TAMPA BAY EXPRESS

A NEW CHOICE FOR A BETTER COMMUTE

FDOT

I-275 (STATE ROAD 93) EXPRESS LANES

PROJECT DEVELOPMENT & ENVIRONMENT STUDY

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

ETDM Number: 13854

Work Program Item Segment Number: 431821-1

HILLSBOROUGH COUNTY, FLORIDA

LOCATION HYDRAULICS MEMORANDUM

Prepared for:

Florida Department of Transportation
District Seven

April 2015

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT), District Seven, is conducting a Project Development and Environment (PD&E) Study to evaluate capacity and operational improvements along State Road 93 (SR 93)/Interstate 275 (I-275) from north of Dr. Martin Luther King, Jr. Boulevard to north of Bearss Avenue in Hillsborough County, Florida. The project length is 9.57 miles and the design year is 2040. This includes the study of multi-lane capacity improvements along I-275 consistent with the Tampa Bay Express Lane Master Plan (TBX Master Plan) (January 2015) proposed express lane (a type of managed lane) projects.

The objective of the PD&E Study is to assist FDOT and the Federal Highway Administration in determining the type, location, and conceptual design of the I-275 improvements to accommodate future travel demand in a safe and efficient manner. This PD&E Study documents the need for the proposed improvements and the steps taken to develop and evaluate potential improvement alternatives along with proposed typical sections and interchange enhancement alternatives. The PD&E Study identifies the social, physical, and natural environmental effects and costs associated with the project. The PD&E Study satisfies applicable requirements, including the National Environmental Policy Act, to qualify this project for federal-aid funding of future phases (design, right-of-way acquisition, and construction).

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 capacity and operational improvements along State Road 93 (SR 93)/Interstate 275 (I-275) from north of Dr. Martin Luther King, Jr. Boulevard to north of Bearss Avenue in Hillsborough County, Florida (See **Figure 1**). The project length is 9.57 miles and the design year is 2040. This includes the study of multi-lane capacity improvements along I-275 consistent with the *Tampa Bay Express Lane Master Plan* (*TBX Master Plan*) (January 2015) proposed express lane (a type of managed lane) projects.

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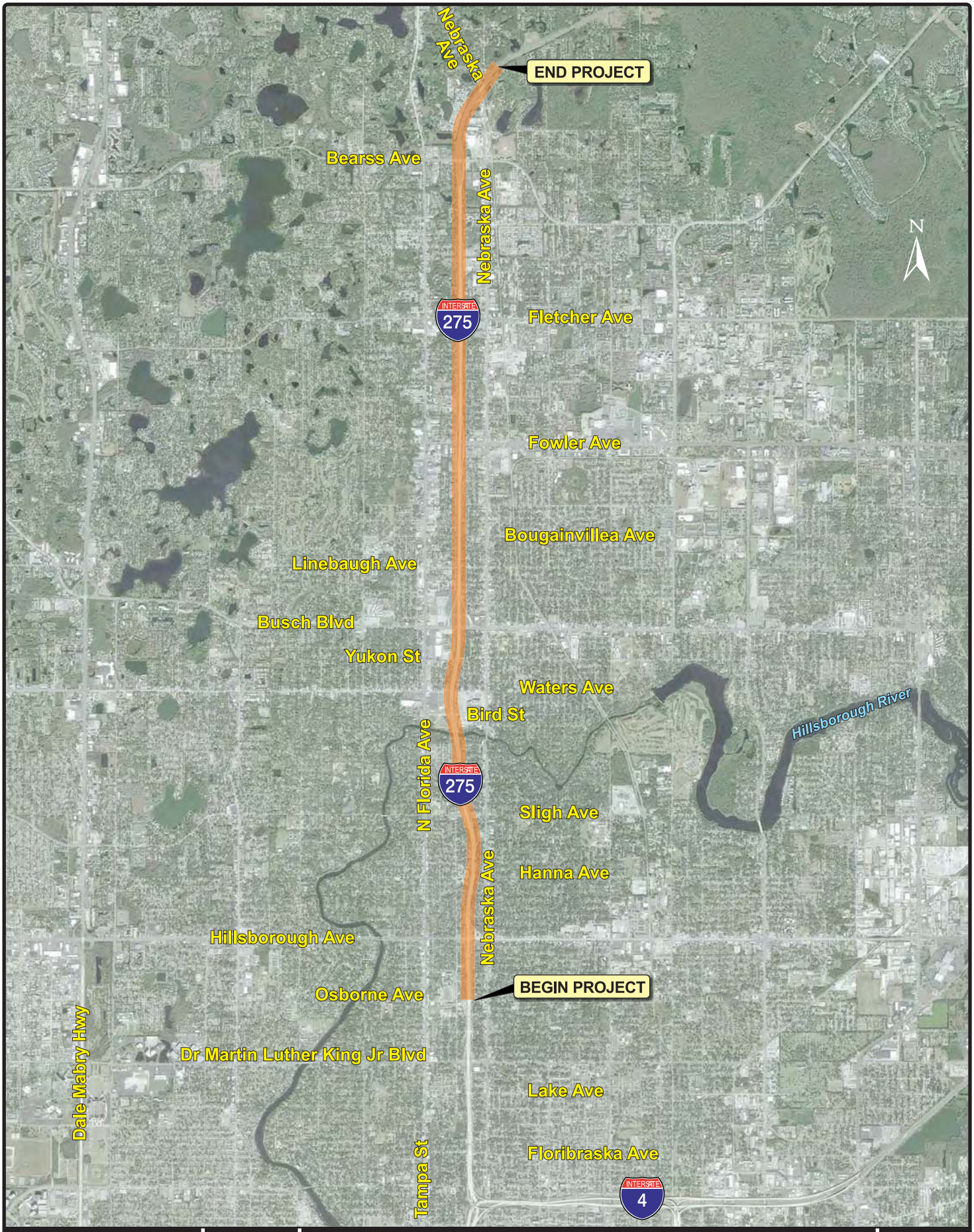
The PD&E Study satisfies applicable requirements, including FDOT's *PD&E Manual* and the National Environmental Policy Act, to qualify this project for federal-aid funding of future phases (design, right-of-way acquisition, and construction). The PD&E Study will also include coordination with the study of the proposed express lanes on I-275 south of MLK Boulevard and will be coordinated with the TBX Master Plan and the PD&E Studies with for adjacent interstate sections and corridors.

