental contamination related to hazardous waste.

**Site No. 29 (Low Risk)**

Site Name: Comcast;  
Former Poly Plastic Packaging Company Inc.

Site Address: 510 Industrial Avenue #247, Boynton Beach, FL 33426

Photo Nos.: 29-1, 29-2, 29-3

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility IDs: FLD059878819

Distance to Project: 257 feet

Contamination Concerns: Hazardous Waste

Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property.

In 2002, Poly Plastics Packaging obtained a small quantity generator (SQG) hazardous waste generator status. The site was formerly a CESQG in August 2000. The site has several documented compliance issues, but no documented environmental contamination related to hazardous waste.

Field personnel observed the site to possibly be a communication company (i.e. Comcast service vehicles). Very little activity observed.

**Site No. 30 (Low Risk)**

Site Name:	Mikes Automotive
Site Address:	509 Industrial Avenue, Boynton Beach, FL 33426
Photo No.:	30
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	614 feet
Contamination Concerns:	Petroleum; Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as Low risk because the property operates as an auto service company, but has never had a documented petroleum tank, hazardous waste generator ID, or environmental contamination.

EDR lists this site as a historical gas station/filling station/auto station with a record from 2009. The facility currently operates as an auto service company. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review. Field reconnaissance personnel noted drums on the exterior of the facility. The contents of the drums is unknown. No spills and/or staining were noted around the drums.

**Site No. 31 (Low Risk)**

Site Name: Freddies Foreign Car Service  
Site Address: 516 West Industrial Avenue, Boynton Beach, FL 33426  
Photo No.: 31  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: 79914  
Distance to Project: 721 feet  
Contamination Concerns: Petroleum, Lubricants, Mineral Spirits  
Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property.

A facility detailed list report indicates the site was no longer a hazardous waste generator. The site does not have documented violations or environmental contamination related to hazardous waste.

**Site No. 32 (Low Risk)**

Site Name: Chucks Auto Repair Service;  
Chucks by Kostas Auto Repair

Site Address: 520 West Industrial Avenue, Boynton Beach, FL 33426

Photo No.: 32

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility ID: FLD984239442

Distance to Project: 755 feet

Contamination Concerns: Petroleum, Hazardous Waste

Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

The site has notified as a CESQG for solvents since May 1992. A 2013 inspection report indicates this facility stores used oil in one 300 gallon AST. The facility also has several 55 gallon drums onsite for used oil filters and spent antifreeze. The site does not have documented violations or environmental contamination related to hazardous waste or petroleum.

**Site No. 34 (Low Risk)**

Site Name:	Zuccalas Wrecker Service
Site Address:	522 Industrial Avenue, Boynton Beach, FL 33426
Photo Nos.:	34-1, 34-2
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	301 feet
Contamination Concerns:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as Low risk because the property has never had a documented petroleum tank, hazardous waste generator ID, or environmental contamination, but numerous vehicles are stored on site.

The site was identified during field reconnaissance. This facility currently operates as a police compound and vehicle (e.g. car / boat / RV) storage yard. The site had good general housekeeping practices and no environmental concerns were noted. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 37 (Low Risk)**

Site Names: Florida Diesel and Hydraulic;  
Former Collision World;  
Former Ideal Paint & Body

Site Address: 610 Industrial Avenue, Boynton Beach, FL 33426

Photo Nos.: 37-1, 37-2

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility ID: FLR000039677

Distance to Project: 317 feet

Contamination Concerns: Hazardous Waste

Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property.

A Facility Detailed List Report notes this site changed name and ownership in 2010 from Ideal Paint and Body to Collision World. This site is listed as CESQG for solvents, used oils, and other lubricants. The site does not have documented violations or environmental contamination related to hazardous waste.

No AST/USTs were observed by field personnel.

**Site No. 38 (Low Risk)**

Site Name:	N & D Auto Body
Site Address:	617 West Industrial Avenue, Boynton Beach, FL 33426
Photo Nos.:	38-1, 38-2
Figure Nos.:	7-1, 7-2, 7-4
FDEP/EPA Facility ID:	FLD982174195
Distance to Project:	793 feet
Contamination Concern:	Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

The site registered as a SQG of solvents in 1989. During a June 2012 inspection, facility was not in compliance for labeling and proper disposal procedures. EDR records indicate the site changed to CESQG status in October 2012. A site detail report indicates this facility is a CESQG generating approximately 440 pounds per year. The site does not have documented environmental contamination related to hazardous waste.



**Site No. 39 (Low Risk)**

Site Name: Thunder Auto Sports Inc.  
Site Address: 617 Industrial Avenue, Boynton Beach, FL 33426  
Photo No.: 41  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: FLD981856891  
Distance to Project: 659 feet  
Contamination Concern: Hazardous Waste  
Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

The site registered as a CESQG in February 1987. Minor violations were noted in 2012 related to the used oil drums and immediately corrected during inspection. The facility is in compliance. The site does not have documented environmental contamination related to hazardous waste.

**Site No. 43 (Low Risk)**

Site Names: New Wave Fabrication;  
Former Ideal Painting & Body Inc.

Site Address: 625 Industrial Avenue, Boynton Beach, FL 33426

Photo Nos.: 43-1, 43-2

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility IDs: FLD984194209; FLTMP9102705

Distance to Project: 672 feet

Contamination Concern: Hazardous Waste

Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

The site notified as a CESQG in February 1991 for generating solvent waste. EDR records indicate non-generator status dates to January 1998. The site does not have documented violations or environmental contamination related to hazardous waste.

**Site No. 44 (Low Risk)**

Site Name: Zuccalas Wrecker Service  
Site Address: 633 Industrial Avenue, Boynton Beach, FL 33426  
Photo Nos.: 44-1, 44-2  
Figure Nos.: 11-1, 11-2, 11-4  
FDEP/EPA Facility ID: 80248  
Distance to Project: 699 feet  
Contamination Concern: Hazardous Waste  
Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

A 2003 Facility Detailed Report indicates the facility is a CESQG for lead batteries, mineral spirits, used oil, and lubricants generating approximately 40 pounds per year. The site does not have documented violations or environmental contamination related to hazardous waste.

**Site No. 46 (Low Risk)**

Site Name:	Comcast East Boynton Hubsite
Site Address:	645 East Industrial Avenue, Boynton Beach, FL 33426
Photo No.:	46
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	9812065
Distance to Project:	702 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as Low risk because the property has an in-compliance AST.

The site has one 570 gallon, double-wall, steel, gasoline AST installed in September 2010. A 2015 inspection report deemed this tank to be in compliance.

**Site No. 47 (Low Risk)**

Site Names: Granite and Marble Fabrication and Installation;  
Former Loomis FWD Systems

Site Address: 870 West Industrial Avenue, Boynton Beach, FL 33426

Photo No.: No Photo

Figure Nos.: 11-1, 11-2, 11-4

FDEP/EPA Facility ID: FLD984247403

Distance to Project: 810 feet

Contamination Concerns: Hazardous Waste

Project: Boynton Beach Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property.

The site was registered as a SQG in December 1993. A November 2010 inspection report indicates the Loomis FWD Systems property is closed. The site does not have documented violations or environmental contamination related to hazardous waste.

**Site No. 49 (Low Risk)**

Site Name: CarMax #7113  
Site Address: 2000 High Ridge Road, Boynton Beach, FL 33426  
Photo No.: No Photo  
Figure Nos.: 11-1, 11-6, 11-8  
FDEP/EPA Facility IDs: 9701106; FLR000035253  
Distance to Project: 259 feet  
Contamination Concerns: Petroleum  
Project: Gateway Boulevard Interchange

This site is identified as Low risk because the property has a documented petroleum tank and hazardous waste generator ID, but no violations or environmental contamination.

The site has two ASTs and one UST deemed in compliance during a 2015 inspection. All tanks were installed in 1997: one 10,000 gallon UST for unleaded gasoline and two 1,000 gallon ASTs for new & lube oil and waste/used oil.

EDR records indicate that in 2012 this site was listed as a SQG of solvents. The site does not have documented violations or environmental contamination related to hazardous waste or petroleum.

**Site No. 52 (Low Risk)**

Site Name:	HGI Industries
Site Address:	2055 High Ridge Road, Boynton Beach, FL 33426
Photo No.:	No photo
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	None
Distance to Project:	553 feet
Contamination Concern:	Petroleum
Project:	Gateway Boulevard Interchange

This site is identified as Low risk because the property has an AST, but no documented environmental contamination.

The site was identified during field reconnaissance. This facility currently operates as a manufacturing/research facility for the ODOROX product line. One AST for an emergency generator observed onsite. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 54 (Low Risk)**

Site Name: Boynton Beach City Lift Station #309  
Site Address: Seacrest and NW 19<sup>th</sup> Avenue, Boynton Beach, FL 33426  
Photo Nos.: 52-1, 52-2  
Figure Nos.: 11-1, 11-6, 11-8  
FDEP/EPA Facility ID: 8840765  
Distance to Project: 29 feet  
Contamination Concern: Petroleum  
Project: Gateway Boulevard Interchange

This site is identified as Low risk based on a TCAR which documents that no soil or groundwater contamination was detected during UST removal. In addition, the site has a documented, in-compliance AST.

The site has one AST deemed in compliance during a 2014 inspection. One 640 gallon AST for emergency generator diesel was installed in May 1998. The site previously had one 550 gallon UST for emergency generator diesel installed in May 1984 and removed in July 1998 and one 3,000 gallon UST for an unregulated substance installed in May 1984 and listed as unmaintained in 1991. The September 1998 TCAR indicates no soil or groundwater contamination was detected during tank removal. The site does not have documented leaks or environmental contamination related to petroleum.



**Site No. 55 (Low Risk)**

Site Name: Boynton Beach City - Fire Station #5 EOC  
Site Address: 2080 High Ridge Road, Boynton Beach, FL 33426  
Photo No.: No Photo  
Figure Nos.: 11-1, 11-6, 11-8  
FDEP/EPA Facility ID: 9810829  
Distance to Project: 67 feet  
Contamination Concerns: Petroleum  
Project: Gateway Boulevard Interchange

This site is identified as Low risk because the property has a documented petroleum tank, but no violations or environmental contamination.

The site has one AST deemed in compliance during a 2016 re-inspection. One 10,000 gallon AST for vehicular diesel was installed in June 2008. The site does not have documented leaks or environmental contamination related to petroleum.

**Site No. 58 (Low Risk)**

Site Name:	Howard Fertilizer and Chemical Corporation
Site Address:	1107 Gateway Boulevard, Boynton Beach, FL 33426
Photo No.:	58
Figure Nos.:	11-1, 11-6, 11-7
FDEP/EPA Facility ID:	None
Distance to Project:	385 feet
Contamination Concern:	Hazardous Waste
Project:	Gateway Boulevard Interchange

This site is identified as Low risk because drums and tanks were observed at the property, but the property has no documented environmental contamination.

The site was identified during field reconnaissance. This facility currently operates as a distribution center. Field personnel observed an outside chemical storage area containing drums and tanks. Drum and tank contents are unknown. Personnel did not observe stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 60 (Low Risk)**

Site Name:	Quantum Village Publix Super Market #1041
Site Address:	1005 NW 22 <sup>nd</sup> Avenue, Boynton Beach, FL 33426
Photo Nos.:	60-1, 60-2
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	9810705
Distance to Project:	Adjacent
Contamination Concern:	Petroleum
Project:	Gateway Boulevard Interchange

This site is identified as Low risk because the property has a documented, in-compliance AST.

The site has one 1,000 AST for emergency generator diesel fuel installed in August 2008. Tank deemed in compliance in 2014 inspection. The site does not have documented leaks or environmental contamination related to petroleum.

**Site No. 61 (Low Risk)**

Site Name:	Children's Services Council of Palm Beach County
Site Address:	2300 High Ridge Road, Boynton Beach, FL 33426
Photo Nos.:	61-1, 61-2
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	None
Distance to Project:	48 feet
Contamination Concerns:	Petroleum
Project:	Gateway Boulevard Interchange

This site is identified as Low risk because an AST was observed on the property.

The site was identified during field reconnaissance. This facility currently operates as an office building. Field personnel observed an emergency generator onsite. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 64 (Low Risk)**

Site Name: Multi-tenant Building;  
Former High Ridge Motor Works

Site Address: 3000 High Ridge Road, Boynton Beach, FL 33426

Photo No.: 64

Figure Nos.: 11-1, 11-6, 11-8

FDEP/EPA Facility ID: FLD984247023

Distance to Project: 418 feet

Contamination Concern: Hazardous Waste

Project: Gateway Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

Business was not present at the listed address. EDR lists site as a non-generator of hazardous waste based on agency documents dated November 2010. EDR records indicate that in 1993 site was listed as a SQG of automotive solvents and waste. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 65 (Low Risk)**

Site Names: Multi-tenant Building;  
Former Motorola High Ridge;  
Former Sears Siding & Windows;  
Former Suspended Animation

Site Address: 614 East Industrial Avenue, Boynton Beach, FL 33426

Photo No.: 65

Figure Nos.: 11-1, 11-6, 11-8

FDEP/EPA Facility IDs: FLD984241752; FLT000065151; FLT140085002

Distance to Project: 568 feet

Contamination Concern: Hazardous Waste

Project: Gateway Boulevard Interchange

This site is identified as Low risk due to the hazardous waste generator ID associated with the property and the lack of a documented release or violation for a release.

Businesses were not present at the listed address. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

EDR lists Motorola site as a non-generator of hazardous waste based on agency documents dated July 2012. EDR records indicate that in 1993 the site was listed as a SQG of ignitable waste and lead. EDR lists the Sears site as a CESQG of hazardous waste based on agency documents dated March 2000. EDR lists Suspended Animation site as a CESQG of hazardous waste based on agency documents dated July 2014.

**Site No. 66 (Low Risk)**

Site Name:	Helena Chemical Corporation
Site Address:	2960 Commerce Park, Boynton Beach, FL 33426
Photo No.:	66
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	None
Distance to Project:	794 feet
Contamination Concern:	Hazardous Waste
Project:	Gateway Boulevard Interchange

This site is identified as Low risk because chemical warning labels were observed on the building, but the property has no documented environmental contamination.

The site was identified during field reconnaissance. This facility currently operates as an agricultural and specialty formulator and distributor. Hazardous materials storage/supply observed at the site as noted by National Fire Protection Association (NFPA) hazardous material warning labels on warehouse doors. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 67 (Low Risk)**

Site Name: Worldwide Superabrasives, LLC;  
Former Florentine Marble Co Inc.

Site Address: 2921 NW Commerce Park Drive, Boynton Beach, FL 33426

Photo No.: 67

Figure Nos.: 11-1, 11-6, 11-8

FDEP/EPA Facility ID: FLR000036152

Distance to Project: 779 feet

Contamination Concern: Hazardous Waste

Project: Gateway Boulevard Interchange

This site is identified as Low risk because chemical warning labels were observed on materials inside the building, but the property has no documented environmental contamination.

During field reconnaissance, hazardous materials storage was observed as noted by NFPA hazardous material warning labels on materials inside the facility operating as Worldwide Superabrasives LLC. Field personnel also noted an odor when near the facility.

Florentine Marble Co Inc previously occupied this property and had an EPA hazardous waste ID for a LQG. Florentine Marble ceased manufacturing at the site in 2005 and the EPA ID is no longer active. The site does not have documented violations or environmental contamination related to hazardous waste.



**Site No. 70 (Low Risk)**

Site Name:	Waste Management Inc. of Florida - Palm Beach
Site Address:	651 Industrial Way, Boynton Beach, FL 33426
Photo Nos.:	70-1, 70-2, 70-3
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility IDs:	9046345; FLD984215038
Distance to Project:	1,002 feet
Contamination Concerns:	Petroleum; Hazardous Waste
Project:	Gateway Boulevard Interchange

This site is identified as Low risk because the property has in-compliance ASTs and no documented environmental contamination. In addition, there is a hazardous waste generator ID associated with the property, but no documented release or violation for a release.

The site has seven ASTs deemed in compliance during a 2016 inspection.

Three 10,000 gallon ASTs for vehicular diesel were installed in March 2012. These tanks replaced two 10,000 gallon and one 6,000 gallon ASTs for vehicular diesel that had been installed in May 1991. New tanks were installed in existing concrete containment. A March 2012 Tank Closure Site inspection noted no signs of discharge to the environment.

Three other existing tanks were installed in May 1991: one 1,000 gallon AST for waste oil and two 1,000 gallon ASTs for new and lube oil. One 750 gallon AST for emergency generator diesel was installed in April 2015.

Field personnel observed a fuel pump island, truck service bays, and container storage at the site. Field personnel did not note any sign of environmental contamination.

The site notifies as a SQG and generates used oil, lead-acid batteries, and fluorescent lamps. The site does not have documented environmental contamination related to petroleum or hazardous waste. The site notifies as a SQG and generates used oil, lead-acid batteries, and fluorescent lamps. The site does not have documented petroleum or hazardous waste contamination.

**7.8 No Risk Sites**

This section addresses all No Risk sites located within the one-quarter mile screening area.

**Site No. 6 (No Risk)**

Site Name:	Boynton Memorial Crematory and Chapel
Site Address:	800 West Boynton Beach Boulevard, Boynton Beach, FL 33426
Photo No.:	No photo
Figure Nos.:	11-1, 11-2, 11-3
FDEP/EPA Facility ID:	990649
Distance to Project:	77 feet
Contamination Concern:	Ash
Project:	Boynton Beach Boulevard Interchange

This site is identified as No risk because the property has never had a documented petroleum tank, hazardous waste generator ID, or environmental contamination.

The site operates under the Air General permit. Authorization was issued in February 2012 and expires in February 2017. The site was deemed in compliance with permit conditions during a February 2016 inspection. The site does not have documented environmental contamination related to crematory operations.

**Site No. 13 (No Risk)**

Site Name:	Lloyds Auto Electric
Site Address:	314 West Industrial Avenue, Boynton Beach, FL 33426
Photo No.:	No Photo
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	184 feet
Contamination Concern:	Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as No risk because the property has never had a documented petroleum tank, hazardous waste generator ID, or environmental contamination.

EDR lists this site as a historical auto station with records in 2001-2003 and 2010. The property currently operates as a commercial auto service business specializing in electrical maintenance. All historical records refer to the business currently operating at the site. Based on an aerial review, the site layout and building footprint has not changed since 2001. The building on site resembles an office building and any electrical work on vehicles is conducted under an awning attached to the property. There are no bay doors on the building and no vehicle maintenance debris visible. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 15 (No Risk)**

Site Name:	FDOT ROW
Site Address:	I-95 & Boynton Beach Boulevard, Boynton Beach, FL
Photo Nos.:	15-1, 15-2, 15-3, 15-4, 15-5, 15-6, 15-7, 15-8, 15-9, 15-10
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	46 feet
Contamination Concerns:	Trash
Project:	Boynton Beach Boulevard Interchange

This site is identified as No risk due to trash observed at the site, but no records of releases or contamination.

The site was identified during field reconnaissance. Field personnel observed trash in ROW, but did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 35 (No Risk)**

Site Name:	Noted Automotive Service
Site Address:	606 West Industrial Avenue, Boynton Beach, FL 33426
Photo No.:	35
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	778 feet
Contamination Concerns:	Petroleum; Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as No risk because the property has never had a documented petroleum tank, hazardous waste generator ID, or environmental contamination.

The site was identified during field reconnaissance. This facility currently operates as an auto service company. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 36 (No Risk)**

Site Name:	East Coast Auto Service
Site Address:	611 Industrial Avenue, Boynton Beach, FL 33426
Photo Nos.:	36-1, 36-2
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	639 feet
Contamination Concern:	Petroleum
Project:	Boynton Beach Boulevard Interchange

This site is identified as No risk because the property has never had a documented petroleum tank, hazardous waste generator ID, or environmental contamination.

The site was identified during field reconnaissance. The facility currently operates as an auto service company. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 42 (No Risk)**

Site Name:	Certified Truck and Auto
Site Address:	700 West Industrial Avenue, Boynton Beach, FL 33426
Photo No.:	42
Figure Nos.:	11-1, 11-2, 11-4
FDEP/EPA Facility ID:	None
Distance to Project:	829 feet
Contamination Concerns:	Petroleum; Hazardous Waste
Project:	Boynton Beach Boulevard Interchange

This site is identified as No risk because the property has never had a documented petroleum tank, hazardous waste generator ID, or environmental contamination.

The site was identified during field reconnaissance. This facility currently operates as an auto service company. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.

**Site No. 57 (No Risk)**

Site Name:	FDOT ROW
Site Address:	I-95 & Gateway, Boynton Beach, FL
Photo Nos.:	56-1, 56-2, 56-3, 56-4, 56-5, 56-6, 56-7, 56-8, 56-9, 56-10, 56-11, 56-12
Figure Nos.:	11-1, 11-6, 11-8
FDEP/EPA Facility ID:	None
Distance to Project:	Adjacent
Contamination Concerns:	Trash
Project:	Gateway Boulevard Interchange

This site is identified as No risk due to trash observed at the site, but no records of releases or contamination.

The site was identified during field reconnaissance. Field personnel observed trash in ROW, but did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.



**7.9 Analysis of Alternative Alignments and Pond Sites**

As part of the PD&E Study, several roadway improvement alternatives were considered for improving traffic operations and safety in the project study area. Tables 9 and 10 below provide a summary of the potential contamination sources directly impacted by each alternative. Direct impacts evaluated include ROW acquisition, new stormwater pond locations, and foundations for mechanically stabilized earth (MSE) walls and piers.

**Table 9: Boynton Beach Blvd. - Summary of Potential Contamination Sources Impacted per Alternative**

Risk	No Build Alternative	Concept Development Alternative	Streamlined Concept Development Alternative	Single Point Urban Interchange (SPUI) Alternative
High	0	3 (Site Nos. 1, 7, 12, 17)	1 (Site Nos. 1, 7)	1 (Site Nos. 1, 7)
Medium	0	1 (Site Nos. 4)	1 (Site Nos. 4)	1 (Site Nos. 4)
Low	0	2 (Site Nos. 16)	2 (Site Nos. 16)	2 (Site Nos. 16)
No	0	0	0	0
<b>Total</b>	0	6	4	4

Each alternative above requires additional ROW along Boynton Beach Boulevard that could be impacted from potential contamination sources. Site No. 7 could impact the ROW south of Boynton Beach Boulevard, west of I-95. Site No. 16 could impact the ROW north of Boynton Beach Boulevard, east of I-95. In addition, the Concept Development Alternative requires additional ROW along the north side of Boynton Beach Boulevard, both west and east of I-95, which could be impacted from Site Nos. 12 and 17, respectively. The widening of the bridge over I-95, MSE wall installation along the I-95 access ramps, and ROW acquisition directly impacts two potential contamination sources (Site Nos. 1 and 4) for all alternatives presented for Boynton Beach Boulevard.

Pond sites 4 and 5 are not adjacent to identified potential contamination sources.

Pond site 6 overlays one, high risk potential contamination source (Site No. 17). Site No. 17 is a former gasoline station with unresolved soil and groundwater contamination on the property. The site had petroleum USTs on the property from 1967 to 1995 and reported petroleum discharges in 1990 and 1993. A pump and treat remediation system operated on the site from 1992 to 1995. In 2016, a Limited Scope Remedial Action Plan was developed for the property to address the documented contamination.

The recommended alternative for the project area was chosen by FDOT on January 26, 2017. The Streamlined Concept Development Alternative was chosen for the Boynton Beach Boulevard Interchange. This option requires the least amount of ROW acquisitions in comparison to other alternatives proposed, except for the No-Build Alternative.

**Table 10: Gateway Blvd. - Summary of Potential Contamination Sources Impacted per Alternative**

Risk	No Build Alternative	Concept Development Alternative	Streamlined Concept Development Alternative	Single Point Urban Interchange (SPUI) Alternative
High	0	3 (Site Nos. 50, 59, 63)	3 (Site Nos. 50, 59, 63)	3 (Site Nos. 50, 59, 63)
Medium	0	0	0	0
Low	0	4 (Site Nos. 57, 58, 60, 61)	3 (Site Nos. 57, 58, 60)	3 (Site Nos. 57, 58, 60)
No	0	0	0	0
<b>Total</b>	0	7	6	6

Each alternative above requires additional ROW along the north side of Gateway Boulevard, west of I-95, that could be impacted from potential contamination sources (Site Nos. 58, 59, and 60). All alternatives also require additional ROW along the west side of High Ridge Road that could be impacted from Site No. 60. In addition, the Concept Development Alternative requires additional ROW along the east side of High Ridge Road, north of Gateway Boulevard, which could be impacted from Site No. 61. The installation of MSE walls directly impacts three potential contamination sources (Site Nos. 50, 57, and 63) for all alternatives presented for Gateway Boulevard.

Pond site 1 is adjacent to one, low risk (Site No. 58) and one, high risk (Site No. 59) potential contamination sources. Site No. 58, Howard Fertilizer and Chemical Corporation, does not have documented violations or environmental contamination related to hazardous waste. Site No. 59, Jackie’s One Price Dry Cleaning, operates as a drycleaning facility. The site has never been assessed and there is the potential for environmental contamination related to drycleaning solvents.

Pond site 2 is adjacent to one, low risk (Site No. 57) and one, high risk (Site No. 50) potential contamination sources. Site No. 57, FDOT ROW, does not have documented environmental contamination and no visual signs of contamination were noted during field reconnaissance. Site No. 50, Tri Rail Coastal Link railroad corridor, does not have documented contamination but is presumed contaminated based on historical railway operations.

Pond site 3 is not adjacent to identified potential contamination sources.

The recommended alternative for the project area was chosen by FDOT on January 26, 2017. The Single Point Urban Interchange was chosen for the Gateway Boulevard Interchange. This option requires the least amount of ROW acquisitions in comparison to other alternatives proposed, except for the No-Build Alternative.

## 8. Regulatory Status

The acquisition of contaminated property could transfer environmental responsibility to FDOT if cleanup is required. Exacerbation of an existing contaminant plume could result in added liability to FDOT. Sections 7.5 through 7.8 detail site-specific activities where a regulatory agency is, has, or may take action on a property with known or potential contamination problems.

### 8.1 ETDM Environmental Technical Advisory Team (ETAT) Regulatory Review

This project has been coordinated through the ETDM ETAT regulatory review. The contamination-related ETDM ETAT comments are detailed below. All comments have been reviewed and the type and number of sites identified in this report are in line with the ETDM ETAT comments.

#### 8.1.1 Boynton Beach Boulevard Interchange

FDOT D4 (11/20/2014)

1. **Coordinator Summary Degree of Effect:** Moderate (3)
2. **Comments:** FDEP and USEPA reported several potential contamination sites within the 500-foot project buffer including: three hazardous waste facilities, eight petroleum contamination monitoring sites, 13 storage tank contamination monitoring sites, four Super Act risk sources, and five USEPA RCRA-regulated facilities. Due to the presence and proximity of these facilities (including potential previous contamination from these sites) and potential presence of hazardous substances associated with the existing bridge over the South Florida Rail Corridor/CSX Railroad line, a Summary Degree of Effect of Moderate has been assigned to the Contamination issue.

Contamination (including any required permits) will be evaluated during Project Development in accordance with federal, state, and local laws and regulations. A Contamination Screening Evaluation Report (similar to Phase I and Phase II Audits) will be prepared in accordance with Part 2, Chapter 22 of the FDOT PD&E Manual, including site specific surveys to assess existing known subsurface contamination and proximity to construction activities, as well as historical contamination release. Contingency Plans/"Special Provisions for Unidentified Areas of Contamination" shall be included in the project's construction contract documents. These provisions will specify procedures to follow in the event any hazardous material or suspected contamination is encountered during construction or should there be any construction-related spills.

FDEP (08/22/2014)

1. **Contamination Degree of Effect:** 3

USEPA (08/24/2014)

1. **Contamination Degree of Effect:** 3

FHA (10/23/2014)

1. **Contamination Degree of Effect:** 3

SFWMD (08/18/2014)

1. **Contamination Degree of Effect: 0**

8.1.2 Gateway Boulevard Interchange

FDOT D4 (11/20/2014)

1. **Coordinator Summary Degree of Effect: Minimal (2)**

2. **Comments:** FDEP and USEPA reported the following potential contamination sites within the 500-foot project buffer: one hazardous waste facility, three petroleum contamination monitoring sites, seven storage tank contamination monitoring sites, one Super Act risk source, and two USEPA RCRA-regulated facilities. Due to the presence and proximity of these facilities (including potential previous contamination from these sites) and potential presence of hazardous substances associated with the existing bridge over the South Florida Rail Corridor/CSX Railroad line, a Summary Degree of Effect of Minimal has been assigned to the Contamination issue.

Contamination (including any required permits) will be evaluated during Project Development in accordance with federal, state, and local laws and regulations. A Contamination Screening Evaluation Report (similar to Phase I and Phase II Audits) will be prepared in accordance with Part 2, Chapter 22 of the FDOT PD&E Manual, including site specific surveys to assess existing known subsurface contamination and proximity to construction activities, as well as historical contamination release. Contingency Plans/"Special Provisions for Unidentified Areas of Contamination" shall be included in the project's construction contract documents. These provisions will specify procedures to follow in the event any hazardous material or suspected contamination is encountered during construction or should there be any construction-related spills.

FDEP (09/04/2014)

1. **Contamination Degree of Effect: 2**

USEPA (09/0/2014)

1. **Contamination Degree of Effect: 2**

SFWMD (08/18/2014)

1. **Contamination Degree of Effect: 0**

## 8.2 Permits and Specifications

The SFWMD administers groundwater monitoring well construction and abandonment permits, environmental resource permits (ERP), and dewatering permits. All permits necessary for the current project design will be obtained in accordance with federal, state, and local laws and regulations.

ROW acquisition and project construction activities will not impede on existing monitoring wells at identified potential contamination sources. Additionally, groundwater monitoring well installation is not required for discrete groundwater sampling as recommended for Level II Assessments. A permit for construction or abandonment of monitoring wells will not be required for the current project design.

An ERP is required when proposed improvements and subsequent roadway construction activities alter surface water flow. The additional impervious area for the proposed improvements along Gateway Boulevard and Boynton Beach Boulevard will require new detention ponds. Additional impervious area along I-95 at the interchanges will be collected via modified exfiltration trenches and existing dry retentions, where feasible. An ERP will be required for the current project design.

Dewatering Permits are dependent on construction methods used for pier installation and other subsurface work. Pier locations and construction methods have not been determined for the current project design. Dewatering operations in the vicinity of potentially contaminated areas may require the implementation of engineering controls. A dewatering plan may also be necessary to avoid potential contamination plume exacerbation.

Additionally, Section 120 Excavation and Embankment – Subarticle 120-1.2 Unidentified Areas of Contamination of the Standard Specifications for Road and Bridge Construction should be provided in the proposed project’s construction contract documents. This specification requires that in the event any material or suspected contamination is encountered during construction, or if any spills caused by construction-related activities should occur, the contractor shall be instructed to stop work immediately and notify the D4 Planning and Environmental Management Office, as well as, the appropriate regulatory agencies for assistance.

## 9. Conclusions and Recommendations

### 9.1 Conclusions

FDOT D4 is considering interchange improvements located at SR-9/I-95 and Gateway Boulevard and SR-9/I-95 at SR-804/Boynton Beach Boulevard in Palm Beach County, Florida. As part of the engineering process of the proposed project corridor, a contamination screening evaluation was performed in accordance with Part 2, Chapter 22 “Contamination Impacts” of the FDOT PD&E Manual, revised September 1, 2016. In addition, guidance provided by FDOT D4 was utilized to complete the contamination screening evaluation (reference *FDOT D4 DCIC Approach to the CSER* provided in Appendix D). The objective of this contamination screening was to identify and evaluate contamination sources that can potentially impact proposed project schedule and costs.

The project corridor is surrounded by a mixture of residential, light industrial, and commercial land use. The evaluation included reviewing an environmental database and aerial photographs, performing a visual reconnaissance of the project corridor and surrounding area, obtaining pertinent environmental records from state and local agencies, and assigning potential contamination ratings for each source within and adjacent to the project corridor. Through this process, 71 potential contamination sources were identified within a one-quarter mile of the project corridor. In general, the environmental databases indicated these sources were associated with hazardous waste generators, former or current petroleum/spill sites containing UST and/or AST systems, and known or former cleaning / drycleaning facilities. Table 9 details the type of sites identified; sites may be listed as more than one type.

**Table 11: Summary of Types of Potential Contamination Sources**

Site Type	Boynton Beach Blvd.		Gateway Blvd.		
	Number of Sites	Site Nos.	Number of Sites	Site Nos.	
Superfund Waste Cleanup	0		0		
Solid Waste Facilities	2	10, 48	0		
Drycleaning Solvent Program	0		0		
Petroleum Contamination Monitoring	9	4, 9, 12, 14, 17, 19, 26, 41, 45	5	51, 53, 56, 63, 69	
Storage Tank Contamination Monitoring	20	3, 4, 5, 9, 10, 12, 14, 16, 17, 19, 22, 23, 24, 25, 26, 33, 40, 41, 45, 46	13	49, 51, 53, 54, 55, 56, 59, 60, 63, 68, 69, 70, 71	
SUPER Act Risk Sources	5	9, 12, 14, 17, 19	3	51, 63, 69	
USEPA RCRA-Regulated Facilities	LQG	0	0		
	SQG	2	11, 29	2	49, 70
	CESQG	7	14, 16, 21, 32, 37, 38, 39	1	65
	Non-Handler / Closed	9	3, 5, 8, 17, 28, 31, 43, 44, 47	4	56, 64, 67, 71

Evaluation of each site’s history and characteristics identified 16 High, 16 Medium, 32 Low, and 7 No contamination risk rated sources associated with hazardous waste or petroleum. Based on these risk ratings, construction activities may encounter soil or groundwater contamination which can potentially impact worker health, the environment, and construction schedule and costs if these sites are not addressed in the design. Furthermore, certain construction activities, such as dewatering, can exacerbate existing groundwater contamination plumes, if not controlled.

The proposed improvements and subsequent roadway construction activities, such as dredging and filling in wetlands or surface waters, constructing flood protection facilities, providing storm water containment and treatment, and site grading, will alter surface water flow in the project study area and require an ERP.

**9.2 Recommendations**

Since contaminated soil and groundwater has the potential to exist at or in close proximity to the project corridor, further site-specific Level II Assessments are recommended as detailed in Table 12.

**Table 12: Level II Site-Specific Assessments**

Site No.	Risk Rating	Site Description	Alternative Impact	Sampling Rationale
<b>Boynton Beach Boulevard</b>				
1	High	Railroad Corridor	Piers, Bridge expansion, MSE wall, and ROW acquisition	Contamination may be present on site due to historical railway operations.
7	High	Convenience Store, Former Gas Station	ROW acquisition	Site may have operated as a gas station in 1983. No records exist regarding petroleum tanks or site assessment activities.
12	High	Gas Station	ROW acquisition	Site has operated as a gas station since 1962. A 1995 CAR documents soil and groundwater contamination above CTLs. Additional site assessment being considered by FDEP (i.e. 2016 SA proposal).
17 / Pond Site 6	High	Vacant Land, Former Gas Station	Pond and ROW acquisition	Site formerly operated as a gas station. Contamination cleanup is ongoing. FDEP is considering a remedial action proposal for excavation and air sparging (i.e. 2016 LSRAP).

**Table 12 (continued): Level II Site-Specific Assessments (continued)**

Site No.	Risk Rating	Site Description	Alternative Impact	Sampling Rationale
<b>Gateway Boulevard</b>				
50 / 63	High	Railroad Corridor	Bridge expansion and MSE wall	Contamination may be present on site due to historical railway operations and a documented diesel spill.
Pond Site 2	NA	Vacant Land	Pond	Site is at a lower elevation compared to the surrounding area and located between the high risk rated rail corridor (Site No. 50) and a medium risk rated gas station (Site No. 56).

The Level II Assessments would include the advancement of soil borings and the collection of soil and discrete groundwater samples in areas where excavation and/or dewatering activities are necessary to accommodate MSE walls, noise walls, ponds, storm water drainage, and bridge expansions. It is estimated soil borings would be no deeper than 15 fbls since depth to water in the project area is typically within 10 feet of natural grade. Soil and discrete groundwater samples should be collected from each boring location and submitted for analytical parameters related to the former and/or current facility type. Soil samples should also be field analyzed for the presence of petroleum hydrocarbon vapors. The frequency, exact location, sampling depths, and associated laboratory analyses can be finalized once construction designs have been developed.

Sampling activities should be performed in accordance with FDEP standard operating procedures (SOPs) for Field Activities, DEP-SOP-001/01, March 1, 2014. Soil and groundwater assessment activities should be in accordance with sections FS 3000 and FS 2200, respectively. These SOPs are designed to ensure collected samples will be representative of current site conditions and that the samples have not been altered or contaminated by the sampling and handling procedures.

The objective of the recommended Level II Assessments is to evaluate potentially impacted soil and groundwater. The Level II Assessments can determine the extent of CoCs within the project corridor that may be encountered during construction. Soil and groundwater samples should be analyzed for petroleum CoCs, drycleaning CoCs, and other waste characteristics, as appropriate, referencing Chapter 62-770, F.A.C., Chapter 62-782, F.A.C., and 40 CFR 261.24, respectively. Sample analytical results should be evaluated against CTLs for groundwater and soil as detailed in CH 62-777 F.A.C., Tables I and II, respectively. Analytical results above CTLs are indicative of environmental liability associated with the property from current or historical operations.

Knowing the extent of impacted media at these areas of concern in the design phase can expedite handling, disposal and/or treatment requirements, as well as protecting worker health and the environment during construction. It can also identify locations, within the project corridor, where certain construction methods require engineering controls so as not to exacerbate contaminant plumes.

Additional site investigation is not recommended for all sites directly impacted by roadway improvement alternatives as discussed in Section 7.9 and detailed in Tables 9 and 10. A recommendation of “No Sampling” is based on site



attributes, history, and the specific construction activity affecting the site. Impacted sites with “No sampling” recommendations are detailed in Table 13.

**Table 13: “No Sampling” Recommendations**

Site No.	Risk Rating	Site Description	Alternative Impact	“No Sampling” Rationale
<b>Boynton Beach Boulevard</b>				
4	Medium	Roadway Accident	Ramp widening, Ramp support / MSE wall	Site received a SRCO in February 2000. Location of the accident has undergone significant roadway improvements.
16	Low	School and Park	ROW Acquisition	UST onsite was closed-in-place in October 1997. Site was re-constructed in 2012/2013.
<b>Gateway Boulevard</b>				
57	Low	Roadway ROW	ROW Acquisition	Trash observed in ROW. Trash requires removal, but no further assessment is warranted by its presence.
58	Low	Light Industrial, Fertilizer and Chemical Company	ROW Acquisition	Business identified as a distributor, not producer, of fertilizer and chemical products. Site does not have documented contamination. ROW acquisition is minimally impacting the parcel.
59	High	Dry Cleaners	ROW Acquisition	Drycleaning business, onsite since 2010, does not have documented contamination. ROW acquisition is minimally impacting the parcel.
60	Low	Grocery Store	ROW Acquisition	Publix has an in-compliance AST with no documented violations or contamination. ROW acquisition is minimally impacting the parcel.
61	Low	Office Building	ROW Acquisition	AST observed onsite with no visible signs of environmental contamination. ROW acquisition is minimally impacting the parcel.

For sites listed in Table 13, no further investigations are recommended because it is unlikely the identified contamination source would impact the project based on the rationale provided. If FDOT requires a higher degree of confidence, Level II Assessments are recommended for these sites.

Additional site investigation is also not recommended for all High and Medium risk rated sites. A recommendation of “No Sampling” is based on specific site attributes, waste characteristics, and site location relative to nearby subsurface construction activities. Of the 32 High and Medium risk rated sites, “No sampling” is recommended for 26 sites.

It is recommended the contractor be held responsible for ensuring compliance with any necessary ERPs issued by the SFWMD for this project. If dewatering will be necessary during construction, a SFWMD Water Use Permit will be required. The contractor will be held responsible for ensuring compliance with necessary dewatering permit(s). Additionally, Section 120 Excavation and Embankment – Subarticle 120-1.2 *Unidentified Areas of Contamination of the Standard Specifications for Road and Bridge Construction* will be provided in the proposed project’s construction contract documents.

A hazardous material survey is recommended if construction activities will disturb existing infrastructure, equipment, or utilities that potentially contain asbestos PCBs, or paint with heavy metals.

The entire rail corridor within the project buffer is not identified as High risk. Only areas of the rail corridor directly impacted by construction activities have been identified with a site number. If a design change encroaches on other areas of the rail corridor beyond sites identified in this report, the contamination risk of new areas should be re-evaluated.

Finally, sampling recommendations, as detailed in this section, apply only to the current project design. A re-evaluation of this CSER is recommended if the project design changes significantly.

## 10. References

“Brownfields Road Map, Railroad yards,” The Brownfields and Land Revitalization Technology Support Center, Provided by the USEPA, Argonne National Laboratory, and USACE, July 2017.

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## **Appendix A**

### **Government Database Descriptions**

## **FEDERAL RECORDS**

**NPL:** The National Priority List (NPL), also known as Superfund, is a database of Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this data is the U.S. Environmental Protection Agency (USEPA).

**Proposed NPL:** Proposed National Priority List sites. A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. USEPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

**Delisted NPL:** National Priority List Deletions. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) established the criteria that the USEPA uses to delete sites from the NPL.

**NPL LIENS:** Federal Superfund Liens. Under the authority granted the USEPA by the CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

**CERCLIS:** The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies, and private individuals, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the NPL and sites which are in the screening and assessment phase for possible inclusion on the NPL.

**CERC-NFRAP:** CERCLIS sites designated “No Further Remedial Action Planned” (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration.

**LIENS 2:** A Federal CERCLA (‘Superfund’) lien can exist by operation of law at any site or property at which USEPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

**CORRACTS:** Corrective Action Reports (CORRACTS) is a list of hazardous waste handlers with Resource Conservation and Recovery Act (RCRA) corrective action activity. This report indicates which nationally defined corrective action core events have occurred for every handler that has had corrective action activity.

**RCRA-TSDF:** The Resource Conservation and Recovery Act (RCRA) - Treatment, Storage, and Disposal Facilities (TSDF) database is USEPA’s comprehensive information system that provides access to data supporting the RCRA of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. Transporters are individuals or entities that move hazardous waste from the generator, offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

**RCRA-LQG:** The RCRA - Large Quantity Generators (LQG) database is USEPA's comprehensive information system that provides access to data supporting the RCRA of 1976, and the HSWA of 1984. The database includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by the RCRA. LQGs generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

**RCRA-SQG:** The RCRA - Small Quantity Generators (SQG) database is USEPA's comprehensive information system that provides access to data supporting the RCRA of 1976, and the HSWA of 1984. The database includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. SQGs generate between 100 kg and 1,000 kg of hazardous waste per month.

**RCRA-CESQG:** The RCRA - Conditionally Exempt Small Quantity Generators (CESQG) database is USEPA's comprehensive information system that provides access to data supporting the RCRA of 1976, and the HSWA of 1984. The database includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by the RCRA. CESQGs generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

**RCRA NonGen / NLR:** The RCRA - Non Generators database is USEPA's comprehensive information system that provides access to data supporting the RCRA of 1976, and the HSWA of 1984. The database includes selective information on sites that generate, transport, store, treat, and/or dispose of hazardous waste as defined by the RCRA. Non-Generators do not presently generate hazardous waste.

**US ENG CONTROLS:** A list of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

**US INST CONTROLS:** A list of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

**ERNS:** The Emergency Response Notification System (ERNS) records and stores information on reported releases of oil and hazardous substances.

**HMIRS:** The Hazardous Materials Information Reporting System (HMIRS) contains hazardous material spill incidents reported to the Department of Transportation.

**DOT OPS:** Department of Transportation, Office of Pipeline Safety Incident and Accident data.

**US CDL:** A listing of clandestine drug lab (CDL) locations provided in a website by the U.S. Department of Justice. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites.

**US BROWNFIELDS:** The US Brownfield database is a listing of real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by USEPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by USEPA Regions.

**DOD:** This Department of Defense (DOD) database consists of federally owned or administered lands, administered by the DOD, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

**FUDS:** A listing of Formerly Used Defense Sites (FUDS) properties where U.S. Army Corps of Engineers is actively working or will take necessary cleanup actions.

**LUCIS:** The Land Use Control Information System (LUCIS) contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

**CONSENT:** Superfund (CERCLA) Consent Decrees are major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) Sites. U.S. District Courts release information after settlement by parties to litigation matters.

**ROD:** Record of Decision (ROD) documents mandate a permanent remedy at an NPL site containing technical and health information to aid cleanup.

**UMTRA:** A list of Uranium Mill Tailing Sites where uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

**ODI:** A list of Open Dump Inventory. An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

**US MINES:** The US Mines Master index File contains all mine identification numbers issued for mines that are active or opened since 1971. The data also includes violation information that is maintained by the Department of Labor, Mine Safety, and Health Administration.

**TRIS:** The Toxic Chemical Release Inventory System (TRIS) identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313. The source of this database is the USEPA.

**TSCA:** The Toxic Substances Control Act (TSCA) identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

**FTTS:** The FIFRA/TSCA Tracking System (FTTS) tracks administrative cases and pesticide enforcement actions and compliance activities related to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), TSCA and Emergency Planning and Community Right-to-Know Act (EPCRS).

**HIST FTTS:** The FIFRA/TSCA Tracking System Administrative Case Listing is a complete administrative case listing from the FIFRA/TSCA Tracking system for all ten USEPA regions.



**SSTS:** The Section 7 Tracking System (SSTS) requires all registered pesticide-producing establishments to report annually (by March 1st) to the USEPA the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the previous year.

**ICIS:** The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

**PADS:** The polychlorinated biphenyl (PCB) Activity Database System (PADS) identifies generators, transporters, commercial storers, and/or brokers, and disposers of PCB's who are required to notify the USEPA of such activities.

**MLTS:** The Material Licensing Tracking System (MLTS) contains a list of approximately 8,100 sites that possess or use radioactive materials subject to the Nuclear Regulatory Commission licensing requirements.

**RADINFO:** The Radiation Information Database (RADINFO) contains information about facilities that are regulated by USEPA for radiation and radioactivity.

**FINDS:** The Facility Index System (FINDS) contains both facility information and references to other sources of information that may contain more detail. The source of this data is the USEPA.

**RAATS:** The RCRA Administrative Action Tracking System (RAATS) contains records based on enforcement action issued under RCRA pertaining to major violations and includes administrative and civil actions brought by the USEPA. The source of this data is the USEPA.

**RMP:** Risk Management Plans (RMP). When Congress passed the Clean Air Act Amendments of 1990, it required USEPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The RMP Rule was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five (5) years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g. the fire department) should an accident occur.

**COAL ASH DOE:** The Steam-Electric Plant Operation Data is a listing of power plants that store ash in surface ponds.

**EPA WATCH LIST:** EPA maintains a "Watch List" to facilitate dialogue between USEPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law, only that an investigation by USEPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between USEPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

**US FIN ASSUR:** Financial Assurance Information is a database that requires all owners and operators of facilities that treat, store, or dispose of hazardous waste to provide proof that they will have sufficient funds to pay for the cleanup, closure, and post-closure care of their facilities.

**PCB TRANSFORMER:** The PCB transformer registrations database includes all PCB registration submittals.

**US HIST CDL:** The National Clandestine Laboratory Register is a listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

**SCRD DRYCLEANERS:** A State Coalition for Remediation of Drycleaners (SCRD) Listing. The State Coalition for Remediation of Drycleaners was established in 1998, with support from the USEPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

**FEMA UST:** A listing of all Federal Emergency Management Agency (FEMA) owned underground storage tanks.

**FEDERAL FACILITY:** A list of Federal Facility Site Information for NPL and Base Realignment and Closure (BRAC) sites found in the CERCLIS Database. The USEPA Federal Facilities Restoration and Reuse Office is involved in these cleanup activities.

**LEAD SMELTERS:** A listing of former lead smelter site locations that contains several hundred sites in the U.S. where secondary lead smelting was done from 1931 to 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

**US AIRS:** Aerometric Information Retrieval System (AIRS) is a computer-based repository of information about airborne pollution in the United States and various World Health Organization (WHO) member countries. AIRS is administered by the U.S. Environmental Protection Agency. The AIRS Facility Subsystem (AFS) contains both emissions and compliance data on air pollution point sources regulated by the USEPA and/or state and local air regulatory agencies. AFS contains data on industrial plants and their components: stacks, the points at which emissions are introduced into the atmosphere; points, the emission point or process within a plant that produces the pollutant emissions; and segments, which are components of the processes that produce emissions. Compliance data is maintained at the plant and point levels, tracking classification status, inspections, and compliance actions. AFS also includes data for management of operating permit applications and renewals.

**COAL ASH EPA:** A listing of coal combustion residues surface impoundments with high hazard potential ratings.

**2020 COR ACTION:** 2020 Corrective Action Program List. USEPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

**PRP:** A listing of verified Potentially Responsible Parties (PRP).

**STATE AND LOCAL RECORDS**

**FL SHWS:** Florida's State Hazardous Waste Sites (SHWS) records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where potentially responsible parties will pay for cleanup.

**FL SWF/LF:** Solid Waste Facility/Landfill (SWF/LF) records contain an inventory of solid waste disposal facilities or landfills in the state of Florida.

**FL UIC:** An Underground Injection Wells Database listing of Class I wells. Class I wells are used to inject hazardous waste, nonhazardous waste, or municipal waste below the lowermost underground source of drinking water (USDW).

**FL SWRCY:** A listing of Florida recycling centers.

**FL LUST:** The Leaking Underground Storage Tank (LUST) incident reports contain an inventory of reported leaking underground storage tank incidents. The data comes from the Florida Department of Environmental Protection (FDEP).

**FL TANKS:** A statewide listing of storage tank facilities that do not have tank information. The tanks have either been closed or removed from the site, but the facilities were still registered at some point in history.

**FL UST:** A database of registered underground storage tank (USTs). The data is derived from the FDEP.

**FL LAST:** A statewide listing of leaking aboveground storage tank site locations.

**FL AST:** The Aboveground Storage Tank (AST) database contains registered AST's. The data comes from FDEP.

**FL SITES:** This summary status report is a compilation and revision of other existing lists including the Eckhardt list, the Moffit list, the USEPA Hazardous Waste Sites list, USEPA's Emergency & Remedial Response information System list (RCRA Section 3012) & existing department lists such as the obsolete uncontrolled Hazardous Waste Sites list. This list is no longer updated.

**RI MANIFEST:** Hazardous waste information provided by FDEP.

**FL SPILLS:** The FDEP maintains a list of inland oil and hazardous material incidents.

**FL ENG CONTROLS:** Database of all contaminated sites in the state of Florida, which are subject to engineering controls. Engineering Controls encompass a variety of engineered remedies to contain and/or reduce contamination, and/or physical barriers intended to limit property access. Engineering controls include fences, signs, guards, and landfill caps, provision of potable water, slurry walls, sheet pile (vertical caps), pumping, and treatment of groundwater, monitoring wells, and vapor extraction systems.

**FL INST CONTROL:** Institutional Controls Registry is a database of all contaminated sites in the state of Florida which are subject to institutional and engineering controls.

**FL VCP:** Voluntary Cleanup Sites Information obtained from the FDEP identifying closed and active voluntary cleanup priority (VCP) sites.

**FL DRYCLEANERS:** A list of dry cleaning facilities maintained by the FDEP, provides information about permitted dry cleaner facilities.

**FL PRIORITY CLEANERS:** The FDEP maintains a priority ranking list of dry cleaners.

**FL DEDB:** The FDEP maintains a database of delineated areas of ethylene dibromide (EDB) groundwater contamination. In these areas, EDB, a soil fumigant, has been detected in drinking water wells. The amount found at these locations exceeds the maximum contaminant level as stated in Chapter 62-550 or 520. EDB is a potential threat to public health when present in drinking water.

**FL BROWNFIELDS:** A database of Brownfields Sites maintained by FDEP. FDEP identifies these sites as abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

**FL NPDES:** Domestic and industrial wastewater facilities database maintained by the FDEP.

**FL AIRS:** A listing of Air Resources Management permits supplied by the FDEP.

**FL TIER 2:** A listing of facilities maintained by FDEP which store or manufacture hazardous materials that submit a chemical inventory report.

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

**FL SITE INV SITES:** A listing of site investigation section sites.

**FL FF TANKS:** A listing of federal facilities with storage tanks.

**FL DWM CONTAM:** A listing of active or known sites that includes sites that need cleanup but are not actively being worked on because the agency currently does not have funding (primarily petroleum and dry-cleaning).

**FL CLEANUP SITES:** This listing includes the locations of waste cleanup sites from various programs. The source of the cleanup site data includes Hazardous Waste programs, Site Investigation Section, Compliance and Enforcement Tracking, Drycleaning State Funded Cleanup Program (possibly other state funded cleanup), Storage Tank Contamination Monitoring.

**FL RESP PARTY:** A listing of open, inactive, and closed responsible party sites.

### **TRIBAL RECORDS**

**INDIAN RESERVE:** Indian Reservations that have any area equal to or greater than 640 acres.

**INDIAN ODI:** A report on the location and Status of Open Dumps on Indian Lands.

**INDIAN LUST:** USEPA database of LUSTs on Indian land.

**INDIAN UST:** USEPA database of USTs on Indian land.

**INDIAN VCP:** A database listing VCP sites located on Indian Land.

**EDR PROPRIETARY HISTORICAL DATABASES**

**EDR MGP:** A database of the existence and location of Former Manufactured Gas Plants (Coal Gas) sites. The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils, and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

**EDR US Hist Auto:** A database of EDR Proprietary Historic Gas Stations that included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records," or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

**EDR US Hist Cleaner:** A database of EDR Proprietary Historic Dry Cleaners. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash and dry, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records," or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

**FL RGA HWS:** An EDR database of Recovered Government Archive State Hazardous Waste Facilities that provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. This list is compiled from Records formerly available from the Department of Environmental Protection in Florida.

**FL RGA LF:** An EDR database of Recovered Government Archive Solid Waste Facilities that provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. The list is compiled from Records formerly available from the Department of Environmental Protection in Florida.

**FL RGA LUST:** An EDR database of Recovered Government Archive LUSTs that provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. This list is compiled from Records formerly available from the Department of Environmental Protection in Florida.

## **Appendix B**

### **Table B-1 Potential Contamination Sites**

**Table B-1  
 POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
1	BBB	1-1 1-2 1-3 1-4 1-5 1-6 1-7	2	TRCL at Boynton Beach Blvd Railroad Corridor Boynton Beach, FL	None	Site Recon	Railway	Adjacent	Petroleum Hazardous Waste Herbicides Pesticides Coal Ash PCBs	NA	High	Conduct Level II sampling (full waste characterization) in Piers area, Bridge expansion area, MSE wall area, and ROW acquisition area.	Site was inspected during field reconnaissance. Site reconnaissance did not identify stressed vegetation, surface staining, monitoring wells or other visual environmental concerns at the site. However, the operation of a rail system has a variety of potential sources that can contribute to environmental impacts along rail corridors. Typical sources include petroleum or chemical leaks from rail cars, leaking transformers, herbicides, railroad ties, and coal ash and cinder. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review. Site does not have documented contamination but is presumed contaminated.
2	BBB	2	2	Vacant Land / Rail Corridor; Former Four Steel Corporation 518 West Ocean Drive Boynton Beach, FL 33426	8735719	STCM FL UST FL Spills RCRA Historical Aerial	Vacant Land	259	Petroleum Hazardous Waste Herbicides Pesticides Coal Ash PCBs	NA	High	None	The historical aerial review revealed this property has been associated with railway operations since at least 1964. The 1964 aerial photograph show railcars onsite and a transportation-type facility. Significant expansion of the facility was visible in the 1986 aerial photograph. The railcars and associated facilities were no long present in the 2014 aerial photograph.  The former Four Steel Corporation had one 2,000 gallon UST for leaded/unleaded gasoline and one 5,000 gallon UST for vehicular diesel. Both tanks were installed in February 1981 and removed from the site in July 1997. The TCAR indicates no soil or groundwater contamination was detected during tank removal. Field reconnaissance personnel observed a concrete pad onsite. The site is classified as a non-generator of hazardous waste. The site does not have documented leaks or environmental contamination related to petroleum or hazardous waste.  Field reconnaissance personnel did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. However, the operation of a rail system has a variety of potential sources that can contribute to environmental impacts along rail corridors. Typical sources include petroleum or chemical leaks from rail cars, leaking transformers, herbicides, railroad ties, and coal ash and cinder.
3	BBB	3-1 3-2 3-3	2	American Tower #519 519 West Ocean Drive Boynton Beach, FL 33426	None	Site Recon	Cell Tower	136	Petroleum	NA	Low	None	The site was identified during field reconnaissance. Reconnaissance personnel observed a cell tower and emergency generator AST onsite. Reconnaissance personnel did not identify stressed vegetation, surface staining, monitoring wells, or other visual environmental concerns at the site. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.
4	BBB	No Photo	2	Hess Tanker Spill I-95 Northbound at Boynton Beach Blvd Off Ramp Boynton Beach, FL 33426	9502635	PCTS STCM FL LUST	Roadway	Adjacent	Petroleum	SRCO-NFA Feb 2000	Medium	None	On August 23, 1995, a Hess Gasoline tanker truck released 7,500 gallons of unleaded gasoline on I-95 northbound at Boynton Beach Blvd off ramp. Contaminated soil was removed to a depth of 7-9 feet (~730 tons). Groundwater was encountered at a depth of 7 feet. A total of 5,785 gallons of product and petroleum impacted water were removed from site. Additional groundwater testing was conducted in June 1999. Based on the non-detect of VOA compounds in the groundwater samples, the site was granted SRCO-NFA status in February 2000.  Subsequent roadway improvements have impacted the site of this spill.
5	BBB	5	3	City of Boynton Beach; Former Palm Beach County - Boynton Beach Elementary 141 East Ocean Avenue Boynton Beach, FL 33435	8734598 FLD982158123	STCM FL UST RCRA	Museum and Vacant Bldg.	438	Petroleum Hazardous Waste	NA	Medium	None	Site had 1-500 gallon UST for fuel oil installed in July 1976 and removed in June 1986. No TCAR was available for review. Site formerly used halogenated solvents in degreasing and notified as a SQG. Site currently classified as a non-generator of hazardous waste. Site does not have documented leaks or environmental contamination related to petroleum or hazardous waste.  PBC sold the property to the City of Boynton Beach. One building of the former school property has been turned into a museum, Schoolhouse Children's Museum & Learning Center. The other building where the fuel tank was located is currently vacant.  Field personnel did not observe AST/USTs.
6	BBB	No Photo	1	Boynton Memorial Crematory and Chapel 800 West Boynton Beach Boulevard Boynton Beach, FL 33426	990649	FL AIRS	Crematory	77	Ash	NA	No	None	Site operates under the Air General permit. Authorization was issued in Feb 2012 and expires in Feb 2017. Site was deemed in compliance with permit conditions during a Feb 2016 inspection. Site does not have documented environmental contamination related to crematory operations.

**Table B-1  
 POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
7	BBB	No Photo	1	7-Eleven; Former Power Service Station 744 West Boynton Beach Boulevard Boynton Beach, FL 33426	None	EDR Hist Auto	Convenience store	64	Petroleum Hazardous Waste	NA	High	None	EDR lists site as a historical gas station/filling station/auto station with a record from 1983. A commercial building is first visible on this site in the 1977 aerial photograph. The footprint of this building resembles an auto service station. Neither a canopy nor pump islands are visible in the aerial. The property currently operates as a 7-Eleven convenience store. The current building is first visible in a 1999 aerial photograph. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
8	BBB	No Photo	2	Boynton Beach Dental Center; Former Steamatic 326 West Boynton Beach Boulevard Boynton Beach, FL 33426	80181	RCRA EDR Hist Cleaner	Dental Office	47	Hazardous Waste	NA	Low	None	Site listed as a non-generator of hazardous waste and out of business as Boynton Beach Dental Center. EDR lists site as a potential historical dry cleaner with a record from 1983 for Steamatic. Steamatic was a carpet and rug cleaning service. Site does not have documented violations or environmental contamination related to hazardous waste.
9	BBB	9-1 9-2 9-3	3	Marathon; Majestic-Patel Roger; Former Boynton Beach Service; Former Phillips Sixty Six; Former Alis Boynton Beach Oil Corporation Service Station; Former Texaco Alis Boynton Beach Oil Corporation; Former AAA Complete Auto Repair 302 West Boynton Beach Boulevard Boynton Beach, FL 33435	8513924	Super Act Risk Source  PCTS STCM FL LUST FL UST FL AST	Auto Service / Gas Station	47	Petroleum	SRCO-NFA Dec 2014	Medium	None	Site has 1-275 gallon AST for waste oil installed in April 1992. The site also has 2-12,000 gallon USTs installed in July 2005 for unleaded gasoline and diesel fuel. The 2 USTs were deemed in compliance during a 2015 inspection.  The site formerly had 4-6,000 gallon USTs for unleaded gasoline installed in 1982 and removed in May 2005, and 1-550 gallon UST for used oil removed in June 1993 (installation unknown). The LTCAR from May 2005 indicates elevated organic vapor concentrations were measured in soils. Soil and GW sampling was not conducted due to site's EDI status. No TCAR was available for the June 1993 tank removal.  Sampling in April 1987 as part of the early detection initiative detected petroleum constituents in the monitoring wells. Site was eligible for State cleanup under the EDI program. The LSSI Report from 2013 measured DTW at 12.4 - 14.4 feet bls and an easterly hydraulic gradient in the shallow ground water. Soil and groundwater sampling indicated CoCs at or below GCTLs. Based on this report and supplemental sampling, a SRCO-NFA was issued in Dec 2014.  Field personnel observed one monitoring well on site.
10	BBB	No Photo	3	City of Boynton Beach; Boynton Beach City Hall; Boynton Beach City Police Department 100 East Boynton Beach Boulevard and 135 NE 1st Avenue Boynton Beach, FL 33435	8944850 8630462 95992	STCM FL UST FL SWF/LF	Government Offices	70	Petroleum	NA	Medium	None	City Hall site had 1-1,000 gallon UST for generator diesel fuel installed in Feb 1987 and removed in Feb 2002. TCAR indicates no soil or groundwater contamination was detected during tank closure. Site does not have documented leaks or environmental contamination related to petroleum. Site listed in EDR as a former waste tire collector. No records found in reference to a tire collection facility.  Police Dept. site had 1-10,000 gallon UST for unleaded gasoline installed in Sep 1984 and removed in May 1989. No TCAR was available for review. Site does not have documented leaks or environmental contamination related to petroleum.
11	BBB	11	3	Bruno Auto Body & Painting 217 NE 3rd Street Boynton Beach, FL 33435	FLD982112203	RCRA	Auto Body Shop	954	Hazardous Waste	NA	Low	None	This facility notified as a SQG of solvent waste in Apr 2010. The facility had a minor violation in 2010 for improper disposal of paint filters. No other violations are reported in the records. Site does not have documented environmental contamination related to hazardous waste.



