

**FINAL  
LOCATION HYDRAULICS MEMORANDUM**

**I-275 (State Road 93)  
Project Development & Environment Study**

**From north of Dr. Martin Luther King, Jr. Boulevard (SR 574)  
to north of Bearss Avenue (SR 678/CR 582)**

**Hillsborough County, Florida**

**ETDM Number: 13854  
Work Program Item Segment Number: 431821-1**

**Florida Department of Transportation  
District Seven  
Tampa, Florida**

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

**January 2019**

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**FLORIDA DEPARTMENT OF TRANSPORTATION  
DISTRICT SEVEN**

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to north of Bearss Avenue (SR 678/CR 582)**

**Hillsborough County, Florida**

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This project evaluates capacity and operational improvements along Interstate 275 including the addition of a general-purpose lane in each direction and accommodates transit on the inside shoulders.

**Florida Department of Transportation**  
**District Seven**  
Tampa, Florida

Prepared By:  
**WSP, Inc.**  
Tampa, Florida

## EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT), District Seven, is conducting a Project Development and Environment (PD&E) Study to evaluate the need for capacity and operational improvements along 7.70 miles of State Road 93 (SR 93)/Interstate 275 (I-275) from north of Dr. Martin Luther King, Jr. Boulevard/SR 574 (MLK Boulevard) to north of Bearss Avenue/SR 678/County Road (CR) 582 in Hillsborough County, Florida.

The objective of the PD&E Study is to assist FDOT in reaching a decision on the type, location, and conceptual design of the I-275 improvements to safely and efficiently accommodate future travel demand. This PD&E Study documents the need for the improvements and the steps taken to develop and evaluate improvement alternatives along with proposed typical sections, and provision of general purpose lanes with transit accommodations. The anticipated social, physical, and natural environmental effects and costs of these improvements are identified, and the alternatives are compared on a variety of factors to identify the alternative that best balances the benefits (such as improved traffic operations and safety) with the impacts (such as environmental effects and construction costs).

The PD&E Study satisfies applicable state and federal requirements, including the National Environmental Policy Act, to qualify this project for federal-aid funding of future phases (design, right of way, and construction). The project was evaluated through FDOT's Efficient Transportation Decision Making (ETDM) process. This project was designated as ETDM Project #13854. An ETDM Final Programming Screen Summary Report was republished on February 7, 2014, containing comments from the Environmental Technical Advisory Team (ETAT) on the project's effects on various natural, physical, and social resources. The lead agency determined the Class of Action to be a Type 2 Categorical Exclusion

This Location Hydraulics Memorandum (LHM) was prepared as a component of the PD&E Study. The purpose of the LHM is to assess highway encroachment impacts within the 100-year (base) floodplains and any regulatory floodways that are associated with the proposed action. Project improvements will not change the flood risk for the I-275 corridor. As a result, the project will not affect existing flood heights or floodplain limits.

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## 1.0 SUMMARY OF PROJECT

The Florida Department of Transportation (FDOT), District Seven, is conducting a Project Development and Environment (PD&E) Study to evaluate the need for capacity and operational improvements along 7.70 miles of State Road 93 (SR 93)/Interstate 275 (I-275) from north of Dr. Martin Luther King, Jr. Boulevard/SR 574 (MLK Boulevard) to north of Bearss Avenue/SR 678/County Road (CR) 582 in Hillsborough County, Florida.

The objective of the PD&E Study is to assist FDOT in reaching a decision on the type, location, and conceptual design of the I-275 improvements to safely and efficiently accommodate future travel demand. This PD&E Study documents the need for the improvements and the steps taken to develop and evaluate improvement alternatives along with proposed typical sections and interchange enhancement alternatives.

This Location Hydraulics Memorandum (LHM) is an engineering tool used to identify potential floodplain encroachments due to the improvements. The information presented in this document is subject to change throughout the preliminary engineering and project design phases. Specific floodplain encroachments and mitigation calculations will be included in the *Pond Siting Report*.

### 1.1 Description of Proposed Action

The proposed action evaluates the need to provide capacity and operational improvements along 7.70 miles of State Road 93 (SR 93)/Interstate 275 (I-275) from north of MLK Boulevard to north of Bearss Avenue in Hillsborough County, Florida (see **Figure 1**). This evaluation considers the operational and highway safety benefits of implementing capacity improvements and compares them to the cost savings and minimization of adverse impacts associated with a No-Build Alternative. An evaluation matrix compares the No-Build and Build Alternative on a variety of factors. This process identifies the alternative that best balances the benefits (such as improved traffic operations and safety) with the impacts (such as environmental effects and construction costs).

The Build Alternative includes one additional travel lane in each direction of I-275. The proposed typical section contains four 12-foot general purpose lanes in each direction and accommodates transit on the inside shoulders. The improvements would be constructed on the existing alignment with the same existing horizontal and vertical geometries. All the proposed improvements within the I-275 project corridor would be accomplished within the existing right of way. Minimal right of way may be required at the Bearss Avenue interchange for storm water ponds.

Planning for the Tampa Bay area interstates began in the late 1980s with the Tampa Interstate Study (TIS) Master Plan being approved in late 1980s with improvements outlined to relieve congestion and improve mobility. The TIS Master Plan included additional travel lanes on the Tampa Bay area interstates and included a transit envelope for the east-west movement but not along this segment of I-275.

Figure 1: Project Location Map



In 2013, building upon the original TIS Master Plan, the Tampa Bay Express (TBX) program was developed to provide guidance for improvements to the Tampa Bay interstate system and identified freeway segments (including this segment of I-275) for the addition of tolled express lanes. In 2017, FDOT District Seven reset TBX to Tampa Bay Next (TBNext) to demonstrate its commitment to comprehensive, integrated transportation planning and development. As part of TBNext, FDOT District Seven committed to remove the express lanes from this segment of I-275 and allow the I-75 corridor to provide the north/south express lanes movement. Providing express lanes on I-75 is more regionally focused.

The improvements proposed for this segment of I-275, from north of MLK Boulevard to north of Bearss Avenue, will include one additional general purpose lane in each direction and improvements to the inside shoulder that will allow for the integration of infrastructure for transit.

## 1.2 Existing Facility

I-275 is a limited access freeway that runs in a north-south direction within the project limits. I-275 is part of the Federal Highway System (National Highway System) Interstate System, Florida's State Highway System, and the Strategic Intermodal System (SIS). Within the project limits there are seven interchanges:

- Hillsborough Avenue
- Sligh Avenue
- Bird Street
- Busch Boulevard
- Fowler Avenue
- Fletcher Avenue
- Bearss Avenue

The existing I-275 is a six-lane divided typical section which varies slightly throughout the project limits (see **Figure 2**). The posted speed varies from 55 mph to 65 mph. The existing right of way along I-275 ranges from approximately 220 feet between Linebaugh Avenue and Bougainvillea Avenue to approximately 1,400 feet at the Busch Boulevard interchange.

The I-275 corridor contains 18 bridges. Fourteen bridges span roadways, two bridges span both a roadway and railroad tracks, and two bridges span waterways. The 14 bridges over roadways do not meet the required minimum vertical clearance of 16.5 feet. The bridges over Busch Boulevard and US 41/Nebraska Avenue that span both a roadway and a railroad meet the minimum vertical clearance of 16.5 feet over roadways, but do not meet the required minimum vertical clearance of 23.5 feet over railroads.

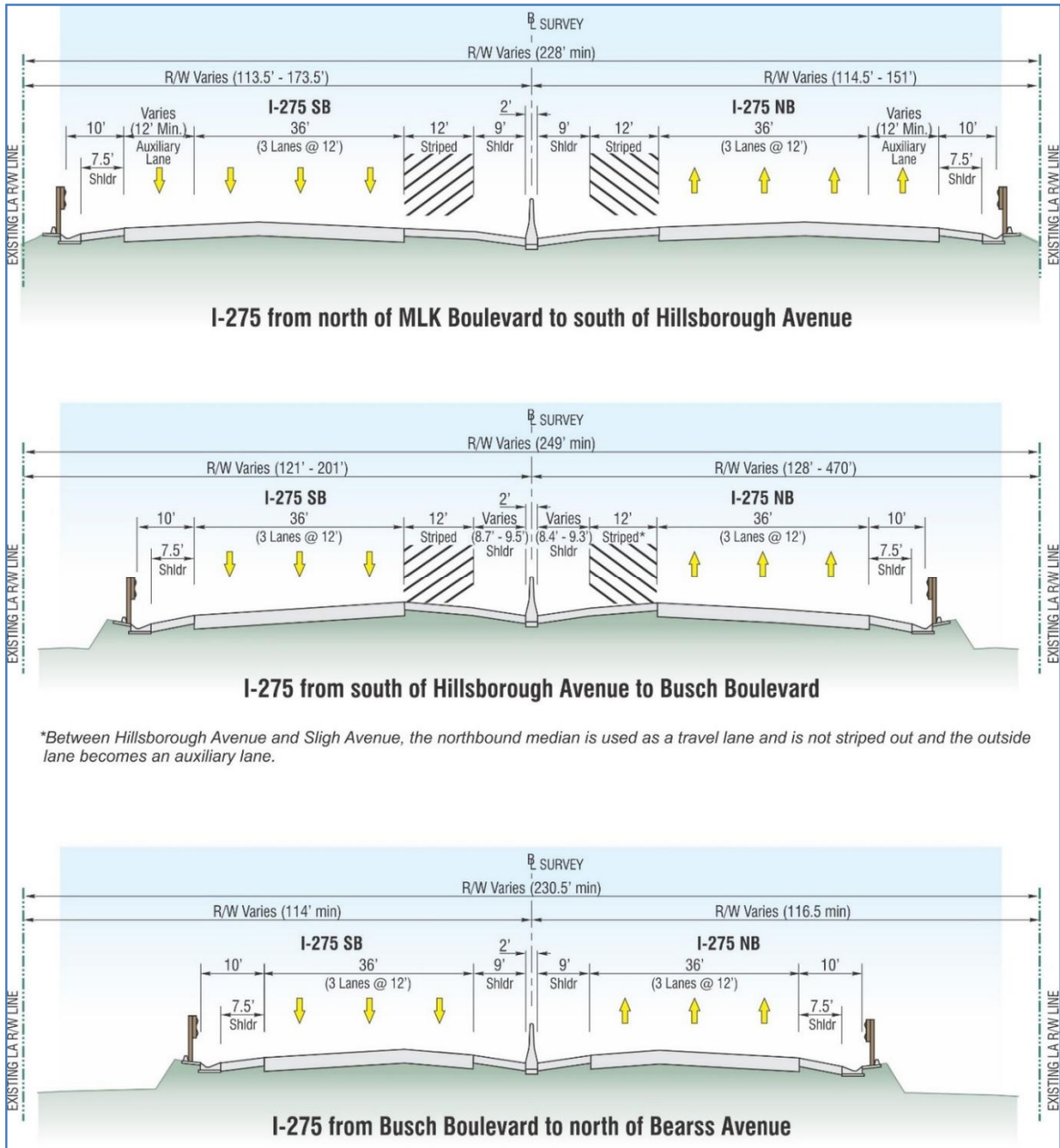
## 1.3 Project Purpose and Need

The purpose of the project is to evaluate additional lanes along I-275 from north of MLK Boulevard to north of Bearss Avenue to increase capacity and relieve congestion. These improvements are expected to enhance the overall safety and improve the operating conditions of the facility within the project limits.