This Location Hydraulics Memorandum (LHM) is an engineering tool used to identify potential floodplain encroachments due to the conceptual 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 "Alternatives Stormwater Management Facility Technical Memorandum".



I-275 EXPRESS LANES PD&E STUDY
Work Program Item Segment
431821-1
HILLSBOROUGH COUNTY

Not to Scale

PROJECT LOCATION MAP

Figure No.
1

1.1 Project Description

This PD&E Study is evaluating capacity and operational improvements along I-275 from north of MLK Boulevard to north of Bearss Avenue. The project is located in the sections, townships, and ranges shown in **Table 1**.

Table 1
Study Area

Section	Township	Range
1, 12	29S	18E
36, 25, 24, 13, 12, 1	28S	18E
36	27S	18E

The Study evaluates adding tolled express lanes along I-275 to supplement the existing non-tolled general use lanes. The study includes an evaluation of multi-lane capacity improvements along I-275 that are a continuation of the *Tampa Interstate Study* (TIS) proposed managed lanes (noted as express lanes) from the I-275 downtown Tampa interchange area to the MLK Boulevard exit.

Within the project limits, I-275 is currently a six-lane divided limited access urban interstate. Recent construction on I-275 from Floribraska Avenue to Yukon Street widened the shoulders and bridges and replaced the median guardrail with concrete barrier wall. The widened shoulders improve access for emergency vehicles responding to traffic incidents and can be incorporated into the express lane project.

The *TBX Master Plan* prepared by FDOT District Seven provides guidance for developing improvements to the Tampa Bay interstate system and identifies specific freeway segments where it would be cost feasible to implement express lanes. The intent of the *TBX Master Plan* is to evaluate the impacts of implementing express lanes on the Tampa Bay interstate system on a system-wide basis rather than treating each corridor as a stand-alone project. Since a portion of the I-275 PD&E Study involves evaluating the need to provide additional capacity to a State Highway System facility, the use of tolling is required in accordance with the FDOT Secretary's policy directive (Topic No.: 525-030-020-a). Due to funding limitations for implementing the Ultimate Project, FDOT identified lower-cost projects (Starter Projects) as part of the *TBX Master Plan* that can be implemented earlier than the Ultimate Project.

1.1.1 TBX Ultimate Project

The limits of the I-275 PD&E Study Ultimate Project are from north of MLK Boulevard to north of Bearss Avenue. These capacity improvements are consistent with the *TBX Master Plan* proposed express lanes projects. The Ultimate Project includes two express lanes in each direction within the median area of I-275. Vehicles can enter or exit the express lanes in two locations, between Busch Boulevard and Fowler Avenue and at the northern project limit north of Bearss Avenue. This segment of I-275 would also have three general use lanes (non-tolled) in each direction separated from and operating adjacent to the express lanes with appropriate buffer separation.

It is anticipated that the majority of the improvements will be within the median from MLK Boulevard to north of Waters Avenue. North of Waters Avenue, additional improvements may have to occur to the outside since the existing median is narrower. Interchange improvements will be evaluated based on mainline improvements. The PD&E Study will evaluate retrofitting existing ponds when possible and some right-of-way may be needed for additional ponds. The Ultimate Project requires major reconstruction of the vertical geometry and involves widening to the outside in some areas of the existing interstate.

1.1.2 TBX Starter Project

The limits of the Starter Project for this segment of I-275 are from Jefferson Street/Orange Avenue to north of Bearss Avenue. The Starter Project includes one express lane in each direction within the median area of I-275. The Starter Project would be constructed on the existing alignment, on the same existing horizontal and vertical geometries, and would require no right-of-way acquisition with the exception of the Bearss Avenue interchange and stormwater management facilities.

1.2 Existing Facility

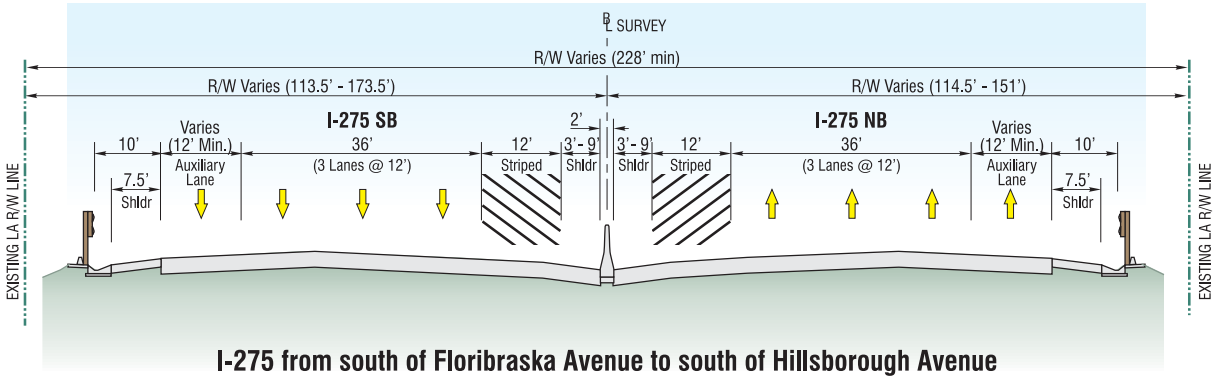
I-275 is a limited access freeway that generally runs in a north-south direction within the project limits. North of the project limits, I-275 connects to I-75 in northern Hillsborough County. South of the project limits, I-275 turns to the west and travels through downtown Tampa in an east-west direction and then travels through Pinellas County and connects with I-75 in Manatee County. I-275 is part of the State Highway System and the Strategic Intermodal System (SIS). I-275 is a major evacuation route in the Tampa Bay region. I-275 is classified as an Urban Interstate.

I-275 is a six-lane divided urban typical section which varies slightly throughout the project limits (see **Figure 2**). 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.