**Table B-1  
 POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
12	BBB	12-1 12-2	2	BP 4 Points Market; Former Georges Texaco; Former Knop Alan F Automotive Service; Former Pinewood Texaco Inc.; Former Boynton Beach 1995 Texaco; Former Boynton Texaco Service Center Inc.; Former Boynton Beach Blvd & I95 Texaco Inc.  645 Boynton Beach Boulevard Boynton Beach, FL 33426	8514185	Super Act Risk Source  PTCS STCM FL LUST FL UST FL AST FL Cleanup Sites FL DWM Contam	Gas Station	41	Petroleum	Ongoing	High	Conduct Level II sampling in ROW acquisition area. Sample for petroleum CoCs (e.g. BTEX, PAH, 8 RCRA Metals).	Site has 1-12,000 gallon unleaded gasoline UST and 1-12,000 gallon compartmentalized unleaded gasoline and diesel fuel UST installed in June 2005. Site also has 1-275 gallon waste oil AST installed in April 1992.  Site had 1-2,000 gallon kerosene UST, 1-2,000 gallon mineral spirits UST, and 1-550 gallon waste oil UST installed in June 1984 and removed in February 1991. The TCAR from Feb 1991 indicates petroleum contaminated soils were not detected in the area of the closed tanks. Soil and GW sampling was not conducted due to site's EDI status.  Site had 1-4,000 gallon and 2-8,000 gallon unleaded gasoline USTs and 1-4,000 gallon diesel fuel UST installed in June 1984 and removed in June 2005. The LTCAR from Aug 2005 indicates elevated organic vapor concentrations were measured in soils suggesting excessively contaminated soil. Approximately 58 tons of petroleum impacted soil were removed from the site. Soil and GW sampling was not conducted due to site's EDI status.  In addition to the tanks listed above, tank registration records indicate the site had 5 more USTs with unknown install/removal dates, unknown size, and unknown contents. Property records indicate site was leased to Texaco in 1962 and these tanks could have been associated with this historical station.  A DRF was submitted on August 18, 1987 due to petroleum detected in compliance monitoring wells. Site was approved for State cleanup under the EDI program in Dec 1987. A 1995 CAR indicates GW flow direction to the west, northwest, and southwest toward NW 7th St / Boynton Beach Blvd. The CAR also indicated the presence of excessively contaminated soils based on organic vapor analysis and GW analysis revealed CoCs above GCTLs. In April 2016, Aerostar submitted a proposal to perform additional site assessment.  Field personnel observed monitoring wells on site. Personnel did not observe a remediation system on site.
13	BBB	No Photo	2	Lloyds Auto Electric  314 West Industrial Avenue Boynton Beach, FL 33426	None	EDR Hist Auto	Auto Service	184	Hazardous Waste	NA	No	None	EDR lists this site as a historical auto station with records in 2001-2003 and 2010. The property currently operates as a commercial auto service business specializing in electrical work. All historical records refer to the business currently operating at the site. Based on an aerial review, the site layout and building footprint has not changed since 2001. The building on site resembles an office building and any electrical work on vehicles is conducted under an awning attached to the property. There are no bay doors on the building and no vehicle maintenance debris visible. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.
14	BBB	14-1 14-2 14-3 14-4	2	Palmdale Oil Company; F. H. Foster Oil Corporation, Inc.  319 Industrial Avenue Boynton Beach, FL 33426	8623212 990155 FLD980709778	Super Act Risk Source  PTCS STCM FL AST FL AIRS FL DWM Contam FL Cleanup Sites RCRA	Commercial Fueling Facility	185	Petroleum	Ongoing	High	None	Field personnel observed site operates as a commercial fueling facility for Pacific Pride. Site has 6-15,000 gallon ASTs installed in 1965, 3 for unleaded gasoline and 3 for vehicular diesel. Site also has 2-6,000 gallon vehicular diesel ASTs installed in Nov 2011 and 1-300 gallon waste oil AST (unknown install). A 2015 tank inspection report notes a minor non-compliance related to a line leak detector test.  Site had 2-2,000 gallon gasoline and diesel USTs and 1-4,000 gallon diesel UST installed in Mar 1987 and removed in Dec 2009. These USTs supplied the dispensers and nothing else. The existing ASTs will now supply the dispensers through connections to the existing underground piping. A TCAR was not required because existing site contamination encompassed the tank pit. Records indicate site also had 3 more USTs (1-1,000 gallon, 1-3,000 gallon, and 1-4,000 gallon) with unknown install and removal dates and contents.  A DRF was submitted on April 20, 1994 in response to petroleum in a compliance monitoring well. A DRF was also submitted on July 22, 1994 for a surface spill of petroleum. In July 1994, the state approved site eligibility for cleanup funding under the FL Petroleum Liability and Restoration Insurance Program.  A Jan 1995 CAR measured DTW at 6-8 feet bls and groundwater flow direction toward the southeast. No free floating product was observed. Excessively contaminated unsaturated soils were detected near the former dispenser rack with an estimated volume of 120 cubic yards. This report documented a dissolved hydrocarbon plume slightly down-gradient of the former loading rack. In 1995, groundwater and soil contamination appear to be contained onsite. The CAR suggested a RAP be prepared and implemented to complete site rehabilitation. A Feb 1995 letter from PBC ERM accepted the CAR and required the development of a RAP within 60 days. No RAP was available in FDEP OCULUS or PBC ERM CINEMA for review. An FDEP communication log from June 2016 indicates site assessment activities will be resuming in June/July 2016.  Site notified as a CESQG in March 1991 for benzene waste. Site does not have documented violations or environmental contamination related to hazardous waste.

**Table B-1  
 POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
15	BBB	15-1, 15-2 15-3, 15-4 15-5, 15-6 15-7, 15-8 15-9, 15-10	2	FDOT ROW I-95 & Boynton Beach Boulevard Boynton Beach, FL	None	Site Recon	Roadway	46	Trash	NA	No	None	Site identified during field reconnaissance. Field personnel observed trash in ROW, but did not identify stressed vegetation, surface staining, monitoring wells or other visual environmental concerns at the site. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
16	BBB	16-1 16-2	2	Palm Beach County School District - Galaxy Elementary School 301 Galaxy Way Boynton Beach, FL 33435	8630569 FLD982157935	STCM FL UST RCRA	School and Park	44	Petroleum	NA	Low	None	Site had 1-1,000 gallon UST for boiler/generator diesel installed in 1958 and closed in place in Oct 1997. The tank closure assessment form indicates no soil contamination was detected during tank closure (i.e. hydrocarbon levels were lower than 50 ppm). Site does not have documented environmental contamination related to petroleum.  Site notified as a CESQG in Feb 2009 for ignitable, corrosive, and reactive wastes. Site does not have documented violations or environmental contamination related to hazardous waste.  Field personnel did not observe AST/USTs on site. A vent pipe was observed at the delivery area on the north side of school.
17	BBB	No Photo	2	Vacant Land; Former Texaco #021-1318; Former Star Enterprise; Former A B C Texaco 433 West Boynton Beach Blvd (433 NW 2nd Avenue) Boynton Beach, FL 33435	8513795 FLD984173013	Super Act Risk Source  PCTS STCM FL LUST FL Cleanup Sites FL DWM Contam RCRA	Vacant Land	34	Petroleum	Ongoing	High	Conduct Level II sampling in pond area and ROW acquisition area. Sample for petroleum CoCs (e.g. BTEX, PAH, 8 RCRA Metals).	Site has had many tanks historically: -- 2-7,500 gallon USTs for leaded and unleaded gas installed in 1967 and removal unknown. -- 1-4,000 gallon UST for diesel fuel installed in 1971 and removal unknown. -- 1-10,000 gallon UST, 1-12,000 gallon UST, and 1-8,000 gallon UST for unleaded gas, along with 1-10,000 gallon UST for diesel all installed in 1987 and removed in May 1995. -- 2-550 gallon USTs for waste oil, one of which was installed in 1987 and removed in May 1995. Installation and removal of the other is unknown.  Site had reported discharges in Jun 1990 and Jan 1993 accepted into the FDEP's PLRIP. A pump and treat remediation system began operation in Nov 1992 and continued until April 1995. ESA activities in May 1999 did not detect CoCs above CTLs. A SRCO was issued in Aug 1999 and rescinded in May 2004. Dec 2003 GW sampling results showed naphthalene above GCTLs. Feb 2004 confirmatory soil and GW sampling detected total xylenes above SCTLs and several CoCs above GCTLs.  A Limited Scope Remedial Action Plan was developed in 2016. Sept 2015 data indicates DTW in the study area was 14.5 feet bls and groundwater flow direction was toward the northwest. Sept 2015 GW sampling also detected CoCs BTEX and Naphthalenes above GCTLs. RAP proposes a 20x20x18 foot excavation and air sparging for 30 days.  In Dec 2002, site listed as a non-generator of hazardous waste. Site formerly generated benzene waste. Site does not have documented environmental contamination related to hazardous waste.
18	BBB	No Photo	2	Lloyds of Boynton Coin Laundry 409 West Boynton Beach Boulevard Boynton Beach, FL 33435	None	EDR Hist Cleaner	Coin Laundry and Dry Cleaners	33	Hazardous Material / Dry Cleaning Solvents	NA	High	None	EDR lists site as a potential historical dry cleaner with records from 1983, 1988, 2011, and 2012. This facility currently operates as a self-service coin laundry offering dry cleaning services. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review. No monitoring wells were observed onsite during field reconnaissance.
19	BBB	19	3	F1 Auto Services & Tires; Former FINA - Fred & Joes Auto & A/C Repair; Former MAPCO No. 8609 319 East Boynton Beach Boulevard Boynton Beach, FL 33435	8842221	Super Act Risk Source  PCTS STCM FL LUST FL UST FL Spills FL DWM Contam FL Cleanup Sites	Auto Service	945	Petroleum	Ongoing	High	None	Site had 3 USTs in the 1950s for leaded gas, waste oil and kerosene. The original USTs were replaced with 2-10,000 gallon USTs for unleaded gas and 1-500 gallon UST for waste oil in Oct 1980. These new USTs were removed in April 1993.  Site had a reported discharge in May 1993 detected during tank closure activities. Site was approved for FDEP PAC funding in Feb 2013. In the Dec 2015 SSAR, DTW was 9.6 feet bls and GW flow direction was toward the south. GW contamination above GCTLs persists in MW-2 for BTEX and Naphthalene CoCs.  Field personnel observed monitoring wells on site.

**Table B-1**  
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SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
20	BBB	20-1 20-2 20-3	3	Coin Laundry Dry Cleaner; Former Boynton Laundry 415 Boynton Beach Boulevard Boynton Beach, FL 33435	None	EDR Hist Cleaner	Coin Laundry and Dry Cleaners	1,287	Hazardous Material / Dry Cleaning Solvents	NA	High	None	EDR lists site as a potential historical dry cleaner with records from 2011-2012. This facility currently operates as a self-service coin laundry offering dry cleaning services. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
21	BBB	21	2	Precision Auto Body Works; Former Mr. D Auto Body & Painting 400 West Industrial Avenue Boynton Beach, FL 33426	FLR000061465 FLD982155756	RCRA	Auto Body Shop	302	Hazardous Waste	NA	Low	None	Precision Auto Body Works: Site notified in Sep 2013 as a CESQG for ignitable waste. A Sep 2013 hazardous waste inspection report indicates the site notified as a SQG in Dec 1999 for spent paint booth filters and spent paint but operates as a CESQG. Site does not have documented environmental contamination related to hazardous waste.  Mr. D Auto Body & Painting: Site notified as a non-generator in Nov 2010. Site previously notified as a SQG for solvents in Aug 1988. Site had hazardous waste management violations but no reported environmental contamination related to hazardous waste.
22	BBB	22-1 22-2	2	Public Storage; Former Marcal Paper Company Inc. 350 East Industrial Avenue Boynton Beach, FL 33426	8840591	STCM FL UST	Public Storage	46	Petroleum	NA	Medium	None	Site had 1-4,000 gallon and 1-2,000 gallon vehicular diesel USTs, and 2-1,000 gallon unleaded gasoline USTs that were removed in April 1988. No install date was provided. No TCAR was available for review. Site does not have documented leaks or environmental contamination related to petroleum.
23	BBB	23-1 23-2	2	George Evesson Property 409 East Industrial Avenue Boynton Beach, FL 33435	9400602	STCM FL UST FL AST	Light Industrial	481	Petroleum	NA	Low	None	Site had 1-2,000 gallon UST for unleaded gas removed in May 1990. No install date provided. A letter referring to the tank closure states no contaminated soils were detected by OVA-FID field detection methods. Another letter referring to GW sampling indicates xylenes were detected below GCTLs. A 1994 inspection report notes the facility is closed. Site does not have documented leaks or environmental contamination related to petroleum.  Field personnel did not observe a company name on the site. Building had a help wanted sign for landscapers. No USTs were observed. Personnel observed a portable AST with pump handle in the front of the property.
24	BBB	24	2	Neighborhood Gallery & Fine Art Appraisers; Former Marcinkoski Gradall Inc.; Former Florida Truck Maintenance 422 West Industrial Avenue Boynton Beach, FL 33426	8735560 79692	STCM FL UST	Light Industrial	539	Petroleum	NA	High	None	As Marcinkoski Gradall Inc., site had 1-10,000 gallon diesel UST installed in Feb 1983 and 1-550 gallon waste oil UST with an unknown install date. Both tanks were removed in Nov 1991. A tank closure assessment form indicates GW sampling detected CoCs above GCTLs. No sampling results were available for review. A tank closure inspection report form states soil OVA readings were clean around the tank and there were no obvious signs of contamination. No TCAR was available for review. During a 1992 inspection, DEP noted no visual signs of contamination and indicated both excavations were covered with concrete slabs and monitoring wells had been removed.  As Florida Truck Maintenance, site was formerly registered as a hazardous waste generator. A 2007 inspection indicates site is out of business and no longer a hazardous waste generator. Site does not have documented violations or environmental contamination related to hazardous waste.
25	BBB	25-1 25-2 25-3 25-4	2	Vacant Building; Former Thompson Movers 501 Industrial Avenue Boynton Beach, FL 33424	9400860	STCM FL UST	Vacant Bldg.	540	Petroleum	NA	Medium	None	Site had 2-550 gallon gasoline USTs removed in Jan 1990. No install date for the tanks was recorded. DEP inspection notes from during the tank pull indicate soil appeared clean based on field observations. Soil OVA sampling was ongoing during the inspection. No TCAR was available for review. A 1994 Inspection report form noted 10 to 12-55 gallon drums present onsite. The content of these drums was unknown. Site does not have documented leaks or environmental contamination related to petroleum.  Field personnel did not observe USTs on site. Site contained concrete junk, parts, and concrete yard art. Property appeared abandoned.

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26	BBB	No Photo	2	SYSCO Food Services Spill Northbound I-95, 1/8th mile North of Boynton Beach Boulevard Overpass Boynton Beach, FL 33426	9803708	PCTS STCM FL LUST	Roadway	Within Corridor	Petroleum	Inactive No additional Contam. Assess. Work was required after source removal.	Medium	None	On October 3, 1998, A SYSCO truck released 100 gallons of vehicular diesel onto the grassy median area on I-95 northbound 1/8th of a mile north of Boynton Beach Blvd overpass. Contaminated soil was removed to a depth of 12 feet (~88 tons). Groundwater was encountered at a soil boring depth of 16 feet; groundwater contamination was deemed unlikely.  Subsequent roadway improvements have impacted the site of this spill. There is no longer a grassy median along this section of I-95. Area is currently covered by roadway.
27	BBB	27-1 27-2 27-3 27-4	2	Marcinkoski Gradall Inc. 510 West Industrial Avenue Boynton Beach, FL 33426	None	Site Recon	Auto Storage Yard	721	Petroleum	NA	Low	None	Site identified during field reconnaissance. This facility currently operates as an auto storage yard. Field personnel observed heavy construction equipment for Marcinkoski Gradall Inc. stored at this site. Internet search records indicate the site is owned by Lois K Marcinkoski Trust Agreement and Raymond A Marcinkoski Trust Agreement. No records were available in FDEP OCULUS or PBC ERM CINEMA databases for review for this address. FDEP OCULUS records found for Marcinkoski Gradall Inc. reference 422 West Industrial Ave (Site No. 24).  Field personnel noted a diesel odor at the site.
28	BBB	28	2	All About Autos; Former L.T. Automotive Former Japanese Quality Car Service Inc.  505 Industrial Avenue Boynton Beach, FL 33426	78778	EDR Hist Auto RCRA	Auto Service	628	Petroleum Hazardous Waste	NA	Low	None	EDR lists site as a historical gas station/filling station/auto station with records for Japanese Quality Car Service Inc. from 2001-2009. The facility currently operates as an auto service company under the name of All About Autos. L.T. Automotive formerly occupied the site as a hazardous waste generator. A 2011 facility detailed list report indicates L.T. Automotive was out of business and no longer a hazardous waste generator. Site does not have documented violations or environmental contamination related to hazardous waste.
29	BBB	29-1 29-2 29-3	2	Comcast; Former Poly Plastic Packaging Company Inc.  510 Industrial Avenue #247 Boynton Beach, FL 33426	FLD059878819	RCRA	Light Industrial	257	Hazardous Waste	NA	Low	None	In 2002, Poly Plastics Packaging obtained a SQG hazardous waste generator status. Site was formerly a CESQG in Aug 2000. Site has several documented compliance issues, but no documented environmental contamination related to hazardous waste.  Field personnel observed site to possibly be a communication company (i.e. Comcast service vehicles). Very little activity observed.
30	BBB	30	2	Mikes Automotive 509 Industrial Avenue Boynton Beach, FL 33426	None	EDR Hist Auto	Auto Service	614	Petroleum Hazardous Waste	NA	Low	None	EDR lists site as a historical gas station/filling station/auto station with a record from 2009. The facility currently operates as an auto service company. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review. Field reconnaissance personnel noted drums on the exterior of the facility. The contents of the drums is unknown. No spills and/or staining were noted around the drums.
31	BBB	31	2	Freddies Foreign Car Service 516 West Industrial Avenue Boynton Beach, FL 33426	79914	RCRA	Auto Service	721	Petroleum, Lubricants, Mineral Spirits	NA	Low	None	A facility detailed list report indicates the site was no longer a hazardous waste generator. Site does not have documented violations or environmental contamination related to hazardous waste.
32	BBB	32	2	Chucks Auto Repair Service; Chucks by Kostas Auto Repair  520 West Industrial Avenue Boynton Beach, FL 33426	FLD984239442	FL AST RCRA	Auto Service	755	Petroleum Hazardous Waste	NA	Low	None	Site has notified as a CESQG for solvents since May 1992. A 2013 inspection report indicates this facility stores used oil in 1-300 gallon AST. The facility also has several 55 gallon drums onsite for used oil filters and spent antifreeze. Site does not have documented violations or environmental contamination related to hazardous waste or petroleum.
33	BBB	33	2	Edward Jim 523 Industrial Avenue Boynton Beach, FL 33426	8735542	STCM FL UST FL AST	Light Industrial	625	Petroleum	NA	Medium	None	Site had 1-550 gallon AST on a skid. Site also had 4-1,000 gallon USTs for waste oil, diesel, and leaded gas. Three USTs were installed in 1980 and the other in 1976. All tanks were filled with concrete and abandoned in place in 1988 and 1989. No TCAR was available for review. Site does not have documented leaks or environmental contamination related to petroleum.  Field personnel did not observe USTs/ASTs on site. Site appears to be used for building race cars (Indy style vehicles).

