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Agenda - Final

Thursday, October 21, 2021

11:00 AM

To give written or live public comment, please see the top of page 4

Construction Committee

Tim Sandoval, Chair

Fernando Dutra, Vice Chair

Jacquelyn Dupont-Walker

Janice Hahn

Paul Krekorian

Tony Tavares, non-voting member

Stephanie Wiggins, Chief Executive Officer

METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES
(ALSO APPLIES TO BOARD COMMITTEES)

PUBLIC INPUT

A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board must be submitted electronically using the tablets available in the Board Room lobby. Individuals requesting to speak will be allowed to speak for a total of three (3) minutes per meeting on agenda items in one minute increments per item. For individuals requiring translation service, time allowed will be doubled. The Board shall reserve the right to limit redundant or repetitive comment.

The public may also address the Board on non agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for one (1) minute during this Public Comment period or at the discretion of the Chair. Speakers will be called according to the order in which their requests are submitted. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

Notwithstanding the foregoing, and in accordance with the Brown Act, this agenda does not provide an opportunity for members of the public to address the Board on any Consent Calendar agenda item that has already been considered by a Committee, composed exclusively of members of the Board, at a public meeting wherein all interested members of the public were afforded the opportunity to address the Committee on the item, before or during the Committee's consideration of the item, and which has not been substantially changed since the Committee heard the item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

CONDUCT IN THE BOARD ROOM - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

REMOVAL FROM THE BOARD ROOM The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

- a. Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
- b. A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- d. Any other unlawful interference with the due and orderly course of said meeting.

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The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars (\$10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

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x3 *中文 (Chinese)*

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The Committee Meeting begins at 11:00 AM Pacific Time on October 21, 2021; you may join the call 5 minutes prior to the start of the meeting.

Dial-in: 888-251-2949 and enter
English Access Code: 8231160#
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Public comment will be taken as the Board takes up each item. To give public comment on an item, enter #2 (pound-two) when prompted. Please note that the live video feed lags about 30 seconds behind the actual meeting. There is no lag on the public comment dial-in line.

Instrucciones para comentarios publicos en vivo:

Los comentarios publicos en vivo solo se pueden dar por telefono.

La Reunion de la Junta comienza a las 11:00 AM, hora del Pacifico, el 21de Octubre de 2021. Puedes unirte a la llamada 5 minutos antes del comienso de la junta.

Marque: 888-251-2949 y ingrese el codigo
Codigo de acceso en ingles: 8231160#
Codigo de acceso en espanol: 4544724#

Los comentarios del público se tomara cuando se toma cada tema. Para dar un comentario público sobre una tema ingrese # 2 (Tecla de numero y dos) cuando se le solicite. Tenga en cuenta que la transmisión de video en vivo se retrasa unos 30 segundos con respecto a la reunión real. No hay retraso en la línea de acceso telefónico para comentarios públicos.

Written Public Comment Instruction:

Written public comments must be received by 5PM the day before the meeting.

Please include the Item # in your comment and your position of "FOR," "AGAINST," OR "GENERAL COMMENT," or "ITEM NEEDS MORE CONSIDERATION."

Email: BoardClerk@metro.net

Post Office Mail:

Board Administration

One Gateway Plaza

MS: 99-3-1

Los Angeles, CA 90012

CALL TO ORDER**ROLL CALL**

28. **SUBJECT: EAST SAN FERNANDO VALLEY LIGHT RAIL TRANSIT PROJECT**

[2021-0543](#)**RECOMMENDATION**

CONSIDER:

- A. FINDING that authorization of the use of alternative delivery methods, including Progressive Design-Build (PDB), will achieve integration of design, project works, and other components in an efficient manner the East San Fernando Valley (ESFV) Light Rail Transit Project (Project) pursuant to Public Utilities Code Section 130242; and
- B. APPROVING a competitive solicitation of a PDB contract to achieve the proposed design approach, specific project features and functions, and other project criteria in addition to price, pursuant to Public Utilities Code 130242 (e).

(REQUIRES 2/3 VOTE OF THE FULL BOARD)

29. **SUBJECT: EAST SAN FERNANDO VALLEY LIGHT RAIL TRANSIT PROJECT**

[2021-0544](#)**RECOMMENDATION**

CONSIDER:

- A. FINDING that authorization of the use of Public/Private Partnership (P3) will achieve the design, build, finance, and participation in oversight of Operation and Maintenance of solar photovoltaic (PV) power (commonly known as solar panels) generation system at the Maintenance and Storage Facility for the East San Fernando Valley Transit Corridor Project (ESFV) pursuant to Public Utilities Code Section 130242; and
- B. APPROVING a competitive solicitation of a P3 contract to achieve the proposed design, specific features and functions, and other qualifications in addition to price, pursuant to Public Utilities Code Section 130242.

**30. SUBJECT: CONSTRUCTION MANAGEMENT SUPPORT SERVICES
FOR CAPITAL PROJECTS**[2021-0572](#)**RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to:

- A. AWARD AND EXECUTE a three-year cost plus fixed fee contract, Contract No. AE76301MC081 with Zephyr Rail, to provide Construction Management Support Services for Capital Projects, in an amount not-to-exceed \$3,519,211.94 for the three-year base period, plus two (2) one-year options if deemed appropriate, subject to resolution of any properly submitted protest(s); and
- B. EXECUTE individual Task Orders within the Board approved not-to-exceed amount.

Attachments: [Attachment A - Procurement Summary](#)
 [Attachment B - DEOD Summary](#)

31. SUBJECT: LOCAL PREFERENCE[2021-0686](#)**RECOMMENDATION**

APPROVE Motion by Directors Hahn, Dupont-Walker, Butts, Mitchell, Dutra, and Kuehl that directs the CEO to:

- A. Survey local preference best practices nationally and make recommendations for local preference criteria;
- B. Evaluate and recommend changes to Metro policies regarding advancing local preference in small, medium, and disadvantaged business contracting;
- C. Review State and Federal laws and regulations and make recommendations for inclusion in future Federal and State Legislative Priorities; and,
- D. Report back on these requests in February 2022.

**32. SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS
REPORT**[2021-0610](#)**RECOMMENDATION**

RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

Attachments: [Presentation](#)

33. SUBJECT: PROGRAM MANAGEMENT QUARTERLY CHANGE REPORT [2021-0580](#)

RECOMMENDATION

RECEIVE AND FILE status report on Program Management Quarterly Change Report.

Attachments: [Attachment A - Change Order Log for October 2021 Construction Committee](#)

34. SUBJECT: OFFICE OF THE INSPECTOR GENERAL CHANGE ORDER CONSTRUCTION SPOT CHECKS [2021-0591](#)

RECOMMENDATION

RECEIVE AND FILE Office of the Inspector General Change Order Construction Spot Check Report for the period June 1, 2021 to August 31, 2021.

Attachments: [Attachment A - Change Order Details for Spot Checks](#)
[Attachment B - Tracking Sheet of OIG Recommendations & Responses](#)
[Attachment C - Power Point for October 2021 Construction Spot Checks](#)

SUBJECT: GENERAL PUBLIC COMMENT [2021-0643](#)

RECEIVE General Public Comment

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.

COMMENTS FROM THE PUBLIC ON ITEMS OF PUBLIC INTEREST WITHIN COMMITTEE'S SUBJECT MATTER JURISDICTION

Adjournment



Board Report

File #: 2021-0572, File Type: Contract

Agenda Number: 30.

CONSTRUCTION COMMITTEE OCTOBER 21, 2021

SUBJECT: CONSTRUCTION MANAGEMENT SUPPORT SERVICES FOR CAPITAL PROJECTS

ACTION: AWARD AND EXECUTE CONTRACT FOR CONSTRUCTION MANAGEMENT SUPPORT SERVICES

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. AWARD AND EXECUTE a three-year cost plus fixed fee contract, Contract No. AE76301MC081 with Zephyr Rail, to provide Construction Management Support Services for Capital Projects, in an amount not-to-exceed \$3,519,211.94 for the three-year base period, plus two (2) one-year options if deemed appropriate, subject to resolution of any properly submitted protest(s); and
- B. EXECUTE individual Task Orders within the Board approved not-to-exceed amount.

ISSUE

The Los Angeles County Metropolitan Transportation Authority (Metro) requires professional services from a qualified Construction Management Support Services (CMSS) firm to support the design review, construction management, and administration of construction contracts for various Metro capital projects and adjacent/joint development projects to ensure compliance with Metro's safety and security policies, contract requirements, and government regulations.

Construction management support services will be provided for final design, pre-construction activities, administration of construction, and contract close out. In general, projects supported by this CMSS will include smaller construction projects at bus and rail facilities, Metro right-of-way, and adjacent/joint development projects. A few examples of Metro projects this contract may support are: small capital project construction oversight / safety inspections at Metro Operating Divisions such as repair/replacement of bus washes, bus bays or replacement of large equipment; and adjacent project inspection and safety for construction related activities adjacent to the alignment that may have an impact on operations such as work on private property that is within a certain distance from our OCS Lines along the L (Gold) Line. Additionally, this contract supports constructability and pre-construction activities for projects in the planning phase that are in the process of transitioning to Program Management.

BACKGROUND

Metro's construction management support services philosophy envisions that the primary role of the CMSS is to provide highly skilled and qualified individuals to assist and support Metro in the construction management and administration of construction projects. This role also entails ensuring that the construction of projects is completed with a high level of quality and safety. The CMSS staff are fully integrated into the construction project team with Metro staff. CMSS staff have the specialized technical and administrative expertise to assist and support project delivery and implementation and to perform the necessary project reporting requirements and control procedures established by Metro. In the performance of work, CMSS staff adhere to and comply with all Metro policies and procedures.

DISCUSSION

On June 2, 2021, requests for proposals were issued for CMSS services to assist Metro in managing the construction of capital projects and adjacent/joint development projects. The CMSS contract is a cost-plus fixed fee contract for a term of three (3) years with two one-year options. If the Board approves staff to exercise the additional option years in the CMSS contract, rates for the option years will be negotiated prior to the end of the base contract period. Option 1 will be to extend the CMSS services and option 2 will be for contract closeout.

Since the CMSS contract is a cost-plus fixed fee contract, consultant services will be performed using Annual Work Plans (AWP). Each AWP will include negotiated direct labor, overhead rates, general and administrative expenses, fee, and negotiated hours for the level of effort to match the work. The AWPs will be funded from the existing project budgets and take into consideration all information available at the time of planning plus applicable time constraints on the performance of the work.

Metro shall ensure that strict project controls are in place prior to approving each AWP to closely monitor the CMSS's budget and AWP schedules. No funds will be obligated until the AWP is approved against each particular capital project or adjacent/joint development project.

Metro staff will begin onboarding of CMSS consultants immediately following contract execution.

DETERMINATION OF SAFETY IMPACT

This Board action will not have an adverse impact on safety standards for Metro.

FINANCIAL IMPACT

The funding for this contract is included under various capital project or adjacent/joint development project numbers within cost center 8510, Construction Management. AWP's under this contract will be funded within life of-project (LOP) budgets or the approved annual budgets for each individual capital project or adjacent/joint development project. As such, approval of this action will not increase

the LOP budgets or approved annual budgets of any individual capital project or adjacent/joint development project. Since this is a multi-year contract, respective project managers, the cost center manager, and Chief Program Management Officer will be accountable for budgeting the contract cost in future years, including any options exercised.

Impact to Budget

There are no impacts to the FY22 budget. All action under this contract will be funded within the LOP budget or the approved annual budget for each individual capital project or adjacent/joint development project

EQUITY PLATFORM

Proper safety and inspection construction management support services reduce the potential impact for interruption to service which would negatively affect our ridership. Further, this contract is being awarded to a company that qualifies as a Small Business within the Small Business Enterprise Program. To ensure maximum opportunity for participation on this contract, Metro staff performed extensive outreach to the small business community, including those within the Disadvantaged Veterans Business Enterprise and the Small Business Enterprise programs. The solicitation was advertised through periodicals of general circulation, posted on Metro's Vendor Portal, and an e-mail notice to small businesses with applicable NAICS codes. The Construction Management Team presented at TBAC and attended meetings with the Small Business Community to further define the experience and background for this solicitation. The Proposal Evaluation Team was comprised of department personnel that were age, race, and gender diverse. DEOD established a goal of 27% SBE and 3% DVBE. The selected firm committed to achieving a 69% SBE goal and 5% DVBE (Attachment B). f

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Project is consistent with the following Metro Vision 2028 Goals and Objectives:

Goal 1: Providing high-quality mobility options that enable people to spend less time traveling.

Goal 3: Enhance communities and lives through mobility and access to opportunity.

Goal 4: Transform LA County through regional collaboration and national leadership.

ALTERNATIVES CONSIDERED

The Board may reject the recommendations. Staff does not recommend this, as rejection will require an extensive hiring effort to provide permanent staff to fill the required positions, several of which are anticipated to be temporary. This would not be cost effective and could cause delays, since many of the CMSS staff are only required on a periodic basis for peak workloads and specific tasks over the life of the project.

NEXT STEPS

After Board approval of this CMSS Contract, the Contracting Officer will award Contract No. AE76301MC081 in accordance with Metro Procurement Policies and Procedures.

ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

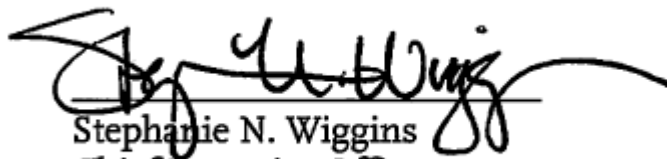
Prepared by:

Brad Owen, Executive Officer Program Management, (213) 418-3143

Reviewed by:

Bryan Pennington, Chief Program Management Officer, (213) 922-7449

Nalini Ahuja, Chief Financial Officer, (213) 922-3088



Stephanie N. Wiggins
Chief Executive Officer

PROCUREMENT SUMMARY

**CONSTRUCTION MANAGEMENT SUPPORT SERVICES - CAPITAL PROJECTS
CONTRACT NUMBER AE76301MC081**

1.	Contract Number: RFP No. AE76301MC081	
2.	Recommended Vendor: Zephyr Rail	
3.	Type of Procurement (check one): <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input checked="" type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	Procurement Dates:	
	A. Issued: June 2, 2021	
	B. Advertised/Publicized: June 2, 2021	
	C. Pre-Proposal Conference: June 16, 2021	
	D. Proposals Due: July 9, 2021	
	E. Pre-Qualification Completed: August 20, 2021	
	F. Conflict of Interest Form Submitted to Ethics: July 22, 2021	
	G. Protest Period End Date: October 25, 2021	
5.	Solicitations Picked up/Downloaded: 244	Proposals Received: 6
6.	Contract Administrator: Wonder Van Twist	Telephone Number: 213-922-7325
7.	Project Manager: Brad Owen	Telephone Number: 213-418-3143

A. Procurement Background

This Board Action is to approve the award of Contract No. AE76301MC081, Construction Management Support Services- Capital Projects, that will support Metro in the performance of Metro's responsibilities for multiple Capital Projects; subject to the resolution of protest(s), if any. The resultant Contract, will be state/locally funded and is subject to fiscal year funding.

The Scope of Services (SOS) of the Construction Management Support Services is to support the design reviews, construction management, and administration of the construction contract(s) and to ensure that the construction of various projects are administered and completed in compliance with contract requirements and government regulations. Additionally, this contract supports constructability and pre-construction activities for projects in the planning phase that are in the process of transitioning to Program Management.

The Request for Proposals (RFP) was an Architecture and Engineer (A&E), qualifications-based procurement process performed in accordance with Los Angeles County Metropolitan Transportation Authority (Metro) Procurement Policies and Procedures, and California Government Code §4525-4529.5 for Architectural and Engineering services. The contract type is a Cost-Plus Fixed Fee (CPFF) for a term of three (3) years plus two (2) one (1)- year options. A virtual pre-proposal conference was held on June 16, 2021 in accordance with the California Governor Executive Order N-33-20 related to COVID-19. Two hundred forty-four (244) individuals from various firms picked up or downloaded the RFP Package.