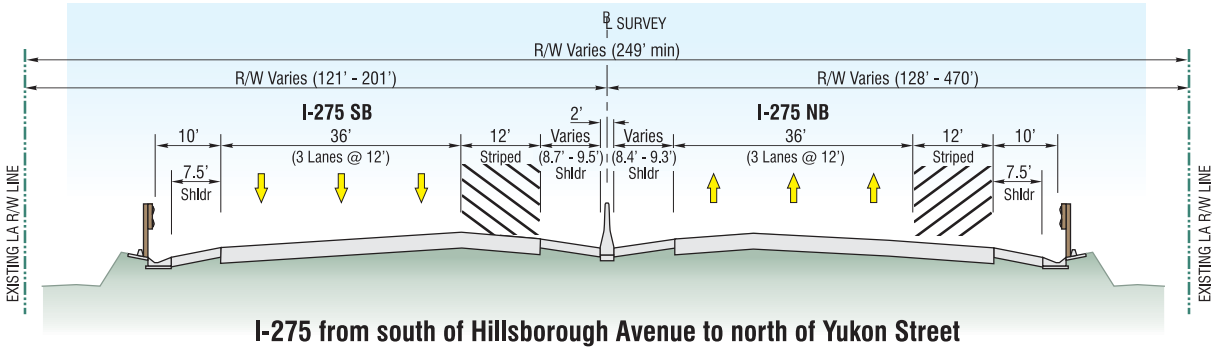
There are eight interchanges within the project limits with intersections at the ramp termini. The interchanges are located at:

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

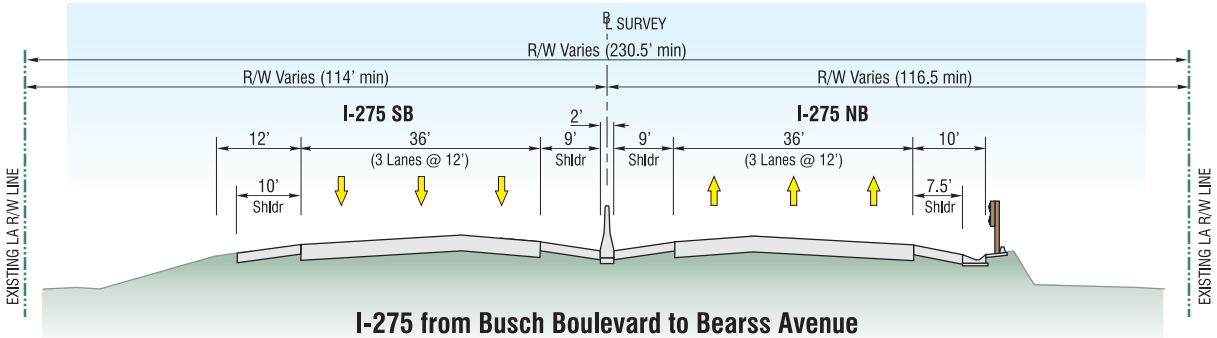
The I-275 corridor contains 21 bridges. Seventeen bridges span roadways, two bridges span both a roadway and railroad tracks, and two bridges span waterways. Per the FEMA FIRM map, the Hillsborough River is designated as a floodplain, but not a regulated floodway.



I-275 from south of Floribraska Avenue to south of Hillsborough Avenue



I-275 from south of Hillsborough Avenue to north of Yukon Street



I-275 from Busch Boulevard to Bearss Avenue

NOTE: The wider right-of-way is at the interchanges.

1.3 Project Purpose and Need

The purpose of the project is to evaluate the use of tolled express lanes along I-275 from north of MLK Boulevard to north of Bearss Avenue, as an alternative to general use lanes during peak use period. These improvements are expected to enhance the capacity, overall safety, and operating conditions of the facility within the project limits.

Statewide and regional transportation plans and studies by FDOT, the Tampa Bay Area Regional Transportation Authority (TBARTA), and Hillsborough County Metropolitan Planning Organization (MPO) identify the need for interstate improvements. Improvements include express lanes, a type of managed lane that responds to changing conditions with features such as dynamic pricing, managed accessibility, and vehicle eligibility. These features would assist in managing congestion on the Tampa Bay interstate system.

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. Each of these factors is discussed in more detail in the following sections.

