



March 10, 2020

Commissioners Court
Administration Building
Houston, Texas 77002

**SUBJECT: Transmittal of the Independent Analysis, completed by COWI North America, Inc. in support of the Harris County Toll Road Authority's Ship Channel Bridge Program, for recommended acceptance, and possible discussion and action
Precinct 2**

Dear Court Members:

Provided for your review, recommended acceptance, and possible discussion and action, is a transmittal of the independent analysis (report) recently completed by COWI North America, Inc. (COWI), in support of the Harris County Toll Road Authority's (HCTRA) Ship Channel Bridge Program. In 2019, COWI was contracted to Harris County, through HCTRA, to perform a fully independent analysis and structural check of the Sam Houston Ship Channel Bridge cable-stayed unit (under construction). To complete their fully independent analysis, COWI did not undertake any engineering to mitigate non-compliance with the project requirements, engineering which might justify acceptance of non-compliance of the design with project requirements or engineering which might justify design approaches alternative to those covered in the design standards specified for this Project.

COWI's independent analysis identifies twenty-one areas of significant concern, with additional concerns and details summarized in their report. Further, COWI's report provides a summary of recommendations arising from their review. COWI's recommendations include:

- 1) Making Plan revisions for components not yet constructed.
- 2) Undertaking corrective work for some components already constructed.
- 3) Undertaking additional investigations into whether the potential consequences of leaving certain already constructed components as-is would be acceptable even though this review has identified that they do not conform to the Project standards.
- 4) Requesting the Designer to validate the bridge design accounting for current information.

It is recommended that Commissioners Court accept this report and that COWI and HCTRA's Ship Channel Bridge design team (including Figg Bridge Engineers, Inc.) be authorized to work jointly with each other, while under contract to Harris County, to resolve the concerns identified in the COWI report. It is further recommended that, if necessary, HCTRA be authorized to prepare contract amendments or new contracts for Commissioners Court approval to effectuate resolution of the concerns identified in the COWI report.

We anticipate returning to Commissioners Court with an update on the Ship Channel Bridge Program's construction schedule and budget status once COWI and HCTRA's design team have begun their collaborative approach for resolution of the identified project concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter W. Key".

Peter W. Key
Interim Executive Director

PWK:th
Attachment

cc: HCTRA Management Tisha Laws Agenda File

FEBRUARY 2020
HARRIS COUNTY TOLL ROAD AUTHORITY

HOUSTON SHIP CHANNEL BRIDGE, INDEPENDENT CHECK FINAL REPORT

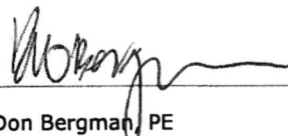
COWI

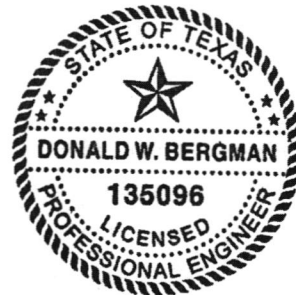
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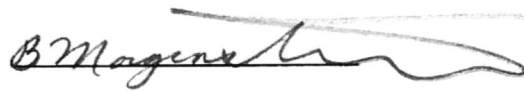
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FEBRUARY 2020
HARRIS COUNTY TOLL ROAD AUTHORITY

HOUSTON SHIP CHANNEL BRIDGE, INDEPENDENT CHECK FINAL REPORT


Don Bergman, PE
Technical Director




Brian Morgenstern
Project Manager

PROJECT NO. DOCUMENT NO.
A122325 A122325-RPT-GEN-004

VERSION	DATE OF ISSUE	DESCRIPTION	PREPARED	CHECKED	APPROVED
	2020 Feb 26		Brian Morgenstern	Don Bergman, PE	Don Bergman, PE