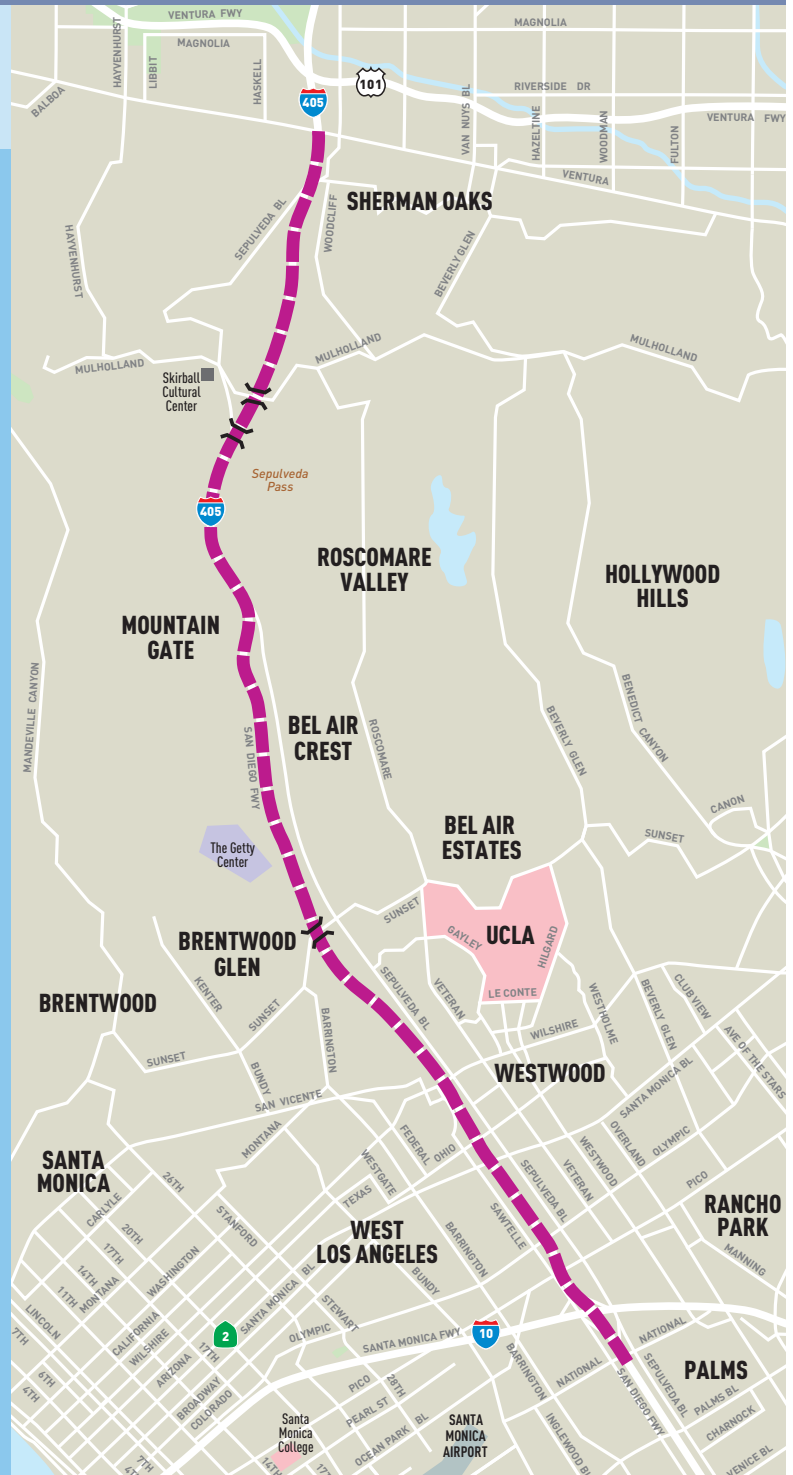




# I-405 Sepulveda Pass Improvements Project

## QUARTERLY PROJECT STATUS REPORT



11-00623P1 © 2010 LACMTA © 2010 LACMTA

# **INTERSTATE 405 SEPULVEDA PASS IMPROVEMENTS PROJECT**

## **QUARTERLY PROJECT STATUS REPORT**

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH GRANTS FROM THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) AND THE AMERICAN RECOVERY AND REINVESTMENT ACT (AARA) AND FUNDS FROM THE STATE OF CALIFORNIA.

**DECEMBER 2010**

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## **PROJECT OVERVIEW & STATUS**

*The I-405 Sepulveda Pass Improvements Project will add a 10-mile HOV lane and improve supporting infrastructure such as ramps, bridges and sound walls on the San Diego Freeway (I-405); while widening lanes from the Santa Monica Freeway (I-10) to Ventura Freeway (U.S. 101). This project will reduce existing and forecasted traffic congestion on the I-405 and enhance traffic operations by adding freeway capacity in an area that experiences heavy congestion. In addition to these modifications, the project will improve both existing and future mobility and enhance safety throughout the corridor. Project benefits include a decrease in commuter time, reduce air pollution, and promote ridesharing. The I-405 Sepulveda Pass Improvements Project features include:*

- *Add a 10-mile HOV lane on the northbound I-405 between the I-10 and US-101 freeways*
- *Remove and replace the Skirball Center, Sunset Blvd. and Mulholland Dr. Bridges*
- *Realign 20 on and off ramps*
- *Widen 20 existing overpasses and structures*
- *Construct approximately 18 miles of retaining walls and sound walls*

*Interstate 405 (I-405), also known as the San Diego Freeway, is a north/south route classified as an interstate/interregional loop freeway. It is part of the National Highway System (NHS), originating at the I-5 in Orange County in the City of Irvine and terminating at the I-5 in Los Angeles County, in the City of Los Angeles near the community of Mission Hills. The high-occupancy vehicle (HOV) lanes on I-405 are currently operating in both northbound and southbound directions from the county line of Orange County to north of I-105; from north of Burbank Boulevard to Route 118; and in the southbound direction from Waterford Street to north of Burbank Boulevard.*

*The design-build contract Notice to Proceed (NTP) was given on 6/2/2009, with commencement of contract time (1550 calendar days) on August 31, 2009. Substantial completion is currently expected to occur in May 2013, with final acceptance of the project required by November 27, 2013.*

Kiewit design related support activities are substantially complete and almost all packages have been submitted at 100%. Unresolved issues are being resolved, and the Project has been meeting and working on final comments with three major comments unresolved. The Project continues to ask Kiewit for a list of issues being held up by the City/County, and is working through these issues to expedite final approval. Kiewit has developed a list of "Road Blocks" which is not Metro or Kiewit specific but is rather Project specific. This list is the basis for the Critical Issues meeting being held on a weekly basis. Design changes requested by COLA, Caltrans, and Metro will be worked into the current plans but there are several areas of concern; I-405 alignment adjacent to Getty (30% design), potential addition of COLA Reversible Lane (Project does not believe that there are any impacts), and 3<sup>rd</sup> lane from Skirball Off-Ramp to Skirball Over-Crossing (to be added once the 100% plans are received). The Project gave direction to Kiewit to proceed with baseline design for the Skirball Ramps. The Project also completed an independent traffic study which confirmed the ramps design. The results of this study were shared with the community members during the Quarterly meeting held on December 9, 2010. There was significant concern from CAC with no new information identified. Project feels that it has fulfilled due diligence and will continue with the plans.

The DWP Power Undergrounding activities on Sepulveda between Montana and Sunset that Kiewit are responsible for has been completed, and DWP is currently working on pulling the cables with completion of mid-February 2011; final switching of power is dependent on

## **PROJECT OVERVIEW & STATUS (Cont'd)**

changing of power source for Bronwood Apartments. Kiewit is working on the Sunset Bridge south side abutments. Construction of Walls 1720/1730 is underway; bench excavations have started as well as the installation of soldier piles with 100% installed to date for Wall 1720. This work is slow because Kiewit is using only one rig. Demolition of the north-end of the Skirball Bridge was completed, and preparation work of dumping out lanes for foundation work is complete. Construction of Bridge 4a/4b (Santa Monica Blvd. UC) is well underway; pile driving and demolition of the bridge is complete. The issue with the excavation material passing specification for PH content continues to be a problem for Kiewit. Project concern on delay and impacts has been brought to Kiewit's attention at numerous meetings. Metro is waiting on the contractor for resolution. This has caused a delay and required some removal of already placed wall panels and backfill material. Kiewit is processing a claim for this issue but the Project has not found merit in the claim; Kiewit will most likely refer the claim to the Dispute Review Board (DRB).

Key project activities for December 2010 include:

- Sound Mitigation for the 23 homeowners, between Montana Avenue and Sunset Blvd. on the east side of the I-405, has been the focus of the project since the beginning of the environmental process. All approvals of MOAs and Agencies are complete. Approval from City Departments are complete with one deferred issue, that being Maintenance of Sound Wall. Caltrans and City Staff have met numerous times and are close to a final decision; regardless of this decision, the Project will construct the walls.