Statewide and regional transportation plans and studies by FDOT and the Hillsborough County Metropolitan Planning Organization (MPO) identify the need for interstate improvements.



**Figure 2: I-275 Existing Typical Sections**



This segment of I-275 provides a vital connection to area tourist and recreational destinations, major employment/activity centers, and the University of South Florida; and is a convenient route for commuters and other work-related travel both north and south of the area. The corridor is also critical to the transport of goods and services. The capacity improvements are needed to accommodate projected future traffic and enhance corridor mobility and safety.

The need for improvements on this segment of I-275 is based on several factors. These factors include plan consistency, regional connectivity, improving safety and capacity, enhancing emergency evacuation, accommodating projected population and employment growth, supporting multi-modal service, and providing access to intermodal and freight centers.

## 1.4 Report Purpose

This Location Hydraulics Memorandum (LHM) was prepared as a component of the PD&E Study. The purpose of the LHM is to assess highway encroachment impacts within the 100-year (base) floodplains and any regulatory floodways that are associated with the proposed action. This memorandum complies with the FDOT PD&E Manual, Part 2, Chapter 13; Executive Order 11988 “Floodplain Management”, USDOT Order 5650.2, “Floodplain Management and Protection”, and Federal-Aid Policy Guidance 23 CFR 650A.

## 2.0 BUILD ALTERNATIVE

### 2.1 Mainline I-275

The Build Alternative includes widening I-275 from an existing six-lane divided interstate to an eight-lane divided interstate, plus accommodating transit on the inside shoulder. The Bearss Avenue interchange will be reconfigured and operational improvements will be implemented at Hillsborough Avenue; no other interchange configurations will change with the improvements.

The proposed typical section includes eight 12-foot wide general purpose lanes (four in each direction), two 15-foot wide inside shoulders which accommodate transit, 12-foot wide outside shoulders, and a 2-foot wide concrete barrier separating the two directions of travel. The proposed I-275 mainline typical section is shown **Figure 3**.

The existing horizontal and vertical alignment will be maintained in the Build Alternative to avoid right of way impacts. The proposed improvements for mainline I-275 will take place within the existing right of way. Minimal right of way may be required at the Bearss Avenue interchange for storm water ponds.

### 2.2 Interchange Build Alternatives

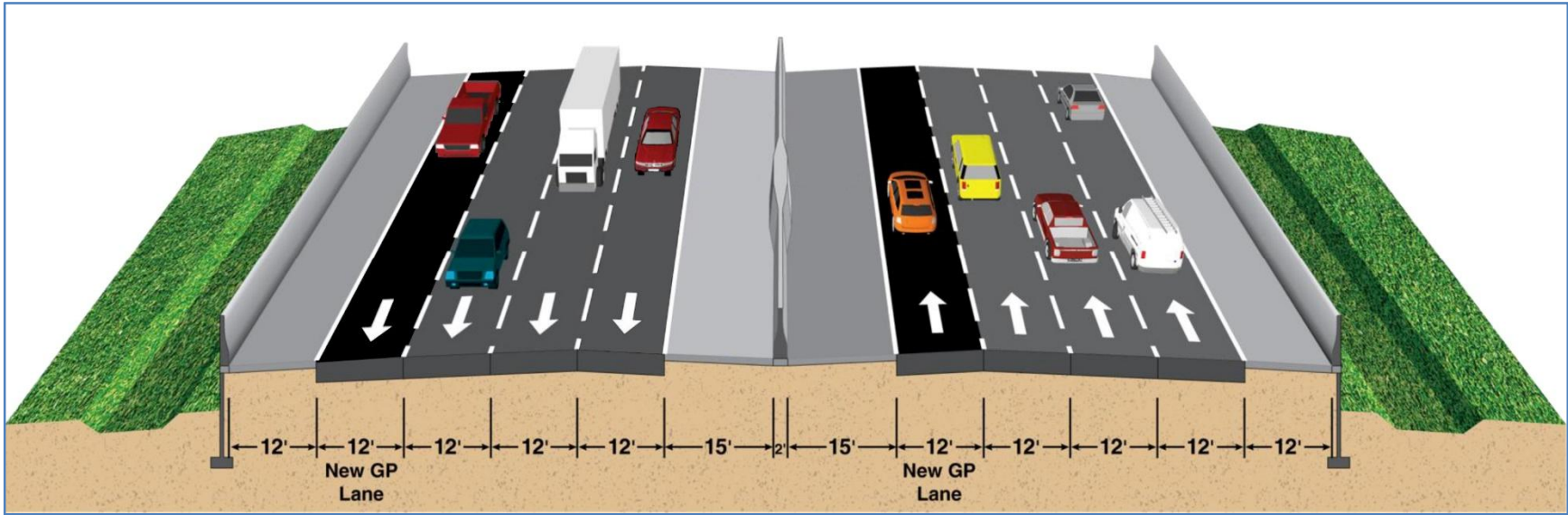
The interchange ramps along the corridor will accommodate the mainline widening of I-275, but the interchange configurations will not change, with the exception of Hillsborough Avenue and Bearss Avenue interchanges. Operational improvements will be included at these two interchanges.

On Hillsborough Avenue, east of I-275, a signal is proposed for the on-ramp for I-275 northbound. An eastbound to northbound dual left will be constructed at this intersection by widening Hillsborough Avenue to accommodate more vehicles entering I-275. Also, the I-275 northbound loop off-ramp will be reconstructed to direct traffic to this proposed signalized intersection.

The vertical and horizontal constraints at the existing bridges at the Bearss Avenue interchange cannot accommodate the proposed improvements; thus, the Bearss Avenue interchange will be reconstructed as a single point urban interchange (SPUI). The design includes reconstructing the I-275 bridge over Bearss Avenue and reconstructing the on- and off-ramps from the I-275 gores to approximately halfway to the Bearss Avenue intersection. The bridge design will accommodate potential future widening of Bearss Avenue.

The future configuration would have one traffic signal underneath the I-275 bridge to control through traffic on Bearss Avenue and left-turning traffic entering or exiting I-275 at the intersection.

Figure 3: I-275 Proposed Typical Section



### 3.0 DATA COLLECTION

As shown in **Table 1**, many diverse sources were utilized to complete the review of the existing hydraulics within the project corridor.

**Table 1: List of Data Collected**

Data	Source	Agency
Drainage Divides, Drainage Patterns, and Existing Stormwater Pipes	Historic Drainage Maps	FDOT
Hillsborough River Bridge Data	Existing Construction Plans	FDOT
Flooding Complaints	FDOT D7 Flood Inventory	FDOT
GIS Base Layers	Florida Geographic Data Library (FGDL)	Varies
Federal Emergency Management Agency (FEMA) Floodplain Data	FEMA Flood Insurance Rate Maps (FIRMs)	FEMA
Soils Information	National Resource Conservation Service (NRCS)	US Department of Agriculture (USDA)
Digital Elevation Model (DEM)	Hillsborough County	Hillsborough County
Southwest Florida Water Management District (SWFWMD) Light Detection and Ranging (LIDAR) Data	SWFWMD	SWFWMD
Digital Orthophotography	United States Geological Survey (USGS)	USGS

## 4.0 EXISTING CONDITIONS

### 4.1 Existing Project Drainage Basins

The project is located mainly within the Hillsborough Bay Watershed which encompasses 1,282 square miles. The remaining area of the I-275 project lies within the Coastal Old Tampa Bay Watershed which spans 338 square miles. Both watersheds ultimately drain to Tampa Bay. Both Hillsborough Bay and Coastal Old Tampa Bay Watersheds are part of the larger regional Tampa Bay Watershed which encompasses 2,200 square miles. The drainage basins in the study area as delineated by the Southwest Florida Water Management District (SWFWMD) include the Hillsborough River, Sulphur Springs, Curiosity Creek, Chapman Lake Outlet, and Cypress Creek. The only major water body within the project limits is the Hillsborough River.

### 4.2 Cross Drains and Bridges

Within the project corridor, I-275 crosses the Hillsborough River. The existing I-275 Bridge (Bridge No. 100218) over the Hillsborough River was originally constructed in 1967. The bridge was widened in 2009. The bridge consists of five 60'-0" spans. The overall bridge length is 300'-0", measured along the centerline of I-275. The overall out-to-out width of the bridge is 163'-1". Details regarding the Hillsborough River Bridge are included in **Table 2**.

**Table 2: Existing Bridges**

Structure	Station	Width	Length
Hillsborough River Bridge	1901+25	163'1"	300'

In addition to the bridge, there are 16 pipes that cross through the existing I-275 alignment. Locations of these pipe systems are taken from existing drainage maps, permit research and field investigations. In Basins 1 through 9 all cross drains are closed storm sewer pipes that ultimately discharge to the Hillsborough River. Basin 6 does not have any cross drains. The cross drains located in Basins 10 through 15 do not connect to existing storm sewer systems. There are no cross drains in Basin 16. A summary of the major cross drains is provided in **Table 3**.

**Table 3: I-275 Main Storm and Cross Drains**

Basin No.	Station (CL of Const.)	Size (inch)	Comment
1	1810+50	(2) 54	Closed Storm Sewer
2	1827+25	30	Closed Storm Sewer
3	1867+60	24	Closed Storm Sewer
4/5	1887+70	24	Closed Storm Sewer
7	1940+00	48	Closed Storm Sewer
8	1974+28	36	Closed Storm Sewer
9	1988+41	42	Closed Storm Sewer
9	1994+71	42	Closed Storm Sewer
9	2016+31	42	Closed Storm Sewer
9	2021+46	36	Closed Storm Sewer
10	2047+95	24	Open Cross Drain
11	2060+69	30	Discharges to Sink Hole
12	2070+46	30	Open Cross Drain
13	2094+70	24	Open Cross Drain
14	2136+24	36	Open Cross Drain
15	2157+27	36	Open Cross Drain

### 4.3 Floodplains and Floodway

Information obtained from the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) shows the project crosses through the limits of the 100-year floodplain at several locations along the project corridor. Segments where potential impacts to the 100-year floodplain could occur are shown on FEMA Map No. 12057C0214H and 12057C0204H. The FEMA maps are provided in **Appendix A**.

According to FEMA, the Hillsborough River is a regulated floodway at the I-275 bridge crossing. The base flood elevation North American Vertical Datum of 1988 (NAVD 88) for the Hillsborough River at the bridge crossing is 10.0 feet. There are minor floodplain impacts anticipated at the Hillsborough River due to proposed piles being placed in the River.

### 4.4 Flooding Inventory

According to the FDOT District Seven Drainage Flood Inventory, there are five documented drainage complaints within the project limits. It is recommended that the flooding complaints within and adjacent to the project area be researched during the design phase of the project. The five drainage complaints are summarized in this section.

During storm events in 2003, Central Avenue (near the I-275 southbound exit ramp) experienced roadway flooding; and, as a result, residential yards and areas adjacent to a house near Fowler Avenue flooded. A recommendation was made to re-grade and lower the ditch to help relieve flooding during storm events. This work was completed and the flooding complaint (#1002042009547) was closed.

In another area on 122nd Avenue adjacent to I-275, a residential property located at 702 E 122nd Avenue is experiencing flooding in the front and back side of the house. Based on the flooding complaint (#1006172010814), Taliaferro Avenue (which intersects with 122<sup>nd</sup> Avenue) is an area predisposed to flooding. Due to right of way constraints, maintaining this ditch along I-275 is very difficult. Improving the I-275 ditch maintainability may alleviate some of the runoff being sent offsite during heavy rainfall events. This area is likely to be evaluated in more detail during the design phase.

