Patsaouras Plaza Busway Station



PATSAOURAS PLAZA BUSWAY STATION

QUARTERLY PROJECT STATUS REPORT

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH A GRANT FROM THE U. S. DEPARTMENT OF TRANSPORTATION, FEDERAL TRANSIT ADMINISTRATION (FTA).

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PROJECT OVERVIEW & STATUS

Metro awarded Patsaouras Plaza Busway Station Contract C0970 in February 2014 and issued Notice to Proceed (NTP) in March 2014. Contract C0970 is a Design-Build (DB) contract that originally had a12-month contract duration for design and 18-month forecast for construction.

Construction

Patsaouras Plaza Busway Station is 24% complete. Project commitments and expenditures through March 2017 indicate that the current budget does not require increasing contract modification authority for the next reporting period

Although substantial completion is contractually scheduled for December 2017, due to delays in starting construction OHL forecasts it will achieve substantial completion in November 2018. The project team is working with OHL to discuss the critical path of the schedule, and to review potential schedule mitigation opportunities as well as concurrent delays available to the project to reduce impacts to the project budget.

CURRENT QUARTER ACCOMPLISHMENTS

Current quarter accomplishments:

- Removed ADL soils
- Closed Vignes Street entrance to US Highway 101N
- · Began and finished deck removal activities
- Mobilized drilling equipment
- Began pile excavations

ACTIVITIES PLANNED FOR NEXT QUARTER

Activities planned for the next quarter include:

- Complete the storm drain relocation
- Complete pile excavation
- Re-open Vignes Street entrance to US Highway 101N
- Finish deck removal activities
- Mobilize drilling equipment

RISKS AND MANAGEMENT ISSUES

Concern No. 1: Project Schedule Re-assessment

Status/Action Although substantial completion is contractually scheduled for December 2017, OHL forecasts it will achieve substantial completion in November 2018. The project team is working with OHL to discuss the critical path of the schedule, and to review potential schedule mitigation opportunities as well as concurrent delays available to the project to reduce impacts to the project budget.

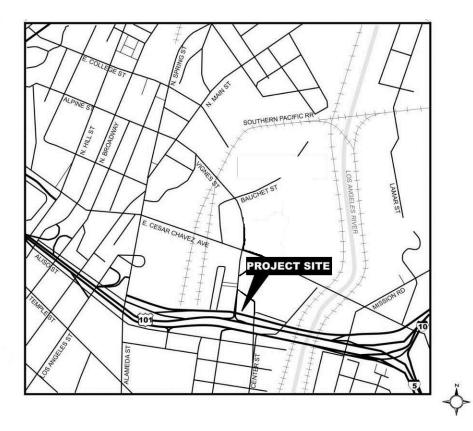
Concern No. 2: Project Cost Re-assessment

Status/Action Professional Services costs are being reassessed as a result of the Project Schedule Re-assessment, especially those related to agency. Currently any potential increase is covered by contingency. The forecast for Special Conditions is also trending to be less than the current budget and is another potential source of funding to cover an increase in professional services.

PROJECT SCOPE

PROJECT LOCATION

The project site is in the industrial area northeast of Downtown Los Angeles, and located above the Vignes Street entrance to the U.S. Highway 101 along the HOV/Express Lanes, adjacent to Patsaouras Bus Plaza and across the street from the C. Erwin Piper Technical Center.



SOURCE: TAHA, 2009

Regional access to the project site is provided by U.S. Highway 101/Interstate 5 (Hollywood Freeway/Santa Ana Freeway), which runs adjacent to the project site, and Interstate 10 (San Bernardino Freeway), which is approximately 0.5 miles southeast of the project site.

LIFE OF PROJECT BUDGET: \$39,793,000:

FEDERAL GRANTS AWARDED TO PROJECT:

Grant CA-04-0233: \$9,679,000 FTA Section 5309 Bus and Bus Livability Initiative Program

Grant CA-90-Y716: \$1,200,000 FTA Section 5307 (CRD)

PROJECT BACKGROUND:

The passenger boarding / alighting areas for the HOV and El Monte Busway lanes are not located contiguous with Union Station, but rather are situated at the corner of Alameda Street and the busway entrance, which requires a long walk to the Plaza. There is currently no direct pedestrian connection to Union Station, and there are no passenger amenities such as lighting, closed circuit television (CCTV), or information displays.

This issue is even more acute now with the revenue operation of the Congestion Reduction Demonstration Initiative project, since all new passengers also need to make the long walk for other transit connections such as the Red Line, Gold Line, and Metrolink.

To resolve these issues and to provide a more user-friendly passenger experience, a number of potential configurations were evaluated. The final preferred configuration provides a new passenger boarding / alighting area on the south side of Patsaouras Plaza on the El Monte Busway.

GENERAL DESCRIPTION / FEATURES

- Relocates patron boarding station currently on north Alameda Street to a new station platform at the southern end of Patsaouras Plaza
- Improves vertical and horizontal pedestrian circulation
- Provides a direct connection to Union Station
- Widens the existing Caltrans Los Angeles River Busway Bridge
- The new station will serve Metro, Foothill Transit, and other operators

SCOPE OF WORK:

The Scope of Work will entail several major elements of construction, each with its own subset of work components. The major elements are: Roadways and Sitework; Structures; Bus Platform and Amenities; Canopy Structure; Pedestrian Circulation; Lighting; Signage and Wayfinding; and Universal Fare Collection.

Roadways and Sitework

- 1. Roadway Modifications at El Monte Busway The El Monte Busway is to be widened on the south side along a length of approximately 200 feet to accommodate the revised El Monte Busway lane configurations south of Patsaouras Plaza. The widening varies from 0.0 feet at the western limit to approximately 9.5 feet at the El Monte Busway bridge's western abutment. Removal work includes removal of pavement sections, raised islands, lighting standards, and barrier rails. New construction includes building new pavement and barrier rails, reconstruction of lighting standards, and modifications to existing embankment slopes. New signage, striping, and pavement markings along this length will also be required. In addition, new overhead signing is to be provided at the entrance to the busway near Alameda Street and an existing overhead sign structure is to be removed and replaced near the west end of the El Monte Busway Bridge.
- 2. Roadway Modifications at Patsaouras Plaza The revised lane configurations along the El Monte Busway require modifications to the busway lanes that once entered and exited Patsaouras Plaza. The existing busway lanes entering and leaving Patsaouras Plaza from the busway will be permanently closed. Existing raised medians will be removed, and existing traffic signal poles and signal heads will be removed and salvaged. Signing and pavement markings will be provided at the Plaza for the new lane configurations.
- 3. Other Modifications at Patsaouras Plaza Construction of the pedestrian overcrossing, stairs, and elevators will require removal of existing improvements in the plaza, including existing brick paving, traffic signal poles, barrier rails, granite curbs, sidewalk, accessible ramps, and palm trees. Brick paving and granite curbs are to be salvaged and reinstalled if not damaged. Any damage to existing pavement, landscape/hardscape, and granite curbs to remain must be removed and replaced with new materials to very specific and exacting standards.
- 4. Roadway Modifications at the US 101 On/Off Ramps at Vignes Street Construction of the columns and footings for the busway bridge and platform canopy in the area of these ramps will require removal and reconstruction of concrete barriers along roadway edges as well as removal /replacement of AC/AB. In addition, portions of an existing retaining wall and curb are to be removed at locations interfering with the new construction (see Drawing C-07 in Volume III of the Project Definition Documents for details). Allowable ramp closures are discussed in Volume II of the Project Definition Documents Specifications.
- 5. Utilities and Drainage Project construction will require relocation and reconstruction of various existing utilities and drainage facilities, including a Caltrans' fiber optic line. In addition, new drainage facilities are to be provided for the freeway widening and other roadway improvements.

Structures

1. El Monte Busway Bridge Widening

The project includes widening both the north and south sides of the existing Caltrans Los Angeles River Busway Bridge and Overhead (Br. Na 53-2673). This bridge provides a travel way for the existing El Monte Busway through the project area. The widening on the north side of the bridge extends approximately 872 feet with an average width of 28 feet. The widening on the south side of the bridge extends approximately 775 feet with an average width of 14 feet.

The widening of the structure is required to provide for construction of the new station platform, bus lanes servicing the platform, and buffer lanes separating platform traffic from through traffic. In addition, the widening is required to provide for construction of the Pedestrian Ramp / Walkway which is to be built along the centerline of the existing bridge, allowing access to the platform from Patsaouras Plaza.

The widening to the north of the existing EI Monte Busway Bridge was originally sized to accommodate an entrance lane from Patsaouras Plaza onto the Busway. Metro has decided not to provide vehicular access to/from Patsaouras Plaza onto the Busway, but is still requiring the north side widening as shown on the plans. The unused deck areas will be stripped off as shown on the Pavement Delineation drawings in Volume III of the Project Definition Documents.

The widening work includes design and construction of new bridge superstructure, substructure, and barrier rails. Work also includes removal of portions of the existing bridge superstructure and barrier rails. In addition, removal (and replacement at some locations) of portions of existing retaining walls and removal of portions of the existing CIDH retaining wall (Bent 6 & 7) for new column /footing construction will be required. New columns / foundations are to be designed to avoid conflicts with existing roadways, the future and existing Metro Rail Subway Tunnel, and the future Ramirez Flyover.

2. Pedestrian Ramp / Walkway Structure

A new Pedestrian Ramp / Walkway is to be constructed to enable pedestrians to access the new Station Platform from the existing Plaza (via the new Pedestrian Overcrossing). This structure extends approximately 277 feet along the centerline of the existing El Monte Busway, connecting to the new Pedestrian Overcrossing on the west side and to the new Station Platform on the east side. The Pedestrian Ramp / Walkway rises approximately 9 feet vertically from the level of the station platform to the level of the new Pedestrian Overcrossing, thus allowing a minimum vertical clearance of 19.5 feet over the existing busway lanes for the Pedestrian Overcrossing.

The Pedestrian Ramp I Walkway structure width is to have a 10 feet minimum horizontal inside clear dimension. It is to be supported on new columns which extend through the

deck surface of the existing busway bridge to new foundations at existing grade below the existing bridge. The structure is enclosed with a structural steel frame with a covered roof. The roof consists of a standing seam over a dovetail roof deck. Side walls consist of fixed perforated stainless steel panels. In addition, swinging perforated stainless steel panels are located outside of the fixed stainless steel panels on the south side wall.

The outside wall swinging panels hang from stainless steel hinges, allowing them to move in the wind. A stopper at the base will limit the extent the panels can move. Final design and implementation of the panels is to be coordinated with and approved by Metro Creative Services.

3. Pedestrian Overcrossing

A new Pedestrian Overcrossing (OC) is to be constructed to enable pedestrians to access the new Pedestrian Ramp / Walkway and Station Platform from the existing Plaza. The Pedestrian OC extends approximately 114 feet south from the south end of the existing Plaza and connects with the new Pedestrian Ramp / Walkway. The OC is basically a level structure that maintains a minimum vertical clearance of 19.5 feet over the existing busway lanes below. The north end of the OC at the Plaza junction connects to new elevators and a stairway that allows pedestrian access to / from the Plaza itself.

The Pedestrian OC width has a 10 feet minimum horizontal inside clear dimension except at the north end, where it widens in the area of the new elevators and stairs. It is to be supported on new columns which extend through the deck surface of the existing busway bridge to new foundations at existing grade below the existing bridge, except for the north support column. The north column is shown to be supported on a new pedestal on the top of the existing parking garage structure.

The OC structure is enclosed with a structural steel frame with a covered roof. The roof consists of a standing seam over a dovetail roof deck. Side walls consist of fixed perforated stainless steel panels. In addition, swinging perforated stainless steel panels are located outside of the fixed stainless steel panels on the west side wall (same design and same oversight requirements as for the Pedestrian Ramp / Walkway structure noted above).

Bus Platform and Amenities

The bus station platform consists of an 8-inch-high concrete slab placed on the existing El Monte Busway bridge deck. The platform is 200 feet long by 18 feet wide, covered by a continuous canopy with lighting. The canopy structure is supported on individual columns, separated from the platform slab, that extend through the existing bridge deck to foundations beneath the existing bridge structure. The station amenities include seating benches, map cases, brick paving, signage and graphics, public address speakers, CCTV cameras, a passenger assistance telephone, an emergency telephone, and trash receptacles.