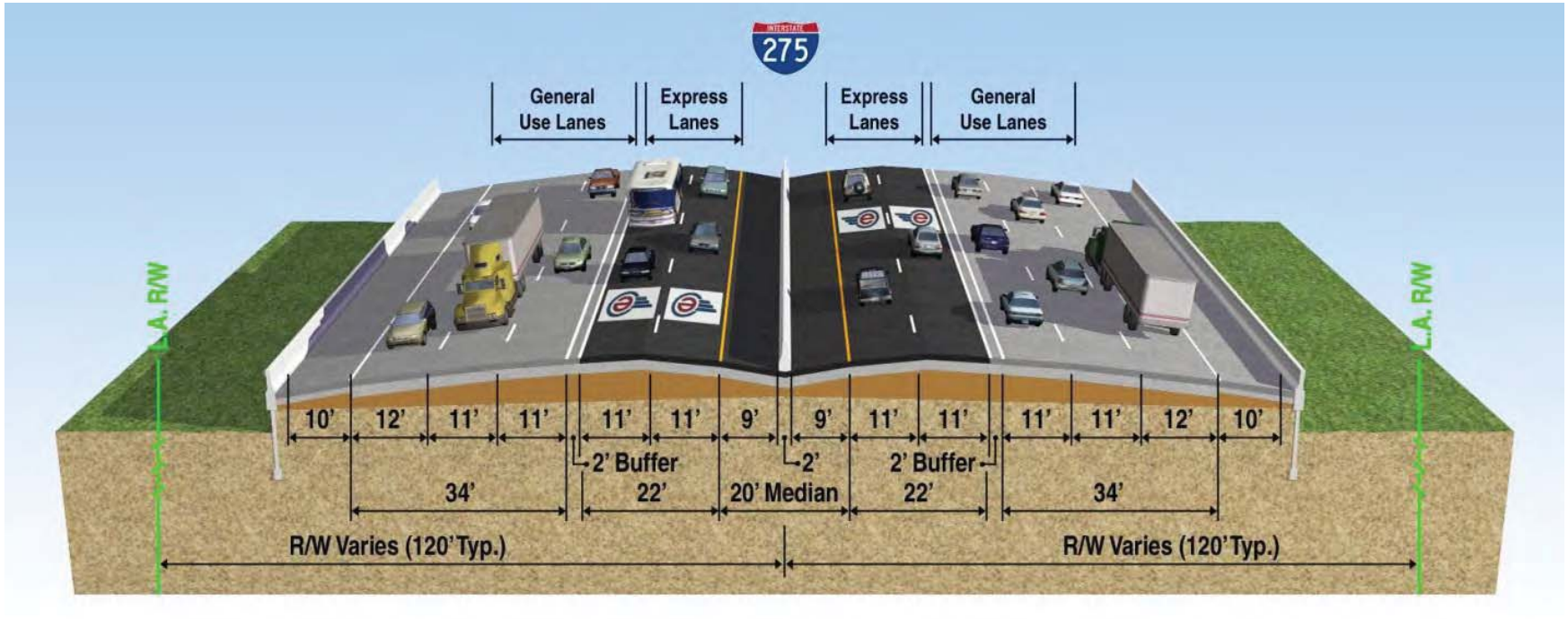
1.4 Report Purpose

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 is in compliance with the FDOT PD&E Manual, Part 2, Chapter 24; Executive Order 11988 “Floodplain Management”, USDOT Order 5650.2, “Floodplain Management and Protection”, and Federal-Aid Policy Guide 23 CFR 650A; Council on Environmental Quality Regulations for Implementing the Procedural Provision of the National Environmental Policy Act; and 23 Code of Federal Regulations 771.

2.0 IMPROVEMENT ALTERNATIVE

The Build Alternative includes two express lanes and three general purpose lanes in each direction. The interchanges along the corridor will be reconstructed as part of the improvements, but the interchange configurations will not change, except for the Bearss Avenue interchange. All of the existing bridges will be replaced to meet vertical clearance and vertical alignment standards. Right-of-way will be required for the reconstruction of the Bearss Avenue interchange and to retrofit existing stormwater ponds and construct new ponds.

The proposed I-275 ten-lane typical section includes six general purpose lanes (three in each direction) on the outside, four express lanes (two in each direction) on the inside, a 2-foot buffer with plastic delineators separating the general use lanes and the express lanes, 10-foot outside shoulders, 9-foot inside shoulders, and a 2-foot concrete barrier separating the two directions of travel. The proposed I-275 mainline typical section is shown in **Figure 3**.



I-275 from north of MLK Boulevard to north of Bearss Avenue

I-275 EXPRESS LANES PD&E STUDY *Work Program Item Segment* 431821-1 HILLSBOROUGH COUNTY	**I-275 PROPOSED TYPICAL SECTION**	*Figure No.* 12

3.0 DATA COLLECTION

As shown in **Table 2**, many diverse sources were utilized to complete the review of the existing hydraulics within the project corridor.

Table 2
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	FGDL	Varies
FEMA Floodplain Data	FEMA FIRM Maps	FEMA
Soils Information	National Resource Conservation Service (NRCS)	USDA
Digital Elevation Model (DEM)	Hillsborough County	Hillsborough County
SWFWMD LIDAR Data	SWFWMD	SWFWMD
Digital Orthophotography	United States Geological Survey (USGS)	USGS

4.0 EXISTING CONDITIONS

4.1 Existing Project Drainage Basins

I-275 roadway lies within the jurisdiction of the Southwest Florida Water Management District (SWFWMD). The study area 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, and 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 study area is contained within Hillsborough River, Sulphur Springs, Curiosity Creek, Chapman Lake Outlet, and Cypress Creek basins as delineated by SWFWMD. The only major water body within the project limits is the Hillsborough River. The Hillsborough River is verified by the Florida Department of Environmental Protection (FDEP) as an Outstanding Florida Water (OFW).

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 3**.

Table 3
Bridges

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

In addition to the bridges, 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 1-9 all cross drains are closed storm sewer pipes that ultimately discharge to the Hillsborough River. At station 1810+50 a double 54" pipe runs under I-275 flowing westward along E. Giddens Ave. toward N. Central Ave. At station 1827+25 a 30" pipe intersects I-275 traveling west along Henry Ave. toward N. Central Ave. The double 54" pipe and 30" pipe connect to a 7' x 4' box culvert west of the project area. At station 1867+60 a 24" pipe crosses the alignment which drains west down Sligh Ave. At station 1887+70, a 24" pipe crosses the alignment, draining east along E. Broad St. Basin 6 does not have any cross drains. At station 1940+00 there is a 48" pipe that crosses the alignment. At station 1974+28 a 36" pipe runs under I-275. At station 1988+41 there is a 42" pipe that crosses the alignment. Basin 9 has multiple cross drains, one at station 1994+71, 2016+31, and 2021+46 with pipe sizes 42", 42", and 36", respectively. The cross drains located in Basins 10-15 do not connect to existing storm sewer systems. A 24" cross drain

exists at station 2047+95. At station 2060+69 there is a 30” pipe, which discharges to a sink hole. A 30” cross drain exists at station 2070+46. At station 2094+70 the cross drain is a 24” pipe. The cross drain at station 2136+24 is 36” pipe. At station 2157+27 there is a 36” pipe cross drain. There are no cross drains in Basin 16. A summary of the major cross drains is provided in **Table 4**.

Table 4
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) shows this project will cross through the limits of the 100 –year floodplain at multiple locations along the project corridor. As shown in **Table 5**, the Hillsborough River is a regulated floodplain at the I-275 Bridge.

The Hillsborough River floodplain is one area that intersects the project, and there are isolated locations within the corridor where the floodplain could be impacted. The proposed conditions section of this report discusses these impacts in greater detail. The FEMA FIRM maps for the project corridor are included in **Appendix A**.