The area at the end of 126th Street, near the noise wall on the east side of I-275 is subject to local roadway flooding. A local resident that lives on the south side of 126th Street was interviewed. According to this resident the roadway area fills with water, then seeps into the ground after the rain stops. FDOT coordinated with Hillsborough County who agreed to survey the area to get a better idea of the existing conditions. Roadway flooding was also reported along 127th Avenue; however, it was addressed by the County. Modification of existing soundwall panel at end of 126th St may still need to be incorporated into this project's design, and design coordination with District Drainage is recommended during design phase. These flooding complaints are referenced as #1003282013398 and #1007022010774 in the District Seven flooding inventory system.

There is a flooding complaint (#1012242009952) associated with April Lane and Garland Court west of I-275. It is reported that the construction of a FDOT I-275 stormwater pond has worsened flooding problems in the receiving wetland system and the surrounding residential area. An alternative analysis was performed and the recommendation was to modify the existing control structure to decrease discharge. This flooding complaint is likely to be verified and analyzed during the design phase of this project.

A flooding complaint located south of the intersection of I-275 and Nebraska Avenue was submitted to the FDOT in August 2015. The complaint states that a FDOT pond overtops and floods adjacent properties including Clear Lane. The stormwater pond was created by enlarging an existing surface water to accommodate the stormwater requirements for the widening of I-275 from four to six lanes. An investigation report of the flooding was performed and submitted to FDOT District Seven titled "Pond 3 Drainage Design (I-275/US 41 Apex)". Based on the report's preliminary recommendation, the flooding of the adjacent properties is attributed to the fact that the historical overtopping elevation is higher than surrounding properties. Therefore, no action is recommended.

## **5.0 PROPOSED CONDITIONS**

### **5.1 Floodplain Encroachment and Compensation**

Impacts to the 100-year floodplain resulting from the proposed improvements will occur in two different ways: longitudinal impacts that occur as a result of the road widening, and transverse



impacts resulting from widening the Hillsborough River Bridge. Each potential type of impact is discussed in the following paragraphs.

There is potential for longitudinal impacts to the floodplain that will require compensation. The magnitude of the impacts to the floodplain cannot be verified until the design phase. However, a preliminary analysis of floodplain impacts for the Build Alternative was conducted and determined the longitudinal impacts will occur in Basin 14. Per the FEMA floodplain maps, the base flood elevation in Basin 14 is 50.1 feet. A preliminary analysis estimates that 1.00 acre-feet of floodplain will be impacted in this basin. The impact is proposed to be compensated by grading a linear swale. The compensation site is referred to as Floodplain Compensation site 14 (FPC-14) and will be constructed within the existing right of way between Station 4102+00 and Station 4121+10 on the east side of I-275. The location of the floodplain compensation site is shown on the drainage maps included in **Appendix B**.

The Build Alternative will widen the existing bridges over the Hillsborough River resulting in minor transverse impacts. The transverse impacts occur from piles constructed in the Hillsborough River to accommodate the proposed widening. A Bridge Hydraulics Report including scour analysis and a no rise will be performed during the design phase to verify upstream flood stages are maintained within the specified limits.

## 5.2 Project Classification

In accordance with the requirements set forth in 23 CFR 650A, the project corridor was evaluated to determine the effects of the proposed improvements on the hydrology and hydraulics of the surrounding area. A significant portion of this project is located in a highly developed urban area. The FDOT's and SWFWMD's design standards, which do not allow for significant impacts, will be adhered to for the design of this project.

Replacement drainage structures for this project are limited to hydraulically equivalent structures. The limitations to the hydraulic equivalency being proposed are basically due to restrictions imposed by the geometrics of design, existing development, cost feasibility, or practicability. An alternative encroachment location is not considered in this category since it defeats the project purpose or is economically unfeasible. Since existing offsite flooding conditions in the project area are inherent in the topography or are a result of other outside contributing sources; there is no alternative to totally eradicate existing flooding areas. The goal of this project is to mitigate for flooding where cost feasible and at a minimum not exacerbate current flooding conditions. The proposed structures will be hydraulically equivalent to or greater than the existing structures, and backwater surface elevations are not expected to increase. As a result, the project will not affect existing flood heights or floodplain limits. This project will not result in any new or increased adverse environmental impacts. There will be no significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that hydraulic impacts from this widening project are not significant.

## 6.0 REGULATORY AGENCY COORDINATION

### 6.1 State Agencies

The state agencies involved in the permitting process for I-275 are SWFWMD and the Florida Department of Environmental Protection. Once this project enters the design phase, a SWFWMD pre-application meeting is recommended to discuss project improvements.

### 6.2 Federal Agencies

Federal agencies that may require permits for the proposed I-275 improvements include the US Army Corps of Engineers (USACE) and FEMA. Federal agency coordination and design criteria will be covered in SWFWMD permitting.

## 7.0 CONCLUSIONS

Based on a preliminary analysis, there will be longitudinal floodplain impacts due to the proposed roadway widening. Preliminary floodplain impact calculations indicate approximately 1.00 acre-feet of impact will result from the widening. It is anticipated that compensation for the impacts will be provided in linear swales within the existing right of way. The size and location of the compensation sites will be finalized during the design phase of the project. There is also potential for transverse minor impacts at the Hillsborough River Bridges due to the piles for the bridge widening. It is not anticipated that the piles will impact the 100-year floodplain or require floodplain compensation.

Project improvements will not change the flood risk for the I-275 corridor. Replacement drainage structures for this project are limited to hydraulically equivalent structures. The limitations to the hydraulic equivalency being proposed are basically due to restrictions imposed by the geometrics of design, existing development, cost feasibility, or practicability. An alternative encroachment location is not considered in this category since it defeats the project purpose or is economically unfeasible. Since existing offsite flooding conditions in the project area are inherent in the topography or are a result of other outside contributing sources; there is no alternative to totally eradicate existing flooding areas. The goal of this project is to mitigate for flooding where cost feasible and at a minimum not exacerbate current flooding conditions. The proposed structures will be hydraulically equivalent to or greater than the existing structures, and backwater surface elevations are not expected to increase. As a result, the project will not affect existing flood heights or floodplain limits. This project will not result in any new or increased adverse environmental impacts. There will be no significant change in the potential for interruption or termination of emergency service or emergency evacuation routes. Therefore, it has been determined that this encroachment is not significant.

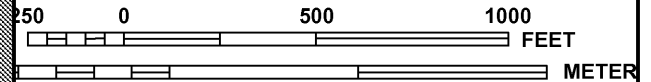
## 8.0 REFERENCES

1. FDOT 2019 Drainage Manual
2. FDOT 2018 Drainage Design Guide
3. SWFWMD Environmental Resource Permit Manual
4. Tampa Bay Water Atlas
5. I-275 Flood Investigation Inventory Sheet
6. Tampa Bay Surface Water Improvement and Management Plan, SWFWMD, February 1999

# **Appendix A FEMA FIRM Maps**

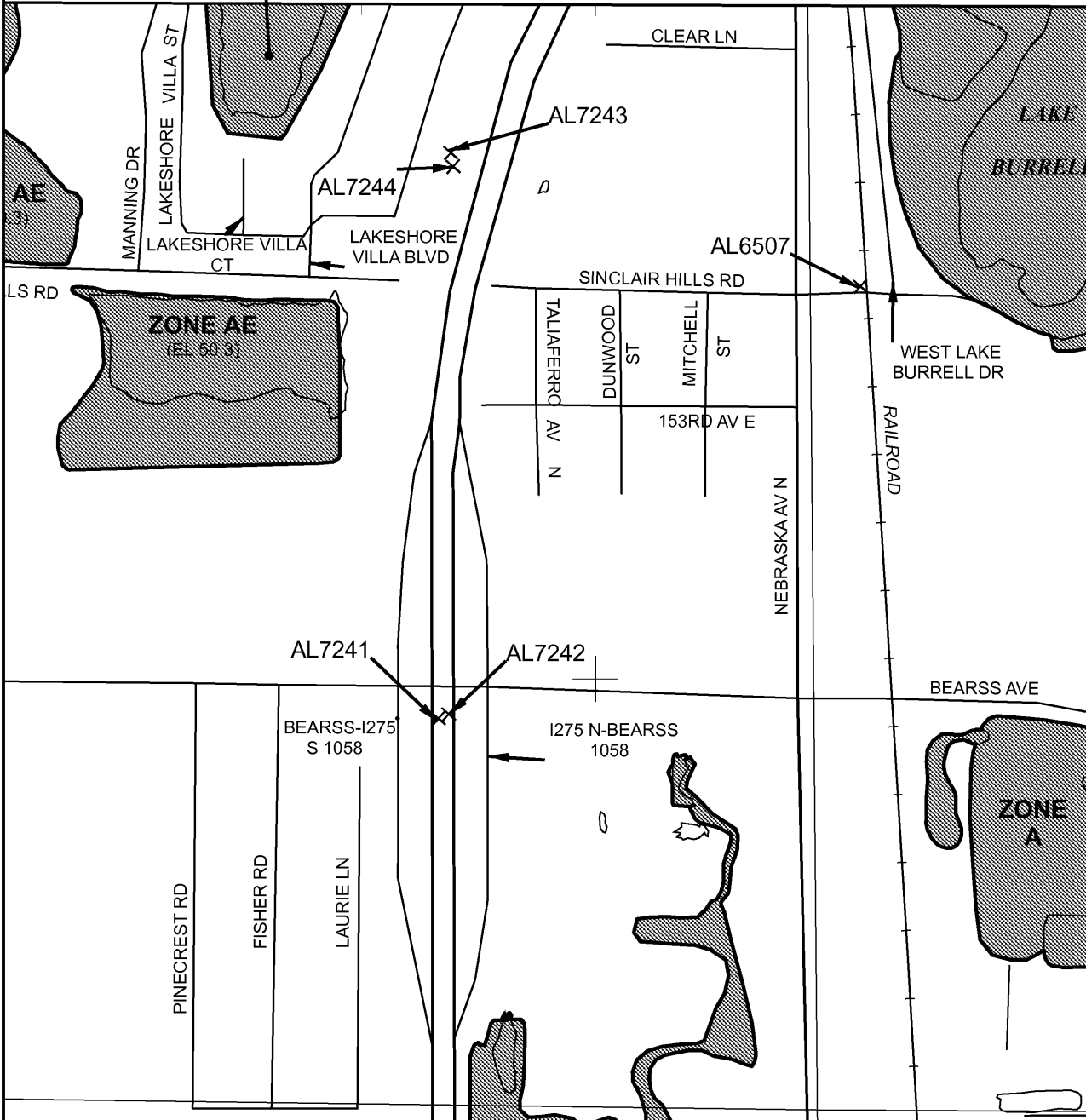


MAP SCALE 1" = 500'



510000 FT JOINS PANEL 0205

**ZONE AE**  
(EL 52.9)



PANEL 0204H

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

**HILLSBOROUGH COUNTY,  
FLORIDA  
AND INCORPORATED AREAS**

**PANEL 204 OF 801**

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
HILLSBOROUGH COUNTY	120112	0204	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



