



Agenda Item No. (3)

To: Building and Operating Committee/Committee of the Whole  
Meeting of October 26, 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. 2011-B-2, DESIGN SERVICES FOR THE GOLDEN  
GATE BRIDGE PHYSICAL SUICIDE DETERRENT SYSTEM, WITH HNTB  
CORPORATION**

### **Recommendation**

The Building and Operating Committee recommends that the Board of Directors approve the following actions relative to the Professional Services Agreement (PSA) No. 2011-B-2, *Design Services for the Golden Gate Bridge Physical Suicide Deterrent System*:

1. Authorize execution of the Second Addendum to the Twelfth Amendment to PSA No. 2011-B-2 with HNTB Corporation (HNTB), in an amount not-to-exceed \$1,400,000 for continuation of the construction engineering design support services during construction of the *Golden Gate Bridge Physical Suicide Deterrent System Construction* (Project #1526); and,
2. Authorize an increase in the amount of \$1,400,000 in the FY 2023/24 Bridge Division Capital Budget, relative to Project #1526, to be financed with District reserves, for a revised total Project #1526 budget of \$218,912,868.

This matter will be presented to the Finance-Auditing Committee at its October 26, 2023, meeting for concurrence, and to the Board of Directors at its October 27, 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).

Project #1526, *Golden Gate Bridge Suicide Deterrent System Construction* involves fabrication and installation on the Golden Gate Bridge (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, and construction of a tall vertical railing at the North Anchorage Housing. The net and cantilevered steel brackets are located approximately twenty feet below the sidewalk and extend out about twenty feet. Because the installation of the Net System on the Suspension Bridge blocks operations of the existing Suspension Bridge maintenance travelers, the Project includes replacement of these travelers with new travelers that are configured to avoid interference with the Net System. The travelers will be located underneath, between and on the sides of the Suspension Bridge stiffening trusses.

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 the Project #1526 construction. This work is performed by the Engineering Department staff with the assistance of consultants with expertise in various aspects of construction administration and engineering. Consistent with established engineering practice, and as referenced in PSA No. 2011-B-2 with HNTB, the administration and management of the Physical Suicide Deterrent Project construction requires that the design consultant provide engineering support services during construction of Project #1526.

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 projected delay in construction completion, an increase in the Project #1526 budget is necessary to finance the extension of the construction management and engineering efforts by Engineering staff and consultants.

Of immediate concern is the budget for PSA No. No. 2011-B-2, *Design Services for the Golden Gate Bridge Physical Suicide Deterrent System*, with HNTB. On December 16, 2016, the Board, by Resolution No. 2016-089, authorized the Twelfth Amendment to PSA No. 2011-B-2, in the not-to-exceed amount of \$6,000,000 with HNTB for providing engineering support services during construction of the Physical Suicide Deterrent System Project as part of construction Contract No. 2016-B-1, *Golden Gate Bridge Physical Suicide Deterrent and Wind Retrofit*, and also authorized a contingency amount of \$600,000. The scope of the services consists, in general, of:

- reviewing and recommending approval of Contractor's technical submittals, working drawings, and requests for substitutions;
- preparing written responses to Contractor's requests for information regarding the design;
- providing recommendations for the resolution of different site condition issues during construction;
- attending mock-up installation of the suicide deterrent net system;
- attending shop and field testing of the new Suspension Bridge access travelers; and, if necessary,

- preparing plans and specifications for construction contract change orders covering changes to the structural and other construction details.

The PSA Twelfth Amendment price was established based on the original construction contract completion date of January 2021 and the estimated number of technical submittals, working drawings and work plans that would be required for the construction. Since then, the Contractor has significantly increased the number of technical submittals, working drawings and work plans for the work. In addition, a much higher number of resubmittals have been required to achieve the correct submittal content. Consequently, the review effort on the part of HNTB has increased substantially. In January 2023, the First Addendum to the Twelfth Amendment utilizing the authorized contingency to the PSA Twelfth Amendment was executed. See Table 2 included in this staff report for a history of the PSA.

A substantial number of technical submittals and working drawings that will require review by HNTB is still outstanding, including for the installation of a portion of the net system in Span 4 of the Suspension Bridge; the removal of the remaining original interior maintenance travelers from the Suspension Bridge; the fabrication and installation of the new maintenance travelers on the Suspension Bridge; and the removal of the Contractor's access systems at the completion of work. In addition, the shop and field testing of the new maintenance travelers remain to be performed.

Staff has reviewed the Contractor's list of remaining submissions and the Contractor's current schedule for delivering these submissions and has determined that a Second Addendum to the Twelfth Amendment to the PSA with HNTB is necessary for HNTB to continue providing engineering design support services for Project #1526.