Three amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on June 10, 2021, revised the Letter of Invitation, added titles to 1.2 Proposal Content, 1.3 Proposal Forms, 1.4 Certification Forms, 1.5 SBE/DVBE Forms, & 1.6 Other Requirements of the Submittal Requirements, and revised the weighting percentages of the Evaluation Criteria.
- Amendment No. 2, issued on June 24, 2021, added details to 1.1 General Format and 1.2 Proposal Forms of the Submittal Requirements.
- Amendment No. 3, issued on July 8, 2021, revised 1.2 Proposal Content of the Submittal Requirements, Special Provision (SP-05), Insurance Requirements and Exhibit 5- Proposal Letter

A total of six (6) proposals were received on July 9, 2021, from the following firms, in alphabetical order:

1. D R Consultants & Designers, Inc.
2. MARRS Services, Inc.
3. RT Engineering & Associates, Inc.
4. SRL Enterprises, LLC.
5. Vanir Construction Management, Inc.
6. Zephyr UAS, Inc. dba Zephyr Rail

B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Metro Program Management was convened and conducted a comprehensive evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and the associated weightings:

- Experience and Capabilities of Firms on the Team..... (15%)
- Experience and Capabilities of the Key Personnel (25%)
- Effectiveness of Management Plan..... (25%)
- Project Understanding and Approach..... (35%)

Total 100%

The evaluation criteria are appropriate and consistent with criteria developed for other A&E procurements. Several factors were considered when developing the

weightings, giving the greatest importance to the Project Understanding and Approach.

This is an A&E, qualifications-based procurement; therefore, price cannot be used as an evaluation factor pursuant to state and federal law.

During the month of July 2021, the PET evaluated the six (6) written proposals. Of the six (6) proposals received, two were determined to be non-responsive, therefore, both were excluded from further consideration. From July 27, 2021 through July 30, 2021, Metro held a virtual Oral Presentations with the following four (4) proposing firms.

1. D R Consultants & Designers, Inc.
2. MARRS Services, Inc.
3. RT Engineering & Associates, Inc.
4. Zephyr Rail

The proposing firms had the opportunity to present their key personnel as well as respond to the PET's questions. In general, each proposer's presentation addressed the requirements of the RFP, experience with all aspects of the required and anticipated tasks and stressed each proposer's commitment to the success of the contract. Each proposing team was asked questions relative to each firm's previous experience performing work of a similar nature to the SOS presented in the RFP. Sealed cost proposals were received from the four (4) proposers at the time of oral presentations.

The Proposal Evaluation Team (PET) ranked the four (4) proposals and assessed the major strengths, weaknesses and associated risks of each of the proposers to determine the most qualified firm. The final scoring was based on evaluation of the written proposals, as supported by oral presentations, and clarifications received from the Proposers. The results of the final scoring are shown below:

Firm	Average Score	Factor Weight	Weighted Average Score	Rank
Zephyr Rail				
Experience and Capabilities of Firms on the Team	91.13	15%	13.67	
Experience and Capabilities of the Key Personnel	90.32	25%	22.58	

Effectiveness of Management Plan	91.68	25%	22.92	
Project Understanding and Approach	89.71	35%	31.40	
Total		100.00%	90.57	1
MARRS Services, Inc.				
Experience and Capabilities of Firms on the Team	87.80	15%	13.17	
Experience and Capabilities of the Key Personnel	87.68	25%	21.92	
Effectiveness of Management Plan	83.68	25%	20.92	
Project Understanding and Approach	83.51	35%	29.23	
Total		100.00%	85.24	2
RT Engineering & Associates, Inc.				
Experience and Capabilities of Firms on the Team	81.13	15%	12.17	
Experience and Capabilities of the Key Personnel	82.00	25%	20.50	
Effectiveness of Management Plan	76.00	25%	19.00	
Project Understanding and Approach	79.63	35%	27.87	

Total		100.00%	79.54	3
D R Consultants & Designers, Inc.				
Experience and Capabilities of Firms on the Team	72.20	15%	10.83	
Experience and Capabilities of the Key Personnel	78.00	25%	19.50	
Effectiveness of Management Plan	78.32	25%	19.58	
Project Understanding and Approach	69.57	35%	24.35	
Total		100.00%	74.26	4

* Weighted scores are rounded to the nearest second decimal point.

C. Cost/Price Analysis

Metro completed negotiations and determined that the recommended estimated costs are fair and reasonable based on a cost analysis of labor rates, indirect rates and other direct costs in accordance with Metro's Procurement Policies and Procedures. Metro completed negotiations and established indirect cost rates and as appropriate provisional indirect (overhead) rates, plus a fixed fee factor to establish a fixed fee amount based on the total estimated cost for contract work orders / task orders, during the contract term to compensate the consultant.

Proposer: Zephyr Rail			
Contract Duration	Proposal Amount	Metro ICE	NTE Funding Amount
Base Period – 3 Years	\$3,519,211.94 ⁽¹⁾	\$3,457,200.00 ⁽²⁾	\$3,519,211.94
Option Year 1 and 2			

(1) The proposal amount is based on the Metro established staffing plan. The Consultant's overall costs include direct labor, overhead, other direct costs, subconsultant costs and fixed fees.

(2) The amount \$3,457,200.00 is the Independent Cost Estimate (ICE) for 3-year base Period of the Contract. Cost proposals were based on the Proposers' rates for the provided level of effort of 18,718 hours in the Staffing Plan.

The CMSS Staffing plan was established based on the SOS developed for the Contract. The estimated costs are based on the anticipated level of effort developed

for each year that will be required to perform the SOS by the Consultant and sub-consultants.

D. Background on Recommended Contractor

The recommended firm, Zephyr Rail, is located in the city of Orange, California and was established in 2015. They hold certifications as a certified Disadvantaged Business Enterprise (DBE) and Small Business Enterprises (SBE). Zephyr Rail's staff has an excellent understanding of the Los Angeles and local cities, agencies and Metro requirements, personnel and practices. They have extensive experience and skills in construction management and engineering design services and are performing similar scope of services as a subconsultant for ongoing Metro projects on the Division 20 Portal Widening Turnback, East San Fernando Valley LRT Project and the Antelope Valley Line Improvements Environmental Assessment and Technical Studies.

DEOD SUMMARY

**CONSTRUCTION MANAGEMENT SUPPORT SERVICES FOR CAPITAL
PROJECTS / AE76301MC081**

A. Small Business Participation

The Diversity and Economic Opportunity Department (DEOD) established a 27% Small Business Enterprise (SBE) and 3% Disabled Veteran Business Enterprise (DVBE) goal for this Task Order Contract. Zephyr Rail, an SBE Prime, exceeded the goal by making a 69% SBE commitment and a 5% DVBE commitment.

In response to a specific Task Order request with a defined scope of work, the prime consultant will be required to identify SBE/DVBE subcontractor(s) to perform work activity and the actual dollar value commitments for that Task Order. Overall SBE/DVBE achievement in meeting the commitments will be determined based on cumulative SBE/DVBE participation of all Task Orders awarded.

Small Business Goal	27% SBE 3% DVBE	Small Business Commitment	69% SBE 5% DVBE
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	SBE Subcontractors	% Committed
1.	Zephyr Rail (SBE Prime)	TBD
2.	AIX Consulting, Inc.	TBD
3.	GCM Consulting, Inc.	TBD
4.	Ramos Consulting Services	TBD
Total SBE Commitment		69%

	DVBE Subcontractors	% Committed
1.	Conaway Geomatics, Inc.	TBD
2.	NSI Engineering, Inc.	TBD
Total DVBE Commitment		5%

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy (LW/SCWRP) is not applicable to the contract.

C. Prevailing Wage Applicability

Prevailing wage is not applicable to this contract.

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. Project Labor Agreement/Construction Careers Policy is applicable only to construction contracts that have a construction contract value in excess of \$2.5 million.



Board Report

File #: 2021-0610, **File Type:** Oral Report / Presentation

Agenda Number: 32.

**CONSTRUCTION COMMITTEE
OCTOBER 21, 2021**

SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS REPORT

ACTION: ORAL REPORT

RECOMMENDATION

RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

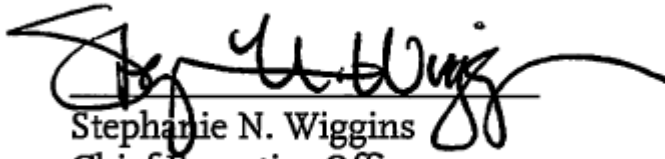
DISCUSSION

Update report covering the month of October 2021 by the Chief Program Management Officer.

Prepared by:

- **Crenshaw/LAX** - Sameh Ghaly, Sr EO Project Mgmt., (213) 418-3369
- **Regional Connector** - Sameh Ghaly, Sr EO Project Mgmt., (213) 418-3369
- **Westside Purple Line Ext 1** - James Cohen, EO Project Mgmt., (213) 922-7911
- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Westside Purple Line Ext 3** - Kimberly Ong, EO Project Mgmt., (323) 903-4112
- **Airport Metro connector (AMC)** - Timothy Lindholm, Sr. EO Project Engr., (213) 922-7297
- **Division 20 Portal Widening Turnback** - Rick Meade, Sr EO Project Mgmt., (562)524-0517
- **G Line BRT Improvements Project** - Timothy Lindholm, Sr. EO Project Engr., (213) 922-7297

- **I-5 North County Enhancements** - Timothy Lindholm, Sr. EO Project Engr., (213) 922-7297
- **I-5 North** - Abdollah Ansari, Sr EO Construction & Engr., (213) 922-4781
- **I-5 South** - Abdollah Ansari, Sr EO Construction & Engr., (213) 922-4781
- **Presentation** - Yohana Jonathan, Mgr, Project Control, (213) 418-3031



Stephanie N. Wiggins
Chief Executive Officer

Program Management Major Project Status Report

Presented By

Bryan Pennington

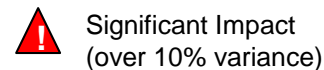
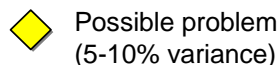
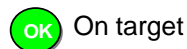
Chief Program Management Officer

PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance		Schedule Performance		Comments
	Variance Approved LOP	Variance Revised Budget	Variance Original	Variance Revised Schedule	
Crenshaw/LAX					Project is 99.24% complete. Contractor is not applying sufficient work force to complete their remaining work. Remaining work is primarily underground station finishing, facility equipment and communications system testing. Metro continues to work with contractor to mitigate the delays and impacts to the project schedule; emphasizing safety and reliability in final acceptance of project elements and systems. Equity - 8 of 8 stations (100%) are within or adjacent to Equity Focus Communities.
Regional Connector					Project is 85% complete. Comprehensive planning for testing underway for 7th/Metro Center interfaces; Site work and restoration throughout alignment continues; and MEP and systems work continues in stations and guideway. Equity - 3 of 3 stations (100%) are within or adjacent to Equity Focus Communities.
Westside Purple Line Extension-Section 1					Project is 72% complete. The Project team continues to evaluate and monitor post-TBM tunnel activities. The current schedule update is being adjusted to reflect the current construction approach. The Project's forecast Revenue Service Date is Fall 2024. Equity - This Project is not located within or adjacent to Equity Focus Communities.
Westside Purple Line Extension-Section 2					Project is 46% complete and proceeding on schedule and within budget. Equity - This project is not located within or adjacent to Equity Focus Communities.
Westside Purple Line Extension-Section 3					Project is 28% complete and proceeding on schedule and within budget. Equity - 1 of 2 stations (50%) are within or adjacent to Equity Focus Communities.
Airport Metro Connector					Early Works Phase is 26% complete. Site work continuing with demolition and grading work with utility work initiated in the Southwestern Yard. Primary station contract process is nearing completion with NTP expected within a month. Equity - 100% of the project is within or adjacent to Equity Focus Communities.
Division 20 Portal Widening Turnback					Project is 27% complete. Construction continues with the excavation and grading for duct banks and vaults, Portal excavation, utility installation, the 1st Bridge, duct banks and manholes for the Traction Power Substation and commence the preparation for MicroLok. Contingency continues to trend downward, and currently working with contractor to finalize an updated schedule. Equity - 100% of the project is within or adjacent to Equity Focus Communities.
G Line BRT Improvements					Progressive Design Build Contract under internal review. Industry review anticipated Oct 2021. Contract award anticipated Summer 2022. Pilot Gate construction commenced Sept 2021. AURs and property acquisitions underway. Equity: 8 of 18 stations (45%) are within or adjacent to Equity Focus Communities
1-5 North County Enhancements					Construction NTP was issued in August 2021. Field work expected to begin in October 2021. Equity - This project is not located within or adjacent to Equity Focus Communities
I-5 North: SR 118 to SR 134					Segment 1, 2 and 4 are completed. Segment 3 (Empire Ave & Burbank) is 92% complete. Equity - I-5 North: 4 of 4 segments of the corridor project are within or adjacent to Metro's Equity Focus Communities. Only 1 segment of the project remains to be completed. Caltrans is the lead on the project.
I-5 South: Orange County Line to I-605					Segments 1, 3, 4, and the Carmenita Interchange are completed. Segment 2 (Valley View) is 83% complete. Segment 5 (Florence) is 94% complete and started the one-year plant establishment period in April 2021. Equity - I-5 South: 4 of 6 segments of the corridor project are within or adjacent to Metro's Equity Focus Communities. Only 2 segments of projects remain to be completed. Caltrans is the lead on the project.

October 2021

Construction Committee



CRENSHAW/LAX TRANSIT PROJECT

BUDGET	Approved	Previous	Current
TIFIA	LOP*	Period**	Forecast**
\$2,148M	\$2,058M	\$2,148M	\$2,148M
Variance from Approved LOP:		\$90M (4%)	\$90M (4%) ok
Variance from Revised Budget:			\$0 ok

SCHEDULE	Approved	(REVENUE OPERATION)	Current
Original	Rebaseline	Previous	Forecast*
Oct.2019	May 2020	Winter 2021	Winter 2021
Variance from Original:		+860d (27%)	+873d (28%) !
Variance from Revised Schedule:		+639d (26%)	+652d (27%) !

*At time of the award of contract - Board Approval June 2013
 **Excludes finance costs and includes \$10M Non-TIFIA activities

*Current Forecast is Contractor's July Schedule update

- Safety: Project Hours: 11,178,251 Recordable Injury Rate: 1.82 vs The National Average: 2.4 (as of July 31, 2021)
- Overall Project Progress is 99.24% complete.
- Contractor is not applying sufficient specialty work force to complete remaining work, testing/test reports on time.
- Remaining work is primarily underground station finishing, permanent remediations of OCS balance weight NCR issue, the completion of facility equipment, system local field testing, and system integration testing.
- Metro continues to work with contractor to minimize delays and impacts to the project; emphasizing safety and reliability in final acceptance of project elements and systems.
- Equity - 8 of 8 stations (100%) are within or adjacent to Equity Focus Communities.



Hindry Station – Mounting wind screen glass



MLK Stations – Installed and grounded bike storage lockers

October 2021

ok On target
 ◆ Possible problem (5-10% variance)
 ! Significant Impact (over 10% variance)



Construction Committee



Los Angeles County Metropolitan Transportation Authority

REGIONAL CONNECTOR TRANSIT PROJECT



BUDGET

FFGA	Approved LOP*	Previous Period**	Current Forecast**
\$1,402M	\$1,420M	\$1,755M	\$1,755M
Variance from Approved LOP:		\$335M (24%)	\$335M (24%) 
Variance from Revised Budget:		\$0	

*At time of the award of contract – Board Approval April 2014

**Excludes finance costs

SCHEDULE

Original	Approved** Rebaseline	Previous Period	Current Forecast*
May 2021	Fall 2022	Fall 2022	Fall 2022
Variance from Original:		+480d (19%)	+480d (19%) 
Variance from Revised Schedule:		0d	

*Current Forecast is Contractor's March Schedule update

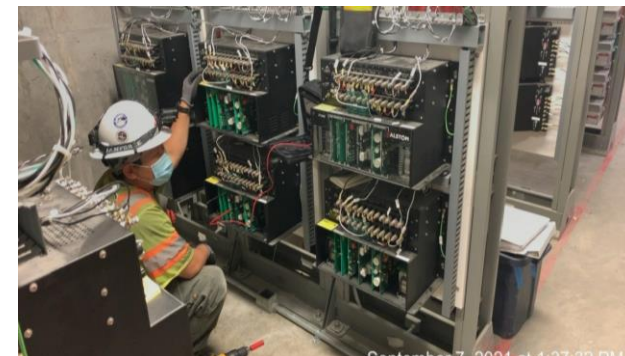
**Approval in process

(REVENUE OPERATION)

- Safety: Project Hours: 6,416,290 Recordable Injury Rate: 0.72 vs The National Average: 2.4 (as of July 31, 2021)
- Overall Project Progress is 85% complete.
- **Little Tokyo/Arts District Station & Surrounding Area:** Alameda Cut and Cover guideway concrete, MSE wall modifications, street restorations, MEP, systems and finishes continue.
- **Historic Broadway Station:** Overbuild Load Transfer System structural concrete complete; vent structures along Spring and Broadway near completion; systems, station finishes and MEP advancing; backfill and street restoration continues.
- **Grand Av Arts/Bunker Hill Station:** Schedule -critical elevator installations behind schedule – mitigation efforts underway; backfill and street restoration continuing; station finishes, systems and MEP are grinding on all levels; pedestrian bridge near completion.
- **Flower Street:** Decking removals have been completed throughout; backfill and restorations continuing with focus now south of Wilshire; remedial work related to height clearances for overhead power completed clearing the way for downstream operations to catch-up; systems cut-over work at 7th/Metro progressing well with six of planned eight bus bridges completed.
- **Trackwork:** Preparations for last legs of trackwork on 1st and Alameda Streets continuing; crossover assembly on Alameda expected to soon commence. Grinding and profiling of rail expected to complete mid-fall.
- **Systems:** Installations of traction power, train control and communications continuing; entire alignment now on permanent power; comprehensive systems testing now underway.
- **Equity:** 3 of 3 stations (100%) are within or adjacent to Equity Focus Communities.



