

**Board Report**

File #: 2019-0689, **File Type:** Informational Report**Agenda Number:** 41.

**CONSTRUCTION COMMITTEE
OCTOBER 17, 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

The OIG’s Spot Check Program (“Spot Checks”) focuses on approved Change Orders and Modifications that exceed \$1,000,000 dollars. The four Change Orders in this report were selected from the October 2019 Program Management Major Project Status Report (File # 2019-0692), covering June 1 to August 30, 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 three Change Orders were negotiated at lower cost and one was equal to 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.
- Contractor and was able to continue working without stoppages, 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 with this October report, is a separate spreadsheet of recommendations and the status of responses concerning former Spot Check recommendations.

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-00432), Update Station Customer Signage, Construction

Facts of Change Order

See Attachment A Spot Check #1 chart.

Summary #1

Scope of Work -The Americans with Disabilities Act (ADA) regulates accessibility and includes requirements for signage. The guidelines were approved by the Department of Justice for publication on September 15, 2010, and made legally enforceable on March 15, 2012. These are known today as "2010 ADA Standards for Accessible Design."

The standard Metro Rail Design Criteria (Metro RDC) and the Technical Specifications were updated with 2010 ADA Standards for Accessible Design after the release and execution of the Crenshaw contract (August 2013). The Customer Signage Directive Drawings were updated by the Crenshaw consultant under a previous modification (MOD-00198.1 and MOD-00075) and completed design changes to platform signage in 2014 and underground stations in 2015.

This modification is to change the signage to conformance to the updated designs under the 2010 ADA Standards for Accessible Design. Under this modification, the contractor will be paid for labor, equipment, material to fabricate and install signage in eight stations at multiple locations.

Budget -This Modification was negotiated and the award amount is \$1,813,970. The contractor's proposal was \$1,813,970. The award amount was equal to the contractor's proposal. This is due to the fact that the contractor took the quote from the lowest vendor, and credited back the amount from the original contract (\$720,039) for this line item. The independent cost estimate (ICE) was \$884,370. The negotiated gross amount was \$929,600, or 5.1% over the ICE. Staff has stated that funds for this change are within the approved the Life-of-Project budget, and unallocated contingency funds.

Schedule - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on June 8, 2019. The Modification was executed on July 15, 2019, and was completed in 25 work-days. Since there was no Board meeting in August the team would have used the September Vendor Contract Management (V/CM) submission date on July 29, 2019, this Change Order would have gone to the September 26, 2019 Board agenda. The scenario of utilizing the Board for approvals on change orders would be 77 work-days later verses the 25 work-days utilizing the delegated authority.

Recommendation - The Metro RDC was updated with 2010 ADA Standards for Accessible Design later, and after the release and execution of the Crenshaw contract. When new standards are issued all request for proposal specifications pending after that date should be reviewed for correction before release when possible.

For request for proposals released between 2010 and 2014,(when we changed the specification and Metro RDC) the OIG recommends immediate evaluation to determine if they were also awarded based on the old pre 2010 standards to determine whether their projects might be similarly impacted.

B. Spot Check #2 - Crenshaw/LAX Transit Project

This OIG Spot Check report concerns the Crenshaw/LAX Transit Corridor Project (Contract C0988 MOD-00434), LADWP and COI New Water Service Connection - Main to Meter.

Facts of Change Order

See Attachment A Spot Check #2 chart.

Summary #2

Scope of Work - This Modification is to have the contractor perform work related to the water service connections from the water main to the water meter. This work is out of the scope of the contract because originally the Los Angeles Department of Water and Power (DWP) and the City of Inglewood were going to perform the work related to the new water service connections, so was not made part of the contract requirement for the contractor. Due to their lack of available personnel, both the City of Inglewood and DWP have requested that the Metro contractor perform the water service connections work. The contractor shall provide all labor, material and equipment necessary to install new water service connections, from the water main to meter, at various locations along the Crenshaw alignment.

Budget - This Modification was negotiated and the award amount is \$1,978,937. The contractor's proposal was \$2,230,705 and the ICE was \$1,427,593. The award amount was \$251,768, or 11.3%, under the contractor's proposal. The negotiated amount was \$551,344 more or 38.6% over the ICE.

Schedule - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on July 9, 2019. The Modification was executed on July 18, 2019, and was completed in 8 work-days. Since there was no Board meeting in August the team would have used the September V/CM submission date on July 29, 2019, this Change Order would have gone to the September 26, 2019 Board agenda. The scenario of utilizing the Board for approvals on change orders would be 57 work-days later verses the 8 work-days utilizing the delegated authority.

Recommendation

None.

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-00083), La Cienega Dewatering DSC

Facts of Change Order

See Attachment A Spot Check #3 chart.

Summary #3

Scope of Work - During excavation, it was found that the groundwater table was not draining as expected. The contractor could not lower the groundwater sufficiently using the methods attempted. This constitutes a “differing site condition” requiring excavation work out of the scope of the contract to stop water seeping into the excavation cavern and making it impossible for productive work.

New engineering design and analysis, installation of additional dewatering wells, drains, and other methods have to be utilized to correct the condition. Additional labor resources are required to avoid schedule impacts.

Budget -This Modification was negotiated and the award amount is \$16,841,067. The contractor’s proposal was \$22,059,501 and the ICE was \$14,555,428. The award amount was \$5,218,434, or 23.6%, under the contractor’s proposal. The negotiated amount was \$2,286,639, or 15.7%, over the ICE.

Schedule - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on May 22, 2019. The Modification was executed on July 3, 2019, and was completed in 26 work-days. Using the June 3, 2019 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 45 work-days later verses the 26 work-days utilizing the delegated authority.

Recommendation

The Geotechnical Baseline Report stated that the ground conditions would permit drainage of water. The OIG questions if the consultant who developed the Geotechnical Baseline Report properly interpreted the boring data. Investigation is warranted to determine if the report accurately reflects the data.

The OIG recommends recovering part of the cost, if the investigation demonstrates that the report was erroneous. The OIG further recommends future Geotechnical Baseline Reports should include interpretation of the borings to determine within a 95% confidence level the nature of the underlying soil and the location of the water table.

D. Spot Check #4 - Purple Line Extension Section 1 Transit Project

This OIG Spot Check report concerns the Purple Line Extension Section 1 Transit Project (Contract C1078 MOD-00085), Geotechnical Instrumentation: Revise Geotechnical Contingency Plan and Reporting.

Facts of Change Order

See Attachment A Spot Check #4 chart.

Summary #4

Scope of Work - Additional geotechnical instrumentation has been required by Los Angeles Bureau of Engineering (LABOE) because of concern over dewatering settlement and to monitor and report any change in ground conditions. Over the past year monitoring equipment has been added to the street, buildings and the construction site. A total of 1,137 instruments have been added to monitor movement. Those instruments have a total of 2,345 monitoring points which has yielded over 40,000 threshold alarms. This led to 1,600 false alarms and 13 work stoppages. Weekly reporting will now take place to replace monthly reporting. Closed-circuit television will now be utilized; a full time field Instrumentation Engineer on site will be added to provide real time analysis; and additional support to the contractor will be provided to avoid work stoppage.

Metro believes the additional instrumentation is a betterment because LABOE does not have criteria for shoring of underground stations and instead of performing periodic checks, the LABOE is requiring additional documentation above and beyond what was required by the original contingency plan and at a level that is not required by any standard.

Budget -This Modification was negotiated and the award amount is \$4,158,687. The contractor's proposal was \$8,345,399 and the ICE was \$2,799,376. The award amount was \$4,186,712, or 50.2%, under the contractor's proposal. The negotiated amount was \$1,359,311, or 48.5%, over the ICE. Funds for this modification are within the approved Budget in Project and Task No. 3.3.02.03.

Schedule - The new delegation process was utilized for this Modification. The agreed upon scope of work occurred on June 27, 2019. The Modification was executed on July 19, 2019, and was completed in 16 work-days. Since there was no Board meeting in August the team would have used the September V/CM submission date on July 29, 2019, this Change Order would have gone to the September 26, 2019 Board agenda. The scenario of utilizing the Board for approvals on change orders would be 65 work-days later verses the 16 work-days utilizing the delegated authority.

Recommendation

The OIG recommends if Metro believes this change order is a betterment, then Metro should complete the new "Potential Notice of Betterment" form, submit a copy to LABOE and retain a copy for negotiations at the end of the contract if not sooner. This means Metro would move forward at LABOE expense. Going forward, this "Potential Notice of Betterment" form should be completed when applicable and submitted to the LABOE prior to agreeing to move forward, thus allowing the LABOE to make the decision if the betterment is truly necessary.

FINANCIAL IMPACT

Report will have no Financial Impact to the agency.

Impact to Budget

For all of the Construction Change Orders, Metro states the funds are within the approved budget, and will utilize the contingency funds to cover the costs.

- Spot Check #1) \$1,813,971 Crenshaw
- Spot Check #2) \$1,978,937 Crenshaw
- Spot Check #3) \$16,841,067 Purple Line Ext. 1
- Spot Check #4) \$4,158,687 Purple Line Ext. 1

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 mission includes reviewing expenditures for 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 January 2020.

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 July 2019, is an attachment to this OIG October 2019 report.

ATTACHMENTS

Attachment A - Charts for Spot Checks

Attachment B - Tracking sheet of Recommendations and Responses

Attachment C - Power Point for October 2019 Construction Spot Checks

Prepared by: Prepared by: Suzanna Sterling, Construction Specialist Investigator, (213) 244-7368

Reviewed by: Karen Gorman, Inspector General, (213) 244-7337



Karen Gorman
Inspector General

Spot Check #1 - Crenshaw/LAX Transit Project - Contract C0988**Facts of Change Order**

<u>Description of Modification MOD-00432</u> Update Station Customer Signage, Construction	
<u>Change Order Dates:</u>	
Scope of Work approved	June 08, 2019
Modification Executed	July 15, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	25 work days
Estimate using former Board approval process Agenda for the September Board	77 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$884,370
Contractor's proposed cost	\$1,813,970
Negotiated amount	\$1,813,970
Negotiated amount over ICE	\$929,600
Percentage of negotiated amount over ICE	105%
Amount negotiated under Contractors proposal	\$0

Spot Check #2 – Crenshaw/LAX Transit Project - Contract C0988**Facts of Change Order**

<u>Description of Modification MOD-000434</u> LADWP and COI New Water Service Connection – Main to Meter	
<u>Change Order Dates:</u>	
Scope of Work approved	July 9, 2019
Modification Executed	July 18, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	8 work days
Estimate using former Board approval process Agenda for the May Board	57 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$1,427,593
Contractor's proposed cost	\$2,230,705
Negotiated amount	\$1,978,937
Negotiated amount over ICE	38.6%
Amount negotiated under Contractors proposal	\$251,768

Spot Check #3 - Purple Line Extension Section 1 Transit Project - Contract C1078**Facts of Change Order**

<u>Description of Modification MOD-00083</u> La Cienega Dewatering DSC	
<u>Change Order Dates:</u>	
Scope of Work approved	May 22, 2019
Modification Executed	July 3, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	26 work days
Estimate using former Board approval process Agenda for the June Board	45 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$14,555,428
Contractor's proposed cost	\$22,059,501
Negotiated amount	\$16,841,067
Negotiated amount above ICE	15.7%
Amount negotiated under Contractors proposal	\$5,218,434

Spot Check# 4 - Purple Line Section 1 Transit Project - Contract C1078**Facts of Change Order**

<u>Description of Modification - MOD-00085</u> Geotechnical Instrumentation: Revise Geotechnical Contingency Plan and Reporting	
<u>Change Order Dates:</u>	
Scope of Work approved	June 27, 2019
Modification Executed	July 19, 2019
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	16 work days
Estimate using former Board approval process	65 work days
<u>Cost of Modification:</u>	
Metro independent cost estimate (ICE)	\$2,799,376
Contractor's proposed cost	\$8,345,399
Negotiated amount	\$4,158,687
Negotiated amount over ICE	48.5%
Amount negotiated under Contractors proposal	\$4,186,712

ATTACHMENT B (Jan. 2019)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
Jan 2019 / #1 C0988 MOD 00335.1 Crenshaw - Cable Transmission System Update - Construction	"The OIG recommends: The schedule negotiations with the contractor be expeditiously concluded so the schedule impacts are minimized."	Not sure what this means. CO's were issued prior to MOD that obligated the contract to commence work - this mitigated schedule impacts. Response could stay as-is I suppose (with edits) as it is relatively benign in nature	Closed
Jan 2019 / #3 C1120 MOD-00026 Purple Line Sect. 2 - Santa Monica Blvd. Bus Layover Design and Construction Changes	The OIG recommends: That Operations and LADOT be provided the scope of work after requests are submitted or "no comments" are received to confirm their requests have been added into the scope prior to the release of the RFP.	Because the OIG's recommendation is for actions to be taken prior to the release of RFPs, it has been passed on to Metro Engineering for consideration in revising Policy DSGN01 DB for future projects.	Metro Engineering (Androush Danielians/ Edwardo Cervantes) have been notified. They provided the below comment: A process will be set in place that will be included in future Specs and contract language for the PE Consultant. The process will require the consultant to submit plans to all applicable agencies (including Metro). Upon receiving comments, the Consultant shall address each comment as to the disposition in a matrix/spreadsheet. The spreadsheet / matrix will then be submitted to each of the commenting agencies. That agency will then be requested to accept the project disposition (via an initial). If the agency is not in acceptance of the disposition, the Consultant via the Project shall work with each agency until that comment disposition is accepted. The final signed off matrix shall then be included in the RFP for the DB (contractor) to complete the path forward based on the agreed upon disposition.

ATTACHMENT B (April 2019)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>April 2019 / #1 C0988 MOD-00402 Crenshaw/LAX - Provisional Payments - Pending Dispute Resolution Fire Rated Cable (multiple) Change Orders</p>	<p>1. The OIG recommends that Metro expeditiously and fairly resolve the litigation with the Contractor. 2. The OIG further recommends that a review team monitor the billings of the Contractor to validate the efficacy of the incentive program as this may become a tool for improving future performance on other projects.</p>	<p>1. Agree, different mechanisms to achieve this being considered. 2. Agree, already being implemented.</p>	<p>1. December 2019 2. Closed</p>
<p>April 2019 / #3 C1045 MOD-00071 Purple Line Sect. 1 - Golder Gas Investigation and Report</p>	<p>The Independent Cost Estimate was not an accurate representation of work stated in the agreed upon scope of work. The OIG recommends that Metro continue to follow through on the plan for mitigation of gas migration utilizing the Contractor's new report of procedures where known high concentrations of hydrogen sulfide and methane gases exist.</p>	<p>Metro is following thru on the plan. Installation of wells for field testing began in 3/19. The mitigation options draft memo, based on the field testing observations, was received 6/25. Design of a selected gas migration mitigation option, i.e. increasing the number of soil vapor extraction wells, is ongoing.</p>	<p>Completion of mitigation recommendation and implementation, is tentatively scheduled for December 31, 2019.</p>
<p>April 2019 / #4 C1045 MOD-00072 Purple Line Sect. 1 - Reach 3 Additional Gas Testing and Assessment</p>	<p>The OIG recommends: 1. In following the new Contractor's report, Work Plan for Exploratory Program to Assess Mitigations for Potential Gas Migration, a. Record all steps that were successful and those that need modification. b. Have information formatted and add to Technical Specifications. c. Have steps and procedures added into Lessons Learned d. Incorporate these finding and procedures into any future bid process where potential gas migration and tunnel boring may occur. 2. Note under Lessons Learned where known high concentrations of hydrogen sulfide and methane gases exist, prior study and geotechnical investigation be completed and included in the bid documents.</p>	<p>1. Metro has the following comments: a. Plan to record this. Modifications to the testing program in field to be made as appropriate b. This is likely a unique area. A Full report on the program and recommendations is included in the work. Pending the outcome, Technical Specifications would be developed for the Project c. Agree, also see b above d. We note that investigation is in progress now to study gas migrations. Pending outcome, future bid process would include results, including incorporation in Geotechnical Investigation and Technical Requirements 2. Agree. In this instance the area was studied and fully identified/described in the bid documents. Also see 'b' above.</p>	<p>12/31/2019</p>

ATTACHMENT B (April 2019)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>April 2019 / #5 C1045 MOD-00074 Purple Line Sect. 1 - Additional Instrumentation (Project Wide) as requested by LABOE and STS EOR</p>	<p>The OIG recommends that instrumentation bought for this project become property of LA Metro, so that future projects (remainder of the Purple Line Extension 2 and 3) will have instrumentation on hand to immediately install when Support of Excavation for those projects begin.</p>	<p>Metro has made several attempts in the past for Purple Line and Regional to salvage and reuse geotechnical instrumentation. However, passing the instruments between projects offer a number of challenges. These include the following:</p> <ul style="list-style-type: none"> • The Design life of instrumentation equipment is limited given the temporary nature of the work. • Given the diminished value of the used instrumentation equipment it is often abandoned in place. An effort to salvage the equipment may result in increased costs. • The means, methods and performance of shoring, instrumentation and monitoring are left with the Design-builder. Dictating the used instruments would interfere with the selection of means and methods and make Metro responsible for warranting the equipment for the life of the project. • The technology associated with the equipment continues to evolve. Metro may then be obligating the contractor to use obsolete equipment. • Timing and turnover of instrumentation. The contract schedules for Regional, Crenshaw and Purple Line Sections 1, 2 and 3 all overlap. As such, the instrumentation for each project is needed at the same time. • Metro would need to inventory and temporary store the instrumentation equipment. There is a risk that Metro may be storing the equipment permanently or Metro may need to make efforts for their disposal. 	<p>Closed</p>

