



Agenda Item No. 1

To: Building and Operating Committee/Committee of the Whole
Meeting of August 13, 2009

From: Ewa Z. Bauer, Deputy District Engineer
Denis J. Mulligan, District Engineer
Celia G. Kupersmith, General Manager

Subject: **AUTHORIZE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH HDR ENGINEERING, INC., RELATIVE TO REQUEST FOR PROPOSALS NO. 2010-B-1, GOLDEN GATE BRIDGE SEISMIC RETROFIT PHASE IIIB DESIGN SERVICES AND AUTHORIZE A REVISED GOLDEN GATE BRIDGE SEISMIC RETROFIT PHASE III DESIGN PROJECT BUDGET**

Recommendation

The Building and Operating Committee recommends that the Board of Directors approve the following actions relative to the *Golden Gate Bridge Seismic Retrofit Project Phase III Design Project*:

1. Authorize the General Manager to execute a Professional Service Agreement relative to Contract No. 2010-B-1, *Golden Gate Bridge Phase IIIB Design Services*, to HDR Engineering, Inc., Walnut Creek, CA, in an amount not to exceed \$18,260,000, subject to the Golden Gate Bridge, Highway and Transportation District receiving approval from the Federal Highway Administration and the California Department of Transportation;
2. Establish a contingency reserve fund for Contract No. 2010-B-1 in the amount of \$1,740,000; and,
3. Approve a budget increase in the Golden Gate Bridge Seismic Retrofit Phase III Design Project budget in the amount of \$35,725,913, bringing the total project budget to \$40,725,913, to be financed by federal funds in the amount of \$34,518,203 and District funds in the amount of \$1,207,710, subject to the concurrence of the Finance-Auditing Committee at its meeting of August 13, 2009,

with the understanding that sufficient federal grant funds are available in the Phase III Design Project budget to finance this contract.

Summary

Implementation of the Golden Gate Bridge Seismic and Wind Retrofit Project has been divided into three phases. Construction of Phase I, Seismic Retrofit of the North Approach Viaduct, and Phase II, Seismic Retrofit of the South Approach Structures, has been completed. The federal funding availability and the need for implementation of security hardening of the Bridge required Phase III to be further subdivided into Phase IIIA, Seismic Retrofit of the North Anchorage Housing and the North Pylon, and Phase IIIB, Seismic and Wind Retrofit and Hardening of the Suspension Bridge and Seismic Retrofit of Undercrossing Structures.

After the events of September 11, 2001, the District assessed the vulnerability of the Bridge to manmade threats and determined that hardening of the Phase III structures as part of the Seismic Retrofit Phase III Project was needed in order to protect the Bridge against major earthquakes and manmade threats. Additionally, as previously reported to the Board, the District reviewed the original plans and specifications for the Seismic Retrofit Phase III Project and determined that these original design documents contained errors and omissions and that a seismic retrofit redesign was necessary.

In 2006 the Board of Directors authorized the redesign of retrofit measures and implementation of hardening security measures for Phase IIIA (the North Anchorage Housing and North Pylon). In June 2008, the Board awarded the Phase IIIA construction contract. The Phase IIIA construction is currently underway.

For Phase IIIB, the District Engineer similarly recommends reevaluation of seismic retrofit strategies and redesign of the Phase IIIB structural modifications to address both the seismic retrofit and structural hardening for security. The Golden Gate Bridge Seismic Retrofit Phase IIIB Design Project will include the following work:

- Reevaluation and update of the Suspension Bridge seismic retrofit strategy.
- Development of strategies for the seismic retrofit of Toll Plaza Undercrossing and Lincoln Boulevard Undercrossing structures.
- Review and approval of the proposed seismic retrofit strategies by the Project Review Panel consisting of independent engineering experts and representatives of the Federal Highway Administration (FHWA), California Department of Transportation (Caltrans) and the District.
- Review of the structural hardening strategies developed previously under a research and testing project conducted jointly by the District, the FHWA and the US Army Corps of Engineers.
- Computer analysis and detail design of the seismic and wind retrofit, and structural hardening for the structures.
- Proof testing of the structural hardening design details.
- Value Engineering Analyses of the proposed structural modifications in conformance with the FHWA rules and regulations.
- Project Environmental Reevaluation in conformance with the Federal and State Environmental rules and regulations.
- Preparation of plans, technical specifications, construction schedule, construction cost estimate and final construction bid documents.

The scope of work outlined above requires that, in addition to assignments to be performed by the District's Engineering staff, several specialty consultants be selected and retained by the District, such as a structural design consultant, an environmental consultant, engineering experts of the Project Peer Review Panel, and Value Engineering consultants. In addition, the District anticipates that an interagency agreement will be negotiated with the US Army Corps of Engineers to perform analysis, proof testing and expert consultation regarding the structural hardening. A recommendation for award of the Design Services contract is presented in this report. Other agreements will be presented to the Board at future meetings for approval as needed.

PHASE IIIB DESIGN SERVICES. Consistent with the District's Procurement Manual, the engineering consultant for the Phase IIIB Design Services was selected through a competitive, qualification-based Request for Statements of Qualification and Proposals (RFQ/RFP) process.