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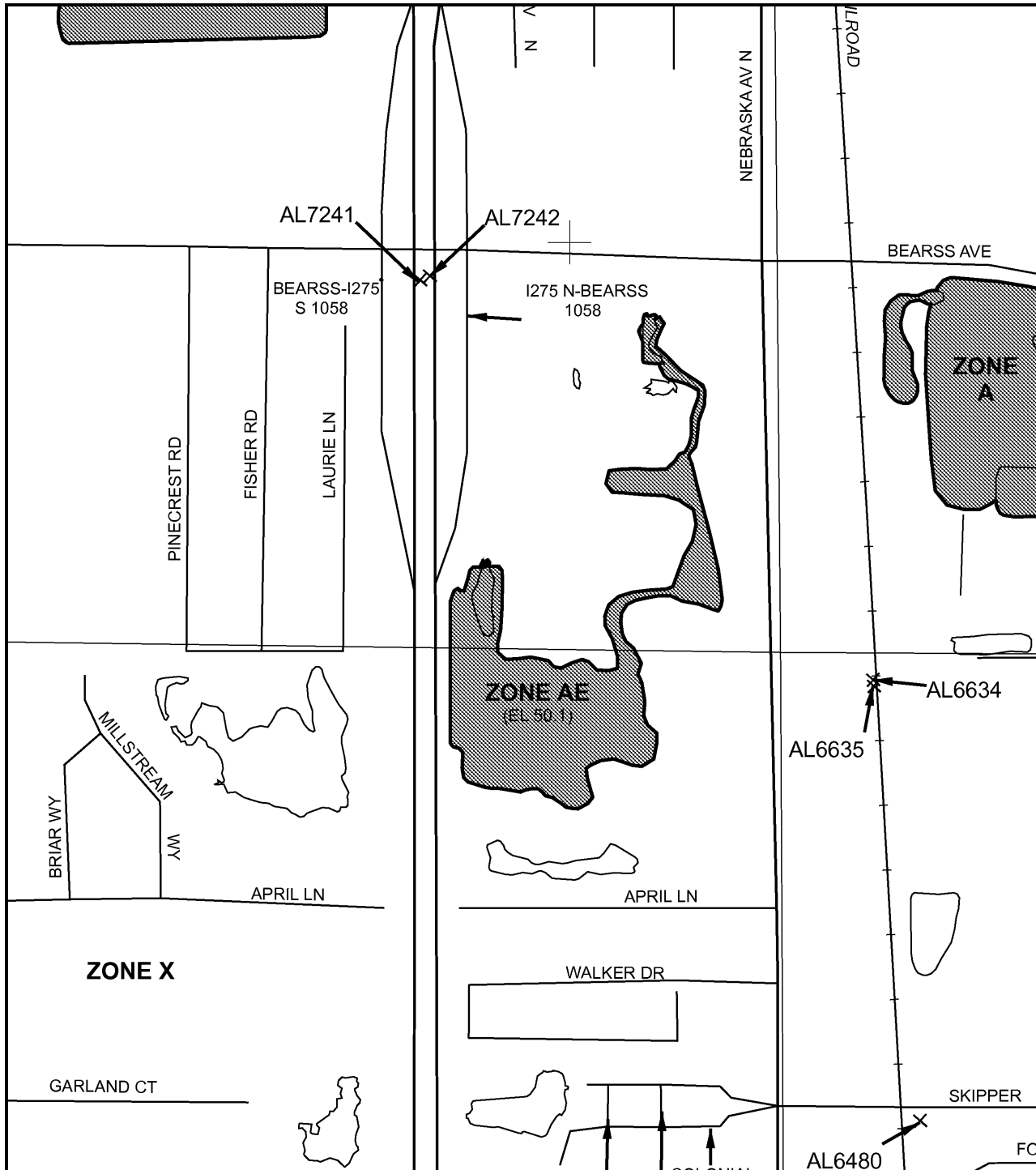
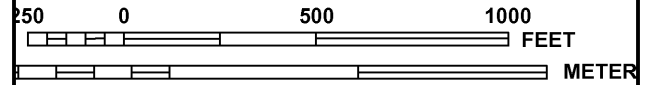
**EFFECTIVE DATE**  
**AUGUST 28, 2008**

**Federal Emergency Management Agency**

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0204H

# FIRM

FLOOD INSURANCE RATE MAP

HILLSBOROUGH COUNTY,  
FLORIDA  
AND INCORPORATED AREAS

PANEL 204 OF 801

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

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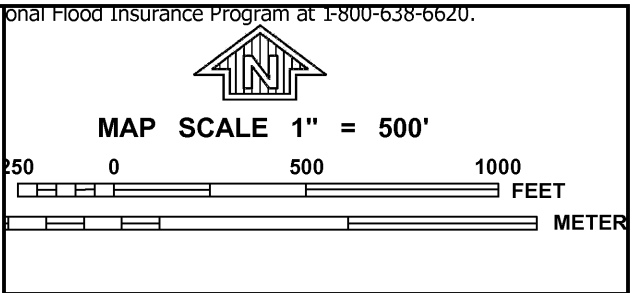
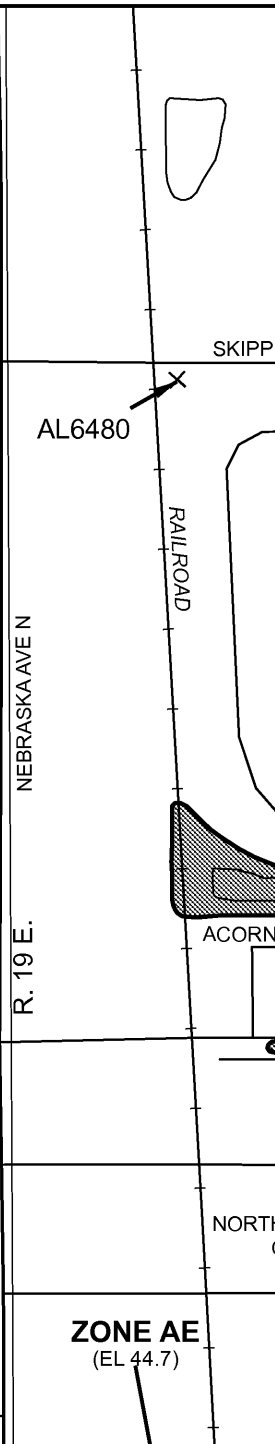
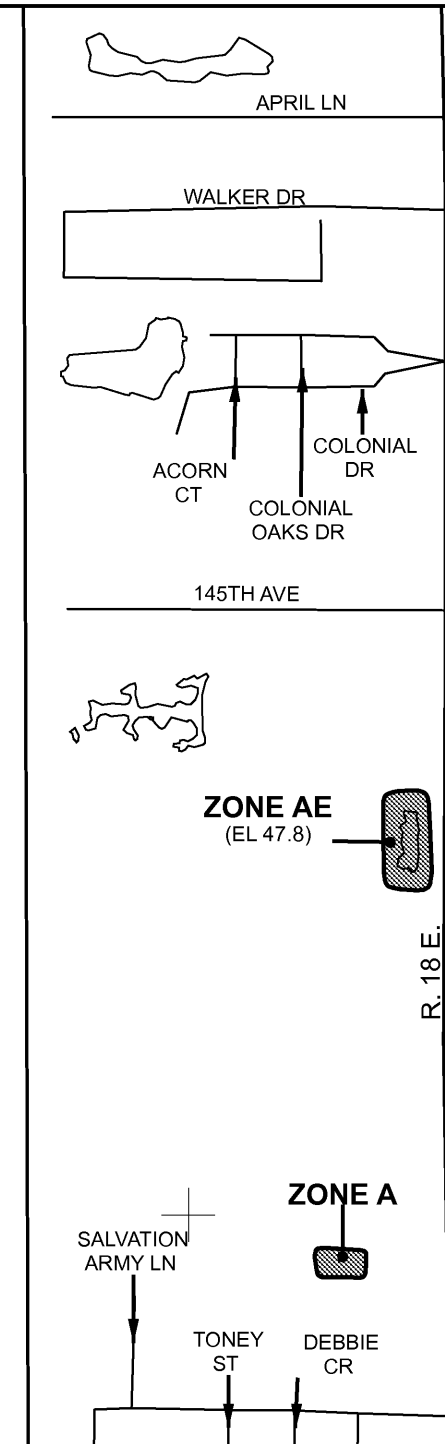
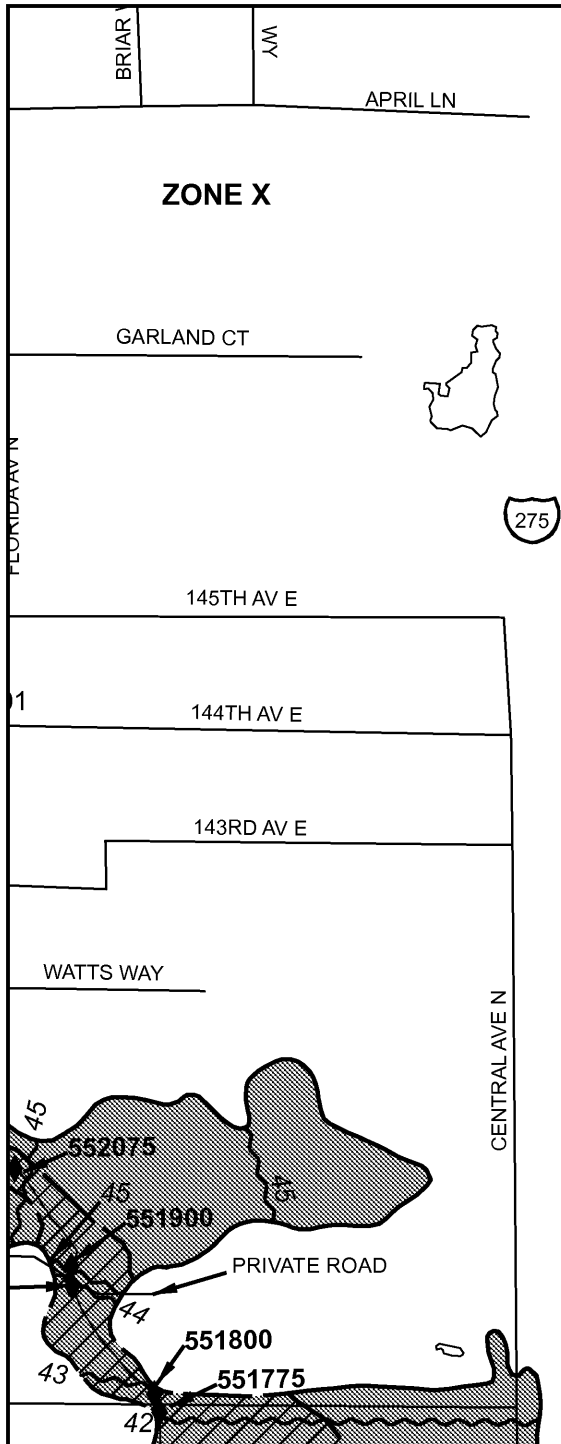


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National Flood Insurance Program at 1-800-638-6620.

