



Agenda Item No. (4)(a)

To: Finance-Auditing Committee/Committee of the Whole
Meeting of May 19, 2022

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

Subject: **AUTHORIZE BUDGET ADJUSTMENT(S) AND/OR TRANSFERS**
(a) BUDGET INCREASE IN THE FY 21/22 BRIDGE DIVISION
CAPITAL BUDGET FOR PROJECT #2121, GOLDEN GATE
BRIDGE TOLL PLAZA ADMINISTRATION BUILDING ELEVATOR
REPLACEMENT PROJECT

Recommendation

The Finance-Auditing Committee recommends, in concurrence with the Building and Operating Committee at its meeting on May 19, 2022, that the Board of Directors authorize a capital budget increase in the amount of \$944,000 in the *Toll Plaza Administration Building Elevator Replacement (Project #2121)*, to be financed from District Reserves, to fully fund the construction Contract No. 2021-B-052, *Golden Gate Bridge Toll Plaza Administration Building Elevator Repairs and Improvements*.

This matter will be presented to the Board of Directors at its meeting on May 20, 2022, for appropriate action.

Summary

The Golden Gate Bridge, Highway and Transportation District's (District) Toll Plaza Administration Building is a reinforced concrete structure that was constructed in 1937 as part of the original construction of the Golden Gate Bridge for the purpose of providing office and administration space for District staff involved with collecting tolls, providing security, and administering the business of the Golden Gate Bridge. The building is currently the location of the District's General Manager, Secretary of the District, Auditor-Controller, and District Engineer offices, Bridge Security offices, accounting and capital and grants offices, engineering staff offices, and is the primary meeting location for the District's Board of Directors. The original building was one-story and a steel framed second story was added in 1965, at which time a three-stop elevator was added to provide access from the basement to the first and second floors. The elevator is an in-ground hydraulic piston type elevator, which operates by pumping hydraulic fluid from a reservoir tank to the in-ground piston operating inside the cylinder that is embedded in the ground under the elevator pit. The elevator has

been regularly maintained by an elevator service firm, but in 2019 and 2020, the hydraulic system began experiencing breakdowns requiring frequent repairs and service. The elevator service firm informed the District that the elevator lift system was failing and required major refurbishing, including replacing the in-ground hydraulic piston, which was beyond the scope of their maintenance agreement. In August 2021, during an inspection by the State of California Division of Occupation Safety and Health (DOSH) Elevator Unit inspector, it was determined that the elevator was no longer fit to operate and was required to be repaired or decommissioned. Since the repairs were extensive and could not be readily made, certified service technicians decommissioned the elevator on November 15, 2021, by disconnecting the electric power and hydraulic fluid pipeline to the elevator.

Elevator Repair Construction Contract

Engineering Staff has developed a construction contract, Contract No. 2021-B-052, *Golden Gate Bridge Toll Plaza Administration Building Elevator Repairs and Improvements*, to accomplish the elevator repairs, which involves the following work:

- Drilling into the ground under the elevator shaft to accommodate a large new cylinder and piston;
- Removing and disposing contaminated soil;
- Removing and replacing the existing passenger elevator hydraulic power and control systems, making improvements to the existing hoistway system and elevator car including cab interior, car door, and hallway entrances;
- Constructing a new fire-rated elevator machine room with a new mechanical ventilation system;
- Performing necessary electrical installations and connections;
- Installing current code required fire detection and fire alarm systems; and
- Performing full-load testing of the repaired elevator and coordinating inspection and certification of the elevator with the State of California Division of Occupation Safety and Health elevator unit (DOSH).

In March 2020, as a result of the coronavirus pandemic, staff working on-site and vendors and visitors that had to access the building were required to follow state and county public health guidelines regarding masking and social distancing. This condition still exists. During the project construction, the building will remain partially occupied and the construction work will be staged to facilitate District operations. To comply with the San Francisco County Public Health and OSHA guidelines for construction work during the COVID-19 pandemic, the contractor will be required to institute rules that comply with these guidelines.

Development of Elevator Repair Scope of Work

Project #2121, *Toll Plaza Admin Building Elevator Replacement*, is included in the Bridge Division FY 21/22 Capital Project Budget at an estimated cost of \$590,000, which includes approximately \$400,000 for construction costs and approximately \$190,000 for staff design and contract administration. This project budget was developed in March of 2020 and was based on a scope of work that included replacing the elevator hydraulic pump and in-ground cylinder, installing new operator panel in the elevator car, refurbishing the elevator car including the door, flooring and paneling, and minor electrical modifications associated with the new operator panel. Staff anticipated that the design could be completed with in-house resources.

Since then, as work progressed, the project evolved into a more complex undertaking and required an expansion of the design and construction scope of work.

With regard to the increased scope of design, after investigating the various elevator code requirements, staff determined that a consulting firm specializing in elevator renovations and refurbishments had to be retained to define the scope of work for the elevator repair that complied with all elevator code requirements, and to assist in developing contract specifications for the repairs.

Engineering staff and the consultant performed a study to determine if an alternate lift system, not requiring drilling, could be utilized at the building but determined that due to space constraints and building configuration, renovation of the existing elevator was the best solution. The consultant reviewed the existing elevator system and informed staff that current system did not have a separate fire-rated elevator equipment room, which is required by code to house the elevator hydraulic fluid tank and controls, and that such room must be ventilated. Staff reviewed the basement floor plan and determined that an existing storage area in the building basement could be renovated into an elevator machine room. Staff retained the services of a mechanical engineer to design a ventilation system for the new elevator machine room. Staff also hired an electrical engineer to assist with the design of the electrical works necessary to support the ventilation system and the elevator system components requiring power, and with developing the elevator fire safety requirements for inclusion into the bid documents.

It was also determined that the currently utilized in-ground elevator cylinders and pistons are larger than the cylinder and piston used in the original District's elevator. This necessitated adding drilling into the ground under the elevator shaft to enlarge the existing bore hole. After a review of the elevator maintenance records, it was determined that some of the hydraulic fluid from the system had leaked out of the cylinder and piping into the underlying soil, requiring removal and special disposal of contaminated soil.

Consequently, the following work has been added to the construction contract: remodeling of the available basement space to create a separate fire-rated elevator equipment room; installing the equipment room ventilation system; electrical work to support the ventilation system and fire safety requirements, drilling of a larger bore hole for a new cylinder, and contaminated soil removal and disposal.

It is also estimated that the increased scope of construction work and the anticipated increased lead time to procure equipment and materials under current market conditions requires a construction time of nine months, and additional effort of managing the construction contract.

Fiscal Impact

Project #2121, *Toll Plaza Admin Building Elevator Replacement*, is included in the FY 21/22 Bridge Division Capital Budget in the amount of \$590,000 and is 100% District funded. A capital budget increase of \$944,000, to be funded with District reserves, is necessary to fully fund Project #2121 at the proposed budget of \$1,534,000 as presented below.

<u>PROJECT #2121 BUDGET ITEM</u>	<u>COST</u>
Previous Costs Expended to Date (Design, staff time, investigations)	\$243,300
Construction Contract No. 2021-B-052	\$726,613
Construction Contract Contingency (15%)	\$109,000
Construction Support Services and Testing (Consultants)	\$15,000
Construction Administration – District Staff Burdened Labor	\$280,087
Indirect Costs (ICAP) on District Staff Burdened Labor - Estimated	\$140,000
Environmental Fees and General Project Expenditures	\$20,000
TOTAL BUDGET	\$1,534,000