Caltrans ROW appraisal process for temporary and permanent easements continues and is well underway. The Project has obtained Right-of-Entry for Kiewit on all the required parcels. Kiewit extended Temporary Construction Easement (TCE) limits beyond the ROE agreements. This has potential impact to the appraisal process being managed by Caltrans. Metro has written a letter to Kiewit on this issue and is looking for review of QA/QC process for excavation and surveying.

- Widening of Sepulveda between Montana and Church to accommodate the COLA requests for standard lanes and shoulders. Part of the potential costs will be through a Change Order and Provisional Sums are involved as well as increases and decreases in baseline costs which are making this not a straightforward process. Metro Contract Administration has determined the merit, and County Counsel has approved this change. The Project is working with Kiewit on splitting the design and construction costs between the different funding sources which has been proven to be a difficult process. The Project met with LACMTA Construction Committee to address the change and obtained full Board approval at the December 9, 2010 Board meeting.
- The existing 12' X 12' Reinforced Concrete Box under Sepulveda Blvd. has been incorporated into Kiewit's design and construction work was incorporated in Kiewit's schedule. Metro is working with Kiewit to finalize costs but have only received ROM estimate to date.

## **PROJECT OVERVIEW & STATUS (Cont'd)**

- Project approved Kiewit's request for 12 Early Release for Construction (ERFC) packages and specific bridges but little work has started. Project sent correspondence requesting Kiewit for explanation on why it appears that Kiewit is treating this job as design-bid-build vs. design-build. Project met with Kiewit management several times and reiterated Metro's dissatisfaction with the status of the project progress followed by a letter explaining the concerns. The Project initiated review of the Recovery Schedule that Kiewit submitted on December 16, 2010 and has concerns with Kiewit's approach regarding missing or lack of detail in the Recovery Schedule.
- Now that design is 100% and Kiewit is finalizing packages for early releases, several issues that Kiewit had not resolved leading up to the Released for Construction (RFC) plans are becoming a problem. Project has resolved a significant number of Design Exceptions issues; Metro/Caltrans informed Kiewit that two of the ramps will each require one additional lane based on the traffic analysis, CHP enforcement areas on the ramps are not expected, and due to realignment of the Mulholland Bridge enough room is expected to be available for a 5+1 lane configuration and truck climbing lane.

As discussed earlier, the Project is working with Kiewit, Designer, and Caltrans to resolve last comments. There appears to be only three significant comments and the resolution is expected by the end of mid-June 2011.

## **MANAGEMENT ISSUES**

**Concern No. 1:** Community Outreach Program

**Status/Action** Aesthetics have been resolved and this issue is closed.

The Project continues to work with Caltrans, Kiewit, and Elected Officials to address noise mitigation during construction. Kiewit and Metro have a new process in place to address the noise which appears to be working at this time; Kiewit will identify potential impacts prior to construction and Metro will provide support on those nights.

Skirball ramps configuration have become somewhat contentious with some community CAC members. As discussed previously, the Project completed an independent traffic study and gave direction to Kiewit to proceed with the baseline design. The results of this study were shared with the community members during the Quarterly meeting held on December 9, 2010, and as discussed earlier, there were complaints but no new information was identified.

**Concern No. 2:** Align I-405 Closer to the Getty Parking Structure (96" MWD Waterline)

**Status/Action** The Project and Getty are in conceptual agreement with the 5+1 lane configuration, ROW, and other issues. Written agreement has been with Caltrans legal staff for the past several months, several staff changes are acerbating the agreement process but it is going forward. This is a critical issue as the 96" waterline relocation has to take place if this agreement is not acceptable to both parties. Getty and Caltrans ROW staff has met twice and it appears that Caltrans ROW staff will assist with the Getty Agreement thus the finalization of this issue is in sight. Caltrans' management has assured Metro that they want this agreement and will work with Getty on their requests as part of this agreement. The project has dropped the 96" waterline relocation plans all together, and while this may be a risk without having the agreement in place, any further work on the 96" waterline relocation will cost at least \$1m with unusable materials left over. The newly appointed Caltrans lawyer has reviewed the agreement and comments are significant. Getty has indicated that the Project is going back to square one. Project is working with Caltrans management to resolve this issue. The Project met with Getty and CTC and Caltrans had a follow-up meeting in late December. Caltrans appears to be fully engaged at this time.

**Concern No. 3:** Provisional Sums

**Status/Action** Provisional Sums process is moving forward but getting agreements on estimates has been difficult. Kiewit and Metro have assigned new staff to oversight and support the process at all levels to address this problem area. The Project continues to address the estimating process but Kiewit also refuses to sign PSAs for one reason or another other than costs which appears to be Kiewit's approach to addressing contract issues if they can have their way (this is very frustrating to the I-405 team).

## **MANAGEMENT ISSUES (Cont'd)**

**Concern No. 4:** One Team with Caltrans and Metro

**Status/Action** Caltrans has asked the Project to review staffing levels, with the intent of resolving any issues before design effort ends. Considering the contentious nature of Kiewit, the Project believes that it is prudent to keep sufficient Caltrans field staff on the project to address potential schedule and management issues. The Project is looking at adding one or two City oversight staff to address the City construction progress and track Kiewit's effort.

**Concern No. 5:** Reversible Lane Project on Sepulveda

**Status/Action** The FHWA has agreed that portions of the Reversible Lane Project on Sepulveda Blvd. could be incorporated in the I-405 Project. The I-405 Project has identified the areas to be included and is now working with COLA and FHWA to resolve the funding issues and concerns, specifically how the I-405 Project would be reimbursed for this work and how the remaining funds for the portions of the work not done on the I-405 Project would be handled. The COLA wrote a letter to FHWA canceling the contract and requesting that funds not be de-obligated. While this letter is 6 weeks late, nevertheless it will provide a resolution on whether the reversible lane will be incorporated into the I-405 Project or not.

FHWA has indicated verbally that they concur with the City request and have asked the Project to write a Change Notice to add the work. Metro needs assurance from FHWA on the cost reimbursement before proceeding. Project has set a meeting with LADWP and LABOE to remind them that the Reversible Lane is a City project and per agreement with the Agencies, relocation of power between Skirball Overcrossing and terminus of Skirball ramp is the City and LADWP responsibility.

**Concern No. 6:** Review Support from COLA

**Status/Action** The COLA has, for the most part, met commitments for the submittal review times, but in the last month or so, the COLA Departments have made it clear that they will not be able to make some of the upcoming review times due to lack of staff and resources. Funding is available to the City, but in some cases, no overtime has been allocated to the appropriate accounts at the Mayor's office. The Project and Metro will continue to work with the City Staff and Elected Officials to find ways to keep the project supported and on schedule. K.N. Murthy, LACMTA Deputy Chief Capital Management Officer and the COLA Mayor's office met with City Managers to develop core services plan which requires City Staff to be committed to Metro Projects. Currently, the I-405 Project has asked LABOE and LADOT for staff and none are available at this time. Regardless of this effort, the Project is working with the City Staff and will escalate issues as necessary.



## **MANAGEMENT ISSUES (Cont'd)**

**Concern No. 7:** Kiewit and Metro Estimating Approaches

**Status/Action** Metro and Kiewit have found it difficult to reconcile estimates, although the Project is working on different approaches with different staff. The Project has made progress with design estimates which seems to be a breakthrough on this aspect of estimating with Kiewit. The Project is also still working on the construction estimate issue; different oversight staff and new hires are in the works. Ultimately, until the construction estimate issues are resolved, the Project will continue using unilateral CNs and PSAs based on agreed quantities and construction estimates verified using more than one method of analysis. Project hired one additional estimator and established oversight by one of I-405 senior staff. Project has also brought in independent estimators for change work verification.

