



Location Hydraulics Technical Memorandum

Northwest Hillsborough Expressway
Final Environmental Impact Statement

Design Change Re-evaluation

from Cypress Street just south of the Tampa International Airport
to Dale Mabry Highway (SR 597)

Work Program Segment #255433-2

September 2018

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.

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1. INTRODUCTION

In 1987, the Federal Highway Administration (FHWA) signed the Final Environmental Impact Statement (FEIS) for the Northwest Hillsborough Expressway (NWE)-currently known as Veterans Expressway - for improvements from Cypress Street just south of the Tampa International Airport (TIA) to Dale Mabry Highway (State Road (SR) 597), approximately 16.9 miles. The original study area is illustrated in **Figure 1-1**. The NWE was proposed as a major, divided, limited-access roadway to serve local traffic in the north and northwest areas of Hillsborough County near Tampa, Florida. The expressway involved improving Eisenhower Boulevard to six and eight lanes and the addition of interchanges between Interstate (I)-275 and Hillsborough Avenue. The remainder of the expressway was a new four-lane divided roadway with interchanges to the local road system from north of Hillsborough Avenue to Dale Mabry Highway.

In 1992, the FHWA signed a Design Change Re-evaluation of the NWE FEIS to authorize design of all eight segments of the roadway from I-275 north to Dale Mabry Highway (SR 597). Subsequently, Florida's Turnpike Enterprise (FTE) assumed responsibility for the project. FTE renamed the roadway Veterans Expressway (SR 589). Construction of the segment from Memorial Highway to Dale Mabry Highway (SR 597) was completed in October 1994. In 1999, a Design Change/Right-of-Way (ROW) Re-evaluation was completed and approved by the FHWA. The interchanges located between I-275 and Memorial Highway, including new access to the TIA, Spruce Street, and SR 60 at Courtney Campbell Causeway (CCC), were reconstructed by the Florida Department of Transportation (FDOT) between 2005 and 2010.

The purpose of this Design Change Re-evaluation is to update the portion of the FEIS from Cypress Street just south of TIA to north of Memorial Highway based on the addition of tolled express lanes and other mobility improvements. The Design Change Re-evaluation will document compliance with new federal laws, identify any changes that may have occurred on the project since the approval of the original environmental document and subsequent re-evaluations, as well as assess the impacts of any new alternative options and compare them to the previously approved improvements.

1.1 Location for the NWE Re-evaluation Project

The general area for the proposed project begins at Cypress Street south of the TIA and thence proceeds northerly and northeasterly in the northwest quadrant of Hillsborough County to north of Memorial Highway as shown in **Figure 1-1**. The portion of the Veterans Expressway from Memorial Highway to Dale Mabry Highway (SR 597) has already been constructed.

1.2 Purpose of the Report

The purpose of this Location Hydraulics Technical Memorandum is to document changes in impacts to floodplains, floodways, and drainage patterns within the project area based on changes to the conceptual design of the project since the approval of the original environmental document and subsequent re-evaluations.