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 POTENTIAL CONTAMINATION SITES**

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34	BBB	34-1 34-2	2	Zuccalas Wrecker Service 522 Industrial Avenue Boynton Beach, FL 33426	None	Site Recon	Auto Storage Yard	301	Petroleum	NA	Low	None	Site was identified during field reconnaissance. This facility currently operates as a police compound and vehicle (e.g. car / boat / RV) storage yard. The site had good general housekeeping practices and no environmental concerns were noted. No records were available in FDEP OCULUS, Palm Beach County ERM CINEMA, or internet search databases for review.
35	BBB	35	2	Noted Automotive Service 606 West Industrial Avenue Boynton Beach, FL 33426	None	Site Recon	Auto Service	778	Petroleum Hazardous Waste	NA	No	None	Site identified during field reconnaissance. This facility currently operates as an auto service company. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
36	BBB	36-1 36-2	2	East Coast Auto Service 611 Industrial Avenue Boynton Beach, FL 33426	None	Site Recon	Auto Service	639	Petroleum	NA	No	None	Site identified during field reconnaissance. The facility currently operates as an auto service company. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
37	BBB	37-1 37-2	2	Florida Diesel and Hydraulic; Former Collision World; Former Ideal Paint & Body 610 Industrial Avenue Boynton Beach, FL 33426	FLR000039677	RCRA	Auto Service	317	Hazardous Waste	NA	Low	None	A Facility Detailed List Report notes site changed name and ownership in 2010 from Ideal Paint and Body to Collision World. This site is listed as CESQG for solvents, used oils, and other lubricants. Site does not have documented violations or environmental contamination related to hazardous waste.  No AST/USTs were observed by field personnel.
38	BBB	38-1 38-2	2	N & D Auto Body 617 West Industrial Avenue Boynton Beach, FL 33426	FLD982174195	RCRA	Auto Body Shop	793	Hazardous Waste	NA	Low	None	Site registered as a SQG of solvents in 1989. During a June 2012 inspection, facility was not in compliance for labeling and proper disposal procedures. EDR records indicate site changed to CESQG status in Oct 2012. A site detail report indicates this facility is a CESQG generating approximately 440 pounds per year. Site does not have documented environmental contamination related to hazardous waste.
39	BBB	39	2	Thunder Auto Sports Inc. 617 Industrial Avenue Boynton Beach, FL 33426	FLD981856891	RCRA	Auto Service	659	Hazardous Waste	NA	Low	None	Site registered as a CESQG in February 1987. Minor violations were noted in 2012 related to the used oil drums and immediately corrected during inspection. The facility is in compliance. Site does not have documented environmental contamination related to hazardous waste.
40	BBB	40-1 40-2	2	Bollenbacher Trucking Inc. 614 East Industrial Avenue Boynton Beach, FL 33426	8736024	STCM FL AST FL UST	Auto Storage Yard	332	Petroleum	NA	Medium	None	Site had 1-4,000 gallon diesel fuel AST installed in January 1986 and removed in October 1990. No TCAR was available for review. Based on a 1988 record, the site also had 1-200 gallon new oil AST and 1-175 gallon used oil AST. Records do not indicate install or removal dates for these ASTs. An inspection report from Oct 1988 mentions the need to clean up spills around the ASTs. An inspection report from Nov 1990 mentions observation of stained soil near the ASTs.  Field personnel did not observe a company name on the location or an AST on site.
41	BBB	No Photo	2	Quick and Easy Trucking Spill I-95, 1/4 Mile North of Boynton Beach Boulevard Southbound Boynton Beach, FL 33435	9802545	PCTS STCM FL LUST DEP Cleanup Sites	Roadway	Adjacent	Petroleum	NFA Sep 2000	Medium	None	On November 22, 1999, a Quick & Easy truck was involved in a vehicular accident and overturned in the median of I-95, 1/4 mile north of Boynton Beach Boulevard. The truck's saddle tanks ruptured as a result of the accident and released 190 gallons of diesel fuel. Contaminated soil was removed from a 56 x 39 x 4.5 foot area (~140 tons). GW was not encountered during excavation. GW depth was estimated at 12 feet bls in the area. Soil sample analysis from the bottom of the pit indicated xylenes and TRPH levels higher than SCTLs. Soil re-sampling in May 2000 did not detect CoCs above SCTLs. The site was granted SRCO-NFA status in September 2000.  Subsequent roadway improvements have impacted the site of this spill.
42	BBB	42	2	Certified Truck and Auto 700 West Industrial Avenue Boynton Beach, FL 33426	None	Site Recon	Auto Service	829	Petroleum Hazardous Waste	NA	No	None	Site identified during field reconnaissance. This facility currently operates as an auto service company. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.

**Table B-1  
 POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
43	BBB	43-1 43-2	2	New Wave Fabrication; Former Ideal Painting & Body Inc.  625 Industrial Avenue Boynton Beach, FL 33426	FLD984194209 FLTMP9102705	RCRA	Light Industrial	672	Hazardous Waste	NA	Low	None	Site notified as a CESQG in Feb 1991 for generating solvent waste. EDR records indicate non-generator status dates to Jan 1998. Site does not have documented violations or environmental contamination related to hazardous waste.
44	BBB	44-1 44-2	2	Zuccalas Wrecker Service  633 Industrial Avenue Boynton Beach, FL 33426	80248	RCRA	Auto Service	699	Hazardous Waste	NA	Low	None	A 2003 Facility Detailed Report indicates the facility is a CESQG for lead batteries, mineral spirits, used oil, and lubricants generating approximately 40 pounds per year. Site does not have documented violations or environmental contamination related to hazardous waste.
45	BBB	45	2	Ridgeway Plumbing, Inc.  640 East Industrial Avenue Boynton Beach, FL 33425	8838180	PCTS STCM FL LUST FL UST	Light Industrial	377	Petroleum	NFA Sep 1994	Medium	None	Site had 1-5,000 gallon unleaded gasoline UST installed in February 1987 and removed Aug 2000.  Site reported a discharge in February 1994 as a result of excessively contaminated water samples from onsite compliance wells. The suspected discharge source was an overfill or a loose extractor riser. A LCA was conducted in May 1994. The LCA concluded no free product was present in the monitoring wells, no contaminated soils were present, and MTBE and benzene contamination was present in GW. The site was granted NFA status in September 1994.  The Sep 2000 TCAR indicates no soil or groundwater contamination was detected during removal of the 5,000 gallon tank.
46	BBB	46	2	Comcast East Boynton Hubsite  645 East Industrial Avenue Boynton Beach, FL 33426	9812065	STCM FL AST	Satellite Dishes	702	Petroleum	NA	Low	None	Site has 1-570 gallon, double-wall, steel, gasoline AST installed in September 2010. A 2015 inspection report deemed this tank to be in compliance.
47	BBB	No Photo	2	Granite and Marble Fabrication and Installation; Former Loomis FWD Systems  870 West Industrial Avenue Boynton Beach, FL 33426	FLD984247403	RCRA	Light Industrial	810	Hazardous Waste	NA	Low	None	Site was registered as a SQG in December 1993. A Nov 2010 inspection report indicates the Loomis FWD Systems property is closed. Site does not have documented violations or environmental contamination related to hazardous waste.
48	BBB	No Photo	2	Residences; Former Luther Street Dump  South-Southeast of Old Cemetery on NW 5th Street Between Northwest 9th Avenue and Martin Luther King Jr. Boulevard, East of Railroad Tracks covered by I-95  Palm Beach County, FL	S108031577 S111220731	FL SWF/LF	Vacant Land	1,162	Petroleum Hazardous Waste Solvents Herbicides Pesticides Lead	Unknown	High	None	EDR records and the Palm Beach County Solid Waste Authority indicate site was a small neighborhood dump opened prior to 1968 and inactive prior to 1986. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review. If subsurface activities will take place near the site, a file review can be requested for FDEP to source archived records from microfiche files.
49	GW	No Photo	5	CarMax #7113  2000 High Ridge Road Boynton Beach, FL 33426	9701106 FLR000035253	STCM FL UST FL AST RCRA	Car Dealer	259	Petroleum	NA	Low	None	Site has 2 ASTs and 1 UST deemed in compliance during a 2015 inspection. All tanks were installed in 1997: 1-10,000 gallon UST for unleaded gasoline and 2-1,000 gallon ASTs for new & lube oil and waste/used oil.  EDR records indicate that in 2012 site was listed as a SQG of solvents. Site does not have documented violations or environmental contamination related to hazardous waste or petroleum.

**Table B-1**  
**POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
50	GW	50-1 50-2 50-3 50-4	5	TRCL at Gateway Blvd Railroad Corridor Boynton Beach, FL	None	Site Recon	Railway	Adjacent	Petroleum Hazardous Waste Herbicides Pesticides Coal Ash PCBs	NA	High	Conduct Level II sampling (full waste characterization) in Bridge expansion area and MSE wall area.	Site was inspected during field reconnaissance. Site reconnaissance did not identify stressed vegetation, surface staining, monitoring wells or other visual environmental concerns at the site. However, the operation of a rail system has a variety of potential sources that can contribute to environmental impacts along rail corridors. Typical sources include petroleum or chemical leaks from rail cars, leaking transformers, herbicides, railroad ties, and coal ash and cinder. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review. Site does not have documented contamination but is presumed contaminated.
51	GW	No Photo	5	Mora Engineering Spill NE 17th Avenue and NE 1st Street Boynton Beach, FL 33435	9806961	Super Act Risk Source  PCTS STCM FL LUST	Roadway	2,048	Petroleum	SRCO-NFA May 2005	Medium	None	In November 2004, an aboveground temporary fuel tank being transported became unsecured and released 40 gallons of vehicular diesel. The incident spilled 35 gallons onto the roadway and 5 gallons onto the grassy swale at the intersection of NE 17th Avenue and NE 1st Street. Free product was collected using oil absorbent material. Contaminated soil was removed to a depth of 6 feet (~8.5 tons). Soil sampling results did not detect any CoCs above SCTLs. GW was not encountered during source removal. No GW testing was conducted. The site was granted SRCO-NFA status in May 2005.
52	GW	No Photo	5	HGI Industries 2055 High Ridge Road Boynton Beach, FL 33426	None	Site Recon	Light Industrial	553	Petroleum	NA	Low	None	Site identified during field reconnaissance. This facility currently operates as a manufacturing/research facility for the ODOROX product line. One AST for an emergency generator observed at site. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
53	GW	53-1 53-2	5	Rainbow City Food Store; Former Woods Seacrest Texaco Service; Former Emils Texaco Service; Former Seacrest Service Station; Former Seacrest Texaco Service; Former Rainbow City Grocery  1919 North Seacrest Boulevard Boynton Beach, FL 33435	8842431	PCTS STCM FL LUST EDR Hist Auto	Convenience store	97	Petroleum	NA	High	None	EDR records list this site as a historical gas station/filling station/auto station since 1965. This site currently operates as a convenience store. According to tank registration records, 3 USTs were improperly abandoned in place in 1984 and removed in March 1989. Tank sizes and contents are not detailed in the records. No TCAR was available for review. Site does not have documented leaks or environmental contamination related to petroleum. Site was denied state cleanup funding in 1989 because there has been no documented contamination.
54	GW	54-1 54-2	5	Boynton Beach City Lift Station #309 Seacrest and NW 19th Avenue Boynton Beach, FL 33435	8840765	STCM FL LUST	Lift Station	29	Petroleum	NA	Low	None	Site has 1 AST deemed in compliance during a 2014 inspection. 1-640 gallon AST for emergency generator diesel was installed in May 1998. Site previously had 1-550 gallon UST for emergency generator diesel installed in May 1984 and removed in July 1998 and 1-3,000 gallon UST for an unregulated substance installed in May 1984 and listed as unmaintained in 1991. The September 1998 TCAR indicates no soil or groundwater contamination was detected during tank removal. Site does not have documented leaks or environmental contamination related to petroleum.
55	GW	No Photo	5	Boynton Beach City - Fire Station #5 EOC 2080 High Ridge Road Boynton Beach, FL 33426	9810829	STCM FL AST	Fire Station	67	Petroleum	NA	Low	None	Site has 1 AST deemed in compliance during a 2016 re-inspection. 1-10,000 gallon AST for vehicular diesel was installed in June 2008. Site does not have documented leaks or environmental contamination related to petroleum.

**Table B-1  
 POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
56	GW	56	5	7-Eleven Store #34857; Former Exxon Mobil Oil Corporation #18205; Former Mobile #02-LXD  850 Gateway Boulevard Boynton Beach, FL 33426	9802376 FLR000165829	PCTS STCM FL LUST RCRA	Gas Station	43	Petroleum Hazardous Wastes	SRCO-NFA Feb 2007	Medium	None	Site has 3 USTs installed in December 1999: 2-12,000 gallon USTs for unleaded gasoline and 1-10,000 gallon UST for vehicular diesel. All tanks deemed in compliance during 2014 inspection.  Discharge reported in October 2006 when staining was observed in the pea-gravel surrounding the fill and vapor return risers during spill bucket replacement. Petroleum impacted soils were excavated. SRCO-NFA granted in February 2007.  Exxon applied for a hazardous waste DEP/EPA identification number in 2010 as a CESQG. Current status as a CESQG is closed. Site does not have documented violations or environmental contamination related to hazardous waste.  Exxon Mobil Corp sold site to 7-Eleven in April 2011.
57	GW	57-1, 57-2 57-3, 57-4 57-5, 57-6 57-7, 57-8 57-9, 57-10 57-11, 57-12	5	FDOT ROW  I-95 & Gateway Boulevard Boynton Beach, FL	None	Site Recon	Roadway	Adjacent	Trash	NA	No	None	Site identified during field reconnaissance. Field personnel observed trash in ROW, but did not identify stressed vegetation, surface staining, monitoring wells or other visual environmental concerns at the site. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
58	GW	58	4	Howard Fertilizer and Chemical Corporation  1107 Gateway Boulevard Boynton Beach, FL 33115	None	Site Recon	Light Industrial	385	Hazardous Waste	Unknown	Low	None	Site identified during field reconnaissance. This facility currently operates as a distribution center. Field personnel observed an outside chemical storage area containing drums and tanks. Drum and tank contents are unknown. Personnel did not observe stressed vegetation, surface staining, monitoring wells or other visual environmental concerns at the site. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
59	GW	59	5	Jackie's One Price Dry Cleaning  1025 Gateway Boulevard Ste 301 A Boynton Beach, FL 33426	9812137	STCM FL AST	Dry Cleaner	Adjacent	Hazardous Material / Dry Cleaning Solvents	NA	High	None	New Dry Cleaner registered in June 2010. Registration form lists HD2000 as the solvent used by the facility. No information could be sourced as to the manufacturer or chemical composition of HD2000. Site does not have documented violations or environmental contamination related to hazardous waste.  Site is located in the Quantum Village shopping center.
60	GW	60-1 60-2	5	Quantum Village Publix Super Market #1041  1005 NW 22nd Avenue Boynton Beach, FL 33426	9810705	STCM FL AST	Grocery Store	Adjacent	Petroleum	NA	Low	None	Site has 1-1,000 AST for emergency generator diesel fuel installed in August 2008. Tank deemed in compliance in 2014 inspection. Site does not have documented leaks or environmental contamination related to petroleum.
61	GW	61-1 61-2	5	Children's Services Council of Palm Beach County  2300 High Ridge Road Boynton Beach, FL 33426	None	Site Recon	Office Bldg.	48	Petroleum	NA	Low	None	Site identified during field reconnaissance. This facility currently operates as an office building. Field personnel observed an emergency generator on site. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
62	GW	62-1 62-2 62-3 62-4	5	Prime Masonry, Inc. Spill  I-95 at Gateway Boulevard Boynton Beach, FL 33426	123458	FL RESP PARTY	Roadway	Within Corridor	Petroleum	Inactive	High	None	On January 27, 1996, a truck accident caused a petroleum release requiring an emergency response cleanup. On February 27, 1996, 165 gallons (3, 55 gallon drums) of contaminated soil were removed from site. Records indicate the source of contamination was a pipe leak at the exterior of a tank. Pipe was removed from tank and tank plugged as appropriate. FDEP requested an IRAR to document cleanup activities and assess site status. The IRAR was not available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.



**Table B-1  
 POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
63	GW	No Photo	5	Tri-Rail Tracks Spill Lantana Station to Boynton Beach Station Boynton Beach, FL 33426	9803517	Super Act Risk Source  PCTS STCM FL LUST DEP Cleanup Sites	Railway	Adjacent	Petroleum Hazardous Waste	Inactive Cleanup Required	High	Conduct Level II sampling (full waste characterization) in Bridge expansion area and MSE wall area.	In October 1992, TRCL reported a discharge of an est. 1,400 gallons of diesel. The discharge was caused by the puncture of the train's tank resulting in soil and ground water contamination. Tank puncture occurred south of the Lantana Station and the tank continued to discharge until the train stopped at the Boynton Beach Station. The train was travelling south during this discharge. Most of the fuel was lost at the Boynton Beach Station. Records indicate a CAR was being completed and cleanup is required. Cleanup is currently designated as inactive. Documents pertaining to contamination extent (i.e. CAR) and cleanup activities were not available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
64	GW	64	5	Multi-tenant Building; Former High Ridge Motor Works  3000 High Ridge Road Boynton Beach, FL 33426	FLD984247023	RCRA	Auto Service	418	Hazardous Waste	NA	Low	None	Business was not present at the listed address. EDR lists site as a non-generator of hazardous waste based on agency documents dated Nov 2010. EDR records indicate that in 1993 site was listed as a SQG of automotive solvents and waste. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
65	GW	65-1 65-2	5	Multi-tenant Building; Former Motorola High Ridge; Former Sears Siding & Windows; Former Suspended Animation  3020 High Ridge Road Boynton Beach, FL 33426	FLD984241752 FLT000065151 FLT140085002	RCRA	Office / Light Industrial	568	Hazardous Waste	NA	Low	None	Businesses were not present at the listed address. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.  EDR lists Motorola site as a non-generator of hazardous waste based on agency documents dated July 2012. EDR records indicate that in 1993 site was listed as a SQG of ignitable waste and lead. EDR lists Sears site as a CESQG of hazardous waste based on agency documents dated March 2000. EDR lists Suspended Animation site as a CESQG of hazardous waste based on agency documents dated July 2014.
66	GW	66	5	Helena Chemical Corporation 2960 NW Commerce Park Drive Boynton Beach, FL 33426	None	Site Recon	Light Industrial	794	Hazardous Waste	NA	Low	None	Site identified during field reconnaissance. This facility currently operates as an agricultural and specialty formulator and distributor. Hazardous materials storage/supply observed at site as noted by NFPA hazardous material warning labels on warehouse doors. No records were available in FDEP OCULUS, PBC ERM CINEMA, or internet search databases for review.
67	GW	67	5	Worldwide Superabrasives, LLC; Former Florentine Marble Co Inc  2921 NW Commerce Park Drive Boynton Beach, FL 33426	FLR000036152	RCRA	Light Industrial	779	Hazardous Waste	NA	Low	None	During field reconnaissance, hazardous materials storage was observed as noted by NFPA hazardous material warning labels on materials inside the facility operating as Worldwide Superabrasives LLC. Field personnel also noted an odor when near the facility.  Florentine Marble Co Inc previously occupied this property and had an EPA hazardous waste ID for a LQG. Florentine Marble ceased manufacturing at site in 2005 and the EPA ID is no longer active. Site does not have documented violations or environmental contamination related to hazardous waste.
68	GW	No Photo	5	Euro Granite and Stone; Former Snapp Nursery  550 Industrial Way Boynton Beach, FL 33426	8839058	STCM FL AST	Light Industrial	657	Petroleum	NA	Medium	None	Site had 2-550 gallon ASTs installed in November 1987 for unleaded gasoline and generator diesel. Tanks removed in 1991 based on an updated tank registration. No TCAR or other information related to tank removal/closure was available for review. Site does not have documented leaks or environmental contamination related to petroleum.
69	GW	69-1 69-2	5	Sherwin Williams; Former KKF Realty- Maintenance Warehouse; Former STS Southeast  2900 High Ridge Road Boynton Beach, FL 33426	9501939 8630769	Super Act Risk Source  PCTS STCM FL LUST FL STCM	Light Industrial	1,103	Hazardous Waste Petroleum	SRCO-NFA Aug 2014	Medium	None	Records indicate KKF Realty site never had tanks, but reported a February 1992 kerosene discharge. A NAM plan was approved in July 1993 and monitored for 5 quarters until March 1995. A 2014 LSA did not detect soil or groundwater contamination. A SRCO was issued in August 2014 based on LSA results. 1992 ground water flow was east.  STS Southeast Site address was 2950 High Ridge Road. Today, this address appears to be encompassed by the 2900 High Ridge Road building. STS had 1 tank based on a 1986 tank registration form. Owner of tank is listed as Sermatech International Inc. A 1994 record states the site has no regulated tanks, but had 1 hazardous substance tank until 1992 that contained chromate and water. No TCAR or other documents related to tank removal were available for review.