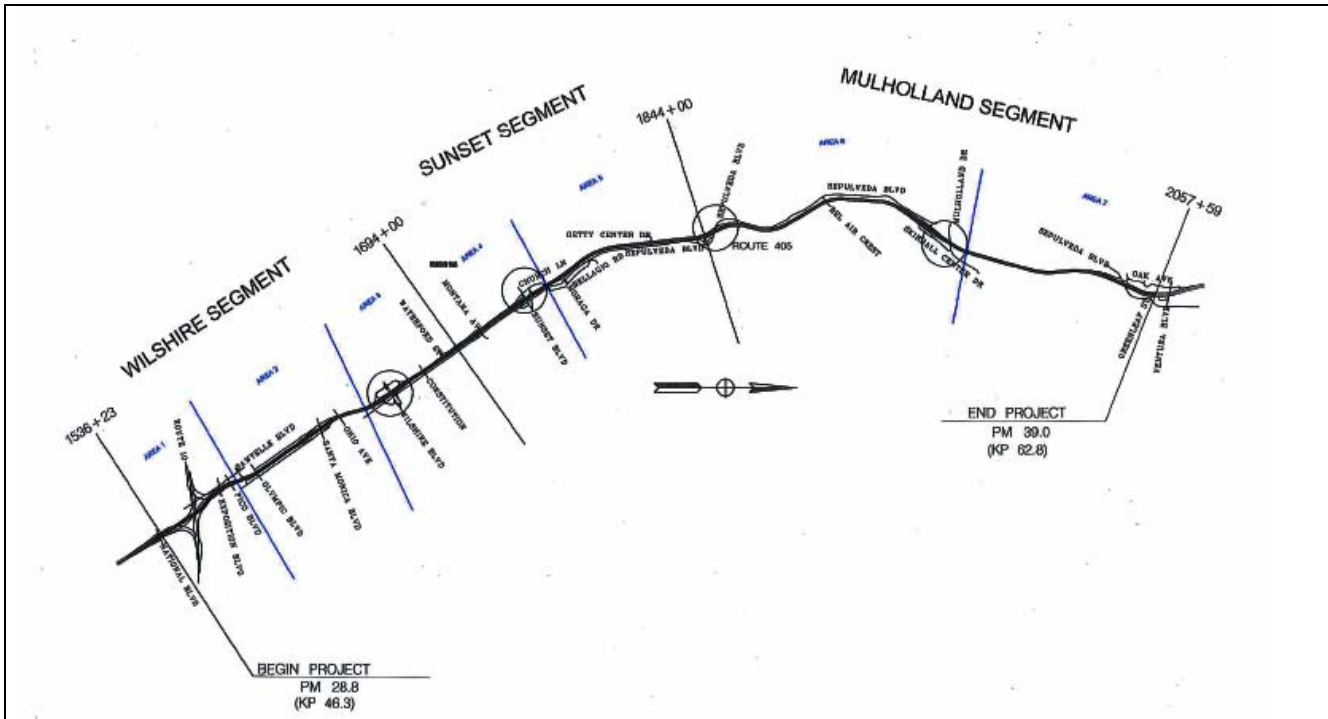
**Concern No. 8:** Mulholland Bridge Realignment

**Status/Action** The Project's plan to realign Mulholland Drive was sailing along until high level City Manager (LADOT) requested that options for "curved" Mulholland Drive be considered. This is causing schedule delay and raised concern with costs. Project met with City on December 21, 2010 to address these concerns. City will submit their comments in early January 2011 and Project will meet with the Elected Officials Staff to obtain concurrence as well.

**Concern No. 9:** Recovery Schedule

**Status/Action** The Project Recovery Schedule was submitted on December 16, 2010 inclusive of all known construction activities and re-sequencing. This is the first step in resolving schedule problems with Kiewit. Project early review detected some problems with the Recovery Schedule. The Project is currently summarizing the issues for transmittal to Kiewit. Project expects approval of the Recovery Schedule by early February 2011.

## PROJECT SCOPE



The I-405 Sepulveda Pass Improvements Project is a Design-Build contract to add a 10-mile High Occupancy Vehicle (HOV) lane on the northbound San Diego Freeway (I-405) between the Santa Monica (I-10) and Ventura (US 101) Freeways. The purpose of the project is to reduce congestion by adding the HOV lane and closing the HOV gap, which will provide a continuous HOV lane from the Orange County Line to the I-405/US-101 interchange. The scope entails an 11-foot half median, one 12-foot HOV lane, a 1-foot HOV buffer, five 12-foot mixed-flow lanes, and a 10-foot outside shoulder.

Most of the freeway widening required for this project occurs along the east side of I-405 along Sepulveda Blvd. between Montana Ave. and Moraga Dr. and between Getty Center Drive and the northbound Getty Center off-ramp. Sepulveda Blvd. is going to be slightly realigned at the relocated southbound I-405 Skirball Center Drive on/off-ramps in order to add a left-turn lane to the on-ramp.

Some freeway widening also occurs along the west side of the freeway between Olympic Blvd. and Waterford Street and between Bel Air Crest to just north of Ventura Blvd.

In order to reduce accidents associated with traffic on the ramps, project scope includes several interchange improvements as detailed below:

## **PROJECT SCOPE**

- Wilshire Blvd. interchange in both directions  
The northbound on-ramp from eastbound Wilshire Blvd. is grade-separated from the northbound off-ramp to westbound Wilshire Blvd. and from Sepulveda Blvd. The southbound off-ramp to eastbound Wilshire Blvd. is grade-separated from the southbound off-ramp to westbound Wilshire Blvd.
- Northbound I-405 Sunset Blvd. interchange  
The northbound I-405 off-ramp to eastbound Sunset Blvd. is widened to include one more lane. Two exclusive 12-foot lanes on the reconstructed Sunset Blvd. overcrossing and two 12-foot lanes on the on-ramp are provided for the northbound I-405 on-ramp from eastbound Sunset Blvd. In the eastbound direction three 12-foot lanes and in the westbound direction three 11-foot lanes are provided which solves the existing reduction from three lanes to two lanes in the eastbound direction. In both directions, 4-foot shoulders and 5-foot sidewalks as well as a 13-foot median are provided on the Sunset Blvd. overcrossing.
- The irregular northbound I-405 on/off-hook ramps at the Getty Center interchange are reconfigured to a standard diamond interchange to increase stopping sight distances in order to improve safety.
- The southbound I-405 Skirball Center Drive interchange is relocated to form a “T” intersection with Sepulveda Blvd. This eliminates the existing intersection at the end of the southbound I-405 Skirball Center Drive off-ramp.
- The southbound Valley Vista/Sepulveda Blvd. off-ramp is reconstructed due to freeway widening.

A total of 12 soundwalls and 54 retaining walls within the project limits are constructed at embankments where right-of-way is constrained.

A total of 12 undercrossings within the project limits are widened. Three overcrossings at Sunset Boulevard, Skirball Center Drive, and Mulholland Drive are replaced.

**KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD**




	Milestone Date	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11
Bridge 13 Montana UC: Start Driving Piles	12/7/10A	○					
Wall 1666: EAP/SOE	12/13/10A	○					
Bridge 5 Ohio UC: Install New Power Poles; Raise Wires	12/15/10A	○					
Wall 1634: Complete Excavation for Demolition	12/16/10A	○					
Bridge 15 Sunset UC: Install SOE Beams 11 & 12	12/17/10A	○					
Bridge 3 Olympic UC: RFC	12/22/10A	○					
Area 6: RFC	12/28/10A	○					
Wall 1664.2: EAP/SOE	12/29/10A	○					
Bridge 7 EB Wilshire Off Ramp: RFC	12/30/10A	○					
Bridge 16- Sunset OC-Piers/Columns/Abutment/Wing Wall	1/7/11*		○				
Bridge 22 Mulholland OC: RFC Base Work	1/7/11*		○				
Bridge 13 Montana UC: Storm Drain Lines 415 & 416 Construction Commences	1/11/11*		○				
Bridge 20 Bel Air Crest UC: RFC	1/11/11*		○				
Bridge 12 Constitution UC: Demo Fence/Sidewalk-Excavate for Access	1/12/11*		○				
Wall 1915: RFC	1/12/11*		○				
Bridge 5 Ohio UC: Begin Demolition	1/13/11*		○				
Bridge 5 - Ohio Ave, Footing & Pile Cap/Abutment/Wing Walls	1/13/11*		○				
Bridge 15 Sunset On Ramp: RFC	1/13/11*		○				
Bridge 2 Exposition OH: RFC	1/14/11*		○				
Bridge 8 EB Wilshire On Ramp: RFC	1/15/11*		○				
Bridge 9 Wilshire UC: RFC	1/15/11*		○				
VA Storm Drain: Excavation Commences	1/17/11*		○				
SCG 8" Steel Gas Pipe ID #239 Relocation Commences	1/20/11*		○				
Bridge 1 E10-N405: RFC	1/21/11*		○				
Bridge 22 Mulholland OC: RFC	1/21/11		○				
Bridge 23 Sepulveda UC NB: RFC	1/21/11		○				
Bridge 16- Sunset OC-Footing/Pile Cap	1/25/11		○				
Bridge 14 Sunset UC Off Ramp: RFC	1/28/11*		○				







 Metro Milestone	 Design/Build	 Third Parties Approval
 Caltrans Milestone	 New Date	 FHWA Federal Highway Administration Approval

**KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD**

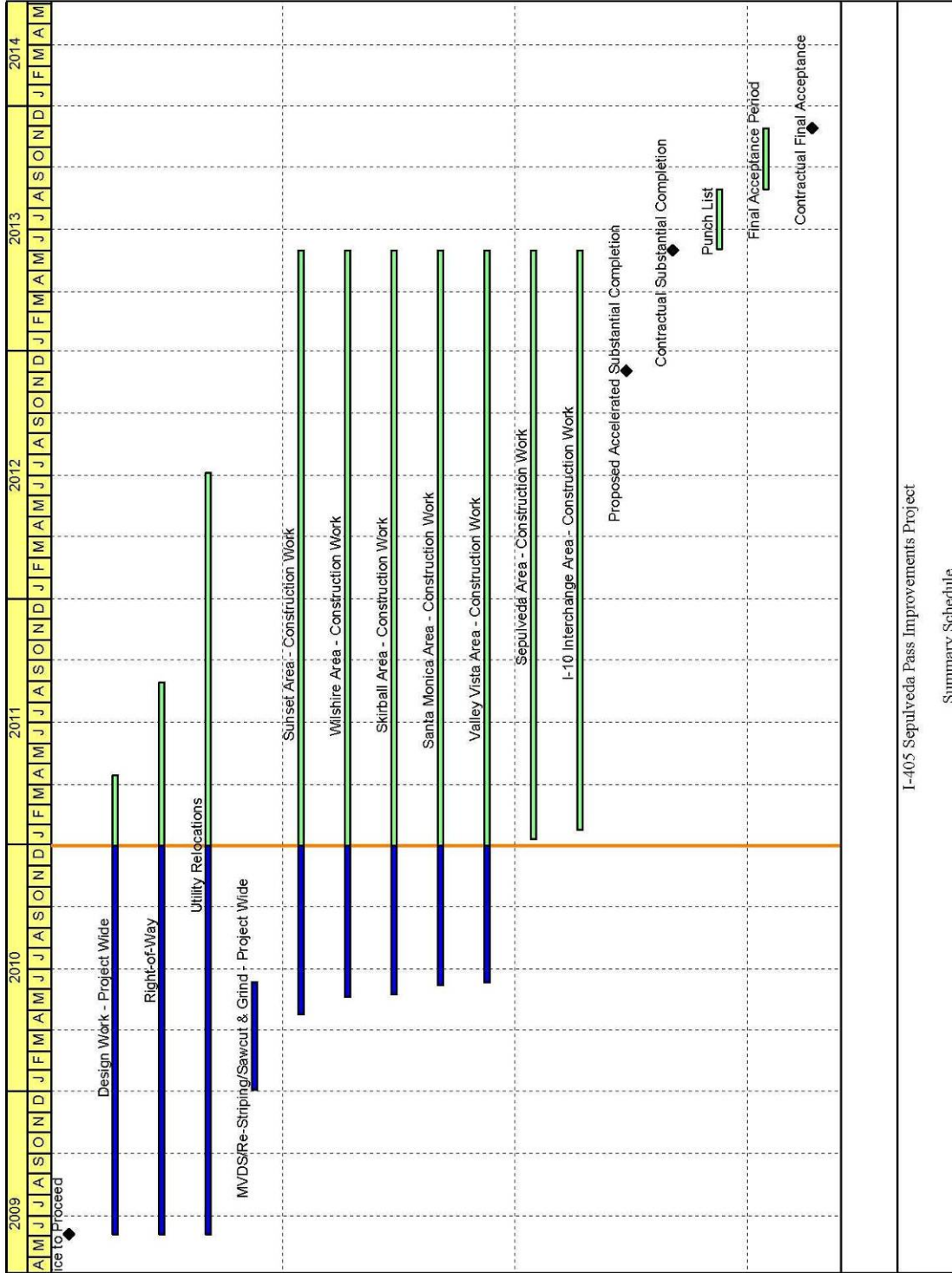
	Milestone Date	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11
Bridge 17: RFC	1/28/11*		○				
Valley Vista Home Demolition	1/28/11*		○				
8" Water Pipe Relocation South of Church Lane	1/31/11		○				
Storm Drain 201-206 Construction Commences	1/31/11		○				
Sewer Lines 401B-403B Construction Commences Late Jan.	1/31/11*		○				
MSE Wall 1782 Begin Structural Excavation	2/9/11			○			
Bridge 23 Sepulveda - Begin Demo Wing Wall/Bridge Barrier	2/10/11			○			
Begin Demo Soundwalls Santa Monica Area	2/11/11			○			
Soundwall 1685 Begin Sound Wall SB Alignment	2/14/11			○			
Wall 1897: Work Commences Mid Feb.	2/14/11*			○			
Bridge 21 Skirball OC: Construction Commences	2/15/11*			○			
Bridge 24 Wildlife Crossing: RFC	2/15/11*			○			
DWP Undergrounding completion	2/15/11			○			
MSE Wall 1675 Begin Structural Excavation	2/15/11			○			
SCE Vault Relocation Commences	2/21/11*			○			
MSE Wall 1985 RFC	2/25/11*			○			
Area 4 Sunset City: RFC	2/28/11*			○			
Bridge 10 Sepulveda UC/Wilshire Off Ramp NB - RFC	2/28/11*			○			
Bridge 11 Sepulveda UC/Wilshire On Ramp NB - RFC	2/28/11*			○			
Bridge 6A Wilshire Blvd Off-Ramp: Abutment	3/1/11*				○		
Skirball Area - Wild Animal Crossing (Double Box Culvert): Begin Construction	3/1/11				○		
Bridge 23 Sepulveda UC: Commence Demolition of Bridge Sound Wall.	3/1/11				○		
Bridge 4a Santa Monica: Begin Installation of Precast Concrete Piles	3/2/11				○		
Area 1 Storm Drain Encasement Construction Commences	3/7/11*				○		
Bridge 8 NB Wilshire On Ramp: Excavation of Abutment 9, Bent 5-8	3/7/11				○		
Bridge 23 Sepulveda UC: Commence demolition of Bridge Steel Railing	3/10/11				○		
Wall 1992: Work Commences Mid March	3/14/11*				○		
Bridge 21 Skirball OC: Falsework Commences	3/15/11*				○		

 Metro Milestone     
  Design/Build     
  Third Parties Approval  
 CT Caltrans Milestone     
 \* New Date     
 FHWA FHWA Federal Highway Administration Approval

**KEY MILESTONE SCHEDULE SIX-MONTH LOOKAHEAD**

	Milestone Date	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11						
Bridge 18 Getty Center UC - RFC	3/15/11				○								
Bridge 19 Sepulveda Blvd. UC - RFC	3/15/11				○								
MSE Wall 1985: Erect MSE Panel SB Alignment	3/17/11				○								
MSE Wall 2041: Erect MSE Panel SB Alignment	3/28/11				○								
Storm Drain 301-308 Construction Commences	3/28/11*				○								
Bridge 6 Wilshire UC: Set Girders Late March	3/31/11*				○								
Bridge 13 Montana UC-Erect Girders	4/1/11*					○							
12" Waterline Relocation Commences	4/4/11*					○							
Skirball Area - Wild Animal Crossing (Double Box Culvert): Completion	4/5/11					○							
Bridge 6 SB Wilshire Off-ramp: Begin installation of Steel Girder, Top Deck & Diaphragms	4/13/11					○							
MSE Wall 1985: Complete erection of MSE Panel SB Alignment	4/13/11					○							
Bridge 21 Skirball OC: Begin Installation of Precast Girder North.	4/14/11*					○							
Bridge 13 Montana UC: Begin Installation of Footing & Pile Cap/Abutment & Wingwalls	4/15/11					○							
MSE Wall 2041 - Erect MSE Panel Late April	4/25/11*					○							
Bridge 17 Church Lane UC: Begin demolition of bridge barrier	4/28/11					○							
MSE Wall 1675 Erect Panel SB Alignment	4/29/11					○							
Bridge 21 Skirball OC: Begin Installation of Precast Girder Top Deck & Diaphragm	4/29/11					○							
Area 5 Sepulveda - RFC	5/1/11						○						
Bridge 15 SOE Bent 2 & Abutment 3	5/1/11						○						
MSE Wall 2041 - Complete Erection of MSE Panels	5/17/11						○						
Bel Air Crest - Begin Demolition	5/20/11						○						
SNW 2004 - Begin Building SNW - NB Alignment Row 2	5/23/11						○						
<table border="0"> <tr> <td> Metro Milestone</td> <td> Design/Build</td> <td> Third Parties Approval</td> </tr> <tr> <td> Caltrans Milestone</td> <td> New Date</td> <td> FHWA Federal Highway Administration Approval</td> </tr> </table>								 Metro Milestone	 Design/Build	 Third Parties Approval	 Caltrans Milestone	 New Date	 FHWA Federal Highway Administration Approval
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 Caltrans Milestone	 New Date	 FHWA Federal Highway Administration Approval											

## PROJECT SUMMARY SCHEDULE



I-405 Sepulveda Pass Improvements Project

Summary Schedule

## **CRITICAL PATH NARRATIVE**

The project has several critical paths which may potentially change as the work progresses. Currently, the primary critical path runs through the COLA 30% plans and Sunset Area 4A Walls 1720/1730 design. It then heads to the construction of Walls 1720/1730, continues on with fine grade/place and finish AB on Sepulveda Blvd, and completes with paving and realignment of traffic on Sepulveda Blvd.

The path continues through construction of the Sunset Off-Ramp Bridge #14, demolition of existing and constructing the Sunset on-ramp, constructing MSE Wall #1740B, finishing sub-grade for the Sunset on-ramp, and finally paving the Sunset on-ramp.

This path then continues on by switching to Phase 2 MOT at Area 4, Median work at Sunset Area, and finally Median Work at Wilshire Area to achieve Area 3 Substantial Completion and Relief of Maintenance.