Table 5
Project Base Flood Elevations

Regulatory Floodplain	Base Flood Elevation (feet-NAVD 88)
Hillsborough River	10.0

4.4 Flooding Inventory

Based on research of the FDOT District 7 Drainage Flood Inventory there are records identifying historic drainage/flooding issues within the project area. It is recommended that flooding complaints within and adjacent to the project area be researched during the design phase of the project.

During storm events in 2003, Central Avenue (near the I-275 southbound exit ramp) experienced roadway flooding; and, as a result, residential yards flooded and areas adjacent to a house near Fowler Ave. 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 Ave. adjacent to I-275, a residential property located at 702 E 122nd Avenue is experiencing flooding in the front and back side of his house. Based on the flooding complaint (# 1006172010814), Taliaferro Ave. 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. It is recommended that this area be looked at in more detail during the design phase.

At the end of 126th St, near the noise wall on the east side of I-275; this area is subject to local roadway flooding. A local resident that lives on the south side of 126th St 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 Ave.; however, it was addressed by the County. These flooding complaints (# 1003282013398 and 1007022010774) should verified and closed out during design.

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 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 should be verified and analyzed during the design phase of this widening project.

5.0 PROPOSED CONDITIONS

5.1 Floodplain Encroachment and Compensation

Impacts to the 100-year floodplain resulting from project improvements will occur in two different ways: longitudinal impacts that occur as a result of the road widening, and transverse impacts resulting from the replacement of the Hillsborough River Bridge. Each potential type of impact is discussed in the following paragraphs.

There is potential for longitudinal impacts to the floodplain. Compensation is required for all floodplain impacts. The magnitude of the impacts to the floodplain cannot be determined until the design phase. However, a preliminary analysis of floodplain impacts for the preferred alternative was conducted. Based on the base flood elevations shown on the FEMA maps, existing GIS contours and the proposed roadway elevations, floodplain impacts will occur in the northern segment of the project.

It is estimated that 0.16 acre-feet of floodplain will be impacted in Basin 12 and 0.10 acre-feet of floodplain will be impacted in Basin 14. Although, based on this preliminary analysis, these floodplain impacts can be mitigated within the right of way, and in a proposed off-site facility. Two potential floodplain compensation sites (FPC) are identified in the general area where the floodplain impacts would occur. FPC 12 is an expansion of an existing Hillsborough County floodplain site located along the eastside of the I-275 at Station 4069+00 Rt. An existing cross drain will hydraulically connect the impacted areas and the proposed mitigation. FPC 14 is located within the right of way between Station 4123+50 Lt to Station 4128+25 Lt.

The Preferred Alternative will replace the existing bridges over the Hillsborough River. In each direction, the proposed bridge typical section consists of two 11-foot lanes, one 12-foot lane, a 12-foot shoulder, and two 11-foot express lanes separated from the general travel lanes. The overall width of the bridges will increase to fit the proposed typical section. The floodplain impacts resulting from bridge replacements are not considered to be significant during the PD&E phase analysis. Hydraulic modeling is recommended for the bridge 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 any 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 structure will be hydraulically equivalent to or greater than the existing structure, 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 is not significant.

6.0 REGULATORY AGENCY COORDINATION

6.1 State Agencies

The state agency involved in the permitting process for I-275 is SWFWMD and FDEP. Once this project enters the design phase, a SWFWMD pre-application meeting is recommended to discuss project improvements.

6.2 Federal Agencies

Federal agencies which may require permits for the proposed I-275 improvements include the U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency, 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 that will result from project improvements. Two potential floodplain compensation sites (FPC) are identified in the general area where these floodplain impacts occur. FPC 12 is located at Station 4069+00 Rt and FPC 14 is located between approximately Station 4123+50 Lt to Station 4128+25 Lt. There is also potential for transverse impacts at the cross drains and at the Hillsborough River Bridge. Permitting requirements dictate that no adverse impacts can result from project improvements and appropriate mitigation must be provided to avoid these impacts.

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 structure will be hydraulically equivalent to or greater than the existing structure, 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.