ATTACHMENT B (July 2019)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>July 2019 / #1 C0988-MOD-00426 Crenshaw/LAX - Irrigation Water Meters, Park Mesa Medians</p>	<p>The OIG recommends this disagreement between the City of Los Angeles Public Works and LA Metro about the responsibility for the changes should be discussed and resolved.</p>	<p>This item is tied to the tree permit that included adding pavement in areas beyond the project limits, increasing the number of replacement of trees for those cut down, adding landscaped medians (which require the subject irrigation). All of the items above were discussed with City and the two parties agreed to an MOU for which the City would be paid 3.5 million to pave the street (work valued at 7.0 million plus) and that this agreement resolved the other issues mentioned above with Metro installing at its cost (medians, trees...etc)</p>	
<p>July 2019 / #2 C0980 MOD-00141.2 Regional Connector - Impacts to Support of Excavation: Decking, Utilities and Temporary Drainage</p>	<p>The OIG recognizes the age of the buildings at the site and errors of definitive drawings. The OIG recommends to research on the front end, even drawings to confirm accuracy, to preclude issuing an expensive change order after construction has commenced.</p>	<p>There are definitely some lessons to be applied to future projects based on Regional Connector's experience with utilities. The most significant finding is the need to conduct utility condition assessments in areas where cut-and-cover construction is planned. This could be accomplished by a combination of potholing, inspection of maintenance holes/vaults and research with the utility owner. The documented age of the utility and the presence of large masonry vaults/maintenance holes, should serve as guides in the determination of whether facilities should be replaced.</p>	<p>No further action by Regional Connector</p>
<p>July 2019 / #3 C1078 MOD-00025 Purple Line Sect. 1 - Revised Low Impact Development (LID)</p>	<p>The OIG recommends that all upcoming sites where known industrial and railway activity occurred, that a full investigation of soils occurs and is stated 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 may be prepared with less delay and less costs than waiting.</p>	<p>Site investigation and soil remediation was completed prior to the construction of the site. However, the original plan for the DTSC directed site cleanup was the previous owners responsibility. Due to the nature in how this property was eventually acquired in order to meet the construction schedule (imminent domain) there was no time to cleanup the groundwater issues prior to LID designs. and assess any data gaps that may have existed. Orders from the DTSC to continue remediation efforts of the groundwater, beyond Metro's planned clean up phase, pushed the environmental effort beyond a clear end date which in effect conflicted with the LID design since it would be predicted to pushing an identified contaminated groundwater plume during rain events once completed. In the future, if Metro can anticipate action to be required from outside entities (that can take significant time to develop and execute) beyond the initial environmental phase, it will request contractor to change the design prior to 60% completion to avoid major changes</p>	
<p>July 2019 / #4 MC1120 MOD-00037 Purple Line Sect. 2 - Revision to Avg Depth of Seismic Borings along Wilshire Blvd. on Tunnel Reach 5</p>	<p>The OIG commends the Engineering department for taking supplementary steps to determine additional the location of seismic fault line in relation to the track alignment for improved safety and long term structural integrity.</p>	<p>Noted</p>	<p>N/A</p>

