




October 14, 2021

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer 

Subject: Contract Change Orders for Construction of the OC Streetcar Project

Overview

On September 24, 2018, the Orange County Transportation Authority Board of Directors authorized Agreement No. C-7-1904 with Walsh Construction Company II, LLC, for construction of the OC Streetcar project. Contract change orders are required for work to address utility conflicts, traction power substation site plan revisions, Southern California Edison metering switchgears, optical backbone network system redundancy, traffic signal interconnects, maintenance storage facility permit drawings and revisions, and utility conflicts.

Recommendations

- A. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 4.4 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$3,500,000, to address utility conflicts.
- B. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 54 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,200,000, for traction power substation site plan revisions.
- C. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 64.2 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$1,200,000, for Southern California Edison metering switchgears.
- D. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 69 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$600,000, for optical backbone network system redundancy.

- E. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 79 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of \$3,000,000, for maintenance and storage facility permit drawings and revisions.

Discussion

On September 24, 2018, the Orange County Transportation Authority (OCTA) Board of Directors (Board) awarded the contract to construct the OC Streetcar project (Project) to Walsh Construction Company II, LLC, (Walsh). The Notice to Proceed with construction was issued to Walsh on March 4, 2019. Since then, the Project has progressed with several construction activities continuing to advance. A summary of recent construction milestones includes the substantial completion of the Santa Ana River and Westminster bridges, completion of the Fairview Street crossing, and installation of embedded track on Santa Ana Boulevard from Raitt Street to Bristol Street, from Parton Street to Ross Street, from Broadway to French Street, on Mortimer Street from Fourth Street to Sixth Street, and on Fourth Street from Mortimer Street to French Street. Construction and installation of the maintenance and storage facility (MSF) includes building floor slabs, a perimeter block wall, and a streetcar wash station. Other ongoing construction activities include track bed excavation on Santa Ana Boulevard from Bristol Street to Broadway, installation of platform station foundations, completion of the Fifth Street crossing, and placement of the overhead contact system poles. To keep the work progressing, staff is requesting Board approval of the following contract change orders (CCO).

Utility Conflicts

Over the past two years, staff has reported to the Board that unknown and mislocated utilities continue to be discovered within the city streets that are over 150 years old. As a result, CCO nos. 4, 4.1, 4.2, and 4.3 were issued to address these hidden utilities as work expanded to various segments within the four-mile Project. The last CCO, No. 4.3, was issued to Walsh to address current expenditures from Segments 1, 2, and 3, as well as utility conflict costs that may occur in Segments 4 and 5 (Attachment A). Since the effort to address numerous utility conflicts was extensive and involved Walsh and its subcontractors, it was difficult to track and document time-and-expense (T&E) work timely. Utility conflicts encountered were more complex than anticipated, requiring significant time and effort to excavate and investigate, resulting in either removal or relocation of utilities or redesign of conflicting Project elements. The resulting additional construction efforts include demobilization as time is required to address the utility conflicts, field meetings, and remobilization after solutions are determined.

Recent T&E documentation that was reviewed and validated by the construction management (CM) team shows that the authorized amount of CCO No. 4.3 will be exhausted by the end of October 2021 as a result of these efforts. Therefore CCO No. 4.4, in the amount of \$3,500,000, is required to pay for the increased construction cost and to replenish the budget for potential future costs that may occur in Segments 4 and 5. An independent cost estimate (ICE) was prepared by the CM team and the effort was estimated to cost up to \$3,500,000, which includes materials, equipment, and labor for the work.

Traction Power Substation (TPSS) Site Plan Revision

A TPSS is an electrical substation that powers the streetcar through the overhead contact system. Prior to the construction of the four TPSS sites, Southern California Edison (SCE) determined that site plan revisions were necessary to meet electrical requirements which include clearances around each piece of electrical equipment at the sites, extensive modifications to electrical conduit alignments, and added maintenance access and security gates. The revisions to the sites also require additional removal and replacement of asphalt and concrete. Landscaping and irrigation at the sites will also need to be modified to accommodate the site revisions. To advance the Project without further delay, CCO No. 54, in the amount of \$1,200,000, is needed to address these site revisions. An ICE was prepared by the CM team and the effort is estimated to cost up to \$1,200,000, which includes materials, equipment, and labor for the work.

SCE Metering Switchgear

A metering switchgear is an electric power system composed of electrical disconnect switches, fuses, and circuit breakers used to control, protect, and isolate electrical equipment. A metering switchgear is required for the Project at each TPSS location to energize and de-energize the TPSS. SCE will supply the electricity to the metering switchgear, requiring that the metering switchgears adhere to SCE's design requirements. Earlier this year, it was determined that the metering switchgear required a design modification to fit within the site constraints. On May 18, 2021, CCO No. 64 was executed, in the amount of \$17,618, to allow Walsh's electrical subcontractor to revise the design.