**PANEL 0204H**

**FIRM**  
FLOOD INSURANCE RATE MAP

**HILLSBOROUGH COUNTY,  
FLORIDA  
AND INCORPORATED AREAS**

**PANEL 204 OF 801**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HILLSBOROUGH COUNTY	120112	0204	H

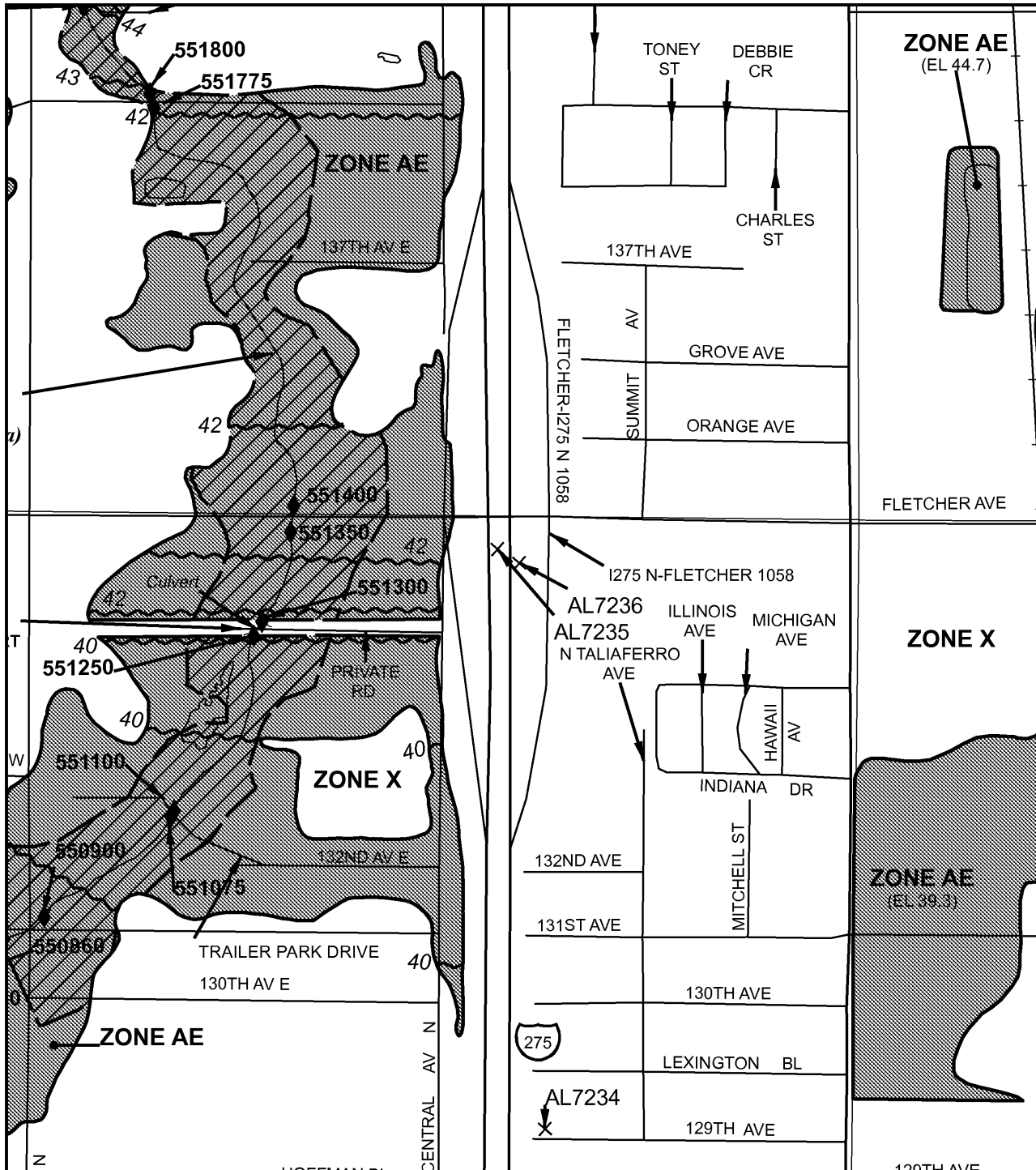
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
12057C0204H

**EFFECTIVE DATE**  
AUGUST 28, 2008

Federal Emergency Management Agency

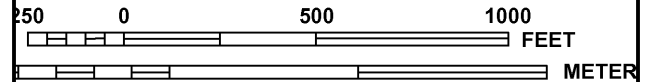
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)



**ZONE AE**  
(EL 44.7)



**MAP SCALE 1" = 500'**



PANEL 0204H

**FIRM**  
FLOOD INSURANCE RATE MAP

**HILLSBOROUGH COUNTY,  
FLORIDA  
AND INCORPORATED AREAS**

**PANEL 204 OF 801**

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HILLSBOROUGH COUNTY	120112	0204	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



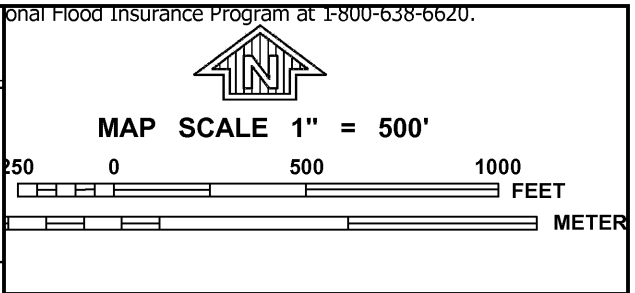
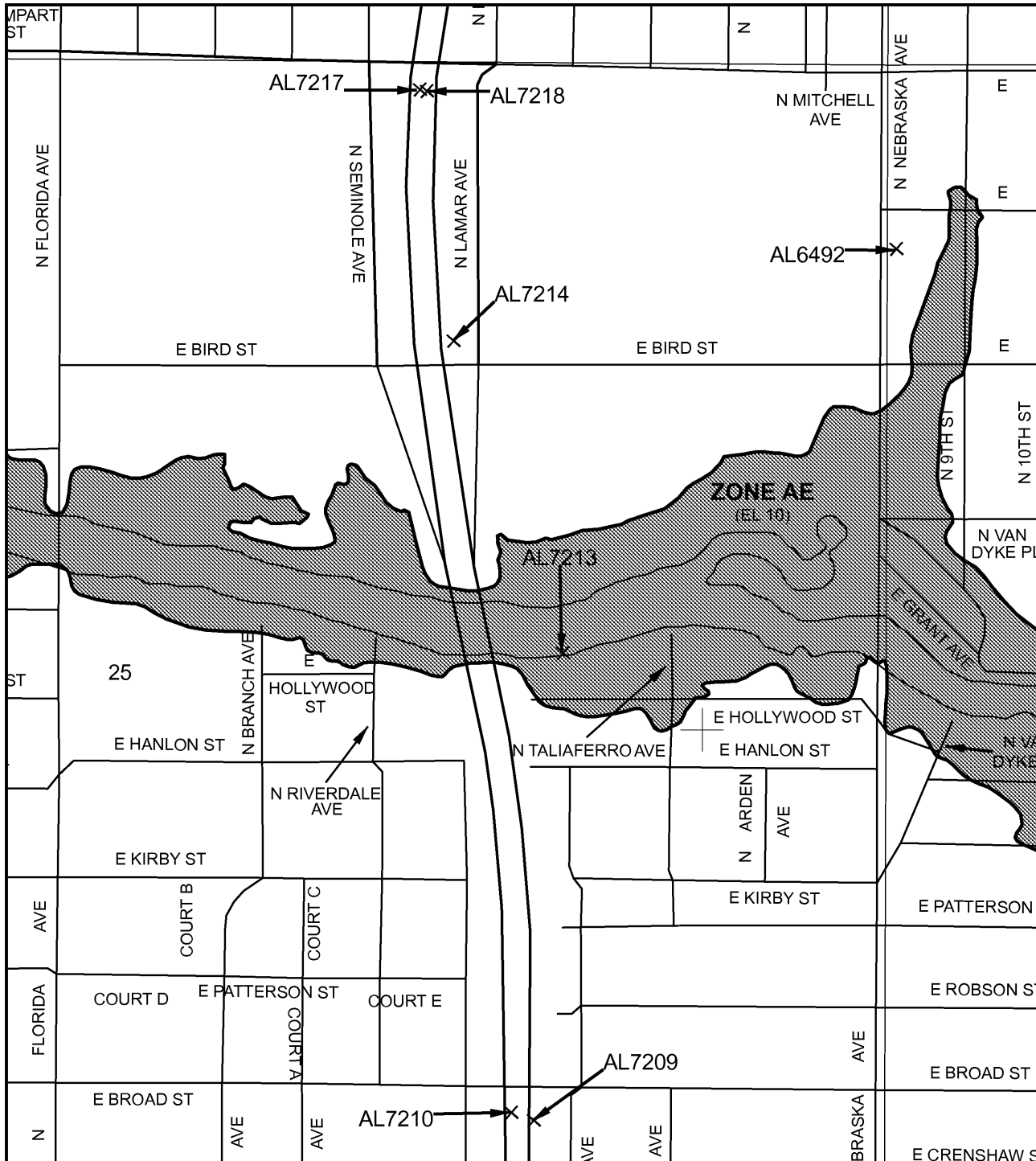
**MAP NUMBER**  
**12057C0204H**

**EFFECTIVE DATE**  
**AUGUST 28, 2008**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)





NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0214H

## FIRM

**FLOOD INSURANCE RATE MAP**

**HILLSBOROUGH COUNTY, FLORIDA AND INCORPORATED AREAS**

**PANEL 214 OF 801**

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
TAMPA, CITY OF	120114	0214	H

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
**12057C0214H**

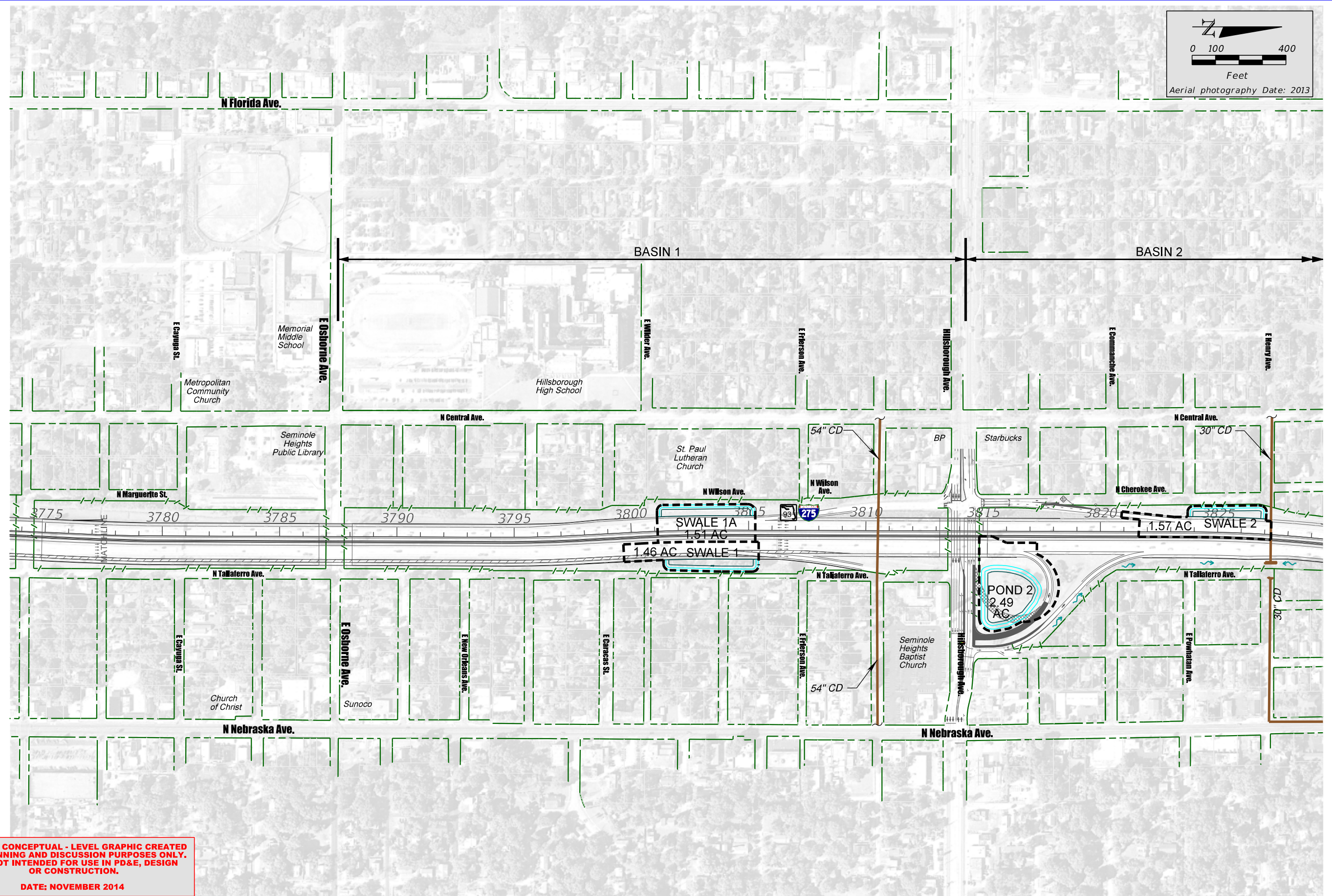
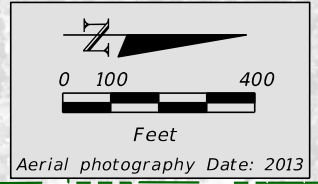
**EFFECTIVE DATE**  
**AUGUST 28, 2008**