The Phase IIIB Design Services RFQ/RFP was issued by the District on June 2, 2009. By the due date of June 30, 2009, the Office of the District Secretary received proposals from four engineering teams. The District established a consultant evaluation panel consisting of four engineers employed by the District, one representative of the FHWA and one representative of Caltrans. The consultant selection criteria listed in the RFQ/RFP included qualifications of the firms and the individual consultant team members, their track records on previously completed similar projects and their understanding and methodology of providing services for this design contract. Consistent with the selection process of the RFQ/RFP, each member of the consultant selection committee independently evaluated and ranked the submitted Statements of Qualifications and Proposals (SOQ&P). The individual rankings were then combined to establish the final ranking of the SOQ&Ps. The consulting teams, which submitted the three top ranked SOQ&Ps, were interviewed on July 10, 2009, by the selection committee. Each of the committee members independently evaluated and ranked the qualifications and project understanding of the three consulting teams based on the interviews and SOQ&Ps. The individual rankings were then combined and the final ranking of the consultants is as follows:

1. HDR Engineering, Inc.
2. CH2M Hill
3. Parsons Brinckerhoff

The panel members unanimously determined, as reflected in their ranking of consultants, that HDR Engineering, Inc. (HDR), is the best qualified consultant to perform these services. The District Engineer concurs with this finding.

In spring 2009, Caltrans issued a directive to all local agencies regarding mandatory requirement to establish contract specific Underutilized Disadvantaged Business Enterprise (UDBE) goals for federally funded contracts. This directive was based upon the results of Caltrans' statewide disparity study that identified four underutilized DBE groups in state contracts: Black Americans, Asian-Pacific Americans, Native Americans, and Women. As a result, the District analyzed and established a 3.3% UDBE contract specific goal for the Phase IIIB Design Services contract. The new UDBE rules for FHWA funded contracts require that, in order for a proposer to be considered responsible and responsive, the proposer must either meet the UDBE goal or document sufficient good faith efforts to retain UDBEs if it did not succeed in obtaining enough UDBE participation. The District's DBE Program Administrator has determined that HDR, has complied with the UDBE requirements applicable to the contract. HDR reported an anticipated 30% UDBE utilization.

As stated in the RFQ/RFP, after the qualifications-based ranking of consultants was established, District staff opened and reviewed a sealed cost proposal submitted by HDR, and negotiated a not-to-exceed cost for the services with the consultant. Staff has determined that the not-to-exceed \$18,260,000 price is commensurate with the scope of services requested by the District and recommends award of the contract to HDR. The design consultant will be compensated based upon actual time expended and expenses incurred plus a fixed fee within the authorized not-to-exceed amount. Staff also recommends that a contingency in the amount of \$1,740,000 be established for this contract for any additional or changed scope that may develop while work proceeds.

This Professional Services Agreement (PSA) is subject to Caltrans pre-award audit and FHWA approval. In accordance with FHWA and Caltrans requirements for Federal-aid fund participation, consultants' proposals must be audited prior to execution of contracts for professional services to verify that the consultants' accounting systems, rates, knowledge of FHWA's cost eligibility, documentation requirements and proposed contract language are satisfactory. The audits and resolution of audit findings are prerequisites for FHWA/Caltrans' approval of consultant services contracts. The District has requested Caltrans Office of External Audits and Investigations to perform such a pre-award audit of the proposed Phase IIIB Design Services contract with HDR. The District is awaiting the audit results. In order to allow for timely engagement of the consultant, it is proposed that the Board authorize the General Manager to execute the contract to HDR, immediately upon receiving FHWA/Caltrans approval.

Fiscal Impact

An amount of \$5,000,000 is included in the FY 09/10 Bridge Division Capital Budget for the Golden Gate Bridge Seismic Retrofit Phase III Design Project. An capital budget increase in the amount of \$35,725,913, to be funded with \$34,518,203 federal grant funds and \$1,207,710 in District funds, is required in the Bridge Division Capital Budget to establish the revised Phase III Design Project budget of \$40,725,913 (97% federal grants / 3% District).

The total cost of the Phase III Design Project (Phase IIIA and Phase IIIB) has been estimated at \$40,725,913, and consists of the \$5,785,513 cost of Phase IIIA design completed in 2007 and the estimated Phase IIIB Design cost of \$34,940,400. The following is the breakdown of the estimated Phase IIIB Design Project cost developed by the District's Engineering staff:

	Estimated Cost
District Staff (Labor + Fringe Benefits + Indirect Cost Markup)	\$12,090,400
Design Consultant	\$20,000,000
Value Engineering Consultants	\$300,000
Environmental Consultant	\$300,000
Project Review Panel Expert Consultants	\$600,000
Structural Hardening Analysis & Proof Testing – US Army Corps of Engineers	\$1,500,000
Advertising & Consultant Selection	\$100,000
Miscellaneous Project Expenses	\$50,000
TOTAL ESTIMATED COST	\$34,940,400