**PROJECT COST STATUS**

**I-405 SEPULVEDA PASS IMPROVEMENTS PROJECT**

FEDERAL PROJECT #: SARRA-405-3(015)N, METRO PRIME CONTRACT# C0882

METRO CONSTRUCTION MANAGEMENT DIVISION / CALTRANS

COMBINED COST REPORT BY PHASE

PERIOD ENDING: DECEMBER 2010

DOLLARS IN THOUSANDS

PHASE #	PHASE CODE	DESCRIPTION	ORIGINAL BUDGET	CURRENT BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		BUDGET / FORECAST
				PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	
0	PA&E	PROJECT APPROVAL & ENVIRO DOCS	22,000	-	22,000	-	21,457	-	21,457	-	22,000	-
1	PSE	PLANS, SPECS, & ENGINEERING	63,100	-	110,494	440	43,475	1,879	33,159	-	110,494	-
2	RS	RIGHT-OF-WAY SUPPORT	14,000	-	1,563	128	3,168	137	3,168	-	1,563	-
3	CS	CONSTRUCTION SUPPORT	28,000	-	-	223	2,397	223	2,397	-	-	-
4	C	CONSTRUCTION	823,900	-	800,074	-	721,000	5,085	213,214	-	800,074	-
9	RC	RIGHT-OF-WAY CAPITAL	83,000	-	99,869	82	14,634	345	10,849	-	99,869	-
<b>TOTAL PROJECT</b>			<b>1,034,000</b>	-	<b>1,034,000</b>	<b>874</b>	<b>806,132</b>	<b>7,669</b>	<b>284,244</b>	-	<b>1,034,000</b>	-

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 30, 2010.  
KIEWIT EXPENDITURES ARE ONLY THROUGH SEPTEMBER 30, 2010 DUE TO INVOICING LAG.

**PROJECT COST ANALYSIS**

**Approved Budget**

The Approved Budget reflects the Metro Board adopted Life-of-Project (LOP) Budget which was approved in April 2009 in the amount of \$1,034.0 million.

**Current Budget and Current Forecast**

The Current Budget and Forecast remain the same at \$1,034.0 million. Certain items budgeted and forecast under the PSE phase will be re-allocated to the RS and CS phases once the necessary approvals are obtained.

**Commitments**

The Commitments increased by \$874k this period for telecom and computer support service contracts, consulting service contracts, and Metro/Caltrans staff charges.

**Expenditures**

Expenditures are cumulative through November 2010. The expenditures increased by a total of \$7.7M this period. Expenditures for this period within the engineering phase included Metro project staff and miscellaneous consultant contract services. Metro costs in the right-of-way categories were for 3<sup>rd</sup> party Metro staff costs and for LAC and DWP, expenditures. Caltrans expenditures for the period included staff charges for engineering, right-of-way support, real estate parcel acquisitions and construction support costs. The Kiewit invoice covering September 2010 for \$5.1M was processed this period. The \$284.2 million in Project Expenditures to date represents 27.5% of the Original Budget.

**FINANCIAL/GRANT STATUS – ORIGINAL SCOPE ACTIVITIES**

DECEMBER 2010

**STATUS OF FUNDS BY SOURCE**

SOURCE	(A)	(B)	(C)	(D)	(D/B)	(E)	(E/B)	(F)	(F/B)
	APPROVED BUDGET	TOTAL FUNDS ANTICIPATED	TOTAL FUNDS AVAILABLE	\$	%	\$	%	BILLED TO FUNDING SOURCE \$	%
FEDERAL SAFETEA-LU	\$117.000	\$117.000	\$117.000	\$117.000	100%	\$41.183	35%	\$19.098	16%
FEDERAL ARRA	\$189.900	\$189.900	\$189.900	\$189.900	100%	\$157.127	83%	\$157.127	83%
STATE CMIA	\$614.000	\$614.000	\$254.700	\$445.494	73%	\$53.531	9%	\$53.531	9%
STATE TCRP	\$90.000	\$90.000	\$42.000	\$42.000	47%	\$30.765	34%	\$30.765	34%
STATE RSTP	\$10.100	\$10.100	\$10.100	\$10.100	100%	\$0.000	0%	\$0.000	0%
PROPOSITION C 25%	\$13.000	\$13.000	\$13.000	\$1.638	13%	\$1.638	13%	\$1.638	13%
<b>TOTAL FUNDS</b>	<b>\$1,034.000</b>	<b>\$1,034.000</b>	<b>\$626.700</b>	<b>\$806.132</b>	<b>78%</b>	<b>\$284.244</b>	<b>27%</b>	<b>\$262.159</b>	<b>25%</b>

NOTE: EXPENDITURES ARE CUMULATIVE THROUGH NOVEMBER 2010.

**STATUS OF FUNDS ANTICIPATED**

**FEDERAL SAFETEA-LU:** \$117M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro.

**FEDERAL ARRA:** \$189.9M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro with consultation with FHWA.

**STATE CMIA:** State Proposition 1B Bond sales provided \$254.7M to the project. Funds are available for drawdown.

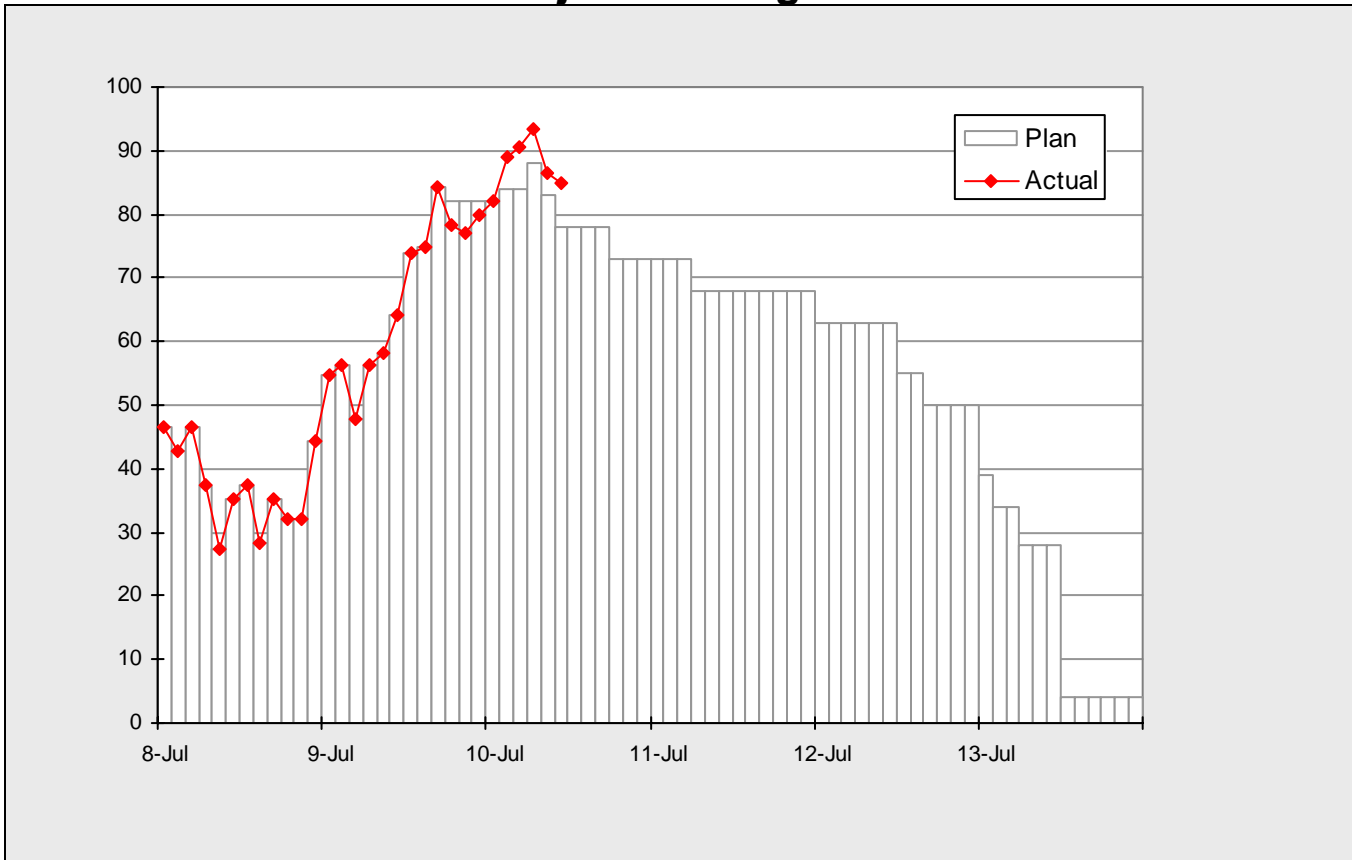
**STATE TCRP:** \$42M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro.

**STATE RSTP:** \$10.1M is available for drawdown for specific phases of the Project as agreed upon in the Cooperative Agreement between Caltrans and Metro.

**PROPOSITION C 25%:** The Metro Board approved the allocation of \$13M to the Project.

## STAFFING STATUS

### Total Project Staffing - FTEs

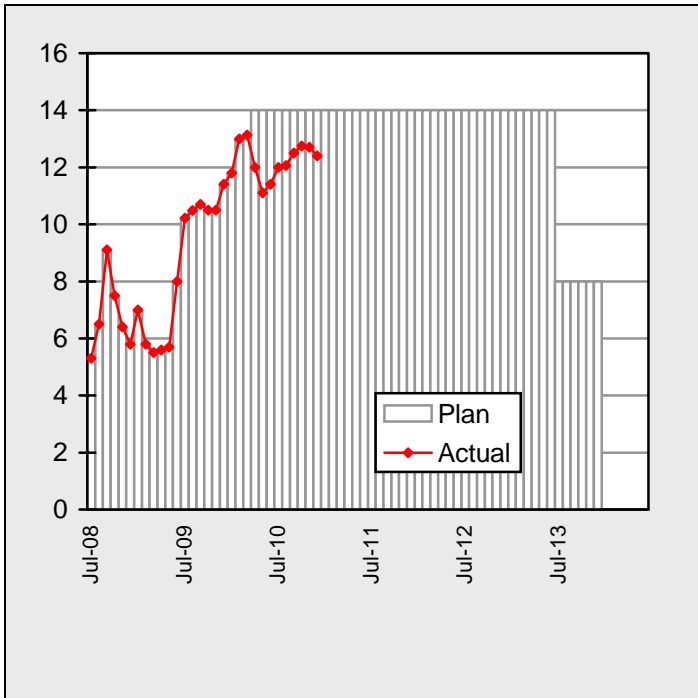


### Total Project Staffing

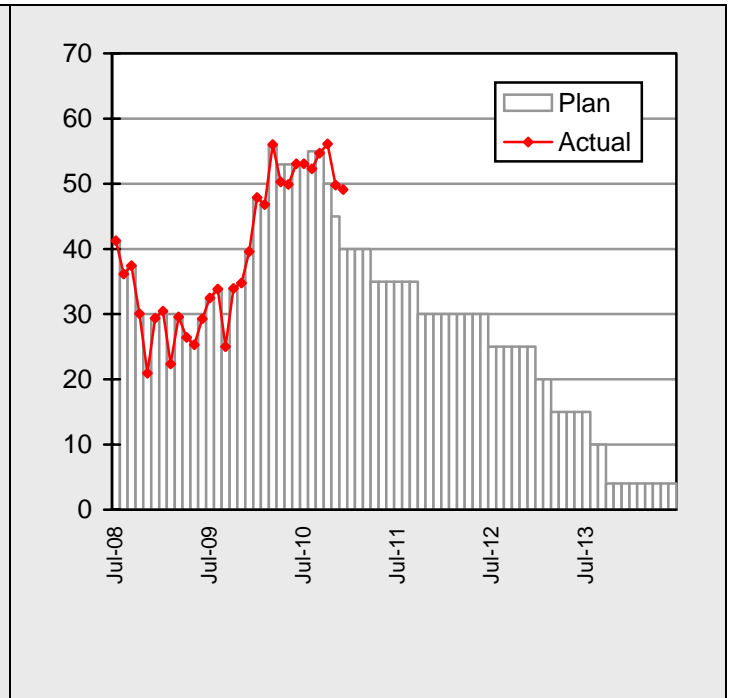
Metro was required to comply with a Federal audit to convert Independent Contract staff to “As needed.” Due to limitations for this classification and to meet the needs of the Project, resources were reallocated to the Construction Management Consultant Contract. Additionally, resources were brought on to assist in qualifying, estimating and processing changes to scope. A forecast trend for consultant staffing was incorporated this period also adjusting the total project staffing plan.

**STAFFING STATUS**

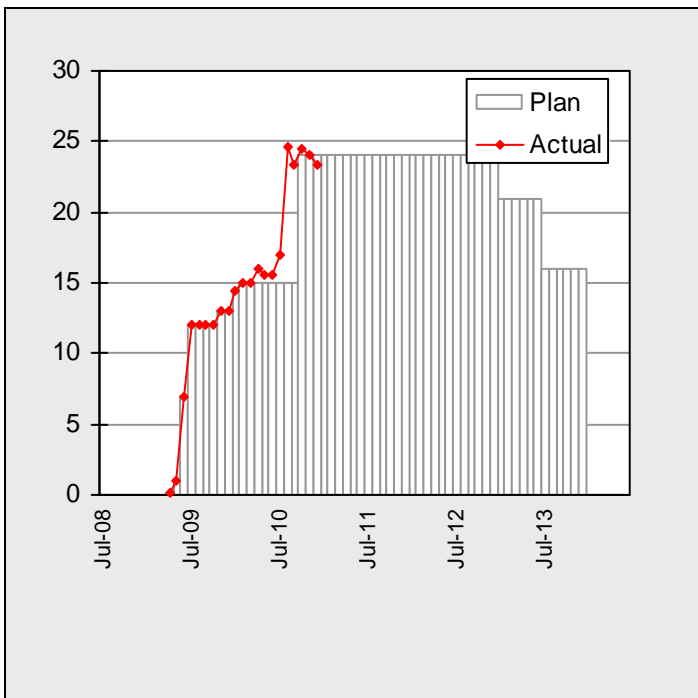
**MTA - FTEs**



**CALTRANS- FTEs**



**STANTEC - FTES**



## **REAL ESTATE STATUS**

The Real Estate acquisition process is proceeding with a majority of the parcels on schedule to be turned over to the Contractor by the dates specified in the contract. Three parcels at the Southbound Skirball Off-Ramp have not been delivered to the Contractor on time, and the Project is working with the Contractor regarding access. Currently, most of the parcels are on schedule to meet the target dates stated in the contract, and several parcels may require condemnation in order to be acquired. The Contractor has requested a number of parcels to be provided earlier than required by the contract and the Project is working to accommodate this request.

Parcels of concern:

- Santa Monica Mountain Conservancy (Parcel 79610) – The Project has acquired a Right-of-Entry (ROE) to proceed with work on the project while the acquisition process proceeds forward.
- County of Los Angeles (79629) – Presently working to acquire a Right-of-Entry (ROE), while at the same time moving forward with condemnation.
- Metropolitan Water District of Southern California (Parcel 79612) – A right-of-entry is expected by mid-September 2010, and the Project is working with the Contractor to mitigate any impacts.
- LA County Sanitation Department (Parcel 79630) – The Project is moving toward condemnation, as the Agency is not willing to sign an easement for retaining wall tie-backs.

The Project is also focusing intently on several parcels to keep acquisition on schedule:

- The Veterans Administration parcels (79586, 79711) containing the Breitburn oil line are impacted because of the 2008 Act (H.R. 2764) referenced as “Consolidated Appropriations Act, 2008” preventing VA from transferring the parcel.
- The General Services Administration parcel (79559) will require additional attention to assure that acquisition does not impact construction.

Project is moving forward with the compensation and Temporary Construction Easements with the 22 parcels in the Westwood Hills Area.

## **REAL ESTATE STATUS**

31	Total Required Parcels
13	Available for Construction
15	In Appraisal Process
3	Deleted
2	Past Due with no apparent schedule impact

## **ENVIRONMENTAL STATUS**

- Ongoing coordination with resource agencies for required surveys for construction activities.
- Ongoing coordination with Caltrans Legal and Bel Air Crest Association regarding amending existing Settlement Agreement with Bel Air Crest Master Association.
- Coordination with LA National Cemetery regarding the extension of the soundwall.
- Coordination with Santa Monica Mountains Conservancy and National Park Service on wildlife crossings.
- Coordination with Salvation Army, Westwood Transitional Village and Bessie Pregerson Child Development Center.

## **COMMUNITY RELATIONS STATUS**

- Distributed construction notices for the following construction activities: construction around the Skirball Bridge area, retaining wall construction at Bel Air Crest, LADWP under grounding at Wilshire/Sepulveda, Santa Monica Bridge deck demolition, Constitution Bridge demolition, Ohio Bridge demolition, wall work south of Ohio, no parking on Beloit, re-striping of Bent 3, pile driving @ Bent 3 and bridge 15, and wall 1738 grading excavation – Sunset off ramp.
- Attended and presented at the following meetings: Elected Official's Briefing, Quarterly Meeting, Sherman Oaks residents, 1720/1730 homeowners office hours, Royal Woods residents and update to Getty Museum key staff.
- Community Advisory Committee (CAC) Meeting, West LA Traffic Committee and Getty Museum staff.
- 1807 followers on Twitter.
- 576 members and 802 likes on Facebook.
- 280 subscribers Nixle.
- Website 9,537 page views.

## **QUALITY ASSURANCE STATUS**

- Metro Quality participated in the following meetings:
  - Pre Activity Meetings for utility relocation of Time Warner Cable @ Wall 1746, resurfacing at Ohio St., Skirball Bridge Abutment footings and Walls, and junction structure at Wall 1686.
  - Project Quality Team Meeting, Construction Task Force Meeting, Owner's Status Meeting and Construction Progress Meetings for Segments 1, 2, and 3 and Project partnering Meeting.
- Three stop work notices were issued by Kiewit.
- Twenty-two Nonconformance Reports (NCR's) have been issued by Kiewit to date. Eighteen are in process and four are approved.
- Metro Quality continues to review/approve all Project Quality personnel.