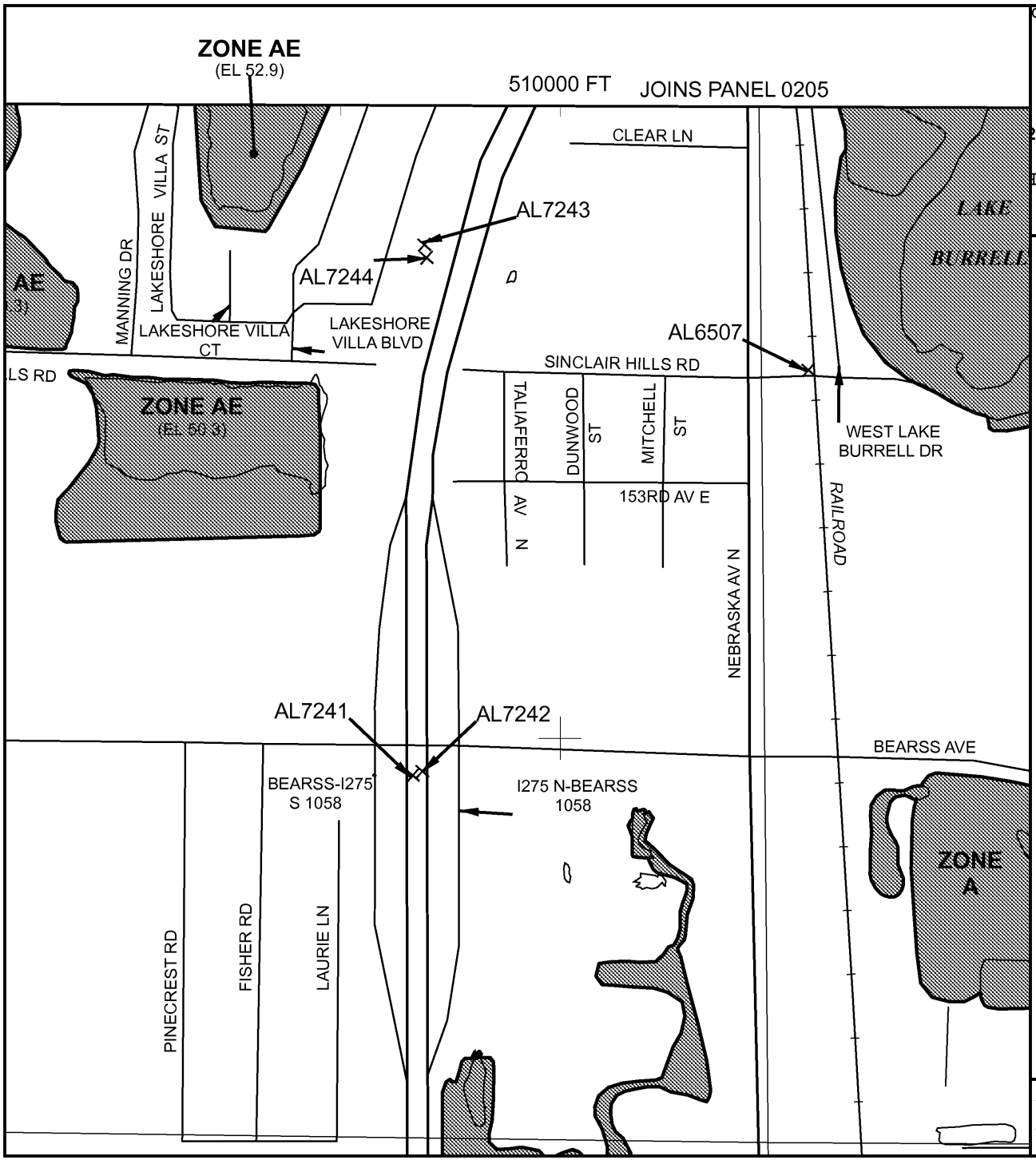
8.0 REFERENCES

1. FDOT 2015 Drainage Manual
2. FDOT 2012 Hydrology Handbook
3. FDOT 2004 Stormwater Facilities Management Handbook
4. SWFWMD Environmental Resource Permit Manual
5. Tampa Bay Wateratlas
6. I-275 Flood Investigation Inventory Sheet
7. Tampa Bay Surface Water Improvement and Management Plan, SWFWMD, February 1999

Appendix A

FEMA FIRM Maps

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



MAP SCALE 1" = 500'

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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)

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

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

MAP SCALE 1" = 500'

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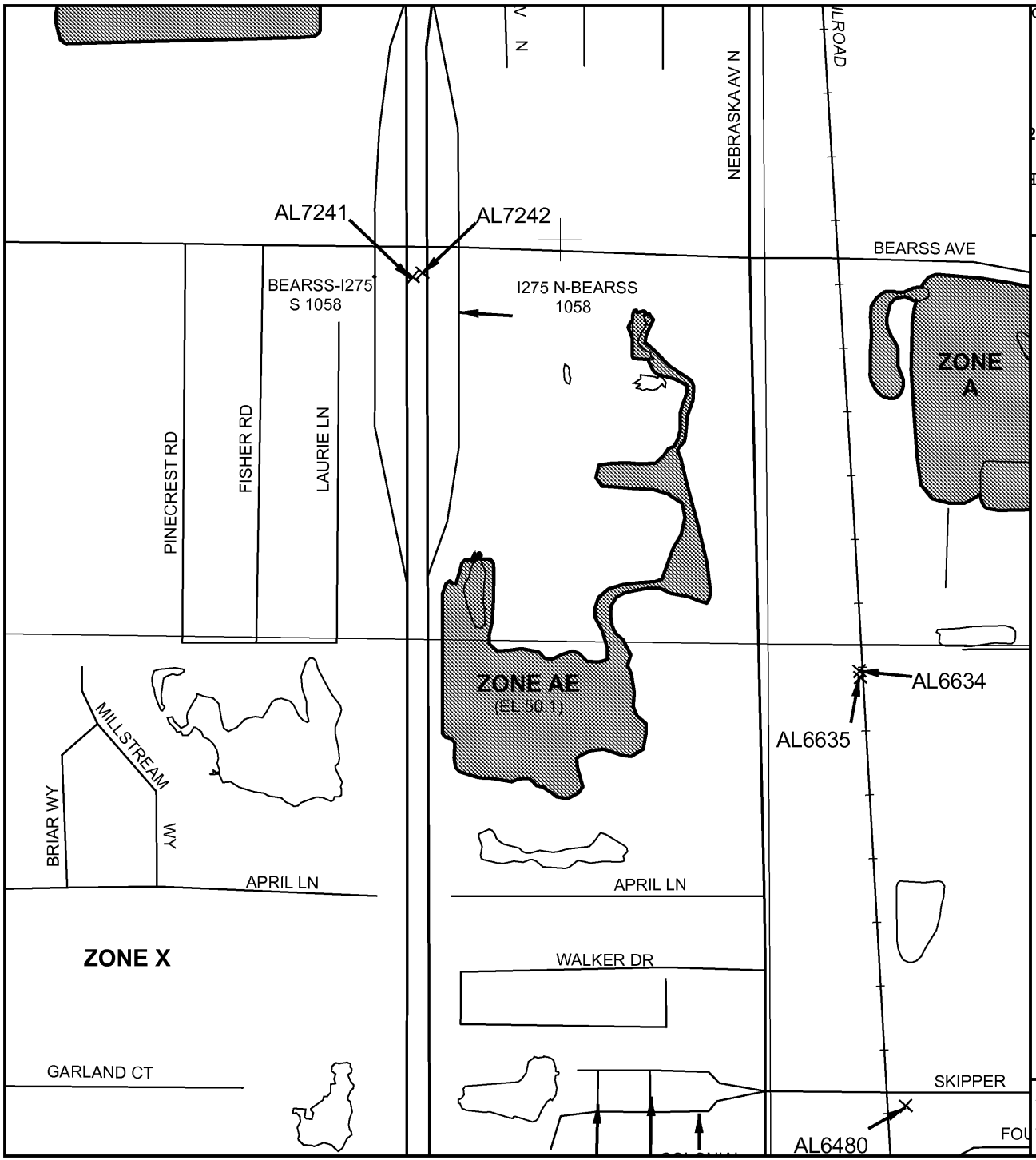

NFIP

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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EFFECTIVE DATE
AUGUST 28, 2008

