



Board Report

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Agenda Number: 16.

CONSTRUCTION COMMITTEE JANUARY 18, 2024

SUBJECT: OFFICE OF THE INSPECTOR GENERAL CONSTRUCTION CHANGE ORDER SPOT CHECKS

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE Office of the Inspector General Construction Change Order Spot Check Report for the period September 1 to November 30, 2023.

ISSUE

On January 25, 2018, the Metro Board directed the Office of the Inspector General (“OIG”) to conduct random spot checks on change orders for the construction projects listed in the Quarterly Program Management report to ensure that the CEO Delegation of Authority to approve Construction Change Orders Policy is performing in the manner desired by the Board of Directors.

BACKGROUND

The OIG’s Construction Change Order Spot Check Program (“Spot Checks”) focuses on approved change orders and modifications that exceed \$500,000. The four change orders in this report were selected from the Program Management Quarterly Major Project Status, Legistar 2023-0750. The OIG gathers the data, reviews all the change orders over \$500,000 and selects change orders from the major projects. The information for the Spot Checks was collected from the Program Management Information System (PMIS) which is the department’s database system. Also, virtual meetings and telephonic interviews were conducted with Metro Program Management, Project Control, and Procurement staff as necessary involved in each change order.

For each Spot Check, we summarize:

- Description of the change order,
- Change order detail,
- Scope of Work,
- Budget,
- Schedule (Time to execute the change order),
- Safety, and

- Recommendations and Lessons Learned.

Metro's Program Control department has provided informal responses to this report before its issuance and are asked to provide written responses to the recommendations in this OIG Spot Checks Report within 30 days after this Report is issued. Included with this Report is a spreadsheet on the status of responses concerning former OIG Spot Check Report recommendations (ATCH. B).

DISCUSSION

Spot Checks Performed in this Quarter

Spot Check #1 - Division 20 Portal Widening Turnback Project

This OIG Spot Check report concerns the Division 20 Portal Widening Turnback Project (Contract C1136 MOD 0109), Lighting Various Civil and Electrical Changes.

Change Order Detail

See Attachment A Spot Check #1 table.

Summary #1

Scope - This change order is to rectify design conflicts within the Division 20 Yard electrical drawings. Ductbank sizes were increased to provide the required separation between conduit and rebar, making room for the additional conduits. The light fixtures and the light poles were modified to increase the height and diameter of the pole, as well as the size of the concrete base for the pole was enlarged. This increase provides for additional conduits and cables added for the closed-circuit television (CCTV), Wi-fi fixtures, and PA systems (The primary PA function would be to amplify a message to yard workers and trains in the Metro Division 20 yard).

Other changes within this modification remedy conflicts between the original design and newly designed utilities. Multiple drawing revisions are required. The project team states it is possible some of these design changes will be reimbursable costs from the Designer of Record. This change order includes all revisions made to the drawings and the contractor's labor and materials for these changes.

Budget - This change order was negotiated as MOD 0109 for the amount of \$1,395,861. The Contractor's proposal was \$1,853,497. The negotiated price is \$457,636 (24.7%) lower than the Contractor's proposal. The ICE was \$216,151. A 1,578,562 credit was erroneously added to the ICE for another RFI. Staff stated that funds for this change order are within the approved Life-of-Project budget. Additionally, there *is* a cost recovery potential from the Designer of Record.

Schedule - The CEO Delegation of Authority process was utilized for this change order. The Contractor and Metro agreed on the Scope of Work on August 28, 2023. The modification was awarded on October 4, 2023, and it took staff 27 workdays to complete all signature approvals. Under the prior Board approval method for change orders, assuming an October Board meeting date, it would have taken a minimum of 43 workdays to complete the transaction.

Safety - The Division 20 Portal Widening Turnback Project has 926,798 project hours through November 2023; the Recordable Injury Rate was 2.4 (the Bureau of Labor Statistics National

Average is 2.4) and the Days Away Rate (DART) was 0.22 (the Bureau of Labor Statistics National Average is 1.5).

Recommendation/Lessons Learned - The OIG recommends continuing forward with cost recovery from the Designer of Record.

Spot Check #2 - Airport Metro Connector Transit Station/96th Street Station

This OIG Spot Check report concerns the Airport Metro Connector (AMC) Transit Station/96th Street Station (Contract C1197, MOD 0027), Low Voltage Cabling.

Change Order Detail

See Attachment A Spot Check #2 table.

Summary #2

Scope -This change order is to install matching fiber optic cabling to connect the AMC to the Crenshaw “K” line. The AMC project is part of the Crenshaw/Los Angeles Airport (CLAX) system. The K line previously had a change order that included the new NFPA-130 standard that calls for a Low Smoke Zero Halogen (LSZH) type fiber optic cable.

The AMC Contract specified fiber optic cables according to code to meet the NFPA-130 rating and the MRDC at that time (2016) but did not specify a LSZH type cable, which is now required to match with the “K” line.

The CLAX rail system cabling was reviewed by Metro Operations - Low Voltage Group and it was determined in order to keep continuity between the projects, the LSZH fiber optic cable should be used to align with the CLAX cabling system.

The AMC project will now not only utilize a LSZH type cable, but will add copper cabling to comply with the latest MRDC requirements. This change order provides for all labor, material, and equipment to install the fiber optic and copper cables for the AMC project.

Budget - This change order was negotiated as MOD 0027 for the amount of \$818,691. The Contractor’s proposal was \$1,105,789. The negotiated price is \$287,098 (26%) lower than the Contractor’s proposal. The ROM is \$708,815, which is \$109,876 (15.5%) lower than the negotiated amount. Staff stated that funds for this change order are within the approved Life-of-Project budget

Schedule - The CEO Delegation of Authority process was utilized for this change order. The Contractor and Metro agreed on the Scope of Work on August 31, 2023. The modification was awarded on November 7, 2023, and it took staff 47 workdays to complete all signature approvals. Under the prior Board approval method for change orders, assuming a November Board meeting date, it would have taken a minimum of 61 workdays to complete the transaction.

Safety - The Airport Metro Connector Transit Station/96th Street Station has 699,883 project hours through November 2023; the Recordable Injury Rate was 1.71 (the Bureau of Labor Statistics National Average is 2.4) and the Days Away Rate (DART) was 0.29 (the Bureau of Labor Statistics National Average is 1.5).

Recommendation/Lessons Learned - The OIG recommends that the project office contact the Airport monorail construction support team and recommend they install the Low Smoke Zero

Halogen (LSZH) type fiber optic cable also.

Spot Check #3 - Purple Line Extension Section 1 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 1 (C1045, CO-45), SCE and LADWP Change to Electrical Rooms and Equipment (Construction with minor design).

Change Order Detail

See Attachment A Spot Check #3 table.

Summary #3

Scope - This change order is to make modifications to the electrical rooms at each of the Purple Line Extension 1 Metro stations.

The power for the La Cienega Station is controlled by Southern California Edison (SCE) and the power for the La Brea and Fairfax Stations is controlled by Los Angeles Department of Water and Power (LADWP).

At the La Cienega Station, SCE has requested a 6-foot clearance from the wall to the switchgear equipment. They have also requested drip protectors be installed on the incoming electrical cables so water does not reach the main electrical feeder cables and short out the system. Galvanized steel conduits of various sizes, from street level to interior meter boxes, will also be added to allow the power use to be remotely metered.

At the La Brea Station LADWP has requested a 3-hour fire rated overhead roll-up door in lieu of double doors at the DWP Switch Room. At the Fairfax Station LADWP has requested double doors in lieu of a 3-hour fire rated overhead roll-up door. The surface of the floor must be sloped toward an area drain and connected to the station's main drain. Galvanized conduit is also a requirement by LADWP from street level to multiple switchgear equipment and Train Control Rooms. A Ground Grid System for lighting and receptacles is required and updates are required on many of the technical electrical plans.

The contractor and Metro have agreed upon a negotiated amount for all these changes. However, the contractor returned the Modification unexecuted, stating they have met the requirements already for the small or disadvantaged business participation goals of the contract and do not need to meet new and additional requirements in that regard for this change order. Therefore, CO 45 is being issued as a unilateral change order at the negotiated lump sum of \$702,052 to proceed and to operate the electrical room according to SCE and DWP standards.

Budget - This unilateral change order was negotiated as CO 45 for the amount of \$702,052. The Contractor's proposal was \$901,722. The negotiated price is \$199,670 (22.1%) lower than the Contractor's proposal. The ICE is \$480,242, which is \$221,810 (46.2%) lower than the negotiated amount. Staff stated that funds for this change order are within the approved Life-of-Project budget.

Schedule - The CEO Delegation of Authority process was utilized for this change order. The Contractor and Metro agreed on the Scope of Work on October 4, 2023. The Unilateral Change Order was awarded on November 14, 2023, and it took staff 29 workdays to complete all signature approvals. Under the prior Board approval method for change orders, assuming a January Board

meeting date, it would have taken a minimum of 77 workdays to complete the transaction.

Safety - The Purple Line Extension Section 1 Project has 9,262,172 project hours through October 2023; the Recordable Injury Rate was 0.89 (the Bureau of Labor Statistics National Average is 2.4) and the Days Away Rate (DART) was 0.09 (the Bureau of Labor Statistics National Average is 1.5).

Recommendation/Lessons Learned - The OIG recommends staff work closely with SCE and LADWP to confirm their approvals for the requested work and to update any MRDC standard or specification to ensure that Metro corrects any out of date standards in relations to SCE or LADWP.

It is recommended that Management discuss with the Diversity and Economic Development Department if the standard change order language might be revised to indicate a particular SBE/DBE goal for the change order “unless the contractor has already met the SBE/DBE goal for the contract as a whole”.

Spot Check #4 - Purple Line Extension Section 3 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 3 (Stations Contract C1152, CO-91.2), VA Station - Water Supply Loop System at Wilshire/Federal Intersection.

Change Order Detail

See Attachment A Spot Check #4 table.

Summary #4

Scope - This change order is to procure the material to construct a new water line and connect the systems together in order to support the new Metro Westwood/VA Hospital Station. The existing Los Angeles Department of Water and Power (LADWP) water supply consists of two single public water lines that run along Federal Blvd. and Wilshire Blvd., approximately 1/2 mile away from the future station. These single lines are currently not connected and do not provide enough pressure to serve the new the Westwood/VA Hospital Station.

The current Metro Rail Design Criteria (MRDC) requires that the water supply to the station come from two public utility main lines to design redundancy into the system. In order to utilize existing water lines, an expanded system will be installed to connect the two water lines, and parts of the old pipes will be upsized to 10-inch pipes.

The project team separated the changes into three parts to not impact the construction progress: design, procurement of material, and construction. This change order (CO 91.2) is to procure all pipes, valves, and fittings necessary to complete the work in both the County and the City of LA sides of the project as well as the yard rental cost in accordance with the design and specifications approved under MOD 70.

Budget - This Not-to-Exceed change order is for \$1,901,250 for materials for a portion of the work. The Contractor’s proposal is \$34.3 million for procurement of materials and construction. There is not an agreed upon price at this time. The ICE is for the procurement of these materials is

\$3,338,985, which is a difference of \$1,437,735 from what the contractor proposes. The balance of the materials and construction costs will be included in future change orders. Staff stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The CEO Delegation of Authority process was utilized for this change order. The Contractor and Metro agreed on the Scope of Work on October 2, 2023. The Not-to-Exceed Change Order was awarded on November 22, 2023, and it took staff 37 workdays to complete all signature approvals. Under the prior Board approval method for change orders, assuming a January Board meeting date, it would have taken a minimum of 79 workdays to complete the transaction.

Safety - The Purple Line Extension Section 3 Project has 2,979,353 combined project hours through November 2023; the Recordable Injury Rate was 1.41 (the Bureau of Labor Statistics National Average is 2.4) and the Days Away Rate (DART) was 0.34 (the Bureau of Labor Statistics National Average is 1.5).

Recommendation/Lessons Learned - None.

FINANCIAL IMPACT

This report does not have a financial impact on the Agency.

For all of the construction change orders reviewed, Metro states the funds are within the approved budget and will utilize the contingency funds to cover the costs from the Life of Project budget.

- Spot Check #1) \$1,395,861 Division 20 Tunnel Widening Turnback Project
- Spot Check #2) \$818,691 Airport Metro Connector Transit Station/96th St. Station
- Spot Check #3) \$702,052 Purple Line Extension Section 1 Project
- Spot Check #4) \$1,901,250 Purple Line Extension Section 3 Project

EQUITY PLATFORM

In the opinion of the OIG, we considered whether these change orders presented any equity related issues on their face. The OIG did not receive any data concerning community impacts. There is a low-income equity-based community near the Veteran's Hospital on Wilshire Blvd. The completion of Extension 3 will benefit veterans by transporting them to and from the Metro Station at the VA Hospital. The OIG observed no obvious disparate impacts created by these change orders on small businesses, low-income persons, or by the performance of the work in a manner that impacted a disadvantaged community beyond what is typical and usual when conducting any construction.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Office of Inspector General reviews large change orders over a calendar quarter and makes recommendations as appropriate to support Metro's Strategic Plan Goal #5: Provide responsive, accountable, and trustworthy governance within the Metro organization and CEO goals to exercise fiscal discipline to ensure financial stability. The OIG mission includes reviewing expenditures for

fraud, waste, and abuse in Metro programs, operations, and resources. For each selected change order reviewed, the OIG evaluates whether there are red flags of fraud, waste, or abuse taking place. We report the details of the significant change orders and make recommendations consistent with the OIG's 2016 and 2023 Construction Best Practices reports, particularly focusing on lessons learned, improving efficiencies, and prudent spending.

NEXT STEPS

The OIG shall provide every quarter, an ongoing spreadsheet of recommendations to Program Control and Program Management. Program Control and Program Management agrees to respond to the recommendations of the OIG within 30 days. The OIG continues to meet periodically to discuss reports, recommendations, and the status of implementation of the recommendations with Project Management, and receive updates. The list of OIG recommendations and Metro management responses is an attachment to this OIG report (Attachment B).

ATTACHMENTS

Attachment A - Change Order Details for Spot Checks in this report

Attachment B - OIG Recommendations and Responses Tracking Sheet

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