October 8, 2020

To: Transit Committee

From: Darrell E. Johnson, Chief Executive Officer

Subject: Contract Change Orders for the 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 to increase the allowance for removal of buried man-made objects, modify the traction power and overhead contact system to enable a single track operation in the Pacific Electric Right-of-Way, and allow adjacent tracks to be de-energized for maintenance or emergencies and conduct electrical continuity testing.

Recommendations

A. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 18 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of $300,000, to increase the allowance for removal of man-made objects.

B. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 24.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of $845,985, for overhead contact system sectionalization.

C. Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 30.1 to Agreement No. C-7-1904 with Walsh Construction Company II, LLC, in the amount of $320,164, to conduct electrical continuity testing.

Discussion

On September 24, 2018, the Orange County Transportation Authority (OCTA) Board of Directors (Board) awarded a contract to Walsh Construction Company II, LLC, (Walsh) to construct the OC Streetcar project (Project). The Notice to Proceed with construction was issued to Walsh on March 4, 2019.

Removal of Buried Man-Made Objects

The construction contract includes a $100,000 allowance for the work to remove buried man-made objects that are encountered and were either unknown or could not be quantified during the Project's design. Examples of buried man-made objects encountered include stumps, non-contaminated railroad ties, rail, woody debris, pilings, and buried pavement. As construction progressed, a higher number of buried man-made objects have been encountered than anticipated, including an underground storage tank and an abandoned well at the maintenance and storage facility (MSF) site, resulting in the existing allowance being depleted.

The allowance needs to be increased by an estimated $300,000 to fund work to remove additional buried man-made objects and/or obstructions encountered during excavations along the city street section of the alignment. The street alignments date back to the 1800's, and many man-made obstructions that have been covered over without record have been found. OCTA intends to track, review, and pay for labor material and equipment costs on a time-and-materials basis.

Overhead Contact System Sectionalization

The Project's design assumed that the traction power system delivering electrical power to the vehicles would be provided by the traction power substations (TPSS). Each of the four TPSS along the alignment energize the overhead contact system (OCS) within a specific segment of the alignment. When maintenance is needed, or if an emergency occurs that requires a single section of track to be de-energized, electrical power to the entire segment is required to be de-energized to ensure the safety of maintenance crews and/or emergency responders. This results in the service being disrupted for all tracks within the section. A subsequent operational efficiency review identified that there is an opportunity in the two-mile Pacific Electric Right-of-Way (PEROW) section of the Project to minimize potential disruptions by enabling service to be operated on one track when the other track is de-energized, given the presence of track cross-overs located within the PEROW.

Additional construction efforts are required to implement this sectionalization of the OCS, including modifying the equipment at the two TPSS facilities serving the PEROW, revising the traction power cabling to the OCS, and installing additional OCS electrical power disconnects. In addition to power that can be de-energized on one section of a track for maintenance or emergencies, it will also provide enhanced flexibility in construction in and around the PEROW for future construction projects and encroachment permit work by public utilities.

To keep work proceeding and minimize delays, an initial contract change order (CCO), in the amount of $158,941, is being processed for the engineering work required to modify the TPSS equipment. This supplement to the original CCO covers manufacturing and installation costs to complete the OCS sectionalization. The cost of the additional work has been determined by the construction management team to be $845,985, and includes materials, equipment, and labor for the OCS sectionalization. Walsh has not agreed to the CCO amount and may pursue additional costs at a later time; however, it is prudent to proceed with this supplement in order to allow the project to advance without further delay.

Electrical Continuity Testing

The power system for the Project uses electricity which, if not properly grounded, can induce a current to supporting structures, such as a bridge deck or reinforced concrete sections. Stray current, if not properly grounded, can create premature corrosion over time in the adjacent conduits, and reinforcing steel resulting in deterioration of the concrete. To mitigate the possibility of stray current, the reinforcing steel is welded together and then grounded.

The contract did not specify that specific continuity testing is required to verify adequate grounding is in place at longitudinal reinforced steel locations during construction. To keep work progressing and minimize delays, an initial CCO, in the amount of $23,928, was issued for continuity testing at the Westminster Avenue Bridge, the Santa Ana River Bridge, and the demonstration section of track, which is the initial section of track that is constructed to confirm track installation procedures. This testing included visual and mechanical tests of all rebar connections.

This supplement to the CCO covers the cost of electrical continuity testing required on the remaining alignment. This includes the embedded track on the streets in the City of Santa Ana, the MSF yard track and three additional spans of the Santa Ana River Bridge. The cost of the additional work has been determined by the construction management team to be $320,164, and includes materials, equipment, and labor for the testing. The contractor has not agreed with the CCO amount and may pursue additional costs at a later date; however,

it is prudent to proceed with this supplement in order to allow the project to advance without further delay.

The cost of the work associated with the three CCOs will be funded from the Project contingency because the work was not included in the Project cost estimate. It will not increase the Project cost of $407,700,000 as defined in the Full Funding Grant Agreement.

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 $220,538,549, for construction of the Project.

Proposed CCO nos. 18, 24.1, and 30.1, in the amount of $300,000, $845,985, and $320,164, respectively, will increase the cumulative value of the contract by $1,466,149, to $237,747,779, as shown in Attachment A. Board approval is required for CCO nos. 18, 24.1, and 30.1, 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 2020-21 Budget, Capital Programs Division, accounts 0051-9017-TS010-Z1A, 0051-9017-TS010-Z14, 0051-9017-TS010-Z32, 0051-9017-TS010-Z53, and 0051-9017-TS010-Z54, and is funded with Federal Transit Administration Section 5309 New Starts and local Measure M2 funds.

Summary

Staff recommends Board of Directors' authorization for the Chief Executive Officer to negotiate and execute CCO No. 18, in the amount of $300,000, CCO No. 24.1, in the amount of $845,985, and CCO No. 30.1, in the amount of $320,164, to Agreement No. C-7-1904 with Walsh Construction Company II, LLC.

Attachment

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

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