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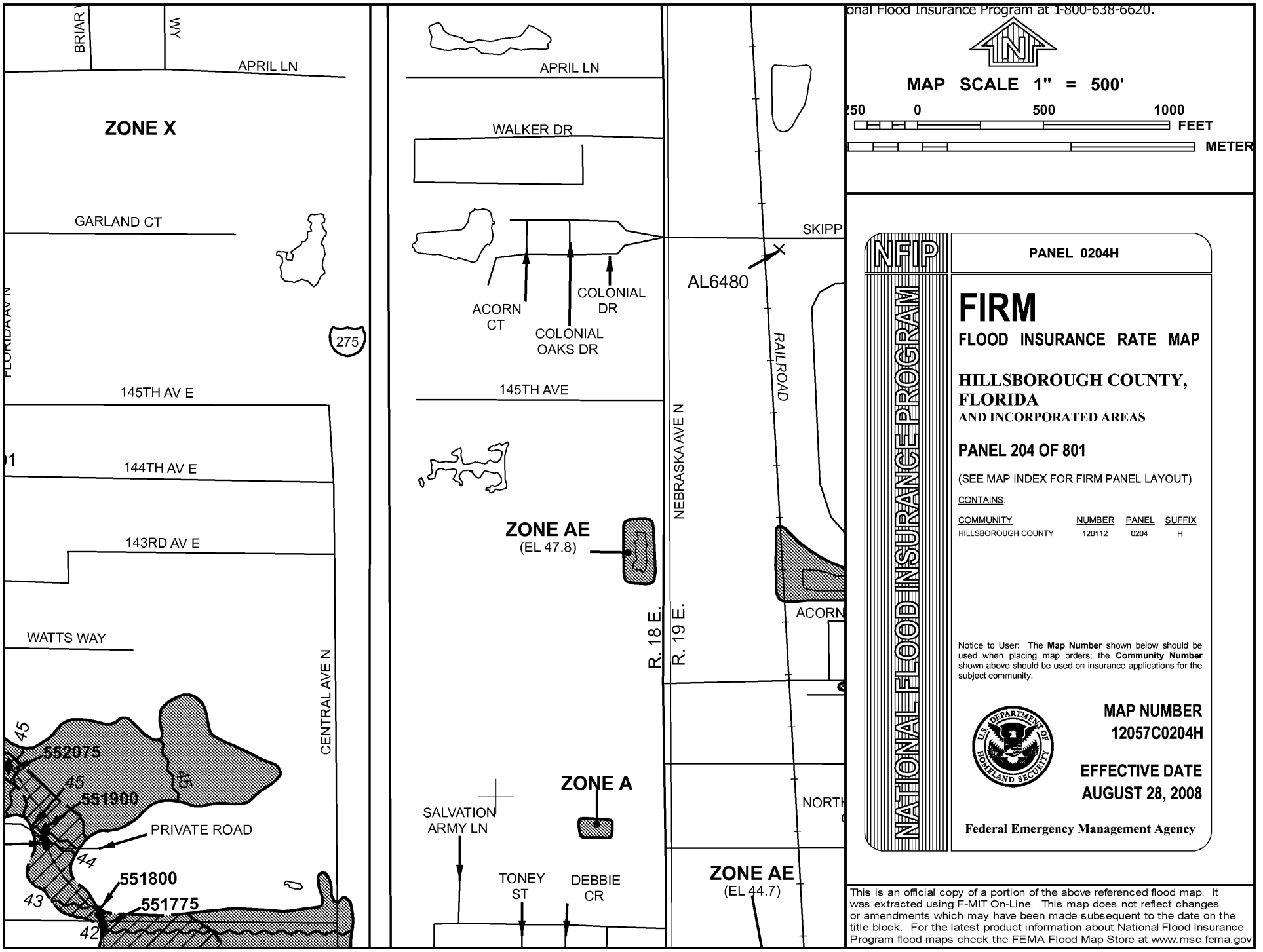
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MAP SCALE 1" = 500'
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NATIONAL FLOOD INSURANCE PROGRAM
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FLOOD INSURANCE RATE MAP
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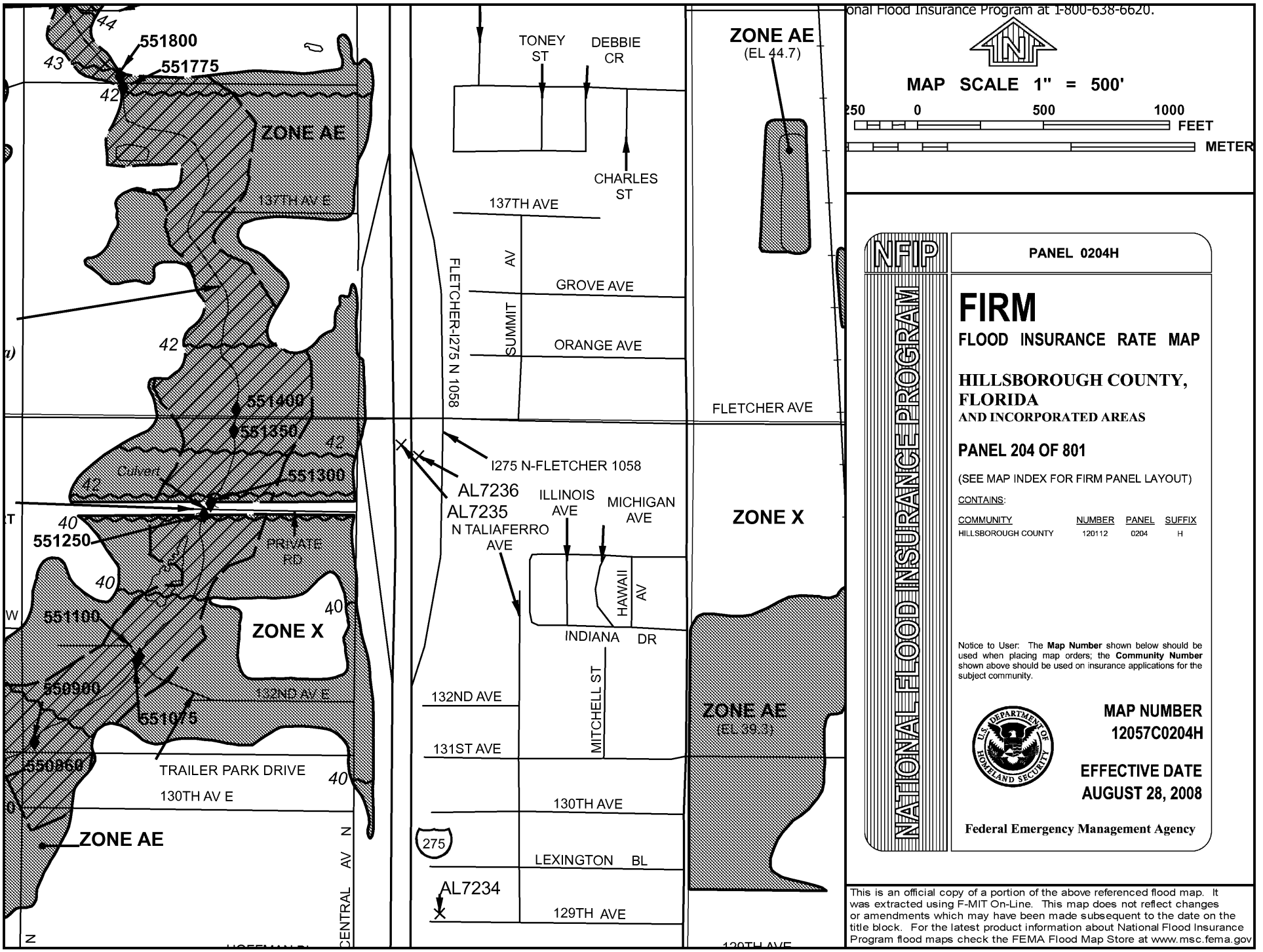
AND INCORPORATED AREAS
PANEL 204 OF 801
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
HILLSBOROUGH COUNTY 120112 0204 H
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications 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