Dead pull test in Crossover Cavern



Train control testing at Flower T&C Room

October 2021



On target



Possible problem
(5-10% variance)



Significant Impact
(over 10% variance)





Metro 4

Construction Committee

Los Angeles County Metropolitan Transportation Authority

WESTSIDE PURPLE LINE EXTENSION – SECTION 1



BUDGET

	Approved	Previous	Current
FFGA	LOP* **	Period**	Forecast**
\$2,822M	\$2,774M	\$3,129M	\$3,129M
Variance from Approved LOP:		\$355M (13%)	\$355M (13%) 
Variance from Revised Budget:		\$0	\$0 

*At time of the award of contract – Board Approval July 2014

**Excludes finance costs

SCHEDULE

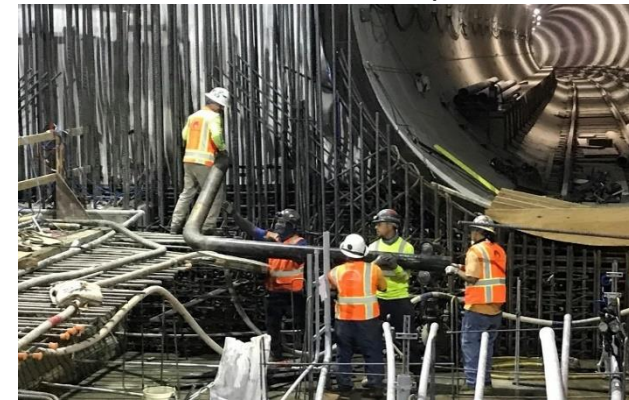
	Approved	Previous	Current
Original	Rebaseline	Period	Forecast*
Nov.2023	Fall 2024	Fall 2024	Fall 2024
Variance from Original:		+365d (11%)	+365d (11%) 
Variance from Revised Schedule:		0d	0d 

*Current Forecast is Contractor's August Schedule update

- Safety: Project Hours: 6,064,578 Recordable Injury Rate: 1.29 vs The National Average: 2.4 (as of July 31, 2021)
- Overall Project progress is 72% complete.
- **Wilshire/La Brea Station:** Permanent utility installation/backfill (above the roof) activities, west hammerhead and entrance structure work, interior MEP installation and appendage construction are ongoing.
- **Wilshire/Fairfax Station:** Structural concrete activities continue. Eleven out of 16 concrete roof blocks have been placed to date. East and west hammerhead structure work moves forward. Entrance plaza and appendage work are ongoing.
- **Wilshire/La Cienega Station:** All TBM gantries have been removed from the Station. East hammerhead, interior walls and appendage construction are progressing.
- **Reach 1 Tunnel:** Tunnel invert and walkway concrete activities continue. Track installation is scheduled to start in October 2021.
- **Reach 2 Tunnel:** One out of six cross passages (CPs) has been excavated (CP #20). Additional grouting on the other CPs is being performed prior to excavation.
- **Budget/Schedule:** An FTA/PMOC risk assessment has been performed. Results will be shared once findings are analyzed.
- **Equity:** This Project is not located within or adjacent to Equity Focus Communities.



Roof Falsework Installation at Wilshire/Fairfax Station



View of Wilshire/La Cienega Station South Infill Slab Area

WESTSIDE PURPLE LINE EXTENSION – SECTION 2

BUDGET	Approved	Previous	Current
<u>FFGA</u>	<u>LOP*</u>	<u>Period**</u>	<u>Forecast**</u>
\$2,499M	\$2,441M	\$2,441M	\$2,441M
Variance from Approved LOP:		\$0M (0%)	\$0M (0%) OK
Variance from Revised Budget:			\$0 OK

*At time of the award of contract – Board Approval January 2017

**Excludes finance costs

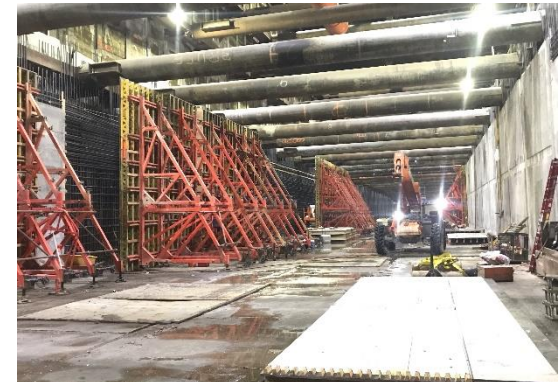
SCHEDULE		(REVENUE OPERATION)	
Approved	Previous	Current	
<u>Rebaseline</u>	<u>Period</u>	<u>Forecast*</u>	
Aug. 2025	N/A	Summer 2025	Summer 2025
Variance from Original:		+0d (0%)	+0d (0%) OK
Variance from Revised Schedule:		0d	0d OK

*Current Forecast is Contractor's April Schedule update

- Safety: Project Hours: 2,233,078 Recordable Injury Rate: 3.31 vs The National Average: 2.4 (as of July 31, 2021)
- Overall Project progress is 46% complete as of period ending August 2021.
- **Century City Constellation Station**
 - Excavation of the station box was 23% complete as of Sept. 15, 2021.
- **Wilshire/Rodeo Station**
 - Installation of waterproofing membrane, rebar, and framework for first level walls is ongoing.
 - Concrete placement for the first level Wilshire/Rodeo Station walls has commenced and is 21% complete.
- **Tunneling**
 - Both tunnel boring machines (TBMs) “Ruth” and “Harriet” are operating within the City of Beverly Hills. Progress as of September 16, 2021, is as follows:
 - Ruth (eastbound subway tunnel) – 3,236ft (28%)
 - Harriet (westbound subway tunnel) – 3,237ft (28%)
- **Equity** - This project is not located within or adjacent to Equity Focus Communities



Constellation Station Box Excavation



First Level Walls at Wilshire/Rodeo Station

October 2021

OK On target

◆ Possible problem (5-10% variance)

▲ Significant Impact (over 10% variance)



Construction Committee

Los Angeles County Metropolitan Transportation Authority

WESTSIDE PURPLE LINE EXTENSION – SECTION 3

BUDGET

<u>FFGA</u>	<u>Approved LOP*</u>	<u>Previous Period**</u>	<u>Current Forecast**</u>
\$3,599M	\$3,224M	\$3,224M	\$3,224M
Variance from Approved LOP:		\$0M (0%)	\$0M (0%) OK
Variance from Revised Budget:		\$0	\$0 OK

*At time of the award of contract – Board Approval February 2019

**Excludes finance costs

SCHEDULE

		(REVENUE OPERATION)	
<u>Original</u>	<u>Approved Rebaseline</u>	<u>Previous Period</u>	<u>Current Forecast*</u>
Mar. 2027	N/A	Spring 2027	Spring 2027
Variance from Original:		+0d (0%)	+0d (0%) OK
Variance from Revised Schedule:		0d	0d OK

*Current Forecast is Contractor's March Schedule update

**Approval in process

- Safety: Project Hours: 1,305,735 Recordable Injury Rate: 1.53 vs The National Average: 2.4 (as of July 31, 2021)
- Overall Project Progress is 28% complete.
- Final design progress is 89% complete.
- Tunneling
 - TBM Iris (BR) – Re-launched TBM in early August 2021 and has mined 874 feet to date.
 - TBM Aura (BL) – Full gantry assembly continues in the starter tunnel.
- Stations
 - Westwood/VA: Utility relocation continues, installation of dewatering wells in progress.
 - Westwood/UCLA: Utility relocation continues; Support of Excavation pile installation began on UCLA parking lot 36.
- Equity - 1 of 2 stations (50%) are within or adjacent to Equity Focus Communities.



Muck Removal System at Bottom of Tail Track Exit Shaft



Sewer Relocation for Westwood/UCLA Station

October 2021

OK On target

◆ Possible problem (5-10% variance)

▲ Significant Impact (over 10% variance)

AIRPORT METRO CONNECTOR (AMC) PROJECT

BUDGET	Approved LOP*	Previous Period	Current Forecast
TOTAL COST	\$898.6M	\$898.6M	\$898.6M
Variance from Approved LOP:		\$0M (0%)	\$0M (0%)
Variance from Revised Budget:			\$0

SCHEDULE	Approved Rebaseline	(Revenue Operation) Previous Period	Current Forecast*
Original	N/A	Fall 2024	Fall 2024
Variance from Original:		+0d (0%)	+0 d (0%)
Variance from Revised Schedule:			0d

*Approved May 2021 Board

*Current Forecast is Metro's May Schedule update

- Early Works Phase construction (26% complete) continues with demolition and site grading work. Work has begun for utility work within Southwestern Yard.
- Primary Station Construction Contract nearing release of NTP - scheduled for Fall 2021.
- APM Station structural concrete completed. Structural Steel work in progress.
- Equity - 100% of the project is located within or adjacent to Equity Focus Communities.



Backfill Work at South End of Site



LAVA APM Steel Work in Progress



Utility Work on Arbor Vitae



On Site Grading and Backfilling Work

DIVISION 20 PORTAL WIDENING TURNBACK

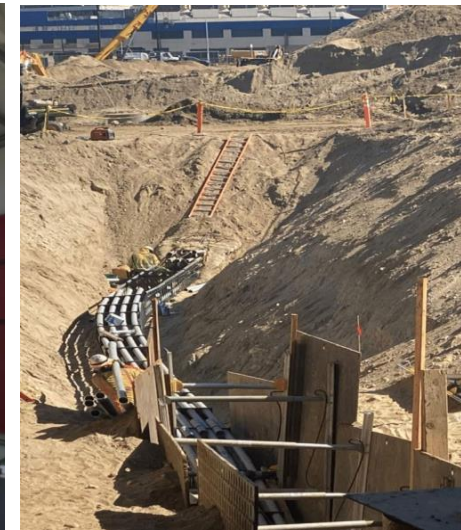
BUDGET	Approved LOP*	Previous Period	Current Forecast
TOTAL COST	\$801.7M	\$801.7M	\$801.7M
Variance from Approved LOP:		\$0M (0%)	\$TBD ◆
Variance from Revised Budget:			\$TBD ◆

*At time of the award of contract – Board Approval (February 2020)

SCHEDULE	Approved Rebaseline	(Substantial Completion) Previous Period	Current Forecast*
Original June 2024	N/A	June 2024	TBD
Variance from Original:		+0d (0%)	TBD ◆
Variance from Revised Schedule:			TBD ◆

*Current Forecast is Contractor's Schedule update

- **Overall Project progress is 27% complete.**
Includes Real Estate Acquisitions, Environmental, Design, Contract Mobilization, Early Demolition, Power, Utility contracts and contract change orders
- **C1136 Portal Widening Turnback Contract**
PWT C1136 Contract progress is 34%.
Phase 1 Track, utilities, and civil work continues
1st Street Bridge Rehabilitation and Portal excavation & prep for first MicroLok cutover ongoing
- **Major Change Orders to Date:**
Hazardous Material Removal
1st Street Bridge Rehabilitation
Completion of Utility Contracts
3rd Party Unforeseen Interfaces
Design Revisions (*in progress*)
- **C1184 Traction Power Substation Contract at 58%**
- **Coordination with Adjacent Projects**
Purple Line Extension (PLE1)
Regional Connector; Metro Center Project
6th Street Bridge (City of L.A. Project)
- **Continued Regular risk assessments to determine budget/schedule**
- **Equity - 100% of the project is located within or adjacent to Equity Focus Communities**



G LINE BRT IMPROVEMENTS PROJECT

BUDGET	Approved LOP	Previous Period	Current Forecast
TOTAL COST	N/A	N/A	\$361M
Variance from Approved LOP:		\$0M (0%)	\$0M (0%)
Variance from Revised Budget:			\$0

**Project will work within the annual budget constraints until LOP is established*

OK
OK

SCHEDULE	Approved Rebaseline	(Revenue Operation) Previous Period	Current Forecast*
Original	N/A	N/A	Dec 2026
Variance from Original:		+0d (0%)	+0 d (0%)
Variance from Revised Schedule:			0d

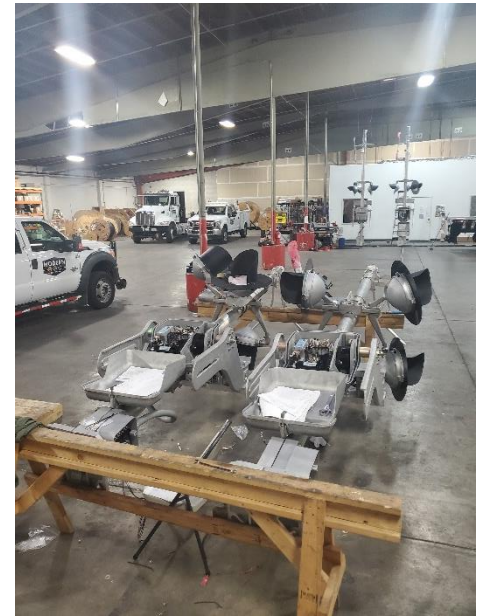
**Current Forecast is Metro's Internal Schedule, Baseline schedule not yet approved at time of update*

OK
OK

- Progressive Design Build Contract under internal review
- Industry Review anticipated for October 2021
- Pilot Gate construction commenced September 2021
- Owner-performed AURs underway at Sepulveda, Vesper and Sylmar
- Ongoing coordination with interfacing contracts:
 - ESFV Light Rail Project
 - District NoHo Joint Development Project
 - LADOT Chandler Bike Path
- Measure W Stormwater Capture scope added to project, grant funding secured
- Nine Property Acquisitions underway:
 - Two acquisitions in negotiation phase
 - Seven acquisitions in appraisal stage
- PDB Contract Award anticipated Summer 2022
- Equity: 8 of 17 stations (47%) are within or adjacent to Equity Focus Communities



Pilot Gate - DWP Service Pedestal Installation



Pilot Gate - Gate Assembly

October 2021

Construction Committee

Los Angeles County Metropolitan Transportation Authority

I-5 Construction Projects (Administered by Metro)



October 2021



Construction Committee

Los Angeles County Metropolitan Transportation Authority

I-5 NORTH COUNTY ENHANCEMENTS

BUDGET	Approved LOP*	Previous Period	Current Forecast
TOTAL COST	\$679.3M	\$679.3M	\$679.3M
Variance from Approved LOP:		\$0M (0%)	\$0M (0%) 
Variance from Revised Budget:			\$0 

*At time of the award of contract – Board Approval (March 2021)