Engineering staff requested, and HNTB has provided, a cost proposal in the amount of \$1,400,000, for the requested additional scope of work related to HNTB review of the outstanding submittals. Staff will be monitoring the work and will inform the Committee if conditions change and if additional services are required.

Engineering staff has reviewed the cost proposal and found it to be reasonable in terms of HNTB's budgeted labor hours to perform the additional scope of services requested by the District and it was consistent with HNTB's audited labor and overhead billing rates. HNTB will be compensated for actual time expended and expenses incurred, plus a fixed fee, for the not-to-exceed authorized amount.

Staff recommends that the Building and Operating Committee recommend that the Board of Directors authorize the execution of the Second Addendum to the Twelfth Amendment to PSA No. 2011-B-2, in a not-to-exceed amount of \$1,400,000, to perform the additional services.

The District's Disadvantaged Business Enterprise (DBE) Program Administrator has determined that there will be no DBE participation associated with the work under the Second Addendum to the Twelfth Amendment.

As was previously reported to the Committee, by November 2024, 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 the National Park Service permit fees by \$25,488,717.

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 \$14,570,000. 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 through the construction completion.

### **Fiscal Impact**

Project #1526, *Golden Gate Bridge Physical Suicide Deterrent System Construction*, is approved in the FY 2023/24 Bridge Division Capital Budget at a total cost of \$217,512,868. As shown in Table 1 below, the budget for Project #1526 includes an amount of \$57,018,957 for Engineering staff time and consulting services related to construction administration and construction engineering, and an amount of \$5,274,868 for the Supplemental Funds.

The proposed Second Addendum to the Twelfth Amendment to PSA No. 2011-B-2 with HNTB Corporation, in the amount of \$1,400,000, funded with District reserves, would increase the total amount assigned to the Construction Administration and Engineering Budget Sub-Element of Project #1526 to \$58,418,957, and would increase the total Project #1526 budget to \$218,912,868.

**TABLE 1: PROJECT #1526 BUDGET**  
**GGB Physical Suicide Deterrent System Construction**

BUDGET ELEMENT		AMOUNT	PROPOSED ADJUSTMENT	ADJUSTED AMOUNT
<b>Construction Contract:</b>		<b>\$132,563,830</b>		<b>\$132,563,830</b>
<b>Construction Contingency:</b>		<b>\$22,405,213</b>		<b>\$22,405,213</b>
<b>Supplemental Funds:</b>		<b>\$5,274,868</b>		<b>\$5,274,868</b>
	<b>SUPPLEMENTAL FUND BUDGET SUB-ELEMENT</b>			
1	CHP Agreement No. 16R350000 Resolution No. 2017-003	\$2,000,000		
	Amendment 1 (time only)	\$0		
	Amendment 2 (time only)	\$0		
	Amendment 3	\$1,280,000		
2	NPS/Permits	\$619,868		
3	Haz Disposal Fees	\$225,000		
4	Legal Fees	\$300,000		

5	Liquidated Damages (fog and directed lane closure pick up)	\$847,800		
6	Printing	\$2,200		
<b>Documentation of Project History:</b>		<b>\$250,000</b>		<b>\$250,000</b>
<b>Construction Administration &amp; Engineering:</b>		<b>\$57,018,957</b>	<b>\$1,400,000</b>	<b>\$58,418,957</b>
	<b>CONSTR. ADMIN. &amp; ENGINEERING BUDGET SUB-ELEMENT</b>	<b>AMOUNT</b>		
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 (HNTB) Amendment 12 PSA 2011-B-2 Resolution No. 2016-089  Addendum 1 Under GM authority  <i>Proposed additional amount (this report)</i>  <i>Total proposed amount</i>	\$6,000,000  \$600,000  <u><i>\$1,400,000</i></u>  <i>\$8,000,000</i>		

3	Environmental Compliance (ESA) PSA 2017-B-09 Resolution No. 2017-002	\$903,152			
4	Interim Construction Scheduling and Claim Support (Secretariat International) PSA 2017-B-17 GM Report	\$59,600			
5	Construction Scheduling and Claim Support (Secretariat International) PSA 2018-B-07 Resolution No. 2017-105	\$2,109,240			
	Amendment 1 Under GM authority	\$210,924			
	Amendment 2, 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 (MTI) 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 (David Engineering) 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			
	Amendment 7 Resolution No. 2023-017	\$94,000			

	Total PSA	\$847,000			
8	Temporary Structures Engineering Advisor (TJA) Support Services PSA 2018-B-082 Resolution No. 2018-066	\$870,500			
	Amendment 1 Under GM authority	\$87,050			
	Amendment 2 Resolution No. 2020-082	\$1,340,000			
	Amendment 3 (time only)	\$0			
	Amendment 4 Under GM authority	\$134,000			
	Proposed additional amount	\$1,200,000			
	Total PSA	\$3,631,550			
9	Field Inspection Support Services (Summit) PSA 2018-B-084 Resolution No. 2018-080	\$3,700,000			
	Amendment 1 Under GM authority	\$370,000			
	Amendment 2 Resolution No. 2021-044	\$1,715,000			
	Amendment 3 Resolution No. 2022-078	\$2,127,000			