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

## **Appendix B**

# **Proposed Conditions Drainage Maps**



**THIS IS A CONCEPTUAL - LEVEL GRAPHIC CREATED FOR PLANNING AND DISCUSSION PURPOSES ONLY. IT IS NOT INTENDED FOR USE IN PD&E, DESIGN OR CONSTRUCTION.**

**DATE: NOVEMBER 2014**

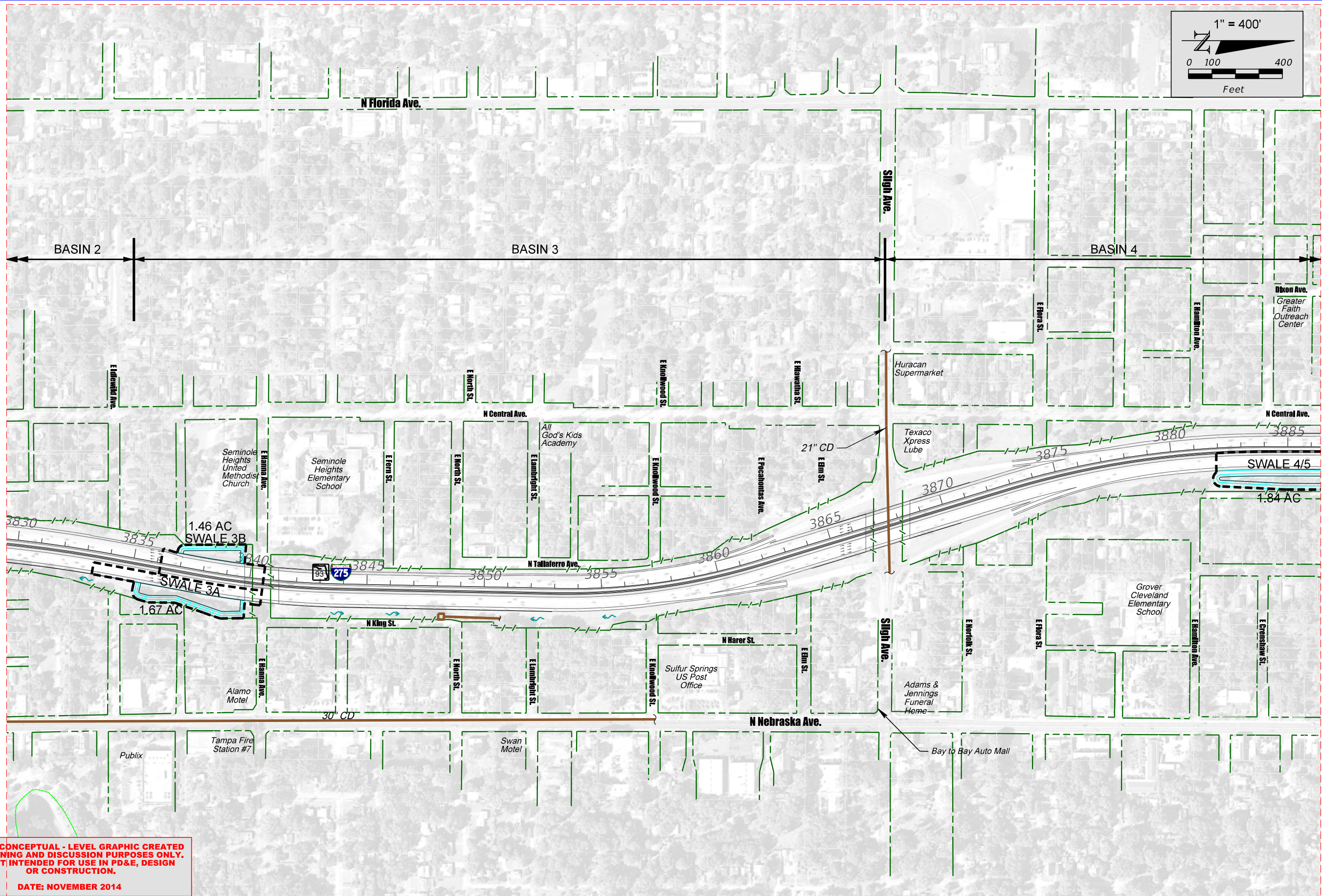
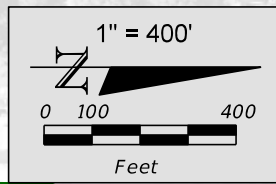
<b>LEGEND</b>		Proposed Stormwater Management Facility		National Wetland Inventory		Property/ROW Line
		Proposed Floodplain Compensation Area		FEMA Flood Map		Proposed LA Right-of-Way
		Flow Arrow		Cross Drain		Existing Pond



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-93	HILLSBOROUGH	431821 1 22 01

*I 275 PD&E*  
**DRAINAGE MAP (1)**

SHEET NO.  
**1**



**THIS IS A CONCEPTUAL - LEVEL GRAPHIC CREATED FOR PLANNING AND DISCUSSION PURPOSES ONLY. IT IS NOT INTENDED FOR USE IN PD&E, DESIGN OR CONSTRUCTION.**

DATE: NOVEMBER 2014

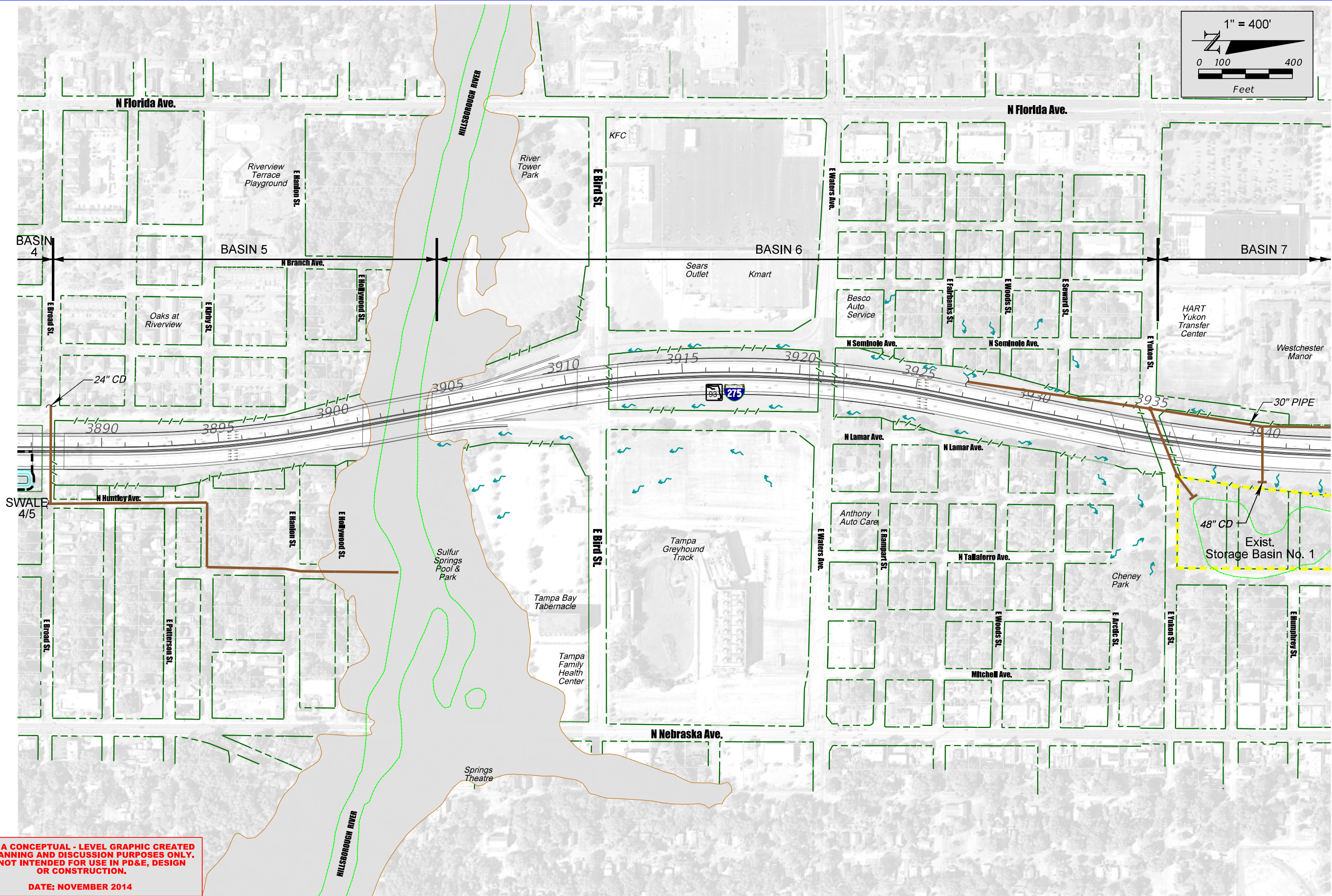
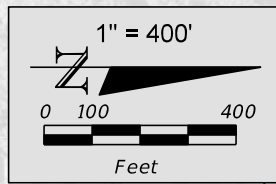
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		Proposed Floodplain Compensation Area		FEMA Flood Map		Proposed LA Right-of-Way
		Flow Arrow		Cross Drain		Existing Pond



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-93	HILLSBOROUGH	431821 1 22 01

*I 275 PD&E*  
**DRAINAGE MAP (2)**

SHEET NO.  
2



**THIS IS A CONCEPTUAL - LEVEL GRAPHIC CREATED FOR PLANNING AND DISCUSSION PURPOSES ONLY. IT IS NOT INTENDED FOR USE IN PD&E, DESIGN OR CONSTRUCTION.**

