



Agenda Item No. (6)

To: Building and Operating Committee/Committee of the Whole
Meeting of February 23, 2023

From: John R. Eberle, Deputy District Engineer
Ewa Z. Bauer-Furbush, District Engineer
Denis J. Mulligan, General Manager

Subject: **APPROVE ACTIONS RELATIVE TO PROFESSIONAL SERVICES AGREEMENT NO. 2018-B-075, GOLDEN GATE BRIDGE PHYSICAL SUICIDE DETERRENT SYSTEM AND WIND RETROFIT, SUICIDE DETERRENT NET SYSTEM FABRICATION SHOP INSPECTION SERVICES, WITH DAVID ENGINEERING, LLC**

Recommendation

The Building and Operating Committee recommends that the Board of Directors approve the following actions relative to the Professional Services Agreement (PSA) No. 2018-B-075, *Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit, Suicide Deterrent Net System Fabrication Shop Inspection Services*:

1. Authorize execution of the Seventh Amendment to PSA No. 2018-B-075 with David Engineering, LLC (David Engineering), Chicago, IL, in an amount not-to-exceed \$94,000 for continuation of the suicide deterrent net system fabrication inspection services through December 2023; and,
2. Authorize a budget increase in the FY 2022/23 Bridge Division Capital Budget in the amount of \$94,000, relative to Project #1526, *Golden Gate Bridge Suicide Deterrent System Construction*, for a revised total project budget of \$215,032,868.

This matter will be presented to the Finance-Auditing Committee at its February 23, 2023, meeting for concurrence, and to the Board of Directors at its February 24, 2023, meeting for appropriate action.

Summary

At its December 16, 2016, meeting, the Board of Directors, by Resolution No. 2016-087, authorized the award of construction Contract No. 2016-B-01, *Golden Gate Bridge Physical Suicide Deterrent System and Wind Retrofit Projects*, to Shimmick Construction Company, Inc./Danny's Construction Company LLC, a Joint Venture (Contractor).

Contract No. 2016-B-01 includes the *Golden Gate Bridge Suicide Deterrent System Construction* (Project #1526), and the *Suspension Bridge Wind Retrofit* (Project #1528). Project #1526 involves

fabrication and installation on the Bridge of a horizontal stainless steel net supported by cantilevered steel brackets along the west and east sides of four Golden Gate Bridge structures: the South Approach Viaduct, the Fort Point Arch, the Suspension Bridge, and the North Approach Viaduct. The net and cantilevered steel brackets will be located approximately twenty feet below the sidewalk and extend out about twenty feet. The total net quantity is 385,000 square feet.

The *Golden Gate Bridge Suicide Deterrent System Construction* (Project #1526) is mostly funded with monies from the Federal Highway Administration (FHWA). Accordingly, the Golden Gate Bridge, Highway and Transportation District (District) follows the rules and procedures set forth in the California Department of Transportation (Caltrans) Local Assistance Procedures Manual (LAPM) for federally assisted projects. In conformance with the LAPM, the District has developed a Construction Contract Administration Plan for the construction of the Project. According to the Plan, the District is responsible for administration and management of Contract No. 2016-B-01. This work is performed by the Engineering Department staff with the assistance of consultants with expertise in various aspects of construction administration and engineering.

On August 24, 2018, by Resolution No. 2018-059, the Board of Directors authorized an award of PSA No. 2018-B-075, *Golden Gate Bridge Physical Suicide Deterrent Net System Fabrication Shop Inspection Services*, to David Engineering, in the amount of \$400,000 and authorized a contingency for the PSA in the amount of \$40,000.

The scope of the services consists, in general, of:

- reviewing the construction plans and specifications;
- reviewing the net fabricator's quality control plans;
- reviewing the net fabricator's shop drawings;
- performing quality assurance inspections of and writing reports related to the net system fabrication; and,
- documenting the packaging and shipment of material from the fabrication shop to the construction site.

As previously reported to the Committee, the Contractor has not progressed the work as required by the contract and has informed the District that it will not complete the installation of the majority of the physical suicide deterrent system until the end of 2023 and will not complete the remaining work until mid-2026. As a result of the delay in construction completion, Engineering staff and consultant support services costs will increase.

Of immediate concern is the budget for PSA No. 2018-B-075, *Golden Gate Bridge Physical Suicide Deterrent Net System Fabrication Shop Inspection Services*, with David Engineering.

The original PSA price was established based on an estimated 24 months of the fabrication period. Due to the Contractor's delays in performing field verifications and development of net system fabrication drawings, the fabrication period and corresponding inspection period have been extended. In early 2020, staff determined that the fabrication would not be completed within the original estimated fabrication period and an amendment increasing the time and cost of services was executed. To-date, six amendments to PSA No. 2018-B-075 have been executed as presented in Table 3 below, which extended the time of services period to March 2023.

The net fabricator has completed fabrication of approximately 80% of the total net quantity. In addition, there are miscellaneous smaller net sections and hardware that remain to be fabricated. Based upon the amount of remaining net fabrication, the current fabrication production rates, and the construction contractor's schedule, Engineering staff has estimated that the fabrication should be completed by the end of 2023.

The current PSA has enough funds to allow quality assurance inspections to continue through the end of March 2023. To continue quality assurance inspections of the remaining suicide deterrent net system fabrication through December 2023, the Seventh Amendment to the PSA with David Engineering is necessary.

Engineering staff requested, and David Engineering has provided, a cost proposal in the amount of \$94,000 to continue performing the requested shop quality assurance inspection services through November 2023. Engineering staff has reviewed the proposed cost and found it to be reasonable in terms of David Engineering's budgeted labor hours to perform the additional scope of services requested by the District and to be consistent with David Engineering's audited labor and overhead billing rates.

Staff recommends that the Building and Operating Committee recommend that the Board of Directors authorize the execution of the Seventh Amendment to PSA No. 2018-B-075 with David Engineering in a not-to-exceed amount of \$94,000, to perform the additional quality assurance inspection services at the suicide deterrent net system fabrication facility as described above.

The District's Disadvantaged Business Enterprise (DBE) Program Administrator has verified that the work under the Seventh Amendment includes 100% DBE participation, since David Engineering is a DBE certified company. David Engineering will be compensated for actual time expended and expenses incurred, plus a fixed fee, for the not-to-exceed authorized amount.

As reported to the Committee at its September 22, 2022, meeting, the additional time of construction was estimated to increase the cost of contract administration and construction engineering efforts of Engineering staff and consultants as well as additional California Highway Patrol traffic control support services and National Park Service permit fees by \$25,488,717 by November 2024. If the action recommended in this staff report is approved by the Board of Directors, the total cost of increases to some of these contracts will be \$10,690,000. Engineering staff will continue monitoring the progress of the construction work and will make an assessment of and will report to the Committee at a later date any additional budget amounts necessary to finance contract administration and construction engineering efforts of Engineering staff and consultants, as well as additional California Highway Patrol traffic control support services and National Park Service permit fees through the construction completion.

Fiscal Impact

Project #1526, *Golden Gate Bridge Suicide Deterrent System Construction*, was approved in the FY 2022/23 Bridge Division Capital Budget at a total cost of \$214,938,868. As shown in Table 1 below, the budget for Project #1526 includes an amount of \$55,724,957 for Engineering staff time and consulting services related to the construction administration and construction engineering.

The proposed \$94,000 increase in the FY 2022/23 Bridge Division Capital Budget for Project #1526, funded with District reserves, would increase the total amount assigned to the Construction Administration and Engineering Budget Sub-Element to \$55,818,957, and would increase the total Project budget to \$215,032,868.

TABLE 1: PROJECT BUDGET - #1526, GGB Suicide Deterrent System Construction

BUDGET ELEMENT		AMOUNT	PROPOSED ADJUSTMENT	ADJUSTED AMOUNT
Construction Contract:		\$132,563,830	0	\$132,563,830
Construction Contingency:		\$22,405,213	0	\$22,405,213
Supplemental Funds:		\$3,994,868	0	\$3,994,868
Documentation of Project History:		\$250,000	0	\$250,000
Construction Administration & Engineering:		\$55,724,957	\$94,000	\$55,818,957
	CONSTR. ADMIN. & ENGINEERING BUDGET SUB-ELEMENT	AMOUNT		
1	District Staff Resolution No. 2020-054 Resolution No. 2021-044 Resolution No. 2022-078 Total amount	\$15,778,991 \$2,000,000 \$5,270,000 \$4,637,000 \$27,685,991		
2	Construction Engineering Support Amendment 12 PSA 2011-B-2 Resolution No. 2016-089	\$6,600,000		
3	Environmental Compliance PSA 2017-B-09 Resolution No. 2017-002	\$903,152		
4	Interim Construction Scheduling and Claim Support PSA 2017-B-17 GM Report	\$59,600		
5	Construction Scheduling and Claim Support	\$2,109,240		

	PSA 2018-B-07 Resolution No. 2017-105				
	Amendment 1 Under GM authority	\$210,924			
	Resolution No. 2021-044	\$925,000			
	Amendment 3 additional amount Resolution No. 2022-078	\$1,542,000			
	Total PSA	\$4,787,164			
6	Steel Fabrication Shop Inspection PSA 2018-B-06 Resolution No. 2017-115, including Amendment 1	\$1,395,000			
	Amendment 1 Under GM authority	\$139,500			
	Amendment 2, including contingency Resolution No. 2020-027	\$198,000			
	Total PSA	\$1,732,500			
7	Suicide Deterrent Net System Fabrication Shop Inspection PSA 2018-B-075 Resolution No. 2018-059	\$400,000			
	Amendment 1 (time only)	\$0			
	Amendment 2 Under GM authority	\$40,000			
	Amendment 3, 4 and 5 Resolution No. 2021-013	\$179,000			
	Amendment 6 Resolution No. 2022-016	\$134,000			

	<i>Proposed additional amount</i>	<u>\$94,000</u>			
	<i>Total proposed amount</i>	<u>\$847,000</u>			
8	Temporary Structures Engineering Advisor Support Services PSA 2018-B-082 Resolution No. 2018-066 Amendment 1 Under GM authority Amendment 2, including contingency Resolution No. 2020-082 Total PSA	\$870,500 \$87,050 \$1,474,000 \$2,431,550			
9	Field Inspection Support Services PSA 2018-B- 084 Resolution No. 2018-080 Amendment 1 Under GM authority Resolution No. 2021-044 Amendment 3 additional amount Resolution No. 2022-078 Total PSA proposed amount	\$3,700,000 \$370,000 \$1,715,000 \$2,127,000 \$7,912,000			
10	Maintenance Traveler System Fabrication Shop Inspection PSA 2019-B- 007 Resolution No. 2019-048 PSA rescinded	\$704,000 (\$704,000)			

11	Maintenance Traveler System Fabrication Shop Inspection PSA 2021-B-073 Resolution No. 2022-16	\$2,860,000			
SUBTOTAL CONSTR. ADMIN & ENG., INCLUDING THE PROPOSED BUDGET INCREASE		<u>\$55,818,957</u>	TOTAL AUTH. AMOUNT: \$55,724,957	PROPOSED INCREASE: \$94,000	PROPOSED REVISED AMOUNT: <u>\$55,818,957</u>
TOTAL PROJECT #1526 BUDGET			AUTH. BUDGET \$214,938,868	<i>PROPOSED INCREASE:</i> \$94,000	<i>PROPOSED REVISED BUDGET:</i> \$215,032,868

TABLE 2: PROJECT FUNDING - #1526, GGB Suicide Deterrent System Construction

SOURCE OF FUNDS	CURRENT AMOUNT	PROPOSED ADJUSTMENT	ADJUSTED AMOUNT
MTC-STP Funds	\$74,910,000	\$0	\$74,910,000
Caltrans HBP Funds	\$58,140,000	\$0	\$58,140,000
GGBHTD District	\$74,460,407	<u>\$94,000</u>	<u>\$74,554,407</u>
MHSOAC	\$7,000,000	\$0	\$7,000,000
Cell Site Revenues	\$389,736	\$0	\$389,736
Donations	\$38,725	\$0	\$38,725
TOTAL	\$214,938,868	\$94,000	\$215,032,868

TABLE 3: The history of PSA No. 2018-B-075

ACTION	AMOUNT
Award PSA No. 2018-B-075, Golden Gate Bridge Physical Suicide Deterrent System, Suicide Deterrent Net System Fabrication Shop Inspection Services Resolution No. 2018-059	\$399,501
First Amendment - time only	\$0,00
Second Amendment – additional quality assurance shop inspection services	\$38,530 (from contingency)
Third Amendment, additional quality assurance shop inspection services Resolution No. 2021-013	\$162,690
Fourth Amendment- time only	\$0,00
Fifth Amendment, additional quality assurance shop inspection services	\$15,979 (from contingency)
Sixth Amendment, additional quality assurance shop inspection services Resolution No. 2022-016	\$134,000
<i>Proposed Seventh Amendment, additional quality assurance shop inspection services.</i>	<u>\$94,000</u>
<i>PROPOSED TOTAL PSA AMOUNT</i>	<i>\$844,700</i>