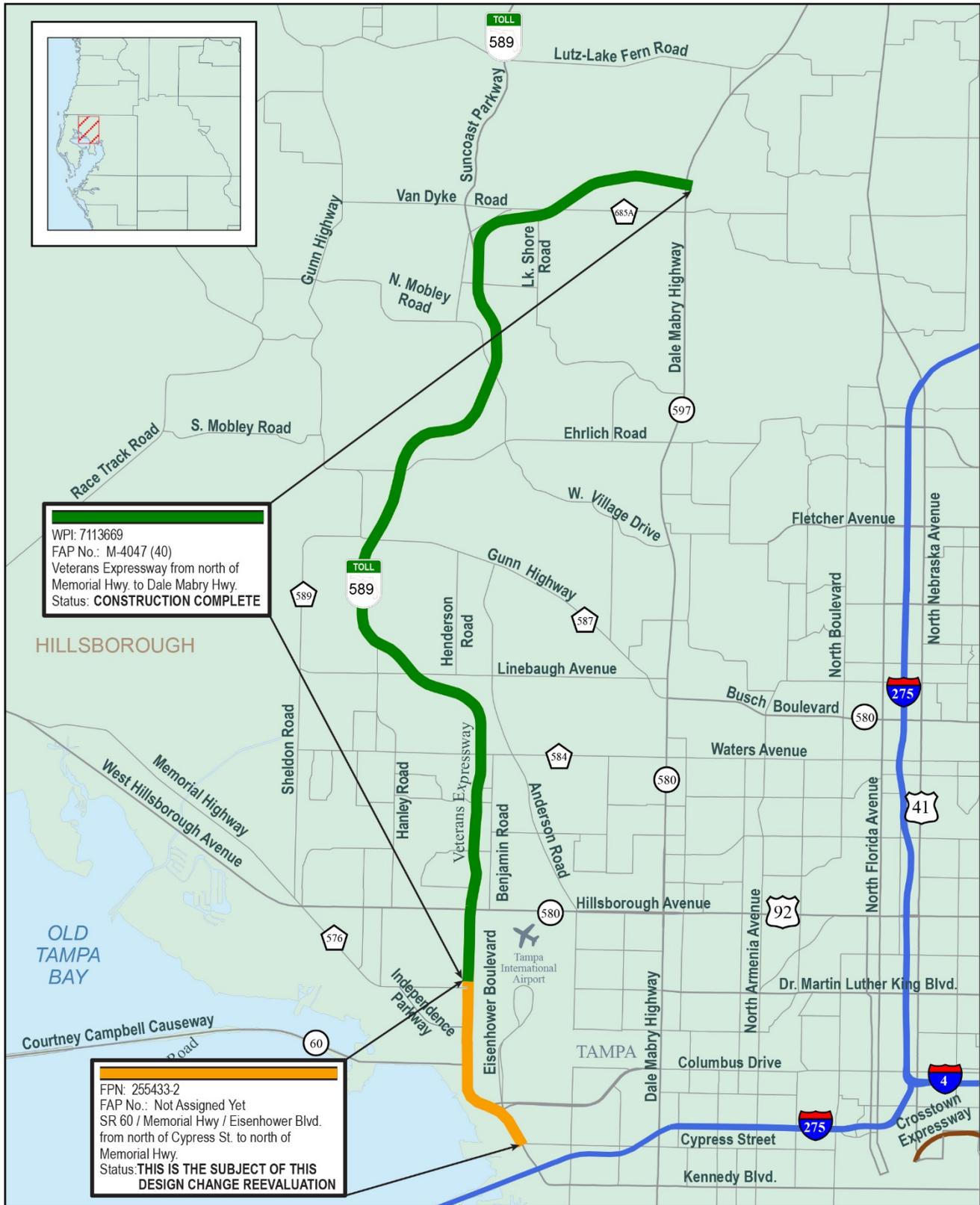


Figure 1-1 Northwest Hillsborough Expressway Project Study Area

2. ANALYSIS OF FLOODPLAIN IMPACTS

2.1 National Flood Insurance Program Communities

The Federal Emergency Management Agency (FEMA) completed the Flood Insurance Study (FIS) for Hillsborough County that became effective August 28, 2008. No changes to the FIS have been made since 2008 according to the local FEMA office.

Portions of the study area for the proposed improvements are located within the floodplain limits shown on the Flood Insurance Rate Map (FIRM) Community Panels 12057C0331H and 12057C0333H as compiled by FEMA. The east approach is in Zone VE with the base flood elevation (BFE) at 9 feet. Zone VE is a coastal flood zone with velocity hazard (wave action). The majority of the project corridor falls within Zone AE, with a BFE of 9 feet. Zone AE is an area of 100-year flooding in which the BFE has been determined. All elevations in the FIRM are in the NAVD 88 datum. Flood hazard factors have been determined by FEMA.

2.2 Floodplains

The floodplain is primarily from storm surge from the Gulf of Mexico. Old Tampa Bay is a tidal bay and is a Class II estuary between Hillsborough and Pinellas Counties. All of the floodplain encroachments will be minimal due to the proposed roadway alignment following the same general alignment as the existing facility.

2.3 Floodways

There are no floodways within the project limits. Seagrass in the vicinity has been mapped and impacts will be minimized.

2.4 Drainage Patterns

The stormwater runoff from the travel lanes and shoulders of the project will be collected with inlets. Stormwater will be routed through stormwater management facilities as required before being discharged. Stormwater from Cypress Street north will be discharged to Old Tampa Bay via various canals and box culverts.

3. FLOODPLAIN COORDINATION

3.1 City of Tampa FEMA Coordinator

The City of Tampa FEMA Coordinator was contacted on August 27, 2018 to ensure that the project is consistent with the local floodway and floodplain management programs and comprehensive plan. Dave Jennings confirmed the FEMA coastal study has been completed; however, there have been no official updates to the FIS or the FIRM. Hillsborough County has the draft panels and anticipates publishing the panels in September 2018. There is no Conditional Letter of Map Revision (CLOMR) in the project vicinity. A joint rule between the City of Tampa and Hillsborough County (ASCE 24-14) requires building finished floor elevation (FFE) to have one foot of freeboard above base flood elevation (BFE). A communication record is provided in **Appendix A**.

4. PROJECT CATEGORY

Based on the information collected during this study, the proposed improvement can be categorized as a project on existing alignment involving replacement of drainage structures in heavily urbanized floodplains.

“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. 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.”



APPENDIX A
Communication Record

Communication record

| | | | |
|-------------------------------|-------------------------------|-----------------------|------------------------|
| Person spoken with: | Dave Jennings | | |
| Representing: | City of Tampa | | |
| Subject: | I-275/SR-60 FEMA Coordination | Date and time: | 27 August 2018 - 09:00 |
| Atkins representative: | Gregory Lee | Phone: | (813) 274-3162 |

Details:

After brief introductions and review of my prior coordination with Mr. Barrios, Mr. Jennings and I discussed the PD&E reevaluation and the study limits. The FEMA coastal study has now been completed. Hillsborough County has the draft panels and will be released to the public in September. The area at the Howard Frankland is going from an AE10 to an AE12. Several of the VE zones have gone up four to five feet.

The NWE team will obtain the current 2018 FEMA panels and include them as an appendix to this technical memorandum once they are published.

The freeboard rule previous discussed has been modified and adapted into ASCE 24-14 and now requires a one-foot freeboard to buildings. Utilities are exempt.

Dave does not know of any CLOMRs in the vicinity.

Action required:

Distribute to:

cc:

File ref: