

SELMON WEST EXTENSION

TAMPA, FLORIDA



Rendering credit: Tampa Hillsborough Expressway Authority

The Selmon Extension is a 1.9-mile toll lane, located in the median of Gandy Boulevard, allowing travelers a choice to use Gandy Boulevard for local destinations or the Selmon Extension for a direct connection eastbound to the Selmon Expressway or Dale Mabry or westbound to the Gandy Bridge. It is designed to limit its size while maximizing visibility. The toll lane will be at least 30 feet high, approximately twice as high as a typical urban bridge. The Selmon Extension provides safer connection transportation for both local and regional travelers and reliable hurricane and emergency evacuation routes for the Gandy area and regional residents.

SYSTRA IBT's role was that of Independent Checking Engineer or ICE. In that role, SYSTRA IBT performed the independent design review that consists of the foundations, substructure, and superstructure of 3 bridges (total length, 1.9-mile toll lane).

SYSTRA IBT based its checks on information and criteria provided in the design plans and specifications to confirm compliance of the design with the project codes and standards. Verification of the structure in service is also included in the scope of this work.

SYSTRA IBT submitted structural check reports for each of the elements considered. The following are the structures and structural elements checked:

Precast Segmental Viaduct

- Foundations (drilled shafts and foundation caps)
- Substructure (abutment, piers, pier caps, transition bent)
- Bearings
- Precast segmental superstructure
- Finbacks with PT tendons

Steel Box Viaduct

- Foundations (drilled shafts and foundation caps)
- Substructure (abutments, piers, pier caps, straddle bents)
- Bearings
- Steel box superstructure
- Cast-in-place concrete deck with transverse post-tensioning

ESSENTIALS:

Client/Owner: Tampa Hillsborough Expressway Authority

Contractor: Kiewit Infrastructure South Co. and Granite Construction Co.

Design Engineer: AECOM

Construction Engineer: Atkins

SYSTRA IBT's Role: Independent Checking Engineer of the precast segmental and steel box viaduct