Although Walsh submitted a general inquiry on who will supply and install the SCE equipment during the bid phase, the inquiry was not specific to the metering switchgear. OCTA staff responded that SCE will supply and install SCE equipment; however, OCTA staff did not specify that metering switchgear is excluded. As a result, Walsh did not include the equipment in its bid, and this was validated when staff reviewed Walsh's bid documents on September 20, 2021.

CCO 64.1, in the amount of \$192,000, was issued so that Walsh could place a deposit with the manufacturer to initiate production of the revised metering switchgear design, which has a lead time of five months.

CCO 64.2 is required to compensate Walsh for the four metering switchgears. An ICE was prepared by the CM team and work is estimated to cost up to \$1,200,000, which includes the cost for the equipment.

Optical Backbone Network System Redundancy

The technical specifications and plans for the fiber optic network that connects each station platform to the control centers at the MSF require redundancy so that a cut line or equipment failure does not result in a communication outage. During construction it was determined that redundancy should also be required between the MSF and the Garden Grove Bus Base Annex Building. In addition, the fiber optic network system should be constructed to not preclude additional cameras, ticket validators, public address speakers, or other equipment should it be deemed necessary for operations and/or safety purposes at a later time. These changes will require additional communication ports at the 16 stations and the Garden Grove Bus Base Annex Building for a total of 20 ports. CCO No. 69 is required for this change.

An ICE was prepared by the CM team and the additional work is estimated at \$600,000, which includes materials, equipment, and labor for installation and testing of the 20 communications ports.

MSF Permit Drawings and Revisions

The City of Santa Ana building permit for the MSF was issued after the Project was bid. Revisions made during the building permit plan-check process included additional streetlights along the Fifth Street frontage, additional drainage, enlarged foundation slabs, and expanded emergency lighting. Other changes to the MSF were directed by OCTA and included changing the mezzanine railing and gates to improve safety for maintenance staff needing access to equipment on the vehicle roof, modifying the car wash to eliminate the escape of recycled water for compliance with storm water permits, modifications to floor drains for compatibility with vehicle jacks, modifications to the layout of the traction power substation at the MSF for SCE to access its equipment from Fifth Street, relocation of the material lift, addition of fall protection railing on the roof, and the addition of drainage to the service and inspection pit. CCO No. 79 is required for the additional work resulting from these changes. An ICE was prepared by the CM team and the effort is estimated to cost up to \$3,000,000, which includes materials, equipment, and labor for the work.

All five CCOs will be paid on a T&E basis to the contractor after labor and equipment quantities are confirmed through daily extra work reports prepared by Walsh and approved by the CM team. There is risk that the CCOs may need to be supplemented again if significant revisions occur as construction progresses; any such additional need will be presented to the Board. The cost of the work associated with the five CCOs will be funded from the Project supplemental contingency as previously approved by the Board on March 22, 2021.

Procurement Approach

The initial procurement was handled in accordance with OCTA's Board-approved procedures for public works projects. These procedures, which conform to both federal and state requirements, require that contracts are awarded to the lowest responsive, responsible bidder after a sealed bidding process. On September 24, 2018, the Board authorized Agreement No. C-7-1904 with Walsh, in the amount of \$220,538,649, for construction of the Project.

Proposed CCO Nos. 4.4, 54, 64.2, 69, and 79, in the cumulative amount of \$9,500,000, will increase the cumulative value of the contract to \$254,757,159, as shown in Attachment B. Board approval is required for CCO Nos. 4.4, 54, 64.2, 69, and 79, pursuant to the State of California Public Contracting Code Section 20142.

Fiscal Impact

The additional work for this Project is included in OCTA's Fiscal Year 2021-22 Budget, Capital Programs Division, account nos. 0051-TS010-9017-Z32, 0051-TS010-9017-Z42, 0051-TS010-9017-Z53, and 0051-TS010-9017-Z55, and is funded with Federal Transit Administration Section 5309 New Starts and local Measure M2 funds

Summary

Staff recommends the Board authorize the Chief Executive Officer to negotiate and execute CCO No 4.4, in the amount of \$3,500,000, for utility conflicts, CCO No. 54 in the amount of \$1,200,000, for TPSS site plan revisions, CCO No. 64.2 in the amount of \$1,200,000, for SCE metering switchgear, CCO No. 69 in the amount of \$600,000, for optical backbone network system redundancy, and CCO No. 79 in the amount of \$3,000,000, for MSF permit drawings and revisions to Agreement No. C-7-1904 between OCTA and Walsh for the construction of the Project.

Attachments

- A. Project Map
- B. Walsh Construction Company II, LLC, Agreement No. C-7-1904, Contract Change Order (CCO) Log

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