



Legislation Text

File #: 21-6526, **Version:** 1

Department: Toll Road Authority

Department Head/Elected Official: Roberto Treviño, P.E., Executive Director

Regular or Supplemental RCA: Regular RCA

Type of Request: Contract - Amendment

Project ID (if applicable): Contract 345; Job Number 17/0028

Vendor/Entity Legal Name (if applicable): Ship Channel Constructors, LLC

MWDBE Participation (if applicable): N/A

Request Summary (Agenda Caption):

Request for approval of a contract amendment with Ship Channel Constructors, LLC, a limited liability company the members of which are Traylor Bros., Inc. and Zachry Construction Corporation, for construction of the ship channel bridge replacement project to increase the contract value by a not-to-exceed amount of \$291,500,000 and to update necessary contract documents associated with this amendment. The majority of this increase impacts in FY 26-28.

Background and Discussion:

On January 9, 2018, Commissioners Court approved a low bid construction contract with Ship Channel Constructors, LLC (SCC) for the construction of twin bridges over the Houston Ship Channel for the Sam Houston Tollway Ship Channel Bridge replacement project. This original contract was based on a concrete-material design by FIGG Bridge Engineers.

In November 2018, the National Transportation Safety Board's (NTSB) released a preliminary report on the collapse of the Florida International University pedestrian bridge. The report alleged that flaws FIGG Bridge Engineers' design contributed to the accident.

In March 2019, in light of the NTSB report, Commissioners Court approved an independent engineering review of FIGG's original project design for the ship channel bridge replacement. In January 2020, based on preliminary findings by the independent engineering review as well as NTSB's November 2019 final report and FHWA's December 2019 support of NTSB's analysis, HCTRA paused construction on certain aspects on the bridge replacement project due to concerns about FIGG's design. The independent engineering review identified significant flaws in FIGG's original concrete-based design of the ship channel bridge replacement.

In August 2020, Commissioners Court approved the termination of FIGG Bridge Engineers as the engineer of record for the main span bridge design and the Toll Road Authority's suspension of all permanent work activities for the main span portion of the bridge. Commissioners Court approved an agreement in October 2020 with a new engineer of record, COWI North America, Inc., for the ship channel bridge main span design.

Working with engineer of record, COWI North America, Inc., HCTRA recommends proceeding with additional design modifications of the ship channel bridge to a primarily composite steel structure which is industry standard. Moving forward with this recommendation is projected to result in a lower cost and shorter schedule than the design of a concrete structure.

A Contract amendment with SCC is necessary to update the contract value and contract documents to accommodate the updated ship channel bridge main span design. For the remainder of the work to be completed on the Ship Channel Bridge replacement project, SCC will strive for a 25% MWBE participation.

Expected Impact:

Approval of the contract amendment will allow SCC to move forward with construction of the main span portion of the ship channel bridge with a composite steel structure design, reducing cost and schedule compared to proceeding with a remediated concrete design.

Alternative Options:

Building the original design is not an option. An updated concrete design would lead to higher costs and a longer schedule.

Alignment with Goal(s):

- Justice and Safety
- Economic Opportunity
- Housing
- Public Health
- Transportation
- Flooding
- Environment
- Governance and Customer Service

Prior Court Action (if any):

Date	Agenda Item #	Action Taken
01/09/2018	21.d.10.d	Court approval of low bid construction contract with SCC

Location:

Address (if applicable): N/A

Precinct(s): Precinct 2

Fiscal and Personnel Summary			
Service Name	Engineering & Construction Service		
	FY 21-22	FY 22	Next 3 FYs
Incremental Expenditures (do NOT write values in thousands or millions)			
Labor Expenditures	\$	\$	\$
Non-Labor Expenditures	\$	\$	\$86,682,528

Total Incremental Expenditures	\$	\$	\$86,682,528
Funding Sources (do NOT write values in thousands or millions)			
Existing Budget			
Revenue - TRA	\$	\$	\$86,682,528
Choose an item.	\$	\$	\$
Choose an item.	\$	\$	\$
Total Current Budget	\$	\$	\$86,682,528
Additional Budget Requested			
Choose an item.	\$	\$	\$
Choose an item.	\$	\$	\$
Choose an item.	\$	\$	\$
Total Additional Budget Requested	\$	\$	\$
Total Funding Sources	\$	\$	\$86,682,528
Personnel (Fill out section only if requesting new PCNs)			
Current Position Count for Service	-	-	-
Additional Positions Requested	-	-	-
Total Personnel	-	-	-

Anticipated Implementation Date: November 30, 2021

Emergency/Disaster Recovery Note: Not an emergency, disaster, or COVID-19 related item

Contact(s) name, title, department: Nicole Stutz, Assistant Director, Harris County Toll Road Authority

Attachments (if applicable): Amendment