Canopy Structure

A 16-feet-wide continuous canopy is to cover the entire platform length. The roof of the canopy consists of a standing seam over a dovetail roof deck. The canopy roof rests on painted steel T-shaped supports and framing members. The supports are separated from the deck platform and extend through the existing bridge deck to new foundations below the existing bridge

Pedestrian Circulation

1. Stairs and Elevators.

Pedestrian access to the Pedestrian OC from the existing Plaza is to be provided via new stairs and two (2) new elevators at the north end of the OC. The elevators are to be enclosed in a glass and steel framework. Elevator doors are to open on three levels within the enclosure: (1) the 00 deck level - opening to the east; (2) the Plaza level - opening to the east; and (3) the P-1 level of the parking garage - opening to the west. The P-1 level doors will provide access to I from the existing pedestrian walkway located outside and along the west side of Metro's existing parking garage.

Construction of the stairs and elevators will require demolition of the southern two bays of the existing arcade structure located along the west side of the Plaza. A new section of the arcade structure is to be built to connect to the southern end of the remaining arcade structure.

2. Emergency Egress

New stairs are to be provided for emergency egress from the eastern end of the new station platform. The stairs will descend approximately 21 feet from the platform level to the street level below. The area at the bottom of the stairs is to be enclosed for security purposes.

Lighting

Lighting will be a key component in the experience of passengers to and from the bus platform and the existing plaza. In addition to achieving required light levels and meeting energy codes, the lighting should assist with creating a visually stimulating procession for pedestrians as well as creating visual interest for people viewing the architectural canopies and structures from adjacent areas and the plaza. Lighting is to be provided for all areas of the project including the stairways, elevator areas, Pedestrian OC, Pedestrian Ramp / Walkway, station platform, and canopies.

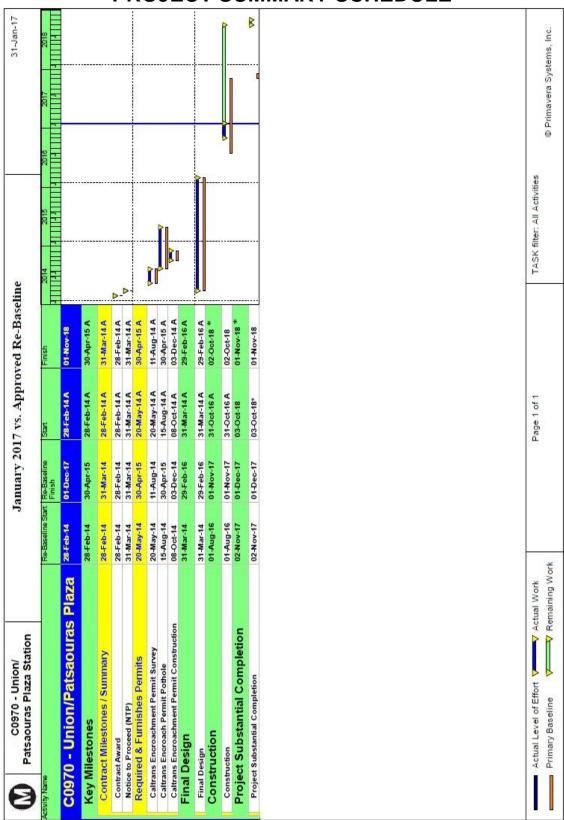
Signage and Wayfinding

The Contractor shall design, procure, and install all signage and wayfinding for the project. These items include identification, directional, and regulatory signage, and map cases. The identification signage includes iconic signs placed on top of the platform canopy. Signage and wayfinding is to be provided for the area of the new stairs and elevators at the south end of the Plaza, along the Pedestrian OC and Ramp / Walkway, and at the station platform and emergency egress. Signs shall conform to Metro's Signage Standards Manual and to accessibility standards under Specifications Section 00.04, Standards.