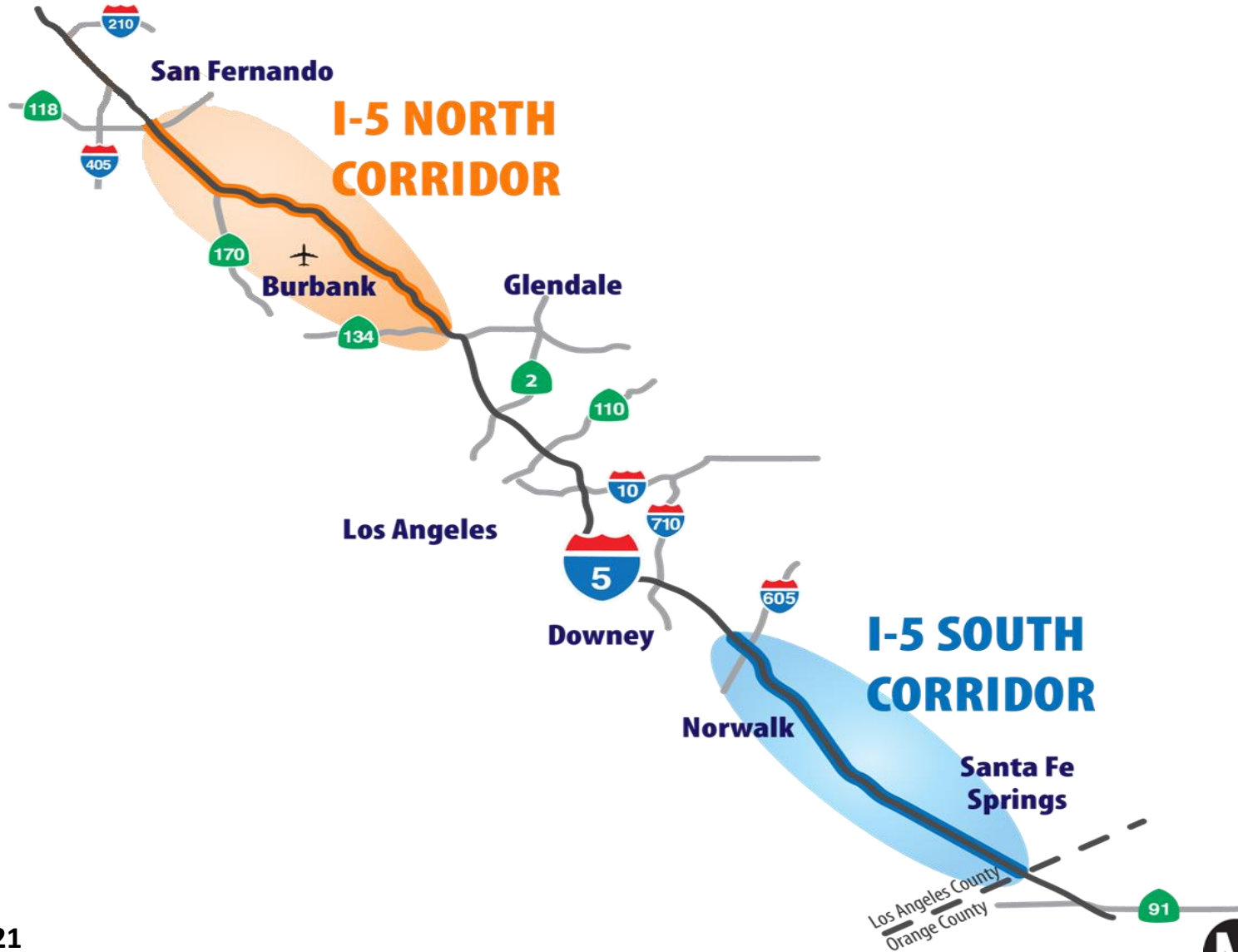
SCHEDULE	Approved Rebaseline	(Substantial Completion) Previous Period	Current Forecast*
Original Spring 2026	N/A	Spring 2026	Spring 2026
Variance from Original:		+0d (0%)	0d (0%) 
Variance from Revised Schedule:			N/A 

*Current Forecast is Metro's Internal Schedule, Baseline schedule not yet approved at time of update

- Notice to Proceed was issued August 23, 2021. Contractor is mobilizing to begin field work in October 2021.
- Construction Community Meeting and Groundbreaking anticipated in the fall
- Equity - This project is not located within or adjacent to Equity Focus Communities



I-5 Construction Projects (By Caltrans)



I-5 NORTH: SR 118 TO SR 134

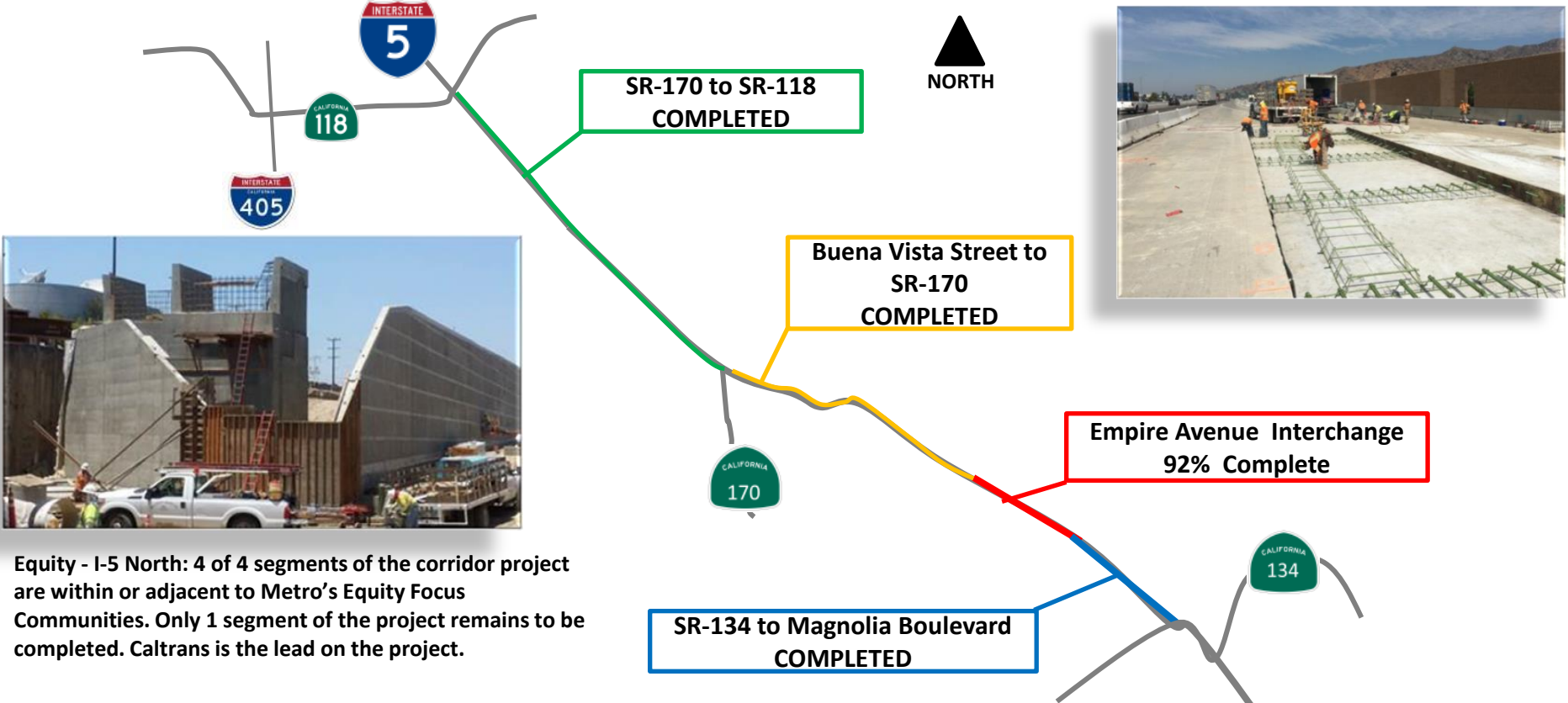


BUDGET	Approved LOP*	Previous Period	Current Forecast
TOTAL COST	\$845.1M	\$954.1M*	\$935.3M*
Variance from Approved LOP:		\$109M (13%)	\$90.2M (11%)
Variance from Revised Budget:		\$ 73.2M (8%)	\$ 54.4M (6%)

*At time of the award of contract – Board Approval (December 2012)

SCHEDULE	(Anticipated Project Completion)		
Original	Approved Rebaseline	Previous Period	Current Forecast*
Fall 2017	Summer 2022	Spring 2023	Spring 2023
Variance from Original:		+2034d (77%)	+2034d (77%)
Variance from Revised Schedule:		+266d (6%)	+266d (6%)

* Current Forecast is Contractor's July Schedule update



- Equity - I-5 North: 4 of 4 segments of the corridor project are within or adjacent to Metro's Equity Focus Communities. Only 1 segment of the project remains to be completed. Caltrans is the lead on the project.

I-5 SOUTH: ORANGE COUNTY LINE TO I-605

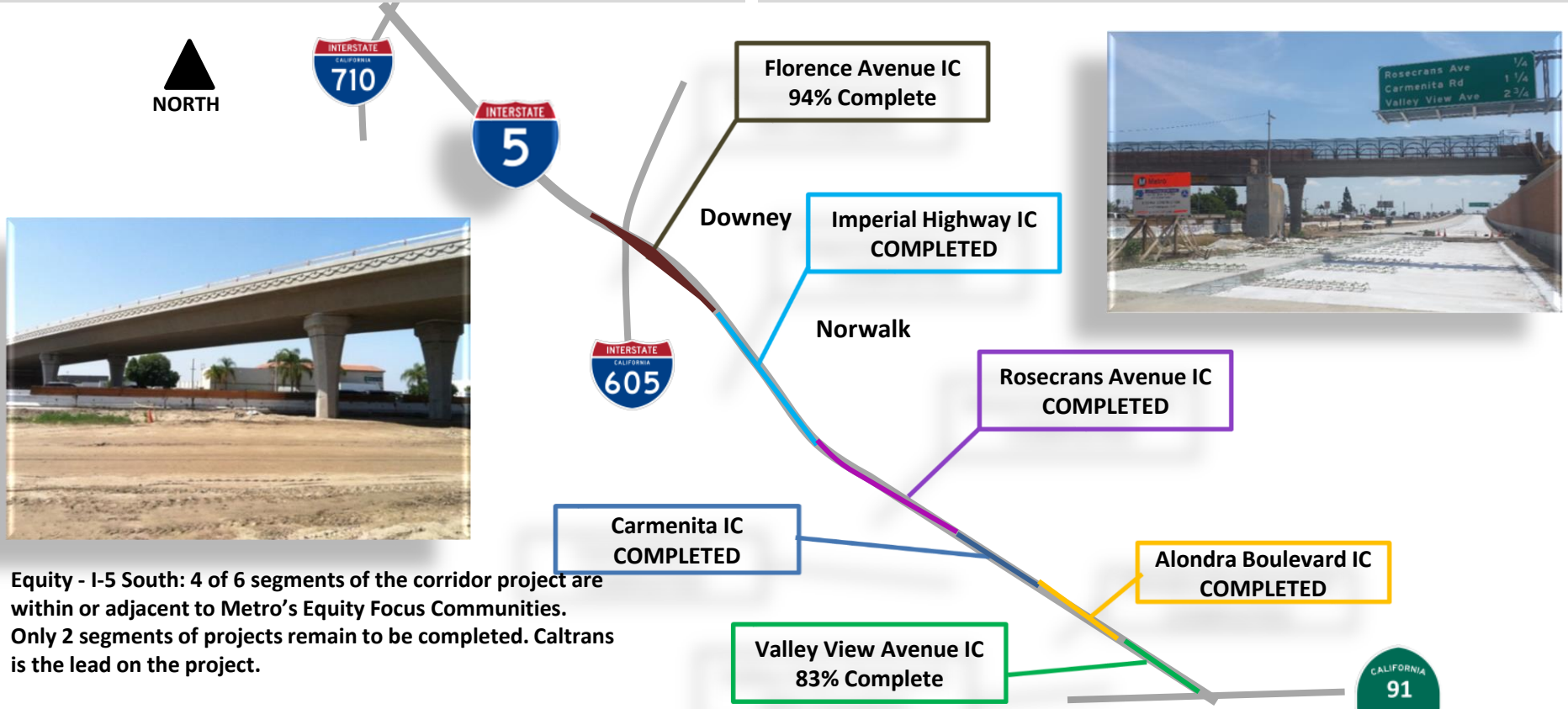


BUDGET	Approved LOP*	Previous Period	Current Forecast
TOTAL COST	\$1,844M	\$1,888M	\$1,888M*
Variance from Approved LOP*:		\$44M (2%)	\$44M (2%)
Variance from Revised Budget:		\$0	\$0

* At time of the award of contract – Board Approval (Jun 2013 & May 2009)

SCHEDULE	(Anticipated Project Completion)		
	Approved Rebaseline	Previous Period	Current Forecast*
Original	Spring 2022	Spring 2023	Spring 2023
Variance from Original:		+2324d (87%)	+2324d (87%)
Variance from Revised Schedule:		+372d (10%)	+372d(10%)

*Current Forecast is Contractor's July Schedule update



Equity - I-5 South: 4 of 6 segments of the corridor project are within or adjacent to Metro's Equity Focus Communities. Only 2 segments of projects remain to be completed. Caltrans is the lead on the project.

October 2021
Construction Committee
 Los Angeles County Metropolitan Transportation Authority

● On target
 ◆ Possible problem (5-10% variance)
 ▲ Significant Impact (over 10% variance)



* Risk Analysis, Aug 2021



Board Report

File #: 2021-0580, File Type: Informational Report

Agenda Number: 33.

CONSTRUCTION COMMITTEE
OCTOBER 21, 2021

SUBJECT: PROGRAM MANAGEMENT QUARTERLY CHANGE REPORT

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE status report on Program Management Quarterly Change Report.

BACKGROUND

At the January 26, 2018 Board meeting, the Board approved the continuation and expansion of the delegation of authority within Life of Project (LOP) budget management on all Transit and Regional Rail Capital Projects. Staff was directed to provide quarterly reports to the Board on change orders and modifications that are above \$500,000.

DISCUSSION

The change activities for the reporting period between June 1, 2021 and August 31, 2021 are included in Attachment A.

FINANCIAL IMPACT

The changes included in this report are included in the approved life-of-project budget for each project.

EQUITY PLATFORM

Crenshaw/LAX	Equity - 8 of 8 stations (100%) are within or adjacent to Equity Focus
Regional Connector	Equity - 3 of 3 stations (100%) are within or adjacent to Equity Focus
Westside Purple Line Ext 1	Equity - This project is not located within or adjacent to Equity Focus Communities

Westside Purple Line Ext 2	Equity - This project is not located within or adjacent to Equity Focus Communities
Westside Purple Line Ext 3	Equity - 1 of 2 stations (50%) are within or adjacent to Equity Focus Communities
Division 20	Equity - 100% of the project is within or adjacent to Equity Focus Communities
Airport Metro Connector	Equity - 100% of the project is within or adjacent to Equity Focus Communities
Soundwall Package 11	Equity - 25% of the project is within or adjacent to Equity Focus Communities

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The recommendation supports strategic plan goal # 5 to provide responsive, accountable, and trustworthy governance within the Metro organization by keeping the Board informed of the Projects’ change orders and modifications via submitting the Change Order log quarterly.

NEXT STEPS

The next Change Order Log will cover the period of September 1, 2021 through November 30, 2021 and will be presented to the January 2022 Construction Committee.

ATTACHMENTS

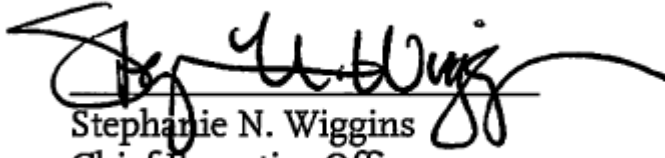
Attachment A - Quarterly Change Orders Log for Reporting Period of June 1, 2021 - August 31, 2021.

Prepared by:

- **Crenshaw/LAX** - Sameh Ghaly, Sr. EO Project Mgmt., (213) 418-3369
- **Regional Connector** - Mathew Antonelli, Project Manager, (213) 893-7114
- **Westside Purple Line Ext 1** - James Cohen, EO Projects Eng., (323) 900-2114
- **Westside Purple Line Ext 2** - Michael McKenna, EO Projects Eng., (424) 551-4447
- **Westside Purple Line Ext 3** - Kimberly Ong, EO Projects Eng., (424) 551-4501
- **Division 20 Portal** - Rick Meade, Sr. EO Project Mgmt., (213) 922-7917
- **Airport Metro Connector** - Tim Lindholm, Sr. EO Project Mgmt., (213) 922-7297
- **Soundwall Package 11** - Tim Lindholm, Sr. EO Project Mgmt., (213) 922-7297
- **Report** - Julie Owen, Sr. EO Program Control, (213) 922-7313

Reviewed by:

Bryan Pennington, Chief Program Management Officer, (213) 922-7449



Stephanie N. Wiggins
Chief Executive Officer

CRENSHAW/LAX TRANSIT PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2021 - August 31, 2021)

Change Types:

1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

A. DESIGN BUILD CONTRACT - Contract No. C0988 - WALSH SHEA CORRIDOR CONSTRUCTORS

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts that is why this is unilateral and a modification will follow upon negotiation is finalized between Contractor and Metro).	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
CO-291	WSSC Operations Support for SIT-2 Testing: Contractor to provide labor, equipment, and material as Operations support for System Integration Testing Phase 2 (SIT-2). Skilled operators are required to execute specific SIT-2 test procedures at TPSS, TC&C, and Ancillary rooms/sites as indicated in Exhibit 1 below. SIT-2 Operations support consists of activating the devices/systems, simulating alarms, verifying the correct test indications back to the Rail Operations Center (ROC), and troubleshooting any problems encountered. These tests will be performed concurrently during the estimated 6-month calendar duration of SIT-2 and require 300 person-days of Contractor supplied Operations support labor in total.	4	6/1/2021	7/19/2021	\$ 850,000	\$ 680,000

B) PROFESSIONAL SERVICES CONTRACTS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
E0128-TO-01-MOD-00009	E0128-TO-001-MOD-00009 CM-14853 Crenshaw Design Services During Construction – Level of Effort Through FY22: To provide Design Services During Construction (DSDC) support for the Crenshaw/LAX Transit Project (Crenshaw Project) through June 30, 2022. Various rail systems disciplines, as specified in the Scope of Work, may be utilized to complete the Work, in support of the Crenshaw project until its completion.	5	6/30/2021	7/9/2021	-----	\$ 3,001,016
E0117-MOD-00053	Add Funding and Extend Crenshaw/LAX Phase III DSDC and Phase IV Systems Activation with Claims Prep Support: The existing funding level is extended for Phase III Design Services During Construction (DSDC), Phase IV Systems Activation and Claims Preparation support through December 21, 2022	5	7/8/2021	8/25/2021	-----	\$ 4,993,764

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (June 1, 2021 - August 31, 2021)**B) PROFESSIONAL SERVICES CONTRACTS**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
MC069-16-CO-001	CWO 16 Construction Management Support Service (CMSS) - Additional Funding: The estimated cost of CWO 16 has been revised and the period of performance has been extended through June 30, 2022. Total funds allotted and authorized for expenditure is revised from \$101,915,922.75 to \$104,415,922.75, an increase in the amount of \$2,500,000.00.	5	Between \$1M and \$5M

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACT - Contract MC069 - STANTEC CONSULTING, INC.

MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
MC069-MOD-0002	CWO 31 FY22 Claims Preparation Support - Additional Funding: The estimated cost of CWO 32 has been revised and the period of performance has been extended through June 30, 2022. The funds allotted and authorized for expenditure is increased by \$584,000.	5	Between \$500K and less than \$1M

REGIONAL CONNECTOR TRANSIT PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2021 - August 31, 2021)

Change Types:
 1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

A. DESIGN BUILD CONTRACT - CONTRACT NO. C0980 - REGIONAL CONNECTOR CONSTRUCTORS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
C0980-MOD-206	CO23.4 Add Wye Junction Fan Plant - Construction	5	5/4/2021	6/16/2021	\$ 22,031,075	\$ 18,700,000
C0980-MOD-209	Increase Schedule C - Provisional Sum; Requests from Third Parties	5	N/A	6/28/2021	----	\$ 600,000
C0980-MOD-210.2	CO 34 - Replacement of DWP Conduits and Manholes on Flower St. btw 5th & 6th St.	5	6/8/2021	7/29/2021	\$ 1,226,442	\$ 1,176,332
C0980-MOD-212	Joint Communications Ductbank Infrastructure at 2nd/Hope Station - Construction	5	6/18/2021	7/20/2021	\$ 2,012,572	\$ 1,975,089

B. PROFESSIONAL SERVICES CONTRACT

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
E0119-MOD-0033	FY22 Funding for Design Support During Construction	5	6/16/2021	7/1/2021	\$ 3,197,707	\$ 3,197,707
MC070-MOD-00024	FY22 Funding for Construction Management Support Services	5	7/12/2021	8/4/2021	\$ 8,141,140	\$ 8,141,140
AE35279 CWO 9 MOD 7	FY22 Program Management Support Services - KKCS/Triunity JV	5	6/4/2021	6/9/2021	\$ 768,814	\$ 638,620

C. OTHER AGREEMENTS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K

A. DESIGN BUILD CONTRACT - CONTRACT NO. C0980 - REGIONAL CONNECTOR CONSTRUCTORS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
C0980-CN-00262	Metro Eastside Access Improvement (Alameda) - Construction	5	Between \$1M and \$5M

B) PROFESSIONAL SERVICES CONTRACTS

Design Support Services During Construction

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

D. OTHER AGREEMENTS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

WESTSIDE PURPLE LINE EXTENSION SECTION 1 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2021 – August 31, 2021)

Change Types:

1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

A. DESIGN BUILD CONTRACT - CONTRACT NO. C1045 - SKANSKA-TRAYLOR-SHEA, A JOINT VENTURE

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD 137	Increased Well Maintenance at Western Shaft due to Groundwater Chemistry Impacts (CN-00129.1): This modification is necessary to mitigate unanticipated groundwater characteristics that caused dewatering well buildup at the Wilshire/Western Shaft resulting in an increase in dewatering well and treatment system maintenance.	3	7/22/2021	8/10/2021	\$ 3,728,954	\$ 2,700,333
MOD 138	Additional Dewatering Treatment & Discharge Impacts at Western (CN-00083.1): This modification is to provide additional groundwater treatment system operations and equipment components due to higher calculated permeability and groundwater rates at the Wilshire/Western Shaft.	3	7/22/2021	8/10/2021	\$ 3,721,859	\$ 3,109,648
MOD 140	Wilshire/Fairfax Station Entrance and A1D Appendage Schedule Advancement (CN-00153.1): This modification advances the building of the Wilshire/Fairfax Station entrance and A1D appendage prior to roof construction, which substantially progresses this component of work and contributes to minimizing schedule delays at Wilshire/Fairfax Station.	5	7/23/2021	8/11/2021	\$ 798,657	\$ 798,667

A. DESIGN BUILD CONTRACT - CONTRACT NO. C1078 - CLARK CONSTRUCTION GROUP

None						
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B. PROFESSIONAL SERVICES CONTRACTS

None						
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C. CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

MOD 7	WEST: Continuation of construction management support services through FY 23.	5	6/29/2021	8/18/2021	\$ 36,698,820	\$ 31,501,125
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II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (June 1, 2021 – August 31, 2021)

A) DESIGN BUILD CONTRACT - CONTRACT NO. C1045 - SKANSKA-TRAYLOR-SHEA, A JOINT VENTURE

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
None			

A. DESIGN BUILD CONTRACT - CONTRACT NO. C1078 - CLARK CONSTRUCTION GROUP

None			
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B) PROFESSIONAL SERVICES CONTRACTS

None			
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C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

None			
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WESTSIDE PURPLE LINE EXTENSION SECTION 2 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (JUNE 1, 2021 -AUGUST 31, 2021)

Change Types:

1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

A. DESIGN BUILD CONTRACT - C1120

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD-00104	Alternate Building Settlement Monitoring Methods (CO-24): This change allows the Contractor to use alternate surveying methods to monitor building settlement without the need for access to a property where Right of Entry to install instrumentation could not be obtained from private property owners.	5	5/25/2021	6/8/2021	\$ 3,045,476	\$ 2,205,574
MOD-00107	Additional Geotechnical Instrumentation at Launch Box and Century City Constellation Station (CO-25): Additional geotechnical instrumentation to monitor the TBM Launch Box and Century City Constellation Station excavations were required to facilitate approval by the City of Los Angeles Bureau of Engineering to obtain the Excavation Permit in a timely manner.	5	3/17/2021	6/17/2021	\$ 1,143,494	\$ 898,771
MOD-00116	Transfer of Wilshire/Rodeo Station Permanent Power Requirements from SCE to TPOG: When the C1120 contract was issued, the cable pulling work from the Preferred/Emergency Switchgear (P/E) gear to the Wilshire/Rodeo Station (WRS) switchroom was to be completed by SCE and paid for by Metro. SCE decided not to undertake this cable installation, therefore Metro transferred this work from SCE to the C1120 contractor.	5	7/19/2021	8/2/2021	\$ 569,916	\$ 520,409
CO-00033	WRS – Procure and Install MEPs to be Embedded into the North Wall for Secondary Entrance (CN-106): This Change makes provisions for the future north entrance for the Wilshire/Rodeo Station at Beverly Drive. The entrance will be constructed by the City of Beverly Hills pursuant to a settlement agreement between Metro and the City, TPOG will be required to modify the inside of the station box to connect to the entrance. The scope of this Change is for the materials and installation of MEPs in the north wall.	5	-----	8/25/2021	-----	\$ 511,000

B. PROFESSIONAL SERVICES CONTRACT

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (JUNE 1, 2021 -AUGUST 31, 2021)

A) DESIGN BUILD CONTRACT - C1120			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN-00101	WRS Temporary Full Closure of Wilshire Blvd: On March 31, 2020 the Beverly Hills City Council voted unanimously to approve a temporary full closure of Wilshire Boulevard to expedite construction of the Wilshire Rodeo Station during the Stay-at-Home order. This change is to compensate the Contractor for impacts and changes for the additional costs and credits to perform contract work in Wilshire Boulevard utilizing a full street closure from April 3, 2020 to June 15, 2020.	5	Between \$500K and less than \$1M
CN-00129	WRS MOA Impacts to Excavation after the Full Closure (June 16, 2020 through Nov. 12, 2020): The purpose of this Change Notice is to compensate the contractor for impacts from additional construction work restrictions from the City of Beverly Hills (COBH) Memorandum of Agreement (MOA) for the construction work expected to occur after the specific work activities identified and included in CN-101 – Full Closure of Wilshire Blvd.	5	Between \$500K and less than \$1M
CN-00130	Remaining Balance of Additional Geotechnical Instrumentation at Launch Box and Century City: The change is to provide additional geotechnical instrumentation and credit other geotechnical instrumentation that were deleted at Century City Constellation Station as a result of design changes in MOD-15 and MOD-4 which impacted the quantity of instrumentation.	5	Between \$1M and \$5M
CN-00146	Late ROW Availability of Parcel ID W-3801 (RFC-0086): This change compensates the contractor for construction impacts due to delayed availability of Parcel ID W-3801 which was to occur on or before November 7, 2019 in accordance with SP-16, Site Access Dates, Appendix B Right of Way (ROW) Availability Schedule.	5	Between \$500K and less than \$1M

B) PROFESSIONAL SERVICES CONTRACTS			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS			
CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

D) OTHER AGREEMENTS			
MOD/CHANGE #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

WESTSIDE PURPLE LINE EXTENSION SECTION 3 PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 01, 2021 - August 31, 2021)

Change Types:
 1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

A. DESIGN BUILD CONTRACT - C1151

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

A. DESIGN BUILD CONTRACT - C1152

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	None					

A. DESIGN BUILD CONTRACT - C1153

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
	Contract Closed					

B. PROFESSIONAL SERVICES CONTRACTS

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MC073-MOD-00015	MPPC - Valet Services for VA (05/01/21 thru 10/31/21)	5	5/6/2021	6/8/2021	\$ 543,487	\$ 564,487
AE35279-017-MOD-00007	PMSS - WPLE 3 services through FY22	5	5/27/2021	6/24/2021	\$ 1,245,721	\$ 1,212,877

C. CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MC073-MOD-00016	MPPC - FY22 Construction Management Support Services	5	6/16/2021	8/4/2021	\$ 14,548,764	\$ 14,548,764

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (June 01, 2021 - August 31, 2021)**A) DESIGN BUILD CONTRACT - C1151**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

A) DESIGN BUILD CONTRACT - C1152

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

A) DESIGN BUILD CONTRACT - C1153

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	Contract Closed		

B) PROFESSIONAL SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

DIVISION 20 PORTAL PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2021 – August 31, 2021)

Change Types:
 1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

A. DESIGN BID BUILD CONTRACT - CONTRACT NO. C1136 - TUTOR PERINI CORPORATION

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
10(MOD)	<u>Temporary Cleaning Platform</u>	5	12/23/2020	3/25/2021	\$ 6,671,291	\$ 6,455,805
11.1(MOD)	<u>Soil Excavation, Utility, Tech Support, Potholing, Krail, Fencing, Asbestos, GC & UST</u>	3	03/09/21	5/11/2021	\$ 1,477,000	\$ 1,477,000
12(MOD)	<u>Authorize Additional Quantity Needed- Excavation Soil Class 3 and 4</u>	3	2/9/2021	3/25/2021	\$ 1,006,000	\$ 1,006,000
20(MOD)	<u>Additional Scope and Additional Requirements for the Division 20 Portal Widening and Turnback Project</u>	6	05/18/21	8/9/2021	\$ 52,530,836	\$ 43,300,000
22(MOD)	<u>West Portal wall construction</u>	3	05/25/21	7/29/2021	\$ 1,700,084	\$ 1,642,826

A. DESIGN BID BUILD CONTRACT - CONTRACT NO. C1184 - C3M

	None					
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B. PROFESSIONAL SERVICES CONTRACTS - CONTRACT NO. AE66758000 T.Y.LIN INTERNATIONAL

20(MOD)	<u>Additional Scope of Design Services during construction service</u>				\$ 10,039,082	\$ 9,701,268
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C. CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS- CONTRACT NO.MC074 ANSER ADVISORY MANAGEMENT LLC

	None					
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II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (June 1, 2021 – August 31, 2021)**A) DESIGN BID BUILD CONTRACT - CONTRACT NO. C1136 - TUTOR PERINI CORPORATION**

CN/CO/MOD #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
11.1(CO)	1st Street Viaduct , Crack and Spall Repair	3	Between \$1M and \$5M
14(CO)	Install Track Connection for PLE1 CWR Transport	3	Between \$500K and less than \$1M
17.1(CO)	First Street Bridge Continuous Monitoring	3	Between \$1M and \$5M
20.1(CO)	Differing Site Conditions - Connections to Existing Ductbanks & unknown utility impacts	3	Between \$1M and \$5M
23(CO)	Additional Third rail - Tail Tracks TL1 and TL2	3	Between \$500K and less than \$1M
38(CO)	Safety and Security fence along Metro/Amtrak Right of Way	7	Between \$500K and less than \$1M
47(CO)	Temporary Traction Power Negative returns and revised Track demolition limits	6	Between \$500K and less than \$1M

B) DESIGN BID BUILD CONTRACT NO. C1184 - C3M

None			
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C) PROFESSIONAL SERVICES CONTRACTS- CONTRACT NO.AE66758000 T.Y.LIN INTERNATIONAL

None			
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D) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS - CONTRACT NO.MCO74 ANSER ADVISORY MANAGEMENT LLC

None			
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AIRPORT METRO CONNECTOR PROJECT

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2021 - August 31, 2021)

Change Types:

1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

A. DESIGN BID BUILD CONTRACT - C1194 - HPH and C1197 Tutor

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
HPH - C1194 Mod 2	Shoring for Pre-Cast Cisterns (Bulletin 1) Previously CN 4	5	8/23/2021	9/3/2021	\$ 1,900,000	\$ 1,526,544

B) PROFESSIONAL SERVICES CONTRACTS

MOD/CHANGE #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
Gruen - PS298340011486 Mod 9	Construction Management Support Services (CMSS) for AMC: Design Revisions for AMC Station Early Works Package, Low Voltage Systems and Station Amenities	5	5/25/2021	TBD	\$ 2,791,237	\$ 2,269,686
Gruen - PS298340011486 Mod 10	Construction Management Support Services (CMSS) for AMC: Design Revisions for the AMC Station Project – Platform and Structural Re-Design	5	5/25/2021	TBD	\$ 4,765,283	\$ 4,726,675
Gruen - PS298340011486 Mod 11	Construction Management Support Services (CMSS) for AMC: Design Revisions for the AMC Station Project – Fire Sprinklers, Bus Plaza and Bid Support	5	6/3/2021	TBD	\$ 1,818,605	\$ 1,503,081

B) THIRD PARTY AGREEMENTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Rough Order of Magnitude Cost
None						

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (June 1, 2021 - August 31, 2021)**A) DESIGN BID BUILD CONTRACT - Contract C1194 - HPH**

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
None			

B) PROFESSIONAL SERVICES CONTRACTS - DSDC Gruen

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
Gruen - PS298340011486 Mod 12	Design Support During Construction	5	Between \$10 M and \$15M

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
None			

d) THIRD PARTY AGREEMENTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
None			

SOUNDWALL PACKAGE 11

I. APPROVED MODIFICATIONS/CHANGES GREATER THAN \$500K IN THIS REPORTING PERIOD (June 1, 2021 - August 31, 2021)

Change Types:

1 - Betterment 2 - Third Party 3 - Differing Site Conditions 4 - Regulatory Requirements 5 - Scope 6 - Value Engineering 7 - Safety

A. DESIGN BUILD CONTRACT - C1101 Soundwall Package 11 - Powell

MOD/CHANGE #	DESCRIPTION (if the change is a unilateral, explain in BOLD fonts)	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Approved Amount
MOD 19 (CN 21)	<u>Time Extension and Related Overhead Costs</u> WORK DESCRIPTION: Time extension and related overhead cost resulting from Owner-caused and concurrent critical path delays. In accordance with GC-31 EXTENSION OF TIME, extend the Contract Time by 215 calendar days, with compensation, for excusable delay to the CSM critical path Work at the Soundwall Package 11 Project due to delay in the permeation grouting and 72 non-compensable days delay. Special Provisions, Appendix A - Work Completion Schedule is hereby modified as follows: Extend Milestone 1 from 1095 to 1382 calendar days; Extend Milestone 2 from 1460 to 1747 calendar days; and In accordance with Contract Article IV COMPENSATION, Schedule of Delay Compensation Rates, Metro will pay the Contractor Delay Compensation at \$4,000 per day for 215 calendar days for a total of \$860,000.	5	04/02/20	6/24/2020	\$ 1,086,000	\$ 860,000
MOD 30 (CN 21)	Inefficiency Claim This potential modification is for an RFC for inefficiencies and escalations for the SW 11 Project	5	9/2/2020	4/27/2021	\$ 4,637,070	\$ 2,320,303
MOD 37 (CN 39)	Mod 37 (CN 39) City of Los Angeles (BSL) Street Lighting (subs)	5	7/21/2021	8/26/2021	\$ 1,022,300	\$ 762,300

B) PROFESSIONAL SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Rough Order of Magnitude Cost
Ghirardelli - Contract AE5062200 Year 5 and Year 6 Option	Construction Management Support Services (CMSS) for Soundwall 11:	5	4/30/2021	7/7/2021	\$ 957,518	\$ 957,518

B) THIRD PARTY AGREEMENTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Submission Date	Approval Date	Contractor's Proposed Amount	Rough Order of Magnitude Cost
None						

II. PENDING MODIFICATIONS/CHANGES GREATER THAN \$500K (June 1, 2021 - August 31, 2021)

A) DESIGN BUILD CONTRACT - Contract C1101 - Powell

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
CN TBD	<u>BSL work</u> City of Los Angeles is requiring Metro to upgrade the current lighting systems to LED (light emitting diodes) at five of the bridge locations for our SW 11 project	5	Between \$500K and less than \$1M
CN TBD	<u>Inefficiency Claim</u> This potential modification is for an RFC for inefficiencies and escalations for the SW 11 Project	5	Between \$1M and \$5M
CN TBD	<u>Inefficiency Claim</u> This potential modification is for an RFC for inefficiencies and escalations for the SW 11 Project		Between \$1M and \$5M

B) PROFESSIONAL SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	Design Support During Construction		

C) CONSTRUCTION MANAGEMENT SUPPORT SERVICES CONTRACTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		

d) THIRD PARTY AGREEMENTS

CHANGE NOTICE/ORDER #	DESCRIPTION	Change Type	Rough Order of Magnitude Cost
	None		



Board Report

File #: 2021-0591, **File Type:** Informational Report

Agenda Number: 34.