**Table B-1  
 POTENTIAL CONTAMINATION SITES**

SITE NUMBER	PROJECT [GATEWAY (GW) OR BOYNTON BEACH BLVD (BBB)]	PHOTO NUMBER	MAP SECTION	SITE NAME AND ADDRESS	FDEP / EPA FACILITY ID	SELECTION RATIONALE	FACILITY TYPE	APPROXIMATE DISTANCE TO NEAREST POINT OF PROJECT CORRIDOR (FEET)	CONTAMINATION CONCERN	REMEDIATION STATUS	CONTAMINATION RISK RATING	RECOMMENDATION	Notes on Regulatory Status & Field Observations
70	GW	70-1 70-2 70-3	5	Waste Management Inc. of Florida - Palm Beach 651 Industrial Way Boynton Beach, FL 33426	9046345 FLD984215038	STCM FL AST RCRA	Office / Light Industrial	1002	Petroleum Hazardous Waste	NA	Low	None	<p>Site has 7 ASTs deemed in compliance during a 2016 inspection.</p> <p>3-10,000 gallon ASTs for vehicular diesel were installed in March 2012. These tanks replaced 2-10,000 gallon and 1-6,000 gallon ASTs for vehicular diesel that had been installed in May 1991. New tanks were installed in existing concrete containment. A March 2012 Tank Closure Site inspection noted no signs of discharge to the environment.</p> <p>3 other existing tanks were installed in May 1991: 1-1,000 gallon AST for waste oil and 2-1,000 gallon ASTs for new &amp; lube oil. 1-750 gallon AST for emergency generator diesel was installed in April 2015.</p> <p>Field personnel observed a fuel pump island, truck service bays, and container storage at site. Field personnel did not note any sign of environmental contamination.</p> <p>Site notifies as a SQG and generates used oil, lead-acid batteries, and fluorescent lamps. Site does not have documented environmental contamination related to petroleum or hazardous waste.</p>
71	GW	No Photo	5	Braddock Metallurgical Aerospace Service, Inc.; Former Sermatech International Inc.; Former Sermatech Power Solutions; Former Sermatech of Boynton Beach  507 Industrial Way Boynton Beach, FL 33426	9400310 FLD000776666	STCM FL AST RCRA	Light Industrial	956	Hazardous Waste	NA	Medium	None	<p>Site had 1-5,000 gallon AST removed in November 1993. Tank contents are documented as "Other". No TCAR or other documents related to tank removal were available for review. Site does not have documented leaks or environmental contamination related to petroleum.</p> <p>Records indicate company was bought in 2003 and no longer has hazardous waste disposal. Inactive generator of hazardous waste. Site does not have documented violations or environmental contamination related to hazardous waste.</p>

## **Appendix C**

### **Site Photo Documentation**



**Photo 1-1**

Site No. 1 – TRCL at Boynton Beach Blvd. - View Towards the Southeast



**Photo 1-2**

Site No. 1 - TRCL at Boynton Beach Blvd. - View Towards the Northeast

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 1-3**

Site No. 1 – TRCL at Boynton Beach Blvd. - View Towards the Southwest



**Photo 1-4**

Site No. 1 - TRCL at Boynton Beach Blvd. - View Towards the North

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 1-5**

Site No. 1 - TRCL at Boynton Beach Blvd. - View Towards the South



**Photo 1-6**

Site No. 1 - TRCL at Boynton Beach Blvd. - View Towards the South



**Photo 1-7**

Site No. 1 - TRCL at Boynton Beach Blvd. - View Towards the South



**Photo 2**

Site No. 2 - Former Four Steel Corporation - View Towards the North



Photo 3-1

Site No. 3 - American Tower - View Towards the East



Photo 3-2

Site No. 3 - American Tower - View Towards the East





Photo 3-3

Site No. 3 - American Tower - View Towards the East

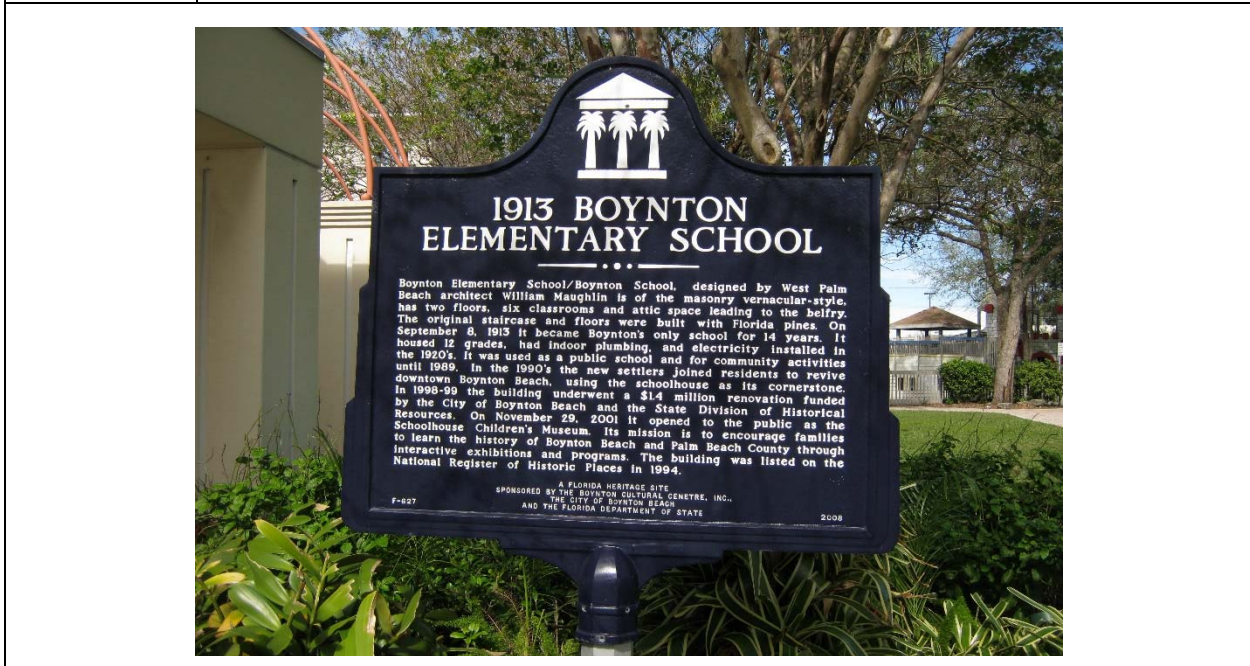


Photo 5

Site No. 5 – City of Boynton Beach, Former Boynton Beach Elementary  
View Towards the North



**Photo 9-1**

Site No. 9 - Marathon Service Station - View Towards the Northwest



**Photo 9-2**

Site No. 9 - Marathon Service Station - View Towards the Southwest



**Photo 9-3**

Site No. 9 - Marathon Service Station - View Towards the Southeast



**Photo 11**

Site No. 11 - Bruno Auto Body & Painting - View Towards the Southwest



**Photo 12-1**

Site No. 12 – BP 4 Points Market - View Towards the Northeast



**Photo 12-2**

Site No. 12 – BP 4 Points Market - View Towards the Southeast

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 14-1**

Site No. 14 - Palmdale Oil Company - View Towards the Southwest



**Photo 14-2**

Site No. 14 - Palmdale Oil Company - View Towards the West



**Photo 14-3**

Site No. 14 - Palmdale Oil Company - View Towards the Northeast

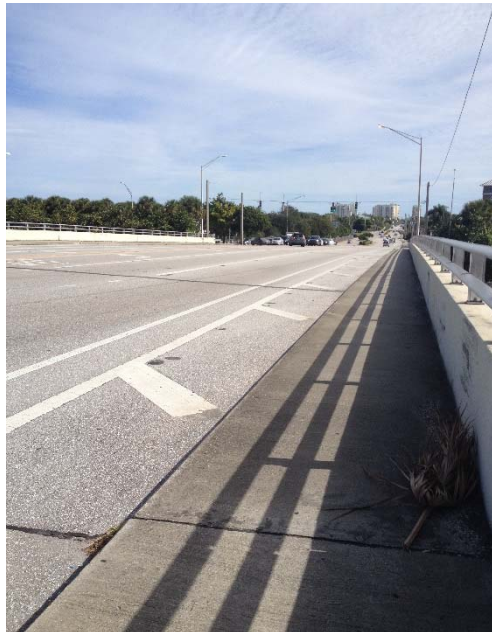


**Photo 14-4**

Site No. 14 - Palmdale Oil Company - View Towards the West

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 15-1**

Site No. 15 – FDOT ROW - Boynton Beach Blvd. at I-95 - View Towards the East



**Photo 15-2**

Site No. 15 – FDOT ROW - I-95 NB at Boynton Beach Blvd. - View Towards the North



**Photo 15-3**

Site No. 15 – FDOT ROW - I-95 NB Entrance Ramp at Boynton Beach Blvd.  
View Towards the North



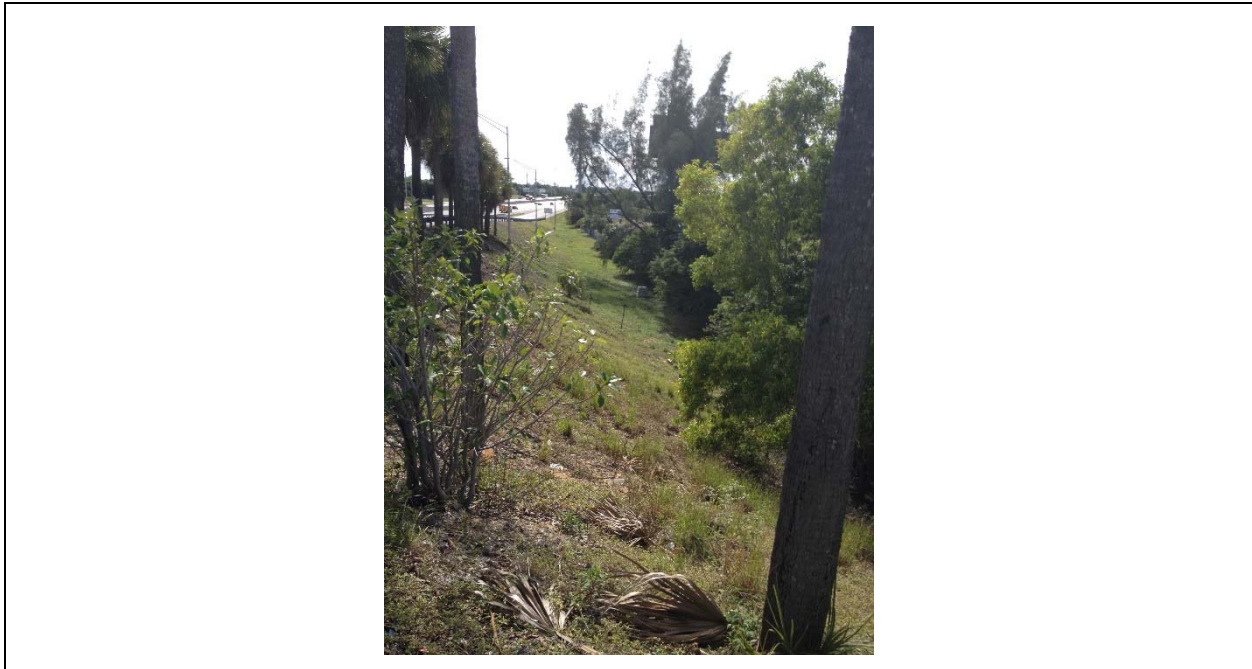
**Photo 15-4**

Site No. 15 – FDOT ROW - I-95 SB at Boynton Beach Blvd. - View Towards the South



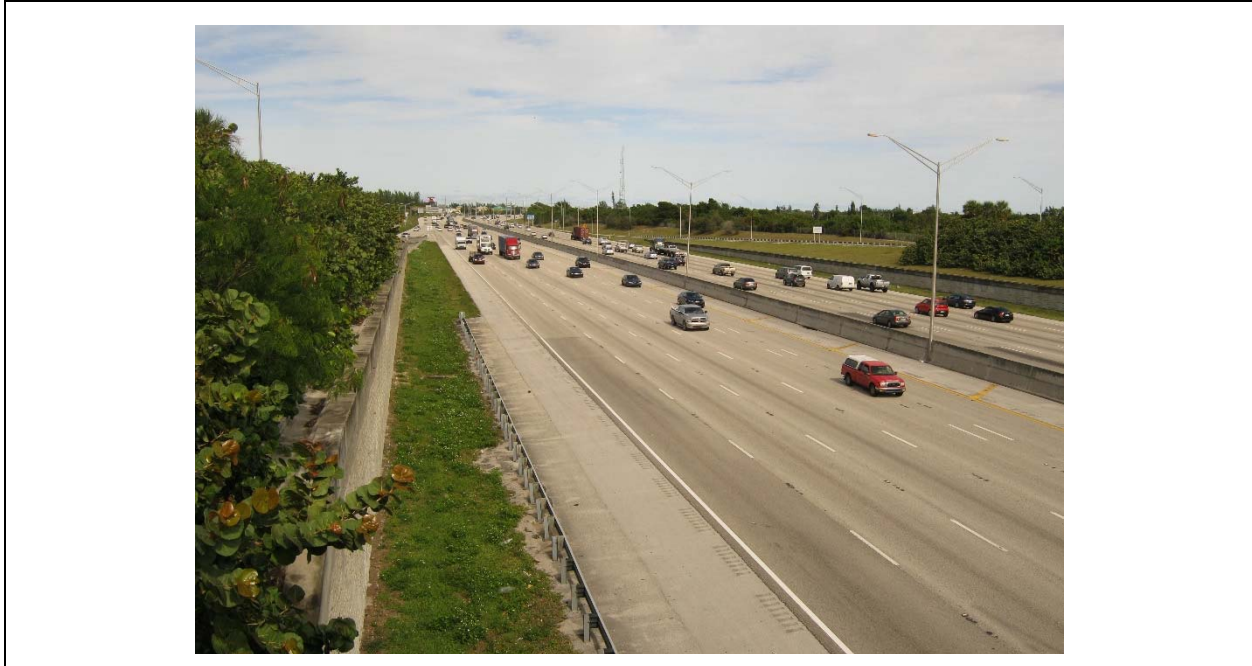
**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 15-5**

Site No. 15 – FDOT ROW - I-95 SB Entrance Ramp at Boynton Beach Blvd.  
View Towards the North



**Photo 15-6**

Site No. 15 – FDOT ROW - I-95 SB at Boynton Beach Blvd. - View Towards the North



**Photo 15-7**

Site No. 15 – FDOT ROW - I-95 SB Exit Ramp at Boynton Beach Blvd.  
View Towards the North



**Photo 15-8**

Site No. 15 – FDOT ROW - I-95 SB Exit Ramp at Boynton Beach Blvd.  
View Towards the North

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 15-9**

Site No. 15 – FDOT ROW - North of Boynton Beach Road at West Industrial Way  
View Towards the Northeast



**Photo 15-10**

Site No. 15 – FDOT ROW - North of Boynton Beach Road at West Industrial Way  
View Towards the Northwest



**Photo 16-1**

Site No. 16 - Galaxy Elementary School (Park) - View Towards the North



**Photo 16-2**

Site No. 16 - Galaxy Elementary School (Service Area) - View Toward the Southeast



**Photo 19**

Site No. 19 - F1 Auto Services & Tires - View Towards the West



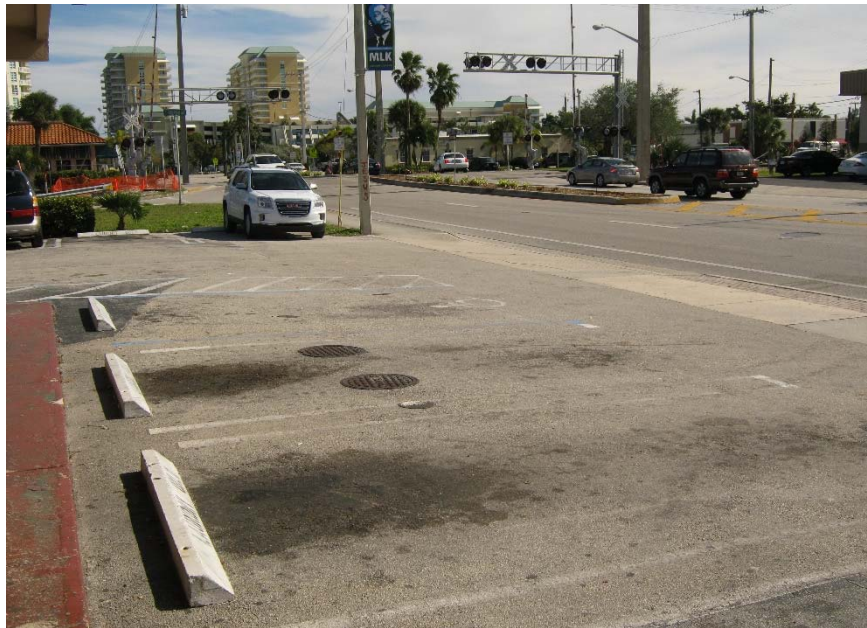
**Photo 20-1**

Site No. 20 - Coin Laundry Dry Cleaner - View Towards the Northwest



**Photo 20-2**

Site No. 20 - Coin Laundry Dry Cleaner - View Towards the West



**Photo 20-3**

Site No. 20 - Coin Laundry Dry Cleaner - View Towards the East



**Photo 21**

Site No. 21 - Precision Auto Body Works - View Towards the Northeast



**Photo 22-1**

Site No. 22 – Public Storage (Industrial Avenue) - View Towards the North



**Photo 22-2**

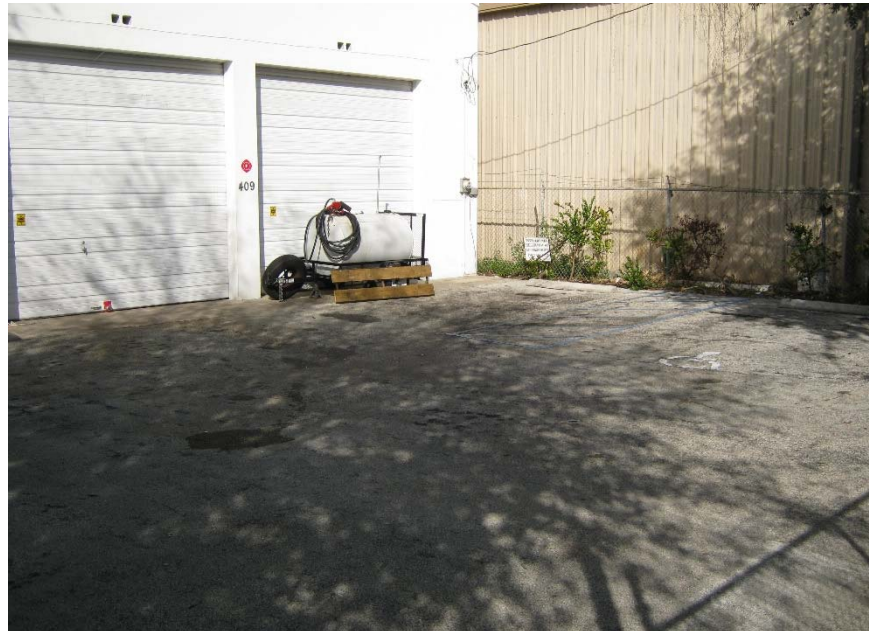
Site No. 22 - Public Storage - View Towards the North



**Photo 23-1**

Site No. 23 - George Evesson Property - View Towards the West





**Photo 23-2**

Site No. 23 - George Evesson Property - View Towards the Northwest



**Photo 24**

Site No. 24 - Neighborhood Gallery & Fine Art Appraisers - View Towards the North



**Photo 25-1**

Site No. 25 - Vacant Building at Industrial Way (Former Thompson Movers)  
View Towards the Northwest



**Photo 25-2**

Site No. 25 - Vacant Building at Industrial Way (Former Thompson Movers)  
View Towards the West



**Photo 25-3**

Site No. 25 - Vacant Building at Industrial Way (Former Thompson Movers)  
View Towards the Northwest