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

MAP SCALE 1" = 500'

250 0 500 1000

FEET

METER

NFIP

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)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HILLSBOROUGH COUNTY	120112	0204	H

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MAP NUMBER
12057C0204H

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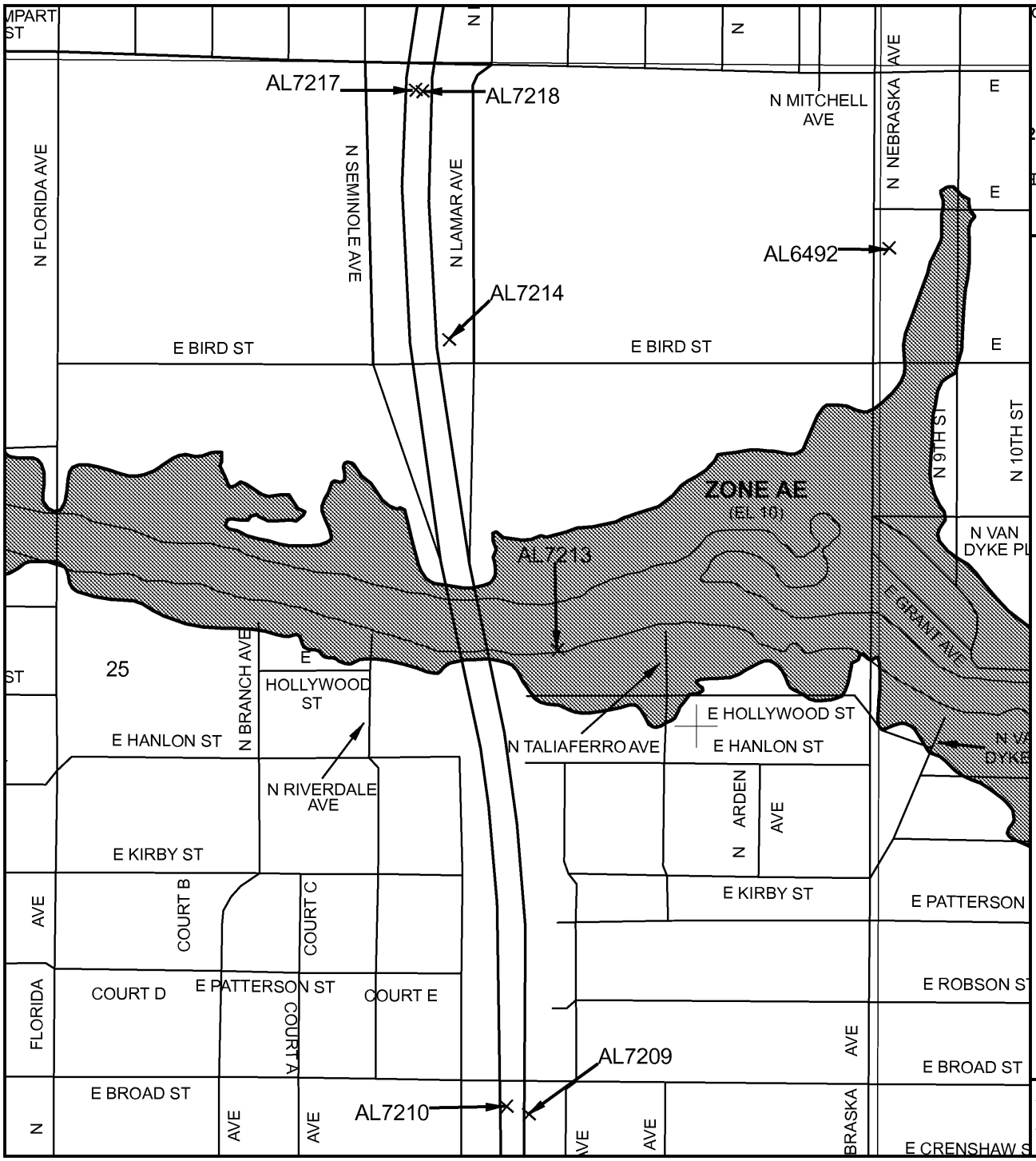

onal Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000

FEET

METER

NFIP

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