**CONSTRUCTION COMMITTEE
OCTOBER 21, 2021**

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

ACTION: RECEIVE AND FILE

RECOMMENDATION

RECEIVE AND FILE Office of the Inspector General Change Order Construction Spot Check Report for the period June 1, 2021 to August 31, 2021.

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 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 \$1,000,000. The four change orders in this report were selected from the Program Management Major Project Status Report (Legistar file # 2021-0580) covering June 1, 2021 to August 31, 2021. The information for the Spot Checks was collected from the Program Management Information System (PMIS) which is the department’s database system. Also, TEAM meetings and telephonic interviews were conducted with Metro Program Management, Project Control, and Procurement staff from each involved 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,
- Approved faster with the new delegation of authority, and
- Negotiated at lower cost than the contractors’ proposed price.

Each Spot Check summarizes the following areas:

- Description of the change order,
- Change order detail,

- Scope of Work,
- Budget,
- Schedule: Time to execute the change order, and
- Recommendations, if any.

Metro's Program Control department will provide 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.

DISCUSSION

Spot Checks Performed in this Quarter

Spot Check #1 - Regional Connector - Transit Corridor Project

This OIG Spot Check report concerns the Regional Connector - Transit Corridor Project (Contract C0980 MOD-00206): Add Wye Junction Fan Plant - Construction

Change Order Detail

See Attachment A Spot Check #1 chart.

Summary #1

Scope of Work - This Modification is part 4 of 4 is for construction of a Wye Fan Plant System (Fan System) at the 1st Street and Alameda junction. (Part one was for the design in June 2016, MOD 0033, with an award of \$1,210,000. Part two was a revision to the design in March 2017, MOD 0087, with an award of \$76,000. Part three was to procure long-lead time mechanical equipment in November 2018, CO-00023, with an award of \$1,200,000.) Metro provided authorization for the contractor to proceed with Modification part 4 up to a not-to-exceed limit of \$11,000,000. The final costs of Modification part 4 Fan System, nevertheless, reached 18,700,000.

This new Fan System replaced the original eight Jet Fan Ventilation design. The new Fan System was jointly developed by the contractor and Metro and reviewed by Metro Fire Life Safety Committee. The new Fan System addresses the concerns of Metro Operations and Fire Life Safety by moving the air more efficiently while potentially having one of the fans shut down for repair at the interior junction of the converging/diverging tunnel segments. The funding for design and construction was approved by the Metro Board in December 2015. That approval was for \$12,000,000.

Budget -This modification was negotiated, and the award amount is \$18,700,000. The Contractor's proposal was \$22,031,075 and the ICE was \$18,526,511. The award amount was \$3,331,075 (15%) under the Contractor's proposal. The negotiated amount was \$173,489 (1%) over the ICE. Staff stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on June 7, 2021. The modification was awarded on June 16, 2021 and was completed in 10 workdays. Under the prior Board approval method for change orders, assuming a September Board meeting date, August was dark, it would have taken an additional 77 workdays to complete the work.

Recommendation - Since the Board approved of a budget for this item in 2015 at \$12 mil., the cost has increased to a total of \$21,186,000 (a 77% increase). This Fan System cost has been reported in pieces, as parts were completed, but not as a whole to indicate the cost creep overall over time. We recommend that when LOP information is being periodically provided to the Board that it includes a summary, per project, to show historical cost information over the life of each project. That summary should indicate if they anticipate completing the project within the current LOP and how many LOP increases have occurred so far.

Spot Check #2 - Division 20 Portal Widening Turnback

This OIG Spot Check report concerns the Division 20 Portal Widening Turnback Project (Contract C1136 MOD 00020): Additional Scope and Additional Requirements for the Division 20 Portal Widening and Turnback Project

Change Order Detail

See Attachment A Spot Check #2 chart.

Summary #2

Scope of Work - This project is built on an old fuel tank yard. It has differing site conditions due to the toxic soil removal, multiple unknown existing utilities, a 100-year old historical bridge that requires modification, and is an active heavy rail yard requiring Rail Operations Center (ROC) access.

The design prepared by the consultant was based on light rail standards and not an active heavy rail yard standard. Metro Operations has identified this as a safety issue during their review and requires a major change to the design layout of the tracks. The tracks must be spaced further apart to meet current national track standards for heavy rail. The standard Metro Rail Design Criteria (MRDC) was written for light rail. The Division 20 yard is to be used for heavy rail cars in order to serve the new Purple line rail tracks.

The Division 20 Project deadline for completion is prior to the delivery, storage, and testing of the new rolling stock of 150 heavy rail cars for Purple Line Ext. 1, 2, and 3. Because of the timeline, Project Management staff made the decision to move forward with the request for proposal for construction pending correction of the design errors. There were multiple design errors by the consultant. To account for these errors, a larger than typical contingency was included in the budget; 20%.

The large change order (\$43.3 mil.) is due to changes in the design to the track. The design was changed to reflect the correct spacing which necessitates multiple other changes. This change order is to demolish and remove a large amount of track, and install 6.2 miles of new track. The traction power sub-station, all the utilities, train car wash, lighting, and underdrains are to be demolished and rebuilt. The 100-year-old historical 1st Street bridge must have upgrades and the train portal north of 1st Street must increase in size to allow for more rail track to run through it.

Budget - The Life of Project (LOP) budget for this project is \$801,749,577.00, including a contingency of \$92,778,555. This change order will use about 50% of the 15% unallocated portion of this contingency amount. An increase in the LOP will be sought by end of year.

The Contractor's original proposal was \$52,530,836 and they reduced it to \$49,486,000. Thereafter workshops were held to review each line item of the Contractor's proposal. Metro identified items in the Contractor's proposal which were not allowed pursuant to the construction contract. The final

amount negotiated is \$43,300,000. The ICE was \$22,565,624. Primary reasons for the disparity between the contractor's price and the ICE is the Contractor's higher estimate of labor cost for hours to be worked (not the per hour rate), the number of equipment to be rented and period of use, how long each activity will take to complete, and the contractor is including a contingency for events likely to occur affecting time to complete tasks. There was little dispute about per unit pricing of materials, though there is a dispute about the quantity of materials needed to accomplish the job tasks. The award amount is \$6,186,000 (12.5%) under the Contractor's rebid proposal. The negotiated amount was \$20,734,376 (92%) over the ICE. Construction management staff believe the price might be reduced somewhat if a Dispute Resolution Board or other such option were utilized, but the delays resulting from utilization of such options would result in costs that exceed the reductions likely achievable so based on that risk, they feel this price is the most speedy and economical considering those risk factors.

Change orders generally occur in a noncompetitive situation and Metro as usual is attempting to proceed at high speed. When performing our construction change order spot checks we have observed many instances where Metro has agreed to a final price that is significantly higher than the ICE. This might be either because the ICE was too low or the contractor is estimating too high and the price could not be negotiated any lower within a reasonable time. Sometimes the percentage over the ICE is high but the dollar amount is not that significant. Noncompetitively procured change orders place Metro in an inferior bargaining position. The more extensive the planning, preparation, and pre-construction work, the lower the chances of large change orders.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on June 25, 2021. The modification was awarded on August 9, 2021 and was completed in 31 workdays. Under the prior Board approval method for change orders, assuming a September Board meeting date, August was dark, it would have taken an additional 63 workdays to complete the work.

Recommendation - The OIG recommends:

1. When Metro needs to expedite a project, include Operations in the initial planning phase early, prior to and during design so they can provide constant input during the design.
2. Explore with Operations if they need additional resources to dedicate full time to assist in the intense design, planning, and implementation pre-opening phases of Metro's rail infrastructure/capital projects, or other ways in which Program Management and Operations can work together to approach these projects to maximize cooperation, communication, and assistance.
3. Have the Legal Department review our designer contracts to determine if they are adequate to hold contractors accountable, enforceable, and require use of bonds and proof of adequate insurance to cover errors of this type and resulting in cost of this magnitude.

Spot Check #3 and #4 - Purple Line Extension Section 1 Transit Project

General - The two following modifications (137 and 138) for Purple Line Extension Section 1 are related. Both modifications are due to excess groundwater with high levels of sulfides which needed to be pumped out at the equipment transport shaft (the Shaft) where the tunnel boring machines were removed at the Wilshire and Western location. It is mandatory for the Shaft to be kept dry until underground construction is complete. Contractually these modifications are from differing site conditions, where the flow in gallons per minute (gpm) of the ground water was originally stated to be at 75 gpm in the Geotechnical Baseline Report (GBR) but that proved to be incorrect. The actual flow is at 350 gpm. This forced the contractor to devise solutions to remove the excessive groundwater and treat the groundwater before allowing the water into the city's storm drain system.

Maintenance of the dewatering wells is still required and the wells will continue to pump out water until construction is complete. The negotiated amounts for both these modifications have been forecasted through the end of construction; June 30, 2022.

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 C1045 MOD-0137): Increased Well Maintenance at Western Shaft due to Groundwater Chemistry Impacts

Change Order Detail

See Attachment A Spot Check #3 chart.

Summary #3

Scope of Work - Both the contractor and Metro took groundwater samplings which demonstrated that the water chemistry characteristics were causing corrosive buildup in the dewatering wells and water treatment system. The result was pump failures; well plunger cleaning treatments, backwash, filter fabric pressure washings, and well cleanings using hydrogen peroxide to avoid bacterial buildup. The cleanings will continue on a monthly basis until the end of dewatering operations when the station is substantially built (through approximately 2022). Three of the dewatering wells pumps were replaced due to corrosive build-up in December. 2018, January. 2019, and March 2019.

Excavation was impacted due to the installation of additional trenches, French Drain systems, and sumps that were needed below a 50-foot depth to control suspended water. Additional workers were hire that include a General Forman, Gas Testers, and Traffic Control staff performed work at Wilshire Blvd. on the wells.

Budget - This modification was negotiated, and the award amount is \$2,700,333. The Contractor's proposal was \$3,728,954 and the ICE was \$2,272,535. The award amount was \$1,028,621 (28%) under the Contractor's proposal. The negotiated amount was \$427,798 (19%) over the ICE. Staff stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on August 9, 2021. The modification was executed on August 10, 2021 and was completed in 1 workday. It should be noted that scope of work was agreed to on July 20, 2019, but due to the dewatering process continuing the contractor and Metro had an understanding to proceed with the work and complete the change order when the station was near completion. Under the prior Board approval method for change orders, assuming an October Board meeting date, it would have taken 58 workdays to complete the work.

Recommendation - See spot check #4 for the combined recommendation.

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 C1045 MOD-0138): Additional Dewatering Treatment and Discharge Impacts at Western

Change Order Detail

See Attachment A Spot Check #4 chart.

Summary #4

Scope of Work - Based on sampling data from MOD 137, the groundwater treatment system had to be redesigned to adequately treat hydrogen sulfide levels of 10.7 mg/l in accordance with federal dewatering discharge requirements and to accommodate the large volume of groundwater removal (75 gpm increased to 350 gpm) at the Shaft at Wilshire and Western.

This modification is for the engineering, design, and parts for a larger dewatering treatment system at the Shaft at Wilshire and Western. This system includes: 1) an increased pipe size (from 3-inch to 6-inch), 2) an increased magnetic flow meter (from 3-inch to 6-inch), 3) an increased pump size (from 10 hp to 30 hp units), 4) an in-line mixer system for the reduction of sulfides, 5) a 2,000-gal chemical storage tank with monthly chemical delivery, 6) two metering pumps with tubing, 7) new site safety equipment (shower, eyewash, and containment), and 8) a larger settling tank (from 8,000 to 20,000 gal.) and other equipment associated with a larger treatment plant.

Budget -These modifications were negotiated, and the award amount is \$3,109,648. The Contractor's proposal was \$3,721,859 and the ICE was \$3,077,031. The award amount was \$612,211 (16%) under the contractor's proposal. The negotiated amount was \$32,617 (1%) over the ICE. The agreed upon settlement covers plant operations and maintenance through June 30, 2022. Staff stated that funds for this change are within the approved Life-of-Project budget.

Schedule - The new delegation process was utilized for this modification. The agreed upon scope of work occurred on June 24, 2021. The modification was executed on August 10, 2021 and was completed in 33 workdays. Under the prior Board approval method for change orders, assuming an October Board meeting date, it would have taken 89 workdays to complete the work.

Recommendation - The OIG recommends that all dewatering change orders for this project should be evaluated or audited. The Geotechnical Baseline Report issued by the consultant to Metro was not accurate for the soil type, ground water, and hydrogen sulfide levels for each segment of Purple Line Section 1 and the consultant might be held liable for some of the costs of differing site conditions not correctly determined by the consultant. Unplanned dewatering site conditions also cost Metro \$15.8 mil. at the La Brea Station and \$16.8 mil. at the La Cienega Station in 2020 and 2019 respectively.

FINANCIAL IMPACT

This report will have no Financial Impact to the agency.

Impact to Budget

- 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 LOP budget.

- Spot Check #1) \$18,700,000 Regional Connector Transit Corridor Project
- Spot Check #2) \$43,300,000 Division 20 Portal Widening Turnback Project
- Spot Check #3) \$2,700,333 Purple Line Extension Section 1
- Spot Check #4) \$3,109,648 Purple Line Extension Section 1

EQUITY PLATFORM

We considered whether these change orders presented any equity related issues on their face. All of the locations (Alameda and 1st Street in China Town, Division 20 at the old railroad tank yard and the 100-year old 1st Street Bridge updates, along with dewatering problem at Western and Wilshire in Korea Town which are the subject of these change orders are within or adjacent to Equity Focus Communities (EFC's). Each of the construction projects are required to install tall (over 20-ft high) sound walls around the construction work sites to protect residential communities and office suites from the nuisance noise of construction. The exterior public side of the walls also serve as community advertisement for local businesses and keep the public safe as a barrier from the construction activities. The OIG did not receive any data concerning community impacts. Each of the contractors are striving to have work performed by Disadvantage Business Enterprises (DBE) typically at 12-15% implementation, for these change orders at these EFC sites. 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 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 and CEO goals to exercise fiscal discipline to ensure financial stability. The OIG mission includes reviewing expenditures for fraud, waste, and abuse in Metro program, operations and resources. For each selected change orders 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 Construction Best Practices report dated 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.