Universal Fare Collection

The project includes design and construction of provisions for future Ticket Vending Machines (TVMs), Stand Alone Validators (SAVs), and gating. The provisions include placing conduit with pull cords to service these elements. As shown in Volume III — Preliminary Engineering Drawings, provisions for future gating are to be provided at two locations. Provisions for future TVMs and SAVs are to be located at the Plaza entrance and at the level P-1 elevator entrance. Locations shown in Volume III are preliminary. Final locations are to be determined by the Contractor and approved by Metro.

PROJECT SUMMARY SCHEDULE



CRITICAL PATH NARRATIVE

Based on the current schedule, the critical path currently begins with the mobilization of the drilling equipment for bent installation/foundations/superstructure for the widening of the El Monte Busway Bridge. Work then continues with bent installation/substructure and superstructure for the Pedestrian Overcrossing items of work flowing to electrical, signage and ADA items of installation.

JUSTIFICATION FOR SCHEDULE CHANGES

There was no change to the schedule during the reporting period, and as of the time this report was prepared OHL had not yet submitted the March update.

PROJECT COST STATUS

PATSAOURAS PLAZA BUSWAY STATION

PROJECT 202317

DIVISION: PROGRAM MANAGEMENT
DEPARTMENT: PROGRAM MANAGEMENT
COMBINED COST REPORT BY ELEMENT
PERIOD ENDING: March 31, 2017

DOLLARS

ELEMENT CODE	ELEMENT DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET / FORECAST
			PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
С	CONSTRUCTION	19,992,000		25,435,000	•	25,596,000	168,000	6,173,000		25,857,000	422,000
S	SPECIAL CONDITIONS	750,000		2,517,000	1,700	1,007,000	12,000	159,000	(72,000)	1,738,000	(779,000)
R	RIGHT-OF-WAY	-	-	-	-	-	-	-	-	-	-
Р	PROFESSIONAL SERVICES	7,425,000	=	9,024,000	837,000	8,310,000	820,000	7,269,000	1,323,000	11,023,000	1,999,000
PC	PROJECT CONTINGENCY	2,817,000	-	2,817,000	-	-	-	-	(1,251,000)	1,175,000	(1,642,000)
	TOTAL PROJECT	30,984,000		39,793,000	838,700	34,913,000	1,000,000	13,601,000		39,793,000	-

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH March 31, 2017

PROJECT COST ANALYSIS

Original Budget

The original Life of Project (LOP) budget of \$16,803,000 was established in October 2011 when the project was in preliminary design. In 2013, bids for the station contract exceeded the LOP budget. Staff performed value engineering and re-bid the work, and in January 2014 the Metro Board increased the LOP budget to \$30,984,000 in order to award Contract C0970.

Current Budget

In March 2016, the Metro Board increased the LOP budget to \$39,793,000. The project budget has been allocated to match the forecasts for construction, professional services special conditions and to replenish contingency as indicated in the March 2016 Board Report.

The project budget established in March 2016 did not change for the period ending March 31, 2017.

PROJECT COST ANALYSIS (Continued)

Commitments

Commitments at the end of March 2017 were \$34.91 million, an increase of \$0.84 million over last quarter. There were no new commitments for construction contract C0970. There was a \$1,700 increase for Special Conditions for a work order permit the California Highway Patrol issued to Metro. There was \$0.83 million in new commitments this period for Professional Services. The new commitments were primarily for the labor hours charged by Metro employees during the reporting period and for a new encumbrance related a task order for environmental services.

Expenditures

Through March 31, 2017, Metro has incurred \$13.6 million in cumulative expenditures. Expenditures increased \$1.0 million this reporting period. Metro paid one construction invoice for \$0.17 million. An additional \$0.12 million spent on Special Conditions was for payments to the California Highway Patrol and to the City of Los Angeles for support by the various City Departments. Metro spent \$0.82 million this period on professional services for costs associated with in-house project administration, document control, and environmental services.

Current Forecast

The overall project forecast remained at \$39,793,000 this reporting period. This quarter:

- The forecast for Construction is \$25,857,000
 This is unchanged from the previous quarter.
- The forecast for Special Conditions is \$1,738,000
 This is a reduction of \$72,000 from the previous quarter as Metro closed out encumbrances for work orders with the City of Los Angeles for prior fiscal years.
- The forecast for Professional Services is \$10,863,000
 This is an increase of \$1.3M from the previous quarter as Metro re-evaluated agency costs due to the potential increase in the duration of construction and for the public outreach effort related to the closure of the streets and freeway entrance.
- The forecast for Contingency is \$1,175,000
 This is a reduction of \$1,251,000 from the previous quarter to cover the increase in professional services discussed above.

SUMMARY OF CONTRACT MODIFICATIONS

Modification	Description	Amount (\$)
1	General Requirements	-
2	CN2 Update SP-27 and Section 01200	-
3	Revise Contract Compliance Manual	-
4	CN7 – Redesign extra work – RFC03 Supplemental PSR/PR	93,450
5	CN6 – Emergency Power to Light Fixtures	79,424
6	CN3 – LED Fixture Change	8,877
7	CN4 – RFC010 – Potential Source Change	173,151
8	CN14 – Ramirez Street Design	60,900
9	CN9.1 – RFC7 – Construction 2 Lanes West with 1 Lane East	614,968
10	CN10.1 – Construction change	3,505,769
11	CN16 – Design of 2 Lanes West & 1 Lane East	51,570
12	CN17 – Redesign of Structural Footings	188,926
13	CN11 – ADA Tactile Pathway	57,000
14	CN12 – CRZ Installation of Bollards at Bus Platform	190,000
15	CN15 – Added Design for Storm Drain Manholes	31,733
16	Mitigation of Concurrent and Compensable Delays	548,000

FINANCIAL/GRANT STATUS

	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
		TOTAL TOTAL		COMMITMENTS		EXPENDITURES		BILLED to FUNDING	
SOURCE	BUDGET	FUNDS	FUNDS					SOURC	E
		ANTICIPATED	AVAILABLE	\$	%	\$	%	\$	%
	(\$)	(\$)	(\$)						
FEDERAL - BUS LIVABILITY SECTION 5309	9,679,000	9,679,000	9,679,000	9,679,000	100%	9,344,000	97%	9,203,000	95%
FEDERAL - SECTION 5307	1,200,000	1,200,000	1,200,000	1,200,000	100%	1,200,000	100%	1,200,000	100%
PROP C 40%	300,000	300,000	300,000	300,000	100%	300,000	100%	300,000	100%
PROP C 25% HIGHWAY	16,590,000	16,590,000	16,590,000	16,590,000	100%	4,000	0%	4,000	0%
PROP C 25% DEBT	8,809,000	8,809,000	8,809,000	3,929,000	45%	-	0%	-	0%
RAMIREZ FLYOVER	3,215,000	3,215,000	3,215,000	3,215,000	100%	2,753,000	86%	2,718,000	85%
(UNION STATION ESCROW)									
TOTAL	39,793,000	39,793,000	39,793,000	34,913,000	88%	13,601,000	34.2%	13,425,000	33.7%

NOTE: Expenditures are cumulative through March 2017

STATUS OF FUNDS ANTICIPATED

FEDERALSECTION 5309 BUS & RAIL LIVABILITY INITIATIVE PROGRAM: FTA Grant CA-04-0233 for \$9.7 million was awarded by the FTA in June 2012. Funds are available for drawdown.

FEDERAL SECTION 5307: FTA Grant CA-90-Y716 for \$1.2 million was awarded by the FTA in July 2009. Funds are available for drawdown.

PROP C 40% DISCRETIONARY: \$300,000 has been allocated to the project through FY2016. Funds are available for drawdown.

PROP C 25% STREET & HIGHWAY: \$16.6 million has been allocated to the project. Funds are available for drawdown.

PROP C 25% DEBT: \$8.8 million has been allocated to the project. Funds are available for drawdown.

CATELLUS (RAMIREZ FLYOVER): \$3.2 million has been allocated to the project. Funds are available for drawdown.

Patsaouras Plaza Busway Station Quarterly Project Status Report

CONTRACT C0970

n-ramp at ly deposite es / sewer				Areas of Concern: OHL has pushed Contractor responsibilities onto Metro. Examples include: Environmental Clearance/approvals (Volume IV, Doc 30) Third Party coordination Utility Relocations A change in Traffic engineering subconstractor (OHL) has delayed obtaining approvals for traffic-handling plans OHL has been non-compliant with General Requirement 1310 for schedule updates and submittals		
y deposite es				OHL has pushed Contractor responsibilities onto Metro. Examples include:		
		Areas of Concern: OHL has pushed Contractor responsibilities onto Metro. Examples include: Environmental Clearance/approvals (Volume IV, Doc 30) Third Party coordination Utility Relocations A change in Traffic engineering subconstractor (OHL) has delayed obtaining approvals for traffic-handling plans OHL has been non-compliant with General Requirement 1310				
ary 2017 S nedule updathe re-base /2016. dates for Just contract n starting c	chedule Up ate at the eline sched uly 2016 at tually sched construction	odate . Of time this re dule on 7/2 nd August duled for n, OHL fore	HL had eport 27/2016 2016. ecasts it	Cost Assessment: The current construction contract cost forecast is \$25,435,768 and is within the Board authorized budget. During the first quarter of 2017, OHL USA, Inc. submitted two pay applications: Pay Estimate 22 for Period Ending 1/31/17 for 168,057.70 Pay Estimate 23 for Period Ending 2/29/17 for 214,557.70 Through the period ending 2/29/2017, OHL USA, Inc. had bille \$6,387,078 or 25.11% of the current contract value.		
				Cost Summary: \$		
	02/26/14			1. Award Value: 19,832,000		
				2. Executed Modifications: 5,603,768		
Duration:	900			3. Approved Change Orders:		
Duration:	1341			4. Current Contract Value (1 + 2 + 3): 25,435,768		
	1096	81.7%		5. Incurred Cost: 6,387,078		
Original Contract	Current Contract	Forecast	Variance (Calendar Days)	PERCENT COMPLETE from 09/10/13 to 03/31/17		
03/26/15	03/01/16	2/29/16A	-	General Regs 80.7%		
09/16/16	12/01/17	11/08/18	-342	Final Design Construction Provisional Total		
a the ///////////////////////////////////	pry 2017 Sedule update the re-base 2016. Is contract a starting con in Nove	ry 2017 Schedule Upedule update at the the re-baseline sched 2016. Idea to see the contractually schedule update at the the re-baseline schedule update at the contractually schedule starting construction on in November 2018 02/26/14 03/31/14 Duration: 900 Duration: 1341 1096 Original Contract Contract 03/26/15 03/01/16	ory 2017 Schedule Update . Oledule update at the time this related update at the time this related the re-baseline schedule on 7/2 (2016). In the re-baseline schedule on 7/2 (2016). It is tarting to construction, OHL for the starting construction, OHL for the on in November 2018 (FY19 Q2	August 2016 Secontractually scheduled for secontractually scheduled for secontractually scheduled for setarting construction, OHL forecasts it in in November 2018 (FY19 Q2)		

0.0%

40.0%

60.0%

Percent Complete Progress

Construction physical percent complete excludes mobilization and general requirements

80.0%

100.0%

CONSTRUCTION PHOTOGRAPHS

AERIAL PHOTOGRAPH OF JOBSITE (3-30-2017)

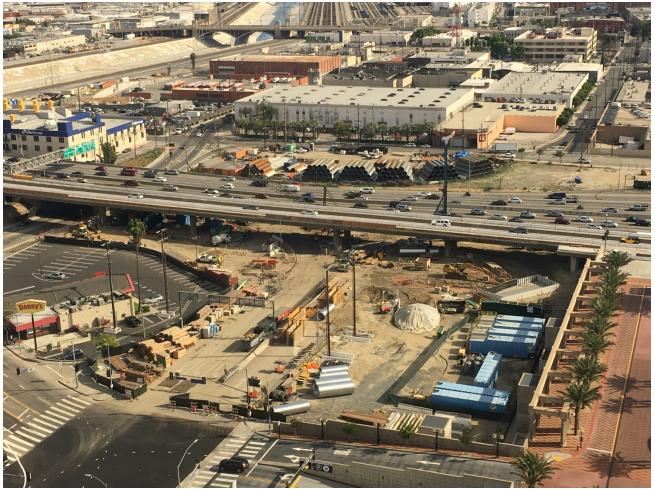


Photo depicts closure of Vignes on-ramp into U.S. Highway 101 North (aka 101 FWY). Individual elements are identified on the next set of photos presented on the next page.

CONSTRUCTION PHOTOGRAPHS



Vignes Street closure.



Edge of deck removal.

CONSTRUCTION PHOTOGRAPHS



Industrial waste tanks.



Utility relocation.

APPENDIX COST AND BUDGET TERMINOLOGY

ADOPTED BUDGET: The Approved Project Budget as established by Metro Board of Directors at the time it authorizes Construction Project Management Division to commence full design and construction of the project (Project Adoption).

CURRENT FORECAST: Evaluation of costs to go combined with actual expenditures.

COMMITMENTS: The total of actual contract awards, executed change orders or amendments, approved work orders of Master Cooperative Agreements, offers accepted for purchase of real estate, and other Metro actions which have been spent or result in the obligation of specific expenditures at a future time. Also includes commitments reported by other agencies.

EXPENDITURES: The total dollar amount of funds expended by Metro for contractor or consultant invoices, third party invoices, staff salaries, real estate and other expenses that are reported in Metro's Financial Information System (FIS), and expenditures reported by other agencies.

APPENDIX

LIST OF ACRONYMS AND ABBREVIATIONS

AFC	Approved For Construction
BNSF	Burlington Northern Santa Fe Railway
CADD	Computer Aided Drafting and Design

CCTV Closed Circuit Television

CD Calendar Day

CM Construction Manager

CMAC Congestion Mitigation Air Quality
CMIA Cash Management Improvement Act

CN Change Notice

CNG Compressed Natural Gas

CO Change Order

CPM Critical Path Method

CPUC California Public Utilities Commission

CR Camera Ready
CO Change Order

CTC California Transportation Commission

D-B Design-Build
D-B-B Design-Bid-Build

DBOM Design, Build, Operate and Maintain

DD Design Development

DEIR Draft Environmental Impact Report
DWP Department of Water and Power
EA Environmental Assessment
EIR Environmental Impact Report
EIS Environmental Impact Statement

FD Final Design

FEIR Final Environmental Impact Report FHWA Federal Highway Administration FIS Financial Information System

FOCT Fiber Optics Cable Transmission System

FTE Full Time Equivalent IFB Invitation for Bid

IPO Integrated Project Office

LA Los Angeles

LADWP Los Angeles Department of Water and Power

LFAT Local Field Acceptance Test
LNTP Limited Notice To Proceed
LONP Letter Of No Prejudice

LOP Life of Project

MCA Master Cooperative Agreement

METRO Los Angeles County Metropolitan Transportation Authority

MIS Major Investment Study MOT Maintenance of Traffic

APPENDIX

LIST OF ACRONYMS (continued)

MOU Memorandum of Understanding

MSA Meter Set Assembly

MSSC Metro Support Services Center

N/A Not Applicable
NOA Notice of Award
NTE Not to Exceed
NTP Notice To Proceed

O & M Operations and Maintenance

PC Project Control

PE Preliminary Engineering
PIP Project Implementation Plan
PLA Project Labor Agreement

PM Project Manager

PMA Project Management Assistance

PMP Project Management Plan P&P Policies & Procedures

PR Project Report

PS&E Plans, Specs & Engineering

PSR Project Study Report QA Quality Assurance

QAR Quality Assurance Report

QC Quality Control

QPSR Quarterly Project Status Report

RFC Request For Change or Released for Construction (based on context)

RFP Request For Proposal ROM Rough Order of Magnitude

ROW Right-Of-Way

RSTP Regional Surface Transportation Program RWQCB Regional Water Quality Control Board

SAFETEA-LU-Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

SCE Southern California Edison

SD Storm Drain

SEOR Structural Engineer of Record SIT System Integration Testing

SOW Statement Of Work
SP Special Provision
TBD To Be Determined

UPS Uninterrupted Power Supply

USDOT United States Department of Transportation

VE Value Engineering

WBS Work Breakdown Structure WDP Whitlock Dalnymple Poston

WP Work Package