## **SAFETY AND SECURITY STATUS**

- Project to date recordable injury rate: (Three recordable injuries) 0.4.
- Reviewed Construction Yard Development activities for adherence to the Project Security Plan.
- Attended pre-activity meetings to ensure compliance with approved Work Plans and contract specifications.
- Monitored Construction activities to ensure contractor and safety compliance with contract specifications.
- Participated in Kiewit's Foreman's Safety Meetings and weekly progress meetings with IPO and Kiewit management personnel to discuss safety related issues and construction work activities.
- Security procedures at the Wilshire Segment Yard were modified as a result of a burglary.
- December Contractor work hours (Design and Construction): 76,735.
- Contractor project to date work hours (Design and Construction): 1,229,620.
- Total project to date work hours (Contractor and the IPO staff): 1,433,267.



**THIRD PARTY AGREEMENT STATUS**

Third Party	Type of Agreement	Forecast Execution Date	Required Need Date	Status/ Comments
City of Los Angeles	MCA	4/11	6/09	In City's court to finalize Exhibit "D" of the draft proposed agreement. In October 2010, Los Angeles County Counsel, Legal Counsel to LACMTA, questioned the need for LACMTA to enter into a Master Cooperative Agreement with the City of Los Angeles since the I-405 Project is a State Project, not a LACMTA Project. A meeting will be convened with the City Attorney's Office and the Los Angeles County Counsel to discuss.
Los Angeles County Department of Public Works/Los Angeles Flood Control District	MCA	4/11	6/09	On 7/29/10, LACMTA provided response to round two of County comments. Expect to meet with County in October to negotiate a final draft. LACMTA is still waiting for the County to set up a meeting to negotiate a final MCA. However, County Counsel has questioned the need for the LACMTA to enter into a Master Cooperative Agreement with the Los Angeles County Department of Public Works since the I-405 Project is a State Project, not a LACMTA Project.
Utility Owners	Utility Agreements	Various	Various	Caltrans style Utility Agreements (similar to MTA Work Order Authorizations) will be completed as relocation plans are approved for each location.

**CONTRACT STATUS**

<b>I-405 Sepuveda Pass Improvements Project</b>		<b>Contract No.: C0882</b>					
<b>Design/Build Contractor: Kiewit</b>		<b>Status as of: December 31, 2010</b>					
<p><b>Progress/Work Completed:</b>                  Major work started/completed this period:</p> <ul style="list-style-type: none"> <li>• Heavy rains and subsequent wet soil conditions in the second half of the month negatively impacted progress.</li> <li>• Completed installation of new power poles and raised power cables at Bridge 5.</li> <li>• Completed installation of Beams #11 and 12 for support of excavation at Bridge 15.</li> <li>• Completed excavation for demolition at Wall 1634.</li> <li>• Commenced SOE installation at Wall 1666.</li> <li>• Commenced SOE installation at Wall 1664.</li> <li>• Completed piles at abutments 1 and 2 for Bridge 13.</li> <li>• Completed piles at abutment 1 Bridge 16.</li> <li>• Maintenance during construction - graffiti removal from k-rails, trash and debris removal.</li> </ul> <p><b>Areas of Concern:</b></p> <ul style="list-style-type: none"> <li>• Reversible Lane Project on Sepulveda Blvd.</li> <li>• MSE backfill material quality.</li> <li>• Re-design of Mulholland Bridge.</li> </ul>		<p><b>Major Activities (In Progress):</b></p> <ul style="list-style-type: none"> <li>• DWP power undergrounding.</li> <li>• VA sewer relocation.</li> <li>• VA duct bank relocation.</li> <li>• Excavate/load/haul ADL Y1/Y2/Z3.</li> <li>• MSE Wall Panel fabrication and delivery.</li> <li>• Grading and paving.</li> <li>• Construction of Walls 1634/1635/1640/1720/1730/1836/1852/1940/1941.</li> <li>• Bridge 4a/4b fine grading.</li> <li>• Bridge 5 excavation and demo of abutments.</li> <li>• Bridge 13 drive piles.</li> <li>• Bridge 15 drive piles.</li> <li>• Bridge 16 drive piles and pour footings.</li> </ul> <p><b>Major Activities Next Period:</b></p> <ul style="list-style-type: none"> <li>• Bridge 3 excavation and demo of abutments.</li> <li>• Bridge 4 demo abotment 1.</li> <li>• Bridge 5 install beams at abutment 1.</li> <li>• Bridge 12 demo for widening.</li> <li>• Bridge 13 pour footings.</li> <li>• Bridge 15 drive piles.</li> <li>• Bridge 16 pour footings.</li> <li>• Maintenance during construction.</li> </ul>					
			Original Baseline	Time Extension	Current Contract	Forecast Completion	Variance Cur-Fcast
Commencement			08/31/09	0	08/31/09	08/31/09	0
Completion			05/31/13	0	05/31/13	05/31/13	0
Punchlist Complete			08/29/13	0	08/29/13	08/29/13	0
Final Acceptance			11/27/13	0	11/27/13	11/27/13	0
<b>Schedule Summary:</b>		<b>Cost Summary: \$ In 000's</b>					
Notice of Award	04/29/09	1. Award Value:		720,922			
Notice to Proceed	06/02/09	2. Executed Modifications:		0.00			
Original Contract Duration (CD)	1640	3. Approved Change Orders:		810.00			
Approved Time Extensions (CD)	0	4. Current Contract Value (1 + 2 + 3):		721,732			
Current Contract Duration (CD)	1640	5. Incurred Cost:		223,689			
Elapsed Time from NTP (CD)	578	6. Percent Incurred Cost:		31.0%			
Contract Elapsed Time Percent	35.2%						

## **CHRONOLOGY OF EVENTS**

May 18, 2007	The Draft Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) is issued.
February 29, 2008	The Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) is issued.
March 10, 2008	The Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) errata with U. S. General Services Administration (GSA) comments is issued.
October 10, 2008	LACMTA issued Invitation For Bid (IFB) for the project.
February 20, 2009	Project bids opened.
April 23, 2009	LACMTA Board authorized the Chief Executive Officer to award Design-Build Contract C0882 to Kiewit Pacific Co.
April 23, 2009	LACMTA Board approved establishing a budget of \$1.034 billion for project 405523.
April 23, 2009	LACMTA awarded Contract C0882 to Kiewit Pacific in the amount \$694,156,000 to include Schedules A, C, and H (Option 4).
April 29, 2009	LACMTA issued a revised NOA to Kiewit Pacific in the amount \$720,922,000 to include Schedules A, C, E (Option 1), F (Option 2), G (Option 3), and H (Option 4).
June 2, 2009	LACMTA issued Notice to Proceed to Kiewit Pacific for the Design-Build Contract C0882.
August 31, 2009	Contract Commencement Date.
September 24, 2009	Kiewit Pacific submitted the Project Baseline Schedule.
October 14, 2009	Project Design Quality Management Plan approved.
December 14, 2009	Project Quality Management System approved.
January 20, 2010	Project Baseline Schedule was approved.
January 27, 2010	Roadway Restriping commenced.

## **CHRONOLOGY OF EVENTS (Cont'd)**

March 12, 2010	Major Project Permits were obtained; Permit 401 – Water Quality Control Board, Permit 404 – U.S. Army Corps of Engineers, and Permit 1600 – California Department of Fish & Game.
May 31, 2010	The Project completed one year without a Recordable Injury.
July 23, 2010	Sunset Bridge major demolition of the south side top deck and center column.
August 2, 2010	Commenced construction on Bridge 4a/b.
August 16, 2010	Commenced ExxonMobil 16" utility relocation at Bridge 16.
August 20, 2010	Operating Engineers Local 12 initiate labor action by striking.
August 24, 2010	Completed ductbank work on Sepulveda for DWP utility undergrounding.
August 24, 2010	Commenced construction of Walls 1720/1730.
August 24, 2010	ITS Backbone is cut.
September 7, 2010	DWP started pulling wires for utility undergrounding on Sepulveda.
September 9, 2010	Operating Engineers Local 12 Labor action is settled and strike ends.
September 13, 2010	Completed the excavation of Roadway at 1685/1691.
September 15, 2010	Completed the removal of Wall 1665.
September 18, 2010	Completed installation of Temporary walkway at Skirball Bridge.
September 28, 2010	Pioneer access to Sunset on-ramp, Bridge 15 Abutment 1.
October 12, 2010	Began excavation of Sunset Bridge 16 Abutment 1 Footing.
October 12, 2010	Began demolition of Skirball Bridge 21.
October 15, 2010	Completed demolition Skirball Bridge 21.

**CHRONOLOGY OF EVENTS (Cont'd)**

October 15, 2010	Began driving piles at Santa Monica Bridge 4.
October 15, 2010	Installed Beams at Sunset Bridge 16, Bent #2.
October 15, 2010	Began driving piles on Santa Monica Bridge 4.
October 19, 2010	Completed demolition of Sunset Bridge 16, Abutment 4.
October 21, 2010	Installed beams at Sunset Bridge 15 On Ramp, Abutment 1.
October 22, 2010	Began Demolition of Sunset Bridge 16, Abutment 1.
October 22, 2010	Installed Piles at Wall 1720.
October 25, 2010	Began Excavation at Walls 1685/1691.
October 28, 2010	Began the relocation of overhead power lines at Ohio Ave Bridge 5.
October 28, 2010	Clear and grub area at Wall 1746.
November 12, 2010	Completed demolition of soundwall, barrier rail, and overhang at Bridge 13.
November 15, 2010	Completed installation of SOE at Abutment 1 NB at Bridge 4 Santa Monica.
November 15, 2010	Completed demolition of existing ExxonMobil 16" Oil Pipeline.
November 17, 2010	Completed excavation of CIP at Wall 1640.
November 18, 2010	Began excavation at Wall 1635.
November 29, 2010	Began Excavation at Bridge 13.
November 30, 2010	Began relocation of SCE underground vault.
December 7, 2010	Began driving piles at Bridge 13 - Montana Avenue UC.
December 14, 2010	Completed Pile driving at Abutment 1 Bridge 16 Sunset OC.
December 15, 2010	Completed the installation of new power poles and raised the utility wires at Bridge 5 - Ohio Avenue.

**CHRONOLOGY OF EVENTS (Cont'd)**

December 16, 2010 Completed piles at abutments 1 and 2 for Bridge 13 Montana Ave UC.

December 17, 2010 Began installation of SOE beams at Bridge 15 Sunset on-ramp.

## CONSTRUCTION PHOTOGRAPHS



Sorting of straps at MSE Wall 1667.



Installing k-rail at Bridge 4 south bound on-ramp from Santa Monica.



## CONSTRUCTION PHOTOGRAPHS



Laying out visqueen prior to rain event.



Montana Bridge demo.



## CONSTRUCTION PHOTOGRAPHS



Montana abutment #2 excavated 100%.



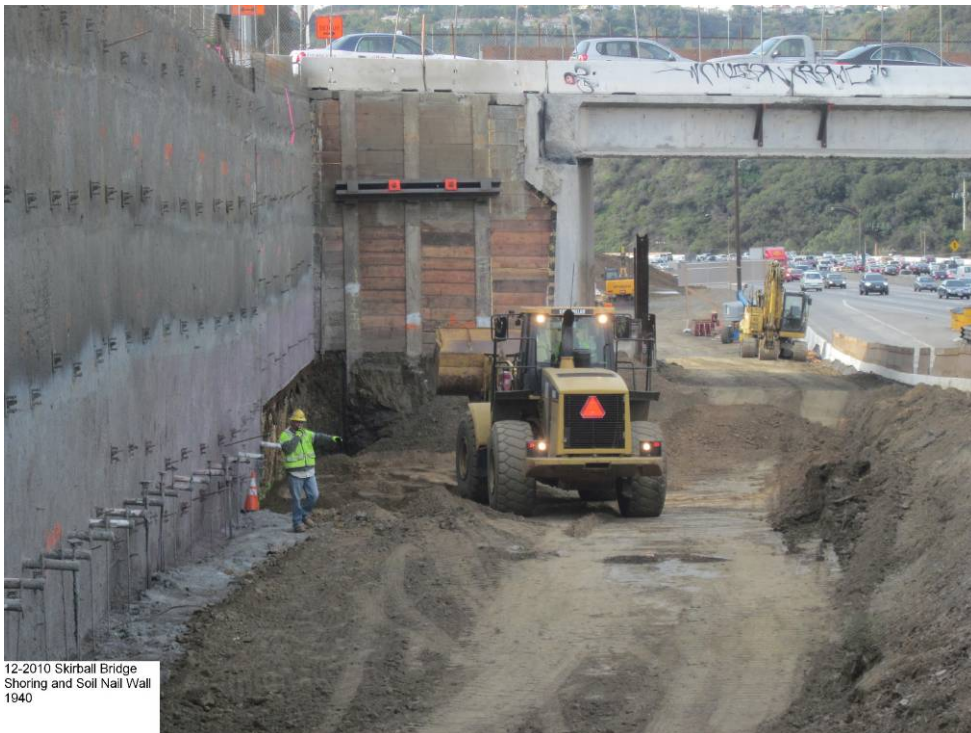
Wall 1720.

## CONSTRUCTION PHOTOGRAPHS



12-2010  
Grading Top of  
Wall @ 1836

Grading top of Wall 1836.



12-2010 Skirball Bridge  
Shoring and Soil Nail Wall  
1940

Skirball Bridge shoring and soil nail Wall 1940.



## CONSTRUCTION PHOTOGRAPHS



12-2010 Skirball Bridge  
Shoring & Soil Nail Wall  
1941

Skirball Bridge shoring and soil nail Wall 1941.



12-2010 Trimming  
Wall Face at Soil Nail  
Wall 1836

Trimming wall face at soil nail Wall 1836.

## **APPENDICES**

### **COST AND BUDGET TERMINOLOGY**

**APPROVED 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 BUDGET:** The Original Budget plus all budget amendments approved by formal Metro action. Also referred to as Approved Budget.

**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.

**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 is reported in Metro's Financial Information System (FIS).

**PROJECT APPROVAL & ENVIRONMENTAL DOCUMENTS:** Costs for agency staff and consulting contracts leading to project approval and environmental clearances.

**PLANS, SPECS. & ENGINEERING:** Agency staff and consulting contract costs between the initial project approval and environmental clearances but prior to start of construction.

**RIGHT-OF-WAY SUPPORT:** Costs for agency staff involved in real estate appraisal and parcel purchase activities and agency staff costs involved in utility relocations and third party agreements. Includes real estate appraisal costs.

**CONSTRUCTION SUPPORT:** Agency staff and consulting contract costs occurring during the construction phase of the project.

**CONSTRUCTION:** Costs for highway construction, bridge and on/off ramp construction and modifications, retaining wall and sound wall construction. Includes final design costs by Design/Build Contractor.

**RIGHT-OF-WAY CAPITAL:** Costs for real estate parcel purchases and utility relocations costs after approval of utility company agreements. Includes costs for Master Cooperative Agreements after approval by agencies.

**APPENDIX  
LIST OF ACRONYMS**

ARRA	American Recovery & Reinvestment Act
AWIS	Automated Work Zone Information Systems
CADD	Computer Aided Drafting and Design
CALTRANS	California Department of Transportation
CCTV	Closed Circuit Television
CD	Calendar Day
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CM	Construction Manager
CMAC	Congestion Mitigation Air Quality
CMIA	Cash Management Improvement Act
CMS	Changeable Message Signs
CN	Change Notice
CO	Change Order
COE	Corps of Engineers
COLA	City Of Los Angeles
CPM	Critical Path Method
CPUC	California Public Utilities Commission
CR	Camera Ready
CTC	California Transportation Commission
D-B	Design-Build
D-B-B	Design-Bid-Build
DD	Design Development
DEIR	Draft Environmental Impact Report
DR	Deficiency Report
DWP	Department of Water and Power
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
GDSR	Geotechnical Design Summary Report
GSA	General Services Administration
GSRD	Gross Solids Removal Devices
HAR	Highway Advisory Radio
HOV	High Occupancy Vehicle
IFB	Invitation for Bid
IPO	Integrated Project Office
ITS	Intelligent Transportation Systems

**APPENDIX  
LIST OF ACRONYMS (Continued)**

LA	Los Angeles
LABOE	Los Angeles Bureau of Engineering
LACFCD	Los Angeles County Flood Control District
LADOT	Los Angeles Department of Transportation
LADPW	Los Angeles Department of Public Works
LADWP	Los Angeles Department of Water and Power
LARTMC	Los Angeles Regional Transportation Management Center
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
MPSR	Monthly Project Status Report
MSE	Mechanically Stabilized Earth
MVDS	Microwave Vehicle Detection System
MVP	Maintenance Vehicle Pullouts
MWD	Metropolitan Water District
N/A	Not Applicable
NCR	Non-Conformance Report
NEPA	National Environmental Quality Act
NHS	National Highway System
NOA	Notice of Award
NTE	Not to Exceed
NTP	Notice To Proceed
NTSC	National Television System Committee
P6	Primavera Project Planner® (scheduling software)
PC	Project Control
PE	Preliminary Engineering
PIP	Project Implementation Plan
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

**APPENDIX  
LIST OF ACRONYMS (Continued)**

QC	Quality Control
QPSR	Quarterly Project Status Report
RFC	Request For Change or Released for Construction (based on context)
RFP	Request For Proposal
RMS	Ramp Metering Systems
ROM	Rough Order of Magnitude
ROW	Right-Of-Way
SIT	System Integration Testing
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
SONET	Synchronous Optical Network
SOV	Schedule Of Value
SOW	Statement Of Work
SP	Special Provision
TBD	To Be Determined
TCRP	Traffic Congestion Relief Program
TMS/CS	Traffic Monitoring Stations/Count Stations
TPM	Transportation Management Plan
VE	Value Engineering
WBS	Work Breakdown Structure
WP	Work Package