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 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

Attachment B - Tracking Sheet of OIG Recommendations and Responses to last quarter

Attachment C - Power Point for October 2021 Construction Spot Checks

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


Karen Gorman
Inspector General

Spot Check #1 – Regional Connector Transit Project - Contract C0980**Change Order Detail**

<u>Description of Modification MOD-00206</u> Add Wye Junction Fan Plant - Construction	
<u>Change Order Dates:</u>	
Scope of Work approved	June 7, 2021
Modification Executed	June 16, 2021
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	10 work days
Estimate using former Board approval process Agenda for the September Board (no August Board)	77 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$18,526,511
Contractor's proposed cost	\$22,031,075
Negotiated amount	\$18,700,000
Percentage of negotiated amount over ICE	1%
Amount negotiated less than the Contractor's proposal	\$3,331,075

Spot Check #2 – Division 20 Portal Widening Turnback - Contract C1136**Change Order Detail**

<u>Description of Modification MOD-00020</u> Additional Scope and Additional Requirements for the Division 20 Portal Widening and Turnback Project	
<u>Change Order Dates:</u>	
Scope of Work approved	June 25, 2021
Modification Executed	August 9, 2021
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	31 work days
Estimate using former Board approval process Agenda for the September Board (no August Board)	63 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$22,565,624
Contractor's REBID proposed cost	\$49,486,000
Negotiated amount	\$43,300,000
Percentage of negotiated amount over ICE	92%
Amount negotiated under Contractor's proposal	\$6,186,000

Spot Check #3 - Purple Line Extension Section 1 Transit Project - Contract C1045**Change Order Detail**

<u>Description of Modification MOD-00137</u> Increased Well Maintenance at Western Shaft due to Groundwater Chemistry Impacts	
<u>Change Order Dates:</u>	
Scope of Work approved	August 9, 2021
Modification Executed	August 10, 2021
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	1 work days
Estimate using former Board approval process Agenda for the October Board	58 work days
<u>Cost of Change Order:</u>	
Metro independent cost estimate (ICE)	\$2,272,535
Contractor's proposed cost	\$3,728,954
Negotiated amount	\$2,700,333
Percentage of negotiated amount over ICE	19%
Amount negotiated under Contractor's proposal	\$1,028,621

Spot Check# 4- Purple Line Extension Section 1 Transit Project - Contract C1045**Change Order Detail**

<u>Description of Modification - MOD-00138</u> Additional Dewatering Treatment and Discharge Impacts at Western	
<u>Change Order Dates:</u>	
Scope of Work approved	June 24, 2021
Modification Executed	August 10, 2021
<u>Elapsed Time for Executing Change Order:</u>	
Using new delegated process	33 work days
Estimate using former Board approval process Agenda for the October Board	89 work days
<u>Cost of Modification:</u>	
Metro independent cost estimate (ICE)	\$3,077,031
Contractor's proposed cost	\$3,721,859
Negotiated amount	\$3,109,648
Percentage of negotiated amount over ICE	1%
Amount negotiated under the Contractor's proposal	\$612,211

ATTACHMENT B (October 2021)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>October 2021 #1 Contract C0980 MOD-00206 Regional Connector - Transit Corridor Project Add Wye Junction Fan Plant - Construction</p>	<p>Since the Board approved of a budget for this item in 2015 at \$12 mil., the cost has increased to a total of \$21,186,000 (a 77% increase). This Fan System cost has been reported in pieces, as parts were completed, but not as a whole to indicate the cost creep overall over time. We recommend that when LOP information is being periodically provided to the Board that it includes a summary, per project, to show historical cost information over the life of each project. That summary should indicate if they anticipate completing the project within the current LOP and how many LOP increases have occurred so far.</p>		
<p>October 2021 #2 Contract C1136 MOD-00020 Division 20 Portal Widening and Turnback Project Additional Scope and Additional Requirements for the Division 20 Portal Widening and Turnback Project</p>	<p>The OIG recommends: 1. When Metro needs to expedite a project, include Operations in the initial planning phase early, prior to and during design so they can provide constant input during the design. 2. Explore with Operations if they need additional resources to dedicate full time to assist in the intense design, planning, and implementation pre-opening phases of Metro's rail infrastructure/capital projects, or other ways in which Program Management and Operations can work together to approach these projects to maximize cooperation, communication, and assistance. 3. Have the Legal Department review our designer contracts to determine if they are adequate to hold contractors accountable, enforceable, and require use of bonds and proof of adequate insurance to cover errors of this type and resulting in cost of this magnitude.</p>		
<p>October 2021 #3 Contract C1045 MOD-0 137 Purple Line Extension Sect. 1 Increased Well Maintenance at Western Shaft due to Groundwater Chemistry Impacts</p>	<p>see #4 for recommendation</p>		
<p>October 2021 #4 Contract C1045 MOD-00138 Purple Line Extension Sect. 1 Additional Dewatering Treatment and Discharge Impacts at Western</p>	<p>The OIG recommends that all dewatering change orders for this project should be evaluated or audited. The Geotechnical Baseline Report issued by the consultant to Metro was not accurate for the soil type, ground water, and hydrogen sulfide levels for each segment of Purple Line Section 1 and the consultant might be held liable for some of the costs of differing site conditions not correctly determined by the consultant. Unplanned dewatering site conditions also cost Metro \$15.8 mil. at the La Brea Station and \$16.8 mil. at the La Cienega Station in 2020 and 2019 respectively.</p>		

ATTACHMENT B (July 2021)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
July 2021 #1 Contract C0980 MOD-00196 Regional Connector - Transit Corridor Project Construct the 2nd & Broadway Station Overbuild Load Transfer System	none		
July 2021 #2 Contract C0980 MOD-00202 Regional Connector - Transit Corridor Project Revise Communications Radio System Scope of Work- Construction	The OIG recommends that after installation of the new radio system that interface with Los Angeles fire, police and sheriff departments be tested and verified for their signal strength and connectivity.	Agreed, all radio systems will be fully tested and verified for signal strength and connectivity	
July 2021 #3 Contract C1045 MOD-0131 Purple Line Extension Sect. 1 Wilshire/Fairfax Station Subgrade Differing Site Conditions	The OIG recommends that after a DRB issues its recommendations that favor the contractor, Metro act swiftly to move forward with a change notice to the contractor and not delay payment to the contractor, less any credits owed to Metro. We understand in this particular case the contractor assigned a lower priority for processing this change notice over many others.	In this case there was no requirement for Metro to issue a Change Notice due to the DRB ruling. The Contractor (STS) chose to delay providing Metro with a cost proposal associated with the DRB ruling due to other higher Contractor priorities. After the eventual receipt of the DRB ruling proposal from the Contractor, the costs were negotiated, and a MOD issued (w/o any Change Notice being created). It should be noted that whether a Change Notice is issued or not, the Contractor has the right to submit a proposal whenever and for whatever they perceive as changed work (via a Request for Change). Section 1 has and continues to issue Change Notices in a timely manner when Metro recognizes merited changed scope of work.	
July 2021 #4 Contract C1152 MOD-0014 Purple Line Extension Sect. 3 Revisions to Westwood/UCLA Station Entrances – Design Only	none		

ATTACHMENT B (April 2021)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
April 2021 #1 Contract C0988 MOD-00253.3 Crenshaw/LAX Transit Corridor Project Landscape Changes – Park Mesa	The OIG recommends that we identify quickly the differences in cost between the new scope of work from the contract and finalize plans and the cost with the prime Contractor.	-Agree and recommendation will be incorporated into C/LAX Project Lessons Learned. -C0988 Contract Team has started to identify the differences in cost between the new scope of work from the contract. Additionally, new scope of work will only be processed if it is a safety related change.	
April 2021 #2 Contract C0980 MOD-00188 Regional Connector - Transit Corridor Project 2nd/Hope Pedestrian Bridge - Construction	no recommendation concerning this change order		
April 2021 #3 Contract C1120 MOD-0095 Purple Line Extension Sect. 2 Station and Bicycle Parking, Architectural Features Design and Construction Changes at Wilshire/Rodeo & Century City Constellation Stations	The OIG recommends that Purple Line, Section 3, be immediately evaluated to determine if the MRDC architectural updates and the Metro bike hub system changes have been incorporated into the Purple Line Extension Section 3 Transit project. This will ensure consistency, compliance with the MRDC, and cost assessments to be determined and negotiated at the earliest possible time.	Purple Line Sect #2 response: Noted. Purple Line Sect #3 response: The WPLE3 contract included the latest MRDC requirements for bike hubs at both stations at time of bid, which minimized changes to the WPLE3 contract.	
April 2021 #4 Contract C1120 MOD-0095 0100 Purple Line Extension Sect. 2 Century City Constellation Main Entrance - Construction	The large cost disparities between the ICE and a Contactor's proposal on high dollar transactions should continue to prompt further technical and commercial evaluation in order to arrive at a fair and reasonable price. The OIG recommends that the ICE be evaluated by the Estimating department to further evaluate the significant differences between the Contractor's proposal and their independent estimate utilizing both technical and commercial evaluation.	ESTIMATING response: Metro Estimating will review the ICE and CSP and work with V/CM and Project Management staff to evaluate the differences. Purple Line Sect #2 response: Project staff will continue to involve Estimating staff in scoping discussions to ensure that they have a full understanding of the scope of work for all Change Work.	

ATTACHMENT B (January 2021)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>January 2021 #1 Contract C0980 MOD-00184 Regional Connector - Transit Corridor Project Expanded Duco Yard and Temple Street Sanitary Sewer Work</p>	<p>The OIG recommends that future contracts with the designer should include verification of sewers identified as abandoned, and to document the verification on the construction drawings if the cost of such verification is minor and the consequences of reliance on erroneous information is significant. Additionally, the OIG recommends that the as-built record drawings at the City be updated.</p>	<p>Planning and engineering need to rely on as-built records for much of their work. However, where key utilities are involved, it is best that their condition and status be validated during the preliminary design phase. This investigation is often expensive and not easily performed without site investigation. The engineer must use his/her judgement to determine which utilities require physical investigation and inspection. Project budget contingency should be set aside for utility discrepancies that may be discovered during construction. Agree that even minor utilities, improperly documented, can have a significant cost and/or schedule impact to a project and should be investigated early, to the extent possible. The City is the best entity to ensure that underground maps are complete.</p>	<p>No further action from Regional Connector as project design has already been completed. However, efforts are continually made to perform potholing investigations for verification prior to construction so as to avoid impacts to schedule should discrepancies be found.</p>
<p>January 2021 #2 Contract C1045 MOD-00121 Purple Line Extension Sect. 1 Alternate Soil Disposal</p>	<p>California laws, including Senate Bill 1383 of 2016 set mandatory targets to reduce waste going to landfills. Metro developed a recycling policy (GEN 51) in response to State recycling goals and to support Metro's sustainability goals. The Conditional Use Permit for the Chiquita Canyon Landfill was set to expire and the Landfill operator sought a new permit, which was granted in July, 2017. The new permit requirements limits the rate of tonnage of dumping allowed, hours of operation, and the county set other multiple requirements that Chiquita Canyon must adhere. The OIG recommends:</p> <ol style="list-style-type: none"> 1. Construction waste disposal options are utilized to minimize project costs and to help achieve the reduction goal of a 75% reduction in waste by 2025; 2. Project teams work very closely with the Metro Sustainability Department, State, Los Angeles County, other regulators, landfill owners, and contractor's personnel, to determine options consistent with GEN 51 for the reuse of soils and construction debris in the current or other construction sites; 3. When a Board member has a matter come before them at their respective municipalities that can potentially effect Metro projects, if they would give notice to Metro of the matter, Metro can determine how its projects will be impacted and possibly address the matter with the municipality or 3rd party prior to the matter being approved including possibly negotiate that the terms of a permit not allow price increases or other impacts on Metro projects where contractual commitments have previously been negotiated in reliance on previous conditions; 4. LA Metro evaluate how other LA Metro projects for which a contract was entered may be impacted by the newly imposed landfill mitigations and higher fees. 	<p>Metro acknowledges the recommendations listed and provides the following responses below:</p> <ol style="list-style-type: none"> 1. Per contract, the project must divert/recycle 75% of waste. Purple Line Section 1 has diverted 100% of excavated clean material on the project to be reused as beneficial cover or fill at offsite projects. 2. The Purple Line Section 1 project has a member of the Metro Environmental Compliance and Sustainability Department (ECSD) on staff. This team member updates project management and contractors on opportunities to reduce waste impacts as they become available across the county. 3. Acknowledged 4. ECSD management will review awarded projects and available facilities and make recommendations on where to make changes to disposal practices as needed. 	
<p>January 2021 #3 Contract C1120 MOD-0091 Purple Line Extension Sect. 2 Increase UPS Spare Capacity at Wilshire Rodeo and Century City Constellation Stations</p>	<p>The OIG recommends that immediately prior to sending out an RFP, Metro should insure that the most current MRDC is used.</p>	<p>In this case, the updated MRDC Section 8 was added to the RFP near the end of the solicitation period, but conflicts with other contract documents were not identified because of the late issuance of the update. Staff agree that all future changes to the MRDC should be coordinated by Metro Engineering and issued before future RFPs are released.</p>	

ATTACHMENT B (January 2021)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
January 2021 #4 Contract C1152 CO-0005.1 Purple Line Extension Sect. 3 VA Hospital Replacement Parking for Lot 42 During Station Construction Phase	The OIG recommends that the Project office and Real Estate continue to work closely and aggressively to come to a full resolution with the VA hospital and the contractor on the modified costs.	Agree	

ATTACHMENT B (October 2020)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>October 2020 #1 Contract C0988 MOD-00485 Crenshaw/LAX Transit Corridor Project Case 5 Bedding Required by LABOE</p>	<p>Since the 'Green book' states the support and materials for sewer and storm drain pipe are to be encased in concrete, the OIG recommends that the LA Metro rail standard drawing US-014, be updated to reflect the required City standard and Metro may negotiate with the LABOE to adopt a different standard for specific projects as warranted.</p> <p>We further recommend, as discussed in previous reports, that Metro study the large discrepancies between the Metro ICE and the award amounts to determine if there is a method by which those discrepancies can be narrowed. This recommendation applies to many of the Spot Checks reviewed in this Report, and is based also on a Metro audit completed by the Management Audit Services Department that noted significant discrepancies in these amounts to be a frequent occurrence.</p>	<p>Recommendation will be incorporated into C/LAX project Lessons Learned.</p>	
<p>October 2020 #2 Contract C1045 MOD-00111 Purple Line Extension Sect. 1 Fairfax Paleo Zone Modified Limits</p>	<p>The OIG recommends future GBR's include a more comprehensive underground site assessment to determine a better approximation of the marine and paleo geological layers. In this instance, a robust underground assessment would have avoided the costly change order. However, the additional excavation costs would have been included in the higher base bid value.</p>	<p>Recommendation will be incorporated into PLE1 project Lessons Learned.</p>	
<p>October 2020 #3 Contract C1120 MOD-00080 Purple Line Extension Sect. 2 Demobilization and Remobilization due to COBH Moratorium</p>	<p>The MOA between Metro and COBH imposes additional restrictions on Metro and adds costly change orders to the original contract.</p> <p>The OIG recommends Metro adopts a standardized MOA for use in negotiations with all jurisdictions within Los Angeles County and utilizes this agreement for every construction project going forward in each respective jurisdiction and that budget estimates for projects should be revised as necessary to take into consideration MOAs entered into.</p>	<p>Agreed.</p>	
<p>October 2020 #4 Contract C1151 MOD-0004.1 Purple Line Extension Sect. 3 Increase Ground Water Treatment Plant Capacity at Tail Track Exit Shaft</p>	<p>It is the OIG's understanding that water pump tests and water quality tests were performed, but they were performed at the original location, the Army Reserve site, which is no longer the correct shaft location. Now the site is at the Veterans Administration property. A change in location can greatly affect both the levels and quality of the groundwater, thus increasing the revised dewatering process.</p> <p>It is critical that the Real Estate Department be included at the earliest possible time in negotiating the property requirements for a project. Having to change location plans after a contract award can have significant scheduling and expense consequences.</p>	<p>The location of the Tail Track Exit Shaft had to move from an environmentally cleared site occupied by the Army reserve site to the US Department of Veterans Affairs West Los Angeles campus when it became evident that the US Army Reserve was unwilling to allow the use of this location for either construction laydown or a permanent Metro Facility. Metro Real Estate and Project staff successfully negotiated with the Department of Veterans Affairs to enable relocation of this construction laydown area and permanent facility to their West Los Angeles Campus.</p>	

ATTACHMENT B (October 2020)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>October 2020 #5 Contract C1151 MOD-0005 Purple Line Extension Sect. 3 Addition of Sepulveda Staging Area to Compensate VA Site Reduction</p>	<p>The Purple Line Extension 3 was a 'next decade project' and was accelerated to be completed in the next 5 years with many project processes that had to be compressed to meet the schedule. We also understand that the real estate acquisition process is contingent on the funding being in place.</p> <p>The real estate acquisition process and all other real estate arrangements must be negotiated as early as possible and negotiate those property rights strategically to ensure we have our real estate needs met at the earliest and least expensive manner possible.</p>	<p>The space available for staging at the Tail Track Exit Shaft on the Department of Veterans Affairs Campus is limited; being located in a nationally designated historic district. Metro Real Estate and Project Staff have and are working closely together, in a timely manner to ensure real estate acquisitions are coordinated with project need dates to minimize overall risk and cost to Metro in delivering the project.</p>	

ATTACHMENT B (August 2020)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
August 2020 #1 Contract C1045 MOD-00095 Purple Line Extension Sect. 1 Transit Project: Phase 5 Golder EOR Mitigation Plan Implementation	<p>The OIG is in agreement with applying extra safety precautions that the Metro project office has put forward. Where conditions are relatively unique to the tunneling industry, more prescriptive specifications for means and methods in these zones is warranted.</p> <p>Since the Contractor, Golder Gas, performed the entire mitigation plan including removal and mitigation, the OIG recommends that LA Metro ensure that Golder Gas is held contractually, jointly, and severally liability for any future incident involving gas in the area where the soil vapor extraction wells and the monitoring wells are installed and abandoned. This is the common practice in environmental cases where a "consulting expert" is hired to monitor and mitigate a hazardous substance issue.</p>	<p>The Section 1 Project will review the indemnification text issued to Golder that was required by STS in order for Golder to proceed with the work. This indemnification will determine what Golder's future obligations are.</p>	
August 2020 #2 Contract C1045 MOD-00106 Purple Line Extension Sect. 1 Center Muck Shaft at La Brea (ECI-03)	<p>The OIG recognizes that this type of shaft at the La Brea station can serve a legitimate purpose and that the OIG recommends that use of such methods should be considered and contemplated in future project specifications and a reserve for same should be made when the savings in time, expense, and safety outweigh the cost of such a shaft.</p>	<p>OIG comment received will be included in the lessons learned.</p>	
August 2020 #3 Contract C1045 MOD-00107 Purple Line Extension Sect. 1 Center Muck Shaft at La Brea (ECI-03)	<p>The OIG is concerned that a bid of 40% over an ICE, when you are in a noncompetitive circumstance, may not be a good faith offer or bad communication on specifications. Such behaviors can have the effect of damaging a relationship during an early phase of construction and create distrust that can harm project collaboration in the future. We appreciate a contractor's willingness to proceed on work even without a commitment from Metro in some cases for the payment for that work, but recommend the contractor exercise greater care in formulating its proposals and that Metro be clear and fair but diligent and firm in its ICE calculations and negotiations stance.</p>	<p>OIG comment received. Contractor will be reminded to have appropriate personell attend the fact finding and provide timely complete CSP in order to resolve issues in a collaborative manner.</p>	

ATTACHMENT B (August 2020)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>August 2020 #4 Contract C1120 MOD-00073 Purple Line Extension Sect. 2 Century City Constellation Station Track work Extension</p>	<p>1. The OIG is concerned that a bid is almost 3 times over the ICE, when you are in a noncompetitive circumstance, may not be a good faith offer or bad communication on specifications. Such behaviors can have the effect of damaging a relationship during an early phase of construction and create distrust that can harm project collaboration in the future. We appreciate a contractor's willingness to proceed on work even without a commitment from Metro in some cases for the payment for that work, but recommend the contractor exercise greater care in formulating its proposals and that Metro be clear and fair but diligent and firm in its ICE calculations and negotiations stance.</p> <p>LA Metro is having to absorb the cost of track extension change orders that arose due to errors and omissions on the part of the engineering consultant WSP. The OIG was informed that WSP miscalculated the braking distance in the initial project definition drawings that were supplied to the construction contractor. Metro will have to cover this expense with the contractor, but should look to the design engineering firm for reimbursement to Metro of the costs it would not have had to otherwise incur less amounts saved or mitigations.</p> <p>2. The OIG additionally recommends that Metro review the current Metro Rail Design Criteria (MRDC) compared to the newly released FRA track design standards for accommodating a train entering a stub-end to determine if any modification or update to our MRDC is warranted.</p>	<p>1. If a Cost and Schedule Proposal (CSP) is significantly higher than the Independent Cost Estimate (ICE), Metro's Contract Administrator and the Project Team engages in further meetings with the Contractor to clarify scope in order to determine the source of the discrepancies between the two estimates. These meetings are professional in nature, and often result in favorable resolution on a price that is somewhere between the ICE and the revised CSP. This process ultimately leads to the execution of mutually agreed upon Contract Modifications, and avoids costly disputes related to Changed Work.</p> <p>Related to the cost of the change, if WSP had calculated the braking distance correctly, the Contractor's proposal price would have included the cost for the trackwork that was recently added by Contract Modification. As a result, the awarded contract value would have been slightly higher, and the project contingency slightly lower at Notice to Proceed. The only additional cost that this error by WSP may have created is a theoretical premium for paying for added trackwork in a non-competitive environment, which would be difficult to prove. It should be noted that the difference between the executed Contract Modification price and the ICE was about 17%, or \$171,000. As a result, it is likely that it would be difficult for Metro to determine if it paid a non-competitive premium. That said, the recommendation will be discussed with senior executive management in VCM and Program Management to determine if any action against WSP will take place.</p> <p>2. This recommendation will be referred to Metro Engineering for consideration.</p>	

ATTACHMENT B (April 2020)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
<p>April 2020 #1 C0980 MOD-00161 Regional Connector - Procure Medium Attenuation Fasteners in Lieu of Standard Direct Fixation Rail Fasteners for the 2nd & Broadway Crossover</p>	<p>Regional Connector project is very unique because of all the existing historical buildings above the construction. Noise pollution has become a major concern for urban transit dwellers and authorities. The rule of thumb is a 10decibel technical increase in noise is heard by the human ear as "doubled" in loudness. When constructing underground for tunnels and stations the Environmental Impact Report must remember to always mitigate sound and vibration to protect the potentially impacted fragile surface buildings.</p> <p>The OIG recommends this scenario be written into the Lessons Learned file for future similar situations when constructing under historic or special case existing buildings.</p>	<p>The Regional Connector Project has extensive vibration mitigation elements included in the design where the operating guidway passes nearby sensitive receptors including recording studios, music venues and hotels. The project also requires that noise and vibration monitoring be performed during construction near sensitive facilities.</p> <p>The lesson learned and responded to in the referenced Contract Modification, is that information gathered during construction monitoring should be used to adjust the designed mitigations where field conditions indicate they are necessary.</p>	<p>Completed with issuance of subject contract modification. Equipment to be installed 3rd quarter 2020</p>
<p>April 2020 #2 C1045 MOD-00098 Purple Line Sect. 1 Additional Air Scrubbers at Fairfax Station</p>	<p>The OIG recommends further questioning to Southern California AQMD to determine why on a previous Metro construction contract (at the same location) they set the emission limit at 50 parts per billion, and the published standards are set at an emission limit of 30 parts per billion. On this contract the limits are set at 15 parts per billion. The inconsistency of the emissions limit should be taken under consideration and request in writing from AQMD why the standard emission limit could not be applied to this permit.</p> <p>The OIG further recommends in future construction pre-bid meetings, disclose to all potential contractors that the AQMD permit values necessary for the technical specification, "Temporary Construction Ventilation for Scrubber Units" has varied in the recent past and to verify the amount with an AQMD representative. If possible a commitment needs to be obtained from AQMD by the contractor at the time of submission of a bid amount, that the standard is firm for a defined period.</p>	<p>The emissions limit for equipment was set at the time the Contractor submitted the specific ventilation plan to SCAQMD for permit.</p> <p>The SCAQMD does not have a set standard for hydrogen sulfide, but the states standard is 30 parts per billion. SCAQMD develops their requirements based on specific site conditions. Our EIR states Metro and its contractors will set and maintain work equipment and standards to meet SCAQMD standards.</p> <p>A letter will be sent to SCAQMD for clarification on how SCAQMD can consistently apply emissions regulations for hydrogen sulfide for Metro's future projects.</p>	
<p>April 2020 #3 C1120 MOD-00064 Purple Line Sect. 2 Geotechnical Instrumentation Installation and Monitoring AT&T and Beverly Hills High School</p>	<p>The OIG recommends that the independent estimator visit the field location concerning where the work for this change order will occur. The construction manager should walk the estimator through the scope of the changes for which they are developing a cost estimate. The independent estimate was a 126.7% lower than the negotiated price. Where such significant discrepancies in price estimates exist, either the estimator for Metro, or the estimator for the contractor needs to re-evaluate the scope of the change order.</p>	<p>Agreed. Moving forward the estimating group will endeavor to work even more closely with available subject matter experts to assure a thorough understanding of scope and of the engineering and construction processes involved.</p>	
<p>April 2020 #4 C1151 MOD-00001 Purple Line Sect. 3 Revise the Tail Track Exit Shaft Location from US Army Reserv to Veterans Affairs Property</p>	<p>If the Army Reserve location had been negotiated prior to the contract award, these amounts might have been included in the original bid, although the price then and now might have been the same for this different location.</p> <p>The OIG recommends Real estate arrangements should be negotiated as early as possible.</p>	<p>Metro agrees with the OIG's comment regarding the price of the change. The cost would roughly be the same whether it was negotiated prior to contract award or after award. We agree that real estate arrangements (agreements) should be negotiated as early as possible. The project initiated contact with the property owner for the Exit Shaft property acquisition after the project was identified to be accelerated from the original 2035 Revenue Service Date. Metro did engage in talks with the VA early in the Project but obtaining VA approval to access their property has not been without a few challenges that Metro was able to overcome.</p>	

ATTACHMENT B (January 2020)

OIG REPORT/ SPOT CHECK # MOD #	RECOMMENDATIONS	MANAGEMENT'S RESPONSES	COMPLETION DATE
Jan 2020 / #1 C0988-MOD-00437 Crenshaw/LAX UG1 (H2S) Ventilation Fans - Construction	none		
January 2020 #2 C0980 MOD-00154 Regional Connector - Acoustical Treatments for Areas Not on Finish Schedule	none		
January 2020 #3 C1045 MOD-00089 Purple Line Sect. 1 Development and On Site Validation of the Selected Gas Mitigation Option for M13	<p>While the soil at every site is unique, it is possible to create a standard for testing soils for gasses. There is no current rule or technical specification within Metro criteria for extraction of CH₄ or H₂S from the soil.</p> <p>The OIG recommends after the final report is submitted by the contractor, that a technical specification for testing be developed and written into the MDRC to use in the future.</p>	<p>PLE1 Final M13 Mitigation Report will be forwarded to Metro Geotechnical Department for their review and further processing.</p>	
January 2020 #4 C1045 MOD-00090 Purple Line Sect. 1 Oil Well Investigation In Lieu of TBM Probe Ahead	<p>The implementation of the drilling and magnetometer survey from Section 1 has been incorporated into Purple Line Extension Section 2 and 3 contracts.</p> <p>The OIG recommends that the procedures implemented for locating tanks, pipes and other abandoned waste be added to the Lessons Learned database.</p> <p>The OIG further recommends that Metro evaluates whether to pursue recovery for waste removal costs under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act, also known as Superfund. Passed in 1980). The OIG recommends that Metro's Engineering Program Management provide information on this matter to Metro's Legal department to assist in making this determination and potentially pursuing this recovery.</p>	<p>PLE1 implemented methodologies for locating known tanks, pipes and other abandoned waste will be added to the Lessons Learned database. PLE1 notes that the hazardous waste removal is relatively small/negligible compared with the overall volume of soil removed. After reviewing the potential ROI on pursuing legal actions against any potential responsible parties for cost recovery the current determination based on the available data is that it is not worth the effort and cost at this time. However, it was decided that Metro County Counsel would provide a preliminary review on the issue and it would be revisited in the future.</p>	

Office Of Inspector General Construction Change Order Spot Check Report

Presented By
Karen Gorman
Inspector General

October 2021

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Spot Check 1

1 - Regional Connector Transit Corridor

❖ Add Wye Junction Fan Plant - Construction **\$18,700,000**

- 2015 Fan Plant Budget Board Approved = \$12mil.
- 2021 Fan Plant Actual Expense = \$21 mil. (77% increase)
- Fan Plant cost reported in pieces, as parts completed, but not as a whole
- Cost creep overall over time

Recommendation:

- Periodically provide to the Board a summary, per project, to show all historical cost increases over life of each project.
- Indicate anticipated LOP increases and how many LOP increases have occurred so far.



October 2021

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Los Angeles County Metropolitan Transportation Authority

Spot Check 2

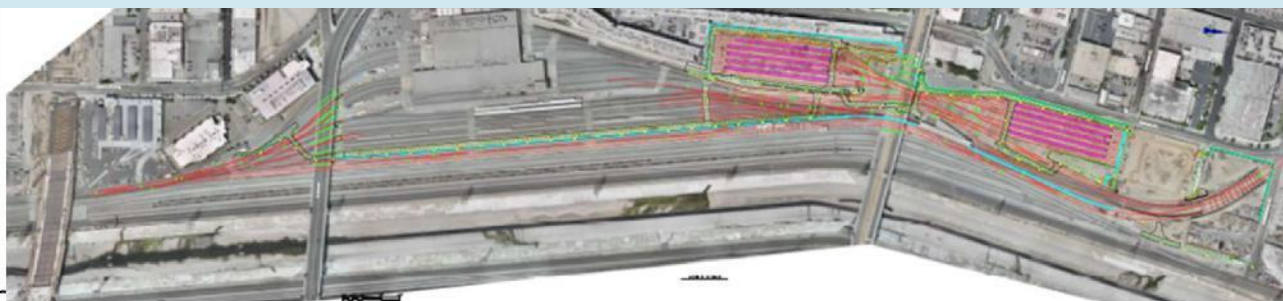
2 - Division 20 Portal Widening Turnback

❖ Additional Scope and Additional Requirements for the Division 20 Portal Widening and Turnback Project **\$43,300,000**

- Consultant prepared vault designs using specifications that did not include requirements for Heavy Rail Vehicle (HRV) loading
- Operations review identified as safety issue/ requires major design change to track layout

Recommendations:

- Include Operations prior to design for their constant input on initial planning.
- Provide Operations with a dedicated full time person to assist in planning, design, and pre-opening implementation phases for infrastructure/capital projects.
- Legal Department to determine if consultant can be held accountable, liable, and enforceable through insurance, bonds, or otherwise to cover large errors of this magnitude.



October 2021

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Los Angeles County Metropolitan Transportation Authority

Spot Check 3 and 4

File #
2021-0591

3 - Change Order for Purple Line Section 1

- ❖ Increased Well Maintenance at Western Shaft due to Groundwater Chemistry Impacts **\$2,700,333**

4 - Change Order for Purple Line Section 1

- ❖ Additional Dewatering Treatment and Discharge Impacts at Western **\$3,109,648**

- The Geotechnical Baseline Report was not accurate for the soil type, ground water, and hydrogen sulfide levels
- 2020 Dewatering at La Brea Station = \$15.8 mil.
- 2019 Dewatering at La Cienega Station = \$16.8 mil.

Recommendation:

- The OIG recommends that all dewatering change orders for this project should be evaluated or audited.
- Legal Department to determine if consultant can be held accountable, liable, and enforceable through insurance bonds to cover large errors of this magnitude.



½" Garden hose
8 to 12 gpm



1 ½" Fire hose
150 to 180 gpm



Wilshire & Western
pumping 350 gpm

October 2021

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Spot Check Schedule Comparison

File #
2021-0591

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
REGIONAL CONNECTOR	Add Wye Junction Fan Plant -Construction	67	10	77
DIVISION 20 PORTAL WIDENING TURNBACK	Additional Scope and Additional Requirements for the Division 20 Portal Widening and Turnback Project	32	31	63
WESTSIDE PURPLE LINE SECT 1	Increased Well Maintenance at Western Shaft due to Groundwater Chemistry Impacts	57	1	58
WESTSIDE PURPLE LINE SECT 1	Additional Dewatering Treatment and Discharge Impacts at Western	56	33	89

Spot Check Costs

Summary of Selected Change Order Costs

Four OIG spot checks of Change Orders / Modifications reported

1 Change Order for Regional Connector Transit Corridor

❖ Add Wye Junction Fan Plant - Construction = \$18,700,000

2 Change Order for – Division 20 Portal Widening Turnback

❖ Additional Scope and Additional Requirements for the Division
20 Portal Widening and Turnback Project = \$43,300,000

3 Change Order for Purple Line Section 1

❖ Increased Well Maintenance at Western Shaft due to
Groundwater Chemistry Impacts = \$2,700,333

4 Change Order for Purple Line Section 1

❖ Additional Dewatering Treatment and Discharge Impacts at Western = \$3,109,648