ATTACHMENT B (Oct 2019)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>Oct. 2019 / #1 C0988-MOD-00432 Crenshaw/LAX - Update Station Customer Signage, Construction</p>	<p>The Metro RDC was updated with 2010 ADA Standards for Accessible Design later, and after the release and execution of the Crenshaw contract. When new standards are issued all request for proposal specifications pending after that date should be reviewed for correction before release when possible.</p> <p>For request for proposals released between 2010 and 2014,(when we changed the specification and Metro RDC) the OIG recommends immediate evaluation to determine if they were also awarded based on the old pre 2010 standards to determine whether their projects might be similarly impacted.</p>		
<p>Oct. 2019 / #2 C0988 MOD-00434 Crenshaw/LAX - LADWP and COI New Water Service Connection</p>	<p>none</p>		
<p>Oct. 2019 / #3 C1078 MOD-00083 Purple Line Sect. 1 - La Cienega Dewatering DSC</p>	<p>The Geotechnical Baseline Report stated that the ground conditions would permit drainage of water. The OIG questions if the consultant who developed the Geotechnical Baseline Report properly interpreted the boring data. Investigation is warranted to determine if the report accurately reflects the data.</p> <p>The OIG recommends recovering part of the cost, if the investigation demonstrates that the report was erroneous. The OIG further recommends future Geotechnical Baseline Reports should include interpretation of the borings to determine within a 95% confidence level the nature of the underlying soil and the location of the water table.</p>		
<p>Oct. 2019 / #4 C1078 MOD-00085 Purple Line Sect. 1 - Geotechnical Instrumentation: Revise Geotechnical Contingency Plan and Reporting</p>	<p>The OIG recommends if Metro believes this change order is a betterment, then Metro should complete the new "Potential Notice of Betterment" form, submit a copy to LABOE and retain a copy for negotiations at the end of the contract if not sooner. This means Metro would move forward at LABOE expense. Going forward, this "Potential Notice of Betterment" form should be completed when applicable and submitted to the LABOE prior to agreeing to move forward, thus allowing the LABOE to make the decision if the betterment is truly necessary.</p>		

Office Of Inspector General Construction Change Order Spot Check Report

Presented By
Karen Gorman
Inspector General

Spot Check Costs

Summary of Selected Change Order Costs

Four OIG spot checks of Change Orders / Modifications reported

1 Change Order for Crenshaw/LAX

❖ Update Station Customer Signage, Construction = \$1,813,970

2 Change Order for Crenshaw/LAX

❖ LADWP and COI New Water Service Connections = \$1,978,937

3 Change Order for Purple Line Section 1

❖ La Cienega Dewatering = \$16,841,067

4 Change Order for Purple Line Section 1

❖ Geotechnical Instrumentation –
Revise Geotechnical Contingency Plan and Reporting = \$4,158,687

Spot Check Schedule Comparison

Schedule Comparison: new delegated process vs. former Board approval process

PROJECT	Title of Change Order	Time Saved Executed date to Board Mtg.	NEW Delegated Process final SOW to Executed date	Former Board Approval Process
CRENSHAW	Update Station Customer Signage, Construction	52	25	77
CRENSHAW	LADWP and COI New Water Service Connections	49	8	57
WESTSIDE PURPLE LINE SECT 1	La Cienega Dewatering	19	26	45
WESTSIDE PURPLE LINE SECT 1	Geotechnical Instrumentation – Revise Geotechnical Contingency Plan and Reporting	49	16	65

Spot Check Recommendations

File #
2019-0689

#1
Crenshaw
Update
Station
Signage,
ADA

The Metro RDC was updated with 2010 ADA Standards for Accessible Design later, and after the release and execution of the Crenshaw contract. When new standards are issued all request for proposal specifications pending after that date should be reviewed for correction before release when possible.

For request for proposals released between 2010 and 2014,(when we changed the specification and Metro RDC) the OIG recommends immediate evaluation to determine if they were also awarded based on the old pre 2010 standards to determine whether their projects might be similarly impacted.

#3
Purple Line
Sect. 1
La Cienega
Dewatering

The Geotechnical Baseline Report stated that the ground conditions would permit drainage of water. The OIG questions if the consultant who developed the Geotechnical Baseline Report properly interpreted the boring data. Investigation is warranted to determine if the report accurately reflects the data.

The OIG recommends recovering part of the cost, if the investigation demonstrates that the report was erroneous. The OIG further recommends future Geotechnical Baseline Reports should include interpretation of the borings to determine within a 95% confidence level the nature of the underlying soil and the location of the water table.

#4
Purple Line
Sect. 1 Revise
Geotechnical
Contingency
Plan &
Reporting

The OIG recommends if Metro believes this change order is a betterment, then Metro should complete the new “Potential Notice of Betterment” form, submit a copy to LABOE and retain a copy for negotiations at the end of the contract if not sooner. This means Metro would move forward at LABOE expense. Going forward, this “Potential Notice of Betterment” form should be completed when applicable and submitted to the LABOE prior to agreeing to move forward, thus allowing the LABOE to make the decision if the betterment is truly necessary.

October 2019

Construction Committee

Los Angeles County Metropolitan Transportation Authority