**Photo 25-4**

Site No. 25 - Vacant Building at Industrial Way (Former Thompson Movers)  
View Towards the Southwest

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 27-1**

Site No. 27 - Marcinkoski Gradall Inc. - View Towards the South



**Photo 27-2**

Site No. 27 - Marcinkoski Gradall Inc. - View Towards the Southeast



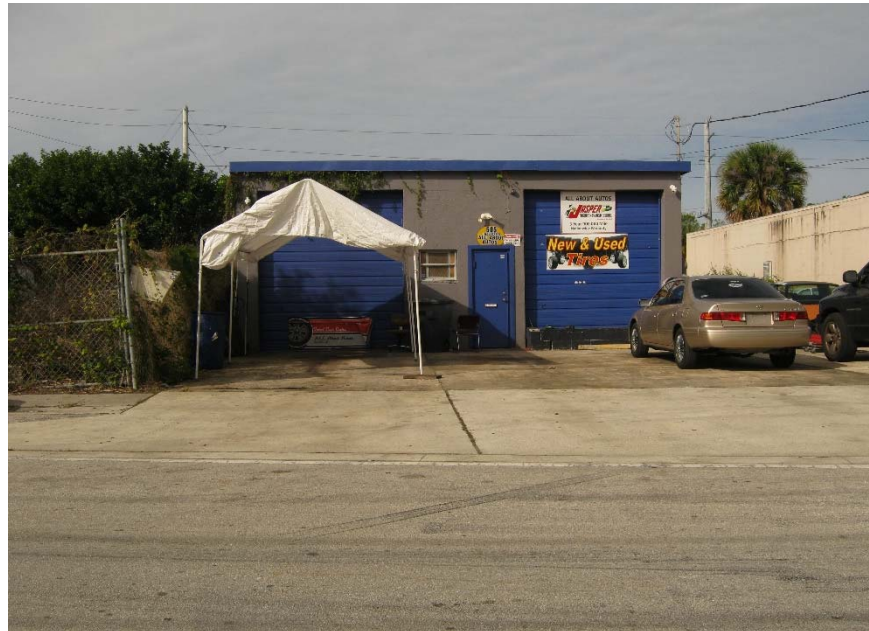
**Photo 27-3**

Site No. 27 - Marcinkoski Gradall Inc. - View Towards the Southeast



**Photo 27-4**

Site No. 27 - Marcinkoski Gradall Inc. - View Towards the Northeast



**Photo 28**

Site No. 28 - All About Autos - View Towards the West



**Photo 29-1**

Site No. 29 – Comcast (Former Poly Plastic Packaging Company Inc.)  
View Towards the Northeast



**Photo 29-2**

Site No. 29 – Comcast (Former Poly Plastic Packaging Company Inc.)  
View Towards the Southeast



**Photo 29-3**

Site No. 29 – Comcast (Former Poly Plastic Packaging Company Inc.)  
View Towards the East



Photo 30

Site No. 30 - Mikes Automotive - View Towards the West



Photo 31

Site No. 31 - Freddie's Foreign Car Service - View Towards the Northeast





**Photo 32**

Site No. 32 - Chucks Auto Repair - View Towards the Northeast



**Photo 33**

Site No. 33 – Edward Jim Property - View Towards the Northwest



**Photo 34-1**

Site No. 34 - Zuccala's Wrecker Service - View Towards the East



**Photo 34-2**

Site No. 34 - Zuccala's Wrecker Service - View Towards the Northeast



Photo 35

Site No. 35 - Noted Automotive - View Towards the East



Photo 36-1

Site No. 36 - East Coast Auto Service - View Towards the West-Southwest



**Photo 36-2**

Site No. 36 - East Coast Auto Service - View Towards the Southwest



**Photo 37-1**

Site No. 37 - Florida Diesel & Hydraulic - View Towards the Northeast



**Photo 37-2**

Site No. 37 - Florida Diesel & Hydraulic - View Towards the East



**Photo 38-1**

Site No. 38 - N & D Auto Body - View Towards the Southeast



**Photo 38-2**

Site No. 38 - N & D Auto Body - View Towards the Southeast



**Photo 39**

Site No. 39 - Thunder Auto Sports Inc.- View Towards the Northwest



**Photo 40-1**

Site No. 40 - Bollenbacher Trucking Inc. - View Towards the Northeast



**Photo 40-2**

Site No. 40 - Bollenbacher Trucking Inc. - View Towards the Northeast



**Photo 42**

Site No. 42 - Certified Truck and Auto - View Towards the East



**Photo 43-1**

Site No. 43 - New Wave Fabrication - View Towards the West



**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 43-2**

Site No. 43 - New Wave Fabrication - View Towards the Southwest



**Photo 44-1**

Site No. 44 - Zuccalas Wrecker Service - View Towards the Southwest



**Photo 44-2**

Site No. 44 - Zuccalas Wrecker Service - View Towards the Southeast



**Photo 45**

Site No. 45 - Ridgeway Plumbing Inc. - View Towards the Northeast

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 46**

Site No. 46 - Comcast East Boynton Hubsite - View Towards the West

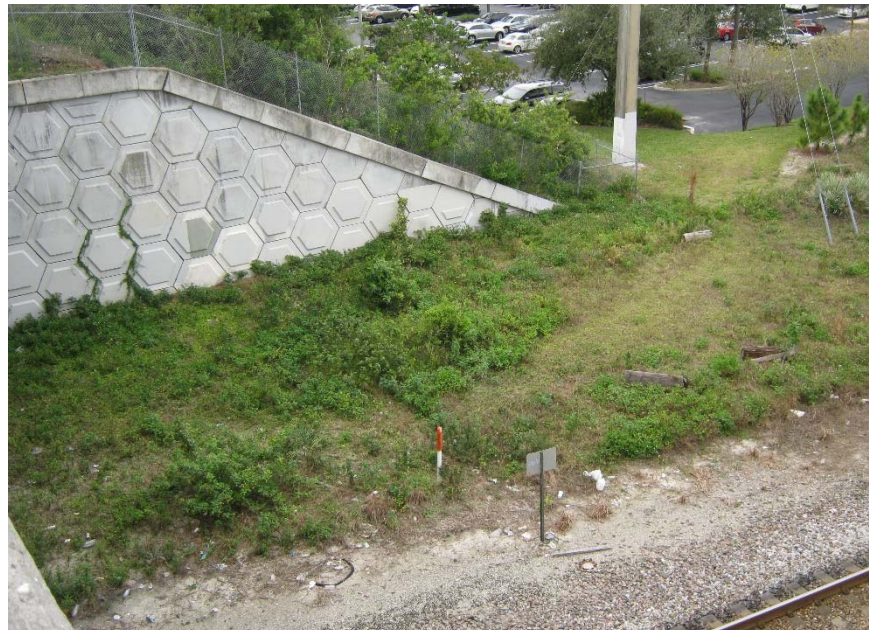
**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 50-1**

Site No. 50 - TRCL at Gateway Blvd. - View Towards the Southeast



**Photo 50-2**

Site No. 50 - TRCL at I-95 SB Exit Ramp and Gateway Blvd.  
View Towards the Northwest



**Photo 50-3**

Site No. 50 - TRCL at I-95 SB Exit Ramp and Gateway Blvd.- View Towards the North




**Photo 50-4**

Site No. 50 - TRCL at I-95 SB Exit Ramp and Gateway Blvd. - View Towards the East

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



	
<p><b>Photo Pond Site 2</b></p>	<p>Vacant Land at High Ridge Road and Gateway Blvd. View Towards the East</p>
	
<p><b>Photo Pond Site 2</b></p>	<p>Vacant Land at High Ridge Road and Gateway Blvd. View Towards the Northeast</p>



**Photo 53-1**

Site No. 53 - Rainbow City Food Store - View Towards the Southwest



**Photo 53-2**

Site No. 53 - Rainbow City Food Store - View Towards the Southwest



**Photo 54-1**

Site No. 54 - Boynton Beach City Lift Station #309 - View Towards the West



**Photo 54-2**

Site No. 54 - Boynton Beach City Lift Station #309 - View Towards the Southwest





**Photo 56**

Site No. 56 - 7-Eleven Store #34857 - View Towards the Northwest



**Photo 57-1**

Site No. 57 – FDOT ROW - Gateway Blvd. at High Ridge Road  
View Towards the Northeast



**Photo 57-2**

Site No. 57 – FDOT ROW - Gateway Blvd. at High Ridge Road - View Towards the West



**Photo 57-3**

Site No. 57 – FDOT ROW - Gateway Blvd at High Ridge Road - View Towards the North



**Photo 57-4**

Site No. 57 – FDOT ROW - Gateway Blvd. at I-95 NB Entrance Ramp  
View Towards the East



**Photo 57-5**

Site No. 57 – FDOT ROW - Gateway Blvd. at I-95 NB Entrance Ramp  
View Towards the North



**Photo 57-6**

Site No. 57 – FDOT ROW - Gateway Blvd. at I-95 SB Exit Ramp  
View Towards the Northeast



**Photo 57-7**

Site No. 57 – FDOT ROW - Gateway Blvd. at I-95 SB Exit Ramp - View Towards the West

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 57-8**

Site No. 57 – FDOT ROW – I-95 NB Entrance Ramp at Gateway Blvd.  
View Towards the West



**Photo 57-9**

Site No. 57 – FDOT ROW – I-95 NB Exit Ramp at Gateway Blvd.  
View Towards the South

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 57-10**

Site No. 57 - FDOT ROW – Gateway Blvd. at I-95 NB Exit Ramp - View Towards the East



**Photo 57-11**

Site No. 57 - FDOT ROW – I-95 NB Exit Ramp at Gateway Blvd. - View Towards the West



**Photo 57-12**

Site No. 57 – FDOT ROW - I-95 SB at I-95 SB Entrance Ramp and Gateway Blvd  
View Towards the South



**Photo 58**

Site No. 58 - Howard Fertilizer and Chemical Corporation  
View Towards the South



Photo 59

Site No. 59 – Jackie’s One Price Dry Cleaning - View Towards the Northwest



Photo 60-1

Site No. 60 - Quantum Village - View Towards the Southwest





**Photo 60-2**

Site No. 60 - Quantum Village Publix - View Towards the South



**Photo 61-1**

Site No. 61 – Children’s Services Council - View Towards the North



**Photo 61-2**

Site No. 61 – Children’s Services Council - View Towards the Northwest



**Photo 62-1**

Site No. 62 – Former Prime Masonry Inc. Spill – I-95 NB at Gateway Blvd.  
View Towards the South



**Photo 62-2**

Site No. 62 – Former Prime Masonry Inc. Spill – I-95 NB at Gateway Blvd.  
View Towards the South



**Photo 62-3**

Site No. 62 – Former Prime Masonry Inc. Spill – I-95 NB at I-95 NB Entrance Ramp and  
Gateway Blvd. - View Towards the North



**Photo 62-4**

Site No. 62 – Former Prime Masonry Inc. Spill – I-95 SB at I-95 SB Exit Ramp and Gateway Blvd. - View Towards the North



**Photo 64**

Site No. 64 – Multi-tenant Building (Former High Ridge Motor Works)  
View Towards the Southeast



**Photo 65-1**

Site No. 65 – Multi-tenant Building (Former Motorola High Ridge)  
View Towards the Northeast



**Photo 65-2**

Site No. 65 – Multi-tenant Building (Former Motorola High Ridge)  
View Towards the North

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 66**

Site No. 66 - Helena Chemical Corporation - View Towards the Southeast



**Photo 67**

Site No. 67 – Worldwide Superabrasives, LLC - View Towards the Northwest

**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 69-1**

Site No. 69 - Sherwin Williams - View Towards the Northwest



**Photo 69-2**

Site No. 69 - Sherwin Williams - View Towards the West



**Photo 70-1**

Site No. 70 - Waste Management Inc. - View Towards the Southeast



**Photo 70-2**

Site No. 70 - Waste Management Inc. - View Towards the North



**PD&E Study**

SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange and  
SR-9/I-95 at Gateway Boulevard Interchange



**Photo 70-3**

Site No. 70 - Waste Management Inc. - View Towards the North

## **Appendix D**

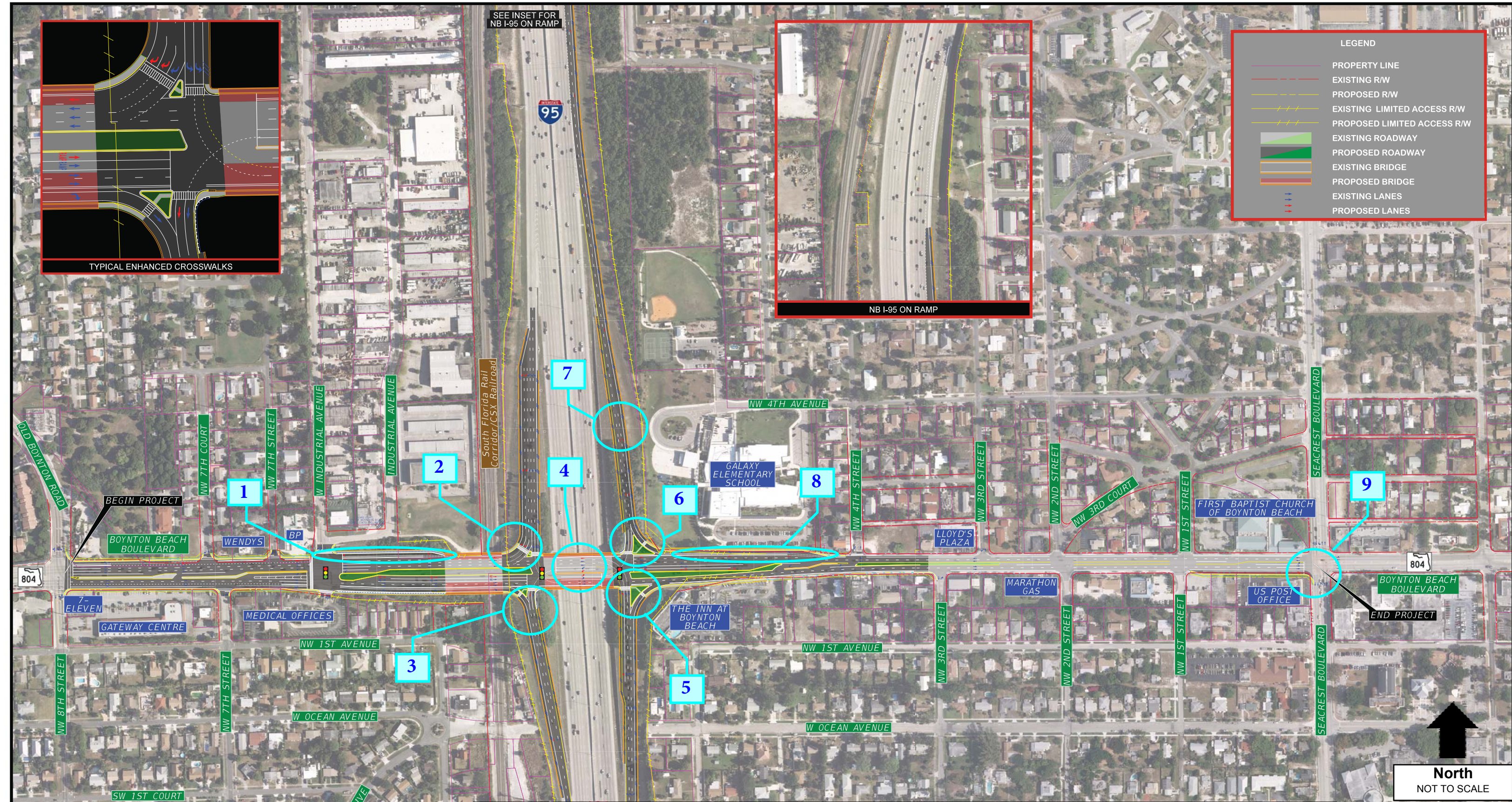
**FDOT D4 DCIC Approach to the CSER**

### FDOT D4 DCIC APPROACH TO THE CSER

1. In order for a site to be a **LOW** risk, it can never have had any releases. Regardless of current regulatory status, if it had any release in the past it is not a LOW. Gas stations that are in compliance (no violations) and have never had a release can be LOW, even if they are adjacent to the corridor.
2. A **LOW** can be any licensed facility that stores hazardous materials and/or potential contaminants (think Lowes, Home Depot, paint stores, furniture shops/refinishers, print shops, Ace Hardware, even WalMart) that has never had a documented release or violation for a release. To that end if said licensed material “storer” had a minor, well documented violation in the past that was well managed, not repeated, and completely addressed and documented, this could also stay as a LOW.
3. If a site had previous releases, but it has obtained a NFA or SRCO, then it is a **MEDIUM**. If a UST was removed from a site, but there is no TCAR on file, then it’s a MEDIUM. If there is a TCAR which documents that no soil or groundwater contamination was detected during removal, then it can be a LOW.
4. Any previous release – even if there is documented cleanup and the site has been “finalized” should be a **MEDIUM**. While it seems like the release/spill as been “addressed” there are too many examples of rebound and/or missed or migrated contaminants for this type of site to be rated LOW, which really means we will not look at this property “in-depth” during design. In addition, it is difficult to determine why the release occurred (i.e. faulty equipment, poor procedures & practices, undertrained employees etc) so the “risk” associated with the original release could still be present thereby earning at least a MEDIUM for the property as a release/spill can occur at any time and might not be detected.
5. Any site that has had a release that has not been resolved or is still under investigation/monitoring/cleanup, it’s a **HIGH**, regardless of distance from the corridor. **Rank sites based on their characteristics, not distance from corridor.** Any property adjacent to an unresolved release/spill should be ranked a HIGH.
6. Petroleum is not considered a hazardous waste; see definition of a hazardous material.
7. Select an alternative, evaluate and include a full a discussion; fully evaluate and discuss each alternative and avoid switching between alternatives when writing the report.
8. Large residential and agricultural areas can be grouped together and discussed as long as they are contiguous – be specific with using stationing and also subdivision or plat tract names etc when describing of the project area.
9. Use a High/Med/Low/No table for analysis and include in the report.