	Total PSA	\$7,912,000			
10	Maintenance Traveler System Fabrication Shop Inspection (Bureau Veritas) PSA 2019-B-007 Resolution No. 2019- 048  PSA rescinded	\$704,000      (\$704,000)			
11	Maintenance Traveler System Fabrication Shop Inspection (Smith Emery) PSA 2021-B-073 Resolution No. 2022- 016	\$2,860,000			
SUBTOTAL CONSTR. ADMIN & ENG., INCLUDING THE PROPOSED BUDGET INCREASE		<u>\$58,418,957</u>	TOTAL AUTH. AMOUNT:  \$57,018,957	PROPOSED INCREASE:  \$1,400,000	PROPOSED REVISED AMOUNT:  <u>\$58,418,957</u>
TOTAL PROJECT #1526 BUDGET			AUTH. BUDGET  \$217,512,868	PROPOSED INCREASE:  \$1,400,000	PROPOSED REVISED BUDGET:  \$218,912,868

**TABLE 2: The history of PSA No. 2011-B-2 is as follows:**

<b>ACTION</b>	<b>AMOUNT</b>	<b>FINANCING SOURCE</b>
Award PSA No. 2011-B-2, Physical Suicide Deterrent System; Resolution No. 2011-059	\$3,990,000	100% District (part of the Physical Suicide Deterrent System design budget)
First Amendment - no cost time extension	0	
Second Amendment - Resolution No. 2013-098; design of electrical power system for battery charging stations for the maintenance travelers	127,257	100% District (part of the Physical Suicide Deterrent System design budget)
Third Amendment - no cost time extension	0	
Fourth Amendment - Coordination of Contract Bid Documents, Resolution No. 2014-042	72,743	100% District (part of the Physical Suicide Deterrent System design budget)
Fifth Amendment - Value Engineering Study, Resolution No. 2014-082	75,227	100% District (part of the Physical Suicide Deterrent System design budget)
Sixth Amendment - Design of Training Rescue Net, Resolution No. 2014-082	65,492	100% District (part of the Physical Suicide Deterrent System design budget)
First Addendum to the Sixth Amendment - engineering support services during the Rescue Training Net construction	66,000	100% District (part of the Rescue Training Net construction project budget)
Seventh Amendment - no cost time extension	0	
Eighth Amendment - no cost time extension	0	
Ninth Amendment - Construction support services during advertisement for bids, Resolution No. 2015-070	322,882	100% District (part of the Physical Suicide Deterrent System design budget)
Tenth Amendment - no cost time extension	0	
Eleventh Amendment - no cost time extension	0	
Twelfth Amendment - engineering support services during the Suicide Deterrent Project construction	6,000,000	65% Federal/4% State/ 31% District (part of the Physical Suicide Deterrent

		System construction project budget)
First Addendum to the Twelfth Amendment - engineering support services during the Suicide Deterrent Project construction	600,000	65% Federal/4% State/ 31% District (part of the Physical Suicide Deterrent System construction project budget)
<i>Proposed Second Addendum to the Twelfth Amendment - continued engineering support services during the Suicide Deterrent Project construction</i>	<i>1,400,000</i>	100% District (part of the Physical Suicide Deterrent System construction project budget)
Thirteenth Amendment - no cost time extension	0	
Fourteenth Amendment - no cost time extension	0	
<b><i>PROPOSED TOTAL PSA AMOUNT</i></b>	<i>\$12,719,601</i>	

**TABLE 3: PROJECT FUNDING - #1526, GGB Suicide Deterrent System Construction**

<b>SOURCE OF FUNDS</b>	<b>CURRENT AMOUNT</b>	<b>PROPOSED ADJUSTMENT</b>	<b>ADJUSTED AMOUNT</b>
MTC-STP Funds	\$74,910,000	\$0	\$74,910,000
Caltrans HBP Funds	\$58,140,000	\$0	\$58,140,000
GGBHTD District	\$77,034,407	<i>\$1,400,000</i>	<i>\$78,434,407</i>
MHSOAC	\$7,000,000	\$0	\$7,000,000
Cell Site Revenues	\$389,736	\$0	\$389,736
Donations	\$38,725	\$0	\$38,725
<b>TOTAL</b>	<b>\$217,512,868</b>	<b><i>\$1,400,000</i></b>	<b><i>\$218,912,868</i></b>

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