**DATE: NOVEMBER 2014**

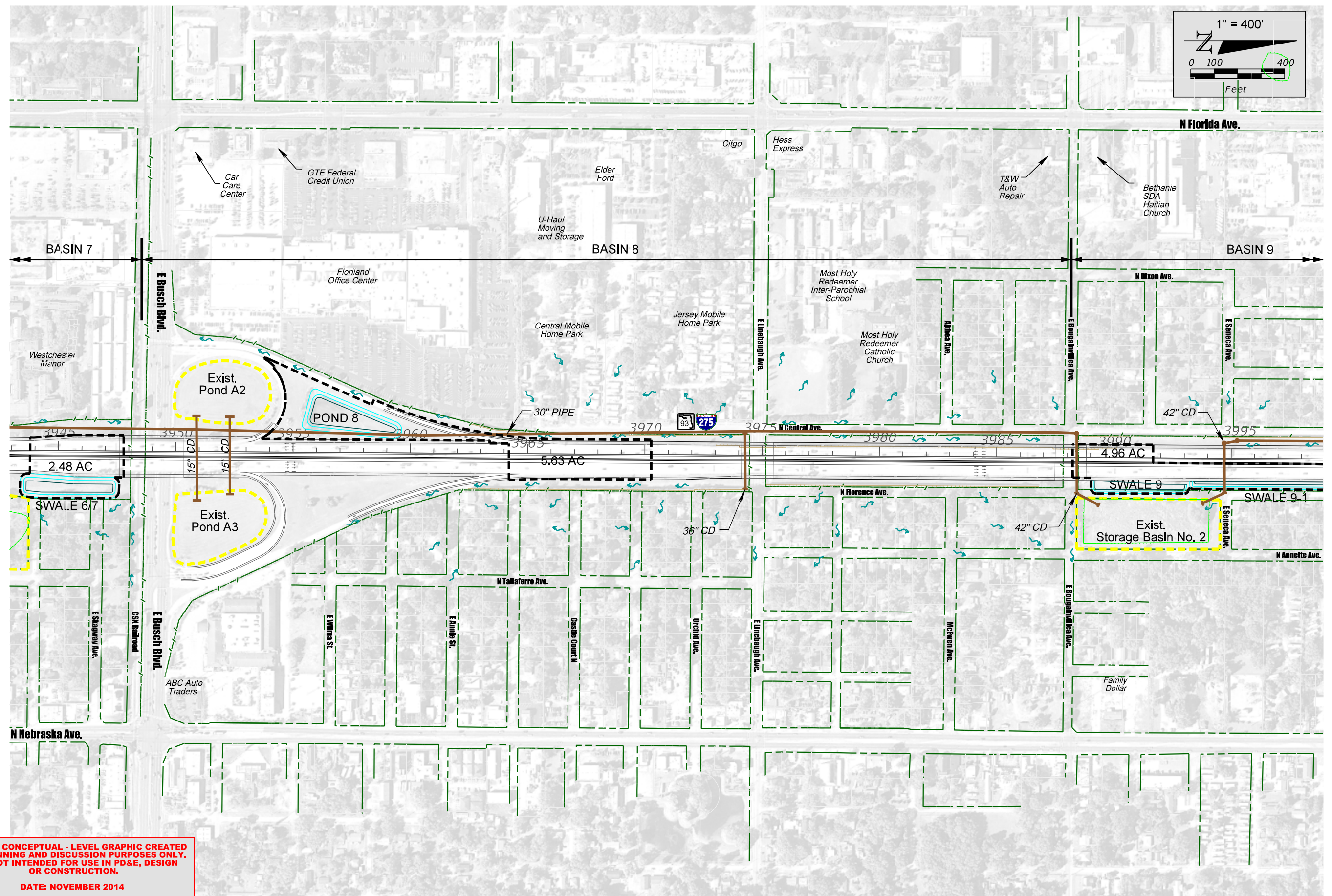
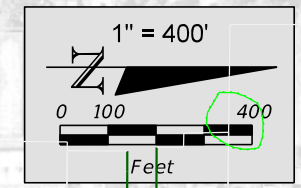
<b>LEGEND</b>		Proposed Stormwater Management Facility		National Wetland Inventory		Property/ROW Line
		Proposed Floodplain Compensation Area		FEMA Flood Map		LA Right-of-Way
		Flow Arrow		Cross Drain		Proposed LA Right-of-Way
				Existing Pond		



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-93	HILLSBOROUGH	431821 1 22 01

*I 275 PD&E*  
**DRAINAGE MAP (3)**

SHEET NO.  
**3**



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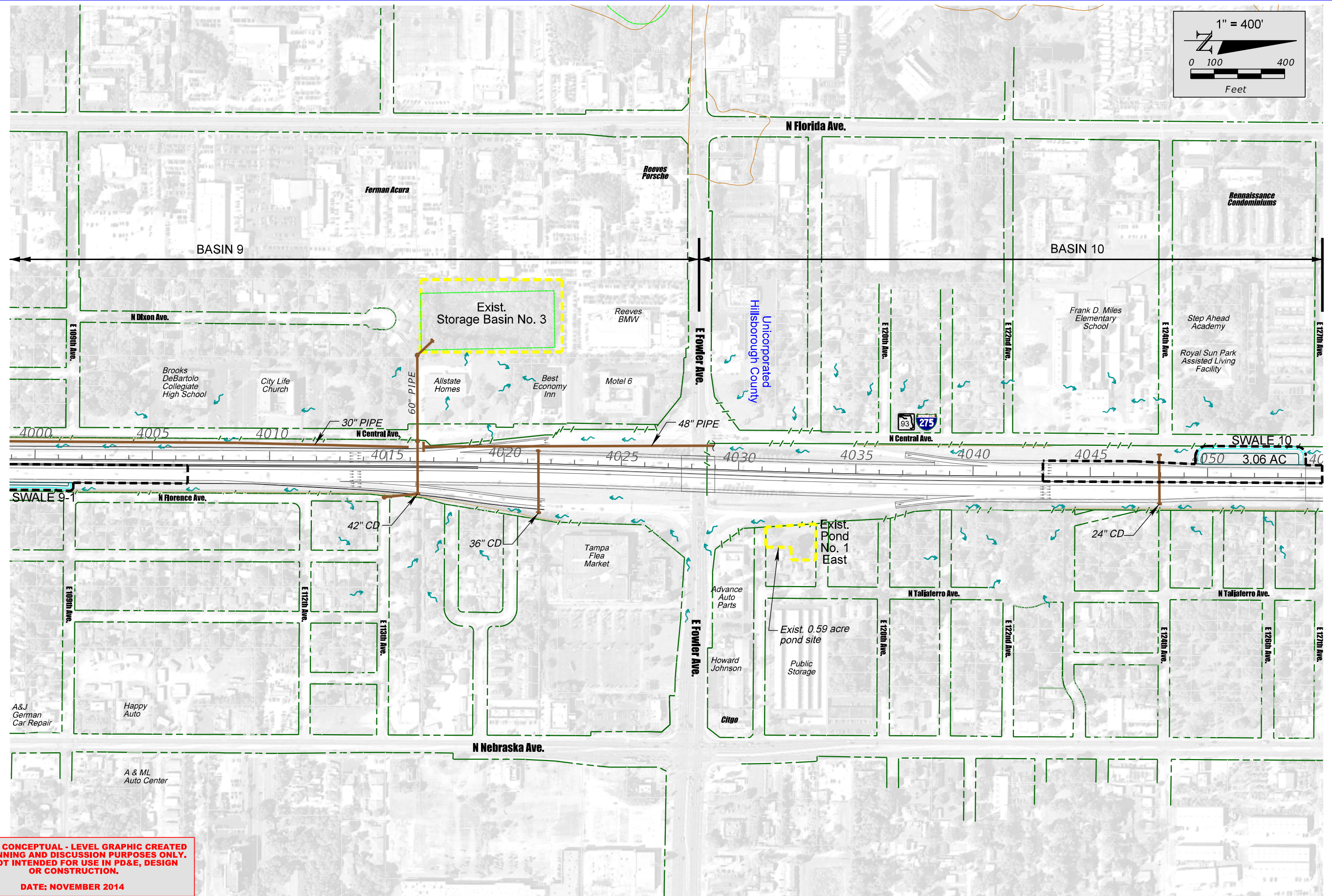
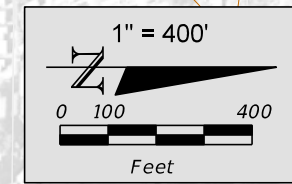
<b>LEGEND</b>		Proposed Stormwater Management Facility		National Wetland Inventory		Property/ROW Line
		Proposed Floodplain Compensation Area		FEMA Flood Map		Proposed LA Right-of-Way
		Flow Arrow		Cross Drain		Existing Pond



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-93	HILLSBOROUGH	431821 1 22 01

*I 275 PD&E*  
**DRAINAGE MAP (4)**

SHEET NO.  
4



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**DATE: NOVEMBER 2014**

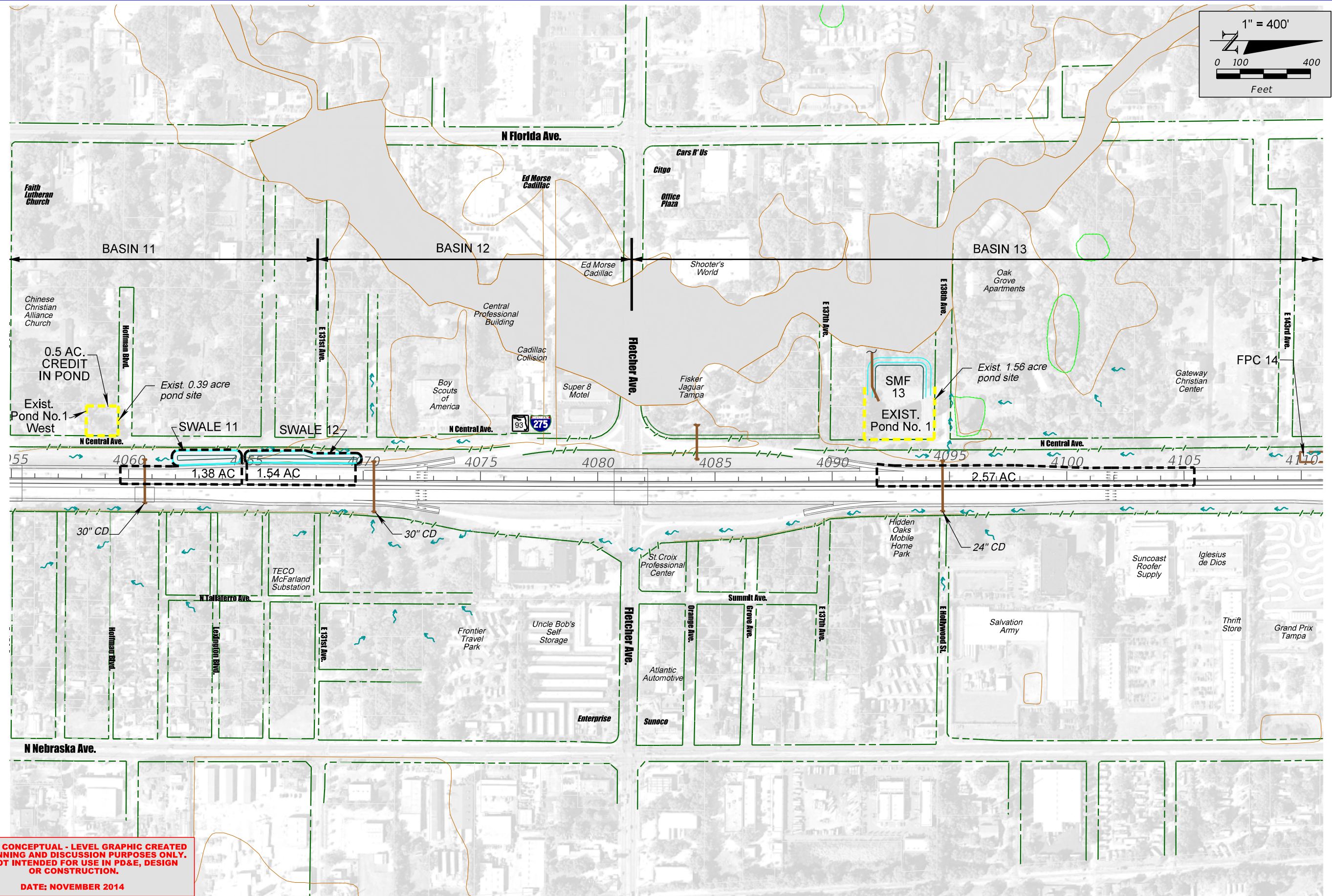
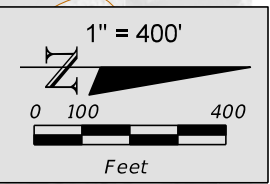
<b>LEGEND</b>		Proposed Stormwater Management Facility		National Wetland Inventory		Property/ROW Line
		Proposed Floodplain Compensation Area		FEMA Flood Map		Proposed LA Right-of-Way
		Flow Arrow		Cross Drain		Existing Pond



