

BAY AREA TOLL AUTHORITY

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Memorandum

TO: BATA Oversight Committee DATE: April 3, 2019

FR: Executive Director W. I. 1251, 1256

RE: Contract Amendment – On-Call Toll Bridge Asset Management Program Support on

Richmond-San Rafael Bridge: WSP USA Inc. (\$1,500,000)

This memorandum requests authorization to amend BATA's contract with WSP USA Inc. (WSP) to provide additional toll bridge asset management program support services for the Richmond-San Rafael (RSR) Bridge, for an amount not to exceed \$1,500,000.

Background

On April 11, 2018, this Committee approved the selection of a panel of pre-qualified consulting firms to provide on-call asset management program support for the seven state-owned toll bridges ("Bridges") as the result of a Request for Qualifications (RFQ) issued by staff.

On October 10, 2018, this Committee authorized a contract with WSP for an amount not to exceed \$800,000 to provide asset management support for the RSR Bridge as the result of a mini-RFQ issued by staff. With these funds, WSP will develop an asset management plan incorporating performance gap, life-cycle, and risk management analyses. The mini-RFQ scope also made provision for focused studies of bridge systems and/or elements and maintenance procedures to identify opportunities to improve effectiveness of the bridge's life-cycle maintenance and rehabilitation projects.

On March 4, 2019, BATA and Caltrans committed to Senator Mike McGuire and Assembly Member Marc Levine to analyze the bridge's structural capacity to accommodate on the upper deck a third westbound lane for peak period traffic, with a movable barrier system for a bicycle and pedestrian path during non-peak hours.

Contract Amendment

Since the start of the assessment last fall, BATA has identified the need for two studies to be performed on the bridge: a load rating study and a deck condition study.

The load rating study will both: 1) Fulfill a Federal Highway Administration requirement of Caltrans; and 2) Evaluate the bridge's structural capacity to accommodate a third westbound traffic lane with a movable barrier system on the upper deck. The load rating would be completed in two phases: 1) Modeling of the as-built condition, including the 2006 seismic retrofit of the bridge; and 2) Accounting for structural degradation or effects of corrosion, where identified in existing inspection reports. The analysis will account for proposed changes to lane configurations, and is expected to take 12-18 months to complete.

The deck condition study will inform on the need for deck rehabilitation and replacement, which Caltrans has identified as future high-cost projects in the Toll Bridge Rehabilitation Program. In the context of the asset management plan, the goal is to optimize which deck projects move forward when, relative to hypothetical timeframes for replacing the bridge. WSP will scan the deck using various vehicle-based non-destructive tests: ground-penetrating radar; infrared thermography; high-resolution video; and digital acoustic response. WSP will post-process the data and provide plan views of the upper and lower decks and a report identifying areas of concrete degradation.

WSP's proposal includes scanning the other state-owned toll bridges without post-processing the data; the testing equipment will be mobilized in the Bay Area and the cost of collecting the data is only approximately one-tenth of the deck study with post-processing being the more costly part of the effort. This will provide raw data of a snapshot in time that can then be post-processed and compared with data collected in the future, should the need arise.

While the deck study is useful in determining the condition of the majority of the deck, it would not have discovered the conditions that led to the February 7th deck joint failure that closed the bridge in both directions as that joint was covered by steel plates. BATA has committed to replacing over the next year the 61 joints that date to the span's original construction.

Staff recommends amending the contract with WSP to fund the completion of a load rating and deck study of the RSR Bridge. Staff recommends including a contingency of 15 percent, equal to \$200,000, for this work. Funding will come from the BATA Toll Bridge Rehabilitation Program. The cost of work is estimated as follows:

1.	Load Rating	\$950,000	
2.	Deck Study	\$350,000	
3.	Contingency	\$200,000	
	Total	\$1,500,000	

Attachment A includes a summary of WSP and its project team's small business and disadvantaged business enterprise status.

Recommendation

Staff recommends that this Committee authorize the Executive Director or designee to negotiate and enter into a contract amendment for toll bridge asset management services on the RSR Bridge, in an amount not to exceed \$1,500,000.

Therese W. McMillan

TWM:sw Attachment

Attachment A Small Business Enterprise (SBE) and Disadvantaged Business Enterprise (DBE) Status

		DBE* Firm			SBE** Firm		
	Firm Name	Yes	If Yes, List #	No	Yes	If Yes, List #	No
Prime Contractor	WSP USA, Inc.			X			X
Subcontractor	Bridge Diagnostic Inc.			X			X
	Bridge Intelligence			X			X
	Collins Engineers, Inc.			X			X
	Infrasense, Inc.			X			X
	KTA-Tator, Inc			X			X
	Protection Engineering Consultants			X			X
	Vector Corrosion Services			X			X
	SEM Incorporated			X		1748098	
	SC Solutions			X			X
	Zoon Engineering			X		58549	

^{*}Denotes certification by the California Unified Certification Program (CUCP).

^{**}Denotes certification by the State of California.

REQUEST FOR COMMITTEE APPROVAL Summary of Proposed Contract Amendment

Work Item No.: 1251, 1256 Vendor: WSP USA Inc. (San Francisco, CA) Work Project Title: Toll Bridge Asset Management Program Support for the Richmond-San Rafael Bridge Purpose of Project: To provide toll bridge asset management program support for the Richmond-San Rafael Bridge. Brief Scope of Work: Provide load rating and deck condition study for the Richmond – San Rafael Bridge Project Cost Not to Exceed: This Amendment: \$1,500,000 Contract value before this amendment: \$800,000 Total contract value after this amendment: \$2,300,000 Funding Source: Toll Bridge Rehabilitation Program Funds Fiscal Impact: Funds are included in the FY 2018-19 Toll Bridge Rehabilitation Program Budget Motion by Committee: That the Executive Director or designee is authorized to negotiate and enter into a contract amendment with WSP USA Inc. to provide toll bridge asset management services for the Richmond-San Rafael Bridge as described above and in the Executive Director's memorandum dated April 3, 2019, and the Chief Financial Officer is directed to set aside additional funds up to \$1,500,000 for such contract amendment.

BATA Oversight Committee: