



## Board Report

File #: 2019-0495, File Type: Informational Report

Agenda Number: 30.

### CONSTRUCTION COMMITTEE JULY 18, 2019

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

**ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE Office of the Inspector General Change Order/Modification Construction Spot Check Report.

#### **ISSUE**

On January 25, 2018, the Metro Board directed the Office of the Inspector General (“OIG”) to conduct random spot checks on the projects listed in the quarterly program management report to ensure that the delegation of authority to approve construction Change Orders policy is performing in the manner desired by the Board of Directors.

#### **BACKGROUND**

This quarters OIG’s Spot Check Program (“Spot Checks) focuses on approved Change Orders and Modifications that exceed \$500,000 dollars. The four Change Orders in this report were selected from the July 2019 Program Management Major Project Status Report (File # 2019-0494), covering March 1 to May 31 2019. The information for the Spot Checks was collected from the Program Management Information System (PMIS) which is the department’s database system. Also, in-person and telephonic interviews were conducted with Metro Program Management, Project Control, and Procurement staff from each individual project office.

We found that all four of the Change Orders in this report were negotiated and executed more expeditiously than would have occurred pursuant to the former Board approval process, and all four were approved faster with the new delegation of authority. In addition all four Change Orders were negotiated at lower cost than the contractors’ proposed price. This quarter’s Spot Checks of Change Orders/Modifications found the delegation of authority has resulted in:

- A negotiated amount that was reasonable for the work to be done,
- Enabled the contractor to immediately order parts and materials, reducing delay.
- Consultant having no overlap in schedule and was able to continue working, and
- Zero Construction delay costs were incurred.

Each Spot Check summarizes the following areas:

- Introduction of Change Order/Modification
- Facts of Change Order (charts and pictures shown on Attachment A)
- Scope of Work
- Budget
- Schedule: Time to Execute Change Order
- Recommendations

Metro's Program Control department will provide responses to the recommendations in this report to the OIG Spot Checks within 30 days after this Board report. Attachment B, included in this July report, is a separate spreadsheet of recommendations and responses for January and April 2019.

## **DISCUSSION**

### **I. Spot Checks Performed in this Quarter**

#### **A. Spot Check #1 - Crenshaw/LAX Transit Project**

This OIG Spot Check report concerns the Crenshaw/LAX Transit Corridor Project (Contract C0988 MOD-00426), Irrigation Water Meters, Park Mesa Medians.

#### **Facts of Change Order**

See Attachment A Spot Check #1 chart.

#### **Summary #1**

**Scope of Work** - This change order came as a request from Los Angeles Board of Public Works. The original scope of work provided for the medians at Park Mesa will be hardscaped with stripes, but during the City review it requested to have landscaping at the medians. Typically Los Angeles Department of Water and Power (LADWP) performs the work of tapping into the main water line and running water service to the new meter would be paid for by Metro, when Metro is requesting the work. However LADWP did not have schedule availability so the Crenshaw contractor was requested to submit a cost proposal (via their subcontractor) to Metro to perform the work. Work includes tapping into the water main, running 15 water services to 15 new water meters, to 15 water pipes to the irrigation project, which provides water to the new proposed landscaping.

**Budget** -. This Modification was negotiated and the award is \$776,000. The contractor's proposal was \$899,819 and the ICE was \$475,120. The award amount was \$123,819 under or 13.76% less than the contractor's proposal. The negotiated amount was \$300,880 over or 63% more than the ICE.

**Schedule** - The new delegation process was utilized for this Modification which was executed on June 3, 2019. The agreed upon scope occurred on Feb.15, 2019 but was not submitted until May 9, 2019. Using the June V/CM submission date, this Change Order would have gone to the July Board agenda. The scenario of utilizing the Board for approvals on change orders would be 56 work-days later verses the 18 work-days utilizing the delegated authority.

### **Recommendation**

There is disagreement between the City of Los Angeles Public Works and LA Metro about the responsibility for the changes. That should be discussed and resolved.

### **B. Spot Check #2 - Regional Connector Transit Project**

This OIG Spot Check report concerns the Regional Connector Transit Corridor Project (Contract C0980 MOD-00141.2), Flower Street from 5<sup>th</sup> to 6<sup>th</sup> Streets- Impacts to Support of Excavation (SOE): Decking, Utilities and Temporary Drainage.

### **Facts of Change Order**

See Attachment A Spot Check #2 chart.

### **Summary #2**

**Scope of Work** - Existing underground utilities are in different locations than what was shown on the as-built drawings and the project definition drawings. This change order is considered differing site conditions that were encountered on Flower Street between 5<sup>th</sup> to 6<sup>th</sup> Streets. The existing underground utilities are multiple communication lines, communication duct banks, and two large storm drains. Additionally a subterranean basement wall and existing building support of excavation were not shown on as-built drawings. The contractor will relocate utilities, modify the support of excavation, and install temporary drainage improvements. The contractor is also directed by Metro to perform work at weekend premium time which eliminates the need for noise/visual barriers and allows for an earlier completion date. Since this work was not included in the original base scope of work, an adjustment in contract price is warranted.

**Budget** - This Modification was negotiated and the award is \$1,900,000. The contractor's proposal was \$2,048,118 and the ICE was \$1,854,717. The award amount was \$148,118 under or 7.23% less than the contractor's proposal. The negotiated amount was \$45,283 over or 2.44% more than the ICE.

**Schedule** - The new delegation process was utilized for this Modification which was executed on March 13, 2019. The scope of work was agreed upon on March 6, 2019, just missing the April cutoff date to submit to V/CM. Using the April V/CM submission date, this Change Order would have gone to the May Board agenda. The scenario of utilizing the Board for approvals on change orders would be 57 work-days later verses the 10 work-days utilizing the delegated authority.

### **Recommendation**

The OIG recognizes the age of the buildings at the site and errors of definitive drawings. This circumstance demonstrates the need to research on the front end, even drawings we have to confirm accuracy, to preclude issuing an expensive change order after construction has commenced.

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

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1078 MOD-00025), Revised Low Impact Development (LID).

### **Facts of Change Order**

See Attachment A Spot Check #3 chart.

### **Summary #3**

**Scope of Work** - The construction project of LID for the maintenance of way/non-revenue vehicle maintenance yard project at Location 64, on South Santa Fe Avenue has been on-going for some time. When the project began, no one was aware of the two contaminated groundwater plumes traveling under the site toward the LA River. Initial design in 2016 proposed permeable pavement and an infiltration trench directly over the plumes. Later in 2016, groundwater investigation took place followed by an in-depth analysis in 2017. It was determined in 2018 that re-design by the consultant was mandatory to comply with Cal/EPA and other agencies regulations. Percolation and infiltration of storm water runoff design now runs to “save zones” within the project. Differing site conditions from the original contract, now requires this Modification in April 2019 to construct the re-design of the LID work to ensure safe groundwater.

The contractor shall build a parallel overflow drainage system that connects to an existing 90-inch storm drain structure which outfalls to the LA River at the northeast corner. The contractor shall also amend the final graded surface, raise fence footings, revise drainage pipe layouts, add additional drainage inlets, enlarge permeable pavement in Area 2 and Area 3, and not build in the original Area 1 which is above the plumes. These modifications should result in safer groundwater and comply with EPA regulations.

**Budget** - This Modification was negotiated and the award is \$612,408. The contractor’s proposal was \$779,428 and the ICE was \$598,898. The award amount was \$167,020 below or 21.42% less than the contractor’s proposal. The negotiated amount was \$13,510 over or 2.26% more than the ICE.

**Schedule** - The new delegation process was utilized for this Modification which was executed on May 10, 2019. The scope of work was agreed upon April 10, 2019, missing May cutoff date to submit to V/CM. Using the May V/CM submission date, this Change Order would have gone to the June Board agenda. The scenario of utilizing the Board for approvals on change orders would be 57 work-days later verses the 23 work-days utilizing the delegated authority.

### **Recommendation**

This location was the original site for the Santa Fe Railway yard. Dumping of diesel fuel, lubricating oils, and axle grease was not monitored in 1907. The cost of hiring consultants to investigate, evaluate, re-design and now construct could have been avoided if underground investigation including sampling and boring occurred in the Environmental Assessment stage of the project. The OIG performed a spot check on this topic before (2018-0191 May) at the phase of the assessment and re-design. Our recommendations at that time were not only to add this to lessons learned, but 1- “Conduct Ultrasonic Soil Examinations at future questionable sites to attempt to avoid unidentified hazards”, and 2- Perform research to determine who could have installed the tanks and consider legal action to recover the cost of remediation under the CERCLA law.

The OIG recommends that for all upcoming construction sites where known industrial and railway activity occurred, conduct a full investigation of soil conditions and discuss the results in the Environmental Impact Statement. Performing such investigation early may result in additional early costs, but these circumstances will then become known costs of the project and we then will be

better prepared to deal with the conditions and proceed with less delay and costs than waiting.

**D. Spot Check #4 - Purple Line Extension Section 2 Transit Project**

This OIG Spot Check report concerns the Purple Line Extension Section 2 Transit Project (Contract MC1120 MOD-00037), Revision to Average Depth of Seismic Borings Along Wilshire Blvd. on Tunnel Reach 5.

**Facts of Change Order**

See Attachment A Spot Check #4 chart.

**Summary #4**

**Scope of Work** - This Modification is to dig with the boring machine, straight down an additional 50 feet below the 200 feet as specified in the original contract. The purpose is to complete the geotechnical investigation needed to determine the potential placement of additional special tunnel liner. The new depth will improve Metro's ability to find critical information about where the seismic fault may cross the Purple Line Section 2 alignment at a second location.

**Budget** - This Modification was negotiated and the award is \$921,496. The contractor's proposal was \$1,156,887 and the ICE was \$881,014. The award amount was \$235,391 less or 20.34% under the contractor's proposal. The negotiated amount was \$40,482 more or 4.59% over the ICE. Metro has stated that funds for this change are within the approved Budget.

**Schedule** - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on February 13, 2019. The Modification was executed on March 11, 2019, and was completed in 19 work-days. Using the April V/CM submission date, this Change Order would have gone to the May Board agenda. The scenario of utilizing the Board for approvals on change orders would be 52 work-days later verses the 19 work-days utilizing the delegated authority.

**Recommendation**

The OIG commends the Engineering department for taking additional steps to determine additional the location of seismic fault line in relation to the track alignment for improved safety and long term structural integrity.

**FINANCIAL IMPACT**

Report will have no Financial Impact to the agency.

**Impact to Budget**

- Spot Check #1) \$776,000
- Spot Check #2) \$1,900,000
- Spot Check #3) \$612,408
- Spot Check #4) \$921,496

**IMPLEMENTATION OF STRATEGIC PLAN GOALS**

The recommendations that the Office of Inspector General has put forward support Metro's Strategic Plan Goal #5: Provide responsive, accountable, and trustworthy governance within the Metro

organization. The OIG focuses on fraud, waste, and abuse. For each selected Change Order/Modification reviewed, the OIG evaluates if fraud, waste, or abuse is taking place. We report the background details of the Change Order, and make recommendations consistent with the OIG's Construction Best Practices report February 29, 2016, more particularly focusing on lessons learned, improving efficiencies, and prudent spending. Our goal is to provide rational, trustworthy information to the Board and support the efforts of Metro management to constantly improve and refine its efforts for the benefit of the public. The Office of the Inspector General will continue reporting to the Board the results of Construction Change Order Spot Checks selected from the Program Management Major Project Status Quarterly Report. The next OIG Construction Spot Check report will be in October.

### **NEXT STEPS**

The OIG shall provide every quarter, an on-going spread sheet of recommendations to Program Control. 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 recommendations, with Project Management and receive updates. The list of OIG recommendations and Metro management responses, including those for January and April, will be an attachment to this OIG July 2019 report.

### **ATTACHMENTS**

- Attachment A - Charts for Spot Checks
- Attachment B - Tracking sheet of Recommendations and Responses
- Attachment C - Power Point for July 2019 Construction Spot Checks

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