## **Appendix E**

### **Concept Plans**



SEE INSET FOR NB I-95 ON RAMP

NB I-95 ON RAMP

TYPICAL ENHANCED CROSSWALKS

**LEGEND**

- PROPERTY LINE
- EXISTING R/W
- PROPOSED R/W
- EXISTING LIMITED ACCESS R/W
- PROPOSED LIMITED ACCESS R/W
- ▬ EXISTING ROADWAY
- ▬ PROPOSED ROADWAY
- ▬ EXISTING BRIDGE
- ▬ PROPOSED BRIDGE
- EXISTING LANES
- PROPOSED LANES

PD&E Study  
 SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange  
 SR 9/I-95 at Gateway Boulevard Interchange  
 FPID Nos.: 435804-1-22-01; 231932-1-22-01  
 ETDM Nos.: 14180 and 14181



**SR 9/I-95 at  
 SR 804/Boynton Beach Boulevard Interchange  
 Alternative 1 - Conceptual Development Alternative (CDA)**

**Figure 1**



SEE INSET FOR NB I-95 ON RAMP

NB I-95 ON RAMP

TYPICAL ENHANCED CROSSWALKS

**LEGEND**

- PROPERTY LINE
- EXISTING R/W
- PROPOSED R/W
- /- EXISTING LIMITED ACCESS R/W
- /- PROPOSED LIMITED ACCESS R/W
- ▬ EXISTING ROADWAY
- ▬ PROPOSED ROADWAY
- ▬ EXISTING BRIDGE
- ▬ PROPOSED BRIDGE
- EXISTING LANES
- PROPOSED LANES

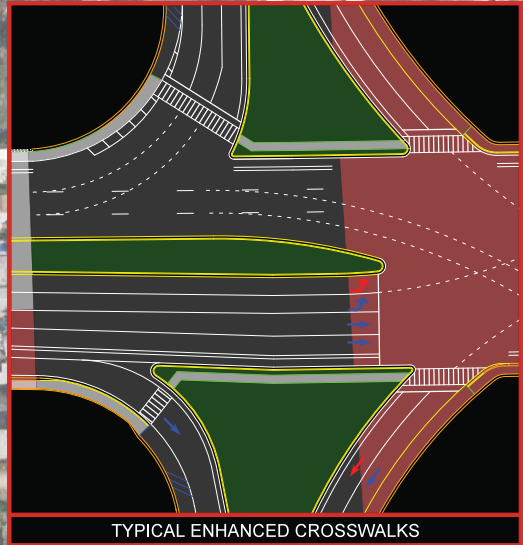
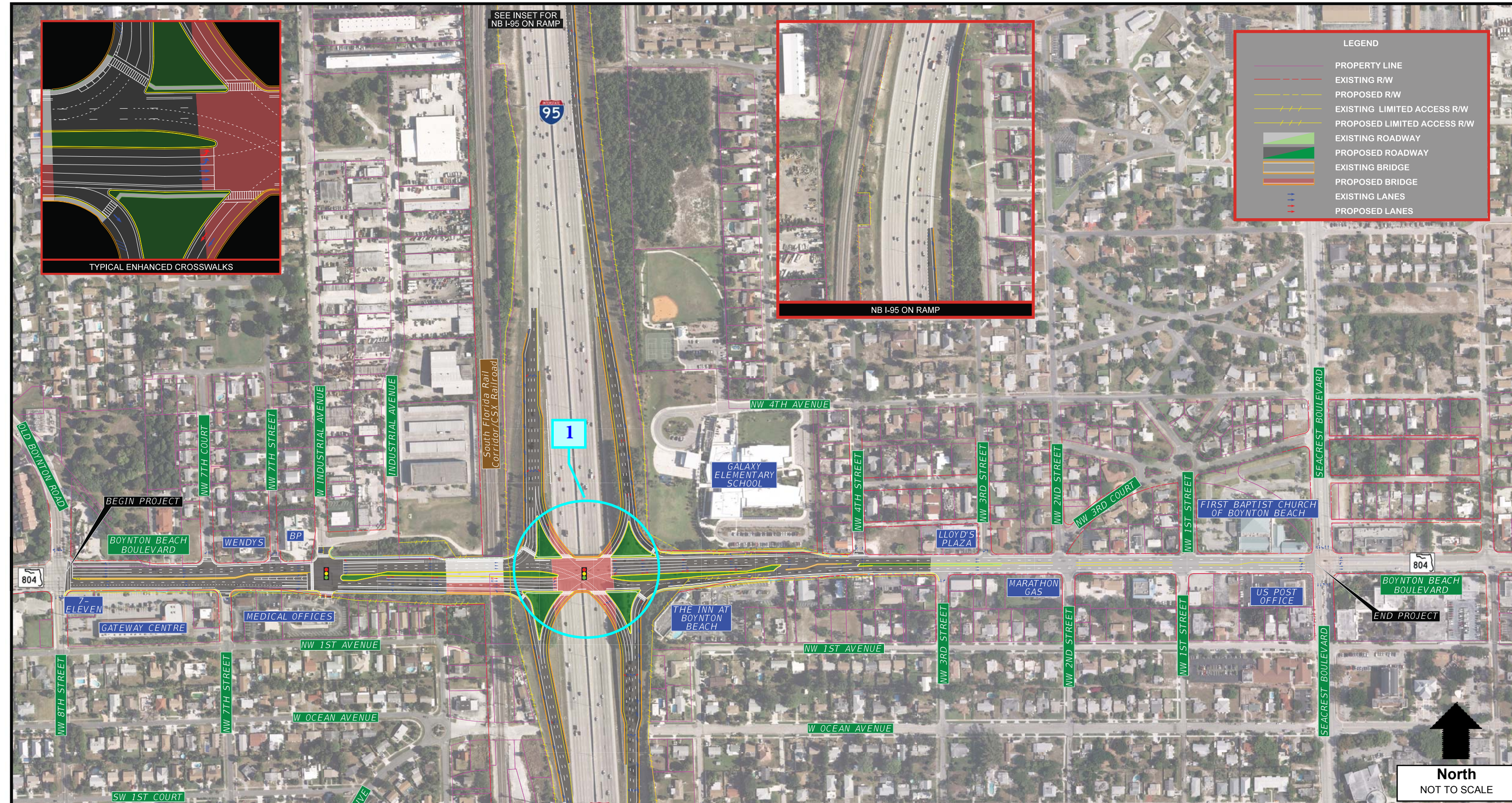
North  
NOT TO SCALE

PD&E Study  
 SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange  
 SR 9/I-95 at Gateway Boulevard Interchange  
 FPID Nos.: 435804-1-22-01; 231932-1-22-01  
 ETDM Nos.: 14180 and 14181



**SR 9/I-95 at  
 SR 804/Boynton Beach Boulevard Interchange  
 Alternative 2 - Streamlined CDA**

**Figure 2**

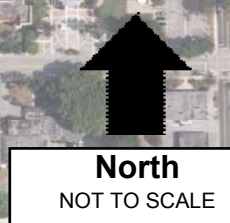


SEE INSET FOR NB I-95 ON RAMP



LEGEND	
	PROPERTY LINE
	EXISTING R/W
	PROPOSED R/W
	EXISTING LIMITED ACCESS R/W
	PROPOSED LIMITED ACCESS R/W
	EXISTING ROADWAY
	PROPOSED ROADWAY
	EXISTING BRIDGE
	PROPOSED BRIDGE
	EXISTING LANES
	PROPOSED LANES

1

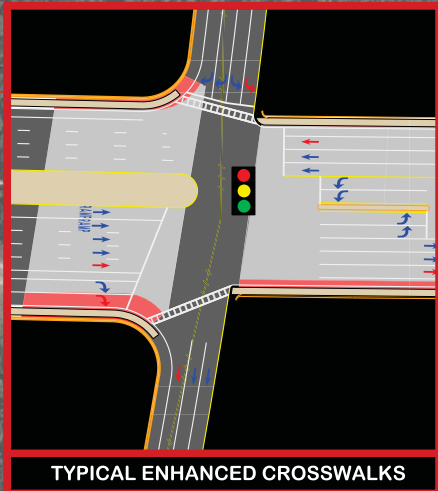


PD&E Study  
 SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange  
 SR 9/I-95 at Gateway Boulevard Interchange  
 FPID Nos.: 435804-1-22-01; 231932-1-22-01  
 ETDM Nos.: 14180 and 14181



**SR 9/I-95 at  
 SR 804/Boynton Beach Boulevard Interchange  
 Alternative 3 - Single Point Urban Interchange (SPUI)**

**Figure 3**



**LEGEND**

- PROPERTY LINE
- EXISTING R/W
- PROPOSED R/W
- EXISTING LIMITED ACCESS R/W
- PROPOSED LIMITED ACCESS R/W
- PAVEMENT
- EXISTING BRIDGE
- PROPOSED BRIDGE
- EXISTING LANES
- PROPOSED LANES

PD&E Study  
 SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange  
 SR 9/I-95 at Gateway Boulevard Interchange  
 FPID Nos.: 435804-1-22-01; 231932-1-22-01  
 ETDM Nos.: 14180 and 14181

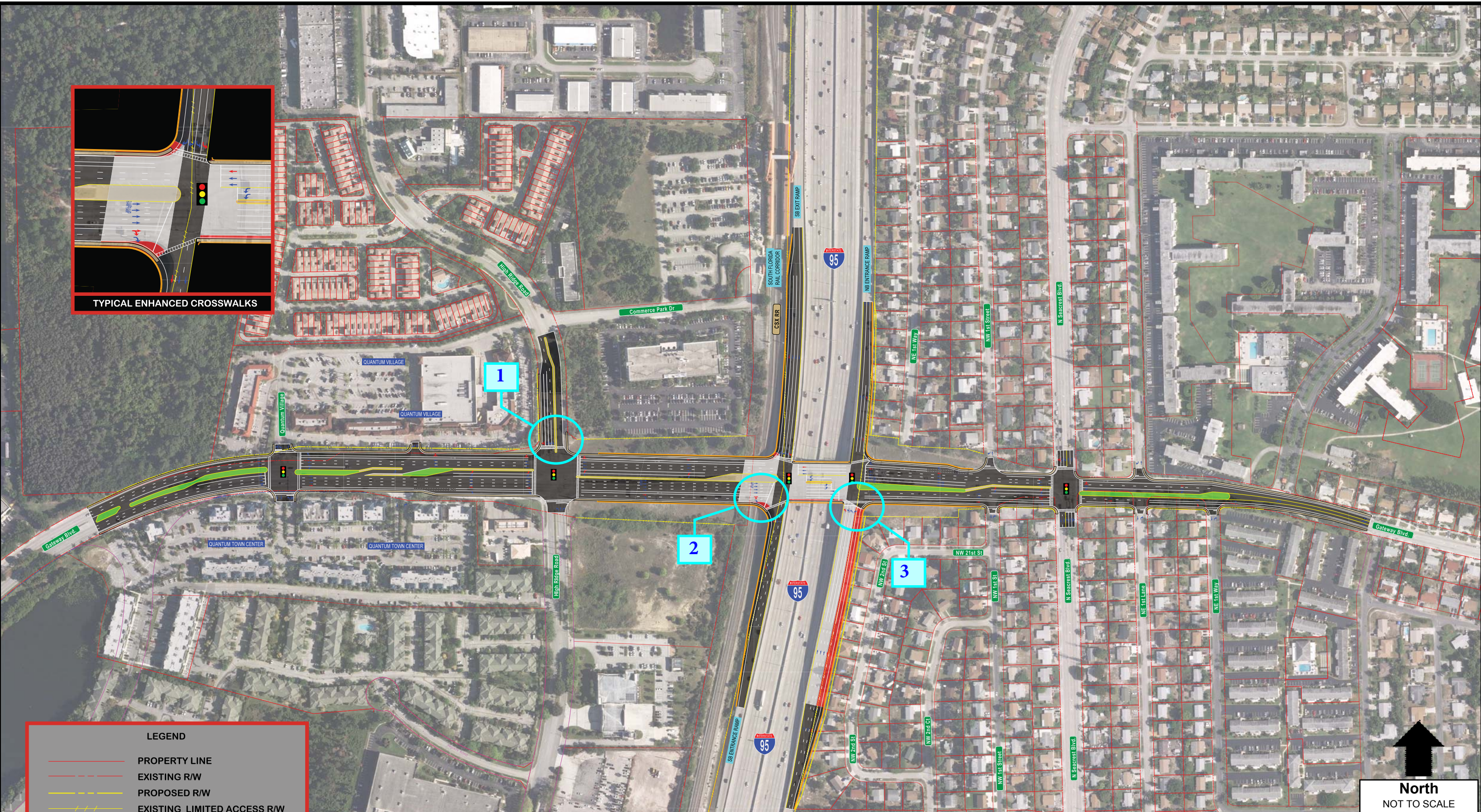
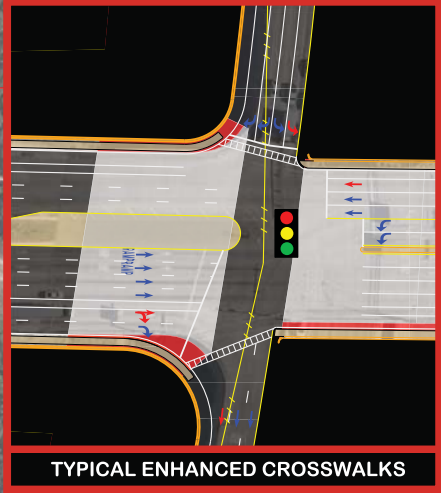


**SR 9/I-95 at  
 Gateway Boulevard Interchange  
 Alternative 1 - Conceptual Development Alternative (CDA)**



**Figure 4**





**LEGEND**

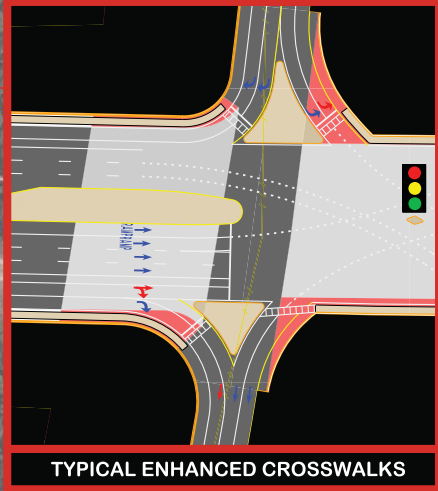
- PROPERTY LINE
- - - EXISTING R/W
- - - PROPOSED R/W
- - - EXISTING LIMITED ACCESS R/W
- - - PROPOSED LIMITED ACCESS R/W
- ▬ PAVEMENT
- ▬ EXISTING BRIDGE
- ▬ PROPOSED BRIDGE
- EXISTING LANES
- PROPOSED LANES

PD&E Study  
 SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange  
 SR 9/I-95 at Gateway Boulevard Interchange  
 FPID Nos.: 435804-1-22-01; 231932-1-22-01  
 ETDM Nos.: 14180 and 14181

**SR 9/I-95 at  
 Gateway Boulevard Interchange  
 Alternative 2 - Streamlined CDA**

North  
 NOT TO SCALE


**Figure 5**



**LEGEND**

- PROPERTY LINE
- EXISTING R/W
- PROPOSED R/W
- EXISTING LIMITED ACCESS R/W
- PROPOSED LIMITED ACCESS R/W
- PAVEMENT
- EXISTING BRIDGE
- PROPOSED BRIDGE
- EXISTING LANES
- PROPOSED LANES

PD&E Study  
 SR 9/I-95 at SR-804/Boynton Beach Boulevard Interchange  
 SR 9/I-95 at Gateway Boulevard Interchange  
 FPID Nos.: 435804-1-22-01; 231932-1-22-01  
 ETDM Nos.: 14180 and 14181



**SR 9/I-95 at  
 Gateway Boulevard Interchange  
 Alternative 1 - Single Point Urban Interchange (SPUI)**



**Figure 6**

**ALTERNATIVES EVALUATION MATRIX**  
**I-95 at Boynton Beach Boulevard**

Evaluation Factors	No Build Alternative	TSM&O <sup>1</sup>	Concept Development Alternative	Streamlined Concept Development Alternative	Single Point Urban Interchange (SPUI) Alternative
<b>Engineering</b>					
Meets Geometric Design Criteria	No	No	Yes	Some	Yes
Provides Current FDOT Standards for Bicycle Facilities	No	No	Yes	Yes	Yes
Provides Pedestrian Facilities	Yes	Yes	Yes	Yes	Yes
Improves Mobility	No	Some	Yes	Yes	Yes
Improves Traffic Operations	No	Some	Yes	Yes	Yes
Improves Safety	No	Some	Yes	Yes	Yes
Meets Purpose & Need	No	No	Yes	Yes	Yes
<b>Physical Resource Impacts</b>					
Residential Properties Impacted – Single Family	0	0	0	0	0
Residential Properties Impacted – Multifamily	0	0	1	1	1
Schools Impacted	0	0	1	1	1
Business Properties Impacted	0	0	21	14	14
<b>Total Properties Impacted</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>16</b>	<b>16</b>
Potential Relocations - Residential	0	0	1	1	1
Potential Relocations - Commercial	0	0	1	0	0
Contamination Sites Impacted	0	0	1	0	0
Required Right of Way (Acres)	0	0	1.207	0.644	0.644
<b>Cultural and Natural Resource Impacts</b>					
Improves Air Quality	No	Some	Yes	Yes	Yes
Noise Receptors <sup>2</sup>	None	None	TBD	TBD	TBD
Wetlands (acres)	0	0	0	0	0
Wildlife and Habitat	0	0	0	0	0
Archaeological Sites	0	0	0	0	0
Current and Previously Recorded Historic Structures To Avoid	0	2	2	2	2
Parks / Recreation (Section 4f)	0	0	0	0	0

**ALTERNATIVES EVALUATION MATRIX  
I-95 at Boynton Beach Boulevard**

Evaluation Factors	No Build Alternative	TSM&O <sup>1</sup>	Concept Development Alternative	Streamlined Concept Development Alternative	Single Point Urban Interchange (SPUI) Alternative
<b>Operational Improvement (Design Year 2040)</b>					
Total Intersection Delay AM Peak Hour (minutes/vehicle)	10.75	8.45	4.75	4.77	4.33
Reduction in Delay from No-Build AM Peak Hour (percent)	-	<b>21.4%</b>	<b>55.8%</b>	<b>55.6%</b>	<b>59.7%</b>
Total Intersection Delay PM Peak Hour (minutes/vehicle)	8.68	7.27	5.47	4.82	4.45
Reduction in Delay from No-Build PM Peak Hour (percent)	-	<b>16.2%</b>	<b>37.0%</b>	<b>44.5%</b>	<b>48.7%</b>
<b>Costs (\$-millions)</b>					
Roadway Construction (LRE Cost)	N/A	N/A	\$32,914,899	\$20,377,866	\$47,478,774
Engineering/Design (10% of Construction)	N/A	N/A	\$3,291,490	\$2,037,787	\$4,747,877
CEI (15% of Construction)	N/A	N/A	\$4,937,235	\$3,056,680	\$7,121,816
Right-of-Way Acquisition	N/A	N/A	\$18,600,000	\$13,600,000	\$13,600,000
<b>TOTAL COST</b>	<b>N/A</b>	<b>N/A</b>	<b>\$59,743,624</b>	<b>\$39,072,333</b>	<b>\$72,948,467</b>

**sec/veh – seconds per vehicle**

**1** Transportation Systems Management and Operations

**2** Noise Impacts will be evaluated following selection of the Recommended Alternative

All public comments received will be considered during the PD&E Study

***PRELIMINARY***

**ALTERNATIVES EVALUTATION MATRIX  
I-95 at Gateway Boulevard**

Evaluation Factors	No Build Alternative	TSM&O <sup>1</sup>	Concept Development Alternative	Streamlined Concept Development Alternative	Single Point Urban Interchange (SPUI) Alternative
<b>Engineering</b>					
Meets Geometric Design Criteria	No	No	Yes	Some	Some
Provides Current FDOT Standards for Bicycle Facilities	No	No	Yes	Yes	Yes
Provides Pedestrian Facilities	Yes	Yes	Yes	Yes	Yes
Improves Mobility	No	Some	Yes	Yes	Yes
Improves Traffic Operations	No	Some	Yes	Yes	Yes
Improves Safety	No	Some	Yes	Yes	Yes
Meets Purpose & Need	No	No	Yes	Yes	Yes
<b>Physical Resource Impacts</b>					
Residential Properties Impacted – Single Family	0	0	41	25	25
Residential Properties Impacted – Multifamily	0	0	1	1	1
Schools Impacted	0	0	0	0	0
Business Properties Impacted	0	0	11	7	7
<b>Total Properties Impacted</b>	<b>0</b>	<b>0</b>	<b>53</b>	<b>33</b>	<b>33</b>
Displacements - Residential	0	0	5	5	6
Displacements - Commercial	0	0	1	1	1
Contamination Sites Impacted	0	0	5	3	3
Required Right of Way (Acres)	0	0	2.37	2.28	2.07
<b>Cultural and Natural Resource Impacts</b>					
Improves Air Quality	No	Some	Yes	Yes	Yes
Noise Receptors <sup>2</sup>	No	No	TBD	TBD	TBD
Wetlands (acres)	0	0	0	0	0
Wildlife and Habitat	0	0	0	0	0
Archaeological Sites	0	0	0	0	0
Current and Previously Recorded Historic Structures To Avoid	0	0	1	1	1
Parks / Recreation (Section 4f)	0	0	0	0	0

## ALTERNATIVES EVALUTATION MATRIX I-95 at Gateway Boulevard

Evaluation Factors	No Build Alternative	TSM&O <sup>1</sup>	Concept Development Alternative	Streamlined Concept Development Alternative	Single Point Urban Interchange (SPUI) Alternative
<b>Operational Improvement (Design Year 2040)</b>					
Total Intersection Delay AM Peak Hour (minutes/vehicle)	11.00	8.24	3.49	3.99	3.28
Reduction in Delay from No-Build AM Peak Hour (percent)	-	<b>25.1%</b>	<b>68.3%</b>	<b>63.7%</b>	<b>70.2%</b>
Total Intersection Delay PM Peak Hour (minutes/vehicle)	8.02	6.79	3.02	3.38	2.85
Reduction in Delay from No-Build PM Peak Hour (percent)	-	<b>15.3%</b>	<b>62.3%</b>	<b>57.9%</b>	<b>64.5%</b>
<b>Costs (\$-millions)</b>					
Roadway Construction	N/A	N/A	\$19,946,597	\$18,109,969	\$20,545,855
Engineering/Design (10% of Construction)	N/A	N/A	\$1,994,660	\$1,810,997	\$2,054,586
CEI (15% of Construction)	N/A	N/A	\$2,991,990	\$2,716,495	\$3,081,878
Right-of-Way Acquisition	N/A	N/A	\$13,000,000	\$10,700,000	\$10,100,000
<b>TOTAL COST</b>	<b>N/A</b>	<b>Low</b>	<b>\$37,933,247</b>	<b>\$33,337,461</b>	<b>\$35,782,319</b>

sec/veh – seconds per vehicle

1 Transportation Systems Management and Operations

2 Noise Impacts will be evaluated following selection of the Preferred Alternative

All public comments received will be considered during the PD&E Study

**PRELIMINARY**