

EXTINGUISH THE TORCH SUMMARY REPORT

VETERANS EXPRESSWAY WIDENING FROM S. OF GUNN HIGHWAY TO SUGARWOOD TOLL PLAZA, DESIGN-BUILD FINANCIAL PROJECT ID NO.: 429350-1-52-01 CONTRACT NO.: E8N19

SUMMARY REPORT

Prime CEI Consultant: HDR, Inc.
Senior Project Engineer - Joseph M. Chao, Jr.
Contract Support Specialist - Barry Williams
Administrative Assistant - MarySue Eads
Senior Roadway Inspector - Bill Smith
Bridge Inspector - Reggie Williams
Roadway Inspector - Jose Figueroa

CEI Subconsultants:

Cardno TBE / Project Administrator - Mathew Kappler, Senior Bridge Inspector - Frank Lavalier

Keystone Civil / Roadway Inspectors - Craig Frier, Ryan Scrivner Mehta & Associates, Inc. / Roadway Inspector - Ricky Ferre Northwest Engineering, Inc. - Survey

Turnpike CPM - Tracie Rose

Design Project Manager – Thomas Never

Prime Design Consultant (Design-Build) – TY Lin International Design Subconsultants:

F.R. Aleman & Associates, Inc. - ITS Plans

Moffatt & Nichol – Traffic Control Plans

Project Description/Information

Widening of the Veterans Expressway from 4 to 8 lanes. This project consisted of the design and construction of the widening and resurfacing of NB and SB Veterans Expressway from 4 to 8 lanes; 6 general use lanes and two express lanes. The project begins just south of Gunn Highway and ends at the Sugarwood Mainline Gantry Plaza. Also included under this contract was the widening of the NB and SB bridge structures at Gunn Highway, Rocky Creek, Ehrlich Road and Bellamy Road and ramp and street improvements at Gunn Highway and Ehrlich Road. Other activities included construction of retaining, barrier, MSE and Noise walls, drainage, guardrail, signing & pavement markings, lighting and Intelligent Transportation System (ITS).

LESSONS LEARNED

Issue No. 01 - Location of the beginning and ending of adjacent projects near bridge structures

Issue Detail:

The end station of the Section 3, E8M60, FPN: 431275-1-52-01 project and the begin station of this project is Sta. 1504+00. The begin station for the Gunn Highway bridge is Sta. 1506+25. With only 225 Ft. between the end of the adjacent project and this project, it was very difficult to coordinate the phases of construction between the two projects. To be able to switch the traffic back and forth between the phases for each project, the striping transitions encroached on each project. We were able to coordinate most of the phasing between the two projects. The problem came when the southbound traffic was switched to the outside on the Section 3 and their transition started on the north side of the Gunn Highway bridge. The traffic needed to be switched to the inside on this project for the construction of the outside of the Gunn Highway bridge widening.

Resolution:

The Contractor constructed as much of the inside and the outside of the southbound Gunn Highway bridge widening, until such time they were able to switch traffic to the inside and complete their work. The Contractor was granted a 16 day time extension for this issue.

Lesson Learned:

When possible, the point of interface between two adjacent projects should not be so close to a bridge structure. With more distance between the end of the adjacent project and the bridge on this project, there would be more room/flexibility in the median and the outside for the transition of the traffic to the inside or outside of each project.

Issue No. 02 – Existing Drainage Pipe

Issue Detail:

The Drainage Analysis section of the RFP had the following requirements for the drainage design, "The Design-Build Firm shall verify that all existing cross drains and storm sewers that are to remain have adequate hydraulic capacity and design life. Flood flow requirements will be determined in accordance with the Department's procedures. If any of these existing cross drains or storm sewers are found to be hydraulically inadequate or found to have insufficient design life, they shall be replaced or supplemented in accordance with the drainage requirements of this RFP. If any existing cross drains or storm sewers require repairs but otherwise would have sufficient remaining design life, repairs shall be made in accordance with the requirements of this RFP." The Design-Build Team contended that there is no way to determine a dollar amount of any anticipated repairs at the time of bid without knowing the condition of the existing pipe.

Resolution:

The existing storm sewer pipe was videoed at the end of the project along with the new pipe in accordance with Section 430-4.8 of the 2014 Standard Specifications. Repairs were made in accordance with the FDOT Repair Matrix and Section 431. The Contractor was granted an 11 day time extension for this issue.

Lesson Learned:

The RFP should include language requiring the Design-Build Team to perform a video inspection of the existing storm sewer system in accordance with Section 430-4.8 and submit their findings during the Design phase of the project. This way a determination can be made early on in the project if the existing pipe needs to be replaced or repaired. Or, depending on the size of the project and the costs involved, the existing pipe under the roadway should be shown in the RFP/Conceptual plans to be replaced.

Issue No. 03 – Location of Proposed Light Pole Pilasters

Issue Detail:

When forming and pouring the bridge deck widening, the Contractor placed the forms and steel for the light pole pilaster per the bridge structural plans. The location of this pilaster was different than what was shown in the lighting plans, which were revised during the design phase. This change was not added to the bridge structure plans, so the pilaster was poured at the incorrect location.

Resolution:

The Contractor had to remove the light pilaster in the deck after the deck had already been poured. The Contractor had to add another light pilaster just off the deck to accommodate the lighting requirements.

Lesson Learned:

Review the bridge structure plans that have proposed lighting and make sure the light pole pilaster locations match the lighting plans.

Issue No. 04 – Sign Structure Concrete Columns Next to MSE Walls

Issue Detail:

There is an overhead sign structure truss just north of the Gunn Highway interchange next to the MSE walls with concrete columns extending from the Drilled Shaft to the top of the MSE wall. The MSE walls at this interchange required the Class V finish coating colors shown in the MSE wall plans and consistent with the colors of the Veterans Expressway corridor. The concrete columns for this sign structure did not require any Class V coating and therefore was not as aesthetically pleasing as the adjacent MSE wall.

Resolution:

N/A. Since this issue was not noticed until the end of the project, nothing was done with the finish of the sign structure columns.

Lesson Learned:

When overhead sign structures are next to MSE walls that have a Class V finish coating with colors, the RFP for Design-Build projects or the plans for Bid-Build projects should require the same aesthetic surface finish treatment on the columns as the adjacent MSE wall.

Issue No. 05 – Existing ITS Cameras

Issue Detail:

The original RFP and conceptual ITS plans depicted six existing ITS CCTV cameras on the project of which two were to be removed, three were to be replaced and one was to remain in place. In viewing the CCTV camera snapshots throughout the Veterans Expressway corridor, the older cameras are not as clear as the newer HD cameras. The ITS cameras along the corridor were replaced or are being replaced under the current construction projects.

Resolution:

The Contractor was paid \$6,060.58 to remove the existing CCTV camera shown to remain and replace it with a new CCTV HD camera consistent with the rest of the corridor.

Lesson Learned:

All existing ITS devices should be checked prior to the time of bid and should be shown in the RFP/Conceptual plans to be replaced if they are in poor condition or if they are not of the same technology and capability of the newer devices utilized by FTE.