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-93	HILLSBOROUGH	431821 1 22 01

*I 275 PD&E*  
**DRAINAGE MAP (5)**

SHEET NO.  
**5**



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**DATE: NOVEMBER 2014**

<b>LEGEND</b>		Proposed Stormwater Management Facility		National Wetland Inventory		Property/ROW Line
		Proposed Floodplain Compensation Area		FEMA Flood Map		Proposed LA Right-of-Way
		Flow Arrow		Cross Drain		Existing Pond

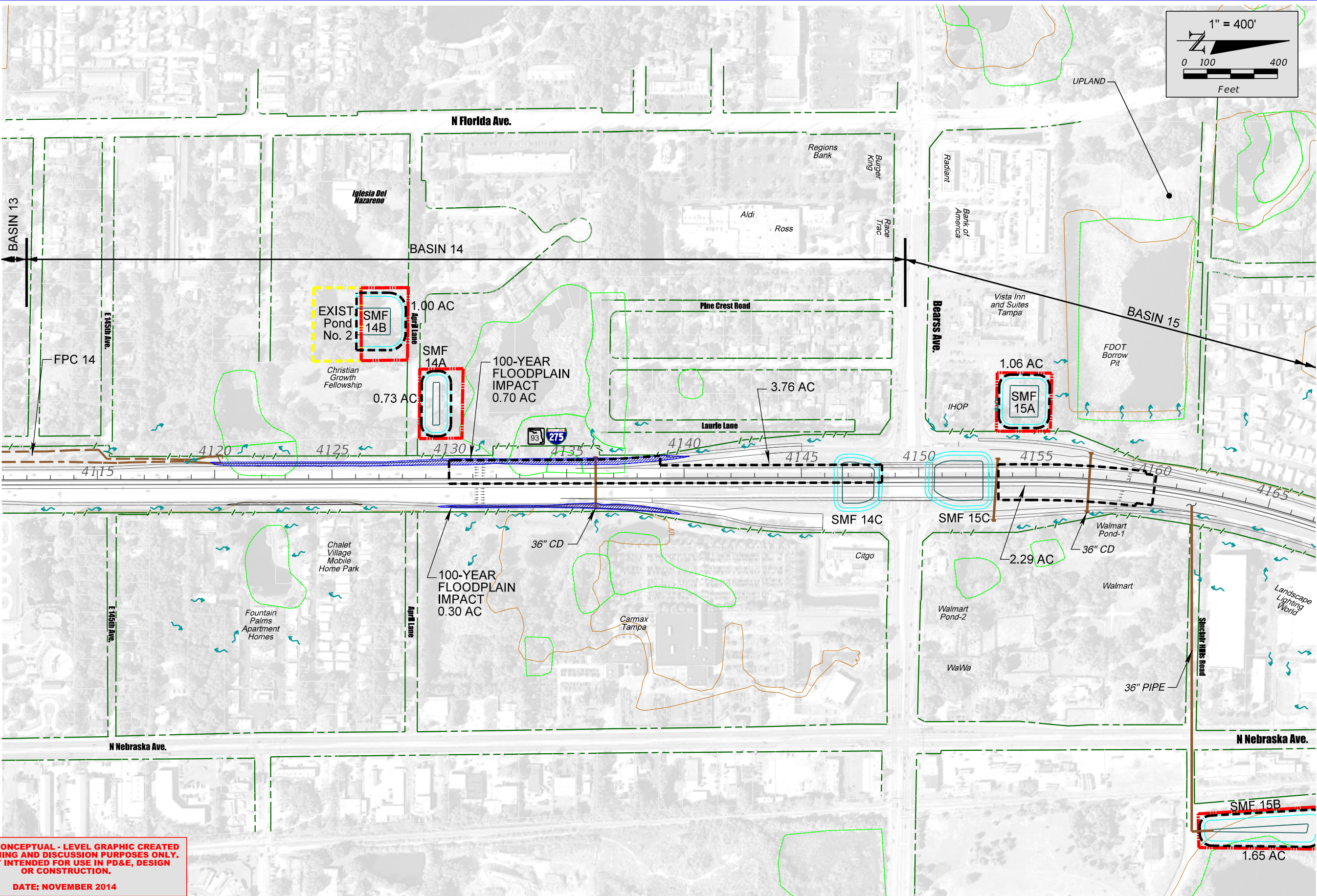
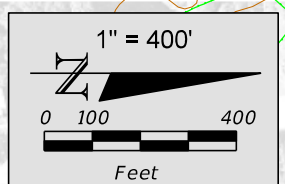


STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-93	HILLSBOROUGH	431821 1 22 01

*I 275 PD&E*  
**DRAINAGE MAP (6)**

SHEET NO.  
**6**

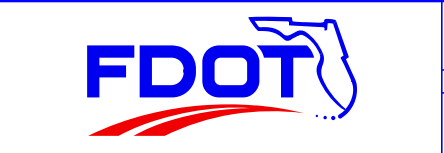




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**DATE: NOVEMBER 2014**

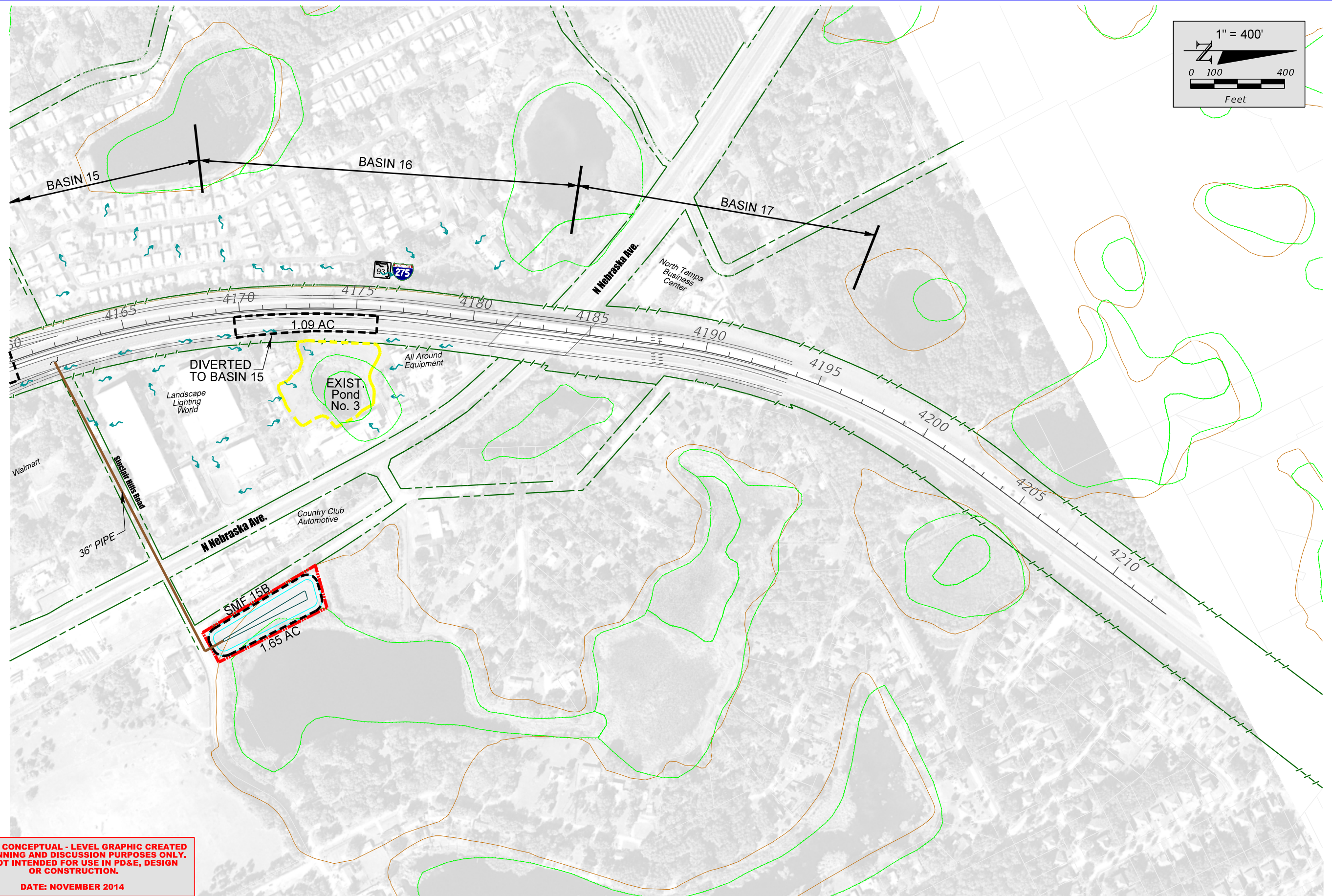
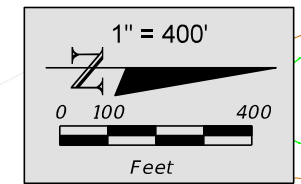
LEGEND	Proposed Stormwater Management Facility		National Wetland Inventory		Property/ROW Line	



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-93	HILLSBOROUGH	431821 1 22 01

I 275 PD&E  
DRAINAGE MAP (7)

SHEET NO.  
7



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**DATE: NOVEMBER 2014**

<b>LEGEND</b>		Proposed Stormwater Management Facility		National Wetland Inventory		Property/ROW Line
		Proposed Floodplain Compensation Area		FEMA Flood Map		Proposed LA Right-of-Way
		Flow Arrow		Cross Drain		Existing Pond



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-93	HILLSBOROUGH	431821 1 22 01

*I 275 PD&E  
DRAINAGE MAP (8)*

SHEET NO.  
8